

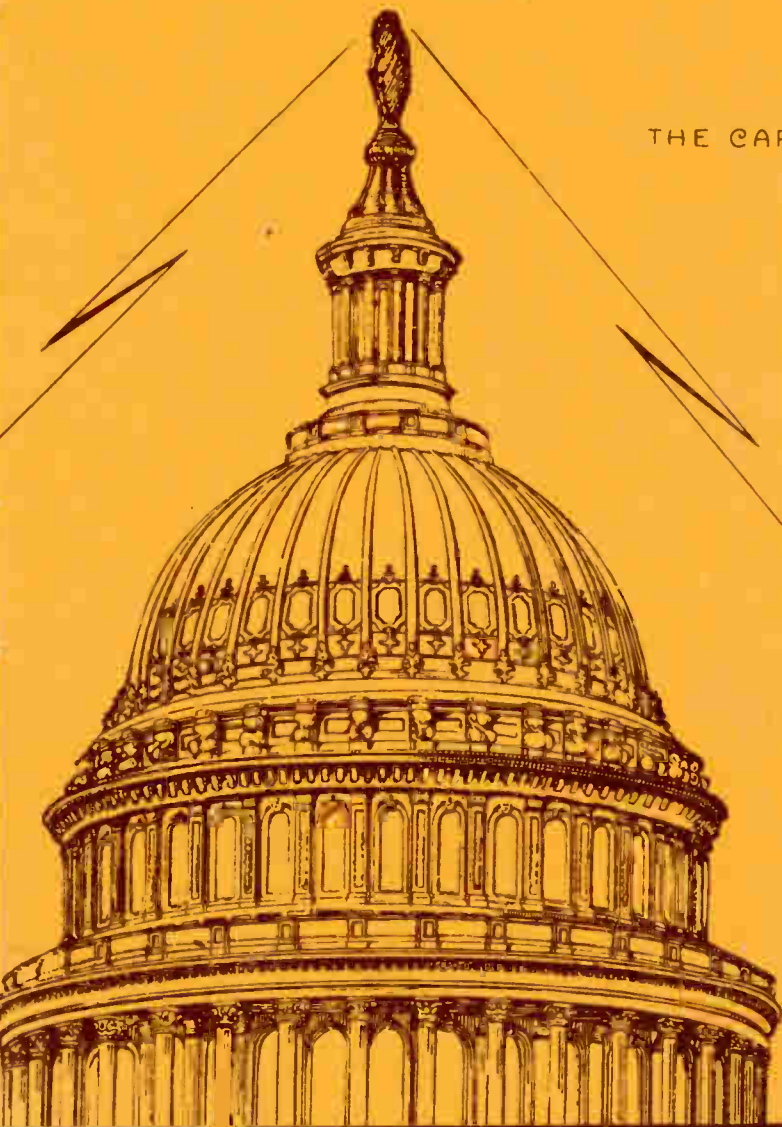
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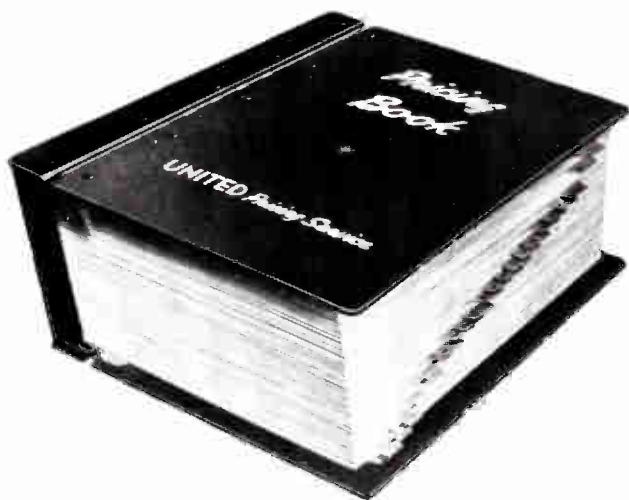
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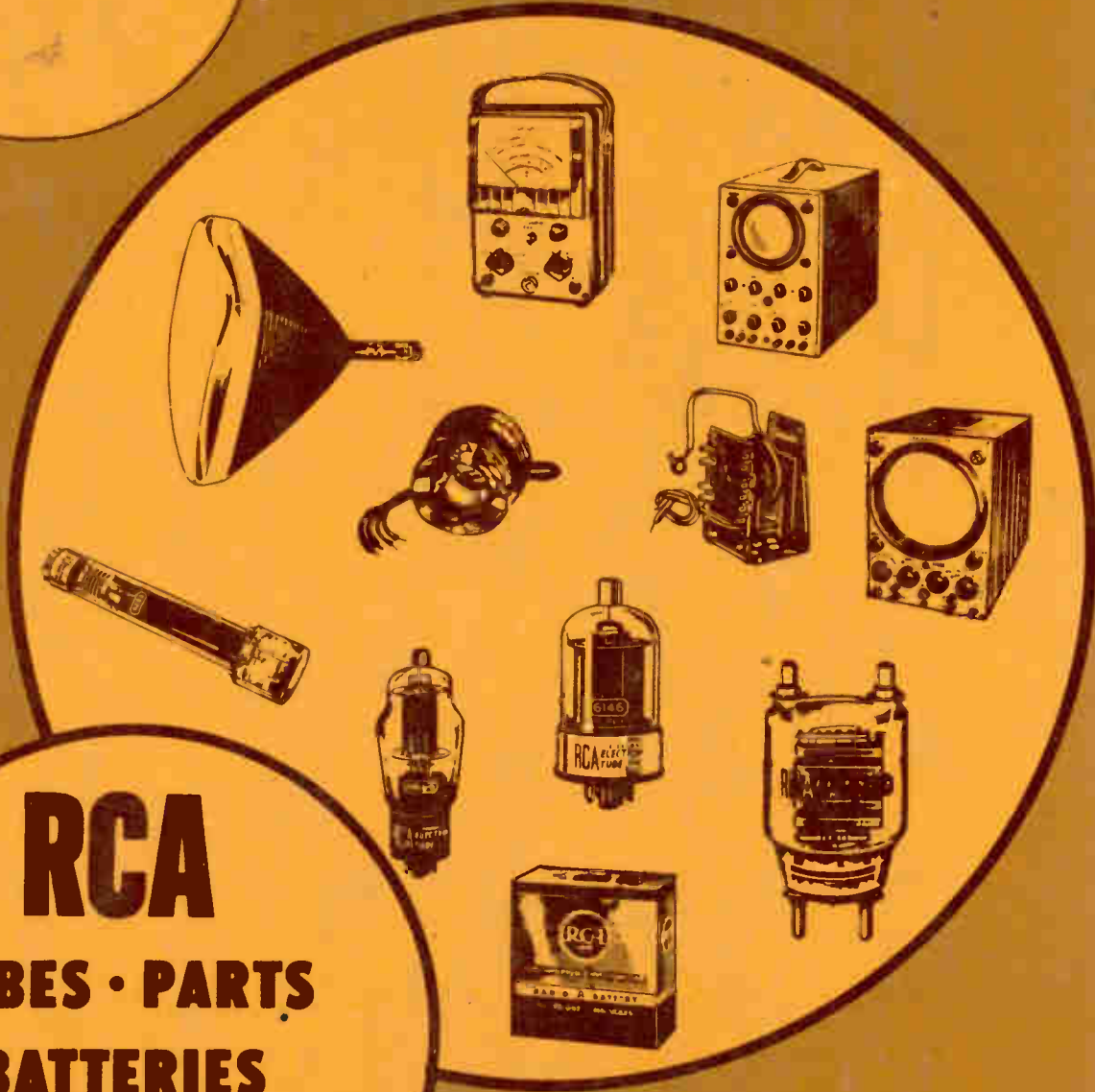
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THE RADIO-ELECTRONIC MASTER

GUIDE TO PRODUCT SECTIONS

As publishers of The Radio-Electronic MASTER, we take great pride in the fact that this publication has reflected the changes and growth of the electronic industry for more than 25 years.

The 32 Product Sections listed below broadly categorize related electronic products and services so that you can quickly compare similar items within the sections. However, to locate specific products within the catalog pages, always refer to the General Index. NOTE: Manufacturers' pages are arranged alphabetically within each section.

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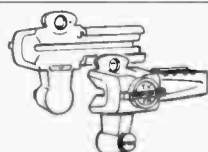
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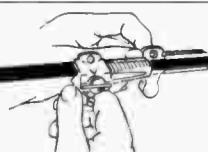


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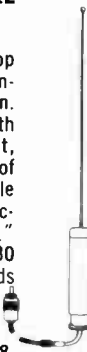




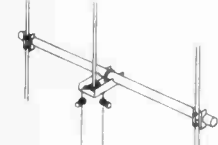

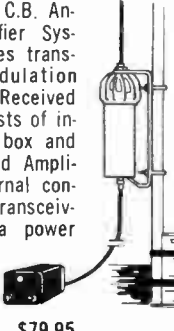





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|  <p>M-1D (102") (27 mc) Chrome plated swivel base and spring, 102" stainless steel whip. One-piece Cyclocac insulator. Complete with sealing gasket and mounting hardware. Official size. Dealer net.....\$11.97</p> <p>M-1 (102") (27 mc) Same as M-1D except swivel ball is aluminum and spring is cadmium plated. Dealer Net.....\$8.97</p> |  <p>MB24 (27 mc) Double chain bumper mount. Cadmium plated spring, 102" stainless steel whip, 20' RG-58/U cable with PL-259 connector, and whip hold-down clip. Dealer net.....\$19.05</p> |  <p>M-49 (27 mc) Center loaded cowl mount antenna provides best omnidirectional pattern. Low VSWR. Extended length 60", 43" collapsed Chrome Tubes. Rocker support assures positive ground and up to 35° mounting angle. 5' RG-58/U lead with PL-259 connectors. Dealer net.....\$9.96</p> |  <p>MAGGIE-MOBILE M-67 (27 mc) Base loaded rooftop antenna. Excellent omnidirectional pattern. Only 44" long with waterproof mount, loading coil. 12' of RG-58/U coax. cable with PL-259 connector. Mounts in 3/4" hole. Also available 30 thru 50 mc. (Exceeds 100 watts.) Dealer net.....\$15.68</p> |
| <p>MAGGIE-MOBILE M-73 (27 Mc) Trunk groove mount. Installs in seconds. No visible holes on car. Just two tiny 1/32" holes in groove of trunk lid. 12' RG-59/U cable and PL-259 connector. Also available 30-50 mc. (Exceeds 100 watts.) Dealer Net \$17.06</p>  | <p>MAGGIE-MOBILE M-74 (27 Mc) Cowl—Fender or Deck mounting. Only 44" high with professional type swivel mount allowing vertical positioning up to 35°. 12' RG-58/U cable with PL-259 on both ends. Also available 30-50 mc. (Exceeds 100 watts.) Dealer Net \$19.32</p>  | <p>M-36 (27 mc) Coaxial antenna. 1/2 wave length. Offers excellent omnidirectional pattern. Composed of 9' radiator and 9' (2" dia.) skirt. All aluminum. Exceptionally neat appearance. Dealer net.....\$19.95</p>  <p>MA-36 Same as M-36 but has jointed skirt and packaged for Parcel Post mailing. Dealer net.....\$21.00</p> | <p>M-71 (27 mc) "CB" Marine antenna. Complete with mounting pipe, "Lay-down" mount, and 15' RG-58/U cable with PL-259 connector. Does not require separate ground plate. Dealer net.....\$34.05</p>  |
|  <p>M-37 (27 mc) Vertical directional beam antenna. 7 db forward gain over ground plain with 5x power gain. 13.5 db front to back ratio. All aluminum, 18' high, 11' wide. Operates with 52 ohm cable. Dealer net.....\$45.00</p> | <p>M-81 (27 mc) The "Magnum 27" End fed, 1/2 wave length Base Station Antenna. Has an actual operating gain of 6 db through improvement of signal to noise ratio. Overall height 18'. Weighs only 10 lbs. Dealer net . . . \$28.43</p>  | <p>M-82 (27 Mc) "Black Box" C.B. Antenna Amplifier System. Increases transmitted modulation gain 10 db. Received 20 db. Consists of inside control box and Mast Mounted Amplifier. No internal connections to transceiver. No extra power line from control box to amplifier. Dealer Net \$79.95</p>  | <p>G-1 (30-50 mc) Professional antenna, includes 96" stainless steel whip, cadmium plated spring and black swivel base. Hardware furnished. Original Equipment acceptance. Dealer net.....\$18.81</p> <p>G-2 (30-50 mc) Same as G-1 except all elements are of stainless steel. Dealer net.....\$35.44</p>  |
| <p>ASPR177 (130-174 mc) 3 db gain rooftop antenna. Mounts in 3/4" hole. Doubles transmitting power. Solderless, weather-tight mount. Sealed transformer. 12' RG-58/U cable and PL-259 connector. Engineered to handle in excess of 100 watts. Dealer net.....\$24.00</p>  | <p>ASPR203 (130-174 mc) Kit to convert GE and RCA 1/4 wave length rooftop antenna to 3 db 1/2 wave length gain antenna. Construction features same as ASPR177. Lead not included. Dealer net.....\$19.50</p> <p>ASPR206 (130-174 mc) Same as ASPR203 except converts Motorola 1/4 wave length antennas. Dealer net.....\$19.50</p>  |  <p>ASP-271 (30-50 mc) 1/2 Wavelength, End-fed, 3 db Gain Omnidirectional Base Station antenna. Direct ground provides lightning protection. A short length of RG-58/U coaxial cable terminated with a constant impedance Type N male weather-proof connector. Dealer Net..... \$100.00</p> | <p>ASP-298 (130-174 mc) Heavy duty Colinear vertical omnidirectional antenna. Has 6 db gain and adequate lightning protection. Frequency must be specified when ordering. Max. power 1000 watts. Dealer net.....\$149.79</p> <p>ASP-313 (450-470 mc) Same general design as ASP-298. Power 300 watts. Dealer net.....\$80.00</p>  |

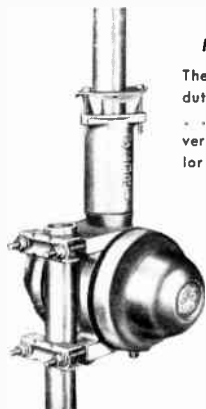
Write for: Catalog SD-144 (Mobile Listings) • Catalog SD-152 (Base Station Antenna) • Catalog SD-149 (Standard Broadcast Auto Antennas) • Stripes of Quality

CLASS
252.00
SERIES

CORNELL-DUBILIER ELECTRONICS
CDR Antenna Rotors

CDE

Automatic **ROTORS**
THE INDUSTRY'S SHARPEST TUNING ROTORS



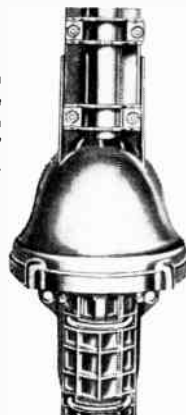
MODEL AR-1

The standard heavy duty economy model . . . the automatic version of the popular TR-11



MODEL AR-22

The rugged extra heavy duty, time tested and proven famous TR-2, NOW FULLY AUTOMATIC.



Mechanical Brake magnetically released
Quick Mounting Mast Collet
Minimum Wind Resistance
Takes Masts up to 1 1/2" O.D. — self-centering sawtooth clamps
Completely Weather Sealed . . . Factory Lubricated

AR-1 List Price \$37.95*

Powerful beyond any TV need
Handles loads to 150 pounds
Reinforced die cast housing
Mechanical Brake magnetically released
Will handle 7/8" to 2" masts
Mast, tower or platform mounting
Completely weather-sealed — factory lubricated

AR-22 List Price \$45.95*

CDR TR-11A ROTOR



Mechanical Brake magnetically released

Quick Mounting Mast Collet
Takes Masts up to 1 1/2" O.D. — self-centering sawtooth clamps
Completely Weather Sealed . . . Factory Lubricated

This model is equipped to use the Ultrasonic Remote Control System AK-122.



TR-11A List Price \$32.95*

CDR MODEL AK-122

ULTRASONIC REMOTE CONTROL SYSTEM

NO WIRES . . . NO TUBES . . . NO BATTERIES

Hand held Actuator permits instantaneous control of rotor direction from any point in a room up to 30 feet. A must for multiplex FM and color TV reception.

FEATURES:

Precise rotor control in all directions
Negligible power consumption
Can be used with CDR Rotor Models TR-2A, TR-4A and TR-11A.

AK-122 Remote Rotor Control System (Ultrasonic Control Box and Actuator) . . . List Price \$54.95*



*List Prices are subject to Dealer Discount.

HEAVY-DUTY ROTORS



TR-2A

TR-4A

CDR MODEL TR-4A . . . the most POWERFUL and dependable manually controlled DeLuxe Heavy Duty ROTOR on the market . . . complete with modern design METER CONTROL cabinet using 4-wire cable.

CDR MODEL TR-2A . . . same as TR-4A except furnished with COMPACT CONTROL cabinet with illuminated "compass pattern" dial. Uses 8-wire cable.

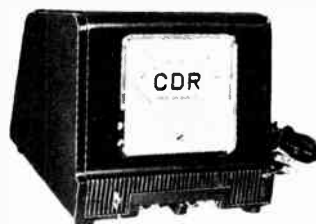
These models are equipped to use the Ultrasonic Remote Control System AK-122.

TR-2A List Price \$37.95*

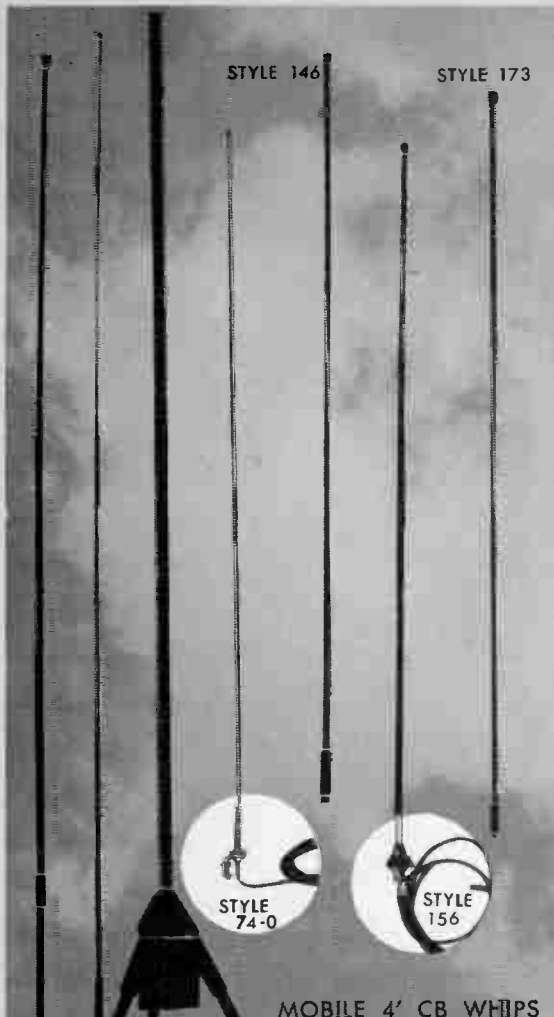
TR-4A List Price \$39.95*

CDR MODEL "HAM-M"
DESIGNED EXCLUSIVELY FOR HAMS

- A complete rotational system
- Supports 1000 lbs. of dead weight
- Super-accurate calibration
- Double-stage switch permits instant direction reading without moving rotor
- Positive brake locks rotor in position against any wind
- Will support and operate heaviest beams commercially available



HAM-M User's Net \$119.50



STYLE 146

STYLE 173



STYLE 74-0



STYLE 156

MOBILE 4' CB WHIPS

BASE STATION ANTENNAS

STYLE 72-0 LOADED COAXIAL SLEEVE for marine or fixed CB; loaded top whip, folded stub in base — 10 6/8" overall. Supplied with U-bolts, saddles to fit 1/2" mounting pipe. SO-239 UHF connector. \$39.95
 STYLE 176 — CB END-FED HALF WAVE VERTICAL whip with built-in matching network, 2 section female UHF connector. \$29.50

STYLE 61 GROUND PLANE with high strength fiberglass radiating elements, cadmium plated steel support bracket fits 1/4" pipe thread. SO-239 UHF connector. —Cutting curve furnished. \$29.50

CB (27 MC) LOADED 4' WHIPS

STYLE 74-0 DETACHABLE RAIN GUTTER Installation; cadmium plated steel hardware; Includes 9' RG 58/U coaxial cable, shielded phono plug. \$14.40

STYLE 156-1 COWL MOUNT looks, installs like ordinary car antenna; adapts for both uses by adding antenna coupler. Molded plastic ball, chrome plated cap and nut; gasket. 54" cable. \$10.50
 STYLE 156-2 —with 9' cable. \$10.95

STYLE 146 terminated with chrome plated brass ferrule, 3/8"/24 thread. \$8.95

—all have space wound loading coils molded into fiberglass around air core; flex tip-to-butt.

STYLE 173 TOP LOADED whip with Shakespeare construction; a Very Impressive Package. \$5.75

QUARTER WAVE WHIPS approximately 10% shorter*

| STYLE | 10-1 | 10-2 | 10-3 (CB) |
|--------|---------|----------|-----------|
| LENGTH | 54"-60" | 60"-102" | 96" |
| PRICE | \$5.75 | \$6.95 | \$6.95 |

BASE EXTENSIONS accommodate loading coil or attach directly to whips.

| STYLE | 29-1 | 29-2 | 29-3 |
|--------|--------|--------|--------|
| LENGTH | 18" | 27" | 36" |
| PRICE | \$4.80 | \$5.48 | \$5.82 |

—both have chrome plated brass ferrules. 3"-24 thread.

3 DB HIGH GAIN ANTENNAS double effective mobile transmitter power. —Choice, BNC or UHF plug.

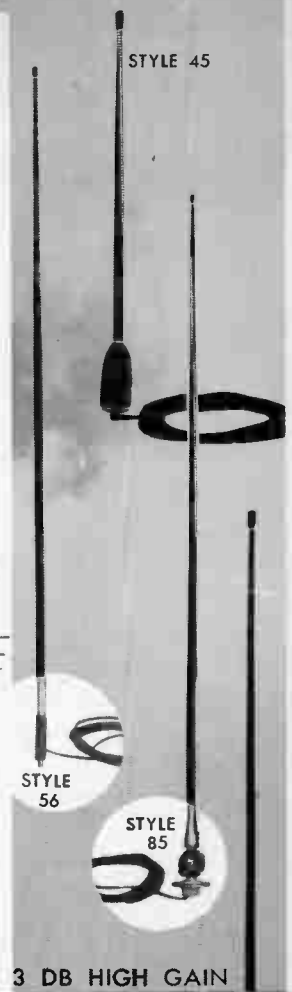
STYLE 56 COWL or BUMPER MOUNTED; cadmium plated brass ferrule; 10' RG 58/U cable. \$18.75

STYLE 85 terminates with protective ball mount thru which cable passes. 56 1/4" above surface; aluminum hardware. 10' RG 58/U cable. \$25.50

| 144-151 MC | 151-161 MC | 161-174 MC |
|---|------------------|------------------|
| STYLE 56-1, 85-1 | STYLE 56-2, 85-2 | STYLE 56-3, 85-3 |
| STYLE 45 19" ROOFTOP model; 440-470 MC. \$20.00 | | |

FIBERGLASS ANTENNAS:

Shakespeare construction seals the conductor in thousands of tiny glass fibers parallel to the axis. The clean, white surface resists weathering/won't corrode/insulates to help protect personnel.



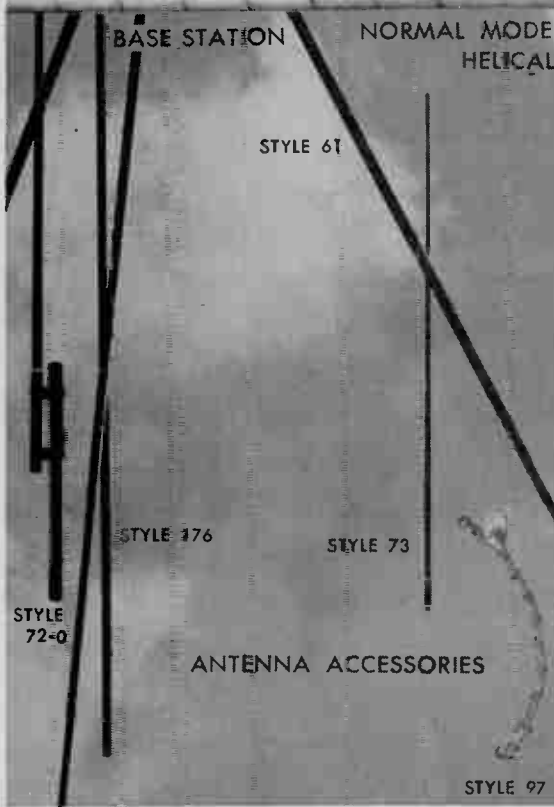
STYLE 45

STYLE 56

STYLE 85

3 DB HIGH GAIN

Shakespeare WONDEROD



BASE STATION

NORMAL MODE HELICAL

STYLE 61

STYLE 76

STYLE 73

STYLE 72-0

ANTENNA ACCESSORIES

These rugged, light-weight antennas improve reception, thru reduced precipitation static/have superior impact and flexural strength/permit shorter resonant lengths.

| RANGE | STYLE | NORMAL MODE HELICAL | shorter length distributed—load antennas mount in choice of positions. |
|--------------------|-------|---------------------|--|
| 27 MC (CB) | 73-0 | | |
| 30-35 MC* | 73-1 | | |
| 35-42 MC* | 73-2 | RANGE | STYLE RANGE |
| 42-50 MC* | 73-11 | 20 Meters | 73-5 40 Meters 73-8 |
| 10 Meters | 73-3 | 40 Meters | 73-6 80 Meters 73-9 |
| 15 Meters | 73-4 | 80 Meters | 73-7 Ch. 5 4.58 MC 73-10 |
| *Specify frequency | | | |
| 4 ft. — \$11.25 | | 6 ft. — \$15.90 | |
| 8 ft. — \$18.75 | | | |

ACCESSORIES

STYLE 95 MARINE STAND-OFF BRACKETS for Style 72; easy-release, insulated latches. pr. \$8.00

STYLE 97 rugged, no-holes BUMPER MOUNT for mobile whip. Adjust to bumper size, style; attach in minutes. Low loss molded insulator. \$7.50

UNIVERSAL SWIVEL BASE MOUNTS — STYLE 70-1 aluminum ball has locking ring, serrated faces for positive adjustment; low-loss molded fiberglass insulator plate; mounts water-tight on flat or curved surface. \$7.95
 STYLE 155 die cast heavy duty, painted metal. \$5.95

BARREL BASE SPRINGS —STYLE 71-1 standard cadmium plated. STYLE 100 provides cable pass thru; for use with Style 85 antenna. each \$4.50

COLUMBIA PRODUCTS COMPANY
 COLUMBIA S. C. Subsidiary of Shakespeare Co.

MOBILE WHIP

STYLE 29

STYLE 10

STYLE 97

STYLE 95

STYLE 70-1

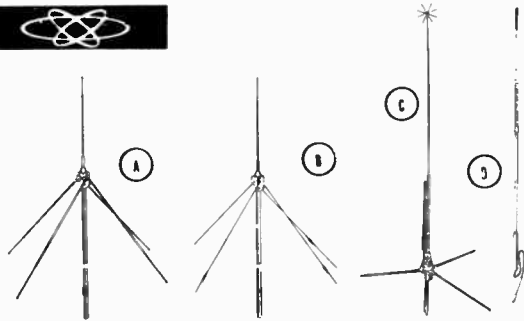
STYLE 155

STYLE 71-1

STYLE 100



CITIZENS BAND ANTENNAS and ACCESSORIES



(A) **GROUND PLANE ANTENNA KIT ROD RADIAL TYPE**—Complete Base Station Antenna, pre-assembled and including mast, cable and all hardware. No guy wires. Radial elements are durable aluminum tubing. For use with chimney, wall or tripod mount.

Cat. No. 29-740 Net \$25.50

(B) **GROUND PLANE ANTENNA KIT RADIAL WIRE TYPE**—Base station antenna kit—including mast, co-ax cable and all hardware. Most parts are pre-assembled average installation time is 1/2 hour. 4 guy wires act as "ground plane."

Cat. No. 29-730 Net \$23.85

(C) **COLINEAR GAIN GROUND PLANE ANTENNA**—3.4 Db Gain: Doubles effective radiated power of your Citizens Band transceiver in all directions... achieves gain through concentration of power at lower angles to the horizon, both receiving or transmitting.

Cat. No. 29-748 Net \$29.97

(D) **END FED DIPOLE BASE STATION ANTENNA**—Requiring no radial wires or elements. More economical and easier to install than most co-axial antennas. A full half-wave two section aluminum radiator, 17 ft. long for above average efficiency.

Cat. No. 29-734 Net \$21.95



(E) **102" STAINLESS STEEL TAPERED WHIP**—High-impact, flexible whip made of selected alloy. Standard threaded fitting used with body mount or bumper mount.

Cat. No. 29-700 Net \$6.90

(F) **100" STAINLESS STEEL TAPERED WHIP**—Same as 102" Whip #29-700, but designed for use with flexing spring type body mount or bumper mount.

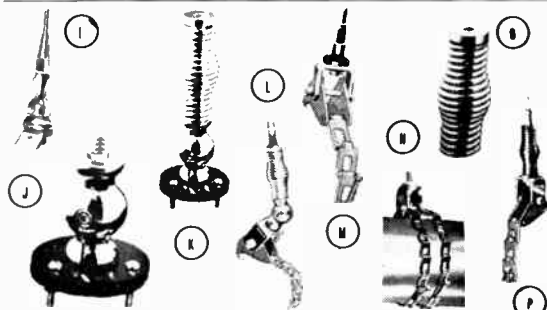
Cat. No. 29-702 Net \$6.90

(G) **"TEL-COIL" WHIP (Pat. Pend)**—48" tapered fibre glass whip, "loaded" type. Step-taper wound helical conductor is superior to other "short" Whips which use base or center loading coils. Standard threaded fitting for any body or bumper mount, truck lid mount.

Cat. No. 29-710 Net \$7.20

(H) **CITIZENS WHIP**—Chrome-plated whip designed for transceiver mounting. High efficiency base loading coil completely enclosed in polypropylene plastic. With PL-259 connector.

Cat. No. 29-708 Net \$5.97



(I) **TRUNK LID MOUNT**—Unique mount requiring no outside holes on car. Designed specifically for "Telcoil" 29-710 antenna, but may be used with other short "whips." Cat. No. 29-716

Net \$3.30

(J) **BODY MOUNT**—Heavy-duty, chrome plated body mount fastens to side, cowl, or fender. Ball swivel provides all angle adjustment, from vertical to horizontal.

Cat. No. 29-718 Net \$4.80

(K) **BODY MOUNT**—Same as Body Mount #29-718 except this model is supplied with flexing spring #29-276. Cat. No. 29-720

Net \$8.40

(L) **BUMPER MOUNT**—With swivel joint and spring for cars where bumpers do not protrude sufficiently for standard mount. Cat. No. 29-728

Net \$15.45

(M) **BUMPER MOUNT**—Durable, chrome plated chain type bumper adjusts to most bumpers from sports car to truck. Cat. No. 29-722

Net \$7.95

(N) **BUMPER MOUNT**—Double chain mount for greater stability.

Cat. No. 29-723 Net \$19.80

(O) **FLEXING ANTENNA SPRING**—Tapered, heavy-duty, chrome plated steel spring built-in flexible center conductor. Cat. No. 29-726

Net \$3.90

(P) **BUMPER MOUNT**—Same as Bumper Mount #29-724 except this model includes flexing spring #29-726. Cat. No. 29-724

Net \$11.85

CABLE ASSEMBLIES—Made of RG 58/U cable, terminated on one end with PL 259 plug, other end stripped and terminated with lugs.

| Cat. No. | Length | Net |
|----------|--------|--------|
| 29-760 | 6 ft. | \$2.91 |
| 29-762 | 10 ft. | 3.21 |
| 29-764 | 15 ft. | 3.57 |

CALL LETTERS—Metal foil, pressure sensitive labels to mark mobile station with FCC call letters. Set of 78 numerals plus two "W's" Characters 3/4" high.

| Cat. No. | Descrip. | Net Per Set |
|----------|-------------------------|-------------|
| 29-776 | Gold Letters on White | \$1.20 |
| 29-778 | Silver Letters on Black | 1.20 |

DIS-CONNECT—Remove mobile whip antennas in two seconds—without tools. Incorporates bayonet lock device... made of stainless steel.

Cat. No. 29-772 Net \$2.97

INSULATOR REPLACEMENT—Replacement insulator for Ground Plane Antennas No. 29-744 and 29-746. Also general purpose insulator.

Cat. No. 29-738 Net \$.60

ANTENNA CONNECTOR—For connections on auto antennas and ground lines.

Cat. No. 1747 Net \$.16

AUTO ANTENNA PLUG—Shielded positive connector plug, same as used on Motorola and other radios.

Cat. No. 1740 Net \$.11

ANTENNA CONNECTOR JACK—Shielded type jack fits No. 1740 plug for auto antenna and phonograph connections.

Cat. No. 1741 Net \$.15

GENERATOR NOISE SUPPRESSOR—Reduce generator noise when motor is accelerated. For Citizens and three Amateur bands. 3 minutes to install.

Complete with Mounting Bracket and Instructions.

Cat. No. 65-510 Net \$2.95

ADAPTERS—Adapts a PL 259 plug to a phono pin (RCA type) plug.

Cat. No. 29-784 Net \$.45

ADAPTER—Adapts a SO 239 Socket to a standard auto radio (Motorola type) socket.

Cat. No. 29-786 Net \$.45

ADAPTER—Adapts a standard auto radio (Motorola type) plug to a phono pin (RCA type) plug.

Cat. No. 29-788 Net \$.24

GUTTER CLAMP—Holds long whip antennas down when not in use. Fastens easily to drain rails on any car.

Cat. No. 29-770 Net \$.99

5 FT. TOWER—Self supporting. Made of electro galvanized tubing. Folds and unfolds like an umbrella.

Cat. No. 9143 Net \$9.54

CITIZENS BAND COUPLER—Use any Citizens Band mobile antenna for both Citizens Band and AM broadcast. Complete with SO-239 coaxial chassis receptacle for attachment of Citizens Band antenna. 2-ft. lead and auto plug for connecting broadcast radio and two feet of lead with PL-259 coaxial plug for C-B transceiver.

Cat. No. 29-824 Net \$8.97

FUSE CONNECTOR (Regular Type)—Same as used on auto radios and other equipment. 2 1/2" long x 3/8" diam. For 1/4" fuses.

Cat. No. 1749 Regular Fuse Connector Net \$.18

JUMBO FUSE HOLDER—Large size fuse holder, 2 1/4" long x 1/2" dia. 14 amps.

Cat. No. 1748 Jumbo Fuse Holder Net \$.17

REPLACEMENT PARTS FOR ANTENNA AND FUSE CONNECTORS

| Cat. No. | Net |
|---|--------|
| 1791 Sleeve of Fuse Connector | \$.04 |
| 1792 Sleeve of Antenna Connector | .02 |
| 1793 End piece for Antenna and Fuse Connector | .03 |
| 1796 Spring for Antenna and Fuse Connector | .01 |
| 1795 Bakelite Bushing | .02 |

PL-259 CONNECTOR—To mate with Adapters 29-780, 29-782, 29-784, 29-786. For use with RG-/U cables 8-9-10-11-12-13-58-63-65.

Cat. No. 29-790 PL-259 Connector Net \$1.05

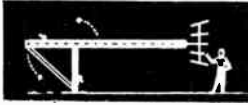
RIGHT ANGLE ADAPTER—For attaching Tel Coil Whip #29-710 or similar antenna to base station. Fits all transceivers using PL 259 plug. Makes base station antenna where it is impractical to install a roof-top antenna or where base station has to be movable.

Cat. No. 29-780 Net \$3.45

ADAPTER—Adapts a PL 259 plug to a standard auto radio (Motorola type) plug.

Cat. No. 29-782 Net \$.45

GC HAS A COMPLETE LINE OF
C-B CONDENSER AND SUPPRESSORS
Write for Catalog
GC ELECTRONICS, ROCKFORD, ILL.

E-Z Way**AMATEUR & TV TOWERS****First in • DESIGN • DEPENDABILITY • SALES****CRANKS UP & DOWN TILTS OVER NO CONCRETE NO GUYS 55,000 PSI STEEL**

Wonder Ground Post: E-Z Way Ground Post mounting revolutionizes the installation of "tilt-over" towers. Minimum yard space, not concrete, stays plumb. Stabilizing fins below grade, insure a solid setting under most ground conditions. Eliminates use of concrete.

**MODEL HD-40**

Maximum tower height, 38 ft.; minimum height 21 ft. Here is low cost E-Z Way quality. Supports light beams, ground planes, and quads in 60 mph winds when cranked up, 125 mph wind cranked down. No Guys! Rotor mounts above tower. Mounting stub and heavy-wall galv. steel mast 1.32 O.D. supplied. Two 20 ft. sections, top sect. #7, bottom sect. #9.
 HD-40P ----- \$ 99.50
 HD-40G ----- 134.50
 GPK-D-40 Ground post mounting kit w/hardware ----- \$50.00
 BAK-D Wall bracket mounting kit ----- \$6.75

MODEL RBS-40

Standard duty tower. Maximum height 41 ft., minimum height 24 ft. Supports triband beams or equivalent at 41 ft. in 60 mph wind cranked up and 125 mph wind cranked down. No Guys! Accepts CDR-Ham-M rotor inside rotor head. 1.5 O.D. x 7 ft. steel mast supplied. Two 21 ft. sections. Top sect. #9, bottom sect. #12, plus rotor head.
 RBS-40P ----- \$169.50
 RBS-40G ----- 209.50
 GPK-S-40 Ground post mounting kit w/hardware ----- \$75.00
 BAK-S-40 Wall Bracket mounting kit ----- \$10.50

FINISHES

All towers are finished in a choice of dip paint Goodyear Pliolite S-5 or Hot Dipped Galvanized after fabrication. This method permits a permanent finish to coat inside tower members as well as outside. Galvanizing in accordance with American Society of Testing Materials, Designation A-123.

Write for free catalog, state make and model of antenna and rotor.

**MODEL RBX-40**

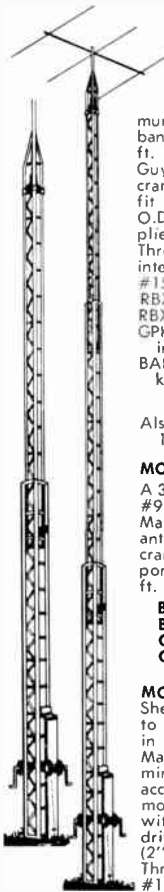
Heavy Duty tower. Maximum height 41 ft., minimum height 25 ft. Supports 4 el. 20M full or 9 el. triband at 41 ft in 90 mph winds. No Guys! Stack 3 el. 15M & 3 el. 20M in winds up to 60 mph at 40 ft. Rotor mounts inside head. Two 21 ft. sections. Top sect. #12, bottom sect. #15 plus rotor head.
 RBX-40P ----- \$245.00
 RBX-40G ----- 315.00
 GPK-X-40 Ground Post mounting kit w/hardware ----- \$105.00
 BAK-X Wall Bracket mounting kit ----- \$17.00

MODEL RBS-50

Standard duty tower. Maximum height 51 ft., minimum height 30 ft. Supports a 3 el. Triband at 51 ft. in winds up to 60 mph. No Guys! Rotor mounts inside. Two 26 ft. sections. Top sect. #9, bottom sect. #12 plus rotor head.
 RBS-50P ----- \$224.50
 RBS-50G ----- 279.50
 GPK-S-50 Ground Post mounting kit w/hardware ----- \$90.00
 BAK-S Wall Bracket mounting kit ----- \$10.50

MODEL RBX-60-3

Super construction puts your beam where you want it. Maximum tower height 58 ft., mini-



um height 25 ft. Supports tri-band beams or equivalent at 60 ft. in winds up to 60 mph. No Guys! 140 mph winds when cranked down. CDR-Ham-M rotors fit in special head mount. 1.90 O.D. x 7 ft. galv. steel mast supplied.

Three 21 ft. sections. Top sect. #9, intermediate #12, bottom sect. #15 plus rotor head.
 RBX-60-3P ----- \$335.00
 RBX-60-3G ----- 410.00
 GPK-X-60-3 Ground Post mounting kit w/hardware ----- \$120.00
 BAK-X Wall Bracket mounting kit ----- \$17.00

Also available in 70, 85, 100, 115, 145 & 175 ft. tower heights.

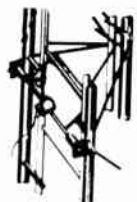
MODEL 6046

A 3 sect. tower using #7 top sect., #9 center sect., #12 bottom sect. Maximum tower height 55 ft. — antenna height 60 ft. Tower cranks down to 22 ft. Will support a 2 or 6 Meter beam at 60 ft. No Guys!

BA-6046P ----- \$199.50
 BA-6046G ----- 259.50
 GP-6046P ----- 264.00
 GP-6046G ----- 324.00

MODEL TORBZ-66-3G

Sheer brute strength with plenty to spare. Stacked arrays at 66 ft. in 70 mph winds without guys! Maximum tower height 62 ft.; minimum height 25 ft. Rotor head accepts CDR-Ham-M rotor without modification. Comes complete with tilt-over post, 2 worm gear drive winches and all hardware, (2" O.D. mast additional.) Three sections. Top sect. 21 ft. #12, intermediate sect. 21 ft. #15, bottom sect. 25 ft. #20 plus rotor head. (Galvanized only.)
 TORBZ-66-3G ----- \$985.00

E-Z WAY ACCESSORIES**ROTOR HEAD****SAFETY REST****BUILDING ATTACH KIT****WORM GEAR WINCH****NEW!**

Motor driven worm gear winch with remote push button control permits raising and lowering of tower without leaving transmitter. Tower-height is given in ft. on beautifully finished console height meter. Precision made finest material — compliments any ham shack. Hermetically sealed motor winch is located at base of tower. Special spring tension drums take up slack on coax and rotor leads. This unit is particularly suited for larger E-Z Way crank-up series but may be used on any E-Z Way crank-up tower. For present owners of E-Z Way Towers, adapter kit available. Specify model when ordering. Motor has 2 limiter switches.

E-Z WAY TOWERS, Inc.**TAMPA 5, FLORIDA**

E-Z Way**COMMERCIAL
TOWERS****2 WAY
AM - FM****RADAR
MOBILE****MICROWAVE
BROADCAST**

55,000 PSI STEEL: All E-Z Way towers are made with 55,000 PSI steel tubing, coupled with proven E-Z Way design, to provide rugged, lightweight, dependability.

G-Series

G-10 . . . Tower is sturdy, economical and may be safely erected up to 40 ft. unguyed or 210 ft. guyed. Comes in 10 ft. sections that weigh 31 lbs. for easy 2-man erection. High strength 55,000 PSI Steel — is used throughout. Completely electric arc welded and Hot Dipped Gal. after fabrication. X-Type bracing and climbable ladder on 3 sides provide rugged resistance against twist & torque. Choice of 8 taper top sections and assorted base mounts and building brackets.

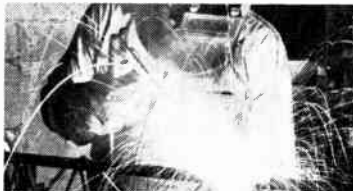
Dealer Net ----- \$16.95 per section



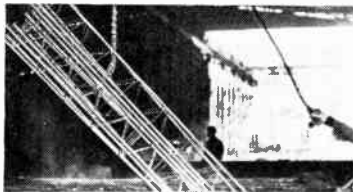
**THE G-40 TOWER IS
PARTICULARLY SUITED
FOR TWO WAY USE.**

G-40 . . . Rugged construction. Particularly adapted for 2-Way. 10 ft. section weighs 51 lbs. Easily erected to 50 ft. unguyed or 300 ft. guyed. 55,000 PSI Steel, completely electric arc welded and Hot Dipped Gal. after fabrication. Diagonal bracing and climbable ladder on 3 sides. Choice of 8 top sections and assorted base and building mounts.

Dealer Net ----- \$30.95 per section



Electric Arc Welded in accordance with the requirements of the American welding society standard code.



Hot Dipped Galvanized after fabrication in accordance with the American Society of Testing Materials A-123.

C-Series

C-12 . . . Comes in 20 ft. sections and may be worked up to 40 ft. above guys, 25 ft. to 40 ft. guy spacing. Maximum height 190 ft. Fast easy erection with first 60-80 ft. which may be set as one unit. Continuous diagonal bracing resists twist and torque. Ladder on one side for easy access to top. Flange type connections have 3 bolts and can be welded for low resistance path from top to bottom of tower. 12" cross sections.

20 ft. section ----- \$48.50 painted
63.50 galvanized

C-15 . . . Similar to above but more ruggedly constructed for greater heights. Sections, 20 ft. lengths and may be worked 50 ft. above guys, 30 ft. to 45 ft. guys spacing. Maximum height 250 ft.—40# tower. Flange can be welded for low resistance path from top to bottom of tower. May be used as vertical radiator. 15" cross sections.

20 ft. section ----- \$65.00 painted
85.00 galvanized

C-200 . . . Super construction. Designed for heights up to 400 ft. 20 ft. sections may be worked 60 ft. above guys. 40 ft. - 60 ft. guy spacing. Flange can be welded for low resistance path top to bottom of tower. Ideal vertical radiator. 20" cross sections.

Write for quote.

**NEW
Stack Pole**

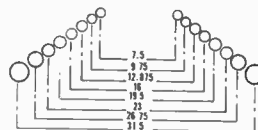
The new Stack Pole series tower is designed to cover a wide field of tower uses by using a combination of sections to fill your specific need. Self supporting up to 200 ft. Ideal for Broadcast, Microwave and Two Way. The eight top sections, 10 ft. each, are step type construction completely arc welded. These 10 ft. sections will nest together into a single 10 ft. package for shipping. Taper top portion is "knock down" construction in 20 ft. sections. All step sections and first three "knock down" taper sections are made of 55,000 PSI tubular steel. Larger taper sections, "KD" construction, of tubular legs and angle iron bracing. Tower can be assembled to support any size antenna and can be rated to withstand 30 lbs. or 40 lbs. of wind load. Specify size of antenna and wind load. The step sections are ideal items as stock items.

Towers are available in any height from 30 ft. to 200 ft., for any size antenna load up to 2 10 x 15 reflectors and either 30 or 40 lb. wind load. Prices shown below are for small antenna and 30 lb. wind load.

| | |
|------|----------|
| 30' | \$ 81.35 |
| 50' | 178.05 |
| 80' | 421.45 |
| 100' | 659.95 |
| 120' | 935.45 |
| 140' | 1285.95 |
| 160' | 2060.45 |

Above prices include foundation section.

| O.D. WALL | |
|-----------|-----|
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |
| 7.25 | 100 |



Erection Service in South East U.S.A.

E-Z WAY TOWERS, Inc.

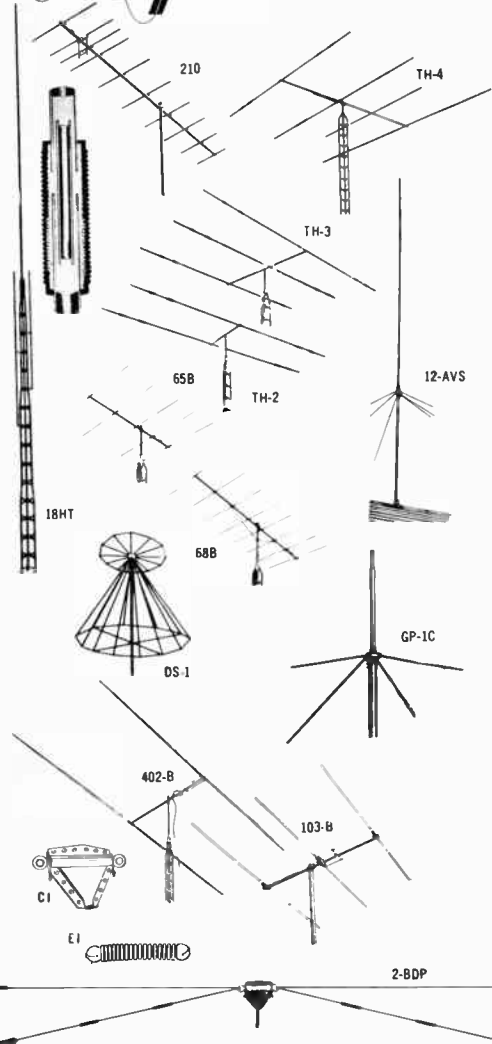
TAMPA 5, FLORIDA

Hy-gain

ALL WEIGHTS SHOWN ARE SHIPPING WEIGHTS.

Amateur Communication Antennas

ALL PRICES SHOWN ARE HAM NET



- TRAP TRIBANDERS**
- 4-Element Thunderbird.** For 10-15-20M. 2" OD, 1 1/4" telescoping to 3/4" elements, aluminum. Longest element 32 ft. Full size elements, full size boom spacing 16 ft. Interlaced 4th element for higher gain and F/B. Model TH-4: 42 lbs. **\$117.50**
 - 2-Element Thunderbird.** For 10-15-20M. Boom 14 ft., longest element 26 ft. 2" OD boom. Elements telescoping 1 1/4-3/4". 100% rustproof. Less than 2:1 SWR. Model TH-3: 36 lbs. **\$99.75**
 - 2-Element Thunderbird.** For 10-15-20M. Light wt., easy to install most anywhere, but same top construction as the TH-3. Rotates easily with TV-rotator. Boom 6 ft., longest element 26 ft. Model TH-2: 23 lbs. **\$69.95**

- DUO-BANDERS**
- 20-40M Beam.** 3 Element 20, 2 Element 40, single 52 ohm feed. Linear loading, no traps. Longest element 44 ft.; Boom 20 ft. Model DB-24. 64 lbs. **\$169.50**
 - 6-2M Beam.** 4 Element 6, 18 Element 2, single 52 ohm feed. Boom 10 ft.; longest element 10 ft. 8.0 db gain on 6, 15.0 db gain on 2. Model DB-62. 6 lbs. **\$32.95**
 - 10-15M Beam.** 3 Element 10, 3 Element 15. 52 ohm feed. Model DB-10-15. **to be announced**

- TRAP VERTICALS**
- 10-20M Vertical.** Self-supporting. 13.5 ft. high. Factory pretuned. SWR 2:1 or less. Weatherproof nylon base assembly. 52 ohm coax fed. Model 12-AVS: 9 lbs. **\$21.95**
 - 10-40M Vertical.** Includes Hy-Gain Capacity Hat and nylon base mount. 21 ft. high. 1/2-wave marconi resonance each band. Model 14-AVS: 10 lbs. **\$29.95**
 - 10-80M Hy-Tower.** No traps. 52 ohm coax fed. 24 ft. tower, 2"-3/4" OD aluminum mast extends to overall 50 ft. Self-supporting. X-braced tower 15" at base. Model 18HT: 105 lbs. **\$139.50**
 - 12AVS Roofmount Kit, Model 12 RMK:** 7 lbs. **\$ 9.50**
 - 14AVS Roofmount Kit, Model 14 RMK:** 9 lbs. **\$11.95**
 - LC80, 80M Loading Coil for 14AVS:** 1/2 lb. **\$ 7.95**
 - 6MK, 6M Add Kit (12 or 14AVS):** 2 lbs. **\$ 4.95**

- VHF BEAMS**
- 8-Element, 6M Beam with Beta Match for 12.1 db gain, 25 db F/B.** Rotate with TV Rotator. Boom 18 ft. Longest element 9'8". Factory pre-assembled. Model 68B: 13 lbs. **\$32.95**
 - 5-Element, 6M Beam with Beta Match for 9 db gain, 25 db F/B.** Rotate with TV Rotator. Boom 9 ft. Longest element, 9'8". Model 65B: 8 lbs. **\$18.95**
 - 9-Element, 2M Beam.** Light weight. Factory pre-tuned. Coax or parallel fed. Boom 5'4". Longest element 4'3/4". 9 db gain. Model 25: 3 lbs. **\$8.95**
 - 10-Element, 2M Beam.** 13.4 db gain with excellent F/B characteristics. Boom 12 ft. Longest element 4'3/4". Coax or parallel. Model 210: 6 lbs. **\$14.95**
 - 11-Element, 1 1/4M Beam.** 220mc beam, boom 12 ft. Longest element 27". Folded ratio dipole. Hi-Q design. 14.2 db gain. Model 111: 5 lbs. **\$13.95**
 - 13-Element, 3/4M Beam.** Highest gain of 16.1 db. Boom 8 ft. Longest element 13'4". Model 313: 3 lbs. **\$12.95**
 - Dual Stacking Kit (2-VHF Beams) Model DS:** 1 1/2-3 lbs. **\$ 4.95**
 - Dual Stacking Kit (4-VHF Beams) Model QS:** 4-8 lbs. **\$15.95**
 - Stacking Frame (for 4-Stacked Beams) Model SF:** 30-45 lbs. **\$39.50**
- Specify Beam Model Number when Ordering

- MONOBANDERS**
- 10-Meter Monobander.** Full size, easily installed and rotated by TV Rotator. Boom 8 ft. Longest element 17 ft. 8 db gain. 25 db F/B. Model 103-B: 12 lbs. **\$32.95**
 - 15-Meter Monobander.** Full size, 2" OD boom 12 ft. Longest element 23 ft. Rotate with heavy duty TV Rotator. 8 db gain 25 db F/B. Model 153-B: 19 lbs. **\$38.50**
 - 20-Meter Monobander.** Full size, "full spacing". 16 ft. boom. Longest element 35 ft. Massive all-aluminum construction. 8 db gain. 25 db F/B. Model 203-B: 35 lbs. **\$65.95**
 - 40-Meter "Hy-Seven".** 2-Element, longest element 42 ft. Boom 16 ft. High efficiency linear loading. No coils. Model 402-B: 40 lbs. **\$99.75**

- MULTIBAND DOUBLET**
- 10, 15 & 20M Doublet.** Trapless. Unlimited power. Model 2BDP: 2 lbs. **\$19.95**
 - 10, 15 & 20M Doublet.** Matched Slim Traps. 500w AM, 1kw PEP. Model 3BDT: 3 lbs. **\$17.50**
 - 10-40M Doublet.** Slim Traps. 500w AM, 1kw PEP. Model 4BDT: 4 lbs. **\$24.50**
 - 10-80M Doublet.** Slim Traps. 500w AM, 1kw PEP. Model 5BDT: 5 lbs. **\$34.95**
 - Center Insulator.** Model CI: 8 oz. **\$3.95**
 - End Insulator.** Model EI: 3 oz. **\$1.00**

- GROUND PLANES**
- Heavy duty commercial construction. Radiator and ground plane elements heat-treated aluminum alloy. Hardware iridite treated. Cyclocac base insulators adjust to mast 3/4"-1 1/4". - Better than 1:2:1 SWR. Omnidirectional radiation pattern, unity gain. 52 ohms.
 - 25-30mc Ground Plane.** Easy assembly. Telescoping radiator and radials, 7/8"-3/4". Model GP-1C: 10 lbs. **\$32.70**
 - 50-88mc Ground Plane.** Telescoping radiator and radials 7/8"-3/4". Model GP-2C: 7 lbs. **\$21.90**
 - 100-500mc Ground Plane.** Radiator, radials solid 1/4" dia. aluminum rod. Model GP-3c: 4 lbs. **\$14.97**
 - Discone.** Vertically polarized, omnidirectional broad band antenna, 50-500 ohms, without adjustments. Unity gain, low angle radiation. SWR less than 1.5:1. Heat treated aluminum elements. Model OS-1: 9 lbs. **\$29.97**

- MOBILE**
- 96" Whip.** Top quality stainless steel. 3/8-24 stud. Model W-96. 1 1/4 lbs. **\$6.90**
 - 72" Whip.** Top quality stainless steel. 3/8-24 stud. Model W-72. 3/4 lb. **\$6.30**
 - 60" Whip.** Top quality stainless steel. 3/8-24 stud. Model W-60. 3/4 lb. **\$6.00**
 - Base Extension.** 36" Chrome plated 3/4" OD steel tube for extending base of whip. Model M-36. 2 lbs. **\$5.25**
 - Standard Body Mount.** Cad. plated split ball type. Model BDYS. 1 lb. **\$3.03**
 - Heavy Duty Mount.** Chrome plated split ball type. Model BOY. 1 1/2 lbs. **\$4.77**
 - Standard Spring Mount.** Taper ground, Cad. plated. Model SPGS. 1 1/2 lbs. **\$2.04**
 - Heavy Duty Spring.** Taper ground, chrome plated. Model SPG. 2 lbs. **\$4.77**
 - Bumper Mount.** Heavy duty stainless steel strap. Model BPR. 1 1/2 lbs. **\$6.57**

- HY-LITE**
- "On the Air" Indicator.** 4x8" oval plastic, bulb included. Model HL. 2 lbs. **\$8.95**

- BALUNS**
- Model BN-12. 52 ohm unbalanced to balanced 13-30mc, 1kw. 3 lbs. **\$13.50**
 - Model BN-24. 52 ohm unbalanced to balanced 7-15mc, 1kw. 3 lbs. **\$13.50**
- HALOS**
- 2M Halo.** 14" dia. heavy wall 1/2" aluminum tubing, cyclocac bracket. Factory pre-tuned. Model HH-2B. 1 1/2 lbs. **\$5.95**
 - 6M Halo.** High mechanical stability, 1" dia. al. tubing. Model HH-6B. 5 lbs. **\$12.95**
 - Mobile Mounting Mast for either halo.** Model HMB. 3 lbs. **\$4.95**
 - Stacking Kit for two 2-Meter Halos.** Model HHS-2B. 1/2 lb. **\$4.95**

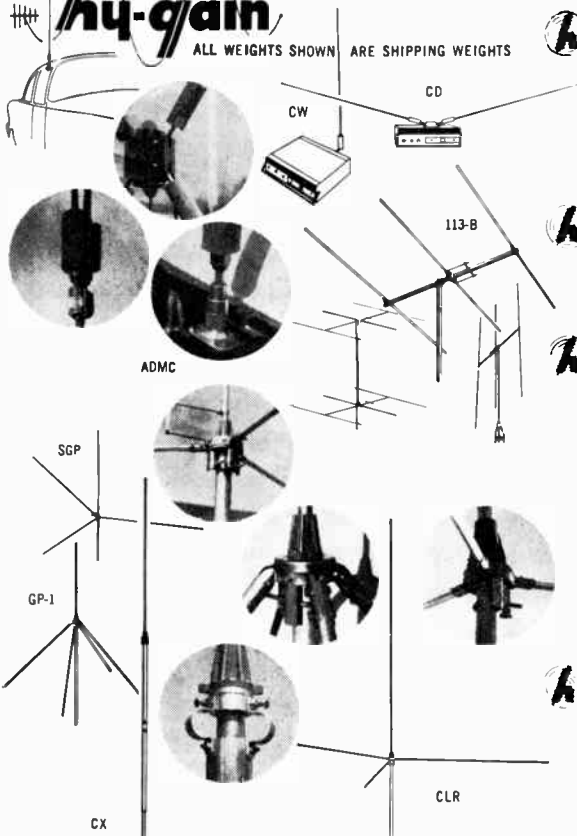
- ROTOBRAKE**
- Spring actuated, solenoid released braking unit. High capacity starting motor. Limit switches. Mounts internally in steel tower 10-18" inside clearance. Great Circle wall map indicator, 16" dia. Moving wedge of light shows beam direction. Available centered West, Midwest, East. Compass rose for other countries. Control box. Model RBX-1: 47 lbs. **\$199.95**

- Mounting Kit for tower less than 10" dia. Model XK-1: 22 lbs. **\$34.50**
- Mounting Kit for pole or pipe masts. Model XK-2: 24 lbs. **\$34.50**
- Mounting Kit for telephone pole masts. Model XK-3: 26 lbs. **\$34.50**
- RC-9 9 Conductor Rotor Cable - 100 ft. spool. 8 lbs. **\$12.00**

WRITE FOR LATEST FULL LINE HY-GAIN CATALOG

14-gain

ALL WEIGHTS SHOWN ARE SHIPPING WEIGHTS



Antennas for Citizens Band

ALL PRICES SHOWN ARE NET

CLOSE RANGE

Citizens Whip. Telescoping 45" to 15" chrome plated whip for transceiver mounting. Efficient polypropylene base loading coil. Swivel joint. Model CW. Wt: 1 lb.

\$5.97

Auto Door Mount. Adapts Citizens Whip for mobile. Attaches to door top easily, quickly. 12 ft. RG-58/U coax. Model ADMC. Wt: 1 lb.

\$8.97

Citizens Dipole. Efficient "Rabbit Ears", telescoping 45" to 15". Suction cup mounting on transceiver, windows, etc. Drients vertically or horizontally. L-matching network. Model CD. Wt: 1 1/2 lbs.

\$13.17

3-ELEMENT BEAM

Highest gain (9 db) commercially manufactured antenna for Citizens Band. F/B Ratio: 25db. F/Side Ratio: 40db. 2" OD aluminum boom 8 ft. long. 16 1/2 ft. elements. Maximum weather resistance. Perfect 50 ohm match, factory pre-tuned. May be rotated by TV rotator. May be mounted vertically or horizontally. Model 113-B.

\$31.50

Stacking Kit. Includes cross boom phasing harness and assembly hardware for two vertical 113-B's. Wt.: 12 lbs. Model 113-S.

\$59.85

BASE STATION

Standard Ground Plane. Maximum efficiency, lowest cost. Radiator & radials 3/8" OD aluminum tubing. Cyclocac plastic base for masts up to 1 3/8" OD. Tuned & matched for 52 ohm coax. Model SGP. Wt: 5 lbs

\$16.17

Heavy Duty Ground Plane. Radiator & radials 7/8" - 3/4" OD aluminum tubing. Departure angle adjusted for perfect 50 ohm match. Cyclocac base assembly for masts up to 1 3/8". Model GP-1. Wt: 10 lbs.

\$26.25

Coaxial Antenna. For inconspicuous roof or side mounting. Half-wave sleeve antenna, 3/8" OD aluminum tubing radiator, 2" OD aluminum sleeve. Easy to mount std. 1 1/4" mast or 1" ID plumbers pipe. Model CXL. Wt. 7 1/2 lbs.

\$19.95

Colinear Ground Plane. Three-quarter wave length ground plane concentrates power at lower angles to horizon and doubles radiated power (3.4db gain). Precision matched, tuned for 52 ohm coax. 20 ft. height. Radiator 1 1/4" OD to 3/4" OD heavy wall aluminum tubing. Radials 9 ft. 3/8" OD tubing. Cyclocac base insulator. Model CLR. Wt: 15 lbs.

\$29.97

MOBILE

Base Mount/Spring/Whip Assembly. Cad Plated swivel mount, spring, and 106" steel whip. Model BSW.

\$8.97

Full Size Quarter Wave Whip. Stainless steel 102" whip. 3/8x24 cad. plated base stud. Model W-102. Wt.: 1 1/4 lbs.

\$4.35

Base Loaded Rooftop Whip. Includes mount and solderless connector. Model CMR. Wt.: 1 lb.

\$8.97

Reduced Size "Topper" Whip. Top loaded stainless steel whip with polyethylene enclosed coil capsule fused to same diameter whip. 50" overall. Radiation resistance 50 ohms for perfect match. Chrome plated, single hole top mounting body mount. Model TLW-M. Wt.: 1 lb.

\$8.95

Same as Model TLW-M, but with 3/8x24 stud. Model TLW. Wt.: 3/4 lb.

\$6.96

Telescoping "Topper" Whip. Same as TLW-M, but with telescoping stainless steel, chrome plated brass whip sections. Telescopes down to 28". Model TLWT-M. Wt. 1 lb.

\$8.95

Same as Model TLWT-M, but with 3/8x24 stud. Model TLWT. Wt.: 3/4 lb.

\$7.20

Standard Spring. Cad plated, double tapered. Accepts 3/8x24 stud. Provided with 3/8x24 stud to fit other mounts. Model SPGS. Wt.: 1 1/2 lbs.

\$2.04

Deluxe Spring. Chrome plated. Model SPG. Wt.: 2 lbs.

\$4.77

Standard Body Mount. Superior, cad plated split ball type, molded cyclocac base. Model BDYS. Wt.: 3/4 lb.

\$3.03

Deluxe Body Mount. Heavily chrome plated split ball. Model BDY. Wt.: 1 lb.

\$4.77

Jiffy Body Mount. Easily installed mount for trunk, door or hood. 3/8x24 threaded female. Model JM. Wt.: 1/2 lb.

\$3.15

Gutter Clip. Holds full length whip for easy garaging. Model GC. Wt.: 1/6 lb.

\$1.17

AM-CB Coupler. Unique, isolating 2x3" coupler with mounting bracket. No switching. Model CPR. Wt.: 1/4 lb.

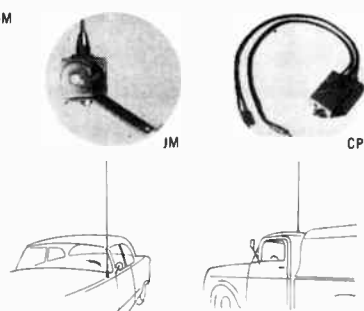
\$8.97

Bumper Mount. Chrome plated, stainless steel strap. Model BPR. Wt.: 1 1/2 lbs.

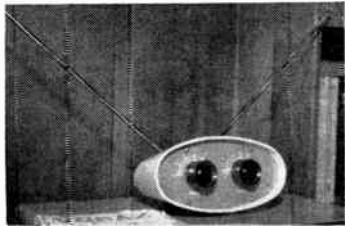
\$6.57

ACCESSORIES

- Model PLSA adapts PL-259 coax plug to auto radio plug _____ \$.45
- Model PLP adapts PL-259 coax to phono plug _____ \$.45
- Model SOSA adapts SO-239 coax socket to auto antenna _____ \$.45
- Model SAP adapts auto radio plug to phono type _____ \$.24
- Model CC-SPL 5 ft. RG-58/U coax (PL-259 both ends). Use with TLW-M and TLWT-M. _____ \$3.45
- Model CC-12. 12 ft. RG-58/U coax (PL-259 & solder lugs). _____ \$3.45
- Model CC-12PL. 12 ft. RG-58/U coax (PL-259 both ends) _____ \$4.17
- Model CC-25. 25 ft. RG-58/U coax (PL-259 both ends) _____ \$5.97
- Model CC-50. 50 ft. RG-58/U coax (PL-259 both ends) _____ \$9.45



Hy-gain SWL Antennas



INDOOR

Attractively housed in unbreakable plastic with chrome plated antennas, this indoor SWL system is completely wired, covering frequencies from 5 through 30 megacycles and including all the important short wave and amateur bands. Greatly increases the performance of any short wave receiver. Easy to operate. Simply attach 6 ft. cable included to the receiver, extend "rabbit ears" and adjust "match" and "tune" controls for maximum signal strength. Model SWI. Shpg. Wt.: 2½ lbs.

\$14.75
Net

OUTDOOR

High efficiency outdoor doublet antenna, peaked for top performance on the important 11, 13, 16, 19, 24, 31 and 40 meter short wave bands. Includes eight trap assemblies, end insulators and 100 ft. of lead-in cable with complete instructions for rapid assembly. Mounts easily under eaves, in attic space, etc. Overall length: 40 ft. Model SWO. Shpg. Wt. 2½ lbs.

\$14.75
Net

Hy-gain FM Antennas

FM AUTO BUTTERFLY

Polished, anodized aluminum rings 6" dia., high impact cycloc plastic and chrome plated brass fittings. Rugged antenna converts existing AM whips to ¾-wave FM antennas. 3 db gain. Increases range, eliminates fading, decreases background noise. Attaches 30 sec. Model FMB. Shpg. wt. 1½.

\$5.97
Net

FM HALO

½-wave dipole in unique configuration for uniform omnidirectional pattern. Increases fidelity of home FM reception. Universal bracket for minute-mounting. Heat treated alloy aluminum tubing. Designed for std. 300 ohm twin-lead. Model FMH. Shpg. Wt. 2½ lbs.

\$5.97
Net

FM HY-LOGS

Fringe area log periodic antennas employ revolutionary concept for tremendous forward gain. Uniform impedance characteristics 88-108mcs. Outperform equivalent-sized Yagis. Heavy wall 1¼" dia. aluminum boom, 7/16" elements. 72 ohm coax or 300 ohm twin lead.

6-ELEMENT

For medium fringe area reception. 9 db gain. Boom 7 ft. Model FM-6. 3½ lbs.

\$13.77
Net

11-ELEMENT

For ultimate fringe reception. 12 db gain. Boom 12 ft. Model FM-11. Shpg. wt. 7½ lbs.

\$22.50
Net

Hy-gain 150 Antennas Communication Band (144-174 MC)

BASE STATION

6.1 DB STACKED JAYPOLE

The first mass produced stacked jaypole array — the Hy-Gain Model SD-150 — available at amazingly low price. Produces highest gain (6.1 db) of any commercially manufactured 150 mc antenna. With 9.5 DB gain in one favored direction with a slight reorientation of staggered jaypole positions. All aluminum (wt.: 19 lbs.) complete factory preassembly. Constructed to withstand 100 mph winds with ½" radial ice load. Iridite treated for resistance to corrosion. Model SD-150: Shpg. Wt. 28 lbs.

\$125.70
Net

SD-150A (144-159 mc.)
SD-150B (159-174 mc.)

Model MSD-150 — Mast side mounting kit for SD-150. Shpg. Wt. 11 lbs.

\$9.57
Net

Model PSD-150 — Pole side mounting kit for SD-150. Shpg. Wt. 11 lbs.

\$10.17
Net

¾-WAVE - 3.4 DB GAIN COMMERCIAL DUTY GROUND PLANE

Hy-Gain Model EC-150 is an extended ¾-wave ground plane developing 3.4 DB omnidirectional gain. All aluminum (wt. 4 lbs.). Ruggedly built to withstand 100 mph winds at ½" radial ice load. Completely treated. Model EC-150 Shpg. Wt. 5 lbs

\$29.70
Net

¼-WAVE STANDARD UNITY GAIN GROUND PLANE

Lowest cost base station antenna available — yet built to commercial duty standards. All aluminum — iridite treated. Ideal for small two-way systems when price is important. Model GP-150: Shpg. Wt. 1 lb.

\$5.40
Net

MOBILE WHIPS FOR ROOF MOUNTING

UNITY GAIN, ¼-WAVE

New design stainless steel Model MW-150 ¼-wave rooftop mounted vehicular whip. High impact cycloc molded base mounts easily from top of roof with unique positive grip locking mechanism. Solderless connector for RG58U cable. Whip only is easily replaceable. Model MW-150: Shpg. Wt.: ¼ lb.

\$2.85
Net

3.4 DB GAIN, ¾-WAVE

Double effective power both receiving and transmitting with the Hy-Gain MWG-150 mobile whip. Extremely flexible stainless steel whip only 52" high. Hermetically sealed matching inductor. Single hole top mounting base and solderless RG58U connector. Model MWG-150: Shpg. Wt. 1 lb.

\$8.97
Net

JONTZ MFG. CO.

MISHAWAKA, INDIANA

SELF-SUPPORTING

Super Kwick-Climb

TOWERS

SELF-SUPPORTING UP TO 60 FEET HIGH
HOT DIP GALVANIZED HEAVY DUTY MODELS
ZINC ELECTROPLATED ECONOMY MODELS
NO LOST TOWER FOOTAGE
FAST, EASY SECTIONAL ERECTING

With these two Jontz Tower models you can fill any tower needs... from small suburban to heavy-duty commercial installations. Sectional construction and special drive-in bases make erection fast and simple. The Zinc Electroplated Economy Model No. 300 will easily withstand high wind loads normally encountered in most parts of the country. The Hot Dip Galvanized Heavy Duty Model No. 500 will withstand hurricane force winds having been tested at wind loads of 80 mph.

Both models are self-supporting up to 60 feet high. Model 300 can be extended to 200 ft. by use of guys every 20 feet and Model 500 up to 500 ft. by use of guys every 20 feet. There is no lost tower footage when mounting in either concrete or the special drive-in base. Since the tower is separate from the base, it may be moved to another location without impairing strength.

Both towers are fabricated in 10'0" sections and can be erected in one piece or by sections. Model 300 is made from 1/4" x 18

ga. tubular uprights and is zinc electroplated and dipped in clear Butyrate lacquer. The Model 500 is made from 1/4" x 16 ga. tubular uprights and is hot dip galvanized. (Model 300 is also available galvanized.) New, extra-wide corrugated cross-braces give 75% more weld contact with uprights. Tower sections lock together with 2 self-locking 3/8" bolts in each leg. The splined bolts prevent thread damage and stop hole stretch when tower moves in the wind.

HOW TO ORDER: 1. Specify if to be mounted in concrete or drive-in base. 2. Order by specific sections, starting at the base. See illustration for section numbers. 3. If Model 300 is wanted with galvanized finish be sure to specify.

SHIPPING: For best freight rates, 40 ft. and over towers will be shipped in section combinations permitting 2 telescoped bundles, unless otherwise specified. (Example: a 60 ft. tower will consist of section A, C, D, E, and 2 F's.)

ZINC ELECTROPLATED ECONOMY MODEL NO. 300

| Size | Ship Wt. |
|-------|----------|
| 40'0" | 130 lbs. |
| 50'0" | 172 lbs. |
| 60'0" | 215 lbs. |
| 70'0" | 245 lbs. |
| 80'0" | 292 lbs. |

HOT DIP GALVANIZED HEAVY-DUTY MODEL NO. 500

| Size | Ship Wt. |
|-------|----------|
| 40'0" | 160 lbs. |
| 50'0" | 211 lbs. |
| 60'0" | 262 lbs. |
| 70'0" | 302 lbs. |
| 80'0" | 357 lbs. |

Add 15 lbs. per Tower for hardware.

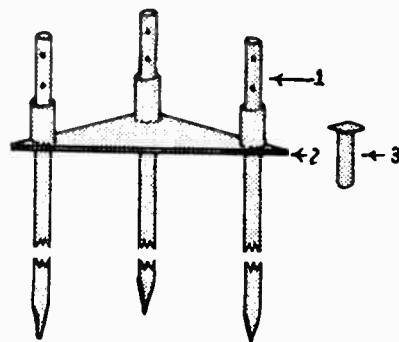
Add approximately 3 lbs. per section for galvanized No. 300 Towers.

HEAVY DUTY DRIVE-IN BASE

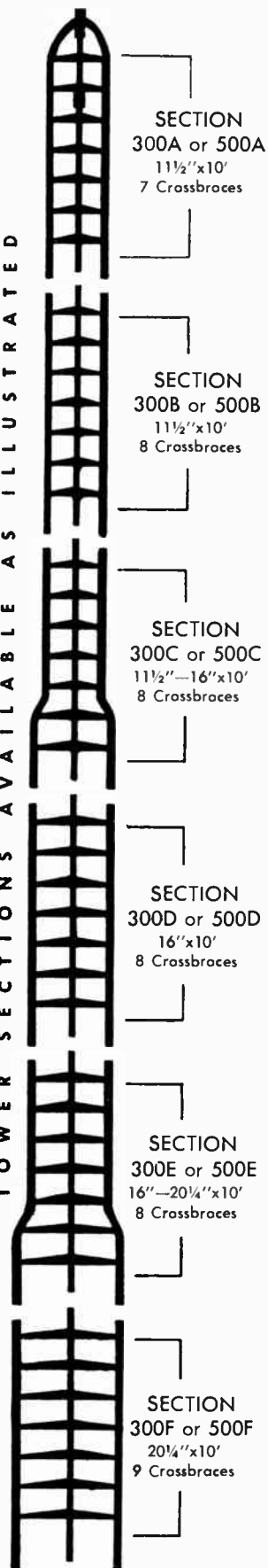
For Jontz self-supporting towers

Specifications:

- 1—Drive-in legs: 1 1/4" x 16 gauge x 36"
- 2—Base plate: 18" triangle x 11 gauge for 40' towers—22" triangle for towers 50' or higher—state tower height
- 3—Driving cap: 2" x 1 1/4" to drive individual legs.



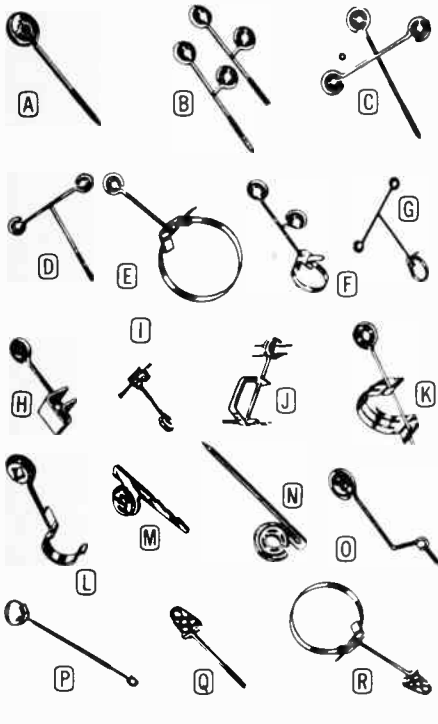
TOWER SECTIONS AVAILABLE AS ILLUSTRATED





TV Mounting Accessories

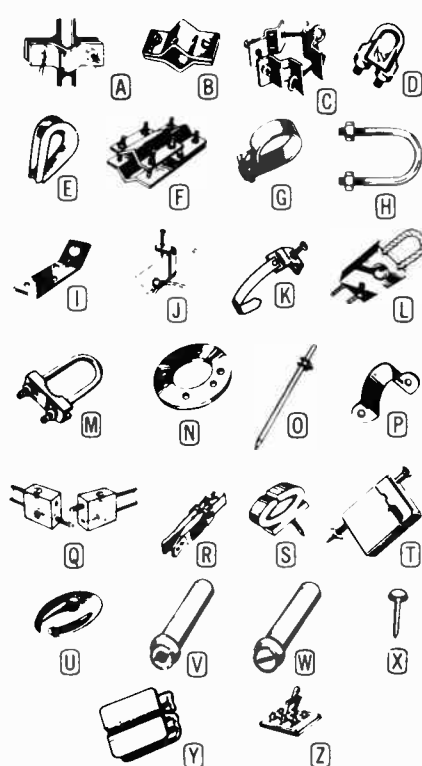
STANDOFFS



Quality standoffs available in several styles to meet all requirements; flat line inserts unless otherwise specified

| IE No. | Fig. | Description | Net |
|--------|------|--|---------|
| 1331 | A | 3/4" wood screw | \$ 2.50 |
| 1350 | A | 5/16" wood screw | 3.50 |
| 1370 | A | 7/16" wood screw | 4.00 |
| 1390 | A | 1" wood screw | 7.50 |
| 1221 | H | 7/4" machine screw inline double type | 12.50 |
| 1420 | B | 7/16" wood screw inline double type | 12.50 |
| 1345 | C | 7/16" wood screw 3-way type | 17.50 |
| 1380 | D | 3/8" wood screw T-type | 11.50 |
| 1343 | D | 3/4" wood screw T-type | 12.00 |
| 1340 | D | 7/16" wood screw T-type | 12.50 |
| 1230 | E | 3/16" machine screw, galvanized strap | 8.50 |
| 1250 | E | 5/16" machine screw, galvanized strap | 11.00 |
| 1270 | E | 3/8" machine screw, galvanized strap | 16.50 |
| 1290 | E | 1/2" machine screw, galvanized strap | 17.50 |
| 1231 | E | 3/16" machine screw, stainless strap | 12.50 |
| 1251 | E | 5/16" machine screw, stainless strap | 15.50 |
| 1271 | E | 3/8" machine screw, stainless strap | 17.50 |
| 1220 | F | 7/16" inline double, galvanized strap | 15.00 |
| 1221 | F | 7/16" inline double, stainless strap | 17.50 |
| 1220 | G | 3/16" T-type, galvanized strap | 14.00 |
| 1243 | G | 5/16" T-type, galvanized strap | 14.50 |
| 1240 | G | 7/16" T-type, galvanized strap | 15.00 |
| 1241 | G | 3/16" T-type, stainless strap | 16.50 |
| 1241 | G | 5/16" T-type, stainless strap | 17.50 |
| 1245 | G | 3/8" 3-way, galvanized strap | 22.50 |
| 1246 | G | 3/8" 3-way, stainless strap | 30.00 |
| 1290 | H | 3/16" machine screw with gutter clamp | 9.50 |
| 1210 | H | 7/16" machine screw with gutter clamp | 17.50 |
| 1212 | H | 7/16" inline double with gutter clamp | 20.00 |
| 1780 | I | 3/16" guy wire standoff | 12.50 |
| 1790 | I | 7/16" guy wire standoff | 12.50 |
| 1800 | I | 3/16" inline double, guy wire type | 15.00 |
| 1880 | J | 3/16" mast and guy wire clamp type | 12.50 |
| 1215 | K | 1 1/2" "Lock-On" standoff | 7.00 |
| 1212 | K | 1 1/2" "Lock-On" standoff | 7.50 |
| 1234 | L | 1 1/2" snap-on mast standoff | 5.00 |
| 1235 | L | 1 1/2" snap-on mast standoff | 5.00 |
| 1280 | M | Masonry type hot nail standoff | 7.00 |
| 1310 | N | 3/16" nail-in standoff | 4.00 |
| 1300 | N | 7/16" nail-in standoff | 8.00 |
| 1305 | O | Long arm mortar type, masonry nail | 7.50 |
| 1320 | P | Spring type ratchet standoff | 7.50 |
| LL1330 | Q | 3/16" wood screw "Line-Lok" type | 4.50 |
| LL1350 | Q | 5/16" wood screw "Line-Lok" type | 5.00 |
| LL1370 | Q | 3/8" wood screw "Line-Lok" type | 6.00 |
| LL1230 | R | 3/16" machine screw "Line-Lok", galvanized strap | 11.50 |
| LL1250 | R | 5/16" machine screw "Line-Lok", galvanized strap | 12.00 |
| LL1270 | R | 3/8" machine screw "Line-Lok", galvanized strap | 12.50 |

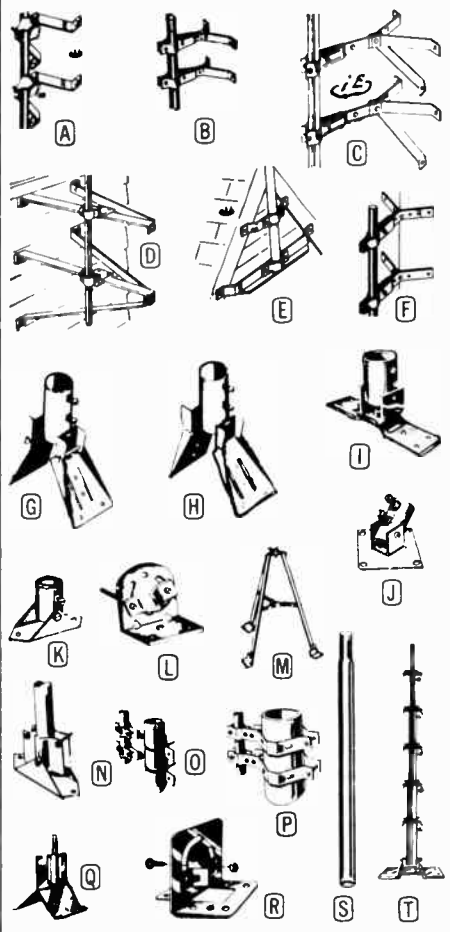
GUYING ACCESSORIES



| IE No. | Fig. | Description | Net Ea. |
|--------|------|--|---------|
| 1500 | A | Guy wire clamp fits 1 1/2" masts | \$0.25 |
| 1510 | B | Screw-on guy wire clamp fits 1 1/2" masts | 0.25 |
| 1512 | C | 3-way guy clamp for 1 1/2, 2 1/2" masts | 0.30 |
| 1650 | D | 1/2" zinc-plated cable clamp | 0.10 |
| 1651 | D | 1/2" zinc-plated cable clamp | 0.10 |
| 1660 | E | Guy wire thimble, zinc-plated | 0.05 |
| 2320 | F | 3-piece mast clamp couples masts of equal or unequal size 1/2, 1 1/2" dia. | 0.80 |
| 3800 | G | Guy ring clamp for 1 1/2, 1 1/2" masts | 0.08 |
| 3810 | G | Guy ring clamp for 1 1/2, 1 1/2" masts | 0.08 |
| 5090 | H | 2" x 3/4" h. U-bolt for masts to 1 1/2" dia | 0.08 |
| 5095 | H | 1 1/2" x 3/4" U-bolt for masts to 1 1/2" dia | 0.08 |
| 1670 | I | Guy wire anchor bracket, cap U tray wire | 0.17 |
| 1675 | J | C-type ground clamp for pipe to 1 1/2" dia | 0.14 |
| 1676 | K | Strap ground clamp, copper-plated, 1/2" x 3/4" | 0.13 |
| 1680 | L | Guy clamp for 1/2, 1/2" wire | 0.10 |
| 5100 | M | Positive grip U-clamp, lockwashers and nuts | 0.24 |
| 3900 | N | Zinc-plated floating guy ring for 1" masts | 0.11 |
| 3910 | N | Same for 1 1/2" mast | 0.11 |
| 3920 | N | Same for 1 1/2" mast | 0.11 |
| 3940 | N | Same for 1 1/2" mast | 0.11 |
| 3941 | N | Same for 1 1/2" mast | 0.11 |
| 3942 | N | Same for 1 1/2" mast | 0.15 |
| 3950 | N | Same for 2" mast | 0.15 |
| 3951 | N | Same for 2 1/2" mast | 0.15 |
| 3953 | N | Same for 2 1/2" mast | 0.15 |
| 4401 | O | 4" x 1/2" dia. copper-plated grd. rod | 0.13 |
| 4402 | O | 6" x 1/2" dia. copper-plated grd. rod | 0.20 |
| 4403 | O | 8" x 1/2" dia. copper-plated grd. rod | 0.20 |
| 4404 | O | 8" x 1/2" dia. copper-plated grd. rod | 2.70 |
| 1580 | P | Mast and pipe strap for 1" masts | 0.03 |
| 1590 | P | Mast and pipe strap for 1 1/2" masts | 0.06 |
| 1750 | Q | Selfless twin lead connectors, pair (easy solderless test clip) | 0.13 |
| 1690 | R | Rubber, twin-lead, wall standoff | 0.07 |
| 3700 | T | Porcelain 300-ohm nail-in standoff | 0.13 |
| 3990 | U | 1 1/2" x 3/4" dia. porcelain strain insulator | 0.13 |
| 3100 | V | 1 1/2" x 2" dia. porcelain strain insulator | 0.17 |
| 3110 | V | 3" VHF porcelain lead-in tube fits 1/2" hole | 0.13 |
| 3120 | V | Same, but 6" long | 0.13 |
| 3130 | V | Same, but 8" long | 0.13 |
| 3130 | V | Same, but 8" long | 0.13 |
| 3040 | W | 4" VHF porcelain lead-in tube for 1/2" hole | 0.13 |
| 3060 | W | Same, but 6" long | 0.13 |
| 3080 | W | Same, but 8" long | 0.13 |
| 1771 | X | Eller-head wiring tack, box of 100 | 0.18 |
| 1690 | Y | TU fuse clip, insulation covered | 0.10 |
| 1603 | Z | DMDT high-low antenna knife switch | 0.42 |

WALL AND EAVE MOUNTS

TELESCOPING MASTS ANTENNA MAST



WALL AND EAVE MOUNTS

DE LUXE UTILITY MOUNT (FIG. A)

Heavy gauge steel 1 1/2" wide, zinc plated for long life. Heavy clamp fastens with U-bolts. Permits quick installations of masts to 1 1/2" diameter. **74c**
 IE Model 1422—Has 2 1/2" clearance. Net Each **\$1.02**
 IE Model 1448—Has 4" clearance. Net Each **45c**
 IE Model 1421—Economy 4" special made of 1" wide steel Has 2 1/2" clearance. Net Each **48c**
 IE Model 1441—4" clearance, 1" wide steel. Net Each **48c**

SNAP-ON WALL MOUNT (FIG. B)

Sturdy steel mount for quick installation. Kit includes two brackets and hardware. Holds masts to 1 1/2" dia. **\$1.20**
 IE Model 1460 6" wall mount. Net Each **\$1.98**
 IE Model 1480 8" wall mount. Net Each **\$1.98**

DE LUXE SNAP-ON WALL MOUNT (FIG. C)

Pressurized for fast installation; has 16" spread to fit 2 x 4 joists. Heavy gauge steel is zinc plated. Takes masts to 2 1/2" dia. Third leg for added support. **\$2.45**
 IE Model 1430 13 1/2" mount. Net Each **\$2.16**
 IE Model 1420 18" mount. Net Each **\$3.18**
 IE Model 2180 24" mount. Net Each **4.17**

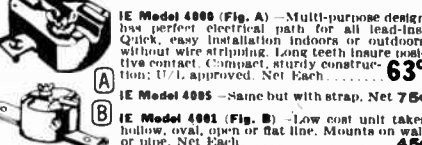
ADJUSTABLE WALL MOUNT (FIG. D)

For difficult overhanging situations, permits 1" to 20" wall clearance. Rugged 3/4" steel is zinc plated. Extra leg for firm support. Pressurized design takes masts to 1 1/2" dia. **\$3.75**
 IE Model 1450 Net Each

EAVE MOUNT (FIG. E)

Stupple, long lasting mast support at eaves where roof-peak installation is desired. Rugged heavy gauge steel with carriage bolts holds masts to 1 1/2" dia. **\$1.74**
 IE Model 1469 For 25" eaves. Net Each **\$2.37**
 IE Model 1470 For 30" eaves. Net Each **2.89**
 IE Model 1471 For 36" eaves. Net Each **3.30**
 IE Model 1472 For 48" eaves. Net Each **3.77**
 IE Model 1473 For 60" eaves. Net Each

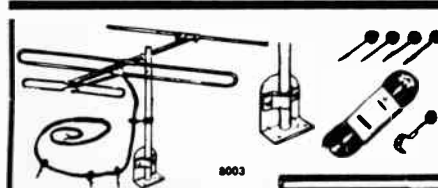
LIGHTNING ARRESTERS



IE Model 4008 (Fig. A) — Multi-purpose design has perfect clearance path for all lead-ins. Quick, easy installation indoors or outdoors without wire stripping. Long teeth insure positive contact. Compact, sturdy construction. U/I approved. Net Each **63c**
 IE Model 4005 — Same but with strap. Net 75c
 IE Model 4001 (Fig. B) — Low cost unit takes hollow, oval, open or flat line. Mounts on wall or pipe. Net Each **48c**

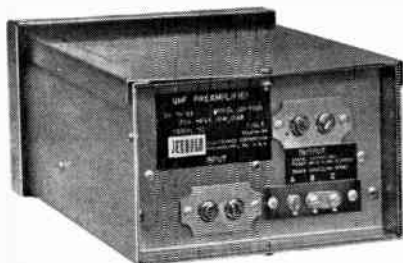
COMBINATION WOOD AND MACHINE SCREW STANDOFFS

| Wood screw tip angles off for machine screw use. | IE No. | Fig. | Description | Net |
|--|--------|-------|---|---------|
| 1332 | A | 3/16" | combination screw "Plus" type | \$ 2.50 |
| 1333 | A | 5/16" | combination screw "Plus" type | 3.50 |
| 1334 | A | 7/16" | combination screw "Plus" type | 4.00 |
| 1381 | D | 3/16" | T-type combination screw "Plus" | 11.50 |
| 1382 | D | 5/16" | T-type combination screw "Plus" | 12.00 |
| 1383 | D | 7/16" | T-type combination screw "Plus" | 12.50 |
| 1223 | B | | inline double combination screw "Plus" | 12.50 |
| 1163 | E | | 9" galv. strap for "Plus" standoffs | 6.50 |
| 1165 | E | | 8" stainless strap for "Plus" standoffs | 9.00 |

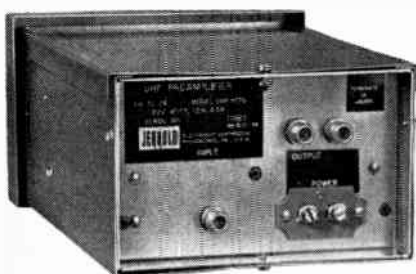


| Part No. | Description | Each |
|----------|---|---------|
| 8003 | 1 BAY INLINE KIT ATTIC ANTENNA 1-806 Snap Out | |
| | 1-1550 Mast Base | |
| | 1-2627 1 1/2" Dia. 5 ft. Mast | |
| | 1-1330 3/16" Wood Screw Standoff | |
| | 1-1235 Mast Standoff | |
| | 50 ft. 300 Ohm Line | \$ 5.52 |

| Part No. | Description | Price Each |
|----------|---|------------|
| 8004 | 1 BAY INLINE KIT ATTIC ANTENNA 1-806 Snap Out | |
| | 1-1061 Chimney Mount | |
| | 1-2627 1 1/2" Dia. 5 ft. Mast | |
| | 4-1330 3/16" Wood Screw Standoff | |
| | 1-1235 Mast Standoff | |
| | 50 ft. 300 Ohm Line | \$ 6.12 |

JERROLD®**NEW UHF EQUIPMENT****SILVER-CIRCUIT PREAMPLIFIERS****FOR "SNOW-FREE" UHF**

MODEL UAP-7276



MODEL UAP-7083

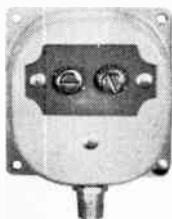
Jerrold's new Mast-Mounting UHF preamplifiers are available in five 300-ohm models covering the entire UHF range, and one 75-ohm model especially designed to cover MPATI channels 72 or 76. These preamplifiers are distinguished by an ultra-sensitive input, delivering a high gain of 15 db minimum for all 300-ohm models and 16 db minimum on MPATI model UAP-7276, at a noise figure unequalled by any other unit. Components employed, such as tuned silver-plated broad-face transmission elements, pure silver coil strips, frame-grid tubes in a two-stage amplifier circuit, and stabilife design, create truly low-loss UHF circuitry at maximum output and long tube-life.

In addition, Model UAP-7276 has a dual output for feeding two mast-mounted converters, eliminating the need for a second antenna. All models are energized from the same type remote power supply, Model 409-P, doubly-filtered for maximum performance of the preamplifiers. A special voltage variation switch on the power supply insures proper preamplifier operating voltage when used with various types and lengths of cables.

Shipping weight of each model is 5½ lbs.

MODELS AVAILABLE

| Model # | Output Impedance | Channels | Freq. Range | Net Price |
|----------|------------------|----------|---------------|-----------|
| UAP-1429 | 300 OHMS | 14 to 29 | 470 to 566 mc | \$57.00 |
| UAP-2540 | 300 OHMS | 25 to 40 | 536 to 632 mc | \$57.00 |
| UAP-4155 | 300 OHMS | 41 to 55 | 632 to 722 mc | \$57.00 |
| UAP-5669 | 300 OHMS | 56 to 69 | 722 to 806 mc | \$57.00 |
| UAP-7083 | 300 OHMS | 70 to 83 | 806 to 890 mc | \$57.00 |
| UAP-7276 | 75 OHMS | 72 to 76 | 818 to 848 mc | \$75.00 |

**NEW UHF
MATCHING TRANSFORMERS****300 TO 75 OHMS**

MODEL MTU-372 \$3.60 Net



MODEL MTUO-374 \$6.00 Net

Jerrold's new UHF Matching Transformers Models MTU-372 (for indoor mounting) and MTUO-374 (for outdoor mounting) are specially designed wide-band impedance matching units that eliminate the need for field construction of baluns. The transformers have a flat response over the entire UHF TV spectrum of 470 to 890 megacycles. Maximum insertion losses are from 0.6 db at 470 mc to 1.2 db or less at 890 mc.

In addition, Model MTUO-374 passes ac (current rating 1.0 amp. max.).

Both models employ new type crown washer screw terminals at the 300-ohm side for fast no-strip twin-lead connection.

Shipping weight of either model is 8 oz.

ALL DATA AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE

NEW**"ULTRA-VISTA" UHF/VHF CONVERTER
FOR MPATI AND TRANSLATOR AREAS****"TOP OF THE SET" MODEL UVC-7083****THE ONLY UHF CONVERTER WITH**

- RF PREAMPLIFICATION • NUVISTOR • TRANSISTOR
- FRAME-GRID TUBE • RADAR TYPE DIODE

CONVERTS UHF CHANNELS 70-83 TO VHF CHANNELS 7 or 8

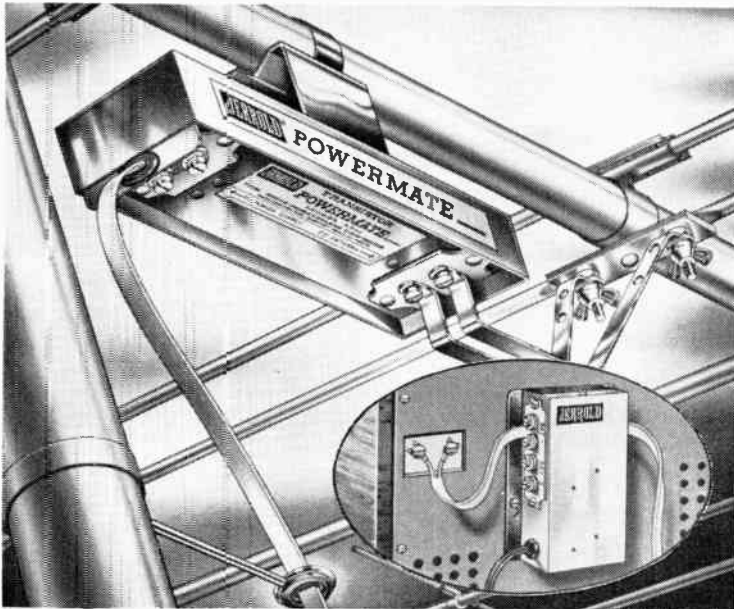
The "ULTRA-VISTA" is the most advanced converter in its class featuring: built-in rf preamplification by a modern frame-grid tube — boosts antenna signals before they enter the mixer; an oscillator circuit with new type Nuvistor — for high stability; a mixer stage using a radar receiver type silicon diode — for low noise figure, reliable performance; a post-amplifier using a PADT type h.f. transistor — for long-life service.

Minimum gain is 10 db over the entire translator band, and at least 11 db over channels 72-76.

Bandspeed tuning makes the converter easier to tune than a radio. Housed in an exquisitely styled, high-impact plastic cabinet, the ULTRA-VISTA will enhance the interior of any home.

Shipping weight 6 lbs.

\$34.95 Net

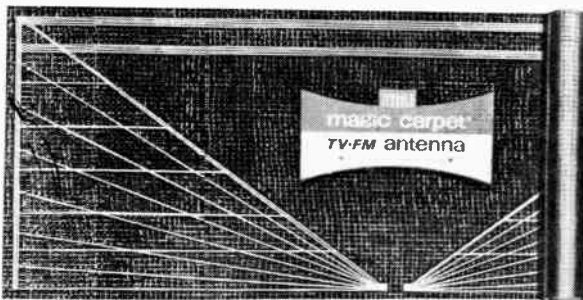
JERROLD®**TV RECEPTION AIDS
FOR THE HOME****NEW TRANSISTOR PREAMPLIFIER POWERMATE MODEL APM-101***

Jerrold's POWERMATE is a transistorized TV-FM preamplifier with exceptional high gain and excellent noise figure, far better than any single-tube or transistor amplifier in its class on the market. Ideal for fringe and weak signal areas, it works with any TV-FM antenna new or already installed, does away with tube replacements, needs no batteries and is fed from a remote power supply consuming only 3 watts (less than an electric clock). Compact, light-weight construction permits mounting directly on antenna boom for maximum transfer of antenna energy. The light metal case is weatherproof and serves as a shield against spurious signal interference. "No-strip sure-contact" terminals allow quick efficient hookup to antenna and receiver. Model APM-101 has dual outputs to feed two TV and/or FM sets, with Jerrold MF-type multi-couplers will feed up to five sets. Shipping weight 2 lbs. **\$26.63 Net**

*Patent pending
UL APPROVED

JERROLD MAGIC CARPET* ANTENNA

THE INDOOR ANTENNA WITH OUTDOOR PERFORMANCE

**MODEL MK-1**

This new antenna by Jerrold is the first full-scale printed-circuit antenna. Truly a "Magic Carpet" carrying quality TV/FM signals to receivers in the home, the MK-1 is easily installed (lay it on any flat, horizontal surface in the attic, under a rug, or staple to a ceiling) and simple to orientate (shift its position for best reception). Ideal for use with the Jerrold Amplified TV/FM Home System, the Magic Carpet eliminates the unsightliness and maintenance costs of outdoor antennas. When properly installed, the Magic Carpet provides reception comparable to an outdoor, conical-type antenna mounted in the same location. This means that the MK-1 will provide excellent reception of TV stations within a 30-mile radius and of FM stations within a much greater radius. The antenna is shipped complete with 6 plastic strap insulators (Model HS-36) and 25 feet of twin-lead for attachment to a home amplifier or to a TV receiver. Shipping Weight — 1¾ lbs. **\$5.97 Net**

*Trademark Patent Pending

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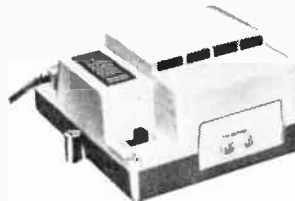
TV/FM 4-SET AMPLIFIED COUPLER**MODEL HSA-44**

The new JERROLD amplified 4-set coupler Model HSA-44 is a printed circuit amplifier employing a 6DJ8 frame grid tube and is designed to feed up to 4 TV or FM receivers from a common antenna. Minimum gain is 0.5 db at each of the four outputs. Model HSA-44 operates on an input as low as 100 microvolts, has an excellent noise figure and high isolation (13 db) between outputs. Input and output impedances of 300 ohms and crown-washer screw terminals permit fast simple twin-lead installation. This compact (5½" x 4½" x 3") rugged unit plugs directly into a 117 volt 60 cps wall outlet and consumes only 10 watts.

Shipping weight 2 lb. 10 oz.

\$18.95 Net

Note: Where desired, use Jerrold's no-strip twin-lead outlets to create convenient plug-in locations.

FM RANGE EXTENDER MODEL FMX

Jerrold's latest FM preamplifier Model FMX has been especially designed with a high gain of 20 db minimum over the entire FM band, while eliminating unwanted background noise and drifting. A frame-grid tube (6DJ8), printed circuitry, and built-in power supply provide stable top performance and long life. Model FMX brings in many more FM stations, makes even inexpensive FM tuners and receivers sound like "a million." It is ideally suited for FM Multiplex reception, will increase to 46 miles the ordinary reception range of 23 miles from FM Multiplex transmitters. With Jerrold MF-type multi-couplers this powerful preamp will feed two, three or four FM sets. Housed in an appealing light-alloy case and equipped with "no-strip" twin lead connectors, Model FMX can be quickly installed anywhere in the home between antenna and receiver. Shipping weight 1¼ lbs. **\$18.95 Net**

JERROLD® TV RECEPTION AIDS

MULTI-SET TV/FM COUPLERS



Jerrold Multi-Set Couplers provide the best method of connecting 2, 3 or 4 television and/or FM receivers to a common antenna array. Units feature positive matching, extremely low forward loss and high isolation. All models equipped with "No-Strip" serrated washers which bite into twin-lead to make positive, permanent connections.

(Each unit packed with special bracket, for outdoor mounting, and necessary hardware.)

MODEL M-2* TWO SET COUPLER FOR STRONG SIGNAL AREAS—inductively compensated with emphasis on positive matching for reduction of ghosting and smear. Color: blue grey. \$2.10 Net

*Best for UHF

MODEL MF-2 TWO SET COUPLER FOR FRINGE AREAS—for use wherever extremely low forward losses are mandatory. Featuring a highly efficient transformer design and positive matching. Provides complete isolation between receivers. Color: ivory. \$2.70 Net

MODEL MF-4 FOUR SET COUPLER FOR ALL AREAS—designed with the same basic circuit as MF-2, but for use in feeding 3 or 4 sets from one antenna. Color: ivory. \$3.45 Net

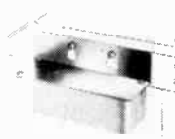


Baseboard

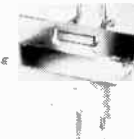


Attic & Basement

INDOOR MOUNTING—on the baseboard for a neat and attractive appearance, with connectors concealed and protected. For attic or basement use, the unit mounts with terminals exposed for ease of servicing.



Outside



Mast

OUTDOOR MOUNTING—a bracket is supplied for strapping to antenna mast. The unit is weather resistant.

MODEL TX-FM SPECIAL TV-FM ANTENNA SPLITTER

Splits TV and FM signals frequency-wise and without loss to either signal from a common antenna. Gives complete isolation between TV and FM sets. Ideal for FM Multiplex Tuner or FM Radio. \$3.57 Net

JERROLD'S AMPLIFIED TV-FM HOME SYSTEM



FLUSH MOUNTING OUTLET ASSEMBLY WITH PLUG Model HS-140

Contains all items for flush mounting. One HS-21, one HS-22, one HS-23 and one HS-24. \$1.65 Net

MODEL HS-140-J

Same as HS-140 but without isolating resistors. \$1.50 Net



HOME OUTLET Model HS-21

An efficient press-on tap unit for surface or flush-mounting (with HS-22 and HS-23). Provides 10 db isolation between receiver and 300-ohm line. \$.87 Net



MOUNTING RING Model HS-22

Plastic bracket used to adapt HS-21 for flush mounting in standard plastic outlet box. \$.18 Net



COVER PLATE Model HS-23

Ivory cover plate to cover the outlet in flush-mounting applications. \$.30 Net



PRESS-ON PLUG Model HS-24

Male plug for simple attachment to 300-ohm twin-lead. No soldering. Inserts into HS-21 outlet \$.30 Net



SURFACE MOUNTING OUTLET ASSEMBLY WITH PLUG Model HS-135

Contains all items for surface mounting. One HS-21 and one HS-24. \$1.17 Net



TWIN-LEAD INSULATORS Model HS-36

Plastic insulators for attaching twin-lead throughout the home. \$1.08/24 Net



OUTDOOR COVER PLATE Model HS-37

Weather-proof flush-outlet plate. \$1.13 Net



OUTLET BOX Model HS-50

Non-metallic outlet box for new construction. \$.30 Net



IVORY TWIN-LEAD Model IV-300

A convenient 100' coil of ivory, 300-ohm twin-lead. \$1.89 Net

AMPLIFIED 4-SET COUPLER MODEL HSA-44



Jerrold's Model HSA-44 is a printed circuit amplifier employing a 6DJ8 frame grid tube and is designed to couple up to 4 TV or FM sets to a common antenna. This compact unit plugs directly into a 117 volt ac outlet and consumes only 10 watts. Ideal for simple home systems.

Shipping weight 2 lbs. 10 oz.

\$18.95 Net

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ALL JERROLD EQUIPMENT DESIGNED FOR COLOR

FOR THE HOME



"DE-SNOWER" PREAMPLIFIERS



Mast-Mounted "De-Snower" Model DSA-202 with Remote Power Supply



JERROLD "De-Snower" preamplifiers provide the high gain and low noise figure necessary to deliver "snow-free" TV pictures and "hiss-free" FM sound to your TV/FM receiver. These mast-mounted units bring your TV/FM set to the antenna to take full advantage of extremely weak signals by overcoming noise pick-up and antenna lead-in losses.

Each "De-Snower" is shipped with a remote power supply (to be placed at any easily-accessible location) which provides low-voltage ac power to the preamplifier and acts as a feed-thru for amplified signal from the preamplifier to the receiver. Only one cable is necessary to carry ac power up to and amplified signal down from the preamplifier to the power supply.

"De-Snower" preamplifiers will improve color TV reception and boost TV/FM signal strengths in all fringe areas. See SPECIFICATIONS chart to determine which model is best suited for your particular needs.

SPECIFICATIONS FOR "DE-SNOWER" PREAMPLIFIERS

| PREAMPLIFIER MODELS | ALL BAND PLUS FM | ALL BAND | SINGLE CHANNEL | FM ONLY |
|--------------------------------|---|---------------------------------------|--|---------------------------|
| | DSA-202 | DSA-132 | DSA-* | DSA-FM |
| BANDWIDTH | 54-108 mc, 174-216 mc | 54-88 mc, 174-216 mc | 6 mc any TV ch. | 88-108 mc |
| GAIN-TV BAND | 20 db min. | 25 db min. | 28 db any TV ch. | NA |
| GAIN-FM BAND | 20 db 88-98 mc, 8 db min. at 108 mc | NA | NA | 25 db min. |
| FREQUENCY RESP. | 1 1/2 db max. peak to valley | 1 db max. peak to valley | 1/2 db max. peak to valley | 1 db max. peak to valley |
| NOISE FIGURE | 4.5 db max. lo-ch, 6 db max. hi-ch. | 6.5 db max. lo-ch, 8.5 db max. hi-ch. | 6 db max. lo-ch, 7.5 db max. hi-ch. | NA |
| MAXIMUM INPUT | 17,000 microvolts pr. ch./3 lo chs, 11,000 microvolts pr. ch./4 hi channels | 5,500 microvolts | 40,000 microvolts | NA |
| MAXIMUM OUTPUT AT 300 OHMS | .17 v/pr. ch. at each of 3 ch. lo, .11 v/pr. ch. at each of 4 ch. hi | 0.2 v/pr. ch. at each of 7 ch. | 1.2 v rms lo, 1.0 v rms hi | 0.5 rms. |
| MAXIMUM OUTPUT AT 75 OHMS | .085 v/pr. ch. at each of 3 ch. lo, .055 v/pr. ch. at each of 4 ch. hi. | 0.1 v/pr. ch. at each of 7 ch. | 0.6 v rms lo, 0.5 v rms hi | NA |
| INPUT IMPEDANCE | 300 ohms | | | |
| OUTPUT IMPEDANCE | 75 or 300 ohms | | | |
| TUBE COMPLEMENT | (2) 6DJ8 | (3) 6BQ7-A (1) 6CB6 (1) 6AK5 | Lo-band (1) 6BQ7-A (1) 6CB6 Hi-band (1) 6BQ7-A (1) 6AK5 | (1) 6BQ7-A (1) 6CB6 |
| FINISH | Iridite | | | |
| DIMENSIONS | 4''x8 1/2''x4'' | 5''x10 1/4''x 7 1/4'' | 2 1/2''x5 1/4''x 10 1/4'' | 2 1/2''x5 1/4''x 10 1/4'' |
| POWER SUPPLY | 407-P | 405-P | | |
| INPUT | 117 V 60 cycle ac | | | |
| OUTPUT VOLTAGE | 22-27 volts | 24-32 volts | | |
| POWER CONSUMPTION | 25 watts | 50 watts | 30 watts | 30 watts |
| DIMENSIONS | 3 1/2''x3 1/2''x 6 1/2'' | 2 7/8''x6 3/4''x 5 1/8'' | | |
| SHIPPING WEIGHT | 5 1/2 lbs. | 12 3/4 lbs. | 8 1/4 lbs. | 8 1/4 lbs. |
| ACCESSORIES FURN. (All Models) | (3) F-59 Cable fittings, mounting screws for power supply, mast clamp and strap | | | |
| NET PRICE | \$53.97 | \$71.70 | \$59.70 | \$59.70 |

NA = Not Applicable

*Specify channel

"TRAP-EASE" TUNABLE INTERFERENCE TRAPS



BEFORE



AFTER

Eliminate adjacent channel interference, permit reception of weak, distant stations normally blocked by a strong local channel.

"TRAP-EASE" KNOCKS OUT ADJACENT CHANNEL INTERFERENCE. This tunable "deep notch" antenna trap (greater than 50 db) permits TV viewers to remove "beat" or "herringbone" patterns caused by adjacent channel sound or video carriers. Permits clear reception of even weak distant stations.

Works with any TV receiver and any 300 ohm antenna that would normally bring in pictures from the distant stations if the interfering adjacent channel was not on the air. Does not affect reception of regularly viewed channels.

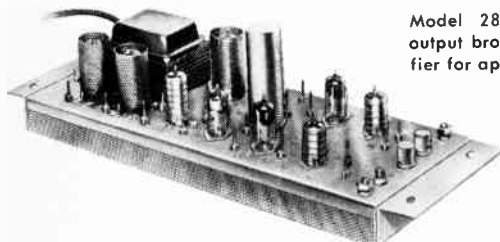
TWO MODELS AVAILABLE



\$11.97 Net

LOW TRAP-EASE (Model HQ-91) covers Channels 2 to 6.

HIGH TRAP-EASE (Model HQ-92) covers Channels 7 to 13

JERROLD®**TV DISTRIBUTION SYSTEMS***as simple as A-B-C***AMPLIFYING****NEW JERROLD DISTRIBUTION AMPLIFIER MODEL 2880**

Model 2880 is a high-output broad-band amplifier for application in TV-FM distribution systems. Incorporating the newly developed Jerrold TJ-880 tube, this amplifier delivers a full

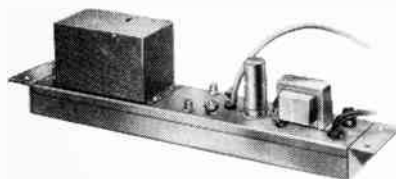
1 volt on both low and high band channels, at a minimum gain of 45 db. The unit is equipped with manual gain control and a receptacle for connecting the new automatic overload control Model OC-238. Model 2880 has an extended band-width that provides amplification of FM as well as TV. It is the ideal amplifier for distribution systems in apartment buildings, hotels, schools, hospitals and similar installations requiring extra long cable runs.

Shipping weight 16 lbs.

\$178.80 Net

SPECIFICATIONS

| | | |
|---|---|---|
| | Low Band | High Band |
| Gain: | 45 db | 45 db |
| Bandwidth: | 54-92 mc | 174 to 216 mc |
| Frequency Response: | ± ¾ db | ± ¾ db |
| Rated Output for ½ % Intermodulation Distortion: | +60 dbj with 3 ch. in 75 ohm, single terminal load | +60 dbj with 3 ch. in 1.5 max. V.S.W.R. 75 ohm, single terminal, to work into 75 ohm load |
| Input: | | |
| Output: | | |
| Tilt of Response in Factory Alignment: | For 950' of RG-11 type cable | |
| Gain Control, Manual: | 14 db | 14 db |
| Equalization: | Plug-in Attenuators, Model PIP, used to provide low band equalization on long runs. | |
| Power Requirements: | 105 watts, 117 volts, 60 cycles A.C. | |
| Tube Complement: | (1) 6EH7, (1) 6EJ7, (2) 6ES8, (2) 12BY7A, (3) TJ-880, (1) 6DJ8. | |
| Mounting: | 19" relay rack or surface | |
| Dimensions: | Panel 19" x 7" | |

NEW JERROLD AUTOMATIC OVERLOAD CONTROL MODEL OC-238**SPECIFICATIONS**

This new control unit has been especially designed for use with Model 2880 or Model 2300. Equipped with separate controls for the high and the low band, Model OC-238 permits setting the amplifier output at the optimum operational level. Once set, highest picture quality is maintained throughout the entire system re-

gardless of fluctuations in signal strength. Model OC-238 is energized from the amplifier to which it is connected.

Shipping weight 6 lbs.

\$112.80 Net

| | |
|--|---|
| Gain requirement of Associated Amplifier: | 35 to 50 db |
| Controlled Frequencies: | 54 to 98 mc and 174 to 216 mc |
| Frequency Response: | ± 1½ db over stated range |
| Minimum Output Levels for Optimum Control per Band: | 5 channels—40 dbj 3 channels—43 dbj 2 channels—46 dbj 1 channel—49 dbj |
| Maximum Output: | 60 dbj |
| Input Impedance: | 75 ohms at 1.2 max. V.S.W.R. |
| Output Impedance: | 75 ohms at 1.2 max. V.S.W.R. |
| Insertion Loss: | 0.5 db. max. |
| Gain Control: | Separate high and low band composite level adjustments |
| Power: | 18 watts at 117 volts, 60 cycles A.C. |
| Mounting: | 19" relay rack or surface |
| Dimensions: | Panel 19" x 3½" |

THE JERROLD HIGH GAIN, HIGH OUTPUT TV DISTRIBUTION AMPLIFIER MODEL 2300

U.L. Approved

SPECIFICATIONS

| | |
|-----------------------------|--|
| Gain: | 38 db min. |
| Gain Controls: | 16 db range Hi and Lo bands. |
| Tilt Controls: | Hi and Lo bands. |
| Rated Output (Max.): | .3v/channel for 9 channel operation |
| Rated Input (Max.): | 26000 uv |
| Tube Complement: | 4-6BQ7-A, 2-12BY7A, 1-6CB6. |
| Cable Fittings: | 75 ohms — (3) F-61; 300 ohms — screw terminals |
| Fuses: | Primary — 1 amp. |
| Finish: | Gray hammertone. |
| Dimensions: | 11" x 7¼" x 5¼" |
| Shipping Weight: | 10 lbs. |
| Power Requirements: | 117 volts AC .58 amps.; 63 watts |



COVERS CHANNELS 2 TO 6 AND 7 TO 13
The Jerrold high gain, high output TV distribution amplifier for large motels, hotels, apartment buildings and "neighborhood cable" systems.

\$107.70 Net

TECHNICAL DATA SHEETS AVAILABLE FOR PRODUCTS LISTED ON THIS PAGE

Above units shipped complete with coaxial fittings and hardware.

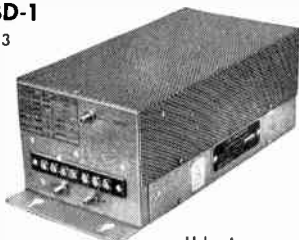
ALL JERROLD EQUIPMENT DESIGNED FOR COLOR

MODELS ABD-1 and 406A

Provide the key to superior television distribution for small economical systems. Combining latest cascode circuitry and superior mechanical design, these amplifiers deliver strong, snow-free pictures and keep installation costs to a minimum.

SPECIFICATIONS: MODEL ABD-1

- COVERS CHANNELS 2 TO 6 and 7 TO 13
- Gain: 25 db
- Rated Output (Max.): 0.1 v/channel (7 channel operation)
- Rated Input (Max.): 5500μv
- Noise Figure: 6 db low band, 7.5 db high band
- Tube Complement: 3-6BQ7A, 1-6AK5, 1-6CB6
- Cable Fittings: 75 ohms-(3)F-61; 300 ohms — screw terminals
- Fuses: B+, 1/10 amp. Slo Blo; Pri. 1/2 amp. Slo Blo
- Dimensions: 11" x 4" x 5"



U.L. Approved

Shipping Weight: 7 lbs. 7 ozs.
 Power Requirements: 117 v AC, 50-60 cps, 35 Watts
 Includes coax connectors \$65.67 Net

SPECIFICATIONS:

MODEL 406A-*

- COVERS ANY SINGLE CHANNEL FROM 2 TO 13
- Gain: 28 db
- Bandwidth: 6 mc. ±1/2 db
- Rated Output (Max.): .6v RMS Lo band, .5 v RMS Hi band
- Noise Figure: 6 db Lo band, 8 db Hi band
- Tube Complement: Lo band, 1-6CB6, 1-6BQ7A; Hi band, 1-6BQ7A, 1-6AK5
- Housing: Gray hammertone finish
- Dimensions: 3" x 4" x 10 1/2" overall
- Shipping Weight: 4 1/4 lbs.
- Power Consumption: 15 Watts



U.L. Approved

* Specify channel desired

\$41.97 Net
 Includes coax connectors

B BRANCHING

TWO-WAY SPLITTER Model 1562

Hybrid two way splitter with only 3 db forward loss in each leg. Isolation between outputs is 15-20 db. B-59 coax bushings do not require cable connectors.



\$4.95 Net

FOUR-WAY SPLITTER Model 1514

Four-way reactive splitter with only 6 db forward loss to each output. Isolation between outputs, 12 db. Complete with five F-59 cable connectors. (Unused outputs must be terminated with TR-72F terminating resistors.)



\$8.70 Net

HYBRID DUAL SPLITTER MODEL 1582

A low-loss, high-isolation, three-terminal directional coupler. VSWR 1.2 input, 1.3 output. JERROLD F-fittings for convenient cable connections. Connectors incl.



\$7.50 Net

C CONNECTING

Connect the signal to TV receivers quickly and efficiently — using simple and rapidly installed Jerrold tap-off units. Designed for high isolation between receivers. Compensates for cable characteristics.

FOR INDOOR USE (Surface Mounting)



Model LT-310 — 300 ohm output
 Taps RG-59/U line to 300 ohm receivers. Full AC isolation. B-59 coax bushings do not require cable connectors. Surface mounting, ivory radiation-proof steel case. Three color-coded attenuation values (specify R, Y or G). Terminate the last tap on feeder line with model TR-72B terminator.

\$3.00 Net

Model LT-77 — 75 ohm output
 Taps RG-59/U line to 75 ohm receiver or to 300 ohm in direct pick-up locations. B-59 coax bushings do not require cable connectors. Surface mounting, ivory radiation-proof steel case. Three color-coded attenuation values (specify R, Y or G). Terminate the last tap on a feeder line with model TR-72B terminator.

\$3.00 Net

(Flush Mounting)

Model 1431 — 300 ohm output
 Electrically identical to LT-310. Mounts in 2" x 4" electrical outlet box or 4" x 4" outlet box with single gang plaster ring. Specify R, Y or G. Terminate the last tap on a feeder line with model TR-72B terminator.

\$3.00 Net

Model 1477 — 75 ohm output
 Electrically identical to Model LT-77. Mounts in 2" x 4" electrical outlet box or 4" x 4" outlet box with single gang plaster ring. Specify R, Y or G. Complete with 75 ohm output plug. Terminate the last tap on a feeder line with model TR-72B terminator. Available in satin-finish stainless steel plate at slight additional cost. (min. order of 100)

\$3.00 Net



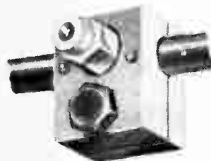
TECHNICAL DATA SHEETS AVAILABLE FOR PRODUCTS LISTED ON THIS PAGE

LOOK TO JERROLD FOR AIDS TO BETTER TELEVIEWING



CONNECTING

FOR OUTDOOR USE



Model PT 1461 — For RG-11/U

Pressure tap for RG-11/U type feeders. Surface mounting. Removable color coded isolation units. (Specify R, Y or GR.) Unique design minimizes shunt capacity. (Requires use of CD-11 Cutting Punch.) Complete with F-59 cable connector. Terminate the last tap on a feeder line with TR-72F terminator. (Use F101-59 cable adaptor.)

\$4.50 Net

Model 1401 — For RG-59/U, RG-6/U

Surface mounting non-resistive line tap for RG-59/U type feeders. Color coded attenuation values permit use with highest gain amplifiers. Specify R, Y, GR. Complete with mounting bracket and three C-52 cable connectors. (Use C-56 connectors for RG-6 type feeders.) Terminate the last tap on a feeder line with TR-72 terminator.

\$4.50 Net



TERMINATORS



Model TR-72B

Inexpensive 75 ohm terminator for easy connection to B-59 type bushings.

\$.90 Net



Model TR-72

Close tolerance 75 ohm resistor for line or equipment termination. Mates with C-61, C-81 or C-5911.

\$.90 Net



Model TR-72F

Similar to TR-72. Mates with F-61, F-81, A-61 or F-101-59.

\$.90 Net

NEW DIMENSIONS IN TV SYSTEMS

NEW JERROLD AUDIOTROL MODEL AT-*

SPECIFICATIONS

| | |
|-----------------------------------|---|
| RF Output: | Up to 55 dbj**, each carrier separately controlled at 75 ohms at each of the two outputs. |
| Frequency Stability: | Video carrier crystal controlled, sound carrier AFC controlled referenced to crystal. |
| Spurious Signals: | Down 50 db. |
| Frequency: | Any VHF TV channel. |
| Carriers: | One at video, unmodulated. One at sound, FM modulated with 25 kc max. deviation (TV standards). |
| Signal for Max. Deviation: | 50 millivolts. |
| Input Impedance: | 100,000 ohms. |
| Output Impedance: | 75 ohms VSWR 1.2. |
| Distortion: | Less than 1%, 2nd harmonic and hum. |
| Regulation: | All critical voltages regulated. |
| Power Requirement: | 45 watts at 117 volts, 60 cycles. |
| Mounting: | 19" rack. |
| Dimensions: | 19 x 5 1/4 x 5 inches. |
| Weight: | 9 lbs. |

*Specify TV channel desired.

**0 dbj = 1,000 microvolts across 75 ohms.



Jerrold's audio modulator Model AT-* utilizes the unused TV channels to transport music, voice, radio, etc. to every receiver in a TV distribution system. The audio source may be an FM tuner, an AM radio, records, tape or microphone. Any commercial TV receiver can be used to reproduce the audio program through the speaker. Simply installed at the head-end, there is no need for additional equipment or alterations in any room. Model AT-* presents a unique method to add audio to an existing or planned TV distribution system in Hotels, Hospitals, Schools and Apartment Houses.

Shipping weight 9 lbs.

\$195.00 Net

*Specify channel when ordering.

NEW AM/FM TUNER MODEL AFT-300

SPECIFICATIONS

| | |
|----------------------------|---|
| FM | |
| Sensitivity: | 3.2 microvolts IHFM (usable sensitivity 0.95 microvolts for 20 db of quieting) |
| Image Rejection: | 45 db |
| Frequency Response: | ±1 db, 15-15,000 cps |
| Distortion: | unmeasurable at 30% modulation, less than 0.1% at 100% modulation gated beam, constant output |
| Limiter: | |
| Antenna Impedance: | 300 ohms |
| AM | |
| Sensitivity: | 80 microvolts per meter; terminal sensitivity 10 mV |
| Selectivity: | 10 kc bandwidth; 6 db down |
| Image Rejection: | 50 db |
| IF Rejection: | 55 db |
| GENERAL | |
| Power Requirements: | 50 w., 117 v. A.C., 60 cps |
| Dimensions: | 19" W x 5 1/4" H x 11 1/2" D (excluding knobs) |
| Shipping Weight: | 25 lbs. |



Jerrold's new Model AFT-300 is a highly selective and sensitive, drift-free tuner for converting any AM or FM broadcast signal into an audio source for Jerrold's "AUDIO-TROL" Model AT-*. Model AT-* in turn will distribute these sound signals over any unused channel in a TV distribution system. While absolutely independent in its function, Model AFT-300 is the perfect companion piece to Model AT-* and can be incorporated together with the Audio-Trol in a single cabinet, or can be rack-mounted separately.

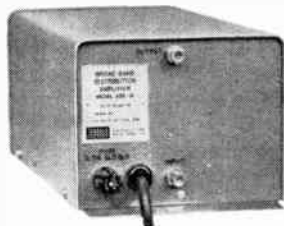
\$139.73 Net

JERROLD®**NEW AMPLIFIERS
AND OUTLETS****NEW LINE OF BROAD-BAND TV/FM AMPLIFIERS****MODEL 2300-A**

Jerrold's new medium system distribution amplifier Model 2300-A provides a minimum gain of 39 db on the low band with a high output of 0.35 volts per channel for 3-channel operation. On the high band the minimum gain is 40 db with an output of 0.25 volts per channel for 4-channel operation (both rated at 0.5% distortion). Model 2300-A features excellent overload capabilities and employs seven tubes, four of which are frame-grid types. The design incorporates low-band equalization for long cable runs and a receptacle for connecting an automatic overload control unit. New heavy duty construction insures long life and reliable service at minimum maintenance.

Shipping weight 12½ lbs.

\$107.70 Net

**MODEL ABD-1A**

This is a small system distribution amplifier with a high output of 0.35 volts for 7-channel operation providing a minimum gain of 22 db on the low band and 20 db on the high band. This amplifier, too, employs new type frame grid tubes and is built for heavy duty service. Model ABD-1A is equipped to accommodate the new 8-way coaxial splitter Model G-1518.

Shipping weight 9 lbs.

\$65.56 Net

**MODEL ACL-200**

Ideal for compact systems, dealers' show rooms and deluxe home installations. Employs two frame-grid tubes delivering minimum 20 db on the low band and 19 db on the high band.

Shipping weight 5 lbs.

\$38.97 Net

NEW "ULTRA-TAP" ALL-PURPOSE TAP-OFF FOR TV-FM DISTRIBUTION

Jerrold's "ULTRA-TAP" combines in one basic unit all the features desired by architects and installers. The architect is free to select the material and finish of the cover plate to match any decor, and can choose to combine the ac and TV/FM outlet in one outlet box with one cover plate. The installer has a choice of either a 75 or 300-ohm receiver connecting plug to meet his specific job requirements. The basic Ultra-Tap handles either TV or FM and can be flush or surface mounted. A special combination model permits simultaneous connection of a TV and an FM set. New type push-on fittings allow quick connect and disconnect of receivers.

**BASIC TAP-OFF UNIT
FOR TV OR FM****Model UT-22 (W, R or Y)**

Provides a choice of three isolation and feed-thru values and is used to tap TV or FM signals from RG-59 type feeder cables. Simple crimp-on bushings and new positive-

gripping clutch provide fast solder-less connections to the feeder. Model UT-22 can be flush or surface mounted. For flush-mounting the unit fits a standard 2" x 4" (or combination) wall box and new cover plates are available in a variety of types. A special housing is also available for surface mounting. Equipped with a "Gommo" receptacle, the unit accepts the new 75 or 300-ohm push-on plugs.

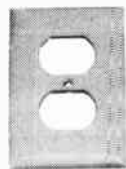
**ISOLATION AND FEED-THRU
CHART**A—Isolation B—Feed-Thru
Values in db

| MODELS UT-22 and UT-33 COLOR CODE | | | | |
|--------------------------------------|---|-------|-----|--------|
| Ch. | | White | Red | Yellow |
| 2 | A | 35 | 27 | 22.5 |
| | B | 0.2 | 0.4 | 0.2 |
| 6 | A | 34 | 25 | 19 |
| | B | 0.2 | 0.4 | 0.3 |
| 7 | A | 31 | 21 | 13 |
| | B | 0.25 | 0.5 | 0.9 |
| 13 | A | 30 | 20 | 11.5 |
| | B | 0.25 | 0.5 | 1.0 |

FLUSH COVER PLATES

Model UT-PI
Single outlet ivory cover plate, sturdy molded plastic.

Model UT-PS
Single outlet cover plate, brushed stainless steel.



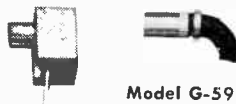
Note: Other finishes, and double-sized cover plates are available on special order.

SURFACE HOUSING

Model UT-SH
Single outlet ivory surface mounting box, sturdy molded plastic. (Not for use with UT-33)

**SPECIAL WALL
TERMINAL UNIT**

(Without Isolation or Feed-Thru)
Model UT-12 A wall terminal unit providing connection to a remotely mounted isolation unit such as G-1404, 1401, or PT-1461. Similar to Model UT-22 in all other respects.

**NEW PUSH-ON
"GAMMA" PLUGS**

Model G-59
Male plug—For use where it is desirable to run RG-59 type cable to the TV/FM receiver. Features a built-on ferrule.
†Pat. Pending

Model G-300
A 75 to 300 ohm adapter plug for connecting 300 ohm lead from receiver directly to Ultra-tap outlet.

**COMBINATION TAP-OFF
UNIT FOR TV AND FM**

Model UT-33 Available in the same isolation and feed-thru values as Model UT-22. It has additional isolation to separate TV and FM signals for simultaneous connection of a TV receiver and an FM receiver. The unit is flush mounted in the same manner as model UT-22. For surface mounting a standard wire mold box is required.

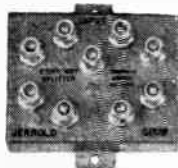
NEW "QUICK DISCONNECT" SPLITTER AND OUTLET**NEW 8-WAY COAXIAL SPLITTER
Model G-1518**

No other Splitter like it on the market! Eight outputs compacted into a 9 cu. in. device! Uses new "Gommo" Series Push-On connectors!

Nine G-59 cable connectors included.

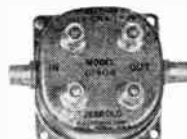
Dimensions: 3" L, 2½" W, 1⅝" H
Shipping Weight: ½ lb.

\$17.70 Net

**NEW 4-OUTLET ISOLATION NETWORK
Model G-1404**

Jerrold's new Model G-1404 is a four-outlet tap-off. It comprises a network providing high isolation between the four outputs. Equipped with new "GAMMA" series chassis fittings the unit permits quick connect and disconnect of coaxial cables to the receivers. Line output and input terminals use F-59 connectors for permanent feed-thru continuity. Two F-59 and four G-59 cable connectors included.

\$9.90 Net



JERROLD TV SYSTEM ACCESSORIES

ANTENNA
MIXING
NETWORKS

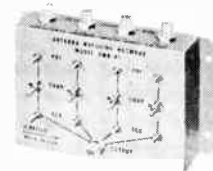
NEW



Group of 4 Model TX-(†) Units on GP-4 Mount

For mixing single channel or broadband antennas into a common line. May be used in reverse as channel splitters.

- INDOOR OR MAST MTG.—FIXED FILTER—300 OHM**
Complete with Matched Mixing Jumpers, and appropriate hardware. NET
- TX-(†) Specify Channel Desired Ch. 2 thru 13 \$3.57
 - TX-(FM) FM From TV Antenna With No Losses \$3.57
 - TX-(H-L) To Be used When Mixing Hi and Lo VHF Chs. \$3.57
 - TX-(VHF-UHF) Mix or Separate VHF and UHF Signals \$3.57
 - GP-4 GANG PLATE For Mounting 4 TX-(†) Complete With Hardware and Strap \$1.67

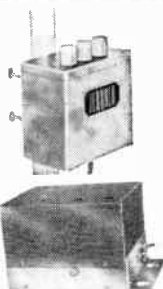


Model AMN-HI

- INDOOR MTG.—TUNABLE FILTER—75 OHM**
- AMN-HI Gray Hammertone Finish 4 ch. 7-13 \$18.15
 - AMN-LO Gray Hammertone Finish 3 ch. 2-6 \$18.15
- † Specify channel desired.

UHF
CONVERTER
MODEL
U2V

UHF Converter Model U2V
Pulling UHF pictures out of the snow where other converters haven't a chance, the U2V mast mounting mixer head converts right at the antenna. The UHF oscillator is mounted at the amplifier location (or at the TV receiver for individual home installation) and sends local oscillator signals up to the mixer, (a technique developed in radar installations). Signals leave the mixer as VHF so coaxial cable may be used. The U2V will convert any UHF channel to any VHF channel. Order by specifying UHF channel to be converted to a specific VHF channel. \$82.17 Net

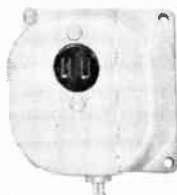


MIXER HEAD
UHF Input: double cavity tuned, 10 mc bandwidth, 75 ohms
VHF Output: 75 ohms
Mixer Crystal: CK 710 or CK 731
Dimensions: 4 1/4" x 4 1/4" x 2 1/8"
Weight: 1 lb. 13 oz.
Mounting: Mast mounted, brackets and straps supplied

Oscillator Output: 1.0 v RMS
Power Requirements: 117v AC, 50-60 cps, 25 watts
Dimensions: 4 1/2" x 5 1/2" x 7"
Weight: 3 1/2 lbs.
Mounting: May be mounted horizontally on a shelf or vertically on a wall.
Shipping Weight: 7 lbs. (Head & Oscillator).

OSCILLATOR
Tube complement: 1-6AF4, 1-0B2.

WALL
TERMINAL
UNITS



Model ST 1611
Features quick-disconnect receptacle. Matches receiver to 75 ohm line. Terminates tap line. Isolates line from AC-DC receivers. Metal construction minimizes radiation. Male plug not included. \$2.49 Net

MODEL 1201
Matches receiver to 75 ohm line. Terminates line. Isolates line from AC-DC receivers. Molded plastic economy model. Surface mounting. \$1.59 Net

MODEL 1202
Same as model 1201 but mounts flush in 2 x 4 electric outlet box. Requires one Model 1202-P Cover Plate. \$1.59 Net
1202P \$.21 Net



MATCHING
TRANS-
FORMERS



Model T-372
Surface mounting. 6 db voltage gain between 75 ohm and 300 ohm line. Flat response 50-250 mc. VSWR 1.26. Isolates line from AC-DC receivers. C-52 male connector included. \$3.60 Net

Model TO-374
Antenna mounting. Outdoor version of T-372. Bypasses AC open line in long runs between De-Snowing pre-amplifier and power supply. Matches 300 ohm broadband or yagi antennas to 75 ohm line. Complete with mounting strap and cable connector (F-59). \$6.00 Net

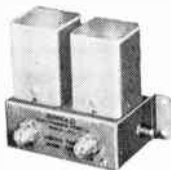
Model T-375
Receiver mounting. Economy version of T-372. Has B-59 crimp-on bushing in place of C-61 female 75 ohm connector, pre-connected 6" 300 ohm lead instead of terminal strip for mounting directly to receiver. \$2.91 Net

Model T-377
Receiver mounting, miniaturized version of T-375. Complete with C-52 fitting for attachment to coaxial cable and a solidly connected length of twin-lead (with terminals) for attachment to receiver terminals. \$1.99 Net

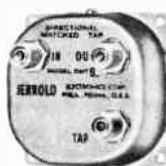
Model T-373
Flush Mounting version of T-372. \$3.60 Net

HIGH Q TRAPS

Each trap consists of two tunable LC circuits in a modified bridged-tee network. Tuning is by Teflon-dielectric trimmers with screwdriver adjustment. With both circuits tuned to an interfering signal, rejection is 40 db minimum with insertion loss only 1 db at 1 mc off the interfering frequency. Complete with two F-59 connectors for RG-59/U cable \$38.55 Net



- Model TLB-1 59.75 — 83.75 mc
- Model TFM-1 88-108 mc
- Model THB-1 179.75 — 211.25 mc



MATCHED T PADS

Model DC-8 is a back-matched directional-coupler type tap unit with a band pass from 7 mc to 216 mc. The insertion loss is 1.5 db and tap loss is 8 db. Isolation between line and tap outputs is 30 db at channel 6. Excellent 75-ohm match on all three terminals. VSWR is 1.3. Shipped complete with 3 mating F-59 connectors. Shipping weight — 6 oz. \$7.70 Net



Model MTP-20 is a resistive splitting device designed to match the trunk line in and out as well as the tap. The band width is 0-216 mc. The insertion loss is 2 db and tap loss is 20 db. Excellent 75-ohm match on all three terminals. VSWR is better than 1.2. Shipped complete with 3 mating F-59 connectors. Shipping weight — 6 oz. \$6.50 Net

FIXED RF PADS

Model PDL — Fixed attenuator or pad for 75-ohm circuits. Shipped with two F-59 connectors for in-line applications. For chassis mounting, order F-71 connectors. Specify 3, 6, 10, or 20 db. \$3.51 Net



Technical Data Sheets Available for Products Listed on this Page.

ALL DATA AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE

LOOK TO JERROLD FOR AIDS TO BETTER TELEVIEWING

JERROLD

JERROLD Solderless COAXIAL CABLE CONNECTORS and ADAPTERS

JERROLD solderless connectors can be permanently bonded to all types of RG-59/U, RG-6/U and RG-35/U cables with simple crimping tools. JERROLD connectors are carefully machined of brass and all exposed surfaces are heavily silver plated. All the new JERROLD "F" series connectors are accurately matched to 75 ohm with a V.S.W.R. less than 1.05 up to 200 mc. "F" connectors can be wrench tightened and all sizes will adapt to each other.

NEW "F" SERIES (For RG-59/U and RG-6/U)



F-71 Male Coupling Adapter. Mates with F-61, F-81, F-101-59 or A-61. \$1.96 Net



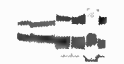
F-61 Female Chassis Fitting. Accepts F-59, F-56 and TR-72F. Mounts in 3/8" diameter chassis hole. \$.55 Net



A-61 Adapter. Mates new F-59 or F-56 male connectors to older type C-61 female fittings. \$1.25/25 Net



PF-59 Push-On Connector eliminates need for screwing an F-59 connector on an F-61 fitting in temporary equipment hook-ups. Simply pushes on and pulls off. Features a split-spring-tightened F-59 connector on one end and on F-61 fitting on the other. \$1.70 Net



F-59 Male Cable Connector. For RG-59-type cables. Mates with F-61, F-81, A-61, F-101-59, F-201-59, AF-101-59, and AF-201-59. \$.48 Net



F-56 Male Cable Connector. For RG-6-type cables. Mates with F-61, F-81, A-61, F-101-59, F-201-59, AF-101-59, and AF-201-59. \$.62 Net



F-81 Female Coupling. Accepts F-59 or F-56. Mounts in 3/8" diameter panel hole for use as feed-thru. \$.75 Net

NEW "F" SERIES (For RG-11/U)



Model F-101-59 ADAPTER ASSEMBLY
Connects RG-11/U type cables to F-59, F-56 or TR-72F. Requires Crimping Tool PL-602. \$1.46 Net



Model AF-101 ADAPTA-FIT MALE CONNECTOR
For RG-11/U type cables. Mates with F-81, F-1159, F-61, F-101-59 and A-61. Requires Crimping Tool PL-602. \$1.26 Net

AF-201. Same as AF-101, but for RG-11 Poly Foam Cable. \$1.26 Net

"C" SERIES



C-52 Male Connector mates with C-61 or C-5911. For RG-59 U type cables requires Crimping Tool PL-601 or PL-602. \$.48 Net

C-56 Male Connector. Same as C-52 but for RG-6/U type cables. \$.62 Net



C-61 Female Chassis Fitting. Accepts C-52, C-56 or A-61. Mounts in 3/8" diameter chassis hole. \$.48 Net



C-81 Female Coupling. Accepts two C-52, C-56 or A-61. Mounts in 1/4" diameter panel hole and feed-thru. \$.60 Net

Ferrules — for use with Jerrold Solderless Fittings

1026 Ferrule—For use with RG-6/U type cables. \$2.86/100 Net

1051 Ferrule—For use with RG-59/U type cables. \$1.43/100 Net

1095 Ferrule—For use with RG-11/U type cables. \$4.29/100 Net

TOOLS



Crimping Tool PL-601 — Crimps type 1051 ferrules. For F-59, F-55 and C-52 connectors and B-59 bushings. Does not distort cable or cause impedance mismatches. \$4.29 Net

Crimping Tool PL-602 — Crimps all three ferrules — 1051, 1026 and 1095. For F-59, C-52, F101-59, AF-101 and B-59 bushings. Does not distort cable or cause impedance mismatches. Made of hardened steel. \$5.39 Net



Cable Cutting Tool CD-11 — Cuts attenuator opening in coax cable for JERROLD pressure taps. Made of hardened steel. \$2.16 Net

CT-1. Replacement cutting tip for CD-11. \$1.10 Net

JERROLD TEST EQUIPMENT

VARIABLE ATTENUATOR

Model A-21



Model A-21

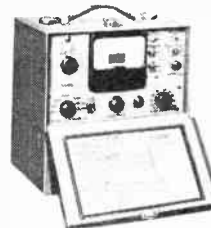
Switch type, Variable RF Attenuator providing precise attenuation over the frequency range of 0 to 250 megacycles. The unit is matched to 75 ohms with a VSWR of less than 1.05 and is capable of handling 500 milliwatts of power. Model A-21 attenuates from 0 to 21 db in 3 db steps. Two F-59 connectors included.

\$12.87 Net

THE UTMOST IN RELIABILITY AND SENSITIVITY—
The Incomparable

MODEL 704B FIELD STRENGTH METER

Reads Down to 5 Microvolts and Up to 3 Volts



Recognized throughout the industry as outstandingly accurate and reliable, the Model 704B—Jerrold's Top-of-the-Line in field strength meters—is a calibrated, direct reading instrument for TV and FM measurements. It is a professional quality instrument for making measurements of RF signal strength within the frequency range of 54 to 220 mc. Its specially-designed tuner assures increased selectivity, 75 ohm impedance and uniform gain—as required for highest accuracy. Extremely versatile, its range of uses includes field intensity surveys, orienting antennas, measuring RF attenuation of coaxial cables and balancing TV distribution systems.

FEATURES

- Reads down to 5 microvolt. and up to 3 volts, in 8 ranges.
- Bandwidth is 0.6 mc.
- Separates audio carriers from adjacent video carriers.
- Precise readings in db or microvolts ±0.8 db over entire range.
- Reads percent of amplitude-modulation of FM carriers, percent of AM distortion of FM amplifiers and percent of AM of RF generators.
- Lightweight, durable aluminum cabinet with carrying handle.
- Calibration cord on hinged door panel for permanent reference.
- Phone outputs for listening to FM signals.
- Oscilloscope output for examining composite video.

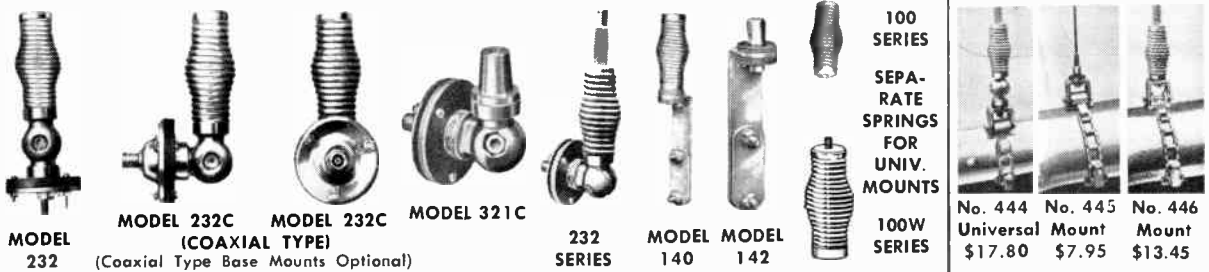
\$395.00 Net

TECH DATA SHEETS AVAILABLE FOR PRODUCTS LISTED ON THIS PAGE
ALL DATA AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE

LOOK TO JERROLD FOR THE BEST IN EVERY TEST

JERROLD

ANTENNAS *Master Mobile* MOUNTS



MODEL 232 (Coaxial Type Base Mounts Optional) MODEL 232C (COAXIAL TYPE) MODEL 232C MODEL 321C 232 SERIES MODEL 140 MODEL 142 100 SERIES SEPARATE SPRINGS FOR UNIV. MOUNTS 100W SERIES No. 444 Universal Mount \$17.80 No. 445 Mount \$7.95 No. 446 Mount \$13.45

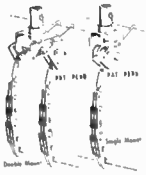
All products are for Universal Use—Mobile, Home, Marine, C.A.P., Civil Defense, Emergency, etc.

MOUNT SPECIFICATIONS (All types are tapped for 3/8" Stud Fitting on Antenna End. Shipping Weight Approx. 3 lbs.)

| | | | |
|-------------|--|---|---------|
| 232 | Base Mount—Double | Tapered Spring—Swivel Base | \$ 8.75 |
| 232C | Base Mount—Double | Tapered Spring—Swivel Base Coax Conn. | 8.75 |
| 2325S | Base Mount—Double | Tapered Spring—Spec. Stainless | 12.95 |
| 2325SC | Base Mount—Double | Tapered Spring—Spec. Stainless Coax. Conn. | 12.95 |
| 232X | Base Mount—Heavy Duty—Double | Tapered Spring—Swivel Base | 9.85 |
| 232XC | Base Mount—Heavy Duty—Double | Tapered Spring—Coax. Conn. | 9.85 |
| 232XSSC | Base Mount—Heavy Duty—Double | Tapered Spring—Spec. Stainless—Coax Conn. | 14.95 |
| 232XSS | Base Mount—Heavy Duty—Double | Tapered Spring Spec. Stainless | 14.95 |
| 232XX | Base Mount—Extra Heavy Duty | Spring | 10.85 |
| 232XXC | Base Mount—Extra Heavy Duty | Spring—Double Tapered Spring—Coax Conn. | 10.85 |
| 232XXSS | Base Mount—Extra Heavy Duty | Spring—Double Tapered Spec. Stainless | 15.95 |
| 232XXSSC | Base Mount—Extra Heavy Duty | Spring—Double Tapered Spec. Stainless Coax Conn. | 15.95 |
| 321 or 321C | Universal Mount—Where no spring desired—with spec. rigid type ball joint | | 7.95 |
| 140 | Universal Mount—Double | Tapered Spring | 6.95 |
| 140X | Universal Mount—Heavy Duty—Double | Tapered Spring | 7.95 |
| 140SS | Universal Mount—Special | Stainless | 9.65 |
| 140XSS | Universal Mount—Special | Heavy Duty Stainless | 10.95 |
| 140XX | Universal Mount—Extra Heavy Duty—Double | Tapered Spring | 8.95 |
| 140XXSS | Universal Mount—Extra Heavy Duty—Stainless Steel | | 11.95 |
| 142 | Universal Mount—Less Spring, with Insulators for Direct Mounting by Series 100 Ant. or 92 Ext. and 106 Antenna | | 3.95 |
| 4465S | Universal Mount—Special | Stainless—Chain Mount | 14.90 |
| 446XSS | Universal Mount—Heavy Duty—Special | Stainless Chain Mount | 15.90 |
| 446XXSS | Universal Mount—Extra Heavy Duty—Special | Stainless Chain Mount | 16.90 |
| 446 | Universal Mount—Heavy Duty | Spring Chain Mount | 13.45 |
| 446L | Universal Mount—Double | Tapered Spring—Chain Mount | 12.45 |
| 446XX | Universal Mount—Extra Heavy Duty | Doubled Tapered Spring—Chain Mount | 14.45 |
| 444 | Universal Mount—Heavy Duty | Spring—Swivel Base Chain Mount | 17.80 |
| 444L | Universal Mount—Double | Tapered Spring—Swivel Base—Chain Mount | 16.70 |
| 444XX | Universal Mount—Extra Heavy Duty | Spring—Swivel Base—Chain Mount | 18.90 |
| 444SS | Universal Mount—Special | Stainless—Swivel Base Double Tapered Spring—Chain Mount | 20.90 |
| 444XSS | Universal Mount—Special | Stainless—Heavy Duty—Swivel Base—Chain Mount | 27.90 |
| 444XXSS | Universal Mount—Extra Heavy Duty—Special | Stainless—Swivel Base—Chain Mount | 23.90 |
| 445 | Universal Mount—Threaded, 3/8"-24 | Chain Mount | 7.95 |

SEPARATE SPRINGS FOR BUMPER MOUNTS

| | Net |
|--|--------|
| 100—Regular | \$4.50 |
| 100-X—Heavy Duty | 5.50 |
| 100SS—Stainless Steel | 6.95 |
| 100XSS—Heavy Duty Stain. Steel | 7.95 |
| 100WX—Hvy. Duty w/Male stud | 5.50 |
| 100XX—Extra Heavy Duty Spring | 6.50 |
| 100WXX—Extra Heavy Duty Spring—Male Stud on one end. | 6.50 |
| 100XXSS—Extra Heavy Duty Spring—Stainless Steel | 8.95 |



UNIVERSAL MOUNTINGS

Unique shaped links adjustable to fit any width surface. For use with spring and or whip. (3/8"-24 thread.) Easily attaches in minutes.

| | | |
|-------|------------------------------|-------------|
| MM530 | Deluxe Dbl Mt. Stain. Steel | Net \$21.95 |
| MM531 | Deluxe Sgl. Mt. Stain. Steel | Net 11.95 |
| MM520 | Dbl. Mt. S-Cad. Plated | Net 7.95 |
| MM519 | Single Mt. S-Cad. Plated | Net 4.95 |

SILICON-CHROME WHIP ANT.

New 9 Series—with 3/8" Thr. Studs

| Model No. | Overall Length | Net Price |
|-----------|----------------|-----------|
| 9-60T | 60" | \$2.97 |
| 9-72T | 72" | 3.24 |
| 9-84T | 84" | 3.30 |
| 9-86T | 86" | 3.60 |
| 9-96T | 96" | 3.75 |

New 8 Series—without Studs

| Model No. | Overall Length | Net Price |
|-----------|----------------|-----------|
| 8-60 | 60" | \$2.82 |
| 8-72 | 72" | 3.07 |
| 8-84 | 84" | 3.13 |
| 8-86 | 86" | 3.42 |
| 8-96 | 96" | 3.55 |

New Model No. 132-J Junior Body Mount—Same design as standard No. 232 Master Mount but smaller size. Built to approved Master spec. for quality, workmanship and finish.

Attractively priced at only \$4.17
Model No. 132-JC—Same as above with Coax Connector Only \$5.17

New Model No. 140-J Junior Bumper Mount—Same design as our standard No. 140 Master Mount but smaller spring—yet of same high quality construction and finish. Net \$4.17

Coaxial Conversion Kit—No. 118 Fits No. 232 and No. 118J Fits No. 132J Models. Net \$1.00

WHIP ANTENNA SPECIFICATIONS

| MODEL Overall St. Steel Length | Base Specifications | Net Price |
|--------------------------------|--|-----------|
| 100-60S | 60" Threaded 3/8" Stud to fit all Mounts... | \$4.95 |
| 100-72S | 72" Threaded 3/8" Stud to fit all Mounts... | 4.95 |
| 100-78S | 78" Threaded 3/8" Stud to fit all Mounts... | 5.00 |
| 100-86S | 86" Threaded 3/8" Stud to fit all Mounts... | 5.15 |
| 100-90S | 90" Threaded 3/8" Stud to fit all Mounts... | 5.20 |
| 100-96S | 96" Threaded 3/8" Stud to fit all Mounts... | 5.25 |
| 100-103S | 103" Threaded 3/8" Stud to fit all Mounts... | 6.95 |
| 106-60S | Pl. End 3/16" Dia. (Fits Mod. 92 Ext.) | 4.15 |
| 106-72S | 72" Pl. End 3/16" Dia. (Fits Mod. 92 Ext.) | 4.15 |
| 106-78S | 78" Pl. End 3/16" Dia. (Fits Mod. 92 Ext.) | 4.20 |
| 106-86S | 86" Pl. End 3/16" Dia. (Fits Mod. 92 Ext.) | 4.35 |
| 106-90S | 90" Pl. End 3/16" Dia. (Fits Mod. 92 Ext.) | 4.40 |
| 106-96S | 96" Pl. End 3/16" Dia. (Fits Mod. 92 Ext.) | 4.50 |
| 106-103S | 103" Pl. End 3/8" Dia. (Fits Mod. 92 Ext.) | 6.45 |

Comb. 106-96" whip with #92 Ext. (18") gives up to 112" adj. Net \$8.00

ORDER FROM YOUR JOBBER TODAY!

Master Mobile Mounts, Inc.
LOS ANGELES, CALIFORNIA

New Giant Catalog...Fully Illustrated...
Covering Full Line of Master Mobile Antennas
and Accessories...Fixed and Mobile.

ANTENNAS *Master Mobile* MOUNTS

THE GREAT NEW ADVANCEMENT IN VARIABLE ANTENNA COILS!

HY "Q" construction with wider spacing of turns for high frequency bands. Use as center or base loaded antenna with 60" whip.



New! . . .
Silver-Plated Roller with Positive Action, Stay-Put Contact
No. 333 MASTER MIGHTY MIDGET
 For 40-20-15-11-10 Meters
\$9.95

No. 750 MASTER DELUXE ALL-BANDER
 Covers 10 thru 75 and all intermediate frequencies.
 Silverplated single turn contact, positive spring. Eccentric cam contact, easy selection of turn.
 Automatic lock prevents damage to coil.
 Net **\$14.95**



Ultra-Hi "Q" COILS
FOR 80-40-20 & 15, METERS
 After many years of experimentation, here is the coil with the highest "Q" ever obtained. Tested and found to have a "Q" of well over 15. Use with 36" base section, 60" whip.
 • Ruggedized construction • Greater efficiency • Precision made • 2 3/4" Diameter
ANY BAND . . . AMATEUR
NET EA. \$5.25



HEAVY DUTY UNIVERSAL SPRINGS
 Heavy duty flexible mounting spring mounts on the base and holds the antenna. Special flexible "give" spring prevents sharp impacts and breakage. Maintains vertical antenna position under normal wind loads.
 3/8-24 tapped hole for antenna mast. 3/8-24 stud for antenna base. 5" h. Tightening wrenches supplied.
Model MMW-7 \$4.50
 Cadmium plated with black painted ends. Lockwasher included.
Model MMW-7HC \$5.50
 Heavy Cadmium plated for extra protection. Lockwasher included.
Model MMW-7SS \$8.95
 Deluxe—Stainless Steel spring high quality appearance. Lockwasher included.

NEW MULTI-BAND TRANS. ANTENNA COILS

New Plug-In Coils! Just plug into desired pair of jacks and presto! your coil is ready for operation on the desired band. No switches, no sliding contacts, no loose connections. Built and tested for maximum resonance.

- Rigidly tested and engineered—found to have a "Q" of 525
- Operates into a 52-ohm cable
- Positive contact—noise-free, trouble-free operation
- Weathersealed
- Ruggedized construction
- Factory pre-tuned—no adjustment is necessary
- Higher efficiency—lower loss

YOUR CHOICE \$14.95



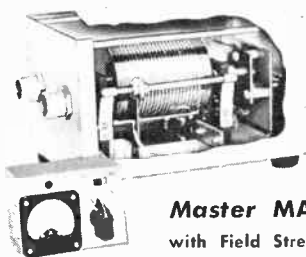
THE ARISTOCRAT No. 900



THE VICTORY

10-15-20-40-75 METERS

No. 999 10-15-20 METERS ONLY



Master MATCHER with Field Strength Meter

Motor driven variable inductance controlled by a switch from the operating position. Makes possible tuning the antenna to the exact resonant frequency. QSY to any particular band without moving to adjust antenna loading coil. All guess work is eliminated, and the field strength meter, with automatic panel light indicator, shows when roller is at minimum inductance position. With the Master MATCHER maximum efficiency is possible with minimum effort.

For 6 volts: Model 2495-6 **Amateur Net \$24.95**
 For 12 volts: Model 2495-12 **Complete**

DELUXE ULTRA-HI "Q" COILS

New design for higher "Q", top efficiency and lighter weight. No arcing with high power transmitters. For use with 3 ft. base section and 60" whip.

| | | | |
|-------------|---------|------------|---------|
| 15 meter | \$ 6.95 | 371 Kc. | \$15.95 |
| 20 meter | 6.95 | 2738 Kc. | 15.95 |
| 40 meter | 8.95 | 1768 Kc. | 15.95 |
| 75-80 meter | 9.95 | 1507.5 Kc. | 10.95 |
| 160 meter | 14.95 | 585 Kc. | 10.95 |
| 2251 Kc. | 15.95 | 325 Kc. | 10.95 |

ULTRA HY "Q" C.A.P. COILS

| | | |
|-------------------|---|-------------|
| UH "Q" 2374 KC. | (Additional HY "Q" C.A.P. Coils to be used with HY "Q" C.A.P. Antennas according to frequency desired. These coils are interchangeable. Other frequencies priced upon request.) | Net \$ 8.95 |
| UH "Q" 2738 KC. | | 8.9 |
| UH "Q" 2768 KC. | | 8.95 |
| UH "Q" 4307.5 KC. | | 7.95 |
| UH "Q" 4325 KC. | | 7.95 |
| UH "Q" 160 Meters | | 12.95 |
| UH "Q" 2251 KC. | | 12.95 |

BASE MOUNT

New design incorporating the best word in modern design for strength and service. Easy one-man installation, no special tools needed. Mounts watertight on flat or curved surface. Mounting template provided. 3/8" 21 thread in mounting hole for whips and antennas.

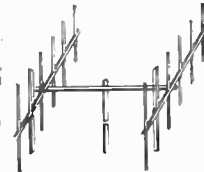


MMW-3 APS

| | | |
|-----------------------|---|--------|
| Model MMW-3AE | High gloss ebony finish | \$6.95 |
| Model MMW-3AP | High gloss gold-shed finish | 7.95 |
| Model MMW-3AES | Ebony finish, Stainless Steel hardware | 8.95 |
| Model MMW-3APS | Polish finish, Stainless Steel hardware | 9.25 |

TWIN-SIX 2 METER BEAM

Sturdy, lightweight stacked beam, 12 db. forward gain, 25-29 db. front-to-back ratio. Easy 1-man assembly for horizontal or vertical polarization. Complete with all hardware for stacking and assembly, balun, matching harness for 52-ohm coax, and 3-foot mast. Pre-tuned at factory. All heavy-duty aluminum.



| | |
|------------------------------------|----------------|
| Model AM-5 Amateur Net | \$16.95 |
| Model AM-4 Six element beam | 8.95 |

2 METER "J"

Mobile/Fixed ANTENNA

Provides 2 db. gain over standard co-axial antennas. Vertically polarized. Perfect impedance match for 52 ohm line. Factory-cut balun supplied. Overall height is 6". Ideal antenna for 2 meter mobile or fixed station use.



Model AM-28 Amateur Net \$14.95

"CLOVERLEAF" ANTENNA

Provides 3 db. gain, VSWR less than 1.5:1. Omni-directional pattern with gain equal to 2 el. beam. Complete balun to match 52-ohm coax. Factory pre-tuned. All aluminum.

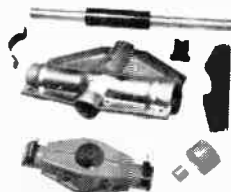


| | |
|--------------|-------------|
| AM-23 | 420-150 mc. |
| AM-24 | 220-225 mc. |
| BR-1 | 150-171 mc. |
| AM-25 | 144-148 mc. |

Amateur Net \$12.95

Model AM-26—50-54 mc. \$19.95

Design-It-Yourself BEAM PARTS!



Everything you need, except the tubing, to build the tri-band or mono-band beam you want at great savings. Trap, boom clamps, element supports, etc., assuring you of a well-built beam. Send for beam data sheets, catalog and prices.

COMPLETE KITS ALSO AVAILABLE

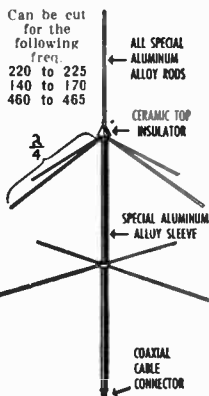
- 3 el. 10, 15 or 20 **No. AM-20—\$22.95**
- 2 el. 40 meters **No. AM-21—\$22.95**
- 3 el. Tri-Bander 10, 15 & 20 **No. AM-22—\$49.95**

ANTENNAS *Master Mobile* MOUNTS

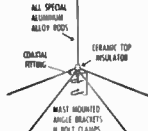
2 METER ANTENNAS — FIXED • MOBILE

GROUND PLANE ANTENNA

Model 300—Master DeLuxe . . . NEW! . . . brings in that DX. Outperforms any type of vertical dipole. "Drooping" Type Ground Plane plus four straight radials to give a low angle of radiation for general coverage, an almost perfect circle radiation pattern. Ideal for CD and defense nets. Covers complete Amateur and with Broad Band char. Matches 52 ohm coax cable through threaded coax fitting at end. Straight radials are adjustable (up or down) to eliminate standing waves on trans. lines. For medium or low-powered trans. Sturdily built of finest alloys to withstand corrosion, high winds and extreme icing. With 3/4" length of 3/4" pipe for mounting purposes. Model 300 Amateur's . . . Net \$12.95 MB-1—Mounting Bracket Net 1.00



Model GP-4 — Four "Drooping" Radials for perfect match to 52 ohm coax cable. Complete amateur band coverage. Specify other frequencies. Attaches to Mast with 11-Bolts, (11-Bolts and Mounting Brackets furnished). Also attachable to side of building. Sturdy, with special alloys, to withstand corrosion and extreme weather.

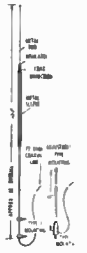


MODEL GP-4
Amateur's Net \$5.95

TWO METER COAX ANTENNAS

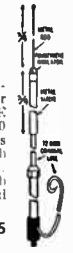
No. 214—MASTER DELUXE . . . ruggedly constructed, vertically polarized, frequency range 110 to 170 MC. Completely waterproofed. Highly polished chrome enhances appearance of any vehicle. Furnished with 10 ft. of 72 Ohm Coax Cable.

Type 1—On side with 2 brackets furnished. \$15.95
Type 2—Master Mount (No. 232X or 140X)—Mounts sold separately. Complete \$17.45
Adjustable mtg.—adjusts to 17"



2 METER STANDARD MODEL

No. 114 COAX VHF ANTENNA — At a popular price! For OPEN TYPE VEHICLES using 140 MC to 165 MC. Mounts any convenient place with standard Master Mounts. Baked enamel finish. With 10 ft. Coax Cable and 18" Adjustable Section.
Net. Only \$9.95



232X
Supp'd Mtg.



No. 613—NEW IMPROVED MASTER VHF ROOF TOP ANTENNA. This new high performance antenna features an improved type positive lock coaxial connector. Designed for police, fire, taxi cabs and amateurs using 140 MC to 165 MC. Stainless steel wire with threaded fitting. Easily changed without disturbing mounting. Comes with 10 ft. coax cable. Net \$4.95

No. 113—ROOF TOP ANTENNA without De Luxe Connections Net 3.95
No. 117—Extra Antenna for No. 113 and No. 114. Net .97
No. 116—Extra Antenna for No. 214 and No. 613. Net 1.70

All products are for Universal Use—Mobile, Home, Marine, C.A.P., Civil Defense, Emergency, etc.

MICRO-Z-MATCH

MICROMETER IMPEDANCE MATCHING INDUCTANCE for MOBILE ANTENNAS

- Used on all bands with any type coaxial cable to match any mobile antenna.
- Roller coil construction with rear cap rotating the inductance within the case. 4 microhenries maximum inductance.
- Silver plated coil and roller contacts for low loss.
- Micrometer type calibration permits infinite adjustment and positive resetting.
- Adjustability Easily adjustable for minimum standing wave ratio (1.1).



No. 925
Complete with Coax Adp. Kit Net \$9.95

Without coax adapter kit Micro-Z-Match may be connected between antenna connector and ground connection.

CITIZEN BAND 2 METER

No. 460 with 10' Coax (RG 58/U) \$7.95
No. B-20 \$1.95
No. CB-19 \$5.45

New improved Master antennas for high performance. Stainless steel and chrome plated brass. Self-tapping threads. Easy to install with one 7/16" hole.

EXTENSIONS — with 3/8"-24 thread, fits all mounts and coils



EXTENSIONS

| Model | Length | Description | Net |
|-------|---------|--|--------|
| 88 | 36" | Lower Section for all Band Antennas | \$4.05 |
| 88C | | In Chrome Plate | \$4.55 |
| 90 | 26" | Extension for 100 Series Whips | \$3.55 |
| 92 | 18 1/4" | Extension for 106 Series Whips | \$3.50 |
| 94 | 36 1/4" | Extension for 106 Series Whips | \$4.05 |
| 115 | 36" | Extension for Models No. 114 and No. 214 | \$4.25 |
| 12* | 12" | Base Section for AB Antenna (baked enamel) | \$2.75 |
| 12C* | 12" | Chrome Base Section for AB Antenna | \$3.25 |
| 18* | 18" | Base Section for AB Antenna (baked enamel) | \$2.75 |
| 18C* | 18" | Chrome Base Section for AB Antenna | \$3.25 |
| 24* | 24" | Base Section for AB Antenna (baked enamel) | \$3.25 |
| 24C* | 24" | Chrome Base Section for AB Antenna | \$3.65 |

*NOTE: Base Sections for use with ALL-BANDER Antenna Coils.

NEW MASTER FLEX-R No. 711

Designed to relieve stress and strain and prevent damage that could be transmitted to the loading coil.



\$1.95

NEW SLIM-JIM

All-Band BASE LOADING Antenna Coil

For 10, 11, 15, 20, 40, 80 Meters.

96" S.S. Whip included. Positive locking action whip provides accurate and tight contact wherever set. Just slide in or out to final loading point and lock whip into position.

No. B-1080 \$17.95



GROUND PLANE (Drooping Type) FOR 6 METERS

No. MGP-6

Aluminum alloy tubing, coax cable connector. For medium or low powered trans.

\$14.95



E-Z-OFF

ANTENNA CONNECTOR



Noise-free. Connect or remove loading coils, whips, or mounts in a jiffy. No wrenches, pliers or screw-driver needed. High-grade stainless steel . . . will not corrode.

- Precision made
- Maximum efficiency
- Positive lock

Model No. E-Z-295

Amateur Net \$2.95



No. 10-H Tenna-clip Fits all cars

Amateur Net.....\$1.00

TENNA-CLIP

Designed to store mobile whip in convenient "storage" position. Instant release. Fits all cars. No. 20-C Amateur



Net \$1.00

Master Mobile Mounts, Inc. LOS ANGELES, CALIFORNIA

ANTENNAS Master Mobile MOUNTS

MASTER FIBRE-GLAS WHIPS

FLEXIBLE, INDESTRUCTIBLE UNIVERSAL ANTENNA

- Completely Weatherproof — permanent and rust resistant, corrosion proof.
 - Break-Proof — specially designed flexibility prevents failure due to fatigue or breakage.
 - Safe — permanent insulation featured in Master Whips make it absolutely safe, prevents burns.
 - Base Fitting — 3/8" x 24 thread with male brass — chrome plated fittings.
- FG-60 60" Amateur Net ... \$4.95
 FG-72 72" Amateur Net ... \$4.95
 FG-84 84" Amateur Net ... \$5.15
 FG-96 96" Amateur Net ... \$5.25
 FG-103 103" Amateur Net ... \$6.95

CLAMP-ON ANTENNAS

- CG-120 Same as CG-360 but without removable whip feature. Net \$5.95
- CG-360 108 to 470 Mc Net \$8.95
- CG-110 11 Met. Cit. Bd. 27 Mc Net \$10.30

SKYMASTER COAX ANTENNA

Skymaster gives you a lower "radiation angle" of your antenna for a better contact for vertically polarized stations in the citizens band. The Skymaster has a nominal impedance of 72 ohms, used with 72 ohm cable. Matches RG59/U coax cable for perfect match to most transmitters and improves receiving.

Both radiator and skirt are of heavy-gauge aluminum tubing, and a resilient machined polyethylene insulator is used for low weight and high strength. Silver-plated coax connector is used for easier connection and lowest SWR.

- Easily installed on any existing mount
- Concentrated signal for best coverage
- Perfect match for transmitting and receiving.
- Highest quality components
- Tested and approved in Master Mobile's own laboratory

SM-700-2 2 Meters Net \$10.95
 SM-700-6 6 Meters Net \$15.95
 SM-700-10 10 Meters Net \$17.95
 SM-700-11 11 Meters Net \$17.95

MASTER MAGIC WAND TUNABLE

Combination Coil & Whip New Magic-Wand Top-Loaded Antenna Mounts On Any Standard Base Mount.

A newly designed single band coil and whip antenna in 1 compact and attractive unit. Top loaded to provide top performance and efficiency at the most useful radiation angle for communications. Built and tested in the Master Mobile Laboratories, the Master Magic-Wand provides a minimum wind resistance which minimizes detuning effects at high speeds. Antenna wound over tapered fiberglass whip for maximum strength.

Available in 5 ft. & 6 ft. Lengths

- No. MM810—10 Meters—5 Ft. L. \$8.95
 No. MM811—11 Meters—5 Ft. L. 8.95
 No. MM811-35—11 Meters—35" 8.95
 No. MM811-45—11 Meters—45" 8.95
 No. MM815—15 Meters—5 Ft. L. 8.95
 No. MM820—20 Meters—5 Ft. L. 8.95
 No. MM840—40 Meters—6 Ft. L. 9.95
 No. MM880—80 Meters—6 Ft. L. 9.95

BASE STATION MONOPOLE ANTENNA

Designed around a folded radiating element intended for service in installations requiring a ground plane configuration and a wider useful frequency range for a single antenna than is possible in the standard ground plane design using a coaxial stub tuner. Antenna is fed by an end seal type termination, through a Type SO, 239 female connector mating with a PL-259 plug. Radiating elements and all ground plane elements are permanently grounded, therefore, damage by lightning is reduced to a minimum.

- VSWR (using 50 ohm cable) 1.31
 - Bandwidth (under 2.1 VSWR) ±4%
 - Max. power input 750 watts
 - Internal feed-line RG-8A/U
 - Nominal input imped. 50 ohms
 - Termination SO, 239
- SR-600-2 2 Meters Net \$14.95
 SR-600-6 6 Meters Net \$16.95
 SR-600-10 10 Meters Net \$24.50
 SR-600-11 11 Meters Net \$24.50

11 METER CITIZENS BAND ANTENNA

A base-loaded stainless-steel whip antenna with an overall height of 40 inches.

The bottom of the whip has been wound into a coil which is potted in a pliable plastic to add rigidity to the coil.

The base of the whip is fitted with a 1/2" diameter brass slug, for use with a standard-broadcast 8-ball type coil mount; also roof-top or trunk-lid type mounting.

The antenna is cut to offer very low standing-wave ratio over most of the band when fed with a 52-ohm coax.

YOUR CHOICE EACH \$12.95

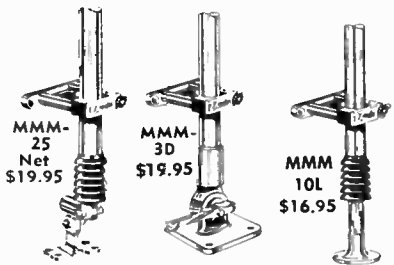


ANTENNA WITH PL-259 PLUG

Model No. PL-259..\$6.95

MARINE LAYDOWN MOUNTS

New deluxe series. Can be mounted on side of cabin or upright on deck. Mounts swivel, and are adjustable to any position. Chrome-plated brass with high impact waterproof-weatherproof phenolic insulator.



- MMM-25 Net \$19.95
 MMM-3D \$19.95
 MMM-10L \$16.95

Additional Brackets Available

MASTER MARINE MARVEL MARINE ANTENNA

Designed, built and tested in Master Mobile's own floating laboratory, the new center-loaded Master Marine Antenna is the latest result of many years of experience in producing the finest in Antennas used throughout the world! The Marine Marvel, sea-seure and powerful, provides maximum power radiation on all marine frequencies from 2 to 3 megacycles. Here is the Antenna that was made for your boat! ... engineered to withstand the most severe type of marine service, with long life assurance by being fabricated of the highest quality material available.

- 10 1/2 Ft. Overall Length.
- Capacity 4 Ft. Stainless Steel Plastic-Coated Whip
- 18" Center-Loaded Impregnated Coil.
- 5 Ft. Anodized Base Section.
- Absolutely Waterproof - Weatherproof.
- No Electrolysis.
- Rugged Insulators.
- Adjustable Antenna Lead.

COLORS AVAILABLE — WHIP—Yellow, Blue or Black COIL—Yellow, Blue or Black BASE—Gold (Spec. Saltwater Anodized)

- No. MMM-2710 Antenna & Solid Mounts—5 Ft. Base \$29.95
 No. MMM-2715 Antenna & Solid Mounts—10 Ft. Base \$35.95
 No. MMM-2700 Antenna—5 Ft. Base (less Mts.) ... \$27.95
 No. MMM-2705 Antenna—10 Ft. Base (less Mts.) ... \$33.95
 MMM-10 SOLID MOUNTS per set \$5.50



3 ELEMENT Beam Antenna

Handles up to 1 Kw. Input



Sturdy and lightweight 3 element beam provides a power gain of approximately 2 1/2 (8 DB) in the forward direction and reduces interference from the sides and rear by approximately 10 to 1 (Front to back ratio 20 DB).

A coaxial gamma match is pre-tuned at the factory to give an excellent VSWR of 1.1 to 1 at band center when fed with a 52 OHM coax.

- SR-500-2 2 Meters \$10.95
 SR-500-6 6 Meters \$12.95
 SR-500-10 10 Meters \$24.95
 SR-500-11 11 Meters \$24.95

MASTER SUPER MARINE ANTENNA No. MMM-2750

The Master Super-Deluxe Marine Antenna in 12 ft. anodized 1 3/8" tubing. Coil section is 35" long. Impregnated coil covered with phenolic tubing, 8" fiberglass whip. Here is the ultimate in Marine Antennas!
 MMM-2750 Antenna & Solid Mounts \$49.95
 Without Mounts \$47.95



MARINE MOUNTING BRACKETS

- Net
 MMM-1 for 1" mast ... \$5.95
 MMM-15 for 1 1/2" mast 6.75

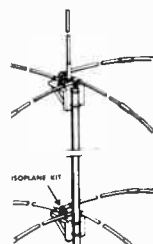
CITIZENS BAND GROUND PLANE

Most popular of all Citizens Band ground planes. Precision engineered and fully tested. Provides the utmost in performance, efficient power ... ideal for transmitting and receiving. All elements are of aircraft-type aluminum, heat treated for long life. Can be installed in a matter of minutes. Telescopic 2-section elements. Furnished with "U" clamps for mounting. Designed for 52 ohm match. Coax fitting accepts PL-259 plug.

MODEL CBGP5 Complete. \$15.95

MODEL CBGP-5C Complete with 50" RG 58U coax ... \$18.95

CBGP-5 Isoplane Kit — Isolating skirt. Aluminum radials mount below antenna to lower angle of radiation and minimize effect of surrounding structures. \$10.95



ASTRONAUT ANTENNA for CITIZENS BAND

Can be resonated precisely to any frequency between approx. 20 and 30 mc. by means of the tip rod attached to top of antenna. Provides outstanding performance. Swivel connection permits installation either horizontally or vertically on curved or flat surfaces. Length approx. 60".

MODEL CBV-6 \$15.95



Master Mobile Mounts, Inc.
 LOS ANGELES, CALIFORNIA

KTV Towers and communications equipment

A TOWER OF STRENGTH

- Safe in gales up to 80 mph without ugly, hazardous guy wires.
- Free-standing to 50 feet high.
- No rusting, ripping or weakening holes... safest by far!
- Big, husky, steel gird-around tubular ties for extra strength.
- Exclusive lateral load bearers take all strain off joints.
- Easy installation and dismantling an roof at ground.
- Free drainage joints prevent trapped moisture and corrosion.

All communication towers are built of hot dipped tubing inside and out, then dipped and galvanized, baked in a bright aluminum after fabrication.

≠820-K Straight Section. Used as bottom of free-standing 50 ft. tower and in other applications. Legs of 16 ga. cold rolled steel triangularly spaced on 10 7/8" centers. Gird-around cross ties spaced at 12" intervals. Over-all length 10 ft. Complete with hardware 38 lbs ≠818-K, same quality, but cross ties are spaced at 15" intervals. Wt. 34 lbs. ≠816-K. Cross ties spaced 20" apart. Wt. 30 lbs.



≠710K Top Section. Equipped with 21" spaced mast socket rings to take 1 1/2" to 2 1/2" dia. mast. Threaded external receptacle securely welded to each ring gives extra bearing for 2" x 1/2" set screw. Hi-tensile bolts, washers, hex nuts and set screws furnished. Over-all length 10 ft. Wt. 28 lbs.

packages available in 10, 20, 30, 40 and 50 ft. Towers

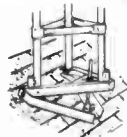
40 ft. Tower Includes: 1 ≠710-K; 1 ≠816-K; 2 ≠818-K tower sections and all connecting hardware. Shipping wt. 126 lbs. Order concrete base or roof mount separately.

50 ft. Tower Includes: 1 ≠710-K; 1 ≠816-K; 2 ≠818-K and 1 ≠820-K tower sections; all connecting hardware. Shipping wt. 164 lbs. Order concrete base or roof mount separately.

DEALER NET PRICES—10 FT.—\$21.20, 20 FT.—\$39.00, 30 FT.—\$55.50, 40 FT.—\$74.00, 50 FT.—\$92.50



≠864-H Wall or House Bracket. Adjustable to 20 inches.



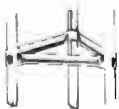
≠863H Roof Mount. Assures a strong, accurately vertical installation of one or more tower sections. Adjusts up to 45° roof pitch. Takes full advantage of KTV's lateral load support. Wt. 8 lbs.



≠852-J "Gin Pole". For easy tower assembly. Has 1/4" heavy duty steel tubing with powerful strap-steel grab brackets. Fits all tower sections. With forged ring and iron pulley. Length 12 ft. Wt. 18 lbs.

Gird-Around Tubular Cross Ties

Bigger, safer, stronger. Actually grip around vertical tubing. Take all outward strain. The tower itself takes none.

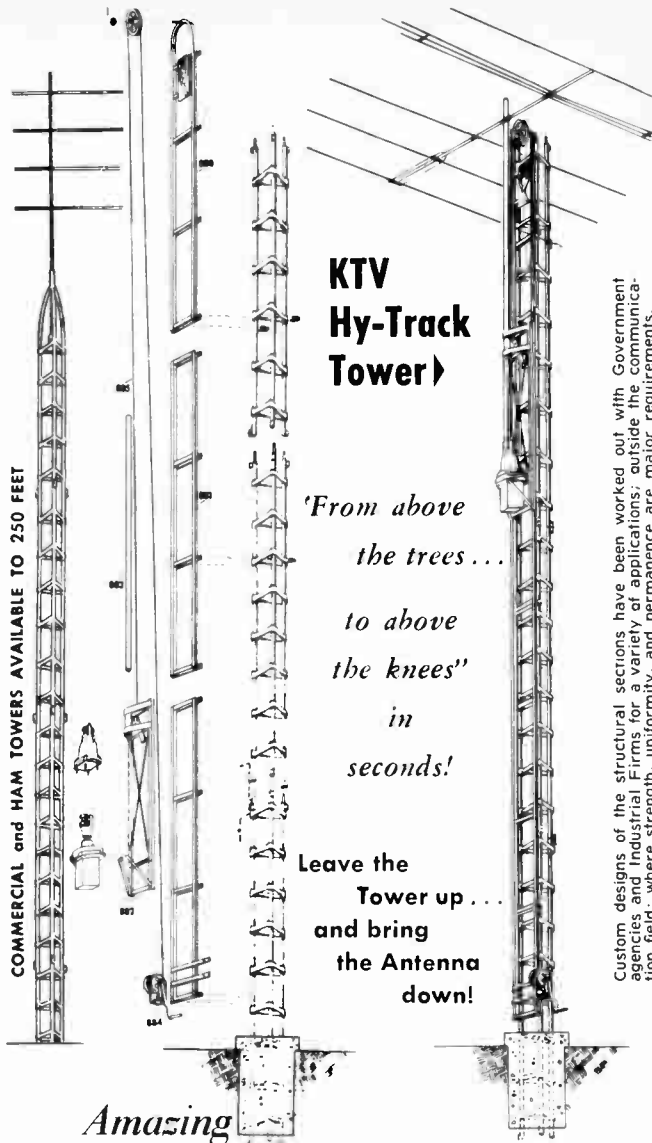


- ≠862H: Concrete base mount. The recommended installation.
- ≠857-F: Mast 10 ft. x 1/4" O.D.
- ≠859-F: Mast 15 ft. x 1/4" O.D.
- ≠865-H: Rotor post brackets—adjustable
- ≠866-H: Tower mast bushing. 1 1/4" I.D. 1 1/2" O.D.
- ≠867-H: Base plate for drive-in base.

- 900 Series —130 Ft.—16 Ga.—Single Lateral Load Bearers
- 1200 Series —175 Ft.—14 Ga.—Double Lateral Load Bearers
- 1200xx Series—200 Ft.—14 Ga.—Double Lateral Load Bearers
- 1600 Series —200 Ft.—14 Ga.—Double Lateral Load Bearers
- 1600xx Series—250 Ft.—14 Ga.—Double Lateral Load Bearers

1600 and 1600xx are towers with legs of 14 ga. cold roll steel triangularly spaced at 16 inches center to center; tubular gird around cross ties spaced at 12 inch intervals. New 18 and 24 inch triangular sizes are being tool for Communication and Microwave applications.

Engineering available for special towers for radiation and special antennas.



KTV Hy-Track Tower

'From above the trees... to above the knees' in seconds!

Leave the Tower up... and bring the Antenna down!

Amazing KTV Hy-Track Tower

"You Crank the Antenna Up the Tower"

PERFECT FOR

Research • Antenna Testing • Survey Work • VHF-UHF Commercial or Private Receiving — Retransmitting applications.

Dealer Net, 30 ft. tower — Complete. \$229.50

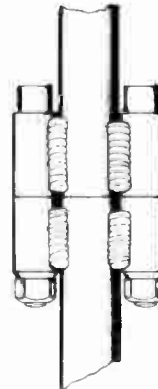
Write for details today.

Exclusive SINGLE LATERAL LOAD BEARERS

No dangerous rust. Arrow (X) shows open joint section. Assures free drainage and ventilation, less corrosion. • • • No hazardous holes. Arrow (Y) shows lateral load bearers lifetime welded to side of each section leg with twin 1 1/8" fillets. Sections are bolted vertically. Bear 100% of the load. No load on joints. No horizontal bolts to tear through. Nothing safer. Only KTV has it!

DOUBLE LOAD BEARERS

Exclusive!! Double Lateral Load Bearers welded to both sides of each section leg with twin 1 1/8" inch fillets—Sections are bolted vertically to bear 100% of the load. No load on joints, nothing safer, nothing so easy to assemble—only KTV has it.



Custom designs of the structural sections have been worked out with Government agencies and Industrial Firms for a variety of applications; outside the communication field, where strength, uniformity, and permanence are major requirements.

KTV Tower and Communications Equipment Company

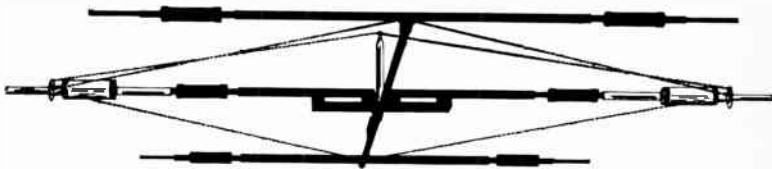
Sullivan, Illinois

Mosley**Mosley**

TA-40K

ADDS 40 METER OPERATION
TO THE TA-33 TRAPMASTER

- SWR 1.5/1 or better at resonant frequencies.
- Maximum element length 38 ft. 7 in.
- Turning radius 19 ft. 6 in.



- Assembled weight 10 lbs.
- Hardware, mast and line for guying is supplied.
- Shipping weight 13 lbs.

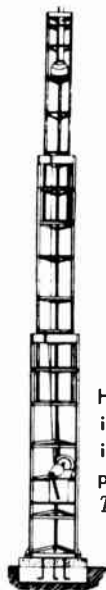
Only a few minutes are required to convert the Mosley TA-33 Trapmaster Beam for operation on 40 meters. When installed on the driven element, the TA-40K will exhibit a typical figure eight pattern obtained from a half wave antenna yet 10, 15 and 20 meter operation is totally unaffected. TA-40K incorporates the famous construction and design features used in the Mosley Trapmaster Antennas which assure years of trouble-free performance. Because of the mechanical strength of some antennas as well as the differences in elec-

trical design, the TA-40K is not recommended for use on any antenna other than Mosley Trapmaster.

Mosley TA-40K 40 meter adapter only Net \$ 39.95

Mosley TA-3340 TA-33 w/TA-40K complete
. . . . Net \$ 139.70

Mosley TA-40K can be used with the TA-32 and TA-31 Trapmaster Antennas with performance equal to the performance of the TA-40K and TA-33.



Mosley TOWERMASTER

- Low friction section guides!
- Heavy steel safety clips!
- Ball bearing metal pulleys!
- Hinged steel base plate!
- Pre-drilled rotor plates!
- Heavy duty geared raising/lowering winches!

Here is a complete line of towers with built-in satisfaction and dependability. Mosley Towermaster is available in many designs, configurations and prices to fit every need. Write Mosley for complete Towermaster information.

Mosley Lo/Ten Coaxial Cable

- Light Weight!
- Higher Tensile Strength!
- 30% Lower Attenuation!
- 20-Year Life Expectancy!
- Suitable For Direct Burial!



prices shown are for 1-99 ft.
price decreases with quantity

| Mosley Type | Similar To | Net Resale Per Foot East of Rockies | West of Rockies |
|-------------|------------|---|--------------------|
| MT 4-50 | RG- 8/U | \$.155 | \$.160 |
| MT 5-50 | RG-58/U | \$.087 | \$.092 |
| MT10-50 | RG-17/U | \$.584 | \$.615 |

Lo/Ten is manufactured for Mosley by Times Wire and Cable Company, division of International Silver Company, and is familiar to coaxial cable users as T-Line. Lo/Ten is distributed by Mosley through exclusive arrangement with Times Wire and Cable Company.

Mosley CM-1

- SELECTIVITY: 2.5 kc. at -6 db.
- SENSITIVITY: ½ microvolt for 10 db. signal-to-noise ratio on ten meters.
- STABILITY: Less than 500 cycles drift after one-minute warm-up. Less than 200 cycles change for 10% line voltage change. Temperature compensated and voltage regulated.
- IMAGE and IF REJECTION: 35 db. minimum.
- AUDIO OUTPUT: ½ watt at 6% distortion.

Features:

- Double conversion with crystal controlled first oscillator.
- Diode detector for AM and product detector for SSB and CW.
- Covers complete range of 80 through 10 meter amateur bands.
- Frequency calibration every 5 kc. WWV reception at 15 mc.
- S-meter functions on AM, CW or SSB, with or without BFO.
- Five dual-purpose tubes and two semi-conductor diodes function as 12 tube sections.

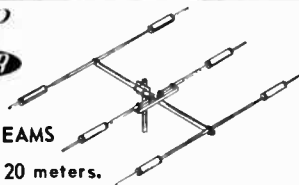


CM-1 Receiver . . .

. . . Net \$182.70

CMS-1 Speaker Net 16.95

CM-1 Complete Net \$199.65

Mosley**AMATEUR RADIO
ANTENNAS****Mosley****TRAP
MASTER****3 BAND BEAMS**

10 - 15 - 20 meters.

3 ELEMENT beam provides outstanding performance on 10, 15 and 20 meter bands. Up to 8 db., forward gain with 25 db., or better, front-to-back. 1.1/1 or less, SWR at resonant frequencies.

Model TA-33 Amateur Net, \$99.75

2 ELEMENT version of the famed TRAP MASTER Beam rated to a full KW. 5.5 db. forward gain with 20 db. front-to-back. 7' boom and 28' maximum element length.

Model TA-32 Amateur Net, \$69.50

3 BAND DIPOLE is rated to 1 KW. For the Ham who wants to begin with an inexpensive three band dipole and in two additional steps have the Famous TA-33 "Trap-Master" Beam.

Model TA-31 Amateur Net, \$25.85

Conversion Kit to make the TA-31 a TA-32.

Model TA-31-32 Amateur Net, \$43.65

Conversion Kit to make the TA-32 a TA-33.

Model TA-32-33 Amateur Net, \$30.25

"JR" FOR 300 WATTS OR LESS
10 - 15 - 20 meter bands.

Trap-Master "Junior" Beams provide the same fine performance as the world famous Model TA-33. Traps are rated to 300 watts (AM).

3 ELEMENT "JUNIOR" with up to 8 db. forward gain and 25 db. front-to-back. SWR is usually less than 1.5/1 at resonant frequencies. Aluminum boom is 1 1/4" OD. x 12". Maximum element length, 26' 8". Turning radius is 14' 9". Wind load, 86 pounds.

Assembled weight, 20 pounds. Recommended feed-line, RG-8/U.

Model TA-33 Jr. Amateur Net, \$69.50

**TRAP
MASTER**

2 ELEMENT "JUNIOR" with 5.5 db. forward gain with approximately 20 db. front-to-back. Aluminum boom is 6' long and maximum element length is 26' 8". Has turning radius of just 13' 9". Assembled weight, 14 pounds. Wind load, 62 pounds.

Model TA-32 Jr. Amateur Net, \$49.50

3 BAND DIPOLE rated to 300 watts. For the Ham who wants to begin with an inexpensive three band dipole and in two additional steps have the famous TA-33 Jr. "Trap-Master" Beam.

Model TA-31 Jr. Amateur Net, \$19.75

Conversion Kit to make the TA-31 Jr. a TA-32 Jr.

Model TA-31-32 Jr. . . . Amateur Net, \$29.75

Conversion Kit to make the TA-32 Jr. a TA-33 Jr.

Model TA-32-33 Jr. . . . Amateur Net, \$25.85

**"TRAP-MASTER"
VERTICAL ANTENNAS**

3 BAND VERTICALS for 10, 15 and 20 meter bands.

Weatherproof traps need no adjusting and provide automatic band-switching. One quarter wave operation for low angle radiation. Requires 4 or more 16' radials. With guy rope and base. The V-3 is rated to a full KW (AM), the V-3 Jr. is rated to 300 watts (AM).

Model V-3 Net, \$22.95

Model V-3 Jr. . . . Net, \$17.95

Six meter adapter kit for V-4-6 and V-3 Antennas.

Model AK-6 Amateur Net, \$3.04

10 thru 40 Meters

Automatic bandswitching with this vertical. Electrical 1/4 wavelength each band with low angle radiation makes this an excellent low cost DX antenna. Low SWR with exceptionally flat response over full bandwidth. Traps are weather and dirt proof for long, reliable service. Will handle full KW (AM). Sturdy aluminum construction. Requires 4 radial wires, 30' each. With guy rope and base.

Model V-4-6 . . . Amateur Net, \$27.95

80 Meter BASE LOADING COIL. Base loading coil for operating V-4-6 Vertical on 75 and 80 meter bands. Space wound on heavy ceramic form. Handles full KW (AM). Mounts on base section of vertical. With coax connectors.

Model D-4BC Amateur Net, \$15.67

5 BANDS!

Work 10, 15, 20, 40 and 80 with one antenna . . . one RG-8/U feed line. Designed and built to meet United States Air Force electrical and structural specifications. The V-5 is 100% rust proof and performs brilliantly on each of the 5 bands. It is capable of handling power of 1 KW to the antenna! Weather proof trap assemblies are used throughout . . . no external loading coil needed. Maximum length of antenna is 43 ft., 8 in. Supplied complete with polyethylene guy rope, heavy duty base with internal coax fitting and all necessary hardware.

Model V-5 . . . Amateur Net, \$118.50

HEAVY DUTY BASE MOUNT

Supplied with the V-5 and V-4-8 Antennas.

2 BANDS!

For 40 and 80 meter bands. 1/4 wavelength vertical on each band. Over-size trap assembly handles 1 KW(AM). Maximum overall length of antenna is 52' 3". Requires 12 radials each 64' in length. Complete with base mount (heavy duty), polyethylene guy rope and hardware.

Model V-4-8 . . . Amateur Net, \$85.00

. . . the 3 BAND BEAM that will give your signal that DX punch.



This wide spaced, six element configuration employs 4 operating elements on 10 meters, 3 operating elements on 15 meters and 3 operating elements on 20 meters. Automatic bandswitching built for operation at maximum legal amateur power. Forward gain on 10 meters is 9 db., on 15 meters is 8.5 db. and on 20 meters is 8 db. Front-to-back is 20 db. or better on all 3 bands. SWR is 1.5/1 or better at resonance. Maximum element length is 19' 3". Assembled weight is 69 lbs. Just one coaxial feed line needed. 52 ohm, RG-8/U is recommended.

Model TA-36 Amateur Net, \$129.50



3 ELEMENT BEAM for 20 and 40 meters. Forward gain on 20 meters, 8 db.; on 40 meters, 5.0 db.; front-to-back on 20 meters, 25 db.; on 40 meters, 20 db.; maximum element length, 54' 8"; turning radius, 29'; boom length, 20'. Antenna weight (with Tilting Head), 150 lbs. Just one coaxial feed-line is needed. 52 ohm, RG-8/U is recommended.

Model TA-20-40 . . . Amateur Net, \$337.50

The AutoWhip-5 is a 5 band mobile antenna for 10, 15, 20 and 40 meters with a parallel network that achieves near unity SWR on 80 meters. Fully automatic, changes bands without switches.

Model TM-5 Amateur Net, \$73.45

GROUND SYSTEM KIT serves as a substitute for your automobile when operating from a fixed or portable location such as an apartment roof, campsite, fishing cottage, house trailer, boat or any of the many locations the active Ham may find himself and his equipment. Easily assembled and installed.

Model TM-5-AK

. . . Amateur Net, \$26.62

**"TRAP-MOBILE"
for 10, 15 and 20 meters.**

Automatic Bandswitching! 3 Band Mobile Antenna functions without switches. Overall length of 7' 8" provides electrical 1/4 wavelength on each band assuring excellent performance with low SWR over full bandwidth. Stainless steel whip sections permit antenna to lay forward over car for garaging. Stainless steel base stud, 3/8"-24, fits standard mounts. Feed with RG-8/U coax, preferably 22 1/2 feet in length.

Model MA-3 Amateur Net, \$20.96

Whip-Klip - Universal clip for mobile whip antennas.

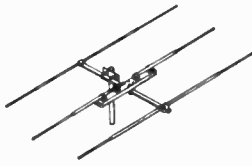
Model MWK . . . Amateur Net, \$.98



AMATEUR RADIO ANTENNAS



"POWER-MASTER" BEAM ANTENNAS



"Power-Master" Antennas are full sized arrays, each designed for a single band, 10, 15, or 20 meter. All are 100% rust-proof, stainless steel hardware, high impact polystyrene insulators with aluminum elements and boom. "Power-Master" is fed with 52 ohm coax.

Forward gain - 8.9 db., front-to-back - 25 db., SWR - 1.1/1, maximum element length - 18' 7", boom - 12' x 1 1/4" OD x .058, turning radius - 11' 1", wind load - 69 lbs.
Model A-310 Net, \$39.39

Forward gain - 8.5 db., front-to-back - 25 db., SWR - 1.1/1, maximum element length - 23' 4", boom - 12' x 1 1/4" OD x .058, turning radius - 13' 2", wind load - 87 lbs.
Model A-315 Net, \$44.63

Forward gain - 8.0 db., front-to-back - 25 db., SWR - 1.1/1, maximum element length - 35' 4", boom - 14' x 1 1/2" OD x .125, turning radius - 18' 9", wind load - 200 lbs.
Model A-320 Net, \$81.10

VHF "POWER-MASTER" ANTENNAS

14 element, 2 meter beam. Forward gain - 13 db., front-to-back - 20 db., SWR - 1.1, maximum element length 3' 5", boom - 1 1/4" x .058" x 12', turning radius - 6' 5", wind load 37 lbs., assembled weight - 11 1/2 lbs. element sections are 5/8" OD and 1/2" OD establishing an extremely low ratio of length-to-diameter.
Model A-142 Net, \$51.18

5 element, 6 meter beam. Forward gain - 11 db., front-to-back - 20 db., SWR - 1.1, maximum element length - 9' 8 3/4", boom - 1 1/4" x .058" x 12', turning radius - 8' 5", wind load - 38 lbs. assembled weight - 11 1/2 lbs. "Power-Master" VHF Antennas combine superlative performance with the most rugged construction to be found in any VHF antenna for amateur use!
Model A-56 Net, \$44.05



5 element, 2 meter beam and 4 element, 6 meter beam. Forward gain - (2M) 11.4 db., (6M) 9.6 db., front-to-back - (2M) 11.5 db., (6M) 16.3 db., SWR - (2 and 6M) 1.1, maximum element length - (2M) 3' 5", (6M) 8', boom - 1 1/2" x .125" x 14', turning radius - 8' 9", wind load - 50 lbs., assembled weight - 20 lbs. 100% rust proof.
Model A-2N6 Net, \$70.40

STACKING KITS

Stacking Kit for A-142, vertical or horizontal.
Model SK-2 Net, \$24.94

Stacking Kit for A-56, vertical or horizontal.
Model SK-6 Net, \$34.39

"SIGNAL-MASTER" ANTENNAS



This 2 element Signal-Master is the antenna for 40 meters. Rated to 1 KW. 100% rust proof. Forward gain - 5 db., Transmission line - 52 ohm coax (RG-8/U), Boom - 2" OD x .110" wall x 20', Maximum element length - 44' 3", Turning radius - 24' 4", Wind load (EIA Standard) - 200 lbs., Antenna weight - 58 lbs. F/B - 20 db.
Model S-402 Amateur Net, \$124.50

"VEST-POCKET" ANTENNAS

2 element, 40 meter "Vest-Pocket" beam with 5 db. forward gain. Front-to-back, 19 db., SWR; 1.1/1, boom, 15'; maximum element length, 36' 1"; turning radius, 19 1/2". Assembled weight, 68 lbs.
Model VPA40-2 Net, \$82.45

TRAP DIPOLES

Resonates at 40 and 80 meters. 1/2 wavelength on each band. Rated to 1 KW. Antenna length, 114' 11". Ideal where a bi-directional pattern is desired. Antenna weight, 7 lbs.
Model TD-2 Net, \$37.54

Will operate on 10, 15 and 20 meters. Rated to 300 watts AM. Overall wire length of 24 feet. 1/2 electrical wavelength on each of three bands. Antenna weight, 1 3/4 lbs.
Model TD-3 Jr. Net, \$13.13

DIPOLE LOADING COILS

Coils are space-wound with plated No. 12 copper wire and are rated to 1 KW.
Type 40-D Net, \$8.36
Type 75/80-D Net, \$8.36

MAST PLATE ADAPTER KIT

Mast Plate Adapter for 2" OD Mast complete with Aluminum Angle and hardware.
Model AK-60 Net, \$4.78

CITIZENS BAND ANTENNAS

DELUXE LINE

3 element beam for best point-to-point communication. 9.3 db. gain. Use the A-311 on each end to develop 80 watts ERP. Less mast, coax line and rotor.
Model A-311 Net, \$37.50

Coaxial ground plane vertical antenna. 100% rust and corrosion proof. Can be mounted on tower, pole or chimney mount. Excellent base station antenna.
Model CA-27 Net, \$36.70

FOR SHORT WAVE LISTENERS

A seven bond receiving dipole that offers real "DX-Ability" on 11, 13, 16, 19, 25, 31 and 49 meters. Made of No. 16 tinned copper wire with glazed porcelain insulators. Entire antenna weighs just 2 lbs. and is 40 feet in length. 75 ohm twin-lead transmission line supplied.
Model SWL-7 Net, \$14.75

A receiving dipole for 10, 15, 20, 40 and 75/80 meters. Antenna is 69 feet in length. Has all the same mechanical construction as the Model SWL-7.
Model RD-5 Net, \$15.75

CITIZENS BAND ANTENNAS

DELUXE LINE

Cardioid Vertical Antenna provides a cardioid shaped radiation pattern with gain over an azimuth of 180 degrees. The gain in the direction of maximum signal is 3 db. plus or minus 90 degrees from the axis of the main forward lobe. Front-to-back ratio is 15 db. and VSWR is 1.5/1 maximum. The cardioid vertical is ideal for mobile services operating along city or state borders, shorelines, or back-to-back with other services.
Model VGR-27 Net, \$45.85

Ground Plane Vertical is ideal as base station antenna. 360 degree pattern and vertical polarization for effective communication with mobiles. High impact polystyrene base with internal coax fitting, less coax line.
Model V-27-GP Net, \$34.95

102" stainless steel vertical whip antenna designed for high efficiency mobile operation. Antenna may be mounted on bumper or rear fender. Base has 3/8" threaded stud to fit any standard mobile base mount.
Model V-102-SS Net, \$6.84

STANDARD LINE

The V-11-UGP is ideal as base station antenna. 360 degree pattern and vertical polarization for effective communication with mobiles. Rugged, 6061-T6 aluminum. 100% rust and corrosion proof.
Model V-11-UGP Net, \$21.95

A 57" telescoping three section disguise antenna. Designed to be mounted on front fender of vehicle. Complete with coax matching system and M-1200 connector.
Model LC-57-A Net, \$15.70

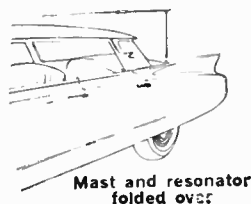
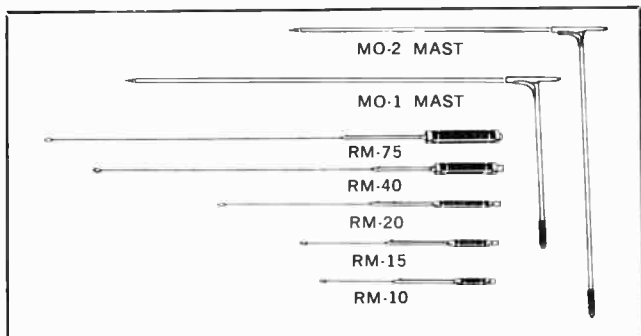
Chrome plated 4 section disguise antenna that telescopes from 100 inches to 39 inches. Designed to be mounted on rear fender. Use standard mobile whip mount, not supplied.
Model LC-100 Net, \$8.94

A 57" three section telescoping vertical antenna, designed for mounting on transmitter, window or desk. Mounting is achieved by means of a large suction cup at the antenna base. Loading coil is enclosed in a molded plastic cover. Complete with coax and M-1200 connector.
Model LC-27-V Net, \$7.35



NEW-TRONICS MOBILE COMMUNICATION ANTENNAS

HUSTLER MOBILE ANTENNA 10-15-20-40-75 METERS



Mast and resonator in mobilizing position

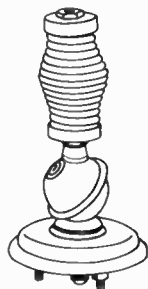


One mast and five resonators permit operating on any of five bands with exceptional results. Fold over aluminum mast is 54" long. When opened to full length, the two sections of the mast are rigidly held in a vertical position. Each resonator has a special coil for maximum radiating efficiency. Tuning for center frequency is by the adjustable stainless steel rod of the resonator. Mast has 3/8-24 base stud to fit all standard mobile mounts. SWR is less than 2 to 1 for any center frequency setting within the band as follows: 10m., 100 to 120 kc; 15m., 100 to 120 kc; 20m., 80 to 100 kc; 40m., 40 to 50 kc; 75m., 25 to 30 kc (all approximation). Power rating: AM-DC input 75 watts; SSB-DC input 150 watts PEP. NO NEED FOR MATCHING DEVICES. USE ANY FEED LINE LENGTH OF 52 OHM CABLE.

| Model | Description | Mount or Height | Net |
|-------|--------------------------------|---------------------|--------|
| MO-1 | 54" mast folds at 15" Fr. Base | Rear deck or fender | \$7.95 |
| MO-2 | 54" mast folds at 27" Fr. Base | Bumper | 7.95 |
| RM-10 | 10 meter resonator | 80" max.—75" min. | 5.95 |
| RM-15 | 15 meter resonator | 81" max.—76" min. | 6.95 |
| RM-20 | 20 meter resonator | 83" max.—78" min. | 7.95 |
| RM-40 | 40 meter resonator | 92" max.—87" min. | 9.95 |
| RM-75 | 75 meter resonator | 97" max.—91" min. | 11.95 |

ANY MAST OR RESONATOR MAY BE PURCHASED SEPARATELY

COMMERCIAL MOBILE ANTENNAS



No exposed mounting bolt heads. One man installation. Lighter weight. Reduced spring assembly length. Tough, molded mounting pad. Engineered and built to meet the most critical standards, the improved design embodied in the ball, base and spring has no equal in appearance and performance.

ALL STAINLESS MODELS

Stainless 2" ball, stainless spring, (17-7-PH) THE ONLY ALL STAINLESS ASSEMBLY ON THE MARKET.

| | | |
|-------|--------------------------------|---------|
| NTS-1 | Base, ball and spring assembly | \$19.44 |
| NTS-2 | Base and ball assembly only | 8.97 |
| NTS-3 | Spring only | 10.47 |

CADMIUM PLATED MODELS

Same as stainless models except all elements are heavily cadmium plated.

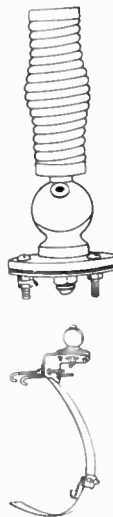
| | | |
|-------|--------------------------------|---------|
| NTC-1 | Base, ball and spring assembly | \$11.34 |
| NTC-2 | Base and ball assembly only | 6.87 |
| NTC-3 | Spring only | 4.47 |

CHROMIUM PLATED MODELS

Same as stainless models except all elements are triple chrome plated.

| | | |
|------|--------------------------------|--------|
| NT-1 | Base, ball and spring assembly | \$8.49 |
| NT-2 | Base and ball assembly only | 5.01 |
| NT-3 | Spring only | 3.51 |

PROFESSIONAL MOBILE ANTENNA



C-29-32 — Assembly includes heavily chrome plated 1 1/2" die cast ZAMAK ball, 3/8-24 female thread. Adjustable to 180°. Stainless steel spring sturdily built to withstand sharp impacts. Gray Cyclocac insulator and cadmium plated hardware \$5.07

C-30-32 Same as C-29-32 except has chrome plated spring \$4.11

C-32 Base 3/8-24 female thread \$2.01

C-29 Stainless steel spring only. Has 3/8-24 threaded stud \$3.06

C-30 Chrome plated, oil-tempered spring only \$2.10

BUMPER MOUNTS

Model BM-1 Flat alloy steel strap fits tightly against any shape large and small bumpers.

Will fit any car where clearance between top of bumper and car body is as low as 1/4".

Whip receptacle is a heavy chrome plated 1 1/2" die cast ZAMAK swivel ball with 3/8-24 thread. All metal parts are heavy cadmium plated \$6.95

MODEL BM-2 Same as Model BM-1 except without swivel ball base \$4.95

WHIPS

STAINLESS STEEL WITH REMOVABLE ADAPTOR

Made of 17-7PH taper ground stainless steel; the best available for this purpose. Adaptors are heavy cadmium plated. Two hex hollow head screws firmly seize whip. 3/8-24 male thread. Wrench included.

| | | |
|--------|---------------------|--------|
| SW60R | 60" Stainless Whip | \$3.27 |
| SW96R | 96" Stainless Whip | \$3.93 |
| SW102R | 102" Stainless Whip | \$4.23 |
| SW108R | 108" Stainless Whip | \$4.50 |

CADMIUM PLATED WITH FIXED ADAPTOR

Made of special alloy cadmium plated oil tempered steel. Taper ground. Heavy cadmium plated adaptor permanently attached to whip. 3/8-24 male thread.

| | | |
|-------|--------------------------|--------|
| TW60 | 60" Cadmium Plated Whip | \$2.85 |
| TW96 | 96" Cadmium Plated Whip | \$3.45 |
| TW102 | 102" Cadmium Plated Whip | \$3.75 |
| TW108 | 108" Cadmium Plated Whip | \$3.50 |

GUTTER CLIP:



Model GC-1 Plastic holder swivels on cadmium plated clamp. Attaches firmly to gutter. Since whip is contained in plastic, it will not rattle \$0.90

LEADS

COAXIAL LEADS

RG-58/U with PL-259 on one end and live terminal and ground terminal on other end, split end.

| | | |
|----------|--------|--------|
| L-11-60 | 5 ft. | \$2.43 |
| L-11-144 | 12 ft. | \$3.12 |
| L-11-240 | 20 ft. | \$3.90 |

HIGH IMPEDANCE LEADS

With Pin Plug on one end and live terminal and ground terminal on other end, split end.

| | | |
|----------|--------|--------|
| L-13-60 | 5 ft. | \$1.23 |
| L-13-144 | 12 Ft. | \$1.56 |
| L-13-240 | 20 ft. | \$1.95 |

SPECIAL LEADS

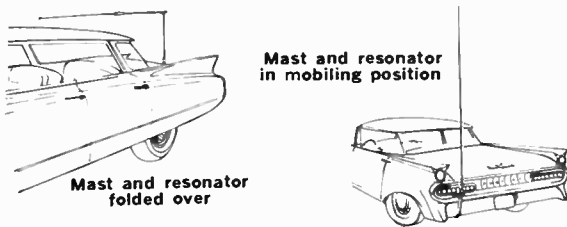
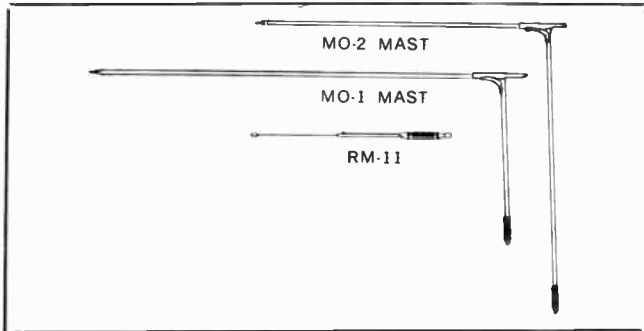
RG-58/U with PL-259 and specially designed end to fit CB-27 and NB-40.

| | | |
|-----------|--------|--------|
| BL-14-60 | 5 ft. | \$2.70 |
| BL-14-144 | 12 ft. | \$3.35 |
| BL-14-240 | 20 ft. | \$4.00 |

NEW-TRONICS CORPORATION Cleveland, Ohio

NEW-TRONICS MOBILE COMMUNICATION ANTENNAS

CITIZENS BAND ANTENNAS



Mast and resonator in mobiling position

Mast and resonator folded over

FOLD-OVER TYPE FOR FENDER OR BUMPER MOUNT:

Sturdy mast and an 11 meter tunable center loaded resonator provides exceptional results with every CB transceiver. Less signal fading when car is in motion. Total extended height is only 83 inches.

The 54-inch aluminum mast folds over to permit assembly to clear openings in garages, etc. When opened to full height, the two sections of the mast are held rigidly in a vertical position. Mast has 3/8-24 stud to fit standard mobile mounts. SWR less than 2 to 1.

Model CB-111 for Rear Deck or Fender: 54" aluminum mast with 11 meter resonator. Mast folds over 15" from base \$13.90

Model CB-211 for Bumper Mount: 54" aluminum mast with 11 meter resonator. Mast folds over 27" from base \$13.90

RM-11 11 meter resonator \$5.95

FOR COWL OR FENDER MOUNT:



Model CB-27 23 channel coverage . . . tunable . . . low SWR. 4 section, heavy duty chrome plated brass tubing assembly. Opens to 60". Collapses to 27". Swivel base, mounts on any car surface. Fits any hole 15/16" or 1". Sealed loading coil solidly affixed to tubing. Stainless tuning rod with etched tuning scales. 5 feet of detachable RG-58/U coaxial cable with PL-259 connector \$10.11

Assembly may be used for Amateur (28-30 MC.)

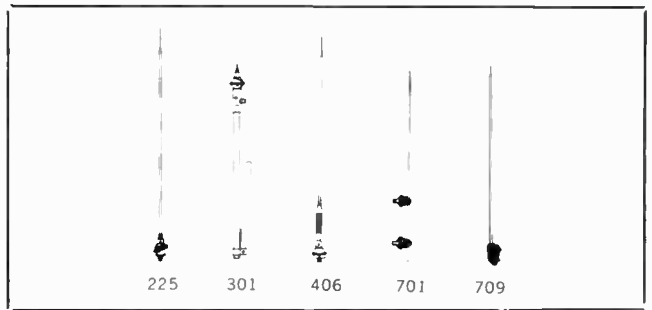
Model CB-2 This mast has same features as mast on Model CB-27 except has standard 3/8-24 male threaded stud. It may be used in combination with Model CB-1 or any other standard base \$8.61



Model CB-1A Base has chrome plated split ball to meet severe angle requirements of fender beyond 30°. 3/8-24 female thread. Ball swivels up to 180° \$1.80 (Series BL lead required)

Model AD-1 Adapter to convert Model CB-1A to accept PL-239 \$1.10

AUTOMOBILE ANTENNAS



No. 225 Hi-ball black plastic base with chrome hood, 3-section mast, 48" detachable lead. Extends to 40"; collapses to 17" \$3.95

No. 226 Same as No. 225 except with 2-section mast. Extends to 40"; collapses to 21" \$3.95

No. 227 Same as No. 225 except with 54" detachable lead. Mast extends to 57 1/4"; collapses to 22 1/4" \$4.50

No. 301 Disappearing type antenna with 54" permanent lead. 3-section antenna extends to 53 1/4" and collapses completely \$6.95

No. 303 Same as No. 301 except with 36" lead. 3-section mast extends to 25" and collapses to 3 3/4" \$5.95

No. 410 Flex-O-Matic Ball-Tronic Antenna. Adjustable to any angle up to 180°. 23 3/4" stainless steel whip. 48" detachable lead \$5.95

No. 406 Same as No. 410 except has 3-section mast which extends to 56 1/4" and collapses to 24". 54" detachable lead \$7.95

No. 701 Side-cowl antenna with 2 plastic insulators and 36" detachable. 3-section mast extends to 57 1/2" and collapses to 22 1/2" \$6.95

No. 709 Volkswagen side cowl antenna with single stanchion and molded insulator. 36" detachable lead. 3-section mast extends to 56 1/2" and collapses to 20 1/2" \$5.95

ABOVE PRICES FOR BOX PACKAGING

AMATEUR ANTENNA

6 Meter and Noise Blanker Antenna (39-51 MC)

NB-40 Similar in appearance and construction as the CB-27, however, electrical characteristics of this tunable antenna and low SWR permit extensive coverage on the 6 meter band. Ideal for use with the Collins' Noise Blanker. Includes 5 feet of detachable RG-58/U cable with split end. 52 ohm match \$10.44

NB-2 Mast has same features and appearance as mast on Model NB-40 except has 3/8-24 male thread stud. May be used with Model CB-1A or any other standard base to meet individual requirements \$8.64

PREMAX ANTENNAS--MOUNTINGS--ACCESSORIES

SERIES C CENTER-LOADED MARINE ANTENNAS

A Center-Loaded Collapsible Type Antenna, consisting of two telescoping, adjustable base sections on which the loading coil is mounted, with a tapered top whip section, giving a total extended length of about 19 feet. This Antenna collapses to a single unit with the whip section telescoping through the coil into the lower section, making a collapsed length of 7 feet. The sections are of seamless aluminum, or stainless steel and the coil is wound on low-loss bakelite tubing and treated after assembly with weatherproof coating.

| No. | Type | Base O.D. | Base I.D. | Wt. Lbs. | List Price |
|----------|-----------|-----------|-----------|----------|------------|
| CLA-619 | Aluminum | 1.000" | .834" | 5 | \$50.00 |
| CLS-1119 | Stainless | 1.000" | .900" | 7 | 110.00 |

SERIES B CENTER-LOADED ANTENNAS FOR MOBILE & MARINE USE

Center-Loaded Whip-Type Antennas consist of a standard base section or spring-type on which is mounted a special Premax coil. The top is a taper-ground stainless steel whip 6 ft. in length, giving a total overall height of 9 ft. Various coils are available or the standard 75-meter coil can be adapted by shorting out turns on the coil. Antennas can be used with any of the Standard Premax Mountings shown below, or will fit any 3/8" x 24-thread mounting.

| NO. | FREQ. | PRICE |
|-------------------------------|---------------------------|---------|
| BXS-11 | 14,000 kc. (20M.) | \$15.00 |
| BXS-23 | 2374 kc. (C.A.P.) | 15.00 |
| BXS-31 | 3105 kc. (A.P.T.) | 15.00 |
| BXS-38 | 3800 kc. (75M.) | 15.00 |
| BXS-43 | 4325 kc. (C.A.P.) | 15.00 |
| BXS-46 | 4585 kc. (C.A.P.) | 15.00 |
| BXM-25 | 2000 to 3000 kc. (Marine) | 15.00 |
| (Same as BXS but with Spring) | | |
| BSS-11 | 14,000 kc. (20M.) | 25.00 |
| BSS-23 | 2374 kc. (C.A.P.) | 25.00 |
| BSS-31 | 3105 kc. (A.P.T.) | 25.00 |
| BSS-38 | 3800 kc. (75M.) | 25.00 |
| BSS-43 | 4325 kc. (C.A.P.) | 25.00 |
| BSS-46 | 4585 kc. (C.A.P.) | 25.00 |
| BSSM-25 | 2000 to 3000 kc. (Marine) | 25.00 |

SERIES B COILS
Premax also supplies the Series "B" coils in the standard frequencies above. Special frequencies available on request.
List Price \$9.00 ea.

MAST EXTENSIONS
Polished Stainless Mast Extensions—threaded 3/8"-24 on both ends and supplied with stainless nuts and lockwashers. Available in 12", 18", 24", 30" and 36" lengths.
Prices range from \$4.00 to \$8.00 list each

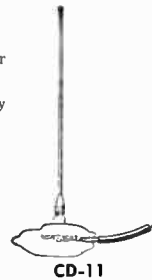
BX Mast Extension Type BXS Type BSS

MOBILE VHF WHIPS

Style CD-11 Series—Permanent type. Porcelain insulator mounts thru 1/2" hole in rooftop.

Style CD-21 Series—Emergency type. Attaches by heavy duty suction cup.

| NO. | FREQ. | PRICE |
|--------|----------------|--------|
| CD-112 | 108 to 120 mc. | \$4.00 |
| CD-114 | 144 mc. | 4.00 |
| CD-115 | 152 to 162 mc. | 4.00 |
| CD-212 | 108 to 120 mc. | 2.80 |
| CD-214 | 144 mc. | 2.80 |
| CD-215 | 152 to 162 mc. | 2.80 |



CD-11

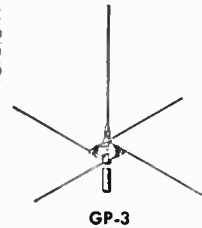


CD-21

GROUND PLANE ANTENNAS FOR POINT-TO-POINT USE

For point-to-point installations, Premax has two VHF Antennas—The Style GP-3 which has elements of heavily-plated spring steel with skirt wires that can be bent down to any angle to match coax cable. Mounting is within a water-proof housing that fits standard 1 1/2" pipe. Cable carries down thru pipe.

| NO. | FREQ. | USE | PRICE |
|--------|---------|-------------------------|--------|
| GP-312 | 120 mc. | For aircraft and C.A.P. | \$8.00 |
| GP-314 | 140 mc. | For 2 meter and C.D. | 8.00 |
| GP-315 | 150 mc. | For police and taxi | 8.00 |

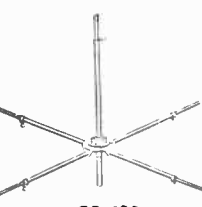


GP-3

PREMAX ADJUSTABLE GROUND PLANE ANTENNAS 20-60 mc

Another low-cost type Ground Plane Antenna is adjustable from 20 to 40 mc. or 40 to 60 mc. Standing wave ratio matching to 52-ohm line is 1.07 to 1.13 and to 72-ohm line is 1.27 to 1.23 depending on type of transformer cable. All-aluminum construction employing adjustable tubular elements

| | | |
|--------|----------------------|---------|
| GP-430 | Adjustable 20-40 mc. | \$50.00 |
| GP-450 | Adjustable 40-60 mc. | 40.00 |



GP-400 Series

MOBILE MOUNTINGS FOR USE WITH WHIPS WITH 3/8"-24 MALE THREAD



Type CA

CA BUMPER MOUNTING

"Chain Style" — clamps on any bumper with 1" clearance; no drilling; theft-proof.

Price \$11.00



Type R-3

R-3 UNIVERSAL MOUNTING

Solid Polished Aluminum Swivel Ball. Heavy stainless steel backup plate with ground nut screws. Stainless steel hardware.

Price \$15.00



Type RS-2

TYPE RS-2 COMBINATION

Similar to R-2 except has spring as shown under SA-2.

Price \$25.00



Type SA-2

SA-2 SPRING ADAPTOR

Stainless steel Spring Adaptor—can be attached to types R-2, R-3, L-1, CA and NA-1 to provide greater flexibility. Height 4 1/4", diameter 2 3/8".

Price \$12.50



Type NA-1

TYPE NA-1

Bumper mounting with ceramic cone insulator and steel bracket.

Price \$8.50



Type F

TYPE F

30° adjustable mounting for fender, cowl or gravel pan. Chrome-plated brass with phenolic insulation.

Price \$13.50



Type R-2

R-2 UNIVERSAL COAX TYPE MOUNTING

Solid Polished Aluminum split-ball can be adjusted to any angle. Has shielded coax connection and stainless hardware.

Price \$15.00



Type L-1

TYPE L-1

Bumper mounting, 2 pairs ceramic cone insulators with steel bracket. 10" adjustment.

Price \$14.00



Type V

TYPE V

Thru-deck mounting designed for Style BX and BS Center-Loaded Marine Antennas. White porcelain comes with a maximum opening for 1-1/2" deck. Stud threaded 7/16"-24.

Price \$9.00

PREMAX PRODUCTS, DIV. CHISHOLM-RYDER CO., NIAGARA FALLS, N. Y.

PREMAX ANTENNAS--MOUNTINGS--ACCESSORIES

VERTICAL TELESCOPING ANTENNAS PREMAX STAINLESS STEEL ANTENNAS

Premax stainless steel antennas, fully telescoping and adjustable, have a locking device that holds the sections firmly at any desired point insuring a perfect electrical contact. Made of a high grade polished stainless steel tubing, hard-drawn to an extremely high tensile and yield strength, they are well suited for the most severe strains from high seas or winds.

PREMAX ALUMINUM ANTENNAS

Premax aluminum antennas are lightweight, corrosion resistant and have adequate strength to meet practically all needs for marine, commercial and mobile installations that demand convenience in erecting and dependable performance. They are constructed of highly polished, specially tempered aluminum tubing engineered to withstand wind velocities up to 60 miles per hour.

PREMAX STEEL ANTENNAS

Inexpensive, popular, fully adjustable telescoping steel antennas for commercial, amateur, civil defense or other installations, made of high-tensile copper-nickel steel tubing, are heavily cadmium-plated. A positive locking device insures proper electrical contact between sections. *Not recommended for marine use on salt water.*

BASE MOUNTINGS FOR VERTICALS



TYPE 1 BASE INSULATOR

Heavy-duty type Base Mounting Insulator with compression rating up to 10,000 lbs. Has wet-process brown-glazed porcelain cones. Available in galvanized malleable iron, and chrome-plated brass, in rigid-post, hinged-post. Ht. to post base, 7 to 5 inches. Wt. 8 lbs.

List Price \$52.00 to \$105.00



TYPE 6 BASE INSULATOR

For marine, mobile unit, roof-top or tower. Lead-thru construction permits connections below deck. Flanges 6" in diameter with 6 bolts on a 5" circle. For 1/2" to 3" deck. Available in galvanized malleable iron, and chrome-plated brass. Rigid post, and hinged post styles. Ht. from flange to post base, 3" to 5". Wt., 11 1/2 lbs.

List Price \$78.00 to \$170.00

SPECIFICATIONS & DESCRIPTIONS OF TELESCOPING VERTICALS

| NO. | DESCRIPTION | EXTD. | COLL. | BASE O.D. | BASE I.D. | WGT. | LIST PRICE |
|---------|------------------|-------|-------|-----------|-----------|-------|------------|
| SS-1118 | 3-Sec. Stainless | 18'4" | 6'3" | .750" | .680" | 6 | \$ 90.00 |
| SS-1124 | 4-Sec. Stainless | 24'3" | 6'3" | 1.000" | .900" | 9 | 135.00 |
| SS-1130 | 5-Sec. Stainless | 30'0" | 6'4" | 1.250" | 1.120" | 13 | 185.00 |
| SS-1135 | 6-Sec. Stainless | 35'7" | 6'4" | 1.500" | 1.370" | 19 | 255.00 |
| AL-312 | 2-Sec. Aluminum | 12'4" | 6'4" | .500" | .334" | 1 1/2 | 15.00 |
| AL-518 | 3-Sec. Aluminum | 18'5" | 6'4" | .750" | .584" | 3 | 25.00 |
| AL-324 | 4-Sec. Aluminum | 24'4" | 6'4" | 1.000" | .834" | 5 | 35.00 |
| AL-530 | 5-Sec. Aluminum | 30'0" | 6'5" | 1.250" | 1.084" | 7 | 55.00 |
| AL-535 | 6-Sec. Aluminum | 35'8" | 6'5" | 1.500" | 1.310" | 12 | 75.00 |
| 112-M | 2-Sec. Steel | 11'8" | 6'0" | .656" | .556" | 4 | 12.00 |
| 318-M | 3-Sec. Steel | 17'3" | 6'2" | .875" | .775" | 7 | 18.00 |
| 224-M | 4-Sec. Steel | 22'9" | 6'3" | 1.063" | .963" | 11 | 25.00 |
| 130-M | 5-Sec. Steel | 28'3" | 6'4" | 1.250" | 1.150" | 15 | 30.00 |
| 136-M | 6-Sec. Steel | 33'9" | 6'5" | 1.500" | 1.400" | 20 | 38.00 |

STANDOFF INSULATORS



TYPE 10-5

A heavy-duty Insulator with chrome-plated brass base and head caps—regular or hinged clamps. Insulator is brown-glazed porcelain in extra heavy style. Ht. to center of clamp, about 4 1/2". Wt., 3 lbs.

List Price \$60.00 to \$72.00

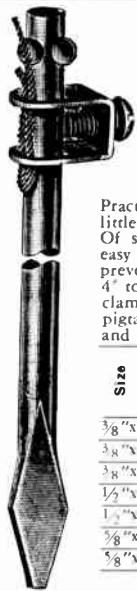


TYPE 13-5

Heavy, rugged cast caps and base plates in aluminum, or chrome-plated brass. Heavy brown-glazed porcelain insulator, 3 inches in diameter. Ht. to center of clamp, 4 3/4". Wt., 2 1/2 lbs.

List Price \$13.00 to \$25.00

PROTECT YOUR EQUIPMENT WITH A PREMAX GROUND ROD!



Practical and efficient Ground Rods, costing so little that it doesn't pay to fuss with makeshifts! Of smooth, hard-drawn steel, chisel-pointed for easy driving and heavily copper-plated for rust prevention and to insure clean electrical contact. 4' to 8' lengths in 3/8", 1/2" and 3/4" with screw clamp (illustrated) or in 6' and 8' lengths in pigtail wire, drilled hole or plain style, 1/2" and 3/8" only.

| Size | Screw No. | Clamp List | Hole | | Pigtail | | Plain | |
|---------|-----------|------------|-------|-------|---------|-------|-------|-------|
| | | | No. | List | No. | List | No. | List |
| 3/8"x4' | J-64 | \$ 80 | | | | | | |
| 3/8"x4' | J-66 | 110 | | | | | | |
| 3/8"x8' | J-68 | 165 | | | | | | |
| 1/2"x6' | G-86 | 210 | H-86 | \$200 | P-86 | \$225 | X-86 | \$180 |
| 1/2"x8' | G-88 | 250 | H-88 | 240 | P-88 | 265 | X-88 | 220 |
| 3/4"x6' | G-106 | 300 | H-106 | 290 | P-106 | 315 | X-106 | 265 |
| 3/4"x8' | G-108 | 380 | H-108 | 370 | P-108 | 395 | X-108 | 345 |

(Prices are per 100 rods, bundled in 25s)

MOBILE WHIP ANTENNAS

HEAVY DUTY TAPERED STAINLESS—TYPE ES

Solid one-piece taper-ground whips, 1/4" at base tapering to 3/32" at tip with top ball. High-tensile stainless steel fabricated by special formula, comparing favorably with the best spring steel, yet having excellent corrosion-resistant properties.

HEAVY DUTY TAPERED CHROME-SILICON—TYPE EC

Same as above only fabricated from chrome-silicon steel of exceptionally high-tensile strength and uniformity of temper, with high fatigue values developed by special heat treatment during fabrication.

STANDARD WEIGHT TAPERED STAINLESS WHIP WITH NON-REMOVABLE ADAPTOR—TYPE TS

Stainless steel whips of extremely high tensile strength with a permanent type stainless adaptor, with 3/8" male thread.

STANDARD WEIGHT WHIP WITH REMOVABLE ADAPTOR—TYPE VS

Same whip as above except supplied with a removable adaptor locked in place by dual set screws.

| NO. | LENGTH | PRICE | NO. | LENGTH | PRICE |
|--------|--------|--------|---------|--------|--------|
| ES-760 | 60" | \$6.00 | TS-860 | 60" | \$7.00 |
| ES-772 | 72" | 6.00 | TS-872 | 72" | 7.00 |
| ES-784 | 84" | 7.00 | TS-884 | 84" | 7.50 |
| ES-796 | 96" | 7.00 | TS-896 | 96" | 7.50 |
| EC-660 | 60" | 5.50 | TS-8108 | 108" | 8.00 |
| EC-672 | 72" | 5.50 | VS-960 | 60" | 8.00 |
| EC-684 | 84" | 6.50 | VS-972 | 72" | 8.00 |
| EC-696 | 96" | 6.50 | VS-984 | 84" | 8.50 |
| | | | VS-996 | 96" | 8.50 |
| | | | VS-9108 | 108" | 9.00 |

AD-700 — Separate Stainless Adaptor with 3/8" male thread for ES and EC series whips.

AD-900 Same as AD-700 except drilled for VS series whips.

ALL PRICES SHOWN ARE LIST PRICES SUBJECT TO USUAL COMMERCIAL DISCOUNTS.

PRICES EFFECTIVE AT TIME OF PRINTING AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.

PREMAX PRODUCTS, DIV. CHISHOLM-RYDER CO., NIAGARA FALLS, N. Y.

SCALA PRECISION TV ANTENNAS

- * FOR TRANSLATORS & CABLE SYSTEMS
- * TRANSMITTING & RECEIVING

5 & 10 ELEMENT YAGIS Channels 2 to 13

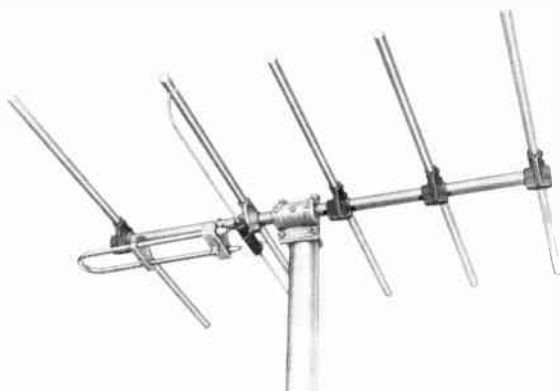
HIGH GAIN: Scala single channel yagis give maximum possible gain evenly distributed throughout the TV channel. They are designed to give flat response across the channel—no peaks that look good on a field strength meter at the sacrifice of signal information.

LOW NOISE LEVEL: Every precaution has been taken to eliminate the generation of noise within the antenna: welded feed points, one-piece boom and parasitic elements, no mechanical splices, no outside sleeving that can corrode causing noise generation later; the gain and low noise factor remain stable for the life of the antenna.

EXCELLENT MATCH TO TRANSMISSION LINE: VSWR is held within an average of 1.45 to 1. Yagis available with either 300 ohm balanced termination or 72 ohm coaxial termination (at additional cost). The 72 ohm antennas use Scala's exclusive trouble-free balun design. Choice of N type, UHF, or Jerrold connector on 72 ohm models.

PERFORMANCE CHARACTERISTICS: Horizontal beam width, 5-element models 48° to half-power point; 10-element models, 40°. Front to back ratio exceeds 18 db for all models. Beam width can be narrowed either vertically or horizontally by stacking two yagis; it can be further narrowed on one plane or narrowed on both planes by stacking four or more yagis.

MAXIMUM DURABILITY: Scala HDCA models are heavy-wall seamless 6061-T6 aluminum: 3/4" OD tubing for parasitic elements, 1.050" OD pipe (0.113 wall) for boom. Terminals

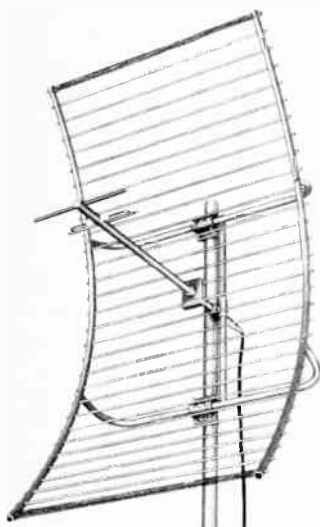


HDCA-5 ALUMINUM YAGI, 72 OHM MODEL. Also available in steel (Model HDCA-5).

HDCA-10, 10-element model not shown, available in aluminum only, has same rugged construction features, added bracing where required.

are stainless steel. Elements are mounted to boom by heavy machined castings, ribbed at stress points. The antenna to mast support clamp has two U-bolts. All castings have double set screws. No welds which can anneal and weaken aluminum are depended upon for mechanical support. Maple dowels are inserted for vibration damping in channels 2 through 6 aluminum yagis. For very extreme weather areas, Scala 5-element yagis can be ordered with machine steel elements and boom (Model HDCA-5).

EASY ASSEMBLY: All Scala antennas can be assembled in a few minutes. All necessary hardware is included. Steel yagis, 10-element yagis, and 5-element aluminum yagis for channels 2 to 6 are equipped with a 2-U-bolt clamp for fastening to a 2" to 2 3/8" OD circular support. The 5-element channels 7 to 13 aluminum yagis have a single U-bolt clamp for mounting the antenna to a 1" to 1 1/2" pipe (two U-bolt clamps for 2" to 2 3/8" pipe available at extra cost).



PARAFLECTOR® Channels 14 to 83

THE SCALA MODEL PR-450 PARAFLECTOR® is a major contribution toward the improvement of antenna construction and performance in the 350 to 1000 Mc range. Essentially a parabolic section in one plane, the driver is positioned to approach a point source. Over the 350 to 1000 Mc range, the Paraflector® is equal to a parabolic dish of the same aperture and has the advantage of lower cost, lighter weight, ease of assembly, installation and rugged construction.

ELECTRICAL SPECIFICATIONS: Gain of the Paraflector® on channel 14 is 16 db higher than that of a half-wave dipole. At the higher frequency channels, this gain increases and exceeds 17.5 db at channel 83. Horizontally polarized, the horizontal beam width is 30 degrees to the half power point, and vertical beam width is 22 degrees. The antenna is available with a termination of 72 ohms or 52 ohms.

MECHANICAL SPECIFICATIONS: Aperture—36" x 67". Mounting—Antenna fastens to a 2" to 2 3/8" circular support. Connectors—N type to mate to UG 21/BU or equal. Wind thrust at 100 mph with 1/4" radial ice is 303.5 lbs. Net weight 25 lbs. (approx.). Shipping weight 75 lbs. (approx.).

SCALA RADIO COMPANY

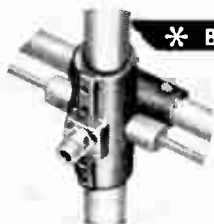
SAN FRANCISCO, CALIF.

UHF • VHF — Complete Antenna Coverage —

Precision Industrial Antennas

by SCALA

Why you get better performance with Scala Antennas —



* BUILT-IN BALUN

(pat. pending)

Provides a balanced feed system assuring equal distribution of current to the driven element, greater electrical and mechanical stability. The balun allows the driven element to be supported by metal and eliminates the necessity of using the insulator as a mechanical support.

* BUILT-IN HEATER

Most of the antennas described below can be obtained with a 24 volt heating system for maximum weather protection and assured winter operation.

* TESTING AND INSPECTION

Each antenna is tested twice for impedance match — once during manufacture and again prior to dis-assembling for shipment. New models are field-tested for one year before released for production.

** Shipped complete — all U-bolt mounting clamps and brackets are included. Unit is ready for installation.*



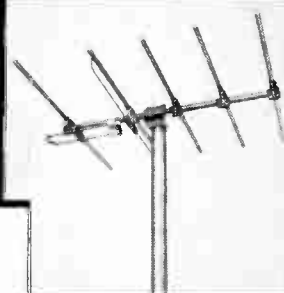
* RUGGED CONSTRUCTION

Elements are supported by machined castings providing a larger support area, damping vibrations and reducing the concentration of stress and metal fatigue. Mechanical splices are never used. All units are available in metals other than aluminum if desired.

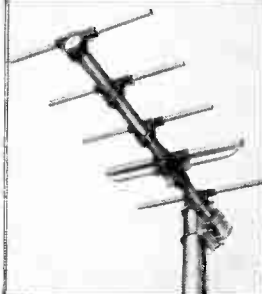


* PROPER STRUCTURAL DESIGN

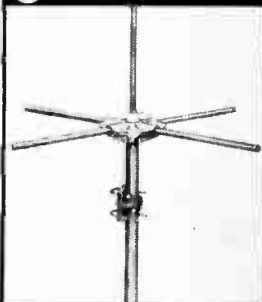
A machined casting, webbed for extra strength and structural support is used to hold parasitic elements in the ground plane antenna. Set screws and lock nuts provide simple assembly and easy installation.



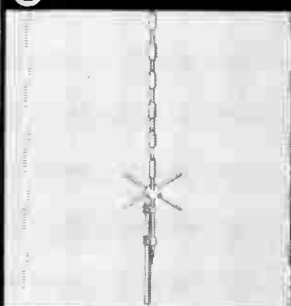
1 MODEL CA5-150



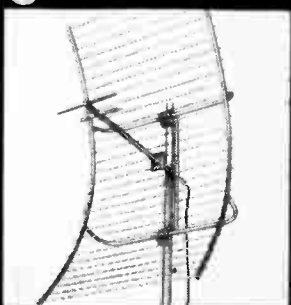
2 MODEL CA5-450



3 MODEL GPC-150



4 MODEL OG-6



5 MODEL PR-450

1 YAGI — VHF

The Scala Model CA5-150 is a 52-ohm 5 element yagi. Nine db gain on the major lobe is assured by careful design and Scala's exclusive feed system which eliminates radiation from the feed line and provides equal distribution of current to the driven element. The VSWR is less than 1.3 to 1. For complete weatherproofing and year-around operation, the boom can be provided with a 24 v heater. The unit is anodized and dichromate sealed.

2 YAGI — UHF

The Scala Model CA5-450 general communications antenna is a product of years of extensive research. Its construction is possible only because of developments in foam plastics and Teflon insulated cable. A Teflon insulated balun is located within a chamber filled with a special foam plastic for complete moisture and corrosion protection. High strength 7/16" solid aluminum rod is used for the parasitic elements. VSWR is less than 1.3 to 1. Gain is 10 db. Two units may be mounted in an array for an increase in gain up to 3 db and greater directivity. Shipped completely assembled, the unit is anodized and dichromate sealed.

3 GROUND-PLANE — 40-170 MC

The Scala Model GPC-150 ground-plane antenna is ideal for non-directional, all weather communications. It is the first ground-plane antenna that can be obtained with 24 v heaters throughout — including the radial elements, providing a completely weatherproof and safe year-round operating antenna. Another version of this unit, comes equipped with a reflector and provides a cardioid radiation pattern with increased gain. In all cases the VSWR is less than 1.3 to 1. The unit is anodized and dichromate sealed.

4 OMNI-DIRECTIONAL GAIN ANTENNAS

Scala's Omni-Directional Gain Antennas — 150 Mc and 450 Mc — use half-wave independently fed radiators. Model OD-4 (150 Mc) provides 4 db plus gain over dipole; Model OD-6 (450 Mc) 6 db plus gain over dipole. All elements at DC ground supported by metal. Extremely rugged anodized aluminum construction. Shipped ready for installation.

5 PARAFLECTOR® — 350-1000 MC

The Scala Model PR-450 Paraflector® is a major contribution toward the improvement of antenna construction and performance in the 350 to 1000 mc range. Essentially, a parabolic section in one plane, the driver is positioned to approach a point source. Over the 350 to 1000 mc range, the Paraflector® is equal to a parabolic dish of the same aperture and has the advantage of lower cost, lighter weight, ease of assembly, installation and rugged construction.

EXACTING DESIGN — TESTED MATERIALS — PRECISION MANUFACTURE

In addition to the antennas described above, and other standard communications, telemetering and community systems, Scala maintains a complete engineering service to design and manufacture special antennas to your specific requirements.

Write for complete catalog on Scala antennas and engineering services. Address Dept. EM 58.

SCALA RADIO COMPANY

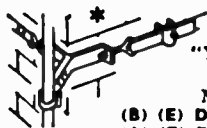
SAN FRANCISCO, CALIF.

South River

THE COMPLETE QUALITY LINE OF ANTENNA MOUNTING ACCESSORIES

CHIMNEY MOUNTS

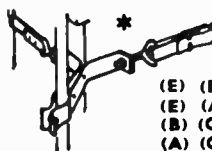
U.S. Pat. #2482575, Can. Pat. #463261



"Y" TYPE HOT DIP GALV. STEEL

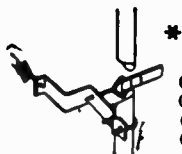
| MODEL | NET |
|------------------------|--------|
| (B) (E) DM-36 | \$2.25 |
| (A) (E) DM-36-ST | 3.15 |
| (B) (C) "Y" Special | 1.77 |
| (A) (C) "Y" ST Special | 2.25 |

COMPLETELY ALL STAINLESS
(A) ST-DM 4.59



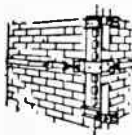
SNAP-IN TYPE

| MODEL | NET |
|------------------|--------|
| (E) (B) SN-50 | \$1.98 |
| (E) (A) SN-50-ST | 2.70 |
| (B) (C) CM-20 | 1.77 |
| (A) (C) CM-20-ST | 2.25 |



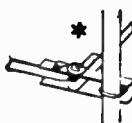
"Z" TYPE

| MODEL | NET |
|-----------------|--------|
| (B) (C) ZM | \$1.35 |
| (A) (C) ZM-ST | 2.07 |
| (B) (C) ZM-2 | 1.23 |
| (A) (C) ZM-2-ST | 1.65 |



ONE PIECE TYPE

| MODEL | NET |
|-----------------------------|--------|
| (E) (A) (One Strap) UM-1-ST | \$3.99 |



RATCHET TYPE

| MODEL | NET |
|-----------|--------|
| (B) RT | \$2.64 |
| (A) RT-ST | 3.24 |

EAVE MOUNTS



| MODEL | NET |
|-------|--------|
| EM-1 | \$3.18 |



| MODEL | NET |
|-----------|--------|
| 90" EM-30 | \$2.61 |
| 48" EM-48 | 3.66 |
| 60" EM-60 | 4.59 |

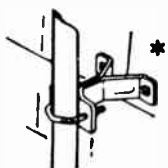
CODE:

* TWO TO A SET

- (A) Stainless Steel Banding
- (B) Galv. Steel Banding
- (C) Economy Model
- (D) Not Illustrated
- (E) With Kwik Klip
- (F) U.S. Pat. # 2734708
- (G) Fits Masts Up To 1 1/2"
- (H) Fits Masts Up To 2"

Complete descriptions and list of South River Products available in latest catalog. Write for your copy.

WALL BRACKETS



"U" BOLT TYPE

| MODEL | NET |
|---------------|--------|
| 3" Alum. WB-3 | \$1.29 |



| MODEL | NET |
|---------|--------|
| 3" NT-3 | \$.78 |
| 4" NT-4 | .90 |

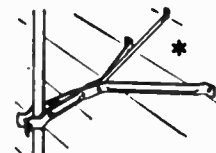


| MODEL | NET |
|---------|--------|
| 6" WB-6 | \$1.32 |

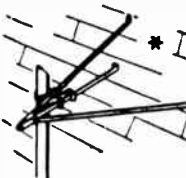
| MODEL | NET |
|-----------|--------|
| 9" WB-9 | \$1.92 |
| 12" WB-12 | 2.67 |
| 15" WB-15 | 3.09 |
| 18" WB-18 | 3.48 |
| 24" WB-24 | 4.41 |

SNAP-IN TYPE

| MODEL | NET |
|---------|--------|
| 6" SN-6 | \$1.32 |



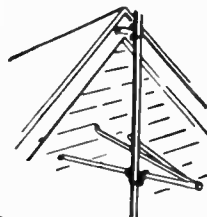
| MODEL | NET |
|-----------|--------|
| 9" SN-9 | \$1.92 |
| 12" SN-12 | 2.67 |
| 15" SN-15 | 3.09 |
| 18" SN-18 | 3.48 |
| 24" SN-24 | 4.41 |



ADJUSTABLE

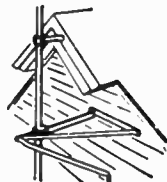
| MODEL | NET |
|------------------|--------|
| 18" Alum. WB-18A | \$4.53 |

| MODEL | NET |
|----------------------|--------|
| Combination WB-3-18A | \$3.24 |
| All Aluminum | |



| MODEL | NET |
|-------------|--------|
| ST-18A | \$5.43 |
| Assembled | |
| ADJ-18 | 3.96 |
| Unassembled | |
| ALL STEEL | |

WALL BRACKETS



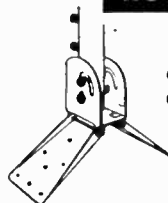
| MODEL | NET |
|----------------------------------|--------|
| Combination Assembled ST-3-18A | \$3.39 |
| Combination Unassembled ADJ-3-18 | 2.97 |
| ALL STEEL | |



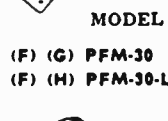
HEAVY SWIVEL GROUND UP TYPE

| MODEL | NET |
|--------------------------------|------------|
| GU-3 | \$3.51 pr. |
| (Fits Masts Up To 3 3/4" O.D.) | |
| GU-7 | \$2.10 pr. |
| Fits Masts up to 2 5/8" O.D. | |

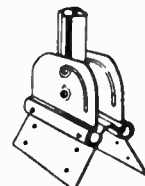
ROOF MOUNTS



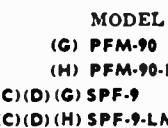
| MODEL | NET |
|------------------|--------|
| (F) (G) PFM-1 | \$2.16 |
| (F) (H) PFM-1-LM | 2.67 |



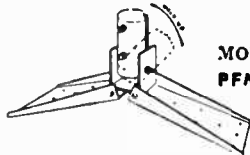
| MODEL | NET |
|-------------------|--------|
| (F) (G) PFM-30 | \$1.89 |
| (F) (H) PFM-30-LM | 2.46 |



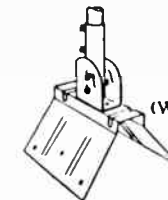
| MODEL | NET |
|---------------|--------|
| (F) (G) PFM-2 | \$4.02 |
| All Aluminum | |



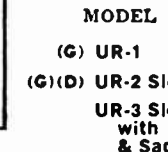
| MODEL | NET |
|----------------------|--------|
| (G) PFM-90 | \$1.26 |
| (H) PFM-90-LM | 1.83 |
| (C) (D) (G) SPF-9 | 1.14 |
| (C) (D) (H) SPF-9-LM | 1.32 |



| MODEL | NET |
|--------------------------------|--------|
| PFM-XL | \$3.21 |
| (Fits Masts Up to 2 1/4" O.D.) | |



| MODEL | NET |
|--|--------|
| (F) (G) PM-10 | \$2.76 |
| (F) (H) PM-10-LM | 3.18 |
| (Without Patented Walk-Up Drop-Lock Feature) | |
| (D) (G) PM-12 | 1.68 |
| (D) (H) PM-12-LM | 2.07 |



| MODEL | NET |
|-----------------------------------|--------|
| (G) UR-1 | \$.36 |
| (G) (D) UR-2 Slotted | .36 |
| UR-3 Slotted with U-Bolt & Saddle | .42 |

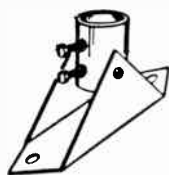


SOUTH RIVER METAL PRODUCTS CO., INC., South River, New Jersey

South River

THE COMPLETE QUALITY LINE OF ANTENNA MOUNTING ACCESSORIES

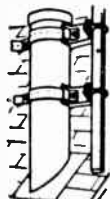
ROOF MOUNTS



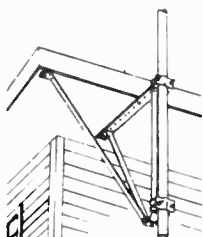
| MODEL | NET |
|------------------|--------|
| (G) RM-80 | \$.72 |
| (H) RM-80-LM | 1.32 |
| (C) (G) SRM-8 | .54 |
| (C) (H) SRM-8-LM | .84 |
| (D) RM-XL* | 1.95 |

*(Fits Masts Up To 2 1/4" O.D.)

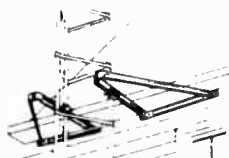
PIPE MOUNT



| MODEL | NET |
|--------------------|--------|
| (B) P-1 | \$1.71 |
| (A) P-1-ST | 1.92 |
| (D) P-2 Clamp Type | \$1.38 |

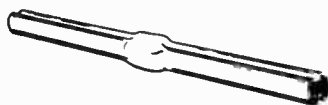


Under-Eave Mount Model #UE-1 \$3.66 ea



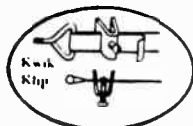
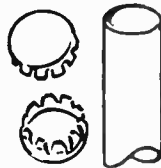
Tower Support Model TS-1 \$5.01 pr.

ACCESSORIES



Mast Coupler MC \$.57

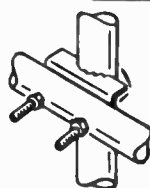
Mast Plug MP \$.12



KWIK KLIP MODEL NET
KK \$.17

Complete descriptions and list of South River Products available in latest catalog. Write for your copy.

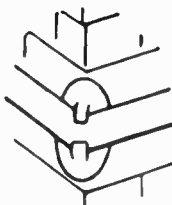
ACCESSORIES



MODEL NET
"U" Bolt & Saddle UBS \$.24

CORNER GUARD

MODEL NET
CG \$.29



STRAP CLAMPS

MODEL NET
(C)-Ø Galv. Steel \$.05
(C)-QS Stainless Steel .09



U.H.F. ANTENNA MAST ADAPTERS

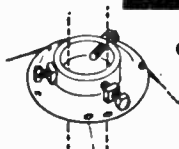
Model UHB-15 \$2.01

BANTAM TOWERS

MODEL NET
BT-5 \$4.29
BT-10 6.00

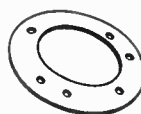


GUY RINGS



(Universal Type Fits Masts up to 2") Model GR-1 \$.93

MODEL NET
1 1/4" MASTS GR-5 \$.12
1 3/8" MASTS GR-6 .18
1 1/2" MASTS GR-7 .18
(D) Guy Ring Support RS-5 .15
(For 1 1/4" Masts)



RATCHET GUY WIRE TIGHTENER



Model GW-RT \$.45

GROUND RODS

MODEL NET
(D) 4 Ft. GND-4 CP \$.63
(D) 6 Ft. GND-6 CP .93
(D) Gnd. Rod Clamp GRC-2 .10

GUY WIRE CLAMPS



(G) Model GC-1 NET \$.24



(G) Model GC-2 NET \$.27

(H) Model GC-3 NET \$.36

Model GC-4 NET \$.48

(For Masts Up to 3")

ALUMINUM MAST TUBING

ALLOY: 6063 T832
NATURAL SILVER TYPE
WALL THICKNESSES—.042", .050", .054", .056"
LENGTHS: 5', 6', 7 1/2', 10'
GOLDEN ANODIZED TYPE
WALL THICKNESSES—.042", .050"
LENGTHS: 5', 10'

ALUMINUM GUY WIRE

ALCLAD, STRANDED—#500 lb. TEST
7 STRAND 17 GAUGE
REGULAR, STRANDED—#400 lb. TEST
7 STRAND 18 GAUGE
50 INTER-CONNECTED COILS
100 INTER-CONNECTED COILS
1000 CONTINUOUS COILS

ALUMINUM GROUND WIRE

=8 E.C. Grade (Dead Soft)
50 INTER-CONNECTED COILS
100 INTER-CONNECTED COILS
1000 CONTINUOUS COILS

REPLACEMENT BANDING KITS

| | | |
|------|--------------------|--------|
| A | 12 Ft. Straps | \$1.11 |
| AT | 10 Ft. Straps | .81 |
| C | 12 Ft. S.S. Straps | 1.95 |
| CT | 10 Ft. S.S. Straps | 1.41 |
| XLG | 18 Ft. Straps | 1.56 |
| XLST | 18 Ft. S.S. Straps | 2.73 |

SOUTH RIVER SUPERLIGHT MAGNESIUM LADDERS

Magnesium: 1/3 Lighter than Aluminum. Strongest Metal Lb. for Lb. in existence.

EXTENSION LADDERS

| Size | Weight | List Price |
|------|---------|------------|
| 40' | 57 Lbs. | \$148.00 |
| 36' | 51 " | 122.40 |
| 32' | 46 " | 108.80 |
| 28' | 32 " | 95.20 |
| 24' | 28 " | 72.00 |
| 20' | 23 " | 60.00 |

Rubber Safety Feet 4.00 pr.

STRAIGHT LADDERS

| Size | Weight | List Price |
|------|---------|------------|
| 20' | 22 Lbs. | \$60.00 |
| 16' | 18 " | 48.00 |
| 14' | 15 " | 42.00 |
| 12' | 13 " | 36.00 |
| 10' | 11 " | 30.00 |

Rubber Safety Feet pr. 4.00
Roof Hooks pr. 6.00

STEPLADDERS

| Size | Weight | List Price |
|---------|---------|------------|
| 8' | 16 Lbs. | \$8.00 |
| 6' | 12 " | 28.00 |
| 4' | 9 " | 21.50 |
| 26" Jr. | 5 " | 9.98 |

These ladders furnished immediately from complete warehouse stocks in South River, N. J.

SOUTH RIVER METAL PRODUCTS CO., INC., South River, New Jersey

TACO WORLD'S FINEST VHF AND UHF ANTENNAS



TRANSISTORIZED T-BIRD ELECTRA

MODEL G990 series — most powerful electronic TV/FM antenna on the market. Unequaled in Gain, Directivity, Sensitivity, Front-to-Back Ratio, Color-Fidelity. Antenna-matched built-on transistor preamplifier — 1000% gain increase over non-powered antennas. Ideal for FM Multiplex reception beyond 23 miles of ordinary reception range. Energized from 117 v line — no battery replacements, no tube burn-outs. Twin outputs for 2 TV, or 1 TV + 1 FM set; with TACO multicouplers feeds several more sets.

Double-strength chrome-aluminum construction, wide-spaced iridized feed lines, fibre glass insulators; stainless steel mounting parts with chromate finish, entire array with heavy gold-chromate finish — 100% rust-proofed. 3 Models available: G990-5 — brings in stations from beyond ordinary reception range; G990-6 — reception up to 100 miles. G990-8 — reception from stations hundreds of miles distant.

All models shipped completely pre-assembled — ready for instant mounting. All components available from factory as replacement parts — even hurricane damaged antennas can be quickly repaired like new.

| MODEL NO. | NET \$ |
|-----------|--------|
| G990-5 | 47.28 |
| G990-6 | 54.09 |
| G990-8 | 64.32 |

T-BIRD ANTENNA — Non-Powered

707 Series — most rugged home TV/FM antenna. Has all the features of the T-Bird Electra, except preamplifier. 3 models (with or without gold-chromate finish) available — each designed to meet conditions of ordinary, fringe and problem areas respectively.

| MODEL NO. | NET \$ | MODEL NO. | NET \$ |
|-----------|--------|-----------|--------|
| 707-5 | 16.98 | G707-5 | 20.13 |
| 707-6 | 23.91 | G707-6 | 27.69 |
| 707-8 | 34.62 | G707-8 | 39.03 |

NEW "SNAP-LOK" CONICAL



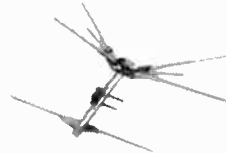
TOP-LINER SERIES

Model 2500 series are compact, streamlined, powerful VHF Yagis, available in 4 different designs to cover metropolitan areas and suburbs, fringe areas, ultra fringe areas, and critical problem locations.

All models can be used singly or stacked to meet any signal condition.

Uniform gain across all channels, high tensile strength aluminum tubing — 100% corrosion proofed. Rugged construction and high signal utilization capability insure excellent service for many years.

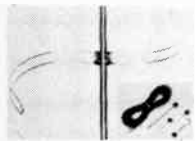
| MODEL NO. | NET \$ | GOLD-CHROMATE FINISH | |
|-----------|--------|----------------------|--------|
| | | MODEL NO. | NET \$ |
| 2540 | 9.99 | G2540 | 11.85 |
| 2550 | 13.20 | G2550 | 16.23 |
| 2560 | 16.98 | G2560 | 20.13 |
| 2570 | 23.91 | G2570 | 27.69 |



Model 2200 series — newly designed high-gain conical antenna. Completely factory-pre-assembled featuring positive snap-locking elements for instant mounting — no loose hardware, no tools necessary to prepare antenna. Unique construction keeps antenna in permanent shape. Elements are of chrome-alloy aluminum — stronger and brighter than ordinary antenna tubing. Completely sealed against entry of moisture. Direct take-off terminals for maximum signal transfer.

| MODEL NO. | DESCRIPTION |
|---------------------|--|
| 2211 | 1 Bay 6 Elements w/Hi Band Stubs |
| 2212 | 2 Bay 6 Elements/Bay w/Hi Band Stubs |
| 2221 | 1 Bay Fan 8 Elements |
| 2222 | 2 Bay Fan 8 Elements/Bay |
| 2231 | 1 Bay 6 Elements w/Hi Band Director |
| 2232 | 2 Bay 6 Elements/Bay w/Hi Band Directors |
| 2241 | 1 Bay 8 Elements w/Hi Band Stubs |
| 2242 | 2 Bay 8 Elements/Bay w/Hi Band Stubs |
| 2251 | 1 Bay 8 Elements w/Hi Band Director |
| 2252 | 2 Bay 8 Elements/Bay w/Hi Band Directors |
| STACKING HARNESSSES | |
| 2208 | 2 Bay stacking line |
| 2209 | 4 Bay stacking kit |

FM ANTENNAS AND KITS



The "LARK"

All directional S-dipole with matching network. Excellent gain for intermediate areas; gold-anodized finish; compact design. "LARK AD-A-KIT" includes antenna, 50 ft. lead-in and mounting hardware.

MODEL G626 NET \$4.38
KIT MODEL KG626A NET \$5.64

NEW BI-DIRECTIONAL FM YAGI

Entirely new design — meets frequency requirements for reception from two approx. opposite directions. Dual directors — one at each end — ideal for bi-directional stereo multiplex reception, eliminates need for rotor or two separate yagis. Shipped factory-preassembled.

MODEL 615 NET \$4.92



6-ELEMENT
MODEL 610



10-ELEMENT
MODEL 644B

DIRECTIONAL FM YAGIS

Available in 6-element and in 10-element arrays, with or without gold-anodized finish. High gain, sharp directivity for extreme performance at great distances. Ideal for stacking and rotor use. Auto-Lok assembly permits quick installation.

MODEL 610 NET \$18.42
MODEL 644B NET \$12.72



The "TURNSTILE"

All directional, golden anodized antenna with matching network. With kit includes: 5' mast, basement, 50' lead-in, guy wires and hardware.

MODEL G666 NET \$5.82
KIT MODEL KG666 NET \$9.93

"MULTIPLEXER"

Tuned Yagi series comes in 3, 5 and 10-element models (Model #681, 683, 686 respectively) — cut to specific fm frequencies. Designed for best possible sound reception — especially stereo multiplex — ideal for background music installations. 75-ohm gamma match connector for maximum signal transfer. Quick-rig construction for easy installation.

3-ELEMENT MODEL 681 NET \$ 5.86
5-ELEMENT MODEL 683 NET \$ 8.14
10-ELEMENT MODEL 686 NET \$16.00

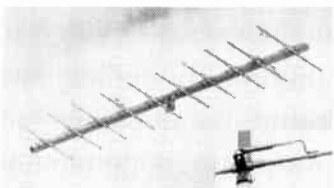
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ASK YOUR TACO DISTRIBUTOR FOR COMPLETE DETAILS ON THESE AND OTHER PRODUCTS

TECHNICAL APPLIANCE CORPORATION, SHERBURNE, NEW YORK

A subsidiary of The Jerrold Corporation

TACO WORLD'S FINEST VHF AND UHF ANTENNAS



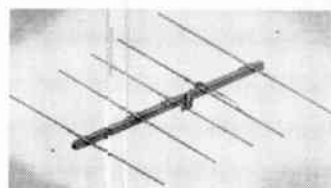
5-ELEMENT MODEL J55-*

TACO's new custom-designed J-series Yagis are distinguished not only by their high directivity and high gain, but foremost by their extra heavy duty construction of seamless double-strength iridited aluminum tubing with sand-loaded low-band elements and reinforced sleeves, all completely sealed to prevent danger of corrosion.

Cadmium plated, gold chromate mounting bracket and heavy U-bolt give full 6 inches of bearing surface against the mast.

*Specify channel required.

MODEL J55-* NET \$25.00



10-ELEMENT MODEL J105-*

The J-* series Yagis come in 5-element assemblies for the lo-band and FM, and in 10-element assemblies for the hi-band. This antenna features exemplary workmanship in its welded and bolted construction, guarantees a long-lasting, maintenance-free, weather-resistant installation — the ideal Master Antenna.

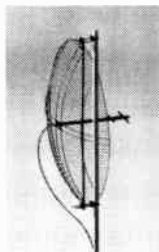
This relatively inexpensive antenna will last as long as the equipment to which it is connected. No longer is it necessary to feed a commercial TV distribution system from a home-type antenna.

MODEL J105-* NET \$25.00

UHF ANTENNAS

NEW UHF PARABOLIC ANTENNAS SPECIAL FOR MPATI AND TRANSLATOR AREAS

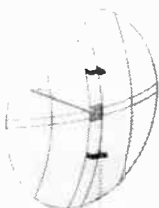
3065 Series features spot-welded, all-aluminum, slot-fed elements mounted in front of a welded grid parabolic reflector. Unusually narrow (1 inch) grid-spacing for great mechanical strength and high front-to-back ratio of 20 db or more. All-welded construction and rear-mounting of dish with double U-bolts — for high resistance to distortion. Entire dish coated with vinyl plastic over anti-oxide primer — maximum protection from weather and corona effects.



DIVERSITRON UHF PARABOLIC ANTENNA

High gain with minimum of 20 db at top of the band. The tuned dipole and the large capture area of the driver screen eliminate "shadow area" problems, assure constant picture quality.

**DIVERSITRON
MODEL 3050
NET \$14.97**

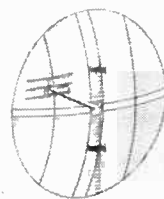


MODEL 3065ST-72

Two basic models: 3065T-72 for 75-ohm, 3065T-300 for 300-ohm output impedance. Both models have undergone extensive field use in the MPATI and Translator Areas — are now recognized as proven best in their class.

MODEL 3065T-72 NET \$51.26

MODEL 3065T-300 NET \$35.98

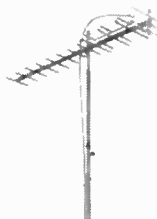


MODEL 3065T-300

UHF YAGI — FOR TRANSLATOR AND ETV AREAS

Model 3025T — twelve-element, triple-driven UHF Yagi with 4-element grid reflector; specially designed for channels 70 thru 83. Very rugged construction assures long-life service. Stacking lines provided for multiple arrays.

MODEL 3025T NET \$4.50



TACO ANTENNA ACCESSORIES

"ELECTRA" TRANSISTORIZED TV/FM PREAMPLIFIER MODEL 992



This preamplifier is the heart of the best electronic antenna. Combining highest gain with lowest noise figure Model 992 gives optimum TV/FM performance, is a must for color sets. Energized from a 117 volt line — no battery replacements, no tube burn-outs. Mounts on boom, mast, window, or wall. Twin outputs feed 2 TV or 1 TV and 1 FM set. With TACO multi-couplers feeds five or more sets. Can be used with any antenna.

MODEL 992 NET \$26.63

ANTENNA COUPLERS, VHF AND UHF



Large variety of Models are available for mixing hi and lo-band antennas, or VHF and UHF antennas to a single lead-in. Model 1465 — DUAL "MAGI-MIX" mixes two (ch. 14-42 with ch. 58-83) UHF antennas. Model 830-2 mixes any two UHF antennas. Model 1465, Net \$2.97; Model 830-2, Net \$2.25.



MULTI-SET COUPLERS



Models 820-2 (2-Set), 820-3 (3-Set), and 820-4 (4-Set); for indoor mounting. Designed for maximum transfer of signal to each set. Model 820-2, Net \$1.92; Model 820-3, Net \$2.19; Model 820-4, Net \$2.55. Models 825-2 (2 Set) and 825-3 (3-Set); weather-proof case for outdoor mounting. Model 825-2, Net \$2.55; Model 825-3, Net \$2.70.

MATCHING TRANSFORMERS TV and FM

Model 1570 — 72 to 300 ohm impedance match for connecting 72-ohm coax to 300-ohm set input. Model 1570, Net \$2.10. Model 1597 — matches 300-ohm antenna to 72-ohm coax cable. Shipped with cable plug and in weather-proof housing. Model 1597, Net \$3.21.

"SELECTRONIC" SWITCHES

Models 823 and 873; low-loss units for selective switching between antennas or sets. Model 823, Net \$1.32; Model 873, Net \$2.37.



SELECTIVE ATTENUATOR MODEL 835

3-way, 0-15-30 db, selective attenuator switch; prevents over-load.

Net \$3.03



FM FILTER TRAP

Model 1435-FM — electronic filter, cuts out FM interference with TV reception. 20 db minimum attenuation of FM band. Mounts on TV antenna for maximum efficiency. Net \$4.77.

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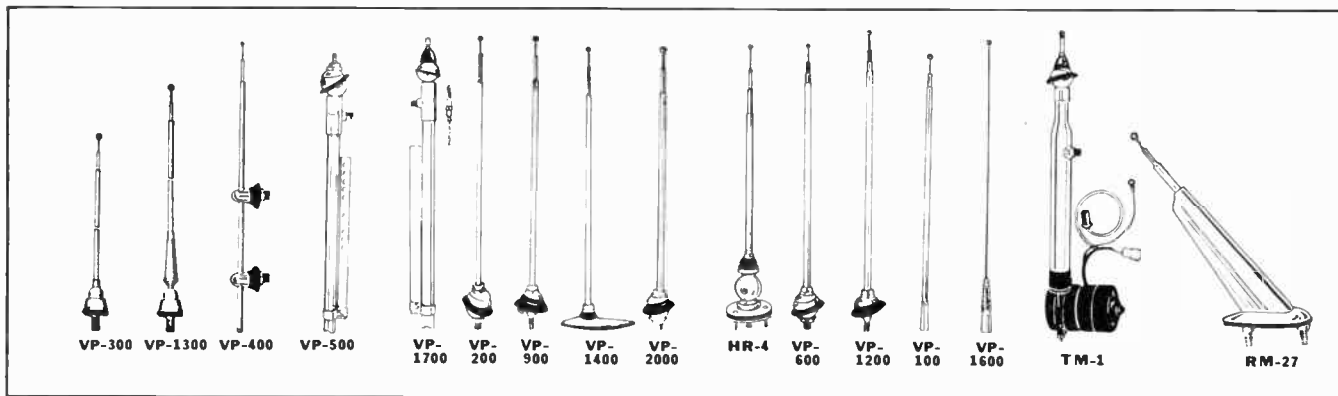
TECHNICAL APPLIANCE CORPORATION, SHERBURNE, NEW YORK

A subsidiary of The Jerrold Corporation

TENNA Auto Antennas and Mounts

THE TENNA MANUFACTURING COMPANY, INC., CLEVELAND, OHIO

World's largest
maker of
Auto Aerials



SWIVEL BALL TYPE TOP COWL ANTENNAS

"DELUXE" SATELLITE

Ball rotates full 360° in any direction. Mast may be locked at any angle. Mounts from outside. Extends 23" to 57", with 48" cable.

Model VP-300*

"ECONOMY" SATELLITE

Same as VP-300, but with two sections. Extends 22" to 39", with 48" cable.

Model VP-2100*

"FLEXO-MAST" SATELLITE

Swing-back spring resists impact for maximum flexibility. Extends 23" to 57", with 48" cable.

Model VP-1300*

SIDE COWL AND CONCEALED ANTENNAS

"DELUXE" SIDE COWL

Triple chrome plated with chrome cap-nuts and screw-on connectors. Extends 23" to 57", with 48" polyethylene cable.

Model VP-400*

Model RAD-4—Four section, extends 29" to 92".

Model RAD-5—Five section, extends 29" to 112".

ECONOMY SIDE COWL

Same as VP-400, but with gray cap-nuts.

Model VP-1000*

"DELUXE" CONCEALED TYPE

Large seamless steel tube reduces capacity losses. Tilts 40° from vertical. Extends 0" to 50", with 48" radar-type cable.

Model VP-500*

Model FD-3A—Deluxe 3-section, extends 8" to 68".

Model VP-1000*—Economy type, extends 4" to 35".

SAF-KEY ANTENNA

Mast completely disappears. Breakproof! Mast can only be raised with combination key; key ring included with antenna. Sweeps back 40°. Extends 0" to 50", with 48" cable.

Model VP-1700*

3 SECTION TOP COWL ANTENNAS

"DELUXE" BALL AND ROCKER

Quick top mounting on cowl, rear deck or fenders. Diecast body; diecast rocker and chrome cover cap. Extends 23" to 57", with 48" radar-type cable.

Model VP-200*

Model MH-3C—Diecast body; diecast rocker and chrome plated diecast ball. Extends 26" to 71", with 54" cable.

"LEADER" WITH SPLIT WASHER BASE

Similar to VP-200, but with black Tenite and split washer base for simple top mounting. Extends 23" to 57", with 48" cable.

Model VP-900*

Model VP-1800*—"Economy Shorty" extends 17" to 35", with 48" cable.

Model VP-1900*—"Leader Shorty", extends 23" to 50", with 48" cable.

"TEAR DROP" MAGIC MOUNT

Top mounting with streamlined tear drop base. Extends 23" to 57", with 48" radar-type cable.

Model VP-1400*

POPULAR BALL AND ROCKER

Triple chrome finish, sweeps back 40° and locks. Die cast rocker has positive grounding teeth. Extends 23" to 57", with 54" cable.

Model VP-2000*

Model VP-800*—Economy type. Same as 2000, but has stamped rocker design and 48" cable.

2 SECTION TOP COWL ANTENNAS

"DELUXE" ALL CHROME

"Ball and rocker" base, sweeps back 40°. Die cast rocker has positive grounding teeth. Has chrome cover cap. Extends 22" to 39", with 48" cable.

Model VP-600*

"LEADER" MAGIC MOUNT

Triple chrome plated, mounts easily by one person. Has split-washer base. Looks like 3 sections. Extends 22" to 39", with 48" cable.

Model VP-1200*

"ECONOMY" BALL AND ROCKER

Triple chrome plated with stamped rocker and plastic ball. Extends 22" to 39", with 48" cable.

Model VP-1500*

REPLACEMENT MASTS

"DELUXE" THREE SECTION

Installs instantly by slipping base over broken portion of old mast and tightening set screws. Weatherproof, anti-rattle construction with chrome finish. Extends 23" to 57".

Model VP-100*

Model VP-700*—Economy 2-section type extends 22" to 39".

FLEX-O-ROD MAST

Single section, chrome plated 26" rod bends to 90°. Polished, high tempered stainless steel spring.

Model VP-1600

SPECIALTY ANTENNAS

TENNAMATIC ELECTRIC ANTENNA

Universal design approved by all major auto manufacturers. Unconditionally guaranteed for one year. For 12-volt systems only. Mast extends 39"; collapses to less than 1". Patented motor design can't "burn out"; give positive 15 lb. thrust for free action in sub-zero weather. Comes with switch and bracket, 54" radar cable (copper shielded), 72" electric harness, cable clips, anchor brackets, metal screws and installation instructions.

Model TM-1—Front mount.

Model TM-2 Rear mount with 18' cable and 20' electric harness. Extra clips supplied. Rear mount adapter pad for crown rear fenders.

Model TM-3 Rear mount kit of 15' cable extension, 14' harness extension and rear mount adapter pad. Converts TM-1 to TM-3.

SNORKLE ANTENNA

Three-section rear fin antenna for dual or single mount. Die cast base; special mounting adapters. Triple chrome plated. Extends 3" to 27". With 18 ft. cable and 75 μuf capacitor.

Model RM-27—Single

Model RMD—Dummy

Model RMT—Dual (1 dummy)

"HOT-ROD" POLICE ANTENNA

Police type antenna for the "hot-rod" enthusiast. Four sturdy sections. Ninety-two inches when extended. Fifteen-foot coaxial lead. Uses 313-2 swivel mounting base.

Model HR-4

RADAR TYPE LEAD CABLES

Radar type ultra high "Q" coaxial cables with polyethylene insulation and 100 per cent shielding. Type L has aircraft connector to areal and pin plug. Extension Type LE has male and female pin plug fittings.

| Model | Length | Model | Length |
|-------|--------|---------|--------|
| LE-12 | 12" | L-72 | 72" |
| LE-18 | 18" | LE-48 | 48" |
| LE-24 | 24" | LE-108 | 108" |
| LE-36 | 36" | LE-144 | 144" |
| L-36 | 36" | LE-180 | 180" |
| L-48 | 48" | LM-144* | 144" |
| L-54 | 54" | LM-180* | 180" |
| L-60 | 60" | MRC-54† | 54" |

*Communication lead. † Universal replacement cable. Equipped with three different mounting nuts for all or any assemblies.

EXACT REPLACEMENT ANTENNAS

Complete Kit, Model ER-1

Kit contains handsome, gold finished, floor display stand with 3 each of 47 Exact Replacement models. Gives Distributor an exact replacement for every original equipment installation. Completely assembled, ready for quick and profitable installation. Skin packed on attractive display cards. Small display space required.

SMALLER STAND FOR DEALERS

Dealer gold finished, rotating counter display holds 12 antennas of dealer's choosing to suit local needs. Write for leaflet explaining full Exact Replacement Program. Multiplies sales at most attractive profits.



A SURE WAY
TO INCREASE
ANTENNA
PROFITS!

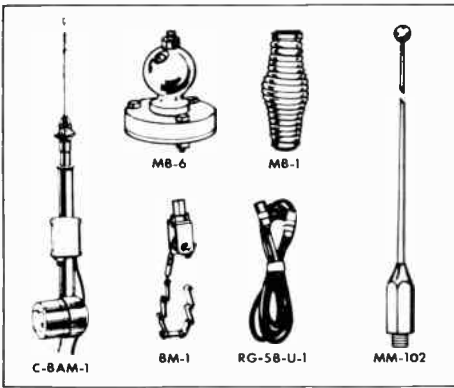
RACK MODEL ER-1

WHERE PROGRESS IS A HABIT AND SALES LEADERSHIP AN ESTABLISHED FACT

Tenna COMMUNICATION ANTENNAS

THE TENNA MANUFACTURING COMPANY, INC., CLEVELAND, OHIO

World's largest
maker of
Auto Aerials



C-BAM DUAL PURPOSE ELECTRIC ANTENNA

Receives CB, AM and FM. Top loaded coil eliminates need for long, cumbersome whips. Extends to 55", collapses to 9 1/2", complete coil disappears. Completely automatic. Sturdy, 4 section. Installs front or rear. C-BEE model same as C-BAM but receives CB only.

- C-BAM-1 front
- C-BAM-2 rear
- C-BEE-1 front
- C-BEE-2 rear

COMMUNICATION GEAR

BASES

- MB-4 Chrome plated Ball and Phenolic Base
- MB-5 Cadmium plated, resistant painted black Ball and Phenolic Base.
- MB-6 Same as above, except contains Cadmium plated Ball with plated hardware.

SPRINGS

- SP-1—Stainless steel Spring
- SP-2—Cadmium plated, black resistant painted Spring
- SP-3—Cadmium plated Spring

STAINLESS STEEL WHIPS

MM Series. Number denotes length. MM-40, MM-55, MM-60, MM-72, MM-84, MM-96, MM-102, MM-108

Add following letters to MM numbers for type of adapter desired. A for non-removable. B for removable. C for set-screw type. D no adapter.

BUMPER MOUNTS

- BM-1—Single Chain Mount
- BM-2—Double Chain Mount

CABLES

- RG-58-U-1 Split end to PL-259
- RG-58-U-2 PL-259 on each end. specify length; 5', 12', 15', 22'

Tenna MIRACLE YAGI and CONICAL ANTENNAS

NEW MIRACLE REFLECTOR YAGIS

The finest, most powerful and best performing TV antennas on the market. Ideal for color reception. Covers all VHF channels, 2 through 13. The Miracle Reflector system consists of one reflector spaced 0.15 wavelength behind, and in the same plane as the rear driven element of the array; two reflectors are mounted above and below the driven element, 0.10 wavelength behind it. The two reflectors are spaced like the first two elements in a corner reflector, but are non-resonant and tuned for high directivity. In this way, the finest possible front-to-back ratio is achieved across the maximum number of channels. Antennas feature all-aluminum construction with 1" boom and 3/4" dipoles with reinforced elements where required. Powerful "Sure-Grip" mast clamp and positive spring-loaded elements clamps. Reflector reinforced with aluminum dowels. Low wind resistance.

Tenna Model TM-711 Broadband Array—Ideal for low signal strength areas where co-channel interference occurs. Front-to-back ratio, 20:1; some channels 40:1. Aluminum finish. Shpg. Wt., 10 lbs.

Tenna Model TM-78A Broadband Yagi—Gold anodized finish, compound array with seven active low-band elements; eight active high-band elements. Front-to-back ratio 40:1. Shpg. wt., 3 1/2 lbs.

Tenna Model TM-78—Same as above, but with aluminum finish. **Tenna Model TM-57A Broadband Yagi**—Two driven elements (five total) on low band; seven active elements, high band. Gold anodized finish. Shpg. wt., 7 lbs.

Tenna Model TM-57—Same, but aluminum finish. **Tenna Model TM-45 Broadband Yagi**—Economy design. Ideal for stacking in direct signal areas. Four active low-band elements; five high-band. Aluminum finish. Shpg. wt., 4 1/2 lbs.

Tenna Model TM-24 Yagi—Replacement for any conical type in intermediate signal areas. Two elements, low band; four high band. Aluminum finish. Shpg. wt., 3 lbs.

Tenna Model TMR Reflector Unit—Reflector only for installation on any Miracle VHF antenna not already equipped; or, on many other type all-channel and cut-channel Yagis. Shpg. wt., 2 lbs.

LOW BAND YAGIS

Available with or without Miracle Reflector. Very high gain on channels 2 through 6. Quick rigged.

| Without Reflector | | | With Reflector | | |
|-------------------|----------|------------|----------------|----------|------------|
| Tenna Model | Elements | Shpg. Lbs. | Tenna Model | Elements | Shpg. Lbs. |
| 5E-26 | 5 | 3 3/4 | TM-5E-26R | 6 | 7 |
| 10E-26 | 10 | 6 | | | |

HIGH BAND YAGIS

Available with or without Miracle Reflector. Very high gain on channels 7 through 13. Durable, all aluminum construction.

| | | | | | |
|---------|----|---|-------------|----|-------|
| 6E-713 | 6 | 2 | TM-6E-713R | 6 | 3 |
| 10E-713 | 10 | 3 | TM-10E-713R | 10 | 3 3/4 |

CUT-CHANNEL YAGIS

With or without Miracle Reflector. Finest all-aluminum construction. Quick-rigged for easy installation. Factory assembly.

5-ELEMENT MODELS

| Channel | Without Reflector | | With Reflector | |
|-----------|-------------------|-------|--------------------|-------|
| | Model | Shpg. | Model | Shpg. |
| 2 | 5E-2 | 1 1/2 | TM-5E-2R | 5 1/2 |
| 3 | 5E-3 | 4 1/2 | TM-5E-3R | 5 1/2 |
| 4 | 5E-4 | 3 1/2 | TM-5E-4R | 5 |
| 5 | 5E-5 | 3 1/2 | TM-5E-5R | 5 |
| 6 | 5E-6 | 3 1/2 | TM-5E-6R | 5 |
| 7 thru 12 | 5E-7 thru -12" | 1 3/4 | TM-5E-7R thru -12" | 2 1/2 |

10-ELEMENT MODELS

| | | | | |
|-----------|-----------------|----|----------------------|-------|
| 22 | 10E-2 | 10 | | |
| 3 | 10E-3 | 9 | | |
| 4 | 10E-4 | 9 | | |
| 5 | 10E-5 | 9 | | |
| 6 | 10E-6 | | | |
| 7 thru 12 | 10E-7 thru -12" | 3 | TM-10E-7R thru -12R" | 3 1/2 |

* Specify channel when ordering, using appropriate suffix.

UHF ANTENNAS

Tenna Model U-21—All-Aluminum construction, pre-assembled. Minimum wind resistance. Very high front-to-back ratio; increased gain. Covers channels 14 through 83. Shpg. wt., 3 1/2 lbs. **Tenna Model U-22**—Horizontally stacked, highly directive. Pre-assembled all-aluminum construction. Low wind resistance. Covers channels 14 through 83. Shpg. Wt., 4 lbs.

CONICAL YAGI MIRACLE ANTENNAS

Deluxe antenna for areas where co-channel interference is a problem. Provide high gain, broad band width and high directivity for near fringe areas. Miracle Reflector System gives front to back ratio as high as 30 to 1. Usable on channels 2 through 13. All aluminum elements are completely preassembled.

Tenna Model CY-8R Yagi—Ten elements. Reflector system eliminates need for stacking. Shipping Weight, 6 lbs. **Tenna Model CY-8A**—Same, but gold anodized.

Tenna Model CY-7 Yagi—Seven elements. Includes "Presto" instant mount assembly and stacking bars. Shipping Weight 4 1/2 lbs.

Tenna Model CY-7A—Same, but gold anodized. **Tenna Model CY-8 Yagi**—Eight elements. With stacking bars. Shipping Weight, 5 lbs. **Tenna Model CY-8A**—Same, but gold anodized.

CONICAL ARRAYS

Full size, all aluminum antennas cover all channels 2 through 13. Available with high-channel Director Bar for greatly improved reception on upper channels. Choice of four or six forward elements and two or four reflector elements. Stacked arrays consist of two bay; with connecting bars for stacking. Completely pre-assembled with Instant Mount Assembly. Includes high impact molded polystyrene insulator.

SINGLE ARRAYS

| Tenna Model | Forward Elements | Ref. Elements | HF Stubs | Director Bar | Shpg. Lbs. |
|-------------|------------------|---------------|----------|--------------|------------|
| T-751 | 4 | 4 | | 1 | 3 |
| T-801 | 4 | 2 | | | 2 1/2 |
| T-811 | 4 | 4 | | | 2 1/2 |
| T-741 | 4 | 4 | 2 | | 3 |
| T-851 | 4 | 2 | | 1 | 2 1/2 |
| T-791 | 4 | 2 | 2 | | 2 1/2 |
| T-771 | 6 | 2 | | | 2 1/2 |
| T-781 | 6 | 2 | | 1 | 3 1/2 |

STACKED ARRAYS

| | | | | | |
|--------|----|---|---|---|-------|
| T-752† | 8 | 8 | | 2 | 6 3/4 |
| T-802† | 8 | 4 | | | 5 1/4 |
| T-812† | 8 | 8 | | | 6 |
| T-742† | 8 | 8 | 4 | | 6 1/4 |
| T-852† | 8 | 4 | | 2 | 5 1/2 |
| T-792† | 8 | 4 | 4 | | 5 1/2 |
| T-772† | 12 | 4 | | | 5 1/2 |
| T-782† | 12 | 4 | | 2 | 6 |

* Bulk-packed 6 per master carton; for individually boxed antennas, packed four per master carton, add suffix A to number (example: T-751A). † Bulk-packed three per master carton; for individually boxed units, packed four per master, add suffix A.

CONICAL ANTENNA KITS

Contain conical arrays, mount, masts, cable and all necessary hardware. "Do-It-Yourself" kits.

CHIMNEY MOUNT

| Tenna Model | Array Type | Shpg. Lbs. | Tenna Model | Array Type | Shpg. Lbs. |
|-------------|------------|------------|-------------|------------|------------|
| DK-801 | T801A | 8 1/2 | DK-741 | T741A | 9 |
| DK-802 | T802A | 13 | DK-742 | T742A | 13 1/2 |
| DK-811 | T811A | 8 3/4 | DK-751 | T751A | 9 |
| DK-812 | T812A | 13 1/2 | DK-752 | T752A | 14 |
| DK-791 | T791A | 8 1/2 | DK-851 | T851A | 8 1/2 |
| DK-792 | T792A | 13 1/2 | DK-852 | T852A | 13 1/2 |
| DK-771 | T771A | 8 1/2 | DK-781 | T781A | 9 1/2 |
| DK-772 | T772A | 13 1/2 | DK-782 | T782A | 13 1/2 |

SWIVEL MOUNT

| | | | | | |
|----------|-------|--------|----------|-------|--------|
| DK-801-3 | T801A | 6 1/4 | DK-741-3 | T741A | 7 |
| DK-802-4 | T802A | 11 1/2 | DK-742-4 | T742A | 12 |
| DK-811-3 | T811A | 6 3/4 | DK-751-3 | T751A | 7 |
| DK-812-4 | T812A | 12 | DK-752-4 | T752A | 12 1/2 |
| DK-791-3 | T791A | 6 3/4 | DK-851-3 | T851A | 6 3/4 |
| DK-792-4 | T792A | 11 1/2 | DK-852-4 | T852A | 11 1/2 |
| DK-771-3 | T771A | 6 3/4 | DK-781-3 | T781A | 7 3/4 |
| DK-772-4 | T772A | 11 1/2 | DK-782-4 | T782A | 12 |

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When ordering products shown in this book
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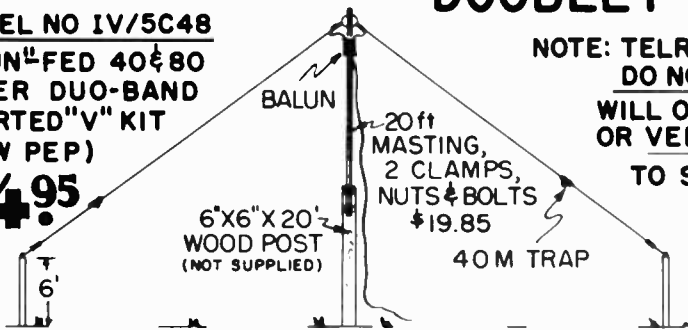
TELREX

"BALUN"-FED INVERTED "V" DOUBLET ANTENNA KITS

MODEL NO IV/5C48

"BALUN"-FED 40 & 80
METER DUO-BAND
INVERTED "V" KIT
(1 KW PEP)

\$24.95



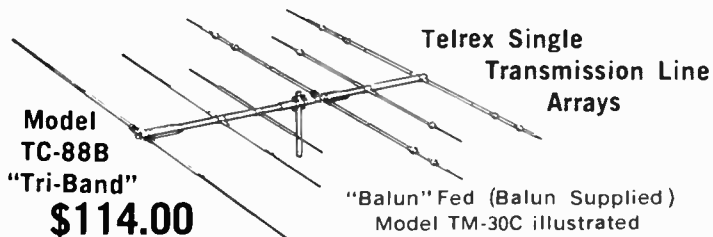
NOTE: TELREX INVERTED "V" DOUBLET KITS
DO NOT REQUIRE RADIALS.

WILL OUTPERFORM ANY MULTI-BAND
OR VERTICAL NOW ON THE MARKET.

TO SUIT EVERY POCKETBOOK
2 POWER RATINGS
1 KW PEP AND 3 KW PEP

TELREX MONO, DUO, TRI, QUAD
AND 5 BAND INVERTED "V" KITS
FROM \$12.95 TO \$108.00

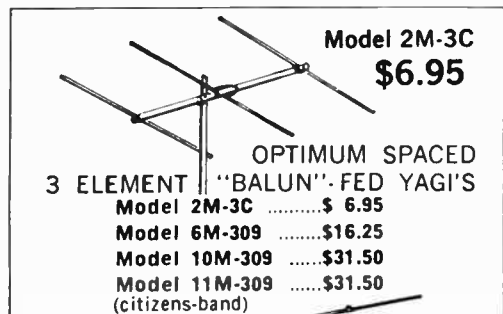
MFG. UNDER TELREX PATENT 2,576,929



Model TC-88B
"Tri-Band"
\$114.00

TC-88B thirty pounds of educated aluminum—
World Renowned for performance, excellence and value. Also—

"Balun" Fed (Balun Supplied)
Model TM-30C illustrated

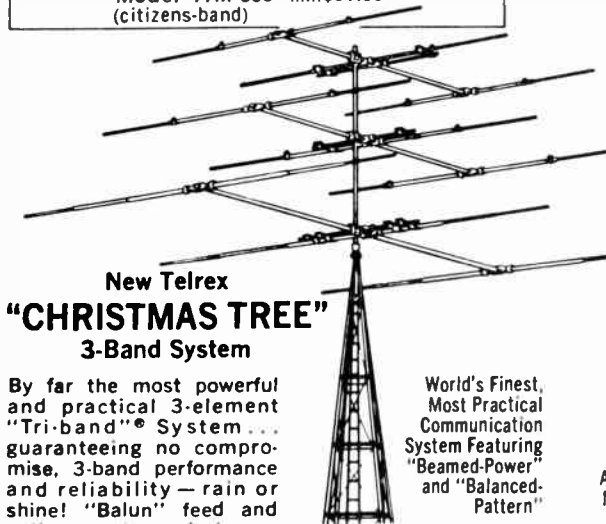


Model 2M-3C
\$6.95

OPTIMUM SPACED
3 ELEMENT "BALUN"-FED YAGI'S

- Model 2M-3C \$ 6.95
- Model 6M-309 \$16.25
- Model 10M-309 \$31.50
- Model 11M-309 \$31.50
(citizens-band)

- Model TC-99B \$174.50
- Model TM-320B \$258.00
- Model TM-30C \$378.00
- Model BFD-3 \$ 56.00
(10-15-20 Meter Dipole)
- Model 4B1524-BFD \$159.50
(10-15-20-40 Meter Dipole)

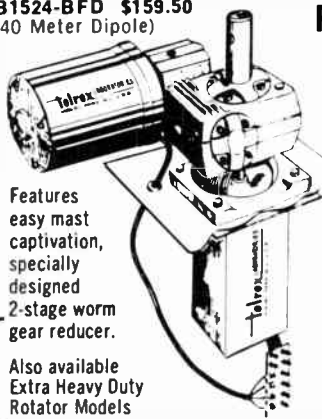


New Telrex
"CHRISTMAS TREE"
3-Band System

By far the most powerful
and practical 3-element
"Tri-band" System...
guaranteeing no compro-
mise, 3-band performance
and reliability — rain or
shine! "Balun" feed and
optimum antenna design as-
sures... maximum gain, and
impedance bandwidth, plus
pattern symmetry with
minimum TVI, BCI and har-
monic radiation qualities
not possible with single
transmission line "Tri-
banders".

World's Finest,
Most Practical
Communication
System Featuring
"Beamed-Power"
and "Balanced-
Pattern"

Telrex Model 175-RIS
ROTATOR/INDICATOR
System **\$198.50**

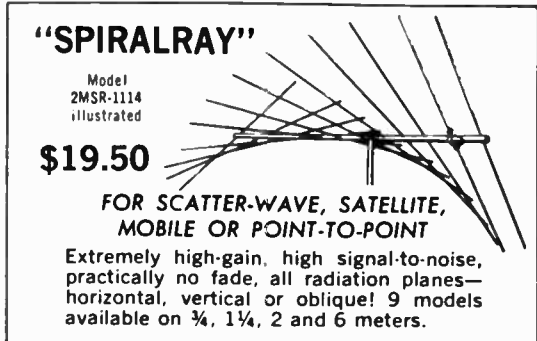


Features
easy mast
capture, specially
designed
2-stage worm
gear reducer.

Also available
Extra Heavy Duty
Rotator Models



Designed to out-perform and out-
last any other beam rotator in its
class. Will hold and rotate beams
in winds up to 110 mph. Control
Housing is Telrex quality thru-out.
Black japanned aluminum hous-
ing. Tri-colored
azimuth rose and
reciprocal read-
ings. Has selsyn
indication and
limit of rotation
circuitry.



"SPIRALRAY"

Model
2MSR-1114
illustrated

\$19.50

FOR SCATTER-WAVE, SATELLITE,
MOBILE OR POINT-TO-POINT

Extremely high-gain, high signal-to-noise,
practically no fade, all radiation planes—
horizontal, vertical or oblique! 9 models
available on 1/4, 1/2, 2 and 6 meters.

All prices
FOB
Asbury Park,
New Jersey,
subject
to change
without notice.

For TOP-MAN-ON-
THE-FREQUENCY results...

Install a Telrex antenna...dollar for
dollar better in every way! Antenna
systems from \$6.95 to \$688.00

Communication and TV Antennas
telrex LABORATORIES
ANTENNAS SINCE 1921
ASBURY PARK, NEW JERSEY, U.S.A.

W a r d

Highest Quality AUTO ANTENNAS

FRONT MOUNTS

LOK MATIC MODEL L-1000

Triple lock top mount. Fits all cars, including '60 — '61 models. Fits any hole 7/8" to 1 1/4". Installed in seconds by one man from the top — Water proof — Highest "Q" ever.

- 3 section to 56" from 19 1/2".
- Triple chrome plated brass tubing.
- Adjusts to 43° LokMatic mount.
- 54" low loss Elektran lead cable.

12 cartons 12 lbs., 1 lb. ea.



NEW SUPER "8" MODEL TCF-4

Extra heavy. Rugged 4 section antenna. "8" Ball mount. Installed in minutes, by one man, from the outside.

- 4 sections, to 57" from 18".
- Triple Chrome plated brass tubing.
- Adjust to 35° "8" ball mount.
- 54" low loss Elektran lead cable.

12-carton: 13 lbs., 1 lb. ea.



SWIVEL BALL MODEL SB-98

3-Section Top Mount

Swivel Ball—48" Lead—
Extends to 56" from 22"
Triple Chrome Plated

12-Carton: 11 lbs.



DISAPPEARING MODEL D-2000

Collapses to only 6 1/2" — complete installation from the top end Lok Matic mount. Fits any hole from 7/8" to 1 1/4". A really major advance in disappearing antenna.

- 3 section.
- Extends to 52" from 6 1/2".
- 54" low loss Elektran lead cable.

12 carton — 13 lbs.



MODEL M-182-D

The only disappearing antenna specifically designed for Foreign, Sports and American Compact cars.

- 3 section disappearing mount.
- Extends to 20 1/2" from 1".
- No brackets needed — LokMatic mount.
- 48" low loss Elektran lead cable.

12 carton: 11 lbs.



MODEL M-171

Short 3 section for Sports and Foreign Cars

- Extends to 38" from 15 1/2".
- Adjusts to 35° — "8" ball mount.

12 carton: 9 1/2 lbs.



SWIVEL BALL MODEL SB-100

3-Section Top Mount

Adjusts to 180° —
54" Lead Cable —
Extends to 57" from 21 1/2"
Stainless Steel Top

12-Carton: 13 lbs.



3-SECTION FLEXIBLE TOP MOUNT MODEL SB-100-FL

Extends to 61 1/2" from 26" — 54" Lead Cable
Adjusts to 180° —
8" Ball Mount

12-Carton: 15 lbs.



"8" BALL MODEL TCF-3C

The ageless "8" Ball, rattle-proof, always modern. Installed in minutes by one man, from the outside.

- 3 sections, to 56" from 22".
- Triple chrome plated brass tubing.
- Adjusts to 35° "8" ball mounting.
- 54" low loss Elektran lead cable.

12 carton: 12 lbs. 14 ozs. ea.



REPLACEMENT MASTS

UNIVERSAL REPLACEMENTS

MODEL TCFR-1

3 Section Telescopic
Extends to 57" from 24"

12-Carton: 4 lbs.



MODEL FR-1 FLEXIBLE

3 Section Telescopic
Extends to 64" from 26 1/2"

12-Carton: 9 lbs.



MODEL FR-2

Flexible Spring Mast Replacement
Fixed Length—27 1/2"

12-Carton: 4 lbs.



MODEL FR-3 FLEXIBLE

2 Section Telescopic
Extends to 42 1/2" from 25 3/4"

12-Carton: 8 lbs.



SIDE MOUNTS

SKY QUEEN MODEL SC-6

Clean, simple styling. Two chrome capped stanchions assure sturdy mounting. Trouble-free, rugged and rattle-proof. Adaptable to foreign cars.

- 3 sections, to 56" from 25"
- Triple chrome plated brass tubing.
- 36" low loss Elektran lead cable.

12-carton: 12 3/4 lbs., 1 lb. ea.



LONG RANGER MODEL SC-8

Extra length for extra pull in low-signal areas. Ideal for over-the-road truck equipment. Rattle-proof. Adaptable to foreign cars.

- 4 sections, to 100" from 39".
- Triple chrome plated brass tubing.
- 36" low loss Elektran lead cable.
- Sturdy 2 stanchion mount with chrome caps.

12-carton: 21 lbs., 1 1/2 lbs. ea.



CONTINENTAL FLEX ANGLE MODEL CF-6

The only antenna that fits the Volkswagen. Adaptable to other foreign cars. Flexible adjustment. Locks vertically.

- 3 sections, to 56" from 22".
- Triple chrome plated brass tubing.
- 36" low loss Elektran lead cable

12 carton: 15 lbs., 1 lb. 7 oz. each



ACCESSORIES

CABLES

LEAD EXTENSIONS

- C-8 12" Length 6 to Box Skin
- C-9 18" Length 6 to Box Skin
- C-12 24" Length 6 to Box Skin
- C-13 36" Length 6 to Box Skin
- C-43 48" Length 6 to Box Skin
- C-72 72" Length 6 to Box Skin
- C-96 96" Length 6 to Box Skin
- *C-41 9' Length 6 to Box Skin
- *C-40 12' Length 6 to Box Skin
- *C-42 15' Length 6 to Box Skin
- *C-63 18' Length 6 to Box Skin

*Built in Capacitor ALSO BULK



REPLACEMENT LEADS

- RL-36" (Formerly 15-289) Bulk Packed
- RL-48" (Formerly 15-291) Bulk Packed
- RL-54" (Formerly 15-290) Bulk Packed
- RL-60" Bulk Packed
- RL-72" Bulk Packed

3-WAY CONNECTOR MODEL C-50

To connect two lead cables and lead extensions of Twin Rear mounts. One 3-way Connector and 5 Clips.

12 on display card—1 lb.

ALSO BULK



COMMUNICATION ANTENNAS by **W a r d**

for every mobile frequency and application

MODEL CB-1

LOW-COST COMMUNICATION ANTENNA FOR THE HOT ROD TRADE

- 96" Steel Whip
- Black painted swivel base
- Cadmium steel spring
- 15' lead

Each whip is in a very attractive plastic bag . . . packed 6 bags to a master carton . . . The base, spring and lead are packed together . . . also 6 to a master carton.



MODEL CB-2

ECONOMY CITIZEN BAND

- WCA-310 Universal Swivel Base Heavily Plated and Painted
- WCA-3A Triple cadmium plated spring
- WCA-326-B 102" stainless steel tapered whip



MODEL CB-1-A

DELUXE MOBILE COMMUNICATION ANTENNA FOR 27 MC CITIZEN BAND

- 102" Stainless Steel Whip
- Chrome Swivel Base
- Chrome Deluxe Spring

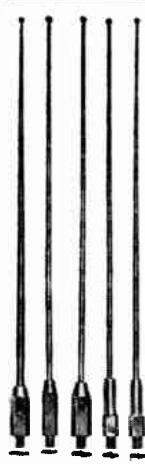
Each whip is in a very attractive bag . . . packed 6 bags to a master carton . . . The base and spring are packed together . . . also 6 to a master carton.



MODEL CB-3

DELUXE CITIZEN BAND

- WCA-315 Chrome plated swivel base with stainless steel hardware
- WCA-3ACH Triple chrome plated, barrel type spring. Bends through 100 degrees.
- WCA-326-B 102" stainless steel tapered whip



HEAVY DUTY MASTS

Finest stainless steel: heavy-duty performance. 84 1/2" mast bends to bring tip and base 30" apart without distortion. All base studs 3/8-24 threads. All taper ground with ball tip. WCA-320 series — 60" long, choice of adapters: Chrome press fit, cadmium plated press fit; 3/8" hex steel, cadmium plated with set screws; 1/2" hex stainless steel with set screws.

- WCA-321 series — 72", same choices.
- WCA-322 series — 84", same choices.
- WCA-323 series — 96", same choices.
- WCA-324 series — Fiberglass in all 4 lengths.



DISGUISE ANTENNAS

Look and mount like ordinary car antennas, with Ward "8" ball mount. The secret is in the lead: stub lead type for 30-50 mcs.; standard leads for 144-174 mcs. WCA-8-71 has triple chrome plated brass tubing and stainless steel tip rod. Looks like 3 section car antenna, but length fixed at 55 1/2". (Permanent at telescopic joints.) Has heavy mounting brackets. WCA-235 same but with 70" mast. WCA-143 same but tapered stainless steel mast. WCA-248 looks like 3 section, "8" ball mount. WCA-249 55 1/2" tapered stainless steel, "8" ball mount.

NEW HEAVY DUTY DIE CAST MOBILE BASES



WCA-310 — Universal swivel base. Plated & painted parts. Stainless steel mounting hardware.



WCA-312 — Chrome plated swivel base w/ stainless steel mounting hardware.



WCA-313 — Coaxial type. New rugged metal backup plate and shell is one unit. Connector mounted in the shell is PL-258 which accepts a PL-259.



WCA-315 — Same as type. WCA-313 except base is chrome plated. Mast Extension. Heavy chrome plated brass tubing with 3/8-24 thread at both ends. 3 lengths: WCA-330 in 12" or 24" or 36"



Adapters have 3/8-24 thread for use on any standard Ward mast. Lock washer and set screws included. WCA-89-357 Stainless; 1/2" hex. WCA-89-358 cadmium plated; 3/8" hex.



Spring protect cap and mast. Shack mounting "gives" under impact. Normal vertical. WCA-3A is cadmium plated with lock washers. WCA-3AL is extra heavy cadmium plated with lock washers. WCA-301 Deluxe has stainless steel spring and mounts.



LEADS FOR DISGUISE ANTENNAS

Available in various lengths with either RG-8/U or RG-58A/U cables. Stub type loading is employed for 30-50 mc. operations to compensate for the short length of the antenna mast. Regular coaxial cable leads are used for 144-174 mc. operation.



WALKIE TALKIE MODEL WCA-254

Expressly for 2-way radio. Greatest operating range, clearest reception. 19" whip rod fits any adapter which accepts PL-259 connector.

ROOF TOP ANTENNAS

Three models with varying megacycle ranges. All mount from outside; only one 3/8" hole required. 12' cable. Weather proof, positive ground. Specify for fleets, police, taxi, fire, etc.

- WCA-250 — 144-174 mc.
- WCA-251 — 450-470 mc.
- WCA-A250 — 108-174 mc.

WARD PRODUCTS CORPORATION • AMSTERDAM, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS



RELIABILITY

AMERICAN COMMUNICATIONS CORPORATION now offers all the materials required to complete a wide variety of electronic Systems installations. Further, AMERICAN'S Professional Engineers will lay out these installations on architectural plans gratis, where AMERICAN'S equipment is used. Systems include: **Status Controls** — for hotel/motel rooms; hospitals; factory production, test, inspection, count-down; etc. **Closed-circuit TV** — for hotel and motor-inn registration and check-out; hospitals; apartment buildings; schools; industrial inspection and remote monitoring.

Additional Systems:

- Signal Mail Rack
 - Message-at-Desk
 - Maid Call
 - Master Radio/TV Antennas
 - Centralized Radio
 - Room TV • Stereo Sound
 - Public Address
 - Background Music
 - Automatic Wake-up
 - Selective Paging
 - Motel-O-Phone
 - Area Sound/Lighting
 - Emergency Alert
 - Automatic Fire Alarm
 - Audio/Visual (silent) Call
 - Doctor's Call Board
- ACC'S Newest — TV THEFT ALARM**

STATUS CONTROLS—(ROOM TYPES)

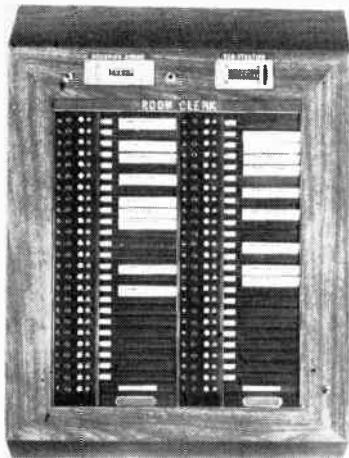


Fig. A. No. A-701-2/- Room Status Control — Automatic. This Room Clerk unit is 3-board type. Has room Maid control of status.



Fig. B. Room Unit for A-707 Automatic may include Radio controls, Message light. For A-L3, light under Jack allows Maid to monitor her signal to office; see Room Unit, facing page.

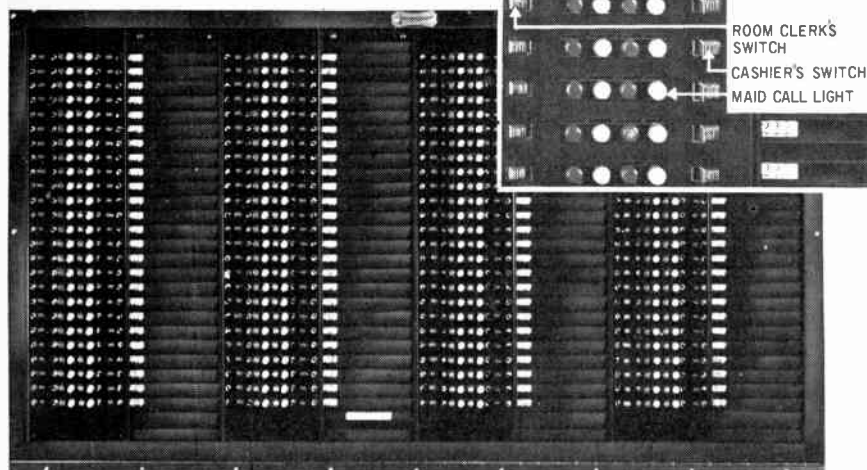


Fig. C. Leamertronic No. A-L2-2/100 Manual Status Control, 100 rooms. This Room Clerk, Cashier Combination Panel has two separate columns of switches, a Registration File, and Maid Call lights (see insert). Up to 1,000 or more, rooms can be accommodated, upon order. Steel panel is hinged.

AMERICAN COMMUNICATIONS CORPORATION builds Status Controls to suit a variety of uses. Originally designed to speed room rentals in hotels and motels, special models may serve other needs for instantaneous sequential control and monitoring in hospitals (for bed status, between Head Nurse, Cashier and Housekeeper); factories, laboratories (production, process control); missile centers (data checkout); etc.

Operation of both Manual and Automatic types is exemplified in hotel/motel Guest Room Control units shown here. Both types show the renting status of rooms: green light indicates to Front Office, Cashier and Housekeeper that a room is Available; yellow, that room is Occupied; red, that room is Out of Order — awaiting change.

Color switching (status control) is accomplished by the flick of a switch (Manual types, Figs. C, D) or the touch of a luminous button (Automatic type, Fig. A). Each office may have its own Control, with 3 (or 4) lights and a switch for each room, Fig. A, or Front Office and Cashier may share a Combination Board, or panel, Fig. C; only Front Office section has name Registration File. Monitor Boards (lamps only) can show management the rental status at all times.

Where System wires into guest room a Room Unit (2-gang plate w/jack, and perhaps lamp) is supplied for each room; or, where the wiring of an existing facility is used, for economy, Room Unit may be made part of present plate, as Fig. B or the ultra-modern type for luxury occupancies, Fig. E.

Manual Room Status Control — Model Leamertronic. This simple and efficient design is available in three types:

A-L1-2 (2 board), A-L1-3 (3 board), 3 light. Is not connected to rooms by wire.

NEW "BLINK LIGHT" MODEL features MAID control:

A-L2-2 (2 board), A-L2-3 (3 board), 4 light. Connected to guest rooms by wire. Room Unit has jack only; Front Office and Housekeeper Controls have a 4th light that shows "white" when Maid plugs into room jack (Maid can then be paged in this room, over room radio speaker, by Housekeeper or Front Office).

A-L3-2 (2 board), A-L3-3 (3 board), 4 light. Wired to guest rooms. Room Unit has jack and light; Front Office and Housekeeper Controls have a 4th light. Both lights blink "white" when Maid plugs into room jack (Maid can then be paged), and change to steady the instant Maid signals, by plugging further into jack, that room is ready. See Fig. B.

- (t) Manual — A-L1-2/- , \$35.00; A-L1-3/- , \$40.00.
- *A-L2-2/- , \$44.90; *A-L2-3/- , \$49.75.
- *A-L3-2/- , \$51.80; *A-L3-3/- , \$56.95.

Automatic Room Status Control — Model 707. This facility includes relays which permit remote control of status on Control Boards: Inspectress or Maid, by room keyswitch or button, can change color to green when ready. Also, Front Office unit may include Totalizers that constantly show total occupancy and rental.

- (t) Automatic — *A-707-2/- , \$58.40;
- *A-707-3/- , \$63.40.

(t) Above Net Prices, per room, are less connecting cable, and labor, but including Power Supply — and, where necessary (*), Room Units — for 1 to 100 rooms. Applicable discount per any number of additional rooms upon request. Literature available.

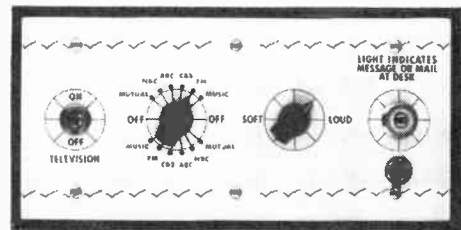


Fig. E. No. A-ELP1 Electroluminous Panel. Operates on A-C. Diffuses a night-light glow in room. Mounts on standard outlet box. Manufactured to order.

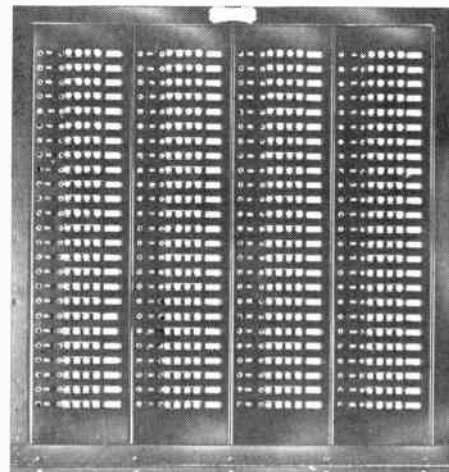


Fig. D. No. A-L2-2/100 — Housekeeper panel. Hinged at base of frame, like Combo. panel (left). No. A-L3 would have almost identical appearance; A-L1, with only 3 lights, would be slightly less wide for same number of rooms. Panel is Console, Surface or Flush mounted.

AMERICAN COMMUNICATIONS CORPORATION
NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

SIGNAL MAIL RACK & MESSAGE-AT-DESK

AMERICAN COMMUNICATIONS manufactures two signal systems, either of which may be used to expedite message and/or mail handling in hotels, motels, schools, factories, hospitals, and other institutions.

The Mail (and Message) Rack Signal System is comprised of numbered pockets, one for each room (or other unit), and a lamp and switch for each pocket, Fig. A. Each pocket is wired to a guest-room. When clerk files mail (or messages) in pocket, he switches on a corresponding lamp; simultaneously, a duplicate lamp in the remote room lights, and remains lit until guest acknowledges the signal, Fig. B.

A new 2-Way model, No. A-MR2, with access from either side and lamps and switches on both, enables Mail Clerk to insert mail from one side and silently signal guest, and for Telephone Operator to insert messages from the opposite side (and also signal the guest).

The Message-at-Desk Signal System is identical with the Mail Rack System, except that there are no pockets — only lamps and switches mounted on a control panel. Message clerk — usually the telephone operator — signals to guest that there is a message (or mail) by moving a switch as above described. Figs. C, D.

The Racks and Panels are available in a variety of constructions to suit individual requirements as to location and number of rooms, and in standard or special finishes as decor dictates. The Mail Rack is available with shelf at top of each pocket for room key, Fig. E.

If guest room is not wired for radio, a separate wall plate, Fig. B, is provided for the signal lamp; otherwise, it can be included on the radio control panel (See Room Unit at bottom of page).

Long-life lamps in Signal Mail Racks and Message-at-Desk units are easily replaced from front. A metal stop strip across the back of each row of pockets, in the standard or No. A-MR3 Mail/Message Rack, permits insertions only from front. Model shown in Fig. A is for 100 rooms, but units can be built to suit 1,000 or more.

They may be made for Flush-wall (recessed), Surface-wall or Desk (table-top) mounting. An easily removable end cover plate permits access to wiring. Power Supply unit (included) is controlled by a switch. House signal wiring carries only low, safe voltage.

AMERICAN'S No. A-22X/- Multi-conductor Cable is used between boards, and No. A-19/2 Twisted-pair is used for house wiring to remote Room Units.

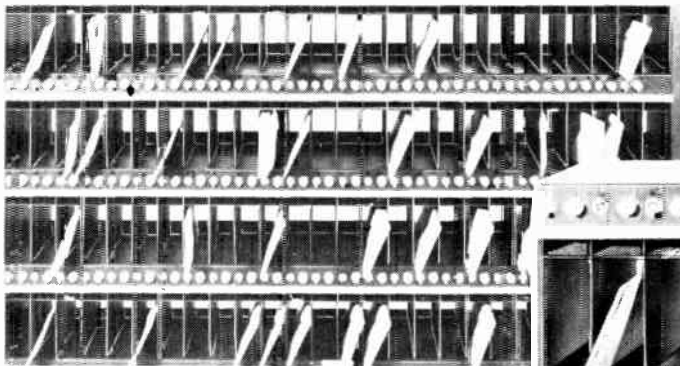


Fig. A. No. A-MR2/100 Mail/Message Rack, standard type, with stop strip and shelf at top of each pocket for room key. A designation strip below each row of lamps and switches identifies each room.

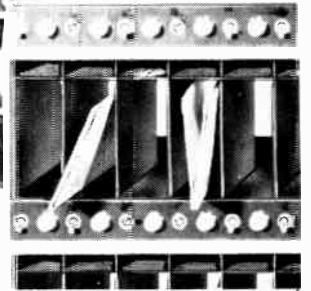


Fig. E. No. A-MR3 Mail/Message Rack has Key Shelf at top of pocket.

SPECIFICATIONS — Signal Mail/Message Racks

Standard finish, velvet black enamel. Material is steel. Standard pocket measurements: approx. 8" deep x 7-3/4" high (incl. 1-1/8" for Key Shelf, where used) x 2" wide. Specify whether wiring termination board is to be placed at left or right end of Rack.

NET PRICES

A-MR2/ Signal Mail Rack System, 2-way type, *17.50.

A-MR3/ Signal Mail Rack System, 1-way type, standard, *12.50.
*Per pigeonhole.

Above Net Prices are less connecting wire and Room Unit, but including Power Supply, for up to 100 rooms. Discount: apply on larger installations.

SPECIFICATIONS — Message-at-Desk

Standard finish, Flush or Surface mounting type, velvet black or gray enamel; Desk-top type, gray enamel. Other colors to suit decor are special. Material is steel.

NET PRICES

A-MD1/- Message-at-Desk System, Desk type; and, A-MD2/ Message-at-Desk System, Flush Panel type, \$7.50 per room for up to 100 rooms. Above Net Price is less connecting wire and Room Unit, but including Power Supply.



Fig. B. No. A-P20-3-A Signal Plate, in guest room, measures 4 3/8" sq.

MAID CALL SYSTEMS

No. A-MC-A/- is Visual type. Maid plugs into room jack, which lights a lamp on a Light Panel in Housekeeper's office. Maid can then be paged if installation includes paging facility. Light goes out when Maid removes plug from jack. This System includes Room Jacks, Maid Plugs, No. A-MC Light Panel (with lamps only), Power Supply and wiring.

No. A-MC-B/- *Blink Light type. This newest design makes room recovery extremely rapid, through its amazing Maid Monitor and Housekeeper "Blink Lights."

Soon as Maid enters guest room she plugs into Maid Jack on Room Unit. Immediately, a tiny light under the jack slowly blinks on and off; at the same time, a second light blinks on Housekeeper's Light Panel, indicating "Maid in room". Housekeeper can now page Maid if paging is provided.



Room Unit for No. A-MC-B/- Maid Call System. "Blink Light" confirms Maid's signals.

When Maid has readied room, she plugs all the way into room jack, then removes plug. Maid's light now goes out but Housekeeper's light changes to steady-on — "room ready"; she can switch light off at her convenience (but circuit will accept Maid's next signal).

Installation includes Room Jacks, Maid Plugs, No. A-MC1/- Light Panel (with lamps and switches), Power Supply, Blinker Unit, and wiring.

Room Clerk can use a No. A-MC Light Panel to monitor room status shown on Housekeeper panel.

SPECIFICATIONS

Maid Call Light Panels are built for Desk, Flush, or Surface mounting, in sizes to suit needs. Material: steel; standard finish: gray Hammettone enamel. Designation strips identify rooms. Lamps have long operating life, on 24 V. circuit.

Net Prices (Discounts on larger units.)

No. A-MC-A/- Maid Call System, w/No. A-MC Light Panel, Power Supply, and 1 Maid Plug per 10 rooms, but less Room Unit, \$5.00 per room.

No. A-MC-B/- Maid Call System, w/No. A-MC1 Light Panel, Power Supply, Blinker Unit, and 1 Maid Plug; per 10 rooms, but less Room Unit, \$8.50 per room.

Prices are for up to 100 rooms.

*Protected by Pending Patents.

Fig. C — inset. No. A-MD1/85 Message-at-Desk unit, Desk-top type, in metal cabinet.

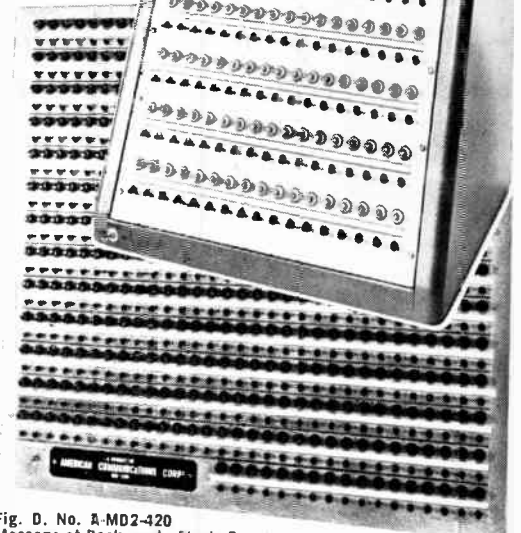


Fig. D. No. A-MD2-420 Message-at-Desk unit, Flush Panel type, 420 rooms. Has lamps, switches, designation strip.

AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

MASTER RADIO OR TV ANTENNA SYSTEM (& CATV)

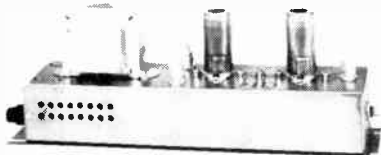
Installation requirements for an AMERICAN COMMUNICATIONS Master Antenna System whether for Radio or TV—or both—mainly depend upon field signal strength and local interference. A field-strength survey must be made to determine whether the received signals are sufficiently strong and reasonably "clean"

If TV signal strength in the area is low, a weatherproof No. A-BA Broadband Booster Amplifier (shown mounted on mast) located at the antenna may be used, for an additional 25 db gain on all VHF channels; power supply and Off-On control are a separate, remote unit, No. A-BAP (not shown), which may be up to 500 ft. distant. Input and Output, each 300 or 75 ohms. Terminals permit use as Broadband, High-band, or Low-band Amplifier.

The Radio signals are fed to the Centralized Radio System, and the TV signals are distributed to the various TV risers.

TV signals on UHF channels may be converted to unused non-adjacent VHF channels by means of a No. A-U/V-C Converter (not shown); its UHF Mixer head mounts at antenna, and delivers VHF signal to remote oscillator. Specify the UHF and VHF channels. Converters are also available to cover VHF High to VHF Low, No. A-V/V-C.

To deliver adequate signal strength at each TV outlet, it usually is necessary to use low noise, high gain, head-end amplifiers, one for each channel. A No. A-CH/- TV Amplifier Strip is shown here. A group of up to 7 such channel amplifiers can be assembled in one steel cabinet, No. A-C/CH/- (not shown here).



No. A-CH/- TV Channel Amplifier.



No. A-BA TV Booster Amplifier.

SPECIFICATIONS

No. A-CH/- TV Channel Amplifier.

Bandwidth, 6 mc.; gain, 45 db. Low-noise cascode input. Output, 1 V. per ea. two outputs.

No. A-BA Weatherproof Broadband TV Booster Amplifier, w/No. A-BAP Power Supply. Net \$79.50.

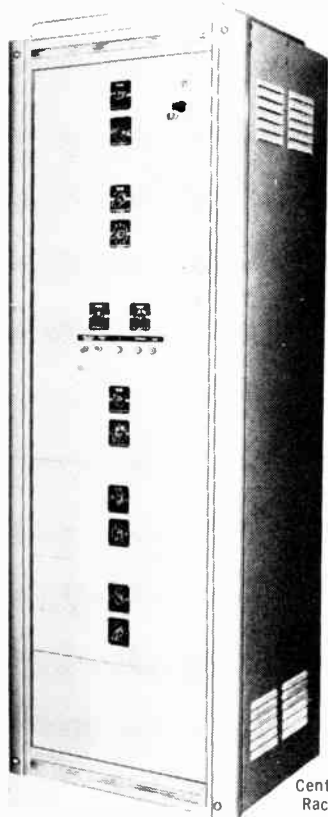
No. A-U/V-C Converter, w/UHF Mixer Head. Specify UHF and VHF channels. Net \$75.00.

No. A-V/V-C Converter, w/Mixer Head, for VHF to VHF. Specify channels. Net \$75.00.

No. A-CH/- Channel Amplifier. Specify which of channels 2 to 13. Net \$44.00.

No. A-C/CH/- Channel Amplifiers in Metal Cabinet. Specify channels. Net, Cabinet A (only) (for 1-3 Amplifier Strips), \$8.50; Cabinet B (1-5), \$14.80; Cabinet C (1-7), \$32.50.

For Community Antenna TV (CATV) installations, special towers, high-gain directional antenna arrays, and low-noise amplifiers can be supplied. For Coaxial Fittings, see last two pages.

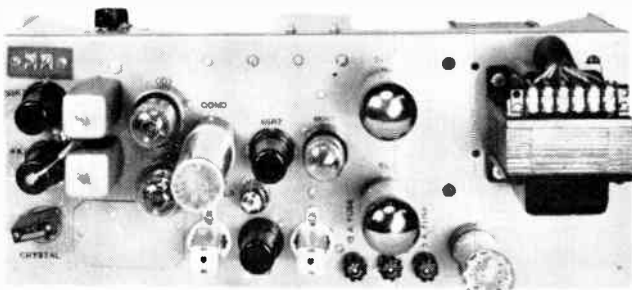


No. A-CR Centralized Radio Rack, complete.

The control center of AMERICAN COMMUNICATIONS' "Channelized" Radio System is the No. A-CR Rack Unit shown here. Signals from the Antenna System are fed to the Rack-and-Panel assembly, and then to remote speakers (guest rooms, public areas, etc.) through a system of properly selected cable and matching components as specified by the Supervising Engineer.

No. A-CR Rack can be modified to suit requirements. The standard Rack, however, is comprised of 4 AMERICAN No. A-300C AM Crystal-controlled Radio Receivers, 1 No. A-300T AM Tunable Radio Receiver, a panel-con-

CENTRALIZED RADIO SYSTEM



No. A-300C Radio Receiver.

trolled No. A-P/M Preamp/Mixer (for mixing a high-impedance microphone and phonograph), Monitor Speaker, power supplies and controls, and Timer. The Radio Receivers deliver a minimum of 35 watts audio power. (Additional amplification, if needed, is incorporated in a second Rack.)

If the tunable receiver is a No. A-300T (for FM reception), the house manager may tune it, like the A-300A AM Radio Receiver, to a continuous-music station for background music, available to guest when he switches to this channel—within the operating hours automatically controlled by the Timer.

The Monitor Speaker (optional), hinged to Rack, has same response as room speakers for true check of programs as received in guest rooms. Switching permits its use on background-music, P.A., etc.

If Rack is to be used with AMERICAN'S Emergency Alert System, the standard model will include 8 hermetically-sealed relays—one each for the 5 radio receivers, one in preamp/mixer, one in the automatic timer circuit, and one in a booster amplifier circuit. These enable remote Emergency Alert equipment to assume control and deliver to all the loudspeakers a suitably high signal whenever needed, regardless of off-on status of Rack, room speaker channel-selector switch, or P.A. system.

Rack can include additional facilities, as for example switching into Muzak or other wire line, or use of tape or record player, for background music. For Stereo FM reception, using a multiplexed FM station as the source of both stereo channels, a Stereo Multiplex Adaptor is added to the existing FM receiver, and the two resulting audio channels are fed to stereo equipment.

Receivers are high-fidelity type, with push-pull output. The No. A-300C Radio Receiver is shown here; No. A-300T, and -F, have same physical dimensions and general appearance. Several features make these re-

ceivers exceptionally reliable and efficient: (A) the single electrolytic capacitor is plug-in type for servicing convenience; (B) circuits are triple-fused (one each for power line, filament supply, high-voltage supply); and, (C) voltage regulator tubes limit surge potentials to safe values. For trouble-free performance over long periods of continuous operation in commercial service, only close-tolerance, high-quality components are used, and operated within wide safety margins, in a ruggedized receiver design.

SPECIFICATIONS

Radio Receivers

Tuning range, 540-1,720 kc.; sets have 1 RF and 2 IF stages. Output transformer has taps that present balanced load impedances to the following lines: 4, 8, 16, 600 ohms, and 70 V. Rated audio output, 35 W. Each Receiver has a Selector Switch, knob-controlled from front of panel, for selection of (1) Radio; (2) Microphone or Phonograph; and, (3) Muzak, or other wire line.

Tube complement, No. A-300T: 1, 6SA7; 2, 6SK7; 2, OD3 VR150; 1, 6SR7; 1, 6SN7GTB; 1, 5AR4; 2, 6L6GC. No. A-300C has same complement, except 6K8 replaces 6SA7.

AMERICAN will supply Crystals in FT-243 holder.

Rack

The No. A-CR Centralized Radio Rack is made of cold-rolled steel $\frac{3}{16}$ " thick; panels are aluminum, $\frac{3}{32}$ " thick. Standard finishes, Rack and Panels, slate gray or black ripple enamel. Rack amply ventilated by louvers on 3 sides. Easy-access rear door has slip-joint hinges. Rack measures approx. 68 x 22 x 18" deep. Fully fused; use on 20 A. mains service, 115 V., 60 cy. Supplied completely equipped as described.

No. A-CR Rack, complete, Net Price \$250.00 per channel.



AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

DOCTORS CALL BOARDS



No. A-DCB/- Doctors "IN" or Call Board. Also available w/Message Signal, Intercom, etc.

Shown here is AMERICAN'S Doctors Call Board, flush-mounting type. Sizes and mountings to order. May be used wherever rapid, convenient check-in and check-out are wanted.

A column of switches at left of a column of translucent designation strips permits doctors to indicate whether they are on duty. Upon arrival, each moves his respective switch to "On." This "IN" Board can be operated by a Receptionist, instead. As doctor may arrive at an Entrance door, and leave by an Exit door, a second or "OUT" Call Board must be provided at this Exit.

Call Boards less switches can be provided for Head Nurse and Superintendent's offices, to show doctors on-duty status.

Doctors Call Board is also available with Message-at-Desk facility — without requiring additional wall space! The lamps under a name strip slowly blink off and on until this message signal is acknowledged.

Another Call Board model provides Intercom facility. This allows physician to receive his message without delay; upon leaving, he can give special instructions to front desk (usually, remote from exit).

Still another model is double-sided, so illuminated name can be seen from both Doctor's side of Call Board and from Telephone Operator's side.

SPECIFICATIONS

No. A-DCB/- Doctors Call Board (illus.) is 3 ins. deep; other dimensions as required. Steel panel swings outward, as do the individual nameplate panels (for change of names or lamps).

No. A-DCB2/- Doctors Call Board includes Message Signal.

No. A-DCB3/- Doctors Call Board includes Intercom.

No. A-DCB4/- Doctors Call Board, double-sided, with names readable from both sides, but switches on only one side. Net \$8.50 per name.

No. A-DCB5/- Doctors Call Board, less switches, for monitoring.

Net Price, A-DCB/100 Doctors Call Board, basic unit for 100 rooms, \$10.00 per room, per Board, less connecting wire but w/Power Supply.

PILLOW SPEAKER CONTROLS



The No. A-S/C-T Pillow Speaker and Remote Control (illustrated) has dynamic earphone w/3.2 ohm voice coil. Unit connects to adaptor in TV set. Button controls set OFF-ON, and selects station; wheel adjusts volume. High-impact plastic case (ivory) w/suspension chain and bed-clip. Cord w/adaptor plug is 5 ft. long. Size: 4 1/2 x 2 1/2 x 1 1/8 ins. deep. Use with GE Hospital-model TV set CBM620 VVY, or equal. Net Price, \$18.32.

The No. A-S/C/N-RT (not illustrated) is a combination Radio and TV Pillow Speaker, Remote Control and Nurse Call. Operates in conjunction with stepper relay (not supplied). Net Price, \$29.32.

AUDIO/VISUAL (SILENT) PAGING SYSTEM



No. A-A/VP-D Decoder, Audio/Visual (silent) Paging System. Has 4" numerals.

No. A-A/VP-E 3 3-bank Encoder, for Audio Visual (silent) Paging System.



Designed for use with a Call Board, AMERICAN'S Audio Visual Paging System presents an efficient means of personnel paging in hospitals, department stores, schools, hotels, factories, offices, etc.

In operation, a designated person (Telephone Operator, for instance, in a hospital) sets up on a desk-top Encoder, the call number assigned to a person (doctor or nurse) whose attention is wanted. This can be any number from 1 to 999 per bank of push-buttons. This number then instantly appears in the window of remote readout indicators or Decoders, wherever located. The called person can acknowledge the call in a variety of ways — house phone, intercom, etc.

Encoder No. A-A/VP-E/3 shown here has two additional banks of buttons which permit two additional calls to be set up at the same time, and by automatic switching, each will be signaled, in sequence, 20 seconds after the preceding one. Or, by operating a switch, any one of the three sets of numbers can be held in view and shown steadily until acknowledged.

A jack on the front skirt, for microphone, permits audio paging, emergency instructions, etc. A pilot light indicates the "ON" condition. Encoders may be located in sev-

eral offices, and Decoders at any number of remote points.

SPECIFICATIONS

Encoder—No. A-A/VP-E/3, 3-bank, is a desk-top unit in metal housing. Dimen., approx. 11 x 5 3/4 x 14" deep. Operates on 115 V., 60 cv. A-C.

Decoder No. A-A/VP-D is a signal speaker assembly in metal housing approx. 25 (incl. flanges) x 5 3/4 x 15 1/2" deep. This unit is surface-mount type; other types of mounting can be supplied. Speaker is 5" PM type in an acoustic chamber designed for maximum intelligibility. Readout unit display: numerals 4" high that are readable at over 60 ft.

Standard finishes: Encoder, buff enamel; Decoder, flat polar white enamel.

Net Prices

Encoders: A-A/VP-E/1, \$450.00; A-A/VP-E/2, \$550.00; A-A/VP-E/3 (3 digits, as illus.), \$650.00. Priced per set of digits, as below.

Decoders: A-A/VP-D 1, \$125.40; A-A/VP-D2, \$234.40; A-A/VP-D3 (3 lights, as illus.), \$354.40. Priced per number of lights.

Auxiliary Equipment (for Paging)—A-PS Paging Set (Microphone and Amplifier, 1 each for paging—not illustrated), Net \$75.00/set.

PATIENT'S RADIO WALL-PLATE



No. A-RW1 Radio Wall-plate.

SPECIFICATIONS

No. A-RW1 Radio Wall-plate. Switch is pull-chain actuated, continuous rotation, single-pole. 5 positions and "Off". Either single-circuit or seize-type jack can be supplied, for PL-55 plug; specify which desired. Plate is brushed steel, approx. 2 3/4 x 4 1/2" high; overall depth, from front of plate, 2 1/4". Fits standard outlet box. Head chain is steel, 3 ft. long; cut to desired length. Brass plate and chain optional. Net Price, \$6.85.

Although designed for use by patients in hospitals, the No. A-RW1 Radio Wall-plate shown here, is a convenience wherever used. Operates by pull chain.

Has stepper switch and a jack. Switch has continuous rotation through "Off", 5 positions for selection of radio programs, and back to "Off", and so-on. Jack provides connection for pillow speaker.

AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

PORTABLE ELECTRONIC LECTERN



No. A-203B
Portable Electronic Lectern is used in "the world's most electronic hotel."

AMERICAN'S No. A-203 (A, B and C) Electronic Lectern is unified — nothing else to buy (includes microphone, amplifier, loudspeaker, reading light, and provides for optional equipment). It is efficient and portable. When combined with base (as No. A-203B) it is sometimes referred to as an Electronic Podium. High-quality cardioid microphone, w/Off-On switch, is adjustable in height and position; side mounted, for maximum desk room. Amplifier is high-quality, reliable, and high-fidelity type, w/separate Bass and Treble controls to suit any acoustic situation of speaker or audience. Loudspeaker is in acoustic chamber designed for maximum voice fidelity and minimum feedback. Lumaline fluorescent reading light is shaded, and noise-filtered.

Housing is in two parts, with top or Lectern section lifting off lower or Base section; Lectern section, sold separately, contains apparatus above-mentioned, and is suited to table-top use in hotels, clubs, banquet halls, industrials (sales meetings, etc.). Ample space under sloped reading desk for reference material: a ledge that will conveniently support a dust cover (not supplied) skirts junction of Lectern and its base. Base section, equipped with quiet, ball-bearing casters, is demountable, and folds for convenient storage.

Optional equipment: (1) jack with extra speaker for covering large audiences; (2) tape machine for background music or recording; (3) jack for patching into existing P.A. system; (4) jack, and neck microphone with long lead, for speaking away from Lectern (as for audience participation, etc.); (5) built-in or remote timer, and signal light. Engraved bakelite Nameplate is extra. **Net \$10.00.**

SPECIFICATIONS

No. A-203A Lectern (only), equipped; No. A-203B, Lectern w/Base. Standard cabinet is solid wood, walnut-veneered, in rich furniture finish; other woods and finishes to order.

Overall dimen. (Lectern and Base), approx. 28" x 19" x 50" high. Cardioid-pattern microphone has gooseneck stand. Amplifier audio output, 10 watts. PM type speaker. Junction box for plug and A-C linecord; specify cord length required. Operates on 115 V, 60 cycles.

No. A-203C, is No. A-203B (Lectern and Base) w/jack for second, auxiliary speaker (supplied: specify type and housing).

Net Prices: A-203A, \$295.00; A-203B, \$395.00; A-203C, \$425.00.

BACKGROUND MUSIC MAKER

Where recorded tape is to be used for highest fidelity background music, AMERICAN manufacturers the No. A-BM/- Background Music Maker (illustrated). Unit is also available recessed in cabinet and cased-over by a front door.

Ideal for hotels, motor-inns, travel terminals, medical centers, bowling alleys, restaurants, shopping centers (one No. A-BM Background Music Maker can supply hi-fi sound to all the units in a Center), etc. Will play up to 16, 8 or 4 hours of original music; then automatically repeat. Can be supplied for stereo systems. Includes facilities for public address or paging. Rack includes tape transport with 10½" reels, preamplifier, standard 30 W hi fi audio amplifier (other power outputs to order), phono and 2 microphone inputs, and controls (separate Bass and Treble tone controls, Phono Gain control, and 2 Microphone Gain controls).

SPECIFICATIONS

No. A-BM/- Background Music Maker. Cabinet overall dimen approx. 48 (high, incl. footing) x 22 x 20" deep. Rear (servicing) door has slip-joint hinges. Material is ¼" steel. Fully louvered for maximum ventilation. Standard finishes: slate gray or black ripple enamel.

No. A-RT/- Recorded Tape, long-play Background Music (choice of mood-music library).

Catalog of extensive library of mood-music supplied to purchasers. Model A-BM - is supplied for 4-, 8- or 16-hour play. **Net Prices:** A-BM/16, \$1,400.00; A-BM/4-8, \$985.00. Tapes: A RT/16, \$178.00; A-RT/8, \$90.00; A-RT/4, \$39.60.



BUILDING ALERT SYSTEM

AMERICAN'S Emergency Alert may also be used with AMERICAN'S Building Alert System (particularly suited to apartment building complexes), in which the warble tone is fed to outdoor speakers to summon the patrolman on the beat, if any emergency arises.

PRE-SIGNAL FIRE ALARM SYSTEM

The Emergency Alert warble-tone signal is also part of AMERICAN'S Pre-signal Fire Alarm System designed to protect hospitals, schools, hotels, etc., against panic due to sounding of general evacuation bells by operation of heat detectors or manual break-glass stations. A Control Panel Assembly connects these detectors or manual stations to the warble-tone signal box, allowing an attendant in the occupancy to exercise judgment as to the urgency of the alert before sounding the general alarm.

EMERGENCY ALERT SYSTEM

The undulating, siren-like tone of AMERICAN'S (patented) automatic electronic Emergency Alert System commands instant attention in an emergency.

The control center of the system is a conveniently located Emergency Alert unit resembling a Fire Box. In operation, operator breaks glass covering switch, and moves switch to SIREN or TALK. In either case, remote relays (usually about 7 in number) take over the amplifiers and loudspeakers in the related radio and P.A. systems, and the priority electronic siren or emergency instructions are heard at high level in guest rooms and public areas, regardless of the sound program previously being received, and even if set is off.

Mounted on the front of the Emergency Alert steel box are the SIREN-OFF-TALK switch in a glass-covered recess, a chained hammer, red pilot light, dynamic microphone (for issuing emergency instructions), and an instruction card. Within box are the electronic siren, audio power amplifier, spare tube, power supply, connecting strip, and a relay.

System operates in conjunction with AMERICAN'S Channelized Radio System, which contains the necessary remote relays and special wiring.

GENERAL SPECIFICATIONS

No. A-EA Emergency Alert unit. Steel signal box, enameled in Chinese Red, measures approx. 15 x 15 x 5" deep; has knockouts for conduit. Supplied equipped as described. Fully fused at 5 A. Operates on 115 V., 60 cy. A-C.

No. A-EAR Relays, for Emergency Alert installations. Multipole, to suit audio circuits into which they connect. Coils operate on 24 V. D-C. Heavy contacts. Hermetically sealed. System quotations upon request.



No. A-EA Emergency Alert signal box has electronic siren with warble sound.

CLOSED-CIRCUIT TELEVISION

CCTV may be combined with AMERICAN'S Status Control System, for instantaneous sequential control and monitoring of manufacturing processes from remote points.

Equipment is sold separately, or as a complete installation — either outright or rental. Prices depend upon installation requirements, and quotations will be supplied upon request.

FINANCING

AMERICAN COMMUNICATIONS CORPORATION can arrange financing of its Systems installation and/or equipment, including TV Receivers.

SPECIAL SERVICES FOR AMERICAN'S CUSTOMERS

Our Registered Professional Engineers will assist in planning installations anywhere. Also, technically-accurate drawings will be prepared for those who wish to accompany their quotations with drawings, but lack the facilities to prepare them.



AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

ANNOUNCING — American's Newest Invention *TV THEFT ALARM

Newest contribution by AMERICAN of electronic facilities for more economical hotel/motel operation is the TV Theft Alarm, available in three models:
A-TV-TA/A, for use with portable TV sets using so-called "rabbit ear" or built-in antennas;
A-TV-TA/B, for use where signal is fed to set via a TV outlet and master antenna system.
 Both above types employ a coded carrier radio alarm signal.
A-TV-TA/C, the third model, is for use where installation includes wiring to Front Office, as when Message-at-Desk system is available.

Basically, each operates on the same principle: any unauthorized attempt to remove a TV set from a guest room results in an alarm in the room and at the front office.

This alarm originates in and is controlled by an Alarm Control (illustrated) installed in each room. The TV set plugs into the Control which in turn will transmit either a carrier-RF alarm or a wire alarm the instant the plug of the TV set is removed from socket, the TV power cord is cut or the master antenna connection is removed from set.

The alarm signal is a loud, insistent, intermittent buzzing, from within the Room Control, which cannot be stopped until measures have been taken to check-out the alarm by management, which has been alerted by a duplicate signal at the front office.

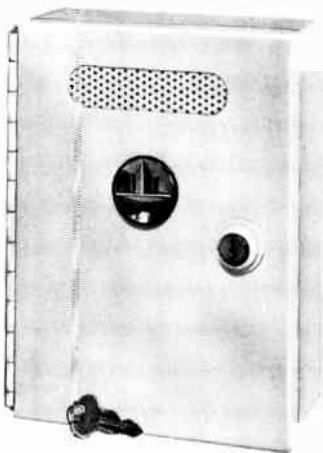
This office signal is dual — the loud buzz above mentioned, and a flashing or blinking light. Where the occupancy employs AMERICAN'S Message-at-Desk system, the message light may be utilized as the intermittent light signal, as an added economy and convenience; otherwise, an RF carrier decoder and blink light are used.

In either case, re-set of the Alarm Control to "alert", after an alarm has been given, can be made only at the Control in the guest-room, after the Control has been unlocked. The Alarm Control mounts directly on the wall outlet box.

Purpose of the code is to identify the building in which the alarm is originating, where the installation involves two or more buildings.

Quotations upon request.

*Protected by pending patents.



DB ATTENUATORS

AMERICAN'S A-DB/39 and (not illustrated) A-DB/59 Attenuators provide at low cost, quick and convenient means for determining losses in a number of essential tests in TV installations. These include measurement of amplifier gain, and of equipment losses.

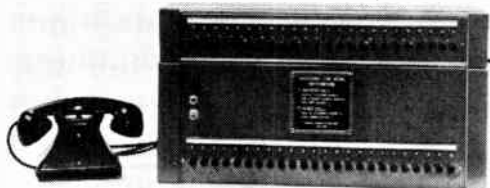
SPECIFICATIONS

Insertion loss of the A-DB/39 is in fixed steps of 3 to 39 db, and, of the A-DB/59, 3 to 59 db, for TV frequencies, when used in 75-ohm circuits. Switches are slide type. Housing is steel, ecru enameled; overall: 2 x 2 x 1" deep.

Net Prices: A-DB/39, \$5.04; A-DB/59, \$19.90.



MOTEL-O-PHONE SYSTEM



AMERICAN developed this interior telephone System specially for Motels, Motor Inns, and small Hotels. This Multiple Telephone Switchboard is described as "selective ringing, common talking." Unit illustrated is for 48 telephones; add units for each 24 telephones. Net Prices: A-MTS Basic Unit, for 24 phones, w/115 V. A-C Power Supply, \$350.00; A-MTS-1 Add-A-Board, for 24 phones, \$150.00; A-FP French-style Desk Phones, \$25.00.

MICROPHONE MIXERS

AMERICAN'S A-6M Portable Microphone Mixer has inputs for 6 low- or high-impedance microphones, individual gain controls (mixers) for each of the 6 microphones, master gain control, Cue jack for headphone monitoring of broadcast-quality program material, pilot light, separate Bass and Treble electronic tone controls, and "Off-On" switches for each of two power supplies (one for service and one for standby).

The 6 mixers work from individual low-noise pre-amplifiers into the master gain control; gain is adequate for remote operation.

Output is +15 dbm; gain, 55 db; frequency range, 30-15,000 cy./sec. ±1 db.

No. A-10M Portable Microphone Mixer (not shown) for 10 microphones is similar in construction.

SPECIFICATIONS

Slope-front metal cabinet (A-6M) measures approx. 22" x 7" x 8" high. Gray crackle finish. Carrying handle. Fused power supplies. Terminations at rear of cabinet. Instrument furnished w/Hubbell connectors.
 Net prices, A-6M, \$495.00; A-10M, \$825.00.

No. A-6M
6-channel Portable
Microphone Mixer



*AUTOMATIC WAKE-UP ALARM

One of the newest of AMERICAN'S inventions in fully-automated electronic facilities especially designed for the hotel/motel trade is the A-WA-1 Automatic Wake-up Alarm System; a portion of its Master Control Panel is shown here.

Smaller, less expensive and more versatile and efficient than its predecessor, the A-WA Wake-up Alarm, AMERICAN'S A-WA-1 consists of a guest-room signal, and means for initiating this call signal at any quarter-hour within a 3-hour period — for example, 6 to 9 A.M.

Operation is simple: Room Clerk or Telephone Operator plugs into a guest-room Time Jack, on a small Master Control Panel, which corresponds (within 15 minutes) to the wake-up time requested by the guest. Operation is now fully automatic — Wake-up Alarm "remembers" calling time and sends a calling message at the proper time to the correct room.

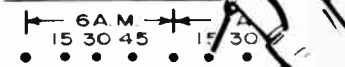
The calling signal is both visible and audible: (a) at 2-second intervals a light blinks at both the office control panel, and in guest room; and, (b) in one model a recording advises guest to "shut me off" and in another a buzzer sounds. When guest pushes a button (alongside blink light on night stand), signal light goes out in guest room and on office panel, and audio signal stops.

Though guest's switch is now in his "off alarm" position it is still electrically in a circuit "on alarm" position so Clerk or Operator can signal next guest.

AUTOMATIC WAKE-UP SYSTEM AMERICAN COMMUNICATIONS CORPORATION NEW YORK

| ROOM | ROOM RETURN LIGHT | CALL TIME | | | | ROOM |
|------|--------------------------|-----------|------|------|------|------|
| 201 | <input type="checkbox"/> | 6 AM | 7 AM | 8 AM | 9 AM | 201 |
| 202 | <input type="checkbox"/> | 6 AM | 7 AM | 8 AM | 9 AM | 202 |
| 203 | <input type="checkbox"/> | 6 AM | 7 AM | 8 AM | 9 AM | 203 |

Call Time is selected within 15 minutes by plug-in Pin.



GENERAL SPECIFICATIONS

Standard A-WA-1 installation includes Master Control Panel for 3-hour timing, complete set of Time-set Plugs, either an A-TD continuous Tape Deck and pre-recorded tape (not sold separately) or a Buzz Generator, 2-second timer, power supply, and guest-room signal facilities as necessary (installed by us or other labor as required). Long life, low current signal lamps are used. Call timing is available up to 6 hours.

Quotation upon request.

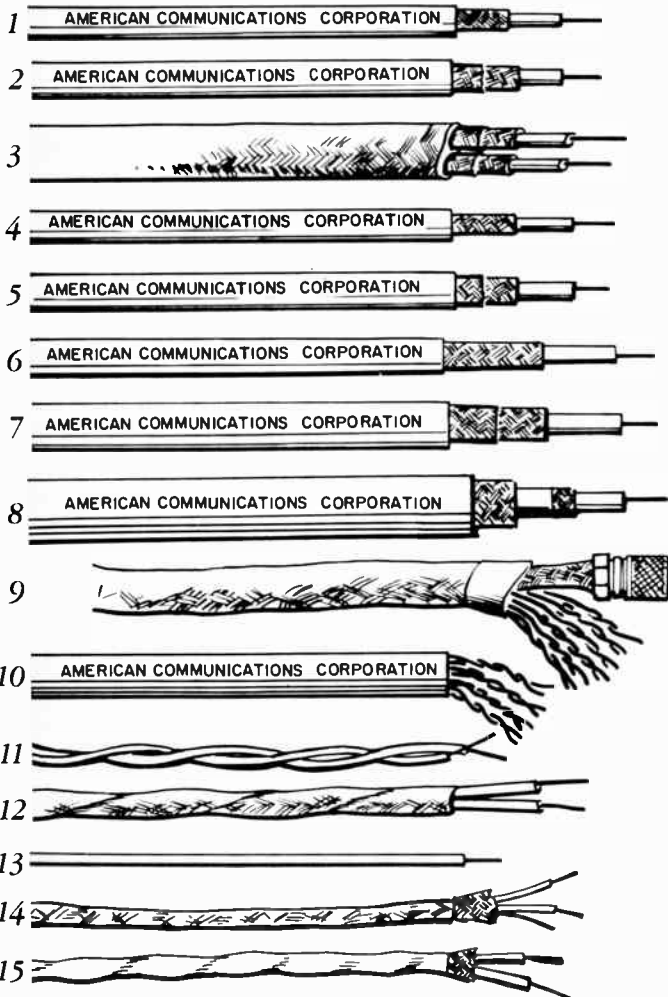
*This System protected by pending patents.

AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS - MOTELS - INSTITUTIONS

CABLE & WIRE



Special Wire and Cable combinations can be fabricated on quantity orders. Types here listed meet all specifications for the respective types, and are those used in making AMERICAN'S Systems installations. Specification sheets supplied upon request.

TV COAXIAL CABLE

| | Net Per ft. |
|--|----------------|
| (1) A-TV91-S (RG-59/U w/1 shield) | \$.04 |
| (2) A-TV92-S (RG-59/U w/2 shields) | .06 |
| (3) A-2TV92-S (twin A-TV92-S) | .20 |
| (4) A-TV61-S (RG-6A/U w/1 shield) | .05 |
| (5) A-TV62-S (RG-6A/U w/2 shields) | .07 |
| (6) A-TV11-S (RG-11/U w/1 shield) | .09 |
| (7) A-TV12-S (RG-11/U w/2 shields) | .10 |
| (8) A-TV12-S(2) (A-TV12-S w/shields insulated from each other) | .20 |

TV & RADIO COMBINATION CABLE

- (9) A-TV/R92-S/- (combo.: A-TV92-S w/4 to 7 twisted pr.)
Net/ft.: -4/11¢; -5/12¢; -6/13¢; -7/14¢

*Request quotations for -91-S, -61-S, -62-S; or more pairs.

MULTI-CONDUCTOR RADIO CABLE

- (10) A-22/2/- (4 to 9 twisted prs. No. 22, for Centralized Radio Systems) Net/ft.: -4 5¢; -5 6¢; -6 7¢; -7 8¢; -9 10¢.

SPEAKER & SYSTEM WIRING

- (11) A-19/2 (No. 19 twisted pr., black & White, no jacket) \$.02
(12) A-19/2/1 (No. 19 twisted pr., black & white, white cotton jacket)03
(13) A-20/1 (No. 20, 1 conductor, red or black)01

MICROPHONE CABLE

- (14) A-20/2-G-S (No. 20 2-conductor twisted pr. plus ground wire and shield, woven cotton jacket) \$.04
(15) A-20/2-S (No. 20 2-conductor twisted pr. w/shield & plastic sheath)04

MULTI-CONDUCTOR STATUS BOARD & MESSAGE CABLE

- (16) A-22X/27 (No. 22 — also No. 24 or No. 26 — twisted pr. w/plastic jacket over 27 prs.) †
(17/20) A-20 (Ditto as No. 16, except 101, 201, 301 or 401 prs.).... †
(†) Not illustrated

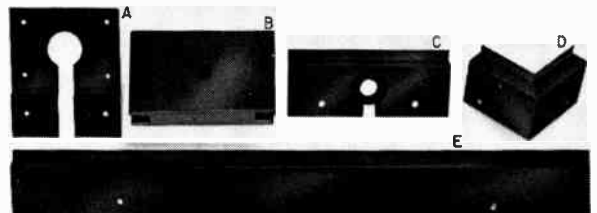
*Prices on request.
Prices subject to change without notice.

CABLE & WIRE CONCEALMENTS

A simple, effective means of concealing television, radio and signal cable and wire, particularly in hotels, is by use of AMERICAN COMMUNICATIONS CORPORATION'S line of metal and wood Cable Mouldings pictured here. Finishes as required; wood mouldings, unfinished, are of hard, kiln-dried wood. Special mouldings to order. **QUANTITY DISCOUNTS.**

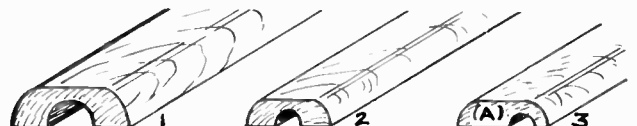
METAL

- Fig. A. No. A-CM-MP Mounting Plate. Holds a variety of connecting, terminating and matching boxes. Net: \$1.12 each.
Fig. B. No. A-CM-SB Splice Box. Access openings front, rear, and at two front corners for feedthrough. Net: \$1.65 each.
Fig. C. No. A-CM-TP Termination Plate, w/rubber grommet for cable. Net: \$1.12 each.
Fig. D. No. A-CM-CE Corner Elbow. Neatly carries concealed cable around corners. Net: \$1.75 each.
Fig. E. No. A-CM-C. Concealment (moulding) in straight lengths. Standard length, 3 ft. Net: \$.40 per foot.



WOOD

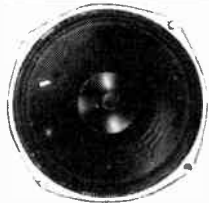
1. No. A-CW1. Wood moulding for concealing large cable. Center channel. Net: \$.20 per foot.
2. No. A-CW2. Concealment for small cable. Center channel. Net: \$.17 ft.
3. No. A-CW3. Conceals cable in offside channel, leaving area (A) for mounting brads alongside cable. Net: \$.19 per foot.



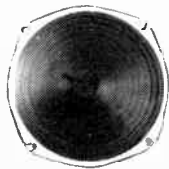
AMERICAN COMMUNICATIONS CORPORATION
NEW YORK CITY 7, NEW YORK

AUDIO/VISUAL/SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

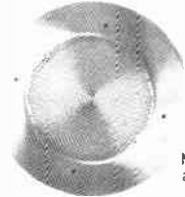
LOUDSPEAKERS & ACCESSORIES



No. A-S1/8 (8"), No. A-S2/6 (6") Speakers. Hi-fi model (left) has best response.



No. A-D Dust Bag. Use on Speakers.



No. A-B1/- Baffle. New Sparton model.



No. A-B2/- Baffle. Standard style.



No. A-B3/- Baffle. Sound is diffused.

Standard Speakers and Accessories for AMERICAN'S sound systems are here illustrated. Baffles and cabinets in other constructions available on order. Control panels, shown here on some items, are extra (see listings of the various types elsewhere). AMERICAN will install control panels in customer's furniture upon Contractor's order.

No. A-S1/- High-fidelity Speaker, with dual cones, 6", Net \$4.27; 3", \$6.05.

No. A-S2/- Wide-range Speaker, 6", Net \$3.08; 8", \$4.86.

No. A-D Speaker Dust Bag, anti-fungus impregnated and verminproof. Sizes: 6", Net \$.97; 8", \$1.12; 12", \$1.19.

No. A-B1/8 Sparton model Baffle, for 8" speaker (only). Enameled iron, white (standard), or colors to order. Net \$2.48 (Plastic Ring, for mounting in ceiling, Net \$1.49).

No. A-B2/- Standard Baffle. Available in brushed aluminum. For 6" speaker, Net \$2.55 (Plaster Ring, Net \$1.19); 8", Net \$2.67 (P.R., Net \$1.49).

No. A-B3/- Ceiling Baffle. Popular model of sound diffuser. Enameled iron: white (standard), or colors to order. For 6" speaker, Net \$4.15 (P.R., Net \$1.19); 8", Net \$5.35 (P.R., Net \$1.49); 12", Net \$7.43 (P.R., Net \$2.06).

SPEAKER BAFFLES (WOOD)

The following Wood Baffles are available in various finishes. Monogram grilles (for hotel and motel rooms) upon order.

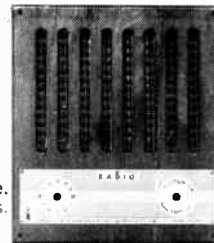
No. A-BW1/- Baffle has waffle-pattern white plastic grille on plywood panel in light mahogany finish. For 6" or 8" speaker, Net \$11.00.

No. A-BW2/- Baffle is plywood, finished in light mahogany. This vertical-vent baffle is a popular number. List, for 6" or 8" speaker, Net \$11.88.

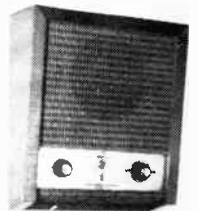
No. A-BW3/- Baffle Cabinet, surface mount, slanting front. Plywood light mahogany finish. Customer choice of grille cloth. For 6" or 8" speaker, Net \$14.55.



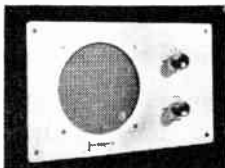
No. A-BW1/- Baffle. Grille is plastic.



No. A-BW2/- Baffle. Wood, vertical vents.



No. A-BW3/- Baffle. Box directs sound.



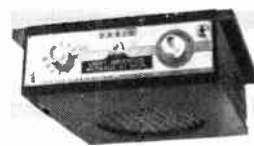
No. A-B4/- Baffle. Provides for controls.

DECORATOR-MODEL SPEAKER PANEL

No. A-B4 Baffle, in Decorator style, is brushed aluminum. Gold anodized available. For 6" or 8" speakers. A-B4A/6-8, Net \$11.23; A-B4G/6-8, \$16.18.

UNDER-TABLE SPEAKER BAFFLE

No. A-BW4 Baffle Cabinet mounts under table. has pressure-release vents on sides, projects sound downward. For 6" or 8" speakers, Net \$11.06.



No. A-BW4/- Baffle. Mounts under table.

TV MOUNTS



No. A-TVB. Bracket swivels for best TV viewing.

No. A-TVB Bracket. Swivel wall-mounted support for 19" TV sets, particularly the Designer series, or equivalent, for hospitals, hotels, etc. Saves floor space. Set easily positioned for best viewing. Net \$6.78.

No. A-TVS. Roll-away TV Stand is easily positioned under, for example, a hospital bed. Shelf holds set over bed. Hard rubber casters, bolted 7/8-in. diam. steel tubing. Shipped KD. Bar holds pillow speaker cord or, as shown, TV Remote Control Cord. Net \$25.49.

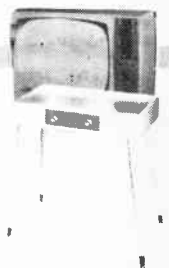


No. A-TVS. Stand holds TV set over bed.

TV TABLES



No. A-TVT-B Table. Speaker cabinet extra.



No. A-TVT-A Table. Provides for controls.

No. A-TVT-A Table. Holds standard Hotel-type TV sets. Control panel can be installed on front skirt, as illustrated. Standard finish is white, or color to order. Wood legs. Net \$12.77.

No. A-TVT-B Table. For TV sets. Control panel and speaker (No. A-BW4 Baffle Cabinet, equipped) will fit underneath. Black, or other color to suit. Metal legs. Net \$10.14.

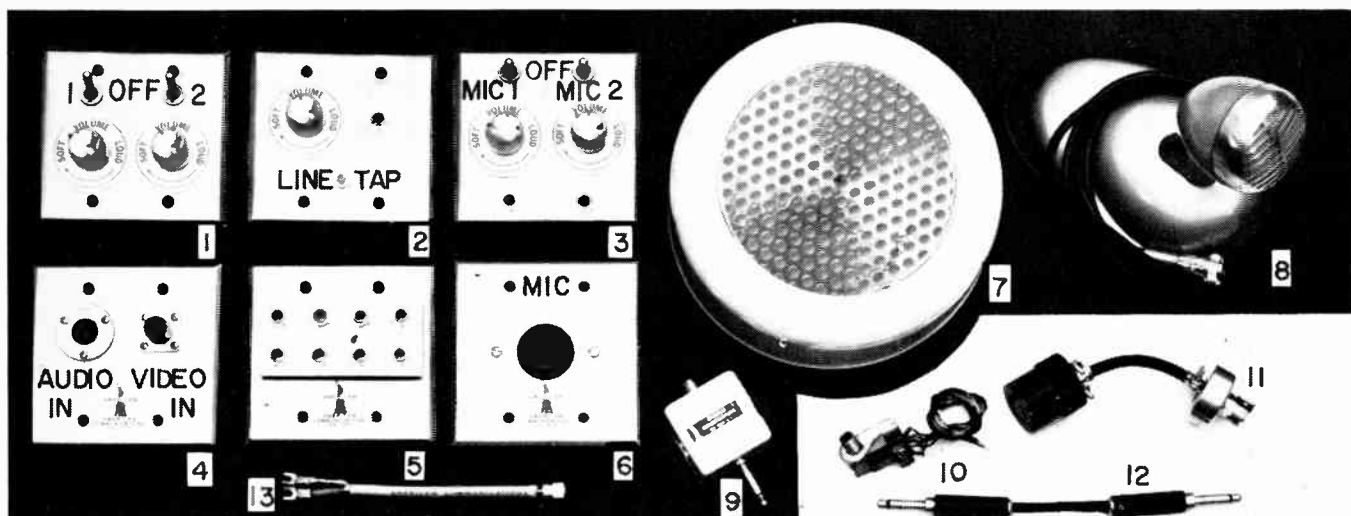


AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

PUBLIC ADDRESS PARTS & ACCESSORIES



Following is description of the items shown above. Additional specifications will be supplied upon request.

(1) No. A-SVC Speaker Volume Control. Has 2 controls, w/dials, for 2 public areas, and switches to control background music. Net \$22.50.

(2) No. A-A/TVC Audio/TV Control. Includes 3.3K ohm volume control w/dial, seize jack, and master antenna outlet. Net \$14.40.

(3) No. A-IC Integrating Control on 2-gang plate, w/2 ea. center-off switches, Volume Control and seize jacks. Net \$22.20.

Items 1, 2 and 3, above, operate on 70-volt lines. Other impedances available.

(4) No. A-A/V-JP Closed-circuit unit — Audio/Video Jack Plate — on 2-gang plate, w/Cannon XLR-314 socket for Audio In, and socket for PL-239 for Video In. Net \$11.88.

(5) No. A-PP-F Flush Patch Plate, on 2-gang plate, w/4 circuit jacks. Net \$2.97 per circuit (4 circuits shown).

(6) No. A-MOP Microphone Outlet Plate, flush type, on 2-gang plate, w/Hubbell Polarized socket. Net \$4.00.

(7) No. A-PAS-I Indoor P.A. Speaker, surface mount type, 8" (only). Metal is enamel finished. Supplied less speaker. Net \$5.81.

No. A-PAS-O Outdoor P.A. Speaker (not illus.), on swivel mount, w/weather-proof housing and output transformer. Net \$23.71.

(8) No. A-DS Microphone, Desk Stand w/press-to-talk switch, Cord, Plug, Net \$17.23.

Also available (not shown): No. A-MF Floor-stand Microphone. Net \$25.54; and, No. A-MB Banquet-stand Microphone. Net \$11.88.

(9) No. A-A Adaptor — PL-55 one end, Amphenol 75-PC1M connector opposite end, to adapt seize jack to Amphenol adaptor, Net \$2.24.

(10) No. A-SJ-1 Seize Jack, wired assembly, Net \$2.70.

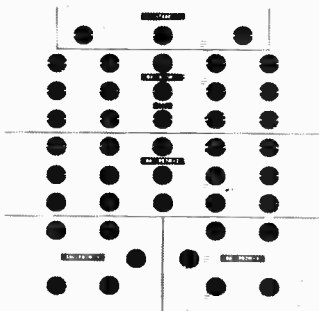
* (11) No. A-MEC Microphone Extension Cord, SJ cord w/Hubbell 7554 plug one end, 7555 other end, Net \$6.72.

* (12) No. A-MCPC Maid Call Patch Cord, 2-conductor cord w/PL-55 ea. end, Net \$1.51.

* (13) No. A-TVH TV Hook-up Lead, A-TV92-S Coax., w/lugs one end, A-C59 other end, Net \$2.50.

* Standard length 6 ft., other lengths — and constructions — to order.

SPEAKER SWITCHING CENTER



Problem: Provide a means of controlling 43 high-fidelity loudspeakers in a large public room, so room can be partitioned into 5 acoustically isolated areas and specific sound programs directed only to these areas. **Solution:** AMERICAN'S No. A-SC/43 Speaker Switching Center. In this example, 43 5-position (and OFF) switches are shown mounted on a metal panel outline-marked to show the available 5 area divisions — a Stage and 4 Ballrooms — of a Main Ballroom. The switches are spotted on the layout in the same relative positions as the 43 (ceiling) speakers.

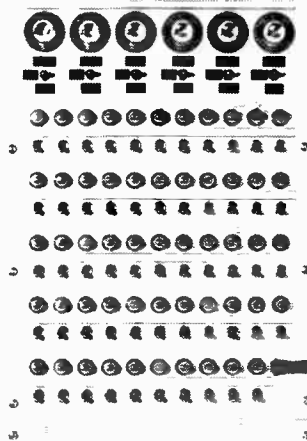
Designed to meet Convention needs, the No. A-SC/- Switching Center is located in the Radio Control Room. Its switches terminate in 3-circuit jacks, to permit patching into a jack field in associated Master Control Board. Connects speakers to any program source.

SPECIFICATIONS: No. A-SC/43 Speaker Switching Center, for 43 high-fidelity loudspeakers. Panel is $\frac{3}{16}$ " sheet metal, approx. 40" sq.; assembly is approx. 3 1/2" deep. Finish: gray Hammettone.

Speaker Switching Centers designed and built.

Quotations upon request.

MESSAGE & MUSIC/PAGING CENTER



The unit shown here, AMERICAN'S No. A-MD/MP/- combination Message-at-Desk and Music/Paging Center, illustrates two useful design factors: (1) provision of an expansion area on the panel for the later addition of more room signals; and, (2) the integration of one facility with another. This design is applicable to any number of rooms.

In this No. A-MD/MP/65, a Message-at-Desk signal is provided to 65 rooms, plus control of speaker volume in 6 public areas, with choice of music or paging in these areas at controlled volumes.

SPECIFICATIONS
No. A-MD/MP/65 Message & Music/Paging Center, 65 rooms. Steel panel measures approx. 21 x 46 x 4" deep. Supplied with or w/out rear housing. Finish, pearl gray Hammettone.

Designed, built to order. Quotations upon request.

No. A-MD/MP/65 Message & Music/Paging Center. Expansion area at lower end of panel, for additional controls.



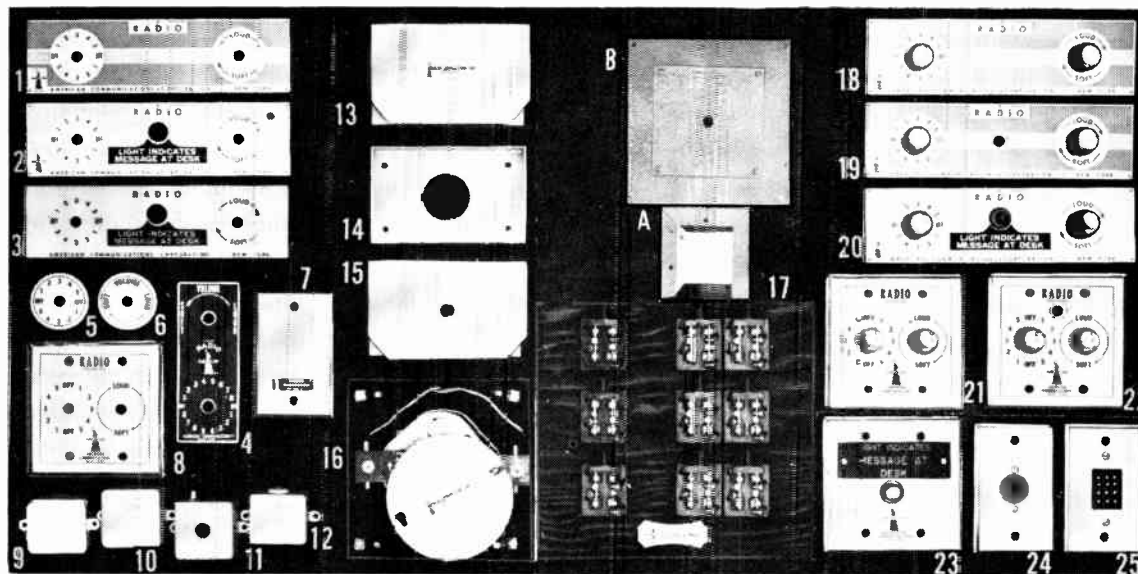
AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO/VISUAL/SIGNAL SYSTEMS & PARTS

FOR HOTELS — MOTELS — INSTITUTIONS

RADIO PARTS & ASSEMBLIES



BLANK (UNASSEMBLED) ESCUTCHEON PLATES

Measurements: No. 1 - No. 3, 9 x 2 1/2"; No. 4, 2 1/8" x 5 1/4"; No. 5, No. 6 (dials), 2" diam. (hole in latter is 3/8" diam.). No. 7, 2 3/4" x 4 1/2". No. 8, 4 1/8" sq.

- (1) No. A-P1 Radio Escutcheon. Patterned bronze, clear lacquered. Lettered: Off — 1 (through) 5 — Off, and Loud-Soft. Net \$2.15.
No. A-P2 Radio/Maid Call Escutcheon (not shown). Same as No. A-P1, except w/hole, centered between controls, for jack. Net \$2.18.
No. A-P3 Radio/Message Escutcheon (not shown). Same as No. A-P1, except w/added hole in center for lamp socket, and wording: Light Indicates Message-at-Desk. Net \$2.23.
- (2) No. A-P4 Radio/Message/Maid Call Escutcheon. Same as No. A-P3, except w/added hole at upper-right for jack. Net \$2.27.
No. A-P5 Radio/Message/Maid Call/Status Escutcheon (not shown). Same as No. A-P4, except w/added hole, below hole for jack, for Status Keyswitch or Status Maid Button. For room use w/Model 707 Room Status Control. Net \$2.67.
- (3) No. A-P3P Radio Escutcheon, plastic. Same as No. A-P3, except material is translucent plastic. For use with incandescent or luminescent light source. Net \$1.90.
- (4) No. A-P2V Radio Escutcheon, vertical. Brown enameled brass. Lettering same as No. A-P1, except radio numerals to 8. Net \$1.61.
- (5) No. A-01-5 Selector Plate. Aluminum disc, black lettered Off — 1 (through) 5 — Off. Net 66¢.
- (6) No. A-02 Volume Plate. Aluminum disc, black lettered: Loud — Volume — Soft. Net 59¢.
- (7) No. A-P10 Wall Plate, 1-gang, blank. Available in aluminum, stainless steel, plain steel and brass, in various finishes, to order. Standard finishes: brushed stainless steel, brushed aluminum. Net 57¢.
No. A-P20 Wall Plate, 2-gang, blank (not illus.). Materials and finishes as No. A-P10. Net 63¢.
- (8) No. A-P20-1 Radio Wall Plate. Uses 2-gang plate No. A-P20. Same lettering as No. A-P1. Net \$2.15.
No. A-P20-2 Radio/Maid Call Wall Plate (not shown). Same as No. A-P20-1, except w/added hole for Maid Call jack. Net \$2.30.
No. A-P20-3 Message Wall Plate (not shown). Has hole for lamp socket, on 2-gang plate. Net \$2.10.

**COMPLETE
SYSTEMS FINANCING
by AMERICAN
AT BANK RATES**

BLANK HOUSINGS

Standard finish: w/cru enamel; material: steel.

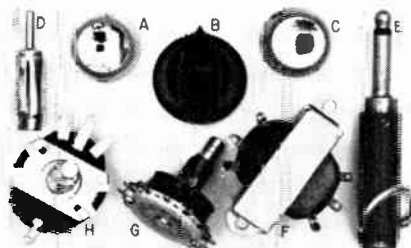
- Measurements: (small housings: No. 9, No. 12, 2" x 1 1/2" x 3/4" deep; No. 10, No. 11, 2" sq. x 1 1/8" deep; (large housings: No. 13 - No. 15, 5 1/4" x 3 3/8" x 1 3/4" deep. Mounting tabs on No. 9 - No. 12.)
- (9) No. A-BC1 Accessory Box, small, blank. Net 36¢.
 - (10) No. A-BC2 Accessory Box, large, blank. Net 45¢.
 - (11) No. A-BC2G1C Accessory Box, large, w/metal grommet and TV feedthrough No. A-TT-81. Used as TV Outlet and Cable Accessory Box. Net \$1.05.
 - (12) No. A-BC1G2 Accessory Box, small, w/rubber grommet. Net 42¢.
 - (13) No. A-BC10 Termination (Accessory) Box, large, surface mounted. Open at 2 corners for feed-through; back plate has opening (optional) for cable, and back-to-back mounting. Net \$1.16.
 - (14) Shows opening at back of No. A-BC10.
 - (15) No. A-BC11 Radio Outlet Box, surface mounted. Has metal grommet in top. Net \$1.29.

APPARATUS

- (16) No. A-SB-R Radio Splice Box, on wood or masonite board 6" sq. x 1/4" thick. Suspension wire is shown. Includes outlet box (shown open), 4 insulated cable clamps, and 2 No. A-1601 line taps. Net \$6.80.
- (17) No. A-RS-A Riser Switchboard. Has 9 O.P.S.T. knife switches (one switch per riser pair) on wood (or masonite) mounting approx. 9 1/2" sq. x 1/2" thick. Net \$8.91 per circuit (illus. 3 circuits).

PANEL ASSEMBLIES

- (18) No. A-P1-A Radio Control Panel. This is No. A-P1 Escutcheon assembled with Radio Selector Switch and Volume Control. Net \$14.85.
- (19) No. A-P2-A Radio/Maid Call Panel. Same assembly as No. A-P1-A, except w/No. A-MJ Maid Call jack added, on No. A-P2 Escutcheon. Net \$15.30.
- (20) No. A-P3-A Radio/Message Panel. Switch, Control, and Message light, on No. A-P3 Escutcheon. Net \$15.60.
No. A-P4-A Radio/Message/Maid Call Panel (not shown). Same items as on No. A-P3-A panel, plus Maid Call Jack, all on No. A-P4 Escutcheon. Net \$18.41.
- (21) No. A-P20-1-A Radio Wall Plate assembly, w/Switch and Volume Control. On aluminum 2-gang plate. Net \$14.85.
- (22) No. A-P20-2-A Radio/Maid Call assembly. Same as No. A-P20-1-A, but w/Maid Call jack added. On aluminum 2-gang plate. Net \$15.30.
- (23) No. A-P20-3-A Message-at-Desk Wall Plate assembly, w/instructions and lamp. On aluminum 2-gang plate. Net \$2.92.
- (24) No. A-P10-TV-A TV Remote Plate assembly. On 1-gang plate, w/octal socket. Net \$1.05.
- (25) No. A-P10-C-A Connector Plate assembly. On aluminum 1-gang plate. Has Jones connector; specify number of connections. Net \$1.61. (12-pin, illus.).
(A) No. A-CB-S Connection Box, surface mtg. Accessible from rear. Used for mounting control plates. Bushing on one side. Enameled steel. Net \$2.08.
(B) No. A-CB-F Connection Box, flush mounting. Shown with bushed plate, for cable. Steel, Hammettone enameled. Net \$4.46.



- (A) No. A-K1 Knob, clear plastic. Gold insert, short pointer, 1 screw. Net 17¢.
- (B) No. A-K3 Pointer Knob, black plastic. Has 1 screw. Net 19¢.
- (C) No. A-K2 Knob, beige plastic. Gold insert, short pointer, 1 screw. Net 17¢.
- (D) No. A-MP Plug, quick-disconnect type. Net 13¢.
No. A-MJ Jack (not shown), quick-disconnect type. Net 14¢.
- (E) No. A-MSP Maid Call Plug, w/belt ring. Net \$1.60.
- (F) No. A-T3 Transformer, 70 ohms to 3.2 ohms. Net \$2.03.
- (G) No. A-CS Radio Selector Switch. Ceramic wafer, dual wiper, 5 positions, center off, 360° continuous rotation. Net \$3.03.
- (H) No. A-VC/50 Volume Control. A patented potentiometer with 360° continuous rotation. Standard resistance 50 ohms. Net \$2.87.

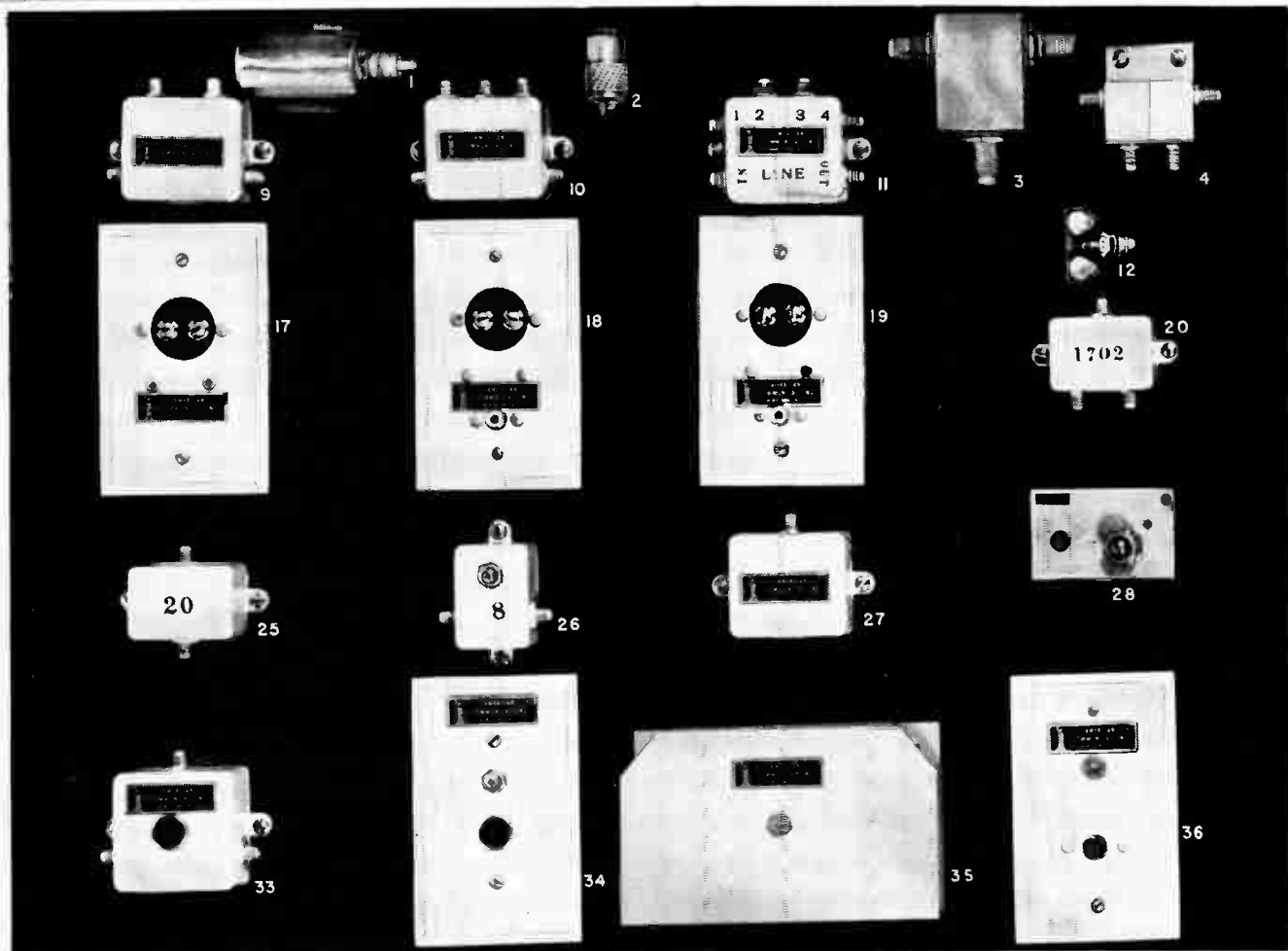
AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

AUDIO / VISUAL / SIGNAL SYSTEMS & PARTS

FOR HOTELS — MOTELS — INSTITUTIONS

TELEVISION & RADIO PARTS



TV & Radio Parts are continued on facing page. Descriptions and Net Prices are given below. Quantity discounts.

First Row (†)

- (1) No. A-MT Matching Transformer, 75 to 300 ohms. Solderless connector for RG-59/U; connector for RG-11/U available. Up to 6 db voltage step-up. Prices upon request.
- (2) No. A-PL259 Connector. Net \$2.26.
- (3) No. A-1601-1 Isolation Unit. A single-unit TV line tap. Attenuation color codes per Note 1. Outdoor housing; 75 ohms. Net \$2.20.
- (4) No. A-1602-1 Double-unit Line Tap, for 2 TV sets. (Note 2) Net \$3.70.
- (5) No. A-1603-1 Triple-unit Line Tap. Net \$4.20.
- (6) No. A-1604-1 Quad-unit Line Tap. Net \$5.70.
- (7) No. A-1601-2 Single-unit Tap, 75 ohms. (Notes 1, 3). Indoor housing. Net \$1.50.
- (8) No. A-1601-3 Single-unit Line Tap, 75 ohms, screw terminals. (Note 3) Net \$2.20.

Second Row (†)

- (9) No. A-1602-2 Double-unit Line Tap, same as No. 1601-2 except has 2 set taps, 75 ohms. (Note 3) Net \$2.75.
- (10) No. A-1603-2 Triple-unit Line Tap. Like No. 9 except has 3 set taps. Net \$4.00.
- (11) No. A-1604-2 Quad-unit Line Tap. Like No. 9, but w/4 set taps. Net \$5.25.
- (12) No. A-1601-G Single-unit Line Tap. Gem flush-mount, 75 ohms. (Note 1) Net \$2.20.
- (13) No. 1602-G Double-unit Line Tap. Like No. 12 except w/2 set taps. Net \$3.70.
- (14) No. A-1603-G Triple-unit Line Tap. Like No. 12 except w/3 set taps. Net \$4.20.
- (15) No. A-1604-G Quad-unit Line Tap. Like No. 12 except w/4 set taps. Net \$5.70.

- (16) No. A-1601-4 Single-unit Line Tap. TV outlet. (Note 4) Net \$2.20.

Third Row (†)

- (17) No. A-1601-5 TV Outlet, 300 ohms. (Note 4) Net \$2.25.
- (18) No. A-1601-6 TV Outlet, 75 ohms, screw terminals, FM outlet. (Note 4) Net \$2.25.
- (19) No. A-1601-8, Same as No. 18, except TV outlet 300 ohms (Note 4) Net \$2.25.
- (20) No. A-1702 Line Splitter, 2-way. Has 6 db forward attenuation. (Note 5) Net \$2.20.
- (21) No. A-1703 Line Splitter, 3-way. Has 10 db forward attenuation. (Note 5) Net \$3.30.
- (22) No. A-1601-7 Outlet, 75-ohm Tap, w/FM outlet. (Note 4) Net \$2.25.
- (23) No. A-1712 Line Splitter, hybrid 2-way. Has 3 db forward attenuation. (Note 3) Net \$4.75.
- No. A-1714 Line Splitter, hybrid 4-way (illustrated). Has 6 db forward attenuation. (Note 3) Net \$5.40.

Fourth Row (†)

- (25) No. A-DBLA DB Line Attenuator Pad, 3-5-10-20-30. (Note 5) Net \$2.17.
- (26) No. A-T/R-T Trunk/Riser Tap. Various db values of isolation. Creates Risers from Trunk Line. (Note 5) Net \$2.17.
- (27) No. A-CTVB Convenience TV Box, w/connector A-CH61. (Note 3) Net 77¢.
- (28) No. A-VLC Volume Limiter Control. Mounted on plate w/access hole for TV cable. Net \$3.81.
- (29) No. A-CTVB/MJ Convenience TV Box, w/No. A-MJ jack. (Note 3) Net 77¢.
- (30) No. A-WN Porcelain Wire Nut. Net 2¢.

- (31) No. A-CC Cable C amp, insulated. Net 6¢.
- (32) No. A-RP Plastic Rawl Plugs. For mounting various radio and TV boxes. As illustrated, 5 per strip. Net 5¢, per strip of 5.

Fifth Row (†)

- (33) No. A-1601/R-F, 1601 & Radio Feedthrough — combination. Surface mount in Accessory Box No. A-BC2G. Net \$2.20.
- (34) No. A-1601/R, 1601 & Radio Plate. Wall plate grommeted for cable. Net \$2.25.
- (35) No. A-TV/R-SB, TV/Radio Splice Box, surface mount, w/1601. In No. A-BC10 Termination Box. Net \$3.54.
- (36) No. A-TV/75 Tap, 75 ohms, w/No. A-MJ jack. (Note 4) Net \$2.25.

Additional Parts (not illustrated)

- (37) No. A-P10-P Plate, punched. (Note 6) Net 61¢.
- (38) No. A-R-BP Radio Plate, bushed. (Note 6) Net 77¢.
- (39) No. A-TV/R-P TV or Radio Plate, blank. (Note 6) Net 61¢.
- (40) No. A-CT-1 Crimping Tool, light duty. For F59 ferrules. Net \$4.29.
- No. A-CT-2 Crimping Tool, heavy duty. For F59 and F6 ferrules. Net \$5.39.

- (Note 1) Attenuation coded red, yellow, green, blue. (Note 2) On mounting bracket.
- (Note 3) Surface mount, in No. A-BC1 Accessory Box.
- (Note 4) Flush mount, on single-gang wall plate No. A-P10. Available in various finishes.
- (Note 5) Surface mount.
- (Note 6) Single or double gang, flush mount.
- (†) All necessary hardware packaged with each unit.

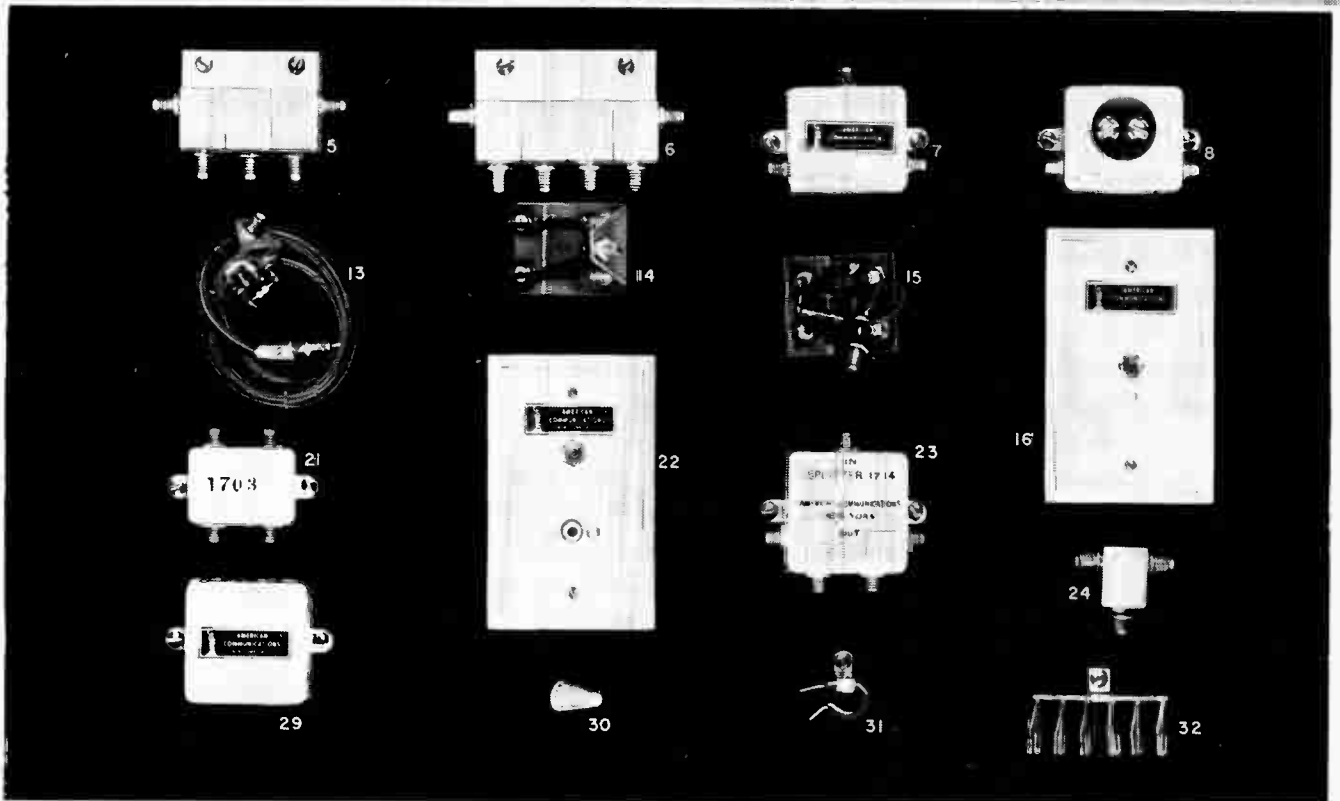


AMERICAN COMMUNICATIONS CORPORATION

NEW YORK CITY 7, NEW YORK

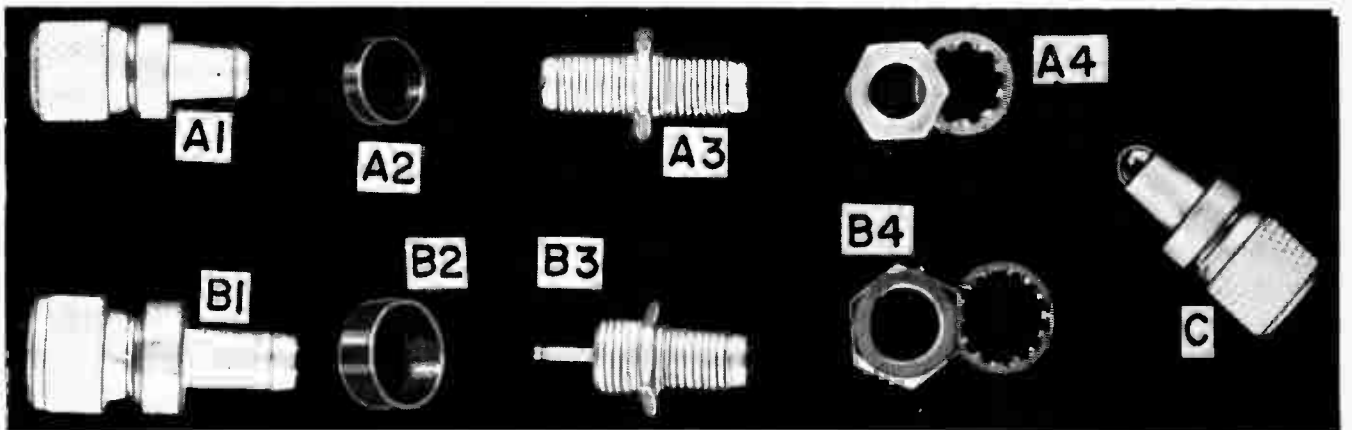
AUDIO/VISUAL/SIGNAL SYSTEMS & PARTS FOR HOTELS — MOTELS — INSTITUTIONS

TELEVISION & RADIO PARTS



TV & Radio Parts, continued from facing page. Descriptions and Net Prices also on facing page. Quantity discounts.

TV COAXIAL CONNECTORS



- (A1) No. A-C59 Solderless TV Connector for A-TV92-S (RG-59/U) cable. Net 31¢, w/A-F59.
 (A2) No. A-F59 Ferrule. Crimping ring for A-C59. Net \$1.50/C.
 (A3) No. A-FT81 Feedthrough TV Connector or TV convenience connector. Net 42¢, w/1/4" A-NW-FT81.
 (A4) No. A-NW-FT81 Nut & Washer, 1/4", for No. A-FT81. Net 3¢.

- (B1) No. A-C6 Solderless TV Connector for A-TV62-S (RG-6A/U). Net 39¢.
 (B2) No. A-F6 Ferrule. Crimping ring for No. A-C6. Net \$2.50/C.
 (B3) No. A-CH61 Convenience Connector — chassis mount. Net 35¢, w/1/4" A-NW-CH61.
 (B4) No. A-NW-CH61 Nut & Washer, 1/4", for No. A-CH61. Net \$.047.
 (C) No. A-TR72 Terminator, 72 ohms. Net 53¢.



AMERICAN COMMUNICATIONS CORPORATION
NEW YORK CITY 7, NEW YORK

BOGEN SOUND SYSTEMS

FLEX-PAK® PA AMPLIFIERS



MX60



MX30



M60



M330



MXM



RP-2

Bogen's award winning Flex-Pak series PA amplifiers, the deluxe MX60 and MX30 and the superb M60 and M330. Features of the deluxe "MX" models: master gain control; built-in remote gain-control circuit allows changes in gain from distances up to 2,000 feet; 4 microphone channels (one converts to phono); plus all the other features listed below. Features of the superb "M" models: constant voltage output taps simplify calculations for speaker matching transformers; power stage screen regulation for higher output, greater efficiency; special filters to improve speech clarity; equalized phono input for all cartridges; separate bass and treble controls; plug-ins for low impedance transformers; quick maintenance (four thumbscrews remove cage); broadcast-type (Cannon XL Series) mic. connectors; pencil-in, erase-out identification strips for all channels; sturdy leather carrying handles; Memory Markers permit resetting of controls to previously determined levels; handsome, compact design, finished in silver, gray and black.

MX60...DELUXE 60-WATT PA AMPLIFIER

Power Output: 60 w. at less than 2% distortion. **Power Consumption:** 270 w. **Frequency Response:** -2 db, 35 to 20,000 cps. **Gain:** mic, 125 db; tuner, 85 db; mag. phono, 115 db. **Hum:** (below rated output) mic., -60 db. **Output Impedance:** 4, 8, 16 and 83 ohms; balanced 25-volt line, 70-volt line. **Inputs:** 4 mic. (one channel converts to phono or tuner). **Tubes:** total of 10 (3 - 6Z34, 2 - 6E7581A, 4 - 12AX7, 1 - 7247). **Tone Controls:** treble (10 kc) +10 db to -10 db; bass (50 c) +10 db to -10 db. **Dimen.:** 16 1/4" W, 13" O, 5 3/8" H. **Ship. Wt.:** 37 lbs. **List Price:** \$295.00 (Zone 2: \$300.25)

MX30...DELUXE 30-WATT PA AMPLIFIER

Power Output: 30 w. at less than 2% distortion. **Power Consumption:** 150 w. **Frequency Response:** -2 db, 35 to 20,000 cps. **Gain:** mic, 120 db; tuner, 80 db; Xtal phono, 80 db; mag. phono, 115 db. **Hum:** (below rated output) mic., -60 db. **Output Impedance:** 4, 8, 16 and 163 ohms; balanced 25-volt line, 70-volt line. **Inputs:** 4 mic. (one channel converts to phono or tuner). **Tubes:** total of 8 (1 - 6Z34, 2 - 6L6GC, 4 - 12AX7, 1 - 7247). **Tone Controls:** treble (10 kc) +10 db to -10 db; bass (60 c) +10 db to -10 db. **Dimen.:** 16 1/4" W, 13" O, 5 3/8" H. **Ship. Wt.:** 31 lbs. **List Price:** \$231.25 (Zone 2: \$235.75)

M60...SUPERB 60-WATT PA AMPLIFIER

With 3 mic. channels (one converts to phono). **Power Output:** 60 w. at less than 2% distortion. **Power Consumption:** 270 w. **Frequency Response:** -2 db, 35 to 20,000 cps. **Gain:** mic., 125 db; tuner, 80 db; Xtal phono, 80 db; mag. phono, 115 db. **Hum:** (below rated output) mic., -50 db. **Output Impedance:** 4, 8, 16 and 83 ohms; balanced 25-volt line, 70-volt line. **Inputs:** 3 mic. (one channel converts to phono or tuner). **Tubes:** total of 9 (3 - 6Z34, 2 - 6E7581A, 3 - 12AX7, 1 - 7247). **Dimen.:** 16 1/4" W, 13" O, 5 3/8" H. **Ship. Wt.:** 37 lbs. **List Price:** \$236.25 (Zone 2: \$241.50)

M330...SUPERB 30-WATT PA AMPLIFIER

With 3 mic. channels (one converts to phono). **Power Output:** 30 w. at less than 2% distortion. **Power Consumption:** 150 w. **Frequency Response:** -2 db, 35 to 20,000 cps. **Gain:** mic., 120 db; tuner, 80 db; Xtal phono, 80 db; mag. phono, 115 db. **Hum:** (below rated output) mic., -60 db. **Output Impedance:** 4, 8, 16 and 163 ohms; balanced 25-volt line, 70-volt line. **Inputs:** 3 mic. (one channel converts to phono or tuner). **Tubes:** total of 7 (1 - 6Z34, 2 - 6L6GC, 3 - 12AX7, 1 - 7247). **Dimen.:** 14 1/2" W, 13" O, 5 3/8" H. **Ship. Wt.:** 29 lbs. **List Price:** \$193.75 (Zone 2: \$198.10)

VERSATILE BOGEN PREAMPLIFIERS

MXM...MIXER-PREAMPLIFIER

The self-powered MXM accommodates 5 microphones or 4 microphones and a tuner or phonograph (both crystal and magnetic cartridges). Features include: separate gain control for each channel; master gain control; individual speech filters for each channel, output level meter, sockets for plug-in low-impedance transformers; feedback-type distortion-free tone controls plus new Memory Markers which permit instant resetting of controls to previously determined levels. May be remote controlled with SR2 and SR4 remote controllers. **Output:** +18 db at less than 1% distortion. **Power Consumption:** 27 w. **Frequency Response:** -2 db, 20 to 20,000 cps. **Hum:** (below rated output) mic., -60 db. **Output Impedance:** Hi-impedance, cathode follower driven, 600 ohms with T161 or T165B (broadcast quality, accessory plug-in transformers). **Input Sensitivity:** Hi-impedance, 4 mv.; Lo-impedance, 0.4 mv.; mag., 4 mv.; Xtal, 0.2 v.; aux., 0.5 v. **Tubes:** total of 9 (4 - 6F8, 2 - 12AX7, 1 - 6CG7, 1 - 6BF6, 1 - 6X4). **Tone Controls:** treble (10 kc) +12 db to -12 db, bass (60 c) +12 db to -12 db. **Dimen.:** 16 1/4" W, 13" O, 5 3/8" H. **Ship. Wt.:** 21 lbs. **List Price:** \$246.25 (Zone 2: \$250.00)

RP-2...LOW-NOISE PROGRAM PREAMPLIFIER

For use at remote pickup points. Features are: separate input channels for 1 microphone and 1 phonograph; separate volume controls for each channel permit input mixing; output feeds either booster amplifier or a low impedance line separately or simultaneously, bass cut-off switch for speech clarity. Enclosure with VU meter (as illustrated) is available. **Power Consumption:** 20 w.; 117 v. AC; 60 cps. **Gain:** mic., 76 db; phono, 35 db. **Sensitivity:** mic., 3.5 mv.; phono, 0.4 v. **Bass Cut:** 20 db. **Output Impedance:** Hi-impedance, cathode follower driven, minimum recommended load resistance 10,000 ohms; Lo-impedance, 600 ohms (50 and 200 ohms). **Input Impedance:** Hi-impedance, 1/2 megohm convertible to Lo-impedance by use of plug-in transformers for 50, 150-250 or 600 ohms. **Pilot Light:** #47. **Tubes:** total of 4 (2 - 6SF5, 1 - 6J5, 1 - 6X5GT). **Dimen.:** 11" W, 7 3/8" D (excluding knobs), 5 1/4" H. With cage, height is 6 1/2". **Ship. Wt.:** 7 lbs. **RP-2 (cage CAGVU2 optional extra) List Price:** \$95.00 (Zone 2: \$96.35). **CAGVU2 cage with meter List Price:** \$38.75 (Zone 2: \$39.50)

The outstandingly versatile Flex-Pak accessories include: matching, removable phono-top, wall mounting kit, control-guard locking plate, plug-in Lo-impedance transformers and more, see page 88

All prices and specifications subject to change without notice. Zone 2 includes the states of Ariz., Ark., Cal., Col., Ida., La., Miss., Mont., Nev., N.M., Okla., Ore., Tex., Utah, Wash. and Wyo. Alaska and Hawaii run slightly higher.

BOGEN SOUND SYSTEMS

BOGEN "MU" PA AMPLIFIERS

The handsomely styled new "MU" series amplifiers offer: 2 or more microphone inputs, a variety of auxiliary inputs, individual and master volume controls, separate bass and treble controls, Memory Markers for resetting controls to previously determined levels, constant voltage output taps and many more features as outlined below.

MU50M... UNIVERSAL MOBILE PA AMPLIFIER

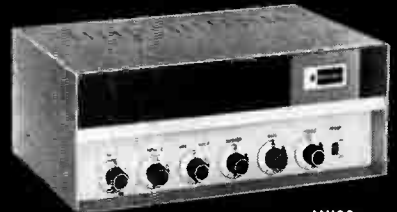
Operates on 12-volt DC or 117-volt AC. Inputs for 2 microphones and 2 auxiliary. Will operate within a temperature range of -20 C. to +65 C. (-4 F. to +149 F.). **Power Output:** 50 w. at 10% (continuous). **Power Consumption:** 160 w. (117 v. AC), 7.5 A. (12 v. DC). **Frequency Response:** ± 2 db, 30 to 15,000 cps. **Gain:** mic., 125 db; aux., 95 db. **Hum and Noise:** (below rated output) mic., -65 db; aux., -80 db. **Output Impedance:** 4, 8 and 16 ohms; 25-volt balanced line (16 ohms), 70-volt (122 ohms). **Inputs:** 2 mic. (Hi-impedance or Lo-impedance; no plug-in transformer is required with Lo-impedance mic.); 2 aux. (Hi-impedance, Hi-level). **Transistors and silicon rectifiers:** total of 12 (6 - 2N417, 2 - 2N1557, 1 - 2N669, 3 - MR322). **Tone Controls:** treble (10 kc) ± 12 db to -14 db; bass (50 c) ± 10 db to -17 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" O, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 15 lbs. **List Price:** \$237.50 (Zone 2: \$240.60)



MU50M with phono top

MU30... 30-WATT AMPLIFIER

Inputs for 3 microphones (or 1 mic. plus 2 mag. phone/tape) and 2 auxiliary. Provision for remote control of 3 inputs. **Power Output:** 30 w. at 2% distortion. **Power Consumption:** 150 w. **Frequency Response:** ± 2 db, 20 to 20,000 cps. **Gain:** mic., 120 db; aux., 95 db; mag. phono, 110 db. **Hum and Noise:** (below rated output) mic., -65 db; aux., -85 db; mag. phono, -60 db. **Output Impedance:** 4, 8 and 16 ohms (16 ohm balanced); 25-volt balanced line, 70-volt line (163 ohms). **Inputs:** 3 mic. (Hi-impedance but can convert to Lo-impedance with T155/6/7 transformers), 2 mag. phono or tape (switch converts mic. 2 and mic. 3), 2 aux. (Hi-impedance, Hi-level). **Tubes:** total of 5 plus silicon rectifier (2 - 6EU7, 1 - 7247, 2 - 7368). **Tone Controls:** treble (10 kc) ± 12 db to -14 db; bass (50 c) ± 15 db to -9 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" O, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 20 lbs. **List Price:** \$186.25 (Zone 2: \$189.40)



MU30

MU15... 15-WATT AMPLIFIER

Inputs for 2 microphones and 2 auxiliary. **Power Output:** 15 w. at 2% distortion. **Power Consumption:** 80 w. **Frequency Response:** ± 2 db, 20 to 20,000 cps. **Gain:** mic., 125 db; aux., 100 db. **Hum and Noise:** (below rated output) mic., -60 db; aux., -80 db. **Output Impedance:** 4, 8 and 16 ohms (16 ohm balanced); 25-volt balanced (42 ohms). **Inputs:** 2 mic. (Hi-impedance can convert to Lo-impedance with T155/6/7 transformers), 2 aux. (Hi-impedance, Hi-level). **Tubes:** total of 6 (1 - 6EU7, 1 - 12AX7, 1 - EZ81, 1 - 6C4, 2 - 6BQ5). **Tone Controls:** treble (10 kc) ± 12 db to -14 db; bass (50 c) ± 15 db to -9 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" O, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 16 lbs. **List Price:** \$139.90 (Zone 2: \$143.05)
see page 88 for accessories



MU15

BT25... 25-WATT MOBILE TRANSISTOR PA AMPLIFIER

A fully-transistorized PA amplifier, compact enough to fit in the glove compartment of your car. Can be operated from either a 6-volt battery, providing 6 watts of power, or a 12-volt battery, providing 25 watts. Maximum power with minimum battery drain: only 3 amperes on a 12-volt battery at full output, 1.4 amperes on a 6-volt battery. It features 2 individually-controlled inputs: a microphone plus record player, radio tuner or tape deck, permitting mixing. The small, high-powered, reliable BT25 has no tubes to burn out, no vibrator to replace... completely hum-free. **Dimen.:** 3 $\frac{3}{4}$ " W, 4 $\frac{3}{8}$ " O, 6 $\frac{5}{8}$ " H. **Ship. Wt.:** 5 lbs. **List Price:** \$120.00 (Zone 2: \$120.95)

"MO" SERIES BOOSTER AMPLIFIERS

Bogen's new "MO" series booster amplifiers embody the most advanced design and construction techniques. Ideal for use wherever undistorted high power is required. Exceptionally wide-range frequency response characteristics. Input signal of 2 volts or less will drive any of the boosters to rated output. Built-in provision for balanced low impedance line input and for paralleling several "MO" series power amplifiers to multiply power output. The MXM and RP-2 are ideal preamplifiers for these boosters.

M0100... 100-WATT BOOSTER AMPLIFIER

Provision for remote control of standby operation. **Industrial Rating:** can be used as 100-watt source of continuous power between 50 and 20 kc (with distortion below 2%). **Power Output:** 100 w. at less than 5% distortion. **Power Consumption:** 275 w. **Frequency Response:** ± 2 db, 50 to 50,000 cps. **Hum:** (below rated output) -80 db. **Sensitivity:** Hi-impedance, 2 v.; Lo-impedance (with T161 transformer), 0.5 v. **Output Impedance:** 1.6, 6.25 and 49 ohms; balanced 25-volt line, 70-volts, 115-volts. **Inputs:** (1) Hi-impedance, .1 megohm; with Lo-impedance transformer (T161), 500 ohms. **Tubes:** total of 7 (2 - GZ34, 1 - EZ81, 2 - 6550, 1 - 6C4, 1 - 12AX7). **Dimen.:** 17 $\frac{1}{4}$ " W, 9" O, 7 $\frac{3}{4}$ " H. **Ship. Wt.:** 35 lbs. **List Price:** \$215.75 (Zone 2: \$221.00)

BT25

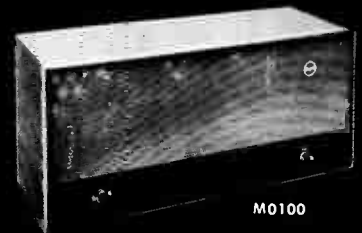


M060... 60-WATT BOOSTER AMPLIFIER

Provision for remote control of standby operation. **Power Output:** 60 w. at less than 2% distortion. **Power Consumption:** 260 w. **Frequency Response:** ± 2 db, 35 to 20,000 cps. **Hum:** (below rated output) -80 db. **Sensitivity:** Hi-impedance, 2 v.; Lo-impedance (with T161 transformer), 0.5 v. **Output Impedance:** 4, 8, 16 and 82 ohms; balanced 25-volt line, 70-volt line. **Inputs:** (1) Hi-impedance, .1 megohm; with Lo-impedance transformer (T161), 500 ohms. **Tubes:** total of 7 (3 - GZ34, 2 - G.E.7581A, 1 - 12AX7, 1 - 6C4). **Dimen.:** 17 $\frac{1}{4}$ " W, 6 $\frac{1}{2}$ " O, 7 $\frac{3}{4}$ " H. **Ship. Wt.:** 23 lbs. **List Price:** \$172.50 (Zone 2: \$176.25)

M030... 30-WATT BOOSTER AMPLIFIER

Power Output: 30 w. at less than 2% distortion. **Power Consumption:** 150 w. **Frequency Response:** ± 2 db, 35 to 20,000 cps. **Hum:** (below rated output) -80 db. **Sensitivity:** Hi-impedance, 2 v.; Lo-impedance (with T161 transformer), 0.5 v. **Output Impedance:** 4, 8, 16 and 163 ohms; balanced 25-volt line, 70-volt line. **Inputs:** (1) Hi-impedance, .1 megohm; with Lo-impedance transformer (T161), 500 ohms. **Tubes:** total of 5 (1 - GZ34, 2 - 6L6C, 1 - 12AX7, 1 - 6C4). **Dimen.:** 17 $\frac{1}{4}$ " W, 6 $\frac{1}{2}$ " O, 7 $\frac{3}{4}$ " H. **Ship. Wt.:** 21 lbs. **List Price:** \$124.90 (Zone 2: \$128.05)



M0100



LEAR SIEGLER, INC.

BOGEN COMMUNICATIONS DIVISION

BOGEN SOUND SYSTEMS

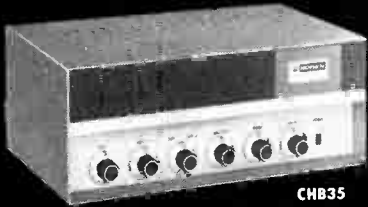
"CHB" SERIES PA AMPLIFIERS AND PACKAGE SYSTEMS



CHB100



CHB50 with phono top



CHB35



CHB1250 with phono top



CHB14

Models CHB35, CHB50 and CHB100 share these outstanding features: systems-tested circuitry for continuous, heavy-duty operation; protection against circuit damage caused by accidental shorting or disconnecting of loudspeaker lines; master volume control; separate bass and treble controls; no "double duty" control devices; built-in remote control circuit permits adjustment of volume from distances up to 2,000 feet; Memory Markers permit resetting controls to previously determined levels; more reserve power for volume peaks; wide frequency response for maximum clarity and intelligibility; fixed grid bias in push-pull output stage assures low distortion at maximum output; high input sensitivity; low noise and hum; simultaneous mixing of 3 input signals, 2 microphones and a tuner or phonograph; all models accept mag. phono cartridge and tape recorder; constant-voltage output taps simplify addition of matching transformers for multiple speaker systems; 2 loudspeaker plug-in sockets, plus screw terminals; compact, lightweight styling.

Model CHB1250 Mobile amplifier is similar to the above and differs only in the following respects: both high-impedance mic. inputs convert to low-impedance without transformers; no remote volume control circuitry or mag. phono input.

CHB100... 100-WATT AMPLIFIER

Power Output: 100 w. at 5% distortion. **Power Consumption:** 300 w. **Frequency Response:** -2 db, 20 to 20,000 cps. **Gain:** mic., 125 db; aux., 100 db; mag. phono cartridge, 115 db. **Hum and Noise:** (below rated output) mic., 70 db; aux., 80 db. **Sensitivity:** mic., 5 mv.; aux., .3 v.; mag. phono cartridge, 15 mv. **Output Impedance:** 4, 8 and 16 ohms; 25-volt line (6 ohm), 70-volt line (50 ohm); 2 speaker sockets and screw terminals. **Inputs:** 2 mic. (Hi-impedance), 1 mag. phono cartridge, 2 aux. (Hi-impedance, Hi-level). **Tubes:** total of 7 and selenium rectifier (1 6EU7, 1 12AX7, 4 7868, 1 6C4). **Tone Controls:** treble (10 kc) +12 db to -15 db; bass (50 c) +14 db to -9 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" D, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 26 lbs. **List Price:** \$187.40 (Zone 2 \$191.35)

CHB50... 50-WATT AMPLIFIER

Power Output: 50 w. at 5% distortion. **Power Consumption:** 150 w. **Frequency Response:** -2 db, 20 to 20,000 cps. **Gain:** mic., 120 db; aux., 95 db; mag. phono cartridge, 110 db. **Hum and Noise:** (below rated output) mic., 70 db; aux., 80 db. **Sensitivity:** mic., 5 mv.; aux., .3 v.; mag. phono cartridge, 15 mv. **Output Impedance:** 4, 8 and 16 ohms; 25-volt line (12 ohm), 70-volt line (100 ohm); 2 speaker sockets and screw terminals. **Inputs:** 2 mic. (Hi-impedance), 1 mag. phono cartridge, 2 aux. (Hi-impedance, Hi-level). **Tubes:** total of 5 and selenium rectifier (1 6EU7, 1 12AX7, 2 6L6G, 1 6C4). **Tone Controls:** treble (10 kc) +10 db to -15 db; bass (50 c) -11 db to 10 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" D, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 21 lbs. **List Price:** \$137.40 (Zone 2 \$140.60)

CHB35... 35-WATT AMPLIFIER

Power Output: 35 w. at 5% distortion. **Power Consumption:** 125 w. **Frequency Response:** -2 db, 20 to 20,000 cps. **Gain:** mic., 125 db; aux., 100 db; mag. phono cartridge, 115 db. **Hum and Noise:** (below rated output) mic., 65 db; aux., 80 db. **Sensitivity:** mic., 4 mv.; aux., .2 v.; mag. phono cartridge, 12 mv. **Output Impedance:** 4, 8 and 16 ohms; 25-volt line (18 ohm), 70-volt line (143 ohm); 2 speaker sockets and screw terminals. **Inputs:** 2 mic. (Hi-impedance), 1 mag. phono cartridge, 2 aux. (Hi-impedance, Hi-level). **Tubes:** total of 6 (1 6EU7, 2 7868, 1 12AX7, 1 6CA4, 1 6C4). **Tone Controls:** treble (10 kc) +10 db to -16 db; bass (50 c) +14 db to -10 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" D, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 18 lbs. **List Price:** \$119.90 (Zone 2 \$122.50)

CHB1250... MOBILE AMPLIFIER

Operates from 12 volt battery. **Power Output:** 50 w. at 10% (continuous). **Power Consumption:** 7.5 A. **Frequency Response:** -2 db, 30 to 15,000 cps. **Gain:** mic., 125 db; aux., 95 db. **Hum and Noise:** (below rated output) mic., 65 db; aux., 80 db. **Sensitivity:** mic., 1.5 mv. (Lo-impedance); 5 mv. (Hi-impedance); aux., 0.5 v. **Output Impedance:** 4, 8 and 16 ohms; 25-volt balanced (16 ohms), 70-volt (122 ohms). **Inputs:** 2 mic. (Hi-impedance or Lo-impedance; no plug in transformer required for Lo-impedance mic.), 2 aux. (Hi-impedance, Hi-level). **Transistors and silicon rectifiers:** total of 10 (6 2N417, 2 2N1557, 1 2N669, 1 MR322). **Tone Controls:** treble (10 kc) -17 db; bass (50 c) +10 db to -17 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" D, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 12 lbs. **List Price:** \$187.25 (Zone 2 \$189.95)

CHB14... 14-WATT AMPLIFIER

Except for differences shown in the following specifications, the CHB14 offers all features of the CHB35, 50 and 100. **Power Output:** 14 w. at 5% distortion. **Power Consumption:** 70 w. **Frequency Response:** -2 db, 20 to 20,000 cps. **Gain:** mic., 120 db; aux., 95 db. **Hum and Noise:** (below rated output) mic., 55 db; aux., 80 db. **Sensitivity:** mic., 4 mv.; aux., .4 v. **Output Impedance:** 4, 8 and 16 ohms; 25-volt line (45 ohms); 1 speaker socket and screw terminals. **Inputs:** 1 mic. (Hi-impedance), 2 aux. (Hi-impedance, Hi-level). **Tubes:** total of 4 (1 6AU6, 1 6V4, 2 6CL86). **Tone Controls:** treble (10 kc) -15 db; bass (50 c) -17 db. **Dimen.:** 15 $\frac{3}{4}$ " W, 10" D, 6 $\frac{3}{4}$ " H. **Ship. Wt.:** 15 lbs. **List Price:** \$75.00 (Zone 2 \$77.25)

All prices and specifications subject to change without notice. Zone 2 includes the states of Ariz., Ark., Cal., Col., Ida., La., Miss., Mont., Nev., N.M., Okla., Oreg., Tex., Utah, Wash. and Wyo. Alaska and Hawaii are slightly higher.

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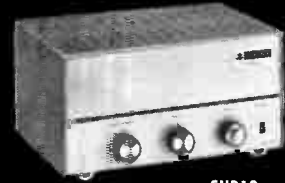


BOGEN COMMUNICATIONS DIVISION

BOGEN SOUND SYSTEMS

CHB10 . . . 10-WATT AMPLIFIER

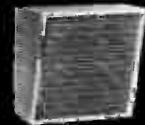
An economy amplifier providing rugged dependability in all low-power applications . . . ideal for wired background music. Available with or without enclosure. **Power Output:** 10 w. **Power Consumption:** 50 w. **Frequency Response:** -2 db, 40 to 12,000 cps. **Gain:** mic., 110 db; phono, 90 db. **Hum and Noise:** (below rated output) mic., 60 db; phono 75 db. **Sensitivity:** mic., 6 mv.; phono, 2 v. **Output Impedance:** 4, 8 and 16 ohms; 25 volt line (62 ohms); 1 speaker socket and screw terminals. **Inputs:** 1 mic. (Hi-impedance), 1 phono (Hi-impedance, Hi-level); provision for 50C, 600 telephone line input for wired background music. **Tubes:** total of 3 (1 - 12AX7 ECC83, 1 - 7868, 1 - 6V4 EZ80). **Tone Controls:** treble (10 kc) -24 db. **Dimen.:** 11 1/4" W, 8 1/4" D, 5 3/4" H. **Ship. Wt.:** Model CHB10, 12 lbs.; Model CHB10-LC (less cage), 10 lbs.
Model CHB10 List Price: **\$64.75** (Zone 2: \$66.50)
Model CHB10-LC (less cage) List Price: **\$60.00** (Zone 2: \$61.50)
See page 88 for accessories



CHB10

CHB PACKAGE SYSTEMS

- CHB100T/outdoor system:** 1 - CHB100 amplifier with tubes; 4 University PH trumpets, each with 1020 driver unit; 1 Bogen-EV 727 ceramic mic. with stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 105 lbs.
List Price: \$449.50 (Zone 2: \$477.00)
- CHB100T-4/outdoor system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 113 lbs.
List Price: \$487.25 (Zone 2: \$515.25)
- CHB50T/outdoor system:** 1 - CHB50 amplifier with tubes; 2 University PH trumpets, each with 1020 driver unit; 1 Bogen-EV 727 ceramic mic. with stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 65 lbs.
List Price: \$281.25 (Zone 2: \$292.10)
- CHB50T-4/outdoor system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 73 lbs.
List Price: \$319.00 (Zone 2: \$330.35)
- CHB1250T/mobile outdoor system:** 1 - CHB1250 amplifier; 2 University PH trumpets with 2 1030 driver units; 1 Bogen-EV 727 ceramic mic. with stand, 10-foot cable and MC1F connector.
- CHB1250T-3/mobile outdoor system:** same as above with 3-speed phonograph top (LPD-3).
- CHB35P/portable system:** 1 - CHB35 amplifier with tubes; 2 - 12" Alnico V PM speakers, each with 25-foot cable and plug, mounted in portable 2-piece speaker case which also accommodates amplifier; 1 Bogen-EV 727 ceramic mic. and stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 55 lbs.
List Price: \$226.65 (Zone 2: \$245.80)
- CHB35P-4, portable system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 63 lbs.
List Price: \$264.40 (Zone 2: \$274.05)
- CHB35B/indoor system:** 1 - CHB35 amplifier with tubes; 2 - 12" Alnico V PM speakers, each with 25-foot cable and plug, mounted in hand-finished walnut wall baffles; 1 Bogen-EV 727 ceramic mic. with stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 47 lbs.
List Price: \$200.50 (Zone 2: \$208.35)
- CHB35B-4/indoor system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 55 lbs.
List Price: \$238.25 (Zone 2: \$246.60)
- CHB35T/outdoor system:** 1 - CHB35 amplifier with tubes; 2 University PH trumpets, each with 1020 driver unit; 1 Bogen-EV 727 ceramic mic. with stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 59 lbs.
List Price: \$263.75 (Zone 2: \$273.60)
- CHB35T-4, outdoor system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 67 lbs.
List Price: \$301.50 (Zone 2: \$311.85)
- CHB14P/portable system:** 1 - CHB14 amplifier with tubes; 2 - 12" Alnico V PM speakers, each with 25-foot cable and plug, mounted in portable 2-piece speaker case which also accommodates amplifier; 1 Bogen-EV 727 ceramic mic. and stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 51.5 lbs.
List Price: \$181.75 (Zone 2: \$190.35)
- CHB14P-4/portable system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 59 lbs.
List Price: \$219.50 (Zone 2: \$228.60)
- CHB14B/indoor system:** 1 - CHB14 amplifier with tubes; 2 - 12" Alnico V PM speakers, each with 25-foot cable and plug, mounted in hand-finished walnut wall baffles; 1 Bogen-EV 727 ceramic mic. with stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 43.5 lbs.
List Price: \$155.65 (Zone 2: \$162.90)
- CHB14B-4/indoor system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 51 lbs.
List Price: \$193.40 (Zone 2: \$201.15)
- CHB14T/outdoor system:** 1 - CHB14 amplifier with tubes; 1 University PH trumpet with 1020 driver unit; 1 Bogen-EV 727 ceramic mic. and stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 39 lbs.
List Price: \$159.75 (Zone 2: \$166.25)
- CHB14T-4, outdoor system:** same as above with 4-speed phonograph top (LPC-4). **Ship. Wt.:** 47 lbs.
List Price: \$197.50 (Zone 2: \$204.50)
- CHB10P/portable system:** 1 - CHB10 (less cage) amplifier with tubes; 1 - 8" Alnico V PM speaker mounted in portable carrying case; 1 Bogen-EV 727 ceramic mic. with stand, 10-foot cable and MC1F connector. **Ship. Wt.:** 29 lbs.
List Price: \$143.00 (Zone 2: \$147.85)

12" Alnico V PM speaker
mounted in hand-finished wall baffle

University PH trumpet



EV727 ceramic mic.



MX6A

MX6A . . . MIXER-PREAMPLIFIER

Self-powered mixer and preamplifier; has provisions for mixing any combination of 4 of its 6 inputs, including 4 high impedance mic. inputs and 2 radio-phonograph inputs; can mix radio and/or phono signals with mic. signals for multi-microphone recordings of large groups and special recording effects. Ideal low-cost accessory for any PA amplifier with individual gain controls for each input channel; wide frequency response, low distortion and low hum; permits physical separation of MX6A from the amplifier of distances up to 400 ft. **Power:** 10 w., 117 v., 60 cps. **Frequency Response:** ±2 db, 50 to 15,000 cps. **Gain:** mic., 59 db; phono, 30 db. **Hum:** (below rated output) -70 db. **Output Impedance:** less than 1,000 ohms (cathode follower). **Input Impedance:** mic., .5 megohm; phono, .5 megohm. **Tubes:** total of 3 (2 - 12AX7, 1 - 12AT7). **Dimen.:** 8" x 5 3/8" x 4 3/4". **Ship. Wt.:** 6 lbs. **List Price: \$67.50** (Zone 2: \$68.00)



LEAR SIEGLER, INC.

BOGEN COMMUNICATIONS DIVISION

BOGEN SOUND SYSTEMS

PA AMPLIFIER ACCESSORIES FOR FLEX-PAK®, "MU" AND "CHB" SERIES

Maximum versatility, for all 3 Series of Bogen amplifiers, is assured by the wide-range of integrated accessories.

(A) MATCHING PHONO TOPS

- LPC-4** Four-speed top with tone arm, cartridge, rubber turntable mat and built-in 45-rpm adapter. For use with CHB14, CHB35, CHB50, CHB100, MU30 and MU15 amplifiers. List Price: \$37.75 (Zone 2: \$38.25)
- LPD-3** Three-speed top; same equipment as LPC-4. For use with: CHB1250 and MUSOM amplifiers. List Price: \$49.00 (Zone 2: \$49.80)
- LPA-3** Three-speed top with tone arm, Ronette turnover cartridge, built-in 45-rpm adapter, mounting brackets and hardware. For use with: M330 amplifier. List Price: \$49.90 (Zone 2: \$50.65)
- LPB-3** Three-speed top; same equipment as LPA-3. For use with: MX60, MX30, M60 and MXM. List Price: \$49.90 (Zone 2: \$50.80)

(B) CARRYING CASES & SPEAKERS for portable systems. With speakers installed, each half of split case acts as a baffle. Cases with speakers include 25-foot cable with plugs.

- PC12** Carrying Case only. Accommodates the following amplifiers [with or without phono tops]: MUSOM, MU30, MU15, CHB100, CHB50, CHB35, CHB14 and CHB1250. Dimen.: 17 $\frac{3}{4}$ " W, 12" D, 23 $\frac{3}{4}$ " H. Ship. Wt.: 20 lbs. List Price: \$42.40 (Zone 2: \$45.40)
- PC12S** Carrying Case with 2 — 12" Alnico V PM speakers. For use with same models as above. Dimen.: Same as PC12. Ship. Wt.: 25 lbs. List Price: \$81.10 (Zone 2: \$84.85)
- PC8** Carrying Case only. Accommodates the CHB10-LC. Dimen.: 12 $\frac{3}{4}$ " W, 9 $\frac{1}{2}$ " D, 13" H. Ship. Wt.: 10 lbs. List Price: \$44.90 (Zone 2: \$46.40)
- PC8S** Carrying Case with 1 — 8" Alnico V PM speaker. Accommodates the CHB10-LC. Dimen.: Same as PC8. Ship. Wt.: 13 lbs. List Price: \$57.40 (Zone 2: \$59.35)
- LK12** Carrying Case only. Accommodates the M330. Dimen.: 16 $\frac{1}{2}$ " W, 15 $\frac{1}{2}$ " D, 19 $\frac{1}{2}$ " H. Ship. Wt.: 15 lbs. List Price: \$43.75 (Zone 2: \$46.75)
- LK12S** Carrying Case with 2 — L123 speakers. Accommodates the M330. Dimen.: 16 $\frac{1}{2}$ " W, 15 $\frac{1}{2}$ " D, 19 $\frac{1}{2}$ " H. Ship. Wt.: 25 lbs. List Price: \$83.75 (Zone 2: \$87.50)
- LKP12** Carrying Case only. Accommodates the M330 with Phono Top. Dimen.: 16 $\frac{1}{2}$ " W, 15 $\frac{1}{2}$ " D, 21 $\frac{3}{4}$ " H. Ship. Wt.: 16 lbs. List Price: \$49.25 (Zone 2: \$52.55)
- LKP12S** Carrying Case with 2 — L123 speakers. Accommodates the M330 with Phono Top. Dimen.: 16 $\frac{1}{2}$ " W, 15 $\frac{1}{2}$ " D, 21 $\frac{3}{4}$ " H. Ship. Wt.: 26 lbs. List Price: \$91.75 (Zone 2: \$95.80)

(C) RACK PANEL MOUNTING KITS with all hardware. When ordering kit, specify model number of amplifier or preamplifier to be mounted.

- RPK-1** Kit for RP-2. Dimen.: 19" W, 7" H. List Price: \$17.40 (Zone 2: \$18.30)
- RPK-3** Kit for M330. Dimen.: 19" W, 7" H. List Price: \$21.90 (Zone 2: \$23.10)
- RPK-4** Kit for MX30, MX60, MXM, M60. Dimen.: 19" W, 7" H. List Price: \$21.90 (Zone 2: \$23.10)
- RPK-5** Kit for M030, M060, M0100. Dimen.: 19" W, 8 $\frac{3}{4}$ " H. List Price: \$16.25 (Zone 2: \$17.30)
- RPK-13** Kit for CHB14. Dimen.: 19" W, 7" H. List Price: \$27.50 (Zone 2: \$28.30)
- RPK-14** Kit for CHB35, CHB50, CHB100. Dimen.: Same as RPK-13. List Price: \$27.50 (Zone 2: \$28.20)
- RPK-15** Kit for MU15. Dimen.: 19" W, 7" H.
- RPK-16** Kit for CHB1250, MUSOM, MU30. Dimen.: 19" W, 7" H.

(D) WALL-MOUNTING KIT for use with M and MX amplifiers and MXM. Sets your equipment flat against wall when idle or at an angle for operation.

- LWM** Kit comes complete with all hardware, mounting template and instructions. List Price: \$18.75 (Zone 2: \$19.20)

(E) CONTROL-GUARD LOCKING PLATES protect your predetermined settings from tampering.

- LK-1** for use with M330. List Price: \$13.10 (Zone 2: \$13.40)
- LK-3** for use with M330 when used on LWM wall mounting. List Price: \$16.25 (Zone 2: \$16.70)
- LK-2** for use with MX60, MX30, M60, MXM. List Price: \$13.75 (Zone 2: \$14.05)
- LK-4** for use with MX60, MX30, M60, MXM when used with LWM wall mounting. List Price: \$17.40 (Zone 2: \$17.85)
- LK-5** for use with CHB14, CHB35, CHB50, CHB100, CHB1250, MUSOM, MU30, MU15. List Price: \$9.90 (Zone 2: \$10.10)

(F) PLUG-IN TRANSFORMERS for use with Bogen amplifiers.

- Microphone Input Transformers:**
- T155 (200 ohm) List Price: \$15.65 (Zone 2: \$17.35)
- T156 (500 ohm) List Price: \$21.25 (Zone 2: \$21.40)
- T157 (50 ohm) List Price: \$18.75 (Zone 2: \$18.90)
- Line Transformers**
- T161 (500 ohm) List Price: \$16.25 (Zone 2: \$16.40)
- T165B broadcast type (500 ohm) List Price: \$20.00 (Zone 2: \$20.15)

WMT-1 WIRED MUSIC TRANSFORMER ASSEMBLY for CHB10, provides 500/600 ohm telephone line input for wired music. Dimen.: 2" W, 1" D, 2 $\frac{1}{2}$ " H. Ship. Wt.: 1 lb. List Price: \$15.65 (Zone 2: \$15.75)

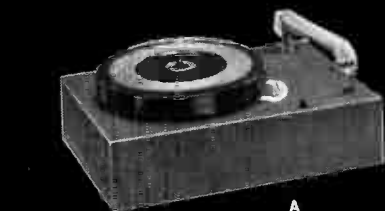
CON-1 MICROPHONE CONNECTOR

For all Bogen amplifiers. List Price: \$1.98

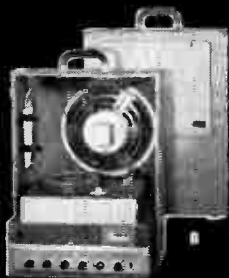
KR6 STANDBY CONTROLLER lengthens amplifier life, reduces high-voltage power consumption. Plugs into M0100 and M060. List Price: \$40.00 (Zone 2: \$40.45)

(G) REMOTE VOLUME CONTROL allows mixing and fading of channels, adjusts amplifier volume from up to 2,000 feet away.

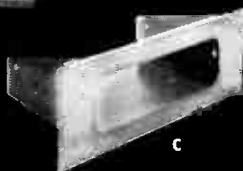
- SR-2** for two channels. Use with CHB35, CHB50, CHB100, MU30, MU15, MX60, MX30, MXM. Dimen.: 6" W, 1 $\frac{1}{4}$ " D, 3 $\frac{1}{4}$ " H. Ship. Wt.: 2 lbs. List Price: \$13.75 (Zone 2: \$14.05)
- SR-4** for four channels. Use with MX60, MX30, MXM, MU30. List Price: \$19.90 (Zone 2: \$20.35)



A



B



C



D



E



F



G



LEAR SIEGLER, INC.

BOGEN COMMUNICATIONS DIVISION

"VP" SERIES PORTABLE TRANSCRIPTION PLAYERS

VP20 & VP40 — The ultimate in ready-to-play, portable, complete sound systems and transcription players.

Phono Mechanism: high-fidelity Bogen B50 turntable, noted for quality performance and silent operation; automatic tone arm cueing; continuously variable turntable speed from 29 to 86 rpm, plus four click-stop speed positions of 16, 33-1/3, 45 and 78 rpm; rubber turntable mat, removable for cleaning; heavy steel turntable accommodates up to 16" records; separate phono motor power switch; tone arm comes complete with G.E. variable reluctance cartridge with dual sapphire-tipped styli; tone arm pressure adjustable; removable 45 rpm spindle adapter.

Amplifier: — Power Output: VP20 — 20 w. peak; VP40 — 40 w. peak. Power Consumption: VP20 — 90 w., VP40 — 150 w. Frequency Response: $\pm 1\frac{1}{2}$ db, 50 to 15,000 cps. Outputs: VP20 — 2 speaker (8 ohms for 1 speaker, 2.5 ohms for 3); VP40 — 2 speaker (4 ohms for 2 speakers, 2 ohms for 4); tape recorder, monitor; aux. power receptacle (2.2 A.). Inputs: phono (internal connection), radio tuner (or tape recorder), 2 Hi-impedance microphones. Tubes: total of 5: VP20 (1 — 12AX7/ECC83, 1 — 7247, 2 — 6XQ5, EL84, 1 — EZ81); VP40 (1 — 12AX7/ECC83, 1 — 7247, 2 — 7355, 1 — GZ34). Controls: Master Power, Bass, Treble, Vol. Input 2, Vol. Mic. Input, Scratch Filter, Input 2 Selector (VP40 — Speech Filter).

VP20 in single portable case with heavy-duty 12" speaker and 25' cable mounted in removable cover. Dimen.: 16 $\frac{1}{2}$ " x 15 $\frac{3}{4}$ " x 12 $\frac{1}{2}$ " (less handle and projections). Ship. Wt.: 40 lbs. List Price: \$187.90 (Zone 2: \$193.05)

VP40 player and electronics in portable case, 2 heavy-duty 12" speakers (with 2 25' cables) mounted in portable "break-apart" case. Dimen.: (ampl./phono case) 18 $\frac{1}{2}$ " x 16 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ " G.; (speaker case) 16" x 15 $\frac{3}{4}$ " x 11 $\frac{1}{2}$ " G. Ship. Wt.: 55 lbs. (for 2 cases). List Price: \$273.25 (Zone 2: \$280.20)

Accessories: SCC-12 Speaker Case (2 speaker units in "break-apart" case with 25' cable for each speaker) 18 lbs. List Price: \$73.25 (Zone 2: \$75.90); MON-1 Monitor Amplifier System (includes 10-watt high gain amplifier and 8" Alnico PM speaker in carrying case). List Price: \$87.65 (Zone 2: \$90.90). Several types of microphones are also available.

VP10 — budget-priced portable. **Phono Mechanism:** silent-operating, sturdy B41 record player with automatic motor start will play all records up to 12" at 4 standard speeds (16, 33-1/3, 45 and 78 rpm).

Amplifier: wide-range 10-watt peak; speaker connector on front panel; power switch; bass & treble controls; volume controls for phono and microphone; input for mic. jack. Tubes: total of 4 (1 — 6AV6, 1 — EZ81, 1 — 12AX7, 1 — 7355). Dimen.: 15 $\frac{1}{2}$ " x 14" x 11 $\frac{1}{2}$ ". Ship. Wt.: 26 lbs. VP10 in single carrying case with 1 heavy-duty 12" speaker and 25' cable mounted in removable cover. List Price: \$129.10 (Zone 2: \$133.10). Lectern Accessory IEC-1 is available.

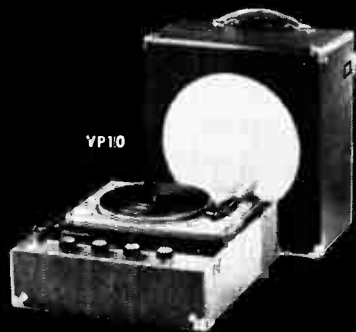
BOGEN SOUND SYSTEMS



VP40



VP20



VP10



SA40

"SA" SERIES HIGH POWER INTERCOM-PAGING SYSTEM

The "SA" series — an ideal combination of selective paging and high power intercommunication. The 10-watt amplifier, in the SA master station, has provision for the connection of an external phonograph and radio tuner . . . makes an economical overall sound console. An external booster amplifier may be added. The master station may be set permanently for private or non-private operation (in private operation, no remote may be listened into unless desired).

Specifications for "SA" Series — Power Output: 10 w. Power Consumption: 70 w., 117 v., 50-60 cycles AC. Tubes: total of 4 (2 — 6SJ7, 1 — 6L6GA, 1 — 5Y3GT). Dimen.: 13 $\frac{1}{4}$ " W, 10 $\frac{1}{4}$ " D, 9" H. Ship. Wt.: SA10 — 31 lbs., SA20 — 33 lbs., SA30 — 35 lbs., SA40 — 37 lbs.

Specifications for "IA" Annunciator Pedal Bases — Dimen.: IA10 & IA20 — 13 $\frac{1}{4}$ " W, 10 $\frac{1}{4}$ " D, 2 $\frac{1}{2}$ " H; IA30 & IA40 — 13 $\frac{1}{4}$ " W, 10 $\frac{1}{4}$ " D, 5" H. Ship. Wt.: IA10 — 10 lbs., IA20 — 12 lbs., IA30 — 23 lbs., IA40 — 25 lbs.

SA10 — Up to 10 remotes, with tubes List Price: \$194.88 (Zone 2: \$200.05)

SA20 — Up to 20 remotes, with tubes List Price: \$228.00 (Zone 2: \$233.50)

SA30 — Up to 30 remotes, with tubes List Price: \$257.25 (Zone 2: \$263.10)

SA40 — Up to 40 remotes, with tubes List Price: \$287.25 (Zone 2: \$293.45)

IA10 — Annu. Pedestal Base for SA10 List Price: \$ 81.65 (Zone 2: \$ 83.30)

IA20 — Annu. Pedestal Base for SA20 List Price: \$123.40 (Zone 2: \$125.35)

IA30 — Annu. Pedestal Base for SA30 List Price: \$179.00 (Zone 2: \$182.75)

IA40 — Annu. Pedestal Base for SA40 List Price: \$220.75 (Zone 2: \$224.85)

JU — Junction box (use 1 for each 10 remotes) List Price: \$8.36 (Zone 2: \$8.66)

All prices and specifications subject to change without notice. Zone 2 includes the states of Ariz., Ark., Cal., Col., Ida., La., Miss., Mont., Nev., N.M., Okla., Oreg., Tex., Utah, Wash. and Wyo. Alaska and Hawaii are slightly higher.



LEAR SIEGLER, INC.

BOGEN COMMUNICATIONS DIVISION

BOGEN SOUND SYSTEMS

INTERCOMS

SERIES "T" INTERCOMS

Fully transistorized intercoms of unlimited flexibility, high intelligibility, simple installation and unique styling. **TIA-6 MASTER STATION** can call any other station. For systems up to 6 stations, all masters or one master plus remotes. Vol. control, talk listen bar and 7-position selector (including "mute" and "all-call" positions). Operates from 117 v. AC, 7 w. power consumption, 8 ohm speaker impedance. **Dimen.:** 7 $\frac{1}{2}$ " W, 7" D, 4" H. **Ship. Wt.:** 4 lbs. **List Price:** \$57.40 (Zone 2: \$57.90)

TIA-12 MASTER STATION. For systems up to 12 stations. Similar to TIA-6 in design and operation but does not permit calling all stations simultaneously. **Dimen.** and **Ship. Wt.** same as TIA-6. **List Price:** \$63.75 (Zone 2: \$64.25)

RIA-1 REMOTE STATION can call only 1 pre-selected master and reply when called. Similar in appearance to TIA-6 with matching loudspeaker. **Dimen.** same as TIA-6. **Ship. Wt.:** 3 lbs. **List Price:** \$17.40 (Zone 2: \$17.55)

TIM-12 MASTER STATION. For intermix systems combining up to 12 masters and remotes in any combination. Same features as TIA-6 plus 12 position selector switch. **Specifications, dimensions, and ship. wt.,** same as TIA-6. **List Price:** \$78.40 (Zone 2: \$78.90)

RIM-6 SELECTIVE REMOTE STATION can call any of 6 pre-selected masters. Features, dimensions same as TIM-12. **Ship. Wt.:** 3 lbs. **List Price:** \$39.00 (Zone 2: \$39.50)

SERIES "X" INTERCOMS

Rugged utility intercoms, used in an 11 or 22 station system (all masters or mixed masters and remotes); featuring push-button convenience, high intelligibility, and simple installation; housed in steel cabinets. **Power Supply:** 117 v. AC, 35 w. **Output Impedance:** 50 ohms balanced. **Tubes:** 3 12AX7, 1 6W6GT, 1 6X4. **Dimen.:** X120 & X220 — 10" W, 7 $\frac{1}{2}$ " D, 7" H.

X120 MASTER STATION can call up to 10 masters or remotes. 10 selector push buttons, 60 ft. master cable ending in plug for solderless connections to junction box, complete with tubes. **Ship. Wt.:** 15 lbs. **List Price:** \$137.25 (Zone 2: \$139.50)

X220 MASTER STATION can call up to 21 masters or remotes. 21 selector push buttons, same features as X120. **Ship. Wt.:** 16 lbs. **List Price:** \$164.65 (Zone 2: \$167.05)

REM-1 REMOTE with call initiating switch to 1 master with vol. control and 6-ft. cable. **Ship. Wt.:** 3 lbs. **List Price:** \$28.75 (Zone 2: \$29.15)

REM-3 REMOTE with selective call initiating switch to 3 masters with vol. control and 6 ft. cable. **Ship. Wt.:** 3 lbs. **List Price:** \$34.85 (Zone 2: \$35.25)

TWIN-COM

TIB-2 TWIN-COM 2-station battery-operated intercom, all-transistor, powered by 8 penlite batteries. Supplied complete with master, remote, 50 ft. of cable and battery box. **List Price:** \$49.95 (Zone 2: \$50.80)

TIA-2 TWIN-COM — 2-station AC powered intercom. Same quality system as TIB-2. Supplied with master, remote, 50 ft. of cable, built-in AC power supply and plug. Operates on 117 v. **List Price:** \$54.95 (Zone 2: \$55.85)

INTERNAL PHONE SYSTEMS

TSB BOGEN-PHONES — a unique and extremely flexible telephone system that provides private, multiple conversations without a costly central exchange. To call, lift phone, press selector button, then press ring button... buzzer sounds at called station... no switching, no dialing, no switchboard delay. System provides 100% trunkage; allowing many private, simultaneous conversations.

TSD-20 with 1 ring button and 19 selector station buttons. **Dimen.:** 9 $\frac{1}{2}$ " W, 3 $\frac{1}{4}$ " D, 3 $\frac{3}{4}$ " H. **Ship. Wt.:** 3 $\frac{1}{2}$ lbs. **List Price:** \$53.25 (Zone 2: \$53.60)

TSD-10 with 1 ring button and 9 station selector buttons. Same dimensions and ship. wt. as TSD-20. **List Price:** \$45.65 (Zone 2: \$45.95)

TSD-1 single station remote with 1 ring button. **Dimen.:** 9 $\frac{1}{2}$ " W, 3 $\frac{1}{4}$ " D, 3 $\frac{1}{4}$ " H. **Ship. Wt.:** 3 lbs. **List Price:** \$33.25 (Zone 2: \$33.55)

PRS-10 Power Supply (1 required for each telephone system). **List Price:** \$44.35 (Zone 2: \$45.25)

TQ BOGEN-PHONES — low-cost telephone system. To call, lift phone, press station button... buzzer sounds at called station... bypassing the switchboard. Selective ringing with common talk line. Handset with base is 9 $\frac{1}{2}$ " x 3 $\frac{3}{4}$ " x 3 $\frac{1}{4}$ ", weighs 5 lbs, comes supplied with 4' snarlproof cord and junction box.

TQ-1 (pair) for 2-station systems. **List Price:** (pair) \$51.45 (Zone 2: \$52.05)

TQ-6 phone for up to 7-station system. **List Price:** (each) \$27.95 (Zone 2: \$28.35)

TQ-12 phone up to 13 station system. **List Price:** (each) \$34.25 (Zone 2: \$34.85)

PRS-1 Power Supply (1 required for each system). **List Price:** \$30.00 (Zone 2: \$30.30)

TRA Phone-Page Adapter allows paging from Series TQ phones. **List Price:** \$42.20 (Zone 2: \$42.50)

PRS-5 Multi-mix Power Adapter to combine TQ-12 or TQ-6 phones with trumpets and PA amplifier. **List Price:** \$147.37 (Zone 2: \$148.25)

TQA ATTEND-A-PHONE System gives communication between a central location and each of a number of remote stations. May be used with TRA adapter for paging through amplifier and loudspeakers. Features: low-cost installation, easily expanded, simple to use, completely private.

TQA-21 Central Switchboard — master station with handset and 21 pushbuttons with signal lamps, signal bell and power supply which plugs into standard 110 v. AC outlet, 6' cables and plugs. **Dimen.:** 8 $\frac{1}{2}$ " W, 7 $\frac{1}{2}$ " D, 10 $\frac{1}{4}$ " H. **Ship. Wt.:** 14 $\frac{1}{2}$ lbs. **List Price:** \$270.25 (Zone 2: \$271.10)

XQA-21 Expansion Board — used in connection with TQA-21 to provide switching facilities for additional 21 remote stations. No additional power equipment needed. **Dimen.:** 5 $\frac{3}{4}$ " W, 5 $\frac{3}{4}$ " D, 10 $\frac{1}{4}$ " H. **Ship. Wt.:** 9 lbs. **List Price:** \$179.35 (Zone 2: \$179.95)

TQX Remote Station Phone — composed of handset, coiled cord, base and junction box, which may be desk or wall mounted. **Dimen.:** 3 $\frac{1}{4}$ " W, 3 $\frac{1}{4}$ " D, 9 $\frac{1}{2}$ " H. **Ship. Wt.:** 4 lbs. **List Price:** \$31.85 (Zone 2: \$31.95)

JB2 Junction Box (2 required for each TQA-21 and XQA-21). **List Price:** \$9.65 (Zone 2: \$9.95)

TQ1-B TWIN-PHONE — 2-station battery operated phone system. Requires 4 standard Type D Flashlight cells. Supplied complete with 2 instruments, 50' of cable, battery case and connectors. **List Price:** \$63.20 (Zone 2: \$63.90)

All prices and specifications subject to change without notice. Zone 2 includes the states of Ariz., Ark., Cal., Col., Ida., La., Miss., Mont., Nev., N.M., Okla., Oreg., Tex., Utah, Wash. and Wyo. Alaska and Hawaii run slightly higher.



LEAR SIEGLER, INC.



BOGEN COMMUNICATIONS DIVISION

**whatever electronic products
you require...**



**...you'll find it
faster in
this catalog...**

**...the world's largest catalog
of electronic
products
sold through
distributors**

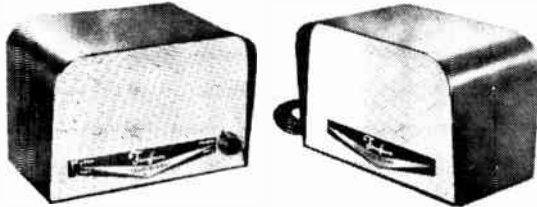
The
Radio - Electronic
MASTER

FAJON-MASCO

INTERCOMS

The complete intercom line styled for the modern office and home at economy prices.

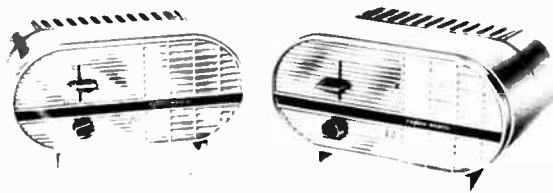
Excellent sensitivity and tonal quality. Each oval cabinet is 8 1/4" x 4 1/4" x 5 1/4" deep of high impact styrene and are available in combination of beige, gold and black styling.



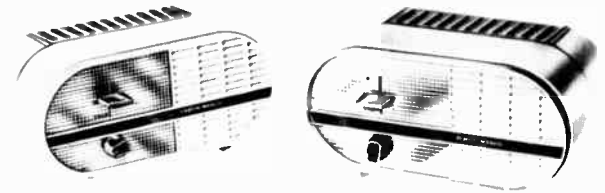
TAL. INTERCOM—\$16.40 Economy, 2 station system, with 50 ft. cable. Remote is always open—no switch to operate. Smartly styled, metal cabinets—ideal for baby sitting and the home. Ready to operate—nothing more to buy. Gray only. Two Tubes. Weight: 6 lbs. Extra remote TR may be added: \$5.85



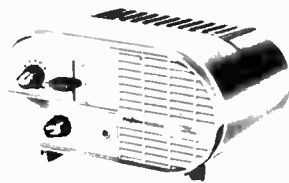
FX-2B TWIN—\$23.90 Ultra-sensitive 2-station system with 50 ft. cable. Powerful amplifier picks up slightest noise. Three way Dictate-Talk-Listen switch. Remote has TALK-LISTEN switch to permit originating calls to master; Use it anywhere—home or business. Extra remote FSB may be added: \$7.95 Weight: 6 lbs.



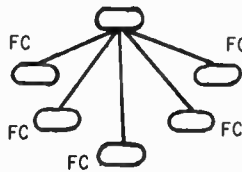
FW-50B Deluxe WIRELESS—\$62.95 A complete 2 station system ready to operate. No wires—no installation—just plug into any AC or DC outlet. Four tubes plus silicon rectifier amplifier. Three way Talk-Listen Dictate switch. In brushed brass cabinets. Weight: 7 lbs. Model FW-51, additional single station for above, may be added. \$32.25 4 lbs.



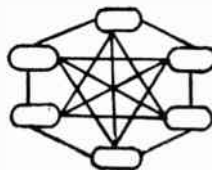
FW-40 Transistorized WIRELESS—\$53.95 Economy 2-station wireless system plugs into any AC line. No wiring required. Instantaneous—no "warm up" necessary. 4 transistors. Three way talk-listen talk lock switch. Weight: 7 lbs. Model FW-41 additional single station to expand system \$27.75 Weight: 4 lbs.



FX-6B OR FX-12B

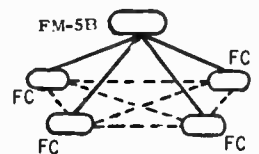
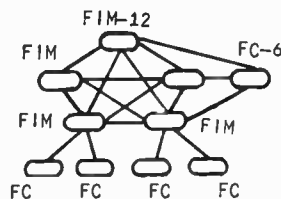
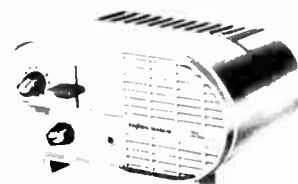


All FX-6B OR FX-12B



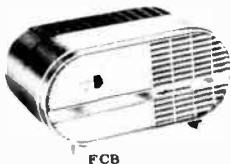
FX-12B MANAGER—\$28.40 A dual purpose master for use with up to ten FC remotes, in a MASTER-TO-REMOTE system, or up to eleven masters in ALL MASTER system. Twelve position rotary selector switch with "All-Call" and "Standby". Dictate-Talk-Listen switch. Five private conversations may be held in an all master system. New: Masters can be non-private "hands free" operation. Weight: 4 lbs.

FX-6B EXECUTIVE—\$23.90 A dual purpose master, for use with up to five FC remotes in a MASTER-TO-REMOTE system, or up to six masters in an ALL MASTER system. Five individual station selector switches. Dictate-Talk-Listen switch, in all master systems. 3 private conversations or conference of all stations may be held. Weight: 4 lbs.

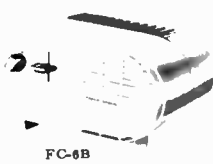


FIM-12B INTERMIX—\$31.20 A deluxe twelve station intermix master which can be used in any combination of masters and/or remotes. Master has 3 position Talk-Listen-Dictate switch. Use in conjunction with two types of remotes: FC-6 which can selectively call any one of six masters, and FC-3 which can call only one master. Weight: 4 lbs.

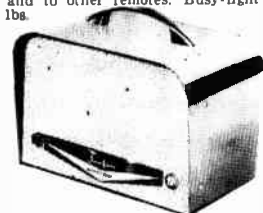
FM-5B MONITOR—\$25.40 A master used with up to four FCB remotes in a MASTER-TO-REMOTE system. "Switch-board" feature provides direct remote-to-remote conversations. Master can monitor any or all remotes. Master can "set-up" remotes to monitor other remotes. Remotes can originate calls to master and to other remotes. Busy-light flashes during conversations. Weight: 4 lbs.



FCB



FC-6B



FCB, REMOTE—\$8.40 Used in conjunction with FM-5B, FX-6B, FIM-12B.

FC-6B, REMOTE—\$13.20 Six station selective remote used with FIM-12B

RB-1, BABY-COM—\$14.95 A one-station, wire-less radio intercom. No installation, no wires required—merely plugs in to any AC or DC outlet and voice is heard through any radio (even car or battery radios). Ideally suited as a portable baby-sitter. Extremely sensitive, can be heard 300 ft. away. Blue & pink cabinets. Weight: 4 lbs.

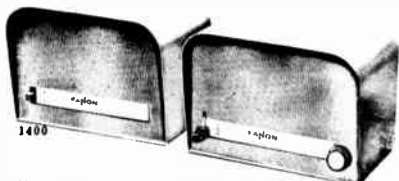
Prices shown are Dealer Net. Add 5% West of the Rockies.

REFER TO CATALOG NO. 1 FOR COMPLETE SPECIFICATIONS ON ABOVE

FANON-MASCO

ALL TRANSISTOR INTERCOMS

Handsome new line of transistorized Fanon intercoms that need no AC current and are battery operated. Special "battery saver" switch prolongs life for months. Batteries used only when talking. Features 4 transistors with push-pull output stage. Instantaneous operation—no warm up. Heavy-duty "talk-listen-standby" switch.



Fanon No. 1400—Economy two-station transistor intercom system. Ideal baby-sitter. Ivory and black only. 50' of cable. 6 lbs. Uses 4 penlite batteries.

Fanon No. 140—Additional remotes for 1400. 50' of cable. 2 lbs. **\$25.45**

Fanon No. 1500B—Deluxe two station transistor intercom in decorator style cabinets. Same features as 1400. 50' of cable. 8 lbs. Uses 4 penlite batteries. **\$6.75**

Fanon No. 152B—Additional remote for deluxe 1500A system. Complete with 50' cable. Grey or tan. 2 lbs. **\$29.95**

Fanon No. 1500B—Deluxe two station transistor intercom in decorator style cabinets. Same features as 1400. 50' of cable. 8 lbs. Uses 4 penlite batteries. **\$7.95**



No. 1500B



No. 1506B



Fanon No. 1506B—(Not shown)—Six station master for use in All-Master. Master-to-Remote or Intermixed installations. Grey or tan. 4 lbs. **\$29.95**

Fanon No. 1512B—Twelve station master for use in All-master, Master-to-Remote or Intermixed installations. Grey or tan. 4 lbs. **\$32.95**

REMOTES FOR 1506B-1512B MASTERS

Fanon No. 156B—Remote with six station selector switch. 2 lbs. **\$14.95**

Fanon No. 150B—Remote with call switch for private or non-private operation. **\$9.60**

Fanon No. 151B—Remote for non-private operation only. 2 lbs. **\$8.10**

FANON-MASCO TELEPHONE SYSTEMS

SELECTIVE TALKING SELECTIVE RINGING

A complete line of telephone intercommunication equipment, designed to meet the needs of any home, office, factory and institution.

"88" SERIES PUSHBUTTON TELEPHONE SYSTEMS

Fanon-Masco's new telephone intercom system that provides multiple conversation lines (full trunkage) without a switchboard. Six, ten or single button masters may be intermixed within the system. Excellent voice quality and "soft tone" signalling. Sturdy high impact styrene construction in handsome beige with gold trim. Loud Buzzer optional. For wall or desk mounting. May be mounted to standard gem box for hidden wiring. Any multi-button master may be connected to an unlimited number of master or remote phones depending upon the situation requirement. Paging from any phone is possible with optional paging relay.

8811—An 11 station master telephone with 10 station buttons and one ringer button. With coiled cord and terminal box **\$38.95**

8807—A seven station master phone with 6 station buttons and one ringer button. With coiled cord and terminal box. **\$31.50**

8801—Single station remote telephone for use with 6 or 10 button phones. Can ring one master only. With coiled cord. **\$23.95**

PSA-88—12 volt DC power supply from 115 volt AC line to power above system. **\$17.95**

PR-10—Special paging relay activated by a predesignated position on master phones that closes circuit to P.A. paging system. **\$22.45**

EB-88—Optional loud buzzer mounts inside phone, for noisy areas. **\$2.25**

8820—Complete two station telephone system consisting of two telephones, 50 foot cable. Each operates on two standard "D" battery cells mounted inside the phone case. **\$44.95**



SELECTIVE TALKING—SELECTIVE RINGING

1010 SERIES DIAL TELEPHONE SYSTEM

Deluxe, precision-made telephones that permit as many separate simultaneous conversations as there are pairs of telephones in an all-master system. Conference calls possible. Up to 11 master phones or 1 master with 10 subs per installation. Masters and remotes may be intermixed. Supplied with junction cable and terminal box.

1010—Master dial telephone **\$44.95**

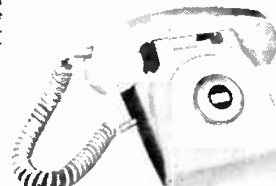
1010W—Wall mount master dial telephone **\$52.50**

101—Sub station telephone **\$28.50**

101W—Wall mount substation telephone **\$31.50**

PSA-88—115v. AC power supply for above phone. **\$17.95**

PR-10—Special paging relay activated by a predesignated position on master phones that closes circuit to P.A. paging system. **\$22.45**



101

20 STATION SYSTEM, WITH SWITCHBOARD — IDEAL FOR BOWLING ALLEYS, MOTELS, HOSPITALS, AND SCHOOLS

FTS-20—A 20 line manual exchange which features selective ringing and a selective talking circuit—assures complete privacy. Each of the twenty push-buttons on the switchboard have busy-lamps as well as a buzzer (which may be shut-off). Stations call switchboard by lifting receiver. The switchboard may arrange for conferences between two or more substations, although only one private conversation may take place at a time. Size of FTS-20: 10½ x 9½ x 3¾" deep. Simple installation requires only 2 wires from each phone to switchboard. For more extensive installations, one FTS-20 switchboard may be ganged with one or two XT-22 extension boards to provide for a total of 12 stations or 64 stations.

FTS-20 **\$179.95**

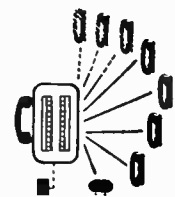
XT-22 **\$164.95**

PS-20—Transformer operated power supply. One required per installation. **\$74.95**



8500—Extension phone for desk or wall use, moulded in high impact polystyrene, with convenient coiled cord. **\$23.95**

SW-85—Selector switch used with each 8500 telephone when two FTS-20's are used. **\$3.75**



System can be expanded to 42 or 64 intercom stations.



FTS-20

Prices shown are Dealer Net. Add 5% West of the Rockies.

COMPLETE LINE OF PAX SWITCHBOARDS SHOWN ON LAST FANON PAGE
REFER TO CATALOG NO. 5 FOR COMPLETE SPECIFICATIONS ON TELEPHONES

FAJON-MASCO

INDUSTRIAL INTERCOMS

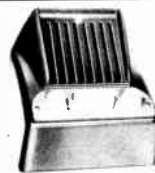


DELUXE JMR—Highly sensitive two-station intercom system in heavy duty die-cast metal cabinets with durable enamel finish. Rugged pushbar talk-listen switch on both master and remote. Remote can answer "hands free", or be completely private. Volume control and pilot light on master. 7½" x 6¾" x 5½" high. Weight of 2 station system with 50' of cable: 10 lbs. \$39.80

MODEL JR—Additional remote station for above. Weight: 5 lbs. \$11.35



MF-5



MF-10

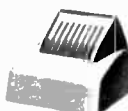


JS-6

INTERMIXED SYSTEM MASTERS

BALANCED LINE

Model MF-5 six station master and MF-10 eleven station master units for use in combination with other remotes or other masters. Heavy duty, "big job" masters of die-cast metal in durable enamel. Each has station selector switch, volume control and push-bar "talk-listen" switch. In an eleven station all-master system up to five separate conversation lines are available. A master may be called even though it is turned off. Cabinet size: 7½" x 6¾" x 5½". Weight per unit: 7 lbs. MF-5 six station master \$41.25 MF-10 eleven station master \$46.80



JL



JR



CAM-5



CAM-10

SIX AND ELEVEN STATION MASTERS—IJM-5 and IJM-10. These famous dual-purpose masters are designed for both master-to-remote and master-to-master operation. No modification is required as units have built-in switch for immediate conversion. Heavy duty die-cast cabinets in durable enamel finish. IJM-5 can be used with up to 5 other masters or remotes. IJM-10 for use with up to 10 other masters or remotes. IJM-10 all-master system can carry on up to 5 separate conversations at the same time. Any master can be called even if its power is off. All have station selector switch, volume control and pushbar "talk-listen-lock" position. A paging horn can be added. Size each: 7½" x 6¾" x 5½".

IJM-5 six station master \$33.00

IJM-10 eleven station master \$38.25

REMOTES FOR USE WITH ABOVE IJM-5 and IJM-10

JL remote, less talk-listen switch. Weight: 3½ lbs. \$10.65

JR remote, with talk-listen switch. Weight: 3½ lbs. \$11.35

AC POWER TRANSFORMER

BALANCED LINE

MODEL CAM-5 six station master and CAM-10 eleven station master similar to above but with higher audio power output and AC power transformer.

CAM-5 six station master weight: 7 lbs. \$51.75

CAM-10 eleven station master weight: 7 lbs. \$57.75

REMOTES

MODEL JL remote, less talk-listen switch. Weight: 3½ lbs. \$10.65

MODEL JS remote, with talk-listen switch. Weight: 3½ lbs. \$13.75

MODEL JS-6 six-station selective remote to call up to six masters in system. Talk-listen switch. Weight: 3½ lbs. \$22.70

7 and 13 Station BALANCED LINE Masters

A completely flexible system designed for most comprehensive installations. The Model JMP-6B accommodates up to six master or remote stations and the Model JMP-12B can handle up to twelve additional masters or remotes. The masters can call any of the remotes in the system at the same time and can also page and receive replies from paging horns. Conferences can be arranged between masters and up to 6 separate conversation lines are available in a 13 station master-to-master system. Cabinet is heavy-duty die-cast metal with durable grey enamel finish. Size overall: 13" x 8½" x 5½" high.

JMP-6B Seven station master. Weight: 10½ lbs. \$71.70

JMP-12B Thirteen station master. Weight: 10½ lbs. \$77.60

AC POWER TRANSFORMER BALANCED INTERMIX SYSTEMS

MODEL AC-12B 13 Station Master.

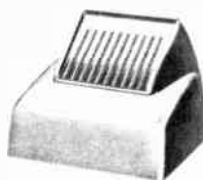
MODEL AC-24B 25 Station Master.

The Electronic Master stations can be used in all three types of installation. Up to 25 masters can be used in an all-master system and up to 156 stations when combining masters and remotes. Rugged pushbutton selector switches provide conference facilities and there can be as many separate conversations as there are masters in the system. Has all the flexibility and features of the above plus a higher audio output and AC powered circuit. Busy signal light flashes when station called is occupied.

MODEL AC-12B Thirteen station. Weight: 12½ lbs. \$108.60

MODEL AC-24B Twenty-five station. Weight: 12½ lbs. \$126.75

REMOTES FOR ABOVE BALANCED LINE MASTER INTERCOM SYSTEMS



MODEL JL—Rugged die-cast metal cabinet, durable grey enamel finish. 7½" x 6¾" x 5½". Less talk-listen switch. \$10.65

MODEL JS—Handsome die-cast metal cabinet, durable grey enamel finish. Complete with talk-listen switch. Size: 7½" x 6¾" x 5½". \$13.75

MODEL JS-6—Selective remote with a six position master selector switch. Die-cast cabinet, durable grey enamel finish. 7½" x 6¾" x 5½". \$22.70

REFER TO CATALOG NO. 2 FOR COMPLETE SPECIFICATIONS ON INDUSTRIAL INTERCOMS

FANON-MASCO

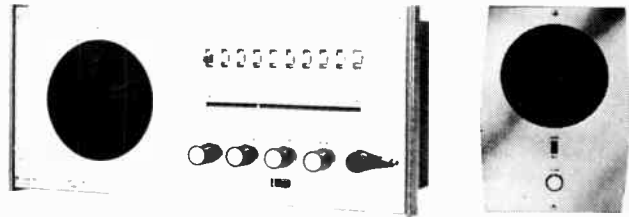
FLUSH-WALL INTERCOMS

AM/FM, MUSIC AND INTERCOM SYSTEM FOR HOME

FANON MASCO 5500 Master provides up to nine remotes for AM or FM reception plus phono music or voice. Input accommodates record player or tape recorder. Highly sensitive and selective AM and FM tuners and wide band noise free amplifier rated at 2 watts. AFC on tuner with AFC-OFF switch for tuning weak stations. Master and remote can call each other at any time. Remotes can call each other by switching at master. Master may monitor all remotes. Each remote has volume control. Satin chrome or copper front panel; 15 1/4" x 7" x 1". Rough-in dimensions: 13 3/4" x 5 7/8". Ship wt.: 12 1/2 lbs. \$104.95

MODEL 56 INDOOR REMOTE—High styled indoor remote with talk-listen switch and volume control. Five inch speaker. Satin chrome or copper finish. 6" x 8 1/2". Rough-in dimensions: 4 7/8" x 8". Ship wt.: 2 1/2 lbs. \$9.75

MODEL BD OUTDOOR REMOTE—Weatherproof gasket sealed Weatherized speaker. Remote can originate call to master. Durable copper enamel finish. 4 3/4" x 6 3/4". Rough-in dimensions: 3 7/8" x 5 1/4". Ship wt.: 2 lbs. \$5.95
BDR REMOTE same as above with pushbutton. \$7.50

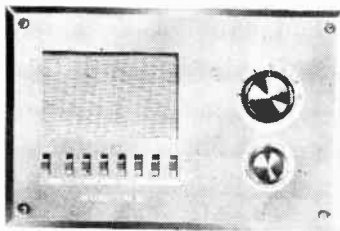


COMPLETE SYSTEM CONSISTS OF:

FANON MASCO 55EK . . . 1 master, 3 Model 56 indoor remotes, 1 Model BD outdoor remote, hardware. Ship wt.: 24 lbs. \$119.95

FANON MASCO 55IK . . . complete installation kit of rough-in materials, plaster rings, 200 feet of cable for 55EK. Ship wt.: 8 lbs. \$14.95

MUSI-TALK AM RADIO AND INTERCOM SYSTEM



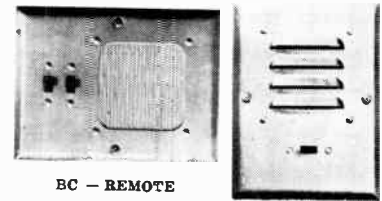
MC — MASTER CONTROL

FANON MASCO MC, MASTER CONTROL

A six tube, six-station master from which you may converse with any or all remotes. The master can "set-up" two or more remotes for direct communication with one another. "Monitor" feature enables master and remotes to eavesdrop any other locations. Powerful printed circuit radio can be "piped" to as many rooms as desired. Simultaneous radio and intercom operation is featured. Stylish satin copper panel is 11" x 7 3/4". \$52.50 Rough-in dimensions: 5 1/2" x 10 1/4" x 3 1/2".

FANON MASCO MCL, MASTER CONTROL

Has all the intercom features listed above, less the radio. A phono input jack enables you to plug in any external music source for complete music distribution. \$32.95



BC — REMOTE

BD — REMOTE

BC, INDOOR REMOTE—Four indoor remotes provide instant 2-way conversation among themselves and the master, as well as radio-music throughout the home. Remotes can originate calls to the master, or to other remotes. Remotes may also "monitor" any other locations. Talk-Listen switch and Privacy switch. Satin copper panel is 6 1/4" x 4 3/4". \$5.95

BD, DOOR REMOTE—Has weatherproof rubber gasket and "weatherized" speaker to withstand all types of weather. Door remote can originate calls to the master and any indoor remote. Enables you to answer the door from within the house and to "pipe" music to the porch or patio. Copper finish panel 6 3/4" x 4 3/4" \$5.95
BDR outdoor remote w/pushbutton \$7.50

FANON MASCO EK (Electronic Kit) — Consists of 1 MC Master Control, (with radio), 3 BC Indoor Remotes, 1 BD Door Remote and hardware. \$62.95

FANON MASCO EKL (Electronic Kit) — Consists of 1 MCL Master Control, (less radio), 3 BC Indoor Remotes, 1 BD Door Remote and hardware. \$44.95

FANON MASCO IK (Installation Kit) — Consists of 1 master plaster box, 4 remote plaster boxes, 200 ft. of wire and hardware. This installation kit is used in conjunction with either the EK or EKL electronic kits. \$11.95

TRANSISTORIZED SIX STATION INTERCOM SYSTEM

FANON MASCO 4405 —Built-in and battery operated the master provides for up to five remotes. Complete two-way communication from master to all remotes or master can set up remote to remote. Long battery life when master is in "standby" since no battery drain occurs until signalled with "beep" tone from remote. "Battery saver" switch limits drain when in monitor or baby-sitting position. Music can be added to system, by plugging radio or phono into jack on BJ remote. Satin chrome or copper front panel: 10 1/2" x 5 3/4". Rough-in dimensions: 9 5/8" x 4 1/2" x 3 1/2". Ship wt.: 5 lbs. \$35.25

MODEL BC INDOOR REMOTE—Remotes may originate calls to master or monitor other remotes. Talk-listen switch and "privacy" switch. Satin chrome or copper finish panel: 6 1/4" x 4 3/4". Rough-in dimensions: 5 1/4" x 3 7/8" x 2". Ship wt.: 2 lbs. \$5.95

MODEL BJ REMOTE same as above with phono jack to add music source. \$8.95

MODEL BD OUTDOOR REMOTE—Weatherized speaker in gasket sealed cover. Remote can call master. Baked copper enamel finish. 4 3/4" x 6 3/4". Rough-in dimensions: 3 7/8" x 5 1/2". Ship wt.: 2 lbs. \$5.95
BDR same w/pushbutton. \$7.50

COMPLETE SYSTEM CONSISTS OF:
FANON MASCO 44EK . . . One master, 3 model BC indoor remotes, 1 model BD outdoor remote, hardware. Ship wt.: 13 lbs. \$42.60
FANON MASCO 44IK . . . complete installation kit of rough-in materials, plaster rings, 200 feet of cable. Ship. wt.: 5 lbs. \$11.25

CENTRAL AMPLIFIER INTERCOM SYSTEM

Economical system requires only one central amplifier for all masters and remotes installed. Each master can accommodate 9 remotes and any combination of up to 6 masters and 24 remotes can be used in system. Masters can contact any station in the system with private conversation between masters.

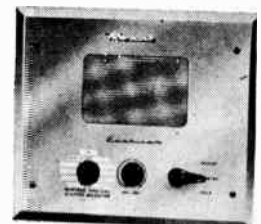
FANON MASCO MODEL 1109 —master accommodates up to five masters and four remotes. Selective switch, volume control and talk-listen-"pickup" lever. Gold baked enamel panel: 10 1/2" x 9 1/4". Rough-in dimensions: 8 5/8" x 7 7/8". Ship wt.: 4 1/2 lbs. \$28.10

FANON MASCO MODEL 11A **CENTRAL AMPLIFIER** for all masters and remotes in system. Can be installed in closet or out of the way. ON-OFF switch and volume control for all stations. Gold enamel finish panel: 10 1/2" x 9 1/4". Rough-in dimensions same as 1109 master. Ship wt.: 8 1/2 lbs. \$44.95

MODEL BCL INDOOR REMOTE less talk-listen switch. Specs same as BC remote. \$5.55

MODEL BDL OUTDOOR REMOTE, L talk-listen switch. Specs same as BD remote. \$5.55

MODEL BDLR OUTDOOR REMOTE WITH BELL BUTTON 1 talk-listen switch. Specs same as BDR. \$7.05



REFER TO CATALOG NO. 6 FOR COMPLETE SPECIFICATIONS ON FLUSH-WALL INTERCOMS

FANON-MASCO

PA AMPLIFIERS AND SYSTEMS

Featuring a wide-range of low distortion amplifiers for continuous-duty operation. All units incorporate point-to-point wired circuits and concealed tamperproof output and input connectors. Booster amp. output jack. All amplifiers and boosters suitable for rack mounting.

FANON MODEL 3370

70 WATT AMPLIFIER

A dramatic new concept in high-power amplifier design that defies comparison in its class. Push-pull output circuit with negative feed-back and fixed bias circuit on the power output stage.

Power Output (Rated): 70 watts at less than 4% distortion. **Peak Power Output (Music Wave-Form Rating):** 100 watts. **Frequency Response:** 20 to 20,000 cps. ± 1 db. **Regulation:** 70 volt line, no load-full load, 3 db at 1 kc. **Inputs:** 4 microphone, 2 phono (fader control), 1 microphone input convertible for phono magnetic cartridge. **Gain:** 130 db microphone, 95 db phono. **Input Sensitivity:** Microphone 4 millivolts (magnetic low impedance 0.5 millivolts), phono 0.3 volts. **Hum and Noise:** Fundamental -75db, microphone -88db, phono -70db. **Tone Control:** Bass: 17 db boost at 50 cps, 14 db cut at 50 cps. Treble: 14 db boost at 15 kc, 15 db cut at 15 kc. **Output Impedance:** 4, 8, 16 Ω , 70 volt line. **Input Impedance:** High impedance 0.5 megohms, convertible to low impedance by use of screw-on input transformer for 50 Ω unbalanced or 200 Ω balanced. **Controls:** (7) 4 microphone volume, 1 phono-radio fader, 1 bass, 1 treble with AC switch, 2 hum-buck, adj., 1 bias adj., 1 slide switch for magnetic cartridge input. **Power Consumption:** 200 watts at 117 volts, 60 cps. **Tubes:** 2-12AX7 ECC83, 1-6AV6, 1-7199, 1-5AR4 GZ34, 2-6CA7 EL34, 1-6CA4 EZ81, and 1 silicon rectifier. **Shipping Weight:** 32 lbs. **Dimensions:** 18 $\frac{1}{2}$ " W, 11 $\frac{1}{8}$ " D, 6 $\frac{3}{4}$ " H. **\$104.95**

MODEL 3070-70 watt BOOSTER AMPLIFIER: similar to above less microphone and tone controls; single high impedance input (sensitivity $\frac{1}{2}$ volt input at full output). Volume and on-off controls. **\$89.95**

FANON MODEL 3345

45 WATT AMPLIFIER

Here's a high powered audio amplifier that meets the most exacting standards. This compact, quality-engineered unit has the advanced push-pull circuit with negative feed-back and fixed bias circuit on the power output stage. **Power Output (Rated):** 45 watts at less than 3.5 distortion. **Peak Power Output (Music Wave-Form Rating):** 52 watts. **Frequency Response:** 20 to 20,000 cps. ± 1 db. **Regulation:** 70 volt line, no load-full load, 3 db at 1 kc. **Inputs:** 3 microphone, 2 phono (fader control), 1 microphone input convertible for phono magnetic cartridge. **Gain:** 127 db microphone, 92 db phono. **Input Sensitivity:** Microphone 4 millivolts (magnetic low impedance 0.5 millivolts), phono 0.3 volts. **Hum and Noise:** Fundamental -75 db, microphone -58 db, phono -69 db. **Tone Control:** Bass: 17 db boost at 50 cps, 14 db cut at 50 cps. Treble: 14 db boost at 15 kc, 15 db cut at 15 kc. **Output Impedance:** 4, 8, 16 Ω , 70 volt line. **Input Impedance:** High impedance 0.5 megohms, convertible to low impedance by use of screw-on input transformer for 50 Ω unbalanced and 200 Ω balanced. **Controls:** (6): 3 microphone volume, 1 phono-radio fader, 1 bass, 1 treble with AC switch, 1 slide switch for magnetic cartridge input, 2 hum-buck, adj., 1 bias adj. **Power Consumption:** 130 watts at 117 volts, 60 cps. **Tubes:** 2-12AX7 ECC83, 1-7199, 2-6L6-GC, 1-5AR4 GZ34 and 1 silicon rectifier. **Shipping Weight:** 26 lbs. **Dimensions:** 17 $\frac{1}{2}$ " W, 11 $\frac{1}{8}$ " D, 6 $\frac{1}{4}$ " H. **\$83.95**

MODEL 3045-45 watt BOOSTER AMPLIFIER: similar to above less microphone and tone controls; single high impedance input (sensitivity $\frac{1}{2}$ volt input at full output). Volume and on-off controls. **\$70.45**

FANON MODEL 3335

35 WATT AMPLIFIER

Dynamically styled medium-high power unit featuring the same advanced circuitry found in the 70 and 45 watt amplifiers. Push-pull output with negative feed-back for improved stability.

Power Output (Rated): 35 watts at less than 4% distortion. **Peak Power Output (Music Wave-Form Rating):** 40 watts. **Frequency Response:** 30 to 20,000 cps. ± 1 db. **Regulation:** 70 volt line, no load-full load, 4 db at 1 kc. **Inputs:** 2 microphone, 2 phono (fader control), 1 microphone input convertible for phono magnetic cartridge. **Gain:** 125 db microphone, 90 db phono. **Input Sensitivity:** Microphone 3 millivolts (magnetic low impedance 0.5 millivolts), phono 0.25 volts. **Hum and Noise:** Fundamental -78 db, microphone -57 db, phono -72 db. **Tone Control:** Bass: 17 db boost at 50 cps, 16 db cut at 50 cps. Treble: 13.5 db boost at 15 kc, 12.3 db cut at 15 kc. **Output Impedance:** 4, 8, 16 Ω , 70 volt line. **Input Impedance:** High impedance 0.5 megohms, convertible to low impedance by use of screw-on input transformer for 50 Ω unbalanced or 200 Ω balanced. **Controls:** (5): 2 microphone volume, 1 phono-radio fader, 1 bass, 1 treble with AC switch, 1 slide switch for magnetic cartridge input, 1 hum-buck, adj., 1 bias adj. **Power Consumption:** 115 watts at 117 volts, 60 cps. **Tubes:** 2-12AX7 ECC83, 1-6AV6, 1-5AR4 GZ34, 2-6L6-GC, 1 selenium rectifier. **Shipping Weight:** 24 lbs. **Dimensions:** 17 $\frac{1}{2}$ " W, 11 $\frac{1}{8}$ " D, 6 $\frac{1}{4}$ " H. **\$68.95**

FANON MODEL 3320

26 WATT AMPLIFIER

Ruggedly constructed advanced design amplifier ideally suited for medium power applications. Same push-pull negative feedback circuit found in higher power FANON amplifiers. Continuous heavy-duty performance dependability.

Power Output (Rated): 20 watts at less than 5% distortion. **Peak Power Output (Music Wave-Form Rating):** 25 watts. **Frequency Response:** 20 to 20,000 cps. ± 1 db. **Regulation:** 70 volt line, no load-full load, 3 db at 1 kc. **Inputs:** 2 microphone, 2 phono (fader control). **Gain:** 123 db microphone, 88 db phono. **Input Sensitivity:** Microphone 3 millivolts, phono 0.32 volts. **Hum and Noise:** Fundamental -78 db, microphone -57 db, phono -72 db. **Tone Control:** Treble cut: 2,500 cps. at 3 db; 10,000 cps. at 13 db. **Output Impedance:** 4, 8, 16 Ω , 70 volt line. **Input Impedance:** High impedance 0.5 megohms, convertible to low impedance by use of screw-on input transformer for 50 Ω unbalanced or 200 Ω balanced. **Controls:** (4) Two microphone volume, one phono-radio fader. One tone with AC switch, one bias adjustment. **Power Consumption:** 70 watts at 117 volts, 60 cps. **Tubes:** 2-12AX7 ECC83, 2-7189A, 1-6CA4 EZ81 and one selenium rectifier. **Shipping Weight:** 14 lbs. **Dimensions:** 13 $\frac{1}{2}$ " W, 10 $\frac{1}{4}$ " D, 5 $\frac{1}{4}$ " H. **\$55.50**

FANON MODEL 3310

10 WATT AMPLIFIER

A new concept in engineering design for limited power output amplifiers. Economically priced high gain unit for continuous service in music, PA, or paging. Compactly constructed.

Power Output (Rated): 10 watts at less than 5% distortion. **Peak Power Output (Music Wave-Form Rating):** 14 watts. **Frequency Response:** 30 to 20,000 cps. ± 2 db. **Regulation:** 70 volt line, no load-full load, 3 db at 1 kc. **Inputs:** 1 microphone, 2 phono (fader control). **Gain:** 120 db microphone, 85 db phono. **Input Sensitivity:** Microphone 4 millivolts, phono 0.3 volts. **Hum and Noise:** Fundamental -75 db, microphone -56 db, phono -70 db. **Tone Control:** Treble cut: 2,500 cps. at 3 db; 10,000 cps. at 13 db. **Output Impedance:** 4, 8, 16 Ω , 70 volt line. **Input Impedance:** High impedance 0.5 megohms, convertible to low impedance by use of screw-on input transformer for 50 Ω unbalanced or 200 Ω balanced. **Controls:** (3) One microphone volume, one phono-radio fader. One tone with AC switch. **Power Consumption:** 60 watts at 117 volts, 60 cps. **Tubes:** 1-12AX7 ECC83, 1-6V4 EZ80, 1-6L6-GC. **Shipping Weight:** 13 $\frac{1}{2}$ lbs. **Dimensions:** 13 $\frac{1}{2}$ " W, 10 $\frac{1}{4}$ " D, 5 $\frac{1}{4}$ " H. **\$41.95**

FANON MODEL 3308

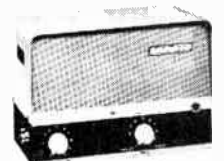
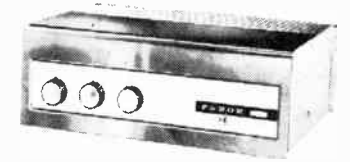
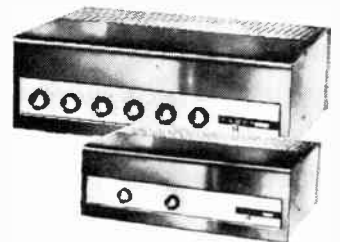
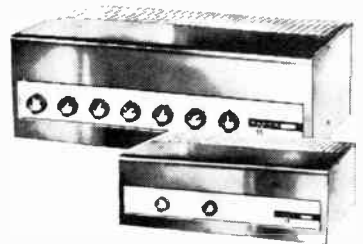
8 WATT AMPLIFIER

Dependable, economy model amplifier for limited power output applications. Made available less case, (case optional). **Power Output (Rated):** 8 watts at less than 5% distortion. **Peak Power Output (Music wave form):** 12 watts. **Frequency Response:** 100 to 15kc cps. ± 2 db. **Regulation:** 70 volt line, no load to full load, 3 db at 1,000 cps. **Inputs:** 1 microphone, 1 phono. **Gain:** 120 db mic., 85 db phono. **Input Sensitivity:** Microphone -4 millivolts, phono -0.3 volts. **Hum and Noise:** Fundamental -70 db, microphone -52 db, phono -65 db. **Tone Control:** Treble cut is 3 db at 3,000 cps and 12 db at 10,000 cps. **Output Impedance:** 4 ohms, 8 ohms and 70 Ω line. **Input Impedance:** High impedance 0.5 megohms, convertible to low impedance by use of screw-on input transformer for 50 ohms unbalanced or 200 ohms balanced. **Controls:** One mic., one phono volume, one tone control with "on-off" switch, one hum adjust (factory adjusted). **Power Consumption:** 60 watts at 117 volts AC. **Tubes:** 1-12AX7, 1-6V4 EZ80, 1-6L6-GC. **Shipping Weight:** 13 $\frac{1}{2}$ lbs. **Dimensions:** 10 $\frac{3}{4}$ " x 8 $\frac{3}{4}$ " x 6". **\$34.50**

MODEL CG-8—Case only for above amplifier. (shown in illustration). \$5.40

FANON MODEL 3220 SPECIAL BACKGROUND MUSIC AMPLIFIER—20 WATTS

Especially designed 20 watt amplifier with a 600 ohm balanced input for background music operation with a high impedance, single-ended microphone input. Each channel is regulated by separate volume controls. Engineered for dependable service where music is desired in commercial and industrial establishments the Model 3220 fills every medium power need. The same push-pull negative feedback circuit used in higher power Fanon P.A. amplifiers is employed. **Power Output (Rated):** 20 watts at less than 5% distortion. **Peak Power Output (Music wave form rating):** 25 watts. **Frequency Response:** 20 to 20,000 cps. ± 1 db. **Regulation:** 70 volt line; no load-full load, 3 db at 1 kc. **Inputs:** 1 microphone, 1 background music. **Gain:** 123 db microphone, 52 db for background music. **Input Sensitivity:** Microphone 5 millivolts, 0.3 volts music. **Hum and Noise:** Fundamental -78 db, microphone -57, music -58. **Tone Control:** Bass: 16 db boost at 50 cps, 14 db cut at 50 cps. Treble is 17 db boost at 15 kc, 17 db cut at 15 kc. **Output Impedance:** 4, 8, 16, 70 volt line (245 ohm). **Input Impedance:** Mic impedance 0.5 megohms convertible to low impedance with screw-on transformer for 50 ohm unbalanced or 200 ohm balanced. Background music is 600 ohms balanced. **Controls:** 3 microphone volume, 1 music volume, 1 bass, 1 treble with AC switch. **Power Consumption:** 70 watts at 117 volts, 60 cycles AC. **Tubes:** 2-12AX7 ECC83, 2-7189A, 1-6CA4 EZ81 and one silicon rectifier. **Shipping Weight:** 14 lbs. **Dimensions:** 13 $\frac{1}{2}$ " W x 10 $\frac{1}{4}$ " D x 5 $\frac{1}{4}$ " H. **Fuse:** 1 amp. **\$55.50**



REFER TO CATALOG NO. 3 FOR COMPLETE SPECIFICATIONS ON PA AMPLIFIERS & SYSTEMS

FANON-MASCO

PA AMPLIFIERS AND SYSTEMS

TRANSISTORIZED MOBILE AMPLIFIERS

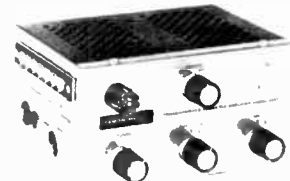
Versatile, fully-transistorized mobile amplifiers ideally suited for continuous duty by Civil Defense, police, fire and other civic organizations where compact quality audio power is required. Their design and performance is unexcelled for every portable PA operation for carnivals, sporting events, yachting, buses and general mobile application.

MODEL 3527 27 WATT MOBILE AMPLIFIER

Exceptionally compact transistorized mobile amplifier for dash or glove compartment mounting where a high audio power is required. Operates on 12 volts DC with very low current drain in standby. Can be used with a 12 volt power supply from 110 volt AC. Complete with mounting fixtures. This unit is finished in black and satin chrome.

Power Output—27 watts at less than 10% distortion @ 1 kc. Frequency Response: 150 cycles to 10 kc. 3 db. Inputs: 1 microphone, 1 X-tal phono, 1 radio input (fed from radio receiver voice coil). Gain: 110 db—microphone; phono 70 db. Input Sensitivity: low impedance microphone (50-2,000 ohms) 0.5 millivolts for full output X-tal Microphone 3 millivolts full output. X-tal Phono 0.5 volts for full output. Radio 0.25 volts—for full output (from voice coil 3.2-16 ohms). Hum and Noise: 70 db.—below full output. Tone Control: Max. treble position—10 db. down at 4 kc. Output Impedance: 4, 8, 16 ohms. Input Impedance—Microphone 2,000 ohms, (aux), 50 K. ohms radio 3.2-16 ohms. Controls: (5): Microphone volume, radio or phono volume (microphone may be mixed with radio or phono input), tone control, power on-off switch, radio-aux. selector slide switch (interaction between controls less than 1 db). Power Consumption: 3.5 amps @ 12.6 V for 27 watts output. Transistors: 2—2N408; 3—2N669. Cable Connectors: (not supplied) Microphone—Amphenol Plug #91-MC4M, phono—RCA type phono plug (Cinch-Jones #13A). Power plug and 7' cable with battery clamps supplied. Dimensions: 6½" W, 3¼" H, 4½" D. Shipping Wt: 4 lbs. \$62.95

Power Supply — Model PS-27 with 117 volt AC primary and 12.6 volt output. Ship. Wt. 3½ lbs. \$37.50



MODEL 3512 12 WATT MOBILE AMPLIFIER

High power in a small package! Here's a fully transistorized mobile featuring high gain and a minimum of distortion. Can be used with 12 volt power supply from 110 volt AC.

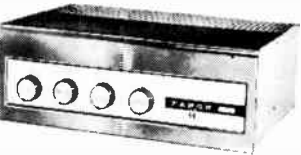
Power Output (Rated): 12 watts at less than 10% distortion. Frequency Response: 150 cycles -10 kc. 3 db down. Inputs: One microphone, one X-tal phono, (aux.) radio input (to be fed from radio receiver voice coil). Gain: Microphone 105 db, phono 65 db. Input Sensitivity: Low impedance microphone (50-2,000 ohms), 0.5 millivolts for full output. X-tal microphone 3 mv for full output. X-tal phono 0.5 volts for full output. Hum and Noise: 70 db below full output. Tone Control: Max. treble position: 10 db. down at 4 kc. 3 db down at 1.5 kc. Output Impedance: 4, 8 and 16 ohm. Input Impedance: Microphone 2000 ohms, Phono 50 K ohms, Radio 3.2-16 ohms. Controls (5): Microphone volume, aux. radio volume, tone control, power on-off switch, radio-aux. selector slide switch, (interaction between controls less than 1 db). Power Consumption: 24 watts at 12.6 volts (2A) for 12 w. output. Transistors: Two—2N408, one—2N669, two—3577. Cable Connectors: (not supplied) Microphone input: Amphenol #91-MC4M. Phono: RCA type phono plug (Cinch-Jones #13A). Power plug and 7 ft. cable with battery clamps supplied. Shipping Wt: 4 lbs. Dimensions: 6½" W., 3¼" H., 4½" D. \$52.50

Power Supply — Model PS-27 with 117 volt AC primary and 12.6 volt output. Ship. Wt. 3½ lbs. \$37.50



MODEL 3535AD 35 WATT MOBILE AMPLIFIER WITH POWER SUPPLY

May be operated on 12 volts DC or 117 volts AC. A medium-high power transistorized amplifier designed to give maximum efficiency and dependable mobile service. Compactly styled with tamper-proof input and output connectors, the 3535 utilizes conservatively-rated transistors that operate at low temperature under continuous duty. Power Output (Rated): 35 watts at less than 10% distortion. Frequency Response: 150-10,000 cycle—3 db down. Inputs: (1) low imp. mic.; (1) 600 ohm balanced line (optional); (1) high impedance mic.; (1) phono. Gain: microphone: 105 db, phono, 85 db. Input Sensitivity: low impedance mic.—0.5 millivolts for full output; high impedance mic.—4 millivolts for full output; phono—0.5 volts for full output. Hum and Noise: Fundamental: 65 db below full output. Microphone: 55 db below full output. Phono: 82 db below full output. Tone Control: Treble cut 3 db at 2000 cps, 15 db at 1500 cycles. Output Impedance 4, 8, 16 ohms and 70 volt line. Input Impedance: low imp.—mic. 200 ohm; phono—0.5 mex.; high imp. mic.—0.5 mex. Controls: one microphone volume. One phono volume. One tone control with "power on-off" switch. Transistors: (7) 2—2N1544, 5—2N408. Power Consumption: 55 watts for maximum output. 117 volts AC at 0.5 amps. 12.6 V D.C. at 4.3 amps. Shipping Wt: 16 lbs. Dimensions: 13½" W., 10¾" D., 5¼" H. \$104.95



MODEL CS-33 "CIRCUIT-SENTRY" OVERLOAD PROTECTION CIRCUIT

Optional "electronic fuse" circuit that protects the output tubes, against possible shorts in the speaker line. This exclusive FANON assembly consists of tubes 6F8B, 6AU6 and associated circuitry—merely plugs into socket provided on chassis in case of intermittent short. "fuse circuit" will lock into protective condition. After fault is cleared, normal condition is restored without any adjustments being required. Patents applied For. Used with 3335, 3455 and 3370 Amplifiers. \$14.95



ATTACHÉ CASE COMPLETE PORTABLE P.A. SYSTEMS

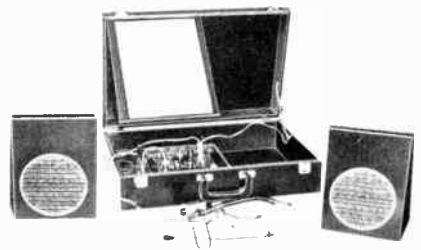
They can be set up in seconds and are complete with microphone, speakers, transistorized amplifier and lectern. Each is a perfect portable PA for sales meetings, speeches, church functions, square dances . . . anywhere you need "instant" sound.

MODEL FL-27 27 WATTS - DUAL SPEAKERS

Distinctively styled attaché case finished in black non-scuffing vinyl. System contains powerful 27 watt amplifier, two separate 8" speakers in their own enclosures (each with 25' cable) and high impedance crystal microphone with chest harness. Two separate speakers provide greater coverage. System has phono input for use with phonograph, tape recorder or radio tuner for dances, entertainment, etc. Power Output: 27 W at 1 kc at less than 10% distortion. Frequency Response: 100 cycles -10 kc. 3 db down. Inputs: (1) microphone, (1) auxiliary (phono, tape, pre-amp or radio tuner). Gain: microphone 100 db; phono 70 db. Input Sensitivity: X-tal microphone: 3 millivolts for full output. Auxiliary: 0.5 volts for full output. Hum and Noise: 70 db below full output. Tone Control: Max. treble position 10 db down at 4 K.C., 3 db down at 1.5 K.C. Speaker: (2) 8" — 8 ohm — 3.16 oz. magnet — each speaker supplied with 25' of extension cord. Microphone crystal, high impedance — neckband type with small gooseneck for close talking. 20 ft. of cable. Controls: (4) (1 mic. volume; (1) aux. volume; (1) power "on-off-external" switch; (1) tone control. Transistors: (5), (2) 2N408; (3) 2N669. Cable Connectors: Microphone plug, Amphenol #91-MC4M (supplied) auxiliary—RCA type phono plug (Cinch-Jones #13A). Average Current Drain: 0.5 Amps at 12.6 V. Batteries: (2) 6.0 volt Eveready #731 or equivalent (not supplied). Case: Portable wooden case with adj. lectern stand. Dimensions: 20½" W., x 5¾" H. x 12¾" D. Shipping Wt.: 19 lbs. Color: Black vinyl. \$112.50

Accessories Model PS-2: 117 V AC power supply. To eliminate need for batteries. \$37.50

Model RMC — remote volume control for microphone. \$10.50

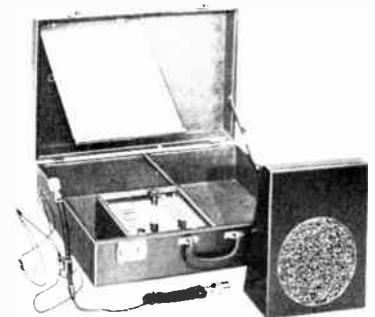


12 WATTS - SINGLE SPEAKER MODEL FL-12

Handsomely styled attaché case in rich ginger brown non-scuffing vinyl equipped with a single 8" speaker in matching enclosure with 25' of extension cord. System is complete with transistorized 12 watt amplifier, high impedance microphone, chest harness and lectern. Case will accommodate an additional 8" speaker enclosure. Power Output: 12W at 1 K.C. at less than 10% distortion. Input Sensitivity: X-tal microphone 3 mv. for full output. Hum and Noise: 70 db below full output. Tone Control: Max. treble position: 10 db down at 4 K.C., 3 db down at 1.5 K.C. Speaker: 8" — 8 ohm — 3.16 oz. magnet. Microphone: crystal, high impedance — neckband type with small gooseneck for close talking. 20 ft. cable. Transistors: (5) (2) 2N408; (2) 3577 (RCA). Cable Connectors: microphone plug, (not supplied). Auxiliary—RCA type phono plug (Cinch-Jones #13A). Average Current Drain: 0.5 amp. av. Batteries: (2) 6.0 volt Eveready #731 or equivalent (not supplied). Case: Portable wooden case with adj. lectern stand. Dimensions: 20½" W., 5¾" H., 12¾" D. Shipping Wt.: 15 lbs. Color: Ginger Brown Vinyl. Note: Equipment supplied without batteries. List: \$154.95

Accessories Model PS-2: 117 V AC power supply to eliminate need for batteries. \$37.50

Model RMC — Remote volume control for microphone. \$10.50



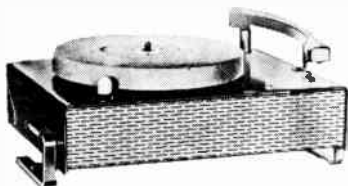
MODEL FL-8 - ADDITIONAL LOUDSPEAKER

Companion 8" speaker and enclosure with 25' of connecting cable for speaker unit in Model FL-12 system. 8¾" x 11¾" x 4" in matching ginger brown vinyl. Nests with other speaker in case. \$10.50

REFER TO CATALOG NO. 3 FOR COMPLETE SPECIFICATIONS ON PA AMPLIFIERS & SYSTEMS

FANON-MASCO

PA ACCESSORIES AND ELECTRONIC SPECIALTIES



Model 3600 PHONO TURNTABLE

Phonograph attachment that may be used with all "33" series AC amplifiers. Easily mounts on top of amplifiers with 2 thumb screws or can be used separately. Four speed motor. Quality ceramic cartridge with dual stylus. 12" x 9 1/4" x 4 1/2". Ship wt.: 10 lbs. **\$27.00**

Model 3612 PHONO TURNTABLE (12 volt)

Same as above but with 3 speed 12 volt motor for use with 3512, 3527 & 3535AD. **\$34.50**

Model 3604 AUTOMATIC 4 SPEED CHANGER

BSR changer with base for use with "33" series PA amplifiers. **\$37.50**



MODEL PHA-3 TRANSISTORIZED TELEPHONE AMPLIFIER with EXTENSION SPEAKER

Frees hands while telephoning and fills room with sound for conferences. 3 transistors. Uses one 9 v. battery included. 10" x 4 1/2" x 3". Ship wt. 4 lbs. **\$11.95**



Model S2

PORTABLE PA SYSTEM CASE (Dual speakers)

Handsome split carrying case with two 12" speakers, each with 25' connecting cable. Accommodates FANON amplifier models 3320, 3335, 3345 plus the model 3600 turntable. Durable fashion fabric covering. Size: 31" x 15" x 15". **\$50.95**



Model S1

PORTABLE PA SYSTEM CASE (Single speaker)

Durable, compact carrying case with one 12" speaker and 25' connecting cable. Accommodates FANON model 3310 or 3320 amplifiers and 3600 turntable. Durable fabric. 23" x 15" x 15". **\$29.95**

Refer to Catalog No. 4
for Complete Specifications on
CB Transceivers.



FANON MEGAVOX MODEL MV-8 Transistorized Megaphone

Fully portable lightweight megaphone with 600 yard range. Indispensable for police, fire, CD, industry communication. Lightweight aluminum, baked enamel finish, waterproof microphone, carrying strap. No connecting cables or power supply required. Pistol grip trigger and volume control.

Power Output: 5 watts-10 watts peak. **Amplifier:** Five transistors including 2 RCA 3577 in push-pull class B. **Current:** Eight 1 1/2 V flashlight batteries "C" size with life of 10 hours continuous average. **Weight:** 4.6 lbs. **Size:** 9" x 14". **\$67.50**



MEGAVOX MODEL MV-1

Popular and compact, this megaphone has range of approx. 300 yds. Powered by 4 "D" size flashlight cells. Separate "low" and "high" volume switches. Over 6 hours continuous operation. **Weight:** 3 1/4 lbs. **Size:** 6 1/2" x 12 1/2". **\$26.95**

PRIVATE AUTOMATIC EXCHANGE SYSTEMS



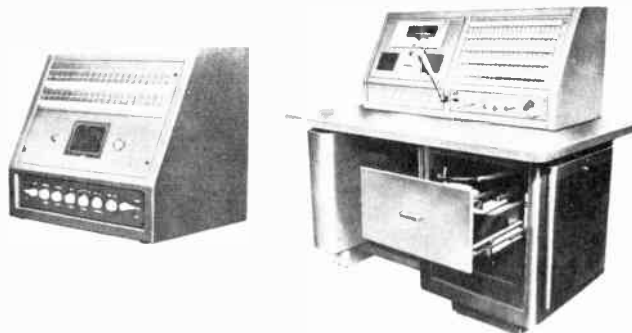
Designed to suit any phone application from 10 to a thousand. Standard equipment available from 16 to 50 line boards. More extensive equipment can be provided by our engineering division. Each has selective ringing, private talking, dial and busy tones, automatic ring and ring back and instantaneous ring cut off. Optional: executive priority, secretarial extensions, conference and paging, dictation, code call, etc. Only two wires required between telephones and switchboard.

| | |
|---------------|--|
| Model FAS-162 | Switchboard—16 line capacity—2 trunks |
| Model FAS-304 | Switchboard—30 line capacity—4 trunks |
| Model FAS-506 | Switchboard—50 line capacity—6 trunks |
| Model FA-42 | Modern styled desk type automatic dial phone |
| Model FA-42P | Same as FA-42 with priority button |
| Model FA-43 | Modern wall mount automatic dial phone |
| Model FA-43P | Same as FA-43 with priority button |

WRITE FOR COMPLETE SPECIFICATIONS AND PRICES

Prices shown are Dealer Net. Add 5% West of the Rockies. For complete details on speakers, microphones, stands, drivers, baffles, etc., write to the factory.

CENTRAL CONTROL SOUND, INTERCOM AND PROGRAM DISTRIBUTION EQUIPMENT.



Complete systems for the distribution programming controlled intercommunications. **27 Watt systems for 10, 20, 30, 40 Stations.** Individual selection of all stations and separate volume control for incoming intercommunication. **100 Watt systems for 20, 40, 60 and 80 stations.** Complete selectivity. All Call facility. Optional: Class session timer with signal as well as remote low impedance mike source.

27 WATTS

| |
|--------------------|
| SC-10 (10 station) |
| SC-20 (20 station) |
| SC-30 (30 station) |
| SC-40 (40 station) |

100 WATTS

| |
|---------------------|
| SCD-20 (20 station) |
| SCD-40 (40 station) |
| SCD-60 (60 station) |
| SCD-80 (80 station) |

WRITE FOR CATALOG #3600 FOR COMPLETE INFORMATION AND QUOTATIONS

FANON ELECTRONIC INDUSTRIES, INC NEWARK NEW JERSEY
Warehouses in Los Angeles, San Francisco, Seattle and Toronto

FISHER

WORLD'S FINEST STEREO
HIGH FIDELITY COMPONENTS

FISHER Stereo Receivers



THE FISHER 800-B

65-Watt AM-FM Stereo Multiplex Receiver. STEREO BEAM instantly identifies stereo broadcasts. In Walnut, Model 30-UW, or Mahogany cabinets, Model 30-UM. Size: 17 1/2" wide, 5 3/4" high, 13 1/2" deep. Weight: 33 pounds \$429.50



THE FISHER 500-B

65-Watt FM Stereo Multiplex Receiver. STEREO BEAM. In Walnut, Model 30-UW, or Mahogany cabinets, Model 30-UM. Size: 17 1/2" wide, 5 3/4" high, 13 1/2" deep. Weight: 31 pounds \$359.50

FISHER Loudspeaker Systems

Available in Walnut, Cherry, Mahogany or Unstained Birch

THE FISHER XP-4A

Size: 14" wide, 24 1/2" high, 12" deep. Weight: 50 pounds. XP4A Walnut, Cherry or Mahogany \$199.50 XP4A Unstained Birch \$189.50

THE FISHER XP-1A

Size: 24" wide, 13 1/4" high, 11 3/4" deep. Weight: 40 pounds. XP1A Walnut, Cherry or Mahogany \$129.50 XP1A Unstained Birch \$124.50

THE FISHER XP-2A

Size: 22" wide, 12" high, 11 3/4" deep. Weight: 30 pounds. XP2A Walnut, Cherry or Mahogany \$34.50 XP2A Unstained Birch \$29.50

THE FISHER WS-1 WIDE-SURROUND® SPEAKER SYSTEM

Can be attached to any speaker terminals. \$49.50 (pr)

FISHER PREAMPLIFIER PR-6

Self-Powered \$12.95

FISHER REMOTE CONTROL RK-1

Remote Stereo control, for use with FISHER 400 CX, X-1000. With 30-ft. cable. \$17.95

FISHER Wide-Band FM-Stereo-Multiplex Tuners



NEW! THE FISHER R-200 FM-AM Multiplex Tuner

Exclusive STEREO BEACON automatically indicates FM-Stereo-Multiplex and automatically switches to stereo. Walnut Cabinet, Model 10-UW. Mahogany, Model 10-UM, or Metal Cabinet in simulated leather, Model MC-2. Size: 15 1/8" wide, 4-13/16" high, 12 3/4" deep. Wt: 20 pounds. \$299.50

THE FISHER FM-1000

Features STEREO BEACON. Cabinets in Walnut, Model 20-UW, or Metal cabinet in simulated leather, Model TA-10. Size: 16-15/16" wide, 4-13/16" high, 12 1/2" deep. Weight: 20 pounds \$429.50

THE FISHER FMR-1

Network Relay FM-Multiplex Tuner Rack Mounted \$439.50

THE FISHER FM-200-B

STEREO BEACON. Size: 15 1/8" wide, 4-13/16" high, 13" deep. Weight: 19 pounds. \$299.50

THE FISHER FM-100-B

STEREO BEACON. Size: 15 1/8" wide, 4-13/16" high, 13" deep. Weight: 18 pounds. \$249.50

THE FISHER KM-61

STEREO BEAM, instantly identifies stereo broadcasts. Size: 15 1/8" wide, 4-13/16" high, 13" deep. Weight: 18 pounds \$219.50

THE FISHER FM-50-B

STEREO BEAM. Size: 15 1/8" wide, 4-13/16" high, 11 7/8" deep. Wt: 14 pounds. \$199.50

Cabinets for the FISHER FM-200-B, FM-100-B, KM-61 and FM-100-B are available in Walnut, Model 10-UW, Mahogany, Model 10-UM, or Metal Cabinets in simulated leather, Model MC-2.

FISHER SPACEEXPANDER K-10

Reverberation, Plays Stereo or Mono. \$69.50

THE FISHER STRATAKITS

EASIEST TO BUILD! No technical skill is required to build any FISHER STRATAKIT. Each easy, error-proof stage (STRATA) corresponds to a specific illustrated page in the Instruction Manual and to a separate transparent, clearly identified packet of parts. Large, three-dimensional diagrams guide the builder every step of the way.

THE FISHER KM-60

FM-Stereo-Multiplex STEREO BEAM \$169.50

FISHER Stereo Master Control Amplifiers

NEW! The FISHER Hinged Control Cover



THE FISHER X-101-C

56 Watts. In Walnut, Model 10-UW, Mahogany Model 10-UM, or Metal Cabinet in simulated leather, Model MC-2 \$199.50



Open View of the X-101-C

Frequently-used controls are in full view, for instant use. The occasionally-used controls are concealed behind the Hinged Control Cover. The FISHER X-101-C has a full complement of controls, including tape record and monitor, inputs for 2 phonos, and jacks for the FISHER Spaceexpander®.

THE FISHER X-1000

110 Watts. Size: 16-15/16" wide, 4-13/16" high, 13 3/4" deep. Weight: 44 pounds. \$339.50

THE FISHER X-202-B

80 Watts. Size: 15 1/8" wide, 4-13/16" high, 12 1/2" deep. Weight: 25 pounds \$249.50

THE FISHER X-100-B

50 Watts. Size: 15 1/8" wide, 4-13/16" high, 11 7/8" deep. Weight: 22 pounds \$159.50

All FISHER Stereo Master Control Amplifier cabinets are available in Walnut, Model 10-UW, Mahogany, Model 10-UM or Metal Cabinet in simulated leather, Model MC-2.

THE FISHER 400-CX

Stereo Master Audio Control \$199.50

THE FISHER KX-200

80-Watt Stereo Master Control Amplifier \$169.50

THE FISHER KX-100

50-Watt Stereo Master Control Amplifier \$129.50

THE FISHER KS-1

Slim-Line Loudspeaker System.
Unfinished Birch \$59.50
Unfinished Walnut \$64.50
Finished Birch \$84.50
Finished Walnut \$89.50

WRITE TODAY FOR COMPLETE TECHNICAL SPECIFICATIONS

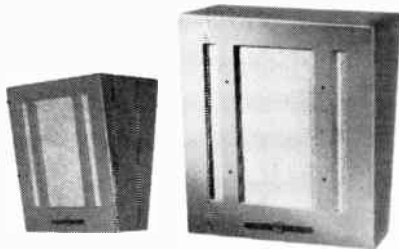
FISHER RADIO CORPORATION • LONG ISLAND CITY 1, N.Y.

Prices Slightly Higher in the Far West. Export: Fisher Radio International, Inc., Long Island City 1, N.Y. Canada: Tri-Tel Associates, Ltd., Willowdale, Ontario

STROMBERG-CARLSON®

SOUND EQUIPMENT

SIGNET SPEAKER HOUSINGS



MODELS RH-34 and RH-54. Rugged tilt-type wall mounting cabinets in Desert Sand finish. RH-34 designed for 8" speaker. RH-54 designed for 12" speaker. RH-34 easily converts to two-way use by addition of RA-8 Back Panel.
LIST PRICE: RH-34 \$12.00
RH-54 \$19.50

DRIVERS



Model RD-95. INPUT CAPACITY: 30 watts. FREQUENCY RANGE: 150-10,000 cps. VOICE COIL: 16 ohms. Built-in transformer.

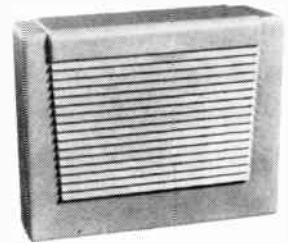
LIST PRICE: \$41.00

Model RD-94. INPUT CAPACITY: 40 watts. FREQUENCY RANGE: 140-11,000 cps. VOICE COIL: 16 ohms.

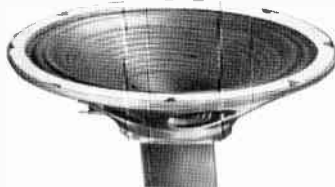
LIST PRICE: \$40.00

Model RD-93. INPUT CAPACITY: 30 watts. FREQUENCY RANGE: 150-10,000 cps. VOICE COIL: 16 ohms.

LIST PRICE: \$31.00



MODEL RH-28D. Modern plastic housing for 8" cone speakers. Molded in solid Desert Sand color. Will withstand extreme abuse without breakage. Designed with sloping front and horizontal louvers. Bracket available for wall mounting.
LIST PRICE: \$10.00



MODEL RC-27 8" PERMANENT MAGNET SPEAKER



MODEL RC-58 12" PERMANENT MAGNET SPEAKER

Both speakers employ high-efficiency Alnico V magnets, aluminum voice coil forms and one-piece ribbed molded diaphragm cones. Model RC-27: FREQUENCY RESPONSE: 55-13,000 cps; POWER RATING: 10 watts (program); CONE RESONANCE: 105 cps; FLUX DENSITY: 8,000 gauss; VOICE COIL IMPEDANCE: 8 ohms; SENSITIVITY: 88 db; SIZE: 8 $\frac{1}{8}$ " dia., 3 $\frac{1}{2}$ " deep; WEIGHT: 2 lbs.

LIST PRICE: \$8.00

Model RC-58: FREQUENCY RESPONSE: 55-13,000 cps; POWER RATING: 16 watts (program); CONE RESONANCE: 80 cps; FLUX DENSITY: 8,500 gauss; VOICE COIL IMPEDANCE: 8 ohms; SENSITIVITY: 85 db; SIZE: 12 $\frac{1}{8}$ " dia., 4 $\frac{3}{4}$ " deep; WEIGHT: 2 $\frac{1}{2}$ lbs.

LIST PRICE: \$14.00



SIGNET RE-ENTRANT HORNS

The Signet Line includes models of various sizes, distribution angles and low-frequency cutoffs.

Model RP-48. 9 $\frac{1}{4}$ " x 18 $\frac{1}{2}$ " mouth (less driver). **LIST PRICE: \$40.25**

Model RP-27. Bell 15 $\frac{1}{2}$ ", Length 12 $\frac{1}{8}$ " (less driver). **LIST PRICE: \$28.88**

Model RP-34. Bell 20", Length 16 $\frac{1}{4}$ " (less driver). **LIST PRICE: \$34.13**

Model RP-40. Bell 24 $\frac{3}{4}$ ", Length 19 $\frac{1}{2}$ " (less driver). **LIST PRICE: \$47.00**

Model RP-44. Bell 25 $\frac{1}{2}$ ", Length 19" (less driver). **LIST PRICE: \$46.73**

Model RP-97. 21" diameter, 17" deep (less driver). **LIST PRICE: \$34.00**



COMPLETE RE-ENTRANT SPEAKERS

MODEL RPD-61 RE-ENTRANT PROJECTOR. For general purpose use, indoor or outdoor. Rugged, with removable driver and excellent voice reproduction.

LIST PRICE: \$36.50

Small re-entrant speakers ideal for paging & intercommunication under adverse weather and noise conditions.



MODEL RPD-91 PAGING SPEAKER. Attractive styling and unusually rugged. Excellent intelligibility. Replaceable driver, unique swivel mount.

LIST PRICE: \$30.00

| Model | Size | EIA Pressure Rating | Power Handling Capacity | Voice Coil impedance | Frequency Response | Distribution Angle | Mounting | Weight | Finish |
|--------|---|---------------------|-------------------------|----------------------|--------------------|--------------------|-----------------------|----------------------|----------|
| RPD-61 | 9 $\frac{7}{8}$ " diameter x 8 $\frac{3}{4}$ " deep | 56 db | 30 watts program | 8 ohms | 250-13,000 cps | 90° | Universal "U" bracket | 5 $\frac{1}{2}$ lbs. | Mesa Tan |
| RPD-91 | 9" H x 6" W x 9 $\frac{1}{2}$ " D | 58 db | 15 watts program | 8 ohms | 350-13,000 cps | 120° | Universal Swivel | 4 $\frac{1}{2}$ lbs. | Mesa Tan |

GENERAL DYNAMICS

GENERAL DYNAMICS | ELECTRONICS — ROCHESTER

In modern package sound . . . THERE IS NOTHING FINER THAN A STROMBERG-CARLSON®

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

STROMBERG-CARLSON®

SOUND EQUIPMENT

SIGNET AMPLIFIERS

Audio perfection depends on careful selection of the right amplifier for the specific job. The wide selection, plus unsurpassed flexibility, quality, dependability and economy of Signet Amplifiers, assures the finest in audio.



SIGNET/10

(illustrated with optional SAC-10 top cover)
POWER OUTPUT: Rated 10 watts. **RESPONSE:** 30 to 20,000 cps \pm 2 db. **REGULATION:** 3.0 db at 1 kc. **INPUTS:** 1 microphone, 1 phono-radio. **GAIN:** 115 db microphone, 77 db phono-radio. **INPUT SENSITIVITY:** Microphone 8 millivolts for rated output. Phono-radio 0.4 volts for rated output. **HUM AND NOISE:** Fundamental—75 db, microphone—50 db, phono-radio—75 db. **TONE CONTROL:** Continuously variable, provides 18 db attenuation at 10 kc. **OUTPUT IMPEDANCES:** 4, 8 ohms, 25 volt line. **POWER CONSUMPTION:** 60 watts at 120 volts, 60 cps. **TUBES:** 1-6AV6, 1-6AU6, 1-6L6GB, 1-5Y3GT. **SHIPPING WEIGHT:** 12 lbs. 8 oz. **DIMENSIONS:** 11 $\frac{1}{4}$ " W, 8" D, 6" H.

SAC-10 top cover for Signet/10 **LIST PRICE: \$61.50**
 (without top cover)

LIST PRICE: \$6.50



SIGNET/22

POWER OUTPUT: Rated 22 watts. **RESPONSE:** 30 to 20,000 cps \pm 2 db. **REGULATION:** 3.0 db at 1 kc. **INPUTS:** 2 microphone (2 meg. input impedance), 1 phono-radio (0.5 meg. input impedance). **GAIN:** 122.5 db microphone, 80 db phono-radio. **INPUT SENSITIVITY:** Microphone 7 millivolts for rated output. Phono-radio 0.35 volts for rated output. **HUM AND NOISE:** Fundamental—75 db, microphone—55 db, phono-radio—70 db. **TONE CONTROL:** Continuously variable, provides 15 db attenuation at 10 kc. **OUTPUT IMPEDANCES:** 4, 8, 16 ohms, 70 volt line. **POWER CONSUMPTION:** 75 watts at 120 volts, 60 cps. **TUBES:** 1-7025, 1-12AX7/ECC83, 2-6BQ5/EL84, 1-5Y3GT. **SHIPPING WEIGHT:** 13 lbs. 8 oz. **DIMENSIONS:** 11 $\frac{1}{4}$ " W, 8" D, 6" H.

LIST PRICE: \$90.00



SIGNET/33

POWER OUTPUT: Rated 33 watts. **RESPONSE:** 30 to 20,000 cps \pm 2 db. **REGULATION:** 2.5 db at 1 kc. **INPUTS:** 2 microphone (2 meg. input impedance); 1 phono-radio (0.5 meg. input impedance). **GAIN:** 122.5 db microphone, 80 db phono-radio. **INPUT SENSITIVITY:** Microphone 7 millivolts for rated output; Phono-radio 0.35 volts for rated output. **HUM AND NOISE:** Fundamental—75 db, microphone—55 db, phono-radio—70 db. **TONE CONTROL:** Separate continuously variable bass and treble controls. Bass control: 13 db boost at 50 cps; 15 db cut at 50 cps. Treble control: 13 db boost at 10 kc.; 18 db cut at 10 kc. **OUTPUT IMPEDANCES:** 4, 8, 16 ohms, 70 volt line. **POWER CONSUMPTION:** 120 watts at 120 volts, 60 cps. **TUBES:** 1-7025, 1-12AX7, 1-6U8, 2-6L6GB, 1-5U4GB. **SHIPPING WEIGHT:** 24 lbs. **DIMENSIONS:** 16 $\frac{1}{2}$ " W, 13" D, 8" H.

LIST PRICE: \$110.00



SIGNET/70

POWER OUTPUT: Rated 70 watts. **RESPONSE:** 20 to 20,000 cps \pm 2 db. **REGULATION:** 3 db at 1 kc. **INPUTS:** 2 microphones (2 meg. input impedance), 1 phono-radio (0.5 meg. input impedance). **GAIN:** 127.6 db microphone, 85.9 db phono-radio. **INPUT SENSITIVITY:** Microphone 6 millivolts for rated output. Phono-radio 0.35 volts for rated output. **HUM AND NOISE:** Fundamental—75 db, microphone—55 db, phono-radio—70 db. **TONE CONTROL:** Separate continuously variable bass and treble controls. Bass Control: 15 db boost at 50 cps; 14 db cut at 50 cps. Treble Control: 13 db boost at 10 kc; 15 db cut at 10 kc. **OUTPUT IMPEDANCES:** 4, 8, 16 ohms, 70 volt line. **POWER CONSUMPTION:** 180 watts at 120 volts, 60 cps. **TUBES:** 1-7025, 1-12AX7, 1-6U8, 2-6550, 1-5U4GB, 1-5Y3GT. **SHIPPING WEIGHT:** 31 lbs. **DIMENSIONS:** 16 $\frac{1}{2}$ " W, 10" D, 8" H.

LIST PRICE: \$170.00



MODEL SPC-12 PORTABLE CASE

Includes 2 high-quality 12" speakers in split portable baffles which double as a carrying case for amplifier. Mounts Signet "22" or "33". Includes 25 feet of cable for each speaker. 18" W x 24 $\frac{1}{2}$ " H x 11 $\frac{1}{2}$ " D.

LIST PRICE: \$84.00



SIGNET/88 TRANSISTOR MOBILE

POWER OUTPUT: 8 watts, less than 5% distortion. **RESPONSE:** 100 to 10,000 cps \pm 3 db. **INPUTS:** 1 microphone, medium impedance (150-600 ohms); 1 phono, high impedance (500,000 ohms). **GAIN:** 97 db. **NOISE LEVEL:** 65 db below rated output. **CONTROLS:** On-off Switch, microphone-phono selector switch, gain control. **OUTPUT IMPEDANCES:** 4, 8, 16 ohms. **POWER SUPPLY:** 12 volts car battery or dry battery pack, current drain 0.15 amperes standby, 0.3 amperes speech, 0.5 amperes music. Power leads, 3 feet, identified for polarity; positive lead has in-line fuse. **TRANSISTORS:** 1-2N214, 2-2N226, 2-2N257. **MOUNTING:** "L" brackets furnished for fastening to bulkheads. **WEIGHT:** 3 lbs. **DIMENSIONS:** 6 $\frac{1}{2}$ " W, 4 $\frac{1}{8}$ " F, 3 $\frac{1}{8}$ " D.

LIST PRICE: \$112.00

GENERAL DYNAMICS

GENERAL DYNAMICS | ELECTRONICS — ROCHESTER

In modern package sound . . . THERE IS NOTHING FINER THAN A STROMBERG-CARLSON®

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STROMBERG-CARLSON®

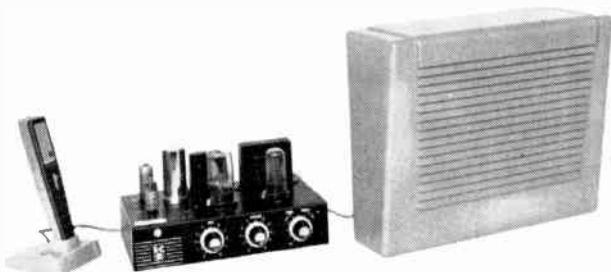
SOUND EQUIPMENT

SIGNET SOUND

NEW, LOW-COST, COMPLETE . . . THE MOST FLEXIBLE
Signet Sound Equipment is designed and engineered to provide economical sound reinforcement for many simplified applications in business and industry. These systems are complete, ready-to-use packages that offer tremendous flexibility, easy installation, and excellent fidelity.

SIGNET COMPONENT ASSEMBLIES

A FEW OF THE MANY POSSIBLE SYSTEMS:



SIGNET/10 ASSEMBLY

Budget-priced package for many applications. A few examples: restaurants, stores, meeting rooms, taverns, offices, warehouses. Unbeatable in its price range.

TYPICAL INDOOR SYSTEM:

- Signet /10 Ten-Watt Amplifier **LIST PRICE: \$61.50**
without top cover
- SMC-75S High Impedance Microphone **LIST PRICE: \$20.00**
- RH-28D Speaker Housing **LIST PRICE: \$10.00**
- RC-27* 8" Speaker **LIST PRICE: \$ 8.00**

*Four speakers may be used without line-matching transformers; up to 20 speakers with line-matching transformers.



SIGNET/22 ASSEMBLY

A perfect matching of high-quality components for any number of applications. A few of many possibilities include: freight docks, amusement parks, parking lots, gymnasiums, garages, bus terminals, railroad stations.

TYPICAL OUTDOOR SYSTEM:

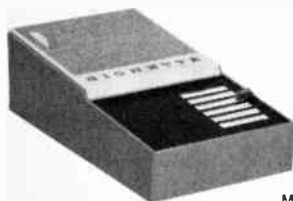
- Signet /22 Twenty-two Watt Amplifier **LIST PRICE: \$90.00**
- SMC-75S High Impedance Microphone **LIST PRICE: \$20.00**
- RPD-61* Re-entrant Speakers with removable driver units **LIST PRICE: \$36.50**

*Four speakers may be used without line-matching transformers; up to 20 with line-matching transformers.

NEW SIGNETTE

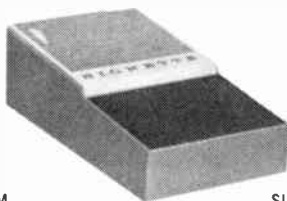
LOUDSPEAKING INTERCOM.

Transistorized economies in space and cost produce a compact and modestly priced intercom of surprising quality. Ideal in stores, professional offices, small business, restaurants and grills, garages and auto dealers. Both master and sub-station units may be used in a variety of combinations. Accessory horns may be applied for extended coverage. Transistor operation provides instant warm-up and low current consumption.



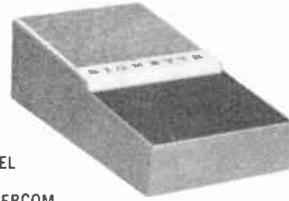
SIGNETTE MODEL
(SIC-7M)
MULTI-MASTER INTERCOM

Selects 6 stations, master-to-master, master-to-remote, or in mixed masters-and-remotes applications. Transistor amplifier, individual power supply, station selector, input volume control, talk-listen panel. **LIST PRICE: \$49.95**



SIGNETTE MODEL
(SIC-1M)
SINGLE MASTER INTERCOM

Master to remote. Transistor amplifier, individual power supply, input volume control, talk-listen panel. Handsfree reply from remote station also provided. **LIST PRICE: \$45.00**



SIGNETTE MODEL
(SIC-1R)
REMOTE INTERCOM

Remote station for use with SIC-7M or SIC-1M master stations. Built-in speaker-microphone. Talk-listen panel. Can operate as handsfree reply station. **LIST PRICE: \$14.50**

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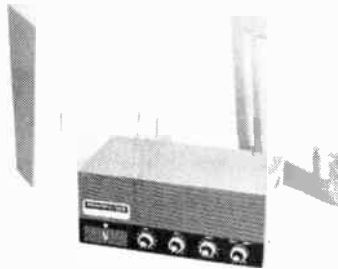
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STROMBERG-CARLSON®

SOUND EQUIPMENT

SIGNET/33 ASSEMBLY

Full fidelity performance, with superior audio reproduction. A few of many applications: industrial plants, hotels, motels, hospitals, auditoriums, field houses, churches.



Typical Indoor System:

- Signet/33 Thirty-three Watt Amplifier. **LIST PRICE: \$110.00**
- SMD-74C Dynamic Microphone. **LIST PRICE: \$32.50**
- MS-12 Floor Stand. **LIST PRICE: \$13.50**
- RH-54 Speaker Housings. **LIST PRICE: \$19.50**
- RC-58* 12" Speakers. **LIST PRICE: \$14.00**

*Four speakers may be used without line-matching transformers; up to 60 speakers with line-matching transformers.

SIGNET/70 ASSEMBLY

Practically unlimited applications, with power to spare for all situations. A few examples: stadiums, playgrounds, race tracks, athletic fields, schools, auditoriums, factories, airports.

Typical Outdoor System:

- Signet/70 Seventy-Watt Amplifier.* **LIST PRICE: \$170.00**
- MD-30C Dynamic Microphone. **LIST PRICE: \$60.00**
- RP-97 Re-entrant Horn with RD-93 Driver Units. **LIST PRICE: \$34.00 (RP-97)
\$31.00 (RD-93)**



*Handles up to 25 horns with RD-95 Driver Units with built-in line-matching transformers.

SIGNET/88 MOBILE ASSEMBLY

Truly mobile-portable package which provides superb coverage over a wide area in countless applications. For example: police, civil defense, sports events, tour guides, field days, etc. Transistor operation provides instant warm-up and low current consumption.

System Features:

- Transistorized SAM-88 8-Watt Amplifier. **LIST PRICE: \$112.00**
- SMD-61 Dynamic Microphone. **LIST PRICE: \$34.00**
- RPD-61* Re-entrant Speaker with removable driver unit. **LIST PRICE: \$36.50**



*Additional RPD-61 Speakers may be used.

MICROPHONES



MODEL SMD-61 DYNAMIC

Close-talking, medium impedance, hand-held type. Designed for clear, natural voice reproduction. Ideal for mobile or portable use. Complete with coiled cord and connector.

LIST PRICE: \$34.00



MODEL SMCC-73S CERAMIC

Small and slim. Excellent for public address and paging, and where random noise exists. Complete with desk stand and a floor adapter.

LIST PRICE: \$26.50



MODEL SMD-74C DYNAMIC

Brings advantages of dynamic microphones to P.S. field at budget price. Use indoors and out without fear of damage from rough usage, extreme temperature or humidity. Virtually maintenance free.

LIST PRICE: \$32.50

GENERAL DYNAMICS

GENERAL DYNAMICS | ELECTRONICS — ROCHESTER

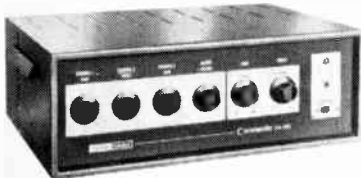
In modern package sound . . . THERE IS NOTHING FINER THAN A STROMBERG-CARLSON®

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harman kardon**COMMERCIAL SOUND DIVISION****BUILT BY SOUNDMEN FOR SOUNDMEN****COMMANDER SERIES****MODEL DA-35**
35 Watts — 4 Channels

Exceptional PA workhorse with unique input and control arrangements that provide remarkable installation and operation flexibility. Has two microphone channels, one of which incorporates a switched equalized input for magnetic phono cartridge and the other offers an alternate high sensitivity input (0.175V) for tuner, recorder or Xtal/ceramic phono. A third channel

is available for still another high level, aux. program source (0.35V sensitivity); the control for this channel useable optionally as Master Volume. An exclusive fourth "MIX" channel permits **one-knob** fading and also **blending** of a microphone with any high level source such as tuner, recorder or Xtal/ceramic phono. Two high level programs can be similarly mixed. Ideal for lectures, demonstrations, entertaining, etc. where such convenience leaves the user free to operate additional equipment simultaneously. The DA-35 is rugged and built for continuous duty; stable under all conditions. Other valuable facilities include individual cut/boost treble and bass controls; there is an output to a tape recorder, independent of tone controls; separate on/off switch to avoid upsetting controls; 4/8/16/150 ohms and 25V bal., 70V unbal. constant voltage outputs; 2 speaker sockets plus screw terminals, switched AC convenience socket; fused. Response 20-20,000 cps ± 2 db, fundamental hum and noise 80 db below rated output. Dimensions 15 $\frac{1}{4}$ "W, 6"H, 10 $\frac{3}{4}$ "D; shipping weight 23 lbs. \$119.95.

MODEL DA-100
100 Watts —
LoZ Microphone Input

No other popular price 100 watt amplifier like it! Has same input arrangements as described for DA-35, except that one of the microphone channels is equipped with a 3-pin mike receptacle (use Amphenol ± 75 -MCIF plug) for use with either high or low impedance microphones; on-

chassis socket for plug-in mike matching transformer. The output to a tape recorder is independent of both the master and tone controls. Separate master volume control is employed. Outputs are 4/8/16/50 ohms; also 25V and 70V constant voltages, both available unbalanced and balanced for greatest installation flexibility. Special circuitry prevents damage to the amplifier due to open or short-circuited loads, and performance is exceptionally stable under all operating conditions. All solid-state, full-wave voltage doubler power supply with 4 stages of filtering provides unsurpassed regulation, hum-free plate current and less heat. Response 20-20,000 cps ± 2 db; fundamental hum and noise 85db below rated output. Dimensions: 18 $\frac{1}{4}$ "W, 6"H, 11 $\frac{3}{4}$ "D; shipping weight 35 lbs. \$189.95.

Microphone input transformers for DA-100:

XT-1 30-50 ohms C. T., \$18.50 ■ XT-2 120-250 ohms C. T., \$18.50 ■ XT-3 500-600 ohms C. T., \$18.50 ■

MODEL DA-12
12 Watts — 3 Channels

An excellent and highly reliable moderate-power amplifier. One microphone input (hi Z) with gain control, plus two inputs for tuner, tape recorder, Xtal/ceramic phono operating through a "fader" control for smooth electronic switch-over. Master Volume control is provided and a 4-position filter adjusts system to best operating and acoustical conditions, including an "anti-feedback" position to help achieve max. sound output. Special high level 500 ohm output for feeding local or remote power boosters, or may be used to record. Response 30-20,000 cps ± 2 db; fundamental hum and noise 75 db below rated output. Dimensions 15 $\frac{1}{4}$ "W, 6"H, 10 $\frac{3}{4}$ "D; shipping weight 18 lbs. \$75.00.

MODEL DPR-7 Mixer-Preamp
4 Channels — 7 Inputs

A quality mixer-preamplifier worth much more than its cost. Four channels, with multiple inputs all switchable at the front panel: 1st channel mic/mag. phono, 2nd channel mic/aux, 3rd channel mic/aux, 4th channel has mic input and its control can be optionally used as Master Volume. The DPR-7 has its

own AC power supply; audio output is low impedance cathode follower permitting long line runs to the main amplifier when necessary. It can be flush mounted in a wall or panel; is also free-standing. Multi-stage filtering and DC on the tube filaments insure hum and distortion free response. The DPR-7 is the perfect instrument for expanding the number of inputs of a sound system, or for controlling several additional program sources from a remote location. It can also be used to directly drive a basic power amplifier. Dimensions: 5 $\frac{1}{2}$ "H, 11 $\frac{1}{2}$ "W, 5 $\frac{1}{2}$ "D; shipping weight 11 lbs. \$75.00.

COMMANDER ACCESSORIES

Model PT-1 Phono Top — Fits top of DA-12, DA-35, DA-100 amplifiers. Speeds: 78/45/33 $\frac{1}{3}$ /16 $\frac{1}{2}$ RPM, with special disengage position. Quality ceramic turnover cartridge. Shipping weight 8 lbs. \$37.50.

Model DBK-1 Wall Mounting Brackets — For DA-12, DA-35, DA-100 amplifiers. Once installed, no screws or tools needed to mount or remove amplifier from brackets. Shipping weight 1 $\frac{1}{2}$ lbs. \$7.25.

Model LC-1 Locking Cover For DA-12 and DA-35. Shipping weight 2 $\frac{1}{4}$ lbs. \$8.50.

Model LC-2 Locking Cover For DA-100. Shipping weight 2 $\frac{1}{2}$ lbs. \$9.00.

Model CS-1 Systems Carrying Case — Accepts DA-12 or DA-35 amplifier with or without PT-1 phono top and will mount one or two standard 12" cone speakers. Special harness for all type microphones. Sturdy; good-looking. Dimensions: 17 $\frac{3}{4}$ "W, 13 $\frac{3}{4}$ "D, 22"H. Shipping weight 21 lbs. \$42.00.

ADVANCE DESIGN, ALL-TRANSISTOR, ALL-PURPOSE TROUBADOR SERIES**MODEL TR-1**

For mobile and general purpose p.a. Exceptionally flexible — Produces full 15 watts @ 12VDC (25w @ 14VDC, 6w @ 6VDC). Unusually natural and highly articulate response. Has a channel for low or high impedance microphone (no matching transformer needed) and a channel for tuner, tape recorder or Xtal/ceramic phono. Both chan-

nels function simultaneously for complete mixing. Adapts to mag. phono cartridge or tape head with plug-in preamp module. Amplifier can be turned on and off remotely at mike or other location using optional plug-in relay. Complete electrical isolation and reverse polarity protection prevents accidental damage to amplifier. Also included: 4-position tone control filter; output to a tape recorder; D.C. convenience outlet; speaker socket and screw terminals for output connections, pilot light and individual on/off switch. Unit is free-standing and can also be flush front-mounted to panel, bulkhead, dashboard. Adjustable brackets available for universal mounting to any surface. Outputs: 4/8/16 ohms and 25V constant voltage. Response 80-15,000 cps; microphone, tape head and mag phono sensitivity less than 1 mv. Dimensions: 7"D, 9 $\frac{1}{2}$ "W, 3 $\frac{1}{2}$ "H; shipping weight 5 lbs. \$109.75.

TROUBADOR ACCESSORIES

Model TPH-1 Plug-in preamp module. Built-in equalization for RIAA mag. cartridge and NARTB 3 $\frac{3}{4}$ ips tape head. \$22.10.

Model TXR-1 Remote power relay. \$13.50.

Model TXR-2 Emergency power relay (for TR-2 only). \$14.90.

Model ACD-1 AC to DC converter, in separate housing. Connects externally to TR-1 or TR-2. \$62.50.

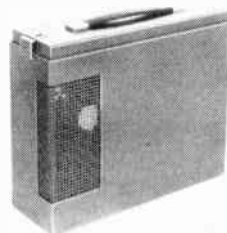
Model ACD-2 Same as ACD-1, less housing; mounts directly into TR-2 chassis. \$52.50.

Model LC-5 Carrying Cover, for TR-2. \$14.90.

MODEL TR-2

For portable and general purpose applications, the TR-2 is the most complete and versatile transistor 30 watt p.a. amplifier available. Operates from 12VDC, or from regular AC power line using the optional model ACD-2 all solid-state converter that mounts directly into the amplifier chassis. Perfect for rental work. Provides two channels for low

imp. microphones and two for high level, high imp. aux. equipment. A special relay is available that switches the TR-2 automatically to the DC source in the event of AC power failure; ideal for applications requiring uninterrupted service or use as an emergency or panic control system. Has sockets for plug-in remote on off relay and preamp module for tape head or mag. phono cartridge; individual cut/boost treble and bass controls, master volume control; protection against incorrect polarity; tape output, independent of tone and master controls; D.C. convenience outlet; speaker socket and screw terminals for output connections. A locking cover with carrying handle is available. Outputs: 4/8/16 ohms, and 25V and 70V constant voltage both unbalanced and balanced, plus output for making tape recordings. Response 30-15,000 cps; fundamental hum and noise 72db below rated output. Microphone, tape head and mag. phono sensitivity less than 1 mv. Dimensions: 11 $\frac{3}{4}$ "W, 4"H, 9 $\frac{1}{2}$ "D; shipping weight 15 lbs. \$175.00.



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COMMERCIAL SOUND DIVISION

BUILT BY SOUNDMEN FOR SOUNDMEN

GALAXY SERIES

A new concept in public address amplifiers incorporating the advantages of modularization in compact packaged equipment and resulting in the flexibility and versatility of custom sound.

MODEL 40GA-12

MODEL 75GA-12

These two professional quality yet moderately priced amplifiers are identical except for power ratings. Employing easily installed plug-in preamp modules, the number and type of channels, inputs and facilities can be tailored to precisely fit a specific application, and expanded or modified with future need without obsolescence or waste. Model 40GA-12 produces 40

watts @ 1% T.H.D. or 50 watts @ 2%; the 75GA-12 is 75 watts @ 1% and 85W @ 2%. Response 15 to 50,000 cps ± 1 db; fundamental hum and noise 90db below rated output. Both amplifiers come complete with modules 1 and 2 (described elsewhere) installed which thus provides 4 operating channels: two balanced or unbalanced high impedance for tuner, tape recorder, Xtal/ceramic phono or telephone line, and two channels for low or high imp. microphones, with input for tape head or magnetic phono cartridge. On-chassis sockets for plug-in equalizers and input transformers. Space is provided for two more modules to expand to a total of six channels. Other standard facilities included: "anti-feedback" Speech Filters; output to a recorder, independent of master and tone controls; individual cut/boost treble and bass controls; master volume control; low-cut filter (0/80/160/320 cps); monitor headset jack and volume control (on front panel); panel space for optional monitor speaker or VU meter; socket for plug-in remote on-off or standby relays; socket for remote gain control accessories; bridging connections; 2 speaker sockets, switched AC convenience outlet. Outputs: 4/8/16 ohms, and 25V, 70V constant voltages both balanced and unbalanced. Dimensions: 17¼"W, 7"H, 14½"D; shipping weight 31 lbs. for 40GA-12, 33 lbs. for 75GA-12. 40GA-12, \$224.95; 75GA-12, \$299.95.

MODEL 150GA-13

Same as 40 and 75 watt versions except that modules 1 and 3 are provided installed and further expansion of channels not possible. Rated power 150 watts @ 1% T.H.D., 200 w @ 2%. Outputs: 1 ohm (12V) and 8 ohms (35V) unbalanced, 4 ohms (25V) balanced and unbalanced, 32 ohms (70V) balanced and unbalanced. Dimensions: 17¼"W, 7"H, 14½"D; shipping weight 45 lbs. \$350.00.

BOOSTER AMPLIFIERS

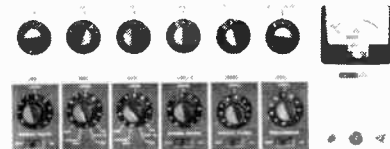
The basic power amplifiers used in the 40, 75 and 150 watt GA Series amplifiers are available as illustrated for use as booster amplifiers to expand a system, or to feed directly from any program source capable of a signal level of only 0.5 volts. Most tuners, recorders and Xtal/ceramic phono cartridges are capable of driving a Galaxy booster amplifier to full rated output. Both balanced and unbalanced inputs are provided, and a socket for plug-in 600 ohm line transformer. Standard equipment included; input level control, low-cut filter, monitor headset jack and monitor volume control, space on front panel for optional monitor speaker or VU meter, bridging in and out connections. Outputs are same as the respective GA amplifier described.

BA-40 Dimensions — 8¾"W, 7"H, 13½"D; Shpg. Wt. 24 lbs. \$137.50.
BA-75 Dimensions — 8¾"W, 7"H, 13½"D; Shpg. Wt. 27 lbs. \$174.95.
BA-150 Dimensions — 13"W, 7"H, 13½"D; Shpg. Wt. 40 lbs. \$237.50.

MODEL PR-1

Mixer-Preamp

This unit incorporates a regulated power supply and line amplifier to feed any number of master amplifiers or booster amplifiers in a central bank or at distant locations. It provides for a total of eight operating channels



(two high level, six low level) with services and facilities dependent only upon the assortment of modules installed. The PR-1 comes with Module 1 installed. The

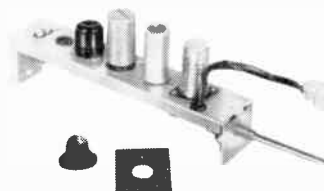
VU meter is also standard equipment. Tone controls, Master Volume, head-set monitoring, and recording facilities are included; output is 600 Ohms, balanced and unbalanced. Facilities are included for remote gain control of up to six low level channels, as well as AC power or plate voltage ("standby"). Dimensions: 17¼"W, 7"H, 14½"D; Shipping weight 17 lbs. \$162.50.

BASIC MODULE No. 1

This module is "basic" and always supplied installed on the PR-1 and all the GALAXY integrated amplifiers. It contains high level inputs for channels 1 and 2, and a high or low impedance microphone input for channel 3 with Speech Filter. Front panel level controls are provided for each of the three channels. There is an input for 600 Ohm line, sockets for plug-in line and microphone transformers, an output to a tape recorder and connection facility for remote controls. Only one of this module is used in a system.

MULTIPLE INPUT

MODULE No. 2



This module is used to provide "standard" input facilities and is also supplied installed in channel 4 on the 40GA-12 and 75GA-12 amplifiers. Separate level control is provided. It offers a choice of inputs, selected at the time of installation: microphone, tape head or magnetic phono cartridge. Sockets are provided for plug-in transformer for low impedance microphone, as well as equalizers for tape head or magnetic phono. A speech filter is included (with front panel In-Out switch), utilizing Harmon-Kardon's exclusive "anti-feedback" network. Shipping weight 2 lbs. \$25.00.

SWITCHED INPUT MODULE No. 3

This module also provides inputs for microphone, magnetic phono and tape head, but a 4-position switch on the front panel permits the selection of any of these program sources without further adjustment of chassis connections. In addition, equalization is built-in for magnetic phono, tape head 3¾" and for 7½"/15". Socket for plug-in transformer for low impedance microphone; Channel Level Control. Shipping weight 2 lbs. \$33.75.

COMPRESSOR/LIMITER MODULE No. 4

This module is used where it is desired to introduce compression and limiting action on any type of program. Complete input facilities are provided for a choice of microphone, tape head, magnetic phono, telephone line or other high level program sources such as tuner, recorder, crystal or ceramic phono. Front panel controls include the Channel Level Control and a 4-position compression switch: OFF/2:1/6:1/FULL. Shipping weight 2 lbs. \$67.50.

PRECEDENCE MODULE No. 5

This is a "precedence" module, for use in channel 6 on the amplifiers and in channel 8 on the PR-1, when desired. It permits the introduction of emergency or commercial messages and time signals, taking precedence over the normal program, remotely or by means of a front panel switch. Inputs are provided for a choice of a microphone, tape head, magnetic phono and balanced or unbalanced high level sources. Sockets are included for plug-in line and microphone transformers and equalizers. A Channel Level Control is included, as well as a variable control for adjusting the relative level of the normal program when the precedence channel is in operation. Shipping weight 2 lbs. \$49.95.

GALAXY ACCESSORIES

XT-1 Mic Input, 30-50 ohms C. T. Input Transformer, \$18.50. XT-2 Mic Input 120-250 ohms C. T. Input Transformer, \$18.50. XT-3 Mic Input, 500-600 ohms C. T. Input Transformer, \$18.50. XT-4 Line Input, 600 ohms C. T. Input Transformer, \$18.50. XR-1 Standby relay, \$8.50. XR-2 Remote on/off relay, \$8.50. XE-1 RIAA equalizer, \$3.25. XE-2 NARTB 7½/15 ips equalizer. \$2.75. XE-3 NARTB 3¾ ips equalizer, \$2.75. SP-1 Monitor Speaker, \$5.00. VU-1 VU meter, \$22.50. GC-1 Cage for 40GA-12, 75GA-12, 150GA-13, PR-1, \$22.50. GC-2 Cage for BA-40, BA-75, \$17.50. GC-3 Cage for BA-150, \$20.00. RM-1 Rack mounting brackets for 40GA-12, 75GA-12, 150GA-13, PR-1, \$7.00. LC-3 Locking cover for GC-1 cage, \$20.00. PCCOM 5382 Knob reset indicator, \$10. RG-1 Remote gain control assembly, for flush wall mounting, \$8.25. RS-1 Remote "standby" switch assembly, for flush wall mounting, \$5.60. XP-1 Remote "on-off" switch & power pack assembly, for flush wall mounting, \$20.50.

voicecaster INTERCOM

VOICECASTER "SPECIAL" 2 STATION SYSTEM VC200 SERIES

THE VC200 SERIES is a completely transistorized two-station intercom system, consisting of 1 Master Station and 1 Remote Station, with 50 feet of connecting wire. Each unit is housed in a handsome bakelite cabinet with gold metal frontplate, thus fitting in with any decor. It is unusually adaptable for office, home, store, restaurant and any other commercial or private application where ambient noise levels are moderate.



SIMPLE TO INSTALL: Just run the wire between each station and attach to connectors on back.

EASY TO USE MASTER STATION has only 2 controls. An on-off volume control switch that regulates volume at both Master and Remote and a 2 position talk/listen switch—press down to talk—up to listen. If Master Station is in "listen" position it can receive calls from remote and monitor Remote Station.

REMOTE STATION can receive and answer Master without going to unit. Can call Master if Master is in "listen" position.

ALWAYS READY: Lee All-Transistor circuit requires no "warm-up" time.

CHOICE OF POWER SUPPLY: Model VC200A can be used if A/C outlet is available. Model VC200D operates on Standard 9 Volt Battery and can be used if no A/C outlet is available.

ADDITIONAL STATIONS: Additional Remote Stations can be added so that Master can call 2 or more Remote Stations at the same time.

3 YEAR GUARANTEE against all mechanical and electrical defects.

SPECIFICATIONS MODELS VC200A AND VC200D

| | MASTER | REMOTE |
|-----------|--|--------------------|
| SIZE | 6 $\frac{1}{4}$ x 3 $\frac{3}{4}$ x 2 | Same as Master |
| CABINET | Black bakelite with gold metal frontplate | Same as Master |
| CONTROLS | 3-position talk/listen switch | |
| AMPLIFIER | 3-transistor; push-pull; class "A"; transformer coupled | |
| SPEAKER | 3 $\frac{1}{2}$ " alnico 5 magnet | Same as Master |
| TERMINALS | 2-position screw type | Same as Master |
| POWER | Model VC200A—110V AC, 60 cycle Model VC200D—9V Eveready #216, or equal (under normal use, battery will operate system for approximately 3 months) | |
| | Model VC200A System, 1 Master, 1 Remote with 50' connecting wire. | List Price \$27.50 |
| | Model VC200D System Battery operated. | List Price 27.50 |
| | Wall mounting brackets each. | List Price 1.25 |
| | Extra Remote Model VC100P. | List Price 8.00 |
| | Extra Remote Model VC100W. | List Price 10.00 |
| | Extra Connecting wire per C'. | List Price 6.00 |

VOICECASTER "DELUXE" 2 STATION SYSTEM VC202 SERIES

A complete 2 station intercom system consisting of a Master and Remote Station with 50' of connecting wire. Provides natural voice reproduction with startling tone fidelity. Featuring the most modern reliable means of communication usually found only in systems selling for many times its cost. Housed in walnut finished wooden cabinets, modernly styled to blend into decor of every type of business office, home, institution and factory. 2 Models are available to meet the requirements of every situation. Model VC202A for use where an AC outlet is available at Master Station location and Model VC202D which operates on a standard 9 Volt Battery for use where no AC outlet is available.



FINGERTIP CONTROL: Talk as you would face to face. Establish instant voice contact by mere pressure of key. Master Station has only 2 controls. An on-off volume control switch and a 3 position talk/listen switch. Press to talk—release to listen.

STANDBY POSITION insures privacy. No one can "listen-in."

MONITORING: Master can monitor Remote Station by leaving switch in "listen" position.

INCOMING CALL INDICATOR: When Remote calls Master audible signal sounds and indicator light flashes.

REMOTE STATION: Model 102W can receive and answer Master calls without touching station. Can call Master by operating calling switch. Additional Remote Stations can be added permitting Master to call all Remotes at same time. Remotes cannot call each other. Remote Privacy switch position can be used to prevent Master from monitoring.

SIMPLE TO INSTALL: Just run the wire to each station and attach to connectors on back of each station.

ALWAYS READY FOR USE: No "warm-up" time necessary, both models are transistor powered.

5 YEAR GUARANTEE against all mechanical and electrical defects.

SPECIFICATIONS MODELS VC202A AND VC202D

| | MASTER | REMOTE |
|-----------|--|--------------------------------|
| SIZE | 8 x 4 x 4 | Same as Master |
| CABINET | Wood, walnut finish with gold and black metal front | Same as Master |
| CONTROLS | 3-position spring return talk/listen switch | 3-position privacy/call switch |
| AMPLIFIER | 4-transistor; push-pull; Class "A"; transformer coupled | |
| SPEAKER | 3 $\frac{1}{2}$ " alnico 5 magnet | Same as Master |
| TERMINALS | 3-position screw type | Same as Master |
| POWER | Model VC202A—110V AC, 60 cycle Model VC202D—9V Eveready #216, or equal (under normal use, battery will operate system for approximately 3 months) | |
| | Model VC202A System, AC powered, 1 Master Station, 1 Remote Station 50' of connecting wire ready for use. | List Price \$42.50 |
| | VC202D System, Battery powered, 1 Master, 1 Remote Station 50' connecting wire. | List Price 39.95 |
| | Wall mounting brackets each. | List Price 1.25 |
| | Extra Wire per 100' Coil. | List Price 8.00 |
| | Additional Remote Model 102W. | List Price 14.00 |

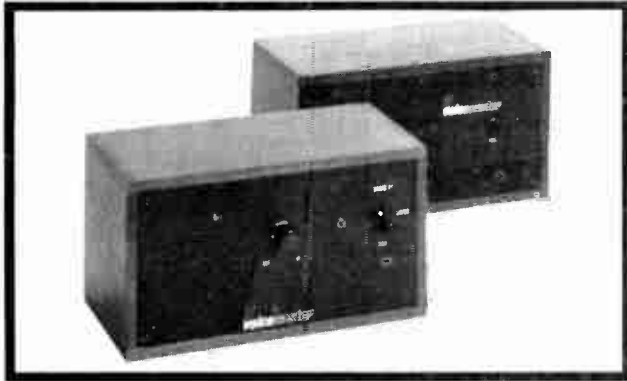
Manufactured by LEE COMMUNICATIONS, INC., New York, N. Y.

voicecaster INTERCOM

"WIRELESS" 2 STATION SYSTEM

MODEL VC210W

A High Quality, Low Cost WIRELESS (Carrier Current) intercom system that provides reliable two-way communication. Especially adaptable where permanent or wired installations may not be practical.



NO INSTALLATION: Simply plug-in at the nearest electric outlet. Place the other unit wherever you wish. **NO WIRES OR CABLING NECESSARY.**

EASY TO USE: Press key to talk, release to listen.

ALWAYS READY: Transistor operation requires no "warm-up" time.

PORTABLE: Can be moved in seconds anywhere in office and home. Weighs less than 3 lbs.

ADDITIONAL STATIONS: Party-Line System can be had by adding additional stations. All stations will receive message originated at any point. (All units must be on same side of electric company transformer.)

ADJUSTABLE VOLUME CONTROL with A/C on and off switch provides efficient reception.

MONITORING KEY POSITION permits use for "listening-in" on conferences, as "baby-sitter," keeping an ear on invalids at home and other monitoring applications.

LOW POWER CONSUMPTION: Less than 1 watt drain.

5 YEAR GUARANTEE against all mechanical and electrical defects.

SPECIFICATIONS MODEL VC210W

| | |
|-----------|--|
| SIZE | 8 x 4 x 4 |
| CABINET | Wood, walnut finish with gold and black metal frontplate |
| CONTROLS | 3-position spring return talk/listen switch with monitor position volume control/on-off switch |
| AMPLIFIER | 4 transistors; 1 diode; RF coil peaked at 200KC; push-pull; class "A"; transformer coupled |
| SPEAKER | 3½" alnico 5 magnet |
| POWER | 110V AC, 60 cycle |

| | | |
|-------------------------------------|------------|---------|
| Model VC210W, 2 Stations Complete. | List Price | \$67.50 |
| Model VC210W-1, Additional Station. | List Price | 38.75 |
| Wall mounting brackets each. | List Price | 1.25 |

"ALL PURPOSE" MASTER STATIONS

MODEL VC500 5 CALL MASTER

MODEL VC1000 10 CALL MASTER

"All Purpose" Circuit provides a service to meet all types of communication problems.

1. Systems of up to 6 and 11 Master Stations with each station calling and receiving calls from every other station. Privacy circuit prevents any station listening in on existing conversation.
2. Systems of One 5 Call Master or One 10 Call Master calling and receiving calls from Remote Stations. (See types of Remote Stations available below.) Remotes cannot call each other.
3. Systems combining the use of both Master and Remote Stations. Masters can call and be called by other Masters. Any Master can call or be called by any number of Remotes. Remotes cannot talk to each other.



You can start with any combination and add either Master Stations or Remote Stations at any future time.

MODERNLY DESIGNED: Beautiful walnut finished wood cabinets fit in with any decor.

EASY TO USE: Individual selector keys to each station. **PRIVATE:** All incoming calls announced by audible signal and light.

SECRET: No one can listen in to existing conversation. **PRIVACY SWITCH** position prevents anyone from "listening-in."

ALWAYS READY: Transistor operation requires no "warm-up" time.

100% TRUNKAGE: As many conversations may be carried on at the same time as there are pairs of instruments. 6 Masters 3 conversations, etc.

INDICATOR LIGHT: Translucent bulb indicates when station is in "on" position.

5 YEAR GUARANTEE against all mechanical and electrical defects.

SPECIFICATIONS MODELS VC500 and VC1000

| | |
|-------------|--|
| SIZE | 8 x 4 x 4 |
| CABINET | Wood, walnut finish with gold and black metal frontplate |
| CONTROLS | 3-position spring return talk/listen switch volume control/on-off switch. Slide selector switches. |
| ANNUNCIATOR | Light and buzz for each selector |
| AMPLIFIER | 4 transistor; push-pull; class "A"; transformer coupled |
| TERMINALS | screw type |
| POWER | 110V AC, 60 cycle |

| | | |
|-----------------------------|------------|---------|
| Model VC500. | List Price | \$43.00 |
| Model VC1000. | List Price | 48.00 |
| Wall mounting brackets each | List Price | 1.25 |

REMOTE STATIONS

| | | |
|----------------------------------|--------------------|--------------------|
| Model VC100P—Non-originating | Plastic case | List Price \$ 8.00 |
| Model VC100W—Non-originating | Walnut finish case | List Price 10.00 |
| Model VC101P—Originating | Plastic case | List Price 10.00 |
| Model VC101W—Originating | Walnut finish case | List Price 12.00 |
| Model VC102P—Originating—Privacy | Plastic case | List Price 12.00 |
| Model VC102W—Originating—Privacy | Walnut finish case | List Price 14.00 |

Note: All remotes can be used with Models VC500, VC1000 Master Stations and Deluxe 2-Call System. Special 2-Call System can use only VC100P or VC100W.

Manufactured by LEE COMMUNICATIONS, INC., New York, N. Y.

LOGE ELECTRONICS, INC. • KWIK-KALL® INTERCOMS

KWIK-KALL EXECUTIVE



Model L-506
or L-606

THE KWIK-KALL EXECUTIVE is designed for the executive . . . to keep his desk "SPACE saving" and efficient. This compact unit permits not only two-way conversation, but serves as a telephone stand as well.

Choice of 5 standard colors to match your telephone—AT NO ADDITIONAL COST—Black, green, beige, white and gray—

L-506 (6 station) **\$137.00**

L-600 series—same as L-500 but adds larger P.M. speaker, full wave rectifier, plus more audio power—

L-606 (6 station) **\$152.00**

KWIK-KALL JUNIOR INTERCOMS

Low cost versatile for smaller installations

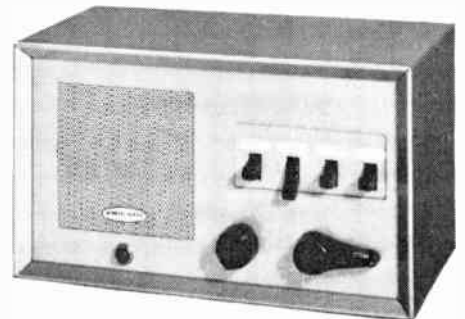
115 Volt A.C. (NOT A.C. - D.C.)

Available in 2, 4, 6 or 12 station Masters, with or without annunciators. Ideal for small offices and plants and interconnecting with Loge Senior and Executive Masters. Compatible with all Loge remote and paging speakers.

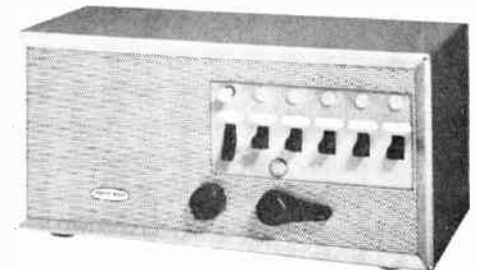
STURDY SPOT WELDED METAL CASE with baked hammertone finish. Patented lever switch assembly and other exclusive features. Small, compact and powerful.

Dimension of L-100, L-104—8"Wx5"Dx4½"H

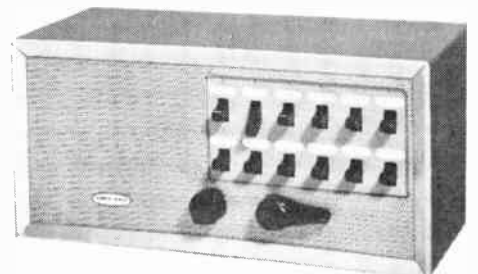
Dimension of L-106, L-112—9¾"Wx5"Dx4½"H



L-104 (4 station)
\$84.50 List Price



L-106A (6 station annunciator)
\$119.50 List Price



L-112 (12 station)
\$119.50 List Price



\$79.50
List Price

MODEL L-100-P System including L-100 Junior Master, one JR-3-45 remote speaker, and 50 ft. of cable.
(extra JR-3-45 remote speaker \$10.50)

LOGE ELECTRONICS, INC.

Los Angeles, California

PIONEERS IN THE DESIGN AND MANUFACTURE OF INTERCOMMUNICATION SYSTEMS FOR MODERN BUSINESS

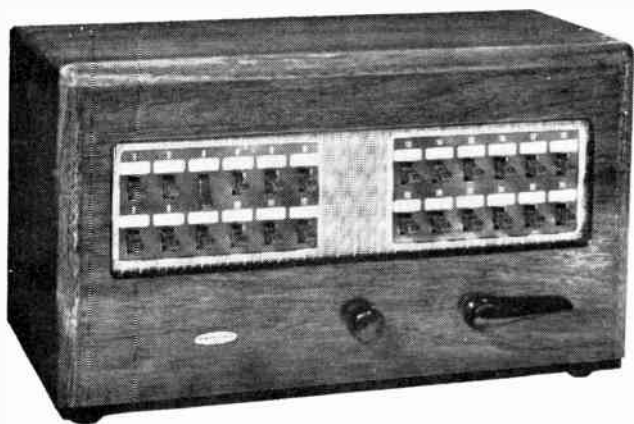
LOGE ELECTRONICS, INC. • KWIK-KALL® INTERCOMS

NEW

KWIK-KALL INTERCOM L-800 SERIES SOLID WALNUT



Model L-806A—6 station annunciator
\$157.00 List Price



Model L-824—24 station
\$197.00 List Price

*Only Loge
offers all this quality . . .*

- ▶ **ADAPTABLE** for every type of business and every size installation. Senior master units are available in 6, 12, 18 and 24 station units which can be interconnected with Loge Junior Masters, Executive Master remote stations, and paging speakers.
- ▶ **PRECISION BUILT** with exclusive Loge engineering features and extra power for wider range adaptability.
- ▶ **SOLID WALNUT** cabinets, beautifully styled and finished to harmonize with every office decor.
- ▶ **AVAILABLE WITH ACCESSORY FEATURES** including telephone handset, busy light signal, annunciators **AND BALANCED LINE ALL CALL FEATURE.**

THE L-400 series STILL remains in the line—same QUALITY and features—Busy lite, annunciators, ALL-CALL available.

| | | | |
|-------|------------------------|-------|----------|
| L-406 | 6-station master unit | ..... | \$137.00 |
| L-412 | 12-station master unit | ..... | \$157.00 |
| L-418 | 18-station master unit | ..... | \$177.00 |
| L-424 | 24-station master unit | ..... | \$197.00 |

KWIK-KALL "NOR" INTERCOMS *Revolutionary 1-pair wire system for secret 2-way intercom*

SECRET INTERCOM with absolute privacy between any two master stations, yet but a single pair of wires is needed. Conference calls are possible with only desired stations connected. Equipped with telephone handset as well as talk-back.

AUDIBLE AND VISIBLE ANNUNCIATORS. Each call announced by chime or buzzer, and also by plunger signal which acts as memo message until answered.

ONE PAGING KEY PER MASTER AVAILABLE at small additional cost. Power is automatically quadrupled when paging key is used.

UNLIMITED INTERCONNECTIONS. Standard master units available with 6, 12, 18 and 24 stations. Larger units available on special order. In solid walnut cabinet with exclusive Loge construction features. 4-station Junior "NOR" master available in metal cabinet. All units can be interconnected with Loge remote stations

and paging speakers. Installations of NOR units can be made up to 10,000 feet with No. 22 wire.

ZERO LEVEL with dual amplification. Can be installed within telephone cable pairs on private or government-owned telephone systems.

MODEL L-406A-NOR \$290.00

6-station master with annunciators, telephone, handset, and chime signal. If no handset is required deduct \$55.00 from list price.

LOGE ELECTRONICS, INC.

Los Angeles, California

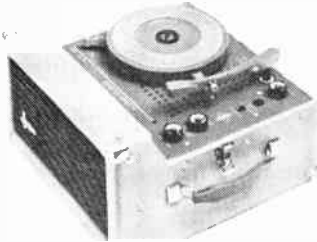
PIONEERS IN THE DESIGN AND MANUFACTURE OF INTERCOMMUNICATION SYSTEMS FOR MODERN BUSINESS

NEWCOMB

PORTABLE PHONOGRAPHS AND RADIOS

MODEL R-124V

4 SPEED, VARIABLE
SPEED, HI-FIDELITY
PHONOGRAPH



A rare combination of ruggedness and high fidelity sound, the Newcomb R-124V is built with a host of features that make it the outstanding value among portable phonographs: New four speed, variable speed motor; big two-way, 9" oval, dual cone speaker; new Bi-

Coupled μ 10 watt peak output system; pilot light; "power point" type plug-in ceramic high fidelity cartridge; rubber record mat and "Twist-up" 45 center spindle; jack for external speaker, headphones, or Newcomb Headphone Listening Center Accessory; idler release interlocked with separate motor switch; spring-suspension feet, Hideaway cord compartment; new ultra wide range tone control; compensated volume control; Tempo Control that smoothly varies speed as much as 20%. Crackproof plywood case, glue-block reinforced, covered in washable gray fabrikoid. Transformer powered. U.L. approved. DIMENSIONS: 8 $\frac{1}{4}$ " x 14 $\frac{3}{4}$ " x 14 $\frac{1}{4}$ "; weight 20 pounds. POWER CONSUMPTION: 55 watts, 117 volts, 60 cycles A.C. PROF. NET \$85.95. Plus excise tax.

MODEL R-124 FIXED SPEED, except for the absence of Tempo Control, is identical to the R-124V. PROF. NET: \$69.50. Plus excise tax.

MODEL R12-C4

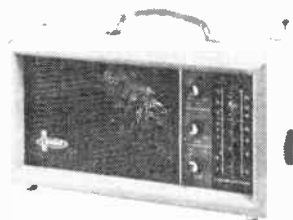
4 SPEED, FIXED
SPEED HI-FIDELITY
PHONOGRAPH



The Newcomb Model R12-C4 is a transformer powered, 10 watts peak utility model that offers safety, dependability, and high performance at low cost. It has a 10 watt inverse feedback controlled output system teamed up with a two-way 9" oval, dual cone

speaker. The R12-CA has a "Power Point" type plug-in ceramic high fidelity cartridge, automatic idler release, rubber record mat and "Twist-up" 45 center spindle, pilot light, A.C. power cord stowage, main power switch turns off everything including idler pressure, spring suspension feet, crackproof plywood case covered in washable gray fabrikoid. U.L. approved. DIMENSIONS: 8 $\frac{1}{4}$ " x 14 $\frac{1}{8}$ " x 14 $\frac{1}{8}$ "; weight 19 pounds. POWER CONSUMPTION: 55 watts, 117 volts, 60 cycles a.c. PROF. NET: \$62.50. Plus excise tax.

**MODEL
AFM-1500
FM & AM
HI-FI A.C. RADIO**



Never before has such all-around excellence, high power, superb sound been built into a table model radio. The Newcomb AFM-1500 has a tuning section with the sensitivity, selectivity, and stability heretofore reserved for high fidelity tuner components costing more than this complete radio set. It has a f.c.c., a 15 watt peak push-pull amplifier coupled with a 20 watt 9" oval, dual cone speaker capable of making full use of amplifier power. The Newcomb AFM-1500 has a pull-up, telescoping rotating FM antenna, built in "Hi-Q" ferrite rod AM antenna, tuning eye, lighted lucite sliderule type dial with reference scale and Conelrad markings, reference AM and FM pilot lights, wide ranging tone control of new design, large tuning knob, compensated volume control, external antenna terminals, jack for external speaker, headphones, or Newcomb Headphone Listening Center Accessory, jack for external amplifier, public address system, or tape recorder. Neat power cord stowage on back. U.L. approved. DIMENSIONS: 16 $\frac{3}{4}$ " x 9 $\frac{3}{4}$ " x 8 $\frac{3}{8}$ "; weight 20 $\frac{1}{4}$ pounds. POWER CONSUMPTION: 70 watts, 117 volts, 60 cycles a.c. PROF. NET: \$164.50.

MODEL R-164V

4 SPEED, VARIABLE SPEED
HI-FI, MEDIUM POWER,
PORTABLE COMBINATION
TRANSCRIPTION PLAYER-
P.A. SYSTEM

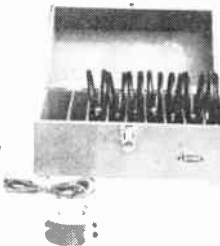


This is a versatile, portable sound system of advanced design that will play any record size up to 17 $\frac{1}{4}$ masters. It has the new four speed, variable speed Newcomb motor. The R-164V has a big 12" round, dual cone high fidelity loudspeaker with 25 foot cord and the new Bi-Coupled μ 10 watt peak output system. Speaker enclosure forms case lid. Jeweled pilot light and lighted operating panel, "Power Point" type plug-in ceramic high fidelity cartridge, rubber record mat and "Twist-up" 45 center spindle. Microphone input jack. Mixing volume controls. Bass tone control does not affect voice. Separate treble control. Output jack for speaker, headphones or Newcomb Headphone Listening Center Accessory. The R-164V has a long tone arm of cast metal, protective drop pad, Hideaway power cord, 4 speed settings — 78, 45, 33 $\frac{1}{3}$, and 16 $\frac{2}{3}$ r.p.m.; tempo control which smoothly varies speed as much as 20%; pickup stop post; pick up lock screw; separate motor power switch that automatically retracts idler. Crackproof plywood case covered in washable gray fabrikoid. Transformer powered. U.L. approved. DIMENSIONS: 11" x 15 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ "; weight 25 pounds. POWER CONSUMPTION: 55 watts, 117 volts, 60 cycles A.C. PROF. NET: \$107.50.

MODEL R-164 FIXED SPEED, except for the absence of Tempo Control, is identical to the R-164V, PROF. NET: \$93.25.

**HEADPHONE LISTENING
CENTER KITS**

Designed for library use, language study, group-within-a-group listening, adapter plugs into output jack on all Newcomb radios, transcription players, phonographs. Up to 8 pair of headphones connect to adapter. Choice of phone connection: suffix "A" after model number indicates pin jacks, suffix "B" denotes standard phone jack. COMPLETE KIT includes adapter,



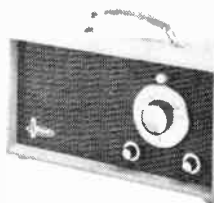
8 pairs of phones, plywood compartmented case covered with gray fabrikoid. PROF. NET: MODEL LC8A — \$59.55; MODEL LC8B — \$67.30.

ADAPTER ONLY, providing outlets for 8 pairs of headphones... PROF. NET: MODEL 8A — \$14.95; MODEL 8B — \$17.50.

HEADPHONE SET ONLY, sturdy, sensitive, double phones, with 6" cord provide excellent reproduction. Colored bright red and black to identify them as public property. PROF. NET: MODEL HDP (with pin jacks) — \$3.95; MODEL HDPB (standard phone jack) — \$4.60.

**MODEL AM-500
AM ONLY**

HI-FIDELITY A.C. RADIO



A high performance, handsome, safe rugged, economical continuous duty table model AM radio, the Newcomb AM-500 has a powerful 5 watt peak inverse feedback amplifier and big 8" oval cone loudspeaker with special

tweeter cone for improved distribution and high frequency response. It has a built in "Hi-Q" antenna and terminals for external antenna. A lighted index illuminates the dial and serves as a pilot light. Dial of satin finished aluminum has large numerals and Conelrad markings. Large tuning knob drives the dial directly through planetary vernier — no strings. Jack for external speaker, headphones, or Newcomb Headphone Listening Center Accessory. Jack for external amplifier, public address system, or tape recorder. When latter is used, the amplifier-speaker system of the AM-500 becomes a fully controllable power monitor. Neat power cord storage. Crack-proof plywood case covered in washable gray fabrikoid. Transformer powered. U.L. approved. DIMENSIONS: 6 $\frac{1}{2}$ " x 8" x 15 $\frac{1}{2}$ "; weight 10 pounds. POWER CONSUMPTION: 40 watts, 117 volts, 60 cycles a.c. PROF. NET: \$59.95. Plus excise tax.

Specifications and Prices subject to change without notice. All parts used in Newcomb Equipment are made in U.S.A. All Newcomb Equipment Approved by Underwriters Laboratories.

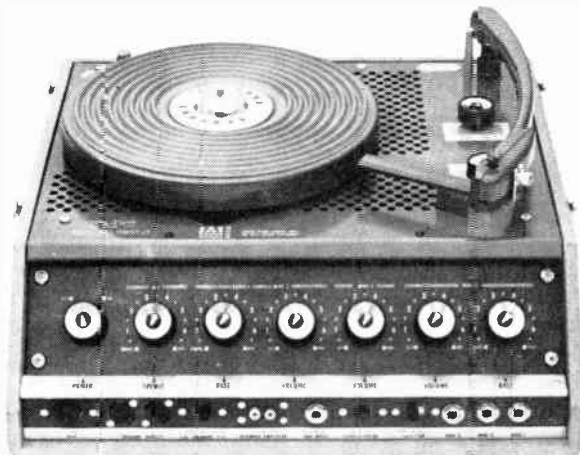
NEWCOMB

AUDIO PRODUCTS CO. • HOLLYWOOD 38, CALIFORNIA

NEWCOMB

TR SERIES HIGH POWER PORTABLE COMBINATION
TRANSCRIPTION PLAYER P.A. SYSTEMS

NEW DESIGNS! NEW MOTORS! NEW OUTPUT SYSTEMS! NEW REPRODUCERS!



New, American-Made 4 Speed Variable Speed Motor delivers full starting torque at any speed setting; no warm-up required. The motor is remarkably stable under all conditions of use, and requires no more attention than conventional fixed speed motors. No flutter producing friction discs or cone drives used. Plays All Sizes of records up to 17 1/4" masters. New Amplifiers are engineered for optimum performance with the

particular types of speakers used with the different models to greatly improve acoustic output. Sturdy Crackproof Plywood Case is glue-blackened for additional strength, covered with washable scratch-resistant fabricoid in a very pleasing shade of warm gray. Metal Corners greatly extend life of case. Non-scratch feet are spring-flaated to prevent needle skip from bumps and jars. Loudspeakers Are Protected by a

Straps for Hanging speakers from wall provided with all standard split-case speakers. Back of speaker in most models is protected by an armored basket. 25 foot cord is provided with all speakers.

New Hideaway Cord Compartment. Power cord is coiled and tucked into compartment built into side of the case.

Readily Accessible. The top deck lifts for instant access to tubes and motor. Bottom Plate Removes for complete access to wiring.

Clear Plastic Card Holder for name of owner, room, instructor, building, or "home base".

New Sta-Kleen® Rubber Mat has deep grooves that swallow up dust and grime, protects records, is clamped on. Easily cleaned.

Heavy Turntable — 10", 2 pounds — for flywheel stability, minimum waw.

Unbreakable Pop-Up 45 Spindle of nylon.

Dual-Lighted Neon Speed-O-Scope® permits precise speed setting. Sturdy, Full-Size Carrying Handle and handhold for assistant.

New Ceramic Cartridge on TR-1625 and TR-1640 series models is dual sapphire styli, high fidelity, plug-in, "power point" type, thoroughly proven for durability, dependability, fidelity.

GE Magnetic Cartridge, twist needle type with individually replaceable microgroove and standard sapphire styli; necessary pre-amplifier built in.

Drop Pad, rubber covered, protects stylus and cartridge.

Long, One Piece, Cost Metal Pickup Arm lifts to vertical position for inspection.

Rugged Stop Post prevents putting arm in wrong position.

Stylus Pressure Adjustment for 78's or LP's.

Separate Motor Power Switch automatically retracts idler.

Tempo Control varies speed from — 5% to — 15% of any standard setting.

Positive Lock Screw holds arm securely during transportation.

Two Jeweled Pilot Lights.

Dual Lighted Panel angled for most convenient operation.

Full Through Ventilation, louvers in bottom plate, holes in deck.

"All" Channel Output Jack to external amplifier permits monitoring entire output with M-9 Monitor.

Speaker Impedance Selector matches amplifier impedance to number of speakers being used.

Auxiliary Input Jack for signal from radio, tape machine, or stereo channel.

"Phono" Output Jack delivers on-ly phono signal to external amplifier or Newcomb Model M-9 Amplified Music Monitor.

Transformer Powered, Safe, completely isolated from the power mains. All units have UL approval.

Positive Humidity Protection is given output transformers by cellulose acetate or mylar insulation.

AMPLIFIED
MONITOR &
ACCESSORY
SPEAKERS

New
Model M-12
Amplified
Music Monitor



includes 10 watt amplifier & 12" full-range speaker. Has its own tone and volume controls. Connected to "Phono" output jack of any Newcomb transcription player, you monitor recorded music without feedback squeal or confusion with own voice. Plug into "All" and use as remote speaker. Plywood case covered with gray fabricoid. 17 7/8" x 13 3/8" x 7 1/2", 17 1/4 lbs. PROF. NET: \$79.50.

Model M-9 is a 10 watt monitor with 9" oval speaker 13 1/4" x 10 1/8" x 7". PROF. NET: \$69.50.

SINGLE SPEAKERS IN CASE

16 3/4" x 16 1/4" x 13 1/4"

Model S-112 Extended range, 12", 30 watt, dual cone speaker. Additional speaker for TR-1625 or TR-1625M. 25' cable. 8 ohms. 14 1/2 pounds. PROF. NET: \$43.95.

Model S-112H Heavy Duty, extended range, 12", 50 watt speaker. Additional speaker for TR-1640. 25' cable. 8 ohms. 14 3/4 pounds. PROF. NET: \$50.00.

Model S-112HF Two-way, 50 watt, reproducer. 12" woofer, crossover filter, 3 1/2" tweeter. Additional speaker for TR-1640M-HF. 25' cable. 8 ohms. 15 pounds. PROF. NET: \$59.50.

PORTABLE REFLEX REPRODUCERS

18 1/2" x 24" x 12 1/2"

Model R112 Reflex enclosure with 12" extended range, 30 watt, dual cone speaker. Additional speaker for TR-1625MR. 25' cable. 8 ohms. 23 pounds. PROF. NET: \$64.50.

Model R-112HF Reflex enclosure with two-way, 50 watt speaker system — 12" woofer, crossover filter, 3 1/2" tweeter. Additional reproducer for TR-1640M-HFR or wherever high efficiency, high fidelity, and high power

handling capacity are desired. 25' cable. 8 ohms. 23 1/4 pounds. PROF. NET: \$88.50.

2 SPEAKERS IN SPLIT CASE

16 3/4" x 16 1/4" x 13 1/8"

Model S-212E Two 12" extended range, 30 watt, 8 ohm, dual cone speaker, each with 25' cord. 21 pounds. PROF. NET: \$64.50.

Model S-212HE Two 12" extended range, 50 watt, 8 ohm speakers (as used in TR-1640 models), each with 25' cord. 2 1/2 pounds. PROF. NET: \$77.50.

Model S-212HFE Two, two-way, 50 watt, 8 ohm speaker systems — 12" woofer, crossover filter, 3 1/2" tweeter (as used in TR-1640MHF models) in each half case — each with 25' cord. 23 pounds. PROF. NET: \$88.50.

Model S-212XE Split case assembly containing two super efficiency, 60 watt, 8 ohm speakers with large, aluminum-domed, 2" voice coils and integral tweeter cones, each with 25' cord, especially for use with the TR-656M-X2. 25 pounds. All above are wired with sockets as extension speakers. PROF. NET: \$110.65.

DIMENSIONS OF NEWCOMB TR PLAYERS:

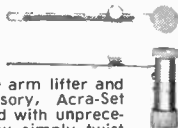
Single speaker TR players form a single case with the speaker case used as the lid. They measure 16 3/4" x 16 1/4" x 13 1/4". Multiple speaker models snap together to form two or three cases — audio unit with lid and speakers in split cases back to back. Audio units, closed, measure 16 3/4" x 16 1/4" x 8 1/2". Dimensions of speaker assemblies are given above.

NEWCOMB

ACRA-SET

Model A-1

A precision-made tone arm lifter and record cueing accessory, Acra-Set lowers stylus to record with unprecedented gentleness. You simply twist the knob. Lifting arm has 100-division scale and traveling stop with pointer. Templates and cue sheets supplied. Specify Newcomb model. PROF. NET: \$12.50.

MICROPHONES AND
ASSOCIATED EQUIPMENT

Model MS-23 Accessory Bag of heavy plastic, zippered, for microphones, etc., can be attached inside lid of speaker case. PROF. NET: (bag only) \$2.10.

Model N-30 Crystal Microphone with lavalier cord, stand adapter, switch, and shielded plug. PROF. NET: \$13.95.

Model N-30D. Desk Mounting for N-30 only. PROF. NET: \$1.85.

Model N-36 Dynamic Professional Quality Microphone is the perfectionist's choice with any TR system, especially intended for use with TR-1640M and TR-1656M series models. Supplied with shielded cord and plug and on-off switch. PROF. NET: \$50.00.

Model N-23 Dynamic Microphone of very high quality with switch and shielded plug, recommended for general purpose use with all TR series systems. PROF. NET: \$39.50.

Model N-3766 Stand, a professional class, extremely stable, collapsible stand, beautifully finished in brushed chrome, extending from 37" to 66" for use with any standard microphone. PROF. NET: \$20.00.

Model PP-61 Stereo Conversion Pickup Cartridge, plug-in type, for any TR series player equipped with stereo output jack and plug-in ceramic cartridge. PROF. NET: \$4.65.

Model WC-64 Connecting Cable, four feet long with plugs for connecting two TR ceramic models together for stereo. PROF. NET: \$4.65.

Specifications and Prices subject to change without notice. All parts used in Newcomb Equipment are made in U.S.A. All Newcomb Equipment Approved by Underwriters Laboratories.

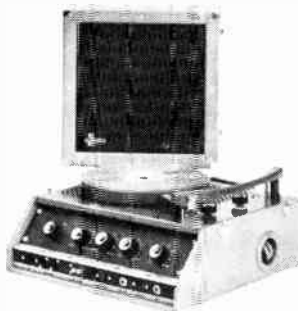
NEWCOMB

AUDIO PRODUCTS CO. • HOLLYWOOD 38, CALIFORNIA

NEWCOMB

TR SERIES HIGH POWER PORTABLE COMBINATION
TRANSCRIPTION PLAYER P.A. SYSTEMS

CERAMIC MODELS



TR-1625 SERIES

25 WATTS PEAK

Successor to the widely used TR16, the Newcomb TR-1625 is capable of doing more jobs better. Four speed, variable speed model with "Power Point" type, dual sapphire styli, high fidelity pick-up. It has a treble tone control, a bass control that does not affect mike, phono volume mixer, mike volume mixer, scratch filter switch, voice filter switch, dual pilot light and

lighted control panel, lift-up motor board access to tubes and motor. Pick-up lock nut, stop post, drop pad. Hideaway cord compartment. Crack-proof plywood case, glue blocked, covered with gray washable fabrikoid. Output jacks for stereo, for 2 speakers, and for monitoring "Phono" only or "All" using Newcomb M-9.

MODEL TR-1625 is in a single, split case with one 12" dual cone, 30 watt speaker. Weight 35 lbs. PROF. NET: \$139.50.

MODEL TR-1625-2 is in two cases with two 12" dual cone, 30 watt speakers. Weight 50 lbs. PROF. NET: \$172.50.



TR-1640 SERIES

40 WATTS PEAK

A completely new system with plenty of power to drive four loudspeakers, TR-1640 models are excellent choices for gyms, athletic fields, auditoriums. Start with a single speaker, or two speaker model; add additional speakers at any time. Provided with a treble tone control for all channels, separate bass for phono, separate bass for

mike, phono volume mixer, mike volume mixer, scratch filter switch. Two pilot lights. Lighted operating panel. Crackproof plywood case, fabrikoid covered. Easy access to tubes and wiring. Spring suspension feet. Hideaway cord compartment.

MODEL TR-1640 is in a single split case with one 12", 50 watt loudspeaker. Weight 36 lbs. PROF. NET: \$169.95.

MODEL TR-1640-2 is in two cases with two 12", 50 watt speakers. Weight 51½ lbs. PROF. NET: \$209.50.

MODEL TR-1640-4 is in three cases with two 12", 50 watt speakers and two 12", 30 watt extension speakers. Weight 72½ lbs. PROF. NET: \$273.05.

USE TWO CERAMIC MODELS FOR STEREO

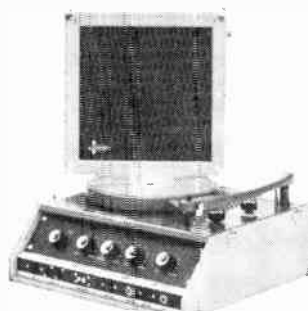
TR ceramic models have stereo jacks. Replace the mono with a stereo cartridge, run a patch cord from the stereo jack to the auxiliary input jack on another player and you have a perfectly balanced, fully controllable stereo reproducer.

MODEL VU-1 PORTABLE VISUAL
OUTPUT METER

A professional quality, self-contained accessory for setting the level of any Newcomb TR player, the Model VU-1 has a jeweled d'Arsonval movement and a scale calibrated in both decibels and volume units from 0 to 100 over the working range of the system. Meter input jack connects to player monitor jack. "Monitor all" jack on meter accepts plug from amplified monitor. 3¼" x 4¼" x 5½", 1½ lbs. PROF. NET: \$29.95.

Specifications and Prices subject to change without notice. All parts used in Newcomb Equipment are made in U.S.A. All Newcomb Equipment Approved by Underwriters Laboratories.

MAGNETIC MODELS



TR-1625M SERIES

25 WATTS PEAK

When music reproduction is a major consideration, a Newcomb TR player equipped with a magnetic cartridge is the answer. The TR-1625M is furnished with a GE variable reluctance, twist needle cartridge with sapphire styli and necessary preamplifier built in. The 4 speed, variable speed motor is a new 4 pole, deluxe unit for minimum rumble. Pilot lights; lighted panel, crackproof plywood case. 2 speaker output

jacks: "Phono" and "All" jacks to external amplifier or Newcomb M-9 Monitor. Input jacks for auxiliary equipment and microphone. **MODEL TR-1625M** is in a single, split case with one 12" dual cone, 30 watt speaker. Weight 36 lbs. PROF. NET: \$154.50.

MODEL TR-1625MR is in two cases with a single 12" dual cone, 30 watt speaker in a portable bass reflex enclosure. Weight 53 lbs. PROF. NET: \$187.50.

MODEL TR-1625M-2 is in two cases with two 12" dual cone, 30 watt speakers. Weight 51 lbs. PROF. NET: \$187.50.



TR-1640M SERIES

40 WATTS PEAK

A more powerful music model with ultra-linear amplifier output system, the TR-1640M systems have the GE cartridge with built in preamp. The phono circuit is convertible to a second mike channel by merely flipping the selector switch. New 4 speed motor is the deluxe, 4 pole unit. As on all TR models a dual lighted neon strobe permits

precise speed setting for accurate pitch reproduction. Same output jacks as TR-1625M.

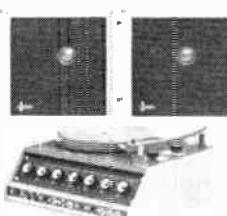
MODEL TR-1640M-HF is a single case model with a two-way speaker system including a 12", 50 watt woofer, crossover, and separate 3½" tweeter. Weight 36½ lbs. PROF. NET: \$205.00.

MODEL TR-1640M-HF2 is a two case system with two, two-way, 50 watt speaker systems. Weight 54 lbs. PROF. NET: \$244.00.

MODEL TR-1640M-HF4 is a three case system with two, two-way 50 watt speaker system and two 12" dual cone, 30 watt extension speakers. Weight 75½ lbs. PROF. NET: \$309.50.

MODEL TR-1640M-HFR is in two cases with one two-way 50 watt speaker system in a bass reflex enclosure. Weight 54 lbs. PROF. NET: \$244.00.

MODEL TR-1640M-HFR2 is in three cases with two, two-way 40 watt speaker systems in reflex enclosures. Weight 77 lbs. PROF. NET: \$333.00.



TR-1656M SERIES

56 WATTS PEAK

Phenomenal output is achieved in these fully integrated systems. Phono channel converts to third microphone channel. First mike channel has separate bass attenuating control for voice clarity. Second mike channel is flat. The phono tone controls affect the third mike channel.

MODEL TR-1656M-HF2 is in two cases with two, two-way 50 watt speaker systems including a 12", 50 watt woofer, crossover, separate 3½" tweeter. Weight 57 lbs. PROF. NET: \$288.50.

MODEL TR-1656M-HF4 is in three cases with four, two-way 50 watt speaker systems. Weight 80 lbs. PROF. NET: \$377.00.

MODEL TR-1656M-X2 is in two cases with two 12", 60 watt, super-efficient, dual cone speaker. Weight 59 lbs. PROF. NET: \$311.00.

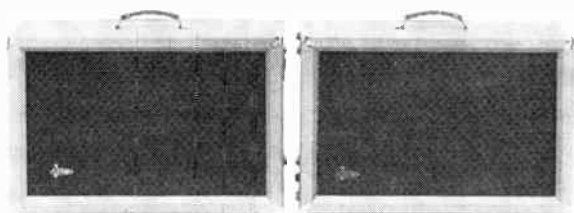
MODEL TR-1656M-X4 is in three cases with four 12", 60 watt speakers. Weight 84 lbs. PROF. NET: \$421.50.

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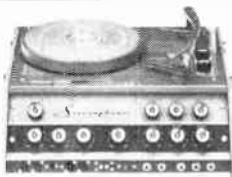
AUDIO PRODUCTS CO. • HOLLYWOOD 38, CALIFORNIA

NEWCOMB

STEREOPHONIC Transcription Players and Phonographs



**80 WATTS
PEAK**



Shown with
Acra-Set, tone
arm lifter
accessory
available at
additional cost.

TRS-1680 SERIES STEREO/MONO

PORTABLE COMBINATION TRANSCRIPTION

PLAYERS/P.A. SYSTEMS

Built with a great reserve of power for most uses — 40 watts peak per channel — the Newcomb TRS-1680 is probably the most complete and flexible portable sound unit ever built. It is stereo or mono at the flick of a switch. In addition, you are offered a wide choice of reproducers to fit specific assignments with extraordinary efficiency. The big 10", 2 lb. turntable is covered with a deep-grooved rubber mat and is driven by a 4-speed, variable-speed, cool-running American-made motor of advanced design. Hi-fidelity ceramic cartridge with turnover, jeweled styli. Dual neon Sped-O-Scope is located over where it can be seen. Unit has 3 mike channels, inputs for L & R radio, tape, & aux. Lighted panel has separate mixers for each mike and phono. Separate tone controls for each channel, also "Blend" control. Outputs for 2 or 4 speakers with impedance-matching switch. Safe, transformer-powered, UL approved. Turntable-amplifier unit DIMENSIONS: 9 1/4" x 17 7/8" x 18 5/8"; 43 pounds. POWER CONSUMPTION: 180 watts, 117 volts, 60 cycles a.c.

MODEL TRS-1680-L2 is a three-case model with two extended frequency L-300 two-way, three-driver, full crossover network reproducers. Weight 101 lbs. PROF. NET: \$538.50

MODEL TRS-1680-L4 is a five-case model with four L-300 reproducers. Weight 159 lbs. PROF. NET: \$777.50

MODEL TRS-1680-NF2 is a two-case model with audio unit in one case and two speakers in split case. Each NF high efficiency reproducer has 12" woofer, 3 1/2" tweeter, cross-over network. Weight 70 lbs. PROF. NET: \$429.00

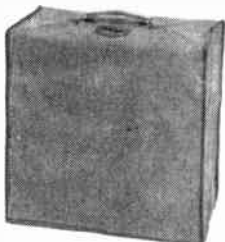
MODEL TRS-1680-NF4 is a three-case model with four NF reproducers. Weight 97 lbs. PROF. NET: \$558.50

MODEL TRS-1680-KN2 is a three-case model with two KN-200 reproducers each of which contains 1 12" woofer with horn, tweeter and control, fully enclosed with ducted port. Weight 113 lbs. PROF. NET: \$565.00

MODEL TRS-1680-KN4 is a five-case model with four KN-200 reproducers. Weight 183 lbs. PROF. NET: \$830.50

CANVAS COVERS

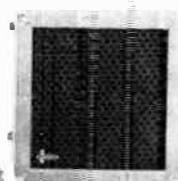
To protect most popular Newcomb TR players and reproducers from dust, mud, and moisture are now available. They are made of tightly-woven, rubberized mackintosh, fleece-lined, closed with stout zippers. Protective flap tucks under handle. Plastic slot for identification.



| Catalog No. | for Use with: | Prof. Net |
|-------------|---|-----------|
| CA-102 | Newcomb TR-1625, TR-1640, TR-1640M, TR-1656M amplifier sections only..... | \$5.95 |
| CA-103 | Newcomb S-212 type split case speaker assemblies and all TR Series systems with single speaker in case lid..... | \$5.95 |
| CA-104 | Newcomb TRS-1680 amplifier section only..... | \$5.95 |
| CA-110 | Newcomb K-200 or K-400 reproducers..... | \$6.63 |
| CA-111 | Newcomb C-100 or J-200 reproducers..... | \$5.95 |



**20 WATTS
PEAK**



**NEW
RS-1620V
SERIES
STEREO/MONO**

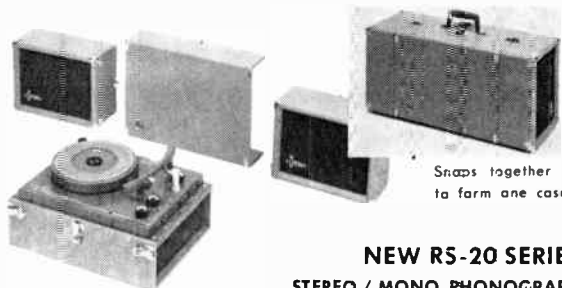


Shown with
Acra-Set, tone
arm lifter
accessory
available at
additional cost.

PORTABLE COMBINATION TRANSCRIPTION PLAYERS/P.A. SYSTEMS

These are simple to operate, durable economical systems that will grow in usefulness as stereo becomes more widespread. The RS-1620V player provides true stereo or monophonic high fidelity at the flip of a switch. The Bi-Coupled output system delivers 10 watts peak per channel. Choice of 3 speaker systems which have been carefully matched to the amplifier. A turnover ceramic stereo cartridge with jeweled styli is plugged into the one-piece cast-metal tone arm which is mounted on an acoustical filter. Turntable has rubber mat and twist-up 45 spindle. Any size record up to 7 1/4" masters can be played at any speed. Tempo control varies speed from +5% to -15% without the use of any rumble or flutter-producing device. Neon strobe is built in. There are two mike inputs and input jacks, left & right, for radio or tape machine. On the illuminated, slanted operating panel are separate mixers for each mike and phono. Separate voice filter. Separate bass and treble tone controls ganged for both channels, but bass does not affect voice. Safe, transformer-powered, UL approved. Player unit DIMENSIONS: 8" x 15 1/2" x 16 1/2", 26 1/2 lbs. For use with 117 volts, 60 cycles a.c. Fixed speed models, identical to variable speed but without strobe or tempo control, are available.

| | Variable Speed Model No. | Prof. Net | Fixed Speed Model No. | Prof. Net |
|---|-----------------------------|--------------|--------------------------|--------------|
| With S-212 split case containing two 12" dual cone hi-fi drivers. Closed case: 16 3/4" x 16 1/4" x 13 1/8", 21 lbs. | RS-1620V-2 | \$215.00 | RS-1620-2 | \$205.00 |
| With S-212HF split case containing two 2-way systems — 12" woofers, 3 1/2" tweeters. Closed: 16 3/4" x 16 1/4" x 13 1/8", 23 lbs. | RS-1620V-HF2 | \$239.00 | RS-1620-HF2 | \$229.00 |
| With 2 C-100 2-way reproducers each in separate enclosure. Each measures 10 1/4" x 14 3/4" x 20", 19 1/2 lbs. | RS-1620V-C2 | \$309.50 | RS-1620-C2 | \$299.50 |



NEW RS-20 SERIES STEREO / MONO PHONOGRAPH

The highly portable and compact Newcomb RS-20 has two full-range 9" oval, dual-cone speakers that can be extended to create a realistic illusion of dimensional sound. Machine is stereo or mono at the flip of a switch. It plays any record size, up to 12", at any standard speed. Rubber-matted turntable has twist-up 45 spindle. Separate turntable on-off switch retracts idler. Dual-acting bass-treble tone control, volume control, jeweled pilot light. Hideaway cord compartment. DIMENSIONS: 8 1/2" x 11 1/8" x 24 3/4", 28 lbs. For use on 117 volts, 60 cycles a.c. PROF. NET: \$149.50.

PLAYER UNIT OFFERED WITH OTHER SPEAKERS:
 Model RS-20-2 in 2 cases with 2 S-212 speakers, PROF. NET: \$184.00
 Model RS-20-C2 in 3 cases with 2 C-100 speakers, PROF. NET: \$278.50.
 Model RS-20-KN2 in 3 cases with 2 KN-200 speakers, PROF. NET: \$385.00.

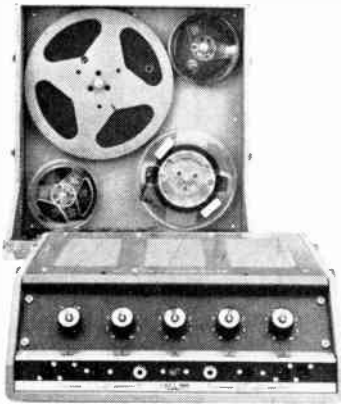
All specifications and prices are subject to change without notice.

NEWCOMB

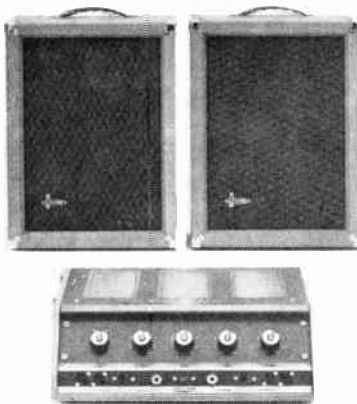
AUDIO PRODUCTS CO. • HOLLYWOOD 38, CALIFORNIA

NEWCOMB**STEREO TAPE RECORDERS AND PORTABLE
STEREO AMPLIFIER-REPRODUCER SYSTEMS****Cybernetically Engineered STEREO TAPE RECORDERS****MODEL SM-310-4B QUARTER-TRACK****MODEL SM-310B HALF-TRACK**

With tape transport control centered in a joy stick, operation of the Newcomb Stereo Tape Recorder is intuitive . . . the natural thing to do is the right thing to do. Handling is fluid-smooth, effortless, positive . . . tape is treated with extraordinary gentleness, stretching obviated. The SM-310-4B records quarter track and will play back either quarter track or half track. The SM-310B records and plays back half track. Both record live, broadcast, or recorded stereo program material. Monophonically, you may record on either one or two channels in the same direction. The Newcomb Stereo Tape Recorder is virtually a studio in a suitcase. It operates vertically or horizontally, takes from 3" to 10¹/₂" reels, has two tape speeds — 7¹/₂ or 3³/₄ inches per second with automatic compensation for 3³/₄" speed, separate mixing controls — mike and line — for each channel, two lighted recording level meters arranged pointer-to-pointer for easy comparison of channel levels, straight line tape loading, dual acting tape tensioning device keeps tape always under control even with the larger reels, automatic shut-off switch, four digit counter pin-points desired position, without repeating, on any size reel, all pre-amplification needs for recording and playback, balance control, microphone input sockets take Cannon XLR-3-12C male connectors. 12³/₄" x 16³/₄" x 9¹/₂"; 34 pounds. POWER REQUIREMENTS: 90 watts, 117 volts, 60 cycles a.c. PROFESSIONAL USERS NET (BOTH MODELS): \$569.50.

MODEL SA-80**2 CHANNEL POWER AMPLIFIER WITH
TONE, VOLUME, AND BALANCE CONTROLS**

The Newcomb SA-80 is a two channel, stereo/monaural, portable, power amplifier designed especially for use with either the Newcomb SM-310-4B or Newcomb SM-310B Tape Recorder. The amplifier puts out 40 watts peak per channel, a total of 80 watts peak. The controls are conveniently grouped on a slanted operating panel that is brightly illuminated by two pilot lights. Controls are ganged. They consist of a bass boost and attenuation control, treble boost and attenuation, volume control, and a balance control. There is an input jack for each channel, a stereo-mono selector switch, output impedance selectors, and two-speaker sockets for each channel. The removable cover carries tape reels of all sizes up to and including 10¹/₂". A plastic zippered bag for miscellaneous cords is included. Frequency response — 20-20,000 cycles \pm 1 db. Distortion per channel at 20 watts r.m.s. — less than 1%. Hum below —65 db. Output impedances per channel — 16, 8, 4 ohms. 8¹/₂" x 16³/₄" x 16³/₈"; 32 pounds. PROFESSIONAL USERS NET: \$199.50.

PORTABLE AMPLIFIER-REPRODUCER SYSTEMS

MODEL SA-80-J2 consists of one SA-80 and two Model J-200 Reproducers. Latter are two-way speaker systems with tweeter level controls, enclosed in compact cases, use latest techniques to provide excellent, full-range coverage in music rooms and small auditoriums. Each measures 14³/₄" x 20" x 10¹/₄". Three-case system weighs 71 pounds. PROFESSIONAL NET: \$368.40.

MODEL SA-80-L2 consists of one SA-80 and two Model L-300 Reproducers. Latter are two-way, three-driver loudspeaker systems in open-back cases designed to cover large audiences with outstanding quality and yet retain reasonable portability. Each measures 17¹/₈" x 26¹/₈" x 9¹/₄". Three-case system weighs 90 pounds. PROFESSIONAL NET: \$448.40.

MODEL SA-80-C2 consists of one SA-80 and two Model C-100 Reproducers. Latter are designed with high efficiency combined with compactness and light weight as leading objectives. Each measures 14³/₄" x 20" x 10¹/₄". Three-case system weighs 71 pounds. PROFESSIONAL NET: \$368.40.

MODEL SA-80-K2 consists of one SA-80 and two Model K-400 Reproducers. Latter are three-way loudspeaker systems developed for those who seek the very best possible reproduction that can be provided by translating advanced engineering concepts into portable form, and yet who do not need the tremendous conversion efficiency of the L-300. Each measures 16⁷/₈" x 23¹/₂" x 10¹/₄". Three-case system weighs 102 pounds. PROFESSIONAL NET: \$468.40.

All specifications and prices are subject to change without notice.

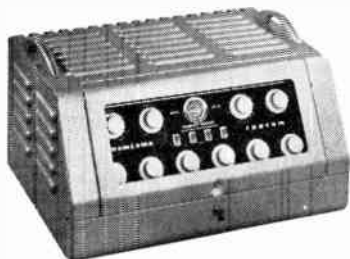
NEWCOMB**AUDIO PRODUCTS CO. • HOLLYWOOD 38, CALIFORNIA**

NEWCOMB

AMPLIFIERS • CUSTOM SERIES



KX-25



KX-50



KX-6A



K-50B

Without equal at any price. The best examples why the name Newcomb is so revered by Engineers and Owners alike. Will improve any system. A rust when using the new 2-way wide range speakers. Check these important features and specifications.

- 20-20,000 cycles ± 1 db
- Less than 3% distortion
- 90% of rating at less than 1%
- Full power any output tap
- Audio bandwidth selectors
- Hum and noise level — 80 db.

- Remote contro. provision — all inputs
- U L Approved
- Continuous duty — longer life parts
- Key locked control cover
- Sensitive volume and overload indicators
- Wired for plug-in input transformers

Full audio power, 50 to 5000 cycles (region of all major power requirements) within $\pm 1/4$ db. less than 5% distortion. Separate tone controls for Bass and Treble Boost or Attenuation of advanced design for better curve shape, greater range. Feedback controlled, 2 stage mike pre-amplifiers. Hum balancing control, all models but booster. Linear mixer frequency response. All but Pre-Amplifier have output impedance of 4, 8, 16, 250, 500 ohms, PLUS a 70 volt "constant voltage" tap, with convenient, simple, impedance selector. Multistage inverse feedback. Large, heavy duty power and output transformers thoroughly impregnated against moisture. Rear connections avoid unsightly wires, simplify rack installation. A. C. convenience outlet in rear, all models except booster. CABINETS: Heavy gauge welded steel beautifully styled. FINISH: Silver Grey Hammertone Baked Enamel. PANELS: Etched metal, illuminated. KNOBS: Round, large, skirted type, for easy operation. Additional specifications given under specific model numbers.

KX-25: 25 watts power output design center, rating, 30 watts max. at less than 3% distortion any output tap. PEAK POWER: 40 watts design center, 48 watts max. INPUTS (6): 5 mike (2 meg.), gain 123 db; 1 phono either Magnetic input gain 99 db based on 27000 ohm input, bass equalization +10 db or Crystal input $1/2$ meg. gain 90 db. REMOTE CONTROL: Use RC-6 remote control unit. BASS TONE CONTROL: Range — 16 to +25 db. TREBLE TONE CONTROL: Range — 30 to +20 db. HUM: —80 db controls off, —75

db crystal phono. —65 db mike and magnetic pickup inputs (Referred to rated output). CONTROLS (15): 5 mike, 1 phono, 1 bass, 1 treble 4 bandwidth, 1 master, 1 volume indicator (all under keylocked control cover) A.C. power switch. TUBES (15): 6-6SC7, 2-6J5, 1-6J7, 1-6SQ7, 1-6SN7, 2-6L6G, 1-6AF6G, 1-5U4G. POWER CONSUMPTION: 135 watts, 117 volts 60 cycles A.C. Max. Input 129 volts. DIMENSIONS: $9\frac{3}{8}$ " x $17\frac{3}{4}$ " x $14\frac{1}{4}$ ". WEIGHT: 38 $\frac{1}{2}$ lbs. LIST: (with tubes) \$456.92. Use Cannon XL3-11 type microphone connectors.

KX-50: 50 watts power output design center rating, 60 watts max. at less than 3% distortion any output tap. PEAK POWER: 80 watts design center, 90 watts, max. BOOSTER COUPLING JACK for connecting K50B Boosters for 100 watts or more. All other characteristics identical with KX-25 except gains, which are all

3 db higher than KX-25. TUBES (18): 6-6SC7, 2-6J5, 1-6SQ7, 1-6J7, 1-6SN7, 4-6L6G, 1-6AF6G, 2-5U4G. POWER CONSUMPTION: 235 watts, 117 volts 60 cycles A.C. Max. Input 129 volts. DIMENSIONS: $9\frac{3}{8}$ " x $17\frac{3}{4}$ " x $14\frac{1}{4}$ ". WEIGHT: 46 lbs. LIST: (with tubes) \$532.03. Use Cannon XL3-11 type microphone connectors.

KX-6A: A 6 channel mixer pre-amplifier designed to feed broadcast lines or boosters for finest quality. OUTPUT: +31 VU, less than 3% distortion, +30 VU at less than 1%. Has built in power supply and genuine VU meter with meter range extension switch. INPUTS: for 5 mikes (2 meg.) gain 97 db and 1 phono either crystal ($1/2$ meg.) gain 64 db or magnetic (27,000 ohms) gain 73 db. Use RC-6 Unit for remote control. Includes Master Volume Control and same fine Dual Tone Controls and Audio Bandwidth Selectors as in KX-25 and KX-50. BASS TONE CON-

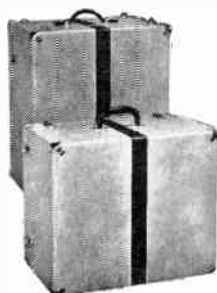
TROL: Range — 16 to +25 db. TREBLE TONE CONTROL: Range — 30 to +20 db. HUM: —80 db controls off, —80 db crystal —75 db mike and magnetic. CONTROLS (12): 5 mike, 1 phono, 1 bass, 1 treble, 1 master, 1 four position bandwidth (all under key locked cover), 1 A.C. power switch, 1 VU meter range switch (in rear). TUBES (12): 6-6SC7, 4-6J5, 1-6J7, 1-6X5. POWER CONSUMPTION 35 WATTS, 117 volts 60 cycles A.C. MAX. Input 129 volts. DIMENSIONS: $9\frac{3}{8}$ " x $17\frac{3}{4}$ " x $14\frac{1}{4}$ ". WEIGHT: 30 lbs. LIST: (with tubes) \$400.29. Use Cannon XL3-11 type microphone connectors.

K50B: Booster Amplifier. Performance, power and output impedance same as KX-50 with but one input of $1/2$ meg. impedance, gain 71 db. Provision for plug-in bridging or low impedance transformer. Built for continuous duty with long life parts, separate plate, and filament power transformers, individually fused, permits dependable plate power switching. Includes volume and overload

indicators as in KX-50. Ample multistage feedback to minimize effects of speaker load variations. Etched metal panel. TUBES (10): 1-6J7, 1-6SN7, 1-6SQ7, 5-6L6G, 1-6AF6G, 2-5U4G. POWER CONSUMPTION: 230 watts 117 volts 60 cycles. 129 volts max. DIMENSIONS: $9\frac{3}{8}$ " x $17\frac{3}{4}$ " x $12\frac{1}{4}$ ". WEIGHT: 41 lbs. LIST: (with tubes) \$225.00. PLUG KIT: \$2.50.

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PORTABLE SYSTEMS • CUSTOM SERIES

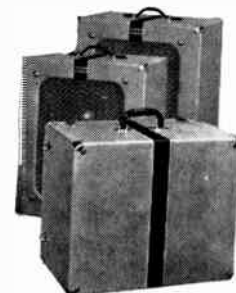


KX-2512X: Portable system with KX-25 amplifier and two heavy duty, extremely efficient speakers, each with 50' cable. System is carried in two cases: Model KA for the amplifier, size $19\frac{1}{2}$ " x $11\frac{3}{4}$ " x $16\frac{1}{2}$ "; Model K-212X for two speakers, size $18\frac{1}{2}$ " x $12\frac{1}{2}$ " x $22\frac{1}{2}$ ". Speakers face inside for maximum protection when split case is closed. Mikes and mountings not included as requirements vary. LIST: (less mikes and stands) \$645.57.

KA: Amplifier case fits all model K amplifiers. LIST: \$35.00.

KX-25R12X: Portable system identical to KX-2512X but with each speaker mounted in an individual portable reflex baffle. Model KR-112X, for utmost tone quality. Speaker cases size, $18\frac{1}{2}$ " x $12\frac{1}{2}$ " x $24\frac{1}{2}$ ". Mikes and mountings not included as requirements vary. LIST: (less mikes and stands) \$716.82.

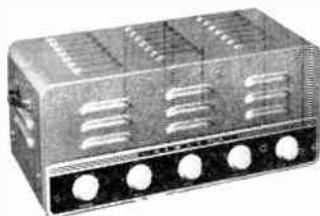
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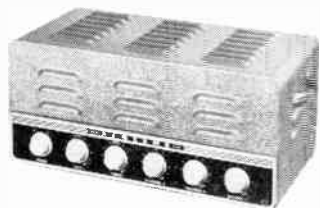
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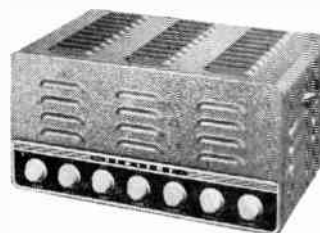
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AMPLIFIERS • DELUXE SERIES
PORTABLE SYSTEMS

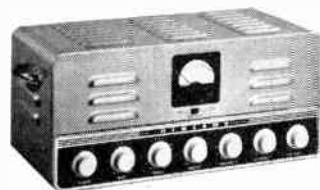
H-15



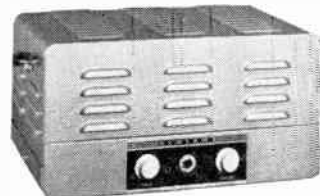
H-25



H-50



H-4VU



H-25B



H-50B

For Performance, Dependability and Value check these features and specifications:

- 20-20,000 cycles \pm 2 db
- Full Power any output tap
- Less than 5% distortion
- 90% of rated power at less than 2%
- Remote Control provision — all mikes
- U/L Approved
- Continuous duty—longer life parts
- Wired for plug-in input transformers

Full Audio Power, 50 to 5000 cycles (region of all major power requirements) within \pm 1/2 db. less than 5% distortion. Individual boost and attenuate type bass and treble tone control in new distortion free circuit. Linear mixer frequency response. All models but pre-amplifier have output impedances of 4, 8, 16, 250, and 500 ohms PLUS a 70 volt "constant voltage" tap, with easily-operated impedance selector. Multi-stage inverse feedback. Large heavy duty power and output transformers thoroughly impregnated against moisture. Rear connections avoid unsightly wires, simplify rack installations. A. C. convenience outlet in rear, all models except boosters. CABINETS: Heavy gauge welded steel beautifully styled in modern functional simplicity that endures. FINISH: Silver Grey Hammer-tone Baked Enamel. PANEL: Etched metal, illuminated. KNOBS: Large, round, skirted type, for ease of operation. Additional specifications under specific model numbers.

H-15: 17 watts power output design center rating, 20 watts max. at less than 5% distortion, any output tap. PEAK POWER: 26 watts design center, 31 watts max. INPUTS (3): 2 mike (2 meg.), gain 120 db; 1 phonograph (1/2 meg.), gain 80 db. BASE TONE CONTROL: Range -16 to +14 db. TREBLE TONE CONTROL: -34 to +13 db. HUM: -72 db phono input, -62 db mike inputs (referred to rated

output). **H-25:** 25 watts power output design rating, 30 watts max. at less than 5% distortion, any output tap. PEAK POWER: 40 watts design center, 48 watts maximum. INPUTS (4): 3 mike (2 meg.), gain 124 db; 1 phonograph (1/2 meg.), gain 80 db. BASS TONE CONTROL: -18 to +15 db. TREBLE TONE CONTROL: Range -27 to +10 db. HUM: -72 db phono input, -62 db mike inputs (referred to

rated output). **H-50:** 50 watts power output design center rating, 60 watts max. at less than 5% distortion, any output tap. PEAK POWER: 80 watts design center, 90 watts max. INPUTS (5): 4 mike (2 meg.), gain 124 db. 1 phono (1/2 meg.), gain 81 db. BOOSTER COUPLING JACK for connecting H-25B or H-50B Boosters for 75 to 100 watts or more. BASS TONE CONTROL: Range -21 to +16 db. TREBLE TONE CONTROL: Range -27 to +10 db.

H-4VU: Mixer Pre-Amp. with built-in power supply. Extremely low hum. Suitable for feeding telephone lines or booster amplifiers such as the H-25B or H-50B. Output -22 db at less than 5% distortion. +21 db at less than 2%. INPUTS for three mikes (2 meg.), gain 90 db. 1 phono (1/2 meg.), gain 51 db. HUM: Better than, -80 db from phono input or -75 db, mike inputs. Use RC-3 Unit for remote control. Includes master con-

rol and genuine VU meter with meter range extension switch. **H-25B:** Booster Amplifier — Performance Power and Output Impedances same as H-25 with but one input of 1/2 meg. impedance, gain 68 db. Provision for plug-in bridging or low impedance transformer. Etched metal panel with pilot light, A.C. power switch and volume control. Ideal for use with H-4 Pre-amplifier.

H-50B: Booster Amplifier — Performance, Power and Output Impedances are same as H-50 with but one input of 1/2 meg. impedance, gain 71 db. Provision for plug-in bridging or low impedance transformer. Etched metal panel with pilot light, A.C. switch and volume control.

CONTROL (5): 1 mike-phonograph, 1 mike, 1 bass, 1 treble, 1 A.C. power switch. REMOTE CONTROL: Use RC-2 remote control unit. TUBES (7): 2-6SF5, 1-6SJ7, 1-6SN7, 2-6L6G, 1-5Z4. POWER CONSUMPTION: 85 watts, 117 volts 60 cycles. A.C. Max. input 129 volts. DIMENSIONS: 8 1/4" x 19" x 10 1/4". WEIGHT: 20 lbs. LIST: (with tubes) \$183.59. Use Cannon XL3-11 type microphone connectors.

CONTROL (6): 2 mike, 1-mike-phonograph, 1 bass, 1 treble, 1 A.C. power switch. REMOTE CONTROL: Use RC-3 remote control unit. TUBES (8): 3-6SF5, 1-6SJ7, 1-6SN7, 2-6L6G, 1-5U4G. POWER CONSUMPTION: 125 watts, 117 volts, 60 cycles A.C. Max. Input 129 volts. DIMENSIONS: 8 1/2" x 19" x 10 1/4". WEIGHT: 24 lbs. LIST: (with tubes) \$215.03. Use Cannon XL3-11 type microphone.

HUM: -72 db phono input, -62 db mike inputs (referred to rated output). CONTROL (7): 3 mike, 1 mike-phonograph, 1 bass, 1 treble, 1 A.C. power switch. REMOTE CONTROL: Use RC-4 remote control. TUBES (12): 4-6SF5, 1-6SJ7, 1-6SN7, 4-6L6G, 2-5U4G. POWER CONSUMPTION: 225 watts, 117 volts, 60 cycles A.C. Max. Input 129 volts. DIMENSIONS: 9 1/4" x 19" x 12 1/2". WEIGHT: 37 lbs. LIST: (with tubes) \$285.60. Use Cannon XL3-11 type

control and genuine VU meter with meter range extension switch. BASS TONE CONTROL: Range -16 to +14 db. TREBLE TONE CONTROL: Range -27 to +13 db. TUBES (7): 3-6SF5, 1-6SJ7, 1-6SN7, 1-6J5, 1-6X5. POWER CONSUMPTION: 30 watts, 117 volts, 60 cycles A.C. Max. Input 129 volts. DIMENSIONS: 8 1/2" x 19" x 10 1/4". WEIGHT: 17 1/2 lbs. LIST: (with tubes) \$228.44. Without UV meter \$182.94. Use Cannon XL3-11 type microphone connectors.

Built for long life. TUBES (5): 1-6SJ7, 1-6J5, 2-6L6G, 1-5U4G. POWER CONSUMPTION: 120 watts, 117 volts. 60 cycles A.C. Max. Input 129 volts. DIMENSIONS: 8 1/8" x 19" x 10 1/4". WEIGHT: 22 lbs. LIST: (with tubes) \$149.50. PLUG KIT: \$1.69.

Built for long life. Ideal for use with H-4 Pre-Amp. TUBES (8): 1-6SJ7, 1-6J5, 4-6L6G, 2-5U4G. POWER CONSUMPTION: 220 watts, 117 volts, 60 cycles A.C. Max. Input 129 volts. DIMENSIONS: 9 1/4" x 19" x 12 1/2". WEIGHT: 33 1/2 lbs. LIST: (with tubes) \$189.50. PLUG KIT: \$1.69.

NEWCOMB DELUXE PORTABLE SYSTEMS

H-1512R: Portable system with H-15 amp. and two 12" speakers, each with 25' cable, in split case Model EH-212R, size 11 1/2" x 20 1/2" x 21", covered in washable fabricoid, Kickproof metal grills protect speakers. Mikes and mountings not included as requirements vary. LIST: (less mikes and stands) \$283.09.

H-2512R: Portable system with H-25 amp. and two 12" speakers, each with 25' cable in split case, Model EH-212R. Size, 20 1/2" x 11 1/4" x 21". Mikes and mountings not included as requirements vary. LIST: (less mikes and stands) \$314.53.

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AMPLIFIERS • SPECIAL SERIES



The same fine workmanship and materials as the incomparable KX- and H-Series. Designed to lead the low-price field. For performance, dependability and economy the E-Series is today's best combination of high quality and low cost. All models U/L Approved.



E-10A: Delivers 10 watts from push-pull 6V6 tubes. Separate mike and phono controls. Multistage inverse feedback circuit. **POWER OUTPUT:** 10 watts at less than 5%. **FREQUENCY RESPONSE:** 40 to 15,000 cycles \pm 2 db. **INPUTS:** (2) 1 mike (2 meg.) gain 116 db. Wired for plug-in input transformers. 1 phono ($\frac{1}{2}$ meg.) gain 77 db. **TONE CONTROL:** Range 0 to -24 db. **OUTPUT**

IMPEDANCES: 4, 8, 16 and 500 (70 Volt Tap) ohms to octal socket. **TUBES:** (5) 1-6SC7, 1-6SJ7, 2-6V6GT, 1-6X5GT. **FINISH:** Silvergrey hammertone baked enamel. **PANEL:** Genuine etched enamel. **POWER CONSUMPTION:** 60 watts at 117 volts, 60 cycles A.C. **SIZE:** 5 $\frac{3}{4}$ " x 10 $\frac{3}{8}$ " x 6 $\frac{3}{4}$ ". **WEIGHT:** 9 $\frac{1}{2}$ lbs. Less cover, 7 $\frac{1}{2}$ lbs. **LIST:** (with tubes, without cover) \$69.50. **Cover \$7.21. PLUG KIT: \$1.71.**



E-17P3: A conservative 17 watt model with 3 speed phono. Separate bass and treble controls, phono bass boost, multi-stage inverse feedback circuit. Input controls for mike and phono. **POWER OUTPUT:** 17 watts at less than 5%. **FREQUENCY RESPONSE:** \pm 2 db. 40 to 15,000 cycles. **INPUTS:** 1 mike (2 meg.) gain 115 db. Wired for plug-in input transformers. 1 phono ($\frac{1}{2}$ meg.) gain 77 db. **OUTPUT IMPEDANCES:** 4, 8, 16, 290 (70 Volt Tap) and 500 ohms. **TUBES:** (5) 1-12AX7, 1-6SJ7, 2-6L6G, 1-5V4G. **FINISH:** Silvergrey hammertone baked enamel. **PANEL:** Etched metal, lighted. **POWER CONSUMPTION:** 75 watts at 117 volts, 60 cycles A.C. **SIZE:** 8 $\frac{3}{8}$ " x 14 $\frac{1}{8}$ " x 8". **WEIGHT:** 15 $\frac{1}{2}$ lbs. **LIST:** (with tubes) \$149.87. **PLUG KIT: \$2.28.**

E-17: A 17 watt amplifier without 3 speed phono. Otherwise identical to model E-17P3. **LIST:** (with tubes and cover) \$107.50. **PLUG KIT: \$2.28.**



E-25: A dependable, full 25 watts with inputs for 2 mikes and 1 phono, separate bass and treble controls, phono bass boost, multi-stage inverse feedback circuit. **POWER OUTPUT:** 25 watts at less than 5%. **FREQUENCY RESPONSE:** \pm 2 db. 40 to 15,000 cycles. **INPUTS:** (3) 2 mike (2 meg.) gain 117 db. Wired for plug-in input transformers. 1 phono ($\frac{1}{2}$ meg.) gain 77 db. **OUTPUT IMPEDANCES:** 4, 8, 16, 196 (70 Volt Tap) and 500 ohms. **TUBES:** (6) 1-12AX7, 1-6SC7, 1-6J5, 2-6L6G, 1-5V4G. **FINISH:** Silvergrey hammertone baked enamel. **PANEL:** Etched metal, lighted. **POWER CONSUMPTION:** 90 watts, 117 volts, 60 cycles A.C. **SIZE:** 8 $\frac{3}{8}$ " x 14 $\frac{1}{8}$ " x 8". **WEIGHT:** 18 $\frac{1}{4}$ lbs. **LIST:** (with tubes and cover) \$139.50. **PLUG KIT: \$3.24.**

E-25P3: A 25 watt amplifier with 3 speed phono. Otherwise identical to model E-25. **LIST:** (with tubes) \$181.50. **PLUG KIT: \$3.24.**



E-254P3: A highly versatile, yet economical 4 channel, 25 watt amplifier with 3 speed phono. **FEATURES:** High gain, inputs for 3 mikes and 1 phono, separate bass and treble tone controls, phono bass boost, multi-stage inverse feedback circuit. Pickup is high-grade turnover crystal. **POWER OUTPUT:** 25 watts at less than 5% distortion. **FREQUENCY RESPONSE:** \pm 2 db, 40 to 15,000 cycles. **3 MIKE INPUTS:** 2 meg., gain 123 db. Wired for plug-in input transformers. **PHONO INPUT:** $\frac{1}{2}$ meg., gain 83 db. **OUTPUT IMPEDANCES:** 4, 8, 16, 196 (70 Volt Tap) and 500 ohms. **TUBES:** (8) 3-6SF5, 1-6SJ7, 1-6SN7, 2-6L6G, 1-5V4G. **FINISH:** Silvergrey hammertone baked enamel. **PANEL:** Etched metal illuminated. **CONTROLS:** 3 mike, 1 phono, 1 bass, 1 treble and power switch. **POWER CONSUMPTION:** 105 watts at 117 volts, 60 cycles A.C. **SIZE:** 8 $\frac{3}{8}$ " x 14 $\frac{1}{8}$ " x 8". **WEIGHT:** 18 $\frac{1}{4}$ lbs. **LIST:** (with tubes) \$211.50. **PLUG KIT: \$3.90.**

E-254: A 25 watt amplifier without 3 speed phono. Otherwise identical to model E-254P3. **LIST:** (with tubes and cover) \$169.50. **PLUG KIT: \$3.90.**



E-50: A distortion-free, conservatively rated 50 watts using push-pull parallel 6L6 tubes and multi-stage inverse feedback circuit. Has inputs for 2 mikes, 1 phono, separate bass and treble controls, phono bass boost. Same as E-25 except as follows:

POWER OUTPUT: 50 watts at less than 5%. **Mike gain** 120 db. Wired for plug-in input transformer **Phono gain** 79 db. **OUTPUT IMPEDANCES:** 4, 8, 16, 98 (70 Volt Tap) and 250 ohms. **TUBES:** (9) 1-6SJ7, 1-12AX7, 1-6J5, 4-6L6G, 2-5V4G. **POWER CONSUMPTION:** 170 watts at 117 volts, 60 cycles A.C. **SIZE:** 11 $\frac{1}{4}$ " x 14 $\frac{1}{8}$ " x 8 $\frac{1}{2}$ ". **WEIGHT:** 29 lbs. **LIST:** (with tubes and cover) \$196.50. **PLUG KIT: \$3.24.**



E-504: A 4 channel 50 watt amplifier featuring: high gain, inputs for 3 mikes and 1 phono, separate bass and treble tone controls, phono bass boost, multi-stage inverse feedback, push pull parallel output system for lowest distortion at all power levels. **POWER OUTPUT:** 50

watts at less than 5% distortion. **FREQUENCY RESPONSE:** \pm 2 db, 40 to 15,000 cycles. **THREE MIKE INPUTS:** 2 meg., gain 126 db. Wired for plug-in input transformers. **PHONO INPUT:** $\frac{1}{2}$ meg., gain 86 db. **OUTPUT IMPEDANCES:** 4, 8, 16, 98 (70 Volt Tap) and 250 ohms. **TUBES:** (11) 3-6SF5, 1-6SJ7, 1-6SN7, 4-6L6G, 2-5V4G. **FINISH:** Silvergrey hammertone baked enamel. **PANEL:** Etched metal, illuminated. **CONTROLS:** 3 mike, 1 phono, 1 bass, 1 treble and power switch. **POWER CONSUMPTION:** 180 watts, 117 volts, 60 cycles A.C. **SIZE:** 11 $\frac{1}{4}$ " x 14 $\frac{1}{8}$ " x 8 $\frac{1}{2}$ ". **WEIGHT:** 30 lbs. **LIST:** (with tubes and cover) \$239.50. **PLUG KIT: \$3.90.**

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PORTABLE AMPLIFIERS

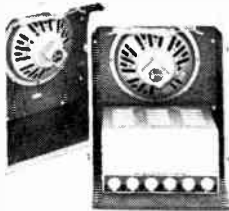
E

SERIES



E-1010S: A 10 watt basic portable consisting of one E-10 amplifier with plugs and one E-110S case assembly with efficient 10" P.M. speaker protected by a kick-proof metal grill. Speaker cable 25'. Overall size: 12 $\frac{1}{4}$ x 15 $\frac{3}{4}$ x 8 $\frac{3}{4}$ ".

Weight: 19 lbs. LIST: (less mike and stand) \$126.82.

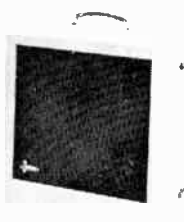


E-1712R: A 17 watt dual speaker portable system consisting of one E-212R split speaker and amplifier case assembly with two 12" high quality P.M. speakers, each with 25' cable, protected by kick-proof grills, and one E-17 amplifier with plugs. Size: 11 $\frac{1}{8}$ x 20 $\frac{1}{2}$ x 21". Weight: 40 lbs. LIST: (less mike and stand) \$209.28.

E-2512R: A 25 watt dual speaker portable system with model E-25 amplifier. Weight 42 $\frac{1}{2}$ lbs.

LIST: (less mikes and stands) \$242.24.

E-25412R: A 25 watt dual speaker portable system consisting of one E-212R split case assembly with two 12" P.M. speakers each with 25' cable, and model E-254 four channel amplifier. LIST: (less mikes and stands) \$272.90.



E-17P312R: A 17 watt dual speaker portable system with 3 speed phono. Consists of model E-17P3 amplifier in E-212R split case assembly. LIST: (less mike and stand) \$246.95.

E-25P312R: A 25 watt dual speaker portable system with 3 speed phono. Model E-25P3 amplifier in E-212R split case assembly. LIST: (less mikes and stands) \$279.65.

E-254P312R: A 25 watt dual speaker portable system with 3 speed phono. Same as E-25412R but with 3 speed phono top amplifier model E-254P3. LIST: (less mikes and stands) \$306.00.

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tuners, amplifiers, phonographs
and sound systems are
U/L APPROVED**

NEWCOMB

MOBILE AMPLIFIERS

E

SERIES

E-10M: A 10 watt mobile amplifier. For use on 6 V.D.C. or 117 V.60 cycles A.C. Features push-pull beam power output tubes with inverse feedback for low distortion, standby, battery saver switch, new freedom from vibrator hash, special mounting for easy removal of chassis, inputs for mike and phono, sturdy Jones connectors for battery and A.C. cables. **POWER OUTPUT:** 10 watts at less than 5%. **FREQUENCY RESPONSE:** ± 2 db. 50 to 15,000 cycles. **INPUTS:** Mike (2 meg.) gain 115 db. phono (1 $\frac{1}{2}$ meg.) gain 75 db. **OUTPUT IMPEDANCES:** 4, 8, 16 ohms. **TUBES:** (5) 1-6SC7, 1-6SF5, 2-6V6GT, 1-6X5GT. **POWER CONSUMPTION:** 60 watts, 117 volts, 8 amps. at 6 V.D.C. **FINISH:** Silvergrey hammertone baked enamel. **PANEL:** Etched metal with pilot lamp. **SIZE** 6 $\frac{1}{8}$ x 6 $\frac{3}{8}$ x 8 $\frac{1}{4}$ ". **WEIGHT:** 9 $\frac{3}{4}$ lbs. **LIST:** (with tubes) \$99.75. **Plug Kit** \$1.39.



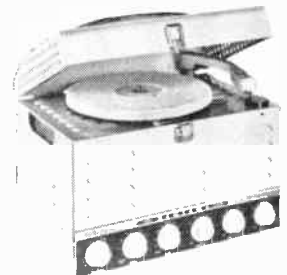
All Newcomb equipment U/L approved. Prices and specifications subject to change without notice.

**No matter what price level . . .
if it's a NEWCOMB,
it's DEPENDABLE!**

Sound installations vary greatly in their needs of complexity as well as requirements of cost. Yet, one important feature is required of all — dependability. No matter how complex, or how simple and inexpensive your needs may be . . . you can enjoy utmost dependability by insisting on a Newcomb amplifier for your sound system. No product bears the name Newcomb unless it is inherently dependable, no matter on what price level you find it. Under the Newcomb name there is only one standard for quality . . . the best! Newcomb amplifiers vary in their complexity, but never in dependability. Quality of parts, materials or workmanship are never sacrificed here to gain lower price. Lower cost of one Newcomb model as compared to another is always entirely the result of greater simplicity.

12-VOLT

Newly developed E-253M Series Newcomb Amplifier designed for use anywhere. Ultra modern 25 watt unit available in several styles with and without turntable (see below). May be used on either 12-volt storage battery or 117 volt 60 cycle AC power source with equal effectiveness. Consumes as much as 20% less battery current, weighs up to 30% less. Separate bass and treble tone controls; two microphone channels each with the new standard broadcast type connectors and convertible to low impedance with Newcomb humless plug-in input transformers; high gain separate phono channel for ceramic pickups; extra input for tape; standby switch to reduce idle battery consumption more than 70%; new freedom from vibrator hash; heat resistant ceramic pickup and turret type motor in 3-speed phono top; completely U/L Approved.



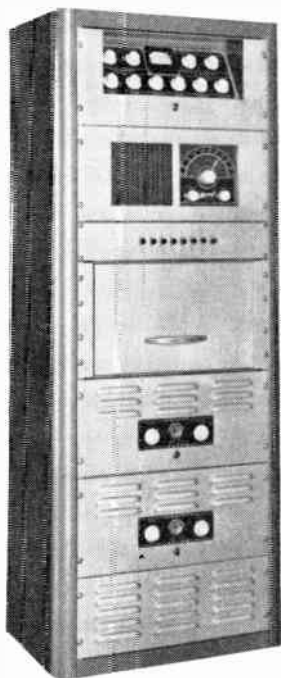
POWER OUTPUT: 25 watts at less than 3% total harmonic distortion, peak power 40 watts. **FREQUENCY RESPONSE:** 30 — 20,000 cycles ± 2 db. **HUM LEVEL:** 70 db below 25 watts. **INPUTS:** Two mike (2 meg.) gain 122 db; one phono (2 meg.) gain 90 db; and one tape (2 meg.) gain 90 db. Mike inputs convertible to low impedance using Newcomb plug-in transformers. **CONTROLS:** One standby switch, one power switch and treble tone control, one bass tone, one phono, two microphone, one phono motor control (on phono top models), and one hum balance control. **OUTPUT IMPEDANCE:** 4, 8, 16, and 500 ohms and a 70 volt tap to impedance selector and two output sockets. **POWER CONSUMPTION:** On 117 volts 60 cycles AC, 100 watts. On 12 volts DC, 8.85 amps (with phono top, 10.3 amps.). Stand-by current less than 3 amps. **SIZE:** 14 $\frac{1}{8}$ x 9 $\frac{1}{2}$ x 8" high (with cover (height 10 $\frac{1}{4}$ ")). **TUBES:** 1-12AX7, 1-12AU6, 2-6L6G, 2-6X5GT, 1-12AV7, E-253M — plain top model, list price \$214.50. (Weight, 24 lbs.). E-253M3 — 3-speed phono-top model, list price \$248.10. (Weight, 28 $\frac{1}{4}$ lbs.). **PC** — Protective turntable cover with "king-sized" handle for use on Model E-253M3 only, list price \$15.00. (Weight, 2 $\frac{3}{4}$ lbs.). Above prices include both battery and AC power cables.

NEWCOMB

AUDIO PRODUCTS CO. • HOLLYWOOD 38, CALIFORNIA

NEWCOMB

RACK AND PANEL ASSEMBLIES



Any standard Newcomb amplifier may be obtained panel mounted on special order in 19" x 8 $\frac{3}{4}$ " panels, thus giving the custom designer a wide choice of equipment to meet any need.

MODEL 595-19 CABINET: (illustrated) Supplies a demand for a beautifully finished housing that is fully in keeping with the Newcomb tradition and reputation for quality. Panel space is 55". Design accepts standard 19" wide panels. Mounting holes are RMA standard 1 $\frac{1}{4}$ " and 1 $\frac{1}{2}$ " spacings. Panel mounting holes are tapped in $\frac{1}{8}$ " stock. Fully ventilated rear door provides easy accessibility. Entire cabinet is a complete welded assembly ready for use as you receive it. Finish is dark grey hammertone. Provision is made in the rear for nine 1 $\frac{1}{2}$ " conduits. Included is a removable terminal strip mounting plate located near conduit inlets. **OVERALL DIMENSIONS:** 59 $\frac{1}{2}$ " x 23" wide x 16" deep. **SHIPPING WEIGHT:** 92 lbs. **LIST:** \$189.50.

MODEL 385-19 CABINET: Provides 35" of panel space for standard 19" panels. **OVERALL DIMENSIONS:** 38 $\frac{1}{2}$ " x 23" wide x 16" deep. **SHIPPING WEIGHT:** 72 lbs. **LIST:** \$149.50.

In addition to the panel mounted amplifiers Newcomb also provides a wide selection of other equipment designed for custom rack installations.

MODEL 1050-C PHONOGRAPH CHANGER PANEL is a practical solution to mounting a phono changer in cabinet 595-19. Ball bearing drawer with wood motor board is adaptable for mounting most popular changers. Panel size 19" x 10 $\frac{1}{2}$ ". All panels are finished in silver-grey hammertone baked enamel. **MODEL E2-525 PRE-AMPLIFIER** answers the need for a simple, dependable but economical pre-amp for rack use. **MODEL TB2-525 INTERCOM AMPLIFIER** has built-in power supply, speaker, talk-listen switch and separate talk and listen volume controls.

MODEL B-100-875 AM RADIO is the Newcomb B-100 radio mounted on an 8 $\frac{3}{4}$ " panel. (See listing page B-7.) **MODEL 700-MP MONITOR** is available for installation of any 6" speaker. **LEVER KEY PANELS** are provided for use with CRL keys, 3 $\frac{1}{2}$ " deep with slot: for 6, 8, 10 or 12 keys. **LOUVERED PANELS** for additional ventilation and **BLANK PANELS** are made in assorted sizes.

SPECIAL PANELS are made to order to fit special equipment. Templates or suitable drawings must accompany order for any special sheet metal work. Full details of Newcomb rack and panel equipment available on request.

NEWCOMB

ACCESSORIES FOR (H) AND (K) SERIES



REMOTE CONTROLS

For mixing and fading all H Series mike inputs. With K Series amplifiers all mikes and phono may be controlled. Up to 2000 feet of cable may be used. No inductive pickup.

RC-2 for H-15 amp. Requires ordinary 3 wire cable, 2 $\frac{3}{4}$ " x 6" x 2 $\frac{1}{8}$ ". **WEIGHT:** 1 lb. **LIST:** (less cable) \$10.50.

RC-3 for H-25 or H-4 amps. Requires ordinary 4 wire cable. 2 $\frac{3}{4}$ " x 6" x 2 $\frac{1}{8}$ ". **WEIGHT:** 1 lb. **LIST:** (less cable) \$15.50.

RC-4 for H-50 amp. Requires ordinary 5 wire cable. 2 $\frac{3}{4}$ " x 7 $\frac{3}{8}$ " x 2 $\frac{1}{8}$ ". **WEIGHT:** 1 $\frac{1}{4}$ lbs. **LIST:** (less cable) \$19.50.

RC-6 for KX-25, KX-50, KX-6 amps. Requires ordinary 7 wire cable. 2 $\frac{3}{4}$ " x 11 $\frac{1}{4}$ " x 2 $\frac{1}{8}$ ". **WEIGHT:** 2 lbs. **LIST:** (less cable) \$27.50.



PLUG-IN TRANSFORMERS

TR-91: Features sextuple alloy and copper shielding for quiet operation right in amp. proper. Alloy core and specially designed windings for extended frequency response from 20 to 20,000 cycles. Plug base for easy installation. For use between 30-50 or 200-250 ohm mikes and grid. **WEIGHT:** 1 $\frac{1}{4}$ lbs. **LIST:** \$32.50.

TR-92: Input impedance 5,000 ohms to grid for bridging a 500-600 ohm line. When plugged into sockets on K50B, H50B, H25B it converts for use as bridging amps. **WEIGHT:** 1 $\frac{1}{4}$ lbs. **LIST:** \$29.50.

TR-100: Identical to TR-91 but for use between 125-150 or 500-600 ohm mikes and grid. **LIST:** \$32.50.

All prices and specifications subject to change without notice.

COMPLETE BID SPECIFICATIONS AVAILABLE

Available from Newcomb are complete bid specifications for public address amplifiers, phonographs, transcription players, and radios. A must for schools, states, or federal governments as well as commercial institutions requiring specifications to be shown. These Newcomb bid specifications spell out the proper details and may be included directly on prints or purchase orders.

All Newcomb equipment approved by Underwriters Laboratory.

NEWCOMB

AUDIO PRODUCTS CO. • HOLLYWOOD 38, CALIFORNIA



SOUND PRODUCTS

The RCA CONSUL SERIES Sound Amplifiers

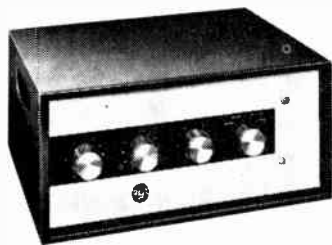
The Consul Series represents the ultimate in flexibility and versatility in moderate priced sound equipment, for conventional applications as well as those requiring a wider choice of installation and operating facilities.

Whatever the application, you will find the correct choice in an amplifier from among those shown on this page. The three amplifiers described here provide a choice of power rating from 12 to 100 watts, all engineered to RCA's traditionally high standards of quality and performance to assure life-like reproduction from microphone, radio, record player, or tape input.

The phonograph top and combination mixer/preamplifier are custom engineered to work in perfect harmony with any Consul Amplifier or with your present sound system.

The Consul Series is the result of sound but imaginative engineering resulting in a product which represents a departure from the usual limitations and restrictions commonly associated with other than "deluxe" or custom engineered sound systems. Ruggedly constructed for continuous duty, the Consul Series is capable of performance and dependability far beyond that expected of such moderately priced equipment.

CONSUL 12



12 WATT PA AMPLIFIER
Type 17649

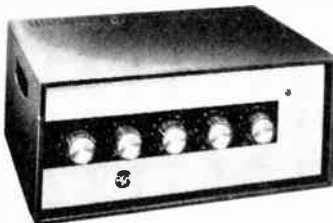
Dependable high quality sound reproduction is offered from this efficient unit. Rugged, versatile, and economical, the Consul 12 is ideal for use in low power public address systems, paging, garages, taverns, auctions, churches, amusement parks, and outdoor facilities.

The Consul 12 provides a low level, high gain channel, with gain control, for microphones of either the high impedance or quality dynamic type. Transformers are available for matching to low impedance microphones and telephone lines.

A second channel is provided for connection to a high impedance phono cartridge, tuner or tape recorder output. Since it employs a "fader" type gain control, two such program sources may be connected to this channel and controlled individually with a single knob for rapid switchover between two program inputs, further simplifying control action. A master volume control is also included for adjustment of amplifier power output without disturbing the gain settings. A four-position switch adjusts system frequency response for best characteristics for music, voice, program noise, and acoustical feedback conditions. A special signal source is available to drive a line or booster amplifier or tape recorder. Separate on-off switch permits the system to be turned off without disturbing control settings.

\$88.50*

CONSUL 35



35 WATT PA AMPLIFIER
Type 17650

The Consul 35 is an attractively styled, medium power amplifier, designed for simple operation and reliable performance. Excellent for speech reproduction, music, or paging, the Consul 35 will perform admirably both indoors and out, in auditoriums, ballrooms, churches, and schools.

Two low level, high gain channels and one high level channel are provided. Channel 1 may be used for a magnetic phono cartridge or a microphone of the high impedance or dynamic type, and line transformers are available for matching to low impedance microphones and telephone lines. A gain control is included.

Channel 2 affords a choice of microphone, or input from a tuner, tape recorder or phono cartridge. By means of a special combination mixer/fader/gain control, this may be mixed with another program source (channel 3) from a tuner, tape recorder or phono. It is thus possible to "fade" between channels 2 and 3 as well as mix and blend the two programs with one hand.

A master volume control is included, to preserve program source balance and gain settings when adjusting system power output. Individual, completely variable Bass and Treble cut/boost controls make it possible to meet practically any operating contingencies. A signal source is also provided for tape recording independent of the amplifier master volume and tone controls.

\$135.00*

CONSUL 100



100 WATT PA AMPLIFIER
Type 17651

The Consul 100 is an extremely versatile, highly efficient, high power amplifier designed to provide maximum sound amplification in hospitals, industrial plants, auditoriums, hotels, churches, etc.

This superb amplifier incorporates the same features, facilities, and operational advantages found in the Consul 35, with two low level, high gain channels and one high level channel.

Unique input and control arrangements permit an unusual degree of operational and installation flexibility.

For example, the Consul 100 features three channels which will accept inputs from a magnetic phono cartridge, tuner, tape recorder, or microphones of the high impedance or dynamic type. It will also accept inputs from low microphones and telephone lines through use of available line transformers.

In addition, inputs from two channels (2 and 3) may be mixed by means of a special mixer/fader/gain control making it possible to "fade" between channels as well as mix and blend two programs with one hand, single control action.

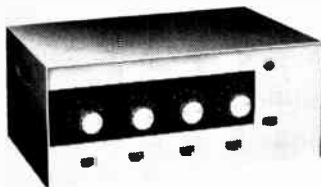
The Consul 100 also features a master volume control, individual, completely variable Bass and Treble cut/boost controls, separate power switch and pilot light. A signal source is also provided for tape recording independent of the amplifier master volume and tone controls.

The extra reserve power of the Consul 100 insures cool-running, trouble-free performance under any load condition; permits future expansion without resorting to additional booster amplifiers. A real work-horse, the Consul 100 provides 100 watts of power at a much lower price than you would expect.

\$208.00*

CONSUL COMBINATION

Mixer-Preamplifier Type 17654



This exceptional combination unit is designed for use with any sound system, fulfilling the need for additional channels and providing a practical way to expand a sound or recording installation. Completely self-contained, the Consul Combination permits remote control of multiple program sources.

Seven inputs are provided, five low level high gain, and two high level. Channel 1 offers a choice of microphones or magnetic cartridge in-

put; Channels 2 and 3 each provide a choice of microphone or input from tuner or tape recorder and crystal or ceramic phono player. All are switchable from the front panel, thereby making it possible to use these inputs at will without having to rearrange input connections. Channel 4 is another microphone channel, which is convertible to a master volume control for the entire mixer by a front panel switch.

The Consul Combination features adjustable re-set indicators for all controls eliminating the need to log or remember previous settings. Low impedance output permits long line runs to the main amplifier or to a basic power amplifier, and delivers sufficient voltage to drive several amplifiers simultaneously. Output to a tape recorder is also available and an auxiliary AC power receptacle is included.

\$86.50*

* Optional List Price

CONSUL PHONOGRAPH

TOP Type 17653



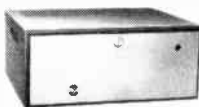
This excellent unit, designed for the rugged dependability required of all public address system components, will mount directly on top of the amplifier, or by itself at some remote location. It provides four

playback speeds and has a built-in 45 r.p.m. adaptor.

The Consul Phonograph Top features a turnover ceramic cartridge for maximum resistance to high humidity, temperature, and salt laden air. The tonearm can be secured to the base for safer portability when not in use and standard styli are used for easy replacement in the field. A separate power switch is used to turn the phonograph on and off.

\$44.00*

PANEL LOCK COVERS



Attractive, sturdy metal panel covers are available, complete with lock, for each of the Consul Series Amplifiers. These covers are a must to guard critical system balance and volume settings against accidents and tampering. The amplifier pilot light may be viewed at all times with the cover in place and locked on the front panel. No screws or other adjustments are necessary to install.

Type 17652 for 12 & 35 watt models **\$ 9.60***

Type 17655 for 100 watt model **\$10.00***



INTERCOMS

RCA offers a complete line of quality intercoms designed for office, home, farm or factory use at an economical price. Manufactured at RCA's traditionally high standards of engineering and design, the intercoms shown here are suitable for almost any possible application from simple wireless 2-way talk listen systems

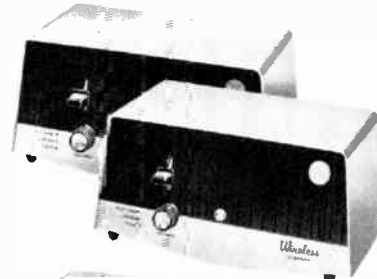
to flexible multi-unit systems with a variety of talk-listen-monitor options. The unsurpassed styling of these fine intercoms will harmonize beautifully with any decor. Installation, in all cases, is simple and inexpensive. Complete instructions are furnished with all units.

WIRELESS INTERCOM SYSTEM

Type 17641

The RCA Wireless Intercom makes use of the existing power lines for the transmission of voice. Just plug the units into any standard home electrical outlet and the installation is complete. Ideal for use anywhere . . . home, office, farm or factory, the RCA Wireless will operate between rooms, office floors and even between adjacent buildings if on the same power line.

2 station system **\$99.50***
Add'l. station (17646) **\$49.75***

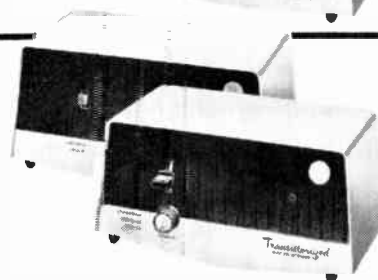


TRANSISTORIZED INTERCOM SYSTEM

Type 17642

The ultimate in low-cost installation. Battery operated (inexpensive penlight cells) it can be installed anywhere independent of ac current. Ideal outdoor system for farms, camps, storage yards, warehouses. Comes complete with master, remote and 50 feet of cable. As many as four additional remotes may be added to system.

1 master and 1 remote **\$52.95***
Add'l. remote (17648) **\$15.50***

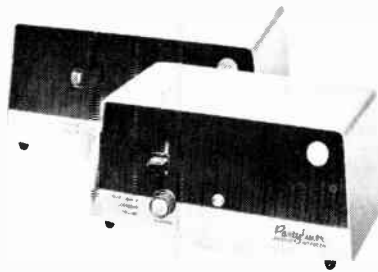


PARTYLINER INTERCOM SYSTEM

Type 17640

Ultra-sensitive "Partyliner" system comes complete with master, remote and 50 feet of cable. Powerful amplifier picks up the slightest noise. Remote can answer calls from a distance without operating switch making the "Partyliner" ideal for use as an electronic baby sitter. As many as four additional remotes can be added to system. Range of master to any remote is about 500 feet.

1 master and 1 remote **\$39.00***
Add'l. remote (17647) **\$15.50***

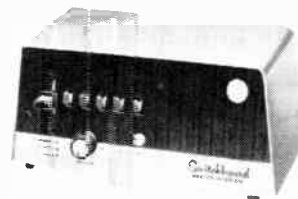


SWITCHBOARD MASTER INTERCOM

Type 17643

Used with as many as four remotes, the switchboard feature provides direct remote-to-remote conversations. Master can monitor any or all remotes or can set-up remotes to monitor other units. Remotes can originate calls to master and other remotes. Busy light flashes during conversation.

Master only **\$49.95***

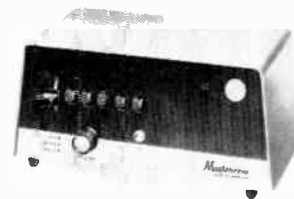


MASTERCOM MASTER INTERCOM

Type 17644

A dual-purpose master, the "Mastercom" can be used with as many as five remotes in a master-to-remote system or with as many as five additional masters in an all-master hook-up. In all-master systems, three private conversations can be held simultaneously or a conference may be held using all six stations.

Master only **\$49.95***

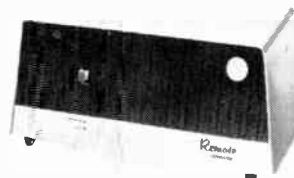


REMOTE STATION

Type 17645

The RCA Intercom Standard Remote Station can be used with either the RCA Mastercom or Switchboard unit. It can be installed for private or non-private operation. When private, its Call switch must be used to converse, but there's no interception by Master. When non-private, the Remote may reply to the master from a distance without using its switch, but its Call switch must be used to originate calls to its master. The RCA Remote Station can also be installed so that the call switch is inoperative and thereby unable to originate calls.

\$15.50*



* Optional List Price

SHERWOOD

TUNERS • AMPLIFIERS • SPEAKERS
MOST HONORED OF THEM ALL

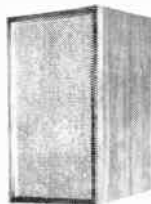


S-8000

32+32 WATT FM/MX STEREO RECEIVER. A triumph in engineering, combining in one unit the famed performance of Sherwood's FM tuner circuitry along with an FM stereo adapter, two 32 watt amplifiers, two complete phono pre-amplifiers and stereo control amplifiers. In spite of the compact size, 16 1/4 x 14 x 4 1/2 inches high, the S-8000 features "acro-beam" tuning eye, balanced flywheel tuning knob, friction-locked stereo bass and treble controls, ganged loudness control, phono level control, stereo balance control, stereo function and input-selector switch. Six slide switches control scratch and rumble filters, FM AFC, FM Inter-Channel Hush, phase reverse, and tape monitor. Inputs are provided for tape playback, tape monitor, phono, and two auxiliary. Outputs are for recording and 4, 8, 16 ohm speakers.

General Specifications—Power Output: Stereo 32 + 32 watts (64 watts mono) at 1 1/2% IM distortion. Frequency Response: 20-20,000 cps. ± 1 db @ 32 watts. Hum and Noise: phono input, 60 db below 32 watts. DC filament supply. Phono sensitivity 1 1/2 mv. Typical Sensitivity: FM: 0.95 μv for 20 db quieting; IHFM Sensitivity: 1.8 μv for - 30 db noise and distortion below 100% FM; Typical Selectivity: 195 kc @ - 3 db; FM discriminator: 950 kc peak-to-peak. 21 tubes plus 4 rectifiers and 2 diodes. Power Consumption: 150 watts. Shipping Weight: 32 lbs. (with case).

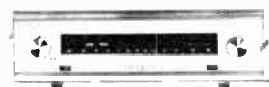
S-8000S (less case) Fair Trade Net. \$299.50
S-8000D brown leatherette case: Fair Trade Net. \$307.00



SR-3

"RAVINIA" 3-WAY SPEAKER SYSTEM features peak-free response (± 2 1/2 db.)—45 to 17,500 cps. High compliance 12" woofer, 8" fibre-glass back fill mid-range, 3 1/2" ring-radiator tweeter. Crossovers at 600 and 3,500 cps. Size: 15" x 26 1/4" x 13" deep.

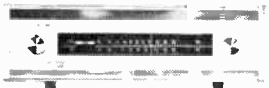
SR3W (Walnut finished). \$139.50
SR3U (unfinished Fir, less grill). \$119.50



S-3000 IV, S-3000 III

Sherwood is best known for its outstanding FM tuners, the first ever to achieve 0.95 μv sensitivity. All four models S-3000 IV, S-3000 III FM/MX STEREO, S-2000 II FM/AM, and S-2100 FM/MX STEREO/AM feature:

FM Interchannel Hush, a new noise-muting system which automatically eliminates noisy "hash" between FM channels to make FM tuning easier than ever, **FM Automatic Frequency Control (AFC),** which corrects electronically by 80% any mistuning of an FM station thereby simplifying accurate tuning of FM stations, velvet flywheel tuning, and single or dual tuning eyes. The built-in FM MX Stereo circuitry of model S-3000 IV is same as described in adapter at bottom of page. Adapters may be used with models S-3000 III, S-2000 II.

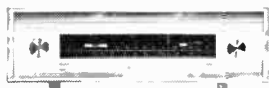


S-2000 II

In addition, Model S-3000 III also features self-contained provision for FM multiplex adapters complete with all necessary stereo controls. S-3000 III specifications same as S-2100 FM specifications.

General Specifications—Typical Sensitivity: FM: 0.95 μv for 20 db quieting; 1.8 μv for 30 db quieting; IHFM Sensitivity: 1.8 μv for - 30 db noise and distortion below 100% FM; AM - 2 μv @ 60% mod. for 0.5v output, 6 db S/N; Typical Selectivity: FM—195 kc @ - 6 db; AM—(wide) 15 kc @ - 6 db, (narrow) 5 kc @ - 6 db; FM Discriminator: 950 kc peak-to-peak; Frequency Response: FM 20-20,000 cps ± 1/2 db, AM—(wide) 20-7,500 cps @ - 6 db; Distortion: FM—less than 1/3% IM @ 100% mod. Hum and Noise Level: FM - 60 db below 100% mod., AM - 55 db below 100% mod.; FM Drift: ± 2 kc w/AFC; AFC Correction: 15 db; Audio Output: 2.0 volts output @ 100% FM; Tuning indicators: EM84 light-bar tuning eye; Tube Complement: 14 plus rectifier. Power Consumption: 65 watts, 110-120v, 50-60 cps; Dimensions 14" x 12 1/2" x 4" high. Shipping Weight: 20 lbs.

S-3000 IV Fair Trade Price—chassis less case*. \$160.00
S-2100 Fair Trade Price—chassis less case*. \$199.50
S-3000 III (same as S-3000 IV without stereo adapter installed). Fair Trade Price—chassis less case*. \$110.50
S-2000 II Specifications same as S-2100 without FM-AM Stereo reception feature.
Fair Trade Price—chassis less case*. \$150.50



S-2100



S-5000 II, S-5500 II

The Sherwood "Top Rated" S-5000 II STEREO DUAL AMPLIFIER-PREAMPLIFIER offers the maximum flexibility in stereo and monophonic operation.

General Specifications—Bass and treble controls have friction type dual knobs to adjust one channel separately from the other or together. Power Output: Stereo, 40 + 40 watts music power (80 watts mono IHFM music power). Frequency Response: 20-20,000 cps ± db at 36 watts. IM Distortion: 1 1/2% at rated output. Hum and Noise: phono input, 60 db below rated output. DC filament supply. Sensitivity: Radio, 0.25 volt; phono, 1 1/2 mv. Inputs: Phono (RIAA); tapehead (NAB) and 6 high-level. 2 cathode follower recording outputs. Controls include: 12 db/octave scratch and rumble filters and presence rise switch. Tubes: 4—7868, 6—12AX7/ECC83, 4 silicon rectifier. Power Required: 110 watts, fused. Size: 14" x 14" x 4". Shipping Weight: 29 lbs.

S-5000 II Fair Trade Price—chassis less case*. \$199.50
S-5500 II Same as S-5000 II except 32 + 32 watts, no presence rise feature. \$164.50



S-1000 II

The famous Sherwood "Music Center" monophonic amplifier-preamplifier offers music power output of 40 watts. This amplifier design is recognized for providing the many features and flexibility appreciated by the high-fidelity expert, yet offering the utmost in simplicity of operation.

General Specifications, S-1000 II—same as one channel of S-5000 II. Six tubes. Size: 14" x 10 1/2" x 4" high. Shipping Weight: 24 lbs.

S-1000 II Fair Trade Price—chassis less case*. \$109.50



S-360

MODEL 360 BASIC 40 WATT AMPLIFIER—Fair Trade Price—(case \$6.00 additional). \$59.50

*Add \$3.00 West of Rockies—see below for case prices.

ONE-YEAR WARRANTY—Every Sherwood product is covered by a full one-year warranty against defects in material and workmanship. Tubes carry the standard EIA 90-day warranty.

CASES: "A"—Brown Flexitone or "B"—Black Flexitone case or "L"—Walnut tone leatherette. \$7.50



STEREO LITE MODEL SL-1. Gives instant identification when FM/Stereo is tuned. Special sensing circuitry prevents false indications (frequent with some other identification devices) due to noise impulses. Operates with any type FM tuner. Size: 2 1/2" x 2 1/4" x 7 1/2" deep.

SL-1 \$29.50

Request technical data sheet showing other models.



Model S3MX and A3MX Stereo FM-MX adapters converts FM tuners to receive FM stereocasts; has 19 kc filter, 67 kc filter, 38 kc sub-carrier eliminated for tape recording. Four tubes plus rectifier. 4" x 5 1/4" x 10 1/2"—8 lbs.

S3MX-S (self-powered) without case. \$69.50
A3MX same as S3MX but plug in type without power supply for use in S-3000 III tuner. \$49.50
Units supplied with brown or black Flexitone case at \$5.00 additional. West of Rockies, add \$1.00 to all prices.

CROSSOVER NETWORKS—The Sherwood line of crossover networks features performance precise enough for the finest 2, 3 or 4-way high-fidelity speaker system at a cost within the reach of the budget-wary experimenter. All networks feature 12 db/octave attenuation.

| Model | Crossover Frequency | Speaker Application | Dimensions | Shipping Weight | Net Price |
|-------|---------------------|---------------------|--------------------|-----------------|-----------|
| SFX35 | 300 c, 5 kc | 3-way | 4 1/2 x 10 x 4 1/2 | 5 lbs. | \$19.50 |
| SX36 | 3500 cps | 2-way | 4 x 5 x 3 | 1 1/4 lbs. | 6.50 |
| SX8 | 800 cps | 2-way | 4 x 7 1/2 x 3 | 2 lbs. | 15.50 |
| SX55 | 500 c, 5 kc | 3-way | 4 1/2 x 10 x 4 1/2 | 4 lbs. | 18.50 |

Sherwood Electronic Laboratories, Inc.

Chicago, Illinois

NEW TALK-A-PHONE WIRELESS AND HOME INTERCOM SYSTEMS

TWO NEW WIRELESS SYSTEMS

Two NEW, high-quality wireless intercoms, featuring the exclusive TALK-A-PHONE "SONIC GATE" circuit. Provides dependable communication where permanent, wired systems are not practical. Ideal for use in offices, factories, stores, homes, apartments, nurseries, farms, etc. Distinctively styled cabinets combine the look and feel of fine grained leather with the strength and rigidity of steel. Beautifully finished in charcoal gray with brushed chrome side panels. Each station has a translucent indicator which illuminates when "On." All stations must be connected to outlets on the same electric company service transformer. Built-in Ground Adapter provides greater sensitivity where electrical wiring is routed over long paths. U.L. Approved.

NEW TALK-A-PHONE 12-STATION SELECTIVE WIRELESS* SYSTEM



- No Installation
- No Wiring
- No Cables
- Just Plug-in and Talk

- 6 Separate 2-Way Conversations Simultaneously
- Selective Paging with Reply • Push-Button Channel Selector
- Start a System with any number of Masters and Staffs

Provides selective communication. Each Master is equipped with a 6 or 12-channel selector; can converse with any other station selectively; can receive calls on any channel Master elects to use. As many as 6 separate conversations may be held simultaneously, with 12 Masters. Masters can talk with any station in system; can also set up conferences.

Wireless Staff Stations are for use where calls need not be originated, but where reply must be made. They are available for operation on any single channel desired—to match that of Master. They also can be used to receive Paging Calls . . . use as many Wireless Staffs as needed but Staffs must operate on same channel for this

purpose). Two or more Wireless Staffs on the same channel will function as a 2-Station System (without Master); they can originate calls and reply to each other.

Start a system with any number of Masters and Staffs. Where up to 12 stations are used, each on a separate channel. Master can converse selectively with any channel. If more than 12 stations are used, channels must be shared; stations on same channel will receive all calls to that channel. To change location, merely pick up unit and move . . . no rewiring or new installation is necessary. All stations are equipped with the original TALK-A-PHONE UNI-TRANS feature, which permits continuous one-way transmission for periods when you wish to dictate or "listen-in."

T-LCM-8912, 12-Station Selective Wireless Master. Complete, with tubes and instructions, ready to use. Operates on 110-120 volts, AC or DC. Size 14"wx8 1/2"dx3 1/2" h. Shipping weight, 12 1/2 lbs. List Price Per Station \$154.00. Net **89.80**

T-LCM-8906, 6-Station Selective Wireless Master. As above except for 6-Station Capacity. Shpg. Wt. 10 lbs. List Price Per Station \$136.00. Net **79.50**

Wireless Staff Stations. Receive and reply on a single channel only.

- T-1 CS-901 Channel 1
- T-1 CS-902 Channel 2
- T-LCS-903 Channel 3
- T-LCS-904 Channel 4
- T-LCS-905 Channel 5
- T-LCS-906 Channel 6

Complete with tubes and instructions, ready to use. Operates on 110-120 volts, AC or DC. Size 10 1/2"wx8 1/2"dx3 1/2" h. Shipping weight, 7 lbs. List Price Per Station \$77.00. Net **45.00**

NEW TALK-A-PHONE 2-STATION WIRELESS* SYSTEM

A complete system of 2 stations, ready to use. Simply place each unit where desired, plug each into nearest electrical outlet, and talk! Add more stations anytime. All stations will receive any messages transmitted from any point. Move units anywhere, plug into electrical outlet and use—no rewiring or new installation necessary! The original TALK-A-PHONE UNI-TRANS is built in—provides continuous one-way transmission; ideal for dictation, or listening-in on baby. 110-120 V., AC-DC. Size, 10 1/2"wx8 1/2"dx3 1/2" h.

T-LC-33. Complete with tubes and instructions. Weight 16 lbs. List Price Per System \$138.00. Net **79.90**

T-LC-17, Additional Single Station. Weight 8 lbs. List Price Each \$69.00. Net **39.95**

CRADLEPHONE—Optional for all units above. Add H to model No. when ordering. List Price per Station add \$59.95. Net add **\$35.00**

NEW TALK-A-PHONE All-Transistor HOME INTERCOM-RADIO SYSTEMS



This new TALK-A-PHONE Intercom System saves the housewife and homeowner miles of tiresome steps, hours of time . . . Makes home life easier, more comfortable and more enjoyable . . .

LISTEN-IN ON BABY, CHILDREN OR SICK ROOM . . . from any room in the house, day or night • ANSWER OUTSIDE DOORS FROM ANY ROOM . . . in any part of the house—without opening doors to strangers • TALK FROM ROOM TO ROOM . . . back and forth, upstairs or downstairs, any time, day or night • YOUR FAVORITE RADIO PROGRAMS . . . follow you throughout the house with the flick of a switch.

TALK-A-PHONE All-Transistor Home Intercom units are beautifully finished in gold, polished and satin silver tones. All Masters and Staff Stations are designed for flush mounting, or with optional Housing Assembly. These stations can be mounted on walls, cabinets, or set on tables, shelves, etc. Plaster Ring included for 8 and 16-Station units require 14 1/2" w., 4 1/4" h., 3 1/2" d wall opening. Front panel size: 15 1/4" w., 5 1/4" h. HI-4 requires 4 1/2" w., 6 1/2" h., 2" d wall opening. Front Panel size: 4 1/2" w x 7 1/2" h. Sub-Stations are designed for flush mounting only, do not need Plaster Ring. Requires 2" square wall opening, 2" deep. Front Panel size: 3 3/8" w., 5 3/8" h. Stations do not plug into electrical outlet. Operates from Battery or HI-PS Power Supply Unit. Total capacity: up to 16 stations including Central Master. With full instructions.

CENTRAL MASTER STATIONS. Only one used per system. Contains the All-Transistor Amplifier (and radio when built-in). Place in any room. Master can call and converse with any other station (or stations) in system; can listen-in to any Station that user makes "non-private." If system has Model HI-9R Central Master (built-in radio), the Master and any Staff can listen to standard AM radio broadcasts. "Additional" Masters can be used in rooms where it is desired to listen to AM radio programs different from those tuned in at Central Master.

HI-9 Central Master Station. Without radio, less battery. List Price, Each, \$99.50. Net Each **58.00**

HI-9R Central Master Station. With built-in radio. Less battery. List Price, Each, \$154.00. Net Each **89.50**

HI-17 Central Master Station. Same as HI-9 except has total 16 station capacity. Without built-in radio. List Price Each \$146.00. Net Each **85.50**

HI-29R Additional Master Station. With built-in radio. Less battery. List Price, Each, \$154.00. Net Each **89.50**

STAFF STATIONS. 4, 8 and 16-Station Capacity Staff Stations can be combined within the same system and used with choice of one 8-station capacity or one 16-station capacity Central Master Station. (When HI-9R is used, any HI-4, HI-8 and HI-16 staff, can listen to radio of HI-9R).

HI-4 Staff Station. Provides same facilities as HI-8 but has 4-Station capacity. For flush mounting in wall. With accessory T-SM-L, can be surface mounted. List Price Each \$29.95. Net Each **17.50**

HI-8 Staff Station. Use as needed to call and converse with one or more Staff, Master or Sub-Stations. Can be switched to "private" or "non-private" operation as desired. When "non-private," as in baby or sick room use, another Staff or Master can listen in. Staff can listen to standard AM radio programs of HI-9R Central Master. List Price Each \$54.00. Net Each **31.50**

HI-16 Staff Station. Same as HI-8 except has total 16 station capacity. List Price Each \$99.95. Net Each **58.50**

HI-SM HOUSING ASSEMBLY. For enclosing any 8 or 16-Station Capacity Master or Staff, to permit mounting on walls or cabinets, or placing on tables, shelves, etc. List Price Each \$19.00. Net Each **11.00**

HI-1 OUTDOOR SUB-STATION. For front and rear entrance applications. Complete with push-button for connection to regular house chime, bell or buzzer. Has illuminated nameplate. When caller rings bells, any Master or Staff may reply and converse with caller. Caller operates no controls. List Price Each \$27.50. Net Each **15.95**

T-LR-2R ALTERNATE OUTDOOR SUB-STATION. For flush mounting. Requires wall opening 4 1/2" square, 2" deep. Stainless steel front panel measures 4 1/2" square. Complete with plaster ring. Without push button or illuminated nameplate. List Price Each \$21.00. Net Each **11.95**

Model T-SM Optional accessory for surface mounting T-LR-2R on wall. List Price Each \$6.80. Net each **4.00**

Model TSM-L Optional accessory for Surface mounting HI-4 Staff on wall. List Price Each \$7.80. Net Each **4.60**

HI-JBS JUNCTION BOX for connecting Masters and Staffs up to a total of 8 stations. See #2 of "How to Determine Cable Needs" List Price Each \$7.00. Net Each **4.00**

HI-JB16 JUNCTION BOX Same as above except for up to 16 stations. List Price Each \$9.95. Net Each **5.95**

BATTERY. Use any 9-volt dry battery, such as ignition or telephone battery; or six standard #6 dry cells in series—available from local sources. Note: When battery is used, power supply is not required.

HI-PS POWER SUPPLY UNIT. One required per system (only when battery is not used). Plugs into any 110-120 volt, 60 cycle AC electrical outlet in basement, attic, etc. List Price Each \$27.50. Net Each **15.95**

HOW TO DETERMINE CABLE NEEDS

Masters and Staff Stations. Use #6226 cable in one of 2 ways: (1) Measure from 1st unit to 2nd unit only; from 2nd unit to 3rd unit only, etc., until last unit is reached—then total Cable between last and 1st unit not needed. (2) Place a Common Junction Box (Model HI-JB) in attic, basement, closet, etc. Measure from each Master and Staff to Junction Box and total. Double length #6226 required for 16-Station units. Connect HI-4 to nearest 8 or 16-Station unit or to HI-JB with #6214 cable.

Outdoor Sub-Stations: Connect to nearest Master or Staff only with #6202 cable.

Battery or Power Supply Unit: Connect with #6202 cable to Master Stations only. **CABLE.** For indoor or outdoor use.

| Type No. | No. Pairs | Approx. O.D. | LIST, Per Ft. | NET, Per Ft. |
|----------|-----------|--------------|---------------|--------------|
| 6226 | 13 | 3/8" | .47c | 28c |
| 6214 | 7 | 1/8" | .24c | 14c |
| 6202 | 1 | 1/16" | .06c | 3 1/2c |



All Prices Slightly Higher West of Rockies All Prices and Specifications Subject to Change Without Notice. Manufactured under exclusive TALK-A-PHONE Patents

TALK-A-PHONE CO.
CHICAGO 25, ILLINOIS





NEW TALK-A-PHONE Deluxe Intercom Systems



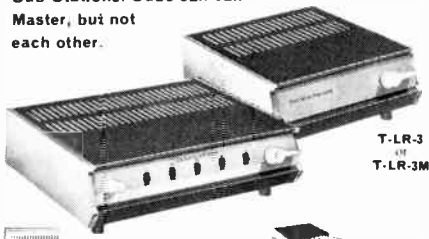
Quality intercommunication systems designed for the Office, Business, Plant, Home, Farm, Professional Man, or any other private or commercial application. A flick-of-a-finger gives you instant and direct two-way conversation between any two points—anywhere. Masters have translucent indicator which illuminates when system is "on." In cabinets

that combine the look and feel of fine grained leather with the strength and rigidity of steel. Beautifully finished in charcoal gray and brushed chrome. Resists industrial liquids and atmospheres. Size: Masters, 10 1/2" w x 8 1/2" d x 3 1/2" h.; Subs, 7 1/2" w x 8 1/2" d x 2 1/2" h. U.L. Approved.

2-way voice communication between any two points



A system of one Master Station which can communicate with from one to ten Sub-Stations. Subs can call Master, but not each other.



TALK-A-PHONE 2-STATION SYSTEM

T-LC-2 A complete, high-quality intercommunication system. Includes a Master Station, a Sub-Station and 50 feet of interconnecting cable. Additional cable available for distances up to 2000 feet. Easy to install and operate. Master and Sub-Station can originate calls to each other and carry on a 2-way conversation. Sub-Stations can be used "privately" or "non-privately." When "private," Master cannot listen-in on Sub-Station; yet Sub can answer and originate calls. When "non-private," persons at Sub-Station can answer calls at a distance without operating controls, as well as originate calls. Master is equipped with a translucent indicator, illuminated by permanent-type bulb, to show when system is "on." Rugged, high-gain amplifier is built to withstand continuous use and to require a minimum of maintenance. Adjustable Volume. Only Master plugs into electrical outlet, 110-120 volts, AC or DC. Master in deluxe cabinet finish, Sub-Station cabinet is of same

style and color, but is in grained, baked enamel finish. U.L. Approved.
Model T-LC-2 2-Station System complete with tubes, easy-to-follow instructions, and 50 feet of cable. Wt. 13 lbs. List Price complete \$62.00 Net complete **36.00**
No. 6303 (3 conductor) cable, 175' F, individually covered conductors with overall plastic jacket and milar shield. Provides noise-free cable lines in Industry, Office and Home. For indoor and outdoor use where additional lengths are required between the Master and Sub-Station. List Price per foot 6 1/4c Net per foot **.04**
No. 5303 (3 conductor) cable for indoor use. List Price per foot 5c Net per foot **.03**
 Optional Wall Mounting Brackets for Model T-LC-2 Sub-Station are available. See description below.

TALK-A-PHONE MASTER SELECTIVE SYSTEMS

T-LM A new system consisting of one Master Station and from one to ten Sub-Stations. Master Station can talk and listen to any one Sub-Station, several Sub-Stations or with all Subs simultaneously. Sub-Stations do not communicate with each other. Only the Master Station plugs into an electrical outlet. You may start with only one Master and one or two Sub-Stations and then add later when necessary. Installation of system has optional feature whereby Sub-Stations can be connected "privately," or "non-privately," and still originate calls to the Master under either application. Once a conversation has been initiated with a "non-private" system, persons at Sub-Stations need operate no controls and can reply from a distance. When the system is connected "privately," Master unit cannot "listen in" on Sub-Stations. However, they can reply when called, and also originate calls to the Master. Operates universally on 110-120 volts, AC-DC, U.L. Approved.

Model T-AC-5411 Master Station, 10 sub-station capacity. High Volume Output. Wt. 8 lbs. List Price each \$89.95 Net each **52.50**
Model T-LR-3 Sub-Station (in same deluxe finish as Masters) for use with any of above Masters. Wt. 6 lbs. List Price each \$27.50 Net each **15.95**
Model T-LR-3M Sub-Station (in cabinet of same style, color and size as above, but in grained, baked enamel finish) for use with any of above Masters. Wt. 6 lbs. List Price each \$21.00 Net each **11.95**
Model T-LR-3R Flush mounted Sub-Station for use with any of above Masters. Requires wall opening 4 1/2" W x 6 1/2" H. Stainless steel front panel measures 4 1/8" W x 7 1/2" H. Complete with plaster ring. List Price each \$21.00 Net each **11.95**
Model T-SM-L Optional accessory for surface mounting T-LR-3R on wall. List Price each \$7.00 Net each **4.60**
Model T-HP-3 Hi-Power Staff Station for wall mounting. Charcoal Gray metal case. Wt. 8 lbs. List Price each \$28.00 Net each **16.50**
Model T-C-20 Nine-inch weatherproof re-entrant horn Charcoal Gray color. Wt. 5 lbs. List Price each \$44.95 Net each **26.50**
T-S-100 Wall Switch for origination of call through T-C-20 or T-HP-3. List Price each \$6.00 Net each **3.50**
No. 6303 (3 conductor) cable, 175' F, individually covered conductors with overall plastic jacket and milar shield. Provides noise-free cable lines in Industry, Office and Home. For indoor and outdoor use to connect Sub-Station to Master. List Price per foot 6 1/4c Net per foot **.04**
No. 5303 (3 conductor) cable for indoor use. List Price per foot 5c Net per foot **.03**

T-AC The T-AC-5406 and T-AC-5411 Master Stations operate as above with the added feature of 10 times volume output. A desirable feature for large or noisy areas and for paging. Operates on 110-120 volts, AC only.

Use only one Master in each System.
 Optional Wall Mounting Brackets for Models T-LR-3 and T-LR-3M are available. See description below.
Model T-LM-5 Master selective Station for 5 Sub-Stations, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$59.95 Net each **34.95**
Model T-LM-10 Master Selective Station for 10 Sub-Stations, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$75.00 Net each **44.00**
Model T-AC-5406 Master Station 5 sub-station capacity. High Volume Output. Wt. 8 lbs. List Price each \$75.00 Net each **44.00**

A system of up to ten Master Stations. Each station can call and communicate with any other.



A system combining one or more Master Stations with one or more Sub-Stations up to a combined total of ten. Masters call any station. Subs reply but cannot originate calls.



TALK-A-PHONE SUPER SELECTIVE SYSTEMS

T-LS A new system of all Master Stations. Any Station can call any other Station in system. Several completely private 2-way conversations are possible at same time. A versatile, low cost intercom system offering extreme flexibility, meeting many requirements in industry, offices, homes, etc. Any Station can call and carry on a conversation with any other Station or Stations in the system with absolute "privacy." Have a visitor in your office and your mind is at ease that no one can eavesdrop on your conversation. Stations can be located even 1000 feet apart. Variable volume, adjustable at each unit, controls incoming voice. You can start with two or three masters, and then add later as required. Operates universally on 110-120 volts, AC-DC, U.L. Approved.

Model T-LS-5 Super Selective Station for five Masters, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$59.95 Net each **34.95**
Model T-LS-10 Super Selective Station for ten Masters, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$75.00 Net each **44.00**
Model T-AC-505 Super-Selective Station for 5 Masters Hi-Volume Output. Wt. 8 lbs. Complete with instructions. List Price \$75.00 Net each **44.00**
Model T-AC-510 Same as T-AC-505 except for 10 Masters. List Price each \$89.95 Net each **52.50**
No. 5506 (6-conductor) Cable for connecting T-LS-5 or T-AC-505 Masters. List Price per foot 13c Net per foot **.07 1/2**
No. 9911 (11-conductor) Cable for connecting T-LS-10 or T-AC-510 Masters. List Price per foot 24c Net per foot **.14**

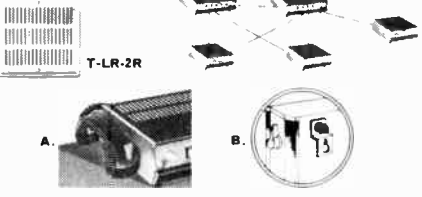
T-AC The T-AC-505 and T-AC-510 Master Stations operate as above but provides a system with the added feature of 10 times volume output. A desirable feature for large or noisy areas and for calling many stations at once. T-AC-505 and T-AC-510 Masters cannot be intermixed with any other master. For 110-120 volts, AC only.

TALK-A-PHONE COMBINATION SYSTEMS

T-CL For the more flexible type of communication system requiring the operation of more than one Master Station, along with Sub-Stations which need not originate calls. Personnel can answer incoming calls even though they are 25 to 40 feet from their unit. Master Stations may talk to each other and to all Sub-Stations in the system selectively, or you can have one or more Sub-Stations which are exclusive to only one Master Station (as illustrated in the diagram at left). Master Stations have the option of making themselves "private" or "non-private" at will. You can begin with two stations (at least one must be a Master) and add other units as required. Model T-CL-5 Master Station has a total interconnecting capacity of five stations, including Masters and Sub-Stations; while Model T-CL-10 Master Station has a total capacity of ten stations. Sub-Stations are not plugged into electric current. U.L. Approved 110-120 volts, AC-DC.

Model T-LS-5 Super Selective Station for five Masters, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$72.00 Net each **42.00**
Model T-CL-10 Combination Master for ten station use, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$87.00 Net each **51.00**
T-AC-605 Combination Master for 5-Station use. Hi-Volume Output. Wt. 8 lbs. Complete with instructions. List Price each \$87.00 Net each **51.00**
T-AC-610 Same as T-AC-605 except for 10-Station use. List Price each \$102.00 Net each **59.95**
Model T-LR-2 Sub-Station (in same deluxe finish as Masters) for use with any of above Masters. Wt. 6 lbs. List Price each \$27.50 Net each **15.95**
Model T-LR-2M Sub-Station (in cabinet of same style, color and size as above, but in grained, baked enamel finish) for use with any of above Masters. Wt. 6 lbs. List Price each \$21.00 Net each **11.95**
Model T-LR-2R Flush mounted Sub-Station for use with any of above Masters. Requires wall opening 4 1/2" square. Stainless steel front panel measures 4 1/8" square. Complete with plaster ring. List Price each \$21.00 Net each **11.95**
Model T-SM Optional accessory for surface mounting T-LR-2R on wall. List Price each \$6.00 Net each **4.00**
Model T-HP-3 Hi-Power Sub-Station for wall mounting in charcoal gray metal case. Wt. 8 lbs. List Price each \$28.00 Net each **16.50**
Model T-C-20 Nine-inch weather proof re-entrant horn Charcoal gray color. List Price each \$44.95 Net each **26.50**
No. 6210 (5 pair) Cable for interconnecting T-CL-5 or T-AC-605 Masters. List Price per foot 24c Net per foot **.14**
No. 6226 (13 pair) Cable for interconnecting T-CL-10 or T-AC-610 Masters. List Price per foot 47c Net per foot **.28**
No. 6902 (2-conductor) Cable for connecting Sub-Station to T-CL-5, T-CL-10, T-AC-605 or T-AC-610. List Price per foot 3 1/2c Net per foot **.02**

Optional Wall Mounting Brackets for Models T-LR-2 and T-LR-2M are available. See description below.
T-AC The T-AC-605 and T-AC-610 Master Stations operate as above but provides a system with the added feature of 10 times volume output. A desirable feature for large or noisy areas and for calling many stations at once. T-AC-605 and T-AC-610 Masters cannot be intermixed with any other master. For 110-120 volts, AC only.
Model T-CL-5 Combination Master for five station use, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$72.00 Net each **42.00**
Model T-CL-10 Combination Master for ten station use, complete with tubes and easy-to-follow instructions. Wt. 8 lbs. List Price each \$87.00 Net each **51.00**
T-AC-605 Combination Master for 5-Station use. Hi-Volume Output. Wt. 8 lbs. Complete with instructions. List Price each \$87.00 Net each **51.00**



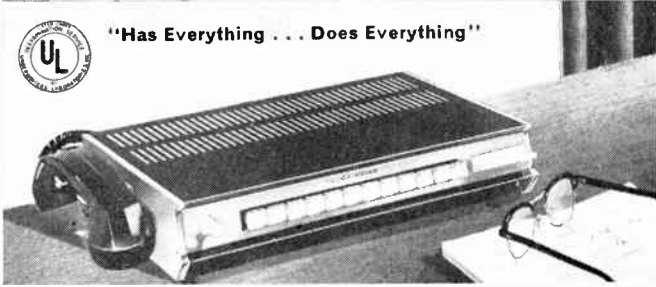
A. CRADLEPHONE—Optional for any unit above (except T-CL-5, T-CL-10, T-AC-605, T-AC-610, T-C-20, T-HP-3, T-LR-3R and T-LR-2R.) Add "H" to Model No. when ordering. List Price per Station, add \$59.95 Net, add **35.00**
B. WALL MOUNTING BRACKETS—Optional accessory for use with TALK-A-PHONE Models T-LR-3, T-LR-3M, T-LR-2, T-LR-2M, T-C-41, T-C-41M, T-C-42, T-C-42M, and T-LC-2 Sub Station to enable mounting on wall, side of desk, etc. One pair required per station. Permits mounting with front panel upward, downward or sideward.
Model T-W1 Mounting Brackets, per pair. List Price \$1.25. Net. **.75**

HOW TO DETERMINE CABLE REQUIREMENTS

For Master Selective Systems measure from each Sub-Station to the Master and order total. For Super Selective Systems—measure from first Master to second Master only, from second Master to third Master only, etc., and total. Cable between first and last Master not necessary. For Combination Systems—Master cable, measure from first Master to second Master only, from second Master to third Master only, etc., and total; Sub-Station cable, measure from each Sub-Station to nearest Master only.

TALK-A-PHONE CO., CHICAGO 25, ILLINOIS

THE ALL-NEW, ALL-TRANSISTOR TALK-A-PHONE "CHIEF" AND "CHIEF REDI-POWER" INTERCOMMUNICATION SYSTEMS



"Has Everything . . . Does Everything"

One Model Meets Every Requirement

Setting a new standard in quality, design and performance, the new TALK-A-PHONE "CHIEF" and "CHIEF REDI-POWER" meets every intercom need of office, factory, institution, or any other commercial or private application. "CHIEF" Master Stations of 6, 12, 20, 30, 40 or 50 station capacity can be intermixed with "CHIEF REDI-POWER" Masters of different capacities, together with Staff Stations and Horns within the same system in any desired combination. Masters can talk with any other Master or Staff . . . page . . . and can utilize other optional equipment shown as well. Staffs can answer any Master and can originate calls to one Master, or to two Masters selectively.

ONLY THE TALK-A-PHONE "CHIEF" AND "CHIEF REDI-POWER" GIVE YOU ALL THESE FEATURES

- **DISTINCTIVELY STYLED**—Less than 3-inches high. In cabinets that combine the look and feel of fine-grained leather with the strength and rigidity of steel. Attractively finished in charcoal gray and brushed chrome.
- **"PRIVATE" OR "NON-PRIVATE" MASTERS AND STAFFS**—Exclusive Dynasonic Design enables stations to perform "privately" (so no one can listen-in), or "non-privately" (for reply without use of controls). The same station can be "private" to one or more Masters and "non-private" to others, and retain full communication facilities.
- **INCOMING CALL CHIME**—A standard feature of Masters. Indicates that your station is being called. Caller talks, you reply.
- **MONITORING SIGNAL**—A standard feature of Masters and Staffs. Visually indicates to a "non-private" station that it is being monitored.
- **BUSY SIGNAL**—A standard feature of Masters and Staffs. Visually indicates when station you call is "busy". All units have facility to override "busy signal" for important calls.
- **DYNASONIC SELECTOR**—An exclusive TALK-A-PHONE feature that permits intermixing of stations and variation of performance. Add to system at anytime without discarding original equipment.
- **MULTI-MAGIC STATION SELECTOR**—A patented, exclusive TALK-A-PHONE feature that enables selection of up to 30 stations with only 12 push buttons . . . 40 and 50 stations with 14 push buttons . . . in the same attractive cabinet style and size.
- **UNI-TRANS DICTATION CONTROL**—No need to operate or hold down controls when one-way transmission is desired or when Cradle Phone is used.
- **EXTERNAL RELAY CONTROL**—A standard built-in feature of Masters. Enables Master to activate external relays for operating siren, gong, light, etc. For use in extremely high noise level areas to signal personnel, who can then communicate with caller from Master in quieter location or in sound booth.
- **RECIPROCAL POWER SUPPLY**—Each Master operates on 110-120 volts, AC only, and should be plugged-in. Where no electrical outlet is available, up to 30% of the Masters in the system can operate without being plugged-in.
- **NOISE-FREE VOICE RANGE POWER**—The rugged, all-transistor high-gain amplifier provides unsurpassed clarity and naturalness of tone. The exclusive, patented TALK-A-PHONE circuit enables performance without noise, hum or distortion when used with TALK-A-PHONE cable.
- **HI-POWER STAFF STATIONS AND HORNS**—For use with any TALK-A-PHONE Master where exceptionally high volume at Staff locations is needed. Ideal for paging speakers. T-HP-3 provides more than twice the volume of universal Staff; T-C-20 provides about 4 times greater volume . . . more with REDI-POWER Masters.
- **WALL SWITCH**—Combine with TALK-A-PHONE Horn or Hi-Power Staff to add origination-of-call feature.
- **"LD" LONG DISTANCE**—(optional accessory on "CHIEF" Masters). For use over cable lines of 2,000 ft., 5,000 ft., 10,000 ft. or more without loss of volume. Functions only between Masters with LD . . . not between an LD Master and Staff. Built-in at factory at additional cost.
- **CRADLE PHONE**—(optional accessory on Masters or Staffs). Has live microphone. Provides listening privacy and greater speaking convenience. Diminishes background noises in noisy areas. Eliminates use of controls in conversation between Masters. Cuts off incoming voice from loudspeaker when in use.
- **RIGHT-OF-WAY RELAY**—(optional accessory). Use with "CHIEF REDI-POWER" Masters to page any group of stations with a single button. Paged stations can also be used for intercommunication. RW-10 capacity, 10 stations. For greater capacity use more RW-10's. Connects to one Master, other Masters also utilize facilities.
- **POWER PAGING BOOSTER**—(Optional accessory). Use with "CHIEF" Masters to page a group of speakers with a single button. 30 watts output. Requires its own paging speakers (as T-C-20, T-HP-3). Provides paging facility only . . . paged stations cannot reply or originate calls through paging speakers. Connects to one Master, other Masters can also utilize facilities.

All "CHIEF" and "CHIEF REDI-POWER" Master Stations come complete with junction box and built-in power supply attached by 6' flexible cable. Master size: 14" w, 3 1/8" h, 8 1/4" d. For 110-120 volts, AC only. U.L. Approved.

| | |
|---|------------|
| T-C-4906 Master 6 station capacity. Wt. 13 lbs. List Price Per Station \$136.00 | Net 79.50 |
| T-C-4912 Master 12 station capacity. Wt. 14 lbs. List Price Per Station \$154.00 | Net 89.80 |
| T-C-4920 Master 20 station capacity. Wt. 17 lbs. List Price Per Station \$184.00 | Net 107.40 |
| T-C-4930 Master 30 station capacity. Wt. 20 lbs. List Price Per Station \$214.00 | Net 125.00 |
| T-C-4940 Master 40 station capacity. Wt. 23 lbs. List Price Per Station \$244.00 | Net 142.60 |
| T-C-4950 Master 50 station capacity. Wt. 26 lbs. List Price Per Station \$274.00 | Net 160.20 |

How to Determine Cable Requirements. To inter-connect Master Stations, measure from first Master to second Master only, from second to third Master only, etc., until the last unit in the system is reached, and total. For T-C-4920 and T-C-RP-5920, use two lengths of 6226 Cable, and for T-C-4930 use three lengths of 6226 Cable, etc. To connect T-C-41, T-C-29, T-C-42 or T-HP-3 Staff Stations, measure from Staff Station to the one Master to which Staff Station originates calls. To connect the T-C-42 Staff Station measure a separate length of cable from Staff Station to each Master Station to which Staff originates calls (for each T-C-41 or T-C-42, follow same procedure).

TALK-A-PHONE ALL-TRANSISTOR "CHIEF REDI-POWER" MASTERS
These units have all the operational features of the "CHIEF," plus the additional feature of built-in extra power (up to 20 watts) for use when and as needed. Provides additional volume for calling many stations at once, or noisy locations singly. Needs no separate power booster, which would eliminate return speech. Return speech is received at normal room volume. REDI-POWER Masters have a self-compensating amount of volume, whether you call 2, 10 or 20 stations simultaneously. Each station receives its pre-determined volume with no division of output as you call more stations at once. Use REDI-POWER Masters with "CHIEF" Masters and Staffs in same system. Add RW-10 and REDI-POWER Masters can page any group of stations with a single selector button. Paged stations can also be used for intercommunication. Operates on 110-120 volts, AC only. U.L. Approved.

| | |
|---|------------|
| T-C-RP-5912 Redi-Power Master 12 station capacity. Wt. 18 lbs. List Price Per Station \$235.00 | Net 138.00 |
| T-C-RP-5920 Redi-Power Master 20 station capacity. Wt. 21 lbs. List Price Per Station \$265.00 | Net 155.00 |



TALK-A-PHONE "CHIEF" UNIVERSAL STAFF STATIONS For use with any "CHIEF" or "CHIEF REDI-POWER" Master. Like Masters, Staff Stations can be connected "privately" or "non-privately", and can originate calls. When "non-private", calls can be answered at a distance from Staff without using controls. Persons at "non-private" Staffs may reply to all Masters in the system (whether directly connected to them or not) and can originate calls to one Master or two Masters, depending upon Staff's capacity. Connected "privately" to one Master or two Masters, depending upon Staff's capacity. "Private" Staffs can originate calls and reply to one or two Masters. Each Staff has "busy signal" and "monitoring signal" features. Staffs do not connect to an electrical outlet . . . are distinctively styled in modern cabinets that combine the look and feel of fine grained leather with the strength and rigidity of steel. Attractively finished in charcoal gray and brushed chrome. Size: 7 1/2" w x 8 1/4" d x 2 1/8" h.

| | |
|---|----------------|
| T-C-41. Staff Station for origination-of-call to one Master. Wt. 8 lbs. List Price, Each \$36.50 | Net 21.50 |
| T-C-41M. Same operation as T-C-41 and in cabinet of same style, color and size, but in grained baked enamel finish. Wt. 8 lbs. List Price, Each \$29.95 | Net 17.50 |
| T-C-42. Staff Station for origination-of-call to two Masters. Wt. 8 lbs. List Price, Each \$45.00 | Net 26.50 |
| T-C-42M. Same operation as T-C-42 and in cabinet of same style, color and size, but in grained baked enamel finish. Wt. 8 lbs. List Price, Each \$38.50 | Net 22.50 |
| T-C-41R Flush mounted Staff Station for use with any of above Masters. Requires wall opening 4 1/4" W. x 6 1/2" H. Stainless steel front panel measures 4 1/2" W. x 7 3/8" H. Complete with plaster ring. List Price Each \$29.95 | Net each 17.50 |
| T-SM-L Optional accessory for surface mounting T-C-41R on wall. List price each \$7.80 | Net each 4.60 |
| T-HP-3. Hi-Power Sub-Station for wall mounting in charcoal gray metal case. Wt. 8 lbs. List Price, Each \$28.00 | Net 16.50 |
| T-C-20. Nine-inch weatherproof re-entrant horn. List Price, Each \$44.95 | Net 26.50 |

Optional Wall Mounting Brackets for Models T-C-41, T-C-41M, T-C-42 and T-C-42M are available. See description on preceding page.

Optional Equipment

| | |
|---|---------------|
| Cradle Phone Available on all Models. Add "H" to Model No. when ordering. List Price, Each—add \$59.95 | Net add 35.00 |
| LD—Long Distance Feature Available on "Chief" Master Stations. Add "LD" to Model No. when ordering. List Price, Each—add \$20.00 | Net add 11.75 |
| T-S-101 Wall Switch For origination of call to one Master through T-C-20, or T-HP-3 in Chief systems. List Price, Each \$11.95 | Net 6.95 |
| T-S-102 Wall Switch For origination of call to two Masters through T-C-20, or T-HP-3 in Chief systems. List Price, Each \$19.95 | Net 11.70 |
| T-RW-10 Right-of-Way Relay. List Price, Each \$63.00 | Net 37.00 |
| T-HP-30 Power Booster. List Price, Each \$138.00 | Net 81.00 |

Cable (For Indoor and Outdoor Use)

| | |
|---|--------------------|
| 6206 Cable for connecting T-C-41, T-C-42, T-HP-3, T-C-20 with origination of call. List Price per Ft. 14c | Net per Ft. 8 1/2c |
| 6214 Cable for inter-connecting T-C-4906 Masters. List Price per Ft. 24c | Net per Ft. 14c |
| 6226 Cable for inter-connecting T-C-4912, T-C-4920, T-C-4930, T-C-4940, T-C-4950, T-C-RP-5912 and T-C-RP-5920 Masters. List Price per Ft. 47c | Net per Ft. 28c |
| 6902 Cable for connecting T-HP-3, T-C-20 without origination of call. List Price per Ft. 3 1/2c | Net per Ft. 2c |

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CHICAGO 25, ILLINOIS

TECH-MASTER CUSTOM-QUALITY TELEVISION

TECH-MASTER Custom-Crafted Constellation T. V. Chassis

A magnificent tribute to fine television design and engineering. Extremely versatile! Perfect for custom installations in newly designed cabinetry or for replacing worn out sets in existing consoles. Especially desirable for use in family heirloom or antique cabinets.

The Tech-Master Custom-Crafted Constellation T.V. Chassis is truly a star performer. This A.C. transformer powered model is not commercially mass-produced, but hand crafted with the same care as our highest priced receivers. Super sensitive for fringe or troublesome areas, the custom crafted receiver operates efficiently with any standard indoor antenna in normal signal area. 15 tubes, 2 silicons, 3 diodes, power-packed circuit delivers bright, sharp, rock steady picture and clean, undistorted static-free sound. Rarely will you find a comparable, quality receiver such as this.

FEATURES:

- Advanced and latest super-sensitive turret tuner with PRE-SET fine tuning (set it once and forget it.)
- Deflection 110-114 degrees.
- Operates new low-voltage electrostatic focus kinescopes 17" to 27".
- High Voltage 18-20 KV.
- Full power transformer for SAFE chassis operation. No Shock Hazard.
- Power THERMISTOR for line surge elimination.
- Silicon full wave power rectifiers.
- Sensitivity 8 UV for 20 Vpp.
- Audio output 4.7 watts.
- 3 stage video I.F. stagger-tuned bifilars
- Bandwidth 3.25 MC. at 3 DB.
- Video detector transformer with diode and tweet filter built in (minimum radiation.)
- DC coupled video Amplifier stage.
- Adjacent channel video and sound traps.
- Keyed A.G.C. continuously adjustable for local to fringe area.
- Automatic noise cancellation circuit continuously adjustable for area characteristics.
- Bright spot eliminator circuit.

TUBES: 6GK5, 6CG8, 2-6BZ6, 6CB6, 12BY7, 6U8, 6DT6, 6BQ5, 6BU8, 6DE7, 6CG7, 6DQ6, 6AX4, 1K3, 2 Silicon rectifiers, 3 Diodes

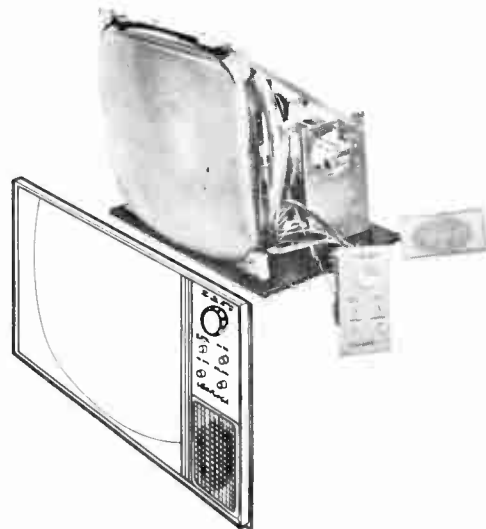
Accessory Units for Model No. 6115



MK23B-23" mask (bonded tube)...\$10.00
MK23-23" mask (unbonded tube)...\$10.00



BR23-23" bonded tube mounting brackets\$10.00



Model No. 6115 (Shown above) Chassis, speaker, and knobs, less picture tube with mtg. hardware.....Price \$199.00

PA 39 — A Most Versatile 14 Watt Stereo Amplifier and Preamplifier.

Ideal for 90% of All Hi-Fi Stereo Layouts

This highly adaptable system is as elegant to the eye as the ear... beautiful blue and white front panel with blue-gray case (also in gold and suntan panel with walnut case.) Two channels of faithful audio faultlessly designed, skillfully produced. TECH-MASTER'S diversified background and experience make the low price possible. Servicemen recommend it for its ease of installation. The simple sandwich type panel-mount eliminates unnecessary fuss and cost.

FEATURES:

Completely hand wired, dual channel, crystal or ceramic phono and tuner inputs; ganged gain control; balance control, two separate tone controls; monaural-stereo switch; speaker reversing switch; transformer power supply for complete line insulation.

TUBES: 2-EL 84, 12AX7, EZ80

DIM: 10 $\frac{1}{2}$ " W x 5 $\frac{3}{8}$ " D x 4 $\frac{3}{8}$ " H

PA 39 Blue & White.....NET PRICE \$49.50

PA 39G Two Tone Gold.....NET PRICE \$49.50



PA 39 + For Magnetic Cartridge — Uses Hum Free 2 Transistor Preamplifier.....NET PRICE \$69.50
P3 39G + For Magnetic Cartridge — Uses Hum Free 2 Transistor Preamplifier.....NET PRICE \$69.50

MODEL 23A — TECH-MASTER'S DUO MASTER TV PLUG-IN TUNER. A Super Sensitive Black & White or Color TV Remote Control System.

An ideal self-contained remote-control system for all TV sets. Just plug a single, thin coaxial lead into your TV receiver and you can select your station, fine-tune both picture and sound, and adjust picture intensity... right from your armchair, from up to 50 feet from the set. There is a separate loudspeaker in the handsomely styled DUO-MASTER cabinet... or you can use the speaker in your TV set or hi-fi system... or any extension speaker... or plug headphones right into the DUO-MASTER for private listening.



FEATURES: 3 IF stages; 2 audio stages; jacks with low impedance connections for external amplifier or tape recorder take-off; a complete television sound receiver. Positive or negative going video signal output.

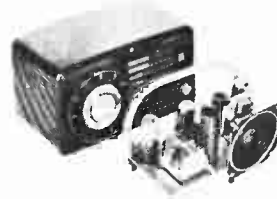
TUBES: 9 plus rectifier; separate audio detector; improved color response thru isolation circuit design.

SIZE: 12 $\frac{1}{2}$ " x 8" x 6"; WGT.: 15 lbs. Net Price.....\$79.50

Also Model 23B. Industrial model as used on commercial basis by broadcasters. Price on request.

DELUXE AC-DC SUPERHET RADIO KIT

MODEL 3B5-K — Complete with modern, handsome Bakelite cabinet (10" x 5 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ "). station selector and control knobs. Tunes AM broadcasts from 550-1720 KC. Super-sensitive, high gain circuit for best reception. Built-in loop antenna. Automatic volume control circuit eliminates blasting or fading.



TUBES: 12SA7, 12SK7, 12SQ7, 50L6 and 25Z5 rectifier. Schematic and pictorial diagram with clear assembly instructions supplied for simple assembly.

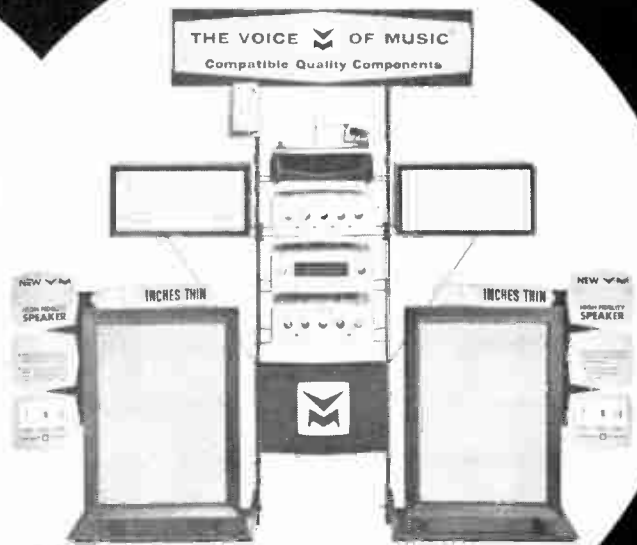
POWER: 115-125 V, 50 60 cy. or D.C. Wgt.: 6 lbs.

NET PRICE (less wire and solder).....\$19.95

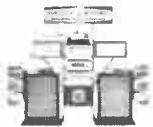


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- Convenient one-source buying . . . backed by V·M's national network of Service Centers.



The store display fixture is complete with literature, and "Silhouette 52" speaker feature posters. It actually displays 9 V·M products:



High-Fidelity FM Stereo, FM, AM Component Radio Tuner Model 1465. FM-AFC. Armstrong FM circuit with limiter. Foster-Seeley discriminator. Superheterodyne AM circuit with AVC.



'Stere-O-Matic' 4-Speed Automatic Record Changer Model 1471. 11" turntable. Automatic Manual-Play. Extra-long, dynamically balanced, non-resonant Tone Arm. Diamond Needle. Shadowlite stylus pressure. Precise, balanced turntable bearing system.



Precision-Built AC Stereo Amplifier Model 1448. Push-pull output, 40 watts (peak); 20 watts per channel. Frequency response, 40-25,000 cps. Integral controls. Input panel for ceramic or crystal cartridge Phono, Radio Tuner, Auxiliary or Tape Recorder.



Changer Base Model 1438. For 'Stere-O-Matic' Changers. Wired output receptacles for stereo sound; AC power.



"Silhouette 62" High-Fidelity Component Speaker System. Three speakers: 10" woofer, 6" mid-range, 3.5" tweeter. Frequency response, 30-16,000 cps. Power rating, 25 watts.



Stereophonic High-Fidelity Component Amplifier Model 1428. Push-pull output, 60 watts (peak); 30 watts per channel. Frequency response, 20-30,000 cps. Five stereo inputs.



High-Fidelity Component Speaker Model 32. Three speakers. Two 6", one 3". Frequency response, 60-12,000 cps. Power rating, 10 watts.

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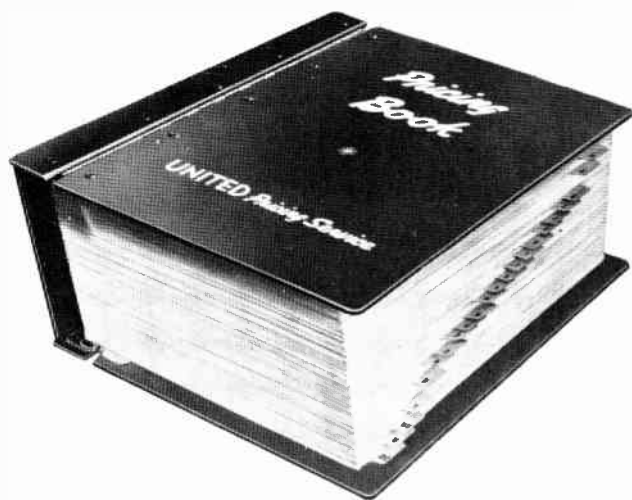
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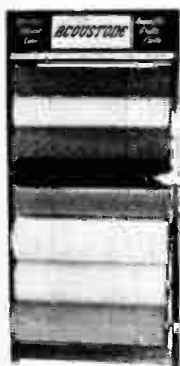
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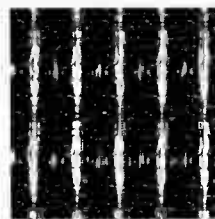
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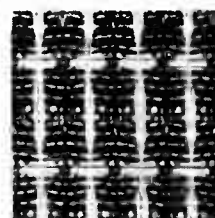
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|-------------|----------------------------------|-------------|-------------|-----------------------------------|-------------|
| 211 | Mahogany with Ivory Threads | \$3.50 | 3705 | Brn/Gold with Met Gold Threads | \$4.25 |
| 212 | Mahogany with Beige Threads | 3.50 | 1803 | Woven Cane-Brown/Tan/Gold | 4.25 |
| 213 | Mahog with Gold Rayon Threads | 3.50 | 1809 | Woven Cane-Walnut/Tan | 4.25 |
| 321A | Walnut/Gold Threads | 3.50 | 1825A | Woven Cane-Brown/Tan/Wht | 4.25 |
| 450 | Solid Black | 3.50 | 2470 | Hexagon Cane-Walnut/Tan/Bge | 4.25 |
| 452B | Black with Gold Threads | 3.50 | 2475 | Hexagon Cane-Walnut/Tan | 4.25 |
| 511 | Blonde with Brown Threads | 3.50 | 2477 | Hexagon Cane-Fruitwood/Tan | 4.25 |
| 615 | White with Gold Threads | 3.50 | 300 | Mahog & Gold Metal Cobweb | 5.00 |
| 625 | Grey with Black & White Threads | 3.50 | 453 | Black with Gold Metal Cobweb | 5.00 |
| 811 | Tan with Bronze Threads | 3.50 | 454 | Black with Silver Metal Cobweb | 5.00 |
| 812 | Tan with White Threads | 3.50 | 618 | White with Gold Met Cobweb | 5.00 |
| 1216A | Beige/Gold with Brown Threads | 3.50 | 619 | Wht/Blk & Gold Met Cobweb | 5.00 |
| 215M | Mah Beige & Met Gold Threads | 4.25 | 805 | Bge with Brn & Gold Met Cobweb | 5.00 |
| 412M | Wht, Black & Met Gold Threads | 4.25 | 388 | Walnut/Beige & Met Gold Threads | 5.00 |
| 413M | Wht Black & Met Gold Threads | 4.25 | 814BM | Bge Varied Wht & Met Gold Threads | 5.00 |
| 512M | Beige/Bronze & Met Gold Threads | 4.25 | 1011 | Solid Gold | 5.00 |
| 515M | Blonde/Blk & Met Gold Threads | 4.25 | 1012 | Solid Silver | 5.00 |
| 611 | Solid White | 4.25 | 2016A | Walnut/Bge/Fruit'd & Gld Threads | 5.00 |
| 616M | White/Blk & Met Gold Threads | 4.25 | 2025A | Tan/Bn Cane & Met Gold Threads | 5.00 |
| 617M | White with Met Gold Threads | 4.25 | 3227 | Mahog/Tan Cane & Gold Threads | 5.00 |
| 711M | Lt Walnut Wht & Met Gold Threads | 4.25 | 3240 | Walnut, Beige & Met Gold Threads | 5.00 |
| 804BM | Beige Straw & Met Gold Threads | 4.25 | 3852 | Walnut Oval with Met Gold Threads | 5.00 |
| 813 | Beige with Beige Straw | 4.25 | 3881 | Tan Brown Novelty Cane | 5.00 |
| 857 | Beige with Lt Beige Straw | 4.25 | 4440 | Blk/Cop/Bge & Met Gold Threads | 5.00 |
| 1214M | Brn/Bge & Met Gold Threads | 4.25 | 7104 | Tan/Var Wht & Met Gold Threads | 5.00 |



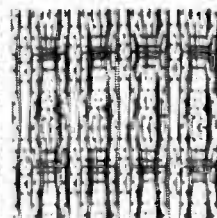
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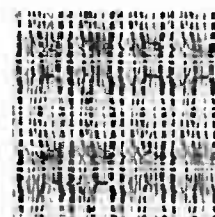
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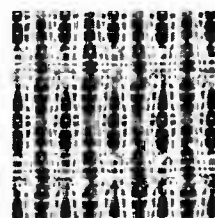
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616M-617M



813-804BM



412M-512M



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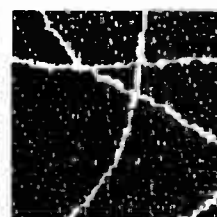
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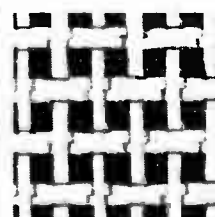
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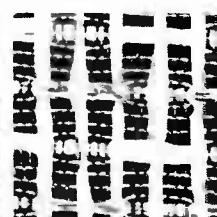
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453-300



1802-1826A



253-1803

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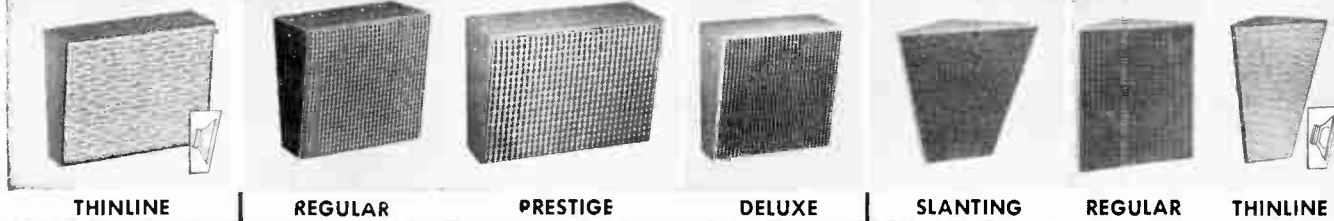
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New, thinner, wider, better looking. Heavy duty ceramic magnet speakers give space-saving thinness. Available with L Pad and/or Transformer, Installed and wired. 8-ohm screw terminals. Argos Speedy Mounting clip for fast installation. Heavy wood-grained pyroxylin covering—blond or walnut.

- Baffles with 8" Jensen Spkr. 6 oz. mag., 15 watts. 12 x 9 1/2 x 4 1/4 in.
- WB-208S—Baffle, spkr. Wt. 4 1/2 lbs. List \$16.90
 - WB-208SL—Baffle, spkr. L pad. 4 1/2 lbs. \$21.00
 - WB-208ST—Baffle, spkr. trans. 4 1/2 lbs. \$21.00
 - WB-208SLT—Baffle, spkr. L pad, and 70.7v transformer. Ship. wt. 4 3/4 lbs. List \$25.15
- Baffles with 12" Jensen Speaker, 10-oz. magnet, 18 watts. 16 x 13 3/4 x 6 1/4 in.
- WB-212S—Baffle, spkr. Wt. 8 lbs. List \$24.60
 - WB-212SL—Baffle, spkr. L. pad. 8 lbs. \$28.75
 - WB-212ST—Baffle, spkr. trans. 8 lbs. \$28.75
 - WB-212SLT—Baffle, spkr. L. pad, and 70.7v transformer. Ship. wt. 8 1/4 lbs. List \$32.90
 - WB-208—8" Baffle only. Wt. 4 lbs. List \$7.15
 - WB-212—12" Baffle only. Wt. 4 lbs. List \$9.75
- New EFFICIENCY Baffle.** Same Thinline cabinet with lightweight speaker for lower sound levels or where cost is important. 8" Jensen Spkr. 1-oz. mag., 6 w. WB-108AS—Ship. wt. 3 1/2 lbs. List \$11.90

REGULAR, PRESTIGE, & DELUXE BAFFLES

Regular Wall Baffles—WB-4/5C, etc. Standard of industry for quality. Wood-grained pyroxylin, blond or walnut. Argos Speedy Mounting Clip.
Prestige Wall Baffles—PB-8A, etc. Wider shape for better appearance, more volume. Same pyroxylin covering and Mounting Clip as WBs.
Deluxe Wall Baffles—DWB-8A, etc. Beautiful natural hardwood, American Walnut or White Birch finish. Satin-smooth appearance. Mounting Clip.

| Model | Spkr. Size | Width, Height Depth, in. | Cubic In. | Ship. Wt. Lbs. | List Each |
|---------|------------|--------------------------|-----------|----------------|-----------|
| WB-4 5C | 4.5 | 6 1/4 x 6 1/4 x 4 | 100 | 2 * | 4.95 |
| WB-6C | 6 | 7 7/8 x 8 1/2 x 5 | 210 | 3 * | 6.00 |
| WB-6/9C | 6x9 | 9 3/4 x 10 1/2 x 6 1/2 | 400 | 5 * | 7.15 |
| WB-8C | 8 | 9 3/4 x 10 1/2 x 6 1/2 | 400 | 5 * | 7.15 |
| WB-10C | 10 | 11 7/8 x 12 3/8 x 7 3/4 | 800 | 6 1/2 * | 8.50 |
| WB-12C | 12 | 13 5/8 x 14 x 9 1/8 | 1180 | 8 1/2 * | 9.75 |
| PB-8A | 8 | 14 x 10 3/8 x 7 | 690 | 4 3/4 * | 9.75 |
| PB-12A | 12 | 18 1/4 x 13 3/4 x 9 | 1580 | 6 1/2 * | 13.75 |
| DWB-8A | 8 | 9 3/8 x 10 1/2 x 6 1/2 | 400 | 5 1/2 * | 10.00 |
| DWB-12A | 12 | 13 1/4 x 14 1/4 x 9 | 1180 | 9 * | 14.00 |

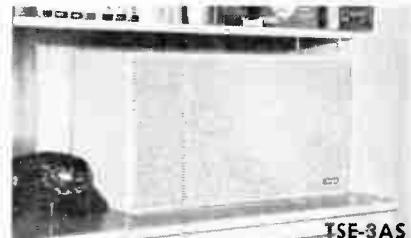
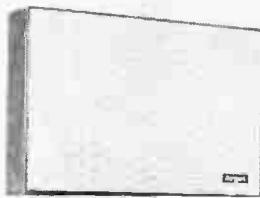
* Shipping wt. of 2 in carton

NEW CORNER BAFFLES

New Design Hangs as Easily as a Wall Baffle... "Clip-In" Front Comes Off in 9 Seconds... Exterior Screw Terminals
The best looking, easiest-to-install corner baffles we've ever seen. No more unsightly screws through the grille! Two automatic clips at top and one screw through bottom hold front panel tightly in place. New slots on back of baffle permit hanging on two Argos Speedy Mounting clips... as easily as a wall baffle. Screw terminals (with lead wires inside for speaker) Bass reflex, acoustic padding. Wood-grained pyroxylin, walnut or blond, same price.

- Slanting Corner Baffles. Aim sound down for best performance.**
- SCB-8D—For 8" spkr. Vol. 680 cu. in. Size 17 3/4 x 15 x 9 in. deep. Ship. wt. 6 lbs. List \$13.90
 - SCB-12D—For 12" spkr. Vol. 1240 cu. in. Size 20 3/4 x 20 x 10 1/2 in. deep. Ship. wt. 8 lbs. List \$18.75
- Regular Corner Baffles**
Long a favorite of sound contractors
- CB-8D—For 8" spkr. Vol. 525 cu. in. Size 12 1/4 x 14 x 6 1/2 in. deep. Ship. wt. 4 1/2 lbs. List \$12.50
 - CB-12D—For 12" spkr. Vol. 1520 cu. in. Size 17 3/4 x 20 x 9 in. deep. Ship. wt. 8 1/2 lbs. List \$18.00
- Thinline Corner Baffle**
New space-saving thinness, with 8" Jensen Profile Speaker, installed and wired. 6-oz. ceramic magnet, 15 watts. 8 ohm. Size 12 1/2 x 18 x 6 3/4 in.
- SCB-208S—Ship. wt. 5 1/2 lbs. List \$22.75

**NEW HI-FI
SPACE SAVER
BAFFLE
Only 3 3/4" THIN
2 SPEAKERS**



The 8" Catalina Hi-Fi Speaker
For bookshelf or floor... one of the most efficient, economical small speaker systems ever built. 8" Jensen woofer and 3 1/2" tweeter in crossover network, 8 ohm terminals. Overall response 50-17,000 cycles. Legs for floor use. Wood-grained pyroxylin, Walnut or Blond. Size 21 x 11 10 1/2 in. deep. Ship. wt. 19 lbs.

- TSE-1S—With 2 speakers. Audiophile Net \$24.95
- TSE-1—Cabinet only. Wt. 17 lbs. Net \$16.50

Deluxe Catalina (Not Shown) Similar to above but built of 3/4" mahogany hand-rubbed, oiled Walnut. Ship. wt. 29 lbs.

- TSE-2AS—With 2 speakers. Audiophile Net \$39.95
- TSE-2A—Cabinet only. Wt. 18 lbs. Net \$26.50
- TSE-8KS—Same specifications as Deluxe Catalina above, in simplified kit form of selected birch. Includes speakers and all hardware. Ship. wt. 19 lbs. Audiophile Net \$27.95
- TSE-8K—Kit, same as above less speakers. Ship. Wt. 16 lb. Audiophile Net \$16.95

The 12" Eldorado Hi-Fi Speaker
Exceptionally fine hi-fi response in a bookshelf or table enclosure. 12" Jensen tweeter and two 3 1/2" Jensen tweeters in crossover network, 8 ohm terminals. Overall response 40-17,000 cycles. Wood-grained pyroxylin, Walnut or Blond. Size 27 1/2 x 14 1/2 x 10 in. deep. Ship. Wt. 24 lbs.

- TSE-3AS—With 3 speakers. Audiophile Net \$39.95
- TSE-1-3A—Cabinet only. Wt. 21 lbs. Net \$22.50

Deluxe Eldorado (Not Shown) Same as above but built of 3/4" hand-rubbed, oiled Walnut

- TSE-4S—3 Jensen speakers. Audiophile Net \$59.95
- Ship. wt. 8 lbs.
- TSE-4—Enclosure only. Audiophile Net \$37.50
- Ship. wt. 22 lbs.

TSE-12KS Same specifications as Deluxe Eldorado above, in simplified kit form of select white birch. Includes 3 speakers and hardware—complete. Ship. wt. 28 lbs. Audiophile Net \$39.95

TSE-12K Kit same as above less speakers. Ship. wt. 22 lbs. Audiophile Net \$24.95

New Vinyl-Clad Tube Caddies



TC-5 \$21.95 SUPER TUBE CADDY. Our largest Tube Caddy... a real main size cage with space for everything. Has over 3500 cu. in. volume, roughly 3x larger than TC-4. Designed for the man who believes in carrying a full load to save extra trips. Holds countless tubes and tools, soldering gun, meter, accessories. Tool tray clearance 2 3/4 in. Handsome, new brown vinyl covering. Size 21" W x 15" H x 8" D. Ship. wt. 19 lbs.

TC-4 \$15.95 CARRY-ALL TUBE CADDY—most popular Tube Caddy ever made. Gives quick availability to all sections. Holds up to 262 tubes... less with tools and meter. Durable, new brown vinyl covering. Size 21" W x 15" H x 8" D. Ship. wt. 12 lbs.

TC-100 \$12.75 THE PACEMAKER TUBE CADDY (Not Illustrated). Same size as TC-4, but built for the thrifty buyer. Popular break-away design gives quick access to all sections. Holds up to 262 tubes... less with tools and meter. Durable, new brown vinyl covering. Size 21" W x 15" H x 8" D. Ship. wt. 11 1/2 lbs.

TC-201 \$9.95 THE PACEMAKER JUNIOR. Smaller, easy to carry size for quick trips or as a matched companion to other Argos Tube Caddies. Holds up to 141 tubes... less with tools and meter. Durable, new brown vinyl covering. Size 15 3/4" W x 12 1/2" H x 8" D. Ship. wt. 9 lbs.

*Registered TM of Argos Products Co. Prices slightly higher west of Rockies



SOUND CADDY® WITH TWO SPEAKERS
Has 2 12-in., heavy-duty, 18-watt PA speakers (6.8 oz. mag.). Accommodates most amplifiers with turntable up to 30 w.

Size: 17 3/4" w. x 13 1/8" d. x 22" h. Shipping Wt. 29 lbs.

SC-2CS — Net \$36.00



Slimline HI-FI CONSOLE
Wood grain pyroxylin covering in blonde or walnut finish. Exceptional full bass and tonal balance. Two matched Jensen speaker: 12" woofer and 3 1/2" tweeter.

- AD-1AS—Enclosure. Ship. wt. 27 lbs. Audiophile Net \$39.95
- AD-1A—Enclosure only (no speakers). Maximum speaker depth 8 1/2 inches. Ship. wt. 22 lbs. Audiophile Net \$24.95

NEW PETITE HI-FI ENCLOSURE
with two custom-designed Jensen speakers
Small wonders the brilliant new "Petite" outperform basic reproducers many times larger and more expensive. Remarkable range—20-17,000 cycles—from unbboxably rich, resonant bass to clean, high trebles. Two way system, high compliance woofer custom designed by Jensen for Argos and tweeter with matching network. Genuine selected American Walnut veneer, oiled and hand-rubbed to an elegant satin finish. Recessed volume control. Screw terminals (polarized for stereo) and wall hangers on back. 8 ohm input.

PHF-1S Enclosure with 2 Jensen speakers. Size: 18" x 12" x 3 3/4" thin. Ship. wt. 10 lbs. Audiophile Net \$24.95

ASTATIC

QUALITY

MICROPHONES

[F] Model GD-104—Complete with Astatic G Stand. List Price—\$51.20. Shipping weight 3 3/4 lbs. Model GD-104C—Complete with Astatic G Stand. List Price—\$51.20. Shipping weight 3 3/4 lbs.

[G] Model 10C, 10D: The tailored response, the more sensitive talk power make these microphones outstanding for SSB and AM transmitter use. They also serve perfectly for industrial paging, semi-directional. Pressure cast body. Model 10C—ceramic element is immune to temperature and humidity. Finish: Bright chrome. Output —52 db. Frequency Range 300 3000 cps. Models G10C and G10D same as above except complete with G Stand.

| List Prices | Shipping weight |
|--------------|-----------------|
| 10C—\$29.70 | 1 lb. 4 oz. |
| 10D—\$39.70 | 1 lb. 10 oz. |
| G10C—\$49.90 | 2 lb. 12 oz. |
| G10D—\$59.90 | 3 lb. 2 oz. |

[H] GS SERIES GOOSENECK FOR LANGUAGE LAB AND P.A. COMMUNICATIONS. Satin chrome flexible gooseneck 13 inches long on permanent mounting. 7 inches single conductor shielded cable. Shipping weight 1 1/4 lbs.

332GS Crystal—See specification for 332, Fig. D. List price \$24.50.

333GS Ceramic—See specification for 333 Fig. D. List price \$24.50.

335H-GS Dynamic Hi-impedance—See specification for 335H, Fig. D. List price \$33.00.

335L-GS Dynamic Lo-impedance—See specification for 335L, Fig. D. List price \$30.00.

MOBILE AND COMMUNICATIONS MICROPHONES

[I] Model 10M5A: "The Communicator"—Approved, accepted rugged, yet light-weight carbon microphone. High sensitivity. Built-in RF filter. Ideal for police, fire department, taxi and other portable or mobile communications. Heavy duty thumb switch. Pressure cast housing. Finish: Opalescent Grey. 5 feet of self-recoiling cable. Includes anti-rattle hang-up bracket. Power level 2 db above 6 mw. List price—\$29.50. Shipping weight—1 lb., 3 oz.

TAPE RECORDING MICROPHONES

[J] A fine performing, value priced high output wide range microphone. Model 150—(Crystal) Grey plastic body, aluminum anodized grille. Output level —44 db. (1 volt/dyne/cm²). Output impedance high (1.5 megohms). Frequency response range 30-10,000 cps. 5-ft. extra flexible single-conductor shielded cable. List price—\$6.50.

[J] Model 151—(Ceramic) Plastic grey body, black metal grille. Output level —48 db (1 volt/dyne/cm²). Output impedance high (1.5 megohms). Frequency response range 30-8,000 cps. 5 ft. extra flexible single-conductor shield cable.

DIMENSIONS: 2 1/4 square x 1 1/4" deep. NEW WEIGHT: 3 ounces. List Price \$6.50
NOTE: PROFESSIONAL RECORDISTS WILL BE INTERESTED IN ASTATIC MODELS SUCH AS THE 330 SERIES, 77 AND 788

ALL-PURPOSE CRYSTAL MICROPHONES

[K] Model 200: "Velvet Voice"—A versatile, low priced, hand-held, desk floor stand. Crystal high impedance microphone. Pressure cast gold finish housing, chrome grille. Complete with 8 feet of cable. Model 200—wide range, output —50 db. Frequency Range 30-10,000 cps. Model 200 S—wide range with switch. Model 241-S rising characteristics, from 1500 to 5500 cps.

MODEL 200—List Price—\$19.50. Shipping weight 2 lbs.

MODEL 200S and 214S—List Price—\$21.50. Shipping weight 2 lbs.

[L] Model T-3: "The Pioneer"—Industry approved. High output —52 db. Frequency Range 30-10,000 cps. Tilting head provides for semi or nondirectional pickup. Pressure-cast housing. Finish bright chrome body and grille. 10 feet of single-conductor cable. Model GT 3 includes Astatic G Stand, with 6 feet two conductor shielded cable.

MODEL T-3—List Price—\$29.30. Shipping weight 2 lbs.

MODEL GT-3—List Price—\$49.50. Shipping weight 3 lbs.

[M] Model JT-30 (Crystal), JT-30C (Ceramic): "The Spokesman"—High quality, low cost, specially designed for PA recording and communications. Pressure cast body and base. Finish: Opalescent Grey, Chrome Grille.

[M] Model JT-30 (Crystal), 8 feet of cable. Output —49 db. Frequency Range 30-10,000. Model JT-30C (Ceramic), 5 feet of cable. Output —54 db. Frequency Range 30-10,000 cps.

[M] Model JT-30—List Price \$18.40. Shipping weight 1 lb.

[M] Model JT-30C—List Price \$18.90. Shipping weight 2 1/2 lbs.

[M] Model JT-30F (Same as JT-30 except head only. Without handle and base.) List Price \$15.90. Shipping weight 1 1/5 lbs.

[M] Model JT-30CF (Same as JT-30C except head only. Without handle and base.) List Price \$16.40. Shipping weight 1 1/5 lbs.

[N] Model L-1—"The Lecturer"—Small, efficient, high quality invisible crystal microphone. Spring attachment clip for coat lapel or other garment. Precision-built, wide-range performance. Wire mesh front and rear grilles. Black melamine finish. 15-ft. small-diameter, single-conductor shielded cable. High impedance. Output —62 db. Range 30-10,000 cps. Shipping weight 1 lb. List Price \$27.35.

ALL DIRECTIONAL DYNAMICS

[O] Model DN-5D, DN-HZ "The Commentator". Highly reliable preferred Astatic dynamic microphones for communication and general purpose use. Rugged construction, tilting head, pressure cast body. Opalescent grey finish with bright chrome grille. Model DN-5D—Low impedance. Output —51 db. Frequency Range 50-10,000, 10 feet of 2 conductor shielded cable. Model DN HZ—High impedance. Output —52 db. Frequency Range 50-10,000 cps. 10 feet of single conductor shielded cable.

[O] Model DN-5D—List Price \$33.50. Shipping weight 2 lbs.

[O] Model DN-HZ—List Price \$39.70. Shipping weight 2 1/2 lbs.

[O] Model GDN-5D—Low impedance with Astatic G Stand. List Price \$52.70. Shipping weight 3 lbs.

[O] Model GDN-HZ—High impedance with Astatic G Stand. List Price \$59.90. Shipping weight 3 lbs. 8 oz.

[O] Model UGDN-5D—Low impedance with Astatic UG Stand (balanced line). List Price \$56.00. Shipping weight 3 lbs. 8 oz.

[P] SWITCH CONNECTORS with standard receptacles to receive the interchangeable connector used on many Astatic microphones. Also have connection for standard concentric cable connector. Model SC-11 used with Astatic microphones T-3, DN-HZ, 10C, 10D, and D-104. SC-12 for use with Astatic microphone DN-5D. List Prices: SC-11 (Bright chrome, less cable), \$9.00; SC-12 (Bright chrome, less cable), \$11.25.

COMPLETE LINE REPLACEMENT MICROPHONE CARTRIDGES AND STANDS



I



J



K



L



M



N



O



P

ASTATIC PHONO NEEDLES

Needle for needle, Astatic always has the highest quality with the most complete stocks of any maker anywhere. No matter who the original equipment maker of the phonograph, Astatic has just the needle made for that particular cartridge on hand, ready for immediate delivery.

ASTATIC

QUALITY

MICROPHONES



B



A



C



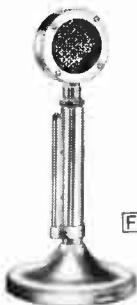
D



E



G



F



H

ASTATIC PHONO CARTRIDGES
For over 25 years Astatic has maintained its number one position as the world's leader in supplying the most complete line of phonograph pickup cartridges for both original equipment manufacturers and distributors.



PROFESSIONAL, HIGH RELIABILITY DYNAMIC MICROPHONES FOR SOUND STAGE—TAPE RECORDING —TV AND BROADCAST

Modern design, outstanding performance. Omnidirectional, widest range, pop and blast proof Mylar diaphragm. Pressure cast body. Complete with lavalier assembly, swivel adaptor and 20 feet of 2-conductor shielded cable.

A Model 988: Extended range (40-20,000) professional microphone for TV broadcast, group pickup. High output —57 db. Frequency response 40-20,000 cps, multi-impedance selection 50-150 250 ohms. Finish—satin black body with satin gold trim. List price—\$150.00. Shipping weight—3 lbs.

A Model 888: Diversified applications, sound stage, tape recording, TV and broadcast. High output —55 db. Frequency response 50-15,000 cps, multi-impedance selection. Finish—black body with chrome trim. List price—\$110.00. Shipping weight—1½ lbs.

A Model 788: Ideal for tape recording, orchestras and PA. Dual impedance 150 ohms and high. High output —55 db. Frequency response 60-13,000 cps. Built-in on off switch. Finish—satin black body, satin gold trim. List price—\$79.50. Shipping weight—12 oz.

CARDIOID DYNAMIC MICROPHONES FOR PUBLIC ADDRESS AND INDUSTRIAL APPLICATIONS, RECORDING, TV AND BROADCAST

THE MOST POSITIVE ANTI-FEEDBACK MICROPHONE EVER BUILT. A high fidelity unidirectional dynamic cardioid microphone. New, advanced design. Front to back pickup, differential of 18 db. Cartridge is suspended in rubber-like material, no need for external shock mount. Built-in impedance selector switch. Low impedance 30 to 50 ohms. Medium 150 to 250 ohms. High 40,000 ohms. Output —52 db. Frequency response 30-15,000 cps all models. Satin chrome or gold finish.

B Model 77—Complete with off-on switch, with provision for locking in on position. List (in chrome) \$82.50—(in gold) \$92.50. Shipping weight—2 lbs., 14 oz.

B Model 77L—Head only for mounting on Astatic G Stand. List (in chrome) \$72.50—(in gold) \$82.50. Shipping weight—1 lb., 14 oz.

B Model G77—Includes Astatic G Stand. List—\$97.45. Shipping weight—3 lbs., 10 oz.

INDUSTRIAL "RUGGEDIZED" DYNAMIC MULTI-IMPEDANCE MICROPHONE

C Model 551: A specially designed, extremely heavy duty dynamic multi-impedance microphone with blastproof feature, high intelligibility and low background noise pickup. Internally sealed against dust, grit and moisture. Low impedance (Rmr) = 150 ohms; High Impedance (Rmr) = 40,000 ohms. Leaf type internal switch with bar actuator external switch for convenient, either-thumb handling. Cable extends to 8'—recoils to 15". Housing of high impact "Delrin". List Price—\$69.50. Shipping weight 2 lbs.

MINIATURIZED PROFESSIONAL QUALITY MICROPHONES FOR PUBLIC ADDRESS, COMMUNICATIONS, RECORDING, STUDIO AND INDUSTRIAL APPLICATIONS

O DYNAMIC MODELS 335H AND 335L: Unusual response uniformity from 60-12,000 cps. Both models. High Impedance (335H) and Low Impedance (335L) 30 50 ohms. Output 335H —56 db; 335L —57 db. Die-cast housing in TV grey finish with chrome cap and grille. 8 foot single conductor cable. Complete with lavalier and stand adaptor with ¼" 27 thread. Shipping weight 1¼ lbs. List prices (335L)—\$23.50 (335H)—\$26.50.

O CERAMIC MODEL 333: Exceptional response uniformity from 30-10,000 cps, High Impedance Output —58 db. Die-cast housing in black finish with black grille and chrome cap. 8 foot single conductor cable. Complete with lavalier and stand adaptor with ¼" 27 thread. Shipping weight 1¼ lbs. List Price \$17.90.

O CRYSTAL MODEL 332: Exceptionally uniform response from 30-15,000 cps. High impedance. Output —54 db. Die-cast housing in satin chrome with chrome cap and black grille. 8 foot single conductor cable. Complete with lavalier and stand adaptor with ¼" 27 thread. Shipping weight 1¼ lbs. List price \$17.90.

O CERAMIC MODEL 331: A voice range unit for communications applications, paging and 27 megacycles citizens' band use. With built-in momentary on, spring-return switch. Die-cast black housing and grille with chrome cap. Complete with hang-up bracket. Output —56 db. Frequency range 300-5,000 cps. High impedance. Cable provides for audio and relay connections. Shipping weight—1 lb. List Price \$17.90.

CERAMIC AND DYNAMIC MOBILE MICROPHONES OF HIGH IMPEDANCE AND UNUSUALLY WIDE RANGE OF APPLICATIONS INCLUDING CITIZENS' BAND AND COMMUNICATIONS.

E Model 511: Tailored response with limited range characteristics, with wide temperature range ceramic element from —40° F. to +300° F. Output: —50 db below 1 volt dyne cm². Press-to-talk leaf type switch in body center for either thumb operation. 3 conductor cable shielded coiled cable extends to 5½' from recoil of 11". Housing of high impact plastic in 2-tone grey and spun aluminum grille. Back handle ridges provide sure hand fit. Uniquely designed mounting bracket permits vertical or horizontal mounting. Shipping weight—1¼ lbs. List Price—\$19.95.

E Model 513: Virtually identical to Model 511 except for Dynamic Element; wide temperature range from —40° F. to +150° F. Shipping weight—1½ lbs. List Price—\$34.50.

FOR SSB-AMATEUR-AM-PAGING AND INDUSTRIAL USE

E Model D-104, D-104C: "The Premier"—An established first among radio amateurs. Balanced performance for maximum intelligibility throughout the voice range. Machine brass parts. Bright chrome finish. 5' single-conductor cable. Note: Frequency range 30-7500 cps. D 104 Crystal —46 db, D-104 Ceramic —51 db. List Price—\$31.00. Shipping weight 1¼ lbs.

THE ASTATIC CORP.

CONNEAUT, OHIO • U.S.A.

MANUFACTURERS OF PHONOGRAPH CARTRIDGES • NEEDLES • PICKUPS • MICROPHONES
RECORDING TAPE • ELECTRONIC DEVICES



ATLAS SOUND



ATLAS PAGING AND TALK BACK SPEAKERS

All speakers approved by Federal Civil Defense Administration.

All New Designs of HU and CJ type speakers are now equipped with the versatile "Versalock" mounting bracket. This new rigid, rugged and reliable bracket is completely adjustable on both a horizontal and vertical plane: Efficient: these speakers are especially efficient in the voice frequency range and provide the extra "punch" that overrides high level background noise. Talk Back: designed to offer a maximum of efficiency in talk back application. All HU type speakers are constructed of aluminum. All parts are chemically processed prior to final finish in gun metal grey, high gloss, high temperature baked enamel. The CJ type speaker horns are constructed of non-resonant indestructible fiber glass. All models are 100% weatherproof under all climatic conditions.

Type HU speakers are excellent for all paging and talk back systems where the utmost in efficiency is to be obtained. Ideal as replacements for inefficient cone type speakers that are usually inadequate for inter-com systems. ATLAS driver unit type paging speakers can be depended upon to offer at least three times the sound level of a small cone speaker at a given power input.

All models are double sealed against all weather conditions in all climates. The response is flat and uniform and free from peaks that often cause acoustic feed back and poor intelligibility. The larger type HU speakers such as the HU-24N offers an advantage in improved low frequency response and as a result is often adequate for the reproduction of music in non-critical industrial and amusement park areas.

Type CJ speakers are similar to the HU type but have the advantage of a wide angle sound dispersion characteristic. The one

piece fibre glass horns are non-resonant and will resist the most adverse weather conditions.

Type TP two-way speakers offer bi-directional sound coverage from a single source. The universal mounting permits the dual horns to be faced downwards or outwards from a wall surface at a 10° angle. Excellent for long corridors where one driver unit can do the work of two. Saves on installation costs. The larger TP-24N with oversized horns offers lower response and added efficiency.

Model DU-12 DéCor speaker combines the intelligibility, directivity and high efficiency of a driver unit type speaker with modern high styling that will harmonize with the most ultra modern décor. Finished in natural brushed aluminum.

Model DC-5 DéCor speaker is identical in outward appearance, size and mechanical details to the DU-12 described above. However, this model is equipped with an efficient 5" diameter cone speaker in place of the driver unit type reproducer. The cone type radiator will reproduce low level voice and music in a pleasing and natural manner. Fine for use in churches, hotel lobbies, restaurants and all quiet locations where appearance must be carefully considered.

The "positive lock" bracket of the DU-12 and DC-5 permits the speaker to be directed on either a horizontal or vertical plane. Connections feed thru the bracket and all wiring, transformer, etc. are concealed behind the canopy. The canopy is equipped with adaptor strap for electrical outlet box or for direct mounting on a wall or ceiling surface.



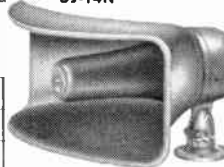
HU-12N



HU-15N
HU-24N



CJ-14N



CJ-30N



TP-15N
TP-24N

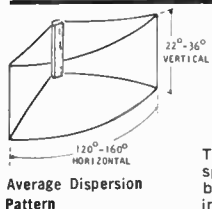


DU-12
DC-5

| MODEL | HU-12N | HU-15N | HU-24N | CJ-14N | CJ-30N | TP-15N | TP-24N | DU-12 | DC-5 |
|------------------|------------|------------|------------|-----------------|------------|------------------|------------------|------------|-----------|
| Power* | 7.5 w | 25 w | 25 w | 7.5 w | 25 w | 25 w | 25 w | 7.5 w | 6 w |
| Impedance† | 8 ohm | 8 ohm | 8 ohm | 8 ohm | 8 ohm | 8 ohm | 8 ohm | 8 ohm | 8 ohm |
| Frequency C.P.S. | 350-10,000 | 250-10,000 | 200-10,000 | 400-10,000 | 250-10,000 | 250-10,000 | 200-10,000 | 400-10,000 | 120-7,000 |
| Length Overall | 7 1/4 in. | 8 3/4 in. | 12 in. | 8 in. | 11 1/4 in. | 16 1/2 in. | 23 in. | 14 in. | 14 in. |
| Bell Diameter | 7 1/2 in. | 9 3/4 in. | 11 1/4 in. | 9 1/2" x 5 1/2" | 14" x 6" | 9 3/4 in. | 11 1/4 in. | 7 in. | 7 in. |
| Sound Level# | 115 db | 123 db | 124 db | 115 db | 120 db | 120 db each horn | 121 db each horn | 114 db | 105 db |
| Dispersion | 120° | 100° | 95° | 120° x 60° | 120° x 60° | 100° each horn | 95° each horn | 110° | — |
| Ship. Weight | 3 1/2 lbs. | 6 lbs. | 6 lbs. | 3 1/2 lbs. | 7 lbs. | 7 1/2 lbs. | 8 lbs. | 4 lbs. | 3 lbs. |
| Net Price | \$16.80 | \$20.70 | \$23.10 | \$18.60 | \$26.10 | \$32.10 | \$35.70 | \$21.60 | \$14.25 |

Note: Add 90¢ to net price of all models if 45 ohm impedance is required.
Measured at 4 ft. on axis rated power.

* Input range limited to frequencies above horn cut off.
† All models available in 45 ohms—add 45 ohms after model No. (Example: HU-15N-45)



ATLAS Columair SOUND COLUMN

(with exclusive EASY-MOUNT Universal Bracket)

The "Columair" consists of an in-line array of six frequency adjusted cone speakers. The in-line configuration produces a sound pattern having a broad horizontal and narrow vertical distribution. Provides uniform sound intensity even at varying distances from the sound column. EASY-MOUNT swivel bracket permits optimum adjustment of critical beam pattern. Transformer cover plate located at top of enclosure. Constructed of heavy gauge steel finished in light beige two tone spatter. Plastic grill cloth in contrasting shade covers front plywood panel. Interior lined with "Tufflex" acoustic padding. Fine appearance blends with most décors.

SPECIFICATIONS

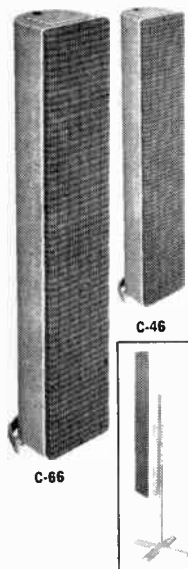
| Model | C-46 | C-66 |
|----------------------------|-------------------|-------------------|
| Speaker Array | Six, Four-Inch | Six, Six-Inch |
| Frequency Range | 200-10,000 cps | 125-10,000 cps |
| *Power Capacity | 20 Watts | 40 Watts |
| **Vert. Distribution Angle | 26-36 Degrees | 22-32 Degrees |
| **Hor. Distribution Angle | 120-160 Degrees | 120-160 Degrees |
| Impedance (Total) | 16 Ohms | 16 ohms |
| Dimensions | 28" x 5 1/4" x 5" | 42" x 7 3/4" x 6" |
| Net Weight | 8 1/4 Lbs. | 18 1/2 Lbs. |
| Net Price | \$37.50 | \$57.00 |

*Constant Program Material Input.
**Distribution varies with frequency and environment.

ATLAS SUPPORT STAND

Model 55-4 support stand for portable and permanent application. Requires use of MK-1 attachment kit to mount Column to stand—designed for quick and easy removal of Column from stand. Upright polished chrome, heavy cast iron base in beige shrivel finish. Adjusts to more than six feet in height, weight 20 lbs.

Model 55-4 Loudspeaker Support Stand Net Price \$12.60
Model MK-1 Columair Attachment Kit Net Price \$ 1.20



ATLAS LINE MATCHING TRANSFORMERS



T-5 for DU-12 and DC-5 DéCor speakers equipped with bracket to mount under wall canopy for a neat installation. Primary marked in impedance and power steps from 7.5 to .31 watts in six steps. Secondary 8 ohms. Net Price \$3.00

T-11 for HU, CJ, TP and WT-6 speakers. Completely weather proof, includes bracket for simple attachment to the speaker, varnish impregnated and all soldering lugs clearly marked. Primary from 45 to 8,000 ohms in nine impedances. Also marked for 70v. and 25v. Power ratings from 15 to .65 watts. Secondary 4, 8, 16 ohms. Net Price \$5.55

T-10 for "Columair" C-46 and all general use. Same specs as T-11 above, less weatherproof housing. Net Price \$3.90

T-15 for CJ-44 Cobra-Jector and all high power driver units. Includes weather proof housing and universal mounting bracket. Primary from 100 to 2,000 ohms in seven steps. Also marked for 70v. line from 50 to 2.5 watts. Secondary 4, 8, 16 ohms. Net Price \$9.90

T-16 for "Columair" C-66 and for general application. Specs same as T-15 above, less weatherproof housing. Net Price \$5.10



ATLAS SOUND



ATLAS COBRA-JECTOR

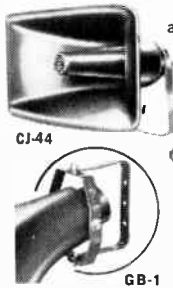
MODEL CJ-44 ALL PURPOSE WIDE ANGLE PROJECTOR—COMPLETE WITH SUPER POWER DRIVER—POLYESTER FIBRE GLASS CONSTRUCTION

All weather speaker with "Acousti-Matched" built in driver unit. The projector and reproducer is a single package, matched design resulting in maximum conversion efficiency. (Power input in watts versus sound pressure output.) The CJ-44 controlled response has been carefully restricted within frequency limits most useful in PA and high level music reproduction. As a result, speaker output energy is not wasted in the reproduction of frequencies that do not contribute to efficient performance.

Net Price \$47.70

| | |
|---------------------------|---------------------------------|
| Input Power (cont.) | 40 watts |
| Power Equalized Response* | 60 watts |
| Input Impedance | 16 ohms |
| Response | 150-10,000 cps |
| Dispersion | 120° x 80° |
| Dimensions—Bell | 23" x 13" |
| Overall length | 19" |
| Weight | 16 lbs. net 19 lbs. shipping |

*Input range limited to frequencies above horn cut off.



All speakers approved by Federal Civil Defense Administration.

DR-54
DR-42
DR-32

MOUNTING BRACKET FOR CJ-44 AND ALL DR PROJECTORS

MODEL GB-1 For all Atlas projectors using "U" type bracket mounting. It permits the speaker to be quickly adjusted in both a horizontal and vertical plane and securely locked in position. Average adjustment limits 160° on the horizontal and 65° on vertical direction. Bonderized steel, baked enamel finish, all hardware supplied. Shipping weight 3 lbs. Net Price \$3.30

ATLAS DR PROJECTORS

NON-RESONANT—STURDY—WEATHERPROOF

Atlas DR projectors are the result of many years of acoustic research. This costly engineering and elaborate tooling has resulted in projectors that are without acoustical or mechanical equal. All acoustical sound paths are clean and uniform without steps or pockets to disturb the normal function of the horn. These critical design features eliminate conditions of turbulence, frequency cancellation and resultant signal distortion. All models are equipped with a heavy duty "U" bracket. This bracket is securely fastened to a main body casting which will not fail when subjected to extreme conditions of stress, strain and vibration.

| SPECIFICATIONS | DR-54 | DR-42 | DR-32 |
|----------------------|-----------|-----------|-----------|
| Air Column | 4½ ft. | 3½ ft. | 2½ ft. |
| Low Frequency | 115 cps | 140 cps | 190 cps |
| Bell Diameter | 26 inches | 21 inches | 15 inches |
| Length (less driver) | 19 inches | 16 inches | 14 inches |
| Shipping Weight | 23 lbs. | 14 lbs. | 10 lbs. |
| Net Price | \$29.40 | \$21.60 | \$18.00 |



ATLAS EXPLOSION-PROOF HIGH EFFICIENCY SPEAKERS

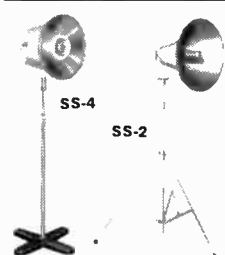
APPROVED BY UNDERWRITERS LABORATORIES FOR USE IN HAZARDOUS LOCATIONS WHERE EXPLOSIVE ATMOSPHERES EXIST

Highly efficient due to exclusive design of explosion barrier. Class 1 speakers for use in atmospheres containing ethyl ether, cyclopropane, gasoline, naphtha, benzene, butane, acetone, lacquer, natural gas, etc. Class 2 can be used in Class 1 conditions as well as in atmospheres containing dust of magnesium, coal, coke, flour, starch, grain, etc.

HLE-30 type speaker preferred where space limitations exist; excellent for paging and talk back applications. HLE-42 type more efficient due to larger horn size—where maximum coverage is required.

| SPECIFICATIONS | HLE (1 or 2) 30 | HLE (1 or 2) 42 |
|----------------------|--------------------------------------|--------------------------------------|
| Power Input | 30 watts | 30 watts |
| Voice Coil Impedance | 16 ohms* | 16 ohms* |
| Freq. Response | 300 to 10,000 cps | 150 to 10,000 cps |
| Overall Length | 17½ inches | 25 inches |
| Bell Opening | 14 in. x 6 in. | 21 inch diameter |
| Cable Entrance | ½" conduit | ½" conduit |
| Shipping Weight | 22 lbs. | 29 lbs. |
| Net Price | HLE-1-30 \$73.50 HLE-2-30 \$85.50 | HLE-1-42 \$84.00 HLE-2-42 \$96.00 |

*Available with 45 ohm V.C. add \$1.50 to net price. T-16 line trans. mounting facilities available within explosion-proof housing. For details see description of T-16.



ATLAS SUPPORT STANDS

Model SS-4 for permanent and portable use, for all types of speakers of medium weight and size. Easy-Off top fitting supplied for convenient attachment of speaker. Cast iron base offers adequate stability for average use. Upright polished chrome steel tubing adjustable to over 6 ft. Beige shrivel base. Weight 20 lbs. Net Price \$12.60

Model SS-2. Heavy duty, all purpose support. Maximum stability due to wide surface spread. All parts plated steel and paint finish. Equipped with Easy-Off top adaptor to facilitate removal of speaker. Height extension 5 to 10 ft. Weight 29 lbs. Net Price \$25.50

ATLAS "SPECIAL DUTY" SPEAKERS

These "special duty" weatherproof speakers are ruggedized for tough-spot service, compact in size for limited mounting area installations. Protective screen over bell openings adds structural strength and prevents entry of foreign material into bell opening. Constructed of heavy gauge aluminum and die castings finished in high temperature baked grey enamel.

Model SPB-1 equipped with "Versalock" bracket for all directional adjustment. Bell dia. 7¼ in., overall length 6½ in. Weight 5½ lbs. Net Price \$29.10

Model SPF-2 for flange mounting in panels, bulkheads, etc. Outside dia. 7¼ in., overall length 6½ in. Weight 5 lbs. Net Price \$28.50

See model HU-15N for detailed electrical and acoustical specifications.



ATLAS "COAX-PROJECTOR" ALL WEATHER HI-FI SPEAKER



Model WT-6—Two-way system—two individual drivers, two individual horns, with built in electronic crossover. A cone type driver with six inch throat for the "lows"; a compression type driver for the "highs". Both drivers are loaded with separate horns to minimize acoustic phase distortion and inter-modulation effects.



Net Price \$36.00

| WT-6 SPECIFICATIONS | |
|---------------------|------------------|
| Power | 15 Watts (cont.) |
| Frequency | 100-15,000 cps |
| Impedance | 8 ohms |
| Dispersion | 120° average |
| Sound Level* | 118 db |
| Crossover | 1,000 cps prox. |
| Bell Opening | 15 inches |
| Overall Depth | 12 inches |
| Shipping Weight | 16 lbs. |

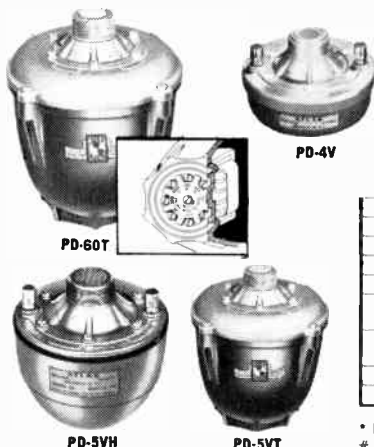
*Measured at 4 ft., 800 to 1300 cps sweep at rated power.

Model W-6, identical in size and appearance to WT-6 but does not include high frequency "tweeter". High end response limited to 8,000 cps, but entirely adequate where good musical reproduction is desired and where the ultimate in high frequency response is not a requirement.

Net Price \$27.00

General: Both models are constructed of aluminum finished in a new modern shade of beige, all weather, baked enamel. Leading edge of bell protected and damped with a plastic beading. Rugged steel "U" type bracket is fully adjustable for all applications. All metal parts chemically treated prior to finishing.

ATLAS DRIVER UNITS • SUPER POWER — SUPER EFFICIENT



Will offer years of satisfactory performance under full power application. The ultimate in frequency response, conversion efficiency and trouble free performance. Specify the new PD-60T for the "tough-spots". All models, except the PD-4V are equipped with self-aligning diaphragms easily replaceable in the field; all driver units double sealed against all climatic conditions.

| SPECIFICATIONS | PD-60T | PD-5VT | PD-5VH | PD-4V |
|---------------------------------------|-------------------------------|---------------------------|-----------|----------|
| Power (continuous)* | 60 watts | 40 watts | 40 watts | 30 watts |
| Power (equalized response)† | 100 watts | 60 watts | 60 watts | 50 watts |
| Voice Coil Impedance | 16 ohms | 16 ohms | 16 ohms | 16 ohms |
| Sound Intensity# | 136 db | 131 db | 131 db | 128 db |
| Frequency Response cps | 70-10,000 | 80-10,000 | 80-10,000 | 75-7,000 |
| Transformer Imp. ohms | 85, 125, 250, 500, 1000, 2000 | 125, 250, 500, 1000, 2000 | | |
| Trans. Power Taps, Watts 70 Volt Line | 60, 40, 20, 10, 5, 2.5 | 40, 20, 10, 5, 2.5 | | |
| Shipping Weight | 8 lbs. | 7 lbs. | 5 lbs. | 4 lbs. |
| Net Price | \$37.20 | \$30.60 | \$22.50 | \$17.70 |

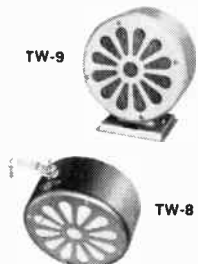
* Integrated speech and music full range. † Input range limited to frequencies above horn cut off. # Measured 4 ft. on axis, 6 ft. air column with integrated full power input.

ATLAS SOUND DIVISION American Trading and Production Corp., Brooklyn, N. Y.

ATLAS "TWO-WAY" BAFFLES

Model TW-9. Bi-directional baffle for wall or ceiling surfaces. Excellent for corridors. Universal mounting plate attaches canopy to electrical outlet box or to any flat surface. All steel, beige enamel finish, plastic grill cloth. Dia. 9 in. depth 5 in., for all standard 8 in. cone speakers. Weight 4 lbs. Net Price \$8.40

Model TW-8. Economy model similar to above with quick-mount universal bracket. Finished in neutral grey enamel for 8 in. cone speakers. Weight 3½ lbs. Net Price \$6.60





ATLAS SOUND



ATLAS "FULL GRIP-VELVET ACTION" MICROPHONE STANDS

NO SLIPPING—NO RATTLE—NO NOISE—NO SCRATCHING—NO WEAR

The "Full Grip" clutch is standard on all models—it offers an extended length clutch body, permitting a secure, full hand grip. The clutch mechanism of all "Velvet Action" stands is inner-lined with a wear-proof bakelite locking collet which grips without jamming, slipping or sudden dropping. All chrome plated surfaces are carefully polished prior to plating to assure a uniform "Super-Chrome" wear resistant, lifetime finish. All threads on tube assemblies are individually inspected to assure a perfect fit when assembled to the base castings. All bases are functionally designed to offer maximum stability for a given base weight. The maximum base mass is located at the outer periphery of the casting where the concentrated weight is most effective. All bases include self leveling, shock absorbing base pads, plus three additional "anti-tip" points located between the base pads. All models terminate with a $\frac{3}{8}$ "-27 thread at the microphone end.

MS-10C Economy model suitable for most applications where a low cost stand is required. Offers adequate base stability for average weight microphone.

MS-12C Similar to above but increased base weight offers an added advantage. Flat design of base is modern in appearance and is finished in a dark gun metal shrivel finish. Equipped with base pads to absorb shock.

MS-11C Full chrome design. Entire stand base and upright tube assembly completely finished in "Super-Chrome." Excellent for use where fine appearance is a requirement. An excellent choice for use with full chrome plated microphones. Equipped with base pads.

MS-4 Three section telescoping microphone stand permitting a wide variation of adjustment. Can be adjusted from 26 inches to 61 inches in height. Excellent for use in schools, etc. where it is necessary to adjust the stand over a wide range of height adjustment. Minimum collapsed length offers convenience in transportation.

MS-20 DeLuxe model. Maximum stability suitable for use with heavy, expensive microphones. Large oversize tube assembly, $\frac{7}{8}$ " diameter telescoping tube, $1\frac{1}{8}$ " diameter base tube, base diameter 12 inches. Oversize clutch assembly assures secure locking adjustment. Top adaptor included for $\frac{3}{8}$ "-27 microphones.

MS-25 Professional Microphone Stand. The ultimate in microphone stands. Features the "Safety Air Lock Cushion." This sensational feature prevents any accidental or sudden slippage of the telescoping section. If the clutch mechanism is accidentally released the stand cannot suddenly crash down—thus prevents damage to the microphone from severe mechanical shock. The telescoping section is at all times "cushioned on air" and the controlled escapement of air will only permit a slow smooth and quiet collapse of the stand. Base finished in a combination of chrome and shrivel. Heavy duty tube assembly, $1\frac{1}{8}$ " and $\frac{7}{8}$ " combination— $\frac{3}{8}$ "-27 top adaptor.

MS-11S - MS-12S Automatic "Sleeve Action" models. A fully automatic means of adjusting the height of the stand. A slight downward pressure on the "Sleeve Action" control permits the telescoping section to be lowered—cannot change its position without a deliberate pressure on the actuating sleeve control. Two models full chrome base or shrivel finish.

CS-1 Fully collapsible, portable stand quick and simple to set up. Collapsible to a minimum overall length of 23 inches.

CS-42 Collapsible base stand. All the advantages of portable type stand without the loss of stability inherent in cast iron base types. When legs are extended they are securely locked in position. Upright tube assembly full chrome, base finished in grey shrivel, base pads provided. Packed: One complete stand to a single shipping carton.

| Model | Weight | Base Finish | Tube Finish | Height Adj. | Base Dia. | Net Price |
|--------|---------|---------------|-------------|-------------|-------------|-----------|
| MS-10C | 10 lbs. | Grey Shrivel | Full Chrome | 35" to 64" | 10 inches | \$ 6.00 |
| MS-12C | 12 lbs. | Grey Shrivel | Full Chrome | 35" to 65" | 10 inches | \$ 6.45 |
| MS-11C | 13 lbs. | Full Chrome | Full Chrome | 35" to 65" | 10 inches | \$ 8.25 |
| MS-4 | 11 lbs. | Grey Shrivel | Full Chrome | 26" to 61" | 10 inches | \$ 9.45 |
| MS-20 | 15 lbs. | Grey Shrivel | Full Chrome | 37" to 66" | 12 inches | \$10.20 |
| MS-25 | 22 lbs. | Chrome & Grey | Full Chrome | 37" to 66" | 17 inches | \$16.80 |
| MS-11S | 13 lbs. | Full Chrome | Full Chrome | 35" to 65" | 10 inches | \$15.00 |
| MS-12S | 12 lbs. | Grey Shrivel | Full Chrome | 35" to 65" | 10 inches | \$13.50 |
| CS-1 | 5 lbs. | Chrome & Cad | Full Chrome | 23" to 62" | collapsible | \$11.40 |
| CS-42 | 9 lbs. | Grey Shrivel | Full Chrome | 34" to 62" | 16 inches | \$ 7.80 |

CS Type Demountable Microphone Floor Stands—with full grip—"Velvet Action," fully collapsible—quick and simple "Come Apart" base design. This new and revolutionary design in microphone stands is ideal for fixed as well as portable applications. Excellent for use when it is desired to contain the stand within the amplifier or speaker carrying case. The stability of the assembled stand is equal to many types employing heavy cast iron base construction. The base legs are easily removed to permit minimum size, lightweight transportation. The spring lock leg-holding mechanism of this ingenious design offers a quick and simple "Come Apart" feature. No tools or screw fastenings are required to hold the base assembly together. No small parts to become lost. The self-leveling legs are chrome plated, tipped with skid-proof rubber shock absorbent bumpers—eliminates vibrational conductivity... protects polished floor surfaces against damage.

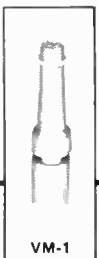
| Model | Finish | Height Adj. | Shipping Weight | Net Price |
|-------|-------------|-------------|-----------------|-----------|
| CS-32 | Full Chrome | 36" to 64" | 5 lbs. | \$ 7.50 |
| CS-33 | Full Chrome | 26" to 64" | 4 lbs. | \$ 8.70 |

Each stand is individually packed complete in a single carton. Model CS33 can be collapsed to a total length of only 22 $\frac{1}{2}$ ".

VM-1 SHOCK MOUNT The VM-1 shock mount will eliminate or greatly reduce microphone pick up of external mechanical shock and stand vibrations.

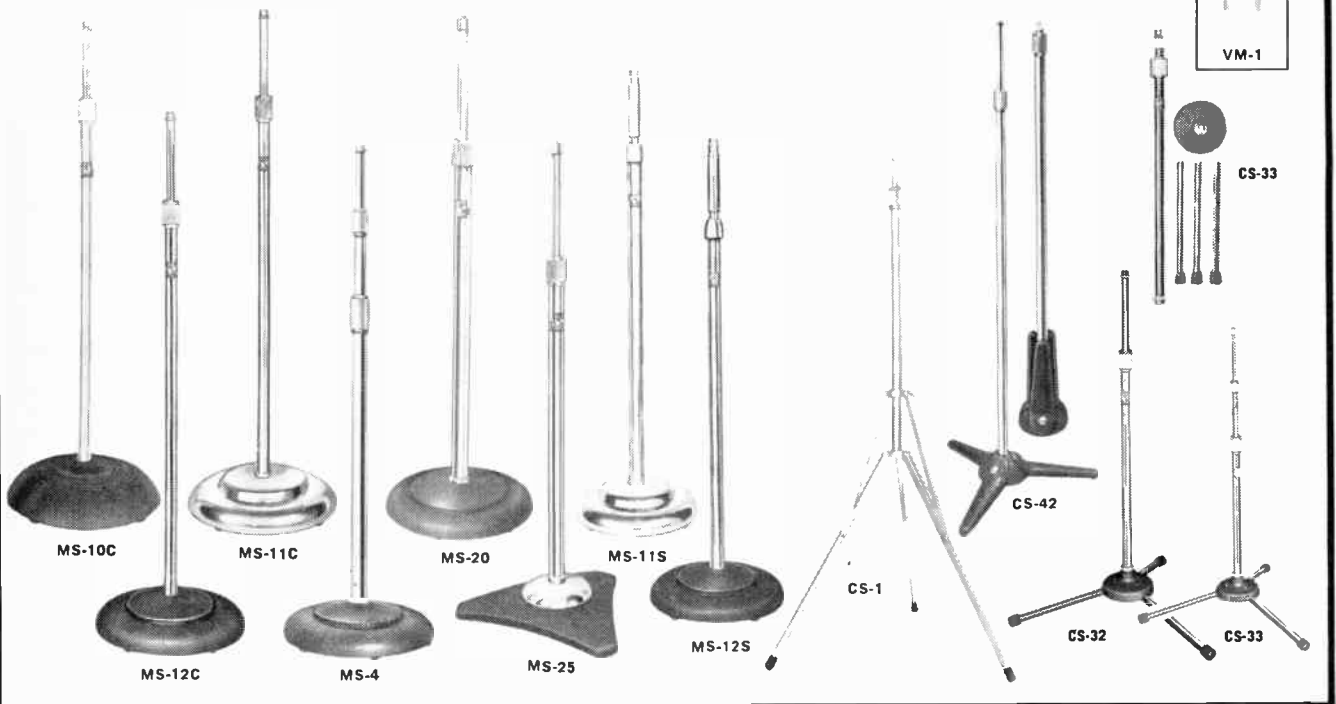
The shock mount is equipped with male and female $\frac{3}{8}$ "-27 threads permitting convenient insertion between the microphone and the microphone stand.

The VM-1 is constructed of die castings and brass turnings finished in bright polished chrome—overall length 4 $\frac{3}{4}$ ", diameter 1" **Net Price \$4.50**



VM-1

CS-33



ATLAS SOUND DIVISION American Trading and Production Corp., Brooklyn, N. Y.



ATLAS SOUND



ATLAS MICROPHONE DESK STANDS AND ACCESSORIES

DS-4 Highly polished molded phenolic base is light beige in color with chrome upright tube. The smooth base will not scratch or mar table tops. Upright tube can be easily removed from base. Base diameter 4", height of tube 4", thread size 5/8"-27. Shipping Weight 1/2 lb. **Net Price \$1.50**

DS-5 Non-Adjustable Desk Stand. Base cast iron, finished in gun metal shrivel. Stable base is equipped with pads to prevent damage to desk or table tops. Base diameter 6", tube height 4" chrome finish. Shipping Weight 2 lbs. **Net Price \$1.95**

DS-7 Same as above but equipped with upright adjustable from 8 to 13 inches. Equipped with standard "Velvet Action" clutch adjustment. Thread 5/8"-27. Shipping Weight 3 lbs. **Net Price \$3.30**

DS-10 "Stream Liner" Desk Stand. Features "Rear Cable Exit". Mike cable is concealed under center section of chrome trim and directed out at rear of base; results in added stability and improved appearance. Constructed of precision die castings, finish gun metal grey, bright chrome trim. Rubber bumpers prevent damage. 5/8"-27 thread. Shipping Weight 1 1/2 lbs. **Net Price \$3.30**

TS-6 Adjustable Banquet Stand with "Velvet Action" adjustment from 14 1/2" to 26". All parts including base finished in full "super-chrome," base diameter 8 inches. Shipping Weight 6 lbs. **Net Price \$5.85**

SW-1 Gyromatic Swivel permits microphone to be adjusted to any angle, up, down, around. Locks in any position. Die cast finished in chrome. **Net Price \$2.85**

SO-1 "Snap On"—A two-section "Snap On" spring sleeve attachment permits the microphone to be attached or removed instantaneously. One section is attached to the microphone and one section permanently fastened to the stand. For use where the microphone must be occasionally removed from the stand as often occurs in sports announcing, floor show use, etc. All parts are of brass, finished in "super-chrome." **Net Price \$1.65**

SB-1 Dispatcher and Switchboard Mike Support. For use over telephone switchboards, dispatcher's desk, dais, banquet table, etc. 12 inch long, flexible, chrome plated "goose neck" arm is mounted on a spring loaded swivel, can be swung aside when not in use. A feed thru hole is located at the mike end of the "goose neck" so that the mike cable can be concealed

within the flexible arm. Base casting is rear loaded so that the base will not tip forward. Finish grey shrivel. Shipping Weight 13 lbs. **Net Price \$9.45**

GN "Goose Necks" can be attached to any microphone stand or fixture; ends have 5/8"-27 male and female threads—all finished in bright chrome, model numeral indicates overall length of "goose neck" in inches. **Net Price GN-6 \$1.20, GN-13 \$1.65, GN-19 \$2.40**

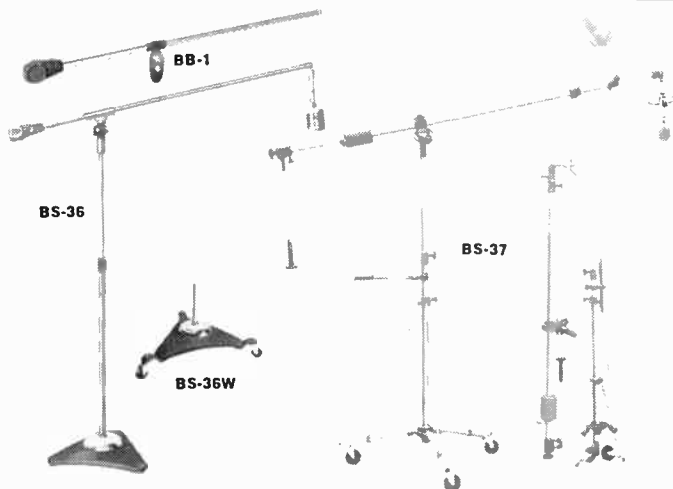
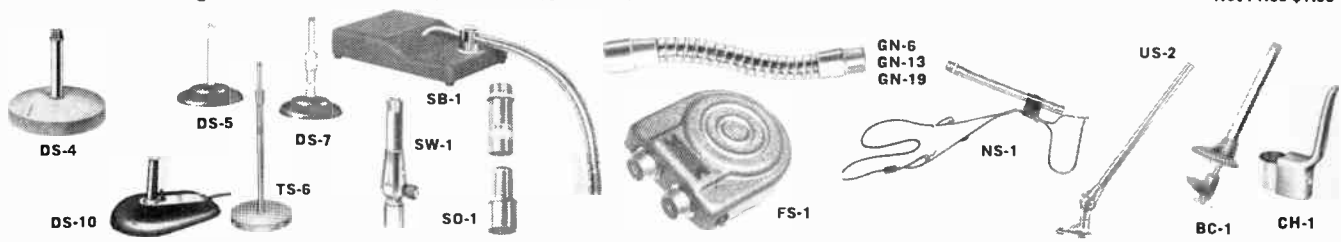
FS-1 Microphone Foot Switch—for use with mikes having single ended inputs. Shielded, grounded, noise free. Primarily for foot operation; used as a hand operated switch on top of a table or switchboard. Long life shielded micro-switch of a "press to open" circuit type. When switch is depressed the short is removed from the mike circuit and the mike becomes operative. Can be easily rewired internally for "press to close" circuit application. Measures 2 1/2" x 3". **Net Price \$7.80**

NS-1 "The Chesty" Neck Supported Mike Holder. Permits a quick and simple "three way" adjustment. Mike is always in a suitably "close talking" position reducing acoustic feedback problems. Wide comfortable chest support prevents rolling due to sudden movement. Cool and lightweight, weighing only 6 oz. **Net Price \$3.30**

US-2 The Atlas US-2 Multi-Purpose microphone support. Excellent for use with language laboratories, dispatcher desks, telephone switchboards, pulpits, etc. The boom arm vertical adjustment and the rotation motion is spring loaded and will "float" the mike in the desired position without requiring a locking adjustment. The microphone cable may be concealed within the boom arm and will feed thru the swivel assembly and base flange. A small opening is provided at the microphone end of the boom for cable entry. Finished in "super-chrome". Specifications—Boom arm length 12 3/4"; vertical adjustment of boom 180°; rotation 360°; base length 2 5/8". **Net Price \$5.70**

BC-1 Bracket Clamp. A multitude of useful applications. Can be used with a boom arm, goose neck, etc. Chrome tube 6" long. Clamp can be removed and top flange screwed or bolted in position. 5/8"-27 thread. **Net Price \$2.10**

CH-1 Cable Hanger. Fits all tubes 7/8" to 1 1/4" diameter. The mike cable can be quickly coiled and looped over the cable hanger when moving, storing or transporting the mike and stand. Finished in polished chromium. **Net Price \$1.65**



ATLAS BOOM STANDS

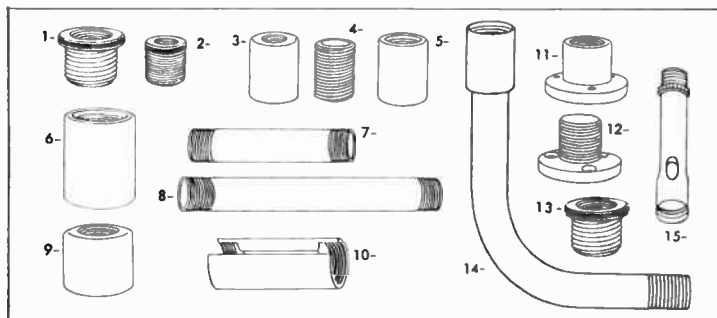
BB-1 "Baby Boom" Attachment. Versatile device that can be attached to any type of floor stand. All swivel parts are precision die castings resulting in smooth operation and secure positioning. Length of boom 31"—Chrome plated 5/8"-27 thread. Shipping weight 3 1/2 lbs. **Net Price \$4.80**

BS-36 Professional Boom Stand with "Safety Air Lock Cushion" offers all the advantages of "Floating Action" plus a secure and dependable locking adjustment. The Air Lock built into the vertical section prevents any accidental or sudden slippage of the upright section. A gyromatic swivel joint is provided at the microphone end. The base casting is equipped with shock absorbent chrome plated, "domes of silence". Specifications: Boom length 62" (extension may be added). Vertical extension from 48" to 72". All tubular sections super-chrome plated. Base finished in polished chrome and gun metal. Shipping weight 36 lbs. **Net Price \$39.90**

BS-36W Mobile Model. Identical to the BS-36 except that the base is supplied with ball bearing swivel casters, permitting the entire stand to be wheeled to various positions in the studio. Shipping weight 40 lbs. **Net Price \$45.90**

BS-37 Porto Boom. For most exacting TV studio, sound motion picture application, etc., ideal for portable service. Fully collapsible down to dimensions permitting its transportation in all automobiles. Air check prevents any accidental collapse of the upright. Detailed description sheet available. Specifications: Upright retracted 5 1/4 ft., extended 9 ft. Boom retracted 7 ft., extended 18 ft. All tubular sections aluminum processed in "Alumilite" Counter weight cast iron with bronze locking mechanism. Base casters 4" swivel type. Base spread 42" on radius. Shipping weight 73 lbs. **Net Price \$390.00**

ATLAS MICROPHONE ADAPTORS AND FITTINGS



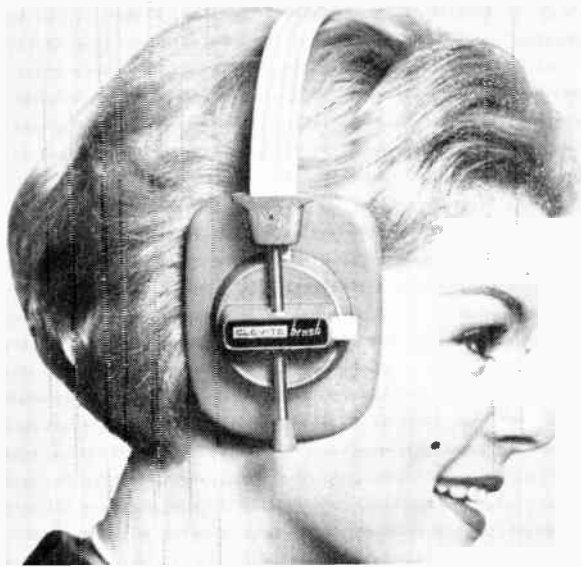
| Model | Description | Net Price |
|-------|---|-----------|
| AD-1 | 1-5/8"-27 female to 1/2" pipe thread male (RCA Adaptor) | \$.54 |
| AD-2 | 1-1/8" pipe female to 5/8"-27 male | .39 |
| AD-3 | 1-1/8" pipe female to 5/8"-27 female | .39 |
| AD-4 | 3-3/4" long, 5/8"-27 male running thread | .21 |
| AD-5 | 5-5/8"-27 female to 5/8"-27 female, coupling | .39 |
| AD-6 | 7-7/8"-27 female to 7/8"-27 female, coupling | .72 |
| AD-7 | 3" long tube 5/8"-27 male each end | .42 |
| AD-8 | 6" long tube 5/8"-27 male each end | .48 |
| AD-9 | 7-7/8"-27 female to 5/8"-27 female | .45 |
| AD-10 | 3/8"-24 female to 5/8"-27 female (W. E. Adaptor) | .78 |
| AD-11 | Flange, 5/8"-27 female. Base Diameter 1 1/4" | .45 |
| AD-12 | Flange, 5/8"-27 male. Base holes on 7/8" mounting centers | .45 |
| AD-13 | 7/8"-27 male to 5/8"-27 female | .51 |
| AD-14 | Right angle bent tube: 5/8"-27 male and female each end | .90 |
| AD-15 | Cable "Feed-Thru" adaptor: 5/8"-27 male and female each end | .90 |

Note: Thread sizes specified as 1/8" pipe is I.P.S. (Electrical fitting) Measures Approx. 3/8" dia. All adaptors chrome plated.

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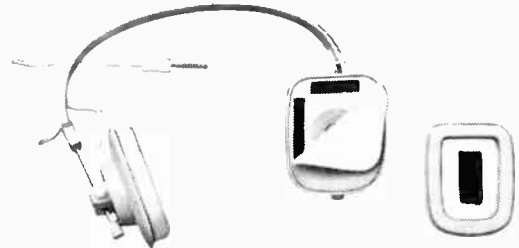
CLEVITE *brush* Headphones

NEW STANDARDS IN FIDELITY



FOR ELECTRONIC TEACHING ■ Designed for modern language training labs ■ Unmatched for comfort, convenience, appearance, performance ■ Fit any head or hair style ■ Lightweight, yet exceptionally durable ■ Available in coral, suntan, spruce green or black. **Frequency response:** exceptionally flat, 50 to 10,000 cps. **Impedance:** 50,000 ohms at 1,000 cps. **Sensitivity:** 8 dynes/cm²/volt at 1,000 cps. **Motor:** piezo-electric "Bimorph".

ED-300 (supplied with blanket ear cushions; add \$1.00 per pair for donut cushions) \$28.00 Net
Net Wt. 9.9 oz. Shipping Wt. 2 lbs.



FOR COMMERCIAL AND AMATEUR LISTENING ■ Possesses wide range response, uniform output. Furnishes close-comfort fit for excellent bass response ■ Lightweight, rugged, shock-proof construction ■ Available with eyelet terminals, molded plastic phone plug, or special cords for binaural listening (double impedance). **Frequency response:** 50 to 10,000 cps. **Impedance:** 50,000 ohms at 1 kc. **Sensitivity:** 8 dynes/cm²/volt at 1 kc. **Crystal:** "Metalseal Bimorph"

BA-206-1 (molded plastic phone plug) \$30.90* Net
BA-206-2 (eyelet terminals) \$30.90* Net
Net Wt. 8 oz. Shipping Wt. 2 lbs.

FOR HIGH FIDELITY ■ Combines performance of Model BA-206 with flexibility of a high fidelity instrument ■ Furnished complete with ear cushions for improved frequency response, greater comfort ■ Simple plug change permits stereo or monophonic listening ■ Single cord permits freedom of movement. **Frequency response:** 50 to 10,000 cps. **Impedance:** 50,000 ohms at 1 kc. **Sensitivity:** 8 dynes/cm²/volt at 1 kc. **Crystal:** "Metalseal Bimorph".

BA-220 \$34.50 Net
Net Wt. 8 oz. Shipping Wt. 2 lbs.

FOR GENERAL PURPOSE ■ Designed for general laboratory, studio or home use ■ Rugged construction ■ Ideal for multiple installations. Available with eyelet terminals, molded plastic phone plug, or special cords for binaural listening. **Frequency response:** 100 to 5,000 cps. **Impedance:** 45,000 ohms at 1 kc. **Sensitivity:** 6 dynes/cm²/volt at 1 kc. **Crystal:** "Bimorph".

BA-200-1 (molded plastic phone plug) \$17.25* Net
BA-200-2 (eyelet terminals) \$17.25* Net
Net Wt. 6 oz. Shipping Wt. 2 lbs.

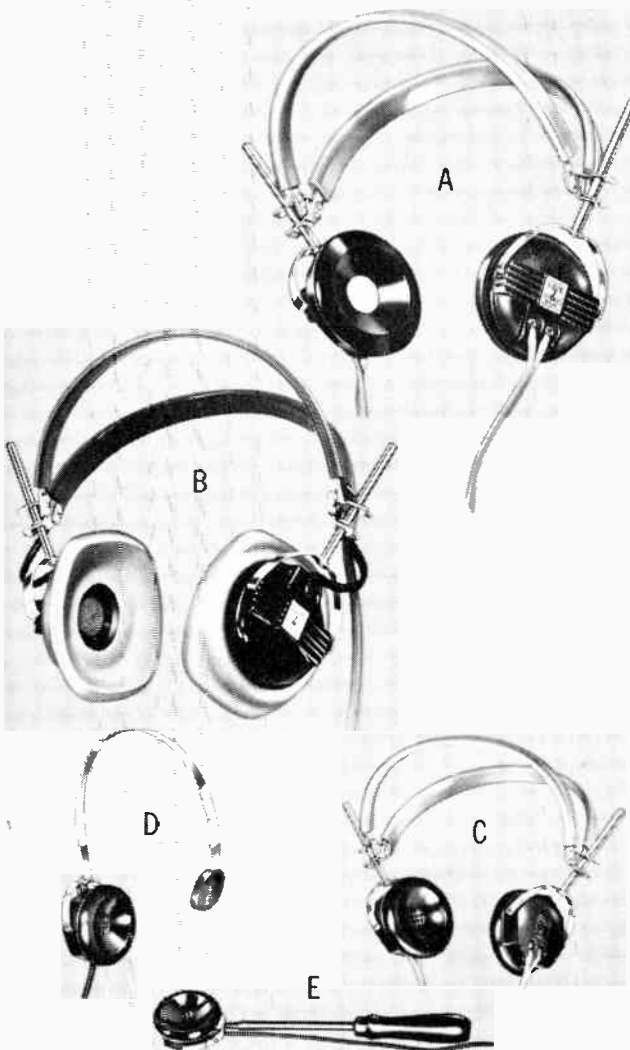
SINGLE PHONE ■ Designed for individual or group hearing aid, radio-TV applications ■ Allows listener to hear both audio signals and surrounding sounds ■ Lightweight, comfortable, good ear seal. **Frequency response:** 100 to 5,000 cps. **Impedance:** 90,000 ohms at 1 kc. **Sensitivity:** 6.3 dynes/cm²/volt at 1 kc. **Crystal:** "Bimorph".

BA-201 \$14.95 Net
Net Wt. 3 oz. Shipping Wt. 1 lb.

LOGNETTE PHONE ■ Designed for group hearing aid systems in churches, concert halls, theaters, auditoriums ■ Lightweight, easy to handle. **Frequency response:** 100 to 6,000 cps. **Impedance:** 90,000 ohms at 1 kc. **Sensitivity:** 6 dynes/cm²/volt at 1 kc. **Crystal:** "Bimorph".

BA-202 \$18.75 Net
Net Wt. 5 oz. Shipping Wt. 1 lb.

* with binaural cords, BA-206 \$33.20, BA-200 \$19.50



CLEVITE ELECTRONIC COMPONENTS

DIVISION OF CLEVITE

BEDFORD, OHIO

HEADPHONES

By **C. F. CANNON CO.**



THE "CHIEF"
Cannon-Ball Bakelite Headset

A high quality headset of durable molded black plastic. Attractive in appearance, it is a sensitive and practical phone for every headset use. Inside terminals. Diameter of diaphragm is 2 1/4". Double coils, two in each receiver. Alnico permanent magnets. Supplied with vinyl plastic covered headband with permanent adjustment and no removable parts. Cotton covered cord, 4 1/2 ft. long.

- CC-2—2000 ohms D.C. List \$4.15 Net \$2.49
- CC-3—3000 ohms D.C. List 4.40 Net 2.64
- CC-5—5000 ohms D.C. List 5.75 Net 3.45
- CC-11—11 ohms D.C. List 4.15 Net 2.49



BRANDES "SUPERIOR"
Matched Tone Headset

A rugged headset, millions of which are in use all over the world. Large size diaphragms of 2 1/2" diameter assure efficient performance. Outside terminals, with polished aluminum cases and bakelite caps. Double coils, two in each receiver. Chrome steel magnets. Steel headband with permanent adjustment. 4 1/2 ft. cotton covered cord.

- BS-2—2000 ohms D.C. List \$4.30 Net \$2.58

BRANDES "ADMIRAL"
Matched Tone Headset

The Brandes "Admiral" is of the same general construction as the Brandes Superior, but has terminals on the inside.

- BA-2—2000 ohms D.C. List \$4.30 Net \$2.58
- BA-3—3000 ohms D.C. List 4.80 Net 2.88
- BA-5—5000 ohms D.C. List 6.00 Net 3.60



CANNON-BALL
ALNICO MAGNETIC No. 25

A New Headset of Unusual Quality, Efficiency and Durability, powered by Alnico V magnets.

The headband is covered by attractive black extruded vinylite and provides utmost wearing comfort. Limits turn of phone to prevent twisting of cord. Cap and case of molded plastic. Large size diaphragm 2 1/4". Equipped with sanitary moisture-resistant plastic cord with riveted catch piece.

- AM-25-2 List \$6.50 Net \$3.90
- AM-25-3 List 7.00 Net 4.20
- AM-25-5 List 8.50 Net 5.10

ALNICO MAGNETIC No. 15

A new, small size, extra sensitive double headset, light in weight. Diameter of diaphragm 1 3/4". Molded cap and case. Steel adjustable headband. 4 1/2 ft. cord.

- AM-15-2 List \$3.65 Net \$2.19
- AM-15-3 List 3.90 Net 2.34

THE "MASTER"
Cannon-Ball Headset

Used extensively in hospitals and other institutions as well as for general purposes, and is especially recommended for institutions. Inside terminals Aluminum cases with black bakelite caps. Spring steel adjustable headband with no removable parts. Diaphragm 2 1/4" diameter. Double coils. Chrome steel magnets. 4 1/2 ft. cotton-covered cord.

- MC-2—2000 ohms D.C. List \$4.30 Net \$2.58
- MC-3—3000 ohms D.C. List 4.65 Net 2.79
- MC-5—5000 ohms D.C. List 5.75 Net 3.45

CANNON-BALL "EMPIRE"
Lightweight Headset

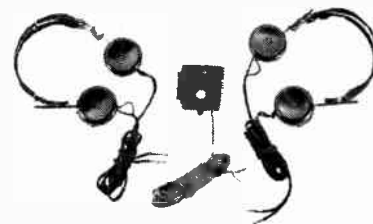
A low-priced light-weight headset with large magnet and double coils. Reproduces with clarity and good volume. Diameter of diaphragm is 1 3/4". Polished aluminum cases with bakelite caps. Steel adjustable headband. 4 1/2 ft. cord. Inside terminal connections.

- EC-2—2000 ohms D.C. List \$3.80 Net \$2.28
- EC-3—3000 ohms D.C. List 4.05 Net 2.43

THE "DIXIE"
Cannon-Ball Headset

The "Dixie" is of the same general construction as the "Master" headset except that the terminals are on the outside. Bakelite case Alnico magnets.

- CD-2—2000 ohms D.C. List \$3.90 Net \$2.34
- CD-3—3000 ohms D.C. List 4.15 Net 2.49



CANNON-BALL HEARING AID
FOR TELEVISION

Provides private listening without disturbing others. Excellent for persons hard of hearing. Can be attached to any television set and permits listening to phones alone, speaker alone, or both together.

- FOR TELEVISION**
Kit complete with 15 foot cord, phone volume control and two sets of phones
List \$16.50 Net \$9.90
With one headset List 12.50 Net 7.50

MOLDED RUBBER CUSHIONS



Fit standard size headsets. Molded-in air chamber provides maximum wearing comfort.

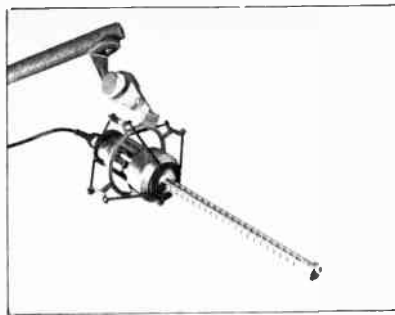
- * per pair List \$1.00 Net \$.60

Phones can be supplied with any resistance required or with variations to meet special requirements.
Sanitary plastic covered cords available for institutional use. Write for special quotation.

BC-TV-RECORDING MICROPHONES-DYNAMICS

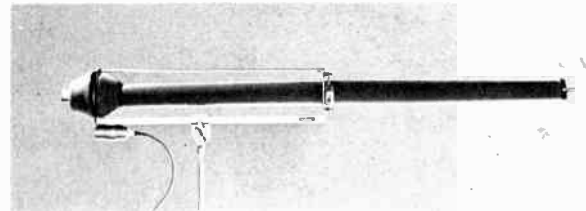
Cardiline® Unidirectional Microphones

MODEL 642—A highly directional dynamic microphone combining the best characteristics of cardioid and distributed front-opening designs. Essentially cardioid unidirectional up to 500 cps; highly directional over balance of range. Working distance is 2 to 3 (or more) times that of conventional types. Excellent for boom use with Model 356 shock mount. Minimum mechanical shock transfer and wind noise interference. Response: Flat from 30 to 10,000 cps or choice of 5 or 10 db low frequency reduction steps by screwdriver adjustment. Impedance: 50, 150 and 250 ohms, externally adjustable. Output level: —48 db. Cast aluminum case with non-reflecting gray epoxy. Supplied with Cannon UA-3-14 connector, 20' 3-conductor shielded broadcast cable and UA-3-11 Cannon connector. Length, 17⁷/₈"; max. diameter, 3³/₁₆". Net weight, 3 lbs., 4 oz. List Each..... **\$390.00**



642

MODEL 643—Similar to Model 642 above but designed for more specialized and extended long-range pickup. Applications: Provides cardioid pickup pattern to 100 cps and is highly directional over balance of range. Includes integral 2-position tilt-down and 100 cps cutoff filters. Impedance: 50, 150 or 250 ohms changed by screwdriver adjustment. Lightweight cast and extruded aluminum case with integral shock mount and removable wind filter. Output level: —47 db; Response: 30 to 10,000 cps. Length, 7' 2"; max. diam. 4". Cannon UA-3-14 and UA-3-11 connectors; supplied with 20' cable and storage case. List Each..... **\$1560.00**



643

Cardioid Unidirectional Microphones

MODEL 666 SUPER CARDIOID—Variable-D* principle for high discrimination against sounds from back. Permits close talking without bass accentuation. Working distance increased by 1.7:1 over pressure microphones. Single moving element is exclusive, rugged Acoustalloy® diaphragm. Response: 30 to 16,000 cps. Output: —58 db. Internal connector pin impedance change. Wired for 150 ohms, taps at 50 and 250 ohms. Non-reflecting gray epoxy aluminum cast case. Built-in Cannon UA-3 connector. Clamp-on stand mount with 3/8"-27 thread and 1/2" pipe thread adapter, 20' cable. Length, 7³/₄"; diameter, 1³/₄". Net weight, 11 oz. List Each..... **\$255.00**



666



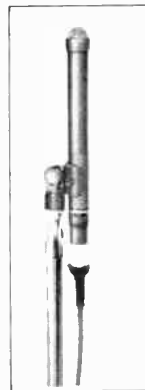
665

MODEL 666R RISING RESPONSE CARDIOID—Like Model 666, but with response which rises 4 1/2 db from 100 to 2,000 cps, reducing pickup of low frequency reverberations, room "rumble" and prop noise. Particularly suited to boom use. Output: —55 db. List Each..... **\$255.00**

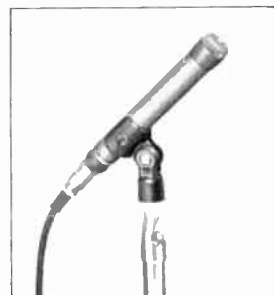
MODEL 665 CARDIOID—Similar in design and function to the Model 666, but for less exacting applications. Uniform response 50 to 14,000 cps. Recessed switch provides 50 or 250 ohms. Pressure-cast zinc case. Non-reflecting gray epoxy. Diameter, 1⁷/₈"; length, 7³/₁₆"; 18' cable. Net weight, 1 lb. 10 oz. List Each..... **\$150.00**

Omnidirectional Microphones

MODEL 655C SLIM-TRIM TV DYNAMIC—Frequency response, 40 to 20,000 cps. Output level, —55 db. Excellent level affords high signal-to-thermal noise ratio. Can be used on stand, in hand or on boom. Easily concealed in studio props, Acoustalloy® diaphragm. Pop-proof grille. Impedance: 50, 150 and 250 ohms. Impedance easily changed. Non-reflecting gray epoxy. Cannon UA-3 connector. Clamp-on stand mount included with 5/8"-27 thread and 1/2" pipe thread adapter. Size: Length, 10 1/2" w o connector; diameter, 1"; 20' cable. Net weight, 7 oz. List Each..... **\$200.00**



655C



654A

MODEL 654A SLIM-TRIM BROADCAST DYNAMIC—Frequency Response, 50 to 16,000 cps. Output level: —55 db. Can be used stand-mounted, hand-held or as lavalier. Matches all low impedance. Built-in Cannon XL-3 connector, Acoustalloy diaphragm, 5/8"-27 thread, 18' cable. Length, 6¹⁵/₁₆"; diameter, 1¹/₈". Non-reflecting gray epoxy. Net weight, 16 oz. Supplied with Model 300 clamp and lavalier neck cord. List Each..... **\$100.00**

MODEL 649B MINIATURE LAVALIER—Smallest dynamic lavalier—weighs only 31 grams without cable; length, 2¹/₄"; diameter, 3/4". Ideal for programming where unobtrusive or concealed microphone placement is desirable. Frequency response: 60 to 12,000 cps. Output: —61db. Omnidirectional. Matches all low impedance. 30' shielded cable. Aluminum case finished in non-reflecting gray epoxy. Complete with neck cord assembly. List Each..... **\$105.00**

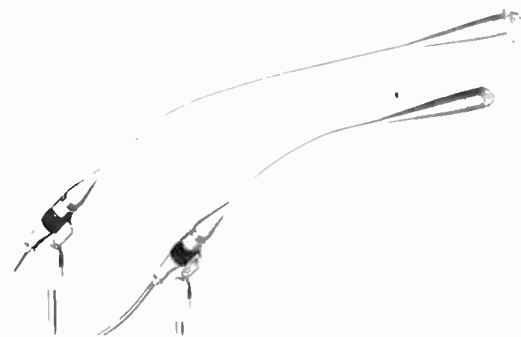


649B

New "Thin-Trim" Dynamic Microphones

MODEL 652—New design for an almost invisible dynamic microphone. Microphone is mounted on the end of the semirigid tube bringing the moving coil element closer to the user for full range, pop free response. Breath and wind filter is an integral part of the microphone. Two clear plastic baffles provided to give either 8 db or 5 db boost in the brilliance range of 5,000 cps for added articulation. The microphone without the baffles gives a smooth response of from 80 to 8,000 cps. The Model 652 is mounted on a 3/16" steel tube and finished in non-reflecting gray epoxy. Output level, —60 db. Matches all low impedances. Furnished with 3-conductor shielded 20' cable; Model 300 stand coupler. Length of microphone, 25". Weight 11 oz. List Each..... **\$120.00**

MODEL 652A—Same as Model 652 except 15" long. List Each **\$120.00**
All above microphones except 642 & 643 are eligible for FCDA purchases.

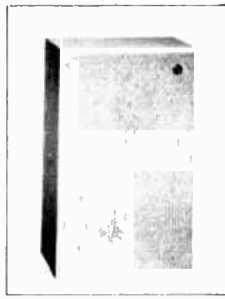


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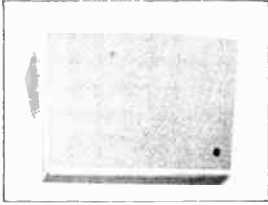
652A



635



SENTRY II



SENTRY I

MODEL 635 BROADCAST DYNAMIC—Compact, rugged, versatile. Omnidirectional. Response: 60 to 13,000 cps. Output level: —55 db. 50-250 ohms impedance selector. Head tilts through 90° arc. Cannon XL-3 connector. 5/8"-27 thread; size 2" x 6 1/4". Satin chrome finish, 18' cable. Net weight, 1 lb. List Each.....**\$82.00**

New Sentry Series Studio Monitor Speaker Systems

SENTRY I WALL OR CEILING MODEL—The first loudspeaker system designed specifically for monitor use. Precision components include 12" Radax loudspeaker, diffraction high frequency driver and crossover. Provides smooth peak free response from 30 to 20,000 cps. Impedance taps for 16 - 150 - 600 ohms. Hardwood cabinet, sanded and sealed, ready for finishing in your choice of colors. Measures 17"D x 37"H x 21 3/4"W. Net weight, 82 lbs. List Each.....**\$231.67**

SENTRY II FLOOR MODEL—Same specifications as those shown for Sentry I. Measures 32"D x 20"W x 13"H. Net weight, 68 lbs. List Each.....**\$248.33**

GENERAL PURPOSE MICROPHONES

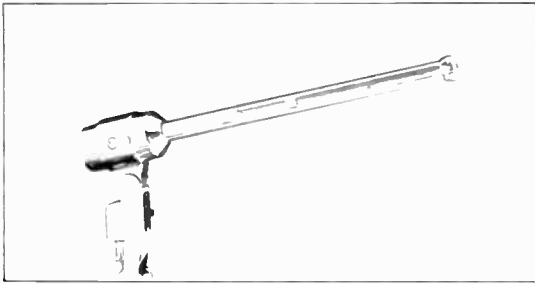
Unidirectional Line Microphone

MODEL 644 SOUND SPOT—Another Electro-Voice revolutionary development, the Sound Spot Model 644 is a combination cardioid and distributed front opening, making it the most directional microphone ever. The Model 644 has the farthest front pickup, or better than 2.5 times the working distance of pressure types. Work close or far away without change of frequency response.

Cancellation from the rear and sides exceeds 20 db giving practically complete rejection of unwanted sound. This feature gives the most rejection of random noise in any microphone commercially available except E-V Model 643. Reverberation and feedback are vastly lower than any other microphone, allowing much greater leeway in loudspeaker placement.

The effective front acceptance angle is 45° each side of center giving best isolation of individual performers. The Model 644 is 9 db better on the reduction of wind noise and has far less response to shock than all other microphones.

Frequency response is smooth from 40 to 12,000 cps. High output: —53 db. Dual high and low impedance selected by changing one tap on MC4M cable connector. The case is high-pressure diecast zinc with 3/4" aluminum tube. Rear diameter 2 3/16", length 16". Cable is 18'. Weight, 2 lbs. 9 oz. List Each.....**\$110.00**



644



633

Cardioid Unidirectional Dynamic Microphones

MODEL 664 CARDIOID DYNAMIC—Similar to Model 666 in function, but designed specifically for PA. Cardioid pattern at all frequencies. Permits close talking without "booming" or bass accentuation. Provides better discrimination against unwanted sound. Less feedback than any cardioid PA microphone built. Blast filter minimizes wind effect. Acoustalloy diaphragm shielded from dust and magnetic particles. Response 40-15,000 cps. Output —55 db. On-Off switch. 150-ohm and high impedance. Impedance changed by moving one wire in MC4 cable connector. Pressure-cast case. Chrome finish. 18' cable. Size 7 3/16" long, less stand coupler, 1 7/8" diameter. Net weight, 1 lb. 10 oz. List Each.....**\$85.00**

MODEL 664G—Gold finish. List Each.....**\$90.00**



634

Omnidirectional Microphones

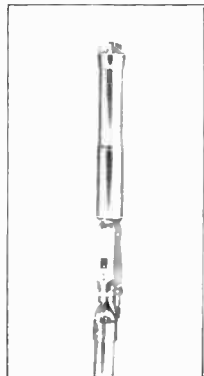
MODEL 633—Modern two-tone design dynamic microphone. High output level, wide range response. For public address, home recording, communications, electronic teaching aids, paging systems. Integral "on-off" switch, wide frequency response, 70 to 10,000 cps, output level, -57 db. Omnidirectional. 6 foot cable. Case is chrome plated diecast zinc and gray high impact plastic. Standard 5/8"-27 stand connector. Hi-Z or balanced 150 ohms (matches standard low impedances). Shipping weight: 1 lb. List Each.....**\$35.00**

MODEL 634—Identical to Model 633 (above) except furnished without fixed-tilt stand coupler. Fits any stand boom or gooseneck with complete cable concealment. Ideal for desk mounting on electronic teaching aids, amateur and commercial communications and switchboard mounting for paging systems. Built-in "on-off" switch, 6 foot cable and standard 5/8"-27 threads in rear of case. Hi-Z or balanced 150 ohms (matches standard low impedances). List Each.....**\$31.50**

MODEL 636 "SLIMAIR" DYNAMIC—Exceptionally fine for PA, recording and general use. Response 60-13,000 cps, output —58 db. Pop-proof head. Wide pickup range. On-Off switch. Satin chrome finish. Tilted head. Built-in MC-4 connector. 5/8"-27 thread. Hi-Z or Lo-Z by changing one wire in connector. 18' cable, 10 1/4" long including stud, 1 1/8" max. diameter. List Each.....**\$72.50**

MODEL 636G—Gold finish. List Each.....**\$77.50**

All above microphones except crystals are eligible for FCDA purchases.

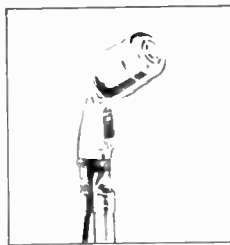


636

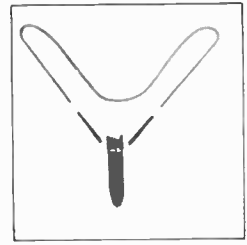


664

MODEL 630 HIGH FIDELITY, HIGH-OUTPUT DYNAMIC—Famous for quality at low cost. Response 60-11,000 cps; output level —55 db. Unaffected by heat or humidity. Acoustalloy diaphragm. Tiltable head. Built-in MC-3 connector. On-Off switch. Satin chrome finish. Available in Hi-Z or 150 (matches 50-250 ohms). Lo-Z balanced to ground. Size: 2" x 6 1/4". 18' cable. Net weight, 1 lb. List Each \$52.50



630



647A

MODEL 647A DYNAMIC LAVALIER—Smallest high quality microphone in the entire public address field delivers big microphone performance. Extremely rugged dynamic construction assures long life. Frequency response, 60 to 12,000 cps. Impedance Hi-Z or balanced 150 ohms, selected from free end of cable. Size 2 1/4" long, 3/4" diameter, net weight 2 oz. Output level -58 db, finish is non-reflecting gray epoxy. 18' cable attached. Shipped complete with neck cord. List Each \$82.50

MODEL 623 SLIM DYNAMIC—Ideal for PA, recording and general use. Use on stand or in hand. Cinnidirectional. Response 60-12,000 cps; output level —56 db. Hi- or Lo-Z by changing one wire in connector. Pressure cast; satin chrome finish. Tiltable head. On-Off switch. Built-in MC-4 connector. 5/8"-27 thread. 7 1/2" x 1 3/16". 18' cable. Net Weight, 15 oz. List Each \$57.00



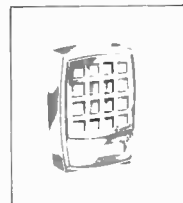
623



611

MODEL 611 "MERCURY" DYNAMIC—Traditional styling, fine performance for general sound pickup. Response 50-9000 cps; output level—55 db. Omnidirectional. Acoustalloy diaphragm. Tiltable head. On-Off Switch. Built-in MC-3 connector. 5/8"-27 thread. Satin chrome finish. Available in Hi-Z or 150 (matches 50-250 ohms), Lo-Z balanced to ground. 2 3/8" x 3 3/8" x 6 1/4" inc. stud. 18' cable. Net Weight 1 1/4 lbs. List Each \$45.00

MODEL 624 DYNAMIC LAVALIER—Most economical dynamic lavalier on the market. For chest or hand use. Supplied with neck cord, support clip and 18' cable. Non-reflecting gray epoxy finish. Wire mesh head acoustically treated for wind and moisture protection. Output — 56 db, response 100-7,000 cps. Hi-Z or 150 ohm, not balanced to ground. 3 3/16" x 1 3/16". Cable has integral strain relief. Net Weight, 14 oz. List Each \$42.50



615



624
924

MODEL 615 "CENTURY" DYNAMIC—Incomparable for paging, home recording, amateur, or any low-cost applications. Can be used in hand, on table, on stand, or overhead. Omnidirectional. Acoustalloy diaphragm. Withstands extreme temperature, humidity, corrosion and shock. Response; 80-8,000 cps. Output: —55 db. Lo-Z (matches 50-250 ohms) or Hi-Z. Lo-Z not balanced to ground. 5' cable. Pressure cast case, Metalustre gray. Rugged, lightweight. Size 3" x 2 3/16" x 1". With 5/8"-27 thread stand adapter. AC-DC insulated. List Each \$25.50

Electro-Voice®

Crystal and Ceramic Microphones

MODEL 951 CARDIOID CRYSTAL—Uses same new Variable-D principle as E-V's BC-TV cardioids to obtain uniform directivity at all frequencies, high discrimination against unwanted sound. The 951 is an excellent wide-range, all-purpose PA microphone for a great variety of acoustic conditions, and especially useful where background noise and reverberation are a problem. Response 50-11,000 cps. Output —60 db. Hi-Z. On-Off switch. Pressure-cast case. Metalustre gray finish. 18' cable. MC-1 connector. 5/8" l. (excluding stud), 1 3/4" dia. overall. Net wt., less cable, 1 1/4 lbs. List Each \$54.50



951



911

MODEL 911 CRYSTAL—Same smart design and fine performance as Model 611. Response 50-9000 cps. Output—50 db. Metal Seal Crystal. MC-1 connector. Hi-Z. 18' cable. Net weight 1 1/2 lbs. List Each \$32.50

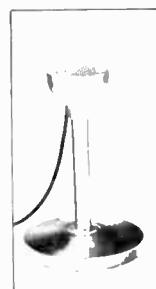
MODEL 926 SLIM CRYSTAL—Level and response ideal for general purpose use. Response 60-8000 cps; output level —60 db. Hi-Z. Pressure cast case, satin chrome finish. Tiltable head. 5/8"-27 thread. 6 3/4" x 1 3/16". 18' cable with integral strain relief. Net Weight 11 oz. List Each \$29.50



926

MODEL 920 "SPHEREX" CRYSTAL—All-direction pick-up. Response 60-7000 cps; output level —50 db. Strong wire-mesh head acoustically treated for wind and moisture protection. High capacity, moisture sealed crystal. Hi-Z. Satin chrome. 5/8"-27 thread. Diam. 2 1/4". 18' cable. Net Weight 8 oz. List Each \$27.50

MODEL 924 LAVALIER CRYSTAL—Unique crystal lavalier for chest or hand use. Supplied with neck cord, support clips and 18' cable. Non-reflecting gray epoxy finish. Wire mesh head acoustically treated for wind and moisture protection. Output—60 db. Response 60-8000 cps. Hi-Z. 3 3/16" x 1 3/16". Cable has integral strain relief. Net Weight 8 oz. List Each \$20.00



920



714SR

MODEL 714SR—A new high output, ceramic mobile communications microphone for paging, ham radio, and citizen's band use. Molded, tough beige Cycloac case, usually found only in most expensive mobile microphones, assures long life and protection from accidental shock damage. Response tailored for maximum intelligibility. High level, high impedance output—55 db over range of 60 to 7,000 cps. DPDT switch shorts microphone in "off" position and closes relay circuit in "on" position. 2 1/2" x 1 1/16" x 3 5/8". 3-conductor coiled cord 10" retracted. Net weight is 8 oz. including cable. Shipped complete with hang-up bracket. List Each \$16.50

All above microphones except crystals are eligible for FCDA purchases.

MODEL 729 CERAMIC CARDIOID—The Model 729 is the lowest priced cardioid ever built. Random noise, reverberation and feedback reduced by a factor of 67%. Front pickup range nearly double that of pressure microphones. For public address, call and paging systems, home recorders, especially stereo, and general communications. Discriminating against sound from the rear makes the 729 excellent for amateur radio VOX operations. Tailored for single sideband. Output: —60 db. Response: 60 to 8,000 cps. High impedance only. Available with or without "on-off" switch. Metalustre gray front with medium gray back. Attractive desk stand and floor stand adapter supplied. Net weight, less cable and stand, 9 oz. List Each **\$24.50**

MODEL 729SR—With relay control switch. List each **\$26.50**

MODEL 727 SLIM CERAMIC—A new approach to the design of ceramic microphones for PA, recording and general use; similar in appearance to Model 729. Withstands extremes of temperature and humidity. Response 60-8000 cps. Output —55 db. High impedance only. 5' cable. Available with or without "on-off" switch. Metalustre gray front with medium gray back. Size: 7 $\frac{3}{4}$ " x 1 $\frac{3}{8}$ " x 1 $\frac{1}{2}$ ". Supplied with attractive desk stand and floor stand coupler. Net Weight less cable, stand, 9 oz. List Each **\$18.00**

MODEL 727SR—With relay control switch. List each **\$20.00**

MODEL 715 "CENTURY" CERAMIC—Use in any position—in hand, on table, on stand or overhead. Ceramic element. 60-7000 cps; output —55 db. Hi-Z. 5' cable. Nondirectional. Metalustre gray finish. Rugged, lightweight. 3" x 2 $\frac{3}{16}$ " x 1". With 5 $\frac{8}{16}$ "-27 adapter. AC-DC insulated. 6 oz. List Each **\$13.00**

MODEL 715S—With switch. List Each **\$15.00**

MODEL 715SR—With relay control switch. List Each **\$17.50**

MODEL 718 CERAMIC—An improved replacement for home recording microphones. 5' cable includes a molded-on phono plug, with adapter, to match all late model home recorders. Improved high-level (—55 db) ceramic element resists damage from temperature, humidity extremes. Response: 60 to 6000 cps. 3 $\frac{1}{16}$ " x 1 $\frac{3}{4}$ " x 1 $\frac{1}{16}$ ". Net Weight 8 oz. List Each **\$12.00**

MODEL 712 CERAMIC—Low cost ceramic microphone. Fits need of low cost PA, home recording, paging and general use. Handheld. Moisture sealed ceramic. Response 70-7000 cps. High output —55 db. Hi-Z. Attractive gray Styron case. Size 3" x 2 $\frac{1}{4}$ " x 1 $\frac{3}{8}$ ". 5' cable. Net Weight 4 oz. List Each **\$7.50**

Electro-Voice®

Differential And Special Purpose Microphones

MODEL 622SKK DYNAMIC HANDSET—For paging, intercom and communications. Sturdy bakelite, 150-ohm magnetic receiver with response 200-4000 cps. Switch closes mike and relay circuit. Response: 100-5000 cps. Output level: —55 db. Impedance: 250 ohms. 6' 5-conductor coiled cord. List Each **\$78.00**

MODEL 622TRSKK—With 2-stage transistor amplifier. List Each **\$94.50**

MODEL 625SKK DYNAMIC DIFFERENTIAL HANDSET—Noise-cancelling microphone designed for use where background noise is at high level. Similar to Model 622SKK. Supplied with five-conductor, unshielded cable. DPST switch will handle relay or remote control and turn on mike. Press button to talk. Size: 8 $\frac{1}{2}$ " x 3" x 2 $\frac{5}{8}$ ". Net Weight, 1 $\frac{1}{2}$ lbs. List Each **\$85.00**

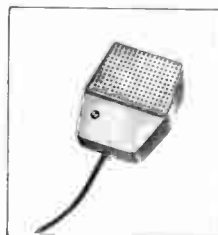
MODEL 625TRSKK—With 2-stage transistor amplifier. FAA type certificate 3R42-2. List Each **\$122.50**

MODEL 606 DIFFERENTIAL DYNAMIC—Close talking, noise cancelling. Accepts sounds of close origin ($\frac{1}{4}$ ") and rejects sounds of distant origin. Response: 100 to 5,000 cps. Output at $\frac{1}{4}$ " : —55 db. Acoustalloy diaphragm. 5 $\frac{8}{16}$ "-27 thread. Built-in MC-1 connector. Satin Chrome. 2" x 3 $\frac{1}{4}$ " x 2 $\frac{1}{2}$ " including stud. Lo-Z (matches 50-250 ohms) or Hi-Z. Low impedance not balanced to ground. 18' cable. List Each **\$52.50**

All above microphones except crystals are eligible for FCDA purchases.



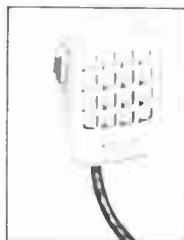
729



712



727SR



715S
715SR



718



622SKK



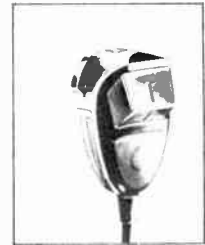
606

MODEL 600D DYNAMIC MOBILE MIKE—Reliability factors have been improved over all previous designs. High-impact Bakelite case and rugged dynamic construction assure protection against shock damage. Easy-action switch provides years of use—shorts microphone in “off” position to eliminate electrical noise pickup and closes relay circuit when depressed. High output level—55 db. Response 100 to 7,000 cps specifically matched to high intelligibility requirements. Size 2½” x 1½” x 4” long; color, communications black. Coiled cord 1’ retracted, 6’ extended. Weight 10 oz. Complete with hang-up bracket. 150 ohms or Hi-Z. List Each.....\$47.50



600D

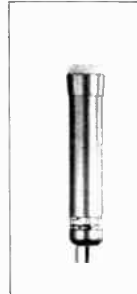
MODEL 210KK CARBON—Similar to Model 600E but single-button carbon. Output —50 db. Press-to-talk switch. 6’ coiled cord. List Each.....\$35.00



210KK

MODEL 602—A noise-cancelling dynamic microphone for use in areas of heavy background noise. It accepts sounds of close origin (¼”) and rejects sounds of a distant origin. Output level: —55 db, 100-7,000 cps. Press-to-talk switch. Acoustalloy diaphragm. 1’ retracted coiled cord, 6’ extended. Available in Hi-Z or balanced line. 50 or 250 ohm. Weight, less cable, 8 oz. List Each.....\$57.50

MODEL 205KK DIFFERENTIAL CARBON—Close-talking, noise-cancelling, single button carbon. For private aircraft and emergency communications. Blastproof, waterproof, shock resistant. Output at ¼”: —50 db. Black phenolic case. Press-to-talk switch. Mounting bracket, 6’ coiled cord. Size: 2¼” x 2¼” x 4”. Net Weight less cable, 8 oz. List Each.....\$45.00



648

MODEL 205KKP—Same, with PJ-068 plug. List Each.....\$49.75

MODEL 205STCKK—FAA Type approved certificate No. 1040 with coiled cord. Designed for commercial aircraft. List Each.....\$56.50

MODEL 205STCKKP—Same as above with PJ068 plug. List Each.....\$61.25

MODEL 648 INTERCOM MICROPHONE—Extremely versatile paging, intercom, or PA mike. Response: 50-10,000 cps. Output —58 db. Choice of Lo-Z (matches 50-250 ohms) or high impedance. Omnidirectional. Acoustalloy diaphragm. Non-reflecting gray. Less Cable. Size: 6¼” x 1” (including ⅝”-27 thread adapter). Net Weight (with adapter), 8½ oz. List Each.....\$56.00



600TR
602TR

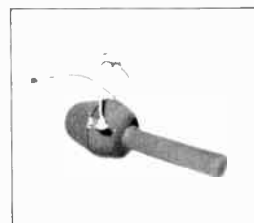
MODEL 805 CONTACT—For guitar, banjo, other stringed instruments. Hi-Z. Sealed crystal. Chrome finish. 15’ cable. List Each \$20.00



805

MODEL 600TR MICROPHONE—Has compact, two-stage transistor amplifier built into case. Complete circuit including transistor, transformers, and associated equipment. Coiled cord, four-wire lead, press-to-talk switch may also actuate relay to control transmitter. Same sensitivity as carbon mike without change in auxiliary equipment. Output: —23 db. Amplifier power gain approximately 34 db. Size: 2¼” x 2” x 4”. Black phenolic case with mounting bracket. 6’ cable. Net Weight less cable, 13 oz. FAA type certificate 3R42-1. List Each \$82.50

MODEL 602TR MICROPHONE—Similar in type and appearance to Model 600TR, but designed for close-talking, noise-cancelling work. Speech is clear, crisp, distinct. May be used to replace carbon microphone with no change in auxiliary equipment. Net Weight less cable 13 oz. FAA type certificate 3R42-1. List Each.....\$93.00



327

MICROPHONE ACCESSORIES

MODEL 327 WINDSCREEN—Designed for use with Model 642 microphone. Fabricated of Acoustifoam®, eliminates “blast” caused by fast panning of boom, or when used outdoors. Includes 356 shock mount. Net weight, 1 lb., 8 oz. List Each.....\$100.00



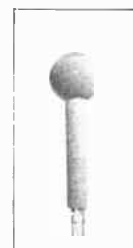
335A

MODEL 335A WINDSCREEN—Acoustifoam® windscreen fits 605, 630, 635 microphones. Net weight, ½ oz. List Each.....\$12.50

MODEL 355 WINDSCREEN—Designed to reduce or eliminate wind noise, this windscreen is constructed of Electro-Voice Acoustifoam®, a material which will not alter frequency response or polar characteristics of a microphone. Also protects microphone against mechanical shock damage and pickup of dust and magnetic particles. For use with models 655C, 654A, 646, 636, 623, 647 and 926. Size, 9” x 3¼”. Shipping weight, ½ oz. Color: gray. List Price.....\$11.00



524A



355

MODEL 524A WINDSCREEN—Designed specifically for use with Model 666 microphone. Minimizes wind effect on boom operation or when used outdoors. Made of Acoustifoam.* Weight, ½ oz. List Each.....\$8.00

MODEL 300 DETACHABLE MICROPHONE CLAMP—Light weight adapter fits any 1" cylindrical microphone providing positive mounting to either 1/2" or 5/8"-27 stand. List Each.....**\$10.00**

MODEL 345 SHOCK MOUNT—Dual-type external shock mount prevents reproduction of external shocks and stand vibrations. Permits tilting microphone head. 5/8"-27 thread. Easily attached or removed. Satin chrome. 1 1/2" x 3 3/8". Net Weight, 10 oz. List Each **\$15.00**

MODEL 346 SHOCK MOUNT—Designed specifically for use with Model 666 microphone. Similar in every feature to Model 345, but constructed for 11 oz. microphone. List Each.....**\$15.00**

MODEL 356 SUSPENSION SHOCK MOUNT—For use with Model 642 on boom or floor stand. Excellent isolation. List Each....**\$50.00**

MODEL 366 SUSPENSION SHOCK MOUNT—Extremely light. Designed for use with 666 microphone. Installs without tools. Pigtail cable connection with UA-3 connectors provides cable loop isolating boom shock noises. For any microphone with 1" diameter. List Each.....**\$40.00**

MODEL 448 SWIVEL BOOM MOUNT—Designed specifically for use with Model 648 microphone. Holds mike 1 1/8" off mounting surface. 62° elbow bend. MC-2M connector. Satin chrome finish. Extends 4" below mounting surface, 2 1/2" diam. mounting base. Net Weight, 1 lb. 5 oz. List Each.....**\$24.00**

MODEL 502A MATCHING TRANSFORMER—Designed for use in series with mike line. Transformer windings have low distributed capacity and are amply shielded against inductive hum by a shield inside pressure cast case. Designed for 50, 150, 250 and 500 ohms—to Hi-Z. Broadcast fidelity response 40-20,000 cps +1 db. MC-4 input connector. 2 7/8" x 1 1/2" diam. List Each.....**\$17.50**

MODEL 513 FILTER—Designed for use with low impedance microphones, has switch to match 50, 150 or 250 ohms. When used in line between microphone and preamp., it rejects unwanted noise below 100 cps. 2 1/4" diameter, 5 5/8" long. Net weight 1 lb. 10 oz. List Each.....**\$70.00**

Microphone Stands

MODEL 415 RECLINING DESK STAND—Mounts 615, 715, 715S at 15° tilt. Metalustre gray. Size 2 5/8" x 2 3/4" x 1". Net Weight, 4 oz. List Each.....**\$1.75**

MODEL 416 STAND—For semipermanent mounting of 646, 654A microphones. Black rubber. Size 3 1/8" diameter, 1" high. Net Weight, 2 oz. List Each.....**\$5.00**

MODEL 418 DESK STAND—Use with microphones using small-type stud such as Models 611, 623, 630, 635, 636, 911, and 951. Die cast base. Gray finish. List Each.....**\$10.00**

MODEL 418-S—With switch. List Each.....**\$15.00**

MODEL 419 DESK STAND—Similar to Model 418 but for use with microphones using large-type stud such as Models 644, 664 and 665. List Each.....**\$10.00**

MODEL 419S—With switch. List Each.....**\$15.00**

MODEL 420 DESK STAND—Heavy cast iron stand finished in TV gray. Specifically designed for use with E-V 666, 655C, 654A, 652, 652A or microphones with 1" diameter. Clamp attachment for mounting 1" cylindrical mikes, without tools. Base holds mike in position when subjected to ordinary strain. Net Weight, 3 lbs. List Each.....**\$20.00**

MODEL 423A DESK STAND—Sturdy smartly styled, round die-cast base, 5 1/8" diameter. Rests firmly on rubber base buttons. Rich satin chrome. 5/8"-27 thread. Choice of 3" or 5" matching stem riser. Net Weight, 1 lb. List Each.....**\$5.00**

MODEL 428 TOUCH-TO-TALK STAND—Fits standard 5/8"-27 thread. Lever-type DPDT switch for relay operation or microphone On-Off—closes or opens instantly or locks in "talk" position. Satin chrome; gray plastic switch lever with locking button. 7" x 5 1/8" base diameter. Net Weight, 1 3/4 lbs. List Each.....**\$17.50**

All above accessories are eligible for FCDA purchases.

Electro-Voice®

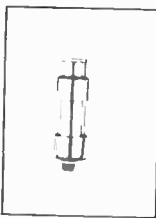
ELECTRO-VOICE, INC., BUCHANAN, MICHIGAN



300



356

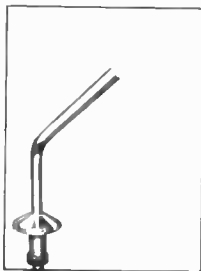


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366



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513



420



416



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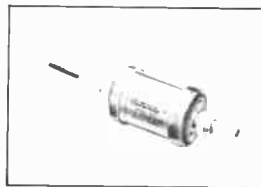


418

419



428



502A



423A

Electro-Voice

PUBLIC ADDRESS HORNS AND DRIVERS

Compound Diffraction Projector

MODEL 848—Combines FC100 Compound Diffraction Horn plus DC30 Compound Driver for finest wide-angle sound, lowest distortion, highest quality of any projector. Specifications: Frequency response, 150-10,000 cps; impedance, 16 ohms; dispersion, 90° x 120°; power handling capacity, 30 watts; sound pressure level, 117 db; dimensions, 10½" x 20½" x 20". Net Weight, 13½ lbs.; Shpg. Wt. 15 lbs. Complete—List Price **\$82.50**

MODEL 848-45—With 45-ohm voice coil. List Price **\$84.00**

Projector Horns

Completely new designs assure finest performance with Electro-Voice projector horns. Two basic types from which to choose . . . compound and reentrant.

EXCLUSIVE COMPOUND HORNS permit widest range at lowest distortion, plus complete directional control of both highs and lows. Best wide-angle coverage with exclusive diffraction horns means better sound through entire coverage area for uniform coverage. Concentrating compound horn provides highest efficiency at lowest distortion. Natural voice and music reproduction result in higher intelligibility without annoying peaks.

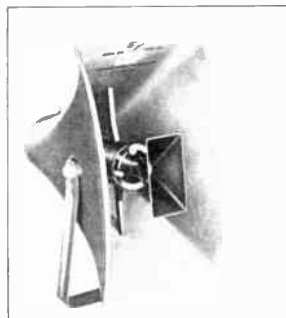
MODEL FC100—Similar to the famous CDP, the FC100 provides two diffraction horns for uniform wide-angle coverage. Frequency response is not compromised since both horns are ideally designed to handle a specific portion of the range. Compound horn reduces distortion far below any other projector design. Flexible coverage control provided by individual adjustment of each horn, or concentrating high-frequency horn (HC1000) can be substituted for small diffraction horn. Large horn is of fiberglass with Mesa Tan finish molded in. Use any E-V convertible driver. Specifications: Low-frequency horn—cut-off, 100 cps; taper, 100 cps; air column length, 58"; sound distribution, 90° x 120°. High frequency sound distribution, 90° x 120°; crossover, 1,000 cps. Mouth size, 10½" x 20½", depth (less driver), 20". Net Wt. (less driver), 10¾ lbs. Shpg. Wt., 12¼ lbs. List Price **\$50.00**

MODEL AC100—Concentrating version of CDP. Has all of the quality advantages of FC100, except utilizes round horns for most concentrated coverage with greatest efficiency. Retains compound design for lowest distortion—widest range. Diffraction high-frequency horn (HD1000) can be substituted for concentrating horn for flexible coverage control. Use any E-V convertible driver. Specifications: Low-frequency horn—cut-off, 100 cps; taper, 100 cps; air column length, 58"; sound distribution, 80°. High-frequency sound distribution, 30°; crossover, 1,000 cps. Diameter, 21"; depth (less driver), 21"; Net Wt. (less driver), 11 lbs. 6 oz. Shpg. Wt., 13½ lbs. List Price **\$47.00**

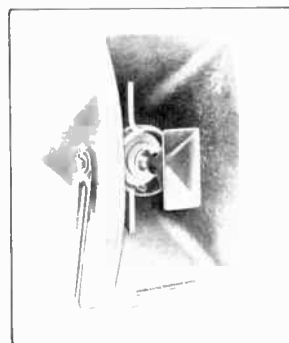
MODEL HD1000—Diffraction horn for converting AC100 to wide-angle (60° x 120°) coverage above 1,000 cps. Shipping Weight, 1½ lbs. List Price **\$6.00**

MODEL HC1000—Concentrating horn for converting FC100 to concentrated (30°) coverage above 1,000 cps. Shipping Weight, 4 lbs. List Price **\$10.00**

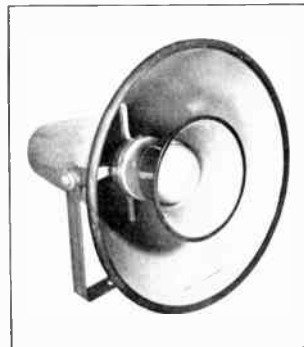
NEW REENTRANT HORNS provide wider range than ever before at lowest cost. Unique E-V ring reflector design provides better balanced highs than possible with conventional exponential designs, by reducing high frequency losses often encountered in reentrant horns. Smoother response plus added useful range increases intelligibility and adds to more natural sound. Rugged aluminum die cast mounting plate plus precision die cast reentrant tubes assure long-lasting performance. Heavy spun aluminum round bell or fiberglass rectangular horn provides either concentrated coverage or medium angle coverage. Electro-Voice Reentrant Horns accept any standard driver with 1¾"-18 threads.



848



FC100



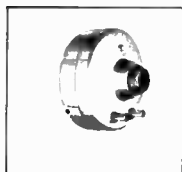
AC100



HC1000



HD1000



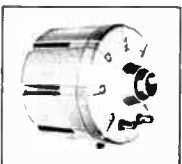
DC30A



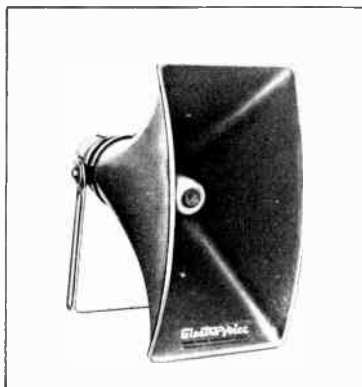
DC30T



DC40
DC50



DC40T
DC50T



FR150



AR150

MODEL FR150—Reentrant Horn. Medium-angle low-cost rectangular horn provides good coverage at low cost. Virtually indestructible fiberglass horn has Mesa Tan color molded in. Adjustable mounting angle allows best coverage. Can be stacked for multiple speaker applications. Ideal for car-top installation or wherever low silhouette is needed, and where bass response cannot be sacrificed. Accepts Electro-Voice convertible drivers or any standard driver with 1 3/8"-18 thread. Specifications: Low-frequency cut-off, 150 cps; taper, 150 cps; air column length, 45"; sound distribution, 70° x 100°; mouth size, 10 1/2" x 20 1/2"; depth (less driver), 21"; Net Wt. (less driver), 9 1/2 lbs. Shpg. Wt., 12 lbs. List\$39.00

MODEL AR150—Reentrant Horn. Round concentrating horn for maximum penetration at lowest cost. E-V ring reflector plus precision new exponential design contributes to widest range yet achieved from this horn type. Smoother curve results in high intelligibility, and remarkably natural voice and music quality. Rubber edge-damping ring eliminates resonances. High-efficiency design allows more useful volume from driver over entire range. Accepts Electro-Voice Convertible drivers or any standard driver with 1 3/8"-18 thread. Specifications: Low-frequency horn—cut-off, 150 cps; taper, 150 cps; air column length, 41"; sound distribution, 85°; diameter, 21"; depth (less driver), 17". Net Weight (less driver), 6 1/2 lbs. Shipping Weight, 8 lbs. List Price\$34.00

Versatile Convertible Drivers

Now, for the first time, here are drivers that can be used interchangeably in compound or reentrant horns. Used on either type of horn, the new Electro-Voice Convertible Drivers feature highest efficiency available. Increased power handling plus extra increased efficiency make the 40 and 50-watt drivers uniquely useful where high power at minimum cost is essential. The high efficiency of all E-V Convertible Drivers is achieved without resorting to "peaked" response which may increase loudness, but does reduce intelligibility. The smooth response of these drivers insures most natural reproduction of voice and music for more satisfying quality with vastly reduced feedback problems and greatly increased tonal range. Double flux ceramic magnets provide long-lasting high efficiency in entirely new low-loss magnetic circuits. Edgewise-wound ribbon voice coils give 18% more efficiency. The drivers are rugged and weatherproof; conversion to either reentrant or compound use can be made instantly in the field. Voice coils are also field replaceable, thus reducing repair costs to a minimum. E-V Convertible Drivers are available with 16 or 45-ohm voice coils or with built-in 70.7-volt line constant voltage transformers. This entirely new design concept gives better performance at minimum cost, making E-V Drivers your best buy.

| | DC30A | DC30T | DC40 | DC40T | DC50 | DC50T |
|-------------------------------|----------------------|-----------------------|-----------------------|---------------------|-----------------------|--------------------|
| Frequency Responset† | 150-10,000 | 150-10,000 | 140-11,000 | 140-11,000 | 140-11,000 | 140-11,000 |
| Program Power Capacity | 30 | 30 | 40 | 40 | 50 | 50 |
| Sound Pressure Level† | FC100 Compound Horn | 117 db | 117 db | 120 db | 120 db | 124 db |
| | AR150 Reentrant Horn | 126 db | 126 db | 129 db | 129 db | 133 db |
| Voice Coil Impedance | 16** | 16 | 16** | 16 | 16** | 16 |
| Transformer Impedances, Ohms | ..... | 167, 333, 1000, 2000 | ..... | 125, 250, 500, 1000 | ..... | 100, 143, 200, 500 |
| Transformer Power Taps, Watts | ..... | 30, 15, 5, 2.5 | ..... | 40, 20, 10, 5 | ..... | 50, 35, 25, 10 |
| Dimensions (overall) | 5 1/2" dia. 3" l. | 5 1/2" dia. 5 1/2" l. | 6 1/4" dia. 4 1/4" l. | 6 1/4" dia. 6" l. | 6 1/4" dia. 4 1/4" l. | 6 1/4" dia. 6" l. |
| List Price | \$31.00 | \$41.00 | \$40.00 | \$52.50 | \$52.50 | \$63.50 |

†Measured at 4' on-axis with full rated power from 750-1250 cps.
 **Available with 45-ohm voice coil at \$1.50 list additional.
 ††Measured on-axis with FC100 horn.

Electro-Voice®

Line Radiator* Loudspeakers

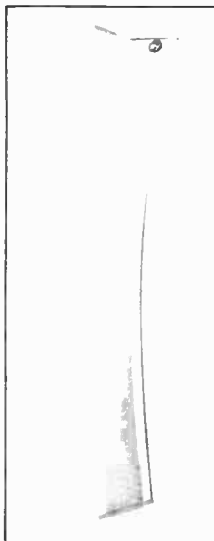
Three new, wide-angle speaker designs permit wide horizontal dispersion while almost eliminating sound output above or below speaker. Superb for voice-reinforcement systems. Unusually wide frequency range coverage.

MODEL LR4—Curved design overcomes unwanted high-frequency dispersion at ends, eliminating echo and feedback. Contains twelve 4" cone speakers, 160° horizontal dispersion; 60° vertical dispersion. Frequency response: 200-10,000 cps. Power handling capacity: 25 watts program, 50 watts peak. Nominal impedance: 8 ohms. Size: 49" h. x 7" w. x 13" d. Mesa tan finished wooden enclosure. List Price\$115.00

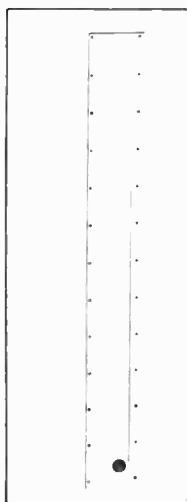
MODEL LR4S—Electrical filter removes end speakers from circuit as frequencies increase, eliminating high-frequency lobes at ends. Specifications like LR4, except that dispersion is 160°, horizontal; 30°, vertical. All-metal, weatherproof enclosure with mesa tan finish. Size: 52" h. x 7 1/16" w. x 4 5/8" d. List Price.....\$125.00

MODEL LR7—The newest of the revolutionary line of Electro-Voice Line Radiators®. Both low and high frequency response extended. Utilizes nine 5" x 7" loudspeakers and two T35 vhf drivers for frequency range of 100 to 20,000 cps. Full half-section crossover at 3500 cps. Horizontal coverage 160°, vertical coverage 45°. Power handling capacity 50 watts, impedance 8 ohms. Non-resonant, curved wood enclosure finished in Mesa Tan. Universal mounting brackets supplied. Dimensions: 60" high x 11" wide x 14" deep. Net weight, 70 lbs. List Price\$215.00

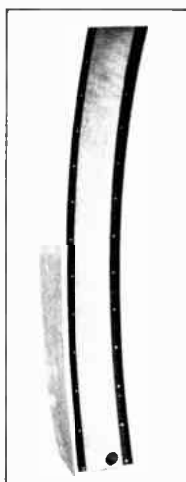
*TRADEMARK



LR7



LR4S



LR4

Electro-Voice®

Paging Speakers

MODEL PA7 REENTRANT PROJECTOR—Attractively styled horn is constructed completely of Cyclac—virtually indestructible. Non-resonant horn won't dent, finish can't wear off. Electro-Voice exclusive ring diaphragm eliminates loading problems, achieves cleanliness of reproduction never before achieved in small projectors. Handles 7½ watts over a range of 400 to 13,000 cps. Wide 120° dispersion angle provides excellent coverage. Mounting bracket allows horn to be positioned at any angle. 6¾" diameter by 6" deep. Weight 3¼ lbs. List Price **\$27.00**



PA7

MODEL PA15—A compact speaker of rugged, die-cast construction finished in mesa tan. Smooth, rising response provides high intelligibility and efficiency. Field-replaceable driver. Universal swivel mount. Frequency response: 350–13,000 cps. Power handling capacity: 15 watts program. Nominal impedance: 8 ohms. Dispersion: 120°. Size: 9" h. x 6" w. x 9½" d. Weight, 4¼ lbs. net. List Price **\$30.00**

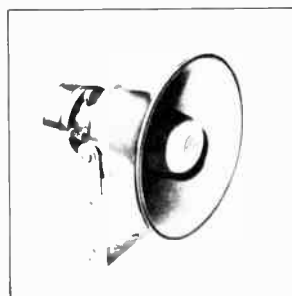


PA15

MODEL PA15T—Same, but with matching transformer for 70.7-volt lines. Transformer taps: 1.5, 2.5, 5, 10, 15 watts; 3300, 2000, 1000, 500, 350 ohms. Weight, 4½ lbs. List Price **\$36.00**

MODEL PA15-45—Same, but with 45-ohm impedance. List Price **\$31.25**

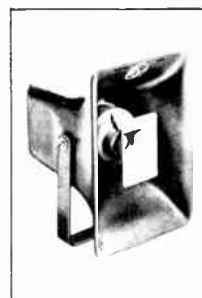
MODEL 844—For medium-angle sound distribution. Features smoothest response in its class with better lows to provide natural paging without feedback. Handles 30 watts—to reduce costs. Rugged diecast horn, plus field-replaceable voice coil keeps service costs at a minimum. Frequency response, 250–13,000 cps; power handling capacity, 30 watts; nominal impedance, 8 ohms; dispersion, 90°; EIA sensitivity rating, 51 db; sound pressure level, 120 db; dimensions, 9¾" diameter x 8¾" deep; Net Weight, 5 lbs. 10 oz.; Shipping Weight, 8½ lbs. List Price **\$36.50**



844

MODEL 844-45—Same as standard 844, but with 45-ohm voice coil for simple installation in intercom systems. List Price **\$38.00**

MODEL 847—Utilizing the famous CDP Principle—this wide-angle speaker provides higher articulation without annoying "peaked" response over a uniform 120° x 90° area. Low distortion results from use of TWO diffraction horns. 25-watt power handling capacity. Fiberglass horn has mesa tan color molded in. Frequency response, 250–10,000 cps; power handling capacity, 25 watts; sound pressure level, 114 db; dispersion, 90° x 120°; impedance, 16 ohms; dimensions, 11¾" x 7¾" x 10¾"; Net Weight, 8 lbs.; Shipping Weight, 10 lbs. List Price **\$51.00**

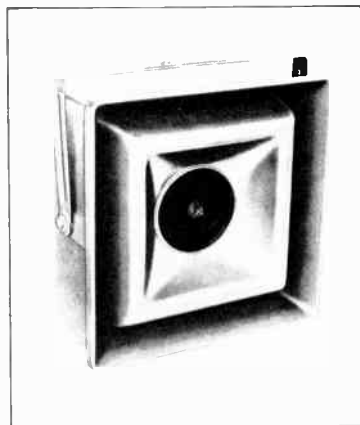


847

MODEL 847-45—Same as standard 847, but with 45-ohm voice coil for simple installation in intercom systems. List Price **\$52.50**

E-V Musicaster Hi-Fi Outdoor Weatherproof Speaker Systems

Musicaster—Provides high fidelity performance in a compact, portable system. Sturdy aluminum diecast housing protects weatherproof cone speaker and extends bass response through back-loaded folded horn. Dual Radax cone radiates smooth useful highs through 120° angle. Provision for mtg. 70.7-volt line transformer inside. Specifications: Frequency response, 60–13,000 cps; nominal impedance, 8 ohms; dispersion, 120°; power handling capacity, 30 watts program; sound pressure level, 110 db; dimensions, 21½" x 21½" x 8½"; Net Weight, 31 lbs.; Shipping Weight, 34 lbs. List Price **\$90.00**



MUSICASTER

Musicaster II—Same fine performance as the Musicaster except has added brilliance and wider coverage from Very-High-Frequency Range Extender. Smooth response to 18,000 cps. Complete with crossover. Net Weight, 33 lbs. Shipping Weight, 36 lbs. List Price **\$125.00**

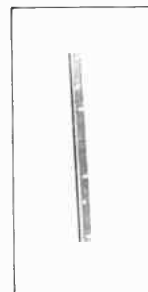
MODEL MB-1—Surface mounting bracket allows mounting of any Musicaster flat against wall for neat unobtrusive installation. Replace standard "U" bracket. Shipping Weight, 1 lb. List Price **\$4.50**

Underwater Loudspeakers

MODEL DU30—Pool Speaker. For use in swimming pools to provide voice and music audible underwater. May be mounted at any depth down to 4 feet. Specifications: Impedance, 16 ohms. Power handling capacity, 30 watts. Frequency response, 40 to 10,000 cps. Size, 5¾" diameter x 2¾" deep. Weight (with cable), 8 lbs. 4 oz. Twelve-foot underwriters approved cable. Resistant to chlorine, bromine, salt water, oil, grease, gasoline. List Price **\$87.50**



DU30



MB-1

All E-V public address speakers are eligible for FCDA purchases.

PA Transformers and Accessories



TH

MODEL TH—Transformer Housing. Provides neat weatherproof mounting of any E-V transformer. Mount vertically or horizontally on any flat surface or on horn bracket. Exclusive wattage indicator tells power setting at a glance. No soldering required with E-V transformers. Size: 4" h., 5" w., 3½" d. Net Weight, 1 lb. 11 oz. Shipping Weight, 2½ lbs. List Price..... **\$8.50**

MODEL 598—Mounting Bracket. Facilitates easy mounting of transformer housing to standard wall box. List Price..... **\$2.50**

MODEL TR5—5-watt 70.7-volt line transformer. Primary impedance taps 1000, 2000, 4000, 8000 ohms; 5, 2.5, 1.25 and .675-watt line power taps. 4, 8 and 16 ohms secondary impedances. Accepts solderless terminals in TH housing. Frequency response ± 2 db, 35-20,000 cps. Insertion loss 0.8 db. Overall dimensions 2" x 1½" x 1¾". Mounting hole centers, 1¾". Shipping Weight, 1 lb. List Price. **\$5.00**

MODEL TR15—Same as TR5 except 15-watt capacity with primary impedances of 333, 500, 1000, 2000 ohms and 15, 10, 5, 2.5-watt line power taps. Overall dimensions 1¾" h., 2⅞" w., 2⅝" d. List Price..... **\$6.00**

MODEL TR30—Same as TR5 except 30-watt capacity with primary impedances of 167, 250, 500, 1000 ohms and 30, 20, 10 and 5-watt line power taps. Overall dimensions 1¾" h., 2⅞" w., 2⅝" d. Mounting hole centers, 2⅞". Shpg. Wt., 1½ lbs. List Price..... **\$7.00**

MODEL TR50—Same as TR5 except 50-watt capacity with primary impedances of 100, 125, 200, 333 ohms and 50, 40, 25 and 15-watt line power taps. Overall dimensions 2¼" h., 2⅝" w., 2¼" d. Mounting hole centers, 2¾". Shpg. Wt., 2 lbs. List Price..... **\$9.00**

MODEL AP-1—Pipe stand adapter for mounting any E-V speaker "U" bracket to standard ½" pipe. Shipping Weight, 1 lb. List Price..... **\$2.50**

MODEL AD-1—Driver adapter allows use of E-V Convertible Driver on horns with 17/16"-16 thread (W.E.—RCA) for improved performance. Shipping Weight, 1 lb. List Price..... **\$3.00**

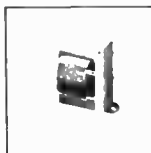
MODEL AD-2—Horn adapter allows use of E-V reentrant horns with drivers having 17/16"-16 thread (W.E.—RCA) for improved performance. Shipping Weight, 1 lb. List Price..... **\$3.00**

MODEL RA-1—Radial Adapter instantly converts FC100 horn or 848 projector to "radial" applications. Superior to typical "360°" projectors. Diffraction horns give better spread and adapter reflects sound off-axis, to eliminate hot spot. No tools required. Extends 2½" in front of FC100 horn with DC30A. Shipping Weight, 1 lb. List Price..... **\$6.00**

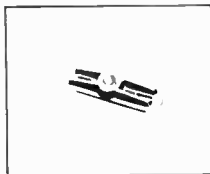
MODEL 879—Joining Kit for two or more 848, FR150 or FC100 horns in multiple array. One kit required for each junction of two horns. Shipping Weight, 1 lb. List Price..... **\$2.75**



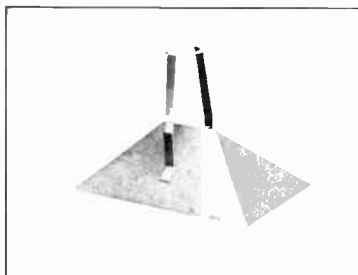
598



TR5



AP-1



RA-1

All E-V public address speakers are eligible for FCDA purchases.

Diaphragm Replacement Kits allow easy field maintenance or conversion of E-V Drivers.

| DRIVER | 8 Ohm | 16 Ohm | 45 Ohm |
|---------------------------------|----------------|----------------|----------------|
| 828 or DC30 (Used on Model 848) | .... | 82016 | 82015 |
| DS30 (Used on Model 844) | 8642 | .... | 8643 |
| DC30A | .... | 82087 | 8617 |
| DC40 | .... | 82088 | 8618 |
| DC50 | .... | 82089 | 8619 |
| List Price | \$10.00 | \$10.50 | \$12.00 |

Replacement kits not available for DC30T, DC40T or DC50T.

Note: Sound Pressure Level is measured as 4' on-axis with full rated power from 750 to 1250 cps.



ELECTRO-VOICE, INC., BUCHANAN, MICHIGAN



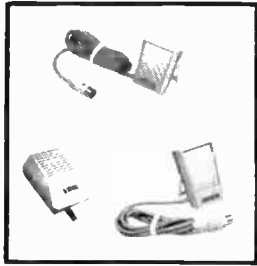
MICROPHONES

work best, because built best!

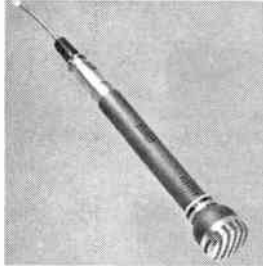
Every AKG Microphone is hand-fabricated and -assembled under white-room conditions with continuous quality control. Each is numbered and response-tested, with a permanent factory record of its performance.

One vital and unique characteristic of all AKG cardioids is that their directional characteristic holds deep into the bass — where it's needed most for crisp recording.

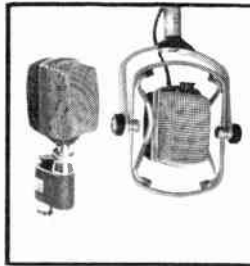
Below is a representative selection of AKG products. In addition to many more microphones of every type, there is a full range of accessories such as windscreens, table and floor stands, power supplies, transformers, and remote-control units. Full technical and service facilities are maintained by the USA import agents, Electronic Applications, Inc. Write for the complete AKG Catalog and advice on specific applications.



D7 A left, D7 Sp center, D11 right — economical, quality mikes for dictation and amateur tape work.



D19 E — high-performance, economical, for pickup, announcement, and semi-pro tape. Bass-cut switch.



D20 B left, D25 B right — two mountings of quality wide-range studio mike with bass-cut switch.



D58 — close-talking announce-/intercom mike, dust-proofed. For noisy environments. See K58.



D24 B — studio-quality voice and music recording; bass-cut switch, anti-magnetic shielding.



D110 — compact, rugged low-noise; for use in hand, lapel, lavalier, Radio, TV, stage, film, and pro tape recording. Excellent under high humidity and extremes of temperature.



C12 left, C24 right — for the most exacting professional recordings. C12 mono, C24 for MS and XY stereo, capsule rotatable thru 180°. Patterns remotely variable omni thru hypercardioid.



K50 — dynamic phones. Perfect bass without earmuffs; light, cool, comfortable for extended monitoring. Wide frequency and dynamic ranges, high sensitivity. Convertible mono/stereo.



C60 — high-performance miniature, interchangeable omni and cardioid capsules. Rechargeable battery-pack as table stand; neck-strap for use in the field; transistorized DC-Converter.



K58 Boom Set — DK58 mike and K50 phones for use in language labs, intercom, announcing, control, field-remotes. For close talking. Light, rugged, comfortable, clean sound, for extended use.

| MODEL | RANGE cps | SENSITIVITY mv/μbar | CARDIOID DISCRIM db @ 1 kc @ 180° | IMPEDANCE ohms | DIMENSIONS inches | PRICE User Net |
|-------------------|-----------|--|---|---------------------|-------------------|----------------|
| dynamic | | | | | | |
| D 7A | 100 — 10k | 0.23 — 2.8* | omni | 200 — 50k | 3½ x 2¼ x 1½ | \$ 14.50 |
| D 7Sp | | | same specifications as D 7A; different housing | | | |
| D 11Sp | 80 — 12k | 0.18 — 2.5* | 12 | 200 — 50k | 3½ x 2¼ x 1½ | 14.50 |
| D 17 | 50 — 15k | 0.25 | 18 | 200 | 4⅞ x 1¾ | 66.00 |
| D 19E | 40 — 16k | 0.18 — 2.5* | 18 | 50/200/50k | 7 x 1⅜ | 52.00 |
| D 20B | 30 — 15k | 0.12 | 25 | 60 | 7⅞ x 2⅞ | 175.00 |
| D 24B | 30 — 16k | 0.18 | 20 | 200 | 6⅜ x 1½ | 165.00 |
| D 25B | | same specifications as D 20B; shock-mounted for boom use | | | | 195.00 |
| D 58 | 50 — 12k | 0.1 | (1) | 200 | 1⅞ x ¾ | 42.00 |
| D 110 | 70 — 17k | 0.12 | omni | 50 — 200 | 3⅜ x 1⅞ | 60.00 |
| condenser | | | | | | |
| C 12 | 30 — 20k | 1.0 | variable | 50 — 200 | 16⅞ x 1⅞ | \$585.00** |
| C 24 | | | same specifications as C 12; two units stacked for stereo | | | 840.00** |
| C 28-29-30 | 30 — 20k | 1.0 — 1.3* | 20 | 50 — 200 | 6⅞ x 1 | 495.00*** |
| C 60 | 30 — 20k | 1.3 | 20 | 50/200/500 | 3⅜ x ¾ | 259.50** |
| headphones | | | | | | |
| K 50 | 30 — 20k | 156 μw/95 phon | — | 400-200-15 per unit | 3 oz. | 22.50 |
| K 58 | | Boom Set: see D 58 and K 50 for specifications | | | | 46.80 |

(1) — close-talking only; noise-cancelling means

* — Values are for High and Low Impedances respectively

** — Price includes all necessary cables, power supplies, etc

*** — Complete Set; individual units priced somewhat lower

ELECTRONIC APPLICATIONS, Inc.

WILTON, CONN.

NEUMANN MICROPHONES

NEW! U-67 CONDENSER MICROPHONE

CULMINATION OF OVER 30 YEARS OF ELECTRONIC LEADERSHIP!

Contains the following advanced features:

1. Electronically switched directional characteristics: Cardioid, Omni-directional, Figure-8.
2. Frequency response with virtually no peak at the high end.
3. Separate "Voice-Music" switch raises the roll-off starting point from 40 cps to 100 cps.
4. Sensitivity switch on microphone prevents overload of amplifier from close placement to sound source.
5. "Calibrating input" permits direct testing of microphone preamplifier with oscillator.
6. Uses regular EF-86 tube, readily replaceable.

Complete system includes: Microphone, Power supply, Interconnect cable and stand mount.

NEUMANN M-49B CONTINUOUSLY ELECTRONICALLY VARIABLE DIRECTIONAL PATTERN MICROPHONE SYSTEM

This microphone permits remote control of the directional characteristic. A smooth, continuous fader-control selects any of the basic directional patterns (non-directional, bi-directional, and cardioid) and any intermediate pattern. Wide frequency response with extremely low distortion—0.6% 40-15 kc up to 110 db absolute.

Complete microphone system consists of microphone, power supply and MZ-49 Swivel mounting harness.

NEUMANN KM-54A/KM-53A

The KM-54a is a super cardioid miniature microphone that has been designed with tv and film in mind. This $\frac{7}{8}$ " diameter by 5" long, 3½ ounce marvel, when mounted in the Z-38 full elastic suspension, can be aimed at the sound and provide more than 25db rejection of extraneous sounds in the studio. Complete microphone system consists of microphone, power supply, inter-connect cable full elastic suspension, connector.

NEUMANN KM-56 MINIATURE CONDENSER MICROPHONE SYSTEM

The KM-56 satisfies a great demand for a microphone of modern, miniature styling of unexcelled reliability and performance. It is a true self-contained condenser microphone incorporating electronic switching of the directional characteristic (U.S. Pat. No. 2,678,967) to all three patterns: omni-directional, bi-directional, and cardioid. It uses a pure nickel double diaphragm capsule offering high resistance to temperature and humidity effects.

Complete microphone system consists of microphone, power supply, interconnect cable, full elastic suspension, connector

BEYER M-160 DYNAMIC RIBBON MICROPHONE (ULTRA- DIRECTIONAL)



An ultra-directional characteristic has now become possible in a ribbon microphone. The warm, transparent classical ribbon quality—in a miniaturized form, with response approaching near theoretical limits through miniaturization of the vibrating system. Close tolerances in manufacture assure uniformity of characteristic between microphones, permitting paired use for Stereo. Overall response: 20-20,000 cps. Impedance: 50/200 ohms. Dimension: 1½" x 6". Weight: 6 ozs.

BEYER DT-48 DYNAMIC PEAK- PERFORMANCE HEADPHONES



A hand-built, high-fidelity transducer used in critical evaluation of recorded and transmitted sound, yet in a reasonable price class. Frequency range: 30-15,000 cycles, down no more than 7 db at 15 kc, and perfectly flat at 30 cycles. Comfortable exchangeable foam rubber pads and separate cords for each ear for Stereo application. Impedance: 5 ohms each side; input voltage required: 0.1 volt; peak power demand: 0.4 watt; weight 12½ ozs.

COMPLETE TECHNICAL SPECIFICATIONS WILL BE PROMPTLY FURNISHED UPON PROFESSIONAL REQUEST.

GOTHAM AUDIO CORPORATION

NEW YORK, N. Y.





Stereosonic SPEAKER ENCLOSURES, SYSTEMS & KITS

NONE BETTER



15-WX
Karlson
Front



12-WX
Walnut



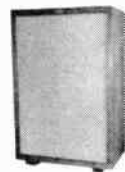
8-WX
Walnut



8-BSC-K
Basic
Unfinished



12-U
Unfinished
Deluxe



15WX
Full
Grille

GENERAL DESCRIPTION

The Karlson enclosures are designed and perfected to meet the requirements for the latest and most advanced stereosonic techniques. They provide highly effective acoustic transformers improving the bass, transient response, dispersion, dynamic range, and definition far beyond the ordinary capacities of your speaker. They have consistently outclassed all other approaches in their ability to satisfy the most discriminating. As a result they are without a doubt the most highly recommended loudspeaker enclosures available at any price. Unexcelled for stereo use. Will outperform systems many times their size.

RELATIVE SIZES AND APPLICATIONS

KARLSON '15'—Enclosures for 15" Speakers

33" high, 22½" wide, 18" deep, wt. 80 lbs. This is the outstanding choice of the real experts. Better bass than even a horn 30 feet long with a 1½ foot mouth diameter—PLUS—unexcelled tonal definition and wide area presentation makes this the finest enclosure available at any price. Use for finest home and professional stereo and monophonic high fidelity systems. Excellent for electronic organs, musical instruments, theatres, studio monitors, music festivals and wherever the very best is required.

KARLSON '12'—Enclosures for 12" Speakers

24¾" high, 16¾" wide, 13¾" deep, wt. 44 lbs. This enclosure is ideal for those who want the biggest and best stereo sound available in a compact system. Its dynamic range in bass is only slightly less than the Karlson '15' and certainly much greater than mammoth systems costing many times more. Very efficient, doesn't need super power amplifiers for good bass. Suitable for almost all types of installation, including built-ins due to their small size.

MODELS AVAILABLE

FINISHED ASSEMBLED: Select wood veneers in mahogany (MX), walnut (WX), and blonde oak (BX). Standard taper front for 15" and 12" models, full grille on special order at 5% additional charge. Full grille only on 8" models.

| | |
|---------------------|--------------|
| 15-MX, 15-BX, 15-WX | ea. \$129.00 |
| 12-MX, 12-BX, 12-WX | ea. 99.60 |
| 8-MX, 8-BX, 8-WX | ea. 42.60 |

DELUXE UNFINISHED ASSEMBLED: Birch veneer exterior footings and front mouldings included.

| | |
|------------------------------|-------------|
| 15-U Karlson "15" Unfinished | ea. \$99.50 |
| 12-U Karlson "12" Unfinished | ea. 69.50 |
| 8-U Karlson "8" Unfinished | ea. 29.95 |

BASIC UNFINISHED ASSEMBLED: Finest quality, high density particle board, no footing or moulding, finishable.

| | |
|-----------------------------|-------------|
| 15-BSC-U Basic Karlson '15' | ea. \$69.50 |
| 12-BSC-U Basic Karlson '12' | ea. 49.50 |
| 8-BSC-U Basic Karlson '8' | ea. 21.95 |

DELUXE KITS: Birch veneer exteriors, footing and mouldings included.

| | |
|-----------------------|-------------|
| 15-K Karlson '15' Kit | ea. \$69.50 |
| 12-K Karlson '12' Kit | ea. 49.50 |
| 8-K Karlson '8' Kit | ea. 21.95 |

BASIC KITS: Finest quality, high density particle board, no footing or front mouldings.

| | |
|---------------------------------|-------------|
| 15-BSC-K Karlson '15' Basic Kit | ea. \$44.95 |
| 12-BSC-K Karlson '12' Basic Kit | ea. 31.95 |
| 8-BSC-K Karlson '8' Basic Kit | ea. 14.95 |

KARLSON '8'—Enclosures for 8" Speakers

17¼" wide 11¾", high 10" deep, wt. 14 lbs. These very small enclosures will actually fit in the average bookshelf, and will give a quality of reproduction and extended bass totally beyond the normal capabilities of a one cubic foot enclosure. Especially good for the small apartment, den or playroom or as an addition to your larger system. May be built into other cabinetry or used as a portable system as well. Provides professional quality at competitive prices.

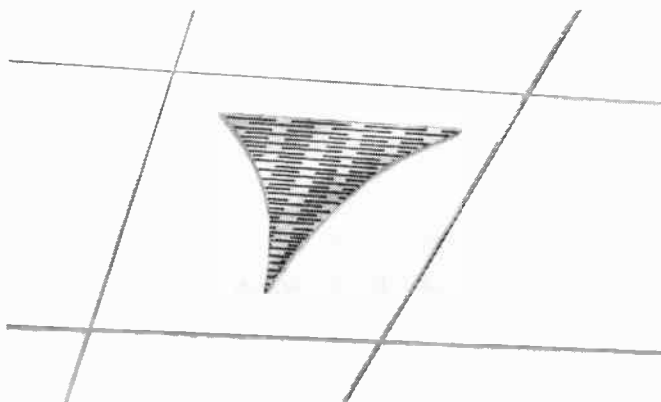
SPECIFICATIONS AND FEATURES

All Karlson enclosures employ the basically new Karlson acoustic transducer (Pat. nos. 2,816,619 and 2,896,736) for greatly extended bass, ultra-uniform wide angle dispersion for all speakers in excess of 120°, and highly improved transient response, efficiency, dynamic range and signal definition. Cone break up and distortion is practically eliminated. Amplifier loading is resistive giving excellent control. Dynamic range in bass varies with size, with the larger units quite capable of filling the largest auditoriums with sound. High frequency response only limited by tweeter used. No tuning required with any speaker.

All enclosures may be mounted either vertically or on side with suitable loose footing provided for the Karlson '15' and '12' enclosures.

SELECTING A SPEAKER

The Karlson enclosures are designed for use with the finest extended range, coaxial, and triaxial speakers. Works best with high compliance speakers having a good linear suspension, strong magnets and smooth very extended tweeters. Separate tweeters may be mounted in the larger enclosures. Mechanical resonance not critical, no tuning is required.



NEW!—KARLSON AP PROJECTORS for BETTER QUALITY, COVERAGE, AND ECONOMY

Flush Mtg. Ceiling AP Projector—Projects a broad fan-like pattern in horizontal plane and special pattern in elevation for max. efficiency. Asymmetric projection improves intelligibility, coverage, and introduces much lower installation costs. Replaces as many as six ordinary ceiling speakers.

SPECIFICATIONS: Complete, ready for quick installation, 10 W. cap., freq. res. 60-15,000 cps, single unit covers up to 2500 sq. ft., full coverage—no blasting or dead spots, anti-feedback front projection permits relatively close mike placement behind projector. Dim. 12" x 12" face plate, 6¼" max. height and 1½" rear ext. above and beyond edge of face plate. Wt. approx. 6 lbs. shipped. Fin.: Ceiling Tile White.

| | |
|--|---------|
| KARLSON AP-9C FLUSH MTG. CEILING PROJECTOR | \$29.50 |
| KARLSON AP-9W WALL MTG PROJECTOR | \$34.95 |
| Size: 13" x 9¾" x 8¼". Wt.: 8 lbs. Fin.: Pastel beige. Specs. as for Karlson AP-9C | |

KARLSON ASSOCIATES INC. • West Hempstead, New York

Jensen ... HEADQUARTERS FOR HIGH FIDELITY SPEAKERS

UNITARY LOUDSPEAKERS / LOUDSPEAKER SYSTEM KITS

LOUDSPEAKER SYSTEMS SHELF... SLIM... AND COMPACT MODELS

**HEADPHONES / STEREO HEADPHONE CONTROL CENTER
WITH SPACE PERSPECTIVE***

*T.M. Licensed by CBS LABORATORIES,
Div. COLUMBIA BROADCASTING SYSTEM, Inc.

*... We'd like to send you HIGH FIDELITY
CATALOG 165-H. Why not write for it TODAY?*



Jensen MANUFACTURING COMPANY
Division of The Muter Co.

CHICAGO, ILLINOIS



Jensen Concert & Viking Speakers

JENSEN CONCERT SERIES SPEAKERS

CONCERT SERIES PM SPEAKERS



| Nom. Size, Inches | Jensen No. | Mag. Wt., Oz. | Voice Coil | | Dia., In. | Dimensions, Inches | | | Baffle Opening | Net Each |
|-------------------|------------|---------------|------------|-------------|-----------|--------------------|-------|-------------------|----------------|----------|
| | | | Imp., Ohms | Power Watts | | H. & W. | Depth | | | |
| 2 1/2 | P275-V | 0.65 | 16 | 0.15 | 1 1/8 | 2 1/8 | 1 1/8 | 2 1/8 | \$ 2.85 | |
| 3 | P3-W | 1.00 | 3.2 | 3.5 | 1 1/8 | 3 | 1 1/8 | 2 1/8 | 2.85 | |
| 3 1/2 | P35-W | 1.00 | 3.2 | 4.0 | 1 1/8 | 3 1/2 | 2 1/8 | 3 1/8 | 2.61 | |
| 4 | P4-W | 1.00 | 3.2 | 4.5 | 1 1/8 | 4 1/8 | 2 1/8 | 3 1/8 | 2.61 | |
| 4 | P4-WV | 1.00 | 45 | 4.5 | 1 1/8 | 4 1/8 | 2 1/8 | 3 1/8 | 2.70 | |
| 4 | P4-V | 1.47 | 3.2 | 5.0 | 1 1/8 | 4 1/8 | 2 1/8 | 3 1/8 | 2.82 | |
| 4 x 6 | P46-W | 1.00 | 3.2 | 4.5 | 1 1/8 | 4 1/2 x 6 1/2 | 2 1/8 | 3 11/16 x 5 11/16 | 3.09 | |
| 4 x 6 | P46-V | 1.47 | 3.2 | 5.0 | 1 1/8 | 4 1/2 x 6 1/2 | 2 1/8 | 3 11/16 x 5 11/16 | 3.30 | |
| 5 | P5-W | 1.00 | 3.2 | 5.0 | 1 1/8 | 4 1/8 | 2 1/8 | 4 | 2.67 | |
| 5 | P5-WV | 1.00 | 45 | 5.0 | 1 1/8 | 4 1/8 | 2 1/8 | 4 | 2.79 | |
| 5 | P5-V | 1.47 | 3.2 | 5.5 | 1 1/8 | 4 1/8 | 2 1/8 | 4 | 2.91 | |
| 5 | P5-T | 3.16 | 3.2 | 6.0 | 1 1/8 | 4 1/8 | 2 1/8 | 4 | 3.32 | |
| 5 1/2 | P525-W | 1.00 | 3.2 | 5.5 | 1 1/8 | 5 1/2 | 2 1/8 | 4 1/2 | 2.85 | |
| 5 1/2 | P525-V | 1.47 | 3.2 | 6.0 | 1 1/8 | 5 1/2 | 2 1/8 | 4 1/2 | 3.03 | |
| 5 x 7 | P57-W | 1.00 | 3.2 | 5.5 | 1 1/8 | 5 x 7 1/2 | 2 1/8 | 4 1/2 x 6 1/2 | 3.24 | |
| 5 x 7 | P57-V | 1.47 | 3.2 | 6.0 | 1 1/8 | 5 x 7 1/2 | 2 1/8 | 4 1/2 x 6 1/2 | 3.48 | |
| 6 | P6-W | 1.00 | 3.2 | 6.0 | 1 1/8 | 6 1/2 | 2 1/8 | 5 1/2 | 2.94 | |
| 6 | P6-V | 1.47 | 3.2 | 6.5 | 1 1/8 | 6 1/2 | 2 1/8 | 5 1/2 | 3.27 | |
| 6 | P6-T | 3.16 | 3.2 | 7.5 | 1 1/8 | 6 1/2 | 2 1/8 | 5 1/2 | 4.68 | |
| 6 x 9 | P69-W | 1.00 | 3.2 | 7.0 | 1 1/8 | 6 3/4 x 9 1/4 | 3 1/8 | 5 1/2 x 8 3/8 | 3.84 | |
| 6 x 9 | P69-V | 1.47 | 3.2 | 7.5 | 1 1/8 | 6 3/4 x 9 1/4 | 3 1/8 | 5 1/2 x 8 3/8 | 4.35 | |
| 7 | P7-V | 1.47 | 3.2 | 7.0 | 1 1/8 | 7 | 3 1/8 | 6 3/4 | 4.20 | |
| 8 | P8-U | 1.73† | 3.2 | 9.0 | 1 | 7 11/16 | 3 | 6 3/4 | 4.32 | |
| 8 | P8-UV | 1.73† | 45 | 8.5 | 1 | 7 11/16 | 3 | 6 3/4 | 4.32 | |
| 8 | P8-T | 2.51 | 3.2 | 10.0 | 1 | 7 11/16 | 3 1/2 | 6 3/4 | 5.04 | |
| 8 | C8-S | 6.0* | 8 | 11.0 | 1 | 7 11/16 | 3 | 6 3/4 | 6.21 | |
| 8 | C8-R | 10.0* | 8 | 12.0 | 1 | 7 11/16 | 3 3/8 | 6 3/4 | 7.50 | |
| 10 | P10-T | 2.51 | 3.2 | 11.0 | 1 | 10 1/2 | 4 1/8 | 8 1/2 | 6.45 | |
| 10 | C10-S | 6.0* | 8 | 12.0 | 1 | 10 1/2 | 5 1/4 | 8 1/2 | 8.10 | |
| 12 | P12-T | 2.51 | 3.2 | 12.0 | 1 | 12 1/2 | 6 1/8 | 10 1/2 | 6.90 | |
| 12 | C12-S | 6.0* | 8 | 13.0 | 1 | 12 1/2 | 6 1/8 | 10 1/2 | 8.85 | |
| 12 | C12-R | 10.0* | 8 | 14.0 | 1 | 12 1/2 | 6 1/8 | 10 1/2 | 10.50 | |
| 12 | P12-P | 14.6 | 8 | 18.0 | 1 1/2 | 12 1/2 | 6 1/8 | 10 1/2 | 20.16 | |
| 12 | C12-N | 27.0* | 8 | 20.0 | 1 1/2 | 12 1/2 | 6 1/8 | 10 1/2 | 31.50 | |
| 14 x 3 | P314-T | 3.16 | 3.2 | 7.5 | 3/8 | 3 1/2 x 14 1/2 | 3 1/8 | 2 3/4 x 13 3/8 | 9.57 | |
| 15 | P15-RJ‡ | 6.8 | 8 | 17.0 | 1 1/2 | 15 1/2 | 6 1/2 | 13 1/2 | 19.20 | |
| 15 | P15-P | 14.6 | 8 | 20.0 | 1 1/2 | 15 1/2 | 8 | 13 1/2 | 27.15 | |
| 15 | C15-N | 27.0* | 8 | 25.0 | 1 1/2 | 15 1/2 | 7 1/2 | 13 1/2 | 36.90 | |

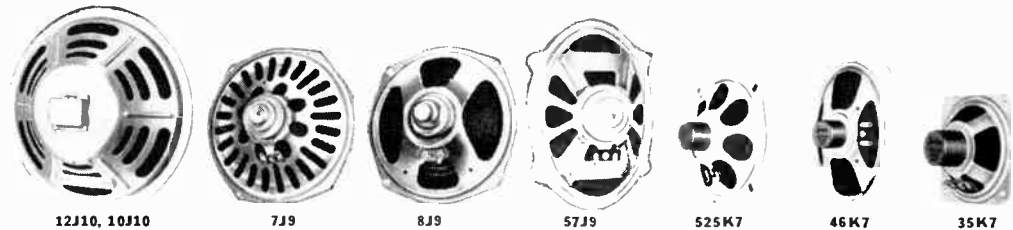
*SYNTOX-6® ceramic magnets. All others DP Alnico 5. All 10", 12" and 15" speakers equipped with magnet covers. †Performance equivalent to EIA 3.16 oz. ‡Performance equivalent to EIA 2.15 oz. §Has extra long travel for heavy duty applications.

CONCERT SERIES SPECIAL OVAL GROUP FOR AUTO USE

| Nom. Size, Inches | Jensen No. | Mag. Wt., Oz. | Voice Coil | | Dia., In. | Dimensions, Inches | | | Baffle Opening | Net Each |
|-------------------|------------|---------------|------------|-------------|-----------|--------------------|-------|---------------|----------------|----------|
| | | | Imp., Ohms | Power Watts | | H. & W. | Depth | | | |
| 5 x 7 | P57-U | 1.73† | 3.2 | 8.0 | 1 | 5 x 7 1/4 | 2 1/2 | 4 1/4 x 6 1/2 | \$4.05 | |
| 5 x 7 | P57-TX‡ | 2.51 | 3.2 | 9.0 | 1 | 5 x 7 1/4 | 2 1/4 | 4 1/4 x 6 1/2 | 5.01 | |
| 6 x 9 | P69-U | 1.73† | 3.2 | 9.0 | 1 | 6 3/4 x 9 1/4 | 3 1/8 | 5 1/2 x 8 3/8 | 4.74 | |
| 6 x 9 | P69-TX‡ | 2.51 | 3.2 | 10.0 | 1 | 6 3/4 x 9 1/4 | 3 1/8 | 5 1/2 x 8 3/8 | 5.40 | |

‡High Fidelity Model. *All Magnets DP Alnico 5. †Performance Equivalent to EIA 2.15 oz. ‡Performance Equivalent to EIA 3.16 oz.

JENSEN VIKING SERIES REPLACEMENT SPEAKERS



| Nom. Size, In. | Jensen No. | Mag. Wt., Oz. | Pwr., Watts | V.C. Dia., In. | Dimensions, Inches | | | Net Each |
|----------------|------------|---------------|-------------|----------------|--------------------|-------|-------------------|----------|
| | | | | | H. & W. | Depth | Baffle Opening | |
| 1 | 3K7 | .68 | 3.5 | 3/8 | 1 1/4 | 1 1/4 | 2 1/8 | \$2.28 |
| 1 1/2 | 35K7 | .68 | 4.0 | 1/2 | 3 1/4 | 1 1/4 | 3 1/8 | 2.10 |
| 4 | 4K7 | .68 | 4.5 | 1/2 | 4 1/2 | 1 1/4 | 3 1/8 | 2.10 |
| 4 x 6 | 46K7† | .68 | 4.5 | 1/2 | 4 1/2 x 6 1/2 | 1 1/4 | 3 11/16 x 5 11/16 | 2.73 |
| 5 | 5K7 | .68 | 5.0 | 1/2 | 4 1/2 | 1 1/4 | 4 | 2.40 |
| 5 1/2 | 525K7 | .68 | 5.0 | 1/2 | 6 1/4 | 2 1/4 | 4 1/2 | 2.46 |
| 5 x 7 | 57J9‡ | 1.47 | 6.0 | 3/4 | 5 x 7 1/2 | 2 1/4 | 4 1/4 x 6 1/4 | 3.24 |

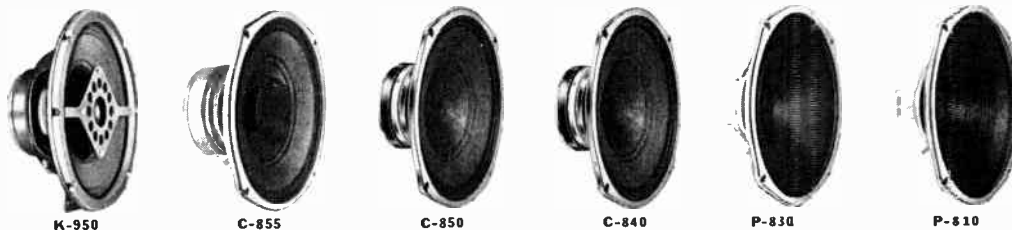
| Nom. Size, In. | Jensen No. | Mag. Wt., Oz. | Pwr., Watts | V.C. Dia., In. | Dimensions, Inches | | | Net Each |
|----------------|------------|---------------|-------------|----------------|--------------------|-------|----------------|----------|
| | | | | | H. & W. | Depth | Baffle Opening | |
| 6 | 6K7 | .68 | 6.0 | 1/2 | 6 1/2 | 2 1/4 | 5 1/4 | \$2.61 |
| 6 x 9 | 69J9‡ | 1.47 | 7.5 | 3/4 | 6 3/4 x 9 1/4 | 2 1/4 | 5 1/2 x 8 3/8 | 3.84 |
| 7 | 7J9 | 1.47 | 7.0 | 3/4 | 7 | 2 1/4 | 6 3/8 | 3.84 |
| 8 | 8J9 | 1.47 | 8.0 | 3/4 | 7 11/16 | 2 1/4 | 6 3/8 | 3.84 |
| 10 | 10J10 | 1.73 | 10.0 | 1 | 10 1/2 | 4 | 8 1/2 | 5.40 |
| 12 | 12J10 | 1.73 | 11.0 | 1 | 12 1/2 | 4 1/4 | 10 1/2 | 6.30 |

‡3.2 ohm voice coils. †Alnico 5 magnets. ‡Oval design.

Jensen Professional Series Speakers

8" SPEAKERS FOR DISTRIBUTED SOUND

VALUE ENGINEERED FOR LOWEST INSTALLED COST



This new line of Jensen 8-inch Professional Series loudspeakers is specially designed to meet the exacting rigorous demands of commercial sound service. The 8-inch size is ideal for the majority of all distributed sound systems giving more than adequate low frequency range with a minimum of enclosure and mounting complications.

A complete line of speakers value engineered for lowest installed cost with such features as the handy 10-pack, preattached transformers, exclusive solderless connectors, weather and corrosion resistant designs . . . and many more. A wide selection of models

to meet every need—from the lowest cost highly competitive application to the most sophisticated, highest quality system. Four conventional type speakers with varying sensitivity and power rating (magnetic energy) with the typical 90° coverage angle. One model has dual cone radiating system with 95° coverage angle and unusual high frequency range. A sixth basic model is an 8" coaxial with 110° coverage angle and unusual frequency range and smoothness for the finest quality and intelligibility. This 110° coverage angle provides approximately twice the coverage area, so fewer are required for a given installation.



PREATTACHED TRANSFORMERS

The six basic models mentioned above are all available with preattached 25-volt or 70.7-volt "constant voltage" transformers, Models 25CV4 or 70CV4. Factory attachment insures lower cost to the end user.

AVAILABLE IN HANDY 10-PACK

All of these speakers are available at added savings and convenience bulk-packed ten per carton (with or without transformers). These handy 10-pack cartons have individual sleeves for each speaker thus giving speaker protection of odd lots until actual installation.

KWIKON* INSTANT CONNECTORS

Simply twist bare ends of two 12" input leads supplied for each speaker to incoming signal cable leads. Insulate with wire-nut or tape. Slide sleeve clips onto input terminal lug of speaker or preattached transformer as speaker assembly is raised into place. KWIKON* instant connectors also provide simple fast power tap readjustment on transformer. *T.M.

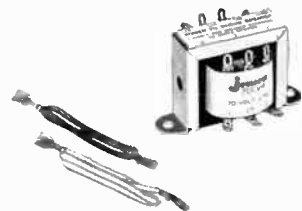
| Model | Type | Power Rating ¹ | Sensitivity ² | Magnet ³ Wt., Oz. | Freq. Range, CPS | Nom. V.C. Dia. | Max. Depth | W/O Transformer | | | Transformer Preattached | | |
|-------|--------------|---------------------------|--------------------------|------------------------------|------------------|----------------|------------|-----------------|---------------|---------------------|-------------------------|----------------|---------------------|
| | | | | | | | | List | Net Ea. Boxed | Net Each In 10-Pack | List | Net Ea. Single | Net Each In 10-Pack |
| K-950 | Coaxial | 16 | 85.5 db | 10.0 | 30-14,000 | 1" | 3 1/2" | \$24.50 | \$14.70 | \$13.24 | \$29.25 | \$17.55 | \$15.80 |
| C-855 | Dual Cone | 12 | 85.0 db | 10.0 | 30-18,000 | 1" | 3 1/4" | 13.50 | 8.10 | 7.29 | 18.25 | 10.95 | 9.86 |
| C-850 | Conventional | 12 | 85.5 db | 10.0 | 30-13,000 | 1" | 3" | 12.95 | 7.77 | 6.99 | 17.70 | 10.62 | 9.56 |
| C-840 | Conventional | 11 | 84.5 db | 6.0 | 30-13,000 | 1" | 2 1/2" | 10.95 | 6.57 | 5.91 | 15.70 | 9.42 | 8.48 |
| P-830 | Conventional | 10 | 84.0 db | 2.5 | 40-13,000 | 1" | 3 3/4" | 7.25 | 4.35 | 3.91 | 12.00 | 7.20 | 6.48 |
| P-810 | Conventional | 9 | 82.0 db | 1.47 | 60-13,000 | 3/4" | 3 3/4" | 5.80 | 3.48 | 3.13 | 10.55 | 6.33 | 5.70 |

¹V.C. and magnet information pertain to L-F unit only. ²Maximum speech and music level as indicated on standard VC meter (peak power is substantially higher). ³Axial free field sound pressure level at a distance of 10 ft. for an input of 1.0 watt 800-1,250 cps warble frequency band (re .000204 dynes/cm²). ⁴All magnets are Jensen Syntox-6® ceramic except P-810 and P-830 with D1'-Alnico-5.

"CONSTANT VOLTAGE" TRANSFORMERS

Specially designed for use with the popular "constant voltage" distribution systems. Primary (input) windings are center-tapped for balanced-to-ground input circuits or for special circuit needs. Tapped secondary windings provide adjustment of power to the 8-ohm speaker in 3 db steps from 1/2 watt to 4 watts. Nominal core size 3" x 3/4". Two 3/8" dia. mounting holes on 2 3/8" centers. Available separately or preattached to these special 8-inch speakers.

| Model | Line | Packing | List | Net | Net Ea. 50-Pack |
|--------|---------|---------|--------|--------|-----------------|
| 25CV4 | 25-volt | Single | \$4.75 | \$2.85 | |
| 25CV4B | 25-volt | 50-Pack | 4.75 | 2.85 | \$2.57 |
| 70CV4 | 70-volt | Single | 4.75 | 2.85 | |
| 70CV4B | 70-volt | 50-Pack | 4.75 | 2.85 | 2.57 |



Jensen Professional Series Speakers

JENSEN HYPEX* PROJECTOR HORNS

These projector horns are acoustically coordinated in design for best performance with HypeX* Driver Units D-30, D-40 and DD-100A, any one of which may be used on any the of horns. The horn expansion formula is the hyperbolic exponential (U. S. Patent 2,338,262) providing low frequency reproduction superior to that obtained with conventional horns of the same mouth size. Horns (with the exception of RT-20) are spun aluminum with weather-resistant baked tan enamel finish. Horns are threaded 1 3/8"-18 and may be used with any driver units with this thread. Sturdy steel mounting "U" brackets allow horn to point in any desired direction; horn locks in desired position by means of new positive action trunion clutches.

(See separate description and specifications on RT-20 Rectangular Horn).

| Specifications | H-150 (15°) | H-200 (20°) | H-240 (24°) | R-242 (20° Radial) |
|--------------------------------|----------------|----------------|----------------|-----------------------|
| Mouth diameter, over all | 15 1/2" | 20 1/2" | 25 1/4" | 20 1/2" |
| Length, over all (less driver) | 12" | 15 1/2" | 20" | 14 1/2" |
| Air column length | 31" | 41" | 59" | 40" |
| Low frequency cutoff | 200 cycles | 150 cycles | 120 cycles | 140 cycles |
| Rated coverage angle | 95° | 85° | 75° | 360° |
| Net weight (less driver) | 6 lbs. | 8 1/2 lbs. | 12 3/4 lbs. | 10 1/2 lbs. |
| Shipping weight | 7 3/4 lbs. | 12 3/4 lbs. | 19 1/2 lbs. | 14 1/2 lbs. |
| List Price | \$29.00 | \$34.50 | \$46.75 | \$47.00 |
| Net Each | 17.40 | 20.70 | 28.05 | 28.20 |



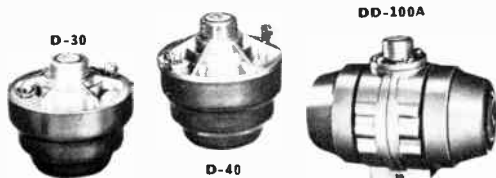
*T.M. Reg. Jensen Mfg. Co.

HYPEX* LIFETIME DRIVER UNITS

Jensen HypeX Lifetime Driver Units have many features which contribute to increased performance and reliability. As a result Lifetime Guarantee is extended against failure under normal conditions of use!

All driver units are threaded 1 3/8"-18 and may be used with all HypeX Projector Horns. They also make ideal replacements for other driver units, improving efficiency and power rating.

Specially shaped reinforced plastic diaphragms. Voice Coils are varnish wound and baked, resulting in a rigid assembly that is indestructible in normal use. Models D-40 and DD-100A have precision self-centering moving system assemblies. External leads connect to heavy binder screw terminals; strain reliefs on all units.



| Model | Power Rating† | Impedance | Frequency Range | Length | Diameter | Weight, lbs. Net | Shpg. | List Price | Net Each |
|---------|---------------|---------------|-----------------|--------|-----------------|------------------|-------|------------|----------|
| D-30 | 30 w. | 16 ohms | 75-7,000 cps | 4 1/2" | 4 1/2" | 3 3/4 | 3 1/2 | \$27.50 | \$16.50 |
| D-40 | 40 w. | 16 ohms | 75-10,000 cps | 4 1/2" | 4 1/2" | 4 | 4 1/2 | 36.00 | 21.60 |
| DD-100A | 100 w. | 12.5 50* ohms | 75-10,000 cps | 6 1/4" | 4 3/4" x 7 3/4" | 7 1/2 | 8 | 96.50 | 67.90 |

†Integrated speech and music program material. For sine wave or siren signal input, reduce ratings one-half. Ratings apply only for frequencies above horn cutoff. *Series connection (50 ohms) for direct connection to 70.7-volt line.

MODEL RT-20 RECTANGULAR HORN

These versatile horns may be used in a variety of ways to provide projector systems of almost any desired directional characteristics and total power rating. They may be used singly just as round horns are used and in such cases, the rectangular shape is frequently an advantage in appearance, minimizing obstruction to vision, and facilitating mounting.

RT-20 Horns are designed so that they may be stacked in plane or circular arrays. Eight units, each with a geometric sector angle of 45 degrees, form a complete circle with a diameter of 5' 9 1/2", giving 360° horizontal coverage. Fewer units are used where less than 360° coverage is required as indicated below:

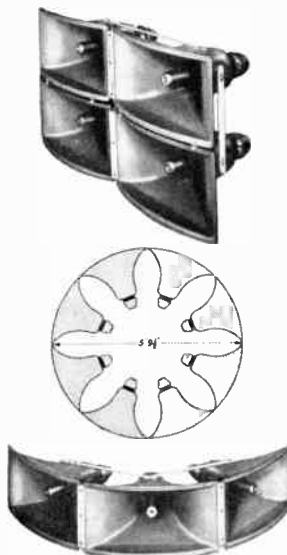
| Number of Units | Horizontal Coverage Angle |
|-----------------|---------------------------|
| 1 | 80° |
| 2 | 125° |
| 3 | 170° |
| 4 | 215° |
| 5 | 260° |
| 6 | 305° |
| 8 | 360° |

Horns may be "double decked," which will concentrate the sound in a narrower angle in the vertical plane. A stack two units high will give a vertical coverage angle of approximately 30 degrees; at the same time, there is a gain in sound pressure on the axis of 2.5 db, due to the restricted angle of radiation.

The horn is molded of high impact strength glass fibre reinforced polyester. Natural molded finish in Modern Tan color.

SPECIFICATIONS—RT-20

Mouth Size: 26" wide by 13 1/2" high.
 Horn Length, overall, less driver: 16 3/4".
 Air Column length: 41".
 Low Frequency cutoff: 140 cycles.
 Rated Coverage angle: 80° horizontal. (See data for arrays).
 Net Weight, less driver unit: 10 3/4 lbs.
 Shipping Weight: 15 lbs.
 RT-20—Horn only, List Price \$46.50
 Net Each \$27.90



ACCESSORIES

MA-1 PIPE ADAPTER

A sturdy malleable iron casting which bolts to the "U" bracket of HypeX* Projector Horns and provides 3/4" pipe thread for pipe mast mounting. Baked tan enamel finish. Net weight: 3/4 lb. Shipping Weight: 1 lb. MA-1—List Price \$2.30. Net Each \$1.38

MA-3 STACKING HARDWARE Complete set of hardware for joining two RT-20 horns side by side. Net weight: 2 3/4 lbs. Shipping Weight: 2 3/4 lbs. MA-3—List Price \$5.30. Net Each \$3.18

MA-4 STACKING HARDWARE Complete set of hardware for joining two RT-20 horns double decked. Net weight: 1 1/2 lbs. Shipping Weight: 2 lbs. MA-4—List Price \$4.60. Net Each \$2.76 *T. M. Reg. Jensen Mfg. Co.

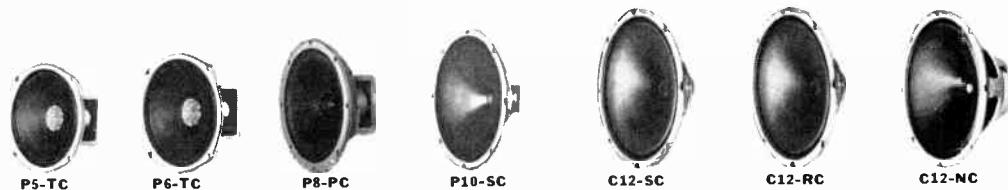
BV-1 BLAST VALVE



The BV-1 Blast Valve is an accessory device for protecting the driver unit from high pressures due to explosive forces. Valve is the same as used in Jensen military blastproof loudspeakers. Under the positive blast pressure phase, the valve moves inward to seal off the driver unit from the horn throat. On the negative phase the valve moves out-

ward, again effecting a seal. With the valve in neutral position, attenuation of sound is negligible. Screws between horn and driver unit. Overall diameter 3". Fits all Jensen driver units and horns. Net weight, 1/2 lb. Shipping Weight, 3/4 lb. BV-1—List Price \$15.00. Net Each \$9.00

Jensen Professional Series Speakers



EXTENDED RANGE HIGH FIDELITY LOUDSPEAKERS

Here is a complete line of unitary loudspeakers to complement the special group of 8-inch speakers designed especially for distributed sound. Same ruggedized construction with special weather and corrosion resistant techniques and materials. Suitable for all protected outdoor locations.

H-225C COAXIAL 2-WAY HIGH FIDELITY SPEAKER

H-225C is a coaxial 2-way assembly for high efficiency, controlled directivity applications typical of "live" auditoriums-control feedback with controlled angle of coverage! Extended range single-element designs from 5-inch to 12-inch size in choice of magnetic structure.



| Nominal Size | Model No. | Power Rating Watts | Magnet Wt., Oz. | Relative Loudness Efficiency | Imped., Ohms | V. C. Dia., Inches | Baffle Cutout Dia., in. | Overall Dia., Inches | Depth Inches | Ship. Wt., Lbs. | List Price | Net Each |
|--------------|-----------|--------------------|-----------------|------------------------------|--------------|--------------------|-------------------------|----------------------|--------------|-----------------|------------|----------|
| 12" | H-225C | 28 | 27½ | +6 db | 16 | 1½" | 10½" | 12½" | 7½" | 10½" | \$21.50 | \$48.90 |
| 12" | C12-NC | 20 | 27½ | +5½ db | 8 | 1½" | 10½" | 12½" | 5½" | 8½" | \$1.00 | 30.80 |
| 12" | C12-RC | 14 | 6.8† | +3 db | 8 | 1" | 10½" | 12½" | 4½" | 6" | 16.00 | 9.60 |
| 12" | C12-SC | 13 | 4.64† | +2 db | 8 | 1" | 10½" | 12½" | 4½" | 6" | 14.75 | 8.25 |
| 10" | P10-SC | 12 | 4.64 | +2 db | 8 | 1" | 8½" | 10½" | 4½" | 4" | 13.75 | 8.25 |
| 8" | P8-PC | 15 | 14.6 | +3½ db | 8 | 1½" | 6½" | 8½" | 4" | 5½" | \$1.80 | 19.05 |
| 6" | P6-TC | 7½ | 3.16 | 0 db | 4 | ¾" | 5½" | 6½" | 3½" | 2" | 8.50 | 4.89 |
| 5" | P5-TC | 6 | 3.16 | 0 db | 4 | ¾" | 4" | 5" | 2½" | 2" | 8.15 | 4.89 |

*Woofer only. †Syntox-6 ceramic magnet. All others DP-Alnico-5.



HF-100A



VH-91A



VR-11

JENSEN COMPLETE HYPEX* PROJECTORS

HF-100A WEATHERPROOF TWO-WAY HIGH FIDELITY PROJECTOR

Here is a real high fidelity projector for use indoors or out, under all weather conditions. Consists of a heavy duty 8" "woofer" feeding a folded horn plus a horn-loaded compression driver "tweeter". Low frequency unit feeds horn by a combination of direct radiation and phase-inversion bass reflex ports for superior efficiency in the low frequency region. The high frequency horn has a 90° fold and is mounted so that the driver unit is at the top, thus providing self-draining and making it impossible for rain, sleet or snow to reach the driver unit. Horn outer section is spun aluminum with baked enamel finish. Central enclosure is glass fibre reinforced polyester in matching natural molded Modern Tan finish. Sturdy "U" mounting bracket is fully adjustable and positive locking.

SPECIFICATIONS: HF-100A PROJECTOR

Type: Coaxial assembly of separate low and high frequency units.
 Frequency Range: 60 to 15,000 cycles.
 Power Rating: 25 watts.
 Impedance: 16 ohms.
 Rated Coverage Angle: 120°.
 Overall Diameter: 24¾".
 Overall Depth: 11½".
 Net Weight: 23 lbs.
 Shipping Weight: 30 lbs.
 HF-100A—List Price \$129.50. Net Each \$77.70

*T. M. Reg. Jensen Mfg. Co.

Jensen VH-91A and VR-11 Hypex* projectors are the most compact in the line and their use is indicated where speech reproduction is the only important consideration and where size or cost are controlling factors. Designed for maximum efficiency in the upper frequency range, these units provide excellent penetration of noise. Small in size, they can also be located near areas of extreme noise. Magnetic structures are highly efficient, using Alnico-5 magnets in ample soft iron structures. Corrosion-resisting finishes and materials such as plastic cloth base diaphragms insure long life under outdoor and industrial atmospheric conditions. For further protection driver units are completely enclosed inside the rigid outer shell.

MODEL VH-91A HYPEX* PROJECTOR

Equipped with new universal mounting bracket for adjustment in any direction and secure locking with a single wing nut. Extremely rigid vibration-proof clamping allows three hole flange mounting on flat surface, single hole mounting with ½" lag or machine screw through center, or mounting on top of standard ½" pipe.

MODEL VR-11 HYPEX* RADIAL PROJECTOR

For application requiring 360° coverage in horizontal plane, such as low ceiling industrial areas. Equipped with sturdy eye-bolt for clamping or suspension from above.

SPECIFICATIONS

| Model | Power Rating Watts | Impedance Ohms | L-F Range | Mouth Dia. Over All | Over All Lgth. | Air Column Path Lgth. | Rated Coverage Angle | Net Wt. Lbs. | Ship. Wt. Lbs. | List Price | Net Each |
|--------|--------------------|----------------|-----------|---------------------|----------------|-----------------------|----------------------|--------------|----------------|------------|----------|
| VH-91A | 15 | 8 or 45 | 300 | 8¾" | 7½" | 16" | 100° | 3¼ | 4¼ | \$35.80 | \$21.48 |
| VR-11 | 15 | 8 | 280 | 11" | 10¾" | 18" | 360° | 4 | 5 | \$35.80 | \$29.48 |

LEVEL CONTROLS

| Model No. | Impedance, Ohms | Power, Watts | Shipping Wt., Lbs. | Net Each |
|-----------|-----------------|--------------|--------------------|----------|
| ST-760 | 4 | 15 | 1 | \$2.91 |
| ST-276 | 8 | 15 | 1 | 1.95 |
| ST-837 | 16 | 35 | 1 | 3.45 |

These level controls are of the two-section L-pad type with practically constant input impedance for any knob position. Designed for use in voice coil or line circuits of similar nominal impedance. Provide continuously adjustable level without disturbance of other circuit levels or total impedance. Rugged construction with special alloy windings and solder lug terminals. Single-hole panel mounting. Complete with lock nut, small bakelite pointer knob and flat metal escutcheon plate.

Jensen Professional Series Speakers

AP-10



JENSEN SPEECH-MASTER LOUDSPEAKERS

JENSEN Speech-Master loudspeakers are specialized units designed for applications where highly intelligible speech reproduction is a prime requisite. Good basic design and sturdiness of construction as well as

pleasing appearance and functional styling are outstanding features of these units. All loudspeakers in this group use high efficiency direct radiator driver units of the permanent magnet type.

MODEL AP-10 SPEECH-MASTER

Attractively styled desk type unit. Heavy cast base with felt pad. Specially designed for superior intelligibility in the presence of static and acoustic background noise. Excellent "talk-back" characteristics. Driver Unit, a sturdy 5" speaker, fully enclosed with protective front screen. Mounting facility for 1/2" x 1/2" transformer (inside cover) locking tilt adjustment. Power rating, 5 watts maximum speech signal. 36" rubber cable. 6 3/4" H.; 5 3/4" D.; 5" W. Gray Hammer finish. Shipping Weight 5 1/4 lbs.
ST-590, 3-4 ohms. List Price \$22.00. Net \$13.20
ST-591, 45-50 ohms. List Price \$23.00. Net 13.80

MODEL RK-61 "CORRIDOR" SPEECH-MASTER

Designed for two-direction sound in corridor or office. Heavy steel case perforated on both sides for high quality speech coverage in both directions protected heavy duty 6" loudspeaker driver unit. Sturdy mounting bracket welded to case provides flexibility in installation. Standard 3/4" conduit (not supplied) can be used. 24" heavy SJ cable for connections. Transformers up to 3/4" x 3/4" mount on speaker frame inside case. Excellent "talk-back" characteristics. Quality on music is also acceptable for many areas. Power rating 8 watts. Case diameter 8"; thickness 3 1/4"; overall distance from wall 9 3/4". Modern Tan finish.
ST-850, 3-4 ohms. List Price \$15.00. Net \$9.00



RK-61

MODEL P5-VC SPEAKER

This loudspeaker is offered for installation in radio communications, intercom and paging equipment. May be panel mounted, wall mounted or installed in a small case as required with excellent results. Pro-

vides the performance of the AP-10 Speech-Master in your equipment. Power rating, 5 watts. Depth, 2 1/4"; OD, 5"; baffle opening 4"; Shipping Weight 1 lb.
ST-916, 3-4 ohms. List Price \$5.30. Net \$3.18

P5-VC



JENSEN PROFESSIONAL SERIES TRANSFORMERS

CONSTANT VOLTAGE TRANSFORMERS

These transformers are designed especially for the distribution systems commonly referred to as 70-volt constant voltage systems. They are designed to draw a predetermined amount of power from a 70-volt line as indicated in the tables. All are mountable in W-1 Weatherproof Transformer Case.

Models ZC-100, ZC-200, ZC-300, and ZC-400 are equipped with terminal board with pin jack adjustment for the desired input power. Heavy duty screw terminals are provided for speaker and line connection. Completely impregnated and dip processed for operation in outdoor and industrial atmospheres.

Model ZC-3514 is similar except color coded pigtail leads replace the terminal board. Non-weatherproof, recommended for indoor and less severe locations.

Models 25CV4 and 70CV4 are especially designed for direct attachment on distributed sound direct radiator loudspeakers. Primary center-tapped for balanced and special input circuits. All terminals are lugs for unique Jensen KWIKON® instant connectors. Speaker-to-transformer leads provided.

ADJUSTABLE IMPEDANCE TRANSFORMERS

The Type ZY adjustable impedance transformers have long been popular for use on 500-ohm line systems. Equipped with sturdy terminal board with pin jack adjustment of impedance. Type ZL transformers are similar except for solder lug terminals for impedance adjustment and pig-tail secondary leads. Vacuum wax impregnated for general purpose applications. Can be installed in Model W-1 Weatherproof Transformer Case.

TYPE "Z" TRANSFORMERS

Model Z-3422 is a high fidelity autotransformer for interconnecting 4, 8 or 16 ohm circuits. Model Z-3345 is particularly designed to properly match 8 ohm loudspeakers and projectors to 45-50 ohm intercommunication systems. Vacuum wax impregnated and mountable in Model W-1 Weatherproof Transformer Case.

| Model No. | Nom. Core Size | Input Power, Watts | Input Impedance, Ohms | Sec. Imped., Ohms | Mtg. Centers | Shipping Wt., Lbs. | List Price | Net Each | Net Each In 50-Pack |
|-----------|-----------------|--------------------|--------------------------|-------------------|--------------|--------------------|------------|----------|---------------------|
| 25CV4 | 3/4" x 3/4" | 4 2/1 1/4 1/4 1/4 | 156 313 625 1250 2500 5K | 8 | 2 3/4" | 9 oz. | \$ 4.75 | \$2.85 | \$2.57 |
| 70CV4 | 1" x 1" | 4 2/1 1/4 1/4 1/4 | 1250 2500 5K 10K 20K 40K | 8 | 2 3/4" | 9 oz. | 4.75 | 2.85 | 2.57 |
| ZC-100 | 1" x 1" | 30 15 7 1/2 | 167 333 667 | 16 8 4 | 3 3/8" | 2 lbs. 5 oz. | 11.50 | 6.90 | ..... |
| ZC-200 | 1" x 1" | 25 10 5 | 200 500 1000 | 16 8 4 | 3 3/8" | 2 lbs. 5 oz. | 13.00 | 7.80 | ..... |
| ZC-300 | 3/4" x 3/4" | 20 10 5 | 250 500 1000 | 16 8 4 | 3 3/8" | 1 lb. 6 oz. | 9.65 | 5.79 | ..... |
| ZC-400 | 3/4" x 3/4" | 5 2 1/2 1 1/4 | 1000 2000 4000 | 16 8 4 | 2 3/4" | 9 oz. | 7.00 | 4.20 | ..... |
| ZC-3514 | 1" x 1 1/4" | 16 8 4 2 | 313 625 1250 2500 | 16 8 | 2" x 2" | 3 lbs. | 13.00 | 7.80 | ..... |
| ZL-2021 | 1 1/2" x 1 1/2" | 3 1/2 | 500/1000/1500/2000 | 4 | 2" | 5 oz. | 3.75 | 2.25 | ..... |
| ZL-2022 | 3/4" x 3/4" | 6 1/2 | 500/1000/1500/2000 | 8 | 2 1/4" | 6 oz. | 4.65 | 2.79 | ..... |
| ZY-2002 | 3/4" x 3/4" | 10 | 500/1000/1500/2000 | 8 | 2 1/4" | 6 oz. | 8.25 | 4.95 | ..... |
| ZY-2003 | 3/8" x 3/8" | 16 | 500/1000/1500/2000 | 8 | 3 1/4" | 1 lb. 6 oz. | 9.92 | 5.95 | ..... |
| ZY-2005 | 1" x 1" | 25 | 500/1000/1500/2000 | 8 | 3 1/4" | 2 lbs. 5 oz. | 11.85 | 7.11 | ..... |
| ZY-4002 | 3/4" x 3/4" | 6 1/2 | 500/1000/1500/2000 | 4 | 2 1/4" | 6 oz. | 6.15 | 3.69 | ..... |
| ZY-4004 | 3/4" x 3/4" | 10 | 500/1000/1500/2000 | 4 | 2 1/4" | 1 lb. | 8.25 | 4.95 | ..... |
| ZY-4005 | 3/4" x 3/4" | 6 1/2 | 500/1000/1500/2000 | 8 | 2 3/4" | 6 oz. | 6.15 | 3.69 | ..... |
| Z-3345 | 3/4" x 3/4" | 6 1/2 | 45-50 | 8 | 2 1/4" | 6 oz. | 3.25 | 1.95 | ..... |
| Z-3422 | 1" x 1" | 25 | 4/8 16 | 8 | 3 1/4" | 2 lbs. 3 oz. | 11.59 | 6.95 | ..... |

MODEL W-1 WEATHERPROOF TRANSFORMER CASE

Thoroughly weatherproof for permanent outdoor installations for maximum protection to transformers. Designed for upright mounting on Jensen HYPLEX® horns, on pipe, or screw mounting to side wall or other flat surface. Accommodates transformers of core sizes 3/4" x 3/8" to 1" x 1" with maximum transformer height of 4". Cast aluminum base and spun aluminum cover with bayonet locking. Net Weight 1 lb., shipping weight 1 1/4 lbs.

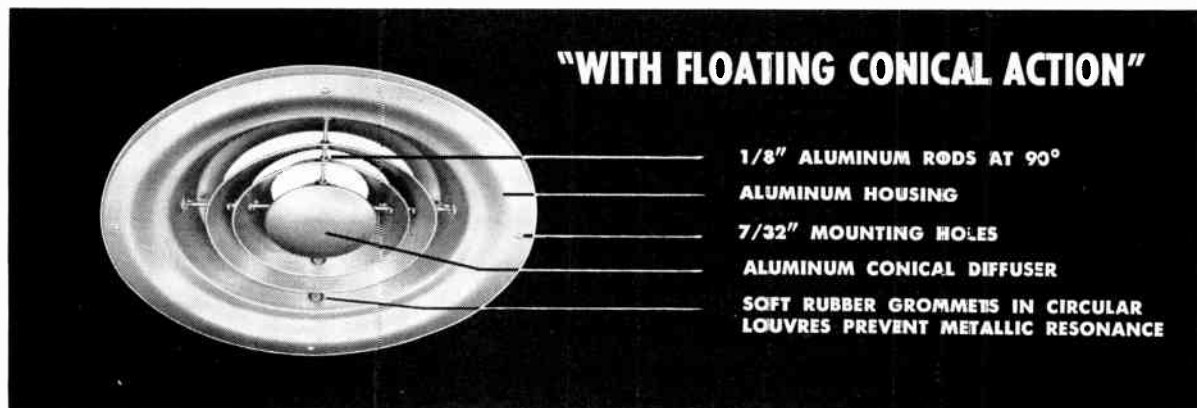
W-1. List Price \$10.50. Net Each \$6.30

*T.M. Reg. Jensen Mfg. Co.



LOWELL STL SERIES

New Low Ceiling Type Baffles



Patented in U.S.A. and Canada

| Model No. | Speaker Size | Will Mount to |
|-----------|--------------|----------------------------|
| STL-6 | 6" | CP8, XCP8, PR8 |
| STL-7 | 7" | STP8, XSTP8, XSTPR8 |
| STL-8 | 8" | STP8, XSTP8, XSTPR8 |
| STL-10 | 10" | STP1012, XSTP1012, XSTPR12 |
| STL-12 | 12" | STP1012, XSTP1012, XSTPR12 |

grommets. Baffles are coated with clear lacquer which also serves as prime coat for on-the-job painting. Wide choice of colored lacquer finishes available on request.

Shipped complete with hardware and instructions for mounting to Lowell Protective Speaker Enclosures illustrated.

These new, unusual additions to the Lowell line of speaker baffles are top quality heavy 18 gauge spun aluminum in a buffed satin finish. Designing assures controlled 360° dispersion of undistorted sound. Echo and feedback are at the minimum. Louvres and conical diffuser "float" on very small soft rubber

From architecture to acoustics, Lowell STL series meets every requirement — in ultra-modern design . . . for even, undistorted low-level sound distribution throughout 360°. Recommended baffle placement is usually 25' from center to axis. Where straight line placement is impossible, triangulating the baffles in the ceiling is highly effective.

STP SERIES



XSTP SERIES



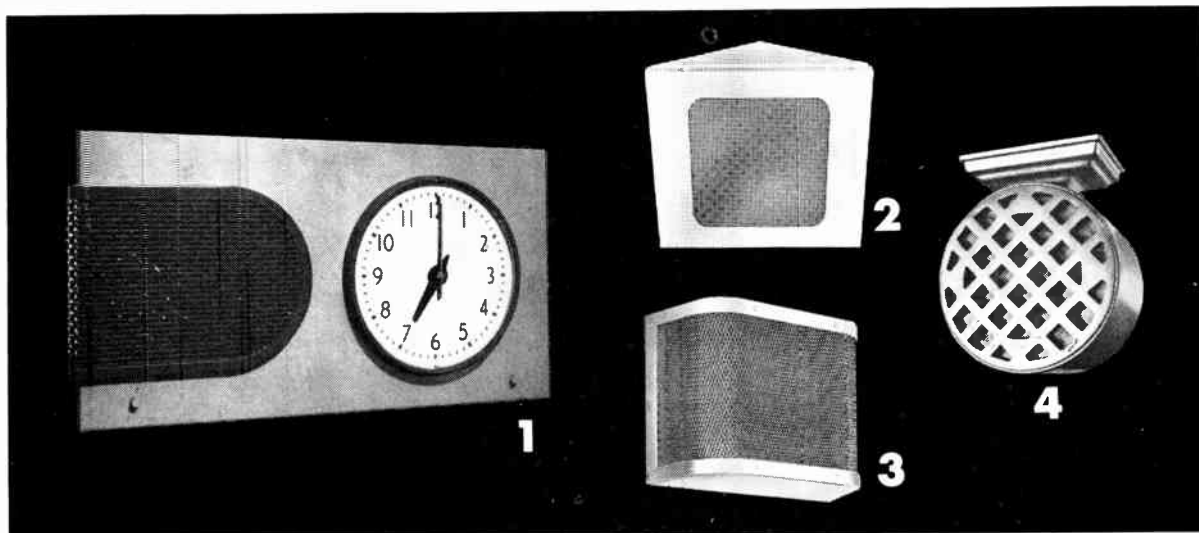
XSTPR SERIES



HEARD EVERYWHERE
Lowell

MANUFACTURING COMPANY

LOWELL SPECIAL APPLICATIONS



1. LOWELL SC SERIES

Designed as a single unit clock and speaker system, the LOWELL Model SC-100 simplifies installation and maintenance. Fire alarm and civil defense warning equipment may also be incorporated in this unit.

Both the clock and speaker are mounted to the front panel. The front panel is hinged at the top, providing quick access to the interior of the unit without disassembling.

LOWELL model SC-100 will mount a variety of standard classroom clocks smaller than 12 inch sizes. Please order 12 inch size special.

Shipped complete with all mounting hardware. Colors are contrasting light and dark grey.

2. MODEL LI-8, a new steel corner speaker baffle, especially suited for use in schools, restaurants, offices or wherever an attractive corner installation is desired. Grille, corner adaptor, mounting bracket and hardware packed unassembled. Desert Sand finish.

3. THE 'DRAMATONE' BASS REFLEX WALL BAFFLE

Especially designed for installations where a modern trend is desired. Beautiful plastic grille cloth mounted directly in back to conceal the loudspeaker. Baffle operates with a bass reflex principle. Interior completely lined with jute to prevent metallic resonance.

4. HEAVY-DUTY PENAL INSTITUTIONAL BAFFLE

Bi-directional type mounts to any standard single or double electrical outlet box. Tamper-proof machine screws, which fasten the baffle together, cannot be removed without a special screwdriver. Rugged construction withstands severe punishment. Both speaker face plates are covered from behind with perforated metal to prevent sharp objects from piercing the speaker cone.

The entire baffle is prime coated and finished in silver grey hammertone.

Order screwdriver with 6-32 and 8-32 tip.

SPECIFICATIONS

Model SC-100 front panel is 25 $\frac{3}{4}$ " x 13" x 1", made of 18 gauge steel painted light gray. The speaker grille is made of 22 gauge steel painted dark gray. The protective enclosure is 24" x 12" x 3", made of 18 gauge steel painted with zinc chromate to prevent rust and undercoated to prevent resonance. It contains twelve $\frac{1}{2}$ ", $\frac{3}{4}$ ", 1" and 1 $\frac{1}{2}$ " conduit knockouts.

MODEL LI-8

Any standard 8" speaker mounts to grille by means of four lugs welded to rear of grille. Dimensions overall: 13 $\frac{1}{4}$ " wide, 11 $\frac{1}{2}$ " high.

'DRAMATONE' BASS REFLEX WALL BAFFLE

DIMENSIONS: 13 $\frac{3}{4}$ " x 5 $\frac{3}{8}$ " depth x 9 $\frac{3}{4}$ " height.

MODELS: DD6-A
DD7-A
DD8-A

PENAL INSTITUTIONAL BAFFLE

| MODELS | SPEAKER SIZE |
|--------|--------------|
| BRLK-5 | 5" |
| BRLK-6 | 6" |
| BRLK-7 | 7" |
| BRLK-8 | 8" |

Model RLK series is very similar to Model BRLK with the exception that these models do not have a cradle base. Mount to ceiling or wall or standard electrical outlet boxes.

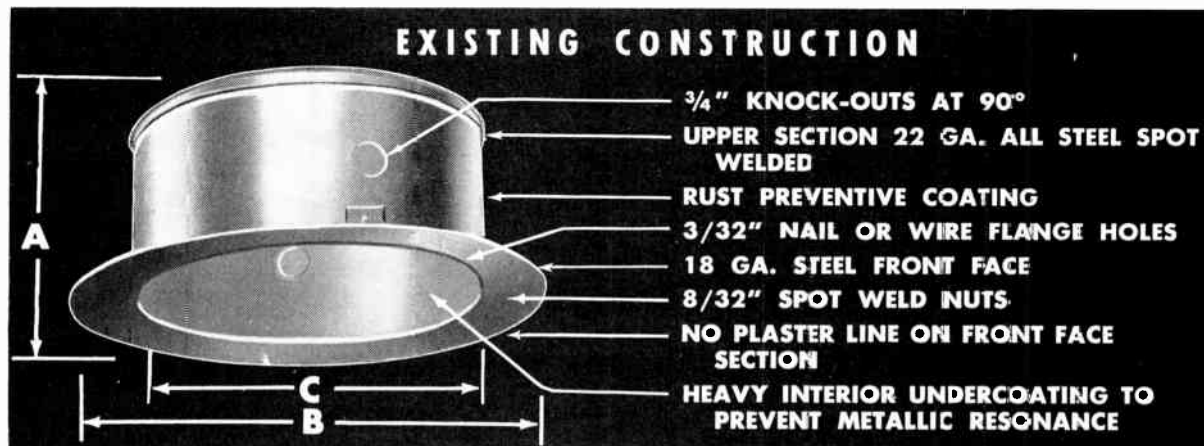
| MODELS | SPEAKER SIZE |
|--------|--------------|
| RLK-5 | 5" |
| RLK-6 | 6" |
| RLK-7 | 7" |
| RLK-8 | 8" |

NOTE: Order only by model numbers.

HEARD EVERYWHERE
Lowell MANUFACTURING COMPANY

LOWELL XCP SERIES

Back Cover Protective Speaker Enclosure



| Model | A | B | C | Speaker Size Accommodation |
|----------|---------|---------|---------|----------------------------|
| XCP6 | 4" | 10 1/4" | 7 3/8" | 6" |
| XCP8 | 2 1/2" | 11 3/4" | 8 1/2" | 8" |
| XCP8 | 4 1/4" | 11 3/4" | 8 1/2" | 8" |
| XCP8 | 7" | 11 3/4" | 8 1/2" | 8" |
| XCP8 | 10" | 11 3/4" | 8 1/2" | 8" |
| XCP1012 | 7" | 16" | 12 3/8" | 10" & 12" |
| XCP15 | 10 3/4" | 21 1/4" | 14 3/8" | 15" |
| XSTP8 | 7" | 13 3/4" | 12 1/2" | 8" |
| XSTP1012 | 10" | 17 1/2" | 14 1/2" | 10" & 12" |

USES: Designed for quick labor-saving wall or ceiling installation of sound systems in EXISTING CONSTRUCTION, ready for plastering.

DESCRIPTION: All-steel, spot-welded construction of heavy 22 ga. metal complete with plaster ring attached. 1/2" and 3/4" knockouts at 90°. Rust preventive coating on exterior. Very heavy undercoating on interior to prevent metallic resonance. Sufficient speaker back pressure relief assures high speaker efficiency. Excellent for high fidelity installations. Complete mounting hardware and mounting instructions furnished to meet problems of various types of installations.

Note: Special overall depths (where space in walls and ceilings allow) and additional "loading" may be ordered at slightly higher price.

IMPORTANT: When mounting back enclosures in wall or ceiling for slip fit, cut hole to following size in diameter as per model ordered and nail to lath:

Model XCP6—7 1/4" dia. Model XCP15—14 3/4" dia.
 Model XCP8—8 3/8" dia. Model XSTP8—12 5/8" dia.
 Model XCP1012—12 3/8" dia. Model XSTP1012—14 1/8" dia.

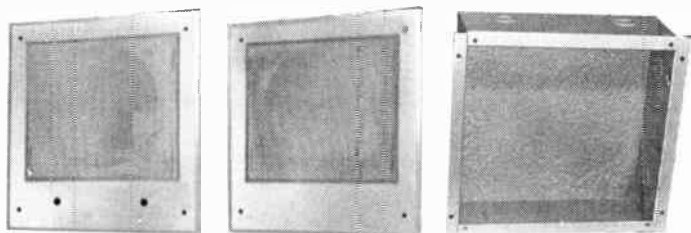
FOR SUSPENDED CEILING:

Mount XCP Series back enclosures to Model SS24 or 48 Steel Support Channels for positive strength.

FEATURES: Protects speaker cone from fire, falling mortar and dust. Prevents rodents from damaging speaker cone. Easily serviced without damage to wall or ceiling. Installation time reduced.

Speaker Baffles That Will Mount to XCP Series Protective Speaker Enclosures:

| Enclosure Model No. | Speaker Baffle Model No. |
|---------------------|--|
| XCP6 | AL6-A, R55-A, R56-A, |
| XCP8 | AL7-A, AL8-A, R57-A, R58-A, CE, JG8, M-8, P58, STL6 |
| XSTP1012 | AL10-A, AL12-A, R510-A, R58T2-M, AL812-M, R512-A, JG12 |
| XCP15 | AL15, R515-A |
| XSTP8 | STL8 |
| XCP1012 | STL10 STL12 |



MODEL MTH-8

MODEL MT-8

MODEL P104X

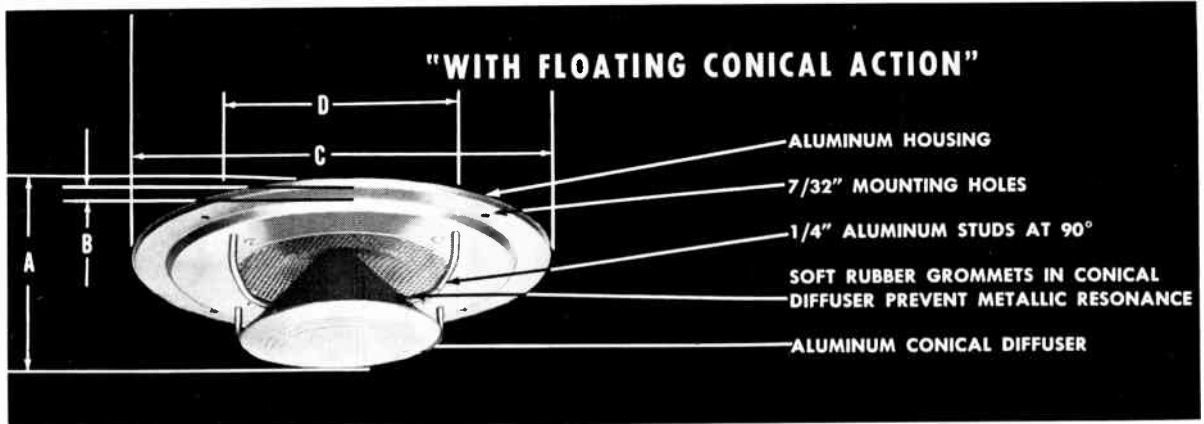
NEW HOTEL/MOTEL SPEAKER GRILLES

Designed for wall mounting, these distinctive grills are ideal for motel and hotel installations. Constructed of 18 gauge steel, they will accommodate 8" speakers. They will mount easily to Lowell enclosure P104X.

HEARD EVERYWHERE
Lowell MANUFACTURING COMPANY

LOWELL AL SERIES

Flush Mounting Low Ceiling Baffles



Patented in U.S.A. and Canada

| Speaker Baffle Model | Size Speaker Accommodated | Mount to Speaker Enclosure Models | Dimensions | | | | Baffle Flange | No. of Flange Mtg. Holes | Dia. of Required Hole in Ceiling | Weight (lbs.) | | No. per Shipping Carton |
|----------------------|---------------------------|-----------------------------------|------------|------|---------|---------|---------------|--------------------------|----------------------------------|---------------|-------|-------------------------|
| | | | A | B | C | D | | | | Net | Shpg. | |
| AL6-A | 6" | CP6, XCP6, PR6 PS | 2 1/2" | 1/2" | 10 3/4" | 5 1/4" | 1" | 4 | 7" | 1/2 | 3/4 | 12 |
| AL7-A | 7" | CP8, XCP8, PR8 PS | 2 1/2" | 1/2" | 12 3/8" | 5 1/4" | 1" | 4 | 8 1/2" | 3/4 | 1 | 15 |
| AL8-A | 8" | CP8, XCP8, PR8 PS | 2 1/2" | 1/2" | 12 3/8" | 6 3/8" | 1" | 4 | 8 1/2" | 3/4 | 1 | 15 |
| AL10-A | 10" | CP1012, XCP1012 PR10 | 3" | 1/2" | 16 7/8" | 8 1/2" | 1" | 4 | 13" | 1 | 1 1/2 | 6 |
| AL12-A | 12" | PR12, CP1012, XCP1012 | 3" | 1/2" | 16 7/8" | 10 3/8" | 1" | 4 | 13" | 1 | 1 1/2 | 6 |
| AL15-A | 15" | PR15, XCP15 CP15 | 5" | 2" | 21 3/4" | 13" | 1 3/4" | 8 | 15 1/2" | 3 | 3 1/2 | 1 |
| AL812-M | 8" | PR12, CP1012 XCP1012 | 2 1/2" | 1/2" | 16 7/8" | 6 1/4" | 2" | 4 | 8 1/2" | 3/4 | 1 | 6 |

Top quality, heavy gauge satin finished spun aluminum. Assures controlled 360° diffusion of undistorted "ear-level" sound with minimum of echo and feedback. Conical diffuser "floats" on soft rubber grommets forming a press fit to aluminum support studs which thread to speaker housing ring. Clear lacquer coating also serves as prime coat for on-the-job painting. Wide choice of colored lacquer finishes available on request. Shipped complete with hardware for mounting to Lowell Protective Speaker Enclosures illustrated.

360° Coverage Low "Ear-Level" Sound

Even undistorted sound. Recommended baffle placement 25' from center of axis. Where straight line placement is impossible, triangulating baffle in ceiling is highly effective.

CP SERIES



XCP SERIES



PR SERIES



P875X ENCLOSURE



HEARD EVERYWHERE
Lowell MANUFACTURING COMPANY

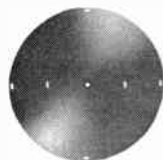
SURFACE MOUNTING CEILING BAFFLES

"WITH FLOATING CONICAL ACTION"



| Model No. | Speaker Size | A | B | C | Will Mount To |
|-----------|--------------|--------|--------|---------|---------------|
| BL6-A | 6" | 7 1/4" | 4 1/4" | 12 3/8" | PL6 |
| BL7-A | 7" | 8 1/8" | 5" | 14 3/4" | PL7 |
| BL8-A | 8" | 8 1/8" | 5" | 14 3/4" | PL8 |
| BL10-A | 10" | 9 1/4" | 6 3/4" | 18 5/8" | PL10 |
| BL12-A | 12" | 9 1/4" | 6 3/4" | 18 5/8" | PL12 |

GENERAL INFORMATION: Designed for surface mounting constructed of heavy gauge aluminum. Accurately engineered for normal ceiling sound reinforcement. Perfect speaker cone loading holds feedback to minimum. Exclusive "Floating Conical Action" assures controlled 360° sound coverage. High frequency diffuser supported to housing by four 1/4" aluminum studs and threaded on one end mounted to housing. Press fit to diffuser through soft rubber grommets prevents metallic resonance. Recommended placement of baffles under normal ceiling heights is 25' off center of axis in straight line placement. All models finished in brushed satin and coated with colorless lacquer. Acts as excellent base coat or primer for on-the-job painting. All models available in colored lacquers at slightly higher price. Complete information on request.



PL Series Steel Discs for mounting BL Series to concrete ceilings. Heavy 18 gauge steel. All holes punched for standard electrical outlet boxes.

TYPE RS recessed wall type directional speaker baffles



TYPE RS RECESSED WALL TYPE DIRECTIONAL SPEAKER BAFFLES:

Excellent speaker trim for modern installations. Especially recommended for Dress Shops, Department Stores, Night Clubs. Provides concealment of speaker. Easily installed.

DESCRIPTION: Made of aluminum with 1/2" mounting flange. Standard finish — satin-aluminum. Improved one-piece construction. Four screws are supplied to mount speaker. Mounts to LOWELL TYPE CP or XCP enclosures where speakers must be protected. The RS7-a, RS8-a, RS10-a and RS12-a are now one-piece construction.

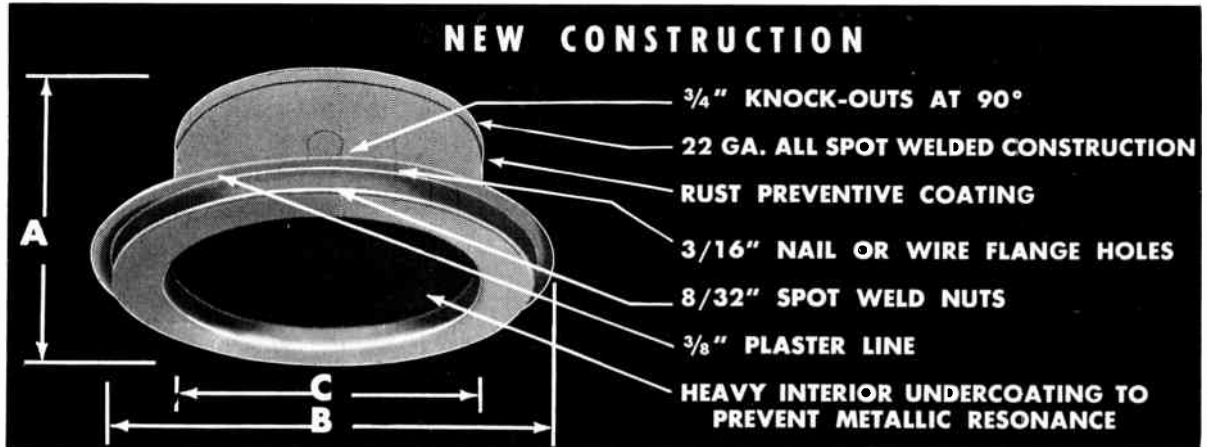
| Model No. | Speaker Size | Dimensions | Wall Hole Size |
|---------------------|--------------|-----------------------------|----------------|
| RS4-A | 4" | 7 1/2" dia. x 7'16" depth | 5" dia. |
| RS5-A | 5" | 10 3/4" dia. x 7'16" depth | 7" dia. |
| RS6-A | 6" | 10 3/4" dia. x 7'16" depth | 7" dia. |
| *RS7-A | 7" | 12 3/8" dia. x 7'16" depth | 8 1/2" dia. |
| RS812-M | 8" | 16 7/8" dia. x 1'2" depth | 8 1/2" dia. |
| RS8-A | 8" | 12 3/8" dia. x 1'2" depth | 8 1/2" dia. |
| RS8-A (1 1/2" deep) | 8" | 12 3/8" dia. x 1 1/2" depth | 8 1/2" dia. |
| RS10-A | 10" | 16 7/8" dia. x 1'2" depth | 12 1/2" dia. |
| RS12-A | 12" | 16 7/8" dia. x 1'2" depth | 12 1/2" dia. |
| RS15-A | 15" | 21 3/4" dia. x 3" depth | 17" dia. |

* For RCA 7" Accordion Speaker. Information on colored lacquer furnished on request for both models.

HEARD EVERYWHERE
Lowell MANUFACTURING COMPANY

LOWELL CP SERIES

Back Cover Protective Speaker Enclosure



| Model | A | B | C | Speaker Size Accommodation |
|---------|--------|---------|---------|----------------------------|
| CP6 | 4" | 11 1/4" | 7" | 6" |
| CP8 | 2 1/2" | 13 1/8" | 8 1/2" | 8" |
| CP8 | 4 1/2" | 13 1/8" | 8 1/2" | 8" |
| CP8 | 7" | 13 1/8" | 8 1/2" | 8" |
| CP8 | 10" | 13 1/8" | 8 1/2" | 8" |
| CP8 | 12" | 13 1/8" | 8 1/2" | 8" |
| CP1012 | 7" | 17 1/8" | 12 1/2" | 10" & 12" |
| CP15 | 11" | 21 1/2" | 14 5/8" | 15" |
| STP8 | 7" | 14 7/8" | 12 3/8" | 8" |
| STP1012 | 10" | 18 7/8" | 14 3/4" | 10" x 12" |

USES: Designed for quick, labor-saving wall or ceiling installation of sound systems in NEW CONSTRUCTIONS, ready for plastering.

DESCRIPTION: All-steel, spot-welded construction of heavy 22 ga. metal complete with plaster ring attached. 3/4" and 1/2" knock-outs at 90°. Rust preventive coating on exterior. Very heavy undercoating on interior to prevent metallic resonance. Sufficient speaker back pressure relief assures high speaker efficiency. Excellent for high fidelity installations. Complete with mounting hardware and mounting instructions to meet problems of various types of installation.

Note: Special overall depths (where space in walls and ceilings allow) and additional "loadings" may be ordered at slightly higher price. Available with removable cylinder and stationary front plaster ring in adjustable face models—DCP series.

IMPORTANT: When mounting back enclosures in wall or ceiling for slip fit, cut hole to following size in diameter as per model ordered and nail to lath.

Model CP6—7" dia.

Model CP15—14 3/4" dia.

Model CP8—8 1/2" dia.

Model STP8—12 1/2" dia.

Model CP1012—12 1/2" dia.

Model STP1012—14 1/2" dia.

FOR SUSPENDED CEILINGS:

Mount CP Series back enclosures to Model SS 24 or 48 Steel Support Channels for positive strength.

FEATURES: Protects speaker cone from fire, falling mortar and dust. Prevents rodents from damaging speaker cone. Easily serviced without damage to wall or ceiling. Reduces installation time.

Speaker Baffles That Will Mount to CP Series Protective Speaker Enclosures:

| Enclosure Model No. | Speaker Baffle Model No. |
|---------------------|--|
| CP6 | AL6-A, R55-A, R56-A |
| CP8 | AL7-A, AL8-A, R57-A, R58-A, JG8, M-8, P58, STL6 |
| CP1012 | AL10-A, AL12-A, R510-A, R512-A, JG12, R5812-M, AM812-M |
| CP15 | AL15, R515-A |
| CTP8 | STL8 |
| STP1012 | STL10, STL12 |

AL SERIES



RS SERIES



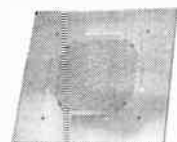
JG SERIES



M SERIES



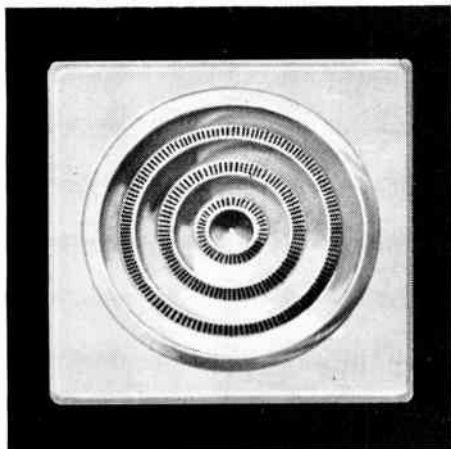
YM8-A CEILING BAFFLE (for Acoustic Tile Ceilings)



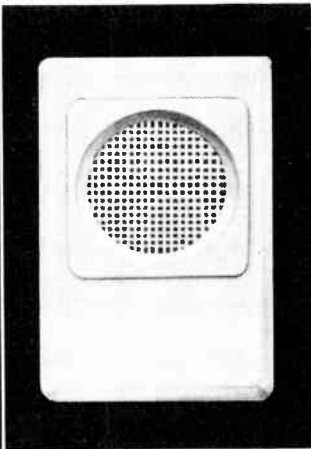
HEARD EVERYWHERE
Lowell MANUFACTURING COMPANY

LOWELL 'COLORAMIC' PLASTIC BAFFLES

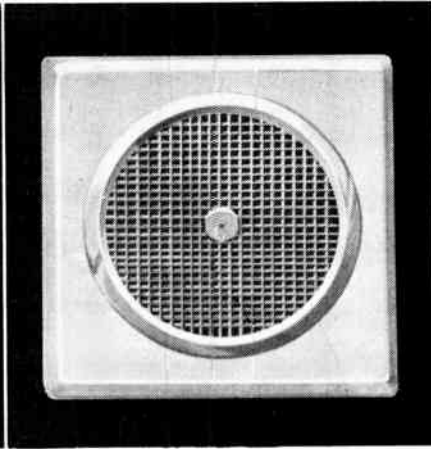
NEW IN-CEILING AND IN-WALL INTER-COM BAFFLES



MODEL ADS80-P



MODEL L35-P



MODEL CR80-P

Acclaimed for New Sound Fashion . . . New Sound Fidelity!

Here is the complete merger of beauty and unique design! Lowell "Coloramic" Baffles are new, lightweight, precision-designed, acoustically perfect, sound projecting baffles deftly molded of amazingly effective HT-88 High-Impact Styrene*

FOR EFFECTIVE USE *EVERYWHERE!*
HOSPITALS • SCHOOLS • PUBLIC BUILDINGS
HOMES • SHIPS • PLANES

'Coloramic' Baffles by Lowell offer complete ease of installation . . . respond to any good Latex spray or paint treatment . . . fit flush in ceilings or walls. Their practical, pleasant room-filling qualities make them the ultimate for low-level, ear-level sound. Inter-Com applications are equally as distinct!

'COLORAMIC' IN-WALL INTER-COM BAFFLE— MODEL L35-P

Highest grade Styrene will not chip or warp. Sound installers never worry about holes lining up . . . mounting holes are always true! Color runs completely through the material and may be painted with any good Latex paint. Available in rich looking neutral colors of White or Beige. Accommodates a 3½" speaker.

'COLORAMIC' IN-CEILING LOW-LEVEL SOUND BAFFLE—MODEL ADS80-P

Ruggedly constructed of High-Impact Styrene material for strength and durability. By means of unique slots located in the circular deflectors in the grille, complete 360° sound dispersion is attained. Thus the best possible sound reproduction is accomplished! This dramatic model gives long, long years of dependable service! White or Beige.

'COLORAMIC' IN-CEILING LOW-LEVEL SOUND BAFFLE—MODEL CR80-P

New and different! The 60% greater opening in the grille affords the best possible sound reproduction. May be sprayed or painted with any good Latex paint. Its beautiful sound qualities equal the beauty of its outward appearance. White or Beige.

'COLORAMIC' ON-WALL
BASS REFLEX BAFFLE—
MODEL EHF 80-P
Unique speaker-mounting facilities accommodate a 6", 7" or 8" speaker. Special bracket included permits mounting baffle directly to single or two-gang electrical outlets. Made of HT-88 High Impact Styrene.



*Research & Development by Monsanto Chemical Co., Inc.

SPECIFICATIONS

MODEL ADS80-P—
Ceiling Baffle
DIMENSIONS: 10" x 10"
WEIGHT: 5½ oz.
COLOR: White or Beige
Mounts to P875X Speaker Box.
MODEL L35-P—
Inter-Com Baffle
DIMENSIONS: 7" x 4½"
WEIGHT: 1¾ oz.
COLOR: White or Beige
Mounts to durable speaker

box, Model P22X.
MODEL CR80-P—
Ceiling Baffle
DIMENSIONS: 10" x 10"
WEIGHT: 5½ oz.
COLOR: White or Beige
Mounts to P875X Speaker Box.
MODEL EHF80-P—
Wall Baffle
DIMENSIONS: 13" w. x
11½" h. x 6¼" d.
COLOR: Beige

HEARD EVERYWHERE
Lowell MANUFACTURING COMPANY

MURDOCK HEADPHONES



P-23 Aviation Headphone
C.A.A.T.C. 1200

Specifications:

Receivers: "Solid-Built" type. Best quality Alnico magnets. Moulded bakelite coil forms impregnated to resist moisture. Moulded bakelite case and cap. Standard impedance 600 ohms. Lightweight sponge rubber cushions.

Headband: All metal parts stainless steel and passivated to prevent corrosion. Headband and earphones are easily adjusted by cleverly designed guide and plate.

Cord: Phones connected within band, making a single cord to instrument panel. Standard set has 5 foot plastic-covered tinsel cord with phone plug attached.

LIST \$12.00



No. 131 "CW" Designed
for Code Communication

Specifications:

Receivers: Same "Solid-Built" construction as P-23. Standard impedance 10,000 ohms. Equipped with wafer-thin rubber cushions.

Headband: Double stainless steel bands with plastic covering. Stainless steel guides and yokes permit adjustment on vertical and horizontal planes.

Cord: Six foot Y type plastic-covered tinsel cord with phone plug attached.

LIST \$12.00



Type P-50 Headset

Specifications:

Receiver: Type C-57. Flat response from 300 to 4,000 cycles. Total deviation less than 8DB. Minimum output 105DB at 1,000 cycles with one milliwatt constant power. Moisture and tamper proof. Concave cap to fit the ear eliminates use of cushions. Units meet the following specifications: MIL-E 17884-A and Radio Commission for Aeronautics Paper 257-58/DO-90. Approved for use on all Civil Aircraft of United States Registry T.S.O. C-57.

Headband: Type HB-75B.

Comments: Cushions are optional.

LIST \$17.00



Type 171 Headset
Language Lab

Specifications:

Receiver: Type M67 — extremely lightweight, approximately 1 ounce, wide response, moisture and tamper proof—ideal for language lab use.

Headband: HB-75.

Cord: Unique new design—designed for rough handling yet can be replaced in minutes—molded plugs and strain relief.

LIST \$20.00



Magnetic
Underpillow Speaker

Specifications:

Speaker: Rugged, durable bakelite case in walnut or gray finish. 3 1/2" diameter. Alnico V magnet.

Cord: Six foot plastic extension cord and phone plug. Mounting jack supplied with switch in jack. Available in impedances from 5 ohms to 10,000 ohms or higher.

LIST \$10.95



Type 181 Headset
Language Lab

Specifications:

Receiver: Type M67—see headset #171.

Headband: Stainless steel band covered with vinyl plastic. Guides and yokes are brass nickel plated.

Cord: Same new design as on headset #171 off-the-shoulder type for ease in writing. All molded design with easy replacement feature.

LIST \$18.00

HEADSET impedances are available up to 17,000 ohms. Cotton-covered or other special cords and special terminals are available to meet individual requirements.

Write today for complete information and FREE CATALOG.

Military Headphones and Accessories

Headset HS-33-A Headset NT 49985A Headset H-32/U
Headset HS-16-A Cushion MC-162 Cushion MC-162-A
Headband HB-7 Headband NT 49028 Receiver ANB-H-1
Receiver NT 49016-A



THE MURDOCK CORPORATION
Chelsea, Mass.

STANDARD REPLACEMENT SPEAKERS

| Size | Model No. | Mag. Wt. | V.C. Size | V.C. Imp. | Watts |
|--------------------|-----------|----------|-----------|-----------|-------|
| 2" Square | 2AMS | .68 oz. | 9/16" | 3.2 ohms | 1-2 |
| 2 1/2" x 10" Rect. | 2510CMS | 1.47 | 9/16" | 3.2 | 2-4 |
| 2 3/4" Round | 27ATS | .68 | 9/16" | 12 | .25 |
| 3" Square | 3CMS | 1.47 | 9/16" | 3.2 | 2-3 |
| 4" Square | 4AMS | .68 | 9/16" | 3.2 | 2-4 |
| 5" Round | 5ECS | 2.15 | 9/16" | 3.2 | 2-4 |
| 5 1/4" Pin. Cush. | 52BMS | 1.00 | 9/16" | 3.2 | 2-4 |
| 5 1/2" Square | 55CMS | 1.47 | 9/16" | 3.2 | 3-5 |
| 6" Pin Cush. | 6BMS | 1.00 | 1 1/4" | 3.2 | 4-6 |
| 7" Pin Cush. | 7CVS | 1.47 | 3/4" | 3.2 | 4-6 |
| 8" Round | 8FOS | 3.16 | 1" | 3.2 | 8-10 |
| 10" Round | 10HBS | 4.64 | 3/4" | 3.2 | 4-6 |
| 12" Round | 12EVS | 2.15 | 1" | 3.2 | 15 |
| 15" Round | 15JBS | 6.80 | 1" | 3.2 | |

ELLIPTICAL SPEAKERS

We have a complete range including 2" x 6", 3" x 5", 4" x 6", 4" x 8", 2" x 10", 5" x 7", 6" x 9" in various magnet weights and voice coil sizes or, can custom design an elliptical speaker for special needs.

COMPRESSION HORN TWEETER

| Size | Model No. | Mag. Wt. | V.C. Size | V.C. Imp. | Watts |
|---------------|-----------|----------|-----------|-----------|-------|
| 2" x 6" Rect. | CH26E16 | 2.15 oz | 1" | 16 | 20 |

VOICE COIL IMPEDANCES

Oxford's various size and type speakers are available with the following voice coil impedances: 3.2, 8, 12, 16 and 45 ohms.

MAGNET WEIGHT SELECTION

45 oz. to 20 oz. Alnico V.

TRANSFORMERS

A complete line of audio output transformers is available from stock. Special transformers can be designed to your special requirements.



FULL RANGE SPEAKERS



EXTENDED RANGE SPEAKERS



PUBLIC ADDRESS CERAMIC SPEAKERS



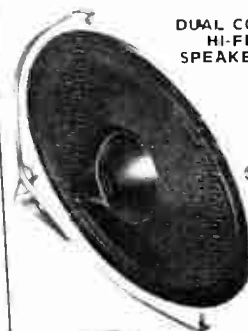
when you think of speakers.. think of

OXFORD

the world's most complete line of Standard Speakers for all applications

Write for literature illustrating and listing our complete line—also available catalog, dimensional data booklet, performance specifications and engineering brochure.

We invite inquiries on your special units currently in use; send us a sample of your present unit or specifications.



DUAL CONE HI-FI SPEAKERS



COAXIAL SPEAKERS



PUBLIC ADDRESS SPEAKERS



WEATHER-PROOFED SPEAKERS

EXTENDED RANGE SPEAKERS

| Size | Model No. | Mag. Wt. Oz. | V.C. Size | V.C. Imp. Ohms | Watts | Frequency Range C.P.S. |
|-----------|-----------|--------------|-----------|----------------|-------|------------------------|
| 8" Round | HF8JB | 6.8 | 1" | 8 | 10 | 50-12,000 |
| 10" Round | HF10JB | 6.8 | 1" | 8 | 10 | 50-10,000 |
| 12" Round | HF12JB | 6.8 | 1" | 8 | 10 | 50-10,000 |
| 12" Round | HF12LN | 14 | 1 1/2" | 8 | 25 | 40-9,000 |
| 15" Round | HF15LN | 14 | 1 1/2" | 8 | 25 | 30-7,000 |

FULL RANGE SPEAKERS

| Size | Model No. | Mag. Wt. Oz. | V.C. Size | Ohms | Watts |
|-----------|-----------|--------------|-----------|------|-------|
| 3" Round | T3C208 | 1.47 | 9/16" | 8 | 3.5 |
| 5" Round | T5C208 | 1.47 | 9/16" | 8 | 3.5 |
| 8" Round | F8J408 | 6.80 | 1" | 8 | 15 |
| 12" Round | F12J408 | 6.80 | 1" | 8 | 25 |
| 12" Round | F12L608 | 14.70 | 1 1/2" | 8 | 25 |

*Tweeters

INTERCOM SPEAKERS

| Size | Model No. | Mag. Wt. Oz. | V.C. Size | V.C. Imp. Ohms | Watts |
|-----------|-----------|--------------|-----------|----------------|-------|
| 3" Square | 3BM-S45 | 1.00 | 9/16" | 45 | 2.3 |
| 4" Square | 4BM-S45 | 1.00 | 9/16" | 45 | 2.3 |
| 5" Round | 5BM-S45 | 1.00 | 9/16" | 45 | 2.4 |
| 8" Round | 8EV-S45 | 2.15 | 3/4" | 45 | 4.6 |

WEATHERPROOF SPEAKERS

| Size | Model No. | Mag. Wt. Oz. | V.C. Size | V.C. Imp. Ohms | Watts |
|----------------|-----------|--------------|-----------|----------------|-------|
| 3" Square | 3CMWS | 1.47 | 9/16" | 3.2 | 2-3 |
| 4" Square | 4AM-65 | .68 | 9/16" | 3.2 | 2-3 |
| 4" Square | 4CM-27 | 1.47 | 9/16" | 3.2 | 2-3 |
| 5" Round | 5BA-3 | .68 | 9/16" | 3.2 | 2-4 |
| 5" Round | 5CM-51 | 1.47 | 9/16" | 3.2 | 2-4 |
| 6" Pin Cushion | 6CMWS | 1.47 | 9/16" | 3.2 | 3-5 |

PUBLIC ADDRESS SPEAKERS

| Size | Model No. | Mag. Wt. Oz. | V.C. Size | V.C. Imp. Ohms | Watts |
|-----------|-----------|--------------|-----------|----------------|-------|
| 8" Round | 8JES-7 | 6.80 | 1" | 6-8 | 6-8 |
| 10" Round | 10JES-7 | 6.80 | 1" | 6-8 | 8-10 |
| 12" Round | 12JES-7 | 6.80 | 1" | 6-8 | 8-10 |

CERAMIC SPEAKERS

| Size | Model No. | Mag. Wt. Oz. | V.C. Size | V.C. Imp. Ohms | Watts |
|---------|-----------|--------------|-----------|----------------|-------|
| 6" P.C. | 6F3S7 | 4 cz. | 3/4" | 8 | 6-8 |
| 8" P.C. | 8F3S7 | 4 cz. | 3/4" | 6 | 6-8 |
| 8" P.C. | 8J4S7 | 10 cz. | 1" | 8 | 8-12 |
| 12" Rd. | 12J4S7 | 10 cz. | 1" | 8 | 8-12 |

2" MINIATURE TRANSISTOR SPEAKER

| Size | Model No. | Mag. Wt. Oz. | V.C. Size | V.C. Imp. Ohms | Watts |
|--------|-----------|--------------|-----------|----------------|-------|
| 2" Rd. | 2P42-S12 | 1/2 Oz. | 1/2" | 12 | .15 |

OXFORD Components,

Division of OXFORD ELECTRIC CORPORATION

Chicago, Illinois



AKTRON REPLACEMENT SPEAKERS

- ALUMINUM VOICE COILS
- ALNICO V MAGNETS
- SPECIALLY TREATED-BLUE CONES
- ATTRACTIVE BLUE LUMINESCENT BAKED ENAMEL FINISH ALL ON STEEL PARTS



4" SQUARE



12" ROUND



5" PIN CUSHION



STANDARD 6" x 9"



8" PIN CUSHION



4" CUP HOUSING

See 6" x 9" Weatherproof Speakers Listed Under Weatherproof Section on next page.

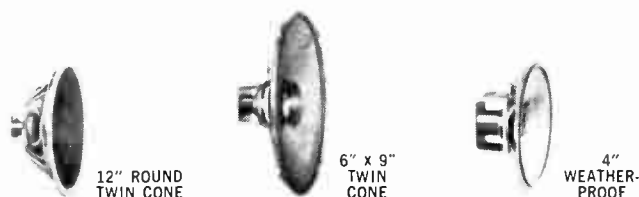
NOTE — Transformer Mounting Boss on all 4", 5" Round, 8" and 12" Speakers.

EIA WARRANTY APPLIES TO ALL OKTRON SPEAKERS.

| Size and Shape | Part No. | Magnet Weight Ounces | VOICE COIL | | | Sugg. Dealer Price |
|--------------------|----------|----------------------|-------------|------------------|----------------|--------------------|
| | | | Dia. Inches | Impedance (Ohms) | Power in Watts | |
| 2 1/4" Round | 23A8 | .53 cup | 3/16 | 8 | 1 | \$2.88 |
| 2 3/4" Round | 28A8 | .53 cup | 3/16 | 8 | 2 | 2.62 |
| 3" Square | 3A3 | .53 cup | 3/16 | 3.2 | 2 | 2.16 |
| 3" Square | 3B3 | .68 | 3/16 | 3.2 | 2 | 2.28 |
| 3" Square | 3C3 | 1.00 | 3/16 | 3.2 | 3 | 2.45 |
| 3 1/2" Square | 35A3 | .53 cup | 3/16 | 3.2 | 2 | 2.16 |
| 3 1/2" Square | 35B3 | .68 | 3/16 | 3.2 | 2 | 2.28 |
| 3 1/2" Square | 35C3 | 1.00 | 3/16 | 3.2 | 3 | 2.45 |
| 4" Square | 4AA3 | .46 cup | 3/16 | 3.2 | 2 | 1.98 |
| 4" Square | 4A3 | .53 cup | 3/16 | 3.2 | 2 | 2.13 |
| 4" Square | 4B3 | .68 | 3/16 | 3.2 | 2 | 2.31 |
| 4" Square | 4C3 | 1.00 | 3/16 | 3.2 | 3 | 2.43 |
| 4" Square | 4D3 | 1.47 | 3/16 | 3.2 | 3 | 2.79 |
| 4" Square | 4E3 | 2.15 | 3/16 | 3.2 | 4 | 3.15 |
| 5" Pin Cushion | 5A3 | .53 cup | 3/16 | 3.2 | 2 | 2.19 |
| 5" Pin Cushion | 5B3 | .68 | 3/16 | 3.2 | 2 | 2.34 |
| 5" Pin Cushion | 5C3 | 1.00 | 3/16 | 3.2 | 3 | 2.52 |
| 5" Pin Cushion | 5D3 | 1.47 | 3/16 | 3.2 | 3 | 2.88 |
| 5" Pin Cushion | 5E3 | 2.15 | 3/16 | 3.2 | 4 | 3.18 |
| 5" Round | R5A3 | .53 cup | 3/16 | 3.2 | 2 | 2.19 |
| 5" Round | R5B3 | .68 | 3/16 | 3.2 | 2 | 2.34 |
| 5" Round | R5C3 | 1.00 | 3/16 | 3.2 | 3 | 2.52 |
| 5" Round | R5D3 | 1.47 | 3/16 | 3.2 | 3 | 2.88 |
| 5" Round | R5E3 | 2.15 | 3/16 | 3.2 | 4 | 3.18 |
| 5 1/4" Pin Cushion | 53B3 | .68 | 3/16 | 3.2 | 2 | 2.46 |
| 5 1/4" Pin Cushion | 53C3 | 1.00 | 3/16 | 3.2 | 3 | 2.64 |
| 5 1/4" Pin Cushion | 53D3 | 1.47 | 3/16 | 3.2 | 4 | 3.03 |
| 6" Pin Cushion | 6B3 | .68 | 3/16 | 3.2 | 3 | 2.70 |
| 6" Pin Cushion | 6C3 | 1.00 | 3/16 | 3.2 | 4 | 2.82 |
| 6" Pin Cushion | 6C3C | 1.00 cup | 3/4 | 3.2 | 4 | 2.82 |
| 6" Pin Cushion | 6D3 | 1.47 | 3/16 | 3.2 | 5 | 3.21 |
| 6" Pin Cushion | 6E3 | 2.15 | 3/16 | 3.2 | 6 | 3.63 |
| 6" Pin Cushion | 6E3C | 2.18 cup | 1 | 3.2 | 7 | 3.63 |
| 8" Pin Cushion | 8C3 | 1.00 | 3/16 | 3.2 | 4 | 3.75 |
| 8" Pin Cushion | 8C3C | 1.00 cup | 3/4 | 3.2 | 4 | 3.75 |
| 8" Pin Cushion | 8D3 | 1.47 | 3/16 | 3.2 | 5 | 4.15 |
| 8" Pin Cushion | 8E3 | 2.15 | 3/4 | 3.2 | 6 | 4.74 |
| 8" Pin Cushion | 8E3C | 2.18 cup | 1 | 3.2 | 6 | 4.74 |
| 8" Pin Cushion | 8F3 | 3.16 | 3/4 | 3.2 | 8 | 5.28 |
| 8" Pin Cushion | 8G3 | 4.64 | 1 | 3.2 | 10 | 6.90 |
| 8" Pin Cushion | 8H3 | 6.80 | 1 | 3.2 | 12 | 7.50 |
| 8" Pin Cushion | 8C8C | 1.00 cup | 3/4 | 8 | 4 | 3.75 |
| 8" Pin Cushion | 8D8 | 1.47 | 3/16 | 8 | 5 | 4.15 |
| 8" Pin Cushion | 8E8 | 2.15 | 3/4 | 8 | 6 | 4.74 |
| 8" Pin Cushion | 8E8C | 2.18 cup | 1 | 8 | 6 | 4.74 |
| 8" Round Flat | 8E8CF | 2.18 cup | 1 | 8 | 6 | 4.74 |
| 8" Pin Cushion | 8F8 | 3.16 | 3/4 | 8 | 8 | 5.28 |
| 8" Pin Cushion | 8G8 | 4.64 | 1 | 8 | 10 | 6.90 |
| 8" Pin Cushion | 8H8 | 6.80 | 1 | 8 | 12 | 7.50 |
| 10" Round | 10D3 | 1.47 | 3/4 | 3.2 | 5 | 5.79 |
| 10" Round | 10F3 | 3.16 | 3/4 | 3.2 | 8 | 6.69 |
| 10" Round | 10H3 | 6.80 | 1 | 3.2 | 12 | 9.42 |
| 10" Round | 10F8 | 3.16 | 3/4 | 8 | 8 | 6.69 |
| 10" Round | 10H8 | 6.80 | 1 | 8 | 12 | 9.42 |
| 12" Round | 12D3 | 1.47 | 3/4 | 3.2 | 5 | 6.65 |
| 12" Round | 12E3 | 2.15 | 3/4 | 3.2 | 6 | 7.02 |
| 12" Round | 12E3C | 2.18 cup | 1 | 3.2 | 7 | 7.02 |
| 12" Round | 12F3 | 3.16 | 3/4 | 3.2 | 8 | 7.62 |
| 12" Round | 12G3 | 4.64 | 1 | 3.2 | 10 | 9.30 |
| 12" Round | 12H3 | 6.80 | 1 | 3.2 | 12 | 10.31 |
| 12" Round | 12D8 | 1.47 | 3/4 | 8 | 5 | 6.65 |
| 12" Round | 12E8 | 2.15 | 3/4 | 8 | 6 | 7.02 |
| 12" Round | 12E8C | 2.18 cup | 1 | 8 | 7 | 7.02 |
| 12" Round | 12F8 | 3.16 | 3/4 | 8 | 8 | 7.62 |
| 12" Round | 12F8X | 3.16 | 1 | 8 | 10 | 8.10 |
| 12" Round | 12G8 | 4.64 | 1 | 8 | 10 | 9.30 |
| 12" Round | 12H8 | 6.80 | 1 | 8 | 12 | 10.31 |
| 15" Round | 15H8 | 6.80 | 1 | 8 | 14 | 14.58 |
| 3" x 5" | 135A3 | .53 cup | 3/16 | 3.2 | 2 | 2.34 |
| 3" x 5" | 135C3 | 1.00 | 3/16 | 3.2 | 3 | 2.64 |
| 3" x 5" | 135D3 | 1.47 | 3/16 | 3.2 | 4 | 3.03 |
| 2 1/2" x 10" | 210C3 | 1.00 | 3/16 | 3.2 | 4 | 4.49 |
| 2 1/2" x 10" | 210D3 | 1.47 | 3/16 | 3.2 | 5 | 4.91 |
| 2 1/2" x 10" | 210E3 | 2.15 | 3/16 | 3.2 | 6 | 5.28 |
| 4" x 6" | 46A3 | .53 cup | 3/16 | 3.2 | 2 | 2.46 |
| 4" x 6" | 46B3 | .68 | 3/16 | 3.2 | 3 | 2.67 |
| 4" x 6" | 46C3 | 1.00 | 3/16 | 3.2 | 4 | 2.85 |
| 4" x 6" | 46D3 | 1.47 | 3/16 | 3.2 | 5 | 3.18 |
| 4" x 10" | 410E3C | 2.18 cup | 1 | 3.2 | 6 | 4.61 |
| 5" x 7" | 57A3 | .53 cup | 3/16 | 3.2 | 2 | 2.70 |
| 5" x 7" | 57B3 | .68 | 3/16 | 3.2 | 3 | 3.15 |
| 5" x 7" | 57C3 | 1.00 | 3/16 | 3.2 | 4 | 3.30 |
| 5" x 7" | 57C3C | 1.00 cup | 3/4 | 3.2 | 5 | 3.30 |
| 5" x 7" Flat | 57C3CF | 1.00 cup | 3/4 | 3.2 | 5 | 3.30 |
| 5" x 7" | 57D3 | 1.47 | 3/16 | 3.2 | 5 | 3.66 |
| 5" x 7" | 57E3 | 2.15 | 3/16 | 3.2 | 6 | 4.05 |
| 5" x 7" | 57E3C | 2.18 cup | 1 | 3.2 | 7 | 4.05 |
| 5" x 7" | 57F3X | 3.16 | 1 | 3.2 | 8 | 5.18 |
| 5" x 7" | 57C8C | 1.00 cup | 3/4 | 8 | 5 | 3.30 |
| 6" x 9" | 69A3 | .53 cup | 3/16 | 3.2 | 2 | 3.15 |
| 6" x 9" | 69B3 | .68 | 3/16 | 3.2 | 3 | 3.54 |
| 6" x 9" | 69C3 | 1.00 | 3/16 | 3.2 | 4 | 3.69 |
| 6" x 9" | 69C3C | 1.00 cup | 3/4 | 3.2 | 5 | 3.69 |
| 6" x 9" | 69D3 | 1.47 | 3/16 | 3.2 | 5 | 4.09 |
| 6" x 9" | 69E3 | 2.15 | 3/4 | 3.2 | 6 | 4.61 |
| 6" x 9" | 69E3C | 2.18 cup | 1 | 3.2 | 7 | 4.61 |
| 6" x 9" Flat | 69E3CF | 2.18 cup | 1 | 3.2 | 7 | 4.61 |
| 6" x 9" | 69F3 | 3.16 | 3/4 | 3.2 | 7 | 5.16 |
| 6" x 9" | 69H3 | 6.80 | 1 | 3.2 | 10 | 7.68 |
| 6" x 9" | 69E8C | 2.18 cup | 1 | 8 | 7 | 4.61 |
| 6" x 9" Flat | 69E20CF | 2.18 cup | 1 | 20 | 7 | 4.85 |
| 6" x 9" Flat | 69E40CF | 2.18 cup | 1 | 40 | 7 | 4.85 |

PUBLIC ADDRESS SPEAKERS

8 OHM VOICE COIL - BLUE CONES - ALNICO V MAGNETS
SPECIALLY TREATED ALUMINUM VOICE COILS
BLUE LUMINESCENT BAKED ENAMEL FINISH



12" ROUND TWIN CONE

6" x 9" TWIN CONE

4" WEATHER-PROOF

TWIN CONE SPEAKERS

Twin Cones can be supplied on any standard speaker at slight additional cost.

| Size and Shape | Part No. | Magnet Weight Ounces | VOICE COIL | | Power in Watts | Sugg. Dealer Price |
|----------------|----------|----------------------|-------------|------------------|----------------|--------------------|
| | | | Dia. Inches | Impedance (Ohms) | | |
| 8" Pin Cushion | 8D8W | 1.47 | 3/8 | 8 | 5 | \$4.56 |
| 8" Pin Cushion | 8E8W | 2.15 | 3/4 | 8 | 6 | 5.13 |
| 8" Pin Cushion | 8E8WC | 2.18 cup | 1 | 8 | 6 | 5.13 |
| 8" Pin Cushion | 8F8W | 3.15 | 3/4 | 8 | 8 | 5.66 |
| 8" Pin Cushion | 8H8W | 6.80 | 1 | 8 | 12 | 7.80 |
| 12" Round | 12F8WX | 3.16 | 1 | 8 | 10 | 8.69 |
| 12" Round | 12H8W | 6.80 | 1 | 8 | 12 | 10.89 |
| 5" x 7" | 5D8W | 1.47 | 3/8 | 8 | 5 | 4.02 |
| 5" x 7" | 5E8W | 2.15 | 3/8 | 8 | 6 | 4.44 |
| 6" x 9" | 6D8W | 1.47 | 3/8 | 8 | 5 | 4.44 |
| 6" x 9" | 6E8W | 2.15 | 3/4 | 8 | 6 | 4.95 |
| 6" x 9" | 6E8WC | 2.18 cup | 1 | 8 | 6 | 4.95 |
| 6" x 9" | 6F8W | 3.16 | 3/4 | 8 | 7 | 5.51 |

WEATHERPROOF SPEAKERS

SPECIALLY IMPREGNATED CONES, GASKETS AND DUST CAPS

| Size and Shape | Part No. | Magnet Weight Ounces | VOICE COIL | | Power in Watts | Sugg. Dealer Price |
|----------------|----------|----------------------|-------------|------------------|----------------|--------------------|
| | | | Dia. Inches | Impedance (Ohms) | | |
| 3 1/2" Square | 35D8M | 1.47 | 3/8 | 8 | 3 | \$3.18 |
| 4" Square | 4A8M | .53 cup | 3/8 | 8 | 2 | 2.52 |
| 4" Square | 4D8M | 1.47 | 3/8 | 8 | 3 | 3.18 |
| 5" Round | R5D8M | 1.47 | 3/8 | 8 | 3 | 3.21 |
| 6" Pin Cushion | 6D8M | 1.47 | 3/8 | 8 | 4 | 3.93 |
| 8" Pin Cushion | 8F8M | 4.16 | 3/4 | 8 | 6 | 5.52 |
| 6" x 9" | 69C3CM | 1.00 cup | 3/4 | 3.2 | 4 | 3.91 |
| 6" x 9" | 69E3CM | 2.18 cup | 1 | 3.2 | 6 | 4.85 |
| 6" x 9" Flat | 69E3CFM | 2.18 cup | 1 | 3.2 | 6 | 4.85 |

INTERCOM SPEAKERS

| Size and Shape | Part No. | Magnet Weight Ounces | VOICE COIL | | Power in Watts | Sugg. Dealer Price |
|----------------|----------|----------------------|-------------|------------------|----------------|--------------------|
| | | | Dia. Inches | Impedance (Ohms) | | |
| 3 1/2" Square | 35A45 | .53 cup | 3/8 | 45 | 2 | \$2.40 |
| 4" Square | 4A45 | .53 cup | 3/8 | 45 | 2 | 2.40 |
| 4" Square | 4C45 | 1.00 | 3/8 | 45 | 3 | 2.64 |
| 4" Square | 4D45 | 1.47 | 3/8 | 45 | 3 | 3.03 |
| 5" Pin Cushion | 5C45 | 1.00 | 3/8 | 45 | 3 | 2.76 |
| 5" Pin Cushion | 5D45 | 1.47 | 3/8 | 45 | 3 | 3.09 |
| 8" Pin Cushion | 8F45 | 3.16 | 3/4 | 45 | 8 | 5.52 |

NOTE—Transformer Mounting Boss on all 4", 5" Round, 8" and 12" Speakers

HIGH FIDELITY SPEAKERS



6" x 9" COAX

12" COAX

8" FREE EDGE

COAXIAL SPEAKERS

All Coaxial type speakers are attractively finished with a glossy Royal Blue luminescent enamel. This is matched with Blue cones in both the Woofer and the Tweeter. The crossover network is housed in the dust cover on the rear of the speaker. Both speakers in the Coaxial unit use our specially processed Aluminum voice coils in Alnico V Magnets. Tweeters are solid basket compression type.

| Size In Inches | Impedance | Part Number | Magnet Weight | V.C. Dia. | Power Watts | Dealer Price |
|----------------|-----------|-------------|---|-----------|-------------|--------------|
| 8 | 8 Ohms | CA-8 | 8" Woofer 3.16 oz. 3" Tweeter .53 oz. | 3/4" | 8 | \$ 7.70 |
| 8 | 8 Ohms | CA8-HD | 8" Woofer 6.80 oz. 3" Tweeter .53 oz. | 1" | 12 | 9.10 |
| 12 | 8 Ohms | CA-12 | 12" Woofer 6.80 oz. 3" Tweeter 1.00 oz. | 1" | 12 | 11.70 |
| 15 | 8 Ohms | CA-15 | 15" Woofer 6.80 oz. 5" Tweeter 1.00 oz. | 1" | 14 | 15.60 |
| 6 x 9 | 8 Ohms | CA-69 | 6"x9" Woofer 2.15 oz. 3" Tweeter .53 oz. | 3/4" | 6 | 6.54 |
| 6 x 9 | 3.2 Ohms | CA-69-3 | 6"x9" Woofer 2.15 oz. 3" Tweeter .53 oz. | 3/4" | 6 | 6.54 |
| 6 x 9 | 8 Ohms | CA-69-HD | 6"x9" Woofer 6.80 oz. 3" Tweeter .53 oz. | 1" | 10 | 9.10 |
| 6 x 9 | 3.2 Ohms | CA-69-3-HD | 6"x9" Woofer 6.80 oz. 3" Tweeter .53 oz. | 1" | 10 | 9.10 |

FREE EDGE CONE SUSPENSION

SAME GENERAL APPEARANCE AS COAXIAL SPEAKERS

| Size in Inches | Impedance | Part Number | Magnet Weight | V.C. Dia. | Power Watts | Dealer Price |
|----------------|-----------|-----------------|---------------|-----------|-------------|--------------|
| 6 x 9 | 8 Ohms | FE-69C | 2.18 oz. | 1" | 8 | \$6.85 |
| 8 | 8 Ohms | FE-8 | 6.80 oz. | 1" | 12 | 7.95 |
| 8 | 8 Ohms | FE-8W Twin Cone | 6.80 oz. | 1" | 12 | 8.40 |

SYSTEMS

MATCHED TRIO FOR MULTI-SPEAKER APPLICATION

| Size In Inches | Impedance | Part Number | Magnet Weight | V.C. Dia. | Power Watts | Dealer Price |
|--|-----------|-------------|---|--------------------|-------------|--------------|
| 12 6 x 9 4 x 6 Harness with Crossover | 8 Ohms | ST-124 | 12" Woofer 6.80 oz. 6" x 9" Mid Range 3.16 oz. 4" x 6" Tweeter 1.47 oz. | 1" 3/4" 3/8" | 12 | \$15.90 |

MID-RANGE SPEAKERS

ENCLOSED BASKET AND CURVILINEAR CONE DESIGNED FOR MID-RANGE FREQUENCIES 8 OHM VOICE COIL

| Size and Shape | Part Number | Magnet Weight | V.C. Dia. | Power Watts | Sugg. Price |
|----------------|-------------|---------------|-----------|-------------|-------------|
| 6" x 9" | 69F8MR | 3.16 oz. | 1" | 7 | \$5.28 |

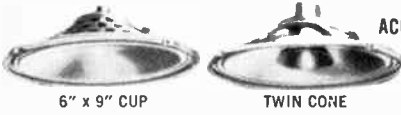
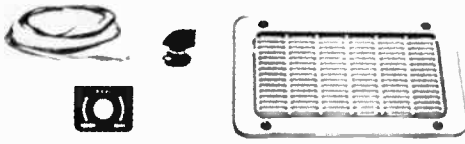
TWEETER SPEAKERS

These speakers are true compression type, using totally enclosed baskets and molded curvilinear cones for maximum high frequency radiation, 8 ohm aluminum voice coils and alnico V magnets — Blue luminescent enamel finish.

| Size and Shape | Part Number | Magnet Weight | V.C. Dia. | Response | Power Watts | Dealer Price |
|----------------|-------------|---------------|-----------|-------------|-------------|--------------|
| 3" Square | 3C8T | 1.00 oz. | 3/8" | 3000-15,000 | 4 | \$2.61 |
| 3 1/2" Square | 35D8T | 1.47 oz. | 3/8" | 3000-15,000 | 5 | 3.00 |
| 4" Square | 4D8T | 1.47 oz. | 3/8" | 3000-15,000 | 5 | 3.00 |
| 5" Round | 5D8T | 1.47 oz. | 3/8" | 2000-15,000 | 5 | 3.09 |
| 4" x 6" | 46D8T | 1.47 oz. | 3/8" | 1500-15,000 | 6 | 3.24 |

REAR SEAT SPEAKER KITS AND ACCESSORIES

ALL KITS INDIVIDUALLY BOXED
ALNICO V MAGNETS
ALUMINUM VOICE COILS
BLUE LUMINESCENT ENAMEL FINISH



| Model | Speaker | Grille | Control | Magnet Size | Sugg. Dealer Price |
|--------|---------|-------------|---------------|--------------|--------------------|
| RK57 | 5 x 7 | Gray | 3 Pos. Switch | 1.0 oz. cup | \$4.75 |
| RK57C | 5 x 7 | Chrome | 3 Pos. Switch | 1.0 oz. cup | 5.06 |
| RK57F | 5 x 7 | Gray | Fader | 1.0 oz. cup | 5.06 |
| RK57CF | 5 x 7 | Chrome | Fader | 1.0 oz. cup | 5.37 |
| AK69 | 6 x 9 | Gray | 3 Pos. Switch | .53 oz. cup | 4.76 |
| AK69C | 6 x 9 | Chrome | 3 Pos. Switch | .53 oz. cup | 5.06 |
| AK69F | 6 x 9 | Gray | Fader | .53 oz. cup | 5.06 |
| AK69CF | 6 x 9 | Chrome | Fader | .53 oz. cup | 5.37 |
| RK69 | 6 x 9 | Gray | 3 Pos. Switch | 1.0 oz. cup | 5.40 |
| RK69C | 6 x 9 | Chrome | 3 Pos. Switch | 1.0 oz. cup | 5.60 |
| RK69F | 6 x 9 | Gray | Fader | 1.0 oz. cup | 5.60 |
| RK69CF | 6 x 9 | Chrome | Fader | 1.0 oz. cup | 5.90 |
| WK69 | 6 x 9 | } Twin Cone | 3 Pos. Switch | 2.18 oz. cup | 6.12 |
| WK69C | 6 x 9 | | 3 Pos. Switch | 2.18 oz. cup | 6.39 |
| WK69F | 6 x 9 | | Fader | 2.18 oz. cup | 6.39 |
| WK69CF | 6 x 9 | | Fader | 2.18 oz. cup | 6.65 |

ACCESSORIES Fader Control with Presoldered wire and hardware \$2.55
Switch Control with Presoldered wire and hardware 2.10
Chrome Grille with hardware 2.25
Grey Grille with hardware 1.80

List Prices

NOTE—Kits can be supplied with other Oaktron speakers. Please request quotation from factory.

LINE TRANSFORMERS

CONSTANT VOLTAGE: UNIVERSAL IMPEDANCE—

MATCHING TYPES—Individually Boxed
CONSTANT VOLTAGE LINE TRANSFORMERS for matching speakers to 70.7V or 25V constant voltage line. This method greatly simplifies matching several speakers to an amplifier, especially when the speakers must produce different amounts of power. The most complicated matching problem can be solved by adding the power required by all speakers and comparing to the rated power of the amplifier. These transformers are of the highest quality of response and efficient use of power.



| Part Number | Primary Impedance/Power | Secondary Impedance (Ohms) | Nominal Watts | Core Size | DIMENSIONS Height/Width/Depth | | | Mtg. Ctrs. | Shpg. Wt., Lbs. | Sugg. Dealer Price |
|--------------------------------------|-------------------------|----------------------------|---------------|-----------|----------------------------------|-------|-------|------------|-----------------|--------------------|
| 70.7 CONSTANT VOLTAGE LINE | | | | | | | | | | |
| T-71 | 2/1/.5 | 8/4 | ..... | 3/8x3/8 | 1 1/4 | 1 1/2 | 1 1/4 | 1 3/4 | 1/2 | \$1.92 |
| T-72 | 5/2.5/1.25 .62/.31 | 8/4 | ..... | 1/2x3/8 | 1 3/8 | 1 3/4 | 1 3/8 | 2 | 3/4 | 2.46 |
| 25 VOLT CONSTANT VOLTAGE LINE | | | | | | | | | | |
| T-25 | 2/1/.5 | 8/4 | ..... | 3/8x3/8 | 1 1/4 | 1 1/2 | 1 1/4 | 1 3/4 | 1/2 | 1.92 |
| T-26 | 5/2.5/1.25 .62/.31 | 8/4 | ..... | 1/2x3/8 | 1 3/8 | 1 3/4 | 1 3/8 | 2 | 3/4 | 2.46 |
| UNIVERSAL IMPEDANCE | | | | | | | | | | |
| T-501 | 500/1000 1500/2000 | 8/4 | 4 | 1/2x1/2 | 1 3/8 | 1 1/2 | 1 3/4 | 2 | 1/2 | 1.92 |
| T-502 | 500/1000 1500/2000 | 8/4 | 8 | 3/8x3/8 | 1 5/8 | 1 3/8 | 1 3/8 | 2 3/8 | 3/4 | 2.46 |

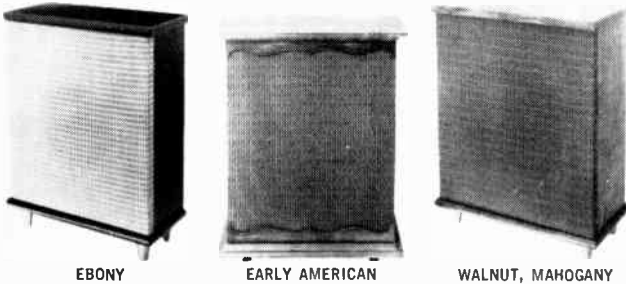
Transformers Can Be Mounted at Factory—Add 10c Per Unit.

TRANSFORMER MOUNTING BRACKET

| Number | Transformer Size | Punching | Dealer Price |
|--------|-----------------------------|----------|--------------|
| #1 | 3/8" x 3/8" | 2 holes | \$.14 |
| #2 | 3/8" x 3/8" and 1/2" x 1/2" | 3 holes | .19 |
| #3 | 1/2" x 1/2" and 3/8" x 3/8" | 3 holes | .24 |

ENCLOSURES AND SPEAKER ENCLOSURE COMBINATIONS

ALL 3/4" CONSTRUCTION TAPERED 2" LEGS
8" OAKTRON ENCLOSURE WITH CA-8-HD INSTALLED



EBONY EARLY AMERICAN WALNUT, MAHOGANY

| Model | Finish | Size | Sugg. Dealer Price |
|---|----------------|---------------------------------|--------------------|
| SM8-E | Ebony | 14" x 18" x 6 1/2" plus 2" Legs | \$36.95 |
| SM8-W | Walnut | 14" x 18" x 6 1/4" plus 2" Legs | 36.95 |
| SM8-M | Mahogany | 14" x 18" x 6 1/4" plus 2" Legs | 36.95 |
| SM8-EA | Early American | 14" x 18" x 6 1/4" plus 2" Legs | 39.95 |
| 8" OAKTRON ENCLOSURE LESS SPEAKER | | | |
| M8-E | Ebony | 14" x 18" x 6 1/2" plus 2" Legs | \$27.95 |
| M8-W | Walnut | 14" x 18" x 6 1/4" plus 2" Legs | 27.95 |
| M8-M | Mahogany | 14" x 18" x 6 1/4" plus 2" Legs | 27.95 |
| M8-EA | Early American | 14" x 18" x 6 1/4" plus 2" Legs | 29.95 |
| 12" OAKTRON ENCLOSURE WITH CA-12 INSTALLED | | | |
| SM12-E | Ebony | 16" x 20" x 8" plus 2" Legs | \$43.95 |
| SM12-W | Walnut | 16" x 20" x 8" plus 2" Legs | 43.95 |
| SM12-M | Mahogany | 16" x 20" x 8" plus 2" Legs | 43.95 |
| SM12-EA | Early American | 16" x 20" x 8" plus 2" Legs | 46.95 |
| 12" OAKTRON ENCLOSURE LESS SPEAKER | | | |
| M12-E | Ebony | 16" x 20" x 8" plus 2" Legs | \$32.95 |
| M12-W | Walnut | 16" x 20" x 8" plus 2" Legs | 32.95 |
| M12-M | Mahogany | 16" x 20" x 8" plus 2" Legs | 32.95 |
| M12-EA | Early American | 16" x 20" x 8" plus 2" Legs | 35.95 |

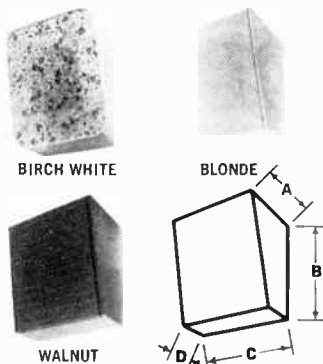
These cabinets are made in two pieces, the cabinet itself, and the easily removable front panel. This construction, while essential for proper performance, allows for easy removal or installation of the speaker, as well as the changing of the grille cloth to fit the decor. The specially designed sound curtain will not deteriorate with use as many other materials will. Also this curtain retains its proper position and configuration even after excessive handling, for it is held in place by the mounting bolts and the struts on the back of the cabinet. These enclosures are specifically designed for optimum reproduction with the Oaktron coaxial speakers Models CA8-HD and CA-12.

SOMETHING NEW IN BAFFLES. This entirely new approach combines unique design with optimum sound quality. These baffles are engineered to possess extreme strength under all conditions of humidity or dryness. The sides, top and bottom are formed of one piece of tempered presdwood, riveted together at the top to a steel plate, which also acts as a wall hanger. The front baffle board is secured to the sides by riveted steel angle brackets. This highly rigid construction eliminates all vibration.

OUTLINE DIMENSIONS and LIST PRICES

| Sp'ker Size | Model | Finish | A | B | C | D | Material | Std. Pack | Sugg. Dealer Price |
|-------------|---------|------------------|--------|---------|---------|--------|--------------------|-----------|--------------------|
| 8 | WB8-BW | Brushed Aluminum | 6 1/4" | 10 3/8" | 9 1/2" | 3 1/2" | Tempered Presdwood | 8 | \$3.10 |
| 8 | WB8-B | Blonde | 6 1/4" | 10 3/8" | 9 1/2" | 3 1/2" | Cabinet Hardwood | 8 | 4.45 |
| 8 | WB8-W | Walnut | 6 1/4" | 10 3/8" | 9 1/2" | 3 1/2" | Cabinet Hardwood | 8 | 4.45 |
| 12 | WB12-BW | Birch White | 9 1/8" | 14 1/8" | 13 3/4" | 5 3/8" | Tempered Presdwood | 4 | 4.45 |
| 12 | WB12-B | Blonde | 9 1/8" | 14 1/8" | 13 3/4" | 5 3/8" | Cabinet Hardwood | 4 | 5.80 |
| 12 | WB12-W | Walnut | 9 1/8" | 14 1/8" | 13 3/4" | 5 3/8" | Cabinet Hardwood | 4 | 5.80 |

QUALITY WALL BAFFLES



BIRCH WHITE

WALNUT

Oaktron's Furniture Finish wall baffles are of the most rigid construction utilizing one-half inch cabinet quality hardwood and have a beautiful, true satin lustre appearance. Truly a masterful combination of the qualities necessary to insure maximum performance, utmost in appearance and the best in value.



SOUND PRODUCTS

The RCA ATTACHE SERIES—General Purpose Microphones

With the versatile Attache Series, RCA makes available three inexpensive general-purpose microphones designed for use in a wide variety of commercial, industrial, and home applications where rugged mechanical construction coupled with excellent fidelity are essential.

Whether your requirements call for a good public-address microphone for use in a church, school, or auditorium, or for a call and paging system, dictating machine, amateur or citizens' band radio, general communications service for mobile or base-station operation, or for a home recorder... there's a performance-proved RCA microphone designed to meet your needs.



ATTACHE 608
Type 17658

This beautifully styled ceramic-type cardioid microphone is designed for use in a variety of applications including public address, call and paging, base-station operation of a mobile-communications network, high-level citizens' band radio or amateur radio. It is especially useful in locations where high-level random noise and reverberation are present. The cardioid characteristic of the Attache 608 provides wide-angle front pickup, but is virtually dead from the rear. The Attache 608 has a slim, trim shape which makes it easy to handle and gives it an attractive appearance. It can be used with the desk stand or hand held. It comes complete with 8½ feet of shielded cable with molded-on phono plug and adapter.

\$26.50*

* Optional List Price

ATTACHE 508
Type 17659

The Attache 508 is an attractive, traditionally styled pressure-type dynamic microphone which combines compact, sturdy, construction with high-level output. With a frequency response of 50 to 8,000 cps, it is excellent for reproduction of both music and speech and is designed especially for public address use in hotels, theaters, auditoriums, schools and churches, as well as general communications work.

The Attache 508 features a non-metallic corrosion-resistant diaphragm capable of withstanding high humidity, extreme temperatures, and severe mechanical shock. It utilizes a rugged, pressure-cast metal case and has a tiltable head. It comes complete with 18 feet of shielded cable with molded-on phono plug and adapter.



\$45.00*

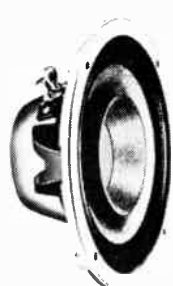
ATTACHE 606
Type 17657

The attractive styling and small size of the Attache 606 makes it the ideal replacement microphone for home recorders or as a utility microphone in low-cost public-address applications. Designed for hand or table use, the Attache 606 has sufficient sensitivity for any modern amplifier input. It comes complete with 5 feet of cable with molded-on phono plug and adapter to match all late-model home recorders.

\$12.00*



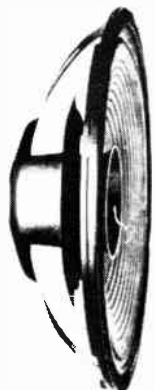
The RCA ENVOY SERIES — High Fidelity, Multi-Purpose Loudspeakers



ENVOY 8
8" Loudspeaker
Type 17660
\$30.00*



ENVOY 12
12" Loudspeaker
Type 17661
\$32.50*



ENVOY 15
15" Loudspeaker
Type 17662
\$40.85*

Whatever your sound requirements, whether it be for a high-fidelity home music system, or for public address work in a school, church, factory or office, RCA's new multi-purpose Envoy Series Loudspeakers provide a truly practical solution to your problem.

The crisp, wide-range response of these high-quality speakers provides realistic performance from your high-fidelity stereo or monophonic equipment.

For public address applications, the Envoy Series Loudspeakers deliver room-filling sound, faithfully reproduced from record, tape, or voice input. Their low-silhouette frames permit installation in walls or ceilings, making them ideal for building into new construction.

Check these outstanding features:

DUAL-CONE CONSTRUCTION for optimum bass reproduction and efficient high-frequency performance.

EDGEWISE-WOUND RIBBON-WIRE VOICE COIL for increased efficiency (18% over conventional coils).

SEALED POLYESTER REINFORCED FIBERGLASS COIL FORM maintains shape for life of speaker—prevents shorts and distortion-causing rubs.

LONG, MEDIUM-DIAMETER VOICE COILS, assure linear operation.

HEAVY-DUTY DIE-CAST FRAMES assure permanent centering of all elements.

FUNGUS-PROOFED CONES AND SPIDERS treated to prevent moisture absorption even in areas of high humidity.

* Optional List Price

QUAM *Quality Line* SPEAKERS

These speakers are engineered and manufactured solely for replacement, public address, high fidelity and outdoor applications. EIA standard dimensions. Fully dust-proofed. Baked gold enamel finish. EIA service guarantee. Only Quam speakers have the U shaped coil pot construction which provides an unbroken flux path of sufficient cross section to carry the full energy of the magnetic field.

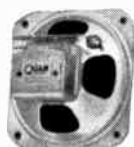
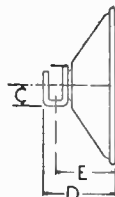


Fig. A



Fig. B

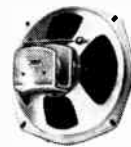


Fig. C



Fig. D

ANY QUAM SPEAKER CAN BE SUPPLIED WITH VOICE COIL IMPEDANCES
OTHER THAN THOSE LISTED FOR AN ADDITIONAL \$1.00 LIST

ED — Electro Dynamic Speakers

REPLACEMENT SPEAKERS

PM — Permanent Magnet Speakers

Voice coil impedance 3.2 ohms \pm 10%

BF — Ceramic Magnet Speakers

| TYPE | MODEL No. | SIZE | FIGURE | MAGNET WEIGHT OR FIELD | POWER HANDLING WATTS | DIMENSIONS IN INCHES | | | SHIP WT., LBS. | PRICE LIST |
|------|-------------|----------|--------|---------------------------|-------------------------|----------------------|---------|---------|-------------------|---------------|
| | | | | | | C | D | E | | |
| PM | 22A06Z8** | 2 1/4" | J | .45 oz. Alnico V | .25 | 19/32 | 1 | --- | 1/4 | \$ 4.75 |
| | 22A06Z100** | 2 1/4" | J | .45 oz. Alnico V | .25 | 19/32 | 1 | --- | 1/4 | 5.25 |
| PM | 25A05 | 2 1/2" | I | .55 oz. Alnico V | 1.5 | 11/16 | 1-1/8 | --- | 1/4 | 3.15 |
| | 25A07 | 2 1/2" | A | .65 oz. Alnico V | 1.5 | 11/16 | 1-1/4 | 7/8 | 1/4 | 4.00 |
| PM | 27A06Z12** | 2 3/4" | J | .55 oz. Alnico V | .25 | 19/32 | 1 | --- | 1/4 | 4.70 |
| PM | 30A05 | 3" | I | .55 oz. Alnico V | 2 | --- | 1-3/8 | --- | 1/2 | 3.15 |
| | 3A05* | 3 1/2" | I | .55 oz. Alnico V | 2 | 7/16 | 1-13/32 | --- | 1/4 | 3.15 |
| | 3A07* | 3 1/2" | A | .65 oz. Alnico V | 2.5 | 3/4 | 1-33/64 | 1-7/64 | 1/2 | 4.00 |
| | 35A05* | 3" x 5" | L | .55 oz. Alnico V | 2 | 7/16 | 1-21/32 | --- | 1/2 | 4.20 |
| ED | 4E45 | 4" | A | 450 Ohms | 3 | 1-1/4 | 2 | 1-7/16 | 1 | 6.25 |
| | 4E62 | 4" | A | 55-65 Ohms | 3 | 1-1/4 | 2-5/16 | 1-5/8 | 1 | 6.25 |
| PM | 4A05* | 4" | I | .55 oz. Alnico V | 2.5 | 7/16 | 1-1/2 | --- | 1/4 | 2.95 |
| | 4A07* | 4" | A | .65 oz. Alnico V | 3 | 3/4 | 1-23/32 | 1-5/16 | 1/2 | 4.30 |
| | 4A07R*★ | 4" | B | .65 oz. Alnico V | 3 | 3/4 | 1-23/32 | 1-5/16 | 1/2 | 4.30 |
| | 4A1 | 4" | A | 1.0 oz. Alnico V | 3 | 1 | 2-3/16 | 1-9/16 | 3/4 | 4.60 |
| | 4A1R★ | 4" | B | 1.0 oz. Alnico V | 3 | 1 | 2-3/16 | 1-9/16 | 3/4 | 4.60 |
| | 4A15 | 4" | A | 1.47 oz. Alnico V | 3 | 1 | 2-3/16 | 1-9/16 | 3/4 | 5.05 |
| PM | 46A07* | 4" x 6" | E | .65 oz. Alnico V | 3.5 | 3/4 | 1-15/16 | 1-27/64 | 3/4 | 4.75 |
| | 46A1 | 4" x 6" | E | 1.0 oz. Alnico V | 3.5 | 1 | 2-1/4 | 1-9/16 | 1 | 5.10 |
| | 46A15 | 4" x 6" | E | 1.47 oz. Alnico V | 3.5 | 1 | 2-1/4 | 1-9/16 | 1 | 5.50 |
| PM | 48A2* | 4" x 8" | K | 1.4 oz. Alnico V | 4.5 | 7/8 | 2-3/16 | --- | 1 | 7.95 |
| | 410A2* | 4" x 10" | M | 1.4 oz. Alnico V | 6 | --- | 2-11/16 | --- | 1 1/4 | 8.95 |
| ED | 5E45 | 5" | C | 450 Ohms | 3.5 | 1-1/4 | 2-1/8 | 1-19/32 | 1 | 6.50 |
| | d5E10 | 5" | C | 1000 Ohms | 3.5 | 1-1/4 | 2-1/8 | 1-19/32 | 1 | 6.50 |
| | d5E62 | 5" | C | 55-65 Ohms | 3.5 | 1-1/4 | 2-7/16 | 1-19/32 | 1-1/4 | 6.50 |
| | d5E90 | 5" | C | 85-95 Ohms | 3.5 | 1-1/4 | 2-7/16 | 1-19/32 | 1-1/4 | 6.50 |
| PM | 5A05* | 5" | I | .55 oz. Alnico V | 3 | 7/16 | 1-11/16 | --- | 1/2 | 3.50 |
| | 5A07* | 5" | C | .65 oz. Alnico V | 3.5 | 3/4 | 1-7/8 | 1-7/16 | 3/4 | 4.50 |
| | 5A07R*★ | 5" | B | .65 oz. Alnico V | 3.5 | 3/4 | 1-7/8 | 1-7/16 | 3/4 | 4.50 |
| | 5A1 | 5" | C | 1.0 oz. Alnico V | 3.5 | 1 | 2-5/16 | 1-11/16 | 1 | 4.85 |
| | 5A1R★ | 5" | B | 1.0 oz. Alnico V | 3.5 | 1 | 2-5/16 | 1-11/16 | 1 | 4.85 |
| | 5A15 | 5" | C | 1.47 oz. Alnico V | 3.5 | 1 | 2-5/16 | 1-11/16 | 1 | 5.25 |
| | 5A15R★ | 5" | B | 1.47 oz. Alnico V | 3.5 | 1 | 2-5/16 | 1-11/16 | 1 | 5.25 |
| | 5A15R★ | 5" | B | 1.47 oz. Alnico V | 3.5 | 1 | 2-5/16 | 1-11/16 | 1 | 5.25 |
| ED | d52E50 | 5 1/4" | C | 45-55 Ohms | 4 | 1-1/4 | 2-17/32 | 1-27/32 | 1-1/2 | 7.00 |
| | d52E90 | 5 1/4" | C | 85-95 Ohms | 4 | 1-1/4 | 2-17/32 | 1-27/32 | 1-1/4 | 7.00 |
| PM | 52A1 | 5 1/4" | C | 1.0 oz. Alnico V | 4 | 1 | 2-25/64 | 1-25/32 | 1 | 4.95 |
| | 52A1SQ† | 5 1/4" | A | 1.0 oz. Alnico V | 4 | 1 | 2-25/64 | 1-25/32 | 1 | 4.95 |
| | 52A21 | 5 1/4" | C | 2.15 oz. Alnico V | 4 | 1-1/8 | 2-21/32 | 1-25/32 | 1-1/4 | 6.05 |
| | 52A21SQ† | 5 1/4" | A | 2.15 oz. Alnico V | 4 | 1-1/8 | 2-21/32 | 1-25/32 | 1-1/4 | 6.05 |
| | BF 52C10 | 5 1/4" | N | 10.0 oz. Ceramic | 10 | --- | 2-1/4 | --- | 2-1/8 | 9.95 |
| PM | 57A1 | 5" x 7" | D | 1.0 oz. Alnico V | 5 | 1 | 2-11/16 | 2-5/64 | 1 | 5.50 |
| | 57A15 | 5" x 7" | D | 1.47 oz. Alnico V | 5 | 1 | 2-11/16 | 2-5/64 | 1 | 6.10 |
| | 57A21 | 5" x 7" | D | 2.15 oz. Alnico V | 5 | 1-1/8 | 2-61/64 | 2-13/64 | 1-1/4 | 6.75 |
| ED | d6E10 | 6 1/2" | C | 1000 Ohms | 5 | 1-1/4 | 2-23/32 | 2-1/32 | 1-1/2 | 7.50 |
| | d6E62 | 6 1/2" | C | 55-65 Ohms | 5 | 1-1/4 | 2-23/32 | 2-1/32 | 1-1/2 | 7.50 |
| | 6E90 | 6 1/2" | C | 85-95 Ohms | 5 | 1-1/4 | 2-23/32 | 2-1/32 | 1-1/2 | 7.50 |
| PM | 6A1 | 6 1/2" | C | 1.0 oz. Alnico V | 5 | 1 | 2-5/8 | 2 | 1 | 5.30 |
| | 6A1R★ | 6 1/2" | B | 1.0 oz. Alnico V | 5 | 1 | 2-5/8 | 2 | 1 | 5.30 |
| | 6A15 | 6 1/2" | C | 1.47 oz. Alnico V | 5 | 1 | 2-5/8 | 2 | 1 | 5.75 |
| | 6A15R★ | 6 1/2" | B | 1.47 oz. Alnico V | 5 | 1 | 2-5/8 | 2 | 1 | 5.75 |
| | 6A21 | 6 1/2" | C | 2.15 oz. Alnico V | 5 | 1-1/8 | 2-7/8 | 2-1/8 | 1-1/4 | 6.45 |
| | 6A31 | 6 1/2" | C | 3.16 oz. Alnico V | 6 | 1-3/8 | 3-11/64 | 2-9/32 | 1-3/4 | 7.60 |
| PM | 69A1* | 6" x 9" | D | 1.2 oz. Alnico V | 6 | 7/8 | 2-3/4 | --- | 1-1/4 | 6.00 |
| | 69A1S* | 6" x 9" | D | 1.2 oz. Alnico V | 8 | 7/8 | 2-1/8 | --- | 1 | 8.50 |
| | 69A2* | 6" x 9" | D | 1.4 oz. Alnico V | 8 | 7/8 | 2-15/16 | --- | 1-1/2 | 7.50 |
| | 69A2Z20CT† | 6" x 9" | D | 1.4 oz. Alnico V | 8 | 7/8 | 2-15/16 | --- | 1-1/2 | 8.40 |
| | 69A3 | 6" x 9" | D | 3.2 oz. Alnico V | 10 | 1-1/4 | 3-5/16 | --- | 2 | 9.20 |

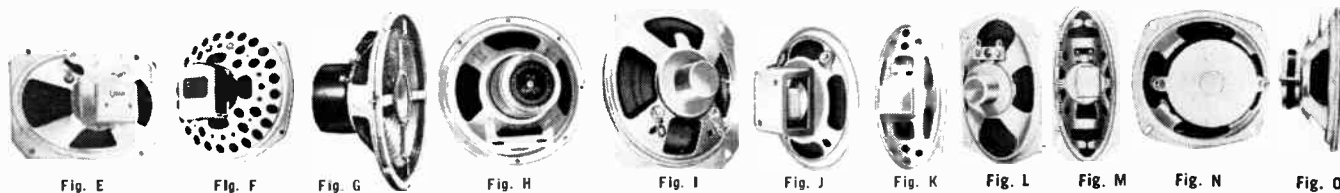
* Very shallow unit. ★ Round basket. † Square basket.

** Impedance of 22A06Z8 is 8 ohms, 22A06Z100 is 100 ohms, 27A06Z12 is 12 ohms.

d Will be discontinued when current stocks are depleted

† 20 ohms, center topped

QUAM *Quality Line* SPEAKERS



Replacement Speakers (Cont'd) Voice coil impedance 3.2 ohms ± 10%

| TYPE | MODEL No. | SIZE | FIGURE | MAGNET WEIGHT OR FIELD | POWER HANDLING WATTS | DIMENSIONS IN INCHES | | | SHIP WT., LBS. | LIST PRICE |
|------|-----------|------|--------|------------------------|----------------------|----------------------|---------|-----|----------------|------------|
| | | | | C | D | E | | | | |
| PM | 7A21* | 7" | F | 1.4 oz. Alnico V | 6 | 7/8 | 2-31/32 | --- | 1 | \$ 7.25 |
| | 7A31 | 7" | F | 3.16 oz. Alnico V | 9 | 1-1/4 | 3-1/32 | --- | 2 | 8.75 |
| ED | d8E10 | 8" | C | 1000 Ohms | 7 | 1-1/4 | 3-9/32 | --- | 1-1/2 | 8.50 |
| | d8E90 | 8" | C | 85-95 Ohms | 7 | 1-1/4 | 3-9/32 | --- | 1-1/2 | 8.50 |
| PM | 8A1 | 8" | C | 1 oz. Alnico V | 6 | 1 | 3-1/2 | --- | 1 | 5.95 |
| | 8A21 | 8" | C | 2.15 oz. Alnico V | 7 | 1-1/8 | 3-13/32 | --- | 1-1/2 | 7.75 |
| | 8A31 | 8" | C | 3.16 oz. Alnico V | 9 | 1-3/8 | 3-21/32 | --- | 2 | 9.00 |
| PM | 10A31 | 10" | B | 3.16 oz. Alnico V | 9 | 1-3/8 | 4-1/2 | --- | 2-3/4 | 11.50 |
| | 10A4A | 10" | B | 4.64 oz. Alnico V | 10 | 1-3/8 | 4-1/2 | --- | 3-3/4 | 12.95 |
| | 10A6A | 10" | B | 6.8 oz. Alnico V | 12 | 1-7/16 | 4-5/8 | --- | 3-1/2 | 14.50 |
| ED | d12E10 | 12" | B | 1000 Ohms | 12 | 1-3/4 | 5-5/8 | --- | 5 | 16.00 |
| PM | 12A31 | 12" | B | 3.16 oz. Alnico V | 10 | 1-1/4 | 4-19/32 | --- | 3-3/4 | 11.95 |
| | 12A4A | 12" | B | 4.64 oz. Alnico V | 12 | 1-3/8 | 5-1/8 | --- | 3-3/4 | 14.25 |
| | 12A6A | 12" | B | 6.8 oz. Alnico V | 14 | 1-7/16 | 5-1/4 | --- | 4-1/2 | 15.95 |

OUTDOOR SPEAKERS Voice coil impedance 3.2 ohms ± 10%

These long-life speakers have the improved Humi-Gard Cone which utilizes a Mylar plastic film to provide maximum resistance to moisture and dirt and sand abrasion, yet does not interfere with response characteristics. Air gap surfaces cadmium plated and enameled. Quantity quotations on request.

All Quam speakers are available weather-proofed for an additional 70c list. When ordering weather-proofed speakers use part numbers appearing in this catalog and add suffix "OT" to part number. (Humi-Gard Cone available only on 3 1/2", 4", 5", and 6 1/2" speakers.)

| | | | | | | | | | | |
|----|----------|--------|---|-------------------|-----|-----|---------|---------|-----|---------|
| PM | 3-07 OT* | 3 1/2" | A | .65 oz. Alnico V | 2.5 | 3/4 | 1-33/64 | 1-3/16 | 1/2 | \$ 4.00 |
| | 4A1 OT | 4" | A | 1.0 oz. Alnico V | 3 | 1 | 2-3/16 | 1-9/16 | 3/4 | 4.65 |
| | 5A15 OT | 5" | C | 1.47 oz. Alnico V | 3.5 | 1 | 2-5/16 | 1-11/16 | 1 | 5.35 |
| | 6A15 OT | 6 1/2" | C | 1.47 oz. Alnico V | 5 | 1 | 2-5/8 | 2 | 1 | 6.00 |

PUBLIC ADDRESS SPEAKERS Voice coil impedance 8 ohms ± 10%

| | | | | | | | | | | |
|----|---------|-----|---|-------------------|----|--------|---------|-----|-------|---------|
| PM | 8A1PA | 8" | C | 1 oz. Alnico V | 8 | 1-9/64 | 3-1/2 | --- | 1-1/4 | \$ 9.95 |
| | ★8A21PA | 8" | C | 2.15 oz. Alnico V | 10 | 1-3/8 | 3-9/16 | --- | 2 | 8.20 |
| | ★8A31PA | 8" | C | 3.16 oz. Alnico V | 10 | 1-3/8 | 3-9/16 | --- | 2 | 9.50 |
| | 8A4PA | 8" | B | 4.64 oz. Alnico V | 12 | 1-3/8 | 3-3/4 | --- | 2-3/4 | 11.00 |
| | 8A6PA | 8" | B | 6.8 oz. Alnico V | 12 | 1-7/16 | 3-7/8 | --- | 3-1/4 | 13.00 |
| BF | 8C6PA | 8" | O | 6.0 oz. Ceramic | 12 | --- | 3 | --- | 2-1/2 | 11.00 |
| | 8C10PA | 8" | O | 10.0 oz. Ceramic | 12 | --- | 3-1/8 | --- | 3 | 13.00 |
| PM | 10A31PA | 10" | B | 3.16 oz. Alnico V | 12 | 1-3/8 | 4-13/32 | --- | 2-3/4 | 11.50 |
| | 10A4PA | 10" | B | 4.64 oz. Alnico V | 14 | 1-3/8 | 4-1/2 | --- | 3-1/4 | 12.95 |
| | 10A6PA | 10" | B | 6.8 oz. Alnico V | 14 | 1-7/16 | 4-5/8 | --- | 3-1/2 | 14.50 |
| | 10A10PA | 10" | B | 10 oz. Alnico V | 20 | 1-3/8 | 4-21/64 | --- | 3-3/4 | 18.00 |
| PM | 12A31PA | 12" | B | 3.16 oz. Alnico V | 12 | 1-3/8 | 5 | --- | 3-1/4 | 11.95 |
| | 12A4PA | 12" | B | 4.64 oz. Alnico V | 15 | 1-3/8 | 5-1/8 | --- | 3-3/4 | 14.25 |
| | 12A6PA | 12" | B | 6.8 oz. Alnico V | 15 | 1-7/16 | 5-1/4 | --- | 4 | 15.95 |
| | 12A10PA | 12" | B | 10 oz. Alnico V | 25 | 1-3/8 | 4-15/16 | --- | 4 | 19.95 |
| BF | 12C10PA | 12" | O | 10.0 oz. Ceramic | 15 | --- | 4-3/8 | --- | 4 | 15.95 |

HIGH IMPEDANCE SPEAKERS Voice coil impedance 45 ohms ± 10%

Speakers with voice coil impedances other than those listed are supplied at an increase of \$1.00 list. Those catalogued are most fre-

quently used but any other model can be supplied with special voice coil impedance.

| | | | | | | | | | | |
|----|----------|--------|---|------------------|-----|-----|---------|---------|-----|---------|
| PM | 3A07Z45* | 3 1/2" | A | .65 oz. Alnico V | 2.5 | 3/4 | 1-33/64 | 1-3/16 | 1/2 | \$ 4.25 |
| | 4A07Z45* | 4" | A | .65 oz. Alnico V | 3.0 | 3/4 | 1-23/32 | 1-5/16 | 1/2 | 4.55 |
| | 4A1Z45 | 4" | A | 1.0 oz. Alnico V | 3.0 | 1 | 2-3/16 | 1-9/16 | 3/4 | 4.85 |
| | 5A07Z45* | 5" | C | .65 oz. Alnico V | 3.5 | 3/4 | 1-7/8 | 1-7/16 | 3/4 | 4.75 |
| | 5A1Z45 | 5" | C | 1.0 oz. Alnico V | 3.5 | 1 | 2-5/16 | 1-11/16 | 1 | 5.10 |

HIGH FIDELITY SPEAKERS

| TYPE | MODEL No. | SIZE | FIGURE | SPEAKER TYPE | FREQUENCY RESPONSE CPS | Pwr Hndlg Watts | V.C. Impedance | Shippg Wt. Lbs. | LIST PRICE |
|------|-----------|--------|--------|--|------------------------|-----------------|----------------|-----------------|------------|
| PM | 15A10C0 | 15" | G | Coaxial, 2000cps. Xover | 25-15,000 | 20 | 8 | 8 | \$52.50 |
| | 12A6C0 | 12" | G | Coaxial, 2000cps. Xover | 50-15,000 | 14 | 8 | 6-1/2 | 34.50 |
| | 8A4C0 | 8" | G | Coaxial, 2000cps. Xover | 50-15,000 | 10 | 8 | 2-3/4 | 22.95 |
| | 12A10X | 12" | H | Extended range dual cone | 50-15,000 | 15 | 8 | 4-3/4 | 26.00 |
| | 10A10X | 10" | H | Extended range dual cone | 50-15,000 | 12 | 8 | 4-1/8 | 24.00 |
| | 8A10X | 8" | H | Extended range | 50-12,000 | 10 | 8 | 3-1/4 | 20.00 |
| | 69C6X | 6"x9" | D | Extended Range dual cone | 50-15,000 | 12 | 8 | 2-1/2 | 13.95 |
| | 6A21X | 6 1/2" | C | Extended Range dual cone | 75-15,000 | 5 | 8 | 1-1/2 | 8.95 |
| | 15A10L | 15" | H | Low frequency woofer | 30-5,000 | 10 | 8 | 7 | 35.00 |
| | 12A10L | 12" | H | Low frequency woofer | 40-5,000 | 10 | 8 | 4-3/4 | 26.00 |
| | 5A15T | 5" | B | High frequency tweeter | 2,000-15,000 | 10 | 14 | 1 | 6.50 |
| | 3A15T | 3 1/2" | A | High frequency tweeter | 2,000-15,000 | 10 | 14 | 3/4 | 5.75 |
| | CO2-50 | | | Crossover Unit for use with 5A15T, 3A15T | | | | 1/2 | 2.00 |

REAR SEAT AUTO SPEAKER KITS

These kits contain everything required for the installation of the speaker. They include a dash-mounting fader control, cable, flocked screen grill, baffle plate, all necessary hardware and complete installation instructions. Kits AS-2 and AS-2C have sponge rubber baffle plate gaskets.

| MODEL NUMBER | SIZE | FIELD OR MAGNET WEIGHT | POWER HANDLING WATTS | SHPG. WEIGHT POUNDS | LIST PRICE |
|--------------|--------|------------------------|----------------------|---------------------|------------|
| AS-1 | 6 1/2" | 1.47 oz. | 5 | 2 | \$ 9.95 |
| AS-2 | 6"x9" | 2.15 oz. | 9 | 3 1/2 | 13.95 |
| AS-2C | 6"x9" | 2.15 oz. | 9 | 3 1/2 | 15.15 |
| AS-3 | 5"x7" | 1.47 oz. | 5 | 2 1/4 | 11.95 |
| AS-4 | 6"x9" | 1.2 oz. | 6 | 1 3/4 | 7.50 |

* Very shallow construction.

★ Pin-cushion basket.

† Square basket.

d Will be discontinued when current stocks are depleted

SHURE

NEW MICROPHONES

UNIPLEX, UNIDIRECTIONAL CERAMIC

The lowest priced probe-type ceramic microphone with truly unidirectional characteristics . . . provides exceptional performance at moderate cost.

The Shure "Uniplex" employs the same "Uniphase" principle found in higher priced Shure unidirectional microphones. Its wide, useful pickup angle at the front and effective elimination of pickup at the rear provide the ideal solution to feedback problems in low-cost P.A. systems.

The 245 is a natural for home recording, particularly in stereo; excellent for base-station usage, paging, and language laboratories. The 245 is lightweight and versatile, comes complete with stand adapter to permit instant conversion from stand to hand-held use and back again. Reliable, rugged ceramic cartridge performs at temperatures from -40° to $+170^{\circ}$ F. Available in four models, all with metal, die-cast zinc case.



Model 245 with A25B Swivel, S38B Desk Stand



Model 245G



Model 245 Hand Held

SPECIFICATIONS FOR MODEL 245

LIST PRICE: Model 245—\$35.00. Includes A25B Swivel-Stand adapter and removable cable.

Model 245S—\$37.00. Includes "On-Off" switch, A25B Swivel-Stand adapter and removable cable.

Model 245G—\$30.00. Gooseneck mounting version of 245 with fixed cable, no swivel-stand adapter.

Model 245GS—\$32.00. Gooseneck mounting version of 245S with "On-Off" switch, fixed cable, no swivel-stand adapter.

FREQUENCY RESPONSE: 50 to 7,000 cps.

OUTPUT LEVEL: 1.10 mv per microbar at end of 7 ft. (2.1m) cable across 1 to 5 megohms. This is equivalent to 59 db below 1 volt per microbar.

IMPEDANCE: High—Recommended load impedance: 1 to 5 megohms

POLAR PATTERN: Cardioid (unidirectional) Response at rear down 15 db from front.

CABLE AND CONNECTORS: Models 245 and 245S provided with 15 ft. (4.6m) single-conductor shielded cable with a plug (equivalent of Amphenol MCI F) for attaching cable to microphone.

Models 245G and 245GS—7 ft. (2.1m) single-conductor shielded cables attached to microphone.

SWITCHES: Models 245S and 245GS have built-in "on-off" switch

STAND THREAD: Models 245 and 245S provided with Model A25B swivel adapter with $\frac{5}{8}$ "-27 thread.

Models 245G and 245GS for use with flexible goosenecks having a $\frac{5}{8}$ "-27 thread.

DIMENSIONS: (Microphone only) $4\frac{3}{4}$ " high, $1\frac{1}{8}$ " diam.

LOW COST, WIDE-RANGE "VERSADYNE" MICROPHONES

Smooth response makes these units a "best-buy" for general public address, home recording and call-system use where both performance and economy are important. High-performance dynamic cartridge is unaffected by temperature and humidity variations. Choice of high or low impedance dynamic or high impedance ceramic models each complete with switch plus stand adaptor and lavalier cord. Small size and light weight, this unit is equally adaptable to hand-held, stand-mounted or lavalier use. Model 575S and 275S feature high impedance and high output, for applications where only a moderate length of cable is required. The low impedance, Model 575SB is designed for use in installations where long cable lengths are required, or for use with transistor amplifiers requiring a medium or low impedance microphone.



Models 275-375

SPECIFICATIONS

| | MODEL 575S | MODEL 575SB | MODEL 275S |
|--------------------|--|---------------------------------------|---------------------------------------|
| LIST PRICE | \$24.00 | \$21.00 | \$15.00 |
| TYPE | DYNAMIC | | CERAMIC |
| FREQUENCY RESPONSE | 40 to 15,000 CPS | | 40 to 12,000 |
| OUTPUT LEVEL | Down 59 db from 1 volt per microbar | -62 db (0db=1 Milliwatt per microbar) | Down 59.5 db from 1 volt per microbar |
| POLAR PATTERN | OMNI-DIRECTIONAL | | |
| IMPEDANCE | High: 100,000 Ohms Recommended | 150-250 Ohms | High: 1 to 5 Megohms Recommended |
| FINISH | Black high-impact plastic body with satin anodized cap and stainless steel grill | | |
| DIMENSIONS | $4\frac{3}{4}$ " long x $1\frac{1}{4}$ " diam. | | |

See Section 1340 for additional Shure Products.

SHURE

COMMUNICATIONS MICROPHONES

"SONOBAR" NOISE CANCELLING MICROPHONES



Model 488

Provides highly intelligible speech communication in mobile and fixed station use where high volume background noise is found, such as airplanes, helicopters, motorcycles, trucks, fire engines, sporting events, drop forges and boiler factories. The 488 incorporated the patented Shure Controlled Reluctance cartridge into a differential type microphone that effectively cancels background noise. Rugged, impact-resistant "Armo-Dur" case is lightweight, easier to handle in extremes of temperature. Three versions available: 488A — high impedance; 488B — low impedance; and 488T — transistorized for direct replacement of carbon microphones (FAA Certified for Aircraft applications). All models equipped with coiled-cord and long-life heavy-duty push-to-talk switches, mounting brackets.

extremes of temperature. Three versions available: 488A — high impedance; 488B — low impedance; and 488T — transistorized for direct replacement of carbon microphones (FAA Certified for Aircraft applications). All models equipped with coiled-cord and long-life heavy-duty push-to-talk switches, mounting brackets.

SPECIFICATIONS

| | 488A High Impedance | 488B Low Impedance | 488T Transistorized* (FAA Certified) |
|----------------------|--|--|---|
| LIST PRICE | \$57.50 | \$57.50 | \$72.50 |
| FREQUENCY RESPONSE | 200-4000 CPS ESPECIALLY TAILORED BEST INTELLIGIBILITY | | |
| NOISE DISCRIMINATION | FAR SUPERIOR TO STANDARD COMMUNICATIONS MICROPHONE | | |
| OUTPUT LEVEL | -58.0 db (1 volt per microbar) | -56.0 db (1 milliwatt with 10 microbars) | -45.0 db (1 volt per microbar) Using 6V and 500 ohm load |
| IMPEDANCE | High: Recommended load 100,000 ohms or more | 150-250 ohms | Recommended load 100 to 800 ohms AC; 6 to 18 VDC across loaded microphone |
| CONNECTOR | NONE | NONE | PJ-068 |
| SWITCH MIC CIRCUIT | Normally Closed | Normally Open | Normally Open |
| RELAY CIRCUIT | NORMALLY OPEN | | |
| DIMENSIONS | 3 1/16" high x 2 3/8" wide x 2 1/2" deep | | |

MODEL 488T FINISHED IN ULTRA-VIOLET PAINT

LOW COST PALM MICROPHONE FOR CB, AMATEUR, MOBILE



Model 201-401

Loaded with features—yet priced unusually low. "Shaped" voice response is patterned after professional mobile and SSB amateur response curves . . . assures maximum intelligibility. Professional design and construction. Long-life slide-switch, guaranteed full year. Virtually indestructible "Armo-Dur" wonder plastic case: shock-, shatter-, corrosion-, rust-

and weather-proof. Coiled-cord won't kink. "Lifetime" hang-up bracket. Choice of ceramic (model 201) or controlled magnetic (model 401A and 401B) elements. (401B recommended for parallel balanced line operation where long cable lengths are required.)

SPECIFICATIONS

| | Model 201 | Model 401A | Model 401B |
|--------------------|---|---|--|
| LIST PRICE | \$18.00 | \$22.00 | \$22.00 |
| TYPE | CERAMIC | CONTROLLED MAGNETIC | |
| FREQUENCY RESPONSE | 200 to 4000 cps. free from undesirable peaks. | | |
| OUTPUT LEVEL | 55.5 db below 1 volt per microbar | 49 db below 1 volt per microbar | -48 db (0db = 1 milliwatt per 10 microbars) |
| IMPEDANCE | High—Recommended load impedance; 1 to 5 megohms | High—Recommended load impedance; 100,000 ohms or more | Low—Recommended load impedance; 150-250 ohms |
| POLAR PATTERN | OMNI-DIRECTIONAL | | |
| DIMENSIONS | 4" High x 2 3/4" Wide x 1 5/8" Deep. | | |

"VERSAPLEX" CB IMPROVEMENT MICROPHONE



Model 275SK

Citizen's Band broadcasters will find this new ceramic unit ideal for replacing original equipment crystal or ceramic microphone. Comes complete with wall or panel bracket for handy hanging, and coiled-cord. "Momentary" push-to-talk switch activates relay circuit. Smooth response from ceramic cartridge that is resistant to extremes of temperature and humidity. Lightweight impact-resistant "Armo-Dur" case with black finish and anodized satin-finish cap.

FREQUENCY RESPONSE: 40 to 10,000 cps. free from undesirable peaks
 OUTPUT LEVEL: 59.5 db below 1 Volt per Microbar
 IMPEDANCE: High—recommended load 1/2 to 5 Megohms
 CABLE: Coiled Cord extends to 5 feet. 3 Conductors, one shielded
 FINISH: Black high impact plastic body with satin anodized cap and grill
 DIMENSION: 4 3/4" long x 1 3/8" diam.

SPECIFICATIONS FOR MODEL 275SK
 List Price: \$16.50

See Section 1340 for additional Shure Products.

SHURE

FAMOUS UNIDYNE MICROPHONES

UNIDYNE III SERIES

The Shure Model 545 "Unidyne III" is a new addition to the famed family of Unidyne microphones. This striking-looking, compact, slender, uni-directional, moving-coil microphone features wide-range reproduction of voice and music and flexibility of uses as a hand or stand microphone. The 545 is ideal for installations where it is desired to keep microphone size and weight to a minimum and still retain maximum operating efficiency. Recommended for dependable use in fine quality P.A. systems, tape recording, fixed-station communications, etc. Provides highly satisfactory operation under adverse acoustic conditions — reduces or eliminates problems due to feedback and background noise pickup. Permits placement at a distance from the performer 75% greater than possible with omni-directional microphones.

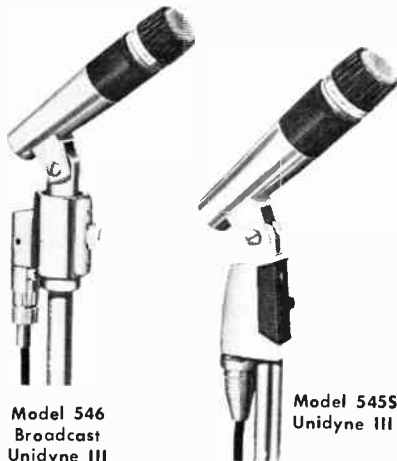
TYPE: Dynamic. FREQUENCY RESPONSE: 50-15,000 cps. POLAR PATTERN: Cardioid (Uniform with frequency, symmetrical about axis). MAGNETIC CIRCUIT: uses Alnico V magnet. CASE: Die cast zinc and "Armo-Dur". FINISH: Satin chrome and black. CABLE CONNECTOR: Equivalent to Amphenol MC4M plug. CABLE: 18 ft., 3 conductor shielded. STAND THREAD: $\frac{3}{8}$ " — 27 thread. DIMENSIONS: Length — $5\frac{7}{8}$ ", Diam. — $1\frac{1}{4}$ ". NET WEIGHT: 6/10 lb., Shipping Weight $2\frac{7}{8}$ lbs. FURNISHED ACCESSORIES: A25 type swivel adapter. OPTIONAL ACCESSORIES: A86A cable type transformer, S33B desk stands.



Model "545"
Unidyne III

BROADCAST UNIDYNE III

MODEL 546. Ultra compact, unidirectional, distinctive design, weighs only 1 lb.! Recommended for critical broadcast and theater-stage sound system operation and highest quality public address and recording applications. Truly uniform cardioid pick-up pattern, symmetrical about axis. Special live-rubber vibration isolating shock mount. Improved self-adjusting lifetime swivel permits tilting of head 180°. Cannon XL-3-11 connector. 20 ft. 2-conductor shielded broadcast type cable. Head only $1\frac{1}{4}$ " diam., $5\frac{7}{16}$ " long. 50-15,000 cps frequency response.



Model 546
Broadcast
Unidyne III

Model 545S
Unidyne III

SWITCH VERSION OF UNIDYNE III

MODEL 545S. Same basic specifications as Unidyne III (above) but equipped with reliable on-off switch. Increases the versatility. Improved swivel same as model 546 (above). With 18 ft. 3-conductor shielded cable; equivalent of Amphenol MC4M plug.

| IMPEDANCE TABLE | OUTPUT LEVEL |
|-----------------------------|--|
| 30-100 ohms 100-250 ohms | 55db below 1 milliwatt per 10 microbars |
| L-50-250 ohms | 57db below 1 milliwatt per 10 microbars |
| H-High | 55db below 1 volt per microbar |

| MODEL | LIST PRICE |
|-------|------------|
| 546 | \$135.00 |
| 545 | \$ 85.00 |
| 545S | \$ 89.95 |

UNIDYNE II SERIES

The Unidynes are the largest selling microphones throughout the world — used consistently by famed celebrities for those important events where the faithfulness of sound reproduction is critical. A sturdy construction provides immunity of the moving-coil system to abnormal atmospheric conditions and severe mechanical shock. Model 555 is highly recommended for fine quality public address, theater-stage sound systems, recording and remote broadcasting, and low-gain tape recording. It is also the field-proved standard for fixed station use in the police, fire, transportation, forestry and commercial services. Smooth frequency response from 50 to 15,000 cps. Furnished with an 18-foot cable and plug assembly. Model 555W is same as Model 555 except it has On-Off switch.

Model 556S is specially constructed and tested to meet the requirements of the broadcast and television studio, and is held within close tolerances in frequency response and directivity. It is a moving-coil type microphone with a frequency range of 40 to 15,000 cps, production uniformity guaranteed to plus or minus $2\frac{1}{2}$ db. As a further precaution against mechanical vibration pickup, the 556S is provided with an additional isolation unit, of live rubber construction in combination with the stand connector and a built-in high quality cable connector. Furnished with a 20-foot, high quality, shielded, 2-conductor cable with Cannon plug attached. Both the 555 and the 556S feature the world-renowned patented "Uniphase" network system.



Model "555"
Unidyne



Model "556S"
Broadcast

| IMPEDANCE TABLE | OUTPUT LEVEL |
|-----------------|---|
| L-35-50 ohms | 54 db below 1 Milliwatt per 10 microbar signal |
| M-150-250 ohms | 55 db below 1 Milliwatt per 10 microbar signal |
| H-High | 57 db below 1 volt per microbar |

| MODEL | LIST PRICE |
|-------|------------|
| 556S | \$135.00 |
| 555 | \$ 83.00 |
| 555W | \$ 85.00 |

See Section 1340 for additional Shure Products.

SHURE

STUDIO MICROPHONES

UNI-DIRECTIONAL RIBBON MICROPHONE



Model "333"
Studio Uni-Ron

Here is the dependable "333," a truly fine and rugged microphone created for discriminating users with the most exacting professional requirements. Here, indeed, is a major advance in microphone development and design! This small, ultra-cardioid "333" is highly recommended for motion-picture studios, TV studios, radio stations, professional recording, and all other uses where quality requirements are of the highest. Here is performance never before achieved in such a small and slender microphone! Here is ruggedness and reliability! Here is matchless beauty and striking design to appeal to users who demand the finest! The "333" is ultra-cardioid, uni-directional—reduces the pickup of random noise energy by 73%—prevents the pickup of moving props, scuffling feet and moving "dollies," so common when conventional broadcast microphones are used. Following are the features that make the "333" Studio so outstanding in performance, so dependable in operation: (1) patented, world-famous "Uniphase" system; (2) a true ultra-cardioid pickup pattern; (3) horn-loaded ribbon transducer provides extended smooth response, production uniformity guaranteed to plus or minus 2½ db, 30-15,000 c.p.s.; (4) multi-impedance switch; (5) voice-music switch; (6) anti-"Pff" filter screen; (7) Shure self-adjusting "lifetime" swivel; (8) high output; (9) sturdy, one-piece metal case; (10) vibration-isolation unit mounted in live rubber; (11) Cannon XL connector. All these important features, plus the striking design of the Studio "333," make it ideal for critical studio applications that call for the highest possible broadcast quality, small size and matchless beauty—plus the ability to withstand the rough work-a-day handling by the sound crew. The "333" has two-tone "Baked Bronze" non-reflecting finish. Head dimensions: Width, 1 1/8"; height, 3 9/16"; depth, 1 3/4".

| IMPEDANCE TABLE | OUTPUT LEVEL |
|----------------------|--|
| Low—50 ohms | 60 db below 1 Milliwatt per 10 microbar signal |
| Medium—150 ohms | 59 db below 1 Milliwatt per 10 microbar signal |
| High-Medium—250 ohms | |



Model 333
Broadcast
Desk Stand
For use with Models
300, 333, 525, 535
and 556
List Price \$15.00

| MODEL | LIST PRICE |
|-------|------------|
| "333" | \$250.00 |

OMNI-DIRECTIONAL DYNAMIC MICROPHONE



Model "525"
Studio Slendyne

The new Studio "525" is an exceptionally fine probe microphone of broadcast quality. It features: (1) frequency response 40-15,000 c.p.s., production uniformity guaranteed to plus or minus 2½ db; (2) a moving-coil mounted in a highly efficient magnetic structure; "Alnico V" magnet; (3) multi-impedance switch; (4) high output; (5) long life "Duracoustic" diaphragm—specially designed to withstand moisture, heat, cold and physical shock. The "525" is furnished with a 20 ft., two-conductor, rubber-covered, shielded cable with Cannon XL-3-11 connector attached; swivel adapter; adjustable lavalier assembly (cord and clip), and a belt clip assembly. The "525" Studio has a non-reflecting "Baked Bronze" finish—which makes it blend into the background, giving the spotlight to the performer. Body diameter, 1"; length, 8 17/32".

| IMPEDANCE TABLE | OUTPUT LEVEL |
|-----------------|--|
| 50 ohms | 61 db below 1 Milliwatt per 10 microbar signal |
| 150 ohms | |
| 250 ohms | |

Model 333
Broadcast
Desk Stand
List Price: \$15.00

| MODEL | LIST PRICE |
|-------|------------|
| "525" | \$200.00 |

BI-DIRECTIONAL GRADIENT' MICROPHONE



Model "300"
Studio Gradient'

This rugged, high fidelity, multi-impedance microphone is widely used for television, radio broadcasting, professional recording and high-fidelity uses. The "300" reduces reverberation and the pickup of random noise by 66%. The "300" combines the best features of conventional velocity microphones with advanced acoustic design—including an anti-"PFF" filter screen. Its bi-directional polar pattern is effective over a broad frequency range. It provides sound pickup at the front and rear of the microphone, but greatly reduces pickup at the sides. One of the outstanding features of the "300" is the fact that the microphone can be placed at a 73% greater distance from the performer than is possible with omni-directional microphones! The "300" has a non-reflecting "Baked Bronze" finish, so it blends into the background, gives the spotlight to the performer. The "300" has a readily accessible Voice-Music switch, vibration-isolation unit mounted in live rubber, and a multi-impedance switch, providing low medium and high impedance. Extended response, production uniformity guaranteed to plus or minus 2½ db, 40-15,000 c.p.s. Furnished with a 20-foot two-conductor, rubber-covered, shielded cable with Cannon XL-3-11 connector attached.

| IMPEDANCE TABLE | OUTPUT LEVEL |
|-----------------|--|
| L—35-50 ohms | 59 db below 1 Milliwatt per 10 microbar signal |
| M—150-250 ohms | 60 db below 1 Milliwatt per 10 microbar signal |
| H—High | 57 db below 1 volt per microbar |

Model 333
Broadcast
Desk Stand
List Price: \$15.00

| MODEL | LIST PRICE |
|-------|------------|
| "300" | \$150.00 |

See Section 1340 for additional Shure Products.

SHURE

GENERAL PURPOSE MICROPHONES

OMNI-DIRECTIONAL DYNAMIC MICROPHONES

The versatile Slendyne 535 is a moving-coil dynamic microphone built to provide wide range reproduction of music and voice. Actually five microphones in one . . . can be used for indoor or outdoor applications: (1) in the hand, (2) on a floor stand, (3) on a desk stand, (4) hung around the neck on a lavalier cord. Add to this an on-off switch adapter and dual-impedance switch and you have the most completely versatile fine quality probe ever developed. Frequency response is 60 to 13,500 c.p.s. Ideal for high quality public address, theater-type sound systems, and all recording applications where an omni-directional microphone is desired. Ruggedly built to withstand hard usage. Unaffected by temperature and humidity variations. The 18-foot, high quality, shielded, two-conductor cable is supplied with a microphone plug equivalent to the Amphenol 91-MC3M plug. Finished in rich satin chrome. A self-adjusting swivel adapter is supplied with the microphone, and permits it to be tilted from 90° from vertical to horizontal, making it possible to tilt the microphone at the source of sound. Also includes on-off switch adapter.

The Model 530 Slendyne is the deluxe broadcast Slendyne, finished in an attractive black and gold anodized finish. It has a frequency range of 50 to 15,000 c.p.s., and is furnished with a 20-foot, high quality, two-conductor shielded cable with a Cannon XL-3-11 cable connector. Furnished with swivel adaptor, deluxe lavalier cord and belt clip, on-off switch adaptor.

LAVALIER ASSEMBLY Model A28L for use with Slendyne model 535.
MODEL A28L LIST PRICE \$4.50

| MODEL | IMPEDANCE TABLE | OUTPUT LEVEL | MODEL | LIST PRICE |
|-------|-----------------|--|-------|------------|
| "535" | L—50-250 ohms | 61 db below 1 Milliwatt per 10 microbar signal | "535" | \$72.50 |
| | H—High | 61 db below 1 volt per microbar | | |
| "530" | L—50-250 ohms | 61 db below 1 Milliwatt per 10 microbar signal | "530" | \$110.00 |
| | H—High | 61 db below 1 volt per microbar | | |



Model "535"
Slendyne



Model "530"
Broadcast Slendyne

BI-DIRECTIONAL GRADIENT¹ MICROPHONE

This rugged high fidelity multi-impedance microphone features a frequency response of 50 to 12,000 cps — will reproduce voice and music in a clear, natural tonal quality, which makes it ideal for use in auditoriums, night clubs, schools and churches. Provides unusual freedom of motion on the platform — making it possible for the user to stand at a 73% greater distance from the microphone than with omni-directional microphones. 8i-directional "Fig. 8" pickup pattern extends over a broad frequency range — and it permits the sound system to be operated at a level almost 6 db higher than is possible with non-directional (omni-directional) microphones! Picks up voices and music from front to back — is "dead" at the sides, reduces reverberation and the pickup of random noises by 66%. It is "PFF"-proof — filters out the "PFF"-type noises often heard over conventional microphones. Dimensions: height 6"; width 1 7/16"; depth 1 3/32". The "315" is furnished with an 18-foot, high quality, two conductor, shielded cable, supplied with the equivalent of the Amphenol 91-MC3M plug. Model "315S" is same as model "315" but it has On-Off switch.

| IMPEDANCE TABLE | OUTPUT LEVEL | MODEL | LIST PRICE |
|-----------------|--|--------|------------|
| L—35-50 ohms | 59 db below 1 Milliwatt per 10 microbar signal | "315" | \$89.50 |
| M—150-250 ohms | 60 db below 1 Milliwatt per 10 microbar signal | "315S" | \$91.50 |
| H—High | 57 db below 1 volt per microbar | | |

Model "315"
Gradient



UNI-DIRECTIONAL RIBBON MICROPHONE

Similar to "333" studio microphones, the 330 "UNI-RON" Microphone has been designed to meet the exacting requirements of professional tape recording and highest quality indoor public-address systems where highest quality is essential, yet cost is a factor. Supercardioid pickup pattern reduces pickup of undesired random noise energy by 73%! Smooth, peak-free response from 30 to 15,000 cps. The Professional "Uni-Ron" is equipped with multi-impedance (50, 150 and 250 ohms) switch, life-time swivel, and special vibration-isolation shock mount, as well as Cannon XL-3-11 cable connector and 20 ft. 2-conductor shielded broadcast-type cable. Finished in beautiful satin-chrome with natural anodized aluminum grille.

| IMPEDANCE TABLE | OUTPUT LEVEL | MODEL | List Price |
|-----------------|--|-------|------------|
| L — 50 ohms | 59 db below 1 milliwatt per 10 microbars | "330" | \$120.00 |
| M — 150 ohms | 57 db below 1 milliwatt per 10 microbars | | |
| H — 250 ohms | 58 db below 1 milliwatt per 10 microbars | | |



Model "330"
"Professional Uni-Ron"

See Section 1340 for additional Shure Products.

SHURE

GENERAL PURPOSE MICROPHONES

"COMMANDO" ALL-PURPOSE MICROPHONES

The new Commando series represents a significant achievement in providing quality performance at nominal cost. These dramatic looking, rugged microphones can be used indoors or outdoors. Models 415 and 430 provide practical versatility of operation. They can be held in the hand, set on a floor stand or on a desk stand — can be inserted or withdrawn from the stand in a second, without the use of any tools. Model 420 is of more compact design and is intended primarily for use as a lavalier microphone. It is readily detachable from its lavalier clip for use as a hand held unit. Coupled with this versatility of usage, the Commandos are ideal for general-purpose applications where both voice and music reproduction are of critical importance. Commandos can be used for tape recording in the home; theater-restaurant public address systems; lecturing; paging and dispatching systems; interview-type shows; outdoor public address systems for carnivals, picnic and special events.

All three units are ruggedly constructed of attractive, non-reflecting gray, impact resistant polystyrene. The lower part of Models 415 and 430 are of die cast zinc with a satin chrome finish.

The Commandos are omni-directional units with a frequency response of 60-10,000 cps. They are controlled magnetic units and are unaffected by extremes of temperature and humidity. Models 420 and 430 are equipped with readily changeable pin jacks for a choice of two impedances (L — 150 to 250 ohms and H — High), without soldering.

Model 430 includes on-off switch, dual-impedance feature and Amphenol MC2M cable conductor. Furnished with 15 Ft. of 2-conductor shielded cable, black Model A25-type swivel adapter and switch locking plate for keeping switch in "on" position. **List Price: \$38.50**

Model 420 includes dual impedance feature and A34L lavalier cord and clip assembly. Furnished with 20 ft. of non-detachable 2-conductor shielded cable. **List Price: \$30.00**

Model 415 includes black Model A25-type swivel adapter and 7 ft. of non-detachable single-conductor shielded cable. High impedance only. **List Price: \$27.50**

S38B Desk Stand for use with Models 415 and 430. **List Price: \$4.50**

A34L Lavalier for use with Models 415, 420, 430. **List Price: \$3.50**



Model 430 in the Hand



Model 430 on Floor Stand

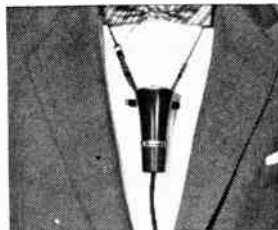


Model 430 on S38 Desk Stand



Model 415 in the Hand

| IMPEDANCE | OUTPUT LEVEL |
|-----------|---|
| 150-250 | -54 db below 1 volt per microbar |
| HIGH | -55 db below 1 milliwatt per 10 microbars |



Lavalier Model 420

425 SERIES "COMMANDO"

Designed for faithful voice and music reproduction. Ideal for recording on tape, wire or disc, fixed or mobile public address systems, language laboratory systems, intercommunications systems, amateur communications and similar uses where a flexible arm is required. The 425 is rugged, and recommended for use where high quality is desired at low cost.

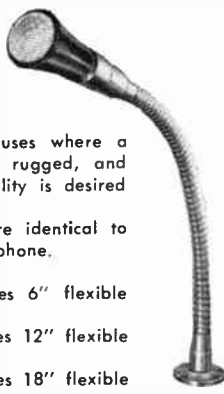
Electrical specifications for the 425 are identical to those for the 420 "Commando" microphone.

LIST PRICE: Model 425 — \$30.00

Model 425-G6 — \$33.00. Includes 6" flexible gooseneck and mounting flange.

Model 425-G12 — \$33.75. Includes 12" flexible gooseneck and mounting flange.

Model 425-G18 — \$35.00. Includes 18" flexible gooseneck and mounting flange.



Model 425 Flexible Gooseneck Mounting

CASE: Impact resistant polystyrene — brass.
FINISH: Bright Chrome and non-reflecting gray.
CABLE: 7 ft., 2-conductor, non-detachable, shielded.
DIMENSIONS: Length 3 1/16", diameter 1 3/4".
OPTIONAL ACCESSORIES: Model A86A Cable Type Transformer.
 Model A25 Swivel Adapter.

"COMMANDO" PAGING MICROPHONE



MODEL 430SL

Latest addition to the famed Shure "Commando" Line. Special "momentary" press-to-talk locking or non-locking switch controls both microphone circuit and external relay or control circuit. Specially designed for public address, call systems, background music paging systems and similar applications. Model 430SL comes with an S38B Desk Stand and an A25B swivel adaptor that permits tilting of microphone through 90° from vertical to horizontal . . . enables you to "aim" microphone at the source of sound. Can be used in stand or hand held, or adaptable to gooseneck mounting.

Electrical specifications same as for the "420" Commando listed above. Complete with 15 ft. non-detachable 3-conductor (one conductor shielded) cable.

MODEL 430SL

LIST PRICE: \$49.95

See Section 1340 for additional Shure Products.

SHURE

GENERAL PURPOSE MICROPHONES

SONODYNE II



Model 540S

MODEL 540S. A compact, modernistic microphone with high output dynamic element at moderate cost. The "Sonodyne II" features adjustable frequency response which allows the user to tailor the microphone to the application—One of the most versatile microphones on the market! High output Dynamic element. Omni-directional pick-up pattern. Frequency response: 60 to 10,000 cps with provisions for alternate response for voice intelligibility in paging and communications systems. Reliable on-off switch. Improved positive action lifetime swivel permits tilting head 150°. 15 ft. 2-conductor shielded cable, equivalent to Amphenol MC3M connector.

| IMPEDANCE TABLE | OUTPUT LEVEL | LIST PRICE |
|-----------------|-------------------------------------|------------|
| L-50-250 ohm | 57db below 1 milliwatt per microbar | \$49.95 |
| H-High | 52.5db below 1 volt per microbar | |

SONODYNE



Model "51" "Sonodyne"

The "Sonodyne" is ideal for all general purposes, including public address, wire and tape recording, and similar applications. Ideal high-quality, moderately-priced replacement for the conventional microphone supplied with tape recorders. The wide range frequency response is 60 to 10,000 cps. This rugged microphone is of the pressure type, with conventional semi-directional characteristics, and it may be used for close-talking without undue low frequency emphasis. Multi-impedance,—for low, medium and high impedance. Has built-in receptacle and a 15-foot, two-conductor shielded cable with microphone plug attached. Satin chrome finish. Model 51S is same as Model 51 except it has On-Off switch.

Model "51" List Price \$49.50
Model "51S" List Price \$51.50

| IMPEDANCE TABLE | OUTPUT LEVEL |
|-----------------|--|
| L-35-50 ohms | 53.0 db below 1 Milliwatt for 10 microbar signal |
| M-150-250 ohms | 52.5 db below 1 Milliwatt for 10 microbar signal |
| H-High | 52.0 db below 1 volt per microbar |

THE "HERCULES"



The "Hercules" is a hand-held unit, ideal for general purpose use in tropical countries and in all coastal areas where heat and humidity are a problem. The "510" provides the ruggedness, clear reproduction and high output for public address, communications and recording where high speech intelligibility is vital. It is recommended for Announcing; Mobile Public Ad-

dress Systems; Communications; Home Recording, and High Quality Intercommunication. The Hercules can be used either Indoors or Outdoors, fits snugly in the hand, sits firmly on a desk. High impedance. Frequency response 100 to 7000 c.p.s. Furnished with 7 ft. shielded cable. Green metallic finish. Diecast case. Furnished with stand adapter. Dimensions: 2 2/3" wide, 3 1/4" high, 1 1/2" thick. Model 510 Series designed to be used with S34B or S36A Desk Stands. (See page D-7)

| MODEL | OUTPUT LEVEL | IMPEDANCE | LIST PRICE |
|--------------------|-----------------------------------|-----------|------------|
| 510C | 52.5 db below 1 volt per microbar | HIGH | \$17.00 |
| 510S (with switch) | 52.5 db below 1 volt per microbar | HIGH | \$19.00 |

THE "GREEN BULLET"



Designed to provide quality music and speech reproduction at moderate cost. Rugged! Practically immune to the effects of high temperatures and humidity. Features: high output, good response, high impedance without the need of a transformer. Modern metallic green finish with plated grille. Frequency response is 100 to 7000 c.p.s. Furnished with 7 ft. single-conductor shielded cable. High Impedance. Use with Shure Model S34B or S36A Desk Stands.

| MODEL | OUTPUT LEVEL | IMPEDANCE | LIST PRICE |
|-------|--|--------------|------------|
| 520 | 52.5 db below 1 volt per microbar | HIGH | \$22.50 |
| 520B | 51 db below 1 milliwatt per 10 microbars | 150-250 ohms | \$22.50 |

THE "DISPATCHER"



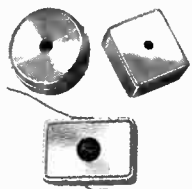
MODEL 520SL

Model 520SL recommended for mobile and fixed station use, also for public address, recording, call systems, radio telephone and amateur use. Model 520SLB recommended where low impedance microphones are used in parallel, balanced-line operation and where long cable lengths are required, or under conditions of severe hum disturbances.

MODEL 520SL equipped with grip-to-talk switch DPST—normally closed—normally open, and 7 ft. 2-conductor shielded cable, equivalent to Amphenol MC3M plug. MODEL 520SLB has grip-to-talk switch DPST—normally open—normally open, 7 ft. 4-conductor (2 conductors shielded) cable, equivalent to Amphenol MC4M plug.

| MODEL | OUTPUT LEVEL | IMPEDANCE | LIST PRICE |
|---------|--|--------------|------------|
| 520 SL | 52.5 db below 1 volt per microbar | High | \$45.00 |
| 520 SLB | 51.0 db below 1 millivolt per 10 microbars | 150-250 Ohms | \$49.25 |

MINIATURE MICROPHONES



Small microphones specially designed for use in vacuum-tube devices such as small, compact amplifiers, transmitters, dictating equipment—wherever size and weight are important factors. They also are highly recommended for use in small transistor-type devices. They are immune to varying conditions of heat and humidity.

Model MC11
(Circular)
Impedance: 1,000 ohms
Frequency Response: 400 to 3,000 cps
Output Level: -75 db (0 db - 1 volt per microbar)
Dimensions: Dia. 1 1/64", thickness 25/64"
List Price \$12.50

Model MC20
(Rectangular)
Impedance: 1,100 ohms
Frequency Response: 400 to 4,500 cps
Output Level: -75 db (0 db - 1 volt per microbar)
Dimensions: width 10/16", thickness 5/16", length 15/16"
List Price: \$14.00

Model MC30
(Rectangular)
Impedance: 1,850 ohms
Frequency Response: 400 to 3,500 cps
Output Level: -76 db (0 db - 1 volt per microbar)
Dimensions: width .5", length .5", thickness .265"
List Price: \$20.00

See Section 1340 for additional Shure Products.

SHURE

CRYSTAL MICROPHONES

THE VERSATILE "SLIM-X" ALL-PURPOSE MICROPHONE

FOR:

- Low Cost P. A. Systems
- Home Recording
- Hams
- General Purpose

The "777" Slim-X Microphones are rugged little microphones weighing only 6 ounces! They are designed for good-quality voice and music reproduction. Their versatility and "hand-ability" make them ideal for use by lecturers, announcers, instructors, and Hams; for audience participation shows; carnivals; panel and quiz shows; and use with home-recorders. When mounted on either cradle or swivel, the "777" can be removed in a flash (no tools necessary)—simply by lifting it



In Cradle
On S38
Desk Stand



On S38
Desk Stand
(With A25
Swivel)



In Cradle
On Floor Stand



In the Hand

out of the holder. This makes it an ideal "walk-around" hand-held microphone.

TECHNICAL INFORMATION: Smooth frequency response—60 to 10,000 c.p.s.; Moisture-proof "Metal Seal" crystal for long operating life; high impedance; 7 ft. single-conductor cable, disconnect type. Dimensions: (Microphone only) Length, 4½"; Diameter, 1". Finish: Rich satin chrome overall.

Note: All Models are furnished with Lavalier Card, for suspension of microphone around neck.

"SLIM-X" ASSEMBLIES

MODEL 777A includes 777 Microphone; A-25 Swivel Adaptor; S-38 Desk Stand; Lavalier Cord. Model: 777A List Price: \$33.00

MODEL 777SA includes 777S Microphone; A-25 Swivel Adaptor; S-38 Desk Stand; Lavalier Cord. Model: 777SA List Price: \$35.00

ACCESSORIES FOR "777"

MODEL S-38 STAND is a heavy die-cast base. Includes metal screw machine stud for connecting microphone adaptor to stand base.

Model: S-38 List Price: \$4.50

MODEL A-25 SWIVEL ADAPTOR features a long-life, high-quality swivel connector. Is lined with a long-life nylon sleeve—for noise-free and scratch-free insertion and removal of microphone. Model: A-25 List Price: \$5.50

| Model | Output | List Price |
|-------------------|---------------------------------|------------|
| 777* | | \$25.00 |
| 777A | 62 db below 1 volt per microbar | \$33.00 |
| 777S* With Switch | 1 volt per microbar | \$27.00 |
| 777SA With Switch | | \$35.00 |

* (Price includes cradle for mounting on stand.)



"MONOPLEX"

The only Super-Cardioid Crystal Microphone made—far superior to conventional Crystal Microphones! Excellent for high-quality public address, communications, recording, and similar applications. The 737A operates under adverse conditions of background noise and reverberation—where a conventional microphone would be practically useless! Reduces pickup of random sound by 73%! Moisture-proof "Metal Seal" crystal for long operating life. Case pivots at rear, can be pointed toward desired sound or upwards for horizontal plane pickup. Has 15 ft. shielded cable. Rich satin chrome finish. High impedance.

| MODEL | OUTPUT | LIST PRICE |
|-------|---------------------------------|------------|
| 737A | 53 db below 1 volt per microbar | \$46.00 |



Model 215
and 715

"STARLITE"

Beautifully designed. Excellent for voice and music. Extremely low price and good quality make them a "natural" for home recording, intercom systems and inexpensive P.A. systems. Can be held in the hand, or used on a desk by simply releasing a built-in retractable stand. Semi-directional, high impedance; impact resistant polystyrene cases.

Model 215, a ceramic unit, has a response from 50-8000 cps; Model 715, a crystal unit, has a response range from 50-10,000 cps. Both supplied with 5 ft. fabric covered single conductor shielded cable.

| MODEL | OUTPUT | LIST PRICE |
|-------------|-----------------------------------|------------|
| 215 Ceramic | 56.5 db below 1 volt per microbar | \$8.00 |
| 715 Crystal | 50 db below 1 volt per microbar | \$8.00 |



THE "REX"

Model 710A
and 710S



Model 707A

A natural for "Hams" and low-cost public address system. A rugged unit designed for high speech intelligibility. Broad "tip-proof" table top base, with floor stand adapter. Die cast case. Frequency response 60 to 9,000 c.p.s. 5 ft. shielded cable. Burgundy-red metallic finish. Only 2½" wide, 3¼" high, 1½" thick. High impedance.

| MODEL | OUTPUT | LIST PRICE |
|--------------------|---------------------------------|------------|
| 710A | 50 db below 1 volt per microbar | \$12.00 |
| 710S (with switch) | 50 db below 1 volt per microbar | \$14.00 |

MODEL 707A

Ideal for low-cost P.A. systems, amateur 'phone transmitters and similar applications. Good quality at low cost. Has typical semi-directional pickup. 7 ft. shielded cable. High impedance. Pearl Gray case, satin chrome finish on front grille. Diam. 2¾". (Use with Shure Model S34B or S36A Desk Stands.)

| MODEL | OUTPUT | LIST PRICE |
|-------|---------------------------------|------------|
| 707A | 50 db below 1 volt per microbar | \$19.50 |

See Section 1340 for additional Shure Products.

SHURE

COMMUNICATIONS MICROPHONES

NEW! SHURE COMMUNICATIONS MICROPHONES

MODEL
488MODELS
201-401MODEL
275SK

NOISE CANCELLING MICROPHONE — Model 488 "Sono-Bar". A real breakthrough in microphone design. Suppresses background noise more effectively than any other microphone!

CITIZENS BAND IMPROVEMENT MICROPHONES — Models 201, 401, 275SK. A great line-up of excellent quality, low cost CB and mobile microphones.

SEE THE FIRST TWO PAGES OF THIS SHURE MICROPHONE SECTION FOR FULL DETAILS AND SPECIFICATIONS

FOR AMATEUR RADIO

MODEL 440 SL



Response characteristic tailored to meet the demands of radio communications. Ideally suited for single-sideband. Rising response characteristic with sharp cutoff below 300 and above 300 cps. eliminates the need for audio filters. Rugged, time-proven controlled magnetic element, with high output equaling that of a crystal unit. Ideal for use with all types of amateur transmitters. Frequency response: 300 to 3000 cps. High impedance, output level 52.5 db below 1 volt per microbar. 7 ft. 2-conductor shielded cable with equivalent to Amphenol MC3M plug, switch and desk stand.

MODEL 440 SL LIST PRICE: \$47.50

MODEL 440



Basic microphone same as above but with 7 ft. single conductor shielded cable. Less switch, stand, connector. Use with S34B or S36A stand.

MODEL 440 LIST PRICE: \$25.00

AB7K MODIFICATION KIT. Modifies 440 SL to obtain maximum flexibility between either VOX or push-to-talk operation. List: \$3.25.

THE "404" WITH HIGH IMPACT "ARMO-DUR" CASE

| MODEL | OUTPUT LEVEL | IMPEDANCE | CABLE LENGTH, TYPE DESCRIPTION | SWITCH (NORMALLY) MIC CIRC. | RELAY CIRC. | LIST PRICE |
|-----------|--|--------------|--|-----------------------------|-------------|------------|
| 404 B | 50 db below 1 milliwatt per 10 microbars | 150-250 Ohms | 5½ ft. Coiled cord, Copper, 4 conductor (2 shielded) | CLOSED* | OPEN | \$33.00 |
| 404 C | 50.5 db below 1 volt per microbar | High | 5½ ft. Coiled cord, Copper, 3 conductor (1 shielded) | CLOSED* | OPEN | \$33.00 |
| 405 T *** | 1 db loaded with 500 ohms | 100-500 ohms | 5 ft. extended 4 conductor stranded coiled cord | — | OPEN | \$48.50 |

The Shure Controlled Magnetic "404" is recommended for those applications where a rugged hand-held microphone is needed. It is ideal for outdoor public address (sports arenas, athletic fields, carnivals, etc.) and for mobile communications. The "404" is designed for high speech intelligibility. Easy to use, fits snugly in the palm of the hand. Leaf-type switches control the mic. circuit and an external relay or switching circuit. Omni-directional. Freq. response 200 to 8000 cps. Only 3¼" high, 2⅝" wide, 1¼" deep. Includes mounting bracket.



*Provision for simple change to normally open.

**Replacement for General Electric EM10A.

***Transistorized for direct replacement of carbon microphones.

MODEL "100" SERIES CARBON MICROPHONES

Used around the world for police, taxi, bus, truck, and commercial applications — more than all other makes combined! Rugged unit with clear, crisp voice response and high output. Heavy duty switch for push-to-talk performance. Furnished with bracket for wall mounting, plus coiled-cord cable. Adopted as standard microphone by G.E., Link, Motorola, R.C.A. and others for 2-way radio communications equipment. Output level: 5db below 1 volt for 100 microbar speech signal.



REPLACEMENT CHART

| MANUFACTURERS MODELS | REPLACEMENT MODEL |
|---|-------------------|
| CB10, CB10B, CB10C, CB10D, CB15, CB15D, | 101C |
| CB10E | 101E |
| CB12, CB12A, CB12C, CB12D | 102C |
| CB12E | 102E |
| CB15F | 103 |

ARMO-DUR MODELS

| Model | Cable | Switch Arrangement | List Price |
|---------------------------------|--|---|------------|
| 104A (replaces 102C, 102E) | Copper coiled cord with trimmed and tinned leads | Relay normally open, Microphone normally open | \$30.00 |
| 104B (replaces 101C, 101E, 103) | Copper coiled cord with trimmed and tinned leads | Normally open relay switch (No microphone switch) | \$30.00 |

DIE CAST MODELS

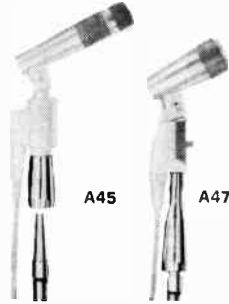
| Model | Cable | Switch Arrangement | List Price |
|-------|--|---|------------|
| 101C | Standard Coiled Cord 11' retracted; 5' extended | Two Wire Relay Switch normally open. (No microphone switch) | \$30.00 |
| 101E | Tinsel Coiled Cord 11' retracted; 5' extended with Amphenol MC4M Connector | | \$33.00 |
| 102C | Standard Coiled Cord 11' retracted; 5' extended | Relay normally open. Microphone switch normally open. | \$30.00 |
| 102E | Tinsel Coiled Cord 11' retracted; 5' extended with spode lugs | | \$33.00 |
| 103 | Standard Coiled Cord 11' retracted; 5' extended with Amphenol MC4M Connector | Two Wire Relay Switch normally open. (No microphone switch) | \$31.00 |

See Sec. 1340 for additional Shure Products.

SHURE

MICROPHONE ACCESSORIES

QUICK DISCONNECT MICROPHONE ISOLATION UNITS



Designed for use with microphones normally mounted on desk or floor stands but which must be periodically removed from stand for hand-held or carry-around use. In addition, because of a molded rubber insert, the adaptors effectively isolate the microphones from mechanical vibration, shocks and noises carried to the microphone through the desk or floor stand. Quick disconnect operation is instant, easy, and silent. Made of aluminum and anodized for beauty and long wear despite frequent handling. Model A45 is designed for microphones incorporating an isolation assembly such as the Shure Models 556, 330 and 546. Model A47 is designed for microphones with connectors such as Shure Models 55S, 51, 545S, 540S, 737A or nearly all microphones with a standard $\frac{5}{8}$ "-27 thread.

| | A45 | A47 |
|--------------------------------------|--|--|
| LIST PRICE | \$12.00 | \$12.00 |
| DIMENSIONS | 3 $\frac{1}{2}$ " high x 1 $\frac{3}{8}$ " diam. assembled | 5 $\frac{1}{2}$ " high x 1 $\frac{3}{8}$ " diam. assembled |
| WEIGHT ADDED TO HAND HELD MICROPHONE | 2.3 oz. | 3.6 oz. |
| NET WEIGHT | 3.3 oz. | 4.6 oz. |

CABLE TYPE TRANSFORMER



Model—A86A

Model A86A is a high-quality, cable-type transformer which makes it convenient to run a long microphone line from a low impedance microphone (35-50 ohm and 150-250 ohm) to a high impedance amplifier. It is housed in a compact, sturdy and magnetically-shielded case. Connection terminals are easily accessible, and compression fittings crimp the microphone and amplifier inputs. This type of system usually solves the problem of excessive high frequency loss and objectionable hum pickup when long lengths of microphone cable are necessary. For use with Shure Models 51, 51S, 55S, 55SW, 556S, 575S, 300, 315, 315S, 330, 333, 525, 530, 535, 540S, 545, 545S and 546 Dynamic and Ribbon Microphones. Model A86A may also be used in specialized applications requiring high impedance to low impedance circuit connections. Attractive two-tone gray furnished with 2-foot cable. Frequency response: 20 to 20,000 c.p.s., plus or minus 1 db. List Price: \$17.50

COILED CORD SETS

| | |
|---|--------------------|
| Tinsel Coiled Cord with trimmed and tinned leads and Amphenol MC4M connector attached (3 conductor shielded) for use with General Electric EM10A and 505K microphones. Model: C10C | List Price \$12.00 |
| Tinsel Coiled Cord with Amphenol MC4M plug for use with General Electric EM10A-2 and Shure 405K and 405 KB Microphones. Model: C11C | List Price \$12.00 |
| Standard Coiled Cord with trimmed and tinned leads for use with Shure 404C, 488A microphones. Model: C12C | List Price \$9.75 |
| Standard Coiled Cord with trimmed and tinned leads for use with Shure 404B, 488B microphones. Model: C14C | List Price \$10.00 |
| Standard Copper Coiled Cord with trimmed and tinned leads. Used in "CB" and "100" Series Microphones. Model: C15C | List Price: \$6.25 |
| Tinsel Coiled Cord with Amphenol MC4M Connector for use with General Electric equipment. Model: C16C | List Price \$9.50 |
| Tinsel Coiled Cord with spade lugs for use in Motorola equipment. Model: C17C | List Price \$7.75 |
| Standard Coiled Cord with Amphenol MC4M Connector for use with Motorola equipment. Model: C18C | List Price \$9.50 |
| Tinsel Coiled Cord with Amphenol MC4M Connector for use with Motorola equipment. Model C19C | List Price \$9.50 |
| Tinsel Coiled Cord For use with Shure 201, 401A Model: C20C | List Price \$7.00 |
| Tinsel Coiled Cord For use with Shure 401B Model: C21C | List Price \$7.75 |
| Tinsel Coiled Cord with PJ-068 connector for use with Shure 488T. Model: C22C | List Price \$15.00 |
| Tinsel Coiled Cord For use with Shure 275 SK Model: C23C | List Price \$16.50 |

TAKE-APART STAND

Model S34B. Handy low-cost stand for desk or hand use. One twist of handle locks it securely in base for use as a table stand, or releases handle for use in hand. Metal base, wood handle.
Model: S34B List Price: \$4.50

MICROPHONE REPLACEMENT CARTRIDGES

CARBON REPLACEMENT CARTRIDGE—MODEL R10

Rugged microphone cartridge replacement for "CB", "100", and "120" Series Carbon Microphones. Includes mounting hardware, installation instructions. Model R10 List Price \$8.50

Model 99A149 replacement cartridge for microphone models: CB20, CB21, CB50 and 115. Model 99A149 List Price \$8.50

CRYSTAL CARTRIDGE — MODEL R7

Available as a replacement for the cartridges in the Shure Crystal Microphones of the 707A and 708A Series, and other microphones of similar design. High output — 48 db below 1 volt per microbar. Supplied with rubber mounting rings and installation instructions.
Model R7 List Price \$8.25

SLIM-X MICROPHONE CARTRIDGE

The Model 99A186 replacement cartridge assembly for the 777 Series Slim-X Microphones. Crystal element metal-sealed for long life under adverse conditions of heat and humidity. Requires only one solder connection. Model 99A186 List Price \$10.00

CONTROLLED MAGNETIC CARTRIDGE — MODEL R5

Direct replacement for cartridges used in the following Shure microphone models: 510C, 510MD, 510S, 520, 520SL, 505C, 505K, 404C, 405C and 405K. Also ideal for replacement of crystal cartridges in Shure cases of the Model 707A and 708A Series, where heat and humidity are a problem. Supplied with rubber mounting ring.
Model R5 List Price \$11.00

LOW IMPEDANCE CARTRIDGE — MODEL R5B

Model R5B is the replacement cartridge for cartridges used in microphone models 505B, 505T, 404B, 405B, 405T, 510SLB, 520SLB, and 520B. Model R5B is physically identical to Model R5; but low impedance (150 to 250 ohms). Can be used in any R5 applications which require a low impedance cartridge.
Model R5B List Price \$11.00

MODEL R4M FOR SHURE "COMMANDOS"

The Model R4M controlled magnetic cartridge assembly is the direct replacement cartridge for use in the models 430, 425, 420 and 415 Shure "Commando" microphones. Model R4M List Price \$15.00

MODEL R5T CONVERSION KIT

Includes a controlled magnetic cartridge and transistor amplifier to convert carbon microphones into improved controlled magnetic transistorized microphones. Conversion takes only minutes with a screw-driver, long-nose plier, soldering iron.

SPECIFICATIONS: Controlled magnetic with transistor amplifier. 200 to 4,000 cps, semi-directional. Output Level: 1 db loaded with 500 ohms (0 db — 1 milliwatt per 100 microbars). List Price: \$25.00.

"GRIP-TO-TALK SLIDE-TO-LOCK" SWITCH

Heavy-Duty Switch withstands the most severe field requirements of paging and dispatching systems. Ideal for Police, Taxi-Cab, Railroad, Airport, Bus, Truck, and all emergency communications work. Can be used with Shure connector-type crystal, dynamic and carbon microphones of any impedance. Fits handily on Shure S36A Desk Stand. Rich satin chrome finish.



Model: A88A

List Price: \$12.50

Model A88A

ON-OFF PRESS-TO-TALK SWITCHES



Model A83B. Rotary-type "On-Off" switch. Quickly attached to any cable-conductor type Shure microphone.

Model: A83B

List Price: \$11.00

Model A84B. Momentary Press-to-Talk "On-Off" switch.

Model: A84B

List Price: \$11.00

Model A85C. Momentary Press-to-Talk Relay-Type Switch.

Model: A85C

List Price: \$11.50

MODERN DESK STAND

Model S36A. Streamlined Desk Mount fits all Shure connector-type microphones. Adapter provided for mounting other type microphones. Ideal for use with A88A switch.
Model: S36A List Price: \$6.50



Model S36A

See Section 1340 for additional Shure Products.

TRIMM

HEADSETS AND ACCESSORIES



"L" TYPE WITH *EFR

TRIMM'S most popular headset with "extended frequency range". For use in communications, language labs and wherever high-quality performance is required. No. 50 series has a black neoprene covered handband and 5 ft. black nylon braided cord with plug, as shown at left. No. 56 series has an adjustable vinyl covered double headband with integral "over-the-head" neoprene cord and plug, as shown below. Impedances as listed.

*Extended Frequency Range

| | List |
|---------------------------|---------|
| No. 50-D8 —8 ohm | \$23.00 |
| No. 50-2M —2M ohm | 23.00 |
| No. 50-5M —5M ohm | 23.00 |
| No. 50-12M —12M ohm | 24.00 |
| No. 56-08 —8 ohm | 27.65 |
| No. 56-2M —2M ohm | 27.65 |
| No. 56-5M —5M ohm | 27.65 |
| No. 56-12M —12M ohm | 28.65 |



SEE FACING PAGE FOR STEREO TYPES



FEATHERWEIGHT

The original light-weight headset. Used by amateurs, commercial operators, etc. Bakelite shell and cap; 5 ft. braided waterproof cord; concealed terminals. No. 100 series and No. 106 type have adjustable nickel plated steel headband as illustrated at left. No. 104 series and No. 107 type have fabric covered double wire headband with spring clip for adjustment as pictured below. Leather, vinyl, and rubber covered headbands available.

| STANDARD TYPES | List |
|----------------------------------|---------|
| No. 100-03 —3.2 ohm | \$11.00 |
| No. 100-06 —600 ohm | 11.00 |
| No. 100-2K —2K ohm D.C. | 11.00 |
| No. 100-4K —4K ohm D.C. | 11.00 |
| No. 104-03 —3.2 ohm | 11.00 |
| No. 104-06 —600 ohm | 11.00 |
| No. 104-9-03 —3.2 ohm w/plug .. | 11.80 |
| No. 104-9-2K —2K ohm D.C. w/plug | 11.80 |
| No. 104-9-4K —4K ohm D.C. w/plug | 11.80 |
| No. 104-2K —2K ohm D.C. | 11.00 |
| No. 104-4K —4K ohm D.C. | 11.00 |

| SPECIAL AMATEUR TYPES | List |
|---------------------------------|-------|
| No. 106 —24M ohm | 11.00 |
| No. 106-9 —24M ohm w/plug | 11.80 |
| No. 107 —24M ohm | 11.00 |
| No. 107-9 —24M ohm w/plug | 11.80 |

SEE FACING PAGE FOR STEREO TYPES



COMMERCIAL



Originally developed for marine and aircraft service. Recommended for commercial radio, amateur radio, etc. A light-weight, comfortable headset. High-impact bakelite cap and shell. Cord is 5 ft. waterproof mercerized cotton with pin tips except on No. 155, 156 and 157 which have TRIMM No. 501 plug attached. No. 151 has adjustable metal headband with over-the-head cord; No. 152 has black fabric covered headband with over-the-head cord; No. 155 has vinyl covered headband; No. 156, 157, 158 and 159 have neoprene covered headbands.

| | |
|-----------------------------------|---------|
| No. 151-03 —3.2 ohm | \$12.10 |
| No. 151-06 —600 ohm | 12.10 |
| No. 151-2K —2K ohm D.C. | 12.10 |
| No. 152-03 —3.2 ohm | 12.10 |
| No. 152-06 —600 ohm | 12.10 |
| No. 152-2K —2K ohm D.C. | 12.10 |
| No. 155-03 —3.2 ohm w/plug | 13.00 |
| No. 155-06 —600 ohm w/plug | 13.00 |
| No. 155-2K —2K ohm D.C. w/plug .. | 13.00 |
| No. 156 —600 ohm w/plug | 15.00 |
| No. 157 —17M ohm w/plug | 15.00 |
| No. 158 —600 ohm | 13.50 |
| No. 159 —17M ohm | 13.50 |



EAR CUSHIONS

Provide the user with maximum comfort when wearing headsets and excludes outside disturbing noises.

| | List |
|--|--------|
| No. 654 —Sponge rubber; fits TRIMM Featherweight, Commercial, Acme, Rex, and "L" types | \$1.60 |
| No. 655 —Solid rubber, military type MC-162A. Fits TRIMM "L", "S", Permo-flux headsets and military type ANB-H-1 units | 3.00 |
| No. 656 —Sponge rubber face, solid rubber back, military type MX-41/AR. Fits same types as No. 655 | 4.20 |
| No. 658 —Chamois donut face, solid rubber back, military type NAF 4849-1. Fits same types as No. 655 | 13.35 |
| No. 658-2—Similar to No. 658. Fits Brush type "A" headset | 16.95 |
| No. 660 —Sponge rubber. Fits TRIMM Dependable, Army-Navy, Brush type "A" and Brush type "BA" headsets | 2.50 |

In code number listing, the impedance at 1000 c.p.s. is indicated unless shown as D.C. resistance.

ACME

A superior low-cost, light-weight headset, used on crystal sets, educational electronic kits, Geiger counters, etc. Cap and shell of molded bakelite. Double headsets have 4½ ft. long braided cord; single earphones supplied with 4½ ft. long vinyl cord. Concealed terminals.



DOUBLE HEADSETS

| | | |
|--------------------------------------|-----------------------------|-------------|
| No. 24-03 —3.2 ohm | Vinyl covered headband..... | List \$3.90 |
| No. 24-9-03 —3.2 ohm w/plug | Vinyl covered headband..... | 4.75 |
| No. 24-15 —1500 ohm | Vinyl covered headband..... | 3.95 |
| No. 24-2K —2K ohm D.C. | Vinyl covered headband..... | 4.05 |
| No. 24-4K —4K ohm D.C. | Vinyl covered headband..... | 4.35 |
| No. 24-9-2K —2K ohm D.C. w/plug..... | Vinyl covered headband..... | 4.90 |
| No. 25-03 —3.2 ohm | Metal headband..... | 3.45 |
| No. 25-15 —1500 ohm | Metal headband..... | 3.55 |
| No. 25-2K —2K ohm D.C. | Metal headband..... | 3.60 |
| No. 25-4K —4K ohm D.C. | Metal headband..... | 3.90 |

SINGLE EARPHONES

| | | |
|-----------------------------------|---------------------|------|
| No. 27-03 —3.2 ohm | Metal headband..... | 2.05 |
| No. 27-9-03 —3.2 ohm w/plug | Metal headband..... | 2.90 |
| No. 27-15 —1500 ohm | Metal headband..... | 2.15 |
| No. 27-1K —1K ohm D.C. | Metal headband..... | 2.20 |
| No. 27-2K —2K ohm D.C. | Metal headband..... | 2.35 |

DEPENDABLE

When a high grade headset is desired, but price must be considered, choose the Dependable. Used by institutions, on general radio applications, etc. Bi-polar construction, bakelite cap and shell. Forged magnet. Tinsel conductor braided cord, 5 ft. long, concealed terminals. Vinyl covered wire headband, adjustable.



DOUBLE HEADSETS

| | |
|---------------------------------------|-------------|
| No. 70-03 —3.2 ohm | List \$5.10 |
| No. 70-06 —600 ohm | 5.20 |
| No. 70-9-03 —3.2 ohm w/plug | 5.90 |
| No. 70-9-2K —2K ohm D.C. w/plug | 6.20 |
| No. 70-9-4K —4K ohm D.C. w/plug | 6.80 |
| No. 70-2K —2K ohm D.C. | 5.40 |
| No. 70-4K —4K ohm D.C. | 6.00 |

SINGLE EARPHONE w/HEADBAND

| | |
|-----------------------------|------|
| No. 72-03 —3.2 ohm | 3.50 |
| No. 72-1K —1K ohm D.C. | 3.60 |
| No. 72-2K —2K ohm D.C. | 3.75 |

SEE FACING PAGE FOR STEREO TYPES

REX

The lowest cost TRIMM bi-polar headset. Bakelite shell and cap. Double headsets have 4½ ft. braided cord; single earphones have 4½ ft. vinyl covered cord. Concealed terminals. Adjustable headband.

DOUBLE HEADSETS

| | |
|---------------------------------------|-------------|
| No. 30-03 —3.2 ohm | List \$4.50 |
| No. 30-9-03 —3.2 ohm w/plug | 5.35 |
| No. 30-2K —2K ohm D.C. | 4.70 |
| No. 30-3K —3K ohm D.C. | 5.00 |
| No. 30-9-2K —2K ohm D.C. w/plug | 5.55 |

SINGLE HEADSETS

| | |
|-----------------------------|------|
| No. 32-03 —3.2 ohm | 2.50 |
| No. 32-1K —1K ohm D.C. | 2.60 |



ARMY-NAVY



Built for severe use. Design has been accepted standard in years past. Bakelite cap, metal shell. Rubber covered headband. Waterproof cord. Available in two impedances.

| | |
|---|--------------|
| No. 28(W)—Double, 600 ohm impedance.... | List \$20.00 |
| No. 29(K)—Double, 20M ohm impedance.... | 20.00 |

See Facing Page for TRIMM Group Hearing Aid Components and other Headsets and Accessories. See Section 2100 for listing of TRIMM Plugs, Jacks, Patch Cords, and Jack Panels.

Prices and specifications subject to change without notice.

TRIMM

HEADSETS AND ACCESSORIES

GROUP HEARING AID COMPONENTS

Single Earphones

The most widely used single earphones for group hearing aid systems in churches, theatres, mortuaries, etc. are of the TRIMM Featherweight type. Lorgnette handle and single headband types available. Normally used as indicated below. Phone plug such as No. 512 is required when phones are used with outlet boxes described below.

300 ohm Imped. Low imped. line (up to 50 ohms)
4500 ohm Imped. (1K D.C. ohms) Medium-high imped. line (200-500 ohms)
9000 ohm Imped. (2K D.C. ohms) Large Installation on high imped. line.

| | |
|--|--------|
| No. 110-3; 110-1K; 110-2K—Fig. B | \$7.60 |
| No. 113-3; 113-1K; 113-2K—Fig. B w/4 ft. cord and 512 plug | 8.50 |
| No. 114-3; 114-1K; 114-2K—Fig. B w/6 ft. cord and 512 plug | 8.50 |
| No. 120-3; 120-1K; 120-2K—Fig. A | 10.00 |
| No. 124-3; 124-1K; 124-2K—Fig. A w/512 plug | 10.90 |

Note: -3=300 ohm imped.; -1K=1K ohm D.C.; -2K=2K ohm D.C.



Fig. A



Fig. B

FLAT PLUGS

TRIMM No. 512 provides a compact, non-protruding design widely used in group hearing aid installations. Bakelite body practically non-breakable. Fits standard jacks. Cord pin tips held by set screws.

| | |
|---|--------|
| No. 512—Black | \$.87 |
| No. 512-1—Red | .87 |
| No. 512-2—Black with hook for hanging headset | 1.32 |



VOLUME CONTROL — OUTLET BOXES

Control boxes No. 460 and 461 are recommended for the majority of group hearing aid systems, etc. Combine, in a single unit, volume control, phone jack, and terminal strip for incoming line. Box measures 3 3/4" x 2 1/2" x 1 1/4". All edges and corners rounded. Units available in brown or gray hammertone enamel finish as listed below. Also available in glossy ivory enamel to improve visibility in theatres. Two standard ohmage: 1000 ohms for low impedance lines; 10,000 ohms for high impedance lines. 25,000 and 50,000 ohms used on large installations; also 100,000 and 500,000 ohms used with crystal type phones; these values available at slightly higher cost but not listed below:

| | |
|--|--------|
| VOLUME CONTROL—OUTLET BOXES | List |
| No. 460-1K—Brown Hammertone | \$5.50 |
| No. 460-10K—Brown Hammertone | 5.50 |
| No. 461-1K—Glossy Ivory | 5.50 |
| No. 461-10K—Glossy Ivory | 5.50 |
| No. 462-10K—Gray Hammertone | 5.50 |
| DUAL JACK OUTLET BOXES (No Control) | |
| No. 477—Brown Hammertone | 3.85 |
| No. 478—Glossy Ivory | 3.85 |
| SINGLE JACK OUTLET BOXES (No Control) | |
| No. 484—Brown Hammertone | 3.30 |
| No. 485—Glossy Ivory | 3.30 |

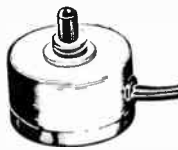


PILLOW-PHONE

Designed for use as a miniature speaker for under-pillow use at home, in hospitals, etc. Very thin, disc-shaped, 2" dia. x 27/64" thick.

Sealed unit is entirely moisture-proof and tamper-proof. Face of stainless steel, back of molded high-impact brown bakelite. Flexible, brown plastic covered cord, 6 ft. long, is anchored to unit under terminal cover that can not be readily removed by user. Normally furnished with TRIMM No. 514 plug. May be cleaned in disinfecting solutions.

| | |
|-----------------------------|--------------|
| No. 85-03—3.2 ohm impedance | List \$11.50 |
| No. 85-3—300 ohm impedance | 11.50 |
| No. 85-2M—2M ohm impedance | 11.50 |



"STOP-IT" COMMERCIAL TRIMMER

Permits user to turn off audio signal of TV or radio set without getting up from chair, giving listener freedom to choke off unwanted commercials. Other uses that suggest themselves are to suppress loudspeaker when phone rings, etc.

No. 639—"STOP-IT" (Illustrated at left) consists of housing containing switch to which is attached 20 ft. cord ready to install in accordance with instructions with each unit \$3.40

HEADSET KITS FOR TV AND RADIO

Kits described provide simple means of attaching headset or extension speaker to TV or radio sets. Consists of one of several types of headsets, including plug, and a small control-outlet box with attached 15 ft. cord. Box has remote on-off switch for loudspeaker and volume control for headset. Two jacks provided for multiple listening.

| | |
|---|--------|
| CONTROL BOX, only | List |
| No. 631 | \$7.15 |
| KITS, including control box and headset or earphone, with plug. | |
| No. 632—With No. 24-9-03 double Acme Headset | 11.90 |
| No. 632-1—With No. 27-9-03 single Acme Earphone | 10.05 |
| No. 633—With No. 70-9-03 double Dependable Headset | 13.05 |
| No. 634—With No. 104-9-03 double Featherweight Headset | 18.95 |
| No. 635—With No. 115-03 single Featherweight earphone (Recommended for hard of hearing).... | 15.60 |
| No. 637—With No. 85-03 Pillow-Phone | 18.65 |



"S" HEADSET

Originally designed for Air Corps service and other military applications. For commercial, high fidelity, and language laboratories, use the new "L" headset (see preceding page). Shell and cap of molded plastic. Alnico V magnet. Supplied with No. 656 cushion (except 35-5 and 35-6; military types HS-33/A) but other types available. Leather covered headband with mounting for unit providing restricted rotation. Over-the-head cord arrangement with No. 501 plug attached to end of cord.

| | |
|-----------------------------|--------------|
| No. 35-06—600 ohm impedance | List \$28.00 |
| No. 35-08—8 ohm impedance | 28.00 |
| No. 35-4M—4M ohm impedance | 28.00 |

STEREO HEADSETS AND CONTROL BOXES

Headsets

A variety of TRIMM stereo headsets are available, depending on quality and response desired. The stereo headsets listed below are the most commonly produced; all are supplied with plug. The "L" type has frequency range up to 10,000 C.P.S.

| | |
|--------------------------------|--------|
| DEPENDABLE | List |
| No. 70-14-03—3.2 ohm impedance | \$7.00 |
| No. 70-14-2K—2K ohm D.C. | 7.90 |
| "L" | |
| No. 50-14-08—8 ohm impedance | 27.00 |
| No. 50-14-16—16 ohm impedance | 27.00 |
| No. 50-14-6M—6M ohm impedance | 28.00 |
| No. 56-14-08—8 ohm impedance | 31.65 |
| No. 56-14-16—16 ohm impedance | 31.65 |
| No. 56-14-6M—6M ohm impedance | 32.65 |
| No. 57-14-08—8 ohm impedance | 29.00 |
| No. 57-14-16—16 ohm impedance | 29.00 |
| No. 57-14-6M—6M ohm impedance | 30.00 |

| | |
|---------------------------------|---------|
| FEATHERWEIGHT | List |
| No. 104-13-03—3.2 ohm impedance | \$13.60 |
| No. 104-14-1K—1K ohm D.C. | 13.60 |
| No. 104-14-2K—2K ohm D.C. | 13.60 |

Control Boxes

TRIMM stereo control boxes are similar to other types illustrated on this page, except supplied with two volume controls and one stereo connected jack. Boxes can be supplied with rubber jacketed cord upon request.

| | |
|---------------------------------------|-------------|
| No. 464-1C—100 ohm (Brown Hammertone) | List \$9.40 |
| No. 465-1C—100 ohm (Glossy Ivory) | 9.40 |
| No. 465-1C—100 ohm (Gray Hammertone) | 9.40 |

CONTACT FACTORY FOR ADDITIONAL INFORMATION ON HEADSETS, ACCESSORIES AND REPLACEMENT PARTS.

SEE GENERAL CATALOG FOR ADDED INFORMATION ON "STOP-IT" AND HEADSET ATTACHMENT KITS

**It's so easy to order
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and Page Numbers.**
- 2. The Year and Edition of This
MASTER.**

This will avoid confusion and expedite delivery.

Thank you!

The
Radio - Electronic
MASTER

SONOTONE CERAMIKE MICROPHONES

rugged, reliable mikes for mobile and fixed communications, A-V and tape recordings

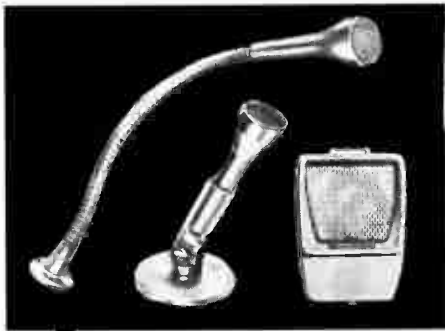


Fig. A



Fig. B



Fig. C



Fig. D

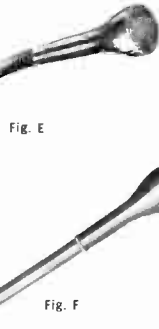


Fig. E

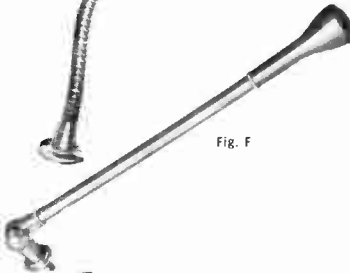


Fig. F



Fig. G



Fig. H

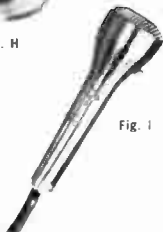


Fig. I

SONOTONE CERAMIKE 'CM-30.' Perfect for mobile units. Intelligibility unsurpassed. Sensitivity curve favors voice frequency range. Ruggedly built to take the punishment of mobile use. Lightweight, shatter-proof plastic case. Convenient "push-to-talk" button and dashboard mounting bracket. Spring-spiraled 4-conductor shielded cable, net \$8.40. Fig. A

SONOTONE CERAMIKE 'CM-30M.' With new dashboard magnet mount — no holes to drill, no brackets to attach, net \$9.90. Fig. B

SONOTONE CERAMIKE 'CM-31.' Rugged mobile communications microphone. This budget-priced model in shatterproof plastic case features excellent intelligibility. Mike has two-conductor coil cable — no switch, net \$8.10. Fig. C

SONOTONE CERAMIKE 'CM-31M.' Available with new dashboard magnet mount — no holes to drill, no brackets to attach. Less switch, net \$9.60.

SONOTONE CERAMIKE 'CM-32.' Ideal, low cost mike for tape recording. Lightweight, shatterproof case. Equipped with standard plug and phone jack. CM-32, net \$7.50. Fig. D

SONOTONE CERAMIKE 'CM-17A.' Omnidirectional high impedance model provides natural sound reproduction and long-term, trouble-free service in audio-visual labs, language labs, PA systems. 13" flexible gooseneck keeps hands free for writing and taking messages. Excellent for all speech needs. 6' shielded cable, net \$14.70. Fig. E

Models utilizing the CM-17A element available in a variety of mountings as follows:

SONOTONE CERAMIKE 'CM-17B' — 13" boom mike. Fixed boom mounted with 350° swivel. 7' mike cable, net \$17.10. Fig. F

SONOTONE CERAMIKE 'CM-17C' — 6" fleximike. Flexible gooseneck with fixed base mount. 7' mike cable, net \$13.50. Fig. E

SONOTONE CERAMIKE 'CM-17D' — 6" boom mike. Solid boom with fixed base mount. 7' mike cable, net \$13.50. Fig. F

SONOTONE CERAMIKE 'CM-17E' — 3" boom mike. Solid boom with fixed base mount. 7' mike cable, net \$12.30. Fig. F

SONOTONE CERAMIKE 'CM-18A' — 13" fleximike. Low impedance omnidirectional microphone with push-to-talk button to keep audio control at the user's fingertips. Ideal for transistorized system, net \$20.70. Fig. E with switch

SONOTONE CERAMIKE 'CM-18' — 13" fleximike with same electrical characteristics as the CM-18A except that it has no push-to-talk switch, net \$19.50. Fig. E

SONOTONE CERAMIKE 'CM-T10A' (Matched Twin) — Ideal for taping the new FM stereo broadcast "off-the-air" and other stereo taping applications. Every CM-T10A set is electronically matched at the factory to a tolerance of ± 2 db to eliminate the risk of distortion. 7' shielded cable and phone plug. Per pair, net \$21.30. Fig. G Shown with optional CMS10 stand.

SONOTONE CERAMIKE 'CM-T11A' (Matched Twin) — For use where greater sensitivity is desired. Per pair, net \$21.30. Fig. G Shown with optional CMS10 stand.

MATCHING TABLE STAND CMS-10 available with $\frac{1}{8}$ " No. 27 thread for floor stand mounting, net \$3.00.

SONOTONE CERAMIKE 'CM-10A' — Natural, clean reproduction over the full audible range. Ideal for tape recording, also excellent for home movie, PA systems and conference pickups. 7' shielded cable with phone plug, net \$10.50. Fig. H Shown with optional CMS10 stand.

SONOTONE CERAMIKE 'CM-11A' — Where greater sensitivity is desired, the CM-11A is the ideal solution, net \$10.50. Fig. H Shown with optional CMS10 stand.

SONOTONE CERAMIKE 'CM-12A' — For PA systems in long lead installations. Low impedance with push-to-talk buttons, net \$17.70. Fig. I

| | |
|--------------|----------------------|
| Response: | 60 to 7,000 cps |
| Sensitivity: | -49 db ± 2 db |
| Case: | Shatterproof plastic |
| Transducer: | Ceramic element |

| | |
|--------------|----------------------|
| Response: | 90 to 6,000 |
| Sensitivity: | -49 db ± 2 db |
| Case: | Shatterproof plastic |
| Transducer: | Ceramic element |

| | |
|--------------|----------------------|
| Response: | 80 to 9,000 |
| Sensitivity: | -49 db ± 2 db |
| Case: | Shatterproof plastic |
| Transducer: | Ceramic element |

| | |
|---------------|-----------------------------|
| Response: | 50 to over 11,000 cps |
| Sensitivity: | -56 db ± 2 db |
| Transducer: | Ceramic element |
| Damping Grid: | Lanced, louvered metal grid |

| | |
|---------------|-----------------------------|
| Response: | 200 to 8,000 cps |
| Sensitivity: | -63 db ± 2 db |
| Transducer: | Ceramic element |
| Damping grid: | Lanced, louvered metal grid |

| | |
|---------------|-----------------------------|
| Response: | 50 to over 11,000 cps |
| Sensitivity: | -56 db ± 2 db |
| Transducer: | Ceramic element |
| Damping grid: | Lanced, louvered metal grid |

| | |
|--|----------------------------|
| Same specifications as the CM-T10A except: | |
| Response: | 80 to 9,000 cps ± 2 db |
| Sensitivity: | -53 db ± 2 db |

| | |
|---------------|-----------------------------|
| Response: | 50 to over 11,000 cps |
| Sensitivity: | -56 db ± 2 db |
| Transducer: | Ceramic element |
| Damping grid: | Lanced, louvered metal grid |

| | |
|---|-------------------|
| Has same specifications as the CM-10A except for: | |
| Response: | 80 to 9,000 cps |
| Sensitivity: | -53 db ± 2 db |

| | |
|---------------|-----------------------------|
| Response: | 200 to 8,000 cps |
| Sensitivity: | -63.5 db ± 2 db |
| Transducer: | Ceramic element |
| Damping grid: | Lanced, louvered metal grid |



MICROPHONES BY TURNER

BROADCAST MICROPHONES

TURNER 400 SERIES MICROPHONES. High quality broadcast type microphones featuring adjustable impedance and response. Wide response pressure operated moving coil dynamic, essentially non-directional. Recommended for motion picture studio, TV, broadcast and high fidelity recording applications. Positive grip cam lock allows instant insertion or removal of microphone without disconnecting.

MODEL 401—Screwdriver, impedance and response adjustment. Response from 40 cps to 20,000 cps. Output level: —60 db. at high impedance. Cable is three conductor shielded plastic jacketed 20 ft. long. Slate blue, non-reflecting finish. Net price **\$75.00**

MODEL 402—Same as Model 401, except with line shorting switch. Net price **\$78.00**

MODEL 403—150 ohms or high impedance with impedance selection at end of cable. Response from 50 cps to 13,000 cps. Output level: —60 db. at high impedance. Bright chrome epoxy finish. Net price **\$48.00**

MODEL 404—Same as Model 403, except with line shorting switch. Net price **\$51.00**

MODEL 58—A dynamic lavalier microphone that's a natural for any application requiring freedom and mobility—panel shows, interview, sportscasting, etc. Only 4" long. Weight, 3½ oz. Choice of either high or 150 ohms impedance selected at the free end of the cable. Response from 60 to 13,000 cps at high impedance. Output level: —60 db. Net price **\$34.20**

MODEL 53A—Same as Model 58, but is combination 50 or 200 ohm selected at free end of cable. Net price **\$34.20**

MODEL 220—A high-quality dynamic lavalier microphone designed for am., fm., and TV broadcast use. Combination output impedance of 50 or 200 ohms selected at the terminal end of the cable. Response from 60 to 20,000 cps. Output level: —90 db. at 50 ohm. Cable is 25 ft. attached rubber covered, three conductor shielded. Net price **\$75.00**

MODEL 57—A dynamic microphone designed for broadcast work, P.A., speech or music, indoor or outdoor, panel discussions, court rooms, or high-fidelity recording. Not sensitive to wind or shock, heat or humidity. Non-directional. Combination impedance of high or 150 ohms selected at the terminal end of the cable. Cable is 20 ft. rubber covered three conductor shielded. Response from 50 to 13,000 cps. Output level: —60 db. at high impedance. Net price **\$45.00**

MODEL 57A—Same as Model 57 except combination impedance is 50/200 ohm. List price **\$75.00**

PUBLIC ADDRESS AND GENERAL PURPOSE MICROPHONES

MODEL 33X—Excellent for paging, communications, announcing, P.A. use, ham radio. Satin chrome finish, 90 degree swivel coupler, supplied with 20 ft. cable. A crystal type microphone with response from 60 to 9,000 cps. Output level: —52 db. High impedance. Net price **\$16.50**

MODEL 33D—Dynamic type. Same as Model 33X except with response from 100 to 9,000 cps. Output level: —54 db. Combination impedance—50, 200 or high. Net price **\$21.00**

MODEL U9S—A rugged, dependable multi-impedance dynamic for use in "tough" P.A., mobile, announcing and recording jobs. Adjustable saddle, gun-metal lustre finish, three pin polarized locking connector and 20 ft. balanced line cable. Response from 80 to 9,000 cps. Output level: —52 db. at high impedance. Multi-impedance—switch for 50, 200, 500, or high. Net price **\$31.80**

MODEL 204D—A dynamic microphone designed to give top performance under hard use conditions. Response from 60 to 13,000 cps. Output level: —53 db. High impedance. Comes with lavalier, desk stand, and stand adapter. Net price **\$24.30**

MODEL 304C—Provides four-in-one versatility to perform as a P.A. or intercom microphone. Accessories: desk stand, lavalier clip and string, and stand adapter. Response from 60—10,000 cps; output level, —60 db. Net price **\$9.90**

MODEL 80—A crystal microphone ideal for home recording, paging or amateur use. Small and graceful with satin chrome finish. 7 ft. cable supplied. Response from 80 to 7,000 cps. Output level: —54 db. High impedance. Net price **\$9.57**

Matching C-4 stand Net Price **\$3.90**

MODEL 95D—A dynamic P.A. microphone for use in churches, schools, night-clubs, and high quality recording applications. Available with on-off switch. Complete with 20 ft. cable. Response from 100 to 10,000 cps. Output level: —58 db. Choice of 50, 200 or high ohms. Net price **\$22.50**

MODEL 9D—A dynamic microphone designed for P.A., amateur, and mobile use. Comes with slide on-off switch. Response from 150 to 7,000 cps. Output level: —52 db. Specify impedance: 200 ohm or high. Net price **\$19.50**

Model P-9D (with push to talk switch) Net price **\$19.50**

MODEL 250—A dynamic microphone ideal for dispatch, paging, P.A., control tower and amateur use. Wired to operate both relay and mike circuits at a touch. Features on-off push-to-talk and lock switch. Also features Turner's "lift-switch". Response from 60 to 10,000 cps. Output level: —52 db. Complete with single unit satin chrome case and 20 ft. three conductor (one shielded) cable. Net price **\$29.70**

MODEL 251—Same as Model 250 except 150 ohms. Net price **\$29.70**

MODEL 256—A crystal version of the 250. Response from 60 to 8,000 cps. Output level: —48 db. Net price **\$21.00**



MICROPHONES BY TURNER



CITIZENS BAND MICROPHONES

MODEL 350C—A ceramic mobile microphone with on-off switch, ideal for citizens band, amateur use, mobile rigs and paging. Wired for relay operation. Rugged plastic case. Complete with hanger button and standard dash bracket for easy mounting. Equipped with 11" retracted, 5 ft. extended, rubber jacketed, coiled cord. Response from 80 to 7,000 cps. Output level: —54 db. Net price **\$10.08**

MODEL 350R—A carbon version of the 350C. Response: 200 to 4,500 cps. Output level: —38 db. Net price **\$11.40**

MODEL 254C—A ceramic base station microphone with on-off push-to-talk and lock switch. Durable grey hammertone finish. Response from 80 to 7,000 cps. Output level: —54 db. Cable is 7 ft., three conductor (one shielded) wired for relay operation. Net price **\$14.10**

MODEL 355C—A new style microphone ideal for citizens band, amateur use, mobile rigs and paging. Wired for relay operation. New hand-ease switch for grip-to-talk action. Complete with hanger button and standard dash bracket for easy mounting. Equipped with 11" retracted, 5 ft. extended, rubber jacketed, coiled cord. Response from 80 to 7,000 cps. Output level: —50 db. Net price **\$7.50**



LANGUAGE LAB MICROPHONES

MODEL 585—An attractive chrome microphone on a 16" goose neck with a three hole mounting flange. All threaded joints are "pinned" to discourage tampering. Available with crystal, ceramic or dynamic (high or 150 ohms) interior. **MODEL 58500 (Crystal)**—High impedance. Response from 50 to 10,000 cps. Output level: —56 db. Net price **\$18.00**

MODEL 58501 (Ceramic)—High impedance. Response from 50 to 10,000 cps. Output level: —62 db. Net price **\$18.00**

MODEL 58502 (Dynamic)—High impedance. Response: 50-12,000 cps. Output level: —58 db. Net price **\$25.00**

MODEL 58503 (Dynamic)—150 ohm. Response: 50-12,000 cps. Output level: —81 db. Net price **\$25.00**

MODEL 588—Comes on a 13" steel shaft with friction swivel base. Exclusive shock mount base reduces extraneous noise caused by auxiliary equipment. Fold down height is 1 3/4". Secures with one bolt. Same specifications as Model 585.

MODEL 58800 (Crystal)—Net price **\$24.00**

MODEL 58801 (Ceramic)—Net price **\$24.00**

MODEL 58802 (Dynamic High)—Net price **\$32.00**

MODEL 58803 (Dynamic 150 ohm)—Net price **\$32.00**

MODEL 260—Features crystal head phones, and a selection of crystal, ceramic or high or low impedance dynamic microphone. Microphone is available with or without headset. Same specifications as comparable 585 Models.

MODEL 2600 (Crystal) Microphone—Net price **\$13.00**

MODEL 26001 (Ceramic) Microphone—Net price **\$13.00**

MODEL 26002 (Dynamic low) Microphone—Net price **\$23.00**

MODEL 26012 (Dynamic high) Microphone—Net price **\$23.00**

MODEL 26003 (Crystal) Headset—Net price **\$51.00**

MODEL 26004 (Ceramic) Headset—Net price **\$51.00**

MODEL 26013 (Dynamic High) Headset—Net price **\$59.00**

MODEL 26005 (Dynamic low) Headset—Net price **\$59.00**

MODEL 265—A rugged, dependable, top performing dynamic microphone specially designed for the language lab. Distinctive new style. Heat and moisture resistant. Adapts quickly and easily to the ED-300 Headset to form Headset Boom combination. Specify when ordering 10 ohms, 500 ohms or hi impedance. Net price, Hi impedance **\$23.00**

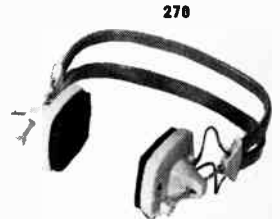
Net price, Low impedance **\$19.00**

MODEL 270 HEADSET—Distinctively styled for comfort, ease of operation, performance and durability. A dynamic (8 ohms, 250 ohms, hi impedance) headset. Double headband fits away from the head for comfort and neatness. Net price **\$35.50**

MODEL 275—Combination of the 265 Microphone and the 270 Headset. Both are moving coil dynamics for maximum response and reproduction over the entire voice range. Single cable carries both microphone and headset audio signals. Net price, Hi impedance **\$55.00**

Net price, low impedance **\$50.00**

Please write for full specifications and prices on Turner Language Lab Microphones.



CUSTOM AUDIO DEVICES

Turner has complete facilities for designing and manufacturing custom audio devices of all kinds. Special application microphone interiors, soft speakers for dictating machines, anything you need. Write for full information on this service.

UNIVERSITY: PUBLIC ADDRESS AND HIGH-FIDELITY



A Division of Ling-Temco-Vought, Inc.

drivers

MODEL ID-20 (20 watts) For speech and music systems requiring moderate sound power output, and where performance with economy is a primary consideration. Designed to deliver maximum output, the ID-20 utilizes its efficiency to the best advantage, producing a substantial "punch" with clear, penetrating sound.

MODEL ID-30 (30 watts) Redesigned version of the world famous MA-25—ideal for installations requiring single medium power units or multiple driver/horn arrangements. The ID-30, with its unusually wide upper midrange response (up to 7500 cycles), produces musical balance and noise penetration far in excess of higher-cost competitive models. Completely weatherproof with tropicalized 2" voice coil and breakdown-proof linen base diaphragm. A top value!

MODEL ID-40 (40 watts) Latest, maximized version of the famous, earlier Model SA-HF, often referred to as the "workhorse" of the sound industry, and widely used by high fidelity manufacturers and audio hobbyists as well. Extended high frequency response and excellent efficiency assure an essentially uniform response characteristic for pleasing, natural reproduction of speech and music, while delivering that extra "punch" needed to cut through heavy noise. Tropicalized and weatherproofed, the ID-40 can be relied upon to give continuous top-flight performance under adverse weather conditions.

MODEL ID-40T (40 watts) Offers the same power capacity, efficiency and frequency response as the ID-40, and incorporates a built-in line-matching transformer. The transformer terminal plate is inside the rugged, die cast aluminum housing; entrance is made through an exclusive watertight dural gland nut, assuring positive weatherproofing after connections have been made. Terminals are labeled in impedances and in wattage consumed on "constant voltage" lines. Transformer impedances: 45/122/250/500/1000/2000 ohms. 70 V. line power taps: 40/20/10/5/2.5 watts.

MODEL ID-60 (60 watts) The premium compression driver in the world famous University line. Ideally suited to applications requiring the greatest power handling capacity, maximum efficiency, widest range frequency response, and rugged construction that will withstand a lifetime of hard use. Extra large, super-power all-

Alnico V exclusive "W" magnet eliminates full 50% of reluctance losses normally present in other designs. Minimum gap width gives lowest leakage, and maximum gap flux density, resulting in peak electromechanical efficiency. Use of rugged overcast assures utmost durability even when abused or in hazardous environment. Watertight voice coil terminals are located at the base of the housing, for added convenience and greater dependability. Without question, the ID-60 is the finest wide range, high power Public Address driver unit ever offered.

MODEL ID 60T (60 watts) Similar to the ID-60, but with high-impact plastic over-cast, the ID-60T includes a husky built-in line matching transformer, with its terminals immediately available at the base of the driver housing. Ideal for rental work requiring repeated set-up and dismantling of equipment, and for semi-permanent systems where changes in the number or location of speakers are likely to affect line impedance requirements. Transformer impedances: 16/80/165/250/500/1000/2000 ohms. 70 volt line power taps: 60/30/20/10/5/2.5 watts.

specifications

| DRIVER MODEL | FREQUENCY RESPONSE | POWER RATING | VOICE COIL IMPEDANCE | DIMENSIONS (Overall) | SHIP. WT. |
|--------------|--------------------|--------------|----------------------|-----------------------|------------|
| ID-20 | 120-6500 cps | 20 watts | 16 ohms | 3 1/2" dia. 3 3/4" d. | 2 1/2 lbs. |
| ID-30 | 85-7500 cps | 30 watts | 16 ohms | 4 1/8" dia. 3 3/4" d. | 3 lbs. |
| ID-40 | 80-12,000 cps | 40 watts | 16 ohms | 4 1/2" dia. 4 7/8" d. | 4 1/4 lbs. |
| ID-40T | 80-12,000 cps | 40 watts | 16 ohms | 5" dia. 6 1/4" d. | 5 1/4 lbs. |
| ID-60 | 70-12,000 cps | 60 watts | 16 ohms | 4 1/8" dia. 5" d. | 4 1/4 lbs. |
| ID-60T | 70-12,000 cps | 60 watts | 16 ohms | 6 3/4" dia. 6 3/4" d. | 6 1/2 lbs. |



trumpets

DIRECTIONAL MODELS GH, LH, PH, SMH For maximum penetration of distance and noise. Reflex construction assures maximum conversion efficiency, full weather protection. Baked finish.

RADIAL MODELS RLH, RPH, RSH For uniform 360° overhead sound distribution from a single projector. Fewer speakers needed to cover high-ceiling factories, hangars, church interiors, etc. Baked finish.

WIDE ANGLE COBREFLEX† Outstanding feature is pair of folded exponential horns, having twin air columns in a single assembly. "Dual Exponential Flare" design results in very smooth radiation pattern and high efficiency. Rugged construction. Use singly or in clusters. Baked finish.

WIDE ANGLE MODEL CLH† Longest air column length and wide-angle bell designed for maximum low frequency response. Omni-directional mounting bracket permits speaker to be rotated horizontally and vertically for optimum projection. . . . tune out reverberation, dead spots. Perfect for multi-speaker cluster arrays. Can be "stacked" in any configuration. Fiberglass shell.

MODEL L30-1 (LH Horn Stacking Kit for clamping bell rims together in any desired configuration. Each kit clamps two horns. Shpg. wt. 6 oz.

SPECIFICATION NOTE: Low frequency limit based on capability of driver unit. If horn cut-off is higher than rated low frequency limit of driver, horn will be determining factor. †Patented.



PH, SMH
GH, LH,



RLH, RPH, RSH

specifications

| HORN MODEL | LOW FREQUENCY CUT-OFF | SOUND DISTRIBUTION | AIR COLUMN LENGTH | HORN LENGTH | BELL DIA. | SHIP. WT. |
|------------|-----------------------|--------------------|-------------------|-------------|-------------------|-------------|
| GH | 85 cps | 65° | 6 1/2 ft. | 28" | 31" | 22 lbs. |
| LH | 120 cps | 75° | 4 1/2 ft. | 19" | 25 3/4" | 16 1/2 lbs. |
| PH | 150 cps | 85° | 3 1/2 ft. | 15 3/4" | 20 3/8" | 11 3/4 lbs. |
| SMH | 200 cps | 95° | 2 1/2 ft. | 12" | 16 1/4" | 8 lbs. |
| RLH | 120 cps | 360° | 5 ft. | 18 1/2" | 28 1/8" | 25 lbs. |
| RPH | 140 cps | 360° | 4 ft. | 13 3/4" | 25 1/8" | 19 lbs. |
| RSH | 180 cps | 360° | 3 ft. | 11" | 19" | 13 lbs. |
| COBREFLEX† | 200 cps | 120° x 60° | 2 1/2 ft. | 10 1/4" | 18 1/2" x 9 1/4" | 10 1/4 lbs. |
| CLH† | 120 cps | 120° x 60° | 4 1/2 ft. | 20" | 21 1/2" x 11 1/2" | 13 1/4 lbs. |



CLH



COBREFLEX®

accessories



MODEL CTR TRANSFORMER/JUNCTION HOUSING Die cast aluminum. Weatherproof. Houses models 5433, 5434, or other transformers up to 2 3/4" x 2 3/4". Adjustable slotted adapter mounts transformers with centers 1 1/2" to 2". Junction box for speaker lines. Bar strap for mounting to "U" brackets. Screws to wall. Also holds University paging speakers. Shpg. wt., 1 1/2 lbs.

MODEL PB-1 TRANSFORMER HOUSING Weatherproof. For MIL-A, CML-A, IB-A and CIB-A paging speakers. Use Model 5434 transformer, or other type with 2" mounting center and 1-15/16" h. x 1 1/2" w. maximum dimensions. Shpg. wt., 1/2 lb.

MODEL 5433 TRANSFORMER 30 watt capacity. Use with ID-20, ID-30 or to feed a number of smaller paging speakers. Primary impedance: 45/165/200/250/500/1000/2000 ohms. Secondary impedance: 4/8/16 ohms. 70 v. line power taps: 30/25/20/10/5/2.5 watts.

Dimensions: 1-15/16" x 2-5/16" x 1 1/4". Mtg. hole centers: 2 3/8". Shpg. wt. 1 lb.

MODEL 5434 TRANSFORMER 15 watt capacity. Primary impedance: 45/325/500/1000/2000/4000/8000 ohms. Secondary impedance: 4/8/16 ohms. 70 v. line power taps: 15/10/5/2.5/1.25/.65 watts. Dimensions: 1 1/2" x 1-15/16" x 1 1/8". Mtg. hole centers: 2". Fits CTR and PB-1. Shpg. wt., 1/2 lb.

2YC CONNECTOR Allows use of two driver units on a single radial, directional, or wide-angle trumpet. Shpg. wt., 1 lb.

RTA ADAPTER Fits University trumpets to Western Electric and RCA drivers having 1-7/16-16 threads. Shpg. wt., 1/2 lb.

WEA ADAPTER Fits University drivers to Western Electric and RCA trumpets having 1-7/16-16 threads. Shpg. wt., 1/2 lb.

SPA ADAPTER Replaces standard triangular base used on all University CR and MM-2 paging speakers for mounting to 1/2" IPS threaded pipe. Shpg. wt., 1/2 lb.

MODEL ST Transformer/Junction Box Adapter. Fits MM-2, ES-50. Weatherproofed. For bulkhead, wall, ceiling mounting. Houses transformers up to 2 1/4" x 2 1/4" x 2 3/4", with 2" and 2 3/8" mounting centers. Use as terminal or junction box. Shpg. wt., 1 lb.

MODEL SB Bulkhead Mounting Adapter. Fits MM-2, ES-50. 3 mounting holes 120° apart on 5-13/16" mounting circle diameter. For flush-fit mounting onto bulkhead, wall, ceiling. Shpg. wt., 1 lb.

HIGH 'A' . . . HIGH AUDIBILITY . . . exclusive with UNIVERSITY LOUDSPEAKERS

paging / talk-back



MIL-A New version of the MIL, with higher power capacity (7.5 watts continuous duty) and improved lower frequency. High conversion efficiency for perfect operation in low power systems. OLB*.



CMIL-A Similar to CIB-A, but for use in lower power operations where excessive sound would be wanted. Offers high efficiency, maximum intelligibility. OLB*.



IB-A New version of world's most widely used medium power speaker. 25 watts continuous duty power capacity. Lower frequency response improved to 250 cps. High efficiency, special rising frequency characteristic. OLB*.



CIB-A Exclusive University wide-angle horn for uniform sound pattern with optimum vertical dispersion. Ideal for wide area coverage where ambient noise level not excessive. Design minimizes feedback problems. OLB*.

*Exclusive patented swivel mounting OMNI-LOK BRACKET; also fastens to 1/2" pipe without additional fixture.



IBR-A Small radial speaker with built-in driver. Economical solution where total number of speakers must be kept to a minimum but where wide coverage is required.



MIS Compact reflex speaker designed for flange or flush mounting in cabinets, walls, etc. Ideal replacement for less efficient cone speakers. Tropicalized and weatherproof. High-impact plastic housing.



CR Big power in a small package. Built-in driver with heavy duty 2" voice coil. High intelligibility in noisy areas. Frequency response ideal for music reproduction.



LIL-8 In appearance, a handsome, functional lamp—in performance, a truly superior paging speaker. Compact, yet offers high power handling capacity, wide frequency range and high conversion efficiency for improved results with low power systems.

multi-duty



2WP Bi-directional paging projector covers two opposite areas effectively, efficiently with one driver. (Takes any University driver except ID-60T.) Supplied less driver.



ES-50 Versatile, high power speaker, especially developed for electronic siren applications. Rated full 50 watts for typical siren signal above 100 cps. As general-purpose speaker, full power rating applies over entire 250-10,000 cps range of integrated program material.



MM-2 Power capacity and frequency response ideal for clear, noise-cutting reception. Screws permit removal from front to expose diaphragm for cleaning. Serrated swivel mounting bracket.



MM-2F Flush mounting version of MM-2. Performance and specifications identical to MM-2. These speakers are the ruggedest in the P.A. field. Completely weather-proof. Performance unaffected even after being completely drenched (as on boats).



MM-2TC Complete speaker, using cast aluminum bell and weatherproof housing with space for a line matching transformer and/or volume control which can be mounted right into position. For bulkhead, wall or ceiling mounting, the MM-2TC-T comes with multi-impedance transformer and pad attenuator built in.



MSR All die-cast reflexed air column speaker with radial deflector for 360° horizontal dispersion. Hermetically sealed driver easily removed. Provisions for line matching transformer and volume control. Wall/ceiling bulkhead mounting. MSR-T comes with multi-impedance transformer and pad attenuator built in.

specifications

| MODEL | FREQUENCY RESPONSE | POWER RATING | IMPEDANCE (specify when ordering) | DISPERSION | *SOUND PRESSURE LEVEL | †SENSITIVITY AS MICROPHONE | DIMENSIONS | SHIPPING WEIGHT |
|--------|-------------------------|-----------------------------|-----------------------------------|-------------------|-----------------------------|-----------------------------|---|--|
| IB-A | 250-13,000 cps | 25 watts | 4, 8, 45 ohms | 90° | 123 db | -26 DBM | 10 1/4" dia. 9" deep | 4 lbs. |
| CIB-A | 250-13,000 cps | 25 watts | 4, 8, 45 ohms | 120° x 60° | 123 db | -22 DBM | 7 3/8" hi. 14" wide 12" deep | 5 1/2 lbs. |
| MIL-A | 350-13,000 cps | 7.5 watts | 4, 8, 45 ohms | 120° | 115 db | -23 DBM | 7 1/4" dia 6 7/8" deep | 3 1/4 lbs. |
| CMIL-A | 350-13,000 cps | 7.5 watts | 4, 8, 45 ohms | 120° x 60° | 115 db | -20 DBM | 6 1/4" hi. 9 1/2" wide 8 1/2" deep | 4 lbs. |
| MIS | 500-13,000 cps | 5 watts | 4, 8, 45 ohms | 150° | 111 db | -22 DBM | 5 1/2" o.d. 4 1/4" deep 6 holes on 4 7/8" mtg. dia. | 2 1/2 lbs. |
| CR | 250-8000 cps | 20 watts | 16 ohms | 90° | 119 db | -22 DBM | 11 1/2" dia. 11 1/2" deep | 8 3/4 lbs. |
| IBR-A | 300-10,000 cps | 25 watts | 4, 8, 45 ohms | 360° | 108 db | -32 DBM | 13" dia. 10 1/4" deep | 5 1/4 lbs. |
| 2WP | 350 cps horn cut-off | Depends upon driver used | Depends upon driver used | 120° each horn | Depends upon driver used | Depends upon driver used | 8 1/2" dia. each bell 20 1/2" long | 4 lbs. |
| MM-2 | 350-10,000 cps | 25 watts | 16 ohms | 150° | 117 db | | 6" o.d. 5" deep | 5 1/4 lbs. |
| ES-50 | 250-10,000 cps | 50 watts* | 16 ohms | 120° | 123 db | | 6 1/4" o.d. 6 7/8" deep | 5 1/2 lbs. |
| MM-2F | 350-10,000 cps | 25 watts | 16 ohms | 150° | 117 db | | 7 1/4" o.d. 3 3/4" deep | 5 1/4 lbs. |
| MM-2TC | 350-10,000 cps | 25 watts | 16 ohms | 120° | 117 db | | 10" high 6 1/4" w. 4 1/4" deep | MM-2TC-8 1/2 lbs. MM-2TC-T-9 3/4 lbs. |
| MSR | 250-10,000 cps | 25 watts | 16 ohms | 360° | 114 db | | 10 3/4" h. 7 3/4" w. 8 1/4" deep | MSR-10 1/4 lbs. MSR-T-11 1/4 lbs. |
| LIL-8 | 300-10,000 cps | 15 watts | 8 ohms | 110° | 119 db | -27 DBM | 15 1/2" long 6 7/8" dia. | 4 1/2 lbs. |

*Sound pressure readings taken at 4 ft. with "Full Range" power input. Reduce by 6 db each time distance is doubled. Reduce by 3 db each time power input is halved; increase by 3 db when power input is doubled.

**See ES-50 description above.

†DBM re 10 dynes/cm².

Note: MIS and all MM speakers are patented.

HIGH 'A' . . . HIGH AUDIBILITY . . . exclusive with UNIVERSITY LOUDSPEAKERS



A Division of Ling-Temco-Vought, Inc.

superpower



4A4 Versatile, powerful, compact. Use with any University driver except ID-60†, according to capacity, response and impedance needed. Four individually reflexed center assemblies united in acoustically correct mixing chamber. Single bell combines entire output, assuring maximum penetration and reserve power. Maximum: 240 watts.



B-6P† Takes 6 drivers of the ID-30, ID-40 or ID-60 types. Amazingly compact, high-power—up to 360 watts. Designed for installations requiring super-power speakers in smallest size: military, carillons, civil defense, etc. Drivers screw into mixing chamber. Separate bell assembly attaches to mixing chamber. Maximum: 360 watts.



B-12P† Takes 12 drivers of the ID-30, ID-40 or ID-60 types. Fantastic power range and reserve power. Drivers screw into patented mixing chamber of heavy cast aluminum. Separate bell assembly easily attaches to mixing chamber. Spin aluminum coverall protects drivers and connections. Use for military, civil defense, church towers, stadiums, etc. Maximum: 720 watts.

†Patented

weatherproof



MLC Ideal for coverage of moderate-size areas or crowds—or for sound reinforcement where smooth, clean, wide-range musical reproduction and even distribution are important. Fiberglass reinforced polyester housing. 2000 cps crossover. Patent pending.



BLC Sets a new standard for voice and music reproduction. Light in weight, shallow in depth, easy to handle. May be used in place of public address trumpet/driver units except where maximum penetration is required. All metal construction. 200 cps crossover.



WLC Finest outdoor system made. For over a decade has brought full range high fidelity sound to auditoriums, concert halls, parades, stadiums, over the world. Achieves full bass response down to 50 cps. All metal construction. 1000 cps crossover.

explosion-proof

7101, 7102 UL approved for 100% safe systems where flammable liquids, gases, dust, etc., are present. Shipped assembled with built-in line matching transformer to comply with govt. safety regulations. Required conduit entrance provided as part of driver housing casting. 7101 for Class I, Groups C & D; 7102, same plus Class II, Groups E, F, G.



underwater

MM-2UW, MM-2FUW Completely waterproof. Can be left submerged indefinitely. Stainless steel cover for special Unilar® diaphragm. Silicone treated gaskets. Fully guaranteed for six months. MM-2UW for bracket mounting. MM-2FUW for flush mounting. Shpg. wt., 6½ lbs.

*Trademark



portable powrpages**

PP-1T Fully transistorized, self powered, 25 watt speaker-amplifier system. Low distortion, high stability in all operating conditions. Rugged dynamic microphone has controlled response curve. Press-to-talk switch. Auxiliaries input jack. Talk/listen switch for highly directional, sensitive listening. Uses lantern batteries. Shpg. wt. (less batteries), 12¼ lbs.

PP-1 Non-transistorized lower powered version of PP-1T. Similar in operation. Shpg. wt., 8 lbs.

PP-2T Lightweight hand-held package. 3-transistor, temperature stabilized circuit delivers 7 watts (14 watts peak). Adjustable gain. Acoustic feedback suppression system allows indoor use without howling. Low standby current. Uses 6 penlight cells or 10 RM601R mercury cells. Shpg. wt. (less batteries), 5 lbs.

PP-2 Non-transistorized lower powered version of PP-2T. Similar in operation. Shpg. wt., 5½ lbs.



specifications

| MODEL | FREQUENCY RESPONSE | POWER RATING | DISPERSION | IMPEDANCE | DIMENSIONS | | SHIPPING WEIGHT |
|--|--------------------|----------------|------------|-----------|----------------------------------|-----------------|-----------------|
| | | | | | DIAMETER (overall) | DEPTH (overall) | |
| MLC | 150-15,000 cps | 15 watts | 120° | 8 ohms | 12¾" x 9½" | 10½" | 10 lbs. |
| BLC | 70-15,000 cps | 25 watts | 120° | 8 ohms | 22¾" | 9¼" | 21 lbs. |
| WLC | 50-15,000 cps | 30 watts | 90° | 8 ohms | 33½" | 20" | 68 lbs. |
| 7101 and 7102† | 200-10,000 cps | 30 watts | 95° | 16 ohms | 15¾" | 19" | 23¾ lbs. |
| 4A4 Used With 4 Drivers of Types | ID-30 | 120- 7,500 cps | 120 watts | 80° | 4, 16, 64 | 30¾" | 28¾" |
| | ID-40 | 120-12,000 cps | 160 watts | | 4, 16, 64 | | |
| | ID-40T | 120-12,000 cps | 160 watts | | wide variation | | |
| | ID-60 | 120-12,000 cps | 240 watts | | 4, 16, 64 | | |
| B-6P Used With 6 Drivers of Types | ID-30 | 200- 7,500 cps | 180 watts | 100° | 2.7, 10.7, 24, 96 ohms | 12½" | 21¾" |
| | ID-40 | 200-12,000 cps | 240 watts | | | | |
| | ID-60 | 200-12,000 cps | 360 watts | | | | |
| B-12P Used With 12 Drivers of Types | ID-30 | 100- 7,500 cps | 360 watts | 80° | 1.3, 5.3, 12, 21.3, 48, 192 ohms | 31½" | 47" |
| | ID-40 | 100-12,000 cps | 480 watts | | | | |
| | ID-60 | 100-12,000 cps | 720 watts | | | | |

**POWRPAGES, as well as all other University P.A. Loudspeakers, are approved for Civil Defense matching funds.

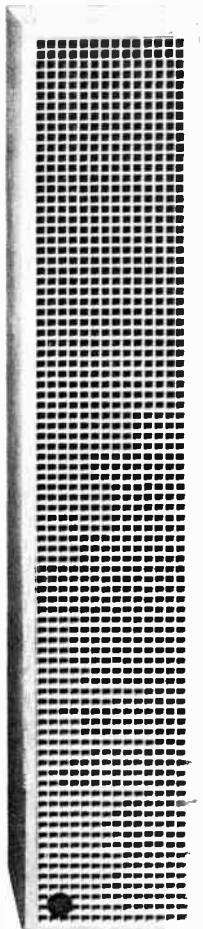
†Transformer impedances, 7101 and 7102: 45/165/200/250/500/1000/2000 ohms. 70 V. line power taps, 7101 and 7102: 30/25/20/10/5/2.5 watts.

HIGH 'A' . . . HIGH AUDIBILITY . . . exclusive with UNIVERSITY LOUDSPEAKERS

"UNILINE"* SOUND COLUMN SPEAKER SYSTEMS



A Division of Ling-Temco-Vought, Inc.



UCS-6

NEW UNIVERSITY UNILINE ACOUSTICALLY TAPERED SOUND COLUMNS REDUCE ACOUSTIC FEEDBACK AND REVERBERATION TO INSIGNIFICANT LEVELS . . .

application:

UNILINE Sound Columns have been designed to provide complete sound coverage in large outdoor and indoor environments, solving difficult microphone and speaker placement problems by virtually eliminating the possibility of acoustic feedback and reverberation. UNILINE Sound Columns feature High 'A' (high audibility), optimum fidelity for music and speech, plus exclusive acoustic tapering to assure uniform sound volume from the front-row of an auditorium to the last row.

concerning sound columns in general:

Essentially, a sound column is a series of "point" sound sources each of which radiate equally in all directions—an in-line radiator using multiple speakers, one above the other, to provide broad horizontal dispersion and narrow vertical dispersion. The shape of the beam, therefore, is similar to that of a fan held horizontally, its apex representing the source of the sound. As a result of its restricted vertical dispersion pattern, the sound is placed only where it is needed, avoiding reflections from the floor and ceiling to reduce acoustic feedback and reverberation.

concerning UNILINE sound columns in particular:

Theoretically, then, all sound columns should perform with equal success—but only theoretically. There are two reasons why UNILINE Sound Columns can outperform all other types. Reason number one—the quality and the design of the UNILINE's speakers. By means of specially designed transducers, University has resolved the conflict arising from the simultaneous requirements of large speakers for high power handling capacity on the one hand, and small speaker diameter

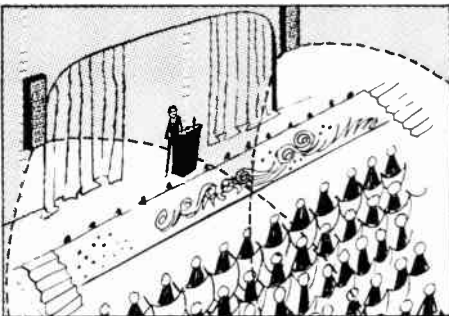
for optimum point source behavior and widest horizontal dispersion on the other. By so doing, University can offer sound columns with the highest power handling capacity in the industry, while maximizing the advantageous directional characteristics of sound column design.

Reason number two—acoustic tapering. The vertical directionality of conventional sound columns tends to become too narrow at high frequencies, making it difficult to place the speaker so as to produce equal volume at all frequencies. Because the length of conventional sound columns is "increased," acoustically, at higher frequencies, and because the longer the column the narrower the vertical beam, some method must be used to "decrease" the length. University's exclusive acoustic tapering, the most perfect method yet devised to prevent excessive high frequency beaming—completely eliminates this imperfection. By using speakers whose response rolls off at high frequencies at the ends of the sound column, the effective length of the column at high frequencies is reduced, so that the proper amount of vertical dispersion is maintained at all frequencies. The result is uniform coverage in breadth, and in depth.

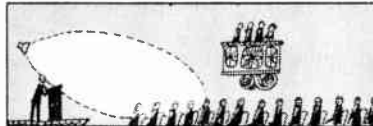
Another characteristic of UNILINE Sound Columns is High 'A'—high audibility—as evidenced by the considerable decrease in distortion UNILINE provides to improve intelligibility and greatly increase listener comfort. This is particularly noticeable when standing or sitting close to the sound source. More conventional high powered speakers tend to blast under similar circumstances.

Therefore . . . for optimum dispersion at all frequencies, for uniform sound level within the beam, for music and speech indoors and out . . . for all high reverberation areas . . . specifications and performance reveal that there is only one best line of sound columns—it is UNILINE.

*Reg. Trade Mark



Wide horizontal dispersion—the UNILINE, delivering sound in depth over a large area.

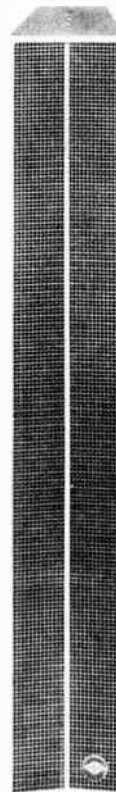


Conventional speaker contour.

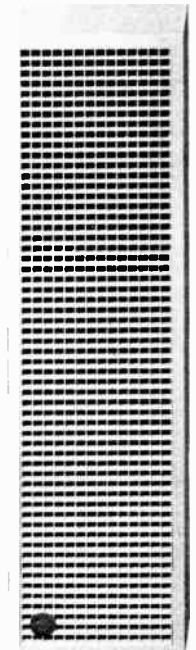


UNILINE column contour.

Constant loudness contours shown for a UNILINE column versus a conventional speaker, illustrating the situation that exists at representative midrange frequencies, where most of the "punch" of the sound is concentrated. With UNILINE, loudness is the same for a listener located anywhere in the auditorium.



CS-3



CS-4

specifications

| | UCS-6 Full Range Music and Speech | CS0-6* Full Range Music and Speech | CS-4 Full Range Music and Speech | CS-3 Music and Speech |
|-------------------|---|--|--|--------------------------|
| speakers | 6 extended range 8" | 6 extended range 8" | 4 extended range 8" | 8 special multi-design |
| frequency range | 55-17,000 cps | 55-17,000 cps | 70-17,000 cps | 150-10,000 cps |
| power capacity | 150 watts IPM** | 150 watts IPM** | 80 watts IPM** | 25 watts IPM** |
| impedance | 16 ohms | 16 ohms | 8 ohms | 16 ohms |
| vertical angle | 16° | 16° | 22° | 22° |
| horizontal angle | 120° | 120° | 120° | 120° |
| dimensions | 59¼" x 10¾" x 9⅞" | 59¼" x 10¾" x 9⅞" | 40¾" x 11" x 9⅞" | 48" x 7½" x 8¾" |
| shipping wt, lbs. | 61 | 61 | 46 | 33 |

*Completely weatherproof.

**Integrated program material.

HIGH 'A' . . . HIGH AUDIBILITY . . . exclusive with UNIVERSITY LOUDSPEAKERS

UNIVERSITY † MODULAR MICROPHONES

...for the professional, for TV, radio, recording, general purpose



A Division of Ling-Temco-Fought, Inc.

WORLD'S ONLY MICROPHONES WITH MODULAR FLEXIBILITY!*

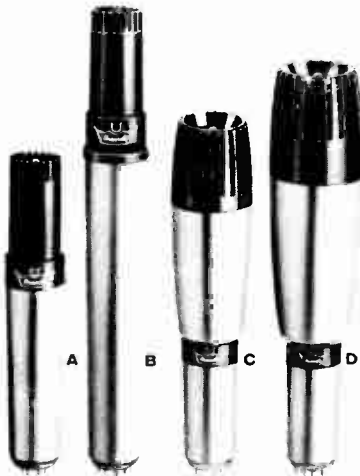
University's professional microphones bring new dimensions in quality and utility for hypercritical applications requiring the ultimate in full-range pick-up. The omni-directional models open new frontiers in over-all uniformity of response and in extension of the bass range. The cardioid models span the complete frequency range, free of peaks and with consistently high front-to-back discrimination. The lavalier models have low frequency characteristics tailored for the most natural response under their special conditions of use. For TV, FM and high fidelity AM—from church to night club—from school to industrial PA—they may well change your way of thinking about the selection, installation and use of high quality professional microphones.

†Trade Mark

A) MODEL 401 Omni-Directional Dynamic Modular

Ideally suited for every sound system application: broadcast, TV, church, school, commercial, industrial PA and the like.

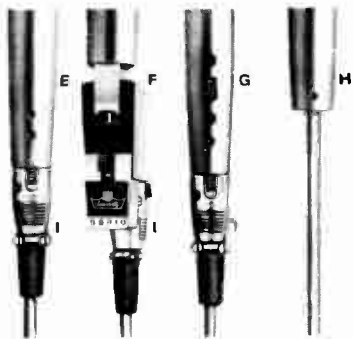
SPECIFICATIONS
Frequency response: 30-20,000 cps
Impedance: 30/50; 150/250; 20,000 ohms
Output level: 30/50, 150/250 ohms:
—55 db/1mw/10 dynes/cm;
—148db EIA sensitivity rating;
20,000 ohms, into high impedance input:
16 mv/10 dynes/cm
Hum reference: —120 db/0.01 gauss
Dimensions: 1 1/4" maximum diameter
6 3/4" maximum length without adapter
Shipping weight: 2 lbs.
Finish: acrylic silver-gray and non-reflecting black.
Furnished with cloth carrying bag.



B) MODEL 402S Omni-Directional Dynamic Modular Shock Mounted

Offers professional flexibility and styling in broadcasting, telecasting and recordings—group pickup, orchestras, public address, interviews.

SPECIFICATIONS
Frequency response: 30-20,000 cps
Impedance: 30/50; 150/250; 20,000 ohms
Output level: 30/50, 150/250 ohms:
—55 db/1mw/10 dynes/cm;
—148 db EIA sensitivity rating;
20,000 ohms, into high impedance input:
16 mv/10 dynes/cm
Hum reference: —120 db/0.01 gauss
Dimensions: 1 1/4" maximum diameter
8 3/4" maximum length without adapter
Shipping weight: 2 1/2 lbs.
Finish: acrylic silver-gray and non-reflecting black.
Furnished with cloth carrying bag.



C) MODEL 501 Cardioid Dynamic Modular

Affords ultra-high discrimination against unwanted sound—virtually eliminating background noise. Performers can work a greater distance away from it.

SPECIFICATIONS
Frequency response: 30-16,000 cps
Impedance: 30/50; 150/250; 20,000 ohms
Output level: 30/50, 150/250 ohms:
—54 db/1mw/10 dynes/cm;
—147 db EIA sensitivity rating;
20,000 ohms into high impedance input:
17 mv/10 dynes/cm
Hum reference: —120 db/0.01 gauss
Dimensions: 1 1/2" maximum diameter
6 1/4" maximum length without adapter
Shipping weight: 2 1/4 lbs.
Finish: acrylic silver-gray and non-reflecting black.
Furnished with cloth carrying bag.

D) MODEL 502S Cardioid Dynamic Modular Shock Mounted

Its directional characteristics yield superior results in noisy or reverberant locations. Features the unique University internal shock mounting arrangement which isolates it from spurious sound and eliminates extraneous noises.

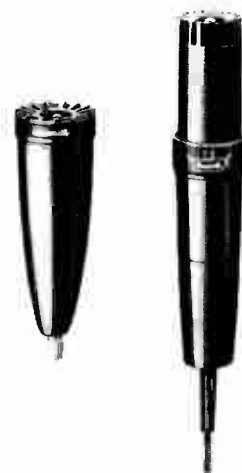
SPECIFICATIONS
Frequency response: 30-16,000 cps
Impedance: 30/50; 150/250; 20,000 ohms
Output level: 30/50, 150/250 ohms:
—54 db/1mw/10 dynes/cm;
—147 db EIA sensitivity rating;
20,000 ohms into high impedance input:
17 mv/10 dynes/cm
Hum reference: —120 db/0.01 gauss
Dimensions: 1 1/4" maximum diameter
7 3/4" maximum length without adapter
Shipping weight: 2 1/2 lbs.
Finish: acrylic silver-gray and non-reflecting black.
Furnished with cloth carrying bag.

TV AND BROADCAST LAVALIERS

MODEL 403L Omni-Directional Dynamic (TV Lavalier)

Ultra-compact, lavalier for sound-casting applications in nightclubs, churches, school and location broadcasting of AM, FM and television.

SPECIFICATIONS
Frequency response: 60-20,000 cps
Impedance: 30/50; 150/250 ohms
Output level: —30.50 and 150/250 ohms: 55 db/1 mw/10 dynes/cm?
—148 db EIA sensitivity rating;
Hum reference: —120 db/0.01 gauss
Dimensions: 1 1/2" maximum diameter
3 3/4" maximum length
Shipping weight: 2 1/4 lbs.
Finish: antique bronze
Furnished with adjustable neck cord and clip, integral 25 foot flexible plastic cable and cloth carrying bag.



MODEL 404L Omni-Directional Dynamic (Broadcast Lavalier)

Fulfills all the critical requirements of a professional broadcast microphone and incorporates every feature of the larger omni-directional professional microphones.

SPECIFICATIONS
Frequency response: 50-20,000 cps
Impedance: 30/50; 150/250; 20,000 ohms

Output level: 30/50 and 150/250 ohms:
—55 db/1 mw/10 dynes/cm;
148 db EIA sensitivity rating;
20,000 ohms into high impedance input;
16 mv/10 dynes/cm
Hum reference: —120 db/0.01 gauss
Dimensions: 1 1/4" maximum diameter
5 3/4" maximum length
Shipping weight: 2 1/4 lbs.
Finish: antique bronze
Furnished with adjustable neck cord and clip, integral 25 foot flexible cloth-covered cable and cloth carrying bag.

FOR HOME TAPE RECORDING, AMATEUR & CB RADIO, & PUBLIC ADDRESS



MODELS 70 and 71† Omni-Directional Dynamic

Freq. Resp.: 50-14,000 cps
Impedance: 30/50; 20K ohms
Output: Lo \neq —50 db 1 mw 10 μ bar
Hi \neq 28 mv 10 μ bar
Dim.: 70 — 1 1/2" dia x 6"
71 — 1 1/2" dia x 8 1/2"
Finish: Silver gray and matte black
Furnished w/ 15' shielded cable and stand adaptor

†Includes on-off slide switch.



MODEL 61 Dynamic Mobile Communications Microphone MODEL 61HF Extended Range Version of Model 61

Freq. Resp.: 61 — 95-9,500 cps
61HF — 70-14,000 cps
Impedance: 25,000 ohms
Output: 18 mv 10 dynes cm²
Dim.: 4" h, 2 1/4" w, 1 1/2" d
Color: Gray
Cable: Coiled, 14'; extended 6'

RUGGED, VERSATILE MICROPHONE DESK STAND FOR PROFESSIONALS & HOBBYISTS

MODEL 5A10
Slide-on
Stand
Adaptor



Modern, heavy cast-iron desk stand with handsome crackle black non-reflecting finish. Perfectly balanced to prevent tipping of even the largest microphones. Quick-action knurled lock washer accommodates all microphones with standard 5/8" 27 thread, as well as University 5A10 and 5A10 stand adaptors.

Dimensions: 4 1/4" x 7 3/4" x 4 3/4"
Shipping weight: 3 1/2 lbs.



MODEL DS10
Desk Stand

The completely interchangeable modular adapters

E) MODEL PA10 Cannon Plug Adaptor, less switch

Dimensions: 3 1/4" x 1"
Shipping weight: 1/4 lb.

F) MODEL SSP10 Stand Adaptor with switch and Cannon Plug Receptacle

Dimensions: 3 1/4" x 2 3/4" x 1 1/2"
Shipping weight: 1/2 lb.

G) MODEL SP10 Cannon Plug Adaptor with switch

Dimensions: 3 1/4" x 1"
Shipping weight: 1/4 lb.

H) MODEL CC10 Cable Adaptor with 18 foot cable

Dimensions: 1 3/4" x 1"
Shipping weight: 1 1/4 lbs.

I) MODEL CA10 Cannon Plug with 18 foot cable

Dimensions: 2 1/4" x 3/4"
Shipping weight: 1 1/4 lbs.

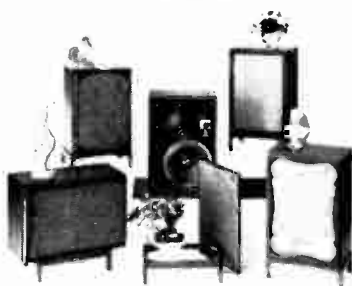
HIGH FIDELITY SPEAKERS AND SPEAKER SYSTEMS

CONDENSED LISTING



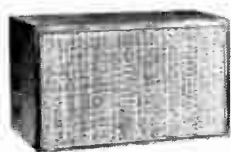
A Division of Ling-Temco-Vought, Inc.

SYSTEMS



MEDALLION XII 12" 3-WAY SYSTEM First truly different speaker system in years! Magnificent sound and tonal separation for the discriminating listener, plus the unique "Select-a-Style" grilles that snap on to convert the Medallion to any of five styles—Contemporary, Swedish Modern, Italian Provincial, French Provincial and Early American. Ideal choice for decorators. High efficiency enclosure design operates with amplifier of 10 clean watts upwars.

Available in all popular finishes.



SENIOR II 12" 3-SPEAKER SYSTEM Ultra-compact high compliance unit features smooth full range performance from 35 cps to beyond audibility. Features sensational Sphericon Super Tweeter.

COMPANION II 10" 3-SPEAKER SYSTEM (not shown) Amazing performance for its diminutive size. Newly engineered 10" high compliance woofer produces bass down to below 40 cps.

S-80 8" SYSTEM (not shown) Solves space and budget problems. Perfect paired for stereo or as "add on" or extension speakers. 21 1/2" x 11 1/2" x 9 1/2" D. Each finished on all four sides for use as highboy or lowboy. Senior and Companion in Oiled Walnut or unfinished S-80 in Mahogany, Walnut, Fruitwood or unfinished.



CLASSIC MARK II 15" 3-WAY HIGH COMPLIANCE SYSTEM The Classic Mark II is the "bridge" between the giant monaural speaker systems of yesterday and the compact stereo bookshelf types of today. Advancing the technology that produced the bookcase compacts, the new Classic brings you that sense of presence and of spaciousness in sound which places you in the concert hall, but with a cabinet designed to fit *effortlessly* into modern environments. Though only 35" wide, the Classic will lend magnificence to the most elegant interiors. Its simplicity of line and styling permits it to be perfectly inter-related with other line furniture, of any period. It is the Classic, a name inspired by the timelessness of its design and the fidelity of its sound.

The Classic features a heavy duty 15" high compliance woofer with exceptionally rigid diaphragm and extremely compliant surround... delivering optimum bass undistorted to below 70 cps, a high compliance X" mid-range, crossing over at 150 cps, with virtually linear response to 3000 cps, using a viscous treated cone to roll off unwanted peaks, and the renowned Sphericon super tweeter extending the system's amazingly smooth response to 40,000 cps... with extremely wide and uniform dispersion! Overall system response, 20 to 40,000 cps.

SERIES 200 PREMIER WIDE-RANGE SPEAKERS

Hand-built at every stage, these high compliance speakers offer many outstanding design features that achieve the finest high fidelity sound, even in smallest enclosures.



MODEL 315-C SUPER 15" 3-WAY DIFFAXIAL Theatre-type woofer cone features high excursion dual-spider piston and low-resonance bass down to 25 cps. Diffusicone mid-range and heavy duty H-600 T-50 tweeter extend response to inaudibility. 50 watts* rating. Shpg. wt., 3 1/2 lbs.



MODEL 312 12" 3-WAY DIFFAXIAL Acclaimed as greatest advance in speaker design for many years. Award-winning die-cast basket. Patented Diffusicone mid-range. Coaxially mounted Sphericon Super Tweeter. Built-in network and adjustable brilliance control. Response: 28-40,000 cps. 35 watts* rating. Shpg. wt., 10 1/4 lbs.



MODEL 6201 12" COAXIAL New improved version of the most popular top quality speaker ever made. Heavy duty woofer with cloth surround cone for extended bass, and superb, new compression type tweeter. Built-in network with adjustable brilliance control. Response: 28-18,500 cps. 35 watts* rating. Shpg. wt., 9 lbs., 8 oz.

ADDITIONAL SPEAKERS IN THIS SERIES INCLUDES:

DIFFUSICONE-12 12" DIFFAXIAL

MODEL 308 8" 3-WAY DIFFAXIAL

DIFFUSICONE-8 8" EXTENDED RANGE

SERIES 100 WIDE-RANGE SPEAKERS

Engineered to the highest specifications from the finest materials available, these moderately priced speakers offer the top values in the high fidelity field.



MODEL UC-153 15" 3-WAY DIFFAXIAL Features high efficiency tweeter and deluxe, multi-element Diffusicone mid-range. Response from below 30 cps to inaudibility. 30 watts* rating. Shpg. wt., 12 lbs.



MODEL UC-152 15" 2-WAY DIFFAXIAL Patented Diffusicone element provides dual horn loading at apex of cone to extend mid and high frequency response. Response from below 30 to 14,000 cps. 30 watts* rating. Shpg. wt., 8 1/4 lbs.



MODEL UC-123 12" 3-WAY DIFFAXIAL Patented Diffusicone element, UXT-5 super-tweeter with "reciprocating flare" horn. Crosses over at 1000 cps mechanically, 5000 cps electrically. Response: below 45 cps to 17,500 cps. 25 watts* rating. Shpg. wt., 9 lbs.

ADDITIONAL SPEAKERS IN THIS SERIES INCLUDES:

MODEL UC-122 12" 2-WAY DIFFAXIAL

MODEL UC-121 12" EXTENDED RANGE

MODEL UC-82 8" WIDE-RANGE

SYL-O-ETTE — the only ultra-thin speaker system that does not compromise bass response for size!



Unique! Low 500 cps crossover for rich, resonating bass response matched by no other ultra-thin system. Unique! Specially made and treated woofer diaphragm to solve cone break-up and distortion problems inherent in other ultra-thin enclosures. Unique! An Ultra-Thin

designed to look like a magnificent framed painting! Unique! Available with imported, hand-embroidered *petit point* floral grilles, silk screened Neo Classic art or Decorator Cane grilles. Response: 40-17,000 cps. May be used on floor or wall. Size: 20" h x 23" w x 4" d. Ship Weight: 20 lbs.



WRITE FOR COMPLETE HIGH FIDELITY CATALOG

...containing full information on all University products: systems, enclosures, kits, high compliance and high efficiency woofers, mid-range speakers, horn-loaded tweeters, compression drivers and accessory networks. Desk X-2, University Loudspeakers, Inc., 80 So. Kenisco Ave., White Plains, N. Y.

| MODEL | WOOFER | MID-RANGE | TWEETER | NETWORK | SIZE: H x W x D | SHPG. WT. |
|-----------------|---------------------|--|------------------------|-----------------|----------------------|-----------|
| CLASSIC MARK II | 15" high compliance | 8" high compliance | Sphericon | 3-Way | 28 1/2 x 35 x 17 1/2 | 98 lbs. |
| MEDALLION XII | 12" high compliance | Spec. 8" mid-range | Sphericon | 3-Way | 24 x 17 x 12 1/2 | 40 lbs. |
| SYL-O-ETTE | 8" high compliance | 6 1/2" mid-range with subsidiary high frequency radiator | 6 db per octave | | 29 x 23 x 4 | 20 lbs. |
| SENIOR II | 12" high compliance | 3 1/2" direct radiator | Sphericon | 6 db per octave | 25 x 15 1/8 x 12 1/2 | 44 lbs. |
| COMPANION II | 10" high compliance | Spec. 3" mid-range | 3 1/2" direct radiator | 6 db per octave | 24 x 13 1/2 x 11 1/2 | 30 lbs. |

Integrated program. All 8-15 ohms. "Diffaxial" is a registered trademark.

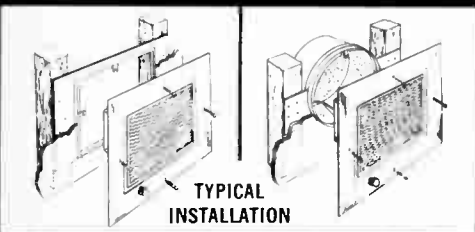
Write for complete catalogs

UNIVERSITY LOUDSPEAKERS, INC., White Plains, N. Y.

Wald inc.

THE ALL NEW COMPLETE LINE OF SPEAKER BAFFLES AND ENCLOSURES

| CAT. NO. | DESCRIPTION | SPEAKER SIZE | SUG. LIST | CAT. NO. | DESCRIPTION | SPEAKER SIZE | SUG. LIST |
|----------|--|--------------|-----------|----------|---|----------------|-------------------------|
| R8F | ROYALTY BAFFLE and FRAME (Impact Plastic) Finished in White, Beige, Ivory, Brass, Copper | 6, 7, 8 | 8 20 | A8C | RECTANGULAR BAFFLE (Aluminum) Assembled with 6x9 Speaker Pot & Switch Finished in Beige | 6x9 | 15 20 |
| N8B | NOBLEMAN BAFFLE (Impact Plastic) Finished in White, Ivory, Beige | 6, 7, 8 | 4 20 | A8 | RECTANGULAR BAFFLE (Aluminum) Finished in Beige | 6x9 | 6 50 |
| G8 | GUARDSMAN BAFFLE (Aluminum) Finished in Chrome, Brass | 8 | 8 20 | A5C | INTERCOM BAFFLE (Impact Plastic) Assembled with 5" Speaker Pot & Switch Finished in Beige | 4 or 5 | 9 60 |
| 100-8 | ROUND TRIM RING (Steel) Finished in Brush Steel, Painted White | 8 | 3 80 | A5 | INTERCOM BAFFLE only (Impact Plastic) Finished in Beige | 4 or 5 | 4 20 |
| 100-12 | ROUND TRIM RING (Steel) Finished in Brush Steel, Painted White | 12 | 6 30 | A3C | OUTSIDE INTERCOM BAFFLE (Impact Plastic) Assembled with 3 1/2" Speaker Pot & Switch Finished in Beige | 3 1/2 | 8 75 |
| 101-8 | ROUND TRIM RING (Aluminum) Finished in Brush Alum., Painted White | 8 | 4 55 | A3CB | SAME AS ABOVE with Bell Hole Finished in Beige | 3 1/2 | 8 75 |
| 101-12 | ROUND TRIM RING (Aluminum) Finished in Brush Alum., Painted White | 12 | 7 10 | C9-SP | INDOOR AND OUTDOOR CORNER/WALL BAFFLE Prewired Assembled with Water Proof 8" 2.15 Speaker | | 19 20 |
| 200-8 | CONIC DIFFUSER (Steel) Finished in Brush Steel, Painted White | 8 | 9 35 | C9P | INDOOR AND OUTDOOR CORNER/WALL BAFFLE With Volume Control Finished in Chrome, Brass | | 12 00 |
| 200-12 | CONIC DIFFUSER (Steel) Finished in Brush Steel, Painted White | 12 | 13 50 | C9-S | INDOOR AND OUTDOOR CORNER/WALL BAFFLE Prewired Assembled with 8" 2.15 Water Proof Speaker Finished in Chrome, Brass | | 17 80 |
| 201-8 | CONIC DIFFUSER (Aluminum) Finished in Brush Steel, Painted White | 8 | 10 40 | C9 | INDOOR AND OUTDOOR CORNER/WALL BAFFLE Finished in Chrome, Brass | | 10 70 |
| 201-12 | CONIC DIFFUSER (Aluminum) Finished in Brush Steel, Painted White | 12 | 15 00 | 50-8 | PLASTER RING (New Construction) | FOR SPEAKER 8" | FITS BAFFLES MODEL 2 30 |
| 400-8 | ROUND LOUVEREO (Steel) Finished in Painted White or Beige | 8 | 8 20 | E50-8 | ENCLOSURE RING UNIT (New Construction) | 8" | Nobleman N8B 8 80 |
| 400-12 | ROUND LOUVEREO (Steel) Finished in Painted White or Beige | 12 | 16 00 | X50-8 | PLASTER RING (Existing Construction) | 8" | 2 30 |
| 500-8 | SQUARE LOUVEREO (Steel) Finished in Painted White or Beige | 8 | 10 70 | EX-50-8 | ENCLOSURE UNIT (Existing Construction) | 8" | 8 50 |
| 500-12 | SQUARE LOUVEREO (Steel) Finished in Painted White or Beige | 12 | 21 25 | 60-8 | PLASTER RING (New Construction) | 8" | 2 30 |
| 600-8 | ACOUSTICAL TILE (Perforated Grill Steel) Finished in Painted White | 8 | 5 25 | E60-8 | ENCLOSURE UNIT (New Construction) | 8" | 100 Series 8 80 |
| 600L8 | ACOUSTICAL TILE (Louvered Grill Steel) Finished in Painted White | 8 | 10 70 | X60-8 | PLASTER RING (Existing Construction) | 8" | 2 30 |
| | | | | EX60-8 | ENCLOSURE UNIT (Existing Construction) | 8" | 200 Series 8 80 |
| | | | | 60-12 | PLASTER RING (New Construction) | 12" | 3 30 |
| | | | | E60-12 | ENCLOSURE UNIT (New Construction) | 12" | 400 Series 12 25 |
| | | | | X60-12 | PLASTER RING (Existing Construction) | 12" | 3 30 |
| | | | | EX60-12 | ENCLOSURE UNIT (Existing Construction) | 12" | 12 25 |
| | | | | 70-8 | PLASTER RING (New Construction) | 8" | 2 30 |
| | | | | E70-8 | ENCLOSURE UNIT (New Construction) | 8" | Royalty R8F 8 80 |
| | | | | X70-8 | PLASTER RING (Existing Construction) | 8" | 2 30 |
| | | | | EX70-8 | ENCLOSURE UNIT (Existing Construction) | 8" | 8 80 |
| | | | | 70-12 | PLASTER RING (New Construction) | 12" | Guardsman G8 3 30 |
| | | | | E70-12 | ENCLOSURE UNIT (New Construction) | 12" | 12 25 |
| | | | | X70-12 | PLASTER RING (Existing Construction) | 12" | 500 Series 3 30 |
| | | | | EX70-12 | ENCLOSURE UNIT (Existing Construction) | 12" | 12 25 |
| | | | | 80-8 | PLASTER RING (New Construction) | 8" | 600 Series 3 30 |
| | | | | E80-8 | ENCLOSURE UNIT (New Construction) | 8" | 8 80 |
| | | | | AP8 | PLASTER RING (New Construction) | 6x9 | Intercom A8 2 30 |
| | | | | AP5 | PLASTER RING (New Construction) | 4, 5 | Intercom A5 1 25 |
| | | | | AP3 | PLASTER BOX (New Construction) | 3 1/2 | Intercom A3 1 50 |



PACKAGE SYSTEMS any baffle completely pre-wired and preassembled with compo-

nents of your choice—ready to install at less than your cost of bulk components.

Wald inc. BURBANK, CALIFORNIA

Protected under Patent No. 2523802

MODEL 300 DYNAMIC PILLOW SPEAKER and MICROPHONE

ORIGINATED AND PATENTED BY

Wright-Zimmerman Inc.

NEW BRIGHTON, MINN.



Waterproof Impregnated Cone
Permanent Alnico V Magnet
Voice Coil Impedance 3.2 ohms

PICTURED IN ACTUAL SIZE!
3" Diameter 7/8" Thick
Cord length 10 feet

\$8.95
list

A compact speaker-microphone with a thousand uses. The Wright-Zimmerman Model 300 Dynamic Reproducer is virtually indestructible, attractively styled and light as a feather. Ideal for personalized pillow speaker use with excellent tone and as a dynamic microphone requiring only 2 stages of amplification.

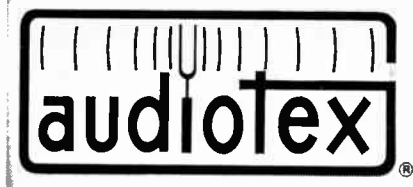
ATTRACTIVELY AND
INDIVIDUALLY
PACKAGED



...as a compact speaker



...as a dynamic microphone



HI-FI ACCESSORIES

AUDIOTEX MFG. CO., DIV. of G-C TEXTRON, INC.
ROCKFORD, ILL. • LOS ANGELES 18, CALIFORNIA

PHONO ACCESSORIES



RECORD BRUSH

Camel hair brush clips on tone arm; sweeps grooves while record is playing. Adjustable swivel permits use with any record player.

CAT NO. 30-000 List: \$.75

ATOMIC STAT-ELIM

Anti-static dust eliminator drains static charge by ionizing air surface of record. Contains mildly radio-active element; lightweight holder attaches to tone arm.

CAT NO. 30-002 List: \$3.95



STYLUS BRUSH

Automatically cleans stylus each time tone arm is moved from rest position. Self-adhesive bottom attaches to turntable; adjustable to any height.

CAT. NO. 30-004.....List: \$1.40



Record Spray STATI-KLEER

Cleans, Destaticizes and Lubricates in One Easy Operation

New Audiotex Stati-Kleer, with Miracle Silicone. The finest record cleaning spray available. Just spray on and wipe off. Cleans and lubricates all plastic records. One application eliminates harmful dirt and dust in record grooves for hours and hours.

CAT. NO. 30-007.....List: \$1.65



RECOR-DE-STAT

Squeeze bottle of anti-static detergent with velvet pad applicator. Long velvet fibers reach bottom of record grooves. Anti-static detergent cleans records; leaves dust-repelling film.

CAT NO. 30-010 List: \$2.00

DUST BUG

Four-in-One Record Cleaner & Static Eliminator

Applies cleaning fluid, brushes dirt from grooves, picks up loosened dirt, eliminates static charge automatically while record is playing. Anti-static cleaning fluid included.

CAT. NO. 30-014 (changer model) List: \$7.90
CAT. NO. 30-012 (player model) List: \$9.50
CAT. NO. 30-016 (fluid refill) List: \$2.00
CAT. NO. 30-018 (plush pad replacement) List \$1.40



45-RPM RECORD ADAPTOR

Plastic adaptor slips over standard spindle to play any 45 RPM disc.

CAT. NO. 30-034 List: \$.25

DISK-O-KLEEN

Silicone treated record cleaning cloth eliminates static charge. Specially woven velvet material has extra length nap to reach bottom of grooves.

CAT. NO. 30-022 List: \$1.25

KLEEN-O-RECORD

Triple action cloth, Anti-Static Record Cleaning Cloth, silicone impregnated, which cleans, lubricates and de-staticizes records. Long lasting.

CAT. NO. 30-024 List: \$.75

RECORD SAVERS

Heavy-duty polyethelene envelopes protect records when not in use.

CAT NO. SIZE LIST
30-062 For 12" records. Pkg. of 5 \$4.99

45-RPM RECORD INSERTS

Plastic snap-in inserts adapt large hole 7" records for play on 3 speed changers. Spring-like construction holds insert firmly in place.

CAT NO. 30-030 (Pkg. of 6) List: \$.30



TURNTABLE RECORD CUSHIONS

Thick plastic sponge cushions eliminate record slip, reduce magnetic pull, prolong record life.

CAT. NO. 30-040 (10").....List: \$1.25

CAT. NO. 30-042 (12").....List: \$1.40

TURNTABLE RUBBER MAT KIT

Heavy rubber mat fits any 12" turntable. Has tapered ridges 7", 10", and 12" in diameter. Supports any size record by its blank outside rim, keeping grooves from touching. Strobe disc and 45 RPM adaptor included.

CAT. NO. 30-044 List: \$4.25



PHONO COVERS

Heavy duty embossed vinyl covers for turntables and changers.

| CAT. NO. | SIZE & USE | LIST PRICE |
|----------|--|------------|
| 30-048 | 13 1/4" x 12 1/2" x 8" For Webcor, V-M, Garrard RC-121, Mirracord, etc. | \$2.50 |
| 30-050 | 17" x 15" x 8 1/2" For Garrard RC-88, RC-98, 4HF; Glaser-Steers, Thorens Changer, Pickering | 2.50 |
| 30-052 | 17 1/2" x 16 1/2" x 8 1/2" For many phono & transcription players such as: Gray, Rek-O-Kut Metzner | 3.00 |
| 30-054 | 2 1/2" x 16" x 8 1/2" For many phono & transcription players such as: Gray, Rek-O-Kut, Metzner | 3.00 |

TONE ARM LIFT

Provides precise control of tone arm. Made of spring metal, plastic coated; attaches to tone arm.

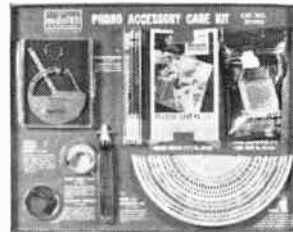
CAT. NO. 30-066.....List: \$.50



PHONO ACCESSORY KIT

Complete phono and record care kit contains record brush, recor-de-stat, 12" record savers, tone arm lift, stylus microscope, stylus weight gauge, strobe disc, and phono and recorder oil.

CAT. ND. 30-098 List: \$9.95



AUDIOTESTER TEST RECORD

12" plastic LP has stereo tests on Side 1; mono on Side 2. Side 1: metronome balance, pickup alignment, channel separation, frequency response, RIAA equalization, turntable rumble. Side 2: stylus wear, frequency response, RIAA equalization, IM distortion, turntable rumble, tone arm resonance.

CAT. NO. 30-200 List: \$4.98

STYLUS MICROSCOPE

Optical instrument for checking stylus wear. Has adjustable focus and magnifying power of 50. Complete with pen-type pocket clip.

CAT NO. 30-218 List: \$2.50

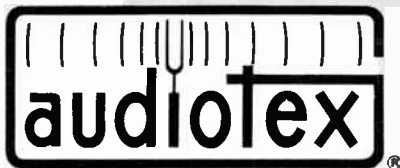


PHONO LEVEL

Bubble-type gauge for precise measurement of phonograph level. Accurate to better than 1°.

CAT NO. 30-224 List: \$2.50





HI-FI ACCESSORIES

AUDIOTEX MFG. CO., DIV. of G-C TEXTRON, INC.
 ROCKFORD, ILL. • LOS ANGELES 18, CALIFORNIA

PHONO ACCESSORIES (Continued)



STYLUS WEIGHT GAUGE

Measures force needed to lift tone arm from record. Calibrated in bands with an expanded scale at low force. Accurately gauges correct stylus pressure.

CAT. NO. 30-220 List: \$2.80

DECI-GRAM STYLUS PRESSURE GAUGE

Precisely calibrated, 1 to 10 gram pressure gauge measures stylus pressure within 1/2 gram. The sturdy DECI-GRAM is built to close tolerances to give you years of accurate service. Use it often... your records will last longer, sound better.

CAT. NO. 30-222 List: \$1.65



PHONO LEVEL KIT

Includes bubble-type phono level and four adjustable feet for balancing of any phono-graph or turntable.

CAT. NO. 30-226 List: \$3.25

STROBE DISC

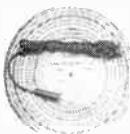
New design shows not only correct speed but also $\pm 2\%$ and $\pm 4\%$ deviations.

CAT. NO. 30-228 (Cardboard) List: \$.55
 CAT. NO. 30-230 (Plastic) List: \$1.65

PHONO SPEED TEST KIT

Complete outfit for checking turntable speed. Includes plastic scrobe disc and handy neon lamp.

CAT. NO. 30-232 List: \$2.90



TAPE ACCESSORIES



TAPE SPLICER — EZE SPLICE MODEL

For fixing broken tape and editing. Provides easy-to-repair mitre cut.

CAT. NO. 30-100 List: \$2.75



TAPE SPLICER—PROFESSIONAL MODEL

Easy to use, precise cutter/splicer with pair of curved cutting blades. Leaves tape edges free of adhesive. For use with any 1/4" tape.

CAT. NO. 30-104 List: \$9.95

SPLICING TAPE

For use with any tape splicer. Special cold setting, non-flowing adhesive on Mylar* base. 100 spool, 1/2" width. Enough for 200 splices. *TM of Dupont

CAT. NO. 30-110 List: \$.50

TAPERASER

Removes all traces of signal and noise from audio tapes and 16 or 35 mm magnetic sound film. Powerful erase action (to -52 db) lowers residual noise level below that of some virgin tape. Erases tape on reels up to 10 1/2" in diam. Complete operation takes only 30 seconds.

CAT. NO. 30-114 List: \$33.00



LANGUAGE LAB ACCESSORY AND SERVICE KIT

Have all your professional Audiotex service aids and accessories in one compact container. Includes tape and record labels, splicing tape, tape threading leader, Hi-Fi service tool kit, tape strobe, head cleaner, head lubricant, kleen-tape, head demagnetizer, and a professional model tape splicer.

CAT. NO. 30-099 List: \$54.95

HEAD-DEMAG TAPE HEAD DEMAGNETIZER



Safely removes all trace of magnetism from recording heads. Curved, flat tip is plastic-covered — can't scratch or damage. Reaches most heads with cover left on; on-off switch eliminates unplugging when device is not in use.

CAT. NO. 30-112 List: \$9.95



TAPE END CLIPS

Stops straying tape ends. Reusable plastic clip, works with any reel.

CAT. NO. 30-116 (Pkg. of 18) List: \$.60

REEL-NEAT TAPE CLIPS

Works on full or partially full reels. Keep tape neatly wound for convenience in storage. Snap-on clips, fit any reel, full or partially empty. Made of non-magnetic stainless steel. Fits snugly on wheel—does not interfere with placing reel back into storage carton. Package of 5.

CAT. NO. 30-130 List: \$1.25 Pkg.

TAPE AND RECORD LABELS

36 pressure-sensitive 1/2" x 2" labels provide handy index to the music library. Space for title, date, and number.

CAT. NO. 30-118 List: \$.55

TAPE CUEING LABELS



Color coded, pressure-sensitive numbered tabs for marking selections anywhere on a tape. Package contains five sheets, six tabs to a sheet, and includes identification labels for the reel or box.

CAT. NO. 30-120 List: \$1.65

TAPE THREADING LEADER

For easy threading of tape on reel. 24" Mylar leaders with pressure sensitive adhesive. A small foam rubber ball at one end drops into hub of take-up reel. On fast rewind, the ball releases without damaging tape.

CAT. NO. 30-122 (Pkg. of 10) List: \$1.40



TAPE HEAD CLEANER AND LUBRICANT

For cleaning and lubricating tape heads. Remove harmful dirt and grease. Lubricant contains silicone. Stops tape squeel reduces friction. Tapes last longer, give better fidelity.

CAT. NO. 30-124-1
 2 oz. Cleaner List: \$1.00

CAT. NO. 30-124-1
 2 oz. Lubricant List: \$1.00

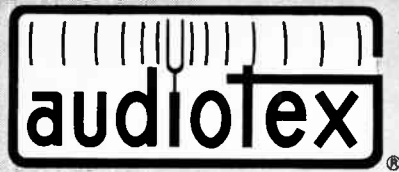


KLEEN-TAPE

30' of specially impregnated cloth tape on 3" reel for cleaning tape heads. "Plays" through any standard tape recorder in less than 2 minutes.

CAT. NO. 30-126 List: \$3.50

Pat. No. 300852



HI-FI ACCESSORIES

AUDIOTEX MFG. CO., DIV. of G-C TEXTRON, INC.
ROCKFORD, ILL. • LOS ANGELES 18, CALIFORNIA

TAPE ACCESSORIES (Continued)

TAPE RECORDER ACCESSORY KIT



Complete set of essentials for proper care and operation of tape recorders. Contains "EZE-Splice" tape splicer, roll of splicing tape, package of tape labels, box of tape end clips, package of tape starting leaders, reel of Kleen-Tape and Vial of Phono and Recorder Oil.

CAT. NO. 30-148 List: \$9.95



TELEPHONE PICK-UP

Records both sides of a telephone conversation — suction cup attaches to any phone. Plugs into tape recorder.

CAT. NO. 30-150
(plug not included) List: \$5.95

CAT. NO. 30-152
(with standard phone plug) List: \$6.95

AUDIOTESTER TAPE

For checking performance of stereo and mono tape machines and associated equipment. Tests include head alignment, resonance, frequency response, NAB equalization, intermodulation, flutter, metronome balance, and distortion. 7.5 ips tape comes with detailed instruction.



CAT. NO. 30-206 (Standard tolerance) List: \$6.50

CAT. NO. 30-208 (Precise tolerance) List: \$8.25

CAT. NO. 30-210 (4 track test tape) List: \$6.50

PILLOW SPEAKER



Personal Instrument for Private Listening. For use with transistor radios or across voice coil leads of any speaker. Electromagnetic element for maximum sensitivity and widest possible tone range. For private listening, without disturbing others. Comes with cord and miniature phone plug to fit transistor radios.

CAT. NO. 30-160 List: \$4.95

MISCELLANEOUS

HI FI ACCESSORIES

PROFESSIONAL HEADPHONES

High quality instruments for stereo and monophonic play. Frequency range 50-15,000 cps. Moving coil elements contain dual 16 ohm voice coils and lightweight plastic diaphragms. Supplied with connecting cable and plugs. Impedance: 16/16 ohms (stereo) or 8 ohms (mono).

CAT. NO. 30-158 List \$49.00



MINIATURE EARPHONE

For private listening to radios, TV, and hi-fi. Electro-dynamic type with frequency range 50-4000 cps. Lightweight metal clip holds phone to either ear.

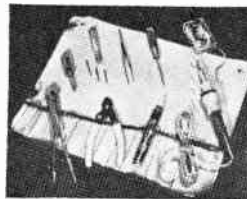
CAT. NO. 30-154 (15 ohm).....List: \$2.95

CAT. NO. 30-156 (2000 ohm)..List: \$2.95



ENGINEER'S HI-FI SERVICE TOOL KIT

Special tools for the audiophile or professional for repair, installation and adjustment of hi-fi and music equipment. Heavy duty plastic pouch contains miniature-tip soldering iron; precision tweezer; neolite circuit tester; phono & recorder oil; set of jeweler's screwdrivers; Phillips screwdriver; miniature screw holding screwdriver ("Minihold"); wire stripper and cutter, and a package of solder.



CAT. NO. 30-244

List: \$16.50

PHONO AND RECORDER OIL

Specially compounded non-gumming oil in handy plastic drop-by-drop applicator. Contains rust inhibitor.

CAT. NO. 30-250 List: \$6.5



SPEAKER CONE WEATHERPROOFING

Special silicone compound weatherproofs speakers for outdoor use. 8 oz. in aerosol-type spray can; enough to protect several speakers.

CAT. NO. 30-252 List: \$2.50

FM INDOOR ANTENNA

Folded Dipole for local or strong signal locations. Comes ready to install with 6' lead wire and spade lugs.

CAT. NO. 30-270 List: \$2.10

VIBRATION PADS

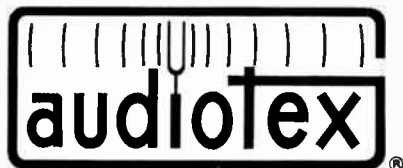
Resilient pads made of foam plastic and sponge rubber. Laminations reduce rumble, minimize feedback, and protect cabinets. Four available sizes to fit wide variety of units.

| CAT. NO. | SIZE | LIST |
|----------|---------|--------|
| 30-162 | 6"x12" | \$0.90 |
| 30-164 | 9"x12" | 1.25 |
| 30-166 | 12"x12" | 1.60 |
| 30-168 | 13"x16" | 2.25 |

HI FI DECALS

Jumbo assortment of attractive labels. Includes identification tabs for controls, cabinets, chassis parts and remote control devices.

CAT. NO. 30-314 List: \$1.50



HI-FI ACCESSORIES

AUDIOTEX MFG. CO., DIV. of G-C TEXTRON, INC.
ROCKFORD, ILL. • LOS ANGELES 18, CALIFORNIA

MISCELLANEOUS HI FI ACCESSORIES (Continued)

STEREO/MONOPHONIC SWITCHBOX

Parallels two stereo channels for noise-free play of monophonic records with stereo cartridge. Two-position switch for stereo or mono play. 3 ft. shielded cables with male phono plugs included.



CAT. NO. 30-290 (surface mounting) List: \$4.85

CAT. NO. 30-292 (panel mounting) List: \$5.25

DUO JACK SWITCH BOX

Connects two units such as tuner and record player or tape machine to single input. Automatically switches signals. Contains two inputs that accept phono jacks and 18" output cable with phono plug.

CAT. NO. 30-294 (surface mounting) List: \$3.00

CAT. NO. 30-296 (panel mounting) List: \$3.75

REMOTE POWER CONTROL

Operates like a light switch; provides remote control of electrical equipment at any location, with any number of switches. Contains low voltage signal power supply and relay switch. Remote switches fit standard electrical outlet box or may be built into a cabinet. Uses 3 conductor low voltage wire. 10 amp at 117.5 volt capacity.



CAT. NO. 30-300 (includes 3 switches) List: \$23.00

CAT. NO. 30-302 (with 3 pilot light switches) List: \$28.00

CAT. NO. 30-304 (additional switches without pilot light) List: \$2.25

POWEROFF

Shuts-off power to automatic record changers when last record has been played. Automatic shut-off may be switched to manual control. Complete with line cord and two receptacles.

CAT. NO. 30-310 (for changers drawing 30-45 watts) List: \$11.95



DRAWER SLIDES

For mounting record players, tape machines or other equipment in storage walls or cabinets. Support up to 50 lbs.; fit any drawer up to 17" long. Nylon rollers provide smooth operation.

CAT. NO. 30-350 (one pair) List: \$3.30

CAT. NO. 30-348 (Ball bearing slides) List: \$5.00/pr.

ACOUSTIC PADDING

Spun fiberglass eliminates standing sound waves, reduces reverberation inside speaker cabinets. May be used for any application to control or absorb sound.

CAT. NO. 30-356 (24"x60"x1") List: \$ 2.25

CAT. NO. 30-358 (Roll 24"x150"x1") List: \$56.15 (30c lin. ft.)

SPEAKER SELECTOR SWITCH

Dial switch provides control of 1 to 3 speakers anywhere in the house. Finished in attractive brush lacquered solid brass. Terminals on rear.

CAT. NO. 30-360
(surface mounting or free standing)
List: \$5.50



CAT. NO. 30-362
(wall plate type) List: \$3.50

CAT. NO. 30-388
(Stereophonic speaker selector Wall plate type)
List: \$4.95

SPEAKER VOLUME CONTROLS

Terminal-type controls for mounting on standard electrical wall plates. Also fit standard conduit box or may be mounted in any panel or cabinet. 10 watt power capacity (20 watt peak); "L" pad design.



| CAT. NO. | List |
|---|--------|
| WALL PLATE TYPE | |
| 30-364 (for 8 ohm speakers) | \$4.95 |
| 30-366 (for 16 ohm speakers) | \$4.95 |
| 30-368 (for 8 ohm speakers with output jack for plug-in of extension speaker) | \$5.25 |
| 30-370 (for 16 ohm speaker with jack as above) | \$5.25 |
| 30-372 (for two 8 ohm speakers) | \$8.50 |
| 30-374 (for two 16 ohm speakers) | \$8.50 |

SURFACE MOUNTING (in self-contained box)

| | |
|--|---------|
| 30-376 (speaker volume control 8 ohm) | \$ 7.00 |
| 30-378 (speaker volume control 16 ohm) | \$ 7.00 |
| 30-380 (dual stereo speaker 8 ohm) | \$10.50 |
| 30-382 (dual stereo speaker 14 ohm) | \$10.50 |

CABINET TYPE

| | |
|--|---------|
| 30-384 (speaker volume control 8 ohm) | \$ 3.50 |
| 30-386 (speaker volume control 16 ohm) | \$ 3.50 |

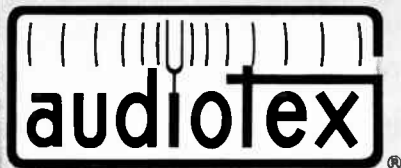
"T" PAD, PANEL MOUNTING

| | |
|-------------------------------------|--------|
| 30-390 (8 ohm, 25 watt peak audio) | \$6.75 |
| 30-392 (16 ohm, 25 watt peak audio) | \$6.75 |

SOLDERLESS PHONO PIN PLUGS

Completely new design requires only stripping of cable inserting in plastic shell and assembly with two screws. Right angle style.

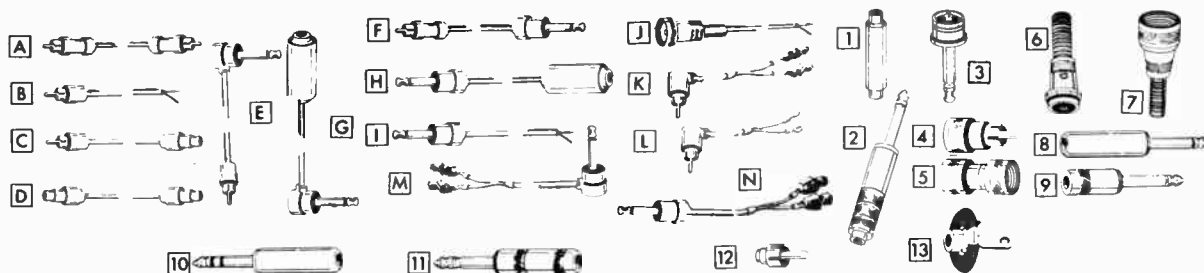
| | |
|-----------------|-------------------------------|
| CAT. NO. 30-530 | List \$.90 pk/2 grey plugs |
| CAT. NO. 30-532 | List: \$.90 pk/2 black plugs |



HI-FI ACCESSORIES

AUDIOTEX MFG. CO., DIV. of G-C TEXTRON, INC.
ROCKFORD, ILL. • LOS ANGELES 18, CALIFORNIA

CONNECTING CABLES, ADAPTORS, PLUGS AND JACKS A full assortment of Interconnecting Cables, Adaptors and connectors for connecting Hi-Fi sets. Cables come in a variety of lengths for any application.



SHIELDED CABLES

Phono Pin Plugs on both ends.

| A CAT. NO. | LENGTH | LIST |
|------------|--------|--------|
| 30-400 | 18" | \$1.00 |
| 30-402 | 36" | 1.25 |
| 30-404 | 72" | 1.50 |
| 30-406 | 144" | 2.00 |

Phono Pin Plug on one end, other end stripped and tinned.

| B CAT. NO. | LENGTH | LIST |
|------------|--------|-------|
| 30-412 | 18" | \$.90 |
| 30-414 | 36" | 1.00 |
| 30-416 | 72" | 1.25 |
| 30-418 | 144" | 1.75 |

Phono Pin Plug on one end; Phono Pin Jack on other end.

| C CAT. NO. | LENGTH | LIST |
|------------|--------|--------|
| 30-424 | 18" | \$1.25 |
| 30-426 | 36" | 1.35 |
| 30-428 | 72" | 1.75 |
| 30-430 | 144" | 2.25 |

Phono Pin Jacks on both ends.

| O CAT. NO. | LENGTH | LIST |
|------------|--------|--------|
| 30-434 | 18" | \$1.55 |
| 30-436 | 36" | 1.80 |
| 30-438 | 72" | 2.25 |

Phono Pin Plug on one end, 90° Phone Plug on other.

E CAT. NO. 30-442 (72") List: \$2.00

Phono Pin Plug on one end, Std. Phone Plug on other.

F CAT. NO. 30-444 (72") List: \$2.00

90° Phone Plug on one end, Phone Jack on other.

G CAT. NO. 30-446 (10') List: \$5.00

Std. Phone Plug on one end, Phone Jack on other end.

H CAT. NO. 30-448 (10') List: \$5.00

Phone Plug on one end, other end stripped and tinned.

I CAT. NO. 30-450 (6') List: \$1.90

Microphone Connector on one end, other end stripped and tinned.

J CAT. NO. 30-452 (10') List: \$2.70

30-464 (8') 2.80

30-466 (15') 3.90

FLEXIBLE "Y" ADAPTORS

Phono Jack and Plug Type

These new Flexible "Y" Adaptors are used in converting stereo record players to monaural and may also be used as a Tap-in Meter Monitor connection. Also required on some tape recorders.

Part No. List Price
CAT. NO. LIST

(A) CAT. NO. 30-510 Phono Plugs to 2 Phono Jacks List: \$2.00

(B) CAT. NO. 30-512 2 Phono Plugs to 1 Phono Jack List: \$2.00

(C) CAT. NO. 30-514 3 Phono Plugs connected together List: \$2.00

TWO-CONDUCTOR CABLES

Alligator Clips on one end; 90° Phono Pin Plug on other end.

K CAT. NO. 30-456 (10') List: \$2.25

Spade Lugs on one end; 90° Phono Pin Plug on other end.

L CAT. NO. 30-458 (10') List: \$1.85

Alligator Clips on one end; 90° Phone Plug on other end.

M CAT. NO. 30-460 (10') List: \$2.40

Standard Phone Plug on one end; Alligator Clips on other end.

N CAT. NO. 30-462 (10') List: \$2.40

ADAPTORS

Phono Pin Jack, for connecting two Phono Pin Plugs.

1 CAT. NO. 30-470 List: \$1.00

Phono Pin Plug to Standard Phone Plug

2 CAT. NO. 30-472 List: \$1.95

Female Microphone Connector to Standard Phone Plug.

3 CAT. NO. 30-474 List: \$.45

Microphone Connector to Phono Pin Plug.

4 CAT. NO. 30-476 List: \$1.00

30-500 Phono Pin Plug to 2 Phono Jacks 1.75

30-502 (3 phono pin jacks) 1.75

30-504 (2 pin jacks) 1.90

30-506 Phone Plug to 2 Microphone Connector 1.90

MISCELLANEOUS

Connector for two Male Microphone Connectors.

5 CAT. NO. 30-478 List: \$1.00

Microphone Connector, Single Contact, Male.

6 CAT. NO. 30-480 List: \$.50

Microphone Connector, Single Contact, Female.

7 CAT. NO. 30-482 \$.70

Three Microphone Connectors.

CAT. NO. 30-508 List: \$1.65

Standard Phone Plug, 2 Contact, Plastic handle.

8 CAT. NO. 30-484 List: \$.80

Standard Phone Plug, 2 Contact, "Stubby" Metal handle (shielded).

9 CAT. NO. 30-486 List: \$1.00

Phone Plug, 3 Contact, Plastic handle.

10 CAT. NO. 30-488 List: \$1.50

Phone Plug, 3 Contact, Metal handle (shielded).

11 CAT. NO. 30-490 List: \$1.50

Phono Pin Plugs, Package of 4.

12 CAT. NO. 30-492 List: \$.55

Phono Pin Jacks, Package of 3.

13 CAT. NO. 30-494 List: \$.55

Phono Pin Plug with Removable Shielded Handle.

CAT. NO. 30-534 List: \$1.00 (pkg./2)

Phono Pin Jack, Package of 2

CAT. NO. 30-536 List: \$1.20

Speaker Wires, 22 Ga, 2 Conn for connecting loud spkr.

CAT. NO. 30-550 (20') Speaker Wire List: \$.70

30-552 (40') Speaker Wire 1.25

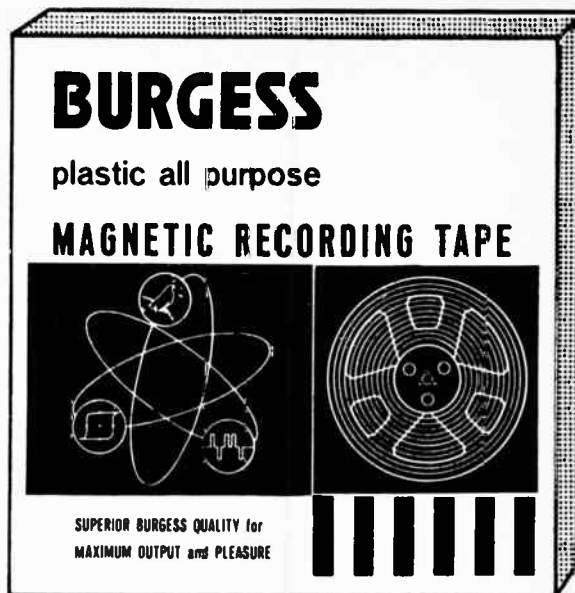
BURGESS

MAGNETIC RECORDING TAPE

by the makers of BURGESS BATTERIES

40 years of successful developments in acoustics, coatings and coating processes, and solid state physics have enabled Burgess engineers to produce a superlative magnetic tape characterized by these quality features . . .

- SUPERB FREQUENCY RESPONSES
- LOW NOISE LEVEL • HIGH SENSITIVITY
- UNIFORM, TROUBLE-FREE PERFORMANCES ASSURED BY BURGESS QUALITY CONTROL



| BURGESS CATALOG NO. | TAPE LENGTH | REEL SIZE | LIST PRICE | DESCRIPTION |
|---------------------|----------------|--------------------|----------------|---|
| 111-1.5 | 150' | 3" | \$.70 | SERIES NO. 111 1.5 mil 1/4" ALL-PURPOSE PLASTIC— 1.5 mil cellulose acetate for all general recording needs. Recognized throughout the recording industry as perfect for flawless recordings at minimum cost. The popular standard series tape. |
| 111-3 | 300' | 4" | 1.35 | |
| 111-6 | 600' | 5" | 2.25 | |
| 111-8.5 | 850' | 5 3/4" | 2.85 | |
| 111-12 | 1200' | 7" | 3.50 | |
| 111-24R 111-24H | 2400' 2400' | 10 1/2" 10 1/2" | 10.90 8.50 | |
| 150-2.25 | 225' | 3" | 1.00 | SERIES NO. 150 1.0 mil 1/4" EXTRA-PLAY POLYESTER MYLAR* 1.0 mil polyester mylar* for trouble-free operation in all weather. Performs brilliantly, unaffected by heat or humidity. 50% more recording time per reel. |
| 150-9 | 900' | 5" | 3.60 | |
| 150-12 | 1200' | 5 3/4" | 4.65 | |
| 150-15 | 1500' | 7" | 5.15 | |
| 150-18 | 1800' | 7" | 6.20 | |
| 150-36R 150-36H | 3600' 3600' | 10 1/2" 10 1/2" | 14.40 12.00 | |
| 102-6 | 600' | 5" | 2.65 | SERIES NO. 102 1.5 mil 1/4" ALL PURPOSE MYLAR*— 1.5 mil mylar* for super toughness, flawless performance under all conditions. Immune to heat or humidity, will not dry out or become brittle. |
| 102-12 | 1200' | 7" | 4.25 | |
| 102-24R 102-24H | 2400' 2400' | 10 1/2" 10 1/2" | 11.20 8.80 | |
| 190-9 | 900' | 5" | 3.50 | |
| 190-15 | 1500' | 7" | 4.50 | SERIES NO. 190 1.0 mil 1/4" EXTRA-PLAY PLASTIC— 1.0 mil cellulose acetate for maximum economy. Superb reproduction with full frequency response and 50% more recording time. |
| 190-18 | 1800' | 7" | 5.50 | |
| 190-36R 190-36H | 3600' 3600' | 10 1/2" 10 1/2" | 12.85 10.00 | |
| 200-3 | 300' | 3" | 1.60 | |
| 200-6 | 600' | 4" | 3.05 | |
| 200-12 | 1200' | 5" | 5.45 | |
| 200-17 | 1700' | 5 3/4" | 7.05 | SERIES NO. 200 .5 mil 1/4" DOUBLE LENGTH TENSILIZED POLYESTER MYLAR*— .5 mil double length tensilized polyester mylar* gives double the recording time of conventional tape. Twice the strength of conventional thin tape. Ideal for use under adverse conditions. Won't stretch or become brittle. |
| 200-24 | 2400' | 7" | 9.50 | |
| 200-48RPS | 4800' | 10 1/2" | 22.00 | |
| 131-12 | 1200' | 7" | 4.40 | |
| 131-24R 131-24H | 2400' 2400' | 10 1/2" 10 1/2" | 12.40 10.00 | SERIES NO. 131 1.5 mil 1/4" LOW PRINT THROUGH PROFESSIONAL QUALITY PLASTIC— 1.5 cellulose acetate, all-purpose professional grade, low print-through tape. Provides absolute minimum layer-to-layer signal transfer. |
| 138-12 | 1200' | 7" | 5.10 | |
| 138-24R 138-24H | 2400' 2400' | 10 1/2" 10 1/2" | 13.50 11.10 | SERIES NO. 138 1.5 mil 1/4" LOW PRINT THROUGH PROFESSIONAL QUALITY ALL-PURPOSE MYLAR*— 1.5 mil mylar* insures good strength and storage characteristics. Provides minimum layer-to-layer signal transfer. |

ACCESSORIES

| BURGESS CAT. NO. | SIZE | LIST PRICE | DESCRIPTION |
|------------------|-----------------------|------------|-------------------|
| LT-15 | 150' L. 1/4" W. | \$1.10 | Mylar Leader Tape |
| ST-5 | 150' L. 1/2" W. | .39 | Splicing Tape |
| RB-3 | Clear Plastic 3" Reel | .25 | Empty Reel, Boxed |
| RB-4 | Clear Plastic 4" Reel | .55 | Empty Reel, Boxed |
| RB-5 | Clear Plastic 5" Reel | .65 | Empty Reel, Boxed |
| RB-7 | Clear Plastic 7" Reel | .75 | Empty Reel, Boxed |

| BURGESS CAT. NO. | SIZE | LIST PRICE | DESCRIPTION |
|------------------|-------------------|------------|---------------------------|
| B-3 | For 3" Reel | \$.15 | Empty Box |
| B-4 | For 4" Reel | .20 | Empty Box |
| B-5 | For 5" Reel | .20 | Empty Box |
| B-7 | For 7" Reel | .20 | Empty Box |
| MB-4 | For 4" Reel & Box | .15 | Corrugated Mailing Carton |
| MB-5 | For 5" Reel & Box | .15 | Corrugated Mailing Carton |
| MB-7 | For 7" Reel & Box | .20 | Corrugated Mailing Carton |

*Trade Mark of DuPont



**TYPE A
AUTOMATIC
TURNTABLE**

Garrard

**WORLD'S FINEST RECORD-
PLAYING EQUIPMENT**

A magnificent record player, designed to satisfy the most critical demands of the knowledgeable music lover—fulfills the requirements of the finest music system. Dynamically-balanced counterweight-adjusted transcription tone arm with plug-in shell. Built-in calibrated stylus force gauge. Double shielded 4-pole motor. Heavily weighted balanced cast turntable is full-sized and non-magnetic. Interchangeable spindles. GARRARD's exclusive pusher platform record changer mechanism, for automatic play when desired. New and exclusive Amplock plug and twin audio sockets facilitate instant connect and disconnect of all cables.

MODEL AT6 AUTOMATIC TURNTABLE

A new automatic turntable modestly priced but distinguished by features and performance unequalled except by Garrard's own TYPE A. Dynamically-balanced, counterweighted tubular tone arm, with bayonet fitted plug-in shell. 4 speeds, center spindle intermix with separate manual and automatic controls. Built-in stylus force scale. Double shielded 4-pole motor. Oversized heavy-duty turntable. Rapid connect/disconnect Amplock plug and twin audio sockets. Compact size fits all player compartments.



AUTOSLIM/P AUTOMATIC RECORD CHANGER

A new standard of styling and performance in a budget-priced record changer. Exceptionally compact. Auto/manual operation—intermixes in any sequence. Die cast aluminum tone arm has plug-in shell—bayonet fitting, a feature expected only in more expensive units. Dynamically balanced 4-pole "Induction Surge" motor—Unified Control Panel has separate manual and automatic play positions. Amplock plug and twin audio sockets for quick connect and disconnect of all cables.



Wharfedale

COMPONENT LOUDSPEAKERS



SUPER 8 FS/AL
Full Range 8"



SUPER 10 RS/DD
Full Range 10"



SUPER 12 RS/DD
Full Range 12"



W12/RS Woofer

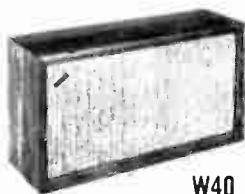


W15/RS Woofer



SUPER 3 Tweeter

**3-WAY
CROSSOVER NETWORK**



W40

The first ultra-compact full range two-speaker system in exclusive sand-filled enclosure. Achromatic principle. Remarkable wide range with excellent bass response.

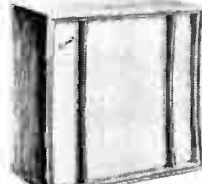
In Oiled or Polished Walnut and Mahogany true wood veneer; also in sanded Birch hardwood utility model without curved molding.



W60

A full range, two-speaker system in exclusive sand-filled enclosure. The original Achromatic unit which has established a new standard for complete speaker systems regardless of size or price. Speakers are matched and tuned to a craftsman's cabinet— $\frac{3}{4}$ " genuine hardwood.

In Oiled or Polished Walnut and Mahogany true wood veneer; also in sanded Birch hardwood utility model without curved molding or divider.

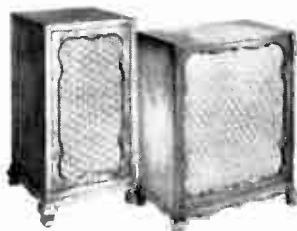


W70

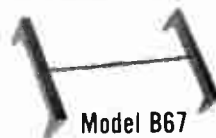
A full range, three-speaker system in exclusive sand filled enclosure. This magnificent Achromatic Speaker System is, in truth, a fine musical instrument. Its reproduction can be compared only to a live performance. Speakers are matched and tuned to a craftsman's cabinet— $\frac{3}{4}$ " genuine hardwood.

In Oiled or Polished Walnut and Mahogany true wood veneers; also in sanded Birch hardwood utility model without curved molding or dividers.

W60PR W70PR



Fine quality Provincial versions of the W60 and W70 Achromatic speaker systems. Both models are beautifully crafted in genuine Fruitwood. In equipment and interior construction, they are identical with the W60 and W70 systems.



Model B67

Universal mounting base for the W60 or W70 speaker systems. In Oiled or Polished Walnut or Mahogany true wood veneers; also in sanded Birch hardwood.

BRITISH INDUSTRIES CORPORATION - PORT WASHINGTON, N. Y.



THE ULTIMATE IN AUDIO TAPE RECORDING

THE ONLY RECORDER AT ANY PRICE THAT DOES EVERYTHING — BEST!

728

748

PROFESSIONAL SERIES



From \$909.00

- Model 728 Tape Speeds—7½ & 15 ips
- Model 748 Tape Speeds—3¾ & 7½ ips
- Stereo Record / Stereo Playback
- 4 Separate Heads — Plays 2 and 4 track tapes (¼ track optional)
- Handles 10½ inch and 7 inch Reels
- 2 Illuminated VU Meters
- Superior Specifications in All Areas
- Sound on Sound
- Every Feature the Sound Perfectionist Desires is Included
- Weight, Approximately 50 Pounds

Model 728-4 As Shown

THE MIGHTY

M-90

SERIES



M-90 AC As Shown From \$1460.00

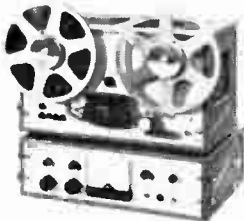
THE MIGHTIEST OF THEM ALL!

- Designed for the Broadcaster and Professional Recording Studio
- All Functions can be Remotely Operated
- Unsurpassed Performance Characteristics
- Handles 10½ inch Reels
- Available for Rack Mounting, In Portable Case or in Studio Console
- Weight, 80 Pounds

PERFECT FOR EDITING

the **P 75**

EDITOR SERIES



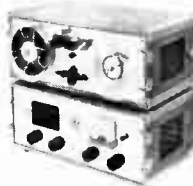
P 75 AC As Shown From \$930.00

- Incorporates Most of the Excellent Features of the M-90
- All Specifications Meet Highest Professional Standards
- 3 Motor Drive with Hysteresis Synchronous Direct Drive Capstan
- Handles 10½ inch Reels
- Monaural
- Weight, 69 Pounds

THE

PT 6

SERIES



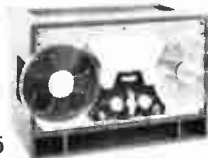
PT 6-6AJ As Shown From \$735.00

WORKHORSE OF THE BROADCAST INDUSTRY

- 7 inch Reels
- 3 Speeds
- Monitor Speaker
- 50 Ohm Microphone and Hi-Z Bridging Inputs
- 4, 16 and 600 Ohm
- Balanced Output Synchronous Motor
- Available Full or Half Track
- Total Weight, 47 Pounds

THE **N35B**

CITATION SERIES



As Shown (½ Track) From \$319.95

- Compact-Complete
- VU Meter
- Microphone (Hi-Z)
- Power Amplifier
- Speaker
- Portable
- 8 Ohm External Speaker Connection
- 3.75 & 7.5 ips Tape Speeds

THE **S 36**

UTILITY

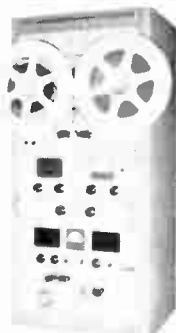


S 36 B As Shown From \$405.00

- Record/Playback/Pre-amplifier
- Weight, 40 Pounds
- Full Track Only
- Inputs Hi-Z Mic.
- Output 600 Ohms
- Monitor Phone Jack
- VU Meter
- 7 inch Reels

AUTOMATIC LONG TERM STORAGE RECORDER

THE **817 DL**



817 DL As Shown (Equipment Only) From \$1809.00

- 8 Hours Continuous Recording or Play
- Delay Loop Insures Complete Recording
- No Accidental Erasure
- Automatic Standby
- For Speech Monitor Only
- Handles 14 inch Reels

THE

D-3



As Shown (Equipment Only) From \$2200.00

TAPE DUPLICATING SYSTEM

- 3 Copies Simultaneously
- Master Motor Control
- Broadcast Quality
- VU Meter for Correct Record Level
- Calibration Circuit

• Represented by leading audio dealers and industrial distributors

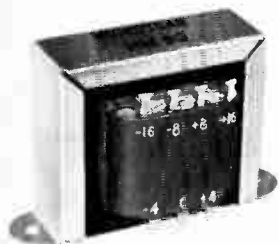


Magnecord SALES DEPARTMENT
MIDWESTERN INSTRUMENTS, INC.
TULSA, OKLAHOMA



MICROTRAN

PRECISION HI-FI ACCESSORIES

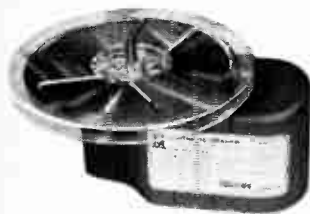


stereo 3rd channel — output matching transformers model HM-90

This precision transformer has been designed for the Audiophile who wishes to convert his Monaural System to Stereo or who wishes to modify or enlarge his Stereo system.

- Permits "hole-in-the-middle" fill in with 3rd Channel Speaker.
- Two HM-90 permits construction of Single cabinet, Single location, stereo system.
- Permits addition of any combination of Monaural or Stereo speakers, regardless of ratings.
- Permits these changes to be made and still maintain matched impedances, required polarities, and desired power levels.
- Power: 30 watts: Peak Power 100 watts.

- Frequency Response (Power): 40 to 20,000 cycles.
- Impedance Range: +16, +8, +4, 0, -4, -8, -16 ohms (Minus sign refers to reversed polarity.)
- Insertion Loss: Less than 1 db. in most hookups. When used on +4Ω and in -4Ω and in -4Ω out Taps, 3 db.
- Simple Connections: Easy to follow instructions show connections to be made to numbered solder lugs for each type of stereo system.
- Finish: Vacuum Varnish impregnation.
- Size: 3¾" x 2½" x 2¾" hi; 3¼" Mtg. ctrs.
- Weight: 2 lbs.
- Model HM-90—USER NET: \$6.33



Magnetic Tape Eraser — Model HD-11M Epoxy Molded

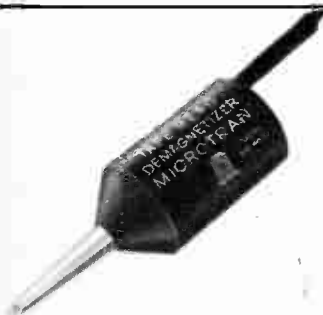
A heavy duty bulk tape demagnetizer that develops a high intensity magnetic field. Erases recorded signals and noise from magnetic tape without rewinding. Saves unnecessary wear on heads and tape. Noise level reduced below level of standard erase heads. Restores tape up to ½" to like new condition or better.

- Spindle mounting of reel permits rapid thorough coverage without missed spots.
- Reel Size Range: 5" x 7" x 10½"
- Spindle removable for use with other reel sizes.

- Accessory: Adapter hub for use with N.A.B. 10½" reels. (Model HD-11-AD... User Net \$2.30)
- Universal Use: May also be used for Demagnetizing record Playback-Erase Heads, watches and other metal objects.
- Rating: 117 Volts AC, 5 Amps.
- Finish: Case Epoxy — High impact.
- Size 7" L x 3½" W x 3¼" H.
- Weight: 9 lbs.
- Model HD-11M—USER NET: \$18.95

A MUST FOR STEREO RECORDING

Most stereo recorders do not provide facilities for pre-erasing both tracks



Tape Head Demagnetizer — Model HD-40M (For Tape Recording Heads)

Permanent magnetizing of recording heads during normal use of tape recorders is a common occurrence. Magnetized heads cause high noise level and harmonic distortion.

The HD-40M Head Demagnetizer, when properly used, removes any residual permanent magnetism from the heads. It consists of a heavy duty alternating current electromagnet with an extended pole piece designed for easy access to the recording heads of most tape recorders. When energized, contact of the demagnetizer pole piece with the pole tip of the recording head causes the head to be saturated by an alternating magnetic field. Gradual removal of the head from this saturating field neutralized any residual permanent (DC) magnetism in the recording head.

- Removes permanent magnetism
- Reduces noise level
- Reduces harmonic distortion
- Improves signal to noise ratio
- Insures high frequency response
- Reduces hum of tape head
- Special finish on pole piece prevents marring recording head surfaces
- Rating 117 volts AC, 1 AMP.
- FINISH: High impact molded epoxy
- SIZE: 4" Long x 1¼" Diameter
- WEIGHT: 7 ozs.
- Model HD-40M—USER NET: \$5.25

telephone pick-up coil — model HP-61



For transcribing telephone conversations with recorder or making messages audible on amplifier. May also be used as probe for locating sources of hum.

- Equalized Level: Local and distant conversations recorded with more constant signal level than base mounted units.
- Suction Cup: Mounting on telephone receiver.
- Universal Model: One unit suitable for all types of telephones.
- Plug-in Use: Supplied with 68" shielded cable, terminated with standard phone plug for mike input of recorder or amplifier.
- Finish: Optical Black.
- Compact: Size only ¾" diameter x 2" long.
- Weight: 1½ ounces.
- Model HP-61—USER NET: \$4.77

hum-bucking telephone pick-up coil — model HP-70

For transcribing telephone conversations, this coil is designed for use with high impedance input tape recorders, amplifiers and dictating machines. This deluxe unit has been designed with symmetrical hum cancelling pick-up coils. Ruggedly constructed of high impact plastic.

- Eliminates high stray hum pick-up usually encountered with conventional pick-up coils.
- Color: Grey.
- Size: 2½" L x 7/8" W x 5/8" H.
- Model HP-70—USER NET: \$6.95



- Mounting: Double Suction Cup
- Cable Length: 5 Feet.
- Termination: Tinned Leads
- Shipping Weight: 2 ozs.



MICROTRAN

company inc.

Valley Stream, New York



As above with Molded Phone Plug Termination.

- Shipping Weight: 3 ozs.
- Model HP-71 USER NET: \$7.50.



| STOCK NO. | DESCRIPTION | REEL | LIST PRICE |
|-----------|--------------|---------|------------|
| *111-1.5 | 1/4" x 150' | 3" | \$.70 |
| 111-3 | 1/4" x 300' | 4" | 1.35 |
| 111-6 | 1/4" x 600' | 5" | 2.25 |
| 111-12 | 1/4" x 1200' | 7" | 3.50 |
| 111-25H | 1/4" x 2500' | HUB | 7.35 |
| 111-25R | 1/4" x 2500' | 10 1/2" | 10.15 |
| *102-6 | 1/4" x 600' | 5" | 2.65 |
| 102-12 | 1/4" x 1200' | 7" | 4.25 |
| 102-25H | 1/4" x 2500' | HUB | 8.55 |
| 102-25R | 1/4" x 2500' | 10 1/2" | 11.35 |
| *120-3 | 1/4" x 300' | 4" | 1.35 |
| 120-6 | 1/4" x 600' | 5" | 2.25 |
| 120-12 | 1/4" x 1200' | 7" | 3.50 |
| 120-25H | 1/4" x 2500' | HUB | 7.35 |
| 120-25R | 1/4" x 2500' | 10 1/2" | 10.15 |
| †190-9 | 1/4" x 900' | 5" | 3.50 |
| 190-18 | 1/4" x 1800' | 7" | 5.50 |
| 190-36H | 1/4" x 3600' | HUB | 9.25 |
| 190-36R | 1/4" x 3600' | 10 1/2" | 12.05 |
| †150-2.25 | 1/4" x 225' | 3" | 1.00 |
| 150-9 | 1/4" x 900' | 5" | 3.60 |
| 150-18 | 1/4" x 1800' | 7" | 6.20 |
| 150-36H | 1/4" x 3600' | HUB | 10.70 |
| 150-36R | 1/4" x 3600' | 10 1/2" | 13.50 |
| *131-12 | 1/4" x 1200' | 7" | 4.40 |
| 131-25H | 1/4" x 2500' | HUB | 8.65 |
| 131-25R | 1/4" x 2500' | 10 1/2" | 11.45 |
| *138-12 | 1/4" x 1200' | 7" | 5.10 |
| 138-25H | 1/4" x 2500' | HUB | 11.10 |
| 138-25R | 1/4" x 2500' | 10 1/2" | 13.90 |
| 200-3 | 1/4" x 300' | 3" | 1.60 |
| 200-6 | 1/4" x 600' | 4" | 3.05 |
| 200-12 | 1/4" x 1200' | 5" | 5.45 |
| 200-24 | 1/4" x 2400' | 7" | 9.50 |
| 200-48RPS | 1/4" x 4800' | 10 1/2" | 22.00 |
| 175-6 | 1/4" x 600' | 5" | 2.40 |
| 175-12 | 1/4" x 1200' | 7" | 3.75 |
| 282-6 | 1/4" x 600' | 5" | 3.10 |
| 282-12 | 1/4" x 1200' | 7" | 4.95 |

No. 111 All Purpose: For all general recording. International standard of the recording industry—provides flawless sound reproduction at low cost. 1 1/2 mil plastic backing.

No. 102 All Purpose, Extra Strength: For all general recording—especially suited for irreplaceable recordings or long term storage. On super-tough, weather balanced 1 1/2 mil polyester backing.

No. 190 Extra Play: 50% more tape—as much recording time as 1 1/2 reels of standard tape. High potency oxide offers complete purity of sound. 1 mil plastic backing.

No. 150 Extra Play, Extra Strength: 50% more playing time—withstanding temperature and humidity extremes. High potency oxide on 1 mil polyester backing.

No. 200 Double Length, Double Strength: As much playing time as two reels of standard tape—enough to record an entire opera, concert or conference. High potency oxide on tensilized polyester backing.

No. 120 High Output: Over 100% more output, greater dynamic range and freedom from distortion on signal peaks. 1 1/2 mil plastic backing.

No. 131 Low Print: Reduces print-through (signal transfer from layer to layer) to a point below the noise level of most professional machines. Has excellent recording characteristics and allows long time storage. 1 1/2 mil plastic backing.

No. 138 Low Print, Extra Strength: Same recording qualities as No. 131 on strong 1 1/2 mil polyester backing.

No. 175 Tenzar[®] Backing: For applications requiring frequent repeat, continuous play, fast stops and starts. High quality—economical—with 16 times greater tear resistance than plastic to resist breaking when edges are nicked. Non-drying 1 1/2 mil TENZAR tape available on Red, Blue, Green, Yellow or Clear (standard) reels.

No. 282 Sandwich: With exclusive micro-thin protective plastic shield over oxide coating. Eliminates oxide rub-off, wears up to 30 times longer, drastically reduces machine maintenance and provides superb sound fidelity. Strong, weatherproof 1 1/2 mil polyester backing.

ACCESSORIES

No. 10 Tape Library Labels: Self sticking labels give front and edge box identification with tear-off tabs for reels. Fits all boxes in Red, Yellow, Blue, Green or White colors. List Price—50 labels \$2.75.

No. 24 Colored Leader & Timing Tapes: Used to identify ends of tape and selections within a roll. Red, Blue, Green, Yellow and White in handy dispenser packages. List Price—1/4" x 100'—\$.90.

No. 41 Splicing Tape: A self-sticking tape expressly made for neat noiseless splices. In metal dispensers. List Price—1/2" x 150' \$.39.

No. 51 Conductive Sensing Tape: For recorders with electronic sensing controls. Sticks tight, stays clean. On dispenser card. List Price—7/32" x 150' \$1.89.

TC-12 End-of-Reel Tape Clips: One clip packed free in each box. Prevents tape spilling. 10 clips per package—\$.35.

EMPTY REELS AND BOXES

| | | |
|-----|----|-----|
| RB3 | 3" | .25 |
| RB4 | 4" | .55 |
| RB5 | 5" | .65 |
| RB7 | 7" | .75 |

*Also available 4800' on hub or 14" reel.

†Also available 7200' on hub or 14" reel.

Magnetic Products Division **3M** COMPANY

"SCOTCH", "TENZAR" AND THE PLAID DESIGN ARE REGISTERED TRADEMARKS OF MINNESOTA MINING AND MANUFACTURING COMPANY, ST. PAUL 1, MINNESOTA

Norelco

'CONTINENTAL' TAPE RECORDERS

developed and skill-crafted by Phillips of the Netherlands

Whether you are a music lover, a recordist or a high fidelity enthusiast, we are confident you will find one of the justly famous Norelco 'Continental' family of professional quality tape recorders ideally suited to your specific recording requirements.



The **CONTINENTAL "100"** (EL 3585)

**100% Transistorized, Battery Operated
PORTABLE TAPE RECORDER**
Ultra-light — ultra-simple — ultra-rugged

It's here—Exactly the portable you've been waiting for, for candid, on-the-shoulder, split-second recordings of any sound, any voice, anywhere, every time.

Nothing approaches this newest addition to the Norelco family of tape recorders when it comes to on-the-fly, extra-fidelity recordings of interviews, inventories, lectures, theatrical and musical performances, parties, nature walks, ball games and singing

gondoliers. Enclosed in a handsome high-impact polystyrene case, and with its full complement of 6 low cost, (20 hr. recording life) "D" cell batteries, the Continental "100" weighs a mere 8 lbs. It readily handles both 3" and 4" reels and hence, provides up to 2 hours of recording and playback time per reel.

OTHER FEATURES AND SPECIFICATIONS: Instantaneous operation, minimum battery drain, small size, superior circuitry — thanks to 100% transistorized construction; **Compatibility** — tapes are fully interchangeable with all constant-speed 1 7/8 ips, 2-track A.C. line-powered recorders; **Simple operation** — 3 self-locking push-buttons handle all recording and playback functions; **Self-contained** — with Norelco 4" speaker; **Combined Indicator** — for modulation level and battery life; **Combined volume control** — for recording and playback; **Storage space** — for microphone and cables; **Input** — for mike /radio phonograph; **Output** — for external amplifier; **Tape speed** — 1 7/8 ips, constant-speed, capstan-drive; **Frequency response** — 100-6000 cps; **Signal-to-noise ratio** — better than -40 db; **Dimensions** — 10 1/2" x 3 3/4" x 7 1/2".

†Suggested list price: \$129.50 complete with Norelco high quality "dynamic" microphone.



The **CONTINENTAL "400"** **4-Track Stereo Record-Playback** **4-Track Mono Record-Playback**

Model EL 3536

◆ fully self-contained with unique dynamic stereo microphone, plus two speakers (one in the removable cover for perfect stereo separation), dual hi-fi preamps, recording and playback amplifiers ◆ fully compatible with conventional pre-recorded magnetic tapes ◆ self-contained phono/P.A. system ◆ mixing facilities ◆ 'sound on sound' trick switch ◆ interlocking pause button ◆ can also play through external hi-fi amplifier.

SPECIFICATIONS: Three Speeds — 7 1/2, 3 3/4, and 1 7/8 ips; Tracks — stereo 2 (dual); monophonic 4; Heads — Stacked; Frequency Response — at 7 1/2 ips 50-18,000 cps; at 3 3/4 ips, 60-14,000 cps; at 1 7/8 ips, 60-7,000 cps; **Signal-to-Noise Ratio** — 46 db or better; **Wow and Flutter** — less than .3% at 3 3/4 ips; **Modulation Indicator** — Magic Eye (Type EM84); **Program Indicator** — Built-in, 4-digit adjustable; **Pause Button** — instantaneous with locking device; **Fast Forward and Reverse** — Less than 2 minutes for 1200 ft. of tape; **Automatic Stop** — At ends of tape (with metalized strips); **Audio Facilities** — Self-contained, including dual hi-fi preamps; recording and playback amplifiers, balance control and Norelco wide-range loudspeakers; **Inputs** — (1) for stereo microphone; (2) for stereo phono or tuners; **Outputs** — (2) for extension speakers; (2) for external amplifiers; (1) for stereo headphones; **Microphone** — Stereophonic (dual elements); **Special Controls** — Two-channel volume, tone and balance; **Switches:** (1) 'sound on sound'; (1) 2-position for combining both stereo channels to single speaker output; (1) 4-position selector (channels 1 and 4, 2 and 3, stereo and P.A.); **Tube Complement** — EF86 (2), ECC83 (3), EL84 (2), EM84 (1); **Line Voltage** — 117 volts at 60 cycles; **Power Consumption** — 100 watts; **Dimensions** — 18 1/2" x 15 1/2" x 8 1/2"; **Weight** — 43 pounds.

†Suggested list price: \$399.50

Norelco



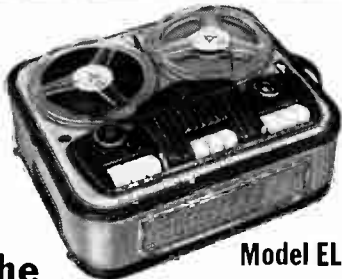
The CONTINENTAL "200"

Model EL 3541

Low-Cost 4-Track Stereo Playback and Mono Record-Playback

The top value, (7½ ips) recorder, available today! Frequency response 50 to 14,000 cps. Stereo head output for playback through external stereo pre-amplifier. 'Sound on sound' trick button. Interlocking pause button. Mixing facilities. Foot switch available. Self-contained, including microphone and wide-range Norelco speaker. Also suitable for use as a phono/P.A. system.

†Suggested list price: \$179.50



Model EL 3542

The CONTINENTAL "300"

4-Track Stereo-Playback 4-Track Mono Record-Playback

◆ mixing facilities ◆ self-contained phono P.A. amplifier and speaker system ◆ sound on sound trick button ◆ interlocking pause button ◆ headphone monitoring ◆ stereo head output for playback through your own stereo preamplifier ◆ foot-switch available.

SPECIFICATIONS: Three Speeds—7½, 3¾, and 1⅞ ips; Tracks—stereo 2 (dual); Mono 4; Heads—Stacked; Frequency Response—at 7½ ips, 50 to 16,000 cps; at 3¾ ips, 60 to 13,000 cps; at 1⅞ ips, 60 to 6,500 cps; Modulation Indicator—Magic Eye (Type EM81); Program Indicator—Built-in, 4-digit adjustable; Inputs—(1) radio/phono; (1) microphone (with mixing facilities); Outputs—(2) stereo head; (1) for external speaker without controls (1) for headphone monitoring recording circuit; Microphone—High-impedance dynamic; Line Voltage—117 volts AC at 60 cycles; Power Consumption—80 watts; Dimensions—15¾" x 13" x 6¾"; Weight—30 pounds.

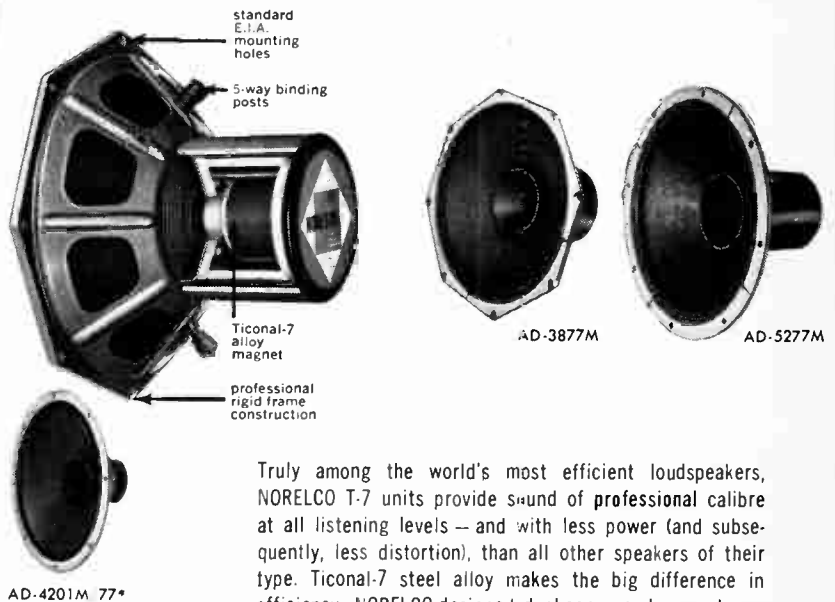
†Suggested list price: \$269.50

HIGH FIDELITY LOUDSPEAKERS

from the audio research center of the world

T-7 LOUDSPEAKERS

featuring the revolutionary TICONALTM VII voice-coil magnets (30% more powerful than alnico V)



Truly among the world's most efficient loudspeakers, NORELCO T-7 units provide sound of professional calibre at all listening levels — and with less power (and subsequently, less distortion), than all other speakers of their type. Ticonal-7 steel alloy makes the big difference in efficiency; NORELCO-designed dual-cones and magnet systems let you hear the difference — unexaggerated bass and transient response, topped by clean, beautifully transparent high frequency reproduction. Listen to the sound — then examine the price tag. Only Philips of the Netherlands, the audio research center of the world, could have guild-crafted these speakers to give you the 'cleanest sound around' at such moderate cost.

NOTE: Where quality is the prime requisite but economy is an important factor, the NEW Norelco 12", Ferroxdure Ceramic AD-4201M/77* is the ideal solution.

| Model | Size | Power (watts) | | Efficiency at 400 cps | Total Flux (Maxwells) | Frequency Response | † Suggested List Price |
|--------------|------|---------------|------|-----------------------|-----------------------|--------------------|------------------------|
| | | Continuous | Peak | | | | |
| AD-5277M | 12" | 20 | 30 | 14% | 134,000 | 35-18,000 | \$48.75 |
| AD-4277M | 12" | 20 | 30 | 7% | 98,000 | 35-18,000 | 32.50 |
| AD-4201M/77* | 12" | 10 | 15 | 7% | 42,600 | 40-15,000 | 21.25 |
| AD-4877M | 8" | 6 | 10 | 10% | 58,300 | 50-20,000 | 23.15 |
| AD-3877M | 8" | 6 | 10 | 6% | 26,200 | 75-19,000 | 9.25 |
| AD-3500M | 5" | 3 | 5 | 4% | 26,200 | 130-19,000 | 4.95 |

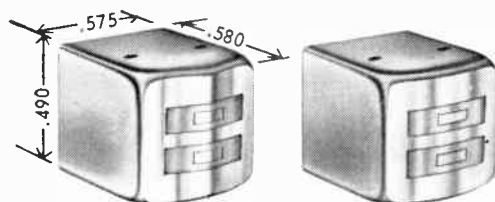
†The unit prices stated are for identification only and are not necessarily the regular or usual retail prices and are not to be represented as such.

NORTH AMERICAN PHILIPS COMPANY, INC.
High Fidelity Products Division
Hicksville, L. I., N. Y.

Nortronics



MAGNETIC TAPE HEADS



ASQ NO MOUNT CSQ NO MOUNT

AVERAGE SPECIFICATIONS

for stereo and monophonic equipment

• RECORD/PLAY • RECORD • ERASE

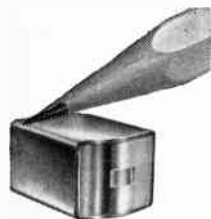
4-Track, 2-Track and Full Track

NORTRONICS magnetic tape heads—original equipment on most major brands of tape recorders!

Designed to offer the highest quality performance and long, dependable service, Nortronics heads have long been "first choice" for most of the nation's major tape recorder manufacturers. Featuring the same sophisticated design and advanced production techniques as used on all Nortronics heads, these all-metal face heads provide: 1) Improved tape-to-head contact for increased high frequency response. 2) Smoother, harder surface to reduce friction, promoting more uniform tape motion and less flutter. 3) Reduction of magnetic oxide loading of head surface by the tape. 4) No build-up of static charge, since entire face is at ground potential.

PRODUCTION RUNS—Our capability and long experience as the Nation's largest manufacturer of laminated heads is your assurance of on schedule delivery of large production runs, consistent in quality to meet or exceed your specifications.

NEW! SERIES "L" MINIATURE HEAD



These compact, Series "L" miniature heads have a laminated core structure and all-metal face with hyperbolic contour. Face measures only 5/16" x 5/16"—head depth is just 3/8". Available in record, record/play, and erase types for track widths from .012" to .060"—inductances up to 500 MHY—and gap lengths from 50 micro-inches up. Base or rear mount types, available with terminals, or lead connections.

| NORTRONICS MODEL NO. | *ASQ4R CSQ4R (TLB4R) | *ASQ4K CSQ4K (TLB4) | *ASQ7K CSQ7K (TLB7) | *ASQ2K CSQ2K (TLB2) | *ASQ1K CSQ1K (TLB1) |
|--|---|---------------------|---------------------|---------------------|---------------------|
| TYPE OF HEAD | 4-track stereo with laminated cores; "ASQ" models have hyperbolic metal face, "CSQ" models have cylindrical metal face. | | | | |
| | RECORD ONLY | RECORD/PLAY | RECORD/PLAY | RECORD/PLAY | PLAY BACK only |
| INDUCTANCE, 1 KC | 60 MHY | 100 MHY | 360 MHY | 750 MHY | 1.0 HY |
| IMPEDANCE, 1 KC | 380 OHMS | 630 OHMS | 2.5 K | 4.8 K | 6.3 K |
| MAX. BIAS FREQ. | 150 KC | 100 KC | 80 KC | 60 KC | — |
| RESISTANCE, D.C. | 140 OHMS | 140 OHMS | 270 OHMS | 450 OHMS | 650 OHMS |
| GAP SPACER | 0.5-MIL | 0.1-MIL | 0.1-MIL | 0.1-MIL | 0.1-MIL |
| TRACK WIDTH | .043 | .043 | .043 | .043 | .043 |
| TRACK SPACING | .136 | .136 | .136 | .136 | .136 |
| MINIMUM CROSSTALK REJ. | 50 DB | 50 DB | 50 DB | 50 DB | 50 DB |
| AVERAGE 7.5 IPS CONSTANT-CURRENT RECORD/PLAY CHARACTERISTICS | | | | | |
| PEAK BIAS 60 KC | 0.7 MA | 0.9 MA | 0.45 MA | 0.30 MA | — |
| RECORD CURRENT | .05 MA | .065 MA | .035 MA | .022 MA | — |
| 1 KC OUTPUT | — | 0.75 MV | 1.5 MV | 2.2 MV | 2.7 MV |
| 10 KC/1 KC RATIO | — | 0 DB | 0 DB | 0 DB | 0 DB |



• NORTRONICS NEW HYPERBOLIC CONTOUR—Eliminates need for pressure pad on record/play heads in machines which have sufficient tape tension and wrap—greatly extends head life—increases tape contact pressure on the gap. May be used with normal capstan power (and corresponding pressure roller force) available in conventional pressure pad design recorders.

TAPE HEADS DO WEAR OUT...

Make Big Profits Replacing Them!

WHERE can you get quality replacement heads? NORTRONICS offers the same premium quality tape heads they supply to original equipment manufacturers for the majority of popular tape recorders sold. Laminated core construction, precision lapping, ultra-fine gaps, metal faced . . . in other words, the best available.

HOW can you quickly and easily install the head? NORTRONICS new Quik-Kits contain everything you need, including detailed instructions and drawings . . . all hardware . . . even special mounting plates and brackets when required!

WHAT is the correct replacement head? NORTRONICS has researched, pre-tested and compiled this information for you! A copy of the detailed Replacement Head List is yours for the asking.

WHY should you stock this program? Mainly because the profit potential for YOU is tremendous. Dealers, distributors, service men and audiophiles have all demanded a COMPLETE head replacement program and NORTRONICS has the ONLY program that meets this requirement. Besides that, for upgrading of equipment, NORTRONICS also has the most comprehensive line of 4-Track Stereo Conversion Kits available anywhere.

WHEN should you get in touch with your distributor? TODAY, of

course! Ask him to supply you with this fast-moving, profitable line of replacement heads, Quik-Kits and 4-Track Stereo Conversion Kits.

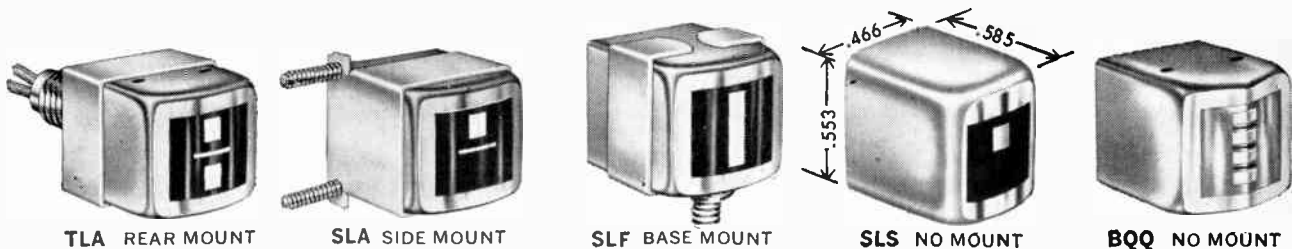
The classic WHERE, HOW, WHAT, WHY and WHEN have all been answered by an intense, continuous research program by NORTRONICS and Sams Photofacts. All new Photofact Folders specify NORTRONICS tape heads for replacement, thus guaranteeing a continuing new demand for your NORTRONICS head stock. Write today for your copy of the detailed replacement head listing because tape heads DO WEAR OUT and YOU should be prepared to sell the replacements.

NORTRONICS national advertising and publicity campaign will pre-sell your customers on the need for replacing their worn tape heads and steer this pent-up demand directly to your door. Promotional material and detailed replacement information for popular tape recorders will make it easy to stock and profitable for you to handle.

WRITE TODAY to Thor Johnson, Distributor Sales Manager for complete information on how you can make big profits with Nortronics new replacement head program.

Nortronics





FOR RECORD/PLAY AND RECORD HEADS

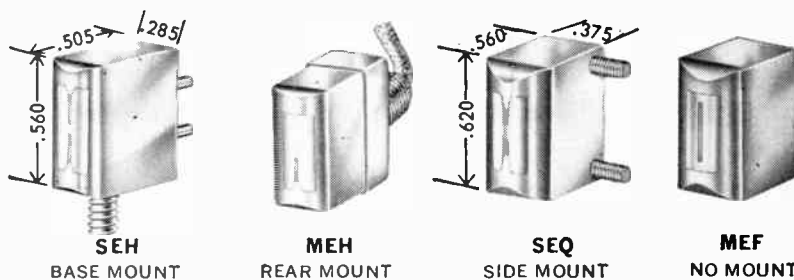
| TLA5R SLA5R •TLA5R •SLA5R | TLA5L SLA5L •TLA5L •SLA5L | TLA4L SLA4L •TLA4L •SLA4L | TLA3L SLA3L •TLA3L •SLA3L | SLF4R •SLFH4R | SLF4L •SLFH4L | SLF3L •SLFH3L | SLS4 GMH4L •KM4L | SLS3 GMH3L •KM3L | SLS1 GMH1L •KM1L | •BQQ4L | •BQQ4R |
|--|------------------------------------|------------------------------------|------------------------------------|---|------------------|------------------|---|------------------------|------------------------|---|-------------|
| 2-track stereo (TLA) and mono. (SLA) with laminated cores; TLAH and SLAH have hyperbolic face. | | | | Full-track with laminated cores; SLFH have hyperbolic face. | | | 2-track mono with solid cores; "G" have cylindrical metal face, "K" have hyperbolic metal face. | | | 4-channel with laminated cores; have hyperbolic metal face for 1/4" tape. | |
| RECORD ONLY | RECORD/PLAY | RECORD/PLAY | RECORD/PLAY | RECORD ONLY | RECORD/PLAY | RECORD/PLAY | RECORD/PLAY | RECORD/PLAY | RECORD/PLAY | RECORD/PLAY | RECORD ONLY |
| 60 MHY | 100 MHY | 350 MHY | 700 MHY | 70 MHY | 100 MHY | 250 MHY | 100 MHY | 400 MHY | 1.0 HY | 65 MHY | 50 MHY |
| 380 OHMS | 630 OHMS | 2.2 K | 4.5 K | 400 OHMS | 630 OHMS | 1.5 K | 630 OHMS | 2.5 K | 6.5 K | 400 OHMS | 320 OHMS |
| 150 KC | 100 KC | 80 KC | 60 KC | 100 KC | 80 KC | 60 KC | 100 KC | 80 KC | 60 KC | 150 KC | 100 KC |
| 135 OHMS | 120 OHMS | 230 OHMS | 380 OHMS | 125 OHMS | 125 OHMS | 200 OHMS | 42 OHMS | 350 OHMS | 625 OHMS | 220 OHMS | 220 OHMS |
| 0.5-MIL | 0.16-MIL | 0.16-MIL | 0.16-MIL | 0.5-MIL | 0.16-MIL | 0.16-MIL | 0.16-MIL | 0.16-MIL | 0.16-MIL | 0.16-MIL | 0.5-MIL |
| .080 | .080 | .080 | .080 | .260 | .260 | .260 | .090 | .090 | .090 | .037 | .037 |
| .160 | .160 | .160 | .160 | — | — | — | — | — | — | .071 | .071 |
| 50 DB | 50 DB | 50 DB | 50 DB | — | — | — | — | — | — | 38 DB | 38 DB |

USING 3M190 TAPE, "PEAK 1 KC." BIAS, AND RECORDED AT A LEVEL OF 12 DB. BELOW TAPE SATURATION AT 1 KC.

| | | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|----------|---------|---------|---------|---------|
| 0.7 MA | 0.8 MA | 0.7 MA | 0.7 MA | 1.2 MA | 1.5 MA | 0.9 MA | 2.5 MA | 0.8 MA | 0.55 MA | 0.55 MA | 0.6 MA |
| 0.07 MA | 0.07 MA | .045 MA | 0.03 MA | 0.11 MA | 0.12 MA | 0.09 MA | 0.062 MA | 0.03 MA | .018 MA | 0.06 MA | 0.06 MA |
| — | 1.0 MV | 2.0 MV | 3.5 MV | — | 2.5 MV | 4.0 MV | 1.2 MV | 3.0 MV | 5.0 MV | 0.7 MV | — |
| — | 0 DB | 0 DB | 0 DB | — | 0 DB | 0 DB | -10 DB | -10 DB | -10 DB | 0 DB | — |

Specifications subject to change without notice.

•For replacement purposes the standard cylindrical-face heads are supplied. Heads with the hyperbolic contour may be used in equipment designed or adapted for this feature.



AVERAGE SPECIFICATIONS FOR ERASE HEADS



BIAS OSCILLATOR TRANSFORMER

For both transistor and vacuum tube circuits.

Ferro-cube E-core and special low resistance windings insure maximum efficiency. Other features: High "Q" stable voltage and frequency; pure waveform.

T60-T2

For transistor circuits, push-pull or single-ended supplies erase and bias power up to 100 KC for low and high impedance heads.

T60-E

For vacuum tube circuits.

| MODEL | STEREO | SEH 1 | SEH 2 | SEH 4 | SEQ 1 | SEQ 2 | SEQ 4 | | |
|-----------------------------|--------|---|------------|-------------|--|-----------|------------|--------------|-------------|
| | MONO | MEH 1 | MEH 2 | MEH 4 | MEQ 1 | MEQ 2 | MEQ 4 | MEF 1 | MEF 4 |
| TYPE | | 2-TRACK STEREO 2-TRACK MONO [Half Track] | | | 4-TRACK STEREO 4-TRACK MONO [Quarter Track] | | | FULL-TRACK | |
| INDUCTANCE 1 KC | | 80 MHY | .17 MHY | 8 MHY | 80 MHY | .13 MHY | 10 MHY | 40 MHY | 3.6 MHY |
| RESISTANCE DC | | 205 OHMS | 5 OHMS | 35 OHMS | 270 OHMS | 5 OHMS | 40 OHMS | 88 OHMS | 25 OHMS |
| *ERASE CURRENT OPERATING | | 4.5 TO 7.0 MA | 100-150 MA | 16 TO 24 MA | 3 TO 5 MA | 80-140 MA | 10-15 MA | 10 TO 15 MA | 32 TO 48 MA |
| IMPEDANCE 60 KC | | 25 K | 45 OHMS | 2 K | 30 K | 40 OHMS | 2.8 K | 12 K | 1 K |
| VOLTAGE, 60 KC OPERATING | | 100 TO 150 V | 4.5 TO 7 V | 32 TO 48 V | 90 TO 150 V | 3 TO 6 V | 28 TO 42 V | 100 TO 150 V | 32 TO 48 V |

*For 60 DB erasure of saturated tape.

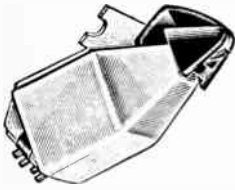
Specifications subject to change without notice.



Pickering*

For more than a decade the world's most experienced manufacturer of high fidelity pickups—supplier to the recording industry. In terms of achieved performance . . . Pickering by far . . . is the most economical and most practical of all high fidelity pickups.

PICKERING Collectors Series Stereo Fluxvalve*



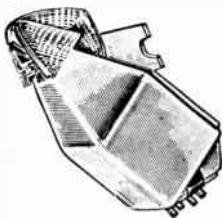
PICKERING Model U38/AT Stereo Fluxvalve is designed especially for the new generation of **automatic turntables**. It combines hum shielding with high output for unequalled signal-to-noise ratio. High compliance is retained for turntable performance while providing the ruggedness demanded by automatic operation. Improved frequency response and low inductance make the new PICKERING U38/AT a truly universal cartridge to match the universal features of the **automatic turntable**.

IMPORTANT TECHNICAL SPECIFICATIONS:

FREQUENCY RESPONSE: 20 to 17,000 cps
NOMINAL OUTPUT: 2 mv
 (per cm of recorded level)
CHANNEL SEPARATION: 35 db
TRACKING FORCE: 2 to 5 grams
WEIGHT: 14 grams
 Supplied with diamond D4007AT V-GUARD stylus, mounting hardware and installation instructions.
AUDIOPHILE NET PRICE **\$46.50**

*U.S. Patent = 2,917,590

PICKERING Collectors Series Stereo Fluxvalve*



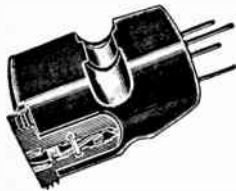
PICKERING 380 Series Stereo Fluxvalve—for the discriminating record collector. This pickup utilizes the exclusive V-GUARD easily replaceable stylus assembly; hermetically sealed and fully encapsulated in precious mu-metal for a lifetime of trouble-free and hum-free performance. Completely compatible for all records, mono or stereo. Miniature design fits all pickup arms, manual or automatic.

Supplied with V-GUARD diamond stylus, mounting hardware and installation instructions.
 *U.S. Patent = 2,917,590

IMPORTANT TECHNICAL SPECIFICATIONS:

FREQUENCY RESPONSE: 20 to 15,000 cps
NOMINAL OUTPUT: 2.5 mv
 (per cm of recorded level)
CHANNEL SEPARATION: 35 db
TRACKING FORCE: 3 to 5 grams for "A" stylus
 4 to 7 grams for "C" stylus
WEIGHT: 14 grams
 Model 380A PICKERING Stereo Fluxvalve—for manual tone arms.
AUDIOPHILE NET PRICE **\$36.00**
 Model 380C PICKERING Stereo Fluxvalve—for automatic record changers.
AUDIOPHILE NET PRICE **\$29.85**

PICKERING MkII Professional Stereo Fluxvalve*



A professional pickup produced under rigid quality control. The choice of the leading recording companies for their own quality control of record masters and pressings. Traditional PICKERING design quality assures the finest performance. Contains the easily replaceable T-GUARD diamond stylus assembly.

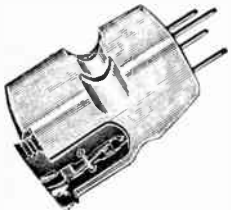
Supplied with T-GUARD diamond stylus, mounting hardware and installation instructions.

*U.S. Patent = 2,917,590

IMPORTANT TECHNICAL SPECIFICATIONS:

FREQUENCY RESPONSE: 20 to 15,000 cps
NOMINAL OUTPUT: 1.3 mv
 (per cm of recorded level)
CHANNEL SEPARATION: 20 to 25 db
TRACKING FORCE: 3 to 5 grams for MkIIA
 4 to 7 grams for MKIIC
WEIGHT: 9 grams
 MkIIA PICKERING Stereo Fluxvalve—for manual tone arms.
AUDIOPHILE NET PRICE **\$26.40**
 MKIIC PICKERING Stereo Fluxvalve—for automatic record changers.
AUDIOPHILE NET PRICE **\$24.00**

PICKERING STEREO 90 Stereo Fluxvalve*



A fine magnetic stereo pickup for the audiophile. For installation in automatic record changers, or manual players. Contains the easily replaceable T-GUARD stylus assembly. Magnetic push-pull circuit, hum bucking coils.

Supplied with D3707C diamond V-GUARD stylus assembly, mounting hardware and installation instructions.

IMPORTANT TECHNICAL SPECIFICATIONS:

FREQUENCY RESPONSE: 20 to 12,000 cps
NOMINAL OUTPUT: 1.3 mv
 (per cm of recorded level)
CHANNEL SEPARATION: 20 db
TRACKING FORCE: 4 to 7 grams
WEIGHT: 9 grams
AUDIOPHILE NET PRICE **\$16.50**

*U.S. Patent = 2,917,590

PICKERING V-GUARD and T-GUARD Stylus Assemblies: To insure the very same quality of performance you have come to know in your PICKERING Stereo Fluxvalve, replace the stylus assembly with a genuine PICKERING V-GUARD or T-GUARD which contains the original moving system and the finest quality diamond precisely shaped to a perfect contour and highly polished to reduce record and stylus wear.

Use the chart below for convenient selection of the correct stylus for the application you require.

| TYPE | MODEL | RADIUS | COLOR | Stereo U38 AT | Stereo 380A | Stereo 380C | Stereo MkIIA | Stereo MkIIC | Stereo '90' | Mono 350 | Mono 370 | Audiophile Net Price |
|---------|---------|---------|----------|---------------|-------------|-------------|--------------|--------------|-------------|----------|----------|----------------------|
| V-GUARD | D3805AA | 5 mil | Clear | | | | | | | | | \$17.50 |
| V-GUARD | D3807AT | 7 mil | Black | Stereo | Stereo | | | | | | | 16.00 |
| V-GUARD | D3807A | 7 mil | Yellow | Stereo | | | | | | | | 16.00 |
| V-GUARD | D3807C | 7 mil | Red | | Stereo | | | | | | | 10.00 |
| V-GUARD | D3810A | 1 mil | Lt. Gray | | | Mono LP | | | | | | 16.00 |
| V-GUARD | D3810C | 1 mil | White | | | Mono LP | | | | | | 10.00 |
| V-GUARD | D3827 | 2.7 mil | Dk Blue | | | 78 RPM | | | | | | 10.00 |
| T-GUARD | D3707A | 7 mil | Yellow | | | | Stereo | | | | | 12.40 |
| T-GUARD | D3707C | 7 mil | Red | | | | | Stereo | | | | 10.00 |
| T-GUARD | D3710A | 1 mil | Lt. Gray | | | | | Mono LP | | | | 12.40 |
| T-GUARD | D3710C | 1 mil | White | | | | | | Mono LP | | | 10.00 |
| T-GUARD | D3707 | 7 mil | Black | | | | | | Stereo | | | 7.50 |
| T-GUARD | D3727 | 2.7 mil | Dk Blue | | | | | 78 RPM | | | | 10.00 |
| T-GUARD | D3505 | 5 mil | Dk Green | | | | | | | Mono LP | | 18.00 |
| T-GUARD | D3510 | 1 mil | Red | | | | | | | Mono LP | | 15.00 |
| T-GUARD | D3527 | 2.7 mil | Yellow | | | | | | | 78 RPM | | 15.00 |

NOTES * AA V-GUARD is for use with ultra-lightweight tone arms capable of tracking within the range from 1 to 3 grams AT stylus is for use in automatic turntables, recommended tracking force is from 2 to 5 grams.

"A" stylus is for use in manual tone arms. "C" stylus is for automatic record changers.

*Only **PICKERING & CO., INC.** manufactures the genuine V-GUARD and T-GUARD stylus assemblies used in the Stereo Fluxvalve which is covered under the following patents: U.S. #2,917,590; Great Britain #783,372; Canada #605,673; Japan #261,203; and other patents are pending throughout the world.

FOR THOSE WHO CAN HEAR THE DIFFERENCE



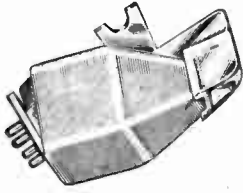
Pickering

PICKERING & COMPANY, INC., Plainview, N. Y.

EXPORT: AD. AURIEMA, INC., 85 BROAD ST. NEW YORK • CANADA: CHARLES W. POINTON LTD. 66 RACINE ROAD, REXDALE, ONTARIO

STANTON

Fine audio components—



The 481 is more than a pickup—it is a precise measuring instrument used by leading record manufacturers for quality control and A&R evaluation. In short, it is the ultimate in pickups available to the professional music critic and the discriminating audiophile as well.

Model 481 STANTON Calibration Standard Stereo Fluxvalve*

IMPORTANT TECHNICAL SPECIFICATIONS:
FREQUENCY RESPONSE: 20 to 10,000 cps \pm 1 db;
 10 kc to 20 kc \pm 2 db
NOMINAL OUTPUT: .8 mv for "A" stylus;
 (per cm of recorded level) .5 mv for "AA" stylus
CHANNEL SEPARATION: 35 db
TRACKING FORCE: 2 to 5 grams for "A" stylus; 1/4 to 3 grams for "AA" stylus
WEIGHT: 11 grams

Model 481AA STANTON Stereo Fluxvalve—an ultra-linear professional pickup for use with ultra-lightweight tone arms capable of tracking within the range from 1/4 to 3 grams. Supplied with the D4005AA V-GUARD diamond stylus assembly.
AUDIOPHILE NET PRICE \$49.50

Model 481A STANTON Stereo Fluxvalve—an ultra-linear professional pickup for use with manual tone arms, recommended tracking force is from 2 to 5 grams. Supplied with the D4007A V-GUARD diamond stylus assembly.

AUDIOPHILE NET PRICE \$48.00

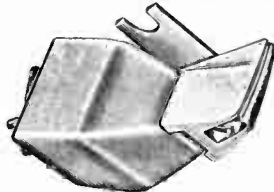
Model 481E STANTON Stereo Fluxvalve Set—same as the Model 481A but includes two additional V-GUARD styli: the D4010A 1 mil for LP's and the D4027 2.7 mil for 78's.

AUDIOPHILE NET PRICE \$60.00

Supplied with diamond V-GUARD stylus, mounting hardware and installation instructions.

Note: Available in 500/600 ohm low impedance for broadcast or professional recording applications.

*U.S. Patent \approx 2,917,590



The all-new STANTON Professional Stereo Fluxvalve for the discriminating record enthusiast. Exclusive V-GUARD diamond stylus assembly is easily replaceable. Hermetically sealed and fully encapsulated in precious mu-metal for a lifetime of trouble-free and hum-free performance. Miniature design fits all pickup arms, manual or automatic.

Model 400 STANTON Professional Stereo Fluxvalve*

IMPORTANT TECHNICAL SPECIFICATIONS:
FREQUENCY RESPONSE: 20 to 20,000 cps
NOMINAL OUTPUT: 1.4 mv for "A" stylus;
 (per cm of recorded level) .85 mv for "AA" stylus;
 2.6 mv for "C" stylus
CHANNEL SEPARATION: 35 db
TRACKING FORCE: 2 to 5 grams for "A" stylus; 1/4 to 3 grams for "AA" stylus; 4 to 7 grams for "C" stylus
WEIGHT: 11 grams

Model 400AA STANTON Stereo Fluxvalve—an ultra-linear professional pickup for use with ultra-lightweight tone arms capable of tracking within the range from 1/4 to 3 grams. Supplied with D4005AA V-GUARD diamond stylus assembly.
AUDIOPHILE NET PRICE \$40.50

Model 400A STANTON Stereo Fluxvalve—an ultra-linear professional pickup for use with manual tone arms, recommended tracking force is from 2 to 5 grams. Supplied with D4007A V-GUARD diamond stylus assembly.

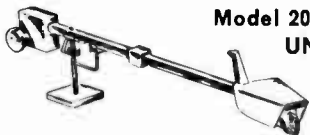
AUDIOPHILE NET PRICE \$39.00

Model 400C STANTON Stereo Fluxvalve—an ultra-linear professional pickup for use in automatic record changers, recommended tracking force is from 4 to 7 grams. Supplied with D4007C V-GUARD diamond stylus assembly.

AUDIOPHILE NET PRICE \$33.00

Supplied with V-GUARD stylus, mounting hardware and installation instructions.

*U.S. Patent \approx 2,917,590



Model 200 STANTON UNIPOSE Arm*

THE PERFECT STEREO COMPLEMENT The ultra-lightweight Model 200 leads a trend to featherweight tracking—extending life of both stylus and record. Only the Model 200 has the patented STANTON UNIPOSE single pivot bearing for friction free motion in all planes. Ultra-lightweight construction gives lowest possible mass for tracking

mono and stereo records at the remarkable feather-touch pressure of only 1/4 gram! Its design is classically simple, yet incorporates exclusive features for highest performance standards and dependability: Simple adjustments balance the arm in all planes ■ A sensitive calibrated stylus force adjustment has a range of 0 to 3 grams ■ Single hole installation requires no tools ■ No soldering needed; plug-in sockets provided ■ Built-in arm rest ■ Standard mounting centers accept most mono and stereo cartridges ■ Entire moving assembly weighs only 6 ounces ■ Mounts in minutes, supplied with template and complete instructions.

*U.S. Patent #2,993,698

IMPORTANT TECHNICAL SPECIFICATIONS:

OVERALL ARM LENGTH: 11-3/8"
PIVOT TO STYLUS TIP: 8-11/16"
REAR OVERHANG: Pivot to rear arm is 2-1/4"

TURNTABLE SPINDLE TO ARM PIVOT: 8-1/8"

WEIGHT OF MOVING SYSTEM: 4-1/2 oz., 6 oz. with base and pivot assembly

SHIPPING WEIGHT: 2 lbs.
AUDIOPHILE NET PRICE \$36.00



Model 604 STANTON Stereo KableKit

A low-cost stereo cable assembly quickly converts automatic mono changers or manual tone arms to stereo. Fully shielded harness has plugs and connector clips already soldered. Length of harness is 4 feet. Supplied with cable retention clips.

AUDIOPHILE NET PRICE \$3.98

STANTON V-GUARD STYLUS ASSEMBLIES: To insure the very same quality of performance you have come to know in your STANTON Stereo Fluxvalve replace the stylus assembly with a genuine STANTON V-GUARD which contains the original moving system and the finest quality diamond precisely shaped to a perfect contour and highly polished to reduce record and stylus wear. The models listed below are for use in the STANTON 481 and 400 (Calibration Standard and Professional Series).

| | | | |
|---------|-----------------|------------------|---------|
| D4005AA | .5 mil diamond | Clear V-GUARD | \$19.50 |
| D4007A | .7 mil diamond | Yellow V-GUARD | 18.00 |
| D4007C | .7 mil diamond | Red V-GUARD | 12.00 |
| D4010A | 1 mil diamond | Lt. Gray V-GUARD | 18.00 |
| D4010C | 1 mil diamond | White V-GUARD | 12.00 |
| D4027 | 2.7 mil diamond | Dk. Blue V-GUARD | 12.00 |

V-GUARD Styli are specially designed for the following purposes:

D4005AA—For use in ultra-lightweight tone arms capable of tracking within the range from 1/4 to 3 grams.
 D4007A and D4010A—for use in manual tone arms, recommended tracking force is from 2 to 5 grams.
 D4007C and D4010C—for use in automatic record changers.
 D4027—for 78 rpm records only.

 **Pickering**

— from the Professional Products Division of
PICKERING & COMPANY, INC., Plainview, N. Y.

EXPORT: AD. AURIEMA, INC., 85 BROAD ST. NEW YORK • CANADA: CHARLES W. POINTON LTD. 66 RACINE ROAD, REXDALE, ONTARIO



MAGNETIC SOUND TAPE

JUNE 29, 1962



RED SEAL

For Highest Quality Stereophonic & Monophonic Recordings—
The Same Tape Used for RCA Victor Masters

ACETATE (PLASTIC) BASE

| Tape Length (feet) | Description | Reel Diameter (inches) | RCA Type | List Price* (Optional) per reel |
|-----------------------------------|---------------|------------------------|----------|---------------------------------|
| 1.0 mil Long Play | | | | |
| 900 | Standard Reel | 5 | 10A-9 | 3.50 |
| 1800 | Standard Reel | 7 | 10A-18 | 5.50 |
| 1.5 mil Professional Grade | | | | |
| 150 | Standard Reel | 3 | 15A-1.5 | .70 |
| 300 | Standard Reel | 4 | 15A-3 | 1.35 |
| 600 | Standard Reel | 5 | 15A-6 | 2.25 |
| 1200 | Standard Reel | 7 | 15A-12 | 3.50 |

MYLAR+ (POLYESTER) BASE

| Tape Length (feet) | Description | Reel Diameter (inches) | RCA Type | List Price* (Optional) per reel |
|-----------------------------------|---------------------|------------------------|----------|---------------------------------|
| 560 | Snap-Load Cartridge | — | 264C1 | 4.50 |
| Tensitized Extra-Long Play | | | | |
| 300 | Standard Reel | 3 | 5TM-3 | 1.60 |
| 600 | Standard Reel | 4 | 5TM-6 | 3.05 |
| 1200 | Standard Reel | 5 | 5TM-12 | 4.75 |
| 2400 | Standard Reel | 7 | 5TM-24 | 8.75 |
| .5 mil Extra-Long Play | | | | |
| 1200 | Standard Reel | 5 | 5M-12 | 4.55 |
| 2400 | Standard Reel | 7 | 5M-24 | 7.85 |
| 1.0 mil Long Play | | | | |
| 225 | Standard Reel | 3 | 10M-2.25 | 1.00 |
| 900 | Standard Reel | 5 | 10M-9 | 3.60 |
| 1800 | Standard Reel | 7 | 10M-18 | 6.20 |
| 1.5 mil Professional Grade | | | | |
| 600 | Standard Reel | 5 | 15M-6 | 2.65 |
| 1200 | Standard Reel | 7 | 15M-12 | 4.25 |



NAB reels have 3" center holes; EIA reels have 3/8" center holes.

†Du Pont Registered Trade Mark

*Prices higher in Alaska and Hawaii.

Prices exclude state and local sales and similar taxes and are subject to change without notice.

Check your authorized RCA magnetic tape distributor for 2-track and 4-track RCA prerecorded Living Stereo tapes.

BROADCAST

Sound Tape for Professional Use

ACETATE (PLASTIC) BASE

| Tape Length (feet) | Description | Reel Diameter (inches) | RCA Type | List Price* (Optional) per reel |
|--------------------|------------------|------------------------|----------|---------------------------------|
| 1.0 mil | | | | |
| 3600 | NAB Hub | — | 269C1 | 10.00 |
| 3600 | NAB Metal Reel | 10 1/2 | 270C1 | 12.85 |
| 3600 | NAB Plastic Reel | 10 1/2 | 272C1 | 12.85 |
| 3600 | EIA Plastic Reel | 10 1/2 | 271C1 | 12.85 |
| 1.5 mil | | | | |
| 2400 | NAB Hub | — | 265C1 | 8.50 |
| 2400 | NAB Metal Reel | 10 1/2 | 266C1 | 10.90 |
| 2400 | NAB Plastic Reel | 10 1/2 | 267C1 | 10.90 |
| 2400 | EIA Plastic Reel | 10 1/2 | 268C1 | 10.90 |

MYLAR+ (POLYESTER) BASE

| Tape Length (feet) | Description | Reel Diameter (inches) | RCA Type | List Price* (Optional) per reel |
|--------------------------|------------------|------------------------|----------|---------------------------------|
| .5 mil Tensitized | | | | |
| 4800 | NAB Metal Reel | 10 1/2 | 273C1 | 20.50 |
| 4800 | NAB Plastic Reel | 10 1/2 | 275C1 | 20.50 |
| 4800 | EIA Plastic Reel | 10 1/2 | 274C1 | 20.50 |
| 1.0 mil | | | | |
| 3600 | NAB Metal Hub | — | 276C1 | 12.00 |
| 3600 | NAB Metal Reel | 10 1/2 | 277C1 | 14.40 |
| 3600 | NAB Plastic Reel | 10 1/2 | 279C1 | 14.40 |
| 3600 | EIA Plastic Reel | 10 1/2 | 278C1 | 14.40 |
| 1.5 mil | | | | |
| 2400 | NAB Metal Hub | 10 1/2 | 280C1 | 8.80 |
| 2400 | NAB Metal Reel | 10 1/2 | 281C1 | 11.20 |
| 2400 | NAB Plastic Reel | 10 1/2 | 283C1 | 11.20 |
| 2400 | EIA Plastic Reel | 10 1/2 | 282C1 | 11.20 |

TAPE ACCESSORIES

| RCA Type | Description | List Price* each (Optional) |
|----------|-----------------------------------|-----------------------------|
| 501C1 | 5-Reel Tape Chest for 5" Reels | 1.28 |
| 506C1 | 5" Standard Reel with Box | .65 |
| 507C1 | 7" Standard Reel with Box | .75 |
| 508C1 | 5" Empty Box | .20 |
| 509C1 | 7" Empty Box | .20 |
| 510C1 | Empty Box for Snap-Load Cartridge | .20 |
| 511C1 | 1/2" x 100" Splicing Tape | .29 |
| 512C1 | 1/2" x 150" Splicing Tape | .39 |
| 513C1 | 3/4" x 100" Splicing Tape | .42 |
| 514C1 | 3/4" x 150" Splicing Tape | .51 |
| 515C1 | 1/4" x 100" Splicing Tape | .22 |
| 516C1 | Tape Recorder Head Demagnetizer | 4.85 |
| 517C1 | 12-Reel Tape shelf | .98 |
| 518C1 | 3" Empty Box | .15 |
| 519C1 | 3" Reel with Box | .25 |
| 520C1 | 4" Empty Box | .20 |
| 521C1 | 4" Reel with Box | .55 |

VIBRANT SERIES

ACETATE (PLASTIC) BASE

| Tape Length (feet) | Description | Reel Diameter (inches) | RCA Type | List Price* (Optional) per reel |
|--------------------|----------------|------------------------|----------|---------------------------------|
| 600 | 1.5 Mil x 1/4" | 5 | 701C1 | 1.75 |
| 1200 | 1.5 Mil x 1/4" | 7 | 702C1 | 2.95 |
| 900 | 1.0 Mil x 1/4" | 5 | 703C1 | 2.50 |
| 1800 | 1.0 Mil x 1/4" | 7 | 704C1 | 4.25 |

MYLAR+ (POLYESTER) BASE

| Tape Length (feet) | Description | Reel Diameter (inches) | RCA Type | List Price* (Optional) per reel |
|--------------------|-----------------|------------------------|----------|---------------------------------|
| 900 | 1.0 mil x 1/4" | 5 | 707C1 | 2.85 |
| 1800 | 1.0 mil x 1/4" | 7 | 708C1 | 4.95 |
| 1200 | Tensitized 1/4" | 5 | 709C1 | 4.50 |
| 2400 | Tensitized 1/4" | 7 | 710C1 | 7.95 |

PRESTO

PROFESSIONAL BROADCAST AND TAPE EQUIPMENT

800 Series — a totally different concept in stereo and monophonic tape recorders. Efficiency . . . flexibility and operating ease . . . with the recording quality that has made Presto the world's foremost name in professional sound recording equipment. All models accept standard tape reels up to 10 1/2" and operate at 7 1/2 and 15 ips or 3 3/4 and 7 1/2 ips. The A908 amplifier has less than 1% total harmonic distortion at +20 dbm, from 25 to 20,000 cps.

Model 800 . . . basic, high quality, 1/4" monophonic recorder, easily converted to stereo by replacing the head assembly and adding another A908 amplifier.

Model 825 . . . 1/4" recorder, quickly and readily convertible to accept 1/2" tapes by merely interchanging recording heads and adding another A908 amplifier.

Model 850 . . . full convertible recorder, equipped with 3 or 4 stacked A908 amplifiers; for 4 channel 1/2" tape recording; can be changed from 1/2" to 1/4" operation (or vice versa) in a few minutes by changing the head assemblies. All 800 Series Recorders are available in portable, console and rack-mounted models.

BAS-101 — **Stereo Broadcast Automation System.** Starting-point of program tape cues in each selected transport. Maximum reliability; maximum of 24 hours uninterrupted stereo programming; automatic 3-transport system; provision for the 4th transport; completely factory wired and adjusted; install and operate in 10 minutes; record your own program tapes; 25-cycle tone sensing; broadcast automatically while recording; stereo-monaural operation; modular plug-in design; fail-safe operation; semi or full automation; master power switch.

625 Series Tape Transports — for equipment requiring high-degree of accuracy in tape motion; maximum reliability; 12-hour stereo playback; modular design; 2-speed hysteresis drive; tape speed, 3 3/4 ips and 7 1/2 ips; 3-motor transport; instantaneous start-stop; automatic bi-directional drive system; minimized maintenance; stereo-monaural playback; fast forward — fast rewind; remote control; automatic reversing; visual direction indicators; dual tape threading.

A915 Tape Playback Pre-amplifier/Line Amplifier for use with 625 Series tape Transports or BAS-101 system; plug-in sensing modules; sensitivity and timing circuits; self-powered; plug-in output transformers; 2 tape head preamplifiers with relay switching; plug for external program clock. Will accept the S5-2 Sensing Adapter Unit (plug-in) for sensing silence periods on the tape; SK-25 Sensing Adapter for sensing 25-cycle tone.

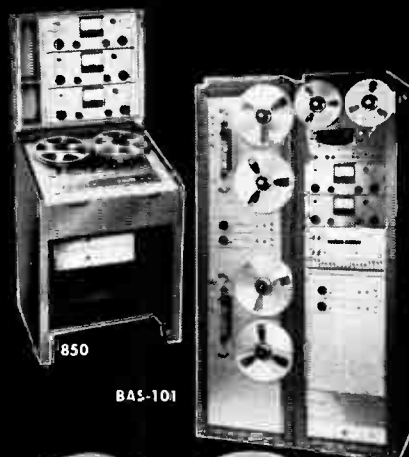
S916 Program Senser to control external instruments; provides automatic switching; switching actuated by 25-cycles tones, silent periods or any external source; sensitivity control for signals from 5 mv. to 1 v.; timing control gives 1 to 30-second delays; self-powered; single portable unit; rack-mountable. Can fit in with ST914, S912 and S911 Interspersers as a step pulser. For 25-cycle tone sensing or silence sensing the SK-25 or the S5-2 Presto plug-in modules are used.

ST914 Stereo Program Selective Intersperser will step through total of 20 steps and recycle to repeat the same sequence; 4-transports; controlled programmer; visual memory indicators; stereo-monaural; additional programmer panels can be added to increase flexibility, manual automatic operation; automatic electro/mechanical fail-safe circuitry; cue control circuits; VU meters. Either the S916, Program Senser or the A915 Sensing Amplifier provide the activating impulse.

S-911 Two Transport Automatic Selective Programmer for use where any 2 Transports, 2 instruments or 2 mechanisms require control with preset conditions; 10 program preselections per transport (20 in all); counts single pulses or groups of pulses; count can be preset independently between 1 and 10 for each transport; pulsed by external sensing circuit; automatic audio cueing; visual memory indicators; switch for manual or automatic operation.

S-912 is identical to the S911 except there is no automatic audio cueing and no provisions for counting pulses.

RM-3 Crystal-Controlled Multiplex Receiver, especially for background music service. High quality reception of frequency-modulated signals where main channel and 1 sub-carrier channel are being transmitted; PA facility provided with mic. input jack, vol. control and mic. amplifier stage; bass and treble controls.

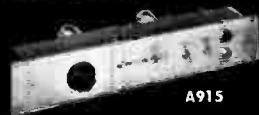


850

BAS-101



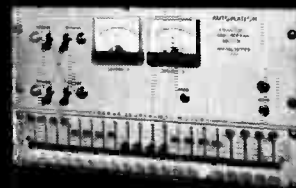
625



A915



S916



ST914



S-912



S-911



RM3







LEAR SIEGLER, INC.

BOGEN COMMUNICATIONS DIVISION

REEVES SOUNDCRAFT CORP.

Main Office: Danbury, Conn.
 Branches: New York • Chicago • Los Angeles
 Canadian Representatives: Toronto • Vancouver

**MAGNETIC
 RECORDING TAPE
 and
 ACCESSORIES**
SOUNDCRAFT MAGNETIC RECORDING TAPES OF "MYLAR"

| DESCRIPTION | CODE | CATALOG NO. | LENGTH | REEL | STANDARD PACKAGE | SUGGESTED CONSUMER NET |
|---|--|-------------|--------|------|------------------|------------------------|
| SOUNDCRAFT LIFETIME® RECORDING TAPE | | | | | | |
|  <p>1½ Mil "MYLAR" BASE SUPER STRENGTH DIMENSIONAL STABILITY LIFETIME GUARANTEE</p> <p>SOUNDCRAFT LIFETIME® tape of DuPont "Mylar" is the ultimate in strength in recording tape. Its dimensional stability is unaffected by temperature and humidity extremes, therefore LIFETIME will never embrittle or dry out even under extremely poor storage conditions. LIFETIME's exceptional strength gives greater protection against tape damage due to faulty equipment or improper handling. LIFETIME is a favorite among students and in areas of extreme weather conditions. Easily identifiable by the Yellow "S" and Yellow diamonds on the box.</p> | L-1 | 10435 | 150' | 3" | 10 | \$.75 |
| | L-6 | 10436 | 600' | 5" | 10 | 2.65 |
| | L-12 | 10437 | 1200' | 7" | 10 | 4.25 |
| | L-24RM△ | 10442 | 2400' | 10½" | 10 | 10.40 |
| | L-24RF† | 10443 | 2400' | 10½" | 10 | 10.40 |
| | L-24RF‡ | 10444 | 2400' | 10½" | 10 | 10.40 |
| | L-24H | 10439 | 2400' | HUB | 10 | 8.30 |
| | L-48RM | 10447 | 4800' | 14" | 1 | 24.50 |
| | L-48H | 10445 | 4800' | HUB | 1 | 16.60 |
| | SOUNDCRAFT PLUS-50® RECORDING TAPE | | | | | |
|  <p>1 Mil "MYLAR" BASE LONG PLAY WITH STRENGTH LONG LIFE DIMENSIONAL STABILITY</p> <p>PLUS-50® gives 50% more playing time per reel. A superb combination of long-play and tape strength. PLUS-50® eliminates many of those annoying reel changes by giving the recordist half again as much recording and playback time. Because of its "Mylar" Base, PLUS-50 is assured of long-life and dimensional stability even if stored under the most unfavorable conditions. Identified by the Aqua "S" and Aqua diamonds on the box.</p> | PL-2 | 10385 | 225' | 3" | 10 | \$.95 |
| | PL-9 | 10386 | 900' | 5" | 10 | 3.40 |
| | PL-12 | 10387 | 1200' | 5¾" | 10 | 4.65 |
| | PL-18 | 10388 | 1800' | 7" | 10 | 5.80 |
| | PL-36RF† | 10392 | 3600' | 10½" | 10 | 13.75 |
| | PL-36RF‡ | 10393 | 3600' | 10½" | 10 | 13.75 |
| | PL-36RM△ | 10391 | 3600' | 10½" | 10 | 13.75 |
| | PL-36H | 10389 | 3600' | HUB | 10 | 11.25 |
| | PL-72RM△ | 10397 | 7200' | 14" | 1 | 28.10 |
| | PL-72H | 10395 | 7200' | HUB | 1 | 22.50 |
| SOUNDCRAFT PLUS-100® RECORDING TAPE | | | | | | |
|  <p>½ Mil "MYLAR" BASE EXTRA LONG PLAY THE EXPERTS TAPE</p> <p>PLUS-100® offers twice the playing time because it's twice as long as ordinary tapes. This is possible because it's twice as thin. Because of its "Mylar" Base PLUS-100® is also immune to changes caused by temperature and humidity extremes. PLUS-100® is extremely thin and should be used only on equipment in perfect adjustment by an experienced recordist. Look for the Black "S" and Black diamonds on the box.</p> | XP-12 | 10626 | 1200' | 5" | 10 | \$3.50 |
| | XP-18 | 10627 | 1800' | 5¾" | 10 | 5.00 |
| | XP-24 | 10628 | 2400' | 7" | 10 | 6.50 |
| | XP-48RM△ | 10631 | 4800' | 10½" | 10 | 16.80 |
| | XP-48RF† | 10632 | 4800' | 10½" | 10 | 16.80 |
| | XP-48RF‡ | 10633 | 4800' | 10½" | 10 | 16.80 |
| | XP-48H | 10629 | 4800' | HUB | 10 | 15.50 |
| | SOUNDCRAFT PLUS-100X RECORDING TAPE | | | | | |
|  <p>½ Mil TENSILIZED "MYLAR" BASE EXTRA-LONG PLAY EXTRA-STRENGTH</p> <p>The ultra-thin "Mylar" base of PLUS-100X has been Tensitized by DuPont to make it extremely strong and stretch-resistant. Twice the recording or playback time without fear of the tape stretching or breaking. Double-length, double-strength, PLUS-100X is an unbeatable combination for extra-long recording tapes. Identified by the Gold "S" and Gold diamonds on the package.</p> | XP-3X | 10667 | 300' | 3" | 10 | \$1.60 |
| | XP-5X | 10681 | 500' | 3¾" | 10 | 2.29 |
| | XP-6X | 10680 | 600' | 4" | 10 | 2.65 |
| | XP-12X | 10668 | 1200' | 5" | 10 | 5.45 |
| | XP-18X | 10669 | 1800' | 5¾" | 10 | 7.48 |
| | XP-24X | 10670 | 2400' | 7" | 10 | 9.50 |
| | XP-48XR△ | 10672 | 4800' | 10½" | 10 | 22.00 |
| | XP-48XRF† | 10673 | 4800' | 10½" | 10 | 22.00 |
| | XP-48XRF‡ | 10674 | 4800' | 10½" | 10 | 22.00 |
| | XP-48XH | 10671 | 4800' | HUB | 10 | 19.50 |




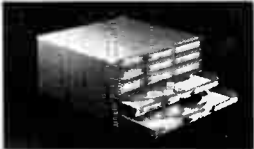
COLORED REELS

Colored Reels for 5" and 7" sizes are available at no extra charge. Red, Blue, Yellow, Green. To order colored reels just add suffix (R), (B), (Y), (G) to SOUNDCRAFT Code No. For instance "S-12R" means 1200 ft. Standard tape on RED 7" reel.

REEVES SOUNDRAFT CORP.

Main Office: Danbury, Conn.
 Branches: New York • Chicago • Los Angeles
 Canadian Representatives: Toronto • Vancouver

**MAGNETIC
RECORDING TAPE
and
ACCESSORIES****SOUNDRAFT ACETATE BASE MAGNETIC RECORDING TAPES**

| | DESCRIPTION | CODE | CATALOG NO. | LENGTH | REEL | STANDARD PACKAGE | SUGGESTED CONSUMER NET |
|---|---|-----------|-------------|--------|------|------------------|------------------------|
| SOUNDRAFT "STANDARD" RECORDING TAPE | | | | | | | |
|  | 1½ MIL ACETATE BASE PROFESSIONAL QUALITY... ECONOMY. | S-1 | 10251 | 150' | 3" | 10 | \$.65 |
| | | S-3 | 10252 | 300' | 4" | 10 | 1.25 |
| | | S-6 | 10253 | 600' | 5" | 10 | 2.10 |
| | The all-purpose tape of the SOUNDRAFT line, offering true professional quality at a sensible budget price. Retains its full dynamic range through endless recordings and playbacks. A durable, high performance tape that is the accepted standard for recording in non-specialized areas. Identified by the Red "S" and Red diamonds on the box. | S-9 | 10294 | 900' | 5¾" | 10 | 2.73 |
| | | S-12 | 10255 | 1200' | 7" | 10 | 3.50 |
| | | S-25RF† | 10297 | 2500' | 10½" | 10 | 8.50 |
| | | S-25RF3‡ | 10298 | 2500' | 10½" | 10 | 8.50 |
| | | S-25RM△ | 10299 | 2500' | 10½" | 10 | 8.50 |
| | | S-25H | 10295 | 2500' | HUB | 10 | 7.35 |
| | SOUNDRAFT "STANDARD-50" RECORDING TAPE | | | | | | |
|  | 1 MIL ACETATE BASE LONG-PLAY... PROFESSIONAL QUALITY | S5-2 | 10503 | 225' | 3" | 10 | \$.90 |
| | | S5-9 | 10485 | 900' | 5" | 10 | 3.29 |
| | "STANDARD-50" the long playing companion to SOUNDRAFT "STANDARD" Tape — 1 mil Acetate Base gives 50% more playing time — SOUNDRAFT'S quality gives Professional results every time. "STANDARD-50" is the choice of the recording industry whenever the application calls for longer play without added strength. Easily identifiable by the Silver "S" and Silver diamonds on the box. | S5-12 | 10486 | 1200' | 5¾" | 10 | 4.23 |
| | | S5-18 | 10487 | 1800' | 7" | 10 | 5.17 |
| | | S5-36H | 10488 | 3600' | HUB | 10 | 9.38 |
| | | S5-36RF3‡ | 10491 | 3600' | 10½" | 10 | 12.04 |
| | | S5-36RF† | 10490 | 3600' | 10½" | 10 | 12.04 |
| | | S5-36RM△ | 10492 | 3600' | 10½" | 10 | 12.04 |
| | | S5-72RM△ | 10495 | 7200' | 14" | 1 | 24.40 |
| | | S5-72H | 10493 | 7200' | HUB | 1 | 18.75 |
| SOUNDRAFT "PROFESSIONAL" RECORDING TAPE | | | | | | | |
|  | 1½ MIL ACETATE BASE FOR PROFESSIONAL RECORDING STUDIOS... | P-12 | 10576 | 1200' | 7" | 10 | \$4.40 |
| | The finest recording tape made. Engineered for professional use, this is the only tape sold with a performance guarantee. "Uniformity at 1000 cps ±¼ db in a reel and ±¾ db from reel to reel. Minimum response at 10,000 cps guaranteed within 1 db of response at 1000 cps. Because of its near-perfect uniformity, it is the preferred tape for professional master recordings, inter-splicing and duplicating. The tape for the perfection-minded home recordist, for all super-critical applications. *Tested on Ampex = 307 | P-25RM△ | 10606 | 2500' | 10½" | 10 | 10.25 |
| | | P-25RF† | 10607 | 2500' | 10½" | 10 | 10.25 |
| | | P-25RF3‡ | 10608 | 2500' | 10½" | 10 | 10.25 |
| | | P-25H | 10604 | 2500' | HUB | 10 | 8.00 |
| | | P-50RM△ | 10588 | 5000' | 14" | 1 | 20.75 |
| | | P-50H | 10586 | 5000' | HUB | 1 | 12.50 |
| | ½" TAPE FOR PROFESSIONAL RECORDING STUDIOS | 5-P-25H | 10611 | 2500' | HUB | 8 | \$15.90 |
| | | 5-P-25RM△ | 10610 | 2500' | 10½" | 8 | 18.25 |
| | SOUNDRAFT TAPE IN RCA TYPE CARTRIDGE | | | | | | |
|  | 1 Mil "MYLAR" BASE Engineered to withstand the rugged requirements of continuous use. | CM-6 | 10704 | 600' | | 10 | 4.50 |
| SOUNDRAFT "MYLAR" BASE TAPES IN SOUNDRAFT TAPE CHEST | | | | | | | |
|  | All SOUNDRAFT "Mylar" base recording tapes are available at no extra cost in the famous SOUNDRAFT TAPE CHEST in the 5" and 7" reel sizes. Tapes are packaged five reels to a Tape Chest. This is the perfect method for tape storage and indexing. | LC-5 | 10448 | 600' | 5" | 2 | \$13.25 |
| | | LC-7 | 10449 | 1200' | 7" | 2 | 21.25 |
| | | PLC-5 | 10398 | 900' | 5" | 2 | 17.00 |
| | | PLC-7 | 10399 | 1800' | 7" | 2 | 29.00 |
| | | XPC-5 | 10634 | 1200' | 5" | 2 | 17.50 |
| | | XPC-7 | 10635 | 2400' | 7" | 2 | 32.50 |
| SOUNDRAFT ACETATE BASE TAPES IN SOUNDRAFT TAPE CHEST | | | | | | | |
|  | SOUNDRAFT "STANDARD" and "Standard 50" are available in Tape Chests in 5" and 7" reel sizes. "Professional" tape is available only in 7" size in Tape Chest. Both are packaged five reels to the chest. | SC-5 | 10270 | 600' | 5" | 2 | \$10.50 |
| | | SC-7 | 10271 | 1200' | 7" | 2 | 17.50 |
| | | PC-7 | 10594 | 1200' | 7" | 2 | 22.00 |
| | | S5C-5 | 10496 | 900' | 5" | 2 | 16.45 |
| | | S5C-7 | 10497 | 1800' | 7" | 2 | 25.85 |

△ Metal Reel (3" center opening)

® Registered SOUNDRAFT Trademark

† Fiberglass Reel (5/16" center opening)

‡ Fiberglass Reel (3" center opening)



REK-O-KUT company

New RONDINE 2 Series



Model R 320A

Turntable with AP-320 Automatic Tonearm — factory installed

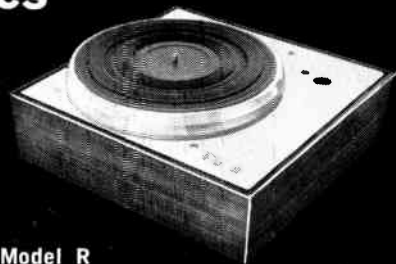
\$169^{95*}



Model R 320

Turntable with S-320 Tonearm — factory installed

\$129^{95*}



Model R

33 $\frac{1}{3}$ RPM—Turntable only

\$79^{95*}

R Base

Walnut finish—especially designed for Model R turntable. 15 $\frac{1}{2}$ "W, 15 $\frac{1}{4}$ "D, 4 $\frac{1}{2}$ "H.

\$149^{5*}

*Prices slightly higher West of the Rockies

TECHNICAL SPECIFICATIONS

TURNTABLE

SPEED 33 $\frac{1}{3}$ rpm

OPERATION Single push-button, on/off reject.

TURNTABLE MOTOR Custom-built hysteresis synchronous motor with sealed lifetime lubrication

REKOTHANE BELT Exclusive, lifetime non-stretchable belt. Special polyurethane compound not affected by temperature or humidity. Machine-finished to close tolerances.

NOISE LEVEL —57 db below average recording level

WOW AND FLUTTER 0.15%

TURNTABLE Massive aluminum casting, lathe-turned. Ridged rubber mat for easy disc handling

ACOUSTI-MOUNTS Built-in, adjustable, self-leveling spring-mounts for easy, drop-in installation on base or motor-board. Prevents acoustic feed-back and isolates extraneous vibrations.

SIZE Only 14 $\frac{7}{8}$ " x 14 $\frac{1}{2}$ ", including tonearm overhang. Fits all cabinets. Requires 3 $\frac{1}{2}$ " above deck, 4 $\frac{1}{4}$ " below deck for mounting

FINISH White and silver deck plate

POWER 117 volts 60 cycle AC, 30 watts

TO NEARM

TO NEARM MOTOR Special synchronous type motor for lifetime operation

TRACKING Less than one gram. Exclusive Micropoise dial for micro-adjustment of cartridge tracking pressure from a fraction of 1 gram to 6 grams

TRACKING ERROR Under 1°

RESONANCE Far below audibility—varying from 12 to 15 cycles depending on cartridge used

TO NEARM STATIC BALANCE Acoustically isolated counterweight

TO NEARM DYNAMIC BALANCE Exclusive Omni-Balance is easily adjusted to provide perfect dynamic balance with any cartridge. Assures equalized output from both walls of stereo groove, eliminates "skating distortion" and excessive groove wear

CARTRIDGE SHELL Interchangeable, with plug-in connector and positive twist-lock. Cartridge lugs pre-soldered

AMPLIFIER PLUGS Standard phono plugs for plug-in to amplifier. Separate spade-lug for ground avoids hum



Model AP320

**Model
APK**

AUTO-POISE AUTOMATIC TONEARM

Only Rek-O-Kut AUTO-POISE, world's first automatic tonearm, can meet the critical requirements of the new, very high compliance cartridges.

At the touch of a button, Auto-Poise (1) lifts the arm from the rest and places it on the record as the turntable starts; (2) disconnects completely from the tonearm during play so that the arm is completely independent; (3) lifts the arm and returns it to the rest after the record is finished and (4) shuts off the turntable.

- **MODEL AP-320 Auto-Poise Automatic Tonearm** net **\$74^{95*}**
- **MODEL APK Auto-Poise Converter only** net **\$49^{95*}**

*slightly higher west of the Rockies

Mechanism only, for those who already own Rek-O-Kut tonearms. Easily installed. Makes any Rek-O-Kut tonearm fully automatic.

TECHNICAL SPECIFICATIONS

OPERATION AP-320 — fully automatic, powered by synchronous motor. Push-button for play and reject.

S-320 — manual. • S-260 — manual.

CONSTRUCTION Tubular aluminum arm. Die-cast cartridge snell. Precision-machined throughout.

HORIZONTAL MOVEMENT Maximum freedom achieved by bearing made of inner and outer races and two rows of hardened steel balls into which shaft of arm fits.

VERTICAL MOVEMENT Friction-free motion is achieved by suspending arm in gimbal using a cross-shaft at each end of which are five 1mm chrome-steel balls.

CARTRIDGE SHELL Accepts all standard stereophonic or monophonic cartridges. Plugs into arm. Secured by twist-lock. Open front permits visible location of stylus in record groove. Lugs for cartridge factory-installed. 4-wire construction.

STATIC BALANCE Acoustically isolated counterweight.

DYNAMIC BALANCE Exclusive Omni-Balance provides perfect dynamic (lateral) balance with any cartridge.

TRACKING ERROR Under 1°.

RESONANCE Far below audibility — varying from 12 to 15 cycles depending on cartridge used.

VERTICAL HEIGHT ADJUSTMENT Permits setting tonearm parallel to record surface.

MODEL S-320
Tonearm with Omni-Balance net **\$34^{95*}**
MODEL S-260
Professional 16" Tonearm
(less Omni-Balance).
\$36^{95*} net



*slightly higher West of the Rockies



REK-O-KUT company

THE HYSTERESIS LINE OF ... 3 SPEED STEREOTABLES



B-12H
\$149⁹⁵* NET PRICE

B-12GH
\$109⁹⁵* NET PRICE

Model B-12H SPECIFICATIONS

NOISE LEVEL: 57 db below average recording level.
WOW & FLUTTER: 0.12%
MOTOR: Custom-built HYSTERESIS SYNCHRONOUS MOTOR.
SPEEDS: 33 $\frac{1}{3}$, 45 and 78 rpm.
SPEED SELECTION: Single selector knob. Idler is disengaged in "off" position. "Off" positions adjacent to each speed permit turntable to be shut off without passing through other speeds.
45 RPM HUB: Built-in.
PILOT LIGHT: Jeweled neon light acts as "on/off" indicator.
MINIMUM DIMENSIONS FOR CABINET INSTALLATION WITH REK-O-KUT TONEARM: 17 $\frac{3}{4}$ " wide x 16" deep; Height above Deck 3"; Height below Deck 6 $\frac{1}{4}$ ".
TURNTABLE: Solid Cast Aluminum Lathe Turned. Designed for easy disc handling.
FINISH: Silvertone Aluminum.
SHIPPING WEIGHT: 19 lbs.

Model B-12GH SPECIFICATIONS

All specifications are identical to the B-12H with the following exceptions:
NOISE LEVEL: 55 db below average recording level.
WOW & FLUTTER: 0.13%
MOTOR: High efficiency HYSTERESIS SYNCHRONOUS motor built to Rek-O-Kut specifications. Sealed lifetime lubrication.
MINIMUM DIMENSIONS FOR CABINET INSTALLATION WITH REK-O-KUT TONEARM: 17 $\frac{3}{4}$ " wide x 16" deep; Height above Deck 3"; Height below deck 4 $\frac{3}{4}$ ".
SHIPPING WEIGHT: 18 lbs.

STEREOTABLE KITS



K-34H/K-33H

True Stereotables, in kit form! If you can handle a screwdriver, you can easily build these kits. Model K-34H is similar to Model N-34H. Model K-33H is similar to Model N-34H but is single speed. Both feature the same hysteresis synchronous motor and Rekothane belt drive system. Substantial savings in costly factory assembly are passed directly on to you! Enjoy REK-O-KUT's new look of beauty and superior performance, at an unbeatable price.

| | | |
|---|-----------------|--------------------------|
| MODEL K-34H (illustrated) 33 AND 45 RPM | NET PRICE . . . | \$69⁹⁵ |
| MODEL K33H—33 RPM | NET PRICE . . . | \$59⁹⁵ |

MODEL B-16H



3 SPEED ... 16" PRECISION TURNTABLE

SPECIFICATIONS:

SPEEDS: 33 $\frac{1}{3}$, 45 and 78 rpm.
SPEED SELECTION: Mastermatic, self-locking, instantaneous shift. Engages either idler without stopping turntable or removing disc.
STARTING: From standing start to operating speed — at 78 rpm $\frac{3}{4}$ turn
 at 33 $\frac{1}{3}$ and 45 rpm $\frac{1}{4}$ turn
MOTOR: Self-lubricating, CUSTOM-BUILT HYSTERESIS SYNCHRONOUS.
NOISE LEVEL: 50 db below average recording level.
45 RPM HUB: Built-in—retractable—requires no external adapter.
STROBE DISC: Permanently affixed—permits instantaneous checking of all speeds.

CHASSIS DECK: Radial-ribbed aluminum casting. Designed for flush mounting in rectangular cut-out.
PRE-DRILLED: for ready mounting of Rek-O-Kut Turntable Arm Model S-260.
DIMENSIONS: 18 $\frac{3}{4}$ " x 20". Fits existing consoles and cabinets with slight modification.
CLEARANCE REQUIRED: Above Deck—1 $\frac{1}{2}$ ". Below Deck—6 $\frac{1}{2}$ ".
FINISH: Wrinkle gray.
SHIPPING WEIGHT: 34 pounds
 NET PRICE **\$275⁰⁰***

NOTE: All Rek-O-Kut Turntables are supplied for 110-120 volt, 60 cycle AC operation. Available in other voltages and frequencies at additional cost.

TWO-SPEED - Model N-34H



N-34H (illus)

NOISE LEVEL: 57 db below average recording level.
WOW & FLUTTER: 0.15%
MOTOR: High efficiency hysteresis synchronous motor built to REK-O-KUT specifications. Sealed lifetime lubrication.
SPEEDS: 33 $\frac{1}{3}$ and 45 rpm.
REKOTHANE BELT: Special molded belt made to REK-O-KUT specifications with variable adjustment for optimum tension.
CHASSIS DECK: 12 $\frac{1}{2}$ " x 19"
FINISH: White deck plate.
MINIMUM DIMENSION: 13" deep, 21" wide, height above deck 3", depth below deck 4 $\frac{1}{4}$ "

NET PRICE **\$89⁹⁵***

*Prices do not include arm or base. All prices, slightly higher West of Rockies.

VARIABLE-SPEED TURNTABLE

MODEL CVS-12



The CVS-12 permits continuous speed variation from 25 rpm to 100 rpm without resetting or stopping the record. It can therefore be used with 33 $\frac{1}{3}$, 45 and 78 rpm records, and permits them to be slowed down to $\frac{1}{2}$ normal tempo or speeded up to as much as 300%. It is standard equipment with the P-VC and P-VM players.

NET PRICE **\$89⁹⁵***

NOTE: This turntable operates at either 50 or 60 cycles. At 50 cycles speed can be varied from 20 rpm to 85 rpm. Shipping Weight: 15 lbs.



REK-O-KUT company

NEW IMPERIAL II RECORD CUTTER AND PLAYBACK UNIT



\$725⁰⁰* net complete

IMPERIAL II SPECIFICATIONS

MOTOR: Custom built Hysteresis Synchronous motor fitted with lamitex drive pulley. Suspended in shock mounts to prevent transmission of motor vibration.

RECORDING AREA: Records from 6" up to 13¼" masters.

SPEEDS: Simple, finger-tip speed control. Records at both 33⅓ and 78 R.P.M. Includes Idler and Adapter for 45 R.P.M. recordings.

OVERHEAD RECORDING LATHE: Model M-12S Lathe. **HAND CRANK** for run-in and run-off spiral grooves. **PROVISION FOR INTERCHANGING LEADSCREWS** for Standard and Microgroove. Equipped with standard 120 line leadscrew. **LIFTOMATIC SAFETY CAM** prevents double cutting and stylus damage. Automatically raises cutter as center of disc is approached. **CALIBRATED SCALE FOR TIMING.**

RECORDING HEAD: Model RH-5 response from 30-13,000 cycles.

PLAYBACK ARM: Model S-120 for records up to 13¼"—with dual-sapphire magnetic cartridge.



RECORDING AMPLIFIER UNIT

R8B AMPLIFIER SPECIFICATIONS

OUTPUT: 20 watts.
RESPONSE: ±2db from 20 to 20,000 cps at full output.
HARMONIC DISTORTION: .3% @ 1,000 cps at full output.
INTERMODULATION DISTORTION: .8% at full output.
HUM LEVEL: (below rated output) Tape—60db; Mike—64db; Phone—61db.
4 INPUTS: Microphone, tape and phono-mixing, plus tuner (high level).
CONTROLS: Phono, microphone and tape level, master volume, bass ±22db @ 50 cps, treble (±20db @ 15 kc), playback-recording switch, power switch.
RECORDING LEVEL INDICATION: Damped volume unit type meter with special calibrated scale.
OUTPUTS: Speaker and cutter (16, 8 and 4 ohms). Monitor (for use with high impedance headphones), pre-amp (2,000 ohms).
TUBES: 2—6973; 1—6AN8.
TRANSISTORS: 3—2N408; 5—2N406.
RECTIFIERS: 1N2071 Silicon.
PREAMPLIFIER SECTIONS: Completely transistorized.
POWER REQUIREMENTS: 115 watts, 117 VAC, 50-60 cps.
VINYL COVERED CARRYING CASES with storage lid and handle.

Size:
 Height: 7"
 Depth: 10"
 Length: 20½"
Weight:
 R8B Amplifier: 25 lbs.
 Recorder: 45 lbs.

PRICES: IMPERIAL II COMPLETE net **\$725.00***
 Disc Recorder, less amplifier net **\$495.00***
MODEL DR net **\$ 50.00***
 Case for Model DR Disc Recorder net **\$ 50.00***
MODEL C-DR net **\$ 50.00***
 Recording Amplifier net **\$250.00***
 MODEL R8B (can be rack mounted) net **\$250.00***
 Case for R8B Amplifier net **\$ 25.00***
MODEL C-B net **\$ 25.00***
ACCESSORIES AVAILABLE:
 Portable dual speaker set net **\$ 79.95***
 MODEL SPK-44 net **\$ 79.95***
 Also available are headphones and microphones.

MODEL TR-43H 2 SPEED (33-78)



12" RECORDING TURNTABLE
 With Accessory Idler for 45 rpm Speed

NET PRICE:
\$159⁹⁵*

(Less Lathe & Cutter)

Design and construction of the Model TR-43H is similar to the Rek-O-Kut 16" professional recording tables. The Model M-12S Overhead Recording mechanism is mounted to the chassis in a few moments.

CHASSIS: Cast ribbed aluminum drilled to accommodate the M-12S Lathe.

IDLERS: Neoprene compound for maximum traction.
OILING: Shafts and bearings are self-oiling. Require infrequent lubrication.

SPEEDS: Instantaneous speed shift engages either 78 or 33⅓ rpm idlers.

FINISH: Gray wrinkle.

DIMENSIONS: Front to back 16½"; width 16"; height above motor board 1¾"; depth below motor board 5".

SHIPPING WEIGHT: 20 bs.

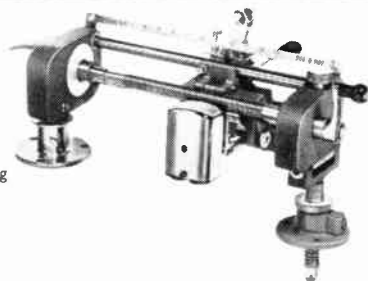
MODEL M-12S 12" OVERHEAD LATHE

This professional lathe is designed to very exacting specifications and features the following:

- Interchangeable Leadscrews.
- Hand-crank for run-in and run-off Spiral Grooves.
- Timing Scale.
- Accommodate Standard Cutting Heads.
- Depth of Cut Adjustment.

LIFT-D-MATIC: Automatically lifts cutter from disc as it approaches end of lead-screw

Designed for instantaneous replacement of the M-12. Supplied with 120-line leadscrew



MODEL M-12S less cutter **\$160⁰⁰***
NET PRICE

LEADSCREWS FOR OVERHEAD LATHES

| Lines/inch | Model M-5S | Net Price | Lines/inch | Model M-12S | Net Price | Lines/inch | Model M-12 | Net Price |
|------------|------------|-----------|------------|-------------|-----------|------------|------------|-----------|
| 120 | MS-120 | \$39.95 | 120 | M12S-120 | \$35.95 | 120 | M12-120 | \$19.95 |
| 210 | MS-210 | 49.95 | 210 | M12S-210 | 44.95 | 210 | — | — |
| 216 | — | — | 216 | — | — | 216 | M12-216 | 29.95 |
| 240 | MS-240 | 49.95 | 240 | M12S-240 | 44.95 | 240 | M12-240 | 29.95 |
| 270 | MS-270 | 49.95 | 270 | M12S-270 | 44.95 | 270 | — | — |

Leadscrews of 210 lines/inch or more = microgroove.

MODEL RH-5 CUTTER... \$115 net

For use with Rek-O-Kut overhead lathes. Designed for vertical mounting—can be fitted to standard lathe brackets other than Rek-O-Kut.

SPECIFICATIONS

Impedance: 8-15-500 ohms. Sensitivity: Approximately 1.8 watts at 1000 cycles for 6.3 cm/sec peak recorded velocity Frequency Response: ±2 db from 1000

The policy of Rek-O-Kut Co., Inc., is one of continual improvement in design and manufacture. Hence, we reserve the right to change specifications and design without notice.

to over 13,000 cycles. From 1000 down to 30 cycles. Built-in attenuation per R.I.A.A. curve within 2 db. Distortion: 1.2% at 1000 cps. Mounting: Universal mounting for most lathes. 1¼" between mounting holes of cutter. Stylus: Short shank steel or sapphire ⅝" overall stylus length. (Stylus not supplied.)

*All prices slightly higher West of Rockies.

REK-O-KUT



REK·O·KUT company

SONOTEER

a remarkable new high fidelity 5 SPEAKER system

ONLY FOUR INCHES THIN

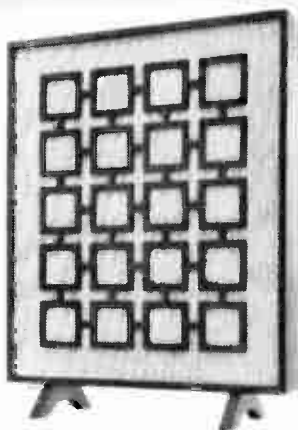
REK-O-KUT SONOTEER

Phenomenal front-to-back dimension of only 4" makes the Sonoteer easiest to place in today's home or apartment. It blends in perfectly with existing decor, or can be used to create exciting new interiors. Unique front and back radiation provides a feeling of spaciousness and clarity which can only be described as a new dimension in stereo fidelity. Big, clean sound comes from a precise blend of the voices of five speakers — two 8" woofers, two 6" mid-range speakers (which eliminate the hole in the middle) and a super-tweeter.

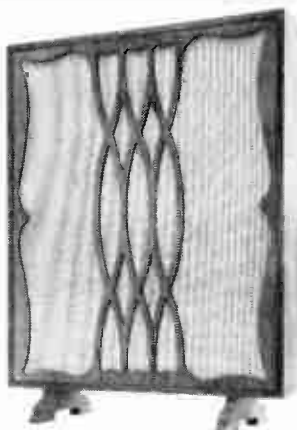
CA-70 MODELS

SPECIFICATIONS

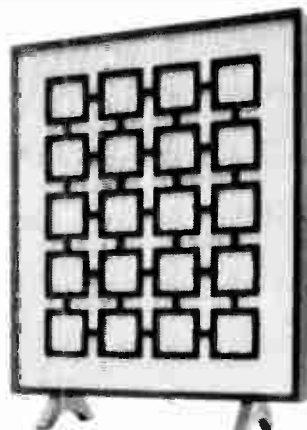
Speakers: 2-8" woofers; 2-6" mid-range; 1 super tweeter
 Response: 40 to 18,000 cps
 Sound Dispersion Angle: 360°
 Impedance: 8 ohms
 Power: 45 watts of integrated program material
 Dimensions: 4" x 21" x 25"
 Weight: 18 pounds



Model CA-70
 Style: Contemporary
 Finish: oil-rubbed, solid walnut
\$79⁹⁵



Model CA-70P
 Style: Provincial
 Finish: fruitwood
\$89⁹⁵



Model CA-70E
 Style: Mandarin
 Finish: satin ebony
\$89⁹⁵

REK-O-KUT BOOKSHELF SPEAKER SYSTEM

3 SPEAKERS IN ONE COMPACT WALNUT ENCLOSURE

The Audax CA-60 is small enough to fit into existing compactly spaced bookshelves, yet can be used as a free-standing unit. True 2-way system (2 six-inch woofers and a separate tweeter) in an acoustically-engineered enclosure. Cabinet is finished in oiled, hand-rubbed walnut on 4 sides. Brushed aluminum grille in an attractive parabolic shape gives unit a character which blends with a variety of surroundings.

Although the CA-60 is true bookshelf size, it achieves quality of sound reproduction wholly consistent with the high fidelity reproduction of many larger systems. Unit is a "powerhouse" despite its size. Handles 20 watts of integrated program material. More clean bass than any structure of its size and price. Speaker delivers more than enough sound for any average living room with as little as 5 watts amplifier power.

Connects to amplifier—phonograph—radio or T.V.!



Model CA-60 **\$59⁹⁵** net

SPECIFICATIONS

| | |
|--------------|--------------------------------------|
| Model | CA-60 |
| Impedance | 8 ohms |
| Response | 70-17,000 c.p.s. |
| Power | 20 watts integrated program material |
| Contents | Two 6" Woofers— One Tweeter |
| Size | 9" x 10" x 18" |
| Shipping Wt. | 15 lbs. |
| Net Price | \$59.95 |

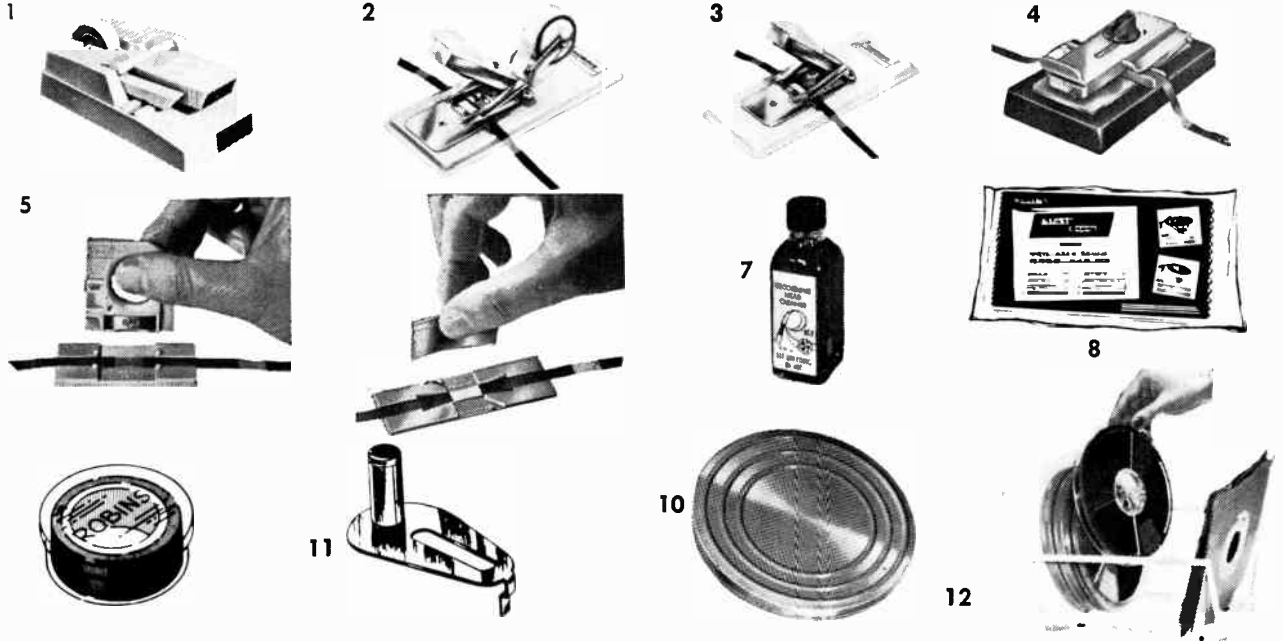
Gibson
Girl®

ROBINS

Made In
U.S.A.

ROBINS INDUSTRIES CORP. FLUSHING 54, N. Y.

GIBSON GIRL® TAPE SPLICERS & ACCESSORIES



Robins Gibson Girl® Tape Splicers are the accepted standard of the professional and industrial users of recording tape. They have gained this reputation because of their ease of operation. The high standards of workmanship assures reliability. They are the only splicers which actually cut a diagonal joint in the tape and trim the splicing tooth and tape edges with an indented trim

cut, making "THE SPLICE WITH THE GIBSON GIRL® SHAPE". These slight "waists" formed in the tape prevent adhesion from contacting critical parts of the recording mechanism and prevent layer to layer adhesion. Adhesive deposited on tape guides, etc. is a frequent cause of wow, flutter, and erratic performance.

Gibson Girl® Tape Splicers are Available in Six Models.

GIBSON GIRL® "STEREO 4" • SERIES MAKES PROFESSIONAL SPLICES IN SECONDS!

NEW! Precision-engineered tape splicers that meet critical requirements of splicing 4-track stereo tapes. Operates equally well on single and 2-track tapes.

All "Stereo 4" splicers feature blade centering adjustment for lifetime accuracy, replaceable cutter cartridges, and miter and trim cut operating positions.

1. GIBSON GIRL STEREO 4 DELUXE—Our finest! The ultimate splicing unit with Space Age design. Features "See-Thru" windows, indicating "Cut" and "Trim" positions. Guide and fingers hold tape in position. Safety lock prevents accidents when not in use. Has roll of 1/2" splicing tape with integral dispenser.

#TS-8D. List \$11.50

2. GIBSON GIRL STEREO 4 STANDARD—Our basic, moderately priced professional model. Has most features of TS-8D except position index windows and safety lock. Unit has roll of 3/8" tape.

#TS-4S. List \$8.50

3. GIBSON GIRL STEREO 4 JUNIOR—Low cost, professional model, similar to TS-4S without tape dispenser and splicing tape.

#TS-4J. List \$6.50

RK-2 Replacement Kit for TS4A series splicers, RK-3 Replacement Kit for TS-4S and TS-4J and RK-8 Replacement Kit for TS-8D. Each kit contains replacement cutter cartridge and 2 cutter pads.

List \$1.25

RP-2 Cutter Pads—only for TS4A series splicers. Package of 12 pads.

List \$1.25

4. GIBSON GIRL® INDUSTRIAL TAPE SPLICERS—For computer, TV industrial and special purpose tapes. Gibson Girl® Industrial Tape Splicers have all of the features of the TS-4S. They are ruggedly constructed for industrial use, mounted on a heavy cast base. Precise blade centering adjustment. Long life blades easily replaceable.

For 1/4" tapes.

#TS-250. Net \$60.00

For 1/2" tapes.

#TS-500. Net \$60.00

For 3/4" tapes.

#TS-1000. Net \$60.00

Custom Built Splicers for Special Tapes and Applications Available—Send for Quotation.

5. GIBSON GIRL® "SEMI-PRO"—This hand held splicer consists of three parts, a tape alignment guide, a cutting unit which has a diagonal cutter on one side and Gibson Girl® cutters on the other side, and a blade cover to protect the blades, designed for semi-professional use.

#SP-4. List \$2.50

6. GIBSON GIRL® "HOBBYIST"—An inexpensive tape splicer consisting of a tape and blade guide and a unique curved

blade. It is designed to produce uniform Gibson Girl® type splices for hobbyists who require its services less frequently.

#H-4. List \$1.25

7. ROBINS RECORDING HEAD CLEANER—A fast, efficient solvent for cleaning recording heads. In brush applicator bottle.

#HC-2. List \$1.00

8. JOCKEY CLOTH FOR TAPES—Revitalizes tapes. Reduces head wear. Reduces tape wear. Eliminates "grime distortion". Reduces tape squeal and chatter. Cleans, lubricates and protects by depositing a microscopic film of Silicone on the tape.

#JCT-2. List \$1.00

SPLICING TAPES

9. ROBINS SPLICING TAPE—(New formula white) Specifically made for splicing recording tape. Tackiness, thickness, strength and cold flow are carefully controlled. Individually pocked in crystal clear plastic container.

1/4" x 100' Mylar (New Formula white)

#ST-234. List \$4.40

3/8" x 100' Mylar (New Formula white)

#ST-375. List \$4.45

1/2" x 100' Mylar (New Formula white)

#ST-500. List \$5.50

3/4" x 100' Mylar (New Formula white)

#ST-750. List \$6.60

10. TAPE STORAGE CANS—For safe storage of recording tapes. Reduces tape "ageing". Helps prevent accidental tape erosion. Fits on cans nest for stacking.

#TC-5 (for 5" reels). List \$5.55

#TC-7 (for 7" reels). List \$7.75

11. ROBINS TAPE THREADER—The perfect solution to an old nuisance! No more awkward fumbling. Just place tape against the reel, slip on your threader to hold it in place, turn the crank and presto!—you're ready to use your recorder. #TT-1. List \$1.00

12. TR-12 TAPE RACK—A modern browser rack which holds up to 12 boxed or unboxed 7" reels of tape. Compact only 5" x 8" x 9 3/4". Labels on side of boxes of pre-recorded tapes stored in the browser rack may be read without removing the boxes from the rack. May also be used for 7" records and movie film.

#TR-12. List \$1.00

REEL LABELS—SELF-STICK ADHESIVE. (not illust.) Write on with pencil, pen, ball point, etc. Names can be typed on labels prior to removal from sheet. For Tape Reels, Parts, Record Service Calls, 1001 other uses.

#SL-30 (30 Labels). List \$4.45

GIBSON GIRL® TAPE SPLICERS—U.S. PAT. No. 2,778,420 PATS. PENDING T.M. REG. U.S. PAT. OFF.

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U.S.A.

ROBINS INDUSTRIES CORP. FLUSHING 54, N. Y.

7

FOR MORE FUN & BETTER TAPE CARE



NEW TAPE PRODUCTS

1. NEW! TELE-TAPE TELEPHONE PICK-UP COIL—Inductor pickup coil fastens to phone with Easy-On mechanical springs for easy telephone tape recording. Has 6 ft. shielded cable. #TRP-1. List \$6.00

2. NEW! TELE-TAPE TELEPHONE PICK-UP COIL AND TRANSISTORIZED BEEPER—Transistorized battery-operated generator injects 1KC "Beep" into phone lines and recorder at 15 second intervals. Makes it easy to comply with most regulations. Has On-Off switch and 6 ft. cable to phone and 6 ft. cable to recorder. Easy-On spring fastens pick-up to phone. Uses standard 22½ v. battery. #TRB-3 (battery not included) List \$25.00

3. NEW! TAPE CLEAN—A 5" reel of chemically treated cloth tape, that threads like recording tape, cleans and lubricates tape heads and guides while being played. Deposits Silicone for friction-free performance. #HC-S. List \$2.75

4. NEW! CLEAN TIPS—For damage-free cleaning and lubricating of tape recording heads. Made of finest surgical cotton (non-sterile) wound on 6" long sticks. Pkg. of 100 tips. #Q-100. List \$7.75

5. NEW REPLACEMENT TAPE RECORDER PRESSURE PADS—Replacement pressure pads of assorted sizes to fit almost all tape recorders, plus "U-Cut-It" pads for odd makes and models. Worn pads increase wow and flutter, induce loss of highs and tape squeal. Pkg. over 50 felt pads. #PP-1. List \$1.00

6. NEW! AUDIO-VISUAL GIBSON GIRL ACCESSORY KIT—Complete tape accessory kit for everyday maintenance and operating needs contains: Gibson Girl Stereo 4 Deluxe Tape Splicer's, UL approved Bulk Eraser, UL approved Head Demagnetizer, Tape Holding Clips, Reel Labels, Tape Cleaning Cloth, 6 Rolls of Special Mylar Splicing Tape, Tape Threader, Strobe and Light kit, Head and Guide Cleaner and Lubricant. (not illust.) #AVK-1. List \$65.00

7. ROBINS VU METER—No more "guess work" with level control. Proves: 1. overmodulation (overloading), recording on too low a level, et. Specifications: 4½ VU Meter, 2 color scale; Modulation calibrations, 0-100%; VU calibrations—20 to +3; Dual impedance inputs, (low or high impedance circuits). Sensitivity 200 Micro-amps (basic movement). VU operation: Shunts for 1.2 or 12 V; Mounts in 2¾" diameter hole; Depth 1½". #VU-100. List \$22.00

8. REEL HOLDERS FOR TAPE RECORDERS—Damps wobbling, holds reels in place regardless of position of recorder. #RH-2 (pair). List \$8.85

9. TK-5, TAPE STROBE & LIGHT KIT—Makes checking of recorder speeds a snap. It consists of a neon light source and five lengths of 25" non-magnetic leader tape with stroboscopic markings. The lamp flickers at the rate of 120 times per minute and indicates if operating speed is slow, fast or correct. The unit requires 110-120 volt, 60 cycle, AC current. #TK-5. List \$2.00

10. MAGNETIC BULK ERASER—Completely erases recorded and unwanted signals from an entire reel of tape in seconds. Reduces background noise levels of tape from 3 to 6 db below normal erase head level. Accommodates tape up to 1½" wide and reels up to 10½" diameter. Saves time and eliminates head and machine wear. 110 volts, 60 cycle A.C., U. L. listed #ME-99. List \$33.00

11. LOW COST BULK TAPE ERASER—Low cost version of ME-99. Reduces background noise levels of tape from 2 to 4 db below normal erase head level. For ¾" tape and reels up to 7". Weighs only 4 lbs. 110 volts, 60 cycle A.C. (not illust.) #ME-77. List \$22.00

12. TAPE KARE KIT—Preserves valuable tapes and protects tape recorders. Contains: Robins Recording Head Cleaner, Jockey Cloth for cleaning tapes. #TK-2. List \$2.00

13. NEW! GIBSON GIRL® "STEREO 4" ACCESSORY KITS—Everything you need for better tape recording and editing. This kit contains the famous Gibson Girl® tape splicer, splicing tape, tape threader, reel holders, head and guide lubricant, head cleaner, tape cleaning cloth, tape clips, reel labels and tape editing book. For professional results! For more pleasure! For better recordings! A perfect Hi-Fi gift! With Gibson Girl® Stereo 4 Deluxe Splicer. #TK-8DLX. List \$15.00

*With Gibson Girl Stereo 4 Standard Splicer. (Illustrated) #TK-4STD. List \$12.00

*With Gibson Girl Stereo 4 Junior Splicer #TK-4Jr. List \$10.00

*Without Reel Holders and Head and Guide Lubricant. Tape Kare Kit with Gibson Girl Hoobyist Splicer, Tape Cleaning Cloth, Splicing Tape, Tape Holding Clips and Tape Editing Book. #TK-4H. List \$3.25

14. REPLACEMENT REELS—Study 7" virgin styrene reels. With write-on surfaces and tape log index. Reels boxed individually in white, set-up boxes. #TR-70. List 75c

5" plastic reel in white set-up box #TR-50. List 60c

3" reel in mailing box #TR-30. List 25c

15. TAPE CLIPS—Keeps tape from unwinding from full or half empty reels. #TC-12 (pkg. of 12). List 40c

16. HEAD DEMAGNETIZER—Helps maintain "like new" performance of tape recorders by removing residual magnetism from tape heads. Reduces noise level, restores optimum signal-to-noise ratio. Has thin extended pole piece for easy access to recording heads of most tape recorders. 110 volts, 60 cycle A.C., U. L. listed. #HD-6. List \$10.00

17. LOW COST HEAD DEMAGNETIZER—A low cost version of HD-6, American made, with specially shaped probe for easy access to most tape heads without removing head cover. Plastic sleeve on tip of probe prevents accidental scratching of heads. (not illust.) #HD-3. List \$5.95

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PATCH CORDS

| (All Grey shielded cable unless shown) | Description | Cat. # | Length | List Price |
|--|--|-----------------------------------|---------------------------|------------------------------------|
| | phone plug to telephone plug | MT-72 MT-120 | 72" 120" | 2.00 2.50 |
| | phone plug to phone jack | MJ-72 | 72" | 2.50 |
| | phone plug to phone jack | TF-72 | 72" | 2.50 |
| | phone plug to phone plug | TT-72 TT-120 | 72" 120" | 2.00 2.50 |
| | microphone connector to stripped and tinned ends | BS-120 | 120" | 2.75 |
| | phono plug to phono plug | MM-18 MM-36 MM-72 MM-120 | 18" 36" 72" 120" | \$1.00 1.25 1.50 2.00 |
| | 3-cond. phone plug with internal resistor to phono plug, shielded cable. Use with Webcor tape recorders. | XM-120 | 10" | 4.00 |
| | phone plug to alligator clips | TC-72 TC-120 | 72" 120" | 2.00 2.50 (grey parallel cable) |
| | phono plug to phono jack | MF-18 MF-36 MF-72 MF-120 | 18" 36" 72" 120" | 1.25 1.50 1.75 2.25 |
| | phone plug to stripped and tinned ends | MS-18 MS-36 MS-72 MS-120 | 18" 36" 72" 120" | 1.00 1.00 1.25 1.75 |
| | phone plug to alligator clips | MC-120 | 120" | 2.25 (grey parallel cable) |
| | phono jack to phono jack | FF-72 | 72" | 2.25 |
| | phone plug to phone jack | TJ-120 | 120" | 4.00 |
| | phone plug to stripped and tinned ends | TS-72 TS-120 | 72" 120" | 2.00 2.50 |
| | short R.C.A. 2-cond. phone plug to std. 2-cond. short ext. jax. Use with late models of Revere and Wallensak tape recorders. | XJ-180 | 12" | 5.00 (white shielded cable) |

NEW

ADAPTORS

| | | | |
|--|---|----------------|----------------------|
| | Description Phono plug coupler mates with phono plug at each end. Grey plastic; completely shielded. | Cat. # FF-1 | List Price \$1.00 |
| | Adapter, 2-conductor phone jack input to phono plug output. | JM-1 | 2.00 |
| | Phone plug output with phono jack input. Grey molded housing, completely shielded. | FT-1 | 1.50 |
| | Phone plug. | T-1 | .75 |
| | Male microphone input to phone plug output. | TD-1 | .75 |
| | Adapter phono plug one end with female microphone connector at other end. | BP-1 | 1.25 |
| | Adapter, phono plug one end with male microphone connector at other end. | DP-1 | 1.50 |
| | Male microphone connector. | D-1 | .50 |
| | Female microphone connector. | B-1 | .75 |
| | Phono jack pkg. of 3 | F-1 | .50 |
| | Phono plug pkg. of 4 | M-1 | .50 |

NEW

FLEXIBLE "Y" CONNECTORS (PHONO JACK AND PLUG TYPE)
For converting Stereo Player to Manual. Can be used for a Tap-in Meter Monitor connection and many other uses. Also required on some Tape Recorders.

| Description | Cat. # | List Price |
|-------------|--------|------------|
| | YFMM-1 | 2.00 |
| | YMFF-2 | \$2.00 |
| | YMFF-1 | 2.00 |
| | YMMM-1 | 2.00 |
| | YTDD-1 | 2.00 |
| | YTFF-1 | 2.00 |
| | YBDD-1 | 1.75 |

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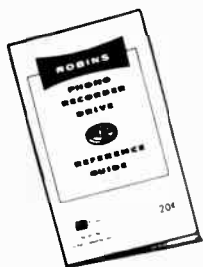
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REPLACEMENT PARTS FOR PHONOS AND TURNTABLES

ROBINS REPLACEMENT PHONO AND TAPE DRIVE PARTS



A complete cross reference guide listing 73 manufacturers and over 500 models with manufacturers part number and Robins Replacement Number

#RRP-4. List \$2.20

For servicemen, engineers, hobbyists, experimenters, and Do-it-yourself hi-fi enthusiasts who want to keep their equipment in top condition.

Ask for Robins Genuine Exact Replacement Parts for every popular make and model including:

Admiral, Aereo, Aircastle, Ampex, Ampro, Arvin, Bell and Howell, Bell Sound, Brush, Capito, Collaro, Columbia, BSR, Concertone, Continental, Crescent, Crestwood, Decca, Dixieland, Dukane, Eicor, Ekotape, Elac, Elec-



tronic Teaching Lab, Emerson, Garrard, General Electric, General Industries, Glaser-Steers, Grundig, Heath, Knight, Lafayette, Magnetic Recording Industries, Magnavox, Milwaukee Stamping, Mirachord, Mitchell Monarch, Motorola, Olympic, Pentron, Philco, R.C.A., Radio Shack, Raytheon, Recordio, Revere, Roberts, Sentinel, Silvertone, Sonora, Sound, Steelman, Stereo-Phonic, TDC, Tape Master, Telectrosonic, Tower, Trifi, Trav-ler, V-M, Viking, Webcor, Westinghouse, Wilcox-Gay, Wollensak, Zenith.



TV CHEATER CORD

6 ft. cord with molded male A.C. plug and TV molded-on connector at other end.

#CH-72. List \$3.80

FM INDOOR ANTENNA—FOLDED DIPOLE

Eliminates need for outdoor antenna in most locations. A big improvement over "built-in" antennas. Easily concealed under a rug or back of cabinet.

#FMA-1. List \$2.00

72" LINE CORD

Heavy insulation, U.L. Listed (SPT-2), with molded AC plug. White.

#LC-72. List \$5.55



EQUIPMENT COVERS

For Test Equipment, Amplifiers, Tuners, etc.

| | | |
|-------|--|-------------|
| EC-2 | 14 $\frac{3}{8}$ " x 10 $\frac{3}{8}$ " x 5" | List \$1.85 |
| EC-4 | 10 $\frac{3}{8}$ " x 6 $\frac{1}{4}$ " x 7" | List \$1.85 |
| EC-8 | 10 $\frac{3}{8}$ " x 8 $\frac{3}{4}$ " x 7" | List \$1.85 |
| EC-10 | 6" x 5 $\frac{1}{2}$ " x 8" | List \$1.85 |
| EC-12 | 12 $\frac{1}{2}$ " x 7 $\frac{3}{4}$ " x 8" | List \$1.85 |
| EC-14 | 12 $\frac{1}{8}$ " x 7 $\frac{1}{4}$ " x 10" | List \$1.85 |
| EC-18 | 16" x 14 $\frac{3}{8}$ " x 13 $\frac{1}{2}$ " | List \$2.50 |
| EC-20 | 22 $\frac{1}{2}$ " x 13 $\frac{1}{4}$ " x 16 $\frac{1}{2}$ " | List \$2.50 |
| EC-22 | 20" x 14 $\frac{3}{4}$ " x 10 $\frac{1}{4}$ " | List \$2.50 |

ROBINS BOOKS



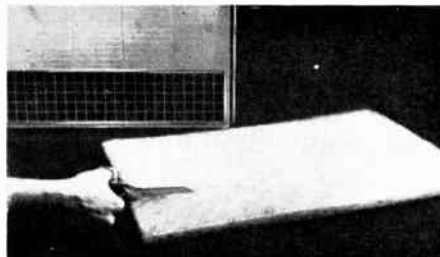
HOW TO GET THE MOST OUT OF TAPE RECORDING— (stereo edition) 128 pp., fully illust. Covers every aspect of tape recorder for the hobbyist and the professional. Tells you how to get the most out of your tape recorder, or if you don't have one, what to look for when purchasing one. **Cat. #TE-128. List \$1.25**

TAPE EDITING AND SPLICING — For the Professional and Amateur tape recordist by N. M. Haynes. 24 pp., illust. An authoritative work on the subject by an outstanding author. Contains a great deal of information which is not readily available elsewhere. **Cat. #TE-24. List \$3.35**

TELEVISION TAPE RECORDING—by George B. Goodall (48 pp., illust.) A semi-technical book on methods and techniques in the amazing new field of Video tape recording. **Cat. #TE-48. List \$1.00**

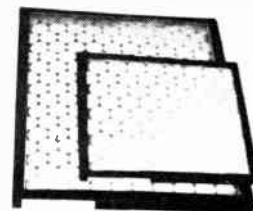
NEW ROBINS "U-CUT-IT" AIR FILTERS

New "U-CUT-IT" type Fiberglass Air Filter reduces allergy producing dust and pollen—contains Bacteria Fighting HEXACHLOROPHENE! These filters measure 15" x 24 $\frac{1}{4}$ " and are easy to-cut-to-fit most room air conditioners. Requires no frame. To install, simply measure old worn out filter, cut new filter to desired size with scissor, and install. The "U-CUT-IT" Filters maintain peak conditioner efficiency with lower electrical consumption. Change your filters often to assure maximum cooling.



Individually packaged in attractive printed poly bag

#GE-1. List \$1.00



ROBINS FILTER DIVISION MAKES OVER 500 SIZES OF VISCOUSE IMPREGNATED FIBERGLASS AIR FILTERS FOR HEATING, AIR-CONDITIONING, AIR CLEANING, SPRAY PAINTING, AND INDUSTRIAL USES.

Write Robins Filter Division for quotation on your requirements.



ROBINS

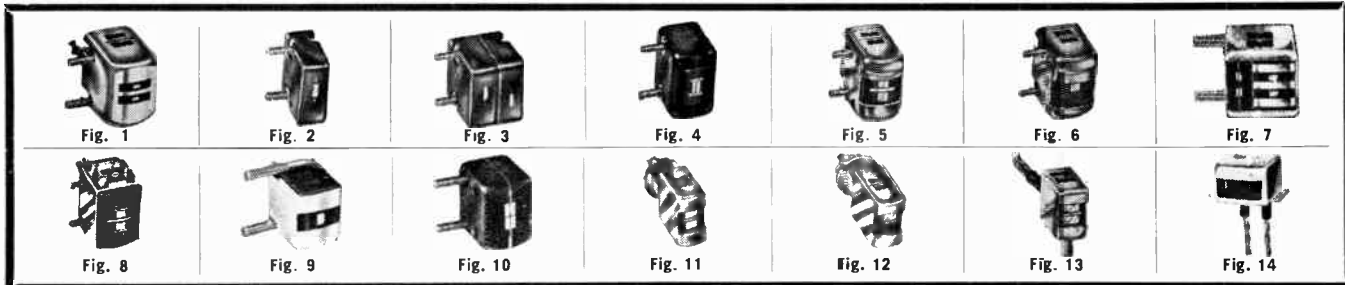
Made in U.S.A.

ROBINS INDUSTRIES CORP. FLUSHING 34, N. Y.

ROBINS $\frac{M}{M}$ EXACT REPLACEMENT AND CONVERSION $\frac{M}{M}$ RECORDING AND ERASE HEADS

• REPLACE WORN HEADS • UPGRADE OLD EQUIPMENT • CONVERT TO STEREO • BUILD SPECIAL EQUIPMENT

WRITE FOR LATEST CONVERSION DATA BOOK RMM-4. LIST 35c



CROSS REFERENCE GUIDE

Cross Reference for Obsolete Michigan Magnetic Heads and Heads of Other Manufacture

| M/M PART NO. | ROBINS M/M REPLACEMENT | MFR. | PART NO. | ROBINS M/M REPLACEMENT |
|--------------|------------------------|------------|----------|------------------------|
| 08Q8 | 5Q17 | NORTRONICS | TLDS | 7B17 |
| 2L35 | 3L20-101 | NORTRONICS | TLD-53 | 7B17 |
| 2M40,G | 3L20-101 | NORTRONICS | TLD-11 | 5Q17-105 |
| 3F20,L | 3L20-101 | | | |
| 3FM20 | 3FM20-108 | SHURE | 815 | 5TR8+ |
| 3FM20-106 | 3F20-105** | SHURE | 817 | 3L20-101 |
| 10FM20 | 3FM20-108 | SHURE | TE-2 | 7EM12A |
| 5B20 | 7B17 | SHURE | TE-2C | 40EM12A |
| 5L20 | 7L17 | SHURE | TE-11C | 7EM12A |
| 5L20U | 7L17-108 | SHURE | TR5 | 5TR8+ |
| | 5QT17*** | SHURE | TR5B | 5TR8 |
| 3M20,A | 3L20-101 | SHURE | TR5D | 5TR8+ |
| 5Q08 | 5Q17 | SHURE | TR5H | 5TR8+ |
| 5Q08 | 5Q17 | SHURE | TR-16 | 7L17 |
| 7L17-105 | 7L17 | SHURE | TR-16A | 3L20-101 |
| 7L17U | 7L17-108 | SHURE | TR-21C | 7L17 |
| 8B30 | 9QE3 | SHURE | TR-2A | 7L17 |
| 9L205 | 7L17 | SHURE | TR-35 | 3FM20-108 |
| 10L17 | 10L17-104 | | | |
| 10L17B | 7L17 | WORLD | EM50-3 | 7EM12A |
| 10L17S | 7L17 | WORLD | ES25-1 | 9QE3 |
| 10L205 | 7L17 | WORLD | RM50-3 | 7L17 |
| 10M20A | 7L17 | WORLD | RS-25 | 5Q17 |
| 10L70 | 7L17 | WORLD | RS-50 | 7B17 |
| 10M70A | 7L17 | | | |
| 2120 | 3L20-101 | | | |

Stereo head clip bottom leads to deactivate lower track. *5QT17 identical to 5Q17 except corners of head beveled for easy insertion of cartridges. May be used as a replacement for 5Q17.
 †Combined Record and Erase head. Leads may have to shortened and plug changed.

ROBINS M/M TAPE HEAD STEREO CONVERSION KITS

Converts 30% of all U.S. made, two track stereo recorders, to 4 track with only a screwdriver and pliers. Each kit contains 4 track record play head, head alignment tape, hardware and instructions. For monoaural units too, but an additional amplifier is required.



≅5K17 5Q17 head List \$30.00
 ≅5K17U same as 5K17 kit, except head mounts from opposite side (5Q17-105 head) List \$30.00

A COMPLETE BASIC KIT containing one each of 16 popular Robins M/M Heads. This assortment is ideal for laboratories and service organizations. Includes FREE 9"x14"x6" cabinet, (illustrated) and replacement data. **KIT ≅DD-6-1 List \$298.00**

A SUPPLEMENTARY KIT containing an assortment of newer type heads and 4-track conversion kits not included in Kit ≅DD-6-1. Has new, popular record-play-erase combination heads. Includes FREE cabinet and replacement data. **KIT ≅DD-6-4. List \$260.50**
 A COMBINATION KIT containing basic and supplementary kit head assortment of 27 heads. Includes FREE cabinet and replacement data. **KIT ≅DD-6-5. List \$558.50**



SPECIFICATIONS — R/P HEADS

| Part No. | Type | Tape Speed (IPS) | Imped (1KC) | Rec. Level (Below Sat.) (DB) | Audio Current (M.A.) | Bias Current (M.A.) | Bias. Freq. (KC) | Play Level (1KC) (MV) | Play Level (10RC) Bel 1KC Level | Induct. (Nom.) (H) | Fig. No. | List Price |
|-----------|---------------------------------|------------------|-------------|------------------------------|----------------------|---------------------|------------------|-----------------------|---------------------------------|--------------------|----------|------------|
| 5AV17 | 1/4 TRACK STEREO R/P & ERASE* | 3.75 | 3600 | -12 | .020 | 0.25 | 80 | 1.8 | -72 | .5 | 7 | 32.00 |
| 7B17 | 1/4 TRACK STEREO R/P | 7.5 | 5150 | -12 | .023 | 1.0 | 80 | 2.15 | -71 | .75 | 5 | 25.75 |
| 5B20L5 | 1/2 TRACK STEREO R/P | 7.5 | 3520 | -12 | .026 | 1.2 | 80 | 1.8 | -73 | .5 | 8 | 27.00 |
| 10B20L5 | 1/2 TRACK STEREO R/P | 7.5 | 7034 | -12 | .02 | 1.0 | 80 | 2.5 | -43 | 1.0 | 8 | 27.00 |
| 2FM20-500 | 1/2 TRACK MONO R/P & ERASE* | 7.5 | 1650 | -12 | — | — | — | 2.15 | -70 | — | — | 18.00 |
| 3F20-101 | 1/2 TRACK STEREO R/P | 7.5 | 2000 | -12 | .043 | 1.0 | 62 | 1.8 | -13 | .3 | 11 | 29.50 |
| 3F20-105 | 1/2 TRACK STEREO R/P | 7.5 | 2000 | -12 | .043 | 1.0 | 62 | 1.8 | -13 | .3 | 13 | 29.50 |
| 3FM20-104 | 1/2 TRACK MONO R/P | 7.5 | 2000 | -12 | .043 | 1.0 | 62 | 1.8 | -13 | .3 | 12 | 15.25 |
| 3FM20-108 | 1/2 TRACK MONO R/P | 7.5 | 2000 | -12 | .043 | 1.0 | 62 | 1.8 | -13 | .3 | 12 | 15.25 |
| 3FM20-502 | 1/2 TRACK MONO R/P & ERASE* | 7.5 | 2000 | -12 | — | — | — | 2.7 | -13 | .3 | — | 30.00 |
| 3L20-101 | 1/2 TRACK MONO R/P | 7.5 | 2460 | -12 | .03 | 1.25 | 50 | 1.64 | -73 | .35 | 6 | 13.50 |
| 7L17 | 1/2 TRACK MONO R/P | 7.5 | 5150 | -12 | .023 | 1.0 | 80 | 2.15 | -11 | .75 | 6 | 13.50 |
| 7L17-108 | 1/2 TRACK MONO R/P | 7.5 | 5150 | -12 | .023 | 1.0 | 80 | 2.15 | -11 | .75 | 6 | 13.50 |
| 10L17-104 | 1/2 TRACK MONO R/P | 7.5 | 7030 | -12 | .020 | 1.0 | 80 | 2.6 | -12 | 1.0 | 6 | 13.50 |
| 5TR8 | COMB. 1/2 TR. MONO R/P & ERASE* | 7.5 | 1450 | +05 | 0.5 | 1.5 | 50 | + | + | + | 14 | 16.50 |
| 5Q17 | 1/4 TRACK STEREO R/P | 7.5 | 3240 | -12 | .025 | 1.0 | 80 | 1.9 | -60 | .5 | 1 | 28.50 |
| 5Q17-105 | 1/4 TRACK STEREO R/P | 7.5 | 3240 | -12 | .025 | 1.0 | 80 | 1.9 | -60 | .5 | 1 | 28.50 |
| 5QT17 | 1/4 TRACK STEREO R/P | 7.5 | 3240 | -12 | .025 | 1.0 | 80 | 1.9 | -60 | .5 | 1 | 28.50 |
| 5QT17-105 | 1/4 TRACK STEREO R/P | 7.5 | 3240 | -12 | .025 | 1.0 | 80 | 1.9 | -60 | .5 | 1 | 28.50 |
| 7H17 | 1/2 TRACK MONO R/P | 7.5 | 5150 | -12 | .042 | .8 | 80 | 3.0 | -80 | 0.75 | 9 | 13.50 |

NOTE: All series L (single track), B (two track) and Q (four track) are electrically and mechanically interchangeable for easy stereo conversion. 9QE3 erase head is 1/2 track replacement for 5S1 and 5S51 heads. *ERASE AND RECORD SPECS IN SEPARATE CHARTS.

SPECIFICATIONS — ERASE HEADS

| Part No. | Type (Erase) | Tape Speed | Imped. @ Erase Freq. | Erase Freq. (kc) | Erase Current (MA) | Erasure (DB) (200 cy. sat.) | Induct. (Nom.) (mh) | Fig. No. | List Price |
|-----------|------------------|------------|----------------------|------------------|--------------------|-----------------------------|---------------------|----------|---|
| 5AV17 | * | 3.75 | 2,800 | 80 | 15 | 60 | 11.0 | 7 | * |
| 7EM12A | 1/2 TRACK MONO | 7.5 | 2,200 | 80 | 30 | 50 | 5.4 | 4 | 10.50 |
| 2FM20-500 | * | 7.5 | 1,750 | 62 | 17 | 55 | 5.0 | * | * |
| 3FM20-502 | * | 7.5 | 1,750 | 62 | 17 | 55 | 5.0 | * | * |
| 40EM12 | 1/2 TRACK MONO | 7.5 | 10,000 | 52 | 10 | 50 | 40.0 | 4 | 10.50 |
| 9QE3 | 1/4 TRACK STEREO | 7.5 | 2,500 | 75 | 12.5 | 60 | 9.0 | 10 | 13.50 |
| 5S1 | 1/2 TRACK MONO | 7.5 | 1,750 | 62 | 17 | 55 | 5.0 | 2 | 10.50 |
| 5S51 | 1/2 TRACK STEREO | 7.5 | 1,750 | 62 | 17 | 55 | 5.0 | 3 | 14.25 |
| 5TR8 | * | 7.5 | 780 | 25 | 27 | 50 | + | 14 | * |
| 5S1-103 | 1/2 TRACK MONO | | | | | | | | IDENTICAL TO 5S1 EXCEPT MOUNTS FROM OPPOSITE SIDE |

ROBINS M/M TAPE HEAD REPLACEMENT GUIDE

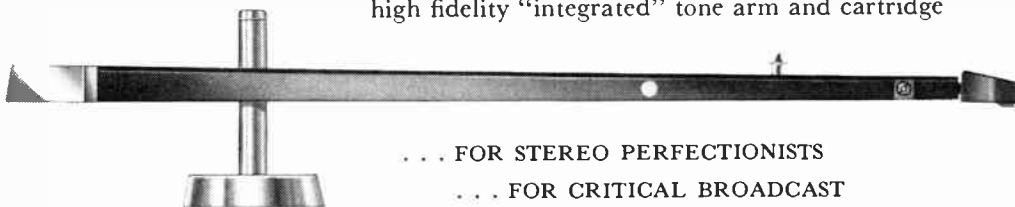
A complete cross reference and replacement guide book with installation instructions, information on stereo conversion and how heads are made. 16 pages with illustrated specs and diagrams.

#RMM-4. List 35c

new...improved
Shure studio
SERIES M222-M226

Stereo Dynetic

high fidelity "integrated" tone arm and cartridge



... FOR STEREO PERFECTIONISTS
... FOR CRITICAL BROADCAST
AND RECORDING APPLICATIONS

NOW! Improved Performance.

The overwhelming first choice of perfectionists who appreciate the full importance of "integrated" tone-arm and cartridge to optimum stereo performance. Tracks at incredibly light $\frac{3}{4}$ to 1.5 grams—with unparalleled fidelity... absolutely minimizes record wear, and CANNOT scratch records! We urge you to make listening tests of this unit before buying any stereo cartridge or arm—you'll hear the difference.

The Studio Stereo Dynetic has a special advantage for those music lovers who like to "index". The cartridge stylus is placed far in front, making it extremely easy for you to position the stylus on the exact spot of the record you want to play. Includes stereo cable.

Still another feature of the Studio Stereo Dynetic is the fact that the stylus can be changed in the home without tools—within ten seconds.

| SPECIFICATIONS | STEREOPHONIC M226, M222 | MONOPHONIC M16; M12 |
|----------------------------------|--|----------------------------------|
| Tracking Force | 1½-2½ grams | 1-2 grams |
| Frequency Response | 20-20,000 cps± | 20-20,000± |
| Channel Separation | 2½ db aver 22.5 db at 1000 cps | 2 db * |
| Sensitivity: Output at 1000 cps | 6 mv per channel (On Westrex /4 Test Record) | 14 mv for 10 cms sec |
| Recommended load impedance | 47,000 ohms | 10,000 ohms |
| Compliance: (Vertical, *Lateral) | 22 x 10 ⁻⁶ cms dyne | 8 x 10 ⁻⁶ cms dyne |
| Inductance | 600 millihenrys | 130 millihenrys |
| D.C. Resistance | 750 ohms | 180 ohms |
| Stylus | .0005" diamond | .0007" diamond |

* Applies to stereo units only.

Model M226—Studia Stereo Dynetic for records up to 16" including M21 cartridge with .0005" Diamond Stylus Audiophile Net: \$89.50

Model M272—Studia Stereo Dynetic for records up to 12" including M21 cartridge with .0005" Diamond Stylus Audiophile Net: \$89.50

Model M22—Studia Stereo Dynetic Cartridge with .0005" Diamond Stylus. Audiophile Net: \$49.50

Model N21—Replacement Stereophonic stylus assembly for Model M21, M216, M212; .0007" Diamond tip. Audiophile Net: \$24.75

Model N22—stylus improves performance, lowers tracking force for M212 and M216 arms. Audiophile Net \$24.75

Model A29R—Adapter Plate for use with Model M12 or M212 for mounting purposes with the Rek-O-Kut turntable. Audiophile Net \$ 2.40



NOW! THE ULTIMATE IN INDEPENDENT TONE ARMS

SHURE SME

MODELS 3009-3012 SERIES 2

The most remarkable independent tone arm ever made — by any standard. Brings out the very best from any high quality cartridge, mono or stereo. Virtually frictionless bearings, both horizontal and vertical... pivot friction at stylus tip measures less than .020 gram! Knife edge bearings are absolutely protected against dust. Manufactured to incredibly close tolerances for Shure by skilled British craftsmen. Unprecedented combination of adjustments: height, overhang, length (up to 1'!), tracking force (so accurate no pressure gauge is required, ever)... even bias (to counteract tendency of arm offset to pull toward center of record and "favor" one side of

stereo groove over the other.) The result is an independent tone arm that carries the cartridge over the record surface with rock-like steadiness and precision — literally eliminates wear on the record and stylus. Lever operates arm through hydraulic damper. No resonances within audible spectrum! Complete with shell, alignment protractor, sockets.

Model 3009 Series 2 (for 12" records) \$89.50 net

Model 3012 Series 2 (for 16" records) \$99.50 net

NOTE: WHEN REPLACING STYLUS, use only genuine Shure replacement stylus with the certification, "Precision Made by Shure." Inferior imitations can seriously downgrade the performance of the cartridge.

See Section 1320 for additional Shure Products.



SHURE

world acclaimed

NEW!

Stereo Dynetic

CARTRIDGE SERIES — MODEL M33-5 — MODEL M33-7 — MODEL M77

MODELS M33

Magnificent cartridges for the very finest sound systems. Extraordinarily compliant stylus permits ultra-light tracking pressures with flawless tracking, outstanding channel separation, highest fidelity.

MODEL M33-5—for professional tone arms

Professional Stereo Dynetic Cartridge including N33-5 stylus assembly (Red) with .0005" diamond. Tracks at 3/4 to 1.5 grams. Audiophile Net Price **\$36.50**

MODEL M33-7—for automatic turntables

Professional Stereo Dynetic Cartridge including N33-7 stylus assembly (White) with .0007" diamond. Tracks at 1.5 to 3 grams. Audiophile Net Price **\$36.50**

MODEL N33-5

Stereo Stylus Assembly for M33-5 (also fits M33-7). Features .0005" diamond tip. (Red plastic grip) Audiophile Net Price **\$19.50**

MODEL N33-7

Stereo Stylus Assembly for M33-7 (also fits M33-5). Includes .0007" diamond tip. (White plastic grip) Audiophile Net Price **\$19.50**

MODEL M77

An excellent, moderately-priced cartridge for use with tone arms that track at 3 to 6 grams. Higher output, superior hum shielding permits use of 2-pole motor and operation of amplifier at low gain. N77 .0007" diamond included. Audiophile Net Price **\$27.50**

MODEL N77

Stereo Stylus Assembly for M77 Stereo Dynetic Cartridge. Includes .0007" diamond tip. (Black plastic grip) Audiophile Net Price **\$10.50**

MODEL N78

Monophonic Stylus Assembly for M33 or M77 cartridges. .0027" diamond tip; 30-15000 cps; Output 11.5 mv; Compliance 6 x 10⁻⁶ cm dyne. 4 to 6 grams tracking. Audiophile Net Price **\$8.55**

| SPECIFICATIONS | M33-5 | M33-7 | M77 |
|--|--|--|---------------------------------------|
| Channel Separation (at 1000 cps) | Over 22.5 db | Over 22.5 db | More than 20.0 db |
| Frequency Response | 20 to 20,000 cps | 20 to 20,000 cps | 20 to 17,000 cps |
| Output Voltage (per channel, at 100 cps) | 6 mv | 6 mv | 9 mv |
| Recommended Load Impedance (per channel) | 47,000 ohms | 47,000 ohms | 47,000 ohms |
| Compliance; Vertical & Lateral | 22.0 x 10 ⁻⁶ cent. per dyne | 20.0 x 10 ⁻⁶ cent. per dyne | 6.0 x 10 ⁻⁶ cent. per dyne |
| Tracking Force | 3/4 to 1.5 grams | 1.5 to 3 grams | 4 to 6 grams |
| Inductance | 600 millihenrys | 600 millihenrys | 600 millihenrys |
| D.C. Resistance | 750 ohms | 750 ohms | 750 ohms |
| Terminals | 4 terminals. (Furnished with adapter for 3-terminal stereo or monaural use.) | | |
| Mounting Centers | Fits Standard 1/2" | | |
| Stylus (Diamond) | .0005" | .0007" | .0007" |



SHURE

Stereo Dynetic

CARTRIDGE SERIES—MODEL M3D—MODEL M3/N21D—MODEL M7D—MODEL M7/N21D

MODEL M3D

The M3D Stereo Professional Dynetic is the premium stereo phono cartridge. It reflects quality control of a high order, based on critical tolerances in all performance characteristics.

MODEL M3D WITH N21D TUBULAR STYLUS

New, higher compliance and frequency response cartridge-stylus combination designed for the perfectionist. For use with top quality independent tone arms or record changers capable of tracking at 2 1/2 grams maximum.

MODEL M7D

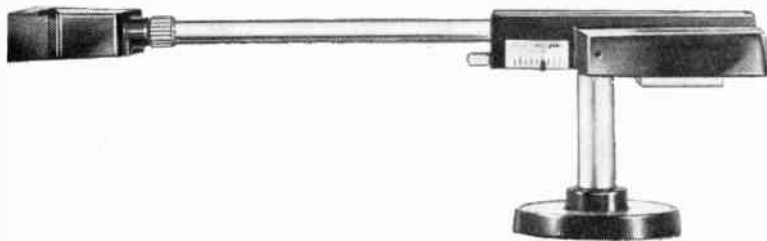
The M7D Stereo Custom Dynetic is designed for the economy-conscious consumer who wants a high quality Stereo Phono Cartridge at moderate cost.

MODEL M7D WITH N21D TUBULAR STYLUS

Top-rated cartridge-stylus assembly. Extraordinarily high compliance and response at modest price. For use in finest quality independent tone arms or record changers capable of tracking at 2 1/2 grams maximum.

| SPECIFICATIONS | M3D | M3/N21D | M7D | M7/N21D |
|---|---|---------------------------------------|---------------------------------------|---------------------------------------|
| Channel Separation at (1000 cps) | Over 20 db | Over 20 db | Over 20 db | Over 20 db |
| Frequency Response | 20 to 15,000 cps (±3 db) | 20 to 20,000 cps (±2 1/2 db) | 20 to 15,000 cps | 20 to 20,000 cps |
| Output Voltage (per channel, at 1000 cps) | 5 mv | 4 mv | 5 mv | 4 mv |
| Recommended Load Impedance (per channel) | 47,000 ohms | 47,000 ohms | 47,000 ohms | 47,000 ohms |
| Compliance; Vertical & Lateral | 4.0 x 10 ⁻⁶ cent. per dyne | 9.0 x 10 ⁻⁶ cent. per dyne | 3.5 x 10 ⁻⁶ cent. per dyne | 9.0 x 10 ⁻⁶ cent. per dyne |
| Tracking force | 3 to 6 grams | 2 gms. optimum (2 1/2 max.) | 4 to 7 grams | 2 gms. optimum (2 1/2 max.) |
| Inductance | 420 millihenrys | 420 millihenrys | 420 millihenrys | 420 millihenrys |
| D. C. Resistance | 280 ohms | 280 ohms | 280 ohms | 280 ohms |
| Terminals | 4 terminals. Furnished with 3-terminal adapter. Fits both 1/2" and 3/8" | | | |
| Mounting Centers | | | | |
| Audiophile Net Price | \$45.00 | \$47.25 | \$24.00 | \$36.75 |
| Replacement Stylus Only: | \$22.50 | \$24.75 | \$12.00 | \$24.75 |

See Section 1320 for additional Shure Products.

SHURE**HIGH FIDELITY STEREO PRODUCTS****PROFESSIONAL TONE ARM**

for use with any quality cartridge, stereo or monophonic

The Shure M232 (and M236) Professional Tone Arm is a premium-quality independent tone arm that accepts practically all cartridges (Stereo and Monophonic) and permits their maximum potential performance characteristics to be utilized. Features precision ball bearings at all pivot points, plug-in head with positive-alignment lock, variable height adjustment. Pays for itself in reduced record wear and damage. Ingeniously simple and unprecedented combination of adjustments gives instant, positive, VISUAL control over balance (without altering overall arm length), tracking force (0-8 grams), and overhang. Floats the needle over the record . . . smoothly — without "drag" — without "skip" — without unnecessary (and ruinous) force. Furnished with cable having plug on each end to simplify and speed up installation (eliminates soldering).

SPECIFICATIONS: MODEL M232 — M236 PROFESSIONAL TONE ARMS

| | |
|---|---------|
| NET PRICE: TONE ARM M232, for 12" records | \$29.95 |
| TONE ARM M236, for 16" records | \$31.95 |
| Model A23H extra Plug-In Head | \$ 2.40 |

FURNISHED ACCESSORIES: Arm rest, mounting template, mounting hardware, 4 ft. cable assembly.

DIMENSIONS: M232 — 12 $\frac{1}{4}$ " long, M236 — 14 $\frac{1}{2}$ " long

MONOPHONIC PROFESSIONAL*Dynetic***STEREO PROFESSIONAL MONOPHONIC**

For those who prefer monophonic cartridges with monophonic records, Shure offers the outstanding Model M5D Professional Dynetic.

SPECIFICATIONS:

Frequency Response: 20 to 20,000 cps.
Sensitivity: Output at 1,000 cycles—21 millivolts for 10 cms/sec.
Recommended Load Impedance: 27,000 ohms.
Compliance: 3 x 10⁻⁶ centimeters per dyne.
Tracking Force: 2 to 6 grams.
Inductance: 350 millihenrys
D. C. Resistance: 440 ohms.
Model M5D—has .001" diamond for use with micro-groove records, 33 $\frac{1}{3}$, 45 r.p.m.
Model M6S—has .0027" sapphire for use with standard records, 78 r.p.m.
Model M5D Monophonic Professional Dynetic Phono Cartridge for LP records including N5D .001" diamond stylus. Audiophile Net: \$27.50.
Model M6S Monophonic Professional Dynetic Phono Cartridge for 78 rpm records including N6S .0027" sapphire stylus. Audiophile Net: \$15.00
Model N5D Monophonic Professional Dynetic stylus with .001" diamond tip. Audiophile Net: \$16.50
Model N6S Monophonic Professional Dynetic stylus with .0027" sapphire tip. Audiophile Net: \$5.00

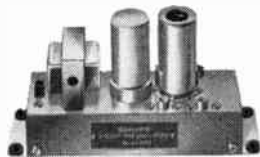
TRANSISTORIZED STEREO PREAMPLIFIER MODEL M61

Compact, rugged, transistorized unit with choice of AC line or battery power supply. Slide-selector switch offers three equalization inputs.

- (1) "phono" for conversion of ceramic phono inputs for use with magnetic cartridges;
- (2) "tape" for equalization of tape playback directly from tape head through hi-fi control preamplifier; and
- (3) "microphone" for flat amplification wherever a boost in microphone output is required.

SPECIFICATIONS:

Net Price: Model M61-1 (for 105-125 v. AC line) \$27.50
Model M61-3 (30 v. Battery, included) \$26.50
Gain: Phono: 45 db (5 mv input produces .88 v. output)
Tape: 40 db (2 mv input produces .20 v. output)
Microphone: 63 db (2 mv input produces 2.8 v. output)
Frequency Response: ± 2.5 db of each function's nominal characteristic from 25 cps to 15,000 cps.
Equalization: Phono: RIAA equalization (with additional treble boost of approximately 3 db at 10,000 cps to complement most magnetic cartridges).
Tape: NARTB equalization.
Microphone: Flat response. ± 3 db 20 to 15,000 cps.
Input Impedance: Phono and tape: approx. 50,000 ohms at 1,000 cps.
Microphone: Approx. 20,000 ohms.
Output Impedance: Low output impedance (less than 1,000 ohms at 10,000 cps for phono and tape functions).
Channel Separation: At least 50 db at 1,000 cps. Channel Balance: 2 db at 1,000 cps (for phono and tape functions). Hum Noise: 50 db below rated output. Overall Dimensions: Length 5"; Width 5 $\frac{1}{4}$ "; Height 2".

**STEREO LINE PRE-AMPLIFIER MODEL M60**

High quality, low noise, stereo line pre-amplifier providing additional gain for use with magnetic stereo phono cartridges and microphones.

Additional gain also can be provided from tape recorder outputs on standard pre-amplifier to improve quality of recordings. Provides flat output response from 30 to 80,000 cps $\pm 1/2$ db. Low output impedance permits use of longer cable lengths (up to 50 feet) without loss of gain or deterioration in response when used with magnetic phono cartridges, microphones, etc.

SPECIFICATIONS:

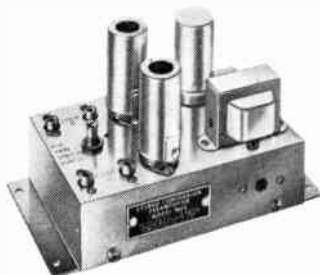
GAIN: 17 db or 7 to 1 (5 mv. input gives 35 mv. output). Circuit change information provided to give one-third and two-thirds output.
IMPEDANCE: Input—47,000 ohms—Output—5,000 ohms.
HUM & NOISE: 64 db below rated output.
DIMENSIONS: 5 $\frac{7}{8}$ " x 2 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ ".
NET WEIGHT: 2 lbs. NET PRICE: \$19.95

STEREO CONVERSION PRE-AMPLIFIER MODEL M65

Provides equalization with amplification for conversion of ceramic inputs to magnetic inputs. Gives smoother, more natural sound. As an added feature, 60 db of amplification without equalization is also provided. Permits the use of a magnetic cartridge with "package" consoles supplied with a ceramic cartridge. Also provides pre-amplification and equalization functions for other inputs (phono, tape, microphone).

SPECIFICATIONS:

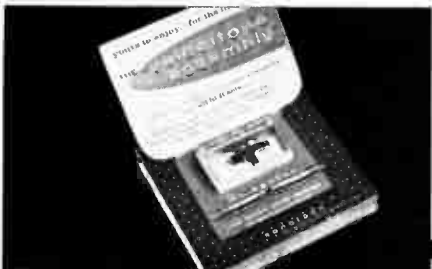
GAIN: Phono: 44 db (5 mv input produces .76 v. output).
Special: 45 db (5 mv input produces .88 v. output).
Tape: 40 db (5 mv input produces .50 v. output).
Microphone: 63 db (2 mv input produces 2.8 v. output)
Frequency Response: ± 1.5 db of each function's nominal characteristic from 25 cps to 15,000 cps. EQUALIZATION: Phono: RIAA equalization (with additional treble boost of approximately 3 db at 10,000 cps to complement the high frequency characteristic of most magnetic cartridges).
Special: A Shure-developed magnetic phono equalization circuit for use with high impedance amplifiers normally used with ceramic phono cartridges.
Tape: N A R T B equalization.
Microphone: Flat response. ± 3 db from 20 to 12,000 cps.
INPUT IMPEDANCE: 47,000 ohms (all functions).
OUTPUT IMPEDANCE: low output impedance (less than 5000 ohms at 10,000 cps for phono, special and tape functions). CHANNEL SEPARATION: 40 db. CHANNEL BALANCE: ± 1 db at 1000 cps. HUM-NOISE: 50 db below rated output. OVERALL DIMENSIONS: Length 6 $\frac{7}{8}$ "; Width 3 $\frac{3}{8}$ "; Height 3 $\frac{1}{4}$ ".
NET PRICE: \$24.00



See Section 1320 for additional Shure Products.

SONOTONE REPLACEMENT CARTRIDGES

designed to bring out the best in record
changers, turntables and phonographs



'VELOCITY MARK II'

Deluxe ceramic stereo/mono cartridge, widely praised by hi-fi experts and audiophile-accepted. Provided with matched equalizers (no tools required) to feed directly into the "magnetic" phono input of any stereo preamp. Universal terminal plug virtually eliminates soldering or splicing, for fast, easy replacement.

MODEL '9TA'

Ceramic stereo/mono cartridge features low stylus mass and high compliance for flawless, hum-free reproduction of stereo and mono records. New universal tonearm terminal plug virtually eliminates soldering or splicing tonearm wires for fast, easy replacement.



MODEL '916TA'

Low-cost stereo cartridge employing some of the basic design features of the audiophile-accepted "Velocity Mark II." Features new universal tonearm terminal plug for fast, easy replacement.



MODELS '16TA' AND '18TA'
CERAMIC STEREO/MONO
CARTRIDGES

Remarkable quality at a realistic price. Out-performs cartridges costing many dollars more.

MODEL '8TA'
CERAMIC STEREO/MONO
TURNOVER CARTRIDGE

More than 30 leading manufacturers protect the quality of their hi-fi stereo phonographs with this cartridge. Unsurpassed frequency response, compliance, separation and rumble suppression. Free from hum.



MODEL '10T2' CERAMIC
STEREO/MONO CARTRIDGE

Excellent for those converting to stereo or replacing old stereo cartridges. Easy conversion with package which includes "fuse clip" mounting bracket and "jack-in" terminal plug with electrical contacts.



MODEL '2TA'

Ceramic mono cartridge. Plays stereo records. An improved version of the famous Sonotone "2T series." New needle assembly, plus increased compliance and lower tracking force, make it ideal for both stereo and mono records.



MODEL '3T'

Ceramic monophonic cartridge. Original equipment in many top quality phonographs. Available with or without brackets.



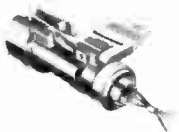
MODEL '1P'

Monophonic single-needle ceramic cartridge. Selected by leading high fidelity phonograph manufacturers to protect quality of their products.



MODEL '12T'

Budget-priced stereo crystal cartridge. Improves the quality of stereo phonographs... and at such a low cost. Available in two versions — the "12THR" with high voltage output and the "12TLA" with low voltage output.



| | |
|---|--|
| SPECIFICATIONS (with equalizers): | Response: 20 to 20,000 cps ($\pm 1/2$ db 20 to 6,000 cps; ± 1 db to 17,000 cps) |
| | Output voltage: 11 millivolts/channel |
| | Compliance: 5.5×10^{-6} cm/dyne |
| | Channel separation: 47 k to 100 k |
| | Recommended load: 2-4 grams for professional arms; 3-5 grams for changers |
| | Tracking force: 2-4 grams for professional arms; 3-5 grams for changers |

9TAS-V dual sapphire, net \$8.85 9TASO-V diamond/sapphire, net \$11.55 9TAD77-V dual diamond, net \$13.35

| | |
|------------------------|---|
| SPECIFICATIONS: | Response: 20 to 20,000 cps (± 1 db 20 to 17,000 cps) |
| | Output voltage: 0.4 volt |
| | Compliance: 5.5×10^{-6} cm/dyne |
| | Channel separation: 30 db |
| | Recommended load: 1 to 5 megohms for ceramic input |
| | Tracking force: 2-4 grams for professional arms; 3-5 grams for changers |

9TA-S dual sapphire, net \$5.01 9TA-S-77 dual sapphire, net \$5.01 9TA-SD dual diamond/sapphire, net \$7.80
9TA-D77 dual diamond, net \$9.60

| | |
|------------------------|--|
| SPECIFICATIONS: | Response: 20 to 20,000 cps (± 2 db 20 to 15,000 cps) |
| | Output voltage: 0.42 volts |
| | Compliance: 4.5×10^{-6} cm/dyne |
| | Channel separation: 28 db |
| | Recommended load: 2.0 megohms |
| | Tracking force: 3-5 grams professional arms; 4-6 grams record changers |

916TA-S dual sapphire, net \$4.29 916TA-S77 dual sapphire, net \$4.29 916TA-SD diamond/sapphire, net \$6.75

| | |
|---------------------------------|---|
| '16TA' SPECIFICATIONS | Response: 20 to 12,000 cps (± 1 db, 20 to 10,000 cps) |
| | Output voltage: 0.65 volt |
| | Compliance: 2.4×10^{-6} cm/dyne |
| | Channel separation: 25 db |
| | Recommended load: 2.0 megohms |
| | Tracking force: 4-6 grams for professional arms; 5-7 grams for changers |

'18TA' SPECIFICATIONS: Specifications for the 18TA same as 16TA except:
Output voltage: 1.0 volts
Compliance: 1.5×10^{-6} cm/dyne

16TA-S & 18TA-S, net \$3.60 16TA-S-77 & 18TA-S-77 dual sapphire, net \$3.60 16TA-SD & 18TA-SD diamond/sapphire, net \$5.85

| | |
|------------------------|---|
| SPECIFICATIONS: | Response: 20 to 20,000 cps (± 2.5 db, 20 to 15,000 cps) |
| | Output voltage: 0.3 volt |
| | Compliance: 3.0×10^{-6} cm/dyne |
| | Channel separation: 20 db |
| | Recommended load: 1-5 megohms |
| | Tracking force: 4.6 grams for changers; 3-5 grams for professional arms |

8TA4-S dual sapphire, net \$5.25 8TA4-S77 dual sapphire, net \$5.25 8TA4-SD diamond/sapphire, net \$7.80

| | |
|------------------------|--|
| SPECIFICATIONS: | Response: 20 to 15,000 cycles ± 2.5 db |
| | Output voltage: 0.5 volt |
| | Compliance: 1.5×10^{-6} cm/dyne |
| | Channel separation: 15 db |
| | Recommended load: 1-5 megohms |
| | Tracking force: 5-7 grams |

10T2-S dual sapphire, net \$5.82 10T2-S77 dual sapphire, net \$5.82 10T2-SD diamond/sapphire, net \$7.80
10T2-SD77 diamond/sapphire, net \$7.80

| | |
|------------------------|--|
| SPECIFICATIONS: | Response: 20 to 20,000 cycles (flat to 12,000) |
| | Output voltage: 1.0 volts |
| | Compliance: 2.0×10^{-6} cm/dyne |
| | Recommended load: 2-3 megohms |
| | Tracking force: 6 grams |

2TA-S dual sapphire, net \$3.39 *2TA-LB-S dual sapphire, net \$3.39 2TA-SD diamond/sapphire, net \$5.82
*2TA-LB-SD diamond/sapphire, net \$5.82

| | |
|------------------------|---|
| SPECIFICATIONS: | Response: 20 to 20,000 cps (flat to 15,000) |
| | Output voltage: 0.5 volt |
| | Compliance: 2.0×10^{-6} (minimum) |
| | Recommended load: 2-3 megohms |
| | Tracking force: 4-6 grams |

*3T-LB-S & 3T-S dual sapphire, net \$4.65 *3T-LB-SD & 3T-SD diamond/sapphire, net \$7.44

| | |
|------------------------|---|
| SPECIFICATIONS: | Response: 20 to 20,000 cps (flat to 12,000) |
| | Output voltage: 1.0 volt |
| | Compliance: 1.0×10^{-6} cm/dyne |
| | Recommended load: 1-5 megohms |
| | Tracking force: 8-10 grams |

*1P-LB-1S & 1P-1S sapphire, net \$2.91 *1P-LB-2S & 1P-2S sapphire, net \$2.91 *1P-LB-3S & 1P-3S sapphire, net \$2.91
*1P-LB-1D & 1P-1D diamond, net \$5.70 *1P-LB-3D & 1P-3D diamond, net \$5.70

| | |
|---|---|
| SPECIFICATIONS (Model 12THR): | Response: 20 to 15,000 cps (± 2 db to 10,000 cps) |
| | Output voltage: 2.5 volts |
| | Compliance: 1.4×10^{-6} cm/dyne in all directions of stylus motion |
| | Channel separation: 20 db |
| | Recommended load: $1/2$ to 5 megohms |
| | Tracking force: 9 to 11 grams |

12THR-S dual sapphire, net \$3.51 12THR-S77 dual sapphire, net \$3.51

| | |
|---|--|
| SPECIFICATIONS (Model 12TLA): | Response: 20 to 15,000 cps (± 2 db to 10,000 cps) |
| | Output voltage: 1.5 volts |
| | Compliance: 2.2×10^{-6} cm/dyne |
| | Channel separation: 23 db |
| | Recommended load: $1/2$ to 5 megohms |
| | Tracking force: 6-8 grams |

12TLA-S dual sapphire, net \$3.51 12TLA-S77 dual sapphire, net \$3.51
*LB denotes less bracket for very slim tonearms.



T1 SERIES TONEARM ASSEMBLY. Complete with "12T" crystal stereo cartridge as a single integrated unit. Provides remarkable performance from stereo and mono records at a remarkably low price. Each unit comes with plated fingertip, arm rest and 21" leads for easy installation and compression spring mounting post. Available in neutral gray, brown and black for any type replacement.

(Complete with '12THR' Crystal Cartridge—High Output Voltage)
T81-12THR-S gray net \$4.47
T81-12THR-S77 gray net \$4.47
T11-12THR-S brown net \$4.47
T11-12THR-S77 brown net \$4.47
T01-12THR-S black net \$4.47
T01-12THR-S77 black net \$4.47

(Complete with '12TLA' Crystal Cartridge—Low Output Voltage)
T81-12TLA-S gray net \$4.47
T81-12TLA-S77 gray net \$4.47
T11-12TLA-S brown net \$4.47
T11-12TLA-S77 brown net \$4.47
T01-12TLA-S black net \$4.47
T01-12TLA-S77 black net \$4.47

SONOTONE REPLACEMENT NEEDLES

CERAMIC-CRYSTAL STEREOGRAPHIC NEEDLES

- N-8TA-S 0.7-mil saph., 3-mil saph., net \$1.50.
- N-8TA-S77 dual 0.7-mil saph., net \$1.50.
- N-8TA-SD 0.7-mil dia., 3-mil saph., net \$3.30.

Fig. A

- N-9T-S 0.7-mil saph., 3-mil saph., net \$1.65.
- N-9T-S77 dual 0.7-mil saph., net \$1.65.
- N-9T-SD 0.7-mil dia., 3-mil saph., net \$3.45.
- N-9T-D77 dual 0.7-mil dia., net \$5.55.

Fig. B

- N-10T2-S less mounting bracket & terminal socket, 0.7-mil saph., 3-mil saph., net \$5.82.
- N-10T2-S77 less mounting bracket & terminal socket, dual 0.7-mil saph., net \$5.82.
- N-10T2-SD less mounting bracket & terminal socket, 0.7-mil dia., 3-mil saph., net \$7.80.
- N-10T2-SD77 less mounting bracket & terminal socket, 0.7-mil dia., 0.7-mil saph., net \$7.80.

Fig. C

- N-12THR-S 0.7-mil saph., 3-mil saph., net \$1.50.
- N-12THR-S77 dual 0.7-mil saph., net \$1.50.

Fig. D

- N-12TLA-S 0.7-mil saph., 3-mil saph., net \$1.50.
- N-12TLA-S77 dual 0.7-mil saph., net \$1.50.

Fig. E

- N-16T-S 0.7-mil saph., 3-mil saph., net \$1.50.
- N-16T-S77 dual 0.7-mil saph., net \$1.50.
- N-16T-SD 0.7-mil dia., 3-mil saph., net \$3.30.

Fig. F

- **N-9916-S 0.7-mil saph., 3-mil saph., net \$1.50.
- **N-9916-S77 dual 0.7-mil saph., net \$1.50.
- **N-9916-SD 0.7-mil dia., 3-mil saph., net \$3.30.

- N-18T-S 0.7-mil saph., 3-mil saph., net \$1.50.
- N-18T-S77 dual 0.7-mil saph., net \$1.50.
- N-18T-SD 0.7-mil dia., 3-mil saph., net \$3.30.

Fig. G

**Universal needle for 9T, 9TA, 9TV, 9TAV, 16T, 16TA and 916 series

CERAMIC-CRYSTAL MONOPHONIC NEEDLES

- N-1P-1S 1-mil saph. for 1P cartridge, net \$1.35.
- N-1P-2S 2-mil saph. for 1P cartridge, net \$1.35.
- N-1P-3S 3-mil saph. for 1P cartridge, net \$1.35.
- N-1P-1D 1-mil dia. for 1P cartridge, net \$3.15.
- N-1P-3D 3-mil dia. for 1P cartridge, net \$3.15.
- N-3P-1S 1-mil saph. for 3P cartridge, net \$1.35.
- N-3P-3S 3-mil saph. for 3P cartridge, net \$1.35.
- N-3P-1D 1-mil dia. for 3P cartridge, net \$3.15.
- N-3P-3D 3-mil dia. for 3P cartridge, net \$3.15.

Fig. H

- N-2T-S 1-mil, 3-mil saph. for 2T cartridge, net \$1.50.
- N-2T-SD 1-mil dia., 3-mil saph. for 2T cartridge, net \$3.30.
- N-2TA-S 0.7-mil saph., 3-mil saph., net \$1.50.
- N-2TA-SD 0.7-mil dia., 3-mil saph., net \$3.30.

Fig. I

- N-3T-S 1-mil, 3-mil saph. for 3T cartridge, net \$1.50.
- N-3T-SD 1-mil dia., 3-mil saph. for 3T cartridge, net \$3.30.

Fig. J

CERAMIC PHONO CARTRIDGE EQUALIZERS FOR MAGNETIC INPUT



40592

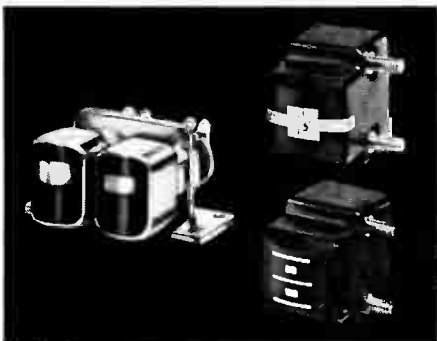


40765MP

- 40592 (single unit) magnetic input equalizer — for "2" and "3" series — single unit required, net \$2.40.
- 40592MP (matched pair) magnetic input equalizer — for "8" series — matched pair required, net \$3.60.
- 40765MP (matched pair) magnetic input equalizer — for "9" series only — matched pair required, net \$3.60.
- 40765 (single unit) magnetic input equalizer — for "9" series only — single unit replacement, net \$2.40.

SONOTONE MONO & STEREO TAPE HEADS

selected as original equipment by leading tape recorder manufacturers... ideal for replacement or stereo conversion



"RH-4 SERIES" RECORD/PLAYBACK/ERASE HEADS

Designed for the new 4-track stereo tape systems. Precise manufacture and holding to close tolerances assures top quality performance. Head dimensions and mounting system complies with the recent EIA standards proposal. Head provided with universal mounting stud insertion which allows for "off-or-on-center," left-right mounting stud protrusion. "EH-4 Series" available singly or with matching erase head. "RH-4 Series" direct Sonotone replacements in Telectro, Knight and Cousino.

"RH-2 SERIES" RECORD/PLAYBACK/ERASE HEADS

Head designed for monophonic half-track recording on 1/4" tape. Construction of head provides a high resolution gap of 120 micro-inches with accurately lapped located pole faces. Heads are of miniature size with 1/4" threaded rear mounted studs. Available singly or with matching erase head. Note: "RH-2" series used as original equipment in RCA, Steelman, Dictaphone and Code-A-Phone.

SPECIFICATIONS (record and play heads)

| Model No. | Type | Tape Speed I.P.S. | Imped. @ 1 kc ohms | Audio Curr. MA | Rec. Level db below tape Sat. | Bias Curr. @ 65 kc MA | Output @ 1 kc mv | Frequency Response @ 10 kc | Net |
|-----------|------------------|-------------------|--------------------|----------------|-------------------------------|-----------------------|------------------|----------------------------|---------|
| RH-4A | 1/4-Track Stereo | 7 1/2 | 3000 | 0.025 | -12 | 0.5 | 3.0 | -5 | \$17.10 |
| | | 3 3/4 | 3000 | 0.02 | -12 | 0.2 | 3.0 | -10 | |
| RH-2A | 1/2-Track Mono | 7 1/2 | 6000 | 0.025 | -12 | 0.6 | 3.0 | -10 | 6.00 |
| | | 3 3/4 | 6000 | 0.02 | -12 | 0.6 | 3.0 | -15 | |
| RH-2B | 1/2-Track Mono | 7 1/2 | 1000 | 0.04 | -12 | 0.7 | 1.0 | -10 | 6.00 |
| | | 3 3/4 | 1000 | 0.04 | -12 | 0.7 | 1.0 | -15 | |
| RH-2C | 1/2-Track Mono | 7 1/2 | 2200 | 0.03 | -12 | 0.6 | 1.0 | -10 | 6.00 |
| | | 3 3/4 | 2200 | 0.03 | -12 | 0.6 | 1.0 | -15 | |

SPECIFICATIONS (erase heads)

| Model No. | Type | Tape Speed I.P.S. | Imped. at Erase Freq. Ohms | Erase Freq. kc | Erase Curr. MA | Erasure db 250 cycles Sat. | Net |
|-----------|----------------------------|-------------------|----------------------------|----------------|----------------|----------------------------|--------|
| EH-4A | 4-Track Stereo (1/4-Track) | 7 1/2 & 3 3/4 | 2400 | 6 | 12.5 | 55 | \$8.10 |
| EH-2A | 1/2-Track Mono | 7 1/2 & 3 3/4 | 1750 | 6 | 30 | 55 | 5.40 |

The 'RH-2' and 'EH-2' series with mounting brackets (complete assemblies)

| Model | Description | Replaces | Net |
|--------|---------------------------------|------------|---------|
| REH-1B | Mono-RH-2A and EH-2A on Bracket | Shure 815H | \$13.80 |
| REH-1C | Mono-RH-2B and EH-2A on Bracket | Shure 815 | 13.80 |
| RH-2A7 | Mono-RH-2A only on Bracket | Shure 816 | 7.20 |
| RH-2B7 | Mono-RH-2B only on Bracket | Shure 817 | 7.20 |



SONOTONE RECHARGEABLE FLASHLIGHT BATTERY CARTRIDGES

Long life for use with flashlights. Based on Sonotone's patented sintered-plate, nickel-cadmium battery cells now in use in U.S. space missiles and jet planes. Complete recharging unit incorporated in cartridge with the sealed

cells. Fits any standard flashlight or other devices using two "D" cells end-to-end. Can be recharged by unscrewing cap and plugging the cartridge into any 110-120 AC outlet. Model FC-2, net \$3.96. Model FC-3, net \$8.50.



SONOTONE LOUDSPEAKERS

Maybe you've seen such quality before, but never at such low prices. Five high quality speakers offering full frequency response, free of distortion to retain the full flavor of the original performance.

SONOTONE 'CA-12A' 12" COAXIAL LOUDSPEAKER, net \$23.75

| SPECIFICATIONS: | Frequency range: | 35 to 20,000 cps |
|-----------------|----------------------|------------------------------------|
| | Resonant frequency: | 50 cps |
| | Crossover frequency: | 2,000 cps |
| | Power input: | 40 watts continuous, 80 watts peak |
| | Impedance: | 16 ohms |

SONOTONE 'W-12' 12" WOOFER FOR STEREO AND MULTI-SPEAKER MONO SYSTEMS, net \$14.25

| SPECIFICATIONS: | Frequency range: | 35 to 7,000 cps |
|-----------------|---------------------|------------------------------------|
| | Resonant frequency: | 50 cps |
| | Power input: | 40 watts continuous, 80 watts peak |
| | Impedance: | 16 ohms |

SONOTONE 'W-15' 15" WOOFER FOR 2, 3, 4-WAY SYSTEMS, net \$66.00

| SPECIFICATIONS: | Frequency range: | 20 to 7,000 cps |
|-----------------|---------------------|---------------------|
| | Resonant frequency: | 30 cps |
| | Power input: | 25 watts continuous |
| | Impedance: | 16 ohms |

SONOTONE 'WR-8' 8" SPEAKER BUDGET-PRICED FOR STEREO CONVERSION, net \$10.13

| SPECIFICATIONS: | Frequency range: | 55 to 15,000 cps |
|-----------------|---------------------|--|
| | Resonant frequency: | 70 cps |
| | Power input: | 20 watts continuous average program, 40 watts peak |
| | Impedance: | 8 ohms |

SONOTONE 'T-64' ELLIPTICAL CONE TWEETER, net \$9.00

| SPECIFICATIONS: | Frequency response: | 2,000 to 20,000 cps |
|-----------------|---------------------|------------------------------------|
| | Power input: | 20 watts continuous, 40 watts peak |
| | Impedance: | 16 ohms with suitable network |

**whatever electronic products
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sold through
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Radio-Electronic

MASTER

RE Tandberg

HIGH QUALITY GRAMPIAN DISC CUTTERHEADS & DP4 MICROPHONE

Gramplan Feedback Cutterhead — Type B 1/D

Technical Data

Frequency Response—30 cycles to 15,000 ± 2 db. Down no more than 4 db at 20 cycles and 20,000 cycles.

Total RMS Harmonic Distortion—Below 1% at 1000 cycles measured at 7 cm/sec. peak recorded velocity (NARTB standard level).

Matching Impedance—16 ohms.

D.C. Resistance—Main winding 3.7 ohms. Feedback winding 23 ohms.

Inductance—Main winding 1.65 MH.

Turns Ratio—Main winding to Feedback winding 2:5 to 1.

*Audio Power Required—At 1000 cycles to record 7 cm/per sec. (2 $\frac{3}{8}$ inches/sec.) peak recorded velocity (NARTB Standard Level)—1.26 watts or ± 31 dbm.

Stability—Change in level less than 1 db from 60°F. to 110°F.

Stylus—Standard short shank $\frac{3}{8}$ inches long.

Damping—Dow-Corning Silicone Fluid.

Mounting—Universal mounting for all lathes. Cover Plate tapped for mounting Fairchild Hot Thermo-Stylus.

*Frequency response measured with PFB-150WA Amplifier, balanced FM Modulator, and Buckman-Meyer Light Pattern.

LIST PRICE of Type B 1/D Feedback Cutterhead

\$350.00

Gramplan Feedback Cutter System

The Gramplan cutterhead is incorporated in the Gramplan Feedback Recording System which produces the highest quality disc recordings known to date. Complete in every detail of equalization, pre-emphasis, and level correction for all three speeds, this unique system comes ready for instant mounting, turn-on, and operation without the necessity of recalibration, experimentation, etc. To operate the system requires only the sound source on one end and the lathe on the other. Write for more information.

LIST PRICE Complete System

\$1,265.00

Gramplan DP4 Dynamic Microphone

Professional type with 50 to 15,000 cycles frequency response. Complete with swivel stand for desk top use and 18 ft. of cable.

LIST PRICE



\$49.50

Gramplan Magnetic Cutterhead — Type C (Non-feedback)



Gramplan Type C cutterheads are a development from our feedback cutterhead and have similar mechanical and electrical constants but are operated from a single winding. They may be used in con-

junction with any high grade power amplifier.

Technical Data

SENSITIVITY—3 volts input for 1 cm/sec. at 78 R.P.M.

IMPEDANCE—15 ohms at 1000 c/s.

FREQUENCY RESPONSE— ± 3 db—50 c/s to 10 Kc.—6 db at 20 Kc.

DISTORTION—2% at 1000 c/s.

WEIGHT—6 $\frac{1}{2}$ ozs.

STYLUS HOLE—0.064" or 0.625" as required.

LIST PRICE

\$225.00

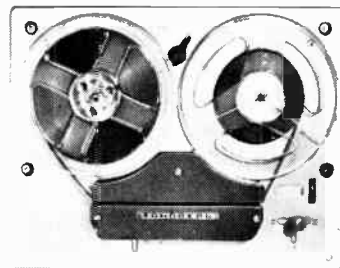
RE Tandberg MODEL "65" STEREO PLAYBACK TAPE DECK

3 SPEED • 4 TRACK

A proud new addition to the Tandberg family of precision crafted tape recording equipment! This unusual playback deck offers superb frequency response and is designed exclusively for installation into new or existing high fidelity systems with their own electronics. Features include: playback head for 2 & 4 track stereo and monaural tapes; start-stop button; 2 outputs for plug-in preamplifiers; facilities for adding erase and record heads. Adaptable for language laboratory and industrial use. Up to 18 hours of listening pleasure.

SPECIFICATIONS: 3 speeds; Frequency response—7 $\frac{1}{2}$ ips—30-20,000 c. (± 2 db., 30-16,000 c.)—3 $\frac{3}{4}$ ips—30-15,000 c. (± 2 db., 40-11,000 c.)—1 $\frac{1}{8}$ ips—50-7,000 c. (± 2 db., 50-5,500 c.); Power—110V. AC, 60 c.; Hysteresis synchronous motor; Operating lever knob for playback, fast forward and fast reverse; 4 digit revolving counter; Complete mechanical drive; 16 lbs.; 16" l. x 12" w. x 6" h. with mounting brackets.

MODEL 65 — \$199.50



RE Tandberg MODEL 6-44 STEREO TAPE DECK

3 SPEED • 4 TRACK RECORD AND PLAYBACK . . . RECORDS FM MULTIPLEX STEREOCASTS AT 3 $\frac{3}{4}$ AND 7 $\frac{1}{2}$ ips DIRECT THROUGH SYSTEM VIA SPECIAL FM-MX FILTER INPUT . . . Has MICRO-SWITCH OPERATED AUTOMATIC TAPE STOP.

The Tandberg 6 Stereophonic Recorder/Reproducer provides full facilities for home, education, business, broadcast and professional tape recording use. Plays back 2 and 4 track stereo and monaural tapes. Exhibiting a wide range of frequency response with high and low input, it incorporates 3 separate heads, each precisely gapped for record, playback and erase. 4 separate pre-amplifiers are built-in; 2 each for record and playback. Also features military type print circuitry, D.C. tube heating, low noise precision resistors, and a Hysteresis "Pabst" motor. May be incorporated into present hi-fi systems or is a complete portable stereo recorder. Operates via 5 push-button controls with remote control circuitry built-in and accessory foot pedal optional. The unique pause control permits no slur, no click start or stop pick-up for record or playback. Also provides Sound-on-Sound Simultaneous record or playback, direct monitor, echo effects and full 4 track stereo and monaural record or playback. Available in a

hand rubbed cabinet with gun metal gray top panel and chrome trimmed black knobs. Measures 16" L x 12" W x 6" H. Total weight, 25 lbs.; with luggage carry case, 31 lbs.

BASIC SPECIFICATIONS—Playback Outputs 1.5V. cathode follower output.

FREQUENCY RESPONSE—7 $\frac{1}{2}$ ips ± 2 db, 30 to 16000 c. 3 $\frac{3}{4}$ ips ± 2 db, 40 to 11000 c., 1 $\frac{1}{8}$ ips ± 2 db, 50 to 5500 c.

WOW & FLUTTER—.1% RMS 7 $\frac{1}{2}$ ips, .2% RMS 3 $\frac{3}{4}$ ips, .25% RMS 1 $\frac{1}{8}$ ips.

FOUR TRACK STACKED PLAYBACK HEAD—Gap Width00012"

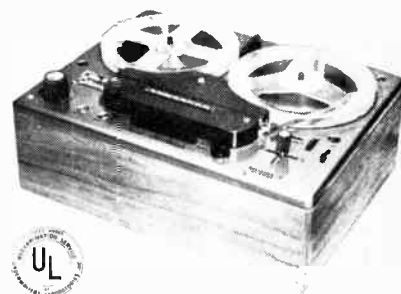
FOUR TRACK STACKED RECORD HEAD—Gap Width0003"

CROSS TALK REJECTION—60 db

POWER REQUIREMENTS—110 to 245 V., 60 c., 65 w. Substitute 60 c. pulley with 50 c. pulley for 50 c. operation.

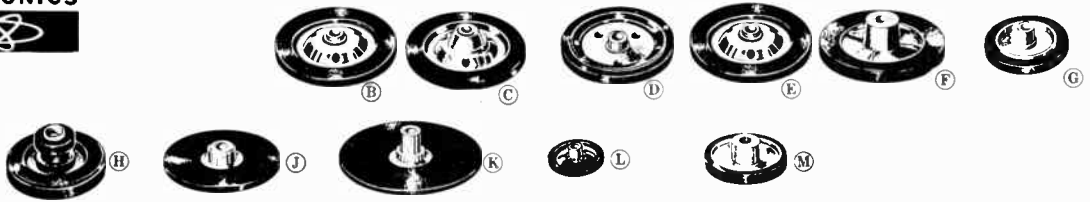
LIST PRICE

\$498.00



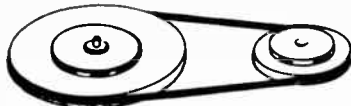


PHONO DRIVES



- (B) IDLER WHEEL—2 1/8" O.D. With bushing. Used on GE, Motorola, Philco, Webcor. Similar to Item No. 1440 but has .160" tire thickness. Cat. No. 1437 Net \$1.27
- (C) IDLER WHEEL—2 1/8" O.D. With bushing. Used on Columbia, GE, Motorola, Webcor. Cat. No. 1438 Net \$1.27
- (D) IDLER WHEEL—2" O.D. With bushing. For use on Webcor. Model 1134, 1136, 1151, 1121-1. Cat. No. 1439 Net \$1.13
- (E) IDLER WHEEL—2 1/8" O.D. Comes with bushing. Similar to Item No. 1437 but has .140" tire thickness at the outer edge. Use on Webcor Model 1135 record changer. Cat. No. 1440 Net \$1.75
- (F) IDLER WHEEL—2 1/8" O.D. Used on most Webcor tape recorders. Cat. No. 1441 Net \$2.00
- (G) IDLER WHEEL—1 1/2" O.D. With bushing. For use with Philco & Webcor. Cat. No. 1443 Net \$.73
- (H) MOLDED IDLER WHEEL—RCA 45 RPM. For use with RCA Series RP168 & RP190. Cat. No. 1447 Net \$.92
- (J) IDLER WHEEL—2" O.D. For use with Collaro record changers in the 520 Series. Cat. No. 1448 Net \$2.00
- (K) IDLER WHEEL—2 1/2" O.D. For use with all Collaro record changers in the 54 and 530 Series. Cat. No. 1449 Net \$2.00
- (L) IDLER WHEEL—1" O.D. For use with Crescent. In Models of 550 Series. Cat. No. 1450 Net \$1.10
- (M) IDLER WHEEL—1 3/4" O.D. For use with VM Models 920 and 990, and Silvertone record changers. Cat. No. 1452 Net \$.77

RECORDER DRIVE BELTS ROUND BLACK RUBBER DRIVES



Precision ground to exacting tolerances for positive, non-slipping drive action. Will eliminate "wow" and "rumble".

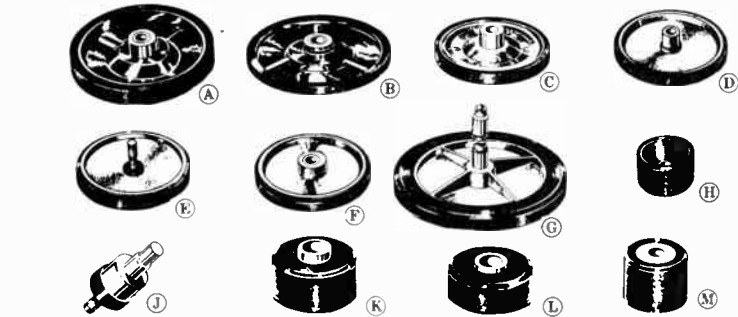
| Cat. No. | Insd. Circum. | Thickness | Used On | Dealer Net |
|----------|---------------|-----------|---|------------|
| 1410-06 | 6.2" | .139" | Model VM-700, 701, 710, 711, 714 Tape Recorders | \$.45 |
| 1410-07 | 7.4" | .139" | RCA SRT 301, 401, 402, 403, Wilcox-Gay 3A10, 3A11 | .52 |
| 1410-08 | 8.6" | .139" | Pentron, Crestwood & other tape recorders | .52 |
| 1410-10 | 10.6" | .139" | Crescent and other tape recorders | .58 |
| 1410-12 | 12.0" | .093" | Ampro and most Revere recorders | .58 |
| 1410-14 | 14.5" | .139" | Most Revere Recorders | 1.07 |
| 1410-15 | 15.3" | .139" | Webcor Tape Recorders | 1.07 |
| 1410-18 | 18.1" | .139" | Ampro Tape Recorders | 1.42 |
| 1410-20 | 20.4" | .139" | Ampro Tape Recorders | 1.75 |
| 1410-21 | 21.1" | .139" | Ampro, Gen. Ind., Webcor & other Tape Recorders | 1.75 |
| 1410-50 | 10.75" | .085" | Webcor & Revere | .67 |
| 1410-51 | 11.3" | .063" | Viking Tape Recorders | 1.17 |
| 1410-52 | 5.8" | .139" | Replaces Belts on Webcor | |
| 1410-53 | 4.3" | .139" | 11 x 1736 pkg. Revere Tape Recorders | .95 |
| 1474 | 6.5" | .210" | Crestwood Tape Recorders | .52 |
| | 9.8" | .139" | | .62 |

Made of a tough, durable, specially treated fabric, to give years of service. Gives smooth, silent, non-slip action.

| Cat. No. | Inside Width | Circum. | Used On | Net |
|----------|--------------|---------|---|------|
| 1409-02 | 3/8" | 17" | Pentron Tape Recorders | 2.20 |
| 1409-03 | 3/8" | 12 1/4" | Pentron, Crescent & other Tape Recorders | 2.20 |
| 1409-04 | 3/8" | 12 1/2" | VM 700, 701, 710, 711, 714 Tape Recorders | 2.25 |
| 1409-05 | 3/8" | 17" | Webcor Tape Recorders | 2.25 |



CAPSTAN PRESSURE ROLLER—1" O.D. For use on many Pentron tape recorders. Cat. No. 1488 Net \$1.47



- (A) IDLER WHEEL—2 1/2" O.D. With bushing. Use on Gen. Ind., Seeburg, and other record players. Cat. No. 1430 Net \$1.27
- (B) IDLER WHEEL—2 1/2" O.D. Used on Webcor Model 110 record players. Replaces Manufacturer's Part No. 45P1530. Cat. No. 1431 Net \$1.38
- (C) IDLER WHEEL—2" O.D. Use on Admiral, Columbia, Crescent, GE, Motorola, Philco, RCA, Seeburg, Silvertone and VM. Cat. No. 1432 Bushing I.D.—.215 Net \$.73
1487 Bushing I.D.—.183 Used on older Silvertone, etc. Net \$1.03
- (D) IDLER WHEEL—2" O.D. With bushing. Use on VM and GE. Cat. No. 1433 Net \$.80
- (E) IDLER WHEEL—2" O.D. With Shaft. Use on Admiral, Crescent, Motorola, Philco, RCA, Seeburg, Silvertone and VM. Cat. No. 1434 Net \$.88
- (F) IDLER WHEEL—2" O.D. With bushing. Use on Milwaukee Stamping, Philco, Zenith and Westinghouse. Cat. No. 1435 Net \$.90
- (G) DRIVE WHEEL—3" O.D. For use on Zenith Cobramatic Changers. Replaces Manufacturer's Part Nos. S-16922 and S-21754, which are inter-changeable. Cat. No. 1473 Net \$3.58
- (H) DRIVE WHEEL—1" O.D. For use on Crescent changers of the 550 series. Cat. No. 1451 Net \$1.25
- (J) 3-STEP DRIVE SLEEVE Used on Webcor Model 135, 136 and other late record changers. Cat. No. 1469 Net \$1.17
- (K) PRESSURE ROLLER—7/8" O.D. For use with certain Webcor tape recorders. Cat. No. 1455 Net \$1.63
- (L) PRESSURE ROLLER—7/8" O.D. For use on certain Webcor tape recorders, 220 series and 2614, 2615. Cat. No. 1482 Net \$1.33
- (M) PRESSURE ROLLER—3/4" O.D. For use with VM Model 700, 701, 710, 711, 714 tape recorders. Cat. No. 1458 Net \$1.20



PRESSURE ROLLER—3/4" O.D. For certain RCA & Wilcox-Gay tape recorders. Cat. No. 1457 Net \$1.75



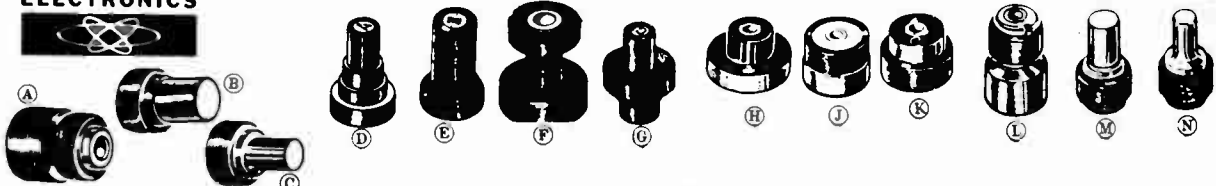
TAKE-UP DRIVER For use with VM tape recorder Model 700. Cat. No. 1484 Net \$3.92



SEND FOR FREE CATALOG of the complete UP-TO-DATE PHONO DRIVE LINE



PHONO DRIVES



- (A) Cat. No. 1460 78 RPM Net \$.95
1470 78 RPM Net 1.07
- (B) Cat. No. 1461 45 RPM Net \$.95
1471 45 RPM Net .92
- (C) Cat. No. 1462 33 1/3 RPM
1472 33 1/3 RPM Net \$.75

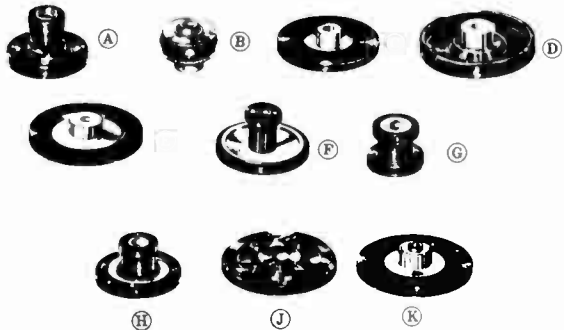
1460, 1461 and 1462 are a Turret Drive group that is used on Crescent, GE, Motorola, RCA, VM and other record changers.
The 1470 series is used on RCA, VM and other record changers.

NOTE: Drives No. 1460, 1461 and 1462 are the same as No. 1470, 1471 and 1472 except that the 1460 series is approximately 1/8" larger in rubber diameter than the 1470 series. If model number of changes or manufacturer's part number is not known, use 1460 series. For most purposes, these two series are interchangeable.

(D) 33 1/3 RPM PULLEY—1/2" O.D. Used on RCA, R.P.-205/190 series motors replaces Mfg.'s Part No. 102941. Cat. No. 1495-01 Net \$.95

(E) 45 RPM PULLEY—1/2" O.D. Used on RCA, R.P.-205/190 series motors. Replaces Mfg.'s Part No. 102942. Cat. No. 1495-02 Net \$.95
(F) 78 RPM PULLEY—1/2" O.D. Used on RCA, R.P.-205/190 series motors. Replaces Mfg.'s Part No. 102943. Cat. No. 1495-03 Net \$.95
(G) 16 RPM PULLEY—3/4" O.D. Used on RCA, R.P.-205/190 series motors. Replaces Mfg.'s Part No. 102944. Cat. No. 1495-04 Net \$.95
(H) Cat. No. 1463 78 RPM Net \$1.83 Standard Pack: 3

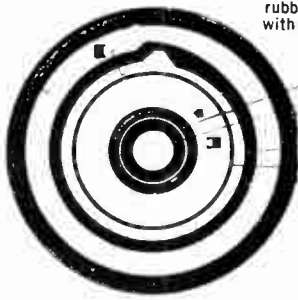
(J) Cat. No. 1464 45 RPM Net \$1.83 Standard Pack: 3
(K) Cat. No. 1465 33 1/3 RPM Standard Pack: 3 Net \$1.83
Above 3 items are turret drives for GE and Webcor record changers.
(L) Cat. No. 1466 78 RPM Net \$1.13
(M) Cat. No. 1467 45 RPM Net \$1.13
(N) Cat. No. 1468 33 1/3 RPM Net \$1.13
For use on Crescent, Motorola, VM, RCA and other record changers.



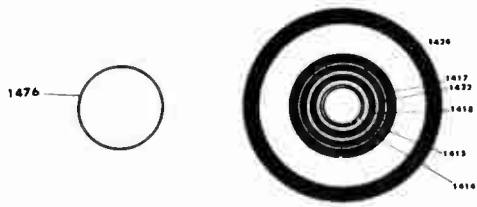
- (A) IDLER WHEEL—1 1/2" O.D. This is a molded rubber wheel for use on RCA Series RP-199 record changers. Cat. No. 1454 Net \$1.58
- (B) IDLER WHEEL—1" O.D. For use with all Zenith Cobra-Matic record changers. Cat. No. 1459 Net \$2.27
- (C) CAPSTAN IDLER—1 3/4" O.D. For use with VM tape recorders in the 700 series. Cat. No. 1485 Net \$1.10
- (D) IDLER WHEEL—2" O.D. Used on certain Eicor Tape Recorders and Silvertone Record Changers. Cat. No. 1475 Net \$1.77
- (E) IDLER WHEEL—2" O.D. For use with certain Pentron Tape Recorders. Cat. No. 1483 Net \$1.33

- (F) IDLER PULLEY—1 5/8" O.D. This is a molded rubber wheel for use on VM Record Changers in 1200 series. Also used on other types. Cat. No. 1453 Net \$2.08
- (G) IDLER PULLEY—1 3/4" O.D. A molder rubber wheel for use with VM Record Changers in the 1200 series having 4-pole motors. Cat. No. 1456 Net \$2.17
- (H) IDLER PULLEY—1 5/8" O.D. This is a molded rubber wheel for use on certain VM record changers. Cat. No. 1486 Net \$2.17
- (J) INTER WHEEL—2" O.D. For use with Garrard Model RC-80 Record Changers. Cat. No. 1444 Net \$2.08
- (K) INTER WHEEL—2" O.D. Has a ball-bearing hub cap. For use with Garrard T & TA record players. Cat. No. 1445 Net \$2.08

BELTS & CAM TIRES — Special Shapes. These belts and tires are made of highest quality abrasion-resistant neoprene rubber. Illustrations are actual size with cross-sections shown on tires.



INDEX FINGER CUSHION
Used on Webcor 100, 121, 1124 series. Also on Webcor 110 and 114 series.
Cat. No. 1419
Net \$.23 pr.



WALSCO TIRES & BELTS

| Cat. No. | I.D. | Wall Thickness | Length | Used on | Net |
|----------|--------|----------------|--------|-------------------------|-----------------|
| 1414 | 5/8" | 1/32" | 1/4" | Admiral, GE, VM | \$.20 per pair |
| 1415 | 3/32" | 1/32" | 1/4" | Garrard, GE, Phiico | .20 per pair |
| 1416 | 2 3/4" | 1/16" | 3/8" | Zenith | .22 each |
| 1417 | 1 1/2" | 3/32" | 3/8" | Admiral, Garrard | .18 each |
| 1418 | 7/8" | 1/8" | 3/8" | Genl. Ind., Wilcox-Gray | .15 each |
| 1424 | 2 7/8" | 1/8" | 1/4" | Admiral, Crescent, RCA | .40 each |
| 1476 | 1 3/8" | 1/32" | 1/4" | Admiral | .22 per pair |

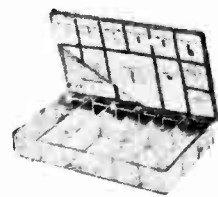
RUBBER BUMPERS—Used on VM Record Changers. Cat. No. 1411
Net \$.30 pr.



WALSCO RECORD ARM SLEEVE—For Garrard. Protects record arm and reduces vibration. Resilient, long-lasting neoprene rubber. (2 required).
Cat. No. 1412
Net \$.20 pr.

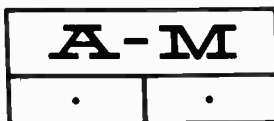


WALSCO VELOCITY TRIP—For Webcor, precision-molded to manufacturers specifications.
Cat. No. 1413
Net \$.22 pr.



PHONO DRIVE INVENTORY CASE—The Walsco Phono Inventory Case enables dealers to give better service to their customers by providing space for 90% of all Phono Drive Replacement needs. Combination loading chart and Manufacturer's Cross Reference chart.
Cat. No. 1403
Net \$2.82

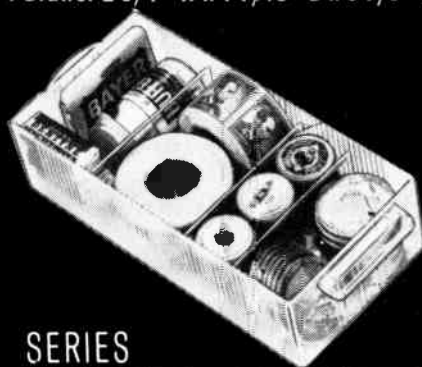
WALSCO PHONO HARDWARE KIT—Kit contains over 60 parts, including phono jacks and plugs, assorted screws, spacers and springs, in transparent plastic box.
Cat. No. 1497
Net \$1.82



Akro-Mils PARTS CABINETS

COMPACT SIZE

JD-1 Drawer 2-3/4" W x 1-7/16" D x 5-7/8" L



J SERIES

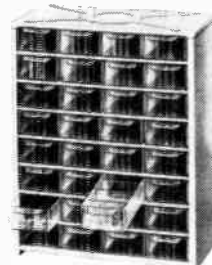
J SERIES COMPACT CABINETS with JD-1 Drawers

Welded all-steel cabinet. Hammertone silver-gray finish. "See-thru," spill-proof drawers. Stands, stacks, hangs on wall or can be integrated into shelving. Adjustable drawer dividers provide efficient storage for variety of small parts. Fully assembled. 2 labels per drawer and 1 long and 3 crosswise dividers with every 4 drawers.

| A-M Model | No. of Drawers | Size, Inches W. x D. x H. | Wt. Lbs. | Net Each |
|-----------|----------------|------------------------------|----------|----------|
| J-32 | 32 | 12-1/2 x 6 x 15-1/4 | 12-1/2 | \$11.98 |
| J-48 | 48 | 12-1/2 x 6 x 22-1/2 | 18 | 18.98 |
| J-64 | 64 | 25-1/8 x 6 x 15-1/4 | 24 | 23.98 |
| J-128 | 128 | 25-1/8 x 6 x 30-1/2 | 50 | 52.98 |

JD-1 DRAWER — Molded from crystal-clear styrene. Infinite flexibility of lengthwise or crisscross compartments. Measure scale on bottom for visual inventory.

D-JDA Crosswise Dividers — Net pkg. 50 \$1.25
D-JF Lengthwise Dividers — Net pkg. 25 1.25



J-32

KING-SIZE EXTRA-WIDE

M4 Drawer 4" W x 2" D x 11" L



M4 SERIES

M4 SERIES KING-SIZE EXTRA-WIDE CABINETS

For electronic parts, hardware, office and laboratory supply storage. May be used anywhere, stacked, hung on walls or integrated into shelving. Welded, all-steel construction. Baked-on, silver-gray, chip-proof finish. Complete with 1 crosswise divider per drawer, 1 lengthwise and 10 half-width dividers per cabinet; 2 sets of labels.

| A-M Model | No. of Drawers | Size, Inches W. x D. x H. | Wt. Lbs. | Net Each |
|-----------|----------------|------------------------------|----------|----------|
| M4B-12 | 12 | 17-7/8 x 11-1/16 x 9 | 14 | \$15.98 |
| M4B-16 | 16 | 17-7/8 x 11-1/16 x 11-3/4 | 17-1/4 | 20.98 |
| M4B-24 | 24 | 17-7/8 x 11-1/16 x 17-3/16 | 24-1/2 | 31.98 |
| M4B-40 | 40 | 17-7/8 x 11-1/16 x 28 | 47 | 52.98 |

M4 PLASTIC DRAWER — Durable, molded one-piece clear plastic. Full width handle. Rear stop tab. Full length runners for easy movement. Press-on front labels, inside slot labels. Removable dividers lock in, making from 2 to 12 equal-size or many odd-sized compartments.

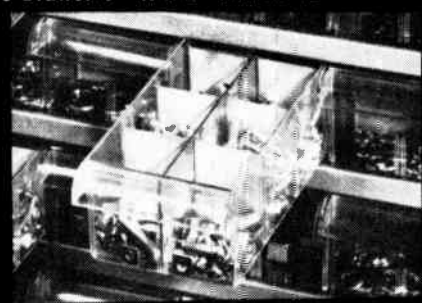
D-MF Lengthwise Dividers — Net pkg. 10 \$1.00
D-M4A Full-Width Dividers — Net pkg. 25 1.00
D-M4G Half-Width Dividers — Net pkg. 2570



M4B-40

KING-SIZE

M3 Drawer 3" W x 2" D x 11" L



M3 SERIES

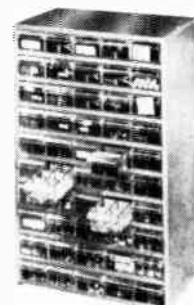
M3 SERIES KING-SIZE CABINETS

Provide unusual flexibility for small parts storage. Sturdy welded steel cabinet can be used alone, stacked, hung on wall or integrated into standard shelving. Complete with 1 crosswise divider per drawer; 1 lengthwise and 10 half-width dividers per cabinet; 2 sets of index labels.

| A-M Model | No. of Drawers | Size, Inches W. x D. x H. | Wt. Lbs. | Net Each |
|-----------|----------------|------------------------------|----------|----------|
| M3C-15 | 15 | 17-1/4 x 11-1/16 x 9 | 14 | \$17.00 |
| M3C-20 | 20 | 17-1/4 x 11-1/16 x 11-3/4 | 18 | 22.50 |
| M3C-30 | 30 | 17-1/4 x 11-1/16 x 17-3/16 | 26 | 33.50 |
| M3C-50 | 50 | 17-1/4 x 11-1/16 x 28 | 38-1/2 | 56.50 |

M3 PLASTIC DRAWER — Durable, molded one-piece clear plastic. Full width handle. Rear stop tab prevents accidental spilling. Press-on front labels, inside slot labels. Full length runners. Removable steel dividers lock in, making from 2 to 12 compartments.

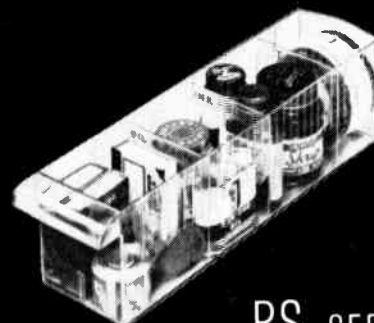
D-MF Lengthwise Dividers — Net pkg. 10 \$1.00
D-M3A Full-Width Dividers — Net pkg. 25 1.00
D-M3G Half-Width Dividers — Net pkg. 2570



M3C-50

SUPER-DEEP RPD-1 Drawer

2-7/8" W x 2-3/4" D x 11" L



RS SERIES

RS SERIES SUPER-DEEP CABINETS

All-steel frame. Baked-on hammer-tone silver gray finish. Can stand on any surface, stack or hang from wall. Labels for quick, easy indexing. Perfect storage and inventory of office supplies, hardware, electronic parts, etc. Fully assembled. 2 crosswise dividers per drawer. 1 lengthwise divider per cabinet. 2 sets of labels.

| A-M Model | No. of Drawers | Size, Inches W. x D. x H. | Wt. Lbs. | Net Each |
|-----------|----------------|------------------------------|----------|----------|
| RS-12 | 12 | 13-5/16 x 11-1/8 x 11 | 12-1/2 | \$13.50 |
| RS-16 | 16 | 13-5/16 x 11-1/8 x 14-1/2 | 16 | 18.50 |
| RS-32 | 32 | 13-5/16 x 11-1/8 x 28-1/2 | 28-1/2 | 37.00 |

RPD-1 PLASTIC DRAWER — Lifetime guarantee. Safety catch prevents spilling. Full length runners. Removable dividers allow for creation of compartments every 1/4" in a single drawer.

D-RA Crosswise Dividers — Net pkg. 25 \$1.25
D-MF Lengthwise Dividers — Net pkg. 10 1.00

RS-32

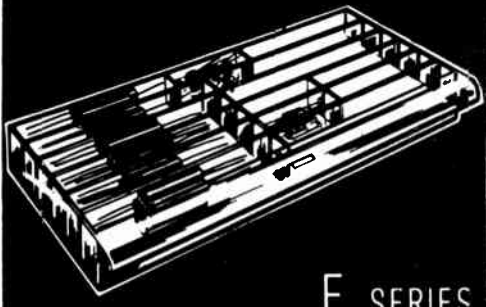


AKRO-MILS, Inc., Akron 9, Ohio 17-2C1



Akro-Mils PARTS CABINETS

6 Cash Register Style Compartments
E-1 Drawer 8-3/4" W x 1-3/16" D x 6" L



E SERIES

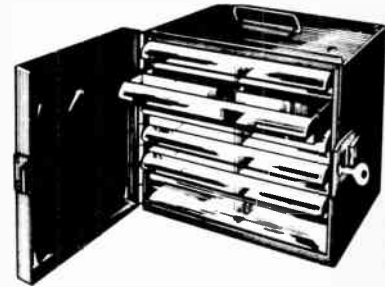


18EA
Electronic
Parts Cabinet

Perfect for resistors, capacitors, other delicate parts. Also coins, fishing items, jewelry, etc. Rigid welded steel frame with chip-proof enamel finish. 6 E-1 drawers with 2 labels and 9 removable dividers per drawer. List \$6.75.

E-1 DRAWER—6 full width cash register type compartments that divide at approx. 1/2" intervals. Easy to remove tiniest parts.

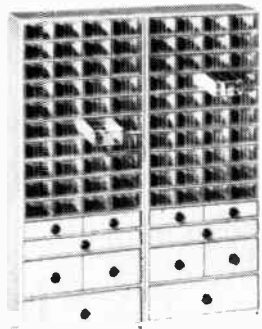
Model 18EA
10" W x 6"
D x 9" H
5 1/2 lbs.
Net ea. \$5.06



18ELA Portable Locking Cabinet
Includes steel door and lock. 4 E-1 drawers and 1 jumbo drawer... 8 3/4" W x 2 1/2" H x 5 3/4" D 1 divider with jumbo drawer. 2 labels and 9 dividers per each E-1 drawer. List \$8.25.

Model 18ELA
10" W x 6 1/2" D x 9" H
6 1/2 lbs. Net ea. \$6.19

J SERIES COMBINATION PARTS CABINET & TOOL CHEST



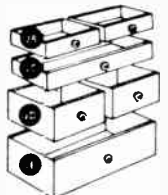
Permits storing together what you use together. JD-1 plastic drawers for small parts. Sturdy, seamless steel drawers for heavy tools, large parts. Labels for easy indexing. Welded steel cabinet stands, stacks or hangs on wall.

J32-6—8 JD-1, 2 JB, 1 JC, 2 JD and 1 JE drawers.
15 1/4" H x 6" D x 12 1/2" W
12 3/4 lbs. Net ea. \$12.88

J48-6—24 JD-1, 2 JB, 1 JC, 2 JD and 1 JE drawers.
22 1/2" H x 6" D x 12 1/2" W
18 1/2 lbs. Net ea. \$19.98

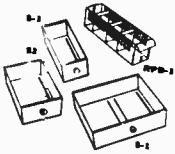
J128-12—80 JD-1, 4 JB, 2 JC, 4 JD and 2 JE drawers.
30 1/2" H x 6" D x 25 1/8" W
52 lbs. Net ea. \$54.98

J-128-12



DRAWER DIMENSIONS for J Combination Cabinets

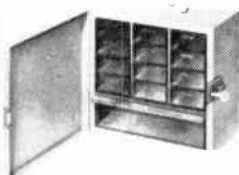
| A-M Model | Size, Inches, W x D x H | Material |
|-----------|-------------------------|----------|
| JB | 5-3/4 x 5-7/8 x 1-3/16 | Steel |
| JC | 11-1/2 x 5-7/8 x 1-7/16 | Steel |
| JD | 5-3/4 x 5-7/8 x 3-1/8 | Steel |
| JE | 11-1/2 x 5-7/8 x 3-1/8 | Steel |
| JD-1 | 2-3/4 x 5-7/8 x 1-7/16 | Plastic |



DRAWER DIMENSIONS for RS Combination Cabinets

| A-M Model | Size, Inches, W x D x H |
|-----------|-------------------------|
| S1 | 12 x 11 x 2 3/4 |
| S2 | 6 x 11 x 2 3/4 |
| S3 | 4 x 11 x 2 3/4 |
| RPD-1 | 2 7/8 x 11 x 2 3/4 |

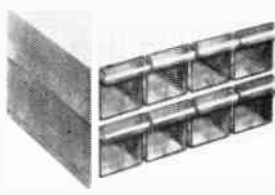
All S drawers are steel. RPD-1 of plastic.



Model 18PA
10" W x 6" D x 9" H
6 1/2 lbs.
Net each \$5.63

GUARDIAN LOCKING CABINET

The safe way to store, protect and transport small articles. Hangs on wall for small parts storage in the workshop or for locking up harmful drugs or hobby items. May also be used as a portable medicine chest or repair kit. Contents cannot spill. Locking, hinged door provides protection from dust, moisture and theft. Rigid, welded steel frame has silver gray finish that will not chip or rub off. Twelve small drawers, 2 3/4" W x 1 1/4" H x 5 3/4" D, and one jumbo drawer, 8 3/4" W x 2 1/2" H x 5 3/4" D. One removable divider per drawer included. Fully adjustable from front to rear. List \$7.50.



PP-8A PLASTIC FRAME CABINET with 8 Super Deep Drawers

RPD-1 Drawers: 2 7/8" W x 11" D x 2 3/4" H
Extra storage capacity with RPD-1 plastic drawers. For office or desk use. Built-in safety catch prevents accidental spilling. 2 drawers with 16 dividers. Cabinet: 13-3/4" W x 11-1/8" D x 6-15/16" H. 6 1/2 lbs. List \$10.50.
Net each \$7.88

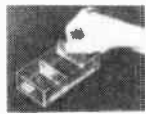
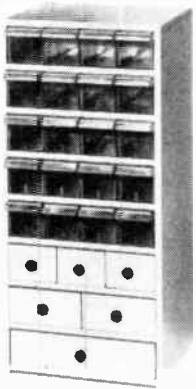
RS SERIES COMBINATION PARTS CABINET & TOOL CHEST

Store tools and parts together in one convenient place. Welded steel cabinet may be used singly, stacked, hung on wall or integrated into standard shelving.

RS16-6—4 RPD-1, 1 S1, 2 S2 and 3 S3 drawers.
14-1/2" H x 11-1/8" D x 13-5/16" W
19 lbs. Net ea. \$18.50

RS32-6—20 RPD-1, 1 S1, 2 S2 and 3 S3 drawers.
28-1/8" H x 11-1/8" D x 13-5/16" W
31 lbs. Net ea. \$37.00

RS32-6

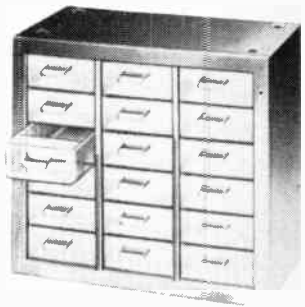


HANDY BIN STEEL CABINETS

PM-1 Drawers: 2 3/4" W x 1 1/4" H x 5 1/4" D
For storing small parts where they are quickly accessible. Welded steel cabinet can be used singly, stack or hung on wall. Durable, molded one-piece plastic drawers can be divided into infinite variety of crosswise, lengthwise or criss-cross compartments. Index labels and 1 divider per drawer. List \$5.98.

18HBA—18 drawers
10" W x 9-1/16" H x 6" D
5 lbs. Net ea. \$4.89

D-PMA Crosswise Dividers — Net pkg. 5C
D-JF Lengthwise Dividers — Net pkg. 25



\$1.25
1.25

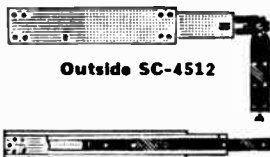
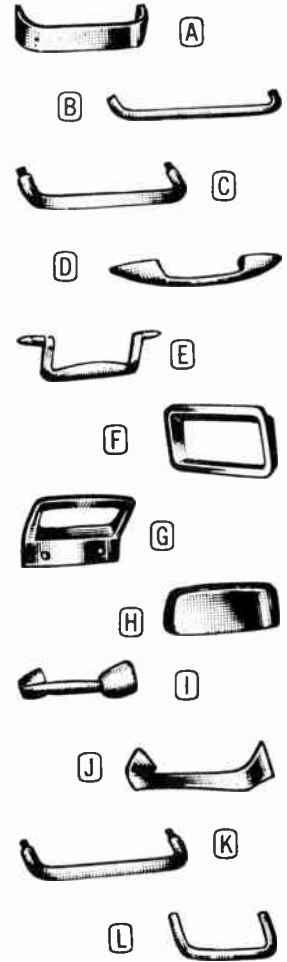


Cabinet Hardware

BUD HANDLES

Fabricated from steel, brass or cast aluminum. Durable finish provides long wear and attractive appearance. Packaged in pairs only with all necessary mounting hardware. Designed for rugged applications, they have unlimited use in electronic, electrical and other fields.

| Bud No. | Fig. | Description | Net Per Pair, Lots of | | |
|---------|------|--|-----------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| H-9100 | A | 1" x 1/4" chrome-plated solid brass; 4" x 1/2" mtg. ctrs.; 1" hand clearance; four 1/2" x 6-32 threaded screws | \$3.96 | \$3.56 | \$3.17 |
| H-9101 | A | Same, but 8" x 1/2" mtg. centers | 6.15 | 5.54 | 4.92 |
| H-9102 | A | 3/8" x 1/4" chrome-plated solid brass; 4" mtg. centers; 1" hand clearance; two 1/2" x 6-32 threaded screws | 3.15 | 2.84 | 2.52 |
| H-9103 | A | Same, but has 6" mounting centers | 3.60 | 3.24 | 2.88 |
| H-9110 | B | 3/8" steel rod angular formed, chrome-plated; 6" mtg. ctrs.; 1 1/4" hand clearance; two 1/2" x 10-32 threaded screws | 2.79 | 2.51 | 2.23 |
| H-9111 | B | Same, but 4" mtg. ctrs and 1" hand clearance | 1.50 | 1.35 | 1.20 |
| H-9112 | B | 6" mtg. center version of H-9111 | 1.89 | 1.70 | 1.51 |
| H-9113 | B | 8" mtg. center version of H-9111 | 2.10 | 1.89 | 1.68 |
| H-9114 | B | 1/2" steel rod, chrome-plated; 8" mtg. centers; 1 1/2" hand clearance; two 1/2" x 1/4-28 thd. screws | 3.10 | 3.16 | 2.81 |
| H-9115 | C | 3/8" steel rod, chrome-plated; 4" mtg. ctrs.; 1 1/4" hand clearance; two 1/2" x 10-32 thd. nuts | 2.40 | 2.16 | 1.92 |
| H-9116 | C | Same, but has 6" mtg. centers | 3.00 | 2.70 | 2.40 |
| H-9120 | D | Silver-anodized die-cast aluminum; 4 3/4" inside, 5 3/8" outside mtg. centers; 1" hand clearance; four 1/2" x 6-32 threaded screws | 3.51 | 3.16 | 2.81 |
| H-9121 | D | Same, except chrome plated alloy | 4.95 | 4.46 | 3.96 |
| H-9123 | D | Similar to H-9120 but 4 1/2" mtg. centers; 1" hand clearance; two 1/2" x 10-32 thd. screws | 2.61 | 2.35 | 2.09 |
| H-9122 | E | Silver-anodized die-cast aluminum; hinged on 1/2" steel pins with 2 hinge blocks; 6 1/2" inside, 7 1/2" outside mtg. centers; 1 1/2" hand clearance; four 3/8" x 10-32 threaded screws | 5.94 | 5.35 | 4.95 |
| H-9130 | F | Silver-anodized die-cast aluminum; 3" mtg. centers; two 3/8" x 10-32 thd. screws; size 4 1/8" x 3" | 5.25 | 4.73 | 4.20 |
| H-9131 | G | Silver-anodized die-cast aluminum; size, 4" x 2 1/4"; 2 1/4" mtg. centers; two 1/2" x 1/4-28 thd. raised, counter-sunk screws and nuts | 3.80 | 3.51 | 3.12 |
| H-9140 | H | Silver-anodized die-cast aluminum; 3 1/4" mtg. centers; 3/4" hand clearance; two 1/2" x 10-32 threaded screws | 2.34 | 2.11 | 1.87 |
| H-9150 | I | Silver-anodized die-cast aluminum; 4" x 3/4" mtg. centers; 1 1/4" hand clearance; four 1/2" x 10-32 threaded screws | 3.15 | 2.84 | 2.52 |
| H-9151 | J | Silver-anodized die-cast aluminum; 5 1/8" x 3/4" mtg. centers; 1 1/2" hand clearance; four 1/2" x 10-32 threaded screws | 5.10 | 4.59 | 4.08 |
| H-9152 | J | Similar to above except 3 3/4" mtg. centers; 1 1/2" hand clearance; two 1/2" x 10-32 threaded screws | 4.14 | 3.73 | 3.31 |
| H-9160 | K | Chrome-plated 3/8" steel rod; 3 1/2" mtg. centers; 1 1/4" hand clearance; two 1/2" x 28 hex nuts | 2.70 | 2.43 | 2.16 |
| H-9161 | K | Same, but with 5 1/2" mounting centers | 3.15 | 2.84 | 2.52 |
| H-9162 | K | Same, but with 7" mounting centers | 3.24 | 2.92 | 2.59 |
| H-9163 | K | Same, but with 8 1/2" mounting centers | 3.35 | 3.16 | 2.81 |
| H-9164 | K | Same, but with 10 1/2" mounting centers | 3.98 | 3.56 | 3.17 |
| H-9165 | K | Same, but with 12 1/2" mounting centers | 4.35 | 3.92 | 3.48 |
| H-9166 | L | Chrome-plated 1/2" brass rod; 1 1/4" mtg. centers; 1" hand clearance; two 1/2" x 6-32 thd. screws | 1.20 | 1.08 | .96 |
| H-9168 | L | Same, but with 3" mounting centers | 1.35 | 1.22 | 1.08 |



Outside SC-4512

Inside SC-4312

Precision built slides for smooth operation, long life under repeated movement conditions. Use with full 17" chassis in std. 19" panel rack or cabinet. Drilled for either panel rail bracket or direct slide rail mounting. Brackets and hardware supplied. "Quick detach" models permit change of instrumentation at point of use with infinitesimal delay in exchange. "SC" Series: For commercial uses where top quality and performance is required, but MIL specs are not. Load ratings conservative with plus factor of at least 2:1 under normal conditions. "SI" Series: Adhere to MIL specifications for industrial or military requirements. Channels 7075T6 aluminum extrusions per QQ-A-277; parts of 302 stainless steel per MIL-S-5059A; bearings are 440 stainless steel per QQ-S-763. Aluminum parts anodized per MIL-A-8625A; stainless steel parts passivated per MIL-S-5002. Lubricant is hi-low temp. grease per MIL-G-3278. Load rating extra conservative with plus factor of at least 3:1 under normal conditions.

CHASSIS SLIDES

"SC" SERIES

| Bud No. | Description | Load Cap. Per Pair | Net Each, Lots of | | |
|---------|--|--------------------|-------------------|---------|---------|
| | | | 1-14 | 15-24 | 25-34 |
| SC-4312 | Full ball-bearing slide 12" long; 12" travel; height, 2"; inner members do not disconnect or tilt; aluminum extrusions of 2014T6 per QQ-A-261; precision broached for flawless operation | 150 lbs. | \$27.15 | \$24.45 | \$21.70 |
| SC-4316 | Same, but 16" long; 16" travel | 110 lbs. | 29.10 | 26.20 | 23.30 |
| SC-4320 | Same, but 20" long; 20" travel | 95 lbs. | 31.80 | 28.60 | 25.45 |
| SC-4412 | Same, but outer track ball bearing, inner track dry lubricated friction type; quick detach facility; locks in extended position; height 2"; 12" long; 12" travel | 150 lbs. | 39.30 | 35.35 | 31.45 |
| SC-4416 | Same as SC-4412 but 16" long; 16" travel | 110 lbs. | 42.15 | 37.95 | 33.70 |
| SC-4420 | Same as SC-4412, but 20" long; 20" travel | 95 lbs. | 44.10 | 39.70 | 35.30 |
| SC-4512 | Quick detach, tilting slide with lock in extended position. Permits 90° tilt of chassis below horizontal position in 45° increments; height, 3 1/2"; 12" long; 12" travel | 275 lbs. | 56.25 | 50.65 | 45.00 |
| SC-4516 | Same, but 16" long; 16" travel | 215 lbs. | 60.90 | 54.80 | 48.70 |
| SC-4520 | Same, but 20" long; 20" travel | 180 lbs. | 64.65 | 58.20 | 51.70 |

"SI" SERIES

| | | | | | |
|---------|---|----------|---------|---------|---------|
| SI-4212 | Ball-bearing; 12" long; 12" travel; 3 1/2" high | 275 lbs. | \$41.25 | \$37.15 | \$33.00 |
| SI-4216 | Same, but 16" long; 16" travel | 225 lbs. | 45.00 | 40.50 | 36.00 |
| SI-4220 | Same, but 20" long; 20" travel | 180 lbs. | 48.75 | 43.90 | 39.00 |
| SI-4012 | Same as SI-4212 except outer track ball bearing; inner, dry-lubricated friction type; quick disconnect; extended lock position; 12" long; 12" travel; 3 1/2" high | 275 lbs. | 48.75 | 43.90 | 39.00 |
| SI-4016 | Same, but 16" long; 16" travel | 225 lbs. | 53.40 | 48.15 | 42.80 |
| SI-4020 | Same, but 20" long; 20" travel | 180 lbs. | 59.10 | 53.20 | 47.30 |
| SI-4112 | Similar to SI-4012, but with tilting action 90° above and below horizontal in 45° increments; 12" long; 12" travel; 3 1/2" high | 275 lbs. | 64.65 | 58.20 | 51.70 |
| SI-4116 | Same, but 16" long; 16" travel | 225 lbs. | 69.30 | 62.35 | 55.45 |
| SI-4120 | Same, but 20" long; 20" travel | 180 lbs. | 72.15 | 64.95 | 57.70 |

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Imlok "Prototyper" Cabinets

System of metal cabinet construction, ideal for research and prototype work, permits quick assembly of cases, cabinets and racks using the simplest of tools. Complex structures may be built to your design using a variety of corner castings and extrusions held rigidly with friction clips or screws. Panels may be cut to size from sheet aluminum or steel, fitted grooves or screw fastened. No grinding or welding needed.

EXTERNAL CORNER CONNECTORS

| Bud No. | Description | Net Each, Lots of | | |
|---------|--|-------------------|--------|--------|
| | | 1-14 | 15-24 | 25 Up |
| BI-1001 | 90° basic corner connector for rectangular cabinets. Use with BI-2004, BI-2014, BI-2024, BI-2034, BI-2044, BI-2054 or BI-2064 extrusions. | \$0.96 | \$0.86 | \$0.77 |
| BI-1016 | 67½° corner connector holds vertical wall and horizontal wall to a third rising at 67½° to the horizontal. One leg fits BI-2041 extrusion; other two fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1024 | 60° corner connector similar to BI-1016. One leg fits BI-2081; other legs fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1002 | 45° corner connector similar to BI-1016. One leg fits BI-2005, BI-2015, or BI-2025; other two legs fit any 90° external extrusion. | .96 | .86 | .77 |
| BI-1020 | 30° corner connector similar to BI-1016. One leg fits BI-2061; other two legs fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1012 | 22½° corner connector similar to BI-1016. One leg fits BI-2021; other two legs fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |

EXTERNAL STANDARD EXTRUSIONS

| Bud No. | Description | Net Each, Lots of | | |
|-----------|---|-------------------|---------|---------|
| | | 1-9 | 10-14 | 15 Up |
| BI-2004 | 12 ft. long, 90° external extrusion most used; has panel retaining groove on each flange for 0.050" panels. Ideal for small to medium sized structures with unbraced spaces up to 2 ft. long. | \$ 7.44 | \$ 6.70 | \$ 5.95 |
| BI-2004-3 | 3 ft. length BI-2004 | 2.18 | 1.96 | 1.74 |
| BI-2004-6 | 6 ft. length BI-2004 | 4.13 | 3.72 | 3.30 |
| BI-2004-9 | 9 ft. length BI-2004 | 5.93 | 5.34 | 4.74 |
| BI-2064 | 12 ft. long, 90° extrusion with panel retaining flange to take 26 gauge panels. | 8.27 | 7.44 | 6.62 |
| BI-2064-3 | 3 ft. length BI-2064 | 2.40 | 2.16 | 1.92 |
| BI-2064-6 | 6 ft. length BI-2064 | 4.58 | 4.10 | 3.64 |
| BI-2064-9 | 9 ft. length BI-2064 | 6.53 | 5.88 | 5.22 |
| BI-2041 | 12 ft. long, 67½° extrusion; companion to BI-1016 for unbraced spans up to 3 ft. long. | 11.37 | 10.23 | 9.10 |
| BI-2041-3 | 3 ft. length BI-2041 | 3.30 | 2.97 | 2.64 |
| BI-2041-6 | 6 ft. length BI-2041 | 6.30 | 5.67 | 5.04 |
| BI-2041-9 | 9 ft. length BI-2041 | 9.00 | 8.10 | 7.20 |
| BI-2081 | 12 ft. long, 60° extrusion; companion to BI-1024 connector. For unbraced spans up to 3 ft. long. | 11.37 | 10.23 | 9.10 |
| BI-2081-3 | 3 ft. length BI-2081 | 3.30 | 2.97 | 2.64 |
| BI-2081-6 | 6 ft. length BI-2081 | 6.30 | 5.67 | 5.04 |
| BI-2081-9 | 9 ft. length BI-2081 | 9.00 | 8.10 | 7.20 |
| BI-2005 | 12 ft. long, 45° extrusion used with BI-1002 connector; for spans up to 2 ft. long. | 8.00 | 7.20 | 6.40 |
| BI-2005-3 | 3 ft. length BI-2005 | 2.33 | 2.10 | 1.86 |
| BI-2005-6 | 6 ft. length BI-2005 | 4.43 | 3.99 | 3.54 |
| BI-2005-9 | 9 ft. length BI-2005 | 6.30 | 5.67 | 5.04 |
| BI-2061 | 12 ft. long, 30° extrusion used with BI-1020 connector. | 11.37 | 10.23 | 9.10 |
| BI-2061-3 | 3 ft. length BI-2061 | 3.30 | 2.97 | 2.64 |
| BI-2061-6 | 6 ft. length BI-2061 | 6.30 | 5.67 | 5.04 |
| BI-2061-9 | 9 ft. length BI-2061 | 9.00 | 8.10 | 7.20 |
| BI-2021 | 12 ft. long, 22½° extrusion used with BI-1012 connector. | 11.37 | 10.23 | 9.10 |
| BI-2021-3 | 3 ft. length BI-2021 | 3.30 | 2.97 | 2.64 |
| BI-2021-6 | 6 ft. length BI-2021 | 6.30 | 5.67 | 5.04 |
| BI-2021-9 | 9 ft. length BI-2021 | 9.00 | 8.10 | 7.20 |
| BI-2014 | 12 ft. long, 90° strengthened extrusion similar to BI-2004 but stronger for use in unbraced spans up to 3 ft. long. | 8.27 | 7.44 | 6.62 |
| BI-2014-3 | 3 ft. length BI-2014 | 2.40 | 2.16 | 1.92 |
| BI-2014-6 | 6 ft. length BI-2014 | 4.58 | 4.12 | 3.66 |
| BI-2014-9 | 9 ft. length BI-2014 | 6.53 | 5.89 | 5.22 |
| BI-2015 | 12 ft. long, 45° external strengthened extrusion used in place of BI-2005 in unbraced spans up to 3 ft. long. | 9.65 | 8.69 | 7.72 |
| BI-2015-3 | 3 ft. length BI-2015 | 2.78 | 2.50 | 2.22 |
| BI-2015-6 | 6 ft. length BI-2015 | 5.33 | 4.80 | 4.26 |
| BI-2015-9 | 9 ft. length BI-2015 | 7.65 | 6.89 | 6.12 |
| BI-2054 | 12 ft. long, 90° strengthened extrusion with two ¼" extended flanges to take standard ¼"; retaining groove at root of flanges. | 12.78 | 11.50 | 10.22 |
| BI-2054-3 | 3 ft. length BI-2054 | 3.68 | 3.31 | 2.94 |
| BI-2054-6 | 6 ft. length BI-2054 | 7.05 | 6.35 | 5.64 |
| BI-2054-9 | 9 ft. length BI-2054 | 10.13 | 9.12 | 8.10 |
| BI-2024 | 12 ft. long, 90° strengthened extrusion with one flange extended ¾" to fit ¾" panel; other has normal panel-retaining groove | 10.25 | 9.23 | 8.20 |
| BI-2024-3 | 3 ft. length BI-2024 | 3.00 | 2.70 | 2.40 |
| BI-2024-6 | 6 ft. length BI-2024 | 5.70 | 5.13 | 4.56 |
| BI-2024-9 | 9 ft. length BI-2024 | 8.10 | 7.29 | 6.48 |
| BI-2025 | 12 ft. long, 45° strengthened extrusion with one ¾" extended flange for ¾" panel and one normal panel-retaining groove flange. | 10.83 | 9.75 | 8.66 |
| BI-2025-3 | 3 ft. length BI-2025 | 3.15 | 2.84 | 2.52 |
| BI-2025-6 | 6 ft. length BI-2025 | 6.00 | 5.40 | 4.80 |
| BI-2025-9 | 9 ft. length BI-2025 | 8.55 | 7.70 | 6.84 |
| BI-2034 | 12 ft. long, 90° heavy-duty extrusion takes loadings for spans over 3 ft. long. Additional returns reinforce strength. Flanges are both ¾" deep. | 16.79 | 15.11 | 13.43 |
| BI-2034-3 | 3 ft. length BI-2034 | 4.88 | 4.39 | 3.90 |
| BI-2034-6 | 6 ft. length BI-2034 | 9.30 | 8.37 | 7.44 |
| BI-2034-9 | 9 ft. length BI-2034 | 13.28 | 11.95 | 10.62 |
| BI-2044 | 12 ft. long, 90° reinforcing angle screws to return flanges of BI-2034 for extra rigid, boxed in section. Use with heavy-duty BI-1011 spacer bar and BI-2018 and BI-2028 extrusions to build almost any size structure. | 6.66 | 5.99 | 5.33 |
| BI-2044-3 | 3 ft. length BI-2044 | 2.45 | 2.21 | 1.96 |
| BI-2044-6 | 6 ft. length BI-2044 | 3.68 | 3.31 | 2.94 |
| BI-2044-9 | 9 ft. length BI-2044 | 5.25 | 4.73 | 4.20 |

Typical Structures

SPECIAL CONNECTORS, ACCESSORIES

No. BI-1003—T-junction connector permits making "T" with 2 lengths of extrusions; also used for picture frame effect. Fits 90° external extrusions.

No. BI-1005—90° table-top or foot connector used in place of radiused corner; has well to hold glass or wood table-top. Used also as foot or as wall mount. One leg fits 90° external extrusion; other two fit BI-2009.

No. BI-1008—Stacking plate for use with BI-1005 to permit stacking.

No. BI-1009—90° spacer bar cruciform connector.

No. BI-4001—Package of 50 friction clips; for assembly without use of screws.

No. BI-4302—Concealed brass hinge fits 90° extrusions; 3 mounting holes take 6-32 or 10-32 screws.

No. BI-4601—Chrome plated ventilation ring for dress-up. Used in addition to slots and louvers. Clips (supplied) into 2½" hole. Has stainless steel gauze.

| Bud No. | Net Each, Lots of | | |
|---------|-------------------|--------|--------|
| | 1-14 | 15-24 | 25 Up |
| BI-1003 | \$0.96 | \$0.86 | \$0.77 |
| BI-1005 | 1.26 | 1.13 | 1.01 |
| BI-1008 | .63 | .57 | .50 |
| BI-1009 | 1.76 | 1.58 | 1.41 |
| BI-4001 | 1.26 | 1.13 | 1.01 |
| BI-4302 | 1.76 | 1.58 | 1.41 |
| BI-4601 | 2.87 | 2.58 | 2.30 |



Imlok "Prototyper" Cabinets

INTERNAL EXTRUSIONS

| Bud No. | Description | Net Each, Lots of | | |
|------------------|---|-------------------|---------|---------|
| | | 1-9 | 10-14 | 15 Up |
| BI-2032 | 12 ft. long, 90° internal extrusion to fit BI-1028; has two panel retaining grooves; for unbraced spans up to 3 ft. long. | \$12.81 | \$11.53 | \$10.25 |
| BI-2032-3 | 3 ft. length BI-2032 | 3.75 | 3.38 | 3.00 |
| BI-2032-6 | 6 ft. length BI-2032 | 7.05 | 6.35 | 5.64 |
| BI-2032-9 | 9 ft. length BI-2032 | 10.15 | 9.14 | 8.12 |
| BI-2051 | 12 ft. long, 67½° internal extrusion to fit BI-1017 connector. For use in unbraced spans up to 3 ft. | 11.37 | 10.23 | 9.10 |
| BI-2051-3 | 3 ft. length BI-2051 | 3.30 | 2.97 | 2.64 |
| BI-2051-6 | 6 ft. length BI-2051 | 6.30 | 5.67 | 5.04 |
| BI-2051-9 | 9 ft. length BI-2051 | 9.00 | 8.10 | 7.20 |
| BI-2091 | 12 ft. long, 60° internal extrusion; fits BI-1025 connector. | 11.37 | 10.23 | 9.10 |
| BI-2091-3 | 3 ft. length BI-2091 | 3.30 | 2.97 | 2.64 |
| BI-2091-6 | 6 ft. length BI-2091 | 6.30 | 5.67 | 5.04 |
| BI-2091-9 | 9 ft. length BI-2091 | 9.00 | 8.10 | 7.20 |
| BI-2006 | 12 ft. long, 45° internal extrusion has two ½" flanges, one with panel-retaining groove. For flat-topped, sloping front cabinets. | 11.66 | 10.49 | 9.33 |
| BI-2006-3 | 3 ft. length BI-2006 | 3.38 | 3.04 | 2.70 |
| BI-2006-6 | 6 ft. length BI-2006 | 6.45 | 5.81 | 5.16 |
| BI-2006-9 | 9 ft. length BI-2006 | 9.23 | 8.31 | 7.38 |
| BI-2071 | 12 ft. long, 30° internal extrusion; fits BI-1021 connector. | 11.37 | 10.23 | 9.10 |
| BI-2071-3 | 3 ft. length BI-2071 | 3.30 | 2.97 | 2.64 |
| BI-2071-6 | 6 ft. length BI-2071 | 6.30 | 5.67 | 5.04 |
| BI-2071-9 | 9 ft. length BI-2071 | 9.00 | 8.10 | 7.20 |
| BI-2031 | 12 ft. long, 22½° internal extrusion; fits BI-1013 connector. | 11.37 | 10.23 | 9.10 |
| BI-2031-3 | 3 ft. length BI-2031 | 3.30 | 2.97 | 2.64 |
| BI-2031-6 | 6 ft. length BI-2031 | 6.30 | 5.67 | 5.04 |
| BI-2031-9 | 9 ft. length BI-2031 | 9.00 | 8.10 | 7.20 |

SPACER BAR AND TABLE-TOP EXTRUSIONS

| | | | | |
|------------------|---|---------|---------|---------|
| BI-2008 | 12 ft. long, spacer bar extrusion used to subdivide panels or act as cross-bracing members. | \$20.33 | \$18.30 | \$16.26 |
| BI-2008-3 | 3 ft. length BI-2008 | 5.85 | 5.27 | 4.68 |
| BI-2008-6 | 6 ft. length BI-2008 | 11.18 | 10.06 | 8.94 |
| BI-2008-9 | 9 ft. length BI-2008 | 16.13 | 14.52 | 12.90 |
| BI-2009 | 12 ft. long, table-top extrusion for use at base of cabinet, as vertical member where double radius between cabinets is undesirable. Has flange with normal retaining groove; other is 1" deep to support table or bench top. | 10.25 | 9.23 | 8.20 |
| BI-2009-3 | 3 ft. length BI-2009 | 3.00 | 2.70 | 2.40 |
| BI-2009-6 | 6 ft. length BI-2009 | 5.70 | 5.13 | 4.56 |
| BI-2009-9 | 9 ft. length BI-2009 | 8.10 | 7.29 | 6.48 |

EXTERNAL SPACER BAR CONNECTORS

| Bud No. | Description | Net Each, Lots of | | |
|----------------|---|-------------------|--------|--------|
| | | 1-14 | 15-24 | 25 Up |
| BI-1011 | This connector specially designed for use with 90° external heavy duty extrusion BI-2034. One leg fits this extrusion as well as all other 90° external extrusions. The other two legs fit BI-2008, 67½° external spacer bar connector; brace or sub-divide walls where BI-1016 is used at corners. One leg fits BI-2041; other two fit any spacer bar extrusion. | \$1.35 | \$1.22 | \$1.08 |
| BI-1018 | 67½° external spacer bar connector; brace or sub-divide walls where BI-1016 is used at corners. One leg fits BI-2041; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1026 | 60° version of BI-1018. One leg fits BI-2081; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1007 | 45° version of BI-1018. One leg fits BI-2005, BI-2015 or BI-2025; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1022 | 30° version of BI-1018. One leg fits BI-2061 extrusion; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1014 | 22½° version of BI-1018. One leg fits BI-2021; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |

INTERNAL CORNER CONNECTORS

| | | | | |
|----------------|---|--------|--------|--------|
| BI-1028 | 90° internal connector gives an included angle of 90° for L-shaped structures. One leg fits BI-2032 extrusion; other two fit any 90° external extrusion, (BI-2004, BI-2014, BI-2024, BI-2034, BI-2054). | \$1.35 | \$1.22 | \$1.08 |
| BI-1017 | 67½° internal connector used where two walls are to meet to include a 67½° angle. One leg fits BI-2051 extrusion; other two fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1025 | 60° version of BI-1017. One leg fits BI-2091; other two fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1006 | 45° version of BI-1017. One leg fits BI-2006; other two fit any 90° external extrusion. Helps make flat top, sloping front structure. | 1.26 | 1.13 | 1.01 |
| BI-1021 | 30° version of BI-1017. One leg fits BI-2071; other two fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1013 | 22½° version of BI-1017. One leg fits BI-2031; other two fit any 90° external extrusion. | 1.35 | 1.22 | 1.08 |

INTERNAL SPACER BAR CONNECTORS

| | | | | |
|----------------|---|--------|--------|--------|
| BI-1029 | 90° internal spacer connector permits bracing or sub-division of spans of BI-2032. One leg fits BI-2032 internal extrusion; other two fit BI-2008 spacer bar extrusion. | \$1.35 | \$1.22 | \$1.08 |
| BI-1019 | 67½° internal spacer bar connector is companion to BI-1017 for sub-dividing or cross-bracing. One leg fits BI-2051; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1027 | 60° version of BI-1019 above; companion for BI-1025. One leg fits BI-2091; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1010 | 45° version of BI-1019; companion for BI-1006. One leg fits BI-2006; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1023 | 30° version of BI-1019; companion to BI-1021. One leg fits BI-2071; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |
| BI-1015 | 22½° version of BI-1019; companion to BI-1013. One leg fits BI-2031; other two fit any spacer bar extrusion. | 1.35 | 1.22 | 1.08 |

CUTTING JIGS

| Bud No. | Description | Net Each, Lots of | | |
|----------------|--|-------------------|---------|---------|
| | | 1-4 | 5-9 | 10 Up |
| BI-3003 | 90° cutting jig permits easy mitering of any 90° external extrusion. Makes assembly quick, easy. | \$15.80 | \$14.22 | \$12.64 |
| BI-3002 | 45° cutting jig for mitering any 45° external extrusion. | 15.80 | 14.22 | 12.64 |



BI-1001



BI-1003



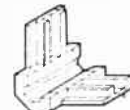
BI-2009



BI-1009



BI-1028



BI-2009



BI-2004



BI-2006



BI-1009



BI-2024



BI-2032



BI-2034



BI-2044



BI-2008



BI-3003



BI-4601

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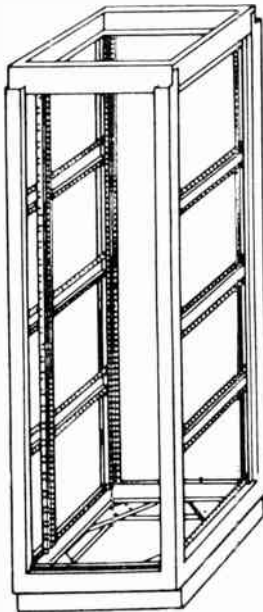
Series "60" Racks

Scientifically designed to meet all requirements for human needs as well as component physical specifications; the most practical cabinet rack developed for either a single piece of equipment or a large instrumentation system. Very economical to the user, units are shipped fully assembled and ready for immediate use.

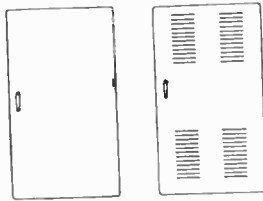
Basic frame welded in a solid unit composed of 14-gauge cold-rolled steel channels. Sides have "U" braces with perforated channels for fastening vertical adjustable mounting rails. Rails also support other types of equipment such as brackets, shelves, slides, etc. Eliminates need of drilling holes in the rack. Sides and rear door made of 16 gauge steel. Door may be mounted to open left or right. Vertical channel, 6" wide, welded to door to prevent vibration or whip. Two pairs of panel mounting rails are supplied; fully adjustable. Panels may be mounted in front and rear at the same time. Front rails drilled and tapped 10-32 W.E. spacing. Rear rails are drilled according to universal spacing.

All Series Sixty enclosures may be quickly combined with each other to create units of any desired width as shown in the Add-A-Rack series. In addition, such accessories as desk tops, turrets, drawers, slides, sloping panel supports and front door are easily installed.

Standard finishes are smooth baked enamel over a primer. For two-tone gray, specify by adding suffix **SG**. For two-tone blue, add suffix **SB** to order number. Standard Bud relay rack panels are available for the Series Sixty racks in light gray and light blue; when ordering, add suffix **SG** for gray; **SB** for blue.

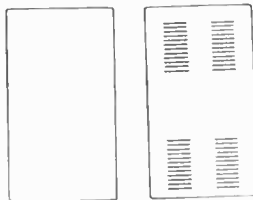


Upright Rack



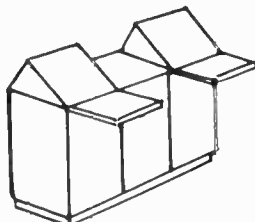
Plain Door

Louvered Door

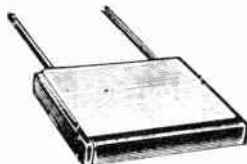


Plain Side

Louvered Side



Typical Assembly



Desk Top

UPRIGHT CABINET RACKS

Completely assembled with sides, rear door and top. Standard units have plain sides and door, solid top. For greater ventilation, order units with louvered sides and/or rear door; both, with solid top. Width, 24 3/8", all units. Inside depth 20 1/4" clear on units with 22" outside depth; 23 3/4", all others. Top opening 18 1/2" w. x 17" d. on units with 22" outside depth; 18 1/2" w. x 20 1/2" d., all others. Specify Color When Ordering: Add suffix **SG** to number for gray; suffix **SB** for blue.

| With Plain Sides and Door | | | | Height | Out-side Depth | Panel Space | Wt., Lbs. | Louvered Sides, Plain Door | | | |
|---------------------------|----------|----------|----------|---------|----------------|-------------|-----------|----------------------------|----------|----------|----------|
| Bud No. 60- | 1-9 | 10-14 | 15-19 | | | | | Bud No. 60- | 1-9 | 10-14 | 15-19 |
| 2300 | \$106.30 | \$ 95.67 | \$ 85.05 | 29 1/2" | 22" | 21" | 118 | 2600 | \$112.00 | \$100.80 | \$ 89.60 |
| 2301 | 131.45 | 118.30 | 105.15 | 40 1/2" | 22" | 31 1/2" | 156 | 2601 | 140.00 | 126.00 | 112.00 |
| 2302 | 146.05 | 131.45 | 116.85 | 50 1/2" | 22" | 42" | 173 | 2602 | 156.50 | 140.85 | 125.20 |
| 2303 | 166.25 | 149.60 | 133.00 | 61 1/2" | 22" | 52 1/2" | 197 | 2603 | 179.00 | 161.10 | 143.20 |
| 2304 | 180.25 | 162.20 | 144.20 | 69 7/8" | 22" | 61 1/4" | 220 | 2604 | 194.75 | 175.28 | 155.80 |
| 2305 | 200.00 | 180.00 | 160.00 | 78 3/4" | 22" | 70" | 235 | 2605 | 216.50 | 194.85 | 173.20 |
| 2306 | 218.65 | 196.80 | 174.90 | 87 3/8" | 22" | 78 3/4" | 265 | 2606 | 235.15 | 211.64 | 188.12 |
| 2307 | 125.50 | 112.95 | 100.40 | 29 1/2" | 25 1/2" | 21" | 156 | 2607 | 135.15 | 123.64 | 108.12 |
| 2308 | 151.20 | 136.10 | 120.95 | 40 1/2" | 25 1/2" | 31 1/2" | 176 | 2608 | 159.80 | 143.82 | 127.84 |
| 2309 | 168.00 | 151.20 | 134.40 | 50 1/2" | 25 1/2" | 42" | 185 | 2609 | 178.00 | 160.20 | 142.40 |
| 2310 | 186.50 | 167.85 | 149.20 | 61 1/2" | 25 1/2" | 52 1/2" | 211 | 2610 | 203.70 | 183.33 | 162.96 |
| 2311 | 207.30 | 186.55 | 165.85 | 69 7/8" | 25 1/2" | 61 1/4" | 240 | 2611 | 219.90 | 197.91 | 175.92 |
| 2312 | 230.30 | 207.25 | 184.25 | 78 3/4" | 25 1/2" | 70" | 256 | 2612 | 244.20 | 219.78 | 195.96 |
| 2313 | 251.35 | 226.20 | 201.10 | 87 3/8" | 25 1/2" | 78 3/4" | 267 | 2613 | 266.20 | 239.58 | 212.96 |

| With Louvered Sides and Door | | | | Height | Out-side Depth | Panel Space | Wt., Lbs. | Plain Sides, Louvered Door | | | |
|------------------------------|----------|----------|----------|---------|----------------|-------------|-----------|----------------------------|----------|----------|----------|
| Bud No. 60- | 1-9 | 10-14 | 15-19 | | | | | Bud No. 60- | 1-9 | 10-14 | 15-19 |
| 2700 | \$110.20 | \$ 99.18 | \$ 88.16 | 29 1/2" | 22" | 21" | 118 | 2800 | \$108.50 | \$ 97.65 | \$ 86.80 |
| 2701 | 137.00 | 123.30 | 109.60 | 40 1/2" | 22" | 31 1/2" | 156 | 2801 | 134.30 | 120.87 | 107.44 |
| 2702 | 153.40 | 138.06 | 122.72 | 50 1/2" | 22" | 42" | 173 | 2802 | 149.20 | 134.28 | 119.36 |
| 2703 | 175.30 | 157.77 | 140.24 | 61 1/2" | 22" | 52 1/2" | 197 | 2803 | 169.70 | 152.73 | 135.76 |
| 2704 | 190.80 | 171.72 | 152.64 | 69 7/8" | 22" | 61 1/4" | 220 | 2804 | 184.10 | 165.69 | 147.28 |
| 2705 | 212.00 | 190.80 | 169.60 | 78 3/4" | 22" | 70" | 235 | 2805 | 204.30 | 183.87 | 163.44 |
| 2706 | 230.20 | 207.18 | 184.16 | 87 3/8" | 22" | 78 3/4" | 265 | 2806 | 223.40 | 201.06 | 178.72 |
| 2707 | 129.90 | 116.91 | 103.92 | 29 1/2" | 25 1/2" | 21" | 156 | 2807 | 127.70 | 114.93 | 102.16 |
| 2708 | 156.90 | 141.21 | 125.52 | 40 1/2" | 25 1/2" | 31 1/2" | 176 | 2808 | 145.00 | 130.50 | 116.00 |
| 2709 | 174.70 | 157.23 | 139.76 | 50 1/2" | 25 1/2" | 42" | 185 | 2809 | 171.10 | 153.99 | 136.88 |
| 2710 | 194.30 | 174.87 | 155.44 | 61 1/2" | 25 1/2" | 52 1/2" | 211 | 2810 | 190.00 | 171.00 | 152.00 |
| 2711 | 215.90 | 194.31 | 172.72 | 69 7/8" | 25 1/2" | 61 1/4" | 240 | 2811 | 211.10 | 189.99 | 168.88 |
| 2712 | 239.80 | 215.82 | 191.84 | 78 3/4" | 25 1/2" | 70" | 256 | 2812 | 234.60 | 211.14 | 187.68 |
| 2713 | 261.30 | 235.17 | 209.04 | 87 3/8" | 25 1/2" | 78 3/4" | 267 | 2813 | 256.10 | 230.49 | 204.88 |

ACCESSORY PERFORATED TOP

| Bud No. | Width | Depth | Fits Upright Rack | Wt., Lbs. | Net Each, Lots of |
|---------|---------|---------|-------------------------------|-----------|-------------------|
| 60-2370 | 21 1/8" | 17" | With overall depth of 22" | 6 | 1-24 25-49 50-99 |
| 60-2371 | 21 1/8" | 20 1/2" | With overall depth of 25 1/2" | 7 | 6.00 5.40 4.80 |

ACCESSORY DOORS

Doors are interchangeable; may be used for front or rear of rack. They may be mounted to open left or right.

| Plain Type | | | | Ht. | Width | Fits Rack With Panel Space of | Wt., Lbs. | Louvered Type | | | |
|------------|-------------------|---------|---------|---------|---------|-------------------------------|-----------|---------------|---------|-------------------|---------|
| Bud No. | Net Each, Lots of | 1-9 | 10-14 | | | | | 15-19 | Bud No. | Net Each, Lots of | 1-9 |
| 60-2340 | \$16.05 | \$14.45 | \$12.85 | 21 1/8" | 18 1/8" | 21" | 8 | 60-2540 | \$18.35 | \$16.52 | \$14.68 |
| 60-2341 | 19.80 | 17.80 | 15.85 | 31 1/8" | 18 1/8" | 31 1/2" | 11 1/2 | 60-2541 | 22.70 | 20.43 | 18.16 |
| 60-2342 | 21.90 | 19.70 | 17.50 | 42 1/8" | 18 1/8" | 42" | 15 1/2 | 60-2542 | 25.20 | 22.68 | 20.16 |
| 60-2343 | 24.30 | 21.85 | 19.45 | 52 1/8" | 18 1/8" | 52 1/2" | 19 | 60-2543 | 27.95 | 25.16 | 22.36 |
| 60-2344 | 27.05 | 24.35 | 21.65 | 61 1/8" | 18 1/8" | 61 1/4" | 22 1/2 | 60-2544 | 31.05 | 27.95 | 24.84 |
| 60-2345 | 30.05 | 27.05 | 24.05 | 70 1/8" | 18 1/8" | 70" | 25 1/2 | 60-2545 | 34.50 | 31.05 | 27.60 |
| 60-2346 | 32.80 | 29.50 | 26.25 | 79 1/8" | 18 1/8" | 78 3/4" | 29 | 60-2546 | 37.70 | 33.93 | 30.16 |

ACCESSORY SIDES

| Plain Type | | | | Ht. | Width | Fits Rack With Panel Space of | Wt., Lbs. | Louvered Type | | | |
|------------|-------------------|---------|---------|---------|---------|-------------------------------|-----------|---------------|---------|-------------------|---------|
| Bud No. | Net Each, Lots of | 1-9 | 10-14 | | | | | 15-19 | Bud No. | Net Each, Lots of | 1-9 | 15-24 | 25-34 |
| 60-2560 | \$24.10 | \$21.70 | \$19.30 | 26 3/8" | 22" | 21" | 12 1/2 | 60-2580 | \$28.10 | \$25.30 | \$22.50 |
| 60-2561 | 31.50 | 28.35 | 25.20 | 37 3/8" | 22" | 31 1/2" | 17 1/2 | 60-2581 | 37.20 | 33.50 | 29.75 |
| 60-2562 | 36.65 | 33.00 | 29.30 | 47 3/8" | 22" | 42" | 21 | 60-2582 | 44.20 | 39.80 | 35.35 |
| 60-2563 | 42.70 | 38.45 | 34.15 | 58 3/8" | 22" | 52 1/2" | 26 1/2 | 60-2583 | 51.95 | 46.75 | 41.55 |
| 60-2564 | 46.70 | 42.05 | 37.35 | 67 3/8" | 22" | 61 1/4" | 30 | 60-2584 | 57.40 | 51.65 | 45.90 |
| 60-2565 | 51.45 | 46.30 | 41.15 | 75 3/8" | 22" | 70" | 34 | 60-2585 | 63.60 | 57.25 | 50.90 |
| 60-2566 | 59.00 | 53.10 | 47.20 | 84 3/8" | 22" | 78 3/4" | 38 | 60-2586 | 70.75 | 63.70 | 56.60 |
| 60-2567 | 30.15 | 27.15 | 24.10 | 26 3/8" | 25 1/2" | 21" | 14 1/2 | 60-2587 | 34.70 | 31.25 | 27.75 |
| 60-2568 | 39.40 | 35.45 | 31.50 | 37 3/8" | 25 1/2" | 31 1/2" | 20 | 60-2588 | 45.30 | 40.75 | 36.25 |
| 60-2569 | 45.85 | 41.25 | 36.70 | 47 3/8" | 25 1/2" | 42" | 24 | 60-2589 | 52.75 | 47.50 | 42.20 |
| 60-2570 | 53.35 | 48.00 | 42.70 | 58 3/8" | 25 1/2" | 52 1/2" | 29 1/2 | 60-2590 | 61.35 | 55.20 | 49.10 |
| 60-2571 | 58.35 | 52.50 | 46.70 | 67 3/8" | 25 1/2" | 61 1/4" | 34 1/2 | 60-2591 | 67.10 | 60.40 | 53.70 |
| 60-2572 | 64.30 | 57.90 | 51.45 | 75 3/8" | 25 1/2" | 70" | 39 | 60-2592 | 73.95 | 66.55 | 59.15 |
| 60-2573 | 67.76 | 61.00 | 54.20 | 84 3/8" | 25 1/2" | 78 3/4" | 43 1/2 | 60-2593 | 77.90 | 70.10 | 62.30 |

SERIES SIXTY DESK TOP

May be used in connection with any Series Sixty enclosure. Furnished completely assembled with wood-grained formica surface. Fastens to panel mounting rails by two pre-drilled channels. Will support in excess of 200 lbs. Available in two colors. Specify Color When Ordering: Add suffix **SG** for gray; **SB** for blue.

| Bud No. | Size, Inches | Weight, Lbs. | Net Each, Lots of | | |
|---------|-------------------------------------|--------------|-------------------|---------|---------|
| | | | 1-14 | 15-24 | 25-34 |
| 60-2360 | 24 3/4" w. x 19 1/4" d. x 3 1/8" h. | 22 | \$36.05 | \$32.45 | \$28.85 |



Series "60" Cabinets

INCLINED PANEL CABINET RACKS

Completely assembled with sides, rear door and solid top. Available in four combinations of plain or louvered sides and rear door. Size, 50 3/4" h. x 24 1/2" w. x 22" d., outside; 20 1/2" d., clear inside. Weight, 165 lbs. **Specify Color When Ordering:** Add suffix **SG** to number for gray; suffix **SB**, for blue.

| With Plain Sides and Door | | | | Incline Panel Hgt. | Vert. Panel Hgt. | Top Opening W. x D. | Louvered Sides and Plain Door | | | |
|---------------------------|-------------------|----------|----------|--------------------|------------------|---------------------|-------------------------------|-------------------|----------|----------|
| Bud No. 60- | Net Each, Lots of | | | | | | Bud No. 60- | Net Each, Lots of | | |
| | 1-9 | 10-14 | 15-19 | | | 1-9 | 10-14 | 15-19 | | |
| 2330 | \$165.25 | \$148.70 | \$132.20 | 10 1/2" | 29 3/4" | 18 1/2" x 11 3/4" | 2630 | \$147.20 | \$132.48 | \$117.76 |
| 2331 | 175.15 | 157.65 | 140.10 | 15 3/4" | 24 1/2" | 18 1/2" x 10" | 2631 | 184.20 | 165.78 | 147.36 |
| 2332 | 175.15 | 157.65 | 140.10 | 17 1/2" | 22 3/4" | 18 1/2" x 9 1/4" | 2632 | 184.20 | 165.78 | 147.36 |

| With Louvered Sides and Door | | | | Plain sides, Louvered Door | | | | | | |
|------------------------------|-------------------|----------|----------|----------------------------|-------------------|-------------------|-------|----------|----------|----------|
| Bud No. 60- | Net Each, Lots of | | | Bud No. 60- | Net Each, Lots of | | | | | |
| | 1-9 | 10-14 | 15-19 | | 1-9 | 10-14 | 15-19 | | | |
| 2730 | \$170.90 | \$153.81 | \$136.72 | 10 1/2" | 29 3/4" | 18 1/2" x 11 3/4" | 2830 | \$168.50 | \$151.65 | \$134.80 |
| 2731 | 181.00 | 162.90 | 144.80 | 15 3/4" | 24 1/2" | 18 1/2" x 10" | 2831 | 178.40 | 160.56 | 142.72 |
| 2732 | 181.00 | 162.90 | 144.80 | 17 1/2" | 22 3/4" | 18 1/2" x 9 1/4" | 2832 | 178.40 | 160.56 | 142.72 |

ACCESSORY FRONT DOORS

| Plain Type | | | | Height | Width | Fits Rack Top Open. Size, In. | Wt., Lbs. | Louvered Type | | | |
|------------|-------------------|---------|---------|---------|---------|-------------------------------|-----------|---------------|-------------------|---------|---------|
| Bud No. | Net Each, Lots of | | | | | | | Bud No. | Net Each, Lots of | | |
| | 1-9 | 10-14 | 15-19 | | | | | 1-9 | 10-14 | 15-19 | |
| 60-2350 | \$19.85 | \$17.85 | \$15.90 | 30 3/8" | 18 1/2" | 18 1/2" x 11 3/4" | 11 | 60-2550 | \$22.80 | \$20.52 | \$18.24 |
| 60-2351 | 18.55 | 16.70 | 14.85 | 25 1/2" | 18 1/2" | 18 1/2" x 10" | 9 1/2 | 60-2551 | 21.30 | 19.17 | 17.04 |
| 60-2352 | 18.00 | 16.20 | 14.40 | 23 1/2" | 18 1/2" | 18 1/2" x 9 1/4" | 9 | 60-2552 | 20.70 | 18.63 | 16.56 |

ACCESSORY REAR DOORS

| | | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|
| 60-2342 | \$21.90 | \$19.70 | \$17.50 | 42 1/4" | 18 1/2" | All sizes | 15 1/2" | 60-2542 | \$25.20 | \$22.68 | \$20.16 |
|---------|---------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|

ACCESSORY SIDES

Specify "L" for left side or "R" for right side, determined when facing front of rack.

| Plain Type | | | | Height | Width | Fits Rack Top Open. Size, In. | Wt., Lbs. | Louvered Type | | | |
|------------|------------------------|---------|---------|---------|-------|-------------------------------|-----------|---------------|------------------------|---------|---------|
| Bud No. | Net Each Pair, Lots of | | | | | | | Bud No. | Net Each Pair, Lots of | | |
| | 1-9 | 10-14 | 15-19 | | | | | 1-9 | 10-14 | 15-19 | |
| 60-2574 | \$38.45 | \$34.60 | \$30.75 | 47 5/8" | 22" | 18 1/2" x 11 3/4" | 11 | 60-2594 | \$44.20 | \$39.80 | \$35.35 |
| 60-2575 | 39.55 | 35.60 | 31.65 | 47 5/8" | 22" | 18 1/2" x 10" | 9 1/2 | 60-2595 | 45.50 | 40.95 | 36.40 |
| 60-2576 | 39.55 | 35.60 | 31.65 | 47 5/8" | 22" | 18 1/2" x 9 1/4" | 9 | 60-2596 | 45.50 | 40.95 | 36.40 |

ACCESSORY PERFORATED TOPS

| Bud No. | Width | Depth | Fits Rack Top Size, In. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------|---------|-------------------------|-----------|-------------------|--------|--------|
| | | | | | 1-24 | 25-49 | 50-99 |
| 60-2372 | 21 1/2" | 11 1/2" | 18 1/2" x 11 3/4" | 4 | \$4.40 | \$3.95 | \$3.50 |
| 60-2373 | 21 1/2" | 10" | 18 1/2" x 10" | 3 | 4.25 | 3.85 | 3.40 |
| 60-2374 | 21 1/2" | 9 1/4" | 18 1/2" x 9 1/4" | 3 | 4.20 | 3.80 | 3.35 |

ADD-A-RACK SERIES

Each assembly consists of frame, top, bottom, rear door and cowlings; used as an add-on unit to join any of the Series Sixty enclosures into a bank of two or more. One standard rack plus several Add-A-Racks make any desired number of racks combined for optimum width. Colors same as above Racks

| Plain Sides | | | | Louvered Sides | | | | Wt., Lbs. | |
|-------------|----------------------------|-------------------|----------|----------------|-------------|----------------------------|-------------------|-----------|----------|
| Bud No. 60- | For Add-on to Rack No. 60- | Net Each, Lots of | | | Bud No. 60- | For Add-on to Rack No. 60- | Net Each, Lots of | | |
| | | 1-9 | 10-14 | 15-19 | | | 1-9 | 10-14 | 15-19 |
| 2500 | 2300, 2700 | \$ 86.10 | \$ 77.50 | \$ 68.90 | 2900 | 2600, 2800 | \$ 88.40 | \$ 79.56 | \$ 70.72 |
| 2501 | 2301, 2701 | 104.75 | 94.30 | 83.80 | 2901 | 2601, 2801 | 107.65 | 96.89 | 86.12 |
| 2502 | 2302, 2702 | 114.70 | 103.25 | 91.75 | 2902 | 2602, 2802 | 118.00 | 106.20 | 94.40 |
| 2503 | 2303, 2703 | 125.30 | 112.75 | 100.25 | 2903 | 2603, 2803 | 128.95 | 116.06 | 103.16 |
| 2504 | 2304, 2704 | 140.00 | 126.00 | 112.00 | 2904 | 2604, 2804 | 144.00 | 129.60 | 115.20 |
| 2505 | 2305, 2705 | 156.00 | 140.40 | 124.80 | 2905 | 2605, 2805 | 160.45 | 144.41 | 128.36 |
| 2506 | 2306, 2706 | 167.35 | 150.60 | 133.90 | 2906 | 2606, 2806 | 172.25 | 155.03 | 137.80 |
| 2507 | 2307, 2707 | 100.00 | 90.00 | 80.00 | 2907 | 2607, 2807 | 102.30 | 92.07 | 81.84 |
| 2508 | 2308, 2708 | 117.25 | 105.55 | 93.80 | 2908 | 2608, 2808 | 120.15 | 108.14 | 96.12 |
| 2509 | 2309, 2709 | 128.00 | 115.20 | 102.40 | 2909 | 2609, 2809 | 131.30 | 118.17 | 105.04 |
| 2510 | 2310, 2710 | 139.60 | 125.65 | 111.70 | 2910 | 2610, 2810 | 143.25 | 128.93 | 114.60 |
| 2511 | 2311, 2711 | 156.10 | 140.50 | 124.90 | 2911 | 2611, 2811 | 160.10 | 144.09 | 128.08 |
| 2512 | 2312, 2712 | 174.00 | 156.50 | 139.20 | 2912 | 2612, 2812 | 178.45 | 160.61 | 142.76 |
| 2513 | 2313, 2713 | 192.50 | 173.25 | 154.00 | 2913 | 2613, 2813 | 197.40 | 177.66 | 157.92 |
| 2530 | 2330, 2730 | 132.90 | 119.60 | 106.30 | 2930 | 2630, 2830 | 136.20 | 122.58 | 108.96 |
| 2531 | 2331, 2731 | 142.10 | 127.90 | 113.70 | 2931 | 2631, 2831 | 145.40 | 130.86 | 116.32 |
| 2532 | 2332, 2732 | 142.10 | 127.90 | 113.70 | 2932 | 2632, 2832 | 145.40 | 130.86 | 116.32 |

SERIES SIXTY TURRETS

Made of 16 gauge steel; designed so that any one of three sides may be attached to a Series Sixty upright rack or any horizontal surface. Accommodate standard 19" panels. All mounting rails have universal spacing. Sides easily removed when a series of interconnecting turrets are desired. **Specify Color When Ordering:** Add suffix **SG** for dark gray; **SB** for dark blue. For panels, order standard Bud panels with suffix **SG** for light gray; **SB** for light blue.

| Bud No. | Width | Depth | Height | Sloping Panel Space | Bottom Panel Space | Rear Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------|---------|---------|---------------------|--------------------|------------------|-----------|-------------------|---------|---------|
| | | | | | | | | 1-14 | 15-24 | 25-34 |
| 60-2364 | 22 1/4" | 17 1/2" | 12 3/8" | 17 1/2" | 14" | 8 3/4" | 17 | \$39.05 | \$35.15 | \$31.25 |
| 60-2365 | 22 1/4" | 14 3/4" | 10 3/8" | 12 3/4" | 10 1/2" | 7 3/4" | 14 | 32.55 | 29.30 | 26.05 |
| 60-2366 | 22 1/4" | 20 1/4" | 14 3/8" | 21 1/2" | 17 1/2" | 10 1/2" | 20 | 41.00 | 36.90 | 32.80 |

SERIES SIXTY DRAWER

Fits into any Series Sixty cabinet rack. Slides easily on nylon rollers. Capable of supporting heavy loads. Drawer extends to full depth while stops prevent drawer from falling out. Slides are easily attached to panel supporting rails. Silver anodized handles. Shipped completely assembled. **Specify Color When Ordering:** Add suffix **SG** to stock number for gray; **SB** for blue.

| Bud No. | Size (Inside), Inches | Weight, Lbs. | Net Each, Lots of | | |
|---------|----------------------------|--------------|-------------------|---------|---------|
| | | | 1-14 | 15-24 | 25-34 |
| 60-2368 | 16 3/4" x 6 3/4" x 19 1/2" | 28 | \$32.05 | \$28.85 | \$25.65 |

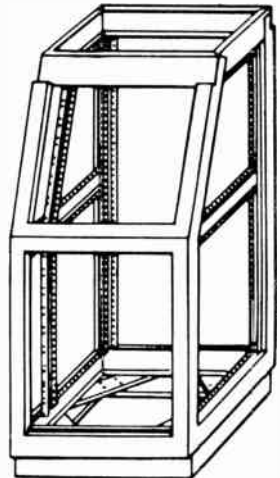
SERIES SIXTY SLIDING DESK TOP

Sliding desk top for use in standard racks provides a handy, smooth surface for writing, servicing or inspection. Surface of writing area is light gray Formica®, which resists most elements that might damage metal or wood surfaces. When fully extended, useable area is 11" x 16 1/2". Tested to support 75 lbs. of distributed weight. Occupies only 1 3/4" of panel space (height). Fits flush with front of unit when not in use. Mounts directly to uprights in Series 60 Cabinet Racks; brackets are included for mounting to rails in other Bud cabinets and consoles. Ball-bearing slide mechanism assures free, easy movement. **Specify front panel finish:** Black wrinkle (suffix "B"); gray wrinkle (suffix "G"), gray hammertone (suffix "HG"), smooth blue (suffix "SB") or smooth gray (suffix "SG"). Weight, 8 lbs.

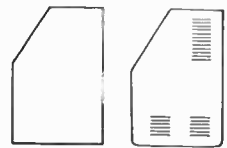
| | |
|--|---------|
| Bud No. 60-2361 Desk Top - Sliding desk top 16 3/4" w. x 15 1/2" d. x panel of 19" x 1 3/4". | |
| Net Each, 1-14 | \$16.65 |
| Net Each, 15-24 | \$14.99 |

BUD RADIO INC. • CLEVELAND, OHIO

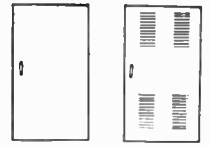
Electronic Publishing Co., Inc., 1982



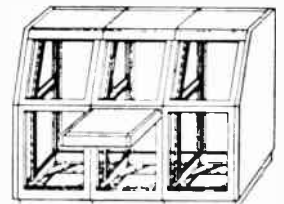
Inclined Panel Rack



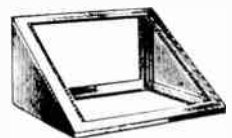
Side Panels



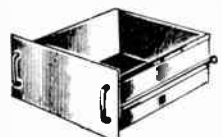
Doors



Add-A-Racks



Turret



Drawer

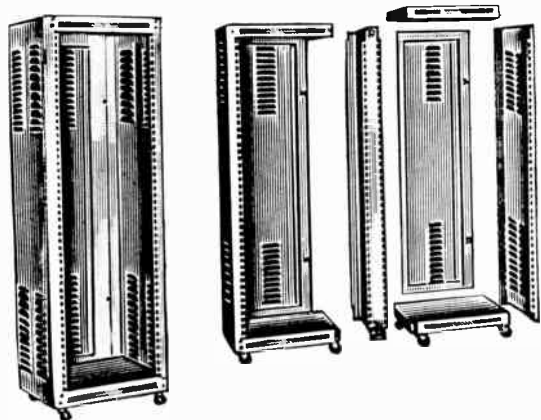


Sliding Desk Top



Relay and Cabinet Racks

DELUXE RELAY RACKS WITH ADD-A-RACK



High quality relay racks made of 16-gauge steel with $\frac{1}{4}$ " panel supports. Panel mounting supports are recessed so that no panel edges will be exposed. Both back and sides are fully louvered for best ventilation. Snap catches are positioned on the door. Rounded corners and red-lined chrome trim give streamlined appearance. Base constructed with four special supports so that casters may be applied directly to base for mobility. All standard 19" panels will fit these racks.

Super Deluxe Series Relay Racks are equipped with adjustable panel mounting supports permitting forward and backward adjustment of panels for more efficient use of space. Adjustable points are at 1" intervals for 9" to 15" clearance behind panels. Super Deluxe Racks are fitted with both front and rear doors, the rear to cover any equipment behind the panel while making it easily accessible. The front door, not louvered, conceals controls on the front panel.

Add-A-Rack Series—Where relay racks are to be joined in series. Provides additional strength and improved appearance. Includes door, top, bottom and coupling unit, all that is needed to make a double relay rack out of a single Deluxe series.

All Racks Listed are shipped knocked-down with all necessary hardware and assembly instructions. (Casters optional. When ordering specify finish. Add suffix "HG" for gray hammertone; suffix "G" for gray wrinkle; and suffix "B" for black wrinkle.

DELUXE RELAY RACKS

17 $\frac{1}{2}$ " Overall Depth

| Bud Number | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|------------|---------------------|--------------------|-----------|-------------------|---------|---------|
| | | | | 1-9 | 10-14 | 15-19 |
| CR-1774 | 42 $\frac{1}{16}$ " | 36 $\frac{3}{4}$ " | 82 | \$45.17 | \$40.65 | \$36.14 |
| CR-1771 | 47 $\frac{1}{16}$ " | 42" | 92 | 51.10 | 45.99 | 40.88 |
| CR-1772 | 66 $\frac{3}{16}$ " | 61 $\frac{1}{4}$ " | 115 | 63.96 | 57.56 | 51.17 |
| CR-1773 | 82 $\frac{3}{16}$ " | 77" | 135 | 76.57 | 68.91 | 61.26 |

EXTRA DEEP DELUXE RACKS

Same as above, except 22" deep instead of 17 $\frac{1}{2}$ " deep. Gray hammertone finish standard; for black or gray wrinkle add 10% to price.

| Bud Number | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|------------|---------------------|--------------------|-----------|-------------------|---------|---------|
| | | | | 1-9 | 10-14 | 15-19 |
| CR-2074 | 42 $\frac{1}{16}$ " | 36 $\frac{3}{4}$ " | 98 | \$ 63.10 | \$56.79 | \$50.48 |
| CR-2071 | 47 $\frac{1}{16}$ " | 42" | 102 | 71.40 | 64.26 | 57.12 |
| CR-2072 | 66 $\frac{3}{16}$ " | 61 $\frac{1}{4}$ " | 137 | 89.35 | 80.42 | 71.48 |
| CR-2073 | 82 $\frac{3}{16}$ " | 77" | 159 | 106.13 | 95.52 | 84.90 |

SUPER DELUXE TWO-DOOR RACKS

| Bud Number | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|------------|---------------------|--------------------|-----------|-------------------|----------|---------|
| | | | | 1-9 | 10-14 | 15-19 |
| CR-2174 | 42 $\frac{1}{16}$ " | 36 $\frac{3}{4}$ " | 102 | \$ 64.13 | \$ 57.72 | \$51.30 |
| CR-2171 | 47 $\frac{1}{16}$ " | 42" | 104 | 72.65 | 65.39 | 58.12 |
| CR-2172 | 66 $\frac{3}{16}$ " | 61 $\frac{1}{4}$ " | 138 | 93.77 | 84.39 | 75.02 |
| CR-2173 | 82 $\frac{3}{16}$ " | 77" | 163 | 112.56 | 101.30 | 90.05 |

SPACE SAVER RELAY RACKS

Same as Deluxe Series, except only 10" deep (9" inside, clear) to save space but retain panel height and width. Suited for use with Bud panel mounting chassis as well as standard 19" relay rack panels; lend themselves to Add-A-Rack assembly. Gray hammertone finish standard; for black or gray wrinkle add 10% to price.

| Bud Number | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|------------|---------------------|--------------------|-----------|-------------------|---------|---------|
| | | | | 1-9 | 10-14 | 15-19 |
| RR-1271 | 47 $\frac{1}{16}$ " | 42" | 70 | \$36.60 | \$32.95 | \$29.28 |
| RR-1272 | 66 $\frac{3}{16}$ " | 61 $\frac{1}{4}$ " | 91 | 45.85 | 41.26 | 36.68 |
| RR-1273 | 75 $\frac{1}{16}$ " | 70" | 100 | 53.75 | 48.37 | 43.00 |

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ADD-A-RACK ASSEMBLIES

Includes door, top, bottom and coupling unit for add-on use with racks indicated.

| Bud Number | For Use With Rack No. | Wt., Lbs. | Net Each, Lots of | | |
|------------|-----------------------|-----------|-------------------|---------|---------|
| | | | 1-9 | 10-14 | 15-19 |
| AR-1275* | RR-1271 | 61 | \$ 34.90 | \$31.41 | \$27.92 |
| AR-1276* | RR-1272 | 81 | 43.75 | 39.37 | 35.00 |
| AR-1277* | RR-1273 | 94 | 51.25 | 46.12 | 41.00 |
| AR-1778 | CR-1774 | 70 | 44.34 | 39.91 | 35.47 |
| AR-1775 | CR-1771 | 74 | 49.01 | 44.11 | 39.21 |
| AR-1776 | CR-1772 | 100 | 60.96 | 54.86 | 48.77 |
| AR-1777 | CR-1773 | 113 | 74.90 | 67.41 | 59.92 |
| AR-2278* | CR-2074 | 102 | 60.15 | 54.13 | 48.12 |
| AR-2275* | CR-2071 | 86 | 68.06 | 61.25 | 54.65 |
| AR-2276* | CR-2072 | 110 | 85.17 | 76.65 | 68.14 |
| AR-2277* | CR-2073 | 130 | 103.75 | 93.38 | 83.00 |

*Gray hammertone standard; for black or gray wrinkle add 10% to price.

TRUCK CASTERS

Use with all Bud relay racks and other floor mounted units. Ball bearing wheels are hard tread composition. RC-7756 is for heavy duty applications. RC-7758 is for extra heavy duty use (Series 60 Racks).

| Bud No. | Height | Weight (Set of 4) | Net Each, Lots of | | |
|---------|-------------------|----------------------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| RC-7756 | 2 $\frac{1}{2}$ " | 1 $\frac{1}{2}$ lbs. | \$0.90 | \$0.81 | \$0.72 |
| RC-7757 | 2" | 1 lb. | .40 | .36 | .32 |
| RC-7758 | 3 $\frac{1}{4}$ " | 6 lbs. | 2.17 | 1.95 | 1.74 |

DOOR HANDLES, CATCH SETS

No. 9347: Fits flush with top of cabinet; exposed parts chrome plated. Nos. 9196 and 9223: Lever-type handles are chrome plated with corrosion-resistant steel spindle and cam; fit Super Deluxe racks.

| Bud No. | Description | Net Each, Lots of | | |
|---------|------------------------|-------------------|--------|---------|
| | | 1-49 | 50-99 | 100-149 |
| 9196 | Non-locking handle | \$2.66 | \$2.39 | \$2.13 |
| 9223 | 9196 with lock and key | 5.00 | 4.50 | 4.00 |
| 9347 | Flush-mount catch set | .98 | .88 | .78 |

TABLE-MOUNT TELEPHONE RACK

Sturdy rack with chassis type base mounts heavy components on table where enclosures are not required. Panel mount rails recessed for flush mount of 19" panels. Shipped knocked down. Specify black wrinkle (suffix "B") or gray hammertone ("HG").

| Bud No. | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|---------|-----------------|-------------|-----------|-------------------|---------|--------|
| | | | | 1-14 | 15-24 | 25-34 |
| RR-1248 | 24" | 21" | 15 | \$ 9.10 | \$ 8.19 | \$7.28 |
| RR-1249 | 31" | 28" | 18 | 11.19 | 10.07 | 8.95 |

DELUXE CABINET RACKS

These cabinet racks have rounded corners and attractive red-lined chrome trim. There is a recessed, hinged door on the top with a snap catch. These racks are made of heavy gauge steel and are of sturdy construction. The five large sizes have a hinged rear door, while the small sizes have a welded panel in the rear. Adequate ventilation is assured by means of louvered sides and a 2 $\frac{1}{2}$ inch opening in the bottom of the back extends the entire width. "NO-SCRATCH" EXTENDED METAL FEET ARE EMBOSSED ON THE BOTTOM TO MINIMIZE MARRING OF A TABLE TOP. Racks are furnished in black wrinkle (add suffix "B" to number when ordering), gray wrinkle (suffix "G"), and hammertone gray (suffix "HG"). Size: 14 $\frac{1}{2}$ " x 22" w. Will fit standard 19" panels. Aluminum relay rack panel covering complete panel space supplied at no extra cost.



| Bud No. | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|----------|---------------------|--------------------|-----------|-------------------|---------|---------|
| | | | | 1-14 | 15-24 | 25-34 |
| CR-1726 | 8 $\frac{3}{16}$ " | 7" | 24 | \$15.28 | \$13.75 | \$12.22 |
| CR-1741 | 10 $\frac{1}{16}$ " | 8 $\frac{3}{4}$ " | 28 | 16.70 | 15.03 | 13.36 |
| CR-1740 | 12 $\frac{1}{16}$ " | 10 $\frac{1}{2}$ " | 31 | 19.12 | 17.21 | 15.30 |
| CR-1742 | 14 $\frac{1}{16}$ " | 12 $\frac{1}{4}$ " | 32 | 20.12 | 18.11 | 16.10 |
| CR-1739 | 15 $\frac{1}{16}$ " | 14" | 35 | 21.96 | 19.76 | 17.57 |
| CR-1743* | 19 $\frac{1}{16}$ " | 17 $\frac{1}{2}$ " | 40 | 26.22 | 23.60 | 20.98 |
| CR-1727* | 22 $\frac{1}{16}$ " | 21" | 43 | 28.06 | 25.25 | 22.45 |
| CR-1744* | 28 $\frac{1}{16}$ " | 26 $\frac{1}{4}$ " | 51 | 30.14 | 27.13 | 24.11 |
| CR-1728* | 33 $\frac{1}{16}$ " | 31 $\frac{1}{2}$ " | 58 | 31.98 | 28.78 | 25.58 |
| CR-1745* | 36 $\frac{1}{16}$ " | 35" | 63 | 33.65 | 30.29 | 26.92 |

*These sizes have both top and rear doors.

HEAVY-DUTY CABINET RACKS

Similar to above units with Add-A-Cab feature (similar to Add-A-Rack) for continuously expanding systems. Panel mounting rails are integral part of the sides. Removable rear door. Louvered sides and 2 $\frac{1}{2}$ " x 17 $\frac{1}{2}$ " opening in the bottom of the back assure adequate ventilation. Made of 16 ga. steel. Gray hammertone finish only; black or gray wrinkle finish available at 10% additional charge. Size: 17 $\frac{1}{2}$ " d. x 22" w.

| | | | | | | |
|----------|-----------------------|--------------------|----|---------|---------|---------|
| CR-1736 | 24 $\frac{1}{2}$ " | 19 $\frac{1}{4}$ " | 50 | \$26.65 | \$23.98 | \$21.32 |
| CR-1737 | 31 $\frac{1}{2}$ " | 26 $\frac{3}{4}$ " | 57 | 28.75 | 25.87 | 23.00 |
| CR-1738 | 40 $\frac{1}{2}$ " | 35" | 70 | 34.15 | 30.73 | 27.32 |
| ACR-1936 | Add-A-Cab for CR-1736 | | 42 | 25.40 | 22.86 | 20.32 |
| ACR-1937 | Add-A-Cab for CR-1737 | | 52 | 27.40 | 24.66 | 21.92 |
| ACR-1938 | Add-A-Cab for CR-1738 | | 57 | 32.55 | 29.29 | 26.04 |

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BUD RADIO INC.

• CLEVELAND, OHIO



Racks, Panels, Chassis

TELEPHONE-TYPE RELAY RACKS

Standard Models. 3" channels and crossbars of 1/4" steel. Base has chassis type bottom with side angles. Base drilled for RC-7756 casters. Black wrinkle (suffix "B") or gray hammettone (suffix "HG").
Heavy Duty Model RR-1265. Two 3 1/2" x 5" x 1/4", 20" long angles form base. Steel channels are 3" x 1 1/2", 72 1/2" long. Cross bars are 1/2" x 2 1/2" angles. Panel holes tapped 12-24 with W.E. space. Black wrinkle finish only. Usually bolted to floor.



| Bud No. | Height, Overall | Panel Space | Net Each, Lots of | | |
|---------|-----------------|-------------|-------------------|---------|---------|
| | | | 1-9 | 10-14 | 15-19 |
| RR-1263 | 35 3/4" | 3 1/2" | \$21.71 | \$19.53 | \$17.37 |
| RR-1363 | 40 3/4" | 3 1/2" | 21.96 | 19.76 | 17.57 |
| RR-1264 | 70 3/4" | 6 1/2" | 24.80 | 22.32 | 19.84 |
| RR-1364 | 75 3/4" | 7 1/2" | 25.13 | 22.62 | 20.10 |
| RR-1366 | 81 1/4" | 7 1/2" | 29.98 | 26.98 | 23.98 |
| RR-1265 | 72 1/4" | 6 1/2" | 54.78 | 49.30 | 43.82 |

STANDARD RELAY RACK PANELS



Choice of steel or aluminum relay rack panels. Both steel and aluminum are 1/4" thick. All panels are 19" wide. Specify color when ordering, use letter suffix: B for black wrinkle; G for gray wrinkle; HG for gray hammettone; SB for smooth blue; SG for smooth gray. Aluminum

panels are available in 3/16" thickness at 60% increase over the 1/4" aluminum panel prices.

| Ht., In. | STEEL | | | | ALUMINUM* | | | |
|----------|-------------|---------------|--------|-----------------|-------------|---------------|--------|-----------------|
| | Bud No. PS- | Net Each, 1-9 | 50-99 | Lots of 100-149 | Bud No. PA- | Net Each, 1-9 | 50-99 | Lots of 100-149 |
| 1 1/2" | 1250 | \$0.84 | \$0.76 | \$0.67 | 1101 | \$1.09 | \$0.98 | \$0.87 |
| 3 1/2" | 1251 | 1.00 | .90 | .80 | 1102 | 1.42 | 1.28 | 1.14 |
| 5 1/2" | 1252 | 1.25 | 1.13 | 1.00 | 1103 | 1.92 | 1.73 | 1.54 |
| 7 1/2" | 1253 | 1.42 | 1.28 | 1.14 | 1104 | 2.42 | 2.18 | 1.94 |
| 8 3/4" | 1254 | 1.75 | 1.58 | 1.40 | 1105 | 2.84 | 2.56 | 2.27 |
| 10 1/2" | 1255 | 2.09 | 1.88 | 1.67 | 1106 | 3.59 | 3.23 | 2.87 |
| 12 1/2" | 1256 | 2.42 | 2.18 | 1.94 | 1107 | 4.09 | 3.68 | 3.27 |
| 14 1/2" | 1257 | 2.84 | 2.56 | 2.27 | 1108 | 4.76 | 4.28 | 3.81 |
| 15 3/4" | 1258 | 3.09 | 2.78 | 2.47 | 1109 | 5.34 | 4.81 | 4.27 |
| 17 1/2" | 1259 | 3.51 | 3.16 | 2.81 | 1110 | 5.85 | 5.27 | 4.68 |
| 19 1/4" | 1260 | 3.84 | 3.46 | 3.07 | 1111 | 6.43 | 5.79 | 5.14 |
| 21 1/2" | 1261 | 4.26 | 3.83 | 3.41 | 1112 | 7.01 | 6.31 | 5.61 |

*Aluminum alloy 5005 H-36.

SURFACE SHIELD PANELS

Bright aluminum alloy 5005 H-36 panels have bluish-free mill finish. Covered on both sides with sturdy, pressure-sensitive, white paper; protects against damage and useful for marking for drilling, positioning, etc. Standard notched 19" wide sizes.

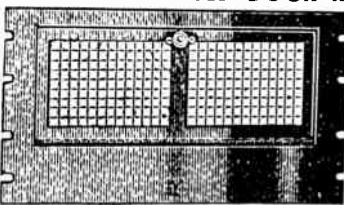
| Ht., In. | 1/4" ALUMINUM | | | | 3/16" ALUMINUM | | | |
|----------|---------------|---------------|--------|-----------------|----------------|---------------|--------|-----------------|
| | Bud SFA- | Net Each, 1-9 | 50-99 | Lots of 100-149 | Bud SFA- | Net Each, 1-9 | 50-99 | Lots of 100-149 |
| 1 1/2" | 1831 | \$0.97 | \$0.87 | \$0.78 | 3161 | \$1.79 | \$1.61 | \$1.43 |
| 3 1/2" | 1832 | 1.34 | 1.21 | 1.07 | 3162 | 2.36 | 2.12 | 1.89 |
| 5 1/2" | 1833 | 1.80 | 1.62 | 1.44 | 3163 | 3.17 | 2.85 | 2.54 |
| 7 1/2" | 1834 | 2.21 | 1.99 | 1.77 | 3164 | 3.91 | 3.52 | 3.13 |
| 8 3/4" | 1835 | 2.66 | 2.39 | 2.13 | 3165 | 4.68 | 4.21 | 3.74 |
| 10 1/2" | 1836 | 3.34 | 3.01 | 2.67 | 3166 | 5.90 | 5.31 | 4.72 |
| 12 1/2" | 1837 | 3.85 | 3.47 | 3.08 | 3167 | 6.80 | 6.12 | 5.44 |
| 14 1/2" | 1838 | 4.45 | 4.01 | 3.56 | 3168 | 7.85 | 7.06 | 6.28 |
| 15 3/4" | 1839 | 4.97 | 4.47 | 3.98 | 3169 | 8.76 | 7.88 | 7.01 |
| 17 1/2" | 1840 | 5.47 | 4.92 | 4.38 | 3170 | 9.67 | 8.70 | 7.74 |
| 19 1/4" | 1841 | 5.99 | 5.39 | 4.79 | 3171 | 10.57 | 9.51 | 8.46 |
| 21 1/2" | 1842 | 6.50 | 5.85 | 5.20 | 3172 | 11.48 | 10.33 | 9.18 |

Substitute for solid panels for extra ventilation. Made of 1/4" steel with die-cut grille 13 1/2" wide. Standard notched 19" wide sizes. Specify black wrinkle (suffix B), gray wrinkle (suffix G), or gray hammettone (suffix HG).

| Bud No. | Height, Overall | Grille Height | Wt., Lbs. | Net Each, Lots of | | |
|---------|-----------------|---------------|-----------|-------------------|--------|---------|
| | | | | 1-9 | 50-99 | 100-149 |
| PS-808 | 5 1/2" | 3 1/2" | 2 1/2 | \$3.26 | \$2.93 | \$2.61 |
| PS-809 | 7 1/2" | 4 3/4" | 3 1/2 | 3.54 | 3.19 | 2.83 |
| PS-810 | 8 3/4" | 5 1/2" | 5 | 4.26 | 3.83 | 3.41 |
| PS-811 | 10 1/2" | 7 1/2" | 5 3/4 | 4.51 | 4.06 | 3.61 |
| PS-812 | 12 1/2" | 9 1/2" | 6 1/2 | 4.84 | 4.36 | 3.87 |

*Allows 3 1/2" space for chassis mounting.

VENTILATED DOOR RACK PANELS



Generous perforated area in door provides adequate ventilation for adjacent units. Also features a newly designed plunger-type latch for positive locking and easy opening. Distance from hinged side of opening to bottom, 3 1/2"; from lock side of opening to top, 1". Available in black or gray wrinkle finish or gray hammettone finish (specify when ordering). 1/4" steel, 19" long.

| Bud No. | Height, Overall | Door Size, Inches | Wt., Lbs. | Net Each, Lots of | | |
|---------|-----------------|-------------------|-----------|-------------------|--------|---------|
| | | | | 1-9 | 50-99 | 100-149 |
| PS-814 | 10 1/2" | 15 3/4" x 6" | 7 1/2 | \$7.52 | \$6.77 | \$6.03 |
| PS-815 | 12 1/2" | 15 3/4" x 7 1/2" | 7 | 8.27 | 7.44 | 6.62 |

NON-VENTILATED METAL DOOR PANELS

| | | | | | | |
|--------|---------|------------------|-------|--------|--------|--------|
| PS-615 | 10 1/2" | 15 3/4" x 6" | 7 1/2 | \$6.08 | \$5.47 | \$4.86 |
| PS-616 | 12 1/2" | 15 3/4" x 7 1/2" | 8 1/2 | 7.52 | 6.77 | 6.02 |

RACK SHELVES

Heavy gauge steel shelves with 1" flange for rigidity and strength. Mount on chassis supporting angles in rack to hold power supplies, modulators, etc. Width 19". Black enamel finish.

| Bud No. | Depth, Inches | Weight, Lbs. | Net Each, Lots of | | |
|---------|---------------|--------------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CB-1976 | 15" | 6 1/2 | \$3.47 | \$3.12 | \$2.78 |
| CB-1977 | 12" | 5 1/2 | 2.64 | 2.38 | 2.11 |

CHASSIS MOUNTING BRACKETS

Mounts chassis to panels, essential when panel supports entire chassis weight. Heavy gauge steel 6 1/2" high, cut away at bottom to mount flush to panel. Black enamel finish.

| Bud No. | Depth, In. | Net Per Pair, Lots of | | |
|---------|------------|-----------------------|--------|---------|
| | | 1-49 | 50-99 | 100-149 |
| MB-458 | 8 | \$1.09 | \$0.98 | \$0.87 |
| MB-448 | 10 | 1.35 | 1.22 | 1.08 |
| MB-459 | 11 | 1.50 | 1.35 | 1.20 |
| MB-449 | 12 | 1.75 | 1.58 | 1.40 |
| MB-460 | 13 | 1.69 | 1.52 | 1.35 |
| MB-450* | 10 | 1.97 | 1.77 | 1.58 |
| MB-451* | 13 | 2.09 | 1.88 | 1.67 |

*8 1/2" high for chassis height of 4".

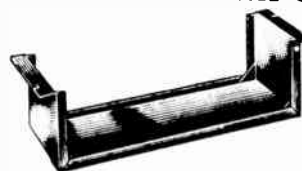


TRIANGULAR MOUNTING BRACKETS

Ideal for rigid support of shelves to take heavy loads. Heavy gauge steel with 3/4" flange. Black enamel finish only.

| Bud No. | Height, In. | Depth, In. | Wt., Lbs. | Net Per Pair, Lots of | | |
|---------|-------------|------------|-----------|-----------------------|--------|--------|
| | | | | 1-9 | 10-14 | 15-19 |
| MB-1266 | 5 | 5 | 1 | \$1.00 | \$0.90 | \$0.80 |
| MB-1267 | 7 | 7 | 1 | 1.17 | 1.05 | .94 |
| MB-1268 | 9 | 9 | 1 1/2 | 1.42 | 1.28 | 1.14 |

PANEL CHASSIS



Panel mounting chassis for vertical installation where depth is limited or front service is desired. Made of .062" aluminum alloy 5005 H-14 in natural finish. Front flange has standard notching. Fits standard 19" panel space.

| Bud No. | Height, Inches | Weight, Lbs. | Net Each, Lots of | | |
|---------|----------------|--------------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CB-1370 | 1 1/2" | 3/4 | \$2.30 | \$2.07 | \$1.84 |
| CB-1371 | 3 1/2" | 1 1/4 | 2.59 | 2.33 | 2.07 |
| CB-1372 | 5 1/2" | 1 1/2 | 2.84 | 2.56 | 2.27 |
| CB-1373 | 7 1/2" | 2 | 3.26 | 2.93 | 2.61 |
| CB-1374 | 8 3/4" | 2 1/4 | 3.76 | 3.38 | 3.01 |
| CB-1375 | 10 1/2" | 2 3/4 | 4.43 | 3.99 | 3.54 |
| CB-1376 | 12 1/2" | 3 | 4.84 | 4.36 | 3.87 |
| CB-1377 | 14 1/2" | 3 1/2 | 5.34 | 4.81 | 4.27 |

OPEN-END CHASSIS

Primarily intended to be used with the various sizes and styles of Bud metal cabinets, these chassis are ideal for any type of small built-up unit such as a record amplifier, code oscillator, etc. U-shaped construction is used with ends folded over 1/4" for additional strength. This unit is natural finish aluminum alloy 5005 H-14.



| Bud No. | Size, Inches D. x W. x H. | Fits Cabinet Number | Net Each, Lots of | | |
|---------|---------------------------|---------------------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CB-38 | 7 x 6 x 2 | C-1584 | \$1.00 | \$0.90 | \$0.80 |
| CB-30 | 5 x 7 x 1 1/2 | | .97 | .87 | .78 |
| CB-41 | 7 x 7 x 1 1/2 | C-973 | 1.24 | 1.12 | .99 |
| CB-39 | 7 x 8 x 2 | C-1585 | 1.17 | 1.05 | .94 |
| CB-996 | 5 1/2 x 9 x 1 1/2 | C-993 | 1.09 | .98 | .87 |
| CB-976 | 7 1/2 x 9 x 1 1/2 | C-999, CD-1481 | 1.40 | 1.26 | 1.12 |
| CB-40 | 7 x 10 x 2 | C-1586 | 1.37 | 1.23 | 1.10 |
| CB-997 | 7 x 11 x 1 1/2 | C-994, CD-1482 | 1.30 | 1.17 | 1.04 |
| CB-998 | 7 x 13 x 1 1/2 | C-995, CD-1483 | 1.59 | 1.43 | 1.27 |

MINIATURE ALUMINUM CHASSIS

Small versions of above with 1/4" flange on bottom for bottom plate or fastening. Ideal for limited space uses. Natural finish.

| | | | | | |
|---------|-----------------------|----------------|--------|--------|--------|
| CB-1623 | 2 1/4 x 2 3/4 x 1 1/4 | | \$0.38 | \$0.34 | \$0.30 |
| CB-1624 | 1 3/4 x 3 3/4 x 1 | CU-883 | .42 | .38 | .34 |
| CB-1625 | 3 1/4 x 4 1/4 x 2 | C-1788 | .48 | .43 | .38 |
| CB-1626 | 2 3/4 x 4 3/4 x 1 | CU-728 | .45 | .41 | .36 |
| CB-1627 | 3 3/4 x 4 3/4 x 1 1/2 | CU-720 | .45 | .41 | .36 |
| CB-1628 | 3 x 6 3/4 x 1 1/4 | C-1788 | .53 | .48 | .42 |
| CB-1629 | 5 3/4 x 4 3/4 x 1 1/2 | CU-1098 | .57 | .51 | .46 |
| CB-1617 | 4 x 3 3/4 x 1 | C-1606, C-1610 | .41 | .37 | .33 |
| CB-1618 | 4 x 4 3/4 x 1 | C-1607, C-1611 | .50 | .45 | .40 |
| CB-1619 | 4 x 5 3/4 x 1 | C-1608, C-1612 | .53 | .48 | .42 |
| CB-1620 | 4 x 6 3/4 x 1 | C-1609, C-1613 | .55 | .50 | .44 |

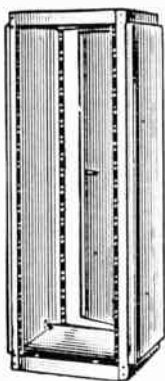
WRITE FOR INFORMATION AND PRICES ON BUD CONSOLE AND TABLE ASSEMBLIES.



Racks, Cabinets, Blowers

PRESTIGE BALL CORNER RACKS

Attractive, practical housing for permanent or mobile instrumentation. Standard Prestige relay rack consists of framework, top, bottom, two ball cornered sides, and a ball corner door. Sides attach to frame by means of a tongue-and-slot arrangement at bottom and two screws at top. Sides easily removable for access. Drilled and tapped panel mounting rails on all four vertical members of frame. Doors mount from either left or right side. Slotted base takes ball-cornered side panels on any of the four sides. Door and side clearance permits covering of equipment without damage to knobs or controls. Provision made for recessed casters. Extra doors available for placing on any of the sides. Knockout holes provided for attaching two or more units together. Bottom will support 500 lbs., panel rails 200 lbs., suspended vertically between rails. Units take Bud SD-1717 sliding drawer assembly or CD-2210 console drawer. Shipped knocked-down, with necessary assembly hardware. **Gray hammertone finish only. Now furnished with adjustable panel mounting rails.**



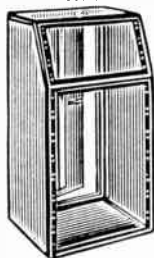
| Bud No. | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|---------|------------------|-------------|-----------|-------------------|----------|----------|
| | | | | 1-9 | 10-14 | 15-19 |
| CR-2280 | 69 1/2" | 6 1/4" | 179 | \$108.35 | \$ 97.51 | \$ 86.68 |
| CR-2281 | 71 1/2" | 6 6/8" | 186 | 115.55 | 103.99 | 92.44 |
| CR-2282 | 82 1/2" | 7 7/8" | 213 | 129.75 | 116.77 | 103.80 |
| DR-2290 | Door for CR-2280 | | 28 | 13.50 | 12.15 | 10.80 |
| DR-2291 | Door for CR-2281 | | 33 | 14.40 | 12.96 | 11.52 |
| DR-2292 | Door for CR-2282 | | 39 | 16.20 | 14.58 | 12.96 |

PRESTIGE ADD-A-RACKS

Where relay racks are to be joined in series the Add-A-Rack assembly is lower in cost yet provides additional strength and improved appearance. Consists of top, bottom, rear door and framework. Made of 16 gauge steel. Extra ball corner doors will fit adjustable panel mounting rails which are recessed so that panel will be flush with face of rack. Add-A-Racks may be added at any time as needed. **Gray hammertone finish.**

| Bud No. | Used to Add-A-Rack to | Net Each, Lots of | | |
|---------|-----------------------|-------------------|---------|---------|
| | | 1-9 | 10-14 | 15-19 |
| CR-2284 | CR-2280 | \$ 85.29 | \$76.76 | \$68.23 |
| CR-2286 | CR-2281 | 92.15 | 82.94 | 73.72 |
| CR-2287 | CR-2282 | 103.47 | 93.12 | 82.78 |

IMPERIAL INCLINED PANEL CONSOLE



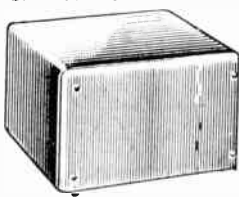
Smart looking all-aluminum Imperial console built for strength while keeping weight factor in mind. Complete assembly includes framework, top, bottom, two sides, and reinforced door with concealed hinges and flush mounted latch. Extrusions and joints are ball-cornered aluminum castings. Inclined panel set at 22 1/2° angle for comfortable viewing. Cast brass, heavy duty hinges specifically designed to enable components, blowers, etc., to be mounted on rear door. Framework for top, inclined panel area and front are extrusions, drilled and tapped to accept standard rack panels. Casters may be attached to bottom. Standard Bud aluminum panels may be used to enclose the front and inclined panel spaces. **Gray hammertone finish only.**

| Bud No. | Overall, Inches W. x D. x H. | Vertical Panel Size, Inches | Weight, Lbs. |
|---------|------------------------------|-----------------------------|--------------|
| BI-1828 | 20 1/8 x 18 1/2 x 40 1/2 | 19 1/8 x 28 1/8 | 41 |
| BI-2228 | 20 1/8 x 22 3/4 x 40 1/2 | 19 1/8 x 28 1/8 | 47 |
| BI-2419 | 20 1/8 x 19 1/2 x 43 1/2 | 19 1/8 x 24 1/8 | 43 |
| BI-2421 | 20 1/8 x 21 1/2 x 43 1/2 | 19 1/8 x 24 1/8 | 46 |

| Bud No. | Net Each, Lots of | | |
|---------|-------------------|----------|----------|
| | 1-9 | 10-14 | 15-19 |
| BI-1828 | \$155.00 | \$139.50 | \$124.00 |
| BI-2228 | 170.00 | 153.00 | 136.00 |
| BI-2419 | 190.00 | 171.00 | 152.00 |
| BI-2421 | 200.00 | 180.00 | 160.00 |

CONTOUR UTILITY CABINETS

Attractively designed utility housing with rounded contour corners. Flanged panels also have rounded corners to preserve the symmetry of design. Constructed of 20 gauge steel. Both front and rear panels are removable; the front panel is solid while the rear panel is louvered for proper ventilation. Four rubber feet, attached to base, prevent scratching surface the unit is placed on. Body is smooth, dark gray enamel; panel is smooth light gray enamel.



| Bud No. | Overall Size, Inches | | | Net Each, Lots of | | |
|---------|----------------------|--------|-------|-------------------|--------|-----------|
| | H. | W. | D. | 1-24 | 25-49 | 50 & Over |
| CU-463 | 4 7/8 | 6 7/8 | 3 3/4 | \$ 5.50 | \$4.95 | \$4.40 |
| CU-465 | 4 7/8 | 6 7/8 | 5 3/4 | 6.35 | 5.72 | 5.08 |
| CU-585 | 5 7/8 | 8 7/8 | 5 3/4 | 8.35 | 7.52 | 6.68 |
| CU-587 | 5 7/8 | 8 7/8 | 7 3/4 | 9.10 | 8.19 | 7.28 |
| CU-7125 | 7 7/8 | 12 7/8 | 5 3/4 | 9.70 | 8.73 | 7.76 |
| CU-7127 | 7 7/8 | 12 7/8 | 7 3/4 | 10.35 | 9.32 | 8.28 |

PORTACAB

Attractive, versatile cabinets desirable as housings for instrumentation requiring highly stylized appearance. Custom, quality look achieved in standard production models. Made entirely of aluminum to minimize weight. Flexible recessed handle permits easy portability as well as vertical stacking. Well louvered for adequate ventilation. Louvers point inward, permitting side-to-side placement of cabinets without space loss. Aluminum front panel recessed 1/2". Welded back has opening. Perimeter of panel follows contour of body. Has four detachable rubber feet. **Gray hammertone finish only.**



| Bud No. | Size, Inches W. x D. x H. | Wt., Lbs. | Bud Chassis | Net Each, Lots of | | |
|---------|---------------------------|-----------|-------------|-------------------|---------|---------|
| | | | | 1-24 | 25-49 | 50-99 |
| WA-1540 | 6 1/4 x 8 x 8 | 2 1/2 | AC-402 | \$ 9.20 | \$ 8.28 | \$ 7.36 |
| WA-1541 | 8 1/4 x 12 x 9 | 3 | AC-407 | 12.00 | 10.80 | 9.60 |
| WA-1542 | 10 1/4 x 8 x 8 | 3 1/2 | AC-406 | 10.65 | 9.59 | 8.52 |
| WA-1543 | 11 1/4 x 18 x 11 | 6 1/2 | AC-416 | 13.50 | 12.15 | 10.80 |
| WA-1544 | 11 1/4 x 18 x 12 | 7 3/4 | AC-420 | 15.50 | 13.95 | 12.40 |

MINISLIDE



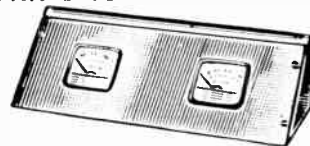
Ideal for housing components or assemblies where easy access to internally mounted parts is important. Can be mounted in a number of positions in a rack or cabinet. Accessibility achieved by removing sliding cover. Design of Minislide Box provides adequate shielding and protection from dust. Sturdily made of .050 aluminum. 4 self-tapping fastening screws included. Choice of gray hammertone (GH) or natural aluminum (NA).

ing screws included. Choice of gray hammertone (GH) or natural aluminum (NA).

| Bud No. | Finish | Size, Inches W. x D. x H. | Wt., Lbs. | Net Each, Lots of | | |
|---------|--------|---------------------------|-----------|-------------------|--------|---------|
| | | | | 1-49 | 50-99 | 100-149 |
| MS-2150 | (GH) | 3 1/4 x 13 x 2 1/2 | 1 | \$3.75 | \$3.38 | \$3.00 |
| MS-2151 | (GH) | 5 1/4 x 13 x 2 1/2 | 1 1/2 | 4.30 | 3.87 | 3.44 |
| MS-2152 | (GH) | 3 1/4 x 17 x 2 1/2 | 1 1/4 | 4.15 | 3.74 | 3.32 |
| MS-3050 | (NA) | 3 1/4 x 13 x 2 1/2 | 1 | 2.85 | 2.57 | 2.28 |
| MS-3051 | (NA) | 5 1/4 x 13 x 2 1/2 | 1 1/2 | 3.50 | 3.15 | 2.80 |
| MS-3052 | (NA) | 3 1/4 x 17 x 2 1/2 | 1 1/4 | 3.35 | 3.02 | 2.68 |

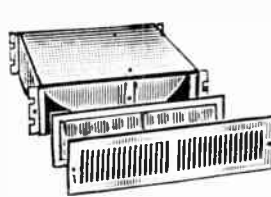
DUAL-VIEW PANEL SUPPORT

Designed for installation on a rack where an oblique view of instrument panel is desired. Engineered so that the entire assembly occupies no more space than size of supported panel. Panel support cover can be removed for easy servicing or installation of instruments. Made of heavy gauge steel with attractive contoured edges. Comes knocked-down with necessary assembly hardware, but without panels. Bud panels to fit these supports are PS-1253 (steel), and PA-1104 (aluminum) for Model IP-1120; PS-1255 (steel), and PA-1106 (aluminum) for IP-1121. Furnished in black wrinkle (add suffix "B"), gray hammertone (add suffix "HG"), gray wrinkle (add suffix "G"), smooth gray (suffix "SG"), or smooth blue (suffix "SB").



Bud No. IP-1120 Requires 19" x 7" panel space. Wt., 3 1/2 lbs. Net Each, Lots of 1-14 \$4.15
 Lots of 15-24, Each \$3.74 Lots of 25-34, Each \$3.32
Bud No. IP-1121 Requires 19" x 10 1/2" panel space. Wt., 6 3/4 lbs. Net Each, Lots of 1-14 \$5.80
 Lots of 15-24, Each \$5.22 Lots of 25-34, Each \$4.64

TRANS-AIRE BLOWER



Ideal for use where excessive heat is generated by equipment in an enclosed rack, cabinet or console. Brings in fresh air or exhausts heated air, enabling use as an exhaust or intake blower, depending upon mounting position. Unit will operate in any position - vertical or horizontal. May be mounted to rails of standard cabinet or rack. Use of Bud Chassis Supporting Angles SA-1349, SA-1350 or CE-2219 is recommended when blower is mounted in rack or cabinet. Motor is rubber mounted to reduce vibration. Operating noise factor reduced to minimum. Thermal overload protection to prevent overheating. Automatic reset. Oil impregnated, fiberglass disposable filter can be changed without removing unit from cabinet. Three sizes provide air displacement from 100 c.f.m. to 750 c.f.m. at 0" static pressure. Complete with filter, chrome-plated grille and 18" three-wire cord. All dimensional and technical data in table below. **Weight:** B-23 17 1/4 lbs., B-25 33 lbs., B-27 35 1/4 lbs.; replacement filter 1 lb.

BLOWERS

| Bud No. | Panel Space | Depth | Air c.f.m. | | Mot. hp | Net Each, Lots of | | |
|---------|--------------|---------|------------|-----|---------|-------------------|---------|---------|
| | | | High | Low | | 1-9 | 10-14 | 15 Up |
| B-23 | 3 1/2" x 19" | 12" | 200 | 100 | 1/20 | \$47.10 | \$42.39 | \$37.68 |
| B-25 | 5 3/4" x 19" | 14 1/2" | 500 | 250 | 1/6 | 53.35 | 48.02 | 42.68 |
| B-27 | 7" x 19" | 14 1/2" | 750 | 350 | 1/4 | 61.35 | 55.22 | 49.08 |

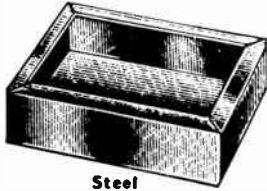
FILTERS FOR ABOVE BLOWERS

| Bud No. | Unit | Net Each, Lots of | | |
|---------|--------------------------|-------------------|--------|--------|
| | | 1-24 | 25-49 | 50-99 |
| BF-24 | Filter for use with B-23 | \$1.35 | \$1.22 | \$1.08 |
| BF-26 | Filter for use with B-25 | 1.50 | 1.35 | 1.20 |
| BF-28 | Filter for use with B-27 | 1.65 | 1.49 | 1.32 |

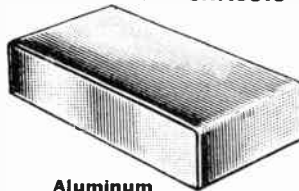


Chassis, Sliding Drawer

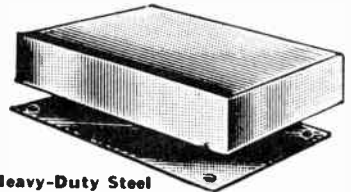
STEEL AND ALUMINUM CHASSIS BASES, PLATES



Steel



Aluminum



Heavy-Duty Steel

Each chassis is made from a single sheet of metal. All corners are reinforced and spot welded. Aluminum bases are welded on Government approved welders as used for aircraft parts; natural finish aluminum alloy 5005 H-14. All four sides are folded at the bottom for added rigidity and strength.

STEEL CHASSIS BASES

Made of 20 gauge steel except as otherwise specified.

| Size, Inches D. x W. x H. | Zinc Plated Finish | | | Black Wrinkle Finish | | | | |
|------------------------------|--------------------|-------------------|--------|----------------------|-------------------|--------|--------|--------|
| | Bud CB- | Net Each, Lots of | | Bud CB- | Net Each, Lots of | | | |
| 5 x 7 x 2 | 629* | \$1.30 | \$1.17 | \$1.04 | 628* | \$1.07 | \$0.96 | \$0.86 |
| 5 x 9 1/2 x 2 1/2 | 645* | 1.67 | 1.50 | 1.34 | 644* | 1.37 | 1.23 | 1.10 |
| 5 x 9 1/2 x 1 1/2 | 776* | 1.69 | 1.52 | 1.35 | 788* | 1.20 | 1.08 | .96 |
| 5 x 10 x 3 | 605* | 1.84 | 1.66 | 1.47 | 604* | 1.27 | 1.14 | 1.02 |
| 6 x 14 x 3 | 756 | 2.05 | 1.85 | 1.64 | 755 | 1.75 | 1.58 | 1.40 |
| 7 x 7 x 2 | 1191 | 1.50 | 1.35 | 1.20 | 789 | 1.20 | 1.08 | .96 |
| 7 x 9 x 2 | 1192 | 1.59 | 1.43 | 1.27 | 790 | 1.40 | 1.26 | 1.12 |
| 7 x 11 x 2 | 1193 | 1.67 | 1.50 | 1.34 | 791 | 1.45 | 1.31 | 1.16 |
| 7 x 12 x 3 | 793 | 2.05 | 1.85 | 1.64 | 792 | 1.57 | 1.41 | 1.26 |
| 7 x 13 x 2 | 1194 | 1.92 | 1.73 | 1.54 | 646 | 1.54 | 1.39 | 1.23 |
| 5 x 13 1/2 x 2 1/2 | 1198 | 2.17 | 1.95 | 1.74 | 647 | 1.77 | 1.59 | 1.42 |
| 7 x 15 x 3 | 1189 | 2.40 | 2.16 | 1.92 | 649 | 2.00 | 1.80 | 1.60 |
| 8 1/2 x 15 x 3 | 666 | 2.71 | 2.44 | 2.17 | 665 | 2.24 | 2.02 | 1.79 |
| 4 x 17 x 3 | 1066 | 2.14 | 1.93 | 1.71 | 1068 | 1.80 | 1.62 | 1.44 |
| 7 x 17 x 2 1/2 | 1199 | 2.37 | 2.13 | 1.90 | 648 | 1.99 | 1.79 | 1.59 |
| 7 x 17 x 3 | 758 | 2.59 | 2.33 | 2.07 | 757 | 2.15 | 1.94 | 1.72 |
| 8 x 10 x 2 1/2 | 702 | 2.02 | 1.82 | 1.62 | 701 | 1.72 | 1.55 | 1.38 |
| 8 x 12 x 2 1/2 | 704 | 2.24 | 2.02 | 1.79 | 703 | 1.75 | 1.58 | 1.40 |
| 8 x 12 x 3 | 760 | 2.34 | 2.11 | 1.87 | 759 | 1.85 | 1.67 | 1.48 |
| 8 x 17 x 2 | 774 | 2.34 | 2.11 | 1.87 | 650 | 1.70 | 1.53 | 1.36 |
| 8 x 17 x 3 | 775 | 2.62 | 2.39 | 2.10 | 651† | 2.05 | 1.85 | 1.64 |
| 10 x 12 x 3 | 1195 | 2.25 | 2.03 | 1.80 | 652 | 1.89 | 1.70 | 1.51 |
| 10 x 14 x 3 | 779 | 2.44 | 2.20 | 1.95 | 653 | 2.04 | 1.84 | 1.63 |
| 10 x 17 x 2 | 769 | 2.39 | 2.15 | 1.91 | 654† | 2.00 | 1.80 | 1.60 |
| 10 x 17 x 3 | 637 | 2.84 | 2.57 | 2.27 | 636† | 2.00 | 1.80 | 1.60 |
| 10 x 17 x 3 | 1196† | 3.05 | 2.75 | 2.44 | 655† | 2.54 | 2.29 | 2.03 |
| 10 x 23 x 3 | 1197† | 3.42 | 3.08 | 2.74 | 656† | 2.86 | 2.57 | 2.29 |
| 11 x 17 x 2 | 770† | 2.81 | 2.53 | 2.25 | 657† | 2.35 | 2.12 | 1.88 |
| 11 x 17 x 3 | 771† | 3.49 | 3.14 | 2.79 | 658† | 2.77 | 2.49 | 2.22 |
| 12 x 17 x 2 | 661† | 3.09 | 2.78 | 2.47 | 663† | 2.44 | 2.20 | 1.95 |
| 12 x 17 x 3 | 662† | 3.67 | 3.30 | 2.94 | 664† | 2.91 | 2.62 | 2.33 |
| 13 x 17 x 2 | 772† | 3.72 | 3.35 | 2.98 | 659† | 2.91 | 2.62 | 2.33 |
| 13 x 17 x 3 | 773† | 4.07 | 3.66 | 3.26 | 660† | 3.41 | 3.07 | 2.73 |
| 10 x 17 x 4 | 641† | 3.51 | 3.16 | 2.81 | 640† | 2.92 | 2.63 | 2.34 |
| 13 x 17 x 4 | 643† | 4.68 | 4.21 | 3.74 | 642† | 3.92 | 3.53 | 3.14 |
| 10 x 17 x 5 | 624† | 5.34 | 4.81 | 4.27 | 623† | 4.51 | 4.06 | 3.61 |
| 13 x 17 x 5 | 626† | 5.93 | 5.34 | 4.74 | 625† | 4.93 | 4.44 | 3.94 |

*22 gauge. †Punched to accommodate chassis mounting brackets. ††8 gauge.

STEEL CHASSIS BOTTOM PLATES

Protect wiring and keep out dust from chassis bottom. Four embossed feet. Two finishes to match chassis finish.

| Fits Chassis Size, In. W. x L. | Zinc Plated Finish | | | Black Wrinkle Finish | | | | |
|--------------------------------------|--------------------|-------------------|--------|----------------------|-------------------|--------|--------|--------|
| | Bud BP- | Net Each, Lots of | | Bud BP- | Net Each, Lots of | | | |
| 5 x 7 | 706 | \$0.69 | \$0.62 | \$0.55 | 705 | \$0.57 | \$0.51 | \$0.46 |
| 5 x 9 1/2 | 667 | .75 | .68 | .60 | 680 | .62 | .56 | .50 |
| 5 x 10 | 538 | .73 | .66 | .58 | 536 | .67 | .60 | .54 |
| 7 x 7 | 668 | .97 | .87 | .78 | 681 | .92 | .83 | .74 |
| 7 x 9 | 669 | .99 | .89 | .79 | 682 | .94 | .85 | .75 |
| 7 x 11 | 670 | 1.07 | .96 | .86 | 683 | .95 | .86 | .76 |
| 7 x 12 | 539 | 1.12 | 1.01 | .90 | 537 | .99 | .89 | .79 |
| 7 x 13 | 671 | 1.20 | 1.08 | .96 | 684 | 1.02 | .92 | .82 |
| 5 x 13 1/2 | 672 | 1.00 | .90 | .80 | 685 | .84 | .76 | .67 |
| 4 x 17 | 1067 | 1.07 | .96 | .86 | 1069 | .84 | .76 | .67 |
| 7 x 17 | 673 | 1.37 | 1.23 | 1.10 | 686 | .90 | .81 | .72 |
| 8 x 10 | 708 | 1.05 | .94 | .84 | 707 | .92 | .83 | .74 |
| 8 x 12 | 710 | 1.34 | 1.21 | 1.07 | 709 | 1.06 | .95 | .85 |
| 8 x 17 | 674 | 1.54 | 1.39 | 1.23 | 687 | .95 | .86 | .76 |
| 10 x 12 | 675 | 1.57 | 1.41 | 1.26 | 688 | .95 | .86 | .76 |
| 10 x 14 | 514 | 1.33 | 1.20 | 1.06 | 517 | 1.25 | 1.13 | 1.00 |
| 10 x 17 | 676 | 1.60 | 1.44 | 1.28 | 689 | 1.20 | 1.08 | .96 |
| 11 x 17 | 677 | 1.60 | 1.44 | 1.28 | 690 | 1.20 | 1.08 | .96 |
| 12 x 17 | 678 | 1.87 | 1.68 | 1.50 | 691 | 1.27 | 1.14 | 1.02 |
| 13 x 17 | 679 | 2.24 | 2.02 | 1.79 | 692 | 1.47 | 1.32 | 1.18 |

ALUMINUM CHASSIS BOTTOM PLATES

| Bud No. | Fits Chassis W. x L., In. | Wt., Lbs. | Net Each, Lots of | | |
|----------|------------------------------|--------------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| BPA-1589 | 5 x 7 | 1/4 | \$0.74 | \$0.67 | \$0.59 |
| BPA-1590 | 5 x 9 1/2 | 1/4 | .75 | .68 | .60 |
| BPA-1591 | 5 x 10 | 1/4 | .75 | .68 | .60 |
| BPA-1592 | 7 x 7 | 1/4 | .77 | .69 | .62 |
| BPA-1593 | 7 x 9 | 1/4 | .80 | .72 | .64 |
| BPA-1594 | 7 x 11 | 1/4 | .90 | .81 | .72 |
| BPA-1595 | 7 x 12 | 1/4 | .97 | .87 | .78 |
| BPA-1596 | 7 x 13 | 1/4 | 1.14 | 1.03 | .91 |
| BPA-1597 | 10 x 17 | 3/4 | 1.52 | 1.37 | 1.22 |
| BPA-1598 | 13 x 17 | 3/4 | 2.07 | 1.86 | 1.66 |

ALUMINUM CHASSIS BASES

| Bud No. | Size, Inches D. x W. x H. | Ga. | Wt., Lbs. | Net Each, Lots of | | |
|---------|------------------------------|-----|--------------|-------------------|--------|--------|
| | | | | 1-24 | 25-49 | 50-99 |
| AC-430 | 4 x 6 x 3 | 18 | 1 1/2 | \$1.34 | \$1.21 | \$1.07 |
| AC-431 | 4 x 6 x 2 | 18 | 1 1/2 | 1.10 | .99 | .88 |
| AC-432 | 4 x 17 x 3 | 16 | 1 1/2 | 2.33 | 2.10 | 1.86 |
| AC-402 | 5 x 7 x 2 | 18 | 1 1/2 | 1.17 | 1.05 | .94 |
| AC-429 | 5 x 7 x 3 | 18 | 1 1/2 | 1.42 | 1.28 | 1.14 |
| AC-403 | 5 x 9 1/2 x 2 | 18 | 1 1/2 | 1.24 | 1.12 | .99 |
| AC-421 | 5 x 9 1/2 x 3 | 18 | 1 1/2 | 1.60 | 1.44 | 1.28 |
| AC-404 | 5 x 10 x 3 | 18 | 1 1/2 | 1.63 | 1.47 | 1.30 |
| AC-422 | 5 x 13 x 3 | 16 | 1 1/2 | 1.84 | 1.66 | 1.47 |
| AC-433 | 6 x 17 x 3 | 18 | 1 1/2 | 2.67 | 2.40 | 2.14 |
| AC-405 | 7 x 7 x 2 | 18 | 1 1/2 | 1.35 | 1.22 | 1.08 |
| AC-406 | 7 x 9 x 2 | 18 | 1 1/2 | 1.46 | 1.31 | 1.17 |
| AC-407 | 7 x 11 x 2 | 18 | 1 1/2 | 1.58 | 1.42 | 1.26 |
| AC-408 | 7 x 12 x 3 | 18 | 1 1/2 | 2.00 | 1.80 | 1.60 |
| AC-409 | 7 x 13 x 2 | 18 | 1 1/2 | 1.67 | 1.50 | 1.34 |
| AC-411 | 7 x 15 x 3 | 16 | 1 1/2 | 2.67 | 2.40 | 2.14 |
| AC-423 | 7 x 17 x 3 | 16 | 1 1/2 | 2.75 | 2.48 | 2.20 |
| AC-424 | 8 x 12 x 3 | 16 | 1 1/2 | 2.42 | 2.18 | 1.84 |
| AC-425 | 8 x 17 x 2 | 16 | 1 1/2 | 2.51 | 2.26 | 2.01 |
| AC-412† | 8 x 17 x 3 | 16 | 1 1/2 | 2.84 | 2.56 | 2.27 |
| AC-413 | 10 x 12 x 3 | 16 | 1 1/2 | 2.67 | 2.40 | 2.14 |
| AC-414 | 10 x 14 x 3 | 16 | 1 1/2 | 2.84 | 2.56 | 2.27 |
| AC-415† | 10 x 17 x 2 | 16 | 1 1/2 | 2.68 | 2.41 | 2.14 |
| AC-416† | 10 x 17 x 3 | 16 | 2 | 3.17 | 2.85 | 2.54 |
| AC-426† | 11 x 17 x 2 | 14 | 2 1/2 | 3.42 | 3.08 | 2.74 |
| AC-417† | 11 x 17 x 3 | 14 | 2 1/2 | 3.97 | 3.57 | 3.18 |
| AC-418† | 12 x 17 x 3 | 14 | 2 1/2 | 4.08 | 3.67 | 3.26 |
| AC-419† | 13 x 17 x 2 | 14 | 2 1/2 | 3.51 | 3.16 | 2.81 |
| AC-420† | 13 x 17 x 3 | 14 | 2 1/2 | 4.26 | 3.83 | 3.41 |
| AC-427† | 10 x 17 x 4 | 14 | 3 1/2 | 4.51 | 4.06 | 3.61 |
| AC-428† | 13 x 17 x 4 | 14 | 3 1/2 | 5.26 | 4.73 | 4.21 |

†Punched to accommodate chassis mounting brackets.

HEAVY DUTY CHASSIS

Complete with 20 ga. bottom plate for uses requiring extra strength to hold heavy weights. Made of 16 ga. steel; 17" wide.

| Size, In. D. x H. | Zinc Plated Finish | | | Black Wrinkle Finish | | | | |
|----------------------|--------------------|-------------------|--------|----------------------|-------------------|--------|--------|--------|
| | Bud CB- | Net Each, Lots of | | Bud CB- | Net Each, Lots of | | | |
| 8 x 3 | 1765 | \$4.76 | \$4.28 | \$3.81 | 1758 | \$4.26 | \$3.83 | \$3.41 |
| 11 x 3 | 1767 | 4.84 | 4.36 | 3.87 | 1760 | 4.34 | 3.91 | 3.47 |
| 13 x 2 | 1768 | 5.34 | 4.81 | 4.27 | 1761 | 4.84 | 4.36 | 3.87 |
| 13 x 3 | 1769 | 5.43 | 4.89 | 4.34 | 1762 | 4.93 | 4.44 | 3.94 |
| 13 x 4 | 1770 | 5.85 | 5.27 | 4.68 | 1763 | 5.26 | 4.73 | 4.21 |

CHASSIS DECKS

Use in carrying cases, cabinets, etc.; deck is folded 1 1/2" over at front and 1/2" on sides. Black enamel finish only.

| Bud No. | Size, In. W. x D. | Fits Cabinet Number | Net Each, Lots of | | |
|---------|----------------------|------------------------|-------------------|-------|-------|
| | | | 1-24 | 25-49 | 50-99 |
| CB-522 | 4 3/4 x 5 1/2 | CU-1098 | 68c | 61c | 54c |
| CB-523 | 4 3/4 x 4 1/2 | CU-1099 | 65c | 59c | 52c |
| CB-525 | 5 3/4 x 5 1/2 | CU-1124, CU-1096 | 78c | 70c | 62c |

CHASSIS SUPPORTING ANGLES

Distribute weight to sides of the rack to relieve the panel. Angles are 3" x 1 1/4" x 1/8" steel. Black enamel finish. No. CE-2219 designed for attachment to rails of Console Pedestal or Prestige Relay Racks. Slotted for infinite vertical adjustment; extend to full cabinet depth: 21" x 3" x 2 1/2".

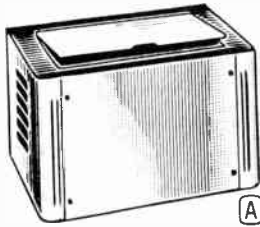
| Bud No. | Length, Inches | Weight, Lbs. | Net Per Pair, Lots of | | |
|---------|-------------------|-----------------|-----------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| SA-1349 | 14 1/2 | 4 | \$2.25 | \$2.03 | \$1.80 |
| SA-1350 | 12 | 3 | 2.17 | 1.95 | 1.74 |
| CE-2219 | 21 | 7 1/2 | 3.00 | 2.70 | 2.40 |

SLIDING DRAWER ASSEMBLY

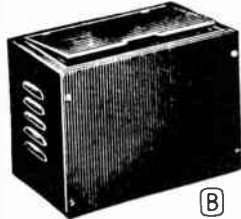
Ideal for use as a record player mounting base, typewriter base, apparatus and instrument base, writing desk, etc. Installs quickly and simply in any standard rack. Can't fall out or tilt. Provides a completely safe mounting base for anything put on it. Ball bearing suspension for easy sliding. Chassis formed from one-piece 14 gauge aluminum; electro-welded. Support brackets formed from one-piece 1/4" aluminum. Slide rail fastens securely to chassis, slides in and out easily on channel ball bearings. Stop screw on slide rail prevents drawer from falling out of channel. Support brackets and channel finished in natural aluminum; chassis, slide and plate finished in light gray hammertone. Will support up to 50 lbs. Chassis Size: 1



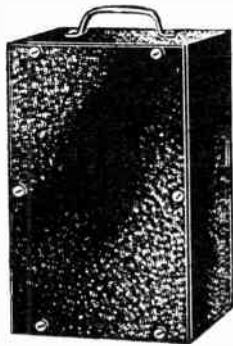
Cabinets and Cases



A



B



C

STREAMLINED CABINETS (FIG. A)

Ideal for housing devices not requiring excessive depth. Recessed, hinged cover with convenient finger lift for access. Panels fit flush with embossed, rounded corner fronts. Recommended for use with Bud Open End Chassis. Back opening 3 1/2" h. provides for cables or rear controls; louvered sides provide ample ventilation. **Size:** 8 1/2" d. x 8" h., overall. Specify black wrinkle (suffix "B"), gray wrinkle (suffix "G") or gray hammertone (suffix "HG") finish.

| Bud No. | Width, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|----------|----------------|-------------|-----------|-------------------|---------|---------|
| | | | | 1-24 | 25-49 | 50-99 |
| CD-1480 | 10 1/2" | 8" x 8" | 5 3/4 | \$ 5.90 | \$ 5.31 | \$ 4.72 |
| CD-1481 | 12 1/2" | 8" x 10" | 6 | 6.01 | 5.41 | 4.81 |
| CD-1482 | 14 1/2" | 8" x 12" | 6 1/2 | 6.31 | 5.68 | 5.05 |
| CD-1483 | 16 1/2" | 8" x 14" | 7 | 7.77 | 6.99 | 5.42 |
| CD-1484 | 18 1/2" | 8" x 16" | 7 3/4 | 7.36 | 6.62 | 5.89 |
| CD-1485* | 20 1/2" | 12" x 18" | 15 | 14.95 | 13.45 | 11.96 |

*Depth is 12"; has 1/2" vertical chrome strip at corners.

INSTRUMENT AND RECEIVER CABINETS (FIG. B)

Economy version of the Streamlined Cabinet series. Recessed, hinged cover provides access to contents. Front panel is attached with self-tapping screws. Louvers provide ample ventilation. Bud Open End Chassis are suited for use with these units. Black wrinkle finish only.

| Bud No. | Size, Inches H. x W. x D. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| C-873 | 7 x 8 x 8 | 5 | \$4.18 | \$3.76 | \$3.34 |
| C-893 | 7 x 10 x 8 | 5 1/2 | 4.84 | 4.36 | 3.87 |
| C-894 | 7 x 12 x 8 | 6 | 5.01 | 4.51 | 4.01 |
| C-895 | 7 x 14 x 8 | 7 | 5.26 | 4.73 | 4.21 |
| C-1190 | 8 x 16 x 8 | 7 | 7.66 | 6.84 | 6.08 |
| C-975 | 9 x 15 x 11 | 8 | 9.19 | 8.27 | 7.35 |
| C-999 | 12 x 18 x 12 | 15 | 9.92 | 8.93 | 7.94 |

CARRYING CASES (FIG. C)

A versatile cabinet that accepts a variety of equipment. Removable front and back panels; handle may be attached to top. Available in sturdy steel or lightweight aluminum to suit your requirements.

STEEL CASES

Specify black wrinkle (suffix "B") or gray hammertone (suffix "HG") finish when ordering.

| Bud No. | Size, Inches D. x W. x H. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CC-1095 | 5 x 6 x 9 | 3 1/4 | \$3.01 | \$2.71 | \$2.41 |
| CC-1091 | 5 x 9 x 6 | 3 1/4 | 3.01 | 2.71 | 2.41 |
| CC-1096 | 6 x 7 x 12 | 4 | 4.18 | 3.76 | 3.34 |
| CC-1092 | 6 x 12 x 7 | 4 | 4.18 | 3.76 | 3.34 |
| CC-1097 | 7 x 7 3/4 x 15 | 5 | 4.68 | 4.21 | 3.74 |
| CC-1100 | 8 x 10 x 10 | 5 | 4.84 | 4.36 | 3.87 |
| CC-1093 | 7 x 15 x 9 | 5 | 5.85 | 5.27 | 4.68 |

NATURAL FINISH ALUMINUM CASES*

| Bud No. | Size, Inches D. x W. x H. | Wt., Lbs. | Net Each, Lots of | | |
|----------|---------------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| ACC-2095 | 5 x 6 x 9 | 1 1/2 | \$3.09 | \$2.78 | \$2.47 |
| ACC-2091 | 5 x 9 x 6 | 1 1/2 | 3.09 | 2.78 | 2.47 |
| ACC-2096 | 6 x 7 x 12 | 1 1/2 | 4.50 | 4.05 | 3.60 |
| ACC-2092 | 6 x 12 x 7 | 1 1/2 | 4.50 | 4.05 | 3.60 |

GRAY HAMMERTONE ALUMINUM CASES*

| Bud No. | Size, Inches D. x W. x H. | Wt., Lbs. | Net Each, Lots of | | |
|------------|---------------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| ACC-2095HG | 5 x 6 x 9 | 1 1/2 | \$3.51 | \$3.16 | \$2.81 |
| ACC-2091HG | 5 x 9 x 6 | 1 1/2 | 3.51 | 3.16 | 2.81 |
| ACC-2096HG | 6 x 7 x 12 | 1 1/2 | 5.09 | 4.58 | 4.07 |
| ACC-2092HG | 6 x 12 x 7 | 1 1/2 | 5.09 | 4.58 | 4.07 |

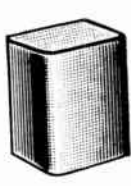
*Aluminum alloy 5005 H-14.



D



E



F

METAL UTILITY CABINETS (FIG. D)

Highly useful housing for all types of electronic equipment such as mixers, monitors, frequency meters, etc. Both front and back panels are removable for easy accessibility.

STEEL CABINETS

Specify black wrinkle (suffix "B") or gray hammertone (suffix "HG") finish.

| Bud No. | Size, Inches D. x W. x H. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------------------------|-----------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| CU-883 | 2 x 4 x 4 | 3/4 | \$1.09 | \$0.98 | \$0.87 |
| CU-728 | 3 x 5 x 4 | 3/4 | 1.22 | 1.10 | .98 |
| CU-729 | 4 x 5 x 6 | 1 1/4 | 1.38 | 1.24 | 1.10 |
| CU-1098 | 6 x 6 x 6 | 2 1/2 | 2.09 | 1.88 | 1.67 |
| CU-1099 | 5 x 6 x 9 | 3 | 2.34 | 2.11 | 1.87 |
| CU-879 | 7 x 8 x 10 | 5 | 3.34 | 3.01 | 2.67 |
| CU-1124 | 6 x 7 x 12 | 4 | 3.29 | 2.96 | 2.63 |
| CU-880 | 8 x 10 x 10 | 5 1/2 | 4.01 | 3.61 | 3.21 |
| CU-881 | 8 x 11 x 12 | 6 | 4.34 | 3.91 | 3.47 |
| CU-882 | 7 x 9 x 15 | 7 1/2 | 4.51 | 4.06 | 3.61 |

NATURAL FINISH ALUMINUM CABINETS*

| AU-1083 | Size, Inches D. x W. x H. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------------------------|-----------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| AU-1083 | 2 x 4 x 4 | 1/2 | \$1.29 | \$1.16 | \$1.03 |
| AU-1028 | 3 x 5 x 4 | 1/2 | 1.37 | 1.23 | 1.10 |
| AU-1029 | 4 x 5 x 6 | 1 1/2 | 1.50 | 1.35 | 1.20 |
| AU-1039 | 6 x 6 x 6 | 3/4 | 2.17 | 1.95 | 1.74 |
| AU-1040 | 5 x 6 x 9 | 1 | 2.51 | 2.26 | 2.01 |

GRAY HAMMERTONE ALUMINUM CABINETS*

| AU-1083HG | Size, Inches D. x W. x H. | Wt., Lbs. | Net Each, Lots of | | |
|-----------|---------------------------|-----------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| AU-1083HG | 2 x 4 x 4 | 1/2 | \$1.50 | \$1.35 | \$1.20 |
| AU-1028HG | 3 x 5 x 4 | 1/2 | 1.67 | 1.50 | 1.34 |
| AU-1029HG | 4 x 5 x 6 | 1 1/2 | 1.84 | 1.66 | 1.47 |
| AU-1039HG | 6 x 6 x 6 | 3/4 | 2.42 | 2.18 | 1.94 |
| AU-1040HG | 5 x 6 x 9 | 1 | 2.84 | 2.56 | 2.27 |

*Aluminum alloy 5005 H-14.

MINIATURE UTILITY CABINETS (FIG. E)

Ideal housing for construction of electronic devices using miniature tubes and transistorized circuitry. Front panel has a built-on chassis. Both front and rear panels are removable; fastened by self-tapping screws. Black wrinkle enamel finish.

| Bud No. | Size, In. H. x W. x D. | Chassis W. x D., In. | Net Each, Lots of | | |
|---------|------------------------|----------------------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| C-1793 | 4 x 4 x 2 | 3 3/4 x 1 3/4* | \$1.34 | \$1.21 | \$1.07 |
| C-1794 | 4 x 5 x 3 | 4 1/4 x 2 3/4* | 1.48 | 1.33 | 1.18 |
| C-1795 | 5 x 4 x 3 | 3 3/4 x 2 3/4† | 1.62 | 1.46 | 1.30 |
| C-1796 | 6 x 5 x 4 | 4 1/4 x 3 3/4† | 1.70 | 1.53 | 1.36 |
| C-1797 | 5 x 6 x 4 | 5 1/4 x 3 3/4† | 1.92 | 1.73 | 1.54 |
| C-1798 | 6 x 6 x 6 | 4 3/4 x 5 1/2† | 2.17 | 1.95 | 1.74 |

*1" high. †1 1/4" high. ‡1 3/4" high.

STREAMLINED MULTI-PURPOSE CABINETS (FIG. F)

Attractive cabinet with curved corners; uses chassis No. CB-1625. Back is entirely open for ventilation. Finished in light gray wrinkle only.

| Bud No. | Size, Inches H. x W. x D. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------------------------|-----------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| C-1787 | 4 1/2 x 5 1/2 x 3 1/2 | 1 | \$1.70 | \$1.53 | \$1.36 |
| C-1788 | 6 1/2 x 5 1/2 x 3 1/2 | 1 1/2 | 1.75 | 1.58 | 1.40 |

UNIVERSAL SLOPING PANEL CABINETS

Fully enclosed and shielded housing with one-piece detachable back and sides fastened to body with four self-tapping screws. Components may be mounted on back, bottom, sides or front. Will accommodate Bud Miniature Aluminum Chassis. **Size:** 4" d. x 4 1/2" h. Gray hammertone finish only.



ALUMINUM MODELS

Aluminum alloy 5005 H-14.

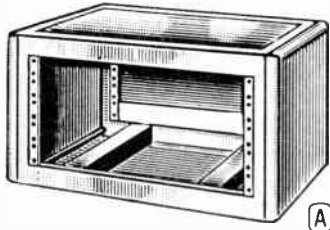
| Bud No. | Uses Chassis | Width | Wt., Lbs. | Net Each, Lots of | | |
|---------|--------------|-------|-----------|-------------------|--------|---------|
| | | | | 1-49 | 50-99 | 100-149 |
| AC-1610 | CB-1617 | 4" | 1 1/2 | \$1.68 | \$1.51 | \$1.34 |
| AC-1611 | CB-1618 | 5" | 1 1/2 | 1.75 | 1.57 | 1.40 |
| AC-1612 | CB-1619 | 6" | 3/4 | 1.90 | 1.71 | 1.52 |
| AC-1613 | CB-1620 | 7" | 3/4 | 2.10 | 1.89 | 1.68 |

STEEL MODELS

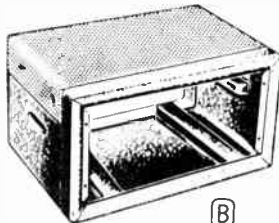
| C-1606 | Uses Chassis | Width | Wt., Lbs. | Net Each, Lots of | | |
|--------|--------------|-------|-----------|-------------------|--------|---------|
| | | | | 1-49 | 50-99 | 100-149 |
| C-1606 | CB-1617 | 4" | 3/4 | \$1.45 | \$1.30 | \$1.16 |
| C-1607 | CB-1618 | 5" | 3/4 | 1.55 | 1.39 | 1.24 |
| C-1608 | CB-1619 | 6" | 1 1/4 | 1.65 | 1.48 | 1.32 |
| C-1609 | CB-1620 | 7" | 1 1/4 | 1.90 | 1.71 | 1.52 |



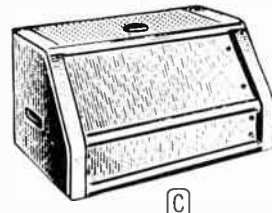
Equipment Cabinets



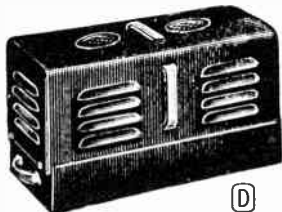
A



B



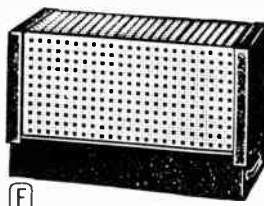
C



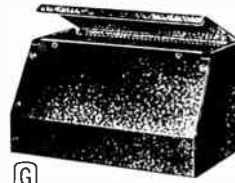
D



E



F



G

PRESTIGE VERSA-CABINETS (FIG. A)

Sturdy framework with ball cornered sides, perforated back, solid bottom plate and two supporting channels. Front, back, top and bottom are removable for easy access; also accept 19" panels for full closure; top panel may be perforated. An opening, 13 1/2" x 19", across the bottom of the back is supplied for controls, knobs, leads, etc.; may be covered with PS-1250 or PA-1101 panels if desired. Sides, attached by holding flanges and nut, may be removed to join one or more cabinets together, using holes supplied in frame; units may also be stacked similarly. Handles may be attached to sides if desired. Comes complete with 4 rubber mounting feet. Top may be closed, using PS-1256HG or PA-1107HG solid panels, PS-616HG or PS-815HG door panels, or PC-1710 perforated panel. Size: 23 3/8" w. x 15 3/8" d. overall. Gray hammertone finish only. Weight, 28 to 35 lbs.

| Bud No. | Height, Overall | Panel Space | Rear Panel | Net Each, Lots of | | |
|---------|-----------------|-------------|------------|-------------------|---------|---------|
| | | | | 1-14 | 15-24 | 25-34 |
| PC-1700 | 8 3/4" | 5 1/2" | 3 1/2" | \$27.25 | \$24.52 | \$21.80 |
| PC-1701 | 10 1/2" | 7" | 5 1/2" | 28.92 | 26.03 | 23.14 |
| PC-1702 | 12 1/2" | 8 3/4" | 7" | 30.75 | 27.67 | 24.60 |
| PC-1703 | 14 1/2" | 10 1/2" | 8 3/4" | 33.50 | 30.15 | 26.80 |
| PC-1704 | 15 3/4" | 12 1/2" | 10 1/2" | 35.25 | 31.72 | 28.20 |

VERSA-CABINETS

| Bud No. | Height, Overall | Panel Space | Rear Panel | Net Each, Lots of | | |
|---------|-----------------|-------------|------------|-------------------|---------|---------|
| | | | | 1-14 | 15-24 | 25-34 |
| PC-1700 | 8 3/4" | 5 1/2" | 3 1/2" | \$27.25 | \$24.52 | \$21.80 |
| PC-1701 | 10 1/2" | 7" | 5 1/2" | 28.92 | 26.03 | 23.14 |
| PC-1702 | 12 1/2" | 8 3/4" | 7" | 30.75 | 27.67 | 24.60 |
| PC-1703 | 14 1/2" | 10 1/2" | 8 3/4" | 33.50 | 30.15 | 26.80 |
| PC-1704 | 15 3/4" | 12 1/2" | 10 1/2" | 35.25 | 31.72 | 28.20 |

PERFORATED STEEL TOP PLATE

| Bud No. | Size, In. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------------|-----------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| PC-1710 | 12 1/2" x 19" | 2 1/2" | \$2.70 | \$2.43 | \$2.16 |

STANDARD PRESTIGE CABINETS (FIG. B)

Hinged solid or perforated cover with smooth grommet finger holes for easy lifting. Cabinet supplied with two supporting rails, laterally movable to fit any chassis width. Two safety shielded handle slots supplied. Made of 16 gauge steel. Takes standard 19" panels. Complete with embossed feet. Size: 21 1/2" w. x 14 3/4" d. overall. Gray hammertone finish only.

| Bud No. | Height, Overall | Panel Space | Wt., Lbs. | Net Each, Lots of | | |
|---------|-----------------|-------------|-----------|-------------------|---------|---------|
| | | | | 1-14 | 15-24 | 25-34 |
| C-1440 | 9 1/2" | 7" | 26 | \$28.22 | \$25.40 | \$22.58 |
| C-1441 | 11 1/4" | 8 3/4" | 27 | 30.06 | 27.05 | 24.05 |
| C-1442 | 13" | 10 1/2" | 29 | 32.82 | 29.54 | 26.26 |
| C-1550* | 9 1/2" | 7" | 26 | 30.56 | 27.50 | 24.45 |
| C-1551* | 11 1/4" | 8 3/4" | 27 | 32.73 | 29.46 | 26.18 |
| C-1552* | 13 1/2" | 10 1/2" | 29 | 35.57 | 32.01 | 28.46 |

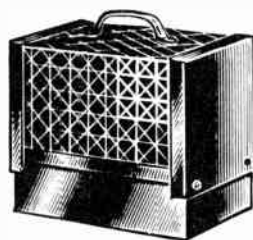
*With perforated cover; others solid.

PRESTIGE SLOPING PANEL CABINETS (FIG. C)

Ventilated top opens completely. Removable panel trim bar permits installation or removal of panels with chassis attached. Top panel is swept back for easy viewing. Takes standard 19" panels. Shielded lifting handles. Rear opening 2 1/2" x 18" for controls, etc.; panel recess 1 1/2"; bottom panel 3 1/2" high. Size: 22" w. x 9" top depth. Gray hammertone finish only. Weight, 26, 28 and 31 lbs.

| Bud No. | Size, In. H. x D. | Slope Height | Net Each, Lots of | | |
|---------|-------------------|--------------|-------------------|---------|---------|
| | | | 1-14 | 15-24 | 25-34 |
| C-1555 | 11 1/2" x 14 1/2" | 7" | \$36.00 | \$32.40 | \$28.80 |
| C-1556 | 13 1/2" x 15 1/2" | 8 3/4" | 38.65 | 34.78 | 30.92 |
| C-1557 | 14 3/4" x 16 1/2" | 10 1/2" | 41.45 | 37.30 | 33.16 |

MINIATURE AMPLIFIER FOUNDATION



With the increased use of miniature tubes, smaller cabinets can be used when designing a compact amplifier. This amplifier foundation was designed expressly for this purpose. The chassis is 5" x 7" x 2". Height, 6". The cover is made of perforated metal. A streamlined handle makes this cabinet portable. Black wrinkle only. Net Wt., 1 1/2 lbs.

| Bud No. | Net Each, Lots of | | |
|---------|-------------------|--------|--------|
| | 1-24 | 25-49 | 50-99 |
| CA-1754 | \$4.00 | \$3.60 | \$3.20 |

STREAMLINED FOUNDATIONS (FIG. D)

Attractive unit houses amplifiers and similar apparatus. Standard chassis with removable top cover with chrome trim. Sides and ends lowered. Handles attached to chassis. Overall height, 9"; chassis 2 3/8" high. Specify black wrinkle (suffix "B"), or gray wrinkle (suffix "G").

| Bud No. | Size, In. W. x D' | Wt., Lbs. | Net Each, Lots of | | |
|---------|-------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CA-1750 | 10 1/2" x 5" | 4 3/4" | \$6.76 | \$6.08 | \$5.41 |
| CA-1751 | 12 1/2" x 7" | 5" | 8.02 | 7.22 | 6.42 |
| CA-1752 | 17 1/2" x 7" | 8" | 8.52 | 7.67 | 6.82 |
| CA-1753 | 17 1/2" x 10" | 9" | 9.27 | 8.34 | 7.42 |

SLOPING PANEL FOUNDATIONS (FIG. E)

Removable top cover mounted on 3 1/2" sloping front chassis. Cover is gray wrinkle with chrome trim; chassis is black wrinkle. Overall height, 9 1/2".

| Bud No. | Chassis W. x D. | Top Depth | Wt., Lbs. | Net Each, Lots of | | |
|---------|-----------------|-----------|-----------|-------------------|---------|---------|
| | | | | 1-24 | 25-49 | 50-99 |
| CA-1980 | 10" x 8" | 5" | 5 | \$ 8.68 | \$ 7.81 | \$ 6.94 |
| CA-1981 | 12" x 10" | 7" | 6 | 9.35 | 8.42 | 7.48 |
| CA-1982 | 17" x 10" | 7" | 8 | 10.69 | 9.62 | 8.55 |
| CA-1983 | 17" x 13" | 10" | 10 | 11.19 | 10.07 | 8.95 |

STANDARD FOUNDATIONS (FIG. F)

Standard chassis with perforated cover for maximum ventilation. Handles are attached to chassis. Chassis 2 1/2" h., except CA-1128, 3" h. Overall height, 8 3/8", except CA-1128, 8 1/2". Black wrinkle finish only.

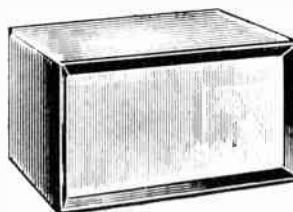
| Bud No. | Size, Inches W. x D. | Wt., Lbs. | Net Each, Lots of | | |
|---------|----------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CA-699 | 9" x 5 1/2" | 3 | \$5.61 | \$5.05 | \$4.49 |
| CA-1125 | 13 1/2" x 5 1/2" | 4 3/4" | 6.43 | 5.79 | 5.14 |
| CA-1126 | 17 1/2" x 7 1/2" | 6" | 7.26 | 6.53 | 5.81 |
| CA-1128 | 12 1/2" x 10 1/2" | 7" | 7.52 | 6.77 | 6.02 |

SLOPING PANEL CABINETS (FIG. G)

Hinged top for easy access; front panel also removable. Specify black wrinkle (suffix "B") or gray hammertone (suffix "HG").

| Bud No. | Size, Inches H. x W. x D. | Wt., Lbs. | Net Each, Lots of | | |
|---------|---------------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| C-1584 | 6 1/2" x 7 1/2" x 7 1/2" | 2 1/2" | \$3.30 | \$2.97 | \$2.64 |
| C-1587 | 8" x 8 1/2" x 8" | 2 3/4" | 4.51 | 4.06 | 3.61 |
| C-1585 | 6 1/2" x 9 1/2" x 7 1/2" | 3" | 3.75 | 3.38 | 3.00 |
| C-1588 | 8" x 10 1/2" x 8" | 3 1/4" | 5.01 | 4.51 | 4.01 |
| C-1586 | 6 1/2" x 11 1/2" x 7 1/2" | 3 1/2" | 4.34 | 3.91 | 3.47 |
| C-1894 | 8" x 13 1/2" x 8" | 4" | 5.34 | 4.81 | 4.27 |
| C-1892 | 8" x 13 1/2" x 8 1/2" | 5 1/4" | 5.95 | 5.36 | 4.76 |
| C-1896 | 9" x 18 1/2" x 8 1/2" | 7" | 7.68 | 6.91 | 6.14 |
| C-1893 | 10" x 18 1/2" x 10 1/2" | 8 1/2" | 7.85 | 7.07 | 6.28 |

SHADOW CABINET



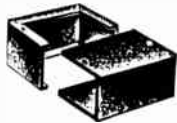
Extremely versatile housing with both front and rear panels and bottom panel removable for installation or servicing purposes. Front panel is recessed one inch to prevent accidental movement of knobs, etc., attached to it. Front edge of body is beveled. The two-piece body is of 18 gauge steel and the panels are of 16 gauge steel. Finish is light gray hammertone. Four rubber feet, attached to the bottom, eliminate marring of surfaces on which it may be placed.

| Bud No. | Overall Size, Inches | | | Uses Bud Chassis No. | Net Each, Lots of | | |
|---------|----------------------|--------|---------|----------------------|-------------------|--------|---------|
| | Width | Height | Depth | | 1-24 | 25-49 | 50 Over |
| SB-2140 | 11 1/2" | 8" | 10" | AC-424, CB-704 | \$6.50 | \$5.85 | \$5.20 |
| SB-2141 | 13 1/2" | 7 1/2" | 9" | AC-407, CB-1193 | 5.00 | 4.50 | 4.00 |
| SB-2142 | 17" | 9 1/2" | 11 1/2" | AC-411, CB-666 | 8.85 | 7.97 | 7.08 |
| SB-2143 | 15 1/2" | 6" | 9" | AC-409, CB-1194 | 4.85 | 4.37 | 3.88 |



Boxes, Baffles, Cases

MINIBOXES, HANDY BOXES



Design of this box permits installation of more components than would be possible in the conventionally designed boxes the same size. Two-piece construction. Either **snap-lock or screw type**. The hinge type construction assures adequate shielding. Made from heavy .040 ga. aluminum. Available in natural aluminum finish and gray hammertone finish.

GRAY HAMMERTONE MINIBOXES

| Bud No. | Size, Inches L. x H. x W. | Wt., Lbs. | Net Each, Lots of | | |
|----------|------------------------------|-----------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| CU-2100A | 2 3/4 x 2 1/2 x 1 3/8 | 1/4 | \$0.74 | \$0.67 | \$0.59 |
| CU-2101A | 3 1/4 x 2 1/2 x 1 3/8 | 1/4 | .76 | .68 | .61 |
| CU-2102A | 4 x 2 1/2 x 1 3/8 | 1/4 | .80 | .72 | .64 |
| CU-2103A | 4 x 2 1/4 x 2 1/4 | 1/4 | .80 | .81 | .72 |
| CU-2104A | 5 x 2 1/4 x 2 1/4 | 1/4 | .95 | .86 | .76 |
| CU-2105A | 5 x 4 x 3 | 1/2 | 1.20 | 1.08 | .96 |
| CU-2106A | 5 1/2 x 3 x 2 1/2 | 1/2 | 1.02 | .92 | .82 |
| CU-2107A | 6 x 5 x 4 | 3/4 | 1.50 | 1.35 | 1.20 |
| CU-2108A | 7 x 5 x 3 | 3/4 | 1.50 | 1.49 | 1.32 |
| CU-2109A | 8 x 6 x 3 1/2 | 1 | 2.10 | 1.89 | 1.68 |
| CU-2110A | 10 x 6 x 3 1/2 | 1 1/4 | 2.35 | 2.12 | 1.88 |
| CU-2111A | 12 x 7 x 4 | 1 3/4 | 3.20 | 2.88 | 2.56 |
| CU-2112A | 17 x 5 x 4 | 2 1/4 | 3.20 | 2.88 | 2.56 |
| CU-2113A | 10 x 2 x 1 1/2 | 1/2 | 1.10 | 1.08 | .99 |
| CU-2114A | 12 x 2 1/2 x 2 1/4 | 1/2 | 1.50 | 1.40 | 1.24 |
| CU-2115A | 4 x 2 x 2 1/4 | 1/4 | .92 | .83 | .74 |
| CU-2116A | 4 1/2 x 2 1/4 x 1 1/2 | 1/4 | .92 | .83 | .74 |
| CU-2117A | 3 1/2 x 2 1/4 x 1 1/2 | 1/4 | .78 | .70 | .62 |

*.050" aluminum.

NATURAL FINISH MINIBOXES

| Bud No. | Size, Inches L. x H. x W. | Wt., Lbs. | Net Each, Lots of | | |
|----------|------------------------------|-----------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| CU-3000A | 2 3/4 x 2 1/2 x 1 3/8 | 1/4 | \$0.59 | \$0.53 | \$0.47 |
| CU-3001A | 3 1/4 x 2 1/2 x 1 3/8 | 1/4 | .61 | .55 | .49 |
| CU-3002A | 4 x 2 1/2 x 1 3/8 | 1/4 | .64 | .58 | .51 |
| CU-3003A | 4 x 2 1/4 x 2 1/4 | 1/4 | .72 | .65 | .58 |
| CU-3004A | 5 x 2 1/4 x 2 1/4 | 1/4 | .76 | .68 | .61 |
| CU-3005A | 5 x 4 x 3 | 1/2 | .96 | .86 | .77 |
| CU-3006A | 5 1/2 x 3 x 2 1/2 | 1/2 | .82 | .74 | .66 |
| CU-3007A | 6 x 5 x 4 | 3/4 | 1.20 | 1.08 | .96 |
| CU-3008A | 7 x 5 x 3 | 3/4 | 1.32 | 1.19 | 1.06 |
| CU-3009A | 8 x 6 x 3 1/2 | 1 | 1.51 | 1.51 | 1.34 |
| CU-3010A | 10 x 6 x 3 1/2 | 1 1/4 | 1.88 | 1.69 | 1.51 |
| CU-3011A | 12 x 7 x 4 | 1 3/4 | 2.56 | 2.30 | 2.05 |
| CU-3012A | 17 x 5 x 4 | 2 1/4 | 2.56 | 2.30 | 2.05 |
| CU-3013A | 10 x 2 x 1 1/2 | 1/2 | .96 | .86 | .77 |
| CU-3014A | 12 x 2 1/2 x 2 1/4 | 1/2 | 1.24 | 1.12 | .99 |
| CU-3015A | 4 x 2 x 2 1/4 | 1/4 | .74 | .67 | .60 |
| CU-3016A | 4 1/2 x 2 1/4 x 1 1/2 | 1/4 | .74 | .67 | .60 |
| CU-3017A | 3 1/2 x 2 1/4 x 1 1/2 | 1/4 | .62 | .56 | .50 |

HANDY BOXES

Similar to Miniboxes in design and construction, except made of 22 gauge steel. Black wrinkle finish only. Screw type only.

| Bud No. | Size, Inches L. x H. x W. | Wt., Lbs. | 1-49 | 50-99 | 100-149 |
|---------|------------------------------|-----------|--------|--------|---------|
| HB-1621 | 4 1/2 x 2 1/4 x 1 1/2 | 1/2 | \$1.15 | \$1.04 | \$0.92 |
| HB-1622 | 4 x 2 x 2 3/4 | 1/2 | 1.17 | 1.05 | .94 |

SILVER SONANCE BAFFLES



Universal Enclosures
Bud Adjustable Mount-Bracket (shown in Fig. A and listed below) permits adjustment to any angle in a horizontal position. Hole in bracket passes 1/2" conduit, permitting any of the speaker housings to be suspended from the ceiling. B-lateral feature permits sound to come from both front and back. Made of heavy gauge steel. Sound-deadening compound eliminates metallic resonance. All screws and nuts furnished for mounting speaker. No holes to drill. Light gray hammertone finish, except CS-2270, 71, 72 and 73, primer finish only.



of heavy gauge steel. Sound-deadening compound eliminates metallic resonance. All screws and nuts furnished for mounting speaker. No holes to drill. Light gray hammertone finish, except CS-2270, 71, 72 and 73, primer finish only.

BAFFLES (FIG. A)

| Bud No. | For Spkr. Dia., In. | Size, Inches H. x W. x D. | Net Each, Lots of | | |
|---------|---------------------|------------------------------|-------------------|---------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CS-2240 | 4, 5 | 7 1/4 x 6 3/4 x 3 1/2 | \$ 4.92 | \$ 4.43 | \$3.94 |
| CS-2241 | 5, 5 1/2, 6 | 8 1/4 x 7 1/2 x 4 | 5.33 | 4.80 | 4.26 |
| CS-2242 | 6, 8 | 10 3/4 x 9 1/2 x 5 1/2 | 8.58 | 7.72 | 6.86 |
| CS-2243 | 10, 12 | 15 1/2 x 13 1/2 x 7 1/2 | 11.67 | 10.50 | 9.34 |
| CS-2270 | 4, 5 | 7 1/4 x 6 3/4 x 3 1/2 | 4.58 | 4.12 | 3.66 |
| CS-2271 | 5, 5 1/2, 6 | 8 1/4 x 7 1/2 x 4 | 4.84 | 4.36 | 3.87 |
| CS-2272 | 6, 8 | 10 3/4 x 9 1/2 x 5 1/2 | 8.16 | 7.34 | 6.53 |
| CS-2273 | 10, 12 | 15 1/2 x 13 1/2 x 7 1/2 | 11.15 | 10.04 | 8.92 |

MOUNTING BRACKETS

| Bud No. | For Baffle | Wt., Lbs. | Net Each, Lots of | | |
|---------|------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| AB-2250 | CS-2240 | 3/4 | \$1.14 | \$1.03 | \$0.91 |
| AB-2251 | CS-2241 | 1 | 1.14 | 1.03 | .91 |
| AB-2252 | CS-2242 | 1 1/4 | 1.41 | 1.27 | 1.13 |
| AB-2253 | CS-2243 | 2 3/4 | 1.65 | 1.49 | 1.32 |

RECESSED CEILING, WALL ENCLOSURES (FIG. B)

Suitable for an 8" speaker. Adjustable brackets make the housing ideal for old and new installations. Treated with sound deadening compound. Grille plate is a 14" square for use with acoustical tile ceiling. Depth, 4 1/4". Housing dimensions, 10" x 10" x 4".

| Bud No. | Description | Wt., Lbs. | Net Each, Lots of | | |
|---------|----------------------------|-----------|-------------------|--------|--------|
| | | | 1-24 | 25-49 | 50-99 |
| CS-2244 | Gray housing with grille | 8 1/4 | \$10.00 | \$9.60 | \$8.00 |
| CS-2274 | Primer housing with grille | 8 1/4 | 9.69 | 8.72 | 7.75 |
| CS-2245 | Gray grille plate only | 4 | 2.20 | 1.98 | 1.76 |
| CS-2275 | Primer grille plate only | 4 | 2.00 | 1.80 | 1.60 |

UNIVERSAL METER CASES

Center hole punched for 2" meters, plus easily removed knock-out ring to provide fit for 3" meters. Single piece detachable back and sides fastened to case with self-tapping screws for easy installation and servicing. Two knock-out holes in top provide for installation of feed-through insulators, switches, volume controls, etc. Gray hammertone finish only. Size: 4 1/4" h. x 4" w. x 4" d.



| Bud No. | Construction | Weight, Lbs. | Net Each, Lots of | | |
|----------|--------------|--------------|-------------------|--------|---------|
| | | | 1-49 | 50-99 | 100-149 |
| CM-1935 | Steel | 1 | \$1.22 | \$1.10 | \$0.98 |
| CMA-1936 | Aluminum | 3/4 | 1.47 | 1.32 | 1.18 |

MINIATURE SPEAKER CASES



Safe, convenient steel housing for 2" and 3" speakers. Black wrinkle finish only.

| Bud No. | For Size Speaker | Net Each, Lots of | | |
|---------|------------------|-------------------|--------|--------|
| | | 1-24 | 25-49 | 50-99 |
| CS-1685 | 2" | \$1.58 | \$1.42 | \$1.26 |
| CS-1686 | 3" | 1.58 | 1.42 | 1.26 |

WALL TYPE SPEAKER CASES

Steel speaker cases for table or wall use; similar in appearance to Miniature cases, above. Keyway holes are provided for wall mounting; embossed feet for table use. Unaffected by weather; will not warp or split. Brown wrinkle enamel finish only.

| Bud No. | For Speaker | Size, Inches H. x W. x D. | Wt., Lbs. | Net Each, Lots of | | |
|---------|-------------|------------------------------|-----------|-------------------|--------|--------|
| | | | | 1-24 | 25-49 | 50-99 |
| CS-1948 | 4" | 7 1/2 x 6 1/2 x 4 1/4 | 1 3/4 | \$2.67 | \$2.40 | \$2.14 |
| CS-1939 | 5" | 7 1/2 x 6 1/2 x 4 1/4 | 1 3/4 | 2.75 | 2.48 | 2.20 |
| CS-1940 | 6" | 9 1/2 x 8 x 5 3/8 | 3 | 3.26 | 2.93 | 2.61 |
| CS-1941 | 8" | 11 1/2 x 9 1/2 x 7 | 4 | 4.01 | 3.61 | 3.21 |
| CS-1942 | 10" | 13 1/2 x 11 1/2 x 8 1/4 | 5 | 5.01 | 4.51 | 4.01 |
| CS-1943 | 12" | 15 1/2 x 13 1/2 x 9 3/4 | 6 | 6.10 | 5.49 | 4.88 |

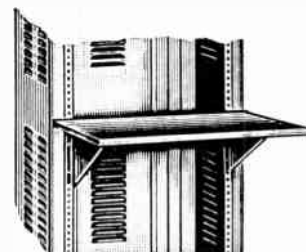
DIAL LOCK

The only simple-to-operate, efficient and inexpensive, positive dial lock on the market. Dual purpose design functions as both dial lock and position indicator. Completely eliminates problems of dial slippage and accidental movement. Nickel-plated brass construction.

Bud No. DL-1947 Dial Lock - Net Each **17c**

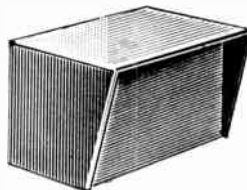
SHELF ASSEMBLY

Immediately adds extra utility to a standard rack at very little cost. Useful as a desk, work space, etc. Gray or black wrinkle finish or gray hammertone finish will match all standard Bud rack finishes. Can't fall off or tilt; will support any reasonable weight. Shelf portion supported by two brackets, punched to fit standard panel mounting strips. No panel support needed but can be attached over panel if desired. Slides welded to bottom of shelf; mounting brackets slip into slides and fasten with two screws. All necessary hardware furnished. Formed of 16 gauge steel; 1/2" flange on all four sides; overall height, 7 1/2". Brackets are 7" high. Specify finish.



| Bud No. | Size, Inches D. x W. | Weight, Lbs. | Net Each, Lots of | | |
|---------|-------------------------|--------------|-------------------|--------|--------|
| | | | 1-14 | 15-24 | 25-34 |
| SA-1719 | 16 x 22 | 14 | \$10.40 | \$9.36 | \$8.32 |
| SA-1720 | 20 x 22 | 15 | 10.55 | 9.50 | 8.44 |

COWL-TYPE MINIBOX



The cowl-type Minibox has a projecting cover to reduce glare on the panel from overhead lighting. It also provides protection for controls and dials. Cover has two box braces to which bottom is attached with sheet metal screws. When assembled, this type of construction results in a sturdy, rigid housing. Constructed of .040" aluminum and available in natural or light hammertone gray finish.

| Bud No. | Overall Size, Inches | | | Net Each, Lots of | | |
|----------|----------------------|----|----|-------------------|--------|------------|
| | H. | W. | D. | 1-49 | 50-99 | 100 & Over |
| SC-2130* | 6 | 10 | 7 | \$5.95 | \$5.36 | \$4.76 |
| SC-2131* | 7 | 12 | 8 | 6.50 | 5.85 | 5.20 |
| SC-2132* | 3 | 8 | 5 | 3.45 | 3.11 | 2.76 |
| SC-2133* | 5 | 5 | 5 | 3.60 | 3.24 | 2.88 |
| SC-3030† | 6 | 10 | 7 | 4.30 | 3.87 | 3.44 |
| SC-3031† | 7 | 12 | 8 | 4.70 | 4.23 | 3.76 |
| SC-3032† | 3 | 8 | 5 | 2.45 | 2.21 | 1.96 |
| SC-3033† | 5 | 5 | 5 | 2.60 | 2.34 | 2.08 |

*Painted light gray hammertone. †Natural aluminum finish.



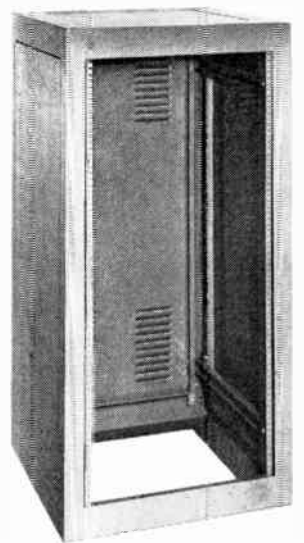
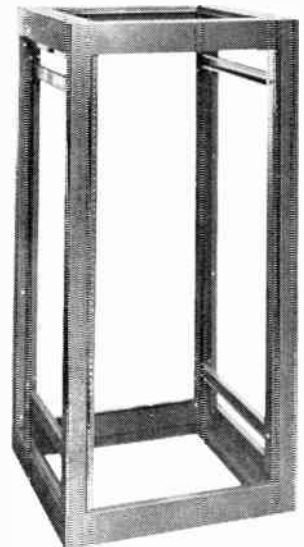
CALIFORNIA CHASSIS CO.

Lynwood, Calif.



ALL-STEEL WELDED CABINET

This flexible AWC cabinet is available as a complete package or as separate components to satisfy individual requirements. Doors and sides are interchangeable. Doors have chrome handles — spring loaded hinge pins provide rapid removal and servicing without tools. Panel mounting angles are tapped 10-32 with universal spacing for all standard panels. Louvers on doors and sides available. Standard finish — gray hammer-tone; other finishes optional.



| | | |
|---------|--|-------------------|
| AWC-42 | Assembly consisting of 42 inch panel space frame, two sides, one door, top, one pair panel mounting angles and all necessary hardware..... | \$125.00 |
| AWC-61 | Same as above except 61¼ inch panel space frame..... | 153.00 |
| AWC-70 | Same as above except 70 inch panel space frame..... | 166.00 |
| AWC-77 | Same as above except 77 inch panel space frame..... | 192.00 |
| AWCF-42 | Basic frame only — 42 inch panel space..... | 60.40 |
| AWCF-61 | Basic frame only — 61¼ inch panel space..... | 75.40 |
| AWCF-70 | Basic frame only — 70 inch panel space..... | 80.40 |
| AWCF-77 | Basic frame only — 77 inch panel space..... | 95.40 |
| AWCS-42 | Side panel — 42 inches high..... | each 14.75 |
| AWCS-61 | Side panel — 61¼ inches high..... | each 17.75 |
| AWCS-70 | Side panel — 70 inches high..... | each 19.75 |
| AWCS-77 | Side panel — 77 inches high..... | each 22.75 |
| AWCD-42 | Door — 42 inches high..... | 17.95 |
| AWCD-61 | Door — 61¼ inches high..... | 20.95 |
| AWCD-70 | Door — 70 inches high..... | 23.95 |
| AWCD-77 | Door — 77 inches high..... | 26.95 |
| AWCT-42 | Top..... | 7.05 |
| AWCT-61 | Top..... | 7.05 |
| AWCT-70 | Top..... | 7.05 |
| AWCT-77 | Top..... | 7.05 |
| AWCP-42 | Panel mounting angles — 42 inches long..... | pair 10.10 |
| AWCP-61 | Panel mounting angles — 61¼ inches long..... | pair 14.10 |
| AWCP-70 | Panel mounting angles — 70 inches long..... | pair 15.10 |
| AWCP-77 | Panel mounting angles — 77 inches long..... | 17.10 |
| AWCZ-42 | Vertical supports for chassis brackets..... | set of four 14.30 |
| AWCZ-61 | Vertical supports for chassis brackets..... | set of four 16.25 |
| AWCZ-70 | Vertical supports for chassis brackets..... | set of four 17.30 |
| AWCZ-77 | Vertical supports for chassis brackets..... | set of four 19.35 |



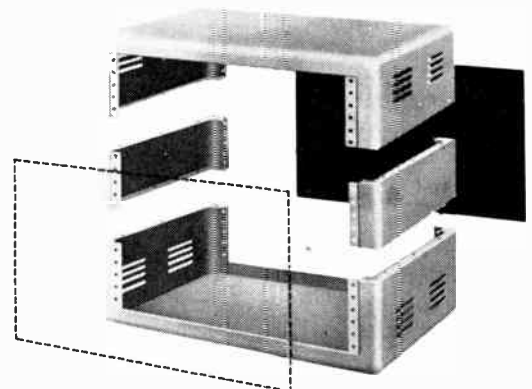
MULTI-PURPOSE EXPANDABLE CABINET

The MPX enclosure combines clean design and attractive finish with utility, strength and versatility. Inserts permit vertical expansion of cabinet. Standard finish — gray hammer-tone; other finishes optional.

MPX CABINET — Consists of top, bottom, rear panel 5¼" high and assembly hardware. Basic cabinet provides 7" of panel space front and back.....\$25.30

MPXF-10 1¾" FILLER — each filler group listed consists of two sides, rear panel same height as sides and hardware..... 9.22

| | | | | | |
|---------|------------------|---------|---------|------------------|---------|
| MPXF-11 | 3½" FILLER..... | \$10.35 | MPXF-18 | 15¾" FILLER..... | \$17.35 |
| MPXF-12 | 5¼" FILLER..... | 11.50 | MPXF-19 | 17½" FILLER..... | 18.50 |
| MPXF-13 | 7" FILLER..... | 12.50 | MPXF-20 | 19¼" FILLER..... | 19.50 |
| MPXF-14 | 8¾" FILLER..... | 13.60 | MPXF-21 | 21" FILLER..... | 20.60 |
| MPXF-15 | 10½" FILLER..... | 14.69 | MPXF-22 | 24½" FILLER..... | 21.80 |
| MPXF-16 | 12¼" FILLER..... | 15.80 | MPXF-23 | 26¼" FILLER..... | 22.95 |
| MPXF-17 | 14" FILLER..... | 16.95 | MPXF-24 | 28" FILLER..... | 24.10 |



| MPX Cabinet without inserts | Width | Height | Depth |
|---|---------|--------------|----------------------|
| Font panel opening | 21½ in. | 11¼ in. | 18½ in. |
| Back panel opening | 19½ in. | 8¾ in. | — |
| Inserts (in increments of 1¾ to 2¾ in.) | — | 1¾ to 2¾ in. | 1¾ to 18½ in. (side) |

Recommended total panel height with inserts: 35 inches. This cabinet accepts standard relay rack panels and is drilled for universal panel mountings. 16 gauge cold rolled steel construction.

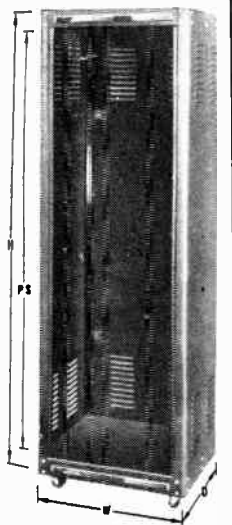
CALIFORNIA Chassis COMPANY

CABINET RACKS

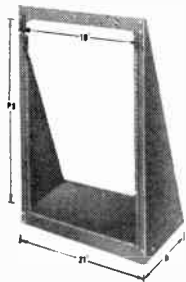
These racks are made entirely of 16 gauge steel except for the heavy steel panel supports. They have universal spacing, the holes being tapped for 10/32" screws. Panels fit into a recess so that the edges do not show. Mounting plate on bottom of rack permits casters to be fastened directly to base for easy mobility. Casters are not included in price of rack but may be ordered separately. No. TC-10.

All standard 19" panels RETMA, Western Electric or Amateur will fit these racks. Double rows of louvres side and rear give ample ventilation.

Finish is black wrinkle, gray wrinkle or silver hammetone. Black will be furnished unless specified otherwise.



| NO. CAT. | PANEL SPACE | HEIGHT | WIDTH | DEPTH | SHIP. INSIDE CLEAR. | WT. LBS. | Net Price |
|----------|-------------|--------|-------|-------|---------------------|----------|-----------|
| CR-36 | 36 3/4 | 42 | 22 | 17 | 15 1/2 | 90 | 47.21 |
| CR-42 | 42 | 47 1/4 | 22 | 17 | 15 1/2 | 96 | 53.36 |
| CR-61 | 61 1/4 | 66 1/2 | 22 | 17 | 15 1/2 | 120 | 66.86 |
| CR-77 | 77 | 82 1/4 | 22 | 17 | 15 1/2 | 145 | 80.05 |
| CRD-36 | 36 3/4 | 42 | 22 | 24 | 22 1/2 | 99 | 66.86 |
| CRD-42 | 42 | 47 1/4 | 22 | 24 | 22 1/2 | 105 | 79.17 |
| CRD-61 | 61 1/4 | 66 1/2 | 22 | 24 | 22 1/2 | 133 | 94.81 |
| CRD-77 | 77 | 82 1/4 | 22 | 24 | 22 1/2 | 160 | 133.97 |



DOOR SERIES

This open rack is made of 16 gauge steel. It is useful where the larger, heavier floor model is not necessary.

Mounting holes are on universal centers tapped 10/32".

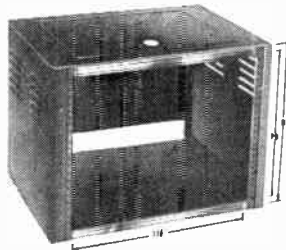
| Cat. No. | Panel Overall Space | Height | Width | Depth | Ship. Wt. | Net Price |
|----------|---------------------|--------|-------|-------|-----------|-----------|
| DOR-21 | 21 x 19 | 25 | 21 | 12 | 18 | 9.66 |
| DOR-28 | 28 x 19 | 32 | 21 | 12 | 19 | 11.92 |

DESK CABINET RACKS

This solid welded, rounded front, deluxe desk cabinet has a professional look as well as being a sturdy utility unit. Embossed feet are on all sizes to reduce marring.

Cabinets have universal punching, accommodating W. E.; RETMA; or Amateur notched panels. Unit is made from 16 ga. steel, having a 2" opening on bottom rear for ventilation in addition to side louvers.

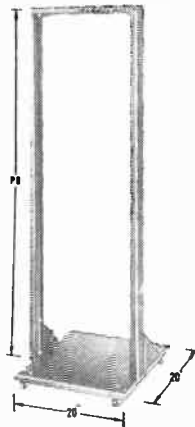
The five smaller models have solid welded backs. The five larger models have a removable hinged rear door. All models clear 14 1/2" inside depth — Outside width is 21 1/2". Black wrinkle is standard. If gray wrinkle or gray hammetone is desired please specify. No additional charge.



| CATALOG NO. | PANEL SPACE | HEIGHT | SHPG. WT. | NET PRICE |
|-------------|-------------|---------|-----------|-----------|
| DCR-7 | 7 | 8 1/8 | 25 | 17.14 |
| DCR-8 | 8 3/4 | 10 1/16 | 27 | 17.49 |
| DCR-10 | 10 1/2 | 12 3/16 | 29 | 20.01 |
| DCR-12 | 12 1/4 | 14 3/16 | 31 | 21.06 |
| DCR-14 | 14 | 15 5/16 | 33 | 22.97 |
| DCR-17 | 17 1/2 | 19 1/16 | 37 | 27.37 |
| DCR-21 | 21 | 22 1/16 | 39 | 29.33 |
| DCR-26 | 26 1/4 | 28 3/16 | 47 | 31.47 |
| DCR-31 | 31 1/2 | 33 3/16 | 51 | 33.42 |
| DCR-35 | 35 | 36 1/16 | 58 | 35.19 |

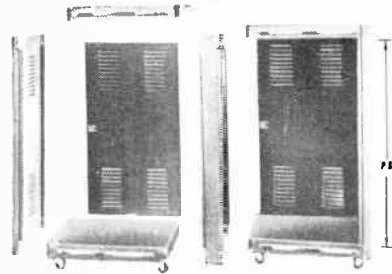
OR SERIES

These open racks are constructed so the uppermost panel mounts at the top of the 1/8" steel upright. There is no loss of space at the top. Rack uprights are punched with universal spacing and tapped 10/32". Two brackets of 1/8" steel bind the uprights and a chassis like base into one solid unit.



| CATALOG NO. | PANEL SPACE | OVERALL HEIGHT | SHPG. WT. | NET PRICE |
|-------------|-------------|----------------|-----------|-----------|
| OR-31 | 31 1/2 | 32 3/4 | 27 | 22.76 |
| OR-36 | 36 3/4 | 38 | 28 | 22.97 |
| OR-42 | 42 | 43 1/4 | 30 | 24.63 |
| OR-61 | 61 1/4 | 62 1/2 | 37 | 25.45 |
| OR-66 | 66 1/2 | 67 3/4 | 39 | 25.96 |
| OR-71 | 71 3/4 | 73 | 41 | 26.88 |
| OR-77 | 77 | 78 1/4 | 42 | 31.28 |

MULTI RACK SERIES

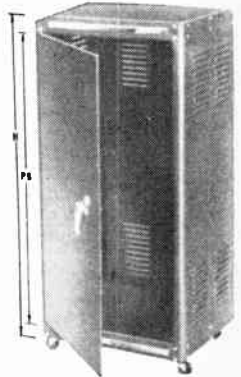


With this unit and a standard rack of the same size one can make a multiple rack or a series of connected racks. Each unit consists of a door, top, bottom, and a multi-rack connecting unit. This must have the same panel space as the unit it is to be used with. All hardware except casters is furnished. Colors are black wrinkle, gray wrinkle or gray hammetone.

| CATALOG NO. | PANEL SPACE | FITS | SHPG. WT. | NET PRICE |
|-------------|-------------|-------|-----------|-----------|
| MR-36 | 36 3/4 | CR-36 | 75 | 46.33 |
| MR-42 | 42 | CR-42 | 80 | 51.22 |
| MR-61 | 61 1/4 | CR-61 | 100 | 63.73 |
| MR-77 | 77 | CR-77 | 118 | 78.29 |

FRONT OOR RACKS

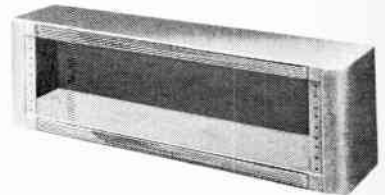
This deluxe rack series has, in addition to the rear door, a front door which completely encloses the panels. Rack strips may be moved towards the rear of the rack to allow space for meters, switches, etc. Rack strips are punched with universal spacing, and tapped 10/32". Casters, TC-10, fit to base of rack, but are not included in price. Finish is black wrinkle (B), Gray wrinkle (G), or gray hammetone (GH). Black wrinkle shipped if no color is specified.



| CATALOG NO. | HEIGHT | PANEL SPACE | SHPG. WT. | NET PRICE |
|-------------|--------|-------------|-----------|-----------|
| FDR-36 | 42 | 36 3/4 | 102 | 67.80 |
| FDR-42 | 47 1/4 | 42 | 118 | 75.94 |
| FDR-61 | 66 1/2 | 61 1/4 | 152 | 98.04 |
| FDR-77 | 82 1/4 | 77 | 185 | 125.00 |

MINIATURE CABINET RACKS

The MCR combines stylized function and compactness for desk-top use. Available in three sizes. Accepts standard relay rack panels and "PC" chassis units. Attractive gray hammetone with chrome trim; other finishes optional.



| | | | |
|----------------|----------------------------|-------|---------|
| MCR-12 CABINET | — Panel space 19" x 5 1/4" | ..... | \$14.27 |
| MCR-13 CABINET | — Panel space 19" x 7" | ..... | 14.57 |
| MCR-14 CABINET | — Panel space 19" x 8 3/4" | ..... | 14.87 |

All above items available in gray hammetone finish. Other finishes available on special order. Contact factory for special wish prices.

All MCR units have embossed feet to protect desk tops.

| TYPE | WIDTH | PANEL SPACE | DEPTH | HEIGHT | WT. |
|--------|-------|-------------|-------|--------|------------|
| MCR-12 | 2 1/8 | 19 x 5 1/4 | 6 1/8 | 7 1/8 | 11 1/2 lb. |
| MCR-13 | 2 1/8 | 19 x 7 | 6 1/8 | 8 | 12 1/2 lb. |
| MCR-14 | 2 1/8 | 19 x 8 3/4 | 6 1/8 | 10 5/8 | 13 1/2 lb. |

LOW TEMPERATURE CABINETS



This cabinet made of perforated metal with 3/32 holes on 3/16 centers, solves most thermal problems. It is a real space saver, the chassis being almost the size of the cabinet.

Chassis is .063 aluminum and bolts to the rear panel which is welded to the perforated screen. Rear steel panel has rectangular hole in it to allow access to connectors in chassis. Front panel has no screws but is held on by control knobs mounted in chassis.

Chassis and front are one piece when unit is complete and can be easily removed yet cabinet chassis and front panel are solidly held together.

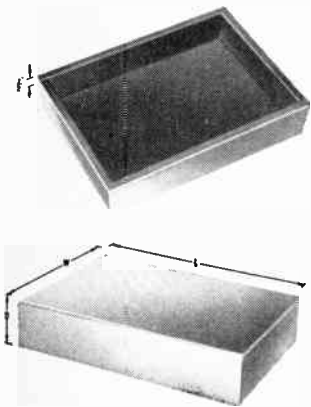
| Catalog Number | Cabinet Size H x W x D | Front Panel | Chassis Size | Hole in Rear Panel | Net Price |
|----------------|------------------------|----------------|-------------------------|--------------------|-----------|
| LTC-463 | 4 1/2 x 7 3/4 x 9 3/4 | 4 1/2 x 7 1/4 | 6 3/16 x 8 1/16 x 1 1/2 | 7/8 x 4 | 6.97 |
| LTC-464 | 4 1/2 x 9 1/4 x 7 3/4 | 4 1/2 x 8 3/4 | 8 3/16 x 6 1/16 x 1 1/2 | 7/8 x 5 | 6.97 |
| LTC-469 | 5 1/4 x 8 3/4 x 11 3/4 | 5 3/8 x 8 3/4 | 8 7/16 x 10 1/16 x 2 | 1 1/2 x 5 | 7.82 |
| LTC-470 | 5 1/4 x 11 3/4 x 8 1/4 | 5 3/8 x 11 3/4 | 10 1/16 x 8 7/16 x 2 | 1 1/2 x 6 | 7.82 |

CALIFORNIA CHASSIS CO. — Lynwood, California

"ALL PRICES SUBJECT TO CHANGE W/O NOTICE"

CALIFORNIA Chassis COMPANY

STANDARD ALUMINUM CHASSIS—All chassis are stamped and formed from one piece of material. All four corners welded and sides flanged to accommodate bottom plates.

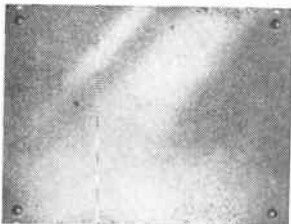


| Alu- minum | W | L | D | Gauge | App. Wt. | Net Price | Alu- minum | W | L | D | Gauge | App. Wt. | Net Price | Alu- minum | W | L | D | Gauge | App. Wt. | Net Price | | | | | | |
|---------------|-------|---|-------|-------|-------------|--------------|---------------|------|-------|----|-------|-------------|--------------|---------------|----|-------|------|-------|-------------|--------------|----|---|---|----|-------|------|
| A-134 | 2 1/2 | x | 4 1/2 | x | 1 | 18 | 1/4 | 1.12 | A-151 | 6 | x | 14 | x | 3 | 18 | 1 | 2.75 | A-141 | 10 | x | 17 | x | 5 | 14 | 3/4 | 5.98 |
| A-135 | 3 1/2 | x | 4 1/2 | x | 1 | 18 | 1/4 | 1.22 | A-114 | 7 | x | 13 | x | 2 | 18 | 3/4 | 1.87 | A-146 | 11 | x | 17 | x | 2 | 16 | 1 1/2 | 3.71 |
| A-136 | 3 1/2 | x | 5 1/2 | x | 1 | 18 | 1/4 | 1.34 | A-139 | 5 | x | 13 | x | 3 | 18 | 3/4 | 1.84 | A-128 | 11 | x | 17 | x | 3 | 14 | 2 1/2 | 4.45 |
| A-137 | 4 | x | 6 | x | 1 1/2 | 18 | 1/4 | 1.34 | A-107 | 8 | x | 12 | x | 2 1/2 | 18 | 1 | 2.77 | A-127 | 12 | x | 17 | x | 2 | 14 | 2 1/4 | 3.74 |
| A-155 | 4 | x | 6 | x | 2 | 18 | 1/4 | 1.22 | A-117 | 7 | x | 12 | x | 3 | 18 | 1 | 1.96 | A-123 | 12 | x | 17 | x | 3 | 14 | 2 1/2 | 4.57 |
| A-149 | 4 | x | 6 | x | 3 | 18 | 1/4 | 1.31 | A-124 | 8 | x | 12 | x | 3 | 18 | 1 | 2.33 | A-126 | 13 | x | 17 | x | 2 | 14 | 2 1/2 | 3.74 |
| A-138 | 4 | x | 5 | x | 2 | 18 | 3/8 | 1.38 | A-108 | 10 | x | 12 | x | 3 | 18 | 1 1/4 | 2.70 | A-111 | 13 | x | 17 | x | 3 | 14 | 2 3/4 | 4.67 |
| A-121 | 5 1/2 | x | 5 1/2 | x | 1 | 18 | 1/4 | 1.45 | A-129 | 12 | x | 12 | x | 3 | 18 | 1 1/2 | 3.28 | A-112 | 13 | x | 17 | x | 4 | 14 | 3 1/4 | 5.13 |
| A-101 | 5 | x | 7 | x | 2 | 18 | 3/8 | 1.22 | A-115 | 10 | x | 14 | x | 3 | 18 | 1 1/4 | 3.18 | A-142 | 13 | x | 17 | x | 5 | 14 | 3 1/2 | 6.55 |
| A-150 | 5 | x | 7 | x | 3 | 18 | 3/8 | 1.39 | A-130 | 7 | x | 15 | x | 3 | 18 | 1 1/4 | 2.62 | A-133 | 14 | x | 17 | x | 3 | 14 | 3 1/4 | 5.24 |
| A-147 | 4 | x | 8 | x | 2 | 18 | 3/8 | 1.63 | A-125 | 9 | x | 15 | x | 3 | 18 | 1 1/2 | 3.45 | A-131 | 15 | x | 17 | x | 4 | 14 | 3 3/4 | 6.21 |
| A-119 | 4 1/2 | x | 8 | x | 1 1/2 | 18 | 3/8 | 1.31 | A-118 | 4 | x | 17 | x | 3 | 18 | 1 | 2.62 | A-148 | 15 | x | 17 | x | 6 | 14 | 4 | 8.04 |
| A-122 | 5 | x | 9 | x | 1 1/2 | 18 | 3/8 | 1.39 | A-145 | 6 | x | 17 | x | 3 | 18 | 1 1/4 | 2.87 | A-132 | 10 | x | 23 | x | 3 | 16 | 2 1/2 | 4.67 |
| A-102 | 5 | x | 9 1/2 | x | 2 1/2 | 18 | 3/8 | 1.51 | A-144 | 7 | x | 17 | x | 2 | 18 | 1 | 2.81 | A-154 | 17 | x | 17 | x | 3 | 16 | 2 1/2 | 6.73 |
| A-120 | 6 | x | 8 | x | 2 | 18 | 3/4 | 1.68 | A-152 | 7 | x | 17 | x | 3 | 18 | 1 1/2 | 3.08 | A-143 | 17 | x | 17 | x | 4 | 14 | 4 1/4 | 7.11 |
| A-103 | 5 | x | 10 | x | 3 | 18 | 1/2 | 1.82 | A-109 | 8 | x | 17 | x | 2 | 18 | 1 1/2 | 2.62 | | | | | | | | | |
| A-104 | 7 | x | 7 | x | 2 | 18 | 1/2 | 1.36 | A-116 | 8 | x | 17 | x | 3 | 16 | 1 1/2 | 2.87 | | | | | | | | | |
| A-105 | 7 | x | 9 | x | 2 | 18 | 3/4 | 1.63 | A-140 | 10 | x | 17 | x | 2 | 16 | 2 1/4 | 2.99 | | | | | | | | | |
| A-113 | 7 | x | 11 | x | 2 | 18 | 3/4 | 1.77 | A-110 | 10 | x | 17 | x | 3 | 16 | 2 1/2 | 3.37 | | | | | | | | | |
| A-106 | 8 | x | 10 | x | 2 1/2 | 18 | 1 | 2.48 | A-153 | 10 | x | 17 | x | 4 | 16 | 3 | 4.86 | | | | | | | | | |

All aluminum chassis are etched finish. 1" and 1 1/2" chassis are flanged on long side only and contain no mounting holes.

ENTER LINE OF CHASSIS DUPLICATED IN STEEL. USE PREFACE "C" INSTEAD OF "A" FOR PLATED STEEL CHASSIS.

CHASSIS BOTTOM PLATES



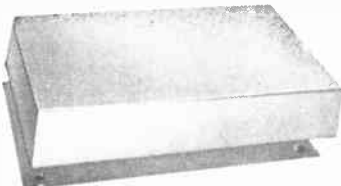
| CATALOG NO. | SIZE | ALUM. WEIGHT | STEEL WEIGHT | Steel Net Price |
|-------------|---------|--------------|--------------|-----------------|
| BP-105 | 7 x 9 | 1/4 lb. | 3/4 lb. | .88 |
| BP-113 | 7 x 11 | 1/2 lb. | 1 lb. | 1.19 |
| BP-106 | 8 x 10 | 1/4 lb. | 3/4 lb. | 1.17 |
| BP-139 | 5 x 13 | 1/4 lb. | 1/2 lb. | .94 |
| BP-114 | 7 x 13 | 1/2 lb. | 1 lb. | 1.34 |
| BP-107 | 8 x 12 | 3/4 lb. | 1 1/4 lb. | 1.50 |
| BP-117 | 7 x 12 | 1/2 lb. | 1 lb. | .88 |
| BP-108 | 10 x 12 | 3/4 lb. | 1 1/2 lb. | 1.56 |
| BP-129 | 12 x 12 | 3/4 lb. | 1 1/2 lb. | 1.50 |
| BP-115 | 10 x 14 | 3/4 lb. | 2 lb. | 1.39 |
| BP-130 | 7 x 15 | 1/2 lb. | 1 lb. | .97 |
| BP-125 | 9 x 15 | 3/4 lb. | 1 1/2 lb. | 1.56 |
| BP-118 | 4 x 17 | 1/2 lb. | 1 lb. | .85 |
| BP-145 | 6 x 17 | 1/2 lb. | 1 lb. | 1.41 |
| BP-144 | 7 x 17 | 1/2 lb. | 1 lb. | 1.36 |
| BP-109 | 8 x 17 | 1/2 lb. | 1 1/4 lb. | 1.53 |
| BP-110 | 10 x 17 | 3/4 lb. | 2 1/2 lb. | 1.60 |
| BP-128 | 11 x 17 | 1 lb. | 2 lb. | 1.60 |
| BP-123 | 12 x 17 | 1 1/4 lb. | 3 lb. | 1.87 |
| BP-111 | 13 x 17 | 1 1/2 lb. | 3 1/4 lb. | 2.24 |
| BP-133 | 14 x 17 | 1 1/2 lb. | 3 1/2 lb. | 2.43 |
| BP-131 | 15 x 17 | 1 1/2 lb. | 3 1/2 lb. | 2.47 |
| BP-143 | 17 x 17 | 2 lb. | 5 lb. | 2.99 |
| BP-132 | 10 x 23 | 1 1/2 lb. | 3 1/4 lb. | 2.24 |

Steel bottom plates may be supplied in either zinc plate or black enamel — aluminum is caustic etched. Actual size of BP is 1/8" under chassis size which is shown. This allows 1/8" of set back when attached to bottom of chassis.

| CATALOG NO. | SIZE | ALUM. WEIGHT | STEEL WEIGHT | Steel Net Price |
|-------------|---------------|--------------|--------------|-----------------|
| BP-134 | 2 1/2 x 4 1/2 | 1 oz. | 2 oz. | .48 |
| BP-135 | 3 1/2 x 4 1/2 | 2 oz. | 1/4 lb. | .48 |
| BP-136 | 3 1/2 x 5 1/2 | 2 oz. | 1/4 lb. | .56 |
| BP-137 | 4 x 6 | 2 oz. | 1/4 lb. | .56 |
| BP-138 | 4 x 5 | 2 oz. | 1/4 lb. | .63 |
| BP-147 | 4 x 8 | 1/4 lb. | 1/2 lb. | .85 |
| BP-121 | 5 1/2 x 5 1/2 | 2 oz. | 1/2 lb. | .70 |
| BP-101 | 5 x 7 | 2 oz. | 1/4 lb. | .77 |
| BP-119 | 4 1/2 x 8 | 1/4 lb. | 1/2 lb. | .70 |
| BP-122 | 5 x 9 | 1/4 lb. | 1/2 lb. | .70 |
| BP-102 | 5 x 9 1/2 | 1/4 lb. | 1/2 lb. | .75 |
| BP-120 | 6 x 8 | 1/4 lb. | 1/2 lb. | .85 |
| BP-151 | 6 x 14 | 1/2 lb. | 1 1/4 lb. | 1.04 |
| BP-103 | 5 x 10 | 1/4 lb. | 1/2 lb. | .60 |
| BP-104 | 7 x 7 | 1/4 lb. | 1/2 lb. | .88 |

| HEAVY DUTY CHASSIS 16 GAUGE STEEL | Net Price |
|-----------------------------------|---------------------|
| HD-109 | 6 3/4# 8x17x2 4.68 |
| HD-116 | 7 1/2 8x17x3 5.15 |
| HD-110 | 8 1/2 10x17x3 5.24 |
| HD-146 | 8 11x17x2 5.19 |
| HD-128 | 10 11x17x3 5.80 |
| HD-126 | 9 1/2 13x17x2 6.17 |
| HD-111 | 11 1/2 13x17x3 6.55 |
| HD-112 | 12 13x17x4 7.48 |

Bottom Plates Included



| CAT. NO. | HEIGHT | WEIGHT | NET PRICE |
|----------|--------|--------|-----------|
| PC-110 | 1 3/4 | 2 | 2.33 |
| PC-111 | 3 1/2 | 2 3/4 | 2.69 |
| PC-112 | 5 1/4 | 4 | 2.96 |
| PC-113 | 7 | 4 1/2 | 3.47 |
| PC-114 | 8 3/4 | 5 3/4 | 4.01 |
| PC-115 | 10 1/2 | 6 3/4 | 4.40 |
| PC-116 | 12 1/4 | 7 1/2 | 4.76 |
| PC-117 | 14 | 8 1/2 | 5.15 |

Larger Sizes On Request
These are constructed so the sharp rib corner is cut to a 45° angle protecting the user's wrist. 16 gauge zinc steel is standard. 14 gauge etched aluminum on request at no added cost.

| Cat. No. | Weight | Dimensions | Net Price |
|----------|--------|------------|-----------|
| RT-1 | 5 1/4# | 10x17x3 | 3.55 |
| RT-2 | 7 | 13x17x3 | 4.42 |
| RT-3 | 6 1/2 | 10x17x4 | 3.93 |
| RT-4 | 9 | 13x17x4 | 4.90 |

Experimenters and the radio amateur when designing, will find it economical to use this type chassis, as the tops and bottoms may be easily replaced or discarded. Steel-Electro Zinc Only.

TOPS ONLY FOR REMOVABLE TOP CHASSIS

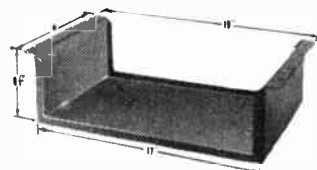
| Cat. No. | Weight | Dimensions | Net Price |
|----------|--------|------------|-----------|
| T-1 | 3# | 10x17 | 1.70 |
| T-2 | 4 | 13x17 | 2.09 |

Made From 16 Gauge Steel — Electro Zinc Finish

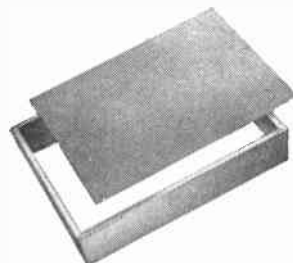
| Cat. No. | Weight | W | L | D | Net Price |
|----------|--------|-------|---|----------|-----------|
| EC-1 | 1 # | 7 | x | 6x2 | 1.02 |
| EC-2 | 3/4 | 5 | x | 7x1 1/2 | .97 |
| EC-3 | 1 | 5 1/2 | x | 9x1 1/2 | 1.12 |
| EC-4 | 1 1/4 | 7 1/2 | x | 9x1 1/2 | 1.39 |
| EC-5 | 1 1/2 | 7 | x | 13x1 1/2 | 1.58 |
| EC-6 | 2 1/4 | 7 3/4 | x | 15x2 | 1.68 |
| EC-7 | 1 | 7 | x | 8x2 | 1.16 |
| EC-8 | 1 1/4 | 7 | x | 10x2 | 1.39 |

These chassis are ideal for any type or unit which is built-up, such as a record changer. Steel — Electro Zinc Only

PANEL CHASSIS



REMOVABLE TOP CHASSIS



SLIDING DRAWER CHASSIS

The drawer chassis is used where there is a need to pull out the chassis without disconnecting it from the rack. Chassis rolls in and out on ball bearings in a formed channel. When assembled it forms a rigid unit which will fit any 19" rack. Brackets are 1/8" Aluminum. Chassis and top plate are 14 gauge aluminum. Finish, except for slide rail assembly, is gray hammertone.

Cat. No. Chassis Size Brk. H Wt. Net Price
SD-399 16 3/4 x 14 x 3 6 1/2" 6 1/2" \$15.52

PLATFORM CHASSIS

These steel platforms are useful as variable level chassis simply by fastening to any side of a carrying case, utility box, etc. They may also be used as shields. Black enamel finish.

| Cat. No. | Width | Depth | Net Price |
|----------|-------|-------|-----------|
| CD-260 | 4 3/4 | 5 1/2 | .70 |
| CD-261 | 4 3/4 | 4 1/2 | .60 |
| CD-262 | 5 3/4 | 5 1/2 | .82 |

MINIATURE ALUMINUM CHASSIS

These are small open end chassis for use where space is limited.

| Catalog No. | Width | Length | Depth | Approx. Shpg. Wt. | Net Price |
|-------------|-------|--------|-------|-------------------|-----------|
| MA-210 | 2 5/8 | 2 3/4 | 1 1/4 | 1/4 | .39 |
| MA-211 | 1 3/4 | 3 3/8 | 1 | 1/4 | .43 |
| MA-212 | 3 1/4 | 4 1/2 | 2 | 1/4 | .49 |
| MA-213 | 2 3/4 | 4 1/8 | 1 | 1/4 | .46 |
| MA-214 | 3 3/4 | 4 1/8 | 1 1/2 | 1/4 | .46 |
| MA-215 | 3 | 6 1/8 | 1 1/4 | 1/4 | .56 |

CHASSIS FLANGES

These 1" chassis flanges will convert any 17" chassis to a 19" panel rack chassis. Made of 16 gauge Zinc plated steel.

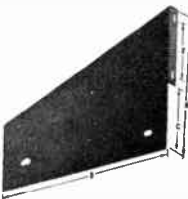
| Catalog No. | Height | Shpg. Wt. | Net Price |
|-------------|--------|-----------|-----------|
| CF-12 | 5 1/4 | 1/2 | 1.00 |
| CF-13 | 7 | 1/2 | 1.94 |
| CF-14 | 8 3/4 | 1 | 1.07 |
| CF-15 | 10 1/2 | 1 | 1.16 |
| CF-16 | 12 1/4 | 1 | 1.22 |
| CF-17 | 14 | 1 | 1.34 |

"ALL PRICES SUBJECT TO CHANGE W/O NOTICE"

CALIFORNIA Chassis COMPANY

CHASSIS MOUNTING BRACKETS

To assure the proper support for a chassis a sturdy mounting bracket is used. Flange is 5/8" inside dimension. Elongated hole 3/4" x 1 1/2" is centered in flange. "X" shows the distance between flange holes. Finished in Zinc plated "C" or Wrinkle "W" may be had at additional cost of 15%.



| Black Enamel | Height | x | Depth | Clearance | Wt. | Net Price |
|--------------|--------|-------|-------|-----------|-------|-----------|
| E-58B | 6 1/2 | 2 1/2 | 8 | 3 1/8 | 1 1/4 | 1.07 |
| E-57B | 6 1/2 | 2 1/2 | 9 | 3 1/8 | 1 1/2 | 1.50 |
| E-48B | 6 1/2 | 2 1/2 | 10 | 3 1/8 | 1 3/4 | 1.34 |
| E-59B | 6 1/2 | 2 1/2 | 11 | 3 1/8 | 1 3/4 | 1.50 |
| E-49B | 6 1/2 | 2 1/2 | 12 | 3 1/8 | 1 3/4 | 1.75 |
| E-60B | 6 1/2 | 2 1/2 | 13 | 3 1/8 | 2 | 1.68 |
| E-50B | 8 1/2 | 3 1/2 | 10 | 4 1/8 | 2 1/2 | 1.96 |
| E-51B | 8 1/2 | 3 1/2 | 13 | 4 1/8 | 3 | 2.09 |
| E-52B | 12 | 7 | 15 | 4 1/8 | 4 1/2 | 3.09 |
| E-53B | 14 | 8 | 17 | 5 1/8 | 5 3/4 | 3.55 |

TRIANGULAR MOUNTING BRACKETS



| Cat. No. | Height | Dimensions | Net Price |
|----------|--------|------------|-----------|
| MB-55 | 1/2 | 5x5 | 1.02 |
| MB-77 | 1 1/2 | 7x7 | 1.19 |
| MB-99 | 1 3/4 | 9x9 | 1.41 |

Steel — Black Enamel Only

CHASSIS SUPPORT ANGLES

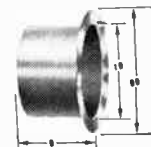
These angles when bolted to the sides of a cabinet will support a heavy chassis unit. They are made of 1/8" thick steel and are finished in black enamel only.



| Cat. No. | Length | Width | Shpg. Lbs. | Net Price |
|----------|--------|-------|------------|-----------|
| CA-12 | 12 | 3 | 3 | 2.14 |
| CA-14 | 14 1/2 | 3 | 4 | 2.24 |

METER SHIELD

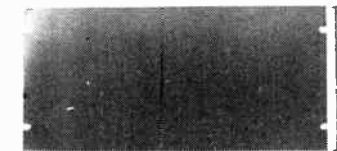
This shield is made of spun aluminum. It will fit over the meter and effectively stops most interference. Furnished with no holes and in natural finish only.



| Catalog Number | L | I.D. | D.D. | Meter Size | Net Price |
|----------------|--------|---------|-------|------------|-----------|
| MSA-2 | 2-3/16 | 2-1/32 | 2 7/8 | 2 | 1.75 |
| MSA-3 | 2 | 2-25/32 | 3 3/4 | 3 | 1.75 |

RELAY RACK PANELS

Regular panels are made from 1/8" steel or aluminum material. Aluminum is 1100 H 14. Notching is either Western Electric (WE) or Amateur (A). Finish Black or Gray Wrinkle or Silver Gray Hammetone. Aluminum is standard and will be sent unless steel is specified. Panels in any material will be furnished 24" wide instead of 19" wide at twice the cost.



| Notching | | Height | Width | Wt. Alum. | Wt. Steel | Steel Price |
|------------------|---------|--------|-------|-----------|-----------|-------------|
| Western Electric | Amateur | | | | | |
| PW-10 | PA-10 | 1 3/4 | 19 | 1/2 | 1 1/4 | .87 |
| PW-11 | PA-11 | 3 1/2 | 19 | 3/4 | 2 1/4 | 1.00 |
| PW-12 | PA-12 | 5 1/4 | 19 | 1 1/4 | 4 | 1.34 |
| PW-13 | PA-13 | 7 | 19 | 1 1/2 | 4 3/4 | 1.51 |
| PW-14 | PA-14 | 8 3/4 | 19 | 2 | 6 | 1.89 |
| PW-15 | PA-15 | 10 1/2 | 19 | 2 1/2 | 6 3/4 | 2.16 |
| PW-16 | PA-16 | 12 1/4 | 19 | 3 | 8 3/4 | 2.53 |
| PW-17 | PA-17 | 14 | 19 | 3 1/2 | 9 3/4 | 2.96 |
| PW-18 | PA-18 | 15 3/4 | 19 | 4 | 10 3/4 | 3.28 |
| PW-19 | PA-19 | 17 1/2 | 19 | 4 1/2 | 12 | 3.74 |
| PW-20 | PA-20 | 19 1/4 | 19 | 5 | 13 | 4.13 |
| PW-21 | PA-21 | 21 | 19 | 5 1/2 | 15 3/4 | 4.57 |
| PW-22 | PA-22 | 24 1/2 | 19 | 6 | 18 1/2 | 7.00 |
| PW-23 | PA-23 | 26 1/4 | 19 | 7 | 20 1/4 | 7.75 |

HARD ALUMINUM PANELS



All panels are 5 1/4" x 19" x 1/8" steel or aluminum, black or grey wrinkle — designed to handle either 2" or 3" meters. All units Western Electric notch.

| ALUMINUM | | No. Holes | Net Price |
|----------|-------|-----------|-----------|
| MPS-32 | 1 | 3 | 2 3/8 |
| MPS-52 | 1 1/4 | 5 | 2 3/8 |
| MPS-33 | 1 1/8 | 3 | 2 1/8 |
| MPS-53 | 1 | 5 | 2 3/8 |

| STEEL | | No. Holes | Net Price |
|--------|-------|-----------|-----------|
| MPS-32 | 3 | 3 | 2 3/8 |
| MPS-52 | 2 3/4 | 5 | 2 3/8 |
| MPS-33 | 3 1/2 | 3 | 2 1/8 |
| MPS-53 | 3 | 5 | 2 3/8 |

Small holes are for 2" meters, larger holes are for 3" meters.

| Cat. No. | Height | Width | Wt. | Net Price |
|----------|--------|-------|-------|-----------|
| PWHA-10 | 1 3/4 | 19 | 1/2 | 1.63 |
| PWHA-11 | 3 1/2 | 19 | 3/4 | 2.06 |
| PWHA-12 | 5 1/4 | 19 | 1 1/4 | 2.72 |
| PWHA-13 | 7 | 19 | 1 1/2 | 3.32 |
| PWHA-14 | 8 3/4 | 19 | 2 1/2 | 3.93 |
| PWHA-15 | 10 1/2 | 19 | 2 1/2 | 4.59 |
| PWHA-16 | 12 1/4 | 19 | 3 | 5.25 |
| PWHA-17 | 14 | 19 | 3 1/2 | 6.07 |
| PWHA-18 | 15 3/4 | 19 | 4 | 6.78 |
| PWHA-19 | 17 1/2 | 19 | 4 1/2 | 7.48 |
| PWHA-20 | 19 1/4 | 19 | 5 | 8.18 |
| PWHA-21 | 21 | 19 | 5 1/2 | 8.87 |
| PWHA-22 | 24 1/2 | 19 | 6 | 10.73 |
| PWHA-23 | 26 1/4 | 19 | 7 | 11.68 |

These 1/8" panels are recommended for high quality work. They are 2024T3 aluminum. Notching is Western Electric, but Amateur on request at no added cost. We also carry a complete line of 3/8" or .188 panels. These are all 2024T3.

SIDE HINGED PANELS

| Cat. No. | Height | Wt. | Net Price |
|----------|--------|-------|-----------|
| SH-12 | 5 1/4 | 4 1/4 | 3.66 |
| SH-13 | 7 | 5 1/2 | 3.94 |
| SH-14 | 8 3/4 | 6 3/4 | 4.23 |
| SH-15 | 10 1/2 | 7 1/4 | 4.56 |
| SH-16 | 12 1/4 | 8 3/4 | 4.91 |



FRONT HINGED DOOR PANEL

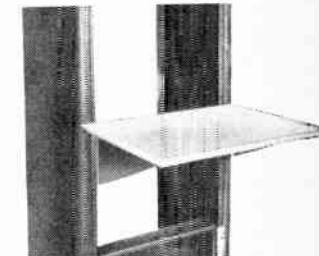
This door gives access to the chassis top. It is free moving and has a substantial catch. Made of 1/8" steel. Please specify finish.



| Cat. No. | Height | Door | Net Price |
|----------|--------|----------------|-----------|
| FH-430 | 10 1/2 | 6 x 15 3/8 | 6.07 |
| FH-432 | 12 1/4 | 7 1/2 x 15 3/8 | 7.48 |

EXTERIOR RACK SHELVES

The exterior shelf replaces a panel when a shelf is needed. Unit is composed of a 16 gauge steel shelf with seam welded front corners and two supporting 1/8" steel brackets. All hardware included.



| Cat. No. | Shelf Size | Wt. | Net Price |
|----------|------------|-----|-----------|
| ER-416 | 16x22 | 12 | 11.66 |
| ER-420 | 20x22 | 15 | 11.83 |

INTERIOR RACK SHELVES

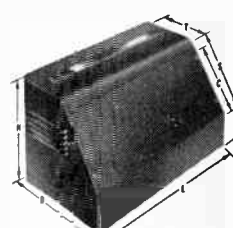
These 16 gauge steel shelves may be supported in the rack by chassis support angles CA-12 or CA-14. They are used to form a strong shelf for modulator units, power supplies etc. Finish black enamel.



| Cat. No. | Size | Shpg. Price | Net Price |
|----------|-------|-------------|-----------|
| RS-512 | 12x19 | 5 1/2 | 2.64 |
| RS-515 | 15x19 | 6 1/2 | 3.47 |

SLOPING FRONT CABINETS

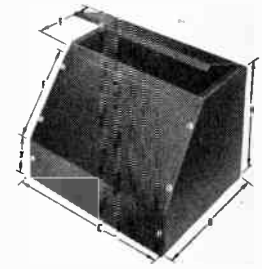
These deluxe all purpose steel cabinets are designed for wide use in the electronic field. Front and top corners are rounded, sides have stainless steel ventilators. Embossed feet to prevent scratching. Gray wrinkle finish.



| Catalog No. | D | H | L | T | X | S | Use This Chassis | Net Price |
|-------------|----|----|----|-------|-------|--------|------------------|-----------|
| SFC-42 | 8 | 8 | 8 | 4 1/4 | 2 3/4 | 6 | 5 1/4 C-104 | 5.19 |
| SFC-44 | 8 | 8 | 10 | 4 1/4 | 2 3/4 | 6 | 5 1/4 C-105 | 7.29 |
| SFC-46 | 8 | 8 | 14 | 4 1/4 | 2 3/4 | 6 | 5 1/4 C-114 | 8.79 |
| SFC-48 | 12 | 12 | 18 | 6 | 3 1/8 | 10 3/8 | 9 1/2 C-110 | 11.78 |

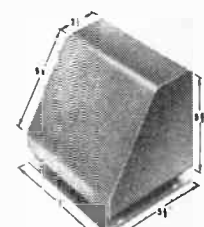
HINGED TOP SLOPING CABINET

This cabinet provides for a complete opening of top and front. Bottom has embossed feet. Rear has opening for connectors. Black wrinkle or Gray hammetone finishes.



ENCLOSED METER CABINET

Enclosed Meter Cabinet bottom is open. Bottom plate with embossed feet and four sheet metal screws included. Gray wrinkle unless other color specified. Available in black wrinkle, silver gray hammetone at no additional cost. Steel or Aluminum.



Catalog No. EMC-2

CALIFORNIA CHASSIS CO. — Lynwood, California

"ALL PRICES SUBJECT TO CHANGE W/D NOTICE"

CALIFORNIA Chassis COMPANY

METER CABINETS

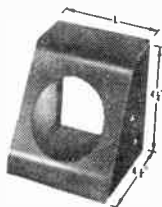
| Meter Size | Aluminum Cat. No. | Net Price | Wt. Lbs. | Net Price |
|------------|-------------------|-----------|----------|-------------------|
| 2" | 4 MC-2 | 1.43 | 1/2 | SMC-2 1 1/2 1.12 |
| 3" | 4 MC-3 | 1.43 | 1/2 | SMC-3 1 1/2 1.12 |
| No Holes | 4 MC-4 | 1.43 | 1/2 | SMC-4 1 1/2 1.12 |
| 2" | 4 MC-6* | 1.43 | 1/2 | SMC-6* 1 1/2 1.12 |
| 3" | 4 MC-7* | 1.43 | 1/2 | SMC-7* 1 1/2 1.12 |
| No Holes | 7 1/2" MC-8 | 2.06 | 3/4 | SMC-8 2 1/4 1.87 |
| 3" | 6 HAC-MC-7* | 2.06 | 3/4 | |

* Indicates it has two 1/2" holes on 3/4" centers at top of cabinet for insulators. 2" meter hole is 2 3/16". 3" meter hole is 2 1/4".

WALL SPEAKER CASES

These all metal cases have keyslotted holes on the rear for easy mounting. They are also provided with embossed feet on one side. Finish is gray hammertone for ease of cleaning.

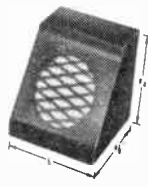
| Catalog No. | Speaker Size | Hole Size | H | L | D | Wt. | Price Net |
|-------------|--------------|-----------|--------|--------|-------|-------|-----------|
| WS-304 | 4 | 3 1/2 | 7 1/2 | 6 1/2 | 4 1/4 | 1 3/4 | 3.20 |
| WS-305 | 5 | 4 | 1 1/2 | 6 1/2 | 4 1/4 | 1 3/4 | 3.37 |
| WS-306 | 6 | 4 3/4 | 9 1/2 | 8 | 5 5/8 | 3 | 3.81 |
| WS-308 | 8 | 6 1/2 | 11 1/2 | 9 1/2 | 7 | 4 | 4.68 |
| WS-310 | 10 | 8 1/2 | 13 1/2 | 11 1/2 | 8 1/4 | 5 | 5.88 |
| WS-312 | 12 | 10 1/2 | 15 1/2 | 13 1/2 | 9 3/4 | 6 | 7.38 |



MINIATURE SPEAKER CABINETS

These small meter cabinets are like the MC series except the meter hole is covered by an expanded metal shield. Furnished in steel only. Black wrinkle standard.

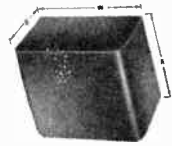
| Catalog No. | Length | Meter Size | Wt. Lbs. | Net Price |
|-------------|--------|------------|----------|-----------|
| MS-261 | 4" | 2" | 3/4 | 1.77 |
| MS-262 | 4" | 3" | 3/4 | 1.77 |



STREAMLINED MINIATURE CABINETS

This miniature steel cabinet has a radiused face. The base has four embossed feet. There rear is open except for a 1/4" flange down two sides. This gives rigidity as well as a place to attach a back cover. Gray wrinkle standard.

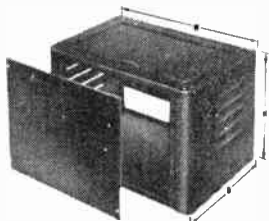
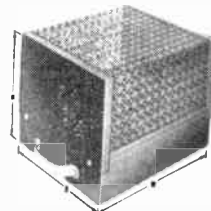
| Catalog No. | H | W | D | Wt. | Net Price |
|-------------|-------|-------|-------|-------|-----------|
| SM-271 | 4 1/2 | 5 1/2 | 3 1/2 | 1 # | 1.90 |
| SM-272 | 6 1/2 | 5 1/2 | 3 1/2 | 1 1/2 | 1.96 |



DELUXE AMPLIFIER FOUNDATION

This foundation is used where the chassis must be covered and appearance is important. Material is steel, finish is black wrinkle. Gray hammertone at no extra cost. Use suffix B or GH.

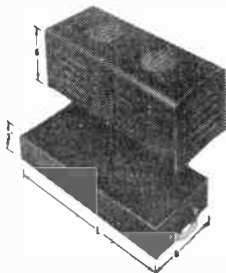
| Cat. No. | Length | Depth | Wt. | Net Price |
|----------|--------|-------|-------|-----------|
| DA-420 | 10 | 5 | 4 1/2 | 6.82 |
| DA-421 | 12 | 7 | 5 | 8.04 |
| DA-422 | 17 | 7 | 8 | 8.50 |
| DA-423 | 17 | 10 | 9 | 9.25 |



STREAMLINED INSTRUMENT CABINET

Miniature aluminum chassis MA series are usually used with this cabinet. Black wrinkle is standard.

| Catalog No. | Panel Space | Height | Width | Depth | Wt. | Net Price |
|-------------|-------------|--------|--------|-------|-------|-----------|
| SC-31 | 8x 8 | 8 | 10 1/2 | 8 1/4 | 5 3/4 | 4.37 |
| SC-32 | 8x10 | 8 | 12 1/2 | 8 1/4 | 6 | 5.42 |
| SC-33 | 8x12 | 8 | 14 1/2 | 8 1/4 | 6 1/2 | 5.88 |
| SC-34 | 8x14 | 8 | 16 1/2 | 8 1/4 | 7 | 6.17 |
| SC-35 | 8x16 | 8 | 18 1/2 | 8 1/4 | 7 3/4 | 6.77 |
| SC-36 | 12x18 | 12 | 20 1/2 | 12 | 15 | 12.17 |



AMPLIFIER FOUNDATIONS

These consist of a chassis and perforated metal cover. They have ample ventilation. Handles are included in each package. Black wrinkle standard.

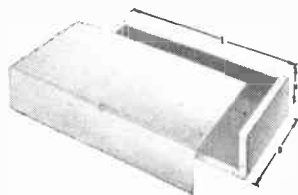
| Catalog No. | Height | Width | Depth | Chassis Height | Shpg. Wt. | Net Price |
|-------------|--------|--------|--------|----------------|-----------|-----------|
| AF-240* | 6 | 7 3/8 | 5 1/8 | 2 | 2 | 4.49 |
| AF-241 | 8 3/8 | 9 3/8 | 5 1/8 | 2 1/2 | 3 | 5.61 |
| AF-242 | 8 3/8 | 13 3/8 | 5 1/8 | 2 1/2 | 4 3/8 | 6.43 |
| AF-243 | 8 3/8 | 17 1/8 | 7 1/8 | 2 1/2 | 6 | 7.29 |
| AF-244 | 8 3/8 | 17 1/8 | 10 1/8 | 3 | 8 | 10.01 |

* Has one handle only — at top.

UTILITY BDX — REMOVABLE COVER

This model allows complete accessibility to the interior of the unit. All work may be completed before cover is installed.

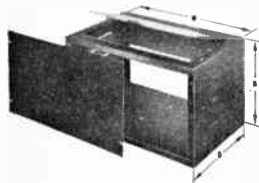
| Cat. No. | D | L | H | Net Price |
|----------|----------|--------|------|-----------|
| HA-10 | 3x 4 | x1 1/2 | 1.50 | |
| HA-11 | 4x 5 | x2 | 1.96 | |
| HA-12 | 4x 8 | x2 | 2.14 | |
| HA-13 | 5x 9 1/2 | x2 1/2 | 2.33 | |
| HA-14 | 6x12 | x2 1/2 | 2.62 | |
| HA 15 | 7x15 | x2 1/2 | 3.55 | |



INSTRUMENT CABINETS

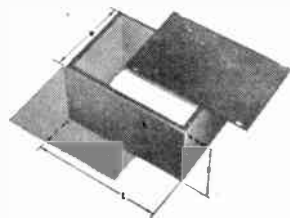
This cabinet has a hinged access door on top and removable front cover. The elimination of the rounded corners gives more inside room. The rear has a 3 1/2" opening for ventilation plus louvers at each end. The open end chassis, E.C. series, is usually used with these cabinets. Black wrinkle only.

| Cat. No. | H | W | D | Ship. Wt. | Net Price |
|----------|----|----|----|-----------|-----------|
| HTC-342 | 7 | 8 | 8 | 5 | 3.77 |
| HTC-343 | 7 | 10 | 8 | 5 1/2 | 4.86 |
| HTC-344 | 7 | 12 | 8 | 5 3/4 | 5.13 |
| HTC-345 | 7 | 14 | 8 | 6 | 5.51 |
| HTC-346 | 8 | 16 | 8 | 7 | 7.58 |
| HTC-347 | 9 | 15 | 11 | 8 | 7.75 |
| HTC-348 | 12 | 18 | 12 | 14 1/2 | 11.12 |



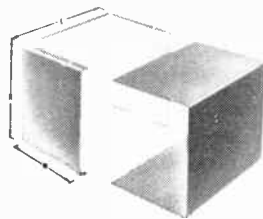
METAL UTILITY CABINETS

| Catalog No. | Wt. Stl. | D | W | L | Wt. Alm. | Painted Alum. |
|-------------|----------|----|-----|-----|----------|---------------|
| CAB-1 | 3/4 | 2" | 4" | 4" | 3/8 | 1.68 |
| CAB-2 | 1 | 3" | 5" | 4" | 1/2 | 1.87 |
| CAB-3 | 1 1/2 | 4" | 5" | 6" | 3/4 | 2.14 |
| CAB-4 | 2 1/2 | 6" | 6" | 6" | 1 | 2.53 |
| CAB-5 | 3 3/4 | 5" | 6" | 9" | 1 1/4 | 3.09 |
| CAB-6 | 4 3/4 | 7" | 8" | 10" | 2 | 3.76 |
| CAB-7 | 5 | 6" | 7" | 12" | 2 | 3.76 |
| CAB-8 | 6 | 8" | 10" | 10" | 2 1/2 | 4.91 |
| CAB-9 | 7 | 8" | 11" | 12" | 2 3/4 | 5.90 |
| CAB-10 | 7 | 7" | 9" | 15" | 2 3/4 | 6.82 |



MINIATURE CABINETS

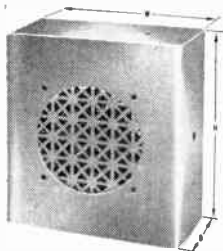
| Aluminum Gray Hammertone Cat. No. | Net Price | Etched Aluminum Cat. No. | Net Price | L | H | W |
|-----------------------------------|-----------|--------------------------|-----------|-------|--------|--------|
| M-51 | .83 | M-81 | .61 | 2 3/4 | x2 1/8 | x1 5/8 |
| M-52 | .95 | M-82 | .85 | 2 3/4 | x2 1/8 | x2 3/4 |
| M-53 | 1.04 | M-83 | .66 | 3 1/4 | x2 1/8 | x1 5/8 |
| M-54 | .88 | M-84 | .61 | 3 1/4 | x2 1/8 | x1 5/8 |
| M-55 | .92 | M-85 | .65 | 4 | x2 1/8 | x1 5/8 |
| M-56 | 1.00 | M-86 | .83 | 4 | x2 1/4 | x2 1/4 |
| M-57 | 1.16 | M-87 | .83 | 4 | x2 | x2 3/4 |
| M-58 | 1.17 | M-88 | .87 | 4 1/4 | x2 1/4 | x1 1/2 |
| M-59 | 1.21 | M-89 | .90 | 5 | x2 1/4 | x2 1/4 |
| M-60 | 1.29 | M-90 | .99 | 5 | x4 | x3 |
| M-61 | 1.14 | M-91 | .97 | 5 1/4 | x3 | x2 1/8 |
| M-62 | 1.85 | M-92 | 1.28 | 6 | x5 | x4 |
| M-63 | 1.89 | M-93 | 1.34 | 7 | x5 | x3 |
| M-64 | 2.28 | M-94 | 2.02 | 8 | x6 | x3 1/2 |
| M-65 | 1.41 | M-95 | 1.28 | 10 | x2 | x1 5/8 |
| M-66 | 2.79 | M-96 | 2.21 | 10 | x6 | x3 1/2 |
| M-67 | 1.62 | M-97 | 1.24 | 12 | x2 1/2 | x2 1/4 |
| M-68 | 3.30 | M-98 | 1.97 | 12 | x7 | x4 |
| M-69 | 3.88 | M-99 | 3.28 | 17 | x5 | x4 |



UNIVERSAL SPEAKER HOUSING—This versatile unit can be screwed to the wall or mounted directly to an outlet box. If greater adjustability is desired a yoke or "U" shaped speaker bracket, one of the USHB series, can be used.

Speaker openings face front and back for bilateral sound projection. This makes them very adaptable for use in halls or auditoriums. Being of steel they do not weather and are easy to clean. Interior is coated with a sound deadening material. Finish is silver gray hammertone.

| Cat. No. | Speaker Size | H | L | D | Wt. | Price Net |
|----------|--------------|--------|--------|-------|-------|-----------|
| USH-534 | 4 or 5 | 7 1/4 | 6 3/4 | 3 1/2 | 2 1/2 | 5.51 |
| USH-535 | 5 or 6 | 8 1/4 | 7 1/2 | 4 | 2 3/4 | 5.98 |
| USH-536 | 6 or 8 | 10 1/4 | 9 1/2 | 5 | 4 1/2 | 9.62 |
| USH-540 | 10 or 12 | 15 | 13 1/2 | 7 1/2 | 9 | 13.09 |



CHROME VENTILATING LOUVERS

These are made of stainless steel with a high polish finish. They fit our sloping face cabinets but can be adapted to any unit. They fit behind a 2x4 3/8 rectangular hole and mount on 4-27/32 centers. Sold pair with screws.

Catalog No. TRM-4D 78

CALIFORNIA CHASSIS CO. — Lynwood, California

"ALL PRICES SUBJECT TO CHANGE W/D NOTICE"

LMB® Box Chassis

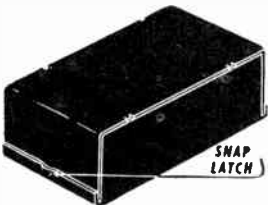
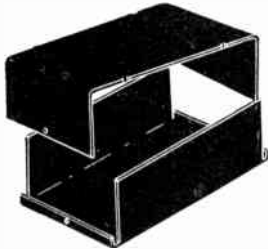
The Engineered Precision Line with Interlocking and Flangelocking Construction

Here is the answer to box chassis needs, for the laboratory, manufacturer, experimenter, or builder. The following L. M. B. Boxes are available from stock in either interlocking (screw fastened) or snap latch. All screw fastenings are drilled and tapped. Self tapping screws are not used. Available colors include natural aluminum, gray or brown hammettone, and black crackle. When ordering specify style and color.

Aluminum used in all LMB products is aircraft quality specifications type 3003-H 14.

All prices quoted are dealer net. Manufacturers Special Discounts on Application.

Interlocking



INTERLOCKING (SCREW-FASTENED OR SNAP LATCH)

| Model | Size | Price | Model | Size | Price |
|-------|---------------------------|-------|-------|--------------------------|-------|
| M00 | 2 1/4" x 1 1/2" x 1 3/8" | .57 | 138 | 6 1/4" x 3 1/2" x 2 1/8" | 1.32 |
| 00Z | 2 5/16" x 2 1/8" x 1 3/4" | .64 | 139 | 5 1/2" x 3" x 1 1/4" | 1.01 |
| 000 | 3 1/4" x 2 1/8" x 1 5/8" | .68 | 140PL | 3" x 4" x 5" | 1.29 |
| 00 | 4" x 2 1/8" x 1 5/8" | .71 | 140 | 3" x 4" x 5" | 1.61 |
| 100 | 2 3/4" x 2 1/8" x 2 5/8" | .89 | 141PL | 6" x 4" x 3" | 1.44 |
| 101 | 4 1/4" x 2 1/8" x 1 1/4" | .87 | 141 | 6" x 4" x 3" | 1.72 |
| 102 | 4" x 2" x 2 3/4" | 1.02 | 142PL | 6" x 4" x 5" | 1.68 |
| 107 | 4" x 2 1/4" x 2 1/4" | .96 | 142 | 6" x 4" x 5" | 2.11 |
| 108 | 5" x 2 1/4" x 2 1/4" | 1.03 | 143 | 4" x 4" x 2" | 1.33 |
| 135 | 3 3/4" x 3" x 2 1/8" | .97 | 144 | 10" x 4" x 2 1/2" | 2.19 |
| 136 | 5 1/4" x 3" x 2 1/8" | 1.08 | 145 | 7" x 5" x 3" | 2.11 |
| 650 | 6 1/2" x 2 1/8" x 1 5/8" | 1.05 | 146 | 8" x 6" x 4 1/2" | 2.99 |
| 137 | 8" x 3" x 2 3/4" | 1.61 | 15 | 12" x 2" x 1 3/4" | 1.61 |
| 850 | 8 1/2" x 2 1/8" x 1 5/8" | 1.35 | | | |

SIDELOCK and ENDLOCK CONSTRUCTION

L. M. B. aluminum Box chassis with sidelock and endlock construction are dust proof, semi-water, and rain proof. Sturdy construction and 100% shielded. The following models are available in plain aluminum, or finished in black, gray, or brown. Endlock or sidelock construction:

| Model | Size | Price | Model | Size | Price |
|-------|--------------------------|-------|-------|-------------------|-------|
| 221 | 2 3/4" x 3 1/8" x 1 5/8" | 1.13 | 654 | 6" x 5" x 4" | 2.51 |
| 321 | 3 1/4" x 2 1/8" x 1 5/8" | 1.13 | 666 | 6" x 6" x 6" | 3.39 |
| 421 | 4" x 2 1/8" x 1 5/8" | 1.13 | 686 | 6" x 8" x 6" | 4.27 |
| 422 | 4" x 2 1/4" x 2 1/4" | 1.29 | 695 | 6" x 9" x 5" | 3.84 |
| 424 | 4" x 2" x 4" | 1.98 | 753 | 7" x 5" x 3" | 2.60 |
| 435 | 4" x 3" x 5" | 2.19 | 754 | 7" x 5" x 4" | 2.76 |
| 444 | 4" x 4" x 4" | 1.89 | 863 | 8" x 6" x 3 1/2" | 2.86 |
| 531 | 5 1/4" x 3" x 1 1/2" | 1.29 | 865 | 8" x 6" x 5" | 3.57 |
| 532 | 5 1/4" x 3" x 2 1/8" | 1.47 | 1063 | 10" x 6" x 3 1/2" | 3.57 |
| 534 | 5 3/8" x 3" x 4" | 2.06 | 1085 | 10" x 8" x 5" | 4.42 |
| 543 | 5" x 4" x 3" | 1.87 | 1221 | 12" x 2" x 1 3/4" | 1.87 |
| 546 | 5" x 4" x 6" | 2.74 | 1274 | 12" x 7" x 4" | 4.65 |
| 645 | 6" x 4" x 5" | 2.60 | 1754 | 17" x 5" x 4" | 5.27 |

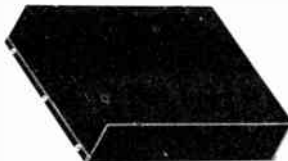
Flangelocking



Endlock



SLIDE COVER



SHIELDED CHASSIS

PRINTED CIRCUIT CHASSIS

Printed circuit chassis are made with a shallow base with a cap cover on the bottom so that it can be removed to work on the assembly without removing the printed circuit from the chassis. All printed circuit chassis are of plain aluminum.



SLIDE COVER (or dust cover) BOXES

| No. | L | W | H | Ea. |
|-----------------------|-----|--------|--------|--------|
| 16—Natural Aluminum | 13" | 3 1/8" | 2 5/8" | \$1.85 |
| 16—Gray, Black, Brown | 13" | 3 1/8" | 2 5/8" | 2.52 |
| 17—Natural Aluminum | 13" | 4 1/8" | 2 5/8" | 3.18 |
| 17—Gray, Black, Brown | 13" | 4 1/8" | 2 5/8" | 3.95 |

Designed by BROADCAST ENGINEERS

| No. | L | W | H | Ea. |
|-----------------------|-----|--------|--------|------|
| 18—Natural Aluminum | 13" | 5 1/4" | 2 5/8" | 3.50 |
| 18—Gray, Black, Brown | 13" | 5 1/4" | 2 5/8" | 4.30 |
| 19—Natural Aluminum | 17" | 3 1/8" | 2 5/8" | 3.35 |
| 19—Gray, Black, Brown | 17" | 3 1/8" | 2 5/8" | 4.15 |

SHIELDED CHASSIS

| No. | L | W | H | Ea. |
|-----------------|--------|-----|----|--------|
| No. 20 Plain | 7 1/2" | 7" | 2" | \$1.67 |
| No. 20 Anodized | 7 1/2" | 7" | 2" | 2.06 |
| No. 21 Plain | 13" | 10" | 3" | 4.34 |

| No. | L | W | H | Ea. |
|-----------------|-----|-----|----|--------|
| No. 21 Anodized | 13" | 10" | 3" | \$5.81 |
| No. 22 Plain | 17" | 10" | 3" | 5.13 |
| No. 22 Anodized | 17" | 10" | 3" | 6.67 |

STANDARD SIZES

| Model No. | L | W | D | Mounting Lip | Price |
|-----------|----|---|-----|--------------|----------|
| PC 325 | 3 | 2 | 1/2 | 3/16" | ea. .70 |
| PC 635 | 6 | 3 | 1/2 | 3/16" | ea. .80 |
| PC 645 | 6 | 4 | 1/2 | 1/2" | ea. .91 |
| PC 855 | 8 | 5 | 1/2 | 1/2" | ea. 1.04 |
| PC 10875 | 10 | 8 | 3/4 | 1/2" | ea. 1.52 |
| PC 12975 | 12 | 9 | 3/4 | 3/8" | ea. 1.76 |

| Model No. | Size | Mounting Lip | Model No. | Size | Mounting Lip |
|--|------------|--------------|---|------------|--------------|
| D 7131 | 7 x 13 x 1 | 1/2" | D 541 | 5 x 4 x 1 | 1/2" |
| for use in building with the Danca model | | | for use in building with the Danca model | | |
| No. 14 printed amplifier circuit | ea. 1.17 | | No. 21, 31, #1 printed preamplifier circuit | ea. \$.63 | |

PRICES SUBJECT TO CHANGE

L M B • LOS ANGELES, CALIF.

L M B® Box Chassis (Continued)

| | Each | DEALER NET Gray, Black, Brown | | Each | DEALER NET Gray, Black, Brown | |
|---------|---|-------------------------------------|-------|---------|--|------------|
| | | Plain | | | Plain | |
| T-F 770 | 2 ³ / ₄ x2 ¹ / ₈ x1 ⁵ / ₈ | \$.62 | \$.81 | T-F 780 | 5 ¹ / ₄ x3 x2 ¹ / ₈ | .82 \$1.12 |
| T-F 771 | 2 ³ / ₄ x2 ¹ / ₈ x2 ³ / ₄ | .68 | .95 | T-F 781 | 6 x5 x4 | 1.47 1.83 |
| T-F 772 | 3 ¹ / ₄ x2 ¹ / ₈ x1 ¹ / ₈ | .62 | .84 | T-F 782 | 7 x5 x3 | 1.40 1.86 |
| T-F 773 | 3 ¹ / ₂ x2 ¹ / ₈ x1 ⁵ / ₈ | .62 | .84 | T-F 783 | 8 x6 x3 ¹ / ₂ | 1.72 2.25 |
| T-F 774 | 4 x2 ¹ / ₈ x1 ⁵ / ₈ | .62 | .95 | T-F 784 | 10 x6 x3 ¹ / ₂ | 2.02 2.54 |
| T-F 775 | 4 x2 ¹ / ₄ x2 ¹ / ₄ | .75 | .97 | T-F 785 | 10 x2 x1 ⁵ / ₈ | 1.15 1.57 |
| T-F 776 | 4 x2 x2 ³ / ₄ | .75 | 1.00 | T-F 786 | 12 x2 ¹ / ₂ x2 ¹ / ₄ | 1.37 1.67 |
| T-F 777 | 4 ¹ / ₄ x2 ¹ / ₄ x1 ¹ / ₂ | .72 | 1.00 | T-F 787 | 12 x7 x4 | 2.71 3.43 |
| T-F 778 | 5 x2 ¹ / ₄ x2 ¹ / ₄ | .78 | 1.03 | T-F 788 | 17 x5 x4 | 2.92 3.44 |
| T-F 779 | 5 x4 x3 | .94 | 1.32 | | | |

| | Each | PRICES Gray, Black, Brown | | Each | PRICES Gray, Black, Brown | |
|-------|---|---------------------------------|-------|-------|--|--------------|
| | | Plain | | | Plain | |
| J-870 | 2 ³ / ₄ x2 ¹ / ₈ x1 ⁵ / ₈ | .62 | \$.81 | J-880 | 5 ¹ / ₄ x3 x2 ¹ / ₈ | \$.82 \$1.12 |
| J-871 | 2 ³ / ₄ x2 ¹ / ₈ x2 ³ / ₄ | .68 | .95 | J-881 | 6 x5 x4 | 1.47 1.83 |
| J-872 | 3 ¹ / ₄ x2 ¹ / ₈ x1 ¹ / ₈ | .62 | .84 | J-882 | 7 x5 x3 | 1.40 1.86 |
| J-873 | 3 ¹ / ₂ x2 ¹ / ₈ x1 ⁵ / ₈ | .62 | .84 | J-883 | 8 x6 x3 ¹ / ₂ | 1.72 2.25 |
| J-874 | 4 x2 ¹ / ₈ x1 ⁵ / ₈ | .62 | .95 | J-884 | 10 x6 x3 ¹ / ₂ | 2.02 2.54 |
| J-875 | 4 x2 ¹ / ₄ x2 ¹ / ₄ | .75 | .97 | J-885 | 10 x2 x1 ⁵ / ₈ | 1.15 1.57 |
| J-876 | 4 x2 x2 ³ / ₄ | .75 | 1.00 | J-886 | 12 x2 ¹ / ₂ x2 ¹ / ₄ | 1.37 1.67 |
| J-877 | 4 ¹ / ₄ x2 ¹ / ₄ x1 ¹ / ₂ | .72 | 1.00 | J-887 | 12 x7 x4 | 2.71 3.43 |
| J-878 | 5 x2 ¹ / ₄ x2 ¹ / ₄ | .78 | 1.03 | J-888 | 17 x5 x4 | 2.92 3.44 |
| J-879 | 5 x4 x3 | .94 | 1.32 | | | |

| | ALUM. GAUGE Each | Each | PRICES Gray, Black, or Brown | | ALUM. GAUGE Each | Each | PRICES Gray, Black, or Brown | |
|---------|---------------------|------|------------------------------------|--------|---------------------|---------|------------------------------------|---------------|
| | | | Plain | | | | Plain | |
| U-C 970 | 4x 4x2 | .040 | \$1.57 | \$1.82 | U-C 976 | 10x 8x7 | .051 | \$4.63 \$5.35 |
| U-C 971 | 5x 4x3 | .040 | 1.69 | 1.98 | U-C 977 | 12x 7x6 | .051 | 4.46 5.30 |
| U-C 972 | 6x 5x4 | .040 | 2.18 | 2.52 | U-C 978 | 10x10x8 | .051 | 5.90 6.85 |
| U-C 973 | 6x 6x6 | .040 | 2.55 | 3.02 | U-C 979 | 12x11x8 | .051 | 7.06 8.02 |
| U-C 974 | 7x 5x3 | .040 | 2.98 | 3.48 | U-C 980 | 15x 9x7 | .051 | 7.15 8.11 |
| U-C 975 | 9x 6x5 | .051 | 3.38 | 3.89 | | | | |

| No. | L | W | H | SIZES | | | | No. | L | W | H |
|------|---------------------------------|-----------------------------------|-----------------------------------|-------|---------------------------------|-----------------------------------|-----------------------------------|------|---------------------------------|-----------------------------------|-----------------------------------|
| | | | | No. | L | W | H | | | | |
| M-01 | 1 ¹ / ₈ " | x 1" | x 1 ¹ / ₂ " | * 09 | 2 ⁵ / ₈ " | x 1" | x 3 ³ / ₈ " | 016 | 2" | x 1 ³ / ₄ " | x 3 ³ / ₄ " |
| 02 | 1" | x 7 ⁷ / ₈ " | x 1 ¹ / ₂ " | 010 | 1 ³ / ₄ " | x 1 ¹ / ₄ " | x 2 ¹ / ₈ " | 017 | 2" | x 1 ³ / ₄ " | x 1" |
| *04 | 1 ¹ / ₄ " | x 1 ¹ / ₂ " | x 7 ⁷ / ₈ " | 011 | 2" | x 1 ¹ / ₄ " | x 3 ³ / ₄ " | 018 | 2" | x 2" | x 1 ¹ / ₄ " |
| *06 | 1 ¹ / ₂ " | x 1 ¹ / ₈ " | x 1 ¹ / ₂ " | *012 | 2" | x 1 ¹ / ₄ " | x 1" | *019 | 2 ¹ / ₂ " | x 1 ³ / ₄ " | x 1 ¹ / ₈ " |
| 07 | 1 ³ / ₄ " | x 1" | x 3 ³ / ₄ " | *013 | 1 ³ / ₄ " | x 1 ¹ / ₄ " | x 1" | *020 | 1 ¹ / ₂ " | x 1 ¹ / ₂ " | x 1" |
| *08 | 2 ¹ / ₄ " | x 1" | x 3 ³ / ₈ " | 014 | 1 ¹ / ₂ " | x 1 ¹ / ₂ " | x 3 ³ / ₄ " | *021 | 2 ¹ / ₂ " | x 1 ³ / ₄ " | x 3 ³ / ₄ " |
| | | | | *015 | 2" | x 1 ³ / ₄ " | x 1 ¹ / ₂ " | 022 | 3 ¹ / ₈ " | x 1 ³ / ₄ " | x 1 ¹ / ₂ " |

* Without Mounting Ears

| With Mounting Ears in Lots of 100 to 999 ea. | Plain | | Plated | | Without Mounting Ears 100 to 999 ea. | Plain | | Plated | |
|--|-------|-----|--------|--|--------------------------------------|-------|-----|--------|--|
| | | | | | | | | | |
| | .49 | .65 | | | | .41 | .57 | | |

Covers for LMB Miniature Boxes 100 to 999 ea.15

TITE-FIT BOX CHASSIS



JIFFY BOX CHASSIS



NO SCREWS

Just push together to close and the Catches snap into place—just a slight pressure of the fingers to open.

UTILITY BOXES

Give approximately 25% more usable space for building.



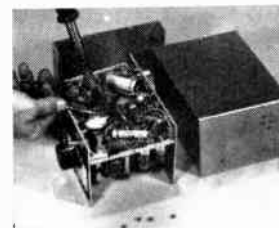
MINIATURE BOX CHASSIS

Precision made in steel only, cadmium plated. Made with or without mounting ears. Covers solder in when used in assembly.



UTILITY ENCLOSURES

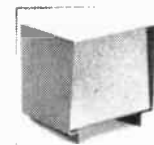
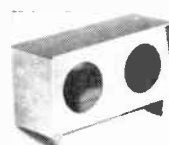
| No. | L | W | H | Plain | Gray |
|------|---------------------------------|-----------------------------------|--|--------|--------|
| W-1A | 7" | x 5" | x 4 ¹ / ₂ " with built in chassis | \$3.97 | \$4.84 |
| W-1B | 10" | x 4" | x 3 ¹ / ₂ " with built in chassis | 3.97 | 4.84 |
| W-1C | 8 ¹ / ₂ " | x 6 ¹ / ₈ " | x 5" with built in chassis | 4.43 | 5.33 |
| W-1D | 18" | x 9" | x 11" will accommodate an 11" x 17" 2", 3" or 4" chassis | 9.75 | 13.13 |



"AL-CAB" CABINETS for meter cases or any application where outstanding appearance is needed

| No. | L | W | H | Plain | Gray |
|-------|---------------------------------|-----------------------------------|--|--------|--------|
| W-2AP | 3 ¹ / ₂ " | x 4" | x 3" with holes | \$1.88 | \$2.18 |
| W-2A | 3 ¹ / ₂ " | x 4" | x 3 ¹ / ₂ " without holes | 1.98 | 2.28 |
| W-2B | 3" | x 7" | x 3 ¹ / ₂ " with and without holes | 2.25 | 2.67 |
| W-2C | 2 ³ / ₈ " | x 7" | x 3 ¹ / ₂ " without holes | 2.93 | 3.36 |
| W-2E | 4 ¹ / ₂ " | x 4 ¹ / ₂ " | x 3 ¹ / ₂ " without holes | 2.30 | 2.60 |

Holes in W-2AP, 2B are 2¹/₄", 2¹³/₁₆". For 4" Meter holes and knock-out, add 10% to above prices.



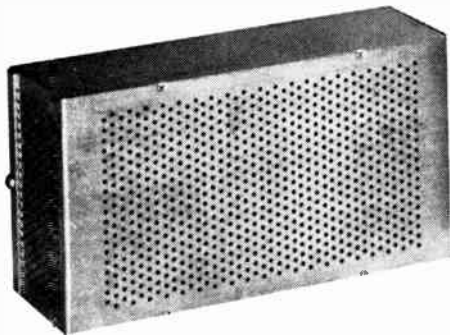
W.M. "AL-CAB" Deluxe Series
All with Built-in Chassis

| No. | D | W | H | Plain | Gray |
|------|---------------------------------|------------------------------------|-----------------------------------|--------|--------|
| W-2F | 7 ¹ / ₂ " | x 5" | x 4 ¹ / ₂ " | \$4.40 | \$5.18 |
| W-2G | 13" | x 10" | x 5 ³ / ₄ " | 9.36 | 11.06 |
| W-2H | 7" | x 11" | x 6 ¹ / ₄ " | 7.38 | 8.63 |
| W-2J | 8" | x 11 ¹ / ₂ " | x 7 ¹ / ₂ " | 8.10 | 9.35 |

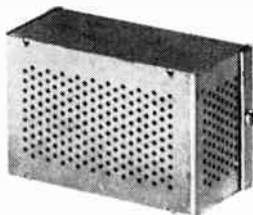


PRICES SUBJECT TO CHANGE

LMB® (Continued)



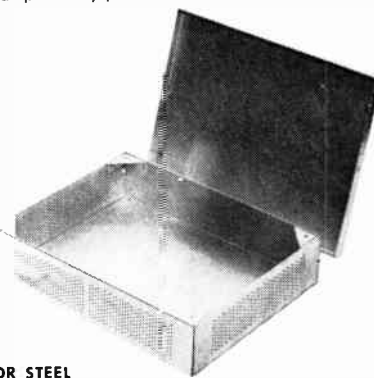
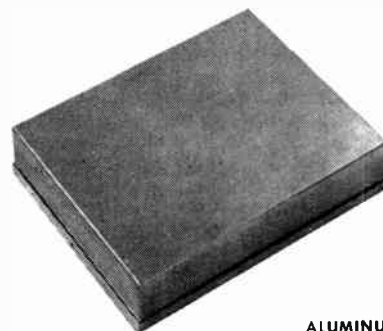
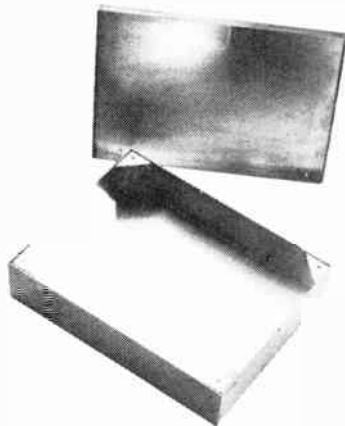
LMB PERFORATED BOX CHASSIS



LMB Perforated Boxes are adaptable wherever heat dissipation is required as they are spaced in perforations that are set by laboratory research to give utmost heat dissipation and also give utmost shielding. They are die perforated on three sides and top of the box.

| NO. | FINISH | SIZE | NET EA. | NO. | FINISH | SIZE | NET EA. |
|-----|---------------|-----------------------|---------|-----|---------------|-----------------------|---------|
| 00Z | Plain or Gray | 2 5/8 x 2 1/8 x 1 3/4 | \$.83 | 138 | Plain or Gray | 6 1/4 x 3 1/2 x 2 1/8 | \$1.82 |
| 000 | " " | 3 1/4 x 2 1/8 x 1 5/8 | .95 | 139 | " " | 5 1/2 x 3 x 1 1/4 | 1.36 |
| 00 | " " | 4 x 2 1/8 x 1 5/8 | 1.02 | 140 | " " | 3 x 4 x 5 | 1.75 |
| 100 | " " | 2 3/4 x 2 1/8 x 2 5/8 | 1.20 | 141 | " " | 6 x 4 x 3 | 1.88 |
| 101 | " " | 4 1/4 x 2 1/4 x 1 1/4 | 1.12 | 142 | " " | 6 x 4 x 5 | 2.18 |
| 102 | " " | 4 x 2 x 2 3/4 | 1.41 | 143 | " " | 4 x 4 x 2 | 1.40 |
| 107 | " " | 4 x 2 1/4 x 2 1/4 | 1.09 | 144 | " " | 10 x 4 x 2 1/2 | 2.19 |
| 108 | " " | 5 x 2 1/4 x 2 1/4 | 1.50 | 650 | " " | 6 1/2 x 2 1/8 x 1 5/8 | 1.41 |
| 135 | " " | 3 3/4 x 3 x 2 1/8 | 1.36 | 850 | " " | 8 1/2 x 2 1/8 x 1 5/8 | 1.59 |
| 136 | " " | 5 1/4 x 3 x 2 1/8 | 1.50 | 15 | " " | 12 x 2 x 1 3/4 | 1.79 |
| 137 | " " | 8 x 3 x 2 3/4 | 2.14 | | | | |

LMB PRESENTS SOMETHING NEW IN CHASSIS —



THE CHASSIS WITH THE CAP COVER AS ORIGINATED BY LMB

Built with the new original LMB popular cap cover construction. This construction enables the builder to use either the top or the bottom of the chassis for construction. The Chassis can also be mounted on its side and construction can be an bath top and bottom at the same time. Sturdily built from Aircraft quality aluminum, Type 3003, H-14, the same material as is used in the construction of all LMB precision box chassis. Special technique in welding the corners makes for a stronger chassis than the orthodox type. Cap construction allows for using all the space inside the chassis without being hindered by the mounting flange, which takes from 10% to 20% of the mounting space out of the average chassis. The P Series are perforated on all four sides and are ideal where heat dissipation is a factor. LMB chassis — the better chassis, with the year's ahead advanced construction for your better project application. An advanced quality product competitively priced.

ALUMINUM OR STEEL

| WITHOUT COVER | | | | WITH CAP COVER | | | PERFORATED | | |
|---------------|------------|-------|--------|----------------|-----------|--------|------------|-----------|--------|
| NO. | SIZE L W H | GAUGE | NET | NO. | L W H | NET | NO. | L W H | NET |
| 572 | 5x 7x2 | 18 | \$1.17 | 572C | 5x 7x2 | \$1.75 | 572P | 5x 7x2 | \$2.05 |
| 573 | 5x 7x3 | 18 | 1.42 | 573C | 5x 7x3 | 1.95 | 573P | 5x 7x3 | 2.25 |
| 5952 | 5x9 1/2x2 | 18 | 1.25 | 5952C | 5x9 1/2x2 | 1.85 | 5952P | 5x9 1/2x2 | 2.15 |
| 5103 | 5x10x3 | 18 | 1.65 | 5103C | 5x10x3 | 2.25 | 5103P | 5x10x3 | 2.55 |
| 5133 | 5x13x3 | 18 | 1.85 | 5133C | 5x13x3 | 2.50 | 5133P | 5x13x3 | 2.80 |
| 6173 | 6x17x3 | 18 | 2.67 | 6173C | 6x17x3 | 3.40 | 6173P | 6x17x3 | 3.70 |
| 772 | 7x 7x2 | 18 | 1.35 | 772C | 7x 7x2 | 1.90 | 772P | 7x 7x2 | 2.20 |
| 792 | 7x 9x2 | 18 | 1.46 | 792C | 7x 9x2 | 1.95 | 792P | 7x 9x2 | 2.25 |
| 7112 | 7x11x2 | 18 | 1.58 | 7112C | 7x11x2 | 2.30 | 7112P | 7x11x2 | 2.60 |
| 7123 | 7x12x3 | 18 | 2.03 | 7123C | 7x12x3 | 2.75 | 7123P | 7x12x3 | 3.05 |
| 7153 | 7x15x3 | 18 | 2.67 | 7153C | 7x15x3 | 3.60 | 7153P | 7x15x3 | 3.90 |
| 7173 | 7x17x3 | 18 | 2.75 | 7173C | 7x17x3 | 3.70 | 7173P | 7x17x3 | 4.00 |
| 8123 | 8x12x3 | 18 | 2.42 | 8123C | 8x12x3 | 3.23 | 8123P | 8x12x3 | 3.53 |
| 8172 | 8x17x2 | 18 | 2.52 | 8172C | 8x17x2 | 3.50 | 8172P | 8x17x2 | 3.80 |
| 8173 | 8x17x3 | 16 | 2.95 | 8173C | 8x17x3 | 4.50 | 8173P | 8x17x3 | 4.80 |
| 10123 | 10x12x3 | 18 | 2.70 | 10123C | 10x12x3 | 3.60 | 10123P | 10x12x3 | 4.30 |
| 10143 | 10x14x3 | 18 | 2.95 | 10143C | 10x14x3 | 4.30 | 10143P | 10x14x3 | 4.70 |
| 10172 | 10x17x2 | 16 | 2.85 | 10172C | 10x17x2 | 4.37 | 10172P | 10x17x2 | 4.77 |
| 10173 | 10x17x3 | 16 | 3.40 | 10173C | 10x17x3 | 5.18 | 10173P | 10x17x3 | 5.98 |
| 10174 | 10x17x4 | 16 | 4.85 | 10174C | 10x17x4 | 6.37 | 10174P | 10x17x4 | 7.17 |
| 11173 | 11x17x3 | 14 | 4.20 | 11173C | 11x17x3 | 6.60 | 11173P | 11x17x3 | 7.10 |
| 12172 | 12x17x2 | 14 | 4.50 | 12172C | 11x17x2 | 6.60 | 12172P | 12x17x2 | 7.20 |
| 12173 | 12x17x3 | 14 | 4.60 | 12173C | 12x17x3 | 6.90 | 12173P | 12x17x3 | 7.50 |
| 13172 | 13x17x2 | 14 | 4.50 | 13172C | 13x17x2 | 6.60 | 13172P | 13x17x2 | 7.30 |
| 13173 | 13x17x3 | 14 | 4.80 | 13173C | 13x17x3 | 6.90 | 13173P | 13x17x3 | 7.50 |
| 13174 | 13x17x4 | 14 | 5.95 | 13174C | 13x17x4 | 7.95 | 13174P | 13x17x4 | 8.55 |



**CONSOLES FOR INDUSTRY...SCHOOLS...AIRPORTS... BROADCASTING
RECORDING...TESTING APPARATUS...FOR 19" RACK PANELS**



RB-100 SINGLE PEDESTAL UNIT

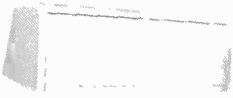
This unit is designed for economy in the smaller broadcast station, school lab, etc.; a low cost unit with a wide range of uses. This unit is equipped with a sliding drawer (PD-1050-16) built into the cabinet. A blank panel (PM-1610) is provided above or below the drawer for equipment. The top has office gray linoleum touched off by attractive metal trim.

NOTE: Drawers furnished with panel mtg. screws showing unless requested as pictured.

Net Price **\$148.50**



RB-100



RB-101 DOUBLE PEDESTAL UNIT

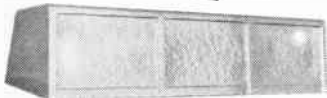
This console is designed for The Dual Turret RBT-101, equivalent to a 30 classroom unit. This unit is equipped with a sliding drawer (PD-1050-16) built in the upper or lower section of the cabinet. A blank panel (PM-1610) is provided in the remaining space. This console has a hard linoleum top trimmed with metal molding.

See Note above.

Net Price **\$189.75**



RB-101

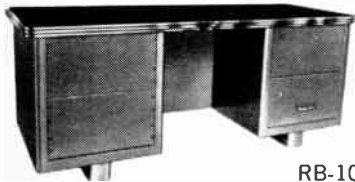


RB-102 TRIPLE PEDESTAL UNIT

This unit is the ultimate in console design. It is able to handle equipment for a 60 classroom unit. Plenty of space is provided on this large top for work area. A sliding drawer (PD-1050-16) with sufficient room for a 16" Transcription turntable is provided in this unit. Three blank 10½" (PM-1610) panels are provided in the remaining space. The top is an attractive office gray set off by metal trim.

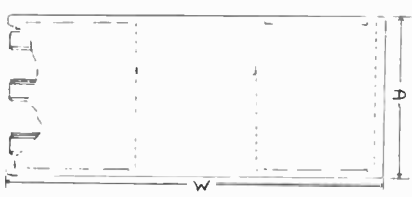
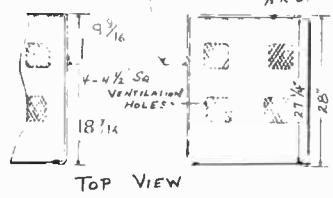
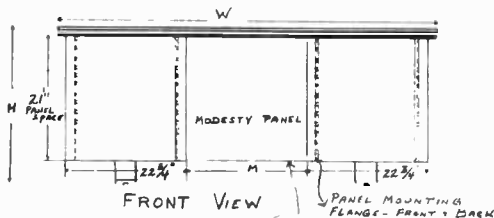
See Note above.

Net Price **\$330.00**



RB-102

ARCHITECTS AND ENGINEERS SPECIFICATIONS



MATERIAL: 18 ga. CRS

CONSTRUCTION:

1. Spot weld throughout.
2. Tops are spot welded and fastened with sheet metal screws.
3. Corners, brazed for added strength and finish appearance.
4. Modesty panels in the two larger models are removable via sheet metal screws.
5. Each pedestal has 21" panel space both front and rear recessed ¼". Rear panel furnished with (4) 4½" screened ventilating holes same as bottom of each pedestal.
6. Panel mounting holes are punched on standard Western Electric spacing. 10-24 oval head screws, Tinnerman clips and finish washers furnished.
7. Six 7/8" wire knockouts are provided toward rear of bottom of each pedestal. These knockouts accommodate ½" conduit or pipe.
8. Top is covered with gray matching linoleum and trimmed with a special aluminum trim. Trim provides 2 spaces for plastic feature strips.

FINISH: Iron phosphate dipped and finished with Silver Gray Hammer-tone Bake On Enamel. Other colors available.

| Catalog No. | H | D | W | M | Inside Pedestal Depth | Ship. Wt. |
|-------------|-----|-----|-----|------|-----------------------|-----------|
| RB-100 | 29" | 30" | 26" | | 27¼" | 125 |
| RB-101 | 29" | 30" | 53" | 23¼" | 27¼" | 190 |
| RB-102 | 29" | 30" | 70" | 21½" | 27¼" | 250 |

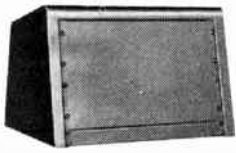


METAL WORKS INCORPORATED

STANDARD & CUSTOM DESIGNS

HERMANN, MISSOURI

TURRETS FOR USE WITH "RB" SERIES — 19" PANELS



RBT-100 -100-1 -100-2



RBT-101 -101-1 -101-2



RBT-102 -102-1 -102-2

Turret console combinations are attractive instruments that accentuate any control room, office, etc., with their modern design.

Turrets featured in three different series and three sizes within each series offer a multiple of combinations that can be used in conjunction with our RB series of consoles. These combinations are readily adaptable to specialized applications in control equipment, testing facilities, sound systems, control units in language laboratories and many other applications in industry and entertainment services.

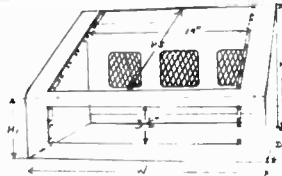
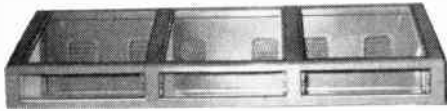
The standard turret which has 12 1/4" panel space is especially designed for use on the consoles (RB-100, RB-101, RB-102) and on equipment tables (RB-80-1, RB-80-3, RB-90-1, RB-90-3), although it has a wide variety of other uses.

MATERIAL: 18 ga. CRS. **CONSTRUCTION:** 1. Spot weld throughout. 2. Corners brazed for added strength and finish appearance. 3. Removable rear panel for easy access to cabinet components. 4. Five 7/8" knockouts provided in rear of each panel space. These knockouts accommodate 1/2" conduit or pipe. 5. Two 6 1/8" channel irons formed from 18 ga. CRS comprise the bottom of each turret. This type construction adds rigidity. 6. Front panel space has 10° slope. Rear of turrets has 10° slope. 7. Panel mounting holes are punched on standard Western Electric spacing. 8. 10/24 oval head screws, Tinnerman clips and finishing washers are furnished. 9. Panel spacing is recessed 1/4". **FINISH:** Iron phosphate dipped and finished with Silver Gray Hammertone Bake On Enamel. Other colors available.

For front height add 2" to H dimension.

| Cat. No. | W | H | WT | WB | PS | No. of Units | Shipping Weight | Net Price |
|-----------|--------|--------|--------|--------|--------|--------------|-----------------|-----------|
| RBT-100 | 21 3/4 | 15 1/2 | 13 1/2 | 18 | 12 1/4 | 1 | 40 lbs. | \$46.68 |
| RBT-101 | 42 | 15 1/2 | 13 1/2 | 18 | 12 1/4 | 2 | 65 lbs. | 63.54 |
| RBT-102 | 62 1/4 | 15 1/2 | 13 1/2 | 18 | 12 1/4 | 3 | 110 lbs. | 82.25 |
| RBT-100-1 | 21 3/4 | 17 1/4 | 12 3/4 | 18 | 14 | 1 | 50 lbs. | 48.74 |
| RBT-101-1 | 42 | 17 1/4 | 12 3/4 | 18 | 14 | 2 | 80 lbs. | 66.04 |
| RBT-100-2 | 21 3/4 | 13 3/4 | 11 5/8 | 15 7/8 | 10 1/2 | 1 | 35 lbs. | 85.97 |
| RBT-102-1 | 62 1/4 | 17 1/4 | 12 3/4 | 18 | 14 | 3 | 130 lbs. | 46.20 |
| RBT-101-2 | 42 | 13 3/4 | 11 5/8 | 15 7/8 | 10 1/2 | 2 | 60 lbs. | 62.87 |
| RBT-102-2 | 62 1/4 | 13 3/4 | 11 5/8 | 15 7/8 | 10 1/2 | 3 | 105 lbs. | 79.37 |

INSTRUCTORS TURRETS FOR USE WITH "RB" SERIES — 19" PANELS



SPECIFICATIONS

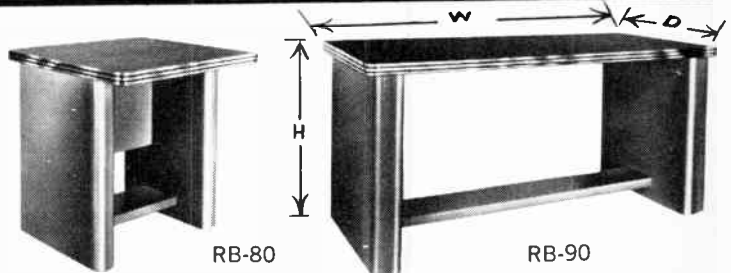
The T-103-1, 103-2, 103-3 series of turrets are especially designed for the language lab control unit ensemble. The low slope affords easy vision of the classroom as well as the equipment installed therein. These turrets are the result of considerable study in the field of audio education and are designed with the instructor, as well as maintenance personnel, in mind. Other applications of this turret are feasible where low slope aids vision of dials, meters and switch panel from a standing position. Takes panels:—ARP-123; RP-123; PM-163 or PA-163—lower space. Upper space:—ARP-1217; RP-1217; PM-1617 or PA-1617. Panels not furnished—order separately.

CRS comprise the bottom of each turret. This construction adds rigidity. 6. Front panel, 3 1/2" x 19", is made especially for our SP-1635 switch panel. 7. 17 1/2" panel space in all bays provides ample space for most installations. 8. Panel mounting holes are punched on standard Western Electric spacing. 9. 10/24 oval head screws, Tinnerman clips and finishing washers are furnished. 10. Panel spacing is recessed 3/8" to flush mount panel. **FINISH:** Iron phosphate dipped and finished with Silver Gray Hammertone Bake On Enamel. Other colors available.

| Cat. No. | W | H1 | H2 | D | PS | Shipping Weight | Net Price |
|----------|--------|-------|----|--------|--------|-----------------|-----------|
| T-103-1 | 22 | 6 3/8 | 10 | 18 1/2 | 17 1/2 | 40 lbs. | \$37.50 |
| T-103-2 | 42 3/4 | 6 3/8 | 10 | 18 1/2 | 17 1/2 | 65 lbs. | 67.50 |
| T-103-3 | 63 3/8 | 6 3/8 | 10 | 18 1/2 | 17 1/2 | 95 lbs. | 99.00 |

EQUIPMENT TABLES FOR SMALL OR LARGE DESK EQUIPMENT

Equipment tables are exclusively in the line. They are very handy when small equipment is being used. Models 80-1 — 80-3 have an overhanging top and plenty of knee room and are used for the smaller equipment. Models 90-1—90-3 are for larger table mounting equipment and have larger tops for more working area. Top is attractive linoleum with bright metal trim. Finish is modern silver gray hammertone.



| Cat. No. | Width-in. | Height-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|----------|-----------|------------|-----------|----------------|-----------|
| RB-80-1 | 26 | 29 | 26 | 75 | \$62.91 |
| RB-80-2 | 36 | 29 | 26 | 95 | 68.11 |
| RB-80-3 | 46 1/2 | 29 | 26 | 120 | 71.61 |
| RB-90-1 | 53 | 29 | 30 | 120 | 84.94 |
| RB-90-2 | 60 | 29 | 30 | 130 | 87.12 |
| RB-90-3 | 70 | 29 | 30 | 150 | 89.27 |



METAL WORKS INCORPORATED
STANDARD & CUSTOM DESIGNS
HERMANN, MISSOURI

CABINET RELAY RACKS FOR STANDARD 19" RACK PANELS



SCR standard DCR deluxe

Cabinet Relay Racks are rigidly constructed of 16 ga. steel. These racks are completely bolted together.

Panel mounting space is recessed 1/4" to give a more modernistic and pleasing appearance. The rear doors swing on rigid slip joint hinges which permit it to be easily removed. The standard type rack has square front vertical corners. The rounded type rack has rounded front vertical corners. The deluxe type rack has a dome top with rounded front vertical corners.

Front door with 1 1/4" depth furnished on request.

ARCHITECTS AND ENGINEERS SPECIFICATIONS

| | Standard | Net Price * | Round Corner | Net Price * | DeLuxe | Net Price * |
|----------|----------|-------------|--------------|-------------|----------|-------------|
| SCR-3675 | \$46.37 | | RCR-3675 | \$46.37 | DCR-3675 | \$54.70 |
| SCR-4200 | 49.87 | | RCR-4200 | 49.87 | DCR-4200 | 63.36 |
| SCR-6125 | 61.88 | | RCR-6125 | 61.88 | DCR-6125 | 67.65 |
| SCR-7000 | 66.52 | | RCR-7000 | 66.52 | DCR-7000 | 69.46 |
| SCR-7700 | 69.30 | | RCR-7700 | 69.30 | DCR-7700 | 81.29 |

*Assembled Price

MATERIAL: 16 ga. CRS.

CONSTRUCTION:

1. Panel mounting angles are punched to standard 1 1/4" x 1/2" spacings and are formed as part of the cabinet side.
 2. Panel mounting offset is 1/4" deep (See Inset).
 3. 10-24 Tinnerman clips, oval head screws and finishing washers furnished for panel space.
 4. Louvers are provided in sides and rear door—Four sets of six louvers each.
 5. Assembled with 1/4-20 pan head bolts and nuts.
 6. Rear doors swing on rigid slip joint hinges permitting easy removal.
 7. All models furnished with stainless steel feature strip (colored) trim, top and bottom.
 8. All models shipped knocked down unless assembled is requested.
- FINISH: Iron phosphate dipped and finished with Silver Gray Hammer-tone Bake On Enamel. Other colors available.

| Model | Catalog No. | Height-in. | Width-in. | Depth-in. | Panel Space-in. | Ship. Wt. Lbs. | Net Price * |
|--------------|-------------|------------|-----------|-----------|-----------------|----------------|-------------|
| Standard | SCR-3675 | 41 1/8 | 22 3/8 | 18 1/2 | 36 3/4 | 100 | \$46.37 |
| | SCR-4200 | 46 3/8 | 22 3/8 | 18 1/2 | 42 | 110 | 49.87 |
| | SCR-6125 | 65 5/8 | 22 3/8 | 18 1/2 | 61 1/4 | 130 | 61.88 |
| | SCR-7000 | 74 3/8 | 22 3/8 | 18 1/2 | 70 | 140 | 66.52 |
| | SCR-7700 | 81 3/8 | 22 3/8 | 18 1/2 | 77 | 150 | 69.30 |
| Round Corner | RCR-3675 | 41 1/8 | 22 3/8 | 18 1/2 | 36 3/4 | 100 | 46.37 |
| | RCR-4200 | 46 3/8 | 22 3/8 | 18 1/2 | 42 | 110 | 49.87 |
| | RCR-6125 | 65 5/8 | 22 3/8 | 18 1/2 | 61 1/4 | 130 | 61.88 |
| | RCR-7000 | 74 3/8 | 22 3/8 | 18 1/2 | 70 | 140 | 66.52 |
| | RCR-7700 | 81 3/8 | 22 3/8 | 18 1/2 | 77 | 150 | 69.30 |
| DeLuxe | DCR-3675 | 43 | 22 3/8 | 18 1/2 | 36 3/4 | 105 | 54.70 |
| | DCR-4200 | 48 1/4 | 22 3/8 | 18 1/2 | 42 | 115 | 63.36 |
| | DCR-6125 | 67 1/2 | 22 3/8 | 18 1/2 | 61 1/4 | 135 | 67.65 |
| | DCR-7000 | 76 1/4 | 22 3/8 | 18 1/2 | 70 | 145 | 69.46 |
| | DCR-7700 | 83 1/4 | 22 3/8 | 18 1/2 | 77 | 155 | 81.29 |

AMPLIFIER CABINETS RACKS AND CONSOLES

For Recessed Application—TB Series

The recessed type amplifier enclosure has a grille cover. The door is equipped with a lock and piano hinge. The grille has an opening in the top part to permit hot air to escape. The back enclosure is designed to reflect the hot air toward the front of the cabinet so that it may escape. Adequate knockouts are placed in back for all wiring purposes. All TB's are furnished complete with TBG-1000 grille.

Surface Mounted—STB Series

Same size and panel space as TB listed above. Made for those applications where surface mounting is required. STB Panel Mtg. Angles furnished on request.

Heavy Duty—HTB Series

This cabinet offers adequate panel mounting space for most applications where the above listed TB's are too small. The rack portion of the cabinet is completely removable and mounted on 4 nylon ball bearing slides. The rack will support a maximum of 200 lbs. of weight. Maintenance convenience is offered in that the rack can be pulled forward to afford easy access to all components. Sturdy construction features of this cabinet are incorporated to give you quality in an economical unit. Doors are furnished with flush mounted locks.

TB and STB

MATERIAL: 16 ga. CRS body
11 ga. CRS grille

CONSTRUCTION:

1. All spot weld and braze construction.
 2. Panel mounting angles are supported in slotted bracket, adjustable 9 1/2" front to rear, affording ample clearance for dials, tuning knobs, switches, etc., on TB only.
 3. 10 1/2" of maximum panel space.
 4. Panel mounting angles are punched for use with Tinnerman clips.
- FINISH: Iron phosphate dipped and finished with Silver Gray Hammettone Bake On Enamel. Other colors available.

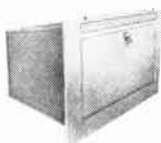
HTB

MATERIAL: 16 ga. CRS cabinet
1/8" thick angle iron with 11 ga. bracing on rack.

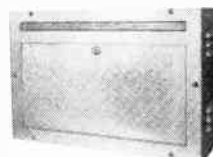
CONSTRUCTION:

1. Spot weld and electric arc construction on cabinet. Electric arc weld on removable rack.
 2. Panel mounting angles drilled and tapped for 10/24 thread.
 3. Nylon ball bearing slides used on rack.
 4. Complete panel mounting rack is removable.
 5. Front door made to provide adequate clearance space for dials, knobs, etc.
- FINISH: Iron phosphate dipped and finished with Silver Gray Hammettone Bake On Enamel. Other colors available.

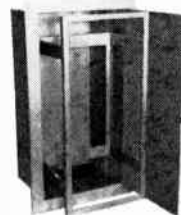
TB Series



STB Series



HTB Series



| Catalog No. | Model | Height | Width | Depth | Ship. Wt. | Net Price |
|-------------|--------|--------|-------|-------|-----------|-----------|
| TBG-1000 | Grille | 16" | 23" | | 13 lbs. | \$15.51 |
| TB -1200 | Encl. | 13" | 20" | 12" | 35 lbs. | 25.30 |
| TB -1500 | Encl. | 13" | 20" | 15" | 38 lbs. | 27.70 |
| TB -1800 | Encl. | 13" | 20" | 18" | 41 lbs. | 28.74 |

| Catalog No. | Inside | | | Outside | | | Net Price |
|-------------|--------|-----|---------|---------|-----|-----|-----------|
| | H | W | D | H | W | D | |
| STB-1200 | 14" | 21" | 11 1/8" | 16" | 23" | 12" | \$29.25 |
| STB-1500 | 14" | 21" | 14 1/8" | 16" | 23" | 15" | 32.42 |
| STB-1800 | 14" | 21" | 17 1/8" | 16" | 23" | 18" | 34.20 |

| Catalog No. | Height | Cabinet Only Width | Depth | Removable Rack | | | P.S. | Ship. Wt. | Net Price |
|-------------|---------|--------------------|-------|----------------|---------|-------|---------|-----------|-----------|
| | | | | Height | Width | Depth | | | |
| HTB-1575 | 17 3/4" | 21 1/8" | 18" | 18 3/8" | 20 3/8" | 16" | 15 3/4" | 85 | \$ 66.47 |
| HTB-2800 | 30" | 21 1/8" | 18" | 30 5/8" | 20 3/8" | 16" | 28" | 125 | 85.93 |
| HTB-4200 | 45 1/4" | 21 1/8" | 18" | 44 5/8" | 20 3/8" | 16" | 42" | 175 | 107.13 |
| HTB-6152 | 61 1/4" | 21 1/8" | 18" | 63 7/8" | 20 3/8" | 16" | 61 1/4" | 225 | 135.96 |

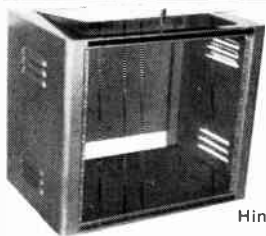
Door frame is 27 1/4" wide or 27 3/4" wider each side than cabinet width. Add 6" to cabinet height for overall height of door frame.



METAL WORKS INCORPORATED

STANDARD & CUSTOM DESIGNS
HERMANN, MISSOURI

DELUXE DESK CABINET RACKS FOR STANDARD 19" RACK PANELS — 15" DEEP



Hinged Door Back Type

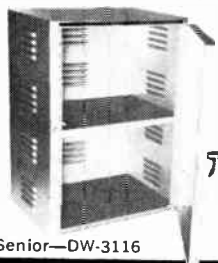
DC SERIES These cabinets are completely welded together to save on assembly time and costs. Panel mounting angles are punched to standard 1 1/4" - 1/2" spacings. Enough 10-24 speed clips and machine screws are furnished to mount several rack panels. To give a more pleasing appearance, the mounting angles are constructed to permit recessing of rack panels. All models have a recessed door on top for easy access to equipment. The six largest sizes have a door in back which permits access from the back. All models have a bright chrome strip on top and bottom of front. Phono drawer PD-1050-14 can be mounted in these cabinets except DC-875.

ARCHITECTS AND ENGINEERS SPECIFICATIONS — MATERIAL: 16 ga. CRS. **CONSTRUCTION:** 1. Completely welded together for rigidity. 2. Rounded front corners. 3. Panels fastened with Tinnerman clips. 4. 10-24 screws, Tinnerman clips and finish washers furnished. 5. 3/8" recessed panel mounting flanges. **FINISH:** Iron phosphate dipped and finished with Silver Gray Hammertone Bake On Enamel. Other colors available.

| Catalog No. | Width-in. | Height-in. | Depth-in. | Panel Space-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------|------------|-----------|-----------------|----------------|-----------|
| DC-875* | 22 3/4 | 10 7/8 | 15 | 8 3/4 | 26 | \$16.75 |
| DC-1050* | 22 3/4 | 12 3/8 | 15 | 10 1/2 | 28 | 18.48 |
| DC-1225* | 22 3/4 | 14 3/8 | 15 | 12 1/4 | 30 | 21.28 |
| DC-1400* | 22 3/4 | 16 1/8 | 15 | 14 | 35 | 22.44 |
| DC-1750 | 22 3/4 | 19 5/8 | 15 | 17 1/2 | 38 | 25.74 |
| DC-2100 | 22 3/4 | 23 1/8 | 15 | 21 | 42 | 27.59 |
| DC-2450 | 22 3/4 | 26 3/8 | 15 | 24 1/2 | 46 | 27.97 |
| DC-2625 | 22 3/4 | 28 3/8 | 15 | 26 1/4 | 48 | 28.38 |
| DC-3150 | 22 3/4 | 33 3/8 | 15 | 31 1/2 | 52 | 29.53 |
| DC-3500 | 22 3/4 | 37 3/8 | 15 | 35 | 56 | 31.35 |

(*) Solid back type.

DELUXE WALL MOUNTING AMPLIFIER CABINET SENIOR MODEL... JUNIOR MODEL



Senior—DW-3116

Here is a sturdy cabinet designed for housing the new style amplifiers. Completely welded construction with facilities for wall mounting. DW3116 comes complete with cabinet shelf and door with locking handle. Tamper proof inside hinges. Deep enough for the new larger amplifiers and wide enough for amplifiers using plugs on the side. Plenty of ventilation from louvers on sides and back.

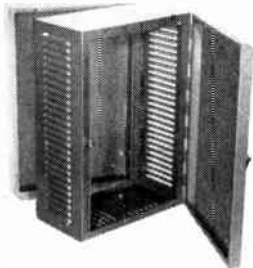
MATERIAL: 16 ga. CRS
CONSTRUCTION:

1. Completely welded together for rigidity.
2. Panels fastened with Tinnerman clips.
3. 10-24 screws, Tinnerman clips and finish washers furnished.

FINISH: Iron phosphate dipped and finished with Silver Gray Hammertone Bake On Enamel. Other colors available.

| Catalog No. | Height | Depth | Width | PS | Ship. Wt. | Net Price |
|----------------|---------|-------|-------|-----|-----------|-----------|
| Senior DW-3116 | 31" | 16" | 21" | 28" | 75 lbs. | \$67.50 |
| Junior DW-1616 | 16 1/8" | 16" | 21" | 14" | 50 lbs. | 44.25 |

SECTIONAL WALL MOUNTING CABINET 193 SERIES



This series of cabinets is designed for maximum installation convenience. Swing out feature of cabinets permits less handling of components on the job or in the shop. Dowel pins and heavy hinge assure you of durability and a greater amount of weight acceptance of components. Camlock studs interlock two sections with a flush lock mounted on front door in A & B models, locking handle on C & D models to complete a totally enclosed locking unit. The cabinets are available in four vertical panel sizes. If a phono drawer is required, order PD-1050-14. See specifications below.

ARCHITECTS AND ENGINEERS SPECIFICATIONS

MATERIAL: 16 ga. CRS, 11 ga. reinforced angle for wall mounting. **CONSTRUCTION:** 1. Each section is spot welded and brazed at corners for sturdiness. 2. Panel mounting holes are tapped for 10-32 threads. 3. Bottom and sides of middle section are louvered for maximum heat dissipation. 4. Dowel pins prevent sagging. 5. Each section is hinged with a heavy continuous hinge having a 1/4" pin diameter. **FINISH:** Iron phosphate dipped and finished with Silver Gray Hammertone Bake On Enamel. Other colors available.

| Model No. | Dimensions | | | | | | | | Ship. Weight | Net Price |
|-----------|------------|--------|--------|-------|----|-------|--------|--------|--------------|-----------|
| | A | B | C | D | E | F | G-ps | D-E-F | | |
| 193A | 20 3/8 | 18 3/8 | 19 1/8 | 4 1/2 | 11 | 1 3/4 | 15 3/4 | 17 1/4 | 50± | \$ 74.27 |
| 193B | 20 3/8 | 31 | 19 1/8 | 4 1/2 | 11 | 1 3/4 | 28 | 17 1/4 | 75± | 78.26 |
| 193C | 20 3/8 | 45 | 19 1/8 | 4 1/2 | 11 | 1 3/4 | 42 | 17 1/4 | 125± | 95.73 |
| 193D | 20 3/8 | 64 3/8 | 19 1/8 | 4 1/2 | 11 | 1 3/4 | 61 1/4 | 17 1/4 | 175± | 105.86 |

PANEL MOUNTING PHONO & STORAGE DRAWERS FOR 19" RACKS

325 SLIDE

With Ball Bearing Drawer Slides

All drawers illustrated are made of 16 ga. steel. Phono drawer chassis has a 3/4" flange to accommodate a plywood or masonite base for a record changer. Base is included with drawer.

PD-1050-16
PD-1050-14



SD-1407
SD-1410



335 SLIDE

DSD-1210
DSD-1207



| Catalog No. | P.S. | Chassis Size | Ship. Wt. | Net Price |
|-------------|---------|------------------------------|-----------|-----------|
| PD-1050-14 | 10 1/2" | 16 3/8" W x 14" D x 3 3/4" H | 16 lbs. | \$21.75 |
| PD-1050-16 | 10 1/2" | 16 3/8" W x 16" D x 3 3/4" H | 18 lbs. | 21.75 |
| SD-1410 | 10 1/2" | 16" W x 16" L x 9 3/4" D | 18 lbs. | 24.75 |
| SD-1407 | 7" | 16" W x 16" L x 6 1/4" D | 16 lbs. | 23.25 |
| DSD-1210 | 10 1/2" | 16" W x 16" L x 9 3/4" D | 18 lbs. | 33.25 |
| DSD-1207 | 7" | 16" W x 16" L x 6 1/4" D | 16 lbs. | 32.25 |

Finished in Silver Gray Hammertone with an attractive chrome drawer pull.

PD-1050-16 or 14 Phono Drawer The phono drawer is obtainable in two sizes, 14" depth and 18" depth. The 14" depth is made to fit our DC, STR, 193 series of cabinets while the 17 1/2" depth can be used in consoles (RB), SCR and DR cabinets. Mounted on slides with nylon rim ball bearing rollers, this drawer pushes in and out with ease. Extends a full 12" from front of cabinet. If full extension slide is desired add suffix "E" to these part numbers. Weight load—75 lbs.

SD-1410 or 1407 Storage Drawer A storage drawer to accommodate those extra tape reels, tools and what have you. Same slides illustrated in our PD-1050 shown above. Two panel sizes are offered, 10 1/2" and 7" by 16" length front to rear. 16" depth fits our STR, SCR, RB and DR cabinets. 10 1/2" panel drawer has storage space 9 5/8" D x 16" L x 16" W. 7" panel drawer has storage space 6 1/4" D x 16" L x 16" W. Weight load 75 lbs.

DSD-1210 or 1207 Deluxe Storage Drawer The ultimate in storage drawer capacity and convenience. These drawers feature a full extension slide—permitting the drawer to be pulled out 15" from cabinet. Smooth operation is provided by ball bearing rollers. Instant drawer removal and positive stopping, positive closing are additional features offered. Weight load—150 lbs. Two panel sizes are offered, 7" x 10 1/2" by 16" length front to rear. 10 1/2" panel drawer has storage space of 9 5/8" D x 16" L x 15 1/2" W. 7" panel drawer has storage space of 6 1/4" D x 16" L x 15 1/2" W.

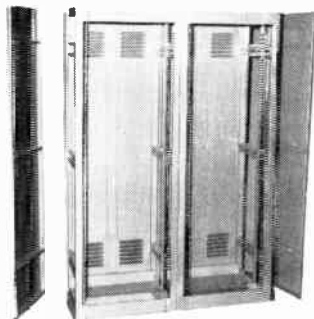


METAL WORKS INCORPORATED

STANDARD & CUSTOM DESIGNS

HERMANN, MISSOURI

DUPLI-RACK

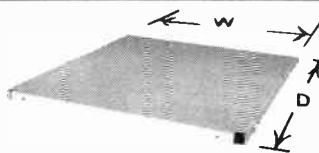


Dupli-rack features a maximum of cabinet space in a minimum of floor space at a savings in cost. To increase the size of an installation, simply remove the detachable side panels, bolt the units together through holes provided, forming a sturdy unit, and slip the detachable side panels on each side. This becomes an attractive installation where the addition of units will always remain the same in color tone and freshness of appearance. Each unit is of weld construction, forming a sturdy and rigid piece of equipment. Basic unit consists of frame and rear door.

SPECIFICATIONS MATERIAL: 16 ga. CRS. Panel mounting angles 11 ga. CRS. **CONSTRUCTION:** (1) Braze and spotweld assembly. (2) Detachable side panels are formed and supported and fastened by brackets. (3) Louvers provided in rear door. (4) Panel mounting angles drilled and tapped to 10-24 thread on standard 1 1/4" x 1/2" spacing. (5) Locking handle furnished on front door with flush mounted lock and separate handle on rear door.

| Rack with Rear Door | | | | Detachable Side Panels | | | Front Door | | | |
|---------------------|-------------|-------------|----------------|------------------------|---------------------------|-----------|----------------|-----------|----|---------|
| | Overall Ht. | Panel Space | Ship. Wt. Lbs. | Net Price | Ship. Wt. Lbs. (Per Pair) | Net Price | Ship. Wt. Lbs. | Net Price | | |
| DR-3675 | 42 7/8" | 36 3/4" | 100 | \$ 71.12 | DSP-36 | 20 | \$27.36 | FDR-36 | 10 | \$15.39 |
| DR-4200 | 48 1/8" | 42" | 104 | 72.63 | DSP-42 | 24 | 31.89 | FDR-42 | 12 | 17.49 |
| DR-6125 | 67 3/8" | 61 1/4" | 120 | 77.88 | DSP-61 | 32 | 38.64 | FDR-61 | 18 | 22.35 |
| DR-7000 | 76 1/8" | 70" | 129 | 83.88 | DSP-70 | 36 | 42.54 | FDR-70 | 20 | 24.87 |
| DR-7700 | 83 1/8" | 77" | 133 | 104.13 | DSP-77 | 40 | 48.93 | FDR-77 | 22 | 28.11 |

CABINET RACK SHELF FOR CABINET RACKS, DESK RACKS AND CONSOLES



Constructed of one piece of No. 16 gauge sheet steel. Formed 1" high. Shelf has holes in side and front and back for mounting to cabinet or rack. Finished in brilliant silver gray hammetone unless otherwise specified.

| Catalog No. | For: | Width-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|-------------|--------------------|-----------|-----------|----------------|-----------|
| CS-1201 | RB Models | 22 5/8" | 26 3/8" | 14 | \$4.09 |
| CS-1202 | DC Models | 22 5/8" | 11 1/2" | 9 | 3.05 |
| CS-1203 | SCR Models | 22 5/8" | 14 1/8" | 10 | 3.27 |
| CS-1204 | RCR and DCR Models | 22 5/8" | 14 3/8" | 10 | 3.27 |

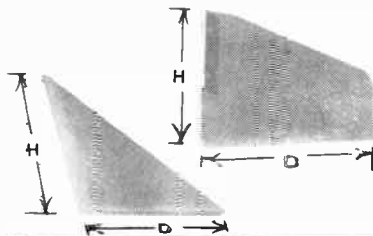
TURRET SHELF FOR "RBT" TURRETS



The Turret Shelf is designed for extremely heavy equipment in the turret. It is made of No. 16 gauge steel and is designed to be movable both forward and backward, and up and down. This model fits all Turrets. Special sizes available upon request. Finished in standard gray hammetone.

| Catalog No. | Height-in. | Width-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|-------------|------------|-----------|-----------|----------------|-----------|
| TS-1000 | 1 3/4" | 17 | 10 1/2" | 8 | \$6.82 |

CHASSIS MOUNTING BRACKETS TRIANGULAR AND STANDARD TYPE

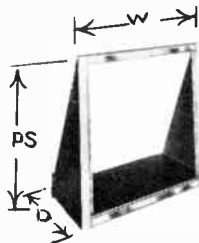
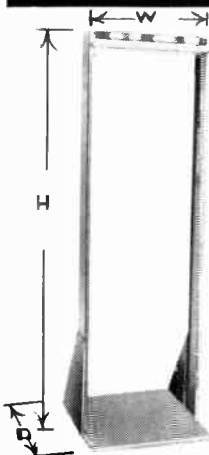


These brackets are made of No. 16 gauge sheet steel. The standard brackets are notched for 3" and 4" high chassis and will fit any of our standard or heavy duty chassis. The triangular brackets can be used where greater strength is required. All brackets are sold in pairs only and are finished in gray hammetone.

(*) Standard type notched for 3" chassis.
(**) Standard type notched for 4" chassis.

| Catalog No. | Height-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|-------------|------------|-----------|----------------|-----------|
| MB-155 | 5 | 5 | 2 | \$.83 |
| MB-177 | 7 | 7 | 3 | .96 |
| MB-199 | 9 | 9 | 5 | 1.16 |
| CB-308* | 7 | 8 | 3 | .83 |
| CB-311* | 7 | 11 | 4 | 1.18 |
| CB-313* | 7 | 13 | 4 | 1.39 |
| CB-413** | 8 3/4" | 13 | 5 | 1.49 |
| CB-417** | 8 3/4" | 17 | 7 | 1.78 |

RELAY RACKS CHANNEL AND TABLE TYPE



TR DESK TYPE

These Table Racks are constructed of heavy No. 16 gauge steel and are completely welded together for strength. Mounting holes are drilled to standard 1 1/4" - 1/2" spacings. All panel mounting hardware is supplied. Each rack is finished in silver gray hammetone and is trimmed with bright chrome molding.

RR CHANNEL TYPE

Channel Relay Racks are constructed of No. 11 ga. steel. The vertical channels are drilled and tapped on 1 1/4" - 1/2" spacing and for No. 10-24 machine screws. Racks are shipped knocked down or assembled. Hardware included. Each rack is finished in silver gray hammetone unless otherwise specified.

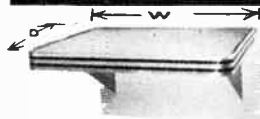
| Catalog No. | Width-in. | Height-in. | Depth-in. | Panel Space-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------|------------|-----------|-----------------|----------------|-----------|
| TR-121 | 22 | 24 | 12 | 21 | 17 | \$6.93 |
| TR-128 | 22 | 31 | 12 | 28 | 20 | 8.58 |

| Catalog No. | Width-in. | Height-in. | Depth-in. | Panel Space-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------|------------|-----------|-----------------|----------------|-----------|
| RR-156 | 19 1/8" | 61 3/8" | 20 | 56 | 70 | \$29.50 |
| RR-163 | 19 1/8" | 68 3/8" | 20 | 63 | 80 | 30.47 |
| RR-170 | 19 1/8" | 75 3/8" | 20 | 70 | 90 | 31.28 |
| RR-177 | 19 1/8" | 82 3/8" | 20 | 77 | 100 | 31.51 |
| RR-184 | 19 1/8" | 89 3/8" | 20 | 84 | 110 | 33.00 |



METAL WORKS INCORPORATED
STANDARD & CUSTOM DESIGNS
HERMANN, MISSOURI

DESK PANEL TO FIT 19" RACKS



The Desk Panel is constructed of No. 16 gauge steel and is entirely spotwelded together for strength. The front corners of the top are rounded to give a pleasing appearance. This model is finished in the standard silver gray hammertone lacquer.

| Catalog No. | Panel Size-in. | Top Size-in. | Ship. Wt. | Net Price |
|-------------|----------------|----------------------|-----------|-----------|
| DT-1050 | 19" x 10½" | 17¾" Wide x 16" Deep | 15 Lbs. | \$14.02 |

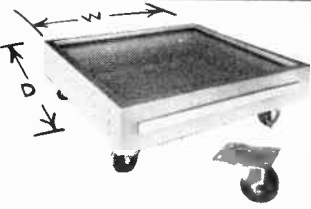
AMPLIFIER FOUNDATIONS STREAMLINED TYPE



A modern cover with rounded corners and bright chrome trim. Constructed of cold rolled steel and finished in gray hammertone.

| Catalog No. | Width-in. | Height-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------|------------|-----------|----------------|-----------|
| SAF-919 | 12 | 9 | 7 | 10 | \$6.19 |
| SAF-925 | 17 | 9 | 7 | 11 | 5.28 |
| SAF-928 | 17 | 9 | 10 | 13 | 6.60 |

ROLLER TRUCKS FOR CABINET AND TRANSMITTER RACKS



Made entirely from No. 16 gauge steel with reinforced corners for the 2½" dia. rollers. Trucks are completely assembled. They are finished in gray hammertone. Casters—2½" dia. ball bearing type. 400 lb. cap. Shipping wt. 2¼ lbs.

| Catalog Number | For: | Inside Dimensions | | Shipping Wt. Lbs. | Net Price |
|----------------|----------------------------------|-------------------|-----------|-------------------|-----------|
| | | Width-in. | Depth-in. | | |
| RT-500 | "DC" Models | 23 | 15¼ | 19 | \$22.56 |
| RT-501 | "RR" Models | 20½ | 19½ | 20 | 22.77 |
| RT-502 | "SCR", "RCR", "DCR" (19" Panels) | 23 | 19 | 21 | 22.97 |
| RT-503 | "STR", "DTR" | 23½ | 19 | 24 | 23.10 |
| RT-504 | "DTR" and "STR" (24" Panels) | 27½ | 24¼ | 28 | 24.21 |
| RT-505 | "DTR" and "STR" (30" Panels) | 33½ | 24¼ | 30 | 25.03 |

UTILITY CABINETS SLOPING FRONT, REMOVABLE PANEL TYPE



This Cabinet is constructed of No. 18 gauge steel. It has a rounded top corner and a removable front panel. Back of cabinet is provided with louvers and has an opening for leads. Finished in gray hammertone.

| Catalog No. | Height-in. | Width-in. | Depth-in. | Use Chassis No. | Ship. Wt. Lbs. | Net Price |
|-------------|------------|-----------|-----------|-----------------|----------------|-----------|
| SFC-500 | 8 | 8 | 8 | SC-104 | 6 | \$6.52 |
| SFC-501 | 8 | 10 | 8 | SC-105 | 7 | 6.72 |
| SFC-502 | 8 | 14 | 8 | SC-109 | 8 | 6.93 |
| SFC-503 | 9 | 18 | 8 | SC-112 | 10 | 7.34 |
| SFC-504 | 12 | 18 | 12 | SC-116 | 14 | 8.17 |

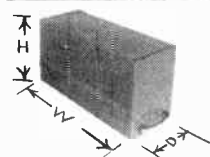
MINIATURE UTILITY CABINET



This Miniature Utility Cabinet is made of No. 22 gauge steel. The back is removable and also ventilated. It has a clean modern appearance and is finished in gray hammertone.

| Catalog No. | Width-in. | Height-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------|------------|-----------|----------------|-----------|
| UC-100 | 4¾ | 4½ | 4¼ | 1 | \$1.07 |
| UC-101 | 5¾ | 4½ | 4¼ | 1½ | 1.22 |
| UC-102 | 6¾ | 4½ | 4¼ | 2 | 1.40 |
| UC-103 | 7¾ | 4½ | 4¼ | 2½ | 1.65 |

AMPLIFIER FOUNDATIONS PERFORATED COVER TYPE

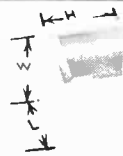


Similar to the streamlined type except that this cover is made of perforated metal for better ventilation. Finished in gray hammertone.

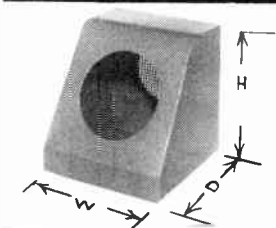
| Catalog No. | Width-in. | Height-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------|------------|-----------|----------------|-----------|
| AF-915 | 10 | 9 | 5 | 8 | \$4.04 |
| AF-920 | 14 | 9 | 6 | 9 | 4.87 |
| AF-924 | 17 | 9 | 7 | 10 | 6.85 |
| AF-922 | 12 | 9 | 10 | 10 | 5.78 |
| AF-927 | 17 | 9 | 10 | 11 | 7.75 |

MINIATURE (2 PIECE) ALUMINUM CASES

These Handy Two Piece Cases are made of No. 16 gauge aluminum. The design of this case permits installation of a variety of components. Natural aluminum or gray hammertone finish is available. Shipping weight of all cases is 1 lb.



METER CASES FOR 2" OR 3" METERS



These Meter Cases are available to accommodate 2" or 3" Meters. They are made of No. 22 gauge steel. A rounded top corner and a sloping front gives this model a modernistic appearance. Finished in silver gray hammertone.

| Catalog No. | For: | Width-in. | Height-in. | Depth-in. | Ship. Wt. Lbs. | Net Price |
|-------------|----------|-----------|------------|-----------|----------------|-----------|
| MC-20C | 2" Meter | 4¾ | 4½ | 4¼ | 1 | \$1.07 |
| MC-300 | 3" Meter | 4¾ | 4½ | 4¼ | 1 | 1.07 |

| Catalog No. | Length-in. | Width-in. | Height-in. | Net Price |
|-------------|------------|-----------|------------|-----------|
| MA-1000 | 2¾ | 2½ | 1½ | \$.60 |
| MA-1001 | 3¼ | 2½ | 1½ | .61 |
| MA-1002 | 4 | 2 | 2¾ | .83 |
| MA-1003 | 4 | 2½ | 1½ | .63 |
| MA-1004 | 4 | 2¼ | 2¼ | .83 |
| MA-1005 | 4¼ | 2¼ | 1½ | .86 |
| MA-1006 | 5 | 2¼ | 2¼ | .87 |
| MA-1007 | 5 | 4 | 3 | .96 |
| MA-1008 | 5¼ | 3 | 2½ | .96 |
| MA-1009 | 6 | 5 | 4 | 1.20 |
| MA-1010 | 7 | 5 | 3 | 1.32 |
| MA-1011 | 8 | 6 | 3½ | 2.03 |
| MA-1012 | 10 | 2 | 1½ | 1.16 |
| MA-1013 | 10 | 6 | 3½ | 2.15 |
| MA-1014 | 12 | 2½ | 2¼ | 1.24 |
| MA-1015 | 12 | 7 | 4 | 2.77 |
| MA-1016 | 17 | 5 | 4 | 3.30 |



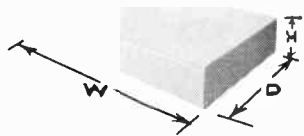
METAL WORKS INCORPORATED
STANDARD & CUSTOM DESIGNS
HERMANN, MISSOURI

CHASSIS Standard Steel and Aluminum Blank Chassis

These Standard Chassis are constructed of one piece of metal. They have reinforced corners. The bottoms are flanged on two sides to give maximum strength with maximum room.

Steel chassis are made of No. 18 gauge sheet steel and are finished in gray hammertone.

Aluminum chassis are constructed of No. 18 gauge (.040) sheet aluminum and is available in natural aluminum or gray hammertone.



| Steel | | | Size | | | Aluminum | | |
|-------------|----------------|-----------|-----------|------------|-------------|----------------|-----------|--|
| Catalog No. | Ship. Wt. Lbs. | Depth-in. | Width-in. | Height-in. | Catalog No. | Ship. Wt. Lbs. | Net Price | |
| SC-100 | 2 | 5 1/2 | 9 1/2 | 1 1/2 | AC-100 | 1 | \$.83 | |
| SC-101 | 2 | 5 | 7 | 2 | AC-101 | 1 | .89 | |
| SC-102 | 3 | 5 | 10 | 3 | AC-102 | 1 | 1.09 | |
| SC-103 | 4 | 6 | 14 | 3 | AC-103 | 2 | 1.32 | |
| SC-104 | 2 | 7 | 7 | 2 | AC-104 | 1 | .98 | |
| SC-105 | 2 | 7 | 9 | 2 | AC-105 | 1 | 1.09 | |
| SC-106 | 3 | 7 | 11 | 2 | AC-106 | 1 | 1.16 | |
| SC-107 | 3 | 7 | 11 | 3 | AC-107 | 1 | 1.25 | |
| SC-108 | 3 | 7 | 12 | 3 | AC-108 | 1 | 1.31 | |
| SC-109 | 3 | 7 | 13 | 2 | AC-109 | 1 | 1.31 | |
| SC-110 | 4 | 7 | 15 | 3 | AC-110 | 2 | 1.49 | |
| SC-111 | 3 | 4 | 17 | 3 | AC-111 | 1 | 1.31 | |
| SC-112 | 4 | 7 | 17 | 3 | AC-112 | 2 | 1.58 | |
| SC-113 | 4 | 10 | 12 | 3 | AC-113 | 2 | 1.55 | |
| SC-114 | 5 | 10 | 14 | 3 | AC-114 | 3 | 1.65 | |
| SC-115 | 5 | 10 | 17 | 2 | AC-115 | 3 | 1.72 | |
| SC-116 | 5 | 10 | 17 | 3 | AC-116 | 3 | 1.79 | |
| SC-117 | 5 | 10 | 17 | 4 | AC-117 | 3 | 2.08 | |
| SC-118 | 5 | 12 | 17 | 2 | AC-118 | 3 | 1.82 | |
| SC-119 | 5 | 12 | 17 | 3 | AC-119 | 3 | 2.15 | |
| SC-120 | 6 | 12 | 17 | 4 | AC-120 | 3 | 2.35 | |
| SC-121 | 1 | 4 | 6 | 2 | AC-121 | 1/2 | .93 | |
| SC-122 | 1 | 4 | 6 | 3 | AC-122 | 1/2 | 1.01 | |
| SC-123 | 1 1/4 | 5 | 7 | 3 | AC-123 | 3/4 | 1.07 | |
| SC-124 | 1 1/4 | 5 | 9 1/2 | 2 | AC-124 | 1/2 | 1.19 | |
| SC-125 | 1 1/2 | 5 | 9 1/2 | 3 | AC-125 | 3/4 | 1.28 | |
| SC-126 | 1 3/4 | 5 | 13 | 3 | AC-126 | 3/4 | 1.41 | |
| SC-127 | 1 1/2 | 6 | 17 | 3 | AC-127 | 1 1/4 | 1.62 | |
| SC-128 | 1 3/4 | 8 | 12 | 3 | AC-128 | 1 1/2 | 1.58 | |
| SC-129 | 2 1/2 | 8 | 17 | 2 | AC-129* | 1 1/2 | 1.50 | |
| SC-130 | 3 | 8 | 17 | 3 | AC-130* | 1 3/4 | 1.95 | |
| SC-131 | 4 | 11 | 17 | 2 | AC-131* | 2 1/4 | 2.24 | |
| SC-132 | 4 | 11 | 17 | 3 | AC-132* | 2 3/4 | 2.60 | |
| SC-133 | 5 | 13 | 17 | 2 | AC-133* | 2 1/2 | 2.70 | |
| SC-134 | 5 | 13 | 17 | 3 | AC-134* | 2 3/4 | 3.15 | |
| SC-135 | 7 | 13 | 17 | 4 | AC-135* | 3 3/4 | 3.53 | |

*Also available in 14 or 16 gauge aluminum.

HEAVY DUTY STEEL CHASSIS

Heavy duty chassis are similar to standard steel chassis except that this model is constructed of No. 16 gauge material. Bottom plates are included with this chassis. Heavy duty chassis are available in gray hammertone.

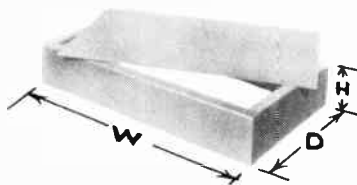
| Catalog No. | Depth-in. | Width-in. | Height-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------|-----------|------------|----------------|-----------|
| HC-82 | 8 | 17 | 2 | 8 | \$2.89 |
| HC-83 | 8 | 17 | 3 | 9 | 3.14 |
| HC-112 | 11 | 17 | 2 | 10 | 3.30 |
| HC-113 | 11 | 17 | 3 | 11 | 3.55 |
| HC-132 | 13 | 17 | 2 | 12 | 3.80 |
| HC-133 | 13 | 17 | 3 | 13 | 3.96 |
| HC-134 | 13 | 17 | 4 | 14 | 4.46 |
| HC-174 | 17 | 17 | 4 | 17 | 5.94 |

BOTTOM PLATES Steel and Aluminum

| Catalog Number | Ship. Wt. Lbs. | Net Price |
|----------------|----------------|-----------|
| BP-401 | 4 x 7 | 2 \$5.55 |
| BP-402 | 5 x 7 | 1 .40 |
| BP-403 | 5 x 10 | 1 .41 |
| BP-404 | 5 1/2 x 9 1/2 | 1 .40 |
| BP-405 | 6 x 14 | 1 .58 |
| BP-406 | 7 x 7 | 1 .43 |
| BP-407 | 7 x 9 | 1 .45 |
| BP-408 | 7 x 11 | 1 .58 |
| BP-409 | 7 x 12 | 2 .71 |
| BP-410 | 7 x 13 | 2 .66 |
| BP-411 | 7 x 15 | 2 .68 |
| BP-412 | 7 x 17 | 2 .70 |
| BP-413 | 8 x 17 | 2 .71 |
| BP-414 | 10 x 12 | 2 .71 |
| BP-415 | 10 x 14 | 2 .73 |
| BP-416 | 10 x 17 | 2 .94 |
| BP-417 | 11 x 17 | 3 .96 |
| BP-418 | 13 x 17 | 3 1.11 |
| BP-419 | 17 x 17 | 4 1.64 |

Bottom plates are made to match standard steel and aluminum chassis. They are made of No. 18 gauge steel and aluminum. Finished in natural aluminum, black enamel, or gray hammertone, and furnished with four dimple glides.

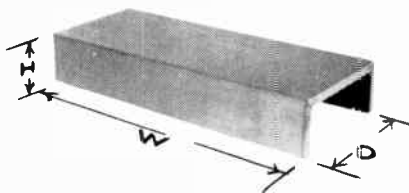
REMOVABLE TOP TYPE CHASSIS



Made of No. 18 gauge sheet steel. Top and bottom edges of chassis are flanged in on four sides. Top plate, which is included with chassis, is removable. Finished in black enamel or gray hammertone.

| Chassis Catalog No. | Depth-in. | Width-in. | Height-in. | Ship. Wt. Lbs. | Net Price |
|-------------------------|-----------|-----------|------------|----------------|-----------|
| RTC-103 | 10 | 17 | 3 | 8 | \$3.43 |
| RTC-104 | 10 | 17 | 4 | 10 | 3.80 |
| RTC-133 | 13 | 17 | 3 | 11 | 3.58 |
| RTC-134 | 13 | 17 | 4 | 12 | 4.37 |
| Replacement Tops | | | | | |
| TRC-1710 | 10 | 17 | | 2 | 1.32 |
| TRC-1713 | 13 | 17 | | 3 | 1.58 |

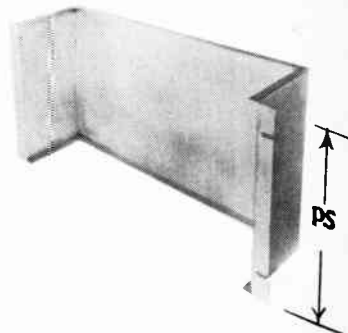
CHASSIS - STEEL and ALUMINUM Open End Type



Made of No. 18 gauge steel or aluminum with reinforced corners. Finished in natural aluminum, black enamel, or gray hammertone.

| Catalog Number | Ship. Wt. Lbs. | Net Price |
|----------------|----------------|-----------|
| OC-101 | 1 | \$.65 |
| OC-102 | 1 | .74 |
| OC-103 | 1 | .83 |
| OC-104 | 1 | .99 |
| OC-105 | 1 | .99 |
| OC-106 | 1 | 1.07 |
| OC-109 | 1 | 1.24 |
| OC-112 | 2 | 1.29 |
| OC-113 | 2 | 1.44 |
| OC-114 | 2 | 1.55 |
| OC-116 | 3 | 1.65 |

PANEL MOUNTING TYPE CHASSIS



Made of heavy gauge aluminum. Flanges are notched for standard 1 1/4"-1 1/2" rack mounting. All chassis are 5 1/4" deep. Corners are reinforced for strength. Natural aluminum finish.

| Catalog No. | Panel Space-in. | Ship. Wt. Lbs. | Net Price |
|-------------|-----------------|----------------|-----------|
| RMC-161 | 1 3/4" | 1 | \$2.08 |
| RMC-163 | 3 1/2" | 2 | 2.48 |
| RMC-165 | 5 1/4" | 2 | 2.63 |
| RMC-167 | 7" | 2 | 3.13 |
| RMC-168 | 8 3/4" | 3 | 3.43 |
| RMC-1610 | 10 1/2" | 3 | 3.88 |
| RMC-1612 | 12 1/4" | 3 | 3.98 |
| RMC-1614 | 14" | 4 | 4.62 |



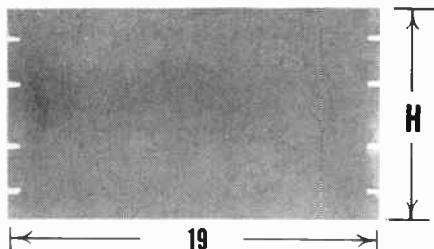
METAL WORKS INCORPORATED
STANDARD & CUSTOM DESIGNS
HERMANN, MISSOURI

19" RACK PANELS

Steel panels finished in Silver Gray Hammertone unless otherwise specified.

1/8" Aluminum and Steel Blank Panels

Aluminum Furnished Unpainted — Painted on Request, So States on Order.

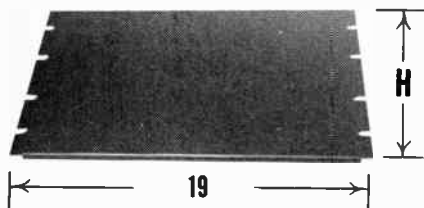


| Aluminum | | | Steel * | | |
|-------------|----------------|------------|-------------|----------------|-----------|
| Catalog No. | Ship. Wt. Lbs. | Height-in. | Catalog No. | Ship. Wt. Lbs. | Net Price |
| ARP- 121 | .4 | 1 3/4 | RP- 121 | 2 | \$.83 |
| ARP- 123 | .8 | 3 1/2 | RP- 123 | 5 | 1.16 |
| ARP- 125 | 1.2 | 5 1/4 | RP- 125 | 7 | 1.65 |
| ARP- 127 | 1.6 | 7 | RP- 127 | 8 | 1.98 |
| ARP- 128 | 2.0 | 8 3/4 | RP- 128 | 9 | 2.31 |
| ARP-1210 | 2.5 | 10 1/2 | RP-1210 | 10 | 2.94 |
| ARP-1212 | 2.8 | 12 1/4 | RP-1212 | 12 | 3.47 |
| ARP-1214 | 3.3 | 14 | RP-1214 | 13 | 4.16 |
| ARP-1215 | 3.6 | 15 3/4 | RP-1215 | 14 | 4.33 |
| ARP-1217 | 4.1 | 17 1/2 | RP-1217 | 15 | 4.95 |
| ARP-1219 | 4.5 | 19 1/4 | RP-1219 | 16 | 5.28 |
| ARP-1221 | 4.9 | 21 | RP-1221 | 16 | 5.80 |

*Steel Price on Request.

Formed 1/8" Thick Aluminum and Steel Blank Panels

Aluminum Furnished Unpainted — Painted on Request, So States on Order.

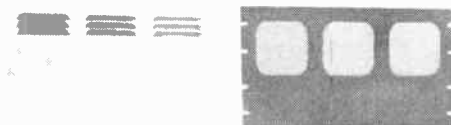


| Aluminum | | | Steel * | | |
|-------------|----------------|------------|-------------|----------------|-----------|
| Catalog No. | Ship. Wt. Lbs. | Height-in. | Catalog No. | Ship. Wt. Lbs. | Net Price |
| PA- 161 | 1/2 | 1 3/4 | PM- 161 | 1 | \$.99 |
| PA- 163 | 1 | 3 1/2 | PM- 163 | 2 1/2 | 1.29 |
| PA- 165 | 1 1/4 | 5 1/4 | PM- 165 | 3 1/2 | 1.65 |
| PA- 167 | 1 1/2 | 7 | PM- 167 | 4 | 2.11 |
| PA- 168 | 1 1/2 | 8 3/4 | PM- 168 | 4 1/2 | 2.56 |
| PA-1610 | 1 3/4 | 10 1/2 | PM-1610 | 5 | 3.17 |
| PA-1612 | 2 | 12 1/4 | PM-1612 | 6 | 3.63 |
| PA-1614 | 2 1/4 | 14 | PM-1614 | 6 1/2 | 4.16 |
| PA-1615 | 2 1/2 | 15 3/4 | PM-1615 | 7 | 4.59 |
| PA-1617 | 2 1/2 | 17 1/2 | PM-1617 | 7 1/2 | 5.15 |
| PA-1619 | 2 3/4 | 19 1/4 | PM-1619 | 8 | 5.61 |
| PA-1621 | 3 | 21 | PM-1621 | 8 | 6.07 |

*Steel Price on Request.

Formed 1/8" Thick Steel Ventilated Panels

Louvre Type



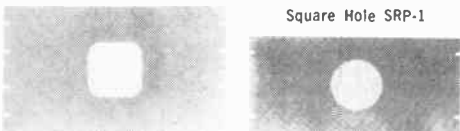
| Grille Type * | | | Louvre Type | | | |
|---------------|--------------|----------------|-------------|--------------|----------------|-----------|
| Catalog No. | Height-in. | Ship. Wt. Lbs. | Catalog No. | Height-in. | Ship. Wt. Lbs. | Net Price |
| VP- 205 | 5 1/4 panel | 3 1/2 | LP- 105 | 5 1/4 panel | 3 1/2 | \$2.76 |
| VP- 207 | 7 panel | 4 | LP- 107 | 7 panel | 4 | 3.04 |
| VP- 208 | 8 3/4 panel | 4 1/2 | LP- 108 | 8 3/4 panel | 4 1/2 | 3.30 |
| VP-2010 | 10 1/2 panel | 5 | LP-1010 | 10 1/2 panel | 5 | 3.63 |
| VP-2012 | 12 1/4 panel | 6 | LP-1012 | 12 1/4 panel | 6 | 4.09 |

*Grille Price on Request.

Formed 1/8" Thick Steel Ventilated Panels

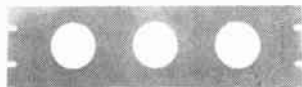
Round Hole SRP

Square Hole SRP-1



| Round Hole | Speaker | Height-in. | Square Hole | Ship. Wt. Lbs. | Net Price |
|------------|---------|---------------|-------------|----------------|-----------|
| SRP- 68 | 6" | 8 3/4" panel | SRP 68-1 | 4 1/2 | \$2.57 |
| SRP- 810 | 8" | 10 1/2" panel | SRP 810-1 | 5 | 3.30 |
| SRP-1012 | 10" | 12 1/4" panel | SRP1012-1 | 6 | 3.88 |
| SRP-1214 | 12" | 14" panel | SRP1214-1 | 6 1/2 | 4.54 |

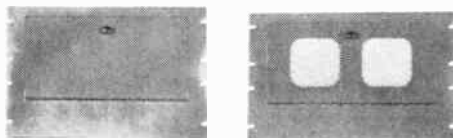
Formed 1/8" Thick Steel Meter Panels 5 1/4" High



| Catalog No. | Size and Style | Ship. Wt. Lbs. | Net Price |
|-------------|---------------------------|----------------|-----------|
| MP-23 | For 2" meter with 3 holes | 3 1/2 | \$1.32 |
| MP-25 | For 2" meter with 5 holes | 3 1/2 | 1.90 |
| MP-33 | For 3" meter with 3 holes | 3 1/2 | 1.32 |
| MP-35 | For 3" meter with 5 holes | 3 1/2 | 1.90 |

Standard Type

Grille Type



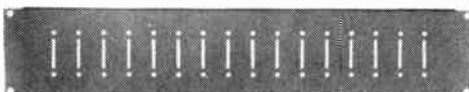
1/8" Thick Steel Door Panels

Panels have flush doors, with piano hinge and are equipped with spring catch and chrome knob — All doors are located 1" from top, to allow space for chassis at bottom.

| Standard Door Panel | Height-in. | Ship. Wt. Lbs. | Grille Panel | Door Opening | Net Price |
|---------------------|---------------|----------------|--------------|------------------|-----------|
| DP- 875 | 8 3/4" Panel | 5 | GDP- 875 | 4 1/2" x 15 3/8" | \$4.79 |
| DP-1050 | 10 1/2" Panel | 5 1/2 | GDP-1050 | 6" x 15 3/8" | 5.12 |
| DP-1225 | 12 1/4" Panel | 6 | GDP-1225 | 7 1/2" x 15 3/8" | 5.45 |

Switch Panels

Furnished with 16 slots 1" apart unless otherwise specified.



| Catalog No. | Height-in. | Ship. Wt. Lbs. | Net Price |
|-------------|------------|----------------|-----------|
| SP-1635 | 3 1/2 | 2 | \$2.97 |

Slots 3/16" W x 1 1/8" L

Screw Holes 1 5/8" Centers

ALL ABOVE PANELS ARE AVAILABLE 30" AND 24" WIDE



METAL WORKS INCORPORATED
STANDARD & CUSTOM DESIGNS
HERMANN, MISSOURI

ALL METAL LANGUAGE LABORATORY FURNITURE



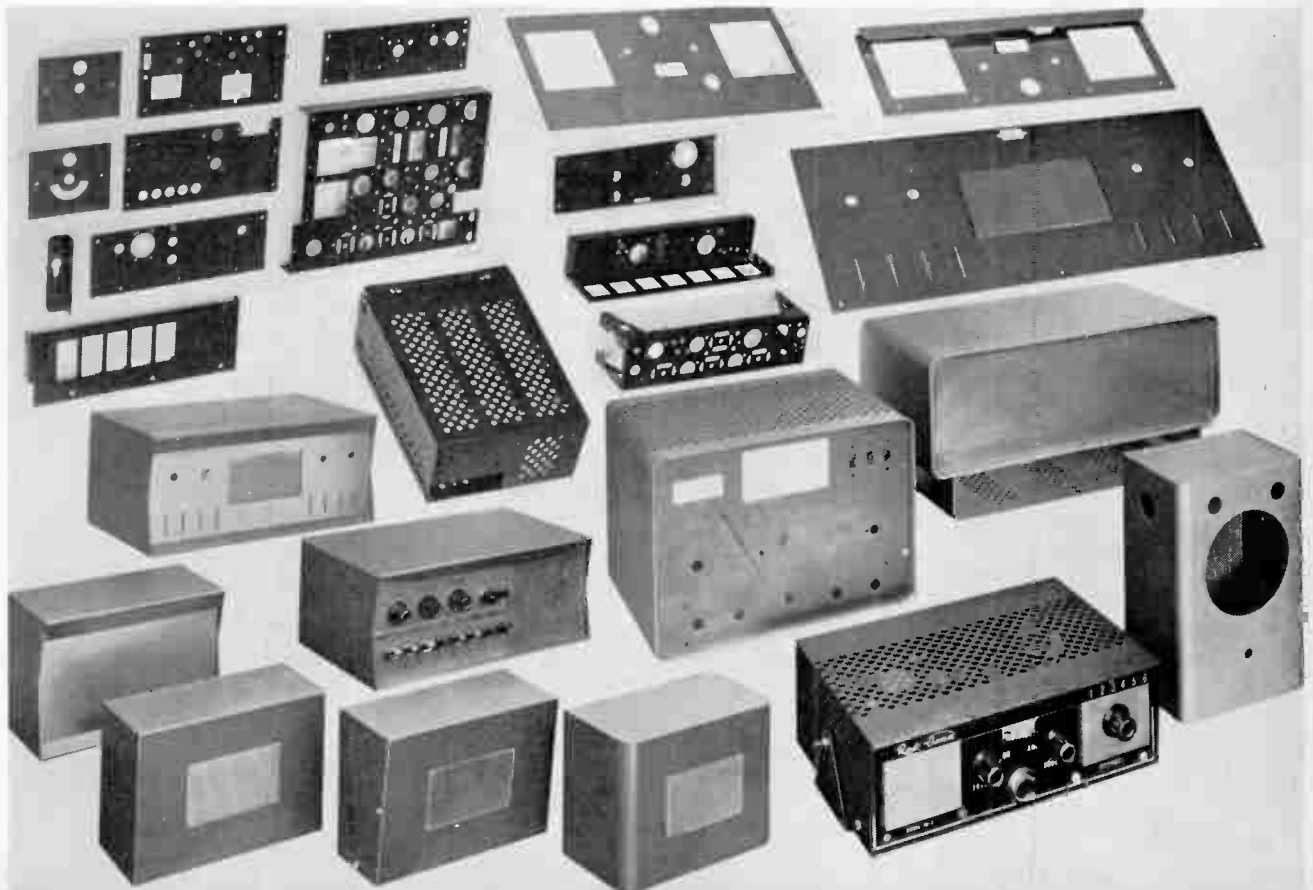
METAL WORKS new design in Student Booths brings you "tomorrow's booth" today! Featured below are three views of the 500 Series. These booths are designed to minimize noise entering the booth and prevent the students' response from adding to the general noise level. Designed to meet today's needs in an ever expanding educational program, they can be added to as funds permit, or as the language program expands, by simply bolting on additional units, consisting of only 1 leg and deck. They are adaptable to flush mount any tape recorder. Design is simple, yet unique in that the curved one piece leg conformation does away with sharp corners. No part of the booths protrude into the aisle leaving all aisle space clear for passage. 'K' leg permits easier entry and discharge from booth.

WHY METAL BOOTHS ARE BEST FOR SCHOOL USE

Metal Booths provide an important safety feature, insuring that all accessible surfaces are at ground potential. Metal Booths also provide better head dissipation permitting equipment to run cooler, and are less resonant than wood or plywood. An installation providing less mechanical hum from deck. Complete information about Metal Works all metal language laboratory furniture furnished on request.

**CUSTOM METAL-WORK TO CUSTOMER SPECIFICATION:
IF YOU CAN DRAW IT—WE CAN MAKE IT! QUOTATIONS ON REQUEST!**

- A few illustrations of metalware parts featuring a multitude of hole patterns, designs and shapes available through MWW Wales Stripping fabrication.
- Many manufacturers have us punch standard chassis, MA cases, panels, etc., as fast economical solutions for some of their requirements.
- Wide choice of materials such as aluminum, cold roll steel, special plated steel sheet, etc., made up to your specifications.



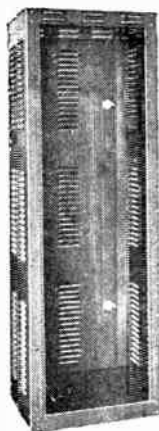


CABINETS CHASSIS

CASES PANELS

MIDDLETOWN IN CONNECTICUT

DE LUXE RELAY RACK



Middletown De Luxe Relay Racks are made of 16-gauge steel with 1/8" panel supports which are recessed so that edges of panels set flush. Standard 19" panels fit these racks. (See next page.)

Adequate ventilation is provided by louvers in the two sides, the door and in the top at front and back. Door is hung on sturdy hinges and has snap catches. Racks come with rigid, built-in caster supports. (Casters not included in price of rack.) Finished in either black or grey wrinkle finish. Shipped knocked down with all necessary hardware.

Rack shelves and supporting angles to fit these Relay Racks are available. Information and prices on request.

| Cat. No. (Block Wrinkle) | Overall Size | | | Panel Size | | | Dealer Cost |
|-----------------------------|--------------|----|--------|------------|----|--|-------------|
| | H | W | D | H | W | | |
| DRR 4236 | 42 1/4 | 22 | 17 1/4 | 36 3/4 | 19 | | \$45.00 |
| DRR 4742 | 47 3/4 | 22 | 17 1/4 | 42 | 19 | | 51.00 |
| DRR 6661 | 66 3/4 | 22 | 17 1/4 | 61 1/4 | 19 | | 63.50 |
| DRR 8277 | 82 3/4 | 22 | 17 1/4 | 77 | 19 | | 76.00 |

Note: When ordering grey wrinkle, add prefix "G" to catalog number. Dimensions in inches.

OPEN-TYPE CHANNEL RELAY RACKS



Sturdy construction with rigid supporting members and side angle braces make these racks perfectly suited to all heavy-duty assignments. Made of 1/8" steel channels, 3" deep. Held together with angle cross pieces of the same material. Chassis type base. Drilled and tapped to accommodate conventional 19" panels. (See next page.) Black wrinkle finish. Shipped knocked down with necessary hardware.

| Cat. No. | Overall Size | | | Panel Size | | | Dealer Cost |
|----------|--------------|----|----|------------|----|--|-------------|
| | H | W | D | H | W | | |
| OCR 35 | 35 1/2 | 21 | 22 | 31 1/2 | 19 | | \$21.60 |
| OCR 70 | 70 1/2 | 21 | 22 | 66 1/2 | 19 | | 24.60 |

Dimensions in inches

OPEN-TYPE TABLE RELAY RACKS



For table mounting of power transmitters, P. A. systems and other radio and electronic apparatus. Rack is ruggedly constructed with strong base to accommodate heavy components. Drilled and tapped for conventional 19" wide panels which set in recess so that no edges are exposed. (See next page.) Shipped knocked down with necessary hardware. Black wrinkle finish.

| Catalog Number | Overall Size | | | Panel Space | | | Dealer Cost |
|----------------|--------------|----|----|-------------|----|--|-------------|
| | H | W | D | H | W | | |
| TRR 24 | 24 | 21 | 12 | 21 | 19 | | \$ 8.30 |
| TRR 31 | 31 | 21 | 12 | 28 | 15 | | 10.40 |

C A S T E R S



Catalog Number
CA 234

Dealers Cost
.99 ea.

CHASSIS SUPPORTING BRACKETS



| Catalog Number | Size | Dealer Cost |
|----------------|----------------|-------------|
| CSB 12 | 12 x 3 x 3 | \$1.98 |
| CSB 14 | 14 1/2 x 3 x 3 | 2.08 |

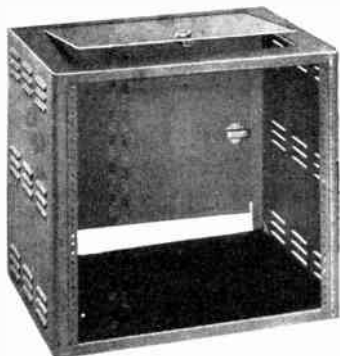
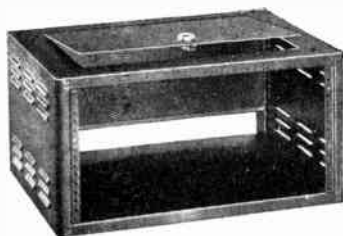
D. C. DELUXE CABINET RACKS — USE 19" RACK PANELS

Middletown D. C. Cabinets conform to the conventional design of streamlined cabinets used by builders of amateur and commercial equipment.

Features

- * Constructed of 16 gauge steel, electrically welded.
- * Adequate ventilation is provided by sufficient louvers in sides, and ventilation in back.
- * Front Vertical posts rounded.
- * Flush panel mounting (recessed).
- * Drilled and tapped for 10/32" screws on universal centers.
- * Flush door in top fitted with flush snap-lock and piano hinges.
- * Black Wrinkle finish. *Grey Wrinkle if desired.*

Standard 19" panels fit these cabinets. For panel sizes, see listing next page.



| CATALOG NUMBER (Block Wrinkle) | OVERALL SIZE | | | PANEL SPACE | | TYPE OF UNIT | Dealer Cost |
|-----------------------------------|--------------|--------|----|-------------|----|--------------|-------------|
| | H | W | D | H | W | | |
| *DC 108 | 10 1/2 | 21 1/2 | 15 | 8 3/4 | 19 | Single | \$13.80 |
| *DC 1210 | 12 1/4 | 21 1/2 | 15 | 10 1/2 | 19 | Single | 15.60 |
| *DC 1412 | 14 | 21 1/2 | 15 | 12 1/4 | 19 | Single | 16.80 |
| *DC 1514 | 15 3/4 | 21 1/2 | 15 | 14 | 19 | Single | 18.60 |
| **DC 1917 | 19 1/4 | 21 1/2 | 15 | 17 1/2 | 19 | Double | 22.20 |
| **DC 2119 | 21 | 21 1/2 | 15 | 19 1/4 | 19 | Double | 23.40 |
| **DC 2321 | 22 3/4 | 21 1/2 | 15 | 21 | 19 | Double | 24.00 |
| **DC 2826 | 28 | 21 1/2 | 15 | 26 1/4 | 19 | Triple | 25.80 |
| **DC 3635 | 36 3/4 | 21 1/2 | 15 | 35 | 19 | Quad. | 28.20 |

*Door in Top only.

**Door in Top & Rear.

Note: When ordering grey wrinkle, add prefix "G" to catalog number. Dimensions in Inches.



CABINETS CHASSIS

CASES PANELS

MIDDLETOWN IN CONNECTICUT

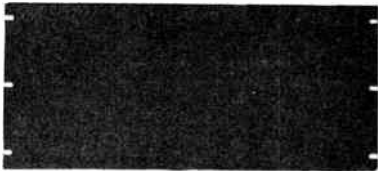
RACK PANELS — 19" LONG (Steel and Aluminum)

Middletown Rack Panels are offered in either 1/4" steel or 1/8" aluminum. They are 19" wide and are slotted for conventional W. E. mounting. Twelve standard sizes. Furnished in black or grey wrinkle finish.

Note: When ordering grey wrinkle, add prefix "G" to catalog number.

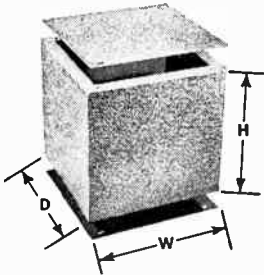
*Available on special order.

Aluminum panels 3/16" thick available at 60% increase in cost above 1/4" al. panels.



| Cat. No. Steel (Blk. Wrinkle) | Dealer Cost | Height | Cat. No. Aluminum (Black Wrinkle) | Dealer Cost |
|-------------------------------------|----------------|----------|---|----------------|
| R.P. 1 | \$.85 | 13 1/4" | A.R.P. 1 | \$ 1.10 |
| R.P. 3 | 1.02 | 31 1/2" | A.R.P. 3 | 1.44 |
| R.P. 5 | 1.23 | 51 1/4" | A.R.P. 5 | 1.94 |
| R.P. 7 | 1.43 | 7" | A.R.P. 7 | 2.45 |
| R.P. 8 | 1.76 | 83 1/4" | A.R.P. 8 | 2.86 |
| R.P. 10 | 2.10 | 101 1/2" | A.R.P. 10 | 3.60 |
| R.P. 12 | 2.45 | 121 1/4" | A.R.P. 12 | 4.05 |
| R.P. 14 | 2.87 | 14" | A.R.P. 14 | 4.79 |
| R.P. 15 | 3.11 | 153 1/4" | A.R.P. 15 | 5.32 |
| R.P. 17 | 3.52 | 171 1/2" | A.R.P. 17 | 5.87 |
| R.P. 19 | 3.70 | 191 1/4" | A.R.P. 19 | 6.37 |
| R.P. 21 | 4.20 | 21" | A.R.P. 21 | 6.89 |
| R.P. 26* | 5.40 | 26 1/4" | A.R.P. 26* | 9.18 |
| R.P. 35* | 7.50 | 35" | A.R.P. 35 | 11.94 |

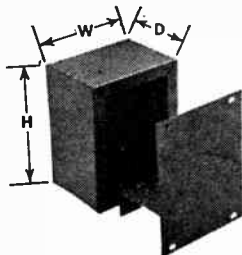
STEEL AND ALUMINUM CASES



These cases are similar to our standard steel utility cans except they have flat tops and bottoms which are held in place with self tapping screws and are removable. These cases are of sturdy construction and have spot welded corners. Case has flanges on all edges. Steel cases furnished in black wrinkle. Aluminum cases are natural.

| Catalog Number | STEEL | | | Dealer Cost | ALUMINUM | | | Catalog Number | Dealer Cost |
|----------------|-------|--------|--------|-------------|----------|-----|----|----------------|-------------|
| | W | D | H | | W | D | H | | |
| SC 442 | 4" | 4" | 2" | \$.96 | AC 442 | 4" | 4" | \$1.26 | |
| SC 453 | 4" | 5" | 3" | 1.08 | AC 453 | 4" | 5" | 1.38 | |
| SC 465 | 4" | 6" | 5" | 1.36 | AC 465 | 4" | 6" | 1.60 | |
| SC 564 | 5" | 6" | 4" | 1.64 | AC 564 | 5" | 6" | 1.60 | |
| SC 666 | 6" | 6" | 6" | 1.98 | AC 666 | 6" | 6" | 1.85 | |
| SC 1276 | 12" | 7" | 6" | 2.89 | AC 596 | 12" | 7" | 2.50 | |
| SC 1287 | 12" | 7 3/4" | 6 1/2" | 3.95 | AC 1276 | 12" | 7" | 3.75 | |
| SC 1576 | 15" | 7 3/4" | 6 1/2" | 3.49 | | | | | |
| SC 1597 | 15" | 9" | 7" | 3.32 | | | | | |

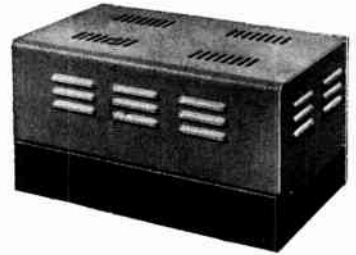
STEEL CASES WITH BUILT IN CHASSIS



| Catalog Number | H | W | D | Chassis Size | Dealer Cost |
|----------------|---|---|---|---------------------|-------------|
| SCWC 442 | 4 | 4 | 2 | 1 x 27/8 x 17/8 | \$1.26 |
| 453 | 4 | 5 | 3 | 1 x 37/8 x 27/8 | 1.46 |
| 543 | 5 | 4 | 3 | 1 1/4 x 27/8 x 27/8 | 1.46 |
| 654 | 6 | 5 | 4 | 1 3/4 x 37/8 x 37/8 | 1.70 |
| 645 | 5 | 6 | 4 | 1 1/4 x 47/8 x 37/8 | 1.70 |
| 666 | 6 | 6 | 6 | 1 3/4 x 47/8 x 57/8 | 1.92 |

AMPLIFIER FOUNDATIONS—DeLuxe Models

This unit is designed to meet the most critical requirements. It has rounded corners, special Middletown designed louvres on all 4 sides and elongated holes on top to give maximum ventilation. Chassis are finished in Black wrinkle. Covers are finished in Grey wrinkle. Chassis are drilled for bottom plates which are listed separately. Covers all have a depth of 6"



| Cat. No. | Size | Dealer Cost |
|------------|--------------|-------------|
| A.F.-5109 | 5 x 10 x 9" | \$4.20 |
| A.F.-6149 | 6 x 14 x 9" | 4.85 |
| A.F.-7179 | 7 x 17 x 9" | 5.62 |
| A.F.-10129 | 10 x 12 x 9" | 5.62 |
| A.F.-10179 | 10 x 17 x 9" | 6.38 |
| A.F.-13179 | 13 x 17 x 9" | 7.68 |

SLOPING FRONT PANEL CABINETS

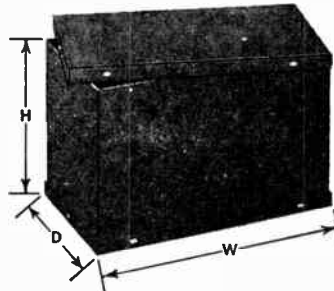


Sloping front panel cabinets have a wide application in the electronic field since they are adaptable for various uses. They are constructed of heavy gauge steel electrically spot-welded. Top corner is rounded, front panel is removable, and louvres on sides provide ventilation.

Back panel is ventilated on top and an opening is provided on the bottom so that connections can be made directly to the rear of the chassis. Finished in Grey wrinkle.

| Cat. No. | H.W.D. | Chassis Size | Dealer Cost |
|-------------|---------------|--------------|-------------|
| S.F.-888 | 8 x 8 x 8" | 7 x 7 x 2" | \$4.48 |
| S.F.-8108 | 8 x 10 x 8" | 7 x 9 x 2" | 4.97 |
| S.F.-8128 | 8 x 12 x 8" | 7 x 11 x 2" | 5.26 |
| S.F.-8148 | 8 x 14 x 8" | 7 x 13 x 2" | 5.32 |
| S.F.-121812 | 12 x 18 x 12" | 10 x 17 x 3" | 9.42 |

STEEL UTILITY CANS



These Utility Cans are ruggedly constructed from sheet steel with spot welded reinforced corners. Tops and bottoms are removable and are flanged on all four sides. Held in place with self-tapping screws.

| Cat. No. | D | W | H | Weight | Dealer Cost |
|-----------|--------|------------|----|--------|-------------|
| U.C.565 | 5 1/2" | 6 x 5 1/2" | 6" | 3 lbs. | \$2.16 |
| U.C.596 | 5 | 9 x 6" | 7" | 5 lbs. | 2.51 |
| U.C.8107 | 8 | 10 x 7" | 7" | 6 lbs. | 3.12 |
| U.C.81010 | 8 | 10 x 10" | 7" | 7 lbs. | 3.72 |
| U.C.11128 | 11 | 12 x 8" | 8" | 9 lbs. | 4.58 |



**CABINETS
CHASSIS**

**CASES
PANELS**

MIDDLETOWN IN CONNECTICUT

METER PANELS



Middletown Meter Panels are made 5/16" high and are made to the same specifications as our Rack Panels—are available to fit 3" meters.

| Cat. No. | Holes | Hole Size | Dealer Cost |
|-----------|-------|-----------|-------------|
| R.P.M. 33 | 3 | 2 3/8" | \$1.65 |
| R.P.M. 35 | 5 | 2 3/8" | 2.23 |



METER CASES

These cases have sloping front panel with rounded top corner which blends with streamline equipment. They are sturdily constructed from sheet steel with welded joints.

| Cat. No. | Meter | Hole Size | H.W.D. | Dealer Cost |
|----------|-------------|-----------|--------------------|-------------|
| M.C. 13 | Single 3" | 2 3/8" | 4 1/2 x 4 x 4 | \$1.32 |
| M.C. 33 | 3-3" Meters | 2 3/8" | 4 1/2 x 11 1/4 x 4 | 3.24 |

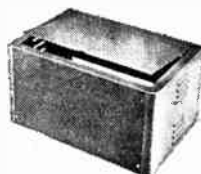


**ALUMINUM
MIDGET CHASSIS**

These small, open-end aluminum chassis are ideal for miniature tube assemblies and all applications where space is limited. Made of prime sheet aluminum with 1/4" flange on bottom for fastening down, or attaching bottom plate. Finish is natural aluminum.

| Cat. No. | Size | Dealer Cost | Cat. No. | Size | Dealer Cost |
|----------|-------------------|-------------|----------|-------------------|-------------|
| AMC D | W H | | AMC D | W H | |
| 221 | 2 3/4 2 3/4 1 1/4 | \$.36 | 541 | 5 3/4 4 7/8 1 1/2 | \$.57 |
| 131 | 1 3/4 3 1/8 1 | .39 | 431 | 4 4 3 1/8 1 | .42 |
| 342 | 3 1/4 4 1/2 2 | .42 | 441 | 4 4 4 1/8 1 | .48 |
| 241 | 2 3/4 4 1/8 1 | .42 | 451 | 4 4 5 1/8 1 | .51 |
| 341 | 3 3/4 4 1/8 1 1/2 | .42 | 461 | 4 4 6 1/8 1 | .57 |
| 361 | 3 6 1/8 1 1/4 | .51 | | | |

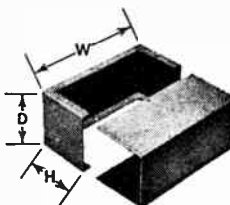
ROUNDED CORNER CABINETS



These are deluxe streamlined cabinets with front vertical corners rounded. Flush panel door, hung on full-length piano hinge, provided in top for convenient access. Ventilating louvres on sides. Opening at bottom of rear panel permits easy accessibility for leads, cables, etc. Front panel held in position with self-tapping screws. Grey wrinkle finish. Sturdily built of sheet steel.

| Catalog No. | H | Size W D | Panel Space H W | Chassis Size D W H | Dealer Cost |
|-------------|----|----------|-----------------|--------------------|-------------|
| RC 8108 | 8 | 10 8 8 | 8 8 8 | 7 7 2 | \$4.47 |
| RC 8128 | 8 | 12 8 8 | 8 8 10 | 7 9 2 | 4.91 |
| RC 8168 | 8 | 16 8 8 | 8 14 7 | 13 2 | 6.27 |
| RC 91711 | 9 | 17 11 9 | 9 15 10 | 14 3 | 9.35 |
| RC 122012 | 12 | 20 12 12 | 12 18 10 | 17 3 | 11.59 |

Chassis are not included unless ordered. See chassis listings. Dimensions in Inches.



MULTI-MOUNTS

These are all-purpose boxes with an unlimited field of application in radio and electronics. Made from prime sheet aluminum. Two-piece telescoping construction, each half forming three sides. Finish is natural aluminum or grey hammer-tone.

| Catalog Number | Dealer Cost | Natural Aluminum | | | Grey Hammertone | |
|----------------|-------------|------------------|-------|-------|-----------------|-------------|
| | | H | W | D | Catalog Number | Dealer Cost |
| MM 122 | \$.69 | 1 5/8 | 2 3/4 | 2 1/8 | GHMM 122 | \$.78 |
| MM 132 | .69 | 1 5/8 | 3 1/4 | 2 1/8 | GHMM 132 | .78 |
| MM 142 | .74 | 1 5/8 | 4 | 2 1/8 | GHMM 142 | .81 |
| MM 242 | .95 | 2 1/4 | 4 | 2 1/4 | GHMM 242 | 1.05 |
| MM 252 | .98 | 2 1/4 | 5 | 2 1/4 | GHMM 252 | 1.08 |
| MM 354 | 1.15 | 3 | 5 | 4 | GHMM 354 | 1.26 |
| MM 253 | 1.12 | 2 1/8 | 5 1/4 | 3 | GHMM 253 | 1.20 |
| MM 465 | 1.40 | 4 | 6 | 5 | GHMM 465 | 1.50 |
| MM 375 | 1.56 | 3 | 7 | 5 | GHMM 375 | 1.88 |
| MM 386 | 2.30 | 3 1/2 | 8 | 6 | GHMM 386 | 2.52 |
| MM 3106 | 2.90 | 3 1/2 | 10 | 6 | GHMM 3106 | 3.14 |
| MM 4127 | 3.21 | 4 | 12 | 7 | GHMM 4127 | 3.60 |
| MM 4175 | 3.80 | 4 | 17 | 5 | GHMM 4175 | 4.23 |
| MM 1102 | 1.15 | 1 5/8 | 10 | 2 | GHMM 1102 | 1.37 |
| MM 2122 | 1.55 | 2 1/4 | 12 | 2 1/2 | GHMM 2122 | 1.65 |
| MM 2420 | .93 | 2 3/4 | 4 | 2 | GHMM 2420 | 1.02 |
| MM 1420 | .95 | 1 1/2 | 4 1/4 | 2 1/4 | GHMM 1420 | 1.05 |

CHASSIS BRACKETS

Mounting

These brackets are for chassis listed on next page. Front end of the bracket is seven inches high. Finished in black wrinkle.



| Catalog Number | Size | Shipping Weight | Dealer Cost |
|----------------|--------------|-----------------|-------------|
| C.B. 8 | For 8" Base | 2 lbs. | \$.96 |
| C.B. 11 | For 11" Base | 3 lbs. | 1.35 |
| C.B. 13 | For 13" Base | 3 lbs. | 1.82 |



**CABINETS
CHASSIS**

**CASES
PANELS**

MIDDLETOWN IN CONNECTICUT

**CHASSIS AND
BOTTOM PLATES**



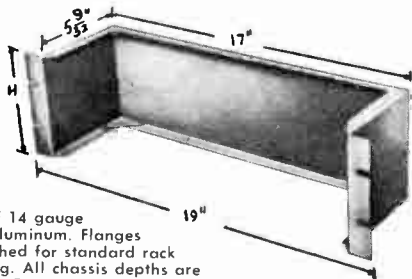
Middletown **STANDARD** Steel Chassis are made from one piece of steel, spot welded at all four corners. 22-, 20- and 16-gauge steel is used as indicated in the table. Bottom edges are folded over on four sides for additional rigidity. Black wrinkle finish.

Middletown **ALUMINUM** Chassis are made from one piece of prime sheet aluminum, 16- and 18-gauge aluminum is used as indicated in the table. The design and construction of these chassis are identical with Middletown blank steel chassis. Natural aluminum finish.

Middletown **BOTTOM PLATES** are drilled and have pressed bumpers at corners. Material is 20-gauge steel. Gauge of aluminum bottom plates match gauge of chassis. Natural finish.

PANEL CHASSIS

TO FIT 19" STANDARD RACKS



Made of 14 gauge (.064) Aluminum. Flanges are notched for standard rack mounting. All chassis depths are 5-9 3/2". Gussets are spot welded in each corner for greater strength. Etched finish.

| | Height | Ship. Wt. Lbs. | Dealer Cost |
|-------|---------|----------------|-------------|
| PCV1 | 1 3/4" | 3/4 | \$2.50 |
| PCV3 | 3 1/2" | 1 3/4 | 2.80 |
| PCV5 | 5 1/4" | 1 1/2 | 3.05 |
| PCV7 | 7" | 2 | 3.45 |
| PCV8 | 8 3/4" | 2 1/4 | 4.10 |
| PCV10 | 10 1/2" | 2 3/4 | 4.45 |
| PCV12 | 12 1/4" | 3 | 4.90 |
| PCV14 | 14" | 3 1/4 | 5.30 |

CHASSIS — STEEL AND ALUMINUM

| STEEL | | ALUMINUM | | SIZE | | | DEALER COST | |
|----------|-------|-----------|-------|-------|-------|-------|-------------|-------|
| Cat. No. | GAUGE | Cat. No. | GAUGE | D | W | H | Steel | Alum. |
| *BS 442 | 22 | ABC 442 | 18 | 4 | 4 | 2 | .94 | 1.10 |
| BS 462 | 22 | ABC 462 | 18 | 4 | 6 | 2 | 1.05 | 1.30 |
| BS 463 | 20 | ABC 463 | 18 | 4 | 6 | 3 | 1.07 | 1.35 |
| BS 4173 | 20 | ABC 4173 | 16 | 4 | 17 | 3 | 1.65 | 2.38 |
| BS 572 | 22 | ABC 572 | 18 | 5 | 7 | 2 | 1.05 | 1.35 |
| BS 573 | 22 | ABC 573 | 18 | 5 | 7 | 3 | 1.11 | 1.41 |
| BS 591 | 22 | ABC 591 | 18 | 5 1/2 | 9 1/2 | 1 1/2 | 1.10 | 1.41 |
| BS 592 | 22 | ABC 592 | 18 | 5 | 9 1/2 | 2 | 1.15 | 1.45 |
| BS 5103 | 22 | ABC 5103 | 18 | 5 | 10 | 3 | 1.25 | 1.62 |
| BS 5133 | 20 | ABC 5133 | 18 | 5 | 13 | 3 | 1.59 | 1.82 |
| BS 6143 | 20 | ABC 6143 | 16 | 6 | 14 | 3 | 1.68 | 2.55 |
| BS 6173 | 20 | ABC 6173 | 16 | 6 | 17 | 3 | 1.80 | 2.75 |
| BS 772 | 22 | ABC 772 | 18 | 7 | 7 | 2 | 1.10 | 1.35 |
| BS 792 | 22 | ABC 792 | 18 | 7 | 9 | 2 | 1.33 | 1.48 |
| BS 7112 | 20 | ABC 7112 | 18 | 7 | 11 | 2 | 1.37 | 1.59 |
| BS 7123 | 20 | ABC 7123 | 18 | 7 | 12 | 3 | 1.52 | 1.94 |
| BS 7132 | 20 | ABC 7132 | 18 | 7 | 13 | 2 | 1.48 | 1.68 |
| BS 7153 | 20 | ABC 7153 | 16 | 7 | 15 | 3 | 1.76 | 2.90 |
| BS 7173 | 20 | ABC 7173 | 16 | 7 | 17 | 3 | 1.97 | 2.88 |
| BS 8123 | 20 | ABC 8123 | 16 | 8 | 12 | 3 | 1.82 | 2.33 |
| BS 8172 | 20 | ABC 8172 | 16 | 8 | 17 | 2 | 1.79 | 2.65 |
| BS 8173 | 20 | ABC 8173 | 16 | 8 | 17 | 3 | 1.97 | 2.95 |
| BS 10123 | 20 | ABC 10123 | 16 | 10 | 12 | 3 | 1.89 | 2.70 |
| BS 10143 | 20 | ABC 10143 | 16 | 10 | 14 | 3 | 1.98 | 3.21 |
| BS 10172 | 20 | ABC 10172 | 16 | 10 | 17 | 2 | 1.98 | 3.15 |
| BS 10173 | 20 | ABC 10173 | 16 | 10 | 17 | 3 | 2.05 | 3.40 |
| BS 10174 | 20 | ABC 10174 | 16 | 10 | 17 | 4 | 2.40 | 4.25 |
| BS 11172 | 16 | ABC 11172 | 16 | 11 | 17 | 2 | 2.60 | 3.52 |
| BS 11173 | 16 | ABC 11173 | 16 | 11 | 17 | 3 | 2.85 | 4.23 |
| BS 12172 | 20 | ABC 12172 | 16 | 12 | 17 | 2 | 2.13 | 3.79 |
| BS 12173 | 20 | ABC 12173 | 16 | 12 | 17 | 3 | 2.45 | 4.42 |
| BS 12174 | 20 | ABC 12174 | 16 | 12 | 17 | 4 | 2.58 | 4.88 |
| BS 13172 | 16 | ABC 13172 | 16 | 13 | 17 | 2 | 3.00 | 3.94 |
| BS 13173 | 16 | ABC 13173 | 16 | 13 | 17 | 3 | 3.45 | 4.62 |
| BS 13174 | 16 | ABC 13174 | 16 | 13 | 17 | 4 | 3.85 | 5.37 |

Steel Chassis available in zinc plate at additional cost
*No flange on 4 x 4 x 2 Chassis

STEEL AND ALUMINUM BOTTOM PLATES

| CATALOG NUMBER | SIZE | CATALOG NUMBER | DEALER COST |
|----------------|---------------|----------------|-------------|
| STEEL | | ALUMINUM | Steel Alum. |
| BP 46 | 4 x 6 | ABP 46 | \$.40 \$.88 |
| BP 417 | 4 x 17 | ABP 417 | .60 1.35 |
| BP 57 | 5 x 7 | ABP 57 | .42 .82 |
| BP 59B | 5 x 9 1/2 | ABP 59B | .42 .82 |
| BP 59 | 5 1/2 x 9 1/2 | ABP 59 | .42 .84 |
| BP 510 | 5 x 10 | ABP 510 | .48 .88 |
| BP 513 | 5 x 13 | ABP 513 | .70 1.00 |
| BP 614 | 6 x 14 | ABP 614 | .66 1.34 |
| BP 617 | 6 x 17 | ABP 617 | .74 1.38 |
| BP 77 | 7 x 7 | ABP 77 | .48 .88 |
| BP 79 | 7 x 9 | ABP 79 | .51 .92 |
| BP 711 | 7 x 11 | ABP 711 | .60 .98 |
| BP 712 | 7 x 12 | ABP 712 | .60 1.06 |
| BP 713 | 7 x 13 | ABP 713 | .66 1.20 |
| BP 715 | 7 x 15 | ABP 715 | .72 1.24 |
| BP 717 | 7 x 17 | ABP 717 | .78 1.30 |
| BP 812 | 8 x 12 | ABP 812 | .80 1.20 |
| BP 817 | 8 x 17 | ABP 817 | .81 1.40 |
| BP 1012 | 10 x 12 | ABP 1012 | .81 1.40 |
| BP 1014 | 10 x 14 | ABP 1014 | .84 1.54 |
| BP 1017 | 10 x 17 | ABP 1017 | 1.02 1.62 |
| BP 1117 | 11 x 17 | ABP 1117 | 1.05 2.00 |
| BP 1217 | 12 x 17 | ABP 1217 | 1.11 2.20 |
| BP 1317 | 13 x 17 | ABP 1317 | 1.20 2.30 |

Steel Bottom Plates available in zinc plate at additional cost

PAR-METAL UNIVERSAL CABINET RACKS

GENERAL DESCRIPTION

Par-Metal Universal Cabinet Racks are now available in three series of models to solve your most difficult housing problems.

Our deluxe series "PL" and "FL" brings you a new trend in cabinet design.

Although smartly styled, there has been no sacrifice in the rugged construction which features all universal type racks. The same sturdy frame which is used in our "PR" series provides a solid foundation for maximum loading under severe conditions. Series "PL" may be combined with our console units listed on Par-Metal Pages 10 and 11 to solve your equipment housing problems.

Except where needed for purposes of adjustment or accessibility, all Universal Cabinet Racks are securely welded into an integral unit. No metal screws, clips, or similar devices are used. Every care has been taken to facilitate your assembly problems with a minimum of parts, an efficient utilization of space, and rapid accessibility to interior components.

RECESSED BASES are available for all universal type racks, and are purchased separately as an optional accessory.

MODULAR GROUPS: All universal type racks (in each series) may be joined into modular groups; cabinets of the same height, in varying panel widths, with and without front doors, may be intermixed.

DIMENSIONS: Racks are available for 19", 24", or 30" wide panels. Cabinet heights are 48 $\frac{1}{8}$ ", 67 $\frac{3}{8}$ ", 77 $\frac{1}{8}$ " and 83 $\frac{1}{8}$ "; depths available are 18" or 24".

DESIGN: All sizes listed may be obtained with conventional solid side walls, or with open side walls and detachable side panels. Side shields for use between racks are also available.

MID-RAIL MOUNTING OF PANELS: The panel mounting angles or "strips" are fully adjustable on all racks, and may be positioned at any location from front to back. Additional panel mounting angles may be easily inserted where needed for mounting terminal boards, etc.

VERTICAL SIDE SUPPORTS: These supports provide a simple method for supporting chassis and other equipment in the racks. The means of attaching such brackets is fully adjustable so that chassis may be accurately lined up with the front panels. No drilling or other fabrication is required. The chassis may then be installed or removed with a minimum of effort. The vertical side supports also facilitate the installation of special sliding devices obtainable from slide manufacturers.

ADJUSTABLE FLOOR LEVELLERS are supplied with all racks as standard.

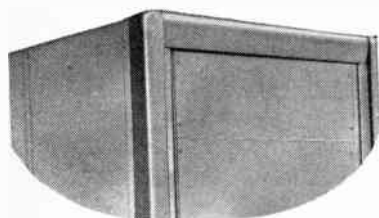
SLIDING SHELVES AND DRAWERS: Several models are listed on Par-Metal Page 8. These are constructed for mounting on the front of the racks the same as regular panels.

SLOPING INSTRUMENT PANELS and EXTENSION DESK TABLES for single and modular assemblies are available for all universal racks, as listed on Par-Metal Page 7.

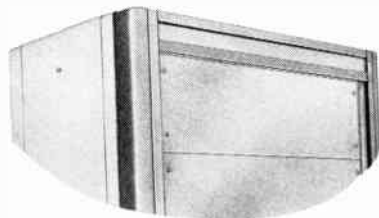
ANGULAR SECTION FRAMES may be obtained for assembling adjacent cabinet racks. Complete information is available in our Catalog 62.

MODIFICATIONS: Without departing from the basic design of our universal cabinet racks, it is possible to modify them to meet your special requirements. Standard ventilated tops are available. They may also be modified with our standard dies for making openings, louvers, circular holes, etc., in sides, tops, bottoms and doors of racks. For additional information write for our complete Catalog 62.

All of our products incorporate the same exacting standards of quality and uniformity which we have maintained for over three decades. If you have a specific problem, do not hesitate to consult us. Personalized and interested engineering assistance is always available.



Close up view above shows the new concept in modern styling of the Par-Metal DeLuxe Series "PL" and "FL" Universal Cabinet Racks.



Close up view above shows the beautiful framed effect achieved in Par-Metal Series "PR", "FR", "PX" and "FX" types of Universal Cabinet Racks.

DeLuxe Type



Series "PL & FL"

With open side walls and detachable side panels.

All styles listed are available for 19", 24", and 30" wide panels.

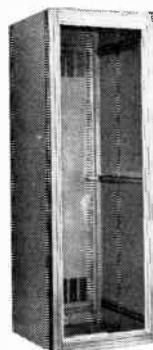
Standard Type



Series "PR & FR"

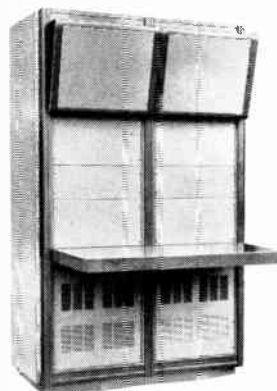
With open side walls and detachable side panels.

Standard Type

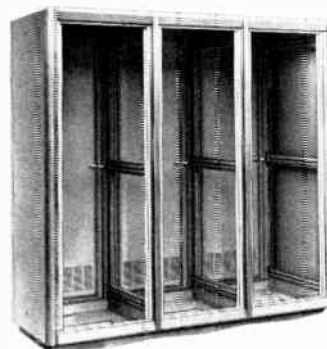


Series "PX & FX"

With closed side walls.



The duplex unit shown above has two No. PR-824-A racks, a pair of No. RS-824-A detachable side panels, two sloping panels No. SP-1719, and an extension table No. RX-219. The same assembly can be made as a single unit or a longer multiple row, as all units are modular, and are available as 19", 24", and 30" panel widths.



Illustrated above is a modular group of three No. PL-7724-A Racks with sub-bases. They are available in various heights for panels 19", 24", and 30" wide.

DETAILS OF CONSTRUCTION AND ASSEMBLY

RACK CONSTRUCTION:

The frame shown is used on series "FL", "FR", "PL", and "PR" racks. The top and bottom is made from $\frac{3}{4}$ " steel. The four uprights are also $\frac{3}{4}$ " steel, and have multiple-formed angle bends to insure rigidity. Series "PX" and "FX" racks are similar, except that the solid side walls are made from $\frac{1}{2}$ " steel. The entire assembly is securely welded to form an integral unit.

DOORS:

For sake of clarity, doors are not shown on the frame drawing. They are stamped from one piece of $\frac{1}{8}$ " steel, and "dutch formed" on all sides providing smooth double-thick edges. Adequate ventilation is obtained from full ventilating (venetian-type) louvers. Short doors for fan or blower installations are available.

DOOR HARDWARE:

Door hinges are slip type to permit easy removal. Die cast, chrome plated handles are equipped with cam latches for door closures. Lock type handles are supplied on racks with both front and rear doors. Non-locking handles are used on racks with rear doors only; locking type handles are optional.

• SIDE MOUNTING BRACKETS:

These may be used separately or with shelves as shown. Slotted holes on the brackets provide any vertical adjustment required.

• PANEL MOUNTING ANGLES:

They are made from $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $\frac{3}{8}$ " thick structural steel. All holes are die punched to provide accurate spacings with close tolerances; holes are tapped 12/24 thread on $1\frac{1}{4}$ "- $\frac{1}{2}$ " alternate spacings for standard rack panels. Additional angles may be purchased for mounting terminal blocks or other devices.

• VERTICAL SIDE SUPPORTS:

These supports are fastened to the same bolt retainer rails used for securing the panel mounting angles. Holes are $\frac{5}{8}$ "- $\frac{3}{8}$ "- $\frac{1}{2}$ " alternate centers, tapped 10/32 thread, provide maximum adjustment for side mounting brackets and equipment shelves. They may also be used for attaching slides or other custom made brackets. The supports are made from $\frac{3}{4}$ " thick steel, locked in place with $\frac{3}{8}$ " diameter screws, lock washers and hexagon nuts, to afford maximum support.

• FLOOR LEVELERS:

Four are supplied with all universal type racks.

• BOLT RETAINER RAILS:

To these are bolted the panel mounting angles and vertical side supports, which may be located at any position from front to back. These rails are made from $\frac{3}{4}$ " steel, and are rigidly welded in place. Angles and supports are securely fastened to rails with $\frac{3}{8}$ " diam. steel bolts, lock washers, and hexagon nuts.

• ACCESS OPENING:

Opening in bottom is 4" x 14" on 19" panel racks; 4" x 19" on 24" panel racks; 4" x 25" on 30" wide panel racks.

• OUTLETS:

"Knock-out holes" are available on cabinet side for connecting cables; a duplex outlet, outlet box and plate are mounted on cabinet under rear door.

• RECESSED SUB-BASES:

They are available for all universal type racks as an optional accessory.

FRONT VERTICAL CORNER AND JOINING TRIMS:

In previous catalogs, wide corner trims were listed as standard on our universal racks. They overlapped the side edges of the rack panels to conceal the panel mounting screws. This type of trim was not suitable where sliding shelves, sliding drawers, extension desk tables, sloping panels and similar equipment were mounted on the rack.

Since such shelves, drawers, etc. are now being used on the majority of racks purchased from us, we will now supply as standard "narrow type" corner trims which do not interfere with the use of these accessories. Narrow type trims are shown on all racks illustrated on the opposite page.

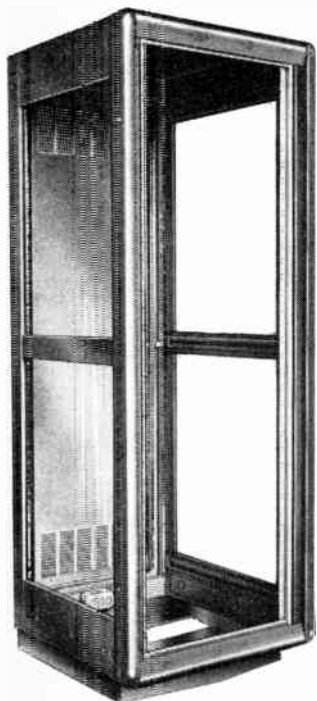
DETAILED DRAWINGS OF ALL UNIVERSAL CABINET RACKS
ARE AVAILABLE IN OUR COMPLETE CATALOG 62. WRITE FOR IT.

PAR-METAL PRODUCTS CORP.

• Long Island City 3, N. Y.

PAR-METAL UNIVERSAL CABINET RACKS

DeLUXE SERIES "PL" & "FL" RACKS WITH OPEN SIDE WALLS FOR 19" - 24" - 30" WIDE PANELS - 18" & 24" DEEP WITH DETACHABLE SIDE PANELS



**"PL" SERIES RACKS
WITH REAR DOOR ONLY**

Complete engineering type detailed drawings of these cabinet racks are available in our Catalog 62. Write directly to home office for personalized and interested engineering assistance.

Our new series "PL" and "FL" racks will solve the major part of your enclosure problems. They are attractively styled with built-in custom quality. Ball corners are not used merely as a sales feature, but are attractively blended into a functional, modular design. The rack frames have the same rugged construction which features all universal type racks. Serious consideration has been given to the problem of stability, as well as maximum flexibility for modular assembly. Removable side panels make the interior readily accessible for assembly, inspection, and adjustment.

SPECIFICATIONS: Constructional details of rack frame and material specifications are on Par-Metal Pages 2 and 3.

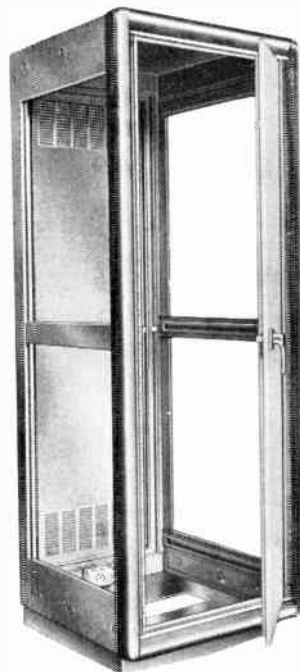
CORNER TRIMS: Narrow type corner trims are standard to permit assembly with all accessories and sliding shelves. Where racks are assembled in groups or rows, please specify number of racks in each row so that proper joining trims can be supplied.

ACCESSORIES: All accessories listed on Par-Metal Pages 7 and 8 may be used with these racks. **ROLLER TRUCKS** are listed on Par-Metal Page 17. **RACK PANELS** are listed on Par-Metal Pages 18 and 19.

FINISHES: Group 1. Black or blue grey wrinkle enamel; primer coat only.

Group 2. Light grey hammertone enamel; light grey hammertone enamel with dark grey hammertone trim on front of assembly; light grey equipment enamel; dark grey metallic enamel. There is an additional charge of 10% for finishes in group 2. PLEASE SPECIFY FINISH WHEN ORDERING.

RECESSED RACK SUB-BASES SHOWN IN ILLUSTRATIONS ARE NOT INCLUDED IN RACK PRICES. They are available as an optional accessory. Listings and prices are on Par-Metal Page 7.



**"FL" SERIES RACKS WITH
FRONT AND REAR DOORS**

TYPE "PL" SERIES RACKS - WITH REAR DOORS ONLY

| Catalog No. | Overall Height | Dimensions | | Panel Space | Clear Inside Depth | Clear Inside Width (Front) | Clear Inside Width (Rear) | Shipping Wt. Lbs. | Net Price |
|---|----------------|------------|-------|---------------|--------------------|----------------------------|---------------------------|-------------------|-----------|
| | | Width | Depth | | | | | | |
| FOR 19" WIDE PANELS - 18" DEEP RACKS | | | | | | | | | |
| PL-4818-A | 48 1/8" | 22" | 18" | 42" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 110 | \$ 92.00 |
| PL-5718-A | 67 3/8" | 22" | 18" | 61 1/4" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 150 | 105.00 |
| PL-7718-A | 76 1/8" | 22" | 18" | 70" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 160 | 116.75 |
| PL-8418-A | 83 1/8" | 22" | 18" | 77" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 180 | 128.50 |
| FOR 19" WIDE PANELS - 24" DEEP RACKS | | | | | | | | | |
| PL-4824-A | 48 1/8" | 22" | 24" | 42" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 125 | 110.50 |
| PL-6724-A | 67 3/8" | 22" | 24" | 61 1/4" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 165 | 126.00 |
| PL-7724-A | 76 1/8" | 22" | 24" | 70" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 175 | 137.75 |
| PL-8424-A | 83 1/8" | 22" | 24" | 77" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 190 | 152.75 |
| FOR 24" WIDE PANELS - 24" DEEP RACKS | | | | | | | | | |
| PL-4827-A | 48 1/8" | 27" | 24" | 42" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 150 | 139.75 |
| PL-6727-A | 67 3/8" | 27" | 24" | 61 1/4" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 185 | 158.75 |
| PL-7727-A | 76 1/8" | 27" | 24" | 70" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 200 | 170.50 |
| PL-8427-A | 83 1/8" | 27" | 24" | 77" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 215 | 187.75 |
| FOR 30" WIDE PANELS - 24" DEEP RACKS | | | | | | | | | |
| PL-5733-A | 67 3/8" | 33" | 24" | 61 1/4" x 30" | 22 5/8" | 28 3/4" | 30 1/8" | 245 | 189.50 |
| PL-7733-A | 76 1/8" | 33" | 24" | 70" x 30" | 22 5/8" | 28 3/4" | 30 1/8" | 270 | 205.50 |
| PL-8433-A | 83 1/8" | 33" | 24" | 77" x 30" | 22 5/8" | 28 3/4" | 30 1/8" | 285 | 224.25 |

| Catalog No. | Shipping Wt. Lbs. | Net Price (Per Pr.) | RECESSED BASES (Optional) Prices on Par-Metal Page 7 |
|-------------|-------------------|---------------------|--|
| | | | |
| RL-418 | 40 | \$40.00 | RB-22-7 |
| RL-618 | 55 | 48.90 | RB-2217 |
| RL-718 | 60 | 52.20 | RB-2217 |
| RL-818 | 65 | 55.80 | RB-2217 |
| RL-424 | 50 | 47.20 | RB-2223 |
| RL-624 | 60 | 55.80 | RB-2223 |
| RL-724 | 65 | 59.40 | RB-2223 |
| RL-824 | 70 | 62.60 | RB-2223 |
| RL-424 | 50 | 47.20 | RB-2723 |
| RL-624 | 60 | 55.80 | RB-2723 |
| RL-724 | 65 | 59.40 | RB-2723 |
| RL-824 | 70 | 62.60 | RB-2723 |
| RL-624 | 60 | 55.80 | RB-3323 |
| RL-724 | 65 | 59.40 | RB-3323 |
| RL-824 | 70 | 62.60 | RB-3323 |

TYPE "FL" SERIES RACKS - WITH FRONT AND REAR DOORS

| Catalog No. | Overall Height | Dimensions | | Panel Space | Clear Inside Depth | Clear Inside Width (Front) | Clear Inside Width (Rear) | Shipping Wt. Lbs. | Net Price |
|---|----------------|------------|-------|---------------|--------------------|----------------------------|---------------------------|-------------------|-----------|
| | | Width | Depth | | | | | | |
| FOR 19" WIDE PANELS - 18" DEEP RACKS | | | | | | | | | |
| FL-4818-A | 48 1/8" | 22" | 18" | 42" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 125 | \$109.25 |
| FL-6718-A | 67 3/8" | 22" | 18" | 61 1/4" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 170 | 128.00 |
| FL-7718-A | 76 1/8" | 22" | 18" | 70" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 180 | 145.25 |
| FL-8418-A | 83 1/8" | 22" | 18" | 77" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 200 | 157.00 |
| FOR 19" WIDE PANELS - 24" DEEP RACKS | | | | | | | | | |
| FL-4824-A | 48 1/8" | 22" | 24" | 42" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 145 | 130.75 |
| FL-6724-A | 67 3/8" | 22" | 24" | 61 1/4" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 190 | 149.00 |
| FL-7724-A | 76 1/8" | 22" | 24" | 70" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 205 | 166.75 |
| FL-8424-A | 83 1/8" | 22" | 24" | 77" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 215 | 181.25 |
| FOR 24" WIDE PANELS - 24" DEEP RACKS | | | | | | | | | |
| FL-4827-A | 48 1/8" | 27" | 24" | 42" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 170 | 160.00 |
| FL-6727-A | 67 3/8" | 27" | 24" | 61 1/4" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 220 | 188.00 |
| FL-7727-A | 76 1/8" | 27" | 24" | 70" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 240 | 199.00 |
| FL-8427-A | 83 1/8" | 27" | 24" | 77" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 245 | 223.00 |
| FOR 30" WIDE PANELS - 24" DEEP RACKS | | | | | | | | | |
| FL-6733-A | 67 3/8" | 33" | 24" | 61 1/4" x 30" | 22 1/4" | 28 3/4" | 30 1/8" | 280 | 231.50 |
| FL-7733-A | 76 1/8" | 33" | 24" | 70" x 30" | 22 1/4" | 28 3/4" | 30 1/8" | 310 | 252.75 |
| FL-8433-A | 83 1/8" | 33" | 24" | 77" x 30" | 22 1/4" | 28 3/4" | 30 1/8" | 325 | 274.00 |

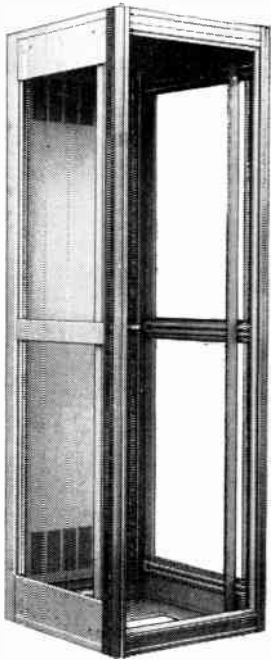
| Catalog No. | Shipping Wt. Lbs. | Net Price (Per Pr.) | RECESSED BASES (Optional) Prices on Par-Metal Page 7 |
|-------------|-------------------|---------------------|--|
| | | | |
| RL-418 | 40 | \$40.00 | RB-2217 |
| RL-618 | 55 | 48.90 | RB-2217 |
| RL-718 | 60 | 52.20 | RB-2217 |
| RL-818 | 65 | 55.80 | RB-2217 |
| RL-424 | 50 | 47.20 | RB-2223 |
| RL-624 | 60 | 55.80 | RB-2223 |
| RL-724 | 65 | 59.40 | RB-2223 |
| RL-824 | 70 | 62.60 | RB-2223 |
| RL-424 | 50 | 47.20 | RB-2723 |
| RL-624 | 60 | 55.80 | RB-2723 |
| RL-724 | 65 | 59.40 | RB-2723 |
| RL-824 | 70 | 62.60 | RB-2723 |
| RL-624 | 60 | 55.80 | RB-3323 |
| RL-724 | 65 | 59.40 | RB-3323 |
| RL-824 | 70 | 62.60 | RB-3323 |

*Clearance between front and rear doors

**Indicates clearance for chassis between panel mounting strips.

PAR-METAL UNIVERSAL CABINET RACKS

STANDARD SERIES "PR" & "FR" RACKS WITH OPEN SIDE WALLS FOR 19" - 24" - 30" WIDE PANELS — 18" & 24" DEEP WITH DETACHABLE SIDE PANELS



"PR" SERIES WITH REAR DOOR ONLY

SERIES "PR" and "FR" RACKS USE THE SAME sturdy cabinet frames as our De Luxe racks listed on PAR-METAL Page 4. New horizontal mouldings and vertical corner trims on the front of racks, with new compact side panels, creates a distinctive appearance in keeping with the current trend in cabinet styling. In effect, a frame is provided which can be finished in a contrasting color at your option.

SPECIFICATIONS: Constructional details of rack frame and material specifications are on Par-Metal Pages 2 and 3.

CORNER TRIMS: Narrow type corner trims are standard to permit assembly with all accessories and sliding shelves. Where racks are assembled in groups or rows, please specify number of racks in each row so that proper joining trims can be supplied.

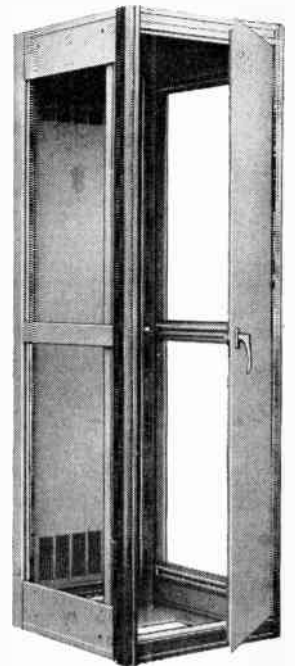
ACCESSORIES: All accessories listed on Par-Metal Pages 7 and 8 may be used with these racks. **ROLLER TRUCKS** are listed on Par-Metal Page 17. **RACK PANELS** are listed on Par-Metal Pages 18 and 19.

FINISHES: Group 1. Black or blue grey wrinkle enamel; primer coat only.

Group 2. Light grey hammertone enamel; light grey hammertone enamel with dark grey hammertone trim on front of assembly; light grey equipment enamel; dark grey metallic enamel. There is an additional charge of 10% for finishes in group 2. PLEASE SPECIFY FINISH WHEN ORDERING.

RECESSED BASES are available as an optional accessory. Listings and prices are on Par-Metal Page 7.

Additional engineering information such as completely detailed drawings of these cabinet racks are given in our Catalog 62. Write directly to home office for assistance.



"FR" SERIES WITH FRONT & REAR DOORS

TYPE "PR" SERIES RACKS — WITH REAR DOORS ONLY

| Catalog No. | Overall Height | Dimensions | | Panel Space | *Clear Inside Depth | **Clear Inside Width (Front) | Inside Width (Rear) | Shipping Wt. Lbs. | Net Price |
|---|----------------|------------|-------|---------------|---------------------|------------------------------|---------------------|-------------------|-----------|
| | | Width | Depth | | | | | | |
| FOR 19" WIDE PANELS — 18" DEEP RACKS | | | | | | | | | |
| PR-4818-A | 48 1/8" | 22" | 18" | 42" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 110 | \$ 80.60 |
| PR-6718-A | 67 3/8" | 22" | 18" | 61 1/4" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 150 | 92.20 |
| PR-7718-A | 76 1/8" | 22" | 18" | 70" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 160 | 103.80 |
| PR-8418-A | 83 3/8" | 22" | 18" | 77" x 19" | 16 7/8" | 17 3/4" | 19 1/8" | 180 | 115.20 |
| FOR 19" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| PR-4824-A | 48 1/8" | 22" | 24" | 42" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 125 | 97.70 |
| PR-6724-A | 67 3/8" | 22" | 24" | 61 1/4" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 165 | 112.00 |
| PR-7724-A | 76 1/8" | 22" | 24" | 70" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 175 | 123.50 |
| PR-8424-A | 83 3/8" | 22" | 24" | 77" x 19" | 22 5/8" | 17 3/4" | 19 1/8" | 190 | 138.30 |
| FOR 24" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| PR-4827-A | 48 1/8" | 27" | 24" | 42" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 150 | 126.20 |
| PR-6727-A | 67 3/8" | 27" | 24" | 61 1/4" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 185 | 143.80 |
| PR-7727-A | 76 1/8" | 27" | 24" | 70" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 200 | 155.30 |
| PR-8427-A | 83 3/8" | 27" | 24" | 77" x 24" | 22 5/8" | 22 3/4" | 24 1/8" | 215 | 172.30 |
| FOR 30" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| PR-6733-A | 67 3/8" | 33" | 24" | 61 1/4" x 30" | 22 5/8" | 28 3/4" | 30 1/8" | 245 | 173.20 |
| PR-7733-A | 76 1/8" | 33" | 24" | 70" x 30" | 22 5/8" | 28 3/4" | 30 1/8" | 270 | 189.00 |
| PR-8433-A | 83 3/8" | 33" | 24" | 77" x 30" | 22 5/8" | 28 3/4" | 30 1/8" | 285 | 207.40 |

| Catalog No. | Shipping Wt. Lbs. | Net Price (Per Pr.) | RECESSED BASES (Optional) Prices on Par-Metal Page 7 | |
|---|-------------------|---------------------|--|-----------------|
| | | | Cat. No. | Price (Per Pr.) |
| DETACHABLE SIDE PANELS | | | | |
| RS-418-A | 40 | \$34.50 | RB-2217 | 44 |
| RS-618-A | 55 | 41.40 | RB-2217 | 55 |
| RS-718-A | 60 | 44.70 | RB-2217 | 60 |
| RS-818-A | 65 | 48.30 | RB-2217 | 65 |
| FOR 19" WIDE PANELS — 24" DEEP RACKS | | | | |
| RS-424-A | 50 | 41.70 | RB-2223 | 50 |
| RS-624-A | 60 | 48.30 | RB-2223 | 60 |
| RS-724-A | 65 | 51.90 | RB-2223 | 65 |
| RS-824-A | 70 | 55.10 | RB-2223 | 70 |
| FOR 24" WIDE PANELS — 24" DEEP RACKS | | | | |
| RS-424-A | 50 | 41.70 | RB-2723 | 50 |
| RS-624-A | 60 | 48.30 | RB-2723 | 60 |
| RS-724-A | 65 | 51.90 | RB-2723 | 65 |
| RS-824-A | 70 | 55.10 | RB-2723 | 70 |
| FOR 30" WIDE PANELS — 24" DEEP RACKS | | | | |
| RS-624-A | 60 | 48.30 | RB-3323 | 60 |
| RS-724-A | 65 | 51.90 | RB-3323 | 65 |
| RS-824-A | 70 | 55.10 | RB-3323 | 70 |

TYPE "FR" SERIES RACKS — WITH FRONT AND REAR DOORS

| Catalog No. | Overall Height | Dimensions | | Panel Space | *Clear Inside Depth | **Clear Inside Width (Front) | Inside Width (Rear) | Shipping Wt. Lbs. | Net Price |
|---|----------------|------------|-------|---------------|---------------------|------------------------------|---------------------|-------------------|-----------|
| | | Width | Depth | | | | | | |
| FOR 19" WIDE PANELS — 18" DEEP RACKS | | | | | | | | | |
| FR-4818-A | 48 1/8" | 22" | 18" | 42" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 125 | \$ 97.70 |
| FR-6718-A | 67 3/8" | 22" | 18" | 61 1/4" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 170 | 115.20 |
| FR-7718-A | 76 1/8" | 22" | 18" | 70" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 180 | 132.20 |
| FR-8418-A | 83 3/8" | 22" | 18" | 77" x 19" | 16 1/4" | 17 3/4" | 19 1/8" | 200 | 143.80 |
| FOR 19" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| FR-4824-A | 48 1/8" | 22" | 24" | 42" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 145 | 118.00 |
| FR-6724-A | 67 3/8" | 22" | 24" | 61 1/4" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 190 | 134.90 |
| FR-7724-A | 76 1/8" | 22" | 24" | 70" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 205 | 152.50 |
| FR-8424-A | 83 3/8" | 22" | 24" | 77" x 19" | 22 1/4" | 17 3/4" | 19 1/8" | 215 | 166.80 |
| FOR 24" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| FR-4827-A | 48 1/8" | 27" | 24" | 42" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 170 | 146.50 |
| FR-6727-A | 67 3/8" | 27" | 24" | 61 1/4" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 220 | 172.90 |
| FR-7727-A | 76 1/8" | 27" | 24" | 70" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 240 | 183.80 |
| FR-8427-A | 83 3/8" | 27" | 24" | 77" x 24" | 22 1/4" | 22 3/4" | 24 1/8" | 245 | 207.40 |
| FOR 30" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| FR-6733-A | 67 3/8" | 33" | 24" | 61 1/4" x 30" | 22 1/4" | 28 3/4" | 30 1/8" | 280 | 215.20 |
| FR-7733-A | 76 1/8" | 33" | 24" | 70" x 30" | 22 1/4" | 28 3/4" | 30 1/8" | 310 | 236.20 |
| FR-8433-A | 83 3/8" | 33" | 24" | 77" x 30" | 22 1/4" | 28 3/4" | 30 1/8" | 325 | 257.20 |

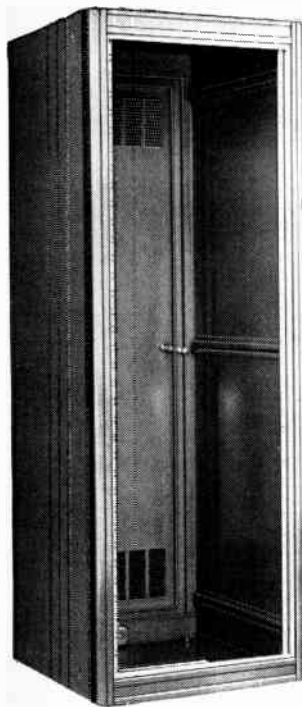
| Catalog No. | Shipping Wt. Lbs. | Net Price (Per Pr.) | RECESSED BASES (Optional) Prices on Par-Metal Page 7 | |
|---|-------------------|---------------------|--|-----------------|
| | | | Cat. No. | Price (Per Pr.) |
| DETACHABLE SIDE PANELS | | | | |
| RS-418-A | 40 | \$34.50 | RB-2217 | 44 |
| RS-618-A | 55 | 41.40 | RB-2217 | 55 |
| RS-718-A | 60 | 44.70 | RB-2217 | 60 |
| RS-818-A | 65 | 48.30 | RB-2217 | 65 |
| FOR 19" WIDE PANELS — 24" DEEP RACKS | | | | |
| RS-424-A | 50 | 41.70 | RB-2223 | 50 |
| RS-624-A | 60 | 48.30 | RB-2223 | 60 |
| RS-724-A | 65 | 51.90 | RB-2223 | 65 |
| RS-824-A | 70 | 55.10 | RB-2223 | 70 |
| FOR 24" WIDE PANELS — 24" DEEP RACKS | | | | |
| RS-424-A | 50 | 41.70 | RB-2723 | 50 |
| RS-624-A | 60 | 48.30 | RB-2723 | 60 |
| RS-724-A | 65 | 51.90 | RB-2723 | 65 |
| RS-824-A | 70 | 55.10 | RB-2723 | 70 |
| FOR 30" WIDE PANELS — 24" DEEP RACKS | | | | |
| RS-624-A | 60 | 48.30 | RB-3323 | 60 |
| RS-724-A | 65 | 51.90 | RB-3323 | 65 |
| RS-824-A | 70 | 55.10 | RB-3323 | 70 |

*Clearance between front and rear doors

**Indicates clearance for chassis between panel mounting strips.

PAR-METAL UNIVERSAL CABINET RACKS

SERIES "PX" & "FX" RACKS WITH SOLID SIDE WALLS FOR 19"-24"-30" WIDE PANELS—18" & 24" DEEP



"PX" SERIES WITH REAR DOOR ONLY

SERIES "PX" and "FX" RACKS ARE SIMILAR to our "PR" series shown on Par-Metal Page 5, except that they are constructed with solid side walls as shown.

These racks feature the same horizontal mouldings and corner trims used on our "PR" series, resulting in a trim, compact appearance. The new styling, in effect, provides an attractive frame around the front of the rack where contrasting color finishes are used.

SPECIFICATIONS: Constructional details of rack frame and material specifications are listed on Par-Metal Pages 2 and 3.

CORNER TRIMS: Narrow type corner trims are standard to permit assembly with all accessories and sliding shelves. Where racks are assembled in groups or rows, please specify number of racks in each row so that proper joining trims can be supplied.

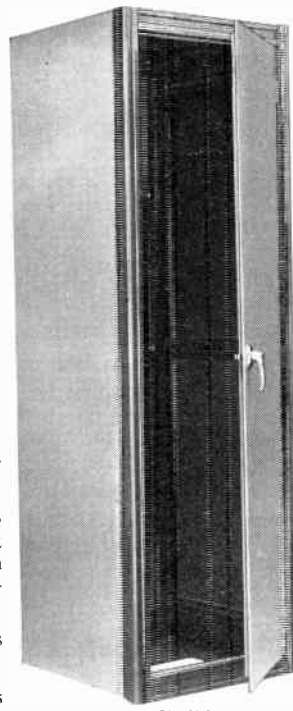
ACCESSORIES: All accessories listed on Par-Metal Pages 7 and 8, may be used with these racks. **ROLLER TRUCKS** are listed on Par-Metal Page 17. **RACK PANELS** are listed on Par-Metal Pages 18 and 19.

FINISHES: Group 1. Black or blue grey wrinkle enamel; primer coat only.

Group 2. Light grey hammertone enamel; light grey hammertone enamel with dark grey hammertone trim on front of assembly; light grey equipment enamel; dark grey metallic enamel. There is an additional charge of 10% for finishes in group 2. **PLEASE SPECIFY FINISH WHEN ORDERING.**

RECESSED Bases are available as an optional accessory. Listings and prices are on the opposite page.

Complete engineering type detailed drawings of these cabinet racks are available in our Catalog 62. Write directly to home office for personalized and interested engineering assistance.



"FX" SERIES WITH FRONT & REAR DOORS

TYPE "PX" SERIES RACKS — WITH REAR DOORS ONLY

| Catalog No. | Overall Dimensions | | | Panel Space | *Clear Inside Depth | **Clear Inside Width (Front) | Clear Inside Width (Rear) | Shipping Wt. Lbs. | Net Price |
|---|----------------------------------|-------|-------|--|----------------------------------|----------------------------------|----------------------------------|-------------------|-----------|
| | Height | Width | Depth | | | | | | |
| FOR 19" WIDE PANELS — 18" DEEP RACKS | | | | | | | | | |
| PX-3718-A | 42 ⁷ / ₈ " | 22" | 18" | 36 ³ / ₄ " x 19" | 16 ⁷ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 105 | \$ 69.00 |
| PX-4818-A | 48 ¹ / ₄ " | 22" | 18" | 42" x 19" | 16 ⁷ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 120 | 80.60 |
| PX-6718-A | 67 ³ / ₈ " | 22" | 18" | 61 ¹ / ₄ " x 19" | 16 ⁷ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 155 | 92.20 |
| PX-7718-A | 76 ¹ / ₄ " | 22" | 18" | 70" x 19" | 16 ⁷ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 170 | 103.80 |
| PX-8418-A | 83 ¹ / ₈ " | 22" | 18" | 77" x 19" | 16 ⁷ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 185 | 115.20 |
| FOR 19" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| PX-4824-A | 48 ¹ / ₄ " | 22" | 24" | 42" x 19" | 22 ⁵ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 140 | 97.70 |
| PX-6724-A | 67 ³ / ₈ " | 22" | 24" | 61 ¹ / ₄ " x 19" | 22 ⁵ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 180 | 112.00 |
| PX-7724-A | 76 ¹ / ₄ " | 22" | 24" | 70" x 19" | 22 ⁵ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 195 | 123.50 |
| PX-8424-A | 83 ¹ / ₈ " | 22" | 24" | 77" x 19" | 22 ⁵ / ₈ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 210 | 138.30 |
| FOR 24" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| PX-4827-A | 48 ¹ / ₄ " | 27" | 24" | 42" x 24" | 22 ³ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 155 | 126.20 |
| PX-6727-A | 67 ³ / ₈ " | 27" | 24" | 61 ¹ / ₄ " x 24" | 22 ³ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 200 | 143.80 |
| PX-7727-A | 76 ¹ / ₈ " | 27" | 24" | 70" x 24" | 22 ³ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 225 | 155.30 |
| PX-8427-A | 83 ¹ / ₄ " | 27" | 24" | 77" x 24" | 22 ³ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 240 | 172.30 |
| FOR 30" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| PX-6733-A | 67 ³ / ₈ " | 33" | 24" | 61 ¹ / ₄ " x 30" | 22 ³ / ₄ " | 28 ³ / ₄ " | 30 ¹ / ₈ " | 260 | 173.20 |
| PX-7733-A | 76 ¹ / ₄ " | 33" | 24" | 70" x 30" | 22 ³ / ₄ " | 28 ³ / ₄ " | 30 ¹ / ₈ " | 280 | 189.00 |
| PX-8433-A | 83 ¹ / ₈ " | 33" | 24" | 77" x 30" | 22 ³ / ₄ " | 28 ³ / ₄ " | 30 ¹ / ₈ " | 300 | 207.40 |

RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-2217 RB-2217 RB-2217 RB-2217 RB-2217

RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-2223 RB-2223 RB-2223 RB-2223

RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-2723 RB-2723 RB-2723 RB-2723

RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-3323 RB-3323 RB-3323

TYPE "FX" SERIES RACKS — WITH FRONT AND REAR DOORS

| Catalog No. | Overall Dimensions | | | Panel Space | *Clear Inside Depth | **Clear Inside Width (Front) | Clear Inside Width (Rear) | Shipping Wt. Lbs. | Net Price |
|---|----------------------------------|-------|-------|--|----------------------------------|----------------------------------|----------------------------------|-------------------|-----------|
| | Height | Width | Depth | | | | | | |
| FOR 19" WIDE PANELS — 18" DEEP RACKS | | | | | | | | | |
| FX-4818-A | 48 ¹ / ₄ " | 22" | 18" | 42" x 19" | 16 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 135 | \$ 97.70 |
| FX-6718-A | 67 ³ / ₈ " | 22" | 18" | 61 ¹ / ₄ " x 19" | 16 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 175 | 115.20 |
| FX-7718-A | 76 ¹ / ₄ " | 22" | 18" | 70" x 19" | 16 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 190 | 132.20 |
| FX-8418-A | 83 ¹ / ₈ " | 22" | 18" | 77" x 19" | 16 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 205 | 143.80 |
| FOR 19" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| FX-4824-A | 48 ¹ / ₄ " | 22" | 24" | 42" x 19" | 22 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 160 | 118.00 |
| FX-6724-A | 67 ³ / ₈ " | 22" | 24" | 61 ¹ / ₄ " x 19" | 22 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 205 | 134.90 |
| FX-7724-A | 76 ¹ / ₄ " | 22" | 24" | 70" x 19" | 22 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 225 | 152.50 |
| FX-8424-A | 83 ¹ / ₈ " | 22" | 24" | 77" x 19" | 22 ¹ / ₄ " | 17 ³ / ₄ " | 19 ¹ / ₈ " | 235 | 166.80 |
| FOR 24" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| FX-4827-A | 48 ¹ / ₄ " | 27" | 24" | 42" x 24" | 22 ¹ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 175 | 146.50 |
| FX-6727-A | 67 ³ / ₈ " | 27" | 24" | 61 ¹ / ₄ " x 24" | 22 ¹ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 235 | 172.90 |
| FX-7727-A | 76 ¹ / ₈ " | 27" | 24" | 70" x 24" | 22 ¹ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 265 | 183.80 |
| FX-8427-A | 83 ¹ / ₄ " | 27" | 24" | 77" x 24" | 22 ¹ / ₄ " | 22 ³ / ₄ " | 24 ¹ / ₈ " | 270 | 207.40 |
| FOR 30" WIDE PANELS — 24" DEEP RACKS | | | | | | | | | |
| FX-6733-A | 67 ³ / ₈ " | 33" | 24" | 61 ¹ / ₄ " x 30" | 22 ¹ / ₄ " | 28 ³ / ₄ " | 30 ¹ / ₈ " | 295 | 215.20 |
| FX-7733-A | 76 ¹ / ₄ " | 33" | 24" | 70" x 30" | 22 ¹ / ₄ " | 28 ³ / ₄ " | 30 ¹ / ₈ " | 320 | 236.20 |
| FX-8433-A | 83 ¹ / ₈ " | 33" | 24" | 77" x 30" | 22 ¹ / ₄ " | 28 ³ / ₄ " | 30 ¹ / ₈ " | 345 | 257.20 |

RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-2217 RB-2217 RB-2217

RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-2223 RB-2223 RB-2223

RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-2723 RB-2723 RB-2723

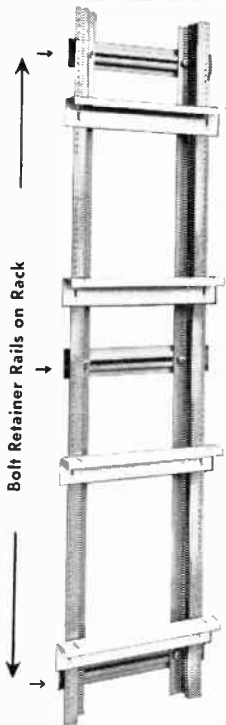
RECESSED BASES (Optional) Prices on Par-Metal Page 7 Cat. No. RB-3323 RB-3323 RB-3323

*Clearance between front and rear doors.

**Indicates clearance for chassis between panel mounting strips.

PAR-METAL CABINET RACK ACCESSORIES

VERTICAL SIDE SUPPORTS



These vertical side supports are supplied in sets of four uprights to fit all universal racks listed on PAR-METAL Pages 4 thru 6. (Cut shows side mounting brackets in place which are sold separately—see listing below).

Supports are fastened to bolt retainer rails which hold panel mounting angles in place, and are adjustably mounted from front to back of rack. Holes are drilled and tapped vertically to provide adequate vertical adjustment for mounting brackets, shelves, and various sliding devices.

When installed in racks for 19" wide panels, the clearance between supports (from right to left) is 17 3/4". On 24" wide panel racks, the clearance is 22 3/4"; on 30" wide panel racks, the clearance is 28 3/4". Supports are 2 5/8" wide and 1 1/2" deep.

Supports are made from 7/16" thick steel, finished in aluminum enamel. Each set is supplied with 3/8" dia. bolts, lock washers, and nuts for rack mounting.

| Cat. No. | Height | To Fit Universal Cabinet Racks | Sh. Wt. Lbs. | Net Price Set of 4 |
|----------|---------|---------------------------------------|--------------|--------------------|
| VS-36 | 41 1/4" | Series 3718-A | 22 | \$15.00 |
| VS-42 | 46 1/2" | Series 4818-A, 4824-A, 4827-A | 25 | 16.50 |
| VS-61 | 65 3/4" | Series 6718-A, 6724-A, 6727-A, 6733-A | 35 | 21.75 |
| VS-70 | 74 1/2" | Series 7718-A, 7724-A, 7727-A, 7733-A | 39 | 25.50 |
| VS-77 | 81 1/2" | Series 8418-A, 8424-A, 8427-A, 8433-A | 45 | 28.35 |

SIDE MOUNTING BRACKETS



Brackets BR-118 and Shelf SS-1918

These brackets will fit on Vertical Side Supports shown above. They are sold in pairs, and slotted to provide vertical adjustment at any height required. Brackets are 2" wide and 1-13/16" high. The vertical face of the bracket is also slotted to match holes in equipment shelves listed below. Where desirable, the horizontal face of the bracket may be bolted to the vertical side supports. They are made from 1/4" steel, zinc plated finish. Necessary bolts are supplied.

| Cat. No. | Length | To Fit Racks | Shpg. Wt. Lbs. | Net Price |
|----------|--------|--------------------|----------------|-----------------|
| BR-118 | 14" | All 18" deep racks | 4 lbs. | \$3.30 per pair |
| BR-124 | 20" | All 24" deep racks | 6 lbs. | 4.45 per pair |

EQUIPMENT SHELVES

These shelves will assemble with the side mounting brackets listed above, to make a complete shelf between Vertical Side Supports. Made from 1/16" steel, zinc plated. Necessary bolts for assembly are included. All shelves are 7/8" high.

| Cat. No. | Width | Depth | To Fit Racks | Net Price |
|----------|---------|---------|---------------------|-----------|
| SS-1918 | 17 5/8" | 14 1/4" | 19" panels-18" deep | \$3.50 |
| SS-1924 | 17 5/8" | 20 1/4" | 19" panels-24" deep | 4.20 |
| SS-2724 | 22 5/8" | 20 1/4" | 24" panels-24" deep | 4.95 |
| SS-3324 | 28 5/8" | 20 1/4" | 30" panels-24" deep | 7.20 |

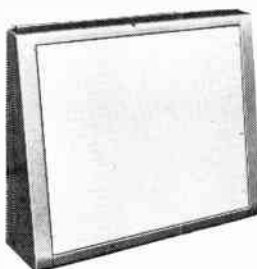


RECESSED RACK SUB-BASES

These heavy duty bases will fit under any of the universal racks listed on PAR-METAL Pages 4 thru 6. They are rigidly made from 7/16" thick steel, and are securely braced at all corners. 4 holes in top match those provided in the racks. Hardware for attaching is supplied. 4 adjustable floor levellers are used under the bottom of the bases. Will be finished in enamel to match racks ordered. Where roller trucks are mounted under the racks, recessed bases are not recommended or required.

| Cat. No. | To Fit Universal Racks Width | Depth | Net Price |
|----------|------------------------------|-------|-----------|
| RB-2217 | 22" | 18" | \$15.00 |
| RB-2223 | 22" | 24" | 16.00 |
| RB-2723 | 27" | 24" | 17.50 |
| RB-3323 | 33" | 24" | 18.75 |

SLOPING RACK MOUNTING PANELS



These panels are intended for installation on relay racks, and are installed the same as other standard rack panels.

The front slopes at an angle of 20°, and it may be used with the slope upward or downward (see illustrations) on PAR-METAL Page 2.

Front and back have removable panels. They are designed for single unit or modular group assemblies.

Constructed from 1/16" sheet steel; panels are included in prices listed below. Available in all finishes—please specify when ordering. All panels are 7 5/8" deep.

| Cat. No. | Panel Space Required | Sloping Panel Size | Rear Panel Size | Net Price |
|----------|----------------------|--------------------|-----------------|-----------|
| SP-1719 | 17 1/2" x 19" | 15 3/4" x 19" | 14" x 19" | \$42.00 |
| SP-1724 | 17 1/2" x 24" | 15 3/4" x 24" | 14" x 24" | 50.00 |
| SP-1730 | 17 1/2" x 30" | 15 3/4" x 30" | 14" x 30" | 65.00 |

RACK TYPE EXTENSION TABLES



These tables are mounted to the front of cabinet racks as illustrated on PAR-METAL Page 2. They are made from 3/4" plywood, to which is bonded 1/16" thick formica of a dark grey pattern on both top and apron, which is 2 1/2" high.

The apron is substantially reinforced for fastening to horizontal channel type supports. The channels are made from 7/16" thick steel, and are bolted to vertical side supports which are securely mounted on the inside wall of the rack. The tables may be adjusted at any height from the floor. This assembly provides a very rigid structure, with a smooth writing space across the entire top. There are no metal parts exposed, and no painted metal surfaces to deteriorate with constant usage.

The tables may be installed on any of the cabinet racks (without front door) listed on PAR-METAL Pages 4 thru 6. They are also available for modular rows of four or more racks.

ALL OF THESE TABLE ASSEMBLIES REQUIRE ONLY 3 1/2" OF PANEL SPACE (height).

| Cat. No. | Table Size | Type | Rack Panel Width | Net Price |
|----------|---------------|-----------|------------------|-----------|
| RX-119 | 21 1/4" x 20" | Single | 19" | \$ 42.00 |
| RX-219 | 42 1/8" x 20" | Double | 19" | 78.00 |
| RX-319 | 64 1/4" x 20" | Triple | 19" | 104.00 |
| RX-419 | 86 1/4" x 20" | Quadruple | 19" | 144.00 |
| RX-124 | 26 1/4" x 20" | Single | 24" | 48.00 |
| RX-224 | 52 1/8" x 20" | Double | 24" | 95.00 |
| RX-324 | 79 1/4" x 20" | Triple | 24" | 128.00 |
| RX-130 | 32 1/4" x 20" | Single | 30" | 55.00 |
| RX-230 | 64 1/8" x 20" | Double | 30" | 100.00 |

PANEL MOUNTING ANGLES

These panel mounting angles (or strips) are the same as used in all Universal type racks, (see PAR-METAL Pages 4 thru 6). They are supplied with necessary bolts to fit into the bolt retainer rails which hold the pair of panel mounting angles regularly supplied with each rack.

It is often desirable to use an additional pair of panel mounting angles for mounting chassis, terminal strips, etc. They may be adjusted to any depth within the rack from front to back.

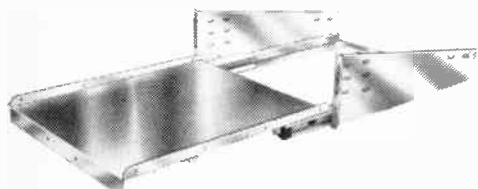
| Angle No. | To Fit Universal Cabinet Racks | Net Price Per Pair |
|-----------|---|--------------------|
| PA-36 | PX-3718-A | \$ 9.50 |
| PA-42 | PL, FL, PX, FX, PR, FR-4818, 4824, 4827-A | 11.50 |
| PA-61 | PL, FL, PX, FX, PR, FR-6718, 6724, 6727, 6733-A | 15.90 |
| PA-70 | PL, FL, PX, FX, PR, FR-7718, 7724, 7727, 7733-A | 18.10 |
| PA-77 | PL, FL, PX, FX, PR, FR-8418, 8424, 8427, 8433-A | 19.80 |

PAR-METAL RACK TYPE SLIDE ASSEMBLIES

GENERAL DESCRIPTION

These slide assemblies will save considerable layout and assembly time as an alternate method of attaching individual slides directly to the interior of a rack. All models are screw mounted to the front panel mounting angles of relay racks, the same as regular panels. Additional holes are provided in the side brackets of the shelf assembly for mounting to our standard vertical side supports. Either method will provide a rigid support; both may be used together where desirable.

The basic slide assemblies for use in 19" wide panel racks will accommodate chassis up to 17" wide. All of the "usable space" noted below may be fully extended from the front of the rack; load capacities are based on the shelf in this position. All units are ruggedly constructed to withstand constant usage. The frames and brackets are made from $\frac{7}{16}$ " thick steel. All parts are securely welded or fastened with stainless steel rivets.



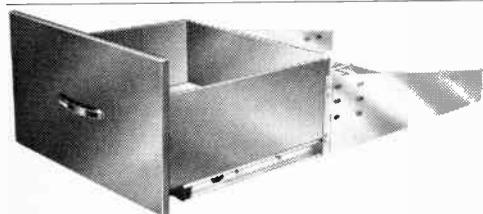
BASIC SLIDE ASSEMBLIES

The basic slide assembly illustrated is sold as a complete unit, ready for installation in all 18" or 24" deep racks. Panels may be attached to chassis by using standard *brackets or any other convenient method. The panel and chassis assembly is then bolted directly to the slide pan. Formed panels with a minimum height of 7" are recommended. Four models are listed to fit racks using panels either 19" or 24" wide.

The BS-1940 and BS-2419 are identical in size, but have different load capacities. All load capacities are conservatively rated to carry the full load with the sliding shelf completely extended. All parts are zinc plated.

| Catalog No. | Usable Space Width | Usable Space Depth | Panel Width | Rack Depth | Bracket Height | Shelf Height | Load Capacity | Net Price | Shipping Weight |
|-------------|--------------------|--------------------|-------------|------------|-------------------|-------------------|---------------|-----------|-----------------|
| BS-1980 | 17 $\frac{1}{8}$ " | 14" | 19" | 18" | 6 $\frac{1}{2}$ " | 1 $\frac{3}{4}$ " | 50 lbs. | \$19.25 | 24 lbs. |
| BS-1940 | 17 $\frac{1}{8}$ " | 20" | 19" | 24" | 6 $\frac{1}{2}$ " | 1 $\frac{3}{4}$ " | 36 lbs. | 25.50 | 32 lbs. |
| BS-2419 | 17 $\frac{1}{8}$ " | 20" | 19" | 24" | 6 $\frac{1}{2}$ " | 1 $\frac{3}{4}$ " | 60 lbs. | 30.75 | 32 lbs. |
| BS-2424 | 22 $\frac{1}{8}$ " | 20" | 24" | 24" | 6 $\frac{1}{2}$ " | 1 $\frac{3}{4}$ " | 55 lbs. | 33.00 | 35 lbs. |

Special brackets are available for mounting rack panels, as listed on Par-Metal page 21.

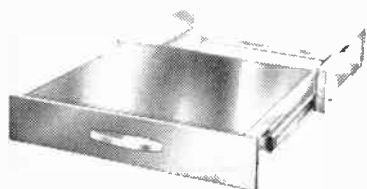


STORAGE DRAWER ASSEMBLIES

These drawers are suitable for stationery, instruments, parts, etc. The drawers are mounted on the basic slide assemblies described above. They are available either 7" or 10 $\frac{1}{2}$ " high to match standard rack panels of the same height. Three models are listed for racks with 19" wide panels, and one for 24" wide panel racks.

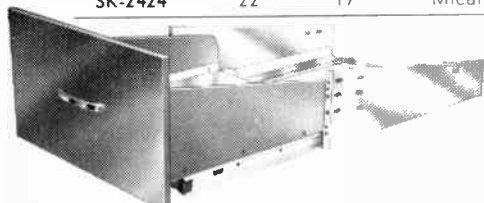
| Catalog No. | Usable Space Width | Usable Space Length | Depth | Panel Height | Panel Width | Rack Depth | Load Capacity | Net Price | Shipping Weight |
|-------------|--------------------|---------------------|-------|--------------------|-------------|------------|---------------|-----------|-----------------|
| DD-1980 | 17" | 14" | 5" | 7" | 19" | 18" | 40 lbs. | \$26.50 | 33 lbs. |
| DD-1940 | 17" | 20" | 5" | 7" | 19" | 24" | 25 lbs. | 35.00 | 42 lbs. |
| DD-2419 | 17" | 20" | 8" | 10 $\frac{1}{2}$ " | 19" | 24" | 45 lbs. | 41.90 | 50 lbs. |
| DD-2424 | 22" | 20" | 8" | 10 $\frac{1}{2}$ " | 24" | 24" | 45 lbs. | 46.75 | 50 lbs. |

DESK SHELF ASSEMBLIES



This assembly effectively provides a retractable writing desk, or may be used for supporting test instruments or other devices. When not in use, it saves valuable aisle space. The writing surface is charcoal grey micarta. The front requires only 3 $\frac{1}{2}$ " of panel space, and is provided with a drawer pull. It is made for racks using panels either 19" or 24" wide. No. SK-1970 and SK-2419 are identical except for load capacity.

| Catalog No. | Shelf Size Width | Shelf Size Depth | Writing Surface | Pulls Out | Panel Width | Rack Depth | Load Capacity | Net Price | Shipping Weight |
|-------------|------------------|------------------|-----------------|--------------------|-------------|------------|---------------|-----------|-----------------|
| SK-1970 | 17" | 17" | Micarta | 16 $\frac{3}{8}$ " | 19" | 18-24" | 36 lbs. | \$36.00 | 32 lbs. |
| SK-2419 | 17" | 17" | Micarta | 16 $\frac{3}{8}$ " | 19" | 18-24" | 60 lbs. | 41.50 | 32 lbs. |
| SK-2424 | 22" | 17" | Micarta | 16 $\frac{3}{8}$ " | 24" | 24" | 60 lbs. | 48.75 | 35 lbs. |



PHONO DRAWER ASSEMBLIES

Consists of basic sliding shelf assembly with a drawer front and handle as illustrated. Drawer front is same size as standard formed panel 10 $\frac{1}{2}$ " high. (12 $\frac{1}{4}$ " high drawer fronts are also available.) The 17" width will accommodate almost all standard changers and turntables.

Where metal base pans are available with changers, it is recommended that such pans be used and bolted directly to the shelf.

| Catalog No. | Width | Usable Space Depth | Height | Panel Height | Panel Width | Rack Depth | Load Capacity | Net Price | Shipping Weight |
|-------------|-------|--------------------|--------------------|--------------------|-------------|------------|---------------|-----------|-----------------|
| PH-1980 | 17" | 14" | 8 $\frac{3}{4}$ " | 10 $\frac{1}{2}$ " | 19" | 18" | 45 lbs. | \$26.00 | 33 lbs. |
| PH-1940 | 17" | 20" | 8 $\frac{3}{4}$ " | 10 $\frac{1}{2}$ " | 19" | 24" | 30 lbs. | 33.00 | 40 lbs. |
| PH-2419 | 17" | 20" | 8 $\frac{3}{4}$ " | 10 $\frac{1}{2}$ " | 19" | 24" | 50 lbs. | 39.00 | 40 lbs. |
| PH-2424 | 22" | 20" | 10 $\frac{1}{2}$ " | 12 $\frac{1}{4}$ " | 24" | 24" | 45 lbs. | 43.00 | 44 lbs. |

IMPORTANT: When ordering, please specify paint finish of front panels or drawer fronts of series "DD", "PH", or "SK" assemblies.

PAR-METAL PRODUCTS CORP.

• Long Island City 3, N. Y.

PAR-METAL DE LUXE CONSOLE ASSEMBLIES

SINGLE UNIT ASSEMBLY



This illustration shows one of our three basic single unit assemblies. For further information, refer to Component Group Check List on the following page.

DOUBLE UNIT ASSEMBLY

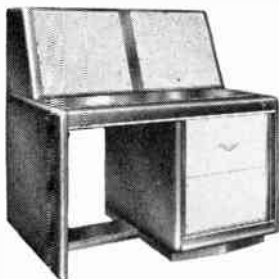
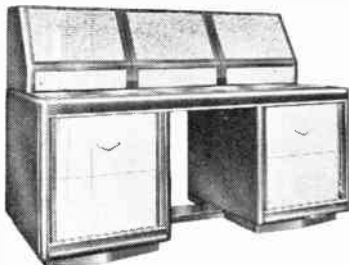


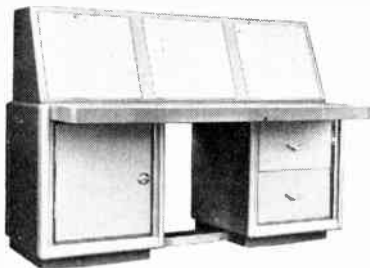
Illustration shows one of three basic assemblies available. See Component Group Check List on following page.

TRIPLE UNIT ASSEMBLY



These assemblies are available in three different arrangements using the various available basic units. See Component Group Check Lists on the following page.

ALTERNATE TRIPLE UNIT ASSEMBLY



The above unit consists of: two No. PD-224 pedestal frames, two No. EP-24 exterior side panels, two No. KP-24 interior side panels, one No. HS-103 high slope cabinet, one No. CD-24 center desk section and one CT-319 extension table, (door drawers, or rack panels for front and back are optional).

GENERAL DESCRIPTION

The combination of a control cabinet mounted on table, desk or similar support usually called a console has been in general use in the electronics industry many years.

While it is obvious that no particular fixed design can serve every requirement, we have devised a group of standard units, the combination of which is readily adaptable for specialized applications in control equipment, testing facilities, sound distribution systems and industrial purposes. These models have been functionally designed and smartly styled to keep pace with current trends. New modular units have been added, all of which may be grouped or expanded to meet your specific needs.

The versatile pedestal racks are the keystone to the entire assembly. They are constructed for heavy duty use, having all the essential features of our type "PL" cabinet racks listed on PAR-METAL Page 4. This would include panel mounting angles which are adjustable from front to back, and provision for installing chassis mounting brackets and shelves where needed. They offer an efficient utilization of space, complete accessibility for servicing, and are solidly built to withstand heavy strains whether in a laboratory or a moving vehicle.

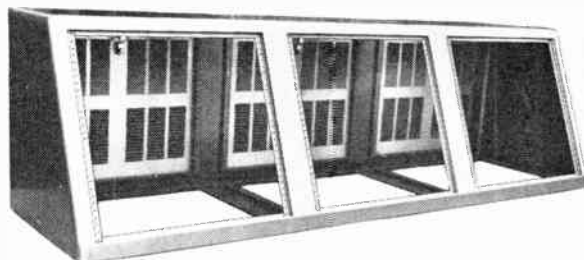
Two models of pedestal frames are available, which are identical except for the depth (front to back). PD-224 frame (24 1/4" deep) unit may be used without an extension desk table as illustrated below.

There are four models of desk panel cabinets suitable for mounting on the pedestal frame top. (PAR-METAL Page 13) to make a complete console. Single or multiple unit consoles may be combined with our Series "PL" racks.

The PD-234 frame (34 1/4" deep) forms a complete desk structure without the use of extension shelves. When one of our desk panel cabinets is mounted on top, additional space is available in front as a desk writing surface. The 34 1/4" depth provides additional interior space, and may also be assembled with our Series "PL" cabinet racks to perform the same functions as our PD-224 (24 1/4" deep) pedestal frame. Unit assemblies are not limited to triple units, and may be extended to modular groups of four or more. If you have a specific problem, do not hesitate to consult us. Personalized and interested engineering assistance is always available.

The new side panels are readily detachable from the outside. No drilling or fitting is necessary for the assembly of pedestals, cabinets, brackets, shelves or drawers. All panel mounting holes are tapped for screws — no metal screws or clips are used.

Our standard finish is a combination of light and dark grey hammertone enamel. Your desk requirements are easily selected from the group charts on the next page. For the turret, you may choose from four types of control cabinets listed on PAR-METAL Page 13. Other standard finishes, including black or blue grey wrinkle enamel, light grey or medium grey enamel or primer coat only, are optional without additional cost.



This is an interior view of our No. HS-103 high slope panel cabinet. Note the rigid bracing and well ventilated individual rear doors. This construction is typical of all panel control cabinets listed on Par-Metal Page 13.

PAR-METAL COMPONENT GROUP CHECK LISTS

The group charts below list all necessary and alternate components for single, double, and triple unit assemblies, and also provides a check list to determine your exact requirements. There are four models of desk panel cabinets specially designed to fit on the top of the assemblies detailed below. For simplicity, they have been omitted; for a complete description see Par-Metal Page 13. All of the 19" wide panels listed on Par-Metal Pages 18 and 19 may be mounted on these assemblies. Refer to Par-Metal Page 8 for sliding drawers shown in the illustrations on Page 9. Other component parts suitable for use with these assemblies are shown on Par-Metal Pages 11 and 12.

FOR SINGLE UNIT ASSEMBLIES

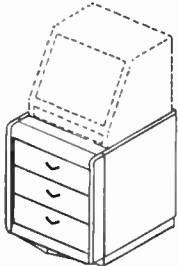


FIGURE "A" AS ABOVE
FIGURE "B" (LESS TOP CABINET)

PARTS REQUIRED

| | |
|----------------------------|----|
| Pedestal Frame | 11 |
| Exterior Side Panel | 11 |
| Extension Desk Table | 12 |
| Formica Table Top | 12 |

*Table top not required.

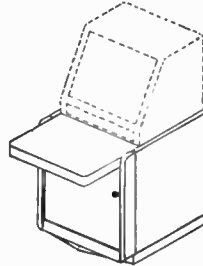


FIGURE "C" AS ABOVE
FIGURE "D" (LESS TOP CABINET)

| Par-Metal Page No. | Quant. | Fig. "A" | Fig. "B" |
|--------------------|--------|----------|----------|
| 11 | 1 | PD-224 | PD-224 |
| 11 | 2 | EP-24 | EP-24 |
| 12 | 1 | * | WT-241 |

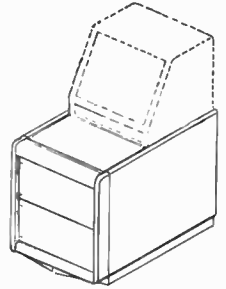


FIGURE "E" AS ABOVE
FIGURE "F" (LESS TOP CABINET)

| Fig. "C" | Fig. "D" | Fig. "E" | Fig. "F" |
|----------|----------|----------|----------|
| PD-224 | PD-224 | PD-234 | PD-234 |
| EP-24 | EP-24 | EP-34 | EP-34 |
| CT-119 | CT-119 | HT-341 | WT-341 |
| * | NT-241 | | |

FOR DOUBLE UNIT ASSEMBLIES

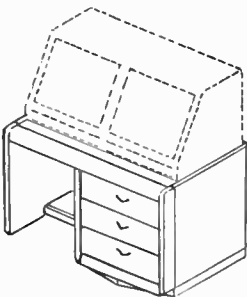


FIGURE "G" AS ABOVE
FIGURE "H" (LESS TOP CABINET)

PARTS REQUIRED

| | |
|-----------------------------|----|
| Pedestal Frame | 11 |
| End Pedestal Assembly | 11 |
| Exterior Side Panel | 11 |
| Interior Side Panel | 11 |
| Extension Desk Table | 12 |
| Formica Table Top | 12 |

*Table top not required

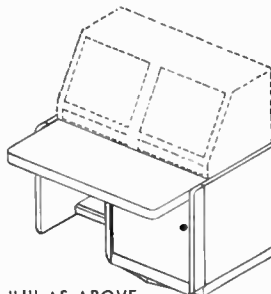


FIGURE "J" AS ABOVE
FIGURE "K" (LESS TOP CABINET)

| Par-Metal Page No. | Quant. | Fig. "G" | Fig. "H" |
|--------------------|--------|----------|----------|
| 11 | 1 | PD-224 | PD-224 |
| 11 | 1 | DU-24 | DU-24 |
| 11 | 1 | EP-24 | EP-24 |
| 11 | 1 | KP-24 | KP-24 |
| 12 | 1 | * | WT-242 |

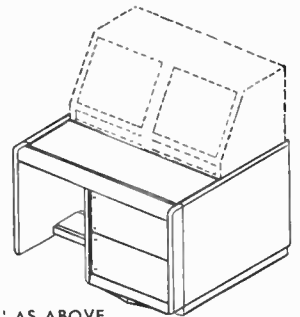


FIGURE "L" AS ABOVE
FIGURE "M" (LESS TOP CABINET)

| Fig. "J" | Fig. "K" | Fig. "L" | Fig. "M" |
|----------|----------|----------|----------|
| PD-224 | PD-224 | PD-234 | PD-234 |
| DU-24 | DU-24 | DU-34 | DU-34 |
| EP-24 | EP-24 | EP-34 | EP-34 |
| KP-24 | KP-24 | KP-34 | KP-34 |
| CT-219 | CT-219 | HT-342 | WT-342 |
| * | NT-242 | | |

FOR TRIPLE UNIT ASSEMBLIES

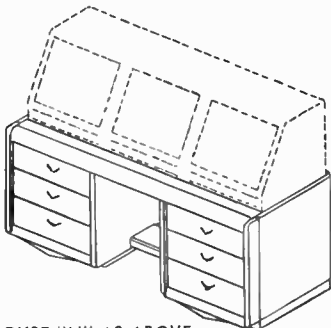


FIGURE "N" AS ABOVE
FIGURE "O" (LESS TOP CABINET)

PARTS REQUIRED

| | |
|----------------------------|----|
| Pedestal Frames | 11 |
| Center Desk Section | 11 |
| Exterior Side Panels | 11 |
| Interior Side Panels | 11 |
| Extension Desk Table | 12 |
| Formica Table Top | 12 |

*Table top not required

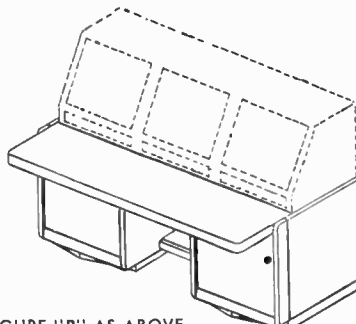


FIGURE "P" AS ABOVE
FIGURE "R" (LESS TOP CABINET)

| Par-Metal Page No. | Quant. | Fig. "N" | Fig. "O" |
|--------------------|--------|----------|----------|
| 11 | 2 | PD-224 | PD-224 |
| 11 | 1 | CD-24 | CD-24 |
| 11 | 2 | EP-24 | EP-24 |
| 11 | 2 | KP-24 | KP-24 |
| 12 | 1 | * | WT-243 |

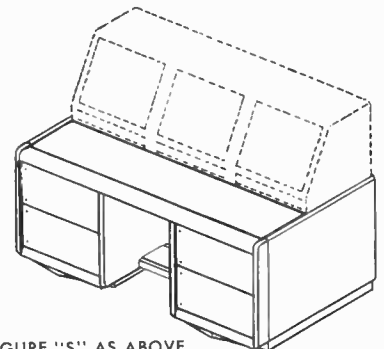
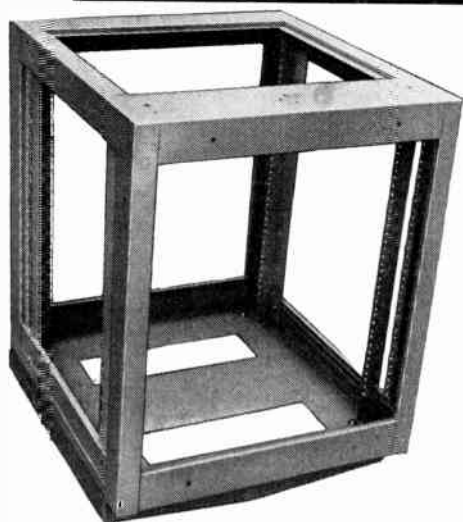


FIGURE "S" AS ABOVE
FIGURE "T" (LESS TOP CABINET)

| Fig. "P" | Fig. "R" | Fig. "S" | Fig. "T" |
|----------|----------|----------|----------|
| PD-224 | PD-224 | PD-234 | PD-234 |
| CD-24 | CD-24 | CD-34 | CD-34 |
| EP-24 | EP-24 | EP-34 | EP-34 |
| KP-24 | KP-24 | KP-34 | KP-34 |
| CT-319 | CT-319 | HT-343 | WT-343 |
| * | NT-243 | | |

PAR-METAL DE LUXE CONSOLE ASSEMBLIES



Cat. No. PD-224

The various units required to make up complete assemblies are listed on Par-Metal Pages 11, 12, and 13. The component check lists on Par-Metal Page 10 enables you to easily select the parts required. Pedestal frames may be obtained as standard units with heavy duty casters at a nominal additional cost. See listing and description on Par-Metal Page 12.

CATALOG NO. PD-224 (24 $\frac{1}{4}$ " deep)

- Overall Dimensions (with side panels, front and rear trim) 30" high, 24 $\frac{1}{2}$ " wide, 25 $\frac{3}{8}$ " deep.
- Overall dimensions (less side panels, front and rear trim) 29" high, 22" wide, 24 $\frac{1}{4}$ " deep.
- Height of pedestal rack (less step base): 26 $\frac{1}{2}$ "
- Panel Mounting Space: Front and Back: 21" x 19" wide.
- Clear opening at front and back: 19 $\frac{1}{8}$ "
- Clear opening between panel mounting angles: 17 $\frac{3}{4}$ "
- Clear opening at left and right: 17 $\frac{5}{8}$ " wide, 21" high
- Clear inside depth (front to back): 23 $\frac{1}{8}$ "
- *Suitable for standard rack panel 19" wide, 21" high (if needed).

NET PRICE \$80.00

CENTER DESK SECTION (For Triple Unit Assemblies)



The center desk section shown is attached between two rack pedestals to make up a triple unit assembly. It consists of a table top support and floor brace illustrated on Par-Metal Page 10. The formica table top is not included in prices of center desk sections.

Sections are finished to match color of pedestal frames, unless otherwise ordered. Both Center Desk Sections are 1 $\frac{3}{8}$ " high and 22" wide.

| Cat. No. | For assembly with | Front to back | Net Price |
|----------|-------------------|--------------------|-----------|
| CD-24 | Pedestal PD-224 | 25 $\frac{3}{8}$ " | \$16.80 |
| CD-34 | Pedestal PD-234 | 35 $\frac{3}{8}$ " | 19.80 |

RACK PEDESTAL FRAMES

The rack pedestal is the principal component used in all single and multiple unit assemblies. It combines the essential features of our type "PL" racks listed on Par-Metal Page 4 and is attractively styled for any environment.

The bottom and step base are formed from $\frac{7}{16}$ " steel; all other parts are made from $\frac{1}{16}$ " steel. They are substantially welded together to insure the extra strength and stability needed for heavy duty installation, wherever located. They are capable of carrying heavy transformers, large power supplies, motors, compressors, and similar apparatus.

Panel space at front and back is 21" x 19". Panel mounting angles (or "strips") may be located at any position from front to back, and have tapped holes for mounting standard rack panels, sliding shelves, phono drawers, or storage drawers. Two pairs are supplied — one pair for front mounting and another pair for rear mounting. Additional tapped holes are available at the sides for mounting chassis supports and shelves.

FINISHES: Standard finish is a combination of light and dark grey hammertone enamel. Other optional finishes are listed on Par-Metal Page 9. We will be happy to answer any questions regarding dimensional information, construction details, etc. Write for assistance.

CATALOG NO. PD-234 (34 $\frac{1}{4}$ " deep)

- Overall Dimensions (with side panels, front and rear trim) 30" high, 24 $\frac{1}{2}$ " wide, 35 $\frac{3}{8}$ " deep.
- Overall Dimensions (less side panels, front and rear trim) 29" high, 22" wide, 34 $\frac{1}{4}$ " deep.
- Height of pedestal rack (less step base): 26 $\frac{1}{2}$ "
- Panel Mounting Space: Front and Back: 21" high x 19" wide.
- Clear opening at front and back: 19 $\frac{1}{8}$ "
- Clear opening between panel mounting angles: 17 $\frac{3}{4}$ "
- *Clear opening at left and right side: 22 $\frac{3}{8}$ " wide, 21" high.
- Clear inside depth (front to back): 33 $\frac{1}{8}$ "
- *Suitable for standard rack panel 24" wide, 19" high (if needed).

NET PRICE \$95.00

DETACHABLE SIDE PANELS

All panels are made from 1/16" sheet steel. All corners are securely welded and ground smooth. Each panel has cowl fasteners at top and bottom, so that they may be quickly removed to provide complete access to the interior of the pedestals.

Prices include front horizontal mouldings on pedestal frames. Panels are finished to match color of pedestal frames, unless otherwise ordered.

| Cat. No. | Description | To fit Pedestal | For use on | Net Price |
|----------|---------------------|-----------------|----------------|-----------|
| EP-24 | Exterior side panel | PD-224 | All assemblies | \$20.00 |
| KP-24 | Interior side panel | PD-224 | " " | 17.50 |
| EP-34 | Exterior side panel | PD-234 | " " | 25.00 |
| KP-34 | Interior side panel | PD-234 | " " | 20.00 |

END PEDESTAL (For Double Unit Assemblies)

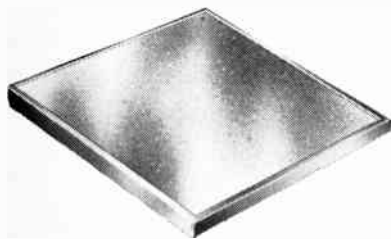
This end pedestal is designed to make up a double unit assembly as illustrated on Par-Metal Pages 9 and 10. It may be installed on either the right or left hand side of the pedestal frame.

The formica table top is not included in prices listed below. Will be finished to match pedestal frame, unless otherwise ordered. Both End Pedestals are 30" in height.

| Cat. No. | For assembly with | Front to back | Net Price |
|----------|-------------------|--------------------|-----------|
| DU-24 | Pedestal PD-224 | 25 $\frac{3}{8}$ " | \$38.50 |
| DU-34 | Pedestal PD-234 | 35 $\frac{3}{8}$ " | 15.00 |

PAR-METAL DE LUXE CONSOLE ASSEMBLIES

FORMICA BONDED TABLE TOPS



These table tops are made from 3/4" thick plywood to which is bonded 1/16" thick patterned grey formica. All sizes are edged with a narrow stainless steel moulding to prevent pencils and similar objects from rolling off the table. There are no metal spacers between units, providing a clear unobstructed writing surface across the entire top.

The table top required for any particular assembly may be easily identified from the check list of component groups on Par-Metal Page 10. The listings below are a cross reference and also include prices.

For Use on No. PD-224 Pedestal Frames (24 1/4" deep)

| Catalog No. | Size | Assembly | Refer to: Figure | Por-Metal Page No. | Net Price |
|-------------|---------------|----------------------|------------------|--------------------|-----------|
| WT-241 | 21 7/8" x 22" | Single Unit Assembly | "B" | 10 | \$15.60 |
| NT-241 | 18 7/8" x 22" | Single Unit Assembly | "D" | 10 | 14.20 |
| WT-242 | 21 7/8" x 44" | Double Unit Assembly | "H" | 10 | 30.00 |
| NT-242 | 18 7/8" x 44" | Double Unit Assembly | "K" | 10 | 25.40 |
| WT-243 | 21 7/8" x 66" | Triple Unit Assembly | "O" | 10 | 45.00 |
| NT-243 | 18 7/8" x 66" | Triple Unit Assembly | "R" | 10 | 39.00 |

For Use on No. PD-234 Pedestal Frames (34 1/4" deep)

| Catalog No. | Size | Assembly | Refer to: Figure | Por-Metal Page No. | Net Price |
|-------------|---------------|----------------------|------------------|--------------------|-----------|
| HT-341 | 12 3/8" x 22" | Single Unit Assembly | "E" | 10 | \$11.20 |
| WT-341 | 31 7/8" x 22" | Single Unit Assembly | "F" | 10 | 23.40 |
| HT-342 | 12 3/8" x 44" | Double Unit Assembly | "L" | 10 | 18.20 |
| WT-342 | 31 7/8" x 44" | Double Unit Assembly | "M" | 10 | 46.00 |
| HT-343 | 12 3/8" x 66" | Triple Unit Assembly | "S" | 10 | 26.00 |
| WT-343 | 31 7/8" x 66" | Triple Unit Assembly | "T" | 10 | 68.00 |

EXTENSION DESK TABLES



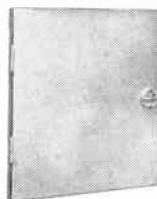
These extension tables are used in console assemblies illustrated on Par-Metal Pages 9 and 10. They are made from 3/4" thick plywood, to which is bonded 1/16" thick grey formica.

The formica covers both the top and apron of the table which is 2-1/2" deep. The apron is substantially reinforced for fastening to horizontal channel supports. The assembly provides a rugged structure with a smooth writing space across the entire top.

There are no metal parts exposed, and no metal surfaces to deteriorate with constant usage. As these tables are mounted above the front panels on the pedestal frame, the full front panel space of 21" may be used.

| Cat. No. | For use on Assemblies | Overall Size | Net Price |
|----------|-----------------------|--------------------|-----------|
| CT-119 | Single Unit | 16" x 22" x 2 1/2" | \$36.00 |
| CT-219 | Double Unit | 16" x 44" x 2 1/2" | 68.00 |
| CT-319 | Triple Unit | 16" x 66" x 2 1/2" | 96.00 |

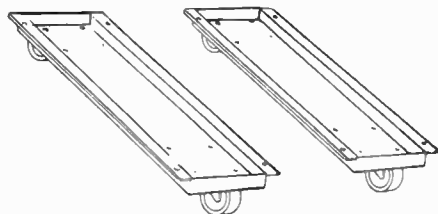
PEDESTAL FRAME DOORS



These doors are made to enclose the front or back of pedestal frames. They are "double wall" type with smooth surfaces inside and outside. A push button spring catch provides easy operation with a minimum projection from the front of the door.

They are made in two heights: 21" high to completely enclose the front opening of the pedestal, with a 10 1/2" high door, which may be inserted above or below a sliding drawer or rack panel. They can be supplied to match finish of console assembly, or any finish listed on Par-Metal Page 9.

| Cat. No. | For assembly with Pedestal | Size | Net Price |
|----------|----------------------------|---------------|-----------|
| DR-1019 | No. PD-224 or 234 | 10 1/2" x 19" | \$13.50 |
| DR-2119 | No. PD-224 or 234 | 21" x 19" | 16.50 |



| Cat. No. | For use on | *Net Price |
|----------|---------------------------|------------|
| CA-24 | Pedestal Frame No. PD-224 | \$15.00 |
| CA-34 | Pedestal Frame No. PD-234 | 15.00 |

*Price is for a pair, for installation on one pedestal frame.

PEDESTAL CASTER ASSEMBLIES

These assemblies are made specifically for use on our No. PD-224 and No. PD-234 pedestal frames listed on Par-Metal Page 11. They replace the regular recessed sub-bases, and are used where mobility is required. The caster plates are made from 7/64" thick steel for heavy-duty usage. Casters are equipped with 3" diameter composition wheels, capable of supporting loads of 225 lbs. per wheel.

Where pedestal frames with caster assemblies are required, they will be supplied at an additional cost of \$4.00 per frame. Simply specify on your pedestal frame order "with casters." They may be obtained separately as listed in chart at the left for replacement of recess sub-bases on pedestal frames now in use.

MOUNTING BRACKETS

These brackets may be mounted on each side of the pedestal.

They are slotted to match the Tapped holes in the sides of the pedestal and may be adjusted to any height.



| Cat. No. | To Fit Pedestal | Overall Size | Net Price Per Pair |
|----------|-----------------|-------------------------------|--------------------|
| CB-24 | PD-224 | 2 1/2" x 2 31/32" x 18 13/16" | \$4.20 |
| CB-34 | PD-234 | 2 1/2" x 2 31/32" x 28 13/16" | 5.80 |

SHELVES

These shelves are drilled for assembly with Mounting Brackets CB-24 and CB-34. Both shelves are 17 1/2" wide and 5/8" high.



| Cat. No. | To Fit Brackets | For Pedestal | Depth | Net Price |
|----------|-----------------|--------------|---------|-----------|
| SS-24 | CB-24 | PD-224 | 22 3/4" | \$4.60 |
| SS-34 | CB-34 | PD-234 | 32 3/4" | 6.40 |

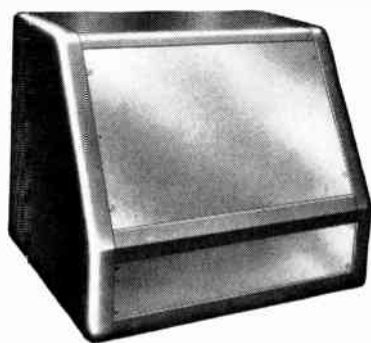
PAR-METAL DE LUXE CONSOLE ASSEMBLIES

DESK PANEL CABINETS

The desk control cabinets shown below are ideal for use in the laboratory, for test equipment and other industrial applications. Each cabinet section is made from $\frac{1}{8}$ " sheet steel, rigidly welded together—ready for use without a multiplicity of clips, studs, nuts and other fastening devices.

Standard finish is dark grey hammertone for cabinets, with contrasting light grey hammertone for panels. Other finishes are available, as listed on Par-Metal Page 9.

Cabinets are regularly supplied with full hinged ventilated doors at the back (except Series LS-101, etc.). Tapped holes are also provided for mounting standard 19" wide panels; panels (blank or ventilated) up to $15\frac{3}{4}$ " high are optional at the same price.



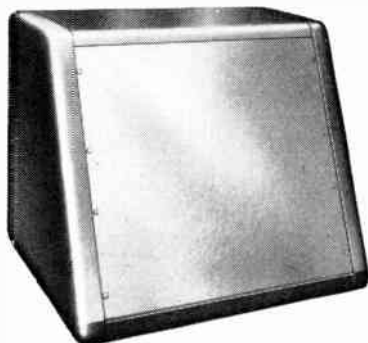
"CX" SERIES

DUAL PANEL DESK CONTROL CABINETS

On Series "CX" cabinets, the upper panel is $12\frac{1}{4}$ " high, and is sloped at an angle of 30° ; the lower vertical panel is $3\frac{1}{2}$ " high. A hinged removable door is mounted on the back, with the hinges at the bottom for easy access to the interior. The door is louvered for efficient ventilation, and held closed with a push-button type spring catch. In double and triple unit cabinets individual doors are used on each unit.

The bottom of the cabinet has a removable panel size $15\frac{3}{4}$ " x 19" for each unit. All panels supplied are the formed type 19" wide (see Par-Metal Page 19). Standard aluminum or steel rack panels, $\frac{1}{8}$ " thick, may be substituted for formed steel panels without additional cost.

| Catalog No. | Description | Height | Width | Depth (at bottom) | Depth (at top) | Net Price |
|-------------|-------------|-------------------|-------|----------------------|-------------------|-----------|
| CX-101 | Single Unit | $18\frac{7}{8}$ " | 22" | $18\frac{7}{8}$ " | $11\frac{5}{8}$ " | \$ 70.00 |
| CX-102 | Double Unit | $18\frac{7}{8}$ " | 44" | $18\frac{7}{8}$ " | $11\frac{5}{8}$ " | 115.00 |
| CX-103 | Triple Unit | $18\frac{7}{8}$ " | 66" | $18\frac{7}{8}$ " | $11\frac{5}{8}$ " | 160.00 |



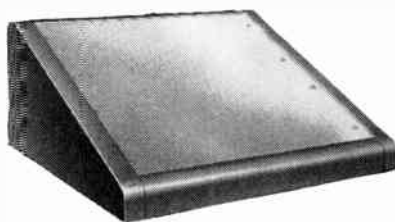
"HS" SERIES

HIGH SLOPE PANEL DESK CABINETS

On Series "HS" cabinets, the front panel size is $17\frac{1}{2}$ " x 19", and is sloped at an angle of 23° . A hinged removable door is mounted on the back, with the hinges at the bottom for easy access to the interior. The door is adequately louvered, and held closed with a push-button type spring catch. In double and triple units, individual doors are used on each unit.

The bottom of the cabinet has a removable panel size $15\frac{3}{4}$ " x 19" for each unit. All panels supplied are the formed type 19" wide (see Par-Metal Page 19). Standard aluminum or steel rack panels, $\frac{1}{8}$ " thick, may be substituted for formed steel panels without additional cost.

| Catalog No. | Description | Height | Width | Depth (at bottom) | Depth (at top) | Net Price |
|-------------|-------------|-------------------|-------|----------------------|-------------------|-----------|
| HS-101 | Single Unit | $18\frac{7}{8}$ " | 22" | $18\frac{7}{8}$ " | $11\frac{5}{8}$ " | \$ 66.50 |
| HS-102 | Double Unit | $18\frac{7}{8}$ " | 44" | $18\frac{7}{8}$ " | $11\frac{5}{8}$ " | 110.00 |
| HS-103 | Triple Unit | $18\frac{7}{8}$ " | 66" | $18\frac{7}{8}$ " | $11\frac{5}{8}$ " | 150.00 |

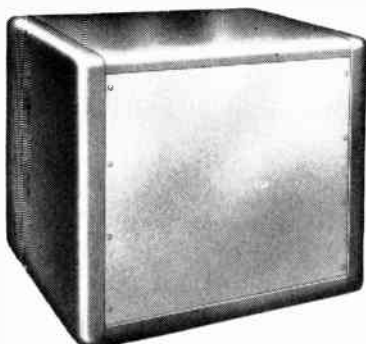


"LS" SERIES

LOW SLOPE PANEL DESK CABINETS

On Series "LS" cabinets, the front panel is $17\frac{1}{2}$ " x 19", and slopes upward at an angle of 23° . The bottom has a removable panel size, $15\frac{3}{4}$ " x 19". Standard aluminum or steel rack panels, $\frac{1}{8}$ " thick, may be substituted for the formed steel panels regularly supplied at no additional cost.

| Catalog No. | Description | Height | Width | Depth | Net Price |
|-------------|-------------|------------------|-------|-------------------|-----------|
| LS-101 | Single Unit | $9\frac{1}{8}$ " | 22" | $18\frac{7}{8}$ " | \$ 40.00 |
| LS-102 | Double Unit | $9\frac{1}{8}$ " | 44" | $18\frac{7}{8}$ " | 70.00 |
| LS-103 | Triple Unit | $9\frac{1}{8}$ " | 66" | $18\frac{7}{8}$ " | 100.00 |



"VF" SERIES

VERTICAL DESK PANEL CABINETS

On Series "VF" cabinets, the vertical front panel, the top panel, and the bottom panel are removable. All have the same size, $15\frac{3}{4}$ " x 19". A hinged removable door is mounted on the back, adequately ventilated with hinges at the bottom for easy access to the interior. The door is held closed with a push-button spring catch; in double and triple units, individual doors are used on each unit.

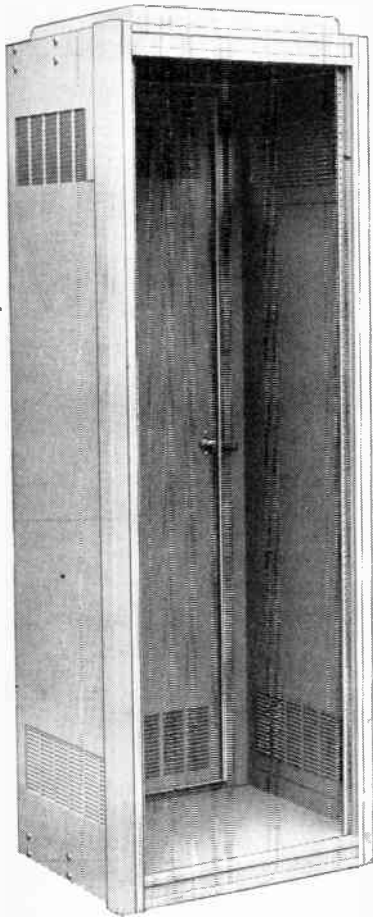
All panels supplied are the formed type 19" wide (see Par-Metal Page 19). Standard aluminum or steel panels, $\frac{1}{8}$ " thick, may be substituted for formed steel panels without additional cost.

| Catalog No. | Description | Height | Width | Depth | Net Price |
|-------------|-------------|-------------------|-------|-------------------|-----------|
| VF-101 | Single Unit | $18\frac{7}{8}$ " | 22" | $18\frac{7}{8}$ " | \$ 55.00 |
| VF-102 | Double Unit | $18\frac{7}{8}$ " | 44" | $18\frac{7}{8}$ " | 100.00 |
| VF-103 | Triple Unit | $18\frac{7}{8}$ " | 66" | $18\frac{7}{8}$ " | 145.00 |

Complete dimensional information on Desk Panel Cabinet Racks including explanatory drawing of side section is available in our Catalog 62. Kindly write directly to home office for personalized and interested engineering assistance.

PAR-METAL TYPE "A" RELAY RACKS

DELUXE TYPE—FOR 19" WIDE PANELS



"ER" SERIES
WITH REAR DOOR ONLY

CABINET: The entire cabinet is made from 1/16" sheet steel. The sides are adequately ventilated with "venetian" type louvers similar to our universal cabinet racks. The vertical corner trims and formed mouldings at top and bottom are designed to effect a distinctive frame around the front of the rack. Racks are shipped "knocked down" for easy assembly.

CORNER TRIMS: All front vertical corner and joining trims are narrow type (do not overlap panels) to permit installation of sliding shelves, drawers, tables, etc.

PANEL MOUNTING: Angle irons are 7/64" thick steel, holes are accurately drilled and tapped 10-32 thread for all types of panels.

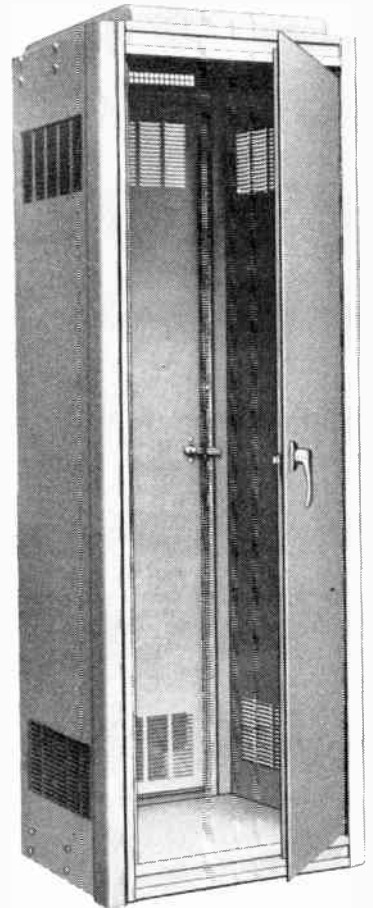
HARDWARE: Doors are the same as our universal racks. "Series ER-225A" racks are equipped with "automobile" type non-locking handles on rear doors. On "Series FD-225A" racks, similar handles with key locks are used on both front and rear doors. Hinges are the "slip-joint" type so that doors may be easily removed.

FINISH: Blue grey wrinkle finish is standard. Black wrinkle enamel finish will be supplied without extra charge if so specified on your order. Grey hammertone enamel is available at an additional charge of 10%.

ROLLER TRUCK: Roller truck No. RT-412 for Series ER-225A racks; use RT-418 for Series FD-225A; both are listed on Par-Metal Page 17.

PANELS: Panels 19" wide to fit these racks are listed on Par-Metal Pages 18 and 19.

SHELVES: For Series ER-225A Racks, use shelf No. ER-2212 listed on Par-Metal Page 21. To install shelves in Series FD-225A, it is recommended that Vertical Side Supports, Brackets and Shelves listed on Par-Metal Page 7 be used.



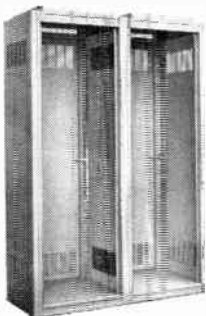
"FD" SERIES
WITH FRONT AND
REAR DOOR

| Catalog No. | Doors | Overall Dimensions | Panel Space | Clear Inside Width (Front) | Clear Inside Width (Rear) | Clear Inside Depth | Shipping Wt. lbs. | Net Price |
|-------------|--------------|--------------------|-------------|----------------------------|---------------------------|--------------------|-------------------|-----------|
| ER-223-A | Rear only | 43¼x22x18" | 36¾x19" | **17½" | 19" | 16¾" | 90 | \$ 52.20 |
| ER-225-A | Rear only | 67¾x22x18" | 61¼x19" | **17½" | 19" | 16¾" | 120 | 64.35 |
| ER-227-A | Rear only | 83½x22x18" | 77 x19" | **17½" | 19" | 16¾" | 140 | 77.70 |
| FD-223-A | Front & Rear | 43¼x22x18" | 36¾x19" | 19½" | 19" | *16" | 110 | 66.90 |
| FD-225-A | Front & Rear | 67¾x22x18" | 61¼x19" | 19½" | 19" | *16" | 150 | 83.10 |
| FD-227-A | Front & Rear | 83½x22x18" | 77 x19" | 19½" | 19" | *16" | 175 | 103.95 |

*clearance between front and rear doors.

**between panel mounting angles.

MULTI-RACK CABINET ASSEMBLIES



MULTI-RACK ASSEMBLY

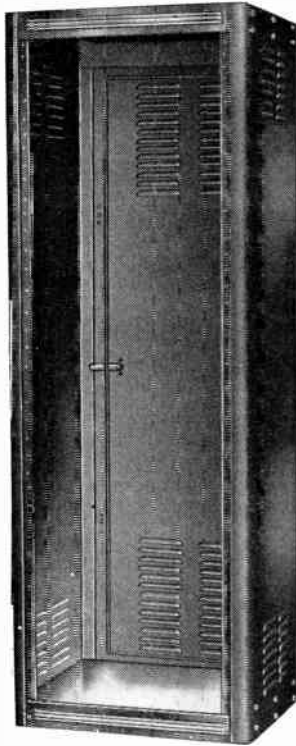
MULTI-RACK ASSEMBLIES: Both Series "ER" and "FD" racks may be set up in rows as shown. The use of "venetian type" louvers provides a flat exterior surface on the sides of the racks; separate side plates with welded screw studs inserted at top and bottom of adjacent sides simplifies the assembly — no screwdrivers or wrenches are needed. Vertical joining trims overlap the joint between racks on the sketch.

SERIES "FD" RACKS: This series with front and rear doors has adjustable panel mounting angles, which may be located at any distance from front to rear of rack. VERTICAL SIDE SUPPORTS listed on Par-Metal Page 7 will fit into these racks.

PAR-METAL PRODUCTS CORP. • Long Island City 3, N. Y.

PAR-METAL TYPE "A" RELAY RACKS

ROUNDED CORNER TYPE—FOR 19" WIDE PANELS



"ER" SERIES
WITH REAR DOOR ONLY

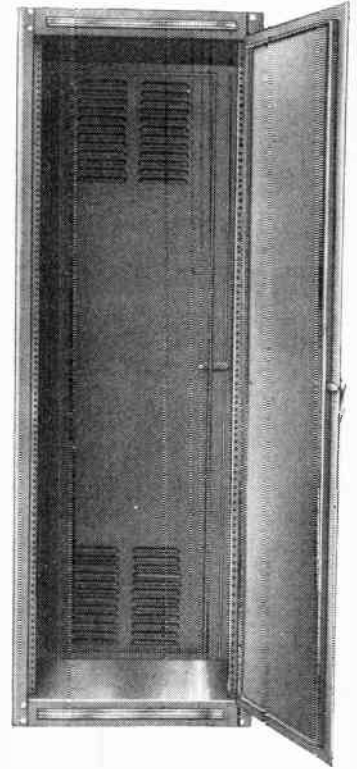
THESE RACKS ARE SIMILAR in construction to our Series ER-225 Racks. They provide a combination of standard functional design and superior construction at a modest price. The vertical front corners are nicely rounded, and the top and bottom are trimmed with chrome finished mouldings. The panels fit into a recess, so that the edges are not exposed.

CABINET: Entire cabinet is constructed of 1/16" thick cold-rolled steel. These racks are shipped "knocked-down" with necessary bolts for easy assembly. Screws for mounting panels are supplied.

PANEL MOUNTING: Angle irons are 7/64" thick steel, holes are accurately drilled and tapped 10-32 thread for all types of panels.

HARDWARE: Doors are of same design as our universal racks. "SERIES ER-215" racks are equipped with "automobile" type non-locking handles on rear doors. On "SERIES FD-215" racks, similar handles with key locks are used on both front and rear doors. Hinges are the "slip-joint" type so that doors may be easily removed.

FRONT DOOR RACKS: On Series FD-215 racks, the front panel mounting angles are recessed 2" deep to allow clearance for dials, etc. The clear inside depth behind the panel is 13½".



"FD" SERIES
WITH FRONT AND REAR DOOR

S P E C I F I C A T I O N S

| Catalog No. | Doors | Overall Dimensions | Panel Space | Clear Inside Depth | Clear Inside Width (Rear) | Clear Inside Width (Front) | Shipping Wt. Lbs. | Net Price |
|-------------|--------------|--------------------|-------------|--------------------|---------------------------|----------------------------|-------------------|-----------|
| ER-213 | Rear only | 42 x22x16½" | 36¾x19" | 15¼" | 19" | **17½" | 85 | \$37.20 |
| ER-215 | Rear only | 66½x22x16½" | 61¼x19" | 15¼" | 19" | **17½" | 110 | 54.90 |
| ER-217 | Rear only | 82¼x22x16½" | 77 x19" | 15¼" | 19" | **17½" | 130 | 66.30 |
| FD-215 | Front & Rear | 66½x22x16½" | 61¼x19" | *13½" | 19" | 19½" | 130 | 73.92 |
| FD-217 | Front & Rear | 82¼x22x16½" | 77 x19" | *13½" | 19" | 19½" | 155 | 89.10 |

*clearance behind panel.

**between panel mounting angles.

FINISH: BLUE GREY RIPPLE is standard. Black Ripple Enamel will be supplied without extra charge if so specified on your order. Grey hammertone enamel is available at an additional cost of 10%.

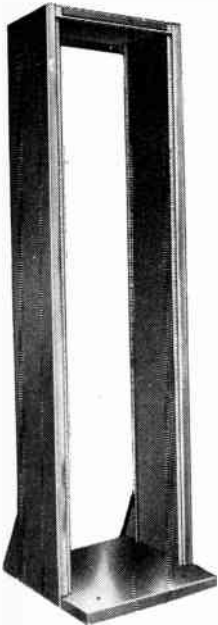
PANELS: Panels 19" wide to fit these racks are listed on Par-Metal Pages 18 and 19.

ROLLER TRUCK: No. RT-411 will fit all racks listed on this page. Roller trucks are listed on Par-Metal Page 17.

SHELVES: For series ER-215 racks, use shelf No. ER-2112. For series FD-215 racks, use shelf No. E-2215. Both shelves are listed on Par-Metal Page 21.

PAR-METAL CHANNEL RELAY RACKS

DELUXE TYPE RACKS for 19" and 24" wide panels



No. RR-197

These DeLuxe Channel Type Relay Racks are made from 7/64" thick steel, and extend the utility and applicability of the standard channel relay rack.

The panel space is 77" x 19", to match a standard height used on enclosed cabinet racks.

The upright channels have been modified to an 8" overall depth, which when combined with a formed recess for the panels, greatly increases the rigidity of the rack. The edges of the panels are not exposed.

The rack is drilled and tapped for 10/32 screws at both front and back, permitting the optional use of either panels, or dish type chassis mounted to the racks at both front and back. The full panel space of 77" x 19" is available on the back, the same as the front.

The clear distance between panel mounting flanges (from front to back) is 6-3/4". It is practicable to use this 6" depth as an enclosure for dish type chassis listed on Par-Metal Page 21.

When such chassis are mounted at the back, the addition of standard or hinged type panels (see Par-Metal 19) will make a rack enclosure with a clear depth of 6-3/4".

The top cross-brace is provided with a grille for ventilation where needed. Two holes are located on each side for bolting racks together in rows; there are no projecting screw heads on the sides.

The top brace and the vertical channel members are securely welded together. The base and rear braces are shipped knocked down, with all necessary bolts for assembly. Panel mounting screws are also supplied.

FINISH: Standard finish is black ripple enamel. For grey ripple enamel, add 5%. For grey hammertone enamel, add 10%.

CATALOG No. RR-197: (for 19" Wide Panels)
Overall Dimensions: 80 3/8" high, 21 1/8" wide, 26" deep
Available Panel Space: 77" x 19" (at front and rear)
Clearance between Uprights: 17 3/4"
Clear Depth in Channel: 6 3/4" inside
Shipping Weight: 100 lbs. Net Price: \$43.50.

CATALOG No. RR-1924: (for 24" Wide Panels)
Overall Dimensions: 80 3/8" high, 26 1/8" wide, 26" deep
Available Panel Space: 77" x 24" (at front and rear)
Clearance between Uprights: 22 5/8"
Clear Depth in Channel: 6 3/4" inside
Shipping Weight: 115 lbs. Net Price \$55.00.

DESK PANEL CABINET RACKS For Standard 19" Rack Panels

In keeping with our other De Luxe racks, the vertical front corners are rounded and the top and bottom are trimmed with chrome finished mouldings. Panels fit into a recess, so that the edges are not exposed. Panel mounting holes are accurately drilled on universal centers, for standard rack panels. Holes are tapped for 10/32 machine screws.

They may be used with any chassis up to 13" x 17" in size. All cabinets are rigidly constructed of 1/16" thick cold rolled sheet steel, with all joints electrically welded. Louvres provide ample ventilation through sides and back. Piano type hinges are used on the top doors, which are provided with chrome plated handles. Panel mounting screws and washers are furnished.

FINISH: BLACK RIPPLE ENAMEL is standard. Blue grey wrinkle enamel will be supplied without extra charge if so specified in your order.

PANELS: Rack panels to fit these racks are listed on Par-Metal Pages 18 and 19.

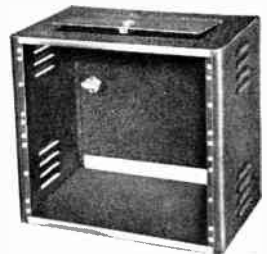
(With door in top only) (not illustrated)

| Catalog No. | Cabinet Size | Available Panel Space | Shp. Wt. Lbs. | Net Price |
|-------------|------------------------------|-----------------------|---------------|-----------|
| DL-128 | 10 1/2" x 21 1/2" x 15" deep | 8 3/4" x 19" | 28 | \$16.20 |
| DL-1210 | 12 1/4" x 21 1/2" x 15" deep | 10 1/2" x 19" | 29 | 17.70 |
| DL-1225 | 14" x 21 1/2" x 15" deep | 12 1/4" x 19" | 30 | 19.20 |
| DL-1413 | 15 3/4" x 21 1/2" x 15" deep | 14" x 19" | 32 | 21.00 |

RACK SHELF: Rack shelf No. R-2128 listed on Par-Metal Page 21 is designed to fit these racks.

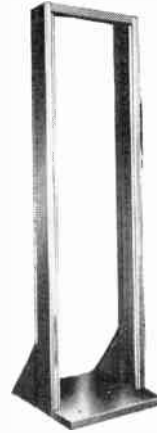
(With door in top and door on rear panel)

| Catalog No. | Cabinet Size | Available Panel Space | Shp. Wt. Lbs. | Net Price |
|-------------|------------------------------|-----------------------|---------------|-----------|
| DL-1713 | 19 1/4" x 21 1/2" x 15" deep | 17 1/2" x 19" | 38 | \$22.80 |
| DL-2613 | 28" x 21 1/2" x 15" deep | 26 1/4" x 19" | 48 | 26.70 |
| DL-3513 | 36 3/4" x 21 1/2" x 15" deep | 35" x 19" | 58 | 29.55 |



No. DL-1713

STANDARD TYPE RACKS for 19" wide panels



No. RX-195

These racks are sturdily constructed from 7/64" pressed steel, and are braced at the back as illustrated. They have been improved by a formed recess for the panels; the edges of the panels are no longer exposed, and the rigidity of the rack has been greatly increased. The two vertical members and the top crossbrace are securely WELDED TOGETHER.

Panel mounting holes are accurately drilled for standard rack panels, tapped for 10-32 machine screws at the front only. An ample supply of panel mounting screws are supplied.

Upright channels are 3" deep with flanges 1 1/8" wide. Clearance between uprights is 17 3/4". Base is 20 7/8" deep and extends both front and rear, and is 21" wide for either unit.

FINISH: Standard finish is black wrinkle. For blue grey wrinkle or grey hammertone enamel add 10%.

| CAT. NO. | OVERALL HEIGHT | PANEL HEIGHT | SH. WT. LBS. | NET PRICE |
|----------|----------------|--------------|--------------|-----------|
| RX-195 | 74 7/16" | 71 3/4" | 55 | \$25.50 |
| RX-193 | 39 7/16" | 36 3/4" | 45 | 21.00 |

PAR-METAL — ROLLER TRUCKS — SHELVES

STANDARD ROLLER TRUCKS FOR RACKS



These trucks are especially designed for use on our Cabinet racks, and have rounded corners at the front with a chrome finished moulding. Overall size is about 2" wider than the racks for better distribution of weight.

Casters are ball-bearing swivel type with 2" rubber composition wheels. **FINISH: BLUE GREY RIPPLE** is standard. Also available in Grey Hammertone at an additional cost of 10%. Shipping weight on all sizes is 22 lbs.

| Catalog No. | Will Fit Rack No. | Par-Metal Rack Page No. | Net Price |
|-------------|---------------------------------------|-------------------------|-----------|
| RT-410 | DL-1713, 2613, 3513 | 16 | \$10.68 |
| RT-411 | ER-213, ER, FD-215, 217 | 15 | 11.19 |
| RT-412 | ER-223, ER-225, ER-227-A | 14 | 12.87 |
| RT-418 | FD-223, 225, 227-A | 14 | 13.65 |
| | PX, FX-3718-A, 4818-A, 6718-A | 6 | |
| | PX, FX-7718-A, 8418-A | 6 | |
| RT-420 | PX, FX-4824-A, 6724-A, 7724-A, 8424-A | 6 | 17.64 |

HEAVY DUTY ROLLER TRUCKS



Heavy duty roller trucks are similar in size and design to the standard units, except that they have reinforced bottoms, and are equipped with heavy-duty swivel type casters, and 3" diam. wheels.

Recommended for use on all 24" deep racks, and on other racks where necessary. 3" casters have a load capacity of 225 lbs. per wheel. **FINISH: BLUE GREY RIPPLE** is standard; Black Ripple is optional without extra charge. Also available in Grey Hammertone or primer coat only at an additional cost of 10%. Shipping weight is 35 lbs.

| Catalog No. | Will Fit Rack No. | Par-Metal Rack Page No. | Net Price |
|-------------|-------------------------------|-------------------------|-----------|
| HD-412 | ER-223, ER-225, ER-227-A | 14 | \$22.00 |
| HD-418 | FD-223, FD-225, FD-227-A | 14 | 24.00 |
| | PX, FX-3718-A, 4818-A, 6718-A | 6 | |
| | PX, FX-7718-A, 8418-A | 6 | |
| HD-420 | PX, FX-4824-A, 6724-A | 6 | 25.40 |
| | PX, FX-7724-A, 8424-A | 6 | |
| *HD-425 | PL, FL, PR, FR-4818-A, 6718-A | 4 and 5 | 25.60 |
| | PL, FL, PR, FR-7718-A, 8418-A | 4 and 5 | |
| *HD-426 | PL, FL, PR, FR-4824-A, 6724-A | 4 and 5 | 28.30 |
| | PL, FL, PR, FR-7724-A, 8424-A | 4 and 5 | |
| HD-427 | PX, FX-4827-A, 6727-A | 6 | 28.60 |
| | PX, FX-7727-A, 8427-A | 6 | |
| *HD-432 | PL, FL, PR, FR-4827-A, 6727-A | 4 and 5 | 31.10 |
| | PL, FL, PR, FR-7727-A, 8427-A | 4 and 5 | |
| HD-434 | PX, FX-6733-A, 7733-A, 8433-A | 6 | 35.50 |
| *HD-438 | PL, FL, PR, FR-6733-A, 7733-A | 4 and 5 | 38.60 |
| | PL, FL, PR, FR-8433-A | 4 and 5 | |

* For racks with detachable side panels attached to racks.

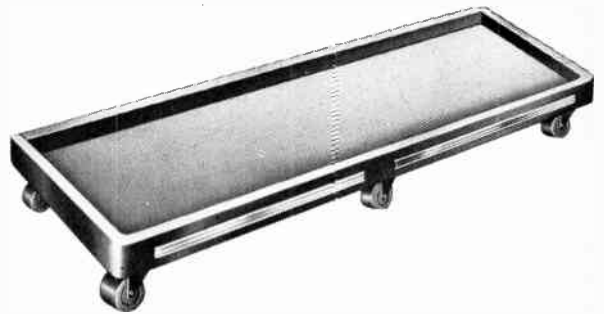
TABLE TYPE RACKS



THESE RACKS are intended for table mounting and are useful where a regular floor type heavy duty rack is not required. The base is constructed of one piece, similar to a chassis. Mounting holes are accurately drilled on universal centers, tapped for 10/32 screws. They are finished in black ripple enamel and shipped "knocked down" with all necessary screws.

| Cat. No. | Overall Size | Panel Space | Shp. Wt. Lbs. | Net Price |
|----------|--------------|-------------|---------------|-----------|
| TR-2520 | 24x21x12" | 21x19" | 17 | \$8.70 |
| TR-3220 | 31x21x12" | 28x19" | 20 | 9.90 |

HEAVY DUTY DOUBLE WIDTH ROLLER TRUCKS



It is often necessary to mount groups of 2 of our enclosed racks on roller trucks. The truck illustrated above is used for that purpose. They are similar to our heavy duty trucks except that they have been reinforced with heavier steel because of their greater length.

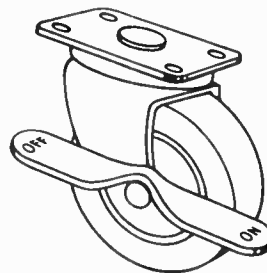
They are supplied with 6 heavy-duty swivel type casters with 3" diameter wheels. These casters have a load capacity of 225 lbs. per wheel.

FINISH: BLUE GREY RIPPLE is standard; Black Ripple is optional without extra charge. Also available in Grey Hammertone or primer coat only at an additional cost of 10%.

| Catalog No. | Will Fit Rack No. | Par-Metal Rack Page No. | Net Price |
|-------------|-------------------------------|-------------------------|-----------|
| HD-412-2 | ER-223, ER-225, ER-227-A | 14 | \$44.00 |
| HD-418-2 | FD-223, FD-225, FD-227-A | 14 | 48.00 |
| | PX, FX-3718-A, 4818-A, 6718-A | 6 | |
| | PX, FX-7718-A, 8418-A | 6 | |
| HD-420-2 | PX, FX-4824-A, 6724-A | 6 | 50.80 |
| | PX, FX-7724-A, 8424-A | 6 | |
| *HD-425-2 | PL, FL, PR, FR-4818-A, 6718-A | 4 and 5 | 51.20 |
| | PL, FL, PR, FR-7718-A, 8418-A | 4 and 5 | |
| *HD-426-2 | PL, FL, PR, FR-4824-A, 6724-A | 4 and 5 | 56.60 |
| | PL, FL, PR, FR-7724-A, 8424-A | 4 and 5 | |
| HD-427-2 | PX, FX-4827-A, 6727-A | 6 | 57.20 |
| | PX, FX-7727-A, 8427-A | 6 | |
| *HD-432-2 | PL, FL, PR, FR-4827-A, 6727-A | 4 and 5 | 62.20 |
| | PL, FL, PR, FR-7727-A, 8427-A | 4 and 5 | |
| HD-434-2 | PX, FX-6733-A, 7733-A, 8433-A | 6 | 71.00 |
| *HD-438-2 | PL, FL, PR, FR-6733-A, 7733-A | 4 and 5 | 77.20 |
| | PL, FL, PR, FR-8433-A | 4 and 5 | |

* For racks with detachable side panels attached to racks.

BRAKE TYPE CASTERS



During the past few years, the use of brakes on roller trucks has become desirable both as a utility and safety measure. This is particularly true where racks have been loaded to capacity with heavy equipment.

We now have available foot brake type casters as illustrated for use on all heavy duty roller trucks. Brake type casters are supplied to replace the two front casters of single roller trucks and to replace the three front casters of double roller trucks. Additional cost per roller truck is as follows:

| | |
|--|---------|
| For single units (HD-412, etc.)..... | \$ 8.50 |
| For double units (HD-412-2, etc.)..... | 12.75 |

WE CAN SUPPLY ON A "SEMI-CUSTOM" BASIS pressed steel roller trucks for our cabinet racks up to 36" wide and 88" long. They can be equipped with 4" dia. wheel casters and necessary foot brakes. The extra width is used in front of the rack assembly to provide stability where extension shelves and other accessories are mounted on the front of the racks. Drawings and prices available upon request

PAR-METAL RACK PANELS 19"-24"-30" WIDE

All panels on this page are uniformly slotted to fit universal cabinet racks and all type "A" racks. They will also fit any other rack equipment having multiple 1 $\frac{1}{4}$ "-1 $\frac{1}{2}$ " spacings or what is commonly termed as W.E. spacing.

IN ADDITION TO FINISHES LISTED BELOW, THEY MAY BE OBTAINED IN LIGHT GREY EQUIPMENT ENAMEL, OR MEDIUM GREY ENAMEL, PRIMER COAT ONLY SUPPLIED AT SAME PRICE AS GREY HAMMERTONE ENAMEL.

STANDARD STEEL BLANK PANELS 1/8" STEEL



Standard flat panels made from 1/8" thick steel, either 19", 24", or 30" wide. Other finishes available as mentioned in page heading.

19" WIDE PANELS — 1/8" STEEL

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------------|--------------------------|-----------|
| 6600 | G-6600 | \$.81 | 1 $\frac{3}{4}$ " | H-6600 | \$.87 |
| 6601 | G-6601 | 1.02 | 3 $\frac{1}{2}$ " | H-6601 | 1.11 |
| 6602 | G-6602 | 1.29 | 5 $\frac{1}{4}$ " | H-6602 | 1.41 |
| 6603 | G-6603 | 1.56 | 7" | H-6603 | 1.71 |
| 6604 | G-6604 | 1.86 | 8 $\frac{3}{4}$ " | H-6604 | 2.04 |
| 6605 | G-6605 | 2.10 | 10 $\frac{1}{2}$ " | H-6605 | 2.31 |
| 6606 | G-6606 | 2.49 | 12 $\frac{1}{4}$ " | H-6606 | 2.73 |
| 6607 | G-6607 | 2.89 | 14" | H-6607 | 3.18 |
| 6608 | G-6608 | 3.24 | 15 $\frac{3}{4}$ " | H-6608 | 3.54 |
| 6609 | G-6609 | 3.60 | 17 $\frac{1}{2}$ " | H-6609 | 3.96 |
| 6610 | G-6610 | 3.98 | 19 $\frac{1}{4}$ " | H-6610 | 4.38 |
| 6611 | G-6611 | 4.29 | 21" | H-6611 | 4.71 |

24" WIDE PANELS — 1/8" STEEL

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------------|--------------------------|-----------|
| 6201 | G-6201 | \$1.38 | 3 $\frac{1}{2}$ " | H-6201 | \$1.52 |
| 6202 | G-6202 | 1.77 | 5 $\frac{1}{4}$ " | H-6202 | 1.95 |
| 6203 | G-6203 | 2.16 | 7" | H-6203 | 2.38 |
| 6204 | G-6204 | 2.76 | 8 $\frac{3}{4}$ " | H-6204 | 3.04 |
| 6205 | G-6205 | 3.15 | 10 $\frac{1}{2}$ " | H-6205 | 3.47 |
| 6206 | G-6206 | 3.57 | 12 $\frac{1}{4}$ " | H-6206 | 3.93 |
| 6207 | G-6207 | 4.35 | 14" | H-6207 | 4.79 |
| 6208 | G-6208 | 4.95 | 15 $\frac{3}{4}$ " | H-6208 | 5.45 |
| 6209 | G-6209 | 5.40 | 17 $\frac{1}{2}$ " | H-6209 | 5.94 |
| 6210 | G-6210 | 6.09 | 19 $\frac{1}{4}$ " | H-6210 | 6.70 |
| 6211 | G-6211 | 6.60 | 21" | H-6211 | 7.26 |

30" WIDE PANELS — 1/8" STEEL

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------------|--------------------------|-----------|
| 6301 | G-6301 | \$2.10 | 3 $\frac{1}{2}$ " | H-6301 | \$2.31 |
| 6302 | G-6302 | 2.55 | 5 $\frac{1}{4}$ " | H-6302 | 2.81 |
| 6303 | G-6303 | 3.00 | 7" | H-6303 | 3.30 |
| 6304 | G-6304 | 3.60 | 8 $\frac{3}{4}$ " | H-6304 | 3.96 |
| 6305 | G-6305 | 3.99 | 10 $\frac{1}{2}$ " | H-6305 | 4.39 |
| 6306 | G-6306 | 4.71 | 12 $\frac{1}{4}$ " | H-6306 | 5.18 |
| 6307 | G-6307 | 5.37 | 14" | H-6307 | 5.91 |
| 6308 | G-6308 | 6.00 | 15 $\frac{3}{4}$ " | H-6308 | 6.60 |
| 6309 | G-6309 | 6.72 | 17 $\frac{1}{2}$ " | H-6309 | 7.39 |
| 6310 | G-6310 | 7.44 | 19 $\frac{1}{4}$ " | H-6310 | 8.18 |
| 6311 | G-6311 | 8.16 | 21" | H-6311 | 8.98 |

STANDARD ALUMINUM BLANK PANELS

These aluminum panels are made from No. 3003-H14 aluminum alloy, caustic etched for proper paint adhesion. Panels 24" or 30" wide, made from 3/16" aluminum, are available on order.

19" WIDE PANELS — 1/8" ALUMINUM

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------------|--------------------------|-----------|
| 6675 | G-6675 | \$.96 | 1 $\frac{3}{4}$ " | H-6675 | \$1.05 |
| 6676 | G-6676 | 1.35 | 3 $\frac{1}{2}$ " | H-6676 | 1.47 |
| 6677 | G-6677 | 1.86 | 5 $\frac{1}{4}$ " | H-6677 | 2.04 |
| 6678 | G-6678 | 2.37 | 7" | H-6678 | 2.61 |
| 6679 | G-6679 | 2.88 | 8 $\frac{3}{4}$ " | H-6679 | 3.15 |
| 6680 | G-6680 | 3.42 | 10 $\frac{1}{2}$ " | H-6680 | 3.75 |
| 6681 | G-6681 | 3.89 | 12 $\frac{1}{4}$ " | H-6681 | 4.26 |
| 6682 | G-6682 | 4.56 | 14" | H-6682 | 5.01 |
| 6683 | G-6683 | 5.13 | 15 $\frac{3}{4}$ " | H-6683 | 5.64 |
| 6684 | G-6684 | 5.60 | 17 $\frac{1}{2}$ " | H-6684 | 6.15 |
| 6685 | G-6685 | 6.27 | 19 $\frac{1}{4}$ " | H-6685 | 6.90 |
| 6686 | G-6686 | 6.87 | 21" | H-6686 | 7.56 |

24" WIDE PANELS — 1/8" ALUMINUM

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------------|--------------------------|-----------|
| 6276 | G-6276 | \$2.28 | 3 $\frac{1}{2}$ " | H-6276 | \$2.51 |
| 6277 | G-6277 | 3.00 | 5 $\frac{1}{4}$ " | H-6277 | 3.30 |
| 6278 | G-6278 | 3.81 | 7" | H-6278 | 4.19 |
| 6279 | G-6279 | 4.74 | 8 $\frac{3}{4}$ " | H-6279 | 5.21 |
| 6280 | G-6280 | 5.73 | 10 $\frac{1}{2}$ " | H-6280 | 6.30 |
| 6281 | G-6281 | 6.66 | 12 $\frac{1}{4}$ " | H-6281 | 7.33 |
| 6282 | G-6282 | 7.62 | 14" | H-6282 | 8.38 |
| 6283 | G-6283 | 8.58 | 15 $\frac{3}{4}$ " | H-6283 | 9.44 |
| 6284 | G-6284 | 9.54 | 17 $\frac{1}{2}$ " | H-6284 | 10.49 |
| 6285 | G-6285 | 10.47 | 19 $\frac{1}{4}$ " | H-6285 | 11.52 |
| 6286 | G-6286 | 11.40 | 21" | H-6286 | 12.54 |

30" WIDE PANELS — 1/8" ALUMINUM

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------------|--------------------------|-----------|
| 6376 | G-6376 | \$2.73 | 3 $\frac{1}{2}$ " | H-6376 | \$3.00 |
| 6377 | G-6377 | 3.96 | 5 $\frac{1}{4}$ " | H-6377 | 4.36 |
| 6378 | G-6378 | 5.19 | 7" | H-6378 | 5.71 |
| 6379 | G-6379 | 6.42 | 8 $\frac{3}{4}$ " | H-6379 | 7.06 |
| 6380 | G-6380 | 7.65 | 10 $\frac{1}{2}$ " | H-6380 | 8.42 |
| 6381 | G-6381 | 8.88 | 12 $\frac{1}{4}$ " | H-6381 | 9.77 |
| 6382 | G-6382 | 10.11 | 14" | H-6382 | 11.12 |
| 6383 | G-6383 | 11.34 | 15 $\frac{3}{4}$ " | H-6383 | 12.47 |
| 6384 | G-6384 | 12.57 | 17 $\frac{1}{2}$ " | H-6384 | 13.83 |
| 6385 | G-6385 | 13.80 | 19 $\frac{1}{4}$ " | H-6385 | 15.18 |
| 6386 | G-6386 | 15.00 | 21" | H-6386 | 16.50 |

19" WIDE PANELS — 3/16" ALUMINUM

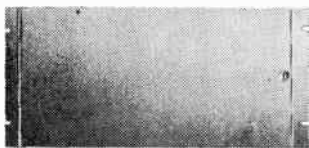
| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------------|--------------------------|-----------|
| 6675-3 | G-6675-3 | \$1.65 | 1 $\frac{3}{4}$ " | H-6675-3 | \$1.74 |
| 6676-3 | G-6676-3 | 2.28 | 3 $\frac{1}{2}$ " | H-6676-3 | 2.40 |
| 6677-3 | G-6677-3 | 3.36 | 5 $\frac{1}{4}$ " | H-6677-3 | 3.54 |
| 6678-3 | G-6678-3 | 4.14 | 7" | H-6678-3 | 4.38 |
| 6679-3 | G-6679-3 | 5.16 | 8 $\frac{3}{4}$ " | H-6679-3 | 5.43 |
| 6680-3 | G-6680-3 | 6.18 | 10 $\frac{1}{2}$ " | H-6680-3 | 6.51 |
| 6681-3 | G-6681-3 | 7.20 | 12 $\frac{1}{4}$ " | H-6681-3 | 7.59 |
| 6682-3 | G-6682-3 | 8.22 | 14" | H-6682-3 | 8.64 |
| 6683-3 | G-6683-3 | 9.30 | 15 $\frac{3}{4}$ " | H-6683-3 | 9.78 |
| 6684-4 | G-6684-3 | 10.35 | 17 $\frac{1}{2}$ " | H-6684-3 | 10.89 |
| 6685-3 | G-6685-3 | 11.40 | 19 $\frac{1}{4}$ " | H-6685-3 | 12.00 |
| 6686-3 | G-6686-3 | 12.60 | 21" | H-6686-3 | 13.26 |

PAR-METAL RACK PANELS 19" & 24" WIDE

(FOR FURTHER DESCRIPTION, SEE PRECEDING PAGE)

SIDE HINGED BLANK PANELS

1/8" STEEL 19" WIDE



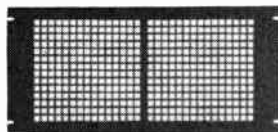
These door panels are made from 1/8" steel, hinged at the sides with a cowl type fastener to hold the door closed.

May be mounted on racks with hinges on right or left side. Clear opening (width) is 15 3/4".

Standard finishes are black wrinkle, blue grey wrinkle, or smooth grey hammertone enamel. Primer coat only is available at hammertone price.

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------|--------------------------|-----------|
| HP-350 | GP-350 | \$3.15 | 3 1/2" | HA-350 | \$3.37 |
| HP-525 | GP-525 | 3.27 | 5 1/4" | HA-525 | 3.60 |
| HP-700 | GP-700 | 3.57 | 7" | HA-700 | 3.93 |
| HP-875 | GP-875 | 3.84 | 8 3/4" | HA-875 | 4.22 |
| HP-1050 | GP-1050 | 4.14 | 10 1/2" | HA-1050 | 4.56 |
| HP-1225 | GP-1225 | 4.41 | 12 1/4" | HA-1225 | 4.85 |
| HP-1400 | GP-1400 | 4.77 | 14" | HA-1400 | 5.25 |
| HP-1750 | GP-1750 | 6.90 | 17 1/2" | HA-1750 | 7.59 |
| HP-2100 | GP-2100 | 7.50 | 21" | HA-2100 | 8.25 |

GRILLE PANELS 19" WIDE — 1/8" STEEL



This modern type ventilating grille panel is stamped into the panel itself; it is not a pieced assembly.

| Black Wrinkle Cat. No. | Grey Wrinkle Cat. No. | Net Price | Panel Size | Grille Size | Grey Hammertone Cat. No. | Net Price |
|------------------------|-----------------------|-----------|------------|------------------|--------------------------|-----------|
| P-661 | G-661 | \$2.94 | 5 1/4" | 3 3/8 x 14 3/8" | H-661 | \$3.23 |
| P-662 | G-662 | 3.24 | 7" | 4 3/8 x 14 3/8" | H-662 | 3.56 |
| P-663 | G-663 | 3.87 | 8 3/4" | 6 7/8 x 14 3/8" | H-663 | 4.26 |
| P-664 | G-664 | 3.54 | 8 3/4" | *3 7/8 x 14 3/8" | H-664 | 3.89 |
| P-665 | G-665 | 4.29 | 10 1/2" | 8 3/8 x 14 3/8" | H-665 | 4.72 |
| P-666 | G-666 | 4.02 | 10 1/2" | *5 7/8 x 14 3/8" | H-666 | 4.42 |
| P-667 | G-667 | 4.35 | 12 1/4" | *7 3/8 x 14 3/8" | H-667 | 4.79 |

* Allows 3 1/2" space at bottom for chassis mounting.

STANDARD DESK PANELS

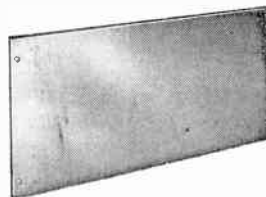
These standard tables are rigidly made of 1/8" thick furniture steel. The rounded front corners are of seamless construction and the flanges of the shelf are folded in to provide smooth edges underneath.



They are securely mounted to regular 1/8" steel panels, size 10 1/2 x 19". They may be obtained in two sizes and finishes as listed below. The tables are 22" wide to give full working space across the front of the racks when mounted in place. Shipping weight is 25 lbs.

| Cat. No. | Width | Depth | Finish | Net Price |
|----------|-------|-------|------------------|-----------|
| BT-2216 | 22" | 16" | Black enamel | \$15.45 |
| GT-2216 | 22" | 16" | Blue Grey enamel | 15.45 |
| HT-2216 | 22" | 16" | Grey Hammertone | 17.00 |
| BT-2220 | 22" | 20" | Black enamel | 16.95 |
| GT-2220 | 22" | 20" | Blue Grey enamel | 16.95 |
| HT-2220 | 22" | 20" | Grey Hammertone | 18.65 |

FORMED BLANK PANELS



These panels are made from 1/8" thick steel, with formed edges to make an overall thickness of 3/16". They are made 19" and 24" wide, with mounting holes on standard centers to fit relay racks.

In addition to standard finishes listed, primer coat only can be supplied at same cost as hammertone enamel.

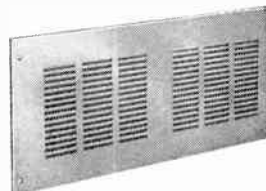
19" WIDE FORMED PANELS — 1/16" STEEL

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------|--------------------------|-----------|
| P-601 | G-601 | \$1.38 | 3 1/2" | H-601 | \$1.52 |
| P-602 | G-602 | 1.56 | 5 1/4" | H-602 | 1.72 |
| P-603 | G-603 | 1.83 | 7" | H-603 | 2.01 |
| P-604 | G-604 | 2.19 | 8 3/4" | H-604 | 2.39 |
| P-605 | G-605 | 2.46 | 10 1/2" | H-605 | 2.71 |
| P-606 | G-606 | 2.88 | 12 1/4" | H-606 | 3.17 |
| P-607 | G-607 | 3.24 | 14" | H-607 | 3.56 |
| P-608 | G-608 | 3.72 | 15 3/4" | H-608 | 4.09 |
| P-609 | G-609 | 4.11 | 17 1/2" | H-609 | 4.52 |
| P-610 | G-610 | 4.53 | 19 1/4" | H-610 | 4.98 |
| P-611 | G-611 | 4.95 | 21" | H-611 | 5.45 |

24" WIDE FORMED PANELS — 1/16" STEEL

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------|--------------------------|-----------|
| P-641 | G-641 | \$1.95 | 3 1/2" | H-641 | \$2.15 |
| P-642 | G-642 | 2.37 | 5 1/4" | H-642 | 2.61 |
| P-643 | G-643 | 2.85 | 7" | H-643 | 3.14 |
| P-644 | G-644 | 3.42 | 8 3/4" | H-644 | 3.76 |
| P-645 | G-645 | 3.78 | 10 1/2" | H-645 | 4.16 |
| P-646 | G-646 | 4.14 | 12 1/4" | H-646 | 4.55 |
| P-647 | G-647 | 4.62 | 14" | H-647 | 5.08 |
| P-648 | G-648 | 5.22 | 15 3/4" | H-648 | 5.74 |
| P-649 | G-649 | 5.82 | 17 1/2" | H-649 | 6.40 |
| P-650 | G-650 | 6.45 | 19 1/4" | H-650 | 7.10 |
| P-651 | G-651 | 7.02 | 21" | H-651 | 7.72 |

19" WIDE FORMED PANELS — 1/16" STEEL VENTILATED TYPE



These are standard formed panels with louvre type ventilation as shown above. Primer coat only available at same price as hammertone. Same panels can be supplied in 24" width if required.

| Black Wrinkle Cat. No. | Blue Grey Wrinkle Cat. No. | Net Price | Panel Height | Grey Hammertone Cat. No. | Net Price |
|------------------------|----------------------------|-----------|--------------|--------------------------|-----------|
| PV-603 | GV-603 | \$3.45 | 7" | HV-603 | \$3.80 |
| PV-604 | GV-604 | 3.90 | 8 3/4" | HV-604 | 4.29 |
| PV-605 | GV-605 | 4.29 | 10 1/2" | HV-605 | 4.72 |
| PV-606 | GV-606 | 4.86 | 12 1/4" | HV-606 | 5.35 |
| PV-608 | GV-608 | 5.70 | 15 3/4" | HV-608 | 6.27 |
| PV-611 | GV-611 | 7.56 | 21" | HV-611 | 8.32 |

PAR-METAL — DESK CABINETS — AMPLIFIER CHASSIS

DELUXE TYPE CABINETS



These cabinets make attractive housings for commercial and amateur use. The formed type door, with modern handle, is hinged at the back for full access to the interior. Chrome finished mouldings are mounted on the front at top and bottom. Cabinet has ventilating louvres on each

side, and full width opening at back for leads, etc. Standard finish is blue grey ripple enamel. Prices do not include chassis which are listed on PAR METAL Page 21.

| Catalog No. | Overall Dimensions | Panel Size | For Chassis | Shp. Wt. Lbs. | Net Price |
|-------------|--------------------------|-----------------------|-------------|---------------|-----------|
| CA-300 | 9x12 $\frac{1}{8}$ x 8" | 8 $\frac{1}{2}$ x10" | 7x 9x2" | 6 | \$ 7.95 |
| CA-301 | 9x16 $\frac{1}{8}$ x 8" | 8 $\frac{1}{2}$ x14" | 7x13x2" | 7 | 9.00 |
| CA-302 | 10x17 $\frac{1}{8}$ x11" | 9 $\frac{1}{2}$ x15" | 10x14x3" | 8 | 12.15 |
| CA-303 | 10x20 $\frac{1}{8}$ x 9" | 9 $\frac{1}{2}$ x18" | 8x17x3" | 11 | 12.15 |
| CA-304 | 13x20 $\frac{1}{8}$ x12" | 12 $\frac{1}{2}$ x18" | 10x17x3" | 15 | 13.65 |

ROUNDED CORNER TYPE CABINETS



Standard type cabinets are similar in design to those listed above. They have flat type doors, hinged at back to permit full access to the interior. The vertical front corners

are rounded; ventilating louvres are stamped in both sides, and full width opening is provided at the back for leads. Standard finish is blue grey ripple enamel. Prices do not include chassis, which are listed on PAR METAL Page 21.

| Catalog No. | Overall Dimensions | Panel Size | For Chassis | Shp. Wt. Lbs. | Net Price |
|-------------|---|-----------------------|-------------|---------------|-----------|
| CA-200 | 8 $\frac{1}{2}$ x10 $\frac{1}{8}$ x 8" | 8 $\frac{1}{2}$ x 8" | 7x 7x2" | 6 | \$ 5.85 |
| CA-201 | 8 $\frac{1}{2}$ x12 $\frac{1}{8}$ x 8" | 8 $\frac{1}{2}$ x10" | 7x 9x2" | 7 | 6.30 |
| CA-202 | 8 $\frac{1}{2}$ x16 $\frac{1}{8}$ x 8" | 8 $\frac{1}{2}$ x14" | 7x13x2" | 8 | 7.65 |
| CA-203 | 9 $\frac{1}{2}$ x17 $\frac{1}{8}$ x11" | 9 $\frac{1}{2}$ x15" | 10x14x3" | 11 | 10.05 |
| CA-204 | 12 $\frac{1}{2}$ x20 $\frac{1}{8}$ x12" | 12 $\frac{1}{2}$ x18" | 10x17x3" | 15 | 11.85 |

SLOPING FRONT CABINETS



May be readily adapted as instrument cases for use in studios, laboratories, etc.

- Top corner is rounded and trimmed with a chrome moulding, and with the blue grey ripple finish makes a very attractive case.

- A chassis may be mounted to a front panel and removed as a unit.

- Rear of case is ventilated, with an opening for connections.
- Prices do not include chassis, which are listed on PAR METAL Page 21.

| Catalog No. | Overall Dimensions | For Chassis | Shp. Wt. Lbs. | Net Price |
|-------------|--------------------|-------------|---------------|-----------|
| SF-500 | 8x 8x 8" | 7x 7x2" | 6 | \$ 5.70 |
| SF-501 | 8x10x 8" | 7x 9x2" | 7 | 6.30 |
| SF-502 | 8x14x 8" | 7x13x2" | 8 | 6.75 |
| SF-503 | 9x18x 8" | 7x17x3" | 10 | 8.40 |
| SF-504 | 12x18x12" | 10x17x3" | 14 | 10.20 |

AMPLIFIER FOUNDATION CHASSIS SLOPING FRONT TYPE



These amplifier foundations are useful where a sloping panel is desirable for mounting meters, etc. This panel is removable and protrudes 3" from the face of the screen cover. All parts are finished in blue grey ripple enamel, trimmed with a chrome finished moulding and handles at each end. Chassis are supplied WITH bottom plates.

| Cat. No. | Chassis Size | Screen Cover | Shp. Wt. Lbs. | Net Price |
|----------|--------------|------------------------|---------------|-----------|
| F-10120 | 10x12x3" | 6 $\frac{1}{2}$ " high | 11 | \$ 9.15 |
| F-10170 | 10x17x3" | 6 $\frac{1}{2}$ " high | 13 | 10.80 |
| F-13170 | 13x17x3" | 6 $\frac{1}{2}$ " high | 15 | 11.85 |

ROUNDED CORNER TYPE



Rounded corners effectively streamline the screen covers of these chassis. Ventilation is obtained through rectangular screen openings. The moulding and handles, finished in chrome with red striping, gives the units a distinctive, modern design.

The screen cover is finished in blue grey ripple enamel to contrast with the black chassis. Chassis are drilled

for bottom plates, which are listed on PAR METAL Page 21.

| Cat. No. | Chassis Size | Depth of Cover | Shp. Wt. Lbs. | Net Price |
|----------|--------------|----------------|---------------|-----------|
| DF-510 | 5x10x3" | 6" | 7 | \$5.10 |
| DF-615 | 6x14x3" | 6" | 8 | 5.67 |
| DF-717 | 7x17x3" | 6" | 9 | 6.57 |
| DF-1012 | 10x12x3" | 6" | 9 | 6.57 |
| DF-1017 | 10x17x3" | 6" | 10 | 7.35 |
| DF-1317 | 13x17x3" | 6" | 12 | 8.76 |

UTILITY CASES & CANS STEEL METER CASES

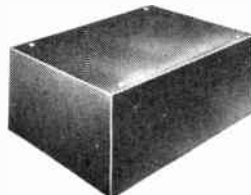


These meter cases may be obtained for 2" and 3" meters, in both single and triple units.

They are substantially made of steel, with welded joints, and black ripple enamel finish. Top front corner is rounded.

| Cat. No. | Meters | Meter Hole | Shp. Wt. Lbs. | Net Price |
|----------|-----------|--------------------|---------------|-----------|
| SM-12 | Single 2" | 2 $\frac{1}{4}$ " | 1 | \$1.32 |
| SM-32 | Three 2" | 2 $\frac{1}{4}$ " | 2 | 3.00 |
| SM-13 | Single 3" | 2 $\frac{1}{16}$ " | 1 | 1.32 |
| SM-33 | Three 3" | 2 $\frac{1}{16}$ " | 2 | 3.00 |

STEEL UTILITY CASES



These cases have flat tops and bottoms, which are removable.

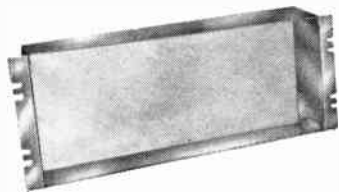
Made from 20 gauge sheet steel, with flanged edges and spot-welded corners. Finished in black ripple enamel.

| Cat. No. | Overall Size | Shp. Wt. Lbs. | Net Price | Cat. No. | Overall Size | Shp. Wt. Lbs. | Net Price |
|----------|--------------|---------------|-----------|----------|--------------|---------------|-----------|
| MC-442 | 4x 4x 2" | 1 | \$1.11 | MC-8101 | 8x10x10" | 7 | \$3.87 |
| MC-453 | 4x 5x 3" | 2 | 1.32 | MC-8107 | 8x10x 7" | 6 | 3.45 |
| MC-596 | 5x 9x 6" | 4 | 2.52 | MC-1128 | 11x12x 8" | 9 | 4.29 |
| MC-654 | 6x 5x 4" | 3 | 1.47 | MC-1597 | 15x 9x 7" | 8 | 4.76 |
| MC-666 | 6x 6x 6" | 3 | 2.04 | | | | |

PAR-METAL BLANK CHASSIS BASES

VERTICAL RACK MOUNTING CHASSIS

TO FIT 19" STANDARD RACKS



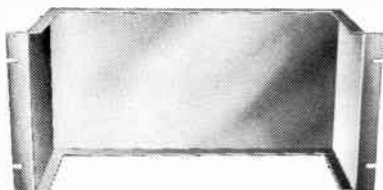
These chassis are fabricated from $\frac{1}{16}$ " thick aluminum with etched finish, or $\frac{1}{16}$ " thick steel, zinc plated. Overall length including mounting flanges is $18\frac{3}{4}$ ". They are designed to mount under 19" wide formed panels listed on PAR METAL Page 19. The $4\frac{1}{16}$ " height is for use with $5\frac{1}{4}$ " high panels, $6\frac{1}{16}$ " for 7" high panels, etc.

Additional slots are provided in chassis side flanges to clear panel attachment screws. Although chassis are $18\frac{3}{4}$ " overall width, they will fit on any relay rack.

| ALUMINUM Cat. No. | Net Price | Chassis Dimensions | STEEL Cat. No. | Net Price |
|----------------------|--------------|--------------------|-------------------|--------------|
| AC-402 | \$3.98 | 4-15/16"x17"x3" | SC-402 | \$3.06 |
| AC-403 | 4.54 | 6-11/16"x17"x3" | SC-403 | 3.45 |
| AC-404 | 5.10 | 8-7/16"x17"x3" | SC-404 | 3.84 |
| AC-405 | 5.64 | 10-3/16"x17"x3" | SC-405 | 4.23 |
| AC-406 | 6.30 | 11-15/16"x17"x3" | SC-406 | 4.59 |

VERTICAL RACK MOUNTING CHASSIS

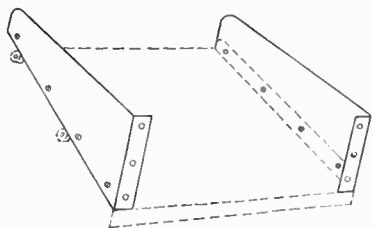
TO FIT 19" STANDARD RACKS



These chassis are suitable for installation in all cabinet relay racks. They may also be used on Deluxe channel racks listed on PAR-METAL Page 16. Material used is $\frac{1}{16}$ " aluminum, with corners welded for added rigidity. Etched finish on inside and outside.

All chassis are $5\frac{1}{4}$ " deep; overall width is 19"; chassis width inside is $16\frac{7}{8}$ ".

| Catalog No. | Height | Shipping Wt. Lbs. | Net Price |
|-------------|--------------------|-------------------|-----------|
| AC-430 | 1 $\frac{3}{4}$ " | 2 | \$2.70 |
| AC-431 | 3 $\frac{1}{2}$ " | 3 | 3.09 |
| AC-432 | 5 $\frac{1}{4}$ " | 3 | 3.51 |
| AC-433 | 7" | 4 | 3.90 |
| AC-434 | 8 $\frac{3}{4}$ " | 5 | 4.29 |
| AC-435 | 10 $\frac{1}{2}$ " | 5 | 4.80 |
| AC-436 | 12 $\frac{1}{4}$ " | 6 | 5.46 |
| AC-437 | 14" | 7 | 5.97 |



PANEL MOUNTING BRACKETS FOR BASIC SLIDE ASSEMBLIES

These brackets are useful for attaching rack panels to the sliding shelves of our series "BS" basic slide assemblies listed on Par-Metal page 9. Special short screws and nuts are supplied for mounting brackets which assures free movement of the shelf after assembly.

Brackets are made from $\frac{1}{16}$ " steel, zinc plated. Brackets are $6\frac{1}{2}$ " high at front, and $3\frac{1}{2}$ " at back. Front flange is $\frac{5}{16}$ " wide. Made in two lengths, for 14" and 20" deep shelf assemblies. Price listed below is for one pair of brackets, with mounting screws and nuts.

| Cat. No. | Length | To Fit Assembly | Net Price |
|----------|--------------------|---------------------|-------------|
| BR-14 | 14 $\frac{1}{4}$ " | BS-1980 | \$2.55 pair |
| BR-20 | 20 $\frac{1}{4}$ " | BS-1940, 2419, 2424 | 3.45 pair |

SHELVES FOR CABINET RACKS



These shelves are designed to fit into the various type "A" enclosed racks listed in this catalog. They are constructed to be mounted inside the rack, with side bolt mounting. All shelves are 1" high, and finished in black ripple enamel. Shipping weight of all shelves is 10 lbs.

| Catalog No. | Will Fit Rack No. | Par-Metal Rack Page No. | Shelf Size | Net Price |
|-------------|--------------------------|-------------------------|---------------------------------------|-----------|
| ER-2112 | ER-213, ER-215, ER-217 | 15 | 13"x21 $\frac{1}{4}$ " | \$3.60 |
| R-2215 | FD-215, FD-217 | 15 | 10 $\frac{5}{8}$ "x21 $\frac{1}{4}$ " | 3.60 |
| ER-2212 | ER-223, ER-225, ER-227-A | 14 | 15"x21 $\frac{1}{4}$ " | 3.60 |
| R-2128 | DL-1713, 2613, 3513 | 16 | 12"x21 $\frac{1}{4}$ " | 2.94 |

CHASSIS



Stamped from one piece of cold rolled steel zinc-plated, and have four solid sides with welded corners. Bottom edges are flanged in on four sides to provide additional reinforcement, and they are drilled for bottom plates. The chassis are made from #20 gauge steel, except those marked (*) which are stamped from $\frac{1}{16}$ " steel for heavy-duty use.

| Cat. No. | Zinc Plated | Size | Shp. Wt. Lbs. | Net Price |
|----------|-------------|--------------|---------------|-----------|
| C-4508 | | 5 x 10 x 3" | 3 | \$1.38 |
| C-4510 | | 7 x 7 x 2" | 2 | 1.08 |
| C-4511 | | 7 x 9 x 2" | 2 | 1.29 |
| C-4513 | | 7 x 13 x 2" | 3 | 1.56 |
| C-4515 | | 7 x 17 x 3" | 4 | 1.98 |
| C-4532 | | 8 x 17 x 3" | 5 | 1.98 |
| C-4524 | | 10 x 14 x 3" | 5 | 2.01 |
| C-4526 | | 10 x 17 x 3" | 7 | 2.22 |
| C-4533* | | 11 x 17 x 2" | 7 | 2.91 |
| C-4534* | | 11 x 17 x 3" | 9 | 3.18 |
| C-4535* | | 13 x 17 x 3" | 8 | 3.12 |
| C-4536* | | 13 x 17 x 3" | 9 | 3.51 |
| C-4537* | | 13 x 17 x 4" | 10 | 3.87 |
| C-4540* | | 17 x 17 x 4" | 13 | 4.65 |

BOTTOM PLATES

These bottom plates have holes to match the standard type chassis listed above, and also have pressed bumpers at the four corners.

| Cat. No. | Zinc Plated | Size | Shp. Wt. Lbs. | Net Price |
|----------|-------------|----------|---------------|-----------|
| CP-4508 | | 5 x 10" | 1 | \$.48 |
| CP-4510 | | 7 x 7" | 1 | .57 |
| CP-4511 | | 7 x 9" | 1 | .66 |
| CP-4513 | | 7 x 13" | 2 | .75 |
| CP-4515 | | 7 x 17" | 2 | .87 |
| CP-4531 | | 8 x 17" | 2 | .90 |
| CP-4524 | | 10 x 14" | 2 | .90 |
| CP-4528 | | 10 x 17" | 2 | 1.08 |
| CP-4533 | | 11 x 17" | 2 | 1.05 |
| CP-4535 | | 13 x 17" | 3 | 1.26 |
| CP-4540 | | 17 x 17" | 4 | 1.71 |

CHASSIS MOUNTING BRACKETS



These brackets are made for assembly with our standard or heavy duty type chassis listed directly above. Panels must be at least 7" high.

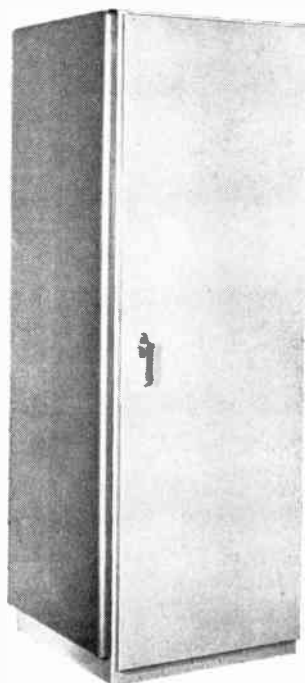
FINISH: Black enamel only. They are made from $\frac{1}{16}$ " thick steel. Cat. Nos. SB-78 thru SB-713 Chassis Mounting Brackets are to be used with the stipulated size base only. Cat. No. SB-717 is used for 17" Bases and larger sizes.

| Cat. No. | Base Dimension | Shp. Wt. Lbs. | Net Price |
|----------|----------------|---------------|-----------|
| SB-78 | For 8" | 2 | \$1.05 |
| SB-710 | For 10" | 2 | 1.23 |
| SB-711 | For 11" | 2 | 1.32 |
| SB-713 | For 13" | 3 | 1.50 |
| SB-717 | For 17" | 4 | 2.31 |

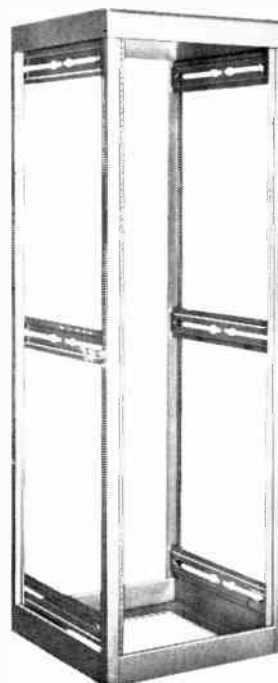
PREM-Ö-RAK[®] MODULAR Rounded Corner FRAMES

22" and 25½" DEEP
for 19" and 24" PANELS

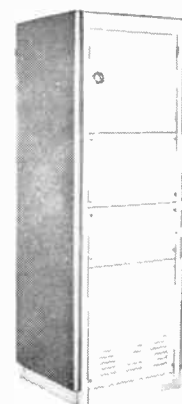
- Designed for MULTIPLE INSTALLATIONS.
- TOPS OF FRONT AND REAR ARE ROUNDED.
- Frames accommodate Ball Cornered End Panels (CEP Series)
- Frame Made of No. 14 gauge steel.
- Supplied with two pair of No. 12 gauge steel Panel Mounting Angles. Both legs of the angle are tapped 10-32 on E.I.A. spacings (5/8"-3/4"-1/2") to accommodate Front Panels & Chassis Support Angles (CSA series).
- Panel mounting angles are held in place at three points by 3/8" carriage bolts and are adjustable to any desired position by means of channel slides.
- Three combination 1 3/8" and 1 1/8" diameter knockouts furnished on both sides of top and bottom to provide access for cabling between racks.
- Frame completely welded throughout.
- Top of frame is solid. Round hole and 5 mounting holes on top of frame to accommodate Exhaust (EF Series) and Intake (IF Series) Fans, available at additional cost.
- Knockouts supplied on sides of up rights for use in ganging frames.
- A rectangular cutout is provided in bottom for leads, etc.
- Rectangular knockouts provided on front and rear of uprights of frame to accommodate hinge and handle brackets, so that door can be mounted either left or right hand. Doors can be mounted to front or rear of frame.
- Holes punched in bottom to accommodate CA-4 (2"), CA-5 (3") and CA-6 (double 2") casters.
- Finished in Gray Hammertone.



Above unit consists of Frame FA Series), 2 End Panels (CEP Series) and Door (DF Series).



FA FRAME



Above unit consists of Frame (FA Series), 2 End Panels (CEP Series), Flush Door (CD Series), Louvred Panel (FPL Series) and Formed Panels (FP Series)

FRAMES — 22" WIDE

| 22" DEEP | | | 25½" DEEP | | | | |
|----------|----------------|-----------|-----------|--------------|-----------|----------------|-----------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | Height | Panel Space | Cat. No. | Shpg. Wt. Lbs. | Net Price |
| FA-42-22 | 50 | \$78.00 | 48 5/8" | 42 x 19" | FA-42-255 | 58 | \$81.96 |
| FA-52-22 | 65 | 84.60 | 59 1/8" | 52 1/2 x 19" | FA-52-255 | 75 | 88.80 |
| FA-61-22 | 80 | 95.85 | 67 7/8" | 61 1/4 x 19" | FA-61-255 | 92 | 105.60 |
| FA-70-22 | 100 | 112.44 | 76 5/8" | 70 x 19" | FA-70-255 | 115 | 123.60 |
| FA-77-22 | 110 | 115.59 | 83 5/8" | 77 x 19" | FA-77-255 | 127 | 127.20 |

FRAMES — 27" WIDE

| Cat. No. | Shpg. Wt. Lbs. | Net Price | Height | Panel Space | Cat. No. | Shpg. Wt. Lbs. | Net Price |
|------------|----------------|-----------|---------|--------------|-------------|----------------|-----------|
| FA-2761-22 | 90 | 105.00 | 67 7/8" | 61 1/4 x 24" | FA-2761-255 | 98 | 114.60 |
| FA-2770-22 | 110 | 123.60 | 76 5/8" | 70 x 24" | FA-2770-255 | 123 | 135.60 |
| FA-2777-22 | 120 | 126.00 | 83 5/8" | 77 x 24" | FA-2777-255 | 135 | 138.00 |

ORDERING GUIDE

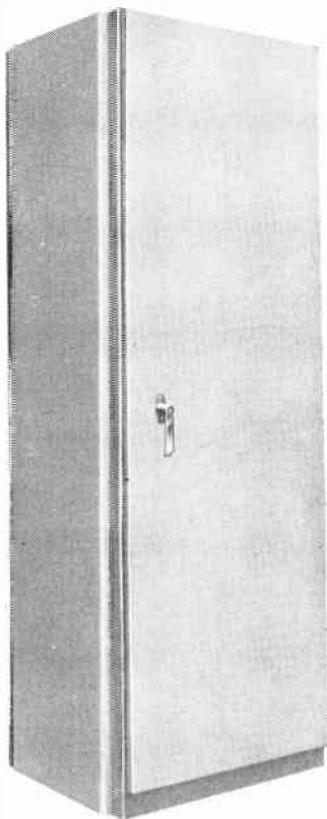


| FRAME | Use END PANEL (Page 12) Cat. No. | Use DOOR (Page 12) Cat. No. | Use CHASSIS SUPPORT ANGLE (Page 13) Cat. No. | Use SHELF (Page 13) Cat. No. | Use CHASSIS SLIDES (Pages 26 & 27) Length |
|-------------|--|-----------------------------------|--|------------------------------------|---|
| FA-42-22 | CEP-42-22 | DF-42 | CSA-22 | S-22-22 | 20" |
| FA-52-22 | CEP-52-22 | DF-52 | CSA-22 | S-22-22 | 20" |
| FA-61-22 | CEP-61-22 | DF-61 | CSA-22 | S-22-22 | 20" |
| FA-70-22 | CEP-70-22 | DF-70 | CSA-22 | S-22-22 | 20" |
| FA-77-22 | CEP-77-22 | DF-77 | CSA-22 | S-22-22 | 20" |
| FA-42-255 | CEP-42-255 | DF-42 | CSA-255 | S-22-255 | 24" |
| FA-52-255 | CEP-52-255 | DF-52 | CSA-255 | S-22-255 | 24" |
| FA-61-255 | CEP-61-255 | DF-61 | CSA-255 | S-22-255 | 24" |
| FA-70-255 | CEP-70-255 | DF-70 | CSA-255 | S-22-255 | 24" |
| FA-77-255 | CEP-77-255 | DF-77 | CSA-255 | S-22-255 | 24" |
| FA-2761-22 | CEP-61-22 | DF-2761 | CSA-22 | S-27-22 | 20" |
| FA-2770-22 | CEP-70-22 | DF-2770 | CSA-22 | S-27-22 | 20" |
| FA-2777-22 | CEP-77-22 | DF-2777 | CSA-22 | S-27-22 | 20" |
| FA-2761-255 | CEP-61-255 | DF-2761 | CSA-255 | S-27-255 | 24" |
| FA-2770-255 | CEP-70-255 | DF-2770 | CSA-255 | S-27-255 | 24" |
| FA-2777-255 | CEP-77-255 | DF-2777 | CSA-255 | S-27-255 | 24" |

PREMIER MODULAR Square Cornered FRAMES



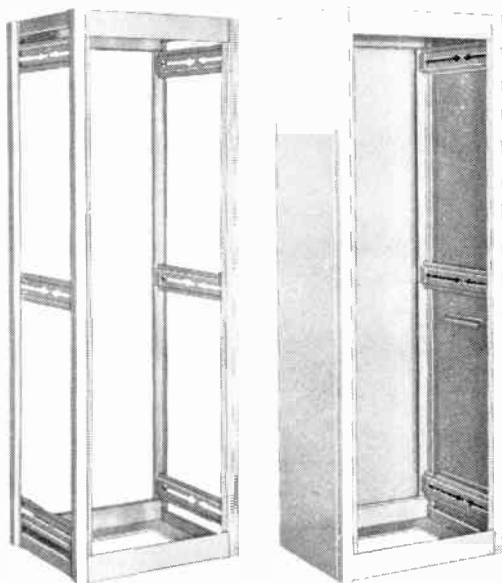
18" and 24" DEEP For 19", 24" and 30" PANELS



Above unit consists of Frame (PRXA Series), Rounded Side Panels (SP Series) and Door (DF Series)

- DESIGNED FOR MULTIPLE INSTALLATIONS
- TOPS of FRONT and REAR are SQUARE
- FRAMES ACCOMMODATE FLUSH SIDE PANELS (FL Series) or ROUNDED SIDE PANELS (SP Series)

- Frame made of No. 14 gauge steel.
- Supplied with two pair of No. 12 gauge steel Panel Mounting Angles. Both legs of the angle are tapped 10-32 on E.I.A. spacings ($\frac{5}{8}$ - $\frac{1}{2}$) to accommodate Front Panels & Chassis Support Angles (CSA series).
- Panel mounting angles are held in place at three points by $\frac{3}{8}$ " carriage bolts and are adjustable to any desired position by means of channel slides.
- Frame completely welded throughout.
- Top of frame is solid. Round hole and 5 mounting holes on top of frame to accommodate Exhaust (EF Series) and Intake (IF Series) Fans, available at additional cost.
- Knockouts supplied on sides of uprights for use in ganging frames.
- A rectangular cutout is provided in bottom for leads, etc.
- Rectangular knockouts provided on front and rear of uprights of frame to accommodate hinge and handle brackets, so that door can be mounted either left or right hand. Doors can be mounted to front or rear of frame.
- Holes punched in bottom to accommodate CA-4 (2"), CA-5 (3") and CA-6 (double 2") casters.
- Finished in Gray Hammertone.



PRXA FRAME

Above unit consists of Frame (PRXA Series), Flush Side Panels (FL Series) and Door (DF Series)

FRAMES

| 18" DEEP | | | 22" WIDE | | 24" DEEP | | |
|-----------|----------------|-----------|--------------------|------------------------|--------------|----------------|-----------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | Height | Panel Space | Cat. No. | Shpg. Wt. Lbs. | Net Price |
| PRXA-42 | 48 | \$46.80 | 48 $\frac{1}{8}$ " | 42 x 19" | PRXA-42-24 | 58 | \$70.80 |
| PRXA-52 | 60 | 57.60 | 58 $\frac{5}{8}$ " | 52 $\frac{1}{2}$ x 19" | PRXA-52-24 | 72 | 78.00 |
| PRXA-61 | 70 | 71.70 | 67 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ x 19" | PRXA-61-24 | 85 | 99.54 |
| PRXA-70 | 88 | 86.76 | 76 $\frac{1}{8}$ " | 70 x 19" | PRXA-70-24 | 108 | 118.56 |
| PRXA-77 | 100 | 83.56 | 83 $\frac{1}{8}$ " | 77 x 19" | PRXA-77-24 | 120 | 126.00 |
| 27" WIDE | | | | | | | |
| PRXA-2761 | 100 | 80.58 | 67 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ x 24" | PRXA-2761-24 | 134 | 112.38 |
| PRXA-2770 | 104 | 95.58 | 76 $\frac{1}{8}$ " | 70 x 24" | PRXA-2770-24 | 140 | 123.00 |
| PRXA-2777 | 116 | 100.20 | 83 $\frac{1}{8}$ " | 77 x 24" | PRXA-2777-24 | 156 | 128.76 |
| 33" WIDE | | | | | | | |
| PRXA-3361 | 122 | 85.56 | 67 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ x 30" | PRXA-3361-24 | 162 | 118.80 |
| PRXA-3370 | 126 | 109.14 | 76 $\frac{1}{8}$ " | 70 x 30" | PRXA-3370-24 | 169 | 140.64 |
| PRXA-3377 | 142 | 110.76 | 83 $\frac{1}{8}$ " | 77 x 30" | PRXA-3377-24 | 190 | 143.52 |

USE EITHER ORDERING GUIDE

| FRAME Cat. No. | ROUNDED SIDE PANEL | OR | FLUSH SIDE PANEL | Use DOOR | Use CHASSIS SUPPORT | Use SHELF | Use CHASSIS SLIDES |
|-------------------|-----------------------|----|-----------------------|-----------------------|------------------------|--------------|--------------------------|
| | (Page 12) Cat. No. | | (Page 12) Cat. No. | (Page 12) Cat. No. | ANGLE (Page 13) | (Page 13) | (Pages 26 & 27) |
| PRXA-42 | SP-42 | | FL-42 | DF-42 | CSA-18 | S-2218 | 16" |
| PRXA-52 | SP-52 | | FL-52 | DF-52 | CSA-18 | S-2218 | 16" |
| PRXA-61 | SP-61 | | FL-61 | DF-61 | CSA-18 | S-2218 | 16" |
| PRXA-70 | SP-70 | | FL-70 | DF-70 | CSA-18 | S-2218 | 16" |
| PRXA-77 | SP-77 | | FL-77 | DF-77 | CSA-18 | S-2218 | 16" |
| PRXA-42-24 | SP-42-24 | | FL-42-24 | DF-42 | CSA-24 | S-2224 | 22" |
| PRXA-52-24 | SP-52-24 | | FL-52-24 | DF-52 | CSA-24 | S-2224 | 22" |
| PRXA-61-24 | SP-61-24 | | FL-61-24 | DF-61 | CSA-24 | S-2224 | 22" |
| PRXA-70-24 | SP-70-24 | | FL-70-24 | DF-70 | CSA-24 | S-2224 | 22" |
| PRXA-77-24 | SP-77-24 | | FL-77-24 | DF-77 | CSA-24 | S-2224 | 22" |
| PRXA-2761 | SP-61 | | FL-61 | DF-2761 | CSA-18 | S-2718 | 16" |
| PRXA-2770 | SP-70 | | FL-70 | DF-2770 | CSA-18 | S-2718 | 16" |
| PRXA-2777 | SP-77 | | FL-77 | DF-2777 | CSA-18 | S-2718 | 16" |
| PRXA-2761-24 | SP-61-24 | | FL-61-24 | DF-2761 | CSA-24 | S-2724 | 22" |
| PRXA-2770-24 | SP-70-24 | | FL-70-24 | DF-2770 | CSA-24 | S-2724 | 22" |
| PRXA-2777-24 | SP-77-24 | | FL-77-24 | DF-2777 | CSA-24 | S-2724 | 22" |
| PRXA-3361 | SP-61 | | FL-61 | DF-3361 | CSA-18 | S-3318 | 16" |
| PRXA-3370 | SP-70 | | FL-70 | DF-3370 | CSA-18 | S-3318 | 16" |
| PRXA-3377 | SP-77 | | FL-77 | DF-3377 | CSA-18 | S-3318 | 16" |
| PRXA-3361-24 | SP-61-24 | | FL-61-24 | DF-3361 | CSA-24 | S-3324 | 22" |
| PRXA-3370-24 | SP-70-24 | | FL-70-24 | DF-3370 | CSA-24 | S-3324 | 22" |
| PRXA-3377-24 | SP-77-24 | | FL-77-24 | DF-3377 | CSA-24 | S-3324 | 22" |

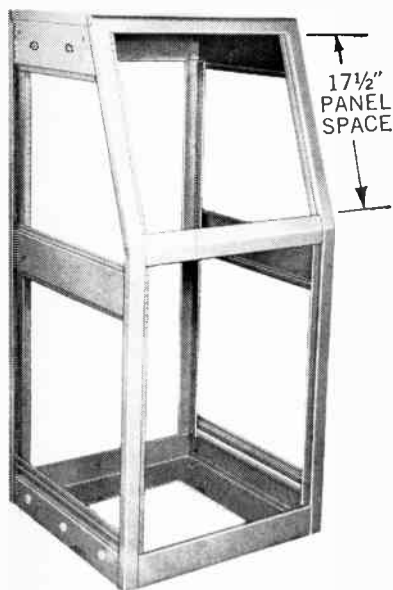
ALL PRICES F.O.B. N. Y. 59, N. Y.

PREMIER PAGE 7

SEE PAGES 25, 26 & 27 FOR SLIDES, BLOWERS and FANS

PREM-O-RAK®

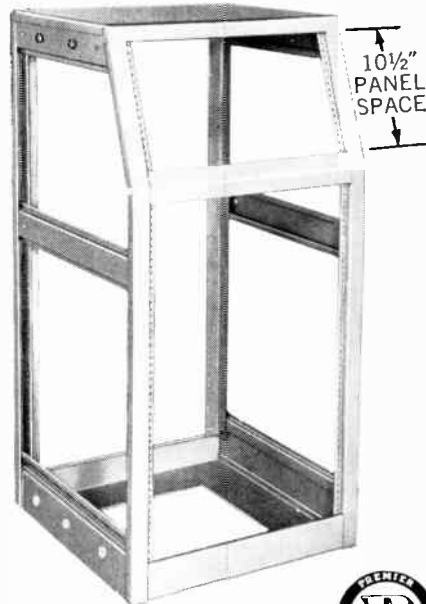
MODULAR CONSOLE SYSTEM



17 1/2" PANEL SPACE

10 1/2" and 17 1/2" SLOPED FRONT CONSOLE FRAMES FOR 19" and 24" PANELS

- TOPS OF FRONT AND REAR ARE ROUNDED
- Frames accommodate Ball Cornered End Panels (CEP Series)
- Designed for Multiple Installations
- Made of No. 14 Gauge Steel
- Sloped Front Is 19° from Vertical
- Frame Completely Welded Throughout
- All Panel Mounting Angles Are Made of No. 12 Gauge Steel and Tapped on both legs 10/32 on E.I.A. Spacings (5/8-5/8-1/2) Front and Rear Vertical Angles Are Adjustable to Any Desired Position.
- Panels Fit Into 1/2" Recess
- Combination 1 3/8" and 1 1/8" Diameter Knockouts on Top and Bottom to Provide Access for Cabling Between Racks.
- Holes Punched in Bottom to Accommodate CA-4 (2"), CA-5 (3") and CA-6 (double 2") casters.
- A Rectangular Cutout Is Provided in Bottom for Leads, etc.
- Finished in Gray Hammertone.



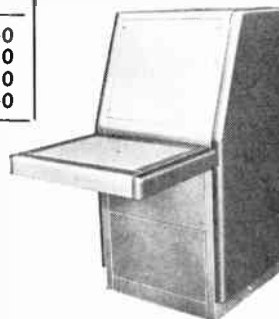
10 1/2" PANEL SPACE

| Cat. No. | Width | Height | Depth* | Sloped Front Panel Space | Front Vertical Space | Rear Vertical Space | Ship. Wt. Lbs. | Net Price |
|----------|-------|--------|--------|--------------------------|----------------------|---------------------|----------------|-----------|
| FS-1001 | 22" | 50" | 22" | 17 1/2 x 19" | 26 1/4 x 19" | 42 x 19" | 66 | \$80.40 |
| FS-1002 | 22" | 47" | 22" | 10 1/2 x 19" | 29 3/4 x 19" | 42 x 19" | 64 | 78.00 |
| FS-1003 | 27" | 50" | 22" | 17 1/2 x 24" | 26 1/4 x 24" | 42 x 24" | 76 | 88.20 |
| FS-1004 | 27" | 47" | 22" | 10 1/2 x 24" | 29 3/4 x 24" | 42 x 24" | 74 | 86.40 |

*Also available 25 1/2" deep

ORDERING GUIDE

| FRAME Cat. No. | USE END PANEL (Page 12) Cat.No. | USE REAR DOOR (Page 9) Cat. No. | USE SHELF (Page 10) Cat. No. | USE CHASSIS SLIDES (Pages 26 & 27) Length |
|----------------|---------------------------------|---------------------------------|------------------------------|---|
| FS-1001 | CEP-1201 (LH and/or RH) | CD-42 | SH-101 | 20" |
| FS-1002 | CEP-1202 (LH and/or RH) | CD-42 | SH-101 | 20" |
| FS-1003 | CEP-1201 (LH and/or RH) | CD-4224 | SH-102 | 20" |
| FS-1004 | CEP-1202 (LH and/or RH) | CD-4224 | SH-102 | 20" |

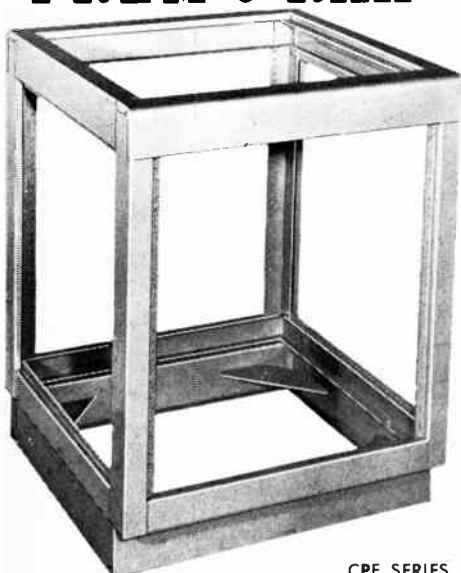


Above unit consists of Frame (FS Series), 2 End Panels (CEP-1201 Series), Writing Work Shelf (WW Series) and 2 End Panels (CEP Series) for shelf.

PREM-O-RAK®

CONSOLE PEDESTAL FRAMES

- TOPS OF FRONT AND REAR ARE ROUNDED.
- Frames accommodate Ball Cornered End Panel (CEP Series).
- Units are designed for multiple installation.
- Adjustable panel mounting angles front and rear are tapped on both legs for 10/32 machine screws on E.I.A. spacings (5/8-5/8-1/2).
- Panels fit into 1/2" recess.
- Two rectangular knockouts supplied on one top cross member to accommodate channels of Writing Work Shelf.
- Brackets welded in base and punched to accommodate CA-5 (3") casters and supplied with adapter to accommodate CA-4 (2") casters.
- Frame made of No. 16 gauge steel; panel mounting angles of 12" gauge steel.
- Finished in Gray Hammertone.



CPF SERIES

| Cat. No. | Width | Depth | Height with Casters | Height without Casters | Front & Rear Panel Space | Top Panel Space | Shpg. Wt. Lbs. | Net Price |
|------------|-------|---------|---------------------|------------------------|--------------------------|-----------------|----------------|-----------|
| CPF-101 | 22" | 22" | 30" | 29 1/2" | 21 x 19" | 17 1/2 x 19" | 45 | \$56.04 |
| CPF-102 | 22" | 22" | 37" | 36 1/2" | 28 x 19" | 17 1/2 x 19" | 48 | 64.20 |
| CPF-103 | 27" | 22" | 30" | 29 1/2" | 21 x 24" | 17 1/2 x 24" | 50 | 63.00 |
| CPF-104 | 27" | 22" | 37" | 36 1/2" | 28 x 24" | 17 1/2 x 24" | 53 | 72.00 |
| CPF-101-34 | 22" | 34 1/4" | 30" | 29 1/2" | 21 x 19" | 29 1/2 x 19" | 54 | 78.00 |

ORDERING GUIDE

| FRAME Cat. No. | USE END PANEL (Page 12) Cat. No. | USE DOOR (Page 9) Cat. No. | USE SHELVES (Page 10) Cat. No. | USE CHASSIS (Pages 26 & 27) Length |
|----------------|----------------------------------|----------------------------|--------------------------------|------------------------------------|
| CPF-101 | CEP-401 | CD-21 | SH-101 | 20" |
| CPF-102 | CEP-402 | CD-28 | SH-101 | 20" |
| CPF-103 | CEP-401 | CD-2124 | SH-102 | 20" |
| CPF-104 | CEP-402 | CD-2824 | SH-102 | 20" |
| CPF-101-34 | CEP-401-34 | CD-21 | SH-103 | — |

SEE PAGES 25, 26 & 27 FOR SLIDES, BLOWERS & FANS

PREMIER PAGE 8

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PREM-O-RAK

MODULAR CONSOLE SYSTEM

DIMENSIONS

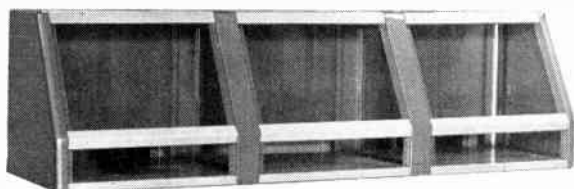
- Width — 21 $\frac{3}{4}$ "
- Depth — 18"
- Height — 18 $\frac{1}{8}$ "
- Slope — 30° from vertical
- Upper panel space — 12 $\frac{1}{4}$ " x 19"
- Lower panel space — 3 $\frac{1}{2}$ " x 19"
- Rear panel space — 15 $\frac{3}{4}$ " x 19"



Cat. No. **CSC-201** Ship. Wt. Lbs. **35** Net Price **\$49.80**

CONSOLE SLOPING CABINET

- BOTH FRONT AND REAR HAVE ATTRACTIVE BALL CORNERS
- Shipped knocked down with necessary hardware for easy assembly.
- All screws for assembling console are not visible from the outside.
- Both front and rear are tapped for 10/32 machine screws on E.I.A. spacings ($\frac{5}{8}$ - $\frac{5}{8}$ - $\frac{1}{2}$).
- Interlocking removable rear panel made of perforated metal and held in place by four captive screws.
- Made of No. 16 gauge steel.
- Rear panel has 1 $\frac{3}{4}$ " opening on bottom for leads, etc.
- Panels fit into $\frac{1}{2}$ " recess.
- Base has 6 knockouts for leads and furnished with 4 rubber feet.
- Components may be mounted on base before assembly of rack into a complete unit.
- May be used individually or in multiples.
- Handsomely finished in Two Tone Hammetone — Top, cross-piece and base are Gray Hammetone. Rear and side panels are Brown Hammetone.



One Triple CSC-201 consists of one CSC-201 and two CMS-301

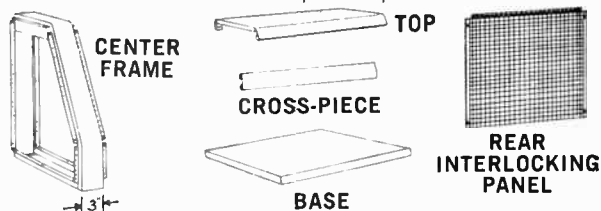
DESIGNED FOR MULTIPLE INSTALLATION

The PREM-O-RAK CONSOLE CABINETS can be joined together to make multiple units by means of a center frame section which is bolted to the top, cross-piece and base. When ordering multiple units specify number of units, such as Double, Triple, etc.

MULTIPLE SECTION for SLOPING CABINET

| Catalog No. | Shipping Wt. Lbs. | Net Price |
|-------------|-------------------|-----------|
| CMS-301 | 26 | \$30.00 |

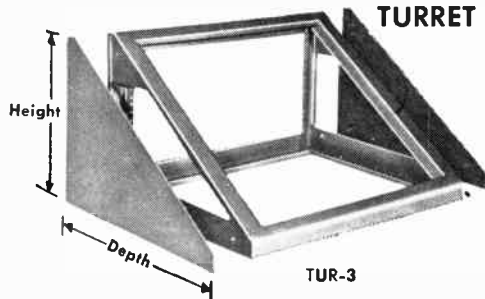
EACH MULTIPLE SECTION comprises 5 pieces as shown:



EXAMPLE:

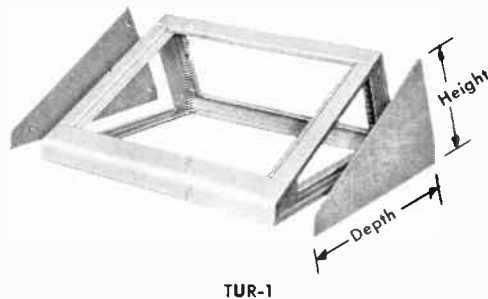
One Double CSC-201 consists of one CSC-201 and one CMS-301
 One Triple CSC-201 consists of one CSC-201 and two CMS-301

TURRET WITH FLAT SIDE PANELS



TUR-3

- Made of No. 16 gauge steel.
- All panel openings tapped for 10/32 machine screws on E.I.A. spacings ($\frac{5}{8}$ - $\frac{5}{8}$ - $\frac{1}{2}$).
- Panels fit into $\frac{1}{2}$ " recess.
- Flat side panels are assembled at factory before shipping.
- Frame finished in Gray Hammetone. Side panels finished in Brown Hammetone.



TUR-1

| Cat. No. | Width | Height | Depth | Sloped Front Panel Space | Rear Panel Space | Bottom Panel Space | Ship. Wt. lbs. | Net Price |
|----------|-------|--------------------|--------------------|--------------------------|-------------------------|--------------------------|----------------|-----------|
| TUR-1 | 22" | 9 $\frac{3}{4}$ " | 21" | 14" x 19" | 7" x 19" | 14" x 19" | 25 | \$40.00 |
| TUR-3 | 22" | 12 $\frac{1}{4}$ " | 17 $\frac{1}{2}$ " | 17 $\frac{1}{2}$ " x 19" | 8 $\frac{3}{4}$ " x 19" | 17 $\frac{1}{2}$ " x 19" | 20 | 34.80 |

FLUSH DOORS — $\frac{1}{2}$ " DEEP

For Prem-O-Rak Console Frames CPF, FS, FA and PRXA Series (when used with other formed panels).

- Made of 16 gauge steel
- Finished in Gray or Brown Hammetone.
- Doors can be mounted either left or right hand by rotating door 180°.
- Hinge brackets are punched to accommodate panel mounting angles on cabinets.
- Furnished with attractive round chrome plated handle and snap catch.

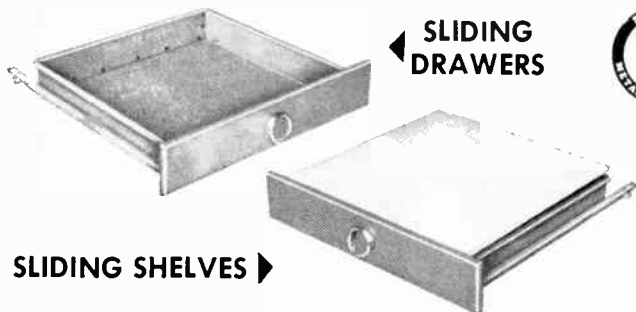
| Cat. No. | Height | Width | Shpg. Wt. Lbs. | Net Price |
|----------|--------------------|-------|----------------|-----------|
| CD-17 | 17 $\frac{1}{2}$ " | 19" | 7 | \$11.34 |
| CD-21 | 21" | 19" | 8 | 12.21 |
| CD-26 | 26 $\frac{1}{4}$ " | 19" | 9 | 13.74 |
| CD-28 | 28" | 19" | 10 | 14.40 |
| CD-29 | 29 $\frac{3}{4}$ " | 19" | 11 | 15.00 |
| CD-42 | 42" | 19" | 16 | 24.42 |
| CD-1724 | 17 $\frac{1}{2}$ " | 24" | 8 | 13.62 |
| CD-2124 | 21" | 24" | 9 | 14.64 |
| CD-2824 | 28" | 24" | 12 | 17.28 |
| CD-2924 | 29 $\frac{3}{4}$ " | 24" | 13 | 18.00 |
| CD-4224 | 42" | 24" | 17 | 30.00 |

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PREMIER PAGE 9

PREM-O-RAK®

MODULAR CONSOLE SYSTEM



SLIDING DRAWERS



SLIDING SHELVES ▶

- Made of No. 16 gauge steel.
- Mounted on suspension slides, which sustain 46 lbs.
- Drawer extends 16" from front of cabinet.
- Supplied with brackets for mounting to tapped holes of panel mounting angles.
- Furnished with attractive, round chrome-plated handle.
- Shipped knocked down with all necessary hardware for easy assembly.
- Will fit CPF series, 18" deep POR series, FS series, FA & PRXA series(when used with other formed panels).
- Finished in Gray Hammettone.
- Sliding shelves supplied with Gray linen weave formica (2-C-1) on top surface.

SLIDING DRAWERS

| Cat. No. | Panel Size | Drawer Size | | | Shpg. Wt. Lbs. | Net Price |
|--------------------------|---|----------------------------------|----------------------------------|----------------------------------|----------------|-----------|
| | | W | D | H | | |
| FOR 19" WIDE PANEL SPACE | | | | | | |
| D-1916 | 10 ³ / ₈ " x 18 ⁷ / ₈ " | 16 ¹ / ₈ " | 16 ¹ / ₂ " | 6" | 23 | \$18.00 |
| D-2016 | 6 ⁷ / ₈ " x 18 ⁷ / ₈ " | 16 ¹ / ₈ " | 16 ¹ / ₂ " | 6" | 22 | 17.25 |
| D-2316 | 3 ³ / ₈ " x 18 ⁷ / ₈ " | 16 ¹ / ₈ " | 16 ¹ / ₂ " | 2 ¹ / ₁₆ " | 16 | 16.25 |
| FOR 24" WIDE PANEL SPACE | | | | | | |
| D-2116 | 10 ³ / ₈ " x 23 ⁷ / ₈ " | 21 ¹ / ₈ " | 16 ¹ / ₂ " | 6" | 25 | 21.60 |
| D-2216 | 6 ⁷ / ₈ " x 23 ⁷ / ₈ " | 21 ¹ / ₈ " | 16 ¹ / ₂ " | 6" | 24 | 20.70 |
| D-2416 | 3 ³ / ₈ " x 23 ⁷ / ₈ " | 21 ¹ / ₈ " | 16 ¹ / ₂ " | 2 ¹ / ₁₆ " | 17 | 18.00 |

SLIDING SHELVES

| Cat. No. | Panel Size | Shelf Size | | Shpg. Wt. Lbs. | Net Price |
|--------------------------|--|----------------------------------|----------------------------------|----------------|-----------|
| | | W | D | | |
| FOR 19" WIDE PANEL SPACE | | | | | |
| RDS-319-22 | 3 ³ / ₈ " x 18 ⁷ / ₈ " | 16 ¹ / ₈ " | 16 ¹ / ₈ " | 20 | \$33.00 |
| FOR 24" WIDE PANEL SPACE | | | | | |
| RDS-324-22 | 3 ³ / ₈ " x 23 ⁷ / ₈ " | 21 ¹ / ₈ " | 16 ¹ / ₈ " | 22 | 42.00 |



SHELF FOR PEDESTAL FRAMES (CPF SERIES) and SLOPED FRONT FRAMES (FS SERIES)

- Made of No. 16 Ga. Steel • Finished in Gray Hammettone
- Mounts to 10-32 tapped holes on side of Panel Mounting Angles.

| Cat. No. | Depth | Width | For use with | Net Price |
|----------|----------------------------------|-----------------------------------|--------------------------------------|-----------|
| SH-101 | 20 ¹ / ₂ " | 20 ¹ / ₄ " | CPF-101, CPF-102 FS-1001, FS-1002 | \$9.00 |
| SH-102 | 20 ¹ / ₂ " | 25 ³ / ₁₆ " | CPF-103, CPF-104 FS-1003, FS-1004 | 10.20 |
| SH-103 | 32 ³ / ₄ " | 20 ³ / ₁₆ " | CPF-101-34 | 12.00 |

FORMICA WRITING PANELS

19" and 24" WIDE — 1/2" THICK

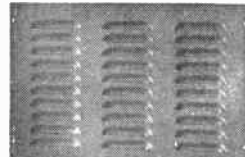
Gray Linen Weave Pattern Formica bonded to plywood as top surface; Unfinished Formica bonded to bottom surface.

| 19" WIDE | | | | |
|----------|--|---|-----------|--|
| Cat. No. | Panel Space | Fits into | Net Price | |
| FWP-1019 | 10 ¹ / ₂ " x 19" | WW-15-22 & WW-15-255 | \$6.60 | |
| FWP-1419 | 14" x 19" | WW-18-22 & WW-18-255 | 8.40 | |
| FWP-1719 | 17 ¹ / ₂ " x 19" | WW-22-22 & WW-22-255 WTO-22-22 & Top Panel Space of CPF-101 and CPF-102 | 10.20 | |
| 24" WIDE | | | | |
| Cat. No. | Panel Space | Fits into | Net Price | |
| FWP-1024 | 10 ¹ / ₂ " x 24" | WW-2715-22, WW-2715-255 | \$7.20 | |
| FWP-1424 | 14" x 24" | WW-2718-22, WW-2718-255 | 9.00 | |
| FWP-1724 | 17 ¹ / ₂ " x 24" | WW-2722-22, WW-2722-255, WTO-27-22 & Top Panel Space of CPF-103 & CPF-104 | 10.80 | |

FORMED PANELS — 19" and 24" WIDE



FP Series
BLANK



FPL Series
LOUVRED

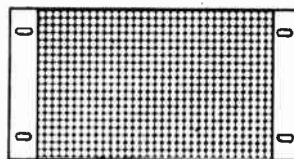
- Made of one piece of No. 16 gauge steel, with edges formed for overall depth of 1/2".
- Each panel has only 2 mounting holes on each side.
- Finished in Gray or Brown Hammettone.

BLANK

| 19" WIDE | | | | 24" WIDE | | | |
|----------|-------------------------------|-----------|----------------------------------|----------|-------------------------------|-----------|--------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | Height | Cat. No. | Shpg. Wt. Lbs. | Net Price | Height |
| FP-119 | 1 ¹ / ₂ | \$1.10 | 13 ³ / ₄ " | FP-324 | 3 | \$1.38 | — |
| FP-319 | 2 | \$1.14 | 3 ¹ / ₂ " | FP-524 | 3 ¹ / ₂ | 1.56 | — |
| FP-519 | 2 ¹ / ₂ | 1.32 | 5 ¹ / ₄ " | FP-724 | 4 | 1.80 | — |
| FP-719 | 3 | 1.50 | 7" | FP-824 | 5 | 2.22 | — |
| FP-819 | 4 | 1.83 | 8 ³ / ₄ " | FP-1024 | 6 | 2.70 | — |
| FP-1019 | 5 | 2.25 | 10 ¹ / ₂ " | FP-1224 | 7 | 3.12 | — |
| FP-1219 | 6 | 2.61 | 12 ¹ / ₄ " | FP-1424 | 7 ¹ / ₂ | 3.54 | — |
| FP-1419 | 6 ¹ / ₂ | 2.94 | 14" | FP-1524 | 8 | 4.08 | — |
| FP-1519 | 7 | 3.39 | 15 ³ / ₄ " | FP-1724 | 8 ¹ / ₂ | 4.50 | — |
| FP-1719 | 7 ¹ / ₂ | 3.75 | 17 ¹ / ₂ " | FP-1924 | 9 | 4.92 | — |
| FP-1919 | 8 | 4.11 | 19 ¹ / ₄ " | FP-2124 | 10 | 5.40 | — |
| FP-2119 | 9 | 4.50 | 21" | FP-2224 | 11 | 6.00 | — |
| FP-2219 | 10 | 5.00 | 22 ³ / ₄ " | FP-2624 | 12 | 6.66 | — |
| FP-2619 | 11 | 5.55 | 26 ¹ / ₄ " | FP-2824 | 13 | 7.20 | — |
| FP-2819 | 12 | 6.00 | 28" | FP-4219 | 18 | 10.00 | 42" |
| FP-4219 | 18 | 10.00 | 42" | FP-4224 | 20 | 12.00 | — |

LOUVRED

| 19" WIDE | | | | 24" WIDE | | | |
|----------|-------------------------------|-----------|----------------------------------|----------|-------------------------------|-----------|--------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | Height | Cat. No. | Shpg. Wt. Lbs. | Net Price | Height |
| FPL-719 | 3 | 3.15 | 7" | FPL-724 | 4 | 3.78 | — |
| FPL-819 | 4 | 3.54 | 8 ³ / ₄ " | FPL-824 | 5 | 4.26 | — |
| FPL-1019 | 5 | 3.90 | 10 ¹ / ₂ " | FPL-1024 | 6 | 4.68 | — |
| FPL-1219 | 6 | 4.41 | 12 ¹ / ₄ " | FPL-1224 | 7 | 5.28 | — |
| FPL-1419 | 6 ¹ / ₂ | 4.74 | 14" | FPL-1424 | 7 ¹ / ₂ | 5.70 | — |
| FPL-1719 | 7 ¹ / ₂ | 5.55 | 17 ¹ / ₂ " | FPL-1724 | 8 ¹ / ₂ | 6.66 | — |
| FPL-2119 | 9 | 6.90 | 21" | FPL-2124 | 10 | 8.28 | — |
| FPL-2219 | 10 | 7.50 | 22 ³ / ₄ " | FPL-2224 | 11 | 8.50 | — |
| FPL-2619 | 11 | 7.74 | 26 ¹ / ₄ " | FPL-2624 | 12 | 9.30 | — |
| FPL-2819 | 12 | 8.20 | 28" | FPL-2824 | 13 | 9.84 | — |
| FPL-4219 | 18 | 14.00 | 42" | FPL-4224 | 20 | 17.00 | — |



FPF Series

PERFORATED

- Made of No. 20 gauge steel with 1/16" diameter holes on 3/16" staggered centers.
- Edges formed on 4 sides. • Overall depth 1/2".
- Each panel has 2 mounting holes on each side.
- Finished in Gray Hammettone.

| 19" WIDE | | | | 24" WIDE | | | |
|----------|--------------------------------|-----------|----------------------------------|----------|--------------------------------|-----------|--------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | Height | Cat. No. | Shpg. Wt. Lbs. | Net Price | Height |
| FPF-319 | 1 ³ / ₄ | \$2.75 | 3 ¹ / ₂ " | FPF-324 | 2 ³ / ₄ | \$3.50 | — |
| FPF-519 | 2 ¹ / ₄ | 3.00 | 5 ¹ / ₄ " | FPF-524 | 3 ¹ / ₄ | 3.90 | — |
| FPF-719 | 2 ³ / ₄ | 3.75 | 7" | FPF-724 | 3 ³ / ₄ | 5.00 | — |
| FPF-819 | 3 ³ / ₄ | 4.25 | 8 ³ / ₄ " | FPF-824 | 4 ³ / ₄ | 5.75 | — |
| FPF-1019 | 4 ³ / ₄ | 5.00 | 10 ¹ / ₂ " | FPF-1024 | 5 ³ / ₄ | 6.25 | — |
| FPF-1219 | 5 ³ / ₄ | 5.60 | 12 ¹ / ₄ " | FPF-1224 | 6 ³ / ₄ | 7.40 | — |
| FPF-1419 | 6 ³ / ₄ | 6.20 | 14" | FPF-1424 | 7 ³ / ₄ | 8.00 | — |
| FPF-1519 | 6 ³ / ₄ | 6.80 | 15 ³ / ₄ " | FPF-1524 | 7 ³ / ₄ | 8.90 | — |
| FPF-1719 | 7 ¹ / ₄ | 7.25 | 17 ¹ / ₂ " | FPF-1724 | 8 ¹ / ₄ | 9.50 | — |
| FPF-1919 | 7 ³ / ₄ | 7.95 | 19 ¹ / ₄ " | FPF-1924 | 8 ³ / ₄ | 10.50 | — |
| FPF-2119 | 8 ³ / ₄ | 8.50 | 21" | FPF-2124 | 9 ³ / ₄ | 11.25 | — |
| FPF-2619 | 10 ³ / ₄ | 10.00 | 26 ¹ / ₄ " | FPF-2624 | 11 ³ / ₄ | 13.00 | — |
| FPF-2819 | 11 ³ / ₄ | 11.00 | 28" | FPF-2824 | 12 ³ / ₄ | 14.25 | — |

ALL PRICES F.O.B. N. Y. 59, N. Y.

PREM-O-RAK[®]

MODULAR CONSOLE SYSTEM

WRITING WORK SHELVES

- Made Of No. 16 Gauge Steel
- Tops Of Front And Rear Are Rounded
- Shipped Knocked Down • Finished In Gray Hammertone
- Supplied With Channels And Brackets For Mounting To Inside Of Frames

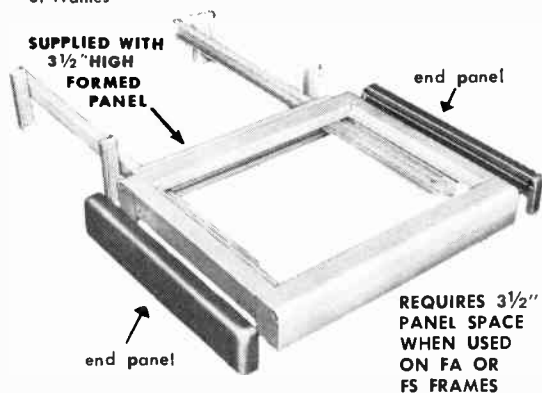


DESIGNED FOR SINGLE OR MULTIPLE INSTALLATION

22" WIDE — 3" HIGH

To Fit 22" DEEP FRAMES

To Fit 25 1/2" DEEP FRAMES



| Cat. No. | Shpg. Lbs. | Wt. Lbs. | Net Price | Top Panel Space | Depth | Cat. No. | Shpg. Lbs. | Wt. Lbs. | Net Price |
|----------|------------|----------|-----------|-----------------|---------|-----------|------------|----------|-----------|
| WW-15-22 | 11 | | \$36.00 | 10 1/2" x 19" | 15" | WW-15-255 | 12 | | \$36.75 |
| WW-18-22 | 12 | | 37.80 | 14" x 19" | 18 1/2" | WW-18-255 | 13 | | 38.55 |
| WW-22-22 | 13 | | 39.60 | 17 1/2" x 19" | 22" | WW-22-255 | 14 | | 40.35 |

27" WIDE

| | | | | | | | | | |
|------------|----|--|-------|---------------|---------|-------------|----|--|-------|
| WW-2715-22 | 14 | | 41.40 | 10 1/2" x 24" | 15" | WW-2715-255 | 15 | | 42.15 |
| WW-2718-22 | 15 | | 42.60 | 14" x 24" | 18 1/2" | WW-2718-255 | 16 | | 43.35 |
| WW-2722-22 | 16 | | 43.80 | 17 1/2" x 24" | 22" | WW-2722-255 | 17 | | 44.55 |

END PANELS FOR WRITING WORK SHELF

- Ball cornered • Attaches to Writing Work Shelf by means of 2 captive screws
- Made of one piece of No. 18 gauge steel
- Finished in Brown Hammertone

| Cat. No. | Lbs. | Used With | Net Price |
|----------|-------|-------------------------------------|-----------|
| CEP-15 | 1 1/2 | WW-15-22, 15-255; 2715-22, 2715-255 | \$3.54 |
| CEP-18 | 2 | WW-18-22, 18-255; 2718-22, 2718-255 | 3.78 |
| CEP-22 | 2 1/2 | WW-22-22, 22-255; 2722-22, 2722-255 | 4.02 |

WORK TOPS FOR MULTIPLE ASSEMBLY — 3" HIGH



CWT Series Solid Type



WTO Series Open Type

- Tops of front and rear are rounded.
- Designed for mounting between two Pedestal Frames or when used with End Pedestal (PE Series).
- USE SHORT END PANELS (CSS Series) FOR THIS INSTALLATION.
- Made of No. 16 gauge steel.
- Finished in Gray Hammertone.

WORK TOPS Solid Type

| Cat. No. | Width | Depth | Shp. Wt. Lbs. | Net Price |
|------------|-------|---------|---------------|-----------|
| CWT-601 | 22" | 22" | 14 | \$12.60 |
| CWT-603 | 27" | 22" | 18 | 15.00 |
| CWT-601-34 | 22" | 34 1/4" | 20 | 18.90 |

Open Type

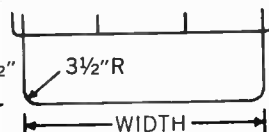
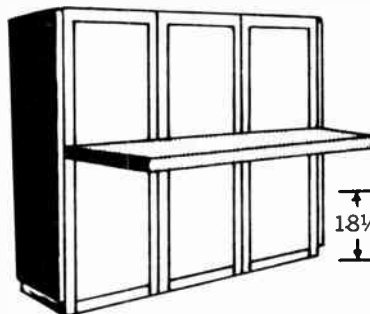
| Cat. No. | Width | Depth | Panel Space | Shpg. Wt. Lbs. | Net Price |
|-----------|-------|---------|--------------|----------------|-----------|
| WTO-22-22 | 22" | 22" | 17 1/2 x 19" | 9 1/2 | \$27.00 |
| WTO-27-22 | 27" | 22" | 17 1/2 x 24" | 11 | 32.40 |
| WTO-22-34 | 22" | 34 1/4" | 29 3/4 x 19" | 12 | 42.00 |

ONE PIECE FORMICA

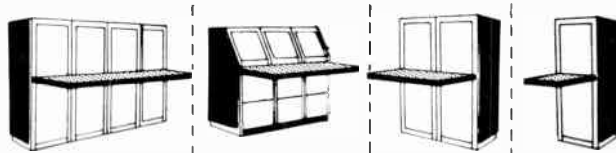
WORK WRITING TOPS

For 22" Wide FA and FS FRAMES

- Gray linen weave Formica (2-C-1) bonded to 3/4" plywood
- 3" self edged Formica skirt on 3 sides
- Supplied with 3 1/2 x 19" formed panel, channels and brackets



| TO FIT 22" DEEP FRAMES | | | | TO FIT 25 1/2" DEEP FRAMES | |
|---|-----------|---------|-------|----------------------------|-----------|
| Cat. No. | Net Price | Depth | Width | Cat. No. | Net Price |
| For 1 Vertical Frame (FA Series) or 1 Sloped Front Frame (FS Series) | | | | | |
| OFT-2218-22 | \$75.00 | 18 1/2" | 22" | OFT-2218-255 | \$76.00 |
| For 2 Vertical Frames (FA Series) or 2 Sloped Front Frames (FS Series) Side By Side | | | | | |
| OFT-4418-22 | 95.00 | 18 1/2" | 44" | OFT-4418-255 | 96.00 |
| For 3 Vertical Frames (FA Series) or 3 Sloped Front Frames (FS Series) Side By Side | | | | | |
| OFT-6618-22 | 115.00 | 18 1/2" | 66" | OFT-6618-255 | 117.00 |
| For 4 Vertical Frames (FA Series) or 4 Sloped Front Frames (FS Series) Side By Side | | | | | |
| OFT-8818-22 | 140.00 | 18 1/2" | 88" | OFT-8818-255 | 142.00 |



ALL PRICES F.O.B. N. Y. 59, N. Y.

PREMIER PAGE 11

PREMIER PANELS AND DOORS

SIDE PANELS FOR PRXA FRAMES

Made of No. 16 Gauge Steel Finished in Gray Hammetone

| 18" DEEP | | | | |
|----------|----------------------|----------------|-----------|--|
| Cat. No. | Size | Shpg. Wt. Lbs. | Net Price | |
| SP-42 | 48 x 15 x 1 1/2" | 20 | \$16.56 | |
| SP-52 | 58 1/2 x 15 x 1 1/2" | 21 | 18.60 | |
| SP-61 | 67 1/4 x 15 x 1 1/2" | 23 | 21.54 | |
| SP-70 | 76 x 15 x 1 1/2" | 26 | 23.16 | |
| SP-77 | 83 x 15 x 1 1/2" | 28 | 24.90 | |

| 24" DEEP | | | | |
|----------|----------------------|----------------|-----------|--|
| Cat. No. | Size | Shpg. Wt. Lbs. | Net Price | |
| SP-42-24 | 48 x 21 x 1 1/2" | 22 | \$21.36 | |
| SP-52-24 | 58 1/2 x 21 x 1 1/2" | 25 | 23.40 | |
| SP-61-24 | 67 1/4 x 21 x 1 1/2" | 28 | 25.83 | |
| SP-70-24 | 76 x 21 x 1 1/2" | 31 | 27.78 | |
| SP-77-24 | 83 x 21 x 1 1/2" | 34 | 30.00 | |

END PANELS — 1-11/32" DEEP FOR FA FRAMES



- Made of one piece of 16 gauge steel.
- BALL CORNERED.
- End panels attach to frame by means of a bracket on bottom and held securely by two captive screws on top.
- Panels supplied blank. Louvres furnished at no additional charge.
- Finished in Brown Hammetone.

| 22" WIDE | | | | 25 1/2" WIDE | | |
|-----------|----------------|-----------|---------|--------------|----------------|-----------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | Hgt. | Cat. No. | Shpg. Wt. Lbs. | Net Price |
| CEP-42-22 | 23 | \$18.00 | 45 1/4" | CEP-42-255 | 28 | \$21.00 |
| CEP-52-22 | 27 | 21.60 | 55 3/4" | CEP-52-255 | 32 | 24.60 |
| CEP-61-22 | 30 | 24.00 | 64 1/2" | CEP-61-255 | 35 | 26.40 |
| CEP-70-22 | 33 | 25.80 | 73 1/4" | CEP-70-255 | 38 | 28.80 |
| CEP-77-22 | 35 | 27.90 | 80 1/4" | CEP-77-255 | 40 | 30.60 |

DOORS FOR FA and PRXA FRAMES 13/16" DEEP

- Made of No. 16 gauge steel
- Doors can be mounted either left or right hand by rotating door 180°
- Doors supplied blank. Louvres furnished at no additional charge
- Doors hung on slip jointed hinges and equipped with locking handle and 2 keys
- Door mounted to frame by 3 removable hinge brackets, permitting the door to be mounted either left or right hand. Handle latch bracket also supplied
- Finished in Gray Hammetone.

| 21 1/2" WIDE | | | | 26 1/2" WIDE | | | |
|--------------|----------------|-----------|---------|--------------|----------------|-----------|---------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | Height | Cat. No. | Shpg. Wt. Lbs. | Net Price | Height |
| DF-42 | 20 | \$26.40 | 45 1/8" | DF-2761 | 34 | \$39.60 | 76" |
| DF-52 | 25 | 29.40 | 56 1/8" | DF-2770 | 38 | 43.50 | 83" |
| DF-61 | 28 | 33.60 | 64 1/8" | DF-2777 | 41 | 45.00 | 80 1/8" |
| DF-70 | 31 | 36.00 | 73 1/8" | | | | |
| DF-77 | 34 | 38.40 | 80 1/8" | | | | |

| 32 1/2" WIDE (DOUBLE DOORS with 3 Point Locking Device) | | | | | | | | | | | |
|---|----------------|---------|-----------|----------|----------------|---------|-----------|----------|----------------|---------|-----------|
| Cat. No. | Shpg. Wt. Lbs. | Height | Net Price | Cat. No. | Shpg. Wt. Lbs. | Height | Net Price | Cat. No. | Shpg. Wt. Lbs. | Height | Net Price |
| DF-3361 | 40 | 64 1/8" | \$45.00 | DF-3370 | 45 | 73 1/8" | \$50.50 | DF-3377 | 48 | 80 1/8" | \$54.00 |

FLUSH SIDE PANELS FOR PRXA FRAMES — 1/2" DEEP

- Fits into side recess of frame.
- Made of one piece of No. 16 gauge steel.
- Clips on to horizontal side section of frame. Finished in Gray Hammetone.

| 15" WIDE for 18" DEEP FRAMES | | | | | | 21" WIDE for 24" DEEP FRAMES | | | | | |
|------------------------------|---------------------|----------------|----------------|---------|--|------------------------------|------------------------------|----------------|----------------|--------|--|
| Cat. No. | To Fit Frame No. | Shpg. Wt. Lbs. | Net Price Each | Height | | Cat. No. | To Fit Frame No. | Shpg. Wt. Lbs. | Net Price Each | Height | |
| FL-42 | PRXA-42 | 19 | \$15.66 | 48" | | FL-42-24 | PRXA-42-24 | 21 | \$20.46 | 76" | |
| FL-52 | PRXA-52 | 21 | 17.72 | 58 1/2" | | FL-52-24 | PRXA-52-24 | 24 | 22.50 | 83" | |
| FL-61 | PRXA-61, 2761, 3361 | 22 | 20.64 | 67 1/4" | | FL-61-24 | PRXA-61-24, 2761-24, 3361-24 | 27 | 24.90 | | |
| FL-70 | PRXA-70, 2770, 3370 | 25 | 22.26 | 76" | | FL-70-24 | PRXA-70-24, 2770-24, 3370-24 | 30 | 26.88 | | |
| FL-77 | PRXA-77, 2777, 3377 | 27 | 24.00 | 83" | | FL-77-24 | PRXA-77-24, 2777-24, 3377-24 | 33 | 29.00 | | |

END PANELS FOR SLOPED FRONT CONSOLE FRAME — 1-11/32" DEEP

- Ball Cornered.
- Made of One Piece No. 18 Gauge Steel.
- End Panels Attached to Frame by Means of a Bracket on Bottom and Held Securely by Two Captive Screws on Top
- Supplied Blank; Louvres Furnished at No Additional Charge
- Finished in Brown Hammetone.

| End Panels | Used for Frame | Ship. Wt. Lbs. | Net Price |
|-------------|---------------------------|----------------|-----------|
| CEP-1201 LH | Left side FS-1001 & 1003 | 20 | \$22.62 |
| CEP-1201 RH | Right side FS-1001 & 1003 | 20 | 22.62 |
| CEP-1202 LH | Left side FS-1002 & 1004 | 18 | 18.00 |
| CEP-1202 RH | Right side FS-1002 & 1004 | 18 | 18.00 |

END PANELS FOR PEDESTAL FRAMES

- Made of one piece of No. 18 gauge steel.
- Finished in Brown Hammetone.
- For easy installation and access, the end panels attach to pedestal frame CPF Series by means of 2 brackets on bottom and held securely with 2 captive screws on top.

END PANEL 1-11/32" DEEP

| Cat. No. | Width | Height | For use with | Ship. Wt. Lbs. | Net Price |
|------------|---------|--------|---------------|----------------|-----------|
| CEP-401 | 22" | 26" | CPF-101 & 103 | 17 | \$15.00 |
| CEP-402 | 22" | 33" | CPF-102 & 104 | 20 | 18.00 |
| CEP-401-34 | 34 1/4" | 26" | CPF-101-34 | 22 | 19.80 |

SHORT END PANEL — 1-11/32" DEEP

Used only when work top is mounted between 2 pedestal frames • Finished in Brown Hammetone.

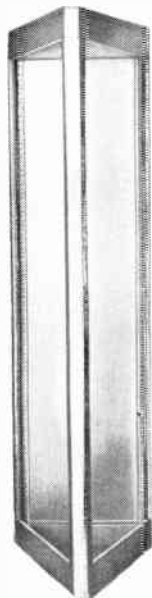
| Cat. No. | Width | Height | For use with | Ship. Wt. Lbs. | Net Price |
|------------|---------|--------|---------------|----------------|-----------|
| CSS-701 | 22" | 23" | CPF-101 & 103 | 15 | \$9.00 |
| CSS-701-34 | 34 1/4" | 23" | CPF-101-34 | 18 | 12.00 |

PREM-O-RAK® MODULAR CONSOLE SYSTEM

30° and 45° WEDGE FRAMES

- Designed for use in Semi-Circular Arrangements when bolted to Pedestal Frames (CPF Series) or Transmitter Rack Frames (FA Series)
- Constructed of 16 gauge steel

- Completely welded throughout
- Supplied with formed panel on rear
- End panels (CEP Series) can be mounted to the side of wedge frames if desired
- Finished in Gray Hammertone

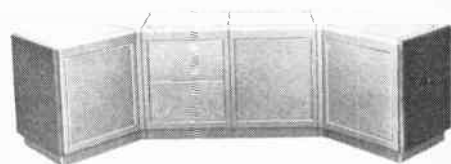


30° WEDGE RACK FRAMES

| Cat. No. | Height | Width | For Use With | Net Price |
|---------------|----------------------------------|----------------------------------|--------------|-----------|
| WED-30-42-22 | 48 ⁵ / ₈ " | 22" | F-42-22 | \$111.00 |
| WED-30-52-22 | 59 ¹ / ₈ " | 22" | F-52-22 | 120.00 |
| WED-30-61-22 | 67 ⁷ / ₈ " | 22" | F-61-22 | 126.00 |
| WED-30-70-22 | 76 ⁵ / ₈ " | 22" | F-70-22 | 135.00 |
| WED-30-77-22 | 83 ⁵ / ₈ " | 22" | F-77-22 | 141.00 |
| WED-30-42-255 | 48 ⁵ / ₈ " | 25 ¹ / ₂ " | F-42-255 | 133.20 |
| WED-30-52-255 | 59 ¹ / ₈ " | 25 ¹ / ₂ " | F-52-255 | 140.40 |
| WED-30-61-255 | 67 ⁷ / ₈ " | 25 ¹ / ₂ " | F-61-255 | 144.00 |
| WED-30-70-255 | 76 ⁵ / ₈ " | 25 ¹ / ₂ " | F-70-255 | 156.00 |
| WED-30-77-255 | 83 ⁵ / ₈ " | 25 ¹ / ₂ " | F-77-255 | 162.00 |

45° WEDGE RACK FRAMES

| Cat. No. | Height | Width | For Use With | Net Price |
|---------------|----------------------------------|----------------------------------|--------------|-----------|
| WED-45-42-22 | 48 ⁵ / ₈ " | 22" | F-42-22 | 114.00 |
| WED-45-52-22 | 59 ¹ / ₈ " | 22" | F-52-22 | 123.00 |
| WED-45-61-22 | 67 ⁷ / ₈ " | 22" | F-61-22 | 129.00 |
| WED-45-70-22 | 76 ⁵ / ₈ " | 22" | F-70-22 | 138.00 |
| WED-45-77-22 | 83 ⁵ / ₈ " | 22" | F-77-22 | 144.00 |
| WED-45-42-255 | 48 ⁵ / ₈ " | 25 ¹ / ₂ " | F-42-255 | 136.20 |
| WED-45-52-255 | 59 ¹ / ₈ " | 25 ¹ / ₂ " | F-52-255 | 143.00 |
| WED-45-61-255 | 67 ⁷ / ₈ " | 25 ¹ / ₂ " | F-61-255 | 147.00 |
| WED-45-70-255 | 76 ⁵ / ₈ " | 25 ¹ / ₂ " | F-70-255 | 159.00 |
| WED-45-77-255 | 83 ⁵ / ₈ " | 25 ¹ / ₂ " | F-77-255 | 165.00 |



30° Wedge Pedestal Frames

| Catalog No. | Height | Width | For Use With | Net Price |
|-------------|----------------------------------|-------|---------------|-----------|
| WED-30-101 | 29 ¹ / ₂ " | 22" | CPF-101 & 103 | \$93.00 |
| WED-30-102 | 36 ¹ / ₂ " | 22" | CPF-102 & 104 | 99.00 |

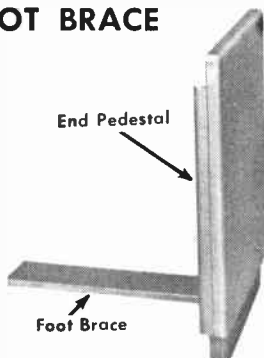
45° Wedge Pedestal Frames

| Catalog No. | Height | Width | For Use With | Net Price |
|-------------|----------------------------------|-------|---------------|-----------|
| WED-45-101 | 29 ¹ / ₂ " | 22" | CPF-101 & 103 | \$96.00 |
| WED-45-102 | 36 ¹ / ₂ " | 22" | CPF-102 & 104 | 102.00 |

END PEDESTAL and FOOT BRACE

FOR DOUBLE UNIT ASSEMBLY

- Made of No. 18 gauge steel
- Ball cornered
- End Pedestal mounts to Work Top CWT Series or WTO Series. Foot Brace mounts to Pedestal Frame CPF Series and End Pedestal PE-901
- Foot Brace can be mounted between two Pedestal Frames (CPF Series).
- Finished in Brown Hammertone

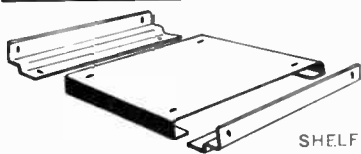


END PEDESTAL

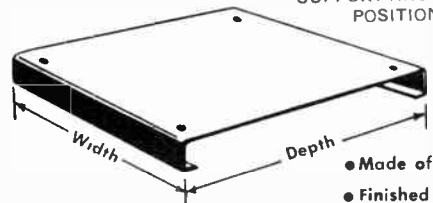
| Cat. No. | Depth | Height | Shpg. Wt. Lbs. | Net Price |
|-----------|----------------------------------|----------------------------------|----------------|-----------|
| PE-901 | 22" | 29 ¹ / ₂ " | 25 | \$30.00 |
| PE-901-34 | 34 ¹ / ₄ " | 29 ¹ / ₂ " | 30 | 45.00 |

FOOT BRACE

| Cat. No. | Shpg. Wt. Lbs. | Used With | Net Price |
|----------|-------------------------------|--------------------|-----------|
| F8-801 | 3 | 22" Wide Work Tops | \$8.10 |
| F8-802 | 3 ¹ / ₂ | 27" Wide Work Tops | 8.76 |



SHELF AND CHASSIS SUPPORT ANGLES IN POSITION



SHELVES

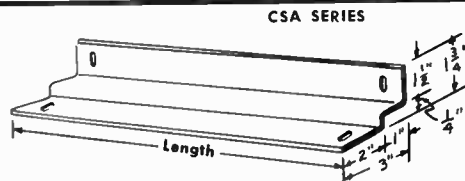
- Made of No. 16 Gauge Steel
- Finished in Gray Hammertone

S SERIES

| Cat. No. | Depth | Width | To Fit Frames | Net Price |
|----------|----------------------------------|----------------------------------|--|-----------|
| S-22-22 | 20 ³ / ₈ " | 17 ¹ / ₂ " | 22" W x 22" D | FA \$3.93 |
| S-27-22 | 20 ³ / ₈ " | 22 ¹ / ₂ " | 27" W x 22" D | FA 5.10 |
| S-22-25 | 23 ³ / ₈ " | 17 ¹ / ₂ " | 22" W x 25 ¹ / ₂ " D | FA 4.62 |
| S-27-25 | 23 ³ / ₈ " | 22 ¹ / ₂ " | 27" W x 25 ¹ / ₂ " D | FA 5.82 |
| S-22-11 | 16 ³ / ₈ " | 17 ¹ / ₂ " | 22" W x 18" D | PRXA 3.39 |
| S-27-11 | 16 ³ / ₈ " | 22 ¹ / ₂ " | 27" W x 18" D | PRXA 4.14 |
| S-33-11 | 16 ³ / ₈ " | 28 ¹ / ₂ " | 33" W x 18" D | PRXA 5.58 |
| S-22-24 | 22 ³ / ₈ " | 17 ¹ / ₂ " | 22" W x 24" D | PRXA 4.38 |
| S-27-24 | 22 ³ / ₈ " | 22 ¹ / ₂ " | 27" W x 24" D | PRXA 5.58 |
| S-33-24 | 22 ³ / ₈ " | 28 ¹ / ₂ " | 33" W x 24" D | PRXA 6.84 |

CHASSIS SUPPORT ANGLES

- Made of No. 12 ga. steel
- Accommodates Shelf (S Series)
- Finished in Gray Hammertone
- Mounts to tapped holes on side legs of Panel Mounting Angles of FA & PRXA series.



CSA SERIES

| Cat. No. | Length | To Fit Frames | Net Price Pair |
|----------|----------------------------------|--|----------------|
| CSA-18 | 16 ¹ / ₈ " | 18" deep PRXA | \$4.50 |
| CSA-22 | 20 ¹ / ₈ " | 22" deep FA | 5.00 |
| CSA-24 | 22 ¹ / ₈ " | 24" deep PRXA | 5.25 |
| CSA-255 | 23 ⁵ / ₈ " | 25 ¹ / ₂ " deep FA | 5.50 |

PANEL MOUNTING ANGLES

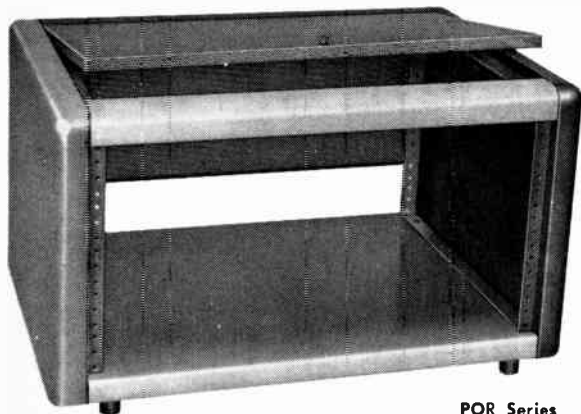
To Fit Premier Heavy Duty Racks (FD & RMA Series)
Made of 1¹/₄" x 1¹/₄" x 3³/₁₆" thick steel and tapped 10-32 on E.I.A. spacings (3/8"-1/2"). Finished in Gray Hammertone.

| Cat. No. | To Fit Racks | Ht. | Net Price Pair |
|----------|-------------------------------|----------------------------------|----------------|
| PMA-362 | FD & RMA 3619, 3619-24 | 36 ³ / ₄ " | \$10.50 |
| PMA-422 | FD & RMA 4219, 4219-24, 2742 | 42" | 12.00 |
| PMA-612 | FD & RMA 6119, 6119-24, 2761 | 61 ¹ / ₄ " | 15.00 |
| PMA-702 | FD-7019, 7019-24, 2770; | 70" | 16.80 |
| PMA-772 | RMA 7618, 7618-24, 7030, 2770 | 77" | 18.00 |
| | FD & RMA 7719, 7719-24, 2777 | | |



PREM-O-RAK®

DESK CABINET RACKS



POR Series

BOTH FRONT AND REAR OF TOP HAVE ATTRACTIVE BALL CORNERS.

- All screws for assembling PREM-O-RAK are not visible from the outside.
- Both front and rear verticals are tapped for 10/32 machine screws on E.I.A. spacings (5/8-5/8-1/2") so that panels may be mounted on both front and rear if desired.
- Interlocking removable top made of perforated metal and held in place by only one captive screw.
- Interlocking removable rear panel made of perforated metal and held in place by two captive screws.
- Rigidly constructed of #16 gauge steel.

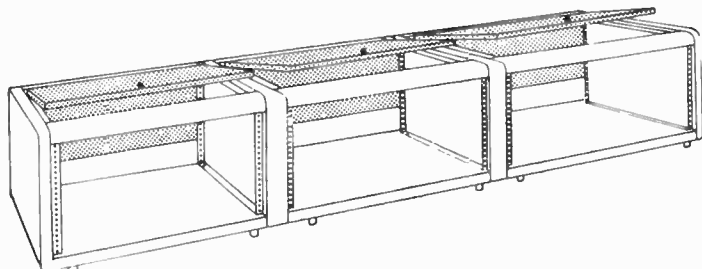
The **ARISTOCRAT** of **DESK CABINET RACKS**

**AVAILABLE IN 24 DIFFERENT SIZES—
FROM 3 1/2" to 35" PANEL SPACES
BOTH 15 1/4" and 18" DEEP
FOR STANDARD 19" PANELS.**

SHIPPED KNOCKED-DOWN WITH ALL THE NECESSARY HARDWARE FOR EASY ASSEMBLY.

- Rear Panel has 3 1/2" opening on bottom for leads, etc., except on POR-3, 318, 5, 518.
- Panels fit into 1/2" recess.
- Base supplied with four rubber feet.
- Components may be mounted on base before assembly of rack into a complete unit.
- **HANDSOMELY FINISHED IN TWO-TONE HAMMERTONE.**
Top cross braces and base are Gray Hammertone. Top and rear panel and side panels are Brown Hammertone.

| 15 1/4" DEEP | | | | ALL CABINETS ARE 21 3/4" WIDE | | 18" DEEP | | | |
|--------------|---------------|------------------|-----------|-------------------------------|-------------|-------------|---------------|------------------|-----------|
| Catalog No. | Shp. Wt. Lbs. | Use Slide Length | Net Price | Overall Height | Panel Space | Catalog No. | Shp. Wt. Lbs. | Use Slide Length | Net Price |
| POR-3 | 18 | 14" | \$22.80 | 5 7/8" | 3 1/2" | POR-318 | 20 | 16" | \$24.00 |
| POR-5 | 20 | 14" | 24.00 | 7 5/8" | 5 1/4" | POR-518 | 22 | 16" | 26.46 |
| POR-7 | 22 | 14" | 25.20 | 9 3/8" | 7" | POR-718 | 24 | 16" | 27.88 |
| POR-8 | 24 | 14" | 26.46 | 11 1/8" | 8 3/4" | POR-818 | 26 | 16" | 29.30 |
| POR-10 | 26 | 14" | 30.24 | 12 7/8" | 10 1/2" | POR-1018 | 29 | 16" | 33.39 |
| POR-12 | 28 | 14" | 32.76 | 14 5/8" | 12 1/4" | POR-1218 | 31 | 16" | 36.07 |
| POR-14 | 32 | 14" | 36.54 | 16 3/8" | 14" | POR-1418 | 35 | 16" | 40.32 |
| POR-17 | 40 | 14" | 43.47 | 19 7/8" | 17 1/2" | POR-1718 | 44 | 16" | 47.88 |
| POR-21 | 44 | 14" | 47.25 | 23 3/8" | 21" | POR-2118 | 48 | 16" | 52.29 |
| POR-26 | 45 | 14" | 51.03 | 28 5/8" | 26 1/4" | POR-2618 | 49 | 16" | 56.23 |
| POR-31 | 50 | 14" | 53.55 | 33 7/8" | 31 1/2" | POR-3118 | 55 | 16" | 59.69 |
| POR-35 | 55 | 14" | 56.70 | 37 3/8" | 35" | POR-3518 | 60 | 16" | 62.53 |



Above unit is one Triple POR-8 which consists of one POR-8 two MOR-8

| 15 1/4" DEEP | | | | | 18" DEEP | | |
|--------------|---------------|-----------|----------------|-------------|----------|---------------|-----------|
| Cat. No. | Shp. Wt. Lbs. | Net Price | Overall Height | Panel Space | Cat. No. | Shp. Wt. Lbs. | Net Price |
| MOR-3 | 16 | \$16.00 | 5 7/8" | 3 1/2" | MOR-318 | 18 | \$16.80 |
| MOR-5 | 17 | 16.80 | 7 5/8" | 5 1/4" | MOR-518 | 19 | 18.55 |
| MOR-7 | 18 | 17.64 | 9 3/8" | 7" | MOR-718 | 20 | 19.60 |
| MOR-8 | 19 | 18.52 | 11 1/8" | 8 3/4" | MOR-818 | 21 | 20.60 |
| MOR-10 | 20 | 21.20 | 12 7/8" | 10 1/2" | MOR-1018 | 23 | 23.50 |
| MOR-12 | 21 | 23.00 | 14 5/8" | 12 1/4" | MOR-1218 | 24 | 25.25 |
| MOR-14 | 23 | 25.60 | 16 3/8" | 14" | MOR-1418 | 26 | 28.25 |
| MOR-17 | 31 | 30.50 | 19 7/8" | 17 1/2" | MOR-1718 | 34 | 33.60 |
| MOR-21 | 33 | 33.10 | 23 3/8" | 21" | MOR-2118 | 37 | 36.60 |
| MOR-26 | 34 | 35.80 | 28 5/8" | 26 1/4" | MOR-2618 | 38 | 39.40 |
| MOR-31 | 36 | 37.50 | 33 7/8" | 31 1/2" | MOR-3118 | 40 | 41.80 |
| MOR-35 | 40 | 39.70 | 37 3/8" | 35" | MOR-3518 | 44 | 43.80 |

ALL PRICES F.O.B. N. Y. 59, N. Y.

SEE PAGES 25, 26 & 27 FOR SLIDES, BLOWERS and FANS

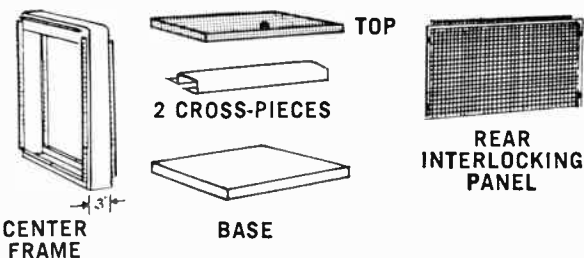
PREMIER PAGE 14

MULTIPLE SECTION FOR PREM-O-RAK DESK CABINETS

PREM-O-RAK DESK CABINETS can be joined together to make multiple units by means of a center frame section which is bolted to the top cross pieces and base. When ordering multiple units specify number of units, such as Double, Triple, etc.

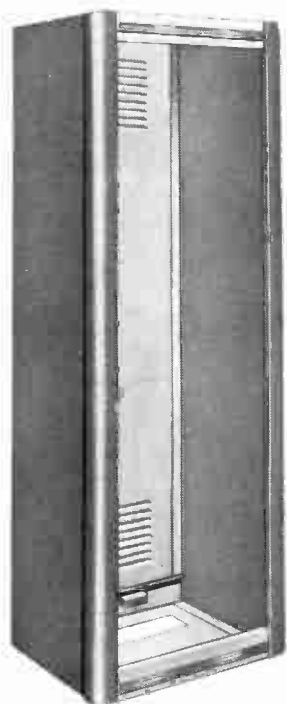
EXAMPLE: One Double POR-1218 consists of one POR-1218 and one MOR-1218.
One Triple POR-8 consists of one POR-8 and two MOR-8.

EACH MULTIPLE SECTION (MOR Series) comprises 6 pieces as shown.

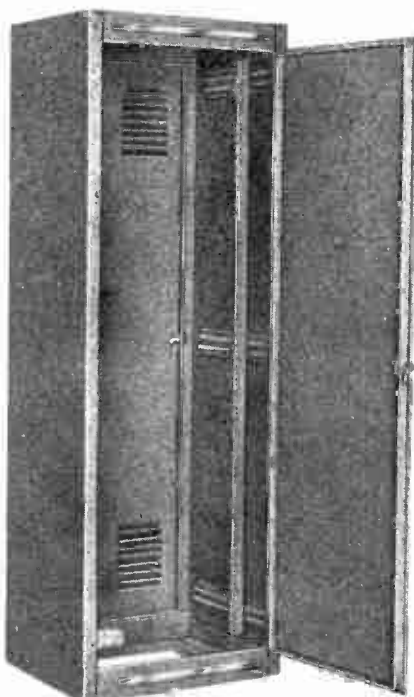


PREMIER**HEAVY DUTY RACKS****FOR 19", 24" AND 30" RACK PANELS – 18" AND 24" DEEP**

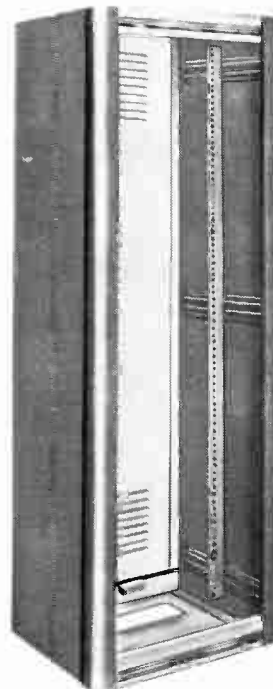
- Rigidly constructed of #16 gauge steel with a #12 gauge steel bottom and welded throughout.
- Panel mounting angles are $\frac{3}{16}$ " thick and are tapped 10-32 on E.I.A. spacings ($\frac{5}{8}$ - $\frac{5}{8}$ - $\frac{1}{2}$).
- Rear doors are hung on sturdy slip-jointed hinges and closed by a chrome handle. Locking handle with 2 keys available at additional cost.
- Round hole and 5 mounting holes on top of frame to accommodate Exhaust (EF Series) and Intake (IF Series) Fans, available at additional cost.
- A rectangular cut-out is made in the bottom for leads, etc.
- RM-7030 Rack supplied with double rear doors and with a 3-point locking device.
- FD Series are furnished with locking handle and 2 keys on Front Door.
- **All racks are supplied without louvres on sides unless specified.**
- Vertical rounded corner "J" type moldings are supplied.
- When joining racks for multiple installation, specify amount of center "U" type moldings (supplied at no additional cost). EXAMPLE: Three RM-3619 requires two "J" and two "U" moldings.
- Tops and bottoms are trimmed with red striped chrome moulding.
- Panel mounting angles are adjustable to any distance from the front by means of channel slides on FD and RMA Racks.
- A Duplex Receptacle and Outlet Box are furnished in the Back Under the Door.
- Racks finished in either Black or Gray wrinkle, Gray or Brown Hammertone.
- **BLACK WRINKLE FURNISHED IF COLOR IS NOT SPECIFIED.**



RM MODEL



FD SERIES WITH FRONT DOORS



RMA MODEL

SPECIFY COLOR WHEN ORDERING

| 18" DEEP RACKS | | | | 18" DEEP RACKS WITH FRONT DOORS | | | | |
|----------------|----------------|-----------|-----------------------|---------------------------------|-------------------|------------|----------------|-----------|
| Cat. No. | Shpg. Wt. Lbs. | Net Price | H & W | Panel Space | Use Slide* Length | Cat. No. | Shpg. Wt. Lbs. | Net Price |
| RM-3619 | 100 | \$ 66.15 | 42 $\frac{7}{8}$ x22" | 36 $\frac{3}{4}$ x19" | 16" | FD-3619 | 115 | \$102.39 |
| RM-4219 | 130 | 78.00 | 48 $\frac{1}{8}$ x22" | 42 x19" | 16" | FD-4219 | 120 | 108.00 |
| RM-6119 | 150 | 86.01 | 67 $\frac{3}{8}$ x22" | 61 $\frac{1}{4}$ x19" | 16" | FD-6119 | 175 | 115.77 |
| RM-7618 | 170 | 105.84 | 76 $\frac{1}{8}$ x22" | 70 x19" | 16" | FD-7019 | 200 | 132.30 |
| RM-7719 | 190 | 109.20 | 83 $\frac{1}{8}$ x22" | 77 x19" | 16" | FD-7719 | 220 | 142.23 |
| 24" DEEP RACKS | | | | 24" DEEP RACKS WITH FRONT DOORS | | | | |
| Cat. No. | Shpg. Wt. Lbs. | Net Price | H & W | Panel Space | Use Slide* Length | Cat. No. | Shpg. Wt. Lbs. | Net Price |
| RM-3619-24 | 110 | \$ 84.00 | 42 $\frac{7}{8}$ x22" | 36 $\frac{3}{4}$ x19" | 22" | FD-3619-24 | 125 | \$100.80 |
| RM-4219-24 | 130 | 93.05 | 48 $\frac{1}{8}$ x22" | 42 x19" | 22" | FD-4219-24 | 150 | 111.00 |
| RM-6119-24 | 175 | 122.40 | 67 $\frac{3}{8}$ x22" | 61 $\frac{1}{4}$ x19" | 22" | FD-6119-24 | 200 | 152.16 |
| RM-7618-24 | 200 | 132.30 | 76 $\frac{1}{8}$ x22" | 70 x19" | 22" | FD-7019-24 | 255 | 158.76 |
| RM-7719-24 | 225 | 148.86 | 83 $\frac{1}{8}$ x22" | 77 x19" | 22" | FD-7719-24 | 270 | 161.89 |
| RMA-2742 | 170 | 120.78 | 48 $\frac{1}{8}$ x27" | 42 x24" | 22" | FD-2742 | 180 | 140.19 |
| RMA-2761 | 210 | 137.58 | 67 $\frac{3}{8}$ x27" | 61 $\frac{1}{4}$ x24" | 22" | FD-2761 | 230 | 165.39 |
| RMA-2770 | 240 | 148.59 | 76 $\frac{1}{8}$ x27" | 70 x24" | 22" | FD-2770 | 260 | 176.22 |
| RMA-2777 | 270 | 165.39 | 83 $\frac{1}{8}$ x27" | 77 x24" | 22" | FD-2777 | 290 | 198.45 |
| RM-7030 | 240 | 191.85 | 76 $\frac{1}{8}$ x33" | 70 x30" | 22" | | | |

All RM Racks can be furnished with adjustable panel mounting angles at no additional cost. Specify RMA.

* Use Slide Adapter Kit (Cat. No. SAK-35 for rear mounting. (See page 27)

ALL PRICES F.O.B. N. Y. 59, N. Y.

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SEE PAGES 25, 26 & 27 FOR SLIDES, BLOWERS and FANS

PREMIER**RELAY RACKS**

HEAVY DUTY RELAY RACK

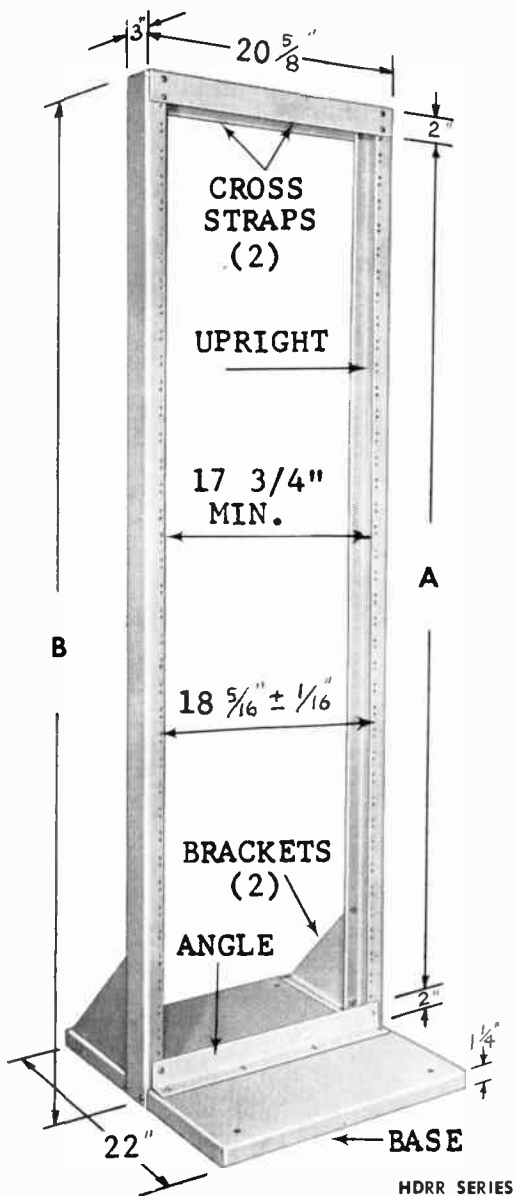
MEETS MIL-STD-189

- Uprights and top cross straps made of $\frac{3}{16}$ " sheet steel.
- Base and Brackets made of No. 12 gauge sheet steel.
- Base angle made of 2 x 2 x $\frac{3}{16}$ " steel.
- Panel mounting holes are tapped 10-32 on E.I.A. spacings ($1\frac{1}{4}$ - $1\frac{1}{2}$ ").
- Finished in Zinc Chromate Primer (MIL SPEC. 6889A).
- Shipped knocked down and assembled with $\frac{1}{4}$ -20 x $\frac{3}{4}$ " long hex head cap screws and nuts.

| Catalog No. | Panel Space (A) | Frame Height (B) | Net Price |
|-------------|----------------------|----------------------|-----------|
| HDRR-6619 | 66 $\frac{21}{32}$ " | 71 $\frac{29}{32}$ " | \$67.00 |
| HDRR-7319 | 73 $\frac{21}{32}$ " | 78 $\frac{29}{32}$ " | 73.00 |
| HDRR-7719 | 77 $\frac{3}{32}$ " | 82 $\frac{11}{32}$ " | 77.00 |

ALSO AVAILABLE IN HEIGHTS UP TO 10 FT.

PRICES UPON REQUEST



HDRR SERIES

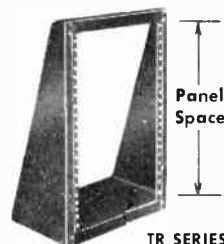
CHANNEL RELAY RACKS

- Rigidly constructed of #12 gauge cold rolled sheet steel and finished in Black Wrinkle.
- Vertical members and top crossbrace are welded together.
- Panel mounting holes are tapped for 10/32 machine screws on E.I.A. spacings ($\frac{5}{8}$ - $\frac{5}{8}$ - $1\frac{1}{2}$ ").
- Racks are shipped knocked down with all necessary bolts for easy assembly.
- Base punched to accommodate CA-4 (2") and CA-5 (3") casters.

| Cat. No. | H. | W. | D. | Panel Space | Shp. Lbs. | Wt. Lbs. | Net Price |
|----------|--------------------|-----|--------------------|--------------------------|-----------|----------|-----------|
| RR-800 | 39 $\frac{1}{4}$ " | 20" | 18 $\frac{3}{8}$ " | 36 $\frac{3}{4}$ " x 19" | 40 | \$20.16 | |
| RR-801 | 74 $\frac{1}{4}$ " | 20" | 20 $\frac{7}{8}$ " | 71 $\frac{3}{4}$ " x 19" | 55 | 24.00 | |
| RR-802 | 79 $\frac{1}{2}$ " | 20" | 20 $\frac{7}{8}$ " | 77" x 19" | 60 | 27.78 | |

RR SERIES

TABLE TYPE RELAY RACKS



TR SERIES

- Rigidly constructed of #16 gauge cold rolled sheet steel and finished in Black Wrinkle.
- Base constructed of one piece, similar to a chassis.
- Panel mounting holes are tapped for 10/32 machine screws on E.I.A. spacings ($\frac{5}{8}$ - $\frac{5}{8}$ - $1\frac{1}{2}$ ").
- Racks are shipped knocked down with all necessary bolts for easy assembly.

| Cat. No. | H. | W. | D. | Panel Space | Shp. Lbs. | Wt. Lbs. | Net Price |
|----------|-----|-----|-----|-------------|-----------|----------|-----------|
| TR-2119 | 25" | 21" | 12" | 21 x 19" | 17 | \$ 8.02 | |
| TR-2819 | 32" | 21" | 12" | 28 x 19" | 20 | 10.03 | |

ALL PRICES F.O.B. N. Y. 59, N. Y.
PREMIER PAGE 16

PREMIER ENCLOSED RELAY RACKS



FOR STANDARD 19" RACK PANELS

- Rigidly constructed of #16 gauge cold rolled sheet steel.
- The panel mounting angles are of #12 gauge steel and are tapped for 10-32 machine screws on E.I.A. spacings ($\frac{5}{8}$ - $\frac{1}{2}$).
- Panels fit into a $\frac{3}{16}$ " recess so that the edges are not exposed.
- Racks are shipped knocked down with all necessary bolts for easy assembly.
- Rear doors are hung on sturdy slip-jointed hinges, and closed by a chrome handle. Locking handle with two keys available at additional cost.
- Holes punched in bottom to accommodate CA-4 and CA-5 casters.

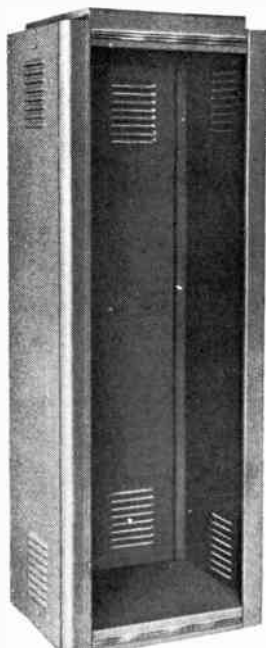
- Round hole and 5 mounting holes on top of cabinets to accommodate Exhaust (EF Series) and Intake (IF Series) Fans, available at additional cost.
- STANDARD TYPE have square front vertical corners.
- DELUXE TYPE — The removable vertical corner mouldings are rounded and cover the mounting screws.
- DELUXE TYPE — Top and bottom are trimmed with red stripped chrome finished moulding.
- FRONT DOOR TYPE has front vertical rounded corners and is supplied with locking chrome handle and two keys.
- Cabinets finished in either Black or Gray Wrinkle, Gray or Brown Hammertone.
- BLACK WRINKLE WILL BE FURNISHED IF COLOR IS NOT SPECIFIED.

DELUXE TYPE

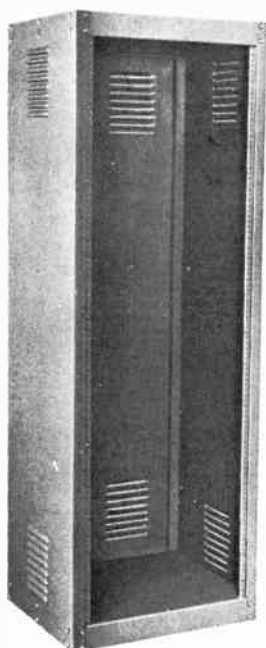
STANDARD TYPE

ROUNDED TYPE

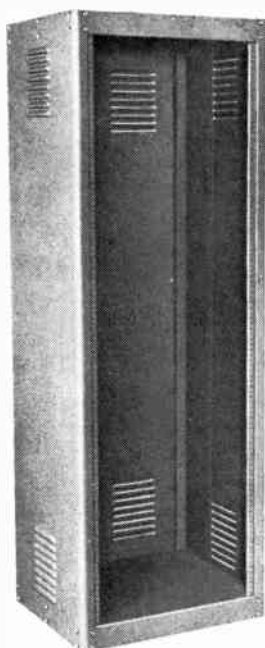
FRONT DOOR TYPE



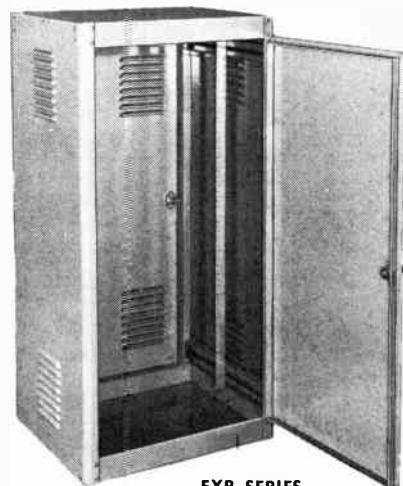
DR SERIES



RS SERIES



R SERIES



FXR SERIES
Supplied with adjustable Panel Mounting Angles

SPECIFY COLOR WHEN ORDERING
Racks are 22" wide x 18" deep

| | Cat. No. | Overall Height | Panel Space | Use Slide Length* | Ship. Wt.—Lbs. | Net Price |
|-------------------|----------|--------------------|--------------------|-------------------|----------------|-----------|
| DELUXE | DR-3619 | 43 $\frac{1}{8}$ " | 36 $\frac{3}{4}$ " | 16" | 85 | \$54.00 |
| | DR-6119 | 67 $\frac{5}{8}$ " | 61 $\frac{1}{4}$ " | 16" | 135 | 66.00 |
| | DR-7719 | 83 $\frac{3}{8}$ " | 77" | 16" | 160 | 79.89 |
| STANDARD | RS-3619 | 41 $\frac{7}{8}$ " | 36 $\frac{3}{4}$ " | 16" | 80 | 37.89 |
| | RS-6119 | 66 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 16" | 120 | 56.43 |
| | RS-7719 | 82 $\frac{1}{8}$ " | 77" | 16" | 140 | 67.77 |
| ROUNDED | R-3619 | 41 $\frac{7}{8}$ " | 36 $\frac{3}{4}$ " | 16" | 80 | 37.89 |
| | R-4219 | 47 $\frac{1}{8}$ " | 42" | 16" | 90 | 43.38 |
| | R-6119 | 66 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 16" | 120 | 56.43 |
| | R-7719 | 82 $\frac{1}{8}$ " | 77" | 16" | 140 | 67.77 |
| FRONT DOOR | FXR-3619 | 41 $\frac{7}{8}$ " | 36 $\frac{3}{4}$ " | 16" | 93 | 56.00 |
| | FXR-4219 | 47 $\frac{1}{8}$ " | 42" | 16" | 105 | 64.23 |
| | FXR-6119 | 66 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 16" | 140 | 80.76 |
| | FXR-7719 | 82 $\frac{1}{8}$ " | 77" | 16" | 164 | 95.00 |

| | Cat. No. | Overall Height | Panel Space | Use Slide Length* | Used With | Net Price |
|-------------------------------|----------|--------------------|--------------------|-------------------|-----------|-----------|
| MULTIPLE RACK SECTIONS | DMR-3619 | 43 $\frac{1}{8}$ " | 36 $\frac{3}{4}$ " | 16" | DR-3619 | \$51.78 |
| | DMR-6119 | 67 $\frac{5}{8}$ " | 61 $\frac{1}{4}$ " | 16" | DR-6119 | 61.83 |
| | DMR-7719 | 83 $\frac{3}{8}$ " | 77" | 16" | DR-7719 | 73.80 |
| | MR-3619 | 41 $\frac{7}{8}$ " | 36 $\frac{3}{4}$ " | 16" | R&RS-3619 | 35.81 |
| | MR-4219 | 47 $\frac{1}{8}$ " | 42" | 16" | R&RS-4219 | 41.29 |
| | MR-6119 | 66 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 16" | R&RS-6119 | 52.29 |
| | MR-7719 | 82 $\frac{1}{8}$ " | 77" | 16" | R&RS-7719 | 63.57 |
| | MXR-3619 | 41 $\frac{7}{8}$ " | 36 $\frac{3}{4}$ " | 16" | FXR-3619 | 54.00 |
| | MXR-4219 | 47 $\frac{1}{8}$ " | 42" | 16" | FXR-4219 | 62.23 |
| | MXR-6119 | 66 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 16" | FXR-6119 | 78.76 |
| | MXR-7719 | 82 $\frac{1}{8}$ " | 77" | 16" | FXR-7719 | 93.00 |

*Use Slide Adapter Kit (Cat. No. SAK-35) for rear mounting. (See page 27)

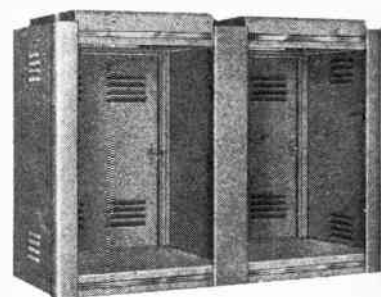
ALL PRICES F.O.B. N. Y. 59, N. Y.

PREMIER PAGE 17

SEE PAGES 25, 26 & 27 FOR SLIDES, BLOWERS & FANS

MULTIPLE RACK UNITS

These racks can be joined together to make multiple units by means of a solid center partition which is bolted to the top and bottom. Each multiple section comprises a top, bottom, rear door and center partition. On MXR Models, front door is also supplied. When ordering multiple units, specify number of units, such as double, triple, quad, etc.



ABOVE UNIT IS ONE DOUBLE DR3619

Example:

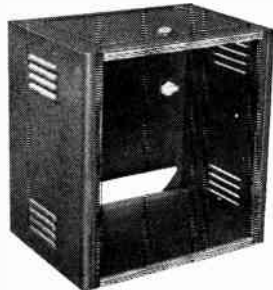
One Double DR-3619 consists of one DR-3619 and one DMR-3619.

One Triple RS-3619 consists of one RS-3619 and two MR-3619.

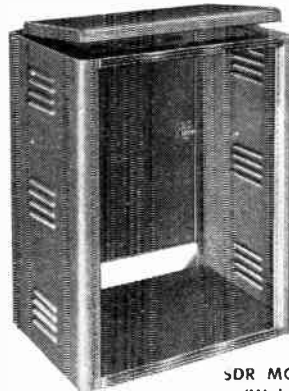
One Quad R-3619 consists of one R-3619 and three MR-3619.

PREMIER DESK CABINET RACKS

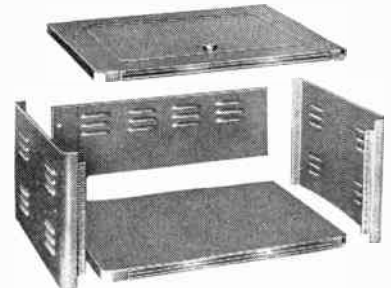
**DESK CABINET RACKS FOR STANDARD 19" RACK PANELS
IN STANDARD, SUPER DELUXE AND KNOCKED DOWN
MODELS — BOTH 15¼" AND 18" DEEP**



DCR MODEL
(Welded)



SDR MODEL
(Welded)



DRK MODEL
(Knocked Down)

- Front vertical corners are rounded and the top and bottom are trimmed with red striped chrome finished moulding.
- Rigidly constructed of No. 16 Ga. cold rolled sheet steel.
- Panels fit into a ¼" recess so that the edges are not exposed.
- Round hole and 5 mounting holes on top of frame to accommodate Exhaust (EF Series) and Intake (IF Series) Fans, available at additional cost.
- Panel mounting holes are tapped for 10-32 machine screws on E I A. Spacings (5/8-5/8-1/2).
- Piano type hinges are used on the top doors, which are provided with snap catches.
- Top door on Models SDR and SDRK open to 90° and have a rounded front corner.
- DRK is identical to DCR; SDRK is identical to SDR except shipped knocked down with all necessary bolts for easy assembly. On these models the bolts are not visible from the outside and have the same appearance as the welded models.
- Gussets welded at bottom of rear on Models 170-350 for additional strength.
- Cabinets finished in either Black or Gray Wrinkle, Gray or Brown Hammettone.
- BLACK WRINKLE IS FURNISHED, IF COLOR IS NOT SPECIFIED.

WALL MOUNTING BRACKETS



FOR MOUNTING
DESK CABINET
RACKS ON WALL
— REMOVE REAR
DOOR AND USE
WALL MOUNTING
BRACKETS.

Catalog No. W8-19
Net Price \$2.85

Sold in sets only.
Finished in Gray Enamel.
Shipping Weight 2½ lbs.

21¾" WIDE x 15¼" DEEP

| | Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price | Overall Height | Panel Space | Ship. Wt. Lbs. | Use Slide Length* |
|---------------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|----------------|-------------|----------------|-------------------|
| WITH DOOR ON TOP ONLY | DCR-70 | \$13.20 | SDR-70 | \$18.09 | DRK-70 | \$12.51 | SDRK-70 | \$17.40 | 8¾" | 7" | 22 | 14" |
| | DCR-80 | 13.89 | SDR-80 | 18.78 | DRK-80 | 13.20 | SDRK-80 | 18.09 | 10½" | 8¾" | 24 | 14" |
| | DCR-100 | 15.66 | SDR-100 | 20.52 | DRK-100 | 14.97 | SDRK-100 | 19.86 | 12¼" | 10½" | 26 | 14" |
| | DCR-120 | 16.92 | SDR-120 | 21.75 | DRK-120 | 16.20 | SDRK-120 | 21.06 | 14" | 12¼" | 28 | 14" |
| | DCR-140 | 18.78 | SDR-140 | 23.64 | DRK-140 | 18.09 | SDRK-140 | 22.95 | 15¾" | 14" | 32 | 14" |
| WITH DOOR ON TOP AND REAR | DCR-170 | 22.26 | SDR-170 | 27.09 | DRK-170 | 21.57 | SDRK-170 | 26.40 | 19¼" | 17½" | 40 | 14" |
| | DCR-190 | 23.31 | SDR-190 | 28.20 | DRK-190 | 22.62 | SDRK-190 | 27.48 | 21" | 19¼" | 42 | 14" |
| | DCR-210 | 24.18 | SDR-210 | 29.25 | DRK-210 | 23.49 | SDRK-210 | 28.29 | 22¾" | 21" | 44 | 14" |
| | DCR-260 | 26.10 | SDR-260 | 30.99 | DRK-260 | 25.41 | SDRK-260 | 30.24 | 28" | 26¼" | 45 | 14" |
| | DCR-310 | 27.48 | SDR-310 | 32.34 | DRK-310 | 26.79 | SDRK-310 | 31.71 | 33¼" | 31½" | 50 | 14" |
| | DCR-350 | 28.86 | SDR-350 | 33.72 | DRK-350 | 28.17 | SDRK-350 | 33.03 | 36¾" | 35" | 55 | 14" |

21¾" WIDE x 18" DEEP

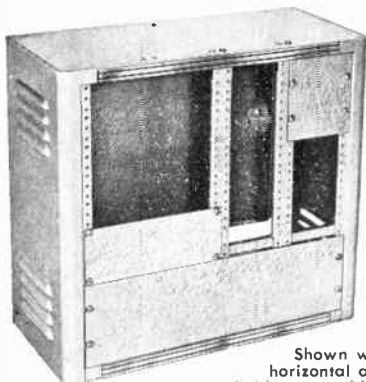
| | Catalog No. | Net Price | Catalog No. | Net Price | Overall Height | Panel Space | Ship. Wt. Lbs. | Use Slide Length* |
|---------------------------|-------------|-----------|-------------|-----------|----------------|-------------|----------------|-------------------|
| WITH DOOR ON TOP ONLY | DCR-1880 | \$16.71 | SDR-1880 | \$21.58 | 10½" | 8¾" | 26 | 16" |
| | DCR-18100 | 18.78 | SDR-18100 | 23.64 | 12¼" | 10½" | 29 | 16" |
| | DCR-18120 | 20.25 | SDR-18120 | 25.11 | 14" | 12¼" | 31 | 16" |
| | DCR-18140 | 22.53 | SDR-18140 | 27.42 | 15¾" | 14" | 35 | 16" |
| WITH DOOR ON TOP AND REAR | DCR-18170 | 26.70 | SDR-18170 | 31.59 | 19¼" | 17½" | 44 | 16" |
| | DCR-18190 | 27.99 | SDR-18190 | 32.85 | 21" | 19¼" | 46 | 16" |
| | DCR-18210 | 28.98 | SDR-18210 | 33.87 | 22¾" | 21" | 48 | 16" |
| | DCR-18260 | 31.29 | SDR-18260 | 36.15 | 28" | 26¼" | 49 | 16" |
| | DCR-18310 | 32.97 | SDR-18310 | 37.80 | 33¼" | 31½" | 55 | 16" |
| | DCR-18350 | 34.65 | SDR-18350 | 39.48 | 36¾" | 35" | 60 | 16" |

SPECIFY COLOR WHEN ORDERING

ALL PRICES F.O.B. N. Y. 59, N. Y.

*Use Slide Adapter Kit (Cat. No. SAK-35) for rear mounting. (See page 27)

PREMIER Standard PRECISION BUILT METAL HOUSINGS



MDK Series

Shown with panels, horizontal and vertical dividers assembled.

MODU-RAK[®]



12" DEEP MINIATURE DESK RACKS

for modular construction of test equipment

FOR STANDARD 19" AND 9 1/2" RACK PANELS

- Front vertical corners are rounded and the top and bottom are trimmed with red striped chrome moulding.
- Rigidly constructed of No. 16 gauge cold rolled sheet steel.
- Panels fit into a recess so that the edges are not exposed.

- Panel mounting holes are tapped for 10-32 machine screws on E.I.A. Spacings.

- 6 knock-out holes are provided on top and bottom of MDK-70 through MDK 280 series to accommodate angle brackets (Cat. No. AB-2).

Two knock-out holes are provided on top and bottom of MDK-50-95 through MDK-140-95 series.

- Rear panel on Models MDK-70 through MDK-140 and MDK-70-95 through MDK-140-95 can be removed from back of cabinet for service.

- Rear doors have snap catches.

- Bolts are not visible from the outside and these units have the same appearance as the welded models.

- FINISHED IN GRAY HAMMERTONE

- SHIPPED KNOCKED-DOWN WITH ALL NECESSARY HARDWARE FOR EASY ASSEMBLY

21 3/4" WIDE x 12" DEEP

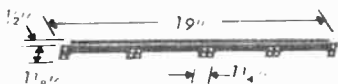
| | Catalog No. | Overall Height | Available Panel-Space | Ship. Wt. Lbs. | Net Price |
|---------------------------|-------------|----------------|-----------------------|----------------|-----------|
| WITH REMOVABLE REAR PANEL | MDK-50 | 7" | 5 1/4" x 19" | 16 | \$10.71 |
| | MDK-70 | 8 3/4" | 7" x 19" | 20 | 11.07 |
| | MDK-80 | 10 1/2" | 8 3/4" x 19" | 21 | 11.76 |
| | MDK-100 | 12 1/4" | 10 1/2" x 19" | 23 | 13.53 |
| | MDK-120 | 14" | 12 1/4" x 19" | 25 | 14.76 |
| MDK-140 | 15 3/4" | 14" x 19" | 29 | 16.65 | |
| WITH REAR DOOR | MDK-170 | 19 1/4" | 17 1/2" x 19" | 36 | 20.22 |
| | MDK-210 | 22 3/4" | 21" x 19" | 39 | 22.05 |
| | MDK-260 | 28" | 26 1/4" x 19" | 40 | 24.12 |
| | MDK-280 | 29 3/4" | 28" x 19" | 41 | 26.01 |

12 1/4" WIDE x 12" DEEP

| | Catalog No. | Overall Height | Available Panel-Space | Ship. Wt. Lbs. | Net Price |
|---------------------------|-------------|----------------|-----------------------|----------------|-----------|
| WITH REMOVABLE REAR PANEL | MDK-50-95 | 7" | 5 1/4" x 9 1/2" | 14 | 10.26 |
| | MDK-70-95 | 8 3/4" | 7" x 9 1/2" | 15 | 10.71 |
| | MDK-80-95 | 10 1/2" | 8 3/4" x 9 1/2" | 16 | 11.43 |
| | MDK-100-95 | 12 1/4" | 10 1/2" x 9 1/2" | 17 | 13.23 |
| | MDK-120-95 | 14" | 12 1/4" x 9 1/2" | 18 | 14.37 |
| MDK-140-95 | 15 3/4" | 14" x 9 1/2" | 20 | 15.81 | |

ACCESSORIES FOR SUBDIVIDING MODU-RAK INTO MODULAR UNITS

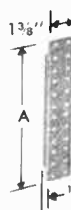
HORIZONTAL DIVIDERS



- Holes punched to accommodate vertical dividers (DV Series) which subdivides MODU-RAK into 9 1/2" and 4 3/4" widths.
- Made of No. 16 gauge steel.
- Finished in gray hammertone.

| Catalog No. | Dimensions | Net Price |
|-------------|-----------------|-----------|
| DH 19 | 19" x 1 1/2" | \$2.85 |
| DH 95 | 9 1/2" x 1 1/2" | 2.34 |

VERTICAL DIVIDERS



- Two rows of 10-32 tapped holes punched on E.I.A. Spacings.
- Made of No. 16 gauge steel.
- Finished in gray Hammertone.

| Cat. No. | "A" Available Panel Mtg. Space | Net Price |
|----------|--------------------------------|-----------|
| DV-5 | 5 1/4" | \$0.79 |
| DV-7 | 7" | 1.05 |
| DV-8 | 8 3/4" | 1.32 |
| DV-10 | 10 1/2" | 1.62 |
| DV-12 | 12 1/4" | 1.71 |
| DV-14 | 14" | 1.86 |
| DV-17 | 17 1/2" | 2.43 |
| DV-21 | 21" | 2.97 |
| DV-26 | 26 1/4" | 3.69 |
| DV-28 | 28" | 3.90 |

ANGLE BRACKETS



- Punched to accommodate vertical dividers.
- Made of No. 16 gauge steel.
- Finished in gray hammertone.

| Cat. No. | Net Price | sold in pairs only |
|----------|------------|--------------------|
| AB-2 | \$.99 pr. | |

RECESSED SPEAKER BOXES AND PLATES



Designed with adjustable mounting brackets for easy installation in walls or acoustical tile ceilings. Speaker plate has beveled edges to give the same appearance as an acoustical tile, and is easily fastened to the speaker box by means of Tinnerman nuts. Box made of #20 gauge steel; plate of #16 gauge steel with perforated grille spot-welded behind the opening. Interior sprayed with special undercoating to eliminate metallic sound. Finished in gray primer.

| Catalog No. | SPEAKER BOX | | | Ship. Wt. Lbs. | Net Price |
|-------------|-------------|-----|----|----------------|-----------|
| | W | H | D | | |
| SB-1010 | 10" | 10" | 4" | 4 | 5.19 |
| SB-1012 | 10" | 12" | 4" | 5 | 5.49 |

| Catalog No. | SPEAKER PLATE | | | Ship. Wt. Lbs. | Net Price |
|-------------|---------------|-----|--------------|----------------|-----------|
| | W | H | Speaker Size | | |
| SP-1212 | 12" | 12" | 8" | 2 1/2 | 2.58 |
| SP-1214 | 12" | 14" | 8" | 3 | 2.76 |



SPEAKER CABINETS

- Constructed of No. 18 gauge steel with perforated grille spot welded behind the opening.
- Front vertical corners are rounded.
- Supplied with handle.
- Removable back plate has key hole slots for hanging.
- Finished in Black Wrinkle.

| Cat. No. | H. | W. | D. | Hole Size | Speaker Size | Ship. Wt. Lbs. | Net Price |
|----------|-----|-----|----|-----------|--------------|----------------|-----------|
| SC-1006 | 10" | 10" | 6" | 4 5/8" | 6" | 7 3/8 | \$4.02 |
| SC-1227 | 12" | 12" | 7" | 6 1/2" | 8" | 10 | 5.04 |

ALL PRICES F.O.B. N. Y. 59, N. Y.

PREMIER RACK ACCESSORIES



SLIDING DRAWERS TO FIT STANDARD 19" RACKS 15" AND 18" DEEP

Panel made of #12 gauge steel; chassis of #16 steel and has a 1" flange on top and bottom to accommodate plywood for the record changer. The chassis is mounted on ball-bearing suspension slides which can sustain 40 lbs. Drawer extends 11" from front of cabinet. Entire unit mounts on angle brackets which can be bolted on to the cabinet. Supplied knocked down with all necessary bolts for easy assembly. Locks in place by means of 2 latches. Finished in black or gray wrinkle, and Gray or Brown Hammertone.

BLACK WRINKLE FURNISHED IF COLOR IS NOT SPECIFIED.

| Catalog No. | Will Fit Rack No. | Panel Size | Chassis Size | | Ship. Wt. Lbs. | Net Price |
|-------------|--|---|--------------|----------|------------------|-----------|
| | | | W. | D. H. | | |
| RD-10 | R, RS, DCR-18, | 10 $\frac{3}{8}$ " x 18 $\frac{3}{8}$ " | 17" | 16" x 3" | 15 | \$15.66 |
| RD-12 | SDR-18, RM, RMA & FD Models | 12 $\frac{1}{8}$ " x 18 $\frac{3}{8}$ " | 17" | 16" x 4" | 18 | 17.40 |
| RD-10-14 | DCR, SDR, DRK, RM, RMA & FD | 10 $\frac{3}{8}$ " x 18 $\frac{3}{8}$ " | 17" | 14" x 3" | 14 $\frac{1}{2}$ | 15.54 |
| RD-12-14 | SDRK, R, RS, DCR- 18, SDR-18 Models | 12 $\frac{1}{8}$ " x 18 $\frac{3}{8}$ " | 17" | 14" x 4" | 17 | 17.25 |

FRONT DOORS TO FIT STANDARD 19" DESK RACK CABINETS AND ENCLOSED RACKS

Constructed from one piece of #16 gauge steel. Two concealed piano hinges are provided with holes, punched to accommodate E.I.A. spacings and are made to fit on top of the panels. Supplied with cylinder lock and cam bracket to hold door in position. All necessary bolts furnished for easy assembly. All doors are 20 $\frac{1}{2}$ " wide x 1 $\frac{1}{4}$ " deep. Finished in Black or Gray Wrinkle, Gray or Brown Hammertone.

BLACK WRINKLE FURNISHED IF COLOR IS NOT SPECIFIED.



FD-300-306
MODELS

| Cat. No. | Will Fit Rack No. | Height | Ship Wt. Lbs. | Net Price |
|----------|--------------------------------|--------------------|---------------|-----------|
| FD-300 | DCR, DRK, SDR, SDRK-260, 18260 | 26 $\frac{1}{4}$ " | 10 | \$12.75 |
| FD-301 | DCR, DRK, SDR, SDRK-310, 18310 | 31 $\frac{1}{2}$ " | 11 | 14.82 |
| FD-302 | DCR, DRK, SDR, SDRK-350, 18350 | 35" | 12 | 16.53 |
| FD-303 | DCR, DRK, SDR, SDRK-120, 18120 | 12 $\frac{1}{4}$ " | 6 | 9.60 |
| FD-304 | DCR, DRK, SDR, SDRK-140, 18140 | 14" | 7 | 10.44 |
| FD-305 | DCR, DRK, SDR, SDRK-170, 18170 | 17 $\frac{1}{2}$ " | 8 | 11.34 |
| FD-306 | DCR, DRK, SDR, SDRK-210, 18210 | 21" | 9 | 12.21 |

DESK PANELS



- Made of No. 16 gauge steel and bolted to a standard steel panel 10 $\frac{1}{2}$ " x 19".
- Front corners are rounded.
- Finished in Black or Gray Enamel, Gray or Brown Hammertone.
- SHIPPED KNOCKED DOWN WITH ALL NECESSARY HARDWARE FOR EASY ASSEMBLY.

| Cat. No. | Width | Depth | Ship. Wt. Lbs. | Net Price |
|----------|-------|-------|----------------|-----------|
| DP-1016 | 22" | 16" | 20 | \$14.91 |
| DP-1020 | 22" | 20" | 22 | 15.24 |

RACK SHELVES



Made of one piece of #16 Ga. Cold Rolled Steel, 1" high. Holes are punched on sides for mounting to rack. Finished in Black or Gray Wrinkle, Gray or Brown Hammertone. **BLACK WRINKLE FURNISHED IF COLOR IS NOT SPECIFIED.**

| Cat. No. | Will Fit Rack No. | Shelf Size | Ship. Wt. Lbs. | Net Price |
|----------|--|-----------------------|----------------|-----------|
| RS-1106 | All 15 $\frac{1}{4}$ " SDR and DCR Racks | 12x21 $\frac{3}{8}$ " | 7 | \$2.82 |
| RS-1107 | R, RS, DR, 18" deep RM, DCR and SDR Racks | 15x21 $\frac{3}{8}$ " | 7 | 3.48 |
| RS-1108 | 18" deep FD Racks | 13x21 $\frac{3}{8}$ " | 7 | 3.15 |
| RS-1110 | For 27" wide - 24" deep Racks (RMA-27 and FD-27 Series) | 22x26 $\frac{3}{8}$ " | 8 | 6.60 |
| RS-1111 | MDK Series - 21 $\frac{3}{4}$ " wide | 10x21 $\frac{3}{8}$ " | 6 | 2.70 |
| RS-1112 | For 22" wide - 24" deep Racks (RM, RMA, FD Series) | 22x21 $\frac{3}{8}$ " | 7 | 5.64 |



CHASSIS SUPPORTS

Made of #12 gauge steel. Finished in black enamel. Sold in pairs only.

| Cat. No. | Size | Ship. Wt. Lbs. | Net Price |
|----------|---------------------------|-----------------|-----------|
| CS-12 | 12 x 3 x 3" | 4 | 1.92 |
| CS-14 | 14 $\frac{1}{2}$ x 3 x 3" | 5 $\frac{1}{4}$ | 2.10 |

ROLLER TRUCKS FOR RACKS



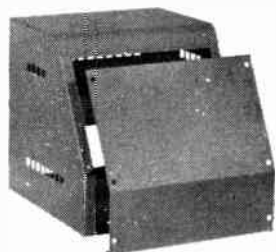
Made from 1 piece of No. 16 ga. Cold Rolled Steel. Supplied with either 2" or 3" diameter casters and bolts for easy assembly. Finished in Black or Gray Wrinkle, Gray or Brown Hammertone with a red striped chrome molding. IF COLOR IS NOT SPECIFIED, BLACK WRINKLE FURNISHED.

| With 2" Dia Casters Cat. No. | Ship. Wt. lbs. | Net Price | Will Fit Rack No. | Inside Dimensions | With 3" Dia. Casters Cat. No. | Ship. Wt. lbs. | Net Price |
|------------------------------|----------------|-----------|---|---------------------------------------|-------------------------------|----------------|-----------|
| RT-1100 | 22 | \$ 9.93 | All 15 $\frac{1}{4}$ " Racks | 15 $\frac{3}{4}$ x 22 $\frac{1}{4}$ " | RT-1100-3 | 24 | \$14.93 |
| RT-1101 | 22 | 12.57 | R, RS, DR, 18" deep FXR, RM, RMA, FD, DCR and SDR Racks | 18 $\frac{3}{4}$ x 22 $\frac{3}{4}$ " | RT-1101-3 | 24 | 17.57 |
| RT-1103 | 23 | 15.60 | 24" deep RM, FD and RMA Racks | 22 $\frac{1}{2}$ x 24 $\frac{1}{2}$ " | RT-1103-3 | 25 | 20.60 |
| RT-1110 | 25 | 23.33 | RMA-27 and FD-27 Series | 27 $\frac{1}{2}$ x 24 $\frac{1}{2}$ " | RT-1110-3 | 27 | 27.33 |
| RT-1111 | 30 | 30.00 | RM-7030, | 33 $\frac{1}{2}$ x 24 $\frac{1}{2}$ " | RT-1111-3 | 32 | 35.00 |

ALL PRICES F.O.B. N. Y. 59, N. Y.

PREMIER PAGE 20

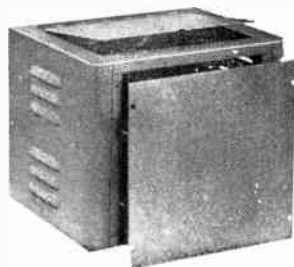
PREMIER Standard PRECISION BUILT METAL HOUSINGS



SLOPING FRONT

Cabinet has rounded top corners and a removable front panel. Back of cabinet is perforated and has opening for leads. Constructed of #20 gauge steel. Finished in Grey Wrinkle.

| Catalog No. | H. | W. | D. | Use Chassis No. | Ship. Wt. Lbs. | Net Price |
|-------------|------|------|-----|-----------------|----------------|-----------|
| SFC-500 | 8 x | 8 x | 8" | CH-403 | 6 | \$ 4.26 |
| SFC-501 | 8 x | 10 x | 8" | CH-404 | 7 | 4.74 |
| SFC-502 | 8 x | 14 x | 8" | CH-406 | 8 | 5.07 |
| SFC-503 | 9 x | 18 x | 8" | CH-409 | 10 | 7.29 |
| SFC-504 | 12 x | 18 x | 12" | CH-415 | 14 | 9.30 |

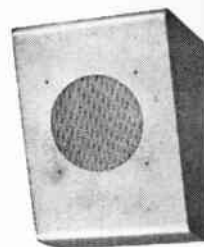


HINGED TOP ROUNDED CORNER TYPE

Cabinet has front vertical rounded corners and a removable front panel. Back of cabinet is louvred and has opening for leads. Constructed of #20 gauge steel. Finished in Grey Wrinkle.

| Catalog No. | H. | W. | D. | Panel Size | Use Chassis No. | Ship. Wt. Lbs. | Net Price |
|-------------|--------|-----|-------|------------|-----------------|----------------|-----------|
| HTC-200 | 8x10x | 8" | 8" | 8x8" | CH-403 | 6 | \$4.19 |
| HTC-201 | 8x12x | 8" | 10" | 8x10" | CH-404 | 6 1/2 | 4.54 |
| HTC-202 | 8x16x | 8" | 14" | 8x14" | CH-406 | 11 | 5.89 |
| HTC-203 | 9x17x | 11" | 9x15" | CH-413 | 6 1/2 | 9.13 | |
| HTC-204 | 12x20x | 12" | 18" | CH-415 | 13 1/2 | 10.80 | |
| HTC-205 | 8x14x | 8" | 12" | CH-405 | 7 1/4 | 5.23 | |

METAL WALL SPEAKER BAFFLE



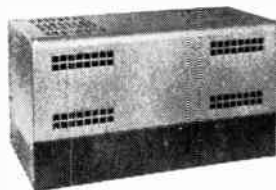
Sturdily constructed of #18 gauge cold rolled steel to eliminate splitting, warping, or cracking. Perforated grille is spot-welded behind speaker opening. Interior has special undercoating to eliminate metallic sound. Supplied with mounting bracket for simple hanging on wall. Finished in buff enamel or brown hammertone.

| Cat. No. | H. | W. | D. | Speaker Size | Net Price |
|----------|----------|----------|--------|--------------|-----------|
| WSB-8 | 11 1/2 x | 9 1/2 x | 7 3/4" | 8" | \$5.04 |
| WSB-12 | 15 1/2 x | 13 1/2 x | 9 3/4" | 12" | 6.30 |

MOUNTING PLATE for above.

Cat. No. SMP-812 .96 Net Price

AMPLIFIER FOUNDATIONS



STANDARD TYPE

STANDARD TYPE

TOP COVER has perforations, rounded corners and is 6" high. Finished in Gray Wrinkle.

CHASSIS constructed of one piece with corners spot-welded. Finished in Black Wrinkle.

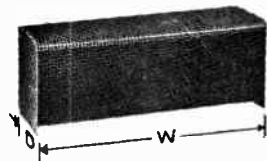
| Cat. No. | Chassis Size | Ship. Wt. Lbs. | Net Price |
|----------|----------------|----------------|-----------|
| AF-510 | 5" x 10" x 3" | 5 | \$4.59 |
| AF-615 | 6" x 14" x 3" | 7 | 5.29 |
| AF-1017 | 10" x 17" x 3" | 11 | 7.13 |
| AF-1317 | 13" x 17" x 3" | 13 | 8.58 |

PERFORATED TYPE COVERS

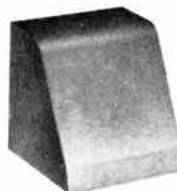
TOP COVER made of perforated steel and has rounded corners with solid ends. 6" high except PC-57*. Finished in Gray Wrinkle. Supplied without chassis.

| Cat. No. | W. | D. | Use Chassis No. | Ship. Wt. Lbs. | Net Price |
|----------|-----|-----|-----------------|----------------|-----------|
| *PC-57 | 7" | 5" | ACH or CH-425 | 1 | \$3.06 |
| PC-510 | 10" | 5" | ACH or CH-401 | 1 3/4 | 3.12 |
| PC-615 | 14" | 6" | ACH or CH-402 | 2 3/8 | 3.60 |
| PC-717 | 17" | 7" | ACH or CH-409 | 3 | 3.96 |
| PC-1012 | 12" | 10" | ACH or CH-412 | 3 | 4.02 |
| PC-1017 | 17" | 10" | ACH or CH 415 | 3 1/4 | 4.95 |

* 4" high.



PERFORATED TYPE COVERS



STEEL and ALUMINUM Sloping Panel Cabinets

ROUND TOP CORNERS WITH SLOPING FRONT

No. 20 gauge Steel—Black Wrinkle Finish. No. 18 gauge (.040) Aluminum—Natural Aluminum finish.

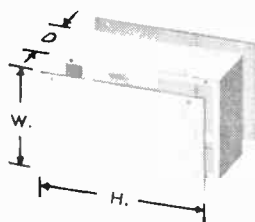
| Steel Cat. No. | W. | H. | D. | Ship. Wt. Lbs. | Net Price | Alum. Cat. No. | Net Price |
|----------------|---------|---------|--------|----------------|-----------|----------------|-----------|
| SPC-1200 | 4 3/8 x | 4 1/2 x | 4 3/8" | 3/4 | \$1.14 | ASFC-1200 | \$1.37 |
| SPC-1201 | 5 3/8 x | 4 1/2 x | 4 3/8" | 1 | 1.29 | ASPC-1201 | 1.55 |
| SPC-1202 | 6 3/8 x | 4 1/2 x | 4 3/8" | 1 | 1.47 | ASPC-1202 | 1.76 |
| SPC-1203 | 7 3/8 x | 4 1/2 x | 4 3/8" | 1 1/2 | 1.77 | ASPC-1203 | 2.12 |

2 in 1 STEEL & ALUMINUM METER CASES

Center Hole for 2" meter (2-3/16" dia.) increases to 3" (2-13/16" dia.) meter hole by simply removing a knock-out. Size: 4 3/8 x 4 3/8 x 4 3/8". Supplied with two 1/2" dia. knockouts. #20 gauge steel—Black Wrinkle Finish, #18 gauge (.040) Aluminum — Natural Aluminum Finish.

| Cat. No. | Sh. Wt. | Net Price |
|------------------|---------|-----------|
| ALUMINUM ASPC-23 | 3/4 | 1.51 |
| STEEL SPC-23 | 3/4 | 1.26 |

UTILITY CASES



ALUMINUM

Constructed of #16 ga. (.051) aluminum with 1/2" flanged edges, spot welded corners and two removable flat covers. Natural Aluminum finish or Gray Hammertone.

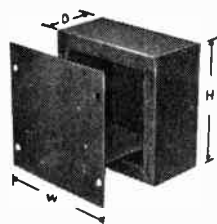
| Natural Aluminum Cat. No. | Net Price | Size H. W. D. | Ship. Wt. Lbs. | Gray Hammertone Cat. No. | Net Price |
|---------------------------|-----------|---------------|----------------|--------------------------|-----------|
| AC-442 | \$1.26 | 4 4 2" | 1/2 | PAC-442 | \$1.39 |
| AC-453 | 1.39 | 4 5 3" | 3/4 | PAC-453 | 1.62 |
| AC-564 | 1.65 | 5 6 4" | 1 | PAC-564 | 2.02 |
| AC-596 | 2.71 | 5 9 6" | 1 1/2 | PAC-596 | 3.07 |
| AC-666 | 1.89 | 6 6 6" | 1 1/2 | PAC-666 | 2.11 |
| AC-1276 | 3.73 | 12 7 6" | 2 1/4 | PAC-1276 | 4.14 |
| AC-1597 | 5.10 | 15 9 7" | 3 1/2 | PAC-1597 | 5.65 |
| AC-695 | 2.71 | 6 9 5" | 1 1/2 | PAC-695 | 3.07 |

STEEL

Constructed of #20 ga. sheet steel with 1/2" flanged edges, spot welded corners, and two removable flat covers. Finished in Black Wrinkle.

| Catalog No. | H. | W. | D. | Ship. Wt. Lbs. | Net Price |
|-------------|-----|-----|----|----------------|-----------|
| C-442 | 4" | 4" | 2" | 7/8 | \$0.93 |
| C-453 | 4" | 5" | 3" | 1 1/4 | 1.08 |
| C-564 | 5" | 6" | 4" | 1 3/4 | 1.28 |
| C-596 | 5" | 9" | 6" | 3 | 2.02 |
| C-666 | 6" | 6" | 6" | 2 1/4 | 1.46 |
| C-695 | 6" | 9" | 5" | 3 | 2.02 |
| C-754 | 7" | 5" | 4" | 2 | 1.39 |
| C-8101 | 10" | 10" | 8" | 6 | 3.30 |
| C-1276 | 12" | 7" | 6" | 4 1/2 | 2.74 |

STEEL UTILITY CASES WITH CHASSIS ATTACHED



Made of #20 gauge steel with a chassis spot welded to front panel. Front and rear panels are removable. Finished in black wrinkle.

| Catalog No. | Height | Width | Depth | Chassis Size | Ship. Wt. Lbs. | Net Price |
|-------------|--------|-------|-------|------------------------|----------------|-----------|
| CA-1400 | 4" | 4" | 2" | 1 x 2 7/8 x 1 7/8" | 1 | \$1.22 |
| CA-1401 | 4" | 5" | 3" | 1 x 3 7/8 x 2 7/8" | 1 1/4 | 1.42 |
| CA-1402 | 5" | 4" | 3" | 1 1/4 x 2 7/8 x 2 7/8" | 1 1/4 | 1.42 |
| CA-1403 | 6" | 5" | 4" | 1 3/4 x 3 7/8 x 3 7/8" | 2 | 1.78 |
| CA-1404 | 5" | 6" | 4" | 1 1/4 x 4 7/8 x 3 7/8" | 2 | 1.78 |
| CA-1405 | 6" | 6" | 6" | 1 3/4 x 4 7/8 x 5 7/8" | 3 | 1.85 |

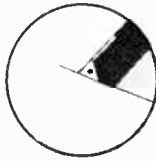
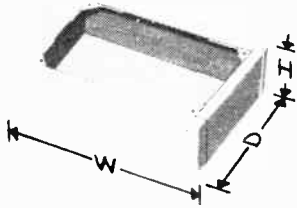
ALL PRICES F.O.B. N. Y. 59, N. Y.

PREMIER STEEL and ALUMINUM CHASSIS

STEEL and ALUMINUM BLANK



EXCLUSIVE PREMIER FEATURE!



View of Chassis Showing Gusset Spot-Welded in Corner.

Chassis are of one piece construction with gussets spot-welded to the bottom flanges for additional strength. Corners have rounded effect and single inside thickness for mounting components. Bottom edges are flanged in on four sides and punched for bottom plates.

Steel chassis are made of No. 20 gauge cold rolled steel, except those marked * which are of No. 16 gauge. Steel chassis are finished in either Black Wrinkle or Zinc Plated. Zinc plated furnished if finish is not specified.

Aluminum chassis are made of No. 18 gauge (.040) aluminum, except those marked * which are of No. 14 gauge (.064). Natural Aluminum Finish.

| ALUMINUM | | | STEEL | | |
|----------|------------|-----------|--------|---------|--------|
| Cat. No. | Ship. Lbs. | Net Price | D. | Size W. | H. |
| ACH-400 | 1/2 | \$1.33 | 5 1/2" | 9 1/2" | 1 1/2" |
| ACH-401 | 3/4 | 1.52 | 5" | 10" | 3" |
| ACH-402 | 1 | 2.57 | 6" | 14" | 3" |
| ACH-403 | 1/2 | 1.33 | 7" | 7" | 2" |
| ACH-404 | 1/2 | 1.39 | 7" | 9" | 2" |
| ACH-405 | 3/4 | 1.52 | 7" | 11" | 2" |
| ACH-406 | 3/4 | 1.64 | 7" | 13" | 2" |
| ACH-407 | 1 | 2.89 | 7" | 15" | 3" |
| ACH-408 | 1 | 2.36 | 4" | 17" | 3" |
| ACH-409 | 1 1/2 | 2.85 | 7" | 17" | 3" |
| ACH-410 | 1 1/8 | 2.89 | 8" | 17" | 2" |
| ACH-411 | 1 1/2 | 3.00 | 8" | 17" | 3" |
| ACH-412 | 1 1/4 | 2.68 | 10" | 12" | 3" |
| ACH-413 | 1 1/4 | 3.40 | 10" | 14" | 3" |
| ACH-414 | 1 1/4 | 3.26 | 10" | 17" | 2" |
| ACH-415* | 1 3/8 | 3.65 | 10" | 17" | 3" |
| ACH-416* | 2 | 4.20 | 10" | 17" | 4" |
| ACH-417* | 1 3/4 | 3.48 | 11" | 17" | 2" |
| ACH-418* | 2 | 4.27 | 11" | 17" | 3" |
| ACH-419* | 1 7/8 | 3.81 | 12" | 17" | 2" |
| ACH-420* | 2 1/8 | 4.51 | 12" | 17" | 3" |
| ACH-421* | 2 1/8 | 4.98 | 12" | 17" | 4" |
| ACH-422* | 1 7/8 | 4.02 | 13" | 17" | 2" |
| ACH-423* | 2 1/8 | 4.79 | 13" | 17" | 3" |
| ACH-424* | 2 1/2 | 5.48 | 13" | 17" | 4" |
| ACH-425 | 7/8 | 1.64 | 7" | 11" | 3" |
| ACH-426 | 1/4 | 1.09 | 5" | 7" | 2" |
| ACH-427 | 1 1/4 | 2.91 | 8 1/2" | 15" | 3" |
| ACH-428 | 1/4 | 1.50 | 5" | 7" | 3" |
| ACH-429 | 3/4 | 1.80 | 5" | 13" | 3" |
| ACH-430 | 1 | 2.19 | 8" | 12" | 3" |
| ACH-431 | 1/4 | 1.29 | 4" | 6" | 2" |
| ACH-432 | 1/4 | 1.33 | 4" | 6" | 3" |
| ACH-433 | 3/8 | 1.83 | 7" | 12" | 3" |
| ACH-434 | 1 | 2.70 | 6" | 17" | 3" |
| ACH-435* | 2 1/2 | 5.37 | 10" | 23" | 3" |
| ACH-436 | 1/4 | 1.09 | 4" | 6" | 1 1/2" |
| ACH-437 | 3/8 | 1.13 | 4" | 8" | 2" |
| ACH-438* | 3 | 10.79 | 17" | 17" | 4" |
| — | — | — | 10" | 17" | 5" |
| — | — | — | 13" | 17" | 5" |
| ACH-441 | 1 | 1.68 | 8" | 10" | 2 1/2" |

*Made from No. 14 gauge (.064) aluminum.

| Cat. No. | Ship. Lbs. | Net Price | Cat. No. | Ship. Lbs. | Net Price |
|----------|------------|-----------|----------|------------|-----------|
| CH-400 | 1 | \$0.91 | CH-400 | 1 1/2 | 1.26 |
| CH-401 | 1 1/2 | 1.26 | CH-402 | 2 1/2 | 1.48 |
| CH-402 | 2 1/2 | 1.48 | CH-403 | 1 1/4 | 1.07 |
| CH-403 | 1 1/4 | 1.07 | CH-404 | 1 1/2 | 1.26 |
| CH-404 | 1 1/2 | 1.26 | CH-405 | 1 7/8 | 1.29 |
| CH-405 | 1 7/8 | 1.29 | CH-406 | 2 | 1.40 |
| CH-406 | 2 | 1.40 | CH-407 | 2 3/4 | 1.67 |
| CH-407 | 2 3/4 | 1.67 | CH-408 | 2 1/4 | 1.50 |
| CH-408 | 2 1/4 | 1.50 | CH-409 | 3 1/8 | 1.83 |
| CH-409 | 3 1/8 | 1.83 | CH-410 | 2 3/4 | 1.67 |
| CH-410 | 2 3/4 | 1.67 | CH-411 | 5 1/4 | 1.83 |
| CH-411 | 5 1/4 | 1.83 | CH-412 | 2 3/4 | 1.76 |
| CH-412 | 2 3/4 | 1.76 | CH-413 | 3 1/4 | 1.86 |
| CH-413 | 3 1/4 | 1.86 | CH-414 | 3 1/4 | 1.92 |
| CH-414 | 3 1/4 | 1.92 | CH-415* | 6 | 2.16 |
| CH-415* | 6 | 2.16 | CH-416* | 7 1/2 | 2.39 |
| CH-416* | 7 1/2 | 2.39 | CH-417* | 5 1/4 | 2.62 |
| CH-417* | 5 1/4 | 2.62 | CH-418* | 6 1/4 | 2.87 |
| CH-418* | 6 1/4 | 2.87 | CH-419* | 5 | 1.99 |
| CH-419* | 5 | 1.99 | CH-420* | 7 | 2.40 |
| CH-420* | 7 | 2.40 | CH-421* | 8 1/2 | 2.62 |
| CH-421* | 8 1/2 | 2.62 | CH-422* | 6 | 2.87 |
| CH-422* | 6 | 2.87 | CH-423* | 7 | 3.31 |
| CH-423* | 7 | 3.31 | CH-424* | 10 | 3.78 |
| CH-424* | 10 | 3.78 | CH-425 | 2 1/4 | 1.40 |
| CH-425 | 2 1/4 | 1.40 | CH-426 | 1 | 1.04 |
| CH-426 | 1 | 1.04 | CH-427 | 3 | 1.92 |
| CH-427 | 3 | 1.92 | CH-428 | 1 1/4 | 1.06 |
| CH-428 | 1 1/4 | 1.06 | CH-429 | 2 | 1.56 |
| CH-429 | 2 | 1.56 | CH-430 | 2 1/2 | 1.67 |
| CH-430 | 2 1/2 | 1.67 | CH-431 | 1 | 1.01 |
| CH-431 | 1 | 1.01 | CH-432 | 1 | 1.04 |
| CH-432 | 1 | 1.04 | CH-433 | 2 1/2 | 1.46 |
| CH-433 | 2 1/2 | 1.46 | CH-434 | 4 | 1.76 |
| CH-434 | 4 | 1.76 | CH-435* | 10 | 2.74 |
| CH-435* | 10 | 2.74 | CH-436 | 3/4 | 1.04 |
| CH-436 | 3/4 | 1.04 | CH-437 | 1 | 1.07 |
| CH-437 | 1 | 1.07 | CH-438* | 13 | 5.42 |
| CH-438* | 13 | 5.42 | CH-439* | 8 1/2 | 2.89 |
| CH-439* | 8 1/2 | 2.89 | CH-440* | 11 | 4.26 |
| CH-440* | 11 | 4.26 | CH-441 | 2 1/2 | 1.42 |
| CH-441 | 2 1/2 | 1.42 | | | |

*Made from No. 16 gauge steel.

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REMOVABLE TOP

Made of #16 Ga. Cold Rolled Steel. Top and Bottom edges flanged in on four sides. Top plate is removable. Finished in either Black Wrinkle or Zinc Plated. Zinc plated furnished if finish is not specified.



| Cat. No. | Size | Ship. Lbs. | Net Price |
|----------|-------------|------------|-----------|
| RCH-415 | 10 x 17 x 3 | 5 | \$4.01 |
| RCH-416 | 10 x 17 x 4 | 5 | 4.46 |
| RCH-423 | 13 x 17 x 3 | 9 | 4.20 |
| RCH-424 | 13 x 17 x 4 | 10 | 5.18 |

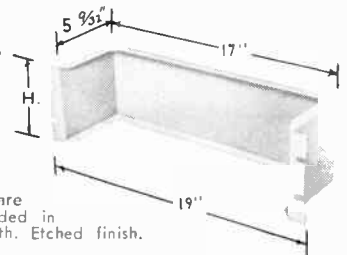
REPLACEMENT TOPS

| Cat. No. | Size | Ship. Lbs. | Net Price |
|----------|---------|------------|-----------|
| RTC-415 | 10 x 17 | 2 | \$1.56 |
| RTC-423 | 13 x 17 | 3 | 1.92 |

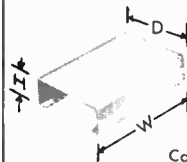
ALUMINUM VERTICAL PANEL

TO FIT 19" STANDARD RACKS

Made of 14 gauge (.064) Aluminum. Flanges are notched for standard rack mounting. All chassis depths are 5-9/32". Gussets are spot welded in each corner for greater strength. Etched finish.



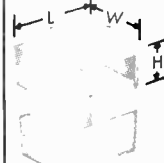
| Catalog No. | Height | Ship. Wt. Lbs. | Net Price |
|-------------|---------|----------------|-----------|
| ACH-1200 | 1 3/4" | 3/4 | \$2.55 |
| ACH-1201 | 3 1/2" | 1 3/4 | 2.79 |
| ACH-1202 | 5 1/4" | 1 1/2 | 3.04 |
| ACH-1203 | 7" | 2 | 3.51 |
| ACH-1204 | 8 3/4" | 2 1/4 | 4.14 |
| ACH-1205 | 10 1/2" | 2 3/4 | 4.44 |
| ACH-1206 | 12 1/4" | 3 | 4.95 |
| ACH-1207 | 14" | 3 1/4 | 5.35 |



ALUMINUM OPEN END

Made of 18 ga. (.040) Aluminum.

| Catalog No. | Depth | Width | Height | Ship. Wt. Lbs. | Net Price |
|-------------|--------|--------|--------|----------------|-----------|
| ACH-1350 | 2 3/8" | 2 3/4" | 1 1/4" | 1/4 | \$.37 |
| ACH-1351 | 1 3/4" | 3 1/8" | 1 1/4" | 1/4 | .41 |
| ACH-1352 | 3 1/4" | 4 1/2" | 2" | 1/4 | .44 |
| ACH-1353 | 2 3/4" | 4 1/8" | 1 1/2" | 1/4 | .44 |
| ACH-1354 | 3 3/4" | 4 1/8" | 1 1/2" | 1/4 | .44 |
| ACH-1355 | 3" | 6 1/8" | 1 1/2" | 1/4 | .52 |
| ACH-1356 | 5 3/4" | 4 7/8" | 1 1/2" | 1/4 | .55 |
| ACH-1357 | 4" | 3 1/8" | 1 1/2" | 1/4 | .44 |
| ACH-1358 | 4" | 4 1/8" | 1" | 1/2 | .48 |
| ACH-1359 | 4" | 5 1/8" | 1" | 1/2 | .51 |
| ACH-1360 | 4" | 6 1/8" | 1" | 1/2 | .55 |



ALUMINUM MINIATURE CASES

A two piece case made of #16 Ga. (.051) aluminum. Natural Aluminum Finish or Gray Hammetone.

| Natural Aluminum Cat. No. | Net Price | L. | W. | H. | Ship Wt. Lbs. | Gray Hammetone Cat. No. | Net Price |
|---------------------------|-----------|--------|--------|--------|---------------|-------------------------|-----------|
| AMC-1000* | \$.70 | 2 3/4" | 2 1/8" | 1 5/8" | 1/4 | PMC-1000* | \$.79 |
| AMC-1001* | .70 | 3 1/4" | 2 1/8" | 1 5/8" | 1/4 | PMC-1001* | .79 |
| AMC-1002* | .73 | 4" | 2 1/8" | 1 5/8" | 1/4 | PMC-1002* | .83 |
| AMC-1003 | .96 | 4" | 2 1/4" | 2 1/4" | 3/8 | PMC-1003 | 1.06 |
| AMC-1004 | .99 | 5" | 2 1/4" | 2 1/4" | 1/2 | PMC-1004 | 1.09 |
| AMC-1005 | 1.17 | 5" | 4" | 3" | 1/2 | PMC-1005 | 1.23 |
| AMC-1006 | 1.09 | 5 1/4" | 3" | 2 1/8" | 1 | PMC-1006 | 1.19 |
| AMC-1007 | 1.39 | 6" | 5" | 4" | 3/4 | PMC-1007 | 1.53 |
| AMC-1008 | 1.56 | 7" | 5" | 3" | 1 1/8 | PMC-1008 | 1.69 |
| AMC-1009 | 2.31 | 8" | 6" | 3 1/2" | 1 1/2 | PMC-1009 | 2.45 |
| AMC-1010 | 2.88 | 10" | 6" | 3 1/2" | 1 3/4 | PMC-1010 | 3.04 |
| AMC-1011 | 3.24 | 12" | 7" | 4" | 2 | PMC-1011 | 3.57 |
| AMC-1012 | 3.84 | 17" | 5" | 4" | 1 1/2 | PMC-1012 | 4.20 |
| AMC-1013 | 1.17 | 10" | 2" | 1 5/8" | 1/4 | PMC-1013 | 1.23 |
| AMC-1014 | 1.53 | 12" | 2 1/2" | 2 1/4" | 1/4 | PMC-1014 | 1.65 |
| AMC-1015 | .93 | 4" | 2" | 2 3/4" | 3/8 | PMC-1015 | 1.20 |
| AMC-1016 | .96 | 4 1/4" | 2 1/4" | 1 1/2" | 1/4 | PMC-1016 | 1.06 |

*18 Gauge (.040)

PREMIER HARDWARE

| Cat. No. | Item | Net Price |
|----------|---|------------------|
| HW-1 | NON-LOCKING HANDLE Chrome plated | \$2.40 |
| HW-3 | LOCKING HANDLE with 2 keys — Chrome plated | 5.10 |
| HW-5 | DROP HANDLE Finished in Black and Gray Wrinkle; Gray and Brown Hammertone | .75 |
| HW-6 | CYLINDER LOCK with 2 keys — Nickel plated | 4.20 |
| HW-7 | BLACK NYLON HANDLE with 2 screws | .51 |
| HW-13 | TRUSS HEAD MACHINE SCREWS 10/32 x 3/4" Nickel plated | 2.00 per 100* |

*Minimum Quantity

PREMIER ECONOMY SLIDES



"A" SERIES Patent No. 2,542,247

- May be mounted on side or underneath.
- Ball bearing spacer and patented silencer spring eliminates slide noise and vibration.
- All members made of 16 gauge cold rolled steel.
- Black oxidized finish.

| Catalog No. | Slide Travel | Track Length | Channel Length | Load Cap. | Net Price Per Pair |
|-------------|--------------|--------------|----------------|-----------|--------------------|
| A-50-13 | 9" | 11" | 13" | 50 | \$2.80 |
| A-40-15 | 11 | 11 | 15 | 40 | 2.90 |
| A-30-165 | 12 1/2 | 11 | 16 1/2 | 30 | 3.00 |
| A-30-185 | 14 1/2 | 11 | 18 1/2 | 30 | 3.20 |



"330" SERIES

- Side mounted.
- Each slide rolls on 2 concealed and dust-free nylon wheels.
- No metal-to-metal contact—noiseless operation.
- Drawer is tilted up for quick removal.
- Made of 16 gauge cold rolled steel and zinc plated.

| Catalog No. | Slide Travel | Track Length | Channel Length | Load Cap. | Net Price Per Pair |
|-------------|--------------|--------------|----------------|-----------|--------------------|
| 330-62-12 | 7 7/8" | 12" | 12" | 62 | \$3.25 |
| 330-58-14 | 9 7/8" | 14 | 14 | 58 | 3.40 |
| 330-54-16 | 11 7/8" | 16 | 16 | 54 | 3.50 |
| 330-50-18 | 13 7/8" | 18 | 18 | 50 | 3.70 |
| 330-46-20 | 15 7/8" | 20 | 20 | 46 | 3.80 |



Self-Spraying LACQUER Available in 3 Colors

| Cat. No. | To Match |
|----------|--------------------------|
| SGL-101 | Premier Gray Wrinkle |
| GHL-102 | Premier Gray Hammertone |
| BHL-103 | Premier Brown Hammertone |

NET PRICE: \$1.95 EACH 12 oz. CAN

ALUMINUM AND STEEL BOTTOM PLATES



The bottom plates have holes to match the chassis and have 4 pressed dimples. Steel plates made of No. 20 gauge steel, finished in either Black Wrinkle or Zinc Plated. Aluminum plates made of No. 18 gauge (.040). Natural aluminum finish.

| ALUMINUM | | | STEEL | | |
|----------|-----------|-----------------|----------|----------------|-----------|
| Cat. No. | Net Price | Size | Cat. No. | Ship. Wt. Lbs. | Net Price |
| ABP-400 | \$0.87 | 5 1/2" x 9 1/2" | BP-400 | 1 | \$0.41 |
| ABP-401 | .87 | 5" x 10" | BP-401 | 1 | .46 |
| ABP-402 | 1.32 | 6" x 14" | BP-402 | 1 | .63 |
| ABP-403 | .90 | 7" x 7" | BP-403 | 1 | .46 |
| ABP-404 | .96 | 7" x 9" | BP-404 | 1 | .50 |
| ABP-405 | 1.06 | 7" x 11" | BP-405 | 1 | .60 |
| ABP-406 | 1.32 | 7" x 13" | BP-406 | 2 | .66 |
| ABP-407 | 1.32 | 7" x 15" | BP-407 | 2 | .73 |
| ABP-408 | 1.32 | 4" x 17" | BP-408 | 2 | .60 |
| ABP-409 | 1.36 | 7" x 17" | BP-409 | 2 | .77 |
| ABP-410 | 1.53 | 8" x 17" | BP-410 | 2 | .77 |
| ABP-412 | 1.50 | 10" x 12" | BP-412 | 2 | .77 |
| ABP-413 | 1.37 | 10" x 14" | BP-413 | 2 | .80 |
| ABP-414 | 1.72 | 10" x 17" | BP-414 | 2 | 1.03 |
| ABP-418 | 2.16 | 11" x 17" | BP-418 | 3 | 1.06 |
| ABP-419 | 2.28 | 12" x 17" | BP-419 | 3 | 1.11 |
| ABP-422 | 2.41 | 13" x 17" | BP-422 | 3 | 1.19 |
| ABP-423 | .87 | 5" x 7" | BP-423 | 1 | .41 |
| ABP-424 | .99 | 5" x 13" | BP-424 | 1 | .66 |
| ABP-425 | 1.32 | 8" x 12" | BP-425 | 2 | .92 |
| ABP-426 | .87 | 4" x 6" | BP-426 | 1 | .41 |
| ABP-427 | 1.14 | 7" x 12" | BP-427 | 2 | .79 |
| ABP-428 | 1.36 | 6" x 17" | BP-428 | 2 | .77 |
| ABP-429 | 2.55 | 10" x 23" | BP-429 | 2 | 1.66 |
| ABP-430 | .87 | 4" x 8" | BP-430 | 1 | .41 |
| ABP-431 | 2.57 | 17" x 17" | BP-431 | 4 | 1.67 |
| ABP-432 | 2.41 | 8 1/2" x 15" | BP-432 | 1 1/2 | 1.19 |
| ABP-433 | 1.14 | 8" x 10" | BP-433 | 1 | .79 |

CASTERS FOR RACKS AND CABINETS

Made of Plaskite non-marking composition wheel with Ball Bearing Swivel Plate. Packed one set of 4 in box with screws for assembly.



| Cat. No. | Wheel Size | Overall Height | Cap. per caster—lbs. | Net Price |
|----------|-------------------------|----------------|----------------------|-----------------|
| CA-4 | 2" dia. x 1 3/8" | 2 3/8" | 80 | \$3.60 Set of 4 |
| CA-5 | 3" dia. x 1 1/4" | 3 1/8" | 225 | 7.20 Set of 4 |
| CA-6 | Double 2" dia. x 1 5/8" | 2 1/8" | 160 | 12.00 Set of 4 |

CHASSIS MOUNTING BRACKETS

- Constructed of No. 16 gauge steel.
- Finished in Black enamel.
- Sold in pairs only.

STANDARD TYPE



| Cat. No. | H. | D. | Ship. Wt. Lbs. | Net Price |
|----------|--------|-----|----------------|-----------|
| (CB-78) | 6 1/2" | 8" | 1 1/2 | \$0.96 |
| (CB-710) | 6 1/2" | 10" | 1 3/4 | 1.29 |
| (CB-711) | 6 1/2" | 11" | 2 | 1.39 |
| (CB-712) | 6 1/2" | 12" | 2 1/8 | 1.51 |
| (CB-713) | 6 1/2" | 13" | 2 1/4 | 1.62 |
| (CB-717) | 6 1/2" | 17" | 3 | 2.51 |
| (CB-810) | 8 1/2" | 10" | 2 3/8 | 1.91 |
| (CB-813) | 8 1/2" | 13" | 3 | 2.02 |

TRIANGULAR TYPE



| Cat. No. | Height | Depth | Ship. Wt. Lbs. | Net Price |
|----------|--------|-------|----------------|-----------|
| TCB-55 | 5" | 5" | 1 | \$.99 |
| TCB-77 | 7" | 7" | 1 | 1.12 |
| TCB-99 | 9" | 9" | 1 1/2 | 1.36 |

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PREMIER STEEL & ALUMINUM RACK PANELS

↑ HT.
↓



BLANK RACK PANELS
9 1/2" - 19" - 24" - 30" WIDTHS



MASKED ALUMINUM PANELS
19" WIDE — 1/8" THICK

Made of bright natural aluminum covered on both sides with special self-adhesive paper. Drilling or milling can be done on paper in place, affording complete damage protection. Paper is removed simply by peeling.

All 24" and 30" wide blank panels are finished in Black or Gray Wrinkle, Gray or Brown Hammertone. If color is not specified, Black Wrinkle is furnished.

ALL 19" WIDE PAINTED PANELS ARE FINISHED IN REVERSIBLE COLORS

REVERSIBLE

When ordering just specify Reversible Colors—

Example: Aluminum Panel 8 3/4" x 19" — Black Wrinkle on one side — Gray Wrinkle on other side — order as follows:

ARP-819 Reversible Wrinkle.

Example: Steel Panel 7" x 19" — Gray Hammertone one side — Brown Hammertone other side — order as follows:

RP-719 Reversible Hammertone.

ALUMINUM
Made of 1/8" Thick Aluminum and finished in Gray Hammertone only.

| 9 1/2" Wide | | | |
|-------------|-----------|---------|-----------|
| Cat. No. | Ship. Wt. | Height | Net Price |
| ARP-195 | 1/4 | 1 3/4" | \$0.84 |
| ARP-395 | 1/2 | 3 1/2" | 1.14 |
| ARP-595 | 3/4 | 5 1/4" | 1.65 |
| ARP-795 | 1 | 7" | 2.01 |
| ARP-895 | 1 1/4 | 8 3/4" | 2.37 |
| ARP-1095 | 1 1/2 | 10 1/2" | 3.00 |
| ARP-1295 | 1 3/4 | 12 1/4" | 3.48 |
| ARP-1495 | 2 | 14" | 3.96 |

| Catalog No. | Height | Ship. Wt. Lbs. | Net Price |
|-------------|---------|----------------|-----------|
| MAP-119 | 1 3/4" | 1/2 | \$1.01 |
| MAP-319 | 3 1/2" | 1 | 1.36 |
| MAP-519 | 5 1/4" | 1 1/2 | 1.86 |
| MAP-719 | 7" | 2 | 2.24 |
| MAP-819 | 8 3/4" | 2 1/2 | 2.68 |
| MAP-1019 | 10 1/2" | 3 | 3.37 |
| MAP-1219 | 12 1/4" | 3 1/2 | 3.94 |
| MAP-1419 | 14" | 4 | 4.51 |
| MAP-1519 | 15 3/4" | 4 | 5.04 |
| MAP-1719 | 17 1/2" | 4 3/4 | 5.54 |
| MAP-1919 | 19 1/4" | 5 | 6.08 |
| MAP-2119 | 21" | 6 | 6.62 |

19" WIDE

| Aluminum — 1/8" Thick | | | | Aluminum — 3/16" Thick | | | Steel — No. 12 Gauge | | |
|-----------------------|----------|----------------|-----------|------------------------|----------------|-----------|----------------------|----------------|-----------|
| Height | Cat. No. | Ship. Wt. Lbs. | Net Price | Cat. No. | Ship. Wt. Lbs. | Net Price | Cat. No. | Ship. Wt. Lbs. | Net Price |
| 1 3/4" | ARP-119 | 1/2 | \$1.01 | ARP-119-36 | 3/4 | \$1.62 | RP-119 | 1 | \$0.77 |
| 3 1/2" | ARP-319 | 1 | 1.36 | ARP-319-36 | 1 1/2 | 2.11 | RP-319 | 2 | .88 |
| 5 1/4" | ARP-519 | 1 1/2 | 1.86 | ARP-519-36 | 2 1/2 | 3.00 | RP-519 | 3 | 1.09 |
| 7" | ARP-719 | 2 | 2.24 | ARP-719-36 | 3 | 3.60 | RP-719 | 4 | 1.26 |
| 8 3/4" | ARP-819 | 2 1/2 | 2.68 | ARP-819-36 | 3 3/4 | 4.29 | RP-819 | 5 1/4 | 1.54 |
| 10 1/2" | ARP-1019 | 3 | 3.37 | ARP-1019-36 | 4 1/2 | 5.40 | RP-1019 | 6 1/4 | 1.86 |
| 12 1/4" | ARP-1219 | 3 1/2 | 3.94 | ARP-1219-36 | 5 | 6.30 | RP-1219 | 7 1/4 | 2.21 |
| 14" | ARP-1419 | 4 | 4.51 | ARP-1419-36 | 6 | 7.23 | RP-1419 | 8 1/4 | 2.55 |
| 15 3/4" | ARP-1519 | 4 | 5.04 | ARP-1519-36 | 6 | 8.07 | RP-1519 | 9 | 2.87 |
| 17 1/2" | ARP-1719 | 4 3/4 | 5.54 | ARP-1719-36 | 7 | 8.88 | RP-1719 | 10 1/2 | 3.15 |
| 19 1/4" | ARP-1919 | 5 | 6.08 | ARP-1919-36 | 7 1/2 | 9.75 | RP-1919 | 12 | 3.50 |
| 21" | ARP-2119 | 6 | 6.62 | ARP-2119-36 | 9 | 10.59 | RP-2119 | 12 1/2 | 3.85 |

24" WIDE

30" WIDE

| Aluminum — 1/8" Thick | | | | Steel — No. 12 Gauge | | | Aluminum — 1/8" Thick | | | Steel — No. 12 Gauge | | | |
|-----------------------|----------------|-----------|---------|----------------------|----------------|-----------|-----------------------|----------------|-----------|----------------------|----------|----------------|-----------|
| Cat. No. | Ship. Wt. Lbs. | Net Price | Height | Cat. No. | Ship. Wt. Lbs. | Net Price | Cat. No. | Ship. Wt. Lbs. | Net Price | Height | Cat. No. | Ship. Wt. Lbs. | Net Price |
| ARP-324 | 1 1/4 | \$2.09 | 3 1/2" | RP-324 | 2 1/4 | \$1.35 | ARP-330 | 1 1/2 | \$2.77 | 3 1/2" | RP-330 | 3 | \$1.77 |
| ARP-524 | 2 | 3.09 | 5 1/4" | RP-524 | 3 1/2 | 1.65 | ARP-530 | 2 1/4 | 4.11 | 5 1/4" | RP-530 | 4 1/2 | 2.19 |
| ARP-724 | 2 1/2 | 3.72 | 7" | RP-724 | 4 1/2 | 1.89 | ARP-730 | 3 | 4.95 | 7" | RP-730 | 6 | 2.52 |
| ARP-824 | 3 | 4.44 | 8 3/4" | RP-824 | 6 | 2.34 | ARP-830 | 3 3/4 | 5.89 | 7" | RP-830 | 8 | 3.09 |
| ARP-1024 | 3 1/2 | 5.58 | 10 1/2" | RP-1024 | 7 | 2.82 | ARP-1030 | 4 1/2 | 7.44 | 8 3/4" | RP-1030 | 9 1/4 | 3.12 |
| ARP-1224 | 4 | 6.54 | 12 1/4" | RP-1224 | 8 | 3.33 | ARP-1230 | 5 | 8.67 | 10 1/2" | RP-1230 | 10 1/4 | 4.41 |
| ARP-1424 | 4 1/2 | 7.47 | 14" | RP-1424 | 9 | 3.81 | ARP-1430 | 6 | 9.93 | 14" | RP-1430 | 12 | 5.07 |
| ARP-1524 | 5 | 8.32 | 15 3/4" | RP-1524 | 10 | 4.32 | ARP-1530 | 6 1/2 | 11.10 | 15 3/4" | RP-1530 | 13 1/2 | 5.76 |
| ARP-1724 | 5 1/2 | 9.18 | 17 1/2" | RP-1724 | 11 | 4.74 | ARP-1730 | 7 | 12.24 | 17 1/2" | RP-1730 | 15 | 6.30 |
| ARP-1924 | 6 | 10.05 | 19 1/4" | RP-1924 | 12 | 5.25 | ARP-1930 | 7 1/2 | 13.41 | 19 1/4" | RP-1930 | 18 | 6.96 |
| ARP-2124 | 6 1/2 | 10.95 | 21" | RP-2124 | 13 | 5.79 | ARP-2130 | 9 | 14.56 | 21" | RP-2130 | 19 | 7.71 |

PANELS — 19" WIDE FINISHED IN EITHER BLACK OR GRAY WRINKLE, GRAY OR BROWN HAMMERTONE
Made of No. 12 Gauge Steel IF COLOR IS NOT SPECIFIED, BLACK WRINKLE IS FURNISHED.



GRILLE PANELS

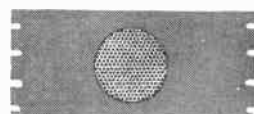
| Cat. No. | Grill Size | Height | Ship. Wt. Lbs. | Net Price |
|----------|-----------------|---------|----------------|-----------|
| GRP-601 | 37/8" x 133/8" | 5 1/4" | 2 | \$3.09 |
| GRP-602 | 37/8" x 133/8" | 7" | 2 | 3.31 |
| GRP-603 | 57/8" x 133/8" | 8 3/4" | 2 1/2 | 4.00 |
| GRP-604 | *37/8" x 133/8" | 8 3/4" | 2 1/2 | 3.68 |
| GRP-605 | *57/8" x 133/8" | 10 1/2" | 2 1/2 | 4.38 |
| GRP-606 | *57/8" x 133/8" | 10 1/2" | 2 1/2 | 4.00 |
| GRP-607 | *77/8" x 133/8" | 12 1/4" | 3 | 4.54 |

* Allows 3 1/2" space at bottom for chassis mounting.



METER PANELS — 5 1/4"

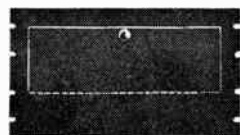
| Cat. No. | No. of Holes | Meter Size | Hole Size | Ship. Wt. Lbs. | Net Price |
|----------|--------------|------------|-----------|----------------|-----------|
| MRP-900 | 3 | 2" | 2 1/2" | 7 | \$1.62 |
| MRP-901 | 5 | 2" | 2 1/2" | 7 | 2.19 |
| MRP-902 | 3 | 3" | 2 1/2" | 7 | 1.62 |
| MRP-903 | 5 | 3" | 2 1/2" | 7 | 2.19 |



SPEAKER PANELS

A piece of perforated metal is spot-welded behind the opening.

| Cat. No. | Height | Spkr. Size | Hole Size | Ship. Wt. Lbs. | Net Price |
|----------|---------|------------|-----------|----------------|-----------|
| SRP-819 | 8 3/4" | 6" | 4 5/8" | 6 | \$2.88 |
| SRP-1019 | 10 1/2" | 8" | 6 1/2" | 8 | 3.66 |
| SRP-1219 | 12 1/4" | 10" | 8 1/2" | 9 | 4.38 |
| SRP-1419 | 14" | 12" | 11" | 10 | 5.04 |



STANDARD TYPE

DOOR PANELS — 19" WIDE

Made of No. 12 Gauge Steel

Panels have flush hinged doors with piano hinges, and are supplied with a quick turn fastener. Doors are located 1" from top to allow space for chassis at bottom.

STANDARD TYPE

| Cat. No. | Net Price | Height | Door Size | Ship. Wt. Lbs. |
|----------|-----------|---------|------------------|----------------|
| DRP-700 | \$5.12 | 8 3/4" | 4 1/2" x 15 3/8" | 9 |
| DRP-701 | 5.48 | 10 1/2" | 6" x 15 3/8" | 10 |
| DRP-702 | 6.04 | 12 1/4" | 7 1/2" x 15 3/8" | 12 |

GRILLE TYPE

| Cat. No. | Net Price |
|----------|-----------|
| GDRP-700 | \$6.57 |
| GDRP-701 | 7.13 |
| GDRP-702 | 7.86 |

ALL PRICES F.O.B. N. Y. 59, N. Y.

PREMIER PAGE 24



SIDE HINGED DOOR PANELS

Used for left or right hand opening. Supplied with a quick turn fastener.

| Cat. No. | Height | Net Price |
|----------|---------|-----------|
| SHP-319 | 3 1/2" | \$3.00 |
| SHP-519 | 5 1/4" | 3.12 |
| SHP-719 | 7" | 3.42 |
| SHP-819 | 8 3/4" | 3.66 |
| SHP-1019 | 10 1/2" | 3.96 |
| SHP-1219 | 12 1/4" | 4.23 |
| SHP-1419 | 14" | 4.59 |
| SHP-2119 | 21" | 7.26 |

PREM-O-KOOL

BLOWERS and FANS

MAXIMUM COOLING with
MINIMUM SPACE!

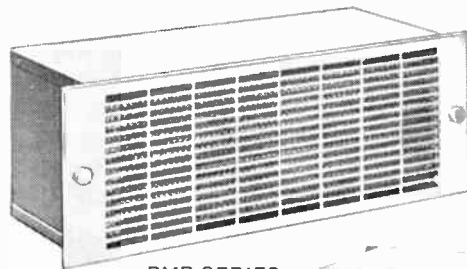


TO FIT
STANDARD
19" WIDE
PANEL
SPACE

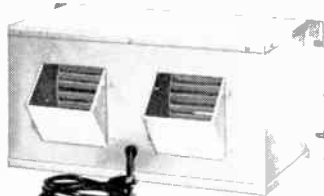
PANEL MOUNTED BLOWERS

- Permanently lubricated motors with lubricant temperature range from -29°C to +148°C.
- Permanent type washable filter—easily removable from front.
- Low noise level with minimum of vibration.
- Standard E.I.A. notching.
- Grille supplied with 2 captive thumb nuts.
- Units furnished with 3/6" lead with molded male plug.
- Performance data prepared by impartial, independent testing laboratory.
- Motors are 115 Volt 50/60 cycle, single phase AC.
- Housing and grille made of cold rolled steel and finished in gray hammer-tone.

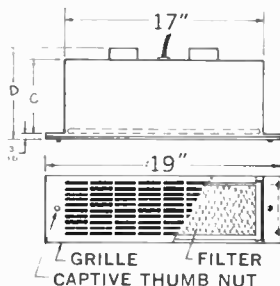
GRILLE FINISHED TO MATCH COLOR OF PREMIER CABINETS OR FRAMES AT NO ADDITIONAL COST.



PMB SERIES



REAR VIEW



Units available to fit Standard 24" wide panel space. Prices upon request.

| CATALOG NO. | PMB-5-150 | PMB-7-285 | PMB-8-410* | PMB-10-750 |
|--|--------------------------|--|--|--|
| CFM at 0" S.P. | 150 | 285 | 410 | 750 |
| PANEL HEIGHT (A) | 5 1/4" | 7" | 8 3/4" | 10 1/2" |
| FILTER | 16 5/8" x 4 7/8" x 1/2" | 16 5/8" x 6 3/4" x 1/2" | 16 5/8" x 8 3/8" x 1/2" | 16 5/8" x 10 1/8" x 1/2" |
| DEPTH OF ENCLOSURE ONLY (C) | 6 1/4" | 8 1/2" | 9 3/4" | 11 1/2" |
| OVERALL DEPTH including outlets and front grille (D) | 7" | 10 1/4" | 11 1/4" | 13 3/8" |
| MOTOR RPM | 3000 | 1500 | 1500 | 1500 |
| WATTS | 120 | 78 | 125 | 255 |
| VOLTS | 115 | 115 | 115 | 115 |
| CYCLES | 50/60 | 50/60 | 50/60 | 50/60 |
| AMPS | 1.5 | 1.1 | 1.3 | 2.2 |
| TYPE | Ball Bearing shaded pole | Ball bearing permanent split capacitor | Ball bearing permanent split capacitor | Ball bearing permanent split capacitor |
| SHIPPING WT. LBS. | 14 | 24 | 26 | 35 |
| NET PRICE | \$125.00 | \$150.00 | \$175.00 | \$220.00 |

*Supplied with grille on rear outlets.

PREM-O-KOOL

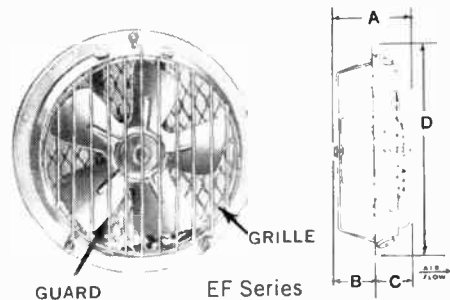
EXHAUST and INTAKE FANS

PREM-O-KOOL fans are available for exhausting air from cabinets (EF Series) and for drawing air into cabinets (IF Series).

- Minimum space required.
- Supplied with 18" lead.
- Fan and motor assembly shock mounted for minimum noise and vibration.
- Permanently lubricated ball bearing, shaded pole motors with low temperature rise.
- Easily interchangeable accessories for flexibility of mounting in cabinets.

• Cut-out and mounting holes for fans can be provided on any Premier rack or cabinet at slight additional cost.

Patent No. 3,019,965. Other Patents Pending.



EXHAUST FANS

| Cat. No. | CFM | Motor Watts | RPM | Fan Blade Dia. | A | B | C | D | Hole Dia. Required | Net Price |
|----------|-----|-------------|------|----------------|---------|--------|--------|---------|--------------------|-----------|
| EF-165 | 165 | 20 | 1650 | 6 1/2" | 27 5/8" | 1 5/8" | 1 1/4" | 8 1/2" | 7 3/8" | \$50.00 |
| EF-220 | 220 | 25 | 1550 | 6 1/2" | 31 1/4" | 1 5/8" | 1 5/8" | 8 1/2" | 7 3/8" | 45.00 |
| EF-300 | 300 | 65 | 3000 | 6 1/2" | 4 1/8" | 2 5/8" | 1 1/2" | 8 1/2" | 7 3/8" | 45.00 |
| EF-400 | 400 | 46 | 1460 | 8" | 3 5/8" | 1 7/8" | 1 3/4" | 10 1/2" | 9 1/4" | 54.00 |
| EF-550 | 550 | 90 | 1600 | 9" | 4 3/8" | 2 1/8" | 2 1/4" | 11 1/2" | 10 3/8" | 57.00 |
| EF-750 | 750 | 105 | 1560 | 10" | 4 3/8" | 2 1/8" | 2 1/4" | 12 1/2" | 11 3/8" | 60.00 |

ACCESSORIES FOR EXHAUST FANS

GUARDS

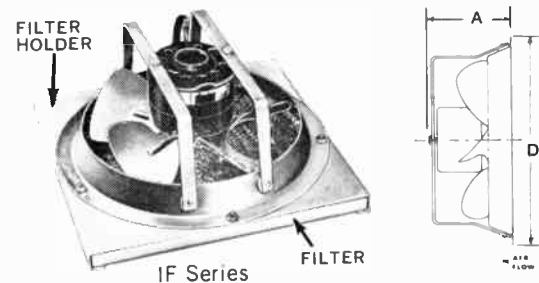
| Cat. No. | Used with Fan | Dia. | Depth | Net Price |
|----------|-----------------|---------|--------|-----------|
| GU-8 | EF165, 220, 300 | 6 3/4" | 1 7/8" | \$2.40 |
| GU-9 | EF400 | 8 1/4" | 2 3/8" | 2.40 |
| GU-10 | EF550 | 9 1/4" | 2 3/8" | 3.00 |
| GU-10 | EF750 | 10 1/4" | 2 3/8" | 3.60 |

GRILLES

| Cat. No. | Used with Fan | Dia. | Net Price |
|----------|-----------------|---------|-----------|
| GR-6 | EF165, 220, 300 | 8 1/2" | \$2.40 |
| GR-8 | EF400 | 10 1/2" | 2.40 |
| GR-9 | EF550 | 11 1/2" | 3.00 |
| GR-10 | EF750 | 12 1/2" | 3.60 |

SLEEVES

| Cat. No. | Used with Fan | Dia. | Depth | Net Price |
|----------|-----------------|---------|--------|-----------|
| SL-6 | EF165, 220, 300 | 8 1/2" | 1 3/4" | \$3.60 |
| SL-8 | EF400 | 10 1/2" | 2" | 3.60 |
| SL-9 | EF550 | 11 1/2" | 2 3/8" | 4.20 |
| SL-10 | EF750 | 12 1/2" | 2 3/8" | 4.80 |
| SL-6-MT | EF165, 300 | 8 1/2" | 1 1/2" | 3.60 |



INTAKE FANS

| Cat. No. | CFM | Motor Watts | RPM | Fan Blade Dia. | Dimensions A | D | Hole Diam. Required | Net Price |
|----------|---|-------------|------|----------------|--------------|---------|---------------------|-----------|
| IF-160 | 160 | 20 | 1650 | 6 1/2" | 27 5/8" | 8 1/2" | 7 3/8" | \$50.00 |
| IF-180 | 180 | 25 | 1550 | 6 1/2" | 31 1/4" | 8 1/2" | 7 3/8" | 45.00 |
| IF-300 | 300 | 65 | 3000 | 6 1/2" | 4 1/8" | 8 1/2" | 7 3/8" | 45.00 |
| IF-360 | 360 | 46 | 1460 | 8" | 3 3/4" | 10 1/2" | 9 1/4" | 54.00 |
| IF-540 | 540 | 90 | 1600 | 9" | 4 3/8" | 11 1/2" | 10 3/8" | 57.00 |
| IF-740 | 740 | 105 | 1560 | 10" | 4 3/8" | 12 1/2" | 11 3/8" | 60.00 |
| IF-625X | Special with 1" deep plenum chamber, for drawing air through the entire area of filter. Separate provision for filter must be made. | | | | | | | |
| | 625 | 95 | 1600 | 9 1/2" | 5 3/8" | 10 1/2" | - | 52.00 |

PREMIER CABINETS AND RACKS



FA, PRXA, RM, RMA, R, RS, DR, DCR, DRK, SDR, SDRK, POR and FXR models may be supplied with one round and 5 mounting holes to accommodate Exhaust and Intake Fans, at additional cost.

ACCESSORIES FOR INTAKE FANS

| FILTERS | | Permanent washable type, 1/2" thick | | |
|----------|------------------|-------------------------------------|-----------|--|
| Cat. No. | Used with Fan | Size | Net Price | |
| FL-6 | IF 160, 180, 300 | 8 3/8" Sq. | \$2.40 | |
| FL-8 | IF 360 | 10 3/8" Sq. | 2.40 | |
| FL-9 | IF 540 | 11 3/8" Sq. | 3.00 | |
| FL-10 | IF 740 | 12 3/8" Sq. | 3.00 | |

| FILTER HOLDERS | | | | |
|----------------|------------------|-------------|-------|-----------|
| Cat. No. | Used with Fan | Size | Depth | Net Price |
| FH-6 | IF 160, 180, 300 | 8 3/8" Sq. | 5/8" | \$4.80 |
| FH-8 | IF 360 | 10 3/8" Sq. | 5/8" | 4.80 |
| FH-9 | IF 540 | 11 3/8" Sq. | 5/8" | 6.00 |
| FH-10 | IF 740 | 12 3/8" Sq. | 5/8" | 7.20 |

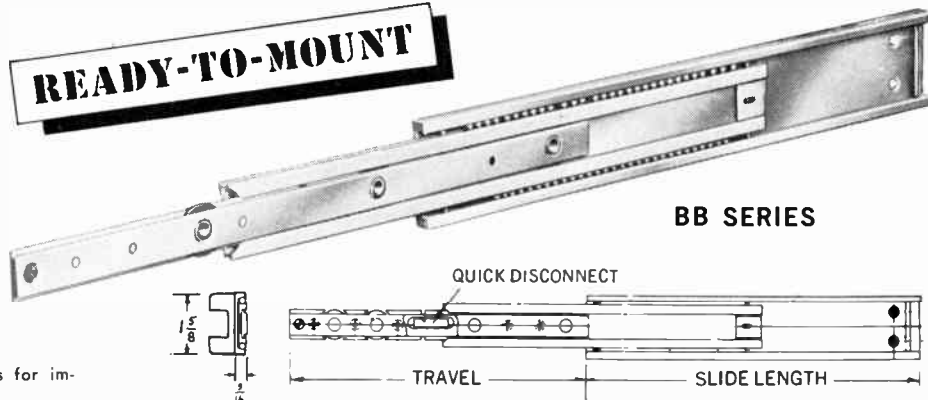
PREM-O-RAK®

Standard CHASSIS SLIDES



READY-TO-MOUNT

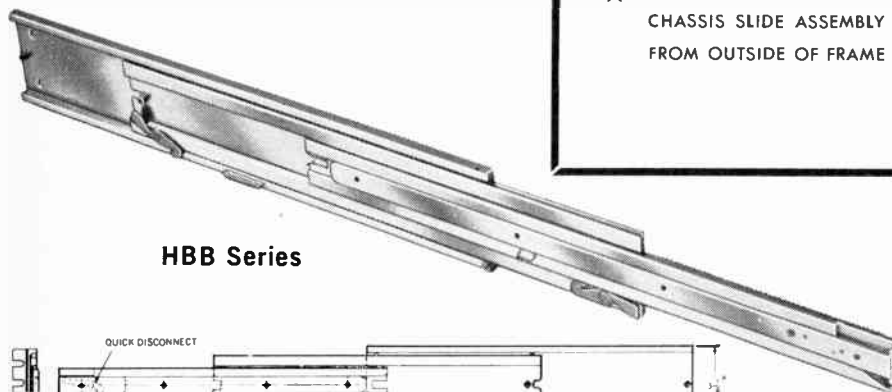
100 lb. BALL BEARING SLIDES



- EXCLUSIVE "QUICK DISCONNECT" allows for immediate removal of chassis.
- Carries load of 100 lbs. when fully extended.
- Glides smoothly on stainless steel ball bearings.
- 3/16" horizontal side space adjustable ± 1/16.
- 1 3/8" vertical side space.
- 3 telescoping anodized aluminum members.
- Allows full accessibility for instantaneous servicing.
- Slide mounts standard 17" wide chassis.
- Slide locks in open position.
- Supplied with all necessary hardware for immediate installation.

| Catalog No. | Load Rating Lbs. | Slide Length | Travel Length | Will Fit Racks | Net Price per Pair |
|-------------|------------------|--------------|---------------|--|--------------------|
| BB-100-14 | 100 | 14" | 13" | 1 5/4" deep POR (DCR, SDR, DRK, SDRK)* | \$63.25 |
| BB-100-16 | 100 | 16 | 15 | 18" deep PRXA, POR (R, RS, RM, RMA, FD, DCR, SDR)* | 63.25 |
| BB-100-20 | 100 | 20 | 19 | FS, 22" deep CPF & FA | 68.50 |
| BB-100-22 | 100 | 22 | 21 | 24" deep PRXA (RM, RMA, FD)* | 69.75 |
| BB-100-24 | 100 | 24 | 23 | 25 1/2" deep FA & FS | 71.50 |

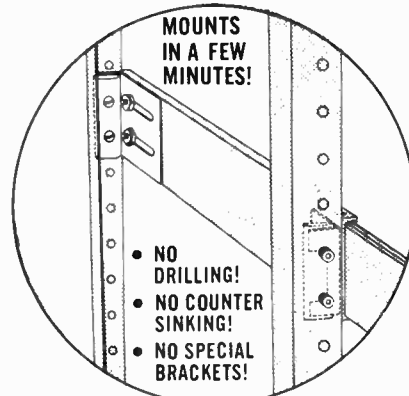
*Slide Adapter Kit (Cat. No. SAK-35) required for rear mounting on all models in parenthesis (See page 27).



HBB Series

★ MOUNTS TO TAPPED HOLES OF FRONT AND REAR PANEL MOUNTING ANGLES

★ SIMPLE ADJUSTABILITY OF CHASSIS SLIDE ASSEMBLY FROM OUTSIDE OF FRAME



200 lb. HEAVY BALL BEARING SLIDES

| Catalog No. | Load Rating Lbs. | Slide Length | Travel Length | Will Fit Racks | Net Price per Pair |
|-------------|------------------|--------------|---------------|--|--------------------|
| HBB-200-14 | 200 | 14" | 13" | 1 5/4" deep POR (DCR, SDR, DRK, SDRK)* | \$81.50 |
| HBB-200-16 | 200 | 16 | 15 | 18" deep PRXA, POR (R, RS, RM, RMA, FD, DCR, SDR)* | 81.50 |
| HBB-200-20 | 200 | 20 | 19 | FS, 22" deep CPF & FA | 88.75 |
| HBB-200-22 | 200 | 22 | 21 | 24" deep PRXA (RM, RMA, FD)* | 92.00 |
| HBB-200-24 | 200 | 24 | 23 | 25 1/2" deep FA & FS | 94.00 |

*Slide Adapter Kit (Cat. No. SAK-35) required for rear mounting on all models in parenthesis (See page 27)

- EXCLUSIVE "QUICK DISCONNECT" allows for immediate removal of chassis.
- Chassis may be removed from side by depressing quick release lever.
- Slide locks in open position.
- 1/2" horizontal side space adjustable ± 3/32.
- Carries loads of 200 lbs. when fully extended.
- 3 1/2" vertical side space.
- 4 telescoping anodized aluminum members.
- Allows full accessibility for instantaneous servicing.
- Glides smoothly on stainless steel ball bearings.
- Slide mounts standard 17" wide chassis.
- Supplied with all necessary hardware for immediate installation.

PREM-O-RAK®

Standard CHASSIS SLIDES

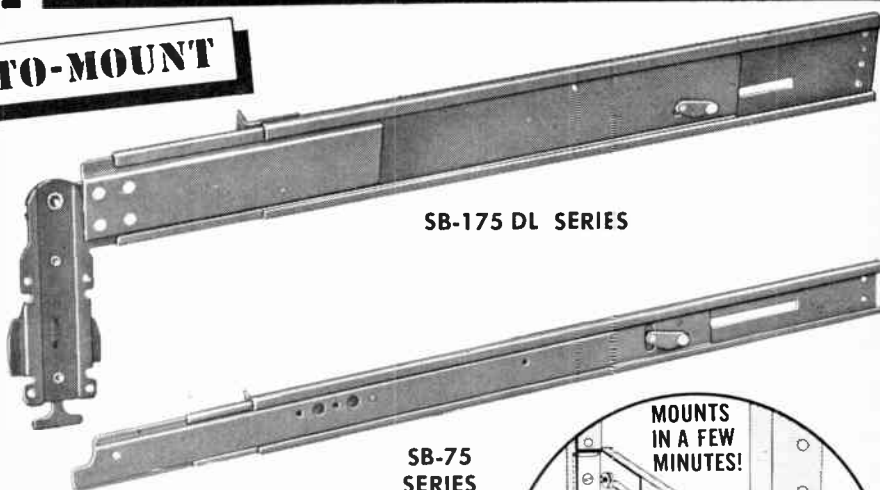


READY-TO-MOUNT

SOLID BEARING SLIDES

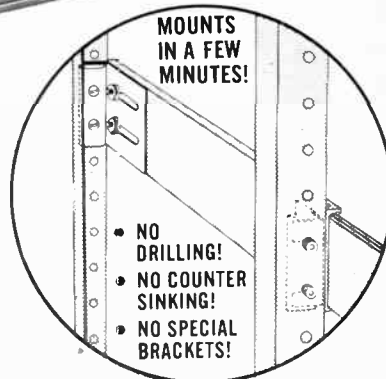
CARRY 75 lb. and 175 lb. LOADS

- TILT and NON-TILT MODELS.
- EXCLUSIVE "QUICK DISCONNECT" allows for immediate removal of chassis.
- SB-75 Series carry 75 lbs. fully extended. SB-175 Series carry 175 lbs. fully extended.
- Made of high strength cold rolled steel.
- Withstands 100 hours salt spray.
- Slide mounts standard 17" wide chassis.
- 3 telescoping members allow full accessibility for instant servicing.
- SB-75 Series—386 horizontal side space adjustable $\pm \frac{1}{32}$.
- SB-175 Series—398 horizontal side space adjustable $\pm \frac{1}{32}$.
- Finish: Electro zinc plated, chromate treated and completely coated with Molybdenum Disulphide lubricant.
- SB-175-DL Series have detent locks which allow chassis to be tilted either up or down and locked at 90° for easy servicing.

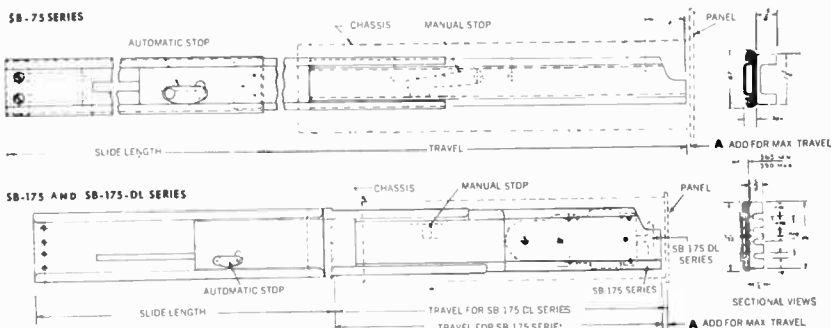


SB-175 DL SERIES

SB-75 SERIES



- ★ MOUNTS TO TAPPED HOLES OF FRONT AND REAR PANEL MOUNTING ANGLES
- ★ SIMPLE ADJUSTABILITY OF CHASSIS SLIDE ASSEMBLY FROM OUTSIDE OF FRAME



SLIDE ADAPTER KIT

Required for rear mounting on RM, RMA, FD, RS, R, DCR, DRK, SDR and SDRK models.

- Mounts to inside rear flange by drilling 4 holes.
- Made of No. 12 gauge steel and tapped 10-32 on E.I.A. spacings (5/8-5/8-1/2).
- Finished in Gray Hammerstone.

Kit includes 2 brackets, four 10-32 screws and keys.

Cat. No. SAK-35 \$3.00 Net Price

SLIDE TILTING KIT

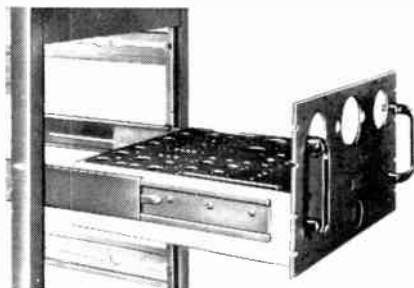
For tilting one pair of slides. Consists of 4 special screws, lock washers and nuts.

STK-75 (For SB-75 series) \$1.50 Net Price

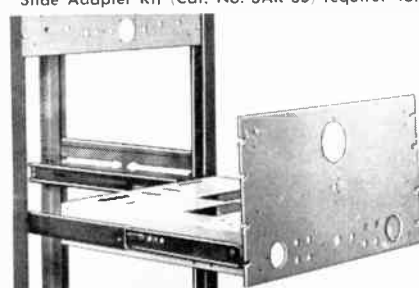
STK-175 (For SB-175 series) 1.75 Net Price

| Catalog No. | Load Rating lbs. | Slide Length | Travel Length | (A) Add for Max. Travel | Will Fit Racks | Net Price per Pair |
|--------------|------------------|--------------|---------------|-------------------------|---|--------------------|
| SB-75-14 | 75 | 14" | 14 1/2" | 1" | 15 1/4" deep POR (DCR, SDR, DRK, SDRK)* 18" deep PRXA, POR (R, RS, RMA, FD, DCR, SDR)* | 17.50 |
| SB-75-16 | 75 | 16 | 14 1/2" | 3 | FS, 22" deep CPF & FA | 17.50 |
| SB-75-20 | 75 | 20 | 18 1/2" | 1 | 24" deep PRXA (RM, RMA, FD)* | 18.75 |
| SB-75-22 | 75 | 22 | 22 1/2" | 3 | 25 1/2" deep FA & FS | 19.75 |
| SB-75-24 | 75 | 24 | 26 1/2" | 1" | 15 1/4" deep POR (DCR, SDR, DRK, SDRK)* 18" deep PRXA, POR (R, RS, RMA, FD, DCR, SDR)* | \$37.25 |
| SB-175-14 | 175 | 14" | 14 1/2" | 1" | FS, 22" deep CPF & FA | 37.25 |
| SB-175-16 | 175 | 16 | 18 1/2" | 1 | 24" deep PRXA (RM, RMA, FD)* | 39.50 |
| SB-175-20 | 175 | 20 | 22 1/2" | 1 | 25 1/2" deep FA & FS | 40.25 |
| SB-175-22 | 175 | 22 | 24 | 1 | 15 1/4" deep POR (DCR, SDR, DRK, SDRK)* | \$59.00 |
| SB-175-24 | 175 | 24 | 26 1/2" | 1 | 18" deep PRXA, POR (R, RS, RMA, FD, DCR, SDR)* | 59.00 |
| SB-175-DL-14 | 175 | 14" | 14 1/2" | — | FS, 22" deep CPF & FA | 59.00 |
| SB-175-DL-16 | 175 | 16 | 18 1/4" | — | 24" deep PRXA (RM, RMA, FD)* | 61.50 |
| SB-175-DL-20 | 175 | 20 | 22 1/4" | — | 25 1/2" deep FA & FS | 63.50 |
| SB-175-DL-22 | 175 | 22 | 26 1/4" | — | | |
| SB-175-DL-24 | 175 | 24 | 26 1/4" | — | | |

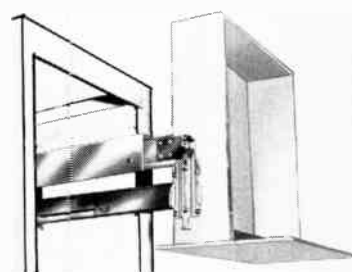
*Slide Adapter Kit (Cat. No. SAK-35) required for rear mounting on all models in parenthesis.



SB-175 Series



SB-75 Series
PREMIER PAGE 27



SB-175-DL Series

ALL PRICES F.O.B. N. Y. 59, N. Y.



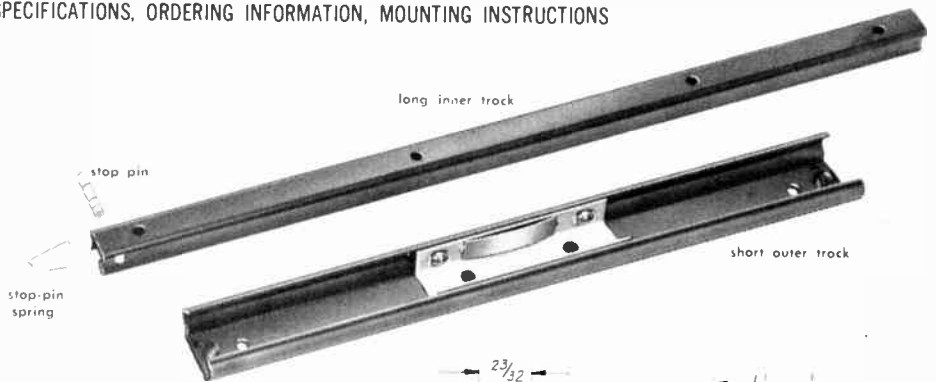
SPECIFICATIONS, ORDERING INFORMATION, MOUNTING INSTRUCTIONS

**BALL BEARING
Record Player
and Hi-Fi
CHASSIS SLIDES**

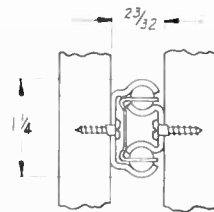
*mounting
instructions*

Tracks may be mounted on bottom or side. These instructions apply to either type of mounting.

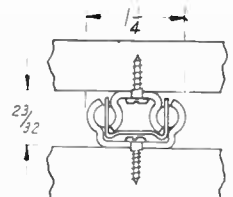
1. Disassemble slide assemblies.
2. Fasten the short outer tracks to the cabinet with wood screws provided, keeping the track ends flush with the front of the cabinet. Tracks must be mounted parallel to each other to insure proper operation. (See Fig. A).
3. Fasten the long inner tracks to the chassis or moving unit, positioning them to conform in spacing to the outer tracks. Make certain that the stop pins protrude sufficiently to the rear of the moving unit to enable removal and replacement of the stop pins. (See Fig. B).
4. Remove stop-pin springs, then remove stop pins from the long inner tracks which are mounted to the chassis.
5. Place the chassis or moving unit into the cabinet by lining up the inner and outer tracks and sliding into position.
6. Replace stop pins and springs.



Part No. PS-13-9. exploded view

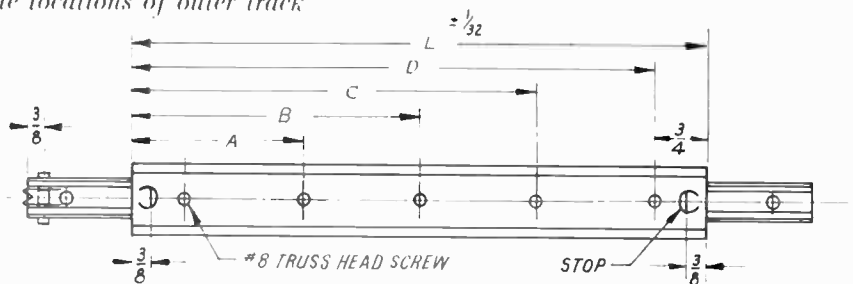


Side mounting, end view.



Bottom mounting, end view.

hole locations of outer track



hole locations of inner track

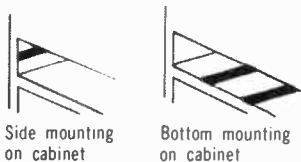
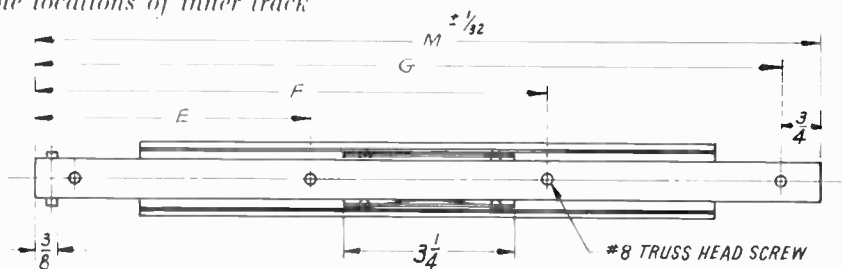


Fig. A—Short outer track

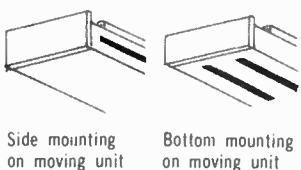


Fig. B—Long inner track

| MODEL NUMBER | SLIDE TRAVEL (inches) | OUTER TRACK (inches) | | | | | INNER TRACK (inches) | | | | | LOAD CAP. (lbs.) | NET PER PAIR | |
|--------------|-----------------------|----------------------|---------|-------|--------|-------|----------------------|--------|--------|--------|----|------------------|--------------|---|
| | | LOCATION OF HOLES | | | | | LOCATION OF HOLES | | | | | | | |
| | | A | B | C | D | L | E | F | G | H | I | J | K | L |
| PS-11-7 | 7 1/2 | — | 5 1/2 | — | 10 1/4 | 11 | 4 5/8 | 8 3/8 | 10 3/4 | 11 1/2 | 50 | 1.65 | | |
| PS-13-9 | 9 | 3 1/8 | 4-15/16 | 6 3/4 | 9 1/8 | 9 7/8 | 4 5/8 | 8 3/8 | 12 1/4 | 13 | 50 | 1.65 | | |
| PS-13-10 | 10 | — | 5 1/2 | — | 10 1/4 | 11 | 4 5/8 | 8 3/8 | 12 1/4 | 13 | 50 | 1.71 | | |
| PS-15-11 | 11 | — | 5 1/2 | — | 10 1/4 | 11 | 5 3/4 | 10 3/4 | 14 1/4 | 15 | 40 | 1.83 | | |
| PS-16-12 | 12 1/2 | — | 5 1/2 | — | 10 1/4 | 11 | 3 3/4 | 10 3/4 | 15 3/4 | 16 1/2 | 30 | 2.01 | | |
| PS-18-14 | 14 1/2 | — | 5 1/2 | — | 10 1/4 | 11 | 6-7/16 | 12 1/8 | 17 3/4 | 18 1/2 | 30 | 2.19 | | |

Model number explanation—"PS" indicates "Phonograph Slide". First number indicates length of movable inner track (excluding fractions). Second number indicates slide travel. Example: Model PS-13-10 indicates a Phonograph Slide with a 13" inner track which has a 10" travel.



METAL PRODUCTS CO., INC.
South River, New Jersey

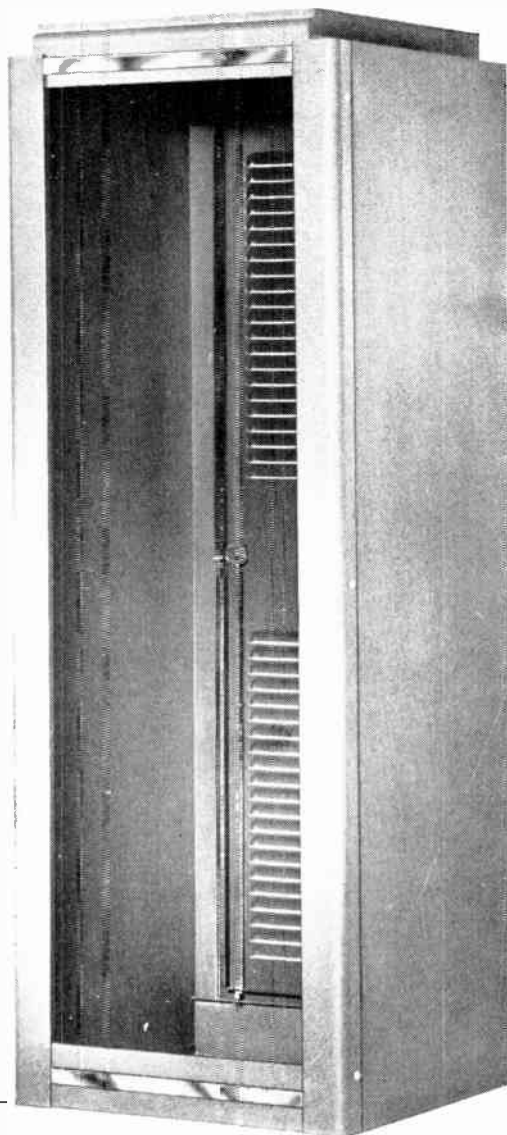
WYCO ALL-WELDED DELUXE CABINET RACKS

METAL PRODUCTS

DELUXE "D" SERIES AN ALL-WELDED UNIT FOR 19" RACK PANELS

SPECIFICATIONS:

- A. Rack is constructed throughout from 16 gauge high-quality steel and is completely welded together.
- B. Panel mounting angles constructed of 1½ x 1½ x ⅛" angle iron.
- C. Mounting holes are tapped 10/32 thread.
- D. Mounting holes are at 1¼"-1½" spacings. (WESTERN ELECTRIC SPACING.)
- E. Double row of louvres in rear door provide ventilation.
- F. Door is hung on loose-pin hinges; it may be easily removed.
- G. Door is securely locked by means of an "automotive" type highly-polished handle and linkage rods.
- H. Highly polished metal trim is on front of rack at top and bottom.
- I. Panel mounting screws are concealed by detachable corner vertical trim (see Item "L").
- J. Finished in black or grey wrinkle enamel and silver grey hammertone.
- K. When it is desired to "gang" two or more of these cabinets together, order connecting trim, using the prefix "AD" plus the last two numbers of the catalog number of the cabinet.
- L. Narrow vertical trim, allowing for removal of 19" panels, without removing vertical trim, is available, upon request, at no additional charge.



RACKS — 18½" DEEP

| Catalog Number | Overall Dimensions | Panel Space | Clear Inside Width (Front) | Clear Inside width (Rear) | Clear Inside Depth | Approx. Shipping Weight | Dealer Cost |
|----------------|---|-------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|-------------|
| D 1869 | 69 ⁵ / ₈ x 23 ⁵ / ₈ x 18½ | 61¼ x 19 | 17 ⁷ / ₈ | 19 ⁵ / ₈ | 16 ³ / ₄ | 155 lbs. | \$112.07 |
| D 1878 | 78 ³ / ₈ x 23 ⁵ / ₈ x 18½ | 70 x 19 | 17 ⁷ / ₈ | 19 ⁵ / ₈ | 16 ³ / ₄ | 167 lbs. | 122.73 |
| D 1885 | 85 ³ / ₈ x 23 ⁵ / ₈ x 18½ | 77 x 19 | 17 ⁷ / ₈ | 19 ⁵ / ₈ | 16 ³ / ₄ | 180 lbs. | 138.71 |

RACKS — 24" DEEP

| | | | | | | | |
|--------|--|----------|--------------------------------|--------------------------------|-----|----------|----------|
| D 2469 | 69 ⁵ / ₈ x 23 ⁵ / ₈ x 24 | 61¼ x 19 | 17 ⁷ / ₈ | 19 ⁵ / ₈ | 22¼ | 176 lbs. | \$131.61 |
| D 2478 | 78 ³ / ₈ x 23 ⁵ / ₈ x 24 | 70 x 19 | 17 ⁷ / ₈ | 19 ⁵ / ₈ | 22¼ | 192 lbs. | 142.26 |
| D 2485 | 85 ³ / ₈ x 23 ⁵ / ₈ x 24 | 77 x 19 | 17 ⁷ / ₈ | 19 ⁵ / ₈ | 22¼ | 205 lbs. | 159.97 |

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

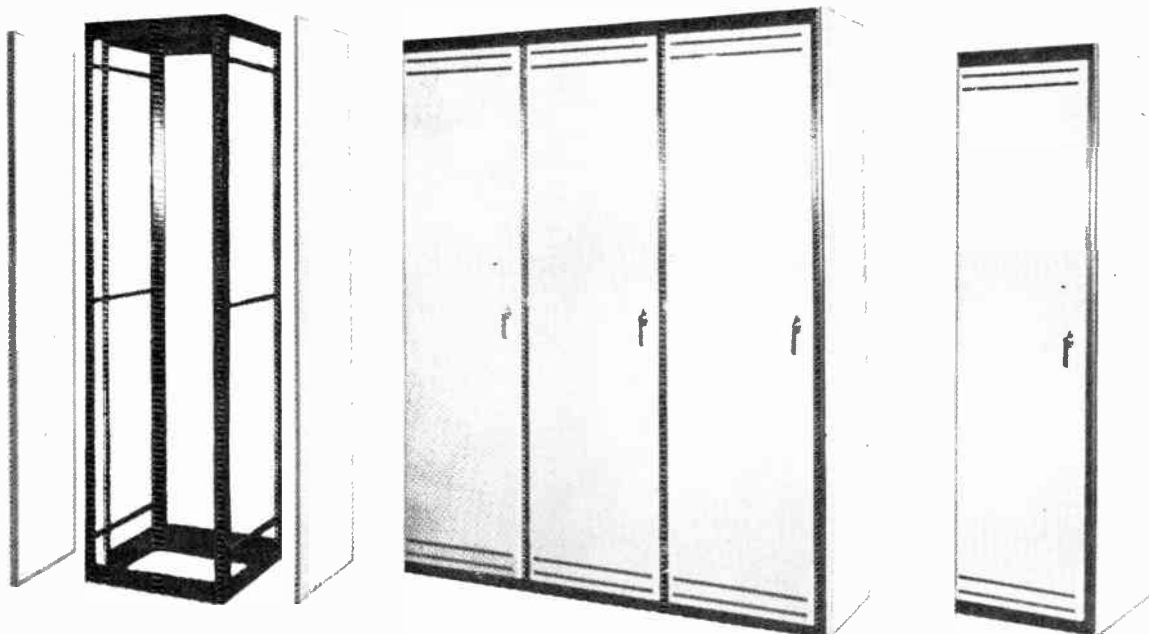
Wyco Metal Products • NORTH HOLLYWOOD, CALIFORNIA

WYCO
METAL PRODUCTS

MULTIPLE RACK INSTALLATIONS

ALL-WELDED FRAME—FOR 19" MODELS
REMOVABLE SIDES—ADJUSTABLE MOUNTING ANGLES

18" DEEP AND 24" DEEP



SPECIFICATIONS:

- A. Sides are removable for MULTIPLE RACK installations of two or more units.
 B. This series consists of one frame and rear door, or one frame, rear and front door.
 C. Removable sides sold separately, in pairs only.
 D. Fabricated of high-quality, heavy gauge steel and electronically welded together.
 E. Panel mounting angles are $\frac{3}{16}$ " structural steel with mounting holes tapped 10-32 thread on $1\frac{1}{4}$ "- $\frac{1}{2}$ " spacing.
 F. Panel mounting angles are adjustable from front to back.
 G. Highly-polished trim on doors.
 H. "Automotive" type, highly-polished handles on doors.
 I. Door can be mounted left or right hand.
 J. Bottom has cut-out for cables, leads, etc.
 K. Louvres in doors, sides and cabinet top can be added at no additional cost.
 L. A rectangular or round opening can be put into cabinet top at no additional cost.
 M. Available in primer coat, two-tone grey enamel (frame in dark grey; doors and ends in silver-grey hammertone), black or grey wrinkle.
 N. Heavy-duty Caster #RC7773 may be used with this series.

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

18" DEEP RACK

| REAR DOOR ONLY | | | | | FRONT AND REAR DOOR | | | | |
|----------------|--------------------|--------------------|------------------|-------------|---------------------|--------------------|--------------------|------------------|-------------|
| Cat. No. | Height | Panel Space | Approx. Shp. Wt. | Dealer Cost | Cat. No. | Height | Panel Space | Approx. Shp. Wt. | Dealer Cost |
| RW861 | 67 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 123 | \$103.28 | FW618 | 67 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 143 | \$122.24 |
| RW870 | 76 $\frac{1}{8}$ " | 70" | 129 | 119.30 | FW708 | 76 $\frac{1}{8}$ " | 70" | 152 | \$32.71 |
| RW877 | 83 $\frac{1}{8}$ " | 77" | 143 | 123.60 | FW778 | 83 $\frac{1}{8}$ " | 77" | 168 | 145.50 |

18" DEEP REMOVABLE SIDES

| Catalog No. | Approx. Shp. Wt. Pairs | Dealer Cost |
|-------------|------------------------|-------------|
| RS 1861 | 45 lbs. | \$37.88 pr. |
| RS 1870 | 50 lbs. | 40.76 pr. |
| RS 1877 | 55 lbs. | 43.84 pr. |

24" DEEP RACK

| REAR DOOR ONLY | | | | | FRONT AND REAR DOOR | | | | |
|----------------|--------------------|--------------------|------------------|-------------|---------------------|--------------------|--------------------|------------------|-------------|
| Cat. No. | Height | Panel Space | Approx. Shp. Wt. | Dealer Cost | Cat. No. | Height | Panel Space | Approx. Shp. Wt. | Dealer Cost |
| RW461 | 67 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 144 | 123.94 | FW614 | 67 $\frac{3}{8}$ " | 61 $\frac{1}{4}$ " | 169 | \$146.67 |
| RW470 | 76 $\frac{1}{8}$ " | 70" | 153 | 143.22 | FW704 | 76 $\frac{1}{8}$ " | 70" | 183 | 167.65 |
| RW477 | 83 $\frac{1}{8}$ " | 77" | 169 | 152.03 | FW774 | 83 $\frac{1}{8}$ " | 77" | 202 | 178.42 |

24" DEEP REMOVABLE SIDES

| Catalog No. | Approx. Shp. Wt. Pairs | Dealer Cost |
|-------------|------------------------|-------------|
| RS 2461 | 56 lbs. | \$45.46 pr. |
| RS 2470 | 64 lbs. | 48.88 pr. |
| RS 2477 | 70 lbs. | 52.79 pr. |

Wyco Metal Products • NORTH HOLLYWOOD, CALIFORNIA

WYCO
METAL PRODUCTS

ALL-WELDED CABINET RACKS

DELUXE SERIES "G" AND "DF" — STANDARD SERIES "SL" AND "S"

DESCRIPTION:

- A. 16 ga. high quality steel.
- B. Welded together.
- C. Panel mounting angles $\frac{1}{8}$ " steel.
- D. Western Electric spacing.
- E. Tapped 10/32.
- F. Louvres rear door.
- G. Rear door hung on loose-pin hinges.
- H. Rear door has flush-type latch.
- I. Highly-polished trim at front, top and bottom.
- J. Front corners rounded.
- K. Available grey or black wrinkle and silver grey hammertone.
- L. "SL" and "S" series have detachable vertical trim.
- M. "G" and "DF" series panel mounting angles adjustable front to back.
- N. "DF" series has front door with automotive type handle and three point catch.
- O. "SL" series has louvres at sides.
- P. Narrow vertical trim can be ordered for "SL" and "S" series.

SPECIFICATIONS:

| Cat. No. | Overall Dim. | Panel Space | Approx. Ship. Wt. Lbs. | Dealer Cost |
|----------|---|--------------------------|------------------------|-------------|
| G 6119 | 67 $\frac{3}{8}$ " x 22" x 18" | 61 $\frac{1}{4}$ " x 19" | 165 | \$ 99.14 |
| G 7019 | 76 $\frac{1}{8}$ " x 22" x 18" | 70" x 19" | 185 | 111.56 |
| G 7719 | 83 $\frac{1}{8}$ " x 22" x 18" | 77" x 19" | 195 | 123.92 |
| DF 1961 | 67 $\frac{3}{8}$ " x 22" x 18" | 61 $\frac{1}{4}$ " x 19" | 185 | 123.92 |
| DF 1970 | 76 $\frac{1}{8}$ " x 22" x 18" | 70" x 19" | 200 | 142.22 |
| DF 1977 | 83 $\frac{1}{8}$ " x 22" x 18" | 77" x 19" | 210 | 154.64 |
| SL 1842 | 42 $\frac{7}{8}$ " x 21 $\frac{1}{8}$ " x 18" | 36 $\frac{3}{4}$ " x 19" | 107 | 71.13 |
| SL 1867 | 67 $\frac{3}{8}$ " x 21 $\frac{1}{8}$ " x 18" | 61 $\frac{1}{4}$ " x 19" | 145 | 92.08 |
| SL 1883 | 83 $\frac{1}{8}$ " x 21 $\frac{1}{8}$ " x 18" | 77" x 19" | 177 | 116.86 |

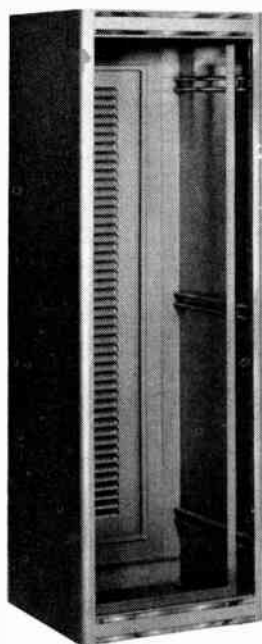
STANDARD "S" SERIES

FOR 19" RACK PANELS

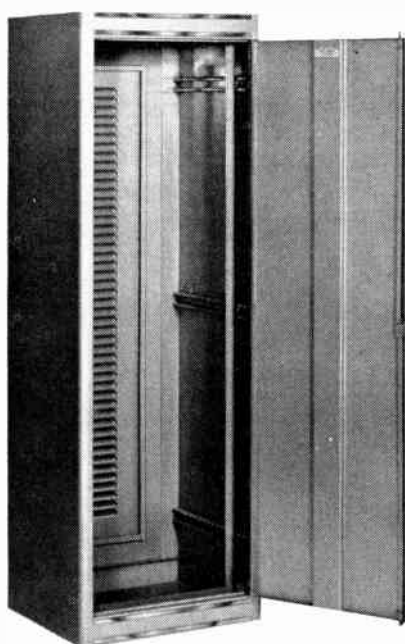
SPECIFICATIONS:

- A. ALL SPECIFICATIONS AND DIMENSIONS OF "SL" SERIES APPLY, EXCEPT FOR FOLLOWING:
 - (1) LOUVRES AT SIDE ARE OMITTED TO FACILITATE USE OF RACKS IN ROWS OR "GANGS."
 - (2) When it is desirable to set up these cabinets in rows or "gangs," we can supply a connecting trim for a small additional charge. Order connecting trim, using prefix "AS" plus the last two numbers of the catalog number of the cabinet.
 - (3) Catalog Numbers are prefaced with "S" instead of "SL."

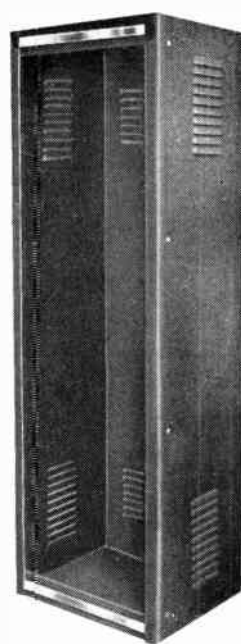
➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀



"G" SERIES
ADJUSTABLE MOUNTING ANGLE



"DF" SERIES
ADJUSTABLE MOUNTING ANGLE



"SL" SERIES
DETACHABLE VERTICAL TRIM
AT FRONT CORNERS

Wyco Metal Products • NORTH HOLLYWOOD, CALIFORNIA



CABINET RACKS - RELAY RACKS EXPAND-A-RACKS

MODEL "W" AND BANNER "B" SERIES

DESCRIPTION: "W" SERIES

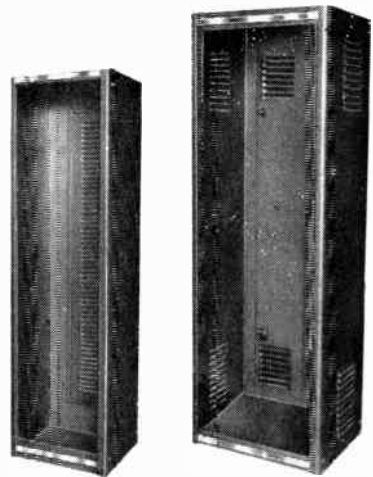
- A. 16 gauge high-quality steel.
- B. Front corners are rounded.
- C. Panel mounting angles 1/8" steel.
- D. Mounting holes topped 10/32 thread.
- E. Mounting holes are UNIVERSAL CENTERS.
- F. Louvres in rear door and sides.
- G. Door hung on loose pin hinges.
- H. Door closed by two flush-type latches.
- I. Highly-polished trim on front.
- J. RACK IS SHIPPED "KNOCKED-DOWN"; all necessary bolts supplied for assembly.
- K. Finished in black or grey wrinkle and silver grey hammertone.
- L. There are four brackets spot welded to the bottom of the cabinet. Our casters (catalog No. RC100) can be attached to these brackets. This offers instant mobility, if required.

DESCRIPTION: "B" SERIES

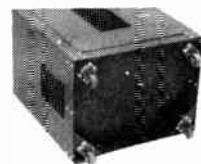
- A. 16 gauge high-quality steel and is welded together.
- B. Panel mounting angles 1 1/2 x 1 1/2 x 1/8" angle iron.
- C. Mounting holes are 10/32 thread.
- D. (WESTERN ELECTRIC SPACING.)
- E. Louvres in rear doors.
- F. Rear corners re-inforced.
- G. Door hung on loose pin hinges.
- H. Door closed by two flush-type latches.
- I. Highly-polished trim on front.
- J. Panel mounting screws concealed by vertical trim.
- K. Finished in black or grey wrinkle enamel and silver grey hammertone.
- L. When it is desirable to set up racks in rows or "gangs," order connecting trim, using the prefix "AB" plus the last two numbers of the catalog number of the cabinet.

SPECIFICATIONS:

| Catalog Number | Overall Dimensions | Panel Space | Clear Inside Width (Front) | Clear Inside Width (Rear) | Clear Inside Depth | Approx. Shipping Weight | Dealer Cost |
|----------------|----------------------|-------------|----------------------------|---------------------------|--------------------|-------------------------|-------------|
| W 1036 | 42 x 22 x 17 1/4 | 36 3/4 x 19 | 17 7/8 | 17 1/4 | 15 7/8 | 88 lbs. | \$45.17 |
| W 1042 | 47 1/4 x 22 x 17 1/4 | 42 x 19 | 17 7/8 | 17 1/4 | 15 7/8 | 95 lbs. | 51.10 |
| W 1061 | 66 1/2 x 22 x 17 1/4 | 61 1/4 x 19 | 17 7/8 | 17 1/4 | 15 7/8 | 122 lbs. | 63.96 |
| W 1077 | 82 1/4 x 22 x 17 1/4 | 77 x 19 | 17 7/8 | 17 1/4 | 15 7/8 | 148 lbs. | 76.57 |
| B 1876 | 76 1/8 x 21 1/8 x 18 | 70 x 19 | 17 7/8 | 17 1/4 | 16 1/2 | 178 lbs. | 124.49 |



"B" SERIES



"W" SERIES



CASTERS

DESCRIPTION:

- A. Can be used with our "W" series and Expand-A-Rack series.
- B. Load capacity of a set of four is 520 lbs.
- C. The swivel bearing wheels are made of a hard fibrous compound.

CATALOG NO. RC-100 APPROX. SHIP. WT. EACH 8 oz.
DEALER COST \$1.10 ea.

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

EXPAND-A-RACK SERIES

DESCRIPTION:

- A. When it is necessary to join two or more racks together, WYCO METAL PRODUCTS offers the "EXPAND-A-RACK" series.
- B. Figure "A" shows two Expand-A-Racks joined together.
- C. Figure "B" illustrates the method of expanding your present rack space. In place of purchasing an additional rack, a unit, consisting of the following items, would be bought: (a) the door; (b) the top; (c) the bottom; (d) an Expand-A-Rack joining unit. The right or left side of your existing relay cabinet rack is dis-assembled and replaced with an Expand-A-Rack joining unit. Following this step, the top and bottom are assembled. The cabinet side removed from the original rack is then fastened onto the second rack. Upon hanging the additional door, two complete racks are now joined together.
- D. Wyco's Expand-A-Rack series may be purchased by one of two methods. One method consists of buying one complete rack (the "W" series) plus one Expand-A-Rack unit. If you already have one of our basic "W" series cabinets, then order an Expand-A-Rack unit.
- E. Supports are electronically welded to the bottom to receive our casters (#RC-100).
- F. There is an ample amount of compound knockouts in the Expand-A-Rack joining unit center partition. This allows cables and leads to be taken from one cabinet to the other.
- G. Available in Grey or Black Wrinkle and Silver Grey Hammertone.

SPECIFICATIONS:

| Cat. No. | Used to Expand-A-Rack With | Approx. Ship Wt. Lbs. | Dealer Cost |
|----------|----------------------------|-----------------------|-------------|
| E-400 | W-1036 | 74 | \$44.34 |
| E-401 | W-1042 | 78 | 49.01 |
| E-402 | W-1061 | 99 | 60.96 |
| E-403 | W-1077 | 126 | 74.90 |

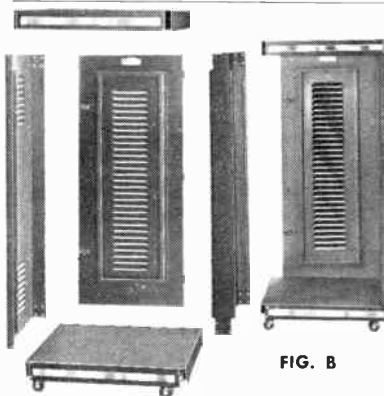


FIG. B

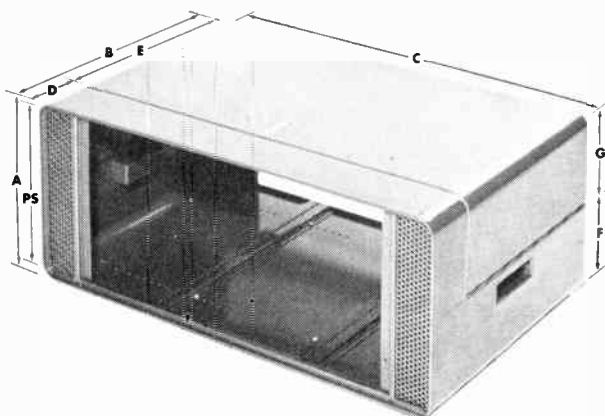


FIG. A

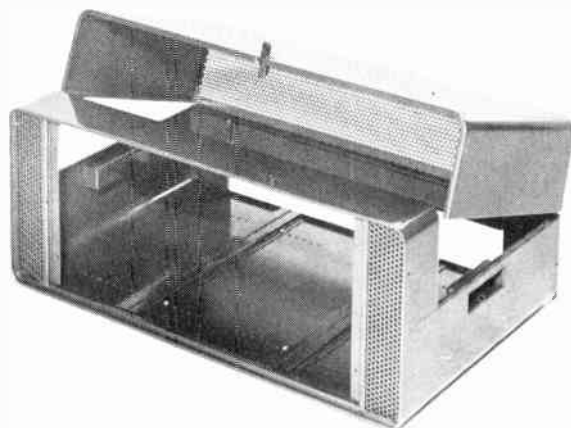
Wyco Metal Products • NORTH HOLLYWOOD, CALIFORNIA



THE "SUPREME LINE" CABINET SERIES AND PORTABLE SCOPE DOLLY



FRONT VIEW



FRONT VIEW — TOP DOOR OPEN

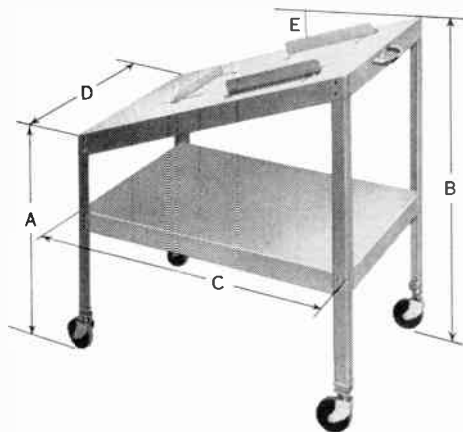
DESCRIPTION :

- A. Fabricated of 16 ga. steel.
- B. Mounting holes tapped 10-32.
- C. Mounting holes: Universal spacing.
- D. Ventilated by perforated metal front and back and rear opening.
- E. Top door has continuous piano hinge.
- F. Top door has flush-type latch.
- G. Embossed feet with rubber bumpers at bottom.
- H. Adjustable Hat-section type rails, furnished to support chassis, have holes for bolting to cabinet bottom and chassis.
- I. Recessed carrying handles are in sides of cabinet.
- J. Finished in dark grey hammertone.
- K. Utilization of our standard aluminum or steel panels in silver grey hammertone finish with this series creates an attractive contrast.

SPECIFICATIONS

| CAT = | PANEL SPACE | A | B | C | D | E | F | G | H | I | Approx. Ship. Wt. Lbs. | Dealer Cost |
|---------|------------------------------------|--------------------------------|----|----|---|----|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------|-------------|
| SL 7760 | 7x19 | 7 ³ / ₄ | 15 | 24 | 3 | 12 | 3 ⁷ / ₈ | 3 ⁷ / ₈ | 3 ¹ / ₈ | 3 ⁷ / ₈ | 23 | \$26.39 |
| SL 7761 | 8 ³ / ₄ x19 | 9 ¹ / ₂ | 15 | 24 | 3 | 12 | 4 ³ / ₄ | 4 ³ / ₄ | 3 ¹ / ₈ | 4 ³ / ₄ | 25 | 28.15 |
| SL 7762 | 10 ¹ / ₂ x19 | 11 ¹ / ₄ | 15 | 24 | 3 | 12 | 5 ⁵ / ₈ | 5 ⁵ / ₈ | 3 ¹ / ₈ | 5 ⁵ / ₈ | 27 | 29.91 |
| SL 7763 | 12 ¹ / ₄ x19 | 13 | 15 | 24 | 3 | 12 | 6 ¹ / ₂ | 6 ¹ / ₂ | 3 ¹ / ₈ | 6 ¹ / ₂ | 29 | 33.87 |
| SL 7764 | 14x19 | 14 ³ / ₄ | 15 | 24 | 3 | 12 | 7 ³ / ₈ | 7 ³ / ₈ | 3 ¹ / ₈ | 7 ³ / ₈ | 31 | 37.66 |

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀



PORTABLE SCOPE DOLLY

DESCRIPTION

- A. Shelves fabricated of high-quality steel.
- B. Legs fabricated of structural steel for strength.
- C. Highly - polished functional handle included.
- D. By adjusting brackets on the top shelf, almost any popular type of laboratory scope may be carried.
- E. Full - swivel 3" rubber casters included.
- F. Painted in smooth silver-grey hammertone.
- G. Shipped knocked-down with all necessary hardware for easy assembly.

| CAT. = | Type | "A" | "B" | "C" | "D" | "E" | Approx. Ship. Wt. | Price |
|---------|---------|----------------------------------|----------------------------------|-----|-----|-----|-------------------|---------|
| SD 7783 | sloping | 21 ³ / ₄ " | 32 ¹ / ₂ " | 28" | 19" | 20° | 30 = | \$34.95 |

(PRICES SUBJECT TO CHANGE WITHOUT NOTICE)

WYCO
METAL PRODUCTS

SLIDES — SLIDE ASSEMBLIES

SLIDING DRAWERS

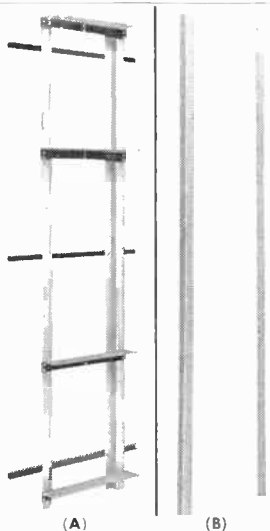
VERTICAL SLIDE SUPPORTS — EXTRA MOUNTING ANGLES

HEAVY DUTY CASTERS

(A) VERTICAL SIDE SUPPORTS

Description: (A) Bolts to Unistrut members in following series cabinets: RW/FW/G/DF. (B) 12 ga. steel; painted hammetone. (C) 10-32 holes; Universal spacing. (D) Supports shelves, mounting brackets and slide units. (E) Support brackets not included; order separately. (F) Mounting hardware included.

| Cat. # | Panel Space | Ship Wt. | Price Set 4 |
|---------|-------------|----------|-------------|
| ZA-7757 | 61 1/4" | 30 | \$20.38 |
| ZA-7758 | 70" | 34 | 23.71 |
| ZA-7759 | 77" | 38 | 26.54 |



(B) EXTRA MOUNTING ANGLES

Description: (A) Order when additional pair mounting angles required for following cabinet series: RW/FW/DF/G. (B) 12 ga. steel; painted grey hammetone. (C) 10-32 holes; WE spacing.

| Cat. # | Panel Space | Ship Wt. | Price Per Pr. |
|---------|-------------|----------|---------------|
| MA-7774 | 61 1/4" | 22 | \$17.48 |
| MA-7775 | 70" | 26 | 19.89 |
| MA-7776 | 77" | 30 | 21.73 |

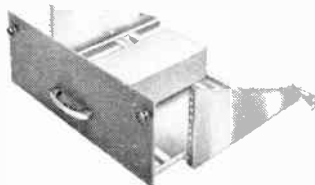
HEAVY DUTY CASTER



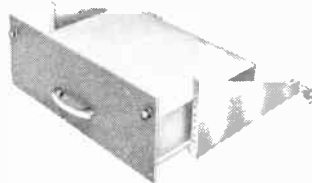
Description: (A) Capacity: 200 # per caster. (B) 4" x 1 5/8" full-swivel wheel. (C) All rubber cushion tread, hard fibrous center. (D) Used on RW/FW cabinet series. Catalog #RC-7773
PRICE: ea. \$5.18

PHOTOGRAPHS A, B, C, D, ARE EXAMPLES OF SLIDE ASSEMBLIES FOR 19" RACKS

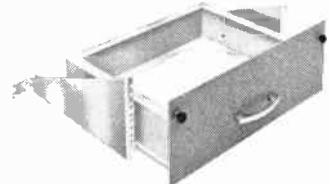
(A) Example: Slide Assembly Using Chassis LESS Than 17" Width



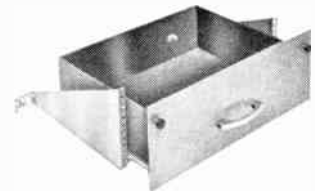
(C) Example: Slide Assembly Using 17" Wide Chassis



(B) Example: Slide Assembly Using Chassis Frame



(D) Example: Slide Assembly Using Drawer



ORDER COMBINATION OF PARTS, DESCRIBED BELOW, TO BUILD ASSEMBLIES, AS REQUIRED, FOR 19" RACK MOUNTING

SLIDES FOR 17" WIDE CHASSIS



Catalog #BS-7777
PRICE: \$7.77 pr. net

Description: (A) Supports 17" wide chassis. (B) Supports 75 lbs. in extended position. (C) Travels on roller bearings. (D) 14" deep in closed position. (E) Extends 10" to front when pulled out. (F) Attaches to rear side of mounting angle. (G) Fabricated of heavy-gauge, plated steel.

SUPPORTS FOR CHASSIS LESS THAN 17" WIDE



Catalog #BS-7778
PRICE: \$2.29 pr. net

Description: (A) Used with BS-7777 to support any chassis less than 17" wide. (B) Heavy-gauge, plated steel. (C) Includes hardware for attaching to basic slides.

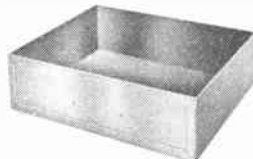
CHASSIS FRAMES



Catalog #BS-7779
PRICE: \$5.12 net

Description: (A) Size 17" x 14" x 3" x 1" flange. (B) 1" flange supports plywood for record changer. (C) Heavy-gauge, plated steel. (D) Includes hardware for attaching to basic slides.

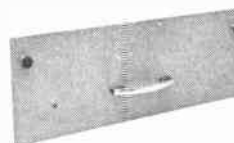
DRAWER



Catalog #BS-7780
PRICE: \$8.96 net

Description: (A) Size: 17" wide x 14" deep x 5" high. (B) Heavy-gauge steel. (C) Painted black enamel. (D) Includes hardware for attaching to basic slides.

FRONT SLIDE PANEL



Cat. # Size Price
BS-7781 7" x 19" \$4.59 net
BS-7782 10 1/2" x 19" 5.22 net

Description: (A) Used as front panel; attaches to slide assembly. (B) 12 gauge steel. (C) Handle and quick-turn latches included. (D) Colors: Grey and Black wrinkle or grey hammetone.

STANDARD CHASSIS



Description: (A) Standard aluminum or steel chassis may be used with our slide unit. (B) See list of sizes described in this catalog.

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

Wyco Metal Products • NORTH HOLLYWOOD, CALIFORNIA



CABINET RACKS - RELAY RACKS CHASSIS - CASES

MODEL "C" SERIES DESCRIPTION:

- A. Constructed of heavy gauge high-quality steel and is completely welded together.
- B. Front vertical corners rounded.
- C. Mounting holes tapped 10/32 thread.
- D. Mounting holes spaced on UNIVERSAL CENTERS.
- E. Louvres in side provide ample ventilation.
- F. Highly-polished trim at top and bottom of front.
- G. Top door has piano hinge and flush-type latch.
- H. Finished in black or grey wrinkle and silver grey hammertone.
- I. Embossed feet on bottom minimize marring of table tops.



SPECIFICATIONS:

(DOOR IN TOP ONLY)

| Catalog Number | Dimensions | Panel Space | Approx. Shipping Weight | Dealer Cost |
|----------------|--|------------------------------------|-------------------------|-------------|
| C719 | 8 ³ / ₄ x22x15 Deep | 7 x19 | 25 lbs. | \$15.28 |
| C819 | 10 ¹ / ₂ x22x15 Deep | 8 ³ / ₄ x19 | 27 lbs. | 16.70 |
| C1019 | 12 ¹ / ₄ x22x15 Deep | 10 ¹ / ₂ x19 | 28 lbs. | 19.12 |
| C1219 | 14 x22x15 Deep | 12 ¹ / ₄ x19 | 30 lbs. | 20.12 |
| C1419 | 15 ³ / ₄ x22x15 Deep | 14 x19 | 32 lbs. | 21.96 |

(DOOR IN TOP AND REAR)

| | | | | |
|-------|--|------------------------------------|---------|---------|
| C1719 | 19 ¹ / ₄ x22x15 Deep | 17 ¹ / ₂ x19 | 36 lbs. | \$26.22 |
| C2119 | 22 ³ / ₄ x22x15 Deep | 21 x19 | 40 lbs. | 28.06 |
| C2619 | 28 x22x15 Deep | 26 ¹ / ₄ x19 | 43 lbs. | 30.14 |
| C3119 | 33 ¹ / ₄ x22x15 Deep | 31 ¹ / ₂ x19 | 47 lbs. | 31.98 |
| C3519 | 36 ³ / ₄ x22x15 Deep | 35 x19 | 50 lbs. | 33.65 |

➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

"RC" SERIES

- A. Rack constructed of 1/8" high-quality steel.
- B. Mounting holes are tapped 10/32 thread.
- C. Mounting holes are spaced on UNIVERSAL CENTERS.
- D. Base is 20" x 20".
- E. Finished in black wrinkle only.
- F. SHIPPED "KNOCKED-DOWN"; all necessary bolts supplied for assembly.

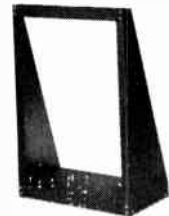


SPECIFICATIONS:

| Catalog Number | Panel Space | Approx. Shipping Weight | Dealer Cost |
|----------------|------------------------------------|-------------------------|-------------|
| RC36 | 36 ³ / ₄ x19 | 28 lbs | \$21.96 |
| RC71 | 71 ³ / ₄ x19 | 41 lbs. | 25.13 |

"RT" SERIES

- A. Rack constructed of heavy gauge high-quality steel.
- B. Mounting holes are tapped 10/32 thread.
- C. Mounting holes are spaced on UNIVERSAL CENTERS.
- D. Finished in black wrinkle only.
- E. SHIPPED "KNOCKED-DOWN"; all necessary bolts supplied for assembly.



| Catalog Number | Panel Space | Height | Width | Depth | Approx. Shipping Weight | Dealer Cost |
|----------------|-------------|--------|-------|-------|-------------------------|-------------|
| RT21 | 21x19 | 25" | 21" | 12" | 16 lbs. | \$ 9.10 |
| RT28 | 28x19 | 32" | 21" | 12" | 18 lbs. | 11.19 |

➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

OPEN END CHASSIS

DESCRIPTION:

Fig. A

- A. Can be utilized on all types of small built-up units such as record amplifier, code oscillator, etc.
- B. Electro-Zinc plated.

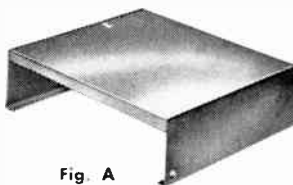


Fig. A

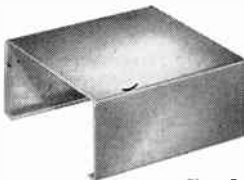


Fig. B

| Catalog Number | Depth | Width | Height | Approx. Shipping Wt.-Lbs. | Dealer Cost |
|----------------|----------------------------------|-------|---------------------------------|-------------------------------|-------------|
| E-570 | 7" | 6" | 2" | 1 | \$1.00 |
| E-571 | 5" | 7" | 1 ¹ / ₂ " | 3/4 | .97 |
| E-572 | 7" | 7" | 1 ¹ / ₂ " | 3/4 | 1.24 |
| E-573 | 7" | 8" | 2" | 1 | 1.17 |
| E-574 | 5 ¹ / ₂ " | 9" | 1 ¹ / ₂ " | 3/4 | 1.09 |
| E-575 | 7 ¹ / ₂ " | 9" | 1 ¹ / ₂ " | 1 | 1.40 |
| E-576 | 7" | 10" | 2" | 1 ¹ / ₄ | 1.37 |
| E-577 | 7" | 11" | 1 ¹ / ₂ " | 1 ¹ / ₄ | 1.30 |
| E-578 | 7" | 13" | 1 ¹ / ₂ " | 1 ¹ / ₂ | 1.59 |
| E-579 | 10 ³ / ₄ " | 14" | 2" | 2 ¹ / ₂ | 1.87 |
| E-580 | 7 ³ / ₄ " | 15" | 2" | 2 | 1.78 |

MINIATURE ALUMINUM CHASSIS

DESCRIPTION:

Fig. B

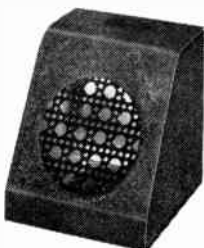
- A. Ideal for miniature tube applications, sub-assemblies, small receivers, narrow band FM adaptors.
- B. Has 1/4" flanges on bottom.
- C. Etched aluminum finish.

| Catalog Number | Depth | Width | Height | Approx. Shipping Wt.-Lbs. | Dealer Cost |
|----------------|---------------------------------|---------------------------------|---------------------------------|---------------------------|-------------|
| MA-700 | 2 ⁵ / ₈ " | 2 ³ / ₄ " | 1 ¹ / ₄ " | 1/4 | \$.38 |
| MA-701 | 1 ³ / ₄ " | 3 ¹ / ₈ " | 1" | 1/4 | .42 |
| MA-702 | 3 ¹ / ₄ " | 4 ¹ / ₂ " | 2" | 1/4 | .48 |
| MA-703 | 2 ³ / ₄ " | 4 ¹ / ₈ " | 1" | 1/4 | .45 |
| MA-704 | 3 ³ / ₄ " | 4 ¹ / ₈ " | 1 ¹ / ₂ " | 1/4 | .45 |
| MA-705 | 3" | 6 ¹ / ₈ " | 1 ¹ / ₄ " | 1/4 | .53 |
| MA-706 | 5 ³ / ₄ " | 4 ⁷ / ₈ " | 1 ¹ / ₂ " | 1/4 | .57 |
| MA-707 | 4" | 3 ¹ / ₈ " | 1" | 1/2 | .41 |
| MA-708 | 4" | 4 ¹ / ₈ " | 1" | 1/2 | .50 |
| MA-709 | 4" | 5 ¹ / ₈ " | 1" | 1/2 | .53 |
| MA-710 | 4" | 6 ¹ / ₈ " | 1" | 1/2 | .55 |

MINIATURE SPEAKER CASE

DESCRIPTION:

- A. Houses midget 2" or 3" speaker.
- B. Silver Grey Hammertone Finish.



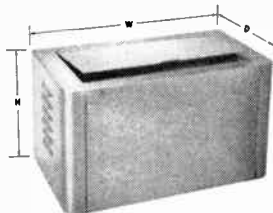
SPECIFICATIONS:

| Catalog Number | Hole Diameter | Fits Speaker Size | Approx. Ship. Wt. Lbs. | Dealer Cost |
|----------------|---------------------------------|-------------------|------------------------|-------------|
| MS-80 | 2 ¹ / ₄ " | 2" | 3/4 | \$1.58 |
| MS-81 | 2 ¹ / ₂ " | 3" | 3/4 | 1.58 |

➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀



RECEIVER CABINETS - SLOPING PANEL/TOP OPENING - MULTI-USE CABINETS - CHASSIS DECK

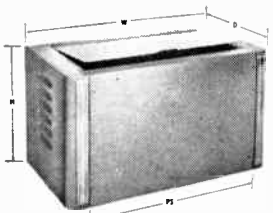


MODEL "CS" RECEIVER CABINET (Description)

(A.) Front vertical corners are rounded. (B.) Has recessed, hinged, top door. (C.) Top door opened by finger lift. (D.) Removable front panel, included, is attached with self-tapping screws. (E.) Louvers in side provide ventilation. (F.) Silver grey hammertone only.

| Cat. # | H | W | D | Panel Size | Approx. Ship. Wt. Lbs. | Dealer Cost |
|---------|-----|---------|--------|------------|------------------------|-------------|
| CS 7727 | 8" | 10 1/2" | 8 1/4" | 8" x 8" | 6 1/4 | \$4.31 |
| CS 7728 | 8" | 12 1/2" | 8 1/4" | 8" x 10" | 6 1/2 | 5.31 |
| CS 7729 | 8" | 14 1/2" | 8 1/4" | 8" x 12" | 7 | 5.78 |
| CS 7730 | 8" | 16 1/2" | 8 1/4" | 8" x 14" | 7 1/2 | 6.05 |
| CS 7731 | 8" | 18 1/2" | 8 1/4" | 8" x 16" | 8 1/4 | 6.63 |
| CS 7732 | 12" | 20 5/8" | 12" | 12" x 18" | 15 1/2 | 12.06 |

➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

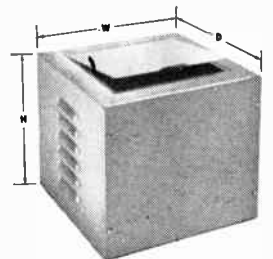


MODEL "DC" RECEIVER CABINET (Description)

(A.) Description of Model "DC" Receiver Cabinet is same as Model "CS" Cabinet except for following: There are two vertical, highly-polished trim strips on face of cabinet.

| Cat. # | H | W | D | Panel Size | Approx. Ship. Wt. Lbs. | Dealer Cost |
|---------|-----|---------|--------|------------|------------------------|-------------|
| DC 7733 | 8" | 10 1/2" | 8 1/4" | 8" x 8" | 6 1/4 | \$6.41 |
| DC 7734 | 8" | 12 1/2" | 8 1/4" | 8" x 10" | 6 1/2 | 6.51 |
| DC 7735 | 8" | 14 1/2" | 8 1/4" | 8" x 12" | 7 | 6.88 |
| DC 7736 | 8" | 16 1/2" | 8 1/4" | 8" x 14" | 7 1/2 | 7.33 |
| DC 7737 | 8" | 18 1/2" | 8 1/4" | 8" x 16" | 8 1/4 | 8.06 |
| DC 7738 | 12" | 20 5/8" | 12" | 12" x 18" | 15 1/2 | 14.66 |

➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀



MODEL "CR" RECEIVER CABINET (Description)

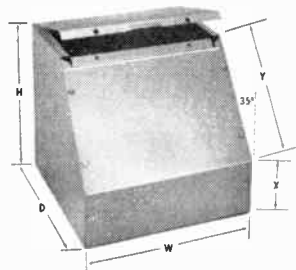
(A.) Front vertical corners are square. (B.) Top door is recessed and hinged. (C.) Top door has finger lift. (D.) Removable front panel, included, is attached with self-tapping screws. (E.) Ventilation is supplied by louvers. (F.) Finished in silver grey hammertone only.

| Cat. # | H | W | D | Approx. Ship. Wt. Lbs. | Dealer Cost |
|---------|-----|-----|-----|------------------------|-------------|
| CR 7720 | 7" | 8" | 8" | 5 1/2 | \$4.18 |
| CR 7721 | 7" | 10" | 8" | 6 | 4.84 |
| CR 7722 | 7" | 12" | 8" | 6 1/4 | 5.01 |
| CR 7723 | 7" | 14" | 8" | 6 1/2 | 5.26 |
| CR 7724 | 8" | 16" | 8" | 7 1/2 | 7.60 |
| CR 7725 | 9" | 15" | 11" | 8 1/2 | 9.19 |
| CR 7726 | 12" | 18" | 12" | 15 1/2 | 9.92 |

➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

SLOPING PANEL/TOP OPENING CABINET (Description)

(A.) Sloping front panel, included, is attached with self-tapping screws. (B.) Hinged, top door has finger lift. (C.) Opening at back for leads and ventilation. (D.) Silver grey hammertone only.



| Cat. # | H | W | D | X | Y | Approx. Ship. Wt. Lbs. | Dealer Cost |
|---------|--------|---------|---------|--------|----------|------------------------|-------------|
| SC 7739 | 6 1/2" | 7 1/8" | 7 3/8" | 2 1/4" | 5 1/8" | 3 | \$3.30 |
| SC 7740 | 8" | 8 1/8" | 8" | 2 1/4" | 6 7/8" | 3 1/4 | 4.51 |
| SC 7741 | 6 1/2" | 9 1/8" | 7 5/8" | 2 1/4" | 5 1/8" | 3 1/2 | 3.75 |
| SC 7742 | 8" | 10 1/8" | 8" | 2 1/4" | 6 7/8" | 3 3/4 | 5.01 |
| SC 7743 | 6 1/2" | 11 1/8" | 7 3/8" | 2 1/4" | 5 1/8" | 4 | 4.34 |
| SC 7744 | 8" | 14 1/8" | 8" | 2 1/4" | 6 7/8" | 4 1/2 | 5.34 |
| SC 7745 | 8" | 13 1/8" | 8 1/2" | 2 3/4" | 6 3/8" | 4 3/4 | 5.59 |
| SC 7746 | 9" | 18 1/8" | 8 1/8" | 2 1/4" | 6 15/16" | 7 1/2 | 7.68 |
| SC 7747 | 10" | 18 1/8" | 10 1/2" | 3 1/4" | 8 1/8" | 8 3/4 | 7.85 |

➔ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

MULTI-USE CABINET (Description)

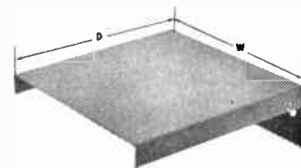
(A.) Ventilated by open back. (B.) Streamlined by rounded corners. (C.) Silver grey hammertone only.

| Cat. # | H | W | D | Approx. Ship. Wt. Lbs. | Dealer Cost |
|---------|--------|--------|--------|------------------------|-------------|
| MC 7748 | 4 1/2" | 5 1/2" | 3 1/2" | 1 1/4 | \$1.70 |
| MC 7749 | 6 1/2" | 5 1/2" | 3 1/2" | 1 3/4 | 1.75 |

CHASSIS DECK (Description)

(A.) Can be used for interstage shielding. (B.) Made of steel. (C.) Painted black enamel.

| Cat. # | W | D | Approx. Ship. Wt. Lbs. | Dealer Cost |
|---------|--------|--------|------------------------|-------------|
| CD 7754 | 4 3/4" | 5 1/2" | 1 | \$5.68 |
| CD 7755 | 4 3/4" | 4 1/2" | 1 | .65 |
| CD 7756 | 5 3/4" | 5 1/2" | 1 1/2 | .78 |



WYCO

METAL PRODUCTS

CHASSIS

| Cat. No. | STEEL | | | | Approx. Ship. Wt.-Lbs. | Dealer Cost |
|----------|--------|---------|--------|-----|------------------------|-------------|
| | Depth | Width | Ht. | Go. | | |
| CP-1300 | 5" | 7" | 2" | 22 | 1 | \$1.30 |
| CP-1301 | 5" | 9 1/2" | 2 1/2" | 22 | 1 1/4 | 1.67 |
| CP-1302 | 5" | 9 1/2" | 1 1/2" | 22 | 1 | 1.69 |
| CP-1303 | 5" | 10" | 3" | 22 | 1 1/4 | 1.84 |
| CP-1304 | 6" | 14" | 3" | 20 | 1 3/4 | 2.05 |
| CP-1305 | 7" | 7" | 2" | 22 | 1 1/2 | 1.50 |
| CP-1306 | 7" | 9" | 2" | 22 | 1 1/2 | 1.59 |
| CP-1307 | 7" | 11" | 2" | 20 | 1 1/2 | 1.67 |
| CP-1308 | 7" | 12" | 3" | 20 | 1 3/4 | 2.05 |
| CP-1309 | 7" | 13" | 2" | 20 | 2 | 1.92 |
| CP-1310 | 5" | 13 1/2" | 2 1/2" | 20 | 1 3/4 | 2.17 |
| CP-1311 | 7" | 15" | 3" | 20 | 2 | 2.40 |
| CP-1312 | 8 1/2" | 15" | 3" | 20 | 2 1/2 | 2.71 |
| CP-1313 | 4" | 17" | 3" | 20 | 2 1/4 | 2.14 |
| CP-1314 | 7" | 17" | 2 1/2" | 20 | 2 1/2 | 2.37 |
| CP-1315 | 7" | 17" | 3" | 20 | 1 3/4 | 2.59 |
| CP-1316 | 8" | 10" | 2 1/2" | 20 | 2 | 2.02 |
| CP-1317 | 8" | 12" | 2 1/2" | 20 | 2 1/2 | 2.24 |
| CP-1318 | 8" | 12" | 3" | 20 | 1 3/4 | 2.34 |
| CP-1319 | 8" | 17" | 2" | 20 | 2 1/2 | 2.34 |
| CP-1320 | 8" | 17" | 3" | 20 | 3 1/4 | 2.62 |
| CP-1321 | 10" | 12" | 3" | 20 | 3 | 2.25 |
| CP-1322 | 10" | 14" | 3" | 20 | 4 | 2.44 |
| *CP-1323 | 10" | 17" | 2" | 20 | 3 1/4 | 2.39 |
| *CP-1324 | 10" | 17" | 3" | 20 | 4 | 2.84 |
| *CP-1325 | 10" | 17" | 3" | 18 | 5 | 3.05 |
| CP-1326 | 10" | 23" | 3" | 18 | 5 1/2 | 3.42 |
| *CP-1327 | 11" | 17" | 2" | 18 | 4 1/2 | 2.81 |
| *CP-1328 | 11" | 17" | 3" | 18 | 4 1/2 | 3.49 |
| *CP-1329 | 12" | 17" | 2" | 18 | 4 1/2 | 3.09 |
| *CP-1330 | 12" | 17" | 3" | 18 | 5 1/4 | 3.67 |
| *CP-1331 | 13" | 17" | 2" | 18 | 5 | 3.72 |
| *CP-1332 | 13" | 17" | 3" | 18 | 5 1/2 | 4.07 |
| *CP-1333 | 10" | 17" | 4" | 18 | 6 1/2 | 4.68 |
| *CP-1334 | 13" | 17" | 4" | 18 | 7 1/2 | 5.34 |
| CP-1335 | 10" | 17" | 5" | 18 | 7 1/2 | 5.34 |
| CP-1336 | 13" | 17" | 5" | 18 | 8 | 5.93 |

| Cat. No. | ALUMINUM | | | | Approx. Shipping Wt.-Lbs. | Dealer Cost |
|----------|----------|--------|-----|-------|---------------------------|-------------|
| | Depth | Width | Ht. | Gauge | | |
| CA-2001 | 4" | 6" | 3" | 18 | 1/2 | \$1.34 |
| CA-2002 | 4" | 6" | 2" | 18 | 1/2 | 1.10 |
| CA-2003 | 4" | 17" | 3" | 16 | 1 1/4 | 2.33 |
| CA-2004 | 5" | 7" | 2" | 18 | 1/2 | 1.17 |
| CA-2005 | 5" | 7" | 3" | 16 | 3/4 | 1.42 |
| CA-2006 | 5" | 9 1/2" | 2" | 18 | 1/2 | 1.24 |
| CA-2007 | 5" | 9 1/2" | 3" | 18 | 3/4 | 1.60 |
| CA-2008 | 5" | 10" | 3" | 18 | 3/4 | 1.63 |
| CA-2009 | 5" | 13" | 3" | 18 | 3/4 | 1.84 |
| CA-2010 | 6" | 17" | 3" | 16 | 1 1/4 | 2.67 |
| CA-2011 | 7" | 7" | 2" | 18 | 1/2 | 1.35 |
| CA-2012 | 7" | 9" | 2" | 18 | 1/2 | 1.46 |
| CA-2013 | 7" | 11" | 2" | 18 | 3/4 | 1.58 |
| CA-2014 | 7" | 12" | 3" | 18 | 1 | 2.00 |
| CA-2015 | 7" | 13" | 2" | 18 | 3/4 | 1.67 |
| CA-2016 | 7" | 15" | 3" | 16 | 1 1/2 | 2.67 |
| CA-2017 | 7" | 17" | 3" | 16 | 1 3/4 | 2.75 |
| CA-2018 | 8" | 12" | 3" | 16 | 1 1/2 | 2.42 |
| CA-2019 | 8" | 17" | 2" | 16 | 1 1/2 | 2.51 |
| CA-2020 | 8" | 17" | 3" | 16 | 1 3/4 | 2.84 |
| CA-2021 | 10" | 12" | 3" | 16 | 1 1/2 | 2.67 |
| CA-2022 | 10" | 14" | 3" | 16 | 1 3/4 | 2.8 |
| CA-2023 | 10" | 17" | 2" | 16 | 1 1/4 | 2.68 |
| CA-2024 | 10" | 17" | 3" | 16 | 2 | 3.17 |
| CA-2025 | 11" | 17" | 2" | 14 | 2 1/4 | 3.42 |
| CA-2026 | 11" | 17" | 3" | 14 | 2 3/4 | 3.9 |
| CA-2027 | 12" | 17" | 3" | 14 | 2 3/4 | 4.0 |
| CA-2028 | 13" | 17" | 2" | 14 | 2 1/2 | 3.51 |
| CA-2029 | 13" | 17" | 3" | 14 | 2 3/4 | 4.2 |
| CA-2030 | 10" | 17" | 4" | 14 | 3 1/2 | 4.51 |
| CA-2031 | 13" | 17" | 4" | 14 | 3 3/4 | 5.26 |

STEEL CHASSIS

DESCRIPTION:

- A. Fabricated from one piece of steel.
- B. All corners electronically spot welded.
- C. Flanges on bottom formed and punched to allow bottom plate to be attached if desired.
- D. Finished in Cad. Plate.
- E. Asterisk indicates holes punched to receive chassis mounting brackets.



ALUMINUM CHASSIS

DESCRIPTION:

- A. Fabricated of one piece of aluminum, 3003-H14.
- B. All corners are electronically spot welded.
- C. Flanges on bottom formed and punched to allow bottom plate to be attached, if desired.
- D. Etched aluminum finish, MIL-C-5541.
- E. Gauges indicated are aluminum gauges.



HEAVY DUTY AND PANEL CHASSIS

DESCRIPTION:

- A. Made of 16 gauge cold rolled steel.
- B. Bottom plate included at no additional charge.
- C. Available in Cad. Plate.



| Cat. No. | Depth | Width | Height | Approx. Shipping Wt. - Lbs. | Dealer Cost | Cad Plated |
|----------|-------|-------|--------|-----------------------------|-------------|------------|
| | | | | | | |
| C-627 | 8" | 17" | 2" | 6 | | \$4.50 |
| C-628 | 8" | 17" | 3" | 7 1/2 | | 4.76 |
| C-629 | 11" | 17" | 2" | 8 1/2 | | 4.78 |
| C-630 | 11" | 17" | 3" | 9 | | 4.84 |
| C-631 | 13" | 17" | 2" | 9 1/2 | | 5.34 |
| C-632 | 13" | 17" | 3" | 10 | | 5.43 |
| C-633 | 13" | 17" | 4" | 11 | | 5.85 |

PANEL CHASSIS ALUMINUM OR STEEL

DESCRIPTION:

- A. .062 aluminum (3003-H14) or 16 ga. steel.
- B. Aluminum etched finish; steel plated.
- C. Flange notched for mounting to rack mounting angles.



| Alum. Cat. # | Steel Cat. # | W. | H. | D. | Alum. Wt. | Steel Wt. | Alum. Cost | Steel Cost |
|--------------|--------------|-----|--------|--------|-----------|-----------|------------|------------|
| PC-505 | PC-7765 | 19" | 13 1/4 | 5 3/32 | 3 1/4 | 1 1/2 | \$2.30 | \$2.30 |
| PC-506 | PC-7766 | 19" | 3 1/2 | 5 3/32 | 1 1/4 | 2 1/2 | 2.59 | 2.59 |
| PC-507 | PC-7767 | 19" | 5 1/4 | 5 3/32 | 1 1/2 | 3 1/2 | 2.84 | 2.84 |
| PC-508 | PC-7768 | 19" | 7 | 5 3/32 | 2 | 4 | 3.26 | 3.26 |
| PC-509 | PC-7769 | 19" | 8 3/4 | 5 3/32 | 2 1/4 | 5 | 3.76 | 3.76 |
| PC-510 | PC-7770 | 19" | 10 1/2 | 5 3/32 | 2 3/4 | 6 | 4.43 | 4.43 |
| PC-511 | PC-7771 | 19" | 12 1/4 | 5 3/32 | 3 | 7 | 4.84 | 4.84 |
| PC-512 | PC-7772 | 19" | 14 | 5 3/32 | 3 1/4 | 8 | 5.34 | 5.34 |

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

Wyco Metal Products

• NORTH HOLLYWOOD, CALIFORNIA



ROLLER TRUCKS - BOTTOM PLATES - SHELVES SUPPORTING ANGLES - MOUNTING BRACKETS

CHASSIS BOTTOM PLATES

STEEL AND ALUMINUM

DESCRIPTION:

- A. Protects component ports and wiring from dust.
- B. Four embossed feet protect table top or other surfaces from being marred.
- C. Catalog number R6023 to R6045 are Cad plated steel.
- D. Catalog numbers R6046 to R6055 are Aluminum etched finish.



| Cod. Plated Cat. No. | Aluminum Etched Cat. No. | W. | L. | Steel Ship. Wt. | | Alum. Ship. Wt. | | Deo'ler Cost | |
|----------------------|--------------------------|--------|---------|-----------------|-----|-----------------|--------|--------------|--|
| | | | | Wt. | Wt. | B.W. | Cad. | Alum. | |
| R-6023 | R-6046 | 5" | 7" | 1/2 | 1/8 | \$.57 | \$.69 | \$.74 | |
| R-6024 | R-6047 | 5" | 9 1/2" | 3/4 | 1/4 | .62 | .75 | .75 | |
| R-6025 | R-6048 | 5" | 10" | 3/4 | 1/4 | .67 | .73 | .75 | |
| R-6026 | R-6049 | 7" | 7" | 1 | 1/3 | .92 | .97 | .77 | |
| R-6027 | R-6050 | 7" | 9" | 1 | 1/3 | .94 | .99 | .90 | |
| R-6028 | R-6051 | 7" | 11" | 1 | 1/3 | .95 | 1.07 | .90 | |
| R-6029 | R-6052 | 7" | 12" | 1 1/4 | 1/2 | .99 | 1.12 | .97 | |
| R-6030 | R-6053 | 7" | 13" | 1 1/4 | 1/2 | 1.02 | 1.20 | 1.14 | |
| R-6031 | | 5" | 13 1/2" | 1 | | .84 | 1.00 | — | |
| R-6032 | | 7" | 15" | 1 1/4 | | 1.00 | 1.37 | — | |
| R-6033 | | 8 1/2" | 15" | 1 1/2 | | 1.04 | 1.47 | — | |
| R-6034 | | 4" | 17" | 1 1/2 | | .84 | 1.07 | — | |
| R-6035 | | 6" | 17" | 1 1/2 | | .90 | 1.37 | — | |
| R-6036 | | 8" | 10" | 1 1/4 | | .92 | 1.05 | — | |
| R-6037 | | 8" | 12" | 1 1/2 | | 1.06 | 1.34 | — | |
| R-6038 | | 8" | 17" | 1 3/4 | | .95 | 1.54 | — | |
| R-6039 | | 10" | 12" | 1 1/2 | | .95 | 1.57 | — | |
| R-6040 | | 10" | 14" | 1 1/2 | | 1.25 | 1.33 | — | |
| R-6041 | R-6054 | 10" | 17" | 1 3/4 | 3/4 | 1.20 | 1.60 | 1.52 | |
| R-6042 | | 11" | 17" | 1 1/2 | | 1.20 | 1.60 | — | |
| R-6043 | | 12" | 17" | 2 | | 1.27 | 1.87 | — | |
| R-6044 | R-6055 | 13" | 17" | 2 1/2 | 3/4 | 1.47 | 2.24 | 2.07 | |
| R-6045 | | 10" | 23" | 2 1/4 | | 2.07 | 2.37 | — | |

RACK SHELVES

DESCRIPTION:

- A. Used to mount heavy power supplies, modulator units, etc.
- B. Supported by chassis supporting angles which are described on this page.
- C. Made of heavy gauge steel.
- D. Finished in black enamel only.



| Cat. No. | Size | Wt. Lbs. | Dealer Cost |
|----------|-----------------|----------|-------------|
| S195 | 19"x15" | 6 1/2 | \$3.47 |
| S196 | 19"x12" | 5 1/2 | 2.64 |
| S197 | 17 5/8"x14 1/4" | 5 | 3.34 |
| S198 | 17 5/8"x20 1/4" | 5 1/2 | 4.38 |

ROLLER TRUCKS



SPECIFICATIONS:

- A. Roller Truck constructed from heavy gauge high-quality steel.
- B. Casters have 2" rubber wheels and are ball-bearing swivel type.
- C. Finished in grey only.

CHASSIS SUPPORTING ANGLES

DESCRIPTION:

- A. Used when heavy weights are encountered in chassis construction.
- B. Distributes weight on sides of rack to relieve panel.
- C. Made of 1/8" steel.
- D. Finished in black enamel only.
- E. Sold in pairs only.

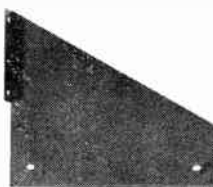


| Cat. No. | Length | Wt. Lbs. | Dealer Cost |
|----------|---------|----------|-------------|
| A143 | 14 1/2" | 4 | \$2.25 pr. |
| A144 | 12" | 3 | 2.17 pr. |
| A145 | 20" | 7 | 3.34 pr. |

CHASSIS MOUNTING BRACKETS

DESCRIPTION:

- A. Used to insure proper support of chassis.
- B. Made of heavy gauge steel.
- C. Cut away at bottom to provide clearance so that chassis can mount flush against panel.
- D. Finished in black enamel only.
- E. Cat. = CB-565 and CB-566 designed for 4" chassis height.
- F. Sold in pairs only.

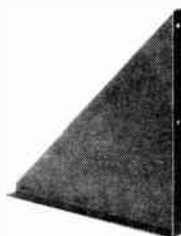


| Cat. No. | H. | D. | Wt. Lbs. | Dealer Cost |
|----------|--------|-----|----------|-------------|
| CB-560 | 6 1/2" | 8" | 1 1/4 | \$1.09 pr. |
| CB-561 | 6 1/2" | 10" | 1 3/4 | 1.35 pr. |
| CB-562 | 6 1/2" | 11" | 2 | 1.50 pr. |
| CB-563 | 6 1/2" | 12" | 2 | 1.75 pr. |
| CB-564 | 6 1/2" | 13" | 2 1/2 | 1.69 pr. |
| CB-565 | 8 1/2" | 10" | 2 1/4 | 1.97 pr. |
| CB-566 | 8 1/2" | 13" | 3 | 2.09 pr. |

TRIANGULAR MOUNTING BRACKETS

DESCRIPTION:

- A. When large weights are involved in panel and chassis assemblies, triangular mounting brackets are used as supports.
- B. Fabricated of heavy gauge steel; finished in Black enamel only.
- C. Sold only in pairs.



| Cat. No. | Size | Approx. Shipping Wt. - Lbs. | Dealer Cost |
|----------|-------|-----------------------------|-------------|
| TB-410 | 5"x5" | 1' | \$1.00 pr. |
| TB-411 | 7"x7" | 1 | 1.17 pr. |
| TB-412 | 9"x9" | 1 1/2 | 1.42 pr. |

| Catalog No. | Constr. for Rack Series | Description of Rack | Inside Clearance | Approx. Ship. Weight | Dealer Cost |
|-------------|-------------------------|---------------------|------------------|----------------------|-------------|
| T 18 | SL | Page = 4 | 21 1/2 x 18 1/2 | 16 lbs. | \$13.79 |
| | S | Page = 4 | | | |
| | B | Page = 5 | | | |
| T 19 | D (18 1/2" Deep) | Page = 2 | 23 7/8 x 18 3/4 | 18 lbs. | 14.66 |
| | W | Page = 5 | | | |
| T 24 | D (24" Deep) | Page = 2 | 23 7/8 x 24 1/4 | 22 lbs. | 15.86 |

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

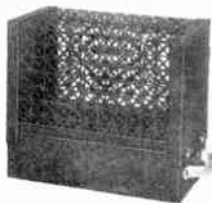
Wyco Metal Products

• NORTH HOLLYWOOD, CALIFORNIA



AMPLIFIER FOUNDATIONS - RACK PANELS SLOPING PANEL SUPPORTS - CABINETS

AMPLIFIER FOUNDATIONS



DESCRIPTION:

- A. Consists of standard chassis and perforated metal cover.
- B. Includes handles.
- C. Available in Black Wrinkle only.

| Cat. No. | Height | Width | Depth | Approx. Shipping | | Dealer Cost |
|----------|--------|---------|---------|------------------|------------|-------------|
| | | | | Height Chassis | Wt. - Lbs. | |
| AF-680 | 8 3/8" | 9 5/8" | 5 1/8" | 2 1/2" | 3 | \$5.61 |
| AF-681 | 8 3/8" | 13 5/8" | 5 1/8" | 2 1/2" | 4 3/4 | 6.43 |
| AF-682 | 8 3/8" | 17 1/8" | 7 1/8" | 2 1/2" | 6 | 7.26 |
| AF-683 | 8 3/8" | 17 1/8" | 10 1/8" | 3" | 8 | 8.50 |
| AF-684 | 8 1/8" | 12 1/8" | 10 1/8" | 3" | 7 | 7.52 |

MINIATURE AMPLIFIER FOUNDATION



DESCRIPTION:

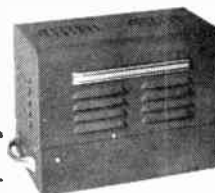
- A. Chassis size 5" x 7" x 2".
- B. Perforated metal cover.
- C. Includes handle.
- D. Black Wrinkle finish only.

| Catalog No. | Approx. Shipping Weight - Lbs. | Dealer Cost |
|-------------|--------------------------------|-------------|
| MA-1000 | 2 | \$4.00 |

STREAMLINED AMPLIFIER FOUNDATIONS

DESCRIPTION:

- A. Consists of standard chassis and streamlined removable top cover.
- B. Includes attractive stainless steel trim and handles.
- C. Available in Silver Grey Hammertone only.



| Catalog No. | Width | Depth | Approx. Shipping Wt. - Lbs. | Dealer Cost |
|-------------|---------|-------|-----------------------------|-------------|
| SA-670 | 10 1/8" | 5" | 4 3/4 | \$6.76 |
| SA-671 | 12 1/8" | 7" | 5 | 8.02 |
| SA-672 | 17 1/8" | 7" | 8 | 8.52 |
| SA-673 | 17 1/8" | 10" | 9 | 9.27 |

STANDARD RELAY RACK PANELS

DESCRIPTION:

- A. 11 ga. STEEL or 1/8" ALUMINUM.
- B. 19" wide.
- C. Western Electric notching.
- D. Available in black or grey wrinkle, silver grey hammertone and unpainted finish.



| STEEL | | | | ALUMINUM | | | |
|----------|---------|----------|-------------|----------|---------|----------|-------------|
| Cat. No. | Height | Wt. Lbs. | Dealer Cost | Cat. No. | Height | Wt. Lbs. | Dealer Cost |
| SP-210 | 1 3/4" | 1 1/4 | 5.84 | SP-216 | 12 1/4" | 8 1/4 | \$2.42 |
| SP-211 | 3 1/2" | 2 1/4 | 1.00 | SP-217 | 14" | 9 1/2 | 2.84 |
| SP-212 | 5 1/4" | 3 1/4 | 1.25 | SP-218 | 15 3/4" | 10 3/4 | 3.09 |
| SP-213 | 7" | 4 1/2 | 1.42 | SP-219 | 17 1/2" | 11 3/4 | 3.51 |
| SP-214 | 8 3/4" | 6 | 1.75 | SP-220 | 19 1/4" | 13 | 3.84 |
| SP-215 | 10 1/2" | 7 | 2.09 | SP-221 | 21" | 14 1/4 | 4.26 |

| ALUMINUM | | | | ALUMINUM | | | |
|----------|---------|----------|-------------|----------|---------|----------|-------------|
| Cat. No. | Height | Wt. Lbs. | Dealer Cost | Cat. No. | Height | Wt. Lbs. | Dealer Cost |
| AP-320 | 1 3/4" | 1/4 | \$1.09 | AP-326 | 12 1/4" | 2 3/4 | \$4.09 |
| AP-321 | 3 1/2" | 3/4 | 1.42 | AP-327 | 14" | 3 | 4.76 |
| AP-322 | 5 1/4" | 1 | 1.93 | AP-328 | 15 3/4" | 3 1/2 | 5.34 |
| AP-323 | 7" | 1 3/4 | 2.42 | AP-329 | 17 1/2" | 4 | 5.85 |
| AP-324 | 8 3/4" | 2 | 2.84 | AP-330 | 19 1/4" | 4 1/4 | 6.43 |
| AP-325 | 10 1/2" | 2 1/2 | 3.59 | AP-331 | 21" | 5 | 7.01 |

SLOPING PANEL SUPPORT

In answer to many requests from engineers within the industry, WYCO METAL PRODUCTS presents the all-new SLOPING PANEL SUPPORT. The SLOPING PANEL SUPPORT allows for mounting of the standard 19" panel in sloping position. This enables the engineer or equipment user to more easily view the rack mounted instrument panel. From this illustration, it is easy to see that the SLOPING PANEL SUPPORT offers a variety of positions in which a standard 19" panel may be supported in sloping position. The SLOPING PANEL SUPPORT is fabricated of heavy gauge steel and is finished in Grey only.

Supports Panel Size
Requires Panel Space



IMPORTANT! When ordering SLOPING PANEL SUPPORTS FOR CABINET RACKS THAT HAVE FRONT CORNER VERTICAL TRIM, use catalog Prefix "B". In all other cases use catalog Prefix "G."

| Prefix "B" Cat. No. | Prefix "G" Cat. No. | Supports Panel Size | Requires Panel Space | Prefix "B" Ship. Wt. | Prefix "G" Ship. Wt. | Prefix "B" Dealer Cost | Prefix "G" Dealer Cost |
|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|------------------------|------------------------|
| B-335 | G-350 | 5 1/4" x 19" | 7" | 4 | 2 | \$6.50 | \$3.60 |
| B-336 | G-351 | 7" x 19" | 10 1/2" | 6 | 4 | 7.50 | 4.20 |
| B-337 | G-352 | 8 3/4" x 19" | 12 1/4" | 6 1/2 | 4 1/2 | 8.10 | 4.67 |
| B-338 | G-353 | 10 1/2" x 19" | 15 3/4" | 9 | 6 1/2 | 9.42 | 5.90 |
| B-339 | G-354 | 12 1/4" x 19" | 17 1/2" | 10 | 7 | 10.32 | 6.80 |
| B-340 | G-355 | 14" x 19" | 21" | 12 | 9 | 11.52 | 7.97 |

METAL DOOR RACK PANELS

DESCRIPTION:

- A. Used when accessibility to component parts on chassis is necessary.
- B. Made of 1/8" steel.
- C. Available in black or grey wrinkle and silver grey hammertone.
- D. 19" wide.

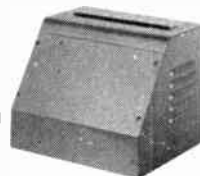


| Cat. No. | Height | Door Opening | Wt. Lbs. | Dealer Cost |
|----------|---------|------------------|----------|-------------|
| RP-310 | 10 1/2" | 15 3/8" x 5 7/8" | 7 1/4 | \$6.08 |
| RP-311 | 12 1/4" | 15 3/8" x 7 5/8" | 8 1/4 | 7.52 |

SLOPING FRONT CABINET

DESCRIPTION:

- A. Top corner rounded.
- B. Attractive high-polish moulding at top.
- C. Front panel is removable.
- D. Chassis may be mounted to front panel and removed as unit.
- E. Louvers at both sides; vented at rear.
- F. Available in silver grey hammertone only.



| Cat. No. | Height | Width | Depth | Dealer Cost |
|----------|--------|-------|-------|-------------|
| K810 | 8" | 8" | 8" | \$5.13 |
| K811 | 8" | 10" | 8" | 7.06 |
| K812 | 8" | 14" | 8" | 8.53 |
| K813 | 12" | 18" | 12" | 11.46 |

NOTE: If desired, an attractive handle can be used with above "K" series cabinet. Holes to mount moulding are spaced far handle, also. Catalog # for handle is HK70. Dealer Cost: \$5.92

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

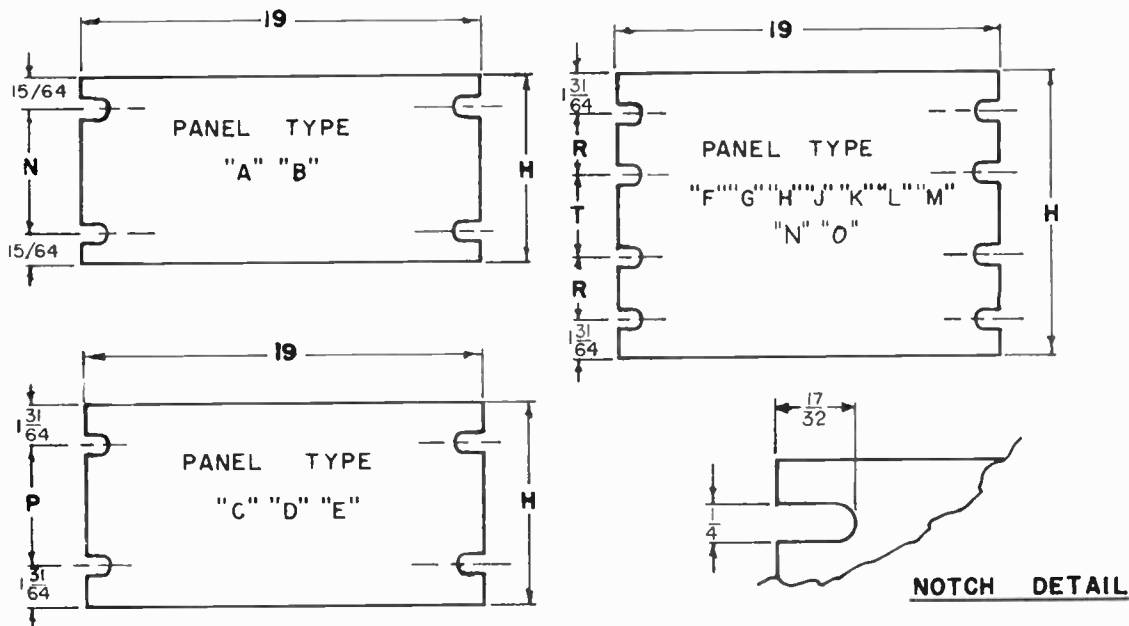




2024-T3 HARD ALUMINUM PANELS

1/8" (.125) AND 3/16" (.188) THICK

RELAY RACK PANEL NOTCHING



NOTE: (A) For 3-1/16" Thick Panels, Add (-316). EXAMPLE: HAP-175-316
(B) 24" Wide Panels are available, Add (-24). EXAMPLE: HAP-175-24

| Panel Type | Catalog No. 1/8" Thick | H | N | P | R | T |
|------------|------------------------|----------|-------|-------|-------|-------|
| "A" | HAP-175 | 1-23/32 | 1 1/4 | | | |
| "B" | HAP-350 | 3-15/32 | 3 | | | |
| "C" | HAP-525 | 5-7/32 | | 2 1/4 | | |
| "D" | HAP-700 | 6-31/32 | | 4 | | |
| "E" | HAP-875 | 8-23/32 | | 5 3/4 | | |
| "F" | HAP-1050 | 10-15/32 | | | 2 1/4 | 3 |
| "G" | HAP-1225 | 12-7/32 | | | 3 1/2 | 2 1/4 |

| Panel Type | Catalog No. 1/8" Thick | H | N | P | R | T |
|------------|------------------------|----------|---|---|-------|-------|
| "H" | HAP-1400 | 13-31/32 | | | 4 | 3 |
| "J" | HAP-1575 | 15-23/32 | | | 4 | 4 3/4 |
| "K" | HAP-1750 | 17-15/32 | | | 4 | 6 1/2 |
| "L" | HAP-1925 | 19-7/32 | | | 5 1/4 | 5 3/4 |
| "M" | HAP-2100 | 20-31/32 | | | 5 3/4 | 6 1/2 |
| "N" | HAP-2450 | 24-15/32 | | | 7 | 7 1/2 |
| "O" | HAP-2625 | 26-7/32 | | | 7 | 9 1/4 |

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

| Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price |
|-------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| HAP-175 | \$.94 | HAP-700-316 | \$2.50 | HAP-1400 | \$3.57 | HAP-1925-316 | \$6.16 |
| HAP-175-316 | 1.23 | HAP-875 | 2.31 | HAP-1400-316 | 4.57 | HAP-2100 | 5.22 |
| HAP-350 | 1.21 | HAP-875-316 | 2.94 | HAP-1575 | 3.99 | HAP-2100-316 | 6.68 |
| HAP-350-316 | 1.54 | HAP-1050 | 2.70 | HAP-1575-316 | 5.10 | HAP-2450 | 6.31 |
| HAP-525 | 1.60 | HAP-1050-316 | 3.45 | HAP-1750 | 4.40 | HAP-2450-316 | 7.26 |
| HAP-525-316 | 2.04 | HAP-1225 | 3.09 | HAP-1750-316 | 5.63 | HAP-2625 | 6.87 |
| HAP-700 | 1.95 | HAP-1225-316 | 3.96 | HAP-1925 | 4.81 | HAP-2625-316 | 8.02 |

Wyco Metal Products • NORTH HOLLYWOOD, CALIFORNIA

WYCO

METAL PRODUCTS

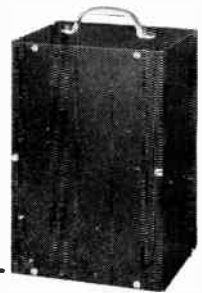
BOXES-CASES-CABINETS-DESK PANELS

CARRYING CASE

| Steel Cat. No. | Alum. Cat. No. | Depth | Width | Height | Steel Approx. Ship. Wt. | Alum. Approx. Ship. Wt. | Dealer Steel | Cost Alum. |
|----------------|----------------|-------|-------------------|--------|-------------------------|-------------------------|--------------|------------|
| D-850 | DA-857 | 5" | 6" | 9" | 3 $\frac{1}{4}$ | 1 $\frac{1}{8}$ | \$3.01 | \$3.09 |
| D-851 | DA-858 | 5" | 9" | 6" | 3 $\frac{1}{4}$ | 1 $\frac{1}{8}$ | 3.01 | 3.09 |
| D-852 | DA-859 | 6" | 7" | 12" | 4 | 1 $\frac{1}{3}$ | 4.18 | 4.50 |
| D-853 | DA-860 | 6" | 12" | 7" | 4 | 1 $\frac{1}{3}$ | 4.18 | 4.50 |
| D-854 | — | 7" | 7 $\frac{3}{4}$ " | 15" | 5 | — | 4.68 | — |
| D-855 | — | 8" | 10" | 10" | 5 | — | 4.84 | — |
| D-856 | — | 7" | 15" | 9" | 5 | — | 5.85 | — |

DESCRIPTION:

- Front and rear panels are removable.
- Includes handle.
- Prefix "D" designates steel finished in Grey Hammertone.
- Prefix "DA" designates aluminum etched finish (.051 alum.).

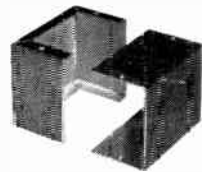


| Silver Grey Cat. No. | Etched Cat. No. | Length | Width | Height | Approx. Shipping Wt.-Lbs. | Dealer Steel | Cost S.G.H. | Etched |
|----------------------|-----------------|-------------------|-------------------|-------------------|---------------------------|--------------|-------------|--------|
| E-900 | E-918 | 2 $\frac{3}{4}$ " | 2 $\frac{1}{8}$ " | 1 $\frac{5}{8}$ " | $\frac{1}{4}$ | \$.85 | \$.62 | |
| E-901 | E-919 | 3 $\frac{1}{4}$ " | 2 $\frac{1}{8}$ " | 1 $\frac{5}{8}$ " | $\frac{1}{4}$ | .92 | .62 | |
| E-902 | E-920 | 4" | 2 $\frac{1}{8}$ " | 1 $\frac{5}{8}$ " | $\frac{1}{4}$ | .92 | .62 | |
| E-903 | E-921 | 4" | 2 $\frac{1}{4}$ " | 2 $\frac{1}{4}$ " | $\frac{1}{4}$ | 1.00 | .75 | |
| E-904 | E-922 | 5" | 2 $\frac{1}{4}$ " | 2 $\frac{1}{4}$ " | $\frac{1}{4}$ | 1.09 | .78 | |
| E-905 | E-923 | 5" | 4" | 3" | $\frac{1}{2}$ | 1.25 | .94 | |
| E-906 | E-924 | 5 $\frac{1}{4}$ " | 3" | 2 $\frac{1}{8}$ " | $\frac{1}{4}$ | 1.09 | .82 | |
| E-907 | E-925 | 6" | 5" | 4" | $\frac{3}{4}$ | 1.90 | 1.47 | |
| E-908 | E-926 | 7" | 5" | 3" | $\frac{3}{4}$ | 1.82 | 1.40 | |
| E-909 | E-927 | 8" | 6" | 3 $\frac{1}{2}$ " | 1 | 2.23 | 1.72 | |
| E-910 | E-928 | 10" | 6" | 3 $\frac{1}{2}$ " | 1 $\frac{1}{4}$ | 2.59 | 2.02 | |
| E-911 | E-929 | 12" | 7" | 4" | 1 $\frac{3}{4}$ | 3.27 | 2.71 | |
| E-912 | E-930 | 17" | 5" | 4" | 2 $\frac{1}{4}$ | 3.51 | 2.92 | |
| E-913 | E-931 | 10" | 2" | 1 $\frac{5}{8}$ " | $\frac{1}{2}$ | 1.38 | 1.15 | |
| E-914 | E-932 | 12" | 2 $\frac{1}{2}$ " | 2 $\frac{1}{4}$ " | $\frac{3}{4}$ | 1.70 | 1.37 | |
| E-915 | E-933 | 4" | 2" | 2 $\frac{3}{4}$ " | $\frac{1}{4}$ | 1.09 | .75 | |
| E-916 | E-934 | 4 $\frac{1}{4}$ " | 2 $\frac{1}{4}$ " | 1 $\frac{1}{2}$ " | $\frac{1}{4}$ | 1.00 | .72 | |
| E-917 | E-935 | 3 $\frac{1}{4}$ " | 2 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | $\frac{1}{4}$ | .84 | .62 | |

MINITBOXES

DESCRIPTION:

- Fabricated of aluminum (.051).
- Design assures necessary shielding.
- Available in etched finish or Silver Grey Hammertone.



EASY BOXES (SAME DESIGN AS MINITBOX)

DESCRIPTION:

- Design allows a number of small components to be easily wired or serviced.
- Fabricated of 22 gauge steel.
- Black Wrinkle finish only.

| Catalog No. | Height | Width | Depth | Approx. Shipping Wt.-Lbs. | Dealer Cost |
|-------------|-------------------|-------------------|-------------------|---------------------------|-------------|
| H-105 | 2 $\frac{1}{4}$ " | 4 $\frac{1}{4}$ " | 1 $\frac{1}{2}$ " | $\frac{1}{2}$ | \$1.15 |
| H-106 | 2" | 4" | 2 $\frac{3}{4}$ " | $\frac{1}{2}$ | 1.17 |

DESK PANELS

DESCRIPTION:

- Table is constructed of heavy gauge high-quality steel and measures 21" x 16".
- Panel, constructed of $\frac{1}{8}$ " steel, is 10 $\frac{1}{2}$ " x 19".
- Front corners of table are rounded.
- SHIPPED "KNOCKED-DOWN"; all necessary bolts supplied for easy assembly.
- Finished in black or grey enamel and silver grey hammertone.

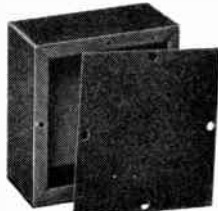


| Catalog No. | Width | Depth | Approx. Shipping Weight | Dealer Cost |
|-------------|-------|-------|-------------------------|-------------|
| DP 16 | 21" | 16" | 14 lbs. | \$14.79 |

METAL UTILITY CABINETS

DESCRIPTION:

- Cabinet has two removable covers.
- Prefix MU designates steel finished in Silver Grey Hammertone only.
- Prefix LU designates aluminum in an etched finish (.051 Alum.).
- Used for amplifiers, monitors, input stages, meters, transceivers, etc.



| Steel Cat. No. | Alum. Cat. No. | Depth | Width | Ht. | Steel Approx. Ship. Wt. Lbs. | Alum. Approx. Ship. Wt. Lbs. | Dealer Steel | Cost Alum. |
|----------------|----------------|-------|-------|-----|------------------------------|------------------------------|--------------|------------|
| MU-750 | LU-760 | 2" | 4" | 4" | $\frac{3}{4}$ | $\frac{1}{4}$ | \$1.09 | \$1.29 |
| MU-751 | LU-761 | 3" | 5" | 4" | 1 | $\frac{1}{4}$ | 1.22 | 1.37 |
| MU-752 | LU-762 | 4" | 5" | 6" | 1 $\frac{1}{4}$ | $\frac{1}{2}$ | 1.38 | 1.50 |
| MU-753 | LU-763 | 6" | 6" | 6" | 2 $\frac{1}{2}$ | $\frac{3}{4}$ | 2.09 | 2.17 |
| MU-754 | LU-764 | 5" | 6" | 9" | 3 | 1 | 2.34 | 2.51 |
| MU-755 | — | 7" | 8" | 10" | 5 | — | 3.34 | — |
| MU-756 | — | 6" | 7" | 12" | 4 | — | 3.29 | — |
| MU-757 | — | 8" | 10" | 10" | 5 $\frac{1}{2}$ | — | 4.01 | — |
| MU-758 | — | 8" | 11" | 12" | 6 | — | 4.34 | — |
| MU-759 | — | 7" | 9" | 15" | 7 $\frac{1}{2}$ | — | 4.51 | — |

METER CASES

DESCRIPTION:

- Sloping front with top corner rounded.
- Prefix "MC" designates steel Grey Hammertone finish.
- Prefix "AC" designates aluminum etched finish.



| Catalog No. | Hole Diameter | Approx. Ship. Wt. - Lbs. | Dealer Cost |
|-------------|--------------------|--------------------------|-------------|
| MC-73 | 2 $\frac{1}{4}$ " | 1 | \$1.10 |
| MC-74 | 2 $\frac{1}{2}$ " | 1 | 1.10 |
| AC-86 | 2 $\frac{1}{4}$ " | $\frac{1}{3}$ | 1.42 |
| AC-87 | 2 $\frac{1}{16}$ " | $\frac{1}{3}$ | 1.42 |

MINIATURE UTILITY CABINETS



DESCRIPTION:

- Front and rear panels are removable.
- Chassis attached to front panel.
- Fabricated in steel; Silver Grey Hammertone only.

| Cat. No. | Ht. | Width | Depth | Chassis Size | Approx. Shipping Wt.-Lbs. | Dealer Cost |
|----------|-----|-------|-------|---|---------------------------|-------------|
| A-780 | 4" | 4" | 2" | 1" x 3 $\frac{1}{8}$ " x 1 $\frac{7}{8}$ " | $\frac{3}{4}$ | \$1.54 |
| A-781 | 4" | 5" | 3" | 1" x 4 $\frac{1}{8}$ " x 2 $\frac{7}{8}$ " | 1 | 1.48 |
| A-782 | 5" | 4" | 3" | 1 $\frac{1}{4}$ " x 3 $\frac{1}{8}$ " x 2 $\frac{7}{8}$ " | 1 | 1.62 |
| A-783 | 6" | 5" | 4" | 1 $\frac{3}{4}$ " x 4 $\frac{1}{8}$ " x 3 $\frac{7}{8}$ " | 1 $\frac{3}{4}$ | 1.70 |
| A-784 | 5" | 6" | 4" | 1 $\frac{1}{4}$ " x 5 $\frac{1}{8}$ " x 3 $\frac{7}{8}$ " | 1 $\frac{3}{4}$ | 1.92 |
| A-785 | 6" | 6" | 6" | 1 $\frac{3}{4}$ " x 4 $\frac{7}{8}$ " x 5 $\frac{7}{8}$ " | 2 $\frac{3}{4}$ | 2.17 |

➤ CONTACT AUTHORIZED DISTRIBUTOR FOR QUANTITY DISCOUNTS ◀

Wyco Metal Products

NORTH HOLLYWOOD, CALIFORNIA

AEROVOX

Capacitors



TYPE AFH (85°C)

Twist-Prong Electrolytic Capacitors SINGLES • DUALS • TRIPLES • QUADS

The outstanding line of twist-prong electrolytic capacitors with the very latest refinements. 85°C operation, improved moisture resistant sealing, special Types AFHS and PWHs for high ripple current circuits, high-purity aluminum foil construction throughout; either etched or composite-plate depending on electrical requirements. Types PWH and PWHs are special construction for printed wiring.

For use over a wide temperature range with minimum change in capacitance. Designed for filter audio bypass applications in radio-TV and amplifier equipment.

While AFH electrolytics enjoy a tremendous popularity as replacement capacitors for TV receivers, they are rapidly gaining acceptance in many industrial applications.

Capacity tolerances and surge voltage are listed in EIA Specification No. RS-154.

ELECTROLYTIC CAPACITY TOLERANCES:

0-50 Volts --10 - 250%
51-350 Volts 10 - 100%
351-Up 10 - 50%

AFH - SINGLES

| AFH No. | Capacity | Voltage | Size | Net Price* |
|--------------|--------------------|---------|-------------|------------|
| 1-00-50 | 2000 | 6 | 1 1/2x2 | 1.83 |
| 1-01 | 3000 | 10 | 1 1/2x3 | 2.43 |
| 1-01-25 | 225 | 15 | 1 1/2x2 | 1.05 |
| 1-02 | 1000 | 15 | 1 1/2 | 1.53 |
| 1-03 | 2000 | 15 | 1 1/2x3 | 2.07 |
| 1-04 | 3000 | 15 | 1 1/2x3 | 2.55 |
| 1-05 | 25 | 25 | 3/4x2 | .93 |
| 1-08 | 400 | 25 | 3/4x2 | .81 |
| 1-07 | 100 | 60 | 2 1/2 | 1.20 |
| 1-08 | 500 | 25 | 1 1/2x2 | 1.53 |
| 1-10 | 1000 | 25 | 1 1/2x2 | 2.13 |
| 1-10-10 | 4 | 50 | 3/4x2 | .93 |
| 1-11 | 100 | 50 | 3/4x2 | .99 |
| 1-12 | 150 | 50 | 3/4x2 | 1.08 |
| 1-13 | 500 | 50 | 1 1/2x2 1/2 | 1.59 |
| 1-13-05 | 500 | 50 | 1 1/2 | 1.59 |
| 1-14 | 1000 | 50 | 1 1/2x3 1/2 | 2.25 |
| 1-14-50 | 1500 | 50 | 1 1/2x4 | 2.64 |
| 1-15 | 25 | 150 | 1 1/2 | 1.11 |
| 1-16 | 30 | 150 | 1 1/2 | .93 |
| 1-17 | 40 | 150 | 1 1/2 | 1.20 |
| 1-18 | 50 | 150 | 1 1/2 | .99 |
| 1-18 | 60 | 150 | 1 1/2 | 1.29 |
| 1-20 AFHS | 80 | 150 | 1 1/2 | 1.11 |
| 1-21 | 100 | 150 | 1 1/2 | 1.20 |
| 1-22 AFHS | 120 | 150 | 1 1/2 | 1.23 |
| 1-22-05 AFHS | 120 | 150 | 1 1/2x2 | 1.29 |
| 1-23 AFHS | 140 | 150 | 1 1/2 | 1.40 |
| 1-23-01 PWHs | 140 | 150 | 1 1/2 | 1.29 |
| 1-24 | 150 | 150 | 1 1/2 | 1.29 |
| 1-24-01 | 150 | 150 | 1 1/2x2 1/2 | 1.29 |
| 1-24-24 AFHS | 200 | 150 | 1 1/2x2 1/2 | 1.47 |
| 1-24-25 AFHS | 200 | 150 | 1 1/2x2 1/2 | 1.47 |
| 1-24-75 AFHS | 300 | 150 | 1 1/2x3 | 1.68 |
| 1-24-95 PWH | 375 | 165 | 1 1/2x3 1/2 | 2.79 |
| 1-25 | 40 | 200 | 1 1/2 | 1.26 |
| 1-25-80 | 120 | 200 | 1 1/2x2 | 1.38 |
| 1-25-70 | 150 | 200 | 1 1/2x2 | 1.68 |
| 1-25-75 PWH | 160 | 200 | 1 1/2x2 | 1.60 |
| 1-26 | 15 | 250 | 1 1/2 | 1.14 |
| 1-27 | 20 | 250 | 3/4x2 | .96 |
| 1-28 | 30 | 250 | 3/4x2 | 1.26 |
| 1-28 | 40 | 250 | 1 1/2 | 1.08 |
| 1-30 | 80 | 250 | 1 1/2x2 1/2 | 1.53 |
| 1-31 | 80 | 250 | 1 1/2 | 1.74 |
| 1-31-25 | 100 | 250 | 1 1/2 | 1.62 |
| 1-31-75 | 150 | 250 | 1 1/2x2 1/2 | 1.86 |
| 1-31-85 AFHS | 200 | 250 | 1 1/2x3 1/2 | 2.19 |
| 1-32 | 15 | 300 | 1 1/2 | 1.14 |
| 1-33 | 30 | 300 | 1 1/2 | 1.20 |
| 1-34 | 50 | 300 | 1 1/2x2 1/2 | 1.56 |
| 1-35 | 80 | 300 | 1 1/2 | 1.53 |
| 1-38 | 100 | 300 | 1 1/2x2 1/2 | 1.74 |
| 1-38-05 AFHS | 100 | 300 | 1 1/2x2 1/2 | 1.74 |
| 1-37 | 125 | 300 | 1 1/2x2 1/2 | 1.74 |
| 1-37-25 AFHS | 150 | 300 | 1 1/2x3 | 2.10 |
| 1-37-30 AFHS | 200 | 300 | 1 1/2x3 | 2.37 |
| 1-37-35 | 250 | 300 | 1 1/2x4 | 3.33 |
| 1-38 | 15 | 350 | 1 1/2 | 1.23 |
| 1-39 | 30 | 350 | 1 1/2 | 1.14 |
| 1-40 | 40 | 350 | 1 1/2x2 1/2 | 1.20 |
| 1-41 | 50 | 350 | 1 1/2 | 1.26 |
| 1-41-05 PWH | 50 | 350 | 1 1/2x2 1/2 | 1.26 |
| 1-42 | 80 | 350 | 1 1/2x2 1/2 | 1.71 |
| 1-42-10 AFHS | 90 | 350 | 1 1/2x3 | 2.19 |
| 1-43 AFHS | 125 | 350 | 1 1/2x3 | 2.37 |
| 1-43-20 | 150 | 350 | 1 1/2x3 1/2 | 3.99 |
| 1-43-80 AFHS | 320 | 350 | 1 1/2x4 1/2 | 3.99 |
| 1-44 | 10 | 400 | 1 1/2 | 1.11 |
| 1-45 | 20 | 400 | 1 1/2 | 1.20 |
| 1-48 | 400 | 400 | 1 1/2x2 1/2 | 2.22 |
| 1-47 | 80 | 400 | 1 1/2x2 1/2 | .93 |
| 1-49 | 15 | 450 | 1 1/2 | 1.17 |
| 1-50 | 20 | 450 | 1 1/2 | 1.26 |
| 1-51 | 30 | 450 | 1 1/2x2 1/2 | 1.23 |
| 1-52 | 40 | 450 | 1 1/2 | 1.41 |
| 1-53 | 50 | 450 | 1 1/2x3 | 1.62 |
| 1-54 | 60 | 450 | 1 1/2x2 1/2 | 1.83 |
| 1-55 | 80 | 450 | 1 1/2x3 | 2.07 |
| 1-55-20 | 100 | 450 | 1 1/2x3 | 2.37 |
| 1-55-25 | 125 | 450 | 1 1/2x4 | 3.58 |
| 1-56 | 30 | 475 | 1 1/2 | 1.50 |
| 1-56-10 | 40 | 475 | 1 1/2x2 1/2 | 1.50 |
| 1-57 | 90 | 475 | 1 1/2x3 1/2 | 2.61 |
| 1-58 | 10 | 500 | 1 1/2 | .96 |
| 1-59 | 20 | 500 | 1 1/2x2 1/2 | 1.11 |
| 1-60 | 30 | 500 | 1 1/2 | 1.23 |
| 1-61 | 40 | 500 | 1 1/2x2 1/2 | 1.50 |
| 1-62 | 80 | 500 | 1 1/2x3 | 2.16 |
| 1-63 | 90 | 500 | 1 1/2x3 1/2 | 2.34 |
| 1-64 | 10 | 525 | 1 1/2 | 1.26 |
| 1-65 | 10 ohm-30 cps | 3 WNP | 1 1/2 | 1.50 |
| 1-68 | 0.5 ohm-15,750 cps | 3 WNP | 1 1/2 | 1.65 |
| 1-67 | 1 ohm-60 cps | 3 WNP | 1 1/2x3 | 3.00 |

ELECTROLYTIC DUALS

| AFH No. | Capacity | Voltage | Size | Net Price** |
|----------------|-----------|---------|-------------|-------------|
| 2-01 | 1000-500 | 6NP | 1 1/2x2 | 2.91 |
| 2-02 | 1500-1000 | 15 | 1 1/2x3 1/2 | 2.64 |
| 1-2-02-05-PWH | 250-250 | 16 | 1 1/2 | 1.65 |
| 2-02-10 | 500-100 | 16 | 1 1/2 | 1.86 |
| 2-02-11 PWH | 500-100 | 16 | 1 1/2x2 | 1.86 |
| 2-02-40 PWH | 500-500 | 16 | 1 1/2x2 | 1.86 |
| 2-02-50 | 700-150 | 16 | 1 1/2x2 | 1.95 |
| 2-02-55 | 800-200 | 16 | 1 1/2 | 1.83 |
| 2-02-60 PWH | 800-250 | 16 | 1 1/2x2 1/2 | 2.01 |
| 2-02-70 | 1000-500 | 16 | 1 1/2x2 1/2 | 2.28 |
| 1-2-02-75 PWH | 500-200 | 18 | 1 1/2 | 1.08 |
| 2-03 | 20-20 | 25 | 1 1/2 | 1.20 |
| 2-04 | 40-40 | 25 | 1 1/2 | 1.40 |
| 2-05 | 150-50 | 25 | 1 1/2 | 1.21 |
| 1-2-05-25 PWH | 250-250 | 25 | 1 1/2x2 1/2 | 1.80 |
| 2-06 | 50-50 | 50 | 1 1/2 | 1.02 |
| 2-06-20 | 100-100 | 50 | 1 1/2 | 1.26 |
| 2-07 | 20-10 | 150 | 1 1/2 | 1.20 |
| 2-08 | 20-20 | 150 | 1 1/2 | 1.02 |
| 2-08 | 30-15 | 150 | 1 1/2 | 1.29 |
| 2-10 | 30-20 | 150 | 1 1/2 | 1.29 |
| 2-11 | 30-30 | 150 | 1 1/2 | 1.11 |
| 2-12 | 40-20 | 150 | 1 1/2 | 1.08 |
| 2-13 | 40-30 | 150 | 1 1/2 | 1.20 |
| 2-14 | 40-40 | 150 | 1 1/2 | 1.14 |
| 2-15 | 50-30 | 150 | 1 1/2 | 1.20 |
| 1-2-15-05 PWH | 50-30 | 150 | 1 1/2 | 1.20 |
| 2-16 | 50-50 | 150 | 1 1/2x2 1/2 | 1.29 |
| 2-17 | 60-60 | 150 | 1 1/2 | 1.41 |
| 1-2-17-50 PWH | 70-30 | 150 | 1 1/2 | 1.32 |
| 2-18 | 75-75 | 150 | 1 1/2 | 1.56 |
| 2-18 | 80-40 | 150 | 1 1/2x2 1/2 | 1.38 |
| 1-2-18-05 PWH | 80-40 | 150 | 1 1/2x2 1/2 | 1.35 |
| 2-18-25 | 80-80 | 150 | 1 1/2x2 1/2 | 1.44 |
| 2-20 | 80-50 | 150 | 1 1/2x2 1/2 | 1.59 |
| 2-20-50 | 125-100 | 150 | 1 1/2x2 1/2 | 2.10 |
| 2-21 AFHS | 200-5 | 150 | 1 1/2x2 1/2 | 1.62 |
| 1-2-21-01 PWHs | 200-5 | 150 | 1 1/2x2 1/2 | 1.68 |
| 2-22 | 200-125 | 150 | 1 1/2x3 | 2.25 |
| 2-22-50 | 200-150 | 150 | 1 1/2x3 | 2.25 |
| 2-23 | 200-200 | 150 | 1 1/2x3 | 2.40 |
| 2-24 | 60-60 | 200 | 1 1/2x2 1/2 | 1.53 |
| 2-24-20 AFHS | 100-100 | 200 | 1 1/2x3 | 2.10 |
| 2-24-21 | 100-100 | 200 | 1 1/2 | 1.83 |
| 2-24-75 AFHS | 200-5 | 200 | 1 1/2x3 | 2.10 |
| 2-25 | 10-10 | 250 | 1 1/2 | 1.26 |
| 2-26 | 20-20 | 250 | 1 1/2 | 1.14 |
| 2-27 | 30-30 | 250 | 1 1/2x2 1/2 | 1.65 |
| 2-28 | 40-20 | 250 | 1 1/2x2 1/2 | 1.50 |
| 2-29 | 40-40 | 250 | 1 1/2 | 1.33 |
| 2-30 AFHS | 150-150 | 250 | 1 1/2x4 | 3.09 |
| 2-30-25 AFHS | 200-15 | 250 | 1 1/2x3 1/2 | 2.94 |
| 2-30-75 AFHS | 200-200 | 250 | 1 1/2x4 1/2 | 3.66 |
| 2-31 | 10-10 | 300 | 1 1/2 | 1.29 |
| 1-2-31-01 PWH | 10-10 | 300 | 1 1/2 | 1.05 |
| 1-2-31-02 PWH | 10-10 | 300 | 1 1/2x2 | 1.29 |
| 2-32 | 15-15 | 300 | 1 1/2 | 1.38 |
| 2-33 | 50-50 | 300 | 1 1/2x2 1/2 | 2.49 |
| 2-33-75 | 80-60 | 300 | 1 1/2x2 1/2 | 2.79 |
| 2-34 | 80-80 | 300 | 1 1/2x3 | 2.43 |
| 2-35 | 100-20 | 300 | 1 1/2x3 | 2.40 |
| 2-35-50 AFHS | 200-80 | 300 | 1 1/2x4 | 3.15 |
| 2-36 | 15-15 | 350 | 1 1/2 | 1.35 |
| 2-37 | 20-20 | 350 | 1 1/2x2 1/2 | 1.71 |
| 2-38 | 30-20 | 350 | 1 1/2 | 1.95 |
| 2-39 | 30-30 | 350 | 1 1/2 | 1.74 |
| 2-40 | 50-30 | 350 | 1 1/2x2 1/2 | 1.89 |
| 2-40-50 | 60-40 | 350 | 1 1/2x3 1/2 | 1.98 |
| 2-40-80 | 80-40 | 350 | 1 1/2x3 | 2.37 |
| 2-41 | 80-80 | 350 | 1 1/2x3 1/2 | 2.82 |
| 2-41-10 | 90-40 | 350 | 1 1/2x3 | 2.58 |
| 2-42 | 100-60 | 350 | 1 1/2x3 1/2 | 2.88 |
| 2-41-50 AFHS | 100-100 | 350 | 1 1/2x3 1/2 | 3.69 |
| 2-41-80 AFHS | 160-10 | 350 | 1 1/2x3 | 2.58 |
| 2-43 | 15-15 | 400 | 1 1/2x2 1/2 | 1.68 |
| 2-43-30 | 30-10 | 400 | 1 1/2 | 1.71 |
| 2-44 | 60-60 | 400 | 1 1/2x3 1/2 | 3.30 |
| 2-44-80 | 75-75 | 400 | 1 1/2x4 | 3.63 |
| 2-44-45 | 80-4 | 400 | 1 1/2 | 1.95 |
| 2-45 | 80-10 | 400 | 1 1/2x3 | 2.55 |
| 2-45-10 | 80-20 | 400 | 1 1/2x3 | 2.73 |
| 2-45-40 | 80-60 | 400 | 1 1/2x4 | 2.91 |
| 2-45-50 AFHS | 80-80 | 400 | 1 1/2x4 | 2.97 |
| 2-45-55 AFHS | 100-100 | 400 | 1 1/2x4 1/2 | 3.75 |
| 2-45-60 | 120-40 | 400 | 1 1/2x4 | 3.15 |
| 2-46 | 5-5 | 450 | 1 1/2 | 1.05 |
| 2-47 | 10-10 | 450 | 1 1/2 | 1.14 |
| 2-48 | 15-10 | 450 | 1 1/2x2 1/2 | 1.53 |
| 2-49 | 15-15 | 450 | 1 1/2x2 1/2 | 1.35 |
| 2-50 | 20-10 | 450 | 1 1/2 | 1.35 |
| 2-51 | 20-20 | 450 | 1 1/2 | 1.53 |
| 2-52 | 30-10 | 450 | 1 1/2 | 1.50 |
| 2-53 | 30-15 | 450 | 1 1/2x2 1/2 | 1.98 |
| 2-54 | 30-30 | 450 | 1 1/2x2 1/2 | 1.83 |
| 2-55 | 40-20 | 450 | 1 1/2x2 1/2 | 1.80 |
| 2-57 | 40-40 | 450 | 1 1/2x3 | 2.07 |
| 2-58 | 40-40 | 450 | 1 1/2x3 | 2.16 |
| 2-59 | 50-50 | 450 | 1 1/2x3 | 2.31 |
| 2-60 | 60-20 | 450 | 1 1/2x3 | 2.13 |
| 2-61 | 60-40 | 450 | 1 1/2x3 1/2 | 2.37 |
| 2-61-50 | 60-60 | 450 | 1 1/2x4 | 3.36 |
| 2-62 | 80-10 | 450 | 1 1/2x2 1/2 | 2.16 |
| 2-63 | 80-40 | 450 | 1 1/2x3 1/2 | 2.34 |
| 2-64 | 80-40 | 450 | 1 1/2x3 1/2 | 2.61 |
| 2-64-25 | 100-40 | 450 | 1 1/2x4 | 2.91 |
| 2-64-50 | 15-15 | 475 | 1 1/2x2 1/2 | 1.41 |
| 2-65 | 30-10 | 475 | 1 1/2x2 1/2 | 1.62 |
| 2-66 | 40-10 | 475 | 1 1/2x2 1/2 | 1.80 |
| 2-66-25 | 450-40 | 475 | 1 1/2x3 | 2.58 |
| 2-66-50 | 80-40 | 475 | 1 1/2x4 | 3.78 |
| 2-67 | 80-50 | 475 | 1 1/2x4 | 3.12 |
| 2-68 | 10-10 | 500 | 1 1/2 | 1.23 |
| 2-69 | 20-20 | 500 | 1 1/2x2 1/2 | 1.73 |
| 2-70 | 30-10 | 500 | 1 1/2x2 1/2 | 1.71 |
| 2-71-90 | 40-25 | 500 | 1 1/2x3 | 2.73 |
| 2-72 | 40-40 | 500 | 1 1/2x3 | 2.64 |
| 2-73</ | | | | |

AEROVOX

Capacitors

TRIPLES — (Continued)

ELECTROLYTICS — (Continued)

TRIPLES — (Continued)

| AFM No. | Capacity | Voltage | Size | Net Price* |
|--------------|-----------------|---------------------|-------------|------------|
| 3-29-50 | 80-60-60 | 350 | 1 3/4x4 | 3.33 |
| 3-29-75 | 90-40-20 | 350 | 1 3/4x4 | 3.15 |
| 3-29-80 | 100-60-40 | 350 | 1 3/4x4 | 3.69 |
| 3-29-85 | 100-100-10 | 350 | 1 3/4x4 | 4.08 |
| 3-29-87 AFHS | 100-100-40 | 350 | 1 3/4x4 1/2 | 4.50 |
| 3-29-95 | 120-40-40 | 350 | 1 3/4x4 | 5.58 |
| 3-30 | 10-10-10 | 400 | 1x2 1/2 | 1.44 |
| 3-30-30 | 40-10-4 | 400 | 1x3 1/2 | 1.83 |
| 3-30-35 | 40-10-10 | 400 | 1x3 | 1.89 |
| 3-30-45 | 40-30-10 | 400 | 1x4 | 2.22 |
| 3-30-60 | 60-20-10 | 400 | 1 3/4x3 | 2.58 |
| 3-30-75 | 90-10-5 | 400 | 1 3/4x3 | 2.64 |
| 3-30-80 | 100-50-10 | 400 | 1 3/4x3 | 3.36 |
| 3-31 | 10-10-10 | 450 | 1x3 | 1.56 |
| 3-31-10 | 15-15-15 | 450 | 1x3 | 2.64 |
| 3-31-15 | 15-15-15 | 450 | 1x3 | 1.86 |
| 3-35 | 20-10-10 | 450 | 1x3 | 1.77 |
| 3-36 | 20-20-20 | 450 | 1 3/4x2 1/2 | 2.16 |
| 3-37 | 30-20-20 | 450 | 1 3/4x3 | 2.31 |
| 3-37-95 | 30-30-10 | 450 | 1 3/4x3 | 3.36 |
| 3-38 | 30-20-20 | 450 | 1 3/4x3 | 3.68 |
| 3-39 | 30-30-30 | 450 | 1 3/4x3 | 2.61 |
| 3-41 | 40-10-10 | 450 | 1 3/4x3 | 2.01 |
| 3-42 | 40-30-20 | 450 | 1 3/4x3 | 2.58 |
| 3-43 | 40-40-10 | 450 | 1 3/4x3 | 2.52 |
| 3-43-50 | 40-40-20 | 450 | 1 3/4x3 | 2.67 |
| 3-44 | 40-40-40 | 450 | 1 3/4x3 1/2 | 2.94 |
| 3-44-50 | 40-40-30 | 450 | 1 3/4x4 | 2.94 |
| 3-45 | 60-20-20 | 450 | 1 3/4x3 1/2 | 2.76 |
| 3-45-10 | 60-30-10 | 450 | 1 3/4x3 | 2.70 |
| 3-45-20 | 60-40-20 | 450 | 1 3/4x3 1/2 | 3.00 |
| 3-45-50 | 80-40-10 | 450 | 1 3/4x4 | 4.53 |
| 3-46 | 80-40-20 | 450 | 1 3/4x4 | 3.24 |
| 3-47 | 10-10-10 | 475 | 1x3 | 1.62 |
| 3-47-50 | 20-20-10 | 475 | 1x3 1/2 | 2.13 |
| 3-48 | 475 | 1 3/4x3 | 3.54 | |
| 3-49 | 30-30-10 | 475 | 1 3/4x3 | 3.60 |
| 3-49-10 | 30-30-20 | 475 | 1 3/4x3 | 2.85 |
| 3-50 | 40-10-10 | 475 | 1 3/4x3 | 3.45 |
| 3-50-05 | 40-20-20 | 475 | 1 3/4x3 | 2.85 |
| 3-50-07 | 40-30-10 | 475 | 1 3/4x3 | 2.70 |
| 3-50-10 | 40-30-30 | 475 | 1 3/4x4 | 3.09 |
| 3-51 | 10-10-10 | 500 | 1x3 | 1.62 |
| 3-52 | 30-20-20 | 500 | 1 3/4x3 | 2.52 |
| 3-53 | 40-10-10 | 500 | 1 3/4x3 | 2.34 |
| 3-54 | 80-40-10 | 500 | 1 3/4x3 1/2 | 3.03 |
| 3-54-30 | 850-400-4 | 16 11 SRMS | 1x2 1/2 | 2.46 |
| 3-54-40 | 1000-500-4 | 16 11 SRMS | 1 1/2x2 | 2.65 |
| 3-54-41 | 1000-500-4 | 16 11 5 SRMS | 1x2 1/2 | 2.64 |
| 3-54-50 | 5-500-200 | 25 16 | 1x2 | 1.92 |
| 3-55 | 100-50/25 | 100/25 1x3 | | 2.37 |
| 3-57 | 15-15 1200 | 150 2 1x2 | | 1.80 |
| 3-58 | 150-6 | 1x2 | | 2.16 |
| 3-59 | 20-20 100 | 150 10 1x2 | | 2.37 |
| 3-60 | 20-20 250 | 150 10 1x2 | | 2.25 |
| 3-61 | 30-30 200 | 150 10 1x2 | | 1.44 |
| 3-62 | 40-20 150 | 150 10 1x2 | | 2.43 |
| 3-63 | 40-20 200 | 150 10 1x2 1/2 | | 1.68 |
| 3-64 | 40-20 250 | 150 10 1x2 1/2 | | 2.55 |
| 3-64-50 | 80-20 200 | 150 10 1 3/4x2 | | 1.89 |
| 3-64-60 | 80-30 300 | 150 10 1 3/4x2 | | 2.04 |
| 3-64-65 | 80-60 250 | 150 10 1x3 | | 2.19 |
| 3-64-70 | 80-60 400 | 150 10 1x3 | | 2.10 |
| 3-64-75 | 90-40 450 | 150 10 1x3 | | 2.16 |
| 3-64-85 | AFHS 100-80 200 | 150 15 1 3/4x2 1/2 | | 2.61 |
| 3-65 | 20 250-100 | 150 15 1 3/4x2 | | 2.52 |
| 3-66 | 80-20 100 | 150 15 1 3/4x2 | | 1.59 |
| 3-66-25 | 50-30 100 | 150 15 1x2 | | 1.98 |
| 3-67 | 20-20 200 | 150 25 1x3 | | 2.37 |
| 3-68 | 30-20 20 | 150 25 1x2 | | 2.01 |
| 3-69 | 30-20 20 | 150 25 1x2 | | 2.07 |
| 3-70 | 40-20 20 | 150 25 1x2 | | 2.25 |
| 3-71 | 40-20 100 | 150 25 1x3 | | 1.62 |
| 3-72 | 40-20 200 | 150 25 1x3 | | 2.10 |
| 3-73 | 40-20 20 | 150 25 1x2 1/2 | | 1.44 |
| 3-74 | 40-20 20 | 150 25 1x2 1/2 | | 1.68 |
| 3-75 | 40-40 20 | 150 25 1x2 1/2 | | 1.44 |
| 3-76 | 40-40 200 | 150 25 1x3 | | 1.89 |
| 3-76-55 | 10-40 250 | 150 25 1x3 | | 2.28 |
| 3-77 | 50-30/20 | 150 25 1x2 1/2 | | 1.62 |
| 3-78 | 50-30/100 | 150 25 1x3 | | 1.59 |
| 3-79 | 50-50 20 | 150 25 1x3 | | 2.28 |
| 3-80 | 60-20 20 | 150 25 1x2 1/2 | | 2.37 |
| 3-81 | 60-40 20 | 150 25 1x2 1/2 | | 1.62 |
| 3-81-10 | 70-30/20 | 150 25 1x2 1/2 | | 2.22 |
| 3-82 | 80-40 20 | 150 25 1 3/4x2 1/2 | | 3.00 |
| 3-82-10 | 10/10/4 | 150 50 1x2 | | 1.83 |
| 3-83-95 | 300-80/200 | 150 50 1 3/4x4 | | 2.97 |
| 3-84 | 30-20 20 | 200 25 1x2 | | 2.16 |
| 3-84-15 | 10-5 500 | 200 50 1 3/4x2 | | 2.37 |
| 3-84-25 | 40-5 500 | 200 50 1x2 1/2 | | 1.50 |
| 3-84-50 | 60-5 100 | 200 50 1x2 1/2 | | 1.74 |
| 3-84-65 | 60-5 200 | 200 50 1x3 | | 1.92 |
| 3-84-75 | 80-10 20 | 200 50 1x3 | | 2.67 |
| 3-85 | 90-20 20 | 200 50 1 3/4x3 | | 3.45 |
| 3-86 | 100-10 40 | 200 50 1 3/4x2 | | 2.82 |
| 3-86-50 | 30-20 40 | 200 150 1x2 1/2 | | 2.88 |
| 3-86-80 | AFHS 60-200/140 | 200 150 1 3/4x4 | | 2.07 |
| 3-86-90 | 10-10/10 | 250 15 1x2 | | 1.40 |
| 3-87 | 15-15 20 | 250 25 1x2 | | 2.10 |
| 3-88 | 20-15 20 | 250 25 1x2 | | 1.60 |
| 3-89 | 30-30 20 | 250 25 1x2 1/2 | | 3.51 |
| 3-90 | 70-70 20 | 250 50 1 3/4x3 | | 2.76 |
| 3-91 | 90-90 20 | 250 150 1x3 | | 2.61 |
| 3-92 | 15 20-20 | 250 150 1 3/4x2 | | 2.43 |
| 3-93 | 40-20 10 | 250 200 1 3/4x2 | | 2.79 |
| 3-94 | AFHS 40-40 10 | 250 200 1 3/4x2 1/2 | | 4.05 |
| 3-95 | 80-80 60 | 250 200 1 3/4x3 1/2 | | 2.34 |
| 3-99-20 | AFHS 10 500-500 | 300 15 1 3/4x2 | | 2.46 |
| 3-99-30 | 20 25 1x2 | | | 2.64 |
| 3-99-40 | 40 15 2x2 | | | 2.64 |
| 3-99-80 | PWH 60-10 25 | 300 25 1 3/4x2 | | 3.51 |
| 3-99-80 | 100-10 20 | 300 25 1 3/4x3 | | 3.99 |
| 3-99-90 | AFHS 140-10 100 | 300 25 1 3/4x3 1/2 | | 1.71 |
| 3-99-95 | 20-20 50 | 300 50 1x2 1/2 | | 2.43 |
| 3-99-98 | 30-30 25 | 300 50 1x3 | | 4.35 |
| 3-99-75 | 100-10 60 | 300 50 1 3/4x2 1/2 | | 5.40 |
| 3-99-80 | AFHS 125-20 100 | 300 50 1 3/4x3 1/2 | | 3.63 |
| 3-99-82 | 140-100 60 | 300 50 1 3/4x3 1/2 | | 2.94 |
| 3-99-85 | 200-20 10 | 300 150 1 3/4x3 | | 2.37 |
| 3-99-85 | 20 150-80 | 300 150 1 3/4x2 | | 2.64 |
| 3-100 | 40 40 20 | 300 150 1 3/4x2 | | 3.90 |
| 3-100-20 | 60 200-20 | 300 150 1 3/4x4 | | |

*Special construction for printed wiring

| AFM No. | Capacity | Voltage | Size | Net Price* |
|----------|-----------------|---------|-------------|------------|
| 3-100-40 | AFHS 100 200-30 | 300 150 | 1 3/4x4 | 3.03 |
| 3-100-60 | 140-10 200 | 300 150 | 1 3/4x4 | 3.30 |
| 3-101 | 10-10 15 | 300 250 | 1x2 | 2.19 |
| 3-101-20 | 60 10-30 | 300 250 | 1 3/4x2 1/2 | 3.36 |
| 3-101-40 | 100 60-20 | 300 250 | 1 3/4x3 1/2 | 4.41 |
| 3-101-60 | 200 60-20 | 300 250 | 1 3/4x4 | 3.48 |
| 3-102 | 10-10 20 | 350 25 | 1x2 1/2 | 2.01 |
| 3-103 | 10 10-20 | 350 25 | 1x2 | 1.50 |
| 3-104 | 15-10 20 | 350 25 | 1x2 | 2.43 |
| 3-105 | 15-15 20 | 350 25 | 1x3 | 1.56 |
| 3-105-50 | 20-5/100 | 350 25 | 1x2 1/2 | 1.53 |
| 3-106 | 20 10-20 | 350 25 | 1x2 1/2 | 2.68 |
| 3-107 | 20-20 20 | 350 25 | 1x2 | 2.73 |
| 3-107-50 | AFHS 20 50-50 | 350 25 | 1x2 1/2 | 1.86 |
| 3-108 | 30-10 20 | 350 25 | 1x3 | 2.04 |
| 3-109 | 30-20 20 | 350 25 | 1x3 1/2 | 1.77 |
| 3-110 | 30-20 20 | 350 25 | 1x2 1/2 | 1.98 |
| 3-110-30 | PWH 40 10 25 | 350 25 | 1 3/4x2 1/2 | 3.36 |
| 3-111 | 40-40 50 | 350 25 | 1 3/4x3 1/2 | 3.18 |
| 3-111-50 | 90-40 50 | 350 25 | 1 3/4x4 | 4.77 |
| 3-111-65 | AFHS 200-10 50 | 350 25 | 1x2 | 1.98 |
| 3-112 | 10-5 150 | 350 50 | 1x3 | 2.43 |
| 3-112-10 | 20-5 150 | 350 50 | 1x3 | 1.77 |
| 3-112-20 | 20-10 100 | 350 50 | 1x3 1/2 | 1.74 |
| 3-112-50 | 60 5 20 | 350 50 | 1x3 1/2 | 1.80 |
| 3-112-60 | AFHS 80-40 400 | 350 50 | 1 3/4x4 | 3.39 |
| 3-112-70 | 150-4 30 | 350 50 | 1 3/4x4 | 2.85 |
| 3-112-75 | 150-5 100 | 350 50 | 1 3/4x3 1/2 | 3.03 |
| 3-112-80 | 30-20 100 | 350 75 | 1 3/4x2 1/2 | 3.60 |
| 3-113 | 40 20 10 | 350 100 | 1 3/4x2 | 2.40 |
| 3-114 | 30-20 100 | 350 150 | 1 3/4x2 1/2 | 2.40 |
| 3-114-52 | 40-20 10 | 350 100 | 1x3 | 2.55 |
| 3-114-55 | 40 200-100 | 350 150 | 1 3/4x3 1/2 | 3.00 |
| 3-114-56 | 60 200-30 | 350 150 | 1 3/4x4 | 2.64 |
| 3-114-59 | 15 130-100 | 350 200 | 1 3/4x3 | 1.60 |
| 3-114-60 | 10 40-100 | 350 200 | 1x3 | 1.60 |
| 3-114-61 | 10 40-100 | 350 200 | 1 3/4x2 1/2 | 3.33 |
| 3-114-62 | 80-40 100 | 350 200 | 1 3/4x3 | 3.27 |
| 3-115 | 20-10 5 | 350 250 | 1x2 1/2 | 1.53 |
| 3-116 | 30 20-10 | 350 250 | 1x3 | 2.70 |
| 3-117 | 30 10-20 | 350 250 | 1x3 | 2.73 |
| 3-118 | 100-60 20 | 350 250 | 1 3/4x4 | 3.30 |
| 3-119 | 15-15 100 | 400 25 | 1x3 | 1.71 |
| 3-120 | 20-20 20 | 400 25 | 1x3 | 1.06 |
| 3-121 | 30-10 150 | 400 50 | 1 3/4x2 1/2 | 3.06 |
| 3-121-50 | AFHS 80-40 100 | 400 50 | 1 3/4x3 | 2.09 |
| 3-122 | 80-40 150 | 400 50 | 1 3/4x4 | 3.36 |
| 3-122-10 | 100-40 100 | 400 50 | 1 3/4x4 | 3.70 |
| 3-122-30 | 100 20 20 | 400 200 | 1 3/4x4 | 4.98 |
| 3-123 | 80 20-60 | 400 300 | 1 3/4x4 | 3.81 |
| 3-123-10 | 20-10 10 | 400 350 | 1x3 | 2.43 |
| 3-123-20 | 20-10 40 | 400 350 | 1x3 | 3.06 |
| 3-123-30 | 20-10 40 | 400 350 | 1x3 | 1.80 |
| 3-123-65 | 60-30 20 | 400 350 | 1 3/4x3 | 2.73 |
| 3-123-80 | 80-20 10 | 400 350 | 1 3/4x3 | 2.58 |
| 3-123-90 | 100-10 80 | 400 350 | 1 3/4x4 | 3.66 |
| 3-124 | 10-10 10 | 450 25 | 1x2 | 1.41 |
| 3-125 | 10 10-20 | 450 25 | 1x2 | 1.44 |
| 3-126 | 15-15 20 | 450 25 | 1x2 1/2 | 2.43 |
| 3-127-10 | 15-15 40 | 450 25 | 1x2 1/2 | 1.65 |
| 3-127-15 | 15-15 40 | 450 25 | 1x2 1/2 | 1.62 |
| 3-128 | 20-15 20 | 450 25 | 1x3 | 2.61 |
| 3-129 | 20-20 20 | 450 25 | 1x2 1/2 | 1.83 |
| 3-130 | 30 500-500 | 450 25 | 1 3/4x3 1/2 | 2.88 |
| 3-131 | 30 250-100 | 450 25 | 1 3/4x2 | 2.67 |
| 3-131-30 | 30-30 125 | 450 25 | 1 3/4x3 1/2 | 2.13 |
| 3-132 | 40-20 20 | 450 25 | 1 3/4x3 1/2 | 2.10 |
| 3-133 | 40-40 20 | 450 25 | 1 3/4x3 | 2.37 |
| 3-134 | 40-40 40 | 450 25 | 1 3/4x3 | 2.64 |
| 3-135 | 80-40 100 | 450 25 | 1 3/4x4 | 3.06 |
| 3-136 | 10-10 40 | 450 50 | 1x2 1/2 | 1.50 |
| 3-137 | 20 10-40 | 450 50 | 1x3 | 2.52 |
| 3-138 | 20 10-50 | 450 50 | 1x3 | 1.71 |
| 3-138-30 | 30-10 150 | 450 50 | 1 3/4x2 1/2 | 2.10 |
| 3-138-40 | 30-15 150 | 450 50 | 1 3/4x3 | 3.3 |

AEROVOX

Capacitors

ELECTROLYTICS — (Continued)

QUADS — (Continued)

| AFH No. | Capacity | Voltage | Size | Net Price* |
|----------------|----------------|-------------|-------------|------------|
| 4-16 | 35-35 10-5 | 450 | 1 3/4x3 1/2 | 2 79 |
| 4-17 | 40-10-10-10 | 450 | 1 3/4x3 | 2 49 |
| 4-18 | 40-20-10-10 | 450 | 1 3/4x3 | 2 88 |
| 4-18-10 | 40-35-10-5 | 450 | 1 3/4x4 | 2 82 |
| 4-18-20 | 40-40-5-5 | 450 | 1 3/4x4 | 2 82 |
| 4-18-30 | 40-40-20-20 | 450 | 1 3/4x4 | 3 33 |
| 4-18-40 | 40-40-30-30 | 450 | 1 3/4x4 | 3 63 |
| 4-18-45 | 40-40-40-40 | 450 | 1 3/4x4 | 3 87 |
| 4-18-50 | 60-20-30-30 | 450 | 1 3/4x4 | 3 99 |
| 4-18-80 | 60-30-10-2 | 450 | 1 3/4x3 | 3 06 |
| 4-18-75 | 70-10-10-5 | 450 | 1 3/4x3 | 4 26 |
| 4-18-80 | 80-10-10-10 | 450 | 1 3/4x4 | 3 03 |
| 4-19 | 10-10-10-10 | 475 | 1 3/4x2 | 3 15 |
| 4-19-10 | 20-20-10-10 | 475 | 1 3/4x2 1/2 | 2 61 |
| 4-19-20 | 20-20-20-20 | 475 | 1 3/4x3 | 3 12 |
| 4-19-40 | 40-10-10-10 | 475 | 1 3/4x3 | 4 17 |
| 4-19-50 | 40-20-10-10 | 475 | 1 3/4x3 | 3 06 |
| 4-20 | 10-10-10-10 | 500 | 1 3/4x2 | 2 10 |
| 4-20-50 | 40-40-8-8 | 500 | 1 3/4x4 | 3 42 |
| 4-20-77 | 750-600-350-4 | 16 11 5 RMS | 1 3/4x2 | 3 45 |
| 4-21 | 30-20-20-20 | 150 10 | 1 3/4x2 | 2 82 |
| 4-22 | 40-40-20-20 | 150/10 | 1 3/4x2 | 2 10 |
| 4-23 | 60-40-20-20 | 150/10 | 1 3/4x2 | 1 95 |
| 4-23-50 AFHS | 60-40-10-20 | 150 25 | 1 3/4x2 1/2 | 3 51 |
| 4-23-70 | 200-30-10-10 | 150 10 | 1 3/4x3 1/2 | 2 46 |
| 4-23-72 PWH | 290-30-10-10 | 150 10 | 1 3/4x3 1/2 | 2 70 |
| 4-23-75 AFHS | 50-20-150-30 | 150 15 | 1 3/4x2 | 1 92 |
| 4-25 | 20-20-20-20 | 150 25 | 1 3/4x2 | 2 61 |
| 4-25-70 | 250-20-160-40 | 150 25 | 1 3/4x2 | 3 09 |
| 4-26 | 30-30-30-40 | 150 25 | 1 3/4x2 | 1 86 |
| 4-27 | 40-20-20-20 | 150 25 | 1 3/4x2 | 1 77 |
| 4-28 | 40-40-30-20 | 150/25 | 1 3/4x2 | 1 86 |
| 4-29 | 40-40-40-20 | 150/25 | 1 3/4x2 | 1 89 |
| 4-30 | 40-40-40-40 | 150 25 | 1 3/4x2 | 2 73 |
| 4-31 | 40-40-40-100 | 150 25 | 1 3/4x2 | 3 00 |
| 4-32 | 40-40-40-160 | 150 25 | 1 3/4x2 | 2 13 |
| 4-33 | 40-40-100-100 | 150 25 | 1 3/4x2 | 3 00 |
| 4-33-20 | 40-40-700-100 | 150 25 | 1 3/4x2 | 3 18 |
| 4-33-50 AFHS | 50-20-20-20 | 150 25 | 1 3/4x2 | 2 10 |
| 4-34 | 50-30-30-100 | 150 25 | 1 3/4x2 | 2 07 |
| 4-35-50 PWH | 50-40-10-10 | 150 25 | 1 3/4x2 | 1 89 |
| 4-35 | 50-50-50-20 | 150 25 | 1 3/4x2 | 2 13 |
| 4-35-15 | 60-20-20-10 | 150 25 | 1 3/4x2 | 2 79 |
| 4-35-25 | 60-40-20-20 | 150 25 | 1 3/4x2 | 2 88 |
| 4-35-50 AFHS | 60-60-10-60 | 150 25 | 1 3/4x2 | 3 15 |
| 4-35-75 AFHS | 70-40-40-25 | 150/25 | 1 3/4x2 1/2 | 3 09 |
| 4-36 | 80-15-75-30 | 150 25 | 1 3/4x3 | 3 87 |
| 4-37 | 80-40-40-20 | 150 25 | 1 3/4x2 | 3 13 |
| 4-37-10 | 80-40-40-40 | 150 25 | 1 3/4x2 1/2 | 2 16 |
| 4-38 | 80-40-40-100 | 150 25 | 1 3/4x2 1/2 | 2 25 |
| 4-38-20 PWH | 100-40-10-50 | 150 25 | 1 3/4x2 | 2 22 |
| 4-38-30 | 100-90-60-200 | 150 25 | 1 3/4x3 | 2 97 |
| 4-38-75 | 125-125-40-100 | 150 25 | 1 3/4x3 | 4 35 |
| 4-38-90 AFHS | 140-40-30-30 | 150 50 | 1 3/4x3 | 3 51 |
| 4-38-95 AFHS | 200-50-100-10 | 150 75 | 1 3/4x4 | 3 57 |
| 4-39 | 40-20-10-20 | 200 25 | 1 3/4x2 | 2 88 |
| 4-39-50 AFHS | 200-200-100-10 | 200 75 | 1 3/4x4 | 4 71 |
| 4-40 | 30-20-20-20 | 250 25 | 1 3/4x2 | 2 04 |
| 4-41 | 100-40-10-100 | 250 50 | 1 3/4x3 1/2 | 3 09 |
| 4-42 | 80-60-40-10 | 250 150 | 1 3/4x3 1/2 | 4 59 |
| 4-43 | 10-10-10-20 | 300 25 | 1 3/4x2 | 1 77 |
| 4-44 | 40-20-20-25 | 300 25 | 1 3/4x2 | 2 40 |
| 4-44-20 | 40-30-20-50 | 300/25 | 1 3/4x2 1/2 | 3 72 |
| 4-45 | 40-40-20-20 | 300 25 | 1 3/4x3 | 2 64 |
| 4-46 | 40-40-20-50 | 300 25 | 1 3/4x3 | 2 48 |
| 4-46-15 | 200-100-2-20 | 300 25 | 1 3/4x4 1/2 | 2 45 |
| 4-46-20 | 60-30-10-60 | 300 50 | 1 3/4x2 1/2 | 2 52 |
| 4-46-30 | 100-80-20-50 | 300 50 | 1 3/4x3 1/2 | 3 66 |
| 4-46-35 | 150-30-30-150 | 300 50 | 1 3/4x4 | 3 06 |
| 4-46-40 | 200-140-30-30 | 300 150 | 1 3/4x4 | 3 66 |
| 4-46-60 | 10-200-200-30 | 300/150 | 1 3/4x4 | 3 21 |
| 4-47 | 40-40-40-20 | 300/150 | 1 3/4x4 | 2 94 |
| 4-47-25 AFHS | 80-20-20-20 | 300 150 | 1 3/4x3 1/2 | 3 51 |
| 4-47-50 AFHS | 100-10-200-30 | 300 150 | 1 3/4x4 | 3 54 |
| 4-47-80 AFHS | 100-10-500-60 | 300 150 | 1 3/4x4 | 3 84 |
| 4-47-80 AFHS | 120-40-40-10 | 300 250 | 1 3/4x4 | 3 69 |
| 4-47-90 PWHs | 200-50-20-2 | 320 300 | 1 3/4x4 1/2 | 3 93 |
| 4-48 | 10-10-10-20 | 350 25 | 1 3/4x2 | 2 67 |
| 4-49 | 20-10-5-20 | 350/25 | 1 3/4x2 | 1 86 |
| 4-49-25 | 30-10-5-20 | 350/25 | 1 3/4x2 | 2 28 |
| 4-50 | 40-10-100-25 | 350 25 | 1 3/4x2 | 3 69 |
| 4-50-60 | 40-10-100-25 | 350 25 | 1 3/4x2 | 3 36 |
| 4-50-90 | 40-20-5-10 | 350 25 | 1 3/4x2 1/2 | 3 42 |
| 4-51 | 40-20-20-25 | 350 25 | 1 3/4x2 1/2 | 3 81 |
| 4-52 | 40-40-20-20 | 350 25 | 1 3/4x3 | 2 82 |
| 4-52-05 | 40-40-30-10 | 350 25 | 1 3/4x3 | 2 97 |
| 4-53 | 40-40-40-40 | 350/25 | 1 3/4x3 | 3 12 |
| 4-53-40 | 60-5-100-40 | 350 25 | 1 3/4x2 1/2 | 2 28 |
| 4-53-90 | 120-20-10-50 | 350 25 | 1 3/4x3 | 3 36 |
| 4-53-95 AFHS | 150-100-20-100 | 350 25 | 1 3/4x5 | 4 92 |
| 4-54 | 15-15-15-50 | 350 50 | 1 3/4x2 | 3 96 |
| 4-55 | 40-30-10-50 | 350 50 | 1 3/4x3 | 2 64 |
| 4-56 | 40-40-40-150 | 350 50 | 1 3/4x3 1/2 | 3 42 |
| 4-56-05 AFHS | 50-40-20-100 | 350 50 | 1 3/4x3 | 5 52 |
| 4-56-20 | 60-5-50-20 | 350 50 | 1 3/4x2 1/2 | 2 19 |
| 4-56-30 | 60-25-25-100 | 350/50 | 1 3/4x3 | 4 62 |
| 4-56-35 | 70-30-20-50 | 350 50 | 1 3/4x3 | 3 21 |
| 4-56-40 | 70-40-10-50 | 350 50 | 1 3/4x4 | 3 15 |
| 4-56-45 AFHS | 80-40-40-100 | 350 50 | 1 3/4x4 | 3 75 |
| 4-56-60 | 100-10-10-20 | 350 50 | 1 3/4x3 | 3 09 |
| 4-56-65 | 100-20-50-30 | 350 50 | 1 3/4x3 1/2 | 4 89 |
| 4-56-75 | 100-40-30-50 | 350 50 | 1 3/4x4 | 3 93 |
| 4-56-80 | 100-80-10-20 | 350 50 | 1 3/4x4 | 3 96 |
| 4-56-85 | 140-20-10-100 | 350/50 | 1 3/4x4 | 3 69 |
| 4-56-88 | 200-10-20-5 | 350 50 | 1 3/4x4 | 3 39 |
| 4-56-90 | 90-30-5-100 | 350 75 | 1 3/4x3 1/2 | 3 69 |
| 4-56-92 | 20-10-5-60 | 350 200 | 1 3/4x2 1/2 | 3 27 |
| 4-56-93 | 20-100-100-20 | 350 200 | 1 3/4x2 1/2 | 4 62 |
| 4-56-93.4 | 30-10-5-100 | 350 200 | 1 3/4x2 1/2 | 2 64 |
| 4-56-93.5 | 30-20-5-100 | 350 200 | 1 3/4x3 | 2 82 |
| 4-56-94 | 10-10-10-10 | 350 300 | 1 3/4x3 | 2 79 |
| 4-56-94.4 AFHS | 80 80 10 10 | 350 300 | 1 3/4x3 1/2 | 3 42 |
| 4-56-94.8 | 130-20-10-40 | 350 300 | 1 3/4x4 | 5 88 |
| 4-56-94.8 AFHS | 100-10-20-20 | 350 300 | 1 3/4x4 1/2 | 4 62 |
| 4-56-95 AFHS | 160 60 10 4 | 350 300 | 1 3/4x4 | 3 84 |

QUADS — (Continued)

| AFH No. | Capacity | Voltage | Size | Net Price* |
|--------------|---------------|---------|-------------|------------|
| 4-56-96 | 10-10-25-25 | 400 25 | 1 3/4x2 | 2 52 |
| 4-57 | 20-20-20-20 | 400 25 | 1 3/4x2 1/2 | 2 31 |
| 4-57-40 | 80-40-10-20 | 400 25 | 1 3/4x4 | 3 18 |
| 4-57-50 | 80-40-30-40 | 400 25 | 1 3/4x4 | 3 57 |
| 4-57-55 | 90-40-10-40 | 400 25 | 1 3/4x4 | 5 22 |
| 4-57-75 | 80-40-40-150 | 400 50 | 1 3/4x4 | 5 13 |
| 4-57-85 | 80-20-10-100 | 400/50 | 1 3/4x4 | 4 71 |
| 4-57-90 AFHS | 100-10-30-20 | 400/50 | 1 3/4x3 | 3 06 |
| 4-57-92 | 20-20-100-100 | 400 100 | 1 3/4x3 1/2 | 1 78 |
| 4-57-93 AFHS | 80-40-10-100 | 400 200 | 1 3/4x3 1/2 | 3 12 |
| 4-57-95 | 80-40-40-40 | 400/200 | 1 3/4x4 | 5 40 |
| 4-58 | 40-10-80-10 | 400 250 | 1 3/4x3 1/2 | 4 23 |
| 4-58-50 | 80-40-20-10 | 400 300 | 1 3/4x4 | 4 98 |
| 14-58-65 PWH | 40-30-20-20 | 400 350 | 1 3/4x3 | 2 97 |
| 4-58-75 | 80-40-40-20 | 400/350 | 1 3/4x4 | 3 87 |
| 4-59 | 10-10-10-20 | 450 25 | 1 3/4x2 | 1 89 |
| 4-60 | 10-10-10-25 | 450 25 | 1 3/4x2 | 2 82 |
| 4-61 | 10-10-10-10 | 450 25 | 1 3/4x2 | 3 00 |
| 4-62 | 10-10-10-150 | 450 25 | 1 3/4x2 1/2 | 3 33 |
| 4-63 | 10-10-20-20 | 450 25 | 1 3/4x2 | 2 67 |
| 4-65 | 20-15-20-20 | 450 25 | 1 3/4x2 | 3 33 |
| 4-66 | 20-15-20-20 | 450/25 | 1 3/4x2 1/2 | 2 13 |
| 4-67 | 20-20-20-20 | 450/25 | 1 3/4x2 1/2 | 2 49 |
| 4-68 | 30-15-15-40 | 450 25 | 1 3/4x2 1/2 | 3 72 |
| 4-69 | 30-20-20-20 | 450 25 | 1 3/4x3 | 3 96 |
| 4-70 | 30-30-10-20 | 450 25 | 1 3/4x3 | 3 90 |
| 4-70-10 | 30-30-10-125 | 450 25 | 1 3/4x3 | 4 17 |
| 4-71 | 30-30-20-20 | 450 25 | 1 3/4x3 | 4 35 |
| 4-71-25 | 30-30-125-125 | 450 25 | 1 3/4x3 | 4 35 |
| 4-72 | 40-10-10-250 | 450/25 | 1 3/4x3 | 2 79 |
| 4-73 | 40-10-10-300 | 450/25 | 1 3/4x3 | 4 35 |
| 4-74 | 40-15-10/25 | 450 25 | 1 3/4x3 | 3 63 |
| 4-75 | 40-20-10-20 | 450 25 | 1 3/4x3 | 2 76 |
| 4-76 | 40-20-10-20 | 450 25 | 1 3/4x3 | 2 79 |
| 4-77 | 40-20-10-20 | 450 25 | 1 3/4x3 | 2 79 |
| 4-78 | 40-30-10-20 | 450 25 | 1 3/4x3 | 3 81 |
| 4-78-10 | 40-40-10-20 | 450 25 | 1 3/4x3 1/2 | 2 82 |
| 4-79 | 40-40-20-20 | 450 25 | 1 3/4x3 1/2 | 3 00 |
| 4-79-10 | 40-40-40-40 | 450 25 | 1 3/4x4 | 3 30 |
| 4-79-20 | 60-40-40-210 | 450 25 | 1 3/4x4 | 3 89 |
| 4-79-30 | 60-5-5-20 | 450 25 | 1 3/4x4 | 3 21 |
| 4-79-40 | 80-40-40-40 | 450 25 | 1 3/4x4 | 3 87 |
| 4-79-60 | 80-40-100-100 | 450 25 | 1 3/4x4 1/2 | 3 48 |
| 4-80 | 20-20-20-100 | 450 50 | 1 3/4x3 | 2 73 |
| 4-81 | 30-30-15-20 | 450 50 | 1 3/4x3 | 2 73 |
| 4-82 | 30-30-15-100 | 450 50 | 1 3/4x3 1/2 | 4 41 |
| 4-83 | 40-20-10-100 | 450/50 | 1 3/4x3 1/2 | 2 76 |
| 4-84 | 40-40-10-20 | 450/50 | 1 3/4x3 | 2 82 |
| 4-85 | 40-40-30-10 | 450 50 | 1 3/4x3 | 4 05 |
| 4-85-25 | 40-40-10-50 | 450 50 | 1 3/4x3 | 2 88 |
| 4-86 | 60-10-10-20 | 450 50 | 1 3/4x3 | 2 88 |
| 4-86-20 | 60-30-30-150 | 450 50 | 1 3/4x4 | 5 52 |
| 4-86-25 | 60-40-10-25 | 450/50 | 1 3/4x4 | 3 15 |
| 4-87 | 40-40-10-100 | 450 100 | 1 3/4x3 1/2 | 3 21 |
| 4-88 | 60-10-10-20 | 450 150 | 1 3/4x3 | 2 76 |
| 4-88-20 | 35-35-10-10 | 450/200 | 1 3/4x3 1/2 | 4 14 |
| 4-88-40 | 40-40-30-10 | 450/200 | 1 3/4x4 | 4 80 |
| 4-88-50 | 40-40-100-60 | 450 200 | 1 3/4x4 | 3 63 |
| 4-88-80 | 40-20-10-100 | 450 250 | 1 3/4x4 | 3 41 |
| 4-88-70 | 60-10-10-40 | 450 250 | 1 3/4x3 1/2 | 4 54 |
| 4-89 | 10-100-20-20 | 450 300 | 1 3/4x3 | 3 15 |
| 4-89 | 20-20-30-30 | 450 300 | 1 3/4x3 | 4 05 |
| 4-90 | 20-20-20-10 | 450 350 | 1 3/4x3 | 3 72 |
| 4-91 | 20-20-30-30 | 450/350 | 1 3/4x3 | 2 83 |
| 4-91-50 | 40-10-10-40 | 450/350 | 1 3/4x3 | 4 55 |
| 4-92 | 40-10-15-10 | 450 350 | 1 3/4x3 | 2 83 |
| 4-92-50 | 40-20-20-20 | 450 350 | 1 3/4x3 | 4 50 |
| 4-92-75 | 40-20-80-10 | | | |

AEROVOX

Capacitors

ELECTROLYTICS — (Continued)

TYPE PR WAX-FILLED TUBULAR CAPACITORS

Wax-filled electrolytic tubulars in wax-impregnated cardboard tubes. Sections manufactured to same high standards as more expensive metal-cased units. These units are made for exact duplicate replacements in television receivers and antenna rotating devices. Tolerances meet RETMA standards and are manufactured for operating temperatures of 0-65°C. PR numbers designate replacements for Television Receivers. XA numbers designate replacements for rotators.



TYPE PR SINGLES

| PR No. | Capacity | Voltage | Size | Net Price★ |
|-----------|----------|----------|-----------|------------|
| XA-4283 | 70 | 50 (VAC) | 7/8x3 | .95 |
| *XA-4098A | 70 | 50 (VAC) | 7/8x3 | .92 |
| XA-10001 | 100 | 50 (VAC) | 1x27/8 | 1.20 |
| PR-1-050 | 100 | 150 | 1x31/2 | 1.11 |
| PR-1-060 | 150 | 200 | 13/8x21/2 | 1.38 |
| PR-1-075 | 200 | 200 | 13/8x33/8 | 1.74 |
| PR-1-100 | 140 | 300 | 13/8x33/8 | 1.89 |
| PR-1-200 | 10 | 450 VNP | 13/8x21/4 | .96 |

TYPE PR DUALS

| PR No. | Capacity | Voltage | Size | Net Price★ |
|------------|----------|---------|-----------|------------|
| PR 2-020 | 200-20 | 8 | 1/2x11/4 | .93 |
| □ PR 2-030 | 50-30 | 150 | 1x21/2 | 1.68 |
| □ PR 2-035 | 50-50 | 150 | 1x21/2 | 1.74 |
| □ PR 2-040 | 80-30 | 150 | 1x21/2 | 1.77 |
| □ PR 2-045 | 100-50 | 150 | 1x3 | 1.92 |
| † PR 2-050 | 120-120 | 150 | 11/8x47/8 | 1.98 |
| PR 2-100 | 200-5 | 150 | 1x4 | 1.62 |
| PR 2-120 | 250-50 | 150 | 13/8x31/4 | 2.22 |
| PR 2-200 | 120-80 | 200 | 13/8x3 | 2.31 |
| PR 2-275 | 200-5 | 200 | 11/8x41/8 | 2.13 |
| PR 2-300 | 150-100 | 300 | 13/8x41/2 | 3.21 |
| PR 2-400 | 140-5 | 350 | 11/4x41/8 | 2.49 |
| PR 2-600 | 40/125 | 200/40 | 1x31/4 | 1.44 |
| PR 2-700 | 50/75 | 250/50 | 11/8x23/8 | 1.44 |
| PR 2-725 | 5/25 | 300/25 | 3/4x17/8 | .87 |
| PR 2-755 | 200/100 | 300/50 | 11/4x43/8 | 2.67 |
| PR 2-790 | 100/150 | 350/250 | 13/8x31/2 | 3.36 |
| PR 2-800 | 20/100 | 450/25 | 11/4x23/4 | 1.35 |

TYPE PR TRIPLES

| PR No. | Capacity | Voltage | Size | Net Price★ |
|-------------|-------------|---------|-----------|------------|
| PR 3-005 | 100-100-65 | 8 | 5/8x13/8 | 1.23 |
| PR 3-010 | 150-150-150 | 150 | 13/8x43/4 | 2.91 |
| PR 3-012 | 250-200-10 | 150 | 13/8x43/8 | 2.76 |
| PR 3-020 | 60-60-60 | 300 | 13/8x31/2 | 2.82 |
| PR 3-025 | 60-60-4 | 350 | 13/8x31/4 | 2.31 |
| PR 3-030 | 80-40-20 | 350 | 13/8x31/2 | 2.82 |
| † PR 3-035 | 30-10-10 | 450 | 13/8x31/2 | 1.89 |
| PR 3-043 | 250-120-50 | 150/25 | 13/8x37/8 | 2.64 |
| PR 3-045 | 100-10/20 | 300/25 | 11/8x31/2 | 2.25 |
| PR 3-046 | 100-100-200 | 300/25 | 11/2x41/2 | 3.48 |
| PR 3-046-50 | 120-40/100 | 300/50 | 13/8x33/4 | 2.91 |
| PR 3-047 | 100-60/100 | 300/50 | 13/8x4 | 2.97 |
| PR 3-048 | 100/200-40 | 300/200 | 13/8x41/2 | 3.69 |
| PR 3-050 | 10-10/100 | 350/50 | 11/4x21/2 | 1.50 |
| PR 3-053 | 100-10/50 | 350/50 | 13/8x31/2 | 2.67 |
| PR 3-054 | 10/200-100 | 400/150 | 13/8x31/2 | 2.46 |
| PR 3-055 | 20-10/150 | 450/50 | 13/8x3 | 1.86 |
| PR 3-060 | 20/200-5 | 450/200 | 11/4x41/8 | 2.70 |

TYPE PR TRIPLES (Continued)

| PR No. | Capacity | Voltage | Size | Net Price★ |
|----------|------------|-------------|-----------|------------|
| PR 3-065 | 5/80-40 | 450/400 | 13/8x41/4 | 2.73 |
| PR 3-070 | 150/100/80 | 150/50/25 | 13/8x3 | 2.01 |
| PR 3-080 | 80/10/100 | 300/250/50 | 13/8x31/2 | 2.16 |
| PR 3-085 | 20/60/100 | 350/200/25 | 13/8x3 | 2.13 |
| PR 3-090 | 30/40/125 | 350/200/25 | 13/8x21/4 | 1.98 |
| PR 3-100 | 140/5/200 | 350/300/200 | 11/2x43/8 | 4.02 |
| PR 3-125 | 100/40/40 | 350/300/250 | 13/8x33/4 | 3.27 |
| PR 3-150 | 30/50/100 | 450/150/25 | 13/8x21/2 | 1.89 |
| PR 3-160 | 25/100/100 | 450/150/50 | 13/8x3 | 2.28 |

TYPE PR QUADS

| PR No. | Capacity | Voltage | Size | Net Price★ |
|----------|----------------|-----------------|-----------|------------|
| PR 4-125 | 40-40-40-4 | 150 | 1x3 | 1.83 |
| PR 4-175 | 20-20-20-10 | 450 | 13/8x31/2 | 2.55 |
| PR 4-185 | 40-20-20-10 | 450 | 13/8x33/8 | 2.82 |
| PR 4-200 | 40-40-20-20 | 450 | 11/2x43/8 | 3.27 |
| PR 4-220 | 40-20-20/100 | 150/25 | 11/8x27/8 | 1.83 |
| PR 4-225 | 40-10-10/200 | 150/35 | 11/8x3 | 2.01 |
| PR 4-250 | 100-80-20/50 | 300/50 | 13/8x41/4 | 3.60 |
| PR 4-275 | 140-4/50-4 | 300/150 | 13/8x31/2 | 2.94 |
| PR 4-280 | 140-5/200-30 | 300/150 | 11/2x4 | 3.63 |
| PR 4-285 | 140-10-5/200 | 300/150 | 11/2x43/8 | 3.60 |
| PR 4-295 | 80-40-10/40 | 300/250 | 13/8x4 | 3.09 |
| PR 4-300 | 120-40-40/10 | 300/250 | 13/8x41/4 | 3.72 |
| PR 4-325 | 150-100-20/100 | 350/50 | 11/2x43/4 | 5.01 |
| PR 4-350 | 15-15/150-150 | 350/150 | 13/8x41/4 | 3.12 |
| PR 4-450 | 80-60-20/40 | 350/300 | 13/8x43/8 | 3.72 |
| PR 4-500 | 10-10-10/150 | 450/50 | 11/4x33/4 | 2.16 |
| PR 4-550 | 100-40/40/25 | 300/50 25 | 13/8x31/4 | 3.03 |
| PR 4-600 | 140/5/200-30 | 350/300/200 | 11/2x43/8 | 4.59 |
| PR 4-700 | 80-10/40/100 | 400/300/50 | 13/8x4 | 3.27 |
| PR 4-800 | 10/80/40-40 | 450/300/250 | 13/8x31/2 | 2.97 |
| PR 4-850 | 40/100/100/25 | 350/250/50/25 | 13/8x31/4 | 3.15 |
| PR 4-875 | 140/5/200/100 | 350/300/200/150 | 11/2x43/8 | 4.92 |
| PR 4-900 | 20/120/40/100 | 450/300/250/50 | 13/8x41/4 | 3.60 |

TYPE PR QUINTS

| PR No. | Capacity | Voltage | Size | Net Price★ |
|----------|----------------|---------|--------|------------|
| PR 5-500 | 40-20-20-20-50 | 300 75 | 13/8x3 | 3.00 |
| PR 5-550 | 60-60-10-4-50 | 350 50 | 11/4x4 | 3.18 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

†Separate negative furnished for two 10 mfd sections. *5" leads. No bracket. †Separate sections. □Special construction for printed wiring.

TYPE XPP — MINIATURIZED METAL-CASED ELECTROLYTICS

OPERATING TEMPERATURE RANGE — minus 20°C to plus 65°C.

CAPACITANCE AT 25°C — minus 10%—plus 250%.

RC PRODUCT AT 25°C — 120 CPS: 500 maximum.

RC product (rated capacitance in mfd. x equivalent series resistance in ohms).

MAXIMUM LEAKAGE:

.15 microamperes/mfd/volt: below 10 volt rating.

.10 microamperes/mfd/volt: above 10 volt rating.

Miniature hermetically-sealed, metal cased, tubular aluminum electrolytic capacitors.

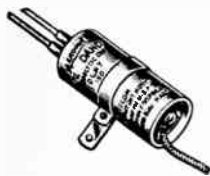
For use in all transistorized assemblies such as personal portable radios, hearing aids, instruments and many other miniaturized electronic apparatus.



| Cap. Mfds. | 3VDCW | | | 6VDCW | | | 10VDCW | | | 12VDCW | | | 15VDCW | | | 25VDCW | | |
|------------|----------|------|------------|----------|------|------------|-----------|------|------------|-----------|------|------------|-----------|------|------------|-----------|------|------------|
| | Type No. | Size | Net Price★ | Type No. | Size | Net Price★ | Type No. | Size | Net Price★ | Type No. | Size | Net Price★ | Type No. | Size | Net Price★ | Type No. | Size | Net Price★ |
| 1 | XPP-3001 | A | .75 | XPP-6001 | A | .75 | XPP-10001 | A | .75 | XPP-12001 | A | .75 | XPP-15001 | A | .75 | XPP-25001 | B | .75 |
| 2 | XPP-3002 | A | .75 | XPP-6002 | A | .75 | XPP-10002 | A | .75 | XPP-12002 | A | .75 | XPP-15002 | A | .75 | XPP-25002 | B | .78 |
| 3 | XPP-3003 | A | .75 | XPP-6003 | A | .75 | XPP-10003 | B | .75 | XPP-12003 | B | .75 | XPP-15003 | C | .75 | XPP-25003 | C | .78 |
| 4 | XPP-3004 | A | .75 | XPP-6004 | B | .75 | XPP-10004 | B | .75 | XPP-12004 | B | .75 | XPP-15004 | C | .78 | XPP-25004 | C | .78 |
| 5 | XPP-3005 | A | .75 | XPP-6005 | B | .75 | XPP-10005 | B | .75 | XPP-12005 | B | .81 | XPP-15005 | C | .84 | XPP-25005 | C | .84 |
| 6 | XPP-3006 | A | .75 | XPP-6006 | B | .75 | XPP-10006 | C | .75 | XPP-12006 | C | .81 | XPP-15006 | C | .84 | XPP-25006 | C | .84 |
| 8 | XPP-3008 | B | .75 | XPP-6008 | C | .81 | XPP-10008 | C | .81 | XPP-12008 | C | .81 | XPP-15008 | C | .84 | XPP-25008 | E | .87 |
| 10 | XPP-3010 | C | .75 | XPP-6010 | C | .81 | XPP-10010 | C | .81 | XPP-12010 | C | .81 | XPP-15010 | C | .84 | XPP-25010 | E | .87 |
| 15 | XPP-3015 | C | .75 | XPP-6015 | C | .81 | XPP-10015 | C | .81 | XPP-12015 | C | .84 | XPP-15015 | D | .87 | XPP-25015 | F | .87 |
| 20 | XPP-3020 | C | .75 | XPP-6020 | D | .81 | XPP-10020 | D | .81 | XPP-12020 | D | .84 | XPP-15020 | E | .87 | XPP-25020 | F | .90 |
| 25 | XPP-3025 | C | .75 | XPP-6025 | D | .81 | XPP-10025 | E | .81 | XPP-12025 | E | .84 | XPP-15025 | E | .87 | XPP-25025 | F | .93 |
| 30 | XPP-3030 | D | .75 | XPP-6030 | E | .84 | XPP-10030 | E | .84 | XPP-12030 | E | .87 | XPP-15030 | F | .90 | | | |
| 40 | XPP-3040 | D | .75 | XPP-6040 | E | .84 | XPP-10040 | E | .84 | XPP-12040 | F | .87 | XPP-15040 | F | .93 | | | |
| 50 | XPP-3050 | D | .75 | XPP-6050 | E | .84 | XPP-10050 | E | .90 | XPP-12050 | F | .93 | XPP-15050 | F | .96 | | | |
| 60 | XPP-3060 | E | .75 | XPP-6060 | F | .84 | | | | | | | | | | | | |
| 100 | XPP-3100 | F | .84 | | | | | | | | | | | | | | | |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

| Size | | | |
|------|----------|---|----------|
| A | 7/8x3/8 | D | .265x3/8 |
| B | 7/8x3/4 | E | 3/8x3/4 |
| C | .265x3/4 | F | 3/8x7/8 |

AEROVOX*Capacitors***ELECTROLYTICS — (Continued)****TYPE PRS "DANDEE" (85°C)****SINGLES • DUALS • TRIPLES • MULTIPLES**
Metal Can Tubular Electrolytic Capacitors TYPE PRS-AC (AC rated units) NP-PRS (non-polarized units)

Compact, electrolytic tubular capacitors furnished in aluminum cans with cardboard insulating sleeves. Designed for use in television and radio applications where space is at a premium.

Included in this listing are the AC rated units (PRS-AC) and non-polarized units (NP PRS) for replacement use in cross-over networks and color TV receivers. Also listed are Types PRSB—separate section, dual units for use in specialized applications.

Single section capacitors are furnished with bare tinned copper leads 3 inches long. Negative grounded to case. Multiple units are furnished with insulated, stranded copper leads 5 inches long. Negative is common and grounded to case. Multiple units have common cathode.

Sizes listed are diameters over cardboard insulating sleeve. For actual can size deduct $\frac{1}{8}$ " from diameter and $\frac{1}{4}$ " from length. Multiple units are supplied with mounting strap. If mounting strap is required on single units, specify on order.

Tolerance and surge voltage are in accordance with EIA Specification RS-154.

TYPE PRS — SINGLES

| PRS No. | Cap. Mfd. | Size | Net Price★ |
|-------------|-----------|------------------------------------|------------|
| 4V | | | |
| 1050 | 2000 | 1 $\frac{1}{16}$ x 2 $\frac{3}{4}$ | 1.38 |
| 6V | | | |
| 1100 | 100 | $\frac{3}{16}$ x 1 $\frac{3}{8}$ | .72 |
| 1110 | 250 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .81 |
| 1120 | 500 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .93 |
| 1130 | 1000 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.14 |
| 1140 | 1500 | $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.26 |
| 1145 | 2000 | $\frac{1}{16}$ x 2 $\frac{3}{4}$ | 1.38 |
| 10V | | | |
| 1147 | 2000 | 1 $\frac{1}{16}$ x 2 | 1.47 |
| 12V | | | |
| 1150 | 100 | $\frac{1}{16}$ x 1 $\frac{1}{4}$ | .72 |
| 1160 | 250 | $\frac{1}{16}$ x 2 | .87 |
| 1170 | 500 | $\frac{3}{16}$ x 2 | 1.02 |
| 1180 | 1000 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.35 |
| 15V | | | |
| 1200 | 100 | $\frac{1}{16}$ x 1 $\frac{1}{2}$ | .75 |
| 1210 | 250 | $\frac{1}{16}$ x 2 | .93 |
| 1220 | 500 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.05 |
| 1230 | 1000 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.38 |
| 25V | | | |
| 1250 | 10 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1255 | 16 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1260 | 25 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1265 | 50 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .66 |
| 1270 | 100 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .81 |
| 1280 | 250 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | 1.02 |
| 1290 | 500 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.38 |
| 1295 | 1000 | 1 $\frac{1}{16}$ x 2 $\frac{1}{2}$ | 1.98 |
| 50V | | | |
| 1300 | 2 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .54 |
| 1310 | 5 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1320 | 10 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1330 | 20 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1340 | 25 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .63 |
| 1350 | 50 | $\frac{1}{16}$ x 1 $\frac{1}{2}$ | .72 |
| 1360 | 100 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .84 |
| 1370 | 150 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .93 |
| 1380 | 250 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.05 |
| 1390 | 500 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.44 |
| 150V | | | |
| 1400 | 4 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1405 | 8 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .63 |
| 1410 | 10 | $\frac{3}{16}$ x 1 $\frac{3}{8}$ | .63 |
| 1420 | 12 | $\frac{3}{16}$ x 1 $\frac{3}{8}$ | .66 |
| 1430 | 16 | $\frac{1}{16}$ x 1 $\frac{1}{2}$ | .69 |
| 1440 | 20 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .72 |
| 1450 | 24 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .75 |
| 1460 | 30 | $\frac{3}{16}$ x 1 $\frac{1}{2}$ | .78 |
| 1470 | 40 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .81 |
| 1480 | 50 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .84 |
| 1490 | 60 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .90 |
| 1500 | 80 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .96 |
| 1510 | 100 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.05 |
| 1520 | 150 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.14 |
| 1530 | 200 | 1 $\frac{1}{16}$ x 3 | 1.32 |
| 1540 | 300 | 1 $\frac{1}{16}$ x 4 | 1.53 |
| 250V | | | |
| 1550 | 4 | $\frac{1}{16}$ x 1 $\frac{1}{4}$ | .60 |
| 1555 | 8 | $\frac{1}{16}$ x 1 $\frac{1}{2}$ | .69 |
| 1560 | 12 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .75 |
| 1565 | 16 | $\frac{3}{16}$ x 1 $\frac{1}{2}$ | .78 |
| 1570 | 20 | $\frac{3}{16}$ x 1 $\frac{1}{2}$ | .81 |
| 1575 | 30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | .87 |
| 1580 | 40 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | .93 |
| 1585 | 50 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.02 |
| 1590 | 60 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.08 |
| 1595 | 100 | 1 $\frac{1}{16}$ x 3 $\frac{1}{4}$ | 1.47 |

TYPE PRS—SINGLES (cont.)

| PRS No. | Cap. Mfd. | Size | Net Price★ |
|-------------|-----------|------------------------------------|------------|
| 350V | | | |
| 1600 | 4 | $\frac{1}{16}$ x 1 $\frac{1}{2}$ | .63 |
| 1610 | 8 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .72 |
| 1620 | 10 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .75 |
| 1630 | 12 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .78 |
| 1640 | 16 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .84 |
| 1650 | 24 | $\frac{3}{16}$ x 2 | .93 |
| 1660 | 30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | .99 |
| 1670 | 40 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.05 |
| 1680 | 50 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.11 |
| 1690 | 60 | 1 $\frac{1}{16}$ x 2 $\frac{1}{2}$ | 1.17 |
| 450V | | | |
| 1700 | 1 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .66 |
| 1705 | 2 | $\frac{3}{16}$ x 1 $\frac{1}{4}$ | .69 |
| 1710 | 4 | $\frac{1}{16}$ x 1 $\frac{1}{2}$ | .69 |
| 1715 | 8 | $\frac{1}{16}$ x 1 $\frac{3}{8}$ | .75 |
| 1720 | 10 | $\frac{1}{16}$ x 1 $\frac{3}{8}$ | .78 |
| 1725 | 12 | $\frac{3}{16}$ x 1 $\frac{3}{8}$ | .81 |
| 1730 | 16 | $\frac{3}{16}$ x 2 | .84 |
| 1735 | 20 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | .93 |
| 1740 | 30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.02 |
| 1750 | 40 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.08 |
| 1760 | 50 | $\frac{3}{16}$ x 3 $\frac{1}{4}$ | 1.26 |
| 1770 | 60 | 1 $\frac{1}{16}$ x 3 $\frac{1}{4}$ | 1.41 |
| 1780 | 80 | 1 $\frac{1}{16}$ x 3 $\frac{3}{4}$ | 1.68 |
| 1790 | 100 | 1 $\frac{1}{16}$ x 4 | 1.92 |
| 500V | | | |
| 1800 | 4 | $\frac{1}{16}$ x 2 | .72 |
| 1805 | 8 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .78 |
| 1810 | 10 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .81 |
| 1815 | 12 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | .84 |
| 1820 | 16 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | .90 |
| 1830 | 20 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | .96 |
| 1840 | 30 | 1 $\frac{1}{16}$ x 2 $\frac{3}{4}$ | 1.05 |
| 600V | | | |
| 1845 | 4 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.44 |
| 1850 | 8 | $\frac{3}{16}$ x 3 $\frac{1}{8}$ | 1.71 |
| 1860 | 10 | $\frac{3}{16}$ x 3 $\frac{1}{8}$ | 1.77 |
| 1870 | 12 | 1 $\frac{1}{16}$ x 3 $\frac{1}{8}$ | 1.89 |
| 1880 | 16 | 1 $\frac{1}{16}$ x 3 $\frac{3}{8}$ | 2.07 |
| 1890 | 20 | 1 $\frac{1}{16}$ x 3 $\frac{3}{8}$ | 2.13 |
| 700V | | | |
| 1900 | 8 | $\frac{3}{16}$ x 3 $\frac{1}{8}$ | 1.74 |
| 1905 | 10 | 1 $\frac{1}{16}$ x 3 $\frac{1}{8}$ | 1.83 |
| 1910 | 12 | 1 $\frac{1}{16}$ x 3 $\frac{3}{8}$ | 1.95 |
| 1915 | 16 | 1 $\frac{1}{16}$ x 3 $\frac{3}{8}$ | 2.10 |

TYPE PRS — DUALS

| PRS No. | Cap. Mfd. | Size | Net Price★ |
|-------------|-----------|------------------------------------|------------|
| 15V | | | |
| 2020 | 500-150 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | 1.62 |
| 25V | | | |
| 2050 | 10-10 | $\frac{1}{16}$ x 1 $\frac{1}{4}$ | .84 |
| 2075 | 20-20 | $\frac{1}{16}$ x 1 $\frac{1}{4}$ | .84 |
| 150V | | | |
| 2150 | 8-8 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .90 |
| 2155 | 16-8 | $\frac{1}{16}$ x 2 $\frac{1}{4}$ | .93 |
| 2160 | 20-10 | $\frac{3}{16}$ x 1 $\frac{1}{2}$ | .93 |
| 2165 | 20-20 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .99 |
| 2170 | 30-20 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.02 |
| 2175 | 30-30 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.08 |
| 2180 | 40-20 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.05 |
| 2190 | 40-30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.08 |
| 2195 | 40-40 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.08 |
| 2200 | 50-30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.17 |
| 2210 | 50-50 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.26 |
| 2220 | 80-20 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.29 |
| 2230 | 80-40 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.32 |
| 2240 | 80-50 | 1 $\frac{1}{16}$ x 2 $\frac{3}{4}$ | 1.41 |

TYPE PRS—DUALS (cont.)

| PRS No. | Cap. Mfd. | Size | Net Price★ |
|-------------|-----------|------------------------------------|------------|
| 2245 | 100-100 | 1 $\frac{1}{16}$ x 3 $\frac{1}{4}$ | 1.92 |
| 200V | | | |
| 2250 | 8-8 | $\frac{1}{16}$ x 1 $\frac{3}{4}$ | .90 |
| 2260 | 16-8 | $\frac{1}{16}$ x 2 $\frac{1}{4}$ | .96 |
| 2280 | 16-16 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.02 |
| 2290 | 30-30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.29 |
| 250V | | | |
| 2300 | 10-10 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | .99 |
| 2320 | 16-16 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.02 |
| 2330 | 20-20 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.11 |
| 2340 | 30-30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.35 |
| 300V | | | |
| 2345 | 50-10 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.50 |
| 450V | | | |
| 2350 | 8-8 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.02 |
| 2360 | 10-10 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.11 |
| 2370 | 16-8 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.20 |
| 2380 | 16-16 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.35 |
| 2390 | 20-20 | $\frac{3}{16}$ x 3 | 1.50 |
| 2400 | 30-30 | 1 $\frac{1}{16}$ x 3 $\frac{1}{4}$ | 1.80 |
| 2410 | 40-20 | 1 $\frac{1}{16}$ x 3 $\frac{1}{4}$ | 1.77 |
| 2420 | 40-40 | 1 $\frac{1}{16}$ x 4 | 2.01 |
| 2430 | 50-30 | 1 $\frac{1}{16}$ x 4 | 2.04 |

TYPE PRS — TRIPLES

| PRS No. | Cap. Mfd. | Size | Net Price★ |
|-------------|-------------|------------------------------------|------------|
| 15V | | | |
| 3200 | 500-100-100 | $\frac{1}{16}$ x 1 $\frac{3}{8}$ | 1.80 |
| 150V | | | |
| 3500 | 20-20-20 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.51 |
| 3550 | 30-25-20 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.51 |
| 3555 | 30-25-20 | 1 $\frac{1}{16}$ x 1 $\frac{3}{4}$ | 1.51 |
| 3560 | 30-30-20 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.58 |
| 3570 | 30-30-30 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.58 |
| 3600 | 40-20-20 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.58 |
| 3625 | 40-30-20 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.58 |
| 3650 | 40-40-20 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.63 |
| 3675 | 40-40-40 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.67 |
| 3700 | 50-30-10 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.58 |
| 3750 | 50-30-20 | 1 $\frac{1}{16}$ x 2 $\frac{1}{2}$ | 1.63 |
| 3800 | 80-40-20 | 1 $\frac{1}{16}$ x 2 $\frac{1}{2}$ | 1.74 |
| 3825 | 80-50-20 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.74 |
| 450V | | | |
| 3900 | 10-10-10 | 1 $\frac{1}{16}$ x 2 $\frac{3}{4}$ | 1.67 |

TYPE PRS — MULTIPLE VOLTAGES

| PRS No. | Cap. Mfd. | VCDW | Size | Net Price★ |
|---------|-----------|--------|------------------------------------|------------|
| 4150 | 40-40/250 | 150/10 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.71 |
| 4200 | 20-20/20 | 150/25 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.48 |
| 4300 | 30-20/20 | 150/25 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.50 |
| 4350 | 30-20/100 | 150/25 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.58 |
| 4400 | 40-20/20 | 150/25 | $\frac{3}{16}$ x 1 $\frac{3}{4}$ | 1.53 |
| 4425 | 40-30/20 | 150/25 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.55 |
| 4450 | 40-40/20 | 150/25 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.59 |
| 4475 | 40-40/100 | 150/25 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.67 |
| 4500 | 50-30/20 | 150/25 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.59 |
| 4525 | 50-30/100 | 150/25 | $\frac{3}{16}$ x 2 $\frac{1}{4}$ | 1.59 |
| 4550 | 50-30/250 | 150/25 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.67 |
| 4575 | 50-50/20 | 150/25 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.66 |
| 4600 | 80-20/100 | 150/25 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.69 |
| 4650 | 80-40/20 | 150/25 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.69 |
| 4700 | 20-20/20 | 450/25 | 1 $\frac{1}{16}$ x 2 $\frac{1}{4}$ | 1.86 |
| *4800 | 20/100 | 475/50 | 1 x 2 $\frac{1}{16}$ | 1.56 |

*No tube

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

TYPE PRS — AC Rated

AEROVOX

Capacitors

ELECTROLYTICS — (Continued)

TYPE PTT-PWE TUBULAR PLASTIC-CASED ELECTROLYTICS



Small in size big in performance, designed especially for wide applications in transistorized circuitry and cramped electronic assemblies, here is a truly

MINIATURE electrolytic tubular that will handle full sized loads. AEROVOX Type PTT-PWE units feature "Polycap" cases that are the next best thing to metal cans for maximum protection against humidity. Advanced construction techniques assure long capacitor life. Units are rated for operation at temperatures from -30°C to +65°C.

| Cap. | PTT # | 3 VDCW Size | PWE # | Net Price★ |
|------|--------|-------------|----------|------------|
| 1 | PTT 1 | A | PWE 3001 | .75 |
| 2 | PTT 2 | A | PWE 3002 | .75 |
| 3 | PTT 3 | A | PWE 3003 | .75 |
| 5 | PTT 4 | A | PWE 3005 | .75 |
| 8 | PTT 5 | A | PWE 3008 | .75 |
| 10 | PTT 6 | A | PWE 3010 | .75 |
| 15 | PTT 7 | A | PWE 3015 | .75 |
| 20 | PTT 8 | A | PWE 3020 | .75 |
| 25 | PTT 9 | A | PWE 3025 | .75 |
| 30 | PTT 10 | A | PWE 3030 | .75 |
| 40 | PTT 11 | A | PWE 3040 | .75 |
| 50 | PTT 12 | B | PWE 3050 | .75 |
| 100 | PTT 13 | C | PWE 3100 | .84 |
| 200 | PTT 14 | E | PWE 3200 | .87 |
| 250 | PTT 15 | F | PWE 3250 | .96 |
| 300 | PTT 16 | G | PWE 3300 | .99 |
| 500 | PTT 17 | K | PWE 3500 | 1.05 |

| Cap. | PTT # | 6 VDCW Size | PWE # | Net Price★ |
|------|--------|-------------|----------|------------|
| 1 | PTT 18 | A | PWE 6001 | .75 |
| 2 | PTT 19 | A | PWE 6002 | .75 |
| 3 | PTT 20 | A | PWE 6003 | .75 |
| 5 | PTT 21 | A | PWE 6005 | .75 |
| 8 | PTT 22 | A | PWE 6008 | .75 |
| 10 | PTT 23 | A | PWE 6010 | .75 |
| 15 | PTT 24 | A | PWE 6015 | .75 |
| 20 | PTT 25 | A | PWE 6020 | .75 |
| 25 | PTT 26 | B | PWE 6025 | .75 |
| 30 | PTT 27 | B | PWE 6030 | .75 |
| 40 | PTT 28 | C | PWE 6040 | .75 |
| 50 | PTT 29 | C | PWE 6050 | .75 |
| 100 | PTT 30 | E | PWE 6100 | .90 |
| 200 | PTT 31 | F | PWE 6200 | .96 |
| 250 | PTT 32 | H | PWE 6250 | 1.02 |
| 300 | PTT 33 | K | PWE 6300 | 1.05 |

| Cap. | PTT # | 10 VDCW Size | PWE # | Net Price★ |
|------|--------|--------------|-----------|------------|
| 1 | PTT 34 | A | PWE 10001 | .75 |
| 2 | PTT 35 | A | PWE 10002 | .75 |
| 3 | PTT 36 | A | PWE 10003 | .75 |
| 5 | PTT 37 | A | PWE 10005 | .75 |
| 8 | PTT 38 | A | PWE 10008 | .75 |
| 10 | PTT 39 | A | PWE 10010 | .75 |
| 15 | PTT 40 | A | PWE 10015 | .75 |
| 20 | PTT 41 | B | PWE 10020 | .75 |
| 25 | PTT 42 | C | PWE 10025 | .75 |
| 30 | PTT 43 | C | PWE 10030 | .75 |
| 40 | PTT 44 | C | PWE 10040 | .75 |
| 50 | PTT 45 | D | PWE 10050 | .75 |
| 100 | PTT 46 | E | PWE 10100 | .90 |
| 200 | PTT 47 | K | PWE 10200 | .99 |

| Cap. | PTT # | 12 VDCW Size | PWE # | Net Price★ |
|------|--------|--------------|-----------|------------|
| 1 | PTT 48 | A | PWE 12001 | .75 |
| 2 | PTT 49 | A | PWE 12002 | .75 |
| 3 | PTT 50 | A | PWE 12003 | .75 |
| 5 | PTT 51 | A | PWE 12005 | .75 |
| 8 | PTT 52 | A | PWE 12008 | .75 |
| 10 | PTT 53 | A | PWE 12010 | .75 |
| 15 | PTT 54 | B | PWE 12015 | .75 |
| 20 | PTT 55 | C | PWE 12020 | .75 |
| 25 | PTT 56 | C | PWE 12025 | .75 |
| 30 | PTT 57 | C | PWE 12030 | .75 |

| Cap. | PTT # | 12VDCW (Continued) Size | PWE # | Net Price★ |
|------|--------|-------------------------|-----------|------------|
| 40 | PTT 58 | C | PWE 12040 | .75 |
| 50 | PTT 59 | E | PWE 12050 | .75 |
| 100 | PTT 60 | H | PWE 12100 | .90 |

| Cap. | PTT # | 15 VDCW Size | PWE # | Net Price★ |
|------|--------|--------------|-----------|------------|
| 1 | PTT 61 | A | PWE 15001 | .75 |
| 2 | PTT 62 | A | PWE 15002 | .75 |
| 3 | PTT 63 | A | PWE 15003 | .75 |
| 5 | PTT 64 | A | PWE 15005 | .75 |
| 8 | PTT 65 | A | PWE 15008 | .75 |
| 10 | PTT 66 | B | PWE 15010 | .75 |
| 15 | PTT 67 | B | PWE 15015 | .75 |
| 20 | PTT 68 | C | PWE 15020 | .75 |
| 25 | PTT 69 | C | PWE 15025 | .75 |
| 30 | PTT 70 | C | PWE 15030 | .75 |
| 40 | PTT 71 | C | PWE 15040 | .75 |
| 50 | PTT 72 | E | PWE 15050 | .75 |
| 100 | PTT 73 | H | PWE 15100 | .90 |

| Cap. | PTT # | 25 VDCW Size | PWE # | Net Price★ |
|------|--------|--------------|-----------|------------|
| 1 | PTT 74 | A | PWE 25001 | .75 |
| 2 | PTT 75 | A | PWE 25002 | .75 |
| 3 | PTT 76 | A | PWE 25003 | .75 |
| 5 | PTT 77 | A | PWE 25005 | .75 |
| 8 | PTT 78 | A | PWE 25008 | .75 |
| 10 | PTT 79 | B | PWE 25010 | .75 |
| 15 | PTT 80 | C | PWE 25015 | .75 |
| 20 | PTT 81 | C | PWE 25020 | .75 |
| 25 | PTT 82 | C | PWE 25025 | .75 |
| 30 | PTT 83 | D | PWE 25030 | .75 |
| 40 | PTT 84 | D | PWE 25040 | .81 |
| 50 | PTT 85 | E | PWE 25050 | .84 |
| 100 | PTT 86 | J | PWE 25100 | 1.02 |

| Cap. | PTT # | 50 VDCW Size | PWE # | Net Price★ |
|------|--------|--------------|-----------|------------|
| 1 | PTT 87 | A | PWE 50001 | .75 |
| 2 | PTT 88 | A | PWE 50002 | .75 |
| 3 | PTT 89 | A | PWE 50003 | .75 |
| 5 | PTT 90 | B | PWE 50005 | .75 |
| 8 | PTT 91 | C | PWE 50008 | .75 |
| 10 | PTT 92 | C | PWE 50010 | .75 |
| 15 | PTT 93 | D | PWE 50015 | .75 |
| 20 | PTT 94 | D | PWE 50020 | .75 |
| 25 | PTT 95 | F | PWE 50025 | .81 |
| 30 | PTT 96 | H | PWE 50030 | .81 |
| 40 | PTT 97 | K | PWE 50040 | .87 |
| 50 | PTT 98 | K | PWE 50050 | .90 |

| SIZE CHART | |
|------------|-------------|
| A | 1/4 x 3/4 |
| B | 3/8 x 3/4 |
| C | 3/8 x 3/4 |
| D | 3/8 x 7/8 |
| E | 3/8 x 1 |
| F | 3/8 x 1 1/8 |
| G | 3/8 x 1 1/8 |
| H | 3/8 x 1 1/2 |
| J | 3/8 x 1 3/4 |
| K | 3/8 x 2 |

TYPE B C D UPRIGHT MOUNTING PLASTIC CASED ELECTROLYTICS



"Polycap" cased, epoxy end filled electrolytic capacitors. Upright mounting for replacement in printed wiring, transistorized personal radios and car radios.

Small size and type of mounting make these units ideal for use in any printed wiring circuit.

Plastic case and epoxy end seal offer good moisture barrier which protects against drying out or leakage of electrolyte. High purity foil insures long life and low leakage.

Minimum 1" lead length assists in threading connections into printed wiring boards even in tightest spaces.

Positive lead is identified by a + (plus) mark on case.

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|--------------|---------|------|------------|
| 3VDCW | | | |
| 1 | 3001 | A | .87 |
| 2 | 3002 | A | .87 |
| 3 | 3003 | A | .87 |
| 4 | 3004 | A | .87 |
| 5 | 3005 | A | .87 |
| 6 | 3006 | A | .87 |
| 8 | 3008 | A | .87 |
| 10 | 3010 | A | .87 |
| 15 | 3015 | A | .87 |
| 20 | 3020 | A | .87 |
| 25 | 3025 | A | .87 |
| 35 | 3035 | A | .90 |
| 50 | 3050 | A | .93 |
| 75 | 3075 | A | 1.02 |
| 100 | 3100 | B | 1.05 |
| 150 | 3150 | C | 1.05 |
| 200 | 3200 | C | 1.08 |
| 250 | 3250 | D | 1.17 |
| 300 | 3300 | D | 1.20 |
| 5VNP | | | |
| 5 | 5005 | B | 1.08 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|--------------|---------|------|------------|
| 6VDCW | | | |
| 1 | 6001 | A | .87 |
| 2 | 6002 | A | .87 |
| 3 | 6003 | A | .87 |
| 4 | 6004 | A | .87 |
| 5 | 6005 | A | .87 |
| 6 | 6006 | A | .87 |
| 8 | 6008 | A | .87 |
| 10 | 6010 | A | .87 |
| 15 | 6015 | A | .87 |
| 20 | 6020 | A | .87 |
| 25 | 6025 | A | .87 |
| 35 | 6035 | A | .90 |
| 50 | 6050 | A | .93 |
| 75 | 6075 | B | 1.02 |
| 100 | 6100 | C | 1.05 |
| 150 | 6150 | D | 1.14 |
| 200 | 6200 | D | 1.17 |
| 100-30 | 6x10030 | E | 1.17 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|---------------|---------|------|------------|
| 10 VNP | | | |
| 5 | 10005 | G | 1.11 |
| 10VDCW | | | |
| 10 | 10010 | A | .87 |
| 25 | 10025 | A | .90 |
| 50 | 10050 | B | .96 |
| 80 | 10080 | C | 1.02 |
| 100 | 10100 | C | 1.08 |
| 190 | 10190 | E | 1.17 |
| 50-30 | 10x5030 | D | 1.05 |
| 50-50 | 10x5050 | D | 1.11 |
| 80-50 | 10x8050 | D | 1.17 |
| 80-80 | 10x8080 | D | 1.20 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|---------------|---------|------|------------|
| 12VDCW | | | |
| 1 | 12001 | A | .87 |
| 2 | 12002 | A | .87 |
| 3 | 12003 | A | .87 |
| 4 | 12004 | A | .87 |
| 5 | 12005 | A | .90 |
| 6 | 12006 | A | .90 |
| 8 | 12008 | A | .90 |
| 10 | 12010 | A | .90 |
| 15 | 12015 | A | .93 |
| 20 | 12020 | A | .93 |
| 25 | 12025 | A | .93 |
| 35 | 12035 | A | .93 |
| 50 | 12050 | B | .99 |
| 75 | 12075 | C | 1.05 |
| 100 | 10100 | D | 1.14 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|---------------------------|---------|------|------------|
| 12VDCW (Continued) | | | |
| 150 | 12150 | E | 1.17 |
| 250 | 12250 | K | 1.26 |
| 500 | 12500 | F | 1.32 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|---------------|---------|------|------------|
| 15VDCW | | | |
| 1 | 15001 | A | .87 |
| 2 | 15002 | A | .87 |
| 3 | 15003 | A | .87 |
| 4 | 15004 | A | .87 |
| 5 | 15005 | A | .90 |
| 6 | 15006 | A | .90 |
| 8 | 15008 | A | .90 |
| 10 | 15010 | A | .90 |
| 15 | 15015 | A | .93 |
| 20 | 15020 | A | .93 |
| 25 | 15025 | A | .93 |
| 35 | 15035 | B | .93 |
| 50 | 15050 | C | .99 |
| 75 | 15075 | D | 1.08 |
| 100 | 15100 | D | 1.17 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|------------|---------|------|------------|
| 100 | 18100 | H | 1.17 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|------------|---------|------|------------|
| 200 | 20200 | J | 1.26 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|---------------|---------|------|------------|
| 25VDCW | | | |
| 1 | 25001 | A | .90 |
| 2 | 25002 | A | .90 |
| 3 | 25003 | A | .93 |
| 4 | 25004 | A | .99 |
| 5 | 25005 | A | .99 |
| 6 | 25006 | A | .99 |
| 8 | 25008 | A | .99 |
| 10 | 25010 | B | .99 |
| 15 | 25015 | B | .99 |
| 20 | 25020 | B | .99 |
| 25 | 25025 | B | .99 |
| 35 | 25035 | C | 1.05 |
| 50 | 25050 | D | 1.05 |
| 75 | 25075 | D | 1.17 |

| Cap. Mfds. | BCD No. | Size | Net Price★ |
|----------------|---------|------|------------|
| 50 VDCW | | | |
| 1 | 50001 | A | .90 |
| 2 | 50002 | A | .90 |
| 3 | 50003 | A | .93 |
| 4 | 50004 | A | .99 |
| 5 | 50005 | A | .99 |
| 6 | 50006 | A | .99 |
| 8 | 50008 | A | .99 |
| 10 | 50010 | B | .99 |
| 15 | 50015 | C | .99 |
| 20 | 50020 | C | .99 |
| 25 | 50025 | D | .99 |

| SIZE CODE | LEAD SPACING | |
|---------------|--------------|---------|
| | Diameter | Spacing |
| A—3/8 x 3/8 | | |
| B—3/8 x 3/4 | | |
| C—7/8 x 3/4 | | |
| D—1/2 x 3/4 | | |
| E—1/2 x 7/8 | 3/8 | .187 |
| F—5/8 x 1 1/8 | 3/8 | .250 |
| G—1/2 x 1 1/8 | 1/2 | .312 |
| H—5/8 x 3/4 | | |
| J—5/8 x 1 1/8 | | |
| K—1/2 x 1 1/4 | | |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 100, 100 to 249

AEROVOX

Capacitors

ELECTROLYTICS — (Continued)



Type SRE "Bantam" Metal Tubular Electrolytics

Although smaller than the PRS the SRE handles full size loads at operating temperature range of 0°C to 85°C at rated voltage. Sealed in aluminum cans and furnished with a cardboard insulating sleeve. Negative grounded to can. If required without tube specify type SREN.

| Cap. | Size | Net Price★ | Cap. | Size | Net Price★ |
|------------|-------------|------------|---|-------------|------------|
| 3V | | | | | |
| 25 | 3/8 x 1 | .51 | 25V (Continued) | | |
| 50 | 3/8 x 1 | .57 | 50 | 1/2 x 1 | .66 |
| 100 | 3/8 x 1 | .66 | 100 | 1/2 x 1 1/8 | .81 |
| 200 | 3/8 x 1 1/8 | .69 | 50V | | |
| 300 | 1/2 x 1 1/8 | .78 | 1 | 3/8 x 1 | .54 |
| 500 | 1/2 x 1 1/8 | .84 | 2 | 3/8 x 1 | .54 |
| 6V | | | | | |
| 5 | 3/8 x 1 | .48 | 5 | 3/8 x 1 | .60 |
| 25 | 3/8 x 1 | .51 | 10 | 3/8 x 1 | .60 |
| 50 | 3/8 x 1 | .57 | 15 | 3/8 x 1 1/8 | .60 |
| 100 | 1/2 x 1 1/8 | .72 | 25 | 1/2 x 1 | .63 |
| 250 | 1/2 x 1 1/8 | .81 | 70V | | |
| 12V | | | | | |
| 50 | 3/8 x 1 1/8 | .60 | 10 | 3/8 x 1 | .63 |
| 100 | 1/2 x 1 | .72 | 5 | 3/8 x 1 1/8 | .60 |
| 200 | 1/2 x 1 1/8 | .81 | 10 | 3/8 x 1 1/8 | .63 |
| 15V | | | | | |
| 100 | 1/2 x 1 1/8 | .75 | 15 | 1/2 x 1 1/8 | .69 |
| 25V | | | | | |
| 5 | 3/8 x 1 | .60 | 20 | 1/2 x 1 1/8 | .72 |
| 10 | 3/8 x 1 | .60 | 25 | 1/2 x 1 1/8 | .75 |
| 20 | 3/8 x 1 | .60 | ★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 100, 100 to 249 | | |
| 25 | 3/8 x 1 | .60 | | | |



TYPE AEP Plug-in Electrolytic Capacitors

Hermetically sealed, dry electrolytic capacitor furnished in round, aluminum can and 4-pin, octal-base mounting. For quick changes, readily removed and replaced in a standard octal-base tube socket.

For use where continuous service is important. They are ideally suited for experimental testing, juke boxes and communication receiver uses. These in MIL Specification C62A. Units are the commercial equivalents of Type CE51's, 2's and 3's, as listed Operating temperature to +65°C. Quadruple element units furnished with ground lug for cathode connection.

| Type | Capacity | Mfd. | VDCW | Diam. x Hght. | Net Price★ |
|--------------------------------|-------------|--------|--------|---------------|------------|
| SINGLE ELEMENT UNITS | | | | | |
| AEP400P | 2000 | 15 | 15 | 1 1/2 x 2 1/2 | 3.43 |
| AEP5A | 25 | 25 | 15 1/2 | 1 1/2 x 2 1/2 | 2.29 |
| AEP4D | 20 | 150 | 1 1/2 | 1 1/2 x 2 1/2 | 2.29 |
| AEP8D | 40 | 150 | 1 1/2 | 1 1/2 x 2 1/2 | 2.33 |
| AEP80D | 400 | 150 | 1 1/2 | 1 1/2 x 3 1/2 | 3.45 |
| AEP2J | 10 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.34 |
| AEP3J | 15 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.39 |
| AEP4J | 20 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.44 |
| AEP6J | 30 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.53 |
| AEP8J | 40 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.77 |
| AEP16J | 80 | 450 | 1 1/2 | 1 1/2 x 3 1/2 | 3.25 |
| AEP2L | 10 | 600 | 1 1/2 | 1 1/2 x 4 1/4 | 2.84 |
| DUAL ELEMENT UNITS | | | | | |
| AEP44D | 20-20 | 50 | 1 1/2 | 1 1/2 x 2 1/2 | 2.46 |
| AEP88D | 40-40 | 150 | 1 1/2 | 1 1/2 x 2 1/2 | 2.54 |
| AEP22J | 10-10 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.57 |
| AEP44J | 20-20 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.90 |
| AEP62J | 30-10 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.97 |
| AEP88J | 40-40 | 450 | 1 1/2 | 1 1/2 x 3 | 3.31 |
| TRIPLE ELEMENT UNITS | | | | | |
| AEP444D | 20-20-20 | 150 | 1 1/2 | 1 1/2 x 2 1/2 | 2.81 |
| AEP884D | 40-40-20 | 150/25 | 1 1/2 | 1 1/2 x 2 1/2 | 2.67 |
| AEP222J | 10-10-10 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 2.78 |
| AEP22J4A | 10-10-20 | 450/25 | 1 1/2 | 1 1/2 x 2 1/2 | 2.69 |
| AEP44J4A | 20-20-20 | 450/25 | 1 1/2 | 1 1/2 x 2 1/2 | 3.03 |
| AEP444J | 20-20-20 | 450 | 1 1/2 | 1 1/2 x 3 | 3.29 |
| AEP822J | 40-10-10 | 450 | 1 1/2 | 1 1/2 x 3 | 3.23 |
| QUADRUPLE ELEMENT UNITS | | | | | |
| AEPG4444D | 20-20-20/20 | 150/25 | 1 1/2 | 1 1/2 x 2 1/2 | 2.87 |
| AEPG2222J | 10-10-10-10 | 450 | 1 1/2 | 1 1/2 x 2 1/2 | 3.11 |
| AEPG4444J | 20-20-20/20 | 450/25 | 1 1/2 | 1 1/2 x 3 | 3.34 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249



TYPE G Insulated Screw-Mounting Capacitors

Hermetically-sealed aluminum can unit, threaded cover size 7/8-16 with hex nut and washer for convenient mounting on chassis. Washer can be used to insulate can from chassis. Terminals molded in cover. Cathode connection thru terminal in cover. These units are the commercial equivalent of case style CE41 and 42 of specification MIL C62A.

| Cap. Mfd. | Size—DxH | Net Price★ | Cap. Mfd. | Size—DxH | Net Price★ |
|-------------------------|---------------|------------|-------------------------|---------------|------------|
| SINGLE TYPE G450 | | | | | |
| | 450 | 525V. | | | |
| | VDCW | Surge Peak | | | |
| 10 | 1 1/8 x 2 1/4 | 2.54 | SINGLE TYPE G500 | | |
| 20 | 1 1/8 x 2 1/4 | 2.64 | 500 | 550V. | |
| 40 | 1 1/8 x 2 3/4 | 2.83 | VDCW | Surge Peak | |
| 80 | 1 1/8 x 4 1/4 | 3.31 | 10 | 1 3/8 x 2 1/4 | 2.60 |
| DUAL TYPE G-450 | | | | | |
| | | | 450 | 525V. | |
| | | | VDCW | Surge Peak | |
| 10-10 | 1 1/8 x 2 1/4 | 3.05 | 10-10 | 1 1/8 x 2 1/4 | 3.05 |
| 20-20 | 1 1/8 x 2 3/4 | 3.26 | 20-20 | 1 1/8 x 2 3/4 | 3.26 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249



TYPE FF Photo-Flash Capacitors

Selective choice of highest purity materials makes these units ideal for rugged photoflash application calling for lowest leakage requirements. Type FF-1 furnished in molded black plastic container, type FF-2 in aluminum can with black glazed tubing; both units furnished with screw lug terminals. Highly resistant to moisture and oil. Surge voltages and time duty cycles as listed in EIA specification No. RS-154.

| Type Number | Cap. Mfd. | Working Voltage | Surge Voltage | Watt Secs. | Size | Net Price★ |
|-------------|-----------|-----------------|---------------|------------|---------------|------------|
| FF-1 | 300 | 450 | 525 | 30 | 2 1/4 x 4 3/8 | 8.85 |
| FF-2 | 525 | 450 | 525 | 53 | 2 1/4 x 4 3/8 | 13.02 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

TYPE GL

These ever-popular inverted-mounting, aluminum can units, are furnished with the same high purity materials as the more expensive type E and G. Two separate color-coded leads 4" long for each section. Inverted chassis mounting can be made, using palnut and threaded neck. Threaded neck size 5/8-18.



SINGLE ELEMENT

| Cap. Mfd. | Size—DxH | Net Price★ |
|---------------------------|---------------|------------|
| TYPE GL600 | | |
| 800 VDCW 750V. Surge Peak | | |
| 4 | 1 1/8 x 4 | 1.71 |
| 8 | 1 1/8 x 4 1/2 | 1.85 |
| 16 | 1 1/8 x 4 1/2 | 2.37 |
| TYPE GL475 | | |
| 475 VDCW 550V. Surge Peak | | |
| 8 | 1 1/8 x 3 | 1.52 |
| 12 | 1 1/8 x 3 | 1.61 |
| 16 | 1 1/8 x 3 | 1.66 |
| TYPE GL450 | | |
| 450 VDCW 525V. Surge Peak | | |
| 4 | 1 1/8 x 3 | 1.50 |
| 8 | 1 1/8 x 3 | 1.54 |
| 10 | 1 1/8 x 3 | 1.56 |
| 12 | 1 1/8 x 3 | 1.58 |
| 16 | 1 1/8 x 3 | 1.62 |
| 20 | 1 1/8 x 3 | 1.66 |
| 30 | 1 1/8 x 3 | 1.76 |
| 40 | 1 1/8 x 3 | 1.86 |
| 80 | 1 1/8 x 4 | 2.46 |

DUAL ELEMENT

| Cap. Mfd. | Size—DxH | Net Price★ |
|-----------------------|-----------|------------|
| TYPE GL475 | | |
| 8-8 | 1 1/8 x 4 | 1.76 |
| TYPE GL450 | | |
| 8-8 | 1 1/8 x 4 | 1.73 |
| 10-10 | 1 1/8 x 4 | 1.77 |
| 12-12 | 1 1/8 x 4 | 1.81 |
| 16-8 | 1 1/8 x 4 | 1.81 |
| 16-16 | 1 1/8 x 4 | 1.90 |
| 20-20 | 1 1/8 x 4 | 1.88 |
| TRIPLE ELEMENT | | |
| TYPE GL450 | | |
| 8-8-8 | 1 1/8 x 4 | 1.93 |
| 10-10-10 | 1 1/8 x 4 | 1.98 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

AEROVOX*Capacitors***ELECTROLYTICS — (Continued)**
TYPES HCB and NPB
High Capacity Low Voltage
Bakelite Cased Electrolytics

Type HCB units are polarized electrolytic capacitors designed for use in industrial applications such as battery eliminators, power supplies, electric fence controls and sound movie projectors. For non-polarized applications in welding and control equipment Type NPB units are available.

Both types feature heavy-duty, moisture resistant bakelite cases which eliminate the need for outer cardboard insulating tubes. Operating temperature range from -40°C to $+85^{\circ}\text{C}$. Capacitance tolerance up to 150 VDCW -10% $+100\%$, over 150 VDCW -10% -50% . High capacity etched plate construction assures long trouble-free operation. Units supplied with wrap around-footed brackets for vertical mtg.—horizontal mtg. available on Special Order.

TYPE HCB

| Capacity MFD | Size | Net Price★ |
|--------------------------|---------------------------------------|------------|
| 6 VDCW—8V Surge | | |
| 12000 | 1 $\frac{1}{2}$ " x 4 $\frac{3}{8}$ " | 8.16 |
| 12 VDCW—18V Surge | | |
| 500 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 2.70 |
| 1000 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 2.94 |
| 2000 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 3.36 |
| 3000 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 3.96 |
| 4000 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 4.60 |
| 6000 | 1 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " | 5.20 |
| 10000 | 1 $\frac{3}{8}$ " x 4 $\frac{3}{8}$ " | 7.82 |

18 VDCW—25V Surge

| | | |
|------|---------------------------------------|------|
| 500 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 2.89 |
| 1000 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 3.31 |
| 1500 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 3.39 |
| 2000 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 3.47 |
| 4000 | 1 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " | 5.37 |
| 6000 | 1 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " | 5.62 |

25 VDCW—40V Surge

| | | |
|------|---------------------------------------|------|
| 500 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 2.89 |
| 1000 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 3.19 |
| 1250 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 3.43 |
| 2000 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 4.15 |
| 3000 | 1 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " | 4.88 |
| 4000 | 1 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " | 5.58 |
| 6000 | 1 $\frac{3}{8}$ " x 4 $\frac{3}{8}$ " | 7.12 |

HCB (Continued)

| Capacity MFD | Size | Net Price★ |
|----------------------------|---------------------------------------|------------|
| 50 VDCW—75V Surge | | |
| 500 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 3.33 |
| 1000 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 4.25 |
| 2000 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 5.06 |
| 3000 | 1 $\frac{1}{8}$ " x 4 $\frac{3}{8}$ " | 7.00 |
| 4000 | 2 $\frac{1}{8}$ " x 4 $\frac{3}{8}$ " | 7.32 |
| 150 VDCW—185V Surge | | |
| 1000 | 1 $\frac{3}{8}$ " x 4 $\frac{3}{8}$ " | 6.44 |

TYPE NPB

| MFD Capacity | Size | Net Price★ |
|---------------------------|---------------------------------------|------------|
| 125 VNP—175V Surge | | |
| 200 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 4.04 |
| 300 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 4.87 |
| 500 | 1 $\frac{3}{8}$ " x 4 $\frac{3}{8}$ " | 6.30 |
| 300 VNP—375V Surge | | |
| 15 | 1 $\frac{1}{8}$ " x 2 $\frac{3}{4}$ " | 2.87 |
| 100 | 1 $\frac{1}{8}$ " x 3 $\frac{3}{8}$ " | 6.13 |
| 200 | 2 $\frac{1}{8}$ " x 4 $\frac{3}{8}$ " | 7.00 |
| 450 VNP—525V Surge | | |
| 50 | 1 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " | 6.30 |
| 100 | 2 $\frac{1}{8}$ " x 4 $\frac{3}{8}$ " | 7.70 |


TYPE E
Hermetically-Sealed,
Aluminum, Round
Metal-Cased Capacitors

Can be mounted with terminals upright or inverted by use of a ring-type clamp provided with unit. Can is floating, thus having two terminals on single-section capacitors, three on duals, and four on triples.

These units are the commercial equivalent of case style CE31, 2 and 3 of MIL Specification C62A.

SINGLE ELEMENT

| Cap. Mfd. | Can Size Dia. x Hght. | Net Price★ |
|-----------------|---------------------------------------|------------|
| 450 VDCW | | |
| 10 | 1" x 2 $\frac{1}{4}$ " | 1.87 |
| 20 | 1" x 2 $\frac{3}{4}$ " | 1.97 |
| 40 | 1 $\frac{3}{8}$ " x 2 $\frac{3}{4}$ " | 2.37 |
| 80 | 1 $\frac{3}{8}$ " x 4 $\frac{1}{4}$ " | 2.82 |
| 250 VDCW | | |
| 500 | 2" x 4 $\frac{1}{8}$ " | 4.27 |
| 50 VDCW | | |
| 10 | 1" x 1 $\frac{3}{4}$ " | 1.77 |
| 25 | 1" x 1 $\frac{3}{4}$ " | 1.79 |
| 25 VDCW | | |
| 10 | 1" x 1 $\frac{3}{4}$ " | 1.77 |
| 25 | 1" x 1 $\frac{3}{4}$ " | 1.78 |
| 1 VNP | | |
| 1250 | 1 $\frac{3}{8}$ " x 4 $\frac{1}{4}$ " | 3.10 |

DUAL ELEMENT

| Cap. Mfd. | Can Size Dia. x Hght. | Net Price★ |
|-----------------|---------------------------------------|------------|
| 450 VDCW | | |
| 10-10 | 1 $\frac{3}{8}$ " x 2 $\frac{1}{4}$ " | 2.43 |
| 20-20 | 1 $\frac{3}{8}$ " x 2 $\frac{3}{4}$ " | 2.64 |

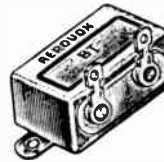
TRIPLE ELEMENT

| | | |
|--------------------|---------------------------------------|------|
| 450 VDCW | | |
| 10-10-10 | 1 $\frac{3}{8}$ " x 2 $\frac{1}{4}$ " | 2.92 |
| 350/50 VDCW | | |
| 30-30/50 | 1 $\frac{3}{8}$ " x 4 $\frac{1}{4}$ " | 3.14 |

QUADRUPLE ELEMENT

| | | |
|---------------------|---------------------------------------|------|
| 350/150 VDCW | | |
| 20-10-5-5 | 1 $\frac{3}{8}$ " x 4 $\frac{1}{4}$ " | 3.03 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249


TYPE BT
Drawn-Case "Bathtub"
Electrolytic Capacitors

Hermetically-sealed units designed for rigid mounting in minimum space. Of sturdy construction, these high-quality units are commercial equivalent to the case style CE63 of MIL Specification C62A.

| Capacity Mfd. | L x W x H | Net Price★ |
|----------------------------|---|------------|
| TYPE BT500 500 VDCW | | |
| 4 | 2" x 2" x 1 $\frac{1}{8}$ " | 2.87 |
| 8 | 2" x 1 $\frac{3}{4}$ " x 1 $\frac{1}{8}$ " | 2.94 |
| TYPE BT450 450 VDCW | | |
| 8 | 1 $\frac{3}{4}$ " x 1" x 1" | 2.64 |
| 12 | 1 $\frac{3}{4}$ " x 1 $\frac{1}{4}$ " x 1" | 2.70 |
| 16 | 2" x 1 $\frac{3}{4}$ " x 1" | 3.03 |
| TYPE BT350 350 VDCW | | |
| 8 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.58 |
| 12 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.65 |
| 16 | 1 $\frac{3}{4}$ " x 1" x 1" | 2.72 |
| 20 | 1 $\frac{3}{4}$ " x 1 $\frac{1}{4}$ " x 1 $\frac{1}{8}$ " | 2.75 |
| TYPE BT150 150 VDCW | | |
| 8 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.44 |
| 12 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.47 |
| 16 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.50 |
| 24 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.55 |
| 30 | 1 $\frac{3}{4}$ " x 1" x 1" | 2.58 |
| 40 | 1 $\frac{3}{4}$ " x 1" x 1" | 2.61 |
| TYPE BT50 50 VDCW | | |
| 10 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.41 |
| 25 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.43 |
| 50 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.53 |
| TYPE BT25 25 VDCW | | |
| 10 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.41 |
| 25 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.43 |
| 50 | 1 $\frac{3}{4}$ " x 1" x $\frac{7}{8}$ " | 2.47 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 249

AEROVOX*Capacitors***ELECTROLYTICS — (Continued)****TYPE QE**
Energy Storage and
Computer Grade Electrolytics

Precisely engineered for high reliability and long operating life, QE capacitors have a life expectancy of greater than 10 years when operated within ratings. Units are rated for operation at temperatures from -20°C to $+85^{\circ}\text{C}$. Manufactured in drawn aluminum cases in four diameters and one standard $4\frac{1}{8}$ " height to facilitate bus bar connections for purposes of ganging units in banks. Units find wide application in computers, power supplies, telephone networks and industrial electronic equipment.

MAXIMUM RATINGS IN MFD

| VDCW | Surge | A— $1\frac{1}{8}$ " Diameter | B— $2\frac{1}{8}$ " Diameter | C— $2\frac{3}{8}$ " Diameter | D— $3\frac{1}{8}$ " Diameter |
|------|-------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 5 | 7 | 8,500 | 25,000 | 45,000 | 65,000 |
| 10 | 13 | 6,500 | 17,000 | 32,000 | 40,000 |
| 15 | 20 | 6,000 | 15,000 | 25,000 | 36,000 |
| 25 | 40 | 4,000 | 8,000 | 15,000 | 25,000 |
| 35 | 45 | 2,000 | 5,000 | 8,000 | 12,000 |
| 50 | 65 | 1,750 | 4,250 | 7,000 | 10,000 |
| 75 | 100 | 1,000 | 2,500 | 4,250 | 6,000 |
| 100 | 135 | 675 | 1,950 | 3,500 | 4,500 |
| 150 | 185 | 600 | 1,250 | 2,400 | 3,250 |
| 200 | 250 | 300 | 900 | 1,450 | 2,250 |
| 250 | 300 | 250 | 700 | 1,250 | 2,000 |
| 300 | 350 | 200 | 575 | 1,050 | 1,600 |
| 350 | 400 | 170 | 450 | 750 | 1,200 |
| 400 | 475 | 150 | 350 | 625 | 1,000 |
| 450 | 525 | 125 | 300 | 550 | 850 |

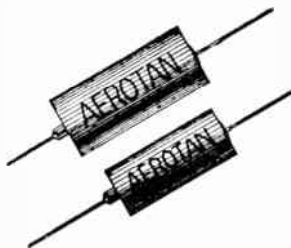
All units are $4\frac{1}{2}$ inches in height over insulating tube. Diameters measured over insulating tube. Bare can size is obtained by subtracting $\frac{1}{16}$ " from diameter and $\frac{3}{8}$ " from height.

STOCK LISTING*

| Cat. No. | VDCW | Cap. Mfd. | Size | Net Price★ |
|-------------|------|-----------|------|------------|
| QE15A-6 | 15 | 6,000 | A | 4.98 |
| QE15B-13P5 | 15 | 13,500 | B | 7.86 |
| QE15C-22 | 15 | 22,000 | C | 11.61 |
| QE15D-33 | 15 | 33,000 | D | 13.26 |
| QE25C-15 | 25 | 15,000 | C | 12.00 |
| QE25D-25 | 25 | 25,000 | D | 13.20 |
| QE35A-2 | 35 | 2,000 | A | 4.20 |
| QE35B-5 | 35 | 5,000 | B | 6.90 |
| QE35C-8 | 35 | 8,000 | C | 10.05 |
| QE35D-12 | 35 | 12,000 | D | 12.45 |
| QE50A-1P75 | 50 | 1,750 | A | 4.44 |
| QE50C-5P5 | 50 | 5,500 | C | 9.00 |
| QE50C-6P5 | 50 | 6,500 | C | 10.05 |
| QE50D-9 | 50 | 9,000 | D | 12.00 |
| QE150A-P4 | 150 | 400 | A | 3.96 |
| QE150A-P5 | 150 | 500 | A | 4.53 |
| QE250C-1 | 250 | 1,000 | C | 11.55 |
| QE350C-P7 | 350 | 700 | C | 10.65 |
| QE350D-1 | 350 | 1,000 | D | 13.80 |
| QE450A-P125 | 450 | 125 | A | 5.61 |

*For values other than those shown above, contact your authorized Aerovox Distributor or Aerovox Corporation, Distributor Division, New Bedford, Mass.

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

"AEROTAN" SOLID TANTALUM CAPACITORS
Type ST12 (uninsulated) Type ST13 (insulated)

Aerotan capacitors are solid electrolyte units featuring sintered tantalum anodes and hermetically sealed in metal cases. The use of a semiconductor electrolyte provides an assembly that is completely dry with absolute freedom from corrosion or electrolyte leakage. All Aerotan units offer excellent stability, high reliability, rugged construction, subminiature sizes and long shelf life. Units are designed to meet all the requirements of MIL-C-26655A. Continuous operation over the temperature range of -80° to $+125^{\circ}\text{C}$. Voltage ratings of 6, 10, 15, 20 and 35 VDC are for $+65^{\circ}\text{C}$ operation. Standard tolerance $\pm 20\%$. Also available at $\pm 10\%$.

SURGE VOLTAGE

| Rated Voltage | 65°C Surge Voltage | 85°C Surge Voltage | 125°C Surge Voltage |
|---------------|-----------------------|-----------------------|------------------------|
| 6 VDC | 8 VDC | 8 VDC | 5 VDC |
| 10 VDC | 12 VDC | 12 VDC | 9 VDC |
| 15 VDC | 17 VDC | 16 VDC | 12 VDC |
| 20 VDC | 23 VDC | 21 VDC | 16 VDC |
| 35 VDC | 41 VDC | 35 VDC | 24 VDC |

CASE SIZES

| Case Size | ST12 Dimensions Uninsulated Case | ST13 Dimensions Insulated Case | Lead Diam. |
|-----------|-------------------------------------|-----------------------------------|------------------------------------|
| | L $\pm .031$ " | D $\pm .016$ " — .010" | L $\pm .031$ " |
| | | | D $\pm .016$ " — .010" |
| | | | Lead Diam. $\pm .005$ " — .001" |
| A | .250" | .125" | .322" |
| B | .438" | .175" | .510" |
| C | .650" | .279" | .722" |
| D | .750" | .341" | .822" |

STOCK LISTING

| CAP. MFD. | Net Price★ | Net Price★ | Net Price★ | Net Price★ | Net Price★ | Net Price★ |
|-----------|------------|------------|------------|------------|------------|------------|
| 6 VDCW | 10 VDCW | 15 VDCW | 20 VDCW | 35 VDCW | | |
| .039 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .047 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .056 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .068 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .082 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .1 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .12 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .15 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .18 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| .22 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| .27 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| .33 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| .39 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| .47 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| .56 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| .68 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| .82 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 | A* 1.41 |
| 1.0 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| 1.2 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| 1.5 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| 1.8 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| 2.2 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| 2.7 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| 3.3 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 | A 1.41 |
| 3.9 | A 1.41 | A* 1.41 | B 1.45 | B 1.45 | B 1.45 | B 1.45 |
| 4.7 | A 1.41 | A* 1.41 | B 1.45 | B 1.45 | B 1.45 | B 1.45 |
| 5.6 | A* 1.41 | B 1.45 | B 1.45 | B 1.45 | B 1.45 | B 1.45 |
| 6.8 | A* 1.41 | B 1.45 | B 1.45 | B 1.45 | B 1.45 | B 1.45 |
| 8.2 | B 1.45 | B 1.45 | B 1.45 | B 1.45 | B* 1.45 | C 2.45 |
| 10. | B 1.45 | B 1.45 | B 1.45 | B 1.45 | B* 1.45 | C 2.45 |
| 12. | B 1.45 | B 1.45 | B 1.45 | B 1.45 | B* 1.45 | C 2.45 |
| 15. | B 1.45 | B 1.45 | B 1.45 | B 1.45 | B* 1.45 | C 2.45 |
| 18. | B 1.45 | B 1.45 | B 1.45 | B* 1.45 | C 2.45 | C 2.45 |
| 22. | B 1.45 | B 1.45 | B 1.45 | B* 1.45 | C 2.45 | C 2.45 |
| 27. | B 1.45 | B* 1.45 | C 2.45 | C 2.45 | C 2.45 | D† |
| 33. | B 1.45 | B* 1.45 | C 2.45 | C 2.45 | C 2.45 | D† |
| 39. | B 1.45 | B* 1.45 | C 2.45 | C 2.45 | C 2.45 | D† |
| 47. | B* 1.45 | C 2.45 | C 2.45 | C 2.45 | C 2.45 | D† |
| 56. | B 1.45 | C 2.45 | C 2.45 | C 2.45 | D 4.55 | |
| 68. | C 2.45 | C 2.45 | C 2.45 | D 4.55 | D 4.55 | |
| 82. | C 2.45 | C 2.45 | D 4.55 | D 4.55 | D 4.55 | |
| 100. | C 2.45 | C 2.45 | D 4.55 | D 4.55 | D 4.55 | |
| 120. | C 2.45 | C 2.45 | D 4.55 | D 4.55 | D 4.55 | |
| 150. | C 2.45 | D 4.55 | D 4.55 | D 4.55 | | |
| 180. | C 2.45 | D 4.55 | D 4.55 | | | |
| 220. | D 4.55 | D 4.55 | | | | |
| 270. | D 4.55 | | | | | |
| 330. | D 4.55 | | | | | |

†To be released at a later date.

*Available from stock in $\pm 20\%$ or $\pm 10\%$ tolerance. All others are available from stock in $\pm 20\%$ only and are subject to factory delivery cycles if 10% tolerance is required. Contact factory for prices on $\pm 10\%$ tolerance. Prices shown are for $\pm 20\%$.

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 499

AEROVOX

Capacitors

PAPER CAPACITORS (cont.)

TYPE P88N

† DURANITE

Duranite Blue Molded Tubular Capacitors



Toughest capacitors ever offered for radio-electronic equipment. DURANITE capacitors. Design, impregnant, processing, and casing insure glove-fitting contact and seal throughout. DURANITE provides a permanent, non-varying, rock-hard casing, does not dry out, does not develop cracks or fissures. Pig-tail leads firmly imbedded, won't pull out, won't work loose. Moisture-proof; operate from sub-zero to over 212°F. Exposure to temperatures of 250°F. will not impair life or performance, no deterioration on the shelf. A white band around one end of the capacitor identifies the outside foil.

| Cap. Mfd. | 200 V | | 400 V | | 600 V | | 1000 V | |
|-----------|-------|------------|-------|------------|-------|------------|--------|------------|
| | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ |
| .001 | A | .150 | A | .150 | A | .150 | A | .300 |
| .0015 | A | .150 | A | .150 | A | .150 | A | .300 |
| .002 | A | .150 | A | .150 | A | .150 | A | .300 |
| .0022 | A | .150 | A | .150 | A | .150 | A | .300 |
| .003 | A | .150 | A | .150 | A | .150 | B | .300 |
| .0033 | A | .150 | A | .150 | A | .150 | B | .300 |
| .004 | A | .150 | A | .150 | A | .150 | B | .300 |
| .0047 | A | .150 | A | .150 | A | .150 | B | .300 |
| .005 | A | .150 | A | .150 | A | .150 | B | .300 |
| .006 | A | .150 | A | .150 | B | .150 | B | .300 |
| .0068 | A | .150 | A | .150 | B | .150 | B | .300 |
| .007 | A | .150 | A | .150 | B | .150 | B | .300 |
| .0075 | A | .150 | A | .150 | B | .180 | B | .300 |
| .008 | A | .150 | A | .150 | B | .180 | B | .300 |
| .01 | A | .150 | A | .150 | B | .180 | B | .300 |
| .015 | A | .150 | B | .150 | B | .180 | D | .300 |
| .02 | B | .150 | B | .180 | D | .180 | E | .300 |
| .022 | B | .150 | B | .180 | D | .180 | E | .300 |
| .025 | B | .150 | B | .180 | D | .210 | E | .300 |
| .03 | B | .150 | B | .180 | D | .210 | E | .300 |
| .033 | B | .150 | B | .180 | E | .210 | E | .360 |
| .04 | B | .150 | D | .180 | E | .210 | F | .360 |
| .047 | B | .180 | D | .180 | E | .210 | F | .360 |

| Cap. Mfd. | 200 V | | 400 V | | 600 V | | 1000 V | |
|-----------|-------|------------|-------|------------|-------|------------|--------|------------|
| | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ |
| .05 | B | .180 | D | .180 | E | .240 | F | .360 |
| .06 | D | .180 | E | .180 | F | .240 | F | .360 |
| .068 | D | .180 | E | .210 | F | .240 | F | .420 |
| .075 | D | .180 | E | .210 | F | .270 | | |
| .1 | D | .210 | E | .210 | F | .270 | | |
| .15 | E | .210 | F | .240 | F | .360 | | |
| .2 | F | .240 | F | .270 | G | .390 | | |
| .22 | F | .240 | F | .270 | G | .420 | | |
| .25 | F | .270 | F | .300 | G | .450 | | |
| .27 | F | .270 | G | .330 | H | .480 | | |
| .33 | F | .300 | G | .360 | H | .570 | | |
| .47 | F | .360 | G | .450 | H | .750 | | |
| .5 | F | .360 | G | .450 | | | | |
| 1.0 | H | .630 | H | .750 | | | | |

| Size | Length x Dia. | Size | Length x Dia. |
|------|---------------|------|---------------|
| A | 1 1/8 x 1 1/2 | E | 1 3/8 x 1 1/2 |
| B | 1 3/8 x 1 1/2 | F | 2 x 1 1/2 |
| | | G | 2 1/4 x 3/4 |
| D | 1 3/8 x 1 1/2 | H | 2 1/2 x 1 |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

Type VBC Vibrator Buffer Capacitors



These units are heavy-duty. Hyvol M impregnated, vibrator buffer capacitors in ceramic tubes, specifically designed for severe-service auto-radio applications.

| Type | Cap. Mfd. | Size | Net Price★ |
|--------|-----------|-------------|------------|
| VBC-2 | .001 | 3/8 x 1 1/4 | .300 |
| VBC-3 | .002 | 3/8 x 1 1/2 | .300 |
| VBC-4 | .0022 | 3/8 x 1 1/2 | .300 |
| VBC-5 | .003 | 3/8 x 1 1/2 | .300 |
| VBC-6 | .0033 | 3/8 x 1 1/2 | .300 |
| VBC-7 | .004 | 3/8 x 1 1/2 | .300 |
| VBC-8 | .0047 | 3/8 x 1 1/2 | .300 |
| VBC-9 | .005 | 1/2 x 1 1/2 | .300 |
| VBC-22 | .006 | 1/2 x 1 1/2 | .300 |
| VBC-23 | .0068 | 1/2 x 1 1/2 | .300 |
| VBC-24 | .007 | 1/2 x 1 1/2 | .330 |
| VBC-25 | .0075 | 1/2 x 1 1/2 | .330 |

| Type | Cap. Mfd. | Size | Net Price★ |
|--------|----------------|-------------|------------|
| VBC-26 | .008 | 1/2 x 1 1/2 | .330 |
| VBC-27 | .01 | 3/4 x 1 1/2 | .330 |
| VBC-28 | .015 | 3/8 x 1 3/4 | .330 |
| VBC-29 | .02 | 3/8 x 2 | .330 |
| VBC-32 | .025 | 1 1/4 x 2 | .330 |
| VBC-33 | .03 | 3/4 x 2 | .390 |
| VBC-34 | .05 | 1 1/4 x 2 | .480 |
| VBC-35 | .015-.015 | 1 1/4 x 2 | .480 |
| VBC-45 | .007-3000 WVDC | 1 1/4 x 2 | .390 |

Vibrator "HASH" Capacitor VHC36
5 Mfd. 100 Volts WVDC 1 1/4 x 1 1/8 .300

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

AUTOPASS® Vertical Mounting Plastic-Cased Paper Capacitors

Aerovox Autopass capacitors were specifically designed and developed for use in conjunction with printed-wiring assemblies where it is highly desirable to mount capacitors at right angles to the mounting surface thereby conserving valuable space.



Aerolene impregnated and assembled into a Polycap® case, Autopass capacitors are then sealed with a thermo-setting end-seal. The end-seal surface is below the outside edges of the plastic case, permitting the capacitor to be mounted flush against the mounting surface. The leads of these capacitors are stiff, and critical spacing is closely held to facilitate their use in mechanized assemblies. Outside foil is identified by wire lead nearest to edge of case or by a paint stripe on the case nearest the outside foil.

| Cap. | 200 | Net Price★ | 400 | Net Price★ | 600 | Net Price★ |
|-------|--------------|------------|--------------|------------|--------------|------------|
| .001 | 3/8 x 1 | .210 | 3/8 x 1 | .210 | 3/8 x 1 | .210 |
| .0015 | 3/8 x 1 | .210 | 3/8 x 1 | .210 | 3/8 x 1 | .210 |
| .0022 | 3/8 x 1 | .210 | 3/8 x 1 | .210 | 3/8 x 1 | .210 |
| .0033 | 3/8 x 1 | .210 | 3/8 x 1 | .210 | 3/8 x 1 | .210 |
| .0047 | 3/8 x 1 | .210 | 3/8 x 1 | .210 | 3/8 x 1 | .210 |
| .0068 | 3/8 x 1 | .210 | 3/8 x 1 | .210 | 3/8 x 1 3/8 | .210 |
| .01 | 3/8 x 1 | .210 | 3/8 x 1 | .210 | 3/8 x 1 3/8 | .240 |
| .015 | 3/8 x 1 | .210 | 3/8 x 1 3/8 | .210 | 7/16 x 1 3/8 | .240 |
| .022 | 3/8 x 1 3/8 | .210 | 7/16 x 1 3/8 | .210 | 7/16 x 1 3/8 | .240 |
| .033 | 3/8 x 1 3/8 | .210 | 7/16 x 1 3/8 | .240 | 1/2 x 1 1/4 | .270 |
| .047 | 7/16 x 1 3/8 | .210 | 1/2 x 1 1/4 | .240 | 1/2 x 1 1/2 | .270 |
| .068 | 7/16 x 1 3/8 | .240 | 1/2 x 1 1/2 | .240 | 5/8 x 1 7/8 | .300 |
| .1 | 1/2 x 1 1/4 | .240 | 5/8 x 1 1/4 | .270 | 5/8 x 1 7/8 | .330 |
| .15 | 5/8 x 1 1/4 | .270 | 5/8 x 1 7/8 | .300 | 3/4 x 1 7/8 | .420 |
| .22 | 5/8 x 1 7/8 | .300 | 5/8 x 1 7/8 | .360 | 3/4 x 2 1/2 | .540 |
| .33 | 5/8 x 1 7/8 | .330 | 3/4 x 1 7/8 | .420 | 7/8 x 2 1/2 | .690 |
| .47 | 3/4 x 1 7/8 | .390 | | | | |
| 1.0 | 7/8 x 2 1/2 | .630 | | | | |

Standard Tolerance ±20%. Also available in 10% on special order.

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

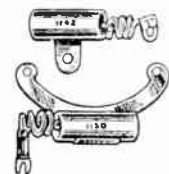
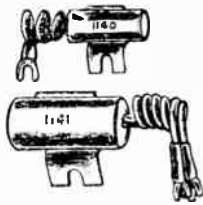
AEROVOX*Capacitors***PAPER (Contd)****TYPE P84CM DURAMIC® Ceramic-Cased Tubular Capacitors**

New ceramic (dense steatite) encased paper tubular for performance above that of conventional paper tubulars. New thermosetting end-seals for exceptional humidity protection—250 hour humidity test as per REC-118. Firmly imbedded terminals will not work loose or pull out. Operating temps are —55°C to +85°C. Meets all requirements of EIA Spec. REC-118, hi-temp range, class M.

| Cap. Mfd. | 2500 VDCW | | 6000 VDCW | | 10,000 VDCW | | 12,500 VDCW | | 15,000 VDCW | |
|-----------|---------------|------------|----------------|------------|---------------|------------|---------------|------------|----------------|------------|
| | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ |
| .0001 | 3/8 x 1 1/2 | .570 | 3/8 x 1 3/4 | .660 | 3/8 x 2 1/4 | .690 | 1 1/8 x 2 1/4 | .960 | 1 1/2 x 2 1/2 | 1.05 |
| .00025 | 3/8 x 1 1/2 | .570 | 3/8 x 1 3/4 | .660 | 1 1/8 x 2 1/4 | .690 | | | 3/4 x 2 1/2 | 1.05 |
| .0005 | 3/8 x 1 1/2 | .570 | 3/8 x 1 3/4 | .660 | 1 1/8 x 2 1/4 | .690 | | | 7/8 x 2 1/2 | 1.14 |
| .001 | 3/8 x 1 1/2 | .570 | 1 1/2 x 1 3/4 | .720 | 1 1/8 x 2 1/4 | .690 | | | *1 x 2 1/2 | 1.17 |
| .003 | 3/8 x 1 1/2 | .570 | 5/8 x 2 1/8 | .750 | 1 x 2 3/4 | .780 | | | *1 1/4 x 3 | 1.26 |
| .005 | 1 1/2 x 1 3/8 | .600 | 3/4 x 2 1/8 | .750 | *1 x 3 | .900 | | | *1 3/8 x 3 1/4 | 1.38 |
| .01 | 5/8 x 1 7/8 | .630 | 1 1/8 x 2 1/8 | .930 | *1 3/8 x 3 | 1.08 | | | | |
| .03 | 1 1/4 x 2 | .750 | *1 1/4 x 2 5/8 | 1.47 | | | | | | |
| .05 | 3 1/2 x 2 3/8 | .870 | *1 1/8 x 3 1/8 | 1.80 | | | | | | |
| .1 | *1 x 2 5/8 | 1.11 | | | | | | | | |
| .15 | *1 x 3 1/8 | 1.17 | | | | | | | | |

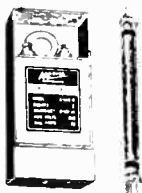
* Will be furnished in cardboard tube Type P84M.

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 249

AUTO-RADIO CAPACITORS

| Type | Cap. Mfd. | Net Price | Type | Cap. Mfd. | Net Price |
|-----------------------|-----------|-----------|---------------------------|-----------|-----------|
| SINGLE ELEMENT | | | | | |
| Car Generators | | | Motorola Auto Radios | | |
| Type 1120 | 1.0 | .54 | Type 1466 | .0008 | .54 |
| Type 1140 | 0.5 | .39 | Ammeter Condenser | | |
| DUAL ELEMENT | | | | | |
| Type 1141 | 0.5-0.5 | .90 | Type 1160 | 0.5 | .54 |
| Ford Auto Radios | | | Gas Gage Filter Condenser | | |
| Type 1144 | 0.6 | .48 | Type 1143-G | 0.05 | .54 |
| For 1936 Models | | | Oil Gage Filter Condenser | | |
| Type 1150 | 0.5 | .60 | Type 1142-0 | 0.25 | .54 |

Note: All auto radio capacitors subject to Federal Excise Tax.

FILTERS**SCREEN ROOM FILTERS**

Screen room filters comply with rigid specifications set up by the designers of the most advanced type screen rooms. All have attenuation equal to or exceeding that of the screen room. Easy mounting arrangements plus high attenuation assure you of the finest equipment specially designed for screen room use. These filters are hermetically sealed and terminals at both ends are shielded using knock-outs for 3/4" and 1" conduit.

1 1/4" diameter mounting hole on all cases is countersunk to permit flush mounting of the filter on the screen room.

| Part No. | Curr. (Amps.) | Cir-cuits | CPS | Attenuation | vs. Frequency | Size L x W x D | Net Price |
|-----------|---------------|-----------|--------|-------------------|-------------------|----------------------------|-------------------|
| *S-1076-1 | 50 | 1 | 0-60 | 100 db from | 14 kc to 1000 mc | 20" x 3 3/8" x 3 3/8" | 95.00 |
| *S-1076-2 | 50 | 2 | 0-60 | 100 db from | 14 kc to 1000 mc | 20" x 7 3/8" x 3 3/8" | 190.00 |
| *S-1076-3 | 50 | 3 | 0-60 | 100 db from | 14 kc to 1000 mc | 20 1/8" x 10 7/8" x 3 1/4" | 285.00 |
| S-1142-1 | 30 | 1 | 0-400 | 100 db from | 150 kc to 1000 mc | 10 1/8" x 2 7/8" x 2 1/4" | 36.50 |
| S-1142-2 | 30 | 2 | 0-400 | 100 db from | 150 kc to 1000 mc | 10 3/8" x 4 3/4" x 2 7/8" | 48.50 |
| S-1142-3 | 30 | 3 | 0-400 | 100 db from | 150 kc to 1000 mc | 10 1/8" x 7" x 2 1/8" | 62.50 |
| S-1302-1 | 100 | 1 | 0-60 | 100 db from | 200 kc to 1000 mc | 14" x 4 3/8" x 4 3/8" | 70.00 |
| *S-1303-1 | 60 | 1 | 0-1000 | 100 db from | 100 kc to 1000 mc | 20" x 3 3/8" x 3 3/8" | 100.00 |
| S-1304-1 | 80 | 1 | 0-60 | 100 db from | 14 kc to 1000 mc | 22" x 4 3/8" x 4 3/8" | 105.00 |
| S-1305-1 | 100 | 1 | 0-1000 | 100 db from | 100 kc to 1000 mc | 22" x 4 3/8" x 4 3/8" | 120.00 |
| S-1361-1 | 100 | 1 | 0-60 | 100 db from | 14 kc to 1000 mc | 22" x 4 3/8" x 4 3/8" | 130.00 |
| S-1432-1 | 100 | 1 | 0-60 | 100 db from | 100 kc to 1000 mc | 22" x 4 3/8" x 4 3/8" | 95.00 |
| S-1455-1 | 100 | 1 | 0-60 | 100 db from | 150 kc to 1000 mc | 22" x 4 3/8" x 4 3/8" | 90.00 |
| | | | | | | Overall L. | Overall D. |
| S-1468-A | 50 | 1 | 0-1000 | >60 db/1000 mc to | 10000 mc | 10 3/4" | 7/8" |
| S-1468-B | 100 | 1 | 0-1000 | >60 db/1000 mc to | 10000 mc | 10 3/4" | 7/8" |

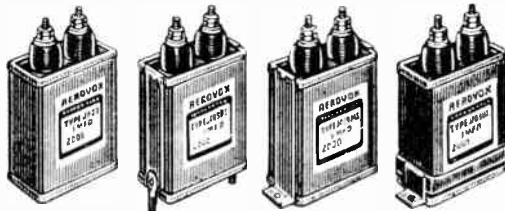
*250VAC DC. All others 500VAC/DC.

AEROVOX

Capacitors

INDUSTRIAL SECTION — STANDARD TYPES

TYPE P09



P09 P09MSB P09MS P09MB

PAPER CAPACITORS

Immersion-proof units in sturdy, rectangular metal cans. High-voltage screw-type pillar terminals fitted with soldering lugs. Use of HYVOL M or J allows exceptionally compact size for capacity, working voltage and safety factor. Intended for heavy-duty, continuous service in transmitters, amplifiers, etc. Operating temperature —55 to +85°C.

Standard tolerance +20 —10%. Other tolerance on request.

Type MB bracket is supplied unless otherwise specified except on units with base sizes 3 3/4" x 3 3/4" and 3 3/4" x 4 1/4" where Type MS bracket is supplied. MSB bracket is available for all sizes on request.

| CAP. | SIZE | Net Price★ | CAP. | SIZE | Net Price★ | CAP. | SIZE | Net Price★ | CAP. | SIZE | Net Price★ | | | |
|---------------|-----------------------|------------|---------------|-----------------------|------------|---------------|-----------------------|------------|---------------|-----------------------|------------|-----|-----------------------|-------|
| 600 V | | | | | | | | | | | | | | |
| .5 | 1 1/4 x 1 1/4 x 2 1/4 | 2.41 | 10.0 | 1 3/4 x 3 3/4 x 4 3/4 | 7.94 | 4.0 | 2 1/4 x 3 3/4 x 3 7/8 | 7.90 | .25 | 2 1/4 x 3 3/4 x 2 3/4 | 7.85 | | | |
| 1.0 | 1 1/4 x 1 3/8 x 2 1/4 | 2.57 | 12.0 | 2 1/4 x 3 3/4 x 3 7/8 | 8.71 | 5.0 | 2 1/4 x 3 3/4 x 4 3/4 | 8.99 | .5 | 2 1/4 x 3 3/4 x 3 7/8 | 9.04 | | | |
| 2.0 | 1 1/4 x 1 3/8 x 2 7/8 | 3.12 | 15.0 | 2 1/2 x 3 3/4 x 4 3/4 | 10.47 | 6.0 | 3 1/4 x 3 3/4 x 4 1/2 | 10.09 | 1.0 | 2 1/4 x 3 3/4 x 5 1/8 | 11.34 | | | |
| 3.0 | 1 1/4 x 1 3/8 x 3 7/8 | 3.69 | 1500 V | | | | | | 8.0 | 3 1/4 x 3 3/4 x 4 3/4 | 11.77 | 2.0 | 3 3/4 x 4 1/4 x 5 1/8 | 12.55 |
| 4.0 | 1 3/8 x 2 1/2 x 3 1/2 | 4.25 | .5 | 1 1/4 x 1 1/4 x 2 7/8 | 3.12 | 10.0 | 3 3/4 x 4 1/4 x 4 3/4 | 13.77 | 4.0 | 3 3/4 x 4 1/4 x 8 1/2 | 24.60 | | | |
| 5.0 | 1 1/4 x 1 3/8 x 4 3/4 | 4.63 | 1.0 | 1 1/4 x 1 3/8 x 3 7/8 | 3.34 | 12.0 | 3 3/4 x 4 1/4 x 5 1/2 | 16.01 | 5000 V | | | | | |
| 6.0 | 1 3/8 x 2 1/2 x 4 3/4 | 5.00 | 2.0 | 1 3/8 x 2 1/2 x 4 1/4 | 4.27 | 15.0 | 3 3/4 x 4 1/4 x 6 1/2 | 19.36 | .1 | 2 1/4 x 3 3/4 x 2 3/4 | 7.44 | | | |
| 8.0 | 1 1/4 x 3 3/4 x 3 7/8 | 6.16 | 3.0 | 1 3/8 x 2 1/2 x 4 3/4 | 5.24 | 2500 V | | | | | | .25 | 2 1/4 x 3 3/4 x 3 7/8 | 8.22 |
| 10.0 | 1 1/4 x 3 3/4 x 4 3/4 | 6.63 | 4.0 | 1 1/4 x 3 3/4 x 4 3/4 | 6.21 | .5 | 1 3/4 x 2 1/2 x 3 1/2 | 5.43 | .5 | 2 1/4 x 3 3/4 x 4 1/2 | 9.81 | | | |
| 12.0 | 1 1/2 x 3 3/4 x 4 3/4 | 7.47 | 5.0 | 1 3/4 x 3 3/4 x 4 3/4 | 7.07 | 1.0 | 1 3/4 x 3 3/4 x 3 1/4 | 6.45 | 1.0 | 3 3/4 x 4 1/4 x 4 3/8 | 13.55 | | | |
| 15.0 | 1 3/4 x 3 3/4 x 4 3/4 | 8.70 | 6.0 | 1 3/4 x 3 3/4 x 4 3/4 | 7.94 | 2.0 | 1 3/4 x 3 3/4 x 4 3/4 | 8.63 | 2.0 | 3 3/4 x 4 1/4 x 6 | 20.50 | | | |
| 1000 V | | | | | | | | | | | | | | |
| .1 | 1 1/4 x 1 1/4 x 1 5/8 | 2.15 | 8.0 | 2 1/2 x 3 3/4 x 4 3/4 | 9.92 | 4.0 | 3 3/4 x 4 1/4 x 4 | 12.73 | 6000 V | | | | | |
| .25 | 1 1/4 x 1 3/8 x 2 1/4 | 2.50 | 10.0 | 3 3/8 x 3 3/4 x 4 3/4 | 11.44 | 10.0 | 3 3/4 x 4 1/4 x 6 3/8 | 24.51 | .1 | 2 1/4 x 3 3/4 x 3 3/8 | 10.76 | | | |
| .5 | 1 1/4 x 1 3/8 x 2 1/4 | 2.56 | 12.0 | 3 3/8 x 3 3/4 x 4 3/4 | 13.17 | 3000 V | | | | | | .25 | 2 1/4 x 3 3/4 x 4 1/2 | 13.16 |
| 1.0 | 1 1/4 x 1 3/8 x 2 1/4 | 2.79 | 15.0 | 3 3/4 x 4 1/4 x 4 3/4 | 15.79 | .1 | 1 1/4 x 2 1/2 x 2 | 6.95 | 1.0 | 3 3/4 x 4 1/4 x 7 1/2 | 19.49 | | | |
| 2.0 | 1 1/4 x 1 3/8 x 3 7/8 | 3.53 | 2000 V | | | | | | .25 | 1 3/8 x 2 1/2 x 2 1/2 | 7.39 | | | |
| 3.0 | 1 3/8 x 2 1/2 x 3 1/2 | 4.16 | .1 | 1 1/4 x 1 1/4 x 2 1/8 | 3.63 | .5 | 1 1/4 x 2 1/2 x 3 7/8 | 8.09 | 1.0 | 2 1/4 x 3 3/4 x 3 7/8 | 9.56 | | | |
| 4.0 | 1 3/8 x 2 1/2 x 4 3/4 | 4.79 | .25 | 1 1/4 x 1 1/4 x 2 1/8 | 3.81 | 2.0 | 3 1/4 x 3 3/4 x 4 3/4 | 12.45 | 2.0 | 3 1/4 x 3 3/4 x 4 3/4 | 12.45 | | | |
| 5.0 | 1 1/4 x 3 3/4 x 3 7/8 | 5.34 | .5 | 1 1/4 x 1 1/4 x 2 7/8 | 4.06 | 4.0 | 3 3/4 x 4 1/4 x 4 3/4 | 17.62 | 4.0 | 3 3/4 x 4 1/4 x 4 3/4 | 17.62 | | | |
| 6.0 | 1 1/4 x 3 3/4 x 4 3/4 | 5.89 | 1.0 | 1 1/4 x 2 1/2 x 3 1/2 | 4.58 | 4000 V | | | | | | .5 | 3 3/4 x 4 1/4 x 5 1/8 | 15.99 |
| 8.0 | 1 1/4 x 3 3/4 x 4 3/4 | 6.91 | 2.0 | 1 1/4 x 2 3/4 x 3 1/2 | 5.70 | .1 | 2 1/4 x 3 3/4 x 2 3/4 | 7.23 | | | | | | |
| | | | | | | | | | | | | | | |

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99,

TYPE P10



Cylindrical hermetically sealed can with screw-base folded cover for vertical mounting. These units are Hyvol M or J impregnated and filled for long life and safe operation at temperatures from —55 to +85°C.

Standard units have two terminals, case floating.

Standard tolerance +20% —10%. Other tolerances available on request.

| CAPACITY | 600 V D C W | | 1000 V D C W | | 1500 V D C W | |
|----------|---------------|------------|---------------|------------|---------------|------------|
| | SIZE | Net Price★ | SIZE | Net Price★ | SIZE | Net Price★ |
| .5 | | | | | 1 1/2 x 2 3/8 | 3.77 |
| 1.0 | | | | | 1 1/2 x 3 7/8 | 4.12 |
| 2.0 | 1 1/2 x 2 7/8 | 3.57 | | | | |
| 4.0 | 1 1/2 x 4 1/2 | 4.82 | 1 1/2 x 2 7/8 | 3.82 | 1 1/2 x 4 1/2 | 4.53 |

★Request O.E.M. prices in the following quantities: 10 to 99

TYPE P16 and P16-CT



Small corrosion and immersion-proof unit for severe atmospheric and climatic conditions. P16-CT is standard; P16 is available in 400 and 600 volts. Operating temperature —55 to +85°C. Dual units have two terminals, case grounded. Standard tolerance +20 —10%. CP091S and CP091F brackets available for P16. Base Size 1 3/4 x 1 1/4. Impregnated with either Hyvol M or Hyvol J.

| SINGLE CAPACITY | 400 V D C W | | | 600 V D C W | | | 1000 V D C W | | | DUAL CAPACITY | 600 V D C W | |
|-----------------|-------------|-------------|------------|-------------|-------------|------------|--------------|--------|------------|---------------|-------------|------------|
| | HEIGHT | P16, P16-CT | Net Price★ | HEIGHT | P16, P16-CT | Net Price★ | HEIGHT | P16-CT | Net Price★ | | HEIGHT | Net Price★ |
| | | | | | | | | | | | | |
| .05 | | | | 1 1/4 | | 1.76 | 1 3/4 | | 1.83 | 2 x .05 | 1 3/4 | 2.06 |
| .1 | | | 1.80 | 1 3/4 | | 1.85 | 1 3/4 | | 1.89 | 2 x .1 | 1 3/4 | 2.13 |
| .25 | 1 1/4 | | 1.87 | 1 3/4 | | 1.91 | 2 | | 1.94 | 2 x .25 | 2 | 2.30 |
| .5 | 1 3/8 | | 1.91 | 2 | | 1.96 | 2 1/4 | | 2.13 | 2 x .5 | 2 1/4 | 2.64 |
| 1.0 | 2 | | 2.16 | 2 1/4 | | 2.20 | | | | | | |

Prices shown are for type P16CT. For prices on P16 deduct .07 ea.

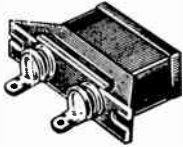
★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 499

AEROVOX

Capacitors

INDUSTRIAL SECTION—STANDARD TYPES (Continued)

TYPE P18-CB



Similar to P16 in construction and electrical characteristics. Because of the difference in the base size type P18-CB can be supplied with three terminals. Dual units are case floating, ripples are case grounded. The size difference also makes these units suitable for use in assemblies where P16's do not fit. Operating temperature range —55 to +85° C. Standard tolerance +20 — 10%. Impregnated with either Hyvol M or Hyvol J.

| Capacity | 400 VDCW P18-CB | | 600 VDCW P18-CB | | 1000 VDCW P18-CB | | Capacity | 400 VDCW P18-CB | | 600 VDCW P18-CB | | 1000 VDCW P18-CB | | |
|----------|-----------------|------------|-----------------|------------|------------------|------------|----------|-----------------|------------|-----------------|------------|------------------|------------|------|
| | Net Height | Net Price★ | Net Height | Net Price★ | Net Height | Net Price★ | | Net Height | Net Price★ | Net Height | Net Price★ | Net Height | Net Price★ | |
| .01 | | | 1 1/4 | 2.02 | 1 1/4 | 2.02 | 2 x .01 | | | 1 1/4 | 2.46 | 3 x .01 | 1 1/4 | 2.47 |
| .02 | | | 1 1/4 | 2.06 | 1 1/4 | 2.06 | 2 x .02 | | | 1 1/4 | 2.49 | 3 x .02 | 1 1/4 | 3.05 |
| .05 | 1 | 2.02 | 1 1/4 | 2.07 | 1 1/4 | 2.11 | 2 x .05 | 1 | 2.47 | 1 1/4 | 2.52 | 3 x .05 | 1 1/2 | 3.09 |
| .1 | 1 | 2.09 | 1 1/4 | 2.14 | 1 1/2 | 2.18 | 2 x .1 | 1 1/4 | 2.54 | 1 1/2 | 2.59 | 3 x .1 | 1 1/2 | 3.11 |
| .25 | 1 1/4 | 2.17 | 1 1/2 | 2.21 | 2 | 2.25 | 2 x .25 | 1 1/2 | 2.72 | 2 | 2.78 | 3 x .25 | 2 | 3.21 |
| .5 | 1 1/2 | 2.24 | 2 | 2.29 | 2 1/2 | 2.44 | 2 x .5 | 2 1/4 | 2.98 | 2 1/2 | 3.05 | | | |
| 1.0 | 2 | 2.48 | 2 1/2 | 2.53 | | | | | | | | | | |

BASE SIZE 1 1/4 x 1/2

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 499

TYPE P30 Bathtub Case



High-quality bypass capacitors furnished in drawn metal bathtub cases, hermetically sealed. These units are Hyvol M or J impregnated for operation at temperatures from —55 to +85° C. They are especially recommended for applications where high reliability and superior performance are required. Typical applications for these rugged units would include marine, aircraft and tropical climates. Standard tolerance +20% —10%.

| Capacity | 400 VDCW P30 | | 600 VDCW P30 | | 1000 VDCW P30 | | Capacity | 400 VDCW P30 | | 600 VDCW P30 | | 1000 VDCW P30 | |
|----------|---------------------|------------|----------------------|------------|-------------------|------------|----------|-------------------|------------|-------------------|------------|-------------------|------------|
| | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ | | Size | Net Price★ | Size | Net Price★ | Size | Net Price★ |
| .05 | 1 1/4 x 1 x 3/4 | 1.65 | 1 1/4 x 1 x 3/4 | 1.73 | 1 1/4 x 1 x 3/4 | 1.80 | 2 x .05 | 1 1/4 x 1 x 3/4 | 2.29 | 1 1/4 x 1 x 3/4 | 2.37 | 1 1/4 x 1 x 3/4 | 2.47 |
| .1 | 1 1/4 x 1 x 3/4 | 1.72 | 1 1/4 x 1 x 3/4 | 1.78 | 1 1/4 x 1 x 3/4 | 1.89 | 2 x .1 | 1 1/4 x 1 x 3/4 | 2.37 | 1 1/4 x 1 x 3/4 | 2.44 | 1 1/4 x 1 x 3/4 | 2.51 |
| .25 | 1 1/4 x 1 x 3/4 | 1.82 | 1 1/4 x 1 x 13/16 | 1.85 | 1 1/4 x 1 x 13/16 | 1.93 | 2 x .25 | 1 1/4 x 1 x 13/16 | 2.42 | 1 1/4 x 1 x 13/16 | 2.51 | 2 x 1 1/4 x 3/8 | 2.76 |
| .5 | 1 1/4 x 1 x 3/4 | 1.97 | 1 1/4 x 1 x 1 | 1.98 | 2 x 1 1/4 x 3/8 | 2.06 | 2 x .5 | 2 x 1 1/4 x 3/8 | 2.77 | 2 x 1 1/4 x 3/8 | 2.82 | 2 x 2 x 1 1/4 | 3.57 |
| .75 | 2 1/4 x 1 1/4 x 7/8 | 2.13 | 2 1/4 x 1 1/4 x 7/8* | 2.14 | 2 x 1 1/4 x 3/8 | 2.44 | 2 x 1.0 | 2 x 2 x 1 1/4 | 3.42 | 2 x 2 x 1 1/4 | 3.44 | | |
| 1.0 | 2 x 1 1/4 x 3/4 | 2.29 | 2 x 1 1/4 x 1 | 2.30 | 2 x 2 x 1 1/4 | 2.82 | 3 x .05 | 1 1/4 x 1 x 13/16 | 2.66 | 1 1/4 x 1 x 13/16 | 2.71 | 1 1/4 x 1 x 13/16 | 2.81 |
| 2.0 | 2 x 2 x 1 1/4 | 2.97 | 2 x 2 x 1 1/4 | 3.06 | | | 3 x .1 | 1 1/4 x 1 x 13/16 | 2.75 | 1 1/4 x 1 x 13/16 | 2.78 | 2 x 1 1/4 x 3/8 | 3.09 |
| | | | | | | | 3 x .25 | 2 x 1 1/4 x 3/8 | 3.01 | 2 x 1 1/4 x 3/8 | 3.09 | 2 x 2 x 1 1/4 | 3.85 |
| | | | | | | | 3 x .5 | 2 x 2 x 1 | 3.71 | 2 x 2 x 1 1/4 | 3.81 | | |

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 499

*Also available with top terminals, size 2 x 1 1/4 x 7/8, Type P30JT.

TYPE P89M



Immersion-proof, oil-impregnated, oil filled units in hermetically sealed metal tubes. Ideal for coupling and bypass functions in transmitters, high-voltage applications and for use in test equipment. Case is insulated, not connected to the capacitor section. Standard units are supplied with cardboard insulating sleeve and radial mounting bracket (Type P89M). All sizes shown are can sizes. For size over insulating sleeve add 1/4" to diameter and 1/4" to length.

Available in the following style variations:

- P89M —with cardboard insulating sleeve, radial mtg. bracket.
- P89MA —with cardboard insulating sleeve and tangential mounting bracket.
- P89MAP —with plastic insulating sleeve and tangential mtg. bracket.
- P89MAY —without insulating sleeve but with tangential mounting bracket.
- P89MP —with plastic insulating sleeve, radial mtg. bracket.
- P89MX —without mounting bracket but with cardboard insulating sleeve.
- P89MXP —without mounting bracket but with plastic insulating sleeve.
- P89MXY —without insulating sleeve or mtg. bracket.
- P89MY —without insulating sleeve but with radial mounting bracket.

| Voltage | Capacity | Can Size | Net Price★ | Voltage | Capacity | Can Size | Net Price★ | Voltage | Capacity | Can Size | Net Price★ |
|---------|----------|---------------|------------|---------|----------|---------------|------------|---------|----------|---------------|------------|
| 400V | .01 | 3/8 x 1 1/4 | 1.02 | 1000V | .03 | 3/8 x 1 1/4 | 1.17 | 2500V | .02 | 3/4 x 2 | 2.18 |
| 400V | .02 | 3/8 x 1 1/4 | 1.04 | 1000V | .05 | 3/8 x 1 1/4 | 1.24 | 2500V | .03 | 3/4 x 2 1/4 | 2.21 |
| 400V | .05 | 3/8 x 1 1/4 | 1.12 | 1000V | .1 | 1 1/4 x 1 1/4 | 1.32 | 2500V | .05 | 3/8 x 2 1/2 | 2.27 |
| 400V | .1 | 3/8 x 1 1/4 | 1.20 | 1000V | .25 | 3/8 x 2 1/4 | 1.68 | 2500V | .1 | 1 x 3 | 2.42 |
| 400V | .25 | 1 1/4 x 2 1/4 | 1.52 | 2000V | .001 | 3/4 x 1 1/4 | 1.93 | 3000V | .005 | 3/8 x 1 1/4 | 2.13 |
| 400V | .5 | 1 x 2 1/4 | 1.96 | 2000V | .005 | 3/4 x 1 1/4 | 1.97 | 3000V | .01 | 3/8 x 1 1/4 | 2.15 |
| 600V | .001 | 3/8 x 1 1/4 | 1.01 | 2000V | .01 | 3/4 x 1 1/4 | 1.99 | 3000V | .02 | 3/8 x 2 | 2.18 |
| 600V | .005 | 3/8 x 1 1/4 | 1.01 | 2000V | .015 | 3/4 x 1 1/4 | 2.00 | 3000V | .03 | 1 x 2 1/4 | 2.21 |
| 600V | .01 | 3/8 x 1 1/4 | 1.02 | 2000V | .02 | 3/4 x 1 1/4 | 2.02 | 3000V | .05 | 1 x 2 1/2 | 2.27 |
| 600V | .02 | 3/8 x 1 1/4 | 1.04 | 2000V | .03 | 3/4 x 1 1/4 | 2.05 | 3000V | .1 | 1 1/4 x 2 1/4 | 2.42 |
| 600V | .05 | 3/8 x 1 1/4 | 1.12 | 2000V | .04 | 3/4 x 2 1/4 | 2.08 | 4000V | .05 | 1 1/4 x 3 1/4 | 4.10 |
| 600V | .1 | 3/8 x 1 1/4 | 1.20 | 2000V | .05 | 3/8 x 2 1/4 | 2.12 | 4000V | .1 | 1 1/2 x 4 1/4 | 4.40 |
| 600V | .25 | 3/8 x 2 1/4 | 1.52 | 2000V | .1 | 1 x 2 1/2 | 2.25 | 6000V | .005 | 1 x 2 1/2 | 4.15 |
| 600V | .5 | 1 1/4 x 2 1/4 | 1.96 | 2500V | .005 | 3/4 x 1 1/4 | 2.13 | 6000V | .01 | 1 x 3 1/4 | 4.19 |
| 1000V | .01 | 3/8 x 1 1/4 | 1.12 | 2500V | .01 | 3/4 x 1 1/4 | 2.15 | 6000V | .05 | 1 1/4 x 5 | 4.43 |

ALL TYPES ON THIS PAGE AVAILABLE IN CLOSER TOLERANCE ON SPECIAL ORDER

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 499

AEROVOX

Capacitors

INDUSTRIAL SECTION—STANDARD TYPES (Continued) PAPER SUB-MINIATURES



Tubular, metal-cased capacitors, hermetically sealed with glass terminal end seals. Miniaturized, conventional, foil-paper construction. Especially developed to meet high temperature and minimum space requirements of present day electronic equipment. Designed for rugged long life operation, these units are preferred for many of those applications where reliability is a factor. Impregnated with Hyvol "S" a special, high-temperature-operating, stable, liquid impregnant for operation at elevated temperature. These units are capable of withstanding a voltage breakdown test of twice rated voltage between terminals or between terminals and case, for a one-minute period. Ambient temperature shall be plus 25°C. plus or minus 10°C. during this test. Power factor will be less than 1% when measured or referred to a frequency of 1000 cycles per second at 25°C. Type P323S and P323SX are rigidly processed to assure operation over the temperature range of -65°C. to +125°C. The capacitor sections on types P323S utilize an inserted tab construction to obtain minimum size. Type P323SX utilizes extended foil construction for those applications where operation is required at very low AC voltages.

For equivalent types rated -65°C. to -100°C. in the same case size as shown order as P123S, SX, etc. and request prices.

| Suffix | Description | Suffix | Description | Suffix | Description |
|--------|--------------------------------------|--------|--|--------|--------------------------------------|
| G | One end grounded | T | Insulated with threaded neck mounting | V | Insulated with side vertical bracket |
| | Omit G. both ends insulated | GE | Grounded with axial threaded stud | GB | Grounded with tangential bracket |
| GP | Grounded and plastic sleeve | GR | Grounded with two radial threaded studs | B | Insulated with tangential bracket |
| P | Insulated with plastic sleeve | R | Insulated with two radial threaded studs | GL | Grounded with tab terminal |
| GT | Grounded with threaded neck mounting | GV | Grounded with side vertical bracket | L | Insulated with tab terminal |

*Style variations and ratings listed below are standard. All others available on special order.

| Capacity | P323S | Net Price★ | P323SP | Net Price★ | P323SX | Net Price★ | P323SX P | Net Price★ |
|------------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
| 100 Volts | | | | | | | | |
| .001 | .175 x 3/4 | 1.63 | .237 x 13/16 | 1.69 | .175 x 1/2 | 1.67 | .237 x 13/16 | 1.73 |
| .0015 | .175 x 3/4 | 1.63 | .237 x 13/16 | 1.69 | .175 x 1/2 | 1.67 | .237 x 13/16 | 1.73 |
| .0022 | .175 x 3/4 | 1.65 | .237 x 13/16 | 1.71 | .175 x 1/2 | 1.67 | .237 x 13/16 | 1.73 |
| .0033 | .175 x 3/4 | 1.65 | .237 x 13/16 | 1.71 | .175 x 1/2 | 1.67 | .237 x 13/16 | 1.73 |
| .0047 | .175 x 3/4 | 1.65 | .237 x 13/16 | 1.71 | .175 x 1/2 | 1.67 | .237 x 13/16 | 1.73 |
| .0068 | .175 x 3/4 | 1.65 | .237 x 13/16 | 1.71 | .195 x 3/4 | 1.67 | .257 x 13/16 | 1.73 |
| .01 | .175 x 3/4 | 1.67 | .237 x 13/16 | 1.73 | .235 x 1/2 | 1.67 | .297 x 13/16 | 1.73 |
| .015 | .175 x 3/4 | 1.67 | .237 x 13/16 | 1.73 | .235 x 1/2 | 1.67 | .297 x 13/16 | 1.73 |
| .022 | .195 x 3/4 | 1.67 | .257 x 13/16 | 1.73 | .312 x 3/4 | 1.72 | .374 x 15/16 | 1.78 |
| .033 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .312 x 3/4 | 1.76 | .374 x 15/16 | 1.82 |
| .047 | .312 x 3/4 | 1.67 | .374 x 15/16 | 1.73 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 |
| .068 | .312 x 3/4 | 1.72 | .374 x 15/16 | 1.78 | .400 x 3/4 | 1.80 | .462 x 15/16 | 1.86 |
| .1 | .312 x 3/4 | 1.76 | .374 x 15/16 | 1.82 | .400 x 3/4 | 1.85 | .462 x 15/16 | 1.91 |
| .15 | .400 x 3/4 | 1.85 | .462 x 15/16 | 1.91 | .400 x 1 1/8 | 1.85 | .462 x 15/16 | 1.91 |
| .22 | .400 x 1 1/8 | 1.85 | .462 x 15/16 | 1.99 | .400 x 1 1/8 | 1.98 | .462 x 1 1/8 | 2.04 |
| .33 | .400 x 1 1/8 | 2.11 | .462 x 1 1/8 | 2.17 | .562 x 1 1/8 | 2.20 | .624 x 1 1/8 | 2.28 |
| .47 | .562 x 1 1/8 | 2.24 | .624 x 1 1/8 | 2.32 | .562 x 1 1/8 | 2.29 | .624 x 1 1/8 | 2.37 |
| .68 | .562 x 1 1/8 | 2.33 | .624 x 1 1/8 | 2.41 | .562 x 1 1/8 | 2.46 | .624 x 1 1/8 | 2.54 |
| 1.0 | .562 x 1 1/8 | 2.38 | .624 x 1 1/8 | 2.46 | .670 x 1 1/8 | 2.64 | .732 x 1 1/8 | 2.72 |

| Capacity | P323S | Net Price★ | P323SP | Net Price★ | P323SX | Net Price★ | P323SX P | Net Price★ |
|------------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
| 200 Volts | | | | | | | | |
| .001 | .235 x 3/4 | 1.63 | .297 x 13/16 | 1.69 | .235 x 1/2 | 1.67 | .297 x 13/16 | 1.73 |
| .0015 | .235 x 3/4 | 1.63 | .297 x 13/16 | 1.69 | .235 x 1/2 | 1.67 | .297 x 13/16 | 1.73 |
| .0022 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 1/2 | 1.67 | .297 x 13/16 | 1.73 |
| .0033 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 1/2 | 1.69 | .297 x 13/16 | 1.75 |
| .0047 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.69 | .297 x 13/16 | 1.75 |
| .0068 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 |
| .01 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 |
| .015 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 |
| .022 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .312 x 3/4 | 1.85 | .374 x 15/16 | 1.91 |
| .033 | .312 x 3/4 | 1.67 | .374 x 15/16 | 1.73 | .312 x 3/4 | 1.85 | .374 x 15/16 | 1.91 |
| .047 | .312 x 3/4 | 1.72 | .374 x 15/16 | 1.78 | .400 x 3/4 | 1.89 | .462 x 15/16 | 1.95 |
| .068 | .312 x 3/4 | 1.76 | .374 x 15/16 | 1.82 | .400 x 3/4 | 1.89 | .462 x 15/16 | 1.95 |
| .1 | .400 x 3/4 | 1.80 | .462 x 15/16 | 1.86 | .400 x 1 1/8 | 1.91 | .462 x 15/16 | 1.97 |
| .15 | .400 x 1 1/8 | 1.83 | .462 x 15/16 | 1.89 | .400 x 1 1/8 | 1.98 | .462 x 1 1/8 | 2.04 |
| .22 | .400 x 1 1/8 | 2.00 | .462 x 15/16 | 2.06 | .562 x 1 1/8 | 2.11 | .624 x 1 1/8 | 2.19 |
| .33 | .562 x 1 1/8 | 2.16 | .624 x 1 1/8 | 2.24 | .562 x 1 1/8 | 2.24 | .624 x 1 1/8 | 2.32 |
| .47 | .562 x 1 1/8 | 2.29 | .624 x 1 1/8 | 2.37 | .562 x 1 1/8 | 2.33 | .624 x 1 1/8 | 2.41 |
| .68 | .562 x 1 1/8 | 2.42 | .624 x 1 1/8 | 2.50 | .670 x 1 1/8 | 2.64 | .732 x 1 1/8 | 2.72 |
| 1.0 | .670 x 1 1/8 | 2.90 | .732 x 1 1/8 | 2.98 | .750 x 2 1/8 | 2.97 | .812 x 2 1/8 | 3.07 |

| Capacity | P323S | Net Price★ | P323SP | Net Price★ | P323SX | Net Price★ | P323SX P | Net Price★ |
|------------------|------------|------------|--------------|------------|------------|------------|--------------|------------|
| 300 Volts | | | | | | | | |
| .001 | .235 x 3/4 | 1.63 | .297 x 13/16 | 1.69 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 |
| .0015 | .235 x 3/4 | 1.63 | .297 x 13/16 | 1.69 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 |
| .0022 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 |
| .0033 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 |
| .0047 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 |
| .0068 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 |
| .01 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .312 x 3/4 | 1.85 | .374 x 15/16 | 1.91 |
| .015 | .235 x 3/4 | 1.69 | .297 x 13/16 | 1.75 | .312 x 3/4 | 1.87 | .374 x 15/16 | 1.93 |
| .022 | .312 x 3/4 | 1.76 | .374 x 15/16 | 1.82 | .312 x 3/4 | 1.89 | .374 x 15/16 | 1.95 |

| Capacity | P323S | Net Price★ | P323SP | Net Price★ | P323SX | Net Price★ | P323SX P | Net Price★ |
|--------------------------|--------------|------------|--------------|------------|---------------|------------|---------------|------------|
| 300 Volts (cont.) | | | | | | | | |
| .033 | .312 x 3/4 | 1.76 | .374 x 15/16 | 1.82 | .400 x 3/4 | 1.91 | .462 x 15/16 | 1.97 |
| .047 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 | .400 x 3/4 | 1.91 | .462 x 15/16 | 1.97 |
| .068 | .400 x 3/4 | 1.85 | .462 x 15/16 | 1.91 | .400 x 1 1/8 | 1.91 | .462 x 15/16 | 1.97 |
| .1 | .400 x 1 1/8 | 1.85 | .462 x 15/16 | 1.91 | .400 x 1 1/8 | 1.94 | .462 x 1 1/8 | 2.00 |
| .15 | .400 x 1 1/8 | 1.94 | .462 x 15/16 | 2.00 | .562 x 1 1/8 | 2.11 | .624 x 1 1/8 | 2.19 |
| .22 | .562 x 1 1/8 | 2.07 | .624 x 1 1/8 | 2.15 | .562 x 1 1/8 | 2.24 | .624 x 1 1/8 | 2.32 |
| .33 | .562 x 1 1/8 | 2.24 | .624 x 1 1/8 | 2.32 | .562 x 1 1/8 | 2.38 | .624 x 1 1/8 | 2.46 |
| .47 | .562 x 1 1/8 | 2.73 | .624 x 1 1/8 | 2.81 | .670 x 1 1/8 | 2.84 | .732 x 1 1/8 | 2.92 |
| .68 | .670 x 1 1/8 | 2.90 | .732 x 1 1/8 | 2.98 | .750 x 2 1/8 | 2.95 | .812 x 2 1/8 | 3.05 |
| 1.0 | .750 x 2 1/8 | 3.74 | .812 x 2 1/8 | 3.84 | 1.000 x 2 1/8 | 3.77 | 1.062 x 2 1/8 | 3.87 |

| Capacity | P323S | Net Price★ | P323SP | Net Price★ | P323SX | Net Price★ | P323SX P | Net Price★ |
|------------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|
| 400 Volts | | | | | | | | |
| .001 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.74 | .297 x 13/16 | 1.80 |
| .0015 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.74 | .297 x 13/16 | 1.80 |
| .0022 | .235 x 3/4 | 1.65 | .297 x 13/16 | 1.71 | .235 x 3/4 | 1.74 | .297 x 13/16 | 1.80 |
| .0033 | .235 x 3/4 | 1.69 | .297 x 13/16 | 1.75 | .235 x 3/4 | 1.76 | .297 x 13/16 | 1.82 |
| .0047 | .235 x 3/4 | 1.69 | .297 x 13/16 | 1.75 | .312 x 3/4 | 1.85 | .374 x 15/16 | 1.91 |
| .0068 | .235 x 3/4 | 1.69 | .297 x 13/16 | 1.75 | .312 x 3/4 | 1.85 | .374 x 15/16 | 1.91 |
| .01 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 | .312 x 3/4 | 1.89 | .374 x 15/16 | 1.95 |
| .015 | .312 x 3/4 | 1.75 | .374 x 15/16 | 1.81 | .312 x 3/4 | 1.89 | .374 x 15/16 | 1.95 |
| .022 | .312 x 3/4 | 1.78 | .374 x 15/16 | 1.84 | .400 x 3/4 | 1.94 | .462 x 15/16 | 2.00 |
| .033 | .312 x 3/4 | 1.78 | .374 x 15/16 | 1.84 | .400 x 3/4 | 1.94 | .462 x 15/16 | 2.00 |
| .047 | .400 x 3/4 | 1.85 | .462 x 15/16 | 1.91 | .400 x 1 1/8 | 1.98 | .462 x 15/16 | 2.04 |
| .068 | .400 x 1 1/8 | 1.89 | .462 x 15/16 | 1.95 | .400 x 1 1/8 | 1.98 | .462 x 15/16 | 2.04 |
| .1 | .400 x 1 1/8 | 1.94 | .462 x 15/16 | 2.00 | .562 x 1 1/8 | 2.11 | .624 x 1 1/8 | 2.19 |
| .15 | .562 x 1 1/8 | 2.11 | .624 x 1 1/8 | 2.19 | .562 x 1 1/8 | 2.20 | .624 x 1 1/8 | 2.28 |
| .22 | .562 x 1 1/8 | 2.24 | .624 x 1 1/8 | 2.32 | .562 x 1 1/8 | 2.33 | .624 x 1 1/8 | 2.41 |
| .33 | .562 x 1 1/8 | 2.29 | .624 x 1 1/8 | 2.37 | .670 x 1 1/8 | 2.55 | .732 x 1 1/8 | 2.63 |
| .47 | .670 x 1 1/8 | 2.73 | .732 x 1 1/8 | 2.81 | .750 x 2 1/8 | 2.95 | .812 x 2 1/8 | 3.05 |
| .68 | .750 x 2 1/8 | 3.63 | .812 x 2 1/8 | 3.73 | .750 x 2 1/8 | 3.90 | .812 x 2 1/8 | 4.00 |
| 1.0 | 1.000 x 1 1/8 | 3.76 | 1.062 x 1 1/8 | 3.86 | 1.000 x 2 1/8 | 4.04 | 1.062 x 2 1/8 | 4.14 |

| Capacity | P323S | Net Price★ | P323SP | Net Price★ | P323SX | Net Price★ | P323SX P | Net Price★ |
|------------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|
| 600 Volts | | | | | | | | |
| .001 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .235 x 3/4 | 1.78 | .297 x 13/16 | 1.82 |
| .0015 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .235 x 3/4 | 1.76 | .297 x 13/16 | 1.82 |
| .0022 | .235 x 3/4 | 1.67 | .297 x 13/16 | 1.73 | .235 x 3/4 | 1.76 | .297 x 13/16 | 1.82 |
| .0033 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 |
| .0047 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 | .312 x 3/4 | 1.87 | .374 x 15/16 | 1.93 |
| .0068 | .235 x 3/4 | 1.72 | .297 x 13/16 | 1.78 | .312 x 3/4 | 1.89 | .374 x 15/16 | 1.95 |
| .01 | .312 x 3/4 | 1.76 | .374 x 15/16 | 1.82 | .312 x 3/4 | 1.91 | .374 x 15/16 | 1.97 |
| .015 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 | .400 x 3/4 | 1.94 | .462 x 15/16 | 2.00 |
| .022 | .312 x 3/4 | 1.80 | .374 x 15/16 | 1.86 | .400 x 3/4 | 1.96 | .462 x 15/16 | 2.02 |
| .033 | .400 x 3/4 | 1.87 | .462 x 15/16 | 1.93 | .400 x 1 1/8 | 1.96 | .462 x 15/16 | 2.02 |
| .047 | .400 x 1 1/8 | 1.89 | .462 x 15/16 | 1.95 | .400 x 1 1/8 | 2.02 | .462 x 15/16 | 2.08 |
| .068 | .400 x 1 1/8 | 1.98 | .462 x | | | | | |

AEROVOX

Capacitors

INDUSTRIAL SECTION — STANDARD TYPES (Continued) METALLIZED-PAPER CAPACITORS

TYPE P8292ZN PLASTIC-CASED, METALLIZED-PAPER TUBULARS



Featuring an exclusive "polycap" plastic-case construction, these capacitors offer outstanding resistance to humidity and improved insulation resistance. The high temperature impregnant permits operation over the temperature range of -30°C to $+100^{\circ}\text{C}$ at working voltage. Distinctive black cases are completely free of any wax coating to facilitate handling problems in automatic insertion and assembly equipment. Standard tolerance on these units is $\pm 20\%$. Available in closer tolerances upon request at an additional charge. Mechanical Tolerances— $\pm \frac{1}{16}$ " on length and diameter.

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 499

| 200 VDCW | | | |
|-----------|-----------------------------------|----------------|-----------|
| Cap. Mfd. | D x L | Catalog Number | Net Price |
| .01 | $\frac{1}{4} \times 1\frac{1}{2}$ | P8292ZN6 | .44 |
| .02 | $\frac{1}{4} \times 2\frac{1}{2}$ | P8292ZN7 | .44 |
| .03 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN8 | .45 |
| .05 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN9 | .45 |
| .1 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN10 | .47 |
| .25 | $\frac{1}{2} \times 2\frac{1}{2}$ | P8292ZN11 | .68 |
| .5 | $\frac{1}{2} \times 1\frac{1}{2}$ | P8292ZN12 | .80 |
| 1.0 | $\frac{1}{2} \times 1\frac{1}{2}$ | P8292ZN13 | 1.07 |
| 2.0 | $\frac{3}{8} \times 1\frac{1}{2}$ | P8292ZN14 | 1.46 |

| 400 VDCW | | | |
|-----------|-----------------------------------|----------------|-----------|
| Cap. Mfd. | D x L | Catalog Number | Net Price |
| .01 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN15 | .44 |
| .02 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN16 | .45 |
| .03 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN17 | .45 |
| .05 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN18 | .47 |
| .1 | $\frac{3}{8} \times 1\frac{1}{2}$ | P8292ZN19 | .51 |
| .25 | $\frac{1}{4} \times 1\frac{1}{2}$ | P8292ZN20 | .74 |
| .5 | $\frac{5}{8} \times 1\frac{1}{2}$ | P8292ZN21 | .95 |
| 1.0 | $\frac{1}{2} \times 1\frac{1}{2}$ | P8292ZN22 | 1.32 |
| 2.0 | $\frac{1}{2} \times 2\frac{3}{8}$ | P8292ZN23 | 1.86 |

| 600 VDCW | | | |
|-----------|-----------------------------------|----------------|-----------|
| Cap. Mfd. | D x L | Catalog Number | Net Price |
| .01 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN24 | .45 |
| .02 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN25 | .47 |
| .03 | $\frac{3}{8} \times 2\frac{1}{2}$ | P8292ZN26 | .50 |
| .05 | $\frac{1}{2} \times 2\frac{1}{2}$ | P8292ZN27 | .53 |
| .1 | $\frac{3}{8} \times 1\frac{1}{2}$ | P8292ZN28 | .59 |
| .25 | $\frac{1}{4} \times 1\frac{1}{2}$ | P8292ZN29 | .92 |
| .5 | $\frac{1}{4} \times 1\frac{1}{2}$ | P8292ZN30 | 1.15 |
| 1.0 | $\frac{1}{4} \times 2$ | P8292ZN31 | 1.43 |
| 2.0 | $1 \times 2\frac{3}{4}$ | P8292ZN32 | 2.03 |

TYPE P83Z Microminiatures



Ultra-small, new metallized paper dielectric capacitor particularly applicable in the electronic field to replace the low capacity paper units now being used. Hyvol K impregnated in humidity resistant molded thermo-plastic cases. Standard Tolerance $\pm 25\%$.

| Cap. Mfd. | Voltage | Case Size (Inches) Dia. x Lgth. | Net Price |
|-----------|---------|------------------------------------|-----------|
| .004 | 200 VDC | $\frac{3}{16} \times \frac{3}{16}$ | .21 |
| .005 | 200 VDC | $\frac{3}{16} \times \frac{3}{16}$ | .21 |
| .01 | 200 VDC | $\frac{3}{16} \times \frac{3}{16}$ | .21 |
| .02 | 200 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .04 | 200 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .002 | 400 VDC | $\frac{3}{16} \times \frac{3}{16}$ | .21 |
| .003 | 400 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .008 | 400 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .01 | 400 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .0005 | 600 VDC | $\frac{3}{16} \times \frac{3}{16}$ | .21 |
| .0008 | 600 VDC | $\frac{3}{16} \times \frac{3}{16}$ | .21 |
| .001 | 600 VDC | $\frac{3}{16} \times \frac{3}{16}$ | .21 |
| .002 | 600 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .0022 | 600 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .0047 | 600 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |
| .005 | 600 VDC | $\frac{1}{4} \times \frac{3}{16}$ | .27 |

Operating temperature range -15°C to $+85^{\circ}\text{C}$ without derating.

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 499

TYPE P89ZXY Hermetically Sealed Tubulars

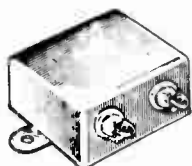
Hermetically sealed metallized paper capacitors. Sealed in metal cases with rubber bakelite end seals. Impregnated with Hyvol K or Hyvol M. These units are manufactured for operating temperature of -55°C . to $+70^{\circ}\text{C}$. without voltage derating and operation up to 95°C ambient with derating. Standard units are furnished without insulating tube or bracket (P89ZXY). Standard tolerance $\pm 20\%$. Also available in $\pm 10\%$ and $\pm 5\%$ on special order.



| Style Variations | Cap. Mfd. | Size 150 VDC | Net Price★ | Size 200 VDC | Net Price★ | Size 400 VDC | Net Price★ | Size 600 VDC | Net Price★ |
|---|---|-------------------------|------------|-----------------------------------|------------|-----------------------------------|------------|------------------------------------|------------------------|
| | P89Z — with cardboard insulating sleeve and radial mounting bracket | .01 | | | | | | | $\frac{1}{8} \times 1$ | 1.30 |
| | .02 | | | | | | | $\frac{1}{8} \times 1$ | 1.30 |
| | .03 | | | | | | | $\frac{1}{8} \times 1$ | 1.30 |
| P89ZXP — without mounting bracket but with plastic insulating sleeve. | .05 | | | $\frac{1}{4} \times 1$ | 1.22 | $\frac{3}{8} \times 1$ | 1.27 | $\frac{1}{2} \times 1$ | 1.35 |
| | .1 | | | $\frac{1}{4} \times 1$ | 1.27 | $\frac{3}{8} \times 1\frac{1}{8}$ | 1.35 | $\frac{1}{2} \times 1\frac{1}{2}$ | 1.40 |
| | .25 | | | $\frac{1}{2} \times 1$ | 1.40 | $\frac{3}{8} \times 1\frac{1}{8}$ | 1.57 | $\frac{3}{8} \times 1\frac{1}{2}$ | 1.73 |
| P89ZXY — without insulating sleeve or mounting bracket. | .5 | | | $\frac{1}{2} \times 1\frac{1}{8}$ | 1.53 | $\frac{3}{8} \times 2$ | 1.76 | $\frac{1}{2} \times 2$ | 1.94 |
| | 1.0 | | | $\frac{3}{8} \times 1\frac{1}{2}$ | 1.81 | $\frac{1}{4} \times 2\frac{1}{2}$ | 2.21 | $\frac{1}{4} \times 2\frac{1}{2}$ | 2.54 |
| P89ZY — without insulating sleeve but with radial mounting bracket. | 2.0 | | | $\frac{3}{8} \times 2$ | 2.24 | $1 \times 2\frac{1}{2}$ | 3.19 | $1\frac{1}{4} \times 2\frac{1}{2}$ | 3.66 |
| | 3.0 | $\frac{3}{4} \times 2$ | 2.97 | | | | | | |
| | 4.0 | $1\frac{1}{8} \times 2$ | 3.51 | | | | | | |
| | 6.0 | 1×2 | 4.62 | | | | | | |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 499

TYPE P30ZN High Temperature Bathtub Case



AEROVOX type P30ZN Aero-lene impregnated metallized-paper capacitors housed in "bathtub" metal cases hermetically sealed. Operating temperature range -65°C . to $+125^{\circ}\text{C}$. at full rating. Standard Tolerance $\pm 20\%$.

| Capacity | 150 V | Net Price★ | 200 V | Net Price★ | 400 V | Net Price★ | 600 V | Net Price★ |
|----------|---|------------|--|------------|---|------------|---|------------|
| .1 | | | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.15 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.30 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.37 |
| .25 | | | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.39 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.42 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.46 |
| .5 | | | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.44 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.58 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.60 |
| 1.0 | | | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.86 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 2.96 | $1\frac{1}{4} \times 1\frac{1}{4} \times \frac{3}{8}$ | 3.26 |
| 2.0 | | | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 3.53 | | | $2 \times 2 \times \frac{1}{8}$ | 3.85 |
| 3.0 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 3.29 | | | $2 \times 1\frac{1}{4} \times 1\frac{1}{8}$ | 3.74 | $2 \times 2 \times \frac{1}{8}$ | 3.85 |
| 4.0 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 3.95 | | | $2 \times 1\frac{1}{4} \times 1\frac{1}{8}$ | 4.21 | $2 \times 2 \times 1\frac{1}{4}$ | 5.45 |
| 5.0 | $1\frac{1}{4} \times 1 \times \frac{3}{4}$ | 4.39 | | | $2 \times 2 \times 1$ | 4.97 | $2 \times 2 \times 1\frac{1}{4}$ | 6.53 |
| 6.0 | $1\frac{1}{4} \times 1\frac{1}{4} \times \frac{3}{8}$ | 4.57 | | | $2 \times 2 \times 1\frac{1}{4}$ | 5.99 | | |
| 8.0 | $2 \times 1\frac{1}{4} \times \frac{3}{4}$ | 5.29 | | | | | | |
| 10.0 | $2 \times 1\frac{1}{4} \times \frac{3}{4}$ | 6.09 | | | | | | |
| 12.0 | $2 \times 2 \times \frac{3}{8}$ | 6.82 | | | | | | |
| 15.0 | $2 \times 2 \times 1$ | 8.25 | | | | | | |

★Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 499

AEROVOX

Capacitors

INDUSTRIAL SECTION—STANDARD TYPES (Continued) METALLIZED-PAPER



Metallized paper tubulars hermetically sealed in metal tubes with glass end seals soldered for positive moisture seal. Designed to meet critical operating temperatures and the need for increased reliability in the electronic field. The P123ZN—Aerolene impregnated—is manufactured to meet operating temperature range of -55C to +100C at full voltage rating and +125C with voltage derating to 75%. P123ZNG is case grounded. P123ZN is case insulated. Standard tolerance .01 mfd. and lower $\pm 25\%$, .015 mfd. and up $\pm 20\%$. Also available in $\pm 10\%$ and $\pm 5\%$ on special order. Units rated at 50 Volts are stocked at $\pm 10\%$. These units are equivalent to characteristic M of MIL-C-18312. Suffix P denotes plastic tube; B denotes mtg. bracket (not available with plastic tube); T denotes threaded neck terminal.

TYPES P123ZN, P123ZNG

Metal-Cased Capacitors

| Type | Type |
|---------|----------|
| CHO4A1M | P123ZN |
| CHO4A3M | P123ZNG |
| CHO5A1M | P123ZNP |
| CHO5A3M | P123ZNGP |

| Voltage |
|---------|
| V 150V |
| C 200V |
| E 400V |
| F 600V |

| Capacity |
|---|
| First two figures are significant figures—third figure represents number of zeros to follow |

| Tolerance |
|--------------|
| K $\pm 10\%$ |
| M $\pm 20\%$ |

MIL CONVERSION CHART

| CHO4A1M (P123ZN) | E (400V) | 223 (.022) | K ($\pm 10\%$) |
|------------------|----------|------------|------------------|
|------------------|----------|------------|------------------|

| Capacity | P123ZN | | P123ZNP | | P123ZNG | | P123ZNGP | | Capacity | P123ZN | | P123ZNP | | P123ZNG | | P123ZNGP | |
|------------------|--------------|-----------|---------------|-----------|---------------|-----------|--------------|-----------|------------------------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| | Price | Net Price | Price | Net Price | Price | Net Price | Price | Net Price | | Price | Net Price | Price | Net Price | Price | Net Price | Price | Net Price |
| 50VDCW | | | | | | | | | | | | | | | | | |
| .047 | .195 x 1/16 | 2.11 | .257 x 7/8 | 2.19 | .195 x 3/4 | 1.31 | .257 x 1/16 | 1.39 | .012 | .235 x 1/16 | 1.42 | .297 x 7/8 | 1.45 | .235 x 3/4 | 1.07 | .297 x 1/16 | 1.10 |
| .068 | .195 x 1/16 | 2.13 | .257 x 7/8 | 2.21 | .195 x 3/4 | 1.33 | .257 x 1/16 | 1.41 | .015 | .235 x 1/16 | 1.42 | .297 x 7/8 | 1.45 | .235 x 3/4 | 1.07 | .297 x 1/16 | 1.10 |
| .1 | .195 x 1/16 | 2.15 | .257 x 1 | 2.23 | .195 x 3/4 | 1.35 | .257 x 1/16 | 1.43 | .018 | .235 x 1/16 | 1.42 | .297 x 7/8 | 1.45 | .235 x 3/4 | 1.07 | .297 x 1/16 | 1.10 |
| .15 | .235 x 1/16 | 2.18 | .297 x 1 | 2.26 | .235 x 3/4 | 1.38 | .297 x 1/16 | 1.46 | .02 | .235 x 1/16 | 1.42 | .297 x 7/8 | 1.45 | .235 x 3/4 | 1.07 | .297 x 1/16 | 1.10 |
| .22 | .312 x 1/16 | 2.22 | .374 x 7/8 | 2.30 | .312 x 3/4 | 1.42 | .374 x 1/16 | 1.50 | .022 | .235 x 1/16 | 1.43 | .297 x 7/8 | 1.46 | .235 x 3/4 | 1.08 | .297 x 1/16 | 1.11 |
| .33 | .312 x 1/16 | 2.27 | .374 x 13/16 | 2.35 | .312 x 1/16 | 1.47 | .374 x 1/16 | 1.55 | .027 | .312 x 1/16 | 1.43 | .374 x 7/8 | 1.46 | .312 x 3/4 | 1.08 | .374 x 1/16 | 1.11 |
| .47 | .400 x 1/16 | 2.34 | .374 x 13/16 | 2.42 | .312 x 1/16 | 1.54 | .374 x 1/16 | 1.62 | .033 | .312 x 1/16 | 1.43 | .374 x 7/8 | 1.46 | .312 x 3/4 | 1.08 | .374 x 1/16 | 1.11 |
| .68 | .400 x 1/16 | 2.54 | .462 x 13/16 | 2.62 | .400 x 1/16 | 1.73 | .462 x 1/16 | 1.81 | .039 | .312 x 1/16 | 1.43 | .374 x 7/8 | 1.46 | .312 x 3/4 | 1.08 | .374 x 1/16 | 1.11 |
| 1.0 | .400 x 1/16 | 2.75 | .462 x 13/16 | 2.83 | .400 x 1/16 | 1.95 | .462 x 1/16 | 2.03 | .04 | .312 x 1/16 | 1.43 | .374 x 7/8 | 1.46 | .312 x 3/4 | 1.08 | .374 x 1/16 | 1.11 |
| 1.5 | .500 x 1/16 | 3.08 | .562 x 13/16 | 3.16 | .500 x 1/16 | 2.28 | .562 x 1/16 | 2.36 | .047 | .312 x 1/16 | 1.43 | .374 x 7/8 | 1.46 | .312 x 3/4 | 1.08 | .374 x 1/16 | 1.11 |
| 2.0 | .562 x 1/16 | 3.41 | .624 x 13/16 | 3.49 | .562 x 1/16 | 2.61 | .624 x 1/16 | 2.69 | .05 | .312 x 1/16 | 1.43 | .374 x 7/8 | 1.46 | .312 x 3/4 | 1.08 | .374 x 1/16 | 1.11 |
| 3.0 | .562 x 1/16 | 3.86 | .624 x 13/16 | 3.94 | .562 x 1/16 | 3.06 | .624 x 1/16 | 3.14 | .056 | .312 x 1/16 | 1.50 | .374 x 1/16 | 1.53 | .312 x 3/4 | 1.15 | .374 x 1/16 | 1.18 |
| 4.0 | .670 x 1/16 | 4.31 | .732 x 13/16 | 4.39 | .670 x 1/16 | 3.51 | .732 x 1/16 | 3.59 | .068 | .312 x 1/16 | 1.53 | .374 x 1/16 | 1.56 | .312 x 3/4 | 1.18 | .374 x 1/16 | 1.21 |
| 150 Volts | | | | | | | | | | | | | | | | | |
| 3.0 | .670 x 1/16 | 3.62 | .732 x 13/16 | 3.66 | .670 x 13/16 | 3.27 | .732 x 17/8 | 3.31 | .1 | .400 x 1/16 | 1.55 | .462 x 1/16 | 1.57 | .400 x 1/16 | 1.20 | .462 x 1/16 | 1.23 |
| 4.0 | .750 x 1/16 | 3.89 | .812 x 13/16 | 3.95 | .750 x 13/16 | 3.54 | .812 x 17/8 | 3.60 | .12 | .500 x 1/16 | 1.60 | .562 x 1/16 | 1.64 | .500 x 1/16 | 1.25 | .562 x 1/16 | 1.29 |
| 5.0 | 1.000 x 1/16 | 4.10 | 1.062 x 13/16 | 4.16 | 1.000 x 13/16 | 3.75 | 1.062 x 17/8 | 3.81 | .15 | .500 x 1/16 | 1.63 | .562 x 1/16 | 1.67 | .500 x 1/16 | 1.28 | .562 x 1/16 | 1.32 |
| 6.0 | 1.000 x 1/16 | 4.31 | 1.062 x 13/16 | 4.37 | 1.000 x 13/16 | 3.96 | 1.062 x 17/8 | 4.02 | .18 | .500 x 1/16 | 1.64 | .562 x 1/16 | 1.68 | .500 x 1/16 | 1.29 | .562 x 1/16 | 1.33 |
| 200 Volts | | | | | | | | | | | | | | | | | |
| .0005 | .175 x 1/2 | 1.36 | .237 x 3/8 | 1.39 | .175 x 3/8 | 1.01 | .237 x 1/2 | 1.04 | .22 | .500 x 1/16 | 1.64 | .562 x 1/16 | 1.68 | .500 x 1/16 | 1.29 | .562 x 1/16 | 1.33 |
| .001 | .175 x 1/2 | 1.36 | .237 x 3/8 | 1.39 | .175 x 3/8 | 1.01 | .237 x 1/2 | 1.04 | .25 | .500 x 1/16 | 1.64 | .562 x 1/16 | 1.68 | .500 x 1/16 | 1.29 | .562 x 1/16 | 1.33 |
| .002 | .175 x 1/2 | 1.36 | .237 x 3/8 | 1.39 | .175 x 3/8 | 1.01 | .237 x 1/2 | 1.04 | .27 | .562 x 1/16 | 1.81 | .624 x 1/16 | 1.85 | .562 x 1/16 | 1.46 | .624 x 1/16 | 1.50 |
| .003 | .175 x 1/2 | 1.36 | .237 x 3/8 | 1.39 | .175 x 3/8 | 1.01 | .237 x 1/2 | 1.04 | .33 | .562 x 1/16 | 1.81 | .624 x 1/16 | 1.85 | .562 x 1/16 | 1.46 | .624 x 1/16 | 1.50 |
| .005 | .175 x 1/2 | 1.36 | .237 x 3/8 | 1.39 | .175 x 3/8 | 1.01 | .237 x 1/2 | 1.04 | .39 | .562 x 1/16 | 1.90 | .624 x 1/16 | 1.94 | .562 x 1/16 | 1.55 | .624 x 1/16 | 1.59 |
| .01 | .175 x 1/2 | 1.36 | .237 x 3/8 | 1.39 | .175 x 3/8 | 1.01 | .237 x 1/2 | 1.04 | .47 | .562 x 1/16 | 1.94 | .624 x 1/16 | 1.98 | .562 x 1/16 | 1.59 | .624 x 1/16 | 1.63 |
| .012 | .195 x 3/8 | 1.36 | .257 x 1/16 | 1.39 | .195 x 3/8 | 1.01 | .257 x 5/8 | 1.04 | .5 | .562 x 1/16 | 2.14 | .624 x 1/16 | 2.18 | .562 x 1/16 | 1.79 | .624 x 1/16 | 1.83 |
| .015 | .195 x 3/8 | 1.36 | .257 x 1/16 | 1.39 | .195 x 3/8 | 1.01 | .257 x 5/8 | 1.04 | .56 | .670 x 1/16 | 2.14 | .723 x 1/16 | 2.18 | .670 x 1/16 | 1.82 | .732 x 1/16 | 1.86 |
| .018 | .195 x 3/8 | 1.36 | .257 x 1/16 | 1.39 | .195 x 3/8 | 1.01 | .257 x 5/8 | 1.04 | .68 | .670 x 1/16 | 2.17 | .732 x 1/16 | 2.21 | .670 x 1/16 | 1.82 | .732 x 1/16 | 1.86 |
| .02 | .195 x 3/8 | 1.36 | .257 x 1/16 | 1.39 | .195 x 3/8 | 1.01 | .257 x 5/8 | 1.04 | .82 | .670 x 1/16 | 2.30 | .732 x 1/16 | 2.34 | .670 x 1/16 | 1.95 | .732 x 1/16 | 1.99 |
| .022 | .195 x 3/8 | 1.36 | .257 x 1/16 | 1.39 | .195 x 3/8 | 1.01 | .257 x 5/8 | 1.04 | 1.0 | .670 x 21/8 | 2.31 | .732 x 21/8 | 2.35 | .670 x 21/8 | 1.96 | .732 x 21/8 | 2.00 |
| .027 | .235 x 3/8 | 1.37 | .297 x 1/16 | 1.40 | .235 x 3/8 | 1.02 | .297 x 1/2 | 1.05 | 1.5 | .750 x 23/8 | 3.00 | .812 x 23/8 | 3.06 | .750 x 23/8 | 2.65 | .812 x 23/8 | 2.71 |
| .033 | .235 x 3/8 | 1.38 | .297 x 1/16 | 1.41 | .235 x 3/8 | 1.03 | .297 x 1/2 | 1.06 | 2.0 | 1.000 x 1/16 | 3.51 | 1.062 x 1/16 | 3.57 | 1.000 x 1/16 | 3.16 | 1.062 x 1/16 | 3.22 |
| .039 | .235 x 3/8 | 1.40 | .297 x 3/4 | 1.43 | .235 x 3/8 | 1.05 | .297 x 1/2 | 1.08 | 400 Volts (Continued) | | | | | | | | |
| .04 | .235 x 3/8 | 1.42 | .297 x 1/16 | 1.45 | .235 x 3/8 | 1.07 | .297 x 1/2 | 1.10 | .0005 | .235 x 1/2 | 1.40 | .297 x 3/8 | 1.43 | .235 x 3/8 | 1.05 | .297 x 1/2 | 1.08 |
| .047 | .235 x 3/8 | 1.42 | .297 x 1/16 | 1.45 | .235 x 3/8 | 1.07 | .297 x 1/2 | 1.10 | .001 | .235 x 5/8 | 1.40 | .297 x 1/16 | 1.43 | .235 x 3/8 | 1.05 | .297 x 3/8 | 1.08 |
| .05 | .235 x 3/8 | 1.42 | .297 x 1/16 | 1.45 | .235 x 3/8 | 1.07 | .297 x 1/2 | 1.10 | .002 | .235 x 5/8 | 1.40 | .297 x 1/16 | 1.43 | .235 x 3/8 | 1.05 | .297 x 3/8 | 1.08 |
| .056 | .235 x 3/8 | 1.43 | .297 x 1/16 | 1.46 | .235 x 3/8 | 1.08 | .297 x 1/2 | 1.11 | .003 | .235 x 5/8 | 1.43 | .297 x 1/16 | 1.46 | .235 x 3/8 | 1.08 | .297 x 3/8 | 1.11 |
| .068 | .312 x 3/8 | 1.45 | .374 x 1/16 | 1.48 | .312 x 3/8 | 1.10 | .374 x 1/16 | 1.13 | .005 | .235 x 5/8 | 1.45 | .297 x 1/16 | 1.48 | .235 x 3/8 | 1.10 | .297 x 3/8 | 1.13 |
| .082 | .312 x 3/8 | 1.46 | .374 x 1/16 | 1.49 | .312 x 3/8 | 1.11 | .374 x 1/16 | 1.14 | .01 | .235 x 5/8 | 1.45 | .297 x 7/8 | 1.48 | .235 x 3/8 | 1.10 | .297 x 3/8 | 1.13 |
| .1 | .312 x 3/8 | 1.48 | .374 x 1/16 | 1.51 | .312 x 3/8 | 1.13 | .374 x 1/16 | 1.16 | .012 | .312 x 1/16 | 1.46 | .374 x 7/8 | 1.49 | .312 x 3/8 | 1.11 | .374 x 3/8 | 1.14 |
| .12 | .312 x 1/16 | 1.49 | .374 x 3/8 | 1.52 | .312 x 1/16 | 1.14 | .374 x 1/16 | 1.17 | .015 | .312 x 1/16 | 1.46 | .374 x 7/8 | 1.49 | .312 x 3/8 | 1.11 | .374 x 3/8 | 1.14 |
| .15 | .312 x 1/16 | 1.49 | .374 x 13/16 | 1.52 | .312 x 1/16 | 1.14 | .374 x 1/16 | 1.17 | .018 | .312 x 1/16 | 1.46 | .374 x 7/8 | 1.49 | .312 x 3/8 | 1.11 | .374 x 3/8 | 1.14 |
| .18 | .312 x 1/16 | 1.50 | .374 x 3/8 | 1.53 | .312 x 1/16 | 1.15 | .374 x 1/16 | 1.18 | .02 | .312 x 1/16 | 1.46 | .374 x 7/8 | 1.49 | .312 x 3/8 | 1.11 | .374 x 3/8 | 1.14 |
| .2 | .312 x 1/16 | 1.50 | .374 x 13/16 | 1.53 | .312 x 1/16 | 1.15 | .374 x 1/16 | 1.18 | .022 | .312 x 1/16 | 1.46 | .374 x 7/8 | 1.49 | .312 x 3/8 | 1.11 | .374 x 3/8 | 1.14 |
| .22 | .312 x 1/16 | 1.50 | .374 x 13/16 | 1.53 | .312 x 1/16 | 1.15 | .374 x 1/16 | 1.18 | .027 | .400 x 1/16 | 1.48 | .462 x 7/8 | 1.51 | .400 x 3/4 | 1.13 | .462 x 3/8 | 1.16 |
| .25 | .312 x 1/16 | 1.62 | .374 x 13/16 | 1.65 | .312 x 1/16 | 1.27 | .374 x 1/16 | 1.30 | .033 | .400 x 1/16 | 1.48 | .462 x 7/8 | 1.51 | .400 x 3/4 | 1.13 | .462 x 3/8 | 1.16 |
| .27 | .400 x 1/16 | 1.62 | .462 x 13/16 | 1.65 | .400 x 1/16 | 1.27 | .462 x 1/16 | 1.30 | .039 | .400 x 1/16 | 1.49 | .462 x 7/8 | 1.52 | .400 x 3/4 | 1.14 | .462 x 3/8 | 1.17 |
| .33 | .400 x 1/16 | 1.62 | .462 x 13/16 | 1.65 | .400 x 1/16 | 1.27 | .462 x 1/16 | 1.30 | .04 | .400 x 1/16 | 1.49 | .462 x 7/8 | 1.52 | .400 x 3/4 | 1.14 | .462 x 3/8 | 1.17 |
| .39 | .400 x 1/16 | 1.70 | .462 x 13/16 | 1.73 | .400 x 1/16 | 1.35 | .462 x 1/16 | 1.38 | .047 | .400 x 1/16 | 1.50 | .462 x 7/8 | 1.53 | .400 x 3/4 | 1.15 | .462 x 3/8 | 1.18 |
| .47 | .400 x 1/16 | 1.71 | .462 x 13/16 | 1.74 | .400 x 1/16 | 1.36 | .462 x 1/16 | 1.39 | .05 | .400 x 1/16 | 1.50 | .462 x 7/8 | 1.53 | .400 x 3/4 | 1.15 | .462 x 3/8 | 1.18 |
| .5 | .400 x 1/16 | 1.73 | .462 x 13/16 | 1.76 | .400 | | | | | | | | | | | | |

AEROVOX

Capacitors

INDUSTRIAL SECTION — STANDARD TYPES (cont.) METALLIZED PAPER

TYPE P323ZN

125°C, No Derating

Metal-Cased, Metallized-Paper Tubulars Similar to CH04 and CH05 —

MIL-C-18312

Characteristic N



Miniature, hermetically-sealed in metal cases with glass terminal end-seal. Type P323ZN units are designed for operation at temperatures from -55°C to +125°C WITHOUT DERATING for voltage. They will meet all the requirements for minimum size, light weight and high temperature in present day electronic equipments. Designed for long life, rugged duty and high reliability operation in critical military and premium priced commercial electronic assemblies.

200 VDCW

| Capacity Mfd. | P323ZN Case Floating | | P323ZNP Case Floating Plastic Insulating Sleeve | | P323ZNG Case Grounded | | P323ZNGP Case Grounded Plastic Insulating Sleeve | |
|---------------|----------------------|--------|---|--------|-----------------------|--------|--|--------|
| | Size | Net ★ | Size | Net ★ | Size | Net ★ | Size | Net ★ |
| .01 | .175 x 1/8 | \$1.51 | .237 x 3/8 | \$1.59 | .175 x 3/8 | \$1.16 | .237 x 1/2 | \$1.24 |
| .012 | .195 x 3/8 | 1.51 | .257 x 1/2 | 1.59 | .195 x 3/8 | 1.16 | .257 x 3/8 | 1.24 |
| .015 | .195 x 3/8 | 1.51 | .257 x 1/2 | 1.59 | .195 x 3/8 | 1.16 | .257 x 3/8 | 1.24 |
| .018 | .235 x 3/8 | 1.51 | .297 x 1/2 | 1.59 | .235 x 3/8 | 1.16 | .297 x 3/8 | 1.24 |
| .022 | .235 x 3/8 | 1.51 | .297 x 1/2 | 1.59 | .235 x 3/8 | 1.16 | .297 x 3/8 | 1.24 |
| .027 | .235 x 3/8 | 1.51 | .297 x 1/2 | 1.59 | .235 x 3/8 | 1.16 | .297 x 3/8 | 1.24 |
| .033 | .235 x 3/8 | 1.53 | .297 x 1/2 | 1.61 | .235 x 1/2 | 1.18 | .297 x 3/8 | 1.26 |
| .039 | .235 x 1/2 | 1.53 | .297 x 3/8 | 1.61 | .235 x 3/8 | 1.18 | .297 x 1/2 | 1.26 |
| .047 | .235 x 1/2 | 1.57 | .297 x 3/8 | 1.65 | .235 x 3/8 | 1.22 | .297 x 1/2 | 1.30 |
| .056 | .235 x 1/2 | 1.57 | .297 x 3/8 | 1.65 | .235 x 3/8 | 1.22 | .297 x 1/2 | 1.30 |
| .068 | .312 x 1/2 | 1.61 | .374 x 3/8 | 1.69 | .312 x 3/8 | 1.26 | .374 x 1/2 | 1.34 |
| .082 | .312 x 1/2 | 1.61 | .374 x 3/8 | 1.69 | .312 x 3/8 | 1.26 | .374 x 1/2 | 1.34 |
| .1 | .312 x 1/2 | 1.63 | .374 x 3/8 | 1.71 | .312 x 3/8 | 1.28 | .374 x 1/2 | 1.36 |
| .12 | .312 x 1/2 | 1.63 | .374 x 3/8 | 1.71 | .312 x 1/2 | 1.28 | .374 x 1/2 | 1.36 |
| .15 | .312 x 1/2 | 1.67 | .374 x 3/8 | 1.75 | .312 x 1/2 | 1.32 | .374 x 1/2 | 1.40 |
| .18 | .400 x 3/8 | 1.67 | .462 x 1/2 | 1.75 | .400 x 1/2 | 1.32 | .462 x 3/8 | 1.40 |
| .22 | .400 x 3/8 | 1.67 | .462 x 1/2 | 1.75 | .400 x 3/8 | 1.32 | .462 x 3/8 | 1.40 |
| .27 | .400 x 1/2 | 1.67 | .462 x 1/2 | 1.75 | .400 x 1/2 | 1.32 | .462 x 1/2 | 1.40 |
| .33 | .400 x 1/2 | 1.82 | .462 x 1/2 | 1.90 | .400 x 1/2 | 1.47 | .462 x 1/2 | 1.55 |
| .39 | .400 x 1/2 | 1.82 | .462 x 1/2 | 1.90 | .400 x 1/2 | 1.47 | .462 x 1/2 | 1.55 |
| .47 | .500 x 1/2 | 1.82 | .562 x 1/2 | 2.01 | .500 x 1/2 | 1.55 | .562 x 1/2 | 1.63 |
| .56 | .500 x 1/2 | 1.93 | .562 x 1/2 | 2.01 | .500 x 1/2 | 1.58 | .562 x 1/2 | 1.66 |
| .68 | .500 x 1/2 | 1.93 | .562 x 1/2 | 2.01 | .500 x 1/2 | 1.58 | .562 x 1/2 | 1.66 |
| .82 | .562 x 1/2 | 2.00 | .624 x 1/2 | 2.08 | .562 x 1/2 | 1.65 | .624 x 1/2 | 1.73 |
| .1 | .562 x 1/2 | 2.00 | .624 x 1/2 | 2.08 | .562 x 1/2 | 1.65 | .624 x 1/2 | 1.73 |
| .15 | .562 x 1/2 | 2.15 | .624 x 1/2 | 2.23 | .562 x 1/2 | 1.80 | .624 x 1/2 | 1.88 |
| .18 | .562 x 1/2 | 3.22 | .624 x 1/2 | 3.30 | .562 x 1/2 | 2.87 | .624 x 1/2 | 2.95 |
| .2.0 | .670 x 1/2 | 3.90 | .732 x 1/2 | 3.98 | .670 x 1/2 | 3.55 | .732 x 1/2 | 3.63 |
| .3.0 | .670 x 1/2 | 4.26 | .732 x 1/2 | 4.34 | .670 x 1/2 | 3.91 | .732 x 1/2 | 3.99 |
| .4.0 | .750 x 1/2 | 5.09 | .812 x 1/2 | 5.17 | .750 x 1/2 | 4.73 | .812 x 1/2 | 4.81 |
| .5.0 | 1.000 x 1/2 | 5.61 | 1.062 x 1/2 | 5.69 | 1.000 x 1/2 | 5.26 | 1.062 x 1/2 | 5.34 |
| .6.0 | 1.000 x 1/2 | 6.03 | 1.062 x 1/2 | 6.11 | 1.000 x 1/2 | 5.68 | 1.062 x 1/2 | 5.76 |
| .8.0 | 1.000 x 1/2 | 6.23 | 1.062 x 1/2 | 6.31 | 1.000 x 1/2 | 5.87 | 1.062 x 1/2 | 5.95 |
| .10.0 | 1.000 x 2/4 | 7.97 | 1.062 x 2/4 | 8.05 | 1.000 x 2/4 | 7.62 | 1.062 x 2/4 | 7.70 |
| .12.0 | 1.000 x 2/4 | 8.87 | 1.062 x 2/4 | 8.95 | 1.000 x 2/4 | 8.52 | 1.062 x 2/4 | 8.60 |

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 999

400 VDCW

| Capacity Mfd. | P323ZN Case Floating | | P323ZNP Case Floating Plastic Insulating Sleeve | | P323ZNG Case Grounded | | P323ZNGP Case Grounded Plastic Insulating Sleeve | |
|---------------|----------------------|--------|---|--------|-----------------------|--------|--|--------|
| | Size | Net ★ | Size | Net ★ | Size | Net ★ | Size | Net ★ |
| .001 | .235 x 3/8 | \$1.56 | .297 x 1/2 | \$1.64 | .235 x 1/2 | \$1.21 | .297 x 3/8 | \$1.29 |
| .0022 | .235 x 3/8 | 1.56 | .297 x 1/2 | 1.64 | .235 x 1/2 | 1.21 | .297 x 3/8 | 1.29 |
| .0047 | .235 x 3/8 | 1.56 | .297 x 1/2 | 1.64 | .235 x 1/2 | 1.21 | .297 x 3/8 | 1.29 |
| .01 | .235 x 3/8 | 1.56 | .297 x 1/2 | 1.64 | .235 x 1/2 | 1.21 | .297 x 3/8 | 1.29 |
| .012 | .235 x 1/2 | 1.56 | .297 x 3/8 | 1.64 | .235 x 3/8 | 1.21 | .297 x 1/2 | 1.29 |
| .015 | .235 x 1/2 | 1.56 | .297 x 3/8 | 1.64 | .235 x 3/8 | 1.21 | .297 x 1/2 | 1.29 |
| .018 | .312 x 1/2 | 1.60 | .374 x 3/8 | 1.68 | .312 x 3/8 | 1.25 | .374 x 1/2 | 1.33 |
| .022 | .312 x 1/2 | 1.61 | .374 x 3/8 | 1.69 | .312 x 3/8 | 1.26 | .374 x 1/2 | 1.34 |
| .027 | .312 x 1/2 | 1.61 | .374 x 3/8 | 1.69 | .312 x 3/8 | 1.26 | .374 x 1/2 | 1.34 |
| .033 | .312 x 1/2 | 1.61 | .374 x 3/8 | 1.69 | .312 x 3/8 | 1.26 | .374 x 1/2 | 1.34 |
| .039 | .312 x 1/2 | 1.61 | .374 x 3/8 | 1.69 | .312 x 1/2 | 1.26 | .374 x 1/2 | 1.34 |
| .047 | .312 x 1/2 | 1.61 | .374 x 3/8 | 1.69 | .312 x 1/2 | 1.26 | .374 x 1/2 | 1.34 |
| .056 | .312 x 1/2 | 1.64 | .374 x 3/8 | 1.72 | .312 x 1/2 | 1.29 | .374 x 1/2 | 1.37 |
| .068 | .400 x 1/2 | 1.69 | .462 x 1/2 | 1.77 | .400 x 1/2 | 1.34 | .462 x 1/2 | 1.42 |
| .082 | .400 x 1/2 | 1.70 | .462 x 1/2 | 1.78 | .400 x 1/2 | 1.35 | .462 x 1/2 | 1.43 |
| .1 | .400 x 1/2 | 1.74 | .462 x 1/2 | 1.82 | .400 x 1/2 | 1.39 | .462 x 1/2 | 1.47 |
| .12 | .500 x 1/2 | 1.79 | .562 x 1/2 | 1.87 | .500 x 1/2 | 1.44 | .562 x 1/2 | 1.52 |
| .15 | .500 x 1/2 | 1.84 | .562 x 1/2 | 1.92 | .500 x 1/2 | 1.49 | .562 x 1/2 | 1.57 |
| .18 | .500 x 1/2 | 1.88 | .562 x 1/2 | 1.96 | .500 x 1/2 | 1.53 | .562 x 1/2 | 1.61 |
| .22 | .562 x 1/2 | 1.91 | .624 x 1/2 | 1.99 | .562 x 1/2 | 1.56 | .624 x 1/2 | 1.64 |
| .27 | .562 x 1/2 | 1.97 | .624 x 1/2 | 2.05 | .562 x 1/2 | 1.62 | .624 x 1/2 | 1.70 |
| .33 | .562 x 1/2 | 2.11 | .624 x 1/2 | 2.19 | .562 x 1/2 | 1.76 | .624 x 1/2 | 1.84 |
| .39 | .562 x 1/2 | 2.19 | .624 x 1/2 | 2.27 | .562 x 1/2 | 1.84 | .624 x 1/2 | 1.92 |
| .47 | .562 x 1/2 | 2.34 | .624 x 1/2 | 2.42 | .562 x 1/2 | 1.99 | .624 x 1/2 | 2.07 |
| .56 | .670 x 1/2 | 2.49 | .732 x 1/2 | 2.57 | .670 x 1/2 | 2.14 | .732 x 1/2 | 2.22 |
| .68 | .670 x 1/2 | 2.68 | .732 x 1/2 | 2.76 | .670 x 1/2 | 2.33 | .732 x 1/2 | 2.41 |
| .82 | .750 x 1/2 | 2.85 | .812 x 1/2 | 2.93 | .750 x 1/2 | 2.50 | .812 x 1/2 | 2.58 |
| .1.0 | .750 x 1/2 | 2.94 | .812 x 1/2 | 3.02 | .750 x 1/2 | 2.59 | .812 x 1/2 | 2.67 |
| .1.5 | 1.000 x 1/2 | 3.90 | 1.062 x 1/2 | 3.98 | 1.000 x 1/2 | 3.55 | 1.062 x 1/2 | 3.63 |
| .2.0 | 1.000 x 1/2 | 4.86 | 1.062 x 1/2 | 4.94 | 1.000 x 1/2 | 4.51 | 1.062 x 1/2 | 4.59 |

600 VDCW

| | | | | | | | | |
|-------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|
| .001 | .235 x 3/8 | \$1.62 | .297 x 1/2 | \$1.70 | .235 x 1/2 | \$1.27 | .297 x 3/8 | \$1.35 |
| .0022 | .235 x 3/8 | 1.62 | .297 x 1/2 | 1.70 | .235 x 1/2 | 1.27 | .297 x 3/8 | 1.35 |
| .0047 | .235 x 3/8 | 1.62 | .297 x 1/2 | 1.70 | .235 x 1/2 | 1.27 | .297 x 3/8 | 1.35 |
| .01 | .312 x 1/2 | 1.62 | .374 x 3/8 | 1.70 | .312 x 3/8 | 1.27 | .374 x 1/2 | 1.35 |
| .012 | .312 x 1/2 | 1.63 | .374 x 3/8 | 1.71 | .312 x 3/8 | 1.28 | .374 x 1/2 | 1.36 |
| .015 | .312 x 1/2 | 1.63 | .374 x 3/8 | 1.71 | .312 x 3/8 | 1.28 | .374 x 1/2 | 1.36 |
| .018 | .312 x 1/2 | 1.64 | .374 x 3/8 | 1.72 | .312 x 3/8 | 1.29 | .374 x 1/2 | 1.37 |
| .022 | .312 x 1/2 | 1.64 | .374 x 3/8 | 1.72 | .312 x 3/8 | 1.29 | .374 x 1/2 | 1.37 |
| .027 | .312 x 1/2 | 1.64 | .374 x 3/8 | 1.72 | .312 x 1/2 | 1.29 | .374 x 1/2 | 1.37 |
| .033 | .312 x 1/2 | 1.64 | .374 x 3/8 | 1.72 | .312 x 1/2 | 1.29 | .374 x 1/2 | 1.37 |
| .039 | .400 x 1/2 | 1.64 | .462 x 1/2 | 1.72 | .400 x 1/2 | 1.29 | .462 x 1/2 | 1.37 |
| .047 | .400 x 1/2 | 1.66 | .462 x 1/2 | 1.74 | .400 x 1/2 | 1.31 | .462 x 1/2 | 1.39 |
| .056 | .400 x 1/2 | 1.70 | .462 x 1/2 | 1.78 | .400 x 1/2 | 1.35 | .462 x 1/2 | 1.43 |
| .068 | .400 x 1/2 | 1.77 | .462 x 1/2 | 1.85 | .400 x 1/2 | 1.42 | .462 x 1/2 | 1.50 |
| .082 | .500 x 1/2 | 1.79 | .562 x 1/2 | 1.87 | .500 x 1/2 | 1.43 | .562 x 1/2 | 1.51 |
| .1 | .500 x 1/2 | 1.79 | .562 x 1/2 | 1.87 | .500 x 1/2 | 1.43 | .562 x 1/2 | 1.51 |
| .12 | .500 x 1/2 | 1.90 | .562 x 1/2 | 1.98 | .500 x 1/2 | 1.55 | .562 x 1/2 | 1.63 |
| .15 | .500 x 1/2 | 2.00 | .562 x 1/2 | 2.08 | .500 x 1/2 | 1.65 | .562 x 1/2 | 1.73 |
| .18 | .562 x 1/2 | 2.09 | .624 x 1/2 | 2.17 | .562 x 1/2 | 1.74 | .624 x 1/2 | 1.82 |
| .22 | .562 x 1/2 | 2.16 | .624 x 1/2 | 2.24 | .562 x 1/2 | 1.81 | .624 x 1/2 | 1.89 |
| .27 | .562 x 1/2 | 2.34 | .624 x 1/2 | 2.42 | .562 x 1/2 | 1.99 | .624 x 1/2 | 2.07 |
| .33 | .562 x 1/2 | 2.46 | .624 x 1/2 | 2.54 | .562 x 1/2 | 2.11 | .624 x 1/2 | 2.19 |
| .39 | .670 x 1/2 | 2.57 | .732 x 1/2 | 2.65 | .670 x 1/2 | 2.22 | .732 x 1/2 | 2.30 |
| .47 | .670 x 1/2 | 2.68 | .732 x 1/2 | 2.76 | .670 x 1/2 | 2.33 | .732 x 1/2 | 2.41 |
| .56 | .670 x 1/2 | 2.79 | .732 x 1/2 | 2.87 | .670 x 1/2 | 2.44 | .732 x 1/2 | 2.52 |
| .68 | .670 x 1/2 | 2.94 | .732 x 1/2 | 3.02 | .670 x 1/2 | 2.59 | .732 x 1/2 | 2.67 |
| .82 | 1.000 x 1/2 | 3.35 | 1.062 x 1/2 | 3.43 | 1.000 x 1/2 | 2.99 | 1.062 x 1/2 | 3.07 |
| .1.0 | 1.000 x 1/2 | 3.42 | 1.062 x 1/2 | 3.50 | 1.000 x 1/2 | 3.07 | 1.062 x 1/2 | 3.15 |
| .1.5 | 1.000 x 1/2 | 4.19 | 1.062 x 1/2 | 4.27 | 1.000 x 1/2 | 3.83 | 1.062 x 1/2 | 3.91 |
| .2.0 | 1.000 x 2/4 | 5.16 | 1.062 x 2/4 | 5.24 | 1.000 x 2/4 | 4.81 | 1.062 x 2/4 | 4.89 |

AEROVOX*Capacitors*
INDUSTRIAL SECTION — MIL TYPES
MIL-C-25C

TYPES CPO4 and CPO5 — Characteristics K Vibration Grades 1 and 3

Hermetically sealed tubular capacitors with glass terminal seal and axial wire leads. CPO4 and CPO5 are inserted tab construction; CPO8 and CPO9 are extended foil construction. Standard tolerance is $\pm 10\%$ (K). Specify Vibration Grade when ordering.

| | | CPO4, CHAR. K | | | CPO5, CHAR. K | | | | |
|----------|---------|---------------|------------|---------------|---------------|---------------|---------------|---------------|--------|
| | | P323S | NO TUBE | | P323SG | P323SP | P323SGP | | |
| CAPACITY | VOLTAGE | Case Floating | Net Price* | Case Grounded | Net Price* | Case Floating | PLASTIC TUBE | | |
| | | | | | | | Net Price* | | |
| | | | | | | | Case Grounded | | |
| | | | | | | | Net Price* | | |
| .027 | 100V | CP04A1KB273K— | \$1.67 | CP04A3KB273K— | \$1.07 | CP05A1KB273K— | \$1.73 | CP05A3KB273K— | \$1.13 |
| .033 | 100V | CP04A1KB333K— | 1.67 | CP04A3KB333K— | 1.07 | CP05A1KB333K— | 1.73 | CP05A3KB333K— | 1.13 |
| .082 | 100V | CP04A1KB823K— | 1.76 | CP04A3KB823K— | 1.16 | CP05A1KB823K— | 1.82 | CP05A3KB823K— | 1.22 |
| .1 | 100V | CP04A1KB104K— | 1.76 | CP04A3KB104K— | 1.16 | CP05A1KB104K— | 1.82 | CP05A3KB104K— | 1.22 |
| .12 | 100V | CP04A1KB124K— | 1.85 | CP04A3KB124K— | 1.25 | CP05A1KB124K— | 1.91 | CP05A3KB124K— | 1.31 |
| .15 | 100V | CP04A1KB154K— | 1.85 | CP04A3KB154K— | 1.25 | CP05A1KB154K— | 1.91 | CP05A3KB154K— | 1.31 |
| .18 | 100V | CP04A1KB184K— | 1.85 | CP04A3KB184K— | 1.25 | CP05A1KB184K— | 1.91 | CP05A3KB184K— | 1.31 |
| .22 | 100V | CP04A1KB224K— | 1.85 | CP04A3KB224K— | 1.25 | CP05A1KB224K— | 1.91 | CP05A3KB224K— | 1.31 |
| .27 | 100V | CP04A1KB274K— | 2.11 | CP04A3KB274K— | 1.51 | CP05A1KB274K— | 2.17 | CP05A3KB274K— | 1.57 |
| .33 | 100V | CP04A1KB334K— | 2.11 | CP04A3KB334K— | 1.51 | CP05A1KB334K— | 2.17 | CP05A3KB334K— | 1.57 |
| .39 | 100V | CP04A1KB394K— | 2.24 | CP04A3KB394K— | 1.64 | CP05A1KB394K— | 2.32 | CP05A3KB394K— | 1.72 |
| .47 | 100V | CP04A1KB474K— | 2.24 | CP04A3KB474K— | 1.64 | CP05A1KB474K— | 2.32 | CP05A3KB474K— | 1.72 |
| .56 | 100V | CP04A1KB564K— | 2.33 | CP04A3KB564K— | 1.73 | CP05A1KB564K— | 2.41 | CP05A3KB564K— | 1.81 |
| .68 | 100V | CP04A1KB684K— | 2.33 | CP04A3KB684K— | 1.73 | CP05A1KB684K— | 2.41 | CP05A3KB684K— | 1.81 |
| .82 | 100V | CP04A1KB824K— | 2.38 | CP04A3KB824K— | 1.78 | CP05A1KB824K— | 2.46 | CP05A3KB824K— | 1.86 |
| 1.0 | 100V | CP04A1KB105K— | 2.38 | CP04A3KB105K— | 1.78 | CP05A1KB105K— | 2.46 | CP05A3KB105K— | 1.86 |
| .012 | 200V | CP04A1KC123K— | 1.67 | CP04A3KC123K— | 1.07 | CP05A1KC123K— | 1.73 | CP05A3KC123K— | 1.13 |
| .015 | 200V | CP04A1KC153K— | 1.67 | CP04A3KC153K— | 1.07 | CP05A1KC153K— | 1.73 | CP05A3KC153K— | 1.13 |
| .018 | 200V | CP04A1KC183K— | 1.67 | CP04A3KC183K— | 1.07 | CP05A1KC183K— | 1.73 | CP05A3KC183K— | 1.13 |
| .022 | 200V | CP04A1KC223K— | 1.67 | CP04A3KC223K— | 1.07 | CP05A1KC223K— | 1.73 | CP05A3KC223K— | 1.13 |
| .039 | 200V | CP04A1KC393K— | 1.72 | CP04A3KC393K— | 1.12 | CP05A1KC393K— | 1.78 | CP05A3KC393K— | 1.18 |
| .047 | 200V | CP04A1KC473K— | 1.72 | CP04A3KC473K— | 1.12 | CP05A1KC473K— | 1.78 | CP05A3KC473K— | 1.18 |
| .056 | 200V | CP04A1KC563K— | 1.76 | CP04A3KC563K— | 1.16 | CP05A1KC563K— | 1.82 | CP05A3KC563K— | 1.22 |
| .068 | 200V | CP04A1KC683K— | 1.76 | CP04A3KC683K— | 1.16 | CP05A1KC683K— | 1.82 | CP05A3KC683K— | 1.22 |
| .082 | 200V | CP04A1KC823K— | 1.80 | CP04A3KC823K— | 1.20 | CP05A1KC823K— | 1.86 | CP05A3KC823K— | 1.26 |
| .1 | 200V | CP04A1KC104K— | 1.80 | CP04A3KC104K— | 1.20 | CP05A1KC104K— | 1.86 | CP05A3KC104K— | 1.26 |
| .12 | 200V | CP04A1KC124K— | 1.83 | CP04A3KC124K— | 1.23 | CP05A1KC124K— | 1.89 | CP05A3KC124K— | 1.29 |
| .15 | 200V | CP04A1KC154K— | 1.83 | CP04A3KC154K— | 1.23 | CP05A1KC154K— | 1.89 | CP05A3KC154K— | 1.29 |
| .18 | 200V | CP04A1KC184K— | 2.00 | CP04A3KC184K— | 1.40 | CP05A1KC184K— | 2.06 | CP05A3KC184K— | 1.46 |
| .22 | 200V | CP04A1KC224K— | 2.00 | CP04A3KC224K— | 1.40 | CP05A1KC224K— | 2.06 | CP05A3KC224K— | 1.46 |
| .27 | 200V | CP04A1KC274K— | 2.16 | CP04A3KC274K— | 1.56 | CP05A1KC274K— | 2.24 | CP05A3KC274K— | 1.64 |
| .33 | 200V | CP04A1KC334K— | 2.16 | CP04A3KC334K— | 1.56 | CP05A1KC334K— | 2.24 | CP05A3KC334K— | 1.64 |
| .39 | 200V | CP04A1KC394K— | 2.29 | CP04A3KC394K— | 1.69 | CP05A1KC394K— | 2.37 | CP05A3KC394K— | 1.77 |
| .47 | 200V | CP04A1KC474K— | 2.29 | CP04A3KC474K— | 1.69 | CP05A1KC474K— | 2.37 | CP05A3KC474K— | 1.77 |
| .56 | 200V | CP04A1KC564K— | 2.42 | CP04A3KC564K— | 1.82 | CP05A1KC564K— | 2.50 | CP05A3KC564K— | 1.90 |
| .68 | 200V | CP04A1KC684K— | 2.42 | CP04A3KC684K— | 1.82 | CP05A1KC684K— | 2.50 | CP05A3KC684K— | 1.90 |
| .82 | 200V | CP04A1KC824K— | 2.90 | CP04A3KC824K— | 2.30 | CP05A1KC824K— | 2.98 | CP05A3KC824K— | 2.38 |
| 1.0 | 200V | CP04A1KC105K— | 2.90 | CP04A3KC105K— | 2.30 | CP05A1KC105K— | 2.98 | CP05A3KC105K— | 2.38 |
| .0082 | 400V | CP04A1KE822K— | 1.72 | CP04A3KE822K— | 1.12 | CP05A1KE822K— | 1.78 | CP05A3KE822K— | 1.18 |
| .01 | 400V | CP04A1KE103K— | 1.72 | CP04A3KE103K— | 1.12 | CP05A1KE103K— | 1.78 | CP05A3KE103K— | 1.18 |
| .027 | 400V | CP04A1KE273K— | 1.78 | CP04A3KE273K— | 1.18 | CP05A1KE273K— | 1.84 | CP05A3KE273K— | 1.24 |
| .033 | 400V | CP04A1KE333K— | 1.78 | CP04A3KE333K— | 1.18 | CP05A1KE333K— | 1.84 | CP05A3KE333K— | 1.24 |
| .039 | 400V | CP04A1KE393K— | 1.85 | CP04A3KE393K— | 1.25 | CP05A1KE393K— | 1.91 | CP05A3KE393K— | 1.31 |
| .047 | 400V | CP04A1KE473K— | 1.85 | CP04A3KE473K— | 1.25 | CP05A1KE473K— | 1.91 | CP05A3KE473K— | 1.31 |
| .056 | 400V | CP04A1KE563K— | 1.89 | CP04A3KE563K— | 1.29 | CP05A1KE563K— | 1.95 | CP05A3KE563K— | 1.35 |
| .068 | 400V | CP04A1KE683K— | 1.89 | CP04A3KE683K— | 1.29 | CP05A1KE683K— | 1.95 | CP05A3KE683K— | 1.35 |
| .082 | 400V | CP04A1KE823K— | 1.94 | CP04A3KE823K— | 1.34 | CP05A1KE823K— | 2.00 | CP05A3KE823K— | 1.40 |
| .1 | 400V | CP04A1KE104K— | 1.94 | CP04A3KE104K— | 1.34 | CP05A1KE104K— | 2.00 | CP05A3KE104K— | 1.40 |
| .12 | 400V | CP04A1KE124K— | 2.11 | CP04A3KE124K— | 1.51 | CP05A1KE124K— | 2.19 | CP05A3KE124K— | 1.59 |
| .15 | 400V | CP04A1KE154K— | 2.11 | CP04A3KE154K— | 1.51 | CP05A1KE154K— | 2.19 | CP05A3KE154K— | 1.59 |
| .18 | 400V | CP04A1KE184K— | 2.24 | CP04A3KE184K— | 1.64 | CP05A1KE184K— | 2.32 | CP05A3KE184K— | 1.72 |
| .22 | 400V | CP04A1KE224K— | 2.24 | CP04A3KE224K— | 1.64 | CP05A1KE224K— | 2.32 | CP05A3KE224K— | 1.72 |
| .27 | 400V | CP04A1KE274K— | 2.29 | CP04A3KE274K— | 1.69 | CP05A1KE274K— | 2.37 | CP05A3KE274K— | 1.77 |
| .33 | 400V | CP04A1KE334K— | 2.29 | CP04A3KE334K— | 1.69 | CP05A1KE334K— | 2.37 | CP05A3KE334K— | 1.77 |
| .39 | 400V | CP04A1KE394K— | 2.73 | CP04A3KE394K— | 2.13 | CP05A1KE394K— | 2.81 | CP05A3KE394K— | 2.21 |
| .47 | 400V | CP04A1KE474K— | 2.73 | CP04A3KE474K— | 2.13 | CP05A1KE474K— | 2.81 | CP05A3KE474K— | 2.21 |
| .56 | 400V | CP04A1KE564K— | 3.63 | CP04A3KE564K— | 3.03 | CP05A1KE564K— | 3.73 | CP05A3KE564K— | 3.11 |
| .68 | 400V | CP04A1KE684K— | 3.63 | CP04A3KE684K— | 3.03 | CP05A1KE684K— | 3.73 | CP05A3KE684K— | 3.11 |
| .82 | 400V | CP04A1KE824K— | 3.76 | CP04A3KE824K— | 3.16 | CP05A1KE824K— | 3.86 | CP05A3KE824K— | 3.26 |
| 1.0 | 400V | CP04A1KE105K— | 3.76 | CP04A3KE105K— | 3.16 | CP05A1KE105K— | 3.86 | CP05A3KE105K— | 3.26 |
| .001 | 600V | CP04A1KF102K— | 1.67 | CP04A3KF102K— | 1.07 | CP05A1KF102K— | 1.73 | CP05A3KF102K— | 1.13 |
| .0012 | 600V | CP04A1KF122K— | 1.67 | CP04A3KF122K— | 1.07 | CP05A1KF122K— | 1.73 | CP05A3KF122K— | 1.13 |
| .0015 | 600V | CP04A1KF152K— | 1.67 | CP04A3KF152K— | 1.07 | CP05A1KF152K— | 1.73 | CP05A3KF152K— | 1.13 |
| .0018 | 600V | CP04A1KF182K— | 1.67 | CP04A3KF182K— | 1.07 | CP05A1KF182K— | 1.73 | CP05A3KF182K— | 1.13 |
| .0022 | 600V | CP04A1KF222K— | 1.67 | CP04A3KF222K— | 1.07 | CP05A1KF222K— | 1.73 | CP05A3KF222K— | 1.13 |
| .0027 | 600V | CP04A1KF272K— | 1.72 | CP04A3KF272K— | 1.12 | CP05A1KF272K— | 1.78 | CP05A3KF272K— | 1.18 |
| .0033 | 600V | CP04A1KF332K— | 1.72 | CP04A3KF332K— | 1.12 | CP05A1KF332K— | 1.78 | CP05A3KF332K— | 1.18 |
| .0039 | 600V | CP04A1KF392K— | 1.72 | CP04A3KF392K— | 1.12 | CP05A1KF392K— | 1.78 | CP05A3KF392K— | 1.18 |
| .0047 | 600V | CP04A1KF472K— | 1.72 | CP04A3KF472K— | 1.12 | CP05A1KF472K— | 1.78 | CP05A3KF472K— | 1.18 |
| .0056 | 600V | CP04A1KF562K— | 1.72 | CP04A3KF562K— | 1.12 | CP05A1KF562K— | 1.78 | CP05A3KF562K— | 1.18 |
| .0068 | 600V | CP04A1KF682K— | 1.72 | CP04A3KF682K— | 1.12 | CP05A1KF682K— | 1.78 | CP05A3KF682K— | 1.18 |
| .0082 | 600V | CP04A1KF822K— | 1.76 | CP04A3KF822K— | 1.16 | CP05A1KF822K— | 1.82 | CP05A3KF822K— | 1.24 |
| .01 | 600V | CP04A1KF103K— | 1.76 | CP04A3KF103K— | 1.16 | CP05A1KF103K— | 1.82 | CP05A3KF103K— | 1.24 |
| .012 | 600V | CP04A1KF123K— | 1.80 | CP04A3KF123K— | 1.20 | CP05A1KF123K— | 1.86 | CP05A3KF123K— | 1.26 |
| .015 | 600V | CP04A1KF153K— | 1.80 | CP04A3KF153K— | 1.20 | CP05A1KF153K— | 1.86 | CP05A3KF153K— | 1.26 |
| .018 | 600V | CP04A1KF183K— | 1.80 | CP04A3KF183K— | 1.20 | CP05A1KF183K— | 1.86 | CP05A3KF183K— | 1.26 |
| .022 | 600V | CP04A1KF223K— | 1.80 | CP04A3KF223K— | 1.20 | CP05A1KF223K— | 1.86 | CP05A3KF223K— | 1.26 |
| .027 | 600V | CP04A1KF273K— | 1.87 | CP04A3KF273K— | 1.27 | CP05A1KF273K— | 1.93 | CP05A3KF273K— | 1.33 |
| .033 | 600V | CP04A1KF333K— | 1.87 | CP04A3KF333K— | 1.27 | CP05A1KF333K— | 1.93 | CP05A3KF333K— | 1.33 |
| .039 | 600V | CP04A1KF393K— | 1.89 | CP04A3KF393K— | 1.29 | CP05A1KF393K— | 1.93 | CP05A3KF393K— | 1.33 |
| .047 | 600V | CP04A1KF473K— | 1.89 | CP04A3KF473K— | 1.29 | CP05A1KF473K— | 1.95 | CP05A3KF473K— | 1.35 |

*Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 999

AEROVOX

Capacitors

| | | CP04, CHAR. K | | | CP05, CHAR. K | | | | |
|----------|---------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------|
| | | P323S | NO TUBE | | P323SG | P323SP | P323SGP | | |
| CAPACITY | VOLTAGE | Case Floating | Net Price★ | Case Grounded | Net Price★ | Case Floating | Case Grounded | | |
| | | PLASTIC TUBE | | | | | | | |
| | | Net Price★ | Case Grounded | | Net Price★ | Net Price★ | | | |
| .056 | 600V | CP04A1KF563K | \$1.98 | CP04A3KF563K | \$1.38 | CP05A1KF563K | \$2.04 | CP05A3KF563K | \$1.44 |
| .068 | 600V | CP04A1KF683K | 1.98 | CP04A3KF683K | 1.38 | CP05A1KF683K | 2.04 | CP05A3KF683K | 1.44 |
| .082 | 600V | CP04A1KF823K | 2.11 | CP04A3KF823K | 1.51 | CP05A1KF823K | 2.19 | CP05A3KF823K | 1.59 |
| .1 | 600V | CP04A1KF104K | 2.11 | CP04A3KF104K | 1.51 | CP05A1KF104K | 2.19 | CP05A3KF104K | 1.59 |
| .12 | 600V | CP04A1KF124K | 2.20 | CP04A3KF124K | 1.60 | CP05A1KF124K | 2.28 | CP05A3KF124K | 1.66 |
| .15 | 600V | CP04A1KF154K | 2.20 | CP04A3KF154K | 1.60 | CP05A1KF154K | 2.28 | CP05A3KF154K | 1.66 |
| .18 | 600V | CP04A1KF184K | 2.38 | CP04A3KF184K | 1.78 | CP05A1KF184K | 2.46 | CP05A3KF184K | 1.84 |
| .22 | 600V | CP04A1KF224K | 2.38 | CP04A3KF224K | 1.78 | CP05A1KF224K | 2.46 | CP05A3KF224K | 1.84 |
| .27 | 600V | CP04A1KF274K | 2.64 | CP04A3KF274K | 2.04 | CP05A1KF274K | 2.72 | CP05A3KF274K | 2.12 |
| .33 | 600V | CP04A1KF334K | 2.64 | CP04A3KF334K | 2.04 | CP05A1KF334K | 2.72 | CP05A3KF334K | 2.12 |
| .39 | 600V | CP04A1KF394K | 2.97 | CP04A3KF394K | 2.37 | CP05A1KF394K | 3.07 | CP05A3KF394K | 2.47 |
| .47 | 600V | CP04A1KF474K | 2.97 | CP04A3KF474K | 2.37 | CP05A1KF474K | 3.07 | CP05A3KF474K | 2.47 |
| .56 | 600V | CP04A1KF564K | 3.70 | CP04A3KF564K | 3.10 | CP05A1KF564K | 3.80 | CP05A3KF564K | 3.20 |
| .68 | 600V | CP04A1KF684K | 3.70 | CP04A3KF684K | 3.10 | CP05A1KF684K | 3.80 | CP05A3KF684K | 3.20 |
| .015 | 1000V | CP04A1KG153K | 2.07 | CP04A3KG153K | 1.38 | CP05A1KG153K | 2.14 | CP05A3KG153K | 1.45 |
| .018 | 1000V | CP04A1KG183K | 2.07 | CP04A3KG183K | 1.38 | CP05A1KG183K | 2.14 | CP05A3KG183K | 1.45 |
| .022 | 1000V | CP04A1KG223K | 2.07 | CP04A3KG223K | 1.38 | CP05A1KG223K | 2.14 | CP05A3KG223K | 1.45 |
| .027 | 1000V | CP04A1KG273K | 2.15 | CP04A3KG273K | 1.46 | CP05A1KG273K | 2.22 | CP05A3KG273K | 1.53 |
| .033 | 1000V | CP04A1KG333K | 2.15 | CP04A3KG333K | 1.46 | CP05A1KG333K | 2.22 | CP05A3KG333K | 1.53 |
| .039 | 1000V | CP04A1KG393K | 2.17 | CP04A3KG393K | 1.48 | CP05A1KG393K | 2.24 | CP05A3KG393K | 1.55 |
| .047 | 1000V | CP04A1KG473K | 2.17 | CP04A3KG473K | 1.48 | CP05A1KG473K | 2.24 | CP05A3KG473K | 1.55 |
| .056 | 1000V | CP04A1KG563K | 2.28 | CP04A3KG563K | 1.59 | CP05A1KG563K | 2.35 | CP05A3KG563K | 1.66 |
| .068 | 1000V | CP04A1KG683K | 2.28 | CP04A3KG683K | 1.59 | CP05A1KG683K | 2.35 | CP05A3KG683K | 1.66 |
| .082 | 1000V | CP04A1KG823K | 2.43 | CP04A3KG823K | 1.74 | CP05A1KG823K | 2.52 | CP05A3KG823K | 1.83 |
| .1 | 1000V | CP04A1KG104K | 2.43 | CP04A3KG104K | 1.74 | CP05A1KG104K | 2.52 | CP05A3KG104K | 1.83 |
| .12 | 1000V | CP04A1KG124K | 2.53 | CP04A3KG124K | 1.84 | CP05A1KG124K | 2.62 | CP05A3KG124K | 1.91 |
| .15 | 1000V | CP04A1KG154K | 2.53 | CP04A3KG154K | 1.84 | CP05A1KG154K | 2.62 | CP05A3KG154K | 1.91 |
| .18 | 1000V | CP04A1KG184K | 2.74 | CP04A3KG184K | 2.05 | CP05A1KG184K | 2.83 | CP05A3KG184K | 2.12 |
| .22 | 1000V | CP04A1KG224K | 2.74 | CP04A3KG224K | 2.05 | CP05A1KG224K | 2.83 | CP05A3KG224K | 2.12 |
| .27 | 1000V | CP04A1KG274K | 3.04 | CP04A3KG274K | 2.35 | CP05A1KG274K | 3.13 | CP05A3KG274K | 2.44 |
| .33 | 1000V | CP04A1KG334K | 3.04 | CP04A3KG334K | 2.35 | CP05A1KG334K | 3.13 | CP05A3KG334K | 2.44 |
| .39 | 1000V | CP04A1KG394K | 3.42 | CP04A3KG394K | 2.73 | CP05A1KG394K | 3.53 | CP05A3KG394K | 2.84 |
| .47 | 1000V | CP04A1KG474K | 3.42 | CP04A3KG474K | 2.73 | CP05A1KG474K | 3.53 | CP05A3KG474K | 2.84 |



INDUSTRIAL SECTION — MIL TYPES MIL-C-25C



TYPES CPO8 and CPO9—Characteristics K Vibration Grades 1 and 3

Hermetically sealed tubular capacitors with glass terminal seal and axial wire leads. CP04 and CP05 are inserted tab construction; CP08 and CP09 are extended foil construction. Standard tolerance is $\pm 10\%$ (K). Specify Vibration Grade when ordering.

| | | CP08, CHAR. K | | | CP09, CHAR. K | | | | |
|----------|---------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------|
| | | P323SX | NO TUBE | | P323SXP | P323SXGP | | | |
| CAPACITY | VOLTAGE | Case Floating | Net Price★ | Case Grounded | Net Price★ | Case Floating | Case Grounded | | |
| | | PLASTIC TUBE | | | | | | | |
| | | Net Price★ | Case Grounded | | Net Price★ | Net Price★ | | | |
| .0082 | 100V | CP08A1KB822K | \$1.67 | CP08A3KB822K | \$1.07 | CP09A1KB822K | \$1.73 | CP09A3KB822K | \$1.13 |
| .01 | 100V | CP08A1KB103K | 1.67 | CP08A3KB103K | 1.07 | CP09A1KB103K | 1.73 | CP09A3KB103K | 1.13 |
| .012 | 100V | CP08A1KB123K | 1.67 | CP08A3KB123K | 1.07 | CP09A1KB123K | 1.73 | CP09A3KB123K | 1.13 |
| .015 | 100V | CP08A1KB153K | 1.67 | CP08A3KB153K | 1.07 | CP09A1KB153K | 1.73 | CP09A3KB153K | 1.13 |
| .039 | 100V | CP08A1KB393K | 1.80 | CP08A3KB393K | 1.20 | CP09A1KB393K | 1.86 | CP09A3KB393K | 1.26 |
| .047 | 100V | CP08A1KB473K | 1.80 | CP08A3KB473K | 1.20 | CP09A1KB473K | 1.86 | CP09A3KB473K | 1.26 |
| .082 | 100V | CP08A1KB823K | 1.85 | CP08A3KB823K | 1.25 | CP09A1KB823K | 1.91 | CP09A3KB823K | 1.31 |
| .1 | 100V | CP08A1KB104K | 1.85 | CP08A3KB104K | 1.25 | CP09A1KB104K | 1.91 | CP09A3KB104K | 1.31 |
| .12 | 100V | CP08A1KB124K | 1.85 | CP08A3KB124K | 1.25 | CP09A1KB124K | 1.91 | CP09A3KB124K | 1.31 |
| .15 | 100V | CP08A1KB154K | 1.85 | CP08A3KB154K | 1.25 | CP09A1KB154K | 1.91 | CP09A3KB154K | 1.31 |
| .18 | 100V | CP08A1KB184K | 1.98 | CP08A3KB184K | 1.38 | CP09A1KB184K | 2.04 | CP09A3KB184K | 1.44 |
| .22 | 100V | CP08A1KB224K | 1.98 | CP08A3KB224K | 1.38 | CP09A1KB224K | 2.04 | CP09A3KB224K | 1.44 |
| .27 | 100V | CP08A1KB274K | 2.20 | CP08A3KB274K | 1.60 | CP09A1KB274K | 2.28 | CP09A3KB274K | 1.68 |
| .33 | 100V | CP08A1KB334K | 2.20 | CP08A3KB334K | 1.60 | CP09A1KB334K | 2.28 | CP09A3KB334K | 1.68 |
| .39 | 100V | CP08A1KB394K | 2.29 | CP08A3KB394K | 1.69 | CP09A1KB394K | 2.37 | CP09A3KB394K | 1.77 |
| .47 | 100V | CP08A1KB474K | 2.29 | CP08A3KB474K | 1.69 | CP09A1KB474K | 2.37 | CP09A3KB474K | 1.77 |
| .56 | 100V | CP08A1KB564K | 2.46 | CP08A3KB564K | 1.86 | CP09A1KB564K | 2.54 | CP09A3KB564K | 1.94 |
| .68 | 100V | CP08A1KB684K | 2.46 | CP08A3KB684K | 1.86 | CP09A1KB684K | 2.54 | CP09A3KB684K | 1.94 |
| .82 | 100V | CP08A1KB824K | 2.64 | CP08A3KB824K | 2.04 | CP09A1KB824K | 2.72 | CP09A3KB824K | 2.12 |
| 1.0 | 100V | CP08A1KB105K | 2.64 | CP08A3KB105K | 2.04 | CP09A1KB105K | 2.72 | CP09A3KB105K | 2.12 |
| .0039 | 200V | CP08A1KC392K | 1.69 | CP08A3KC392K | 1.09 | CP09A1KC392K | 1.75 | CP09A3KC392K | 1.15 |
| .0047 | 200V | CP08A1KC472K | 1.69 | CP08A3KC472K | 1.09 | CP09A1KC472K | 1.75 | CP09A3KC472K | 1.15 |
| .0056 | 200V | CP08A1KC562K | 1.72 | CP08A3KC562K | 1.12 | CP09A1KC562K | 1.78 | CP09A3KC562K | 1.18 |
| .0068 | 200V | CP08A1KC682K | 1.72 | CP08A3KC682K | 1.12 | CP09A1KC682K | 1.78 | CP09A3KC682K | 1.18 |
| .018 | 200V | CP08A1KC183K | 1.85 | CP08A3KC183K | 1.25 | CP09A1KC183K | 1.91 | CP09A3KC183K | 1.31 |
| .022 | 200V | CP08A1KC223K | 1.85 | CP08A3KC223K | 1.25 | CP09A1KC223K | 1.91 | CP09A3KC223K | 1.31 |
| .027 | 200V | CP08A1KC273K | 1.85 | CP08A3KC273K | 1.25 | CP09A1KC273K | 1.91 | CP09A3KC273K | 1.31 |
| .033 | 200V | CP08A1KC333K | 1.85 | CP08A3KC333K | 1.25 | CP09A1KC333K | 1.91 | CP09A3KC333K | 1.31 |
| .039 | 200V | CP08A1KC393K | 1.89 | CP08A3KC393K | 1.29 | CP09A1KC393K | 1.95 | CP09A3KC393K | 1.35 |
| .047 | 200V | CP08A1KC473K | 1.89 | CP08A3KC473K | 1.29 | CP09A1KC473K | 1.95 | CP09A3KC473K | 1.35 |
| .056 | 200V | CP08A1KC563K | 1.89 | CP08A3KC563K | 1.29 | CP09A1KC563K | 1.95 | CP09A3KC563K | 1.35 |
| .068 | 200V | CP08A1KC683K | 1.89 | CP08A3KC683K | 1.29 | CP09A1KC683K | 1.95 | CP09A3KC683K | 1.35 |
| .082 | 200V | CP08A1KC823K | 1.91 | CP08A3KC823K | 1.31 | CP09A1KC823K | 1.97 | CP09A3KC823K | 1.37 |
| .1 | 200V | CP08A1KC104K | 1.91 | CP08A3KC104K | 1.31 | CP09A1KC104K | 1.97 | CP09A3KC104K | 1.37 |
| .12 | 200V | CP08A1KC124K | 1.98 | CP08A3KC124K | 1.38 | CP09A1KC124K | 2.04 | CP09A3KC124K | 1.44 |
| .15 | 200V | CP08A1KC154K | 1.98 | CP08A3KC154K | 1.38 | CP09A1KC154K | 2.04 | CP09A3KC154K | 1.44 |
| .18 | 200V | CP08A1KC184K | 2.11 | CP08A3KC184K | 1.51 | CP09A1KC184K | 2.19 | CP09A3KC184K | 1.59 |
| .22 | 200V | CP08A1KC224K | 2.11 | CP08A3KC224K | 1.51 | CP09A1KC224K | 2.19 | CP09A3KC224K | 1.59 |
| .27 | 200V | CP08A1KC274K | 2.24 | CP08A3KC274K | 1.64 | CP09A1KC274K | 2.32 | CP09A3KC274K | 1.72 |

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 439

AEROVOX*Capacitors*

| | | CP08, CHAR. K | | | | CP09, CHAR. K | | | |
|----------|---------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|
| | | P323SX | | P323SXG | | P323SXP | | P323SXGP | |
| CAPACITY | VOLTAGE | NO TUBE | | NO TUBE | | NO TUBE | | NO TUBE | |
| | | Case Floating | Net Price* | Case Grounded | Net Price* | Case Floating | Net Price* | Case Grounded | Net Price* |
| .33 | 200V | CP08A1KC334K | \$2.24 | CP08A3KC334K | \$1.64 | CP09A1KC334K | \$2.32 | CP09A3KC334K | \$1.72 |
| .39 | 200V | CP08A1KC394K | 2.33 | CP08A3KC394K | 1.73 | CP09A1KC394K | 2.41 | CP09A3KC394K | 1.81 |
| .47 | 200V | CP08A1KC474K | 2.33 | CP08A3KC474K | 1.73 | CP09A1KC474K | 2.41 | CP09A3KC474K | 1.81 |
| .56 | 200V | CP08A1KC564K | 2.64 | CP08A3KC564K | 2.04 | CP09A1KC564K | 2.72 | CP09A3KC564K | 2.12 |
| .68 | 200V | CP08A1KC684K | 2.64 | CP08A3KC684K | 2.04 | CP09A1KC684K | 2.72 | CP09A3KC684K | 2.12 |
| .82 | 200V | CP08A1KC824K | 2.97 | CP08A3KC824K | 2.37 | CP09A1KC824K | 3.07 | CP09A3KC824K | 2.47 |
| 1.0 | 200V | CP08A1KC105K | 2.97 | CP08A3KC105K | 2.37 | CP09A1KC105K | 3.07 | CP09A3KC105K | 2.47 |
| .0027 | 400V | CP08A1KE272K | 1.76 | CP08A3KE272K | 1.16 | CP09A1KE272K | 1.82 | CP09A3KE272K | 1.22 |
| .0033 | 400V | CP08A1KE332K | 1.76 | CP08A3KE332K | 1.16 | CP09A1KE332K | 1.82 | CP09A3KE332K | 1.22 |
| .012 | 400V | CP08A1KE123K | 1.89 | CP08A3KE123K | 1.29 | CP09A1KE123K | 1.95 | CP09A3KE123K | 1.35 |
| .015 | 400V | CP08A1KE153K | 1.89 | CP08A3KE153K | 1.29 | CP09A1KE153K | 1.95 | CP09A3KE153K | 1.35 |
| .027 | 400V | CP08A1KE273K | 1.94 | CP08A3KE273K | 1.34 | CP09A1KE273K | 2.00 | CP09A3KE273K | 1.40 |
| .033 | 400V | CP08A1KE333K | 1.94 | CP08A3KE333K | 1.34 | CP09A1KE333K | 2.00 | CP09A3KE333K | 1.40 |
| .039 | 400V | CP08A1KE393K | 1.98 | CP08A3KE393K | 1.38 | CP09A1KE393K | 2.04 | CP09A3KE393K | 1.44 |
| .047 | 400V | CP08A1KE473K | 1.98 | CP08A3KE473K | 1.38 | CP09A1KE473K | 2.04 | CP09A3KE473K | 1.44 |
| .056 | 400V | CP08A1KE563K | 1.98 | CP08A3KE563K | 1.38 | CP09A1KE563K | 2.04 | CP09A3KE563K | 1.44 |
| .068 | 400V | CP08A1KE683K | 1.98 | CP08A3KE683K | 1.38 | CP09A1KE683K | 2.04 | CP09A3KE683K | 1.44 |
| .082 | 400V | CP08A1KE823K | 2.11 | CP08A3KE823K | 1.51 | CP09A1KE823K | 2.19 | CP09A3KE823K | 1.59 |
| .1 | 400V | CP08A1KE104K | 2.11 | CP08A3KE104K | 1.51 | CP09A1KE104K | 2.19 | CP09A3KE104K | 1.59 |
| .12 | 400V | CP08A1KE124K | 2.20 | CP08A3KE124K | 1.60 | CP09A1KE124K | 2.28 | CP09A3KE124K | 1.68 |
| .15 | 400V | CP08A1KE154K | 2.20 | CP08A3KE154K | 1.60 | CP09A1KE154K | 2.28 | CP09A3KE154K | 1.68 |
| .18 | 400V | CP08A1KE184K | 2.33 | CP08A3KE184K | 1.73 | CP09A1KE184K | 2.41 | CP09A3KE184K | 1.81 |
| .22 | 400V | CP08A1KE224K | 2.33 | CP08A3KE224K | 1.73 | CP09A1KE224K | 2.41 | CP09A3KE224K | 1.81 |
| .27 | 400V | CP08A1KE274K | 2.55 | CP08A3KE274K | 1.95 | CP09A1KE274K | 2.63 | CP09A3KE274K | 2.03 |
| .33 | 400V | CP08A1KE334K | 2.55 | CP08A3KE334K | 1.95 | CP09A1KE334K | 2.63 | CP09A3KE334K | 2.03 |
| .39 | 400V | CP08A1KE394K | 2.95 | CP08A3KE394K | 2.35 | CP09A1KE394K | 3.05 | CP09A3KE394K | 2.45 |
| .47 | 400V | CP08A1KE474K | 2.95 | CP08A3KE474K | 2.35 | CP09A1KE474K | 3.05 | CP09A3KE474K | 2.45 |
| .001 | 600V | CP08A1KF102K | 1.76 | CP08A3KF102K | 1.16 | CP09A1KF102K | 1.82 | CP09A3KF102K | 1.22 |
| .0012 | 600V | CP08A1KF122K | 1.76 | CP08A3KF122K | 1.16 | CP09A1KF122K | 1.82 | CP09A3KF122K | 1.22 |
| .0015 | 600V | CP08A1KF152K | 1.76 | CP08A3KF152K | 1.16 | CP09A1KF152K | 1.82 | CP09A3KF152K | 1.22 |
| .0018 | 600V | CP08A1KF182K | 1.76 | CP08A3KF182K | 1.16 | CP09A1KF182K | 1.82 | CP09A3KF182K | 1.22 |
| .0022 | 600V | CP08A1KF222K | 1.76 | CP08A3KF222K | 1.16 | CP09A1KF222K | 1.82 | CP09A3KF222K | 1.22 |
| .0027 | 600V | CP08A1KF272K | 1.80 | CP08A3KF272K | 1.20 | CP09A1KF272K | 1.86 | CP09A3KF272K | 1.26 |
| .0033 | 600V | CP08A1KF332K | 1.80 | CP08A3KF332K | 1.20 | CP09A1KF332K | 1.86 | CP09A3KF332K | 1.26 |
| .0039 | 600V | CP08A1KF392K | 1.87 | CP08A3KF392K | 1.27 | CP09A1KF392K | 1.93 | CP09A3KF392K | 1.33 |
| .0047 | 600V | CP08A1KF472K | 1.87 | CP08A3KF472K | 1.27 | CP09A1KF472K | 1.93 | CP09A3KF472K | 1.33 |
| .0056 | 600V | CP08A1KF562K | 1.89 | CP08A3KF562K | 1.29 | CP09A1KF562K | 1.95 | CP09A3KF562K | 1.35 |
| .0068 | 600V | CP08A1KF682K | 1.89 | CP08A3KF682K | 1.29 | CP09A1KF682K | 1.95 | CP09A3KF682K | 1.35 |
| .0082 | 600V | CP08A1KF822K | 1.91 | CP08A3KF822K | 1.31 | CP09A1KF822K | 1.97 | CP09A3KF822K | 1.37 |
| .01 | 600V | CP08A1KF103K | 1.91 | CP08A3KF103K | 1.31 | CP09A1KF103K | 1.97 | CP09A3KF103K | 1.37 |
| .012 | 600V | CP08A1KF123K | 1.94 | CP08A3KF123K | 1.34 | CP09A1KF123K | 2.00 | CP09A3KF123K | 1.40 |
| .015 | 600V | CP08A1KF153K | 1.94 | CP08A3KF153K | 1.34 | CP09A1KF153K | 2.00 | CP09A3KF153K | 1.40 |
| .018 | 600V | CP08A1KF183K | 1.96 | CP08A3KF183K | 1.36 | CP09A1KF183K | 2.02 | CP09A3KF183K | 1.42 |
| .022 | 600V | CP08A1KF223K | 1.96 | CP08A3KF223K | 1.36 | CP09A1KF223K | 2.02 | CP09A3KF223K | 1.42 |
| .027 | 600V | CP08A1KF273K | 1.96 | CP08A3KF273K | 1.36 | CP09A1KF273K | 2.02 | CP09A3KF273K | 1.42 |
| .033 | 600V | CP08A1KF333K | 1.96 | CP08A3KF333K | 1.36 | CP09A1KF333K | 2.02 | CP09A3KF333K | 1.42 |
| .039 | 600V | CP08A1KF393K | 2.02 | CP08A3KF393K | 1.42 | CP09A1KF393K | 2.08 | CP09A3KF393K | 1.48 |
| .047 | 600V | CP08A1KF473K | 2.02 | CP08A3KF473K | 1.42 | CP09A1KF473K | 2.08 | CP09A3KF473K | 1.48 |
| .056 | 600V | CP08A1KF563K | 2.16 | CP08A3KF563K | 1.56 | CP09A1KF563K | 2.24 | CP09A3KF563K | 1.64 |
| .068 | 600V | CP08A1KF683K | 2.16 | CP08A3KF683K | 1.56 | CP09A1KF683K | 2.24 | CP09A3KF683K | 1.64 |
| .082 | 600V | CP08A1KF823K | 2.20 | CP08A3KF823K | 1.60 | CP09A1KF823K | 2.28 | CP09A3KF823K | 1.68 |
| .1 | 600V | CP08A1KF104K | 2.20 | CP08A3KF104K | 1.60 | CP09A1KF104K | 2.28 | CP09A3KF104K | 1.68 |
| .12 | 600V | CP08A1KF124K | 2.33 | CP08A3KF124K | 1.73 | CP09A1KF124K | 2.41 | CP09A3KF124K | 1.81 |
| .15 | 600V | CP08A1KF154K | 2.33 | CP08A3KF154K | 1.73 | CP09A1KF154K | 2.41 | CP09A3KF154K | 1.81 |
| .18 | 600V | CP08A1KF184K | 2.64 | CP08A3KF184K | 2.04 | CP09A1KF184K | 2.72 | CP09A3KF184K | 2.12 |
| .22 | 600V | CP08A1KF224K | 2.64 | CP08A3KF224K | 2.04 | CP09A1KF224K | 2.72 | CP09A3KF224K | 2.12 |
| .27 | 600V | CP08A1KF274K | 2.95 | CP08A3KF274K | 2.35 | CP09A1KF274K | 3.05 | CP09A3KF274K | 2.45 |
| .33 | 600V | CP08A1KF334K | 2.95 | CP08A3KF334K | 2.35 | CP09A1KF334K | 3.05 | CP09A3KF334K | 2.45 |
| .39 | 600V | CP08A1KF394K | 3.08 | CP08A3KF394K | 2.48 | CP09A1KF394K | 3.18 | CP09A3KF394K | 2.58 |
| .47 | 600V | CP08A1KF474K | 3.08 | CP08A3KF474K | 2.48 | CP09A1KF474K | 3.18 | CP09A3KF474K | 2.58 |
| .001 | 1000V | CP08A1KG102K | 2.02 | CP08A3KG102K | 1.33 | CP09A1KG102K | 2.09 | CP09A3KG102K | 1.40 |
| .0012 | 1000V | CP08A1KG122K | 2.02 | CP08A3KG122K | 1.33 | CP09A1KG122K | 2.09 | CP09A3KG122K | 1.40 |
| .0015 | 1000V | CP08A1KG152K | 2.02 | CP08A3KG152K | 1.33 | CP09A1KG152K | 2.09 | CP09A3KG152K | 1.40 |
| .0018 | 1000V | CP08A1KG182K | 2.02 | CP08A3KG182K | 1.33 | CP09A1KG182K | 2.09 | CP09A3KG182K | 1.40 |
| .0022 | 1000V | CP08A1KG222K | 2.02 | CP08A3KG222K | 1.33 | CP09A1KG222K | 2.09 | CP09A3KG222K | 1.40 |
| .0027 | 1000V | CP08A1KG272K | 2.07 | CP08A3KG272K | 1.38 | CP09A1KG272K | 2.14 | CP09A3KG272K | 1.44 |
| .0033 | 1000V | CP08A1KG332K | 2.07 | CP08A3KG332K | 1.38 | CP09A1KG332K | 2.14 | CP09A3KG332K | 1.44 |
| .0039 | 1000V | CP08A1KG392K | 2.15 | CP08A3KG392K | 1.46 | CP09A1KG392K | 2.22 | CP09A3KG392K | 1.52 |
| .0047 | 1000V | CP08A1KG472K | 2.15 | CP08A3KG472K | 1.46 | CP09A1KG472K | 2.22 | CP09A3KG472K | 1.52 |
| .0056 | 1000V | CP08A1KG562K | 2.17 | CP08A3KG562K | 1.48 | CP09A1KG562K | 2.24 | CP09A3KG562K | 1.55 |
| .0068 | 1000V | CP08A1KG682K | 2.17 | CP08A3KG682K | 1.48 | CP09A1KG682K | 2.24 | CP09A3KG682K | 1.55 |
| .0082 | 1000V | CP08A1KG822K | 2.20 | CP08A3KG822K | 1.51 | CP09A1KG822K | 2.27 | CP09A3KG822K | 1.58 |
| .01 | 1000V | CP08A1KG103K | 2.20 | CP08A3KG103K | 1.51 | CP09A1KG103K | 2.27 | CP09A3KG103K | 1.58 |
| .012 | 1000V | CP08A1KG123K | 2.23 | CP08A3KG123K | 1.54 | CP09A1KG123K | 2.30 | CP09A3KG123K | 1.61 |
| .015 | 1000V | CP08A1KG153K | 2.23 | CP08A3KG153K | 1.54 | CP09A1KG153K | 2.30 | CP09A3KG153K | 1.61 |
| .018 | 1000V | CP08A1KG183K | 2.25 | CP08A3KG183K | 1.56 | CP09A1KG183K | 2.32 | CP09A3KG183K | 1.63 |
| .022 | 1000V | CP08A1KG223K | 2.25 | CP08A3KG223K | 1.56 | CP09A1KG223K | 2.32 | CP09A3KG223K | 1.63 |
| .027 | 1000V | CP08A1KG273K | 2.25 | CP08A3KG273K | 1.56 | CP09A1KG273K | 2.32 | CP09A3KG273K | 1.63 |
| .033 | 1000V | CP08A1KG333K | 2.25 | CP08A3KG333K | 1.56 | CP09A1KG333K | 2.32 | CP09A3KG333K | 1.63 |
| .039 | 1000V | CP08A1KG393K | 2.32 | CP08A3KG393K | 1.63 | CP09A1KG393K | 2.39 | CP09A3KG393K | 1.70 |
| .047 | 1000V | CP08A1KG473K | 2.32 | CP08A3KG473K | 1.63 | CP09A1KG473K | 2.39 | CP09A3KG473K | 1.70 |
| .056 | 1000V | CP08A1KG563K | 2.48 | CP08A3KG563K | 1.79 | CP09A1KG563K | 2.58 | CP09A3KG563K | 1.89 |
| .068 | 1000V | CP08A1KG683K | 2.48 | CP08A3KG683K | 1.79 | CP09A1KG683K | 2.58 | CP09A3KG683K | 1.89 |
| .082 | 1000V | CP08A1KG823K | 2.53 | CP08A3KG823K | 1.84 | CP09A1KG823K | 2.62 | CP09A3KG823K | 1.93 |
| .1 | 1000V | CP08A1KG104K | 2.53 | CP08A3KG104K | 1.84 | CP09A1KG104K | 2.62 | CP09A3KG104K | 1.93 |
| .12 | 1000V | CP08A1KG124K | 2.68 | CP08A3KG124K | 1.99 | CP09A1KG124K | 2.77 | CP09A3KG124K | 2.08 |
| .15 | 1000V | CP08A1KG154K | 2.68 | CP08A3KG154K | 1.99 | CP09A1KG154K | 2.77 | CP09A3KG154K | 2.08 |
| .18 | 1000V | CP08A1KG184K | 3.04 | CP08A3KG184K | 2.35 | CP09A1KG184K | 3.13 | CP09A3KG184K | 2.44 |
| .22 | 1000V | CP08A1KG224K | 3.04 | CP08A3KG224K | 2.35 | CP09A1KG224K | 3.13 | CP09A3KG224K | 2.44 |
| .27 | 1000V | CP08A1KG274K | 3.39 | CP08A3KG274K | 2.70 | CP09A1KG274K | 3.51 | CP09A3KG274K | 2.82 |
| .33 | 1000V | CP08A1KG334K | 3.39 | CP08A3KG334K | 2.70 | CP09A1KG334K | 3.51 | CP09A3KG334K | 2.82 |
| .39 | 1000V | CP08A1KG394K | 3.54 | CP08A3KG394K | 2.85 | CP09A1KG394K | 3.66 | CP09A3KG394K | 2.97 |
| .47 | 1000V | CP08A1KG474K | 3.54 | CP08A3KG474K | 2.85 | CP09A1KG474K | 3.66 | CP09A3KG474K | 2.97 |

*Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 499

AEROVOX

Capacitors

INDUSTRIAL SECTION — MIL TYPES MIL-C-25C

TYPES CP53, CP54, CP55



Hvylol J or H oil impregnated and filled, drawn-metal cased capacitors, immersion proof and hermetically sealed. This unusually compact "bathtub" type capacitor is the most popular of the small units for severe operating conditions. Available with terminals on side (CP53), top (CP54), or bottom (CP55). The standard tolerance on single section units is $\pm 10\%$ (K), on multiple section units $\pm 20 - 10\%$ (V).

| CAP. | VOLT. | P30 SIDE TERM. | ★Net Price | P30-T TOP TERM. | ★Net Price | P30-B BOTTOM TERM. | ★Net Price | CAP. | VOLT. | P30 SIDE TERM. | ★Net Price | P30-T TOP TERM. | ★Net Price | P30-B BOTTOM TERM. | ★Net Price |
|-------|-------|----------------|------------|-----------------|------------|--------------------|------------|-------|-------|----------------|------------|-----------------|------------|--------------------|------------|
| 2.0 | 100V | CP53B1EB205K | 2.64 | | | | | 3X.1 | 600V | CP53B5EF104V | 2.87 | CP54B5EF104V | 2.87 | CP55B5EF104V | 2.87 |
| 4.0 | 100V | CP53B1EB405K | 3.26 | | | | | 3X.25 | 600V | CP53B5EF254V | 3.17 | CP54B5EF254V | 3.17 | CP55B5EF254V | 3.17 |
| 1.0 | 200V | CP53B1EG105K | 2.27 | | | | | 3X.5 | 600V | CP53B5EF504V | 3.88 | CP54B5EF504V | 3.88 | CP55B5EF504V | 3.88 |
| 2.0 | 200V | CP53B1EG205K | 2.90 | | | | | .05 | 1000V | CP53B1EG503K | 1.84 | | | | |
| .5 | 400V | CP53B1KE504K | 2.02 | CP54B1KE504K | 2.02 | | | .1 | 1000V | CP53B1EG104K | 1.95 | | | | |
| 3X.5 | 400V | CP53B5E504V | 3.82 | | | | | .25 | 1000V | CP53B1EG254K | 2.02 | | | | |
| .25 | 600V | CP53B1EF254K | 1.91 | CP54B1EF254K | 1.91 | CP55B1EF254K | 1.91 | .5 | 1000V | CP53B1EG504K | 2.16 | | | | |
| .5 | 600V | CP53B1EF504K | 2.06 | CP54B1EF504K | 2.06 | CP55B1EF504K | 2.06 | 1.0 | 1000V | CP53B1EG105K | 2.90 | | | | |
| 1.0 | 600V | CP53B1EF105K | 2.41 | CP54B1EF105K | 2.41 | CP55B1EF105K | 2.41 | 2X.05 | 1000V | CP53B4EG503V | 2.53 | | | | |
| 2.0 | 600V | CP53B1EF205K | 3.22 | CP54B1EF205K | 3.22 | CP55B1EF205K | 3.22 | 2X.1 | 1000V | CP53B4EG104V | 2.53 | | | | |
| 2X.05 | 600V | CP53B4EF503V | 2.47 | CP54B4EF503V | 2.47 | CP55B4EF503V | 2.47 | 2X.25 | 1000V | CP53B4EG254V | 2.83 | | | | |
| 2X.1 | 600V | CP53B4EF104V | 2.51 | CP54B4EF104V | 2.51 | CP55B4EF104V | 2.51 | 2X.5 | 1000V | CP53B4EG504V | 3.71 | | | | |
| 2X.25 | 600V | CP53B4EF254V | 2.59 | CP54B4EF254V | 2.59 | CP55B4EF254V | 2.59 | 3X.05 | 1000V | CP53B5EG503V | 2.94 | | | | |
| 2X.5 | 600V | CP53B4EF504V | 2.95 | CP54B4EF504V | 2.95 | CP55B4EF504V | 2.95 | 3X.1 | 1000V | CP53B5EG104V | 3.21 | | | | |
| 2X1.0 | 600V | CP53B4EF105V | 3.48 | CP54B4EF105V | 3.49 | CP55B4EF105V | 3.49 | 3X.25 | 1000V | CP53B5EG254V | 3.92 | | | | |

| CHARACTERISTIC F | | | |
|------------------|-------|-----------------|------------|
| CAP. | VOLT. | P30J SIDE TERM. | ★Net Price |
| B.0 | 100V | CP53B1FB805K | 4.86 |
| 10.0 | 100V | CP53B1FB106K | 6.05 |

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 499



MIL-C-25C

CP63, CP65 — Characteristics E & K

Compact, Hvylol M or J oil impregnated and filled, rectangular units. Immersion proof and hermetically sealed. Dual section has case grounded. Channel brackets attached. Standard tolerance on single section units, $\pm 10\%$ (K), on multiple section units $\pm 20 - 10\%$ (V).

| Cap. | Voltage | P16-CT Top Term. | Net Price★ | P16-CB Bottom Term. | Net Price★ |
|-------|---------|------------------|------------|---------------------|------------|
| .1 | 400V | CP63B1KE104K | 1.90 | CP65B1KE104K | 1.90 |
| .25 | 400V | CP63B1KE254K | 1.94 | | |
| 1.0 | 400V | CP63B1EE105K | 2.21 | | |
| .05 | 600V | CP63B1EF503K | 1.83 | CP65B1EF503K | 1.83 |
| .25 | 600V | CP63B1EF254K | 2.00 | CP65B1EF254K | 2.00 |
| .5 | 600V | CP63B1EF504K | 2.07 | CP65B1EF504K | 2.07 |
| 1.0 | 600V | CP63B1EF105K | 2.31 | CP65B1EF105K | 2.31 |
| 2X.1 | 600V | CP63B6EF104V | 2.51 | CP65B6EF104V | 2.51 |
| 2X.25 | 600V | CP63B6EF254V | 2.66 | CP65B6EF254V | 2.66 |
| 2X.5 | 600V | CP63B6EF504V | 2.81 | CP65B6EF504V | 2.81 |
| .01 | 1000V | CP63B1EG103K | 1.87 | CP65B1EG103K | 1.87 |
| .02 | 1000V | CP63B1EG203K | 1.87 | CP65B1EG203K | 1.87 |
| .05 | 1000V | CP63B1EG503K | 1.90 | CP65B1EG503K | 1.90 |
| .1 | 1000V | CP63B1EG104K | 1.98 | | |
| .25 | 1000V | CP63B1EG254K | 1.99 | | |
| .5 | 1000V | CP63B1EG504K | 2.20 | | |



MIL-C-25C

CP91 — Characteristics E & K

Former issues of MIL-C-25 listed variations of this item as CP61 and CP90. CP91 base size $1\frac{1}{4} \times \frac{3}{8}$. Brackets must be ordered separately. Specify CP91F (footed) or CP91S (spade).

| Cap. | Voltage | P16 No Brackets | Net Price★ |
|-------|---------|-----------------|------------|
| .1 | 400V | CP91B1EK104K | 1.82 |
| .25 | 400V | CP91B1EK254K | 1.87 |
| 1.0 | 400V | CP91B1EE105K | 2.13 |
| .05 | 600V | CP91B1EF503K | 1.75 |
| .25 | 600V | CP91B1EF254K | 1.92 |
| .5 | 600V | CP91B1EF504K | 1.99 |
| 1.0 | 600V | CP91B1EF105K | 2.23 |
| 2X.05 | 600V | CP91B6EF503V | 2.36 |
| 2X.1 | 600V | CP91B6EF104V | 2.44 |
| 2X.25 | 600V | CP91B6EF254V | 2.58 |
| 2X.5 | 600V | CP91B6EF504V | 2.73 |
| .01 | 1000V | CP91B1EG103K | 1.79 |
| .02 | 1000V | CP91B1EG203K | 1.79 |
| .05 | 1000V | CP91B1EG503K | 1.82 |
| .1 | 1000V | CP91B1EG104K | 1.91 |
| .25 | 1000V | CP91B1EG254K | 1.92 |
| .5 | 1000V | CP91B1EG504K | 2.12 |

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 499



MIL-C-25C

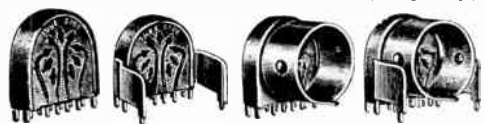
TYPES CP67, CP69 — Characteristics E

Hvylol M or J oil impregnated and filled unit, rectangular cased. Similar to CP91 except additional length in base size of $1\frac{1}{4} \times \frac{3}{8}$, permits 2 or 3 sections, case floating. Single units also can be used for special applications where type CP91 does not fit. Both CP67 and CP69 supplied with channel brackets attached. Standard tolerance on single section units $\pm 10\%$ (K), on multiple section units $\pm 20 - 10\%$ (V).

| Capacity | Voltage | P18-CT Top Terminal | Net Price★ | P18-CB Bottom Terminal | Net Price★ | Capacity | Voltage | P18-CB Bottom Terminal | Net Price★ |
|----------|---------|---------------------|------------|------------------------|------------|----------|---------|------------------------|------------|
| .05 | 600V | CP67B1EF503K | 2.13 | CP69B1EF503K | 2.13 | .1 | 1000V | CP69B1EG104K | 2.27 |
| .1 | 600V | CP67B1EF104K | 2.23 | CP69B1EF104K | 2.23 | .25 | 1000V | CP69B1EG254K | 2.36 |
| .25 | 600V | CP67B1EF254K | 2.30 | CP69B1EF254K | 2.30 | .5 | 1000V | CP69B1EG504K | 2.53 |
| .5 | 600V | CP67B1EF504K | 2.40 | CP69B1EF504K | 2.40 | 2X.01 | 1000V | CP69B4EG103V | 2.54 |
| 1.0 | 600V | CP67B1EF105K | 2.63 | CP69B1EF105K | 2.63 | 2X.02 | 1000V | CP69B4EG203V | 2.61 |
| 2X.05 | 600V | CP67B4EF503V | 2.64 | CP69B4EF503V | 2.64 | 2X.05 | 1000V | CP69B4EG503V | 2.69 |
| 2X.1 | 600V | CP67B4EF104V | 2.69 | CP69B4EF104V | 2.69 | 2X.1 | 1000V | CP69B4EG104V | 2.78 |
| 2X.25 | 600V | CP67B4EF254V | 2.90 | CP69B4EF254V | 2.90 | 2X.25 | 1000V | CP69B4EG254V | 2.96 |
| 2X.5 | 600V | CP67B4EF504V | 3.25 | CP69B4EF504V | 3.25 | 3X.01 | 1000V | CP69B5EG103V | 3.12 |
| 3X.05 | 600V | CP67B5EF503V | 3.15 | CP69B5EF503V | 3.15 | 3X.02 | 1000V | CP69B5EG203V | 3.15 |
| 3X.1 | 600V | CP67B5EF104V | 3.24 | CP69B5EF104V | 3.24 | 3X.05 | 1000V | CP69B5EG503V | 3.25 |
| 3X.25 | 600V | CP67B5EF254V | 3.52 | CP69B5EF254V | 3.52 | 3X.1 | 1000V | CP69B5EG104V | 3.37 |
| .01 | 1000V | CP67B1EG103K | 2.14 | CP69B1EG103K | 2.14 | | | | |
| .02 | 1000V | CP67B1EG203K | 2.16 | CP69B1EG203K | 2.16 | | | | |
| .05 | 1000V | CP67B1EG503K | 2.20 | CP69B1EG503K | 2.20 | | | | |

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99, 100 to 499

RIGHT ANGLE TUBE SOCKETS



Type A Type AX Type B Type BX

Ordering Example: RA7A = (Type 7 Pin Socket)

Available in 7-pin and 9-pin types in four styles, these sockets are designed to meet existing MIL Specifications. Active contacts are silver plated and non-fatiguing contact pressure provides proper insertion and withdrawal pressure with a minimum of contact resistance. Ideal for hand or mechanical insertion into printed-wiring boards using simple in-line punched round holes. Templates are furnished with each socket. Long terminals permit use of sockets on wide range of board thickness.

- Type A — for general purpose applications.
- Type AX — for special applications (military and commercial) where extra strength and rigidity are required.
- Type B — same as Type A except tube shield shell added.
- Type BX — same as Type AX except tube shield shell added.

RA 7 — 7 pin right angle tube socket. RA 9 — 9 pin right angle tube socket

| Cat. No. | Net Price★ |
|----------|------------|
| RA7A | .83 |
| RA7AX | .85 |
| RA7B | .90 |
| RA7BX | 1.08 |
| RA9A | .99 |
| RA9AX | 1.01 |
| RA9B | 1.06 |
| RA9BX | 1.24 |

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 499

AEROVOX

Capacitors



INDUSTRIAL SECTION — MIL TYPES TYPE CP70 MIL-C-25C

Characteristics E and F • Porcelain and Riveted Terminals

Hyvol M or J oil impregnated and filled, large, rectangular, metal-cased capacitor for heavy-duty, continuous-service applications such as power supplied for transmitters, amplifiers, etc. immersion proof and hermetically sealed. Available with either high-voltage screw-type porcelain-pillar terminals or the space-saving riveted terminal. Pillar terminals have soldering lugs.

Standard tolerance ±10% (K). MIL-C-25C mounting brackets are also available for all units.

Units meet Vibration Grade 1 of MIL-C-25C—Designated by addition of numeral 1 to part number.

| Capacity | Voltage | CHAR. E | | | CHAR. F | | | CHAR. E | | | CHAR. F | | |
|----------|---------|--------------|--------------------------------|--------|--------------|--------------------------------|--------|--------------|--------------------------------|--------|--------------|--------------------------------|--------|
| | | P09 | Case Size and Net Brkt. Desig. | Price★ | P09 | Case Size and Net Brkt. Desig. | Price★ | P09-R | Case Size and Net Brkt. Desig. | Price★ | P09-R | Case Size and Net Brkt. Desig. | Price★ |
| 1.0 | 600V | CP70E1EF105K | A2 | 3.62 | | | | CP70B1EF105K | A2 | 3.06 | | | |
| 2.0 | 600V | CP70E1EF205K | A4 | 4.29 | CP70E1FF205K | A3 | 4.09 | CP70B1EF205K | A4 | 3.96 | CP70B1FF205K | A3 | 3.77 |
| 4.0 | 600V | CP70E1EF405K | B4 | 5.68 | CP70E1FF405K | B3 | 5.58 | CP70B1EF405K | B4 | 5.52 | CP70B1FF405K | B3 | 5.26 |
| 6.0 | 600V | CP70E1EF605K | C2 | 6.86 | CP70E1FF605K | B6 | 6.55 | CP70B1EF605K | C2 | 6.54 | CP70B1FF605K | B6 | 6.23 |
| 8.0 | 600V | CP70E1EF805K | C3 | 8.43 | CP70E1FF805K | C2 | 8.07 | CP70B1EF805K | C3 | 7.89 | CP70B1FF805K | C2 | 7.75 |
| 10.0 | 600V | CP70E1EF106K | D3 | 9.11 | CP70E1FF106K | C4 | 8.69 | CP70B1EF106K | D3 | 8.78 | CP70B1FF106K | C4 | 8.37 |
| .1 | 1000V | CP70E1EG104K | A1 | 2.70 | | | | | | | | | |
| .25 | 1000V | CP70E1EG254K | A2 | 3.06 | | | | | | | | | |
| .5 | 1000V | CP70E1EG504K | A2 | 3.24 | | | | | | | | | |
| 1.0 | 1000V | CP70E1EG105K | A3 | 4.14 | CP70E1FG105K | A2 | 3.84 | CP70B1EG105K | A3 | 3.68 | | | |
| 2.0 | 1000V | CP70E1EG205K | A6 | 5.41 | CP70E1FG205K | A5 | 4.87 | CP70B1EG205K | A6 | 4.73 | CP70B1FG205K | A5 | 4.51 |
| 4.0 | 1000V | CP70E1EG405K | C2 | 6.84 | CP70E1FG405K | B6 | 6.56 | CP70B1EG405K | C2 | 6.38 | CP70B1FG405K | B6 | 6.22 |
| 6.0 | 1000V | CP70E1EG605K | D3 | 8.46 | CP70E1FG605K | C4 | 8.09 | CP70B1EG605K | D3 | 8.13 | CP70B1FG605K | C4 | 7.75 |
| 8.0 | 1000V | CP70E1EG805K | D5 | 9.05 | | | | CP70B1EG805K | D5 | 8.93 | CP70B1FG805K | D2 | 9.15 |
| 10.0 | 1000V | CP70E1EG106K | E5 | 10.99 | CP70E1FG106K | D5 | 10.91 | CP70B1EG106K | E5 | 10.82 | CP70B1FG106K | D5 | 10.08 |
| 12.0 | 1000V | CP70E1EG126K | E6 | 11.89 | | | | CP70B1EG126K | E6 | 11.75 | CP70B1FG126K | E4 | 11.69 |
| 15.0 | 1000V | CP70E1EG156K | G2 | 13.15 | CP70E1FG156K | F1 | 13.09 | CP70B1EG156K | G2 | 13.01 | CP70B1FG156K | F1 | 12.95 |
| .5 | 1500V | CP70E1EH504K | A3 | 3.95 | | | | CP70B1EH504K | A3 | 3.46 | | | |
| 1.0 | 1500V | CP70E1EH105K | A6 | 4.64 | CP70E1FH105K | A5 | 4.37 | CP70B1EH105K | A6 | 4.23 | | | |
| 2.0 | 1500V | CP70E1EH205K | B6 | 6.54 | CP70E1FH205K | B5 | 5.57 | CP70B1EH205K | B6 | 5.51 | CP70B1FH205K | B5 | 5.25 |
| 4.0 | 1500V | CP70E1EH405K | D4 | 8.77 | CP70E1FH405K | C4 | 8.14 | CP70B1EH405K | D4 | 8.20 | CP70B1FH405K | C4 | 7.82 |
| 6.0 | 1500V | CP70E1EH605K | E5 | 10.66 | CP70E1FH605K | D5 | 10.40 | CP70B1EH605K | E5 | 10.53 | CP70B1FH605K | D5 | 10.09 |
| 8.0 | 1500V | CP70E1EH805K | F2 | 13.66 | CP70E1FH805K | F1 | 12.99 | CP70B1EH805K | F2 | 12.92 | CP70B1FH805K | F1 | 12.66 |
| 10.0 | 1500V | CP70E1EH106K | G4 | 15.64 | CP70E1FH106K | G2 | 15.06 | CP70B1EH106K | G4 | 13.79 | CP70B1FH106K | G2 | 14.66 |
| 12.0 | 1500V | CP70E1EH126K | J3 | 17.01 | CP70E1FH126K | G2 | 16.97 | CP70B1EH126K | J3 | 16.89 | CP70B1FH126K | G2 | 16.84 |
| 15.0 | 1500V | CP70E1EH156K | J6 | 18.74 | CP70E1FH156K | J3 | 18.68 | CP70B1EH156K | J6 | 18.61 | CP70B1FH156K | J3 | 18.56 |
| .25 | 2000V | CP70E1EJ254K | B1 | 4.47 | | | | | | | | | |
| .5 | 2000V | CP70E1EJ504K | B2 | 4.64 | | | | | | | | | |
| 1.0 | 2000V | CP70E1EJ105K | B6 | 5.67 | CP70E1FJ105K | B3 | 5.62 | | | | | | |
| 2.0 | 2000V | CP70E1EJ205K | C4 | 6.71 | CP70E1FJ205K | C3 | 6.65 | | | | | | |
| 4.0 | 2000V | CP70E1EJ405K | E6 | 9.45 | CP70E1FJ405K | E3 | 9.40 | | | | | | |
| 6.0 | 2000V | | | | CP70E1FJ605K | G1 | 12.24 | | | | | | |
| 10.0 | 2000V | | | | CP70E1FJ106K | J3 | 17.64 | | | | | | |
| 12.0 | 2000V | | | | CP70E1FJ126K | J5 | 20.50 | | | | | | |
| 15.0 | 2000V | | | | CP70E1FJ156K | J7 | 22.04 | | | | | | |
| .1 | 2500V | CP70E1EK104K | B1 | 6.50 | | | | | | | | | |
| .5 | 2500V | CP70E1EK504K | B4 | 6.99 | CP70E1FK504K | B3 | 6.93 | | | | | | |
| 1.0 | 2500V | CP70E1EK105K | D2 | 7.97 | CP70E1FK105K | D1 | 7.90 | | | | | | |
| 2.0 | 2500V | CP70E1EK205K | E5 | 12.88 | CP70E1FK205K | D5 | 12.82 | | | | | | |
| 4.0 | 2500V | CP70E1EK405K | J2 | 17.96 | | | | | | | | | |
| 10.0 | 2500V | CP70E1EK106K | J10 | 40.72 | | | | | | | | | |
| .1 | 3000V | CP70E1EL104K | B2 | 8.30 | | | | | | | | | |
| .25 | 3000V | CP70E1EL254K | B3 | 8.79 | | | | | | | | | |
| .5 | 3000V | CP70E1EL504K | B6 | 9.76 | | | | | | | | | |
| 1.0 | 3000V | CP70E1EL105K | E4 | 12.06 | | | | | | | | | |
| 2.0 | 3000V | CP70E1EL205K | G2 | 15.01 | CP70E1FL205K | G1 | 11.45 | | | | | | |
| 4.0 | 3000V | CP70E1EL405K | J7 | 22.05 | CP70E1FL405K | J3 | 21.99 | | | | | | |
| .1 | 4000V | CP70E1EM104K | E1 | 10.99 | | | | | | | | | |
| .25 | 4000V | | | | CP70E1FM254K | E1 | 11.08 | | | | | | |
| .5 | 4000V | | | | CP70E1FM504K | E3 | 12.15 | | | | | | |
| 1.0 | 4000V | | | | CP70E1FM105K | E6 | 15.27 | | | | | | |
| 2.0 | 4000V | | | | CP70E1FM205K | J4 | 21.56 | | | | | | |
| 4.0 | 4000V | CP70E1EM405K | J11 | 39.44 | CP70E1FM405K | J10 | 35.62 | | | | | | |
| .1 | 5000V | CP70E1EN104K | E1 | 11.41 | | | | | | | | | |
| .25 | 5000V | CP70E1EN254K | E3 | 12.72 | | | | | | | | | |
| .5 | 5000V | CP70E1EN504K | E6 | 15.44 | CP70E1FN504K | E4 | 13.38 | | | | | | |
| 1.0 | 5000V | | | | CP70E1FN105K | J2 | 17.95 | | | | | | |
| 2.0 | 5000V | | | | CP70E1FN205K | J6 | 28.86 | | | | | | |
| .1 | 6000V | CP70D1EP104K | E3 | 13.68 | CP70D1FP104K | E2 | 12.65 | | | | | | |
| .25 | 6000V | CP70D1EP254K | E5 | 16.50 | CP70D1FP254K | E4 | 14.22 | | | | | | |
| .5 | 6000V | CP70D1EP504K | J3 | 20.58 | | | | | | | | | |
| 1.0 | 6000V | CP70D1EP105K | J11 | 23.49 | CP70D1FP105K | J9 | 29.51 | | | | | | |
| .1 | 7500V | | | | CP70D1FR104K | E3 | 13.46 | | | | | | |
| .25 | 7500V | | | | CP70D1FR254K | J1 | 16.80 | | | | | | |
| .5 | 7500V | | | | CP70D1FR504K | J4 | 23.69 | | | | | | |

| | | | |
|----|-----------------------|-----|-----------------------|
| A1 | 1 1/4 x 1 1/4 x 1 3/8 | E2 | 3 3/4 x 2 1/4 x 3 3/8 |
| A2 | 1 1/4 x 1 1/4 x 2 1/4 | E3 | 3 3/4 x 2 1/4 x 4 1/4 |
| A3 | 1 1/4 x 1 1/4 x 2 7/8 | E4 | 3 3/4 x 2 1/4 x 4 3/4 |
| A4 | 1 1/4 x 1 1/4 x 3 1/4 | E5 | 3 3/4 x 2 1/4 x 4 3/4 |
| A5 | 1 1/4 x 1 1/4 x 3 7/8 | E6 | 3 3/4 x 2 1/4 x 5 1/8 |
| A6 | 1 1/4 x 1 1/4 x 4 3/4 | F1 | 3 3/4 x 2 1/2 x 4 3/4 |
| B1 | 2 1/2 x 1 3/4 x 2 1/2 | F2 | 3 3/4 x 2 1/2 x 5 3/4 |
| B2 | 2 1/2 x 1 3/4 x 2 7/8 | G1 | 3 3/4 x 3 3/4 x 4 3/4 |
| B3 | 2 1/2 x 1 3/4 x 3 1/2 | G2 | 3 3/4 x 3 3/4 x 4 3/4 |
| B4 | 2 1/2 x 1 3/4 x 3 7/8 | G4 | 3 3/4 x 3 3/4 x 5 1/2 |
| B5 | 2 1/2 x 1 3/4 x 4 3/4 | J1 | 4 1/4 x 3 3/4 x 3 7/8 |
| B6 | 2 1/2 x 1 3/4 x 4 3/4 | J2 | 4 1/4 x 3 3/4 x 4 3/8 |
| C2 | 3 3/4 x 1 1/4 x 3 7/8 | J3 | 4 1/4 x 3 3/4 x 4 3/4 |
| C3 | 3 3/4 x 1 1/4 x 4 1/4 | J4 | 4 1/4 x 3 3/4 x 5 1/8 |
| C4 | 3 3/4 x 1 1/4 x 4 3/4 | J5 | 4 1/4 x 3 3/4 x 5 1/2 |
| D1 | 3 3/4 x 1 3/4 x 3 3/4 | J6 | 4 1/4 x 3 3/4 x 6 |
| D2 | 3 3/4 x 1 3/4 x 3 7/8 | J7 | 4 1/4 x 3 3/4 x 6 1/2 |
| D3 | 3 3/4 x 1 3/4 x 4 | J9 | 4 1/4 x 3 3/4 x 7 1/2 |
| D4 | 3 3/4 x 1 3/4 x 4 1/4 | J10 | 4 1/4 x 3 3/4 x 8 1/2 |
| D5 | 3 3/4 x 1 3/4 x 4 3/4 | J11 | 4 1/4 x 3 3/4 x 9 3/8 |
| E1 | 3 3/4 x 2 1/4 x 2 3/4 | | |

If MIL brackets are required with units, specify CP07S (spade) or CP07F (footed) and add the bracket designation listed beside the unit.

Example: CP70E1EF504K with CP07SA2 brackets.

★Request O.E.M. prices in the following quantities: 10 to 24, 25 to 49, 50 to 99



TYPE CP41 — Characteristics E and F

Cylindrical, hermetically sealed can with screwbase molded cover for vertical mounting. Operating temperature range —55 +85°C. Solder lug, nonremovable terminals MIL designation B). Supplied with mounting nut and lockwasher. Standard tolerance ±10% (K).

Units meet Vibration Grade 1 of MIL-C-25C Designated by addition of numeral 1 to part number.

| CAPACITY | VOLTAGE | CHAR. E P10M | Net Price* | CHAR. F P10M | Net Price* |
|----------|---------|--------------|------------|--------------|------------|
| 2.0 | 600V | CP41B1EF205K | 4.82 | CP41B1FF205K | 4.82 |
| 4.0 | 600V | CP41B1EF405K | 5.67 | CP41B1FF405K | 5.67 |
| 1.0 | 1000V | CP41B1EG105K | 5.27 | CP41B1FG105K | 5.27 |
| 2.0 | 1000V | CP41B1EG205K | 5.57 | CP41B1FG205K | 5.57 |
| .5 | 1500V | | | CP41B1FH504K | 4.62 |
| 1.0 | 1500V | | | CP41B1FH105K | 6.42 |

★Request O.E.M. prices in the following quantities: 10 to 99

AEROVOX

Capacitors

INDUSTRIAL CERAMIC CAPACITORS ULTRAMINIATURE CAPACITORS DIPPED-RADIAL & AXIAL LEADS MOLDED-AXIAL LEADS

CERAFIL[®]

Cerafil[®] capacitors are the smallest ceramic capacitors available anywhere. These remarkably ultra-miniature units are designed primarily for air-borne and space-borne equipments, having critical space and weight parameters. They are also designed for transistorized circuit applications in hearing aids and other critical requirements where space and weight are at an absolute premium. The unique design and construction features of Cerafil[®] capacitors make it possible to obtain extremely high capacities per unit volume. These tiny capacitors are the ideal answer to many problems created by the growing trend towards miniaturization of electronic assemblies and equipments. When tested using Cerafil[®] ratings, these units will meet or surpass the requirements of MIL-C-11015B.

- All 29 stock values are available in three styles.
 1. C80V dipped axial leads (Also referred to as C80A or C80T)
 2. Dipped radial lead units (Also referred to as C80R)
 3. Completely new molded MC80V

The new molded unit features a rugged epoxy encapsulation which provides an even greater degree of reliability to the already missile proven Cerafil[®]. Increase mechanical strength, the uniform dimensions make the molded Cerafil[®] ideal for automated assembly operation. Certain values of the C80V have been assigned military part numbers; CK12 thru CK18. These units are marked in the listing below. The applicable military specifications for these units is MIL-C-11015B, and they may be procured against Signal Corps spec sheet SCL-640T/1.

| Capacity Mfds | Dimensions | | Dipped Axial Leads | | Dipped Radial Leads | | Dimensions .003 — .005 | | Molded Axial Leads | |
|---------------|------------|--------|------------------------|------------|---------------------|------------|------------------------|--------|--------------------|------------|
| | Diameter | Length | Part No. | Net★ Price | Part No. | Net★ Price | Diameter | Length | Part No. | Net★ Price |
| .00001 | .090 | .320 | C80V100AM | .52 | C80V100RM | .57 | .087 | .315 | MC80V100AM | .47 |
| .000022 | .090 | .320 | C80V220AM | .52 | C80V220RM | .57 | .087 | .315 | MC80V220AM | .47 |
| .000033 | .090 | .320 | C80V330AM | .52 | C80V330RM | .57 | .087 | .315 | MC80V330AM | .47 |
| .000047 | .090 | .320 | C80V470AM | .52 | C80V470RM | .57 | .087 | .315 | MC80V470AM | .47 |
| .000056 | .090 | .320 | C80V560AM | .52 | C80V560RM | .57 | .087 | .315 | MC80V560AM | .47 |
| .000068 | .090 | .320 | C80V680AM | .52 | C80V680RM | .57 | .087 | .315 | MC80V680AM | .47 |
| .000082 | .090 | .320 | C80V820AM | .52 | C80V820RM | .57 | .087 | .315 | MC80V820AM | .47 |
| .0001 | .090 | .320 | C80V101AM | .52 | C80V101RM | .57 | .087 | .315 | MC80V101AM | .47 |
| .00022 | .090 | .320 | C80V221AM | .52 | C80V221RM | .57 | .087 | .315 | MC80V221AM | .47 |
| .00033 | .090 | .320 | C80V331AM | .52 | C80V331RM | .57 | .087 | .315 | MC80V331AM | .47 |
| .00047 | .090 | .320 | C80V471AM | .52 | C80V471RM | .57 | .087 | .315 | MC80V471AM | .47 |
| .00056 | .090 | .320 | C80V561AM | .52 | C80V561RM | .57 | .087 | .315 | MC80V561AM | .47 |
| .00068 | .090 | .320 | C80V681AM | .52 | C80V681RM | .57 | .087 | .315 | MC80V681AM | .47 |
| .00082 | .090 | .320 | C80V821AM | .52 | C80V821RM | .57 | .087 | .315 | MC80V821AM | .47 |
| .001 | .090 | .320 | ¹ C80V102AM | .46 | C80V102RM | .51 | .087 | .315 | MC80V102AM | .41 |
| .002 | .120 | .500 | C80V202AM | .76 | C80V202RM | .84 | .117 | .495 | MC80V202AM | .68 |
| .0022 | .120 | .500 | ² C80V222AM | .76 | C80V222RM | .84 | .117 | .495 | MC80V222AM | .68 |
| .0033 | .120 | .500 | ³ C80V332AM | .76 | C80V332RM | .84 | .117 | .495 | MC80V332AM | .68 |
| .0047 | .120 | .500 | ⁴ C80V472AM | .76 | C80V472RM | .84 | .117 | .495 | MC80V472AM | .68 |
| .005 | .120 | .500 | C80V502AM | .76 | C80V502RM | .84 | .117 | .495 | MC80V502AM | .68 |
| .0068 | .180 | .500 | C80V682AM | 1.00 | C80V682RM | 1.19 | .157 | .495 | MC80V682AM | .90 |
| .01 | .180 | .500 | ⁵ C80V103AM | 1.00 | C80V103RM | 1.19 | .157 | .495 | MC80V103AM | .90 |
| .02 | .200 | .500 | C80V203AM | 1.83 | C80V203RM | 2.03 | .197 | .495 | MC80V203AM | 1.65 |
| .022 | .240 | .650 | ⁶ C80V223AM | 3.05 | C80V223RM | 3.38 | .237 | .645 | MC80V223AM | 2.75 |
| .033 | .240 | .650 | C80V333AM | 3.05 | C80V333RM | 3.38 | .237 | .645 | MC80V333AM | 2.75 |
| .047 | .240 | .650 | ⁷ C80V473AM | 3.05 | C80V473RM | 3.38 | .237 | .645 | MC80V473AM | 2.75 |
| .05 | .240 | .650 | C80V503AM | 3.05 | C80V503RM | 3.38 | .237 | .645 | MC80V503AM | 2.75 |
| .068 | .310 | .750 | C80V683AM | 5.48 | C80V683RM | 6.08 | .277 | .745 | MC80V683AM | 4.93 |
| .1 | .310 | .750 | C80V104AM | 5.48 | C80V104RM | 6.08 | .277 | .745 | MC80V104AM | 4.93 |

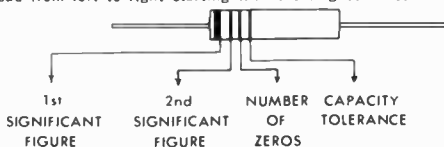
*Overall length may exceed dimensions shown by as much as 1/16" due to deposit of insulating material on leads.

CK Type Designation

- (1) CK12V102M (2) CK13V222M (3) CK14V332M (4) CK15V472M (5) CK16V103M (6) CK17V223M (7) CK18V473M

| CAPACITANCE | | TOLERANCE | |
|-------------|--------|-----------|--------|
| ±20 | | Black | |
| CAPACITANCE | | | |
| 0 | Black | 5 | Green |
| 1 | Brown | 6 | Blue |
| 2 | Red | 7 | Violet |
| 3 | Orange | 8 | Gray |
| 4 | Yellow | 9 | White |

MARKING
 The following color code system is used to denote capacity in micromicrofarads and tolerance.
 Read from left to right starting with the largest band.



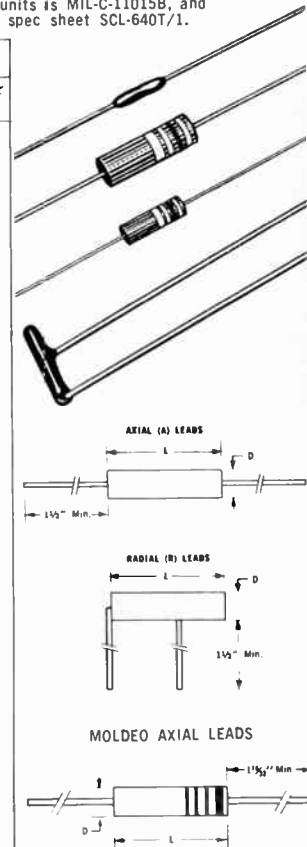
*Request O.E.M. prices in the following quantities: 25 to 49, 50 to 99, 100 to 499.

ELECTRICAL SPECIFICATIONS

- VOLTAGE — 100 VDCW; 300 VOCT.
- CAPACITY TOLERANCE — ±20%. Available ±10% on Special Order. Contact Factory for price and delivery.
- INSULATION RESISTANCE — 100 mfd.—megohms or 10,000 megohms whichever is smaller.
- TEMPERATURE COEFFICIENT — (—55°C to +85°C).
 No voltage +10% to —15%.
 100 volts applied — +10% to —35%.
- POWER FACTOR — 2.5% maximum.
- OPERATING TEMPERATURE —
 —55°C to 85°C at 100 volts
 —55°C to 125°C at 50 volts

MECHANICAL SPECIFICATIONS

- All dimensions in inches.
- LEADS — Tinned Copper.
 Below .01 mfd — #26 gauge.
 .01 mfd. and above — #22 gauge.
- LEAD LENGTHS — See drawings.
- MARKING — Color code. No code for temperature coefficient; no code for lead designation since it is obvious.



AEROVOX

Capacitors

INDUSTRIAL CERAMIC CAPACITORS (cont.)



HIGH CAPACITY, HIGH RELIABILITY, ROLLED CERAMIC CAPACITORS



Cerol® capacitors are rolled ceramic capacitors in the high capacitance range of paper and plastic film dielectrics but in much smaller physical sizes and with superior electrical characteristics. Designed for general applications in bypass-coupling, filtering and blocking circuits. Excellent electrical characteristics for critical applications in decoupling and pulse circuits where low series resistance at high frequencies together with miniature sizes are required. Low series resistance makes them ideal for use in all computer circuits. Operating tempera-

ture range at rated voltage —55°C to 85°C and at 50% rated voltage —55°C to 125°C. Capacitance tolerance is ±20%. Will meet or surpass all the requirements of MIL-C-11015B.

Cerol capacitors are available in three types; type CR89, CR90 and CR91 rated at 50V, 100V and 200V respectively at 85°C and derated by 50% at 125°C.

Units are stamped with the rated voltage for identification of type.

| Value | TYPE CR89 — 50 VDCW | | | TYPE CR90 — 100 VDCW | | | TYPE CR91 — 200 VDCW | | | Color Code | | | |
|---------|---------------------|-----------|-----------|----------------------|-------------|-----------|----------------------|------------|-------------|------------|-----------|-----------|---|
| | Stock Items | D Max In. | L Max In. | Net★ Price | Stock Items | D Max In. | L Max In. | Net★ Price | Stock Items | | D Max In. | L Max In. | Net★ Price |
| .1 MFD | CR89W104AM | .140 | .400 | 3.65 | CR90V104AM | .210 | .690 | 4.05 | CR91W104AM | .290 | .495 | 4.86 | Brown, Black, Yellow & Black Red Green, Yellow & Black Green, Black, Yellow & Black Brown, Black, Green, Black Red, Black, Green, Black |
| .25 MFD | CR89W254AM | .210 | .495 | 4.86 | CR90V254AM | .260 | .690 | 5.40 | CR91W254AM | .350 | .690 | 6.48 | |
| .5 MFD | CR89W504AM | .260 | .495 | 7.90 | CR90V504AM | .350 | .690 | 8.78 | CR91W504AM | .440 | .690 | 10.54 | |
| 1.0 MFD | CR89W105AM | .260 | .690 | 12.15 | CR90V105AM | .480 | .690 | 13.50 | CR91W105AM | .470 | 1.000 | 16.20 | |
| 2.0 MFD | CR89W205AM | .350 | .690 | 18.23 | CR90V205AM | .400 | 1.440 | 20.25 | CR91W205AM | .520 | 1.440 | 24.30 | |

SPECIFICATIONS

Axial Tinned copper leads. Also available in weldable alloy leads on special order. All values — ±22 gauge except CR89W104AM has 26 gauge leads. For non-standard values, use dimensions of next higher standard value and order special.

Power Factor — 2% Maximum
Insulation Resistance = 100 Meg. — Mfd. minimum
Series Resistance < .20 ohms at 8 to 10 mc.
Test Voltage = 3 times Rated Voltage
Other requirements per MIL-C-11015C

| T. C. | TYPE CR90 | TYPES CR89 & CR91 |
|-----------------|------------|-------------------|
| —55° to +125°C | | |
| 0 Voltage | +15%, —25% | +10%, —30% |
| U Rated Voltage | +15%, —35% | +10%, —40% |

★ Request OEM Prices in the following quantities: 25 to 49, 50 to 99, 100 to 499.

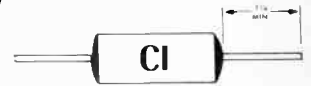
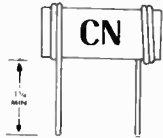
General Purpose Bypass Coupling Disks Type IDI Net Price .15*



These industrial ceramic disks capacitors offer small physical sizes with high capacity. Mainly used for by-pass coupling or filter applications these units contain maximum protection against humidity, voltage breakdown, vibration. Rated for 500 VDCW these units are flash-tested at 1500 VDC. Units will be marked with capacity and tolerance except those units which have a CK number listed. Such units are equivalent to those listed in MIL-C-11015 and will be marked with the number shown in the listing.

| Cap. mmf | Size | Tolerance | Cap. mmf | Size | Tolerance | Mil Equivalent |
|----------|------|-----------|----------|------|-----------|----------------|
| 2.2 | DI-1 | ±5 mmf. | 470 | DI-1 | +100-20% | CK60Y471Z |
| 3.3 | DI-1 | ±5 mmf. | 500 | DI-1 | ±10% | |
| 4.7 | DI-1 | ±5 mmf. | 510 | DI-1 | ±10% | CK60Y681Z |
| 5.0 | DI-1 | ±10% | 560 | DI-1 | ±10% | |
| 6.0 | DI-1 | ±10% | 600 | DI-2 | ±10% | CK60Y821Z |
| 6.5 | DI-1 | ±10% | 680 | DI-2 | ±10% | |
| 7.5 | DI-1 | ±10% | 680 | DI-1 | +100-20% | CK61Y102Z |
| 8.0 | DI-1 | ±10% | 750 | DI-2 | ±10% | |
| 8.2 | DI-1 | ±10% | 800 | DI-2 | ±10% | CK61Y152Z |
| 10 | DI-1 | ±10% | 820 | DI-2 | ±10% | |
| 12 | DI-1 | ±10% | 820 | DI-1 | +100-20% | CK62Y222Z |
| 15 | DI-1 | ±10% | 910 | DI-2 | ±10% | |
| 18 | DI-1 | ±10% | 1000 | DI-2 | ±10% | CK62Y332Z |
| 20 | DI-1 | ±10% | 1000 | DI-2 | ±10% | |
| 22 | DI-1 | ±10% | 1200 | DI-3 | ±10% | CK62Y472Z |
| 24 | DI-1 | ±10% | 1300 | DI-3 | ±10% | |
| 25 | DI-1 | ±10% | 1500 | DI-3 | ±10% | CK62Y472Z |
| 27 | DI-1 | ±10% | 1500 | DI-3 | +100-20% | |
| 30 | DI-1 | ±10% | 1500 | DI-3 | ±10% | CK62Y472Z |
| 33 | DI-1 | ±10% | 1600 | DI-4 | ±10% | |
| 39 | DI-1 | ±10% | 1800 | DI-4 | ±10% | CK63Y103Z |
| 47 | DI-1 | ±10% | 2000 | DI-4 | ±10% | |
| 50 | DI-1 | ±10% | 2200 | DI-4 | ±20% | CK63Y103Z |
| 51 | DI-1 | ±10% | 2200 | DI-4 | +100-20% | |
| 56 | DI-1 | ±10% | 2500 | DI-4 | ±20% | CK63Y103Z |
| 68 | DI-1 | ±10% | 2700 | DI-4 | ±20% | |
| 75 | DI-1 | ±10% | 3000 | DI-4 | ±20% | CK63Y103Z |
| 82 | DI-1 | ±10% | 3300 | DI-4 | ±20% | |
| 82 | DI-1 | ±10% | 3300 | DI-4 | +100-20% | CK63Y103Z |
| 91 | DI-1 | ±10% | 3900 | DI-2 | GMV | |
| 100 | DI-1 | ±10% | 4000 | DI-2 | GMV | CK63Y103Z |
| 120 | DI-1 | ±10% | 4300 | DI-2 | GMV | |
| 130 | DI-1 | ±10% | 4700 | DI-4 | ±20% | CK63Y103Z |
| 150 | DI-1 | ±10% | 4700 | DI-4 | +100-20% | |
| 180 | DI-1 | ±10% | 5000 | DI-3 | GMV | CK63Y103Z |
| 200 | DI-1 | ±10% | 5600 | DI-3 | GMV | |
| 200 | DI-1 | ±10% | 6800 | DI-3 | GMV | CK63Y103Z |
| 220 | DI-1 | ±10% | 7500 | DI-4 | GMV | |
| 240 | DI-1 | ±10% | 8200 | DI-4 | GMV | CK63Y103Z |
| 250 | DI-1 | ±10% | 10000 | DI-5 | ±20% | |
| 270 | DI-1 | ±10% | 10000 | DI-5 | +100-20% | |
| 300 | DI-1 | ±10% | | | | |
| 330 | DI-1 | ±10% | | | | |
| 350 | DI-1 | ±10% | | | | |
| 360 | DI-1 | ±10% | | | | |
| 390 | DI-1 | ±10% | | | | |
| 400 | DI-1 | ±10% | | | | |
| 470 | DI-1 | ±10% | | | | |

★ Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999

AEROVOX*Capacitors***INDUSTRIAL CERAMIC CAPACITORS (cont.)****Temperature Compensating Tubulars****NPO**

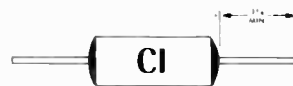
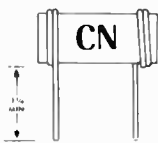
Popular values in accordance with the latest revisions of specification MIL-C-20 and EIA specification RS-198. Uninsulated units are furnished color coded, packaged in bulk. Insulated units—stamped with part number. Voltage rating 500 VDCW.

| UNINSULATED TYPE CN | | | | | INSULATED TYPE CI | | | | |
|---------------------|------------|------------|---------------|------------|-------------------|------------|---------------|------------|--|
| Cap. | MIL No. | Net Price★ | EIA No. | Net Price★ | MIL No. | Net Price★ | EIA No. | Net Price★ | |
| .3 | CC20CK0R3C | .30 | RICC20COK308C | .30 | CC21CK0R3C | .30 | RICC21COK308C | .30 | |
| .5 | CC20CK0R5C | .30 | RICC20COK508C | .30 | CC21CK0R5C | .30 | RICC21COK508C | .30 | |
| .68 | CC20CKR68C | .30 | RICC20COK688C | .30 | CC21CKR68C | .30 | RICC21COK688C | .30 | |
| .75 | CC20CKR75C | .30 | RICC20COK758C | .30 | CC21CKR75C | .30 | RICC21COK758C | .30 | |
| 1.0 | CC20CK010C | .30 | RICC20COK109C | .30 | CC21CK010C | .30 | RICC21COK109C | .30 | |
| 1.2 | CC20CK1R2C | .30 | RICC20COK129C | .30 | CC21CK1R2C | .30 | RICC21COK129C | .30 | |
| 1.5 | CC20CK1R5C | .30 | RICC20COK159C | .30 | CC21CK1R5C | .30 | RICC21COK159C | .30 | |
| 2.0 | CC20CK020C | .30 | RICC20COK209C | .30 | CC21CK020C | .30 | RICC21COK209C | .30 | |
| 2.2 | CC20CK2R2C | .30 | RICC20COK229C | .30 | CC21CK2R2C | .30 | RICC21COK229C | .30 | |
| 3.0 | CC20CJ030C | .30 | RICC20COK309C | .30 | CC21CJ030C | .30 | RICC21COK309C | .30 | |
| 4.0 | CC20CH040C | .30 | RICC20COH409C | .30 | CC21CH040C | .30 | RICC21COH409C | .30 | |
| 5.0 | CC20CH050C | .30 | RICC20COH509C | .30 | CC21CH050C | .30 | RICC21COH509C | .30 | |
| 5.0 | CC20CH060C | .30 | RICC20COH609C | .30 | CC21CH060C | .30 | RICC21COH609C | .30 | |
| 6.2 | CC20CH6R2C | .30 | RICC20COH629C | .30 | CC21CH6R2C | .30 | RICC21COH629C | .30 | |
| 7.0 | CC20CH070C | .30 | RICC20COH709C | .30 | CC21CH070C | .30 | RICC21COH709C | .30 | |
| 8.0 | CC20CH080C | .30 | RICC20COH809C | .30 | CC21CH080C | .30 | RICC21COH809C | .30 | |
| 9.0 | CC20CH090C | .30 | RICC20COH909C | .30 | CC21CH090C | .30 | RICC21COH909C | .30 | |
| 10.0 | CC20CH100C | .30 | RICC20COH100C | .30 | CC21CH100C | .30 | RICC21COH100C | .30 | |
| 12.0 | CC20CH120G | .30 | RICC20COH120G | .30 | CC21CH120G | .30 | RICC21COH120G | .30 | |
| 15.0 | CC20CH150G | .30 | RICC20COH150G | .30 | CC21CH150G | .30 | RICC21COH150G | .30 | |
| 18.0 | CC20CH180G | .30 | RICC20COH180G | .30 | CC21CH180G | .30 | RICC21COH180G | .30 | |
| 20.0 | CC20CH200G | .30 | RICC20COH200G | .30 | CC21CH200G | .30 | RICC21COH200G | .30 | |
| 22.0 | CC20CH220G | .30 | RICC20COH220G | .30 | CC21CH220G | .30 | RICC21COH220G | .30 | |
| 24 | CC25CH240G | .30 | RICC25COH240G | .30 | CC26CH240G | .30 | RICC26COH240G | .30 | |
| 27 | CC25CH270G | .30 | RICC25COH270G | .30 | CC26CH270G | .30 | 21CC26COH270G | .30 | |
| 30 | CC25CH300G | .30 | RICC25COH300G | .30 | CC26CH300G | .30 | RICC26COH300G | .30 | |
| 33 | CC25CH330G | .30 | RICC25COH330G | .30 | CC26CH330G | .30 | RICC26COH330G | .30 | |
| 36 | CC25CH360J | .30 | RICC25COH360J | .30 | CC26CH360J | .30 | RICC26COH360J | .30 | |
| 39 | CC25CH390J | .30 | RICC25COH390J | .30 | CC26CH390J | .30 | RICC26COH390J | .30 | |
| 43 | CC25CH430J | .30 | RICC25COH430J | .30 | CC36CH430J | .30 | RICC36COH430J | .30 | |
| 47 | CC25CH470J | .30 | RICC25COH470J | .30 | CC36CH470J | .30 | RICC36COH470J | .30 | |
| 51 | CC25CH510J | .30 | RICC25COH510J | .30 | CC36CH510J | .30 | RICC36COH510J | .30 | |
| 56 | CC32CG560J | .30 | RICC32COG560J | .30 | CC36CG560J | .30 | RICC36COG560J | .30 | |
| 62 | CC32CG620J | .30 | RICC32COG620J | .30 | CC36CG620J | .30 | RICC36COG620J | .30 | |
| 68 | CC32CG680J | .30 | RICC32COG680J | .30 | CC36CG680J | .30 | RICC36COG680J | .30 | |
| 75 | CC32CG750J | .30 | RICC32COG750J | .30 | CC36CG750J | .30 | RICC36COG750J | .30 | |
| 82 | CC32CG820J | .30 | RICC32COG820J | .30 | CC36CG820J | .30 | RICC36COG820J | .30 | |
| 91 | CC32CG910J | .30 | RICC32COG910J | .30 | CC36CG910J | .30 | RICC36COG910J | .30 | |
| 100 | CC32CG101G | .30 | RICC32COG101G | .30 | CC36CG101J | .30 | RICC36COG101J | .30 | |
| 110 | CC32CG111G | .30 | RICC32COG111G | .30 | CC36CG111J | .60 | RICC36COG111J | .60 | |
| 120 | CC35CG121G | .45 | RICC35COG121G | .45 | CC36CG121J | .60 | RICC36COG121J | .60 | |
| 130 | CC35CG131G | .45 | RICC35COG131G | .45 | CC36CG131J | .60 | RICC36COG131J | .60 | |
| 150 | CC35CG151G | .45 | RICC35COG151G | .45 | CC36CG151J | .60 | RICC36COG151J | .60 | |
| 160 | CC45CG161G | .60 | RICC45COG161G | .60 | | | | | |
| 180 | CC45CG181G | .60 | RICC45COG181G | .60 | | | | | |
| 200 | CC45CG201G | .60 | RICC45COG201G | .60 | | | | | |
| 220 | CC45CG221G | .60 | RICC45COG221G | .60 | | | | | |
| 240 | CC45CG241G | .60 | RICC45COG241G | .60 | | | | | |
| 270 | CC45CG271F | .90 | RICC45COG271F | .90 | | | | | |
| 300 | CC45CG301F | .90 | RICC45COG301F | .90 | | | | | |

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999

AEROVOX*Capacitors***INDUSTRIAL CERAMIC CAPACITORS (cont.)**

Temperature Compensating Tubulars

N750

| UNINSULATED TYPE CN | | | | | INSULATED TYPE CI | | | |
|---------------------|------------|------------|---------------|------------|-------------------|------------|---------------|------------|
| Cap. | MIL No. | Net Price★ | EIA No. | Net Price★ | Mil No. | Net Price★ | EIA No. | Net Price★ |
| .5 | CC20UK0R5C | .30 | RICC20U2K508C | .30 | | | | |
| .75 | CC20UKR75C | .30 | RICC20U2K758C | .30 | CC21UKR75C | .30 | RICC21U2K758C | .30 |
| 1.0 | CC20UK010C | .30 | RICC20U2K109C | .30 | CC21UK010C | .30 | RICC21U2K109C | .30 |
| 1.5 | CC20UK1R5C | .30 | RICC20U2K159C | .30 | CC21UK1R5C | .30 | RICC21U2K159C | .30 |
| 2.0 | CC20UK020C | .30 | RICC20U2K209C | .30 | CC21UK020C | .30 | RICC21U2K209C | .30 |
| 5.0 | CC20UJ050C | .30 | RICC20U2J509C | .30 | CC21UJ050C | .30 | RICC21U2J509C | .30 |
| 10.0 | CC20UJ100C | .30 | RICC20U2J100C | .30 | CC21UJ100C | .30 | RICC21U2J100C | .30 |
| 12.0 | CC20UJ120G | .30 | RICC20U2J120G | .30 | CC21UJ120G | .30 | RICC21U2J120G | .30 |
| 15.0 | CC20UJ150G | .30 | RICC20U2J150G | .30 | CC21UJ150G | .30 | RICC21U2J150G | .30 |
| 18.0 | CC20UJ180G | .30 | RICC20U2J180G | .30 | CC21UJ180G | .30 | RICC21U2J180G | .30 |
| 20.0 | CC20UJ200G | .30 | RICC20U2J200G | .30 | CC21UJ200G | .30 | RICC21U2J200G | .30 |
| 22.0 | CC20UJ220G | .30 | RICC20U2J220G | .30 | CC21UJ220G | .30 | RICC21U2J220G | .30 |
| 24.0 | CC20UJ240G | .30 | RICC20U2J240G | .30 | CC21UJ240G | .30 | RICC21U2J240G | .30 |
| 27.0 | CC20UJ270G | .30 | RICC20U2J270G | .30 | CC21UJ270G | .30 | RICC21U2J270G | .30 |
| 30.0 | CC20UJ300G | .30 | RICC20U2J300G | .30 | CC21UJ300G | .30 | RICC21U2J300G | .30 |
| 33.0 | CC20UJ330G | .30 | RICC20U2J330G | .30 | CC21UJ330G | .30 | RICC21U2J330G | .30 |
| 36.0 | CC20UJ360J | .30 | RICC20U2J360J | .30 | CC21UJ360J | .30 | RICC21U2J360J | .30 |
| 39.0 | CC20UJ390J | .30 | RICC20U2J390J | .30 | CC21UJ390J | .30 | RICC21U2J390J | .30 |
| 43.0 | CC20UJ430J | .30 | RICC20U2J430J | .30 | CC21UJ430J | .30 | RICC21U2J430J | .30 |
| 47.0 | CC20UJ470J | .30 | RICC20U2J470J | .30 | CC21UJ470J | .30 | RICC21U2J470J | .30 |
| 51.0 | CC20UJ510J | .30 | RICC20U2J510J | .30 | CC21UJ510J | .30 | RICC21U2J510J | .30 |
| 56.0 | CC20UJ560J | .30 | RICC20U2J560J | .30 | CC21UJ560J | .30 | RICC21U2J560J | .30 |
| 62.0 | CC20UJ620J | .30 | RICC20U2J620J | .30 | CC21UJ620J | .30 | RICC21U2J620J | .30 |
| 68.0 | CC25UJ680J | .30 | RICC25U2J680J | .30 | CC26UJ680J | .30 | RICC26U2J680J | .30 |
| 75.0 | CC25UJ750J | .30 | RICC25U2J750J | .30 | CC26UJ750J | .30 | RICC26U2J750J | .30 |
| 82.0 | CC25UJ820J | .30 | RICC25U2J820J | .30 | CC26UJ820J | .30 | RICC26U2J820J | .30 |
| 91.0 | CC25UJ910J | .30 | RICC25U2J910J | .30 | CC26UJ910J | .30 | RICC26U2J910J | .30 |
| 100.0 | CC25UJ101G | .30 | RICC25U2J101G | .30 | CC26UJ101J | .30 | RICC26U2J101J | .30 |
| 110 | CC25UJ111G | .30 | RICC25U2J111G | .30 | CC26UJ111J | .30 | RICC26U2J111J | .30 |
| 120 | CC25UJ121G | .30 | RICC25U2J121G | .30 | CC26UJ121J | .30 | RICC26U2J121J | .30 |
| 130 | CC25UJ131G | .30 | RICC25U2J131G | .30 | CC36UJ131J | .30 | RICC36U2J131J | .30 |
| 150 | CC25UJ151G | .30 | RICC25U2J151G | .30 | CC36UJ151J | .30 | RICC36U2J151J | .30 |
| 160 | CC32UJ161G | .30 | RICC32U2J161G | .30 | CC36UJ161J | .30 | RICC36U2J161J | .30 |
| 180 | CC32UJ181G | .30 | RICC32U2J181G | .30 | CC36UJ181J | .60 | RICC36U2J181J | .60 |
| 200 | CC32UJ201G | .30 | RICC32U2J201G | .30 | CC36UJ201J | .60 | RICC36U2J201J | .60 |
| 220 | CC32UJ221G | .30 | RICC32U2J221G | .30 | CC36UJ221J | .60 | RICC36U2J221J | .60 |
| 240 | CC32UJ241G | .30 | RICC32U2J241G | .30 | CC36UJ241J | .60 | RICC36U2J241J | .60 |
| 270 | CC35UJ271F | .90 | RICC35U2J271F | .90 | CC36UJ271J | .60 | RICC36U2J271J | .60 |
| 300 | CC35UJ301F | .90 | RICC35U2J301F | .90 | CC36UJ301J | .60 | RICC36U2J301J | .60 |
| 330 | CC35UJ331F | .90 | RICC35U2J331F | .90 | CC36UJ331F | .60 | RICC36U2J331F | .60 |
| 360 | CC35UJ361F | .90 | RICC35U2J361F | .90 | CC36UJ361J | .60 | RICC36U2J361J | .60 |
| 390 | CC45UJ391F | .90 | RICC45U2J391F | .90 | | | | |
| 430 | CC45UJ431F | .90 | RICC45U2J431F | .90 | | | | |
| 470 | CC45UJ471F | .90 | RICC45U2J471F | .90 | | | | |

SIZE

| Type Designation | | Max. Size |
|------------------|--------|--------------|
| MIL | EIA | |
| CC20 | RICC20 | .200 x .400 |
| CC21 | RICC21 | .250 x .562 |
| CC25 | RICC25 | .200 x .655 |
| CC26 | RICC26 | .250 x .812 |
| CC32 | RICC32 | .250 x .860 |
| CC35 | RICC35 | .255 x 1.090 |
| CC36 | RICC36 | .340 x 1.328 |
| CC45 | RICC45 | .340 x 1.890 |

TOLERANCE

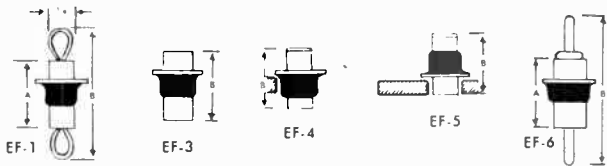
| Letter Descrip. | Tolerance |
|-----------------|-----------|
| C | ±.25 mmf. |
| F | ±1% |
| G | ±2% |
| J | ±5% |

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999.

AEROVOX*Capacitors***INDUSTRIAL CERAMIC CAPACITORS (cont.)****Eyelet Feed-Thru Capacitors**

Net Price .30★

Hi-Q Feed-Thru Capacitors Eyelet Type are the ultimate in miniaturization because of unique design. This design is such that the capacitors can be soldered directly to a chassis and provide excellent bypass performance where space is critical. The low inductance characteristics brought about through the construction of the capacitors make the eyelet type ideal for high frequency bypass.



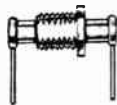
| Style | Capacity in mmf | | | | | | D.C. Working Voltage | Size | |
|-------|-----------------|-----|-----|-----|------|------|----------------------|------|------|
| | A | B | C | D | E | F | | A | B |
| EF-1 | 50 | 100 | 200 | 500 | 1000 | 1500 | 500 | .375 | .750 |
| EF-3 | 50 | 100 | 200 | 500 | 1000 | 1500 | 500 | — | .375 |
| EF-4 | 50 | 100 | 200 | 500 | 1000 | 1500 | 250 | — | .250 |
| EF-5 | 50 | 100 | 200 | 500 | 1000 | 1500 | 250 | — | .250 |
| EF-6 | 50 | 100 | 200 | 500 | 1000 | 1500 | 500 | .375 | .875 |

Tolerance $\pm 20\%$ up to and including 500 mmf.
GMV above 500 mmf.

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999

Feed-Thru Capacitors

FEED-THRU TYPE CFC



FEED-THRU TYPE CF

Hi-Q Feed-Thru Capacitors provide means to transmit thru shields or ground potentials and simultaneously by-pass unwanted frequencies. A good mechanical connection is provided by the silver-plated bushing. These are excellent dependable units even under severe mechanical vibrations as in aircraft, missiles and automotive requirements. All units are flash tested at 1250 volts D.C.

Net Price .90★

| Type | Cap. Mmfd. | Thread | Type | Cap. Mmfd. | Thread |
|-------|------------|-------------------|------|------------|--------------------|
| CFC-1 | 500 mmf. | 12-28 | CF-2 | 1800 mmf. | $\frac{3}{16}$ -24 |
| | 1000 mmf. | 12-28 | | 2300 mmf. | $\frac{3}{16}$ -24 |
| | 1500 mmf. | 12-28 | | 3000 mmf. | $\frac{3}{16}$ -24 |
| CF-1 | 1500 mmf. | $\frac{1}{4}$ -28 | CF-3 | 4000 mmf. | $\frac{3}{16}$ -24 |
| | | | CF-4 | 7000 mmf. | $\frac{3}{16}$ -24 |

Tolerance $\pm 20\%$

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999

Stand-Off Capacitors

TYPE MCS



TYPE CS



500 VDCW

Net Price .90★

| Type | Capacity Mmfd. | Type | Capacity Mmfd. |
|-------|----------------|-------|----------------|
| CS-1A | 50 | CS-4 | 7500 |
| CS-1A | 100 | CIS-1 | 50 |
| CS-1B | 500 | CIS-1 | 100 |
| CS-1B | 1000 | CIS-1 | 500 |
| CS-1B | 1500 | CIS-1 | 1000 |
| CS-2 | 3000 | CIS-2 | 1500 |
| CS-3 | 4000 | MCS | 1500 |

Radial leads only

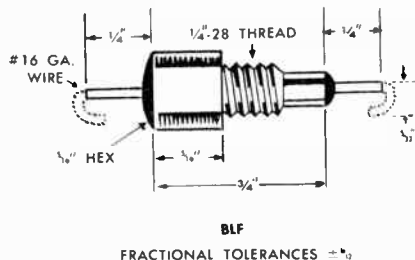
Tolerance $\pm 10\%$ up to and including 500 mmf.
 $\pm 20\%$ above 500 mmf.

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999

Heavy Duty Feed-Thru Capacitors

Type BLF-ICC

These heavy-duty Feed-Thru capacitors are the same as listed in specification MIL-C-11015. Units through 100 mmf. are rated at 1000 VDCW, values above 100 mmf. are rated at 500 VDCW. Capacity tolerance is $\pm 10\%$ except on the 1000 mmf. and 1500 mmf. which have capacity tolerance of $\pm 20\%$.

BLF
FRACTIONAL TOLERANCES $\pm \frac{1}{10}$

| Capacity | Part Number | Net Price★ |
|----------|--------------|------------|
| 10 | AXCK70AX100K | 1.20 |
| 33 | AXCK70AX330K | 1.20 |
| 47 | AXCK70AX470K | 1.20 |
| 68 | AXCK70AX680K | 1.20 |
| 100 | AXCK70AX101K | 1.20 |
| 470 | AXCK70AX471K | 1.20 |
| 680 | AXCK70AX681K | 1.20 |
| 1000 | AXCK70AW102M | 1.20 |
| 1500 | AXCK70AW152M | 1.20 |

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999

Disk Stand-Off Capacitors

Type DS-C



DS-C

These units are very popular in industrial applications having a critical space requirement but requiring a stand-off capacitor. These stock units are furnished with captive lock washers, are rated at 950 VDCW. Capacity tolerance GMV. Both units are furnished with threaded portion $\frac{3}{16}$ inch long, $\pm 6-32$ thread.

| Capacity | Net Price★ |
|----------|------------|
| 470 | .90 |
| 1000 | .90 |

AEROVOX

Capacitors



DISK CAPACITORS Hi-Q DISK CAPACITORS
 Bypass and Coupling
BPD-GMV CAPACITOR
 Stock Items 1000 VDCW



DI-DISK CAPACITORS
 General Purpose
 Stock Items 1000 VDCW

| Type | Cap. Mfd. | Dia. | Net Price* | Type | Cap. Mfd. | Dia. | Net Price* |
|-------------|-----------|------|------------|-----------|-----------|------|------------|
| BPD .00001 | 3/16 | .15 | | BPD .0033 | 3/16 | .15 | |
| BPD .000015 | 3/16 | .15 | | BPD .004 | 3/16 | .15 | |
| BPD .000022 | 3/16 | .15 | | BPD .0047 | 1/32 | .15 | |
| BPD .000025 | 3/16 | .15 | | BPD .005 | 1/32 | .15 | |
| BPD .000033 | 3/16 | .15 | | BPD .0068 | 1/32 | .15 | |
| BPD .000047 | 3/16 | .15 | | BPD .01 | 3/16 | .18 | |
| BPD .00005 | 3/16 | .15 | | | | | |
| BPD .000068 | 3/16 | .15 | | BPD .015 | 2/32 | .24 | |
| BPD .0001 | 3/16 | .15 | | BPD .02 | 2/32 | .36 | |
| BPD .00012 | 3/16 | .15 | | BPD .03 | 2/32 | .39 | |
| BPD .00015 | 3/16 | .15 | | BPD .05* | 2/32 | .42 | |
| BPD .0002 | 3/16 | .15 | | | | | |
| BPD .00027 | 3/16 | .15 | | | | | |
| BPD .00033 | 3/16 | .15 | | | | | |
| BPD .00047 | 3/16 | .15 | | | | | |
| BPD .0005 | 3/16 | .15 | | | | | |
| BPD .00068 | 3/16 | .15 | | | | | |
| BPD .0008 | 3/16 | .15 | | | | | |
| BPD .001 | 3/16 | .15 | | | | | |
| BPD .0015 | 3/16 | .15 | | | | | |
| BPD .002 | 3/8 | .15 | | | | | |
| BPD .0022 | 3/8 | .15 | | | | | |
| BPD .0025 | 3/8 | .15 | | | | | |

| Type | Cap. Mmfd. | Dia. | Net Price* | Type | Cap. Mmfd. | Dia. | Net Price* |
|--------|------------|------|------------|----------|------------|------|------------|
| DI 3.3 | 3/16 | .15 | | DI 250 | 3/16 | .15 | |
| DI 5 | 3/16 | .15 | | DI 270 | 3/16 | .15 | |
| DI 6.8 | 3/16 | .15 | | DI 300 | 3/16 | .15 | |
| DI 8.2 | 3/16 | .15 | | DI 330 | 3/16 | .15 | |
| DI 10 | 3/16 | .15 | | DI 390 | 3/16 | .15 | |
| DI 12 | 3/16 | .15 | | DI 470 | 3/16 | .15 | |
| DI 15 | 3/16 | .15 | | DI 500 | 3/16 | .15 | |
| DI 18 | 3/16 | .15 | | DI 560 | 3/16 | .15 | |
| DI 20 | 3/16 | .15 | | DI 680 | 3/16 | .15 | |
| DI 22 | 3/16 | .15 | | DI 750 | 3/8 | .15 | |
| DI 25 | 3/16 | .15 | | DI 820 | 3/8 | .15 | |
| DI 27 | 3/16 | .15 | | DI 1000 | 3/8 | .15 | |
| DI 30 | 3/16 | .15 | | DI 1200 | 3/8 | .15 | |
| DI 33 | 3/16 | .15 | | DI 1500 | 3/8 | .15 | |
| DI 39 | 3/16 | .15 | | DI 1800 | 1/32 | .15 | |
| DI 47 | 3/16 | .15 | | DI 2000 | 1/32 | .15 | |
| DI 50 | 3/16 | .15 | | DI 2200 | 1/32 | .15 | |
| DI 56 | 3/16 | .15 | | DI 2500 | 1/32 | .15 | |
| DI 68 | 3/16 | .15 | | DI 2700 | 1/32 | .15 | |
| DI 82 | 3/16 | .15 | | DI 3000 | 1/32 | .15 | |
| DI 100 | 3/16 | .15 | | DI 3300 | 1/32 | .15 | |
| DI 120 | 3/16 | .15 | | DI 4000 | 1/16 | .15 | |
| DI 150 | 3/16 | .15 | | DI 4700 | 3/16 | .15 | |
| DI 180 | 3/16 | .15 | | DI 5000 | 3/16 | .15 | |
| DI 200 | 3/16 | .15 | | DI 5600 | 3/8 | .18 | |
| DI 220 | 3/16 | .15 | | DI 6800 | 2/32 | .18 | |
| | | | | DI 7500 | 2/32 | .18 | |
| | | | | DI 10000 | 2/32 | .18 | |

* .05MFD can be supplied in 500VDCW only

★Request O.E.M. prices in the following quantities:
 25 to 99, 100 to 249, 250 to 499, 500 to 999.

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999.

Standard tolerance ±10%.

Hi-VOLTAGE DISK CAPACITORS

General Purpose

Hi-Q high voltage disk capacitors are available in many capacities and voltage ratings. These types offer many possible uses in TV circuits where voltages above 500 are necessary. They are the ideal units for dependable day-after-day service. Hi-Q has available numerous combinations of capacity, working voltages and physical sizes. These units are manufactured to specific tolerances as listed.



1500 VDCW

| Type | Capacity Mmfd. | Dia. | Net Price* |
|-------------|----------------|------|------------|
| HVD-15 4.7 | 3/16 | .21 | |
| HVD-15 6.8 | 3/16 | .21 | |
| HVD-15 10 | 3/16 | .21 | |
| HVD-15 15 | 3/16 | .21 | |
| HVD-15 22 | 3/16 | .21 | |
| HVD-15 33 | 3/16 | .21 | |
| HVD-15 39 | 3/16 | .21 | |
| HVD-15 47 | 3/16 | .21 | |
| HVD-15 56 | 3/16 | .21 | |
| HVD-15 68 | 3/16 | .21 | |
| HVD-15 82 | 3/16 | .21 | |
| HVD-15 100 | 3/16 | .21 | |
| HVD-15 120 | 3/16 | .21 | |
| HVD-15 150 | 3/16 | .21 | |
| HVD-15 180 | 3/16 | .21 | |
| HVD-15 220 | 3/16 | .21 | |
| HVD-15 270 | 3/16 | .21 | |
| HVD-15 330 | 3/16 | .21 | |
| HVD-15 390 | 3/16 | .21 | |
| HVD-15 470 | 3/16 | .21 | |
| HVD-15 560 | 3/16 | .21 | |
| HVD-15 680 | 3/16 | .21 | |
| HVD-15 820 | 3/16 | .21 | |
| HVD-15 1000 | 3/16 | .21 | |
| HVD-15 1200 | 3/16 | .21 | |
| HVD-15 1500 | 1/16 | .21 | |
| HVD-15 2200 | 1/16 | .21 | |
| HVD-15 3300 | 1/16 | .21 | |
| HVD-15 4700 | 1/16 | .24 | |
| HVD-15 5600 | 1/16 | .24 | |

3000 VDCW

| | | | |
|------------|------|-----|--|
| HVD-30 4.7 | 3/16 | .24 | |
| HVD-30 6.8 | 3/16 | .24 | |
| HVD-30 10 | 3/16 | .24 | |
| HVD-30 15 | 3/16 | .24 | |
| HVD-30 22 | 3/16 | .24 | |
| HVD-30 33 | 3/16 | .24 | |
| HVD-30 39 | 3/16 | .24 | |
| HVD-30 47 | 3/16 | .24 | |
| HVD-30 56 | 3/16 | .24 | |
| HVD-30 68 | 3/16 | .24 | |
| HVD-30 82 | 3/16 | .24 | |
| HVD-30 100 | 3/16 | .24 | |
| HVD-30 120 | 3/16 | .24 | |
| HVD-30 150 | 3/16 | .24 | |
| HVD-30 180 | 3/16 | .24 | |
| HVD-30 220 | 3/16 | .24 | |
| HVD-30 270 | 3/16 | .24 | |
| HVD-30 330 | 3/16 | .24 | |
| HVD-30 390 | 3/16 | .24 | |
| HVD-30 470 | 3/16 | .24 | |
| HVD-30 560 | 3/16 | .24 | |
| HVD-30 680 | 3/16 | .24 | |

3000 VDCW — (Cont'd)

| Type | Capacity Mmfd. | Dia. | Net Price* |
|-------------|----------------|------|------------|
| HVD-30 820 | 3/16 | .24 | |
| HVD-30 1000 | 3/16 | .24 | |
| HVD-30 1200 | 3/16 | .24 | |
| HVD-30 1500 | 3/16 | .24 | |
| HVD-30 2200 | 3/16 | .24 | |
| HVD-30 3300 | 1/16 | .24 | |

6000 VDCW

| Type | Capacity Mmfd. | Dia. | Net Price* |
|------------|----------------|------|------------|
| HVD-60 4.7 | 1/16 | .39 | |
| HVD-60 6.8 | 1/16 | .39 | |
| HVD-60 10 | 1/16 | .39 | |
| HVD-60 15 | 1/16 | .39 | |
| HVD-60 18 | 1/16 | .39 | |
| HVD-60 22 | 1/16 | .39 | |
| HVD-60 30 | 1/16 | .39 | |
| HVD-60 33 | 1/16 | .39 | |
| HVD-60 39 | 1/16 | .39 | |
| HVD-60 47 | 1/16 | .39 | |
| HVD-60 56 | 1/16 | .39 | |
| HVD-60 68 | 1/16 | .39 | |
| HVD-60 82 | 1/16 | .39 | |
| HVD-60 100 | 1/16 | .39 | |
| HVD-60 120 | 1/16 | .39 | |
| HVD-60 150 | 1/16 | .39 | |
| HVD-60 180 | 1/16 | .39 | |
| HVD-60 220 | 1/16 | .39 | |
| HVD-60 270 | 1/16 | .39 | |
| HVD-60 330 | 1/16 | .39 | |
| HVD-60 390 | 1/16 | .39 | |
| HVD-60 470 | 1/16 | .39 | |

Tolerance ±20% up to .001 mfd.
 +80% —20% over .001 mfd.

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999.



TEMPERATURE COMPENSATING DISK CAPACITORS — 500 VDCW

| Type | NPO Cap. Mmfd. | Dia. | Net Price* | Type | NPO Cap. Mmfd. | Dia. | Net Price* |
|------------|----------------|------|------------|------------|----------------|------|------------|
| NPO-D1 1.0 | 3/16 | .30 | | NPO-D1 22 | 3/16 | .30 | |
| NPO-D1 1.5 | 3/16 | .30 | | NPO-D1 25 | 3/16 | .30 | |
| NPO-D1 2.2 | 3/16 | .30 | | NPO-D1 33 | 1/32 | .30 | |
| NPO-D1 3.0 | 3/16 | .30 | | NPO-D1 39 | 1/32 | .30 | |
| NPO-D1 3.3 | 3/16 | .30 | | NPO-D1 47 | 1/32 | .30 | |
| NPO-D1 4.7 | 3/16 | .30 | | NPO-D1 50 | 1/32 | .30 | |
| NPO-D1 5.0 | 3/16 | .30 | | NPO-D1 68 | 1/16 | .30 | |
| NPO-D1 6.8 | 3/16 | .30 | | NPO-D1 75 | 1/16 | .30 | |
| NPO-D1 8.2 | 3/16 | .30 | | NPO-D1 100 | 3/16 | .30 | |
| NPO-D1 10 | 3/16 | .30 | | NPO-D1 120 | 2/32 | .45 | |
| NPO-D1 15 | 3/8 | .30 | | NPO-D1 150 | 1/32 | .45 | |
| NPO-D1 20 | 3/8 | .30 | | | | | |

| Type | N-750 Capacity Mmfd. | Size | Net Price* | Type | N-750 Capacity Mmfd. | Size | Net Price* |
|------------|----------------------|------|------------|-------------|----------------------|------|------------|
| N750-D1 10 | 3/16 | .30 | | N750-D1 100 | 1/32 | .30 | |
| N750-D1 15 | 3/16 | .30 | | N750-D1 150 | 1/32 | .45 | |
| N750-D1 20 | 3/16 | .30 | | N750-D1 200 | 1/16 | .45 | |
| N750-D1 22 | 3/16 | .30 | | N750-D1 220 | 1/16 | .45 | |
| N750-D1 25 | 3/16 | .30 | | N750-D1 330 | 2/32 | .45 | |
| N750-D1 33 | 3/16 | .30 | | N750-D1 360 | 2/32 | .45 | |
| N750-D1 47 | 3/8 | .30 | | N750-D1 390 | 2/32 | .45 | |
| N750-D1 68 | 3/16 | .30 | | N750-D1 430 | 2/32 | .45 | |
| N750-D1 75 | 3/16 | .30 | | | | | |

Standard Tolerance — up to 10 mmf. ±.5 mmf., above 10 mmf. ±10%

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999

VIBRATOR BUFFER CAPACITORS — DAC 1600 VDCW — GMV

Vibrator Buffer Capacitors — ceramic disks for use as buffers in car radios and similar equipment, compact, easily assembled, 1/4 the size of previous paper tubular types rated for 1600 VDCW GMV. For use as replacements only when original equipment uses ceramic buffer.

| Type | Capacity Mfd. | Diameter | Net Price* |
|-------|---------------|----------|------------|
| DAC-2 | .001 | 1/16 | .30 |
| DAC-3 | .002 | 1/16 | .30 |
| DAC-4 | .0022 | 1/16 | .30 |
| DAC-5 | .003 | 1/16 | .30 |
| DAC-6 | .0033 | 1/16 | .30 |
| DAC-7 | .004 | 1/16 | .30 |
| DAC-8 | .0047 | 1/16 | .30 |

| Type | Capacity Mfd. | Diameter | Net Price* |
|--------|---------------|----------|------------|
| DAC-9 | .005 | 1/16 | .30 |
| DAC-22 | .006 | 1/16 | .30 |
| DAC-23 | .0068 | 1 | .30 |
| DAC-24 | .007 | 1 | .30 |
| DAC-25 | .0075 | 1 | .30 |
| DAC-26 | .008 | 1 | .30 |
| DAC-27 | .01 | 1 | .30 |

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999.

AEROVOX*Capacitors***INDUSTRIAL CERAMIC CAPACITORS****TUBULAR and DISK CAPACITOR SIZES**

| SI TUBULAR | |
|-------------|--------------|
| Designation | Size |
| SI-1 | .234 x .437 |
| SI-2 | .234 x .687 |
| SI-3 | .312 x 1.250 |
| SI-4 | .375 x 1.093 |
| SI-5 | .375 x 1.600 |
| SI-6 | .375 x 1.968 |
| SI-7 | .275 x .875 |
| SI-13 | .234 x .468 |
| SI-19 | .312 x .937 |
| SI-22 | .280 x .750 |
| SI-27 | .275 x .500 |



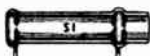
| CI TUBULAR | |
|-------------|--------------|
| Designation | Size |
| CI-1 | .250 x .562 |
| CI-2 | .250 x .812 |
| CI-3 | .340 x 1.320 |



| DI DISK | |
|-------------|----------|
| Designation | Diameter |
| DI-0 | 1/4 |
| DI-1 | 5/16 |
| DI-2 | 3/8 |
| DI-3 | 7/16 |
| DI-4 | 1 1/16 |
| DI-5 | 1 1/4 |
| DI-6 | 3/4 |
| DI-7 | 1 1/2 |

GENERAL PURPOSE TUBULARS

The items listed below fall into two type categories. The type SI or "Dog Bone" Durez coated tubular, and the CI which is an insulated tubular made in a ceramic tube.

**500 VDCW**

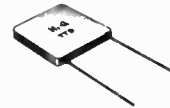
★Net Price — .15



| Cap. Mmfd. | Size | Cap. Mmfd. | Size | Cap. Mmfd. | Size |
|------------|-----------|------------|-----------|------------|------------|
| 5 | SI-1 CI-1 | 120 | SI-1 CI-1 | 1800 | SI-2 CI-2 |
| 10 | SI-1 CI-1 | 150 | SI-1 CI-1 | 2000 | SI-2 CI-2 |
| 12 | SI-1 CI-1 | 180 | SI-1 CI-1 | 2200 | SI-7 CI-3 |
| 15 | SI-1 CI-1 | 200 | SI-1 CI-1 | 2400 | SI-7 CI-3 |
| 18 | SI-1 CI-1 | 220 | SI-1 CI-1 | 2500 | SI-7 CI-3 |
| 20 | SI-1 CI-1 | 240 | SI-1 CI-1 | 2700 | SI-7 CI-3 |
| 22 | SI-1 CI-1 | 250 | SI-1 CI-1 | 3000 | SI-19 CI-3 |
| 24 | SI-1 CI-1 | 270 | SI-1 CI-1 | 3300 | SI-19 CI-3 |
| 25 | SI-1 CI-1 | 300 | SI-1 CI-1 | 4000 | SI-19 CI-3 |
| 27 | SI-1 CI-1 | 330 | SI-1 CI-1 | 4700 | SI-3 CI-3 |
| 30 | SI-1 CI-1 | 360 | SI-1 CI-1 | 5000 | SI-3 CI-3 |
| 33 | SI-1 CI-1 | 390 | SI-1 CI-1 | 5100 | SI-3 CI-3 |
| 39 | SI-1 CI-1 | 470 | SI-1 CI-1 | 5600 | SI-3 CI-3 |
| 47 | SI-1 CI-1 | 500 | SI-1 CI-1 | 6000 | SI-3 CI-3 |
| 50 | SI-1 CI-1 | 510 | SI-1 CI-1 | 6800 | SI-4 |
| 51 | SI-1 CI-1 | 560 | SI-1 CI-1 | 7500 | SI-4 |
| 56 | SI-1 CI-1 | 680 | SI-1 CI-1 | 10,000 | SI-5 |
| 68 | SI-1 CI-1 | 750 | SI-1 CI-1 | 15,000 | SI-6 |
| 75 | SI-1 CI-1 | 820 | SI-1 CI-2 | 17,500 | SI-6 |
| 82 | SI-1 CI-1 | 910 | SI-1 CI-2 | 20,000 | SI-5 GMV |
| 91 | SI-1 CI-1 | 1000 | SI-1 CI-2 | 25,000 | SI-5 GMV |
| 100 | SI-1 CI-1 | 1200 | SI-2 CI-2 | 30,000 | SI-6 GMV |
| 110 | SI-1 CI-1 | 1500 | SI-2 CI-2 | 33,000 | SI-6 GMV |

Standard Tolerance ±20%

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999.

**Type TTD
Transistor Disks**

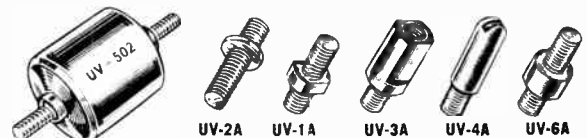
These square miniature disks are ideally suited for all applications where size is a factor such as transistorized radios and industrial applications having critical space requirements. Units are rated at 100 VDCW ±2% standard tolerance.

| Capacity | Length & Width | Thickness | Net Price★ |
|----------|----------------|-----------|------------|
| .005 | .280 | .125 | .24 |
| .01 | .340 | .125 | .24 |
| .02 | .430 | .125 | .30 |
| .025 | .465 | .125 | .30 |
| .03 | .465 | .125 | .30 |
| .05 | .535 | .125 | .36 |
| .1 | .700 | .125 | .54 |

★Request O.E.M. prices in the following quantities: 25 to 99, 100 to 249, 250 to 499, 500 to 999.

HIGH VOLTAGE "CARTWHEELS"

Hi-Q high voltage "cartwheels" are thoroughly tested units capable of assuring dependable service while withstanding high voltages. This new universal type (UV) offers interchangeable terminals in 5 styles for use in filter and by-pass applications in TV high voltage power supplies.

Terminal Hardware**STOCK ITEMS****STOCK ITEMS—
TERMINAL HARDWARE**

| Type | Voltage | Cap. Mmfd. | Net Price★ | Type | Net Price★ | Type | Net Price★ |
|--------|-------------|------------|------------|-------|------------|-------|------------|
| UV-501 | 10,000 VDCW | 500 mmf. | .84 | UV-1A | .06 | UV-4A | .06 |
| UV-502 | 20,000 VDCW | 500 mmf. | 1.11 | UV-2A | .06 | UV-6A | .06 |
| UV-503 | 30,000 VDCW | 500 mmf. | 2.70 | UV-3A | .06 | | |

★Request O.E.M. prices in the following quantities: 25 and up

AEROVOX

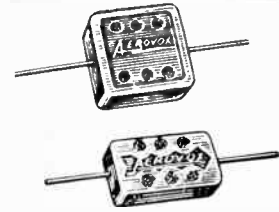
Capacitors

M I C A S

MIL Types CM15, CM20, CM30, CM35

AEROVOX Types 1459, 1468, 1469, 1467, 1464

Compact, precision-made mica dielectric capacitors made in accordance with specification MIL-C-5B. Units are furnished color coded and tested to meet all MIL requirements for 'N' temperature rating and all vibration grades of this specification. Types 1467 and 1468 are stacked mica and foil units molded in yellow bakelite. Types 1459, 1464 and 1469 are silvered mica molded in red bakelite. TYPE 1459 MINATURE MICA IS THE LATEST EDITION TO THIS MOLEDED MICA LINE.



Type CM-15 (500 VDCW)

Type CM-20 (500 VDCW)

Type CM-30 (500 VDCW)

| 1459 | | | 1468LS | | | 1469 | | | 1467LS | | | 1464 | | |
|-----------|------------------|------------|-----------|------------------|------------|-----------|------------------|------------|-----------|------------------|------------|-----------|------------------|------------|
| Cap. Mmf. | Type Designation | Net★ Price | Cap. Mmf. | Type Designation | Net★ Price | Cap. Mmf. | Type Designation | Net★ Price | Cap. Mmf. | Type Designation | Net★ Price | Cap. Mmf. | Type Designation | Net★ Price |
| 1 | CM-15C-010 | .24 | 1 | CM-20B-010 | .18 | 5 | CM-20C-050 | .24 | 470 | CM-30B-471 | .18 | 470 | CM-30D-471 | .42 |
| 2 | CM-15C-020 | .24 | 5 | CM-20B-050 | .18 | 10 | CM-20C-100 | .24 | 500 | CM-30B-501 | .18 | 510 | CM-30D-511 | .42 |
| 3 | CM-15C-030 | .24 | 10 | CM-20B-100 | .18 | 12 | CM-20C-120 | .24 | 510 | CM-30B-511 | .18 | 560 | CM-30D-561 | .45 |
| 5 | CM-15C-050 | .24 | 12 | CM-20B-120 | .18 | 15 | CM-20C-150 | .24 | 560 | CM-30B-561 | .18 | 620 | CM-30D-621 | .45 |
| 10 | CM-15C-100 | .24 | 15 | CM-20B-150 | .18 | 18 | CM-20C-180 | .24 | 620 | CM-30B-621 | .18 | 680 | CM-30D-681 | .48 |
| 12 | CM-15C-120 | .24 | 18 | CM-20B-180 | .18 | 20 | CM-20C-200 | .24 | 680 | CM-30B-681 | .18 | 750 | CM-30D-751 | .48 |
| 15 | CM-15C-150 | .24 | 20 | CM-20B-200 | .18 | 22 | CM-20C-220 | .24 | 750 | CM-30B-751 | .18 | 800 | CM-30D-801 | .51 |
| 18 | CM-15C-180 | .24 | 22 | CM-20B-220 | .18 | 24 | CM-20C-240 | .24 | 820 | CM-30B-821 | .18 | 820 | CM-30D-821 | .51 |
| 20 | CM-15C-200 | .24 | 24 | CM-20B-240 | .18 | 25 | CM-20C-250 | .24 | 910 | CM-30B-911 | .18 | 900 | CM-30D-901 | .54 |
| 22 | CM-15C-220 | .24 | 25 | CM-20B-250 | .18 | 27 | CM-20C-270 | .24 | 1000 | CM-30B-912 | .21 | 910 | CM-30D-911 | .54 |
| 24 | CM-15E-240 | .24 | 27 | CM-20B-270 | .18 | 30 | CM-20C-300 | .24 | 1100 | CM-30B-112 | .21 | 1000 | CM-30D-102 | .60 |
| 27 | CM-15E-270 | .24 | 30 | CM-20B-300 | .18 | 33 | CM-20C-330 | .24 | 1200 | CM-30B-122 | .21 | 1100 | CM-30D-112 | .60 |
| 30 | CM-15E-300 | .24 | 33 | CM-20B-330 | .12 | 36 | CM-20C-360 | .24 | 1300 | CM-30B-132 | .21 | 1200 | CM-30D-122 | .69 |
| 33 | CM-15E-330 | .24 | 36 | CM-20B-360 | .12 | 39 | CM-20C-390 | .24 | 1500 | CM-30B-152 | .24 | 1300 | CM-30D-132 | .69 |
| 36 | CM-15E-360 | .24 | 39 | CM-20B-390 | .12 | 40 | CM-20C-400 | .24 | 1600 | CM-30B-162 | .24 | 1500 | CM-30D-152 | .75 |
| 39 | CM-15E-390 | .24 | 40 | CM-20B-400 | .12 | 43 | CM-20C-430 | .24 | 1800 | CM-30B-182 | .27 | 1600 | CM-30D-162 | .75 |
| 43 | CM-15E-430 | .24 | 43 | CM-20B-43C | .12 | 47 | CM-20C-470 | .24 | 2000 | CM-30B-202 | .27 | 1800 | CM-30D-182 | .75 |
| 47 | CM-15E-470 | .24 | 47 | CM-20B-470 | .12 | 50 | CM-20C-500 | .24 | 2200 | CM-30B-222 | .27 | 2000 | CM-30D-202 | .81 |
| 50 | CM-15E-500 | .24 | 50 | CM-20B-500 | .12 | 51 | CM-20C-510 | .24 | 2400 | CM-30B-242 | .30 | 2200 | CM-30D-222 | .81 |
| 51 | CM-15E-510 | .24 | 51 | CM-20B-510 | .12 | 56 | CM-20C-560 | .24 | 2500 | CM-30B-252 | .30 | 2400 | CM-30D-242 | .96 |
| 56 | CM-15E-560 | .24 | 56 | CM-20B-560 | .12 | 62 | CM-20C-620 | .24 | 2700 | CM-30B-272 | .30 | 2500 | CM-30D-252 | .96 |
| 62 | CM-15E-620 | .24 | 62 | CM-20B-620 | .12 | 68 | CM-20C-680 | .24 | 3000 | CM-30B-302 | .36 | 2700 | CM-30D-272 | 1.08 |
| 68 | CM-15E-680 | .24 | 68 | CM-20B-680 | .12 | 70 | CM-20C-700 | .24 | 3300 | CM-30B-332 | .36 | 3000 | CM-30D-302 | 1.14 |
| 75 | CM-15E-750 | .24 | 75 | CM-20B-750 | .12 | 75 | CM-20C-750 | .24 | 3600 | CM-30B-362 | .36 | 3300 | CM-30D-332 | 1.14 |
| 82 | CM-15E-820 | .27 | 82 | CM-20B-820 | .12 | 82 | CM-20C-820 | .24 | 3900 | CM-30B-392 | .39 | 3600 | CM-30D-362 | 1.20 |
| 91 | CM-15E-910 | .27 | 91 | CM-20B-910 | .12 | 91 | CM-20C-910 | .24 | 4000 | CM-30B-402 | .39 | 3900 | CM-30D-392 | 1.20 |
| 100 | CM-15E-101 | .27 | 100 | CM-20B-101 | .12 | 100 | CM-20C-101 | .24 | 4300 | CM-30B-432 | .39 | 4000 | CM-30D-402 | 1.20 |
| 110 | CM-15E-111 | .27 | 110 | CM-20B-111 | .12 | 110 | CM-20C-111 | .27 | 4700 | CM-30B-472 | .39 | 4300 | CM-30D-432 | 1.26 |
| 120 | CM-15E-121 | .27 | 120 | CM-20B-121 | .12 | 120 | CM-20C-121 | .27 | 5000 | CM-30B-502 | .42 | 4700 | CM-30D-472 | 1.26 |
| 130 | CM-15E-131 | .27 | 130 | CM-20B-131 | .15 | 130 | CM-20C-131 | .27 | 5100 | CM-30B-512 | .42 | 5000 | CM-30D-502 | 1.29 |
| 150 | CM-15E-151 | .27 | 150 | CM-20B-151 | .15 | 150 | CM-20C-151 | .27 | 5600 | CM-30B-562 | .42 | 5100 | CM-30D-512 | 1.29 |
| 160 | CM-15E-161 | .30 | 160 | CM-20B-161 | .15 | 160 | CM-20C-161 | .27 | 6000 | CM-30B-602 | .54 | 5600 | CM-30D-562 | 1.35 |
| 180 | CM-15E-181 | .30 | 180 | CM-20B-181 | .15 | 180 | CM-20C-181 | .27 | 6200 | CM-30B-622 | .54 | 6200 | CM-30D-622 | 1.44 |
| 200 | CM-15E-201 | .30 | 200 | CM-20B-201 | .15 | 200 | CM-20C-201 | .27 | 6800 | CM-30B-682 | .54 | 6800 | CM-30D-682 | 1.50 |
| 220 | CM-15E-221 | .33 | 220 | CM-20B-221 | .15 | 220 | CM-20C-221 | .27 | 7000 | CM-30B-702 | .54 | 7500 | CM-30D-752 | 1.50 |
| 240 | CM-15E-241 | .33 | 240 | CM-20B-241 | .18 | 240 | CM-20D-241 | .33 | 7500 | CM-30B-752 | .60 | 8200 | CM-30D-822 | 1.50 |
| 250 | CM-15E-251 | .33 | 250 | CM-20B-251 | .18 | 250 | CM-20D-251 | .33 | 8000 | CM-30B-802 | .60 | 9100 | CM-30D-912 | 1.50 |
| 270 | CM-15E-271 | .36 | 270 | CM-20B-271 | .18 | 270 | CM-20D-271 | .33 | 8200 | CM-30B-822 | .60 | | | |
| 300 | CM-15E-301 | .36 | 300 | CM-20B-301 | .18 | 300 | CM-20D-301 | .33 | 9000 | CM-30B-902 | .66 | | | |
| 330 | CM-15E-331 | .39 | 330 | CM-20B-331 | .18 | 330 | CM-20D-331 | .33 | 9100 | CM-30B-912 | .66 | | | |
| 360 | CM-15E-361 | .42 | 350 | CM-20B-351 | .18 | 350 | CM-20D-351 | .33 | 10000 | CM-30B-103 | .72 | | | |
| 390 | CM-15E-391 | .42 | 360 | CM-20B-361 | .18 | 360 | CM-20D-361 | .33 | | | | | | |
| 430* | CM-15E-431 | .45 | 390 | CM-20B-391 | .18 | 390 | CM-20D-391 | .39 | | | | | | |
| 470* | CM-15E-471 | .48 | 400 | CM-20B-401 | .18 | 400 | CM-20D-401 | .39 | | | | | | |
| 500* | CM-15E-501 | .48 | 430 | CM-20B-431 | .18 | 430 | CM-20D-431 | .39 | | | | | | |
| 510* | CM-15E-511 | .48 | | | | | | | | | | | | |
| | | | 470 | CM-20B-471 | .18 | 470 | CM-20D-471 | .42 | | | | | | |
| | | | 500 | CM-20B-501 | .18 | 500 | CM-20D-501 | .42 | | | | | | |
| | | | 510 | CM-20B-511 | .18 | 510 | CM-20D-511 | .42 | | | | | | |
| | | | 560 | CM-20B-561 | .21 | 560 | CM-20D-561 | .45 | | | | | | |
| | | | 600 | CM-20B-601 | .21 | 620 | CM-20D-621 | .45 | | | | | | |
| | | | 620 | CM-20B-621 | .21 | 680 | CM-20D-681 | .48 | 3600 | CM-35B-362 | .36 | 3600 | CM-35D-362 | 1.20 |
| | | | 680 | CM-20B-681 | .21 | 750 | CM-20D-751 | .48 | 3900 | CM-35B-392 | .39 | 3900 | CM-35D-392 | 1.20 |
| | | | 750 | CM-20B-751 | .21 | 820 | CM-20D-821 | .51 | 4000 | CM-35B-402 | .39 | 4000 | CM-35D-402 | 1.20 |
| | | | 800 | CM-20B-801 | .24 | 910 | CM-20D-911 | .51 | 4300 | CM-35B-432 | .39 | 4300 | CM-35D-432 | 1.26 |
| | | | 820 | CM-20B-821 | .24 | 1000 | CM-20D-102 | .54 | 4700 | CM-35B-472 | .39 | 4700 | CM-35D-472 | 1.26 |
| | | | 900 | CM-20B-901 | .27 | | | | 5000 | CM-35B-502 | .42 | 5000 | CM-35D-502 | 1.29 |
| | | | 910 | CM-20B-911 | .27 | | | | 5100 | CM-35B-512 | .42 | 5100 | CM-35D-512 | 1.29 |
| | | | 1000 | CM-20B-102 | .27 | | | | 5600 | CM-35B-562 | .42 | 5600 | CM-35D-562 | 1.35 |
| | | | | | | | | | 6200 | CM-35B-622 | .54 | 6000 | CM-35D-602 | 1.44 |
| | | | | | | | | | 6800* | CM-35B-682 | .57 | 6200 | CM-35D-622 | 1.44 |
| | | | | | | | | | 7000* | CM-35B-702 | .57 | 6800* | CM-35D-682 | 1.59 |
| | | | | | | | | | 7500* | CM-35B-752 | .60 | 7000* | CM-35D-702 | 1.59 |
| | | | | | | | | | 8000* | CM-35B-802 | .69 | 7500* | CM-35D-752 | 1.68 |
| | | | | | | | | | 8200* | CM-35B-822 | .69 | 8000* | CM-35D-802 | 1.80 |
| | | | | | | | | | 9100* | CM-35B-912 | .69 | 8200* | CM-35D-822 | 1.80 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | 10000* | CM-35B-103 | .84 | 9100* | CM-35D-912 | 1.92 |
| | | | | | | | | | 12000* | CM-35B-123 | .96 | 10000* | CM-35D-103 | 2.10 |
| | | | | | | | | | 13000* | CM-35B-133 | 1.02 | | | |
| | | | | | | | | | 14000* | CM-35B-143 | 1.08 | | | |
| | | | | | | | | | 15000* | CM-35B-153 | 1.20 | | | |

N D T E S

In mica and foil construction the standard tolerance is $\pm 20\%$. Also available in $\pm 10\%$ and $\pm 5\%$. Closest available tolerance up to and including 10 mmf. is ± 1 mmf.; above 10 mmf. $\pm 2\%$ or ± 2 mmf., whichever is greater.

In silver mica the standard tolerance is $\pm 5\%$. Also available in $\pm 2\%$ and $\pm 1\%$. Closest available tolerance up to 10 mmf. is $\pm 1/2$ mmf.; 10 mmf. and up $\pm 1\%$ or ± 1 mmf., whichever is greater.

Nominal Size All CM30 Units — $5/16 \times 5/16 \times 3/32$
 Nominal Size All CM35 Units — $3/16 \times 3/16 \times 2/16$
 Nominal Size All CM20 Units — $4/16 \times 2/16 \times 3/16$
 Nominal Size All CM15 Units — $1/2 \times 3/32 \times 3/16$

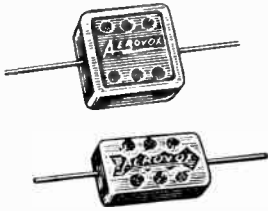
*Capacities are 300 WV. Type Designation 1467XLS and 1464X.

★Request O.E.M. Prices in the following quantities: 50 to 99, 100 and up.

AEROVOX

Capacitors

RECEIVING MICA CAPACITORS — (Continued)



Type 1469HV and 1464HV

Designed especially for television, low power transmitters and power amplifier applications, these capacitors feature the highest voltages ever before available in these case sizes. They are furnished in silvered mica molded in red Bakelite. Standard Tolerance is plus and minus 5% and they are tested to meet EIA standards. Units are marked with capacity and working voltage and are tested at double the rated voltage to insure long life.

| Type 1469HV | | | Type 1464HV | | |
|-------------|--------------------------------------|--------------------------------------|-------------|--------------------------------------|--------------------------------------|
| Cap. Mmfd. | 1000 VDCW 2000 VDCT Net Price★ | 1500 VDCW 3000 VDCT Net Price★ | Cap. Mmfd. | 1000 VDCW 2000 VDCT Net Price★ | 1500 VDCW 3000 VDCT Net Price★ |
| 5 | .27 | .30 | 430 | | \$. 90 |
| 10 | .27 | .30 | 470 | | .90 |
| 12 | .27 | .30 | 500 | | .90 |
| 15 | .27 | .30 | 510 | | .90 |
| 18 | .27 | .30 | 560 | | .90 |
| 20 | .27 | .30 | 620 | | .90 |
| 22 | .27 | .30 | 680 | \$. 72 | .90 |
| 24 | .27 | .30 | 750 | .72 | .90 |
| 25 | .27 | .30 | 820 | .72 | 1.02 |
| 27 | .27 | .30 | 910 | .72 | 1.08 |
| 30 | .27 | .30 | 1000 | .72 | 1.08 |
| 33 | .27 | .30 | 1100 | .72 | 1.14 |
| 36 | .27 | .30 | 1200 | .78 | 1.32 |
| 39 | .27 | .30 | 1300 | .72 | 1.38 |
| 43 | .27 | .30 | 1500 | .90 | 1.56 |
| 47 | .27 | .33 | 1600 | .96 | 1.56 |
| 50 | .27 | .33 | 1800 | .96 | 1.74 |
| 51 | .27 | .33 | 2000 | 1.02 | 1.92 |
| 56 | .27 | .33 | 2200 | 1.14 | 2.04 |
| 62 | .27 | .33 | 2400 | 1.26 | 2.16 |
| 68 | .27 | .33 | 2500 | 1.26 | |
| 75 | .27 | .33 | 2700 | 1.26 | |
| 82 | .27 | .33 | 3000 | 1.38 | |
| 91 | .30 | .36 | 3300 | 1.44 | |
| 100 | .30 | .36 | 3600 | 1.62 | |
| 110 | .30 | .36 | 3900 | 1.68 | |
| 120 | .30 | .36 | 4000 | 1.68 | |
| 130 | .30 | .36 | 4300 | 1.80 | |
| 150 | .30 | .42 | 4700 | 1.98 | |
| 160 | .33 | .42 | 5000 | 2.04 | |
| 180 | .33 | .42 | 5100 | 2.04 | |
| 200 | .33 | .48 | | | |
| 220 | .36 | .48 | | | |
| 240 | .36 | .48 | | | |
| 250 | .39 | .60 | | | |
| 270 | .39 | .60 | | | |
| 300 | .42 | .66 | | | |
| 330 | .42 | .66 | | | |
| 350 | .42 | .69 | | | |
| 360 | .42 | .69 | | | |
| 390 | .42 | .69 | | | |
| 400 | .42 | .69 | | | |
| 430 | .45 | | | | |
| 470 | .45 | | | | |
| 500 | .45 | | | | |
| 510 | .45 | | | | |
| 560 | .48 | | | | |
| 620 | .51 | | | | |

★Request O.E.M. prices in the following quantities: 50 to 99, 100 and up



DIPPED, SILVERED MICA CAPACITORS TYPES ADM-15, ADM-19, ADM-20 and ADM-30

Aerovox plastic-coated dipped-mica units exceed many of the advantages of molded mica units, and at the same time are smaller than conventional units. Meeting all the applicable MIL-C-5B Test Standards for molded mica capacitors, these unique dipped-mica units offer the following features:

- High operating temperatures —55° to +125°C • Excellent long-life characteristics • Improved temperature coefficient range • Radial leads for automatic insertion and plug-in assemblies • Ideal for printed-wiring assemblies • Unsurpassed performance and stability characteristics • Smaller physical size.

Humidity Resistance: these capacitors shall have an insulation resistance of not less than 2,000 megohms after being subjected to the Humidity Resistance Test as outlined in MIL-C-5B. Minimum Insulation Resistance: 25,000 megohms at 25°C; 1000 megohms at 125°C.

Capacitors will be marked with capacity and tolerance. In addition voltage rating will be marked on all units other than 500 volts rating.

| Cap. Mmfd. | Type Designation | Net Price★ |
|------------|------------------|------------|
| 5 | ADM-15-050 | .17 |
| 10 | ADM-15-100 | .17 |
| 12 | ADM-15-120 | .17 |
| 15 | ADM-15-150 | .17 |
| 18 | ADM-15-180 | .17 |
| 20 | ADM-15-200 | .17 |
| 22 | ADM-15-220 | .17 |
| 24 | ADM-15-240 | .17 |
| 27 | ADM-15-270 | .17 |
| 30 | ADM-15-300 | .17 |
| 33 | ADM-15-330 | .17 |
| 36 | ADM-15-360 | .17 |
| 39 | ADM-15-390 | .17 |
| 43 | ADM-15-430 | .17 |
| 47 | ADM-15-470 | .17 |
| 50 | ADM-15-500 | .17 |
| 51 | ADM-15-510 | .17 |
| 56 | ADM-15-560 | .17 |
| 62 | ADM-15-620 | .17 |
| 68 | ADM-15-680 | .17 |
| 75 | ADM-15-750 | .17 |
| 82 | ADM-15-820 | .17 |
| 91 | ADM-15-910 | .17 |
| 100 | ADM-15-101 | .17 |
| 110 | ADM-15-111 | .20 |
| 120 | ADM-15-121 | .20 |
| 130 | ADM-15-131 | .20 |
| 150 | ADM-15-151 | .20 |
| 160 | ADM-15-161 | .23 |
| 180 | ADM-15-181 | .23 |
| 200 | ADM-15-201 | .23 |
| 220 | ADM-15-221 | .26 |
| 240 | ADM-15-241 | .26 |
| 250 | ADM-15-251 | .26 |
| 270 | ADM-15-271 | .30 |
| 300 | ADM-15-301 | .30 |
| 330 | ADM-15-331 | .33 |
| 360 | ADM-15-361 | .33 |
| 390 | ADM-15-391 | .36 |
| 430 | *ADM-15-431 | .36 |
| 470 | *ADM-15-471 | .40 |
| 500 | *ADM-15-501 | .40 |
| 510 | *ADM-15-511 | .40 |
| 560 | | .36 |
| 620 | | .36 |
| 680 | | .40 |
| 750 | | .40 |
| 820 | | .40 |
| 910 | | .43 |
| 1000 | | .46 |
| 1100 | | .46 |
| 1200 | | .50 |
| 1300 | | .53 |
| 1500 | | .56 |
| 1600 | | .59 |
| 1800 | | .66 |
| 2000 | | .73 |
| 2200 | | .79 |
| 2400 | | .86 |
| 2500 | | .89 |
| 2700 | | .92 |
| 3000 | | .99 |
| 3300 | | |
| 3600 | | |
| 3900 | | |
| 4300 | | |
| 4700 | | |
| 5000 | | |
| 5100 | | |
| 5600 | | |
| 6200 | | |
| 6800 | | |
| 7500 | | |
| 8200 | | |
| 9100 | | |
| 10000 | | |
| 12000 | | |
| 13000 | | |
| 15000 | | |

★Request O.E.M. prices in the following quantities: 50 to 99, 100 and up

* All items asterisked are rated at 300 VDCW.

CHARACTERISTICS

ADM-15—from 5 to 20 mmf. Characteristic "C".
from 22 to 150 mmf. Characteristic "E".
from 160 mmf. and up Characteristic "F".
ADM-19—All capacities listed "F" Characteristic.
ADM-20—All capacities listed "F" Characteristic.
ADM-30—All capacities listed "F" Characteristic.

Standard Tolerance ±5%

Minimum tolerance for capacitances up to and including 10 mmf. is ± 1/2 mmf., for all other capacitances ± 1% or 1 mmf. whichever is greater.

| Sizes | L | W | T |
|--------|------|------|-----------|
| ADM-15 | 1/32 | 3/16 | 1/32 max. |
| ADM-19 | 1/16 | 1/8 | 1/16 max. |
| ADM-20 | 1/8 | 1/4 | 1/8 max. |
| ADM-30 | 1/16 | 1/8 | 1/16 max. |

| Type Designation | Net Price★ |
|------------------|------------|
| ADM-20-681 | .33 |
| ADM-20-751 | .33 |
| ADM-20-821 | .33 |
| ADM-20-911 | .36 |
| ADM-20-102 | .40 |
| ADM-20-112 | .40 |
| ADM-20-122 | .43 |
| ADM-20-132 | .46 |
| ADM-20-152 | .50 |
| ADM-20-162 | .53 |
| ADM-20-182 | .59 |
| ADM-20-202 | .63 |
| ADM-20-222 | .69 |
| ADM-20-242 | .73 |
| ADM-20-252 | .78 |
| ADM-20-272 | .79 |
| ADM-20-302 | .86 |
| ADM-20-332 | .92 |
| ADM-20-362 | .99 |
| ADM-20-392 | 1.06 |
| *ADM-20-432 | 1.06 |
| *ADM-20-472 | 1.12 |
| *ADM-20-502 | 1.16 |
| *ADM-20-512 | 1.19 |

| Type Designation | Net Price★ |
|------------------|------------|
| ADM-30-432 | 1.06 |
| ADM-30-472 | 1.12 |
| ADM-30-502 | 1.16 |
| ADM-30-512 | 1.16 |
| ADM-30-562 | 1.19 |
| ADM-30-622 | 1.25 |
| ADM-30-682 | 1.39 |
| ADM-30-752 | 1.52 |
| ADM-30-822 | 1.65 |
| ADM-30-912 | 1.78 |
| ADM-30-103 | 1.98 |
| *ADM-30-123 | 2.11 |
| *ADM-30-133 | 2.31 |
| *ADM-30-153 | 2.54 |

AEROVOX*Capacitors***TRANSMITTING MICA CAPACITORS — (Continued)****TYPES 1650L, 1651L, 1652L, 1653L and 1654L**

Heaviest-duty molded in bakelite mica capacitors of the AEROVOX line. Threaded mounting holes for roundhead screw terminals or plain holes available. Add suffix "A" for plain holes.



| TYPE 1650L | | TYPE 1652L | |
|---|------|--|------|
| 600 VDCW — 1000 VDCT 35D VACW — 70D VACT | | 2500 VDCW — 5000 VDCT 175D VACW — 350D VACT | |
| Net Price | | Net Price | |
| .0005 | .87 | .00005 | 1.14 |
| .0001 | .87 | .000075 | 1.14 |
| .00025 | .87 | .0001 | 1.14 |
| .003 | .87 | .00015 | 1.20 |
| .00035 | .87 | .0002 | 1.26 |
| .0004 | .87 | .00025 | 1.29 |
| .0005 | .87 | .0003 | 1.32 |
| .001 | .87 | .00035 | 1.35 |
| .0015 | .87 | .0004 | 1.50 |
| .002 | .99 | .0005 | 1.53 |
| .0025 | 1.02 | .001 | 1.74 |
| .003 | 1.11 | .0015 | 2.34 |
| .004 | 1.20 | .002 | 2.55 |
| .005 | 1.26 | .0025 | 2.76 |
| .006 | 1.32 | .003 | 3.06 |
| .008 | 1.47 | .004 | 3.39 |
| .01 | 1.68 | .005 | 3.72 |
| .015 | 1.83 | .006 | 3.81 |
| .02 | 2.13 | .008* | 4.11 |
| .025 | 2.61 | .01* | 4.38 |
| .03 | 2.73 | | |
| .04* | 3.51 | | |
| .05* | 4.26 | | |
| .06* | 4.83 | | |

| TYPE 1651L | | TYPE 1653L | |
|---|------|--|------|
| 120D VDCW — 250D VDCT 87D VACW — 175D VACT | | 375D VDCW — 750D VDCT 262D VACW — 525D VACT | |
| Net Price | | Net Price | |
| .00005 | .96 | .00005 | 1.98 |
| .0001 | .96 | .000075 | 2.19 |
| .00025 | .96 | .0001 | 2.28 |
| .0003 | .96 | .00015 | 2.49 |
| .00035 | .96 | .0002 | 2.58 |
| .0004 | .96 | .00025 | 2.85 |
| .0005 | .96 | .0003 | 2.94 |
| .001 | 1.14 | .00035 | 3.45 |
| .0015 | 1.35 | .0004 | 3.54 |
| .002 | 1.50 | .0005 | 3.90 |
| .0025 | 1.68 | .001 | 4.62 |
| .003 | 1.77 | .0015 | 6.06 |
| .004 | 1.86 | .002* | 6.90 |
| .005 | 1.98 | .0025* | 7.74 |
| .006 | 2.07 | .003* | 8.55 |
| .008 | 2.46 | | |
| .01 | 2.82 | | |
| .015 | 3.48 | | |
| .02* | 4.23 | | |
| .025* | 4.74 | | |
| .03* | 4.86 | | |

| TYPE 1654L | |
|--|------|
| 5000 VDCW — 10,000 VDCT 350D VACW — 700D VACT | |
| Net Price | |
| .00005 | 2.25 |
| .000075 | 2.49 |
| .0001 | 2.79 |
| .00015 | 3.03 |
| .0002 | 3.75 |
| .00025 | 4.08 |
| .0003 | 4.29 |
| .00035 | 4.50 |
| .0004 | 4.62 |
| .0005 | 5.94 |
| .001* | 7.50 |

These units are equivalent to case styles CM55, CM56, CM60, and CM61 or specification MIL-C-5B.

Standard tolerance $\pm 10\%$.

$\pm 5\%$ Tolerance available on special order.

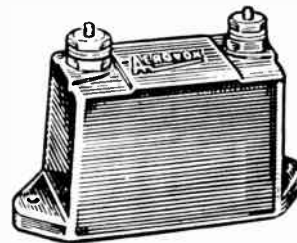
$\pm 2\%$ Tolerance available on special order.

Nominal Size: $1\frac{3}{4}'' \times 1\frac{1}{4}'' \times \frac{1}{4}''$

*Thickness $\frac{3}{4}''$

**TYPES 1550L, 1570L and 1590L
Potted Transmitting Capacitors**

These potted transmitting capacitors in thermo-setting case materials have greater load-carrying capacity than molded-in-thermo-setting case material capacitors. Types 1550 to 1590, inclusive, not only have high voltage rating but afford higher current ratings than equivalent capacitances in thermo-setting case material units. Because of their construction they are made with higher capacitance stability. Furnished only in low-loss thermo-setting case material as standard. Bakelite cased mica stack capacitors. These units have highest quality mica sections stacked for greater load carrying capacity. The sections are potted in low-loss bakelite cases and permanently clamped with non-magnetic material.

**TYPE 1570L (Similar to CM65)**

| Cat. No. | Capacity | Test Volts Eff. | Max. Operating Current in Amps. | | | | Net Price |
|------------|----------|-----------------|---------------------------------|---------|--------|--------|-----------|
| | | | 3000 kc | 1000 kc | 300 kc | 100 kc | |
| 1570LS-204 | .00005 | 3500 | 1.3 | .6 | .15 | .05 | 10.17 |
| 1570LS-210 | .0001 | 3500 | 2.0 | .9 | .3 | .1 | 10.17 |
| 1570LS-214 | .00015 | 3500 | 2.2 | 1.0 | .45 | .15 | 10.17 |
| 1570LS-217 | .0002 | 3500 | 2.6 | 1.2 | .6 | .25 | 10.17 |
| 1570LS-219 | .00025 | 3500 | 2.9 | 1.6 | .7 | .25 | 10.17 |
| 1570LS-221 | .0003 | 3500 | 3.2 | 1.9 | .8 | .3 | 10.17 |
| 1570LS-223 | .0004 | 3500 | 3.6 | 2.0 | .9 | .4 | 10.17 |
| 1570LS-226 | .0005 | 3500 | 3.75 | 2.0 | 1.0 | .5 | 10.17 |
| 1570LS-228 | .0006 | 3500 | 4.1 | 2.0 | 1.2 | .6 | 10.17 |
| 1570LS-232 | .0008 | 3500 | 4.6 | 2.5 | 1.5 | .7 | 10.17 |
| 1570LS-234 | .001 | 3500 | 4.9 | 3.0 | 1.6 | .8 | 10.17 |
| 1570LS-236 | .0015 | 3500 | 5.8 | 3.5 | 2.0 | 1.0 | 10.17 |
| 1570LS-237 | .002 | 3500 | 6.3 | 4.0 | 2.5 | 1.3 | 10.17 |
| 1570LS-240 | .003 | 2500 | 7.1 | 5.0 | 3.0 | 1.5 | 10.17 |
| 1570LS-242 | .004 | 2500 | 7.6 | 6.0 | 3.5 | 1.6 | 10.17 |
| 1570LS-245 | .005 | 2500 | 8.5 | 6.5 | 4.0 | 2.0 | 10.17 |
| 1570LS-248 | .006 | 2500 | 9.0 | 7.5 | 4.5 | 2.2 | 10.17 |
| 1570LS-254 | .008 | 1500 | 10.0 | 8.0 | 5.0 | 2.3 | 10.17 |
| 1570LS-257 | .01 | 1500 | 10.0 | 10.0 | 6.0 | 2.5 | 10.17 |
| 1570LS-260 | .02 | 1500 | 11.0 | 10.0 | 7.0 | 3.0 | 11.37 |
| 1570LS-268 | .05 | 500 | 8.5 | 7.5 | 6.0 | 3.8 | 11.37 |
| 1570LS-273 | .1 | 250 | 11.0 | 12.0 | 10.0 | 6.0 | 12.12 |

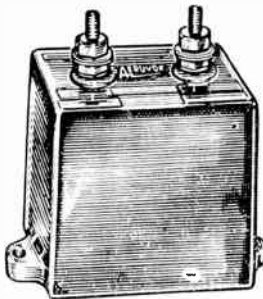
Type 1570L also manufactured in case style CM65 of Spec. MIL-C-5B. Prices on request.

TYPE 1550L (Similar to CM70)

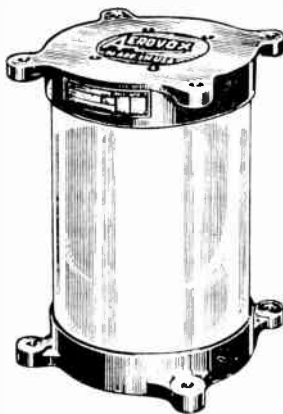
| Cat. No. | Capacity | Test Volts Eff. | Max. Operating Current in Amps. | | | | Net Price |
|------------|----------|-----------------|---------------------------------|---------|--------|--------|-----------|
| | | | 3000 kc | 1000 kc | 300 kc | 100 kc | |
| 1550LS-200 | .00005 | 6000 | 1.5 | .7 | .2 | .07 | 13.94 |
| 1550LS-201 | .0001 | 6000 | 2.5 | 1.3 | .35 | .1 | 13.94 |
| 1550LS-202 | .00015 | 6000 | 3.0 | 1.7 | .5 | .16 | 13.94 |
| 1550LS-203 | .0002 | 6000 | 3.5 | 1.8 | .7 | .3 | 13.94 |
| 1550LS-204 | .00025 | 6000 | 5.0 | 2.5 | 1.0 | .3 | 13.94 |
| 1550LS-206 | .0003 | 6000 | 5.0 | 2.5 | 1.0 | .4 | 13.94 |
| 1550LS-208 | .0004 | 6000 | 5.0 | 2.7 | 1.1 | .5 | 13.94 |
| 1550LS-210 | .0005 | 6000 | 5.0 | 3.0 | 1.6 | .75 | 13.94 |
| 1550LS-212 | .0006 | 6000 | 5.1 | 3.1 | 1.7 | .8 | 13.94 |
| 1550LS-215 | .00075 | 6000 | 5.5 | 3.5 | 2.1 | 1.0 | 13.94 |
| 1550LS-216 | .0008 | 6000 | 6.0 | 4.0 | 2.1 | 1.0 | 13.94 |
| 1550LS-218 | .001 | 6000 | 7.0 | 4.0 | 2.2 | 1.0 | 13.94 |
| 1550LS-220 | .0015 | 6000 | 9.0 | 5.1 | 3.0 | 1.6 | 13.94 |
| 1550LS-221 | .002 | 6000 | 9.0 | 6.0 | 4.0 | 1.9 | 13.94 |
| 1550LS-222 | .002 | 3000 | 6.0 | 4.6 | 3.0 | 1.1 | 11.74 |
| 1550LS-223 | .0025 | 5000 | 9.0 | 6.0 | 4.0 | 2.0 | 13.94 |
| 1550LS-225 | .003 | 3000 | 6.5 | 6.0 | 4.1 | 1.6 | 12.95 |
| 1550LS-228 | .004 | 3000 | 10.0 | 6.5 | 4.5 | 2.0 | 13.94 |
| 1550LS-230 | .005 | 3000 | 10.0 | 6.8 | 5.0 | 2.5 | 13.94 |
| 1550LS-235 | .0075 | 3000 | 11.0 | 8.0 | 6.5 | 2.9 | 13.94 |
| 1550LS-236 | .008 | 3000 | 11.0 | 9.0 | 6.8 | 3.0 | 13.94 |
| 1550LS-238 | .01 | 2000 | 11.0 | 10.0 | 8.0 | 4.0 | 13.94 |
| 1550LS-239 | .015 | 2000 | 11.5 | 11.0 | 9.0 | 5.0 | 13.94 |
| 1550LS-240 | .02 | 2000 | 12.5 | 11.0 | 10.5 | 7.0 | 13.94 |
| 1550LS-241 | .03 | 2000 | 13.0 | 16.0 | 13.0 | 7.0 | 13.94 |
| 1550LS-242 | .04 | 1500 | 13.0 | 16.0 | 13.0 | 7.5 | 13.94 |
| 1550LS-243 | .05 | 1500 | 14.0 | 16.0 | 13.0 | 7.5 | 13.94 |
| 1550LS-244 | .1 | 1000 | 16.0 | 18.0 | 14.0 | 9.0 | 19.27 |
| 1550LS-247 | .25 | 250 | 16.0 | 18.0 | 14.0 | 12.0 | 22.25 |

Type 1550L also manufactured in case style CM70 of Spec. MIL-C-5B. Prices on request

$\pm 2\%$ Tolerance Available on Special Order.

AEROVOX*Capacitors***TRANSMITTING MICA CAPACITORS — (Continued)****TYPE 1590L — POTTED TRANSMITTING CAPACITORS**

| Cat. No. | Capacity | Test Volts Eff. | Max. Operating Current in Amps. | | | | Net Price |
|-----------|----------|-----------------|---------------------------------|---------|--------|--------|-----------|
| | | | 3000 kc | 1000 kc | 300 kc | 100 kc | |
| 1590L-200 | .00025 | 8000 | 7.0 | 5.0 | 2.0 | .6 | 31.07 |
| 1590L-201 | .0005 | 8000 | 8.5 | 6.0 | 3.0 | 1.0 | 31.07 |
| 1590L-203 | .001 | 8000 | 10.0 | 8.5 | 4.5 | 2.0 | 34.67 |
| 1590L-205 | .002 | 8000 | 12.0 | 11.0 | 8.0 | 4.0 | 34.67 |
| 1590L-207 | .003 | 8000 | 15.0 | 15.0 | 11.0 | 5.0 | 36.84 |
| 1590L-209 | .004 | 8000 | 16.0 | 16.0 | 12.0 | 6.0 | 39.41 |
| 1590L-211 | .005 | 8000 | 16.0 | 16.0 | 13.0 | 7.0 | 42.74 |
| 1590L-213 | .006 | 8000 | 16.0 | 18.0 | 13.0 | 7.0 | 42.74 |
| 1590L-217 | .01 | 8000 | 17.0 | 21.0 | 15.0 | 9.0 | 48.54 |
| 1590L-218 | .01 | 6000 | 16.0 | 20.0 | 15.0 | 8.0 | 46.13 |
| 1590L-219 | .02 | 5000 | 18.0 | 22.0 | 18.0 | 12.0 | 48.54 |
| 1590L-220 | .03 | 4000 | 18.0 | 23.0 | 20.0 | 13.0 | 48.54 |
| 1590L-222 | .05 | 4000 | 18.0 | 25.0 | 23.0 | 15.0 | 54.44 |
| 1590L-223 | .05 | 2000 | 18.0 | 25.0 | 22.0 | 12.0 | 51.68 |
| 1590L-224 | .1 | 2000 | 18.0 | 28.0 | 23.0 | 15.0 | 42.84 |
| 1590L-226 | .2 | 600 | 18.0 | 28.0 | 23.0 | 15.0 | 34.67 |
| 1590L-227 | .25 | 600 | 18.0 | 28.0 | 23.0 | 15.0 | 39.14 |
| 1590L-228 | .3 | 600 | 18.0 | 28.0 | 23.0 | 15.0 | 42.36 |
| 1590L-230 | .5 | 600 | 18.0 | 28.0 | 23.0 | 15.0 | 46.38 |
| 1590L-233 | 1.0 | 600 | 18.0 | 28.0 | 23.0 | 15.0 | 71.16 |

Standard Tolerance $\pm 5\%$ Also Available in $\pm 2\%$ on Special Order.**TYPES 1940, 1950, 1960, 1970 and 1980
Stack-Mounting Transmitting Capacitors**

These stack-mounting transmitting mica capacitors are especially intended for various applications such as grid, plate blocking, coupling, tank, and by-passing functions for higher-powered installations. They are made with a special cylindrical low-loss, glazed ceramic case providing a long creepage path between terminals. They are designed to eliminate corona losses, inside and outside alike, and also provide uniform voltage gradient. The cast-aluminum terminal ends provide low contact resistance between units. These units are conservatively rated to withstand surge voltages above their rated values. They have extremely low power factor so that they can handle large KVA loads without overheating.

TYPE 1940

| Catalog No. | Cap. Mfd. | Test Volts Eff. | Net Price |
|-------------|-----------|-----------------|-----------|
| 1940-236 | .000075 | 35000 | 371.39 |
| 1940-203 | .0001 | 35000 | 371.39 |
| 1940-204 | .00015 | 35000 | 403.66 |
| 1940-205 | .0002 | 35000 | 403.66 |
| 1940-206 | .00025 | 35000 | 403.66 |
| 1940-207 | .0003 | 35000 | 403.66 |
| 1940-208 | .00035 | 35000 | 403.66 |
| 1940-209 | .0004 | 35000 | 403.66 |
| 1940-210 | .0005 | 35000 | 435.44 |
| 1940-211 | .0006 | 35000 | 435.44 |
| 1940-212 | .0007 | 35000 | 435.44 |
| 1940-213 | .0008 | 35000 | 435.44 |
| 1940-214 | .01 | 35000 | 449.27 |
| 1940-215 | .0125 | 35000 | 449.27 |
| 1940-216 | .015 | 35000 | 449.27 |
| 1940-217 | .02 | 30000 | 430.55 |
| 1940-218 | .025 | 25000 | 438.27 |
| 1940-219 | .03 | 25000 | 454.51 |
| 1940-220 | .04 | 20000 | 476.16 |
| 1940-221 | .05 | 20000 | 476.16 |
| 1940-222 | .06 | 15000 | 476.16 |
| 1940-223 | .07 | 15000 | 476.16 |
| 1940-224 | .08 | 15000 | 476.16 |
| 1940-225 | .1 | 15000 | 476.16 |
| 1940-237 | .02 | 12000 | 476.16 |
| 1940-238 | .03 | 10000 | 476.16 |
| 1940-239 | .04 | 7500 | 476.16 |
| 1940-240 | .05 | 6000 | 476.16 |
| 1940-241 | .06 | 6000 | 476.16 |
| 1940-242 | .07 | 6000 | 476.16 |
| 1940-243 | .08 | 6000 | 476.16 |
| 1940-244 | .1 | 5000 | 476.16 |

TYPE 1950 (Similar to CM75)

| Catalog No. | Cap. Mfd. | Test Volts Eff. | Net Price |
|-------------|-----------|-----------------|-----------|
| 1950-202 | .00005 | 6000 | 30.56 |
| 1950-204 | .0001 | 6000 | 32.27 |
| 1950-207 | .0002 | 6000 | 32.52 |
| 1950-209 | .0003 | 6000 | 35.59 |
| 1950-212 | .0005 | 6000 | 37.16 |
| 1950-216 | .001 | 6000 | 37.16 |
| 1950-218 | .002 | 6000 | 39.26 |
| 1950-220 | .003 | 6000 | 40.34 |
| 1950-222 | .005 | 6000 | 40.34 |
| 1950-226 | .01 | 5000 | 41.07 |
| 1950-228 | .02 | 3000 | 41.07 |
| 1950-231 | .05 | 1500 | 43.13 |

TYPE 1960 (Similar to CM80)

| Catalog No. | Cap. Mfd. | Test Volts Eff. | Net Price |
|-------------|-----------|-----------------|-----------|
| 1960-202 | .00005 | 15,000 | 52.33 |
| 1960-203 | .0001 | 15,000 | 52.33 |
| 1960-204 | .00015 | 12,500 | 52.33 |
| 1960-205 | .0002 | 12,500 | 52.33 |
| 1960-209 | .0005 | 12,500 | 52.33 |
| 1960-212 | .0008 | 10,000 | 52.33 |
| 1960-213 | .001 | 10,000 | 52.33 |
| 1960-214 | .0015 | 10,000 | 52.33 |
| 1960-215 | .002 | 10,000 | 52.33 |
| 1960-218 | .004 | 8,000 | 52.33 |
| 1960-219 | .005 | 8,000 | 52.33 |
| 1960-223 | .01 | 7,000 | 55.49 |
| 1960-224 | .015 | 5,000 | 55.49 |
| 1960-225 | .02 | 4,000 | 55.49 |

TYPE 1970 (Similar to CM85)

| Catalog No. | Cap. Mfd. | Test Volts Eff. | Net Price |
|-------------|-----------|-----------------|-----------|
| 1970-202 | .00005 | 20,000 | 88.90 |
| 1970-203 | .0001 | 20,000 | 96.95 |
| 1970-204 | .00015 | 20,000 | 104.77 |
| 1970-205 | .0002 | 20,000 | 104.77 |
| 1970-210 | .0005 | 20,000 | 109.91 |
| 1970-213 | .0008 | 20,000 | 109.91 |
| 1970-214 | .001 | 20,000 | 112.71 |
| 1970-216 | .0015 | 20,000 | 114.67 |
| 1970-217 | .002 | 15,000 | 114.67 |
| 1970-220 | .004 | 12,000 | 120.91 |
| 1970-221 | .005 | 10,000 | 120.91 |
| 1970-225 | .01 | 10,000 | 120.91 |
| 1970-227 | .02 | 6,000 | 120.91 |

TYPE 1980 (Similar to CM90)

| Catalog No. | Cap. Mfd. | Test Volts Eff. | Net Price |
|-------------|-----------|-----------------|-----------|
| 1980-202 | .00005 | 35,000 | 134.48 |
| 1980-203 | .0001 | 35,000 | 168.22 |
| 1980-204 | .00015 | 35,000 | 168.22 |
| 1980-207 | .0003 | 35,000 | 177.02 |
| 1980-209 | .0004 | 35,000 | 177.02 |
| 1980-210 | .0005 | 35,000 | 177.02 |
| 1980-213 | .0008 | 30,000 | 177.02 |
| 1980-214 | .001 | 25,000 | 183.12 |
| 1980-217 | .002 | 20,000 | 183.12 |
| 1980-220 | .004 | 20,000 | 187.52 |
| 1980-221 | .005 | 20,000 | 193.77 |
| 1980-224 | .008 | 15,000 | 207.82 |
| 1980-225 | .01 | 15,000 | 217.84 |
| 1980-230 | .05 | 5,000 | 217.84 |

All units also manufactured in equivalent MIL-C-5B case styles. Prices on request.

Standard tolerance for all units is plus and minus 5%.

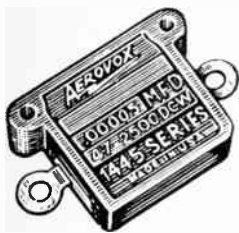
Also Available in $\pm 2\%$ on Special Order.

AEROVOX

Capacitors

TRANSMITTING MICA CAPACITORS

TYPES 1445, 1446 and 1447



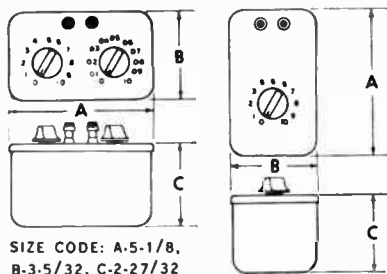
Designed with insulated mounting holes $1\frac{1}{4}$ " apart independent of soldering lugs. Used to shunt meter windings.

Size: $1\frac{1}{8}$ " x $1\frac{1}{8}$ " x $\frac{1}{2}$ "
 Standard Tolerance $\pm 10\%$
 $\pm 5\%$ and $\pm 2\%$ tolerance are available on special order.
 Meter Mounting Bracket E available. Specify when ordering.
 These units are equivalent to case styles CM45 and CM50 of specification MIL-C5B.

| TYPE 1445 600 VDCW 1000 VDCT | | TYPE 1446 1200 VDCW 2500 VDCT | | TYPE 1447 2500 VDCW 5000 VDCT | |
|------------------------------------|-----------|-------------------------------------|-----------|-------------------------------------|-----------|
| Cap. Mfd. | Net Price | Cap. Mfd. | Net Price | Cap. Mfd. | Net Price |
| .00005 | .72 | .00005 | .96 | .00005 | 1.14 |
| .0001 | .72 | .0001 | .96 | .000075 | 1.14 |
| .00015 | .72 | .00015 | .96 | .0001 | 1.14 |
| .0002 | .72 | .0002 | .96 | .00015 | 1.14 |
| .00025 | .72 | .00025 | .96 | .0002 | 1.14 |
| .0003 | .72 | .0003 | .96 | .00025 | 1.32 |
| .00035 | .72 | .00035 | .96 | .0003 | 1.35 |
| .0004 | .72 | .0004 | .96 | .00035 | 1.35 |
| .0005 | .72 | .0005 | .96 | .0004 | 1.38 |
| .001 | .72 | .001 | 1.08 | .0005 | 1.44 |
| .0015 | .72 | .0015 | 1.38 | .001 | 1.68 |
| .002 | .78 | .002 | 1.44 | .0015 | 2.13 |
| .0025 | .78 | .0025 | 1.68 | .002* | 2.49 |
| .003 | .87 | .003 | 1.83 | .0025* | 2.76 |
| .004 | .90 | .004* | 1.83 | .003* | 2.94 |
| .005 | .93 | .005* | 1.98 | .004* | 3.39 |
| .006 | 1.08 | .006* | 1.98 | .005* | 3.84 |
| .008 | 1.14 | .008* | 2.31 | | |
| .01 | 1.29 | .01* | 3.06 | | |
| .015* | 1.59 | .015* | 3.60 | | |
| .02* | 1.83 | | | | |
| .025* | 2.16 | | | | |
| .03* | 2.67 | | | | |
| .04* | 3.39 | | | | |

*Thickness $\frac{1}{16}$ "

AEROVOX DECADE BOXES



SIZE CODE: A-5-1/8,
B-3-5/32, C-2-27/32

TYPES 1991 thru 1996

Porcelain-Cased Capacitors



Ideal for high-frequency application. Glazed porcelain case, high temperature wax sealed. Heavy duty power terminals. Minimum power loss due to dielectric absorption. No heating at full load.

Size: 4" overall by 3" high; $2\frac{1}{2}$ "

Standard Tolerance $\pm 10\%$

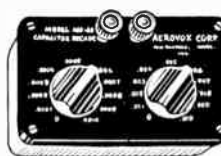
| Cap. Mfd. | DC Voltage Rating | Type | Maximum Current Capacity—Amperes | | | | Net Price |
|-----------|-------------------|------|----------------------------------|--------|---------|---------|-----------|
| | | | 15 mc | 7.5 mc | 3750 kc | 1875 kc | |
| .00005 | 12,500 | 1996 | 3 | 2.5 | 1.5 | 1 | 10.80 |
| .0001 | 12,500 | 1996 | 5 | 4 | 3 | 2 | 10.80 |
| .00025 | 12,500 | 1996 | 7 | 8 | 6 | 4 | 10.80 |
| .0005 | 12,500 | 1996 | 8 | 9 | 8 | 7 | 10.80 |
| | 7,000 | 1994 | 7 | 8 | 6 | 4 | 8.91 |
| .001 | 12,500 | 1996 | 9 | 10 | 11 | 12 | 10.80 |
| | 7,000 | 1994 | 8 | 9 | 10 | 8 | 9.66 |
| | 3,500 | 1992 | 8 | 9 | 8 | 5 | 9.51 |
| .0015 | 12,500 | 1996 | 9 | 10 | 11 | 12 | 12.66 |
| | 7,000 | 1994 | 9 | 9 | 10 | 8 | 10.59 |
| | 5,000 | 1993 | 8 | 9 | 9 | 7 | 10.59 |
| | 3,500 | 1992 | 8 | 9 | 8 | 5 | 9.51 |
| | 2,000 | 1991 | 7 | 8 | 8 | 5 | 9.51 |
| .002 | 12,500 | 1996 | 9 | 12 | 13 | 15 | 15.00 |
| | 10,000 | 1995 | 9 | 10 | 11 | 12 | 13.83 |
| | 7,000 | 1994 | 9 | 9 | 10 | 10 | 12.66 |
| | 5,000 | 1993 | 8 | 9 | 9 | 8 | 11.88 |
| | 3,500 | 1992 | 8 | 8 | 9 | 7 | 11.16 |
| | 2,000 | 1991 | 7 | 8 | 8 | 6 | 11.16 |
| .003 | 12,500 | 1996 | 9 | 12 | 13 | 15 | 18.60 |
| | 10,000 | 1995 | 9 | 11 | 12 | 13 | 16.20 |
| | 7,000 | 1994 | 9 | 10 | 10 | 10 | 13.80 |
| | 5,000 | 1993 | 8 | 9 | 9 | 9 | 12.78 |
| | 3,500 | 1992 | 8 | 9 | 9 | 8 | 11.88 |
| | 2,000 | 1991 | 7 | 8 | 8 | 7 | 11.88 |
| .005 | 10,000 | 1995 | 10 | 13 | 14 | 15 | 19.47 |
| | 7,000 | 1994 | 9 | 11 | 12 | 11 | 18.39 |
| | 5,000 | 1993 | 9 | 11 | 12 | 10 | 12.93 |
| | 3,500 | 1992 | 9 | 10 | 11 | 9 | 12.78 |
| | 2,000 | 1991 | 8 | 9 | 10 | 8 | 12.78 |
| .01 | 7,000 | 1994 | 10 | 13 | 15 | 15 | 20.37 |
| | 5,000 | 1993 | 10 | 13 | 15 | 15 | 19.89 |
| | 3,500 | 1992 | 10 | 13 | 14 | 14 | 19.47 |
| | 2,000 | 1991 | 10 | 13 | 14 | 14 | 19.47 |
| .02 | 3,500 | 1992 | 10 | 14 | 16 | 17 | 19.47 |
| | 2,000 | 1991 | 10 | 13 | 15 | 15 | 18.12 |
| .05 | 3,500 | 1992 | 10 | 14 | 17 | 18 | 22.56 |
| | 2,000 | 1991 | 10 | 14 | 16 | 17 | 19.47 |
| .1 | 2,000 | 1991 | 10 | 14 | 17 | 18 | 22.56 |

RESISTANCE



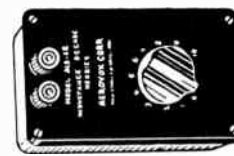
ARD

CAPACITANCE



ACD

INDUCTANCE



ALD

All ratings are maximum and no guarantee can be enforced if ratings are exceeded in any way. Overload can change accuracy or cause actual burn-outs. Multiple dial units have the highest value multipliers on the left-hand side so that readings are in order exactly as they should be read.

| PART NO. | TYPE | DIELECTRIC | DIALS | RANGE | STEPS | ACCURACY \pm | | RATING | | Net Price |
|--------------------|------|------------------|-------|----------------|------------|----------------|----------|--------------------|--------------------|-----------|
| | | | | | | 1st Dial | 2nd Dial | 1st Dial | 2nd Dial | |
| RESISTANCE | | | | | | | | | | |
| ARD-15 | R | Wire-Wound | 2 | 0 to 110 ohms | 1.0 ohm | 5% | 3% | 1.0 Amp. | .5 Amp. | 15.15 |
| ARD-23 | R | Wire-Wound | 2 | 0 to 11 K | 100 ohm | 3% | 3% | 100 Ma. | 50 Ma. | 15.15 |
| ARD-31 | R | Carbon Deposited | 2 | 0 to 1.1 meg. | 10 K ohms | 1% | 1% | 5 Ma. | 2 Ma. | 15.15 |
| CAPACITANCE | | | | | | | | | | |
| ACD-13 | C | Mica | 2 | 0 to .011 mfd. | .0001 mfd. | 3% | 3% | 600 VDC 220 VAC | 600 VDC 220 VAC | 14.50 |
| ACD-23 | C | Oil-Paper | 2 | 0 to 1.1 mfd. | .01 mfd. | 3% | 3% | 600 VDC 220 VAC | 600 VDC 220 VAC | 16.50 |
| ACD-33 | C | Oil-Paper | 1 | 0 to 10.0 mfd. | 1.0 mfd. | 3% | — | 600 VDC 220 VAC | — | 27.25 |
| INDUCTANCE | | | | | | | | | | |
| ALD-12 | L | Toroidal | 1 | 0 to 10 mh. | 1.0 mh. | 2% | — | 250 MaDC | — | 29.90 |
| ALD-22 | L | Toroidal | 1 | 0 to 100 mh. | 10.0 mh. | 2% | — | 79 MaDC | — | 29.90 |
| ALD-32 | L | Toroidal | 1 | 0 to 1.0 hy. | 100.0 mh. | 2% | — | 25 MaDC | — | 29.90 |
| ALD-42 | L | Toroidal | 1 | 0 to 10.0 hy. | 1.0 hy. | 2% | — | 8 MaDC | — | 32.90 |

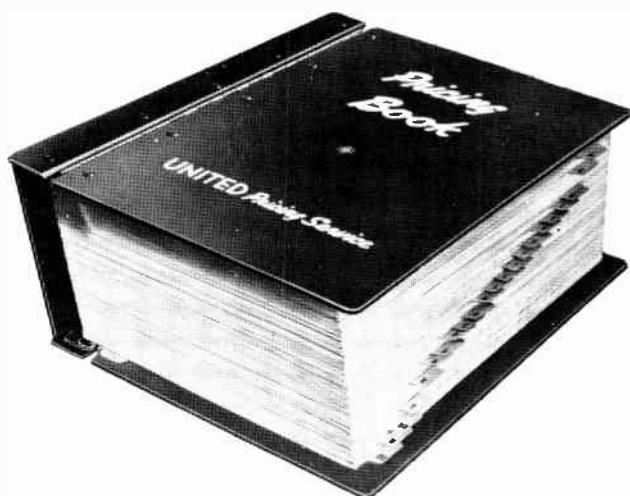
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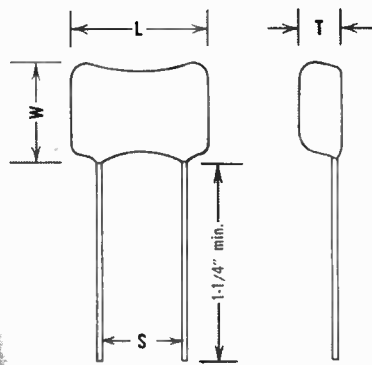
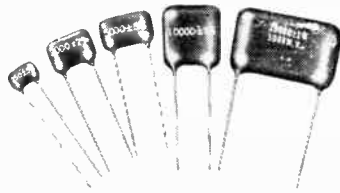


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ELMENCO
CAPACITORS

DUR-MICA
CASE SIZES



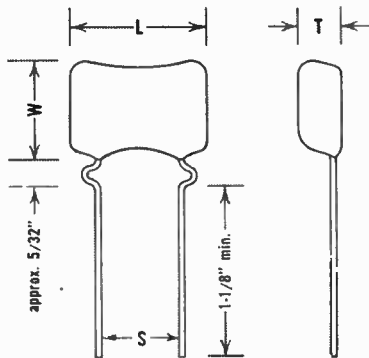
| | DM-15 | DM-16 | DM-19 | DM-20 | DM-30 | DM-40 | DM-42 | DM-43 |
|----------------|-------|-------|-------|-------|-------|-------|--------|---------|
| S | | | | | | | | |
| ± 1/32 | 15/64 | 1/2 | 11/32 | 7/16 | 7/16 | 19/32 | 1-1/16 | 1-11/16 |
| LEAD WIRE GAGE | # 22 | # 22 | # 20 | # 20 | # 18 | # 18 | # 18 | # 18 |

CASE SIZES — DUR-MICA SERIES

| CASE SIZE | Cap. mmf. | Volt. VDCW | L max. | W max. | T max. |
|-----------|-----------|------------|--------|--------|--------|
| DM-15 | 10 | 500 | .446 | .351 | .163 |
| | 40 | 500 | .448 | .355 | .166 |
| | 100 | 500 | .451 | .360 | .175 |
| | 200 | 500 | .457 | .372 | .190 |
| | 400 | 500 | .470 | .395 | .220 |
| DM-16 | 400 | 300 | .457 | .365 | .190 |
| | 600 | 300 | .463 | .371 | .204 |
| | 820 | 300 | .470 | .378 | .220 |
| | 430 | 500 | .726 | .378 | .196 |
| | 600 | 500 | .731 | .388 | .210 |
| DM-19 | 720 | 500 | .736 | .395 | .220 |
| | 720 | 300 | .723 | .365 | .190 |
| | 900 | 300 | .726 | .368 | .197 |
| | 1100 | 300 | .730 | .372 | .206 |
| | 1300 | 300 | .733 | .375 | .214 |
| DM-20 | 100 | 500 | .622 | .476 | .178 |
| | 200 | 500 | .624 | .478 | .180 |
| | 500 | 500 | .628 | .482 | .186 |
| | 1000 | 500 | .636 | .490 | .197 |
| | 2000 | 500 | .652 | .506 | .219 |
| DM-30 | 3000 | 500 | .668 | .520 | .240 |
| | 3000 | 300 | .655 | .510 | .223 |
| | 4000 | 300 | .665 | .520 | .240 |
| | 4300 | 500 | .760 | .525 | .258 |
| | 4300 | 300 | .750 | .511 | .233 |
| DM-40 | 5000 | 300 | .755 | .520 | .242 |
| | 6200 | 300 | .763 | .533 | .258 |
| | 3000 | 500 | .757 | .845 | .238 |
| | 5000 | 500 | .765 | .855 | .253 |
| | 7000 | 500 | .773 | .865 | .268 |
| DM-42 | 10000 | 500 | .783 | .879 | .290 |
| | 10000 | 300 | .780 | .855 | .273 |
| | 15000 | 300 | .798 | .868 | .302 |
| | 20000 | 300 | .815 | .880 | .330 |
| | 3000 | 500 | .927 | .659 | .220 |
| DM-43 | 5000 | 500 | .938 | .682 | .247 |
| | 10000 | 500 | .965 | .740 | .315 |
| | 10000 | 300 | .962 | .693 | .263 |
| | 15000 | 300 | .990 | .725 | .305 |
| | 10000 | 500 | 1.385 | .833 | .237 |
| DM-44 | 20000 | 500 | 1.406 | .851 | .287 |
| | 30000 | 500 | 1.426 | .868 | .337 |
| | 40000 | 500 | 1.446 | .886 | .384 |
| | 40000* | 300 | 1.431 | .880 | .357 |
| | 50000 | 300 | 1.446 | .918 | .396 |
| DM-45 | 63000 | 300 | 1.466 | .963 | .442 |
| | 50000 | 500 | 2.056 | .873 | .352 |
| | 60000 | 500 | 2.069 | .884 | .381 |
| | 75000 | 500 | 2.089 | .901 | .428 |
| | 75000 | 300 | 2.069 | .912 | .391 |
| DM-46 | 90000 | 300 | 2.084 | .948 | .425 |
| | 100000 | 300 | 2.092 | .964 | .443 |

Crimped Leads

In addition to the straight lead design, DM capacitors are also available with crimped leads for printed circuit application. The crimp provides a positive stop when capacitors are mounted. This prevents interference of resin coat on the leads with dip-solder operation, provides greater mounting uniformity, and elevates the components slightly above the surface of the board. The crimp lead design is not a regularly stocked item, but it is available to special order at a small fixed handling charge.



Lead wire gage for crimped lead units is the same as for straight lead capacitors with the exception of DM15 and DM16. Crimped lead gage of DM15 and DM16 is #20.

Maximum Dimensions

The following is a tabulation of maximum dimensions of the various DM case sizes. They have been specified to anticipate variations in coat thickness and minor protrusions on the surface. As a result, average dimensions of a given lot may be appreciably smaller than those listed.

It is to be noted that the leads are not centered in the thickness dimension as can be seen on the end view dimensional drawing. Construction of Elmenco Dur-Mica capacitors provides for leads to project from one surface of the mica stack, causing them in turn to extend from one edge of the capacitor. Regardless of case size and overall thickness, leads will always be within 1/16 to 3/32 from one of the capacitor surfaces.

The "W" dimension specifies the distance from the top of the capacitor to the point where the visible dip-coat ends on the leads. However, for reliable lead attachment, another 5/64 lead length should be allowed for resinous coating before solder connection is made.

Not all dimensions of every capacitance value are listed below. It has been found that size varies almost linearly with capacitance value. As a result, dimensions of values between those specified below should be determined by interpolation.

TYPE SCDM SINGLE COAT

| SCDM-10 | Cap. mmf. | Volt. VDCW | L max. | W max. | T max. |
|---------|-----------|------------|--------|--------|--------|
| SCDM-10 | 10 | 500 | .303 | .210 | .113 |
| | 50 | 500 | .305 | .210 | .121 |
| | 100 | 500 | .309 | .210 | .130 |
| | 150 | 500 | .311 | .210 | .139 |
| | 200 | 500 | .313 | .210 | .149 |
| | 250 | 500 | .315 | .210 | .159 |
| SCDM-15 | 300 | 300 | .315 | .210 | .159 |
| | 390 | 100 | .315 | .210 | .159 |
| SCDM-15 | 10 | 500 | .415 | .267 | .144 |
| | 40 | 500 | .417 | .268 | .146 |
| | 100 | 500 | .419 | .271 | .148 |
| | 200 | 500 | .423 | .275 | .152 |
| | 400 | 500 | .430 | .283 | .160 |
| | 400 | 300 | .425 | .277 | .156 |
| SCDM-15 | 600 | 300 | .430 | .282 | .162 |
| | 820 | 300 | .437 | .287 | .169 |
| | 1000 | 100 | .442 | .290 | .174 |



ELMENCO CAPACITORS

TYPES
DM-15, DM-16
DM-19, DM-20

DUR-MICA

TYPE DM-10 500VDCW (SCDM 10 values and prices the same)

| Cap. Mmf. | Type Designation | ± 10% "K" | Net Price | Tolerance ± 5% "J" | ± 2% "G" | ± 1% "F" |
|-----------|------------------|-----------|-----------|--------------------|----------|----------|
| 1 | DM-10-010† | \$0.18 | | | | |
| 2 | DM-10-020† | .18 | | | | |
| 3 | DM-10-030† | .18 | | | | |
| 5 | DM-10-050 | .18 | | | | |
| 10 | DM-10-100 | .18 | \$0.20 | | | |
| 12 | DM-10-120 | .21 | .23 | | | |
| 15 | DM-10-150 | .21 | .23 | | | |
| 18 | DM-10-180 | .21 | .23 | | | |
| 20 | DM-10-200 | .21 | .23 | | | |
| 22 | DM-10-220 | .21 | .23 | | | |
| 24 | DM-10-240 | .21 | .23 | | | |
| 27 | DM-10-270 | .21 | .23 | \$0.28 | | |
| 30 | DM-10-300 | .21 | .23 | .28 | | |
| 33 | DM-10-330 | .21 | .23 | .28 | | |
| 36 | DM-10-360 | .21 | .23 | .28 | | |
| 39 | DM-10-390 | .21 | .23 | .28 | | |
| 43 | DM-10-430 | .21 | .23 | .28 | | |
| 47 | DM-10-470 | .24 | .26 | .31 | | |
| 50 | DM-10-500 | .24 | .26 | .31 | \$0.38 | |
| 51 | DM-10-510 | .24 | .26 | .31 | .38 | |
| 56 | DM-10-560 | .24 | .26 | .31 | .38 | |
| 62 | DM-10-620 | .24 | .26 | .31 | .38 | |
| 68 | DM-10-680 | .24 | .26 | .31 | .38 | |
| 75 | DM-10-750 | .24 | .26 | .31 | .38 | |
| 82 | DM-10-820 | .24 | .26 | .31 | .38 | |
| 91 | DM-10-910 | .24 | .26 | .31 | .38 | |
| 100 | DM-10-101 | .24 | .26 | .31 | .38 | |
| 110 | DM-10-111 | .24 | .26 | .31 | .38 | |
| 120 | DM-10-121 | .27 | .30 | .35 | .43 | |
| 130 | DM-10-131 | .27 | .30 | .35 | .43 | |
| 150 | DM-10-151 | .30 | .33 | .37 | .48 | |
| 160 | DM-10-161 | .33 | .37 | .43 | .53 | |
| 180 | DM-10-181 | .36 | .40 | .47 | .58 | |
| 200 | DM-10-201 | .36 | .40 | .47 | .58 | |
| 220 | DM-10-221 | .39 | .43 | .51 | .62 | |
| 240 | DM-10-241 | .42 | .46 | .55 | .67 | |
| 250 | DM-10-251 | .42 | .46 | .55 | .67 | |
| 270* | DM-10-271 | .42 | .46 | .55 | .67 | |
| 300* | DM-10-301 | .45 | .50 | .59 | .72 | |
| 330** | DM-10-331 | .45 | .50 | .59 | .72 | |
| 360** | DM-10-361 | .48 | .53 | .62 | .77 | |
| 390** | DM-10-391 | .51 | .56 | .67 | .82 | |

TYPE DM-15 500VDCW (SCDM15 values and prices the same)

| Cap. Mmf. | Type Designation | ± 10% "K" | Net Price | Tolerance ± 5% "J" | ± 2% "G" | ± 1% "F" |
|-----------|------------------|-----------|-----------|--------------------|----------|----------|
| 1 | DM-15-010† | \$0.15 | | | | |
| 2 | DM-15-020† | .15 | | | | |
| 3 | DM-15-030† | .15 | | | | |
| 5 | DM-15-050† | .15 | | | | |
| 10 | DM-15-100 | .15 | \$0.17 | | | |
| 12 | DM-15-120 | .15 | .17 | | | |
| 15 | DM-15-150 | .15 | .17 | | | |
| 18 | DM-15-180 | .15 | .17 | | | |
| 20 | DM-15-200 | .15 | .17 | | | |
| 22 | DM-15-220 | .15 | .17 | | | |
| 24 | DM-15-240 | .15 | .17 | | | |
| 27 | DM-15-270 | .15 | .17 | \$0.20 | | |
| 30 | DM-15-300 | .15 | .17 | .20 | | |
| 33 | DM-15-330 | .15 | .17 | .20 | | |
| 36 | DM-15-360 | .15 | .17 | .20 | | |
| 39 | DM-15-390 | .15 | .17 | .20 | | |
| 43 | DM-15-430 | .15 | .17 | .20 | | |
| 47 | DM-15-470 | .15 | .17 | .20 | | |
| 50 | DM-15-500 | .15 | .17 | .20 | \$0.24 | |
| 51 | DM-15-510 | .15 | .17 | .20 | .24 | |
| 56 | DM-15-560 | .15 | .17 | .20 | .24 | |
| 62 | DM-15-620 | .15 | .17 | .20 | .24 | |
| 68 | DM-15-680 | .15 | .17 | .20 | .24 | |
| 75 | DM-15-820 | .15 | .17 | .20 | .24 | |
| 82 | DM-15-820 | .15 | .17 | .20 | .24 | |
| 91 | DM-15-910 | .15 | .17 | .20 | .24 | |
| 100 | DM-15-101 | .15 | .17 | .20 | .24 | |
| 110 | DM-15-111 | .18 | .20 | .23 | .29 | |
| 120 | DM-15-121 | .18 | .20 | .23 | .29 | |
| 130 | DM-15-131 | .18 | .20 | .23 | .29 | |
| 150 | DM-15-151 | .18 | .20 | .23 | .29 | |
| 160 | DM-15-161 | .21 | .23 | .28 | .34 | |
| 180 | DM-15-181 | .21 | .23 | .28 | .34 | |
| 200 | DM-15-201 | .21 | .23 | .28 | .34 | |
| 220 | DM-15-221 | .24 | .26 | .31 | .38 | |
| 240 | DM-15-241 | .24 | .26 | .31 | .38 | |
| 250 | DM-15-251 | .24 | .26 | .31 | .38 | |
| 270 | DM-15-271 | .27 | .30 | .35 | .43 | |
| 300 | DM-15-301 | .27 | .30 | .35 | .43 | |
| 330 | DM-15-331 | .30 | .33 | .39 | .48 | |
| 360 | DM-15-361 | .30 | .33 | .39 | .48 | |
| 390 | DM-15-391 | .33 | .37 | .43 | .53 | |
| 430* | DM-15-431 | .33 | .37 | .43 | .53 | |
| 470* | DM-15-471 | .36 | .40 | .47 | .58 | |
| 500* | DM-15-501 | .36 | .40 | .47 | .58 | |
| 510* | DM-15-511 | .36 | .40 | .47 | .58 | |
| 560* | DM-15-561 | .39 | .43 | .51 | .62 | |
| 620* | DM-15-621 | .42 | .46 | .55 | .67 | |
| 680* | DM-15-681 | .45 | .50 | .59 | .72 | |
| 750* | DM-15-751 | .48 | .53 | .62 | .77 | |
| 820* | DM-15-821 | .51 | .56 | .67 | .82 | |
| 910** | DM-15-911 | .57 | .63 | .74 | .86 | |
| 1000** | DM-15-102 | .60 | .66 | .78 | .96 | |

NOTE

Characteristics on above are as follows:
DM-15 "C" Characteristic from 1 to 24 Mmf.
DM-15 "E" Characteristic from 27 to 82 Mmf.
DM-15 "F" Characteristic from 91 and up.
†Minimum Tolerance ±0.5 Mmf.

TYPE DM-19 500VDCW

| Cap. Mmf. | Type Designation | ± 10% "K" | Net Price | Tolerance ± 5% "J" | ± 2% "G" | ± 1% "F" |
|-----------|------------------|-----------|-----------|--------------------|----------|----------|
| 100 | DM-19-101 | \$0.15 | | | | \$0.23 |
| 110 | DM-19-111 | .18 | .20 | .18 | .18 | .27 |
| 120 | DM-19-121 | .18 | .20 | .18 | .18 | .27 |
| 130 | DM-19-131 | .18 | .20 | .18 | .18 | .27 |
| 150 | DM-19-151 | .18 | .20 | .18 | .18 | .27 |
| 160 | DM-19-161 | .18 | .20 | .18 | .18 | .27 |
| 180 | DM-19-181 | .18 | .20 | .18 | .18 | .27 |
| 200 | DM-19-201 | .18 | .20 | .18 | .18 | .27 |
| 220 | DM-19-221 | .18 | .20 | .18 | .18 | .27 |
| 240 | DM-19-241 | .21 | .23 | .25 | .32 | .32 |
| 250 | DM-19-251 | .21 | .23 | .25 | .32 | .32 |
| 270 | DM-19-271 | .24 | .26 | .29 | .36 | .36 |
| 300 | DM-19-301 | .24 | .26 | .29 | .36 | .36 |
| 330 | DM-19-331 | .24 | .26 | .29 | .36 | .36 |
| 360 | DM-19-361 | .27 | .30 | .32 | .41 | .41 |
| 390 | DM-19-391 | .27 | .30 | .32 | .41 | .41 |
| 430 | DM-19-431 | .27 | .30 | .32 | .41 | .41 |
| 470 | DM-19-471 | .30 | .33 | .36 | .45 | .45 |
| 500 | DM-19-501 | .30 | .33 | .36 | .45 | .45 |
| 510 | DM-19-511 | .30 | .33 | .36 | .45 | .45 |
| 560 | DM-19-561 | .33 | .37 | .40 | .50 | .50 |
| 620 | DM-19-621 | .33 | .37 | .40 | .50 | .50 |
| 680 | DM-19-681 | .36 | .40 | .43 | .54 | .54 |
| 750 | DM-19-751 | .36 | .40 | .43 | .54 | .54 |
| 820 | DM-19-821 | .36 | .40 | .43 | .54 | .54 |
| 910 | DM-19-911 | .39 | .43 | .47 | .59 | .59 |
| 1000 | DM-19-102 | .42 | .46 | .50 | .63 | .63 |
| 1100 | DM-19-112 | .42 | .46 | .50 | .63 | .63 |
| 1200 | DM-19-122 | .45 | .50 | .54 | .68 | .68 |
| 1300 | DM-19-132 | .48 | .53 | .58 | .72 | .72 |
| 1500 | DM-19-152 | .51 | .56 | .61 | .77 | .77 |
| 1600 | DM-19-162 | .54 | .59 | .65 | .81 | .81 |
| 1800 | DM-19-182 | .60 | .66 | .72 | .90 | .90 |
| 2000 | DM-19-202 | .66 | .73 | .79 | .99 | .99 |
| 2200 | DM-19-222 | .72 | .79 | .86 | 1.08 | 1.08 |
| 2400 | DM-19-242 | .78 | .86 | .94 | 1.17 | 1.17 |
| 2500 | DM-19-252 | .81 | .89 | .97 | 1.23 | 1.23 |
| 2700 | DM-19-272 | .84 | .92 | 1.01 | 1.26 | 1.26 |
| 3000 | DM-19-302 | .90 | .99 | 1.08 | 1.35 | 1.35 |
| 3300 | DM-19-332 | .96 | 1.06 | 1.15 | 1.44 | 1.44 |
| 3600 | DM-19-362 | 1.02 | 1.12 | 1.22 | 1.53 | 1.53 |
| 3900 | DM-19-392 | 1.08 | 1.19 | 1.30 | 1.62 | 1.62 |
| 4300 | DM-19-432 | 1.14 | 1.25 | 1.37 | 1.71 | 1.71 |
| 4700 | DM-19-472 | 1.20 | 1.32 | 1.44 | 1.80 | 1.80 |
| 5000 | DM-19-502 | 1.26 | 1.39 | 1.51 | 1.89 | 1.89 |
| 5100 | DM-19-512 | 1.26 | 1.39 | 1.51 | 1.89 | 1.89 |
| 5600* | DM-19-562 | 1.32 | 1.45 | 1.58 | 1.98 | 1.98 |
| 6200* | DM-19-622 | 1.38 | 1.52 | 1.66 | 2.07 | 2.07 |
| 6800** | DM-19-682 | 1.38 | 1.52 | 1.66 | 2.07 | 2.07 |
| 7500** | DM-19-752 | 1.44 | 1.58 | 1.73 | 2.16 | 2.16 |
| 8200** | DM-19-822 | 1.50 | 1.65 | 1.80 | 2.25 | 2.25 |

TYPE DM-20 500VDCW

| Cap. Mmf. | Type Designation | ± 10% "K" | Net Price | Tolerance ± 5% "J" | ± 2% "G" | ± 1% "F" |
|-----------|------------------|-----------|-----------|--------------------|----------|----------|
| 680 | DM-20-681 | \$0.30 | \$0.33 | \$0.36 | \$0.45 | |
| 750 | DM-20-751 | .30 | .33 | .36 | .45 | |
| 820 | DM-20-821 | .30 | .33 | .36 | .45 | |
| 910 | DM-20-911 | .33 | .37 | .40 | .50 | |
| 1090 | DM-20-102 | .36 | .40 | .43 | .54 | |
| 1100 | DM-20-112 | .36 | .40 | .43 | .54 | |
| 1200 | DM-20-122 | .39 | .43 | .47 | .59 | |
| 1300 | DM-20-132 | .42 | .46 | .50 | .63 | |
| 1500 | DM-20-152 | .45 | .50 | .54 | .68 | |
| 1600 | DM-20-162 | .48 | .53 | .58 | .72 | |
| 1800 | DM-20-182 | .54 | .59 | .65 | .81 | |
| 2000 | DM-20-202 | .57 | .63 | .68 | .86 | |
| 2200 | DM-20-222 | .63 | .70 | .76 | .95 | |
| 2400 | DM-20-242 | .66 | .73 | .79 | .99 | |
| 2500 | DM-20-252 | .66 | .73 | .79 | .99 | |
| 2700 | DM-20-272 | .72 | .79 | .86 | 1.08 | |
| 3000 | DM-20-302 | .78 | .86 | .94 | 1.17 | |
| 3300 | DM-20-332 | .84 | .92 | 1.01 | 1.26 | |
| 3600 | DM-20-362 | .90 | .99 | 1.08 | 1.35 | |
| 3900 | DM-20-392 | .96 | 1.06 | 1.15 | 1.44 | |
| 4300 | DM-20-432 | 1.02 | 1.12 | 1.22 | 1.53 | |
| 4700 | DM-20-472 | 1.08 | 1.19 | 1.30 | 1.62 | |
| 5000 | DM-20-502 | 1.14 | 1.25 | 1.37 | 1.71 | |
| 5100 | DM-20-512 | 1.17 | 1.29 | 1.40 | 1.76 | |
| 5600 | DM-20-562 | 1.20 | 1.32 | 1.44 | 1.80 | |
| 6200* | DM-20-622 | 1.20 | 1.32 | 1.44 | 1.80 | |
| 6800* | DM-20-682 | 1.26 | 1.39 | 1.51 | 1.89 | |
| 7500** | DM-20-752 | 1.32 | 1.45 | 1.58 | 1.98 | |
| 8200** | DM-20-822 | 1.44 | 1.58 | 1.73 | 2.16 | |
| 9100** | DM-20-912 | 1.62 | 1.78 | 1.94 | 2.43 | |
| 10000** | DM-20-103 | 1.80 | 1.98 | 2.16 | 2.70 | |

Notes: Higher DM-20 values are available on special order as follows:
up to 10,000 mmf. at 500VDCW
up to 12,000 mmf. at 300VDCW
up to 18,000 mmf. at 100VDCW
Characteristics of DM-19 and DM-20 are as follows:
C characteristic 1 to 180 mmf.
E characteristic 200 to 510 mmf.
F characteristic 560 and up.
For ±1/2% double the list price of the 5% units.

Lower values less than above listing use DM-15 prices.

All capacities marked with * are 300VDCW.
All capacities marked with ** are 100VDCW.



ARCO
electronics inc.
GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

ELMENCO
CAPACITORS

TYPES
DM-30, DM-40, DM-42
DM-43, SCDM-15

TYPE DM-30 500VDCW

DUR-MICA

TYPE HRDM

| Cap. Mmf. | Type Designation | Net Price Tolerance | | | |
|-----------|------------------|---------------------|----------|----------|----------|
| | | ± 10% "K" | ± 5% "J" | ± 2% "G" | ± 1% "F" |
| 4300 | DM-30-432 | \$0.96 | \$1.06 | \$1.15 | \$1.25 |
| 4700 | DM-30-472 | 1.02 | 1.12 | 1.22 | 1.33 |
| 5000 | DM-30-502 | 1.05 | 1.16 | 1.26 | 1.37 |
| 5100 | DM-30-512 | 1.05 | 1.16 | 1.26 | 1.37 |
| 5600 | DM-30-562 | 1.08 | 1.19 | 1.30 | 1.40 |
| 6200 | DM-30-622 | 1.14 | 1.25 | 1.37 | 1.48 |
| 6800 | DM-30-682 | 1.26 | 1.39 | 1.51 | 1.64 |
| 7500 | DM-30-752 | 1.38 | 1.52 | 1.66 | 1.79 |
| 8200 | DM-30-822 | 1.50 | 1.65 | 1.80 | 1.95 |
| 9100 | DM-30-912 | 1.62 | 1.78 | 1.94 | 2.11 |
| 10000 | DM-30-103 | 1.80 | 1.98 | 2.16 | 2.34 |
| 12000 | DM-30-123 | 2.10 | 2.41 | 2.52 | 2.73 |
| 13000 | DM-30-133 | 2.25 | 2.48 | 2.70 | 2.93 |
| 15000 | DM-30-153 | 2.55 | 2.81 | 3.06 | 3.32 |
| 16000 | DM-30-163 | 2.70 | 2.97 | 3.24 | 3.51 |
| 18000 | DM-30-183 | 3.00 | 3.30 | 3.60 | 3.90 |
| 20000 | DM-30-203 | 3.30 | 3.63 | 3.96 | 4.29 |
| 22000* | DM-30-223 | 3.42 | 3.76 | 4.10 | 4.45 |
| 24000* | DM-30-243 | 3.69 | 4.06 | 4.43 | 4.80 |
| 25000* | DM-30-253 | 3.84 | 4.22 | 4.61 | 4.99 |
| 27000* | DM-30-273 | 4.11 | 4.52 | 4.93 | 5.35 |
| 30000** | DM-30-303 | 4.50 | 4.95 | 5.40 | 5.85 |
| 33000** | DM-30-333 | 4.95 | 5.45 | 5.94 | 6.44 |
| 36000** | DM-30-363 | 5.40 | 5.94 | 6.48 | 7.02 |

TYPE DM-40 500VDCW

This case size series is available, but it is not carried as a standard stock item as yet. Add 15% to net prices for DM-30 values with comparable specifications to determine the DM-40 net price. Delivery time is four weeks.

TYPE DM-42 500VDCW

| CAP. MMF. | TYPE DESIGNATION | NET PRICE TOLERANCE | | | |
|-----------|------------------|---------------------|----------|----------|------------|
| | | ± 5% "J" | ± 2% "G" | ± 1% "F" | ± 0.5% "E" |
| 10000 | DM-42-103 | \$1.98 | \$2.28 | \$2.48 | \$2.68 |
| 12000 | DM-42-123 | 2.34 | 2.69 | 2.93 | 3.15 |
| 13000 | DM-42-133 | 2.52 | 2.90 | 3.15 | 3.40 |
| 15000 | DM-42-153 | 2.88 | 3.31 | 3.60 | 3.88 |
| 16000 | DM-42-163 | 3.06 | 3.52 | 3.83 | 4.11 |
| 18000 | DM-42-183 | 3.42 | 3.94 | 4.28 | 4.61 |
| 20000 | DM-42-203 | 3.78 | 4.35 | 4.73 | 5.06 |
| 22000 | DM-42-223 | 4.14 | 4.76 | 5.18 | 5.53 |
| 24000 | DM-42-243 | 4.50 | 5.18 | 5.63 | 5.98 |
| 25000 | DM-42-253 | 4.68 | 5.38 | 5.85 | 6.20 |
| 27000 | DM-42-273 | 5.05 | 5.88 | 6.30 | 6.65 |
| 30000 | DM-42-303 | 5.58 | 6.42 | 6.98 | 7.33 |
| 33000 | DM-42-333 | 6.12 | 7.04 | 7.65 | 8.03 |
| 36000 | DM-42-363 | 6.68 | 7.66 | 8.33 | 8.73 |
| 39000 | DM-42-393 | 7.20 | 8.28 | 9.00 | 9.40 |
| 43000 | DM-42-433 | 7.80 | 8.97 | 9.75 | 10.15 |
| 47000 | DM-42-473 | 8.40 | 9.66 | 10.50 | 10.95 |
| 50000 | DM-42-503 | 8.82 | 10.15 | 11.03 | 11.65 |
| 51000* | DM-42-513 | 9.00 | 10.35 | 11.25 | 11.85 |
| 56000* | DM-42-563 | 8.52 | 9.80 | 10.65 | 11.25 |
| 62000* | DM-42-623 | 9.36 | 10.76 | 11.70 | 12.30 |
| 68000** | DM-42-683 | 10.20 | 11.33 | 12.75 | 13.35 |
| 75000** | DM-42-753 | 11.22 | 12.91 | 14.03 | 14.75 |
| 82000** | DM-42-823 | 12.24 | 14.08 | 15.30 | 16.05 |

TYPE DM-43 500 VDCW

| | | | | |
|----------|-----------|--------|--------|---------|
| 47000 | DM-43-473 | \$8.52 | \$9.80 | \$10.65 |
| 50000 | DM-43-503 | 8.70 | 10.01 | 10.88 |
| 51000 | DM-43-513 | 8.88 | 10.21 | 11.10 |
| 56000 | DM-43-563 | 9.72 | 11.18 | 12.15 |
| 62000 | DM-43-623 | 10.74 | 12.35 | 13.43 |
| 68000 | DM-43-683 | 11.70 | 13.46 | 14.63 |
| 75000* | DM-43-753 | 9.60 | 11.04 | 12.00 |
| 82000* | DM-43-823 | 10.50 | 12.08 | 13.13 |
| 91000* | DM-43-913 | 11.40 | 13.11 | 14.25 |
| 100000* | DM-43-104 | 12.60 | 14.49 | 15.75 |
| 110000** | DM-43-114 | 10.20 | 14.73 | 12.75 |
| 120000** | DM-43-124 | 11.10 | 12.77 | 13.88 |
| 130000** | DM-43-134 | 12.00 | 13.80 | 15.00 |

All capacities marked with * are 300VW. ** are 100 VW.

SCDM15 capacitors are units which have been given a single protective resin coat rather than the full series of dips to which standard units are subjected. There is a marked difference in size of these thin-coated capacitors, but there is a sacrifice in moisture resistance as a result. SCDM15 units are therefore recommended for applications requiring extreme miniaturization such as military and transistor filter, networks, and delay lines. However, for long term high reliability of operation, the capacitors should receive additional environmental protection such as encapsulation, circuit potting, or hermetic sealing.

| Type SCDM-15 Case Sizes:* | Cap. | Volt | L | W | T |
|---------------------------|------|------|------|------|------|
| | 10 | 500 | .415 | .267 | .144 |
| | 40 | 500 | .417 | .268 | .146 |
| | 100 | 500 | .419 | .271 | .148 |
| | 200 | 500 | .423 | .275 | .152 |
| | 400 | 500 | .430 | .283 | .160 |
| | 400 | 300 | .425 | .277 | .156 |
| | 600 | 300 | .430 | .282 | .162 |
| | 820 | 300 | .437 | .287 | .169 |
| | 1000 | 100 | .442 | .290 | .174 |

* Please refer to DM-15 case size information on page 366 which is equally applicable to SCDM-15 units.

Capacitance Values (mmf.)

| DM10 | DM15 | ± 10% | ± 5% | ± 2% | ± 1% |
|---------|-----------|-------|------|------|------|
| 1-10 | 1-100 | .30 | .32 | .35 | .39 |
| 12-43 | 110-150 | .33 | .35 | .39 | .44 |
| 47-110 | 160-200 | .38 | .39 | .43 | .49 |
| 120-130 | 220-250 | .39 | .42 | .47 | .53 |
| | 270-300 | .42 | .45 | .51 | .59 |
| | 150 | .45 | .48 | .54 | .63 |
| | 160 | .48 | .52 | .59 | .68 |
| | 180-200 | .51 | .56 | .63 | .74 |
| | 220 | .56 | .60 | .68 | .80 |
| | 240-270 | .61 | .64 | .72 | .86 |
| | 300-330 | .62 | .68 | .77 | .92 |
| | 360 | .66 | .71 | .81 | .96 |
| | 390 | .69 | .75 | .86 | 1.02 |
| | 910 | .75 | .81 | .94 | 1.06 |
| | 1000 | .80 | .85 | .98 | 1.11 |
| | DM19 | | | | |
| | DM20 | | | | |
| | 100 | .30 | .32 | .33 | .38 |
| | 110-220 | .33 | .35 | .37 | .42 |
| | 240-250 | .36 | .39 | .41 | .47 |
| | 270-330 | .39 | .42 | .44 | .51 |
| | 360-430 | .42 | .45 | .48 | .56 |
| | 470-510 | .45 | .48 | .51 | .60 |
| | 560-620 | .48 | .52 | .55 | .65 |
| | 680-820 | .51 | .56 | .59 | .70 |
| | 910 | .54 | .59 | .62 | .75 |
| | 1000-1100 | .57 | .62 | .66 | .79 |
| | 1200 | .60 | .65 | .70 | .84 |
| | 1300 | .63 | .68 | .74 | .88 |
| | 1500 | .70 | .76 | .81 | .98 |
| | 1600 | .70 | .76 | .81 | .93 |
| | 1800 | .73 | .79 | .84 | 1.02 |
| | 1800 | .76 | .82 | .88 | 1.09 |
| | 2200 | .79 | .86 | .92 | 1.12 |
| | 2000 | .82 | .89 | .96 | 1.16 |
| | 2200 | .88 | .96 | 1.03 | 1.25 |
| | 2700 | .90 | .98 | 1.06 | 1.29 |
| | 2400 | .95 | 1.02 | 1.11 | 1.35 |
| | 2500 | .97 | 1.05 | 1.14 | 1.38 |
| | 2700 | 1.00 | 1.09 | 1.17 | 1.43 |
| | 3000 | 1.04 | 1.13 | 1.22 | 1.49 |
| | 3300 | 1.10 | 1.20 | 1.29 | 1.58 |
| | 3600 | 1.17 | 1.27 | 1.37 | 1.68 |
| | 3900 | 1.23 | 1.34 | 1.45 | 1.78 |
| | 4300 | 1.30 | 1.41 | 1.53 | 1.88 |
| | 4700 | 1.37 | 1.49 | 1.61 | 1.98 |
| | 5000-5100 | 1.48 | 1.55 | 1.69 | 2.08 |
| | 5600-6200 | 1.50 | 1.62 | 1.77 | 2.18 |
| | 6800 | 1.56 | 1.70 | 1.86 | 2.29 |
| | 7500 | 1.63 | 1.77 | 1.94 | 2.39 |
| | 8200 | 1.69 | 1.85 | 2.03 | 2.50 |
| | 9100 | 1.76 | 1.92 | 2.11 | 2.61 |
| | 1000 | 1.85 | 2.04 | 2.21 | 2.85 |
| | 1000 | 2.07 | 2.25 | 2.45 | 3.04 |
| | DM30 | | | | |
| | 4300 | 1.13 | 1.23 | 1.33 | 1.43 |
| | 4700 | 1.19 | 1.30 | 1.41 | 1.51 |
| | 5000-5100 | 1.23 | 1.34 | 1.44 | 1.55 |
| | 5600 | 1.26 | 1.37 | 1.48 | 1.59 |
| | 6200 | 1.32 | 1.44 | 1.56 | 1.68 |
| | 6800 | 1.53 | 1.58 | 1.71 | 1.82 |
| | 7500 | 1.57 | 1.71 | 1.86 | 2.00 |
| | 8200 | 1.69 | 1.85 | 2.01 | 2.16 |
| | 9100 | 1.81 | 1.98 | 2.16 | 2.33 |
| | 10000 | 2.00 | 2.19 | 2.38 | 2.57 |
| | 12000 | 2.39 | 2.62 | 2.85 | 3.08 |
| | 13000 | 2.55 | 2.81 | 3.05 | 3.29 |
| | 15000 | 2.97 | 3.16 | 3.43 | 3.71 |
| | 16000 | 3.03 | 3.33 | 3.63 | 3.92 |
| | 18000 | 3.36 | .69 | 4.01 | 4.34 |
| | 20000 | 3.68 | 4.04 | 4.39 | 4.74 |
| | 22000 | 3.80 | 4.17 | 4.53 | 4.90 |
| | 24000 | 4.09 | 4.48 | 4.87 | 5.27 |
| | 25000 | 4.25 | 4.66 | 5.07 | 5.48 |
| | 27000 | 4.53 | 4.98 | 5.42 | 5.86 |
| | 30000 | 4.88 | 5.37 | 5.84 | 6.32 |
| | 33000 | 5.36 | 5.90 | 6.42 | 6.94 |
| | 36000 | 5.83 | 6.41 | 6.98 | 7.55 |

NOTE: Voltage ratings of items listed correspond to those indicated for the standard line DM capacitors in equivalent values and cases sizes indicated on previous pages.

THERE IS A SET-UP AND HANDLING CHARGE OF \$2.00 PER ITEM NET FOR HRDM CAPACITORS IN ADDITION TO THE UNIT PRICES INDICATED ABOVE.



ARCO
electronics inc.
GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

ELMENCO CAPACITORS

TYPES
VDM-20, VDM-30
VDM-42, VDM-43
HVDM-42, HVDM-43

HIGH VOLTAGE DUR-MICA

A new line of ELMENCO Silvered Hi-Voltage Dur-Mica capacitors is now available to complement the similar values in the molded configuration. These high voltage capacitors afford the same facility of use in low power applications by providing reliable operation in a small case size. Elmenco Dur-Mica capacitors may be substituted for similarly rated molded units normally supplied in the larger CM45, CM50, CM55, and CM60 case sizes. The Dur-Mica design provides advantage of higher tempera-

ture operation (125° C. max.); radial leads for printed circuit application; higher capacitance in a given case size; and improved reliability. The dipped units, being solidly impregnated with corona resistant material, do not have the voids which make molded types susceptible to corona. As a result, the dipped capacitors can be supplied with voltage rating as high as 5000VDCW. All Elmenco Dur-Mica capacitors are silvered mica construction. They conform to electrical and environmental specifications set forth in MIL-C-5 specifications.

| VDM-20 HI-VOLTAGE TOLERANCE ± 5% | | | | | |
|-------------------------------------|------------------|-----------------|-----------------|-----------------|------|
| CAP. MMF. | TYPE DESIGNATION | VDC 2000T 1000W | VDC 3000T 1500W | VDC 5000T 2500W | |
| 5 | VDM-20-050K | | | .24 | |
| 10 | VDM-20-100J | USE 2500V | USE 2500V | .24 | |
| 12 | VDM-20-120J | | | .24 | |
| 15 | VDM-20-150J | | | .24 | |
| 18 | VDM-20-180J | | | .27 | |
| 20 | VDM-20-200J | | | .24 | |
| 22 | VDM-20-220J | | | .27 | |
| 24 | VDM-20-240J | | | .27 | |
| 27 | VDM-20-270J | USE 1500V | | .27 | |
| 30 | VDM-20-300J | | | .27 | |
| 33 | VDM-20-330J | | | .24 | .30 |
| 36 | VDM-20-360J | | | .24 | .30 |
| 39 | VDM-20-390J | | | .24 | .30 |
| 43 | VDM-20-430J | | | .24 | .30 |
| 47 | VDM-20-470J | | | .24 | .33 |
| 50 | VDM-20-500J | | | .24 | .27 |
| 51 | VDM-20-510J | | | .24 | .27 |
| 56 | VDM-20-560J | | | .24 | .27 |
| 62 | VDM-20-620J | | | .24 | .27 |
| 68 | VDM-20-680J | | | .24 | .27 |
| 75 | VDM-20-750J | | | .24 | .27 |
| 82 | VDM-20-820J | | | .24 | .30 |
| 91 | VDM-20-910J | | | .24 | .30 |
| 100 | VDM-20-110J | | | .27 | .30 |
| 110 | VDM-20-111J | | | .27 | .30 |
| 120 | VDM-20-121J | | | .27 | .30 |
| 130 | VDM-20-131J | | | .27 | .33 |
| 150 | VDM-20-151J | | | .27 | .33 |
| 160 | VDM-20-161J | | | .30 | .36 |
| 180 | VDM-20-181J | | | .30 | .36 |
| 200 | VDM-20-201J | | | .30 | .36 |
| 220 | VDM-20-221J | | | .30 | .39 |
| 240 | VDM-20-241J | | | .30 | .39 |
| 250 | VDM-20-251J | | | .30 | .42 |
| 270 | VDM-20-271J | | | .30 | .42 |
| 300 | VDM-20-301J | | | .33 | .45 |
| 330 | VDM-20-331J | | | .33 | .48 |
| 360 | VDM-20-361J | | | .33 | .48 |
| 390 | VDM-20-391J | | | .36 | .51 |
| 430 | VDM-20-431J | | | .36 | .54 |
| 470 | VDM-20-471J | | | .36 | .57 |
| 500 | VDM-20-501J | | | .39 | .60 |
| 510 | VDM-20-511J | | | .39 | .60 |
| 560 | VDM-20-561J | | | .39 | .69 |
| 620 | VDM-20-621J | | | .42 | .69 |
| 680 | VDM-20-681J | | | .45 | .72 |
| 750 | VDM-20-751J | | | .45 | .78 |
| 820 | VDM-20-821J | | | .48 | .84 |
| 910 | VDM-20-911J | | | .51 | .90 |
| 1000 | VDM-20-102J | | | .54 | .96 |
| 1100 | VDM-20-112J | | | .57 | 1.05 |
| 1200 | VDM-20-122J | | | .60 | 1.11 |
| 1300 | VDM-20-132J | | | .63 | 1.20 |
| 1500 | VDM-20-152J | | | .66 | |
| 1600 | VDM-20-162J | | | .69 | |
| 1800 | VDM-20-182J | | | .75 | |
| 2000 | VDM-20-202J | | | .84 | |
| 2200 | VDM-20-222J | | | .90 | |
| 2400 | VDM-20-242J | | | .96 | |
| 2700 | VDM-20-272J | | | 1.05 | |
| 3000 | VDM-20-302J | | | 1.14 | |

| VDM-30 HI-VOLTAGE TOLERANCE ± 5% | | | | | |
|-------------------------------------|------------------|-----------------|-----------------|-----------------|--|
| CAP. MMF. | TYPE DESIGNATION | VDC 2000T 1000W | VDC 3000T 1500W | VDC 5000T 2500W | |
| 390 | VDM-30-391J | | | .75 | |
| 430 | VDM-30-431J | | | .81 | |
| 470 | VDM-30-471J | | | .87 | |
| 500 | VDM-30-501J | | | .96 | |
| 510 | VDM-30-511J | | | .96 | |
| 560 | VDM-30-561J | | | 1.02 | |
| 620 | VDM-30-621J | | | 1.08 | |
| 680 | VDM-30-681J | | | 1.20 | |
| 750 | VDM-30-751J | | | 1.26 | |
| 820 | VDM-30-821J | | | 1.41 | |
| 910 | VDM-30-911J | | | 1.53 | |
| 1000 | VDM-30-102J | | | 1.65 | |
| 1100 | VDM-30-112J | | | 1.80 | |
| 1200 | VDM-30-122J | | | 1.92 | |
| 1300 | VDM-30-132J | | | 2.04 | |
| 1500 | VDM-30-152J | | | 2.40 | |
| 1600 | VDM-30-162J | | | 2.52 | |
| 1800 | VDM-30-182J | | | 2.76 | |
| 2000 | VDM-30-202J | | | 3.15 | |
| 2200 | VDM-30-222J | | | 3.36 | |
| 2400 | VDM-30-242J | | | 3.66 | |
| 2700 | VDM-30-272J | | | 4.05 | |
| 3000 | VDM-30-302J | | | 1.80 | |
| 3300 | VDM-30-332J | | | 2.01 | |
| 3600 | VDM-30-362J | | | 2.19 | |
| 3900 | VDM-30-392J | | | 2.34 | |
| 4300 | VDM-30-432J | | | 2.52 | |
| 4700 | VDM-30-472J | | | 2.76 | |
| 5000 | VDM-30-502J | | | 2.91 | |
| 5100 | VDM-30-512J | | | 3.00 | |
| 5600 | VDM-30-562J | | | 3.30 | |
| 6200 | VDM-30-622J | | | 3.60 | |
| 6800 | VDM-30-682J | | | 2.52 | |
| 7500 | VDM-30-752J | | | 2.70 | |
| 8200 | VDM-30-822J | | | 3.00 | |
| 9100 | VDM-30-912J | | | 3.24 | |
| 10000 | VDM-30-103J | | | 3.60 | |
| 3000 | VDM-42-302J | | | 2.88 | |
| 3300 | VDM-42-332J | | | 3.00 | |
| 3600 | VDM-42-362J | | | 3.24 | |
| 3900 | VDM-42-392J | | | 3.51 | |
| 4300 | VDM-42-432J | | | 3.90 | |
| 4700 | VDM-42-472J | | | 4.14 | |
| 5000 | VDM-42-502J | | | 4.38 | |
| 5100 | VDM-42-512J | | | 4.38 | |
| 5600 | VDM-42-562J | | | 4.77 | |
| 6200 | VDM-42-622J | | | 5.28 | |
| 6800 | VDM-42-682J | | | 5.79 | |
| 7500 | VDM-42-752J | | | 6.30 | |
| 8200 | VDM-42-822J | | | 6.78 | |
| 9100 | VDM-42-912J | | | 7.53 | |
| 10000 | VDM-42-103J | | | 8.19 | |
| 12000 | VDM-42-123J | | | 5.31 | |
| 13000 | VDM-42-133J | | | 5.70 | |
| 15000 | VDM-42-153J | | | 6.51 | |
| 16000 | VDM-42-163J | | | 6.96 | |
| 18000 | VDM-42-183J | | | 7.77 | |
| 20000 | VDM-42-203J | | | 5.46 | |
| 22000 | VDM-42-223J | | | 6.00 | |
| 24000 | VDM-42-243J | | | 6.42 | |
| 25000 | VDM-42-253J | | | 6.72 | |
| 27000 | VDM-42-273J | | | 7.02 | |
| 30000 | VDM-42-303J | | | 7.29 | |

| VDM-43 HI-VOLTAGE TOLERANCE ± 5% | | | | | |
|-------------------------------------|------------------|-----------------|-----------------|-----------------|-------|
| CAP. MMF. | TYPE DESIGNATION | VDC 2000T 1000W | VDC 3000T 1500W | VDC 5000T 2500W | |
| 12000 | VDM-43-123J | | | USE VDM42 CASE | 9.72 |
| 13000 | VDM-43-133J | | | USE VDM42 CASE | 10.32 |
| 15000 | VDM-43-153J | | | USE VDM42 CASE | 11.82 |
| 20000 | VDM-43-203J | | | USE VDM42 CASE | 8.40 |
| 22000 | VDM-43-223J | | | USE VDM42 CASE | 9.30 |
| 24000 | VDM-43-243J | | | USE VDM42 CASE | 9.90 |
| 25000 | VDM-43-253J | | | USE VDM42 CASE | 10.50 |
| 27000 | VDM-43-273J | | | USE VDM42 CASE | 11.10 |
| 30000 | VDM-43-303J | | | USE VDM42 CASE | 12.00 |
| 33000 | VDM-43-333J | | | USE VDM42 CASE | 8.31 |
| 36000 | VDM-43-363J | | | USE VDM42 CASE | 9.12 |
| 39000 | VDM-43-393J | | | USE VDM42 CASE | 9.87 |
| 43000 | VDM-43-433J | | | USE VDM42 CASE | 10.80 |
| 47000 | VDM-43-473J | | | USE VDM42 CASE | 11.70 |

| SPECIAL HVDM-42 & HVDM-43 5000VW UNITS | | | |
|---|------------------|--|--------------|
| CAP. MMF. | TYPE DESIGNATION | 10000 VOLTS DC TEST 5000 VOLTS DC WKG. | DC TEST WKG. |
| 5 | HVDM-42-050K | | 2.28 |
| 10 | HVDM-42-100J | | 2.28 |
| 12 | HVDM-42-120J | | 2.28 |
| 15 | HVDM-42-150J | | 2.28 |
| 18 | HVDM-42-180J | | 2.28 |
| 20 | HVDM-42-200J | | 2.28 |
| 22 | HVDM-42-220J | | 2.28 |
| 24 | HVDM-42-240J | | 2.28 |
| 27 | HVDM-42-270J | | 2.28 |
| 30 | HVDM-42-300J | | 2.70 |
| 33 | HVDM-42-330J | | 2.70 |
| 36 | HVDM-42-360J | | 2.70 |
| 39 | HVDM-42-390J | | 2.70 |
| 43 | HVDM-42-430J | | 2.70 |
| 47 | HVDM-42-470J | | 2.70 |
| 50 | HVDM-42-500J | | 2.70 |
| 51 | HVDM-42-510J | | 2.70 |
| 56 | HVDM-42-560J | | 2.70 |
| 62 | HVDM-42-620J | | 3.12 |
| 68 | HVDM-42-680J | | 3.12 |
| 75 | HVDM-42-750J | | 3.12 |
| 82 | HVDM-42-820J | | 3.12 |
| 91 | HVDM-42-910J | | 3.54 |
| 100 | HVDM-42-101J | | 3.54 |
| 110 | HVDM-42-111J | | 3.54 |
| 120 | HVDM-42-121J | | 3.96 |
| 130 | HVDM-42-131J | | 3.96 |
| 150 | HVDM-42-151J | | 4.38 |
| 160 | HVDM-42-161J | | 4.38 |
| 180 | HVDM-42-181J | | 4.80 |
| 200 | HVDM-42-201J | | 5.22 |
| 220 | HVDM-42-221J | | 5.22 |
| 240 | HVDM-42-241J | | 5.64 |
| 250 | HVDM-42-251J | | 5.64 |
| 270 | HVDM-42-271J | | 6.06 |
| 300 | HVDM-42-301J | | 6.48 |
| 330 | HVDM-42-331J | | 6.90 |
| 360 | HVDM-42-361J | | 7.32 |
| 390 | HVDM-42-391J | | 7.74 |
| 430 | HVDM-42-431J | | 8.58 |
| 470 | HVDM-42-471J | | 8.88 |
| 500 | HVDM-42-501J | | 9.30 |
| 510 | HVDM-42-511J | | 9.72 |
| 560 | HVDM-42-561J | | 10.14 |
| 620 | HVDM-42-621J | | 11.40 |
| 680 | HVDM-43-681J | | 13.50 |
| 750 | HVDM-43-751J | | 14.70 |
| 820 | HVDM-43-821J | | 15.90 |
| 910 | HVDM-43-911J | | 17.10 |

NOTE: All above units can be supplied in characteristic "C","D","E","F" at above net prices.

Above prices are for Standard 5% Tolerance. Add 15% for 2% Tolerance; Add 25% for 1% Tolerance; Add 100% for 1/2% Tolerance. Minimum Tolerance ± 0.5 mmf.

PLEASE SPECIFY WORKING VOLTAGE RATING WHEN ORDERING

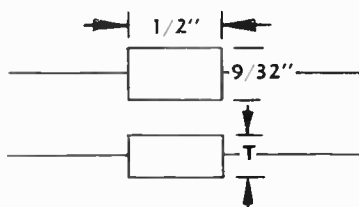


ELMENCO CAPACITORS

TYPES
CM-15
CM-19, CM-20

MOLDED SILVERED MICA

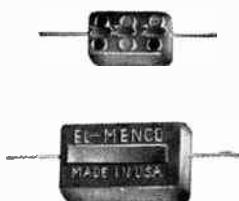
TYPE CM-15



T—from 1-300 mmf. 3/16"
T—from 301-510 mmf. 7/32"

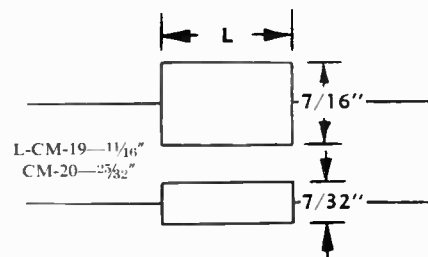
500 VDCW

CM-15



CM-19

TYPE CM-19 & 20



500 VDCW

| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|--------|--------|
| | | 5% "J" | 2% "G" | 1% "F" |
| 1 | CM-15-C-010† | \$0.24 | | |
| 2 | CM-15-C-020† | .24 | | |
| 3 | CM-15-C-030† | .24 | | |
| 5 | CM-15-C-050† | .24 | | |
| 10 | CM-15-C-100 | .24 | | |
| 12 | CM-15-C-120 | .24 | | |
| 15 | CM-15-C-150 | .24 | | |
| 18 | CM-15-C-180 | .24 | | |
| 20 | CM-15-C-200 | .24 | | |
| 22 | CM-15-C-220 | .24 | | |
| 24 | CM-15-E-240 | .24 | | |
| 27 | CM-15-E-270 | .24 | \$0.28 | |
| 30 | CM-15-E-300 | .24 | .28 | |
| 33 | CM-15-E-330 | .24 | .28 | |
| 36 | CM-15-E-360 | .24 | .28 | |
| 39 | CM-15-E-390 | .24 | .28 | |
| 43 | CM-15-E-430 | .24 | .28 | |
| 47 | CM-15-E-470 | .24 | .28 | |
| 50 | CM-15-E-500 | .24 | .28 | \$0.30 |
| 51 | CM-15-E-510 | .24 | .28 | .30 |
| 56 | CM-15-E-560 | .24 | .28 | .30 |
| 62 | CM-15-E-620 | .24 | .28 | .30 |
| 68 | CM-15-E-680 | .24 | .28 | .30 |
| 75 | CM-15-E-750 | .24 | .28 | .30 |
| 82 | CM-15-E-820 | .27 | .31 | .34 |
| 91 | CM-15-E-910 | .27 | .31 | .34 |
| 100 | CM-15-E-101 | .27 | .31 | .34 |
| 110 | CM-15-E-111 | .27 | .31 | .34 |
| 120 | CM-15-E-121 | .27 | .31 | .34 |
| 130 | CM-15-E-131 | .27 | .31 | .34 |
| 150 | CM-15-E-151 | .27 | .31 | .34 |
| 160 | CM-15-E-161 | .30 | .35 | .38 |
| 180 | CM-15-E-181 | .30 | .35 | .38 |
| 200 | CM-15-E-201 | .30 | .35 | .38 |
| 220 | CM-15-E-221 | .33 | .38 | .41 |
| 240 | CM-15-E-241 | .33 | .38 | .41 |
| 250 | CM-15-E-251 | .33 | .38 | .41 |
| 270 | CM-15-E-271 | .36 | .41 | .45 |
| 300 | CM-15-E-301 | .36 | .41 | .45 |
| 330 | CM-15-E-331 | .39 | .45 | .49 |
| 360 | CM-15-E-361 | .42 | .49 | .53 |
| 390 | CM-15-E-391 | .42 | .49 | .53 |
| 430* | CM-15-E-431 | .45 | .52 | .56 |
| 470* | CM-15-E-471 | .48 | .55 | .60 |
| 500* | CM-15-E-501 | .48 | .55 | .60 |
| 510* | CM-15-E-511 | .48 | .55 | .60 |
| 560** | CM-15-E-561J | .48 | .588 | .636 |
| 620** | CM-15-E-621J | .51 | .624 | .678 |
| 680** | CM-15-E-681J | .54 | .654 | .714 |
| 750** | CM-15-E-751J | .60 | .69 | .75 |
| 820** | CM-15-E-821J | .66 | .726 | .786 |

NOTES—*300 VDCW—**100 VDCW.

†Closest Tolerance ±0.5 mmf.

SPECIFICATIONS NOTES:

±½% tolerance available above 100 mmf. at double ±5% list price.

CM15, available "F" characteristic above 33 mmf.
CM19, 20 available "E" characteristic above 33 mmf.
CM19, 20 available "F" characteristic above 56 mmf.

All CM30, 35, and 42 values listed are available in "F" characteristic.

| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|---------|---------|
| | | ±5% "J" | ±2% "G" | ±1% "F" |
| 5 | CM-20C-050 | \$0.24 | | |
| 10 | CM-20C-100 | .24 | | |
| 12 | CM-20C-120 | .24 | | |
| 15 | CM-20C-150 | .24 | | |
| 18 | CM-20C-180 | .24 | | |
| 20 | CM-20C-200 | .24 | | |
| 22 | CM-20C-220 | .24 | | |
| 24 | CM-20C-240 | .24 | | |
| 27 | CM-20C-270 | .24 | \$0.28 | |
| 30 | CM-20C-300 | .24 | .28 | |
| 33 | CM-20C-330 | .24 | .28 | |
| 36 | CM-20C-360 | .24 | .28 | |
| 39 | CM-20C-390 | .24 | .28 | |
| 43 | CM-20C-430 | .24 | .28 | |
| 47 | CM-20C-470 | .24 | .28 | |
| 50 | CM-20C-500 | .24 | .28 | \$0.30 |
| 51 | CM-20C-510 | .24 | .28 | .30 |
| 56 | CM-20C-560 | .24 | .28 | .30 |
| 62 | CM-20C-620 | .24 | .28 | .30 |
| 68 | CM-20C-680 | .24 | .28 | .30 |
| 75 | CM-20C-750 | .24 | .28 | .30 |
| 82 | CM-20C-820 | .24 | .28 | .30 |
| 91 | CM-20C-910 | .24 | .28 | .30 |
| 100 | CM-20C-101 | .24 | .28 | .30 |
| 110 | CM-20C-111 | .27 | .31 | .34 |
| 120 | CM-20C-121 | .27 | .31 | .34 |
| 130 | CM-20C-131 | .27 | .31 | .34 |
| 150 | CM-20C-151 | .27 | .31 | .34 |
| 160 | CM-20C-161 | .27 | .31 | .34 |
| 180 | CM-20C-181 | .27 | .31 | .34 |
| 200 | CM-20D-201 | .27 | .31 | .34 |
| 220 | CM-20D-221 | .27 | .31 | .34 |
| 240 | CM-20D-241 | .33 | .38 | .41 |
| 250 | CM-20D-251 | .33 | .38 | .41 |
| 270 | CM-20D-271 | .33 | .38 | .41 |
| 300 | CM-20D-301 | .33 | .38 | .41 |
| 330 | CM-20D-331 | .33 | .38 | .41 |
| 360 | CM-20D-361 | .33 | .38 | .41 |
| 390 | CM-20D-391 | .39 | .45 | .49 |
| 430 | CM-20D-431 | .39 | .45 | .49 |
| 470 | CM-20D-471 | .42 | .49 | .53 |
| 500 | CM-20D-501 | .42 | .49 | .53 |
| 510 | CM-20D-511 | .42 | .49 | .53 |
| 560 | CM-20D-561 | .45 | .52 | .55 |
| 620 | CM-20D-621 | .45 | .52 | .56 |
| 680 | CM-20D-681 | .48 | .55 | .60 |
| 750 | CM-20D-751 | .48 | .55 | .60 |
| 820 | CM-20D-821 | .51 | .59 | .64 |
| 910 | CM-20D-911 | .51 | .59 | .64 |
| 1000 | CM-20E-102 | .54 | .62 | .68 |
| 1100 | CM-20E-112 | .54 | .62 | .68 |
| 1200 | CM-20E-122 | .60 | .69 | .75 |
| 1300 | CM-20E-132 | .60 | .69 | .75 |
| 1500 | CM-20E-152 | .66 | .76 | .83 |
| 1600 | CM-20E-162 | .66 | .76 | .83 |
| 1800 | CM-20E-182 | .72 | .83 | .90 |
| 2000 | CM-20E-202 | .78 | .90 | .98 |
| 2200 | CM-20E-222 | .84 | .97 | 1.05 |
| 2400 | CM-20E-242 | .87 | 1.00 | 1.09 |
| 2500 | CM-20E-252 | .90 | 1.04 | 1.18 |
| 2700 | CM-20E-272 | .96 | 1.10 | 1.20 |
| 3000 | CM-20E-302 | 1.08 | 1.24 | 1.35 |
| 3300 | CM-20E-332 | 1.14 | 1.31 | 1.43 |
| 3600* | CM-20E-362 | 1.14 | 1.31 | 1.43 |
| 3900* | CM-20E-392 | 1.20 | 1.38 | 1.50 |
| 4300* | CM-20E-432 | 1.26 | 1.45 | 1.58 |
| 4700* | CM-20E-472 | 1.32 | 1.52 | 1.65 |
| 5000* | CM-20E-502 | 1.38 | 1.59 | 1.73 |
| 5100* | CM-20E-512 | 1.38 | 1.59 | 1.73 |

Capacities from 5 mmf. to 2400 mmf. can be supplied in CM-19 cases.

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ELMENCO
CAPACITORS

TYPES
CM-19, CM-20, CM-30
CM-35, CM-42

MOLDED SILVERED MICA

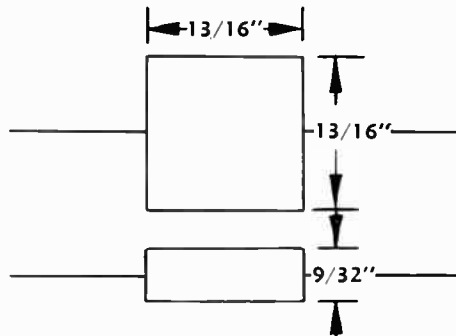
TYPE CM-19 & 20

500 VDCW

| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|---------|---------|
| | | "J" ±5% | "G" ±2% | "F" ±1% |
| 2700 | CM-20E-272 | .96 | 1.10 | 1.20 |
| 3000 | CM-20E-302 | 1.08 | 1.24 | 1.35 |
| 3300 | CM-20E-332 | 1.14 | 1.31 | 1.43 |
| 3600* | CM-20E-362 | 1.14 | 1.31 | 1.43 |
| 3900* | CM-20E-392 | 1.20 | 1.38 | 1.50 |
| 4300* | CM-20E-432 | 1.26 | 1.45 | 1.58 |
| 4700* | CM-20E-472 | 1.32 | 1.52 | 1.65 |
| 5000* | CM-20E-502 | 1.38 | 1.59 | 1.73 |
| 5100* | CM-20E-512 | 1.38 | 1.59 | 1.73 |

Capacities from 5 mmf. to 2700 mmf. can be supplied in CM-19 cases.

TYPE CM-30



500 VDCW

| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|---------|---------|
| | | "J" ±5% | "G" ±2% | "F" ±1% |
| 510 | CM-30-E-511 | \$0.42 | \$0.49 | \$0.53 |
| 560 | CM-30-E-561 | .45 | .52 | .56 |
| 620 | CM-30-E-621 | .45 | .52 | .56 |
| 680 | CM-30-E-681 | .48 | .55 | .60 |
| 750 | CM-30-E-751 | .48 | .55 | .60 |
| 820 | CM-30-E-821 | .51 | .59 | .64 |
| 910 | CM-30-E-911 | .54 | .62 | .68 |
| 1000 | CM-30-E-102 | .60 | .69 | .75 |
| 1100 | CM-30-E-112 | .60 | .69 | .75 |
| 1200 | CM-30-E-122 | .69 | .79 | .86 |
| 1300 | CM-30-E-132 | .69 | .79 | .86 |
| 1500 | CM-30-E-152 | .75 | .86 | .94 |
| 1600 | CM-30-E-162 | .75 | .86 | .94 |
| 1800 | CM-30-E-182 | .75 | .86 | .94 |
| 2000 | CM-30-E-202 | .81 | .93 | 1.01 |
| 2200 | CM-30-E-222 | .81 | .93 | 1.01 |
| 2400 | CM-30-E-242 | .96 | 1.10 | 1.20 |
| 2500 | CM-30-E-252 | | | |
| 2700 | CM-30-E-272 | 1.08 | 1.24 | 1.35 |
| 3000 | CM-30-E-302 | 1.14 | 1.31 | 1.43 |
| 3300 | CM-30-E-332 | 1.14 | 1.31 | 1.43 |
| 3600 | CM-30-E-362 | 1.20 | 1.38 | 1.50 |
| 3900 | CM-30-E-392 | 1.20 | 1.38 | 1.50 |
| 4300 | CM-30-E-432 | 1.26 | 1.45 | 1.58 |
| 4700 | CM-30-E-472 | 1.26 | 1.45 | 1.58 |
| 5000 | CM-30-E-502 | 1.29 | 1.48 | 1.61 |
| 5100 | CM-30-E-512 | 1.29 | 1.48 | 1.61 |
| 5600 | CM-30-E-562 | 1.35 | 1.55 | 1.69 |
| 6200 | CM-30-E-622 | 1.44 | 1.66 | 1.80 |

NOTE:—All above "SILVERED MICA" units can be supplied in "F" Characteristic at no extra cost. For ±1/2% Tolerance double the 5% List prices.

All Type CM-42 units can be supplied in "F" characteristic at no extra cost. For ±1/2% Tolerance double the 1% list price.

All CM30, 35, and 42 values listed are available in "F" characteristic.

CM-30



CM-42

TYPES CM25 & CM40

Although CM25 and CM40 are not listed, they are still available and most items are in stock. Use CM20 list prices for corresponding CM25 values and CM30 and CM35 prices for comparable CM40 values.

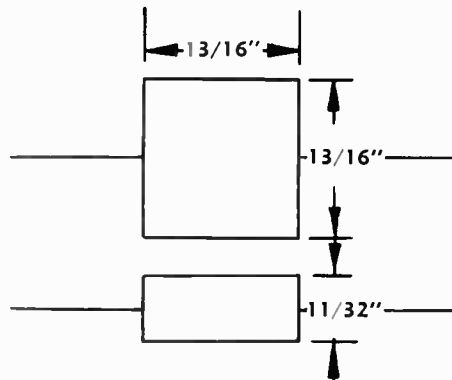
TYPE HTCM

We supply Elmenco Type HTCM capacitors for these temperature grades requiring operation above the old limit of 85°C. After extensive characteristic evaluation and analysis of hundreds of life tests under varying temperature, voltage and other environmental conditions; it was found that modification of standard design molded mica capacitors was necessary to maintain our standards. We admit that we are very conservative in our design parameters, but we believe that this is the prime reason for universal acceptance of Elmenco products. The modifications which affect the price are as follows:

1. Every mica film is selected for excellence of electrical characteristics at elevated temperatures. This is done 100%, not on a sampling basis.
2. A more expensive molding material is used to preserve strength and electrical characteristics at temperatures in excess of 150°C. This molding material was also selected for the lower molding pressure required. The lower molding stress greatly enhances reliability of the mica films.
3. A solid high temperature impregnant is used in place of the wax for greater stability and retention of resistance to moisture. Wax will have a tendency to melt out at the specified temperatures, causing possible change in capacitance value, loss of moisture resistance after a few cycles, and possible fouling of adjacent circuitry.

With these modifications a vast improvement is obtained in operating reliability at elevated temperature. The expected failure rate is reduced to a small fraction of what might otherwise be expected of standard design capacitors.

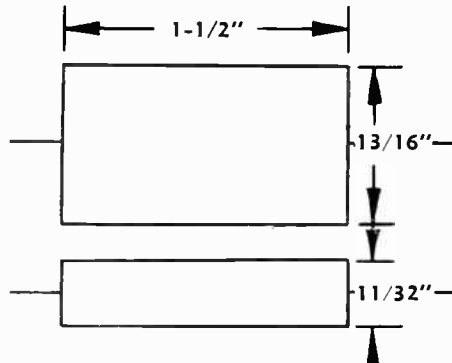
TYPE CM-35



500 VDCW

| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|---------|---------|
| | | "J" ±5% | "G" ±2% | "F" ±1% |
| 6800* | CM-35-E-682 | \$1.59 | \$1.83 | \$1.99 |
| 7500* | CM-35-E-752 | 1.68 | 1.93 | 2.10 |
| 8200* | CM-35-E-822 | 1.80 | 2.07 | 2.25 |
| 9100* | CM-35-E-912 | 1.92 | 2.21 | 2.40 |
| 10000* | CM-35-E-103 | 2.10 | 2.42 | 2.63 |
| 12000* | CM-35-E-123 | 2.55 | 2.93 | 3.19 |
| 15000* | CM-35-E-153 | 3.00 | 3.45 | 3.75 |
| 6800 | VCM-35-E-682 | 1.74 | 2.00 | 2.17 |
| 7500 | VCM-35-E-752 | 1.83 | 2.11 | 2.29 |
| 8200 | VCM-35-E-822 | 1.98 | 2.28 | 2.48 |
| 9100 | VCM-35-E-912 | 2.10 | 2.42 | 2.63 |
| 10000 | VCM-35-E-103 | 2.31 | 2.66 | 2.89 |

TYPE CM-42



500 VDCW

| | | | | |
|--------|-------------|------|------|------|
| 12000 | CM-42-E-123 | 2.34 | 2.69 | 2.93 |
| 13000 | CM-42-E-133 | 2.52 | 2.90 | 3.15 |
| 15000 | CM-42-E-153 | 2.88 | 3.31 | 3.60 |
| 16000 | CM-42-E-163 | 3.06 | 3.52 | 3.83 |
| 18000 | CM-42-E-183 | 3.42 | 3.94 | 4.28 |
| 20000 | CM-42-E-203 | 3.78 | 4.35 | 4.73 |
| 22000 | CM-42-E-223 | 4.14 | 4.76 | 5.18 |
| 24000 | CM-42-E-243 | 4.50 | 5.18 | 5.63 |
| 25000 | CM-42-E-253 | 4.68 | 5.38 | 5.85 |
| 27000* | CM-42-E-273 | 4.50 | 5.18 | 5.63 |
| 30000* | CM-42-E-303 | 4.68 | 5.38 | 5.85 |
| 33000* | CM-42-E-333 | 5.10 | 5.87 | 6.38 |
| 36000* | CM-42-E-363 | 5.70 | 6.56 | 7.13 |
| 39000* | CM-42-E-393 | 6.30 | 7.25 | 7.88 |

All capacities marked with * are 300WV.



ARCO

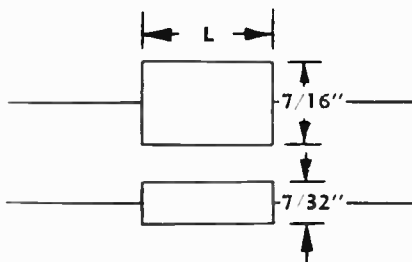
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ELMENCO
CAPACITORS

TYPES
CM-19, CM-20
CM-30, CM-35

MOLDED FOIL MICA

TYPE CM-19 & 20



L—CM-19—11/16"; CM-20—25/32"

CM-19



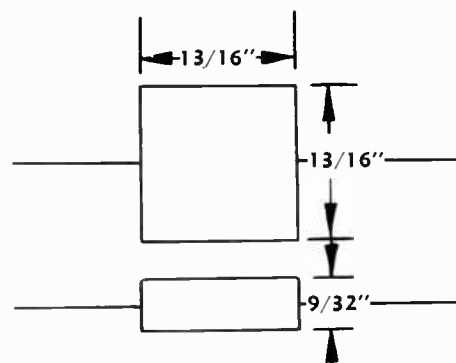
CM-30



| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|----------|---------|
| | | "M" ±20% | "K" ±10% | "J" ±5% |
| 2700 | CM-20B-272 | \$0.57 | \$0.63 | \$0.71 |
| 3000 | CM-20B-302 | .60 | .66 | .75 |
| 3300 | CM-20B-332 | .63 | .70 | .79 |
| 3600* | CM-20B-362 | .60 | .66 | .75 |
| 3900* | CM-20B-392 | .63 | .70 | .79 |
| 4300* | CM-20B-432 | .66 | .73 | .83 |
| 4700* | CM-20B-472 | .72 | .79 | .90 |
| 5000* | CM-20B-502 | .75 | .83 | .94 |
| 5100* | CM-20B-512 | .75 | .83 | .94 |

Capacities from 5 mmf. to 2700 mmf. can be supplied in CM-19 cases.

TYPE CM-30



T—CM-30—9/32"; CM-35—11/32"

500 VDCW

| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|----------|---------|
| | | "M" ±20% | "K" ±10% | "J" ±5% |
| 5 | CM-20B-050 | \$0.18 | \$0.20 | |
| 10 | CM-20B-100 | .18 | .20 | \$0.23 |
| 12 | CM-20B-120 | .18 | .20 | .23 |
| 15 | CM-20B-150 | .18 | .20 | .23 |
| 18 | CM-20B-180 | .18 | .20 | .23 |
| 20 | CM-20B-200 | .18 | .20 | .23 |
| 22 | CM-20B-220 | .18 | .20 | .23 |
| 24 | CM-20B-240 | .18 | .20 | .23 |
| 27 | CM-20B-270 | .18 | .20 | .23 |
| 30 | CM-20B-300 | .18 | .20 | .23 |
| 33 | CM-20B-330 | .12 | .13 | .15 |
| 36 | CM-20B-360 | .12 | .13 | .15 |
| 39 | CM-20B-390 | .12 | .13 | .15 |
| 43 | CM-20B-430 | .12 | .13 | .15 |
| 47 | CM-20B-470 | .12 | .13 | .15 |
| 50 | CM-20B-500 | .12 | .13 | .15 |
| 51 | CM-20B-510 | .12 | .13 | .15 |
| 56 | CM-20B-560 | .12 | .13 | .15 |
| 62 | CM-20B-620 | .12 | .13 | .15 |
| 68 | CM-20B-680 | .12 | .13 | .15 |
| 75 | CM-20B-750 | .12 | .13 | .15 |
| 82 | CM-20B-820 | .12 | .13 | .15 |
| 91 | CM-20B-910 | .12 | .13 | .15 |
| 100 | CM-20B-101 | .12 | .13 | .15 |
| 110 | CM-20B-111 | .12 | .13 | .15 |
| 120 | CM-20B-121 | .12 | .13 | .15 |
| 130 | CM-20B-131 | .15 | .17 | .19 |
| 150 | CM-20B-151 | .15 | .17 | .19 |
| 160 | CM-20B-161 | .15 | .17 | .19 |
| 180 | CM-20B-181 | .15 | .17 | .19 |
| 200 | CM-20B-201 | .15 | .17 | .19 |
| 220 | CM-20B-221 | .15 | .17 | .19 |
| 240 | CM-20B-241 | .18 | .20 | .23 |
| 250 | CM-20B-251 | .18 | .20 | .23 |
| 270 | CM-20B-271 | .18 | .20 | .23 |
| 300 | CM-20B-301 | .18 | .20 | .23 |
| 330 | CM-20B-331 | .18 | .20 | .23 |
| 360 | CM-20B-361 | .18 | .20 | .23 |
| 390 | CM-20B-391 | .18 | .20 | .23 |
| 430 | CM-20B-431 | .18 | .20 | .23 |
| 470 | CM-20B-471 | .18 | .20 | .23 |
| 500 | CM-20B-501 | .18 | .20 | .23 |
| 510 | CM-20B-511 | .18 | .20 | .23 |
| 560 | CM-20B-561 | .21 | .23 | .26 |
| 620 | CM-20B-621 | .21 | .23 | .26 |
| 680 | CM-20B-681 | .21 | .23 | .26 |
| 750 | CM-20B-751 | .21 | .23 | .26 |
| 820 | CM-20B-821 | .24 | .26 | .30 |
| 910 | CM-20B-911 | .27 | .30 | .34 |
| 1000 | CM-20B-102 | .27 | .30 | .34 |
| 1100 | CM-20B-112 | .30 | .33 | .38 |
| 1200 | CM-20B-122 | .30 | .33 | .38 |
| 1300 | CM-20B-132 | .30 | .33 | .38 |
| 1500 | CM-20B-152 | .36 | .40 | .45 |
| 1600 | CM-20B-162 | .36 | .40 | .45 |
| 1800 | CM-20B-182 | .42 | .46 | .53 |
| 2000 | CM-20B-202 | .45 | .50 | .56 |
| 2700 | CM-20B-222 | .48 | .53 | .60 |
| 2400 | CM-20B-242 | .51 | .56 | .64 |
| 2500 | CM-20B-252 | .54 | .59 | .68 |

500 VDCW

| Cap. Mmf. | Type Designation | Net Price Tolerance | | |
|-----------|------------------|---------------------|----------|---------|
| | | "M" ±20% | "K" ±10% | "J" ±5% |
| 510 | CM-30-B-511 | \$0.18 | \$0.22 | \$0.23 |
| 560 | CM-30-B-561 | .18 | .22 | .23 |
| 620 | CM-30-B-621 | .18 | .22 | .23 |
| 680 | CM-30-B-681 | .18 | .22 | .23 |
| 750 | CM-30-B-751 | .18 | .22 | .23 |
| 820 | CM-30-B-821 | .18 | .22 | .23 |
| 910 | CM-30-B-911 | .18 | .22 | .23 |
| 1000 | CM-30-B-102 | .21 | .23 | .26 |
| 1100 | CM-30-B-112 | .21 | .23 | .26 |
| 1200 | CM-30-B-122 | .21 | .23 | .26 |
| 1300 | CM-30-B-132 | .21 | .23 | .26 |
| 1500 | CM-30-B-152 | .24 | .26 | .30 |
| 1600 | CM-30-B-162 | .24 | .26 | .30 |
| 1800 | CM-30-B-182 | .27 | .30 | .34 |
| 2000 | CM-30-B-202 | .27 | .30 | .34 |
| 2200 | CM-30-B-222 | .27 | .30 | .34 |
| 2400 | CM-30-B-242 | .30 | .33 | .38 |
| 2500 | CM-30-B-252 | .30 | .33 | .38 |
| 2700 | CM-30-B-272 | .30 | .33 | .38 |
| 3000 | CM-30-B-302 | .36 | .40 | .45 |
| 3300 | CM-30-B-332 | .36 | .40 | .45 |
| 3600 | CM-30-B-362 | .36 | .40 | .45 |
| 3900 | CM-30-B-392 | .39 | .45 | .51 |
| 4300 | CM-30-B-432 | .39 | .45 | .51 |
| 4700 | CM-30-B-472 | .39 | .45 | .51 |
| 5000 | CM-30-B-502 | .42 | .49 | .55 |
| 5100 | CM-30-B-512 | .42 | .49 | .55 |
| 5600 | CM-30-B-562 | .42 | .49 | .55 |
| 6200 | CM-30-B-622 | .54 | .62 | .70 |

TYPE CM-35

| | | | | |
|--------|--------------|--------|--------|--------|
| 6800* | CM-35-B-682 | \$0.57 | \$0.63 | \$0.71 |
| 7500* | CM-35-B-752 | .60 | .66 | .75 |
| 8200* | CM-35-B-822 | .69 | .76 | .86 |
| 9100* | CM-35-B-912 | .69 | .76 | .86 |
| 10000* | CM-35-B-103 | .84 | .92 | 1.05 |
| 12000* | CM-35-B-123 | .96 | 1.06 | 1.20 |
| 15000* | CM-35-B-153 | 1.20 | 1.32 | 1.50 |
| 6800 | VCM-35-B-682 | .63 | .70 | .79 |
| 7500 | VCM-35-B-752 | .69 | .76 | .86 |
| 8200 | VCM-35-B-822 | .78 | .86 | .97 |
| 9100 | VCM-35-B-912 | .78 | .86 | .97 |
| 10000 | VCM-35-B-103 | .93 | 1.03 | 1.16 |

All capacities marked with * are 300WV.



ARCO

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GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

ELMENCO
CAPACITORS

Type
VCM-20

Demand for smaller units in higher voltages designed to meet the requirements for TELEVISION, POWER AMPLIFIERS, LOW POWER TRANSMITTERS, and various INDUSTRIAL USES has increased. EL-MENCO designed and produced units listed below are especially adaptable to compact circuits where space is an important factor. Their acceptance has been overwhelming by the various manufacturers of TELEVISION RECEIVERS.

In many cases, these units will do the work of capacitors molded in CM-45, CM-50, and CM-55 cases without breaking down. NO SPECIAL MOUNTINGS ARE NECESSARY; just wire right into the circuit.

The capacitors are molded in low-loss Phenolic Resin in CM-20, CM-35, CM-42 cases and tested at double the branded voltage. They are tested for dielectric strength, insulation resistance, temperature coefficient capacitance drift, susceptibility to humidity, and length of life, according to RMA Standards. All units are wax-dipped for protection against salt water immersion.

VCM-20 HI-VOLTAGE MOLDED SILVER MICA
CHARACTERISTICS "B" - "C" & "D"

| Cap. Mmf. | Type Designation | 2000 VOLTS DC TEST 1000 VOLTS DC WKG. TOLERANCE NET PRICE | | | | | 3000 VOLTS DC TEST 1500 VOLTS DC WKG. TOLERANCE NET PRICE | | | | | 5000 VOLTS DC TEST 2500 VOLTS DC WKG. TOLERANCE NET PRICE | | | | |
|-----------|------------------|---|-------------|------------|------------|------------|---|-------------|------------|------------|------------|---|-------------|------------|------------|------------|
| | | "M" ±20% | "K" ±10% | "J" ±5% | "G" ±2% | "F" ±1% | "M" ±20% | "K" ±10% | "J" ±5% | "G" ±2% | "F" ±1% | "M" ±20% | "K" ±10% | "J" ±5% | "G" ±2% | "F" ±1% |
| 5 | VCM-20-050 | \$0.18 | \$0.21 | \$0.27 | | | | | | | \$0.21 | \$0.24 | | | | |
| 10 | VCM-20-100 | .18 | .21 | .27 | | | | | | | .21 | .24 | | | | |
| 12 | VCM-20-120 | .18 | .21 | .27 | | | | | | | .21 | .24 | \$0.30 | | | |
| 15 | VCM-20-150 | .18 | .21 | .27 | | | | | | | .21 | .24 | .30 | | | |
| 18 | VCM-20-180 | .18 | .21 | .27 | | | | | | | .21 | .24 | .30 | | | |
| 20 | VCM-20-200 | .18 | .21 | .27 | | | | | | | .21 | .24 | .30 | | | |
| 22 | VCM-20-220 | .18 | .21 | .27 | | | | | | | .21 | .24 | .30 | | | |
| 24 | VCM-20-240 | .18 | .21 | .27 | | | | | | | .21 | .24 | .30 | | | |
| 27 | VCM-20-270 | .18 | .21 | .27 | \$0.31 | | | | | | .21 | .24 | .30 | | \$0.35 | |
| 30 | VCM-20-300 | .18 | .21 | .27 | .31 | | \$0.21 | \$0.24 | .30 | \$0.35 | .24 | .28 | .36 | | .41 | |
| 33 | VCM-20-330 | .18 | .21 | .27 | .31 | | .21 | .24 | .30 | .35 | .24 | .28 | .36 | | .41 | |
| 36 | VCM-20-360 | .18 | .21 | .27 | .31 | | .21 | .24 | .30 | .35 | .24 | .28 | .36 | | .41 | |
| 39 | VCM-20-390 | .18 | .21 | .27 | .31 | | .21 | .24 | .30 | .35 | .24 | .28 | .36 | | .41 | |
| 43 | VCM-20-430 | .18 | .21 | .27 | .31 | | .21 | .24 | .30 | .35 | .24 | .28 | .36 | | .41 | |
| 47 | VCM-20-470 | .18 | .21 | .27 | .31 | | .21 | .24 | .33 | .38 | .24 | .28 | .42 | | .49 | |
| 50 | VCM-20-500 | .18 | .21 | .27 | .31 | \$0.34 | .21 | .24 | .33 | .38 | \$0.41 | .24 | .28 | .42 | .49 | \$0.53 |
| 51 | VCM-20-510 | .18 | .21 | .27 | .31 | .34 | .21 | .24 | .33 | .38 | .41 | .24 | .28 | .42 | .49 | .53 |
| 56 | VCM-20-560 | .18 | .21 | .27 | .31 | .34 | .21 | .24 | .33 | .38 | .41 | .24 | .28 | .42 | .49 | .53 |
| 62 | VCM-20-620 | .18 | .21 | .27 | .31 | .34 | .21 | .24 | .33 | .38 | .41 | .24 | .28 | .42 | .49 | .53 |
| 68 | VCM-20-680 | .18 | .21 | .27 | .31 | .34 | .21 | .24 | .33 | .38 | .41 | .27 | .31 | .48 | .55 | .60 |
| 75 | VCM-20-750 | .18 | .21 | .27 | .31 | .34 | .21 | .24 | .33 | .38 | .41 | .30 | .35 | .54 | .62 | .68 |
| 82 | VCM-20-820 | .18 | .21 | .27 | .31 | .34 | .21 | .24 | .33 | .38 | .45 | .30 | .35 | .54 | .62 | .68 |
| 91 | VCM-20-910 | .21 | .24 | .30 | .35 | .38 | .24 | .28 | .36 | .41 | .45 | .30 | .35 | .54 | .62 | .68 |
| 100 | VCM-20-101 | .21 | .24 | .30 | .35 | .38 | .24 | .28 | .36 | .41 | .45 | .33 | .40 | .60 | .69 | .75 |
| 110 | VCM-20-111 | .21 | .24 | .30 | .35 | .38 | .24 | .28 | .36 | .41 | .45 | .36 | .43 | .66 | .76 | .83 |
| 120 | VCM-20-121 | .21 | .24 | .30 | .35 | .38 | .24 | .28 | .36 | .41 | .45 | .36 | .43 | .72 | .83 | .90 |
| 130 | VCM-20-131 | .21 | .24 | .30 | .35 | .38 | .24 | .28 | .36 | .41 | .45 | .36 | .43 | .72 | .83 | .90 |
| 150 | VCM-20-151 | .21 | .24 | .30 | .35 | .38 | .24 | .28 | .42 | .49 | .53 | .39 | .47 | .78 | .90 | .98 |
| 160 | VCM-20-161 | .21 | .24 | .33 | .38 | .41 | .24 | .28 | .42 | .49 | .53 | .42 | .50 | .84 | .97 | 1.05 |
| 180 | VCM-20-181 | .21 | .24 | .33 | .38 | .41 | .24 | .28 | .42 | .49 | .53 | .42 | .50 | | | |
| 200 | VCM-20-201 | .24 | .28 | .33 | .38 | .41 | .27 | .31 | .48 | .55 | .60 | .48 | .58 | .96 | 1.10 | 1.20 |
| 220 | VCM-20-221 | .24 | .28 | .36 | .41 | .45 | .27 | .31 | .48 | .55 | .60 | .51 | .61 | .96 | 1.10 | 1.20 |
| 240 | VCM-20-241 | .24 | .28 | .36 | .41 | .45 | .27 | .31 | .48 | .55 | .60 | | | | | |
| 250 | VCM-20-251 | .24 | .28 | .39 | .45 | .49 | .33 | .40 | .60 | .69 | .75 | | | | | |
| 270 | VCM-20-271 | .24 | .28 | .39 | .45 | .49 | .33 | .40 | .60 | .69 | .75 | | | | | |
| 300 | VCM-20-301 | .27 | .31 | .42 | .49 | .53 | .36 | .43 | .66 | .76 | .83 | | | | | |
| 330 | VCM-20-331 | .27 | .31 | .42 | .49 | .53 | .36 | .43 | .66 | .76 | .83 | | | | | |
| 360 | VCM-20-361 | .27 | .31 | .42 | .49 | .53 | .36 | .43 | .69 | .79 | .86 | | | | | |
| 390 | VCM-20-391 | .27 | .31 | .42 | .49 | .53 | .39 | .47 | .69 | .79 | .86 | | | | | |
| 430 | VCM-20-431 | .30 | .35 | .45 | .52 | .56 | .39 | .47 | .72 | .83 | .90 | | | | | |
| 470 | VCM-20-471 | .30 | .35 | .45 | .52 | .56 | .42 | .50 | .75 | .86 | .94 | | | | | |
| 500 | VCM-20-501 | .30 | .35 | .45 | .52 | .56 | .42 | .50 | .78 | .90 | .98 | | | | | |
| 510 | VCM-20-511 | .30 | .35 | .45 | .52 | .56 | .42 | .50 | .78 | .90 | .98 | | | | | |
| 560 | VCM-20-561 | .33 | .40 | .48 | .55 | .60 | .48 | .58 | .81 | .93 | 1.01 | | | | | |
| 620 | VCM-20-621 | .33 | .40 | .51 | .59 | .64 | | | | | | | | | | |
| 680 | VCM-20-681 | .36 | .43 | .54 | .62 | .68 | | | | | | | | | | |
| 750 | VCM-20-751 | .36 | .43 | .57 | .65 | .71 | | | | | | | | | | |
| 820 | VCM-20-821 | .39 | .47 | .60 | .69 | .75 | | | | | | | | | | |
| 910 | VCM-20-911 | .42 | .50 | .63 | .73 | .79 | | | | | | | | | | |
| 1000 | VCM-20-102 | .45 | .54 | .66 | .76 | .83 | | | | | | | | | | |
| 1100 | VCM-20-112 | .48 | .55 | .72 | .83 | .90 | | | | | | | | | | |
| 1200 | VCM-20-122 | .51 | .59 | .75 | .86 | .94 | | | | | | | | | | |
| 1300 | VCM-20-132 | .54 | .62 | .78 | .90 | .98 | | | | | | | | | | |

PLEASE SPECIFY WORKING VOLTAGE RATING WHEN ORDERING



ARCO
electronics inc.
GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

ELMENCO
CAPACITORS

Types
VCM-35 & 42

VCM-35 & 42 HI-VOLTAGE
REGULAR FOIL MICA

VCM-35 & 42 HI-VOLTAGE
SILVERED MICA

| Cap. Mmf. | Type Designation | "B" CHARACTERISTIC | | | | | | "C" - "D" - "E" - "F" CHARACTERISTIC | | | | | | | | |
|-----------|------------------|---|-------------|---|-------------|---|-------------|---|------------|------------|---|------------|------------|---|------------|------------|
| | | 2000VDC Test 1000VDC Wkg. NET PRICE | | 3000VDC Test 1500VDC Wkg. NET PRICE | | 5000VDC Test 2500VDC Wkg. NET PRICE | | 2000VDC Test 1000VDC Wkg. NET PRICE | | | 3000VDC Test 1500VDC Wkg. NET PRICE | | | 5000VDC Test 2500VDC Wkg. NET PRICE | | |
| | | "M" ±20% | "K" ±10% | "M" ±20% | "K" ±10% | "M" ±20% | "K" ±10% | "J" ±5% | "G" ±2% | "F" ±1% | "J" ±5% | "G" ±2% | "F" ±1% | "J" ±5% | "G" ±2% | "F" ±1% |
| 240 | VCM-35-241 | | | | | \$0.36 | \$0.41 | | | | | | | \$0.72 | \$0.83 | \$0.90 |
| 250 | VCM-35-251 | | | | | .36 | .41 | | | | | | | .72 | .83 | .90 |
| 270 | VCM-35-271 | | | | | .36 | .41 | | | | | | | .72 | .83 | .90 |
| 300 | VCM-35-301 | | | | | .39 | .45 | | | | | | | .78 | .90 | .98 |
| 330 | VCM-35-331 | | | | | .39 | .45 | | | | | | | .78 | .90 | .98 |
| 360 | VCM-35-361 | | | | | .45 | .52 | | | | | | | .90 | 1.04 | 1.13 |
| 390 | VCM-35-391 | | | | | .48 | .55 | | | | | | | .96 | 1.10 | 1.20 |
| 430 | VCM-35-431 | | | | | .48 | .55 | | | | | | | .96 | 1.10 | 1.20 |
| 470 | VCM-35-471 | | | | | .48 | .55 | | | | | | | .96 | 1.10 | 1.20 |
| 500 | VCM-35-501 | | | | | .51 | .59 | | | | | | | 1.02 | 1.18 | 1.28 |
| 510 | VCM-35-511 | | | | | .51 | .59 | | | | | | | 1.02 | 1.18 | 1.28 |
| 560 | VCM-35-661 | | | | | .54 | .62 | | | | | | | 1.08 | 1.24 | 1.35 |
| 620 | VCM-35-621 | | | \$0.45 | \$0.52 | | | | | | \$0.90 | \$1.04 | \$1.13 | | | |
| 680 | VCM-35-681 | | | .45 | .52 | | | | | | .90 | 1.04 | 1.13 | | | |
| 750 | VCM-35-751 | | | .45 | .52 | | | | | | .90 | 1.04 | 1.13 | | | |
| 820 | VCM-35-821 | | | .51 | .59 | | | | | | 1.02 | 1.18 | 1.28 | | | |
| 910 | VCM-35-911 | | | .54 | .62 | | | | | | 1.08 | 1.24 | 1.35 | | | |
| 1000 | VCM-35-102 | | | .54 | .62 | | | | | | 1.08 | 1.24 | 1.35 | | | |
| 1100 | VCM-35-112 | \$0.36 | \$0.41 | .57 | .65 | | | \$0.72 | \$0.83 | \$0.90 | 1.14 | 1.31 | 1.43 | | | |
| 1200 | VCM-35-122 | .39 | .45 | .66 | .76 | | | .78 | .90 | .98 | 1.32 | 1.52 | 1.65 | | | |
| 1300 | VCM-35-132 | .39 | .45 | .69 | .79 | | | .78 | .90 | .98 | 1.38 | 1.59 | 1.73 | | | |
| 1500 | VCM-35-152 | .45 | .52 | .78 | .90 | | | .90 | 1.04 | 1.13 | 1.56 | 1.79 | 1.95 | | | |
| 1600 | VCM-35-162 | .48 | .55 | .78 | .90 | | | .96 | 1.10 | 1.20 | 1.56 | 1.79 | 1.95 | | | |
| 1800 | VCM-35-182 | .48 | .55 | .87 | 1.00 | | | .96 | 1.10 | 1.20 | 1.74 | 2.00 | 2.18 | | | |
| 2000 | VCM-35-202 | .51 | .59 | .96 | 1.10 | | | 1.02 | 1.18 | 1.28 | 1.92 | 2.21 | 2.40 | | | |
| 2200 | VCM-35-222 | .57 | .65 | 1.02 | 1.18 | | | 1.14 | 1.31 | 1.43 | 2.04 | 2.35 | 2.55 | | | |
| 2400 | VCM-35-242 | .63 | .73 | 1.08 | 1.24 | | | 1.26 | 1.45 | 1.58 | 2.16 | 2.48 | 2.70 | | | |
| 2700 | VCM-35-272 | .63 | .73 | 1.20 | 1.38 | | | 1.26 | 1.45 | 1.58 | 2.40 | 2.76 | 3.00 | | | |
| 3000 | VCM-35-302 | .69 | .79 | 1.32 | 1.52 | | | 1.38 | 1.59 | 1.73 | 2.64 | 3.04 | 3.30 | | | |
| 3300 | VCM-35-332 | .72 | .83 | 1.38 | 1.59 | | | 1.44 | 1.66 | 1.80 | 2.76 | 3.17 | 3.45 | | | |
| 3600 | VCM-35-362 | .81 | .93 | | | | | 1.62 | 1.86 | 2.03 | | | | | | |
| 3900 | VCM-35-392 | .84 | .97 | | | | | 1.68 | 1.92 | 2.10 | | | | | | |
| 4300 | VCM-35-432 | .90 | 1.04 | | | | | 1.80 | 2.07 | 2.25 | | | | | | |
| 4700 | VCM-35-472 | .99 | 1.14 | | | | | 1.98 | 2.28 | 2.48 | | | | | | |
| 5000 | VCM-35-502 | 1.05 | 1.20 | | | | | 2.04 | 2.35 | 2.55 | | | | | | |
| 5100 | VCM-35-512 | 1.05 | 1.20 | | | | | 2.04 | 2.35 | 2.55 | | | | | | |
| 5600 | VCM-35-562 | 1.20 | 1.38 | | | | | 2.28 | 2.62 | 2.85 | | | | | | |
| 6200 | VCM-42-622 | 1.26 | 1.45 | | | | | 2.50 | 2.97 | 3.23 | | | | | | |
| 6800 | VCM-42-682 | 1.32 | 1.52 | | | | | 2.76 | 3.17 | 3.45 | | | | | | |
| 7500 | VCM-42-752 | 1.38 | 1.59 | | | | | 2.94 | 3.38 | 3.68 | | | | | | |
| 8200 | VCM-42-822 | 1.44 | 1.66 | | | | | 3.18 | 3.66 | 3.98 | | | | | | |
| 9100 | VCM-42-912 | 1.56 | 1.79 | | | | | 3.48 | 4.00 | 4.35 | | | | | | |
| 10000 | VCM-42-103 | 1.68 | 1.93 | | | | | 3.78 | 4.35 | 4.73 | | | | | | |
| 12000 | VCM-42-123 | 1.80 | 2.07 | | | | | 4.38 | 5.04 | 5.48 | | | | | | |
| 13000 | VCM-42-133 | 2.10 | 2.42 | | | | | 4.80 | 5.52 | 6.00 | | | | | | |
| 15000 | VCM-42-153 | 2.40 | 2.76 | | | | | 5.40 | 6.21 | 6.75 | | | | | | |
| 16000 | VCM-42-163 | 2.70 | 3.11 | | | | | 5.76 | 6.62 | 7.20 | | | | | | |

NOTE:—All above units can be supplied in characteristic "C"-"D"-"E"-"F" at the above list prices.

WHEN ORDERING PLEASE SPECIFY WORKING VOLTAGE RATING

REGULAR FOIL MICA
Designate VCM-35B

SILVERED MICA
Designate VCM-35C-D-E or F



ARCO
electronics inc.
GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

ELMENCO
CAPACITORS

TYPE
MPD

DIPPED MYLAR* —PAPER (Elmenco type MPD)

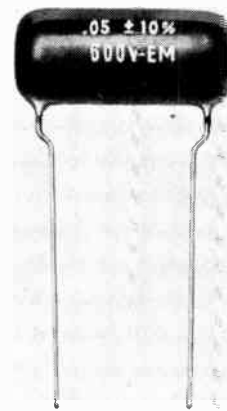
The new Elmenco Type MPD (ARCO dp) capacitors are dip-coated tubular Mylar*-paper dielectric capacitors. They represent a double breakthrough in capacitor design by combining missile and computer quality with commercial radio-TV cost. The "dp" series is designed for near universal use from TV by-pass to critical industrial applications requiring stringent electrical and environmental characteristics. New high levels of ruggedness, stability, and reliability have been achieved, yet these new Elmenco capacitors are miniaturized for transistor circuitry.

Elmenco Type MPD capacitors are non-inductively wound and vacuum dipped to obtain solid impregnation and a rugged, moisture-proof coat. New fabricating techniques realize the full potential of the dielectric materials utilizing most of the low-cost procedures of the exclusive Elmenco dip-coat process. The result is a product of electrical excellence with high reliability in operation at 125°C. without derating. The specifications listed on this and following pages well-illustrate the inherent quality of these capacitors.

NOTE: The 100VDCW rated dp units are pure mylar* dielectric capacitors.

| CASE SIZE | 1 | 2 | 3 | 4 | 5 | 6 |
|--------------------|-----|------|-------|-------|-------|--------|
| DIM. "A" ± 1/32 | 1/4 | 7/16 | 23/32 | 27/32 | 13/16 | 127/32 |

NOTE: The 1DP-1 100VDCW dp capacitors up through .015 mfd. value have straight leads spaced 1/2" apart.



ACTUAL SIZE

SPECIFICATIONS

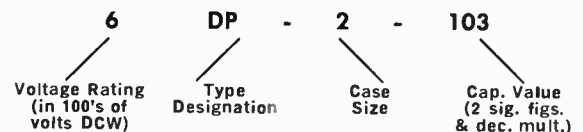
Tolerance ± 10%.

| | |
|-------------------------------------|--|
| VOLTAGE RATINGS: | 100VDCW, 200VDCW, 400VDCW, 600VDCW, 1600VDCW, (1000VDCW upon request). |
| INSULATION RESISTANCE: | @ 25°C.: 5000 megohm-microfarads or 100,000 megohms minimum, whichever is the lesser. @ 125°C.: 70 megohm-microfarads or 1400 megohms minimum, whichever is the lesser. |
| POWER FACTOR: | 1.3% maximum at 1kc. |
| TEMPERATURE RANGE: | -55°C. to +125°C. with no voltage derating. |
| CAPACITANCE CHANGE VS. TEMPERATURE: | From 25°C. to -55° (-9.0% max.) From 25°C. to +125°C. (+12.0% max.) |

LONG TERM OPERATING STABILITY AT FULL RATED VOLTAGE AND RATED TEMPERATURE EXTREMES IS ± 2% MAXIMUM.

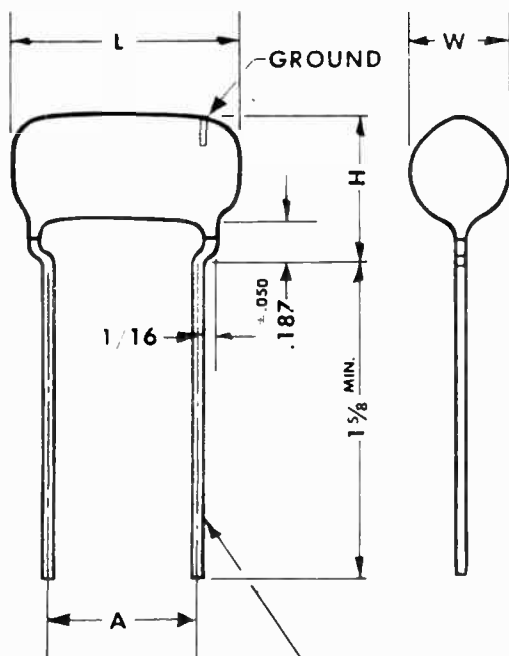
Part Numbers:

The part numbers indicated in the table of values on page 385 are constructed as follows:



The above example calls for a .01 mfd. capacitor with a 600VDCW voltage rating. Case dimensions are shown in the table of values listing on page 376.

* Reg. Du Pont Trademark



#20 (.032) TINNED ANNEALED COPPERWELD WIRE



ARCO
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GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

ELMENCO
CAPACITORS

TYPE
MPD

DIPPED MYLAR* — PAPER (Elmenco type MPD)

100VDCW

| Cap Mfd. | Part No. | L | W | H | Net Price |
|----------|-----------|--------|-------|-------|-----------|
| .005 | 1DP-1-502 | 11/16 | 5/16 | 1/2 | \$0.18 |
| .006 | 1DP-1-602 | 11/16 | 5/16 | 1/2 | .18 |
| .0068 | 1DP-1-682 | 11/16 | 5/16 | 1/2 | .18 |
| .0075 | 1DP-1-752 | 11/16 | 5/16 | 1/2 | .18 |
| .01 | 1DP-1-103 | 11/16 | 5/16 | 1/2 | .18 |
| .015 | 1DP-1-153 | 23/32 | 11/32 | 17/32 | .18 |
| .02 | 1DP-1-203 | 23/32 | 11/32 | 19/32 | .18 |
| .022 | 1DP-1-223 | 23/32 | 11/32 | 19/32 | .18 |
| .025 | 1DP-1-253 | 23/32 | 11/32 | 19/32 | .18 |
| .03 | 1DP-1-303 | 23/32 | 3/8 | 5/8 | .18 |
| .033 | 1DP-1-333 | 23/32 | 3/8 | 5/8 | .18 |
| .04 | 1DP-1-403 | 23/32 | 3/8 | 5/8 | .18 |
| .047 | 1DP-2-473 | 7/8 | 11/32 | 19/32 | .21 |
| .05 | 1DP-2-503 | 7/8 | 11/32 | 19/32 | .21 |
| .056 | 1DP-2-563 | 7/8 | 3/8 | 5/8 | .21 |
| .068 | 1DP-2-683 | 7/8 | 13/32 | 5/8 | .21 |
| .075 | 1DP-2-753 | 7/8 | 13/32 | 5/8 | .21 |
| .1 | 1DP-2-104 | 29/32 | 7/16 | 11/16 | .21 |
| .15 | 1DP-3-154 | 1-1/4 | 7/16 | 11/16 | .24 |
| .2 | 1DP-3-204 | 1-9/32 | 1/2 | 23/32 | .27 |
| .22 | 1DP-3-224 | 1-9/32 | 1/2 | 23/32 | .27 |
| .25 | 1DP-3-254 | 1-9/32 | 17/32 | 3/4 | .30 |
| .33 | 1DP-4-334 | 1-3/8 | 9/16 | 13/16 | .36 |
| .47 | 1DP-4-474 | 1-3/8 | 21/32 | 29/32 | .45 |
| .5 | 1DP-4-504 | 1-3/8 | 21/32 | 29/32 | .45 |
| .68 | 1DP-5-684 | 1-9/16 | 11/16 | 15/16 | .66 |
| 1.0 | 1DP-5-105 | 1-9/16 | 3/4 | 1 | .96 |

200VDCW

| Cap Mfd. | Part No. | L | W | H | Net Price |
|----------|-----------|---------|-------|-------|-----------|
| .1 | 2DP-3-104 | 1-7/32 | 1/2 | 23/32 | \$0.21 |
| .15 | 2DP-3-154 | 1-1/4 | 9/16 | 25/32 | .24 |
| .2 | 2DP-4-204 | 1-11/32 | 5/8 | 7/8 | .27 |
| .22 | 2DP-4-224 | 1-11/32 | 5/8 | 7/8 | .27 |
| .25 | 2DP-4-254 | 1-11/32 | 21/32 | 7/8 | .30 |
| .33 | 2DP-5-334 | 1-9/16 | 21/32 | 7/8 | .36 |
| .47 | 2DP-5-474 | 1-9/16 | 3/4 | 1 | .45 |
| .5 | 2DP-5-504 | 1-9/16 | 25/32 | 1 | .45 |

400VDCW

| Cap. Mfd. | Part No. | L | W | H | Net Price |
|-----------|-----------|---------|-------|--------|-----------|
| .01 | 4DP-1-103 | 23/32 | 3/8 | 5/8 | \$0.15 |
| .015 | 4DP-1-153 | 23/32 | 7/16 | 21/32 | .15 |
| .02 | 4DP-2-203 | 7/8 | 13/32 | 5/8 | .18 |
| .022 | 4DP-2-223 | 7/8 | 13/32 | 5/8 | .18 |
| .025 | 4DP-2-253 | 7/8 | 7/16 | 21/32 | .18 |
| .03 | 4DP-2-303 | 7/8 | 15/32 | 21/32 | .18 |
| .033 | 4DP-2-333 | 7/8 | 15/32 | 21/32 | .18 |
| .04 | 4DP-3-403 | 1-3/16 | 7/16 | 21/32 | .18 |
| .047 | 4DP-3-473 | 1-3/16 | 7/16 | 21/32 | .21 |
| .05 | 4DP-3-503 | 1-3/16 | 7/16 | 21/32 | .21 |
| .056 | 4DP-3-563 | 1-3/16 | 15/32 | 11/16 | .21 |
| .068 | 4DP-3-683 | 1-3/16 | 1/2 | 23/32 | .24 |
| .075 | 4DP-3-753 | 1-1/4 | 17/32 | 3/4 | .24 |
| .1 | 4DP-3-104 | 1-1/4 | 19/32 | 27/32 | .24 |
| .15 | 4DP-4-154 | 1-11/32 | 5/8 | 7/8 | .27 |
| .2 | 4DP-5-204 | 1-9/16 | 5/8 | 7/8 | .33 |
| .22 | 4DP-5-224 | 1-9/16 | 21/32 | 7/8 | .33 |
| .25 | 4DP-5-254 | 1-9/16 | 11/16 | 15/16 | .36 |
| .27 | 4DP-5-274 | 1-9/16 | 11/16 | 15/16 | .36 |
| .33 | 4DP-5-334 | 1-9/16 | 3/4 | 15/16 | .54 |
| .47 | 4DP-6-474 | 2-3/8 | 13/16 | 1-1/16 | .78 |
| .5 | 4DP-6-504 | 2-3/8 | 13/16 | 1-1/16 | .78 |

600VDCW

| Cap. Mfd. | Part No. | L | W | H | Net Price |
|-----------|-----------|---------|-------|-------|-----------|
| .001 | 6DP-1-102 | 11/16 | 11/32 | 17/32 | \$0.15 |
| .0012 | 6DP-1-122 | 11/16 | 11/32 | 17/32 | .15 |
| .0015 | 6DP-1-152 | 11/16 | 11/32 | 17/32 | .15 |
| .002 | 6DP-1-202 | 11/16 | 11/32 | 17/32 | .15 |
| .0022 | 6DP-1-222 | 11/16 | 11/32 | 17/32 | .15 |
| .0025 | 6DP-1-252 | 11/16 | 11/32 | 17/32 | .15 |
| .0027 | 6DP-1-272 | 11/16 | 11/32 | 17/32 | .15 |
| .003 | 6DP-1-302 | 11/16 | 11/32 | 17/32 | .15 |
| .0033 | 6DP-1-332 | 11/16 | 11/32 | 17/32 | .15 |
| .0039 | 6DP-1-392 | 11/16 | 11/32 | 9/16 | .15 |
| .004 | 6DP-1-402 | 11/16 | 11/32 | 9/16 | .15 |
| .0047 | 6DP-1-472 | 23/32 | 3/8 | 19/32 | .15 |
| .005 | 6DP-1-562 | 23/32 | 3/8 | 19/32 | .15 |
| .0056 | 6DP-1-562 | 23/32 | 3/8 | 19/32 | .15 |
| .006 | 6DP-1-602 | 23/32 | 3/8 | 5/8 | .15 |
| .0068 | 6DP-1-682 | 23/32 | 13/32 | 21/32 | .18 |
| .0075 | 6DP-2-752 | 7/8 | 11/32 | 9/16 | .18 |
| .008 | 6DP-2-802 | 7/8 | 11/32 | 9/16 | .18 |
| .0082 | 6DP-2-822 | 7/8 | 11/32 | 9/16 | .18 |
| .01 | 6DP-2-103 | 7/8 | 3/8 | 19/32 | .18 |
| .012 | 6DP-2-123 | 7/8 | 3/8 | 19/32 | .18 |
| .015 | 6DP-2-153 | 7/8 | 13/32 | 5/8 | .18 |
| .02 | 6DP-2-203 | 7/8 | 7/16 | 21/32 | .18 |
| .022 | 6DP-2-223 | 7/8 | 15/32 | 21/32 | .18 |
| .025 | 6DP-2-253 | 7/8 | 1/2 | 11/16 | .21 |
| .027 | 6DP-3-273 | 1-3/16 | 7/16 | 21/32 | .21 |
| .03 | 6DP-3-303 | 1-3/16 | 7/16 | 21/32 | .21 |
| .033 | 6DP-3-333 | 1-3/16 | 7/16 | 21/32 | .21 |
| .039 | 6DP-3-393 | 1-3/16 | 15/32 | 11/16 | .21 |
| .04 | 6DP-3-403 | 1-3/16 | 15/32 | 11/16 | .21 |
| .047 | 6DP-3-473 | 1-3/16 | 1/2 | 23/32 | .24 |
| .05 | 6DP-3-503 | 1-3/16 | 1/2 | 23/32 | .24 |
| .056 | 6DP-3-563 | 1-3/16 | 17/32 | 3/4 | .24 |
| .06 | 6DP-3-603 | 1-3/16 | 17/32 | 3/4 | .27 |
| .068 | 6DP-4-683 | 1-11/32 | 17/32 | 13/16 | .27 |
| .075 | 6DP-4-753 | 1-11/32 | 17/32 | 13/16 | .27 |
| .082 | 6DP-4-823 | 1-11/32 | 9/16 | 27/32 | .27 |
| .1 | 6DP-4-104 | 1-11/32 | 5/8 | 7/8 | .27 |
| .15 | 6DP-5-154 | 1-9/16 | 21/32 | 7/8 | .36 |
| .2 | 6DP-5-204 | 1-9/16 | 23/32 | 15/16 | .42 |
| .22 | 6DP-5-224 | 1-9/16 | 25/32 | 1 | .42 |
| .25 | 6DP-5-254 | 1-9/16 | 13/16 | 1-1/6 | .45 |
| .33 | 6DP-6-334 | 2-3/8 | 3/4 | 1 | .63 |
| .47 | 6DP-6-474 | 2-3/8 | 7/8 | 1-1/8 | .90 |
| .5 | 6DP-6-504 | 2-3/8 | 7/8 | 1-1/8 | .90 |

1600VDCW

| Cap. Mfd. | Part No. | L | W | H | Net Price |
|-----------|------------|---------|-------|--------|-----------|
| .001 | 16DP-2-102 | 7/8 | 11/32 | 9/16 | \$0.24 |
| .0015 | 16DP-2-152 | 7/8 | 11/32 | 9/16 | .24 |
| .0018 | 16DP-2-182 | 7/8 | 3/8 | 19/32 | .24 |
| .002 | 16DP-2-202 | 7/8 | 3/8 | 19/32 | .24 |
| .0022 | 16DP-2-222 | 7/8 | 3/8 | 19/32 | .24 |
| .0025 | 16DP-2-252 | 7/8 | 13/32 | 5/8 | .27 |
| .003 | 16DP-2-302 | 7/8 | 7/16 | 21/32 | .27 |
| .0033 | 16DP-2-332 | 7/8 | 7/16 | 21/32 | .27 |
| .004 | 16DP-2-402 | 7/8 | 15/32 | 21/32 | .27 |
| .0047 | 16DP-2-472 | 7/8 | 1/2 | 23/32 | .27 |
| .005 | 16DP-2-502 | 7/8 | 17/32 | 3/4 | .27 |
| .006 | 16DP-3-602 | 1-3/16 | 7/16 | 21/32 | .30 |
| .007 | 16DP-3-702 | 1-3/16 | 15/32 | 11/16 | .30 |
| .0075 | 16DP-3-752 | 1-3/16 | 1/2 | 23/32 | .30 |
| .008 | 16DP-3-802 | 1-3/16 | 17/32 | 3/4 | .30 |
| .01 | 16DP-3-103 | 1-3/16 | 17/32 | 3/4 | .30 |
| .015 | 16DP-4-153 | 1-11/32 | 9/16 | 27/32 | .33 |
| .02 | 16DP-4-203 | 1-11/32 | 21/32 | 7/8 | .36 |
| .022 | 16DP-4-223 | 1-9/16 | 5/8 | 7/8 | .42 |
| .025 | 16DP-5-253 | 1-9/16 | 21/32 | 7/8 | .42 |
| .03 | 16DP-5-303 | 1-9/16 | 11/16 | 15/16 | .47 |
| .033 | 16DP-5-333 | 1-9/16 | 23/32 | 15/16 | .47 |
| .04 | 16DP-5-403 | 1-9/16 | 3/4 | 1 | .45 |
| .047 | 16DP-5-473 | 1-9/16 | 13/16 | 1-1/16 | .48 |
| .05 | 16DP-5-503 | 1-9/16 | 13/16 | 1-1/16 | .48 |

Reg. Du Pont Trademark

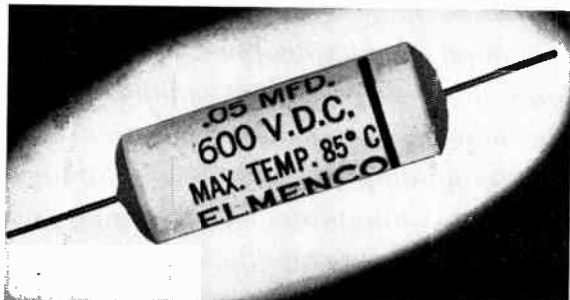


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ELMENCO
CAPACITORS

TYPE
CP

STEATITE TUBULAR CAPACITORS CP TYPE



**MINERAL OIL IMPREGNATION
NON INDUCTIVE WINDING SYNTHETIC
RESIN END SEALS — STEATITE CASE**

The Steatite tube and baked synthetic resin end-fill provide a seal which rivals that of hermetically sealed construction, resulting in a dependability and longevity previously unequalled. Whether in operation or on the shelf, this paper tubular capacitor will maintain its excellent characteristics for years.

El-Menco CP type paper tubular capacitors are sealed into Steatite Tubes which serve to insulate the capacitor electrically as well as against moisture and heat. The capacitor insert is impregnated with Mineral Oil, thereby assuring long life at 85° C operating conditions. This feature insures successful operation at the high ambient temperatures existing in small, compact enclosures.

The Non-Inductively wound paper and foil units are sealed in the Ceramic Tubes by means of baked Synthetic Resin End Fills which cannot melt at any conceivable operating temperature. The end fills will not dissolve in wax, permitting the capacitors to be potted without damage to the insert. Leads are of tinned copper 2 1/4" long.

**DIMENSIONS FOR
CP TYPE CAPACITORS**

| | Max. Diameter | Max. Length |
|------|---------------|-------------|
| CP-1 | 23/64" | 1-1/8" |
| CP-2 | 27/64" | 1-3/8" |
| CP-3 | 31/64" | 1-3/8" |
| CP-4 | 9/16" | 1-5/8" |
| CP-5 | 3/4" | 2" |
| CP-6 | 51/64" | 2" |
| CP-7 | 1" | 2-7/8" |

Part numbers can be read as follows: First one or two numbers indicate voltage rating in hundreds of volts. CP indicates type of capacitor. Next number between the dashes indicates case size. Last three digits indicate capacity, the first two being significant figures and the last the decimal multiplier.

| Cap. Mfd. | Part No. | Net Price | Cap. Mfd. | Part No. | Net Price | Cap. Mfd. | Part No. | Net Price | Cap. Mfd. | Part No. | Net Price |
|----------------|-----------|-----------|----------------|-----------|-----------|-----------------|------------|-----------|-----------------|------------|-----------|
| 200VDCW | | | 600VDCW | | | 600VDCW | | | 1000VDCW | | |
| .02 | 2CP-1-203 | \$0.15 | .001 | 6CP-1-102 | \$0.15 | .075 | 6CP-5-753 | 0.27 | .05 | 10CP-5-503 | 0.33 |
| .022 | 2CP-1-223 | 0.15 | .0012 | 6CP-1-122 | 0.15 | .082 | 6CP-5-823 | 0.27 | .056 | 10CP-5-563 | 0.36 |
| .05 | 2CP-3-503 | 0.18 | .0015 | 6CP-1-152 | 0.15 | .1 | 6CP-5-104 | 0.27 | .068 | 10CP-5-683 | 0.39 |
| .1 | 2CP-4-104 | 0.21 | .002 | 6CP-1-202 | 0.15 | .15 | 6CP-5-154 | 0.33 | .075 | 10CP-6-753 | 0.39 |
| .15 | 2CP-4-154 | 0.24 | .0022 | 6CP-1-222 | 0.15 | .2 | 6CP-6-204 | 0.39 | .1 | 10CP-6-104 | 0.42 |
| .2 | 2CP-5-204 | 0.27 | .0025 | 6CP-1-252 | 0.15 | .22 | 6CP-6-224 | 0.42 | 1600VDCW | | |
| .22 | 2CP-5-224 | 0.27 | .0027 | 6CP-1-272 | 0.15 | .25 | 6CP-6-254 | 0.42 | .001 | 16CP-2-102 | \$0.30 |
| .25 | 2CP-5-254 | 0.27 | .003 | 6CP-1-302 | 0.15 | .33 | 6CP-7-334 | 0.57 | .0015 | 16CP-2-152 | 0.30 |
| .33 | 2CP-6-334 | 0.33 | .0033 | 6CP-1-332 | 0.15 | .47 | 6CP-7-474 | 0.75 | .002 | 16CP-2-202 | 0.30 |
| .47 | 2CP-6-474 | 0.42 | .0039 | 6CP-1-392 | 0.15 | .5 | 6CP-7-504 | 0.75 | .0022 | 16CP-2-222 | 0.30 |
| .5 | 2CP-6-504 | 0.42 | .004 | 6CP-1-402 | 0.15 | 1000VDCW | | | .0025 | 16CP-3-252 | 0.30 |
| 400VDCW | | | .0047 | 6CP-1-472 | 0.15 | .001 | 10CP-1-102 | \$0.24 | .003 | 16CP-3-302 | 0.30 |
| .01 | 4CP-1-103 | \$0.15 | .005 | 6CP-1-502 | 0.15 | .0015 | 10CP-1-152 | 0.24 | .0033 | 16CP-3-332 | 0.30 |
| .015 | 4CP-2-153 | 0.15 | .0056 | 6CP-1-562 | 0.15 | .002 | 10CP-1-202 | 0.24 | .004 | 16CP-3-402 | 0.30 |
| .02 | 4CP-2-203 | 0.15 | .006 | 6CP-2-602 | 0.15 | .0022 | 10CP-1-222 | 0.24 | .0047 | 16CP-3-472 | 0.30 |
| .022 | 4CP-2-223 | 0.18 | .0068 | 6CP-2-682 | 0.18 | .0025 | 10CP-1-252 | 0.24 | .005 | 16CP-3-502 | 0.30 |
| .025 | 4CP-3-253 | 0.18 | .0075 | 6CP-2-752 | 0.18 | .003 | 10CP-1-302 | 0.24 | .006 | 16CP-4-602 | 0.33 |
| .03 | 4CP-3-303 | 0.18 | .008 | 6CP-2-802 | 0.18 | .0033 | 10CP-2-332 | 0.24 | .0068 | 16CP-4-682 | 0.33 |
| .033 | 4CP-3-333 | 0.18 | .0082 | 6CP-2-822 | 0.18 | .004 | 10CP-2-402 | 0.24 | .007 | 16CP-4-702 | 0.33 |
| .04 | 4CP-4-403 | 0.18 | .01 | 6CP-2-103 | 0.18 | .0047 | 10CP-2-472 | 0.24 | .0075 | 16CP-4-752 | 0.33 |
| .047 | 4CP-4-473 | 0.18 | .012 | 6CP-2-123 | 0.18 | .005 | 10CP-2-502 | 0.24 | .008 | 16CP-4-802 | 0.33 |
| .05 | 4CP-4-503 | 0.18 | .015 | 6CP-2-153 | 0.18 | .006 | 10CP-2-602 | 0.24 | .01 | 16CP-4-103 | 0.33 |
| .056 | 4CP-4-563 | 0.18 | .02 | 6CP-3-203 | 0.18 | .0068 | 10CP-2-682 | 0.24 | .015 | 16CP-5-153 | 0.36 |
| .068 | 4CP-4-683 | 0.21 | .022 | 6CP-3-223 | 0.18 | .0075 | 10CP-2-752 | 0.24 | .02 | 16CP-5-203 | 0.39 |
| .075 | 4CP-4-753 | 0.21 | .025 | 6CP-3-253 | 0.21 | .01 | 10CP-2-103 | 0.27 | .022 | 16CP-5-223 | 0.39 |
| .1 | 4CP-4-104 | 0.21 | .03 | 6CP-4-303 | 0.21 | .015 | 10CP-3-153 | 0.27 | .025 | 16CP-5-253 | 0.39 |
| .15 | 4CP-5-154 | 0.27 | .033 | 6CP-4-333 | 0.21 | .02 | 10CP-4-203 | 0.27 | .03 | 16CP-5-303 | 0.39 |
| .2 | 4CP-6-204 | 0.33 | .04 | 6CP-4-403 | 0.21 | .022 | 10CP-4-223 | 0.27 | .033 | 16CP-5-333 | 0.39 |
| .22 | 4CP-6-224 | 0.33 | .047 | 6CP-4-473 | 0.24 | .025 | 10CP-4-253 | 0.27 | .04 | 16CP-6-403 | 0.42 |
| .25 | 4CP-6-254 | 0.33 | .05 | 6CP-4-503 | 0.24 | .03 | 10CP-4-303 | 0.27 | .047 | 16CP-6-473 | 0.42 |
| .33 | 4CP-7-334 | 0.42 | .056 | 6CP-4-563 | 0.24 | .033 | 10CP-5-333 | 0.33 | .05 | 16CP-6-503 | 0.42 |
| .47 | 4CP-7-474 | 0.48 | .06 | 6CP-5-603 | 0.27 | .04 | 10CP-5-403 | 0.33 | | | |
| .5 | 4CP-7-504 | 0.54 | .068 | 6CP-5-683 | 0.27 | .047 | 10CP-5-473 | 0.33 | | | |



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ARCO CAPACITORS

TYPES
CCD, 3CCD
6CCD, CCS

CERAMIC DISC

MINIATURE GENERAL PURPOSE

ARCO Type CCD ceramic disc capacitors have improved ceramic bodies which impart longer life and greater stability to any application. The standard CCD line has a $\pm 10\%$ tolerance and 1000VDCW rating, making possible a single ceramic disc stock for universal use. Whether a broad coupling or by-pass application, or a critical close tolerance use, ARCO CCD units fill the bill with dependability and economy. The 'space-saving' size of ARCO discs is another feature designed to offer greater service convenience with complete safety of operation. In addition to the 1000VDCW line, higher voltage ratings are available in Type CCD units. 3000VDCW (Type 3CCD) and 6000VDCW (Type 6CCD) disc ceramics are supplied in tolerance of $\pm 20\%$.

TYPE CCD

$\pm 10\%$ Tolerance — 1000 VDCW

| Cap. mmf. | Part Number | Net Price | Cap. mmf. | Part Number | Net Price |
|-----------|-------------|-----------|-----------|-------------|-----------|
| 5 | CCD-050 | \$0.15 | 390 | CCD-391 | \$0.15 |
| 10 | CCD-100 | 0.15 | 400 | CCD-401 | 0.15 |
| 12 | CCD-120 | 0.15 | 470 | CCD-471 | 0.15 |
| 15 | CCD-150 | 0.15 | 500 | CCD-501 | 0.15 |
| 18 | CCD-180 | 0.15 | 560 | CCD-561 | 0.15 |
| 20 | CCD-200 | 0.15 | 680 | CCD-681 | 0.15 |
| 22 | CCD-220 | 0.15 | 750 | CCD-751 | 0.15 |
| 25 | CCD-250 | 0.15 | 800 | CCD-801 | 0.15 |
| 27 | CCD-270 | 0.15 | 820 | CCD-821 | 0.15 |
| 30 | CCD-300 | 0.15 | 1000 | CCD-102 | 0.15 |
| 33 | CCD-330 | 0.15 | 1200 | CCD-122 | 0.15 |
| 39 | CCD-390 | 0.15 | 1500 | CCD-152 | 0.15 |
| 47 | CCD-470 | 0.15 | 2000 | CCD-202 | 0.15 |
| 50 | CCD-500 | 0.15 | 2200 | CCD-222 | 0.15 |
| 56 | CCD-560 | 0.15 | 2500 | CCD-252 | 0.15 |
| 68 | CCD-680 | 0.15 | 2700 | CCD-272 | 0.15 |
| 75 | CCD-750 | 0.15 | 3000 | CCD-302 | 0.15 |
| 82 | CCD-820 | 0.15 | 3300 | CCD-332 | 0.15 |
| 91 | CCD-910 | 0.15 | 3900 | CCD-392 | 0.15 |
| 100 | CCD-101 | 0.15 | 4700 | CCD-472 | 0.15 |
| 120 | CCD-121 | 0.15 | 5000 | CCD-502 | 0.18 |
| 150 | CCD-151 | 0.15 | 5600 | CCD-562 | 0.18 |
| 180 | CCD-181 | 0.15 | 6800 | CCD-682 | 0.18 |
| 200 | CCD-201 | 0.15 | 8200 | CCD-822 | 0.18 |
| 220 | CCD-221 | 0.15 | 10000 | CCD-103 | 0.18 |
| 250 | CCD-251 | 0.15 | *15000 | CCD-153 | 0.18 |
| 270 | CCD-271 | 0.15 | *20000 | CCD-203 | 0.18 |
| 300 | CCD-301 | 0.15 | *30000 | CCD-303 | 0.30 |
| 330 | CCD-331 | 0.15 | *40000 | CCD-403 | 0.36 |
| | | | *50000 | CCD-503 | 0.42 |

*500VDCW, $\pm 20\%$ tolerance
†500VDCW, +80, -20% tolerance



TYPE 3CCD

High Voltage — $\pm 20\%$ Tolerance
3000 VDCW

| Cap. mmf. | Part Number | Net Price | Cap. mmf. | Part Number | Net Price |
|-----------|-------------|-----------|-----------|-------------|-----------|
| 4.7 | 3CCD-4R7 | \$0.24 | 150 | 3CCD-151 | 0.24 |
| 6.8 | 3CCD-6R8 | 0.24 | 180 | 3CCD-181 | \$0.24 |
| 10 | 3CCD-100 | 0.24 | 220 | 3CCD-221 | 0.24 |
| 15 | 3CCD-150 | 0.24 | 270 | 3CCD-271 | 0.24 |
| 22 | 3CCD-220 | 0.24 | 330 | 3CCD-331 | 0.24 |
| 27 | 3CCD-270 | 0.24 | 390 | 3CCD-391 | 0.24 |
| 33 | 3CCD-330 | 0.24 | 470 | 3CCD-471 | 0.24 |
| 39 | 3CCD-390 | 0.24 | 560 | 3CCD-561 | 0.24 |
| 47 | 3CCD-470 | 0.24 | 680 | 3CCD-681 | 0.24 |
| 56 | 3CCD-560 | 0.24 | 820 | 3CCD-821 | 0.24 |
| 68 | 3CCD-680 | 0.24 | 1000 | 3CCD-102 | 0.24 |
| 82 | 3CCD-820 | 0.24 | 2000 | 3CCD-202 | 0.24 |
| 100 | 3CCD-101 | 0.24 | 5000 | 3CCD-502 | 0.24 |
| 120 | 3CCD-121 | 0.24 | | | |

TYPE 6CCD

High Voltage — $\pm 20\%$ Tolerance
6000 VDCW

| Cap. mmf. | Part Number | Net Price | Cap. mmf. | Part Number | Net Price |
|-----------|-------------|-----------|-----------|-------------|-----------|
| 4.7 | 6CCD-4R7 | \$0.36 | 100 | 6CCD-101 | 0.36 |
| 6.8 | 6CCD-6R8 | 0.36 | 120 | 6CCD-121 | 0.42 |
| 10 | 6CCD-100 | 0.36 | 150 | 6CCD-151 | 0.36 |
| 15 | 6CCD-150 | 0.36 | 220 | 6CCD-221 | 0.36 |
| 22 | 6CCD-220 | 0.36 | 330 | 6CCD-331 | 0.36 |
| 27 | 6CCD-270 | 0.36 | 470 | 6CCD-471 | 0.36 |
| 33 | 6CCD-330 | 0.36 | 560 | 6CCD-561 | 0.42 |
| 47 | 6CCD-470 | 0.36 | 680 | 6CCD-681 | 0.42 |
| 56 | 6CCD-560 | 0.36 | 820 | 6CCD-821 | 0.42 |
| 68 | 6CCD-680 | 0.36 | 1000 | 6CCD-102 | 0.42 |
| 82 | 6CCD-820 | \$0.36 | 2000 | 6CCD-202 | 0.42 |

TEMPERATURE STABLE

This new ELMENCO ceramic capacitor maintains excellent capacitance stability with wide temperature variation. The graph illustrates typical percentage variation of capacity value with temperature. The operating temperature range has been extended to -55°C. to $+125^{\circ}\text{C.}$ without derating of the 1000VDCW specification. Standard tolerance is $\pm 10\%$. The combined small size, low cost, and high stability represents another significant advance in the quality line of ELMENCO capacitors. All units are marked "TS" for identification.

TYPE CCS

$\pm 10\%$ Tolerance — 1000 VDCW

| Cap. mmf. | Part Number | Net Price | Cap. mmf. | Part Number | Net Price |
|-----------|-------------|-----------|-----------|-------------|-----------|
| 150 | CCS-151 | \$0.18 | 820 | CCS-821 | \$0.21 |
| 180 | CCS-181 | 0.18 | 1000 | CCS-102 | 0.21 |
| 200 | CCS-201 | 0.18 | 1200 | CCS-122 | 0.21 |
| 220 | CCS-221 | 0.18 | 1500 | CCS-152 | 0.21 |
| 250 | CCS-251 | 0.18 | 1800 | CCS-182 | 0.21 |
| 270 | CCS-271 | 0.18 | 2000 | CCS-202 | 0.21 |
| 300 | CCS-301 | 0.18 | 2200 | CCS-222 | 0.21 |
| 330 | CCS-331 | 0.18 | 2500 | CCS-252 | 0.24 |
| 390 | CCS-391 | 0.18 | 2700 | CCS-272 | 0.24 |
| 470 | CCS-471 | 0.18 | 3000 | CCS-302 | 0.24 |
| 500 | CCS-501 | 0.18 | 3300 | CCS-332 | 0.24 |
| 560 | CCS-561 | 0.18 | 3900 | CCS-392 | 0.24 |
| 620 | CCS-621 | 0.18 | 4700 | CCS-472 | 0.24 |
| 680 | CCS-681 | 0.18 | | | |
| 750 | CCS-751 | 0.18 | | | |

LOOK for the "A.E." brand on all ARCO disc ceramic capacitors



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ARCO
CAPACITORS

TYPE CCTO, CCTN
NPO - TYPE CCTO
N750 - TYPE CCTN
VARIABLE CERAMIC
TRIMMER - FEED
THRU CERAMICS

TEMPERATURE COMPENSATING

TYPE CCTO

Elmenco Type CCTO ceramic disc capacitors are zero temperature coefficient units specifically suited for high stability, high Q application. In addition to extreme temperature stability, Type CCTO capacitors have very high insulation resistance and low aging rate. These special characteristics are added to the high 1000VDCW rating and close tolerance of the entire Elmenco ceramic line to provide a superior capacitor for the special purpose intended. Type CCTO capacitors are identified by "NPO" printed on each unit.

NPO-TYPE CCTO

(ELMENCO Type TC)

±10% TOLERANCE

1000 VDCW

| Cap. mmf. | Part Number | Net Price |
|-----------|-------------|-----------|
| *2.2 | CCTO-2R2 | \$0.30 |
| *3.3 | CCTO-3R3 | 0.30 |
| *4.7 | CCTO-4R7 | 0.30 |
| 5.0 | CCTO-050 | 0.30 |
| 6.8 | CCTO-6R8 | 0.30 |
| 10 | CCTO-100 | 0.30 |
| 12 | CCTO-120 | 0.30 |
| 15 | CCTO-150 | 0.30 |
| 18 | CCTO-180 | 0.30 |
| 20 | CCTO-200 | 0.30 |
| 22 | CCTO-220 | 0.30 |
| 24 | CCTO-240 | 0.30 |
| 27 | CCTO-270 | 0.30 |
| 30 | CCTO-300 | 0.30 |
| 33 | CCTO-330 | 0.30 |
| 36 | CCTO-360 | 0.30 |
| 39 | CCTO-390 | 0.30 |
| 47 | CCTO-470 | 0.30 |
| 51 | CCTO-510 | 0.33 |
| 56 | CCTO-560 | 0.33 |
| 68 | CCTO-680 | 0.33 |
| 75 | CCTO-750 | 0.33 |
| 82 | CCTO-820 | 0.33 |
| 100 | CCTO-101 | 0.33 |
| 120 | CCTO-121 | 0.33 |
| 150 | CCTO-151 | 0.33 |

* ±.5 mmf. tolerance



TYPE CCTN

Another member of the Elmenco temperature compensating disc ceramic line is the Type CCTN unit which has a negative temperature coefficient of -750 ppm/°C. (N750). These units are used to counterbalance shifts in other circuit components with change in temperature. The result is a more stable circuit essential to many frequency control applications. Improved ceramic bodies in the temperature compensating line provide greater long term stability in addition to accurate temperature compensation. Type CCTN capacitors are identified by "N750" imprinted on each unit except the smallest size. On the small units the E.I.A. temperature coefficient designation "U2" is imprinted.

N750-TYPE CCTN

(ELMENCO Type TC)

±10% TOLERANCE

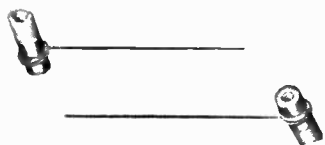
1000 VDCW

| Cap. mmf. | Part Number | Net Price |
|-----------|-------------|-----------|
| 5 | CCTN-050 | \$0.30 |
| 10 | CCTN-100 | 0.30 |
| 15 | CCTN-150 | 0.30 |
| 22 | CCTN-220 | 0.30 |
| 27 | CCTN-270 | 0.30 |
| 33 | CCTN-330 | 0.30 |
| 39 | CCTN-390 | 0.30 |
| 47 | CCTN-470 | 0.30 |
| 56 | CCTN-560 | 0.30 |
| 62 | CCTN-620 | 0.30 |
| 68 | CCTN-680 | 0.30 |
| 75 | CCTN-750 | 0.30 |
| 82 | CCTN-820 | 0.30 |
| 100 | CCTN-101 | 0.30 |
| 120 | CCTN-121 | 0.30 |
| 150 | CCTN-151 | 0.30 |
| 200 | CCTN-201 | 0.30 |
| 220 | CCTN-221 | 0.30 |
| 270 | CCTN-271 | 0.30 |
| 300 | CCTN-301 | 0.30 |
| 330 | CCTN-331 | 0.30 |
| 390 | CCTN-391 | 0.30 |
| 470 | CCTN-471 | 0.30 |



NOTE: In addition to the NPO and N750 standard stock ratings, a wide assortment of other negative temperature coefficient ratings are available to special order. N030, N080, N150, N220, N330, N470, N1500, N2100, N3300, N4100, N4700, and N5600 ratings are included. Specifications and prices will be supplied upon request.

VARIABLE CERAMIC TRIMMER

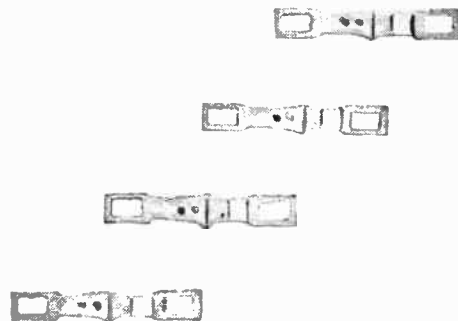


Adjustable ceramic trimmer capacitor for high frequency applications. Silvered Steatite tubes 5/8" in length provide capacity ranges listed below upon insertion of 6-32 screw.

| PART No. | CAP. RANGE MMF. | NET PRICE |
|----------|-----------------|-----------|
| CV-1 | 0.5 - 3 | \$0.21 |
| CV-2 | 1 - 4 | .21 |
| CV-3 | 2 - 6 | .21 |

FEED THRU CERAMICS

Compact rugged ceramic feed through capacitors are designed for high frequency coupling with a minimum of inductive reactance through elimination of wire leads. These units are three dot RMA coded and rated at 500VDCW.



| PART No. | CAP. (MMF) (Guar. Min. Val.) | NET PRICE |
|----------|------------------------------|-----------|
| CCF-501 | 50C | \$0.24 |
| CCF-102 | 1000 | .24 |
| CCF-152 | 1500 | .24 |
| CCF-202 | 2000 | |



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ELMENCO
CAPACITORS

TYPES
46, 40, PC46
42

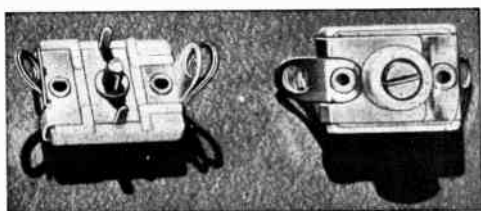
TRIMMERS

El-Menco Trimming Condensers are treated for resistance to humidity and for permanence of capacity setting.

The base is made of the lowest dielectric loss ceramic material available and the mica is clear India Ruby.

The soldering lugs may be bent in any position without affecting capacity setting due to the rigid construction of adjusting plates.

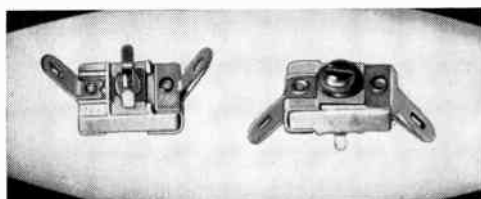
Trimmers shown here are standard sizes and capacities. Voltage 350 VDCT — 175 VDCW.



TYPE 46 STANDARD TRIMMER 3/4" x 5/8"

TYPE 46—STANDARD TRIMMER

| TYPE 46W | | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--------------------------------------|---|-----------|
| NUMBER PART | PLATES NUMBER OF | At Tight Cap. Will Be More Than MMF. | At 3 Turns Open Cap. Will Be Less Than MMF. | |
| 460 | 1 1/4 Pl. | 15 | 1.5 | \$0.24 |
| 461 | 1 3/4 Pl. | 30 | 2.7 | .24 |
| 462 | 2 Pl. | 80 | 5 | .27 |
| 463 | 3 Pl. | 180 | 9 | .30 |
| 464 | 4 Pl. | 280 | 25 | .33 |
| 465 | 5 Pl. | 380 | 50 | .36 |
| 466 | 6 Pl. | 480 | 80 | .39 |
| 467 | 7 Pl. | 580 | 110 | .45 |
| 468 | 8 Pl. | 680 | 140 | .48 |
| 469 | 9 Pl. | 780 | 170 | .51 |
| 4610 | 10 Pl. | 900 | 190 | .54 |
| 4611 | 11 Pl. | 1000 | 210 | .57 |
| 4612 | 12 Pl. | 1100 | 240 | .60 |
| 4613 | 13 Pl. | 1200 | 300 | .66 |
| 4614 | 14 Pl. | 1300 | 340 | .72 |
| 4615 | 15 Pl. | 1400 | 390 | .78 |



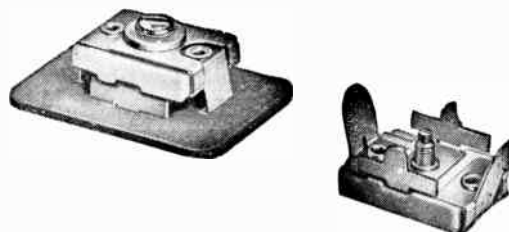
TYPE 40 MINIATURE TRIMMER 3/8" x 9/16"

TYPE 40—MINIATURE TRIMMER

| TYPE 40 | | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--------------------------------------|---|-----------|
| NUMBER PART | PLATES NUMBER OF | At Tight Cap. Will Be More Than MMF. | At 3 Turns Open Cap. Will Be Less Than MMF. | |
| 400 | 1 1/2 Pl. | 7 | 0.9 | \$0.24 |
| 402 | 2 Pl. | 20 | 1.5 | .27 |
| 403 | 3 Pl. | 35 | 3 | .30 |
| 404 | 4 Pl. | 60 | 8 | .33 |

TYPE PC46

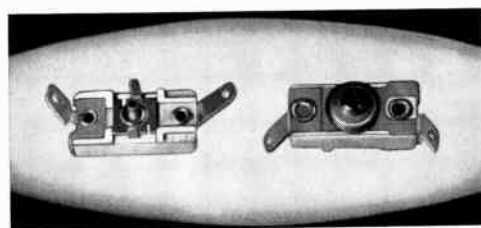
PRINTED CIRCUIT TRIMMERS



The Elmenco Type 46 trimmer series has been adapted for printed circuit techniques through alteration of terminals and mounting configuration. The holes in the terminal lugs are removed since necessity for hook-up is eliminated. The resulting solid terminals have greatly increased spring action, allowing the trimmer to be "snapped-in" the circuit and firmly held until soldered.

This printed circuit trimmer, available at present only in the Type 46 style, is identified by the prefix letter "PC". All capacitance ranges listed for Type 46 are available, designated as part numbers PC460 through PC468.

For net price add \$0.05 to net price of standard Type 46 trimmer.



TYPE 42 MIDGET TRIMMER 3/8" x 3/4"

TYPE 42—MIDGET TRIMMER

| TYPE 42 | | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--------------------------------------|---|-----------|
| NUMBER PART | PLATES NUMBER OF | At Tight Cap. Will Be More Than MMF. | At 3 Turns Open Cap. Will Be Less Than MMF. | |
| 420 | 1 1/2 Pl. | 12 | 1 | \$0.24 |
| 421 | 1 3/4 Pl. | 25 | 2 | .24 |
| 422 | 2 Pl. | 40 | 4 | .27 |
| 423 | 3 Pl. | 100 | 7 | .30 |
| 424 | 4 Pl. | 150 | 14 | .33 |
| 425 | 5 Pl. | 200 | 24 | .36 |
| 426 | 6 Pl. | 250 | 37 | .39 |
| 427 | 7 Pl. | 300 | 55 | .45 |
| 428 | 8 Pl. | 350 | 70 | .48 |
| 429 | 9 Pl. | 400 | 90 | .51 |



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ELMENCO CAPACITORS

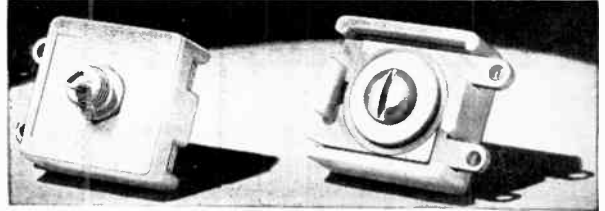
**TYPES
30, 30M**

Single and Dual PADDERS

EL-MENCO PADDING CONDENSERS have been acclaimed by engineers as the finest development in adjustable mica condensers.

The construction is such as to completely enclose and protect the delicate edges of the mica films, made of the finest quality clear India ruby mica.

The phosphor bronze adjusting plates assure permanent resilience and freedom from mechanical fatigue. All parts are heavily plated to resist corrosion.

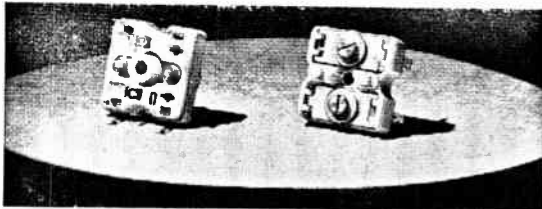


TYPE 30 AND TYPE 30-M PADDER 7/8" x 15/16"

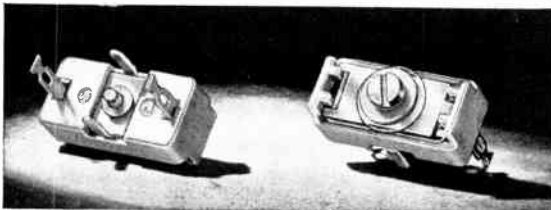
TYPE 30 500 Volts DC Flash-Test — 250 WVDC

| PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--|--|-----------|
| | | At 1 1/2 Inch Pounds Cap. Will Be More Than MMF. | At 2 1/2 Turns Open Cap. Will Be Less Than MMF | |
| 302 | 2 Pl. | 180 | 15 | \$0.48 |
| 303 | 3 Pl. | 340 | 65 | .51 |
| 304 | 4 Pl. | 550 | 100 | .54 |
| 305 | 5 Pl. | 760 | 190 | .60 |
| 306 | 6 Pl. | 970 | 275 | .66 |
| 307 | 7 Pl. | 1180 | 350 | .72 |
| 308 | 8 Pl. | 1390 | 450 | .75 |
| 309 | 9 Pl. | 1600 | 550 | .81 |
| 310 | 10 Pl. | 1890 | 650 | .87 |
| 311 | 11 Pl. | 2110 | 780 | .93 |
| 312 | 12 Pl. | 2330 | 880 | .99 |
| 313 | 13 Pl. | 2605 | 1150 | 1.05 |
| 314 | 14 Pl. | 2830 | 1300 | 1.11 |
| 315 | 15 Pl. | 3055 | 1400 | 1.17 |

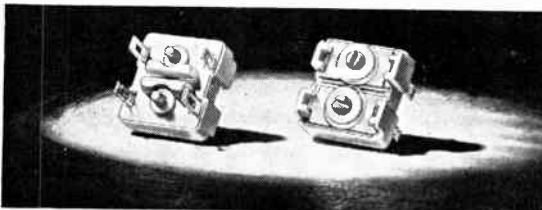
Screw is insulated from top plate by mica washer. Above maximum capacity values are based on using 1 1/2 to 1 3/4 Mil Mica films



TYPE 50 DUAL PADDER 175VDCV
(will fit any size shield having dimensions exceeding 1-1/16" x 1-1/16")



TYPE 58 PADDER 1" x 15/32" 175VDCV



TYPE 60 DUAL PADDER 175VDCV
(will fit any size shield having dimensions exceeding 3/4" x 3/4")

TYPE 30-M 1000 Volts DC Flash-Test — 500 Working Volts DC

| PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--|---|-----------|
| | | At 1 1/2 Inch Pounds Cap. Will Be More Than MMF. | At 2 1/2 Turns Open Cap. Will Be Less Than MMF. | |
| 302-M | 2 Pl. | 120 | 15 | \$0.48 |
| 303-M | 3 Pl. | 320 | 65 | .54 |
| 304-M | 4 Pl. | 500 | 100 | .57 |
| 305-M | 5 Pl. | 690 | 180 | .63 |
| 306-M | 6 Pl. | 880 | 265 | .69 |
| 307-M | 7 Pl. | 1070 | 340 | .75 |
| 308-M | 8 Pl. | 1260 | 425 | .78 |
| 309-M | 9 Pl. | 1415 | 525 | .84 |
| 310-M | 10 Pl. | 1600 | 615 | .90 |
| 311-M | 11 Pl. | 1785 | 730 | .96 |
| 312-M | 12 Pl. | 1970 | 800 | 1.02 |
| 313-M | 13 Pl. | 2156 | 1000 | 1.08 |
| 314-M | 14 Pl. | 2340 | 1100 | 1.14 |
| 315-M | 15 Pl. | 2525 | 1200 | 1.20 |

Screw is insulated from top plate by mica washer. Above maximum capacity values are based on using 2 to 2 1/4 Mil Mica.

| PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--------------------------------------|---|-----------|
| | | At Tight Cap. Will Be More Than MMF. | At 2 Turns Open Cap. Will Be Less Than MMF. | |
| 502 | 2 Pl. | 80 | 7.5 | \$0.51 |
| 503 | 3 Pl. | 160 | 19 | .60 |
| 504 | 4 Pl. | 240 | 50 | .69 |

TYPE 50 Dual Padders provide two variable trimmers mounted on a single base. This unit is designed as a tuning component for I.F. transformers; and as such, may be snap-in mounted along with the transformer coil in any size shield having dimensions exceeding 1 1/8" x 1 1/8".

| PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--------------------------------------|---|-----------|
| | | At Tight Cap. Will Be More Than MMF. | At 2 Turns Open Cap. Will Be Less Than MMF. | |
| 582 | 2 Pl. | 80 | 7.5 | \$0.33 |
| 583 | 3 Pl. | 160 | 19 | .36 |
| 584 | 4 Pl. | 240 | 50 | .39 |

TYPE 58 Padder is a single variable trimmer section provided with a two-pronged staple mounting for attachment to bracket or chassis. Base is made of lowest loss steatite and the mica is India Ruby.

| PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | | NET PRICE |
|-------------|------------------|--------------------------------------|---|-----------|
| | | At Tight Cap. Will Be More Than MMF. | At 2 Turns Open Cap. Will Be Less Than MMF. | |
| 602 | 2 Pl. | 55 | 7 | \$0.48 |
| 603 | 3 Pl. | 100 | 15 | .57 |
| 604 | 4 Pl. | 160 | 35 | .66 |
| 605 | 5 Pl. | 220 | 60 | .75 |

TYPE 60 Dual Padders provide two variable trimmers mounted on a single base. This unit is designed as a tuning component for I.F. transformers; and as such, may be snap-in mounted along with the transformer coil in any size shield having dimensions exceeding 3/4" x 3/4"



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ELMENCO CAPACITORS

**TYPES
S46, L30**

VARIABLE COMPRESSION MICA CAPACITORS



TYPE S46

Net Price:
Add 45¢ to the
Net price of
trimmer alone

A complete Type 46 trimmer assembly with mounting bracket and adjusting shaft for ease of tuning. Can be supplied as pictured from stock or with construction variations to order.

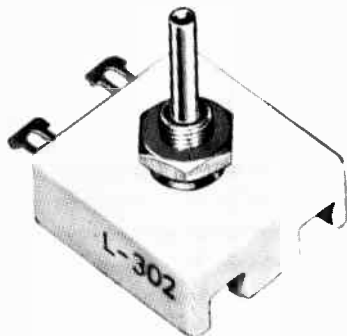
To specify precede trimmer part number with the letter "S".

For example:

Type 460 trimmer will be ordered as S-460.

The two new assemblies shown at left have been developed due to increasing demands for miniaturized tuning devices. However, certain precautions must be taken in design so that these variable mica capacitors are not used in circuits for which they are not adapted. These assemblies are highly stable for components of their design, but they do not match the stability of the air dielectric tuners. Short term drift of the mica trimmers and padders after tuning is negligible. Long term drift at one setting due to changes in atmospheric conditions and physical motion should be well within $\pm 2\%$.

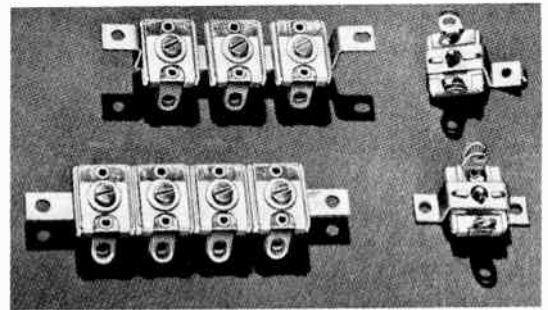
It should also be remembered that variable compression type mica capacitors do not have linear variation with adjustment. Rate of change of capacity decreases per turn as the screw is withdrawn. For example, a 306 padder will reduce to half the nominal maximum value within one opening turn. Those with a greater number of plates require further screw disengagement for a similar percentage reduction in capacity value. On the other hand, a 302 padder will reach one-half the nominal maximum in less than one-half turn open. Type 46 trimmers operate in much the same way. Detailed information on specific sizes is available upon request.



TYPE - L30

Net Price:
Add 10¢ to the
Net price of
padder alone

The Type 30 or Type 30M padder can now be obtained with a special adjusting screw which has been lengthened to accommodate a tuning knob. To obtain a padder with the special screw, precede the regular padder part number with the letter "L". For example, a 302 padder with the special screw would be specified as "L-302".



Mounting brackets as illustrated above can be supplied for all types of trimmers in flat "Z" (single mounting hole with or without non-rotational stop), and "U" (dual mounting hole) configurations.

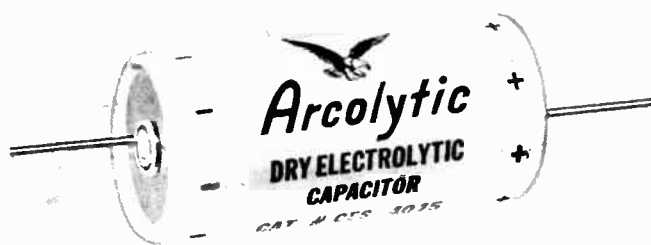
| | Net Price |
|--------------------------------------|-----------|
| Bracket for mounting 1 Trimmer | \$0.09 |
| Bracket for mounting 2 Trimmers..... | .11 |
| Bracket for mounting 3 Trimmers..... | .13 |
| Bracket for mounting 4 Trimmers..... | .14 |
| Bracket for mounting 5 Trimmers..... | .16 |
| Bracket for mounting 6 Trimmers..... | .18 |

NOTE: Knobs may also be obtained if desired at a cost of 30¢ each net.



Arcolytic

TUBULAR ELECTROLYTIC CAPACITORS



ARCOLYTIC TUBULARS

- Made with 99.99% high purity aluminum foil.
- Higher reliability because of practically no impurities in the foil.
- Maximum operating temperature: 85°C. (Type CTW: 75°C.)
- Perfect replacement electrolytic for all types entertainment units.
- Extended shelf and operating life at both normal and elevated temperatures.
- Built and tested to meet EIA specification RS-154.

Type CTA Single and multiple section tubular electrolytics in drawn aluminum cans with cardboard sleeves. Single section units have bare wire leads with negative grounded to can. Multiple units have a common negative grounded to can, and all leads have vari-colored insulated wire for ease of identification.

Type CTW Same as type CTA except that these are multiple section electrolytics in wax-filled cardboard tubes.

SINGLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|------|----------------|-----------|
| CTA-1050 | 50 | 6 | 1/2 x 1/4 | .57 |
| CTA-1055 | 100 | 6 | 1/2 x 1/4 | .72 |
| CTA-1060 | 250 | 6 | 5/8 x 1/4 | .81 |
| CTA-1065 | 500 | 6 | 3/4 x 1/4 | .93 |
| CTA-1070 | 1000 | 6 | 3/4 x 2/4 | 1.14 |
| CTA-1075 | 1500 | 6 | 1 x 2/4 | 1.26 |
| CTA-1080 | 2000 | 6 | 1 x 2/4 | 1.38 |
| CTA-1085 | 100 | 15 | 5/8 x 1/4 | .75 |
| CTA-1090 | 250 | 15 | 5/8 x 1/4 | .93 |
| CTA-1095 | 500 | 15 | 3/4 x 2/4 | 1.05 |
| CTA-1100 | 1000 | 15 | 7/8 x 2/4 | 1.38 |
| CTA-1105 | 2 | 25 | 1/2 x 1/4 | .54 |
| CTA-1110 | 5 | 25 | 1/2 x 1/4 | .60 |
| CTA-1115 | 10 | 25 | 1/2 x 1/4 | .60 |
| CTA-1125 | 50 | 25 | 1/2 x 1/4 | .60 |
| CTA-1120 | 25 | 25 | 5/8 x 1/4 | .66 |
| CTA-1130 | 100 | 25 | 5/8 x 1/4 | .81 |
| CTA-1135 | 250 | 25 | 7/8 x 2/4 | 1.02 |
| CTA-1140 | 500 | 25 | 1 x 2/4 | 1.38 |
| CTA-1145 | 1 | 50 | 1/2 x 1/4 | .54 |
| CTA-1150 | 2 | 50 | 1/2 x 1/4 | .54 |
| CTA-1155 | 5 | 50 | 1/2 x 1/4 | .60 |
| CTA-1160 | 10 | 50 | 1/2 x 1/4 | .60 |
| CTA-1165 | 20 | 50 | 5/8 x 1/4 | .60 |
| CTA-1170 | 25 | 50 | 5/8 x 1/4 | .63 |
| CTA-1175 | 50 | 50 | 5/8 x 1/4 | .72 |
| CTA-1180 | 100 | 50 | 3/4 x 1/4 | .84 |
| CTA-1185 | 150 | 50 | 3/4 x 1/4 | .93 |
| CTA-1190 | 250 | 50 | 7/8 x 1/4 | 1.05 |
| CTA-1195 | 500 | 50 | 1 x 2/4 | 1.44 |
| CTA-1200 | 4 | 150 | 1/2 x 1/4 | .60 |
| CTA-1205 | 5 | 150 | 1/2 x 1/4 | .60 |
| CTA-1210 | 8 | 150 | 5/8 x 1/4 | .63 |
| CTA-1215 | 10 | 150 | 5/8 x 1/4 | .63 |
| CTA-1220 | 12 | 150 | 5/8 x 1/4 | .66 |
| CTA-1225 | 16 | 150 | 5/8 x 1/4 | .69 |
| CTA-1230 | 20 | 150 | 5/8 x 1/4 | .72 |
| CTA-1235 | 25 | 150 | 5/8 x 1/4 | .75 |
| CTA-1240 | 30 | 150 | 3/4 x 1/4 | .78 |
| CTA-1245 | 40 | 150 | 3/4 x 1/4 | .81 |

* Preferred Type

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|------|----------------|-----------|
| CTA-1250 | 50 | 150 | 7/8 x 1/4 | .84 |
| CTA-1255 | 60 | 150 | 7/8 x 1/4 | .90 |
| CTA-1260 | 80 | 150 | 3/4 x 2/4 | .96 |
| CTA-1265 | 100 | 150 | 1 x 2/4 | 1.05 |
| CTA-1270 | 150 | 150 | 1 1/4 x 2/4 | 1.14 |
| CTW-1275 | 200 | 150 | 1 1/4 x 2/4 | 1.32 |
| CTW-1280 | 250 | 150 | 1 1/4 x 3/4 | 1.53 |
| CTW-1285 | 300 | 150 | 1 1/4 x 3/4 | 1.53 |
| CTW-1290 | 150 | 200 | 1 x 3/4 | 1.53 |
| CTW-1295 | 200 | 200 | 1 1/4 x 3/4 | 1.74 |
| CTA-1300 | 4 | 250 | 5/8 x 1/4 | .60 |
| CTA-1305 | 8 | 250 | 5/8 x 1/4 | .69 |
| CTA-1310 | 10 | 250 | 5/8 x 1/4 | .72 |
| CTA-1315 | 12 | 250 | 5/8 x 1/4 | .75 |
| CTA-1320 | 16 | 250 | 5/8 x 1/4 | .78 |
| CTA-1325 | 20 | 250 | 3/4 x 1/4 | .81 |
| CTA-1330 | 30 | 250 | 3/4 x 2/4 | .87 |
| CTA-1335 | 40 | 250 | 3/4 x 2/4 | .93 |
| CTA-1340 | 50 | 250 | 7/8 x 2/4 | 1.02 |
| CTA-1345 | 60 | 250 | 7/8 x 2/4 | 1.08 |
| CTA-1350 | 100 | 250 | 1 x 2/4 | 1.47 |
| CTW-1355 | 140 | 300 | 1 x 3/4 | 1.89 |
| CTA-1360 | 4 | 350 | 5/8 x 1/4 | .63 |
| CTA-1365 | 8 | 350 | 5/8 x 1/4 | .72 |
| CTA-1370 | 10 | 350 | 5/8 x 1/4 | .75 |
| CTA-1375 | 12 | 350 | 3/4 x 1/4 | .78 |
| CTA-1380 | 16 | 350 | 3/4 x 1/4 | .84 |
| CTA-1385 | 20 | 350 | 7/8 x 1/4 | .87 |
| CTA-1390 | 30 | 350 | 7/8 x 2/4 | .99 |
| CTA-1395 | 40 | 350 | 1 x 2/4 | 1.05 |
| CTA-1398 | 60 | 350 | 1 x 2/4 | 1.17 |
| CTA-1400 | 1 | 450 | 1/2 x 1/4 | .66 |
| CTA-1405 | 2 | 450 | 1/2 x 1/4 | .66 |
| CTA-1410 | 4 | 450 | 5/8 x 1/4 | .69 |
| CTA-1415 | 8 | 450 | 5/8 x 1/4 | .75 |
| CTA-1420 | 10 | 450 | 3/4 x 1/4 | .78 |
| CTA-1425 | 12 | 450 | 3/4 x 1/4 | .81 |
| CTA-1430 | 16 | 450 | 7/8 x 1/4 | .84 |
| CTA-1435 | 20 | 450 | 7/8 x 2/4 | .93 |
| CTA-1440 | 30 | 450 | 1 x 2/4 | 1.02 |
| CTA-1445 | 40 | 450 | 1 x 2/4 | 1.08 |
| CTA-1450 | 50 | 450 | 1 x 2/4 | 1.26 |
| CTA-1455 | 60 | 450 | 1 x 3/4 | 1.41 |
| CTA-1460 | 80 | 450 | 1 x 3/4 | 1.68 |
| CTA-1465 | 100 | 450 | 1 1/4 x 3/4 | 1.92 |
| CTA-1470 | 8 | 500 | 3/4 x 1/4 | .78 |
| CTA-1475 | 10 | 500 | 7/8 x 1/4 | .81 |
| CTA-1480 | 16 | 500 | 7/8 x 2/4 | .90 |
| CTA-1485 | 20 | 500 | 1 x 2/4 | .96 |
| CTA-1490 | 30 | 500 | 1 x 2/4 | 1.05 |
| CTA-1500 | 8 | 600 | 1 x 2/4 | 1.71 |
| CTA-1505 | 10 | 600 | 1 x 2/4 | 1.77 |
| CTA-1510 | 16 | 600 | 1 x 3/4 | 2.07 |
| CTA-1515 | 20 | 600 | 1 x 3/4 | 1.05 |
| CTA-1520 | 8 | 700 | 1 x 2/4 | 2.13 |
| CTA-1525 | 10 | 700 | 1 x 2/4 | 2.07 |
| CTA-1530 | 16 | 700 | 1 x 3/4 | 2.13 |

DOUBLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|---------|----------------|-----------|
| CTA-2030 | 10-10 | 50-50 | 5/8 x 1/4 | .84 |
| CTA-2035 | 8-8 | 150-150 | 5/8 x 1/4 | .90 |
| CTA-2040 | 16-16 | 150-150 | 3/4 x 1/4 | 1.08 |
| CTA-2045 | 20-12 | 150-150 | 3/4 x 1/4 | .96 |
| CTA-2050 | 20-20 | 150-150 | 3/4 x 1/4 | .98 |
| CTA-2055 | 30-20 | 150-150 | 7/8 x 1/4 | 1.02 |
| CTA-2060 | 30-30 | 150-150 | 7/8 x 1/4 | 1.08 |
| CTA-2065 | 40-20 | 150-150 | 7/8 x 1/4 | 1.05 |
| CTA-2070 | 40-30 | 150-150 | 7/8 x 2/4 | 1.08 |
| CTA-2075 | 40-40 | 150-150 | 7/8 x 2/4 | 1.11 |
| CTA-2080 | 50-30 | 150-150 | 7/8 x 2/4 | 1.17 |
| CTA-2085 | 50-50 | 150-150 | 7/8 x 2/4 | 1.26 |
| CTA-2090 | 80-30 | 150-150 | 1 x 2/4 | 1.32 |
| CTA-2100 | 80-40 | 150-150 | 1 x 2/4 | 1.32 |
| CTA-2105 | 80-50 | 150-150 | 1 x 2/4 | 1.41 |
| CTW-2110 | 100-100 | 150-150 | 1 x 3/4 | 1.92 |
| CTW-2115 | 250-50 | 150-150 | 1 1/4 x 3/4 | 2.22 |
| CTW-2120 | 200-5 | 150-150 | 1 x 3/4 | 1.59 |
| CTW-2125 | 250-200 | 150-150 | 1 1/4 x 4/4 | 2.52 |
| CTA-2130 | 20-20 | 250-250 | 7/8 x 2/4 | 1.11 |
| CTA-2135 | 40-10 | 250-250 | 7/8 x 2/4 | 1.23 |
| CTA-2140 | 80-10 | 250-250 | 1 x 3/4 | 1.53 |
| CTW-2145 | 120-30 | 250-250 | 1 1/4 x 3/4 | 2.40 |
| CTW-2150 | 140-5 | 350-350 | 1 1/4 x 4/4 | 2.49 |
| CTW-2155 | 80-100 | 450-50 | 1 1/4 x 4/4 | 2.22 |



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**TUBULAR
ELECTROLYTIC
CAPACITORS**

DOUBLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|---------|----------------|-----------|
| CTA-2160 | 8-8 | 450-450 | 7/8 x 2 1/4 | 1.02 |
| CTA-2165 | 10-10 | 450-450 | 1 x 2 1/4 | 1.11 |
| CTA-2170 | 16-8 | 450-450 | 1 x 2 1/4 | 1.20 |
| CTA-2175 | 20-20 | 450-450 | 1 x 2 3/4 | 1.50 |
| CTA-2180 | 30-30 | 450-450 | 1 x 3 1/4 | 1.80 |
| CTA-2185 | 40-40 | 450-450 | 1 x 3 3/4 | 2.04 |
| CTA-2190 | 50-30 | 450-450 | 1 x 3 3/4 | 2.04 |

TRIPLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|-------------|----------------|-----------|
| CTA-3050 | 20-20-20 | 150-150-150 | 7/8 x 1 3/4 | 1.50 |
| CTA-3055 | 30-30-30 | 150-150-150 | 7/8 x 2 1/4 | 1.56 |
| CTA-3060 | 40-30-20 | 150-150-150 | 7/8 x 2 1/4 | 1.56 |
| CTA-3063 | 40-40-20 | 150-150-150 | 1 x 2 1/4 | 1.41 |
| CTA-3065 | 40-40-40 | 150-150-150 | 1 x 2 1/4 | 1.68 |
| CTA-3070 | 50-30-20 | 150-150-150 | 1 x 2 1/4 | 1.62 |
| CTA-3075 | 80-40-20 | 150-150-150 | 1 x 2 3/4 | 1.74 |
| CTW-3078 | 150-150-150 | 150-150-150 | 1 3/8 x 4 1/4 | 2.91 |
| CTW-3080 | 250-200-10 | 150-150-150 | 1 1/4 x 4 1/4 | 2.76 |
| CTA-3085 | 60-40-250 | 150-150-15 | 1 x 3 1/4 | 1.56 |
| CTA-3090 | 80-30-300 | 150-150-15 | 1 x 3 3/4 | 1.74 |
| CTA-3095 | 20-20-20 | 150-150-25 | 7/8 x 1 3/4 | 1.47 |
| CTA-3100 | 40-20-20 | 150-150-25 | 1 x 1 3/4 | 1.53 |
| CTA-3105 | 40-30-20 | 150-150-25 | 7/8 x 2 1/4 | 1.56 |
| CTA-3110 | 40-40-20 | 150-150-25 | 1 x 2 1/4 | 1.59 |
| CTA-3115 | 40-40-100 | 150-150-25 | 1 x 2 1/4 | 1.68 |
| CTA-3120 | 50-30-20 | 150-150-25 | 1 x 2 1/4 | 1.59 |
| CTA-3125 | 50-30-100 | 150-150-25 | 1 x 2 1/4 | 1.68 |
| CTA-3130 | 50-30-250 | 150-150-25 | 1 x 3 | 1.86 |
| CTA-3135 | 50-50-20 | 150-150-25 | 1 x 2 1/4 | 1.65 |
| CTA-3140 | 80-20-100 | 150-150-25 | 1 x 2 3/4 | 1.68 |
| CTA-3145 | 80-40-20 | 150-150-25 | 1 x 2 3/4 | 1.68 |
| CTW-3150 | 250-120-50 | 150-150-25 | 1 3/8 x 4 | 2.61 |
| CTW-3153 | 120-40-100 | 300-250-50 | 1 3/8 x 4 1/4 | 2.97 |
| CTW-3155 | 60-60-60 | 300-300-300 | 1 3/8 x 3 1/2 | 2.82 |
| CTW-3160 | 80-40-100 | 300-300-50 | 1 3/8 x 3 1/2 | 2.55 |
| CTW-3165 | 100-60-100 | 300-300-50 | 1 3/8 x 4 1/4 | 2.97 |
| CTW-3168 | 120-40-10 | 300-300-250 | 1 3/8 x 3 1/2 | 2.91 |
| CTW-3170 | 60-60-4 | 350-350-350 | 1 3/8 x 3 1/4 | 2.31 |
| CTW-3175 | 140-5-200 | 350-350-200 | 1 1/2 x 4 3/4 | 4.02 |

TRIPLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|-------------|----------------|-----------|
| CTW-3178 | 10-20-100 | 400-150-150 | 1 1/4 x 4 3/4 | 2.46 |
| CTW-3180 | 5-80-40 | 450-400-400 | 1 3/4 x 4 1/4 | 2.73 |
| CTA-3185 | 20-20-20 | 450-450-25 | 1 1/4 x 3 | 1.86 |
| CTA-3190 | 40-40-20 | 450-450-25 | 1 x 3 3/4 | 2.28 |

QUADRUPLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|----------------|-----------------|----------------|-----------|
| CTW-4050 | 40-20-20-100 | 150-150-150-25 | 1 x 3 1/4 | 1.86 |
| CTW-4055 | 150-100-20-100 | 300-300-300-50 | 1 1/2 x 4 3/4 | 4.17 |
| CTW-4060 | 120-40-40-10 | 300-300-300-250 | 1 1/4 x 4 3/4 | 3.72 |
| CTW-4065 | 140-5-200-100 | 350-300-200-150 | 1 1/2 x 4 3/4 | 4.92 |
| CTW-4070 | 140-5-200-30 | 350-300-200-200 | 1 1/2 x 4 3/4 | 4.59 |
| CTW-4075 | 80-60-40-20 | 350-350-300-150 | 1 1/4 x 4 3/4 | 3.54 |
| CTW-4085 | 80-10-40-100 | 400-400-300-50 | 1 3/8 x 4 1/4 | 3.27 |
| CTW-4090 | 10-80-40-100 | 450-300-250-50 | 1 3/8 x 4 1/4 | 2.88 |
| CTW-4095 | 20-120-40-100 | 450-300-250-50 | 1 3/8 x 4 1/4 | 3.69 |
| CTW-4100 | 10-80-40-40 | 450-300-300-250 | 1 3/8 x 4 1/4 | 2.97 |
| CTW-4105 | 20-20-20-10 | 450-450-450-450 | 1 3/8 x 3 3/4 | 2.55 |
| CTW-4110 | 40-20-20-10 | 450-450-450-450 | 1 1/4 x 4 1/4 | 2.82 |
| CTW-4115 | 40-40-20-20 | 450-450-450-450 | 1 1/2 x 4 1/4 | 3.27 |

FIVE LEADS

| | | | | |
|----------|----------------|--------------------|---------------|------|
| CTW-5050 | 40-20-20-20-50 | 300-300-300-300-75 | 1 3/8 x 4 1/4 | 3.03 |
|----------|----------------|--------------------|---------------|------|

PRINTED CIRCUIT

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|---------|----------------|-----------|
| APC-2100 | 50-30 | 150-150 | 1 x 2 1/2 | 1.56 |
| APC-2105 | 50-50 | 150-150 | 1 x 2 1/2 | 1.62 |
| APC-2110 | 80-30 | 150-150 | 1 x 3 | 1.65 |
| APC-2115 | 100-50 | 150-150 | 1 x 3 1/2 | 1.77 |

ANTENNA ROTAR CAPACITOR

| | | | | |
|----------|-----|--------|-----------|-----|
| CRA-1000 | 70 | 50 VAC | 7/8 x 3 | .75 |
| CRA-1050 | 120 | 50 VAC | 1 x 2 3/4 | .99 |

PRINTED CIRCUIT TWIST MOUNTS

SINGLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|------|----------------|-----------|
| CTP-1250 | 140 | 150 | 1 x 2 1/2 | 1.29 |
| CTP-1350 | 375 | 165 | 1 3/8 x 3 1/2 | 1.80 |
| CTP-1450 | 160 | 200 | 1 3/8 x 3 | 1.74 |
| CTP-1550 | 50 | 350 | 1 x 2 | 1.26 |
| CTP-1650 | 20 | 450 | 1 x 2 | 1.08 |

DUAL UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|---------|----------------|-----------|
| CTP-2150 | 250-250 | 16-16 | 1 x 2 | 1.65 |
| CTP-2275 | 500-100 | 16-16 | 1 x 2 | 1.86 |
| CTP-2350 | 800-250 | 16-16 | 1 x 2 1/2 | 2.01 |
| CTP-2360 | 500-200 | 18-18 | 1 x 2 | 2.01 |
| CTP-2475 | 50-30 | 150-150 | 1 x 2 | 1.20 |
| CTP-2550 | 80-30 | 150-150 | 1 x 2 | 1.35 |
| CTP-2625 | 80-40 | 150-150 | 1 x 3 | 1.38 |
| CTP-2700 | 200-5 | 150-150 | 1 3/8 x 2 1/2 | 1.62 |
| CTP-2775 | 2-20 | 300-25 | 1 x 2 | .87 |
| CTP-2850 | 10-10 | 300-50 | 1 x 2 | .96 |
| CTP-2875 | 150-100 | 300-150 | 1 3/8 x 4 | 2.70 |
| CTP-2890 | 10-10 | 300-300 | 1 3/8 x 2 | 1.05 |

TRIPLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|------------|----------------|-----------|
| CTP-3130 | 250-250-50 | 16-16-16 | 1 x 2 | 1.95 |
| CTP-3160 | 500-250-50 | 16-16-16 | 1 x 2 | 2.10 |
| CTP-3190 | 500-250-250 | 16-16-16 | 1 x 2 | 2.46 |
| CTP-3220 | 70-30-100 | 150-150-10 | 1 x 2 | 1.68 |
| CTP-3250 | 40-30-250 | 150-150-10 | 1 x 2 1/2 | 1.86 |

PRINTED CIRCUIT TWIST MOUNTS

TRIPLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|-------------|----------------|-----------|
| CTP-3280 | 80-60-250 | 150-150-10 | 1 x 2 1/2 | 2.04 |
| CTP-3310 | 80-60-400 | 150-150-10 | 1 x 3 | 2.19 |
| CTP-3340 | 90-40-400 | 150-150-10 | 1 x 3 | 2.10 |
| CTP-3370 | 40-20-20 | 150-150-25 | 1 x 2 1/2 | 1.38 |
| CTP-3400 | 80-20-20 | 150-150-25 | 1 x 2 | 1.62 |
| CTP-3430 | 70-30-20 | 150-150-25 | 1 x 2 1/2 | 1.62 |
| CTP-3460 | 30-30-30 | 150-150-150 | 1 x 2 | 1.50 |
| CTP-3490 | 40-40-20 | 150-150-150 | 1 x 2 1/2 | 1.50 |
| CTP-3510 | 40-40-30 | 150-150-150 | 1 x 2 1/2 | 1.62 |
| CTP-3540 | 50-30-20 | 150-150-150 | 1 x 2 | 1.56 |
| CTP-3570 | 50-40-30 | 150-150-150 | 1 x 2 1/2 | 1.62 |
| CTP-3600 | 60-60-40 | 150-150-150 | 1 3/8 x 2 | 1.86 |
| CTP-3630 | 70-15-15 | 150-150-150 | 1 x 2 | 1.62 |
| CTP-3660 | 80-60-10 | 150-150-150 | 1 x 3 | 1.77 |
| CTP-3690 | 10-10-20 | 300-50-25 | 1 x 2 | 1.26 |
| CTP-3720 | 150-60-200 | 300-200-150 | 1 3/8 x 4 | 3.57 |
| CTP-3750 | 60-10-25 | 300-300-25 | 1 3/8 x 2 | 1.83 |
| CTP-3780 | 150-100-30 | 300-300-300 | 1 3/8 x 4 | 3.81 |
| CTP-3810 | 125-5-100 | 350-150-10 | 1 3/8 x 3 1/2 | 2.76 |
| CTP-3830 | 40-30-20 | 400-350-300 | 1 3/8 x 2 1/2 | 2.37 |

QUADRUPLE UNITS

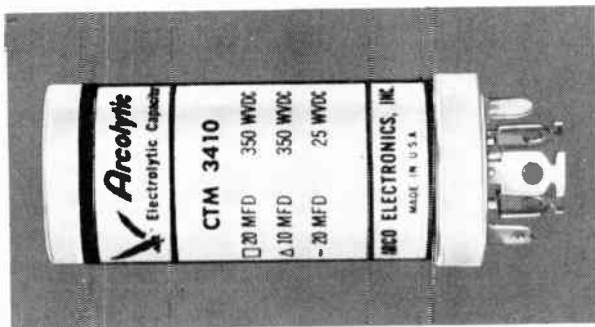
| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|-----------------|----------------|-----------|
| CTP-4100 | 290-30-10-100 | 150-150-150-10 | 1 3/8 x 3 1/2 | 2.70 |
| CTP-4200 | 50-40-10-50 | 150-150-150-25 | 1 3/8 x 2 | 1.89 |
| CTP-4300 | 100-40-10-50 | 150-150-150-25 | 1 3/8 x 2 | 2.22 |
| CTP-4400 | 60-60-40-10 | 150-150-150-150 | 1 3/8 x 2 | 2.19 |
| CTP-4500 | 100-60-60-40 | 350-350-200-75 | 1 3/8 x 4 | 3.93 |
| CTP-4600 | 40-20-10-100 | 350-350-350-50 | 1 3/8 x 2 1/2 | 2.61 |
| CTP-4700 | 40-30-20-20 | 400-350-350-350 | 1 3/8 x 2 1/2 | 2.97 |

* Preferred Type



Arcolytic

TWIST MOUNT ELECTROLYTIC CAPACITORS



ARCOLYTIC TWIST MOUNTS

- Made with 99.99% pure aluminum foil.
- Hermetically sealed in aluminum cans.
- Designed for high temperature operation: 85°C.
- Made to withstand high surge voltages and high ripple currents.
- Greater shelf and operating life because only premium grade ingredients are used.
- Built and tested to meet EIA specification RS-154.
- Complete with phenolic and metal mounting plates.

SINGLE UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|-----------------|--------|----------------|-----------|
| †CTM-1050 | .5 @ 15.75 KC | 3 N.P. | 1 x 2 | 1.59 |
| CTM-1059 | 1 OHM @ 60 CPS | 3 N.P. | 1 3/8 x 2 1/2 | 2.40 |
| †CTM-1068 | 10 OHM @ 30 CPS | 3 N.P. | 1 3/8 x 2 | 1.65 |
| CTM-1077 | 1000 | 6 | 1 3/8 x 2 | 1.44 |
| CTM-1086 | 2000 | 6 | 1 3/8 x 2 | 1.83 |
| CTM-1095 | 1000 | 10 | 1 x 2 1/2 | 1.92 |
| CTM-1104 | 3000 | 10 | 1 3/8 x 3 | 2.19 |
| CTM-1113 | 225 | 15 | 3/4 x 2 | 1.05 |
| CTM-1122 | 1000 | 15 | 1 x 2 1/2 | 1.53 |
| CTM-1131 | 1500 | 15 | 1 x 3 | 2.07 |
| CTM-1140 | 2000 | 15 | 1 3/8 x 2 | 2.07 |
| CTM-1149 | 3000 | 15 | 1 3/8 x 3 | 2.10 |
| CTM-1158 | 4000 | 15 | 1 3/8 x 3 1/2 | 2.25 |
| CTM-1167 | 25 | 25 | 3/4 x 2 | .93 |
| CTM-1176 | 40 | 25 | 3/4 x 2 | .81 |
| †CTM-1185 | 50 | 25 | 1 x 2 | 1.02 |
| CTM-1194 | 100 | 25 | 3/4 x 2 | 1.20 |
| CTM-1203 | 500 | 25 | 1 x 2 | 1.53 |
| CTM-1212 | 1000 | 25 | 1 3/8 x 2 | 2.13 |
| CTM-1221 | 4 | 50 | 3/4 x 2 | .93 |
| CTM-1230 | 25 | 50 | 3/4 x 2 | 1.02 |
| CTM-1239 | 100 | 50 | 3/4 x 2 | .99 |
| CTM-1248 | 150 | 50 | 3/4 x 2 1/2 | 1.08 |
| CTM-1257 | 250 | 50 | 1 x 2 1/2 | 1.20 |
| CTM-1266 | 500 | 50 | 1 3/8 x 2 1/2 | 1.59 |
| CTM-1275 | 1000 | 50 | 1 3/8 x 3 1/2 | 2.25 |
| CTM-1284 | 1500 | 50 | 1 3/8 x 4 | 2.31 |
| CTM-1293 | 10 | 150 | 1 x 2 | .99 |
| CTM-1302 | 20 | 150 | 1 x 2 | 1.08 |
| CTM-1311 | 25 | 150 | 1 x 2 | 1.14 |
| CTM-1320 | 30 | 150 | 1 x 2 | .93 |
| CTM-1329 | 40 | 150 | 1 x 2 | 1.20 |
| CTM-1338 | 50 | 150 | 1 x 2 | .99 |
| CTM-1347 | 60 | 150 | 1 x 2 | 1.32 |
| CTM-1356 | 80 | 150 | 1 x 2 1/2 | 1.11 |
| CTM-1365 | 80 | 150 | 1 3/8 x 2 | 1.38 |
| CTM-1374 | 100 | 150 | 1 x 2 1/2 | 1.20 |
| CTM-1383 | 110 | 150 | 1 x 3 | 1.62 |
| CTM-1392 | 120 | 150 | 1 x 2 1/2 | 1.29 |
| CTM-1401 | 120 | 150 | 1 3/8 x 2 1/2 | 1.29 |
| CTM-1410 | 140 | 150 | 1 x 3 | 1.29 |
| CTM-1419 | 150 | 150 | 1 x 3 | 1.29 |
| CTM-1428 | 150 | 150 | 1 3/8 x 3 | 1.29 |
| CTM-1437 | 200 | 150 | 1 3/8 x 3 1/2 | 1.47 |
| CTM-1446 | 300 | 150 | 1 3/8 x 3 1/2 | 1.68 |

*Preferred Type †Discontinued

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|------|----------------|-----------|
| *CTM-1455 | 375 | 165 | 1 3/8 x 3 1/2 | 2.79 |
| CTM-1464 | 40 | 200 | 1 x 2 | 1.29 |
| *CTM-1473 | 125 | 200 | 1 3/8 x 2 1/2 | 1.68 |
| *CTM-1482 | 160 | 200 | 1 3/8 x 3 | 1.89 |
| CTM-1491 | 500 | 200 | 1 3/8 x 4 | 3.96 |
| *CTM-1500 | 15 | 250 | 1 x 2 | 1.17 |
| CTM-1509 | 20 | 250 | 1 x 2 | .96 |
| CTM-1518 | 30 | 250 | 1 x 2 | 1.29 |
| *CTM-1527 | 40 | 250 | 1 x 2 | 1.08 |
| CTM-1536 | 50 | 250 | 1 x 2 1/2 | 1.47 |
| CTM-1545 | 60 | 250 | 1 x 3 | 1.53 |
| CTM-1554 | 80 | 250 | 1 x 3 1/2 | 1.62 |
| *CTM-1563 | 100 | 250 | 1 x 3 | 1.62 |
| *CTM-1572 | 150 | 250 | 1 3/8 x 2 1/2 | 1.86 |
| *CTM-1581 | 200 | 250 | 1 3/8 x 3 1/2 | 2.19 |
| CTM-1590 | 15 | 300 | 1 x 2 | 1.20 |
| CTM-1599 | 30 | 300 | 1 x 2 | 1.32 |
| CTM-1608 | 50 | 300 | 1 x 2 1/2 | 1.53 |
| CTM-1617 | 60 | 300 | 1 x 3 | 1.59 |
| *CTM-1626 | 80 | 300 | 1 x 3 1/2 | 1.53 |
| *CTM-1635 | 100 | 300 | 1 x 4 | 1.74 |
| *CTM-1644 | 125 | 300 | 1 3/8 x 3 1/2 | 2.10 |
| *CTM-1653 | 150 | 300 | 1 3/8 x 3 1/2 | 2.10 |
| *CTM-1662 | 250 | 300 | 1 3/8 x 4 | 2.10 |
| CTM-1651 | 10 | 350 | 1 x 2 | 1.14 |
| CTM-1660 | 15 | 350 | 1 x 2 | 1.23 |
| CTM-1669 | 20 | 350 | 1 x 2 | 1.32 |
| *CTM-1678 | 30 | 350 | 1 x 2 | 1.14 |
| *CTM-1687 | 40 | 350 | 1 x 2 | 1.20 |
| *CTM-1696 | 50 | 350 | 1 x 2 | 1.26 |
| *CTM-1705 | 60 | 350 | 1 x 3 | 1.32 |
| *CTM-1714 | 80 | 350 | 1 3/8 x 2 | 1.71 |
| *CTM-1723 | 125 | 350 | 1 3/8 x 3 1/2 | 2.37 |
| CTM-1732 | 140 | 350 | 1 3/8 x 4 | 2.97 |
| *CTM-1741 | 150 | 350 | 1 3/8 x 4 | 2.37 |
| CTM-1750 | 320 | 350 | 1 3/8 x 4 | 4.05 |
| CTM-1759 | 10 | 400 | 1 x 2 | 1.14 |
| CTM-1768 | 20 | 400 | 1 x 2 | 1.32 |
| CTM-1777 | 40 | 400 | 1 3/8 x 2 | 1.82 |
| CTM-1786 | 50 | 400 | 1 3/8 x 2 1/2 | 1.65 |
| CTM-1795 | 80 | 400 | 1 3/8 x 3 | 2.22 |
| CTM-1804 | 100 | 400 | 1 3/8 x 3 | 2.55 |
| *CTM-1813 | 4 | 450 | 1 x 2 | .84 |
| *CTM-1822 | 10 | 450 | 1 x 2 | .93 |
| *CTM-1831 | 15 | 450 | 1 x 2 | 1.02 |
| CTM-1840 | 20 | 450 | 1 x 2 | 1.08 |
| CTM-1849 | 25 | 450 | 1 x 2 1/2 | 1.44 |
| *CTM-1858 | 30 | 450 | 1 x 2 1/2 | 1.17 |
| *CTM-1867 | 40 | 450 | 1 x 3 | 1.23 |
| *CTM-1876 | 50 | 450 | 1 x 3 | 1.41 |
| *CTM-1885 | 60 | 450 | 1 3/8 x 2 1/2 | 1.56 |
| *CTM-1894 | 80 | 450 | 1 3/8 x 2 1/2 | 1.83 |
| *CTM-1903 | 100 | 450 | 1 3/8 x 3 | 2.07 |
| *CTM-1912 | 125 | 450 | 1 3/8 x 4 | 2.31 |
| CTM-1921 | 20 | 475 | 1 x 2 1/2 | 1.38 |
| CTM-1930 | 30 | 475 | 1 x 3 | 1.50 |
| CTM-1939 | 40 | 475 | 1 3/8 x 2 | 1.50 |
| CTM-1948 | 90 | 475 | 1 3/8 x 3 1/2 | 2.62 |
| *CTM-1957 | 10 | 500 | 1 x 2 | 1.04 |
| *CTM-1966 | 20 | 500 | 1 x 2 1/2 | 1.11 |
| CTM-1975 | 30 | 500 | 1 x 3 | 1.20 |
| CTM-1984 | 40 | 500 | 1 x 3 1/2 | 1.50 |
| CTM-1993 | 80 | 500 | 1 3/8 x 3 | 1.92 |
| CTM-1995 | 90 | 500 | 1 3/8 x 3 1/2 | 2.10 |
| CTM-1997 | 15 | 525 | 1 3/8 x 3 | 1.38 |

DUAL UNITS

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|-------------------------------------|-----------------|----------------|-----------|
| CTM-2050 | (.5 OHM @ 15.75 K 2.5 OHM) @ 60 CPS | 16 N.P. | 1 3/8 x 2 | 2.70 |
| †CTM-2054 | 1000-500 | 6 N.P. - 6 N.P. | 1 3/8 x 2 | 2.94 |
| *CTM-2058 | 250-1000 | 10-6 | 1 3/8 x 2 | 1.71 |
| †CTM-2062 | 200-40 | 10-10 | 1 x 2 | 1.20 |
| *CTM-2066 | 1000-1000 | 15-15 | 1 x 3 1/2 | 2.64 |
| CTM-2070 | 1000-1000 | 15-15 | 1 3/8 x 2 1/2 | 2.64 |
| CTM-2074 | 250-250 | 16-16 | 1 x 2 | 2.07 |
| CTM-2078 | 500-100 | 16-16 | 1 x 2 | 2.34 |
| CTM-2082 | 20-20 | 25-25 | 1 x 2 | 1.08 |
| CTM-2086 | 40-40 | 25-25 | 1 x 2 | 1.20 |
| CTM-2090 | 100-70 | 25-25 | 1 x 2 | 1.08 |
| CTM-2094 | 150-50 | 25-25 | 1 x 2 | 1.44 |
| CTM-2098 | 500-500 | 25-25 | 1 3/8 x 2 | 3.30 |
| CTM-2101 | 1000-500 | 25-25 | 1 3/8 x 2 | 4.08 |
| *CTM-2106 | 50-50 | 50-50 | 1 x 2 | 1.02 |
| CTM-2110 | 100-25 | 50-50 | 1 x 2 | 1.38 |
| CTM-2114 | 100-100 | 50-50 | 1 x 2 | 1.26 |
| CTM-2118 | 50-500 | 150-5 | 1 x 3 | 1.47 |
| CTM-2122 | 40-20 | 150-25 | 1 x 2 | 1.29 |
| CTM-2126 | 40-150 | 150-25 | 1 x 2 | 1.52 |



ARCO
electronics inc.

Arcolytic

**TWIST MOUNT
ELECTROLYTIC
CAPACITORS**

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price | Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|---------|----------------|-----------|-------------|---------------|---------|----------------|-----------|
| CTM-2130 | 50-150 | 150-25 | 1 x 2 1/2 | 1.65 | CTM-2490 | 60-20 | 350-300 | 1 3/8 x 2 1/2 | 2.13 |
| CTM-2134 | 150-100 | 150-25 | 1 3/8 x 2 1/2 | 1.62 | CTM-2494 | 15-15 | 350-350 | 1 x 2 | 1.35 |
| CTM-2138 | 40-20 | 150-50 | 1 x 2 | 1.53 | CTM-2498 | 20-20 | 350-350 | 1 x 3 | 1.74 |
| CTM-2142 | 150-50 | 150-50 | 1 x 3 | 1.68 | CTM-2502 | 30-20 | 350-350 | 1 x 3 1/2 | 1.95 |
| CTM-2146 | 150-100 | 150-50 | 1 3/8 x 2 1/2 | 1.95 | CTM-2506 | 30-30 | 350-350 | 1 x 3 | 1.74 |
| CTM-2150 | 20-10 | 150-150 | 1 x 2 | 1.20 | CTM-2510 | 50-30 | 350-350 | 1 3/8 x 2 1/2 | 1.89 |
| CTM-2154 | 20-20 | 150-150 | 1 x 2 | 1.02 | CTM-2514 | 60-30 | 350-350 | 1 3/8 x 3 | 1.89 |
| CTM-2158 | 30-15 | 150-150 | 1 x 2 | 1.32 | CTM-2518 | 80-4 | 350-350 | 1 3/8 x 2 1/2 | 2.40 |
| CTM-2162 | 30-20 | 150-150 | 1 x 2 | 1.32 | CTM-2522 | 80-20 | 350-350 | 1 3/8 x 3 | 2.10 |
| CTM-2166 | 30-30 | 150-150 | 1 x 2 | 1.11 | CTM-2526 | 80-40 | 350-350 | 1 3/8 x 3 | 2.46 |
| CTM-2170 | 40-20 | 150-150 | 1 x 2 | 1.11 | CTM-2530 | 80-80 | 350-350 | 1 3/8 x 4 | 2.82 |
| CTM-2174 | 40-30 | 150-150 | 1 x 2 | 1.11 | CTM-2534 | 90-40 | 350-350 | 1 3/8 x 3 | 2.58 |
| CTM-2178 | 40-40 | 150-150 | 1 x 2 1/2 | 1.14 | CTM-2538 | 100-40 | 350-350 | 1 3/8 x 3 | 3.45 |
| CTM-2182 | 50-30 | 150-150 | 1 x 2 1/2 | 1.20 | CTM-2542 | 100-60 | 350-350 | 1 3/8 x 3 1/2 | 2.88 |
| CTM-2186 | 50-50 | 150-150 | 1 x 2 1/2 | 1.29 | CTM-2546 | 100-100 | 350-350 | 1 3/8 x 4 | 3.69 |
| CTM-2190 | 60-20 | 150-150 | 1 x 2 | 1.50 | CTM-2550 | 160-10 | 350-350 | 1 3/8 x 3 | 2.58 |
| CTM-2194 | 60-60 | 150-150 | 1 x 3 1/2 | 1.41 | CTM-2554 | 50-50 | 385-385 | 1 3/8 x 3 | 2.73 |
| CTM-2198 | 70-30 | 150-150 | 1 x 2 1/2 | 1.32 | CTM-2558 | 35-100 | 400-50 | 1 x 3 | 1.56 |
| CTM-2202 | 75-75 | 150-150 | 1 x 3 | 1.56 | CTM-2562 | 40-100 | 400-50 | 1 3/8 x 2 | 2.04 |
| CTM-2206 | 80-40 | 150-150 | 1 3/8 x 2 1/2 | 1.38 | CTM-2566 | 100-30 | 400-50 | 1 3/8 x 3 | 2.34 |
| CTM-2210 | 80-50 | 150-150 | 1 x 2 1/2 | 1.44 | CTM-2570 | 80-80 | 400-200 | 1 3/8 x 3 1/2 | 2.37 |
| CTM-2214 | 80-60 | 150-150 | 1 x 3 | 1.80 | CTM-2574 | 60-80 | 400-250 | 1 3/8 x 4 | 2.94 |
| CTM-2218 | 80-80 | 150-150 | 1 3/8 x 2 | 1.59 | CTM-2578 | 4-140 | 400-300 | 1 3/8 x 3 | 2.16 |
| CTM-2222 | 100-30 | 150-150 | 1 x 2 1/2 | 1.68 | CTM-2582 | 100-80 | 400-350 | 1 3/8 x 4 | 4.08 |
| CTM-2226 | 100-100 | 150-150 | 1 3/8 x 2 1/2 | 2.43 | CTM-2586 | 15-15 | 400-400 | 1 x 2 1/2 | 1.68 |
| CTM-2230 | 125-100 | 150-150 | 1 3/8 x 2 1/2 | 2.01 | CTM-2590 | 30-10 | 400-400 | 1 x 3 | 1.77 |
| CTM-2234 | 150-80 | 150-150 | 1 3/8 x 2 1/2 | 1.83 | CTM-2594 | 60-60 | 460-400 | 1 3/8 x 4 | 3.30 |
| CTM-2238 | 150-150 | 150-150 | 1 3/8 x 3 | 2.64 | CTM-2598 | 75-75 | 400-400 | 1 3/8 x 4 | 3.63 |
| CTM-2242 | 200-5 | 150-150 | 1 3/8 x 2 1/2 | 1.62 | CTM-2602 | 80-10 | 400-400 | 1 3/8 x 3 1/2 | 2.55 |
| CTM-2246 | 200-125 | 150-150 | 1 3/8 x 3 1/2 | 2.25 | CTM-2606 | 80-20 | 400-400 | 1 3/8 x 3 | 2.73 |
| CTM-2250 | 200-150 | 150-150 | 1 3/8 x 4 | 2.25 | CTM-2610 | 80-40 | 400-400 | 1 3/8 x 4 | 3.09 |
| CTM-2254 | 200-200 | 150-150 | 1 3/8 x 4 | 2.40 | CTM-2614 | 80-60 | 400-400 | 1 3/8 x 3 | 2.82 |
| CTM-2258 | 60-125 | 200-25 | 1 x 3 | 1.80 | CTM-2618 | 120-40 | 400-400 | 1 3/8 x 4 | 3.15 |
| CTM-2262 | 30-10 | 200-50 | 1 x 2 | 1.38 | CTM-2622 | 10-20 | 450-25 | 1 x 2 | 1.02 |
| CTM-2266 | 100-100 | 200-50 | 1 3/8 x 2 1/2 | 2.13 | CTM-2626 | 10-50 | 450-25 | 1 x 2 1/2 | 1.29 |
| CTM-2270 | 40-40 | 200-200 | 1 x 3 | 1.74 | CTM-2630 | 20-20 | 450-25 | 1 x 2 | 1.50 |
| CTM-2274 | 60-60 | 200-200 | 1 x 3 | 2.04 | CTM-2634 | 20-100 | 450-25 | 1 x 2 1/2 | 1.65 |
| CTM-2278 | 60-60 | 200-200 | 1 3/8 x 2 | 2.04 | CTM-2638 | 40-20 | 450-25 | 1 x 3 | 1.83 |
| CTM-2282 | 100-100 | 200-200 | 1 3/8 x 3 | 2.10 | CTM-2642 | 80-10 | 450-25 | 1 3/8 x 3 | 2.55 |
| CTM-2286 | 200-5 | 200-200 | 1 3/8 x 2 1/2 | 1.68 | CTM-2646 | 80-20 | 450-25 | 1 3/8 x 3 | 2.55 |
| CTM-2290 | 40-350 | 250-15 | 1 3/8 x 2 | 2.07 | CTM-2650 | 10-100 | 450-50 | 1 x 2 1/2 | 1.53 |
| CTM-2294 | 40-25 | 250-25 | 1 x 2 1/2 | 1.50 | CTM-2654 | 30-25 | 450-50 | 1 x 2 1/2 | 1.74 |
| CTM-2298 | 50-100 | 250-50 | 1 3/8 x 2 | 1.95 | CTM-2658 | 40-50 | 450-50 | 1 x 3 1/2 | 2.25 |
| CTM-2302 | 80-100 | 250-50 | 1 3/8 x 2 1/2 | 2.13 | CTM-2662 | 40-100 | 450-50 | 1 x 3 1/2 | 1.68 |
| CTM-2306 | 100-150 | 250-50 | 1 3/8 x 3 | 2.19 | CTM-2666 | 50-100 | 450-50 | 1 3/8 x 2 1/2 | 1.80 |
| CTM-2310 | 40-25 | 250-150 | 1 x 2 1/2 | 2.07 | CTM-2668 | 80-50 | 450-50 | 1 3/8 x 3 | 2.10 |
| CTM-2314 | 10-10 | 250-250 | 1 x 2 | 1.29 | CTM-2670 | 80-100 | 450-50 | 1 3/8 x 3 | 2.25 |
| CTM-2318 | 20-20 | 250-250 | 1 x 2 | 1.14 | CTM-2674 | 10-50 | 450-100 | 1 3/8 x 2 | 1.53 |
| CTM-2322 | 30-30 | 250-250 | 1 x 2 1/2 | 1.65 | CTM-2678 | 20-100 | 450-100 | 1 3/8 x 2 | 2.19 |
| CTM-2326 | 40-20 | 250-250 | 1 x 3 | 1.65 | CTM-2682 | 30-40 | 450-150 | 1 3/8 x 2 | 2.19 |
| CTM-2330 | 40-40 | 250-250 | 1 x 2 | 1.50 | CTM-2686 | 30-200 | 450-150 | 1 3/8 x 3 | 2.10 |
| CTM-2334 | 150-40 | 250-250 | 1 3/8 x 3 | 2.88 | CTM-2690 | 40-150 | 450-150 | 1 3/8 x 3 | 2.58 |
| CTM-2338 | 150-150 | 250-250 | 1 3/8 x 4 | 3.09 | CTM-2694 | 80-50 | 450-150 | 1 3/8 x 3 | 2.82 |
| CTM-2342 | 200-200 | 250-250 | 1 3/8 x 4 | 3.63 | CTM-2698 | 80-60 | 450-150 | 1 3/8 x 3 1/2 | 3.12 |
| CTM-2346 | 35-500 | 300-6 | 1 x 2 1/2 | 1.68 | CTM-2702 | 80-40 | 450-200 | 1 3/8 x 3 | 2.85 |
| CTM-2350 | 20-20 | 300-25 | 1 x 2 | 1.38 | CTM-2706 | 20-50 | 450-250 | 1 x 3 | 1.68 |
| CTM-2354 | 20-100 | 300-25 | 1 x 2 1/2 | 2.04 | CTM-2710 | 20-150 | 450-250 | 1 3/8 x 3 | 2.88 |
| CTM-2358 | 10-40 | 300-50 | 1 x 2 | 1.02 | CTM-2714 | 40-10 | 450-300 | 1 x 3 | 1.56 |
| CTM-2362 | 80-100 | 300-50 | 1 3/8 x 3 | 2.37 | CTM-2718 | 10-100 | 450-350 | 1 3/8 x 3 1/2 | 3.00 |
| CTM-2366 | 60-200 | 300-150 | 1 3/8 x 3 | 2.79 | CTM-2722 | 20-80 | 450-350 | 1 3/8 x 3 1/2 | 2.73 |
| CTM-2370 | 80-100 | 300-150 | 1 3/8 x 2 1/2 | 2.73 | CTM-2726 | 25-15 | 450-350 | 1 x 3 | 1.92 |
| CTM-2374 | 60-10 | 300-200 | 1 x 3 1/2 | 1.89 | CTM-2730 | 40-10 | 450-350 | 1 3/8 x 2 | 1.56 |
| CTM-2378 | 100-100 | 300-200 | 1 x 4 | 2.55 | CTM-2734 | 40-20 | 450-350 | 1 3/8 x 2 1/2 | 2.13 |
| CTM-2382 | 20-60 | 300-250 | 1 x 3 1/2 | 2.07 | CTM-2738 | 40-40 | 450-350 | 1 3/8 x 3 | 2.49 |
| CTM-2386 | 10-10 | 300-300 | 1 x 2 | 1.32 | CTM-2742 | 30-20 | 450-400 | 1 3/8 x 3 | 2.04 |
| CTM-2390 | 15-15 | 300-300 | 1 x 2 | 1.44 | CTM-2746 | 5-5 | 450-450 | 1 x 2 | 1.02 |
| CTM-2394 | 40-30 | 300-300 | 1 x 3 | 1.59 | CTM-2750 | 10-10 | 450-450 | 1 x 2 | 1.14 |
| CTM-2398 | 40-40 | 300-300 | 1 3/8 x 2 1/2 | 2.25 | CTM-2754 | 15-10 | 450-450 | 1 x 2 1/2 | 1.68 |
| CTM-2402 | 50-50 | 300-300 | 1 3/8 x 2 1/2 | 2.52 | CTM-2758 | 15-15 | 450-450 | 1 x 2 1/2 | 1.35 |
| CTM-2406 | 60-20 | 300-300 | 1 3/8 x 2 1/2 | 2.10 | CTM-2762 | 20-10 | 450-450 | 1 x 2 1/2 | 1.35 |
| CTM-2410 | 60-60 | 300-300 | 1 3/8 x 2 1/2 | 2.55 | CTM-2766 | 20-20 | 450-450 | 1 x 3 | 1.53 |
| CTM-2414 | 75-75 | 300-300 | 1 3/8 x 3 | 2.85 | CTM-2770 | 30-10 | 450-450 | 1 x 3 | 1.44 |
| CTM-2418 | 80-40 | 300-300 | 1 3/8 x 2 1/2 | 2.67 | CTM-2774 | 30-10 | 450-450 | 1 3/8 x 2 | 1.80 |
| CTM-2422 | 80-60 | 300-300 | 1 3/8 x 3 1/2 | 2.79 | CTM-2778 | 30-15 | 450-450 | 1 3/8 x 2 | 1.98 |
| CTM-2426 | 80-80 | 300-300 | 1 3/8 x 3 | 2.43 | CTM-2782 | 30-30 | 450-450 | 1 3/8 x 2 1/2 | 1.83 |
| CTM-2430 | 120-20 | 300-300 | 1 3/8 x 3 1/2 | 2.40 | CTM-2786 | 40-5 | 450-450 | 1 x 3 | 1.92 |
| CTM-2434 | 120-40 | 300-300 | 1 3/8 x 3 1/2 | 2.61 | CTM-2790 | 40-15 | 450-450 | 1 3/8 x 2 1/2 | 2.10 |
| CTM-2438 | 150-100 | 300-300 | 1 3/8 x 3 1/2 | 4.05 | CTM-2794 | 40-20 | 450-450 | 1 3/8 x 2 1/2 | 1.95 |
| CTM-2442 | 200-80 | 300-300 | 1 3/8 x 4 | 3.15 | CTM-2798 | 40-40 | 450-450 | 1 3/8 x 3 | 2.07 |
| CTM-2446 | 20-20 | 350-25 | 1 x 2 | 1.44 | CTM-2802 | 50-40 | 450-450 | 1 3/8 x 3 | 2.70 |
| CTM-2450 | 40-20 | 350-25 | 1 x 2 1/2 | 1.77 | CTM-2806 | 50-50 | 450-450 | 1 3/8 x 3 | 2.31 |
| CTM-2454 | 80-100 | 350-50 | 1 3/8 x 3 | 3.39 | CTM-2810 | 60-20 | 450-450 | 1 3/8 x 3 | 2.13 |
| CTM-2458 | 20-100 | 350-75 | 1 x 2 1/2 | 1.68 | CTM-2814 | 60-40 | 450-450 | 1 3/8 x 3 1/2 | 2.37 |
| CTM-2462 | 5-75 | 350-150 | 1 x 2 1/2 | 1.59 | CTM-2818 | 60-60 | 450-450 | 1 3/8 x 3 1/2 | 2.70 |
| CTM-2466 | 40-10 | 350-200 | 1 3/8 x 2 | 1.83 | CTM-2822 | 80-10 | 450-450 | 1 3/8 x 3 | 2.16 |
| CTM-2470 | 20-30 | 350-250 | 1 x 3 | 1.74 | CTM-2826 | 80-20 | 450-450 | 1 3/8 x 3 | 2.34 |
| CTM-2474 | 40-10 | 350-250 | 1 x 3 | 1.83 | CTM-2830 | 80-30 | 450-450 | 1 3/8 x 4 | 2.52 |
| CTM-2478 | 60-80 | 350-250 | 1 3/8 x 3 1/2 | 2.58 | CTM-2834 | 80-40 | 450-450 | 1 3/8 x 3 1/2 | 3.03 |
| CTM-2482 | 20-10 | 350-300 | 1 x 2 | 1.53 | CTM-2838 | 80-80 | 450-450 | 1 3/8 x 4 1/2 | 3.96 |
| CTM-2486 | 30-30 | 350-300 | 1 x 3 1/2 | 1.98 | CTM-2842 | 100-40 | 450-450 | 1 3/8 x 4 | 2.91 |

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**TWIST MOUNT
ELECTROLYTIC
CAPACITORS**

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price | Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|---------|----------------|-----------|-------------|---------------|-------------|----------------|-----------|
| CTM-2846 | 10-20 | 475-25 | 1 x 2 | 1.29 | CTM-3130 | 120-60-20 | 150-150-25 | 1 3/8 x 2 1/2 | 3.03 |
| CTM-2850 | 30-100 | 475-50 | 1 3/8 x 3 1/2 | 2.04 | †CTM-3132 | 300-80-200 | 150-150-50 | 1 3/8 x 4 | 2.97 |
| CTM-2854 | 75-50 | 475-50 | 1 3/8 x 3 | 2.73 | CTM-3134 | 10-10-10 | 150-150-150 | 1 x 2 | 1.86 |
| CTM-2858 | 40-80 | 475-200 | 1 3/8 x 2 1/2 | 2.73 | CTM-3136 | 20-20-20 | 150-150-150 | 1 x 2 | 1.38 |
| CTM-2862 | 80-80 | 475-250 | 1 3/8 x 4 | 2.79 | CTM-3138 | 30-30-10 | 150-150-150 | 1 x 2 | 1.71 |
| CTM-2866 | 20-100 | 475-300 | 1 3/8 x 3 1/2 | 2.97 | CTM-3140 | 40-20-10 | 150-150-150 | 1 x 2 | 1.41 |
| CTM-2870 | 20-100 | 475-400 | 1 3/8 x 4 | 2.70 | CTM-3142 | 40-20-20 | 150-150-150 | 1 x 2 | 1.44 |
| CTM-2874 | 40-40 | 475-400 | 1 3/8 x 3 | 2.82 | CTM-3144 | 40-30-20 | 150-150-150 | 1 x 2 | 1.50 |
| CTM-2878 | 15-15 | 475-475 | 1 x 2 1/2 | 1.41 | CTM-3146 | 40-40-40 | 150-150-150 | 1 x 3 1/2 | 1.56 |
| CTM-2882 | 30-10 | 475-475 | 1 x 3 | 1.56 | †CTM-3148 | 50-20-20 | 150-150-150 | 1 x 2 1/2 | 2.31 |
| CTM-2886 | 40-10 | 475-475 | 1 3/8 x 2 1/2 | 1.86 | CTM-3150 | 50-40-10 | 150-150-150 | 1 x 2 1/2 | 1.53 |
| CTM-2890 | 40-40 | 475-475 | 1 3/8 x 3 | 3.24 | CTM-3152 | 50-50-10 | 150-150-150 | 1 3/8 x 2 | 2.43 |
| CTM-2894 | 60-40 | 475-475 | 1 3/8 x 4 | 3.42 | *CTM-3154 | 50-50-50 | 150-150-150 | 1 x 3 | 1.80 |
| CTM-2898 | 80-40 | 475-475 | 1 3/8 x 4 | 3.78 | CTM-3156 | 50-50-50 | 150-150-150 | 1 3/8 x 3 | 2.70 |
| CTM-2902 | 80-50 | 475-475 | 1 3/8 x 4 | 3.12 | CTM-3158 | 60-40-20 | 150-150-150 | 1 x 3 | 1.65 |
| CTM-2906 | 80-50 | 500-50 | 1 3/8 x 3 1/2 | 2.85 | CTM-3160 | 60-40-30 | 150-150-150 | 1 3/8 x 2 | 2.52 |
| CTM-2910 | 60-80 | 500-150 | 1 3/8 x 3 | 2.82 | CTM-3162 | 60-50-50 | 150-150-150 | 1 3/8 x 2 | 2.79 |
| CTM-2914 | 40-50 | 500-200 | 1 3/8 x 3 | 2.52 | CTM-3164 | 70-15-15 | 150-150-150 | 1 x 2 1/2 | 1.62 |
| CTM-2918 | 15-20 | 500-300 | 1 x 2 1/2 | 1.74 | CTM-3166 | 70-40-40 | 150-150-150 | 1 x 3 | 2.43 |
| CTM-2922 | 20-100 | 500-300 | 1 3/8 x 3 | 2.94 | CTM-3168 | 80-20-20 | 150-150-150 | 1 x 3 1/2 | 2.52 |
| CTM-2926 | 40-40 | 500-400 | 1 3/8 x 3 | 2.82 | CTM-3170 | 80-30-10 | 150-150-150 | 1 x 3 | 1.65 |
| CTM-2930 | 4-4 | 500-500 | 1 x 2 1/2 | 1.29 | CTM-3172 | 80-40-20 | 150-150-150 | 1 x 3 | 1.74 |
| CTM-2934 | 10-10 | 500-500 | 1 x 2 1/2 | 1.17 | CTM-3174 | 80-50-50 | 150-150-150 | 1 x 3 | 2.94 |
| CTM-2938 | 20-20 | 500-500 | 1 3/8 x 2 1/2 | 1.71 | CTM-3176 | 80-80-80 | 150-150-150 | 1 3/8 x 3 | 3.39 |
| CTM-2942 | 30-10 | 500-500 | 1 3/8 x 3 | 1.56 | CTM-3178 | 100-30-10 | 150-150-150 | 1 x 3 | 1.83 |
| CTM-2946 | 30-30 | 500-500 | 1 3/8 x 3 | 1.95 | CTM-3180 | 120-80-40 | 150-150-150 | 1 3/8 x 3 1/2 | 2.28 |
| CTM-2950 | 40-25 | 500-500 | 1 3/8 x 3 | 2.73 | CTM-3182 | 120-120-40 | 150-150-150 | 1 3/8 x 3 | 2.43 |
| CTM-2954 | 40-40 | 500-500 | 1 3/8 x 3 | 2.58 | CTM-3184 | 150-50-25 | 150-150-150 | 1 3/8 x 3 | 3.24 |
| CTM-2958 | 60-40 | 500-500 | 1 3/8 x 3 1/2 | 2.76 | CTM-3186 | 200-100-60 | 150-150-150 | 1 3/8 x 3 1/2 | 2.73 |
| | | | | | †CTM-3188 | 200-140-60 | 150-150-150 | 1 3/8 x 4 | 4.02 |
| | | | | | CTM-3190 | 200-150-150 | 150-150-150 | 1 3/8 x 4 | 4.50 |
| | | | | | CTM-3192 | 300-100-80 | 150-150-150 | 1 3/8 x 4 | 4.65 |
| | | | | | CTM-3194 | 80-40-50 | 200-100-50 | 1 3/8 x 2 1/2 | 2.76 |
| | | | | | CTM-3196 | 40-40-20 | 200-150-25 | 1 x 3 | 2.34 |
| | | | | | CTM-3198 | 60-200-140 | 200-150-150 | 1 3/8 x 4 | 2.88 |
| | | | | | CTM-3200 | 20-20-20 | 200-200-25 | 1 x 2 | 2.07 |
| | | | | | CTM-3202 | 30-20-20 | 200-200-25 | 1 x 2 | 2.31 |
| | | | | | CTM-3204 | 30-20-40 | 200-200-25 | 1 x 2 | 2.31 |
| | | | | | CTM-3206 | 60-5-20 | 200-200-50 | 1 x 2 1/2 | 1.50 |
| | | | | | CTM-3208 | 60-5-100 | 200-200-50 | 1 x 2 1/2 | 1.74 |
| | | | | | CTM-3210 | 80-10-20 | 200-200-50 | 1 x 3 | 1.68 |
| | | | | | CTM-3212 | 80-40-100 | 200-200-50 | 1 3/8 x 3 | 3.15 |
| | | | | | CTM-3214 | 90-90-20 | 200-200-50 | 1 3/8 x 3 | 3.42 |
| | | | | | CTM-3216 | 100-10-40 | 200-200-50 | 1 3/8 x 2 | 2.85 |
| | | | | | CTM-3218 | 30-20-40 | 200-200-150 | 1 x 2 1/2 | 1.62 |
| | | | | | CTM-3220 | 20-20-20 | 200-200-200 | 1 x 2 1/2 | 2.25 |
| | | | | | CTM-3222 | 30-20-20 | 200-200-200 | 1 x 2 1/2 | 2.43 |
| | | | | | CTM-3224 | 40-40-20 | 200-200-200 | 1 x 2 1/2 | 2.73 |
| | | | | | CTM-3226 | 50-30-30 | 200-200-200 | 1 3/8 x 2 | 2.85 |
| | | | | | CTM-3228 | 250-200-10 | 200-200-200 | 1 3/8 x 4 | 4.02 |
| | | | | | CTM-3230 | 40-40-20 | 250-150-25 | 1 3/8 x 2 | 2.43 |
| | | | | | CTM-3232 | 80-40-50 | 250-150-50 | 1 3/8 x 2 1/2 | 1.41 |
| | | | | | CTM-3234 | 15-20-20 | 250-150-150 | 1 x 2 | 2.16 |
| | | | | | CTM-3236 | 60-40-20 | 250-200-25 | 1 3/8 x 2 | 2.97 |
| | | | | | CTM-3238 | 15-15-20 | 250-250-25 | 1 x 2 | 1.41 |
| | | | | | CTM-3240 | 20-15-20 | 250-250-25 | 1 x 2 1/2 | 2.13 |
| | | | | | CTM-3242 | 30-30-20 | 250-250-25 | 1 x 3 | 1.68 |
| | | | | | CTM-3244 | 60-60-25 | 250-250-25 | 1 x 3 1/2 | 3.42 |
| | | | | | CTM-3246 | 70-70-20 | 250-250-50 | 1 3/8 x 3 | 3.51 |
| | | | | | CTM-3248 | 90-90-20 | 250-250-50 | 1 3/8 x 3 | 2.76 |
| | | | | | CTM-3250 | 40-20-10 | 250-250-150 | 1 3/8 x 2 | 2.49 |
| | | | | | CTM-3252 | 40-40-10 | 250-250-200 | 1 3/8 x 2 | 2.67 |
| | | | | | CTM-3254 | 80-80-60 | 250-250-200 | 1 3/8 x 3 1/2 | 4.05 |
| | | | | | CTM-3256 | 15-15-10 | 250-250-250 | 1 x 2 | 2.22 |
| | | | | | CTM-3258 | 20-20-10 | 250-250-250 | 1 x 2 | 2.25 |
| | | | | | CTM-3260 | 20-20-10 | 250-250-250 | 1 x 2 | 1.56 |
| | | | | | CTM-3262 | 30-15-10 | 250-250-250 | 1 x 2 1/2 | 2.43 |
| | | | | | CTM-3264 | 30-15-15 | 250-250-250 | 1 x 2 | 2.49 |
| | | | | | CTM-3266 | 30-20-10 | 250-250-250 | 1 x 2 | 2.43 |
| | | | | | †CTM-3268 | 40-20-10 | 250-250-250 | 1 x 2 1/2 | 2.58 |
| | | | | | CTM-3270 | 40-20-20 | 250-250-250 | 1 x 3 1/2 | 1.74 |
| | | | | | CTM-3272 | 80-10-10 | 250-250-250 | 1 x 3 | 1.92 |
| | | | | | CTM-3274 | 80-80-60 | 250-250-250 | 1 3/8 x 3 | 2.94 |
| | | | | | CTM-3276 | 10-500-500 | 300-15-15 | 1 3/8 x 2 1/2 | 2.34 |
| | | | | | CTM-3278 | 20-10-10 | 300-75-25 | 1 3/8 x 3 | 2.13 |
| | | | | | CTM-3280 | 100-60-20 | 300-150-25 | 1 3/8 x 3 | 3.78 |
| | | | | | CTM-3282 | 140-200-100 | 300-150-50 | 1 3/8 x 4 | 5.16 |
| | | | | | CTM-3284 | 20-150-80 | 300-150-150 | 1 3/8 x 3 | 2.37 |
| | | | | | CTM-3286 | 60-200-30 | 300-150-150 | 1 3/8 x 4 | 3.90 |
| | | | | | CTM-3288 | 100-150-30 | 300-150-150 | 1 3/8 x 4 | 4.47 |
| | | | | | CTM-3290 | 100-200-30 | 300-150-150 | 1 3/8 x 4 | 3.12 |
| | | | | | CTM-3292 | 100-200-60 | 300-150-150 | 1 3/8 x 4 | 3.00 |
| | | | | | CTM-3294 | 20-80-10 | 300-250-200 | 1 3/8 x 2 1/2 | 3.12 |
| | | | | | CTM-3296 | 16-20-20 | 300-250-250 | 1 x 3 | 2.34 |
| | | | | | CTM-3298 | 40-80-40 | 300-250-250 | 1 3/8 x 3 | 3.78 |
| | | | | | †CTM-3300 | 60-30-30 | 300-250-250 | 1 3/8 x 2 1/2 | 3.39 |
| | | | | | CTM-3302 | 100-60-20 | 300-250-250 | 1 3/8 x 4 | 2.94 |
| | | | | | CTM-3304 | 200-60-20 | 300-250-250 | 1 3/8 x 4 | 3.30 |
| | | | | | CTM-3306 | 20-20-20 | 300-300-25 | 1 x 2 1/2 | 2.49 |
| | | | | | CTM-3308 | 40-15-20 | 300-300-25 | 1 x 3 | 2.67 |

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**TWIST MOUNT
ELECTROLYTIC
CAPACITORS**

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price | Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|-------------|---|-----------|-------------|---------------|-------------|---|-----------|
| CTM-3310 | 40-20-20 | 300-300-25 | 1 ³ / ₈ x 2 | 2.79 | CTM-3490 | 90-40-20 | 350-350-350 | 1 ³ / ₈ x 4 | 3.15 |
| CTM-3312 | 140-10-100 | 300-300-25 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.02 | CTM-3492 | 100-20-20 | 350-350-350 | 1 ³ / ₈ x 4 | 3.09 |
| CTM-3314 | 30-30-25 | 300-300-50 | 1 ¹ / ₈ x 3 | 2.61 | CTM-3494 | 100-40-10 | 350-350-350 | 1 ³ / ₈ x 4 | 3.15 |
| CTM-3316 | 100-10-60 | 300-300-50 | 1 ³ / ₈ x 2 ¹ / ₂ | 2.43 | CTM-3496 | 100-100-10 | 350-350-350 | 1 ³ / ₈ x 4 | 4.08 |
| CTM-3318 | 125-20-20 | 300-300-50 | 1 ³ / ₈ x 3 | 4.02 | CTM-3498 | 120-40-40 | 350-350-350 | 1 ³ / ₈ x 4 | 5.58 |
| CTM-3320 | 125-20-100 | 300-300-50 | 1 ³ / ₈ x 3 | 4.41 | CTM-3500 | 140-140-20 | 350-350-350 | 1 ³ / ₈ x 4 | 4.59 |
| CTM-3322 | 125-60-40 | 300-300-50 | 1 ³ / ₈ x 4 | 4.41 | CTM-3502 | 20-50-50 | 400-10-10 | 1 x 2 | 2.13 |
| CTM-3324 | 140-100-60 | 300-300-50 | 1 ³ / ₈ x 4 | 3.63 | CTM-3504 | 40-200-60 | 400-200-200 | 1 ³ / ₈ x 4 | 4.98 |
| CTM-3326 | 140-100-100 | 300-300-50 | 1 ³ / ₈ x 4 | 5.04 | CTM-3506 | 10-5-40 | 400-300-25 | 1 x 2 | 1.98 |
| CTM-3328 | 200-20-10 | 300-300-100 | 1 ³ / ₈ x 4 | 2.94 | CTM-3508 | 60-40-20 | 400-300-25 | 1 ³ / ₈ x 3 ¹ / ₂ | 3.78 |
| CTM-3330 | 40-40-20 | 300-300-150 | 1 ³ / ₈ x 2 | 3.24 | CTM-3510 | 80-20-10 | 400-300-300 | 1 ³ / ₈ x 3 ¹ / ₂ | 3.84 |
| CTM-3332 | 140-10-200 | 300-300-150 | 1 ³ / ₈ x 4 | 3.30 | CTM-3512 | 10-50-30 | 400-350-25 | 1 x 3 ¹ / ₂ | 2.79 |
| CTM-3334 | 10-10-15 | 300-300-250 | 1 x 2 | 2.22 | CTM-3514 | 100-10-200 | 400-350-25 | 1 ³ / ₈ x 3 | 2.94 |
| CTM-3336 | 10-10-10 | 300-300-300 | 1 x 2 | 1.44 | CTM-3516 | 80-20-100 | 400-350-50 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.05 |
| CTM-3338 | 60-20-10 | 300-300-300 | 1 ³ / ₈ x 2 | 2.07 | CTM-3518 | 100-10-20 | 400-350-50 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.05 |
| CTM-3340 | 80-20-10 | 300-300-300 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.42 | CTM-3520 | 20-15-10 | 400-350-350 | 1 x 3 | 2.67 |
| CTM-3342 | 80-40-40 | 300-300-300 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.15 | CTM-3522 | 10-20-20 | 400-350-350 | 1 x 3 | 2.40 |
| CTM-3344 | 100-40-20 | 300-300-300 | 1 ³ / ₈ x 3 ¹ / ₂ | 3.30 | CTM-3524 | 15-15-40 | 400-400-25 | 1 x 3 | 2.52 |
| CTM-3346 | 120-50-40 | 300-300-300 | 1 ³ / ₈ x 4 | 3.51 | CTM-3526 | 20-20-20 | 400-400-25 | 1 x 3 | 1.71 |
| CTM-3348 | 150-100-10 | 300-300-300 | 1 ³ / ₈ x 4 | 3.81 | CTM-3528 | 30-10-20 | 400-400-25 | 1 x 3 | 2.55 |
| CTM-3350 | 160-60-20 | 300-300-300 | 1 ³ / ₈ x 4 | 4.92 | CTM-3530 | 20-10-40 | 400-400-50 | 1 x 3 | 2.40 |
| CTM-3352 | 200-140-20 | 300-300-300 | 1 ³ / ₈ x 4 | 6.36 | CTM-3532 | 30-10-150 | 400-400-50 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.06 |
| CTM-3354 | 30-25-100 | 350-25-6 | 1 x 2 | 1.68 | CTM-3534 | 80-40-100 | 400-400-50 | 1 ³ / ₈ x 4 | 4.50 |
| CTM-3356 | 5-100-40 | 350-25-25 | 1 x 2 | 2.10 | CTM-3536 | 80-40-150 | 400-400-50 | 1 ³ / ₈ x 4 | 3.15 |
| CTM-3358 | 40-100-25 | 350-50-25 | 1 ³ / ₈ x 2 | 2.88 | CTM-3538 | 100-10-20 | 400-400-50 | 1 ³ / ₈ x 3 ¹ / ₂ | 2.70 |
| CTM-3360 | 10-50-100 | 350-100-75 | 1 x 3 | 2.58 | CTM-3540 | 20-20-10 | 400-400-100 | 1 x 3 | 2.67 |
| CTM-3362 | 20-50-100 | 350-100-75 | 1 x 3 | 1.86 | CTM-3542 | 20-10-10 | 400-400-350 | 1 x 3 | 2.43 |
| CTM-3364 | 10-10-250 | 350-150-15 | 1 x 2 ¹ / ₂ | 2.49 | CTM-3544 | 20-10-40 | 400-400-350 | 1 x 3 | 3.06 |
| CTM-3366 | 10-50-160 | 350-150-50 | 1 x 3 ¹ / ₂ | 1.71 | CTM-3546 | 20-20-10 | 400-400-350 | 1 x 3 | 1.80 |
| CTM-3368 | 60-200-30 | 350-150-150 | 1 ³ / ₈ x 4 | 2.64 | CTM-3548 | 60-30-20 | 400-400-350 | 1 ³ / ₈ x 3 | 2.73 |
| CTM-3370 | 40-80-500 | 350-200-25 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.56 | CTM-3550 | 80-20-10 | 400-400-350 | 1 ³ / ₈ x 3 | 2.58 |
| CTM-3372 | 125-5-100 | 350-200-75 | 1 ³ / ₈ x 3 ¹ / ₂ | 3.18 | CTM-3552 | 100-10-80 | 400-400-350 | 1 ³ / ₈ x 4 | 3.66 |
| CTM-3374 | 50-10-500 | 350-250-5 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.33 | CTM-3554 | 10-10-10 | 400-400-400 | 1 x 2 ¹ / ₂ | 1.44 |
| CTM-3376 | 50-10-1000 | 350-250-5 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.66 | CTM-3556 | 40-10-10 | 400-400-400 | 1 x 3 | 1.89 |
| CTM-3378 | 20-30-20 | 350-250-25 | 1 x 3 | 2.52 | CTM-3558 | 90-10-5 | 400-400-400 | 1 ³ / ₈ x 3 | 2.64 |
| CTM-3380 | 30-20-100 | 350-250-50 | 1 x 3 | 2.94 | CTM-3560 | 100-30-20 | 400-400-400 | 1 ³ / ₈ x 4 | 4.95 |
| CTM-3382 | 100-40-5 | 350-250-50 | 1 ³ / ₈ x 2 ¹ / ₂ | 2.91 | CTM-3562 | 10-20-10 | 450-25-25 | 1 x 2 | 1.95 |
| CTM-3384 | 30-20-10 | 350-250-250 | 1 x 3 ¹ / ₂ | 2.70 | CTM-3564 | 30-20-20 | 450-25-25 | 1 x 3 | 2.49 |
| CTM-3386 | 10-80-25 | 350-300-25 | 1 ³ / ₈ x 3 | 3.06 | CTM-3566 | 30-100-25 | 450-25-25 | 1 ³ / ₈ x 2 | 2.67 |
| CTM-3388 | 30-30-20 | 350-300-25 | 1 x 3 | 1.89 | CTM-3568 | 10-100-20 | 450-50-25 | 1 x 3 | 2.31 |
| CTM-3390 | 30-50-20 | 350-300-25 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.24 | CTM-3570 | 80-100-20 | 350-50-50 | 1 ³ / ₈ x 3 | 3.84 |
| CTM-3392 | 10-40-5 | 350-300-150 | 1 x 2 ¹ / ₂ | 2.58 | CTM-3572 | 10-50-160 | 450-150-25 | 1 x 3 | 2.49 |
| CTM-3394 | 20-40-10 | 350-300-150 | 1 x 3 ¹ / ₂ | 2.85 | CTM-3574 | 40-40-130 | 450-150-50 | 1 ³ / ₈ x 3 | 2.22 |
| CTM-3396 | 40-20-10 | 350-300-200 | 1 ³ / ₈ x 2 | 2.97 | CTM-3576 | 40-50-100 | 450-150-50 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.30 |
| CTM-3398 | 100-40-40 | 350-300-250 | 1 ³ / ₈ x 3 ¹ / ₂ | 2.91 | CTM-3578 | 10-50-100 | 450-150-75 | 1 x 3 | 1.95 |
| CTM-3400 | 10-10-1400 | 350-350-3 | 1 ³ / ₈ x 3 | 2.94 | CTM-3580 | 20-50-100 | 450-150-75 | 1 ³ / ₈ x 2 | 3.06 |
| CTM-3402 | 15-10-20 | 350-350-25 | 1 x 2 ¹ / ₂ | 1.50 | CTM-3582 | 40-90-50 | 450-150-150 | 1 ³ / ₈ x 4 | 2.40 |
| CTM-3404 | 15-15-20 | 350-350-25 | 1 x 2 ¹ / ₂ | 2.43 | CTM-3584 | 20-80-50 | 450-200-50 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.06 |
| CTM-3406 | 20-5-30 | 350-350-25 | 1 x 2 | 2.22 | CTM-3586 | 10-100-200 | 450-200-25 | 1 x 3 ¹ / ₂ | 2.16 |
| CTM-3408 | 20-5-100 | 350-350-25 | 1 x 3 | 1.56 | CTM-3588 | 10-100-100 | 450-200-50 | 1 x 3 ¹ / ₂ | 2.13 |
| CTM-3410 | 20-10-20 | 350-350-25 | 1 x 2 ¹ / ₂ | 1.53 | CTM-3590 | 20-60-100 | 450-250-25 | 1 ³ / ₈ x 2 ¹ / ₂ | 2.19 |
| CTM-3412 | 20-20-20 | 350-350-25 | 1 x 2 ¹ / ₂ | 1.68 | CTM-3592 | 10-60-60 | 450-250-250 | 1 ³ / ₈ x 4 | 3.60 |
| CTM-3414 | 30-10-20 | 350-350-25 | 1 x 2 ¹ / ₂ | 2.76 | CTM-3594 | 10-80-80 | 450-250-250 | 1 ³ / ₈ x 4 | 2.49 |
| CTM-3416 | 30-20-20 | 350-350-25 | 1 x 2 ¹ / ₂ | 1.86 | CTM-3596 | 20-40-10 | 450-250-250 | 1 ³ / ₈ x 2 | 2.85 |
| CTM-3418 | 30-20-40 | 350-350-25 | 1 x 3 | 2.85 | CTM-3598 | 20-60-40 | 450-250-250 | 1 ³ / ₈ x 3 | 3.57 |
| CTM-3420 | 30-30-20 | 350-350-25 | 1 ³ / ₈ x 2 | 2.04 | CTM-3600 | 80-40-40 | 450-250-250 | 1 ³ / ₈ x 4 | 2.88 |
| CTM-3422 | 40-5-30 | 350-350-25 | 1 ³ / ₈ x 2 | 2.61 | CTM-3602 | 10-10-10 | 450-300-150 | 1 ³ / ₈ x 2 | 1.86 |
| CTM-3424 | 40-40-50 | 350-350-25 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.39 | CTM-3604 | 30-10-10 | 450-300-150 | 1 ³ / ₈ x 2 | 2.67 |
| CTM-3426 | 60-10-25 | 350-350-25 | 1 ³ / ₈ x 2 ¹ / ₂ | 2.70 | CTM-3606 | 5-80-40 | 450-300-300 | 1 ³ / ₈ x 3 | 2.49 |
| CTM-3428 | 90-40-50 | 350-350-25 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.41 | CTM-3608 | 10-100-20 | 450-300-300 | 1 ³ / ₈ x 3 | 3.90 |
| CTM-3430 | 100-20-20 | 350-350-25 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.26 | CTM-3610 | 20-15-10 | 450-300-300 | 1 ³ / ₈ x 3 | 2.58 |
| CTM-3432 | 200-10-50 | 350-350-50 | 1 ³ / ₈ x 4 | 3.15 | CTM-3612 | 10-10-20 | 450-350-25 | 1 x 2 ¹ / ₂ | 2.07 |
| CTM-3434 | 10-5-30 | 350-350-50 | 1 x 2 | 1.98 | CTM-3614 | 10-10-50 | 450-350-25 | 1 x 3 | 2.16 |
| CTM-3436 | 10-5-150 | 350-350-50 | 1 x 3 | 2.43 | CTM-3616 | 30-15-40 | 450-350-25 | 1 ³ / ₈ x 2 | 1.92 |
| CTM-3438 | 20-5-150 | 350-350-50 | 1 x 3 | 1.77 | CTM-3618 | 30-40-50 | 450-350-25 | 1 x 4 | 2.22 |
| CTM-3440 | 20-10-100 | 350-350-50 | 1 ³ / ₈ x 2 ¹ / ₂ | 1.74 | CTM-3620 | 20-80-160 | 450-350-50 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.05 |
| CTM-3442 | 70-40-50 | 350-350-50 | 1 ³ / ₈ x 3 ¹ / ₂ | 3.90 | CTM-3622 | 80-50-100 | 450-350-200 | 1 ³ / ₈ x 4 | 3.51 |
| CTM-3444 | 80-10-40 | 350-350-50 | 1 ³ / ₈ x 3 | 3.42 | CTM-3624 | 15-20-20 | 450-350-250 | 1 ³ / ₈ x 2 | 2.67 |
| CTM-3446 | 80-10-100 | 350-350-50 | 1 ³ / ₈ x 3 | 3.69 | CTM-3626 | 20-15-10 | 450-350-300 | 1 x 3 | 2.76 |
| CTM-3448 | 100-20-50 | 350-350-50 | 1 ³ / ₈ x 3 | 4.17 | CTM-3628 | 40-50-50 | 450-350-300 | 1 ³ / ₈ x 4 | 4.38 |
| CTM-3450 | 80-40-40 | 350-350-50 | 1 ³ / ₈ x 4 | 3.39 | CTM-3630 | 20-15-15 | 450-350-350 | 1 x 3 | 2.94 |
| CTM-3452 | 150-4-30 | 350-350-50 | 1 ³ / ₈ x 3 ¹ / ₂ | 2.85 | CTM-3632 | 20-40-10 | 450-350-350 | 1 ³ / ₈ x 2 ¹ / ₂ | 2.10 |
| CTM-3454 | 30-20-160 | 350-350-75 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.60 | CTM-3634 | 20-80-10 | 450-350-350 | 1 ³ / ₈ x 3 | 2.55 |
| CTM-3456 | 40-20-10 | 350-350-100 | 1 ³ / ₈ x 2 | 2.58 | CTM-3636 | 40-80-40 | 450-350-350 | 1 ³ / ₈ x 3 ¹ / ₂ | 3.24 |
| CTM-3458 | 30-20-100 | 350-350-150 | 1 ³ / ₈ x 2 ¹ / ₂ | 2.40 | CTM-3638 | 50-80-10 | 450-350-350 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.41 |
| CTM-3460 | 40-20-10 | 350-350-150 | 1 x 3 | 2.88 | CTM-3640 | 60-20-20 | 450-350-350 | 1 ³ / ₈ x 3 ¹ / ₂ | 3.87 |
| CTM-3462 | 40-40-160 | 350-350-200 | 1 ³ / ₈ x 4 | 4.47 | CTM-3642 | 60-40-20 | 450-350-350 | 1 ³ / ₈ x 3 ¹ / ₂ | 4.14 |
| CTM-3464 | 80-40-100 | 350-350-200 | 1 ³ / ₈ x 4 | 3.27 | CTM-3644 | 10-30-150 | 450-400-5 | 1 x 3 | 2.70 |
| CTM-3466 | 100-60-20 | 350-350-200 | 1 ³ / ₈ x 4 | 3.20 | CTM-3646 | 30-50-40 | 450-400-25 | 1 ³ / ₈ x 3 | 3.51 |
| CTM-3468 | 20-10-5 | 350-350-250 | 1 x 2 ¹ / ₂ | 1.53 | CTM-3648 | 60-80-20 | 450-400-250 | 1 ³ / ₈ x 4 | 3.27 |
| CTM-3470 | 30-10-20 | 350-350-250 | 1 x 3 | 2.76 | CTM-3650 | 10-30-30 | 450-400-300 | 1 ³ / ₈ x 2 ¹ / ₂ | 3.03 |
| CTM-3472 | 20-20-10 | 350-350-350 | 1 x 3 | 2.67 | CTM-3652 | | | | |



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**TWIST MOUNT
ELECTROLYTIC
CAPACITORS**

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price | Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|-------------|----------------|-----------|------------------------|----------------|-----------------|----------------|-----------|
| *CTM-3670 | 30-30-20 | 450-450-25 | 1 3/8 x 2 1/2 | 2.13 | *CTM-3850 | 20-20-60 | 475-475-450 | 1 3/8 x 4 | 2.91 |
| *CTM-3672 | 30-30-125 | 450-450-25 | 1 3/8 x 3 | 2.37 | CTM-3852 | 10-10-10 | 475-475-475 | 1 x 3 | 2.43 |
| *CTM-3674 | 40-20-20 | 450-450-25 | 1 3/8 x 2 1/2 | 2.10 | CTM-3854 | 30-30-10 | 475-475-475 | 1 3/8 x 3 | 3.60 |
| *CTM-3676 | 40-40-20 | 450-450-25 | 1 3/8 x 3 | 2.34 | CTM-3856 | 30-30-20 | 475-475-475 | 1 3/8 x 3 | 2.67 |
| *CTM-3678 | 40-40-40 | 450-450-25 | 1 3/8 x 3 | 2.37 | CTM-3858 | 40-10-10 | 475-475-475 | 1 3/8 x 3 | 3.48 |
| *CTM-3680 | 80-10-125 | 450-450-25 | 1 3/8 x 3 1/2 | 2.67 | CTM-3860 | 40-20-20 | 475-475-475 | 1 3/8 x 3 | 4.29 |
| *CTM-3682 | 80-40-100 | 450-450-25 | 1 3/8 x 4 | 3.03 | *CTM-3862 | 40-30-10 | 475-475-475 | 1 3/8 x 3 | 2.20 |
| *CTM-3684 | 10-10-40 | 450-450-50 | 1 x 2 1/2 | 1.50 | *CTM-3864 | 40-30-30 | 475-475-475 | 1 3/8 x 4 | 3.09 |
| CTM-3686 | 20-10-50 | 450-450-50 | 1 x 3 | 1.71 | CTM-3866 | 40-35-10 | 475-475-475 | 1 3/8 x 3 | 4.11 |
| CTM-3688 | 20-20-100 | 450-450-50 | 1 3/8 x 2 1/2 | 3.15 | CTM-3868 | 10-80-10 | 500-150-150 | 1 x 3 1/2 | 2.58 |
| *CTM-3690 | 30-10-150 | 450-450-50 | 1 3/8 x 2 1/2 | 2.10 | CTM-3870 | 10-100-40 | 500-200-50 | 1 3/8 x 2 1/2 | 3.03 |
| *CTM-3692 | 30-15-150 | 450-450-50 | 1 3/8 x 3 | 2.22 | CTM-3872 | 40-40-100 | 500-250-50 | 1 3/8 x 3 | 3.87 |
| CTM-3694 | 30-30-40 | 450-450-50 | 1 3/8 x 3 | 3.30 | CTM-3874 | 20-20-40 | 500-300-25 | 1 3/8 x 2 | 2.79 |
| *CTM-3696 | 35-25-150 | 450-450-50 | 1 3/8 x 3 | 2.37 | CTM-3876 | 20-40-100 | 500-300-25 | 1 3/8 x 2 1/2 | 3.24 |
| CTM-3698 | 40-10-40 | 450-450-50 | 1 3/8 x 2 1/2 | 2.99 | CTM-3878 | 5-100-200 | 500-300-150 | 1 3/8 x 4 | 4.65 |
| *CTM-3700 | 40-10-100 | 450-450-50 | 1 3/8 x 3 | 2.58 | CTM-3880 | 40-40-25 | 500-400-50 | 1 3/8 x 3 | 3.87 |
| *CTM-3702 | 40-30-25 | 450-450-50 | 1 3/8 x 2 1/2 | 3.39 | CTM-3882 | 20-40-100 | 500-450-25 | 1 3/8 x 3 | 3.42 |
| *CTM-3704 | 40-40-100 | 450-450-50 | 1 3/8 x 3 1/2 | 2.58 | CTM-3884 | 80-20-100 | 500-450-50 | 1 3/8 x 4 | 4.59 |
| CTM-3706 | 60-40-75 | 450-450-50 | 1 3/8 x 4 | 2.79 | CTM-3886 | 10-40-40 | 500-450-450 | 1 3/8 x 3 1/2 | 3.75 |
| *CTM-3708 | 80-20-100 | 450-450-50 | 1 3/8 x 4 | 2.88 | CTM-3888 | 30-20-20 | 506-500-25 | 1 3/8 x 2 1/2 | 3.21 |
| CTM-3710 | 80-50-50 | 450-450-50 | 1 3/8 x 4 | 4.68 | CTM-3890 | 10-10-100 | 500-500-50 | 1 x 3 1/2 | 2.58 |
| CTM-3712 | 30-30-125 | 450-450-75 | 1 3/8 x 3 | 4.05 | *CTM-3892 | 20-10-100 | 500-500-50 | 1 x 4 | 1.98 |
| CTM-3714 | 10-10-50 | 450-450-100 | 1 3/8 x 2 | 2.40 | CTM-3894 | 30-10-20 | 500-500-50 | 1 3/8 x 2 1/2 | 2.79 |
| CTM-3716 | 30-20-30 | 450-450-150 | 1 3/8 x 2 1/2 | 3.15 | *CTM-3896 | 40-40-100 | 500-500-200 | 1 3/8 x 4 | 3.48 |
| *CTM-3718 | 40-40-40 | 450-450-150 | 1 3/8 x 3 1/2 | 2.49 | CTM-3898 | 10-10-5 | 500-500-350 | 1 x 2 1/2 | 2.25 |
| *CTM-3720 | 40-10-80 | 450-450-200 | 1 3/8 x 3 | 2.34 | *CTM-3900 | 20-20-60 | 500-500-400 | 1 3/8 x 3 1/2 | 2.88 |
| *CTM-3722 | 40-10-100 | 450-450-200 | 1 3/8 x 3 1/2 | 2.49 | *CTM-3902 | 10-10-10 | 500-500-500 | 1 x 3 | 1.02 |
| CTM-3724 | 40-40-60 | 450-450-200 | 1 3/8 x 3 1/2 | 2.67 | CTM-3904 | 30-20-20 | 500-500-500 | 1 3/8 x 3 | 2.52 |
| *CTM-3726 | 40-40-100 | 450-450-200 | 1 3/8 x 4 | 2.97 | *CTM-3906 | 40-10-10 | 500-500-500 | 1 3/8 x 3 | 2.34 |
| CTM-3728 | 15-10-120 | 450-450-300 | 1 3/8 x 3 1/2 | 4.23 | *CTM-3908 | 40-40-10 | 500-500-500 | 1 3/8 x 3 1/2 | 3.03 |
| CTM-3730 | 15-15-10 | 450-450-300 | 1 x 3 1/2 | 2.58 | QUADRUPLE UNITS | | | | |
| CTM-3732 | 15-5-15 | 450-450-350 | 1 x 3 | 2.58 | CTM-4020 | 40-40-40-40 | 25-25-25-25 | 1 3/8 x 2 | 2.49 |
| CTM-3734 | 20-20-60 | 450-450-350 | 1 3/8 x 3 1/2 | 4.56 | CTM-4022 | 5-5-25-100 | 75-75-25-15 | 1 3/8 x 2 | 2.40 |
| CTM-3736 | 40-10-10 | 450-450-350 | 1 3/8 x 3 | 2.97 | *CTM-4025 | 50-20-150-30 | 150-150-15-15 | 1 3/8 x 2 | 1.89 |
| CTM-3738 | 40-40-60 | 450-450-350 | 1 3/8 x 4 | 4.11 | CTM-4028 | 40-40-50-200 | 150-150-25-10 | 1 3/8 x 2 | 2.85 |
| *CTM-3740 | 40-40-80 | 450-450-350 | 1 3/8 x 4 | 3.33 | *CTM-4031 | 20-20-160-40 | 150-150-25-25 | 1 3/8 x 2 | 1.92 |
| *CTM-3742 | 50-5-50 | 450-450-350 | 1 3/8 x 3 1/2 | 2.55 | CTM-4034 | 40-40-100-100 | 150-150-25-25 | 1 3/8 x 2 | 3.03 |
| CTM-3744 | 60-20-40 | 450-450-350 | 1 3/8 x 4 | 4.41 | CTM-4037 | 40-40-200-100 | 150-150-25-25 | 1 3/8 x 2 | 3.21 |
| *CTM-3746 | 10-10-10 | 450-450-450 | 1 x 3 | 1.56 | *CTM-4040 | 50-40-160-40 | 150-150-25-25 | 1 3/8 x 2 | 2.13 |
| CTM-3748 | 15-15-10 | 450-450-450 | 1 x 3 1/2 | 2.67 | CTM-4043 | 80-20-160-40 | 150-150-25-25 | 1 3/8 x 2 | 3.33 |
| *CTM-3750 | 15-15-15 | 450-450-450 | 1 x 3 | 1.86 | CTM-4047 | 80-30-100-40 | 150-150-25-25 | 1 3/8 x 2 | 3.12 |
| *CTM-3752 | 20-10-10 | 450-450-450 | 1 x 3 | 1.74 | CTM-4050 | 40-40-100-100 | 150-150-50-50 | 1 3/8 x 2 | 3.33 |
| *CTM-3754 | 20-20-20 | 450-450-450 | 1 3/8 x 2 1/2 | 2.16 | CTM-4052 | 30-20-20-200 | 150-150-150-10 | 1 3/8 x 2 | 2.79 |
| *CTM-3756 | 30-10-10 | 450-450-450 | 1 3/8 x 2 | 1.89 | *CTM-4055 | 40-40-20-300 | 150-150-150-10 | 1 3/8 x 2 | 1.92 |
| *CTM-3758 | 30-20-20 | 450-450-450 | 1 3/8 x 3 | 2.31 | CTM-4058 | 50-30-25-200 | 150-150-150-10 | 1 3/8 x 2 | 3.03 |
| CTM-3760 | 30-30-10 | 450-450-450 | 1 3/8 x 3 | 3.39 | *CTM-4061 | 60-40-20-200 | 150-150-150-10 | 1 3/8 x 2 | 2.07 |
| *CTM-3762 | 30-30-30 | 450-450-450 | 1 3/8 x 3 1/2 | 2.61 | CTM-4064 | 80-80-10-200 | 150-150-150-10 | 1 3/8 x 2 1/2 | 3.51 |
| *CTM-3764 | 40-10-10 | 450-450-450 | 1 3/8 x 3 | 2.01 | *CTM-4067 | 200-30-10-100 | 150-150-150-10 | 1 3/8 x 3 1/2 | 2.46 |
| *CTM-3766 | 40-30-20 | 450-450-450 | 1 3/8 x 3 | 2.58 | *CTM-4070 | 290-30-10-100 | 150-150-150-10 | 1 3/8 x 3 1/2 | 2.90 |
| *CTM-3768 | 40-40-10 | 450-450-450 | 1 3/8 x 2 1/2 | 2.49 | CTM-4073 | 60-20-20-1000 | 150-150-150-15 | 1 3/8 x 2 1/2 | 4.20 |
| *CTM-3770 | 40-40-20 | 450-450-450 | 1 3/8 x 3 | 2.57 | CTM-4076 | 20-20-20-20 | 150-150-150-25 | 1 3/8 x 2 | 2.61 |
| *CTM-3772 | 40-40-40 | 450-450-450 | 1 3/8 x 3 1/2 | 2.94 | CTM-4079 | 30-20-20-100 | 150-150-150-25 | 1 3/8 x 2 | 2.85 |
| CTM-3774 | 50-30-30 | 450-450-450 | 1 3/8 x 3 1/2 | 4.29 | *CTM-4082 | 30-30-30-40 | 150-150-150-25 | 1 3/8 x 2 | 1.86 |
| *CTM-3776 | 50-40-30 | 450-450-450 | 1 3/8 x 3 1/2 | 2.94 | *CTM-4085 | 40-20-20-20 | 150-150-150-25 | 1 3/8 x 2 | 1.77 |
| CTM-3778 | 60-10-10 | 450-450-450 | 1 3/8 x 3 | 3.51 | CTM-4088 | 40-30-20-100 | 150-150-150-25 | 1 3/8 x 2 | 2.86 |
| *CTM-3780 | 60-20-20 | 450-450-450 | 1 3/8 x 3 | 2.76 | *CTM-4092 | 40-40-30-20 | 150-150-150-25 | 1 3/8 x 2 | 1.88 |
| *CTM-3782 | 60-30-10 | 450-450-450 | 1 3/8 x 3 | 2.70 | CTM-4095 | 40-40-30-120 | 150-150-150-25 | 1 3/8 x 2 | 3.15 |
| *CTM-3784 | 60-40-20 | 450-450-450 | 1 3/8 x 3 1/2 | 3.00 | *CTM-4098 | 40-40-40-20 | 150-150-150-25 | 1 3/8 x 2 | 1.89 |
| CTM-3786 | 80-40-10 | 450-450-450 | 1 3/8 x 4 | 4.56 | CTM-4101 | 40-40-40-100 | 150-150-150-25 | 1 3/8 x 2 | 3.03 |
| *CTM-3788 | 80-40-20 | 450-450-450 | 1 3/8 x 4 | 3.24 | *CTM-4104 | 40-40-40-160 | 150-150-150-25 | 1 3/8 x 2 | 2.13 |
| *CTM-3790 | 20-50-20 | 475-50-25 | 1 x 3 | 1.65 | *CTM-4107 | 50-20-20-200 | 150-150-150-25 | 1 3/8 x 2 | 2.10 |
| *CTM-3792 | 80-80-50 | 475-150-50 | 1 3/8 x 4 | 2.91 | CTM-4110 | 50-30-30-100 | 150-150-150-25 | 1 3/8 x 2 | 2.04 |
| CTM-3794 | 10-100-40 | 475-200-50 | 1 3/8 x 2 1/2 | 3.03 | *CTM-4113 | 50-50-50-20 | 150-150-150-25 | 1 3/8 x 2 | 2.13 |
| CTM-3796 | 40-40-100 | 475-250-50 | 1 3/8 x 3 | 3.87 | CTM-4116 | 50-50-50-100 | 150-150-150-25 | 1 3/8 x 2 | 3.39 |
| CTM-3798 | 40-40-100 | 475-250-100 | 1 3/8 x 3 | 3.69 | CTM-4118 | 60-30-10-60 | 150-150-150-25 | 1 3/8 x 2 | 2.76 |
| CTM-3800 | 40-40-10 | 475-250-250 | 1 3/8 x 3 1/2 | 3.00 | CTM-4120 | 60-40-20-20 | 150-150-150-25 | 1 3/8 x 2 | 2.97 |
| CTM-3802 | 20-20-40 | 475-300-25 | 1 3/8 x 2 | 2.79 | CTM-4122 | 60-60-10-60 | 150-150-150-25 | 1 3/8 x 2 | 3.15 |
| CTM-3804 | 40-40-100 | 475-300-50 | 1 3/8 x 3 1/2 | 4.05 | CTM-4124 | 70-40-40-25 | 150-150-150-25 | 1 3/8 x 2 1/2 | 3.12 |
| CTM-3806 | 40-80-10 | 475-300-300 | 1 3/8 x 3 1/2 | 4.32 | CTM-4126 | 80-40-30-100 | 150-150-150-25 | 1 3/8 x 2 1/2 | 3.33 |
| CTM-3808 | 10-100-25 | 475-350-25 | 1 3/8 x 3 | 3.33 | *CTM-4128 | 80-40-40-20 | 150-150-150-25 | 1 3/8 x 2 | 2.13 |
| CTM-3810 | 10-4-100 | 475-350-50 | 1 x 2 1/2 | 2.34 | *CTM-4130 | 80-40-40-40 | 150-150-150-25 | 1 3/8 x 2 1/2 | 2.16 |
| CTM-3812 | 20-10-5 | 475-350-150 | 1 x 2 1/2 | 2.52 | *CTM-4132 | 80-40-40-100 | 150-150-150-25 | 1 3/8 x 2 1/2 | 2.25 |
| *CTM-3814 | 10-4-40 | 475-350-250 | 1 3/8 x 2 | 1.65 | CTM-4134 | 80-50-50-25 | 150-150-150-25 | 1 3/8 x 2 1/2 | 3.42 |
| CTM-3816 | 20-20-10 | 475-350-350 | 1 x 3 | 2.88 | CTM-4136 | 80-60-40-100 | 150-150-150-25 | 1 3/8 x 2 1/2 | 3.57 |
| CTM-3818 | 40-40-25 | 475-400-50 | 1 3/8 x 3 | 3.87 | *CTM-4138 | 100-90-60-200 | 150-150-150-25 | 1 3/8 x 3 | 2.97 |
| CTM-3820 | 10-45-100 | 475-450-50 | 1 3/8 x 3 | 3.30 | CTM-4140 | 125-125-40-100 | 150-150-150-25 | 1 3/8 x 3 | 4.47 |
| CTM-3822 | 40-40-20 | 475-450-50 | 1 3/8 x 3 | 3.96 | CTM-4143 | 250-200-10-25 | 150-150-150-50 | 1 3/8 x 4 | 3.21 |
| *CTM-3824 | 10-40-100 | 475-450-200 | 1 3/8 x 3 | 2.52 | *CTM-4146 | 200-200-100-10 | 150-150-150-75 | 1 3/8 x 4 | 3.57 |
| CTM-3826 | 40-20-20 | 475-450-450 | 1 3/8 x 3 | 4.05 | CTM-4148 | 40-40-40-30 | 150-150-150-150 | 1 3/8 x 2 | 1.98 |
| *CTM-3828 | 40-80-10 | 475-450-450 | 1 3/8 x 4 | 3.30 | *CTM-4150 | 50-40-30-30 | 150-150-150-150 | 1 3/8 x 2 | 3.06 |
| CTM-3830 | 40-40-500 | 475-475-10 | 1 3/8 x 3 1/2 | 4.92 | CTM-4152 | 50-50-50-50 | 150-150-150-150 | 1 3/8 x 2 1/2 | 3.51 |
| CTM-3832 | 10-10 | | | | | | | | |



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| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price | Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|----------------|-----------------|----------------|-----------|-------------|---------------|-----------------|----------------|-----------|
| CTM-4167 | 60-20-5-50 | 200-200-200-50 | 1 3/8 x 3 | 3.15 | *CTM-4393 | 40-40-40-150 | 350-350-350-50 | 1 3/8 x 4 | 3.39 |
| CTM-4170 | 40-40-50-80 | 250-250-150-150 | 1 3/8 x 2 1/2 | 3.69 | CTM-4395 | 50-40-20-100 | 350-350-350-50 | 1 3/8 x 3 | 4.65 |
| *CTM-4173 | 100-40-10-100 | 250-250-250-50 | 1 3/8 x 3 1/2 | 3.09 | CTM-4398 | 50-40-40-160 | 350-350-350-50 | 1 3/8 x 4 | 5.19 |
| CTM-4176 | 80-60-40-20 | 250-250-250-150 | 1 3/8 x 4 | 4.59 | CTM-4400 | 60-25-25-100 | 350-350-350-50 | 1 3/8 x 3 1/2 | 4.65 |
| CTM-4178 | 40-40-20-20 | 250-250-250-250 | 1 3/8 x 2 1/2 | 3.60 | *CTM-4403 | 60-30-30-150 | 350-350-350-50 | 1 3/8 x 3 | 3.30 |
| CTM-4180 | 100-40-80-20 | 300-50-25-25 | 1 3/8 x 3 | 4.11 | CTM-4405 | 70-40-10-50 | 350-350-350-50 | 1 3/8 x 3 | 3.15 |
| *CTM-4183 | 20-150-150-100 | 300-150-150-30 | 1 3/8 x 4 | 3.18 | CTM-4408 | 100-10-10-100 | 350-350-350-50 | 1 3/8 x 3 1/2 | 3.09 |
| *CTM-4185 | 10-200-140-30 | 300-150-150-150 | 1 3/8 x 3 1/2 | 3.06 | CTM-4410 | 100-20-10-20 | 350-350-350-50 | 1 3/8 x 3 1/2 | 3.24 |
| *CTM-4188 | 10-200-200-30 | 300-150-150-150 | 1 3/8 x 4 | 3.21 | *CTM-4413 | 100-40-30-50 | 350-350-350-50 | 1 3/8 x 4 | 3.93 |
| *CTM-4190 | 100-60-10-20 | 300-200-150-50 | 1 3/8 x 3 1/2 | 2.91 | CTM-4415 | 140-20-10-100 | 350-350-350-50 | 1 3/8 x 4 | 5.55 |
| CTM-4193 | 120-20-20-100 | 300-250-25-30 | 1 3/8 x 3 1/2 | 4.77 | *CTM-4418 | 90-30-5-100 | 350-350-350-75 | 1 3/8 x 3 1/2 | 3.69 |
| CTM-4195 | 200-20-100-20 | 300-250-50-25 | 1 3/8 x 4 | 3.48 | CTM-4420 | 80-60-40-20 | 350-350-350-150 | 1 3/8 x 4 | 5.49 |
| CTM-4198 | 40-40-40-40 | 300-250-250-25 | 1 3/8 x 2 1/2 | 3.96 | CTM-4424 | 20-10-5-60 | 350-350-350-200 | 1 3/8 x 2 1/2 | 3.30 |
| CTM-4200 | 80-5-60-20 | 300-300-150-25 | 1 3/8 x 3 | 2.61 | CTM-4428 | 30-10-5-100 | 350-350-350-200 | 1 3/8 x 2 1/2 | 2.73 |
| CTM-4203 | 100-40-125-50 | 300-300-150-50 | 1 3/8 x 4 | 5.58 | CTM-4432 | 30-20-5-100 | 350-350-350-200 | 1 3/8 x 3 | 2.82 |
| *CTM-4205 | 140-10-10-100 | 300-300-150-50 | 1 3/8 x 3 1/2 | 3.03 | CTM-4439 | 80-40-10-100 | 350-350-350-200 | 1 3/8 x 3 1/2 | 4.47 |
| *CTM-4208 | 100-10-200-30 | 300-300-150-150 | 1 3/8 x 4 | 3.54 | CTM-4443 | 130-20-10-40 | 350-350-350-300 | 1 3/8 x 4 | 5.88 |
| *CTM-4210 | 140-10-200-30 | 300-300-150-150 | 1 3/8 x 4 | 3.75 | CTM-4446 | 35-30-20-10 | 350-350-350-350 | 1 3/8 x 3 | 4.17 |
| *CTM-4213 | 140-10-200-60 | 300-300-150-150 | 1 3/8 x 4 1/2 | 3.84 | *CTM-4449 | 40-20-20-10 | 350-350-350-350 | 1 3/8 x 2 1/2 | 2.61 |
| *CTM-4215 | 150-20-10-250 | 300-300-250-50 | 1 3/8 x 4 | 3.63 | CTM-4453 | 40-25-25-10 | 350-350-350-350 | 1 3/8 x 2 1/2 | 3.57 |
| CTM-4218 | 10-10-10-20 | 300-300-300-25 | 1 3/8 x 2 | 2.67 | *CTM-4456 | 40-40-40-40 | 350-350-350-350 | 1 3/8 x 4 | 3.60 |
| CTM-4220 | 40-30-20-50 | 300-300-300-25 | 1 3/8 x 2 1/2 | 3.75 | *CTM-4459 | 80-60-40-20 | 350-350-350-350 | 1 3/8 x 4 | 3.84 |
| *CTM-4223 | 60-40-20-50 | 300-300-300-25 | 1 3/8 x 3 1/2 | 2.82 | *CTM-4461 | 90-40-30-30 | 350-350-350-350 | 1 3/8 x 4 | 4.08 |
| CTM-4225 | 30-30-15-30 | 300-300-300-50 | 1 3/8 x 3 | 3.30 | CTM-4464 | 100-20-10-5 | 350-350-350-350 | 1 3/8 x 3 1/2 | 4.77 |
| CTM-4228 | 60-30-10-60 | 300-300-300-50 | 1 3/8 x 2 1/2 | 3.78 | CTM-4467 | 100-40-10-10 | 350-350-350-350 | 1 3/8 x 3 1/2 | 3.60 |
| *CTM-4230 | 150-30-30-150 | 300-300-300-50 | 1 3/8 x 4 | 3.66 | *CTM-4469 | 100-40-25-25 | 350-350-350-350 | 1 3/8 x 4 | 3.93 |
| *CTM-4233 | 40-40-40-20 | 300-300-300-150 | 1 3/8 x 3 | 2.94 | CTM-4471 | 50-20-100-25 | 400-200-150-25 | 1 3/8 x 2 1/2 | 4.20 |
| *CTM-4235 | 120-40-40-10 | 300-300-300-250 | 1 3/8 x 4 | 3.78 | CTM-4473 | 20-20-10-40 | 400-250-250-25 | 1 3/8 x 2 1/2 | 3.03 |
| *CTM-4238 | 40-20-10-10 | 300-300-300-300 | 1 3/8 x 2 | 2.37 | *CTM-4475 | 40-120-10-150 | 400-250-250-50 | 1 3/8 x 4 | 3.54 |
| *CTM-4240 | 40-40-20-10 | 300-300-300-300 | 1 3/8 x 3 1/2 | 2.73 | CTM-4477 | 10-100-10-100 | 400-300-75-25 | 1 3/8 x 2 1/2 | 4.23 |
| *CTM-4243 | 40-40-30-20 | 300-300-300-300 | 1 3/8 x 3 | 2.91 | CTM-4479 | 30-40-50-200 | 400-300-250-150 | 1 3/8 x 4 | 5.40 |
| *CTM-4245 | 60-40-10-10 | 300-300-300-300 | 1 3/8 x 2 1/2 | 2.73 | CTM-4481 | 20-30-20-20 | 400-300-300-25 | 1 3/8 x 2 1/2 | 3.42 |
| *CTM-4248 | 100-40-20-20 | 300-300-300-300 | 1 3/8 x 4 | 5.22 | CTM-4483 | 80-40-20-10 | 400-300-300-300 | 1 3/8 x 4 | 5.01 |
| CTM-4250 | 100-50-10-5 | 300-300-300-300 | 1 3/8 x 4 | 4.65 | CTM-4485 | 20-40-100-10 | 400-350-50-50 | 1 3/8 x 3 | 3.78 |
| *CTM-4253 | 140-100-20-20 | 300-300-300-300 | 1 3/8 x 4 1/2 | 4.26 | CTM-4487 | 20-10-10-20 | 400-350-200-25 | 1 3/8 x 2 | 2.88 |
| *CTM-4255 | 150-100-10-10 | 300-300-300-300 | 1 3/8 x 4 | 3.99 | *CTM-4489 | 40-80-100-25 | 400-350-200-50 | 1 3/8 x 3 1/2 | 3.57 |
| CTM-4258 | 150-150-30-30 | 300-300-300-300 | 1 3/8 x 4 1/2 | 4.62 | CTM-4491 | 40-10-80-10 | 400-350-250-250 | 1 3/8 x 4 | 4.20 |
| *CTM-4260 | 200-20-20-20 | 300-300-300-300 | 1 3/8 x 4 | 3.69 | CTM-4493 | 80-40-20-20 | 400-350-300-300 | 1 3/8 x 3 1/2 | 3.84 |
| CTM-4263 | 20-150-80-20 | 350-150-150-25 | 1 3/8 x 3 | 4.11 | CTM-4495 | 10-50-30-30 | 400-350-350-25 | 1 3/8 x 3 | 3.96 |
| CTM-4265 | 60-60-30-160 | 350-150-150-25 | 1 3/8 x 3 | 4.11 | †CTM-4497 | 35-25-25-20 | 400-350-350-25 | 1 3/8 x 2 1/2 | 4.11 |
| CTM-4268 | 40-50-20-80 | 350-150-150-50 | 1 3/8 x 3 | 3.66 | CTM-4499 | 80-40-10-10 | 400-350-350-25 | 1 3/8 x 4 | 4.77 |
| CTM-4270 | 20-60-160-40 | 350-200-25-25 | 1 3/8 x 2 | 3.60 | *CTM-4501 | 20-50-40-80 | 400-350-350-50 | 1 3/8 x 3 | 3.00 |
| CTM-4273 | 15-80-40-200 | 350-200-200-25 | 1 3/8 x 3 | 4.05 | †CTM-4503 | 30-60-20-100 | 400-350-350-50 | 1 3/8 x 4 | 4.50 |
| CTM-4275 | 20-100-100-10 | 350-200-200-100 | 1 3/8 x 4 | 4.50 | CTM-4505 | 40-80-10-100 | 400-350-350-200 | 1 3/8 x 4 | 5.10 |
| CTM-4278 | 20-100-100-20 | 350-200-200-200 | 1 3/8 x 4 | 4.65 | CTM-4507 | 40-100-20-10 | 400-350-350-350 | 1 3/8 x 4 | 3.90 |
| †CTM-4280 | 20-40-10-250 | 350-300-150-50 | 1 3/8 x 3 | 4.14 | CTM-4509 | 10-10-25-25 | 400-400-25-25 | 1 3/8 x 2 | 2.52 |
| CTM-4283 | 140-10-10-100 | 350-300-150-50 | 1 3/8 x 4 | 3.45 | CTM-4511 | 20-5-20-20 | 400-400-25-25 | 1 3/8 x 2 | 2.76 |
| *CTM-4285 | 20-150-10-250 | 350-300-150-50 | 1 3/8 x 4 | 3.66 | CTM-4513 | 20-20-40-10 | 400-400-25-25 | 1 3/8 x 2 1/2 | 4.56 |
| CTM-4288 | 40-40-20-20 | 350-300-300-25 | 1 3/8 x 3 1/2 | 4.05 | CTM-4515 | 50-25-100-20 | 400-400-50-25 | 1 3/8 x 3 | 4.20 |
| *CTM-4290 | 160-30-30-20 | 350-300-300-50 | 1 3/8 x 4 | 3.48 | *CTM-4517 | 50-40-100-100 | 400-400-50-25 | 1 3/8 x 4 | 3.06 |
| *CTM-4293 | 30-30-50-100 | 350-300-300-75 | 1 3/8 x 3 | 3.15 | CTM-4519 | 80-40-100-20 | 400-400-50-25 | 1 3/8 x 4 | 5.04 |
| CTM-4295 | 40-80-10-10 | 350-300-300-300 | 1 3/8 x 3 | 3.21 | *CTM-4521 | 100-10-30-20 | 400-400-50-50 | 1 3/8 x 3 1/2 | 3.06 |
| *CTM-4298 | 140-100-20-20 | 350-300-300-300 | 1 3/8 x 4 1/2 | 4.62 | CTM-4523 | 20-10-10-25 | 400-400-100-25 | 1 3/8 x 2 | 2.79 |
| *CTM-4300 | 160-30-10-4 | 350-300-300-300 | 1 3/8 x 3 1/2 | 3.63 | *CTM-4525 | 20-20-100-100 | 400-400-100-100 | 1 3/8 x 3 | 3.12 |
| *CTM-4303 | 160-60-10-4 | 350-300-300-300 | 1 3/8 x 4 | 3.78 | *CTM-4527 | 20-10-20-25 | 400-400-200-25 | 1 3/8 x 2 | 1.98 |
| *CTM-4305 | 40-10-100-25 | 350-350-25-25 | 1 3/8 x 2 | 2.25 | CTM-4529 | 10-10-40-10 | 400-400-200-50 | 1 3/8 x 2 | 2.88 |
| *CTM-4308 | 60-4-100-40 | 350-350-25-25 | 1 3/8 x 2 1/2 | 2.28 | CTM-4531 | 40-30-80-10 | 400-400-200-200 | 1 3/8 x 3 1/2 | 4.47 |
| CTM-4310 | 100-4-50-50 | 350-350-50-25 | 1 3/8 x 3 1/2 | 4.50 | CTM-4533 | 80-10-80-100 | 400-400-250-50 | 1 3/8 x 4 | 4.28 |
| CTM-4313 | 200-10-4-20 | 350-350-50-25 | 1 3/8 x 4 | 5.22 | CTM-4535 | 40-10-80-10 | 400-400-250-250 | 1 3/8 x 3 1/2 | 3.43 |
| CTM-4315 | 60-5-50-20 | 350-350-50-50 | 1 3/8 x 2 1/2 | 2.19 | CTM-4537 | 5-5-50-80 | 400-400-300-250 | 1 3/8 x 3 | 4.20 |
| CTM-4318 | 100-20-50-30 | 350-350-50-50 | 1 3/8 x 3 1/2 | 4.89 | *CTM-4539 | 50-20-20-25 | 400-400-350-25 | 1 3/8 x 3 | 2.67 |
| *CTM-4320 | 60-20-80-100 | 350-350-150-50 | 1 3/8 x 4 | 2.94 | †CTM-4541 | 60-40-40-10 | 400-400-350-50 | 1 3/8 x 3 1/2 | 5.19 |
| CTM-4323 | 60-10-100-100 | 350-350-150-10 | 1 3/8 x 4 | 3.60 | CTM-4543 | 100-10-20-20 | 400-400-350-50 | 1 3/8 x 4 | 3.27 |
| *CTM-4325 | 100-60-100-100 | 350-350-150-10 | 1 3/8 x 4 1/2 | 4.08 | CTM-4544 | 20-20-20-20 | 400-400-400-25 | 1 3/8 x 2 1/2 | 3.48 |
| CTM-4328 | 15-15-150-150 | 350-350-150-150 | 1 3/8 x 3 1/2 | 4.17 | CTM-4545 | 60-30-30-150 | 400-400-400-25 | 1 3/8 x 4 | 5.22 |
| CTM-4330 | 40-20-10-20 | 350-350-200-25 | 1 3/8 x 2 | 3.51 | *CTM-4547 | 80-40-10-20 | 400-400-400-25 | 1 3/8 x 4 | 3.18 |
| CTM-4333 | 40-20-100-10 | 350-350-200-50 | 1 3/8 x 3 | 4.29 | *CTM-4549 | 80-40-30-40 | 400-400-400-25 | 1 3/8 x 4 | 3.57 |
| CTM-4335 | 80-20-20-100 | 350-350-200-50 | 1 3/8 x 3 1/2 | 4.50 | CTM-4551 | 90-40-10-40 | 400-400-400-25 | 1 3/8 x 4 | 5.22 |
| CTM-4338 | 80-20-20-200 | 350-350-200-50 | 1 3/8 x 3 1/2 | 4.86 | CTM-4553 | 40-40-40-150 | 400-400-400-50 | 1 3/8 x 4 | 5.13 |
| *CTM-4340 | 60-40-60-20 | 350-350-200-150 | 1 3/8 x 3 1/2 | 3.03 | *CTM-4555 | 90-20-10-50 | 400-400-400-50 | 1 3/8 x 4 | 3.24 |
| CTM-4343 | 80-60-60-10 | 350-350-200-150 | 1 3/8 x 4 | 5.04 | CTM-4557 | 80-20-10-100 | 400-400-400-50 | 1 3/8 x 4 | 4.74 |
| CTM-4345 | 50-30-8-20 | 350-350-250-200 | 1 3/8 x 2 1/2 | 4.05 | *CTM-4559 | 40-40-30-4 | 400-400-400-350 | 1 3/8 x 4 | 3.54 |
| CTM-4348 | 15-15-15-15 | 350-350-300-25 | 1 3/8 x 2 | 3.12 | CTM-4561 | 30-30-20-20 | 400-400-400-400 | 1 3/8 x 3 | 4.38 |
| CTM-4350 | 35-35-10-20 | 350-350-300-25 | 1 3/8 x 2 1/2 | 3.75 | CTM-4563 | 40-35-10-10 | 400-400-400-400 | 1 3/8 x 3 | 4.02 |
| CTM-4353 | 100-80-10-20 | 350-350-300-50 | 1 3/8 x 4 | 3.96 | †CTM-4565 | 50-40-30-20 | 400-400-400-400 | 1 3/8 x 4 | 3.39 |
| CTM-4355 | 100-60-40-40 | | | | | | | | |



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CAPACITORS**

| Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price | Catalog No. | Capacity MFD. | WVDC | Diam. x Length | Net Price |
|-------------|---------------|-----------------|----------------|-----------|-------------|---------------|-----------------|----------------|-----------|
| *CTM-4609 | 10-100-20-20 | 450-300-300-200 | 1 3/8 x 3 | 3.03 | *CTM-4824 | 35-35-10-5 | 450-450-450-450 | 1 3/8 x 3 1/2 | 2.76 |
| CTM-4612 | 10-100-20-20 | 450-300-300-300 | 1 3/8 x 3 | 4.74 | *CTM-4826 | 40-10-10-10 | 450-450-450-450 | 1 3/8 x 3 | 2.46 |
| CTM-4615 | 10-40-80-10 | 450-350-200-200 | 1 3/8 x 3 1/2 | 4.23 | CTM-4828 | 40-20-20-10 | 450-450-450-450 | 1 3/8 x 3 | 4.32 |
| *CTM-4618 | 10-40-100-100 | 450-350-250-50 | 1 3/8 x 3 | 3.33 | *CTM-4830 | 40-35-10-10 | 450-450-450-450 | 1 3/8 x 3 | 2.88 |
| CTM-4621 | 40-30-15-50 | 450-350-300-50 | 1 3/8 x 3 | 3.93 | *CTM-4832 | 40-40-4-4 | 450-450-450-450 | 1 3/8 x 3 1/2 | 2.79 |
| CTM-4624 | 10-140-20-10 | 450-350-300-300 | 1 3/8 x 4 | 5.37 | *CTM-4834 | 40-40-20-20 | 450-450-450-450 | 1 3/8 x 4 | 3.33 |
| †CTM-4627 | 10-100-10-20 | 450-350-350-25 | 1 3/8 x 3 | 4.68 | *CTM-4836 | 40-40-30-30 | 450-450-450-450 | 1 3/8 x 4 | 3.63 |
| *CTM-4630 | 10-60-40-25 | 450-350-350-25 | 1 3/8 x 4 | 2.76 | *CTM-4838 | 40-40-40-40 | 450-450-450-450 | 1 3/8 x 4 | 3.87 |
| CTM-4633 | 20-15-15-20 | 450-350-350-25 | 1 3/8 x 2 1/2 | 3.42 | *CTM-4840 | 60-20-20-20 | 450-450-450-450 | 1 3/8 x 4 | 3.39 |
| *CTM-4636 | 20-80-50-100 | 450-350-350-50 | 1 3/8 x 4 | 3.60 | *CTM-4842 | 60-30-10-2 | 450-450-450-450 | 1 3/8 x 3 | 3.06 |
| CTM-4639 | 30-40-40-10 | 450-350-350-200 | 1 3/8 x 3 1/2 | 4.65 | CTM-4844 | 70-10-10-5 | 450-450-450-450 | 1 3/8 x 3 | 4.29 |
| CTM-4642 | 80-10-30-40 | 450-400-300-150 | 1 3/8 x 4 | 4.74 | *CTM-4846 | 80-10-10-10 | 450-450-450-450 | 1 3/8 x 4 | 3.03 |
| *CTM-4645 | 80-10-40-30 | 450-400-300-300 | 1 3/8 x 4 | 5.48 | *CTM-4848 | 40-40-50-80 | 475-250-150-50 | 1 3/8 x 3 1/2 | 3.00 |
| CTM-4648 | 5-60-50-20 | 450-400-350-25 | 1 3/8 x 3 1/2 | 4.56 | *CTM-4850 | 20-40-100-80 | 475-300-50-25 | 1 3/8 x 3 | 2.67 |
| CTM-4651 | 10-40-30-40 | 450-400-400-25 | 1 3/8 x 3 | 3.96 | *CTM-4852 | 10-100-10-100 | 475-300-300-25 | 1 3/8 x 3 1/2 | 2.94 |
| CTM-4654 | 80-40-10-150 | 450-400-400-50 | 1 3/8 x 4 | 5.40 | *CTM-4854 | 20-80-20-10 | 475-300-300-300 | 1 3/8 x 3 1/2 | 3.00 |
| CTM-4657 | 10-40-40-100 | 450-400-400-50 | 1 3/8 x 3 1/2 | 4.38 | *CTM-4856 | 20-140-20-10 | 475-300-300-300 | 1 3/8 x 4 | 3.60 |
| CTM-4660 | 60-40-20-20 | 450-400-400-100 | 1 3/8 x 4 | 5.22 | CTM-4858 | 10-20-100-25 | 475-350-25-25 | 1 3/8 x 2 | 2.07 |
| CTM-4664 | 10-10-20-20 | 450-450-25-25 | 1 3/8 x 2 | 2.67 | †CTM-4860 | 10-40-80-100 | 475-350-200-100 | 1 3/8 x 3 1/2 | 4.32 |
| CTM-4666 | 20-10-100-50 | 450-450-25-25 | 1 3/8 x 2 | 3.21 | *CTM-4862 | 20-40-80-100 | 475-350-200-100 | 1 3/8 x 4 | 3.27 |
| *CTM-4669 | 20-15-20-20 | 450-450-25-25 | 1 3/8 x 2 | 2.07 | *CTM-4864 | 10-40-80-100 | 475-350-300-100 | 1 3/8 x 4 | 3.33 |
| *CTM-4672 | 30-30-125-125 | 450-450-25-25 | 1 3/8 x 3 | 2.91 | *CTM-4866 | 10-30-5-80 | 475-350-350-50 | 1 3/8 x 4 | 3.33 |
| CTM-4675 | 30-10-150-30 | 450-450-50-50 | 1 3/8 x 3 | 3.69 | *CTM-4868 | 10-140-4-100 | 475-350-350-50 | 1 3/8 x 4 | 3.51 |
| *CTM-4678 | 20-20-60-100 | 450-450-150-25 | 1 3/8 x 2 1/2 | 2.55 | *CTM-4870 | 10-130-20-10 | 475-350-350-350 | 1 3/8 x 4 | 3.60 |
| *CTM-4681 | 40-40-125-125 | 450-450-150-25 | 1 3/8 x 4 | 3.42 | CTM-4872 | 20-60-40-10 | 475-350-350-350 | 1 3/8 x 3 1/2 | 4.68 |
| *CTM-4684 | 10-10-60-100 | 450-450-200-50 | 1 3/8 x 3 | 2.31 | *CTM-4874 | 30-130-10-10 | 475-350-350-350 | 1 3/8 x 4 | 3.84 |
| *CTM-4687 | 35-25-20-100 | 450-450-200-50 | 1 3/8 x 3 | 2.79 | CTM-4876 | 10-40-100-10 | 475-400-50-25 | 1 3/8 x 2 1/2 | 2.43 |
| CTM-4690 | 40-40-100-60 | 450-450-200-200 | 1 3/8 x 4 | 3.63 | *CTM-4878 | 10-40-4-100 | 475-400-350-50 | 1 3/8 x 4 | 3.48 |
| CTM-4693 | 10-10-10-50 | 450-450-300-25 | 1 3/8 x 2 | 2.85 | *CTM-4880 | 10-80-40-100 | 475-400-400-50 | 1 3/8 x 4 | 3.48 |
| CTM-4696 | 40-40-10-50 | 450-450-300-50 | 1 3/8 x 3 1/2 | 4.23 | *CTM-4882 | 5-70-25-5 | 475-400-400-400 | 1 3/8 x 3 1/2 | 3.03 |
| CTM-4699 | 20-20-30-30 | 450-450-300-300 | 1 3/8 x 3 1/2 | 4.05 | CTM-4884 | 10-10-80-50 | 475-450-200-60 | 1 3/8 x 3 | 3.48 |
| CTM-4702 | 20-5-50-20 | 450-450-350-25 | 1 3/8 x 2 1/2 | 4.11 | CTM-4886 | 25-20-20-100 | 475-450-300-50 | 1 3/8 x 3 | 4.14 |
| CTM-4705 | 20-20-30-30 | 450-450-350-350 | 1 3/8 x 3 | 4.56 | CTM-4888 | 25-20-40-100 | 475-450-300-50 | 1 3/8 x 3 1/2 | 4.47 |
| CTM-4708 | 40-10-35-10 | 450-450-350-350 | 1 3/8 x 3 1/2 | 4.14 | *CTM-4890 | 10-60-30-125 | 475-450-400-50 | 1 3/8 x 4 | 3.33 |
| CTM-4710 | 40-20-80-10 | 450-450-350-350 | 1 3/8 x 4 | 5.22 | *CTM-4892 | 10-50-30-30 | 475-450-450-25 | 1 3/8 x 3 | 2.85 |
| *CTM-4712 | 40-40-30-30 | 450-450-350-350 | 1 3/8 x 4 | 3.54 | *CTM-4894 | 10-40-10-100 | 475-450-450-50 | 1 3/8 x 2 1/2 | 2.58 |
| *CTM-4714 | 10-10-10-20 | 450-450-450-25 | 1 3/8 x 2 | 1.89 | *CTM-4896 | 15-15-80-40 | 475-475-300-50 | 1 3/8 x 3 | 2.88 |
| CTM-4716 | 10-10-10-100 | 450-450-450-25 | 1 3/8 x 2 | 2.94 | CTM-4898 | 50-30-20-20 | 475-475-300-300 | 1 3/8 x 4 | 5.13 |
| CTM-4718 | 15-10-10-20 | 450-450-450-25 | 1 3/8 x 3 | 2.97 | *CTM-4900 | 40-10-4-40 | 475-475-350-300 | 1 3/8 x 3 | 2.97 |
| CTM-4720 | 20-10-10-100 | 450-450-450-25 | 1 3/8 x 2 | 3.33 | *CTM-4902 | 40-10-40-10 | 475-475-350-350 | 1 3/8 x 3 | 3.30 |
| *CTM-4722 | 20-20-20-20 | 450-450-450-25 | 1 3/8 x 2 1/2 | 2.49 | *CTM-4904 | 20-10-20-100 | 475-475-450-25 | 1 3/8 x 2 1/2 | 2.52 |
| CTM-4724 | 30-15-15-40 | 450-450-450-25 | 1 3/8 x 2 1/2 | 3.75 | CTM-4906 | 10-5-80-40 | 475-475-450-50 | 1 3/8 x 3 1/2 | 4.41 |
| CTM-4726 | 30-20-20-20 | 450-450-450-25 | 1 3/8 x 3 | 3.96 | CTM-4908 | 30-30-10-20 | 475-475-475-25 | 1 3/8 x 3 | 4.11 |
| CTM-4728 | 30-30-10-20 | 450-450-450-25 | 1 3/8 x 3 | 3.93 | CTM-4910 | 40-20-10-10 | 475-475-475-25 | 1 3/8 x 3 | 4.38 |
| *CTM-4730 | 30-30-10-125 | 450-450-450-25 | 1 3/8 x 3 | 2.82 | CTM-4912 | 80-30-10-20 | 475-475-475-25 | 1 3/8 x 4 | 5.19 |
| CTM-4732 | 30-30-20-20 | 450-450-450-25 | 1 3/8 x 3 | 4.20 | *CTM-4914 | 20-20-10-10 | 475-475-475-300 | 1 3/8 x 2 1/2 | 2.58 |
| CTM-4734 | 40-10-10-250 | 450-450-450-25 | 1 3/8 x 3 | 4.23 | *CTM-4916 | 50-30-10-20 | 475-475-475-300 | 1 3/8 x 3 1/2 | 3.36 |
| CTM-4736 | 40-15-10-25 | 450-450-450-25 | 1 3/8 x 3 | 3.69 | CTM-4918 | 10-10-10-10 | 475-475-475-475 | 1 3/8 x 2 | 3.15 |
| CTM-4738 | 40-20-10-20 | 450-450-450-25 | 1 3/8 x 3 | 3.84 | *CTM-4920 | 20-20-10-10 | 475-475-475-475 | 1 3/8 x 2 1/2 | 2.61 |
| *CTM-4740 | 40-20-20-20 | 450-450-450-25 | 1 3/8 x 3 | 2.76 | *CTM-4922 | 20-20-20-20 | 475-475-475-475 | 1 3/8 x 3 | 3.06 |
| *CTM-4742 | 40-20-20-40 | 450-450-450-25 | 1 3/8 x 3 | 2.79 | CTM-4924 | 40-10-10-10 | 475-475-475-475 | 1 3/8 x 3 | 4.20 |
| *CTM-4744 | 40-30-10-20 | 450-450-450-25 | 1 3/8 x 3 1/2 | 2.70 | *CTM-4926 | 40-20-10-70 | 475-475-475-475 | 1 3/8 x 3 | 3.06 |
| *CTM-4746 | 40-40-10-20 | 450-450-450-25 | 1 3/8 x 3 1/2 | 2.82 | CTM-4928 | 10-10-4-20 | 500-300-300-25 | 1 3/8 x 2 | 1.74 |
| *CTM-4748 | 40-40-20-20 | 450-450-450-25 | 1 3/8 x 3 1/2 | 3.00 | CTM-4930 | 10-100-30-100 | 500-300-300-25 | 1 3/8 x 3 1/2 | 4.68 |
| *CTM-4750 | 40-40-40-40 | 450-450-450-25 | 1 3/8 x 3 | 3.30 | CTM-4932 | 5-100-10-200 | 500-300-300-150 | 1 3/8 x 4 | 5.28 |
| CTM-4752 | 50-40-5-20 | 450-450-450-25 | 1 3/8 x 3 | 4.32 | CTM-4934 | 20-80-20-10 | 500-300-300-300 | 1 3/8 x 3 1/2 | 4.50 |
| *CTM-4754 | 60-40-40-10 | 450-450-450-25 | 1 3/8 x 4 | 3.60 | *CTM-4936 | 30-10-150-30 | 500-450-50-50 | 1 3/8 x 3 | 2.52 |
| *CTM-4756 | 60-50-5-20 | 450-450-450-25 | 1 3/8 x 4 | 3.21 | *CTM-4938 | 10-10-10-10 | 500-500-500-500 | 1 3/8 x 2 | 2.10 |
| *CTM-4758 | 80-40-40-40 | 450-450-450-25 | 1 3/8 x 4 | 3.87 | *CTM-4940 | 40-40-8-8 | 500-500-500-500 | 1 3/8 x 4 | 3.42 |
| CTM-4760 | 10-10-10-150 | 450-450-450-25 | 1 3/8 x 2 1/2 | 3.33 | | | | | |
| *CTM-4762 | 20-20-20-100 | 450-450-450-25 | 1 3/8 x 2 1/2 | 2.73 | | | | | |
| *CTM-4764 | 30-30-15-30 | 450-450-450-25 | 1 3/8 x 3 | 2.73 | | | | | |
| *CTM-4766 | 30-30-15-100 | 450-450-450-25 | 1 3/8 x 3 1/2 | 4.41 | | | | | |
| *CTM-4768 | 40-20-10-100 | 450-450-450-25 | 1 3/8 x 3 1/2 | 2.76 | | | | | |
| *CTM-4770 | 40-40-10-25 | 450-450-450-25 | 1 3/8 x 3 | 2.82 | | | | | |
| *CTM-4772 | 40-40-10-50 | 450-450-450-25 | 1 3/8 x 4 | 2.88 | | | | | |
| *CTM-4774 | 60-40-10-25 | 450-450-450-25 | 1 3/8 x 4 | 3.15 | | | | | |
| *CTM-4776 | 40-40-10-100 | 450-450-450-100 | 1 3/8 x 3 1/2 | 3.33 | | | | | |
| CTM-4778 | 10-10-10-10 | 450-450-450-150 | 1 3/8 x 2 | 2.85 | | | | | |
| *CTM-4780 | 60-10-10-20 | 450-450-450-150 | 1 3/8 x 3 | 2.73 | | | | | |
| CTM-4782 | 35-35-10-10 | 450-450-450-200 | 1 3/8 x 3 1/2 | 4.14 | | | | | |
| CTM-4785 | 40-10-10-100 | 450-450-450-200 | 1 3/8 x 4 | 4.41 | | | | | |
| CTM-4788 | 40-40-30-10 | 450-450-450-200 | 1 3/8 x 4 | 4.83 | | | | | |
| CTM-4790 | 30-10-10-10 | 450-450-450-250 | 1 3/8 x 2 1/2 | 3.48 | | | | | |
| †CTM-4792 | 40-10-10-40 | 450-450-450-250 | 1 3/8 x 3 1/2 | 4.02 | | | | | |
| *CTM-4794 | 40-20-10-100 | 450-450-450-250 | 1 3/8 x 4 | 3.51 | | | | | |
| †CTM-4796 | 60-10-10-40 | 450-450-450-250 | 1 3/8 x 3 1/2 | 4.38 | | | | | |
| *CTM-4798 | 40-10-10-40 | 450-450-450-350 | 1 3/8 x 3 | 2.85 | | | | | |
| CTM-4800 | 40-20-20-20 | 450-450-450-350 | 1 3/8 x 3 | 4.50 | | | | | |
| CTM-4802 | 40-40-10-10 | 450-450-450-350 | 1 3/8 x 3 1/2 | 4.32 | | | | | |
| *CTM-4804 | 5-5-5-5 | 450-450-450-450 | 1 3/8 x 2 | 1.80 | | | | | |
| *CTM-4806 | 10-10-10-10 | 450-450-450-450 | 1 3/8 x 2 | 2.01 | | | | | |
| *CTM-4808 | 20-10-10-10 | 450-450-450-450 | 1 3/8 x 2 1/2 | 2.22 | | | | | |
| *CTM-4810 | 20-20-20-20 | 450-450-450-450 | 1 3/8 x | | | | | | |



ARCO
electronics inc.
GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

PLASTIC FILM CAPACITORS

**TYPES
PT, PJ**

Type PT capacitors are polystyrene dielectric enclosed in non-ferrous metallic tubes with compression glass end seals. The principle features of this type are high stability, high insulation resistance, low dielectric absorption, and low dissipation factor. Their principle uses include precision filter and tuned circuits, analog computer circuits, pulse networks, servo systems, reference capacitors, and high Q applications.



SPECIFICATIONS:

DISSIPATION FACTOR: .02% max. at 25°C.
.04% max. at 85°C.
INSULATION RESISTANCE: 10⁵ megohm-microfarads min. for 100DCW and 200VDCW units; 10⁶ megohm-microfarads for 400VDCW and higher ratings (at 25°C.)
TEMPERATURE RANGE: -55°C. to +85°C.
TEMPERATURE COEFFICIENT: -120 ± 15 ppm/°C. This specification may be tightened if required for specific values.
DIELECTRIC ABSORPTION: .05% max. at 25°C.
STABILITY: ±0.1% maximum capacitance drift long term under maximum operating conditions.
TOLERANCES: standard tolerance ±5% ±10% ±3% ±2% ±1% ±½% ±¼% also available.

TYPE PT

| Part No. | Capacitance Value | Size L. x D. | 1 to 9 Qty. Net Price |
|-----------------|-------------------|--------------|-----------------------|
| 100 VDCW | | | |
| 1PT-102J | .001 | ¾ x .312 | 3.17 |
| *1PT-202J | .002 | ¾ x .312 | 3.17 |
| 1PT-222J | .0022 | ¾ x .312 | 3.17 |
| 1PT-272J | .0027 | ¾ x .312 | 3.17 |
| *1PT-332J | .0033 | ¾ x .312 | 3.17 |
| 1PT-392J | .0039 | ¾ x .312 | 3.17 |
| *1PT-472J | .0047 | ¾ x .312 | 3.17 |
| *1PT-502J | .005 | ¾ x .312 | 3.17 |
| *1PT-682J | .0068 | ¾ x .312 | 3.17 |
| 1PT-822J | .0082 | ¾ x .312 | 3.17 |
| *1PT-103J | .01 | ¾ x .312 | 3.17 |
| 1PT-123J | .012 | ¾ x .312 | 3.19 |
| *1PT-153J | .015 | ¾ x .312 | 3.20 |
| *1PT-203J | .02 | ¾ x .312 | 3.22 |
| *1PT-223J | .022 | ¾ x .312 | 3.24 |
| 1PT-273J | .027 | 1 x .312 | 3.27 |
| *1PT-333J | .033 | 1 x .312 | 3.30 |
| 1PT-393J | .039 | 1 x .400 | 3.34 |
| *1PT-473J | .047 | 1 x .400 | 3.38 |
| *1PT-503J | .05 | 1 x .400 | 3.40 |
| *1PT-683J | .068 | 1 x .400 | 3.57 |
| 1PT-823J | .082 | 1 ¼ x .400 | 3.71 |
| *1PT-104J | .1 | 1 ¼ x .500 | 3.89 |
| 1PT-124J | .12 | 1 ¼ x .500 | 4.10 |
| *1PT-154J | .15 | 1 ¼ x .500 | 4.38 |
| *1PT-204J | .2 | 1 ¼ x .500 | 4.90 |
| *1PT-224J | .22 | 1 ¼ x .500 | 5.04 |
| 1PT-274J | .27 | 1 ¼ x .562 | 5.43 |
| *1PT-334J | .33 | 1 ¼ x .562 | 5.85 |
| 1PT-394J | .39 | 1 ¼ x .562 | 6.30 |
| 1PT-474J | .47 | 1 ¼ x .670 | 6.86 |
| *1PT-504J | .5 | 1 ¼ x .670 | 7.18 |
| 200 VDCW | | | |
| 2PT-102J | .001 | ¾ x .312 | 3.17 |
| *2PT-202J | .002 | ¾ x .312 | 3.17 |
| 2PT-222J | .0022 | ¾ x .312 | 3.17 |
| 2PT-272J | .0027 | ¾ x .312 | 3.17 |
| *2PT-332J | .0033 | ¾ x .312 | 3.17 |
| 2PT-392J | .0039 | ¾ x .312 | 3.17 |
| *2PT-472J | .0047 | ¾ x .312 | 3.17 |
| *2PT-502J | .005 | ¾ x .312 | 3.17 |
| *2PT-682J | .0068 | ¾ x .312 | 3.17 |
| 2PT-822J | .0082 | ¾ x .312 | 3.17 |
| 2PT-103J | .01 | ¾ x .312 | 3.17 |
| 2PT-123J | .012 | 1 x .312 | 3.20 |
| 2PT-153J | .015 | 1 x .312 | 3.24 |
| 2PT-203J | .02 | 1 x .400 | 3.31 |
| 2PT-223J | .022 | 1 x .400 | 3.32 |
| 2PT-273J | .027 | 1 x .400 | 3.35 |
| 2PT-333J | .033 | 1 ¼ x .400 | 3.40 |
| 2PT-393J | .039 | 1 ¼ x .400 | 3.44 |
| 2PT-473J | .047 | 1 ¼ x .400 | 3.50 |
| 2PT-503J | .05 | 1 ¼ x .500 | 3.64 |
| 2PT-683J | .068 | 1 ¼ x .500 | 3.99 |
| 2PT-823J | .082 | 1 ¼ x .500 | 4.31 |
| 2PT-104J | .1 | 1 ¼ x .500 | 4.66 |
| 2PT-124J | .12 | 1 ¼ x .562 | 4.97 |
| 2PT-154J | .15 | 1 ¼ x .562 | 5.43 |
| 2PT-204J | .2 | 1 ¼ x .562 | 6.16 |
| 2PT-224J | .22 | 1 ¼ x .670 | 6.44 |
| 2PT-274J | .27 | 1 ¼ x .670 | 7.11 |
| 2PT-334J | .33 | 1 ¼ x .750 | 7.88 |
| 2PT-394J | .39 | 1 ¼ x 1.00 | 8.65 |
| 2PT-474J | .47 | 1 ¼ x 1.00 | 9.70 |
| 2PT-504J | .5 | 1 ¼ x 1.00 | 10.22 |

| Part No. | Capacitance Value | Size L. x D. | 1 to 9 Qty. Net Price |
|-----------------|-------------------|--------------|-----------------------|
| 400 VDCW | | | |
| 4PT-102J | .001 | ¾ x .312 | 3.17 |
| *4PT-202J | .002 | ¾ x .312 | 3.17 |
| 4PT-222J | .0022 | ¾ x .312 | 3.17 |
| 4PT-272J | .0027 | ¾ x .312 | 3.11 |
| *4PT-332J | .0033 | ¾ x .312 | 3.17 |
| 4PT-392J | .0039 | ¾ x .312 | 3.17 |
| *4PT-472J | .0047 | ¾ x .312 | 3.17 |
| *4PT-502J | .005 | ¾ x .312 | 3.17 |
| *4PT-682J | .0068 | ¾ x .312 | 3.22 |
| 4PT-822J | .0082 | ¾ x .312 | 3.26 |
| *4PT-103J | .01 | 1 x .312 | 3.31 |
| *4PT-153J | .015 | 1 x .400 | 3.39 |
| *4PT-203J | .02 | 1 x .400 | 3.48 |
| *4PT-223J | .022 | 1 x .400 | 3.50 |
| 4PT-273J | .027 | 1 ¼ x .400 | 3.57 |
| *4PT-333J | .033 | 1 ¼ x .400 | 3.68 |
| 4PT-393J | .039 | 1 ¼ x .500 | 3.75 |
| *4PT-473J | .047 | 1 ¼ x .500 | 3.89 |
| *4PT-503J | .05 | 1 ¼ x .500 | 3.96 |
| 4PT-683J | .068 | 1 ¼ x .500 | 4.34 |
| 4PT-823J | .082 | 1 ¼ x .562 | 4.65 |
| *4PT-104J | .1 | 1 ¼ x .562 | 5.04 |
| 4PT-124J | .12 | 1 ¼ x .562 | 5.46 |
| *4PT-154J | .15 | 1 ¼ x .670 | 6.06 |
| *4PT-204J | .2 | 1 ¼ x .750 | 7.07 |
| 4PT-224J | .22 | 1 ¼ x .750 | 7.42 |
| 4PT-274J | .27 | 1 ¼ x 1.00 | 8.30 |
| *4PT-334J | .33 | 1 ¼ x 1.00 | 9.38 |
| 4PT-394J | .39 | 1 ¼ x 1.00 | 10.43 |
| 600 VDCW | | | |
| 6PT-102J | .001 | ¾ x .312 | 3.17 |
| *6PT-202J | .002 | ¾ x .312 | 3.17 |
| 6PT-222J | .0022 | ¾ x .312 | 3.17 |
| 6PT-272J | .0027 | ¾ x .312 | 3.17 |
| *6PT-332J | .0033 | ¾ x .312 | 3.19 |
| 6PT-392J | .0039 | ¾ x .312 | 3.22 |
| 6PT-472J | .0047 | ¾ x .312 | 3.27 |
| *6PT-502J | .005 | ¾ x .312 | 3.28 |
| 6PT-682J | .0068 | ¾ x .312 | 3.33 |
| 6PT-822J | .0082 | 1 x .312 | 3.37 |
| *6PT-103J | .01 | 1 x .400 | 3.41 |
| 6PT-153J | .015 | 1 x .400 | 3.54 |
| *6PT-203J | .02 | 1 ¼ x .400 | 3.68 |
| 6PT-223J | .022 | 1 ¼ x .400 | 3.75 |
| 6PT-273J | .027 | 1 ¼ x .500 | 3.89 |
| *6PT-333J | .033 | 1 ¼ x .500 | 4.06 |
| 6PT-393J | .039 | 1 ¼ x .500 | 4.17 |
| 6PT-473J | .047 | 1 ¼ x .562 | 4.31 |
| *6PT-503J | .05 | 1 ¼ x .562 | 4.38 |
| 6PT-683J | .068 | 1 ¼ x .562 | 5.22 |
| 6PT-823J | .082 | 1 ¼ x .670 | 5.60 |
| *6PT-104J | .1 | 1 ¼ x .750 | 6.09 |
| 6PT-124J | .12 | 1 ¼ x .750 | 6.65 |
| *6PT-154J | .15 | 1 ¼ x 1.00 | 7.49 |
| *6PT-204J | .2 | 1 ¼ x 1.00 | 8.58 |
| 6PT-224J | .22 | 1 ¼ x 1.00 | 10.19 |

NOTE: Non-standard capacitance values between those listed are also available at no additional cost.
* The starred items are stock items available for immediate delivery.
NOTE: The suffix letter "J" refers to the standard tolerance of ±5%. This letter is changed for different tolerances.

| Part No. | Capacitance Value | Size L. x D. | 1 to 9 Qty. Net Price |
|------------------|-------------------|--------------|-----------------------|
| 1000 VDCW | | | |
| 10PT-102J | .001 | ¾ x .312 | 3.17 |
| 10PT-152J | .0015 | ¾ x .312 | 3.17 |
| 10PT-202J | .002 | ¾ x .312 | 3.17 |
| 10PT-222J | .0022 | ¾ x .312 | 3.19 |
| 10PT-272J | .0027 | ¾ x .312 | 3.21 |
| 10PT-332J | .0033 | ¾ x .312 | 3.24 |
| 10PT-392J | .0039 | ¾ x .312 | 3.27 |
| 10PT-472J | .0047 | ¾ x .312 | 3.31 |
| 10PT-502J | .005 | ¾ x .312 | 3.34 |
| 10PT-682J | .0068 | 1 x .312 | 3.40 |
| 10PT-822J | .0082 | 1 x .400 | 3.44 |
| 10PT-103J | .01 | 1 x .400 | 3.50 |
| 10PT-153J | .015 | 1 ¼ x .400 | 3.68 |
| 10PT-203J | .02 | 1 ¼ x .500 | 3.85 |
| 10PT-223J | .022 | 1 ¼ x .500 | 3.92 |
| 10PT-273J | .027 | 1 ¼ x .500 | 4.10 |
| 10PT-333J | .033 | 1 ¼ x .500 | 4.27 |
| 10PT-393J | .039 | 1 ¼ x .562 | 4.41 |
| 10PT-473J | .047 | 1 ¼ x .562 | 4.62 |
| 10PT-503J | .05 | 1 ¼ x .670 | 4.69 |
| 10PT-683J | .068 | 1 ¼ x .750 | 5.64 |
| 10PT-823J | .082 | 1 ¼ x 1.00 | 6.23 |
| 10PT-104J | .1 | 1 ¼ x 1.00 | 6.97 |

Type PJ capacitors are polystyrene dielectric enclosed in silicone treated fused polystyrene jackets. The same superior quality of the Type PT hermetically sealed units is preserved in Type PJ units while effecting a marked saving in both size and price. Extensive evaluation has confirmed the excellent moisture resistance of this design as well as extreme ruggedness. The Type PJ will meet MIL tests for vibration, shock, moisture resistance and immersion as well as providing the excellent electrical characteristics specified.



SPECIFICATIONS:

DISSIPATION FACTOR: .02% max. at 25°C.
.04% max. at 85°C.
INSULATION RESISTANCE: 10⁵ megohm-microfarads at 25°C.
TEMPERATURE RANGE: -55°C. to +85°C.
TEMPERATURE COEFFICIENT: -120 ± 15 ppm/°C.
DIELECTRIC ABSORPTION: .05% max. at 25°C.
STABILITY: ±0.1% maximum capacitance drift long term under maximum operating conditions.
TOLERANCES: standard tolerance ±5%. ±10% ±3% ±2% ±1% ±½% also available.

TYPE PJ

| Part No. | Capacitance Value | Size L. x D. | 1 to 9 Qty. Net Price |
|-----------------|-------------------|--------------|-----------------------|
| 100 VDCW | | | |
| 1PJ-102J | .001 | 1/16 x 3/32 | 1.49 |
| *1PJ-202J | .002 | 1/16 x 3/32 | 1.49 |
| 1PJ-222J | .0022 | 1/16 x 3/32 | 1.49 |
| 1PJ-272J | .0027 | 1/16 x 3/32 | 1.49 |
| *1PJ-332J | .0033 | 1/16 x 3/32 | 1.49 |
| 1PJ-392J | .0039 | 1/16 x 3/32 | 1.49 |
| *1PJ-472J | .0047 | 1/16 x 3/32 | 1.49 |
| *1PJ-502J | .005 | 1/16 x 3/32 | 1.49 |
| *1PJ-682J | .0068 | 1/16 x 3/32 | 1.49 |
| 1PJ-822J | .0082 | 1/16 x 3/32 | 1.49 |
| *1PJ-103J | .01 | 1/16 x 3/32 | 1.49 |
| 1PJ-123J | .012 | 1/16 x 3/16 | 1.51 |
| *1PJ-153J | .015 | 1/16 x 3/16 | 1.51 |
| *1PJ-203J | .02 | 1/16 x 3/16 | 1.53 |
| *1PJ-223J | .022 | 1/16 x 3/16 | 1.54 |
| 1PJ-273J | .027 | 1/8 x 3/16 | 1.56 |
| *1PJ-333J | .033 | 1/8 x 3/16 | 1.60 |
| 1PJ-393J | .039 | 1/8 x 3/16 | 1.63 |
| *1PJ-473J | .047 | 1/8 x 3/16 | 1.67 |
| *1PJ-503J | .05 | 1/8 x 3/16 | 1.69 |
| *1PJ-683J | .068 | 1/8 x 1/32 | 1.83 |
| 1PJ-823J | .082 | 1 x 3/8 | 1.94 |
| *1PJ-104J | .1 | 1 x 1/32 | 2.09 |
| 1PJ-124J | .12 | 1 x 1/32 | 2.28 |
| *1PJ-154J | .15 | 1 ¼ x 3/16 | 2.54 |
| *1PJ-204J | .2 | 1 ¼ x 1/2 | 2.99 |
| *1PJ-224J | .22 | 1 ¼ x 1/2 | 3.12 |
| 1PJ-274J | .27 | 1 ¼ x 3/8 | 3.43 |
| *1PJ-334J | .33 | 1 ¼ x 1/32 | 3.82 |
| 1PJ-394J | .39 | 1 ¼ x 3/8 | 4.20 |
| 1PJ-474J | .47 | 1 ¼ x 5/8 | 4.69 |
| *1PJ-504J | .5 | 1 ¼ x 5/8 | 4.97 |



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GREAT NECK, NEW YORK
Branches: Los Angeles 35, Dallas 7

ELMENCO CAPACITORS

CM-15, CM-20, CM-30
Mica Capacitor Kits

ARCO CM-15 MINIATURE MICA CAPACITOR KIT #1



THESE MINIATURES FIT INTO THE SMALLEST AREA CAPACITOR SIZE (9/32" x 1/2" x 3/16")

SPECIAL KIT LIST PRICE

ONLY **\$90⁰⁰**

FOR EXPERIMENTAL WORK

DON'T GET CAUGHT SHORT!

ALWAYS HAVE THE CORRECT CAPACITY

ON HAND!

This Handy Kit consists of 46 most commonly used Capacitors . . . per MIL-C-5 specifications . . . five of each capacity as listed on page 367 packed in individual tuck boxes, of 5 each properly identified for permanent use.

The complete set of capacitors amounts to \$111.50 at list prices. You get the entire set for *only* \$90.00.

COMPARE THE COST!



MIL-C-5 ARCO SILVERED MICA KIT #3

SPECIAL KIT LIST PRICE
\$325

Purchased individually the total list price value of the capacitors contained in this kit would be . . . **\$385**

This kit contains the complete range of ELMENCO silvered molded mica capacitors from 5 mmf. to 10,000 mmf. manufactured in accordance with MIL-C-5 specifications. All units are of letters "C", "D" or "E" characteristics as specified and letter "J" (5%) tolerance and are MIL color coded.

SPECIAL KIT LIST PRICE

\$140

Purchased individually the total list price value of the capacitors contained in this kit would be . . . **\$158⁴⁰**

THESE KITS CONTAIN FIVE EACH OF THE FOLLOWING ELMENCO MICA CAPACITORS (500 V D C W)

| CM20 Cap. mmf. | CM20 Cap. mmf. | CM20 Cap. mmf. | CM20 Cap. mmf. | CM30 Cap. mmf. | CM30 Cap. mmf. |
|----------------|----------------|----------------|----------------|----------------|----------------|
| 5 | 39 | 120 | 390 | 1100 | 3600 |
| 10 | 43 | 130 | 430 | 1200 | 3900 |
| 12 | 47 | 150 | 470 | 1300 | 4300 |
| 15 | 51 | 160 | 510 | 1500 | 4700 |
| 18 | 56 | 180 | 560 | 1600 | 5100 |
| 20 | 62 | 200 | 620 | 1800 | 5600 |
| 22 | 68 | 220 | 680 | 2000 | 6200 |
| 24 | 75 | 240 | 750 | 2200 | 6800 |
| 27 | 82 | 270 | 820 | 2400 | 7500* |
| 30 | 91 | 300 | 910 | 2700 | 8200* |
| 33 | 100 | 330 | 1000 | 3000 | 9100* |
| 36 | 110 | 360 | 360 | 3300 | 9100* |

*300VDCW

PER MIL-C-5 SPECIFICATIONS

10000*



MIL-C-5 ARCO REG. FOIL MICA KIT #2

This kit contains the complete range of ELMENCO regular foil molded mica capacitors from 5 mmf. to 10,000 mmf. manufactured in accordance with MIL-C-5 specifications. All units are of the letter "B" characteristics and letter "K" (10%) tolerance and are MIL color coded.



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ELMENCO
CAPACITORS

DM-15 KIT #10 & 11
DM-15
STOCK PACKAGE

FOR: ENGINEERING LABS • GOVERNMENTAL AGENCIES • EXPERIMENTAL LABS
SCHOOLS, ETC.

DUR-MICA the silvered mica capacitor coated with a specially developed plastic coating for extra durability... provides maximum protection at environmental extremes of moisture and temperature.



ARCO DM-15 KIT #10

This handy kit consists of five of each DM-15 capacity as listed. All are 500 VDCW and $\pm 5\%$ tolerance... packed in individual transparent plastic snap boxes, properly identified for ease of handling.

SPECIAL KIT LIST PRICE \$95.00

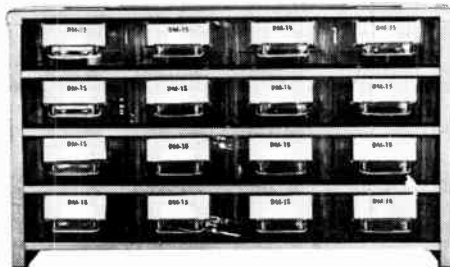
Purchased individually the total list price value of the capacitors contained in this kit would be — **\$103.31**

| CAP. MMF. | TYPE DESIGNATION |
|-----------|------------------|
| 1 | DM-15-010† |
| 2 | DM-15-020† |
| 3 | DM-15-030† |
| 5 | DM-15-050† |
| 10 | DM-15-100 |
| 12 | DM-15-120 |
| 15 | DM-15-150 |
| 18 | DM-15-180 |
| 20 | DM-15-200 |
| 22 | DM-15-220 |
| 24 | DM-15-240 |
| 27 | DM-15-270 |
| 30 | DM-15-300 |
| 33 | DM-15-330 |
| 36 | DM-15-360 |
| 39 | DM-15-390 |
| 43 | DM-15-430 |
| 47 | DM-15-470 |
| 50 | DM-15-500 |
| 51 | DM-15-510 |
| 56 | DM-15-560 |
| 62 | DM-15-620 |
| 68 | DM-15-680 |
| 75 | DM-15-750 |
| 82 | DM-15-820 |

| CAP. MMF. | TYPE DESIGNATION |
|-----------|------------------|
| 91 | DM-15-910 |
| 100 | DM-15-101 |
| 110 | DM-15-111 |
| 120 | DM-15-121 |
| 130 | DM-15-131 |
| 150 | DM-15-151 |
| 160 | DM-15-161 |
| 180 | DM-15-181 |
| 200 | DM-15-201 |
| 220 | DM-15-221 |
| 240 | DM-15-241 |
| 250 | DM-15-251 |
| 270 | DM-15-271 |
| 300 | DM-15-301 |
| 330 | DM-15-331 |
| 360 | DM-15-361 |
| 390 | DM-15-391 |
| 430* | DM-15-431 |
| 470* | DM-15-471 |
| 500* | DM-15-501 |
| 510* | DM-15-511 |
| 560* | DM-15-561 |
| 620* | DM-15-621 |
| 680* | DM-15-681 |
| 750* | DM-15-751 |
| 820* | DM-15-821 |

* All capacitors marked with * are 300WV.
† Minimum tolerance ± 0.5 mmf.

ARCO MINIATURE DM-15 CAPACITOR STOCK PACKAGE



SPECIAL LIST PRICE \$596

Distinctive Steel Cabinet With Plastic Pull-Out Drawers Supplied FREE With DM-15 Package.

Purchased individually the total list price value of the capacitors contained in this package would be — **\$715**

A complete stock of DM-15 capacitors (fifty-one items) totaling 2100 capacitors; fifty each of the most used values and 25 each of the others. Capacity range is 1-820 mmf., tolerance $\pm 5\%$ or ± 0.5 mmf., whichever is greater.



ARCO DUR-MICA KIT #11

This Kit contains five each of the following listed DUR-MICA capacitors, all 500 VDCW and $\pm 5\%$ tolerance; or ± 0.5 mmf., whichever is greater. Packed in individual transparent plastic snap boxes, properly identified for ease of handling.

SPECIAL KIT LIST PRICE \$250.00

Purchased individually the total list price value of the capacitors contained in this kit would be — **\$286.35**

| CAP. MMF. | TYPE DESIGNATION |
|-----------|------------------|
| 2 | DM15-020M |
| 5 | DM15-050K |
| 10 | DM15-100J |
| 12 | DM15-120J |
| 15 | DM15-150J |
| 18 | DM15-180J |
| 20 | DM15-200J |
| 22 | DM15-220J |
| 24 | DM15-240J |
| 27 | DM15-270J |
| 30 | DM15-300J |
| 33 | DM15-330J |
| 36 | DM15-360J |
| 39 | DM15-390J |
| 43 | DM15-430J |
| 47 | DM15-470J |
| 51 | DM15-510J |
| 56 | DM15-560J |
| 62 | DM15-620J |
| 68 | DM15-680J |
| 75 | DM15-750J |
| 82 | DM15-820J |
| 91 | DM15-910J |
| 100 | DM15-101J |
| 110 | DM15-111J |
| 120 | DM15-121J |
| 130 | DM15-131J |
| 150 | DM15-151J |
| 160 | DM19-161J |
| 180 | DM19-181J |
| 200 | DM19-201J |
| 220 | DM19-221J |
| 240 | DM19-241J |
| 270 | DM19-271J |
| 300 | DM19-301J |
| 330 | DM19-331J |

| CAP. MMF. | TYPE DESIGNATION |
|-----------|------------------|
| 360 | DM19-361J |
| 390 | DM19-391J |
| 430 | DM19-431J |
| 470 | DM19-471J |
| 510 | DM19-511J |
| 560 | DM19-561J |
| 620 | DM19-621J |
| 680 | DM20-681J |
| 750 | DM20-751J |
| 820 | DM20-821J |
| 910 | DM20-911J |
| 1000 | DM20-102J |
| 1100 | DM20-112J |
| 1200 | DM20-122J |
| 1300 | DM20-132J |
| 1500 | DM20-152J |
| 1600 | DM20-162J |
| 1800 | DM20-182J |
| 2000 | DM20-202J |
| 2200 | DM20-222J |
| 2400 | DM20-242J |
| 2700 | DM20-272J |
| 3000 | DM20-302J |
| 3300 | DM20-332J |
| 3600 | DM20-362J |
| 3900 | DM20-392J |
| 4300 | DM20-432J |
| 4700 | DM30-472J |
| 5100 | DM30-512J |
| 5600 | DM30-562J |
| 6200 | DM30-622J |
| 6800 | DM30-682J |
| 7500 | DM30-752J |
| 8200 | DM30-822J |
| 9100 | DM30-912J |
| 10000 | DM30-103J |



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ELMENCO CAPACITORS

TYPES
46 TRIMMER
30 & 30M PADDER
KITS

ARCO TYPE 46 TRIMMER KIT #5



This Kit Contains 24 of Each
Trimmer Listed Below

| TYPE 46W | PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | |
|----------|-------------|------------------|--------------------------------------|---|
| | | | At Tight Cap. Will Be More Than MMF. | At A Turns Open Cap. Will Be Less Than MMF. |
| | 460 | 1 1/4 Pl. | 15 | 1.5 |
| | 461 | 1 3/4 Pl. | 30 | 2.7 |
| | 462 | 2 Pl. | 80 | 5 |
| | 463 | 3 Pl. | 180 | 9 |
| | 464 | 4 Pl. | 280 | 25 |
| | 465 | 5 Pl. | 380 | 50 |
| | 466 | 6 Pl. | 480 | 80 |
| | 467 | 7 Pl. | 580 | 110 |
| | 468 | 8 Pl. | 680 | 140 |
| | 469 | 9 Pl. | 780 | 170 |

The total list price for all units included in the kit is \$142.80.

Yet you may have this complete kit for only

SPECIAL KIT LIST PRICE

\$120⁰⁰

A complete stock of trimmers and padders is provided in these compact, easily handled, and readily accessible kits. Always have a full line of El-Menco trimmers and padders available for immediate use.

ARCO TYPE 30 PADDER KIT #6

This Kit Contains 12 Each
of Padders Listed Below

The total list price for all units included in the kit is \$223.80.

Yet you may have this complete kit for only

SPECIAL KIT LIST PRICE

\$195⁰⁰



ARCO TYPE 30M PADDER KIT #6M

This Kit Contains 12 Each
of Padders Listed Below

The total list price for all units included in the kit is \$231.60

Yet you may have this complete kit for only

SPECIAL KIT LIST PRICE

\$200⁰⁰

| PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | |
|-------------|------------------|--|---|
| | | At 1 1/2 Inch Pounds Cap. Will Be More Than MMF. | At 2 1/2 Turns Open Cap. Will Be Less Than MMF. |
| 302 | 2 Pl. | 130 | 15 |
| 303 | 3 Pl. | 340 | 65 |
| 304 | 4 Pl. | 550 | 100 |
| 305 | 5 Pl. | 760 | 190 |
| 306 | 6 Pl. | 970 | 275 |
| 307 | 7 Pl. | 1180 | 350 |
| 308 | 8 Pl. | 1390 | 450 |
| 309 | 9 Pl. | 1600 | 550 |
| 310 | 10 Pl. | 1890 | 650 |
| 311 | 11 Pl. | 2110 | 780 |
| 312 | 12 Pl. | 2330 | 880 |
| 313 | 13 Pl. | 2605 | 1150 |
| 314 | 14 Pl. | 2830 | 1300 |
| 315 | 15 Pl. | 3055 | 1400 |

| PART NUMBER | NUMBER OF PLATES | GUARANTEED RANGE | |
|-------------|------------------|--|---|
| | | At 1 1/2 Inch Pounds Cap. Will Be More Than MMF. | At 2 1/2 Turns Open Cap. Will Be Less Than MMF. |
| 302-M | 2 Pl. | 120 | 15 |
| 303-M | 3 Pl. | 320 | 65 |
| 304-M | 4 Pl. | 500 | 100 |
| 305-M | 5 Pl. | 690 | 180 |
| 306-M | 6 Pl. | 880 | 265 |
| 307-M | 7 Pl. | 1070 | 340 |
| 308-M | 8 Pl. | 1260 | 425 |
| 309-M | 9 Pl. | 1415 | 525 |
| 310-M | 10 Pl. | 1600 | 615 |
| 311-M | 11 Pl. | 1785 | 730 |
| 312-M | 12 Pl. | 1970 | 800 |
| 313-M | 13 Pl. | 2155 | 1000 |
| 314-M | 14 Pl. | 2340 | 1100 |
| 315-M | 15 Pl. | 2525 | 1200 |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

MINIMITE* TYPE MM

Miniature Metal-Cased Tubular Electrolytics
"SM"* Safety Margin Construction



- Hermetically sealed aluminum-cased tubulars. Small and light. Ideal for under-chassis mounting in compact, tight assemblies.
- Designed to withstand high surge voltages and high ripple currents. Stable capacitance characteristics. Long service life.
- Exceptionally low leakage. Terminal tab connections provide permanent low-resistance contact for life of the unit.
- Outer insulating tube. Duals have centered mounting strap, and 3 leads (common negative).

SINGLE MINIMITE (2 Leads)

| Cat. No. | Cap. Mf. | WVDC | †Dia. x L. | Sugg. Resale Price |
|------------|----------|------|---------------|--------------------|
| MM-50-3 | 50 | 3 | 1/2 x 1 1/8 | .57 |
| MM-500-3 | 500 | 3 | 5/8 x 1 5/8 | .93 |
| MM-50-6 | 50 | 6 | 1/2 x 1 1/8 | .57 |
| MM-100-6 | 100 | 6 | 1/2 x 1 1/8 | .72 |
| MM-500-6 | 500 | 6 | 3/4 x 1 5/8 | .93 |
| MM-1000-6 | 1000 | 6 | 7/8 x 2 1/4 | 1.14 |
| MM-100-10 | 100 | 10 | 5/8 x 1 1/4 | .75 |
| MM-100-15 | 100 | 15 | 5/8 x 1 1/4 | .75 |
| MM-250-15 | 250 | 15 | 5/8 x 1 5/8 | .75 |
| MM-500-15 | 500 | 15 | 7/8 x 2 1/4 | 1.05 |
| MM-1000-15 | 1000 | 15 | 1 x 2 1/4 | 1.38 |
| MM-10-25 | 10 | 25 | 1/2 x 1 1/4 | .60 |
| MM-25-25 | 25 | 25 | 1/2 x 1 1/4 | .60 |
| MM-50-25 | 50 | 25 | 5/8 x 1 1/4 | .66 |
| MM-100-25 | 100 | 25 | 5/8 x 1 5/8 | .81 |
| MM-250-25 | 250 | 25 | 7/8 x 1 5/8 | 1.02 |
| MM-500-25 | 500 | 25 | 1 x 2 3/8 | 1.44 |
| MM-2-50 | 2 | 50 | 1/2 x 1 1/4 | .54 |
| MM-4-50 | 4 | 50 | 1/2 x 1 1/4 | .57 |
| MM-10-50 | 10 | 50 | 1/2 x 1 1/8 | .60 |
| MM-25-50 | 25 | 50 | 5/8 x 1 5/8 | .60 |
| MM-50-50 | 50 | 50 | 5/8 x 1 5/8 | .72 |
| MM-100-50 | 100 | 50 | 3/4 x 1 5/8 | .84 |
| MM-4-150 | 4 | 150 | 1/2 x 1 1/4 | .60 |
| MM-8-150 | 8 | 150 | 1/2 x 1 5/8 | .63 |
| MM-10-150 | 10 | 150 | 1/2 x 1 5/8 | .69 |
| MM-16-150 | 16 | 150 | 5/8 x 1 5/8 | .69 |
| MM-20-150 | 20 | 150 | 5/8 x 1 5/8 | .72 |
| MM-30-150 | 30 | 150 | 3/4 x 1 5/8 | .78 |
| MM-40-150 | 40 | 150 | 3/4 x 1 5/8 | .81 |
| MM-50-150 | 50 | 150 | 7/8 x 1 5/8 | .84 |
| MM-80-150 | 80 | 150 | 7/8 x 2 1/4 | .96 |
| MM-100-150 | 100 | 150 | 7/8 x 2 3/8 | 1.05 |
| MM-150-150 | 150 | 150 | 1 x 2 3/8 | 1.14 |
| MM-200-150 | 200 | 150 | 1 1/8 x 3 | 1.23 |
| MM-8-250 | 8 | 250 | 5/8 x 1 5/8 | .69 |
| MM-16-250 | 16 | 250 | 3/4 x 1 5/8 | .78 |
| MM-20-250 | 20 | 250 | 3/4 x 1 5/8 | .81 |
| MM-40-250 | 40 | 250 | 7/8 x 1 3/4 | .93 |
| MM-8-350 | 8 | 350 | 5/8 x 1 5/8 | .75 |
| MM-10-350 | 10 | 350 | 3/4 x 1 5/8 | .75 |
| MM-20-350 | 20 | 350 | 7/8 x 1 5/8 | .87 |
| MM-4-450 | 4 | 450 | 5/8 x 1 3/8 | .69 |
| MM-8-450 | 8 | 450 | 3/4 x 1 3/8 | .75 |
| MM-10-450 | 10 | 450 | 3/4 x 1 5/8 | .78 |
| MM-12-450 | 12 | 450 | 7/8 x 1 5/8 | .81 |
| MM-16-450 | 16 | 450 | 7/8 x 1 3/4 | .84 |
| MM-20-450 | 20 | 450 | 7/8 x 2 1/4 | .93 |
| MM-30-450 | 30 | 450 | 1 x 2 3/8 | 1.02 |
| MM-40-450 | 40 | 450 | 1 x 2 1/4 | 1.08 |
| MM-50-450 | 50 | 450 | 1 x 3 | 1.23 |
| MM-60-450 | 60 | 450 | 1 1/8 x 3 | 1.38 |
| MM-80-450 | 80 | 450 | 1 1/8 x 3 3/4 | 1.68 |
| MM-8-500 | 8 | 500 | 7/8 x 2 1/4 | .78 |
| MM-16-500 | 16 | 500 | 1 x 2 3/8 | .90 |
| MM-20-500 | 20 | 500 | 1 x 2 3/8 | .96 |

‡DUAL MINIMITE (3 leads, Common Negative)

| | | | | |
|-------------|-------|-----|-----------------|------|
| MM-2x20-150 | 20+20 | 150 | 3/4 x 1 5/8* | .93 |
| MM-2x30-150 | 30+30 | 150 | 7/8 x 1 5/8* | 1.08 |
| MM-2x40-150 | 40+40 | 150 | 7/8 x 2 1/8* | 1.11 |
| MM-5030-150 | 50+30 | 150 | 7/8 x 2 1/8* | 1.17 |
| MM-2x50-150 | 50+50 | 150 | 7/8 x 2 3/8* | 1.06 |
| MM-8040-150 | 80+40 | 150 | 1 x 2 3/8* | 1.32 |
| MM-2x8-450 | 8+8 | 450 | 7/8 x 2 1/8* | 1.02 |
| MM-2x10-450 | 10+10 | 450 | 7/8 x 2 1/8* | 1.11 |
| MM-168-450 | 16+8 | 450 | 1 x 2 1/8* | 1.17 |
| MM-2x16-450 | 16+16 | 450 | 1 x 2 1/8* | 1.35 |
| MM-2x20-450 | 20+20 | 450 | 1 x 2 1/8* | 1.50 |
| MM-2x40-450 | 40+40 | 450 | 1 1/8 x 3 3/4** | 2.04 |

†Dimensions are for metal tubes. Add 1/16" to diameter and 1/8" to length for dimensions over cardboard insulating tubes.

‡Supplied with radial mounting strap.

*TRADE MARK

TYPE ES

Cardboard-Cased Electrolytics



- Dual and triple-section units. Can be used in place of costlier metal-can types of equal rating in television, radio, radio-phonos and other equipment. 65°C. operation.
- Sections wrapped in plastic film. Lasting protection from moisture, humidity, severest climatic conditions. High-melting-point wax fill.
- Centered radial mounting strap. Plastic insulated wire leads, 6" long. Color coding on tubes.
- Overall wax coating for added protection against moisture and humidity.

DUAL UNITS (Common Negative)

| CAT. NO. | CAP. MF./WVDC | DIA x LENGTH | SUGG. RESALE PRICE |
|----------|---------------|---------------|--------------------|
| ESD-140 | 10+10/50 | 5/8 x 2 3/8 | .84 |
| ESD-150 | 8+8/150 | 5/8 x 2 3/8 | .87 |
| ESD-155 | 20+20/150 | 3/4 x 2 1/2 | .99 |
| ESD-156 | 30+20/150 | 3/4 x 2 1/2 | 1.02 |
| ESD-160 | 30+30/150 | 7/8 x 2 1/2 | 1.08 |
| ESD-163 | 40+20/150 | 7/8 x 2 1/2 | 1.05 |
| ESD-165 | 40+40/150 | 1 x 2 1/2 | 1.11 |
| ESD-170 | 50+30/150 | 1 x 2 1/2 | 1.17 |
| ESD-175 | 50+50/150 | 1 x 3 | 1.26 |
| ESD-190 | 80+40/150 | 1 1/8 x 3 | 1.35 |
| ESD-250 | 16+16/250 | 7/8 x 2 1/2 | 1.08 |
| ESD-255 | 20+20/250 | 7/8 x 2 1/2 | 1.11 |
| ESD-450 | 8+8/450 | 1 x 2 1/2 | 1.02 |
| ESD-455 | 20+20/450 | 1 1/8 x 3 1/4 | 1.50 |
| ESD-475 | 40+40/450 | 1 3/8 x 3 1/2 | 2.04 |

TRIPLE UNITS (Common Negative)

| CAT. NO. | CAP. MF./WVDC | DIA x LENGTH | SUGG. RESALE PRICE |
|----------|------------------|---------------|--------------------|
| EST-555 | 20+20+20/150 | 1 x 2 1/2 | 1.32 |
| EST-560 | 40+20+20/150 | 1 x 2 1/2 | 1.35 |
| EST-570 | 40+30+20/150 | 1 x 2 1/2 | 1.41 |
| EST-575 | 40+40+20/150 | 1 x 3 | 1.41 |
| EST-580 | 40+40+40/150 | 1 x 3 1/4 | 1.47 |
| EST-585 | 60+40+20/150 | 1 x 3 1/4 | 1.44 |
| EST-595 | 80+40+20/150 | 1 1/8 x 3 3/4 | 1.50 |
| EST-610 | 40+10/150+20/25 | 1 x 2 1/2 | 1.17 |
| EST-620 | 40+30/150+20/25 | 1 x 2 1/2 | 1.38 |
| EST-625 | 40+40/150+40/25 | 1 x 3 1/4 | 1.44 |
| EST-640 | 50+30/150+100/25 | 1 x 3 1/4 | 1.50 |
| EST-645 | 40+40/25 | 5/8 x 1 7/8 | 2.10 |
| EST-655 | 50+30/150+200/10 | 1 x 3 1/4 | 1.53 |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

TYPE EY

Twist-Prong Electrolytics

"SM" Safety Margin Construction

- Widest choice of singles, and dual, triple and quadruple capacitance voltage combinations in smallest practical aluminum can sizes.
- Ideal for replacement in television, radio and other high quality electronic equipment where high ripple and high surge voltages are encountered.
- Hermetically sealed. Designed for 85°C. operation.
- Quick, easy, firm mounting through chassis slots or slotted plates for insulated or grounded connection. Mounting prong ring serves as common negative terminal.
- Terminal coding clearly stamped on container.
- Individually packaged for the service trade, including metal and phenolic mounting plates.



SINGLE UNITS

| Cat. No. | Cap. Mf./WVDC | Dia. x Length | Sugg. Resale Price |
|----------|---------------|---------------|--------------------|
| EYS-90 | 2000/6 | 1 3/8 x 2 | 1.53 |
| EYS-100 | 1000/15 | 1 x 3 | 1.53 |
| EYS-105 | 2000/15 | 1 3/8 x 3 | 2.07 |
| EYS-108 | 3000/15 | 1 3/8 x 3 | 2.09 |
| EYS-115 | 100/25 | 1 x 2 | .96 |
| EYS-120 | 500/25 | 1 x 3 | 1.53 |
| EYS-125 | 1000/25 | 1 3/8 x 3 | 2.13 |
| EYS-130 | 500/50 | 1 3/8 x 2 1/2 | 1.59 |
| EYS-131 | 1000/50 | 1 3/8 x 3 | 2.25 |
| EYS-133 | 1500/50 | 1 3/8 x 4 | 2.25 |
| EYS-135 | 50/150 | 1 x 2 | .99 |
| EYS-140 | 80/150 | 1 x 2 | 1.11 |
| EYS-145 | 100/150 | 1 x 2 | 1.20 |
| EYS-150 | 120/150 | 1 x 2 1/2 | 1.26 |
| EYS-151 | 120/150 | 1 3/8 x 3 | 1.26 |
| EYS-155 | 140/150 | 1 x 3 | 1.29 |
| EYS-160 | 150/150 | 1 x 3 | 1.29 |
| EYS-161 | 200/150 | 1 3/8 x 2 1/2 | 1.47 |
| EYS-162 | 300/150 | 1 3/8 x 3 | 1.68 |
| EYS-165 | 15/250 | 1 x 2 | .93 |
| EYS-170 | 30/250 | 1 x 2 | 1.02 |
| EYS-175 | 40/250 | 1 x 2 | 1.08 |
| EYS-180 | 60/250 | 1 x 2 1/2 | 1.23 |
| EYS-185 | 80/250 | 1 x 3 | 1.29 |
| EYS-186 | 100/250 | 1 x 2 1/2 | 1.61 |
| EYS-190 | 150/250 | 1 3/8 x 2 1/2 | 1.86 |
| EYS-1901 | 200/250 | 1 3/8 x 3 | 2.38 |
| EYS-1902 | 80/300 | 1 x 3 | 1.53 |
| EYS-191 | 100/300 | 1 3/8 x 2 1/2 | 1.73 |
| EYS-193 | 150/300 | 1 3/8 x 3 | 2.10 |
| EYS-195 | 30/350 | 1 x 2 | 1.14 |
| EYS-200 | 40/350 | 1 x 2 1/2 | 1.20 |
| EYS-205 | 50/350 | 1 x 3 | 1.26 |
| EYS-215 | 80/350 | 1 3/8 x 2 1/2 | 1.71 |
| EYS-220 | 125/350 | 1 3/8 x 3 | 2.19 |
| EYS-222 | 150/350 | 1 3/8 x 3 1/2 | 2.37 |
| EYS-225 | 80/400 | 1 3/8 x 2 1/2 | 1.77 |
| EYS-230 | 10/450 | 1 x 2 | .93 |
| EYS-235 | 20/450 | 1 x 2 | 1.05 |
| EYS-240 | 30/450 | 1 x 2 1/2 | 1.17 |
| EYS-245 | 40/450 | 1 x 3 | 1.23 |
| EYS-246 | 50/450 | 1 x 3 1/2 | 1.41 |
| EYS-247 | 60/450 | 1 3/8 x 2 1/2 | 1.55 |
| EYS-250 | 80/450 | 1 3/8 x 3 | 1.83 |
| EYS-251 | 100/450 | 1 3/8 x 3 | 2.07 |
| EYS-253 | 125/450 | 1 3/8 x 4 | 2.55 |
| EYS-255 | 30/475 | 1 x 3 | 1.20 |
| EYS-260 | 40/475 | 1 3/8 x 2 | 1.50 |
| EYS-265 | 90/475 | 1 3/8 x 3 1/2 | 2.00 |
| EYS-266 | 10/500 | 1 x 2 | .95 |
| EYS-267 | 20/500 | 1 x 2 1/2 | 1.11 |

SINGLE UNITS (Cont.)

| Cat. No. | Cap. Mf./WVDC | Dia. x Length | Sugg. Resale Price |
|----------|---------------|---------------|--------------------|
| EYS-268 | 30/500 | 1 x 3 | 1.20 |
| EYS-269 | 40/500 | 1 x 3 1/2 | 1.50 |
| EYS-270 | 80/500 | 1 3/8 x 3 1/2 | 1.91 |
| EYS-271 | 90/500 | 1 3/8 x 3 1/2 | .96 |

DUAL UNITS

| Cat. No. | Cap. Mf./WVDC | Dia. x Length | Sugg. Resale Price |
|----------|---------------|---------------|--------------------|
| EYD-500 | 1000-1000/15 | 1 3/8 x 3 | 2.64 |
| EYD-505 | 150/50/25 | 1 x 2 | 1.05 |
| EYD-506 | 50-50/50 | 1 x 2 | 1.02 |
| EYD-507 | 100-25/50 | 1 x 2 | 1.11 |
| EYD-508 | 20-20/150 | 1 x 2 | 1.02 |
| EYD-510 | 30-30/150 | 1 x 2 | 1.05 |
| EYD-511 | 40-20/150 | 1 x 2 | 1.08 |
| EYD-512 | 40-30/150 | 1 x 2 | 1.12 |
| EYD-513 | 40-40/150 | 1 x 2 | 1.14 |
| EYD-514 | 50-30/150 | 1 x 2 | 1.20 |
| EYD-515 | 50/50/150 | 1 x 2 1/2 | 1.17 |
| EYD-5151 | 60-60/150 | 1 x 2 1/2 | 1.42 |
| EYD-5152 | 75-75/150 | 1 x 3 | 1.56 |
| EYD-5153 | 80-40/150 | 1 x 2 1/2 | 1.38 |
| EYD-5154 | 80-80/150 | 1 3/8 x 2 | 1.60 |
| EYD-516 | 125-100/150 | 1 3/8 x 2 1/2 | 2.10 |
| EYD-517 | 200-5/150 | 1 3/8 x 2 1/2 | 1.65 |
| EYD-520 | 200-200/150 | 1 3/8 x 3 1/2 | 2.40 |
| EYD-525 | 20-20/250 | 1 x 2 | 1.14 |
| EYD-530 | 40-40/250 | 1 x 2 1/2 | 1.50 |
| EYD-532 | 150-150/250 | 1 3/8 x 4 | 3.10 |
| EYD-533 | 200/200/250 | 1 3/8 x 3 1/2 | 3.66 |
| EYD-540 | 80-80/300 | 1 3/8 x 3 1/2 | 2.43 |
| EYD-545 | 120-20/300 | 1 3/8 x 3 | 2.28 |
| EYD-547 | 120-40/300 | 1 3/8 x 3 1/2 | 2.61 |
| EYD-550 | 15-15/350 | 1 x 2 | 1.35 |
| EYD-555 | 20-20/350 | 1 x 2 1/2 | 1.41 |
| EYD-556 | 30-30/350 | 1 x 3 | 1.74 |
| EYD-557 | 50-30/350 | 1 3/8 x 2 1/2 | 1.90 |
| EYD-558 | 80-20/350 | 1 3/8 x 2 1/2 | 2.10 |
| EYD-559 | 80-40/350 | 1 3/8 x 3 | 2.38 |
| EYD-560 | 80-80/350 | 1 3/8 x 3 1/2 | 2.82 |
| EYD-5601 | 90-40/350 | 1 3/8 x 3 | 2.58 |
| EYD-561 | 100-100/350 | 1 3/8 x 4 | 3.70 |
| EYD-562 | 160-10/350 | 1 3/8 x 3 1/2 | 2.58 |
| EYD-563 | 40-10/400 | 1 3/8 x 2 1/2 | 1.50 |
| EYD-5631 | 80-60/400 | 1 3/8 x 3 1/2 | 2.92 |
| EYD-564 | 5-5/450 | 1 x 2 | .96 |
| EYD-565 | 10-10/450 | 1 x 2 | 1.14 |
| EYD-566 | 15-15/450 | 1 x 2 1/2 | 1.36 |
| EYD-567 | 20-10/450 | 1 x 2 1/2 | 1.36 |
| EYD-575 | 20/20/450 | 1 x 3 | 1.53 |
| EYD-576 | 30-10/450 | 1 x 3 | 1.50 |
| EYD-580 | 30/30/450 | 1 3/8 x 2 1/2 | 1.83 |
| EYD-581 | 40-20/450 | 1 3/8 x 2 1/2 | 1.80 |
| EYD-585 | 40-40/450 | 1 3/8 x 3 | 2.07 |
| EYD-586 | 50-50/450 | 1 3/8 x 3 | 2.32 |

DUAL UNITS (Cont.)

| Cat. No. | Cap. Mf./WVDC | Dia. x Length | Sugg. Resale Price |
|----------|----------------|---------------|--------------------|
| EYD-587 | 60-20/450 | 1 3/8 x 3 | 2.14 |
| EYD-588 | 60-40/450 | 1 3/8 x 3 | 2.37 |
| EYD-590 | 80-10/450 | 1 3/8 x 3 | 2.16 |
| EYD-592 | 80-20/450 | 1 3/8 x 3 | 2.34 |
| EYD-600 | 80-40/450 | 1 3/8 x 4 | 2.61 |
| EYD-601 | 100-40/450 | 1 3/8 x 4 | 2.92 |
| EYD-602 | 15-15/475 | 1 x 2 1/2 | 1.42 |
| EYD-603 | 30-10/475 | 1 3/8 x 2 | 1.56 |
| EYD-604 | 40-10/475 | 1 3/8 x 2 1/2 | 1.86 |
| EYD-605 | 40-40/475 | 1 3/8 x 3 1/2 | 2.58 |
| EYD-6051 | 80-50/475 | 1 3/8 x 4 | 3.12 |
| EYD-606 | 10-10/500 | 1 x 2 1/2 | 1.17 |
| EYD-610 | 20-20/500 | 1 3/8 x 2 1/2 | 1.71 |
| EYD-611 | 30-10/500 | 1 3/8 x 2 1/2 | 1.56 |
| EYD-615 | 40-40/500 | 1 3/8 x 4 | 2.64 |
| EYD-616 | 60-40/500 | 1 3/8 x 3 1/2 | 2.76 |
| EYD-617 | 100/400/30/50 | 1 3/8 x 2 1/2 | 1.86 |
| EYD-620 | 250/10/1000/6 | 1 3/8 x 2 | 1.71 |
| EYD-621 | 50/150/500/5 | 1 x 2 1/2 | 1.48 |
| EYD-622 | 150/150/100/25 | 1 3/8 x 2 1/2 | 1.62 |
| EYD-623 | 100/250/150/50 | 1 3/8 x 3 | 2.19 |
| EYD-624 | 35/300/500/6 | 1 x 2 1/2 | 1.68 |
| EYD-625 | 20/350/30/250 | 1 x 2 1/2 | 1.38 |
| EYD-630 | 60/350/80/250 | 1 3/8 x 3 | 2.07 |
| EYD-633 | 80/350/100/50 | 1 3/8 x 3 | 2.37 |
| EYD-6331 | 35/400/100/50 | 1 x 3 | 1.56 |
| EYD-634 | 10/450/20/25 | 1 x 2 | 1.02 |
| EYD-635 | 20/450/20/25 | 1 x 2 1/2 | 1.20 |
| EYD-640 | 20/450/100/100 | 1 3/8 x 2 1/2 | 1.59 |
| EYD-644 | 20/450/50/250 | 1 x 3 | 1.68 |
| EYD-645 | 20/450/80/350 | 1 3/8 x 3 | 2.19 |
| EYD-650 | 30/450/40/150 | 1 3/8 x 2 | 1.50 |
| EYD-651 | 30/450/200/150 | 1 3/8 x 3 | 2.10 |
| EYD-655 | 40/450/20/25 | 1 x 3 1/2 | 1.44 |
| EYD-660 | 40/450/10/350 | 1 3/8 x 2 1/2 | 1.56 |
| EYD-661 | 50/450/100/50 | 1 3/8 x 2 1/2 | 1.80 |
| EYD-665 | 80/450/50/50 | 1 3/8 x 3 | 2.10 |
| EYD-666 | 80/450/100/50 | 1 3/8 x 3 1/2 | 2.26 |
| EYD-670 | 20/475/100/300 | 1 3/8 x 3 1/2 | 2.37 |
| EYD-671 | 20/475/100/400 | 1 3/8 x 4 | 2.70 |
| EYD-675 | 40/500/50/200 | 1 3/8 x 3 1/2 | 2.01 |

TRIPLE UNITS

| Cat. No. | Cap. Mf./WVDC | Dia. x Length | Sugg. Resale Price |
|-----------|-----------------|---------------|--------------------|
| EYT-999 | 20-20-20/25 | 1 x 2 | 1.17 |
| EYT-1000 | 40-40-40/25 | 1 x 2 | 1.29 |
| EYT-1001 | 20-20-20/150 | 1 x 2 | 1.38 |
| EYT-1005 | 40-20-20/150 | 1 x 2 | 1.44 |
| EYT-1007 | 40-30-20/150 | 1 x 2 | 1.50 |
| EYT-1010 | 40-40-40/150 | 1 x 2 1/2 | 1.56 |
| EYT-1012 | 50-40-10/150 | 1 x 2 1/2 | 1.53 |
| EYT-1015 | 50-50-50/150 | 1 x 3 | 1.80 |
| EYT-1016 | 60-40-20/150 | 1 x 2 1/2 | 1.65 |
| EYT-1017 | 70-15-15/150 | 1 x 2 1/2 | 1.62 |
| EYT-1018 | 80-40-20/150 | 1 x 3 | 1.74 |
| EYT-1019 | 120-80-40/150 | 1 3/8 x 2 1/2 | 2.28 |
| EYT-10191 | 120-120-40/150 | 1 3/8 x 3 | 2.44 |
| EYT-10192 | 200-100-60/150 | 1 3/8 x 3 1/2 | 2.74 |
| EYT-10193 | 200-150-150/150 | 1 3/8 x 4 | 4.50 |
| EYT-10194 | 20-20-20/250 | 1 x 2 | 1.56 |
| EYT-1020 | 40-20-10/250 | 1 x 2 1/2 | 1.71 |
| EYT-1021 | 40-20-20/250 | 1 x 2 1/2 | 1.74 |
| EYT-1022 | 80-80-60/250 | 1 3/8 x 3 1/2 | 2.94 |
| EYT-1023 | 60-20-10/300 | 1 3/8 x 2 | 2.07 |
| EYT-1024 | 80-40-40/300 | 1 3/8 x 3 | 2.86 |
| EYT-10241 | 120-50-40/300 | 1 3/8 x 4 | 3.40 |
| EYT-10242 | 20-20-10/350 | 1 x 2 1/2 | 2.68 |
| EYT-10243 | 30-20-10/350 | 1 x 3 | 1.96 |
| EYT-1025 | 60-40-20/350 | 1 3/8 x 3 | 2.55 |
| EYT-1026 | 60-50-50/350 | 1 3/8 x 3 1/2 | 2.94 |
| EYT-10261 | 80-60-60/350 | 1 3/8 x 4 | 3.34 |
| EYT-10262 | 90-40-20/350 | 1 3/8 x 3 1/2 | 3.16 |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

TRIPLE UNITS (Cont.)

| Cat. No. | Cap. Mf./WVDC | Dia. x Resale Length Price | Sugg. Resale Price |
|-----------|-------------------|----------------------------|--------------------|
| EYT-10263 | 100-100-10/350 | 1 3/8 x 4 | 3.30 |
| EYT-1027 | 40-40-20/400 | 1 3/8 x 3 | 2.25 |
| EYT-1028 | 30-50-4/400 | 1 3/8 x 2 1/2 | 2.31 |
| EYT-1029 | 80-20-10/400 | 1 3/8 x 3 | 2.58 |
| EYT-10291 | 90-10-5/400 | 1 3/8 x 3 | 2.64 |
| EYT-1030 | 10-10-10/450 | 1 x 3 | 1.56 |
| EYT-10301 | 15-15-15/450 | 1 x 3 | 1.86 |
| EYT-1035 | 20-10-10/450 | 1 x 3 | 1.77 |
| EYT-1040 | 20-20-20/450 | 1 3/8 x 3 | 2.16 |
| EYT-1041 | 30-20-20/450 | 1 3/8 x 3 | 2.31 |
| EYT-1045 | 30-30-30/450 | 1 3/8 x 3 1/2 | 2.61 |
| EYT-1046 | 40-10-10/450 | 1 3/8 x 2 1/2 | 2.16 |
| EYT-1047 | 40-30-20/450 | 1 3/8 x 3 | 2.58 |
| EYT-1050 | 40-40-10/450 | 1 3/8 x 3 1/2 | 2.49 |
| EYT-1051 | 40-40-20/450 | 1 3/8 x 3 1/2 | 2.68 |
| EYT-1055 | 40-40-40/450 | 1 3/8 x 4 | 2.94 |
| EYT-1056 | 50-40-30/450 | 1 3/8 x 3 1/2 | 2.94 |
| EYT-1057 | 60-20-20/450 | 1 3/8 x 3 1/2 | 2.76 |
| EYT-1058 | 60-40-20/450 | 1 3/8 x 3 1/2 | 3.00 |
| EYT-1060 | 60-30-10/450 | 1 3/8 x 3 1/2 | 2.70 |
| EYT-1065 | 80-40-20/450 | 1 3/8 x 4 1/2 | 3.24 |
| EYT-1070 | 10-10-10/475 | 1 x 3 | 1.62 |
| EYT-1075 | 30-30-20/475 | 1 3/8 x 3 1/2 | 2.64 |
| EYT-1078 | 40-10-10/475 | 1 3/8 x 3 1/2 | 2.34 |
| EYT-10781 | 40-30-10/475 | 1 3/8 x 3 | 2.70 |
| EYT-1079 | 40-30-30/475 | 1 3/8 x 3 1/2 | 3.10 |
| EYT-1080 | 10-10-10/500 | 1 x 3 1/2 | 1.62 |
| EYT-1081 | 30-20-20/500 | 1 3/8 x 3 | 2.52 |
| EYT-1082 | 40-10-10/500 | 1 3/8 x 3 | 2.34 |
| EYT-1083 | 40-40-10/500 | 1 3/8 x 3 1/2 | 3.04 |
| EYT-1085 | 40-20/150 20/25 | 1 x 2 | 1.38 |
| EYT-1087 | 40-20/150 100/25 | 1 x 2 1/2 | 1.50 |
| EYT-1088 | 40-20/150 200/25 | 1 x 2 1/2 | 1.62 |
| EYT-10882 | 40-40/150 20/25 | 1 x 2 | 1.44 |
| EYT-10883 | 40-40/150 250/25 | 1 x 3 | 1.89 |
| EYT-10884 | 50-30/150 20/25 | 1 x 2 | 1.50 |
| EYT-1089 | 50-30/150 30/25 | 1 x 2 | 1.56 |
| EYT-10891 | 50-30/150 100/25 | 1 x 2 1/2 | 1.62 |
| EYT-1090 | 50-50/150 20/25 | 1 x 2 1/2 | 1.62 |
| EYT-10901 | 80-30/150 300/10 | 1 3/8 x 2 | 1.89 |
| EYT-10902 | 80-40/150 20/25 | 1 x 2 1/2 | 1.68 |
| EYT-1091 | 80-40/150 300/25 | 1 3/8 x 2 1/2 | 2.22 |
| EYT-1093 | 100-80/150 200/10 | 1 3/8 x 2 1/2 | 2.16 |
| EYT-1095 | 120-60/150 20/25 | 1 3/8 x 2 1/2 | 1.98 |
| EYT-1097 | 30-20/200 40/25 | 1 x 2 | 1.68 |
| EYT-10971 | 30-20/200 40/150 | 1 x 2 1/2 | 1.62 |
| EYT-1098 | 60-5/200 20/50 | 1 x 2 1/2 | 1.50 |
| EYT-1100 | 100-10/200 40/50 | 1 3/8 x 2 | 1.86 |
| EYT-1101 | 15-15/250 20/25 | 1 x 2 | 1.41 |
| EYT-1102 | 30-30/250 20/25 | 1 x 2 1/2 | 1.68 |
| EYT-1105 | 40-20/250 10/150 | 1 x 2 1/2 | 1.65 |
| EYT-1110 | 70-70/250 20/50 | 1 3/8 x 2 1/2 | 2.34 |
| EYT-1112 | 90-90/250 20/50 | 1 3/8 x 3 | 2.76 |
| EYT-1113 | 10-10/300 10/15 | 1 x 2 | 1.41 |
| EYT-1115 | 10-10/300 15/250 | 1 x 2 | 1.47 |
| EYT-1117 | 100-10/300 60/50 | 1 3/8 x 2 1/2 | 2.43 |
| EYT-11191 | 200-20/300 10/100 | 1 3/8 x 4 | 2.94 |
| EYT-1120 | 10-5/350 150/50 | 1 x 3 | 1.62 |
| EYT-1121 | 15-10/350 20/25 | 1 x 2 | 1.50 |
| EYT-1122 | 20-5/350 100/25 | 1 x 2 1/2 | 1.56 |
| EYT-1123 | 20-5/350 150/50 | 1 x 3 | 1.78 |
| EYT-1124 | 20-10/350 20/25 | 1 x 2 | 1.53 |
| EYT-1125 | 15-15/350 20/25 | 1 x 2 1/2 | 1.50 |
| EYT-11251 | 20-10/350 5/250 | 1 x 2 | 1.53 |
| EYT-1126 | 20-20/350 20/25 | 1 x 2 1/2 | 1.68 |
| EYT-1130 | 30-20/350 20/25 | 1 x 3 | 1.86 |
| EYT-1131 | 30-20/350 100/150 | 1 3/8 x 2 1/2 | 2.40 |
| EYT-1135 | 30-30/350 20/25 | 1 3/8 x 2 | 2.04 |
| EYT-1140 | 30-30/350 50/50 | 1 3/8 x 2 1/2 | 2.10 |
| EYT-1145 | 40-20/350 10/100 | 1 3/8 x 2 | 1.68 |
| EYT-1150 | 40-40/350 50/25 | 1 3/8 x 2 1/2 | 2.22 |

TRIPLE UNITS (Cont.)

| Cat. No. | Cap. Mf./WVDC | Dia. x Resale Length Price | Sugg. Resale Price |
|-----------|----------------------|----------------------------|--------------------|
| EYT-1151 | 20-20/400 10/350 | 1 x 3 | 1.80 |
| EYT-1153 | 40-10/400 200/50 | 1 3/8 x 3 1/2 | 2.22 |
| EYT-11531 | 60-30/400 20/350 | 1 3/8 x 3 | 2.74 |
| EYT-11532 | 80-40/400 150/50 | 1 3/8 x 3 1/2 | 3.10 |
| EYT-11533 | 100-10/400 20/50 | 1 3/8 x 3 1/2 | 2.70 |
| EYT-1154 | 100-10/400 80/350 | 1 3/8 x 4 | 3.66 |
| EYT-1155 | 10-10/450 20/25 | 1 x 2 1/2 | 1.44 |
| EYT-1160 | 10-10/450 40/50 | 1 x 2 1/2 | 1.65 |
| EYT-1162 | 15-15/450 40/25 | 1 x 2 1/2 | 1.65 |
| EYT-1163 | 20-10/450 20/25 | 1 x 2 1/2 | 1.62 |
| EYT-1165 | 20-10/450 50/50 | 1 x 3 | 1.71 |
| EYT-1170 | 20-20/450 20/25 | 1 x 3 1/2 | 1.86 |
| EYT-1175 | 20-20/450 60/350 | 1 3/8 x 3 1/2 | 2.40 |
| EYT-1177 | 30-10/450 150/50 | 1 3/8 x 2 1/2 | 1.50 |
| EYT-1180 | 30-30/450 20/25 | 1 3/8 x 2 1/2 | 2.10 |
| EYT-1185 | 30-30/450 40/50 | 1 3/8 x 3 | 2.19 |
| EYT-1186 | 30-30/450 125/25 | 1 3/8 x 3 | 2.38 |
| EYT-1188 | 40-10/450 100/50 | 1 3/8 x 3 | 2.58 |
| EYT-1190 | 40-10/450 80/200 | 1 3/8 x 3 | 2.34 |
| EYT-1195 | 40-10/450 100/200 | 1 3/8 x 3 1/2 | 2.46 |
| EYT-1200 | 40-10/450 10/350 | 1 3/8 x 2 1/2 | 1.98 |
| EYT-1201 | 40-20/450 20/25 | 1 3/8 x 2 1/2 | 2.10 |
| EYT-1205 | 40-20/450 25/50 | 1 3/8 x 3 | 2.04 |
| EYT-1210 | 40-40/450 20/25 | 1 3/8 x 3 1/2 | 2.37 |
| EYT-1215 | 40-40/450 40/25 | 1 3/8 x 3 1/2 | 2.40 |
| EYT-1217 | 40-40/450 100/50 | 1 3/8 x 3 1/2 | 2.58 |
| EYT-1220 | 40-40/450 40/150 | 1 3/8 x 3 1/2 | 2.49 |
| EYT-1221 | 40-40/450 60/200 | 1 3/8 x 3 1/2 | 2.68 |
| EYT-1225 | 40-40/450 100/200 | 1 3/8 x 4 | 2.97 |
| EYT-12251 | 40-40/450 80/350 | 1 3/8 x 4 | 3.34 |
| EYT-12252 | 60-40/450 75/50 | 1 3/8 x 3 1/2 | 2.76 |
| EYT-12253 | 80-10/450 125/25 | 1 3/8 x 3 1/2 | 2.64 |
| EYT-1226 | 80-20/450 100/50 | 1 3/8 x 4 | 2.88 |
| EYT-1240 | 80-40/450 100/25 | 1 3/8 x 4 1/2 | 3.06 |
| EYT-1241 | 20-10/475 100/400 | 1 3/8 x 4 | 3.16 |
| EYT-1245 | 20-20/475 60/400 | 1 3/8 x 4 | 2.88 |
| EYT-1250 | 10-10/500 4/350 | 1 x 3 | 1.50 |
| EYT-1251 | 20-10/500 100/50 | 1 x 3 1/2 | 1.98 |
| EYT-1255 | 10-10/500 100/50 | 1 x 3 1/2 | 1.86 |
| EYT-1260 | 30-10/500 20/50 | 1 3/8 x 2 1/2 | 1.86 |
| EYT-1261 | 40-40/500 100/200 | 1 3/8 x 4 | 3.52 |
| EYT-1262 | 60/200 200-140/150 | 1 3/8 x 4 | 2.88 |
| EYT-1263 | 10/300 500-500/15 | 1 3/8 x 2 | 2.34 |
| EYT-1264 | 20/300 150-80/150 | 1 3/8 x 3 | 2.37 |
| EYT-1265 | 40/300 80/40/250 | 1 3/8 x 3 | 2.61 |
| EYT-1266 | 100/300 200-60/150 | 1 3/8 x 4 | 3.34 |
| EYT-12661 | 200/300 60-20/250 | 1 3/8 x 4 1/2 | 3.48 |
| EYT-1267 | 60/400 20-20/350 | 1 3/8 x 3 | 2.55 |
| EYT-1270 | 80/400 20-10/300 | 1 3/8 x 3 1/2 | 2.55 |
| EYT-12701 | 5/450 80-40/300 | 1 3/8 x 3 | 2.49 |
| EYT-1273 | 10/450 20-10/25 | 1 x 2 | 1.29 |
| EYT-12731 | 10/450 80-80/250 | 1 3/8 x 3 | 2.52 |
| EYT-1275 | 20/450 40-10/250 | 1 3/8 x 2 | 1.89 |
| EYT-1276 | 20/450 40-10/350 | 1 3/8 x 2 1/2 | 2.10 |
| EYT-1277 | 20/450 80-10/350 | 1 3/8 x 3 | 2.55 |
| EYT-1280 | 30/450 100-25/25 | 1 3/8 x 2 | 1.80 |
| EYT-1281 | 40/450 90-50/150 | 1 3/8 x 3 | 2.37 |
| EYT-1282 | 80/450 40-40/250 | 1 3/8 x 4 | 2.98 |
| EYT-1290 | 40/450 90-50/150 | 1 3/8 x 3 1/2 | 2.40 |
| EYT-1291 | 40/475 80-10/450 | 1 3/8 x 3 1/2 | 3.30 |
| EYT-1292 | 80/250 40/150 50/50 | 1 3/8 x 2 1/2 | 1.41 |
| EYT-1295 | 20/350 30/250 20/25 | 1 x 2 1/2 | 1.68 |
| EYT-1300 | 100/300 60/150 20/25 | 1 3/8 x 2 1/2 | 1.71 |
| EYT-1301 | 20/350 50/100 100/75 | 1 x 3 | 1.86 |
| EYT-1310 | 10/350 50/150 100/50 | 1 x 3 | 1.71 |
| EYT-1313 | 20/350 10/300 20/25 | 1 x 2 1/2 | 1.50 |
| EYT-1315 | 20/350 40/300 10/150 | 1 x 3 | 1.89 |
| EYT-1320 | 30/350 30/300 20/25 | 1 x 3 | 1.89 |
| EYT-1321 | 125/350 5/200 100/75 | 1 3/8 x 3 1/2 | 3.18 |
| EYT-1325 | 40/350 20/300 10/200 | 1 3/8 x 2 | 1.98 |
| EYT-1327 | 60/400 40/300 20/25 | 1 3/8 x 3 | 2.52 |

TRIPLE UNITS (Cont.)

| Cat. No. | Cap. Mf./WVDC | Dia. x Resale Length Price | Sugg. Resale Price |
|-----------|----------------------|----------------------------|--------------------|
| EYT-1328 | 10/450 50/150 100/75 | 1 x 3 | 1.96 |
| EYT-1329 | 10/450 40/300 10/150 | 1 3/8 x 2 | 1.86 |
| EYT-1330 | 10/450 30/400 30/300 | 1 3/8 x 2 1/2 | 2.01 |
| EYT-1335 | 20/450 60/250 100/25 | 1 3/8 x 2 1/2 | 2.19 |
| EYT-1340 | 20/450 80/350 100/50 | 1 3/8 x 3 1/2 | 2.70 |
| EYT-1341 | 30/450 15/350 40/25 | 1 3/8 x 2 | 1.44 |
| EYT-1342 | 30/450 40/350 50/25 | 1 x 4 | 2.22 |
| EYT-1345 | 40/450 40/150 130/50 | 1 3/8 x 3 | 2.19 |
| EYT-13451 | 10/475 4/350 40/250 | 1 3/8 x 2 | 1.80 |
| EYT-1346 | 0/475 40/450 100/200 | 1 3/8 x 3 | 2.52 |
| EYT-1350 | 10/475 100/200 40/50 | 1 3/8 x 2 1/2 | 2.71 |
| EYT-1351 | 20/475 50/50 20/25 | 1 x 3 | 1.65 |
| EYT-1352 | 80/475 80/150 50/50 | 1 3/8 x 4 | 2.92 |
| EYT-1360 | 20/500 20/300 40/25 | 1 3/8 x 2 1/2 | 1.86 |
| EYT-1365 | -0/500 40/250 100/50 | 1 3/8 x 3 1/2 | 2.25 |

QUADRUPLE UNITS

| | | | |
|-----------|--------------------|---------------|------|
| EYQ-1998 | 100-80-60-40/150 | 1 3/8 x 3 | 2.79 |
| EYQ-1999 | 40-20-10-10/300 | 1 3/8 x 2 | 2.37 |
| EYQ-2000 | 40-40-20-10/300 | 1 3/8 x 2 1/2 | 2.73 |
| EYQ-20004 | 40-40-30-20/300 | 1 3/8 x 3 | 2.91 |
| EYQ-20005 | 60-40-10-10/300 | 1 3/8 x 2 1/2 | 2.73 |
| EYQ-2002 | 200-20-20-20/300 | 1 3/8 x 4 1/2 | 3.70 |
| EYQ-2003 | 80-40-20-10/350 | 1 3/8 x 3 1/2 | 3.12 |
| EYQ-2004 | 40-40-40-40/350 | 1 3/8 x 3 1/2 | 3.60 |
| EYQ-2005 | 30-30-20-20/400 | 1 3/8 x 3 1/2 | 2.91 |
| EYQ-2007 | 50-40-30-20/400 | 1 3/8 x 4 | 3.39 |
| EYQ-2010 | 80-10-10-10/400 | 1 3/8 x 3 1/2 | 2.82 |
| EYQ-2011 | 80-25-10-10/400 | 1 3/8 x 3 1/2 | 3.03 |
| EYQ-2012 | 5-5-5-5/450 | 1 3/8 x 2 | 1.80 |
| EYQ-2015 | 10-10-10-10/450 | 1 3/8 x 2 | 2.01 |
| EYQ-2020 | 20-10-10-10/450 | 1 3/8 x 2 1/2 | 2.22 |
| EYQ-2025 | 20-20-20-20/450 | 1 3/8 x 3 | 2.82 |
| EYQ-2027 | 20-60-20-20/450 | 1 3/8 x 3 1/2 | 3.39 |
| EYQ-2030 | 30-15-15-15/450 | 1 3/8 x 3 | 2.67 |
| EYQ-2035 | 30-30-15-10/450 | 1 3/8 x 3 1/2 | 2.82 |
| EYQ-2036 | 30-30-20-20/450 | 1 3/8 x 3 1/2 | 3.12 |
| EYQ-2037 | 35-35-10- 5/450 | 1 3/8 x 3 | 2.79 |
| EYQ-2038 | 40-10-10-10/450 | 1 3/8 x 3 | 2.41 |
| EYQ-2040 | 40-20-10-10/450 | 1 3/8 x 3 | 2.67 |
| EYQ-2041 | 40-35-10-10/450 | 1 3/8 x 3 | 2.88 |
| EYQ-2042 | 40-40- 4- 4/450 | 1 3/8 x 3 1/2 | 2.79 |
| EYQ-2043 | 40-40-20-20/450 | 1 3/8 x 4 | 3.34 |
| EYQ-20431 | 40-40-30-30/450 | 1 3/8 x 4 | 3.64 |
| EYQ-2044 | 40-40-40-40/450 | 1 3/8 x 4 1/2 | 3.87 |
| EYQ-20441 | 60-20-20-20/450 | 1 3/8 x 4 | 3.34 |
| EYQ-20442 | 60-30-10- 2/450 | 1 3/8 x 3 1/2 | 3.06 |
| EYQ-20443 | 80-10-10-10/450 | 1 3/8 x 3 1/2 | 3.03 |
| EYQ-2045 | 10-10-10-10/475 | 1 3/8 x 2 | 2.10 |
| EYQ-2048 | 20-20-10-10/475 | 1 3/8 x 2 1/2 | 2.62 |
| EYQ-2049 | 20-20-20-20/475 | 1 3/8 x 3 | 3.12 |
| EYQ-2050 | 40-20-10-10/475 | 1 3/8 x 3 1/2 | 3.06 |
| EYQ-2051 | 10-10-10-10/500 | 1 3/8 x 2 | 2.10 |
| EYQ-2052 | 40-40- 8- 8/500 | 1 3/8 x 3 1/2 | 3.42 |
| EYQ-2053 | 30-30-30/150 40/25 | 1 3/8 x 2 | 1.86 |
| EYQ-2 | | | |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

QUADRUPLE UNITS (Cont.)

| CAT. NO. | CAP. MF./VWDC | DIA x LENGTH | SUGG. RESALE PRICE |
|-----------|-----------------------|---------------|--------------------|
| EYQ-2074 | 40-40-10/300 20/15 | 1 3/8 x 2 1/2 | 2.55 |
| EYQ-2075 | 40-40-40/300 20/150 | 1 3/8 x 2 1/2 | 2.94 |
| EYQ-2076 | 60-40-20/300 50/25 | 1 3/8 x 2 1/2 | 2.82 |
| EYQ-20761 | 120-40-40/300 10/250 | 1 3/8 x 4 | 3.70 |
| EYQ-20762 | 150-20-10/300 250/50 | 1 3/8 x 4 | 3.64 |
| EYQ-2077 | 150-40-10/300 100/50 | 1 3/8 x 4 | 3.54 |
| EYQ-20771 | 20-10- 5/350 20/25 | 1 3/8 x 2 | 1.86 |
| EYQ-20772 | 30-10- 5/350 200/25 | 1 3/8 x 2 | 2.28 |
| EYQ-20773 | 30-10- 5/350 100/200 | 1 3/8 x 2 1/2 | 2.64 |
| EYQ-20774 | 30-20- 5/350 100/200 | 1 3/8 x 3 | 2.82 |
| EYQ-2080 | 40-20-20/350 25/25 | 1 3/8 x 2 1/2 | 2.55 |
| EYQ-2081 | 40-40-30/350 10/25 | 1 3/8 x 3 | 2.97 |
| EYQ-2085 | 40-40-40/350 40/25 | 1 3/8 x 3 | 3.12 |
| EYQ-2090 | 40-40-40/350 150/50 | 1 3/8 x 3 1/2 | 3.42 |
| EYQ-2091 | 90-30- 5/350 100/75 | 1 3/8 x 3 1/2 | 3.70 |
| EYQ-2092 | 100-10-10/350 20/50 | 1 3/8 x 3 | 3.09 |
| EYQ-2094 | 100-40-30/350 50/50 | 1 3/8 x 4 | 3.94 |
| EYQ-20941 | 100-80-10/350 20/50 | 1 3/8 x 4 | 3.96 |
| EYQ-2095 | 20-20-20/400 20/25 | 1 3/8 x 2 1/2 | 2.31 |
| EYQ-2096 | 80-40-10/400 20/25 | 1 3/8 x 3 1/2 | 3.18 |
| EYQ-20961 | 80-40-10/400 100/200 | 1 3/8 x 4 | 3.78 |
| EYQ-20962 | 80-40-30/400 40/25 | 1 3/8 x 4 | 3.58 |
| EYQ-2097 | 80-60-15/400 60/50 | 1 3/8 x 4 | 3.75 |
| EYQ-2105 | 10-10-10/450 20/25 | 1 3/8 x 2 | 1.89 |
| EYQ-2110 | 10-10-10/450 10/150 | 1 3/8 x 2 | 1.89 |
| EYQ-2115 | 20-10-10/450 100/25 | 1 3/8 x 2 1/2 | 2.22 |
| EYQ-2120 | 20-20-20/450 20/25 | 1 3/8 x 2 1/2 | 2.79 |
| EYQ-2125 | 20-20-20/450 100/50 | 1 3/8 x 3 | 2.73 |
| EYQ-2126 | 30-30-10/450 125/25 | 1 3/8 x 3 | 2.70 |
| EYQ-2130 | 30-30-15/450 30/50 | 1 3/8 x 3 | 2.49 |
| EYQ-2135 | 30-30-20/450 20/25 | 1 3/8 x 3 1/2 | 2.79 |
| EYQ-2140 | 40-10-10/450 250/25 | 1 3/8 x 3 1/2 | 2.55 |
| EYQ-2145 | 40-10-10/450 10/350 | 1 3/8 x 3 | 2.34 |
| EYQ-2146 | 40-10-10/450 40/350 | 1 3/8 x 3 | 2.86 |
| EYQ-2150 | 40-15-10/450 20/25 | 1 3/8 x 3 | 2.46 |
| EYQ-2151 | 40-20-10/450 100/50 | 1 3/8 x 3 1/2 | 2.76 |
| EYQ-2152 | 40-20-10/450 100/250 | 1 3/8 x 4 | 2.52 |
| EYQ-2153 | 40-20-20/450 20/25 | 1 3/8 x 3 1/2 | 2.76 |
| EYQ-2155 | 40-20-20/450 40/25 | 1 3/8 x 3 1/2 | 2.79 |
| EYQ-2160 | 40-30-10/450 20/25 | 1 3/8 x 3 | 2.76 |
| EYQ-2162 | 40-40-10/450 50/50 | 1 3/8 x 3 1/2 | 2.88 |
| EYQ-2163 | 40-40-10/450 100/100 | 1 3/8 x 4 | 3.21 |
| EYQ-2164 | 40-40-20/450 20/25 | 1 3/8 x 3 1/2 | 3.00 |
| EYQ-21641 | 40-40-40/450 40/25 | 1 3/8 x 3 1/2 | 3.30 |
| EYQ-2165 | 40-40-40/450 25/50 | 1 3/8 x 4 | 2.82 |
| EYQ-2170 | 60-10-10/450 20/150 | 1 3/8 x 3 1/2 | 2.76 |
| EYQ-2171 | 60-40-10/450 25/50 | 1 3/8 x 3 1/2 | 3.15 |
| EYQ-2172 | 60-40-40/450 10/25 | 1 3/8 x 4 | 3.60 |
| EYQ-2173 | 60-50- 5/450 20/25 | 1 3/8 x 3 1/2 | 3.21 |
| EYQ-2175 | 20-20-10/475 10/300 | 1 3/8 x 3 | 2.58 |
| EYQ-2180 | 40-20-10/475 10/25 | 1 3/8 x 3 1/2 | 2.91 |
| EYQ-2181 | 20-20/150 160-40/25 | 1 3/8 x 2 | 1.92 |
| EYQ-2182 | 50-20/150 150-30/15 | 1 3/8 x 2 | 1.92 |
| EYQ-2183 | 100-10/300 200-30/150 | 1 3/8 x 4 1/2 | 3.54 |
| EYQ-2184 | 60- 4/350 100-40/25 | 1 3/8 x 2 1/2 | 2.28 |
| EYQ-2185 | 40-10/400 80-10/250 | 1 3/8 x 3 1/2 | 2.82 |
| EYQ-2186 | 100-10/400 30-20/50 | 1 3/8 x 3 1/2 | 3.06 |
| EYQ-2190 | 10-10/450 20-20/25 | 1 3/8 x 2 | 1.77 |
| EYQ-2195 | 20-20/450 20-20/25 | 1 3/8 x 2 | 2.16 |
| EYQ-2197 | 40-10/450 35-10/350 | 1 3/8 x 4 | 3.30 |
| EYQ-2198 | 40-40/450 100-60/200 | 1 3/8 x 4 | 3.64 |
| EYQ-2200 | 40-40/450 30-30/350 | 1 3/8 x 4 1/2 | 3.54 |
| EYQ-2202 | 60-10/300 10/75 | | |
| | 10/25 | 1 3/8 x 2 | 2.16 |
| EYQ-22021 | 80- 5/300 60/150 | | |
| | 20/25 | 1 3/8 x 2 1/2 | 2.58 |
| EYQ-2203 | 60-40/350 60/200 | | |
| | 20/150 | 1 3/8 x 3 1/2 | 3.00 |
| EYQ-22031 | 10-10/450 60/200 | | |
| | 100/50 | 1 3/8 x 3 | 2.31 |
| EYQ-22032 | 20-20/450 60/150 | | |
| | 100/25 | 1 3/8 x 2 1/2 | 2.55 |
| EYQ-22033 | 35-25/450 20/200 | | |
| | 100/50 | 1 3/8 x 3 | 2.79 |

QUADRUPLE UNITS (Cont.)

| CAT. NO. | CAP. MF./VWDC | DIA x LENGTH | SUGG. RESALE PRICE |
|-----------|-----------------------|---------------|--------------------|
| EYQ-22034 | 40-40/450 125/150 | | |
| | 125/25 | 1 3/8 x 4 | 3.42 |
| EYQ-2205 | 10- 5/475 80/450 | | |
| | 40/50 | 1 3/8 x 4 | 2.97 |
| EYQ-2210 | 15-15/475 80/300 | | |
| | 40/50 | 1 3/8 x 3 1/2 | 2.88 |
| EYQ-2211 | 20-10/475 20/450 | | |
| | 100/25 | 1 3/8 x 2 1/2 | 2.52 |
| EYQ-2212 | 40-10/475 4/350 | | |
| | 40/300 | 1 3/8 x 3 | 2.97 |
| EYQ-2213 | 20/400 50-40/350 | | |
| | 80/50 | 1 3/8 x 3 | 3.00 |
| EYQ-2215 | 10/450 120-40/300 | | |
| | 25/25 | 1 3/8 x 4 | 3.15 |
| EYQ-2220 | 10/450 60-40/350 | | |
| | 25/25 | 1 3/8 x 3 1/2 | 2.76 |
| EYQ-2222 | 10/450 100-10/350 | | |
| | 20/25 | 1 3/8 x 3 1/2 | 3.15 |
| EYQ-2225 | 20/450 80-20/200 | | |
| | 50/50 | 1 3/8 x 3 | 2.49 |
| EYQ-2227 | 25/450 100-10/300 | | |
| | 50/50 | 1 3/8 x 3 | 3.15 |
| EYQ-22271 | 40/450 40-40/300 | | |
| | 20/150 | 1 3/8 x 3 | 2.94 |
| EYQ-22272 | 60/450 80-40/250 | | |
| | 20/150 | 1 3/8 x 4 | 3.39 |
| EYQ-2228 | 10/475 140-40/350 | | |
| | 100/50 | 1 3/8 x 4 | 3.18 |
| EYQ-2229 | 10/475 40-10/450 | | |
| | 100/50 | 1 3/8 x 3 | 2.58 |
| EYQ-2230 | 25/500 80-10/350 | | |
| | 10/50 | 1 3/8 x 4 1/2 | 2.70 |
| EYQ-2235 | 100/300 40/50 | | |
| | 80-20/25 | 1 3/8 x 3 | 2.70 |
| EYQ-2236 | 80/450 10/400 | | |
| | 40-30/300 | 1 3/8 x 4 | 3.48 |
| EYQ-2237 | 30/500 10/450 | | |
| | 150-30/50 | 1 3/8 x 3 | 2.52 |
| EYQ-2238 | 10/300 200-140-30/150 | | |
| | 10/300 200-200-30/150 | 1 3/8 x 4 1/2 | 3.06 |
| EYQ-22381 | 160/350 60-10-4/300 | | |
| | 30/475 130-10-10/350 | 1 3/8 x 4 | 3.84 |
| EYQ-22391 | 20/300 150-150/150 | | |
| | 100/30 | 1 3/8 x 3 1/2 | 3.18 |
| EYQ-22392 | 120/300 20/250 | | |
| | 100/50 20/25 | 1 3/8 x 3 1/2 | 3.03 |
| EYQ-2240 | 200/300 20/250 | | |
| | 100/50 20/25 | 1 3/8 x 4 1/2 | 3.27 |
| EYQ-2245 | 20/350 150/300 | | |
| | 10/250 250/50 | 1 3/8 x 4 | 3.66 |
| EYQ-2246 | 10/450 10/300 | | |
| | 60/200 100/50 | 1 3/8 x 2 1/2 | 2.28 |
| EYQ-2250 | 20/450 20/400 | | |
| | 20/350 20/25 | 1 3/8 x 3 | 2.28 |
| EYQ-2255 | 80/450 10/400 | | |
| | 30/300 40/150 | 1 3/8 x 4 1/2 | 3.15 |
| EYQ-2260 | 10/475 40/350 | | |
| | 80/300 100/100 | 1 3/8 x 4 | 3.34 |
| EYQ-2261 | 10/475 40/400 | | |
| | 4/350 100/50 | 1 3/8 x 2 1/2 | 2.44 |
| EYQ-2262 | 20/300 20-8-4/250 | | |
| | 10/475 10/450 | 1 3/8 x 2 | 1.86 |
| EYQ-2263 | 10/475 80/200 | | |
| | 50/60 | 1 3/8 x 3 | 2.31 |
| EYQ-2265 | 10/475 60/450 | | |
| | 30/400 125/50 | 1 3/8 x 4 | 3.27 |
| EYQ-2270 | 20/475 40/300 | | |
| | 100/50 80/25 | 1 3/8 x 3 | 2.70 |
| EYQ-2275 | 20/475 40/350 | | |
| | 80/200 100/100 | 1 3/8 x 4 | 3.27 |
| EYQ-2276 | 25/475 20/450 | | |
| | 40/300 100/50 | 1 3/8 x 3 1/2 | 2.97 |
| EYQ-2280 | 40/475 40/250 | | |
| | 50/150 80/50 | 1 3/8 x 3 1/2 | 3.00 |

ASTRON

CORPORATION

East Newark, New Jersey



Capacitors

SOLID ELECTROLYTE TANTALUM CAPACITORS —TYPE TES

CASE DIMENSIONS — INCHES

NOTES TO STANDARD RATINGS

- I—Standard ratings and tolerances are as shown on the table. Non-standard ratings and tolerances are available on request.
- II—Standard insulating sleeves are made of Mylar plastic. To designate an insulating sleeve add M after the TES style designation in the catalog number; for example — TESM-47-35. Other insulating sleeves are available on request.

| ASTRON CASE SIZE | UNINSULATED | | MYLAR INSULATING SLEEVE | | WIRE LEAD GAUGE | WIRE LEAD DIA. | MIL CASE SIZE |
|------------------------|-------------|-------------|----------------------------|-------------|-----------------------|----------------------|---------------------|
| | D (±.010) | X L (±.031) | D (±.015) | X L (±.031) | | | |
| A | .125 | .250 | .135 | .286 | 24 | .020 | A |
| C | .175 | .438 | .185 | .474 | 24 | .020 | B |
| D | .279 | .650 | .289 | .686 | 22 | .025 | C |
| E | .341 | .750 | .351 | .786 | 22 | .025 | D |

6 VDC WORKING, 8 VDC SURGE

| CAP. MFD. | MAX. R _s (ohms) | CASE | CATALOG NUMBER | |
|--------------|-------------------------------|------|----------------|---------------|
| | | | 20% Tolerance | 10% Tolerance |
| .1 | 798 | A | TES-1-6 | TES-1-6-10 |
| .12 | 664 | A | | TES-12-6-10 |
| .15 | 533 | A | TES-15-6 | TES-15-6-10 |
| .18 | 443 | A | | TES-18-6-10 |
| .22 | 363 | A | TES-22-6 | TES-22-6-10 |
| .27 | 297 | A | | TES-27-6-10 |
| .33 | 242 | A | TES-33-6 | TES-33-6-10 |
| .39 | 205 | A | | TES-39-6-10 |
| .47 | 170 | A | TES-47-6 | TES-47-6-10 |
| .56 | 142 | A | | TES-56-6-10 |
| .68 | 118 | A | TES-68-6 | TES-68-6-10 |
| .82 | 97.3 | A | | TES-82-6-10 |
| 1. | 79.8 | A | TES-1M-6 | TES-1M-6-10 |
| 1.2 | 66.4 | A | | TES-1.2M-6-10 |
| 1.5 | 53.3 | A | TES-1.5M-6 | TES-1.5M-6-10 |
| 1.8 | 44.3 | A | | TES-1.8M-6-10 |
| 2.2 | 36.3 | A | TES-2.2M-6 | TES-2.2M-6-10 |
| 2.7 | 29.7 | A | | TES-2.7M-6-10 |
| 3.3 | 24.2 | A | TES-3.3M-6 | TES-3.3M-6-10 |
| 3.9 | 20.5 | A | | TES-3.9M-6-10 |
| 4.7 | 17.0 | A | TES-4.7M-6 | TES-4.7M-6-10 |
| 5.6 | 14.2 | A | | TES-5.6M-6-10 |
| 6.8 | 11.8 | A | TES-6.8M-6 | TES-6.8M-6-10 |
| 8.2 | 9.7 | C | | TES-8.2M-6-10 |
| 10. | 8.0 | C | TES-10M-6 | TES-10M-6-10 |
| 12. | 6.6 | C | | TES-12M-6-10 |
| 15. | 5.3 | C | TES-15M-6 | TES-15M-6-10 |
| 18. | 4.4 | C | | TES-18M-6-10 |
| 22. | 3.6 | C | TES-22M-6 | TES-22M-6-10 |
| 27. | 3.0 | C | | TES-27M-6-10 |
| 33. | 2.4 | C | TES-33M-6 | TES-33M-6-10 |
| 39. | 2.1 | C | | TES-39M-6-10 |
| 47. | 1.7 | C | TES-47M-6 | TES-47M-6-10 |
| 56. | 1.4 | C | | TES-56M-6-10 |
| 60. | 1.3 | C | TES-60M-6 | |
| 68. | 1.2 | D | TES-68M-6 | TES-68M-6-10 |
| 82. | .97 | D | | TES-82M-6-10 |
| 100. | .80 | D | TES-100M-6 | TES-100M-6-10 |
| 120. | .66 | D | | TES-120M-6-10 |
| 150. | .53 | D | TES-150M-6 | TES-150M-6-10 |
| 180. | .44 | D | TES-180M-6 | TES-180M-6-10 |
| 220. | .36 | E | TES-220M-6 | TES-220M-6-10 |
| 270. | .30 | E | | TES-270M-6-10 |
| 330. | .24 | E | TES-330M-6 | TES-330M-6-10 |

10 VDC WORKING, 13 VDC SURGE

| CAP. MFD. | MAX. R _s (ohms) | CASE | CATALOG NUMBER | |
|--------------|-------------------------------|------|----------------|----------------|
| | | | 20% Tolerance | 10% Tolerance |
| .1 | 798 | A | TES-1-10 | TES-1-10-10 |
| .12 | 664 | A | | TES-12-10-10 |
| .15 | 533 | A | TES-15-10 | TES-15-10-10 |
| .18 | 443 | A | | TES-18-10-10 |
| .22 | 363 | A | TES-22-10 | TES-22-10-10 |
| .27 | 297 | A | | TES-27-10-10 |
| .33 | 242 | A | TES-33-10 | TES-33-10-10 |
| .39 | 205 | A | | TES-39-10-10 |
| .47 | 170 | A | TES-47-10 | TES-47-10-10 |
| .56 | 142 | A | | TES-56-10-10 |
| .68 | 118 | A | TES-68-10 | TES-68-10-10 |
| .82 | 97.3 | A | | TES-82-10-10 |
| 1. | 79.8 | A | TES-1M-10 | TES-1M-10-10 |
| 1.2 | 66.4 | A | | TES-1.2M-10-10 |
| 1.5 | 53.3 | A | TES-1.5M-10 | TES-1.5M-10-10 |
| 1.8 | 44.3 | A | | TES-1.8M-10-10 |
| 2.2 | 36.3 | A | TES-2.2-10 | TES-2.2M-10-10 |
| 2.7 | 29.7 | A | | TES-2.7M-10-10 |
| 3.3 | 24.2 | A | TES-3.3M-10 | TES-3.3M-10-10 |
| 3.9 | 20.5 | A | | TES-3.9M-10-10 |
| 4.7 | 17.0 | A | TES-4.7M-10 | TES-4.7M-10-10 |
| 5.6 | 14.2 | C | | TES-5.6M-10-10 |
| 6.8 | 11.8 | C | TES-6.8M-10 | TES-6.8M-10-10 |
| 8.2 | 9.7 | C | | TES-8.2M-10-10 |
| 10. | 8.0 | C | TES-10M-10 | TES-10M-10-10 |
| 12. | 6.6 | C | | TES-12M-10-10 |
| 15. | 5.3 | C | TES-15M-10 | TES-15M-10-10 |
| 18. | 4.4 | C | | TES-18M-10-10 |
| 22. | 3.6 | C | TES-22M-10 | TES-22M-10-10 |
| 27. | 3.0 | C | | TES-27M-10-10 |
| 33. | 2.4 | C | TES-33M-10 | TES-33M-10-10 |
| 39. | 2.1 | C | | TES-39M-10-10 |
| 40. | 2.0 | C | TES-40M-10 | |
| 47. | 1.7 | D | TES-47M-10 | TES-47M-10-10 |
| 56. | 1.4 | D | | TES-56M-10-10 |
| 68. | 1.2 | D | TES-68M-10 | TES-68M-10-10 |
| 82. | .97 | D | | TES-82M-10-10 |
| 100. | .80 | D | TES-100M-10 | TES-100M-10-10 |
| 120. | .66 | D | TES-120M-10 | TES-120M-10-10 |
| 150. | .53 | E | TES-150M-10 | TES-150M-10-10 |
| 180. | .44 | E | | TES-180M-10-10 |
| 220. | .36 | E | TES-220M-10 | TES-220M-10-10 |

ASTRON

CORPORATION

East Newark, New Jersey



Capacitors

SOLID ELECTROLYTE TANTALUM CAPACITORS

-TYPE TES

15 VDC WORKING, 20 VDC SURGE

| CAP. MFD. | MAX. R. (ohms) | CASE | CATALOG NUMBER 20% Tolerance | CATALOG NUMBER 10% Tolerance |
|-----------|-------------------|------|---------------------------------|---------------------------------|
| .1 | 798 | A | TES-1-15 | TES-1-15-10 |
| .12 | 664 | A | | TES-12-15-10 |
| .15 | 533 | A | TES-15-15 | TES-15-15-10 |
| .18 | 443 | A | | TES-18-15-10 |
| .22 | 363 | A | TES-22-15 | TES-22-15-10 |
| .27 | 297 | A | | TES-27-15-10 |
| .33 | 242 | A | TES-33-15 | TES-33-15-10 |
| .39 | 205 | A | | TES-39-15-10 |
| .47 | 170 | A | TES-47-15 | TES-47-15-10 |
| .56 | 142 | A | | TES-56-15-10 |
| .68 | 118 | A | TES-68-15 | TES-68-15-10 |
| .82 | 97.3 | A | | TES-82-15-10 |
| 1. | 79.8 | A | TES-1M-15 | TES-1M-15-10 |
| 1.2 | 66.4 | A | | TES-1.2M-15-10 |
| 1.5 | 53.3 | A | TES-1.5M-15 | TES-1.5M-15-10 |
| 1.8 | 44.3 | A | | TES-1.8M-15-10 |
| 2.2 | 36.3 | A | TES-2.2M-15 | TES-2.2M-15-10 |
| 2.7 | 29.7 | A | | TES-2.7M-15-10 |
| 3.3 | 24.2 | A | TES-3.3M-15 | TES-3.3M-15-10 |
| 3.9 | 20.5 | C | | TES-3.9M-15-10 |
| 4.7 | 17.0 | C | TES-4.7M-15 | TES-4.7M-15-10 |
| 5.6 | 14.2 | C | | TES-5.6M-15-10 |
| 6.8 | 11.8 | C | TES-6.8M-15 | TES-6.8M-15-10 |
| 8.2 | 9.7 | C | | TES-8.2M-15-10 |
| 10. | 8.0 | C | TES-10M-15 | TES-10M-15-10 |
| 12. | 6.6 | C | | TES-12M-15-10 |
| 15. | 5.3 | C | TES-15M-15 | TES-15M-15-10 |
| 18. | 4.4 | C | | TES-18M-15-10 |
| 22. | 3.6 | C | TES-22M-15 | TES-22M-15-10 |
| 27. | 3.0 | D | | TES-27M-15-10 |
| 33. | 2.4 | D | TES-33M-15 | TES-33M-15-10 |
| 39. | 2.1 | D | | TES-39M-15-10 |
| 47. | 1.7 | D | TES-47M-15 | TES-47M-15-10 |
| 56. | 1.4 | D | | TES-56M-15-10 |
| 68. | 1.2 | D | TES-68M-15 | TES-68M-15-10 |
| 82. | .97 | E | | TES-82M-15-10 |
| 100. | .80 | E | TES-100M-15 | TES-100M-15-10 |
| 120. | .66 | E | | TES-120M-15-10 |
| 150. | .53 | E | TES-150M-15 | TES-150M-15-10 |

20 VDC WORKING, 26 VDC SURGE

| | | | | |
|-------|--------|---|-------------|----------------|
| .0022 | 36,300 | A | TES-0022-20 | TES-0022-20-10 |
| .0027 | 29,700 | A | | TES-0027-20-10 |
| .0033 | 24,200 | A | TES-0033-20 | TES-0033-20-10 |
| .0039 | 20,500 | A | | TES-0039-20-10 |
| .0047 | 17,000 | A | TES-0047-20 | TES-0047-20-10 |
| .0056 | 14,200 | A | | TES-0056-20-10 |

20 VDC WORKING, 26 VDC SURGE

(Continued)

| MFD. CAP. | MAX. R. (ohms) | CASE | CATALOG NUMBER 20% Tolerance | CATALOG NUMBER 10% Tolerance |
|-----------|-------------------|------|---------------------------------|---------------------------------|
| .0068 | 11,800 | A | TES-0068-20 | TES-0068-20-10 |
| .0082 | 9,730 | A | | TES-0082-20-10 |
| .01 | 7,980 | A | TES-01-20 | TES-01-20-10 |
| .012 | 6,640 | A | | TES-012-20-10 |
| .015 | 5,330 | A | TES-015-20 | TES-015-20-10 |
| .018 | 4,430 | A | | TES-018-20-10 |
| .022 | 3,630 | A | TES-022-20 | TES-022-20-10 |
| .027 | 2,970 | A | | TES-027-20-10 |
| .033 | 2,420 | A | TES-033-20 | TES-033-20-10 |
| .039 | 2,050 | A | | TES-039-20-10 |
| .047 | 1,700 | A | TES-047-20 | TES-047-20-10 |
| .056 | 1,420 | A | | TES-056-20-10 |
| .068 | 1,180 | A | TES-068-20 | TES-068-20-10 |
| .082 | 973 | A | | TES-082-20-10 |
| .1 | 798 | A | TES-1-20 | TES-1-20-10 |
| .12 | 664 | A | | TES-12-20-10 |
| .15 | 533 | A | TES-15-20 | TES-15-20-10 |
| .18 | 443 | A | | TES-18-20-10 |
| .22 | 363 | A | TES-22-20 | TES-22-20-10 |
| .27 | 297 | A | | TES-27-20-10 |
| .33 | 242 | A | TES-33-20 | TES-33-20-10 |
| .39 | 205 | A | | TES-39-20-10 |
| .47 | 170 | A | TES-47-20 | TES-47-20-10 |
| .56 | 142 | A | | TES-56-20-10 |
| .68 | 118 | A | TES-68-20 | TES-68-20-10 |
| .82 | 97.3 | A | | TES-82-20-10 |
| 1. | 79.8 | A | TES-1M-20 | TES-1M-20-10 |
| 1.2 | 66.4 | A | | TES-1.2M-20-10 |
| 1.5 | 53.3 | A | TES-1.5M-20 | TES-1.5M-20-10 |
| 1.8 | 44.3 | A | | TES-1.8M-20-10 |
| 2.2 | 36.3 | A | TES-2.2M-20 | TES-2.2M-20-10 |
| 2.7 | 29.7 | C | | TES-2.7M-20-10 |
| 3.3 | 24.2 | C | TES-3.3M-20 | TES-3.3M-20-10 |
| 3.9 | 20.5 | C | | TES-3.9M-20-10 |
| 4.7 | 17.0 | C | TES-4.7M-20 | TES-4.7M-20-10 |
| 5.6 | 14.2 | C | | TES-5.6M-20-10 |
| 6.8 | 11.8 | C | TES-6.8M-20 | TES-6.8M-20-10 |
| 8.2 | 9.7 | C | | TES-8.2M-20-10 |
| 10. | 8.0 | C | TES-10M-20 | TES-10M-20-10 |
| 12. | 6.6 | C | | TES-12M-20-10 |
| 15. | 5.3 | C | TES-15M-20 | TES-15M-20-10 |
| 18. | 4.4 | D | | TES-18M-20-10 |
| 22. | 3.6 | D | TES-22M-20 | TES-22M-20-10 |
| 27. | 3.0 | D | | TES-27M-20-10 |
| 33. | 2.4 | D | TES-33M-20 | TES-33M-20-10 |
| 39. | 2.1 | D | | TES-39M-20-10 |
| 47. | 1.7 | D | TES-47-20 | TES-47M-20-10 |
| 56. | 1.4 | E | | TES-56M-20-10 |
| 68. | 1.2 | E | TES-68M-20 | TES-68M-20-10 |
| 82. | .97 | E | | TES-82M-20-10 |
| 100. | .80 | E | TES-100M-20 | TES-100M-20-10 |

35 VDC WORKING, 46 VDC SURGE

| MFD. CAP. | MAX. R. (ohms) | CASE | CATALOG NUMBER 20% Tolerance | CATALOG NUMBER 10% Tolerance |
|-----------|-------------------|------|---------------------------------|---------------------------------|
| .0022 | 36,300 | A | TES-0022-35 | TES-0022-35-10 |
| .0027 | 29,700 | A | | TES-0027-35-10 |
| .0033 | 24,200 | A | TES-0033-35 | TES-0033-35-10 |
| .0039 | 20,500 | A | | TES-0039-35-10 |
| .0047 | 17,000 | A | TES-0047-35 | TES-0047-35-10 |
| .0056 | 14,200 | A | | TES-0056-35-10 |
| .0068 | 11,800 | A | TES-0068-35 | TES-0068-35-10 |
| .082 | 9,730 | A | | TES-0082-35-10 |
| .01 | 7,980 | A | TES-01-35 | TES-01-35-10 |
| .012 | 6,640 | A | | TES-012-35-10 |
| .015 | 5,330 | A | TES-015-35 | TES-015-35-10 |
| .018 | 4,430 | A | | TES-018-35-10 |
| .022 | 3,630 | A | TES-022-35 | TES-022-35-10 |
| .027 | 2,970 | A | | TES-027-35-10 |
| .033 | 2,420 | A | TES-033-35 | TES-033-35-10 |
| .039 | 2,050 | A | | TES-039-35-10 |
| .047 | 1,700 | A | TES-047-35 | TES-047-35-10 |
| .056 | 1,420 | A | | TES-056-35-10 |
| .068 | 1,180 | A | TES-068-35 | TES-068-35-10 |
| .082 | 973 | A | | TES-082-35-10 |
| .1 | 798 | A | TES-1-35 | TES-1-35-10 |
| .12 | 664 | A | | TES-12-35-10 |
| .15 | 533 | A | TES-15-35 | TES-15-35-10 |
| .18 | 443 | A | | TES-18-35-10 |
| .22 | 363 | A | TES-22-35 | TES-22-35-10 |
| .27 | 297 | A | | TES-27-35-10 |
| .33 | 242 | A | TES-33-35 | TES-33-35-10 |
| .39 | 205 | A | | TES-39-35-10 |
| .47 | 170 | A | TES-47-35 | TES-47-35-10 |
| .56 | 142 | A | | TES-56-35-10 |
| .68 | 118 | A | TES-68-35 | TES-68-35-10 |
| .82 | 97.3 | A | | TES-82-35-10 |
| 1. | 79.8 | A | TES-1M-35 | TES-1M-35-10 |
| 1.2 | 66.4 | C | | TES-1.2M-35-10 |
| 1.5 | 53.3 | C | TES-1.5M-35 | TES-1.5M-35-10 |
| 1.8 | 44.3 | C | | TES-1.8M-35-10 |
| 2.2 | 36.3 | C | TES-2.2M-35 | TES-2.2M-35-10 |
| 2.7 | 29.7 | C | | TES-2.7M-35-10 |
| 3.3 | 24.2 | C | TES-3.3M-35 | TES-3.3M-35-10 |
| 3.9 | 20.5 | C | | TES-3.9M-35-10 |
| 4.7 | 17.0 | C | TES-4.7M-35 | TES-4.7M-35-10 |
| 5.6 | 14.2 | C | | TES-5.6M-35-10 |
| 6.8 | 11.8 | C | TES-6.8M-35 | TES-6.8M-35-10 |
| 8.2 | 9.7 | D | | TES-8.2M-35-10 |
| 10. | 8.0 | D | TES-10M-35 | TES-10M-35-10 |
| 12. | 6.6 | D | | TES-12M-35-10 |
| 15. | 5.3 | D | TES-15M-35 | TES-15M-35-10 |
| 18. | 4.4 | D | | TES-18M-35-10 |
| 22. | 3.6 | D | TES-22M-35 | TES-22M-35-10 |
| 27. | 3.0 | E | | TES-27M-35-10 |
| 33. | 2.4 | E | TES-33M-35 | TES-33M-35-10 |
| 39. | 2.1 | E | | TES-39M-35-10 |
| 47. | 1.7 | E | TES-47M-35 | TES-47M-35-10 |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

CP53
thru
CP55
of
MIL C-25C



TYPE ADM

Bathtub Paper Capacitors
85°C. Operation

- Non-inductively wound. Mineral oil impregnated and filled. Hermetically sealed.
- Operating temperature range -55°C. to +85°C.
- Built to comply with strict requirements of MIL-C-25C. Silicone rubber compression seal lug terminals. Completely immersion-proof.
- Single units have two terminals; duals have three terminals (one common); triple units have three terminals (case common).
- Standard position of Type ADM terminals is on side (MIL-C-25C Style CP53). Available also with terminals on top (ASTRON Type ADMT or MIL Style CP54) and bottom terminals (ASTRON Type ADMB or MIL Style CP55).
- Cap. Tolerance: ±20%.

Military Number Astron Type L. x W. x H.

100 VOLTS DC WORKING

| | | |
|-----------------|----------|--|
| AS-CP53B1EB105M | ADM-1-1M | 1 ¹³ / ₁₆ x1 x 7/8 |
| AS-CP53B1EB205M | ADM-1-2M | 2 x1 ³ / ₄ x 7/8 |
| AS-CP53B1EB405M | ADM-1-4M | 2 x2 x1 ¹ / ₂ |

200 VOLTS DC WORKING

| | | |
|-----------------|----------|--|
| AS-CP53B1EC504M | ADM-2-5 | 1 ¹³ / ₁₆ x1 x 7/8 |
| AS-CP53B1EC105M | ADM-2-1M | 2 x1 ³ / ₄ x 7/8 |
| AS-CP53B1EC205M | ADM-2-2M | 2 x2 x1 |

400 VOLTS DC WORKING

| | | |
|-----------------|-----------|--|
| AS-CP53B1EE504M | ADM-4-5 | 1 ¹³ / ₁₆ x1 x 7/8 |
| AS-CP53B1EE105M | ADM-4-1M | 2 x1 ³ / ₄ x 7/8 |
| AS-CP53B5EE504M | ADM-4-3x5 | 2 x2 x1 ¹ / ₂ |

600 VOLTS DC WORKING

| | | |
|-----------------|------------|--|
| AS-CP53B1EF503M | ADM-6-05 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B1EF104M | ADM-6-1 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B1EF254M | ADM-6-25 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B1EF504M | ADM-6-5 | 1 ¹³ / ₁₆ x1 x1 |
| AS-CP53B1EF105M | ADM-6-1M | 2 x1 ³ / ₄ x1 |
| AS-CP53B1EF205M | ADM-6-2M | 2 x2 x1 ¹ / ₂ |
| AS-CP53B4EF503M | ADM-6-2x05 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B4EF104M | ADM-6-2x1 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B4EF254M | ADM-6-2x25 | 1 ¹³ / ₁₆ x1 x1 |
| AS-CP53B4EF504M | ADM-6-2x5 | 2 x1 ³ / ₄ x1 |
| AS-CP53B4EF105M | ADM-6-2x1M | 2 x2 x1 ¹ / ₂ |
| AS-CP53B5EF503M | ADM-6-3x05 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B5EF104M | ADM-6-3x1 | 1 ¹³ / ₁₆ x1 x 7/8 |
| AS-CP53B5EF254M | ADM-6-3x25 | 2 x1 ³ / ₄ x 7/8 |
| AS-CP53B5EF504M | ADM-6-3x5 | 2 x2 x1 ¹ / ₂ |

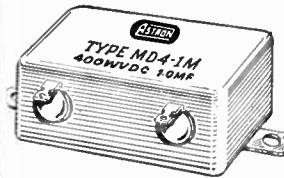
1000 VOLTS DC WORKING

| | | |
|-----------------|-------------|--|
| AS-CP53B1EG503M | ADM-10-05 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B1EG104M | ADM-10-1 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B1EG254M | ADM-10-25 | 1 ¹³ / ₁₆ x1 x 7/8 |
| AS-CP53B1EG504M | ADM-10-5 | 2 x1 ³ / ₄ x 7/8 |
| AS-CP53B1EG105M | ADM-10-1M | 2 x2 x1 ¹ / ₂ |
| AS-CP53B4EG503M | ADM-10-2x05 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B4EG104M | ADM-10-2x1 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B4EG254M | ADM-10-2x25 | 2 x1 ³ / ₄ x 7/8 |
| AS-CP53B4EG504M | ADM-10-2x5 | 2 x2 x1 ¹ / ₂ |
| AS-CP53B5EG503M | ADM-10-3x05 | 1 ¹³ / ₁₆ x1 x 3/4 |
| AS-CP53B5EG104M | ADM-10-3x1 | 2 x1 ³ / ₄ x 7/8 |
| AS-CP53B5EG254M | ADM-10-3x25 | 2 x2 x1 ¹ / ₂ |

METALITE® TYPE MD

Bathtub Capacitors

85°C. Operation



| Cat. No. | Cap. Mf. | L. x W. x H. | Mtg. Ctr |
|-----------------------------|----------|--|-------------------------------|
| 150 VOLTS DC WORKING | | | |
| MD-1.5-4M | 4.0 | 1 ³ / ₄ x1 x 7/8 | 2 ¹ / ₂ |
| MD-1.5-6M | 6.0 | 1 ³ / ₄ x1 x 7/8 | 2 ³ / ₈ |
| MD-1.5-8M | 8.0 | 1 ³ / ₄ x2 x 7/8 | 2 ³ / ₈ |
| MD-1.5-10M | 10.0 | 1 ³ / ₄ x2 x 7/8 | 2 ³ / ₈ |
| MD-1.5-12M | 12.0 | 1 ³ / ₄ x2 x1 | 2 ³ / ₈ |
| MD-1.5-16M | 16.0 | 1 ³ / ₄ x2 x1 ³ / ₈ | 2 ³ / ₈ |
| MD-1.5-18M | 18.0 | 1 ³ / ₄ x2 x1 ¹ / ₂ | 2 ³ / ₈ |
| MD-1.5-2x4M | 4.0-4.0 | 1 ³ / ₄ x2 x 7/8 | 2 ³ / ₈ |
| MD-1.5-2x6M | 6.0-6.0 | 1 ³ / ₄ x2 x1 | 2 ³ / ₈ |
| 200 VOLTS DC WORKING | | | |
| MD-2-5 | .5 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-2-1M | 1.0 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-2-2M | 2.0 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-2-2x1M | 1.0-1.0 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-2-2x2M | 2.0-2.0 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| 400 VOLTS DC WORKING | | | |
| MD-4-25 | .25 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-4-5 | .5 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-4-1M | 1.0 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-4-2M | 2.0 | 2 x1 ³ / ₄ x 7/8 | 2 ³ / ₈ |
| MD-4-4M | 4.0 | 2 x2 x1 ¹ / ₂ | 2 ³ / ₈ |
| MD-4-6M | 6.0 | 2 x2 x1 ¹ / ₂ | 2 ³ / ₈ |
| MD-4-2x5 | .5-.5 | 1 ³ / ₄ x1 x 7/8 | 2 ¹ / ₂ |
| MD-4-2x1M | 1.0-1.0 | 2 x1 ³ / ₄ x 7/8 | 2 ³ / ₈ |
| MD-4-2x2M | 2.0-2.0 | 2 x2 x1 ¹ / ₂ | 2 ³ / ₈ |
| 600 VOLTS DC WORKING | | | |
| MD-6-1 | 1 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-6-25 | .25 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-6-5 | .5 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-6-1M | 1.0 | 1 ³ / ₄ x1 ¹ / ₄ x 7/8 | 2 ³ / ₈ |
| MD-6-2M | 2.0 | 2 x2 x1 | 2 ³ / ₈ |
| MD-6-3M | 3.0 | 2 x2 x1 ³ / ₈ | 2 ³ / ₈ |
| MD-6-4M | 4.0 | 2 x2 x1 ¹ / ₂ | 2 ³ / ₈ |
| MD-6-2x25 | .25-.25 | 1 ³ / ₄ x1 x 3/4 | 2 ¹ / ₂ |
| MD-6-2x5 | .5-.5 | 1 ³ / ₄ x1 ¹ / ₄ x 7/8 | 2 ³ / ₈ |
| MD-6-2x1M | 1.0-1.0 | 2 x2 x1 | 2 ³ / ₈ |

STANDARD CAPACITANCE TOLERANCE: ±20%.

- Units meet MIL tests for moisture resistance, thermal cycle immersion and vibration.
- Single units have two terminals; dual units have three terminals, one terminal common negative.
- Standard position of terminals on side. Also available with terminals on top (Type MDT) or bottom (Type MDB).
- Standard capacitance tolerance: ±20%.
- Compact sizes. Light weight. Up to 75% reduction in sizes over conventional paper-foil capacitors.
- Temperature Range -65°C. to +85°C.
- Space-saving metallized paper dielectric makes possible wider choice of high capacitance ratings than ever before obtainable in bathtub cases.
- Hermetically sealed. Silicone rubber compression seal lug terminals.

TYPE AXM

MIL C-25C TYPE (CP70)
(B Terminal) (Char. E)



Terneplate "Squeeze Seam" Case
with Spade Bolt Brackets

600 VOLTS DC WORKING

| Cat. No. | Cap. MF | L. x W. x H. |
|-----------|---------|--|
| AXM 6-25 | .25 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 1 ¹ / ₈ |
| AXM 6-5 | .5 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 2 ¹ / ₄ |
| AXM 6-1M | 1.0 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 2 ¹ / ₄ |
| AXM 6-2M | 2.0 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 3 ¹ / ₄ |
| AXM 6-4M | 4.0 | 2 ¹ / ₂ x 1 ¹ / ₁₆ x 3 ⁷ / ₈ |
| AXM 6-6M | 6.0 | 3 ³ / ₄ x 1 ¹ / ₄ x 3 ⁷ / ₈ |
| AXM 6-8M | 8.0 | 3 ³ / ₄ x 1 ¹ / ₄ x 4 ¹ / ₄ |
| AXM 6-10M | 10.0 | 3 ³ / ₄ x 1 ³ / ₄ x 4 |

1000 VOLTS DC WORKING

| Cat. No. | Cap. MF | L. x W. x H. |
|-----------|---------|--|
| AXM 10-1 | .1 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 1 ⁵ / ₈ |
| AXM 10-25 | .25 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 2 ¹ / ₄ |
| AXM 10-5 | .5 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 2 ¹ / ₄ |
| AXM 10-1M | 1.0 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 2 ⁷ / ₈ |
| AXM 10-2M | 2.0 | 1 ¹³ / ₁₆ x 1 ¹ / ₁₆ x 4 ³ / ₄ |
| AXM 10-4M | 4.0 | 3 ³ / ₄ x 1 ¹ / ₄ x 3 ⁷ / ₈ |
| AXM 10-6M | 6.0 | 3 ³ / ₄ x 1 ³ / ₄ x 4 |
| AXM 10-8M | 8.0 | 3 ³ / ₄ x 1 ³ / ₄ |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

TYPE AQF MILITARY TYPE

CP08
CP09
MIL-C-25C



Commercial
Equivalent

TEMPERATURE CHARACTERISTICS E AND K CIRCUIT 1

(Capacitor Section Insulated From Case)

| 100 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP08A1-B103M | AQF-1-01 | .01 | .235 x 3/4 |
| AS-CP08A1-B153M | AQF-1-015 | .015 | .235 x 3/4 |
| AS-CP08A1-B473M | AQF-1-047 | .047 | .312 x 7/8 |
| AS-CP08A1-B104M | AQF-1-1 | .1 | .400 x 7/8 |
| AS-CP08A1-B154M | AQF-1-15 | .15 | .400 x 1 1/8 |
| AS-CP08A1-B224M | AQF-1-22 | .22 | .400 x 1 1/8 |
| AS-CP08A1-B334M | AQF-1-33 | .33 | .562 x 1 1/8 |
| AS-CP08A1-B474M | AQF-1-47 | .47 | .562 x 1 1/8 |
| AS-CP08A1-B684M | AQF-1-68 | .68 | .562 x 1 1/8 |
| AS-CP08A1-B105M | AQF-1-1M | 1.0 | .670 x 1 1/8 |

| 200 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP08A1-C472M | AQF-2-0047 | .0047 | .235 x 3/4 |
| AS-CP08A1-C682M | AQF-2-0068 | .0068 | .235 x 3/4 |
| AS-CP08A1-C223M | AQF-2-022 | .022 | .312 x 7/8 |
| AS-CP08A1-C333M | AQF-2-033 | .033 | .312 x 7/8 |
| AS-CP08A1-C473M | AQF-2-047 | .047 | .400 x 7/8 |
| AS-CP08A1-C683M | AQF-2-068 | .068 | .400 x 7/8 |
| AS-CP08A1-C104M | AQF-2-1 | .1 | .400 x 1 1/8 |
| AS-CP08A1-C154M | AQF-2-15 | .15 | .400 x 1 1/8 |
| AS-CP08A1-C224M | AQF-2-22 | .22 | .562 x 1 1/8 |
| AS-CP08A1-C334M | AQF-2-33 | .33 | .562 x 1 1/8 |
| AS-CP08A1-C474M | AQF-2-47 | .47 | .562 x 1 1/8 |
| AS-CP08A1-C684M | AQF-2-68 | .68 | .670 x 1 1/8 |
| AS-CP08A1-C105M | AQF-2-1M | 1.0 | .750 x 2 1/8 |

| 400 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP08A1-E332M | AQF-4-0033 | .0033 | .235 x 3/4 |
| AS-CP08A1-E153M | AQF-4-015 | .015 | .312 x 7/8 |
| AS-CP08A1-E333M | AQF-4-033 | .033 | .400 x 7/8 |
| AS-CP08A1-E473M | AQF-4-047 | .047 | .400 x 1 1/8 |
| AS-CP08A1-E683M | AQF-4-068 | .068 | .400 x 1 1/8 |
| AS-CP08A1-E104M | AQF-4-1 | .1 | .562 x 1 1/8 |
| AS-CP08A1-E154M | AQF-4-15 | .15 | .562 x 1 1/8 |
| AS-CP08A1-E224M | AQF-4-22 | .22 | .562 x 1 1/8 |
| AS-CP08A1-E334M | AQF-4-33 | .33 | .670 x 1 1/8 |
| AS-CP08A1-E474M | AQF-4-47 | .47 | .750 x 2 1/8 |

| 600 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP08A1-F102M | AQF-6-001 | .001 | .235 x 3/4 |
| AS-CP08A1-F152M | AQF-6-0015 | .0015 | .235 x 3/4 |
| AS-CP08A1-F222M | AQF-6-0022 | .0022 | .235 x 3/4 |
| AS-CP08A1-F332M | AQF-6-0033 | .0033 | .312 x 7/8 |
| AS-CP08A1-F472M | AQF-6-0047 | .0047 | .312 x 7/8 |
| AS-CP08A1-F682M | AQF-6-0068 | .0068 | .312 x 7/8 |
| AS-CP08A1-F103M | AQF-6-01 | .01 | .312 x 7/8 |
| AS-CP08A1-F153M | AQF-6-015 | .015 | .400 x 7/8 |
| AS-CP08A1-F223M | AQF-6-022 | .022 | .400 x 7/8 |
| AS-CP08A1-F333M | AQF-6-033 | .033 | .400 x 1 1/8 |
| AS-CP08A1-F473M | AQF-6-047 | .047 | .400 x 1 1/8 |
| AS-CP08A1-F683M | AQF-6-068 | .068 | .562 x 1 1/8 |
| AS-CP08A1-F104M | AQF-6-1 | .1 | .562 x 1 1/8 |
| AS-CP08A1-F154M | AQF-6-15 | .15 | .562 x 1 1/8 |
| AS-CP08A1-F224M | AQF-6-22 | .22 | .670 x 1 1/8 |
| AS-CP08A1-F334M | AQF-6-33 | .33 | .750 x 2 1/8 |
| AS-CP08A1-F474M | AQF-6-47 | .47 | .750 x 2 1/8 |

| 1000 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP08A1-G102M | AQF-10-001 | .001 | .400 x 7/8 |
| AS-CP08A1-G152M | AQF-10-0015 | .0015 | .400 x 7/8 |
| AS-CP08A1-G222M | AQF-10-0022 | .0022 | .400 x 7/8 |
| AS-CP08A1-G332M | AQF-10-0033 | .0033 | .400 x 7/8 |
| AS-CP08A1-G472M | AQF-10-0047 | .0047 | .400 x 7/8 |
| AS-CP08A1-G682M | AQF-10-0068 | .0068 | .400 x 7/8 |
| AS-CP08A1-G103M | AQF-10-01 | .01 | .400 x 7/8 |
| AS-CP08A1-G153M | AQF-10-015 | .015 | .400 x 1 1/8 |
| AS-CP08A1-G223M | AQF-10-022 | .022 | .400 x 1 1/8 |
| AS-CP08A1-G333M | AQF-10-033 | .033 | .562 x 1 1/8 |
| AS-CP08A1-G473M | AQF-10-047 | .047 | .562 x 1 1/8 |
| AS-CP08A1-G683M | AQF-10-068 | .068 | .562 x 1 1/8 |
| AS-CP08A1-G104M | AQF-10-1 | .1 | .670 x 1 1/8 |
| AS-CP08A1-G154M | AQF-10-15 | .15 | .670 x 1 1/8 |
| AS-CP08A1-G224M | AQF-10-22 | .22 | .750 x 2 1/8 |
| AS-CP08A1-G334M | AQF-10-33 | .33 | 1.000 x 2 1/8 |
| AS-CP08A1-G474M | AQF-10-47 | .47 | 1.000 x 2 3/8 |

VARIATIONS

| CIRCUIT 1 | CAPACITOR SECTION INSULATED FROM THE CASE | MIL STYLE | ASTRON TYPE |
|--|---|---|-------------|
| UNINSULATED BODY SIZES SHOWN IN LISTINGS | Basic unit in floating construction. Sizes as shown in listings. | CP08 (1) | AQF |
| | Basic unit with tangential soldered-on bracket. Add suffix (A). | — | AQF-A |
| | Basic unit with soldered-on L type bracket. Add suffix (B). | — | AQF-B |
| | Screw neck mounting type. Available in same ratings as AQF. Minimum in case diameter .400". | — | AQFS |
| | FOR INSULATED BODY ADD 1/16" TO DIAMETER AND LENGTH OF AQF SIZES LISTED | Internally insulated ("Floating" Construction) with plastic outer sleeve (P). | CP09 (1) | AQFP |

| CIRCUIT 3 | CAPACITOR SECTION GROUNDED TO CASE | MIL STYLE | ASTRON TYPE |
|--|--|-----------|-------------|
| UNINSULATED BODY DEDUCT 1/16" FROM LENGTH OF UNITS LISTED | Basic unit — Grounded construction. | CP08 (3) | AQ |
| | Basic AQ unit with soldered-on tangential (A) bracket. | — | AQ-A |
| | Basic AQ unit with soldered-on L type bracket (B). | — | AQ-B |
| | Screw neck mounting type. Available in same ratings as AQ. Minimum case diameter is .400". | — | AQS |
| | Stud base mounting type. Available in same ratings as AQ. | — | AQV |
| FOR INSULATED BODY ADD 1/16" TO DIAMETER OF AQF SIZES LISTED | Grounded construction, with plastic outer sleeve (P). | CP09 (3) | AQP |

TYPE AQF (50V)

SUBMINIATURE GLASS-TO-METAL SEALED TUBULARS

For Transistorized Applications
50 Volt Rating —
Extended Foil Construction



- SMALLER SIZE THAN LOWEST RATING AVAILABLE IN MIL-C-25C
- MEETS ELECTRICAL AND ENVIRONMENTAL REQUIREMENTS OF MIL-C-25C
- SUPPLIED TO COMPLY WITH CHARACTERISTICS E OR K OF MIL-C-25C
- CONTINUOUS OPERATION OVER TEMPERATURE RANGE OF -65°C. TO 125°C. WITHOUT DERATING
- EXCELLENT CAPACITANCE TEMPERATURE STABILITY

Designed to fill the need for a high quality capacitor for use primarily in transistor and other low voltage applications. These capacitors offer the outstanding advantage of smaller sizes without any loss in performance or electrical and physical characteristics in accordance with MIL-C-25C.

50 VOLTS DC WORKING

| | | |
|------------|------|------------|
| AQF-.5-027 | .027 | .235x3/4 |
| AQF-.5-068 | .068 | .312x7/8 |
| AQF-.5-1 | .1 | .312x7/8 |
| AQF-.5-27 | .27 | .400x1 1/8 |
| AQF-.5-47 | .47 | .500x1 1/4 |
| AQF-.5-1M | 1.0 | .562x1 1/8 |
| AQF-.5-2M | 2.0 | .750x2 1/8 |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

TYPE TQF
MILITARY
TYPE

CP04 CP10
CP05 CP11
MIL-C-25C



Commercial
Equivalent

TEMPERATURE CHARACTERISTICS E AND K CIRCUIT 1

(Capacitor Section Insulated From Case)

| 100 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP04A1-B333M | TQF-1-033 | .033 | .235 x 3/4 |
| AS-CP04A1-B104M | TQF-1-1 | .1 | .312 x 7/8 |
| AS-CP04A1-B154M | TQF-1-15 | .15 | .400 x 7/8 |
| AS-CP04A1-B224M | TQF-1-22 | .22 | .400 x 1 1/8 |
| AS-CP04A1-B334M | TQF-1-33 | .33 | .400 x 1 1/8 |
| AS-CP04A1-B474M | TQF-1-47 | .47 | .562 x 1 1/8 |
| AS-CP04A1-B684M | TQF-1-68 | .68 | .562 x 1 1/8 |
| AS-CP04A1-B105M | TQF-1-1M | 1.0 | .562 x 1 1/8 |

| 200 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP04A1-C153M | TQF-2-015 | .015 | .235 x 3/4 |
| AS-CP04A1-C223M | TQF-2-022 | .022 | .235 x 3/4 |
| AS-CP04A1-C473M | TQF-2-047 | .047 | .312 x 7/8 |
| AS-CP04A1-C683M | TQF-2-068 | .068 | .312 x 7/8 |
| AS-CP04A1-C104M | TQF-2-1 | .1 | .400 x 7/8 |
| AS-CP04A1-C154M | TQF-2-15 | .15 | .400 x 1 1/8 |
| AS-CP04A1-C224M | TQF-2-22 | .22 | .400 x 1 1/8 |
| AS-CP04A1-C334M | TQF-2-33 | .33 | .562 x 1 1/8 |
| AS-CP04A1-C474M | TQF-2-47 | .47 | .562 x 1 1/8 |
| AS-CP04A1-C684M | TQF-2-68 | .68 | .562 x 1 1/8 |
| AS-CP04A1-C105M | TQF-2-1M | 1.0 | .670 x 1 1/8 |

| 400 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP04A1-E103M | TQF-4-01 | .01 | .235 x 3/4 |
| AS-CP04A1-E333M | TQF-4-033 | .033 | .312 x 7/8 |
| AS-CP04A1-E473M | TQF-4-047 | .047 | .400 x 7/8 |
| AS-CP04A1-E683M | TQF-4-068 | .068 | .400 x 1 1/8 |
| AS-CP04A1-E104M | TQF-4-1 | .1 | .400 x 1 1/8 |
| AS-CP04A1-E154M | TQF-4-15 | .15 | .562 x 1 1/8 |
| AS-CP04A1-E224M | TQF-4-22 | .22 | .562 x 1 1/8 |
| AS-CP04A1-E334M | TQF-4-33 | .33 | .562 x 1 1/8 |
| AS-CP04A1-E474M | TQF-4-47 | .47 | .670 x 1 1/8 |
| AS-CP04A1-E684M | TQF-4-68 | .68 | .750 x 2 1/8 |
| AS-CP04A1-E105M | TQF-4-1M | 1.0M | 1.000 x 1 1/8 |

| 600 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP04A1-F102M | TQF-6-001 | .001 | .235 x 3/4 |
| AS-CP04A1-F152M | TQF-6-0015 | .0015 | .235 x 3/4 |
| AS-CP04A1-F222M | TQF-6-0022 | .0022 | .235 x 3/4 |
| AS-CP04A1-F332M | TQF-6-0033 | .0033 | .235 x 3/4 |
| AS-CP04A1-F472M | TQF-6-0047 | .0047 | .235 x 3/4 |
| AS-CP04A1-F682M | TQF-6-0068 | .0068 | .235 x 3/4 |
| AS-CP04A1-F103M | TQF-6-01 | .01 | .312 x 7/8 |
| AS-CP04A1-F153M | TQF-6-015 | .015 | .312 x 7/8 |
| AS-CP04A1-F223M | TQF-6-022 | .022 | .312 x 7/8 |
| AS-CP04A1-F333M | TQF-6-033 | .033 | .400 x 7/8 |
| AS-CP04A1-F473M | TQF-6-047 | .047 | .400 x 1 1/8 |
| AS-CP04A1-F683M | TQF-6-068 | .068 | .400 x 1 1/8 |
| AS-CP04A1-F104M | TQF-6-1 | .1 | .562 x 1 1/8 |
| AS-CP04A1-F154M | TQF-6-15 | .15 | .562 x 1 1/8 |
| AS-CP04A1-F224M | TQF-6-22 | .22 | .562 x 1 1/8 |
| AS-CP04A1-F334M | TQF-6-33 | .33 | .670 x 1 1/8 |
| AS-CP04A1-F474M | TQF-6-47 | .47 | .750 x 2 1/8 |
| AS-CP04A1-F684M | TQF-6-68 | .68 | 1.000 x 1 1/8 |

| 1000 VOLTS | Commercial Equivalent | Cap. Mfd. | Dia. x Length |
|-----------------|-----------------------|-----------|---------------|
| AS-CP04A1-G153M | TQF-10-015 | .015 | .400 x 7/8 |
| AS-CP04A1-G223M | TQF-10-022 | .022 | .400 x 1 1/8 |
| AS-CP04A1-G333M | TQF-10-033 | .033 | .400 x 1 1/8 |
| AS-CP04A1-G473M | TQF-10-047 | .047 | .562 x 1 1/8 |
| AS-CP04A1-G683M | TQF-10-068 | .068 | .562 x 1 1/8 |
| AS-CP04A1-G104M | TQF-10-1 | .1 | .562 x 1 1/8 |
| AS-CP04A1-G154M | TQF-10-15 | .15 | .670 x 1 1/8 |
| AS-CP04A1-G224M | TQF-10-22 | .22 | .750 x 2 1/8 |
| AS-CP04A1-G334M | TQF-10-33 | .33 | .750 x 2 1/8 |
| AS-CP04A1-G474M | TQF-10-47 | .47 | 1.000 x 2 1/8 |

CP25
thru
CP29
of
MIL C-25C



TYPE ARMF Oil Filled Metal Tubulars 85°C. Operation

- Non-inductively wound. Mineral oil impregnated and filled. Hermetically sealed.
- Excellent capacitance stability and low power factor over entire temperature range -55°C. to +85°C.
- Units listed are internally insulated from case. Also available with capacitor section grounded to case (Type ARMG) and in accordance with all Specification MIL-C-25C styles CP25-26-27-28-29.
- Wire leads 1 1/2" long. Standard capacitance tolerance ±20%.

| Military Number | Astron Type | Cap. Mf. | Dia. x Length |
|------------------------------|-------------|----------|---------------|
| 200 VOLTS DC WORKING | | | |
| AS-CP25A1EC104M | ARMF-2-1 | .1 | 5/8 x 1 1/8 |
| AS-CP25A1EC254M | ARMF-2-25 | .25 | 3/4 x 2 1/8 |
| AS-CP25A1EC504M | ARMF-2-5 | .5 | 1 x 2 1/8 |
| 600 VOLTS DC WORKING | | | |
| AS-CP25A1EF302M | ARMF-6-003 | .003 | 7/16 x 1 1/8 |
| AS-CP25A1EF602M | ARMF-6-006 | .006 | 7/16 x 1 1/8 |
| AS-CP25A1EF103M | ARMF-6-01 | .01 | 7/16 x 1 1/8 |
| AS-CP25A1EF203M | ARMF-6-02 | .02 | 7/16 x 1 1/8 |
| AS-CP25A1EF503M | ARMF-6-05 | .05 | 5/8 x 1 1/2 |
| AS-CP25A1EF104M | ARMF-6-1 | .1 | 5/8 x 1 1/8 |
| AS-CP25A1EF254M | ARMF-6-25 | .25 | 1 x 2 1/8 |
| AS-CP25A1EF504M | ARMF-6-5 | .5 | 1 x 2 1/8 |
| 1000 VOLTS DC WORKING | | | |
| AS-CP25A1EG302M | ARMF-10-003 | .003 | 5/8 x 1 1/8 |
| AS-CP25A1EG602M | ARMF-10-006 | .006 | 5/8 x 1 1/8 |
| AS-CP25A1EG103M | ARMF-10-01 | .01 | 5/8 x 1 1/8 |
| AS-CP25A1EG203M | ARMF-10-02 | .02 | 5/8 x 1 1/2 |
| AS-CP25A1EG503M | ARMF-10-05 | .05 | 3/4 x 1 1/8 |
| AS-CP25A1EG104M | ARMF-10-1 | .1 | 1 x 1 7/8 |
| AS-CP25A1EG254M | ARMF-10-25 | .25 | 1 x 2 1/8 |
| 1500 VOLTS DC WORKING | | | |
| AS-CP25A1EH302M | ARMF-15-003 | .003 | 1 x 1 1/4 |
| AS-CP25A1EH602M | ARMF-15-006 | .006 | 1 x 1 1/4 |
| AS-CP25A1EH103M | ARMF-15-01 | .01 | 1 x 1 1/4 |
| AS-CP25A1EH203M | ARMF-15-02 | .02 | 1 x 1 1/8 |
| AS-CP25A1EH503M | ARMF-15-05 | .05 | 1 x 1 1/8 |
| AS-CP25A1EH104M | ARMF-15-1 | .1 | 1 x 2 1/8 |

VARIATIONS AVAILABLE

CAPACITOR SECTION INSULATED FROM CASE

Circuit 1

| ASTRON TYPE AND DESCRIPTION | | MIL STYLE |
|---------------------------------------|--|-----------|
| UNINSULATED BODY | ARMF — Basic type as listed. | CP25 |
| (sizes shown in listings) | ARMF-Y — with radial (Y) bracket. Example: ARMF-2-Y. | CP27 |
| | ARMF-A — with tangential (A) soldered-on bracket. Example: ARMF-2-1A. | CP29 |
| INSULATED BODY | ARMFP — Basic with plastic sleeve (P). Example: ARMFP-2-1. | CP26 |
| add 3/16" to length and 1/16" to dia. | ARMFP-Y — with plastic sleeve (P) and radial (Y) bracket. Example: ARMFP-2-1Y. | CP28 |

CAPACITOR SECTION GROUNDED TO CASE

Circuit 3

| ASTRON TYPE AND DESCRIPTION | | MIL STYLE |
|---|--|-----------|
| UNINSULATED BODY | ARMG — Basic grounded section type. | CP25 |
| deduct 1/8" from length in above listings | ARMG-Y — with radial (Y) bracket. Example: ARMG-2-1Y. | CP27 |
| | ARMG-A — with tangential (A) soldered-on bracket. Example: ARMG-2-1A. | CP29 |
| INSULATED BODY | ARMGP — Basic grounded section type with plastic sleeve (P). | CP26 |
| add 1/16" to length and 1/16" to dia. in above listings | ARMGP-Y — with plastic sleeve (P) and radial (Y) bracket. Example: ARMGP-2-1Y. | CP28 |

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

TYPE MQZF

Transistor Metallized Paper Capacitors



| Catalog Number | WVDC | Cap. Mfd. | Dia. ±1/64" (Inches) D | Length ±1/32" (Inches) L |
|----------------|------|-----------|------------------------|--------------------------|
| MQZF .5-047 | 50 | .047 | .195 | 11/16 |
| MQZF .5-068 | 50 | .068 | .195 | 13/16 |
| MQZF .5-1 | 50 | .1 | .235 | 11/16 |
| MQZF .5-15 | 50 | .15 | .235 | 13/16 |
| MQZF .5-22 | 50 | .22 | .235 | 1 |
| MQZF .5-33 | 50 | .33 | .312 | 1 |
| MQZF .5-47 | 50 | .47 | .312 | 1 |
| MQZF .5-68 | 50 | .68 | .400 | 1 |
| MQZF .5-1M | 50 | 1.0 | .400 | 1 |
| MQZF .5-1.5M | 50 | 1.5 | .500 | 1-1/8 |
| MQZF .5-2M | 50 | 2.0 | .562 | 1-1/8 |
| MQZF .5-4M | 50 | 4.0 | .670 | 1-11/32 |
| MQZF .5-6M | 50 | 6.0 | .670 | 1-15/16 |
| MQZF .5-8M | 50 | 8.0 | .750 | 1-15/16 |

NOTE:

- Standard MQZF is supplied in "floating" construction.
- Grounded construction is available upon request. Specify Type MQZ. Subtract 1/16" from length of sizes listed.
- For plastic insulating outer sleeve (P) specify MQZFP or MQZP.
 - (A) For floating type add 1/16" to diameter and length of sizes listed.
 - (B) For grounded units add 1/16" to diameter of sizes listed.
- Standard tolerance of Type MQZF is ±20%; special tolerances of ±10% and ±5% available upon request. Specify by adding tolerance numerals to part number. Example: MQZF-5-1M-10.

METALITE® TYPE MRF Metal Cased Tubulars

85°C. Operation



- Temperature Range -65°C. to +85°C.
- Mineral wax impregnated and filled.
- Hermetically sealed. Neoprene-phenolic end discs.
- Type MRF supplied with capacitor section insulated from case. Also available with section grounded to case (Type MRG).
- Lead length 1 3/4" minimum.
- Standard capacitance tolerance: ±20%.

VARIATIONS AVAILABLE

| CAPACITOR SECTION INSULATED FROM CASE CIRCUIT 1 | |
|---|--|
| TYPE AND DESCRIPTION | |
| UNINSULATED BODY Sizes shown in listings | MRF — Basic type as listed. MRF-Y — with radial (Y) bracket. MRF-A — with tangential (A) soldered-on bracket. |
| INSULATED BODY Add 3/16" to length and 1/16" to dia. | MRFP — Basic type, with plastic sleeve (P). MRFP-Y — with plastic sleeve (P) and radial (Y) bracket. |
| CAPACITOR SECTION GROUNDED TO CASE CIRCUIT 3 | |
| TYPE AND DESCRIPTION | |
| UNINSULATED BODY deduct 3/32" from length shown in listings | MRG — Basic grounded section unit. MRG-Y — with radial (Y) bracket. MRG-A — with tangential (A) soldered-on bracket. |
| INSULATED BODY add 3/32" to length and 1/16" to dia. shown in listings | MRGP — Basic grounded section type with plastic sleeve (P). MRGP-Y — with plastic sleeve (P) and radial (Y) bracket. |

| Cat. No. | Cap. Mfd. | Dia. x Length |
|-----------------------------|-----------|---------------|
| 150 VOLTS DC WORKING | | |
| MRF-1.5-4M | 4.0 | 1 x 1 1/8 |
| MRF-1.5-6M | 6.0 | 1 x 1 1/8 |
| MRF-1.5-8M | 8.0 | 1 1/4 x 1 1/8 |
| MRF-1.5-10M | 10.0 | 1 1/4 x 1 1/8 |

| Cat. No. | Cap. Mfd. | Dia. x Length |
|-----------------------------|-----------|---------------|
| 200 VOLTS DC WORKING | | |
| MRF-2-05 | .05 | 3/8 x 3/8 |
| MRF-2-1 | .1 | 7/8 x 7/8 |
| MRF-2-25 | .25 | 1/2 x 3/8 |
| MRF-2-5 | .5 | 1/2 x 1 3/8 |
| MRF-2-1M | 1.0 | .670 x 1 3/8 |
| MRF-2-2M | 2.0 | .670 x 1 3/8 |

| Cat. No. | Cap. Mfd. | Dia. x Length |
|-----------------------------|-----------|---------------|
| 400 VOLTS DC WORKING | | |
| MRF-4-03 | .03 | 3/8 x 7/8 |
| MRF-4-05 | .05 | 3/8 x 7/8 |
| MRF-4-1 | .1 | 1/2 x 1 3/8 |
| MRF-4-25 | .25 | .670 x 1 3/8 |
| MRF-4-5 | .5 | .670 x 1 3/8 |
| MRF-4-1M | 1.0 | 3/4 x 2 3/8 |
| MRF-4-2M | 2.0 | 1 x 2 3/8 |
| MRF-4-3M | 3.0 | 1 1/4 x 2 3/8 |
| MRF-4-4M | 4.0 | 1 1/4 x 2 3/8 |

| Cat. No. | Cap. Mfd. | Dia. x Length |
|-----------------------------|-----------|---------------|
| 600 VOLTS DC WORKING | | |
| MRF-6-01 | .01 | 3/8 x 7/8 |
| MRF-6-02 | .02 | 7/8 x 7/8 |
| MRF-6-03 | .03 | 7/8 x 7/8 |
| MRF-6-05 | .05 | 1/2 x 3/8 |
| MRF-6-1 | .1 | 1/2 x 1 3/8 |
| MRF-6-2 | .2 | .670 x 1 3/8 |
| MRF-6-25 | .25 | .670 x 1 3/8 |
| MRF-6-5 | .5 | .670 x 1 3/8 |
| MRF-6-1M | 1.0 | 3/4 x 2 3/8 |
| MRF-6-2M | 2.0 | 1 1/4 x 2 3/8 |
| MRF-6-3M | 3.0 | 1 1/4 x 2 3/8 |

Standard capacitance tolerance: ±20%
Other tolerances are available.

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

METALITE® HY-MET* TYPE MQLF 125°C. Operation



- Smallest paper capacitors available for the given ratings.
- Solid thermosetting impregnant. Temperature Range: -65°C. to +125°C.
- Tinned, non-ferrous metal cases. Hermetically sealed.
- Non-inductively wound. Capacitor section grounded to case, glass-to-metal seal terminal at one end. Available also with section insulated from case with glass-to-metal terminal at each end (Type MQLF).

Glass-to-Metal Sealed SUBMINIATURE TUBULARS 150 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length |
|-------------|----------|-------------------------------------|
| MQLF-1.5-4M | 4.0 | 1 x 1 ¹³ / ₁₆ |
| MQLF-1.5-6M | 6.0 | 1 x 1 ¹³ / ₁₆ |
| MQLF-1.5-8M | 8.0 | 1 x 2 ⁵ / ₁₆ |

200 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length |
|------------|----------|--|
| MQLF-2-01 | .01 | .235 x 1 ¹³ / ₁₆ |
| MQLF-2-022 | .022 | .235 x 1 ¹³ / ₁₆ |
| MQLF-2-033 | .033 | .235 x 1 ¹³ / ₁₆ |
| MQLF-2-047 | .047 | .235 x 1 ¹³ / ₁₆ |
| MQLF-2-05 | .05 | .235 x 1 ¹³ / ₁₆ |
| MQLF-2-068 | .068 | .312 x 1 ¹³ / ₁₆ |
| MQLF-2-1 | .1 | .312 x 1 ¹³ / ₁₆ |
| MQLF-2-15 | .15 | .312 x 1 ¹³ / ₁₆ |
| MQLF-2-22 | .22 | .312 x 1 ¹³ / ₁₆ |
| MQLF-2-25 | .25 | .312 x 1 ¹³ / ₁₆ |
| MQLF-2-33 | .33 | .400 x 1 ¹³ / ₁₆ |
| MQLF-2-47 | .47 | .400 x 1 ¹³ / ₁₆ |
| MQLF-2-5 | .5 | .400 x 1 ¹³ / ₁₆ |
| MQLF-2-68 | .68 | .500 x 1 ¹³ / ₁₆ |
| MQLF-2-1M | 1.0 | .562 x 1 ¹³ / ₁₆ |
| MQLF-2-2M | 2.0 | .562 x 1 ¹³ / ₁₆ |

400 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length |
|------------|----------|--|
| MQLF-4-01 | .01 | .235 x 1 ¹³ / ₁₆ |
| MQLF-4-022 | .022 | .235 x 1 ¹³ / ₁₆ |
| MQLF-4-033 | .033 | .312 x 1 ¹³ / ₁₆ |
| MQLF-4-047 | .047 | .312 x 1 ¹³ / ₁₆ |
| MQLF-4-05 | .05 | .312 x 1 ¹³ / ₁₆ |

400 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length |
|------------|----------|--|
| MQLF-4-068 | .068 | .400 x 1 ¹³ / ₁₆ |
| MQLF-4-1 | .1 | .400 x 1 ¹³ / ₁₆ |
| MQLF-4-22 | .22 | .500 x 1 ¹³ / ₁₆ |
| MQLF-4-25 | .25 | .500 x 1 ¹³ / ₁₆ |
| MQLF-4-33 | .33 | .562 x 1 ¹³ / ₁₆ |
| MQLF-4-47 | .47 | .562 x 1 ¹³ / ₁₆ |
| MQLF-4-5 | .5 | .562 x 1 ¹³ / ₁₆ |
| MQLF-4-68 | .68 | .670 x 1 ¹³ / ₁₆ |
| MQLF-4-1M | 1.0 | .670 x 2 ⁵ / ₁₆ |
| MQLF-4-2M | 2.0 | 1 x 2 ⁵ / ₁₆ |

600 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length |
|------------|----------|--|
| MQLF-6-01 | .01 | .235 x 1 ¹³ / ₁₆ |
| MQLF-6-022 | .022 | .312 x 1 ¹³ / ₁₆ |
| MQLF-6-033 | .033 | .400 x 1 ¹³ / ₁₆ |
| MQLF-6-047 | .047 | .400 x 1 ¹³ / ₁₆ |
| MQLF-6-05 | .05 | .400 x 1 ¹³ / ₁₆ |
| MQLF-6-068 | .068 | .400 x 1 ¹³ / ₁₆ |
| MQLF-6-1 | .1 | .400 x 1 ¹³ / ₁₆ |
| MQLF-6-15 | .15 | .500 x 1 ¹³ / ₁₆ |
| MQLF-6-22 | .22 | .562 x 1 ¹³ / ₁₆ |
| MQLF-6-25 | .25 | .562 x 1 ¹³ / ₁₆ |
| MQLF-6-33 | .33 | .562 x 1 ¹³ / ₁₆ |
| MQLF-6-47 | .47 | .670 x 1 ¹³ / ₁₆ |
| MQLF-6-5 | .5 | .670 x 1 ¹³ / ₁₆ |
| MQLF-6-68 | .68 | .670 x 2 ⁵ / ₁₆ |
| MQLF-6-1M | 1.0 | .750 x 2 ⁵ / ₁₆ |
| MQLF-6-2M | 2.0 | 1 x 2 ⁵ / ₁₆ |

STANDARD CAPACITANCE TOLERANCE: ±20%. Other tolerances are available.

VARIATIONS AVAILABLE

| CAPACITOR SECTION INSULATED FROM CASE Glass-to-Metal Terminal at both ends Circuit 1 | |
|---|--|
| TYPE AND DESCRIPTION | |
| UNINSULATED BODY | MQLF — Basic internally insulated unit as listed. MQLF-A — with tangential (A) soldered-on bracket. Example: MQLF-2-1-A. MQLF-B — with L-type (B) soldered-on bracket. Example: MQLF-2-1-B. MQLFS — screw neck vertical-mounting type. Same ratings as MQL. Minimum diameter .400". Example: MQLFS-2-1. |
| INSULATED BODY Add 1/16" to dia. and length of MQLF sizes listed | MQLFP — Basic internally insulated unit with plastic outer sleeve (P). Example: MQLFP-2-1. |

| CAPACITOR SECTION GROUNDED TO CASE Glass-to-Metal Terminal at one end Circuit 3 | |
|---|---|
| TYPE AND DESCRIPTION | |
| UNINSULATED BODY Sizes shown in listings Deduct 1/16" from length of MQLF sizes listed | MQL — Basic type. MQL-A — with tangential (A) soldered-on bracket. Example: MQL-2-1-A. MQL-B — with L-type (B) soldered-on bracket. Example: MQL-2-1-B. MQLS — screw neck vertical-mounting type. Same ratings as Type MQL. Minimum diameter .400". Example: MQLS-2-1. MQLV — Stud base vertical-mounting type. Same ratings and size as type MQL. Example: MQLV-2-1. |
| INSULATED BODY Add 1/16" to dia. of MQLF sizes listed | MQLP — Basic grounded construction as listed, with plastic outer sleeve (P). Example: MQLP-2-1. |

METALITE® HY-MET* TYPE MLL Cardboard Tubulars



- Sturdy cardboard cased units. Temperature Range -55° to +100°C. Solid thermosetting impregnant.
- Exceptional length. Metal end caps. Units can be point-to-point connected and supported by own leads. Leads 1 1/2" minimum length.
- Overall mineral wax coat provides added protection against moisture and humidity.
- Standard capacitance tolerance: -20% +30%.

200 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length | Cat. No. | Cap. Mf. | Dia. x Length | Cat. No. | Cap. Mf. | Dia. x Length |
|----------|----------|---------------|----------|----------|---------------------------------------|----------|----------|---|
| MLL-2-01 | .01 | 3/8 x 5/8 | MLL-2-05 | .05 | 3/8 x 5/8 | MLL-2-5 | .5 | 1 ¹³ / ₁₆ x 1 ¹³ / ₁₆ |
| MLL-2-02 | .02 | 3/8 x 5/8 | MLL-2-1 | .1 | 3/8 x 5/8 | MLL-2-1M | 1.0 | 3/8 x 1 ¹³ / ₁₆ |
| MLL-2-03 | .03 | 3/8 x 5/8 | MLL-2-25 | .25 | 1 ¹³ / ₁₆ x 5/8 | MLL-2-2M | 2.0 | 3/8 x 1 ¹³ / ₁₆ |

400 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length | Cat. No. | Cap. Mf. | Dia. x Length | Cat. No. | Cap. Mf. | Dia. x Length |
|----------|----------|---------------|----------|----------|---|----------|----------|---|
| MLL-4-01 | .01 | 3/8 x 5/8 | MLL-4-05 | .05 | 1 ¹³ / ₁₆ x 5/8 | MLL-4-5 | .5 | 3/8 x 1 ¹³ / ₁₆ |
| MLL-4-02 | .02 | 3/8 x 5/8 | MLL-4-1 | .1 | 1 ¹³ / ₁₆ x 1 ¹³ / ₁₆ | MLL-4-1M | 1.0 | 2 ³ / ₁₆ x 2 ⁵ / ₁₆ |
| MLL-4-03 | .03 | 3/8 x 5/8 | MLL-4-25 | .25 | 3/8 x 1 ¹³ / ₁₆ | | | |

600 VOLTS DC WORKING

| Cat. No. | Cap. Mf. | Dia. x Length | Cat. No. | Cap. Mf. | Dia. x Length | Cat. No. | Cap. Mf. | Dia. x Length |
|----------|----------|---------------------------------------|----------|----------|---|----------|----------|--|
| MLL-6-01 | .01 | 3/8 x 5/8 | MLL-6-05 | .05 | 1 ¹³ / ₁₆ x 5/8 | MLL-6-5 | .5 | 2 ³ / ₁₆ x 1 ¹³ / ₁₆ |
| MLL-6-02 | .02 | 3/8 x 5/8 | MLL-6-1 | .1 | 1 ¹³ / ₁₆ x 1 ¹³ / ₁₆ | MLL-6-1M | 1.0 | 2 ³ / ₁₆ x 2 ⁵ / ₁₆ |
| MLL-6-03 | .03 | 1 ¹³ / ₁₆ x 5/8 | MLL-6-25 | .25 | 3/8 x 1 ¹³ / ₁₆ | | | |

CAPACITANCE TOLERANCE: -20% +30%
*Trade Mark

ASTRON CORPORATION

East Newark, New Jersey



Capacitors

METALLIZED MYLAR* CAPACITORS



ASTRON TYPE RLR metallized Mylar* capacitors provide reliable operation even under adverse conditions in spite of their smaller size and lower cost.

Type RLR is an uncased unit, with a tough, protective Mylar* wrap and epoxy end seal . . . ideal for potted assembly, military and commercial applications.

| WVDC | Catalog Number | Mfd. Cap. | Dia. x Lgth. |
|------|----------------|-----------|----------------|
| | RLR 2-01 | .01 | .155" x 5/8" |
| | RLR 2-012 | .012 | .165" x 5/8" |
| | RLR 2-015 | .015 | .180" x 5/8" |
| | RLR 2-018 | .018 | .190" x 5/8" |
| | RLR 2-022 | .022 | .205" x 5/8" |
| | RLR 2-027 | .027 | .220" x 5/8" |
| | RLR 2-047 | .047 | .200" x 3/4" |
| | RLR 2-068 | .068 | .220" x 3/4" |
| | RLR 2-1 | .1 | .255" x 3/4" |
| | RLR 2-15 | .15 | .227" x 1 1/8" |
| | RLR 2-22 | .22 | .262" x 1 1/8" |
| | RLR 2-33 | .33 | .305" x 1 1/8" |
| | RLR 2-47 | .47 | .355" x 1 1/8" |
| | RLR 2-56 | .56 | .380" x 1 1/8" |
| | RLR 2-68 | .68 | .415" x 1 1/8" |
| | RLR 2-1M | 1.0 | .490" x 1 1/8" |
| | RLR 2-1.5M | 1.5 | .470" x 1 5/8" |
| | RLR 2-2M | 2.0 | .535" x 1 5/8" |
| | RLR 2-3M | 3.0 | .595" x 1 7/8" |
| | RLR 2-6M | 6.0 | .825" x 1 7/8" |

200

Cap. Tolerance ±20%.

* Reg. DuPont Trade Mark

FLAT MINIATURE MYLAR* DIELECTRIC CAPACITORS



| Cat. No. | Cap. Mds. | L | T | W | Cat. No. | Cap. Mds. | L | T | W |
|-------------|-----------|------|-------|--------|------------|-----------|--------|--------|--------|
| XPF-1.5-01 | .01 | 3/4" | 5/32" | 9/32" | XPF-1.5-1 | .1 | 7/8" | 9/32" | 7/16" |
| XPF-1.5-015 | .015 | 3/4" | 3/16" | 3/8" | XPF-1.5-15 | .15 | 1" | 5/16" | 3/16" |
| XPF-1.5-022 | .022 | 3/4" | 1/4" | 3/8" | XPF-1.5-22 | .22 | 1 1/4" | 9/32" | 15/32" |
| XPF-1.5-033 | .033 | 3/4" | 3/32" | 1/2" | XPF-1.5-33 | .33 | 1 1/4" | 3/8" | 17/32" |
| XPF-1.5-047 | .047 | 3/4" | 1/4" | 9/8" | XPF-1.5-47 | .47 | 1 3/8" | 13/32" | 9/16" |
| XPF-1.5-068 | .068 | 7/8" | 3/32" | 3/8" | XPF-1.5-68 | .68 | 1 5/8" | 7/32" | 19/32" |
| XPF-1.5-082 | .082 | 7/8" | 1/4" | 13/32" | XPF-1.5-82 | .82 | 1 5/8" | 15/32" | 5/8" |
| | | | | | XPF-1.5-1M | 1.0M | 1 7/8" | 15/32" | 5/8" |

Standard Tolerance ±20%.

* Reg. DuPont Trade Mark

ROUND MINIATURE MYLAR* DIELECTRIC CAPACITORS



| Cat. No. | Cap. Mfds. | L | Dia. | Cat. No. | Cap. Mfds. | L | Dia. |
|-------------|------------|------|------|------------|------------|--------|------|
| XPR-1.5-01 | .01 | 3/4" | .230 | XPR-1.5-1 | .1 | 7/8" | .380 |
| XPR-1.5-015 | .015 | 3/4" | .270 | XPR-1.5-15 | .15 | 1" | .390 |
| XPR-1.5-022 | .022 | 3/4" | .310 | XPR-1.5-22 | .22 | 1 1/4" | .390 |
| XPR-1.5-033 | .033 | 3/4" | .280 | XPR-1.5-33 | .33 | 1 1/4" | .460 |
| XPR-1.5-047 | .047 | 3/4" | .330 | XPR-1.5-47 | .47 | 1 3/8" | .500 |
| XPR-1.5-068 | .068 | 7/8" | .320 | XPR-1.5-68 | .68 | 1 5/8" | .530 |
| XPR-1.5-082 | .082 | 7/8" | .350 | XPR-1.5-82 | .82 | 1 5/8" | .580 |
| | | | | XPR-1.5-1M | 1.0 | 1 7/8" | .580 |

Standard Tolerance ±20%.

* Reg. DuPont Trade Mark

METALITE® TYPE MXJ In Terneplate Cases 85°C. Operation



| Cat. No. | Cap. Mf. | L. x W. x H. | Mtg. Ctr. | Cat. No. | Cap. Mf. | L. x W. x H. | Mtg. Ctr. |
|-----------------------------|----------|-----------------------|-----------|-----------------------------|----------|-----------------------|-----------|
| 600 VOLTS DC WORKING | | | | 150 VOLTS DC WORKING | | | |
| MXJ-6-1M | 1.0 | 1 3/4 x 1 x 1 5/8 | 2 | MXJ-1.5-4M | 4.0 | 1 3/4 x 1 x 1 5/8 | 2 |
| MXJ-6-2M | 2.0 | 1 3/4 x 1 x 2 3/8 | 2 | MXJ-1.5-10M | 10.0 | 1 3/4 x 1 x 2 3/8 | 2 |
| MXJ-6-4M | 4.0 | 1 3/4 x 1 x 3 3/8 | 2 | MXJ-1.5-12M | 12.0 | 1 3/4 x 1 x 2 7/8 | 2 |
| MXJ-6-6M | 6.0 | 1 3/4 x 1 x 4 3/8 | 2 | MXJ-1.5-15M | 15.0 | 1 3/4 x 1 x 3 3/8 | 2 |
| MXJ-6-8M | 8.0 | 2 1/2 x 1 1/8 x 3 7/8 | 2 3/4 | MXJ-1.5-20M | 20.0 | 1 3/4 x 1 x 4 3/8 | 2 |
| MXJ-6-10M | 10.0 | 2 1/2 x 1 1/8 x 4 3/4 | 2 3/4 | MXJ-1.5-25M | 25.0 | 2 1/2 x 1 1/8 x 3 3/4 | 2 3/4 |
| MXJ-6-15M | 15.0 | 3 3/4 x 1 1/4 x 4 3/4 | 4 | MXJ-1.5-30M | 30.0 | 2 1/2 x 1 1/8 x 3 7/8 | 2 3/4 |
| MXJ-6-20M | 20.0 | 3 3/4 x 1 3/4 x 4 1/4 | 4 | MXJ-1.5-50M | 50.0 | 2 1/2 x 1 1/8 x 4 3/4 | 2 3/4 |
| 100 VOLTS DC WORKING | | | | 400 VOLTS DC WORKING | | | |
| MXJ-1-100M | 100.0 | 3 3/4 x 1 3/4 x 4 3/4 | 4 | MXJ-4-2M | 2.0 | 1 3/4 x 1 x 2 1/8 | 2 |
| | | | | MXJ-4-4M | 4.0 | 1 3/4 x 1 x 2 7/8 | 2 |
| | | | | MXJ-4-6M | 6.0 | 1 3/4 x 1 x 3 3/8 | 2 |
| | | | | MXJ-4-8M | 8.0 | 1 3/4 x 1 x 4 3/8 | 2 |
| | | | | MXJ-4-10M | 10.0 | 2 1/2 x 1 1/8 x 3 3/4 | 2 3/4 |
| | | | | MXJ-4-20M | 20.0 | 2 1/2 x 1 1/8 x 4 3/4 | 2 3/4 |
| | | | | MXJ-4-30M | 30.0 | 3 3/4 x 1 1/4 x 4 3/4 | 4 |

STANDARD CAPACITANCE TOLERANCE: ±20%. Other tolerances are available.

**It's so easy to order
from this catalog . . .**

When ordering products shown in this book
or writing for additional information, please
be sure to specify:










- 1. Manufacturer's Catalog Numbers
and Page Numbers.**
- 2. The Year and Edition of This
MASTER.**

This will avoid confusion and expedite delivery.

Thank you!

The
Radio - Electronic
MASTER

Barco, Inc. MILWAUKEE 1, WISCONSIN

| | CATALOG NO. | CAPACITY -20 + 60% | WORKING VOLTAGE | LIST PRICE | BODY SIZE (Illustrations 3/4 Actual) Tolerances: dia. + 1/64, Length + 1/32 Leads: 1/4 in. Minimum |
|------------------|--|-----------------------|-----------------|------------|---|
| TYPE 0 | FOR OPERATING TEMPERATURES UP TO 70° C. | | | | |
| | *P3-2I | 2 mfd. | 3 v dc | .85 |  1/8 dia. x 7/16 length |
| | *P6-1 | 1 mfd. | 6 v dc | .85 | |
| | P6-1.5 | 1.5 mfd. | 6 v dc | .85 | |
| | P6-3 | 3 mfd. | 6 v dc | \$1.00 | |
| | P10-2 | 2 mfd. | 10 v dc | \$1.00 | |
| | *P16-1.25 | 1.25 mfd. | 16 v dc | \$1.00 | |
| | *P25-.8I | 0.8 mfd. | 25 v dc | \$1.00 | |
| | P40-.5I | 0.5 mfd. | 40 v dc | \$1.00 | |
| | P70-.3I | 0.3 mfd. | 70 v dc | \$1.00 | |
| TYPE 1/2 | *PT4-4 | 4 mfd. | 4 v dc | .85 |  | 1/8 dia. x 5/8 length |
| | *PT8-2 | 2 mfd. | 8 v dc | \$1.00 | |
| TYPE 3/4 | *PC4-25 | 25 mfd. | 4 v dc | .85 |  11/64 dia. x 7/16 length |
| | *PX6-8I | 8 mfd. | 6 v dc | .85 | |
| | *P15-5I | 5 mfd. | 15 v dc | .85 | |
| | *P16-10I | 10 mfd. | 16 v dc | .85 | |
| | *PX25-2.5I | 2.5 mfd. | 25 v dc | .85 | |
| | PX25-6 | 6 mfd. | 25 v dc | .85 | |
| | PC40-3 | 3 mfd. | 40 v dc | .85 | |
| | *P70-1I | 1 mfd. | 70 v dc | .85 | |
| TYPE I-IA | *PT6-2 | 2 mfd. | 6 v dc | .70 |  11/64 dia. x 9/16 length ① ① Body size 11/64 x 3/4 |
| | PT6-4 | 4 mfd. | 6 v dc | .70 | |
| | PT12-25-2 | 2 mfd. | 12/25 v dc | .70 | |
| | *P25-2.5 | 2.5 mfd. | 25 v dc | .70 | |
| TYPE II | PT3-32I | 32 mfd. | 3 v dc | .75 |  1/4 dia. x 11/16 length |
| | *P3-40I | 40 mfd. | 3 v dc | .75 | |
| | PC4-100†† | 100 mfd. | 4 v dc | .85 | |
| | *P6-25I | 25 mfd. | 6 v dc | .75 | |
| | PC6-80I†† | 80 mfd. | 6 v dc | .85 | |
| | *P12-16I | 16 mfd. | 12 v dc | .75 | |
| | PC16-40I†† | 40 mfd. | 16 v dc | .85 | |
| | PC25-25I†† | 25 mfd. | 25 v dc | .85 | |
| *P70-4 | 4 mfd. | 70 v dc | .75 | | |
| TYPE III | PC6-200†† | 200 mfd. | 6 v dc | \$1.00 |  23/64 dia. x 11/16 length |
| | *P12-50I | 50 mfd. | 12 v dc | \$1.00 | |
| | PC40-30†† | 30 mfd. | 40 v dc | \$1.00 | |
| | *P70-10I | 10 mfd. | 70 v dc | \$1.00 | |
| TYPE IV | PC4-500 | 500 mfd. | 4 v dc | \$1.35 |  23/64 dia. x 1-3/16 length ② ② Body size 19/32 dia. x 1-9/32 |
| | PC6-400 | 400 mfd. | 6 v dc | \$1.35 | |
| | P10-320I | 320 mfd. | 10 v dc | \$1.25 | |
| | P12-100I | 100 mfd. | 12 v dc | \$1.25 | |
| | P25-125I | 125 mfd. | 25 v dc | \$1.25 | |
| | PC40-64I | 64 mfd. | 40 v dc | \$1.35 | |
| | P70-20I | 20 mfd. | 70 v dc | \$1.25 | |
| | TYPE V | PT3-500I | 500 mfd. | 3 v dc |  | $1.25 | 7/16 dia. x 1-1/8 length ④ ④ Body size 7/16 x 1-3/8 (④a 1-5/8) |
| PT50-25I | | 25 mfd. | 50 v dc | \$1.25 | |
| PT150-8I | | 8 mfd. | 150 v dc | \$1.25 | |
| PT150-20I | | 20 mfd. | 150 v dc | \$1.25 | |
| TYPE IIA | FOR OPERATING TEMPERATURES UP TO 85° C. | | | | |
| | PCH10-25 | 25 mfd. | 10 v dc | .75 |  1/4 dia. x 11/16 length |
| | PCH25-10I | 10 mfd. | 25 v dc | .75 | |
| PCH40-6I | 6 mfd. | 40 v dc | .75 | | |
| TYPE IIIA | PCH40-16 | 16 mfd. | 40 v dc | \$1.00 |  23/64 dia. x 11/16 length |
| TYPE IV A | PCH6-160 | 160 mfd. | 6 v dc | \$1.25 |  23/64 dia. x 1-3/16 length |
| | PCH25-50I | 50 mfd. | 25 v dc | \$1.25 | |

* Indicates fastest selling items which should be stocked heavily.

I Designates insulated covering available; add I to catalog number if desired (I insulated only.)

†† New, super-small, dimensions for these capacity-voltage ratings.

UltraMiniature Electrolytics

Centralab.

Ceramic Capacitors

TYPE5 DD30 AND DD60 3000-6000 VOLT DISC HI-KAPS®

All these units are highly efficient for bypass-coupling in high frequency circuits under conditions of extreme humidity or temperature. Maintain high capacity and performance at 85° C. All units have a tolerance of ±20%.



CRL Type DD30—3000 v. DC working, 6000 v. DC test; 1/4" thick. Values through 820 μf. Net Each..... **24c**
CRL Type DD60—6000 v. DC working, 12,000 v. DC test; 1/4" thick. Values through 820 μf. Net Each..... **36c**
CRL Type DD60—Values 1000 μf and up. Net Each..... **60c**

| Cap. μf | CRL No. DD30 | Dia. In. | CRL No. DD60 | Dia. In. | Cap. μf | CRL No. DD30 | Dia. In. | CRL No. DD60 | Dia. In. |
|---------|--------------|----------|--------------|----------|---------|--------------|----------|--------------|----------|
| 4.7 | 4R7 | 1/8 | 4R7 | 1/8 | 300 | 301 | 1/8 | 301 | 1/8 |
| 10 | 100 | 1/8 | 100 | 1/8 | 330 | 331 | 1/8 | 331 | 1/8 |
| 15 | 150 | 1/8 | 150 | 1/8 | 390 | 391 | 1/8 | 391 | 1/8 |
| 22 | 220 | 1/8 | 220 | 1/8 | 400 | 401 | 1/8 | 401 | 1/8 |
| 25 | 250 | 1/8 | 250 | 1/8 | 470 | 471 | 1/8 | 471 | 1/8 |
| 30 | 300 | 1/8 | 300 | 1/8 | 500 | 501 | 1/8 | 501 | 1/8 |
| 33 | 330 | 1/8 | 330 | 1/8 | 560 | 561 | 1/8 | 561 | 1/8 |
| 39 | 390 | 1/8 | 390 | 1/8 | 680 | 681 | 1/8 | 681 | 1/8 |
| 47 | 470 | 1/8 | 470 | 1/8 | 750 | 751 | 1/8 | 751 | 1/8 |
| 50 | 500 | 1/8 | 500 | 1/8 | 820 | 821 | 1/8 | 821 | 1/8 |
| 56 | 560 | 1/8 | 560 | 1/8 | 1000 | 1002 | 1/8 | 1002 | 1/8 |
| 68 | 680 | 1/8 | 680 | 1/8 | 1200 | 122 | 1/8 | 122 | 1/8 |
| 75 | 750 | 1/8 | 750 | 1/8 | 1500 | 152 | 1/8 | 152 | 1/8 |
| 82 | 820 | 1/8 | 820 | 1/8 | 2000 | 202 | 1/8 | 202 | 1/8 |
| 100 | 101 | 1/8 | 101 | 1/8 | 2200 | 222 | 1/8 | 222 | 1/8 |
| 120 | 121 | 1/8 | 121 | 1/8 | 2500 | 252 | 1/8 | 252 | 1/8 |
| 150 | 151 | 1/8 | 151 | 1/8 | 2700 | 272 | 1/8 | 272 | 1/8 |
| 180 | 181 | 1/8 | 181 | 1/8 | 3000 | 302 | 1/8 | 302 | 1/8 |
| 200 | 201 | 1/8 | 201 | 1/8 | 3300 | 332 | 1/8 | 332 | 1/8 |
| 220 | 221 | 1/8 | 221 | 1/8 | 3900 | 392 | 1/8 | 392 | 1/8 |
| 250 | 251 | 1/8 | 251 | 1/8 | 4700 | 472 | 1/8 | 472 | 1/8 |
| 270 | 271 | 1/8 | 271 | 1/8 | 6000 | 602 | 1/8 | 602 | 1/8 |

TYPE DD2 DUO-KAPS®

Single disc, dual capacity. Double Durez Insulation. Rated 600 v. DC, working; 1200 v. DC, test.

| Cap. μf | CRL No. | Tolerance | Dia. | Thick. | Net Each |
|-----------|---------|------------|------|--------|----------|
| 2 x .001 | DD2-102 | GMV | 1/8" | 1/16" | 24c |
| 2 x .0015 | DD2-152 | GMV | 1/8" | 1/16" | 24c |
| 2 x .005 | DD2-502 | -20% + 80% | 1/8" | 1/16" | 36c |

TYPE DD3 SHIELDED DUO-KAPS®

Three leads—two capacitors in the space formerly needed for one. Shielded to minimize stray capacities between discs. Rated 600 v. DC, working; 1200 v. DC, test.

| Cap. μf | CRL No. | Tolerance | Dia. | Thick. | Net Each |
|-----------|---------|-----------|------|--------|----------|
| 2 x .001 | DD3-102 | GMV | 1/8" | 1/16" | 30c |
| 2 x .0015 | DD3-152 | GMV | 1/8" | 1/16" | 30c |
| 2 x .002 | DD3-202 | GMV | 1/8" | 1/16" | 30c |
| 2 x .005 | DD3-502 | GMV | 1/8" | 1/16" | 30c |
| 2 x .01 | DD3-103 | GMV | 1/8" | 1/16" | 30c |

TYPE DD16 HI-KAP® BUFFERS

Compact, easy to install. Long life, low cost. Able to withstand high heat, moisture, and vibration. Size: All 1/4" dia., 1/16" thk. except DD16-153, 1/8" thk. Tolerance on all except DD16-153, GMV; DD16-153, -20% + 80%. 1600 v. DC, working.

| Cap. μf | CRL No. | Net Ea. | Cap. μf | CRL No. | Net Ea. |
|---------|----------|---------|---------|----------|---------|
| .003 | DD16-302 | 27c | .0075 | DD16-752 | 27c |
| .004 | DD16-402 | 27c | .008 | DD16-802 | 27c |
| .005 | DD16-502 | 27c | .01 | DD16-103 | 27c |
| .006 | DD16-602 | 27c | .015 | DD16-153 | 48c |
| .007 | DD16-702 | 27c | | | |

ATTACHABLE TERMINAL HI-VO-KAPS®



TYPE TV-20—20,000 v. DC working ceramic capacitors; 35,000 v. DC test. Capacity 500 μf. Terminals will not pull out or break off. Five different type terminals available as listed below.
Type TV-20 Capacitor—\$1.11
 Net Each.....

ATTACHABLE TERMINALS

CRL Type TX—Net Each..... **6c**

| CRL No. | Type | Thread | CRL No. | Type | Thread |
|---------|-------------|--------|---------|------------|--------|
| TX-1 | Slotted Rod | | TX-4 | Short Male | 8-32 |
| TX-2 | Female Tap | 6-32 | TX-5 | Long Male | 8-32 |
| TX-3 | Male Thread | 6-32 | | | |

HI-VO-KAP KITS®

CRL Type TV-207—One TV-20 capacitor with 7 attachable terminals. Net Each..... **\$1.35**
CRL Type TVK-5-50—Five TV-20 capacitors with 10 each terminals in plastic box. Net Each..... **\$6.75**

FIXED TERMINAL HI-VO-KAPS®

Similar to TV-20, with fixed terminals. Rated 30 kv working, 45 kv test. TV1-503; 2-rod type. TV8-503; Two 8-32 male terminals.
CRL Type TV1-503 or TV8-503—\$1.98
 Net Each.....

TYPE DD 1000 VDCW DISC HI-KAPS®

Rated 1000 VDCW (Nos. DD6-103, DD-153, DD-203, DD-303, DD-403 and DD-503 are 600 VDCW) Tol. ±10%, except noted.
 Net Each: 3,300 μf thru 8,200 μf..... **15c**
 Net Each: 10,000, 15,000, 20,000 μf..... **24c**
 Net Each: 30,000, 40,000, 50,000 μf..... **45c**

| Cap. μf | No. DD | Dia. In. | Cap. μf | No. DD | Dia. In. | Cap. μf | No. DD | Dia. In. | Cap. μf | No. DD | Dia. In. |
|---------|--------|----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|
| 3.3* | 3R3 | 1/8 | 68 | 680 | 1/8 | 500 | 501 | 1/8 | 3000† | 302 | 1/8 |
| 5 | 050 | 1/8 | 75 | 750 | 1/8 | 510 | 511 | 1/8 | 3300† | 332 | 1/8 |
| 6 | 060 | 1/8 | 82 | 820 | 1/8 | 560 | 561 | 1/8 | 3900† | 392 | 1/8 |
| 6.8 | 6R8 | 1/8 | 91 | 910 | 1/8 | 600 | 601 | 1/8 | 4000† | 402 | 1/8 |
| 7.5 | 7R5 | 1/8 | 100 | 101 | 1/8 | 680 | 681 | 1/8 | 4300† | 432 | 1/8 |
| 8 | 080 | 1/8 | 120 | 121 | 1/8 | 750 | 751 | 1/8 | 4700† | 472 | 1/8 |
| 10 | 100 | 1/8 | 130 | 131 | 1/8 | 800† | 801 | 1/8 | 4700† | 472G | 1/8 |
| 12 | 120 | 1/8 | 150 | 151 | 1/8 | 820 | 821 | 1/8 | 5000† | 502 | 1/8 |
| 15 | 150 | 1/8 | 180 | 181 | 1/8 | 910 | 911 | 1/8 | 5000† | 502 | 1/8 |
| 18 | 180 | 1/8 | 200 | 201 | 1/8 | 1000 | 102 | 1/8 | 5600† | 562 | 1/8 |
| 20 | 200 | 1/8 | 220 | 221 | 1/8 | 1000† | 102G | 1/8 | 6800† | 682 | 1/8 |
| 22 | 220 | 1/8 | 240 | 241 | 1/8 | 1200 | 122 | 1/8 | 7500† | 752 | 1/8 |
| 24 | 240 | 1/8 | 250 | 251 | 1/8 | 1200† | 122G | 1/8 | 8200† | 822 | 1/8 |
| 25 | 250 | 1/8 | 270 | 271 | 1/8 | 1300 | 132 | 1/8 | 10,000† | 6-103 | 1/8 |
| 27 | 270 | 1/8 | 300 | 301 | 1/8 | 1500 | 152 | 1/8 | 10,000† | 1032 | 1/8 |
| 30 | 300 | 1/8 | 330 | 331 | 1/8 | 1500† | 152G | 1/8 | 10,000† | 103 | 1/8 |
| 33 | 330 | 1/8 | 360 | 361 | 1/8 | 1800 | 182 | 1/8 | 15,000† | 153 | 1/8 |
| 39 | 390 | 1/8 | 360 | 361 | 1/8 | 1800 | 182 | 1/8 | 20,000† | 203 | 1/8 |
| 47 | 470 | 1/8 | 390 | 391 | 1/8 | 2000† | 202 | 1/8 | 30,000† | 303 | 1/8 |
| 60 | 500 | 1/8 | 400 | 401 | 1/8 | 2200† | 222 | 1/8 | 40,000† | 403 | 1/8 |
| 51 | 510 | 1/8 | 470 | 471 | 1/8 | 2500† | 252 | 1/8 | 50,000† | 503 | 1/8 |
| 66 | 560 | 1/8 | 470† | 471G | 1/8 | 2700† | 272 | 1/8 | | | |

Tolerance: * ±0.5 μf, † GMV, ‡ ±20%, § +80, -20%.

TYPE DF FLAT-PLATE HI-KAPS®

Replacement ceramic capacitors, 600 VDCW, 1200 VDCT. Size: 1 1/4" l. x 1 1/4" h. Thickness: DF-503, 1/16"; DF-104, 1/8". .05 μf, DF-503 Net Ea. 75c; .1 μf, DF-104 Net Ea. \$1.05

MIL-C-11015 B GENERAL PURPOSE DISC HI-KAPS® (500 VDCW)

Net Each: 2.2-680 μf, 21c; 820-1500 μf, 27c; 2200 μf ("AX"), 27c; 2200 μf ("BX"), 30c; 3300 μf, 30c

| Cap. μf | CRL No. & MIL-C-11015B (PF) Designation | Cap. μf | CRL No. & MIL-C-11015B (PF) Designation | Cap. μf | CRL No. & MIL-C-11015B (PF) Designation |
|---------|---|---------|---|---------|---|
| 2.2* | C K60B V2R2 K | 220* | C K60A X221 K | 520† | C K62B X821 M |
| 3.3* | C K60B V3R3 K | 220† | C K60A X221 M | 1000† | C K62B X102 K |
| 4.7* | C K60B V4R7 K | 330* | C K60A X331 K | 1600† | C K62B X102 M |
| 6.8* | C K60B V6R8 K | 330† | C K60A X331 M | 1800* | C K62B X152 K |
| 10* | C K60B V100 K | 330* | C K61B X331 K | 1,000† | C K62B X152 M |
| 15* | C K60B V150 K | 330† | C K61B X331 M | 2,000* | C K62A X222 K |
| 22* | C K60B V220 K | 470* | C K60A X471 K | 2,000† | C K62A X222 M |
| 33* | C K60B X330 M | 470* | C K60A X471 M | 2,000* | C K63B X222 K |
| 33† | C K60B X330 M | 470* | C K61B X471 K | 2,000† | C K63B X222 M |
| 47* | C K60B X470 M | 470* | C K61B X471 M | 3,000* | C K63B X332 K |
| 47† | C K60B X470 M | 680* | C K61B X681 K | 3,000† | C K63B X332 M |
| 150* | C K60B X151 K | 680† | C K61B X681 M | | |
| 150† | C K60B X151 M | 820* | C K62B X821 K | | |

Tolerances: * ±10%, † ±20%

NDTE: Items requiring certified test data and government source inspection are special. Prices and information supplied on request.

TYPES CE, CF TEMP. STABLE DISC HI-KAPS®

Net Ea.: 150-1800 μf, 18c; 2000-6200 μf, 18c; 8200 μf & up, 24c

| Temperature Stable "K" | | | | Temp. Semi-Stable "K" | | | | | | | |
|------------------------|--------|--------|--------|-----------------------|--------|--------|--------|------|-----|------|-----|
| μf | CE- μf | CE- μf | CE- μf | μf | CF- μf | CF- μf | CF- μf | | | | |
| 150 | 151 | 500 | 501 | 800 | 801 | 1200 | 122 | 2200 | 222 | 5000 | 502 |
| 220 | 221 | 560 | 561 | 1000 | 102 | 1800 | 182 | 3300 | 332 | 6200 | 622 |
| 330 | 331 | 680 | 681 | | | 1800 | 182 | 3900 | 392 | 8200 | 822 |
| 470 | 471 | 750 | 751 | | | 2000 | 202 | 4700 | 472 | 10K | 103 |

TYPE CPR POLYSTYRENE CAPACITORS

Highly reliable sealed polystyrene foil capacitors. Ideal direct replacements for mica and mylar in TV and radio. Tol. ±5%. Size: 1/4"-250 μf, .394" l. x .157"-276" dia.; 251-3000 μf, .591" l. x .197"-413" dia.; 3001-10,000 μf, .787" l. x .335"-531" dia. Number indicates capacitance in μf (PF).
 Net Each: 20-1000 μf, 15c; 1100-3000 μf, 18c; 3300 μf & up 21c.

| CRL No. | CRL No. | CRL No. | CRL No. | CRL No. | CRL No. |
|---------|----------|----------|-----------|-----------|-----------|
| CPR-20J | CPR-75J | CPR-270J | CPR-910J | CPR-3000J | CPR9100J |
| CPR-22J | CPR-82J | CPR-300J | CPR-1000J | CPR-3300J | CPR10000J |
| CPR-24J | CPR-91J | CPR-330J | CPR-1100J | CPR-3600J | |
| CPR-27J | CPR-100J | CPR-360J | CPR-1200J | CPR-3900J | |
| CPR-30J | CPR-110J | CPR-390J | CPR-1300J | CPR-4300J | |
| CPR-33J | CPR-120J | CPR-430J | CPR-1500J | CPR-4700J | |
| CPR-36J | CPR-130J | CPR-470J | CPR-1600J | CPR-5000J | |
| CPR-39J | CPR-150J | CPR-510J | CPR-1800J | CPR-5300J | |
| CPR-43J | CPR-160J | CPR-560J | CPR-2000J | CPR-5600J | |
| CPR-47J | CPR-180J | CPR-620J | CPR-2200J | CPR-6200J | |
| CPR-56J | CPR-200J | CPR-680J | CPR-2400J | CPR-6800J | |
| CPR-62J | CPR-220J | CPR-750J | CPR-2500J | CPR-7500J | |
| CPR-68J | CPR-240J | CPR-820J | CPR-2700J | CPR-8200J | |

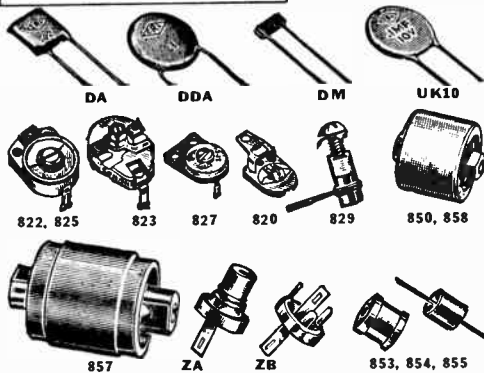
TYPE CI AC LINE DISC HI-KAPS® (1000 VDCW)

Designed to meet or exceed the proposed requirements of Underwriters' Laboratories, subject 492, dated Dec. 58. Recommended for AC by-pass application or where a steady or intermittent higher voltage may occur. Tol. ±20%.

| Cap. μf | CRL No. | Dia. x Thk. Max. In. | Net Each | Cap. μf | CRL No. | Dia. x Thk. Max. In. | Net Each |
|---------|---------|----------------------|----------|---------|---------|----------------------|----------|
| 470 | CI-471 | .400 x .240 | 18c | 2200 | CI-222 | .600 x .240 | 18c |
| 680 | CI-681 | .400 x .240 | 18c | 5000 | CI-502 | .850 x .180 | 18c |
| 1000 | CI-102 | .600 x .240 | 18c | 10,000 | CI-103 | .850 x .180 | 24c |

Centralab.

Ceramic Capacitors



TYPE CK LOW VOLTAGE DISC HI-KAPS®

For high capacity, low voltage use in transistor circuits. Phenolic insulation, vacuum wax impregnated. Power factor 2% max. at 1 kc. Rated 50 VDC. Tol., +80 - 20%. Max. capacity change: +25% (-20% at +45°C, =30%).

| Cap., μ f | CRL No. | Dia., In. | Net Each | Cap., μ f | CRL No. | Dia., In. | Net Each |
|---------------|---------|-----------------|----------|---------------|---------|-----------------|----------|
| .005 | CK-502 | $\frac{3}{8}$ " | 21c | .03 | CK-303 | $\frac{1}{2}$ " | 21c |
| .01 | CK-103 | $\frac{3}{8}$ " | 21c | .05 | CK-503 | $\frac{1}{2}$ " | 21c |
| .02 | CK-203 | $\frac{3}{8}$ " | 21c | | CK-104 | $\frac{3}{8}$ " | 60c |
| .025 | CK-253 | $\frac{3}{8}$ " | 21c | | | | |

TYPE DA MINIATURE PLATE CAPACITORS

Extremely small size. Proven in use by transistor radio receivers, designed for cathode bypass and transistor applications. Power factor, 2.5% at 1 kc. Rated 30 v. DC working; 50 v. DC test. Vacuum wax impregnated with Durez resin coating. Tolerances: +100% - 20%.

| Cap. μ f | CRL No. | Size (Sq.) In., Max. | Thick. Inches | Net Each |
|--------------|---------|----------------------|---------------|----------|
| .02 | DA-203 | $\frac{1}{8}$ " | .140 | \$0.36 |
| .05 | DA-503 | $\frac{1}{8}$ " | .160 | .81 |
| .1 | DA-104 | $\frac{1}{8}$ " | .187 | 1.35 |

TYPE DDA MINIATURE DISCS

Disc type similar to above, 75 VDCW, 150 VDC. Size: $\frac{3}{8}$ " diam. x $\frac{1}{8}$ " thick.

| Cap. μ f | CRL No. | Tolerance | Net Each |
|--------------|---------|-----------|----------|
| .05 | DDA-503 | -30% +80% | 30c |
| .1 | DDA-104 | -30% +80% | 60c |

TYPE DDM MIN-KAP® DISC CAPACITORS

Ceramic disc type capacitors for smaller voltage requirement applications; 150 VDCW; 300 VDC test. Very small in size; maximum of $\frac{3}{8}$ " diam. In high capacity values. Ideal for hearing aid, miniature radio, intercom and experimental rigs. Packaged 5 per package. Tolerance: -40% +60%.

| Capacity, μ f | CRL Number | VDCW | Thickness, Inches | Net Each |
|-------------------|------------|------|-------------------|----------|
| .005 | DDM-502 | 150 | .146 | 30c |
| .01 | DDM-103 | 150 | .146 | 30c |
| .02 | DDM-203 | 150 | .166 | 54c |
| 2 x .01 | DDM2-103 | 150 | .166 | 54c |

TYPE DM FLAT-PLATE MIN-KAPS®

150 VDCW, 300 v. DC test. Size: $\frac{1}{2}$ " x $\frac{1}{4}$ " x $\frac{1}{8}$ ". Tolerance +50%, -20%, except (*) +80%, -20%.

| Cap., μ f | CRL No. | Net Each | Cap., μ f | CRL No. | Net Each |
|---------------|---------|----------|---------------|----------|----------|
| .0001 | DM-101 | 30c | .002 | DM-202 | 30c |
| .0002 | DM-201 | 30c | .003 | DM-302* | 30c |
| .0003 | DM-301 | 30c | .005 | DM-502* | 30c |
| .0005 | DM-501 | 30c | .01 | DM-103* | 60c |
| .001 | DM-102 | 30c | 2 x .005 | DM2-502* | 75c |

TYPES UK, UK10, UK20 ULTRA-KAP® LOW VOLTAGE DISC CAPACITORS

High capacity, low voltage ceramic capacitors for transistor circuit application. Double durez insulation with high vacuum wax impregnation to withstand extreme temperature, humidity and vibration. Where size permits, capacitors are stamped with capacity and voltage. Tolerance: UK, GMV; UK10, +80 - 20%; UK20, +80 - 20%. *Trade Mark.

| UK (3 VDCW) | | | | UK10 (10 VDCW) | | | | UK20 (20VDCW) | | | |
|--------------|--------|-----------|---------|----------------|----------|-----------|---------|---------------|----------|-----------|---------|
| Cap. μ f | No. UK | Max. Dia. | Net Ea. | Cap. μ f | No. UK10 | Max. Dia. | Net Ea. | Cap. μ f | No. UK20 | Max. Dia. | Net Ea. |
| .005 | 502 | .120" | 75c | .05 | 503 | .290" | 33c | .05 | 503 | .408" | 33c |
| .01 | 103 | .120" | 75c | .1 | 104 | .408" | 33c | .1 | 104 | .590" | 33c |
| .02 | 203 | .120" | 75c | .2 | 204 | .590" | 33c | .2 | 204 | .840" | 33c |
| .1 | 104 | .220" | 54c | .47 | 474 | .840" | 54c | | | | |
| .22 | 224 | .290" | 33c | | | | | | | | |
| .47 | 474 | .408" | 33c | | | | | | | | |
| 1.0 | 105 | .590" | 54c | | | | | | | | |
| 2.2 | 225 | .840" | 54c | | | | | | | | |

ROTARY TRIMMER CAPACITORS

Highly stable, small lightweight design. Power factor less than 0.2% at 1 mc. All units rated 500 v. DC, working; 1000 v. DC, test. Suffix Z: Indicates zero temperature coefficient. Suffix N: Indicates negative coefficient. Shpg. Wt., 3 oz. max.

CRL Type 820—High dielectric ceramic base impervious to moisture. Flat rotor and stator. Mounting holes take No. 4 machine screws: $\frac{3}{8}$ " x $\frac{1}{4}$ ". Net Each **78c**

CRL Type 822—Stearite body; silver rotor and stator plates: $\frac{1}{4}$ " x $\frac{1}{8}$ ". Mtg. holes take No. 4 screw. Net Each **\$1.14**

CRL Type 823—Stearite body: $\frac{1}{4}$ " x $\frac{1}{8}$ ". Net Each **3.60**

CRL Type 827—Molded phenolic body has high stability under vibration. Insulation resistance 10,000 megs. minimum. Size: $\frac{1}{4}$ " x $\frac{1}{8}$ ". Net Each **75c**

CRL Type 829—Tiny, tubular, high voltage types for TV or FM. Ceramic bodies—.215" dia. Full capacity in 180° rotation. Net. **30c**

| Range, μ f | CRL No. | Range, μ f | CRL No. | Range, μ f | CRL No. |
|----------------|---------|----------------|---------|----------------|---------|
| 1.0-3.5 | 820D | 4.5-25 | 822-AZ | 8-50 | 823-DN |
| 2.5-8.0 | 820A | 2.0-6.0 | 822-DN | 10-100 | 823-BN |
| 5.0-20 | 820B | 4.0-30 | 822-EN | 20-125 | 823-AN |
| 7.0-35 | 820C | 4.5-25 | 822-CN | 2.5-7 | 827A |
| 35-55 | 820E* | 7.0-45 | 822-BN | 3.5-12 | 827B |
| 55-75 | 820F* | 8.0-50 | 822-AN | 6.0-30 | 827C |
| 70-90 | 820G* | 5-12 | 823-EZ | 7.0-35 | 827D |
| 1.5-3 | 822-DZ | 6-25 | 823-DZ | .5-3 | 829-3 |
| 1.5-7 | 822-EZ | 10-50 | 823-BZ | 1-4 | 829-4 |
| 2.0-7.5 | 822-CZ | 12-62 | 823-AZ | 1-6 | 829-6 |
| 2.5-13.0 | 822-BZ | 5-15 | 823-FN | 1-7.5 | 829-7 |
| 3.0-12 | 822-FZ | 8-25 | 823-EN | 1.5-10 | 829-10 |

*Less brackets.

TYPE 825 (MIL-C-81A) TRIMMERS

Meet MIL-C-81A specifications. Low loss steatite base with pure silver fired on top surface to form stator plate. Silver-plated brass terminals bent 90° from stator plane. Rated 500 VDCW; 1500 v. DC test. Power factor less than 0.2% at 1 mc. Body $\frac{1}{2}$ " lg. x $\frac{1}{4}$ " w. Zero temp. coefficient, except * which are negative 650. Shpg. Wt., 2 oz. **\$1.05**

| Cap., μ f | MIL Spec. | CRL No. | Cap., μ f | MIL Spec. | CRL No. |
|---------------|-----------|---------|---------------|-----------|---------|
| 1.5-7 | CV11A070 | 825-EZ | 2.0-6 | CV11D060 | 825-DN* |
| 3.0-12 | CV11A120 | 825-FZ | 4.0-30 | CV11D300 | 825-EN* |
| 4.5-25 | CV11A250 | 825-AZ | 7.0-45 | CV11D450 | 825-BN* |

Note: Items requiring certified test data and government source inspection are special. Prices and information supplied on request.

TRANSMITTING CAPACITORS

Designed for high voltage, high frequency circuits requiring very low power factor and stable retrace characteristics. Double cup design for long leakage paths and rugged construction.

TYPE 850 AND 858—3 AND 7.5 KV

Tolerance: $\pm 10\%$ 850 type; $\pm 20\%$ 858 type. Size: $\frac{1}{4}$ " dia. x $\frac{1}{4}$ ". Stud type has $\frac{1}{8}$ " long hex studs 6-32 thread. Lug type $\frac{1}{8}$ " long solder lugs with tapped 6-32 threaded hole.

| Cap. μ f | CRL No. | Stud Type | Lug Type | KV DCW | Temp. Coeff. | RF Load at 30 MC† | Net Each |
|--------------|-----------|------------|----------|--------|--------------|-------------------|----------|
| 25 | 850S-25Z | 850SL-25Z | 7.5 | NPO | 7 amps. | \$2.70 | |
| 50 | 850S-50Z | 850SL-50Z | 7.5 | NPO | 10 amps. | 2.70 | |
| 50 | 850S-50M | 850SL-50M | 7.5 | N750 | 8.8 amps. | 2.70 | |
| 75 | 850S-75N | 850SL-75N | 7.5 | N750 | 10 amps. | 2.70 | |
| 100 | 850S-100N | 850SL-100N | 5 | N750 | 9.8 amps. | 2.70 | |
| 500 | 858S-500 | ..... | 5 | HI-K | ..... | 2.70 | |
| 1 K | 858S-1000 | ..... | 5 | HI-K | ..... | 2.70 | |

TYPE 853, 854, 855—5 KV

Tolerance: $\pm 10\%$. Size: 853, $\frac{1}{4}$ " dia. x $\frac{1}{2}$ ". 854, $\frac{1}{4}$ " dia. x $\frac{1}{4}$ ". 855, $\frac{1}{4}$ " dia. x $\frac{3}{8}$ ". Lead type has $\frac{1}{4}$ " axial leads. Tap type has axial screw terminals tapped 2-56.

| Cap. μ f | CRL No. | Lead Type | Tap Type | KV DCW | Temp. Coeff. | RF Load at 30 MC† | Net Each |
|--------------|---------|-----------|----------|--------|--------------|-------------------|----------|
| 3 | 855-3Z | 855A-3Z | 5 | NPO | 1.8 amps. | \$1.80 | |
| 5 | 855-5Z | 855A-5Z | 5 | NPO | 1.8 amps. | 1.80 | |
| 10 | 854-10Z | 854A-10Z | 5 | NPO | 1.8 amps. | 1.80 | |
| 10 | 855-10N | 855A-10N | 5 | N750 | 3.2 amps. | 1.80 | |
| 20 | 853-20Z | 853A-20Z | 5 | NPO | 2.8 amps. | 1.80 | |
| 20 | 854-20N | 854A-20N | 5 | N750 | 3.2 amps. | 1.80 | |
| 40 | 853-40N | 853A-40N | 5 | N750 | 5.6 amps. | 1.80 | |

TYPE 857—7.5 AND 15 KV

Tolerance: 10%. Size: $1\frac{1}{2}$ " dia. x $1\frac{1}{4}$ ". Axial screw terminals at both ends; $\frac{1}{4}$ " deep 10-32 NF-2 thread.

| Cap. μ f | CRL No. | Temp. Coeff. | RF Load at 30 MC† | KV DCW | Net Each |
|--------------|----------|--------------|-------------------|--------|----------|
| 25 | 857-25Z | NPO | 12 amps. | 15 | \$8.40 |
| 50 | 857-50Z | NPO | 12 amps. | 15 | 8.40 |
| 100 | 857-100N | N750 | 14.4 amps. | 15 | 7.20 |
| 200 | 857-200N | N750 | 18.2 amps. | 7.5 | 7.20 |

TYPE 859—15 AND 20 KV

Tolerance: $\pm 10\%$. Size: 2" dia. x $2\frac{3}{4}$ " overall. Terminals $\frac{1}{4}$ " deep both ends, tapped 10-32.

| Cap. μ f | CRL No. | Temp. Coeff. | RF Load at 30 MC† | KV DCW | Net Each |
|--------------|-----------|--------------|-------------------|--------|----------|
| 50 | 859S-50Z | NPO | 30 amps. | 20 | \$54.00 |
| 100 | 859S-100Z | NPO | 30 amps. | 20 | 54.00 |
| 250 | 859S-250N | N750 | 30 amps. | 20 | 54.00 |
| 500 | 859S-500N | N3300 | 30 amps. | 15 | 54.00 |

†R.F. Load Ratings based on 30° C rise in temperature.

TYPES ZA AND ZB BUTTON-STYLE CERAMICS

Solder-sealed for long life and high quality performance. Shell is effective at ground potential, 500 VDCW, 1000 VDC. Type ZA is standoff 3-48 thread tapped base and ground terminal. Type ZB is feed-thru style with three solder lugs.

| μ f | ZA- | μ f | ZA- | μ f | ZB- | μ f | ZB- | Net Ea. |
|---------|-----|---------|-----|---------|-----|---------|-----|---------|
| 15 | 150 | 500 | 501 | 15 | 150 | 500 | 501 | 75c |
| 50 | 500 | 1000 | 102 | 50 | 500 | 1000 | 102 | 75c |

Centralab.

Ceramic Capacitors, Kits



TYPE TC



TC DISC



D6



TYPE FT



DDK-200

TEMPERATURE COMPENSATING TUBULAR HI-KAP® CAPACITORS

Especially designed to limit frequency drift in RF circuits where temperature variations are prevalent. Ceramic body construction changes capacities as the temperature varies; made to comply with JAN-C-20A specifications. Rated 1,200 volts DC, test: 800 volts DC, working. Extremely compact. Weight, 2 oz. Type TCZ: NPO or zero units, superior to micas for all uses. Show zero capacitance changeover temperature range -20° C to +85° C. Left end coded black. Type TCN: N750 units show negative capacity of -750 parts per million per degree C rise in temperature. Left end coded violet.

TYPES TCN AND TCZ

| Type TCN Units | | | | Type TCZ Units | | | |
|----------------|------------|------|------------|----------------|------------|------|------------|
| Cap., μ f | CRL Number | Size | Tol. | Cap., μ f | CRL Number | Size | Tol. |
| 0.5 | | | | 25 | TCZ-R5 | A | 25 μ f |
| 0.88 | | | | 30 | TCZ-R68 | A | 25 μ f |
| 1.0 | | | | 30 | TCZ-1 | A | 25 μ f |
| 1.5 | | | | 30 | TCZ-R15 | A | 25 μ f |
| 2.2 | | | | 30 | TCZ-2R2 | A | 25 μ f |
| 3.3 | TCN-3R3 | A | .5 μ f | 30c | TCZ-3R3 | A | 25 μ f |
| 4.7 | | | | 30c | TCZ-4R7 | A | 5 μ f |
| 5.0 | TCN-5 | A | .5 μ f | 30c | | | |
| 8.8 | | | | 30c | TCZ-6R8 | A | 5 μ f |
| 10 | TCN-10 | A | .5 μ f | 30c | TCZ-10 | A | 5 μ f |
| 12 | TCN-12 | A | 2% | 30c | TCZ-12 | A | 2% |
| 15 | TCN-15 | A | 2% | 30c | TCZ-15 | A | 2% |
| 18 | TCN-18 | A | 2% | 30c | TCZ-18 | A | 2% |
| 20 | TCN-20 | A | 2% | 30c | TCZ-20 | A | 2% |
| 22 | TCN-22 | A | 2% | 30c | TCZ-22 | A | 2% |
| 24 | TCN-24 | A | 2% | 30c | TCZ-24 | A | 2% |
| 25 | TCN-25 | A | 2% | 30c | TCZ-25 | A | 2% |
| 27 | TCN-27 | A | 2% | 30c | TCZ-27 | A | 2% |
| 30 | TCN-30 | A | 2% | 30c | TCZ-30 | A | 2% |
| 33 | TCN-33 | A | 2% | 30c | TCZ-33 | A | 2% |
| 36 | TCN-36 | A | 2% | 30c | TCZ-36 | A | 2% |
| 39 | TCN-39 | A | 2% | 30c | TCZ-39 | A | 2% |
| 43 | TCN-43 | A | 2% | 30c | TCZ-43 | B | 2% |
| 47 | TCN-47 | A | 2% | 30c | TCZ-47 | B | 2% |
| 50 | TCN-50 | A | 2% | 30c | TCZ-50 | B | 2% |
| 51 | TCN-51 | A | 2% | 30c | TCZ-51 | B | 2% |
| 56 | TCN-56 | A | 2% | 30c | TCZ-56 | B | 2% |
| 62 | TCN-62 | A | 2% | 30c | TCZ-62 | B | 2% |
| 68 | TCN-68 | A | 2% | 30c | TCZ-68 | B | 2% |
| 75 | TCN-75 | A | 2% | 30c | TCZ-75 | B | 2% |
| 82 | TCN-82 | A | 2% | 30c | TCZ-82 | B | 2% |
| 91 | TCN-91 | A | 2% | 30c | TCZ-91 | C | 2% |
| 100 | TCN-100 | A | 2% | 30c | TCZ-100 | C | 2% |
| 110 | TCN-110 | B | 5% | 30c | TCZ-110 | D | 5% |
| 120 | TCN-120 | B | 5% | 30c | TCZ-120 | D | 5% |
| 130 | TCN-130 | B | 5% | 30c | TCZ-130 | D | 5% |
| 150 | TCN-150 | B | 5% | 30c | TCZ-150 | D | 5% |
| 180 | TCN-180 | B | 5% | 30c | TCZ-180 | D | 5% |
| 180 | TCN-180 | B | 5% | 30c | TCZ-180 | D | 5% |
| 200 | TCN-200 | B | 5% | 30c | TCZ-200 | D | 5% |
| 220 | TCN-220 | C | 5% | 30c | TCZ-220 | D | 5% |
| 240 | TCN-240 | C | 5% | 30c | TCZ-240 | E | 5% |
| 270 | TCN-270 | C | 5% | 30c | TCZ-270 | E | 5% |
| 300 | TCN-300 | D | 5% | 45c | TCZ-300 | E | 5% |
| 330 | TCN-330 | D | 5% | 45c | | | |
| 360 | TCN-360 | D | 5% | 45c | | | |
| 390 | TCN-390 | D | 5% | 45c | | | |
| 430 | TCN-430 | D | 5% | 45c | | | |
| 470 | TCN-470 | D | 5% | 45c | | | |
| 510 | TCN-510 | D | 5% | 45c | | | |
| 560 | TCN-560 | E | 5% | 60c | | | |
| 620 | TCN-620 | E | 5% | 60c | | | |
| 680 | TCN-680 | E | 5% | 60c | | | |
| 750 | TCN-750 | E | 5% | 60c | | | |

TYPES TCA AND TCL

Intermediate stock values. This group changes negatively capacity-wise with temperature increases. Type TCA: Changes 330 parts per million per degree C. Type TCL: Changes 1500 parts per million per degree C.

| Type TCA Units | | | | Type TCL Units | | | |
|----------------|------------|------|------------|----------------|------------|------|------------|
| Cap., μ f | CRL Number | Size | Tol. | Cap., μ f | CRL Number | Size | Tol. |
| 10 | TCA-10 | A | .5 μ f | 30c | TCL-10 | A | .5 μ f |
| 15 | TCA-15 | A | 2% | 30c | TCL-15 | A | 2% |
| 22 | TCA-22 | A | 2% | 30c | TCL-22 | A | 2% |
| 33 | TCA-33 | A | 2% | 30c | TCL-33 | A | 2% |
| 47 | TCA-47 | A | 2% | 30c | TCL-47 | A | 2% |
| 68 | TCA-68 | A | 2% | 30c | TCL-68 | A | 2% |
| 100 | TCA-100 | B | 2% | 30c | TCL-100 | A | 2% |

| SIZE | | | |
|------|--------------|-----|--------------|
| Key | Size, inches | Key | Size, inches |
| A | .400 x .200 | C | .860 x .225 |
| B | .890 x .200 | D | 1.165 x .285 |
| E | 1.625 x .285 | | |

TEMPERATURE COMPENSATING DISC HI-KAPS®
Very popular unit that replaces mica types in all applications. High stability and small size, using TC ceramic dielectric material. Type DTZ is NPO or zero TC disc type. Type DTN is an N750 TC type. Thickness: $\frac{1}{8}$ " and $\frac{1}{16}$ ". Tolerance: $\pm 5\%$.

| TYPE DTN (N750) | | | | | | | |
|-----------------|---------|-----------|----------|---------------|---------|-----------|----------|
| Cap., μ f | CRL No. | Dia., In. | Net Each | Cap., μ f | CRL No. | Dia., In. | Net Each |
| 5 | DTN-5* | | 30c | 85 | DTN-88 | | 30c |
| 10 | DTN-10* | | 30c | 75 | DTN-75 | | 30c |
| 15 | DTN-15 | | 30c | 100 | DTN-100 | | 30c |
| 20 | DTN-20 | | 30c | 150 | DTN-150 | | 45c |
| 22 | DTN-22 | | 30c | 200 | DTN-200 | | 45c |
| 25 | DTN-25 | | 30c | 220 | DTN-220 | | 45c |
| 33 | DTN-33 | | 30c | 330 | DTN-330 | | 45c |
| 47 | DTN-47 | | 30c | | | | |

| TYPE DTZ (NPO) | | | | | | | |
|----------------|----------|-----------|----------|---------------|---------|-----------|----------|
| Cap., μ f | CRL No. | Dia., In. | Net Each | Cap., μ f | CRL No. | Dia., In. | Net Each |
| 1.5 | DTZ-1R5* | | 30c | 50 | DTZ-50 | | 30c |
| 2.2 | DTZ-2R2* | | 30c | 68 | DTZ-68 | | 30c |
| 3.3 | DTZ-3R3* | | 30c | 75 | DTZ-75 | | 30c |
| 4.7 | DTZ-4R7* | | 30c | 82 | DTZ-82 | | 30c |
| 6.8 | DTZ-6R8* | | 30c | 100 | DTZ-100 | | 30c |
| 10 | DTZ-10 | | 30c | 120 | DTZ-120 | | 45c |
| 15 | DTZ-15 | | 30c | 150 | DTZ-150 | | 45c |
| 20 | DTZ-20 | | 30c | 180 | DTZ-180 | | 45c |
| 22 | DTZ-22 | | 30c | 200 | DTZ-200 | | 45c |
| 25 | DTZ-25 | | 30c | 220 | DTZ-220 | | 45c |
| 33 | DTZ-33 | | 30c | 270 | DTZ-270 | | 45c |
| 47 | DTZ-47 | | 30c | | | | |

*Tolerance, $\pm 5\%$.

TYPE D6 TUBULAR BC HI-KAPS®
Rated 600 v. DC working; 1200 v. test. Tropicalized. Operating temperature 85° C. Tolerance: $\pm 0.5\%$. D6-030: $\pm 10\%$, 5μ f thru 680μ f; $\pm 20\%$, 750μ f thru 2200μ f; GMV, 2500 μ f and up. CRL Type D6—Any model thru 5000 μ f. Net Each. **15c**
CRL Type D6 5000 μ f and 10,000 μ f. Net Each. **18c**

| Cap., μ f | CRL No. | Size | Cap., μ f | CRL No. | Size | Cap., μ f | CRL No. | Size |
|---------------|---------|------|---------------|---------|------|---------------|---------|------|
| 3 | D6-030 | A | 100 | D6-101 | A | 520 | D6-821 | A |
| 5 | D6-050 | A | 150 | D6-121 | A | 1000 | D6-102 | A |
| 10 | D6-100 | A | 180 | D6-151 | A | 1200 | D6-122 | A |
| 12 | D6-120 | A | 200 | D6-181 | A | 1500 | D6-152 | A |
| 15 | D6-150 | A | 220 | D6-201 | A | 1800 | D6-182 | A |
| 20 | D6-200 | A | 250 | D6-221 | A | 2000 | D6-202 | B |
| 22 | D6-220 | A | 270 | D6-251 | A | 2200 | D6-222 | B |
| 25 | D6-250 | A | 300 | D6-271 | A | 2500 | D6-252 | B |
| 27 | D6-270 | A | 330 | D6-301 | A | 2700 | D6-272 | B |
| 33 | D6-330 | A | 390 | D6-331 | A | 3000 | D6-302 | B |
| 39 | D6-390 | A | 400 | D6-391 | A | 3300 | D6-332 | B |
| 40 | D6-400 | A | 470 | D6-401 | A | 4000 | D6-402 | B |
| 47 | D6-470 | A | 500 | D6-471 | A | 4700 | D6-472 | C |
| 50 | D6-500 | A | 560 | D6-501 | A | 5000 | D6-502 | C |
| 56 | D6-560 | A | 600 | D6-601 | B | 5600 | D6-562 | C |
| 68 | D6-680 | A | 680 | D6-681 | B | 10000 | D6-103 | D |
| 75 | D6-750 | A | 750 | D6-751 | A | | | |
| 82 | D6-820 | A | | | | | | |

*Size: A—260" x 460", B—260" x 790", C—280" x 900", D—330" x 1.21".

TYPES FT AND MFT FED-THRU HI-KAPS®
Rated 500 v. DC, working; 1000 v. DC, test. Type FT: Hooked end terminals; mounting nut supplied. Type MFT: $\frac{1}{4}$ " (max.) flange eyelet inserts in .160" hole; solders direct to chassis. **75c**
CRL Type FT—Any model. Net Each. **30c**
CRL Type MFT—Any model. Net Each. **30c**

| Type FT Hi-Kaps® | | | Type MFT Hi-Kaps® | | |
|------------------|---------|------------|-------------------|----------|------------|
| μ f | No. | Tolerance | μ f | No. | Tolerance |
| 500 | FT-500 | $\pm 20\%$ | 50 | MFT-50 | $\pm 10\%$ |
| 1000 | FT-1000 | $\pm 20\%$ | 100 | MFT-100 | $\pm 10\%$ |
| 1500 | FT-1500 | -20, +50% | 500 | MFT-500 | $\pm 10\%$ |
| 1800 | FT-1800 | -20, +50% | 1000 | MFT-1000 | GMV |
| 2300 | FT-2300 | -20, +50% | | | |

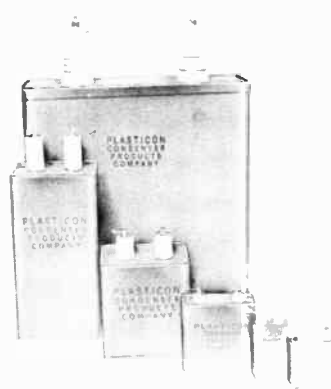
CERAMIC CAPACITOR KITS
Each kit contains a carefully balanced inventory of the most required replacement values. All kits utilize the sturdy, convenient Centralab ceramic capacitor packages. Housed in a 8" x 4" x 11", one drawer, heavy gauge steel cabinet. Entire contents labeled and marked for prompt identification. *Supplied bulk in plastic case.

| CRL No. | Qty/Values | Types | Value Range | Net Each |
|----------|------------|----------------------|-----------------|--|
| DDK-200 | 200/31 | Hi-Kap Cer. disc | 1000 | 5 μ f to 20,000 μ f 531.10 |
| DDK-100* | 100/6 | Hi-Kap Cer. disc | 600/1000 | 100 μ f to 10,000 μ f 15.45 |
| D6K-200 | 200/27 | Hi-Kap Tubular | 600 | 5 μ f to 10,000 μ f 30.00 |
| HVK-150 | 150/17 | Hi-V. disc | 1.6KV, 3KV, 6KV | 47 μ f to 15,000 μ f 38.60 |
| LVK-100 | 100/12 | Hi-Kap Lo-V. disc | 50, 75, 150 | .005 μ f to 0.1 μ f 34.40 |
| TCK-80 | 80/28 | Temp. Comp. | 600 | 0.68 μ f to 750 μ f 26.90 |
| UK-60 | 60/10 | Ultra-Kap Lo-V. disc | 3, 10 | 0.005 μ f to 1 μ f 28.70 |



PLASTICON DC RECTANGULARS

Mineral oil impregnated and filled. Hermetically sealed. Can be operated in any position, continuously at 10% over rated voltage up to +40° C. Tolerance 10%. Ambient temperature range -40° C. to 105° C. Insulators: Two ceramic type bushings for standard temperature range. Two soldered-in metallized ceramic insulators for extended temperature range. All DC rectangulars have 8-32 screw and hex nut terminals with removable hot-tinned solder lugs. Case: Rectangular base, lead coated steel with heavy finish of grey organic lacquer.



| Mfr's. No. | Cap. Mfd. | Volts DC | Dimensions - Inches | | | Term. Height | Dist. Bet. Ter. | List Price |
|------------|-----------|----------|---------------------|-------|-------|--------------|-----------------|------------|
| | | | Height | Width | Depth | | | |
| AOC6C1 | 1.0 | 600 | 2 1/8 | 1 3/4 | 1 | 5/8 | 1 3/8 | \$ 4.12 |
| AOC6C2 | 2.0 | 600 | 2 3/8 | 1 3/4 | 1 | 5/8 | 1 3/8 | 5.14 |
| AOC6C4 | 4.0 | 600 | 3 1/2 | 2 1/2 | 1 1/8 | 5/8 | 1 1/8 | 6.39 |
| AOC6C8 | 8.0 | 600 | 4 | 3 3/4 | 1 1/4 | 5/8 | 2 | 9.65 |
| AOC6C10 | 10.0 | 600 | 4 | 3 3/4 | 1 3/8 | 5/8 | 2 | 11.68 |
| AOC1M1 | 1.0 | 1000 | 2 3/8 | 1 3/4 | 1 | 5/8 | 1 3/8 | 4.27 |
| AOC1M2 | 2.0 | 1000 | 3 | 2 1/2 | 1 1/8 | 5/8 | 1 1/8 | 5.50 |
| AOC1M4 | 4.0 | 1000 | 4 5/8 | 2 1/2 | 1 1/8 | 5/8 | 1 1/8 | 6.71 |
| AOC1M8 | 8.0 | 1000 | 4 5/8 | 3 3/4 | 1 3/8 | 5/8 | 2 | 9.48 |
| AOC1M10 | 10.0 | 1000 | 4 5/8 | 3 3/4 | 2 1/4 | 5/8 | 2 | 10.94 |
| AOC2M05 | 0.5 | 2000 | 2 3/8 | 1 3/4 | 1 | 5/8 | 1 3/8 | 4.71 |
| AOC2M1 | 1.0 | 2000 | 4 1/2 | 1 3/4 | 1 | 5/8 | 1 1/8 | 5.72 |
| AOC2M2 | 2.0 | 2000 | 3 1/2 | 3 3/4 | 1 1/4 | 5/8 | 2 | 6.62 |
| AOC2M4 | 4.0 | 2000 | 3 1/2 | 2 3/4 | 2 1/4 | 5/8 | 2 | 8.98 |
| AOC3M1 | 1.0 | 3000 | 4 | 2 1/2 | 1 1/8 | 1 1/8 | 1 1/8 | 11.70 |
| AOC3M2 | 2.0 | 3000 | 4 5/8 | 3 3/4 | 1 1/4 | 1 1/8 | 2 | 14.97 |
| AOC3M4 | 4.0 | 3000 | 4 5/8 | 3 3/4 | 2 1/4 | 1 | 2 | 20.70 |
| AOC4M1 | 1.0 | 4000 | 4 | 3 3/4 | 1 1/4 | 1 1/4 | 2 | 14.40 |
| AOC4M2 | 2.0 | 4000 | 4 | 3 3/4 | 1 3/8 | 1 1/4 | 2 | 21.60 |
| AOC4M4 | 4.0 | 4000 | 4 | 3 3/4 | 4 1/8 | 1 1/8 | 2 | 35.46 |
| AOC5M1 | 1.0 | 5000 | 4 | 3 3/4 | 1 3/8 | 2 1/4 | 2 | 17.01 |
| AOC5M2 | 2.0 | 5000 | 3 1/2 | 3 3/4 | 4 1/8 | 1 1/8 | 2 | 27.00 |
| AOC10M1 | 1.0 | 10000 | 4 5/8 | 3 3/4 | 4 1/8 | 2 1/4 | 2 | 59.40 |

PLASTICON TEFLON CAPACITORS

POWER FACTOR @ 25°C05%
 @ 165°C07%

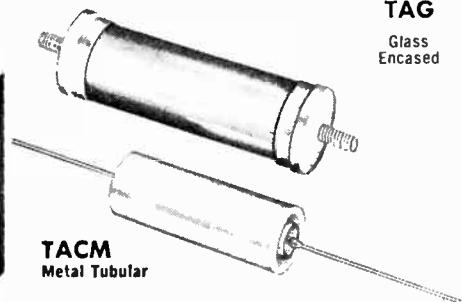
TEMPERATURE COEFFICIENT -70°C to 165°C -200 ppm/°C.

INSULATION RESISTANCE @25°C 500,000 meg x mfd.
 But need not exceed 10,000,000 megohms

@ 165°C 7,000 meg. x mfd.
 But need not exceed 50,000 megohms

DIELECTRIC ABSORPTION @25°C02%

TAC
CP-70
Type
Can



TAG
Glass
Encased

TACM
Metal Tubular

VOLTAGE RANGE 200 to 1,000 vdc.

CAPACITANCE RANGE TAG, TACM — .001 to 1.0 mfd
 TAC — 1 mfd and above.



Condenser Products Company

MANUFACTURERS: Glossmikes • Plasticon Copocitors • HiVolt Power Supplies • Pulse Forming Networks

See Sect. 4000 for Plasticon Power Supplies



"Glassmike" Plasticon Capacitors



GLASSMIKE
CONDENSER
PRODUCTS CO



Type LSG

Type ASG

Type ASG are Plasticon A dielectric-silicone fluid impregnated capacitor elements in hermetically sealed glass tubes. Standard range -60°C to +85°C, extended range -60°C to +125°C with proper derating. The smallest and lightest high voltage capacitors made. Type ASG are ideal for DC and low frequency AC applications.

LSG type capacitors have Plasticon L film-silicone fluid impregnated designed to compete with mica capacitors, the LSG capacitors are more applicable for Radio Frequency. Special beneficial features include greater safety factor, lower RF loss, more conveniently mounted, utilizes less chassis space, impervious to moisture, and smaller in overall volume.

All 19/32 diameter Glassmikes are supplied with pigtail leads

| Cat. No. | Cap. Mfd. | Volts D.C. | Dimensions Dia. & Length | List Price | Part No. | Size | Cap | Volts D.C. | List Price |
|------------|-----------|------------|--------------------------|------------|------------|-------------|--------|------------|------------|
| ASG502-1M | .005 | 1000 | 19/32x1 9/16 | \$ 2.85 | LSG303-1M | 13/16x1 1/2 | .03 | 1000 | 6.17 |
| ASG103-1M | .01 | 1000 | 19/32x1 3/16 | 2.85 | LSG403-1M | 29/32x1 1/2 | .04 | 1000 | 6.85 |
| ASG203-1M | .02 | 1000 | 19/32x1 3/16 | 2.85 | LSG503-1M | 1 3/4x1 1/2 | .05 | 1000 | 7.33 |
| ASG503-1M | .05 | 1000 | 3/4x1 3/4 | 3.08 | LSG603-1M | 1 1/4x1 1/2 | .06 | 1000 | 7.33 |
| ASG104-1M | .1 | 1000 | 3/4x2 1/4 | 3.10 | LSG753-1M | 1 3/4x1 1/2 | .075 | 1000 | 7.33 |
| ASG254-1M | .25 | 1000 | 29/32x2 3/4 | 3.35 | LSG104-1M | 1 1/4x2 | 0.1 | 1000 | 8.00 |
| ASG504-1M | .5 | 1000 | 1 1/4x2 1/4 | 3.55 | LSG154-1M | 1 3/4x2 | 0.15 | 1000 | 9.50 |
| ASG102-3M | .001 | 3000 | 19/32x1 3/16 | 3.26 | LSG204-1M | 1 3/4x2 1/2 | 0.2 | 1000 | 10.80 |
| ASG202-3M | .002 | 3000 | 19/32x1 3/16 | 3.26 | LSG254-1M | 1 3/4x2 1/2 | 0.25 | 1000 | 11.00 |
| ASG502-3M | .005 | 3000 | 19/32x1 3/16 | 3.26 | LSG304-1M | 1 3/4x3 | 0.3 | 1000 | 11.70 |
| ASG103-3M | .01 | 3000 | 19/32x1 9/16 | 3.40 | LSG404-1M | 1 3/4x3 1/2 | 0.4 | 1000 | 12.70 |
| ASG203-3M | .02 | 3000 | 3/4x1 3/4 | 3.96 | LSG752-25C | 29/32x1 | .0075 | 2500 | 6.17 |
| ASG503-3M | .05 | 3000 | 29/32x2 1/4 | 4.36 | LSG103-25C | 1 1/4x1 | .01 | 2500 | 6.50 |
| ASG104-3M | .1 | 3000 | 1 1/4x2 1/4 | 4.80 | LSG203-25C | 1 1/4x1 1/2 | .02 | 2500 | 7.18 |
| ASG254-3M | .25 | 3000 | 1 3/4x2 | 5.28 | LSG253-25C | 1 1/4x1 1/2 | .025 | 2500 | 7.18 |
| ASG102-5M | .001 | 5000 | 19/32x1 3/16 | 5.04 | LSG303-25C | 1 1/4x1 1/2 | .03 | 2500 | 7.18 |
| ASG202-5M | .002 | 5000 | 19/32x1 3/16 | 5.12 | LSG403-25C | 1 1/4x2 | .04 | 2500 | 8.00 |
| ASG502-5M | .005 | 5000 | 19/32x1 3/16 | 5.20 | LSG503-25C | 1 3/4x2 | .05 | 2500 | 8.68 |
| ASG103-5M | .01 | 5000 | 3/4x1 3/4 | 5.44 | LSG603-25C | 1 3/4x2 | .06 | 2500 | 8.68 |
| ASG203-5M | .02 | 5000 | 3/4x2 1/4 | 5.76 | LSG753-25C | 1 3/4x2 | .075 | 2500 | 10.40 |
| ASG503-5M | .05 | 5000 | 29/32x2 1/4 | 6.08 | LSG104-25C | 1 3/4x2 1/2 | 0.1 | 2500 | 11.70 |
| ASG104-5M | .1 | 5000 | 1 3/4x3 1/2 | 6.80 | LSG154-25C | 1 3/4x3 1/2 | 0.15 | 2500 | 12.70 |
| ASG501-8M | .0005 | 8000 | 19/32x1 9/16 | 5.20 | LSG402-35C | 29/32x1 | .004 | 3500 | 7.00 |
| ASG102-8M | .001 | 8000 | 19/32x1 9/16 | 5.20 | LSG502-35C | 1 1/4x1 | .005 | 3500 | 7.50 |
| ASG202-8M | .002 | 8000 | 19/32x1 3/4 | 5.44 | LSG602-35C | 1 1/4x1 | .006 | 3500 | 7.50 |
| ASG502-8M | .005 | 8000 | 3/4x1 3/4 | 5.60 | LSG752-35C | 1 3/4x1 | .0075 | 3500 | 7.85 |
| ASG103-8M | .01 | 8000 | 3/4x2 1/4 | 6.00 | LSG103-35C | 1 3/4x1 | .01 | 3500 | 8.18 |
| ASG203-8M | .02 | 8000 | 29/32x2 3/4 | 6.88 | LSG203-35C | 1 3/4x1 1/2 | .02 | 3500 | 8.50 |
| ASG503-8M | .05 | 8000 | 1 3/4x4 1/4 | 8.80 | LSG253-35C | 1 3/4x1 1/2 | .025 | 3500 | 8.67 |
| ASG501-10M | .0005 | 10,000 | 19/32x1 3/4 | 5.60 | LSG303-35C | 1 3/4x2 | .03 | 3500 | 10.80 |
| ASG102-10M | .001 | 10,000 | 19/32x1 3/4 | 5.76 | LSG403-35C | 1 3/4x2 1/2 | .04 | 3500 | 10.80 |
| ASG202-10M | .002 | 10,000 | 19/32x1 3/4 | 5.92 | LSG503-35C | 1 3/4x2 1/2 | .05 | 3500 | 11.65 |
| ASG502-10M | .005 | 10,000 | 13/16x1 3/4 | 6.80 | LSG603-35C | 1 3/4x3 | .06 | 3500 | 12.35 |
| ASG103-10M | .01 | 10,000 | 29/32x3 1/2 | 7.36 | LSG753-35C | 1 3/4x3 | .075 | 3500 | 12.35 |
| ASG203-10M | .02 | 10,000 | 1 1/4x2 3/4 | 9.12 | LSG104-35C | 1 3/4x4 | 0.1 | 3500 | 13.65 |
| ASG303-10M | .03 | 10,000 | 1 3/4x2 3/4 | 11.00 | LSG252-5M | 13/16x2 | .0025 | 5000 | 9.65 |
| ASG603-10M | .06 | 10,000 | 1 3/4x4 1/4 | 12.40 | LSG302-5M | 13/16x2 | .003 | 5000 | 9.65 |
| ASG501-15M | .0005 | 15,000 | 19/32x2 3/4 | 10.80 | LSG402-5M | 1 1/4x2 | .004 | 5000 | 10.50 |
| ASG102-15M | .001 | 15,000 | 3/4x2 1/4 | 11.04 | LSG502-5M | 1 1/4x2 | .005 | 5000 | 10.50 |
| ASG202-15M | .002 | 15,000 | 3/4x2 1/4 | 11.68 | LSG602-5M | 1 1/4x2 | .006 | 5000 | 10.50 |
| ASG502-15M | .005 | 15,000 | 1 1/4x2 3/4 | 13.60 | LSG752-5M | 1 3/4x2 | .0075 | 5000 | 11.50 |
| ASG103-15M | .01 | 15,000 | 1 1/4x3 3/4 | 16.00 | LSG103-5M | 1 3/4x2 | .01 | 5000 | 11.50 |
| ASG203-15M | .02 | 15,000 | 1 3/4x4 1/2 | 17.60 | LSG203-5M | 1 3/4x3 | .02 | 5000 | 13.15 |
| ASG501-20M | .0005 | 20,000 | 19/32x3 1/2 | 14.40 | LSG253-5M | 1 3/4x3 | .025 | 5000 | 13.80 |
| ASG102-20M | .001 | 20,000 | 3/4x3 1/2 | 15.20 | LSG303-5M | 1 3/4x4 | .03 | 5000 | 15.00 |
| ASG202-20M | .002 | 20,000 | 13/16x3 1/2 | 16.80 | LSG403-5M | 1 3/4x4 | .04 | 5000 | 16.70 |
| ASG502-20M | .005 | 20,000 | 1 1/4x3 1/2 | 18.00 | LSG503-5M | 1 3/4x6 | .05 | 5000 | 18.70 |
| ASG103-20M | .01 | 20,000 | 1 3/4x4 1/2 | 19.20 | LSG603-5M | 1 3/4x6 | .06 | 5000 | 20.70 |
| ASG501-30M | .0005 | 30,000 | 19/32x4 9/16 | 16.80 | LSG753-5M | 1 3/4x8 | .075 | 5000 | 22.70 |
| ASG102-30M | .001 | 30,000 | 3/4x5 | 18.80 | LSG104-5M | 1 3/4x8 | 0.1 | 5000 | 24.70 |
| ASG202-30M | .002 | 30,000 | 1 3/4x4 1/4 | 20.80 | LSG751-7M | 3/4x2 | .00075 | 7000 | 9.00 |
| ASG502-30M | .005 | 30,000 | 1 3/4x5 | 22.40 | LSG102-7M | 3/4x2 | .001 | 7000 | 9.00 |
| ASG501-40M | .0005 | 40,000 | 3/4x6 1/2 | 18.00 | LSG202-7M | 29/32x2 | .002 | 7000 | 10.00 |
| ASG102-40M | .001 | 40,000 | 13/16x6 1/2 | 20.80 | LSG252-7M | 1 1/4x2 | .0025 | 7000 | 10.66 |
| ASG202-40M | .002 | 40,000 | 1 1/4x6 1/2 | 22.40 | LSG302-7M | 1 1/4x2 | .003 | 7000 | 10.66 |
| ASG501-50M | .0005 | 50,000 | 3/4x8 1/4 | 19.60 | LSG402-7M | 1 3/4x2 | .004 | 7000 | 12.35 |
| ASG102-50M | .001 | 50,000 | 13/16x8 1/4 | 22.40 | LSG502-7M | 1 3/4x2 | .005 | 7000 | 14.35 |
| ASG202-50M | .002 | 50,000 | 1 1/4x8 1/4 | 25.20 | LSG602-7M | 1 3/4x2 | .006 | 7000 | 14.35 |
| ASG502-50M | .005 | 50,000 | 1 3/4x10 1/4 | 28.80 | LSG752-7M | 1 1/4x4 | .0075 | 7000 | 17.00 |
| ASG501-60M | .0005 | 60,000 | 3/4x11 | 22.80 | LSG103-7M | 1 1/4x4 | .01 | 7000 | 17.00 |
| ASG102-60M | .001 | 60,000 | 29/32x11 | 27.20 | LSG203-7M | 1 3/4x4 | .02 | 7000 | 18.65 |
| | | | | | LSG253-7M | 1 3/4x6 | .025 | 7000 | 19.30 |
| | | | | | LSG303-7M | 1 3/4x6 | .03 | 7000 | 19.30 |
| | | | | | LSG403-7M | 1 3/4x8 | .04 | 7000 | 20.70 |
| | | | | | LSG503-7M | 1 3/4x8 | .05 | 7000 | 20.70 |
| | | | | | LSG102-10M | 29/32x3 | .001 | 10 KV | 12.35 |
| | | | | | LSG202-10M | 1 1/4x3 | .002 | 10 KV | 13.65 |
| | | | | | LSG252-10M | 1 3/4x3 | .0025 | 10 KV | 15.35 |
| | | | | | LSG302-10M | 1 3/4x3 | .003 | 10 KV | 15.35 |
| | | | | | LSG402-10M | 1 3/4x3 | .004 | 10 KV | 17.65 |
| | | | | | LSG502-10M | 1 1/4x6 | .005 | 10 KV | 21.30 |
| | | | | | LSG602-10M | 1 1/4x6 | .006 | 10 KV | 21.30 |
| | | | | | LSG752-10M | 1 3/4x6 | .0075 | 10 KV | 24.00 |
| | | | | | LSG103-10M | 1 3/4x6 | .01 | 10 KV | 24.00 |
| | | | | | LSG203-10M | 1 3/4x9 | .02 | 10 KV | 27.70 |
| | | | | | LSG253-10M | 1 3/4x9 | .025 | 10 KV | 27.70 |
| | | | | | LSG101-14M | 19/32x4 | .0001 | 14 KV | 12.00 |
| | | | | | LSG201-14M | 3/4x4 | .0002 | 14 KV | 12.85 |
| | | | | | LSG251-14M | 3/4x4 | .00025 | 14 KV | 12.85 |

OTHER VALUES READILY AVAILABLE

See Sect. 4000 for Plasticon Power Supplies

CORNELL-DUBILIER ELECTRONICS

"BLUE BEAVER" Tubular Electrolytics

CLASS 201.01



BR

Type BR is the compact unit in aluminum can with cardboard outer sleeve. Fits neatly into the cramped quarters, self-supported by rigid tinned copper leads. Larger sizes may be further supported by a metal strap. NEGATIVE TERMINAL IS GROUNDED TO CAN.

BBR

Type BBR "BLUE BEAVERS," miniature versions of the BR, are especially popular for cramped space installations in television receivers, hearing aids, miniature radios and other small assemblies. They are hermetically sealed in tubular aluminum containers with cardboard sleeve and ideally suited to meet requirements in low voltage circuits. NEGATIVE TERMINAL IS GROUNDED TO CAN.

The anodes AND cathodes of all 150 volt BBR and BR units are ETCHED. This feature recommends these types for use with JUNCTION RECTIFIERS.

TEMPERATURE RANGE: to +85°C except 500 V. D.C., to +65°C.



TYPE BBR



TYPE BR

Lead Lengths: BBR — 2 3/8" ± 1/8" — #20 AWG

Lead Lengths: BR — 3 3/8" ± 1/8" — #18 AWG

| BBR/BR | Cat. No. | Cap. Mfd. | V.D.C.W. | *Can Size—Inches Diam x Length | List Price | Net Price | Equivalent Cat. No. (And Size if Different) |
|------------|----------|-----------|----------|-----------------------------------|------------|-----------|--|
| BBR 25-3 | | 25 | 3 | 3/8 x 1 1/16 | .85 | \$.51 | |
| BBR 50-3 | | 50 | 3 | 3/8 x 1 1/16 | .95 | .57 | |
| BBR 5-6 | | 5 | 6 | 3/8 x 1 1/16 | .80 | .48 | |
| BBR 25-6 | | 25 | 6 | 3/8 x 1 1/16 | .85 | .51 | |
| BBR 50-6 | | 50 | 6 | 3/8 x 1 1/16 | .95 | .57 | |
| BR 100-6 | | 100 | 6 | 1/2 x 1 1/16 | 1.20 | .72 | |
| BR 250-6 | | 250 | 6 | 1/2 x 1 1/16 | 1.35 | .81 | |
| BR 500-6 | | 500 | 6 | 1/2 x 1 1/16 | 1.55 | .93 | |
| BR 1000-6 | | 1000 | 6 | 3/4 x 1 1/16 | 1.90 | 1.14 | |
| BR 2000-6 | | 2000 | 6 | 3/4 x 2 | 2.30 | 1.38 | |
| BR 3000-6 | | 3000 | 6 | 3/4 x 2 | 2.50 | 1.50 | |
| BR 4000-6 | | 4000 | 6 | 1 x 2 3/16 | 2.75 | 1.63 | |
| BR 100-12 | | 100 | 12 | 1/2 x 1 1/16 | 1.20 | .72 | |
| BR 250-12 | | 250 | 12 | 1/2 x 1 1/16 | 1.45 | .87 | |
| BR 500-12 | | 500 | 12 | 1/2 x 1 1/16 | 1.70 | 1.02 | |
| BR 1000-12 | | 1000 | 12 | 3/4 x 1 1/16 | 2.25 | 1.35 | |
| BR 2000-12 | | 2000 | 12 | 3/4 x 2 | 2.65 | 1.59 | |
| BR 100-15 | | 100 | 15 | 1/2 x 1 1/16 | 1.25 | .75 | |
| BR 250-15 | | 250 | 15 | 1/2 x 1 1/16 | 1.55 | .93 | |
| BR 500-15 | | 500 | 15 | 1/2 x 1 1/16 | 1.75 | 1.05 | |
| BR 1000-15 | | 1000 | 15 | 3/4 x 1 1/16 | 2.30 | 1.38 | |
| BR 2000-15 | | 2000 | 15 | 3/4 x 2 | 3.20 | 1.92 | |
| BR 3000-15 | | 3000 | 15 | 3/4 x 2 3/16 | 3.30 | 1.98 | |
| BR 4000-15 | | 4000 | 15 | 3/4 x 2 3/4 | 3.55 | 2.13 | |
| BR 5000-15 | | 5000 | 15 | 1 x 3 | 4.45 | 2.67 | |
| BBR 10-25 | | 10 | 25 | 3/8 x 1 1/16 | 1.00 | .60 | |
| BBR 20-25 | | 20 | 25 | 3/8 x 1 1/16 | 1.00 | .60 | |
| BBR 25-25 | | 25 | 25 | 3/8 x 1 1/16 | 1.00 | .60 | |
| BR 50-25 | | 50 | 25 | 1/2 x 1 1/16 | 1.10 | .66 | |
| BR 100-25 | | 100 | 25 | 1/2 x 1 1/16 | 1.35 | .81 | |
| BR 250-25 | | 250 | 25 | 1/2 x 1 1/16 | 1.70 | 1.02 | |
| BR 500-25 | | 500 | 25 | 3/4 x 1 1/16 | 2.30 | 1.38 | |
| BR 1000-25 | | 1000 | 25 | 3/4 x 2 | 3.30 | 1.98 | |
| BR 2000-25 | | 2000 | 25 | 3/4 x 2 1/2 | 3.55 | 2.13 | |
| BBR 1-50 | | 1 | 50 | 3/8 x 1 1/16 | .90 | .54 | |
| BBR 2-50 | | 2 | 50 | 3/8 x 1 1/16 | .90 | .54 | |
| BBR 4-50 | | 4 | 50 | 3/8 x 1 1/16 | 1.00 | .60 | |
| BBR 5-50 | | 5 | 50 | 3/8 x 1 1/16 | 1.00 | .60 | |
| BBR 10-50 | | 10 | 50 | 3/8 x 1 1/16 | 1.00 | .60 | |
| BR 25-50 | | 25 | 50 | 1/2 x 1 1/16 | 1.05 | .63 | |
| BR 50-50 | | 50 | 50 | 1/2 x 1 1/16 | 1.20 | .72 | |
| BR 100-50 | | 100 | 50 | 1/2 x 1 1/16 | 1.40 | .84 | |
| BR 150-50 | | 150 | 50 | 3/8 x 1 1/16 | 1.55 | .93 | |
| BR 250-50 | | 250 | 50 | 3/4 x 1 1/16 | 1.75 | 1.05 | |
| BR 500-50 | | 500 | 50 | 3/4 x 1 1/16 | 2.40 | 1.44 | |
| BR 1000-50 | | 1000 | 50 | 1 x 2 11/16 | 2.70 | 1.62 | |
| BBR 10-90 | | 10 | 90 | 1/2 x 1 1/16 | 1.10 | .66 | |
| BBR 16-90 | | 16 | 90 | 1/2 x 1 1/16 | 1.10 | .66 | |
| BBR 4-150 | | 4 | 150 | 3/8 x 1 1/16 | 1.00 | .60 | |
| BBR 8-150 | | 8 | 150 | 1/2 x 1 1/16 | 1.05 | .63 | |
| BBR 10-150 | | 10 | 150 | 1/2 x 1 1/16 | 1.05 | .63 | |
| BBR 12-150 | | 12 | 150 | 1/2 x 1 1/16 | 1.10 | .66 | |
| BBR 16-150 | | 16 | 150 | 1/2 x 1 1/16 | 1.15 | .69 | |
| BBR 20-150 | | 20 | 150 | 1/2 x 1 1/16 | 1.20 | .72 | |
| BR 25-150 | | 25 | 150 | 3/4 x 1 1/16 | 1.25 | .75 | |
| BR 30-150 | | 30 | 150 | 3/4 x 1 1/16 | 1.30 | .78 | |
| BR 40-150 | | 40 | 150 | 3/4 x 1 1/16 | 1.35 | .81 | |
| BR 50-150 | | 50 | 150 | 3/4 x 1 1/16 | 1.40 | .84 | |
| BR 60-150 | | 60 | 150 | 3/8 x 1 1/16 | 1.50 | .90 | |
| BR 80-150 | | 80 | 150 | 3/8 x 1 1/16 | 1.60 | .96 | |
| BR 100-150 | | 100 | 150 | 3/8 x 2 | 1.75 | 1.05 | |
| BR 150-150 | | 150 | 150 | 1 x 2 3/16 | 1.90 | 1.14 | |
| BR 200-150 | | 200 | 150 | 1 x 3 | 2.20 | 1.32 | |
| BR 300-150 | | 300 | 150 | 1 x 3 13/16 | 2.55 | 1.53 | |
| | | | | | | | BBR 601, 3/8 x 1 1/16 |
| | | | | | | | BBR 250-6, 1/2 x 1 1/16 |
| | | | | | | | BR 500-6, 3/8 x 1 1/16 |
| | | | | | | | BR 1000-6, 3/4 x 2 |
| | | | | | | | BR 2000-6, 1 x 2 3/16 |
| | | | | | | | BRN 6025, 3/8 x 1 1/16 |
| | | | | | | | BRN 603, 3/8 x 1 11/16 |
| | | | | | | | BRN 610, 3/8 x 2 |
| | | | | | | | BRN 620, 1 x 2 3/16 |
| | | | | | | | BRN 121, 3/8 x 1 1/16 |
| | | | | | | | BRN 1225, 3/8 x 1 11/16 |
| | | | | | | | BRN 123, 3/8 x 2 |
| | | | | | | | BRN 1210, 3/8 x 2 |
| | | | | | | | BRN 1220, 1 x 3 |
| | | | | | | | BBR 100-15, 1/2 x 1 1/16 |
| | | | | | | | BR 2501, 3/8 x 1 11/16 |
| | | | | | | | BR 5001, 3/8 x 2 |
| | | | | | | | BR 10001, 3/8 x 2 |
| | | | | | | | BR 20001, 1 x 3 |
| | | | | | | | BRN 151, 3/8 x 1 1/16 |
| | | | | | | | BRN 1525, 3/8 x 1 11/16 |
| | | | | | | | BRN 153, 3/8 x 2 |
| | | | | | | | BRN 1510, 3/8 x 2 |
| | | | | | | | BRN 1520, 1 x 3 |
| | | | | | | | BBR 50-25, 1/2 x 1 1/16 |
| | | | | | | | BBR 100-25, 1/2 x 1 1/16 |
| | | | | | | | BR 2502, 3/8 x 1 11/16 |
| | | | | | | | BR 5002, 3/8 x 2 |
| | | | | | | | BRN 2510, 1 x 3 |
| | | | | | | | BRN 251, 3/8 x 1 1/16 |
| | | | | | | | BRN 2525, 3/8 x 1 11/16 |
| | | | | | | | BRN 255, 3/8 x 2 |
| | | | | | | | BBR 25-50 |
| | | | | | | | BR 505, 3/8 x 1 1/16 |
| | | | | | | | BR 1005, 3/8 x 1 11/16 |
| | | | | | | | BR 1505, 3/8 x 1 11/16 |
| | | | | | | | BR 2505, 3/8 x 1 11/16 |
| | | | | | | | BR 5005, 1 x 3 |
| | | | | | | | BRN 501, 3/8 x 1 1/16 |
| | | | | | | | BRN 5015, 3/8 x 1 11/16 |
| | | | | | | | BRN 5025, 3/8 x 1 11/16 |
| | | | | | | | BR 5050, 1 x 3 |
| | | | | | | | BR 2515 |
| | | | | | | | BR 3015 |
| | | | | | | | BR 4015 |
| | | | | | | | BR 5015 |
| | | | | | | | BR 6015 |
| | | | | | | | BR 8015 |
| | | | | | | | BR 10015 |
| | | | | | | | BR 15015 |
| | | | | | | | BR 20015 |
| | | | | | | | BR 30015 |

*For Overall BBR Size add 1/16" to Diam. and 3/32" to Length. For Overall BR Size add 1/16" to Diam. and 3/16" to Length.

CORNELL-DUBILIER ELECTRONICS

CLASS

201.01 "BLUE BEAVER" Tubular Electrolytics



| BBR/BR Cat. No. | Cap. Mfd. | V.D.C.W. | *Can Size—Inches Diam x Length | List Price | Net Price | Equivalent Cat. No. (And Size if Different) |
|-----------------|-----------|----------|--------------------------------|------------|--------------|---|
| BBR 4-250 | 4 | 250 | 1/2 x 1 1/16 | \$1.00 | \$.60 | |
| BBR 8-250 | 8 | 250 | 1/2 x 1 1/16 | 1.15 | .69 | |
| BBR 12-250 | 12 | 250 | 1/2 x 1 1/16 | 1.25 | .75 | |
| BR 16-250 | 16 | 250 | 3/4 x 1 1/16 | 1.30 | .78 | BR 1625 |
| BR 20-250 | 20 | 250 | 3/4 x 1 1/16 | 1.35 | .81 | BR 2025 |
| BR 30-250 | 30 | 250 | 3/4 x 1 1/16 | 1.45 | .87 | BR 3025 |
| BR 40-250 | 40 | 250 | 3/4 x 2 | 1.55 | .93 | BR 4025 |
| BR 50-250 | 50 | 250 | 7/8 x 1 1/16 | 1.70 | 1.02 | BR 5025 |
| BR 60-250 | 60 | 250 | 1 x 1 1/16 | 1.80 | 1.08 | BR 6025 |
| BR 200-250 | 200 | 250 | 1 3/8 x 3 1/4 | 3.50 | 2.10 | BR 20025 |
| BR 4-350 | 4 | 350 | 5/8 x 1 1/16 | 1.05 | .63 | BR 435 |
| BR 8-350 | 8 | 350 | 5/8 x 1 1/16 | 1.20 | .72 | BR 835 |
| BR 12-350 | 12 | 350 | 3/4 x 1 1/16 | 1.30 | .78 | BR 1235 |
| BR 16-350 | 16 | 350 | 3/4 x 1 1/16 | 1.40 | .84 | BR 1635 |
| BR 20-350 | 20 | 350 | 3/4 x 1 1/16 | 1.45 | .87 | BR 2035 |
| BR 30-350 | 30 | 350 | 3/4 x 2 | 1.65 | .99 | BR 3035 |
| BR 40-350 | 40 | 350 | 7/8 x 2 | 1.75 | 1.05 | BR 4035 |
| BR 50-350 | 50 | 350 | 1 x 2 | 1.85 | 1.11 | BR 5035 |
| BR 60-350 | 60 | 350 | 1 x 2 | 1.95 | 1.17 | BR 6035 |
| BR 80-350 | 80 | 350 | 1 x 3 | 2.10 | 1.26 | BR 8035 |
| BR 100-350 | 100 | 350 | 1 x 3 | 2.30 | 1.38 | BR 10035 |
| BR 150-350 | 150 | 350 | 1 3/8 x 3 | 3.95 | 2.37 | BR 15035 |
| BR 200-350 | 200 | 350 | 1 3/8 x 4 1/4 | 4.50 | 2.70 | BR 20035 |
| BR 1-450 | 1 | 450 | 5/8 x 1 1/16 | 1.10 | .66 | BR 145 |
| BR 2-450 | 2 | 450 | 5/8 x 1 1/16 | 1.10 | .66 | BR 245 |
| BR 4-450 | 4 | 450 | 5/8 x 1 1/16 | 1.15 | .69 | BR 445 |
| BR 8-450 | 8 | 450 | 3/4 x 1 1/16 | 1.25 | .75 | BR 845 |
| BR 10-450 | 10 | 450 | 3/4 x 1 1/16 | 1.30 | .78 | BR 1045 |
| BR 12-450 | 12 | 450 | 3/4 x 1 1/16 | 1.35 | .81 | BR 1245 |
| BR 16-450 | 16 | 450 | 3/4 x 1 1/16 | 1.40 | .84 | BR 1645 |
| BR 20-450 | 20 | 450 | 7/8 x 1 1/16 | 1.55 | .93 | BR 2045 |
| BR 30-450 | 30 | 450 | 1 x 2 | 1.70 | 1.02 | BR 3045 |
| BR 40-450 | 40 | 450 | 1 x 2 3/16 | 1.80 | 1.08 | BR 4045 |
| BR 50-450 | 50 | 450 | 1 x 2 1/16 | 2.10 | 1.26 | BR 5045 |
| BR 60-450 | 60 | 450 | 1 x 3 | 2.35 | 1.41 | BR 6045 |
| BR 80-450 | 80 | 450 | 1 x 3 9/16 | 2.80 | 1.68 | BR 8045 |
| BR 100-450 | 100 | 450 | 1 x 3 13/16 | 3.20 | 1.92 | BR 10045 |
| BR 150-450 | 150 | 450 | 1 3/8 x 3 3/4 | 4.75 | 2.85 | BR 15045 |
| BR 200-450 | 200 | 450 | 1 3/8 x 4 1/4 | 5.00 | 3.00 | BR 20045 |
| BR 4-500 | 4 | 500 | 5/8 x 1 1/16 | 1.20 | .72 | BR 450 |
| BR 8-500 | 8 | 500 | 3/4 x 1 1/16 | 1.30 | .78 | BR 850 |
| BR 12-500 | 12 | 500 | 3/4 x 1 1/16 | 1.40 | .84 | BR 1250 |
| BR 16-500 | 16 | 500 | 7/8 x 1 1/16 | 1.50 | .90 | BR 1650 |
| BR 20-500 | 20 | 500 | 7/8 x 2 | 1.60 | .96 | BR 2050 |
| BR 30-500 | 30 | 500 | 1 x 2 | 1.75 | 1.05 | BR 3050 |

*For Overall BBR Size add 1/16" to Diam. and 3/32" to Length. For Overall BR Size add 1/16" to Diam. and 3/16" to Length.

| BR Cat. No. | Cap. Mfd. | V.D.C.W. | Overall Size Diam. x Length | List Price | Net Price | Equivalent to Cat. No. |
|-------------|-----------|----------|-----------------------------|------------|---------------|------------------------|
| BR 4-600 | 4 | 600 | 1 1/16 x 2 1/16 | \$1.95 | \$1.17 | BRHV 604 |
| BR 8-600 | 8 | 600 | 1 1/16 x 3 1/16 | 2.10 | 1.26 | BRHV 608 |
| BR 10-600 | 10 | 600 | 1 3/16 x 3 1/16 | 2.20 | 1.32 | BRHV 610 |
| BR 12-600 | 12 | 600 | 1 1/2 x 3 1/16 | 2.40 | 1.44 | BRHV 612 |
| BR 16-600 | 16 | 600 | 1 1/16 x 3 1/16 | 2.55 | 1.53 | BRHV 616 |
| BR 20-600 | 20 | 600 | 1 1/16 x 3 1/16 | 2.70 | 1.62 | BRHV 620 |
| BR 8-700 | 8 | 700 | 1 5/16 x 3 3/16 | 2.20 | 1.32 | BRHV 708 |
| BR 10-700 | 10 | 700 | 1 1/16 x 3 3/16 | 2.35 | 1.41 | BRHV 710 |
| BR 12-700 | 12 | 700 | 1 1/16 x 3 1/16 | 2.45 | 1.47 | BRHV 712 |
| BR 16-700 | 16 | 700 | 1 1/16 x 4 3/16 | 2.65 | 1.59 | BRHV 716 |

WIDE-RANGE ELECTROLYTIC CAPACITOR

TYPE ESS-7515



A compact, versatile unit that provides an EXACT electrical replacement for 8 original standard 150 VDCW Capacitors, used principally in printed circuit home radio receivers:

- | | |
|------------|------------|
| 50-30 Mfd. | 80-40 Mfd. |
| 70-30 Mfd. | 50-50 Mfd. |
| 75-30 Mfd. | 70-50 Mfd. |
| 60-40 Mfd. | 80-50 Mfd. |

In addition, the versatility of this unit makes it an ideal replacement for many combinations of capacitance within its ratings, both single and dual capacitance units.

A modest stock of ESS-7515's provides an ever-ready answer for a multitude of service replacements.

| Cat. No. | Diam. x Length | List Price | Net Price |
|----------|-------------------|------------|---------------|
| ESS-7515 | 1 in. x 2 1/2 in. | \$2.00 | \$1.20 |

CORNELL-DUBILIER ELECTRONICS

Multi-Section Tubular Electrolytics

CLASS
201.01

BBRD

A series of compact, tubular METAL-CASED, CARDBOARD SLEEVED electrolytics—specially sealed against heat and humidity.

Featuring—

- ◆ Direct-to-terminal internal lead construction reduces possibility of shorts. (Pure aluminum wires crimped securely together with outer leads within aluminum stud terminals.)
- ◆ New high-insulation vinylite covered leads — generous 7 inches long.
- ◆ Sections sealed in aluminum tube for protection against moisture getting in, or electrolyte drying out.
- ◆ Wax impregnated cardboard outer insulation sleeve.
- ◆ Rubber diaphragm-type vent insures ideal vent action under all conditions.
- ◆ IDEAL FOR OPERATION AT TEMPERATURES UP TO 85° C.

BBRD — Dual Common Negative

| BBRD Cat. No. | Cap. Mfd. | D.C. W. Volts | Can† Size—Inches Dia. x Lgth. | List Price | Net Price |
|---------------|-----------|---------------|-------------------------------|------------|-----------|
| BBRD 2202 | 20-20 | 25 | 3/4 x 1 1/16 | \$1.40 | \$.84 |
| BBRD 115 | 10-10 | 50 | 3/4 x 1 1/16 | 1.40 | .84 |
| BBRD 2115 | 20-10 | 150 | 3/4 x 1 1/16 | 1.55 | .93 |
| BBRD 2215 | 20-20 | 150 | 3/4 x 1 1/16 | 1.65 | .99 |
| BBRD 3215 | 30-20 | 150 | 7/8 x 1 1/16 | 1.70 | 1.02 |
| BBRD 3315 | 30-30 | 150 | 7/8 x 1 1/16 | 1.80 | 1.08 |
| BBRD 4215 | 40-20 | 150 | 7/8 x 1 1/16 | 1.75 | 1.05 |
| BBRD 4315 | 40-30 | 150 | 7/8 x 2 | 1.80 | 1.08 |
| BBRD 4415 | 40-40 | 150 | 7/8 x 2 | 1.85 | 1.11 |
| BBRD 5315 | 50-30 | 150 | 7/8 x 2 | 1.95 | 1.17 |
| BBRD 5515 | 50-50 | 150 | 1 x 2 | 2.10 | 1.26 |
| BBRD 8415 | 80-40 | 150 | 1 x 2 3/16 | 2.25 | 1.35 |
| BBRD 8515 | 80-50 | 150 | 1 x 2 1/2 | 2.30 | 1.38 |
| *BBRD 0183.7 | 100-50 | 150 | 1 x 3 | 3.00 | 1.80 |
| *BBRD 101015 | 100-100 | 150 | 1 x 3 | 3.20 | 1.92 |
| *BBRD 0196 | 200-5 | 200 | 1 x 4 3/16 | 3.50 | 2.10 |
| BBRD 8025 | 8-8 | 250 | 3/4 x 1 1/16 | 1.60 | .96 |
| BBRD 16825 | 16-8 | 250 | 3/4 x 2 | 1.70 | 1.02 |
| BBRD 16D25 | 16-16 | 250 | 7/8 x 2 | 1.80 | 1.08 |
| BBRD 2225 | 20-20 | 250 | 1 x 1 1/16 | 1.85 | 1.11 |
| BBRD 3325 | 30-30 | 250 | 1 x 2 3/16 | 2.25 | 1.35 |
| *BBRD 7V225 | 75-20 | 250 | 1 x 3 | 2.60 | 1.56 |
| *BBRD 0242 | 80-10 | 250 | 1 x 3 | 2.55 | 1.53 |
| *BBRD 0246 | 120-80 | 250 | 1 3/8 x 3 1/16 | 4.00 | 2.40 |
| *BBRD 0286 | 150-100 | 300 | 1 3/8 x 4 3/16 | 5.25 | 3.15 |
| *BBRD 0334 | 140-5 | 350 | 1 1/8 x 4 3/16 | 4.15 | 2.49 |
| BBRD 8D45 | 8-8 | 450 | 7/8 x 1 1/16 | 1.70 | 1.02 |
| BBRD 1145 | 10-10 | 450 | 7/8 x 2 | 1.95 | 1.17 |
| BBRD 16845 | 16-8 | 450 | 1 x 2 3/16 | 2.00 | 1.20 |
| BBRD 16D45 | 16-16 | 450 | 1 x 2 1/2 | 2.25 | 1.35 |
| *BBRD 2245 | 20-20 | 450 | 1 x 3 | 2.50 | 1.50 |
| *BBRD 3345 | 30-30 | 450 | 1 1/8 x 3 9/16 | 3.00 | 1.80 |
| *BBRD 4445 | 40-40 | 450 | 1 x 4 3/16 | 3.40 | 2.04 |
| *BBRD 0576 | 60, 125 | 200, 50 | 1 x 3 | 3.25 | 1.95 |
| BBRD 0646 | 20, 100 | 450, 25 | 1 x 2 1/2 | 2.20 | 1.32 |
| *BBRD 0652 | 40, 50 | 450, 50 | 1 x 3 9/16 | 3.00 | 1.80 |
| *BBRD 0722 | 80, 100 | 450, 50 | 1 3/8 x 3 9/16 | 3.75 | 2.25 |
| *BBRD 0707 | 30, 50 | 450, 200 | 1 1/8 x 2 1/2 | 2.85 | 1.71 |

†For OVERALL size add 1/16" to Diam. and 3/16" to Length.

All above Packed—5 Units per Carton, except those marked (*) which are individual Carton Packed.

BBRT — Triple-Common Negative

| BBRT Cat. No. | Cap. Mfd. | D.C. W. Volts | Can† Size—Inches Dia. x Lgth. | List Price | Net Price |
|---------------|-------------|---------------|-------------------------------|------------|-----------|
| BBRT 22215 | 20-20-20 | 150 | 7/8 x 1 1/16 | \$2.20 | \$1.32 |
| BBRT 32V215 | 30-25-20 | 150 | 7/8 x 2 | 2.25 | 1.35 |
| BBRT 33315 | 30-30-30 | 150 | 1 x 2 | 2.35 | 1.41 |
| BBRT 42215 | 40-20-20 | 150 | 1 x 1 1/16 | 2.25 | 1.35 |
| BBRT 43215 | 40-30-20 | 150 | 1 x 2 | 2.35 | 1.41 |
| BBRT 44215 | 40-40-20 | 150 | 1 x 2 | 2.35 | 1.41 |
| BBRT 44415 | 40-40-40 | 150 | 1 x 2 3/16 | 2.45 | 1.47 |
| BBRT 53215 | 50-30-20 | 150 | 1 x 2 | 2.45 | 1.47 |
| *BBRT 84215 | 80-40-20 | 150 | 1 x 3 | 2.75 | 1.65 |
| *BBRT 0126.5 | 150-150-150 | 150 | 1 3/8 x 4 3/16 | 4.75 | 2.85 |
| BBRT 0129 | 250-200-10 | 150 | 1 3/8 x 4 3/16 | 5.65 | 3.39 |
| *BBRT 7V4125 | 75-40-10 | 250 | 1 1/8 x 3 | 3.45 | 2.07 |
| *BBRT 0185 | 40-40-40 | 300 | 1 1/8 x 3 | 4.60 | 2.76 |
| *BBRT 0196 | 120-40-10 | 300 | 1 3/8 x 3 1/16 | 4.85 | 2.91 |
| *BBRT 0235 | 60-60-5 | 350 | 1 3/8 x 3 1/16 | 4.25 | 2.55 |
| *BBRT 11145 | 10-10-10 | 450 | 1 x 2 1/2 | 2.45 | 1.47 |
| *BBRT 16T45 | 16-16-16 | 450 | 1 1/8 x 3 | 3.10 | 1.86 |
| BBRT 4415X25 | 40-40, 250 | 150, 10 | 1 x 2 3/16 | 2.60 | 1.56 |
| BBRT 5315X20 | 50-30, 200 | 150, 10 | 1 x 2 3/16 | 2.55 | 1.53 |
| BBRT 5315C | 50-30, 20 | 150, 25 | 1 x 1 1/16 | 2.35 | 1.41 |
| BBRT 5515C | 50-50, 20 | 150, 25 | 1 x 2 3/16 | 2.50 | 1.50 |
| BBRT 8415C | 80-40, 20 | 150, 25 | 1 x 2 1/2 | 2.65 | 1.59 |
| BBRT 3215C10 | 30-20, 100 | 150, 25 | 1 x 2 | 2.35 | 1.41 |
| BBRT 2215C | 20-20, 20 | 150, 25 | 7/8 x 1 1/16 | 2.05 | 1.23 |
| BBRT 3315C | 30-30, 20 | 150, 25 | 7/8 x 2 | 2.20 | 1.32 |
| BBRT 4215C | 40-20, 20 | 150, 25 | 1 x 1 1/16 | 2.15 | 1.29 |
| BBRT 4315C | 40-30, 20 | 150, 25 | 1 x 1 1/16 | 2.20 | 1.32 |
| BBRT 4415C | 40-40, 20 | 150, 25 | 1 x 1 1/16 | 2.25 | 1.35 |
| BBRT 5315C10 | 50-30, 100 | 150, 25 | 1 x 2 3/16 | 2.45 | 1.47 |
| *BBRT 5315C25 | 50-30, 250 | 150, 25 | 1 x 3 | 3.10 | 1.86 |
| BBRT 8215C10 | 80-20, 100 | 150, 25 | 1 x 2 1/2 | 2.75 | 1.65 |
| BBRT 2225C | 20-20, 20 | 250, 25 | 1 x 2 | 2.25 | 1.35 |
| BBRT 4225C | 40-20, 20 | 250, 25 | 1 x 2 3/16 | 2.55 | 1.53 |
| BBRT 4425C | 40-40, 20 | 250, 25 | 1 x 2 1/16 | 2.90 | 1.74 |
| *BBRT 0733 | 80-10, 100 | 300, 50 | 1 3/8 x 3 1/16 | 4.05 | 2.43 |
| *BBRT 0878 | 140-5, 200 | 350, 200 | 1 1/2 x 4 3/16 | 6.70 | 4.02 |
| *BBRT 2245C | 20-20, 20 | 450, 25 | 1 x 3 | 2.90 | 1.74 |
| BBRT 0925 | 10-10, 100 | 450, 50 | 1 x 3 | 3.30 | 1.90 |
| *BBRT 1238 | 5, 80-40 | 450, 400 | 1 3/8 x 3 9/16 | 4.55 | 2.73 |
| *BBRT 1411 | 30, 50, 100 | 450, 150, 25 | 1 1/8 x 3 | 3.70 | 2.22 |

BBRQ — Quadruple-Common Negative

| BBRQ Cat. No. | Cap. Mfd. | D.C. W. Volts | Can† Size—Inches Dia. x Lgth. | List Price | Net Price |
|---------------|------------------|-------------------|-------------------------------|------------|-----------|
| *BBRQ 111145 | 10-10-10-10 | 450 | 1 x 3 | \$3.20 | \$1.92 |
| *BBRQ 222245 | 20-20-20-20 | 450 | 1 1/8 x 4 3/16 | 4.50 | 2.70 |
| *BBRQ 0125 | 20-20-20-10 | 450 | 1 3/8 x 3 1/16 | 4.25 | 2.55 |
| *BBRQ 0170.5 | 40-20-20-10 | 450 | 1 3/8 x 3 9/16 | 4.70 | 2.82 |
| *BBRQ 0174 | 40-40-20-20 | 450 | 1 3/8 x 4 3/16 | 5.45 | 3.27 |
| BBRQ 33215C | 30-30-20, 20 | 150, 25 | 1 x 2 | 2.90 | 1.74 |
| BBRQ 42215C | 40-20-20, 20 | 150, 25 | 1 x 2 | 2.85 | 1.71 |
| BBRQ 44315C | 40-40-30, 20 | 150, 25 | 1 x 2 1/2 | 3.00 | 1.80 |
| BBRQ 53215C | 50-30-20, 20 | 150, 25 | 1 x 2 1/2 | 3.05 | 1.83 |
| *BBRQ 55515C | 50-50-50, 20 | 150, 25 | 1 x 3 | 3.45 | 2.07 |
| *BBRQ 0789.4 | 140-5, 200-30 | 300, 150 | 1 1/2 x 4 3/16 | 5.15 | 3.09 |
| *BBRQ 0385 | 120-40-40, 10 | 300, 250 | 1 3/8 x 3 9/16 | 6.20 | 3.72 |
| *BBRQ 22245C | 20-20-20, 20 | 450, 25 | 1 1/8 x 3 9/16 | 4.05 | 2.43 |
| BBRQ 0500 | 10-10-10, 150 | 450, 50 | 1 1/8 x 3 | 4.60 | 2.76 |
| *BBRQ 0695.3 | 10, 20-20-10 | 450, 350 | 1 1/8 x 3 | 3.50 | 2.10 |
| *BBRQ 0789.5 | 80-60, 40, 20 | 350, 300, 150 | 1 3/8 x 3 9/16 | 5.90 | 3.54 |
| *BBRQ 0925 | 140, 5, 200-30 | 350, 300, 200 | 1 1/2 x 4 3/16 | 7.65 | 4.59 |
| *BBRQ 0805 | 80-10, 40, 100 | 400, 300, 50 | 1 3/8 x 3 9/16 | 5.45 | 3.27 |
| *BBRQ 0926.5 | 10, 80, 40-40 | 450, 300, 250 | 1 3/8 x 3 9/16 | 4.95 | 2.97 |
| *BBRQ 0954 | 10, 80, 40, 100 | 450, 300, 250, 50 | 1 3/8 x 3 9/16 | 4.80 | 2.88 |
| BBRQ 0954.5 | 20, 120, 40, 100 | 450, 300, 250, 50 | 1 3/8 x 4 3/16 | 6.15 | 3.69 |

CORNELL-DUBILIER ELECTRONICS

CLASS
201.10

Phenolic-Cased Parallel-Leads Electrolytics



ECPB

Type ECPB is an aluminum foil electrolytic capacitor embedded and sealed into a premolded phenolic case with single-ended, parallel lead termination. A special cast-resin sealer is employed which forms a moisture-tight seal and anchor for the pull-proof leads. This construction is especially well suited to printed board assemblies and because of its ultra-small size, is ideal for compact transistor circuitry.

Scrupulous selection of high-purity materials and precise fabrication assure a unit of the highest dependability.

TEMPERATURE RANGE: -20°C. to +65°C.

TOLERANCE: -10%, +150%

SINGLES

| ECPB Cat. No. | Cap. Mfd. | Size—Inches† Diam. x Length | List Price | Net Price |
|---------------|-----------|-----------------------------|------------|-----------|
| 3 WVDC | | | | |
| ECPB 15 | 50 | 3/8 x 3/8 | \$1.55 | \$.93 |
| ECPB 16 | 75 | 3/8 x 3/8 | 1.70 | 1.02 |
| ECPB 17 | 100 | 3/8 x 7/8 | 1.75 | 1.05 |
| ECPB 18 | 125 | 7/16 x 7/8 | 1.75 | 1.05 |
| ECPB 19 | 150 | 7/16 x 7/8 | 1.75 | 1.05 |
| ECPB 20 | 175 | 1/2 x 7/8 | 1.80 | 1.08 |
| ECPB 21 | 200 | 1/2 x 7/8 | 1.80 | 1.08 |
| ECPB 22 | 250 | 1/2 x 1 | 1.95 | 1.17 |
| ECPB 23 | 300 | 1/2 x 1 1/4 | 2.00 | 1.20 |
| ECPB 24 | 350 | 1/2 x 1 1/4 | 2.05 | 1.23 |
| 6 WVDC | | | | |
| ECPB 113 | 35 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 114 | 40 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 115 | 50 | 3/8 x 3/8 | 1.55 | .93 |
| ECPB 116 | 75 | 3/8 x 3/8 | 1.70 | 1.02 |
| ECPB 117 | 100 | 7/16 x 3/8 | 1.75 | 1.05 |
| ECPB 118 | 125 | 1/2 x 7/8 | 1.80 | 1.08 |
| ECPB 119 | 150 | 1/2 x 7/8 | 1.90 | 1.14 |
| ECPB 120 | 175 | 1/2 x 1 | 1.90 | 1.14 |
| ECPB 121 | 200 | 1/2 x 1 | 1.95 | 1.17 |
| ECPB 122 | 250 | 1/2 x 1 1/4 | 2.00 | 1.20 |
| ECPB 123 | 300 | 1/2 x 1 1/4 | 2.10 | 1.26 |

SINGLES

| ECPB Cat. No. | Cap. Mfd. | Size—Inches† Diam. x Length | List Price | Net Price |
|----------------|-----------|-----------------------------|------------|-----------|
| 15 WVDC | | | | |
| ECPB 401 | 1 | 3/8 x 3/8 | \$1.45 | \$.87 |
| ECPB 402 | 2 | 3/8 x 3/8 | 1.45 | .87 |
| ECPB 403 | 3 | 3/8 x 3/8 | 1.45 | .87 |
| ECPB 404 | 4 | 3/8 x 3/8 | 1.45 | .87 |
| ECPB 405 | 5 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 406 | 6 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 407 | 8 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 408 | 10 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 409 | 15 | 3/8 x 3/8 | 1.55 | .93 |
| ECPB 410 | 20 | 3/8 x 3/8 | 1.55 | .93 |
| ECPB 411 | 25 | 3/8 x 3/8 | 1.55 | .93 |
| ECPB 412 | 30 | 3/8 x 3/8 | 1.55 | .93 |
| ECPB 413 | 35 | 3/8 x 3/8 | 1.55 | .93 |
| ECPB 414 | 40 | 3/8 x 3/8 | 1.60 | .96 |
| ECPB 415 | 50 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 416 | 75 | 7/16 x 7/8 | 1.80 | 1.08 |
| ECPB 417 | 100 | 1/2 x 7/8 | 1.95 | 1.17 |
| ECPB 418 | 125 | 1/2 x 1 | 2.00 | 1.20 |
| ECPB 419 | 150 | 1/2 x 1 1/4 | 2.05 | 1.23 |
| ECPB 420 | 175 | 1/2 x 1 1/4 | 2.10 | 1.26 |
| ECPB 421 | 200 | 1/2 x 1 1/4 | 2.20 | 1.32 |
| 25 WVDC | | | | |
| ECPB 601 | 1 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 602 | 2 | 3/8 x 3/8 | 1.50 | .90 |
| ECPB 603 | 3 | 3/8 x 3/8 | 1.55 | .93 |
| ECPB 604 | 4 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 605 | 5 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 606 | 6 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 607 | 8 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 608 | 10 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 609 | 15 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 610 | 20 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 611 | 25 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 612 | 30 | 7/16 x 3/8 | 1.70 | 1.02 |
| ECPB 613 | 35 | 7/16 x 3/8 | 1.75 | 1.05 |
| ECPB 614 | 40 | 7/16 x 3/8 | 1.75 | 1.05 |
| ECPB 615 | 50 | 1/2 x 3/8 | 1.75 | 1.05 |
| ECPB 616 | 75 | 1/2 x 1 | 1.95 | 1.17 |
| ECPB 617 | 100 | 1/2 x 1 1/4 | 2.00 | 1.20 |
| 50 WVDC | | | | |
| ECPB 806 | 6 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 807 | 8 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 808 | 10 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 809 | 15 | 3/8 x 3/8 | 1.65 | .99 |
| ECPB 810 | 20 | 7/16 x 3/8 | 1.65 | .99 |
| ECPB 811 | 25 | 7/16 x 7/8 | 1.65 | .99 |
| ECPB 812 | 30 | 7/16 x 7/8 | 1.70 | 1.02 |
| ECPB 813 | 35 | 1/2 x 7/8 | 1.75 | 1.05 |
| ECPB 814 | 40 | 1/2 x 7/8 | 1.75 | 1.05 |
| ECPB 815 | 50 | 1/2 x 1 | 1.75 | 1.05 |
| ECPB 816 | 75 | 1/2 x 1 1/4 | 1.95 | 1.17 |
| 75 WVDC | | | | |
| ECPB 901 | 1 | 3/8 x 3/8 | 1.25 | .75 |
| ECPB 902 | 2 | 3/8 x 3/8 | 1.25 | .75 |
| ECPB 903 | 3 | 3/8 x 3/8 | 1.25 | .75 |
| ECPB 904 | 4 | 3/8 x 3/8 | 1.25 | .75 |
| ECPB 905 | 5 | 3/8 x 7/8 | 1.30 | .78 |
| ECPB 906 | 6 | 7/16 x 3/8 | 1.30 | .78 |
| ECPB 907 | 8 | 7/16 x 7/8 | 1.30 | .78 |
| ECPB 908 | 10 | 7/16 x 1 | 1.35 | .81 |
| ECPB 910 | 15 | 1/2 x 1 | 1.35 | .81 |
| ECPB 911 | 20 | 1/2 x 1 1/4 | 1.35 | .81 |

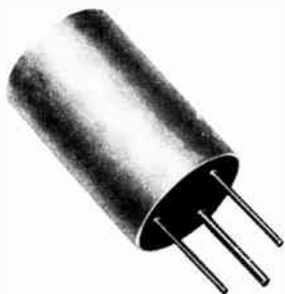
†LEAD SPACING = Nominal .168" for 3/8" or 7/16" Dia. cases; .283" for 1/2" Dia. cases.
LEAD LENGTH = 3/4" Min. — #22 AWG tinned copper.

CORNELL-DUBILIER ELECTRONICS

CLASS

Aluminum-Cased Parallel-Leads Electrolytics

201.10



ECPAN-ECPAP

Types ECPAN and ECPAP are DUAL SECTION versions of the type ECPB. The dual types are housed in a tubular aluminum case as compared with the phenolic cased ECPB. Otherwise they are electrically and physically similar to type ECPB.

Type ECPAN are COMMON NEGATIVE-Dual Anode capacitors.

Type ECPAP are COMMON POSITIVE-Dual Cathode capacitors.

*NOMINAL LEAD SPACING: Dimension "A"

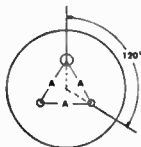
For 1/2" Diameter case = 7/32"

For 9/16" Diameter case = 1/4"

For 5/8" Diameter case = 9/32"

For 3/4" Diameter case = 1 1/32"

For 1" Diameter case = 7/16"



*NOMINAL LEAD LENGTH: 1/2"

DUALS

COMMON NEGATIVE — DUAL ANODE

| ECPAN | Cat. No. | Cap. Mfd. | Size—Inches* Diam. x Length | List Price | Net Price |
|----------------|----------|-----------|--------------------------------|------------|---------------|
| 10 WVDC | | | | | |
| ECPAN 1 | | 25-25 | 1/2 x 3/4 | \$2.05 | \$1.23 |
| ECPAN 2 | | 50-25 | 1/2 x 3/4 | 2.15 | 1.29 |
| ECPAN 3 | | 100-25 | 1/2 x 7/8 | 2.30 | 1.38 |
| ECPAN 4 | | 30-30 | 1/2 x 3/4 | 2.40 | 1.44 |
| ECPAN 5 | | 50-50 | 1/2 x 3/4 | 2.15 | 1.29 |
| ECPAN 6 | | 100-50 | 9/16 x 7/8 | 2.50 | 1.50 |
| ECPAN 7 | | 100-100 | 9/16 x 7/8 | 3.00 | 1.80 |
| 15 WVDC | | | | | |
| ECPAN 8 | | 25-25 | 1/2 x 3/4 | 2.60 | 1.56 |
| ECPAN 9 | | 50-25 | 1/2 x 3/4 | 2.85 | 1.71 |
| ECPAN 10 | | 100-25 | 9/16 x 7/8 | 3.05 | 1.83 |
| ECPAN 11 | | 30-30 | 1/2 x 3/4 | 2.70 | 1.62 |
| ECPAN 12 | | 50-50 | 1/2 x 3/4 | 2.95 | 1.77 |
| ECPAN 13 | | 100-50 | 9/16 x 7/8 | 3.20 | 1.92 |
| ECPAN 14 | | 100-100 | 9/16 x 1 | 3.30 | 1.98 |

DUALS

COMMON NEGATIVE — DUAL ANODE

| ECPAN | Cat. No. | Cap. Mfd. | Size—Inches* Diam. x Length | List Price | Net Price |
|----------------|----------|-----------|--------------------------------|------------|---------------|
| 25 WVDC | | | | | |
| ECPAN 15 | | 25-25 | 1/2 x 7/8 | \$3.40 | \$2.00 |
| ECPAN 16 | | 50-25 | 9/16 x 7/8 | 3.50 | 2.10 |
| ECPAN 17 | | 100-25 | 3/8 x 1 | 3.65 | 2.20 |
| ECPAN 18 | | 30-30 | 9/16 x 7/8 | 3.45 | 2.07 |
| ECPAN 19 | | 50-50 | 3/8 x 1 | 3.55 | 2.13 |
| ECPAN 20 | | 100-50 | 3/8 x 1 1/4 | 3.75 | 2.25 |
| ECPAN 21 | | 100-100 | 3/8 x 1 1/2 | 4.20 | 2.52 |
| ECPAN 22 | | 250-250 | 1 x 1 1/2 | 5.40 | 3.24 |
| 50 WVDC | | | | | |
| ECPAN 23 | | 25-25 | 9/16 x 7/8 | 3.70 | 2.22 |
| ECPAN 24 | | 50-25 | 3/8 x 1 | 3.95 | 2.37 |
| ECPAN 25 | | 50-50 | 3/8 x 1 | 4.20 | 2.52 |

ECPAP COMMON POSITIVE — DUAL CATHODE

| ECPAP | Cat. No. | Cap. Mfd. | Size—Inches* Diam. x Length | List Price | Net Price |
|----------------|----------|-----------|--------------------------------|------------|---------------|
| 10 WVDC | | | | | |
| ECPAP 1 | | 25-25 | 1/2 x 3/4 | \$2.45 | \$1.77 |
| ECPAP 2 | | 50-25 | 1/2 x 3/4 | 2.70 | 1.62 |
| ECPAP 3 | | 100-25 | 1/2 x 7/8 | 2.85 | 1.71 |
| ECPAP 4 | | 30-30 | 1/2 x 3/4 | 2.60 | 1.56 |
| ECPAP 5 | | 50-50 | 1/2 x 3/4 | 2.70 | 1.62 |
| ECPAP 6 | | 100-50 | 9/16 x 7/8 | 3.00 | 1.80 |
| ECPAP 7 | | 100-100 | 9/16 x 7/8 | 3.60 | 2.16 |
| 15 WVDC | | | | | |
| ECPAP 8 | | 25-25 | 1/2 x 3/4 | 2.55 | 1.53 |
| ECPAP 9 | | 50-25 | 1/2 x 3/4 | 2.55 | 1.53 |
| ECPAP 10 | | 100-25 | 9/16 x 7/8 | 2.70 | 1.62 |
| ECPAP 11 | | 30-30 | 1/2 x 3/4 | 2.95 | 1.77 |
| ECPAP 12 | | 50-50 | 1/2 x 3/4 | 3.20 | 1.92 |
| ECPAP 13 | | 100-50 | 9/16 x 7/8 | 3.45 | 2.07 |
| ECPAP 14 | | 100-100 | 3/8 x 1 | 3.65 | 2.19 |
| 25 WVDC | | | | | |
| ECPAP 15 | | 25-25 | 1/2 x 7/8 | 3.65 | 2.19 |
| ECPAP 16 | | 50-25 | 9/16 x 7/8 | 3.85 | 2.31 |
| ECPAP 17 | | 100-25 | 3/8 x 1 | 4.00 | 2.40 |
| ECPAP 18 | | 30-30 | 9/16 x 7/8 | 3.80 | 2.28 |
| ECPAP 19 | | 50-50 | 3/8 x 1 | 3.90 | 2.34 |
| ECPAP 20 | | 100-50 | 3/8 x 1 1/4 | 4.15 | 2.49 |
| ECPAP 21 | | 100-100 | 3/8 x 1 1/2 | 4.55 | 2.73 |
| ECPAP 22 | | 250-250 | 1 x 1 1/2 | 5.95 | 3.57 |
| 50 WVDC | | | | | |
| ECPAP 23 | | 25-25 | 9/16 x 7/8 | 4.10 | 2.46 |
| ECPAP 24 | | 50-25 | 3/8 x 1 | 4.35 | 2.61 |
| ECPAP 25 | | 50-50 | 3/8 x 1 | 4.55 | 2.73 |

CORNELL-DUBILIER ELECTRONICS

CLASS
201.15

"ELECTOMITE" Metal-Cased Electrolytics



NLW

Type NLW is an aluminum foil capacitor, hermetically sealed into an ultra-small tubular aluminum can which is tightly fitted with an outer transparent plastic sleeve to insure freedom from "shorts" with adjacent components commonly found in compact assemblies. All terminal connections are securely welded. Despite their extremely small size, "Electomites" exhibit excellent electrical characteristics as well as rugged physical construction. Ideal for by-pass, filter and coupling applications in low-voltage, compact, miniaturized equipment.

TEMPERATURE RANGE: -40°C. to +85°C.

TOLERANCE: -10%, +150%

NOMINAL LEAD LENGTH: 1/2"

| NLW Cat. No. | Cap. Mfd. | WVDC | Can Size—Inches Diam. x Length | List Price | Net Price |
|--------------|-----------|------|--------------------------------|------------|-----------|
| NLW 10-3 | 10 | 3 | 3/16 x 1/2 | \$1.25 | \$.75 |
| NLW 25-3 | 25 | 3 | 1/4 x 1/2 | 1.25 | .75 |
| NLW 35-3 | 35 | 3 | 1/4 x 3/8 | 1.25 | .75 |
| NLW 40-3 | 40 | 3 | 1/4 x 3/8 | 1.25 | .75 |
| NLW 50-3 | 50 | 3 | 1/4 x 3/8 | 1.25 | .75 |
| NLW 75-3 | 75 | 3 | 5/16 x 3/8 | 1.40 | .85 |
| NLW 100-3 | 100 | 3 | 3/8 x 3/8 | 1.40 | .84 |
| NLW 125-3 | 125 | 3 | 3/8 x 3/8 | 1.40 | .84 |
| NLW 150-3 | 150 | 3 | 3/8 x 3/8 | 1.45 | .87 |
| NLW 175-3 | 175 | 3 | 3/8 x 3/8 | 1.50 | .90 |
| NLW 200-3 | 200 | 3 | 3/8 x 3/8 | 1.50 | .90 |
| NLW 250-3 | 250 | 3 | 3/8 x 1 | 1.60 | .96 |
| NLW 300-3 | 300 | 3 | 3/8 x 1 | 1.65 | .99 |
| NLW 350-3 | 350 | 3 | 3/8 x 1 | 1.65 | .99 |
| NLW 400-3 | 400 | 3 | 3/8 x 1 1/4 | 1.70 | 1.02 |
| NLW 450-3 | 450 | 3 | 3/8 x 1 1/2 | 1.75 | 1.05 |
| NLW 1-6 | 1 | 6 | 3/16 x 1/2 | 1.25 | .75 |
| NLW 10-6 | 10 | 6 | 3/16 x 1/2 | 1.35 | .81 |
| NLW 15-6 | 15 | 6 | 1/4 x 1/2 | 1.35 | .81 |
| NLW 20-6 | 20 | 6 | 1/4 x 1/2 | 1.35 | .81 |
| NLW 30-6 | 30 | 6 | 1/4 x 3/8 | 1.40 | .84 |
| NLW 40-6 | 40 | 6 | 5/16 x 3/8 | 1.40 | .84 |
| NLW 50-6 | 50 | 6 | 5/16 x 3/8 | 1.40 | .84 |
| NLW 125-6 | 125 | 6 | 3/8 x 3/8 | 1.50 | .90 |
| NLW 150-6 | 150 | 6 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 175-6 | 175 | 6 | 3/8 x 1 | 1.55 | .93 |
| NLW 250-6 | 250 | 6 | 3/8 x 1 1/4 | 1.70 | 1.02 |
| NLW 300-6 | 300 | 6 | 3/8 x 1 1/2 | 1.80 | 1.08 |
| NLW 8-10 | 8 | 10 | 3/16 x 1/2 | 1.35 | .81 |
| NLW 25-10 | 25 | 10 | 1/4 x 3/8 | 1.45 | .87 |
| NLW 40-10 | 40 | 10 | 3/16 x 3/8 | 1.45 | .87 |
| NLW 50-10 | 50 | 10 | 3/16 x 3/8 | 1.55 | .93 |
| NLW 75-10 | 75 | 10 | 3/8 x 3/8 | 1.65 | .99 |
| NLW 125-10 | 125 | 10 | 3/8 x 3/8 | 1.85 | 1.11 |
| NLW 150-10 | 150 | 10 | 3/8 x 1 | 1.90 | 1.14 |
| NLW 225-10 | 225 | 10 | 3/8 x 1 1/4 | 2.10 | 1.26 |
| NLW 15-12 | 15 | 12 | 1/4 x 1/2 | 1.40 | .84 |
| NLW 35-12 | 35 | 12 | 5/16 x 3/8 | 1.45 | .87 |
| NLW 100-12 | 100 | 12 | 3/8 x 3/8 | 1.75 | 1.05 |
| NLW 200-12 | 200 | 12 | 3/8 x 1 1/4 | 2.05 | 1.23 |
| NLW 250-12 | 250 | 12 | 3/8 x 1 1/2 | 2.20 | 1.32 |

NLW (cont'd)

| NLW Cat. No. | Cap. Mfd. | WVDC | Can Size—Inches Diam. x Length | List Price | Net Price |
|--------------|-----------|------|--------------------------------|------------|-----------|
| NLW 3-15 | 3 | 15 | 3/16 x 1/2 | \$1.25 | \$.75 |
| NLW 4-15 | 4 | 15 | 3/16 x 1/2 | 1.30 | .78 |
| NLW 5-15 | 5 | 15 | 3/16 x 1/2 | 1.40 | .84 |
| NLW 6-15 | 6 | 15 | 3/16 x 1/2 | 1.40 | .84 |
| NLW 10-15 | 10 | 15 | 1/4 x 1/2 | 1.40 | .84 |
| NLW 15-15 | 15 | 15 | 1/4 x 3/8 | 1.45 | .87 |
| NLW 20-15 | 20 | 15 | 1/4 x 3/8 | 1.45 | .87 |
| NLW 25-15 | 25 | 15 | 5/16 x 3/8 | 1.45 | .87 |
| NLW 30-15 | 30 | 15 | 5/16 x 3/8 | 1.50 | .90 |
| NLW 35-15 | 35 | 15 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 40-15 | 40 | 15 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 50-15 | 50 | 15 | 3/8 x 3/8 | 1.60 | .96 |
| NLW 75-15 | 75 | 15 | 3/8 x 3/8 | 1.70 | 1.02 |
| NLW 100-15 | 100 | 15 | 3/8 x 3/8 | 1.80 | 1.08 |
| NLW 125-15 | 125 | 15 | 3/8 x 1 | 1.85 | 1.11 |
| NLW 150-15 | 150 | 15 | 3/8 x 1 1/4 | 1.95 | 1.17 |
| NLW 175-15 | 175 | 15 | 3/8 x 1 1/4 | 2.00 | 1.20 |
| NLW 200-15 | 200 | 15 | 3/8 x 1 1/2 | 2.10 | 1.26 |
| NLW 3-25 | 3 | 25 | 3/16 x 1/2 | 1.30 | .78 |
| NLW 6-25 | 6 | 25 | 1/4 x 1/2 | 1.40 | .84 |
| NLW 8-25 | 8 | 25 | 1/4 x 1/2 | 1.45 | .87 |
| NLW 10-25 | 10 | 25 | 1/4 x 3/8 | 1.45 | .87 |
| NLW 15-25 | 15 | 25 | 5/16 x 3/8 | 1.45 | .87 |
| NLW 20-25 | 20 | 25 | 3/8 x 3/8 | 1.50 | .90 |
| NLW 25-25 | 25 | 25 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 30-25 | 30 | 25 | 3/8 x 3/8 | 1.60 | .96 |
| NLW 35-25 | 35 | 25 | 3/8 x 3/8 | 1.60 | .96 |
| NLW 40-25 | 40 | 25 | 3/8 x 3/8 | 1.70 | 1.02 |
| NLW 50-25 | 50 | 25 | 3/8 x 3/8 | 1.80 | 1.08 |
| NLW 75-25 | 75 | 25 | 3/8 x 1 1/4 | 1.95 | 1.17 |
| NLW 100-25 | 100 | 25 | 3/8 x 1 1/2 | 2.10 | 1.26 |
| NLW 1-50 | 1 | 50 | 3/16 x 1/2 | 1.30 | .78 |
| NLW 2-50 | 2 | 50 | 3/16 x 1/2 | 1.35 | .81 |
| NLW 3-50 | 3 | 50 | 1/4 x 1/2 | 1.35 | .81 |
| NLW 4-50 | 4 | 50 | 1/4 x 1/2 | 1.35 | .81 |
| NLW 5-50 | 5 | 50 | 1/4 x 1/2 | 1.45 | .87 |
| NLW 6-50 | 6 | 50 | 1/4 x 3/8 | 1.45 | .87 |
| NLW 8-50 | 8 | 50 | 5/16 x 1/2 | 1.50 | .90 |
| NLW 10-50 | 10 | 50 | 5/16 x 3/8 | 1.50 | .90 |
| NLW 15-50 | 15 | 50 | 3/8 x 3/8 | 1.50 | .90 |
| NLW 20-50 | 20 | 50 | 3/8 x 3/8 | 1.50 | .90 |
| NLW 25-50 | 25 | 50 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 30-50 | 30 | 50 | 3/8 x 3/8 | 1.60 | .96 |
| NLW 35-50 | 35 | 50 | 3/8 x 3/8 | 1.70 | 1.02 |
| NLW 40-50 | 40 | 50 | 3/8 x 1 | 1.75 | 1.05 |
| NLW 50-50 | 50 | 50 | 3/8 x 1 1/4 | 1.85 | 1.11 |
| NLW 75-50 | 75 | 50 | 3/8 x 1 1/2 | 2.00 | 1.20 |
| NLW 2-100 | 2 | 100 | 1/4 x 3/8 | 1.40 | .84 |
| NLW 3-100 | 3 | 100 | 3/16 x 3/8 | 1.40 | .84 |
| NLW 6-100 | 6 | 100 | 3/8 x 3/8 | 1.50 | .90 |
| NLW 8-100 | 8 | 100 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 10-100 | 10 | 100 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 15-100 | 15 | 100 | 3/8 x 1 1/4 | 1.55 | .93 |
| NLW 20-100 | 20 | 100 | 3/8 x 1 1/2 | 1.60 | .96 |
| NLW 1-150 | 1 | 150 | 1/4 x 1/2 | 1.40 | .84 |
| NLW 2-150 | 2 | 150 | 5/16 x 3/8 | 1.45 | .87 |
| NLW 3-150 | 3 | 150 | 3/8 x 3/8 | 1.45 | .87 |
| NLW 4-150 | 4 | 150 | 3/8 x 3/8 | 1.45 | .87 |
| NLW 5-150 | 5 | 150 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 6-150 | 6 | 150 | 3/8 x 3/8 | 1.55 | .93 |
| NLW 8-150 | 8 | 150 | 3/8 x 3/8 | 1.60 | .96 |
| NLW 10-150 | 10 | 150 | 3/8 x 1 | 1.60 | .96 |
| NLW 12-150 | 12 | 150 | 3/8 x 1 1/4 | 1.60 | .96 |
| NLW 15-150 | 15 | 150 | 3/8 x 1 1/4 | 1.60 | .96 |
| NLW 18-150 | 18 | 150 | 3/8 x 1 1/2 | 1.60 | .96 |

CORNELL-DUBILIER ELECTRONICS



Plug-In Electrolytics Conversion Adapters

CLASS
201.32

TYPE QC★

Type QC Capacitors are hermetically sealed in round aluminum containers with a four-pin octal base. Ideally suited for experimental, testing, juke box, government communication receiver uses and applications where quick capacitor changes are required. Ground lugs are furnished with all multiple-section units for cathode connection.

TEMPERATURE RANGE: to $+85^{\circ}\text{C}$; except,
 $+65^{\circ}\text{C}$ at 500
V.D.C.W.

★When MIL-C-62A units must be supplied, order according to specific CE type designations.

SINGLES

| QC Cat. No. | Cap. Mfd. | D.C. W. Volts | Size—Inches Dio. x Lgth. | List Price | Net Price |
|-------------|-----------|---------------|-------------------------------------|------------|---------------|
| QC 1045 | 10 | 450 | $1\frac{5}{32} \times 2\frac{1}{2}$ | \$4.05 | \$2.43 |
| QC 2045 | 20 | 450 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 4.30 | 2.58 |
| QC 4045 | 40 | 450 | $1\frac{7}{8} \times 2\frac{1}{2}$ | 4.80 | 2.88 |
| QC 8045 | 80 | 450 | $1\frac{7}{8} \times 3\frac{1}{2}$ | 5.55 | 3.33 |
| QC 4050 | 40 | 500 | $1\frac{7}{8} \times 2\frac{1}{2}$ | 5.00 | 3.00 |

DUALS

| | | | | | |
|---------|-------|-----|-------------------------------------|------|-------------|
| QC 2215 | 20-20 | 150 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 4.30 | 2.58 |
| QC 4415 | 40-40 | 150 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 4.40 | 2.64 |
| QC 5515 | 50-50 | 150 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 4.65 | 2.79 |
| QC 8815 | 80-80 | 150 | $1\frac{7}{8} \times 2\frac{1}{2}$ | 5.15 | 3.09 |
| QC 1145 | 10-10 | 450 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 4.50 | 2.70 |
| QC 2245 | 20-20 | 450 | $1\frac{7}{8} \times 2\frac{1}{2}$ | 5.05 | 3.03 |
| QC 3345 | 30-30 | 450 | $1\frac{7}{8} \times 3$ | 5.55 | 3.33 |
| QC 4445 | 40-40 | 450 | $1\frac{7}{8} \times 3\frac{1}{2}$ | 5.90 | 3.54 |
| QC 2250 | 20-20 | 500 | $1\frac{7}{8} \times 2\frac{1}{2}$ | 5.30 | 3.18 |

TRIPLES

| | | | | | |
|----------|----------|--------|-------------------------------------|------|-------------|
| QC 22215 | 20-20-20 | 150 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 4.85 | 2.91 |
| QC 44415 | 40-40-40 | 150 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 5.10 | 3.06 |
| QC 11145 | 10-10-10 | 450 | $1\frac{5}{32} \times 2\frac{1}{2}$ | 5.10 | 3.06 |
| QC 22245 | 20-20-20 | 450 | $1\frac{7}{8} \times 3$ | 6.10 | 3.66 |
| QC 4245C | 40-20-20 | 450/25 | $1\frac{7}{8} \times 3$ | 6.00 | 3.60 |
| QC 11150 | 10-10-10 | 500 | $1\frac{7}{8} \times 2\frac{1}{2}$ | 5.30 | 3.18 |

QUADRUPLES

| | | | | | |
|-----------|-------------|--------|------------------------------------|------|-------------|
| QC 11145C | 10-10-10/20 | 450/25 | $1\frac{7}{8} \times 2\frac{1}{2}$ | 5.65 | 3.39 |
| QC 33145C | 30-30-10/20 | 450/50 | $1\frac{7}{8} \times 4\frac{1}{4}$ | 6.85 | 4.11 |

TWIST-PRONG CAPACITOR ADAPTERS for PRINTED BOARD MOUNTING



Standard Base



Large



Small



Converted Base

ADAPTERS

This special C-D ADAPTER makes it possible to convert the standard twist-prong capacitor base so that it can be mounted in a printed circuit board. In this manner a standard stock twist-prong unit can be utilized in servicing a printed board originally designed to use the special "plug-in" type unit (C-D types UPC and UPL). A speedy, sturdy and permanent substitution can thus be made.

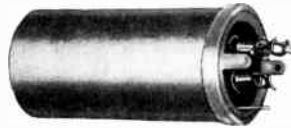
Two sets (4 each) of C-D ADAPTERS are included in each packet: the larger adapters No. 55277 are for the terminals; the smaller adapters No. 55278 are for the mounting lugs.

Cat. No. ADK8 per packet (8 pcs.).....List \$.45

Net .27

CORNELL-DUBILIER ELECTRONICS

CLASS
201.35 Twist-Prong Electrolytics



Small round-can TWIST-PRONG electrolytic units. Each is furnished with a bakelite and a metal mounting washer.

X types are especially designed for SELENIUM RECTIFIER circuit applications. ONLY THIS TYPE SHOULD BE USED FOR THIS SERVICE.

TEMP. RANGE: to 475 V.D.C.W. + 85°C.
over 475 V.D.C.W. + 65°C.

★★ BEST-SELLING PREFERRED TYPE
★ PREFERRED TYPE

1 SECTION — 1 VOLTAGE

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| 10 Ohms 30 CPS. | A0010 | 3/4 x 2 | \$2.50 | \$1.50 |
| .5 Ohms 15,750 CPS. | A0020 | 1 x 2 | 2.75 | 1.65 |
| 1 Ohms 60 CPS. | A0030 | 1 3/8 x 3 | 3.50 | 2.10 |
| ★★ 2000/6 | A0040 | 1 3/8 x 2 | 3.05 | 1.83 |
| 3000/10 | A0050 | 1 3/8 x 2 1/2 | 3.65 | 2.19 |
| ★★ 225/15 | A0053 | 3/4 x 2 | 1.75 | 1.05 |
| ★★ 1000/15 | A0060 | 1 x 2 1/2 | 2.55 | 1.53 |
| ★★ 2000/15 | A0070 | 1 3/8 x 2 | 3.45 | 2.07 |
| ★★ 3000/15 | A0080 | 1 3/8 x 3 | 4.50 | 2.43 |
| ★ 40/25 | A0090 | 3/4 x 2 | 1.35 | .81 |
| 100/25 | A0100 | 3/4 x 2 | 2.00 | 1.20 |
| 500/25 | A0110 | 1 x 2 1/2 | 3.20 | 1.92 |
| ★★ 500/25 | A0120 | 1 x 2 | 2.55 | 1.53 |
| ★★ 1000/25 | A0130 | 1 3/8 x 2 | 3.55 | 2.13 |
| ★★ 100/50 | A0140 | 3/4 x 2 | 1.65 | .99 |
| ★★ 150/50 | A0150 | 1 x 2 | 1.80 | 1.08 |
| ★★ 500/50 | A0160 | 1 3/8 x 2 1/2 | 2.65 | 1.59 |
| ★ 1000/50 | A0170 | 1 3/8 x 3 3/8 | 3.75 | 2.25 |
| ★★ 1500/50 | A0174 | 1 3/8 x 4 1/8 | 4.40 | 2.64 |
| ★ 30/150 | A0180 | 3/4 x 2 | 1.55 | .93 |
| ★★ 40/150 | XA0191 | 3/4 x 2 | 2.00 | 1.20 |
| ★ 50/150 | A0200 | 1 x 2 | 1.65 | .99 |
| 60/150 | A0220 | 1 x 2 | 2.20 | 1.32 |
| ★★ 80/150 | XA0231 | 1 x 2 | 1.85 | 1.11 |
| ★★ 100/150 | XA0241 | 1 x 2 1/2 | 2.00 | 1.20 |
| ★★ 120/150 | XA0248 | 1 x 2 1/2 | 2.05 | 1.23 |
| ★★ 120/150 | A0250 | 1 3/8 x 2 | 2.05 | 1.23 |
| ★★ 150/150 | XA0261 | 1 x 3 | 2.15 | 1.29 |
| ★★ 200/150 | XA0262 | 1 3/8 x 2 1/2 | 2.45 | 1.47 |
| ★★ 200/150 | XA0262.1 | 1 x 3 3/8 | 2.45 | 1.47 |
| ★★ 300/150 | XA0263 | 1 3/8 x 3 | 2.80 | 1.68 |
| 80/200 | XA0265 | 1 3/8 x 2 | 2.45 | 1.47 |
| ★★ 120/200 | XA0265.3 | 1 3/8 x 2 | 2.80 | 1.68 |
| ★★ 20/250 | A0270 | 3/4 x 2 | 1.60 | .96 |
| 30/250 | A0280 | 1 x 2 | 2.15 | 1.29 |
| ★★ 40/250 | XA0291 | 1 x 2 | 1.80 | 1.08 |
| ★★ 100/250 | XA0312 | 1 x 3 | 2.70 | 1.62 |
| ★★ 150/250 | XA0315 | 1 3/8 x 2 1/2 | 3.10 | 1.86 |
| ★★ 200/250 | XA0318 | 1 3/8 x 3 | 3.95 | 2.37 |
| 50/300 | A0320 | 1 x 2 1/2 | 2.55 | 1.53 |
| 60/300 | XA0324 | 1 x 2 1/2 | 2.65 | 1.59 |
| ★★ 80/300 | XA0331 | 1 x 3 | 2.55 | 1.53 |
| ★★ 100/300 | A0340 | 1 3/8 x 3 | 2.90 | 1.74 |
| ★★ 100/300 | A0350 | 1 x 3 3/8 | 2.90 | 1.74 |
| ★★ 150/300 | XA0355 | 1 3/8 x 3 | 3.50 | 2.10 |
| 15/350 | A0360 | 1 x 2 | 2.05 | 1.23 |
| ★★ 30/350 | A0370 | 1 x 2 | 1.90 | 1.14 |
| ★★ 40/350 | A0380 | 1 x 2 | 2.00 | 1.20 |
| ★★ 50/350 | A0390 | 1 x 3 | 2.10 | 1.26 |
| ★★ 80/350 | XA0401 | 1 3/8 x 2 1/2 | 2.80 | 1.68 |
| ★★ 125/350 | XA0411 | 1 3/8 x 3 | 3.65 | 2.19 |
| ★★ 150/350 | XA0415 | 1 3/8 x 3 3/8 | 3.95 | 2.37 |
| ★★ 10/450 | A0430 | 1 x 2 | 1.75 | 1.05 |

1 SECTION — 1 VOLTAGE

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| ★★ 10/450 | A0440 | 3/4 x 2 | \$1.95 | \$1.17 |
| 15/450 | A0450 | 1 x 2 | 2.15 | 1.29 |
| ★★ 20/450 | A0460 | 1 x 2 | 1.80 | 1.08 |
| ★★ 30/450 | A0470 | 1 x 2 1/2 | 1.95 | 1.17 |
| ★★ 40/450 | A0480 | 1 x 3 | 2.05 | 1.23 |
| ★★ 50/450 | A0490 | 1 x 3 | 2.35 | 1.41 |
| ★★ 60/450 | A0500 | 1 3/8 x 2 1/2 | 2.70 | 1.62 |
| ★★ 80/450 | A0510 | 1 3/8 x 2 1/2 | 3.05 | 1.83 |
| ★★ 100/450 | A0512 | 1 3/8 x 3 | 3.45 | 2.07 |
| ★★ 125/450 | A0514 | 1 3/8 x 4 | 3.95 | 2.37 |
| ★ 40/475 | A0516 | 1 3/8 x 2 | 2.50 | 1.50 |
| ★★ 10/500 | A0520 | 1 x 2 | 1.60 | .96 |
| ★★ 20/500 | A0530 | 1 x 2 1/2 | 1.85 | 1.11 |
| 25/500 | A0532 | 1 x 2 1/2 | 2.45 | 1.47 |
| ★★ 30/500 | XA0541 | 1 x 3 | 2.20 | 1.32 |
| ★★ 40/500 | A0550 | 1 x 3 1/2 | 2.50 | 1.50 |
| ★★ 80/500 | A0560 | 1 3/8 x 3 | 3.60 | 2.16 |
| ★★ 90/500 | A0570 | 1 3/8 x 3 1/2 | 3.90 | 2.34 |

2 SECTIONS — 1 VOLTAGE

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| .5 Ohms 15,750 CPS. | B0010 | 1 3/8 x 2 | 4.90 | 2.94 |
| 2.5 Ohms 60 CPS. | B0020 | 1 3/8 x 2 | 4.80 | 2.88 |
| 1000-500/6 VNP | B0030 | 1 x 3 3/8 | 4.40 | 2.64 |
| ★ 1000-1000/15 | B0040 | 1 x 2 1/2 | 4.40 | 2.64 |
| ★★ 1000-1000/15 | B0045 | 1 x 2 | 3.15 | 1.89 |
| ★ 500-100/20 | B0050 | 1 x 2 | 1.80 | 1.08 |
| 20-20/25 | B0060 | 1 x 2 | 2.00 | 1.20 |
| 40-40/25 | B0070 | 1 x 2 | 2.40 | 1.44 |
| 150-50/25 | B0080 | 1 x 2 | 1.70 | 1.02 |
| ★ 50-50/50 | B0085 | 1 x 2 | 2.10 | 1.26 |
| ★ 100-100/50 | XB0091 | 1 x 1 1/2 | 1.85 | 1.11 |
| ★★ 20-20/150 | B0100 | 1 x 2 | 2.20 | 1.32 |
| 30-20/150 | B0110 | 1 x 2 | 1.85 | 1.11 |
| ★ 30-30/150 | B0120 | 1 x 1 1/2 | 1.80 | 1.08 |
| ★ 40-20/150 | B0130 | 1 x 2 | 1.85 | 1.11 |
| ★ 40-30/150 | XB0141 | 1 x 1 1/2 | 2.00 | 1.20 |
| ★ 40-40/150 | B0150 | 1 x 1 1/2 | 2.00 | 1.20 |
| ★ 50-30/150 | XB0161 | 1 x 1 1/2 | 2.15 | 1.29 |
| ★ 50-50/150 | XB0165 | 1 x 3 | 2.35 | 1.41 |
| ★ 60-60/150 | B0170 | 1 x 3 | 2.60 | 1.56 |
| ★ 75-75/150 | XB0181 | 1 x 1 3/4 | 2.30 | 1.38 |
| ★★ 80-40/150 | XB0183 | 1 3/8 x 2 | 2.65 | 1.59 |
| ★ 80-80/150 | XB0184 | 1 3/8 x 2 1/2 | 4.05 | 2.43 |
| ★ 100-100/150 | XB0184.5 | 1 3/8 x 2 1/2 | 3.50 | 2.10 |
| ★ 125-100/150 | XB0185 | 1 3/8 x 3 | 4.40 | 2.64 |
| 150-150/150 | B0186 | 1 3/8 x 2 1/2 | 3.40 | 2.04 |
| 200-5/150 | XB0187 | 1 3/8 x 3 3/8 | 3.75 | 2.25 |
| ★ 200-125/150 | XB0188 | 1 3/8 x 3 3/8 | 3.75 | 2.25 |
| ★★ 200-150/150 | XB0189 | 1 3/8 x 2 1/2 | 4.00 | 2.40 |
| ★ 200-200/150 | B0190 | 1 3/8 x 2 | 2.55 | 1.53 |
| ★ 60-60/200 | XB0194 | 1 3/8 x 3 | 3.50 | 2.10 |
| ★ 100-100/200 | XB0196 | 1 3/8 x 2 | 3.20 | 1.92 |
| ★★ 200-5/200 | B0200 | 1 x 2 | 2.15 | 1.29 |
| 10-10/250 | B0210 | 1 x 1 1/2 | 1.90 | 1.14 |
| ★★ 20-20/250 | B0220 | 1 x 2 1/2 | 2.90 | 1.74 |
| 30-30/250 | B0230 | 1 x 2 1/2 | 2.75 | 1.65 |
| 40-20/250 | B0240 | 1 x 3 | 3.20 | 1.92 |
| 40-40/250 | XB0241 | 1 x 1 3/4 | 2.50 | 1.50 |
| ★★ 40-40/250 | XB0243 | 1 3/8 x 2 1/2 | 3.75 | 2.25 |
| ★★ 80-40/250 | B0250 | 1 3/8 x 4 1/8 | 5.15 | 3.09 |
| ★ 150-150/250 | XB0252 | 1 3/8 x 4 1/8 | 6.10 | 3.66 |
| ★★ 200-200/250 | B0254 | 1 x 3 | 3.75 | 2.25 |
| 40-40/300 | B0260 | 1 3/8 x 2 1/2 | 4.20 | 2.52 |
| 50-50/300 | XB0264 | 1 3/8 x 2 1/2 | 4.45 | 2.67 |
| 80-40/300 | B0270 | 1 3/8 x 3 | 4.05 | 2.43 |
| ★ 80-80/300 | B0280 | 1 3/8 x 3 | 4.00 | 2.40 |
| ★ 120-20/300 | B0282 | 1 3/8 x 3 3/8 | 5.45 | 3.27 |
| 120-40/300 | B0286 | 1 3/8 x 3 3/8 | 5.25 | 3.15 |
| ★ 200-80/300 | B0290 | 1 x 2 | 2.25 | 1.35 |
| ★ 15-15/350 | B0300 | 1 x 2 | 2.90 | 1.74 |
| ★★ 20-20/350 | B0310 | 1 x 3 | 2.90 | 1.74 |
| ★★ 30-30/350 | | | | |

CORNELL-DUBILIER ELECTRONICS

CLASS

Twist-Prong Electrolytics 201.35



★ ★ BEST-SELLING PREFERRED TYPE ★ PREFERRED TYPE
2 SECTIONS — 1 VOLTAGE

2 SECTIONS — 2 VOLTAGES

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| ★ 50-30/350 | B0320 | 1 3/8 x 2 1/2 | \$3.15 | \$1.89 |
| 60-30/350 | B0321 | 1 3/8 x 2 1/2 | 3.15 | 1.89 |
| ★ 80-20/350 | B0322 | 1 x 3 3/8 | 3.50 | 2.10 |
| ★ 80-20/350 | B0324 | 1 3/8 x 2 1/2 | 3.50 | 2.10 |
| ★ ★ 80-40/350 | B0326 | 1 3/8 x 3 | 3.95 | 2.37 |
| ★ ★ 80-80/350 | B0330 | 1 3/8 x 3 3/8 | 4.70 | 2.82 |
| ★ 90-40/350 | B0331 | 1 3/8 x 3 | 4.30 | 2.58 |
| ★ ★ 100-100/350 | B0332 | 1 3/8 x 4 1/8 | 6.15 | 3.69 |
| ★ 160-10/350 | B0334 | 1 3/8 x 3 3/8 | 4.30 | 2.58 |
| ★ ★ 40-120/400 | B0336 | 1 3/8 x 4 1/8 | 5.25 | 3.15 |
| 60-60/400 | B0340 | 1 3/8 x 3 3/8 | 5.50 | 3.30 |
| 80-10/400 | B0350 | 1 3/8 x 3 | 4.25 | 2.55 |
| ★ 80-60/400 | B0354 | 1 3/8 x 3 3/8 | 4.85 | 2.91 |
| ★ ★ 80-80/400 | B0356 | 1 3/8 x 4 1/8 | 4.95 | 2.97 |
| ★ 5-5/450 | B0362 | 1 x 2 | 1.75 | 1.05 |
| ★ ★ 10-10/450 | B0370 | 1 x 2 | 1.90 | 1.14 |
| 15-10/450 | B0374 | 1 x 2 1/2 | 2.55 | 1.53 |
| ★ 15-15/450 | B0380 | 1 x 2 1/2 | 2.25 | 1.35 |
| ★ ★ 20-10/450 | B0390 | 1 x 2 1/2 | 2.25 | 1.35 |
| ★ ★ 20-20/450 | B0400 | 1 x 2 1/2 | 2.55 | 1.53 |
| ★ 30-10/450 | B0410 | 1 x 3 | 2.50 | 1.50 |
| ★ ★ 30-30/450 | B0430 | 1 3/8 x 2 1/2 | 3.05 | 1.83 |
| 40-5/450 | B0436 | 1 x 3 | 3.20 | 1.92 |
| ★ ★ 40-20/450 | B0440 | 1 3/8 x 2 1/2 | 3.00 | 1.80 |
| ★ ★ 40-40/450 | B0450 | 1 3/8 x 2 1/2 | 3.45 | 2.07 |
| ★ ★ 50-50/450 | XB0455 † | 1 3/8 x 3 | 3.85 | 2.31 |
| ★ 60-20/450 | B0460 | 1 3/8 x 3 | 3.55 | 2.13 |
| ★ ★ 60-40/450 | B0462 | 1 3/8 x 3 3/8 | 3.95 | 2.37 |
| 60-60/450 | B0464 | 1 3/8 x 3 3/8 | 5.65 | 3.39 |
| ★ ★ 80-10/450 | B0470 | 1 3/8 x 3 | 3.60 | 2.16 |
| ★ 80-20/450 | B0473 | 1 3/8 x 3 3/8 | 3.90 | 2.34 |
| 80-30/450 | B0477 | 1 3/8 x 3 3/8 | 4.20 | 2.40 |
| ★ ★ 80-40/450 | B0480 | 1 3/8 x 3 3/8 | 4.35 | 2.61 |
| ★ ★ 100-40/450 | B0483 | 1 3/8 x 4 1/8 | 4.85 | 2.91 |
| ★ 15-15/475 | B0485 | 1 x 2 1/2 | 2.35 | 1.41 |
| ★ 30-10/475 | B0486 | 1 3/8 x 2 | 2.70 | 1.62 |
| ★ 40-10/475 | B0487 | 1 3/8 x 2 1/2 | 3.10 | 1.86 |
| ★ 80-50/475 | B0489 | 1 3/8 x 4 1/8 | 5.20 | 3.12 |
| ★ ★ 10-10/500 | B0490 | 1 x 2 | 2.35 | 1.41 |
| ★ ★ 20-20/500 | B0500 | 1 3/8 x 2 1/2 | 2.85 | 1.71 |
| 25-40/500 | B0510 | 1 3/8 x 3 | 4.55 | 2.73 |
| ★ 30-10/500 | B0520 | 1 3/8 x 2 1/2 | 2.85 | 1.71 |
| ★ ★ 40-40/500 | B0530 | 1 3/8 x 3 | 4.40 | 2.64 |
| ★ ★ 60-40/500 | B0540 | 1 3/8 x 3 3/8 | 4.60 | 2.76 |

2 SECTIONS — 2 VOLTAGES

| | | | | |
|---------------------|----------|---------------|------|------|
| ★ 250/10 1000/6 | B0550 | 1 3/8 x 2 | 2.85 | 1.71 |
| 40/150 20/50 | B0560 | 1 x 2 | 2.15 | 1.29 |
| 40/150 150/25 | B0570 | 1 x 2 | 2.55 | 1.53 |
| ★ 50/150 500/5 | B0574 | 1 x 2 1/2 | 2.45 | 1.47 |
| ★ 150/150 100/25 | B0575 | 1 3/8 x 2 1/2 | 2.70 | 1.62 |
| 150/150 100/50 | XB0575.5 | 1 x 3 3/8 | 2.85 | 1.71 |
| 60/200 125/50 | B0576 | 1 x 3 | 3.00 | 1.80 |
| 40/250 20/25 | B0580 | 1 x 2 | 2.50 | 1.50 |
| 50/250 100/50 | B0590 | 1 3/8 x 2 | 3.25 | 1.95 |
| ★ 100/250 150/50 | B0600 | 1 3/8 x 3 | 3.65 | 2.19 |
| 10/300 40/50 | B0601 | 1 x 2 | 1.70 | 1.02 |
| ★ 35/300 500/6 | XB0603 | 1 x 2 1/2 | 2.80 | 1.68 |
| 80/300 100/50 | B0606 | 1 3/8 x 2 1/2 | 3.95 | 2.37 |
| ★ ★ 150/300 100/150 | B0608 | 1 3/8 x 3 3/8 | 4.50 | 2.70 |
| 20/350 20/25 | B0610 | 1 x 2 | 2.40 | 1.44 |
| 20/350 100/75 | B0612 | 1 x 2 1/2 | 2.80 | 1.68 |
| 40/350 20/25 | B0620 | 1 x 2 1/2 | 2.95 | 1.77 |
| ★ 35/400 100/50 | B0623 | 1 x 3 | 2.60 | 1.56 |
| 80/400 80/200 | B0625 | 1 3/8 x 3 3/8 | 3.95 | 2.37 |
| ★ ★ 100/400 30/50 | B0626 | 1 3/8 x 3 | 3.90 | 2.34 |
| ★ 10/450 20/25 | B0630 | 1 x 2 | 1.75 | 1.05 |
| 20/450 20/25 | B0640 | 1 x 2 | 2.50 | 1.50 |
| 20/450 100/25 | B0646 | 1 x 2 1/2 | 2.75 | 1.65 |
| 40/450 20/25 | B0650 | 1 x 3 | 3.05 | 1.83 |
| 40/450 50/50 | B0652 | 1 x 3 3/8 | 3.75 | 2.25 |
| 40/450 10/300 | B0654 | 1 x 3 | 2.60 | 1.56 |
| 80/450 20/25 | B0660 | 1 3/8 x 3 | 4.25 | 2.55 |

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| 10 450 100 50 | B0670 | 1 3/8 x 2 | \$2.55 | \$1.53 |
| ★ 20 450 50 250 | B0674 | 1 x 2 1/2 | 2.80 | 1.68 |
| B0680 | | 1 3/8 x 3 | 3.65 | 2.19 |
| ★ 20 450 80 350 | B0690 | 1 3/8 x 2 | 3.30 | 1.98 |
| 20 450 100 100 | B0700 | 1 3/8 x 2 | 3.15 | 1.89 |
| 30 450 40 150 | B0705 | 1 3/8 x 3 | 3.50 | 2.10 |
| ★ 30 450 200 150 | B0710 | 1 3/8 x 2 | 2.65 | 1.59 |
| ★ 40 450 10 350 | B0715 | 1 3/8 x 2 1/2 | 3.00 | 1.80 |
| ★ 50 450 100 50 | B0720 | 1 3/8 x 3 | 3.50 | 2.10 |
| ★ 80 450 50 50 | B0722 | 1 3/8 x 3 | 3.75 | 2.25 |
| ★ ★ 80 450 100 50 | B0724 | 1 3/8 x 3 | 4.75 | 2.85 |
| 80 450 40 200 | B0726 | 1 3/8 x 4 1/8 | 4.50 | 2.70 |
| ★ 20 475 100 400 | B0730 | 1 x 2 1/2 | 2.90 | 1.74 |
| 15 500 20 300 | B0740 | 1 3/8 x 3 | 4.95 | 2.97 |
| 20 500 100/300 | B0750 | 1 3/8 x 2 1/2 | 4.20 | 2.52 |
| 40 500 50 200 | B0760 | 1 3/8 x 3 3/8 | 4.70 | 2.82 |
| 60 500 80 150 | B0770 | 1 3/8 x 3 3/8 | 4.75 | 2.85 |
| 80 500 50 50 | | | | |

3 SECTIONS — 1 VOLTAGE

| | | | | |
|--------------------|---------|---------------|------|------|
| ★ 20-20-20 25 | C0010 | 1 x 2 | 1.95 | 1.17 |
| ★ 40-40-40 25 | C0020 | 1 x 2 | 2.15 | 1.29 |
| 30-30-30 50 | C0030 | 1 x 2 | 3.25 | 1.95 |
| ★ ★ 20-20-20 150 | XC0041 | 1 x 1 1/2 | 2.30 | 1.38 |
| 30-30-10 150 | C0050 | 1 x 2 | 3.55 | 2.13 |
| ★ 40-20-10/150 | C0060 | 1 x 2 | 2.35 | 1.41 |
| ★ ★ 40-20-20 150 | XC0071 | 1 x 2 | 2.40 | 1.44 |
| ★ ★ 40-30-20 150 | C0080 | 1 x 2 | 2.50 | 1.50 |
| ★ ★ 40-40-40 150 | C0090 | 1 x 1 3/4 | 2.60 | 1.56 |
| ★ 40-70-40 150 | C0100 | 1 x 3 | 2.95 | 1.77 |
| ★ 50-40-10 150 | C0103 | 1 x 2 1/2 | 2.55 | 1.53 |
| ★ ★ 50-50-50 150 | XC0103 | 1 x 3 | 3.00 | 1.80 |
| ★ ★ 60-40-20 150 | C0110 | 1 x 1 1/2 | 2.75 | 1.65 |
| ★ 70-15-15 150 | C0113 | 1 x 2 1/2 | 2.70 | 1.62 |
| ★ ★ 80-40-20 150 | C0120 | 1 x 3 | 2.90 | 1.74 |
| 80-80-80 150 | XC0123 | 1 3/8 x 3 | 5.65 | 3.39 |
| ★ 120-80-40 150 | XC0125 | 1 3/8 x 3 | 3.80 | 2.28 |
| ★ 120-120-40 150 | XC0126 | 1 3/8 x 3 | 4.05 | 2.43 |
| ★ ★ 200-100-60 150 | XC0127 | 1 3/8 x 3 3/8 | 4.55 | 2.73 |
| ★ 200-150-150 150 | XC0128 | 1 3/8 x 4 1/8 | 7.50 | 4.50 |
| ★ ★ 250-200-10 150 | XC0129 | 1 3/8 x 4 1/8 | 5.60 | 3.36 |
| 20-20-10 250 | C0130 | 1 x 2 | 3.75 | 2.25 |
| ★ 20-20-20 250 | C0132 | 1 x 2 | 2.60 | 1.56 |
| 30-20-10 250 | C0140 | 1 x 2 1/2 | 4.05 | 2.43 |
| 40-20-10 250 | C0150 | 1 3/8 x 2 | 4.30 | 2.58 |
| ★ 40-20-20 250 | C0160 | 1 x 3 | 2.90 | 1.74 |
| ★ 80-10-10 250 | C0165 | 1 x 3 | 3.20 | 1.92 |
| ★ 80-80-60 250 | C0170 | 1 3/8 x 3 3/8 | 4.90 | 2.94 |
| 20-80-10 300 | C0180 | 1 3/8 x 2 1/2 | 5.70 | 3.42 |
| ★ 60-20-10 300 | C0190 | 1 3/8 x 2 1/2 | 3.45 | 2.07 |
| ★ ★ 80-40-40 300 | C0194 | 1 3/8 x 3 | 4.75 | 2.85 |
| ★ ★ 120-50-40 300 | C0200 | 1 3/8 x 4 1/8 | 5.65 | 3.39 |
| ★ ★ 10-10-10 350 | C0210 | 1 x 2 | 2.40 | 1.44 |
| 20-20-10 350 | C0220 | 1 x 3 | 4.45 | 2.67 |
| ★ 30-20-10 350 | C0225 | 1 x 3 | 3.25 | 1.95 |
| ★ ★ 60-40-20 350 | C0230 | 1 3/8 x 3 | 4.25 | 2.55 |
| 60-40-40 350 | C0232 | 1 3/8 x 3 3/8 | 7.05 | 4.23 |
| ★ ★ 60-50-50 350 | C0234 | 1 3/8 x 3 3/8 | 4.90 | 2.94 |
| ★ ★ 80-60-60 350 | C0236 | 1 3/8 x 4 1/8 | 5.55 | 3.33 |
| ★ 90-40-20 350 | C0237 | 1 3/8 x 3 3/8 | 5.25 | 3.15 |
| ★ ★ 100-100-10 350 | C0238 | 1 3/8 x 4 1/8 | 5.50 | 3.30 |
| ★ 80-20-10 400 | C0239 | 1 3/8 x 3 | 4.30 | 2.58 |
| ★ 90-10-5 400 | C0239.2 | 1 3/8 x 3 | 4.40 | 2.64 |
| ★ ★ 10-10-10 450 | C0240 | 1 x 2 1/2 | 2.60 | 1.56 |
| 15-15-10 450 | C0250 | 1 x 3 | 4.45 | 2.67 |
| ★ ★ 15-15-15 450 | C0254 | 1 x 3 | 3.10 | 1.86 |
| ★ ★ 20-10-10 450 | C0260 | 1 x 3 | 2.95 | 1.77 |
| ★ ★ 20-20-20 450 | C0270 | 1 3/8 x 2 1/2 | 3.60 | 2.16 |
| ★ ★ 30-20-20 450 | C0280 | 1 3/8 x 3 | 3.85 | 2.31 |
| ★ ★ 30-30-30 450 | C0300 | 1 3/8 x 3 | 4.35 | 2.61 |
| ★ 30-60-10 450 | C0310 | 1 3/8 x 3 3/8 | 4.50 | 2.70 |
| ★ ★ 40-10-10 450 | C0320 | 1 3/8 x 3 | 3.35 | 2.01 |
| ★ ★ 40-30-20 450 | C0330 | 1 3/8 x 3 | 4.30 | 2.58 |
| ★ ★ 40-40-10 450 | C0340 | 1 3/8 x 3 | 4.20 | 2.52 |

† For Photoflash use only.

CORNELL-DUBILIER ELECTRONICS

CLASS

201.35 Twist-Prong Electrolytics



★★ BEST-SELLING PREFERRED TYPE

★ PREFERRED TYPE

3 SECTIONS — 1 VOLTAGE

2 SECTIONS HV — 1 SECTION LV

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| ★★ 40-40-20/450 | C0344 | 1 1/2 x 3 | \$4.45 | \$2.67 |
| ★★ 40-40-40/450 | C0350 | 1 1/2 x 3 3/8 | 4.90 | 2.94 |
| ★ 50-40-30/450 | C0355 | 1 3/8 x 3 3/8 | 4.90 | 2.94 |
| ★★ 60-20-20/450 | C0360 | 1 3/8 x 3 | 4.60 | 2.76 |
| ★★ 60-40-20/450 | C0365 | 1 3/8 x 3 3/8 | 5.00 | 3.00 |
| ★★ 80-40-20/450 | C0370 | 1 3/8 x 4 1/8 | 5.40 | 3.24 |
| ★ 30-30-20/475 | C0371 | 1 3/8 x 3 | 4.75 | 2.85 |
| ★★ 40-20-20/475 | C0372 | 1 3/8 x 3 | 4.75 | 2.85 |
| ★ 40-30-10/475 | C0373 | 1 3/8 x 3 | 4.50 | 2.70 |
| ★ 40-30-30/475 | C0374 | 1 3/8 x 3 3/8 | 5.15 | 3.09 |
| ★★ 10-10-10/500 | C0380 | 1 x 3 | 2.70 | 1.62 |
| ★★ 30-20-20/500 | C0390 | 1 3/8 x 3 | 4.20 | 2.52 |
| ★ 40-10-10/500 | C0400 | 1 3/8 x 3 | 3.90 | 2.34 |
| ★ 40-40-10/500 | C0410 | 1 3/8 x 3 3/8 | 5.05 | 3.03 |

2 SECTIONS HV — 1 SECTION LV

| | | | | |
|----------------------|----------|---------------|------|------|
| ★ 15-15/150 1200/1.5 | C0420 | 1 x 2 | 3.00 | 1.80 |
| 20-20/150 20/25 | XC0431 | 1 x 2 | 3.30 | 1.98 |
| 20-20/150 100/10 | C0440 | 1 x 2 | 3.55 | 2.13 |
| 20-20/150 250/10 | C0450 | 1 x 2 | 3.90 | 2.34 |
| 30-30/150 20/25 | C0460 | 1 x 2 | 3.55 | 2.13 |
| 30-30/150 200/10 | C0470 | 1 x 2 | 3.75 | 2.25 |
| ★ 40-20/150 20/25 | XC0481 | 1 x 1 1/2 | 2.30 | 1.38 |
| 40-20/150 100/25 | C0490 | 1 x 2 | 3.75 | 2.25 |
| ★ 40-20/150 200/25 | C0510 | 1 x 2 1/2 | 2.70 | 1.62 |
| ★ 40-20/150 200/10 | C0520 | 1 x 2 | 2.40 | 1.44 |
| 40-20/150 250/10 | C0530 | 1 x 2 | 4.05 | 2.43 |
| 40-30/150 20/25 | C0540 | 1 x 2 | 3.55 | 2.13 |
| ★★ 40-40/150 20/25 | XC0551 | 1 x 1 1/2 | 2.40 | 1.44 |
| ★★ 40-40/150 250/25 | XC0555 | 1 x 3 | 3.15 | 1.89 |
| ★ 50-30/150 20/25 | C0560 | 1 x 2 | 2.50 | 1.50 |
| ★ 50-30/150 100/25 | C0570 | 1 x 1 3/4 | 2.70 | 1.62 |
| ★★ 50-50/150 20/25 | C0580 | 1 x 1 3/4 | 2.65 | 1.59 |
| 60-20/150 20/25 | C0590 | 1 x 2 | 3.85 | 2.31 |
| 60-40/150 20/25 | C0600 | 1 x 2 1/2 | 4.00 | 2.40 |
| ★ 80-30/150 300/10 | XC0602 | 1 3/8 x 2 | 3.15 | 1.89 |
| 80-30/150 300/25 | XC0604 | 1 3/8 x 2 1/2 | 5.50 | 3.30 |
| ★★ 80-40/150 20/25 | C0610 | 1 x 2 1/2 | 2.80 | 1.68 |
| ★ 80-40/150 300/25 | XC0613 | 1 3/8 x 2 1/2 | 3.70 | 2.22 |
| ★★ 80-60/150 250/10 | XC0615 | 1 3/8 x 2 1/2 | 3.40 | 2.04 |
| ★ 100-80/150 200/10 | XC0618 | 1 3/8 x 2 1/2 | 3.60 | 2.16 |
| 120-60/150 20/25 | C0620 | 1 3/8 x 2 1/2 | 5.05 | 3.03 |
| ★ 300-80/150 200/50 | C0626 | 1 3/8 x 4 1/8 | 4.95 | 2.97 |
| 30-20/200 20/25 | C0630 | 1 x 2 | 3.85 | 2.31 |
| ★ 30-20/200 40/150 | C0632 | 1 x 2 1/2 | 2.70 | 1.62 |
| 40-80/200 100/50 | C0634 | 1 3/8 x 3 | 5.25 | 3.15 |
| ★ 60-5/200 20/50 | C0636 | 1 x 2 1/2 | 2.50 | 1.50 |
| 80-10/200 20/50 | C0638 | 1 x 3 | 2.80 | 1.68 |
| 100-10/200 40/50 | C0640 | 1 3/8 x 2 | 4.75 | 2.85 |
| ★ 15-15/250 20/25 | C0650 | 1 x 2 | 2.35 | 1.41 |
| 20-15/250 20/25 | C0660 | 1 x 2 | 3.55 | 2.13 |
| ★ 30-30/250 20/25 | C0670 | 1 x 2 1/2 | 2.80 | 1.68 |
| 40-40/250 10/200 | C0674 | 1 x 3 | 4.45 | 2.67 |
| 70-70/250 20/50 | C0680 | 1 3/8 x 3 | 5.85 | 3.51 |
| 80-80/250 10/450 | C0690 | 1 3/8 x 3 3/8 | 6.30 | 3.78 |
| ★ 90-90/250 20/50 | C0695 | 1 3/8 x 3 | 4.60 | 2.76 |
| 10-10/300 15/250 | C0700 | 1 x 2 | 3.70 | 2.22 |
| 20-20/300 20/25 | C0710 | 1 x 2 | 4.15 | 2.49 |
| 30-30/300 25/50 | C0720 | 1 x 3 | 4.35 | 2.61 |
| 40-20/300 20/25 | XC0732 | 1 x 2 1/2 | 4.65 | 2.79 |
| ★ 100-10/300 60/50 | C0733 | 1 3/8 x 2 1/2 | 4.05 | 2.43 |
| 125-20/300 20/50 | XC0733.2 | 1 3/8 x 3 | 4.30 | 2.58 |
| 125-20/300 100/50 | XC0733.4 | 1 3/8 x 3 3/8 | 7.35 | 4.41 |
| 125-60/300 40/50 | C0733.7 | 1 3/8 x 3 3/8 | 7.35 | 4.41 |
| ★ 140-10/300 200/150 | C0734 | 1 3/8 x 4 1/8 | 5.50 | 3.30 |
| ★★ 140-100/300 60/50 | C0734.3 | 1 3/8 x 4 1/8 | 6.05 | 3.63 |
| ★ 200-20/300 10/100 | C0735 | 1 3/8 x 4 1/8 | 4.90 | 2.94 |
| 10-5/350 30/50 | C0739 | 1 x 2 1/2 | 3.85 | 2.31 |
| 10-5/350 150/50 | C0740 | 1 x 3 | 4.05 | 2.43 |
| 10-15/350 20/25 | C0760 | 1 x 2 | 3.75 | 2.25 |
| ★★ 15-10/350 20/25 | C0770 | 1 x 2 | 2.50 | 1.50 |
| ★ 20-4/350 100/25 | C0773 | 1 x 2 1/2 | 2.60 | 1.56 |
| ★ 20-5/350 150/50 | C0775 | 1 x 3 | 2.95 | 1.77 |

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| ★ 20-10/350 20/25 | C0780 | 1 x 2 | \$2.55 | \$1.53 |
| ★ 20-10/350 5/250 | C0790 | 1 x 2 | 2.55 | 1.53 |
| ★ 20-20/350 20/25 | C0800 | 1 x 2 1/2 | 2.80 | 1.68 |
| 30-5/350 100/200 | C0806 | 1 3/8 x 2 1/2 | 6.00 | 3.60 |
| 30-10/350 20/25 | C0810 | 1 x 2 1/2 | 4.30 | 2.58 |
| 30-10/350 20/250 | C0820 | 1 x 3 | 4.60 | 2.76 |
| ★★ 30-20/350 20/25 | C0830 | 1 x 3 | 3.10 | 1.86 |
| ★ 30-20/350 100/150 | C0835 | 1 3/8 x 2 1/2 | 4.00 | 2.40 |
| ★ 30-30/350 20/25 | C0840 | 1 3/8 x 2 | 3.40 | 2.04 |
| 40-20/350 10/100 | C0850 | 1 3/8 x 2 | 4.30 | 2.58 |
| 20-40/350 10/150 | C0860 | 1 x 3 | 4.80 | 2.88 |
| 40-40/350 50/25 | C0870 | 1 3/8 x 2 1/2 | 5.65 | 3.39 |
| ★ 80-40/350 400/50 | XC0874 | 1 3/8 x 4 1/8 | 5.65 | 3.39 |
| 80-40/350 100/200 | C0874.5 | 1 3/8 x 3 3/8 | 5.45 | 3.27 |
| ★ 100-60/350 20/250 | C0875 | 1 3/8 x 4 1/8 | 5.50 | 3.30 |
| 150-4/350 30/50 | XC0875.5 | 1 3/8 x 3 3/8 | 4.75 | 2.85 |
| ★ 20-20/400 10/350 | C0876 | 1 x 3 | 3.00 | 1.80 |
| 30-10/400 150/50 | C0880 | 1 3/8 x 2 1/2 | 5.10 | 3.06 |
| ★ 60-30/400 20/350 | C0885 | 1 3/8 x 3 | 4.55 | 2.73 |
| ★ 80-40/400 150/50 | C0890 | 1 3/8 x 3 3/8 | 5.15 | 3.09 |
| ★ 100-10/400 20/50 | C0894 | 1 3/8 x 3 3/8 | 4.50 | 2.70 |
| ★★ 100-10/400 80/350 | C0896 | 1 3/8 x 4 1/8 | 6.10 | 3.66 |
| 15-5/450 15/350 | C0900 | 1 x 3 | 4.30 | 2.58 |
| ★ 10-10/450 20/25 | C0910 | 1 x 2 | 2.40 | 1.44 |
| ★ 10-10/450 40/50 | C0920 | 1 x 2 1/2 | 2.50 | 1.50 |
| 10-10/450 50/100 | C0930 | 1 3/8 x 2 | 4.00 | 2.40 |
| 15-15/450 20/25 | C0940 | 1 x 2 1/2 | 4.15 | 2.49 |
| ★ 15-15/450 40/25 | C0945 | 1 x 2 1/2 | 2.75 | 1.65 |
| 15-15/450 10/300 | C0950 | 1 x 3 | 4.35 | 2.61 |
| ★★ 20-10/450 20/25 | C0960 | 1 x 2 1/2 | 2.70 | 1.62 |
| ★ 20-10/450 50/50 | C0970 | 1 x 3 | 2.85 | 1.71 |
| 20-15/450 20/25 | C0980 | 1 x 3 | 4.35 | 2.61 |
| ★★ 20-20/450 20/25 | C0990 | 1 x 3 | 3.05 | 1.83 |
| 20-20/450 100/50 | C0992 | 1 3/8 x 2 1/2 | 5.25 | 3.15 |
| 20-20/450 60/350 | C1000 | 1 3/8 x 3 | 6.10 | 3.66 |
| ★ 30-10/450 150/50 | C1005 | 1 3/8 x 2 1/2 | 3.50 | 2.10 |
| 30-20/450 30/150 | C1010 | 1 3/8 x 2 1/2 | 5.25 | 3.15 |
| ★ 30-30/450 20/25 | C1020 | 1 3/8 x 2 1/2 | 3.55 | 2.13 |
| 30-30/450 40/50 | C1030 | 1 3/8 x 3 | 5.50 | 3.30 |
| ★ 30-30/450 125/25 | C1034 | 1 3/8 x 3 | 3.95 | 2.37 |
| ★ 35-25/450 100/50 | C1036 | 1 3/8 x 3 | 3.95 | 2.37 |
| ★ 40-10/450 100/50 | C1040 | 1 3/8 x 3 | 4.30 | 2.58 |
| ★★ 40-10/450 80/200 | C1050 | 1 3/8 x 3 | 3.90 | 2.34 |
| ★ 40-20/450 20/25 | C1060 | 1 3/8 x 2 1/2 | 3.50 | 2.10 |
| ★ 40-40/450 20/25 | C1070 | 1 3/8 x 3 | 3.95 | 2.37 |
| ★ 40-40/450 40/25 | C1080 | 1 3/8 x 3 | 3.95 | 2.37 |
| ★ 40-40/450 100/50 | C1090 | 1 3/8 x 3 | 4.30 | 2.58 |
| ★ 40-40/450 40/150 | C1100 | 1 3/8 x 3 3/8 | 4.10 | 2.46 |
| ★ 40-40/450 60/200 | C1102 | 1 3/8 x 3 3/8 | 4.45 | 2.67 |
| ★ 40-40/450 80/350 | C1103 | 1 3/8 x 4 1/8 | 5.55 | 3.33 |
| ★ 50-5/450 50/350 | C1103.5 | 1 3/8 x 3 3/8 | 4.25 | 2.55 |
| ★ 60-40/450 75/50 | C1104 | 1 3/8 x 3 3/8 | 4.60 | 2.76 |
| ★ 80-10/450 125/25 | C1106 | 1 3/8 x 3 3/8 | 4.40 | 2.64 |
| ★ 80-20/450 100/50 | C1108 | 1 3/8 x 4 1/8 | 4.80 | 2.88 |
| ★ 80-40/450 100/25 | C1110 | 1 3/8 x 4 1/8 | 5.10 | 3.06 |
| ★ 20-10/475 100/400 | C1114 | 1 3/8 x 4 1/8 | 5.25 | 3.15 |
| 10-10/500 100/50 | C1120 | 1 x 3 | 4.30 | 2.58 |
| 10-10/500 4/350 | C1130 | 1 x 2 1/2 | 3.75 | 2.25 |
| ★ 20-10/500 100/50 | C1150 | 1 x 3 3/8 | 3.30 | 1.98 |
| 20-20/500 60/400 | C1160 | 1 3/8 x 3 3/8 | 7.20 | 4.32 |
| ★ 20-20/500 60/450 | C1162 | 1 3/8 x 3 3/8 | 4.85 | 2.91 |
| 30-10/500 20/50 | C1170 | 1 3/8 x 2 1/2 | 4.65 | 2.79 |
| ★★ 40-40/500 100/200 | C1180 | 1 3/8 x 4 1/8 | 5.85 | 3.51 |

1 SECTION HV — 2 SECTIONS LV

| | | | | |
|----------------------|--------|---------------|------|------|
| 100/100 50-25/25 | C1190 | 1 x 3 | 4.00 | 2.40 |
| 20/150 250-100/15 | C1200 | 1 3/8 x 2 | 4.35 | 2.61 |
| ★ 60/200 200-140/150 | XC1202 | 1 3/8 x 4 | 4.80 | 2.88 |
| ★ 10/300 500-500/15 | XC1204 | 1 3/8 x 2 1/2 | 3.90 | 2.34 |
| ★ 20/300 150-80/150 | C1206 | 1 3/8 x 3 | 3.95 | 2.37 |
| ★ 100/300 200-30/150 | XC1207 | 1 3/8 x 4 1/8 | 5.05 | 3.03 |
| ★ 100/300 200-60/150 | XC1208 | 1 3/8 x 4 1/8 | 5.55 | 3.33 |
| 100/300 60-20/250 | XC1209 | 1 3/8 x 4 1/8 | 7.35 | 4.41 |

CORNELL-DUBILIER ELECTRONICS

Twist-Prong Electrolytics

CLASS
201.35



★★ BEST-SELLING PREFERRED TYPE

★ PREFERRED TYPE

1 SECTION HV — 2 SECTIONS LV

4 SECTIONS — 1 VOLTAGE

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| 120/300 15-10/450 | C1210 | 1 3/8 x 3 3/8 | \$6.75 | \$4.05 |
| ★ 200/300 60-20/250 | XC1212 | 1 3/8 x 4 | 5.80 | 3.48 |
| 4/350 100-40/25 | C1214 | 1 x 2 | 3.40 | 2.04 |
| 30/350 20-10/250 | C1220 | 1 x 3 | 4.50 | 2.70 |
| ★ 40/350 200-100/150 | C1224 | 1 3/8 x 3 3/8 | 5.00 | 3.00 |
| ★ ★ 60/350 200-30/150 | C1226 | 1 3/8 x 3 3/8 | 4.40 | 2.64 |
| 40/400 200-60/200 | C1228 | 1 3/8 x 4 1/8 | 8.30 | 4.98 |
| 80/400 20-10/300 | C1230 | 1 3/8 x 3 3/8 | 6.40 | 3.84 |
| ★ 5/450 80-40/300 | C1231 | 1 3/8 x 3 | 4.15 | 2.49 |
| 10/450 20-10/25 | C1232 | 1 x 2 | 3.25 | 1.95 |
| ★ 10/450 80-80/250 | C1236 | 1 3/8 x 3 3/8 | 4.20 | 2.52 |
| 20/450 40-10/250 | C1240 | 1 3/8 x 2 | 4.75 | 2.85 |
| ★ 20/450 40-10/350 | C1243 | 1 3/8 x 2 1/2 | 3.50 | 2.10 |
| ★ 20/450 80-10/350 | C1246 | 1 3/8 x 3 3/8 | 4.25 | 2.55 |
| 30/450 100-25/25 | C1250 | 1 3/8 x 2 | 4.50 | 2.70 |
| ★ 40/450 90-50/150 | C1260 | 1 3/8 x 3 | 3.95 | 2.37 |
| 60/450 40-20/350 | C1261 | 1 3/8 x 3 3/8 | 6.90 | 4.14 |
| ★ 80/450 40-40/250 | C1262 | 1 3/8 x 4 1/8 | 4.95 | 2.97 |
| 80/450 100-20/50 | C1263 | 1 3/8 x 3 3/8 | 6.40 | 3.84 |
| 40/475 40-10/250 | C1265 | 1 3/8 x 2 1/2 | 6.00 | 3.60 |
| 40/475 80-10/300 | C1266 | 1 3/8 x 3 3/8 | 7.20 | 4.32 |
| 40/475 20-20/450 | C1268 | 1 3/8 x 3 | 6.75 | 4.05 |
| ★ 40/475 80-10/450 | C1167 | 1 3/8 x 4 1/8 | 5.50 | 3.30 |
| 10/500 80-10/150 | C1269 | 1 x 3 3/8 | 4.30 | 2.58 |

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| ★ 200-20-20-20/300 | D0026 | 1 3/8 x 5 | \$6.15 | \$3.69 |
| ★ ★ 40-20-20-10/350 | D0032 | 1 3/8 x 2 1/2 | 4.35 | 2.61 |
| ★ ★ 40-40-40-40/350 | D0034 | 1 3/8 x 3 3/8 | 6.00 | 3.60 |
| 80-10-10-10/350 | D0040 | 1 3/8 x 3 3/8 | 6.90 | 4.14 |
| 80-60-40-20/350 | D0042 | 1 3/8 x 4 1/8 | 6.40 | 3.84 |
| 100-40-10-10/350 | D0044 | 1 3/8 x 3 3/8 | 7.60 | 4.56 |
| 140-40-10-10/350 | D0046 | 1 3/8 x 4 1/8 | 7.90 | 4.74 |
| 30-30-20-20/400 | D0050 | 1 3/8 x 3 | 7.30 | 4.38 |
| ★ 50-40-30-20/400 | D0054 | 1 3/8 x 4 1/8 | 5.50 | 3.30 |
| 80-10-10-10/400 | D0058 | 1 3/8 x 3 3/8 | 7.05 | 4.23 |
| ★ 80-20-10-10/400 | D0060 | 1 3/8 x 3 3/8 | 5.05 | 3.03 |
| 80-40-30-4/400 | D0065 | 1 3/8 x 4 1/8 | 5.80 | 3.48 |
| ★ 5-5-5-5/450 | D0080 | 1 3/8 x 2 | 3.00 | 1.80 |
| ★ ★ 10-10-10-5/450 | D0088 | 1 3/8 x 2 | 4.90 | 2.94 |
| ★ ★ 10-10-10-10/450 | D0090 | 1 3/8 x 2 | 3.35 | 2.01 |
| 15-30-30-10/450 | D0100 | 1 3/8 x 3 | 7.05 | 4.23 |
| 15-30-30-30/450 | D0110 | 1 3/8 x 3 3/8 | 7.95 | 4.77 |
| ★ ★ 20-10-10-10/450 | D0120 | 1 3/8 x 2 1/2 | 3.70 | 2.22 |
| ★ ★ 20-20-20-20/450 | D0130 | 1 3/8 x 3 | 4.70 | 2.82 |
| ★ 80-15-15-15/450 | D0140 | 1 3/8 x 3 | 4.45 | 2.67 |
| ★ ★ 30-30-20-20/450 | D0144 | 1 3/8 x 3 | 5.20 | 3.12 |
| ★ ★ 35-35-10-5/450 | D0150 | 1 3/8 x 3 3/8 | 4.65 | 2.79 |
| ★ 40-10-10-10/450 | D0160 | 1 3/8 x 3 | 4.15 | 2.49 |
| ★ 40-20-10-10/450 | D0170 | 1 3/8 x 3 | 4.45 | 2.67 |
| ★ 40-35-10-10/450 | D0171 | 1 3/8 x 3 | 4.80 | 2.88 |
| ★ 40-40-4-4/450 | D0172 | 1 3/8 x 3 3/8 | 4.70 | 2.82 |
| ★ ★ 40-40-20-20/450 | D0174 | 1 3/8 x 4 1/8 | 5.55 | 3.33 |
| ★ ★ 40-40-30-30/450 | D0176 | 1 3/8 x 4 1/8 | 6.05 | 3.63 |
| ★ ★ 40-40-40-40/450 | D0177 | 1 3/8 x 4 | 6.45 | 3.87 |
| ★ 60-20-20-20/450 | D0177.4 | 1 3/8 x 4 1/8 | 5.65 | 3.39 |
| ★ 60-30-10-2/450 | D0177.6 | 1 3/8 x 3 3/8 | 5.10 | 3.06 |
| 70-10-10-5/450 | D0178 | 1 3/8 x 3 3/8 | 7.15 | 4.29 |
| ★ ★ 80-10-10-10/450 | D0179 | 1 3/8 x 3 3/8 | 5.05 | 3.03 |
| ★ 20-20-10-10/475 | D0179.3 | 1 3/8 x 2 1/2 | 4.35 | 2.61 |
| ★ 20-20-20-20/475 | D0179.5 | 1 3/8 x 3 | 5.20 | 3.12 |
| ★ 40-20-10-10/475 | D0179.7 | 1 3/8 x 3 | 5.10 | 3.06 |
| ★ 10-10-10-10/500 | D0180 | 1 3/8 x 2 | 3.50 | 2.10 |
| ★ 40-40-8-8/500 | D0185 | 1 3/8 x 3 3/8 | 5.70 | 3.42 |

1 SECTION HV — 1 SECTION MV — 1 SECTION LV

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| 40/150 25/25 130/15 | C1270 | 1 x 3 | 3.55 | 2.13 |
| 50/150 100/50 20/25 | C1274 | 1 x 3 | 4.30 | 2.58 |
| ★ 80/250 40/150 50/50 | C1280 | 1 3/8 x 2 1/2 | 2.90 | 1.74 |
| 100/300 60/150 20/50 | C1290 | 1 3/8 x 3 | 6.30 | 3.78 |
| 150/300 60/200 200/150 | XC1295 | 1 3/8 x 4 1/8 | 5.70 | 3.42 |
| ★ 20/350 50/100 100/75 | C1300 | 1 x 3 | 3.10 | 1.86 |
| ★ ★ 30/350 30/300 20/25 | C1310 | 1 x 3 | 3.15 | 1.89 |
| 50/350 10/250 500/5 | C1320 | 1 3/8 x 2 1/2 | 5.40 | 3.24 |
| ★ ★ 125/350 5/200 100/75 | C1325 | 1 3/8 x 3 3/8 | 5.30 | 3.18 |
| 10/400 50/350 30/25 | C1330 | 1 x 3 | 4.65 | 2.79 |
| 40/400 80/350 100/200 | C1336 | 1 3/8 x 3 3/8 | 7.95 | 4.77 |
| 60/400 40/300 20/25 | C1340 | 1 3/8 x 3 3/8 | 6.30 | 3.78 |
| 10/450 50/150 100/25 | C1350 | 1 x 3 | 4.15 | 2.49 |
| ★ 10/450 50/150 100/75 | C1355 | 1 x 3 | 3.25 | 1.95 |
| ★ ★ 10/450 40/300 10/150 | C1360 | 1 3/8 x 2 | 3.10 | 1.86 |
| 10/450 40/350 100/50 | C1366 | 1 3/8 x 3 3/8 | 5.10 | 3.06 |
| 10/450 30/400 30/300 | C1370 | 1 3/8 x 2 1/2 | 5.05 | 3.03 |
| 15/450 20/350 20/250 | C1380 | 1 x 3 | 4.50 | 2.70 |
| ★ 20/450 80/200 50/50 | C1385 | 1 3/8 x 2 1/2 | 3.40 | 2.04 |
| ★ 20/450 60/250 100/25 | C1390 | 1 3/8 x 2 1/2 | 3.65 | 2.19 |
| ★ 20/450 15/350 10/300 | C1400 | 1 x 3 | 4.60 | 2.76 |
| 20/450 80/350 100/50 | C1410 | 1 3/8 x 3 3/8 | 6.75 | 4.05 |
| ★ 30/450 15/350 40/25 | C1412 | 1 3/8 x 2 | 2.40 | 1.44 |
| ★ 30/450 40/350 50/25 | C1414 | 1 x 4 1/8 | 2.90 | 1.74 |
| 30/450 50/400 40/25 | C1420 | 1 3/8 x 3 | 5.95 | 3.57 |
| ★ 40/450 40/150 130/50 | C1430 | 1 3/8 x 3 | 3.75 | 2.25 |
| 40/450 100/150 50/50 | C1440 | 1 3/8 x 3 | 5.95 | 3.57 |
| 40/450 50/350 50/300 | C1442 | 1 3/8 x 4 1/8 | 7.30 | 4.38 |
| ★ 60/450 80/400 20/350 | C1443 | 1 3/8 x 4 1/8 | 5.65 | 3.39 |
| ★ 10/475 4/350 40/250 | C1444 | 1 3/8 x 2 | 3.00 | 1.80 |
| 10/475 4/350 100/50 | C1445 | 1 x 2 1/2 | 4.50 | 2.70 |
| ★ 10/475 40/450 100/200 | C1445.3 | 1 3/8 x 3 | 4.20 | 2.52 |
| ★ 20/475 50/50 20/25 | C1446 | 1 x 3 | 2.75 | 1.65 |
| 20/475 10/350 5/150 | C1448 | 1 x 2 1/2 | 4.90 | 2.94 |
| ★ 80/475 80/150 50/50 | C1449 | 1 3/8 x 4 1/8 | 4.85 | 2.91 |
| 10/500 100/200 40/50 | C1450 | 1 3/8 x 2 1/2 | 5.05 | 3.03 |
| 20/500 20/300 40/25 | C1460 | 1 3/8 x 2 | 4.65 | 2.79 |
| 40/500 40/250 100/50 | C1470 | 1 3/8 x 3 | 6.45 | 3.87 |
| 40/500 40/400 25/50 | C1480 | 1 3/8 x 3 | 6.45 | 3.87 |

3 SECTIONS HV — 1 SECTION LV

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| 20-20-20/150 20/25 | D0190 | 1 3/8 x 2 | 4.35 | 2.61 |
| 30-20-20/150 200/10 | D0200 | 1 3/8 x 2 | 4.65 | 2.79 |
| ★ 30-30-30/150 40/25 | D0210 | 1 3/8 x 2 | 3.10 | 1.86 |
| ★ 40-20-20/150 20/25 | D0220 | 1 3/8 x 2 | 2.95 | 1.77 |
| ★ 40-40-20/150 200/10 | D0230 | 1 3/8 x 2 | 3.25 | 1.95 |
| ★ 40-40-30/150 20/25 | D0240 | 1 3/8 x 2 | 3.10 | 1.86 |
| ★ 40-40-40/150 20/25 | D0250 | 1 3/8 x 2 | 3.15 | 1.89 |
| 40-40-40/150 100/25 | D0260 | 1 3/8 x 2 | 5.05 | 3.03 |
| ★ 40-40-40/150 160/25 | D0270 | 1 3/8 x 2 | 3.55 | 2.13 |
| ★ 50-20-20/150 200/25 | D0275 | 1 3/8 x 2 | 3.50 | 2.10 |
| ★ 50-30-30/150 100/25 | D0280 | 1 3/8 x 2 | 3.45 | 2.07 |
| ★ 50-50-50/150 20/25 | D0290 | 1 3/8 x 2 | 3.55 | 2.13 |
| ★ ★ 60-40-20/150 200/10 | D0300 | 1 3/8 x 2 | 3.50 | 2.10 |
| 75-75-75/150 30/25 | D0310 | 1 3/8 x 3 | 6.45 | 3.87 |
| ★ ★ 80-40-40/150 40/25 | D0325 | 1 3/8 x 2 | 3.60 | 2.16 |
| ★ ★ 80-40-40/150 100/25 | D0330 | 1 3/8 x 2 1/2 | 3.75 | 2.25 |
| ★ 100-90-60/150 200/25 | D0336 | 1 3/8 x 3 | 4.95 | 2.97 |
| ★ 200-200-100/150 10/75 | D0338 | 1 3/8 x 4 1/8 | 5.95 | 3.57 |
| 40-20-10/250 20/25 | D0340 | 1 3/8 x 2 | 5.10 | 3.06 |
| 80-60-40/250 20/150 | D0350 | 1 3/8 x 3 3/8 | 7.65 | 4.59 |
| ★ 100-40-10/250 100/50 | D0360 | 1 3/8 x 3 3/8 | 5.15 | 3.09 |
| ★ 40-20-20/300 25/25 | D0367 | 1 3/8 x 2 | 4.00 | 2.40 |
| 40-30-20/300 50/25 | D0368 | 1 3/8 x 2 | 6.25 | 3.75 |
| ★ 40-40-40/300 20/150 | D0370 | 1 3/8 x 3 | 4.90 | 2.94 |
| ★ 60-40-20/300 50/25 | D0380 | 1 3/8 x 3 | 4.65 | 2.79 |
| ★ 120-40-40/300 10/250 | D0385 | 1 3/8 x 4 1/8 | 6.15 | 3.69 |
| ★ 150-20-10/300 250/50 | D0387 | 1 3/8 x 4 1/8 | 6.05 | 3.63 |
| 150-30-30/300 150/50 | D0388 | 1 3/8 x 4 1/8 | 6.10 | 3.66 |
| 10-10-10/350 20/25 | D0390 | 1 3/8 x 2 | 4.45 | 2.67 |
| 15-15-15/350 50/50 | D0400 | 1 3/8 x 2 | 5.70 | 3.42 |
| ★ 20-10-5/350 20/25 | D0410 | 1 3/8 x 2 | 3.10 | 1.86 |
| ★ 30-10-5/350 200/25 | D0414 | 1 3/8 x 2 | 3.80 | 2.28 |
| ★ 30-10-5/350 100/200 | D0416 | 1 3/8 x 2 1/2 | 4.40 | 2.64 |
| ★ 30-20-5/350 100/200 | D0418 | 1 3/8 x 3 | 4.70 | 2.82 |
| 30-20-20/350 20/25 | D0420 | 1 3/8 x 2 1/2 | 6.15 | 3.69 |
| ★ 40-40-20/350 20/25 | D0430 | 1 3/8 x 3 | 4.70 | 2.82 |
| ★ 40-40-30/350 10/25 | D0433 | 1 3/8 x 3 | 4.95 | 2.97 |
| 40-20-20/350 25/25 | D0440 | 1 3/8 x 2 1/2 | 6.40 | 3.84 |
| 40-30-10/350 50/50 | D0450 | 1 3/8 x 3 | 6.60 | 3.96 |

4 SECTIONS — 1 VOLTAGE

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| ★ ★ 40-40-40-30/150 | D0010 | 1 3/8 x 2 | 3.35 | 2.01 |
| ★ 100-80-60-40/150 | D0014 | 1 3/8 x 3 | 4.65 | 2.79 |
| 200-200-60-30/175 | XD0015 | 1 3/8 x 4 1/8 | 6.00 | 3.60 |
| ★ 40-20-10-10/300 | D0016 | 1 3/8 x 2 | 3.95 | 2.37 |
| ★ 40-40-20-10/300 | D0020 | 1 3/8 x 2 1/2 | 4.55 | 2.73 |
| ★ 40-40-30-20/300 | D0022 | 1 3/8 x 3 | 4.85 | 2.91 |
| ★ 60-40-10-10/300 | D0024 | 1 3/8 x 3 3/8 | 4.55 | 2.73 |
| ★ ★ 150-100-10-5/300 | D0025 | 1 3/8 x 4 1/8 | 6.60 | 3.96 |

CORNELL-DUBILIER ELECTRONICS

CLASS
201.35 Twist-Prong Electrolytics



★★BEST-SELLING PREFERRED TYPE ★PREFERRED TYPE

3 SECTIONS HV — 1 SECTION LV

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|---------------------------|----------------------|------------------------|------------|-----------|
| ★ 40-40-40/350 40/25 | D0460 | 1 3/8 x 3 | \$5.20 | \$3.12 |
| ★ 40-40-40/350 150/50 | D0470 | 1 3/8 x 3 3/8 | 5.70 | 3.42 |
| ★ 70-40-10/350 50/50 | D0471 | 1 3/8 x 3 | 5.25 | 3.15 |
| ★ 80-40-60/350 10/50 | D0472 | 1 3/8 x 4 1/8 | 9.30 | 5.58 |
| ★ 90-30-5/350 100/75 | D0473 | 1 3/8 x 3 3/8 | 6.15 | 3.69 |
| ★ 100-10-10/350 20/50 | D0473.3 | 1 3/8 x 3 | 5.15 | 3.50 |
| ★ 100-20-10/350 20/50 | D0473.4 | 1 3/8 x 3 3/8 | 5.40 | 3.24 |
| ★ 100-80-10/350 20/50 | D0473.5 | 1 3/8 x 4 1/8 | 6.60 | 3.96 |
| ★ 100-40-30/350 50/50 | D0474 | 1 3/8 x 4 1/8 | 6.55 | 3.93 |
| ★ 140-20-10/350 100/50 | D0475 | 1 3/8 x 4 1/8 | 9.25 | 5.55 |
| ★ 20-10-10/400 25/25 | D0476 | 1 3/8 x 2 | 3.25 | 1.95 |
| ★ 80-40-10/400 20/25 | D0477 | 1 3/8 x 3 3/8 | 5.30 | 3.18 |
| ★ 80-40-10/400 100/200 | D0477.5 | 1 3/8 x 4 1/8 | 6.30 | 3.78 |
| ★ 80-40-30/400 40/25 | D0478 | 1 3/8 x 4 1/8 | 5.95 | 3.57 |
| ★ 90-20-10/400 50/50 | D0479 | 1 3/8 x 3 3/8 | 5.40 | 3.24 |
| ★ 90-40-10/400 40/25 | D0479.2 | 1 3/8 x 3 3/8 | 8.70 | 5.22 |
| ★ 10-10-10/450 20/25 | D0480 | 1 3/8 x 2 | 3.15 | 1.89 |
| ★ 10-10-10/450 100/25 | D0490 | 1 3/8 x 2 | 5.05 | 3.03 |
| ★ 10-10-10/450 150/50 | D0500 | 1 3/8 x 2 1/2 | 5.55 | 3.33 |
| ★ 15-10-10/450 20/25 | D0504 | 1 3/8 x 2 | 4.95 | 2.97 |
| ★ 20-10-10/450 100/25 | D0510 | 1 3/8 x 2 | 5.55 | 3.33 |
| ★ 20-20-20/450 20/25 | D0520 | 1 3/8 x 2 1/2 | 4.15 | 2.49 |
| ★ 20-20-20/450 100/50 | D0530 | 1 3/8 x 3 | 4.55 | 2.73 |
| ★ 30-15-15/450 40/25 | D0540 | 1 3/8 x 2 1/2 | 6.25 | 3.75 |
| ★ 30-20-20/450 20/25 | D0550 | 1 3/8 x 3 | 6.60 | 3.96 |
| ★ 30-30-10/450 125/25 | D0555 | 1 3/8 x 3 | 4.50 | 2.70 |
| ★ 30-30-15/450 30/50 | D0560 | 1 3/8 x 3 | 4.55 | 2.73 |
| ★ 30-30-15/450 100/50 | D0570 | 1 3/8 x 3 3/8 | 7.35 | 4.41 |
| ★ 30-30-20/450 20/25 | D0590 | 1 3/8 x 3 | 7.00 | 4.20 |
| ★ 35-35-10/450 10/200 | D0592 | 1 3/8 x 3 3/8 | 6.90 | 4.14 |
| ★ 40-10-10/450 250/25 | D0600 | 1 3/8 x 3 | 4.65 | 2.79 |
| ★ 40-10-10/450 100/200 | D0602 | 1 3/8 x 3 3/8 | 7.35 | 4.41 |
| ★ 40-10-10/450 40/300 | D0604 | 1 3/8 x 3 3/8 | 7.00 | 4.20 |
| ★ 40-10-10/450 40/350 | D0606 | 1 3/8 x 3 | 4.75 | 2.85 |
| ★ 40-20-10/450 25/25 | D0610 | 1 3/8 x 3 | 6.40 | 3.84 |
| ★ 40-20-10/450 100/50 | D0620 | 1 3/8 x 3 3/8 | 4.60 | 2.76 |
| ★ 40-20-10/450 100/250 | D0622 | 1 3/8 x 4 1/8 | 5.85 | 3.51 |
| ★ 40-20-20/450 20/25 | D0624 | 1 3/8 x 3 | 4.60 | 2.76 |
| ★ 40-20-20/450 40/25 | D0630 | 1 3/8 x 3 | 4.65 | 2.79 |
| ★ 40-30-10/450 20/25 | D0640 | 1 3/8 x 3 | 4.50 | 2.70 |
| ★ 40-40-10/450 25/50 | D0650 | 1 3/8 x 3 3/8 | 4.70 | 2.82 |
| ★ 40-40-10/450 50/50 | D0655 | 1 3/8 x 3 3/8 | 4.80 | 2.88 |
| ★ 40-40-10/450 100/100 | D0660 | 1 3/8 x 3 3/8 | 5.35 | 3.21 |
| ★ 40-40-10/450 100/350 | D0662 | 1 3/8 x 3 3/8 | 7.20 | 4.32 |
| ★ 40-40-20/450 20/25 | D0663 | 1 3/8 x 3 3/8 | 5.00 | 3.00 |
| ★ 40-40-40/450 40/25 | D0663.2 | 1 3/8 x 3 3/8 | 5.50 | 3.30 |
| ★ 50-40-5/450 20/25 | D0664 | 1 3/8 x 3 3/8 | 7.20 | 4.32 |
| ★ 60-10-10/450 20/150 | D0670 | 1 3/8 x 3 | 4.60 | 2.76 |
| ★ 60-30-30/450 150/50 | D0671 | 1 3/8 x 4 1/8 | 5.80 | 3.48 |
| ★ 60-40-10/450 25/50 | D0672 | 1 3/8 x 3 3/8 | 5.25 | 3.15 |
| ★ 60-40-40/450 10/25 | D0674 | 1 3/8 x 4 1/8 | 6.00 | 3.60 |
| ★ 60-50-5/450 20/25 | D0676 | 1 3/8 x 3 3/8 | 5.35 | 3.21 |
| ★ 40-10-20/475 10/25 | D0680 | 1 3/8 x 3 | 7.30 | 4.38 |
| ★ 20-20-10/500 10/300 | D0690 | 1 3/8 x 2 1/2 | 4.30 | 2.58 |
| ★ 50-30-10/500 20/300 | D0692 | 1 3/8 x 3 3/8 | 5.60 | 3.36 |

1 SECTION HV — 3 SECTIONS LV

| | | | | |
|-------------------------|----------|---------------|------|------|
| ★ 10/300 200-140-30/150 | D0694 | 1 3/8 x 5 | 5.10 | 3.06 |
| ★ 10/300 200-200-30/150 | XD0694.5 | 1 3/8 x 5 | 5.35 | 3.21 |
| ★ 160/350 60-10-4/300 | XD0695 | 1 3/8 x 4 1/8 | 6.40 | 3.84 |
| ★ 5/475 70-25-5/400 | D0695.3 | 1 3/8 x 3 3/8 | 5.05 | 3.03 |
| ★ 10/450 100-20-20/300 | D0695.5 | 1 3/8 x 3 | 5.25 | 3.15 |
| ★ 10/475 130-20-10/350 | D0695.7 | 1 3/8 x 4 1/8 | 6.00 | 3.60 |
| ★ 20/475 60-40-10/350 | D0696 | 1 3/8 x 3 3/8 | 7.80 | 4.68 |
| ★ 30/475 130-10-10/350 | D0697 | 1 3/8 x 4 1/8 | 6.40 | 3.84 |
| ★ 20/500 80-20-10/300 | D0698 | 1 3/8 x 3 3/8 | 5.00 | 3.00 |

1 SECTION HV — 2 SECTIONS MV — 1 SECTION LV

| | | | | |
|-----------------------------|---------|---------------|------|------|
| 5/75 25-25/25 100/15 | D0700 | 1 3/8 x 2 | 4.15 | 2.49 |
| ★ 20/300 150-150/150 100/30 | D0710 | 1 3/8 x 4 1/8 | 5.30 | 3.18 |
| ★ 15/350 80-40/200 200/25 | D0720 | 1 3/8 x 3 | 6.75 | 4.05 |
| ★ 20/350 150-80/150 20/25 | D0722 | 1 3/8 x 3 | 6.85 | 4.11 |
| ★ 40/350 50-20/150 80/50 | D0724 | 1 3/8 x 3 | 6.10 | 3.66 |
| ★ 10/400 50-30/350 30/25 | D0730 | 1 3/8 x 3 | 6.60 | 3.96 |
| ★ 20/400 50-40/350 80/50 | D0730.4 | 1 3/8 x 3 | 5.00 | 3.00 |
| ★ 30/400 60-20/350 100/50 | D0731 | 1 3/8 x 3 | 6.80 | 4.08 |
| ★ 40/400 120-10/250 150/50 | D0731.3 | 1 3/8 x 4 1/8 | 5.90 | 3.54 |
| ★ 80/400 40-10/350 10/25 | D0732 | 1 3/8 x 3 3/8 | 7.95 | 4.77 |
| ★ 50/400 60-40/350 20/25 | D0733 | 1 3/8 x 3 3/8 | 7.35 | 4.41 |
| ★ 10/450 100-20/300 20/200 | D0736 | 1 3/8 x 3 3/8 | 7.60 | 4.56 |
| ★ 10/450 60-40/350 25/25 | D0740 | 1 3/8 x 3 3/8 | 4.60 | 2.76 |
| ★ 10/450 100-10/350 20/25 | D0750 | 1 3/8 x 3 3/8 | 5.25 | 3.15 |
| ★ 20/450 80-20/200 50/50 | D0760 | 1 3/8 x 3 | 4.15 | 2.49 |
| ★ 20/450 80-50/350 100/50 | D0764 | 1 3/8 x 4 1/8 | 6.00 | 3.60 |

1 SECTION HV — 2 SECTIONS MV — 1 SECTION LV

| Single Section Cap./Volts | Rotational Stock No. | Size—Ins. Dia. x Lgth. | List Price | Net Price |
|----------------------------|----------------------|------------------------|------------|-----------|
| 25/450 100-10/300 60/50 | D0768 | 1 3/8 x 3 3/8 | \$8.40 | \$5.04 |
| 30/450 125-125/25 30/450 | D0770 | 1 3/8 x 3 | 7.35 | 4.41 |
| 30/450 40-40/350 10/200 | D0780 | 1 3/8 x 3 3/8 | 7.75 | 4.65 |
| 40/450 40-40/250 20/25 | D0782 | 1 3/8 x 3 | 6.85 | 4.11 |
| ★ 40/450 40-40/300 20/150 | D0783 | 1 3/8 x 3 | 4.90 | 2.94 |
| ★ 60/450 80-40/250 20/150 | D0783.2 | 1 3/8 x 4 1/8 | 5.65 | 3.39 |
| ★ 10/475 140-4/350 100/50 | D0783.4 | 1 3/8 x 4 1/8 | 5.30 | 3.18 |
| ★ 10/475 40-10/450 100/50 | D0783.6 | 1 3/8 x 3 | 4.30 | 2.58 |
| ★ 10/475 50-30/450 30/25 | D0783.8 | 1 3/8 x 3 3/8 | 4.75 | 2.85 |
| 5/500 100-10/300 200/150 | D0784 | 1 3/8 x 3 3/8 | 10.45 | 6.27 |
| ★ 10/500 10-4/300 20/25 | D0784.8 | 1 3/8 x 2 | 2.90 | 1.74 |
| ★ 10/500 100-10/300 100/25 | D0785 | 1 3/8 x 3 3/8 | 4.90 | 2.94 |
| 20/525 40-20/450 100/25 | D0786 | 1 3/8 x 3 3/8 | 8.95 | 5.37 |

2 SECTIONS HV — 1 SECTION MV — 1 SECTION LV

| | | | | |
|----------------------------|---------|---------------|------|------|
| 5-5/75 25/25 100/15 | D0788 | 1 3/8 x 2 | 4.00 | 2.40 |
| ★ 80-5/300 60/150 20/25 | D0788.2 | 1 3/8 x 2 1/2 | 4.30 | 2.58 |
| ★ 140-10/300 10/150 100/50 | D0788.3 | 1 3/8 x 3 3/8 | 5.20 | 3.12 |
| ★ 30-30/350 50/300 100/75 | D0788.7 | 1 3/8 x 3 | 5.25 | 3.15 |
| 50-30/350 8/250 20/200 | D0789 | 1 3/8 x 2 1/2 | 6.75 | 4.05 |
| 60-20/350 80/150 100/50 | D0789.1 | 1 3/8 x 3 | 4.90 | 2.94 |
| ★ 60-40/350 60/250 20/150 | D0789.2 | 1 3/8 x 3 3/8 | 5.40 | 3.24 |
| ★ 60-100/350 60/200 40/75 | D0789.4 | 1 3/8 x 4 1/8 | 6.55 | 3.93 |
| ★ 5-5/400 50/300 80/250 | D0790 | 1 3/8 x 3 | 7.00 | 4.20 |
| 40-60/400 40/350 10/50 | D0800 | 1 3/8 x 3 3/8 | 8.65 | 5.19 |
| ★ 100-10/400 20/350 20/50 | D0805 | 1 3/8 x 3 3/8 | 5.45 | 3.27 |
| ★ 10-10/450 60/200 100/50 | D0810 | 1 3/8 x 3 | 3.85 | 2.31 |
| ★ 20-20/450 60/150 100/25 | D0816 | 1 3/8 x 2 1/2 | 4.25 | 2.55 |
| ★ 35-25/450 20/200 100/50 | D0820 | 1 3/8 x 3 3/8 | 4.65 | 2.79 |
| ★ 40-40/450 125/150 125/25 | D0825 | 1 3/8 x 4 1/8 | 5.70 | 3.42 |
| 10-5/475 80/450 40/50 | D0830 | 1 3/8 x 3 3/8 | 7.45 | 4.47 |
| ★ 15-15/475 80/300 40/50 | D0840 | 1 3/8 x 3 | 4.80 | 2.88 |
| ★ 20-10/475 20/450 100/25 | D0841 | 1 3/8 x 2 1/2 | 4.20 | 2.52 |
| ★ 40-10/475 4/350 40/300 | D0842 | 1 3/8 x 3 | 4.95 | 2.97 |

2 SECTIONS HV — 2 SECTIONS LV

| | | | | |
|-------------------------|--------|---------------|------|------|
| ★ 20-20/150 160-40/25 | XD0844 | 1 3/8 x 2 | 3.20 | 1.92 |
| 40-40/150 40-40/25 | D0850 | 1 3/8 x 2 | 4.60 | 2.76 |
| 40-40/150 100-100/25 | D0860 | 1 3/8 x 2 | 5.05 | 3.03 |
| ★ 50-20/150 150-30/15 | XD0862 | 1 3/8 x 2 | 3.20 | 1.92 |
| 140-40/150 50-30/50 | XD0864 | 1 3/8 x 2 1/2 | 5.25 | 3.15 |
| ★ 100-10/300 200-30/150 | D0866 | 1 3/8 x 4 | 5.90 | 3.54 |
| ★ 60-4/350 100-40/25 | D0868 | 1 3/8 x 2 1/2 | 3.80 | 2.28 |
| 60-40/350 60-20/200 | D0869 | 1 3/8 x 3 3/8 | 7.00 | 4.20 |
| 40-10/400 80-10/250 | D0870 | 1 3/8 x 3 3/8 | 7.05 | 4.23 |
| ★ 100-10/400 30-20/50 | D0875 | 1 3/8 x 3 3/8 | 5.10 | 3.06 |
| 10-10/450 20-20/25 | D0880 | 1 3/8 x 2 | 4.45 | 2.67 |
| ★ 20-20/450 20-20/25 | D0890 | 1 3/8 x 2 | 3.55 | 2.13 |
| 20-20/450 30-30/350 | D0900 | 1 3/8 x 3 | 7.60 | 4.56 |
| 30-10/450 150-30/50 | D0906 | 1 3/8 x 3 | 6.15 | 3.69 |
| 40-10/450 35-10/350 | D0910 | 1 3/8 x 3 | 6.90 | 4.14 |
| 40-20/450 80-10/350 | D0912 | 1 3/8 x 4 1/8 | 8.70 | 5.22 |
| ★ 40-40/450 100-60/200 | D0914 | 1 3/8 x 4 1/8 | 6.05 | 3.63 |
| ★ 40-40/450 30-30/350 | D0920 | 1 3/8 x 4 1/8 | 5.90 | 3.54 |

1 SECTION HV — 1 SECTION MV — 2 SECTIONS LV

| | | | | |
|---------------------------|-------|---------------|------|------|
| 100/300 40/50 80-20/25 | D0922 | 1 3/8 x 2 1/2 | 6.85 | 4.11 |
| 40/350 100/250 100-25/50 | D0924 | 1 3/8 x 3 3/8 | 6.30 | 3.78 |
| 20/400 50/350 80-40/25 | D0926 | 1 3/8 x 2 1/2 | 6.25 | 3.75 |
| ★ 80/450 10/400 40-30/300 | D0927 | 1 3/8 x 4 1/8 | 5.80 | 3.48 |
| ★ 30/500 10/450 150-30/50 | D0928 | 1 3/8 x 2 1/2 | 4.20 | 2.52 |

ALL SECTIONS DIFFERENT VOLTAGE

| | | | | |
|--------------------------------|---------|---------------|------|------|
| ★ 100/300 60/200 10/150 20/50 | D0929 | 1 3/8 x 3 | 5.35 | 3.21 |
| 120/300 20/250 20/25 100/50 | D0930 | 1 3/8 x 4 1/8 | 7.60 | 4.56 |
| ★ 200/300 20/250 20/25 100/50 | D0940 | 1 3/8 x 4 | 5.80 | 3.48 |
| 20/350 40/300 10/150 250/50 | D0950 | 1 3/8 x 3 | 6.90 | 4.14 |
| ★ 20/350 150/300 10/250 250/50 | D0951 | 1 3/8 x 4 1/8 | 6.10 | 3.66 |
| 10/400 100/300 10/75 100/25 | D0952 | 1 3/8 x 3 | 6.70 | 4.02 |
| 30/450 40/300 50/250 200/150 | D0952.5 | 1 3/8 x 4 1/8 | 9.00 | 5.40 |
| ★ 10/450 40/350 100/250 100/50 | D0953 | 1 3/8 x 3 | 5.55 | 3.33 |
| 60/450 40/250 10/150 80/50 | D0956 | 1 3/8 x 3 3/8 | 7.20 | 4.32 |
| 80/450 10/400 30/300 40/150 | D0960 | 1 3/8 x 4 1/8 | 7.90 | 4.74 |
| ★ 10/475 40/350 80/300 100/100 | D0961 | 1 3/8 x 4 1/8 | 5.55 | 3.33 |
| 10/475 40/350 80/200 100/50 | D0962 | 1 3/8 x 3 3/8 | 7.20 | 4.32 |
| 10/475 40/400 100/50 10/25 | D0964 | 1 3/8 x 2 1/2 | 6.00 | 3.60 |
| ★ 10/475 40/400 4/350 100/50 | D0966 | 1 3/8 x 2 1/2 | 4.05 | 2.43 |

CORNELL-DUBILIER ELECTRONICS

CLASS

High-Capacity Low-Voltage Electrolytics

201-42



Photoflash Electrolytics



TYPE FB ★

Type FB capacitors in round cardboard sleeved aluminum cans are designed for high-capacity, low-voltage applications, and are especially popular as replacements in motion picture sound equipment, and other low-voltage circuits.

TEMPERATURE RANGE: to +85°C.

| FB Cat. No. | Cap. Mfd. | D.C. W. Volts | Can†† Size—Inches Dia. x Lgth. | List Price | Net Price |
|-------------|-----------|---------------|--------------------------------|------------|---------------|
| FB 1005 | 500 | 10 | 1 3/8 x 2 3/8 | \$3.10 | \$1.86 |
| FB 1010 | 1000 | 10 | 1 3/8 x 2 3/8 | 3.55 | 2.13 |
| FB 1015 | 1500 | 10 | 1 3/8 x 2 3/8 | 3.75 | 2.25 |
| FB 1020 | 2000 | 10 | 1 3/8 x 2 3/8 | 3.95 | 2.37 |
| FB 1030 | 3000 | 10 | 1 3/8 x 3 1/8 | 4.35 | 2.61 |
| FB 1040 | 4000 | 10 | 1 3/8 x 4 1/8 | 4.75 | 2.85 |
| FB 1050 | 5000 | 10 | 1 1/2 x 4 1/8 | 5.15 | 3.09 |
| FB 1060 | 6000 | 10 | 1 3/4 x 4 1/8 | 7.50 | 4.50 |
| FB 1205 | 500 | 12 | 1 3/8 x 2 3/8 | 3.20 | 1.92 |
| FB 1210 | 1000 | 12 | 1 3/8 x 2 3/8 | 3.75 | 2.25 |
| FB 1215 | 1500 | 12 | 1 3/8 x 2 3/8 | 3.95 | 2.37 |
| FB 1220 | 2000 | 12 | 1 3/8 x 3 1/8 | 4.15 | 2.49 |
| FB 1225 | 2500 | 12 | 1 3/8 x 3 1/8 | 4.85 | 2.91 |
| FB 1230 | 3000 | 12 | 1 3/8 x 4 1/8 | 5.05 | 3.03 |
| FB 1240 | 4000 | 12 | 1 1/2 x 4 1/8 | 5.25 | 3.15 |
| FB 1260 | 6000 | 12 | 2 x 4 1/8 | 9.35 | 5.61 |
| FB 1505 | 500 | 15 | 1 3/8 x 2 3/8 | 3.25 | 1.95 |
| FB 1510 | 1000 | 15 | 1 3/8 x 2 3/8 | 3.80 | 2.28 |
| FB 1515 | 1500 | 15 | 1 3/8 x 2 3/8 | 4.00 | 2.40 |
| FB 1520 | 2000 | 15 | 1 3/8 x 3 1/8 | 4.70 | 2.82 |
| FB 1530 | 3000 | 15 | 1 3/8 x 4 1/8 | 5.15 | 3.09 |
| FB 1540 | 4000 | 15 | 1 1/2 x 4 1/8 | 8.10 | 4.86 |
| FB 1560 | 6000 | 15 | 2 x 4 1/8 | 10.00 | 6.00 |
| FB 1805 | 500 | 18 | 1 3/8 x 2 3/8 | 3.00 | 1.80 |
| FB 1810 | 1000 | 18 | 1 3/8 x 2 3/8 | 3.90 | 2.34 |
| FB 1820 | 2000 | 18 | 1 3/8 x 3 1/8 | 4.90 | 2.94 |
| FB 1840 | 4000 | 18 | 1 1/2 x 4 1/8 | 8.45 | 5.07 |
| FB 2005 | 500 | 20 | 1 3/8 x 2 3/8 | 3.40 | 2.04 |
| FB 2010 | 1000 | 20 | 1 3/8 x 3 1/8 | 4.10 | 2.46 |
| FB 2020 | 2000 | 20 | 1 3/8 x 4 1/8 | 5.20 | 3.12 |
| FB 2040 | 4000 | 20 | 2 x 4 1/8 | 8.75 | 5.25 |
| FB 2505 | 500 | 25 | 1 3/8 x 2 3/8 | 3.55 | 2.13 |
| FB 2510 | 1000 | 25 | 1 3/8 x 3 1/8 | 4.80 | 2.88 |
| FB 2520 | 2000 | 25 | 1 3/8 x 4 1/8 | 5.75 | 3.45 |
| FB 2530 | 3000 | 25 | 1 3/8 x 4 1/8 | 8.00 | 4.80 |
| FB 2540 | 4000 | 25 | 2 x 4 1/8 | 9.50 | 5.70 |
| FB 2550 | 5000 | 25 | 2 1/2 x 4 1/8 | 11.00 | 6.60 |
| FB 3005 | 500 | 30 | 1 3/8 x 3 1/8 | 3.60 | 2.16 |
| FB 3010 | 1000 | 30 | 1 3/8 x 4 1/8 | 4.90 | 2.94 |
| FB 3020 | 2000 | 30 | 1 3/8 x 4 1/8 | 7.40 | 4.44 |
| FB 3030 | 3000 | 30 | 2 x 4 1/8 | 8.95 | 5.37 |
| FB 3040 | 4000 | 30 | 2 1/2 x 4 1/8 | 10.50 | 6.30 |
| FB 3505 | 500 | 35 | 1 3/8 x 3 1/8 | 3.70 | 2.22 |
| FB 3510 | 1000 | 35 | 1 3/8 x 4 1/8 | 5.00 | 3.00 |
| FB 3520 | 2000 | 35 | 1 3/4 x 4 1/8 | 8.00 | 4.80 |

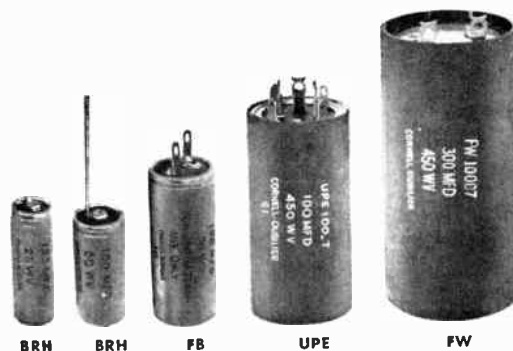
TYPE FB — (Cont'd)

| FB Cat. No. | Cap. Mfd. | D.C. W. Volts | Can†† Size—Inches Dia. x Lgth. | List Price | Net Price |
|-------------|-----------|---------------|--------------------------------|------------|---------------|
| FB 3530 | 3000 | 35 | 2 x 4 1/8 | \$ 9.50 | \$5.70 |
| FB 3540 | 4000 | 35 | 2 1/2 x 4 1/8 | 11.00 | 6.60 |
| FB 4005 | 500 | 40 | 1 3/8 x 3 1/8 | 3.80 | 2.28 |
| FB 4010 | 1000 | 40 | 1 3/8 x 4 1/8 | 6.50 | 3.90 |
| FB 4020 | 2000 | 40 | 1 3/4 x 4 1/8 | 9.00 | 5.40 |
| FB 4030 | 3000 | 40 | 2 x 4 1/8 | 10.50 | 6.30 |
| FB 4040 | 4000 | 40 | 2 1/2 x 4 1/8 | 11.50 | 6.90 |
| FB 5005 | 500 | 50 | 1 3/8 x 3 1/8 | 3.90 | 2.34 |
| FB 5010 | 1000 | 50 | 1 3/8 x 4 1/8 | 7.00 | 4.20 |
| FB 5020 | 2000 | 50 | 1 3/4 x 4 1/8 | 9.10 | 5.46 |
| FB 5030 | 3000 | 50 | 2 x 4 1/8 | 11.50 | 6.90 |
| FB 5040 | 4000 | 50 | 2 1/2 x 4 1/8 | 12.50 | 7.50 |

††For Overall Size add 1/16" to Diam. and 3/8" to Length.

★When MIL-C-62A units must be supplied, order according to specific CE type designations.

HIGH VOLTAGE PHOTOFLASH



| Cat. No. | Cap. Mfd. | D.C. W. Volts | OVERALL Size—Inches Dia. x Length | Watt Secands | List Price | Net Price |
|-------------|-----------|---------------|-----------------------------------|--------------|------------|---------------|
| XBO 455♦ | 100 | 450 | 1 3/4 x 3 | 10 | \$3.85 | \$2.31 |
| FB 10063* | 200 | 450 | 2 1/16 x 4 1/2 | 20 | 6.85 | 4.11 |
| FW 10005† | 200 | 500 | 2 1/16 x 4 3/8 | 25 | 10.50 | 6.30 |
| FW 10007† | 300 | 450 | 2 1/16 x 4 3/8 | 30 | 10.50 | 6.30 |
| FWS 10000† | 300 | 450 | 2 1/16 x 4 3/8 | 30 | 11.50 | 6.90 |
| FA 10300* | 400 | 450 | 2 1/16 x 4 1/2 | 40 | 17.95 | 10.77 |
| FWSN 10001† | 525 | 450 | 2 1/16 x 4 3/8 | 53 | 22.60 | 13.56 |

LOW VOLTAGE PHOTOFLASH

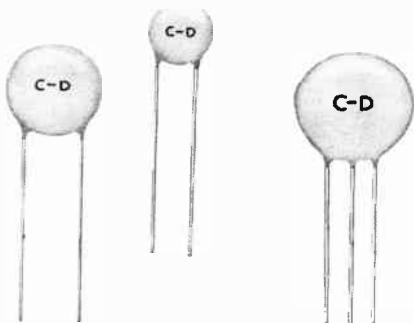
| Cat. No. | Cap. Mfd. | D.C. W. Volts | OVERALL Size—Inches Dia. x Length | List Price | Net Price |
|------------|-----------|---------------|-----------------------------------|------------|--------------|
| BRE 10001♦ | 40 | 150 | 3/4 x 1 1/16 | \$1.35 | \$.81 |
| FB 10077♦ | 100 | 30 | 1 x 2 1/16 | 3.35 | 2.01 |
| BRH 10062♦ | 125 | 25 | 5/8 x 1 1/16 | 1.35 | .81 |
| BRH 10067♦ | 150 | 50 | 3/4 x 1 1/16 | 1.35 | .81 |
| BRH 2525* | 250 | 25 | 15/16 x 1 1/8 | 1.70 | 1.02 |

*Aluminum can with cardboard sleeve. †Bakelite Case—Screw Terminals.
♦Aluminum can—no sleeve. ‡Bakelite Case—Salder Lug Terminals.

CLASS
202.01
202.02

CORNELL-DUBILIER ELECTRONICS

"TINYMIKE" Disc Ceramics



THE CERAMIC WITH
THE MILLION DOLLAR BODY

- Small, space-saving and lightweight.
- Available in all popular capacities.
- Guaranteed minimum capacity tolerance.
- Adapted for wide variety of applications.
- Minimized eddy current losses due to construction.
- Low inductance, stable, dependable performance.
- Available with temperature compensating characteristics.

General Purpose DISC
HIGH K

CLASS 202.01

TYPE: BYA

VOLTAGE: 1000 VDCW, except as nated.

TOLERANCE: GMC, except as nated.

TEMPERATURE RANGE: -55°C to +85°C.

SINGLES

| Cap. Mmfd. | Cat. No. | Dia. Max. (Inches) | Thick. Max. (Inches) | List Price | Net Price |
|------------|-----------|--------------------|----------------------|------------|-----------|
| 470 | BYA10T47 | .290 | .156 | \$.25 | \$.15 |
| 500 | BYA10T5 | .290 | .156 | .25 | .15 |
| 680 | BYA10T68 | .290 | .156 | .25 | .15 |
| 820 | BYA10T82 | .290 | .156 | .25 | .15 |
| 1000 | BYA10D1 | .290 | .156 | .25 | .15 |
| †1000 | BYA10D1M | .290 | .156 | .25 | .15 |
| 1500 | BYA10D15 | .290 | .156 | .25 | .15 |
| 2000 | BYA10D2 | .390 | .156 | .25 | .15 |
| 2200 | BYA10D22 | .390 | .156 | .25 | .15 |
| 2500 | BYA10D25 | .437 | .156 | .25 | .15 |
| 2700 | BYA10D27 | .437 | .156 | .25 | .15 |
| 3000 | BYA10D3 | .437 | .156 | .25 | .15 |
| 3300 | BYA10D33 | .437 | .156 | .25 | .15 |
| 4000 | BYA10D4 | .593 | .156 | .25 | .15 |
| †4700 | BYA10D47M | .593 | .156 | .25 | .15 |
| 5000 | BYA10D5 | .593 | .156 | .25 | .15 |
| †5000 | BYA10D5M | .593 | .156 | .25 | .15 |
| 6800 | BYA10D68 | .593 | .156 | .25 | .15 |
| *10000 | BYA6S1 | .660 | .156 | .25 | .15 |
| 10000 | BYA10S1 | .750 | .156 | .30 | .18 |
| †10000 | BYA10S1M | .750 | .156 | .30 | .18 |
| 15000 | BYA10S15 | .840 | .156 | .30 | .18 |
| *20000 | BYA6S2 | .840 | .156 | .30 | .18 |

*Rated at 600 VDCW.
†Tolerance ±20%.

General Purpose DISC
CLOSE TOLERANCE

CLASS 202.02

TYPE: LA

VOLTAGE: 1000 VDCW

TOLERANCE: ±10%, except as nated, to 390 mmfd. incl.
±20%, 400 mmfd. and over.

TEMPERATURE RANGE: -55°C to +85°C.

MAXIMUM THICKNESS: .156 inches.

SINGLES

| Cap. Mmfd. | New Cat. No. | Old Cat. No. | Max. Dia. (Inches) | List Price | Net Price |
|------------|--------------|--------------|--------------------|------------|-----------|
| †3.3 | LA10V33-SL | L10V33 | .290 | \$.25 | \$.15 |
| †5.0 | LA10V5-SL | L10V5 | .290 | .25 | .15 |
| †6.8 | LA10V68-SL | L10V68 | .290 | .25 | .15 |
| 7.0 | LA10V7-SL | L10V7 | .290 | .25 | .15 |
| 8.0 | LA10V8-SL | L10V8 | .290 | .25 | .15 |
| 10 | LA10Q1-SL | L10Q1 | .290 | .25 | .15 |
| 12 | LA10Q12-SL | L10Q12 | .290 | .25 | .15 |
| 15 | LA10Q15-SL | L10Q15 | .290 | .25 | .15 |
| 18 | LA10Q18-SL | L10Q18 | .290 | .25 | .15 |
| 20 | LA10Q2-SL | L10Q2 | .290 | .25 | .15 |
| 22 | LA10Q22-SL | L10Q22 | .290 | .25 | .15 |
| 25 | LA10Q25-SL | L10Q25 | .290 | .25 | .15 |
| 27 | LA10Q27-SL | L10Q27 | .290 | .25 | .15 |
| 30 | LA10Q3-SL | L10Q3 | .290 | .25 | .15 |
| 33 | LA10Q33-SL | L10Q33 | .290 | .25 | .15 |
| 39 | LA10Q39-S3 | L10Q39 | .290 | .25 | .15 |
| 47 | LA10Q47-S3 | L10Q47 | .290 | .25 | .15 |
| 50 | LA10Q5-S3 | L10Q5 | .290 | .25 | .15 |
| 56 | LA10Q56-S3 | L10Q56 | .290 | .25 | .15 |
| 68 | LA10Q68-S3 | L10Q68 | .290 | .25 | .15 |
| 75 | LA10Q75-S3 | L10Q75 | .290 | .25 | .15 |
| 82 | LA10Q82-S3 | L10Q82 | .290 | .25 | .15 |
| 91 | LA10Q91-S3 | L10Q91 | .290 | .25 | .15 |
| 100 | LA10T1-S3 | L10T1 | .290 | .25 | .15 |
| 120 | LA10T12-S3 | L10T12 | .290 | .25 | .15 |
| 130 | LA10T13-S3 | L10T13 | .290 | .25 | .15 |
| 150 | LA10T15-S3 | L10T15 | .290 | .25 | .15 |
| 180 | LA10T18-S3 | L10T18 | .290 | .25 | .15 |
| 200 | LA10T2-S3 | L10T2 | .290 | .25 | .15 |
| 220 | LA10T22-S3 | L10T22 | .290 | .25 | .15 |
| 250 | LA10T25-C4 | L10T25 | .290 | .25 | .15 |
| 270 | LA10T27-C4 | L10T27 | .290 | .25 | .15 |
| 300 | LA10T3-C4 | L10T3 | .290 | .25 | .15 |
| 330 | LA10T33-C4 | L10T33 | .290 | .25 | .15 |
| 350 | LA10T35-C4 | L10T35 | .290 | .25 | .15 |
| 360 | LA10T36-C4 | L10T36 | .290 | .25 | .15 |
| 390 | LA10T39-C4 | L10T39 | .290 | .25 | .15 |
| 400 | LA10T4-C4 | L10T4 | .290 | .25 | .15 |
| 470 | LA10T47-C4 | L10T47 | .290 | .25 | .15 |
| 500 | LA10T5-C4 | L10T5 | .290 | .25 | .15 |
| 560 | LA10T56-C4 | L10T56 | .390 | .25 | .15 |
| 600 | LA10T6-C4 | L10T6 | .390 | .25 | .15 |
| 680 | LA10T68-C4 | L10T68 | .390 | .25 | .15 |
| 750 | LA10T75-C4 | L10T75 | .390 | .25 | .15 |
| 800 | LA10T8-C4 | L10T8 | .390 | .25 | .15 |
| 820 | LA10T82-C4 | L10T82 | .390 | .25 | .15 |
| 1000 | LA10D1-C4 | L10D1 | .437 | .25 | .15 |
| 1200 | LA10D12-C4 | L10D12 | .437 | .25 | .15 |
| 1500 | LA10D15-C4 | L10D15 | .593 | .25 | .15 |
| 1600 | LA10D16-C4 | L10D16 | .593 | .25 | .15 |

†Tolerance ±.5 Mmfd.

"TINYMIKE" Disc Ceramics



General Purpose DISC
CLOSE TOLERANCE

CLASS 202.02 (Cont'd)

TYPE: LA

VOLTAGE: 10 VDCW

TOLERANCE: ± 10%, except as noted, to 390 mmfd. incl.
± 20%, 400 mmfd. and over.

TEMPERATURE RANGE: -55°C to +85°C.

MAXIMUM THICKNESS: .156 inches.

SINGLES

| Cap. Mmfd. | New Cat. No. | Old Cat. No. | Max. Dia. (Inches) | List Price | Net Price |
|------------|--------------|--------------|--------------------|------------|-----------|
| 1800 | LA10D18-C4 | L10D18 | .593 | .25 | .15 |
| 2000 | LA10D2-C4 | L10D2 | .593 | .25 | .15 |
| 2200 | LA10D22-C4 | L10D22 | .593 | .25 | .15 |
| 2500 | LA10D25-C4 | L10D25 | .660 | .25 | .15 |
| 2700 | LA10D27-C4 | L10D27 | .660 | .25 | .15 |
| 3000 | LA10D3-C4 | L10D3 | .660 | .25 | .15 |
| 3300 | LA10D33-C4 | L10D33 | .660 | .25 | .15 |
| 3900 | LA10D39-C4 | L10D39 | .750 | .25 | .15 |
| 4000 | LA10D4-C4 | L10D4 | .750 | .25 | .15 |
| 4300 | LA10D43-C4 | L10D43 | .840 | .25 | .15 |
| 4700 | LA10D47-C4 | L10D47 | .840 | .25 | .15 |
| 5000 | LA10D5-C4 | L10D5 | .840 | .25 | .15 |

†Tolerance ±.5 Mmfd.

Low Voltage Miniature DISC
for TRANSISTOR CIRCUITRY

CLASS 202.04

TYPE: H

VOLTAGE: 50 VDCW

TOLERANCE: +100%, -0%, except as noted.

TEMPERATURE RANGE: +10°C to +85°C.

| Cap. Mfd. | New Cat. No. | Old Cat. No. | Dia. Max. (Inches) | Thick. Max. (Inches) | List Price | Net Price |
|-----------|--------------|--------------|--------------------|----------------------|------------|-----------|
| .005 | H1 | H05D5 | .350 | 1/8 | \$.45 | \$.27 |
| .01 | H2 | H05S1 | .350 | 1/8 | .65 | .39 |
| .02 | H3 | H05S2 | .500 | 1/8 | .65 | .39 |
| .025 | H4 | H05S25 | .500 | 1/8 | .65 | .39 |
| *.05 | H5 | H05S5 | .625 | 1/8 | .70 | .42 |
| *.10 | H6 | H05P1 | .625 | 5/16 | .90 | .54 |

*Tolerance +80%, -20%.

High-Capacitance DISCS
for TRANSISTOR CIRCUITRY

CLASS 202.05

TYPE: HCC

TOLERANCE: GMV on 3 VDCW Units
+80, -20% on 10 and 25 VDCW Units

TEMPERATURE RANGE: -55°C to +85°C.

| Cap. Mfd. | VDCW | Cat. No. | Diam. (Inches) | Thick. (Inches) | List Price | Net Price |
|-----------|------|-----------|----------------|-----------------|------------|-----------|
| .22 | 3 | HCC3224P | .290 | .156 | \$.55 | \$.33 |
| .47 | 3 | HCC3474P | .437 | .156 | .55 | .33 |
| 1.0 | 3 | HCC3105P | .593 | .156 | .75 | .45 |
| 2.2 | 3 | HCC3225P | .840 | .156 | .90 | .54 |
| .05 | 10 | HCC10503Z | .290 | .156 | .55 | .33 |
| .1 | 10 | HCC10104Z | .437 | .156 | .55 | .33 |
| .22 | 10 | HCC10224Z | .593 | .156 | .55 | .33 |
| .47 | 10 | HCC10474Z | .840 | .156 | .90 | .54 |
| .01 | 25 | HCC25103Z | .290 | .156 | .55 | .33 |
| .05 | 25 | HCC25503Z | .437 | .156 | .65 | .39 |
| .10 | 25 | HCC25104Z | .593 | .156 | .75 | .45 |
| .22 | 25 | HCC25224Z | .840 | .156 | .90 | .54 |

Temperature Compensating DISC
Coefficient NPO

CLASS 202.20

TYPE: C

VOLTAGE: 1000 VDCW

TOLERANCE: ±5%, except as noted.

TEMPERATURE RANGE: -55°C to +85°C.

SINGLES

| Cap. Mmfd. | Present Cat. No. | Dia. Max. (Inches) | Thick. Max. (Inches) | List Price | Net Price |
|------------|------------------|--------------------|----------------------|------------|-----------|
| †1.5 | C10V15C | .290 | .156 | \$.50 | \$.30 |
| †2.2 | C10V22C | .290 | .156 | .50 | .30 |
| †3.3 | C10V33C | .290 | .156 | .50 | .30 |
| †4.7 | C10V47C | .290 | .156 | .50 | .30 |
| †6.8 | C10V68C | .290 | .156 | .50 | .30 |
| 10 | C10Q1C | .290 | .156 | .50 | .30 |
| 15 | C10Q15C | .290 | .156 | .50 | .30 |
| 20 | C10Q2C | .390 | .156 | .50 | .30 |
| 22 | C10Q22C | .390 | .156 | .50 | .30 |
| 25 | C10Q25C | .437 | .156 | .50 | .30 |
| 33 | C10Q33C | .437 | .156 | .50 | .30 |
| 39 | C10Q39C | .593 | .156 | .50 | .30 |
| 47 | C10Q47C | .593 | .156 | .50 | .30 |
| 50 | C10Q5C | .593 | .156 | .50 | .30 |
| 68 | C10Q68C | .593 | .156 | .50 | .30 |
| 75 | C10Q75C | .660 | .156 | .50 | .30 |
| 100 | C10T1C | .660 | .156 | .50 | .30 |
| 120 | C10T12C | .750 | .156 | .75 | .45 |
| 150 | C10T15C | .840 | .156 | .75 | .45 |

†Tolerance ±.5 Mmfd.

Temperature Compensating DISC
Coefficient N750

CLASS 202.20 (Cont'd)

TYPE: C

VOLTAGE: 1000 VDCW

TOLERANCE: ±5%

TEMPERATURE RANGE: -55°C to +85°C.

SINGLES

| Cap. Mmfd. | Present Cat. No. | Dia. Max. (Inches) | Thick. Max. (Inches) | List Price | Net Price |
|------------|------------------|--------------------|----------------------|------------|-----------|
| 5.0 | C10V5U | .290 | .156 | \$.50 | \$.30 |
| 6.8 | C10V68U | .290 | .156 | .50 | .30 |
| 10 | C10Q1U | .290 | .156 | .50 | .30 |
| 15 | C10Q15U | .290 | .156 | .50 | .30 |
| 20 | C10Q2U | .290 | .156 | .50 | .30 |
| 22 | C10Q22U | .290 | .156 | .50 | .30 |
| 25 | C10Q25U | .290 | .156 | .50 | .30 |
| 33 | C10Q33U | .290 | .156 | .50 | .30 |
| 39 | C10Q39U | .390 | .156 | .50 | .30 |
| 47 | C10Q47U | .390 | .156 | .50 | .30 |
| 50 | C10Q5U | .390 | .156 | .50 | .30 |
| 68 | C10Q68U | .390 | .156 | .50 | .30 |
| 75 | C10Q75U | .437 | .156 | .50 | .30 |
| 100 | C10T1U | .593 | .156 | .75 | .45 |
| 130 | C10T13U | .593 | .156 | .75 | .45 |
| 150 | C10T15U | .593 | .156 | .75 | .45 |
| 180 | C10T18U | .660 | .156 | .75 | .45 |
| 200 | C10T2U | .660 | .156 | .75 | .45 |
| 220 | C10T22U | .660 | .156 | .75 | .45 |
| 270 | C10T27U | .750 | .156 | .75 | .45 |
| 300 | C10T3U | .840 | .156 | .75 | .45 |
| 330 | C10T33U | .840 | .156 | .75 | .45 |
| 370 | C10T37U | .840 | .156 | .75 | .45 |

CLASS 202.22
 CLASS 202.21 202.30

CORNELL-DUBILIER ELECTRONICS

"TINYMIKE" Disc Ceramics



Stabilized Capacity DISC

CLASS 202.21

TYPE: JB

VOLTAGE: 600 VDCW

TOLERANCE: ±10%

TEMPERATURE RANGE: -55°C to +125°C.

| Cap. Mmfd. | Cat. No. | Dia. Max. (Inches) | Thick. Max. (Inches) | List Price | Net Price |
|------------|----------|--------------------|----------------------|------------|-----------|
| 220 | JB6T22 | .290 | .156 | \$.25 | \$.15 |
| 330 | JB6T33 | .290 | .156 | .25 | .15 |
| 470 | JB6T47 | .290 | .156 | .25 | .15 |
| 500 | JB6T5 | .290 | .156 | .25 | .15 |
| 560 | JB6T56 | .390 | .156 | .25 | .15 |
| 680 | JB6T68 | .390 | .156 | .25 | .15 |
| 800 | JB6T8 | .390 | .156 | .25 | .15 |
| 1000 | JB6D1 | .437 | .156 | .25 | .15 |
| 1200 | JB6D12 | .437 | .156 | .25 | .15 |
| 1800 | JB6D18 | .593 | .156 | .25 | .15 |
| 2000 | JB6D2 | .593 | .156 | .25 | .15 |
| 2200 | JB6D22 | .593 | .156 | .25 | .15 |
| 3300 | JB6D33 | .660 | .156 | .25 | .15 |
| 3900 | JB6D39 | .750 | .156 | .30 | .18 |
| 4700 | JB6D47 | .840 | .156 | .30 | .18 |
| 5000 | JB6D5 | .840 | .156 | .30 | .18 |

General Purpose DISC
 HIGH VOLTAGE

CLASS 202.22

TYPE: HVA — HVB — HVC

VOLTAGE: 1600 & 2000 VDCW

TEMPERATURE RANGE: -55°C to +85°C.

TOLERANCE: 200 to 1000 mmfd. incl. ±20%.
 1200 to 4700 mmfd. incl. GMC.

SINGLES

| Voltage VDCW | Cap. Mmfd. | Cat. No. | Dia. Max. (Inches) | Thick. Max. (Inches) | List Price | Net Price |
|--------------|------------|----------|--------------------|----------------------|------------|-----------|
| 1600 | 220 | HVB16T22 | .390 | .218 | \$.35 | \$.21 |
| 1600 | 390 | HVB16T39 | .390 | .218 | .35 | .21 |
| 1600 | 1000 | HVB16D1 | .593 | .218 | .35 | .21 |
| 1600 | 3300 | HVC16D33 | .593 | .218 | .35 | .21 |
| 1600 | 4700 | HVC16D47 | .750 | .218 | .35 | .21 |
| 2000 | 15 | HVA20Q15 | .390 | .218 | .35 | .21 |
| 2000 | 68 | HVB20Q68 | .593 | .218 | .35 | .21 |
| 2000 | 470 | HVB20T47 | .593 | .218 | .35 | .21 |
| 2000 | 1000 | HVB20D1 | .750 | .218 | .50 | .30 |
| 2000 | 2000 | HVC20D2 | .593 | .218 | .35 | .21 |
| 2000 | 5000 | HVC20D5 | .750 | .218 | .50 | .30 |

High Voltage DISC

for BUFFER Applications

TYPE: HVE

VOLTAGE: 1600 VDCW

TOLERANCE: GMC, except as noted.

TEMPERATURE RANGE: -55°C to +85°C.

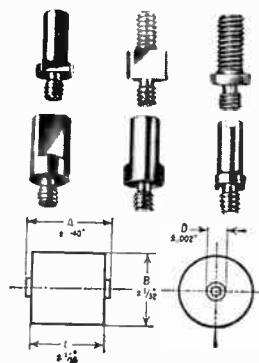
SINGLES

| Cap. Mmfd. | Cat. No. | Dia. Max. (Inches) | Thick. Max. (Inches) | List Price | Net Price |
|------------|----------|--------------------|----------------------|------------|-----------|
| 3000 | HVE16D3 | .750 | .218 | \$.35 | \$.21 |
| 4000 | HVE16D4 | .750 | .218 | .35 | .21 |
| 5000 | HVE16D5 | .750 | .218 | .35 | .21 |
| 6000 | HVE16D6 | .840 | .218 | .35 | .21 |
| 7000 | HVE16D7 | .840 | .218 | .35 | .21 |
| 7500 | HVE16D75 | .840 | .218 | .35 | .21 |
| 8000 | HVE16D8 | .840 | .218 | .35 | .21 |
| 10000 | HVE16S1 | .840 | .218 | .35 | .21 |
| †15000 | HVE16S15 | .840 | .250 | .60 | .36 |

†Tolerance +80%, -20%.

UNIVERSAL HIGH VOLTAGE

CLASS 202.30



- ◆ New, superior design and construction.
- ◆ High insulation resistance, low power factor.
- ◆ Generous factor of safety permits use at FULL rated voltage.
- ◆ Choice of terminal styles to meet all TV assembly requirements.

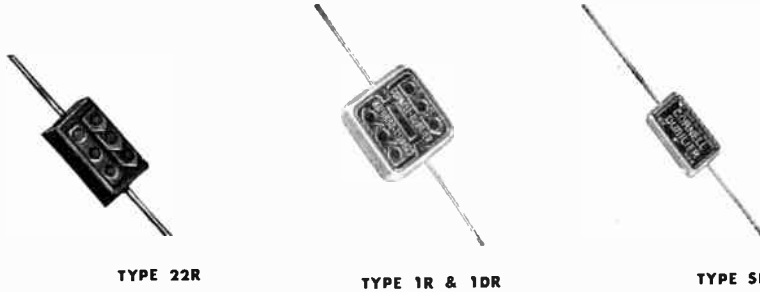
STANDARD TOLERANCE: +50% -20%

| | New Cat. No. 105TM200T5 Old Cat. No. MMU200T5 | New Cat. No. 105TM300T5 Old Cat. No. MMU300T5 |
|------------|--|--|
| Cap. Mmfd. | 500 | 500 |
| VDCW | 20,000 | 30,000 |
| Flash Test | 30,000 | 40,000 |
| Body Size | | |
| A | 1.068" | 1.381" |
| B | .950" | 1.375" |
| C | .937" | 1.250" |
| D | .250" | .250" |
| List Price | \$2.50 | \$4.00 |
| Net Price | 1.50 | 2.40 |

CORNELL-DUBILIER ELECTRONICS

CLASS
203.03

"SILVER-MIKE" Molded Midget Micacs



HIGH-STABILITY "SILVER-MIKE"† UNITS

Type 22R miniature "Silver-Mike" capacitors are especially adapted for use in circuits where accuracy and stability of capacity is of prime importance. They are rated at 500 volts D.C.W. and tested at 1,000 volts D.C., molded in low-loss red plastic and fully protected against physical damage or changes in characteristics due to varying atmospheric conditions.

STANDARD TOLERANCE $\pm 5\%$, but in no instance less than $\pm 1\text{mmf.}$

Types 1R, 1DR, and 5R "Silver-Mike" capacitors are designed for use in high Q electronic circuits where frequency stability and minimum loss must be maintained. Ideally suited for use in circuits where the LC product must be maintained constant, and particularly adapted for use in tuning IF transformers, tuning circuits and other similar applications.

SIZES: 5R— $5/16'' \times 1/32'' \times 7/32''$
1R— $1/16'' \times 1/16'' \times 1/4''$ See Note bottom of column 1.
1DR— $1/16'' \times 1/16'' \times 5/16''$

SIZE: $1/2'' \times 1/8'' \times 3/16''$

22 R

| 22R Cat. No. | Cap. mmf. | List Price | Net Price |
|--------------|-----------|------------|-----------|
| 22R 5V2 | 2 | \$.20 | \$.12 |
| 22R 5V5 | 5 | .20 | .12 |
| 22R 5Q1 | 10 | .20 | .12 |
| 22R 5Q12 | 12 | .20 | .12 |
| 22R 5Q15 | 15 | .20 | .12 |
| 22R 5Q18 | 18 | .20 | .12 |
| 22R 5Q2 | 20 | .20 | .12 |
| 22R 5Q22 | 22 | .20 | .12 |
| 22R 5Q24 | 24 | .20 | .12 |
| 22R 5Q25 | 25 | .20 | .12 |
| 22R 5Q27 | 27 | .20 | .12 |
| 22R 5Q3 | 30 | .20 | .12 |
| 22R 5Q33 | 33 | .20 | .12 |
| 22R 5Q36 | 36 | .20 | .12 |
| 22R 5Q39 | 39 | .20 | .12 |
| 22R 5Q4 | 40 | .20 | .12 |
| 22R 5Q43 | 43 | .20 | .12 |
| 22R 5Q47 | 47 | .20 | .12 |
| 22R 5Q5 | 50 | .20 | .12 |
| 22R 5Q51 | 51 | .20 | .12 |
| 22R 5Q56 | 56 | .20 | .12 |
| 22R 5Q62 | 62 | .20 | .12 |
| 22R 5Q68 | 68 | .20 | .12 |
| 22R 5Q7 | 70 | .20 | .12 |
| 22R 5Q75 | 75 | .20 | .12 |
| 22R 5Q82 | 82 | .20 | .12 |
| 22R 5Q91 | 91 | .25 | .15 |
| 22R 5T1 | 100 | .25 | .15 |
| 22R 5T11 | 110 | .25 | .15 |
| 22R 5T12 | 120 | .25 | .15 |
| 22R 5T13 | 131 | .25 | .15 |
| 22R 5T15 | 151 | .30 | .18 |
| 22R 5T16 | 161 | .30 | .18 |
| 22R 5T18 | 181 | .30 | .18 |
| 22R 5T2 | 200 | .30 | .18 |
| 22R 5T22 | 220 | .30 | .18 |
| 22R 5T24 | 240 | .35 | .21 |
| 22R 5T25 | 250 | .35 | .21 |
| 22R 5T27 | 270 | .35 | .21 |
| 22R 5T3 | 300 | .35 | .21 |
| 22R 5T33 | 330 | .40 | .24 |
| 22R 5T36 | 360 | .40 | .24 |
| 22R 5T39 | 390 | .45 | .27 |
| 22R 5T43 | 430 | .45 | .27 |
| 22R 5T47 | 470 | .45 | .27 |
| 22R 5T51 | 510 | .45 | .27 |

1R, 1DR, 5R

| Cap. mmf. | 500 V. D.C. W.—1000 V. D.C. T. | | | List Price | Net Price |
|-----------|--------------------------------|------------------|-------------------|------------|-----------|
| | Type 5R Cat. No. | Type 1R Cat. No. | Type 1DR Cat. No. | | |
| 270 | 5R 5T27 | | | \$.30 | \$.18 |
| 300 | 5R 5T3 | | | .30 | .18 |
| 330 | 5R 5T33 | | | .30 | .18 |
| 360 | 5R 5T36 | | | .30 | .18 |
| 390 | 5R 5T39 | | | .30 | .18 |
| 400 | 5R 5T4 | | | .35 | .21 |
| 430 | 5R 5T43 | | | .35 | .21 |
| 470 | 5R 5T47 | | | .35 | .21 |
| 500 | 5R 5T5 | | | .35 | .21 |
| 510 | 5R 5T51 | | | .35 | .21 |
| 560 | 5R 5T56 | | | .40 | .24 |
| 600 | 5R 5T6 | | | .40 | .24 |
| 620 | 5R 5T62 | | | .40 | .24 |
| 680 | 5R 5T68 | | | .40 | .24 |
| 700 | 5R 5T7 | | | .45 | .27 |
| 750 | 5R 5T75 | | | .45 | .27 |
| 800 | 5R 5T8 | | | .45 | .27 |
| 820 | 5R 5T82 | | | .45 | .27 |
| 900 | 5R 5T9 | | | .50 | .30 |
| 910 | 5R 5T91 | | | .50 | .30 |
| 1,000 | 5R 5D1 | | | .50 | .30 |
| 1,100 | 5R 5D11 | | | .55 | .33 |
| 1,200 | 5R 5D12 | | | .55 | .33 |
| 1,300 | 5R 5D13 | | | .55 | .33 |
| 1,500 | 5R 5D15 | | | .65 | .39 |
| 1,600 | 5R 5D16 | | | .65 | .39 |
| 1,800 | 5R 5D18 | | | .70 | .42 |
| 2,000 | 5R 5D2 | | | .75 | .45 |
| 2,200 | | 1R 5D22 | | .85 | .51 |
| 2,400 | | 1R 5D24 | | .85 | .51 |
| 2,500 | | 1R 5D25 | | .90 | .54 |
| 2,700 | | 1R 5D27 | | .90 | .54 |
| 3,000 | | 1R 5D3 | | 1.00 | .60 |
| 3,300 | | 1R 5D33 | | 1.10 | .66 |
| 3,600 | | 1R 5D36 | | 1.15 | .69 |
| 3,900 | | 1R 5D39 | | 1.20 | .72 |
| 4,000 | | 1R 5D4 | | 1.30 | .78 |
| 4,300 | | 1R 5D43 | | 1.30 | .78 |
| 4,700 | | 1R 5D47 | | 1.40 | .84 |
| 5,000 | | 1R 5D5 | | 1.45 | .87 |
| 5,100 | | 1R 5D51 | | 1.45 | .87 |
| 5,600 | | 1R 5D56 | | 1.55 | .93 |
| 6,200 | | 1R 5D62 | | 1.70 | 1.02 |
| 6,800 | | | 1DR 5D68 | 1.90 | 1.14 |
| 7,000 | | | 1DR 5D7 | 2.00 | 1.20 |
| 7,500 | | | 1DR 5D75 | 2.00 | 1.20 |
| 8,000 | | | 1DR 5D8 | 2.20 | 1.30 |
| 8,200 | | | 1DR 5D82 | 2.20 | 1.30 |
| 9,000 | | | 1DR 5D9 | 2.35 | 1.41 |
| 9,100 | | | 1DR 5D91 | 2.35 | 1.41 |
| 10,000 | | | 1DR 551 | 2.65 | 1.59 |

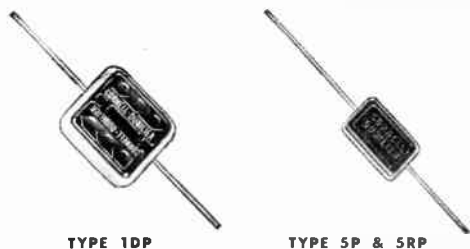
Notes On Ordering 5R, 1R, 1DR Units

Standard capacity tolerance is 5% (or within 1 mmfd.—whichever is greater).

*Rated at 300 WVDC

†Trademark

CORNELL-DUBILIER ELECTRONICS

CLASS
203.04 "HIVOMIKE" High Voltage Micacs

TYPE 1DP

TYPE 5P & 5RP

Where high voltage, capacitance stability and high Q are important and units of the smallest size are requisite, the "HIVOMIKE" is ideal. Recommended for commercial—civilian and military uses under Characteristic "B." Voltage ratings actually exceed those required under MIL-C-5B.

SIZES: 1DP— $1\frac{3}{16}$ " x $1\frac{3}{16}$ " x $\frac{5}{16}$ "; 5P & 5RP— $\frac{5}{16}$ " x $1\frac{1}{2}$ " x $\frac{7}{32}$ "

FOIL TYPES — Tolerance $\pm 20\%$

| Type | Cap. mmf. | Volts DCW | List Price | Net Price | Type | Cap. mmf. | Volts DCW | List Price | Net Price |
|----------|-----------|-----------|------------|-----------|----------|-----------|-----------|------------|-----------|
| 5P25Q1 | 10 | 2500 | \$.20 | \$.12 | 5P15Q2 | 20 | 1500 | \$.20 | \$.12 |
| 5P25Q2 | 20 | 2500 | .20 | .12 | 5P15Q3 | 30 | 1500 | .20 | .12 |
| 5P25Q3 | 30 | 2500 | .25 | .15 | 5P15Q5 | 50 | 1500 | .25 | .15 |
| 5P25Q5 | 50 | 2500 | .25 | .15 | 5P15Q75 | 75 | 1500 | .25 | .15 |
| 5P25Q75 | 75 | 2500 | .30 | .18 | 5P15T1 | 100 | 1500 | .30 | .18 |
| 5P25T1 | 100 | 2500 | .30 | .18 | 5P15T15 | 150 | 1500 | .30 | .18 |
| 5P25T15 | 150 | 2500 | .35 | .21 | 5P15T2 | 200 | 1500 | .35 | .21 |
| 5P25T2 | 200 | 2500 | .45 | .27 | 5P15T25 | 250 | 1500 | .40 | .24 |
| 1DP25T25 | 250 | 2500 | .40 | .24 | 5P15T3 | 300 | 1500 | .40 | .24 |
| 1DP25T3 | 300 | 2500 | .45 | .27 | 5P15T47 | 470 | 1500 | .45 | .27 |
| 1DP25T5 | 500 | 2500 | .60 | .36 | 5P15T5 | 500 | 1500 | .45 | .27 |
| 1DP25T75 | 750 | 2500 | .70 | .42 | 1DP15T75 | 750 | 1500 | .60 | .36 |
| 1DP25D1 | 1,000 | 2500 | .85 | .51 | 1DP15D1 | 1,000 | 1500 | .70 | .42 |
| 1DP25D12 | 1,200 | 2500 | .95 | .57 | 1DP15D12 | 1,200 | 1500 | .85 | .51 |
| 1DP25D15 | 1,500 | 2500 | 1.30 | .78 | 1DP15D15 | 1,500 | 1500 | .95 | .57 |
| 1DP25D18 | 1,800 | 2500 | 1.55 | .93 | 1DP15D18 | 1,800 | 1500 | 1.05 | .63 |
| 1DP25D2 | 2,000 | 2500 | 1.65 | .99 | 1DP15D2 | 2,000 | 1500 | 1.15 | .69 |
| 5P15Q1 | 10 | 1500 | .20 | .12 | | | | | |

1000-VOLT SILVERED MICA — Tolerance $\pm 5\%$

| Type | Cap. mmf. | List Price | Net Price | Type | Cap. mmf. | List Price | Net Price |
|----------|-----------|------------|-----------|----------|-----------|------------|-----------|
| SRP10V5 | 5 | \$.30 | \$.18 | SRP10T16 | 160 | \$.35 | \$.21 |
| SRP10Q1 | 10 | .30 | .18 | SRP10T18 | 180 | .35 | .21 |
| SRP10Q12 | 12 | .30 | .18 | SRP10T2 | 200 | .40 | .24 |
| SRP10Q15 | 15 | .30 | .18 | SRP10T22 | 220 | .40 | .24 |
| SRP10Q18 | 18 | .30 | .18 | SRP10T24 | 240 | .40 | .24 |
| SRP10Q2 | 20 | .30 | .18 | SRP10T25 | 250 | .40 | .24 |
| SRP10Q22 | 22 | .30 | .18 | SRP10T27 | 270 | .40 | .24 |
| SRP10Q25 | 25 | .30 | .18 | SRP10T3 | 300 | .45 | .27 |
| SRP10Q27 | 27 | .30 | .18 | SRP10T33 | 330 | .45 | .27 |
| SRP10Q3 | 30 | .30 | .18 | SRP10T36 | 360 | .45 | .27 |
| SRP10Q33 | 33 | .30 | .18 | SRP10T39 | 390 | .50 | .36 |
| SRP10Q36 | 36 | .30 | .18 | SRP10T4 | 400 | .50 | .36 |
| SRP10Q39 | 39 | .30 | .18 | SRP10T43 | 430 | .50 | .36 |
| SRP10Q4 | 40 | .30 | .18 | SRP10T47 | 470 | .50 | .36 |
| SRP10Q43 | 43 | .30 | .18 | SRP10T5 | 500 | .50 | .36 |
| SRP10Q47 | 47 | .30 | .18 | SRP10T51 | 510 | .50 | .36 |
| SRP10Q5 | 50 | .30 | .18 | SRP10T56 | 560 | .50 | .36 |
| SRP10Q51 | 51 | .30 | .18 | SRP10T6 | 600 | .55 | .33 |
| SRP10Q56 | 56 | .30 | .18 | SRP10T62 | 620 | .55 | .33 |
| SRP10Q62 | 62 | .30 | .18 | SRP10T68 | 680 | .60 | .36 |
| SRP10Q68 | 68 | .30 | .18 | SRP10T7 | 700 | .60 | .36 |
| SRP10Q7 | 70 | .30 | .18 | SRP10T75 | 750 | .60 | .36 |
| SRP10Q75 | 75 | .30 | .18 | SRP10T8 | 800 | .65 | .39 |
| SRP10Q82 | 82 | .30 | .18 | SRP10T82 | 820 | .65 | .39 |
| SRP10Q91 | 91 | .30 | .18 | SRP10T9 | 900 | .70 | .42 |
| SRP10T1 | 100 | .35 | .21 | SRP10T91 | 910 | .70 | .42 |
| SRP10T11 | 110 | .35 | .21 | SRP10D1 | 1000 | .75 | .45 |
| SRP10T12 | 120 | .35 | .21 | SRP10D11 | 1100 | .80 | .48 |
| SRP10T13 | 130 | .35 | .21 | SRP10D12 | 1200 | .85 | .51 |
| SRP10T15 | 150 | .35 | .21 | | | | |

CORNELL-DUBILIER ELECTRONICS



"SILVER-MIKE" Dipped Micacs

CLASS
203.20

- Designed to Replace Malted Mica or Ceramic Capacitors in Critical Circuits
- Silvered Mica Assures Close Temperature Coefficient and High Stability
- Operate at Temperatures from -55°C to $+125^{\circ}\text{C}$ without Derating, and to 150°C with Derating
- Multi-Coated with Tough Phenolic to Withstand Extremes of Heat and Humidity
- Meet Specifications of EIA and MIL-C-5B

TYPE CD15, CD19, CD20, CD30

Rated at 500 WVDC . . . Tolerance $\pm 5\%$ or 0.5 MMF (whichever is greater)

| Cap. MMF | Cat. No. | Size—Inches Lgth. x Wid. x Thick. | List Price | Net Price | Cap. MMF | Cat. No. | Size—Inches Lgth. x Wid. x Thick. | List Price | Net Price |
|----------|------------------|--------------------------------------|------------|--------------|----------|------------------|--------------------------------------|------------|--------------|
| 1 | CD15-5V1 | .440 x .344 x .180 | \$.20 | \$.12 | 360 | CD15-5T36 | .440 x .344 x .200 | \$.40 | \$.24 |
| 2 | CD15-5V2 | .440 x .344 x .180 | .20 | .12 | 390 | CD15-5T39 | .440 x .344 x .200 | .45 | .27 |
| 3 | CD15-5V3 | .440 x .344 x .180 | .20 | .12 | 430 | CD19-5T43 | .610 x .460 x .175 | .30 | .18 |
| 5 | CD15-5V5 | .440 x .344 x .180 | .20 | .12 | 470 | CD19-5T47 | .610 x .460 x .175 | .35 | .21 |
| 10 | CD15-5Q1 | .440 x .344 x .180 | .20 | .12 | 500 | CD19-5T5 | .610 x .460 x .175 | .35 | .21 |
| 12 | CD15-5Q12 | .440 x .344 x .180 | .20 | .12 | 510 | CD19-5T51 | .610 x .460 x .175 | .35 | .21 |
| 15 | CD15-5Q15 | .440 x .344 x .180 | .20 | .12 | 560 | CD19-5T56 | .610 x .460 x .175 | .35 | .21 |
| 18 | CD15-5Q18 | .440 x .344 x .180 | .20 | .12 | 620 | CD19-5T62 | .610 x .460 x .175 | .35 | .21 |
| 20 | CD15-5Q2 | .440 x .344 x .180 | .20 | .12 | 680 | CD19-5T68 | .610 x .460 x .175 | .40 | .24 |
| 22 | CD15-5Q22 | .440 x .344 x .180 | .20 | .12 | 750 | CD19-5T75 | .610 x .460 x .175 | .40 | .24 |
| 24 | CD15-5Q24 | .440 x .344 x .190 | .20 | .12 | 820 | CD19-5T82 | .610 x .460 x .175 | .45 | .27 |
| 27 | CD15-5Q27 | .440 x .344 x .190 | .20 | .12 | 910 | CD19-5T91 | .610 x .460 x .175 | .45 | .27 |
| 30 | CD15-5Q3 | .440 x .344 x .190 | .20 | .12 | 1000 | CD19-5D1 | .610 x .460 x .175 | .50 | .30 |
| 33 | CD15-5Q33 | .440 x .344 x .190 | .20 | .12 | 1100 | CD19-5D11 | .630 x .480 x .190 | .50 | .30 |
| 36 | CD15-5Q36 | .440 x .344 x .190 | .20 | .12 | 1200 | CD19-5D12 | .630 x .480 x .190 | .55 | .33 |
| 39 | CD15-5Q39 | .440 x .344 x .190 | .20 | .12 | 1300 | CD19-5D13 | .630 x .480 x .190 | .60 | .36 |
| 43 | CD15-5Q43 | .440 x .344 x .190 | .20 | .12 | 1500 | CD19-5D15 | .630 x .480 x .190 | .65 | .39 |
| 47 | CD15-5Q47 | .440 x .344 x .190 | .20 | .12 | 1600 | CD19-5D16 | .630 x .480 x .190 | .70 | .42 |
| 50 | CD15-5Q5 | .440 x .344 x .190 | .20 | .12 | 1800 | CD19-5D18 | .630 x .480 x .190 | .75 | .45 |
| 51 | CD15-5Q51 | .440 x .344 x .200 | .20 | .12 | 2000 | CD19-5D2 | .630 x .480 x .190 | .80 | .48 |
| 56 | CD15-5Q56 | .440 x .344 x .200 | .20 | .12 | 2200 | CD19-5D22 | .650 x .500 x .220 | .85 | .51 |
| 62 | CD15-5Q62 | .440 x .344 x .200 | .20 | .12 | 2400 | CD19-5D24 | .650 x .500 x .220 | .90 | .54 |
| 68 | CD15-5Q68 | .440 x .344 x .200 | .20 | .12 | 2500 | CD19-5D25 | .650 x .500 x .220 | .95 | .57 |
| 75 | CD15-5Q75 | .440 x .344 x .200 | .20 | .12 | 2700 | CD19-5D27 | .650 x .500 x .220 | 1.05 | .63 |
| 82 | CD15-5Q82 | .440 x .344 x .200 | .20 | .12 | 3000 | CD19-5D3 | .650 x .500 x .220 | 1.15 | .69 |
| 91 | CD15-5Q91 | .440 x .344 x .200 | .20 | .12 | 3300 | CD20-5D33 | .740 x .500 x .220 | 1.05 | .63 |
| 100 | CD15-5T1 | .440 x .344 x .200 | .20 | .12 | 3600 | CD20-5D36 | .740 x .500 x .220 | 1.10 | .66 |
| 110 | CD15-5T11 | .440 x .344 x .200 | .25 | .15 | 3900 | CD20-5D39 | .740 x .500 x .220 | 1.15 | .69 |
| 120 | CD15-5T12 | .440 x .344 x .200 | .25 | .15 | 4300 | CD20-5D43 | .740 x .500 x .220 | 1.25 | .75 |
| 130 | CD15-5T13 | .440 x .344 x .200 | .25 | .15 | 4700 | CD30-5D47 | .780 x .880 x .300 | 1.25 | .75 |
| 150 | CD15-5T15 | .440 x .344 x .200 | .25 | .15 | 5000 | CD30-5D5 | .780 x .880 x .300 | 1.35 | .81 |
| 160 | CD15-5T16 | .440 x .344 x .200 | .25 | .15 | 5100 | CD30-5D51 | .780 x .880 x .300 | 1.35 | .81 |
| 180 | CD15-5T18 | .440 x .344 x .200 | .30 | .18 | 5600 | CD30-5D56 | .780 x .880 x .300 | 1.45 | .87 |
| 200 | CD15-5T2 | .440 x .344 x .200 | .30 | .18 | 6200 | CD30-5D62 | .780 x .880 x .300 | 1.55 | .93 |
| 220 | CD15-5T22 | .440 x .344 x .200 | .30 | .18 | 6800 | CD30-5D68 | .780 x .880 x .300 | 1.75 | 1.05 |
| 240 | CD15-5T24 | .440 x .344 x .200 | .30 | .18 | 7500 | CD30-5D75 | .780 x .880 x .300 | 1.85 | 1.11 |
| 250 | CD15-5T25 | .440 x .344 x .200 | .30 | .18 | 8200 | CD30-5D82 | .780 x .880 x .300 | 2.05 | 1.23 |
| 270 | CD15-5T27 | .440 x .344 x .200 | .35 | .21 | 9100 | CD30-5D91 | .780 x .880 x .300 | 2.20 | 1.32 |
| 300 | CD15-5T3 | .440 x .344 x .200 | .35 | .21 | 10,000 | CD30-551 | .780 x .880 x .300 | 2.40 | 1.44 |
| 330 | CD15-5T33 | .440 x .344 x .200 | .40 | .24 | | | | | |

CORNELL-DUBILIER ELECTRONICS

CLASS
203.30

"SUPER MICADON" Encapsulated Micas



"Super MICADON"



Cornell-Dubilier "SUPER MICADONS" represent an entirely new concept in Midget Mica Capacitor construction. The vastly improved design and construction makes it possible to produce miniature units of greatly increased capacitance and superior quality over conventional units of the same case size. Ideally suited for printed board assemblies.

- ◆ 3 to 6 Times Greater Capacity Over Conventional Case Sizes
- ◆ 10 to 35 Times Higher Insulation Resistance
- ◆ Up to 20 Times Greater Moisture Resistance
- ◆ Up to 19 Times Longer Life

STANDARD TOLERANCE: ±5%; ±2% from stock when specified; ±½% and ±1% on special order.
 For ±2% Tol. add 15% to List
 For ±1% Tol. add 25% to List
 For ±½% Tol. add 50% to List

CHARACTERISTICS*: All types are supplied from stock as follows:

- 1 to 24 mmfd. in Char. "C".
- 24 to 51 mmfd. in Char. "E".
- 51 to 41,000 mmfd. in Char. "E". (Char. "F" on Spec. Order)

| | | Long | Wide | Thick |
|--------|-----|---------------|---------|-------|
| Type | 1A | 53/64 x 53/64 | x 9/32 | |
| SIZES | 1AD | 53/64 x 53/64 | x 11/32 | |
| in | 5A | 51/64 x 15/32 | x 7/32 | |
| Inches | 22A | 35/64 x 5/16 | x 7/32 | |

TEMPERATURE RANGE: -55°C to +130°C.

TYPE 22A

500 V. D.C. Working

| Type | Cap Mfmd. | List* Price | Net* Price |
|---------|-----------|-------------|------------|
| 22A5V5 | 5 | \$.20 | \$.12 |
| 22A5Q1 | 10 | .20 | .12 |
| 22A5Q12 | 12 | .20 | .12 |
| 22A5Q15 | 15 | .20 | .12 |
| 22A5Q18 | 18 | .20 | .12 |
| 22A5Q2 | 20 | .20 | .12 |
| 22A5Q22 | 22 | .20 | .12 |
| 22A5Q24 | 24 | .20 | .12 |
| 22A5Q27 | 27 | .20 | .12 |
| 22A5Q3 | 30 | .20 | .12 |
| 22A5Q33 | 33 | .20 | .12 |
| 22A5Q36 | 36 | .20 | .12 |
| 22A5Q39 | 39 | .20 | .12 |
| 22A5Q43 | 43 | .20 | .12 |
| 22A5Q47 | 47 | .20 | .12 |
| 22A5Q51 | 51 | .20 | .12 |
| 22A5Q56 | 56 | .20 | .12 |
| 22A5Q62 | 62 | .20 | .12 |
| 22A5Q68 | 68 | .20 | .12 |
| 22A5Q75 | 75 | .20 | .12 |
| 22A5Q82 | 82 | .20 | .12 |
| 22A5Q91 | 91 | .25 | .15 |

TYPE 22A (Cont'd)

500 V. D.C. Working

| Type | Cap Mfmd. | List* Price | Net* Price |
|---------|-----------|-------------|------------|
| 22A5T1 | 100 | \$.25 | \$.15 |
| 22A5T11 | 110 | .25 | .15 |
| 22A5T12 | 120 | .25 | .15 |
| 22A5T13 | 130 | .25 | .15 |
| 22A5T15 | 150 | .30 | .18 |
| 22A5T16 | 160 | .30 | .18 |
| 22A5T18 | 180 | .35 | .21 |
| 22A5T2 | 200 | .35 | .21 |
| 22A5T22 | 220 | .35 | .21 |
| 22A5T24 | 240 | .35 | .21 |
| 22A5T27 | 270 | .40 | .24 |
| 22A5T3 | 300 | .40 | .24 |
| 22A5T33 | 330 | .45 | .27 |
| 22A5T36 | 360 | .45 | .27 |
| 22A5T39 | 390 | .45 | .27 |
| 22A5T43 | 430 | .50 | .30 |
| 22A5T47 | 470 | .50 | .30 |
| 22A5T51 | 510 | .60 | .36 |
| 22A5T56 | 560 | .60 | .36 |
| 22A5T62 | 620 | .65 | .39 |
| 22A5T68 | 680 | .70 | .42 |
| 22A5T75 | 750 | .80 | .48 |
| 22A5T82 | 820 | .85 | .51 |
| 22A5T91 | 910 | .90 | .54 |
| 22A5D1 | 1,000 | .95 | .57 |

TYPE 5A

500 V. D.C. Working

| Type | Cap Mfmd. | List* Price | Net* Price |
|--------|-----------|-------------|------------|
| 5A5D11 | 1,100 | \$.65 | \$.39 |
| 5A5D12 | 1,200 | .65 | .39 |
| 5A5D13 | 1,300 | .65 | .39 |
| 5A5D15 | 1,500 | .75 | .45 |
| 5A5D16 | 1,600 | .75 | .45 |
| 5A5D18 | 1,800 | .90 | .54 |
| 5A5D2 | 2,000 | 1.10 | .66 |
| 5A5D22 | 2,200 | 1.10 | .66 |
| 5A5D24 | 2,400 | 1.25 | .75 |
| 5A5D27 | 2,700 | 1.35 | .81 |
| 5A5D3 | 3,000 | 1.45 | .87 |
| 5A5D33 | 3,300 | 1.55 | .93 |
| 5A5D36 | 3,600 | 1.85 | 1.11 |

TYPE 1A

500 V. D.C. Working

| Type | Cap Mfmd. | List* Price | Net* Price |
|--------|-----------|-------------|------------|
| 1A5D39 | 3,900 | \$1.40 | \$.84 |
| 1A5D43 | 4,300 | 1.50 | .90 |
| 1A5D47 | 4,700 | 1.65 | .99 |
| 1A5D51 | 5,100 | 1.70 | 1.02 |
| 1A5D56 | 5,600 | 1.85 | 1.11 |
| 1A5D62 | 6,200 | 1.95 | 1.17 |
| 1A5D68 | 6,800 | 2.15 | 1.29 |
| 1A5D75 | 7,500 | 2.30 | 1.38 |
| 1A5D82 | 8,200 | 2.50 | 1.50 |
| 1A5D91 | 9,100 | 2.70 | 1.62 |
| 1A5S1 | 10,000 | 3.15 | 1.89 |
| 1A5S11 | 11,000 | 3.35 | 2.02 |
| 1A5S12 | 12,000 | 3.50 | 2.10 |
| 1A5S13 | 13,000 | 3.85 | 2.31 |
| 1A5S15 | 15,000 | 4.20 | 2.52 |

TYPE 1AD

500 V. D.C. Working

| Type | Cap Mfmd. | List* Price | Net* Price |
|----------|-----------|-------------|------------|
| 1AD5S16 | 16,000 | \$4.85 | \$2.91 |
| 1AD5S18 | 18,000 | 5.30 | 3.18 |
| 1AD5S2 | 20,000 | 5.80 | 3.48 |
| 1AD5S22 | 22,000 | 6.10 | 3.66 |
| 1AD5S24 | 24,000 | 6.50 | 3.90 |
| 1AD5S27 | 27,000 | 7.10 | 4.26 |
| 1AD5S3 | 30,000 | 7.85 | 4.71 |
| †1AD3S33 | 33,000 | 8.45 | 5.07 |
| †1AD3S36 | 36,000 | 9.05 | 5.43 |
| †1AD3S39 | 39,000 | 9.80 | 5.88 |
| †1AD3S4 | 40,000 | 9.95 | 5.97 |

†Rated at 300 V. D.C. Working.

*Prices shown cover Char. "C" or "E"; For Char. "F" add 25¢ each to list.

CORNELL-DUBILIER ELECTRONICS

CLASS
203.40
203.42

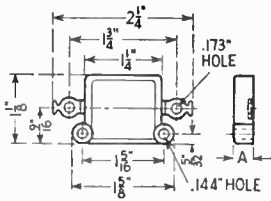
Low-Power Molded Micacs



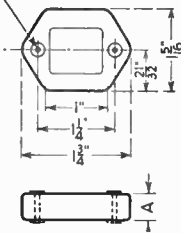
TYPE 4



TYPE 9



TYPE 9: 6-32 THD. TAPPED HOLES
TYPE 9A: .144" DIA. HOLES



C-D types 4 and 9 are designed to meet applications in power amplifiers and low-power transmitters. Principally employed for grid and plate blocking and for r.f. by-pass. Units are molded in a low-loss bakelite and have a special salt water immersion seal against humidity. In the type 9 the two terminals are tapped to receive mounting screws.

STANDARD TOLERANCE: ± 10%.

| TYPE 4 | | | | TYPE 9 | | | |
|--|-----------|------------|-----------|--|-----------|------------|-----------|
| Cat. No. | Cap. Mfd. | List Price | Net Price | Cat. No. | Cap. Mfd. | List Price | Net Price |
| 1200 V. D.C. Test—600 V. D.C. Working | | | | 1200 V. D.C. Test—600 V. D.C. Working | | | |
| 4-14050 | .00005 | \$1.20 | \$.72 | 9-14050 | .00005 | \$1.45 | \$.87 |
| 4-13010 | .0001 | 1.20 | .72 | 9-13010 | .0001 | 1.45 | .87 |
| 4-13020 | .0002 | 1.20 | .72 | 9-13025 | .00025 | 1.45 | .87 |
| 4-13025 | .00025 | 1.20 | .72 | 9-13050 | .0005 | 1.45 | .87 |
| 4-13030 | .0003 | 1.20 | .72 | 9-12010 | .001 | 1.45 | .87 |
| 4-13040 | .0004 | 1.20 | .72 | 9-12020 | .002 | 1.65 | .99 |
| 4-13050 | .0005 | 1.20 | .72 | 9-12025 | .0025 | 1.70 | 1.02 |
| 4-12010 | .001 | 1.20 | .72 | 9-12030 | .003 | 1.85 | 1.11 |
| 4-12015 | .0015 | 1.20 | .72 | 9-12040 * | .004 | 2.00 | 1.20 |
| 4-12020 * | .002 | 1.30 | .78 | 9-12050 | .005 | 2.10 | 1.26 |
| 4-12025 | .0025 | 1.30 | .78 | 9-12060 | .006 | 2.20 | 1.32 |
| 4-12030 | .003 | 1.45 | .87 | 9-12080 | .008 | 2.45 | 1.47 |
| 4-12040 | .004 | 1.50 | .90 | 9-11010 | .01 | 2.80 | 1.68 |
| 4-12050 | .005 | 1.55 | .93 | 9-11015 | .015 | 3.05 | 1.83 |
| 4-12060 | .006 | 1.80 | 1.08 | 9-11020 | .02 | 3.55 | 2.13 |
| 4-12070 | .007 | 1.85 | 1.11 | 9-11025 | .025 | 4.35 | 2.61 |
| 4-12080 | .008 | 1.90 | 1.14 | 9-11030 | .03 | 4.55 | 2.73 |
| 4-11010 | .01 | 2.15 | 1.29 | 9-11040 | .04 | 5.85 | 3.51 |
| 4-11015 | .015 | 2.65 | 1.59 | 9-11050 † | .05 | 7.10 | 4.26 |
| 4-11020 | .02 | 3.05 | 1.83 | 9-11060 | .06 | 8.05 | 4.83 |
| 4-11025 † | .025 | 3.60 | 2.16 | | | | |
| 4-11030 | .03 | 4.45 | 2.67 | | | | |

| TYPE 4 | | | | TYPE 9 | | | |
|---|-----------|------------|-----------|---|-----------|------------|-----------|
| Cat. No. | Cap. Mfd. | List Price | Net Price | Cat. No. | Cap. Mfd. | List Price | Net Price |
| 2500 V. D.C. Test—1200 V. D.C. Working | | | | 2500 V. D.C. Test—1200 V. D.C. Working | | | |
| 4-24050 | .00005 | \$1.60 | \$.96 | 9-24050 | .00005 | \$1.60 | \$.96 |
| 4-23010 | .0001 | 1.60 | .96 | 9-23010 | .0001 | 1.60 | .96 |
| 4-23020 | .0002 | 1.60 | .96 | 9-23025 | .00025 | 1.60 | .96 |
| 4-23025 | .00025 | 1.60 | .96 | 9-23050 | .0005 | 1.60 | .96 |
| 4-23030 | .0003 | 1.60 | .96 | 9-22010 | .001 | 1.90 | 1.14 |
| 4-23050 * | .0005 | 1.60 | .96 | 9-22020 | .002 | 2.50 | 1.50 |
| 4-22010 | .001 | 1.80 | 1.08 | 9-22025 * | .0025 | 2.80 | 1.68 |
| 4-22015 | .0015 | 2.30 | 1.38 | 9-22030 | .003 | 2.95 | 1.77 |
| 4-22020 | .002 | 2.40 | 1.44 | 9-22040 | .004 | 3.10 | 1.86 |
| 4-22025 | .0025 | 2.80 | 1.68 | 9-22050 | .005 | 3.30 | 1.98 |
| 4-22030 | .003 | 3.05 | 1.83 | 9-22060 | .006 | 3.45 | 2.07 |
| 4-22040 | .004 | 3.05 | 1.83 | 9-22080 | .008 | 4.10 | 2.46 |
| 4-22050 | .005 | 3.30 | 1.98 | 9-21010 | .01 | 4.70 | 2.82 |
| 4-22060 † | .006 | 3.30 | 1.98 | 9-21015 | .015 | 5.80 | 3.48 |
| 4-22080 | .008 | 3.85 | 2.31 | 9-21020 † | .02 | 7.05 | 4.23 |
| 4-21010 | .01 | 5.10 | 3.06 | 9-21025 † | .025 | 7.90 | 4.74 |
| | | | | 9-21030 | .03 | 8.10 | 4.86 |
| 5000 V. D.C. Test—2500 V. D.C. Working | | | | 5000 V. D.C. Test—2500 V. D.C. Working | | | |
| 4-54050 | .00005 | \$1.90 | \$1.14 | 9-54050 | .00005 | \$1.90 | \$1.14 |
| 4-53010 | .0001 | 1.90 | 1.14 | 9-53010 | .0001 | 1.90 | 1.14 |
| 4-53020 | .0002 | 1.90 | 1.14 | 9-53025 | .00025 | 2.15 | 1.29 |
| 4-53025 | .00025 | 2.20 | 1.32 | 9-53050 | .0005 | 2.55 | 1.53 |
| 4-53030 * | .0003 | 2.25 | 1.35 | 9-52010 * | .001 | 2.90 | 1.74 |
| 4-53050 | .0005 | 2.50 | 1.50 | 9-52020 | .002 | 4.25 | 2.55 |
| 4-52010 | .001 | 2.80 | 1.68 | 9-52025 | .0025 | 4.60 | 2.76 |
| 4-52015 | .0015 | 3.55 | 2.13 | 9-52030 | .003 | 5.10 | 3.06 |
| 4-52020 | .002 | 4.15 | 2.49 | 9-52040 | .004 | 5.65 | 3.39 |
| 4-52025 | .0025 | 4.50 | 2.70 | 9-52050 | .005 | 6.20 | 3.72 |
| 4-52030 † | .003 | 4.90 | 2.94 | 9-52060 | .006 | 6.35 | 3.81 |
| 4-52040 | .004 | 5.65 | 3.39 | 9-52080 † | .008 | 6.85 | 4.11 |
| 4-52050 | .005 | 6.40 | 3.84 | 9-51010 | .01 | 7.30 | 4.38 |
| | | | | 9-51015 | .015 | 8.05 | 4.83 |

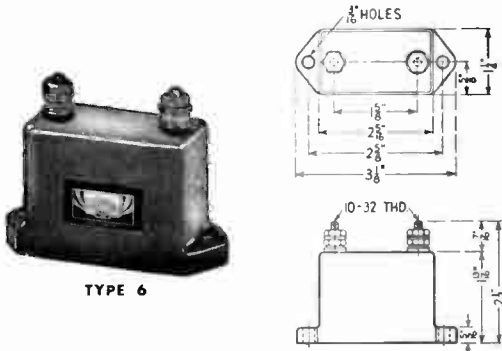
*Dimension "A" in diagram—for type 4—1 1/32"; for type 9—7/16".
†Dimension "A" in diagram—for type 4—7/16"; for type 9—4 7/64".
Supplied as Type 4D or 9D.

"E" METER BRACKETS: For Weston Model 301 meters. Add "E" to C-D Type No., for example, 4E-52020, etc. These "E" brackets are also available separately. Specify by ordering (2) Part No. 18445 per capacitor.

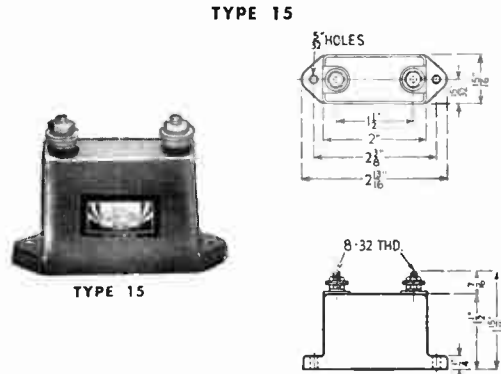
CORNELL-DUBILIER ELECTRONICS

CLASS
203.50

Medium-Power Bakelite-Cased Micacs



TYPE 6



TYPE 15

Plastic-cased capacitors designed for a wide variety of radio-frequency applications, especially where small size and minimum weight are essential such as in airborne and portable equipment. Used also in stationary medium-power transmitters, television transmitters, oscillators, and many electronic devices, in grid, plate, coupling, tank and bypass functions.

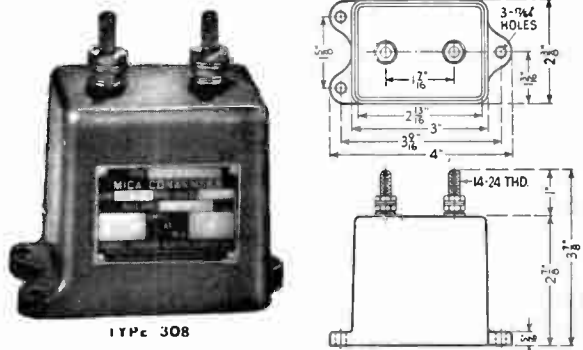
- ◆ SPECIAL C-D SERIES-SECTION MICA STACK
- ◆ STACKS PERMANENTLY HELD UNDER PRESSURE WITH NON-MAGNETIC CLAMPS
- ◆ COMPLETELY SOLDERED FOILS
- ◆ VACUUM - IMPREGNATED STACK
- ◆ NON-TURNABLE PLATED BRASS STUD TERMINALS
- ◆ SECTIONS INDIVIDUALLY TESTED FOR CAPACITY AND VOLTAGE
- ◆ SPECIAL LOW-LOSS FILLER
- ◆ FINEST INDIA RUBY MICA DIELECTRIC
- ◆ LOW-LOSS PLASTIC CASES

| Cat. No. | Cap. Mfd. | Test. Volt. Effective | Max. Oper. Cur. in Amps. | | | | List Price | Net Price |
|----------|-----------|-----------------------|--------------------------|----------|---------|---------|------------|-----------|
| | | | 3000 kc. | 1000 kc. | 300 kc. | 100 kc. | | |
| 639-15 | .00005 | 3,000 | 1.3 | .6 | .18 | .06 | \$12.60 | \$7.56 |
| 583A-15 | .0001 | 3,000 | 1.8 | .75 | .33 | .1 | 12.60 | 7.56 |
| 657-15 | .00015 | 3,000 | 2.2 | 1.0 | .47 | .18 | 12.60 | 7.56 |
| 582A-15 | .0002 | 3,000 | 2.4 | 1.2 | .62 | .24 | 12.60 | 7.56 |
| 805-15 | .00025 | 3,000 | 3.0 | 2.0 | .8 | .3 | 12.60 | 7.56 |
| 640A-15 | .0003 | 3,000 | 3.0 | 1.5 | .75 | .36 | 12.60 | 7.56 |
| 641-15 | .0004 | 3,000 | 4.0 | 2.0 | .9 | .45 | 12.60 | 7.56 |
| 642-15 | .0005 | 3,000 | 4.0 | 2.0 | 1.1 | .55 | 12.60 | 7.56 |
| 643-15 | .0006 | 3,000 | 4.5 | 2.4 | 1.2 | .6 | 12.60 | 7.56 |
| 727-15 | .0008 | 3,000 | 4.5 | 2.7 | 1.5 | .7 | 12.60 | 7.56 |
| 5818-15 | .001 | 3,000 | 4.7 | 3.0 | 1.6 | .75 | 12.60 | 7.56 |
| 679-15 | .0015 | 3,000 | 5.6 | 3.9 | 2.0 | .91 | 12.60 | 7.56 |
| 726-15 | .002 | 3,000 | 6.2 | 4.3 | 2.4 | 1.1 | 12.60 | 7.56 |
| 645-15 | .003 | 3,000 | 7.5 | 5.0 | 3.0 | 1.5 | 12.60 | 7.56 |
| 699-15 | .004 | 3,000 | 8.2 | 6.2 | 3.5 | 1.6 | 12.60 | 7.56 |
| 725-15 | .005 | 3,000 | 8.5 | 6.8 | 4.0 | 2.0 | 12.60 | 7.56 |
| 580-15 | .006 | 2,000 | 9.1 | 7.5 | 4.5 | 2.2 | 12.60 | 7.56 |
| 724-15 | .008 | 1,500 | 10.0 | 8.2 | 5.0 | 2.3 | 12.60 | 7.56 |
| 677-15 | .01 | 1,000 | 10.0 | 9.1 | 5.1 | 2.4 | 12.60 | 7.56 |
| 723-15 | .02 | 1,000 | 11.0 | 11.0 | 7.5 | 3.6 | 14.30 | 8.58 |
| 722-15 | .05 | 500 | 11.0 | 11.0 | 9.1 | 5.0 | 14.30 | 8.58 |
| 721-15 | .1 | 250 | 11.0 | 11.0 | 9.1 | 5.6 | 15.10 | 9.06 |

TYPE 6

| Cat. No. | Cap. Mfd. | Test. Volt. Effective | Max. Oper. Cur. in Amps. | | | | List Price | Net Price |
|----------|-----------|-----------------------|--------------------------|----------|---------|---------|------------|-----------|
| | | | 3000 kc. | 1000 kc. | 300 kc. | 100 kc. | | |
| 390-6 | .00005 | 5,000 | 1.5 | .8 | .2 | .07 | \$17.30 | \$10.38 |
| 362-6 | .0000625 | 5,000 | 1.8 | .85 | .3 | .075 | 17.30 | 10.38 |
| 321-6 | .0001 | 5,000 | 2.4 | 1.2 | .47 | .1 | 17.30 | 10.38 |
| 395-6 | .00015 | 5,000 | 3.7 | 1.8 | .68 | .24 | 17.30 | 10.38 |
| 307-6 | .0002 | 5,000 | 3.6 | 2.0 | .82 | .33 | 17.30 | 10.38 |
| 364-6 | .00025 | 5,000 | 5.0 | 2.5 | 1.0 | .45 | 17.30 | 10.38 |
| 294A-6 | .0003 | 5,000 | 3.9 | 2.7 | 1.1 | .51 | 17.30 | 10.38 |
| 283-6 | .0004 | 5,000 | 4.3 | 2.7 | 1.3 | .62 | 17.30 | 10.38 |
| 272-6 | .0005 | 5,000 | 4.7 | 3.3 | 1.7 | .8 | 17.30 | 10.38 |
| 266-6 | .0006 | 5,000 | 5.1 | 3.6 | 1.8 | .8 | 17.30 | 10.38 |
| 654-6 | .00075 | 5,000 | 5.6 | 3.9 | 2.2 | .91 | 17.30 | 10.38 |
| 599-6 | .0008 | 5,000 | 6.0 | 4.0 | 2.3 | 1.0 | 17.30 | 10.38 |
| 246-6 | .001 | 5,000 | 6.2 | 4.3 | 2.4 | 1.2 | 17.30 | 10.38 |
| 234-6 | .0015 | 5,000 | 6.8 | 5.1 | 3.3 | 1.5 | 17.30 | 10.38 |
| 215-6 | .002 | 3,000 | 6.0 | 3.0 | 1.5 | .8 | 17.30 | 10.38 |
| 217-6 | .002 | 6,000 | 9.0 | 6.2 | 4.0 | 2.0 | 17.30 | 10.38 |
| 473-6 | .0025 | 5,000 | 9.0 | 6.2 | 4.3 | 2.0 | 17.30 | 10.38 |
| 197-6 | .003 | 3,000 | 8.2 | 6.8 | 4.7 | 2.2 | 17.30 | 10.38 |
| 184-6 | .004 | 3,000 | 9.1 | 7.5 | 5.6 | 2.7 | 17.30 | 10.38 |
| 173-6 | .005 | 2,000 | 8.0 | 5.0 | 3.0 | 1.5 | 17.30 | 10.38 |
| 474-6 | .005 | 3,000 | 9.1 | 8.2 | 6.2 | 3.0 | 17.30 | 10.38 |
| 565-6 | .0075 | 2,000 | 10.0 | 9.1 | 6.8 | 3.9 | 17.30 | 10.38 |
| 476-6 | .008 | 2,000 | 11.0 | 9.0 | 7.0 | 3.0 | 17.30 | 10.38 |
| 162-6 | .008 | 3,000 | 10.0 | 10.0 | 7.5 | 3.9 | 17.30 | 10.38 |
| 151-6 | .01 | 2,000 | 11.0 | 11.0 | 8.2 | 4.3 | 17.30 | 10.38 |
| 140-6 | .015 | 1,500 | 12.0 | 10.0 | 7.0 | 4.0 | 17.30 | 10.38 |
| 784-6 | .015 | 2,000 | 12.0 | 12.0 | 10.0 | 5.1 | 17.30 | 10.38 |
| 131-6 | .02 | 2,000 | 13.0 | 13.0 | 11.0 | 6.2 | 17.30 | 10.38 |
| 479-6 | .03 | 2,000 | 14.0 | 20.0 | 15.0 | 7.0 | 17.30 | 10.38 |
| 480-6 | .04 | 1,500 | 15.0 | 16.0 | 13.0 | 7.5 | 17.30 | 10.38 |
| 118-6 | .05 | 1,500 | 15.0 | 16.0 | 15.0 | 7.5 | 17.30 | 10.38 |
| 111-6 | .1 | 500 | 15.0 | 18.0 | 15.0 | 8.2 | 19.20 | 11.52 |
| 406-6 | .1 | 1,000 | 18.0 | 20.0 | 15.0 | 8.0 | 17.30 | 10.38 |
| 110-6 | .1-1 | 250 | 20.0 | 20.0 | 15.0 | 10.0 | 17.30 | 10.38 |
| 105-6 | .2 | 250 | 18.0 | 20.0 | 16.0 | 12.0 | 25.25 | 15.15 |
| 885-6 | .25 | 250 | 18.0 | 20.0 | 16.0 | 12.0 | 27.90 | 16.74 |

TYPE 30B



TYPE 30B

| Cat. No. | Cap. Mfd. | Test. Volt. Effective | Max. Oper. Cur. in Amps. | | | | List Price | Net Price |
|----------|-----------|-----------------------|--------------------------|----------|--------------------|---------|------------|-----------|
| | | | 3000 kc. | 1000 kc. | 300 kc. | 100 kc. | | |
| 533-30B | .0001 | 4,000 | [20 Amps. at 60 mc.] | 8.5 | [3 Amps. at 4 mc.] | 35.25 | \$21.15 | |
| 959-30B | .0005 | 8,000 | 10 | 11 | 4.5 | 1.5 | 39.25 | 23.55 |
| 960-30B | .001 | 8,000 | 11 | 11 | 7.5 | 2.5 | 39.25 | 23.55 |
| 961-30B | .002 | 8,000 | 12 | 14 | 10 | 5 | 42.25 | 25.35 |
| 759-30B | .003 | 8,000 | 12 | 14 | 10 | 6 | 44.60 | 26.76 |
| 757-30B | .004 | 8,000 | 13 | 15 | 11 | 7 | 48.60 | 29.16 |
| 758-30B | .005 | 8,000 | 15 | 15 | 11 | 7 | 48.60 | 29.16 |
| 756-30B | .006 | 6,000 | 15 | 15 | 11 | 7 | 48.60 | 29.16 |
| 962-30B | .01 | 6,000 | 16 | 20 | 15 | 8 | 52.55 | 31.53 |
| 915-30B | .01 | 8,000 | 17 | 21 | 15 | 9 | 55.20 | 33.12 |
| 963-30B | .02 | 5,000 | 18 | 22 | 18 | 12 | 55.20 | 33.12 |
| 741-30B | .03 | 4,000 | 18 | 23 | 20 | 13 | 55.20 | 33.12 |
| 113-30B | .1 | 2,000 | 18 | 25 | 22 | 12 | 48.60 | 29.16 |
| 603-30B | .2 | 600 | 18 | 28 | 23 | 15 | 39.25 | 23.55 |
| 750-30B | .25 | 600 | 18 | 28 | 23 | 15 | 44.60 | 26.76 |
| 933-30B | .3 | 600 | 18 | 28 | 23 | 15 | 44.60 | 26.76 |
| 898-30B | 1.0 | 600 | 18 | 28 | 23 | 15 | 81.85 | 49.11 |

Molded Tubular Mylars*

CDE



PM

CDE type PM is a MYLAR* dielectric, high temperature, moisture resistant molded tubular capacitor. The thermoset molded case is tough and non-inflammable. The Mylar dielectric assures dependable operation under high humidity conditions, and it exhibits very high insulation resistance. Low RF impedance of these capacitors makes them ideal for all general bypass and coupling applications. High stability under changes in temperature makes these capacitors excellent replacements in tuned circuits.

TOLERANCE: $\pm 10\%$

TEMPERATURE RANGE: -55°C to $+130^{\circ}\text{C}$.

†Derate voltage by 10% at 100°C ; by 50% at 130°C . Full rating at 85°C .

| PM Cat. No. | Cap. Mfd. | Dimensions—Inches Diameter x Length | List Price | Net Price |
|----------------------|-----------|-------------------------------------|------------|--------------|
| 200 V. D.C.W. | | | | |
| PM 2S2 | .02 | $\frac{3}{8} \times 1\frac{1}{4}$ | \$.25 | \$.15 |
| PM 2S47 | .047 | $\frac{3}{8} \times 1\frac{1}{4}$ | .25 | .15 |
| PM 2S5 | .05 | $\frac{3}{8} \times 1\frac{1}{4}$ | .25 | .15 |
| PM 2P1 | .10 | $\frac{7}{16} \times 1\frac{1}{4}$ | .35 | .21 |
| PM 2P15 | .15 | $\frac{1}{2} \times 1\frac{1}{2}$ | .35 | .21 |
| PM 2P22 | .22 | $\frac{1}{2} \times 1\frac{1}{2}$ | .40 | .24 |
| PM 2P25 | .25 | $\frac{9}{16} \times 1\frac{9}{16}$ | .40 | .24 |
| PM 2P47 | .47 | $\frac{3}{8} \times 1\frac{1}{8}$ | .60 | .36 |
| PM 2P5 | .50 | $\frac{3}{8} \times 1\frac{1}{8}$ | .60 | .36 |
| PM 2W1 | 1.00 | $\frac{3}{4} \times 2\frac{1}{4}$ | 1.05 | .63 |
| 400 V. D.C.W. | | | | |
| PM 4S1 | .01 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 4S12 | .012 | $\frac{3}{8} \times 1\frac{1}{4}$ | .25 | .15 |
| PM 4S15 | .015 | $\frac{3}{8} \times 1\frac{1}{4}$ | .25 | .15 |
| PM 4S18 | .018 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S22 | .022 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S25 | .025 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S27 | .027 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S33 | .033 | $\frac{7}{16} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S39 | .039 | $\frac{7}{16} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S47 | .047 | $\frac{7}{16} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S5 | .05 | $\frac{7}{16} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 4S56 | .056 | $\frac{1}{2} \times 1\frac{1}{2}$ | .30 | .18 |
| PM 4S68 | .068 | $\frac{1}{2} \times 1\frac{1}{2}$ | .35 | .21 |
| PM 4S82 | .082 | $\frac{1}{2} \times 1\frac{1}{2}$ | .35 | .21 |
| PM 4P1 | .10 | $\frac{1}{2} \times 1\frac{1}{2}$ | .35 | .21 |
| PM 4P12 | .12 | $\frac{1}{2} \times 1\frac{1}{2}$ | .40 | .24 |
| PM 4P15 | .15 | $\frac{9}{16} \times 1\frac{9}{16}$ | .40 | .24 |
| PM 4P18 | .18 | $\frac{9}{16} \times 1\frac{9}{16}$ | .40 | .24 |
| PM 4P22 | .22 | $\frac{5}{8} \times 1\frac{7}{8}$ | .45 | .27 |
| PM 4P25 | .25 | $\frac{5}{8} \times 1\frac{7}{8}$ | .50 | .30 |

*Dupont TM.

†For Higher Voltage Units see Type PKM

| PM Cat. No. | Cap. Mfd. | Dimensions—Inches Diameter x Length | List Price | Net Price |
|----------------------|-----------|---------------------------------------|------------|------------|
| 400 V. D.C.W. | | | | |
| (Cont'd) | | | | |
| PM 4P27 | .27 | $\frac{5}{8} \times 1\frac{7}{8}$ | .55 | .33 |
| PM 4P33 | .33 | $\frac{11}{16} \times 1\frac{15}{16}$ | .60 | .36 |
| PM 4P39 | .39 | $\frac{11}{16} \times 1\frac{15}{16}$ | .65 | .39 |
| PM 4P47 | .47 | $\frac{3}{4} \times 2\frac{1}{4}$ | .75 | .45 |
| PM 4P5 | .50 | $\frac{3}{4} \times 2\frac{1}{4}$ | .75 | .45 |
| PM 4P56 | .56 | $\frac{3}{4} \times 2\frac{1}{4}$ | .80 | .48 |
| PM 4P68 | .68 | $1 \times 2\frac{1}{8}$ | .90 | .54 |
| PM 4P82 | .82 | $1 \times 2\frac{1}{8}$ | 1.00 | .60 |
| PM 4W1 | 1.00 | $1 \times 2\frac{1}{8}$ | 1.25 | .75 |
| 600 V. D.C.W. | | | | |
| PM 6D1 | .001 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D12 | .0012 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D15 | .0015 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D18 | .0018 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D22 | .0022 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D27 | .0027 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D33 | .0033 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D39 | .0039 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D47 | .0047 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D5 | .005 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D56 | .0056 | $\frac{5}{16} \times 1$ | .25 | .15 |
| PM 6D68 | .0068 | $\frac{5}{16} \times 1$ | .30 | .18 |
| PM 6D82 | .0082 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S1 | .01 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S12 | .012 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S15 | .015 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S18 | .018 | $\frac{3}{8} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S22 | .022 | $\frac{7}{16} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S25 | .025 | $\frac{7}{16} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S27 | .027 | $\frac{7}{16} \times 1\frac{1}{4}$ | .30 | .18 |
| PM 6S33 | .033 | $\frac{7}{16} \times 1\frac{1}{4}$ | .35 | .21 |
| PM 6S39 | .039 | $\frac{7}{16} \times 1\frac{1}{4}$ | .35 | .21 |
| PM 6S47 | .047 | $\frac{1}{2} \times 1\frac{1}{2}$ | .40 | .24 |
| PM 6S5 | .05 | $\frac{1}{2} \times 1\frac{1}{2}$ | .40 | .24 |
| PM 6S56 | .056 | $\frac{1}{2} \times 1\frac{1}{2}$ | .40 | .24 |
| PM 6S68 | .068 | $\frac{1}{2} \times 1\frac{1}{2}$ | .45 | .27 |
| PM 6S82 | .082 | $\frac{1}{2} \times 1\frac{1}{2}$ | .45 | .27 |
| PM 6P1 | .10 | $\frac{9}{16} \times 1\frac{9}{16}$ | .45 | .27 |
| PM 6P12 | .12 | $\frac{9}{16} \times 1\frac{9}{16}$ | .45 | .27 |
| PM 6P15 | .15 | $\frac{5}{8} \times 1\frac{7}{8}$ | .50 | .30 |
| PM 6P18 | .18 | $\frac{3}{4} \times 1\frac{7}{8}$ | .60 | .36 |
| PM 6P22 | .22 | $\frac{3}{4} \times 1\frac{7}{8}$ | .70 | .42 |
| PM 6P25 | .25 | $\frac{11}{16} \times 1\frac{15}{16}$ | .75 | .45 |
| PM 6P27 | .27 | $\frac{11}{16} \times 1\frac{15}{16}$ | .80 | .48 |
| PM 6P33 | .33 | $\frac{3}{4} \times 2\frac{1}{4}$ | .90 | .54 |
| PM 6P39 | .39 | $\frac{3}{4} \times 2\frac{1}{4}$ | 1.00 | .60 |
| PM 6P47 | .47 | $\frac{3}{4} \times 2\frac{1}{4}$ | 1.25 | .75 |
| PM 6P5 | .50 | $\frac{3}{4} \times 2\frac{1}{4}$ | 1.25 | .75 |
| PM 6P56 | .56 | $1 \times 2\frac{1}{8}$ | 1.30 | .78 |

"The PM"

MYLAR Molded Tubular CAPACITOR KIT

A handy quick-select assortment of 80 of the fastest moving C-D "PM" MYLAR tubulars

IN A

crystal clear plastic . . . hinged cover . . . compartment type case (11x6 $\frac{1}{2}$ x1 $\frac{7}{8}$) . . . the clean, orderly way of stocking capacitors . . . and service parts, too!

YOU GET THE CASE AND THE CAPACITORS

ALL FOR THE PRICE OF THE CAPACITORS ALONE.

"PM" KIT

List Price \$26.40

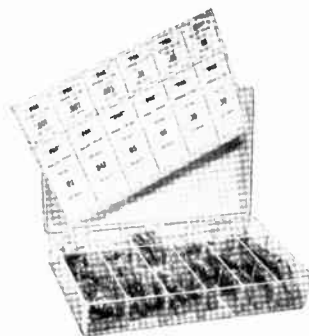
Net \$15.84

CONTAINS:

10 — .001
12 — .01
12 — .056 — .002
10 — .02
10 — .1010 — .005
10 — .047
All 600V

Keep a KIT in your field-service bag and one on your service-bench. They're great too — for screws, nuts and small parts.

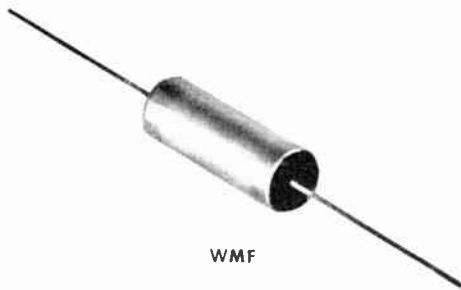
ORDER YOUR "PM" MYLAR KITS FROM YOUR C-D DISTRIBUTOR . . . NOW!



CORNELL-DUBILIER ELECTRONICS

CLASS

204.28 Film-Encased Tubular Mylars*



WMF

Type WMF is an ultra-compact Mylar dielectric tubular capacitor encased in a thin, tough Mylar film wrapping and end-sealed with a high density thermosetting plastic. A most desirable unit where a metal-cased unit is not indicated. The WMF is extremely small in size, has high resistance to humidity and excellent capacitance stability with temperature and life.

TEMPERATURE RANGE: -55°C. to $+125^{\circ}\text{C.}$

Full rated voltage at 85°C.

Derate voltage 10% at 100°C.

Derate voltage 50% at 125°C.

TOLERANCE: $\pm 10\%$.

| WMF Cat. No. | Cap. Mfd. | Size—Inches Diam. x Length | List Price | Net Price |
|---------------------|-----------|-------------------------------|------------|--------------|
| 100 W.V.D.C. | | | | |
| WMF1D1 | .001 | .156 x 1/2 | \$.35 | \$.21 |
| WMF1D15 | .0015 | .156 x 1/2 | .35 | .21 |
| WMF1D22 | .0022 | .156 x 1/2 | .35 | .21 |
| WMF1D33 | .0033 | .156 x 1/2 | .35 | .21 |
| WMF1D47 | .0047 | .156 x 1/2 | .35 | .21 |
| WMF1D68 | .0068 | .175 x 1/2 | .35 | .21 |
| WMF151 | .01 | .200 x 1/2 | .35 | .21 |
| WMF1515 | .015 | .235 x 1/2 | .35 | .21 |
| WMF1522 | .022 | .275 x 5/8 | .40 | .24 |
| WMF1533 | .033 | .300 x 5/8 | .40 | .24 |
| WMF1547 | .047 | .265 x 3/4 | .45 | .27 |
| WMF1568 | .068 | .280 x 3/4 | .45 | .27 |
| WMF1P1 | .1 | .290 x 7/8 | .60 | .36 |
| WMF1P15 | .15 | .335 x 7/8 | .60 | .36 |
| WMF1P22 | .22 | .385 x 1 | .65 | .39 |
| WMF1P33 | .33 | .415 x 1 1/8 | .75 | .45 |
| WMF1P47 | .47 | .475 x 1 1/4 | .85 | .51 |
| WMF1P68 | .68 | .570 x 1 1/4 | .95 | .57 |
| WMF1W1 | 1.0 | .625 x 1 1/2 | 1.45 | .87 |
| WMF1W1P25 | 1.25 | .690 x 1 1/2 | 1.75 | 1.05 |
| WMF1W1P5 | 1.5 | .770 x 1 3/4 | 2.05 | 1.23 |
| WMF1W2 | 2.0 | .955 x 1 3/4 | 2.50 | 1.50 |
| 200 W.V.D.C. | | | | |
| WMF2D1 | .001 | .156 x 1/2 | .35 | .21 |
| WMF2D15 | .0015 | .156 x 1/2 | .35 | .21 |
| WMF2D22 | .0022 | .156 x 1/2 | .35 | .21 |
| WMF2D33 | .0033 | .160 x 1/2 | .35 | .21 |
| WMF2D47 | .0047 | .170 x 1/2 | .35 | .21 |
| WMF2D68 | .0068 | .200 x 1/2 | .35 | .21 |
| WMF251 | .01 | .230 x 1/2 | .35 | .21 |
| WMF2515 | .015 | .290 x 1/2 | .35 | .21 |
| WMF2522 | .022 | .275 x 5/8 | .40 | .24 |
| WMF2533 | .033 | .270 x 3/4 | .40 | .24 |

| WMF Cat. No. | Cap. Mfd. | Size—Inches Diam. x Length | List Price | Net Price |
|----------------------------------|-----------|-------------------------------|------------|--------------|
| 200 W.V.D.C. (cont'd) | | | | |
| WMF2547 | .047 | .320 x 3/4 | \$.45 | \$.27 |
| WMF2568 | .068 | .350 x 3/4 | .45 | .27 |
| WMF2P1 | .1 | .410 x 7/8 | .60 | .36 |
| WMF2P15 | .15 | .500 x 7/8 | .60 | .36 |
| WMF2P22 | .22 | .500 x 1 1/8 | .65 | .39 |
| WMF2P33 | .33 | .550 x 1 1/8 | .75 | .45 |
| WMF2P47 | .47 | .600 x 1 1/4 | .85 | .51 |
| WMF2P68 | .68 | .650 x 1 1/4 | .95 | .57 |
| WMF2W1 | 1.0 | .750 x 1 3/4 | 1.45 | .87 |
| WMF2W1P25 | 1.25 | .825 x 1 3/4 | 1.75 | 1.05 |
| WMF2W1P5 | 1.5 | .900 x 1 3/4 | 2.05 | 1.23 |
| WMF2W2 | 2.0 | .980 x 1 3/4 | 2.50 | 1.50 |
| 400 W.V.D.C. | | | | |
| WMF4D1 | .001 | .156 x 5/8 | .35 | .21 |
| WMF4D15 | .0015 | .156 x 5/8 | .35 | .21 |
| WMF4D22 | .0022 | .156 x 5/8 | .35 | .21 |
| WMF4D33 | .0033 | .190 x 5/8 | .40 | .24 |
| WMF4D47 | .0047 | .200 x 5/8 | .40 | .24 |
| WMF4D68 | .0068 | .250 x 5/8 | .40 | .24 |
| WMF451 | .01 | .300 x 5/8 | .45 | .27 |
| WMF4515 | .015 | .360 x 5/8 | .45 | .27 |
| WMF4522 | .022 | .320 x 3/4 | .45 | .27 |
| WMF4533 | .033 | .350 x 7/8 | .45 | .27 |
| WMF4547 | .047 | .400 x 7/8 | .50 | .30 |
| WMF4568 | .068 | .390 x 1 | .55 | .33 |
| WMF4P1 | .1 | .465 x 1 | .55 | .33 |
| WMF4P15 | .15 | .515 x 1 1/4 | .60 | .36 |
| WMF4P22 | .22 | .565 x 1 1/4 | .70 | .42 |
| WMF4P33 | .33 | .600 x 1 1/4 | 1.10 | .66 |
| WMF4P47 | .47 | .700 x 1 1/2 | 1.30 | .78 |
| WMF4P68 | .68 | .790 x 1 1/2 | 1.60 | .96 |
| WMF4W1 | 1.0 | .875 x 2 | 2.00 | 1.20 |
| WMF4W1P25 | 1.25 | .950 x 2 | 2.30 | 1.38 |
| WMF4W1P5 | 1.5 | .975 x 2 1/4 | 2.60 | 1.56 |
| WMF4W2 | 2.0 | 1.250 x 2 1/4 | 3.30 | 2.04 |
| 600 W.V.D.C. | | | | |
| WMF6D1 | .001 | .170 x 3/4 | .40 | .24 |
| WMF6D15 | .0015 | .170 x 3/4 | .40 | .24 |
| WMF6D22 | .0022 | .187 x 3/4 | .40 | .24 |
| WMF6D33 | .0033 | .203 x 3/4 | .40 | .24 |
| WMF6D47 | .0047 | .234 x 3/4 | .45 | .27 |
| WMF6D68 | .0068 | .265 x 3/4 | .45 | .27 |
| WMF651 | .01 | .290 x 3/4 | .50 | .30 |
| WMF6515 | .015 | .312 x 3/4 | .50 | .30 |
| WMF6522 | .022 | .325 x 7/8 | .50 | .30 |
| WMF6533 | .033 | .350 x 1 | .50 | .30 |
| WMF6547 | .047 | .415 x 1 | .55 | .33 |
| WMF6568 | .068 | .500 x 1 | .60 | .36 |
| WMF6P1 | .1 | .520 x 1 1/8 | .70 | .42 |
| WMF6P15 | .15 | .625 x 1 1/8 | .75 | .45 |
| WMF6P22 | .22 | .660 x 1 1/8 | .85 | .51 |
| WMF6P33 | .33 | .687 x 2 | 1.50 | .90 |
| WMF6P47 | .47 | .855 x 2 | 1.90 | 1.14 |
| WMF6P68 | .68 | .970 x 2 | 2.55 | 1.53 |
| WMF6W1 | 1.0 | 1.165 x 2 1/2 | 4.25 | 2.55 |
| WMF6W1P25 | 1.25 | 1.340 x 2 1/2 | 4.80 | 2.88 |
| WMF6W1P5 | 1.5 | 1.275 x 3 | 5.80 | 3.48 |
| WMF6W2 | 2.0 | 1.460 x 3 | 7.30 | 4.38 |

*Dupont TM.

CORNELL-DUBILIER ELECTRONICS

"BLACK CAT" Molded Kraft-Mylars*

CLASS
204.41

CDE

"BLACK CAT"

PKM

Dual dielectric, molded tubular of Mylar and Kraft assuring high temperature operation, exceptional resistance to moisture and high reliability.

CDE's exclusive "FIXFIL" impregnant (a solid thermosetting compound) together with a rugged molded plastic case, make PKM ideal for the most exacting and rugged services.

For operation at temperatures from -40°C to $+125^{\circ}\text{C}$ — without Derating.

TOLERANCE: $\pm 10\%$.

1000 V. D.C. Working

| PKM Cat. No. | Cap. Mfd. | Size—Inches Diam. x Length | List Price | Net Price |
|--------------|-----------|--------------------------------------|------------|--------------|
| PKM 10D1 | .001 | $\frac{3}{16} \times 1$ | \$.50 | \$.30 |
| PKM 10D5 | .005 | $\frac{3}{16} \times 1\frac{1}{4}$ | .50 | .30 |
| PKM 10D68 | .0068 | $\frac{7}{16} \times 1\frac{1}{4}$ | .50 | .30 |
| PKM 10S1 | .01 | $\frac{7}{16} \times 1\frac{1}{4}$ | .50 | .30 |
| PKM 10S15 | .015 | $\frac{1}{2} \times 1\frac{1}{2}$ | .50 | .30 |
| PKM 10S22 | .022 | $\frac{1}{2} \times 1\frac{1}{2}$ | .50 | .30 |
| PKM 10S33 | .033 | $\frac{1}{2} \times 1\frac{1}{2}$ | .50 | .30 |
| PKM 10S47 | .047 | $\frac{5}{16} \times 1\frac{1}{2}$ | .60 | .36 |
| PKM 10S5 | .05 | $\frac{5}{16} \times 1\frac{1}{2}$ | .60 | .36 |
| PKM 10S68 | .068 | $\frac{3}{8} \times 1\frac{1}{2}$ | .70 | .42 |
| PKM 10P1 | .1 | $1\frac{1}{16} \times 1\frac{1}{16}$ | .75 | .45 |



1600 V. D.C. Working

| PKM Cat. No. | Cap. Mfd. | Size—Inches Diam. x Length | List Price | Net Price |
|-------------------------------|-----------|--------------------------------------|------------|--------------|
| PKM 16D1 | .001 | $\frac{3}{8} \times 1\frac{1}{4}$ | \$.65 | \$.39 |
| PKM 16D15 | .0015 | $\frac{3}{8} \times 1\frac{1}{4}$ | .65 | .39 |
| PKM 16D22 | .0022 | $\frac{3}{8} \times 1\frac{1}{4}$ | .65 | .39 |
| PKM 16D33 | .0033 | $\frac{3}{8} \times 1\frac{1}{4}$ | .65 | .39 |
| PKM 16D47 | .0047 | $\frac{3}{8} \times 1\frac{1}{4}$ | .65 | .39 |
| PKM 16D5 | .005 | $\frac{3}{8} \times 1\frac{1}{4}$ | .65 | .39 |
| PKM 16D68 | .0068 | $\frac{7}{16} \times 1\frac{1}{4}$ | .65 | .39 |
| PKM 16D82 | .0082 | $\frac{7}{16} \times 1\frac{1}{4}$ | .65 | .39 |
| PKM 16S1 | .01 | $\frac{1}{2} \times 1\frac{1}{2}$ | .70 | .42 |
| PKM 16S15 | .015 | $\frac{1}{2} \times 1\frac{1}{2}$ | .70 | .42 |
| PKM 16S22 | .022 | $\frac{3}{8} \times 1\frac{1}{2}$ | .70 | .42 |
| PKM 16S33 | .033 | $\frac{3}{8} \times 1\frac{1}{2}$ | .70 | .42 |
| PKM 16S47 | .047 | $\frac{3}{8} \times 1\frac{1}{2}$ | .90 | .54 |
| PKM 16S5 | .05 | $\frac{3}{8} \times 1\frac{1}{2}$ | .90 | .54 |
| 6000 V. D.C. Working | | | | |
| PKM 60T5 | .0005 | $\frac{1}{2} \times 1\frac{1}{2}$ | 1.35 | .81 |
| PKM 60D1 | .001 | $\frac{5}{16} \times 1\frac{1}{2}$ | 1.35 | .81 |
| PKM 60D5 | .005 | $1\frac{1}{16} \times 1\frac{1}{16}$ | 1.35 | .81 |
| 10,000 V. D.C. Working | | | | |
| PKM 100T5 | .0005 | $\frac{1}{2} \times 1\frac{1}{2}$ | 1.50 | .90 |
| 12,500 V. D.C. Working | | | | |
| PKM 125T25 | .00025 | $\frac{1}{2} \times 1\frac{1}{2}$ | 1.70 | 1.02 |

*DuPont TM

The "DPMS" PAPER & MYLAR* TUBULAR CAPACITOR KIT

Another of the popular C-D KITS . . . this time filled with the NEW DPMS Dipped Paper and Mylar (Dual-Film) Tubular Capacitors. 80 units, selected in types to meet your day-to-day needs.

ALL IN A

clear, "look-through" plastic, jumbo size ($11 \times 6\frac{1}{2} \times 1\frac{7}{8}$) service kit — with hinged cover and separate compartments.

THE CASE IS FREE YOU PAY ONLY FOR THE CAPACITORS

The DPMS KIT—List Price \$25.90, Special Dealer Net \$15.54

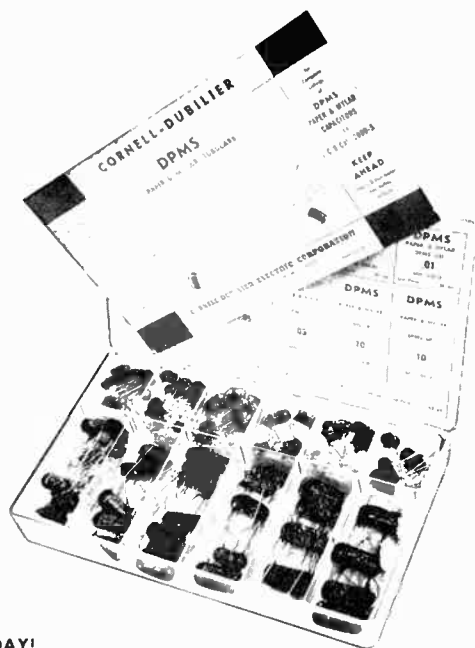
Beside the FREE PLASTIC CASE you get

| | |
|-----------|-----------|
| 10 — .001 | 10 — .02 |
| 6 — .002 | 10 — .047 |
| 10 — .005 | 12 — .05 |
| 12 — .01 | 10 — .1 |

ALL 600 WVDC AND $\pm 10\%$ QUALITY

The new C-D "DPMS" will simplify many of your service problems and you can depend on top performance.

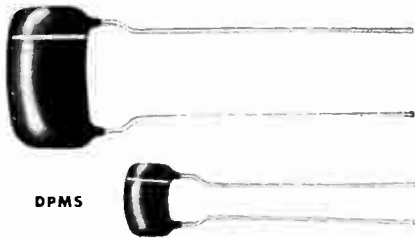
YOUR C-D DISTRIBUTOR HAS "DPMS KITS" IN STOCK. ORDER YOURS TODAY!



CORNELL-DUBILIER ELECTRONICS

CLASS

204.45 Side-Lead Dipped Paper-Mylars*



DPMS

Type DPMS is unique in that it is constructed with TWO dielectrics—Mylar® Polyester Film and a film of the very highest grade paper. The combination of the two thus provides the best features of both —

- ★ HIGH TEMPERATURE OPERATION
- ★ HIGH INSULATION RESISTANCE
- ★ HIGH RELIABILITY
- ★ COMPACT — SPACE SAVING
- ★ IDEAL For Printed and Transistorized Circuitry

"FIXFIL" impregnant, a C-D exclusive, assures stability of temperature characteristics. This solid thermosetting compound will not crack, soften or flow, even at maximum operating temperatures.

The DPMS has a "dipped" rock-hard casing which holds wire leads rigidly at fixed spacings. This tough, durable material has high humidity resistance, high dielectric strength against grounding and is unaffected by accidental contact with soldering iron. The crimped side-leads are space saving and permit uniform mounting of units parallel to the plane of the chassis or printed wiring board.

LEAD SPACING—INCHES

| Case Length | Lead Spacing | Case Length | Lead Spacing | Case Length | Lead Spacing |
|-------------|--------------|-------------|--------------|-------------|--------------|
| .690 | .250 | 1.150 | .719 | 1.300 | .844 |
| .855 | .438 | 1.160 | .719 | 1.560 | 1.094 |
| .870 | .438 | 1.180 | .719 | 1.600 | 1.094 |

TEMPERATURE RANGE: -55°C to $+125^{\circ}\text{C}$

Derate Working Voltage by 25%
for over $+100^{\circ}\text{C}$ operation.

TOLERANCE: $\pm 10\%$

| DPMS Cat. No. | Cap. Mfd. | Size—Inches Diam. x Length | List Price | Net Price |
|---------------------|-----------|-------------------------------|------------|-----------|
| 200 W.V.D.C. | | | | |
| DPMS 252 | .02 | .350 x .855 | \$.25 | \$.15 |
| DPMS 2547 | .047 | .450 x .855 | .30 | .18 |
| DPMS 255 | .05 | .450 x .855 | .30 | .18 |
| DPMS 2P1 | .10 | .470 x 1.180 | .35 | .21 |
| DPMS 2P15 | .15 | .540 x 1.180 | .40 | .24 |
| DPMS 2P22 | .22 | .590 x 1.300 | .45 | .27 |
| DPMS 2P25 | .25 | .620 x 1.300 | .45 | .27 |
| DPMS 2P47 | .47 | .730 x 1.600 | .60 | .36 |
| DPMS 2P5 | .5 | .730 x 1.600 | .60 | .36 |
| 400 W.V.D.C. | | | | |
| DPMS 451 | .01 | .390 x .690 | .25 | .15 |
| DPMS 4515 | .015 | .430 x .690 | .25 | .15 |
| DPMS 452 | .02 | .390 x .855 | .30 | .18 |
| DPMS 4522 | .022 | .400 x .855 | .30 | .18 |
| DPMS 4533 | .033 | .440 x .855 | .30 | .18 |

| DPMS Cat. No. | Cap. Mfd. | Size—Inches Diam. x Length | List Price | Net Price |
|----------------------|-----------|-------------------------------|------------|-----------|
| 400 W.V.D.C. | | | | |
| DPMS 4547 | .047 | .415 x 1.150 | \$.35 | \$.21 |
| DPMS 455 | .05 | .415 x 1.150 | .35 | .21 |
| DPMS 4568 | .068 | .440 x 1.180 | .40 | .24 |
| DPMS 4P1 | .10 | .520 x 1.180 | .40 | .24 |
| DPMS 4P15 | .15 | .560 x 1.300 | .50 | .30 |
| | .22 | | | |
| DPMS 4P22 | | .620 x 1.560 | .60 | .36 |
| DPMS 4P25 | .25 | .650 x 1.560 | .60 | .36 |
| 600 W.V.D.C. | | | | |
| DPMS 6D1 | .001 | .340 x .590 | .25 | .15 |
| DPMS 6D12 | .0012 | .340 x .590 | .25 | .15 |
| DPMS 6D15 | .0015 | .340 x .590 | .25 | .15 |
| DPMS 6D2 | .002 | .340 x .590 | .25 | .15 |
| DPMS 6D22 | .0022 | .340 x .590 | .25 | .15 |
| DPMS 6D25 | .0025 | .350 x .590 | .25 | .15 |
| DPMS 6D27 | .0027 | .370 x .690 | .25 | .15 |
| DPMS 6D3 | .003 | .370 x .690 | .25 | .15 |
| DPMS 6D33 | .0033 | .370 x .690 | .25 | .15 |
| DPMS 6D39 | .0039 | .370 x .690 | .25 | .15 |
| DPMS 6D4 | .004 | .370 x .690 | .25 | .15 |
| DPMS 6D47 | .0047 | .400 x .690 | .25 | .15 |
| DPMS 6D5 | .005 | .400 x .690 | .25 | .15 |
| DPMS 6D56 | .0056 | .415 x .690 | .25 | .15 |
| DPMS 6D6 | .006 | .415 x .690 | .25 | .15 |
| DPMS 6D68 | .0068 | .430 x .690 | .30 | .18 |
| DPMS 6D75 | .0075 | .370 x .870 | .30 | .18 |
| DPMS 6D8 | .008 | .370 x .870 | .30 | .18 |
| DPMS 6D82 | .0082 | .370 x .870 | .30 | .18 |
| DPMS 651 | .01 | .390 x .870 | .30 | .18 |
| DPMS 6512 | .012 | .400 x .870 | .30 | .18 |
| DPMS 6515 | .015 | .415 x .870 | .30 | .18 |
| DPMS 652 | .02 | .445 x .870 | .30 | .18 |
| DPMS 6522 | .022 | .470 x .870 | .30 | .18 |
| DPMS 6525 | .025 | .400 x 1.150 | .35 | .21 |
| DPMS 6527 | .027 | .415 x 1.150 | .35 | .21 |
| DPMS 653 | .03 | .415 x 1.150 | .35 | .21 |
| DPMS 6533 | .033 | .430 x 1.150 | .35 | .21 |
| DPMS 6539 | .039 | .470 x 1.150 | .35 | .21 |
| DPMS 654 | .04 | .470 x 1.150 | .35 | .21 |
| DPMS 6547 | .047 | .490 x 1.150 | .35 | .21 |
| DPMS 655 | .05 | .490 x 1.150 | .40 | .24 |
| DPMS 6556 | .056 | .520 x 1.180 | .40 | .24 |
| DPMS 656 | .06 | .520 x 1.180 | .40 | .24 |
| DPMS 6568 | .068 | .540 x 1.300 | .45 | .27 |
| DPMS 6575 | .075 | .570 x 1.300 | .45 | .27 |
| DPMS 6582 | .082 | .590 x 1.300 | .45 | .27 |
| DPMS 6P1 | .10 | .640 x 1.300 | .45 | .27 |
| DPMS 6P15 | .15 | .650 x 1.560 | .55 | .33 |
| DPMS 6P2 | .20 | .730 x 1.560 | .60 | .36 |
| DPMS 6P22 | .22 | .750 x 1.560 | .60 | .36 |
| DPMS 6P25 | .25 | .830 x 1.560 | .60 | .36 |
| 1600 W.V.D.C. | | | | |
| DPMS 16D1 | .001 | .350 x .870 | .35 | .21 |
| DPMS 16D15 | .0015 | .375 x .870 | .35 | .21 |
| DPMS 16D18 | .0018 | .400 x .870 | .35 | .21 |
| DPMS 16D2 | .002 | .405 x .870 | .35 | .21 |
| DPMS 16D22 | .0022 | .420 x .870 | .35 | .21 |
| DPMS 16D25 | .0025 | .445 x .870 | .40 | .24 |
| DPMS 16D3 | .003 | .475 x .870 | .40 | .24 |
| DPMS 16D33 | .0033 | .480 x .870 | .40 | .24 |
| DPMS 16D4 | .004 | .520 x .870 | .40 | .24 |
| DPMS 16D47 | .0047 | .540 x .870 | .40 | .24 |
| DPMS 16D5 | .005 | .565 x .870 | .45 | .27 |
| DPMS 16D6 | .006 | .460 x 1.180 | .45 | .27 |
| DPMS 16D7 | .007 | .485 x 1.180 | .45 | .27 |
| DPMS 16D75 | .0075 | .495 x 1.180 | .45 | .27 |
| DPMS 16D8 | .008 | .510 x 1.180 | .50 | .30 |
| DPMS 16S1 | .01 | .525 x 1.180 | .50 | .30 |
| DPMS 16S15 | .015 | .560 x 1.300 | .55 | .33 |
| DPMS 16S2 | .02 | .570 x 1.600 | .60 | .36 |
| DPMS 16S22 | .022 | .585 x 1.600 | .70 | .42 |
| DPMS 16S25 | .025 | .620 x 1.600 | .70 | .42 |
| DPMS 16S3 | .03 | .665 x 1.600 | .70 | .42 |
| DPMS 16S33 | .033 | .695 x 1.600 | .80 | .48 |
| DPMS 16S4 | .04 | .735 x 1.600 | .80 | .48 |
| DPMS 16S47 | .047 | .785 x 1.600 | .85 | .51 |
| DPMS 16S5 | .05 | .815 x 1.600 | .85 | .51 |

*DUPONT-TM

CORNELL-DUBILIER ELECTRONICS



Triclad Metalized Papers **CLASS 207.09**



MPY

CORNELL-DUBILIER TYPE MPY CAPACITORS are metalized paper, resin-impregnated units for operation from -55°C to $+125^{\circ}\text{C}$ at full rated voltage for 200, 400 and 600 Volt DC Working.

These capacitors are unique in that they are encased in the CDE-developed Triclad tube—a laminated tube that is completely wax-free and extremely resistant to moisture. The Triclad tube consists of a resin-impregnated Kraftboard exterior bonded to a foil-film shield. In addition to being moisture-proof, it is also heat resistant. The Triclad tube is unaffected by accidental contact with a hot soldering iron. This tube is clean-handling because it is completely wax-free and is therefore ideal for manual or automated assembly.

Type MPY capacitors have the self-healing characteristics of metalized dielectric capacitors when subjected to momentary over-voltages. The resin impregnant will remain solid throughout the entire operating temperature range and will not soften, melt or flow.

TEMPERATURE RANGE: -55°C to $+125^{\circ}\text{C}$

STD. TOLERANCE: $\pm 20\%$

SUBSTITUTION GUIDE

| Cat. No. | Cap. Mfd. | Voltage DCW | Size—Inches Diam. x Length | List Price | Net Price |
|----------|-----------|-------------|-------------------------------|------------|-----------|
| MPY 2S5 | .05 | 200 | 1/4 x 3/8 | \$.75 | \$.45 |
| MPY 2P1 | .1 | 200 | 3/8 x 3/8 | .80 | .48 |
| MPY 2P25 | .25 | 200 | 15/32 x 3/8 | 1.15 | .69 |
| MPY 2P5 | .5 | 200 | 7/16 x 1 1/8 | 1.35 | .81 |
| MPY 2W1 | 1.0 | 200 | 9/16 x 1 1/8 | 1.80 | 1.08 |
| MPY 2W2 | 2.0 | 200 | 3/4 x 1 7/16 | 2.45 | 1.47 |
| MPY 4S5 | .05 | 400 | 7/16 x 3/8 | .80 | .48 |
| MPY 4P1 | .1 | 400 | 3/8 x 1 1/8 | .85 | .51 |
| MPY 4P25 | .25 | 400 | 1/2 x 1 1/8 | 1.25 | .75 |
| MPY 4P5 | .5 | 400 | 3/8 x 1 7/16 | 1.60 | .96 |
| MPY 4W1 | 1.0 | 400 | 11/16 x 1 13/16 | 2.20 | 1.32 |
| MPY 4W2 | 2.0 | 400 | 13/16 x 2 3/8 | 2.75 | 1.65 |
| MPY 6S1 | .01 | 600 | 1/4 x 3/8 | .75 | .45 |
| MPY 6P1 | .1 | 600 | 3/8 x 1 1/8 | 1.00 | .60 |
| MPY 6P25 | .25 | 600 | 9/16 x 1 1/8 | 1.60 | .96 |
| MPY 6P5 | .5 | 600 | 3/8 x 1 7/16 | 1.95 | 1.17 |
| MPY 6W1 | 1.0 | 600 | 23/32 x 2 3/8 | 2.40 | 1.44 |
| MPY 6W2 | 2.0 | 600 | 29/32 x 2 3/8 | 3.50 | 2.10 |

| MPY REPLACES | | | |
|----------------|---------------|-----------------|---------------|
| Former MP Type | | Former MPX Type | |
| MP 2S5 | 3/8 x 3/8 | MPX 2S5 | 1/4 x 13/16 |
| MP 2P1 | 3/8 x 3/8 | MPX 2P1 | 5/16 x 13/16 |
| MP 2P25 | 15/32 x 3/8 | MPX 2P25 | 13/32 x 13/16 |
| MP 2P5 | 15/32 x 1 1/8 | MPX 2P5 | 13/32 x 1 1/8 |
| MP 2W1 | 9/16 x 1 1/8 | MPX 2W1 | 9/16 x 1 3/16 |
| MP 2W2 | 3/4 x 1 3/8 | MPX 2W2 | 3/4 x 1 1/2 |
| MP 4S5 | 15/32 x 3/8 | MPX 4S5 | 3/8 x 13/16 |
| MP 4P1 | 15/32 x 1 1/8 | MPX 4P1 | 3/8 x 1 1/8 |
| MP 4P25 | 9/16 x 1 1/8 | MPX 4P25 | 9/16 x 1 3/16 |
| MP 4P5 | 3/8 x 1 3/8 | MPX 4P5 | 3/8 x 1 3/8 |
| MP 4W1 | 23/32 x 2 3/8 | MPX 4W1 | 11/16 x 1 3/8 |
| MP 4W2 | 15/16 x 2 3/8 | MPX 4W2 | 7/8 x 2 3/8 |
| MP 6S1 | 3/8 x 3/8 | MPX 6S1 | 1/4 x 13/16 |
| MP 6P1 | 15/32 x 1 1/8 | MPX 6P1 | 1/4 x 1 1/8 |
| MP 6P25 | 3/8 x 1 1/8 | MPX 6P25 | 3/8 x 1 3/16 |
| MP 6P5 | 23/32 x 1 3/8 | MPX 6P5 | 11/16 x 1 1/2 |
| MP 6W1 | 23/32 x 2 3/8 | MPX 6W1 | 13/16 x 1 3/8 |
| MP 6W2 | 29/32 x 2 3/8 | MPX 6W2 | 1 x 2 3/8 |

CORNELL-DUBILIER ELECTRONICS

CLASS
220.00
SERIES

"QUIETONE" Filters



QUIETONE® Interference Suppression FILTERS

NFF and NFT types are coaxial feed-thru capacitors. Since the conductor is completely surrounded by the capacitor, these provide much more effective bypassing at frequencies encountered in Citizens Band, Amateur Radio, and other high frequency communications services. MC-8D98 is a heavy-duty bypass capacitor, specially designed for use on vehicular accessories.

NFF-055B is designed to be used in place of the conventional condensers on the automobile generator and spark coil. NFF-315D is intended for use at the generator and battery terminals of the voltage regulator.

The A-C line on a fixed-station transmitter can be effectively filtered against TVI by using two of the Type NFF-315D as terminals on the chassis and connecting the line-cord to them with conventional insulated plate caps. (This also provides easy removal of the line-cord to prevent unauthorized use of the equipment).



NFF-055B

NFF-315D
NFT-1F246

MC-8D98

| Cat. No. | Mfd. | V.D.C.W. | Amp. | Dia. x Length Inches | List Price* | Net Price* |
|------------------|------|----------|------|---|-------------|---------------|
| NFF-055B | 0.5 | 50 | 40 | 1 x 1 ¹³ / ₁₆ | \$3.50 | \$2.10 |
| NFF-315D | 0.1 | 600 | 20 | 1 ¹¹ / ₁₆ x 1 ¹³ / ₁₆ | 2.95 | 1.77 |
| NFT-1F246 | 0.25 | 200 | 20 | 7/8 x 2 ¹⁷ / ₁₆ | 4.50 | 2.70 |
| NFT-1D086 | 0.1 | 600 | 20 | 1 ¹¹ / ₁₆ x 1 ⁷ / ₁₆ | 2.60 | 1.56 |
| MC-8D98 | 0.1 | 100 | — | 1 ¹¹ / ₁₆ x 1 ³ / ₈ | 2.38 | 1.43 |



IF-18



IF-19

IF-21



IF-6



IF-4



IF-20

FOR USE ON TELEVISION, RADIOS AND HOME APPLIANCES



IF-7A



IF-54



IF-25



IF-24

FOR USE ON INDUSTRIAL AND HEAVY-DUTY ELECTRICAL EQUIPMENT

Cornell-Dubilier UNIVERSAL Quietone filters offer a practical solution for the suppression of interference from many types of household, industrial and heavy duty electrical equipment. See "Radio, TV and Appliance Quietones." A partial list of such sources is shown in the QUIETONE APPLICATION SELECTOR. Because high frequency disturbances are usually carried through

the power lines, most effective interference suppression is obtained when the Quietone filter is installed on the equipment as an integral part thereof.

C-D Quietones are designed to give optimum suppression on the equipment for which they are intended and can be relied upon to render excellent service.

RADIO, TV AND APPLIANCE "QUIETONES" RATING—110 V. A.C. - D.C. — 5 AMPS

| Cat. No. | Radio and Electrical Appliance Uses | List Price | Net Price |
|--------------|--|------------|---------------|
| IF-4 | Small radios, portables. Low intensity noise. | \$1.25 | \$.75 |
| IF-5 | Small electric appliances. Low intensity interference. | 1.25 | .75 |
| IF-6 | All home appliances. Low intensity interference. | 1.95 | 1.17 |
| IF-18 | All radios and appliances with severe interference. | 9.20 | 5.52 |
| IF-19 | All types home appliances with severe interference. | 7.70 | 4.62 |


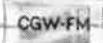
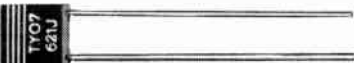


IF SERIES INDUSTRIAL "QUIETONES"

| Cat. No. | Volts AC-DC | Amps. Max. | Connections | Housing | List Price | Net Price |
|--------------|-------------|------------|--|------------|------------|---------------|
| IF-20 | | | Small appliances with very low interference. | | .85 | .51 |
| IF-21 | | | Electric barber clippers, shavers, small appliances. 1.6 amps. | | 4.40 | 2.64 |
| IF-7A | 110-220 | 5 | BX | Cutout Box | \$13.75 | \$8.25 |
| IF-24 | 110 | ... | Flex-Leads | Metal | 1.25 | .75 |
| IF-25 | 110-220 | ... | Flex-Leads | Metal | 4.95 | 2.97 |
| IF-54 | 110-220 | 2 | Flex-Leads | Metal | 2.50 | 1.50 |

CORNING ELECTRONIC COMPONENTS

FIXED GLASS CAPACITORS

Stack ultrastable glass and foil, attach leads, fuse under heat and pressure, and you have a practically indestructible Corning capacitor. Its properties are entirely those of the closely controlled dielectric, and can't be changed by assembly methods or subsequent treatment. Properties like these at 1 Kc and 25°C.: dissipation factor less than 0.001; temperature coefficient within 10PPM with absolute retrace. Standard values from 0.5 to 10,000 pf are the same as standard decade values in applicable military specifications. Our distributors across the nation can give you fast service at factory prices on top reliability Corning capacitors.

| TYPE AND MIL SPEC | MODEL | CAPACITANCE RANGE (pf) | VOLTAGE | NOMINAL DIMENSIONS (inches) | WEIGHT (grams) |
|--|--------|------------------------|-------------|---|----------------|
| CYFR The Minuteman capacitor, for the most exacting applications where extremely high reliability levels to your specifications must be guaranteed. Environment-proof fused construction. MIL-C-11272B.  | CYFR10 | 0.5 to 240 | 500 and 300 | $1\frac{1}{32} \times 1\frac{1}{64} \times \frac{5}{64}$ | 0.25 - 0.50 |
| | CYFR15 | 160 to 1200 | 500 and 300 | $1\frac{5}{32} \times 1\frac{1}{64} \times \frac{7}{64}$ | 0.75 - 1.25 |
| | CYFR20 | 560 to 5100 | 500 and 300 | $\frac{47}{64} \times 2\frac{7}{64} \times \frac{9}{64}$ | 2.50 - 4.00 |
| | CYFR30 | 3600 to 10000 | 500 and 300 | $\frac{49}{64} \times \frac{3}{4} \times \frac{9}{64}$ | 5.00 - 7.00 |
| | | | | | |
| CYFM Fusion-sealed environment-proof performance at cost savings. Electrically and environmentally interchangeable with CYFR. MIL-C-11272B.  | CYFM10 | 0.5 to 300 | 500 and 300 | $1\frac{1}{32} \times 1\frac{1}{64} \times \frac{5}{64}$ | 0.25 - 0.50 |
| | CYFM15 | 220 to 1200 | 500 and 300 | $1\frac{5}{32} \times 1\frac{1}{64} \times \frac{7}{64}$ | 0.75 - 1.25 |
| | CYFM20 | 560 to 5100 | 500 and 300 | $\frac{47}{64} \times 2\frac{7}{64} \times \frac{9}{64}$ | 2.50 - 4.00 |
| | CYFM30 | 3600 to 10000 | 500 and 300 | $\frac{49}{64} \times \frac{3}{4} \times \frac{9}{64}$ | 5.00 - 7.00 |
| | | | | | |
| TY New printed circuit capacitor provides glass stability in a uniformly symmetric case. Leads spaced on 1/10th inch grids.  | TY06 | 1 to 560 | 300 | .300 x .200 x .115 | |
| | TY07 | 561 to 1000 | 300 | .300 x .300 x .115 | |
| W, WL Smallest high stability wafer capacitors available. With or without radial leads. Meet performance requirements of MIL-C-11272B.  | W, WL1 | 4700 to 10000 | 300 | .468 x .737 x .125 | 2.50 |
| | W, WL2 | 3000 to 4300 | 300 | .468 x .377 x .115 | 1.12 |
| | W, WL3 | 1100 to 2700 | 300 | .468 x .234 x .115 | 0.71 |
| | W, WL4 | 620 to 1000 | 300 | .218 x .234 x .115 | 0.37 |
| | W, WL5 | 5 to 560 | 300 | .218 x .144 x .115 | 0.30 |
| | | | | | |
| CY 60-70 Medium-Power Transmitting. This CY style is excellent for radio frequency applications. Small size and weight suits them to airborne and mobile transmitters.  | CY60 | 22 to 56000 | 4000 to 500 | $2\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{16}$ to $\frac{5}{8}$ | |
| | CY70 | 22 to 150000 | 6000 to 500 | $2\frac{5}{8} \times 1\frac{3}{4} \times \frac{1}{4}$ to $\frac{3}{4}$ | |

For more information and data sheets on our fixed capacitors, rugged trimmer capacitors with unique direct traverse design, high-stability standard and variable inductors, FOTOCERAM™ printed circuit grid boards for quick and easy breadboarding, or top-performance, low-cost ultrasonic delay lines, write:

CORNING
 Electronic Components
 CORNING GLASS WORKS, RALEIGH, N. C.

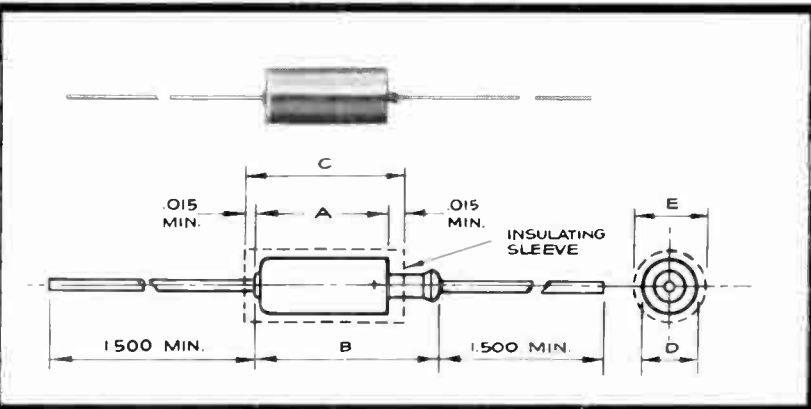


TANTACONS

Capacitance • Size • Voltage • Decoding

SIZE

| STYLE | A ± .031 | B ± .031 | C ± .031 | D ± .010 | E ± .010 | LEAD DIA. |
|---------|----------|----------|----------|----------|----------|-----------|
| 900-000 | .250 | .345 | — | .125 | — | .020 |
| 900-500 | .250 | .345 | .300 | — | .131 | .020 |
| 901-000 | .438 | .520 | — | .175 | — | .020 |
| 901-500 | .438 | .520 | .488 | — | .181 | .020 |
| 902-000 | .650 | .745 | — | .279 | — | .025 |
| 902-500 | .650 | .745 | .700 | — | .285 | .025 |
| 903-000 | .750 | .845 | — | .341 | — | .025 |
| 903-500 | .750 | .845 | .800 | — | .347 | .025 |



CAPACITANCE MF / ERIE STYLE

| WORKING VOLTAGE - DC | 20% Decade (± 20% Tolerance) 0.33 - 0.47 - 0.68 - 1.0 - 1.5 - 2.2 - 3.3 - 4.7 - 6.8 - 10 - 15 - 22 - 33 - 47 - 68 - 100 - 150 - 220 - 330 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 10% Decade (± 10% Tolerance) 0.33 0.39 0.47 0.56 0.68 0.82 1.0 1.2 1.5 1.8 2.2 2.7 3.3 3.9 4.7 5.6 6.8 8.2 10 12 15 18 22 27 33 39 47 56 68 82 100 120 150 180 220 270 330 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 35V | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 901 | 901 | 901 | 901 | 901 | 901 | 901 | 901 | 901 | 902 | 902 | 902 | 902 | 902 | 902 | 903 | 903 | 903 | 903 | | | | |
| 20V | | | | | | | | 900 | 900 | 900 | 900 | | | | | | 901 | 901 | 901 | 901 | | | 902 | 902 | 902 | 902 | 903 | 903 | 903 | 903 |
| 15V | | | | | | | | | | | | | | | | | 900 | 900 | | | | | | | | | | | | |
| 10V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Note: ± 5% Tolerance available on values in the 10% decade upon special request.

DECODING PROCEDURE

EXAMPLE OF A TANTACON PART NO.: 901 501 A0B0 336M

Denotes Tantalum Capacitor

Denotes Case Size

| | | | | |
|---------------|-----|-----|-----|-----|
| Eric Part No. | 900 | 901 | 902 | 903 |
| MIL case | A | B | C | D |

Denotes Non-insulated or Insulated Case

"0" = Non-insulated Case
"5" = Insulated Case

Denotes Special Requirements Such as Testing, Marking, etc.

Denotes Characteristic (Operating Temperature Range @ Full Rated Voltage)

A = -55° C to +65° C
B = -80° C to +85° C

Presently Unused

Denotes Rated D.C. Working Voltage

| | | | | | | | |
|--------|---|----|----|----|----|----|----|
| Symbol | B | C | D | E | F | G | H |
| VDCW | 6 | 10 | 15 | 20 | 35 | 50 | 25 |

Denotes Leakage Current Requirements

0 = Same as Erie Standard

Denotes Capacitance in picofarads (p f) (2 Significant Figures Plus a Multiplier)

Denotes Tolerances: M = ±20%, K = ±10%, J = ±5%

TANTACONS

Mil-Erie Cross Reference Chart



Tantacons may be purchased in accordance with the requirements of the latest military specification MIL-C-26655. A complete cross reference list covering these parts is shown below.

To Order: Specify either MIL or ERIE part number. The table below shows MIL CS13 part numbers which are insulated cases. If non-insulated cases are desired specify either MIL CS12 or change last three digits of Erie style number from 501 to 001.

Example: **CS13AB5R6K**, or ERIE 900-501, AOBO, 565K.

If wanted in a non-insulated case specify: **CS12AB5R6K**, or ERIE 900-001, AOBO, 565K.

A † indicates a standard distributor stock item in capacitance tolerance of K ($\pm 10\%$).

Where an * appears below, capacitance tolerance of M ($\pm 20\%$) available on special order.

MIL-C-26655

FIXED, SOLID ELECTROLYTE, TANTALUM CAPACITORS

| MIL Part No. (See Notes 1 & 2) | Erie Part No. (See Notes 1 & 2) | Rated DC Working Voltage (volts) | Surge Voltage Rating (volts) | Nominal Capacitance (@ 25°C (mf) | Capacity Tolerance (%) ² | Max. DC Leakage Current (@ 25°C (µa) | MIL Case Size |
|--|--|--------------------------------------|--|--|--|---|--|
| †CS13AB5R6K †CS13AB6R8K* †CS13AB470K* †CS13AB560K †CS13AB151K* †CS13AB181K †CS13AB271K †CS13AB331K* | 900-501 AOBO 565K 900-501 AOBO 685K* 901-501 AOBO 476K* 901-501 AOBO 566K 902-501 AOBO 157K* 902-501 AOBO 187K 903-501 AOBO 277K 903-501 AOBO 337K* | 6 VDCW (⁽¹⁾ +85°C | 8 VDC Surge (⁽¹⁾ +85°C | 5.6 6.8 47 56 150 180 270 330 | K K, M K, M K K, M K K K, M | 1 1 6 7 18 21 32 40 | A A B B C C D D |
| †CS13AC3R9K †CS13AC4R7K* †CS13AC270K †CS13AC330K* †CS13AC390K †CS13AC820K †CS13AC101K* †CS13AC121K †CS13AC181K †CS13AC221K* | 900-501 AOCC 395K 900-501 AOCC 475K* 901-501 AOCC 276K 901-501 AOCC 336K* 901-501 AOCC 396K 902-501 AOCC 826K 902-501 AOCC 107K* 902-501 AOCC 127K 903-501 AOCC 187K 903-501 AOCC 227K* | 10 VDCW (⁽¹⁾ +85°C | 12 VDC Surge (⁽¹⁾ +85°C | 3.9 4.7 27 33 39 82 100 120 180 220 | K K, M K K, M K K K, M K K K, M | 1 1 5 7 8 16 20 24 36 44 | A A B B B C C C D D |
| †CS13AD2R7K †CS13AD3R3K* †CS13AD180K †CS13AD220K* †CS13AD560K †CS13AD680K* †CS13AD121K †CS13AD151K* | 900-501 AODO 275K 900-501 AODO 335K* 901-501 AODO 186K 901-501 AODO 226K* 902-501 AODO 566K 902-501 AODO 686K* 903-501 AODO 127K 903-501 AODO 157K* | 15 VDCW (⁽¹⁾ +85°C | 17 VDC Surge (⁽¹⁾ +85°C | 2.7 3.3 18 22 56 68 120 150 | K K, M K K, M K K, M K K, M | 1 1 5 7 17 20 36 45 | A A B B C C D D |

CONT'D.



TANTACONS

Mil-Erie Cross Reference Chart

MIL-C-26655**FIXED, SOLID ELECTROLYTE, TANTALUM CAPACITORS (Cont'd)**

| MIL Part No. (See Notes) | Erie Part No. (See Notes) | Rated DC Working Voltage (volts) | Surge Voltage Rating (volts) | Nominal Capacitance (@ 25°C (mf) | Capacity Tolerance (%) ² | Max. DC Leakage Current (@ 25°C (μa) | MIL Case Size |
|-----------------------------|------------------------------|----------------------------------|-------------------------------|----------------------------------|-------------------------------------|--------------------------------------|---------------|
| †CS13AE1R2K | 900-501 AOEO 125K | 20 VDCW @ +85°C | 23 VDC Surge @ +85°C | 1.2 | K | 1 | A |
| †CS13AE1R5K* | 900-501 AOEO 155K* | | | 1.5 | K, M | 1 | A |
| †CS13AE1R8K | 900-501 AOEO 185K | | | 1.8 | K | 1 | A |
| †CS13AE2R2K* | 900-501 AOEO 225K* | | | 2.2 | K, M | 1 | A |
| †CS13AE8R2K | 901-501 AOEO 825K | | | 8.2 | K | 3 | B |
| †CS13AE100K* | 901-501 AOEO 106K* | | | 10 | K, M | 4 | B |
| †CS13AE120K | 901-501 AOEO 126K | | | 12 | K | 5 | B |
| †CS13AE150K* | 901-501 AOEO 156K* | | | 15 | K, M | 6 | B |
| †CS13AE270K | 902-501 AOEO 276K | | | 27 | K | 11 | C |
| †CS13AE330K* | 902-501 AOEO 336K* | | | 33 | K, M | 13 | C |
| †CS13AE390K | 902-501 AOEO 396K | | | 39 | K | 16 | C |
| †CS13AE470K* | 902-501 AOEO 476K* | | | 47 | K, M | 19 | C |
| †CS13AE560K | 903-501 AOEO 566K | | | 56 | K | 22 | D |
| †CS13AE680K* | 903-501 AOEO 686K* | | | 68 | K, M | 27 | D |
| †CS13AE820K | 903-501 AOEO 826K | | | 82 | K | 33 | D |
| †CS13AE101K* | 903-501 AOEO 107K* | | | 100 | K, M | 40 | D |
| †CS13AFR33K* | 900-501 AOFO 334K* | | | 35 VDCW @ +85°C | 41 VDC Surge @ +85°C | .33 | K, M | 1 | A |
| †CS13AFR39K | 900-501 AOFO 394K | .39 | K | | | 1 | A |
| †CS13AFR68K* | 900-501 AOFO 684K* | .68 | K, M | | | 1 | A |
| †CS13AFR82K | 900-501 AOFO 824K | .82 | K | | | 1 | A |
| †CS13AF010K* | 900-501 AOFO 105K* | 1.0 | K, M | | | 1 | A |
| †CS13AF1R2K | 901-501 AOFO 125K | 1.2 | K | | | 1 | B |
| †CS13AF1R5K* | 901-501 AOFO 155K* | 1.5 | K, M | | | 1 | B |
| †CS13AF1R8K | 901-501 AOFO 185K | 1.8 | K | | | 1 | B |
| †CS13AF2R2K* | 901-501 AOFO 225K* | 2.2 | K, M | | | 2 | B |
| †CS13AF2R7K | 901-501 AOFO 275K | 2.7 | K | | | 2 | B |
| †CS13AF3R3K* | 901-501 AOFO 335K* | 3.3 | K, M | | | 2 | B |
| †CS13AF3R9K | 901-501 AOFO 395K | 3.9 | K | | | 3 | B |
| †CS13AF4R7K* | 901-501 AOFO 475K* | 4.7 | K, M | | | 3 | B |
| †CS13AF5R6K | 901-501 AOFO 565K | 5.6 | K | | | 4 | B |
| †CS13AF6R8K* | 901-501 AOFO 685K* | 6.8 | K, M | | | 5 | B |
| †CS13AF8R2K | 902-501 AOFO 825K | 8.2 | K | | | 6 | C |
| †CS13AF100K* | 902-501 AOFO 106K* | 10 | K, M | | | 7 | C |
| †CS13AF120K | 902-501 AOFO 126K | 12 | K | | | 8 | C |
| †CS13AF150K* | 902-501 AOFO 156K* | 15 | K, M | | | 11 | C |
| †CS13AF180K | 902-501 AOFO 186K | 18 | K | | | 13 | C |
| †CS13AF220K* | 902-501 AOFO 226K* | 22 | K, M | | | 15 | C |
| †CS13AF270K | 903-501 AOFO 276K | 27 | K | | | 19 | D |
| †CS13AF330K* | 903-501 AOFO 336K* | 33 | K, M | | | 23 | D |
| †CS13AF390K | 903-501 AOFO 396K | 39 | K | | | 27 | D |
| †CS13AF470K* | 903-501 AOFO 476K* | 47 | K, M | | | 33 | D |

NOTES: †Indicates a standard distributor stock item in capacitance tolerance of $\pm 10\%$.
*Capacitance tolerance of M ($\pm 20\%$) available on short notice.

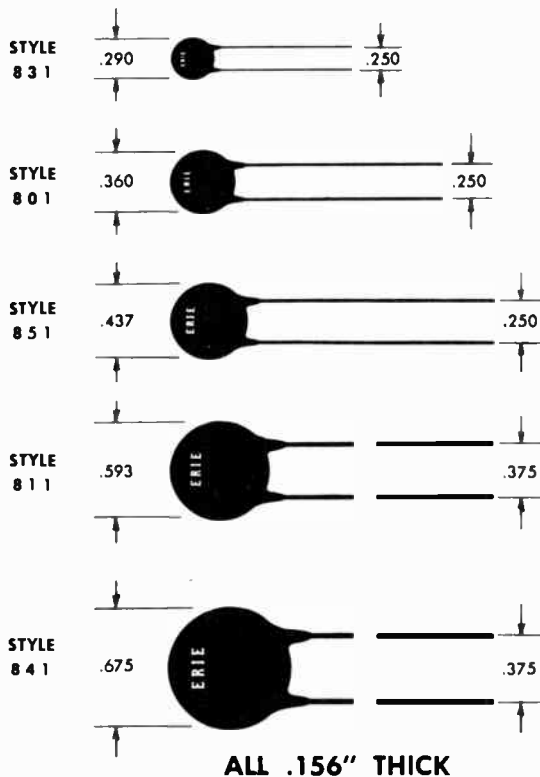
DISC CERAMICONS®

Erie produces a complete line of disc ceramic capacitors. All processing steps, from the manufacture of the raw ceramic dielectrics to final testing of the finished product is under the unified Erie control. Erie Disc Ceramicons have an outstanding reputation for quality and performance in meeting all requirements for radio, TV, industrial electronics, and military equipment at +85°C.

GENERAL PURPOSE

600 VDCW AND 1,000 VDCW • 1,500 VDC FLASH TEST

CAPACITANCE TOLERANCE $\pm 10\%$



ORDERING INFORMATION

Utilization of new catalog numbers gives more information about product ordered.

When ordering commercial parts, specify new catalog number.

When ordering MIL parts, specify MIL designation.

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) |
|--------------------|--------------------|------------|------------------|
| 831 U2M 509D | ED-5 | 831 | 5 |
| 831 U2M 100F | ED-10 | 831 | 10 |
| 831 U2M 120K | ED-12 | 831 | 12 |
| 831 U2M 150K | ED-15 | 831 | 15 |
| 831 U2M 180K | ED-18 | 831 | 18 |
| 831 U2M 200K | ED-20 | 831 | 20 |
| 831 U2M 220K | ED-22 | 831 | 22 |
| 831 U2M 250K | ED-25 | 831 | 25 |
| 831 U2M 270K | ED-27 | 831 | 27 |
| 831 U2M 300K | ED-30 | 831 | 30 |
| 831 U2M 330K | ED-33 | 831 | 33 |
| 831 U2M 390K | ED-39 | 831 | 39 |
| 831 U2M 470K | ED-47 | 831 | 47 |
| 831 U2M 500K | ED-50 | 831 | 50 |
| 831 U2M 510K | ED-51 | 831 | 51 |
| 831 X5R 560K | ED-56 | 831 | 56 |
| 831 X5R 680K | ED-68 | 831 | 68 |
| 831 X5R 750K | ED-75 | 831 | 75 |
| 831 X5R 820K | ED-82 | 831 | 82 |
| 831 X5R 910K | ED-91 | 831 | 91 |
| 831 X5R 101K | ED-100 | 831 | 100 |
| 831 X5R 121K | ED-120 | 831 | 120 |
| 831 X5R 151K | ED-150 | 831 | 150 |
| 831 X5R 181K | ED-180 | 831 | 180 |
| 831 X5R 201K | ED-200 | 831 | 200 |
| 831 X5R 221K | ED-220 | 831 | 220 |
| 831 X5R 241K | ED-240 | 831 | 240 |
| 831 X5R 271K | ED-270 | 831 | 270 |
| 831 X5R 301K | ED-300 | 831 | 300 |
| 831 X5R 331K | ED-330 | 831 | 330 |
| 831 X5R 361K | ED-360 | 831 | 360 |
| 831 X5R 391K | ED-390 | 831 | 390 |
| 831 X5R 471K | ED-470 | 831 | 470 |
| 801 X5R 501K | ED-500 | 801 | 500 |
| 801 X5R 511K | ED-510 | 801 | 510 |
| 801 X5R 561K | ED-560 | 801 | 560 |
| 801 X5R 681K | ED-680 | 801 | 680 |
| 851 X5R 751K | ED-750 | 851 | 750 |
| 851 X5R 821K | ED-820 | 851 | 820 |
| 851 X5R 911K | ED-910 | 851 | 910 |
| 851 X5R 102K | ED-1000 | 851 | 1000 |
| 811 X5R 122K | ED-1200 | 811 | 1200 |
| 811 X5R 152K | ED-1500 | 811 | 1500 |
| 811 X5R 182K | ED-1800 | 811 | 1800 |



DISC CERAMICONS

600 VDCW • MIL

HI-K BY PASS and COUPLING CERAMICONS

GMV

| New Catalog Number | Old Catalog Number | Body Style | Capacitance |
|--------------------|--------------------|------------|-------------|
| 831 Z5V 471P | ED-.00047 | 831 | 470 pf |
| 831 Z5V 801P | ED-.0008 | 831 | 800 pf |
| 801 Z5V 102P | ED-.001 | 801 | 1000 pf |
| 801 Z5V 122P | ED-.0012 | 801 | 1200 pf |
| 801 Z5V 152P | ED-.0015 | 801 | 1500 pf |
| 801 Z5V 202P | ED-.002 | 801 | 2000 pf |
| 851 Z5V 222P | ED-.0022 | 851 | 2200 pf |
| 851 Z5V 252P | ED-.0025 | 851 | 2500 pf |
| 851 Z5V 272P | ED-.0027 | 851 | 2700 pf |
| 851 Z5V 302P | ED-.003 | 851 | 3000 pf |
| 851 Z5V 332P | ED-.0033 | 851 | 3300 pf |
| 811 Z5V 402P | ED-.004 | 811 | 4000 pf |
| 811 Z5V 472P | ED-.0047 | 811 | 4700 pf |
| 811 Z5V 502P | ED-.005 | 811 | 5000 pf |
| 811 Z5V 682F | ED-.0068 | 811 | 6800 pf |
| 811 Z5V 103P | ED-.01 | 811 | .01 mf |
| 841 Z5V 153P | ED-.015 | 841 | .015 mf |
| 841 Z5V 203P | ED-.02 | 841 | .02 mf |

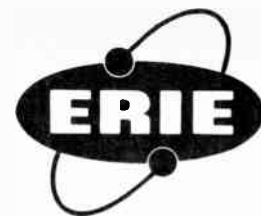
MIL-C-11015B DISC CERAMICONS

±10% CAPACITANCE TOLERANCE (K) and ±20% CAPACITANCE TOLERANCE (M)

| MIL Designation | Body Style | Capacitance (pf) | MIL Designation | Body Style | Capacitance (pf) |
|-------------------|------------|------------------|-------------------|------------|------------------|
| CK60 AW 681K or M | 831 | 680 | CK60 BX 101K or M | 831 | 100 |
| CK60 AW 821K or M | 831 | 820 | CK60 BX 151K or M | 831 | 150 |
| CK60 AW 102K or M | 831 | 1,000 | CK61 AW 222K or M | 801 | 2,200 |
| CK60 AW 152K or M | 831 | 1,500 | CK61 BX 221K or M | 801 | 220 |
| CK60 AX 221K or M | 831 | 220 | CK61 BX 331K or M | 801 | 330 |
| CK60 AX 331K or M | 831 | 330 | CK61 BX 471K or M | 801 | 470 |
| CK60 AX 471K or M | 831 | 470 | CK61 BX 681K or M | 801 | 680 |
| CK60 BV 2R2K only | 831 | 2.2 | CK62 AW 332K or M | 811 | 3,300 |
| CK60 BV 3R3K only | 831 | 3.3 | CK62 AW 472K or M | 811 | 4,700 |
| CK60 BV 4R7K only | 831 | 4.7 | CK62 AW 682K or M | 811 | 6,800 |
| CK60 BV 6R8K only | 831 | 6.8 | CK62 AW 822K or M | 811 | 8,200 |
| CK60 BV 100K only | 831 | 10 | CK62 AX 222K or M | 811 | 2,200 |
| CK60 BV 150K only | 831 | 15 | CK62 BX 821K only | 811 | 820 |
| CK60 BV 220K only | 831 | 22 | CK62 BX 102K or M | 811 | 1,000 |
| CK60 BX 330K or M | 831 | 33 | CK62 BX 152K or M | 811 | 1,500 |
| CK60 BX 470K or M | 831 | 47 | CK63 AW 103K or M | 841 | 10,000 |
| CK60 BX 680K or M | 831 | 68 | CK63 BX 222K or M | 841 | 2,200 |
| | | | CK63 BX 332K or M | 841 | 3,300 |

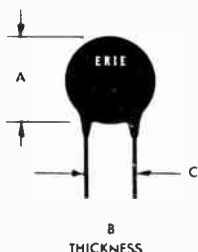
DISC & PLATE CERAMICONS

LOW VOLTAGE



TRANSISTOR DISC CERAMICONS

100 VDCW • CAPACITANCE TOLERANCE $\pm 80\%$ -20%



| Style | A Dim. | B Dim. | C Dim. | New Catalog Number | Old Catalog Number | Body Style | Capacitance (mf) |
|-------|--------|--------|--------|--------------------|--------------------|------------|------------------|
| 835 | .275 | .125 | .250 | 835 X5V 502Z | ET8-005 | 835 | .005 |
| 805 | .344 | .125 | .250 | 805 X5V 103Z | ET8-.01 | 805 | .01 |
| 855 | .420 | .125 | .250 | 855 X5V 203Z | ET8-.02 | 855 | .02 |
| 815* | .575 | .172 | .375 | *815 X5V 503Z | ET8-.05 | 815 | .05 |
| 845 | .655 | .125 | .375 | 845 X5V 473Z | ET8-.047 | 845 | .047 |
| 845 | .655 | .125 | .375 | 845 X5V 503Z | ET8-.05 | 845 | .05 |
| 845* | .675 | .172 | .375 | *845 X5V 104Z | ET8-.1 | 845 | .1 |

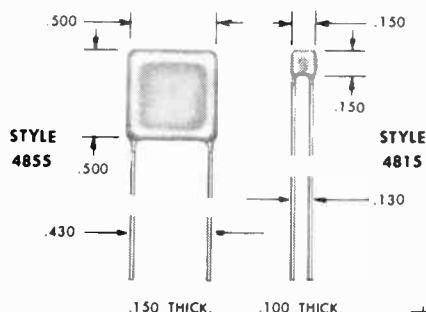
*Dual Ceramic

*Dual Ceramic

WEECON[†]

SUB-MINIATURE CAPACITOR

200 VDCW



Erie's Weecon Ceramicons offer the utmost in miniaturization of ceramic capacitors to the industry. The square shape gives the best available form factor to save expensive printed board space. Weecon are made from the same basic materials and with the manufacturing techniques of ERIE's famous Disc Ceramicons used and proven by many years of service and testing. This vast amount of experience and the conservative ratings make the Weecon the industry's finest miniature capacitor.

Where compactness is required, specify ERIE Weecon.

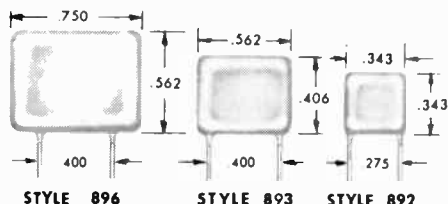
† Trademark

$\pm 20\%$ CAPACITANCE TOLERANCE

| New Catalog Number | Old Catalog Number | Capacitance | New Catalog Number | Old Catalog Number | Capacitance |
|--------------------|--------------------|-------------|--------------------|--------------------|-------------|
| 4815 U2M 479M | — | 4.7 pf | 4815 X5V 471M | — | 470 pf |
| 4815 U2M 689M | — | 6.8 pf | 4815 X5V 681M | 4815-680 | 680 pf |
| 4815 U2M 100M | 4815-10 | 10 pf | 4815 X5V 102M | — | 1000 pf |
| 4815 U2M 150M | 4815-15 | 15 pf | 4815 X5V 152M | 4815-1500 | 1500 pf |
| 4815 U2M 220M | — | 22 pf | 4815 X5V 222M | — | 2200 pf |
| 4815 U2M 330M | 4815-33 | 33 pf | 4815 X5V 332M | 4815-3300 | 3300 pf |
| 4815 S3N 470M | — | 47 pf | 4855 X5V 472M | — | 4700 pf |
| 4815 S3N 680M | — | 68 pf | 4855 X5V 682M | — | 6800 pf |
| 4815 S3N 101M | 4815-100 | 100 pf | 4855 X5V 103M | — | .01 mf |
| 4815 S3N 151M | — | 150 pf | 4855 X5V 153M | — | .015 mf |
| 4815 S3N 221M | — | 220 pf | 4855 X5V 223M | — | .022 mf |
| 4815 S3N 331M | — | 330 pf | 4855 X5V 333M | — | .033 mf |

ERIE HIGH CAPACITANCE MINIATURE CERAMICONS

200 VDCW



.150 THICK IN .015, .022, .047 mf
.170" THICK IN .033, .068, .1 mf

By employing basically new methods of construction, Erie is able to offer high capacitance Ceramicons in small size for transistor and other miniaturized circuitry.

Rectangular in shape — for the most capacity in the smallest space — these monolithic plate Ceramicons are available in sizes and capacitance values as tabled below.

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (mf) | Capacitance Tolerance | New Catalog Number | Old Catalog Number | Body Style | Capacitance (mf) | Capacitance Tolerance |
|--------------------|--------------------|------------|------------------|-----------------------|--------------------|--------------------|------------|------------------|-----------------------|
| 892 X5P 222M | 892-.0022 | 892 | .0022 | $\pm 20\%$ | 896 X5S 223M | 896-.022 | 896 | .022 | $\pm 20\%$ |
| 892 X5P 332M | 892-.0033 | 892 | .0033 | $\pm 20\%$ | 896 X5S 333M | 896-.033 | 896 | .033 | $\pm 20\%$ |
| 892 X5S 472M | 892-.0047 | 892 | .0047 | $\pm 20\%$ | 896 Z5U 473Z | 896-.047 | 896 | .047 | $\pm 80\%$, -20% |
| 893 X5P 682M | 893-.0068 | 893 | .0068 | $\pm 20\%$ | 896 Z5U 683Z | 896-.068 | 896 | .068 | $\pm 80\%$, -20% |
| 893 X5S 103M | 893-.01 | 893 | .01 | $\pm 20\%$ | 896 Z5U 104Z | 896-.1 | 896 | .1 | $\pm 80\%$, -20% |
| 896 X5P 153M | 896-.015 | 896 | .015 | $\pm 20\%$ | | | | | |



DISC CERAMICONS

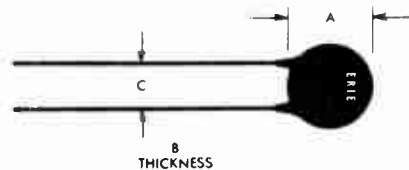
LOW VOLTAGE • HIGH VOLTAGE

TRANSCAP®

- ULTRA-HIGH CAPACITANCE • SMALL SIZE
- 25 VDCW FOR ALL TRANSISTORIZED CIRCUITS

Transcap is a new ceramic capacitor incorporating thin-film techniques. Transcap combines ultra-high capacitance with small size at a working voltage of 25VDC.

The reliable, rating of Transcap permits its application in nearly all transistor circuits. Transcap reliability is assured by meeting life test specifications of 150% of rated voltage at 85 C for 1,000 hours.



±80%, -20% CAPACITANCE TOLERANCE

| New Catalog Number | Old Catalog Number | Capacitance (mf) | Temperature Characteristic | A Max. Diameter | B Max. Thickness | C Lead Spacing |
|--------------------|--------------------|------------------|----------------------------|-----------------|------------------|----------------|
| 5835 Y5U 103Z | — | .01 | Y5U | .290" | .156" | .250" |
| 5835 Y5U 203Z | — | .02 | Y5U | .290" | .156" | .250" |
| 5855 Y5U 503Z | 5855-.05 | .05 | Y5U | .437" | .156" | .250" |
| 5815 Y5U 104Z | 5815-.1 | .1 | Y5U | .593" | .156" | .375" |
| 5815 Y5U 204Z | 5815-.2 | .2 | Y5U | .593" | .200" | .375" |

*Dual Ceramic

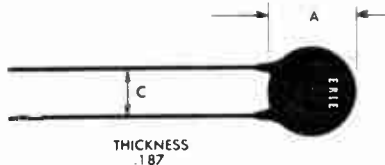
HIGH VOLTAGE CERAMICONS

Erie High Voltage Disc Ceramicons are conservatively designed to meet rigorous high voltage applications. Voltage rating is determined by 1,000 hour life test requirements at 1.5 times rated voltage.

1,000 VDCW DISC CERAMICONS ARE LISTED ON PAGE 2.

3,000 VDCW

| Style | A Max. Dia. | C Max. Lead Spacing |
|-------|-------------|---------------------|
| 808 | .360 | .250 |
| 858 | .437 | .375 |
| 818 | .593 | .375 |
| 828 | .750 | .375 |

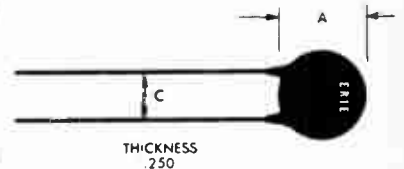


±20% CAPACITANCE TOLERANCE

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) |
|--------------------|--------------------|------------|------------------|
| 808 U2M 479M | HD3-4R7 | 808 | 4.7 |
| 808 U2M 689M | HD3-6R8 | 808 | 6.8 |
| 818 U2M 100M | HD3-10 | 818 | 10 |
| 818 U2M 150M | HD3-15 | 818 | 15 |
| 818 U2M 220M | HD3-22 | 818 | 22 |
| 818 U2M 330M | HD3-33 | 818 | 33 |
| 818 U2M 470M | HD3-47 | 818 | 47 |
| 828 U2M 560M | HD3-56 | 828 | 56 |
| 828 U2M 680M | HD3-68 | 828 | 68 |
| 828 U2M 820M | HD3-82 | 828 | 82 |
| 808 Z5U 101M | HD3-100 | 808 | 100 |
| 808 Z5U 151M | HD3-150 | 808 | 150 |
| 808 Z5V 221M | HD3-220 | 808 | 220 |
| 808 Z5V 331M | HD3-330 | 808 | 330 |
| 808 Z5V 471M | HD3-470 | 808 | 470 |
| 808 Z5V 681M | HD3-680 | 808 | 680 |
| 858 Z5V 821M | HD3-820 | 858 | 820 |
| 818 Z5V 102M | HD3-1000 | 818 | 1000 |
| 818 Z5V 152M | HD3-1500 | 818 | 1500 |
| 818 Z5V 222M | HD3-2200 | 818 | 2200 |
| 828 Z5V 332M | HD3-3300 | 828 | 3300 |

6,000 VDCW

| Style | A Max. Dia. | C Max. Lead Spacing |
|-------|-------------|---------------------|
| 858 | .437 | .375 |
| 818 | .593 | .500 |
| 828 | .750 | .500 |



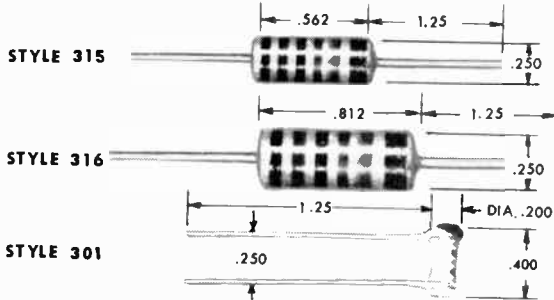
±20% CAPACITANCE TOLERANCE

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) |
|--------------------|--------------------|------------|------------------|
| 818 U2M 479M | HD6-4R7 | 818 | 4.7 |
| 828 U2M 689M | HD6-6R8 | 828 | 6.8 |
| 818 U2M 100M | HD6-10 | 818 | 10 |
| 818 U2M 150M | HD6-15 | 818 | 15 |
| 828 U2M 220M | HD6-22 | 828 | 22 |
| 828 U2M 330M | HD6-33 | 828 | 33 |
| 828 U2M 470M | HD6-47 | 828 | 47 |
| 818 U2M 560M | HD6-56 | 818 | 56 |
| 828 U2M 680M | HD6-68 | 828 | 68 |
| 828 U2M 820M | HD6-82 | 828 | 82 |
| 858 Z5U 101M | HD6-100 | 858 | 100 |
| 818 Z5U 151M | HD6-150 | 818 | 150 |
| 828 Z5U 221M | HD6-220 | 828 | 220 |
| 828 Z5U 331M | HD6-330 | 828 | 330 |
| 828 Z5U 471M | HD6-470 | 828 | 470 |
| 828 Z5U 681M | HD6-680 | 828 | 680 |
| 828 Z5U 821M | HD6-820 | 828 | 820 |

ERIE TUBULAR CERAMICONS

Erie Style 315 and 316 Tubular Ceramicons have molded insulation for excellent durability and uniformity of size. Axial leads are ideal for either point to point wiring or printed board installation. As in the case of Erie Disc Ceramicons, the raw ceramic dielectric tubes are made in Erie's modern Technical Ceramics plant. Erie Tubular Ceramicons meet performance specifications of EIA Standard RS198 for Class 1; Temperature Compensating, class 2 Hi-K; and are on the QPL for MIL-C-20D and MIL-10509B at +85 C.

TEMPERATURE COMPENSATING CERAMICONS



Erie Temperature Compensating Ceramicons are capacity sensitive to temperature in predetermined degrees depending upon the ceramic dielectric used. Because of this controlled and reproducible characteristic, they have found widespread applications as temperature compensating elements in circuits that must be temperature stabilized over wide temperature ranges.

Below 12 pf non insulated Style 301 with white baked enamel coating are supplied. For capacitances 12 pf and above, molded case Styles 315 and 316 are supplied.

600 VDCW • 1,500 VDC FLASH TEST

NPO Temperature Coefficient

N330 Temperature Coefficient

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) | Capacitance Tolerance | TC Tolerance PPM/°C |
|--------------------|--------------------|------------|------------------|-----------------------|---------------------|
| 301 COK 508C | TCO-.5 | 301 | 0.5 | 0.25 pf | ±250 |
| 301 COK 688C | TCO-.68 | 301 | 0.68 | 0.25 pf | ±250 |
| 301 COK 109C | TCO-1 | 301 | 1.0 | 0.25 pf | ±250 |
| 301 COK 159C | TCO-1.5 | 301 | 1.5 | 0.25 pf | ±250 |
| 301 COJ 229C | TCO-2.2 | 301 | 2.2 | 0.25 pf | ±120 |
| 301 COJ 309C | TCO-3 | 301 | 3.0 | 0.25 pf | ±120 |
| 301 COJ 339C | TCO-3.3 | 301 | 3.3 | 0.25 pf | ±120 |
| 301 COH 479C | TCO-4.7 | 301 | 4.7 | 0.25 pf | ±60 |
| 301 COH 509C | TCO-5 | 301 | 5.0 | 0.25 pf | ±60 |
| 301 COH 689C | TCO-6.8 | 301 | 6.8 | 0.25 pf | ±60 |
| 301 COH 829C | TCO-8.2 | 301 | 8.2 | 0.25 pf | ±60 |
| 301 COG 100C | TCO-10 | 301 | 10 | 0.25 pf | ±30 |
| 315 COG 120J | TCO-12 | 315 | 12 | 5% | ±30 |
| 315 COG 150J | TCO-15 | 315 | 15 | 5% | ±30 |
| 315 COG 180J | TCO-18 | 315 | 18 | 5% | ±30 |
| 315 COG 200J | TCO-20 | 315 | 20 | 5% | ±30 |
| 315 COG 220J | TCO-22 | 315 | 22 | 5% | ±30 |
| 316 COG 240J | TCO-24 | 316 | 24 | 5% | ±30 |
| 316 COG 270J | TCO-27 | 316 | 27 | 5% | ±30 |
| 316 COG 300J | TCO-30 | 316 | 30 | 5% | ±30 |
| 316 COG 330J | TCO-33 | 316 | 33 | 5% | ±30 |
| 316 COG 360J | TCO-36 | 316 | 36 | 5% | ±30 |
| 316 COG 390J | TCO-39 | 316 | 39 | 5% | ±30 |
| 316 COG 430J | TCO-43 | 316 | 43 | 5% | ±30 |

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) | Capacitance Tolerance | TC Tolerance PPM/°C |
|--------------------|--------------------|------------|------------------|-----------------------|---------------------|
| 301 S2K 109C | TC3-1 | 301 | 1.0 | 0.25 pf | ±250 |
| 301 S2K 159C | TC3-1.5 | 301 | 1.5 | 0.25 pf | ±250 |
| 301 S2J 229C | TC3-2.2 | 301 | 2.2 | 0.25 pf | ±120 |
| 301 S2J 339C | TC3-3.3 | 301 | 3.3 | 0.25 pf | ±120 |
| 301 S2J 399C | TC3-3.9 | 301 | 3.9 | 0.25 pf | ±120 |
| 301 S2H 479C | TC3-4.7 | 301 | 4.7 | 0.25 pf | ±60 |
| 301 S2H 569C | TC3-5.6 | 301 | 5.6 | 0.25 pf | ±60 |
| 301 S2H 689C | TC3-6.8 | 301 | 6.8 | 0.25 pf | ±60 |
| 301 S2H 829C | TC3-8.2 | 301 | 8.2 | 0.25 pf | ±60 |
| 301 S2H 100C | TC3-10 | 301 | 10 | 0.25 pf | ±60 |
| 315 S2H 120J | TC3-12 | 315 | 12 | 5% | ±60 |
| 315 S2H 150J | TC3-15 | 315 | 15 | 5% | ±60 |
| 315 S2H 180J | TC3-18 | 315 | 18 | 5% | ±60 |
| 315 S2H 220J | TC3-22 | 315 | 22 | 5% | ±60 |
| 315 S2H 270J | TC3-27 | 315 | 27 | 5% | ±60 |
| 315 S2H 330J | TC3-33 | 315 | 33 | 5% | ±60 |
| 316 S2H 390J | TC3-39 | 316 | 39 | 5% | ±60 |
| 316 S2H 470J | TC3-47 | 316 | 47 | 5% | ±60 |
| 316 S2H 560J | TC3-56 | 316 | 56 | 5% | ±60 |
| 316 S2H 680J | TC3-68 | 316 | 68 | 5% | ±60 |

N750 Temperature Coefficient

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) | Capacitance Tolerance | TC Tolerance PPM/°C |
|--------------------|--------------------|------------|------------------|-----------------------|---------------------|
| 301 U2J 229C | TC7-2.2 | 301 | 2.2 | 0.25 pf | ±120 |
| 301 U2J 339C | TC7-3.3 | 301 | 3.3 | 0.25 pf | ±120 |
| 301 U2J 509C | TC7-5 | 301 | 5.0 | 0.25 pf | ±120 |
| 301 U2J 689C | TC7-6.8 | 301 | 6.8 | 0.25 pf | ±120 |
| 301 U2J 100C | TC7-10 | 301 | 10 | 0.25 pf | ±120 |
| 315 U2J 120J | TC7-12 | 315 | 12 | 5% | ±120 |
| 315 U2J 150J | TC7-15 | 315 | 15 | 5% | ±120 |
| 315 U2J 180J | TC7-18 | 315 | 18 | 5% | ±120 |
| 315 U2J 200J | TC7-20 | 315 | 20 | 5% | ±120 |
| 315 U2J 220J | TC7-22 | 315 | 22 | 5% | ±120 |
| 315 U2J 240J | TC7-24 | 315 | 24 | 5% | ±120 |
| 315 U2J 270J | TC7-27 | 315 | 27 | 5% | ±120 |
| 315 U2J 300J | TC7-30 | 315 | 30 | 5% | ±120 |
| 315 U2J 330J | TC7-33 | 315 | 33 | 5% | ±120 |
| 315 U2J 360J | TC7-36 | 315 | 36 | 5% | ±120 |

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) | Capacitance Tolerance | TC Tolerance PPM/°C |
|--------------------|--------------------|------------|------------------|-----------------------|---------------------|
| 315 U2J 390J | TC7-39 | 315 | 39 | 5% | ±120 |
| 315 U2J 430J | TC7-43 | 315 | 43 | 5% | ±120 |
| 315 U2J 470J | TC7-47 | 315 | 47 | 5% | ±120 |
| 315 U2J 500J | TC7-50 | 315 | 50 | 5% | ±120 |
| 315 U2J 510J | TC7-51 | 315 | 51 | 5% | ±120 |
| 315 U2J 560J | TC7-56 | 315 | 56 | 5% | ±120 |
| 315 U2J 620J | TC7-62 | 315 | 62 | 5% | ±120 |
| 316 U2J 680J | TC7-68 | 316 | 68 | 5% | ±120 |
| 316 U2J 750J | TC7-75 | 316 | 75 | 5% | ±120 |
| 316 U2J 820J | TC7-82 | 316 | 82 | 5% | ±120 |
| 316 U2J 910J | TC7-91 | 316 | 91 | 5% | ±120 |
| 316 U2J 101J | TC7-100 | 316 | 100 | 5% | ±120 |
| 316 U2J 111J | TC7-110 | 316 | 110 | 5% | ±120 |
| 316 U2J 121J | TC7-120 | 316 | 120 | 5% | ±120 |

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TUBULAR CERAMICONS

GENERAL PURPOSE • MIL

ERIE GP[®] GENERAL PURPOSE CERAMICONS

These rugged tubular units are ideally suited for coupling and by-pass applications in circuits where temperature coefficient is not important, such as non frequency determining circuits. Working voltage is 600 Volts DC based on 1,000 hour life test at 1,000 VDC. Flash test 1,500 VDC, Capacitance Tolerance $\pm 10\%$ 5pf through 1,500 pf; $\pm 20\%$ 1,800 pf through 2,200 pf; $+80\%$, -20% 2,500 pf through 10,000 pf.

GENERAL PURPOSE TUBULARS

| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) | Capacitance Tolerance |
|--------------------|--------------------|------------|------------------|-----------------------|
| 315 U2M 509D | GP-5 | 315 | 5 | ± 0.5 pf |
| 315 U2M 100F | GP-10 | 315 | 10 | ± 1 pf |
| 315 U2M 120K | GP-12 | 315 | 12 | $\pm 10\%$ |
| 315 U2M 150K | GP-15 | 315 | 15 | $\pm 10\%$ |
| 315 U2M 180K | GP-18 | 315 | 18 | $\pm 10\%$ |
| 315 U2M 200K | GP-20 | 315 | 20 | $\pm 10\%$ |
| 315 U2M 220K | GP-22 | 315 | 22 | $\pm 10\%$ |
| 315 U2M 240K | GP-24 | 315 | 24 | $\pm 10\%$ |
| 315 U2M 250K | GP-25 | 315 | 25 | $\pm 10\%$ |
| 315 U2M 270K | GP-27 | 315 | 27 | $\pm 10\%$ |
| 315 U2M 300K | GP-30 | 315 | 30 | $\pm 10\%$ |
| 315 U2M 330K | GP-33 | 315 | 33 | $\pm 10\%$ |
| 315 U2M 390K | GP-39 | 315 | 39 | $\pm 10\%$ |
| 315 U2M 470K | GP-47 | 315 | 47 | $\pm 10\%$ |
| 315 U2M 500K | GP-50 | 315 | 50 | $\pm 10\%$ |
| 315 U2M 510K | GP-51 | 315 | 51 | $\pm 10\%$ |
| 315 U2M 560K | GP-56 | 315 | 56 | $\pm 10\%$ |
| 315 U2M 680K | GP-68 | 315 | 68 | $\pm 10\%$ |
| 315 U2M 750K | GP-75 | 315 | 75 | $\pm 10\%$ |
| 315 U2M 820K | GP-82 | 315 | 82 | $\pm 10\%$ |
| 315 X5U 101K | GP-100 | 315 | 100 | $\pm 10\%$ |
| 315 X5U 111K | GP-110 | 315 | 110 | $\pm 10\%$ |
| 315 X5U 121K | GP-120 | 315 | 120 | $\pm 10\%$ |
| 315 X5U 151K | GP-150 | 315 | 150 | $\pm 10\%$ |
| 315 X5U 181K | GP-180 | 315 | 180 | $\pm 10\%$ |
| 315 X5U 201K | GP-200 | 315 | 200 | $\pm 10\%$ |
| 315 X5U 221K | GP-220 | 315 | 220 | $\pm 10\%$ |
| 315 X5U 241K | GP-240 | 315 | 240 | $\pm 10\%$ |
| 315 X5U 251K | GP-250 | 315 | 250 | $\pm 10\%$ |
| 315 X5U 271K | GP-270 | 315 | 270 | $\pm 10\%$ |
| 315 X5U 301K | GP-300 | 315 | 300 | $\pm 10\%$ |
| 315 X5U 331K | GP-330 | 315 | 330 | $\pm 10\%$ |
| 315 X5U 361K | GP-360 | 315 | 360 | $\pm 10\%$ |
| 315 X5U 391K | GP-390 | 315 | 390 | $\pm 10\%$ |
| 315 X5U 471K | GP-470 | 315 | 470 | $\pm 10\%$ |
| 315 X5U 501K | GP-500 | 315 | 500 | $\pm 10\%$ |
| 315 X5U 511K | GP-510 | 315 | 510 | $\pm 10\%$ |
| 315 X5U 561K | GP-560 | 315 | 560 | $\pm 10\%$ |
| 315 X5U 681K | GP-680 | 315 | 680 | $\pm 10\%$ |
| 315 X5U 751K | GP-750 | 315 | 750 | $\pm 10\%$ |
| 315 X5U 821K | GP-820 | 315 | 820 | $\pm 10\%$ |
| 316 X5U 102K | GP-1000 | 316 | 1000 | $\pm 10\%$ |
| 316 X5U 122K | GP-1200 | 316 | 1200 | $\pm 10\%$ |
| 316 X5U 152K | GP-1500 | 316 | 1500 | $\pm 10\%$ |
| 316 Z5U 182M | GP-1800 | 316 | 1800 | $\pm 20\%$ |
| 316 Z5U 202M | GP-2000 | 316 | 2000 | $\pm 20\%$ |
| 316 Z5U 222M | GP-2200 | 316 | 2200 | $\pm 20\%$ |
| 316 Z5U 252Z | GP-2500 | 316 | 2500 | $+80\%$, -20% |
| 316 Z5U 272Z | GP-2700 | 316 | 2700 | $+80\%$, -20% |
| 316 Z5U 302Z | GP-3000 | 316 | 3000 | $+80\%$, -20% |
| 316 Z5U 332Z | GP-3300 | 316 | 3300 | $+80\%$, -20% |
| 316 Z5U 402Z | GP-4000 | 316 | 4000 | $+80\%$, -20% |
| 316 Z5U 472Z | GP-4700 | 316 | 4700 | $+80\%$, -20% |
| 316 Z5V 502Z | GP-5000 | 316 | 5000 | $+80\%$, -20% |
| 316 Z5V 562Z | GP-5600 | 316 | 5600 | $+80\%$, -20% |
| 316 Z5V 602Z | GP-6000 | 316 | 6000 | $+80\%$, -20% |
| 316 Z5V 682Z | GP-6800 | 316 | 6800 | $+80\%$, -20% |
| 316 Z5V 752Z | GP-7500 | 316 | 7500 | $+80\%$, -20% |
| 316 Z5V 103Z | GP-10000 | 316 | 10000 | $+80\%$, -20% |

MIL-C-20-D TUBULARS

10 pf and BELOW
 $\pm 0.25\%$ CAPACITANCE TOLERANCE

| NPO Temp. Coefficient | | | N330 Temp. Coefficient | | | N750 Temp. Coefficient | | |
|--------------------------|------------|-----------|---------------------------|------------|-----------|---------------------------|------------|-----------|
| Mil Designation | Body Style | Cap. (pf) | Mil Designation | Body Style | Cap. (pf) | Mil Designation | Body Style | Cap. (pf) |
| CC20 CK 0R5C | 301 | 0.5 | CC20 SK 010C | 301 | 1 | CC20 UK 020C | 301 | 2 |
| CC20 CK R75C | 301 | 0.75 | CC20 SK 1R5C | 30T | 1.5 | CC20 UJ 030C | 301 | 3 |
| CC20 CK 1R5C | 301 | 1.5 | CC20 SK 020C | 30T | 2 | CC20 UJ 040C | 301 | 4 |
| CC20 CK 020C | 301 | 2 | CC20 SJ 030C | 30' | 3 | CC20 UJ 050C | 301 | 5 |
| CC20 CJ 030C | 301 | 3 | CC20 SH 040C | 301 | 4 | CC20 UJ 060C | 301 | 6 |
| CC20 CH 040C | 301 | 4 | CC20 SH 050C | 30' | 5 | CC20 UJ 070C | 301 | 7 |
| CC20 CH 050C | 301 | 5 | CC20 SH 060C | 301 | 6 | CC20 UJ 080C | 301 | 8 |
| CC20 CH 060C | 301 | 6 | CC20 SH 070C | 301 | 7 | CC20 UJ 090C | 301 | 9 |
| CC20 CH 070C | 301 | 7 | CC20 SH 080C | 301 | 8 | CC20 UJ 100C | 301 | 10 |
| CC20 CH 080C | 301 | 8 | CC20 SH 090C | 301 | 9 | | | |
| CC20 CH 090C | 301 | 9 | CC20 SH 100C | 301 | 10 | | | |
| CC20 CH 100C | 301 | 10 | | | | | | |

ABOVE 10 pf
 $\pm 5\%$ CAPACITANCE TOLERANCE

| NPO Temp. Coefficient | | | N330 Temp. Coefficient | | | N750 Temp. Coefficient | | |
|--------------------------|------------|-----------|---------------------------|------------|-----------|---------------------------|------------|-----------|
| Mil Designation | Body Style | Cap. (pf) | Mil Designation | Body Style | Cap. (pf) | Mil Designation | Body Style | Cap. (pf) |
| CC21 CH 120J | 315 | 12 | CC21 SH 270J | 315 | 27 | CC21 UJ 430J | 315 | 43 |
| CC21 CH 150J | 315 | 15 | CC21 SH 300J | 315 | 30 | CC21 UJ 470J | 315 | 47 |
| CC21 CH 180J | 315 | 18 | CC21 SH 330J | 315 | 33 | CC21 UJ 510J | 315 | 51 |
| CC21 CH 220J | 315 | 22 | CC21 SH 360J | 315 | 36 | CC21 UJ 560J | 315 | 56 |
| CC21 CH 240J | 315 | 24 | CC21 SH 390J | 315 | 39 | CC21 UJ 620J | 315 | 62 |
| CC26 CH 270J | 316 | 27 | CC21 SH 510J | 316 | 51 | CC26 UJ 680J | 316 | 68 |
| CC26 CH 300J | 316 | 30 | CC26 SH 430J | 316 | 43 | CC26 UJ 750J | 316 | 75 |
| CC26 CH 330J | 316 | 33 | CC26 SH 470J | 316 | 47 | CC26 UJ 820J | 316 | 82 |
| CC26 CH 360J | 316 | 36 | CC26 SH 510J | 316 | 51 | CC26 UJ 910J | 316 | 91 |
| CC26 CH 390J | 316 | 39 | CC26 SH 560J | 316 | 56 | CC26 UJ 101J | 316 | 100 |
| CC26 CH 430J | 316 | 43 | CC26 SH 620J | 316 | 62 | CC26 UJ 111J | 316 | 110 |
| CC26 CH 470J | 316 | 47 | | | | CC26 UJ 121J | 316 | 120 |

EXPLANATION OF MIL-C-20D AND MIL-C-11015B DESIGNATIONS



MIL-C-11015B GENERAL PURPOSE FIXED CERAMIC CAPACITORS

Example { MIL Part CK 60 A W 68 1 M
Erie Part 831-010 X5 U 68 1 M

| MIL Type | Erie Type | MIL Code | Erie Code | Temperature Range | MIL Code | Erie Code | Maximum Capacity Change | Cap. 1st - 2nd Significant Figure ¹ | MIL and Erie Code | Multiplier | Tolerance | | |
|----------|-----------|----------|-----------|-------------------|----------|-----------|-------------------------|--|-------------------|-------------------|-----------|-----------|------|
| | | | | | | | | | | | MIL Code | Erie Code | % |
| CK 21 | 315 | A | X5 | -55°C +85°C | V | P | +10% -10% | 1 | 0 | 1 | K | K | ±10% |
| CK 26 | 316 | B | W5 | -55°C +125°C | W | U | +22% -56% | 2 | 1 | 10 | M | M | ±20% |
| CK 60 | 831 | C | V5 | -55°C +150°C | X | R | +15% -15% | 3 | 2 | 100 | | | |
| CK 61 | 801 | | | | Z | S | +30% -20% | 4 | 3 | 1,000 | | | |
| CK 62 | 811 | | | | | | | 5 | 4 | 10,000 | | | |
| CK 63 | 841 | | | | | | | 6 | 5 | 100,000 | | | |
| CK 70 | 327 | | | | | | | 7 | 6 | 1,000,000 | | | |
| CK 80 | 326 | | | | | | | 8 | 7 | | | | |
| CK 81 | 323 | | | | | | | 9 | 8 | 0.01 ² | | | |
| | | | | | | | | 0 | 9 | 0.1 ² | | | |

¹The letter "R" may appear in MIL Part No. to indicate decimal points. Ex.: 2R2 indicates 2.2 pf.

²Multipliers used by Erie to locate decimal points not recognized by MIL. Ex.: 229 indicates 2.2 pf. For capacitance below 10 pf use lowest possible multiplier to avoid alternate codings.

MIL-C-20D TEMPERATURE COMPENSATING FIXED CERAMIC CAPACITORS

Example { MIL Part CC 26 U J 10 1 J
Erie Part 316-051 U2 J 10 1 J

| MIL Type | Erie Type | MIL Code | Erie Code | TC Nominal | MIL Code | Erie Code | TC Tolerance | Cap. 1st - 2nd Significant Figure ¹ | MIL and Erie Code | Multiplier | Tolerance | | | |
|----------|-----------|----------|-----------|------------|----------|-----------|--------------|--|-------------------|-------------------|-----------|-----------|---------------|------------|
| | | | | | | | | | | | MIL Code | Erie Code | 10 pf or Less | Over 10 pf |
| CC 20 | 301 | | | | | | | | | | | | | |
| CC 21 | 315 | A | M7 | +100 PPM | G | G | ± 30 PPM | 1 | 0 | 1 | C | C | ±.25 pf | |
| CC 26 | 316 | C | C0 | 0 PPM | H | H | ± 60 PPM | 2 | 1 | 10 | D | D | ±.5 pf | |
| CC 50 | 831 | H | B1 | - 30 PPM | J | J | ±120 PPM | 3 | 2 | 100 | F | F | ±1 pf | ±1% |
| CC 51 | 801 | L | U1 | - 80 PPM | K | K | ±250 PPM | 4 | 3 | 1,000 | G | G | ±2 pf | ±2% |
| CC 52 | 811 | P | P2 | -150 PPM | | | | 5 | 4 | 10,000 | J | J | | ±5% |
| CC 53 | 821 | R | R2 | -220 PPM | | | | 6 | 5 | 100,000 | K | K | | ±10% |
| | | S | S2 | -330 PPM | | | | 7 | 6 | 1,000,000 | | | | |
| | | T | T2 | -470 PPM | | | | 8 | 7 | | | | | |
| | | U | U2 | -750 PPM | | | | 9 | 8 | 0.01 ² | | | | |
| | | | | | | | | 0 | 9 | 0.1 ² | | | | |

¹The letter "R" may appear in MIL Part No. to indicate decimal points. Ex.: 2R2 indicates 2.2 pf.

²Multipliers used by Erie to locate decimal points not recognized by MIL. Ex.: 229 indicates 2.2 pf. For capacitance below 10 pf use lowest possible multiplier to avoid alternate codings.



EXPLANATION OF ERIE & EIA, AND MIL-C-20D COLOR CODE

EIA RS 198 CLASS 1 & 2 and ERIE COLOR CODE

Color code band on axial units.
Color code dots on radial lead units.

| TC Types Temperature Coefficient | | | Hi-K Types Temperature Characteristic | | | | | Capacitance | | | | Nominal Capacitance Tolerance | | | |
|-------------------------------------|-----------|-----------|--|-------------------|-----------------|-----------------------|---------|-----------------|-----------------|------------|--------|-------------------------------|--------------------|-----------|--------|
| T. C. | 1st Color | 2nd Color | Symbol | Temperature Range | Symbol | Maximum Cap. Change % | Color | 1st Sig. Figure | 2nd Sig. Figure | Multiplier | Color | Nominal 10 pf or Less | Nominal Over 10 pf | Color | |
| P100 | M7 | Red | Violet | X5 | -55°C to +85°C | A | ± 1.0 | Gold | 0 | 0 | 1 | Black | ± 2.0 pf | ± 20% | Black |
| P030 | B6 | Green | Blue | Y5 | -30°C to +85°C | B | ± 1.5 | Silver | 1 | 1 | 10 | Brown | ± 0.1 pf | ± 1% | Brown |
| NPO | C0 | Black | | W5 | -55°C to +125°C | C | ± 2.2 | Black | 2 | 2 | 100 | Red | | ± 2% | Red |
| N030 | B1 | Brown | | Z5 | +10°C to +85°C | D | ± 3.3 | Brown | 3 | 3 | 1,000 | Orange | | ± 3% | Orange |
| N080 | U1 | Red | | V5 | -55°C to +150°C | E | ± 4.7 | Red | 4 | 4 | 10,000 | Yellow | | +100% -0% | Yellow |
| N150 | P2 | Orange | | | | F | ± 7.5 | Orange | 5 | 5 | | Green | ± 0.5 pf | ± 5% | Green |
| N220 | R2 | Yellow | | | | P | ± 10 | Yellow | 6 | 6 | | Blue | | | Blue |
| N330 | S2 | Green | | | | R | ± 15 | Green | 7 | 7 | | Violet | | | Violet |
| N470 | T2 | Blue | | | | S | ± 22 | Blue | 8 | 8 | .01 | Gray | ± 0.25 pf | +80% -20% | Gray |
| N750 | U2 | Violet | | | | T | +22 -33 | Violet | 9 | 9 | .1 | White | ± 1 pf | ± 10% | White |
| N1500 | P3 | Orange | Orange | | | U | +22 -56 | Gray | | | | | | | Gray |
| N2200 | R3 | Yellow | Orange | | | V | +22 -82 | White | | | | | | | White |
| N3300 | S3 | Green | Orange | | | | | | | | | | | | |
| N4200 | G3 | Green | Green | | | | | | | | | | | | |
| N4700 | T3 | Blue | Orange | | | | | | | | | | | | |
| N5600 | H3 | Green | Black | | | | | | | | | | | | |
| N330 | | | | | | | | | | | | | | | |
| ± 500 | S2L | White | | | | | | | | | | | | | |
| N750 | | | | | | | | | | | | | | | |
| ± 1000 | U2M | Gray | | | | | | | | | | | | | |
| N3300 | | | | | | | | | | | | | | | |
| ± 2500 | S3N | Gray | Black | | | | | | | | | | | | |

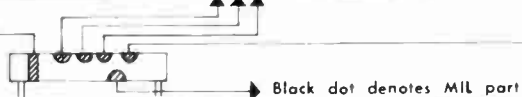
MIL-C-20D COLOR CODE

CC20 U J 150 K

| STYLE | | TEMPERATURE CHARACTERISTIC | | | T. C. TOLERANCE Parts/million/°C. 25°C.-85°C. | | NOMINAL CAPACITY (mmf) | | | CAPACITY TOLERANCE | | |
|-------|------|----------------------------|-----|------------|---|------------|------------------------|------------|------------|------------------------------|------------|------------|
| Erie | MIL | Erie | MIL | Color Code | Tolerance | MIL Letter | 1st and 2nd DIGIT | COLOR CODE | MULTIPLIER | If Capacity is 10 pf or less | MIL Letter | Color Code |
| 301 | CC20 | P100 | A | Gold | ± 30 | G | 0 | Black | 1 | ± .25 pf | C | Red |
| 315 | CC21 | NPO | C | Black | ± 60 | H | 1 | Brown | 10 | ± .5 pf | D | Green |
| 316 | CC26 | N030 | H | Brown | ± 120 | J | 2 | Red | 100 | ± 1.0 pf | F | White |
| | | N080 | L | Red | ± 250 | K | 3 | Orange | 1000 | ± 2.0 pf | G | Black |
| | | N150 | P | Orange | | | 4 | Yellow | | | | |
| | | N220 | R | Yellow | | | 5 | Green | | | | |
| | | N330 | S | Green | | | 6 | Blue | | | | |
| | | N470 | T | Blue | | | 7 | Violet | | | | |
| | | N750 | U | Purple | | | 8 | Gray | .01 | | | |
| | | | | | | | 9 | White | .1 | | | |

If Capacity is Greater than 10 pf
 ± 1% F Brown
 ± 2% G Red
 ± 5% J Green
 ± 10% K White

Example: Brown, Red, Red is 1200 mmf capacitance.

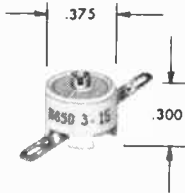


ERIE TRIMMERS

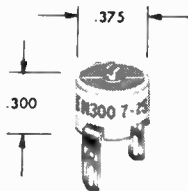
CERAMIC TRIMAcons†

These trimmers have been well known for years for their stability under the most exacting conditions. The top of the base and underside of the titanium dioxide rotor are lapped optically flat, thus eliminating air space variations with temperature. Fired silver electrodes are applied to top of base and rotor, so that capacity is changed by varying the amount of overlap. Capacitance change per degree of rotation is approximately constant, resulting in a smoothness of adjustment not possible with compression type trimmers, where the greater part of capacity change is concentrated close to one end of adjustment.

STYLE 538-000



STYLE 538-002



| New Catalog Number | Old Catalog Number | Capacitance Range (pf) | Temperature Coefficient |
|--------------------|--------------------|------------------------|-------------------------|
| 538-000 89R | 538A | 2-8 | NPO |
| 538-000 92R | 538-B | 5.5-18 | NPO |
| 538-000 90R | 538-C | 2.5-11 | N300 |
| 538-000 93R | 538-D | 7-25 | N300 |
| 538-000 91R | 538-E | 3-10 | N500 |
| 538-000 99R | 538-F | 8-25 | N500 |
| 538-000 110R | 538-G | 3-15 | N650 |
| 538-000 94R | 538-H | 9-35 | N650 |
| 538-002 89R | — | 2-8 | NPO |
| 538-002 92R | — | 5.5-18 | NPO |
| 538-002 90R | — | 2.5-11 | N300 |
| 538-002 93R | — | 7-25 | N300 |
| 538-002 91R | — | 3-10 | N500 |
| 538-002 99R | — | 8-25 | N500 |
| 538-002 110R | — | 3-15 | N650 |
| 538-002 94R | — | 9-35 | N650 |
| <hr/> | | | |
| 503 10R | TS-A | 1.5-7 | NPO |
| 503 17R | TS-B | 3-12 | NPO |
| 503 24R | TS-C | 4-30 | N500 |
| 503 28R | TS-D | 5-20 | N300 |
| 503 33R | TS-E | 7-45 | N500 |
| 503 34R | TS-F | 8-50 | N650 |
| <hr/> | | | |
| 557 10R | 557-A | 1.5-7 | NPO |
| 557 17R | 557-B | 3-12 | NPO |
| 557 39R | 557-F | 5-25 | NPO |
| 557 29R | 557-G | 5-30 | N750 |
| 557 34R | 557-H | 8-50 | N750 |
| <hr/> | | | |
| 519 10R | TD-A | 1.5-7 | NPO |
| 519 17R | TD-B | 3-12 | NPO |
| 519 24R | TD-C | 4-30 | N500 |
| 519 28R | TD-D | 5-20 | N300 |
| 519 33R | TD-E | 7-45 | N500 |

† Trademark

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CERAMIC DISC & TUBULAR TRIMMERS

CERAMIC TRIMAcons

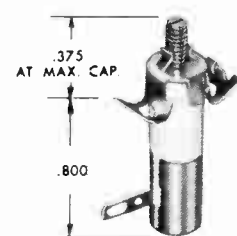
MIL-C-81

| MIL-C-81 Designation | Erie Catalog Number | Capacitance Range (pf) | Temperature Coefficient |
|----------------------|---------------------|------------------------|-------------------------|
| CV11 A 070 | 503-041 10R | 1.5-7 | NP0 |
| CV11 A 120 | 503-041 17R | 3-12 | NP0 |
| CV11 A 250 | 503-041 37R | 4.5-25 | NP0 |
| CV11 B 130 | 503-041 18R | 3-13 | N300 |
| CV11 B 200 | 503-041 28R | 5-20 | N300 |
| CV11 C 300 | 503-041 24R | 4-30 | N500 |
| CV11 C 450 | 503-041 33R | 7-45 | N500 |
| CV11 D 300 | 503-041 24R | 4-30 | N650 |
| CV11 D 450 | 503-041 33R | 7-45 | N650 |

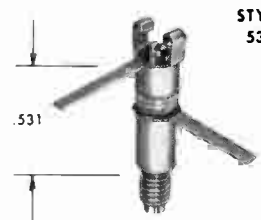
TUBULAR TRIMAcons

These are compact, economical Tubular Trimmers that are ideal for applications calling for a low minimum capacity and a high ratio of maximum to minimum capacity. Styles 532 and 535 have molded plastic dielectric. Style 3115 has ceramic dielectric.

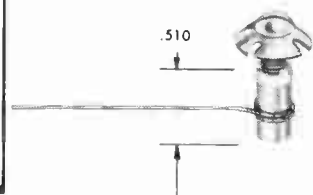
| New Catalog Number | Old Catalog Number | Capacitance Range (pf) | Panel Thickness |
|--------------------|--------------------|------------------------|-----------------|
| 532 3R | 532-A | 0.5-5 | .040" - .065" |
| 532 8R | 532-B | 1-8 | .040" - .065" |
| 535 4R | 535-C | 0.7-3 | up to .050" |
| 3115-001 1R | 3115-D | 0.5-3 | .025" to .065" |
| 3115-001 6R | 3115-E | 1-4 | .025" to .065" |



STYLE
532



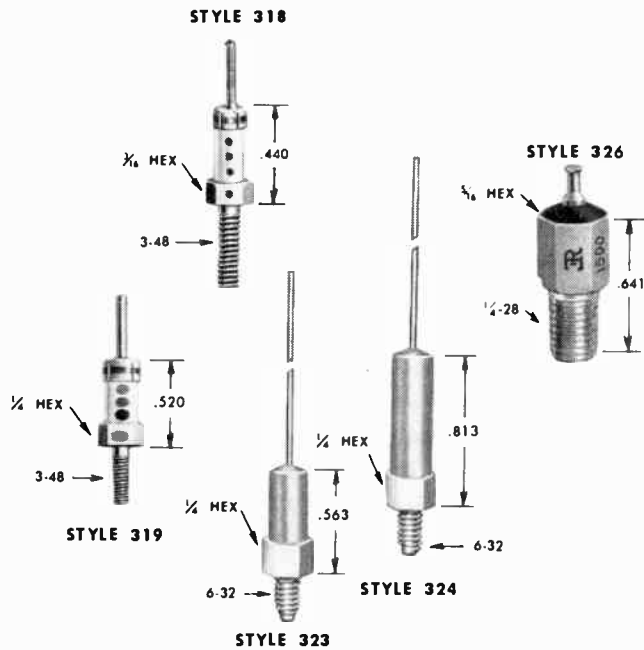
STYLE
535



STYLE
3115

ERIE STAND-OFF CERAMICONS

Stand-off Ceramicons, an original Erie development, are now widely used for the dual purpose of by-passing R.F. current to ground, and of mechanically supporting other circuit elements. They are especially suited for V.H.F. and U.H.F. applications, due to their low-inductance electrical paths and resultant high resonant frequency.



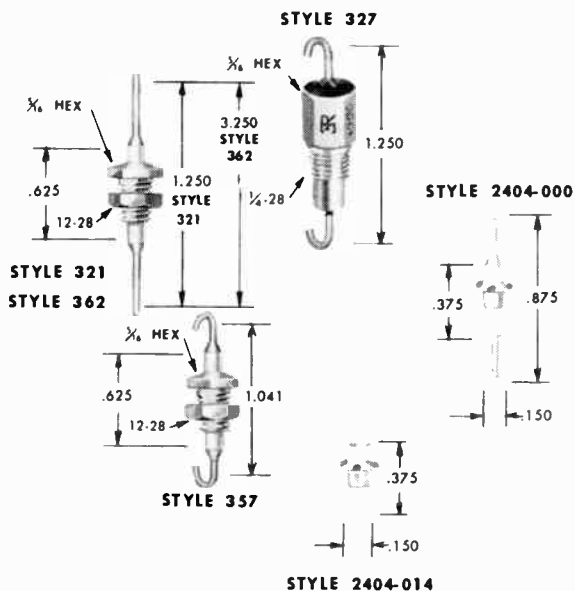
| New Catalog Number | Old Catalog Number | Body Style | Capacitance and Tolerance (pf) |
|--------------------|--------------------|------------|--------------------------------|
| 318 X5U 501M | 318-501 | 318 | 500 ±20% |
| 319 X5U 501M | 319-501 | 319 | 500 ±20% |
| 319 X5U 102M | 319-102 | 319 | 1000 ±20% |
| 323 X5U 101M | 323-101 | 323 | 100 ±20% |
| 323 X5U 501M | 323-501 | 323 | 500 ±20% |
| 324 X5U 102M | 324-102 | 324 | 1000 ±20% |
| 324 X5U 152M | 324-152 | 324 | 1500 ±20% |
| 326 X5U 102M | 326-102 | 326 | 1000 ±20% |
| 326 X5U 152M | 326-152 | 326 | 1500 ±20% |

MIL-C-11015B

| MIL Designations | Body Style | Capacitance (pf) and Tolerance |
|------------------|------------|--------------------------------|
| CK80 AW 102M | 326 | 1000 ±20% |
| CK80 AW 152M | 326 | 1500 ±20% |

ERIE FEED-THRU CERAMICONS

These very practical feed-thru capacitors are highly recommended for by-passing R.F. to ground in feed-thru applications. Wire terminals of Style 362 and hook type terminals of Style 327 are sufficiently rugged to serve as tie points for several connections, for supporting other circuit elements, and long enough for point to point wiring. Style 327 is hermetically sealed and ruggedized, and is primarily for military and similar commercial usage.



| New Catalog Number | Old Catalog Number | Body Style | Capacitance (pf) |
|--------------------|--------------------|------------|------------------|
| 321 X5U 102M | 321-102 | 321 | 1000 ±20% |
| 327 X5U 102M | 327-102 | 327 | 1000 ±20% |
| 327 X5U 152M | 327-152 | 327 | 1500 ±20% |
| 327 X5U 202M | 327-202 | 327 | 2000 ±20% |
| 357 X5U 102M | 357-102 | 357 | 1000 ±20% |
| 357 X5U 152M | 357-152 | 357 | 1500 ±20% |
| 362 X5U 102M | 362-102 | 362 | 1000 ±20% |
| 362 X5U 152M | 362-152 | 362 | 1500 ±20% |
| 2404-000 U2M 500M | 2404-500 | 2404 | 50 ±20% |
| 2404-000 X5U 101M | 2404-101 | 2404 | 100 ±20% |
| 2404-000 X5U 102P | 2404-102 | 2404 | 1000 GMV |
| 2404-014 X5U 501M | 2405-501 | 2405 | 500 ±20% |
| 2404-014 X5U 102P | 2405-102 | 2405 | 1000 GMV |

MIL-C-11015B

| MIL Designations | Body Style | Capacitance (pf) and Tolerance |
|------------------|------------|--------------------------------|
| CK70 AW 102M | 327 | 1000 ±20% |
| CK70 AW 152M | 327 | 1500 ±20% |

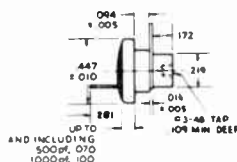
BUTTON®-MICA CAPACITORS

RESIN SEALED BUTTON-MICA CAPACITORS

These Erie developed, midget, silver-mica capacitors should be used where compact size, minimum series inductance, and high leakage resistance are essential. They offer high stability of capacitance over the full temperature range -55°C . to $+85^{\circ}\text{C}$. Erie Button mica capacitors are unmatched for V.H.F. and U.H.F. work. "Q" at 1 MC is not less than 1000 above 100 pf; not less than 700 between 50 and 100 pf; not less than 500 below 50 pf. Style 654 has ring type metal shell with three soldering ears. High potential terminal at either end for feed-thru connection. Style 662 is fastened to chassis with 3-48 screw.

500 VDCW • FA SERIES MIL CB21

| MIL Designation | New Catalog Number | Old Catalog Number | Capacitance (pf) | Capacitance Tolerance |
|-----------------|--------------------|--------------------|------------------|-----------------------|
| CB21 PD 150K | 662-003 150K | 370-FA-150K | 15 | $\pm 10\%$ |
| CB21 PD 250K | 662-003 250K | 370-FA-250K | 25 | $\pm 10\%$ |
| CB21 PD 500K | 662-003 500K | 370-FA-500K | 50 | $\pm 10\%$ |
| CB21 PD 101K | 662-003 101K | 370-FA-101K | 100 | $\pm 10\%$ |
| CB21 PD 151K | 662-003 151K | 370-FA-151K | 150 | $\pm 10\%$ |
| CB21 PD 201K | 662-003 201K | 370-FA-201K | 200 | $\pm 10\%$ |
| CB21 PD 251K | 662-003 251K | 370-FA-251K | 250 | $\pm 10\%$ |
| CB21 PD 501K | 662-003 501K | 370-FA-501K | 500 | $\pm 10\%$ |
| CB21 PD 501J | 662-003 501J | 370-FA-501J | 500 | $\pm 5\%$ |
| CB21 PD 102K | 662-003 102K | 370-FA-102K | 1000 | $\pm 10\%$ |
| CB21 PD 102J | 662-003 102J | 370-FA-102J | 1000 | $\pm 5\%$ |



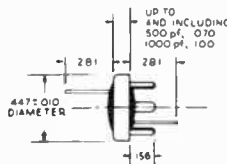
STYLE
662

UNSPECIFIED TOLERANCE IS $\pm .015$

500 VDCW • CB SERIES MIL CB11

| MIL Designation | New Catalog Number | Old Catalog Number | Capacitance (pf) | Capacitance Tolerance |
|-----------------|--------------------|--------------------|------------------|-----------------------|
| CB11 RD 150K | 654-017 150K | 370-CB-150K | 15 | $\pm 10\%$ |
| CB11 RD 250K | 654-017 250K | 370-CB-250K | 25 | $\pm 10\%$ |
| CB11 RD 500K | 654-017 500K | 370-CB-500K | 50 | $\pm 10\%$ |
| CB11 RD 101K | 654-017 101K | 370-CB-101K | 100 | $\pm 10\%$ |
| CB11 RD 151K | 654-017 151K | 370-CB-151K | 150 | $\pm 10\%$ |
| CB11 RD 201K | 654-017 201K | 370-CB-201K | 200 | $\pm 10\%$ |
| CB11 RD 251K | 654-017 251K | 370-CB-251K | 250 | $\pm 10\%$ |
| CB11 RD 501K | 654-017 501K | 370-CB-501K | 500 | $\pm 10\%$ |
| CB11 RD 501J | 654-017 501J | 370-CB-501J | 500 | $\pm 5\%$ |
| CB11 RD 102K | 654-017 102K | 370-CB-102K | 1000 | $\pm 10\%$ |
| CB11 RD 102J | 654-017 102J | 370-CB-102J | 1000 | $\pm 5\%$ |

UNSPECIFIED TOLERANCE IS $\pm .015$



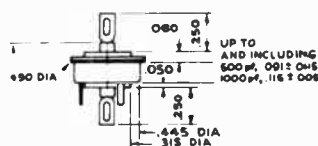
STYLE
654

GOLD SEAL® BUTTON-MICA CAPACITORS

At 200°C , this outstanding capacitor far exceeds requirements of MIL-C-10950 for life test and temperature cycling. And its all-welded, hermetic glass seal plus gold-plated exterior metal parts provide the ultimate in maintaining extremely high resistance to moisture.

500 VDCW • -55°C TO $+200^{\circ}\text{C}$

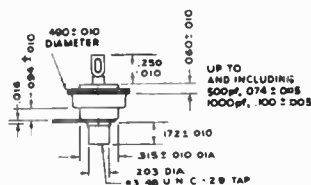
| Catalog Number | Capacitance | Capacitance Tolerance |
|----------------|-------------|-----------------------|
| 2921-600 501K | 500 | $\pm 10\%$ |
| 2921-600 102K | 1000 | $\pm 10\%$ |
| 2922-600 501K | 500 | $\pm 10\%$ |
| 2922-600 102K | 1000 | $\pm 10\%$ |



NOTE: A THIRD GROUND
TAB IS HIDDEN
BY FLAG TAB.

STYLE
2921

UNSPECIFIED TOLERANCE IS $\pm .010$



STYLE
2922

UNSPECIFIED TOLERANCE IS $\pm .005$

Items listed above represent the most popular capacitances. Other capacitance values in $\pm 5\%$ and $\pm 10\%$ tolerance are available on special order.

FILTERCONS†

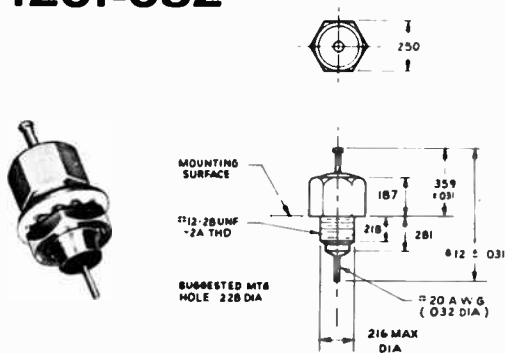
FILTERCON is the name applied to Erie's high frequency, low pass filters.

Standard tubular ceramic feed-thru capacitors have been used for many years in by-pass applications in the RF range. The advent of the UHF range (above 100 MC/sec) requires in many cases the application of new techniques in feed-thru design to eliminate parallel resonance peaks inherent in the UHF range as a result of the conventional design. Erie's Filtercons were designed to provide maximum effective filtering in the UHF range.

STYLE 1201 is a bushing type FILTERCON intended for rugged applications. The filter element is soldered inside the bushing and then both ends are resin sealed to completely protect the element. The center terminal consisting of formed 20 AWG-tinned copper wire is ideal for connection. The bushing is silver plated and silver plated lockwashers and hex nuts are supplied.

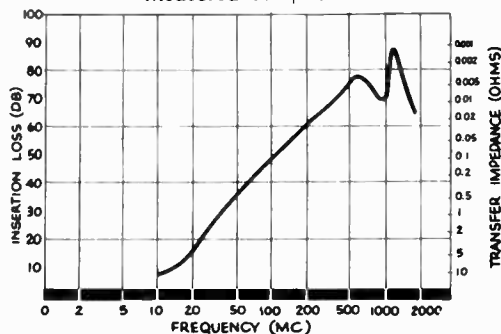
STYLE 1203 is a miniaturized eyelet type FILTERCON similar in performance to Bushing Style 1201. The heavy tinned eyelet and solder coated terminals facilitate ready assembly of the FILTERCON to the chassis. Soldering can be accomplished through oven or iron soldering techniques. In the latter method the soldering iron should make contact with the chassis only and not with the FILTERCON.

STYLE 1201-052



Typical Attenuation Characteristics

Measured at +25°C.



SPECIFICATIONS:

Minimum Attenuation: 45 db from 200 MC to 2000 MC, over the temperature range of -55°C to +125°C.

Capacitance: 1000pf minimum @ 1KC, .5 to 5VRMS, 25°C.

Working Voltage: 200VDC.

Dielectric Strength: 600VDC for 1 sec. (50ma max. charging current)

Operating Temperature Range: -55°C to +125°C.

Insulation Resistance: 10K meg Ω min. @ 100VDC, 50ma max. charging current, 25°C.

D.C. Resistance: 0.01 Ω max.

D.C. and low frequency current: 5 amperes max.

R.F. Current: 0.25 amperes max.

Life Test: 1000 hours @ 400VDC @ 125°C.

After life IR shall be 1000 meg Ω minimum.

Moisture Resistance:

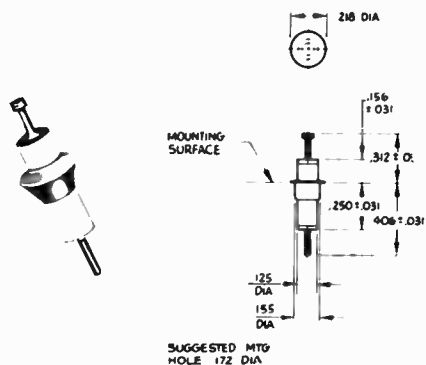
Temperature and Immersion Cycling:

Specification MIL-STD-202B.

Methods 102A, Test Condition D; 104A, Test Condition A; and 106A. IR shall be 1000 meg Ω minimum and the units shall withstand the initial dielectric strength test.

† All measurements made in strict accordance with MIL-STD-220A.

STYLE 1203-050

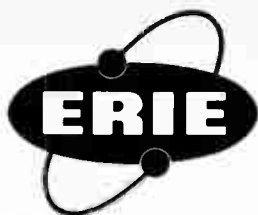


UNSPECIFIED TOLERANCE IS $\pm .015$

When Ordering Specify: the desired seven digit Erie part number.

† Trademark

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FILTERCONS

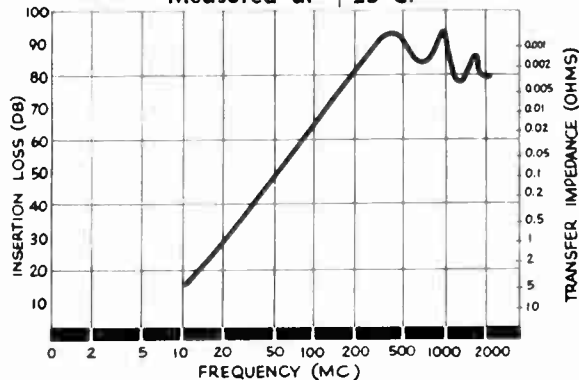
Bushing Mount • Eyelet Mount

STYLE 1202 is a larger version of Style 1201 but incorporating the identical husky construction. The resin seal at both ends of the FILTERCON assures protection of the element. Headed terminals are formed from 16AWG copper wire and are readily solderable. The bushing is silver plated and silver plated hex nuts and lockwashers are supplied.

STYLE 1204 is an eyelet type Filtercon similar in characteristics to Style 1202. Soldering directly to the chassis is the means for mounting style 1204. Mounting can be accomplished through using either oven or iron soldering techniques. Care must be exercised in iron soldering so that the iron contacts the chassis only.

Typical Attenuation Characteristics

Measured at +25°C.



SPECIFICATIONS:

Minimum Attenuation⁰: 50 db from 100 MC to 2000 MC, over the temperature range of -55°C to +125°C.

Capacitance: 2000pf minimum @ 1KC, .5 to 5VRMS, 25°C.

Working Voltage: 500VDC.

Dielectric Strength: 1500VDC for 1 sec. (50ma max. charging current)

Operating Temperature Range: -55°C to +125°C.

Insulation Resistance: 10K meg Ω min. @ 100VDC, 50ma max. charging current, 25°C.

D.C. Resistance: 0.10 Ω max.

D.C. and low frequency current: 5 amperes max.

R.F. Current: 0.25 amperes max.

Life Test: 1000 hours at 1000VDCW @ 125°C. After life, I.R. shall be 1000 meg Ω minimum.

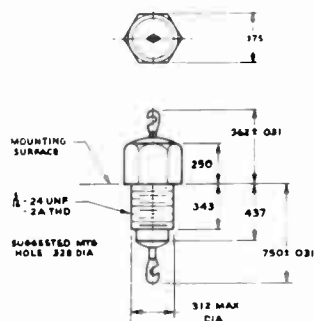
Moisture Resistance:

Temperature and Immersion Cycling:

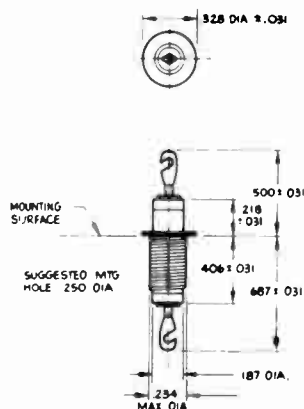
Specification MIL-STD-202B. Methods 102A, Test Condition D; 104A, Test Condition A; and 106A. IR shall be 1000 meg Ω minimum and the units shall withstand the initial dielectric strength test.

⁰ All measurements made in strict accordance with MIL-STD-220A.

STYLE 1202-052



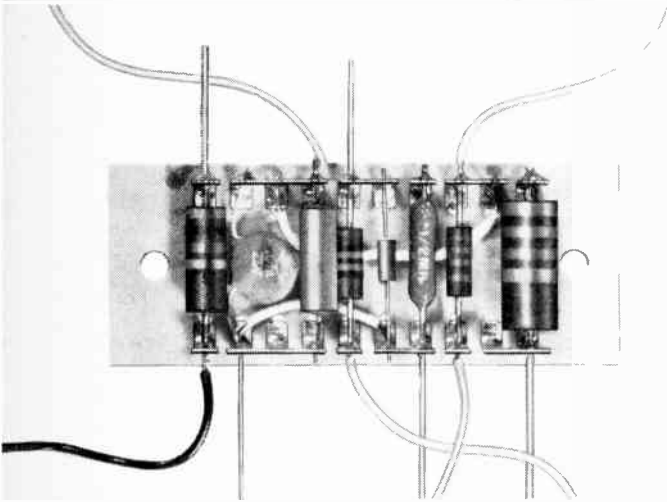
STYLE 1204-050



UNSPECIFIED TOLERANCE IS ± 0.15

When Ordering Specify: the desired seven digit Erie part number.

ERIE STRIP-PACK†



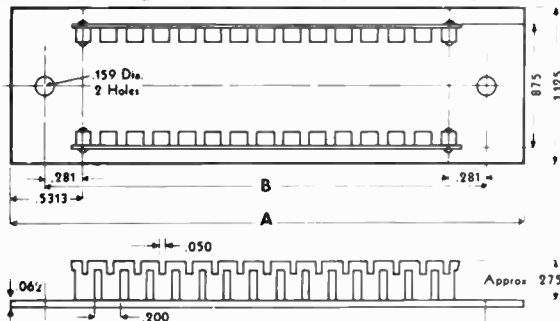
Strip-Pack consists of a XXXP phenolic board with continuous metal terminals inserted on that board.

Strip-Pack is ideal for simplified bread-board applications as well as production-line assembly of components. Assembly and circuit make-up is simplified by built in series connection design of the continuous terminals. Unwanted series connections are easily cut out of the terminal strips.

This flexible system which can be adopted to many variations of complex circuitry features:

- Space between terminals permits usage of most standard electronic components with an excellent density factor.
- Cross over connectors can be made through the use of jumper wires under the components.
- Practical and economical for prototype and volume production.
- Reliability, serviceability and neatness inherent in the finished assembly.

† Trademark



| Catalog Number | Stations | A Dimension | B Dimensions |
|----------------|----------|-------------|--------------|
| 3976-205-2 | 10 | 2.875 | 2.362 |
| 3976-205-3 | 15 | 3.875 | 3.362 |
| 3976-205-4 | 20 | 4.875 | 4.362 |
| 3976-205-5 | 25 | 5.875 | 5.362 |
| 3976-205-6 | 30 | 6.875 | 6.362 |

BUY FROM YOUR LOCAL ERIE DISTRIBUTOR

A nationwide network of leading Electronic Parts Industrial Distributors carry a complete stock of all standard Erie electronic components shown in this catalog.

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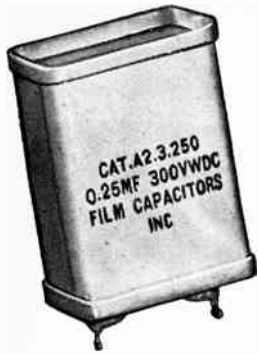
The

Radio - Electronic

MASTER

FILM CAPACITORS, INC.

F-C-I POLYSTYRENE CAPACITORS



F-C-I Polystyrene capacitors are characterized by a unique combination of low power factor, high insulation resistance and low dielectric absorption ("soakage") which cannot be duplicated by any other type capacitor except Teflon units. Furthermore, the capacitance stability is excellent, and the temperature coefficient of capacitance is very small. F-C-I Polystyrene capacitors are furnished as standard units

in hermetically sealed metal shells; in bathtub cases with low loss steatite terminals; and in style CP70 metal cans with low loss steatite terminals. Special units, including multi-section blocks are also available to order.

TOLERANCES TO .25% AVAILABLE.

METAL SHELL POLYSTYRENE CAPACITORS

| Part Number | Volts DC | Cap. MFD. | Case Size—Ins. L | Ins. D | List Price |
|-------------|----------|-----------|------------------|--------|------------|
| A4-1-10 | 100 | .01 | 1 | .235 | \$4.00 |
| A4-1-22 | 100 | .022 | 1 | .312 | 4.00 |
| A4-1-33 | 100 | .033 | 1 | .312 | 4.10 |
| A4-1-47 | 100 | .047 | 1 | .400 | 4.15 |
| A4-1-68 | 100 | .068 | 1 | .400 | 4.20 |
| A4-1-100 | 100 | .10 | 1 3/8 | .400 | 4.40 |
| A4-1-220 | 100 | .22 | 1 3/8 | .562 | 4.80 |
| A4-1-330 | 100 | .33 | 1 3/8 | .670 | 5.25 |
| A4-1-470 | 100 | .47 | 1 3/8 | .670 | 5.60 |
| A4-2-10 | 200 | .01 | 1 | .312 | 4.00 |
| A4-2-22 | 200 | .022 | 1 | .400 | 4.10 |
| A4-2-33 | 200 | .033 | 1 | .400 | 4.10 |
| A4-2-47 | 200 | .047 | 1 3/8 | .400 | 4.15 |
| A4-2-68 | 200 | .068 | 1 3/8 | .400 | 4.15 |
| A4-2-100 | 200 | .10 | 1 3/8 | .562 | 4.50 |
| A4-2-220 | 200 | .22 | 1 3/8 | .562 | 5.20 |
| A4-2-330 | 200 | .33 | 1 3/8 | .750 | 5.80 |
| A4-2-470 | 200 | .47 | 1 3/8 | 1.00 | 6.10 |
| A4-4-10 | 400 | .01 | 1 | .312 | 4.00 |
| A4-4-22 | 400 | .022 | 1 | .400 | 4.10 |
| A4-4-33 | 400 | .033 | 1 3/8 | .400 | 4.25 |
| A4-4-47 | 400 | .047 | 1 3/8 | .400 | 4.35 |
| A4-4-68 | 400 | .068 | 1 3/8 | .562 | 4.50 |
| A4-4-100 | 400 | .10 | 1 3/8 | .562 | 4.90 |
| A4-4-220 | 400 | .22 | 1 3/8 | .750 | 5.45 |
| A4-4-330 | 400 | .33 | 1 3/8 | .750 | 6.30 |
| A4-4-470 | 400 | .47 | 1 3/8 | 1.00 | 7.20 |
| A4-6-10 | 600 | .01 | 1 | .400 | 4.00 |
| A4-6-22 | 600 | .022 | 1 3/8 | .562 | 4.25 |
| A4-6-33 | 600 | .033 | 1 3/8 | .562 | 4.25 |
| A4-6-47 | 600 | .047 | 1 3/8 | .670 | 4.50 |
| A4-6-68 | 600 | .068 | 1 3/8 | .670 | 4.80 |
| A4-6-100 | 600 | .10 | 1 3/8 | .670 | 5.10 |
| A4-6-220 | 600 | .22 | 1 3/8 | .750 | 5.45 |
| A4-6-330 | 600 | .33 | 2 3/8 | 1.00 | 6.30 |
| A4-6-470 | 600 | .47 | 2 3/8 | 1.00 | 7.20 |

STYLE CP70 CASED POLYSTYRENE CAPACITORS

| Part Number | Volts DC | Cap. MFD. | Case Size—Ins. L | W | H | List Price |
|-------------|----------|-----------|------------------|-------|-------|------------|
| A2-0-1000 | 50 | 1.0 | 1 3/4 | 1 | 1 5/8 | \$ 8.10 |
| A2-0-2000 | 50 | 2 | 1 3/4 | 1 | 2 1/4 | 11.60 |
| A2-0-4000 | 50 | 4 | 2 1/2 | 1 3/4 | 2 1/4 | 14.90 |
| A2-0-6000 | 50 | 6 | 3 3/4 | 1 1/4 | 2 1/4 | 20.00 |
| A2-0-8000 | 50 | 8 | 3 3/4 | 1 1/4 | 2 1/2 | 23.50 |
| A2-0-10M | 50 | 10 | 3 3/4 | 1 3/4 | 2 1/4 | 27.50 |
| A2-1-500 | 100 | 0.5 | 1 3/4 | 1 | 1 5/8 | 6.00 |
| A2-1-1000 | 100 | 1.0 | 1 3/4 | 1 | 2 1/4 | 9.50 |
| A2-1-2000 | 100 | 2.0 | 2 1/2 | 1 3/4 | 2 1/4 | 13.65 |
| A2-1-4000 | 100 | 4.0 | 3 3/4 | 1 1/4 | 2 1/2 | 17.55 |
| A2-1-6000 | 100 | 6.0 | 3 3/4 | 1 1/4 | 2 1/2 | 23.50 |
| A2-1-8000 | 100 | 8.0 | 3 3/4 | 2 1/4 | 2 1/2 | 27.70 |
| A2-1-10M | 100 | 10.0 | 3 3/4 | 2 1/4 | 3 | 32.30 |
| A2-1-20M | 100 | 20.0 | 3 3/4 | 3 1/8 | 3 1/2 | 46.00 |
| A2-2-250 | 200 | 0.25 | 1 3/4 | 1 | 2 1/4 | 5.40 |
| A2-2-500 | 200 | 0.5 | 1 3/4 | 1 | 3 1/4 | 6.10 |
| A2-2-1000 | 200 | 1.0 | 1 3/4 | 1 | 3 | 9.60 |
| A2-2-2000 | 200 | 2.0 | 2 1/2 | 1 3/8 | 3 | 13.75 |
| A2-2-4000 | 200 | 4.0 | 3 3/4 | 1 1/4 | 3 1/2 | 17.90 |
| A2-2-6000 | 200 | 6.0 | 3 3/4 | 1 1/4 | 3 1/2 | 23.90 |
| A2-2-8000 | 200 | 8.0 | 3 3/4 | 2 1/4 | 3 1/2 | 28.00 |
| A2-2-10M | 200 | 10.0 | 3 3/4 | 3 3/8 | 3 1/2 | 32.60 |
| A2-2-20M | 200 | 20.0 | 4 3/8 | 3 3/4 | 4 | 48.50 |
| A2-4-250 | 400 | 0.25 | 1 3/4 | 1 | 2 1/4 | 5.45 |
| A2-4-500 | 400 | 0.5 | 1 3/4 | 1 | 2 1/2 | 7.20 |
| A2-4-1000 | 400 | 1.0 | 2 1/2 | 1 3/4 | 2 1/2 | 14.50 |
| A2-4-2000 | 400 | 2.0 | 3 3/4 | 1 1/4 | 3 | 21.70 |
| A2-4-4000 | 400 | 4.0 | 3 3/4 | 1 1/4 | 3 1/2 | 34.10 |
| A2-4-6000 | 400 | 6.0 | 3 3/4 | 3 3/8 | 3 | 47.50 |
| A2-4-8000 | 400 | 8.0 | 3 3/4 | 3 3/8 | 5 1/8 | 58.50 |
| A2-4-10M | 400 | 10.0 | 4 3/8 | 3 3/4 | 3 1/2 | 72.00 |
| A2-6-250 | 600 | 0.25 | 1 3/4 | 1 | 2 1/4 | 5.45 |
| A2-6-500 | 600 | 0.5 | 1 3/4 | 1 | 3 1/2 | 7.20 |
| A2-6-1000 | 600 | 1.0 | 2 1/2 | 1 3/4 | 3 1/2 | 14.50 |
| A2-6-2000 | 600 | 2.0 | 3 3/4 | 1 3/4 | 3 | 22.10 |
| A2-6-4000 | 600 | 4.0 | 3 3/4 | 3 3/8 | 4 | 34.60 |
| A2-6-5000 | 600 | 5.0 | 4 3/8 | 3 3/4 | 3 1/2 | 41.65 |

BATHTUB CASED POLYSTYRENE CAPACITORS

| Part Number | Volts DC | Cap. MFD. | Case Size—Ins. L | W | H | List Price |
|-------------|----------|-----------|------------------|-------|-------|------------|
| A3-0-50 | 50 | .05 | 1 1/8 | 1 | 1/2 | \$ 4.35 |
| A3-0-100 | 50 | .10 | 1 1/8 | 1 | 1/2 | 4.50 |
| A3-0-250 | 50 | .25 | 1 1/8 | 1 | 1/2 | 4.65 |
| A3-0-500 | 50 | .50 | 1 1/8 | 1 | 1 | 5.10 |
| A3-0-1000 | 50 | 1.0 | 1 3/4 | 1 | 3/4 | 8.10 |
| A3-1-50 | 100 | .05 | 1 1/8 | 1 | 1/2 | 5.25 |
| A3-1-100 | 100 | .10 | 1 1/8 | 1 | 1/2 | 5.35 |
| A3-1-250 | 100 | .25 | 1 1/8 | 1 | 1 | 5.45 |
| A3-1-500 | 100 | .50 | 1 3/4 | 1 | 3/4 | 6.00 |
| A3-1-1000 | 100 | 1.0 | 1 3/4 | 1 | 1 | 9.50 |
| A3-2-50 | 200 | .10 | 1 3/4 | 1 | 3/4 | 5.35 |
| A3-2-100 | 200 | .05 | 1 3/4 | 1 | 3/4 | 5.25 |
| A3-2-250 | 200 | .25 | 2 | 1 3/4 | 7/8 | 5.45 |
| A3-2-500 | 200 | .50 | 2 | 1 3/4 | 7/8 | 6.10 |
| A3-2-1000 | 200 | 1.0 | 2 | 2 | 1 1/4 | 9.60 |
| A3-4-10 | 400 | 1.0 | 1 3/4 | 1 | 3/4 | 5.15 |
| A3-4-20 | 400 | .02 | 1 3/4 | 1 | 3/4 | 5.15 |
| A3-4-50 | 400 | .05 | 1 3/4 | 1 | 3/4 | 5.25 |
| A3-4-100 | 400 | .10 | 1 3/4 | 1 | 3/4 | 5.35 |
| A3-4-250 | 400 | .25 | 2 | 1 3/4 | 7/8 | 5.45 |
| A3-4-500 | 400 | .50 | 2 | 1 3/4 | 7/8 | 7.20 |
| A3-4-1000 | 400 | 1.0 | 2 | 2 | 1 1/4 | 14.50 |
| A3-6-10 | 600 | .01 | 1 3/4 | 1 | 3/4 | 5.15 |
| A3-6-20 | 600 | .02 | 1 3/4 | 1 | 3/4 | 5.15 |
| A3-6-50 | 600 | .05 | 1 3/4 | 1 | 3/4 | 5.25 |
| A3-6-100 | 600 | .10 | 1 3/4 | 1 | 1 | 5.35 |
| A3-6-250 | 600 | .25 | 2 | 1 3/4 | 7/8 | 5.45 |
| A3-6-500 | 600 | .50 | 2 | 2 | 1 1/4 | 7.20 |

F-C-I TEFLON CAPACITORS

F-C-I Teflon capacitors, available in all capacity and voltage ranges, are essentially identical to polystyrene capacitors in their electrical characteristics, with one important difference—Teflon capacitors may be operated at temperatures up to 200°C, whereas polystyrene capacitors have a maxi-

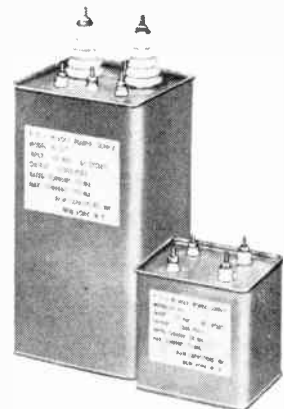
mum operating temperature of 85°C. Furthermore, the insulation resistance of Teflon capacitors is many times that of polystyrene at elevated temperatures.

SOLID STATE HIGH VOLTAGE PACKAGED POWER SUPPLIES

Completely enclosed and hermetically sealed power supplies operating on 115 volt, 60 or 400 cycle, AC input. Output ranges from 2,000 vdc to 50,000 vdc. Standard sizes as follows: Non-standard supplies available upon request.

| PART No. | OUTPUT VOLTAGE | RATED CURRENT OUTPUT | MAX. CURRENT OUTPUT |
|----------|----------------|----------------------|---------------------|
| PS—25 | 2 KVDC | 5 MA | 7.5 MA |
| PS—55 | 5 KVDC | 5 MA | 7.5 MA |
| PS—125 | 12 KVDC | 1 MA | 1.75 MA |
| PS—155 | 15 KVDC | 1 MA | 1.75 MA |
| PS—205 | 20 KVDC | 1 MA | 1.75 MA |
| PS—305 | 30 KVDC | 1 MA | 1.75 MA |
| PS—505 | 50 KVDC | 1 MA | 1.75 MA |

® Du Pont Trade Mark



FILM CAPACITORS, INC.

F-C-I HIGH VOLTAGE CAPACITORS

F-C-I Type D-6 capacitors employ a newly developed plastic film, plus Kraft paper dielectric which, with suitable processing, produces capacitors which are better, smaller and cheaper than could ever be produced before. F-C-I Type D-6 capacitors are suitable for practically every type of high voltage D-C application. Type D-6 capacitors can be used up to 125°C with proper derating. With

these capacitors available, it is no longer necessary to stock groups of units each outstanding in only one property. F-C-I Type D-6 capacitors are furnished in steatite tubes with hermetically sealed metal end caps and either threaded studs or wire leads. Sizes not listed here can be furnished upon request. Ask for our quotation.

FURNISHED IN STEATITE CASES—NO BREAKAGE...NO LEAKAGE

| Cat. No. | Capacity MFD. | Working Volts DC | Dimensions Dia. | L | List Price | Cat. No. | Capacity MFD. | Working Volts DC | Dimensions Dia. | L | List Price |
|-----------|---------------|------------------|-----------------|--------|------------|-----------|---------------|------------------|-----------------|--------|------------|
| D6-6-10 | .01 | 600 | 1/2 | 1 3/8 | \$ 3.10 | D6-100-1 | .001 | 10 KV | 5/8 | 1 1/4 | \$ 7.20 |
| D6-6-20 | .02 | 600 | 1/2 | 1 3/8 | 3.10 | D6-100-2 | .002 | 10 KV | 5/8 | 1 1/4 | 7.40 |
| D6-6-50 | .05 | 600 | 1/2 | 1 3/8 | 3.20 | D6-100-5 | .005 | 10 KV | 5/8 | 2 9/16 | 8.50 |
| D6-6-100 | .10 | 600 | 1/2 | 1 3/8 | 3.30 | D6-100-10 | .01 | 10 KV | 7/8 | 2 9/16 | 9.20 |
| D6-6-250 | .25 | 600 | 1/2 | 2 3/8 | 3.50 | D6-100-20 | .02 | 10 KV | 1 | 2 9/16 | 11.40 |
| D6-6-500 | .50 | 600 | 1 | 2 3/8 | 3.90 | D6-100-50 | .05 | 10 KV | 1 1/2 | 2 9/16 | 14.60 |
| D6-6-1000 | 1.00 | 600 | 1 1/4 | 2 3/8 | 4.20 | D6-150-1 | .001 | 15 KV | 5/8 | 2 3/8 | 13.80 |
| D6-10-10 | .01 | 1000 | 1/2 | 1 3/8 | 3.20 | D6-150-2 | .002 | 15 KV | 7/8 | 2 3/8 | 14.60 |
| D6-10-20 | .02 | 1000 | 1/2 | 1 3/8 | 3.20 | D6-150-5 | .005 | 15 KV | 7/8 | 2 9/16 | 17.00 |
| D6-10-50 | .05 | 1000 | 1/2 | 1 3/8 | 3.20 | D6-150-10 | .01 | 15 KV | 1 1/4 | 2 9/16 | 20.00 |
| D6-10-100 | .10 | 1000 | 1/2 | 2 3/8 | 3.40 | D6-150-20 | .02 | 15 KV | 1 1/4 | 4 3/4 | 22.00 |
| D6-10-250 | .25 | 1000 | 1/2 | 2 3/8 | 3.40 | D6-150-50 | .05 | 15 KV | 1 1/2 | 4 3/4 | 26.00 |
| D6-10-500 | .50 | 1000 | 1 | 2 3/8 | 3.70 | D6-200-05 | .0005 | 20 KV | 5/8 | 2 3/8 | 18.00 |
| D6-20-2 | .002 | 2000 | 1/2 | 1 3/8 | 3.50 | D6-200-1 | .001 | 20 KV | 3/4 | 2 3/8 | 19.00 |
| D6-20-5 | .005 | 2000 | 1/2 | 1 3/8 | 3.50 | D6-200-2 | .002 | 20 KV | 3/4 | 2 9/16 | 21.00 |
| D6-20-10 | .01 | 2000 | 1/2 | 1 3/8 | 3.50 | D6-200-5 | .005 | 20 KV | 1 | 2 9/16 | 22.50 |
| D6-20-20 | .02 | 2000 | 1/2 | 1 3/8 | 3.60 | D6-200-10 | .01 | 20 KV | 1 1/2 | 2 9/16 | 24.00 |
| D6-20-50 | .05 | 2000 | 1/2 | 1 3/8 | 3.90 | D6-200-20 | .02 | 20 KV | 1 1/2 | 4 3/4 | 27.00 |
| D6-20-100 | .10 | 2000 | 1/2 | 2 3/8 | 4.00 | D6-300-02 | .0002 | 30 KV | 5/8 | 3 | 21.00 |
| D6-20-250 | .25 | 2000 | 1 | 2 3/8 | 4.50 | D6-300-05 | .0005 | 30 KV | 5/8 | 3 | 21.00 |
| D6-20-500 | .50 | 2000 | 1 1/4 | 2 3/8 | 5.20 | D6-300-1 | .001 | 30 KV | 7/8 | 3 | 23.50 |
| D6-30-2 | .002 | 3000 | 1/2 | 1 3/8 | 4.30 | D6-300-2 | .002 | 30 KV | 3/4 | 4 3/4 | 26.00 |
| D6-30-5 | .005 | 3000 | 1/2 | 1 3/8 | 4.30 | D6-300-5 | .005 | 30 KV | 1 1/4 | 4 3/4 | 28.00 |
| D6-30-10 | .01 | 3000 | 1/2 | 1 3/8 | 4.50 | D6-300-10 | .01 | 30 KV | 1 1/4 | 6 7/8 | 35.00 |
| D6-30-20 | .02 | 3000 | 1/2 | 1 3/8 | 5.10 | D6-400-01 | .0001 | 40 KV | 5/8 | 3 | 22.50 |
| D6-30-50 | .05 | 3000 | 1/2 | 2 3/8 | 5.50 | D6-400-02 | .0002 | 40 KV | 5/8 | 3 | 22.50 |
| D6-30-100 | .10 | 3000 | 1/2 | 2 3/8 | 6.00 | D6-400-05 | .0005 | 40 KV | 3/4 | 3 | 22.50 |
| D6-30-250 | .25 | 3000 | 1 1/4 | 2 3/8 | 6.60 | D6-400-1 | .001 | 40 KV | 3/4 | 4 3/4 | 26.00 |
| D6-50-5 | .005 | 5 KV | 5/8 | 1 1/4 | 6.50 | D6-400-2 | .002 | 40 KV | 1 | 4 3/4 | 28.00 |
| D6-50-10 | .01 | 5 KV | 3/4 | 1 1/4 | 6.80 | D6-400-5 | .005 | 40 KV | 1 1/2 | 4 3/4 | 33.00 |
| D6-50-20 | .02 | 5 KV | 3/4 | 2 9/16 | 7.20 | D6-500-01 | .0001 | 50 KV | 5/8 | 4 1/4 | 23.50 |
| D6-50-50 | .05 | 5 KV | 7/8 | 2 9/16 | 7.60 | D6-500-02 | .0002 | 50 KV | 5/8 | 4 1/4 | 23.50 |
| D6-50-100 | .10 | 5 KV | 1 1/4 | 2 9/16 | 8.50 | D6-500-05 | .0005 | 50 KV | 3/4 | 4 1/4 | 24.50 |
| D6-75-1 | .001 | 7 1/2 KV | 5/8 | 1 1/4 | 6.50 | D6-500-1 | .001 | 50 KV | 3/4 | 6 7/8 | 28.00 |
| D6-75-2 | .002 | 7 1/2 KV | 5/8 | 1 1/4 | 6.80 | D6-500-2 | .002 | 50 KV | 7/8 | 6 7/8 | 31.50 |
| D6-75-5 | .005 | 7 1/2 KV | 3/4 | 1 1/4 | 7.00 | D6-500-5 | .005 | 50 KV | 1 1/4 | 6 7/8 | 36.00 |
| D6-75-10 | .01 | 7 1/2 KV | 3/4 | 2 9/16 | 7.50 | D6-600-01 | .0001 | 60 KV | 5/8 | 4 1/4 | 24.50 |
| D6-75-20 | .02 | 7 1/2 KV | 7/8 | 2 9/16 | 8.60 | D6-600-02 | .0002 | 60 KV | 5/8 | 4 1/4 | 24.50 |
| D6-75-50 | .05 | 7 1/2 KV | 1 1/4 | 2 9/16 | 11.00 | D6-600-05 | .0005 | 60 KV | 7/8 | 4 1/4 | 28.00 |
| D6-75-100 | .10 | 7 1/2 KV | 1 1/2 | 2 9/16 | 12.50 | D6-600-1 | .001 | 60 KV | 7/8 | 6 7/8 | 34.00 |
| | | | | | | D6-600-2 | .002 | 60 KV | 1 1/4 | 6 7/8 | 36.50 |
| | | | | | | D6-600-5 | .005 | 60 KV | 1 1/4 | 13 | 41.50 |

FCI TYPE MMS METALLIZED MYLAR CAPACITORS (Glass Button Seal Terminals with Metal Shells)

| WVDC | Catalog Number | Cap. Mfd. | Dia. x Length in inches | WVDC | Catalog Number | Cap. Mfd. | Dia. x Length in inches | WVDC | Catalog Number | Cap. Mfd. | Dia. x Length in inches |
|------|----------------|-----------|-------------------------|------|----------------|-----------|-------------------------|------|----------------|-----------|-------------------------|
| | MMS 2-01 | .010 | .235 x 3/4 | | MMS 4-01 | .010 | .312 x 7/8 | | MMS 6-01 | .010 | .312 x 7/8 |
| | MMS 2-022 | .022 | .235 x 3/4 | | MMS 4-022 | .022 | .312 x 7/8 | | MMS 6-022 | .022 | .312 x 1 1/8 |
| | MMS 2-033 | .033 | .235 x 3/4 | | MMS 4-033 | .033 | .312 x 1 1/8 | | MMS 6-033 | .033 | .312 x 1 1/8 |
| | MMS 2-047 | .047 | .312 x 7/8 | | MMS 4-047 | .047 | .400 x 1 1/8 | | MMS 6-047 | .047 | .400 x 1 1/8 |
| | MMS 2-1 | .1 | .312 x 7/8 | | MMS 4-1 | .1 | .500 x 1 1/8 | | MMS 6-1 | .1 | .500 x 1 1/8 |
| | MMS 2-22 | .22 | .400 x 1 1/8 | | MMS 4-22 | .22 | .562 x 1 1/8 | | MMS 6-22 | .22 | .562 x 1 1/8 |
| | MMS 2-33 | .33 | .400 x 1 1/8 | | MMS 4-33 | .33 | .562 x 1 1/8 | | MMS 6-33 | .33 | .562 x 1 1/8 |
| | MMS 2-47 | .47 | .500 x 1 1/8 | | MMS 4-47 | .47 | .670 x 1 1/8 | | MMS 6-47 | .47 | .670 x 1 1/8 |
| 200 | MMS 2-1.M | 1.0 | .562 x 1 1/8 | 400 | MMS 4-1.M | 1.0 | .750 x 1 1/8 | 600 | MMS 6-1.M | 1.0 | 1.00 x 1 1/8 |
| | MMS 2-1.5M | 1.5 | .562 x 1 1/8 | | MMS 4-1.5M | 1.5 | 1.00 x 1 1/8 | | MMS 6-1.5M | 1.5 | 1.00 x 1 1/8 |
| | MMS 2-2.M | 2.0 | .670 x 1 1/8 | | MMS 4-2.M | 2.0 | 1.00 x 1 1/8 | | MMS 6-2.M | 2.0 | 1.00 x 2 1/8 |
| | MMS 2-3.M | 3.0 | .670 x 1 1/8 | | MMS 4-3.M | 3.0 | 1.00 x 2 1/8 | | MMS 6-2.5M | 2.5 | 1.00 x 2 1/8 |
| | MMS 2-4.M | 4.0 | .750 x 1 1/8 | | | | | | | | |
| | MMS 2-5.M | 5.0 | 1.00 x 1 1/8 | | | | | | | | |
| | MMS 2-6.M | 6.0 | 1.00 x 1 1/8 | | | | | | | | |
| | MMS 2-8.M | 8.0 | 1.00 x 1 1/8 | | | | | | | | |
| | MMS 2-10.M | 10.0 | 1.00 x 2 1/8 | | | | | | | | |
| | MMS 2-12.M | 12.0 | 1.00 x 2 1/8 | | | | | | | | |

* Standard tolerance plus or minus 20%. Tolerances to 1% are also available.

* For flat mylar wrap types specify MMMF.

* For round mylar wrap types specify MMMR.

FILM CAPACITORS, INC.

MINIATURE MYLAR® CAPACITORS HERMETICALLY SEALED — CLOSE TOLERANCE

F-C-1 miniature "Mylar" capacitors are furnished in metal shells hermetically sealed with metal-steatite compression type seals. The capacitor elements are non-inductively wound, and wire leads are carefully soldered to the swaged, extended foils to minimize self-

inductance, power factor and noise. The Mylar dielectric capacitors are characterized by high insulation resistance (10⁶ megohm-microfarads at 20°C); 0.5% power factor; and a temperature coefficient of +500 PPM/°C.

| PART No. | CAP. MFD. | SIZE | | LIST PRICE |
|-----------------|-----------|-------|------|------------|
| | | L | D | |
| 100 VWDC | | | | |
| HD4-1-10 | .01 | 1 | .235 | \$2.25 |
| HD4-1-15 | .015 | 1 | .235 | 2.25 |
| HD4-1-22 | .022 | 1 | .235 | 2.25 |
| HD4-1-33 | .033 | 1 | .312 | 2.25 |
| HD4-1-47 | .047 | 1 | .312 | 2.25 |
| HD4-1-68 | .068 | 1 | .400 | 2.35 |
| HD4-1-100 | .10 | 1 | .400 | 2.40 |
| HD4-1-220 | .22 | 1 3/8 | .400 | 2.60 |
| HD4-1-330 | .33 | 1 3/8 | .562 | 2.65 |
| HD4-1-470 | .47 | 1 3/8 | .562 | 2.75 |
| HD4-1-1000 | 1.0 | 1 3/8 | .670 | 3.40 |
| 200 VWDC | | | | |
| HD4-2-10 | .01 | 1 | .235 | 2.25 |
| HD4-2-15 | .015 | 1 | .235 | 2.25 |
| HD4-2-22 | .022 | 1 | .312 | 2.25 |
| HD4-2-33 | .033 | 1 | .312 | 2.25 |
| HD4-2-47 | .047 | 1 | .400 | 2.35 |
| HD4-2-68 | .068 | 1 | .400 | 2.40 |
| HD4-2-100 | .10 | 1 3/8 | .400 | 2.55 |
| HD4-2-220 | .22 | 1 3/8 | .562 | 2.65 |
| HD4-2-330 | .33 | 1 3/8 | .670 | 2.70 |
| HD4-2-470 | .47 | 1 3/8 | .670 | 4.10 |
| HD4-2-1000 | 1.0 | 1 3/8 | 1.00 | 4.70 |

| PART No. | CAP. MFD. | SIZE | | LIST PRICE |
|-----------------|-----------|-------|------|------------|
| | | L | D | |
| 400 VWDC | | | | |
| HD4-4-10 | .01 | 1 | .312 | 2.90 |
| HD4-4-15 | .015 | 1 | .312 | 2.90 |
| HD4-4-22 | .022 | 1 | .400 | 3.00 |
| HD4-4-33 | .033 | 1 | .400 | 3.05 |
| HD4-4-47 | .047 | 1 3/8 | .400 | 3.05 |
| HD4-4-68 | .068 | 1 3/8 | .400 | 3.40 |
| HD4-4-100 | .10 | 1 3/8 | .562 | 3.45 |
| HD4-4-220 | .22 | 1 3/8 | .670 | 4.00 |
| HD4-4-330 | .33 | 1 3/8 | .750 | 4.15 |
| HD4-4-470 | .47 | 1 3/8 | 1.00 | 4.50 |
| HD4-4-1000 | 1.0 | 2 3/8 | 1.00 | 5.70 |
| 600 VWDC | | | | |
| HD4-6-10 | .01 | 1 | .400 | 3.65 |
| HD4-6-15 | .015 | 1 | .400 | 3.70 |
| HD4-6-22 | .022 | 1 3/8 | .400 | 3.75 |
| HD4-6-33 | .033 | 1 3/8 | .400 | 3.80 |
| HD4-6-47 | .047 | 1 3/8 | .562 | 3.85 |
| HD4-6-68 | .068 | 1 3/8 | .562 | 3.90 |
| HD4-6-100 | .10 | 1 3/8 | .670 | 4.00 |
| HD4-6-220 | .22 | 1 3/8 | 1.00 | 5.00 |
| HD4-6-330 | .33 | 1 3/8 | 1.00 | 6.00 |
| HD4-6-470 | .47 | 2 3/8 | 1.00 | 7.00 |

The capacitors listed above are suitable for continuous operation at 125° C without derating. For 85° C operation, 100 volt series HD capacitors may be operated at 200 volts; 200 volt capacitors at 400 volts; 400 volt capacitors at 600 volts; and 600 volt capacitors at 1000 volts. To correctly designate 85° C capacitors, omit the letter "H" in the part number, and correct the single number standing for the voltage rating.

Prices listed above are for ±5% tolerance. For ±2% tolerance, add 20% and for ±1% tolerance, add 50% to these prices. These capacitors are also available in ceramic shells with epoxy resin end fill. Write for prices.

We are set up to produce these capacitors in any quantity to any odd value of capacitance at close tolerance for manufacturers of filter networks, R-C networks and the like. Write for information.

HIGH CAPACITANCE MYLAR® CAPACITORS HERMETICALLY SEALED — HIGH INSULATION RESISTANCE

F-C-1 Series D-2 capacitors are Mylar dielectric capacitors which possess extremely high insulation resistance, together with good power factor and dielectric absorption. The insulation resistance runs well over 10⁶ megohm-microfarads at room temperature, even for the highest values of capacitance. The power factor and the dielectric absorption are both on the order of 0.5%. These proper-

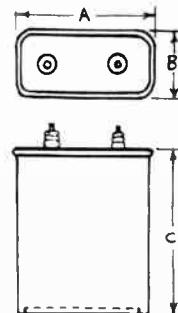
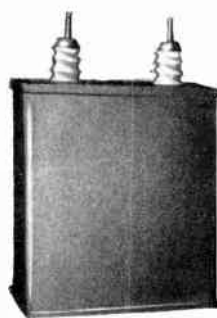
ties make Series D-2 capacitors extremely useful in computers of moderate precision, in timing circuits, and similar types of circuitry. Standard tolerance is ±10%, and closer tolerances are available on order. (Case sizes indicated below are in inches.) (D3 indicates bathtub case and D2 CP70 cases.)

| CAP. MFD. | 100 VWDC | | | 200 VWDC | | | 300 VWDC | | | 400 VWDC | | | 600 VWDC | | |
|------------|-------------|-------|--------------|-------------|-------|--------------|-------------|-------|--------------|-------------|-------|--------------|-------------|-------|--------------|
| | CASE SIZE L | W | H LIST PRICE | CASE SIZE L | W | H LIST PRICE | CASE SIZE L | W | H LIST PRICE | CASE SIZE L | W | H LIST PRICE | CASE SIZE L | W | H LIST PRICE |
| 0.5 CAT # | 1 3/4 | 1 | 3/4 \$ 3.00 | 1 3/4 | 1 | 3/4 \$ 3.00 | 1 3/4 | 1 | 3/4 \$ 3.20 | 1 3/4 | 1 | 3/4 \$ 3.38 | 1 3/4 | 1 | 3/4 \$ 3.38 |
| 1.0 CAT # | 1 3/4 | 1 | 3/4 3.12 | 1 3/4 | 1 | 1 3/4 3.12 | 1 3/4 | 1 | 1 3/8 4.95 | 1 3/4 | 1 | 2 1/4 5.37 | 1 3/4 | 1 | 2 3/4 5.50 |
| 2.0 CAT # | 1 3/4 | 1 | 1 4.00 | 1 3/4 | 1 | 1 3/8 5.12 | 1 3/4 | 1 | 2 1/4 6.35 | 1 3/4 | 1 | 3 1/4 6.60 | 2 1/2 | 1 1/4 | 3 1/2 7.60 |
| 5.0 CAT # | 1 3/4 | 1 | 2 3/4 6.35 | 1 3/4 | 1 | 3 1/4 7.00 | 2 1/2 | 1 1/4 | 3 1/2 9.50 | 3 3/4 | 1 1/4 | 2 1/2 11.25 | 3 3/4 | 1 1/4 | 5 11.25 |
| 10.0 CAT # | 2 1/2 | 1 1/4 | 3 1/2 11.00 | 2 1/2 | 1 1/4 | 3 1/2 11.60 | 3 3/4 | 1 3/4 | 3 1/4 17.75 | 3 3/4 | 1 3/4 | 4 19.75 | 3 3/4 | 1 3/4 | 5 24.70 |
| 20.0 CAT # | 3 3/4 | 1 3/4 | 2 1/2 18.80 | 3 3/4 | 1 3/4 | 3 1/4 20.30 | 4 3/8 | 3 3/4 | 3 3/4 29.40 | 4 3/8 | 3 3/4 | 4 32.50 | 4 3/8 | 3 3/4 | 4 1/2 42.50 |
| 25.0 CAT # | 3 3/4 | 1 3/4 | 3 1/4 22.20 | 3 3/4 | 1 3/4 | 4 23.70 | 4 3/8 | 3 3/4 | 3 1/2 36.10 | 4 3/8 | 3 3/4 | 4 39.00 | 4 3/8 | 3 3/4 | 5 51.50 |

FILM CAPACITORS, INC.

HIGH VOLTAGE TYPE KM-2 CAPACITORS — 85 C OPERATION WITH SOLDER-SEAL CERAMIC BUSHINGS

F-C-1 type KM-2 capacitors have been designed specifically to meet the need for smaller, more reliable capacitors that will withstand the severe operating conditions encountered in military and industrial electronic equipment. The dielectric employed is a combination of synthetic Polyester film and the finest grade capacitor tissue. Capacitor cases are of CP70 rectangular construction. Units will meet the requirements of proposed specification MIL-C-19978. Terminals are of the solder seal ceramic type with screw bolt terminations for easy connections and true hermetic sealing. Capacity tolerance is plus or minus 10% with an insulation resistance of 20,000 megohm microfarads. Specify type KMH-2 for operating temperatures up to 125°C. Case sizes for the KMH-2 and engineering data for both series are available upon request. CP07 mounting brackets are available for all sizes.

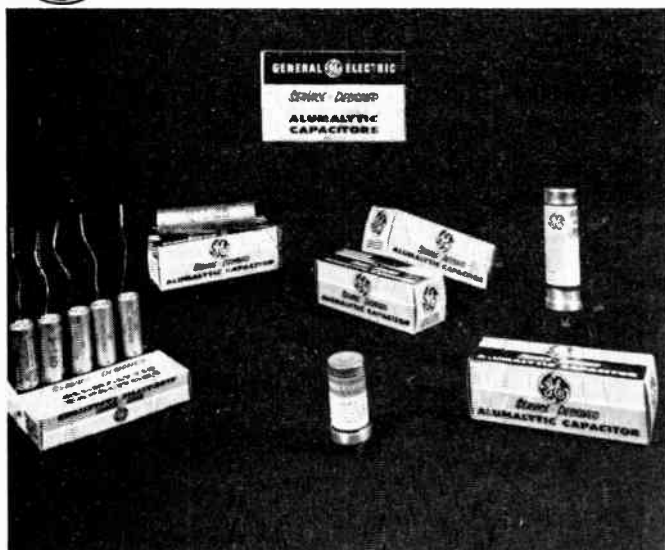


| Cat. No. | μf | A | B | C |
|-------------------------|------|---------------------------------|--------------------------------|-------------------------------|
| 400 W. V. D. C. | | | | |
| KM-2-4-500 | 0.5 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 1 ⁵ / ₈ |
| KM-2-4-1M | 1.0 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 1 ⁵ / ₈ |
| KM-2-4-2M | 2.0 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 2 ¹ / ₄ |
| KM-2-4-4M | 4.0 | 2 ¹ / ₂ | 1 ³ / ₁₆ | 2 ⁷ / ₈ |
| KM-2-4-6M | 6.0 | 2 ¹ / ₂ | 1 ³ / ₁₆ | 4 ³ / ₄ |
| KM-2-4-8M | 8.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 4 ¹ / ₄ |
| KM-2-4-10M | 10.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 4 ³ / ₄ |
| KM-2-4-12M | 12.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ³ / ₈ |
| KM-2-4-15M | 15.0 | 3 ³ / ₄ | 1 ³ / ₄ | 4 ³ / ₄ |
| 600 W. V. D. C. | | | | |
| KM-2-6-500 | 0.5 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 1 ⁵ / ₈ |
| KM-2-6-1M | 1.0 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 2 ¹ / ₄ |
| KM-2-6-2M | 2.0 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 2 ⁷ / ₈ |
| KM-2-6-4M | 4.0 | 2 ¹ / ₂ | 1 ³ / ₁₆ | 3 ¹ / ₂ |
| KM-2-6-6M | 6.0 | 2 ¹ / ₂ | 1 ³ / ₁₆ | 4 ³ / ₄ |
| KM-2-6-8M | 8.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ⁷ / ₈ |
| KM-2-6-10M | 10.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 4 ³ / ₄ |
| KM-2-6-12M | 12.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 3 ³ / ₈ |
| KM-2-6-15M | 15.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 4 ³ / ₄ |
| 1000 W. V. D. C. | | | | |
| KM-2-10-500 | 0.5 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 1 ⁵ / ₈ |
| KM-2-10-1M | 1.0 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 2 ¹ / ₄ |
| KM-2-10-2M | 2.0 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 3 ⁷ / ₈ |
| KM-2-10-4M | 4.0 | 2 ¹ / ₂ | 1 ³ / ₁₆ | 4 ³ / ₄ |
| KM-2-10-6M | 6.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 4 ³ / ₄ |
| KM-2-10-8M | 8.0 | 3 ³ / ₄ | 1 ³ / ₄ | 3 ⁷ / ₈ |
| KM-2-10-10M | 10.0 | 3 ³ / ₄ | 1 ³ / ₄ | 4 ³ / ₄ |
| KM-2-10-12M | 12.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 4 ¹ / ₂ |
| KM-2-10-15M | 15.0 | 3 ³ / ₄ | 2 ¹ / ₂ | 4 ³ / ₄ |
| 1500 W. V. D. C. | | | | |
| KM-2-15-100 | 0.1 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 1 ⁵ / ₈ |
| KM-2-15-250 | 0.25 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 1 ⁵ / ₈ |
| KM-2-15-500 | 0.5 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 2 ¹ / ₄ |
| KM-2-15-1M | 1.0 | 1 ¹³ / ₁₆ | 1 ¹ / ₁₆ | 3 ⁷ / ₈ |
| KM-2-15-2M | 2.0 | 2 ¹ / ₂ | 1 ³ / ₁₆ | 4 ³ / ₄ |
| KM-2-15-4M | 4.0 | 3 ³ / ₄ | 1 ³ / ₄ | 4 ³ / ₄ |
| KM-2-15-6M | 6.0 | 3 ³ / ₄ | 3 ³ / ₁₆ | 4 ¹ / ₂ |
| KM-2-15-8M | 8.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 4 ³ / ₈ |
| KM-2-15-10M | 10.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 5 ¹ / ₂ |
| KM-2-15-12M | 12.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 6 |
| KM-2-15-15M | 15.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 8 ¹ / ₂ |
| 2000 W. V. D. C. | | | | |
| KM-2-20-2M | 2.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 4 ³ / ₄ |
| KM-2-20-4M | 4.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 4 ³ / ₄ |
| KM-2-20-6M | 6.0 | 3 ³ / ₄ | 3 ³ / ₁₆ | 5 ¹ / ₈ |
| KM-2-20-8M | 8.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 4 ³ / ₈ |
| KM-2-20-10M | 10.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 5 ¹ / ₂ |
| KM-2-20-12M | 12.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 6 |
| KM-2-20-15M | 15.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 9 ⁵ / ₈ |

| Cat. No. | μf | A | B | C |
|---------------------------|------|--------------------------------|--------------------------------|-------------------------------|
| 2500 W. V. D. C. | | | | |
| KM-2-25-2M | 2.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 4 ³ / ₄ |
| KM-2-25-4M | 4.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 5 ¹ / ₈ |
| KM-2-25-6M | 6.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 4 ³ / ₈ |
| KM-2-25-8M | 8.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 5 ¹ / ₂ |
| KM-2-25-10M | 10.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 6 ¹ / ₂ |
| KM-2-25-12M | 12.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 9 ⁵ / ₈ |
| 3000 W. V. D. C. | | | | |
| KM-2-30-1M | 1.0 | 3 ³ / ₄ | 1 ³ / ₄ | 3 ¹ / ₄ |
| KM-2-30-2M | 2.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 3 ⁷ / ₈ |
| KM-2-30-4M | 4.0 | 3 ³ / ₄ | 3 ³ / ₁₆ | 5 ¹ / ₂ |
| KM-2-30-6M | 6.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 5 ¹ / ₂ |
| 4000 W. V. D. C. | | | | |
| KM-2-40-1M | 1.0 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-40-2M | 2.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 5 ¹ / ₈ |
| KM-2-40-4M | 4.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 5 ¹ / ₂ |
| 5000 W. V. D. C. | | | | |
| KM-2-50-100 | 0.1 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-50-250 | 0.25 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-50-500 | 0.5 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-50-1M | 1.0 | 3 ³ / ₄ | 1 ³ / ₄ | 3 ⁷ / ₈ |
| KM-2-50-2M | 2.0 | 3 ³ / ₄ | 2 ¹ / ₂ | 5 ³ / ₈ |
| 6000 W. V. D. C. | | | | |
| KM-2-60-100 | 0.1 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-60-250 | 0.25 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-60-500 | 0.5 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-60-1M | 1.0 | 3 ³ / ₄ | 2 ¹ / ₄ | 4 ³ / ₄ |
| KM-2-60-2M | 2.0 | 3 ³ / ₄ | 3 ³ / ₁₆ | 5 ¹ / ₈ |
| 7500 W. V. D. C. | | | | |
| KM-2-75-100 | 0.1 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₄ |
| KM-2-75-250 | 0.25 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ⁷ / ₈ |
| KM-2-75-500 | 0.5 | 3 ³ / ₄ | 2 ¹ / ₄ | 4 ¹ / ₂ |
| KM-2-75-1M | 1.0 | 3 ³ / ₄ | 3 ³ / ₁₆ | 5 ¹ / ₈ |
| KM-2-75-2M | 2.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 8 ¹ / ₂ |
| 10,000 W. V. D. C. | | | | |
| KM-2-100-100 | 0.1 | 3 ³ / ₄ | 1 ¹ / ₄ | 3 ¹ / ₂ |
| KM-2-100-250 | 0.25 | 3 ³ / ₄ | 2 ¹ / ₄ | 3 ⁷ / ₈ |
| KM-2-100-500 | 0.5 | 3 ³ / ₄ | 2 ¹ / ₂ | 5 ³ / ₄ |
| KM-2-100-1M | 1.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 6 |
| 12,500 W. V. D. C. | | | | |
| KM-2-125-100 | 0.1 | 3 ³ / ₄ | 2 ¹ / ₄ | 3 ³ / ₈ |
| KM-2-125-250 | 0.25 | 3 ³ / ₄ | 2 ¹ / ₄ | 4 ¹ / ₂ |
| KM-2-125-500 | 0.5 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 5 ¹ / ₂ |
| KM-2-125-1M | 1.0 | 4 ⁹ / ₁₆ | 3 ³ / ₄ | 8 ¹ / ₂ |



ELECTRONICS service-designed capacitors



General Electric has taken the confusion out of the capacitor business! With General Electric's new line of Service-Designed Alumalytic® Capacitors, you will now be able to make all your electrolytic capacitor replacements with one-fourth as many types. In fact, you'll be able to handle over 70% of your electrolytic capacitor replacement needs with just 20 G-E types!

Fewer G-E types are needed to meet your requirements because every G-E capacitor meets not just one, but a range of capacitance and voltage requirements. This extended-range approach reduces the total number of types in much the same way you are already doing it in the rectifier field when, for instance, you use a 500 ma unit to replace units rated at 500 ma or less.

As a result of the greatly reduced number of types necessary to meet your capacitor replacement needs, you can:

SIMPLIFY YOUR PURCHASING PROBLEMS. You can now replace any aluminum electrolytic capacitor used by any radio and TV manufacturer in the past ten years with one-fourth as many types. Ordering is faster and easier — because A FEW WILL DO!

MEET MOST NEEDS WITH A SMALL STOCK. If you wish, General Electric can suggest a stock list of 20 or more types which will meet 70% or more of your replacement needs. If you presently stock a large number of aluminum electrolytic capacitors, you will be able to reduce your inventory and still meet most of your needs. If you do not presently stock capacitors, you will now be able to carry a small assortment and save on single-unit ordering and pickup costs — because A FEW WILL DO!

ELECTROLYTIC TUBULARS (Type QT)

Application: General Electric Type QT electrolytic capacitors are designed for all television and other electronic applications requiring high reliability and long life. Each capacitor listed can be used as a replacement in applications requiring a capacitance value at or between the two capacitance values shown and provided the application voltage does not exceed the capacitor's rated voltage.

The larger bold type capacitance value is the absolute value or the value normally shown on ordinary capacitors.

Example: The rating of QT1-10 (15-20 mfd up to 475 VDC) means that this is a 20 mfd capacitor which can replace capacitors rated 15, 16, 17, 18, 19 or 20 mfd at any voltage up to and including 475 VDC, and still be well within approved limitations.

SINGLE-SECTION TUBULARS

| Catalog No. | Capacitance | Voltage | *Size | List Price | Catalog No. | Capacitance | Voltage | *Size | List Price |
|-------------|-------------|------------|---------|------------|-------------|----------------|-------------|-----------|------------|
| QT1-1 | 2 mfd. | Up to 450V | ½ X 1 ¼ | \$1.15 | QT1-18 | 50-60 mfd. | Up to 350V | 1 X 2 ¾ | \$1.95 |
| QT1-2 | 3-4 mfd. | Up to 300V | ½ X 1 ¾ | 1.25 | QT1-19 | 50-60 mfd. | Up to 450V | 1 X 2 ¾ | 2.35 |
| QT1-2.1 | 3-4 mfd. | Up to 450V | ¾ X 1 ¼ | 1.15 | QT1-20 | 60-80 mfd. | Up to 150V | 1 X 1 ¼ | 1.60 |
| QT1-3 | 3-5 mfd. | Up to 150V | ½ X 1 ¾ | 1.00 | QT1-21 | 60-80 mfd. | Up to 450V | 1 X 3 ¼ | 2.80 |
| QT1-4 | 5-8 mfd. | Up to 450V | ¾ X 1 ¼ | 1.25 | QT1-22 | 50-100 mfd. | Up to 15V | ¾ X 1 ¼ | 1.25 |
| QT1-5 | 8-10 mfd. | Up to 150V | ½ X 1 ¾ | 1.05 | QT1-23 | 50-100 mfd. | Up to 50V | ¾ X 1 ¼ | 1.40 |
| QT1-6 | 8-10 mfd. | Up to 450V | ¾ X 1 ¼ | 1.30 | QT1-24 | 80-100 mfd. | Up to 450 V | 1 ¼ X 2 ¼ | 3.20 |
| QT1-7 | 8-10 mfd. | Up to 600V | 1 X 2 ¼ | 2.25 | †QT1-24.1 | 75-140 mfd. | Up to 300V | 1 ¼ X 2 ¾ | 3.15 |
| QT1-8 | 12-16 mfd. | Up to 450V | ¾ X 1 ¼ | 1.40 | QT1-25 | 100-150 mfd. | Up to 150V | 1 X 2 ¼ | 1.90 |
| QT1-8.1 | 12-20 mfd. | Up to 150V | ¾ X 1 ¼ | 1.20 | QT1-26 | 100-150 mfd. | Up to 300V | 1 ¼ X 2 ¾ | 3.15 |
| QT1-9 | 16-20 mfd. | Up to 350V | ¾ X 1 ¼ | 1.45 | QT1-27 | 150-200 mfd. | Up to 200V | 1 ¼ X 2 ¾ | 2.90 |
| QT1-10 | 15-20 mfd. | Up to 475V | ¾ X 1 ¼ | 1.60 | †QT1-27.1 | 110-200 mfd. | Up to 200V | 1 ¼ X 2 ¾ | 2.90 |
| QT1-11 | 16-25 mfd. | Up to 50V | ¾ X 1 ¼ | 1.05 | QT1-28 | 150-250 mfd. | Up to 25V | ¾ X 1 ¼ | 1.70 |
| QT1-12 | 25-30 mfd. | Up to 450V | 1 X 1 ¼ | 1.70 | QT1-29 | 200-300 mfd. | Up to 150V | 1 X 3 ¼ | 2.55 |
| QT1-13 | 30-40 mfd. | Up to 150V | ¾ X 1 ¼ | 1.35 | QT1-30 | 250-500 mfd. | Up to 15V | ¾ X 1 ¼ | 1.75 |
| QT1-14 | 30-40 mfd. | Up to 450V | 1 X 2 ¼ | 1.80 | QT1-31 | 250-500 mfd. | Up to 50V | 1 X 2 ¾ | 2.40 |
| QT1-15 | 25-50 mfd. | Up to 50V | ¾ X 1 ¼ | 1.20 | QT1-32 | 500-1000 mfd. | Up to 15V | 1 X 1 ¼ | 2.30 |
| QT1-16 | 40-50 mfd. | Up to 450V | 1 X 2 ¼ | 2.10 | QT1-33 | 1500-2000 mfd. | Up to 15V | 1 X 2 ¼ | 3.20 |
| QT1-17 | 40-60 mfd. | Up to 150V | ¾ X 1 ¼ | 1.50 | | | | | |

* Add ¼" to diameter and ⅛" to length to all for insulating sleeve.

† Single ended with 5" insulated leads and mounting bracket.

ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

SECTION 1500

† DUAL-SECTION TUBULARS

| Catalog No. | Capacitance | Voltage | *Size | List Price | Catalog No. | Capacitance | Voltage | *Size | List Price |
|-------------|----------------|--------------------------|---------------------------------|------------|-------------|------------------|--------------------------|-----------------------------------|------------|
| QT2-1 | 4-5 150-200 | Up to 150V Up to 150V | 1 X 2 $\frac{7}{8}$ | \$2.65 | QT2-7 | 20-30 40-50 | Up to 150V Up to 150V | $\frac{7}{8}$ X 1 $\frac{1}{8}$ | \$1.95 |
| QT2-2 | 5-8 5-8 | Up to 450V Up to 450V | $\frac{7}{8}$ X 1 $\frac{1}{8}$ | 1.70 | QT2-8 | 30-40 30-40 | Up to 450V Up to 450V | 1 X 3 $\frac{1}{8}$ | 3.40 |
| QT2-3 | 8-10 8-10 | Up to 450V Up to 450V | $\frac{7}{8}$ X 1 $\frac{1}{8}$ | 1.85 | QT2-9 | 40-50 40-50 | Up to 150V Up to 150V | $\frac{7}{8}$ X 1 $\frac{1}{8}$ | 2.10 |
| QT2-4 | 8-10 30-40 | Up to 350V Up to 350V | $\frac{7}{8}$ X 2 $\frac{3}{8}$ | 2.35 | QT2-10 | 40-50 60-80 | Up to 150V Up to 150V | $\frac{7}{8}$ X 2 $\frac{3}{8}$ | 2.35 |
| QT2-5 | 16-20 16-20 | Up to 150V Up to 150V | $\frac{7}{8}$ X 1 $\frac{1}{8}$ | 1.65 | ††QT2-11 | 60-120 60-120 | Up to 150V Up to 150V | 1 $\frac{1}{4}$ X 3 $\frac{3}{8}$ | 3.45 |
| QT2-6 | 16-20 16-20 | Up to 450V Up to 450V | $\frac{7}{8}$ X 2 $\frac{3}{8}$ | 2.50 | | | | | |

† TRIPLE-SECTION TUBULARS

| Catalog No. | Capacitance | Voltage | *Size | List Price | Catalog No. | Capacitance | Voltage | *Size | List Price |
|-------------|-------------------------|----------------------|---------------------|------------|-------------|-------------------------|----------------------|---------------------|------------|
| QT3-1 | 8-10 8-10 8-10 | 450V 450V 450V | 1 X 1 $\frac{1}{8}$ | \$2.80 | QT3-5 | 16-20 30-40 30-40 | 150V 150V 150V | 1 X 1 $\frac{1}{8}$ | \$2.70 |
| QT3-2 | 16-20 16-20 16-20 | 450V 450V 450V | 1 X 2 $\frac{7}{8}$ | 3.80 | QT3-6 | 16-20 30-40 60-80 | 150V 150V 150V | 1 X 2 $\frac{7}{8}$ | 2.90 |
| QT3-3 | 16-20 25-30 30-40 | 150V 150V 150V | 1 X 1 $\frac{1}{8}$ | 2.65 | QT3-7 | 16-20 40-50 40-50 | 150V 150V 150V | 1 X 2 $\frac{7}{8}$ | 2.70 |
| QT3-4 | 16-20 25-30 50-60 | 150V 150V 150V | 1 X 2 $\frac{7}{8}$ | 2.60 | QT3-8 | 30-50 30-50 30-50 | 150V 150V 150V | 1 X 2 $\frac{7}{8}$ | 3.15 |

† QUAD-SECTION TUBULARS

| Catalog No. | Capacitance | Voltage | *Size | List Price | Catalog No. | Capacitance | Voltage | *Size | List Price |
|-------------|---|--|-----------------------------------|------------|-------------|----------------------------------|--|-----------------------------------|------------|
| QT4-1 | 4-5 mfd. 20-30 100-140 150-200 | Up to 300V Up to 200V Up to 350V Up to 200V | 1 $\frac{3}{8}$ X 3 $\frac{3}{8}$ | \$6.85 | QT4-3 | 16-20 16-20 30-40 30-40 | Up to 450V Up to 450V Up to 450V Up to 450V | 1 $\frac{3}{8}$ X 3 $\frac{3}{8}$ | \$5.45 |
| QT4-2 | 8-10 30-40 30-40 60-80 | Up to 450V Up to 250V Up to 250V Up to 300V | 1 $\frac{3}{8}$ X 2 $\frac{3}{8}$ | 4.95 | QT4-4 | 16-20 20-30 30-40 40-50 | Up to 25V Up to 150V Up to 150V Up to 150V | 1 $\frac{3}{8}$ X 2 | 5.50 |

NON-POLARIZED TUBULARS

| Catalog No. | Capacitance | Voltage | *Size | List Price | Catalog No. | Capacitance | Voltage | *Size | List Price |
|-------------|-------------|---------|---------------------------------|------------|-------------|-------------|---------|-----------------------------------|------------|
| NPQT-1 | 3-5 | 30V | $\frac{1}{2}$ X 1 $\frac{3}{8}$ | \$1.50 | NPQT-5 | 15-30 | 30V | $\frac{3}{8}$ X 1 $\frac{5}{8}$ | \$1.55 |
| NPQT-2 | 4-5 | 350V | $\frac{3}{4}$ X 1 $\frac{5}{8}$ | 1.70 | **NPQT-5.1 | 66.5-90 | 50V | $\frac{7}{8}$ X 2 $\frac{7}{8}$ | 1.50 |
| NPQT-3 | 8-10 | 400V | 1 X 1 $\frac{5}{8}$ | 2.00 | NPQT-6 | 250-500 | 10V | 1 $\frac{3}{8}$ X 1 $\frac{5}{8}$ | 2.00 |
| NPQT-4 | 15-20 | 350V | 1 X 1 $\frac{5}{8}$ | 2.50 | NPQT-7 | 500-1000 | 3V | 1 $\frac{3}{8}$ X 1 $\frac{5}{8}$ | 2.10 |

* Add $\frac{1}{16}$ " to diameter and $\frac{1}{8}$ " to length to allow for insulating sleeve.

** Replacement for antenna rotator capacitors.

† All designs have mounting bracket and insulated leads.

†† Separate sections.

ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.



ELECTRONICS service-designed capacitors

TWIST-PRONG ELECTROLYTICS (Type XC)

Applications: General Electric Type XC electrolytic capacitors are designed for all television and other electronic applications requiring high reliability and long life.

Each capacitor listed can be used as a replacement in applications requiring a capacitance value at or between the two capacitance values shown and provided the application voltage does not exceed the capacitor's rated voltage.

The larger bold type capacitance value is the absolute value or the value normally shown on ordinary capacitors.

Example: The rating of XC1-2 (15-20 mfd up to 500 VDC) means that this is a 20 mfd capacitor which can replace capacitors rated 15, 16, 17, 18, 19 or 20 mfd at any voltage up to and including 500 VDC, and still be well within approved limitations.

Description: The 100% use of high purity aluminum foil for anodes insures longer shelf and operation life with superior capacitance, resistance, and leakage current characteristics. These capacitors are hermetically sealed in aluminum cans and packaged with phenolic mounting wafers.

Temperature Range: -20°C to 85°C.

SINGLE-SECTION CANS

| Catalog No. | Capacitance | Voltage | Size | List Price | Catalog No. | Capacitance | Voltage | Size | List Price |
|-------------|--------------|------------|---------------|------------|-------------|----------------|------------|---------------|------------|
| XC1-1 | 7-10 mfd. | Up to 500V | 1 X 2 | \$1.70 | XC1-16 | 80-140 mfd. | Up to 150V | 1 X 2 1/2 | \$2.15 |
| XC1-2 | 15-20 mfd. | Up to 500V | 1 X 2 | 1.85 | *XC1-16.1 | 80-150 mfd. | Up to 150V | 1 X 2 1/2 | 2.20 |
| XC1-3 | 30-40 mfd. | Up to 500V | 1 X 2 1/2 | 2.50 | XC1-17 | 100-150 mfd. | Up to 150V | 1 3/8 X 2 | 2.15 |
| XC1-4 | 25-50 mfd. | Up to 150V | 1 X 2 | 1.65 | XC1-18 | 100-150 mfd. | Up to 350V | 1 3/8 X 3 1/2 | 3.60 |
| XC1-5 | 30-50 mfd. | Up to 350V | 1 X 2 | 2.10 | XC1-19 | 100-160 mfd. | Up to 250V | 1 3/8 X 2 1/2 | 3.40 |
| XC1-6 | 35-50 mfd. | Up to 450V | 1 X 2 1/2 | 2.35 | XC1-20 | 120-200 mfd. | Up to 150V | 1 X 3 | 2.70 |
| XC1-7 | 50-80 mfd. | Up to 350V | 1 3/8 X 2 | 2.85 | XC1-21 | 120-200 mfd. | Up to 300V | 1 3/8 X 2 1/2 | 4.05 |
| XC1-8 | 60-80 mfd. | Up to 450V | 1 3/8 X 2 1/2 | 3.05 | XC1-22 | 200-300 mfd. | Up to 150V | 1 3/8 X 2 1/2 | 2.80 |
| XC1-9 | 60-80 mfd. | Up to 500V | 1 3/8 X 2 1/2 | 3.35 | XC1-23 | 250-300 mfd. | Up to 350V | 1 3/8 X 4 | 5.55 |
| XC1-10 | 60-100 mfd. | Up to 150V | 1 X 2 | 2.00 | XC1-24 | 250-500 mfd. | Up to 25V | 1 X 2 | 2.40 |
| XC1-11 | 60-100 mfd. | Up to 300V | 1 X 3 | 2.90 | XC1-25 | 250-500 mfd. | Up to 50V | 1 3/8 X 2 | 2.65 |
| XC1-12 | 60-100 mfd. | Up to 300V | 1 3/8 X 2 | 2.90 | XC1-26 | 500-1000 mfd. | Up to 16V | 1 X 2 | 2.55 |
| XC1-13 | 70-100 mfd. | Up to 450V | 1 3/8 X 2 1/2 | 3.45 | XC1-27 | 750-1500 mfd. | Up to 50V | 1 3/8 X 3 | 4.40 |
| XC1-14 | 70-125 mfd. | Up to 200V | 1 X 3 | 2.50 | XC1-28 | 1000-2000 mfd. | Up to 16V | 1 3/8 X 2 | 3.45 |
| XC1-15 | 100-125 mfd. | Up to 450V | 1 3/8 X 3 | 3.85 | XC1-29 | 1500-3000 mfd. | Up to 16V | 1 3/8 X 2 1/2 | 4.25 |

DUAL-SECTION CANS

| Catalog No. | Capacitance | Voltage | Size | List Price | Catalog No. | Capacitance | Voltage | Size | List Price |
|-------------|-------------------|-----------|---------------|------------|-------------|-----------------|-----------|---------------|------------|
| XC2-1 | 3-60 4-80 mfd. | 350V-450V | 1 X 3 1/2 | \$3.40 | XC2-12 | 8-100 10-160 | 350V-350V | 1 3/8 X 3 | 4.30 |
| XC2-2 | 4-4 5-5 | 450V-450V | 1 X 2 | 1.90 | XC2-13 | 15-15 20-20 | 250V-250V | 1 X 2 | \$1.90 |
| XC2-3 | 4-15 5-20 | 350V-350V | 1 X 2 | 2.05 | XC2-14 | 15-15 20-20 | 450V-450V | 1 X 2 1/2 | 2.55 |
| XC2-4 | 4-120 5-200 | 200V-200V | 1 3/8 X 2 1/2 | 2.80 | XC2-15 | 15-15 20-20 | 500V-500V | 1 3/8 X 2 | 2.85 |
| XC2-5 | 8-8 10-10 | 500V-500V | 1 X 2 | 2.00 | XC2-16 | 15-30 20-40 | 350V-350V | 1 X 2 1/2 | 2.75 |
| XC2-6 | 8-16 10-20 | 350V-475V | 1 X 2 1/2 | 2.35 | XC2-17 | 15-30 20-40 | 450V-450V | 1 3/8 X 2 | 3.25 |
| XC2-7 | 5-20 10-30 | 50V-200V | 1 X 2 | 2.00 | XC2-18 | 15-60 20-80 | 350V-350V | 1 3/8 X 2 1/2 | 3.50 |
| XC2-8 | 8-25 10-30 | 500V-500V | 1 X 3 | 2.60 | XC2-19 | 15-60 20-80 | 450V-450V | 1 3/8 X 2 1/2 | 3.90 |
| XC2-9 | 8-30 10-40 | 300V-300V | 1 X 2 | 2.50 | XC2-20 | 15-75 20-100 | 475V-400V | 1 3/8 X 3 | 4.50 |
| XC2-10 | 8-30 10-40 | 450V-450V | 1 X 2 | 2.75 | XC2-21 | 20-30 30-50 | 150V-150V | 1 X 2 | 2.00 |
| XC2-11 | 8-40 10-50 | 300V-350V | 1 3/8 X 2 | 2.90 | XC2-22 | 20-40 30-60 | 350V-350V | 1 3/8 X 2 | 3.15 |
| | | | | | XC2-23 | 20-75 30-100 | 50V-400V | 1 3/8 X 2 1/2 | 3.90 |
| | | | | | XC2-24 | 30-30 40-40 | 250V-250V | 1 X 2 1/2 | 2.50 |

* Can insulated.

ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

SECTION 1500

Dual-Section Cans (cont.)

| Catalog No. | Capacitance | Voltage | Size | List Price | Catalog No. | Capacitance | Voltage | Size | List Price |
|-------------|---------------|-----------|---------------|------------|-------------|------------------|-----------|---------------|------------|
| XC2-25 | 30-30 | 450V-450V | 1 3/8 X 2 1/2 | 3.45 | XC2-35 | 60-60 | 450V-450V | 1 3/8 X 3 1/2 | 5.40 |
| | 40-40 | | | | | 80-80 | | | |
| XC2-26 | 30-35 | 500V-500V | 1 3/8 X 2 1/2 | 4.40 | XC2-36 | 60-75 | 450V-50V | 1 3/8 X 3 | 3.75 |
| | 40-45 | | | | | 80-100 | | | |
| XC2-27 | 30-60 | 350V-350V | 1 3/8 X 2 1/2 | 4.10 | XC2-37 | 50-50 | 50V-50V | 1 X 2 | 2.10 |
| | 40-80 | | | | | 100-100 | | | |
| XC2-28 | 30-75 | 450V-450V | 1 3/8 X 3 1/2 | 4.85 | XC2-38 | 75-75 | 200V-300V | 1 3/8 X 3 | 3.45 |
| | 40-100 | | | | | 100-100 | | | |
| XC2-28.1 | 30-50 | 450V-50V | 1 X 2 1/2 | 2.80 | XC2-39 | 75-75 | 400V-400V | 1 3/8 X 4 | 5.75 |
| | 40-100 | | | | | 100-100 | | | |
| XC2-29 | 30-30 | 150V-150V | 1 X 2 | 2.15 | XC2-40 | 75-100 | 150V-150V | 1 X 3 1/2 | 3.10 |
| | 50-50 | | | | | 100-150 | | | |
| XC2-30 | 30-60 | 150V-150V | 1 X 2 1/2 | \$2.40 | XC2-41 | 75-100 | 150V-150V | 1 3/8 X 2 | 3.25 |
| | 50-80 | | | | | 100-150 | | | |
| XC2-31 | 30-60 | 475V-475V | 1 3/8 X 3 1/2 | 5.20 | XC2-42 | 75-90 | 400V-400V | 1 3/8 X 4 | 6.20 |
| | 50-80 | | | | | 100-120 | | | |
| XC2-32 | 30-100 | 50V-150V | 1 X 3 | 2.50 | XC2-43 | 100-120 | 250V-250V | 1 3/8 X 4 | 5.50 |
| | 50-150 | | | | | 200-200 | | | |
| XC2-32.1 | 25-250 | 150V-5V | 1 X 2 | 2.45 | XC2-44 | 500-500 | 16V-16V | 1 X 3 1/2 | 3.80 |
| | 50-500 | | | | | 1000-1000 | | | |
| XC2-33 | 40-40 | 450V-450V | 1 3/8 X 3 | 4.50 | XC2-45 | 500-500 | 30V-30V | 1 3/8 X 2 1/2 | 5.35 |
| | 60-60 | | | | | 1000-1000 | | | |
| XC2-34 | 60-60 | 200V-400V | 1 3/8 X 2 1/2 | 3.95 | | | | | |
| | 80-80 | | | | | | | | |

TRIPLE-SECTION CANS

| Catalog No. | Capacitance | Voltage | Size | List Price | Catalog No. | Capacitance | Voltage | Size | List Price |
|-------------|-------------------|-------------|---------------|------------|-------------|-------------------|-------------|---------------|------------|
| XC3-1 | 4-8-15 mfd. | 350-400-400 | 1 X 2 | \$2.55 | XC3-16 | 8-30-75 | 400-400-350 | 1 3/8 X 3 | 5.05 |
| | 5-10-20 | | | | | 10-40-100 | | | |
| XC3-2 | 4-15-30 | 350-475-400 | 1 X 3 | 3.70 | XC3-17 | 8-35-75 | 450-450-200 | 1 3/8 X 2 1/2 | 4.15 |
| | 5-20-40 | | | | | 10-45-100 | | | |
| XC3-3 | 4-15-50 | 350-350-400 | 1 X 3 1/2 | 3.70 | XC3-18 | 8-60-75 | 400-350-400 | 1 3/8 X 3 1/2 | 5.55 |
| | 5-20-60 | | | | | 10-80-100 | | | |
| XC3-4 | 4-30-100 | 350-350-350 | 1 3/8 X 3 1/2 | 5.05 | XC3-19 | 8-75-110 | 450-300-300 | 1 3/8 X 3 1/2 | 5.75 |
| | 5-40-150 | | | | | 10-100-150 | | | |
| XC3-5 | 4-40-75 | 450-350-350 | 1 3/8 X 3 | 4.55 | XC3-20 | 8-150-200 | 450-300-200 | 1 3/8 X 4 | 6.85 |
| | 5-50-100 | | | | | 10-200-250 | | | |
| XC3-5.1 | 3-30-100 | 200-200-50 | 1 X 2 1/2 | 2.90 | XC3-21 | 12-12-15 | 450-450-450 | 1 X 3 | \$3.25 |
| | 5-60-200 | | | | | 15-15-20 | | | |
| XC3-6 | 4-50-75 | 200-75-350 | 1 3/8 X 3 | 4.80 | XC3-22 | 12-12-20 | 450-450-25 | 1 X 2 1/2 | 2.75 |
| | 5-100-125 | | | | | 15-15-40 | | | |
| XC3-6.1 | 2-250-500 | 32-16-16 | 1 X 2 1/2 | 4.10 | XC3-23 | 15-15-15 | 350-350-350 | 1 X 2 1/2 | 2.90 |
| | 5-500-1000 | | | | | 20-20-20 | | | |
| XC3-7 | 8-8-8 | 450-450-450 | 1 X 2 | 2.60 | XC3-23.1 | 15-15-10 | 450-450-25 | 1 X 2 | 2.95 |
| | 10-10-10 | | | | | 20-20-20 | | | |
| XC3-8 | 8-8-30 | 400-400-400 | 1 X 3 | 3.35 | XC3-24 | 15-15-15 | 450-450-450 | 1 3/8 X 2 | 3.60 |
| | 10-10-40 | | | | | 20-20-20 | | | |
| XC3-9 | 8-8-60 | 450-450-450 | 1 3/8 X 2 1/2 | 4.80 | XC3-25 | 15-10-20 | 350-25-350 | 1 X 2 1/2 | 2.95 |
| | 10-10-80 | | | | | 20-20-30 | | | |
| XC3-10 | 8-15-10 | 350-350-25 | 1 X 2 | 2.55 | XC3-26 | 15-15-30 | 450-450-450 | 1 3/8 X 2 1/2 | 4.40 |
| | 10-20-20 | | | | | 20-20-40 | | | |
| XC3-11 | 8-15-20 | 475-475-350 | 1 X 3 | \$3.40 | XC3-27 | 15-15-75 | 450-450-350 | 1 3/8 X 3 | 4.95 |
| | 10-20-30 | | | | | 20-20-100 | | | |
| XC3-12 | 8-15-60 | 350-450-350 | 1 3/8 X 2 1/2 | 4.25 | XC3-28 | 15-20-30 | 150-150-150 | 1 X 2 | 2.60 |
| | 10-20-80 | | | | | 20-30-40 | | | |
| XC3-13 | 8-15-75 | 450-350-350 | 1 3/8 X 2 1/2 | 4.55 | XC3-29 | 15-30-30 | 450-450-450 | 1 3/8 X 2 1/2 | 4.45 |
| | 10-20-100 | | | | | 20-40-40 | | | |
| XC3-13.1 | 7-15-50 | 450-450-50 | 1 X 2 1/2 | 2.95 | XC3-30 | 15-30-50 | 450-450-450 | 1 3/8 X 3 | 5.00 |
| | 10-20-100 | | | | | 20-40-60 | | | |
| XC3-14 | 8-20-75 | 150-150-150 | 1 X 2 1/2 | 2.85 | XC3-31 | 15-30-60 | 150-150-150 | 1 X 2 1/2 | 2.90 |
| | 10-30-100 | | | | | 20-40-80 | | | |
| XC3-15 | 8-30-30 | 500-500-500 | 1 3/8 X 2 1/2 | 5.05 | XC3-32 | 15-30-60 | 450-450-450 | 1 3/8 X 3 | 5.40 |
| | 10-40-40 | | | | | 20-40-80 | | | |

ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.



ELECTRONICS

service-designed capacitors

Triple-Section Cans (cont.)

| Catalog No. | Capacitance | Voltage | Size | List Price |
|-------------|-------------|-------------|---------------|------------|
| XC3-33 | 15-30-60 | 350-350-350 | 1 3/8 X 3 | 4.85 |
| | 20-40-90 | | | |
| XC3-34 | 15-60-75 | 450-450-350 | 1 3/8 X 3 1/2 | 5.85 |
| | 20-80-100 | | | |
| XC3-35 | 15-75-90 | 450-400-300 | 1 3/8 X 4 | 6.70 |
| | 20-100-140 | | | |
| XC3-36 | 20-20-30 | 475-475-475 | 1 3/8 X 3 | \$5.15 |
| | 30-30-40 | | | |
| XC3-37 | 20-15-150 | 400-350-150 | 1 3/8 X 3 | 5.00 |
| | 30-60-200 | | | |
| XC3-38 | 30-30-30 | 150-150-150 | 1 X 2 1/2 | 2.60 |
| | 40-40-40 | | | |
| XC3-39 | 30-30-20 | 450-450-25 | 1 3/8 X 2 1/2 | 3.95 |
| | 40-40-40 | | | |
| XC3-40 | 30-30-30 | 450-450-450 | 1 3/8 X 3 | 4.90 |
| | 40-40-40 | | | |
| XC3-41 | 30-60-90 | 450-400-350 | 1 3/8 X 4 | 6.30 |
| | 40-80-125 | | | |

| Catalog No. | Capacitance | Voltage | Size | List Price |
|-------------|-------------|-------------|---------------|------------|
| XC3-42 | 30-60-300 | 400-400-50 | 1 3/8 X 3 1/2 | 5.80 |
| | 40-80-500 | | | |
| XC3-43 | 30-70-70 | 150-150-150 | 1 3/8 X 2 1/2 | 4.05 |
| | 40-120-120 | | | |
| XC3-44 | 30-30-30 | 150-150-150 | 1 X 2 1/2 | 3.05 |
| | 50-50-50 | | | |
| XC3-45 | 40-40-50 | 350-350-350 | 1 3/8 X 3 1/2 | 5.55 |
| | 60-60-80 | | | |
| XC3-45.1 | 30-40-50 | 175-175-175 | 1 X 3 | 3.60 |
| | 60-80-100 | | | |
| XC3-46 | 40-80-125 | 200-150-150 | 1 3/8 X 3 | 4.40 |
| | 60-140-200 | | | |
| XC3-47 | 60-125-175 | 150-150-150 | 1 3/8 X 3 1/2 | 5.00 |
| | 80-200-300 | | | |
| XC3-47.1 | 30-75-250 | 16-16-16 | 1 X 1 3/4 | 3.35 |
| | 100-200-700 | | | |
| XC3-48 | 50-250-250 | 16-16-16 | 1 X 2 | 3.35 |
| | 100-500-500 | | | |
| XC3-48.1 | 80-80-150 | 16-16-16 | 1 X 1 3/4 | 3.35 |
| | 250-250-500 | | | |

QUAD-SECTION CANS

| Catalog No. | Capacitance | Voltage | Size * | List Price |
|-------------|---------------|-----------------|--------|------------|
| XC4-1 | 3-8-8-10 | 300-500-300-25 | 2" | \$3.35 |
| | 4-10-10-20 | | | |
| XC4-2 | 3-8-30-100 | 350-475-400-350 | 4 | 6.30 |
| | 4-10-40-160 | | | |
| XC4-3 | 3-8-40-100 | 300-300-300-350 | 3 1/2 | 6.20 |
| | 4-10-60-160 | | | |
| XC4-4 | 3-8-75-100 | 350-475-300-350 | 4 | 6.70 |
| | 4-10-100-160 | | | |
| XC4-4.1 | 2-100-250-250 | 32-16-16-16 | 2 | 4.80 |
| | 4-350-750-750 | | | |
| XC4-5 | 4-4-4-4 | 450-450-450-450 | 2 | 3.00 |
| | 5-5-5-5 | | | |
| XC4-6 | 4-4-20-60 | 450-450-450-450 | 2 1/2 | 5.10 |
| | 5-5-25-70 | | | |
| XC4-7 | 4-8-8-60 | 450-450-450-450 | 2 1/2 | 5.00 |
| | 5-10-10-70 | | | |
| XC4-8 | 4-8-30-30 | 450-475-450-475 | 2 1/2 | 5.00 |
| | 5-10-35-40 | | | |
| XC4-9 | 4-15-40-50 | 450-350-350-400 | 3 | 5.15 |
| | 5-20-50-60 | | | |
| XC4-10 | 4-25-30-60 | 400-400-400-400 | 3 1/2 | 5.85 |
| | 5-30-40-80 | | | |
| XC4-11 | 4-30-75-80 | 350-350-75-350 | 3 | 5.50 |
| | 5-40-100-110 | | | |
| XC4-12 | 8-8-8-8 | 450-450-450-450 | 2 | 3.35 |
| | 10-10-10-10 | | | |
| XC4-13 | 8-8-15-30 | 475-475-475-475 | 2 1/2 | 4.85 |
| | 10-10-20-40 | | | |
| XC4-14 | 8-8-15-90 | 475-350-350-350 | 3 | \$5.60 |
| | 10-10-20-130 | | | |
| XC4-15 | 8-8-30-30 | 450-450-450-450 | 2 1/2 | 4.80 |
| | 10-10-35-40 | | | |
| XC4-16 | 8-8-50-50 | 450-450-200-50 | 2 | 3.85 |
| | 10-10-60-100 | | | |
| XC4-17 | 8-8-75-100 | 475-400-300-300 | 3 1/2 | 6.20 |
| | 10-10-100-150 | | | |
| XC4-18 | 8-15-15-100 | 475-300-300-300 | 2 1/2 | 5.05 |
| | 10-20-20-140 | | | |
| XC4-19 | 8-10-20-75 | 400-50-50-400 | 2 1/2 | 5.10 |
| | 10-20-30-100 | | | |

| Catalog No. | Capacitance | Voltage | Size * | List Price |
|-------------|---------------|-----------------|--------|------------|
| XC4-20 | 8-15-30-30 | 350-350-350-350 | 2 1/2 | 4.40 |
| | 10-20-40-40 | | | |
| XC4-21 | 8-15-30-30 | 450-25-450-450 | 2 1/2 | 4.70 |
| | 10-20-40-40 | | | |
| XC4-22 | 8-15-30-50 | 350-475-350-350 | 2 1/2 | 4.95 |
| | 10-20-40-60 | | | |
| XC4-23 | 8-15-30-90 | 475-450-450-300 | 3 | 5.80 |
| | 10-20-40-125 | | | |
| XC4-24 | 8-15-30-90 | 350-350-475-350 | 3 1/2 | 6.35 |
| | 10-20-40-130 | | | |
| XC4-25 | 8-15-30-90 | 350-350-50-350 | 3 | 5.10 |
| | 10-20-50-120 | | | |
| XC4-26 | 8-10-30-90 | 475-400-50-400 | 3 | 5.90 |
| | 10-20-50-120 | | | |
| XC4-27 | 8-10-50-75 | 150-50-200-300 | 2 1/2 | \$4.55 |
| | 10-20-60-100 | | | |
| XC4-28 | 8-15-60-75 | 300-50-350-350 | 3 1/2 | 5.35 |
| | 10-20-80-100 | | | |
| XC4-29 | 8-15-75-100 | 450-300-300-350 | 4 | 6.60 |
| | 10-20-100-140 | | | |
| XC4-30 | 8-15-100-100 | 450-300-350-300 | 4 | 6.70 |
| | 10-20-140-150 | | | |
| XC4-31 | 8-15-100-150 | 250-350-300-50 | 3 | 5.55 |
| | 10-20-150-250 | | | |
| XC4-32 | 8-15-30-50 | 450-25-350-350 | 2 1/2 | 4.60 |
| | 10-25-40-60 | | | |
| XC4-33 | 8-15-30-50 | 350-25-350-25 | 2 | 3.75 |
| | 10-25-40-100 | | | |
| XC4-34 | 8-25-30-60 | 450-450-450-475 | 3 1/2 | 6.65 |
| | 10-30-40-80 | | | |
| XC4-35 | 8-25-30-60 | 450-300-400-400 | 3 | 5.75 |
| | 10-30-40-80 | | | |
| XC4-36 | 8-25-25-75 | 475-500-50-50 | 2 1/2 | 4.45 |
| | 10-30-50-150 | | | |
| XC4-37 | 8-25-75-150 | 300-300-300-300 | 4 | 6.80 |
| | 10-30-100-200 | | | |
| XC4-38 | 8-25-100-150 | 300-150-300-150 | 3 1/2 | 5.70 |
| | 10-30-140-200 | | | |

SECTION 1500

Quad-Section Cans (cont.)

| Catalog No. | Capacitance | Voltage | Size* | List Price | Catalog No. | Capacitance | Voltage | Size | List Price |
|-------------|-------------------------------|-----------------|-------|------------|-------------|--------------------------------|-----------------|-------|------------|
| XC4-39 | 8-25-150-150 10-30-200-200 | 300-150-200-150 | 3 1/2 | 5.50 | XC4-63 | 15-25-30-25 20-30-40-50 | 300-300-300-25 | 2 | 4.00 |
| XC4-40 | 8-30-30-60 10-40-40-80 | 250-300-300-300 | 3 | 4.85 | XC4-64 | 15-25-25-150 20-30-50-200 | 350-400-50-350 | 4 | 6.75 |
| XC4-41 | 8-30-25-75 10-40-50-100 | 350-350-50-350 | 3 | 5.15 | XC4-65 | 15-30-50-50 20-40-60-60 | 150-350-350-200 | 3 | 4.80 |
| XC4-42 | 8-30-60-75 10-40-80-100 | 475-400-400-400 | 4 | 6.95 | XC4-66 | 15-30-50-60 20-40-60-80 | 400-300-450-350 | 3 1/2 | 6.15 |
| XC4-43 | 8-30-90-110 10-40-120-150 | 250-400-250-50 | 3 | 5.20 | XC4-67 | 15-30-50-65 20-40-60-90 | 350-350-350-350 | 3 1/2 | 5.90 |
| XC4-44 | 8-50-50-60 10-60-60-80 | 150-200-350-350 | 3 | 5.40 | XC4-68 | 15-30-50-150 20-40-60-200 | 150-150-150-10 | 2 | 3.60 |
| XC4-45 | 12-12-12-30 15-15-15-40 | 450-350-450-350 | 2 1/2 | 4.00 | XC4-69 | 15-50-60-50 20-60-80-100 | 350-350-150-50 | 2 1/2 | 4.65 |
| XC4-46 | 12-15-10-10 15-20-20-20 | 450-450-25-25 | 2 | 3.45 | XC4-70 | 15-75-75-170 20-100-100-240 | 350-150-150-150 | 3 1/2 | 5.95 |
| XC4-47 | 12-30-30-20 15-40-40-40 | 450-450-450-50 | 3 | 5.20 | XC4-70.1 | 15-60-50-80 20-100-100-150 | 450-350-50-350 | 4 | 6.75 |
| XC4-48 | 15-15-15-10 20-20-20-20 | 450-450-450-25 | 2 | 4.15 | XC4-71 | 15-30-60-75 25-40-80-100 | 50-400-350-200 | 3 1/2 | 5.55 |
| XC4-49 | 15-15-15-15 20-20-20-20 | 450-450-450-450 | 2 1/2 | 4.55 | XC4-72 | 25-25-30-30 30-30-40-40 | 450-350-450-350 | 3 | 5.35 |
| XC4-50 | 15-15-15-15 20-20-20-20 | 475-475-475-475 | 2 1/2 | 4.85 | XC4-73 | 25-25-110-110 30-30-150-150 | 450-450-300-300 | 4 | 6.95 |
| XC4-51 | 15-15-15-50 20-20-20-60 | 450-450-450-450 | 3 | 5.50 | XC4-74 | 25-30-20-60 30-40-40-80 | 400-400-25-400 | 3 1/2 | 5.90 |
| XC4-52 | 15-15-15-75 20-20-20-100 | 450-450-450-300 | 3 | 5.30 | XC4-75 | 25-30-25-100 30-40-50-140 | 350-350-50-350 | 3 1/2 | 5.90 |
| XC4-53 | 15-15-15-150 20-20-20-200 | 300-300-300-300 | 3 1/2 | 5.95 | XC4-76 | 25-30-40-150 30-40-50-200 | 400-300-250-150 | 3 | 5.45 |
| XC4-54 | 15-15-30-20 20-20-40-40 | 450-450-450-25 | 2 1/2 | 4.65 | XC4-77 | 25-45-150-150 30-60-200-200 | 175-175-175-175 | 3 1/2 | 6.15 |
| XC4-55 | 15-15-30-30 20-20-40-40 | 450-450-450-450 | 3 | 5.55 | XC4-78 | 30-30-30-30 40-40-40-40 | 150-150-150-150 | 2 | 3.60 |
| XC4-56 | 15-15-30-75 20-20-40-100 | 350-350-350-400 | 3 1/2 | 6.00 | XC4-79 | 30-30-30-20 40-40-40-40 | 450-450-450-25 | 3 | 5.50 |
| XC4-57 | 15-15-60-150 20-20-80-200 | 350-300-350-150 | 3 1/2 | \$5.50 | XC4-80 | 30-30-30-30 40-40-40-40 | 450-450-450-450 | 3 1/2 | 6.25 |
| XC4-58 | 15-15-75-75 20-20-100-100 | 400-400-350-100 | 3 1/2 | 5.50 | XC4-81 | 30-30-20-60 40-40-40-80 | 150-150-25-150 | 2 | 3.65 |
| XC4-59 | 15-15-75-100 20-20-100-140 | 300-300-300-350 | 4 | 5.00 | XC4-82 | 30-30-20-60 40-40-40-80 | 450-450-25-450 | 3 1/2 | 6.45 |
| XC4-60 | 15-20-30-75 20-25-35-100 | 200-450-450-50 | 2 1/2 | 4.65 | XC4-83 | 30-30-50-100 40-40-60-150 | 350-350-350-75 | 3 | 5.25 |
| XC4-61 | 15-20-30-30 20-25-40-40 | 450-50-450-450 | 2 1/2 | 5.05 | XC4-84 | 30-50-50-75 40-60-60-100 | 400-400-300-400 | 4 | 6.85 |
| XC4-62 | 10-25-30-30 20-30-40-40 | 25-350-350-350 | 2 1/2 | 4.20 | XC4-85 | 50-60-75-50 60-80-100-100 | 400-350-200-50 | 3 1/2 | 5.90 |

CAPACITOR ACCESSORIES

| Catalog No. | Description | Catalog No. | Description |
|-------------|--|-------------|---|
| W53 | Mounting wafer (phenolic) for 1 inch can | 1T7 | Insulating sleeves for 1 x 3 inch can |
| WL4 | Mounting wafer (phenolic) for 1 3/8 inch can | 1T8 | Insulating sleeves for 1 x 3 1/2 inch can |
| WM3 | Mounting wafer (metal) for 1 inch can | 1T9 | Insulating sleeves for 1 x 4 inch can |
| WM4 | Mounting wafer (metal) for 1 3/8 inch can | 1T10 | Insulating sleeves for 1 3/8 x 2 inch can |
| PMA1 | Printed board mounting adapter kit | 1T11 | Insulating sleeves for 1 3/8 x 2 1/2 inch can |
| 1T5 | Insulating sleeves for 1 x 2 inch can | 1T12 | Insulating sleeves for 1 3/8 x 3 inch can |
| 1T6 | Insulating sleeves for 1 x 2 1/2 inch can | 1T13 | Insulating sleeves for 1 3/8 x 3 1/2 inch can |
| | | 1T14 | Insulating sleeves for 1 3/8 x 4 inch can |

* All Dia. ore 1 3/8".

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ELECTRONICS service-designed capacitors

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS IN ALUMINUM CASES

| Catalog No. | Capacitance | Voltage | Size* | List Price | Catalog No. | Capacitance | Voltage | Size* | List Price |
|-------------|-------------|---------|--------------------------------|------------|-------------|-------------|---------|--------------------------------|------------|
| MT1-1 | 1-2 | 50 | $\frac{3}{16}$ X $\frac{1}{2}$ | \$1.35 | MT1-14 | 20-35 | 50 | $\frac{3}{8}$ X $\frac{7}{8}$ | \$1.70 |
| MT1-2 | 1-2 | 150 | $\frac{5}{16}$ X $\frac{3}{8}$ | 1.45 | MT1-15 | 25-50 | 6 | $\frac{1}{16}$ X $\frac{3}{4}$ | 1.40 |
| MT1-3 | 3-5 | 50 | $\frac{1}{4}$ X $\frac{1}{2}$ | 1.45 | MT1-16 | 25-50 | 15 | $\frac{3}{8}$ X $\frac{5}{8}$ | 1.60 |
| MT1-4 | 3-5 | 150 | $\frac{3}{8}$ X $\frac{3}{8}$ | 1.55 | MT1-17 | 25-50 | 50 | $\frac{3}{8}$ X $1\frac{1}{4}$ | 1.85 |
| MT1-5 | 6-10 | 25 | $\frac{1}{4}$ X $\frac{3}{8}$ | 1.45 | MT1-18 | 50-100 | 6 | $\frac{3}{8}$ X $\frac{3}{4}$ | 1.50 |
| MT1-6 | 6-10 | 50 | $\frac{5}{16}$ X $\frac{5}{8}$ | 1.50 | MT1-19 | 50-100 | 15 | $\frac{3}{8}$ X $\frac{7}{8}$ | 1.80 |
| MT1-7 | 6-10 | 100 | $\frac{3}{8}$ X $\frac{7}{8}$ | 1.55 | MT1-20 | 50-100 | 25 | $\frac{3}{8}$ X $1\frac{1}{2}$ | 1.80 |
| MT1-8 | 6-10 | 150 | $\frac{3}{8}$ X 1 | 1.60 | MT1-21 | 75-150 | 6 | $\frac{3}{8}$ X $\frac{7}{8}$ | 1.55 |
| MT1-9 | 12-20 | 100 | $\frac{3}{8}$ X $1\frac{1}{2}$ | 1.60 | MT1-22 | 100-200 | 3 | $\frac{3}{8}$ X $\frac{7}{8}$ | 1.50 |
| MT1-10 | 15-25 | 15 | $\frac{5}{16}$ X $\frac{3}{8}$ | 1.45 | MT1-23 | 100-200 | 15 | $\frac{3}{8}$ X $1\frac{1}{2}$ | 2.10 |
| MT1-11 | 15-25 | 25 | $\frac{3}{8}$ X $\frac{3}{8}$ | 1.55 | MT1-24 | 150-300 | 6 | $\frac{3}{8}$ X 1 | 1.80 |
| MT1-12 | 15-25 | 50 | $\frac{3}{8}$ X $\frac{3}{4}$ | 1.60 | MT1-25 | 125-250 | 12 | $\frac{3}{8}$ X $1\frac{1}{2}$ | 2.10 |
| MT1-13 | 20-35 | 6 | $\frac{5}{16}$ X $\frac{3}{8}$ | 1.40 | MT1-26 | 250-500 | 3 | $\frac{3}{8}$ X $1\frac{1}{2}$ | 1.75 |

* Dimensions are actual dimensions; add $\frac{1}{64}$ " to diameter and $\frac{3}{32}$ " to length for plastic sleeving.

PAPER-MYLAR SIDE-LEAD TUBULARS (Type MPC)

G-E Type MPC is especially designed for use in printed circuits as well as conventional wiring in television and radio. It has two dielectrics—Mylar[®] polyester film and highest grade paper—which provide high insulation resistance and high reliability while saving space. Type MPC capacitors have maximum stability of temperature characteristics because they are dipped in a solid thermosetting compound which will not crack, soften or flow, even at maximum temperatures.

Side leads are held rigidly at fixed spacings by a dipped, rock-hard casing with high humidity resistance and high dielectric strength against grounding. This tough, durable material is unaffected by contact with soldering iron. Crimped side leads save space and permit uniform mounting of units parallel to the plane of the chassis or printed wiring board.

Temperature Range: 55°C to +125°C. (Derate working voltage by 25% for +125°C operation)
±10%

| Catalog No. | Capacitance Mfd. | Size—Inches Diam. X Length | List Price | Catalog No. | Capacitance Mfd. | Size—Inches Diam. X Length | List Price |
|---------------------|------------------|----------------------------|------------|---------------------|------------------|----------------------------|------------|
| 200 W.V.D.C. | | | | | | | |
| MPC-2S2 | .02 | .350 X .855 | \$0.25 | MPC-6D2 | .002 | .340 X .690 | .25 |
| MPC-2S47 | .047 | .450 X .855 | .30 | MPC-6D22 | .0022 | .340 X .690 | .25 |
| MPC-2S5 | .05 | .450 X .855 | .30 | MPC-6D25 | .0025 | .350 X .690 | .25 |
| MPC-2P1 | .1 | .470 X 1.180 | .35 | MPC-6D27 | .0027 | .370 X .690 | .25 |
| MPC-2P15 | .15 | .540 X 1.180 | .40 | MPC-6D3 | .003 | .370 X .690 | .25 |
| MPC-2P25 | .25 | .620 X 1.300 | .45 | MPC-6D33 | .0033 | .370 X .690 | .25 |
| MPC-2P47 | .47 | .730 X 1.600 | .60 | MPC-6D39 | .0039 | .370 X .690 | .25 |
| MPC-2P5 | .5 | .730 X 1.600 | .60 | MPC-6D4 | .004 | .370 X .690 | .25 |
| 400 W.V.D.C. | | | | | | | |
| MPC-4S1 | .01 | .390 X .690 | .25 | MPC-6D47 | .0047 | .400 X .690 | .25 |
| MPC-4S15 | .015 | .430 X .690 | .25 | MPC-6D5 | .005 | .400 X .690 | .25 |
| MPC-4S2 | .02 | .390 X .855 | .30 | MPC-6D56 | .0056 | .415 X .690 | .25 |
| MPC-4S22 | .022 | .400 X .855 | .30 | MPC-6D6 | .006 | .415 X .690 | .25 |
| MPC-4S33 | .033 | .440 X .855 | .30 | MPC-6D68 | .0068 | .430 X .690 | .25 |
| MPC-4S47 | .047 | .415 X 1.150 | .35 | MPC-6D75 | .0075 | .370 X .870 | .30 |
| MPC-4S5 | .05 | .415 X 1.150 | .35 | MPC-6D8 | .008 | .370 X .870 | .30 |
| MPC-4S68 | .068 | .440 X 1.180 | .35 | MPC-6S1 | .01 | .390 X .870 | .30 |
| MPC-4P1 | .10 | .520 X 1.180 | .40 | 600 W.V.D.C. | | | |
| MPC-4P15 | .15 | .560 X 1.300 | .50 | MPC-6S12 | .012 | .400 X .870 | 0.30 |
| MPC-4P22 | .22 | .620 X 1.560 | .60 | MPC-6S15 | .015 | .415 X .870 | .30 |
| MPC-4P25 | .25 | .650 X 1.560 | .60 | MPC-6S2 | .02 | .445 X .870 | .30 |
| MPC-4P47 | .47 | .850 X 1.600 | .70 | MPC-6S22 | .022 | .470 X .870 | .30 |
| MPC-4P5 | .50 | .850 X 1.600 | .75 | MPC-6S25 | .025 | .400 X 1.150 | .35 |
| | | | | MPC-6S27 | .027 | .415 X 1.150 | .35 |
| | | | | MPC-6S3 | .03 | .415 X 1.150 | .35 |
| | | | | MPC-6S33 | .033 | .430 X 1.150 | .35 |
| | | | | MPC-6S39 | .039 | .470 X 1.150 | .35 |

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PAPER-MYLAR SIDE-LEAD TUBULARS (Type MPC)

| Catalog No. | Capacitance Mfd. | Dimensions—Inches Diameter X Length | List Price | Catalog No. | Capacitance Mfd. | Dimensions—Inches Diameter X Length | List Price |
|-------------|------------------|--|------------|-------------|------------------|--|------------|
| MPC-6S4 | .04 | .470 X 1.150 | .35 | MPC-16D22 | .0022 | .420 X .870 | .35 |
| MPC-6S47 | .047 | .490 X 1.150 | .40 | MPC-16D3 | .003 | .475 X .870 | .40 |
| MPC-6S5 | .05 | .490 X 1.150 | .40 | MPC-16D33 | .0033 | .480 X .870 | .40 |
| MPC-6S56 | .056 | .520 X 1.100 | .40 | MPC-16D4 | .004 | .520 X .870 | .40 |
| MPC-6S6 | .06 | .520 X 1.180 | .45 | MPC-16D47 | .0047 | .540 X .870 | .40 |
| MPC-6S68 | .068 | .540 X 1.300 | .45 | MPC-16D5 | .005 | .565 X .870 | .45 |
| MPC-6S75 | .075 | .570 X 1.300 | .45 | MPC-16D6 | .006 | .460 X 1.180 | .45 |
| MPC-6S82 | .082 | .590 X 1.300 | .45 | MPC-16D7 | .007 | .485 X 1.180 | .45 |
| MPC-6P1 | .10 | .640 X 1.300 | .45 | MPC-16D75 | .0075 | .495 X 1.180 | .45 |
| MPC-6P15 | .15 | .650 X 1.560 | .55 | MPC-16D8 | .008 | .510 X 1.180 | .50 |
| MPC-6P2 | .20 | .730 X 1.560 | .65 | MPC-16S1 | .01 | .525 X 1.180 | .50 |
| MPC-6P22 | .22 | .750 X 1.560 | .65 | MPC-16S15 | .015 | .560 X 1.300 | .50 |
| | | 1600 V.D.C.W. | | MPC-16S2 | .02 | .570 X 1.600 | .60 |
| MPC-16D1 | .001 | .350 X .870 | .35 | MPC-16S3 | .03 | .665 X 1.600 | .70 |
| MPC-16D15 | .0015 | .375 X .870 | .35 | MPC-16S33 | .033 | .695 X 1.600 | .80 |
| MPC-16D18 | .0018 | .400 X .870 | .35 | MPC-16S47 | .047 | .785 X 1.600 | .85 |
| MPC-16D2 | .002 | .405 X .870 | .35 | MPC-16S5 | .05 | .815 X 1.600 | .85 |

PAPER-MYLAR AXIAL-LEAD TUBULARS (Type MAL)

| Catalog No. | Capacitance Mfd. | Dimensions—Inches Diameter X Length | List Price | Catalog No. | Capacitance Mfd. | Dimensions—Inches Diameter X Length | List Price |
|-------------|------------------|--|------------|-------------|------------------|--|------------|
| | | 200 V.D.C.W. | | | | 600 V.D.C.W. | |
| MAL-2S2 | .02 | $\frac{3}{8}$ X $1\frac{1}{4}$ | \$0.25 | MAL-6S3 | .03 | $\frac{7}{16}$ X $1\frac{1}{4}$ | \$0.35 |
| MAL-2S47 | .047 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .25 | MAL-6S33 | .033 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .35 |
| MAL-2S5 | .05 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .25 | MAL-6S4 | .04 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .35 |
| MAL-2P1 | .10 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .35 | MAL-6S47 | .047 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .40 |
| MAL-2P15 | .15 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .35 | MAL-6S5 | .05 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .40 |
| MAL-2P25 | .25 | $\frac{9}{16}$ X $1\frac{9}{16}$ | .45 | MAL-6S6 | .06 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .40 |
| MAL-2P47 | .47 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .60 | MAL-6S68 | .068 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .45 |
| MAL-2P5 | .50 | $\frac{5}{8}$ X $1\frac{1}{8}$ | .60 | MAL-6P1 | .10 | $\frac{5}{16}$ X $1\frac{9}{16}$ | .45 |
| | | 400 V.D.C.W. | | MAL-6P15 | .15 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .55 |
| MAL-4S1 | .01 | $\frac{5}{16}$ X 1 | .25 | MAL-6P2 | .20 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .65 |
| MAL-4S15 | .015 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .25 | MAL-6P22 | .22 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .70 |
| MAL-4S2 | .02 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .25 | MAL-6P25 | .25 | $\frac{11}{16}$ X $1\frac{11}{16}$ | .75 |
| MAL-4S22 | .022 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .30 | MAL-6P33 | .33 | $\frac{3}{4}$ X $2\frac{1}{4}$ | .90 |
| MAL-4S33 | .033 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .30 | MAL-6P47 | .47 | $\frac{3}{4}$ X $2\frac{1}{4}$ | 1.25 |
| MAL-4S47 | .047 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .30 | MAL-6P50 | .50 | $\frac{3}{4}$ X $2\frac{1}{4}$ | 1.25 |
| MAL-4S5 | .05 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .30 | | | 1600 V.D.C.W. | |
| MAL-4S68 | .068 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .35 | MAL-16D1 | .001 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .65 |
| MAL-4P1 | .10 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .35 | MAL-16D15 | .0015 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .65 |
| MAL-4P15 | .15 | $\frac{9}{16}$ X $1\frac{9}{16}$ | .40 | MAL-16D22 | .0022 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .65 |
| MAL-4P22 | .22 | $\frac{5}{8}$ X $1\frac{5}{8}$ | .45 | MAL-16D33 | .0033 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .65 |
| MAL-4P25 | .25 | $\frac{5}{8}$ X $1\frac{5}{8}$ | .50 | MAL-16D47 | .0047 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .65 |
| MAL-4P47 | .47 | $\frac{3}{4}$ X $2\frac{1}{4}$ | .75 | MAL-16D5 | .005 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .65 |
| MAL-4P50 | .50 | $\frac{3}{4}$ X $2\frac{1}{4}$ | .80 | MAL-16D68 | .0068 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .65 |
| | | 600 V.D.C.W. | | MAL-16D82 | .0082 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .65 |
| MAL-6D1 | .001 | $\frac{5}{16}$ X 1 | .25 | MAL-16S1 | .01 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .70 |
| MAL-6D15 | .0015 | $\frac{5}{16}$ X 1 | .25 | MAL-16S15 | .015 | $\frac{1}{2}$ X $1\frac{1}{2}$ | .70 |
| MAL-6D2 | .002 | $\frac{5}{16}$ X 1 | .25 | MAL-16S22 | .022 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .70 |
| MAL-6D22 | .0022 | $\frac{5}{16}$ X 1 | .25 | MAL-16S33 | .033 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .70 |
| MAL-6D3 | .003 | $\frac{5}{16}$ X 1 | .25 | MAL-16S33 | .033 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .70 |
| MAL-6D33 | .0033 | $\frac{5}{16}$ X 1 | .25 | MAL-16S47 | .047 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .90 |
| MAL-6D4 | .004 | $\frac{5}{16}$ X 1 | .25 | MAL-16S5 | .05 | $\frac{3}{8}$ X $1\frac{3}{8}$ | .90 |
| MAL-6D47 | .0047 | $\frac{5}{16}$ X 1 | .25 | | | 6000 V.D.C.W. | |
| MAL-6D5 | .005 | $\frac{5}{16}$ X 1 | .25 | MAL-60T5 | .0005 | $\frac{1}{2}$ X $1\frac{1}{2}$ | 1.35 |
| MAL-6D6 | .006 | $\frac{5}{16}$ X 1 | .25 | MAL-60D1 | .001 | $\frac{9}{16}$ X $1\frac{9}{16}$ | 1.35 |
| MAL-6D68 | .0068 | $\frac{5}{16}$ X 1 | .30 | MAL-60D5 | .005 | $\frac{11}{16}$ X $1\frac{11}{16}$ | 1.35 |
| MAL-6S1 | .01 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .30 | | | 10,000 V.D.C.W. | |
| MAL-6S15 | .015 | $\frac{3}{8}$ X $1\frac{1}{4}$ | .30 | MAL-100T5 | .0005 | $\frac{1}{2}$ X $1\frac{1}{2}$ | 1.50 |
| MAL-6S2 | .02 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .30 | | | 12,500 V.D.C.W. | |
| MAL-6S22 | .022 | $\frac{7}{16}$ X $1\frac{1}{4}$ | .30 | MAL-125T25 | .00025 | $\frac{1}{2}$ X $1\frac{1}{2}$ | 1.70 |

ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Dyna-Tan[®] Tantalum Capacitors in production quantities

**Available
Ratings**

**.0047UF to 330UF
6VDC to 50VDC
-80°C to +125°C**

All Series SD capacitors are designed with a porous tantalum or wire tantalum anode formed by electrochemical means to produce an extremely stable oxide dielectric. The anode is then coated with a solid semiconductor type of electrolyte, thus preparing it for a

conductive coating that is used for the cathode. The entire assembly is then hermetically sealed in a hot-tinned brass can with a time tested glass-to-metal seal, thus giving full protection against all adverse outside environmental conditions for long term operation over a temperature range from -80°C to $+125^{\circ}\text{C}$, and under proper conditions can be operated to temperatures approaching 150°C .

GLP Series SD Capacitors are designed to meet or exceed the requirements of style CS 12 and CS 13 of MIL C 26655A Characteristic B.

GLP TYPE SD STANDARD RATINGS

| | 6 VDC 8 VDC Surge | 10 VDC 13 VDC Surge | 15 VDC 18 VDC Surge | 20 VDC 24 VDC Surge | 35 VDC 42 VDC Surge | 50 VDC 60 VDC Surge |
|------------------------------|--|--|--|--|--|--|
| uf | Part No.* | Part No.* | Part No.* | Part No.* | Part No.* | Part No.* |
| 0047 0056 0068 0082 | | | | SD 172-20A SD 562-20A SD 682-20A SD 822-20A | SD 472-35A SD 562-35A SD 682-35A SD 822-35A | SD 472-50A SD 562-50A SD 682-50A SD 822-50A |
| 01 012 015 018 | | | | SD 103-20A SD 123-20A SD 153-20A SD 183-20A | SD 103-35A SD 123-35A SD 153-35A SD 183-35A | SD 103-50A SD 123-50A SD 153-50A SD 183-50A |
| 022 027 033 039 | | | | SD 223-20A SD 273-20A SD 333-20A SD 393-20A | SD 223-35A SD 273-35A SD 333-35A SD 393-35A | SD 223-50A SD 273-50A SD 333-50A SD 393-50A |
| 047 056 068 082 | | | | SD 473-20A SD 563-20A SD 683-20A SD 823-20A | SD 473-35A SD 563-35A SD 683-35A SD 823-35A | SD 473-50A SD 563-50A SD 683-50A SD 823-50A |
| 1 12 15 18 | | | | SD 104-20A SD 124-20A SD 154-20A SD 184-20A | SD 104-35A SD 124-35A SD 154-35A SD 184-35A | SD 104-50A SD 124-50A SD 154-50A SD 184-50A |
| 22 27 33 39 | SD 224-6A SD 274-6A SD 334-6A SD 394-6A | SD 224-10A SD 274-10A SD 334-10A SD 394-10A | SD 224-15A SD 274-15A SD 334-15A SD 394-15A | SD 224-20A SD 274-20A SD 334-20A SD 394-20A | SD 224-35A SD 274-35A SD 334-35A SD 394-35A | SD 224-50A SD 274-50A SD 334-50A SD 394-50A |
| 47 56 68 82 | SD 474-6A SD 564-6A SD 684-6A SD 824-6A | SD 474-10A SD 564-10A SD 684-10A SD 824-10A | SD 474-15A SD 564-15A SD 684-15A SD 824-15A | SD 474-20A SD 564-20A SD 684-20A SD 824-20A | SD 474-35A SD 564-35A SD 684-35A SD 824-35A | SD 474-50A SD 564-50A SD 684-50A SD 824-50A |

NOTE: Non-polar units available on request

*Part No. shall be completed by adding capacitance tolerance letter (K, M, or F) after capacitance and type of insulation (2 or 3) after case size. (Refer to page 4 for complete numbering system)

DIMENSIONS IN INCHES

| CASE SIZE CODE | LEADS | | BARE CASE — FIG. 1 | | | FIG. 2 | PLASTIC FILM INSULATION—FIG. 3 | | RIGID INSULATION — FIG. 3 | |
|----------------------|------------------------------------|---------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------------|------------------------------------|------------------------------|-----------------------------|
| | WIRE DIA. + 0.005 - 0.001 | WIRE SIZE AWG | DIA. D + 0.016 - 0.005 | LENGTH L ± 0.031 | LENGTH L1 ± 0.031 | LENGTH L2 ± 0.031 | DIA. D1 ± 0.010 | LENGTH L3 + 0.000 - 0.062 | DIA. D1 ± 0.015 | LENGTH L3 ± 0.015 |
| A | 0.020 | 24 | 0.125 | 0.250 | 0.325 | 0.45 | 0.135 | 0.312 | 0.159 | 0.345 |
| B | 0.020 | 24 | 0.175 | 0.438 | 0.515 | 0.62 | 0.183 | 0.500 | 0.207 | 0.562 |
| C | 0.025 | 22 | 0.279 | 0.650 | 0.745 | 0.89 | 0.289 | 0.722 | 0.312 | 0.775 |
| D | 0.025 | 22 | 0.341 | 0.750 | 0.845 | 1.02 | 0.351 | 0.822 | 0.375 | 0.875 |

GLP electronics, inc., BRISTOL, CONN.

SECTION 1500

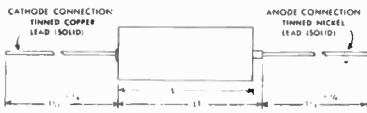


FIG. 1
UNINSULATED

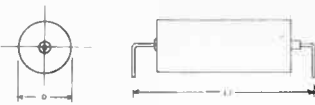


FIG. 2
FOR PRINTED CIRCUIT BOARDS

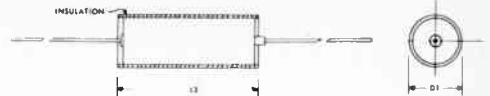


FIG. 3
INSULATED

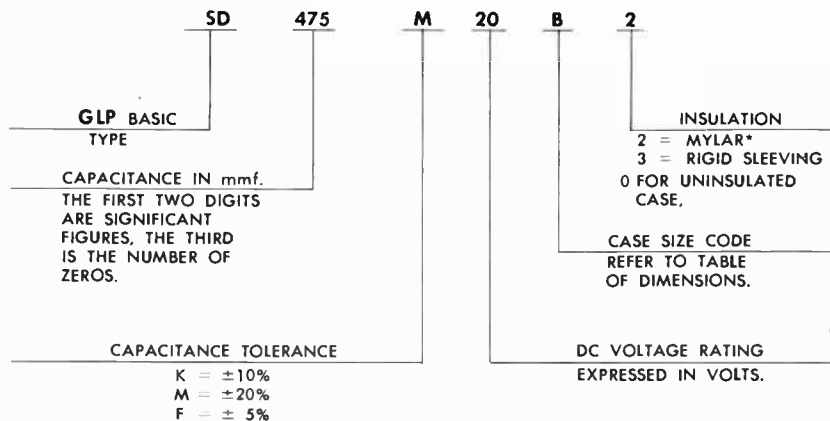
GLP TYPE SD STANDARD RATINGS

| | 6 VDC 8 VDC Surge | 10 VDC 13 VDC Surge | 15 VDC 18 VDC Surge | 20 VDC 24 VDC Surge | 35 VDC 42 VDC Surge | 50 VDC 60 VDC Surge |
|-----|----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| uf | Part No.* | Part No.* | Part No.* | Part No.* | Part No.* | Part No.* |
| 1.0 | SD 105-6A. | SD 105-10A | SD 105-15A | SD 105-20A | SD 105-35A. | SD 105-50A. |
| 1.2 | SD 125-6A. | SD 125-10A | SD 125-15A. | SD 125-20A. | SD 125-35A. | SD 125-50B. |
| 1.5 | SD 155-6A. | SD 155-10A. | SD 155-15A. | SD 155-20A. | SD 155-35A. | SD 155-50B. |
| 1.8 | SD 185-6A. | SD 185-10A. | SD 185-15A. | SD 185-20A. | SD 185-35B. | SD 185-50B. |
| 2.2 | SD 225-6A. | SD 225-10A. | SD 225-15A. | SD 225-20A. | SD 225-35B. | SD 225-50B. |
| 2.7 | SD 275-6A. | SD 275-10A. | SD 275-15A. | SD 275-20B. | SD 275-35B. | SD 275-50B. |
| 3.3 | SD 335-6A. | SD 335-10A. | SD 335-15A. | SD 335-20B. | SD 335-35B. | SD 335-50B. |
| 3.9 | SD 395-6A. | SD 395-10A. | SD 395-15B. | SD 395-20B. | SD 395-35B. | SD 395-50B. |
| 4.7 | SD 475-6A. | SD 475-10A. | SD 475-15B. | SD 475-20B. | SD 475-35B. | SD 475-50B. |
| 5.6 | SD 565-6A. | SD 565-10B. | SD 565-15B. | SD 565-20B. | SD 565-35B. | SD 565-50C. |
| 6.8 | SD 685-6A. | SD 685-10B. | SD 685-15B. | SD 685-20B. | SD 685-35B. | SD 685-50C. |
| 8.2 | SD 825-6B. | SD 825-10B. | SD 825-15B. | SD 825-20B. | SD 825-35C. | SD 825-50C. |
| 10 | SD 106-6B. | SD 106-10B. | SD 106-15B. | SD 106-20B. | SD 106-35C. | SD 106-50C. |
| 12 | SD 126-6B. | SD 126-10B. | SD 126-15B. | SD 126-20B. | SD 126-35C. | SD 126-50C. |
| 15 | SD 156-6B. | SD 156-10B. | SD 156-15B. | SD 156-20B. | SD 156-35C. | SD 156-50C. |
| 18 | SD 186-6B. | SD 186-10B. | SD 186-15B. | SD 186-20B. | SD 186-35C. | SD 186-50C. |
| 22 | SD 226-6B. | SD 226-10B. | SD 226-15B. | SD 226-20C. | SD 226-35C. | SD 226-50C. |
| 27 | SD 276-6B. | SD 276-10B. | SD 276-15C. | SD 276-20C. | SD 276-35D. | |
| 33 | SD 336-6B. | SD 336-10B. | SD 336-15C. | SD 336-20C. | SD 336-35D. | |
| 39 | SD 396-6B. | SD 396-10B. | SD 396-15C. | SD 396-20C. | SD 396-35D. | |
| 47 | SD 476-6B. | SD 476-10C. | SD 476-15C. | SD 476-20C. | SD 476-35D. | |
| 56 | SD 566-6B. | SD 566-10C. | SD 566-15C. | SD 566-20D. | — — | |
| 60 | SD 606-6B. | — — | — — | — — | — — | |
| 68 | SD 686-6C. | SD 686-10C. | SD 686-15C. | SD 686-20D. | — — | |
| 82 | SD 826-6C. | SD 826-10C. | SD 826-15D. | SD 826-20D. | — — | |
| 100 | SD 107-6C. | SD 107-10C. | SD 107-15D. | SD 107-20D. | — — | |
| 120 | SD 127-6C. | SD 127-10C. | SD 127-15D. | SD 127-20D. | — — | |
| 150 | SD 157-6C. | SD 157-10D. | SD 157-15D. | — — | — — | |
| 180 | SD 187-6C. | SD 187-10D. | — — | — — | — — | |
| 220 | SD 227-6C. | SD 227-10D. | — — | — — | — — | |
| 330 | SD 337-6C. | — — | — — | — — | — — | |

NOTE: Non-polar units available on request

*Part No. shall be completed by adding capacitance tolerance letter (K, M, or F) after capacitance and type of insulation (2 or 3) after case size (Refer to page 4 for complete numbering system)

SOLID TANTALUM NUMBERING SYSTEM



* E. I. DUPONT CO. TRADEMARK

GLP electronics, inc., BRISTOL, CONN.

Dyna-Mite[®] Micro-Miniature Tantalum Capacitors

Available Ratings

.001UF to 10UF
1VDC to 30VDC
-55°C to 85°C

Micro-Miniature Solid Tantalum Capacitors are designed to operate from -55°C to +125°C where reliability and performance are prime factors. Type MM capacitors are designed with solid non-corrosive elements. In order to obtain extremely low

power factor and a maximum operating temperature of 125°C, the capacitor elements are housed in a solid silver case with a securely bonded high temperature epoxy end-fill which completely covers the positive terminal. The end result is a completely moisture-proof unit. Since the case of Type MM capacitors is of a negative potential, two types of insulation are available:

1. Type M—Mylar[®] Sleeve
2. Type G—Plastic Coating

All units manufactured with weldable leads.

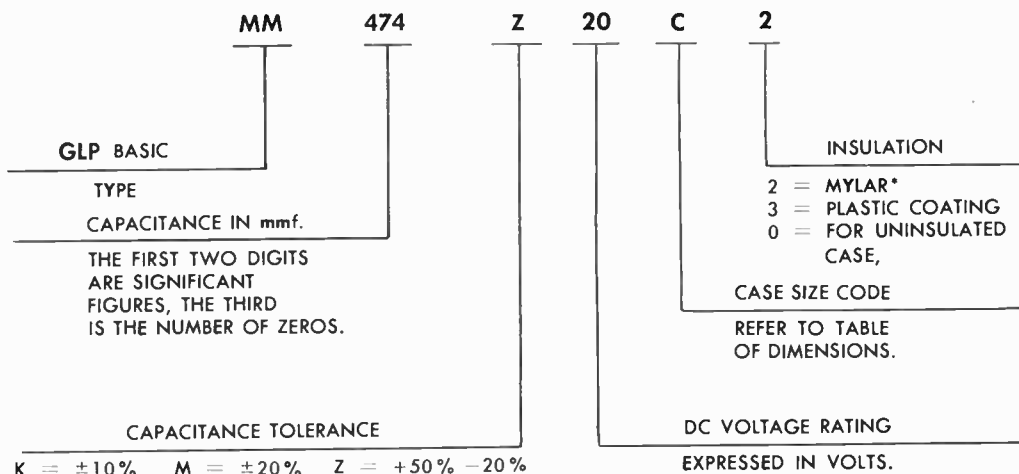
TYPE MM—DIMENSIONS & RATINGS



CASE SIZES

| | AA | A | B | C | D | E |
|----------------|----------------------------|------|------|------|------|------|
| Diameter (in.) | .054 | .065 | .065 | .065 | .065 | .093 |
| Length (in.) | .110 | .125 | .150 | .200 | .225 | .250 |
| Rated Voltage | MAXIMUM MICROFARADS | | | | | |
| 30 | | .10 | .25 | .50 | 1.0 | 1.5 |
| 20 | | .15 | .3 | .75 | 1.5 | 2.0 |
| 15 | | .25 | .5 | 1.0 | 2.0 | 3.0 |
| 10 | .20 | .50 | 1.0 | 1.50 | 3.0 | 4.0 |
| 8 | .30 | .60 | 1.2 | 2.0 | 5.0 | 6.0 |
| 6 | .50 | .68 | 1.5 | 3.25 | 6.5 | 7.0 |
| 4 | .70 | .75 | 2.0 | 5.0 | 8.0 | 8.0 |
| 3 | .90 | 1.0 | 2.5 | 6.50 | 8.75 | 8.75 |
| 2 | 1.0 | 1.5 | 3.0 | 8.0 | 10.0 | 10.0 |
| 1 | 1.125 | 2.0 | 4.0 | | | |

SOLID TANTALUM NUMBERING SYSTEM



GLPT electronics, inc., BRISTOL, CONN.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE TM TWIST-MOUNT ELECTROLYTICS

Designed for 85° C operation. Available in single, dual, triple and quadruple capacitors units. Assembled in aluminum containers providing protection against moisture. Easy to mount, low leakage, long shelf life. Highly dependable. For use in applications where high temperatures, voltage, surges, and ripple currents are encountered; as in radio and television receivers, amplifiers and similar equipment. Packaged in new Vu-Pak especially designed for the new General Instrument Capac-O-Mat.



| Stock No. | Former Stock No. | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|-----------|------------------|----------|---------|-----------|--------|------------|
| 1010 | 1 | 1000 | 6 | 1 3/8 | 2 | 1.41 |
| 1020 | 2 | 2000 | 6 | 1 3/8 | 2 | 1.50 |
| 1030 | 3 | 3000 | 10 | 1 3/8 | 2 1/2 | 2.16 |
| 1040 | 4 | 1000 | 15 | 1 | 2 1/2 | 1.50 |
| 1050 | 5 | 2000 | 15 | 1 3/8 | 2 1/2 | 2.04 |
| 1060 | 6 | 3000 | 15 | 1 3/8 | 3 | 2.07 |
| 1070 | 7 | 4000 | 15 | 1 3/8 | 3 1/2 | 2.22 |
| 1080 | 8 | 50 | 25 | 1 | 2 | .99 |
| 1090 | 9 | 100 | 25 | 1 | 2 | .96 |
| 1100 | 73 | 250 | 25 | 1 | 2 | 1.14 |
| 1110 | 10 | 500 | 25 | 1 | 2 | 1.50 |
| 1120 | 11 | 1000 | 25 | 1 3/8 | 2 | 2.10 |
| 1130 | 12 | 100 | 50 | 1 | 2 | .99 |
| 1140 | 13 | 150 | 50 | 1 | 2 | 1.08 |
| 1150 | 14 | 250 | 50 | 1 | 2 1/2 | 1.17 |
| 1160 | 15 | 500 | 50 | 1 3/8 | 2 | 1.56 |
| 1170 | 16 | 1000 | 50 | 1 3/8 | 3 1/2 | 2.22 |
| 1180 | | 1500 | 50 | 1 3/8 | 4 | 2.28 |
| 1190 | 17 | 20 | 150 | 1 | 2 | 1.05 |
| 1200 | 18 | 30 | 150 | 1 | 2 | .90 |
| 1210 | 19 | 40 | 150 | 1 | 2 | 1.17 |
| 1220 | 20 | 50 | 150 | 1 | 2 | .96 |
| 1230 | 21 | 80 | 150 | 1 | 2 | 1.08 |
| 1240 | 22 | 100 | 150 | 1 | 2 | 1.17 |
| 1250 | 23 | 120 | 150 | 1 | 2 1/2 | 1.26 |
| 1260 | 76 | 120 | 150 | 1 3/8 | 2 | 1.26 |
| 1270 | 24 | 140 | 150 | 1 | 3 | 1.26 |
| 1280 | 25 | 150 | 150 | 1 | 3 | 1.26 |
| 1285 | | 150 | 150 | 1 3/8 | 2 | 1.26 |
| 1290 | 26 | 200 | 150 | 1 3/8 | 2 1/2 | 1.44 |
| 1300 | 27 | 300 | 150 | 1 3/8 | 2 1/2 | 1.65 |
| 1310 | 77 | 40 | 175 | 1 | 2 | .99 |
| 1320 | 78 | 50 | 175 | 1 | 2 | 1.02 |
| 1330 | 79 | 80 | 175 | 1 | 2 | 1.14 |
| 1340 | 80 | 100 | 175 | 1 | 2 | 1.23 |
| 1350 | 81 | 120 | 175 | 1 | 2 1/2 | 1.29 |
| 1360 | 82 | 140 | 175 | 1 | 3 | 1.32 |
| 1370 | 83 | 150 | 175 | 1 | 2 1/2 | 1.32 |
| 1380 | 84 | 200 | 175 | 1 3/8 | 2 | 1.50 |
| 1390 | 85 | 300 | 175 | 1 3/8 | 3 | 1.71 |
| 1400 | | 160 | 200 | 1 3/8 | 2 1/2 | 1.86 |
| 1410 | 74 | 5 | 250 | 1 | 2 | .81 |
| 1420 | 28 | 15 | 250 | 1 | 2 | 1.14 |
| 1430 | 29 | 20 | 250 | 1 | 2 | .93 |
| 1440 | 30 | 30 | 250 | 1 | 2 | 1.26 |
| 1450 | 31 | 40 | 250 | 1 | 2 | 1.05 |
| 1460 | 32 | 60 | 250 | 1 | 2 1/2 | 1.50 |
| 1470 | 33 | 80 | 250 | 1 | 2 1/2 | 1.59 |
| 1480 | 34 | 150 | 250 | 1 3/8 | 2 1/2 | 1.83 |
| 1490 | 75 | 200 | 250 | 1 3/8 | 3 1/2 | 2.16 |
| 1500 | 35 | 15 | 300 | 1 | 2 | 1.17 |
| 1510 | 36 | 30 | 300 | 1 | 2 | 1.29 |
| 1520 | 37 | 40 | 300 | 1 | 2 1/2 | 1.11 |
| 1530 | 38 | 50 | 300 | 1 | 2 1/2 | 1.50 |
| 1540 | 39 | 80 | 300 | 1 | 3 | 1.50 |
| 1550 | 40 | 100 | 300 | 1 | 3 | 1.71 |
| 1560 | 41 | 125 | 300 | 1 3/8 | 2 1/2 | 2.07 |
| 1570 | 42 | 150 | 300 | 1 3/8 | 3 | 2.07 |
| 1580 | 89 | 200 | 300 | 1 3/8 | 3 1/2 | 1.71 |
| 1590 | | 250 | 300 | 1 3/8 | 4 | 3.30 |
| 1600 | 43 | 15 | 350 | 1 | 2 | 1.20 |
| 1610 | 44 | 30 | 350 | 1 | 2 | 1.11 |
| 1620 | 45 | 40 | 350 | 1 | 2 1/2 | 1.17 |
| 1630 | 46 | 50 | 350 | 1 | 3 | 1.23 |
| 1640 | | 60 | 350 | 1 | 3 | 1.29 |
| 1650 | 47 | 80 | 350 | 1 3/8 | 2 1/2 | 1.68 |
| 1660 | 48 | 125 | 350 | 1 3/8 | 3 | 2.34 |
| 1670 | 86 | 300 | 350 | 1 3/8 | 5 | 3.45 |
| 1680 | 49 | 10 | 400 | 1 | 2 | 1.11 |
| 1690 | 50 | 20 | 400 | 1 | 2 | 1.29 |
| 1700 | 51 | 40 | 400 | 1 | 3 | 1.86 |
| 1710 | 52 | 80 | 400 | 1 3/8 | 2 1/2 | 2.19 |
| 1720 | | 4 | 450 | 1 | 2 | .81 |
| 1730 | 53 | 10 | 450 | 1 | 2 | .90 |
| 1740 | 54 | 15 | 450 | 1 | 2 | .99 |
| 1750 | 55 | 20 | 450 | 1 | 2 | 1.08 |
| 1760 | 56 | 30 | 450 | 1 | 2 1/2 | 1.14 |

| Stock No. | Former Stock No. | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|-----------|------------------|----------|---------|-----------|--------|------------|
| 1770 | 57 | 40 | 450 | 1 | 3 | 1.20 |
| 1780 | 58 | 50 | 450 | 1 | 3 | 1.38 |
| 1790 | 59 | 60 | 450 | 1 3/8 | 2 1/2 | 1.53 |
| 1800 | 60 | 80 | 450 | 1 3/8 | 3 | 1.80 |
| 1810 | 61 | 100 | 450 | 1 3/8 | 3 | 2.04 |
| 1820 | | 125 | 450 | 1 3/8 | 3 1/2 | 2.28 |
| 1830 | 62 | 150 | 450 | 1 3/8 | 4 | 2.52 |
| 1840 | 87 | 200 | 450 | 1 3/8 | 5 | 3.60 |
| 1850 | 88 | 250 | 450 | 1 3/8 | 5 | 4.05 |
| 1860 | 66 | 10 | 500 | 1 | 2 | .99 |
| 1870 | 67 | 20 | 500 | 1 | 2 1/2 | 1.08 |
| 1880 | 68 | 30 | 500 | 1 | 3 | 1.17 |
| 1890 | 69 | 40 | 500 | 1 | 3 1/2 | 1.47 |
| 1900 | 70 | 80 | 500 | 1 3/8 | 3 1/2 | 1.89 |
| 1910 | 71 | 90 | 500 | 1 3/8 | 3 1/2 | 2.07 |
| 1920 | 72 | 10 | 525 | 1 | 2 | 1.02 |

| Stock No. | Former Stock No. | Capacity | Voltage | Dia-meter | Length | Net |
|-----------|------------------|-----------|---------|-----------|--------|------|
| 2005 | 64 | 250-1000 | 10-6 | 1 3/8 | 2 | 1.68 |
| 2010 | 1 | 1000-500 | 10-10 | 1 3/8 | 2 | 2.40 |
| 2015 | 2 | 1000-1000 | 15-15 | 1 | 3 | 2.61 |
| 2020 | | 1000-1000 | 15-15 | 1 3/8 | 2 | 2.61 |
| 2025 | 109 | 500-100 | 16-16 | 1 | 2 | 2.31 |
| 2030 | 3 | 40-40 | 25-25 | 1 | 2 | 1.17 |
| 2035 | | 100-70 | 25-25 | 1 | 2 | 1.05 |
| 2040 | 4 | 150-50 | 25-25 | 1 | 2 | 1.41 |
| 2045 | 5 | 50-50 | 50-50 | 1 | 2 | .99 |
| 2050 | 107 | 100-100 | 50-50 | 1 | 2 | 1.23 |
| 2055 | 94 | 50-50 | 150-5 | 1 | 3 | 1.44 |
| 2060 | 65 | 50-150 | 150-25 | 1 | 2 | 1.62 |
| 2065 | | 150-100 | 150-25 | 1 3/8 | 2 | 1.59 |
| 2070 | 66 | 40-20 | 150-50 | 1 | 2 | 1.50 |
| 2075 | 6 | 20-20 | 150-150 | 1 | 2 | .99 |
| 2080 | 7 | 30-15 | 150-150 | 1 | 2 | 1.29 |
| 2085 | 8 | 30-30 | 150-150 | 1 | 2 | 1.08 |
| 2090 | 9 | 40-20 | 150-150 | 1 | 2 | 1.08 |
| 2095 | 10 | 40-30 | 150-150 | 1 | 2 | 1.08 |
| 2100 | 11 | 40-40 | 150-150 | 1 | 2 | 1.11 |
| 2105 | 12 | 50-30 | 150-150 | 1 | 2 | 1.17 |
| 2110 | 13 | 50-50 | 150-150 | 1 | 2 | 1.26 |
| 2115 | 14 | 60-20 | 150-150 | 1 | 2 | 1.47 |
| 2120 | 15 | 60-60 | 150-150 | 1 | 2 1/2 | 1.38 |
| 2125 | | 70-30 | 150-150 | 1 | 2 1/2 | 1.29 |
| 2130 | | 75-75 | 150-150 | 1 | 2 1/2 | 1.53 |
| 2135 | 16 | 80-40 | 150-150 | 1 | 2 1/2 | 1.35 |
| 2140 | 17 | 80-50 | 150-150 | 1 | 2 1/2 | 1.41 |
| 2145 | 18 | 80-80 | 150-150 | 1 | 2 1/2 | 1.56 |
| 2150 | 87 | 100-30 | 150-150 | 1 3/8 | 2 1/2 | 1.65 |
| 2155 | 19 | 100-100 | 150-150 | 1 3/8 | 2 | 2.40 |
| 2160 | | 125-100 | 150-150 | 1 3/8 | 2 1/2 | 1.98 |
| 2165 | | 200-5 | 150-150 | 1 3/8 | 2 1/2 | 1.59 |
| 2170 | 20 | 200-125 | 150-150 | 1 3/8 | 3 | 2.22 |
| 2180 | | 200-150 | 150-150 | 1 3/8 | 3 1/2 | 2.22 |
| 2185 | 21 | 200-200 | 150-150 | 1 3/8 | 3 | 2.37 |
| 2190 | 105 | 100-100 | 175-175 | 1 3/8 | 2 1/2 | 1.86 |
| 2195 | 106 | 200-200 | 175-175 | 1 3/8 | 3 | 2.46 |
| 2200 | | 60-60 | 200-200 | 1 | 3 | 2.01 |
| 2205 | 22 | 60-60 | 200-200 | 1 3/8 | 2 | 2.01 |
| 2210 | | 100-100 | 200-200 | 1 3/8 | 3 | 2.07 |
| 2215 | 67 | 40-20 | 250-25 | 1 | 2 | 1.20 |
| 2220 | 68 | 40-25 | 250-50 | 1 | 2 | 1.23 |
| 2225 | 69 | 100-150 | 250-50 | 1 3/8 | 3 | 2.16 |
| 2230 | 23 | 10-10 | 250-250 | 1 | 2 | 1.26 |
| 2235 | 24 | 20-20 | 250-250 | 1 | 2 | 1.11 |
| 2240 | 25 | 30-30 | 250-250 | 1 | 2 | 1.62 |
| 2245 | 26 | 40-20 | 250-250 | 1 | 2 1/2 | 1.62 |
| 2250 | 27 | 40-40 | 250-250 | 1 | 3 | 1.47 |
| 2255 | 28 | 150-150 | 250-250 | 1 3/8 | 4 | 3.06 |
| 2260 | 88 | 200-200 | 250-250 | 1 3/8 | 4 | 3.60 |
| 2265 | | 35-500 | 300-6 | 1 | 2 1/2 | 1.65 |
| 2270 | | 10-40 | 300-50 | 1 | 2 | .99 |
| 2275 | 111 | 150-100 | 300-150 | 1 3/8 | 4 | 3.36 |
| 2280 | 97 | 60-10 | 300-200 | 1 | 3 | 1.86 |
| 2285 | 96 | 200-5 | 300-200 | 1 3/8 | 3 | 2.10 |
| 2290 | 98 | 20-60 | 300-250 | 1 | 3 | 2.04 |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE TM TWIST-MOUNT ELECTROLYTICS (Con't.)

| Stock No. TMD | Former Stock No. TMD | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|---------------|----------------------|----------|---------|-----------|--------|------------|
| 2295 | 29 | 20-20 | 300-300 | 1 | 2 | 1.23 |
| 2300 | 30 | 30-30 | 300-300 | 1 3/8 | 2 | 1.47 |
| 2310 | | 40-30 | 300-300 | 1 | 3 | 1.56 |
| 2315 | 31 | 40-40 | 300-300 | 1 3/8 | 2 1/2 | 2.22 |
| 2320 | 32 | 60-60 | 300-300 | 1 3/8 | 2 1/2 | 2.52 |
| 2325 | 104 | 80-40 | 300-300 | 1 3/8 | 3 | 2.64 |
| 2330 | 33 | 80-80 | 300-300 | 1 3/8 | 3 | 2.40 |
| 2340 | 110 | 80-200 | 300-300 | 1 3/8 | 4 1/2 | 3.27 |
| 2350 | 34 | 120-20 | 300-300 | 1 3/8 | 3 | 2.37 |
| 2355 | | 120-40 | 300-300 | 1 3/8 | 3 | 2.58 |
| 2360 | 70 | 20-20 | 350-25 | 1 | 2 | 1.41 |
| 2365 | 71 | 40-25 | 350-25 | 1 | 2 1/2 | 1.74 |
| 2370 | | 15-15 | 350-350 | 1 | 2 | 1.32 |
| 2375 | 35 | 20-20 | 350-350 | 1 | 2 1/2 | 1.71 |
| 2380 | 36 | 30-20 | 350-350 | 1 | 3 | 1.92 |
| 2385 | 37 | 30-30 | 350-350 | 1 | 3 | 1.71 |
| 2390 | 38 | 40-40 | 350-350 | 1 3/8 | 2 1/2 | 1.77 |
| 2395 | 39 | 50-30 | 350-350 | 1 3/8 | 2 1/2 | 1.86 |
| 2400 | | 60-30 | 350-350 | 1 3/8 | 2 1/2 | 1.86 |
| 2405 | | 80-20 | 350-350 | 1 3/8 | 2 1/2 | 2.07 |
| 2410 | | 80-40 | 350-350 | 1 3/8 | 3 | 2.43 |
| 2415 | 40 | 80-80 | 350-350 | 1 3/8 | 3 | 2.79 |
| 2420 | | 90-40 | 350-350 | 1 3/8 | 3 | 2.55 |
| 2425 | 108 | 100-60 | 350-350 | 1 3/8 | 4 | 2.85 |
| 2430 | 89 | 100-80 | 350-350 | 1 3/8 | 3 1/2 | 2.94 |
| 2435 | | 100-100 | 350-350 | 1 3/8 | 4 | 3.66 |
| 2440 | 90 | 160-10 | 350-350 | 1 3/8 | 3 1/2 | 2.55 |
| 2445 | | 35-100 | 400-50 | 1 | 3 | 1.53 |
| 2450 | 99 | 40-100 | 400-50 | 1 | 3 1/2 | 2.01 |
| 2455 | | 100-30 | 400-50 | 1 3/8 | 3 | 2.31 |
| 2460 | | 80-80 | 400-200 | 1 3/8 | 3 1/2 | 2.34 |
| 2465 | 100 | 60-80 | 400-250 | 1 3/8 | 3 1/2 | 2.91 |
| 2470 | 41 | 15-15 | 400-400 | 1 | 2 | 1.65 |
| 2475 | 42 | 30-10 | 400-400 | 1 | 2 | 1.74 |
| 2480 | 43 | 40-40 | 400-400 | 1 3/8 | 3 | 2.04 |
| 2485 | 44 | 60-60 | 400-400 | 1 3/8 | 3 | 3.27 |
| 2490 | 45 | 80-10 | 400-400 | 1 3/8 | 3 | 2.52 |
| 2495 | | 80-60 | 400-400 | 1 3/8 | 3 | 2.79 |
| 2500 | 91 | 120-40 | 400-400 | 1 3/8 | 4 | 3.12 |
| 2510 | 72 | 10-20 | 450-25 | 1 | 2 | .99 |
| 2515 | 73 | 20-20 | 450-25 | 1 | 2 | 1.47 |
| 2520 | 74 | 40-20 | 450-25 | 1 | 3 | 1.80 |
| 2525 | 75 | 80-20 | 450-25 | 1 3/8 | 3 | 2.52 |
| 2530 | 101 | 20-25 | 450-50 | 1 | 2 1/2 | 1.68 |
| 2535 | | 40-100 | 450-50 | 1 | 3 1/2 | 1.65 |
| 2540 | | 50-100 | 450-50 | 1 3/8 | 2 1/2 | 1.77 |
| 2545 | 76 | 80-50 | 450-50 | 1 3/8 | 3 | 2.07 |
| 2550 | | 80-100 | 450-50 | 1 3/8 | 3 | 2.22 |
| 2555 | 102 | 100-50 | 450-50 | 1 3/8 | 3 | 2.25 |
| 2560 | 77 | 20-100 | 450-100 | 1 3/8 | 2 | 2.16 |
| 2565 | 78 | 30-40 | 450-150 | 1 3/8 | 2 | 2.16 |
| 2570 | | 30-200 | 450-150 | 1 3/8 | 3 | 2.07 |
| 2575 | | 20-50 | 450-250 | 1 | 3 | 1.65 |
| 2580 | 103 | 20-200 | 450-250 | 1 3/8 | 3 | 2.70 |
| 2585 | | 40-10 | 450-300 | 1 | 3 | 1.53 |
| 2590 | 79 | 20-80 | 450-350 | 1 3/8 | 3 | 2.70 |
| 2595 | 80 | 40-10 | 450-350 | 1 3/8 | 2 | 1.53 |
| 2600 | 46 | 4-4 | 450-450 | 1 | 2 | .93 |
| 2605 | | 5-5 | 450-450 | 1 | 2 | .99 |
| 2610 | 47 | 10-10 | 450-450 | 1 | 2 | 1.11 |
| 2615 | 48 | 15-15 | 450-450 | 1 | 2 | 1.32 |
| 2620 | 49 | 20-10 | 450-450 | 1 | 2 | 1.32 |
| 2625 | 50 | 20-20 | 450-450 | 1 | 3 | 1.50 |
| 2630 | 51 | 30-10 | 450-450 | 1 | 3 | 1.41 |
| 2635 | | 30-15 | 450-450 | 1 | 3 | 1.95 |
| 2640 | 52 | 30-30 | 450-450 | 1 3/8 | 2 1/2 | 1.80 |
| 2645 | 53 | 40-20 | 450-450 | 1 3/8 | 2 | 1.92 |
| 2650 | 54 | 40-40 | 450-450 | 1 3/8 | 2 1/2 | 2.04 |
| 2655 | | 50-50 | 450-450 | 1 3/8 | 3 | 2.28 |
| 2660 | 55 | 60-20 | 450-450 | 1 3/8 | 3 | 2.10 |
| 2665 | 56 | 60-40 | 450-450 | 1 3/8 | 3 | 2.34 |
| 2670 | | 60-60 | 450-450 | 1 3/8 | 3 1/2 | 2.67 |
| 2675 | 57 | 80-10 | 450-450 | 1 3/8 | 3 | 2.13 |
| 2680 | | 80-20 | 450-450 | 1 3/8 | 3 | 2.31 |
| 2685 | | 80-30 | 450-450 | 1 3/8 | 3 1/2 | 2.49 |
| 2690 | 58 | 80-40 | 450-450 | 1 3/8 | 3 1/2 | 3.00 |
| 2695 | 59 | 80-80 | 450-450 | 1 3/8 | 4 | 2.85 |
| 2700 | | 100-40 | 450-450 | 1 3/8 | 4 | 2.88 |
| 2705 | | 20-100 | 475-400 | 1 3/8 | 3 1/2 | 2.67 |
| 2710 | | 15-15 | 475-475 | 1 | 2 1/2 | 1.38 |
| 2715 | | 30-10 | 475-475 | 1 | 3 | 1.53 |
| 2720 | | 40-10 | 475-475 | 1 3/8 | 2 1/2 | 1.83 |
| 2725 | | 80-50 | 474-475 | 1 3/8 | 4 | 3.09 |
| 2730 | | 80-50 | 500-50 | 1 3/8 | 3 1/2 | 2.82 |
| 2735 | 81 | 80-50 | 500-150 | 1 3/8 | 3 1/2 | 2.79 |
| 2740 | 82 | 60-80 | 500-150 | 1 3/8 | 2 1/2 | 2.49 |
| 2745 | 83 | 40-50 | 500-200 | 1 3/8 | 2 1/2 | 2.49 |
| | 84 | 15-20 | 500-300 | 1 | 2 1/2 | 1.71 |

| Stock No. TMD | Former Stock No. TMD | Capacity | Voltage | Dia-Meter | Length | Dealer Net |
|---------------|----------------------|----------|---------|-----------|--------|------------|
| 2750 | 85 | 20-100 | 500-300 | 1 3/8 | 3 | 2.91 |
| 2755 | 60 | 10-10 | 500-500 | 1 | 2 1/2 | 1.14 |
| 2760 | 61 | 20-20 | 500-500 | 1 3/8 | 2 1/2 | 1.68 |
| 2765 | | 30-10 | 500-500 | 1 3/8 | 2 1/2 | 1.53 |
| 2770 | | 30-30 | 500-500 | 1 3/8 | 3 | 1.92 |
| 2775 | 92 | 40-10 | 500-500 | 3/8 | 3 | 1.89 |
| 2780 | 62 | 40-40 | 500-500 | 1 3/8 | 3 1/2 | 2.55 |
| 2785 | 63 | 60-40 | 500-500 | 1 3/8 | 3 1/2 | 2.73 |
| 2790 | 93 | 80-50 | 500-500 | 1 3/8 | 3 1/2 | 3.06 |

| Stock No. TMD | Former Stock No. TMD | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|---------------|----------------------|-------------|-------------|-----------|--------|------------|
| 3003 | 1 | 20-20-20 | 25-25-25 | 1 | 2 | 1.14 |
| 3006 | 2 | 40-40-40 | 25-25-25 | 1 | 2 | 1.89 |
| 3009 | 3 | 30-30-30 | 50-50-50 | 1 | 2 | 1.92 |
| 3012 | 49 | 100-50-25 | 100-25-25 | 1 | 3 | 1.59 |
| 3015 | 50 | 20-250-100 | 150-15-15 | 1 3/8 | 2 | 2.58 |
| 3018 | 51 | 40-25-130 | 150-25-15 | 1 | 3 | 2.94 |
| 3021 | 166 | 15-15-1200 | 150-150-2 | 1 | 2 | 1.86 |
| 3024 | 52 | 30-20-200 | 150-150-10 | 1 | 2 | 1.44 |
| 3027 | 53 | 30-30-200 | 150-150-10 | 1 | 2 | 2.22 |
| 3030 | | 40-20-150 | 150-150-10 | 1 | 2 | 1.41 |
| 3033 | 54 | 40-20-250 | 150-150-10 | 1 | 2 | 2.40 |
| 3036 | 208 | 80-20-200 | 150-150-10 | 1 | 2 1/2 | 2.55 |
| 3039 | | 80-30-300 | 150-150-10 | 1 3/8 | 2 | 1.86 |
| 3042 | 209 | 80-60-250 | 150-150-10 | 1 | 3 | 1.77 |
| 3045 | 168 | 90-40-400 | 150-150-10 | 1 | 3 | 3.12 |
| 3048 | | 100-80-200 | 150-150-10 | 1 3/8 | 2 | 2.13 |
| 3051 | 55 | 20-20-20 | 150-150-25 | 1 | 2 | 1.95 |
| 3054 | 56 | 30-30-20 | 150-150-25 | 1 | 2 | 2.04 |
| 3057 | 57 | 40-20-20 | 150-150-25 | 1 | 2 | 1.35 |
| 3060 | 58 | 40-20-100 | 150-150-25 | 1 | 2 | 2.22 |
| 3063 | 59 | 40-20-200 | 150-150-25 | 1 | 2 1/2 | 1.59 |
| 3066 | 60 | 40-30-20 | 150-150-25 | 1 | 2 | 2.10 |
| 3069 | 61 | 40-40-20 | 150-150-25 | 1 | 2 | 1.41 |
| 3072 | 169 | 40-40-200 | 150-150-25 | 1 | 3 | 1.65 |
| 3075 | | 40-40-250 | 150-150-25 | 1 | 3 | 1.86 |
| 3078 | 62 | 50-30-20 | 150-150-25 | 1 | 2 | 1.47 |
| 3081 | 63 | 50-30-100 | 150-150-25 | 1 | 3 | 1.59 |
| 3084 | 64 | 50-50-20 | 150-150-25 | 1 | 2 1/2 | 1.56 |
| 3087 | 65 | 60-20-20 | 150-150-25 | 1 | 2 | 2.28 |
| 3090 | 66 | 60-40-20 | 150-150-25 | 1 | 2 1/2 | 1.59 |
| 3093 | | 60-40-200 | 150-150-25 | 1 | 3 | 1.80 |
| 3096 | 206 | 60-60-175 | 150-150-25 | 1 3/8 | 2 | 1.98 |
| 3097 | 67 | 80-40-20 | 150-150-25 | 1 | 2 1/2 | 1.65 |
| 3100 | | 80-40-300 | 150-150-25 | 1 3/8 | 2 1/2 | 2.16 |
| 3103 | 170 | 100-40-300 | 150-150-25 | 1 3/8 | 2 1/2 | 2.25 |
| 3106 | 68 | 120-60-20 | 150-150-25 | 1 3/8 | 2 1/2 | 3.00 |
| 3109 | 204 | 15-15-15 | 150-150-150 | 1 | 2 | 1.62 |
| 3112 | 4 | 20-20-20 | 150-150-150 | 1 | 2 | 1.35 |
| 3115 | 5 | 30-30-10 | 150-150-150 | 1 | 2 | 1.68 |
| 3118 | 6 | 40-20-10 | 150-150-150 | 1 | 2 | 1.38 |
| 3121 | 7 | 40-20-20 | 150-150-150 | 1 | 2 | 1.41 |
| 3124 | 8 | 40-30-20 | 150-150-150 | 1 | 2 | 1.47 |
| 3127 | 9 | 40-40-40 | 150-150-150 | 1 | 2 1/2 | 1.53 |
| 3130 | 162 | 50-40-10 | 150-150-150 | 1 | 2 | 1.50 |
| 3133 | 10 | 50-50-50 | 150-150-150 | 1 | 3 | 1.74 |
| 3136 | 11 | 60-40-20 | 150-150-150 | 1 | 2 1/2 | 1.62 |
| 3139 | | 70-15-15 | 150-150-150 | 1 | 2 | 1.59 |
| 3142 | 12 | 70-40-40 | 150-150-150 | 1 | 3 | 2.40 |
| 3145 | | 80-30-10 | 150-150-150 | 1 | 2 1/2 | 1.62 |
| 3148 | 13 | 80-40-20 | 150-150-150 | 1 | 2 1/2 | 1.71 |
| 3151 | 14 | 80-80-80 | 150-150-150 | 1 3/8 | 3 | 3.36 |
| 3154 | | 100-30-10 | 150-150-150 | 1 | 2 1/2 | 1.80 |
| 3160 | 15 | 120-80-40 | 150-150-150 | 1 3/8 | 3 | 2.25 |
| 3163 | 163 | 120-120-40 | 150-150-150 | 1 3/8 | 3 1/2 | 2.40 |
| 3166 | | 200-100-60 | 150-150-150 | 1 3/8 | 3 | 2.70 |
| 3169 | | 200-150-150 | 150-150-150 | 1 3/8 | 3 1/2 | 4.47 |
| 3172 | 203 | 120-120-40 | 175-175-175 | 1 3/8 | 3 1/2 | 2.52 |
| 3175 | 171 | 60-140-200 | 200-150-150 | 1 3/8 | 4 | 2.85 |
| 3178 | 69 | 20-20-20 | 200-200-25 | 1 | 2 | 2.04 |
| 3181 | 172 | 60-5-20 | 200-200-50 | 1 | 3 | 1.47 |
| 3184 | | 80-10-20 | 200-200-50 | 1 | 3 | 1.65 |
| 3187 | 70 | 100-10-40 | 200-200-50 | 1 3/8 | 2 | 2.82 |
| 3190 | | 30-20-40 | 200-200-150 | 1 | 2 1/2 | 1.59 |
| 3193 | 71 | 80-40-50 | 250-150-50 | 1 3/8 | 2 1/2 | 1.38 |
| 3196 | 72 | 15-15-20 | 250-250-25 | 1 | 2 | 1.38 |
| 3199 | 73 | 20-15-20 | 250-250-25 | 1 | 2 | 2.10 |
| 3202 | 74 | 30-30-20 | 250-250-25 | 1 | 3 | 1.65 |
| 3205 | 75 | 70-70-20 | 250-250-50 | 1 3/8 | 3 | 3.48 |
| 3208 | 173 | 90-90-20 | 250-250-50 | 1 3/8 | 3 | 2.73 |
| 3211 | 76 | 40-20-10 | 250-250-150 | 1 3/8 | 2 | 2.46 |
| 3214 | 16 | 15-15-10 | 250-250-250 | 1 | 2 | 2.19 |
| 3217 | 17 | 20-20-10 | 250-250-250 | 1 | 2 | 2.22 |
| 3220 | | 20-20-20 | 250-250-250 | 1 | 2 | 1.53 |
| 3223 | 18 | 30-20-10 | 250-250-250 | 1 | | |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE TM TWIST-MOUNT ELECTROLYTICS (Con't.)

| Stock No. TMT | Former Stock No. TMT | Capacity | Voltage | Dia-meter | Length | Dealer Net | Stock No. TMT | Former Stock No. TMT | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|---------------|----------------------|------------|-------------|-----------|--------|------------|---------------|----------------------|------------|-------------|-----------|--------|------------|
| 3226 | 19 | 40-20-10 | 250-250-250 | 1 3/8 | 2 | 2.55 | 3483 | 186 | 100-10-20 | 400-400-50 | 1 3/8 | 3 1/2 | 2.67 |
| 3229 | 20 | 40-20-20 | 250-250-250 | 1 | 3 | 1.71 | 3486 | | 20-20-10 | 400-400-350 | 1 | 3 | 1.77 |
| 3232 | | 80-10-10 | 250-250-250 | 1 | 3 | 1.89 | 3489 | | 60-30-20 | 400-400-350 | 1 3/8 | 3 | 2.70 |
| 3235 | 21 | 80-80-60 | 250-250-250 | 1 3/8 | 3 1/2 | 2.91 | 3492 | | 80-20-10 | 400-400-350 | 1 3/8 | 3 | 2.55 |
| 3238 | | 10-500-500 | 300-15-15 | 1 3/8 | 2 1/2 | 2.31 | 3495 | 187 | 100-10-80 | 400-400-350 | 1 3/8 | 4 1/2 | 3.63 |
| 3241 | 77 | 100-60-20 | 300-150-25 | 1 3/8 | 3 | 3.75 | 3498 | 31 | 10-10-10 | 400-400-400 | 1 | 2 1/2 | 1.41 |
| 3244 | | 20-150-80 | 300-150-150 | 1 3/8 | 3 | 2.37 | 3501 | | 90-10-5 | 400-400-400 | 1 3/8 | 3 | 2.61 |
| 3247 | | 100-200-30 | 300-150-150 | 1 3/8 | 4 | 3.09 | 3504 | 188 | 20-500-500 | 450-25-25 | 1 3/8 | 3 1/2 | 3.15 |
| 3250 | 174 | 100-200-60 | 300-150-150 | 1 3/8 | 4 | 2.97 | 3507 | 110 | 30-100-25 | 450-25-25 | 1 3/8 | 2 | 2.64 |
| 3253 | 78 | 30-30-20 | 300-250-25 | 1 | 3 | 1.89 | 3510 | 189 | 80-100-20 | 450-50-50 | 1 3/8 | 3 | 3.81 |
| 3256 | | 100-60-20 | 300-250-250 | 1 3/8 | 3 1/2 | 2.91 | 3513 | 111 | 10-50-100 | 450-150-25 | 1 | 3 | 2.46 |
| 3259 | 175 | 200-60-20 | 300-250-250 | 1 3/8 | 4 | 3.27 | 3516 | 112 | 40-40-130 | 450-150-50 | 1 3/8 | 3 | 2.19 |
| 3262 | 79 | 20-20-20 | 300-300-25 | 1 | 2 1/2 | 2.46 | 3519 | 113 | 40-100-50 | 450-150-50 | 1 3/8 | 2 1/2 | 3.54 |
| 3265 | 80 | 40-15-20 | 300-300-25 | 1 | 2 1/2 | 2.64 | 3522 | | 10-50-100 | 450-150-75 | 1 | 3 | 1.92 |
| 3268 | 81 | 30-30-25 | 300-300-50 | 1 | 3 | 2.58 | 3525 | 114 | 40-90-50 | 450-150-150 | 1 3/8 | 3 | 2.37 |
| 3271 | 210 | 80-60-40 | 300-300-50 | 1 3/8 | 3 1/2 | 5.79 | 3528 | 115 | 20-60-100 | 450-250-25 | 1 3/8 | 2 1/2 | 2.16 |
| 3274 | 176 | 100-10-60 | 300-300-50 | 1 3/8 | 2 1/2 | 2.40 | 3531 | | 10-80-80 | 450-250-250 | 1 3/8 | 3 | 2.46 |
| 3277 | 211 | 125-60-40 | 300-300-50 | 1 3/8 | 4 | 4.38 | 3534 | 116 | 20-40-10 | 450-250-250 | 1 3/8 | 2 | 2.82 |
| 3280 | 212 | 140-100-60 | 300-300-50 | 1 3/8 | 3 1/2 | 5.43 | 3537 | | 80-40-40 | 450-250-250 | 1 3/8 | 3 1/2 | 2.85 |
| 3283 | | 200-20-10 | 300-300-100 | 1 3/8 | 4 | 2.91 | 3540 | | 10-40-10 | 450-300-150 | 1 3/8 | 2 | 1.83 |
| 3286 | 177 | 140-10-200 | 300-300-150 | 1 3/8 | 4 1/2 | 2.94 | 3543 | 117 | 10-40-20 | 450-300-150 | 1 3/8 | 2 | 1.86 |
| 3289 | 82 | 10-10-15 | 300-300-250 | 1 | 2 | 2.19 | 3546 | | 5-80-40 | 450-300-300 | 1 3/8 | 3 | 2.46 |
| 3292 | 22 | 10-10-10 | 300-300-300 | 1 | 2 | 1.41 | 3549 | 118 | 20-15-10 | 450-300-300 | 1 | 3 1/2 | 2.55 |
| 3295 | 23 | 40-40-40 | 300-300-300 | 1 3/8 | 3 | 2.34 | 3552 | 119 | 10-10-20 | 450-350-25 | 1 | 2 | 2.04 |
| 3298 | 24 | 60-20-10 | 300-300-300 | 1 3/8 | 2 1/2 | 2.04 | 3555 | 190 | 10-100-25 | 450-350-25 | 1 3/8 | 3 | 2.43 |
| 3301 | 25 | 80-20-10 | 300-300-300 | 1 3/8 | 2 1/2 | 3.39 | 3558 | | 30-15-40 | 450-350-25 | 1 3/8 | 2 | 1.89 |
| 3304 | | 80-40-40 | 300-300-300 | 1 3/8 | 2 1/2 | 2.82 | 3561 | 120 | 30-40-50 | 450-350-25 | 1 | 4 | 2.19 |
| 3307 | | 120-50-40 | 300-300-300 | 1 3/8 | 4 | 3.48 | 3564 | 121 | 20-80-100 | 450-350-50 | 1 3/8 | 3 1/2 | 4.02 |
| 3310 | 26 | 120-60-40 | 300-300-300 | 1 3/8 | 4 | 3.45 | 3567 | 191 | 20-80-50 | 450-350-300 | 1 3/8 | 3 | 2.04 |
| 3313 | 178 | 4-100-40 | 350-25-25 | 1 | 2 | 2.01 | 3570 | 122 | 40-50-50 | 450-350-300 | 1 3/8 | 3 1/2 | 4.35 |
| 3316 | 213 | 20-50-50 | 350-25-25 | 1 | 2 | 2.25 | 3573 | | 20-40-10 | 450-350-350 | 1 3/8 | 2 1/2 | 2.07 |
| 3319 | 83 | 20-50-100 | 350-100-75 | 1 | 3 | 1.83 | 3576 | | 20-80-10 | 450-350-350 | 1 3/8 | 3 | 2.52 |
| 3322 | 84 | 10-50-100 | 350-150-50 | 1 | 3 | 1.68 | 3577 | | 40-80-40 | 450-350-350 | 1 3/8 | 3 1/2 | 3.21 |
| 3325 | 179 | 125-5-100 | 350-200-75 | 1 3/8 | 3 1/2 | 3.15 | 3580 | 192 | 50-80-10 | 450-350-350 | 1 3/8 | 3 1/2 | 4.38 |
| 3328 | 85 | 50-10-500 | 350-250-5 | 1 3/8 | 2 1/2 | 3.30 | 3583 | 123 | 30-50-40 | 450-400-25 | 1 3/8 | 3 | 3.48 |
| 3331 | 180 | 10-80-25 | 350-300-25 | 1 | 3 1/2 | 3.03 | 3586 | | 60-80-20 | 450-400-250 | 1 3/8 | 4 | 3.24 |
| 3334 | 87 | 30-30-20 | 350-300-25 | 1 | 3 | 1.86 | 3589 | 124 | 10-30-30 | 450-400-300 | 1 3/8 | 2 1/2 | 3.00 |
| 3337 | 181 | 40-40-30 | 350-300-250 | 1 3/8 | 2 1/2 | 2.58 | 3592 | | 10-10-10 | 450-450-25 | 1 | 2 | 1.41 |
| 3340 | 88 | 10-10-20 | 350-350-25 | 1 | 2 | 2.01 | 3595 | 125 | 10-10-20 | 450-450-25 | 1 | 2 | 1.41 |
| 3343 | 89 | 15-10-20 | 350-350-25 | 1 | 2 | 1.47 | 3598 | 126 | 15-15-20 | 450-450-25 | 1 | 2 1/2 | 2.40 |
| 3346 | 90 | 15-15-20 | 350-350-25 | 1 | 2 | 2.40 | 3601 | | 15-15-40 | 450-450-25 | 1 | 2 1/2 | 1.62 |
| 3349 | | 20-5-100 | 350-350-25 | 1 | 3 | 1.53 | 3604 | 127 | 20-10-20 | 450-450-25 | 1 | 2 1/2 | 1.59 |
| 3352 | 91 | 20-10-20 | 350-350-25 | 1 | 2 | 1.50 | 3607 | 128 | 20-15-20 | 450-450-25 | 1 | 3 | 2.58 |
| 3355 | 92 | 20-20-20 | 350-350-25 | 1 | 2 1/2 | 1.71 | 3610 | 129 | 20-20-20 | 450-450-25 | 1 | 3 | 1.80 |
| 3358 | 93 | 30-10-20 | 350-350-25 | 1 | 2 1/2 | 2.73 | 3613 | 130 | 30-30-20 | 450-450-25 | 1 3/8 | 2 1/2 | 2.10 |
| 3361 | 94 | 30-20-20 | 350-350-25 | 1 | 3 | 1.83 | 3616 | | 30-30-125 | 450-450-25 | 1 3/8 | 3 | 2.34 |
| 3364 | 95 | 30-30-20 | 350-350-25 | 1 3/8 | 2 | 2.01 | 3619 | 131 | 30-30-150 | 450-450-25 | 1 3/8 | 3 | 2.43 |
| 3367 | 96 | 40-40-25 | 350-350-25 | 1 3/8 | 2 1/2 | 2.16 | 3622 | 132 | 40-20-20 | 450-450-25 | 1 3/8 | 2 1/2 | 2.07 |
| 3370 | 97 | 40-40-50 | 350-350-25 | 1 3/8 | 2 1/2 | 3.36 | 3625 | 133 | 40-40-20 | 450-450-25 | 1 3/8 | 3 | 2.31 |
| 3373 | 182 | 90-40-50 | 350-350-25 | 1 3/8 | 3 1/2 | 4.38 | 3628 | 134 | 40-40-40 | 450-450-25 | 1 3/8 | 3 | 2.34 |
| 3376 | | 200-10-50 | 350-350-25 | 1 3/8 | 4 | 3.12 | 3631 | 135 | 80-10-125 | 450-450-25 | 1 3/8 | 3 1/2 | 2.64 |
| 3379 | 98 | 10-5-150 | 350-350-50 | 1 | 3 | 4.0 | 3634 | 136 | 80-40-100 | 450-450-25 | 1 3/8 | 4 | 3.00 |
| 3382 | 183 | 20-5-30 | 350-350-50 | 1 | 2 | 1.47 | 3637 | 137 | 10-10-40 | 450-450-50 | 1 | 2 1/2 | 1.47 |
| 3385 | | 20-5-150 | 350-350-50 | 1 | 3 | 1.74 | 3640 | 138 | 20-10-50 | 450-450-50 | 1 | 3 | 1.68 |
| 3388 | | 20-10-100 | 350-350-50 | 1 3/8 | 2 | 1.71 | 3643 | | 30-10-150 | 450-450-50 | 1 3/8 | 2 1/2 | 2.07 |
| 3392 | 214 | 80-40-400 | 350-350-50 | 1 3/8 | 5 | 3.12 | 3646 | | 30-15-150 | 450-450-50 | 1 3/8 | 3 | 2.19 |
| 3395 | 184 | 150-4-30 | 350-350-50 | 1 3/8 | 3 1/2 | 2.82 | 3649 | 139 | 30-30-40 | 450-450-50 | 1 3/8 | 3 | 3.27 |
| 3398 | | 30-20-100 | 350-350-150 | 1 3/8 | 2 1/2 | 2.37 | 3652 | | 35-25-150 | 450-450-50 | 1 3/8 | 3 | 2.34 |
| 3401 | 99 | 40-20-10 | 350-350-150 | 1 | 3 | 1.89 | 3655 | 140 | 40-10-100 | 450-450-50 | 1 3/8 | 3 | 2.55 |
| 3404 | 215 | 30-5-100 | 350-350-200 | 1 3/8 | 2 1/2 | 3.33 | 3658 | 141 | 40-40-100 | 450-450-50 | 1 3/8 | 3 1/2 | 2.55 |
| 3407 | | 80-40-100 | 350-350-200 | 1 3/8 | 4 | 3.24 | 3661 | | 60-40-75 | 450-450-50 | 1 3/8 | 3 1/2 | 2.76 |
| 3410 | 207 | 100-60-20 | 350-350-200 | 1 3/8 | 4 | 3.27 | 3664 | | 80-20-100 | 450-450-50 | 1 3/8 | 3 1/2 | 2.85 |
| 3413 | | 20-10-5 | 350-350-250 | 1 | 2 | 1.50 | 3667 | 142 | 10-10-50 | 450-450-100 | 1 3/8 | 2 | 2.37 |
| 3417 | 100 | 30-10-20 | 350-350-250 | 1 | 3 | 2.73 | 3670 | 143 | 30-20-30 | 450-450-150 | 1 3/8 | 2 1/2 | 3.12 |
| 3420 | 86 | 30-20-10 | 350-350-250 | 1 | 3 | 2.61 | 3673 | 144 | 40-40-40 | 450-450-150 | 1 3/8 | 3 1/2 | 2.46 |
| 3423 | 27 | 10-10-10 | 350-350-350 | 1 | 2 | 1.44 | 3676 | 145 | 40-10-80 | 450-450-200 | 1 3/8 | 3 | 2.31 |
| 3426 | 28 | 20-20-10 | 350-350-350 | 1 | 3 | 2.64 | 3679 | | 40-10-100 | 450-450-200 | 1 3/8 | 3 | 2.46 |
| 3429 | 205 | 30-20-10 | 350-350-350 | 1 | 2 1/2 | 1.92 | 3682 | | 40-40-60 | 450-450-200 | 1 3/8 | 3 | 2.64 |
| 3432 | 216 | 30-30-30 | 350-350-350 | 1 | 2 1/2 | 1.98 | 3685 | | 40-40-100 | 450-450-200 | 1 3/8 | 3 1/2 | 2.94 |
| 3435 | 29 | 60-40-20 | 350-350-350 | 1 3/8 | 3 | 2.52 | 3688 | 146 | 15-10-120 | 450-450-300 | 1 3/8 | 3 1/2 | 4.20 |
| 3438 | | 60-50-50 | 350-350-350 | 1 3/8 | 3 1/2 | 2.91 | 3691 | 147 | 15-15-10 | 450-450-300 | 1 | 3 | 2.55 |
| 3441 | 30 | 80-60-60 | 350-350-350 | 1 3/8 | 4 | 3.30 | 3694 | 148 | 15-5-15 | 450-450-350 | 1 | 3 | 2.55 |
| 3444 | 164 | 90-40-20 | 350-350-350 | 1 3/8 | 4 | 3.12 | 3697 | 149 | 20-20-60 | 450-450-350 | 1 3/8 | 3 | 4.53 |
| 3447 | 165 | 100-100-10 | 350-350-350 | 1 3/8 | 4 | 3.42 | 3700 | 150 | 40-40-10 | 450-450-350 | 1 3/8 | 2 | 1.98 |
| 3450 | 101 | 60-40-20 | 400-300-25 | 1 3/8 | 3 1/2 | 3.75 | 3703 | | 40-40-80 | 450-450-350 | 1 3/8 | 4 | 3.30 |
| 3453 | 102 | 10-40-10 | 400-300-150 | 1 3/8 | 2 | 1.74 | 3706 | 218 | 50-5-50 | 450-450-350 | 1 3/8 | 3 | 2.19 |
| 3456 | 103 | 80-20-10 | 400-300-300 | 1 3/8 | 3 1/2 | 3.81 | 3709 | 193 | 60-40-20 | 450-450-400 | 1 3/8 | 3 1/2 | 3.03 |
| 3459 | 217 | 10-4-20 | 400-350-25 | 1 | 2 | 2.07 | 3712 | 32 | 10-10-10 | 450-450-450 | 1 | 2 1/2 | 1.53 |
| 3462 | 104 | 10-50-30 | 400-350-25 | 1 | 3 | 2.76 | 3715 | 33 | 15-15-10 | 450-450-450 | 1 | 3 | 2.64 |
| 3465 | 105 | 15-15-40 | 400-400-25 | 1 | 2 1/2 | 2.49 | 3718 | | 15-15-15 | 450-450-450 | 1 | 3 | 1.83 |
| 3468 | 106 | 20-20-20 | 400-400-25 | 1 | 3 | 1.68 | 3721 | | 20-10-10 | 450-450-450 | 1 | 3 | 1.71 |
| 3471 | 107 | 20-10-40 | 400-400-50 | 1 | 3 | 2.37 | 3724 | 34 | 20-20-20 | 450-450-450 | 1 3/8 | 2 | 2.13 |
| 3474 | 108 | 30-10-150 | 400-400-50 | 1 3/8 | 2 1/2 | 3.03 | 3727 | | 30-10-10 | 450-450-450 | 1 3/8 | 2 | 1.86 |
| 3477 | 185 | 40-10-200 | 400-400-50 | 1 3/8 | 3 1/2 | 2.31 | | | | | | | |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE TM TWIST-MOUNT ELECTROLYTICS (Con't.)

| Stock No. TMS | Former Stock No. TMT | Capacity | Voltage | Dia-meter | Length | Dealer Net | Stock No. TMQ | Former Stock No. TMQ | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|---------------|----------------------|-----------|-------------|-----------|--------|------------|---------------|----------------------|----------------|-----------------|-----------|--------|------------|
| 3736 | 36 | 40-10-10 | 450-450-450 | 1 3/8 | 3 | 1.98 | 4110 | 42 | 20-150-150-100 | 300-150-150-30 | 1 3/8 | 4 | 3.15 |
| 3739 | 37 | 40-30-20 | 450-450-450 | 1 3/8 | 3 | 2.55 | 4113 | 43 | 10-200-140-30 | 300-150-150-150 | 1 3/8 | 4 | 3.03 |
| 3742 | 38 | 40-40-10 | 450-450-450 | 1 3/8 | 3 | 2.46 | 4116 | | 10-200-200-30 | 300-150-150-150 | 1 3/8 | 4 | 3.18 |
| 3745 | 39 | 40-40-20 | 450-450-450 | 1 3/8 | 3 | 2.64 | 4119 | 127 | 100-60-10-20 | 300-200-150-50 | 1 3/8 | 3 | 2.88 |
| 3748 | 40 | 40-40-40 | 450-450-450 | 1 3/8 | 3 1/2 | 2.91 | 4122 | 44 | 120-20-100-20 | 300-250-50-25 | 1 3/8 | 4 | 4.71 |
| 3751 | | 50-40-30 | 450-450-450 | 1 3/8 | 3 1/2 | 2.91 | 4125 | 45 | 200-20-100-20 | 300-250-50-25 | 1 3/8 | 5 | 3.45 |
| 3754 | 41 | 60-20-20 | 450-450-450 | 1 3/8 | 3 1/2 | 2.73 | 4128 | 189 | 80-5-60-20 | 300-300-150-75 | 1 3/8 | 3 | 2.55 |
| 3757 | 42 | 60-30-10 | 450-450-450 | 1 3/8 | 3 | 2.67 | 4131 | 185 | 140-10-10-100 | 300-300-150-50 | 1 3/8 | 4 | 3.00 |
| 3760 | | 60-40-20 | 450-450-450 | 1 3/8 | 3 1/2 | 2.97 | 4134 | 46 | 100-10-200-30 | 300-300-150-150 | 1 3/8 | 4 | 3.51 |
| 3763 | 43 | 80-40-20 | 450-450-450 | 1 3/8 | 4 | 3.21 | 4137 | | 150-20-10-250 | 300-300-250-50 | 1 3/8 | 4 | 3.60 |
| 3766 | 194 | 20-50-20 | 475-50-25 | 1 | 3 | 1.62 | 4140 | 47 | 60-40-20-50 | 300-300-300-25 | 1 3/8 | 3 1/2 | 2.79 |
| 3769 | | 80-80-50 | 475-150-50 | 1 3/8 | 3 1/2 | 2.88 | 4143 | 129 | 150-20-10-250 | 300-300-300-50 | 1 3/8 | 4 | 3.60 |
| 3772 | 195 | 10-100-40 | 475-200-50 | 1 3/8 | 2 1/2 | 3.00 | 4146 | 190 | 150-30-30-150 | 300-300-300-50 | 1 3/8 | 4 | 2.91 |
| 3775 | 196 | 40-40-100 | 475-250-100 | 1 3/8 | 3 | 3.66 | 4149 | 48 | 40-40-40-20 | 300-300-300-150 | 1 3/8 | 3 | 3.21 |
| 3778 | 219 | 5-100-200 | 475-300-150 | 1 3/8 | 4 | 4.65 | 4152 | | 120-40-40-10 | 300-300-300-250 | 1 3/8 | 4 | 3.75 |
| 3781 | 197 | 10-100-25 | 475-350-25 | 1 3/8 | 3 | 3.30 | 4155 | 2 | 40-20-10-10 | 300-300-300-300 | 1 3/8 | 2 | 2.34 |
| 3784 | 220 | 10-4-100 | 475-350-50 | 1 | 2 1/2 | 2.31 | 4158 | 3 | 40-40-20-10 | 300-300-300-300 | 1 3/8 | 2 1/2 | 2.70 |
| 3787 | 198 | 20-10-5 | 475-350-150 | 1 3/8 | 2 1/2 | 2.49 | 4161 | | 40-40-30-20 | 300-300-300-300 | 1 3/8 | 3 | 2.88 |
| 3790 | 199 | 10-4-40 | 475-350-250 | 1 3/8 | 2 | 1.62 | 4164 | 4 | 60-40-10-10 | 300-300-300-300 | 1 3/8 | 3 1/2 | 2.70 |
| 3793 | | 10-40-100 | 475-450-200 | 1 3/8 | 3 | 2.49 | 4167 | 191 | 100-20-20-4 | 300-300-300-300 | 1 3/8 | 3 1/2 | 3.15 |
| 3796 | 200 | 10-45-100 | 475-450-200 | 1 3/8 | 3 | 2.52 | 4170 | 120 | 120-40-40-10 | 300-300-300-300 | 1 3/8 | 4 | 3.30 |
| 3799 | | 40-80-10 | 475-450-450 | 1 3/8 | 3 1/2 | 3.27 | 4173 | 118 | 200-20-20-20 | 300-300-300-300 | 1 3/8 | 4 | 3.72 |
| 3802 | | 20-10-100 | 475-475-50 | 1 3/8 | 2 | 1.92 | 4176 | 49 | 20-150-80-20 | 350-150-150-25 | 1 3/8 | 3 | 4.08 |
| 3805 | | 20-10-100 | 475-475-400 | 1 3/8 | 3 1/2 | 3.12 | 4179 | 50 | 40-50-20-80 | 350-150-150-50 | 1 3/8 | 3 | 3.63 |
| 3808 | | 20-20-60 | 475-475-450 | 1 3/8 | 3 | 2.88 | 4182 | 51 | 15-80-40-200 | 350-200-200-25 | 1 3/8 | 3 | 4.02 |
| 3811 | | 30-30-20 | 475-475-475 | 1 3/8 | 3 | 2.64 | 4185 | 130 | 20-100-100-10 | 350-200-200-100 | 1 3/8 | 3 1/2 | 4.47 |
| 3814 | | 40-30-10 | 475-475-475 | 1 3/8 | 3 | 2.55 | 4188 | | 20-150-10-250 | 350-300-150-50 | 1 3/8 | 4 | 3.63 |
| 3817 | | 40-30-30 | 500-200-50 | 1 3/8 | 2 1/2 | 3.06 | 4191 | 52 | 20-40-10-250 | 350-300-150-150 | 1 3/8 | 3 | 2.76 |
| 3820 | 151 | 10-100-40 | 475-475-475 | 1 3/8 | 3 1/2 | 3.00 | 4194 | | 30-30-50-100 | 350-300-300-75 | 1 3/8 | 3 | 3.12 |
| 3823 | 152 | 40-40-100 | 500-250-50 | 1 3/8 | 3 | 3.84 | 4197 | 180 | 160-60-10-4 | 350-300-300-300 | 1 3/8 | 4 | 3.75 |
| 3826 | 153 | 20-20-40 | 500-300-25 | 1 3/8 | 2 | 2.76 | 4200 | 131 | 40-10-100-25 | 350-350-25-25 | 1 3/8 | 2 1/2 | 2.22 |
| 3829 | 201 | 20-40-100 | 500-300-25 | 1 3/8 | 2 1/2 | 3.21 | 4203 | 132 | 60-4-100-40 | 350-350-25-25 | 1 3/8 | 2 1/2 | 2.25 |
| 3832 | 202 | 10-80-10 | 500-350-350 | 1 3/8 | 3 | 2.91 | 4205 | 133 | 140-40-50-30 | 350-350-50-50 | 1 3/8 | 4 | 3.81 |
| 3835 | 154 | 40-40-25 | 500-400-50 | 1 3/8 | 3 | 3.84 | 4208 | | 60-20-80-100 | 350-350-150-150 | 1 3/8 | 4 | 2.91 |
| 3838 | 155 | 10-10-100 | 500-500-50 | 1 | 3 | 2.55 | 4211 | 134 | 40-10-100-100 | 350-350-200-50 | 1 3/8 | 3 1/2 | 3.15 |
| 3841 | 156 | 20-10-100 | 500-500-50 | 1 3/8 | 3 | 1.95 | 4214 | 135 | 100-60-60-40 | 350-350-200-75 | 1 3/8 | 4 | 3.75 |
| 3844 | 157 | 30-10-20 | 500-500-50 | 1 3/8 | 2 1/2 | 2.76 | 4217 | 136 | 60-40-60-20 | 350-350-200-150 | 1 3/8 | 3 1/2 | 3.00 |
| 3847 | 158 | 40-40-100 | 500-500-200 | 1 3/8 | 4 | 3.45 | 4220 | 192 | 100-80-10-20 | 350-350-300-50 | 1 3/8 | 4 | 3.27 |
| 3850 | 159 | 10-10-5 | 500-500-350 | 1 | 2 1/2 | 2.22 | 4223 | | 20-10-5-10 | 350-350-350-25 | 1 3/8 | 2 | 1.83 |
| 3853 | 160 | 20-20-60 | 500-500-400 | 1 3/8 | 3 1/2 | 2.85 | 4226 | 54 | 20-10-5-20 | 350-350-350-25 | 1 3/8 | 2 | 1.83 |
| 3856 | 45 | 10-10-10 | 500-500-500 | 1 | 3 | 1.59 | 4229 | 53 | 20-10-10-20 | 350-350-350-25 | 1 3/8 | 2 | 1.83 |
| 3859 | | 30-20-20 | 500-500-500 | 1 3/8 | 3 | 2.49 | 4232 | | 30-10-5-200 | 350-350-350-25 | 1 3/8 | 2 | 2.25 |
| 3862 | 46 | 30-30-20 | 500-500-500 | 1 3/8 | 3 | 2.64 | 4235 | 55 | 30-20-20-20 | 350-350-350-25 | 1 3/8 | 2 1/2 | 3.66 |
| 3865 | 47 | 40-10-10 | 500-500-500 | 1 3/8 | 3 | 2.31 | 4238 | 56 | 40-20-20-25 | 350-350-350-25 | 1 3/8 | 2 1/2 | 3.81 |
| 3868 | 48 | 40-40-10 | 500-500-500 | 1 3/8 | 4 | 3.00 | 4241 | 57 | 40-40-20-20 | 350-350-350-25 | 1 3/8 | 3 | 2.76 |
| | | | | | | | 4244 | | 40-40-30-10 | 350-350-350-25 | 1 3/8 | 3 | 2.94 |
| | | | | | | | 4247 | 58 | 40-40-40-40 | 350-350-350-25 | 1 3/8 | 3 | 3.09 |
| | | | | | | | 4250 | 59 | 15-15-15-50 | 350-350-350-50 | 1 3/8 | 2 | 3.36 |
| | | | | | | | 4253 | 60 | 40-30-10-50 | 350-350-350-50 | 1 3/8 | 3 | 3.81 |
| | | | | | | | 4256 | 61 | 40-40-40-150 | 350-350-350-50 | 1 3/8 | 3 1/2 | 3.36 |
| | | | | | | | 4259 | 137 | 60-25-25-100 | 350-350-350-50 | 1 3/8 | 3 1/2 | 4.62 |
| | | | | | | | 4262 | | 60-30-30-150 | 350-350-350-50 | 1 3/8 | 3 | 3.75 |
| | | | | | | | 4265 | 181 | 70-40-10-50 | 350-350-350-50 | 1 3/8 | 3 | 3.12 |
| | | | | | | | 4268 | | 100-10-10-20 | 350-350-350-50 | 1 3/8 | 3 1/2 | 3.06 |
| | | | | | | | 4271 | | 100-20-10-20 | 350-350-350-50 | 1 3/8 | 3 1/2 | 3.21 |
| | | | | | | | 4274 | 138 | 100-40-30-50 | 350-350-350-50 | 1 3/8 | 4 | 5.92 |
| | | | | | | | 4277 | 193 | 140-20-10-100 | 350-350-350-50 | 1 3/8 | 4 | 3.50 |
| | | | | | | | 4280 | 139 | 60-30-30-150 | 350-350-350-75 | 1 3/8 | 4 | 3.33 |
| | | | | | | | 4283 | 140 | 90-30-5-100 | 350-350-350-75 | 1 3/8 | 3 1/2 | 3.66 |
| | | | | | | | 4286 | | 30-10-5-100 | 350-350-350-200 | 1 3/8 | 2 1/2 | 2.70 |
| | | | | | | | 4289 | 182 | 30-20-5-100 | 350-350-350-200 | 1 3/8 | 3 | 2.79 |
| | | | | | | | 4292 | 5 | 10-10-10-10 | 350-350-350-350 | 1 3/8 | 2 | 2.76 |
| | | | | | | | 4295 | | 40-20-20-10 | 350-350-350-350 | 1 3/8 | 2 1/2 | 2.58 |
| | | | | | | | 4298 | | 40-40-40-40 | 350-350-350-350 | 1 3/8 | 4 | 3.54 |
| | | | | | | | 4301 | 6 | 80-10-10-10 | 350-350-350-350 | 1 3/8 | 3 | 3.57 |
| | | | | | | | 4304 | | 80-60-40-20 | 350-350-350-350 | 1 3/8 | 4 | 3.81 |
| | | | | | | | 4307 | | 90-40-30-30 | 350-350-350-350 | 1 3/8 | 4 | 4.05 |
| | | | | | | | 4310 | 194 | 130-40-20-10 | 350-350-350-350 | 1 3/8 | 4 1/2 | 3.39 |
| | | | | | | | 4313 | | 40-120-10-150 | 400-250-250-50 | 1 3/8 | 4 | 3.51 |
| | | | | | | | 4316 | 141 | 10-100-10-100 | 400-300-75-25 | 1 3/8 | 3 | 4.20 |
| | | | | | | | 4319 | 142 | 30-40-50-200 | 400-300-250-150 | 1 3/8 | 4 | 5.37 |
| | | | | | | | 4322 | 143 | 80-40-20-10 | 400-300-300-300 | 1 3/8 | 4 | 4.98 |
| | | | | | | | 4325 | 144 | 20-10-10-20 | 400-350-200-25 | 1 3/8 | 2 | 2.85 |
| | | | | | | | 4328 | 145 | 40-80-100-20 | 400-350-200-50 | 1 3/8 | 4 | 3.54 |
| | | | | | | | 4331 | 146 | 40-10-80-10 | 400-350-250-250 | 1 3/8 | 3 | 4.17 |
| | | | | | | | 4334 | 195 | 20-10-80-20 | 400-350-350-25 | 1 3/8 | 3 | 3.93 |
| | | | | | | | 4337 | 62 | 10-50-30-30 | 400-350-350-25 | 1 3/8 | 3 | 3.93 |
| | | | | | | | 4340 | | 20-50-40-40 | 400-350-350-50 | 1 3/8 | 3 | 2.97 |
| | | | | | | | 4343 | 147 | 50-25-100-20 | 400-400-50-25 | 1 3/8 | 3 | 4.17 |
| | | | | | | | 4346 | | 50-40-100-100 | 400-400-50-25 | 1 3/8 | 4 | 3.03 |
| | | | | | | | 4349 | 183 | 100-10-30-20 | 400-400-50-50 | 1 3/8 | 3 1/2 | 3.03 |
| | | | | | | | 4352 | | 20-10-20-25 | 400-400-200-25 | 1 3/8 | 2 | 2.25 |
| | | | | | | | 4358 | 148 | 10-10-40-10 | 400-400-200-50 | 1 3/8 | 2 | 2.85 |
| | | | | | | | 4361 | 63 | 40-10-80-10 | 400-400-250-250 | 1 3/8 | 3 1/2 | 4.20 |
| | | | | | | | 4364 | 64 | 5-5-50-80 | 400-400-300-250 | 1 3/8 | 3 | 4.17 |
| | | | | | | | 4367 | | 50-20-20-25 | 400-400-350-25 | 1 3/8 | 3 | 2.64 |
| | | | | | | | 4370 | 65 | 60-40-40-10 | 400-400-350-50 | 1 3/8 | 3 1/2 | 5.16 |
| | | | | | | | 4373 | 196 | 100-10-20-20 | 400-400-350-50 | 1 3/8 | 3 | 3.24 |
| | | | | | | | 4376 | 184 | 80-40-10-20 | 400-400-400-25 | 1 3/8 | 4 | 3.15 |

| Stock No. TMQ | Former Stock No. TMQ | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|---------------|----------------------|--------------|---------------|-----------|--------|------------|
| 4001 | | 50-20-150-30 | 150-150-15-15 | 1 3/8 | 2 | 1.86 |
| 4004 | | 20-20-160-40 | 150-150-25-25 | 1 3/8 | 2 | 1.89 |
| 4007 | 20 | 40-40-40-40 | | | | |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE TM TWIST-MOUNT ELECTROLYTICS (Con't.)

| Stock No. TMQ | Former Stock No. TMQ | Capacity | Voltage | Dia-meter | Length | Dealer Net | Stock No. TMQ | Former Stock No. TMQ | Capacity | Voltage | Dia-meter | Length | Dealer Net |
|---------------|----------------------|---------------|-----------------|-----------|--------|------------|---------------|----------------------|---------------|-----------------|-----------|--------|------------|
| 4379 | 149 | 80-40-30-40 | 400-400-400-25 | 1 3/8 | 4 | 3.51 | 4592 | 100 | 40-40-10-100 | 450-450-450-100 | 1 3/8 | 3 1/2 | 3.30 |
| 4382 | | 90-20-10-50 | 400-400-400-50 | 1 3/8 | 4 | 3.21 | 4595 | 101 | 60-10-10-20 | 450-450-450-150 | 1 3/8 | 3 | 2.70 |
| 4385 | 150 | 80-40-30-4 | 400-400-400-350 | 1 3/8 | 4 | 3.51 | 4598 | 102 | 35-35-10-10 | 450-450-450-200 | 1 3/8 | 3 | 4.11 |
| 4388 | 7 | 30-30-20-20 | 400-400-400-400 | 1 3/8 | 3 | 4.35 | 4601 | | 40-20-10-100 | 450-450-450-250 | 1 3/8 | 4 | 3.48 |
| 4391 | 119 | 40-40-30-30 | 400-400-400-400 | 1 3/8 | 4 | 3.39 | 4604 | | 40-10-10-40 | 450-450-450-350 | 1 3/8 | 3 | 2.82 |
| 4394 | | 50-40-30-20 | 400-400-400-400 | 1 3/8 | 4 | 3.36 | 4607 | 9 | 5-5-5-5 | 450-450-450-450 | 1 3/8 | 2 | 1.77 |
| 4397 | 8 | 80-25-10-10 | 400-400-400-400 | 1 3/8 | 3 1/2 | 3.12 | 4610 | 10 | 10-10-10-10 | 450-450-450-450 | 1 3/8 | 2 | 1.98 |
| 4400 | 151 | 10-80-40-100 | 450-200-200-50 | 1 3/8 | 3 | 3.81 | 4613 | 11 | 20-10-10-10 | 450-450-450-450 | 1 3/8 | 2 | 2.19 |
| 4403 | 66 | 20-80-20-50 | 450-200-200-50 | 1 3/8 | 3 | 2.43 | 4616 | 12 | 20-20-20-20 | 450-450-450-450 | 1 3/8 | 2 1/2 | 2.79 |
| 4406 | 152 | 40-40-40-20 | 450-250-250-25 | 1 3/8 | 3 | 3.99 | 4619 | 13 | 30-15-15-15 | 450-450-450-450 | 1 3/8 | 3 | 2.64 |
| 4409 | | 60-80-40-20 | 450-250-250-150 | 1 3/8 | 4 | 3.36 | 4622 | 14 | 30-30-15-10 | 450-450-450-450 | 1 3/8 | 4 | 4.20 |
| 4412 | 153 | 60-30-100-25 | 450-300-50-50 | 1 3/8 | 3 1/2 | 3.06 | 4625 | | 30-30-20-20 | 450-450-450-450 | 1 3/8 | 3 1/2 | 4.20 |
| 4415 | | 10-100-10-100 | 450-300-75-25 | 1 3/8 | 3 | 2.82 | 4628 | 15 | 30-30-30-15 | 450-450-450-450 | 1 3/8 | 3 1/2 | 4.74 |
| 4418 | 154 | 10-100-10-100 | 450-300-150-25 | 1 3/8 | 3 | 2.88 | 4631 | 16 | 35-35-10-5 | 450-450-450-450 | 1 3/8 | 3 1/2 | 2.73 |
| 4421 | 158 | 10-40-60-100 | 450-300-250-50 | 1 3/8 | 3 1/2 | 2.70 | 4634 | 17 | 40-10-10-10 | 450-450-450-450 | 1 3/8 | 3 | 2.43 |
| 4424 | 67 | 10-100-20-20 | 450-300-300-25 | 1 3/8 | 3 1/2 | 2.94 | 4637 | 18 | 40-20-10-10 | 450-450-450-450 | 1 3/8 | 2 1/2 | 2.67 |
| 4427 | | 25-100-10-60 | 450-300-300-50 | 1 3/8 | 3 | 3.15 | 4640 | | 40-35-10-10 | 450-450-450-450 | 1 3/8 | 3 | 2.85 |
| 4430 | 155 | 30-100-10-60 | 450-300-300-50 | 1 3/8 | 3 1/2 | 3.15 | 4643 | | 40-40-4-4 | 450-450-450-450 | 1 3/8 | 3 1/2 | 2.76 |
| 4433 | 156 | 40-40-10-20 | 450-300-300-150 | 1 3/8 | 3 | 2.91 | 4646 | | 40-40-20-20 | 450-450-450-450 | 1 3/8 | 4 | 3.30 |
| 4436 | | 10-100-20-20 | 450-300-300-200 | 1 3/8 | 3 | 3.00 | 4649 | | 40-40-30-30 | 450-450-450-450 | 1 3/8 | 4 | 3.60 |
| 4439 | 157 | 10-100-20-20 | 450-300-300-300 | 1 3/8 | 3 | 4.71 | 4652 | 120 | 40-40-40-40 | 450-450-450-450 | 1 3/8 | 4 | 3.84 |
| 4442 | | 10-40-100-100 | 450-350-250-50 | 1 3/8 | 3 | 3.30 | 4655 | 121 | 60-20-20-20 | 450-450-450-450 | 1 3/8 | 3 1/2 | 3.36 |
| 4445 | 68 | 10-60-40-25 | 450-450-350-25 | 1 3/8 | 3 1/2 | 2.73 | 4658 | | 60-30-10-2 | 450-450-450-450 | 1 3/8 | 3 | 3.03 |
| 4448 | 69 | 10-100-10-20 | 450-350-350-25 | 1 3/8 | 3 | 3.12 | 4661 | 122 | 80-10-10-10 | 450-450-450-450 | 1 3/8 | 3 1/2 | 3.00 |
| 4451 | 159 | 20-80-50-100 | 450-350-350-50 | 1 3/8 | 4 | 3.57 | 4664 | 165 | 40-40-50-80 | 475-250-150-50 | 1 3/8 | 3 1/2 | 2.97 |
| 4454 | 70 | 30-40-40-10 | 450-350-350-200 | 1 3/8 | 3 1/2 | 4.62 | 4667 | 103 | 20-40-100-80 | 475-300-50-25 | 1 3/8 | 3 | 2.64 |
| 4457 | 160 | 40-30-10-10 | 450-350-350-300 | 1 3/8 | 3 | 2.79 | 4670 | 166 | 10-100-10-100 | 475-300-300-25 | 1 3/8 | 3 1/2 | 2.91 |
| 4460 | 71 | 80-10-30-40 | 450-400-300-150 | 1 3/8 | 4 | 4.71 | 4673 | 167 | 20-80-20-10 | 475-300-300-300 | 1 3/8 | 3 1/2 | 2.97 |
| 4463 | | 80-10-40-30 | 450-400-300-300 | 1 3/8 | 4 | 3.45 | 4676 | 104 | 10-40-80-100 | 475-350-200-50 | 1 3/8 | 3 1/2 | 4.29 |
| 4466 | 161 | 5-60-50-20 | 450-400-350-25 | 1 3/8 | 3 1/2 | 4.53 | 4679 | | 20-40-80-100 | 475-350-200-100 | 1 3/8 | 4 | 3.24 |
| 4469 | 72 | 10-10-20-20 | 450-450-25-25 | 1 3/8 | 2 | 2.64 | 4682 | | 10-40-80-100 | 475-350-300-100 | 1 3/8 | 4 | 3.30 |
| 4472 | | 20-15-20-20 | 450-450-25-25 | 1 3/8 | 2 | 2.04 | 4685 | 168 | 20-40-80-100 | 475-350-300-100 | 1 3/8 | 4 | 3.33 |
| 4475 | 73 | 20-20-20-20 | 450-450-25-25 | 1 3/8 | 2 | 2.10 | 4688 | 169 | 10-30-5-80 | 475-350-350-50 | 1 3/8 | 2 1/2 | 3.30 |
| 4478 | 74 | 30-30-125-125 | 450-450-25-25 | 1 3/8 | 3 | 2.88 | 4691 | 186 | 10-140-4-100 | 475-350-350-50 | 1 3/8 | 4 | 3.48 |
| 4481 | | 20-20-60-100 | 450-450-150-25 | 1 3/8 | 2 1/2 | 2.52 | 4694 | 187 | 10-130-20-10 | 475-350-350-350 | 1 3/8 | 4 | 3.57 |
| 4484 | | 40-40-125-125 | 450-450-150-25 | 1 3/8 | 4 | 3.39 | 4697 | | 30-130-10-10 | 475-350-350-350 | 1 3/8 | 4 | 3.81 |
| 4487 | 75 | 10-10-60-100 | 450-450-200-50 | 1 3/8 | 3 | 2.28 | 4700 | 170 | 30-130-10-20 | 475-350-350-350 | 1 3/8 | 5 | 3.66 |
| 4490 | 76 | 35-25-20-100 | 450-450-200-50 | 1 3/8 | 3 | 2.76 | 4703 | 171 | 10-40-100-10 | 475-400-50-30 | 1 3/8 | 2 1/2 | 2.40 |
| 4493 | | 40-40-100-60 | 450-450-200-200 | 1 3/8 | 4 | 3.60 | 4706 | 172 | 10-40-4-100 | 457-400-350-50 | 1 3/8 | 2 1/2 | 2.40 |
| 4496 | 77 | 20-20-30-30 | 450-450-350-350 | 1 3/8 | 3 1/2 | 4.11 | 4709 | 173 | 10-40-100-10 | 475-400-350-50 | 1 3/8 | 2 1/2 | 2.40 |
| 4499 | 78 | 40-10-35-10 | 450-450-350-350 | 1 3/8 | 3 | 4.11 | 4710 | | 5-70-25-5 | 475-400-400-400 | 1 3/8 | 3 1/2 | 3.00 |
| 4502 | 79 | 40-40-30-30 | 450-450-350-350 | 1 3/8 | 4 | 3.51 | 4713 | 105 | 10-10-80-50 | 475-450-200-60 | 1 3/8 | 3 | 3.45 |
| 4505 | 80 | 10-10-10-20 | 450-450-450-25 | 1 3/8 | 2 | 1.86 | 4716 | 174 | 25-20-20-100 | 475-450-300-50 | 1 3/8 | 3 | 4.11 |
| 4508 | 81 | 10-10-10-100 | 40-450-450-25 | 1 3/8 | 2 | 2.91 | 4719 | 106 | 25-20-40-100 | 475-450-300-50 | 1 3/8 | 3 | 4.44 |
| 4511 | 82 | 20-10-10-100 | 450-450-450-25 | 1 3/8 | 2 | 3.30 | 4722 | 107 | 10-60-30-125 | 475-450-400-50 | 1 3/8 | 4 | 3.30 |
| 4514 | 83 | 20-20-20-20 | 450-450-450-25 | 1 3/8 | 2 1/2 | 2.46 | 4725 | | 10-50-30-30 | 475-450-450-25 | 1 3/8 | 3 | 2.82 |
| 4517 | 84 | 30-15-15-40 | 450-450-450-25 | 1 3/8 | 2 1/2 | 3.72 | 4728 | | 10-40-10-100 | 475-450-450-50 | 1 3/8 | 2 1/2 | 2.55 |
| 4520 | 85 | 30-20-20-20 | 450-450-450-25 | 1 3/8 | 3 | 3.83 | 4731 | 108 | 15-15-80-40 | 475-475-300-50 | 1 3/8 | 3 | 2.85 |
| 4523 | 86 | 30-30-10-20 | 450-450-450-25 | 1 3/8 | 3 | 3.90 | 4734 | 109 | 40-10-4-40 | 475-475-350-50 | 1 3/8 | 3 | 2.94 |
| 4526 | 163 | 30-30-10-125 | 450-450-450-25 | 1 3/8 | 3 | 2.79 | 4737 | 175 | 50-10-30-30 | 475-475-450-25 | 1 3/8 | 3 | 2.85 |
| 4529 | 87 | 30-30-20-20 | 450-450-450-25 | 1 3/8 | 3 | 4.17 | 4740 | 110 | 10-5-80-40 | 475-475-450-50 | 1 3/8 | 3 | 4.38 |
| 4532 | 88 | 40-10-10-250 | 450-450-450-25 | 1 3/8 | 3 | 4.20 | 4743 | 111 | 40-20-10-10 | 475-475-475-25 | 1 3/8 | 3 | 4.35 |
| 4535 | 89 | 40-20-10-20 | 450-450-450-25 | 1 3/8 | 3 | 3.81 | 4746 | | 20-20-10-10 | 475-475-475-300 | 1 3/8 | 2 1/2 | 2.55 |
| 4538 | 90 | 40-20-20-20 | 450-450-450-25 | 1 3/8 | 3 | 2.73 | 4749 | | 50-30-10-20 | 475-475-475-300 | 1 3/8 | 3 1/2 | 3.33 |
| 4541 | 91 | 40-20-20-40 | 450-450-450-25 | 1 3/8 | 3 | 2.76 | 4752 | | 20-20-10-10 | 475-475-475-475 | 1 3/8 | 2 | 3.12 |
| 4544 | 92 | 40-30-10-20 | 450-450-450-25 | 1 3/8 | 3 | 2.67 | 4755 | | 20-20-20-20 | 475-475-475-475 | 1 3/8 | 3 | 3.03 |
| 4547 | | 40-40-10-20 | 450-450-450-25 | 1 3/8 | 3 1/2 | 2.79 | 4758 | | 40-20-10-10 | 475-475-475-475 | 1 3/8 | 3 | 3.03 |
| 4550 | | 40-40-20-20 | 450-450-450-25 | 1 3/8 | 3 1/2 | 2.97 | 4761 | 176 | 5-100-10-20 | 500-300-300-150 | 1 3/8 | 4 | 5.25 |
| 4553 | 164 | 40-40-40-40 | 450-450-450-25 | 1 3/8 | 3 1/2 | 3.27 | 4764 | 177 | 30-10-150-30 | 500-450-50-50 | 1 3/8 | 3 | 2.49 |
| 4556 | 93 | 60-40-10-35 | 450-450-450-25 | 1 3/8 | 3 1/2 | 2.82 | 4767 | 112 | 30-30-10-20 | 500-500-450-25 | 1 3/8 | 3 1/2 | 2.94 |
| 4559 | | 60-40-40-10 | 450-450-450-25 | 1 3/8 | 4 | 3.57 | 4770 | 113 | 20-20-10-10 | 500-500-500-300 | 1 3/8 | 2 1/2 | 2.58 |
| 4562 | | 60-50-5-20 | 450-450-450-25 | 1 3/8 | 4 | 3.18 | 4773 | 114 | 50-30-10-20 | 500-500-500-300 | 1 3/8 | 4 | 3.36 |
| 4565 | | 80-40-40-40 | 450-450-450-25 | 1 3/8 | 4 | 3.84 | 4776 | 19 | 10-10-10-10 | 500-500-500-500 | 1 3/8 | 2 | 2.07 |
| 4568 | 94 | 10-10-10-150 | 450-450-450-50 | 1 3/8 | 3 | 2.70 | 4779 | 123 | 40-20-20-20 | 500-500-500-500 | 1 3/8 | 4 | 3.51 |
| 4571 | 95 | 20-20-20-100 | 450-450-450-50 | 1 3/8 | 3 | 2.70 | 4782 | | 40-40-8-8 | 500-500-500-500 | 1 3/8 | 4 | 3.39 |
| 4574 | 96 | 30-30-15-30 | 450-450-450-50 | 1 3/8 | 3 | 2.70 | | | | | | | |
| 4577 | 97 | 30-30-15-100 | 450-450-450-50 | 1 3/8 | 3 1/2 | 4.38 | | | | | | | |
| 4580 | 98 | 40-20-10-100 | 450-450-450-50 | 1 3/8 | 3 1/2 | 2.73 | | | | | | | |
| 4583 | 99 | 40-40-10-25 | 450-450-450-50 | 1 3/8 | 3 1/2 | 2.79 | | | | | | | |
| 4586 | | 40-40-10-50 | 450-450-450-50 | 1 3/8 | 4 | 2.85 | | | | | | | |
| 4589 | | 60-40-10-25 | 450-450-450-50 | 1 3/8 | 4 | 3.12 | | | | | | | |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

**Polarized Electrolytic Capacitors
to MIL-C-62 (latest revision) specifications**



TYPE PFB STYLE CE 31, 32, 33

Type PFB General Instrument Polarized Electrolytics are available in standard round aluminum containers with convenient solder lugs. Special gasket provides maximum seal. Mounting ring optional.



TYPE DI STYLE CE 41-42

Type DI Electrolytics are provided in chassis mounting aluminum cans. Have standard $\frac{7}{8}$ -16N-2A thread neck with lock nut. Solder lugs solidly anchored in special leak-proof gasket. Available as CE41 in single and CE42 in dual capacity units.



TYPE DO STYLE CE 51, 52, 53

Type DO Electrolytics are available in plug mounting round aluminum containers. Have standard nickel-plated four-pin octal base. Maximum leakage seal provided by famous General Instrument design. Order CE51 for Type DO's in single capacity, CE52 for dual and CE53 for triple capacity units.



TYPE DPD STYLE CE 61, 62, 63

Type DPD's are hermetically sealed in drawn, hot-finned steel bath-tub containers. Solder lug terminals are anchored to case with silicone rubber grommets. Type DPD's are single capacity units in CE61, CE62, CE63 and CE64.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

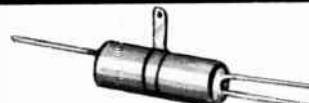
TYPE TD TYNEE-DRY ELECTROLYTICS

Tyne-Dry single capacitor units with 3-inch bare-wire leads. Designed for 85° C operation. Each unit sealed in metal tubular case. Supplied with insulating cardboard sleeve. Low leakage. Long shelf life. Top quality in minimum space.



| Catalogue No. | Capacity in UF | Dia.* | Length* | Dealer Net | Catalogue No. | Capacity in UF | Dia.* | Length* | Dealer Net |
|--|----------------|-------|---------|------------|------------------------------|----------------|-------|---------|------------|
| 6 Volts DC Working | | | | | 500 Volts DC Working | | | | |
| TD-50-6 | 50 | 1/2 | 1 1/8 | .57 | TD-500-6 | 500 | 5/8 | 1 1/8 | .93 |
| TD-100-6 | 100 | 1/2 | 1 1/8 | .72 | TD-1000-6 | 1000 | 3/4 | 2 | 1.14 |
| TD-250-6 | 250 | 5/8 | 1 1/8 | .81 | TD-1500-6 | 1500 | 3/4 | 2 | 1.26 |
| 15 Volts DC Working | | | | | 2000 Volts DC Working | | | | |
| TD-100-15 | 100 | 5/8 | 1 1/4 | .75 | TD-12-250 | 12 | 5/8 | 1 1/4 | .75 |
| TD-250-15 | 200 | 5/8 | 1 1/8 | .93 | TD-16-250 | 16 | 5/8 | 1 1/8 | .78 |
| TD-500-15 | 500 | 3/4 | 2 | 1.05 | TD-20-250 | 20 | 5/8 | 1 1/8 | .81 |
| TD-1000-15 | 1000 | 7/8 | 2 | 1.38 | TD-30-250 | 30 | 3/4 | 1 1/8 | .87 |
| 25 Volts DC Working | | | | | 40-250 | | | | |
| TD-2-25 | 2 | 3/4 | 1 1/8 | .54 | TD-40-250 | 40 | 7/8 | 1 1/8 | .93 |
| TD-4-25 | 4 | 3/4 | 1 1/8 | .60 | TD-60-250 | 60 | 7/8 | 2 | 1.08 |
| TD-5-25 | 5 | 3/4 | 1 1/8 | .60 | TD-100-250 | 100 | 1 1/8 | 3 | 1.62 |
| TD-10-25 | 10 | 3/4 | 1 1/8 | .60 | 300 Volts DC Working | | | | |
| TD-25-25 | 25 | 1/2 | 1 1/8 | .60 | TD-150-300 | 150 | 1 | 4 1/4 | 1.95 |
| TD-50-25 | 50 | 5/8 | 1 1/4 | .66 | TD-200-300 | 200 | 1 | 4 1/4 | 2.25 |
| TD-100-25 | 100 | 5/8 | 1 1/8 | .81 | 350 Volts DC Working | | | | |
| TD-250-25 | 250 | 7/8 | 2 | 1.02 | TD-8-350 | 8 | 5/8 | 1 1/8 | .72 |
| TD-500-25 | 500 | 7/8 | 2 | 1.38 | TD-12-350 | 12 | 5/8 | 1 1/8 | .78 |
| 50 Volts DC Working | | | | | TD-16-350 | | | | |
| TD-1-50 | 1 | 3/4 | 1 1/8 | .54 | TD-20-350 | 20 | 3/4 | 1 1/8 | .87 |
| TD-2-50 | 2 | 3/4 | 1 1/8 | .60 | TD-30-350 | 30 | 7/8 | 1 1/8 | .99 |
| TD-4-50 | 4 | 3/4 | 1 1/8 | .60 | TD-40-350 | 40 | 1 | 2 | 1.05 |
| TD-5-50 | 5 | 3/4 | 1 1/8 | .60 | TD-60-350 | 60 | 1 | 2 1/2 | 1.17 |
| TD-10-50 | 10 | 3/4 | 1 1/8 | .60 | TD-80-350 | 80 | 1 | 2 1/2 | 1.29 |
| TD-25-50 | 25 | 5/8 | 1 1/4 | .63 | TD-300-350 | 300 | 1 1/4 | 4 | 2.64 |
| TD-50-50 | 50 | 5/8 | 1 1/4 | .72 | 400 Volts DC Working | | | | |
| TD-100-50 | 100 | 3/4 | 1 1/8 | .84 | TD-200-400 | 200 | 1 1/4 | 4 | 2.58 |
| TD-150-50 | 150 | 3/4 | 1 1/8 | .93 | 450 Volts DC Working | | | | |
| TD-250-50 | 250 | 7/8 | 1 1/8 | 1.05 | TD-2-450 | 2 | 5/8 | 1 1/4 | .66 |
| TD-500-50 | 500 | 1 | 2 1/2 | 1.38 | TD-4-450 | 4 | 5/8 | 1 1/4 | .69 |
| 150 Volts DC Working | | | | | TD-8-450 | | | | |
| TD-4-150 | 4 | 3/4 | 1 1/8 | .60 | TD-10-450 | 10 | 3/4 | 1 1/8 | .78 |
| TD-8-150 | 8 | 5/8 | 1 1/4 | .63 | TD-12-450 | 12 | 3/4 | 1 1/8 | .81 |
| TD-10-150 | 10 | 5/8 | 1 1/4 | .63 | TD-16-450 | 16 | 3/4 | 2 | .84 |
| TD-12-150 | 12 | 5/8 | 1 1/4 | .66 | TD-20-450 | 20 | 7/8 | 2 | .93 |
| TD-16-150 | 16 | 5/8 | 1 1/4 | .69 | TD-30-450 | 30 | 1 | 2 | 1.02 |
| TD-20-150 | 20 | 5/8 | 1 1/4 | .72 | TD-40-450 | 40 | 1 | 2 1/2 | 1.08 |
| TD-30-150 | 30 | 5/8 | 1 1/8 | .78 | TD-50-450 | 50 | 1 | 3 | 1.26 |
| TD-40-150 | 40 | 3/4 | 1 1/8 | .81 | TD-80-450 | 80 | 1 | 3 1/2 | 1.68 |
| TD-50-150 | 50 | 3/4 | 1 1/8 | .84 | TD-100-450 | 100 | 1 | 4 | 1.86 |
| TD-80-150 | 80 | 7/8 | 1 1/8 | .96 | 500 Volts DC Working | | | | |
| TD-100-150 | 100 | 7/8 | 2 | .84 | TD-8-500 | 8 | 7/8 | 1 1/8 | .78 |
| TD-150-150 | 150 | 1 | 2 1/2 | 1.14 | TD-10-500 | 10 | 7/8 | 1 1/8 | .84 |
| TD-200-150 | 200 | 1 | 3 | 1.32 | TD-12-500 | 12 | 7/8 | 1 1/8 | .84 |
| TD-250-150 | 250 | 1 | 3 | 1.05 | TD-20-500 | 20 | 1 | 2 | .96 |
| TD-300-150 | 300 | 1 | 3 3/4 | 1.53 | TD-30-500 | 30 | 1 | 2 1/2 | 1.05 |
| 200 Volts DC Working | | | | | 600 Volts DC Working | | | | |
| TD-100-200 | 100 | 1 | 3 | 1.32 | TD-8-600 | 8 | 7/8 | 2 3/4 | 1.23 |
| TD-150-200 | 150 | 1 | 3 1/2 | 1.53 | TD-10-600 | 10 | 7/8 | 2 3/4 | 1.29 |
| TD-200-200 | 200 | 1 | 4 | 1.71 | TD-12-600 | 12 | 1 | 2 3/4 | 1.41 |
| TD-300-200 | 300 | 1 | 4 1/4 | 1.89 | TD-16-600 | 16 | 1 | 3 3/4 | 1.50 |
| 250 Volts DC Working | | | | | TD-20-600 | | | | |
| TD-4-250 | 4 | 1/2 | 1 1/8 | .60 | TD-20-600 | 20 | 1 | 3 3/4 | 1.59 |
| TD-8-250 | 8 | 5/8 | 1 1/4 | .69 | 700 Volts DC Working | | | | |
| TD-10-250 | 10 | 5/8 | 1 1/4 | .72 | TD-8-700 | 8 | 7/8 | 2 3/4 | 1.29 |
| * For sleeve add 1/16" to diameter, 3/16" to length. | | | | | TD-10-700 | 10 | 1 | 2 3/4 | 1.38 |
| | | | | | TD-12-700 | 12 | 1 | 3 3/4 | 1.44 |
| | | | | | TD-16-700 | 16 | 1 | 3 3/4 | 1.56 |

DUAL & TRIPLE CAPACITY TYPE TDL ELECTROLYTICS

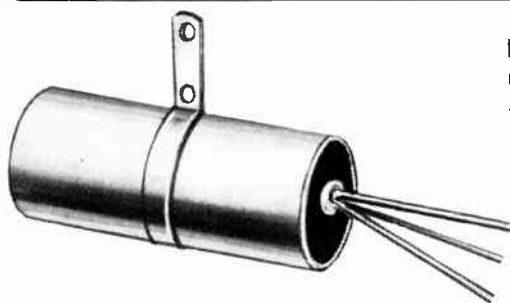


| Stock Number | Catalogue Number | Cap. in UF | Size in Inches Dia. | Length | Dealer Net | Stock Number | Catalogue Number | Cap. in UF | Size in Inches Dia. | Length | Dealer Net |
|------------------------------------|------------------|------------|---------------------|--------|------------|--|------------------|------------|---------------------|--------|------------|
| 150 Volts DC Working | | | | | | Dual 250 Volts DC Working | | | | | |
| TDL-D-1A | TDL-D10-150 | 10-10 | 3/4 | 1 5/8 | .96 | TDL-D-17 | TDL-D8-250 | 8-8 | 3/4 | 1 1/8 | .96 |
| TDL-D-3 | TDL-D20-150 | 20-20 | 3/4 | 1 5/8 | .99 | TDL-D-18 | TDL-D16-250 | 16-16 | 3/4 | 1 1/8 | 1.05 |
| TDL-D-4 | TDL-D30-150 | 30-30 | 3/4 | 2 | 1.08 | TDL-D-19 | TDL-D20-250 | 20-20 | 3/4 | 2 | 1.11 |
| TDL-D-5 | TDL-D40-150 | 40-20 | 3/4 | 2 | 1.05 | TDL-D-20 | TDL-D30-250 | 30-30 | 7/8 | 2 | 1.32 |
| TDL-D-6 | TDL-D40-150 | 40-30 | 3/4 | 2 | 1.08 | TDL-D-21 | TDL-D40-250 | 40-20 | 7/8 | 2 | 1.29 |
| TDL-D-7 | TDL-D40-150 | 40-40 | 3/4 | 2 | 1.11 | TDL-D-22 | TDL-D40-250 | 40-40 | 1 | 2 | 1.29 |
| Dual 150 Volts DC Working | | | | | | Dual 450 Volts DC Working | | | | | |
| TDL-D-8 | TDL-D50-150 | 50-30 | 3/4 | 2 | 1.17 | TDL-D-24 | TDL-D8-450 | 8-8 | 7/8 | 1 1/8 | 1.02 |
| TDL-D-9 | TDL-D50-150 | 50-50 | 7/8 | 2 | 1.26 | TDL-D-25 | TDL-D16-450 | 8-16 | 7/8 | 2 | 1.20 |
| TDL-D-10 | TDL-D80-150 | 80-30 | 7/8 | 2 | 1.32 | TDL-D-26 | TDL-D10-450 | 10-10 | 7/8 | 2 | 1.35 |
| TDL-D-11 | TDL-D80-150 | 80-40 | 1 | 2 | 1.35 | TDL-D-27 | TDL-D16-450 | 16-16 | 1 | 2 | 1.32 |
| TDL-D-12 | TDL-D80-150 | 80-50 | 1 | 2 | 1.38 | TDL-D-28 | TDL-D20-450 | 20-20 | 1 | 2 1/2 | 1.50 |
| TDL-D-13 | TDL-D80-150 | 80-80 | 1 | 2 1/2 | 1.56 | TDL-D-29 | TDL-D30-450 | 30-30 | 1 | 3 | 1.80 |
| TDL-D-14 | TDL-D100-150 | 100-50 | 1 | 3 | 1.77 | TDL-D-30 | TDL-D40-450 | 40-20 | 1 | 3 1/2 | 1.77 |
| TDL-D-15 | TDL-D100-150 | 100-100 | 1 | 3 | 1.92 | TDL-D-31 | TDL-D40-450 | 40-40 | 1 | 3 1/2 | 2.04 |
| TDL-D-16 | TDL-D200-150 | 200-5 | 1 | 3 1/2 | 2.07 | Triple Mixed Sections Diameter 1" | | | | | |
| Triple 150 Volts DC Working | | | | | | TDLT-10 | TDL-8332 | 80-30-300 | 150-150-10 | 3 | 1.83 |
| TDLT-1 | TDL-T20-150 | 20-20-20 | 1 | 2 | 1.29 | TDLT-11 | TDL-222 | 20-20-20 | 150-150-25 | 2 | 1.23 |
| TDLT-2 | TDL-T30-150 | 30-30-30 | 1 | 2 | 1.38 | TDLT-12 | TDL-432 | 40-30-20 | 150-150-25 | 2 | 1.32 |
| TDLT-3 | TDL-403020-150 | 40-30-20 | 1 | 2 | 1.41 | TDLT-13 | TDL-442 | 40-40-20 | 150-150-25 | 2 | 1.29 |
| TDLT-4 | TDL-404020-150 | 40-40-20 | 1 | 2 | 1.41 | TDLT-14 | TDL-4412 | 40-40-100 | 150-150-25 | 3 1/2 | 1.47 |
| TDLT-5 | TDL-T40-150 | 40-40-40 | 1 | 2 | 1.47 | TDLT-15 | TDL-532 | 50-30-20 | 150-150-25 | 2 | 1.38 |
| TDLT-6 | TDL-503020-150 | 50-30-20 | 1 | 2 | 1.44 | TDLT-16 | TDL-5312 | 50-30-100 | 150-150-25 | 2 1/2 | 1.47 |
| TDLT-7 | TDL-804020-150 | 80-40-20 | 1 | 2 | 1.65 | TDLT-17 | TDL-5322 | 50-30-200 | 150-150-25 | 2 1/2 | 1.65 |
| Triple 250 Volts DC Working | | | | | | TDLT-18 | TDL-8212 | 80-20-100 | 150-150-25 | 2 1/2 | 1.50 |
| TDLT-8 | TDL-T754010-250 | 75-40-10 | 1 | 3 | 2.07 | TDLT-19 | TDL-552 | 50-50-20 | 150-150-25 | 2 1/2 | 1.65 |
| Triple 450 Volts DC Working | | | | | | TDLT-20 | TDL-44225 | 40-40-20 | 250-250-25 | 2 1/2 | 1.74 |
| TDLT-9 | TDL-T16-450 | 16-16-16 | 1 | 3 | 1.86 | TDLT-21 | TDL-22245 | 20-20-20 | 450-450-25 | 2 1/2 | 1.74 |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE CDB CARTRIJ-DRY ELECTROLYTICS



DC dry electrolytic capacitors assembled in wax-filled, impregnated cardboard tubes. 8-inch flexible leads at one end. Assembled mounting strap. Low leakage. Long shelf life.

TEMPERATURE RANGE
-20° +75°C

| Catalog Number | Cap. in UF | Voltage DC Working | Size in Dia. | Inches Lgth. | Dealer Net |
|---|------------|--------------------|--------------|--------------|------------|
| CDB Dual Capacitor (Common Negative) | | | | | |
| CDB-D20-150CN | 20-20 | 150-150 | 7/8 | 2 | .99 |
| -D30-150CN | 30-30 | 150-150 | 1 | 2 | 1.08 |
| -D40-150CN | 40-40 | 150-150 | 1 | 2 1/4 | 1.11 |
| -5030-150CN | 50-30 | 150-150 | 1 | 2 1/4 | 1.17 |
| -D50-150CN | 50-50 | 150-150 | 1 | 2 1/4 | 1.26 |
| -D-1014 | 150-100 | 300-300 | 1 3/8 | 4 3/4 | 3.33 |
| -816-450CN | 8-16 | 450-450 | 1 | 2 | 1.20 |
| -D20-450CN | 20-20 | 450-450 | 1 | 2 3/4 | 1.50 |
| CDB Triple Capacitor Units (Common Negative) | | | | | |
| CDBT-1015 | 200-250-10 | 150-150-150 | 1 3/8 | 4 1/8 | 2.37 |

| Catalog Number | Cap. in UF | Voltage DC Working | Size in Dia. | Inches Lgth. | Dealer Net |
|--|---------------|--------------------|--------------|--------------|------------|
| CDB Triple Capacitor Units (Mixed Sections) | | | | | |
| CDBT-1002 | 80-30-20 | 150-150-25 | 1 | 2 3/4 | 1.65 |
| -1009 | 100-200-40 | 300-200-200 | 1 3/8 | 4 1/2 | 2.85 |
| -1011 | 120-40-100 | 300-250-50 | 1 3/8 | 4 1/8 | 2.70 |
| CDB Quadruple Capacitor Units (Common Negative) | | | | | |
| CDBQ-1003 | 20-20-10-10 | 350-350-350-350 | 1 1/8 | 3 1/2 | 2.46 |
| -4422 | 40-40-20-20 | 450-450-450-450 | 1 1/2 | 4 3/4 | 3.27 |
| CDB Quadruple Capacitor (Mixed Sections) | | | | | |
| CDBQ-1013 | 70-30-30-20 | 150-150-150-15 | 1 | 3 1/2 | 2.19 |
| -1001 | 40-40-20-20 | 150-150-150-25 | 1 | 3 | 1.86 |
| -1008 | 140-5-200-30 | 350-350-200-200 | 1 1/2 | 5 | 3.27 |
| -1005 | 20-120-40-100 | 450-300-250-50 | 1 1/2 | 4 1/2 | 3.30 |

TYPE MLV HERMETICALLY-SEALED MINIATURIZED ELECTROLYTICS

Designed for -30°C to +85°C operation. For -40°C to +85°C Extended Life Capacitors write for Bulletin EL6. Features unit Hermetically Sealed with Specially processed rubber. Low Leakage Current. All Welded Construction. Long Shelf and Operating Life. Units supplied with plastic insulated sleeve.



FOR -40°C TO +85°C EXTENDED LIFE CAPACITORS
WRITE FOR BULLETIN EL6.

| Cat. No. | Cap. in mfd. | Dia.* | Length* | Dealer Net |
|------------------------------|--------------|-------|---------|------------|
| 3 Volts Working D.C. | | | | |
| MLV5-3 | 3 | 3/16 | 1 1/8 | .75 |
| MLV10-3 | 10 | 1/4 | 1 1/8 | .75 |
| MLV15-3 | 15 | 1/4 | 1 1/8 | .75 |
| MLV25-3 | 25 | 1/4 | 1 1/8 | .75 |
| MLV40-3 | 40 | 1/4 | 1 1/8 | .75 |
| MLV50-3 | 50 | 1/4 | 1 1/8 | .75 |
| MLV100-3 | 100 | 3/8 | 1 1/8 | .84 |
| MLV150-3 | 150 | 3/8 | 1 1/8 | .87 |
| MLV200-3 | 200 | 3/8 | 1 1/8 | .90 |
| MLV250-3 | 250 | 3/8 | 1 1/8 | .96 |
| MLV300-3 | 300 | 3/8 | 1 1/8 | .99 |
| 10 Volts Working D.C. | | | | |
| MLV10-10 | 10 | 1/4 | 1 1/8 | .81 |
| MLV15-10 | 15 | 1/4 | 1 1/8 | .81 |
| MLV25-10 | 25 | 1/4 | 1 1/8 | .81 |
| MLV50-10 | 50 | 3/8 | 1 1/8 | .90 |
| MLV100-10 | 100 | 3/8 | 1 3/8 | 1.02 |
| MLV200-10 | 200 | 3/8 | 1 3/8 | 1.62 |
| 12 Volts Working D.C. | | | | |
| MLV2-12 | 2 | 3/16 | 1 1/8 | .75 |
| MLV5-12 | 5 | 1/4 | 1 1/8 | .81 |
| MLV10-12 | 10 | 1/4 | 1 1/8 | .81 |
| MLV15-12 | 15 | 1/4 | 1 1/8 | .84 |
| MLV20-12 | 20 | 1/4 | 1 1/8 | .84 |
| MLV25-12 | 25 | 1/4 | 1 1/8 | .84 |
| MLV40-12 | 40 | 3/8 | 1 1/8 | .87 |
| MLV50-12 | 50 | 3/8 | 1 1/8 | .93 |
| MLV100-12 | 100 | 3/8 | 1 3/8 | 1.05 |
| MLV150-12 | 150 | 3/8 | 1 3/8 | 1.14 |
| MLV200-12 | 200 | 3/8 | 1 3/8 | 1.23 |
| 15 Volts Working D.C. | | | | |
| MLV5-15 | 5 | 1/4 | 1 1/8 | .84 |
| MLV10-15 | 10 | 1/4 | 1 1/8 | .84 |
| MLV15-15 | 15 | 1/4 | 1 1/8 | .87 |
| MLV25-15 | 25 | 3/8 | 1 1/8 | .87 |
| MLV35-15 | 35 | 3/8 | 1 1/8 | .93 |
| MLV50-15 | 50 | 3/8 | 1 1/8 | .96 |
| MLV100-15 | 100 | 3/8 | 1 3/8 | 1.08 |
| MLV150-15 | 150 | 3/8 | 1 3/8 | 1.17 |

| Cat. No. | Cap. in mfd. | Dia.* | Length* | Dealer Net |
|-------------------------------|--------------|-------|---------|------------|
| 6 Volts Working D.C. | | | | |
| MLV2-6 | 2 | 3/16 | 1 1/8 | .75 |
| MLV5-6 | 5 | 1/4 | 1 1/8 | .75 |
| MLV10-6 | 10 | 1/4 | 1 1/8 | .81 |
| MLV15-6 | 15 | 1/4 | 1 1/8 | .81 |
| MLV25-6 | 25 | 1/4 | 1 1/8 | .84 |
| MLV30-6 | 30 | 1/4 | 1 1/8 | .84 |
| MLV40-6 | 40 | 3/8 | 1 1/8 | .84 |
| MLV50-6 | 50 | 3/8 | 1 1/8 | .84 |
| MLV100-6 | 100 | 3/8 | 1 3/8 | .90 |
| MLV150-6 | 150 | 3/8 | 1 3/8 | .93 |
| MLV200-6 | 200 | 3/8 | 1 3/8 | .96 |
| 25 Volts Working D.C. | | | | |
| MLV5-25 | 5 | 1/4 | 1 1/8 | .84 |
| MLV10-25 | 10 | 1/4 | 1 1/8 | .87 |
| MLV15-25 | 15 | 3/8 | 1 1/8 | .87 |
| MLV25-25 | 25 | 3/8 | 1 1/8 | .93 |
| MLV50-25 | 50 | 3/8 | 1 3/8 | 1.08 |
| MLV100-25 | 100 | 3/8 | 1 3/8 | |
| 50 Volts Working D.C. | | | | |
| MLV2-50 | 2 | 1/4 | 1 1/8 | .81 |
| MLV5-50 | 5 | 1/4 | 1 1/8 | .87 |
| MLV10-50 | 10 | 3/8 | 1 1/8 | .90 |
| MLV15-50 | 15 | 3/8 | 1 1/8 | .90 |
| MLV25-50 | 25 | 3/8 | 1 1/8 | .90 |
| MLV50-50 | 50 | 3/8 | 1 1/2 | 1.11 |
| 100 Volts Working D.C. | | | | |
| MLV2-100 | 2 | 3/8 | 1 1/8 | .84 |
| MLV5-100 | 5 | 3/8 | 1 1/8 | .90 |
| MLV10-100 | 10 | 3/8 | 1 1/8 | .93 |
| MLV15-100 | 15 | 3/8 | 1 1/8 | .93 |
| MLV25-100 | 25 | 3/8 | 1 1/2 | .96 |
| 150 Volts Working D.C. | | | | |
| MLV1-150 | 1 | 3/8 | 1 1/8 | .84 |
| MLV2-150 | 2 | 3/8 | 1 1/8 | .87 |
| MLV5-150 | 5 | 3/8 | 1 1/8 | .93 |
| MLV10-150 | 10 | 3/8 | 1 1/4 | .96 |
| MLV15-150 | 15 | 3/8 | 1 1/2 | .96 |

*These units supplied with plastic insulated sleeve to listed dimension add 1/32 to diam. and 1/16 to length.

General Instrument also manufactures Electrolytics Type MLE for operation at -40°C to +85 — Write to General Instrument Sales Engineering Department for Bulletin EL-6.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE BL SUBMINIATURE ELECTROLYTICS

Small, inexpensive and reliable, best describe this versatile new series of Subminiature Electrolytics. For compact transistorized circuits in conventional or printed board construction. New non-conductive plastic case. End seal compounds, offer true moisture resistance. Low leakage. Long shelf life. Operating temp. -20°C to $+65^{\circ}\text{C}$.



| Cap. Mfd. No. | Part No. | 3 V. D-C. W.V. 4 V. Surge | Cap. Mfd. No. | Part No. | 6 V. D-C. W.V. 8 V. Surge | Cap. Mfd. No. | Part No. | 10 V. D-C. W.V. 12 V. Surge | Cap. Mfd. No. | Part No. | 15 V. D-C. W.V. 18 V. Surge | Cap. Mfd. No. | Part No. | 20 V. D-C. W.V. 25 V. Surge | Cap. Mfd. No. | Part No. | 25 V. DC. W.V. 30 V. Surge | Cap. Mfd. No. | Part No. | 50 V. D-C. W.V. 60 V. Surge |
|---------------|----------|---------------------------|---------------|----------|---------------------------|---------------|----------|-----------------------------|---------------|----------|-----------------------------|---------------|----------|-----------------------------|---------------|----------|----------------------------|---------------|----------|-----------------------------|
| 6. | BL1010 | | 5. | BL1020 | | 4. | BL1030 | | 4. | BL1140 | | 2. | BL1050 | | 2. | BL1160 | | 2. | BL1270 | |
| 8. | BL1110 | | 6. | BL1120 | | 5. | BL1130 | | 5. | BL1141 | | 4. | BL1150 | | 4. | BL1260 | | 4. | BL1370 | |
| | | | 8. | BL1121 | | 6. | BL1131 | | 6. | BL1142 | | 5. | BL1250 | | 5. | BL1261 | | 5. | BL1470 | |
| 10. | BL1111 | | 10. | BL1220 | | 8. | BL1230 | | 8. | BL1240 | | 6. | BL1251 | | 6. | BL1262 | | 6. | BL1471 | |
| 12. | BL1112 | | 12. | BL1221 | | 10. | BL1231 | | 10. | BL1241 | | 8. | BL1252 | | 8. | BL1360 | | 8. | BL1570 | |
| 15. | BL1210 | | 15. | BL1222 | | 12. | BL1232 | | 12. | BL1242 | | 10. | BL1350 | | 10. | BL1460 | | 10. | BL1670 | |
| 20. | BL1211 | | 20. | BL1223 | | 15. | BL1233 | | 15. | BL1340 | | 12. | BL1351 | | 12. | BL1461 | | 12. | BL1671 | |
| 25. | BL1212 | | 25. | BL1320 | | 20. | BL1330 | | 20. | BL1440 | | 15. | BL1450 | | 15. | BL1560 | | 15. | BL1770 | |
| | | | 30. | BL1321 | | 25. | BL1331 | | 25. | BL1441 | | 20. | BL1451 | | 20. | BL1561 | | 20. | BL1870 | |
| 30. | BL1213 | | 40. | BL1420 | | 30. | BL1430 | | 30. | BL1540 | | 25. | BL1550 | | 25. | BL1660 | | 25. | BL1970 | |
| 40. | BL1310 | | 50. | BL1520 | | 40. | BL1530 | | 40. | BL1541 | | 30. | BL1650 | | 30. | BL1760 | | 30. | BL2070 | |
| 50. | BL1410 | | 60. | BL1521 | | 50. | BL1531 | | 50. | BL1640 | | 40. | BL1750 | | 40. | BL1860 | | 40. | BL2170 | |
| 60. | BL1411 | | 65. | BL1522 | | 60. | BL1630 | | 60. | BL1740 | | 50. | BL1850 | | 50. | BL1861 | | 50. | BL2171 | |
| 65. | BL1510 | | 75. | BL1620 | | 65. | BL1631 | | 65. | BL1741 | | 60. | BL1950 | | 60. | BL1960 | | 60. | BL2270 | |
| | | | 75. | BL1621 | | 75. | BL1730 | | 75. | BL1840 | | 65. | BL1951 | | 65. | BL1961 | | 65. | BL2271 | |
| 75. | BL1511 | | 100. | BL1720 | | 100. | BL1731 | | 100. | BL1940 | | 75. | BL1952 | | 75. | BL2060 | | 75. | BL2370 | |
| 100. | BL1610 | | 125. | BL1721 | | 125. | BL1830 | | 125. | BL1941 | | 100. | BL2050 | | 100. | BL2160 | | 100. | BL2371 | |
| 125. | BL1611 | | 150. | BL1820 | | 150. | BL1930 | | 150. | BL2040 | | 125. | BL2051 | | 125. | BL2161 | | 125. | BL2470 | |
| 150. | BL1710 | | 175. | BL1920 | | 175. | BL1931 | | 175. | BL2041 | | 150. | BL2150 | | 150. | BL2260 | | 150. | BL2260 | |
| 175. | BL1711 | | 200. | BL1921 | | 200. | BL2030 | | 200. | BL2140 | | 175. | BL2151 | | 175. | BL2261 | | 175. | BL2261 | |
| 200. | BL1910 | | 250. | BL2020 | | 250. | BL2031 | | 250. | BL2141 | | 200. | BL2250 | | 200. | BL2360 | | 200. | BL2360 | |
| 250. | BL1911 | | 300. | BL2021 | | 300. | BL2130 | | 300. | BL2240 | | 250. | BL2251 | | 250. | BL2361 | | 250. | BL2361 | |
| 300. | BL1912 | | 350. | BL2120 | | 350. | BL2131 | | 350. | BL2241 | | 300. | BL2350 | | 300. | BL2362 | | 300. | BL2362 | |
| 350. | BL2010 | | 400. | BL2121 | | 400. | BL2230 | | 400. | BL2340 | | 350. | BL2351 | | 350. | BL2460 | | 350. | BL2460 | |
| 400. | BL2011 | | 450. | BL2220 | | 450. | BL2231 | | 450. | BL2341 | | 400. | BL2450 | | 400. | BL2461 | | 400. | BL2461 | |
| 450. | BL2110 | | 500. | BL2221 | | 500. | BL2232 | | 500. | BL2342 | | 450. | BL2451 | | | | | | | |
| 500. | BL2111 | | 600. | BL2222 | | 600. | BL2330 | | 600. | BL2440 | | | | | | | | | | |
| 600. | BL2210 | | 750. | BL2320 | | 750. | BL2331 | | | | | | | | | | | | | |
| 750. | BL2211 | | 1,000. | BL2321 | | 1,000. | BL2430 | | | | | | | | | | | | | |
| 1,000. | BL2310 | | 1,200. | BL2420 | | | | | | | | | | | | | | | | |
| 1,200. | BL2311 | | | | | | | | | | | | | | | | | | | |
| 1,500. | BL2410 | | | | | | | | | | | | | | | | | | | |

| Code Case | Dia. $\pm .010$ | Max. Lgth. |
|-----------|-----------------|-----------------|
| 10 | .187 | $1\frac{1}{16}$ |
| 11 | .187 | $1\frac{3}{16}$ |
| 12 | .250 | $1\frac{1}{2}$ |
| 13 | .250 | $1\frac{3}{8}$ |
| 14 | .312 | $1\frac{1}{2}$ |
| 15 | .312 | $1\frac{3}{8}$ |
| 16 | .375 | $\frac{7}{8}$ |
| 17 | .375 | 1 |

| Code Case | Dia. $\pm .010$ | Max. Lgth. |
|-----------|-----------------|----------------|
| 18 | .375 | $1\frac{1}{8}$ |
| 19 | .437 | $1\frac{1}{8}$ |
| 20 | .437 | $1\frac{1}{4}$ |
| 21 | .500 | $1\frac{1}{4}$ |
| 22 | .500 | $1\frac{1}{2}$ |
| 23 | .625 | $1\frac{1}{2}$ |
| 24 | .625 | $1\frac{3}{4}$ |

ARC-ROTATOR CAPACITOR



The ARC is an antenna rotator replacement capacitor. Quality construction features an etched cathode design.

50 VOLTS DC

| CAT. NO. | CAP/MFD | SIZE | DEALER NET |
|----------|---------|-----------------------------------|------------|
| ARC-1A | 75-90 | $\frac{7}{8} \times 2\frac{3}{4}$ | \$.75 |
| ARC-2 | 100-120 | $1 \times 2\frac{3}{4}$ | .99 |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE MCS MINIATURIZED SOLID ELECTROLYTE TANTALUMS (MIL TYPES CS12 & CS13) TO MIL-C-26655A

True Subminiature Sizes
Solid Tantalum Electrolyte
Hermetically Sealed Metal Cases

No Electrolyte Leakage
Tolerance $\pm 20\%$
Closer Tolerances on Request.



SUPPLIED WITH PLASTIC INSULATED SLEEVE

| Catalog Number | Capacity in MFD | Case Size | Catalog Number | Capacity in MFD | Case Size | Catalog Number | Capacity in MFD | Case Size |
|-----------------|-----------------|-----------|-----------------|-----------------|-----------|--|-----------------|-----------|
| 6 VOLTS | | | 20 VOLTS | | | 35 VOLTS (continued) | | |
| MCS13B565 | 5.6 | A | MCS13E125 | 1.2 | A | MCS13F274 | 0.27 | A |
| MCS13B685 | 6.8 | A | MCS13E155 | 1.5 | A | MCS13F334 | 0.33 | A |
| MCS13B825 | 8.2 | B | MCS13E185 | 1.8 | A | MCS13F394 | 0.39 | A |
| MCS13B106 | 10.0 | B | MCS13E225 | 2.2 | A | MCS13F474 | 0.47 | A |
| MCS13B476 | 47.0 | B | MCS13E275 | 2.7 | B | MCS13F564 | 0.56 | A |
| MCS13B566 | 56.0 | B | MCS13E335 | 3.3 | B | MCS13F684 | 0.68 | A |
| MCS13B107 | 100.0 | C | MCS13E106 | 10.0 | B | MCS13F824 | 0.82 | A |
| MCS13B127 | 120.0 | C | MCS13E126 | 12.0 | B | MCS13F105 | 1.0 | A |
| MCS13B157 | 150.0 | C | MCS13E156 | 15.0 | B | MCS13F125 | 1.2 | A |
| MCS13B187 | 180.0 | C | MCS13E336 | 33.0 | C | MCS13F155 | 1.5 | B |
| MCS13B227 | 220.0 | D | MCS13E396 | 39.0 | C | MCS13F185 | 1.8 | B |
| MCS13B337 | 330.0 | D | MCS13E476 | 47.0 | C | MCS13F225 | 2.2 | B |
| 10 VOLTS | | | 35 VOLTS | | | | | |
| MCS13C395 | 3.9 | A | MCS13F472 | 0.0047 | A | MCS13F325 | 2.7 | B |
| MCS13C475 | 4.7 | A | MCS13F562 | 0.0056 | A | MCS13F335 | 3.3 | B |
| MCS13C565 | 5.6 | B | MCS13F682 | 0.0068 | A | MCS13F395 | 3.9 | B |
| MCS13C685 | 6.8 | B | MCS13F882 | 0.0082 | A | MCS13F475 | 4.7 | B |
| MCS13C276 | 27.0 | B | MCS13F103 | 0.01 | A | MCS13F565 | 5.6 | B |
| MCS13C336 | 33.0 | B | MCS13F123 | 0.012 | A | MCS13F685 | 6.8 | B |
| MCS13C396 | 39.0 | B | MCS13F153 | 0.015 | A | MCS13F825 | 8.2 | C |
| MCS13C686 | 68.0 | C | MCS13F183 | 0.018 | A | MCS13F106 | 10.0 | C |
| MCS13C107 | 100.0 | C | MCS13F223 | 0.022 | A | MCS13F126 | 12.0 | C |
| MCS13C227 | 220.0 | D | MCS13F273 | 0.027 | A | MCS13F156 | 15.0 | C |
| 15 VOLTS | | | | | | | | |
| MCS13D275 | 2.7 | A | MCS13F333 | 0.033 | A | MCS13F186 | 18.0 | C |
| MCS13D335 | 3.3 | A | MCS13F393 | 0.039 | A | MCS13F226 | 22.0 | C |
| MCS13D395 | 3.9 | B | MCS13F473 | 0.047 | A | MCS13F276 | 27.0 | C |
| MCS13D475 | 4.7 | B | MCS13F683 | 0.068 | A | MCS13F336 | 33.0 | D |
| MCS13D186 | 18.0 | B | MCS13F823 | 0.082 | A | MCS13F476 | 47.0 | D |
| MCS13D226 | 22.0 | B | MCS13F104 | 0.1 | A | Diameter Length Case Size A .125 x .250 Case Size B .173 x .438 Case Size C .279 x .650 Case Size D .341 x .750 | | |
| MCS13D566 | 56.0 | C | MCS13F124 | 0.12 | A | | | |
| MCS13D826 | 82.0 | D | MCS13F154 | 0.15 | A | GENERAL INSTRUMENT manufactures a wide range of capacity and voltages. Write for engineering bulletin for full information. | | |
| | | | MCS13F184 | 0.18 | A | | | |
| | | | MCS13F224 | 0.22 | A | | | |

TYPE TAK, TAK-C, TAK-H MINIATURE SINTERED ANODE TANTALUMS (MIL TYPES CL64 & CL65)

Afford maximum space economy. Conventional cylindrical cases allow for various methods of mounting. Sealing method and materials used in manufacturing this capacitor assure protection against seepage and defect due to vibration. Manufactured to meet MIL-C-3965 specification, style CL-64 and CL-65 (insulated sleeve). For full details write for Eng. Bulletin ET-8.

TEMPERATURE OPERATING RANGES No Voltage Rating

| | |
|-------|----------------|
| TAK | -55°C to 85°C |
| TAK-C | -55°C to 100°C |
| TAK-H | -55°C to 125°C |

STANDARD LISTING TO -15, +20

| Mfd. | 6 VOLTS Cat. No. | Case Size | Mfd. | 25 VOLTS Cat. No. | Case Size | Mfd. | 75 VOLTS Cat. No. | Case Size | | |
|------|----------------------|-----------|------|----------------------|-----------|------------------|-----------------------|----------------|-------------|-----------------------|
| 30 | TAK-30T6B | B | 10 | TAK-10T25B | B | 3.5 | TAK-3.5T75B | B | | |
| 50 | TAK-30T6B | B | 22 | TAK-22T25B | B | 6.8 | TAK-6.8T75B | B | | |
| 63 | TAK-68T6B | B | 30 | TAK-30T25D | D | 12 | TAK-12T75D | D | | |
| 140 | TAK-140T6E | E | 70 | TAK-70T25E | E | 15 | TAK-15T75E | E | | |
| 200 | TAK-200T6E | E | 100 | TAK-100T25E | E | 33 | TAK-33T75E | E | | |
| 270 | TAK-270T6F | F | 150 | TAK-150T25F | F | 40 | TAK-40T75F | F | | |
| 330 | TAK-330T6F | F | 180 | TAK-180T25F | F | 56 | TAK-56T75F | F | | |
| 450 | TAK-450T6F | F | | | | 70 | TAK-70T75F | F | | |
| 560 | TAK-560T6F | F | | | | | | | | |
| Mfd. | 10 VOLTS Cat. No. | Case Size | Mfd. | 30 VOLTS Cat. No. | Case Size | Mfd. | 100 VOLTS Cat. No. | Case Size | | |
| 20 | TAK-20T10B | B | 8 | TAK-8T30B | B | 2.5 | TAK-2.5T100B | B | | |
| 35 | TAK-35T10B | B | 15 | TAK-15T30B | B | 4.7 | TAK-4.7T100B | B | | |
| 47 | TAK-47T10B | B | 25 | TAK-25T30D | D | 8 | TAK-8T100D | D | | |
| 100 | TAK-100T10E | E | 40 | TAK-40T30E | E | 11 | TAK-11T100E | E | | |
| 150 | TAK-150T10E | E | 63 | TAK-63T30E | E | 22 | TAK-22T100F | F | | |
| 180 | TAK-180T10E | E | 100 | TAK-100T30F | F | 30 | TAK-30T100F | F | | |
| 250 | TAK-250T10F | F | 150 | TAK-150T30F | F | 43 | TAK-43T100F | F | | |
| 320 | TAK-320T10F | F | | | | | | | | |
| 390 | TAK-390T10F | F | | | | | | | | |
| Mfd. | 15 VOLTS Cat. No. | Case Size | Mfd. | 50 VOLTS Cat. No. | Case Size | CASE SIZES | | | | |
| 15 | TAK-15T15B | B | 5 | TAK-5T50B | B | Uninsulated Case | | Insulated Case | | Lead Length $\pm 1/4$ |
| 33 | TAK-33T15B | B | 10 | TAK-10T50B | B | Oia. | Length | Dia. | Length | |
| 40 | TAK-40T15D | D | 20 | TAK-20T50D | D | A. | ± 0.010 | ± 0.016 | ± 0.031 | ± 0.031 |
| 70 | TAK-70T15E | E | 25 | TAK-25T50E | E | B. | 0.212 | 0.375 | 0.234 | 0.437 |
| 100 | TAK-100T15E | E | 40 | TAK-40T50E | E | C. | 0.187 | 0.453 | 0.203 | 0.515 |
| 120 | TAK-120T15E | E | 47 | TAK-47T50E | E | D. | 0.212 | 0.468 | 0.234 | 0.531 |
| 170 | TAK-170T15F | F | 60 | TAK-60T50F | F | E. | 0.212 | 0.531 | 0.234 | 0.593 |
| 225 | TAK-225T15F | F | 82 | TAK-82T50F | F | F. | 0.275 | 0.640 | 0.296 | 0.703 |
| 270 | TAK-270T15F | F | 100 | TAK-100T50F | F | | 0.375 | 0.765 | 0.390 | 0.828 |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Type IMP Molded Tubular Paper Capacitors

Noninductive extended-foil section molded in nonflammable thermosetting plastic. High insulation resistance. Excellent power factor. Withstands standard RETMA Humidity-resistance Test. Extremely rugged. Very long life.

Temperature Rating:
-40°C to + 100°C

Standard Tolerance:
.0001-.001 UF: -25% to + 60%
.0011-.009 UF: -20% to + 40%
.01-1.0 UF: -20% to + 20%



| Catalogue Number | Cap. in UF | Diameter | Length | Dealer Net | Catalogue Number | Cap. in UF | Diameter | Length | Dealer Net |
|-----------------------------|------------|----------|--------|------------|--------------------------------|------------|----------|--------|------------|
| 200 Volts DC Working | | | | | 1000 Volts DC Working | | | | |
| IMP2-S2 | .02 | 3/8 | 1 1/4 | .15 | IMP10-T5 | .0005 | 3/16 | 1 | .30 |
| IMP2-S47 | .047 | 3/8 | 1 1/4 | .18 | IMP10-D1 | .001 | 3/16 | 1 | .30 |
| IMP2-S5 | .05 | 3/8 | 1 1/4 | .18 | IMP10-D15 | .0015 | 3/16 | 1 | .30 |
| IMP2-P1 | .1 | 3/16 | 1 1/4 | .21 | IMP10-D2 | .002 | 3/8 | 1 1/4 | .30 |
| IMP2-P15 | .15 | 1/2 | 1 1/2 | .21 | IMP10-D22 | .0022 | 3/8 | 1 1/4 | .30 |
| IMP2-P25 | .25 | 5/8 | 1 7/8 | .27 | IMP10-D3 | .003 | 3/8 | 1 1/4 | .30 |
| IMP2-P47 | .47 | 3/4 | 1 7/8 | .36 | IMP10-D4 | .004 | 3/8 | 1 1/4 | .30 |
| IMP2-P5 | .5 | 3/4 | 1 7/8 | .36 | IMP10-D47 | .0047 | 3/8 | 1 1/4 | .30 |
| IMP2-1 | 1. | 3/4 | 2 1/4 | .51 | IMP10-D5 | .005 | 3/8 | 1 1/4 | .30 |
| 400 Volts DC Working | | | | | 1,600 Volts DC Working | | | | |
| IMP4-S1 | .01 | 3/16 | 1 | .15 | IMP10-D68 | .0068 | 3/8 | 1 1/4 | .30 |
| IMP4-S2 | .02 | 3/16 | 1 1/4 | .15 | IMP10-S1 | .01 | 3/16 | 1 1/4 | .30 |
| IMP4-S22 | .022 | 3/8 | 1 1/4 | .15 | IMP10-S15 | .015 | 1/2 | 1 1/2 | .30 |
| IMP4-S25 | .025 | 3/8 | 1 1/4 | .15 | IMP10-S2 | .02 | 1/2 | 1 1/2 | .30 |
| IMP4-S3 | .03 | 3/8 | 1 1/4 | .15 | IMP10-S22 | .022 | 1/2 | 1 1/2 | .30 |
| IMP4-S4 | .04 | 3/16 | 1 1/4 | .18 | IMP10-S3 | .03 | 3/8 | 1 7/8 | .30 |
| IMP4-S47 | .047 | 3/16 | 1 1/4 | .18 | IMP10-S35 | .035 | 3/8 | 1 7/8 | .30 |
| IMP4-S5 | .05 | 3/16 | 1 1/4 | .18 | IMP10-S47 | .047 | 3/8 | 1 7/8 | .36 |
| IMP4-S68 | .068 | 1/2 | 1 1/2 | .21 | IMP10-S5 | .05 | 3/8 | 1 7/8 | .36 |
| IMP4-P1 | .1 | 1/2 | 1 1/2 | .21 | IMP10-S68 | .068 | 3/8 | 1 7/8 | .39 |
| IMP4-P15 | .15 | 5/8 | 1 7/8 | .24 | IMP10-P1 | .1 | 3/4 | 2 1/4 | .45 |
| IMP4-P22 | .22 | 5/8 | 1 7/8 | .24 | 6,000 Volts DC Working | | | | |
| IMP4-P25 | .25 | 5/8 | 1 7/8 | .27 | IMP16-T5 | .0005 | 3/8 | 1 1/4 | .39 |
| IMP4-P47 | .47 | 3/4 | 2 1/4 | .36 | IMP16-D1 | .001 | 3/8 | 1 1/4 | .39 |
| IMP4-P5 | .5 | 3/4 | 2 1/4 | .36 | IMP16-D15 | .0015 | 3/8 | 1 1/4 | .39 |
| 600 Volts DC Working | | | | | IMP16-D2 | .002 | 3/8 | 1 1/4 | .39 |
| IMP6-T1 | .0001 | 3/16 | 1 | .15 | IMP16-D22 | .0022 | 3/8 | 1 1/4 | .39 |
| IMP6-T25 | .00025 | 3/16 | 1 | .15 | IMP16-D3 | .003 | 3/16 | 1 1/4 | .39 |
| IMP6-T4 | .0004 | 3/16 | 1 | .15 | IMP16-D33 | .0033 | 3/16 | 1 1/4 | .39 |
| IMP6-T5 | .0005 | 3/16 | 1 | .15 | IMP16-D4 | .004 | 3/16 | 1 1/4 | .39 |
| IMP6-D1 | .001 | 3/16 | 1 | .15 | IMP16-D47 | .0047 | 3/16 | 1 1/4 | .39 |
| IMP6-D15 | .0015 | 3/16 | 1 | .15 | IMP16-D5 | .005 | 3/16 | 1 1/4 | .39 |
| IMP6-D2 | .002 | 3/16 | 1 | .15 | IMP16-D6 | .006 | 1/2 | 1 1/2 | .39 |
| IMP6-D22 | .0022 | 3/16 | 1 | .15 | IMP16-D68 | .0068 | 1/2 | 1 1/2 | .39 |
| IMP6-D3 | .003 | 3/16 | 1 | .15 | IMP16-D7 | .007 | 1/2 | 1 1/2 | .39 |
| IMP6-D33 | .0033 | 3/16 | 1 | .15 | IMP16-D75 | .0075 | 1/2 | 1 1/2 | .39 |
| IMP6-D4 | .004 | 3/16 | 1 | .15 | IMP16-D8 | .008 | 1/2 | 1 1/2 | .39 |
| IMP6-D47 | .0047 | 3/16 | 1 | .15 | IMP16-S1 | .01 | 1/2 | 1 1/2 | .42 |
| IMP6-D5 | .005 | 3/16 | 1 | .15 | IMP16-S15 | .015 | 5/8 | 1 7/8 | .42 |
| IMP6-D6 | .006 | 3/8 | 1 1/4 | .18 | IMP16-S2 | .02 | 5/8 | 1 7/8 | .42 |
| IMP6-D68 | .0068 | 3/8 | 1 1/4 | .18 | IMP16-S22 | .022 | 5/8 | 1 7/8 | .42 |
| IMP6-D8 | .008 | 3/8 | 1 1/4 | .18 | IMP16-S3 | .03 | 5/8 | 1 7/8 | .42 |
| IMP6-S1 | .01 | 3/8 | 1 1/4 | .18 | IMP16-S4 | .04 | 5/8 | 1 7/8 | .42 |
| IMP6-S15 | .015 | 3/8 | 1 1/4 | .18 | IMP16-S5 | .05 | 3/4 | 2 1/4 | .42 |
| IMP6-S2 | .02 | 3/8 | 1 1/4 | .18 | *CT16-S68 | .068 | 1 1/16 | 2 7/8 | .48 |
| IMP6-S22 | .022 | 3/8 | 1 1/4 | .18 | *CT16-P1 | .1 | 1 5/16 | 2 7/8 | .51 |
| IMP6-S3 | .03 | 3/8 | 1 1/4 | .21 | 6,000 Volts DC Working | | | | |
| IMP6-S33 | .033 | 1/2 | 1 1/2 | .21 | *CT60-T5 | .0005 | 5/8 | 2 | .78 |
| IMP6-S4 | .04 | 1/2 | 1 1/2 | .24 | *CT60-D1 | .001 | 5/8 | 2 | .78 |
| IMP6-S47 | .047 | 1/2 | 1 1/2 | .24 | *CT60-D5 | .005 | 1 1/16 | 2 1/4 | .78 |
| IMP6-S5 | .05 | 1/2 | 1 1/2 | .24 | 10,000 Volts DC Working | | | | |
| IMP6-S6 | .06 | 5/8 | 1 7/8 | .27 | *CT100-D1 | .001 | 3/4 | 2 5/8 | .90 |
| IMP6-S68 | .068 | 5/8 | 1 7/8 | .27 | *CT100-T5 | .0005 | 5/8 | 2 | .90 |
| IMP6-P1 | .1 | 3/4 | 1 7/8 | .27 | 12,500 Volts DC Working | | | | |
| IMP6-P2 | .2 | 3/4 | 2 1/4 | .33 | *CT125-T25 | .00025 | 3/4 | 2 5/8 | 1.02 |
| IMP6-P22 | .22 | 3/4 | 2 1/4 | .33 | *CT125-T5 | .0005 | 3/4 | 2 5/8 | 1.02 |
| IMP6-P25 | .25 | 3/4 | 2 1/4 | .33 | | | | | |
| CT6P5* | .5 | 1 5/16 | 2 3/4 | .48 | | | | | |

* Supplied in ceramic-case units.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Type III "Gold Standard" Molded Mylar* Capacitors

Noninductive polyester film extended foil section, molded in a noninflammable thermosetting plastic case. Very high insulation resistance. Excellent power factor. Greatly reduced sizes. Dielectric impervious to moisture. Extremely rugged with a very long life.

Temperature Rating: -40°C to $+100^{\circ}\text{C}$
Standard Tolerance: $\pm 20\%$



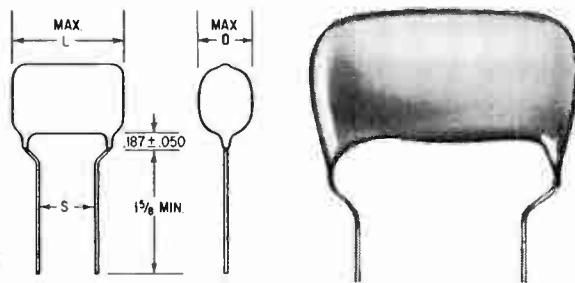
| Catalog Number | Cap. in Mfd. | Size in Inches Dia. Length | Dealer Net |
|-----------------------------|--------------|-------------------------------|------------|
| 200 Volts DC Working | | | |
| 111-2S2 | .02 | $\frac{3}{16}$ 1 | .15 |
| 111-2S47 | .047 | $\frac{3}{8}$ $1\frac{1}{4}$ | .15 |
| 111-2S5 | .05 | $\frac{3}{8}$ $1\frac{1}{4}$ | .15 |
| 111-2P1 | .1 | $\frac{3}{8}$ $1\frac{1}{4}$ | .21 |
| 111-2P15 | .15 | $\frac{3}{8}$ $1\frac{1}{4}$ | .21 |
| 111-2P22 | .22 | $\frac{1}{2}$ $1\frac{1}{2}$ | .24 |
| 111-2P25 | .25 | $\frac{1}{2}$ $1\frac{1}{2}$ | .27 |
| 111-2P47 | .47 | $\frac{3}{4}$ $1\frac{7}{8}$ | .36 |
| 111-2P5 | .5 | $\frac{3}{4}$ $1\frac{7}{8}$ | .36 |
| 111-2-1 | 1.0 | $\frac{3}{4}$ $2\frac{1}{4}$ | .57 |
| 400 Volts DC Working | | | |
| 111-4S1 | .01 | $\frac{3}{16}$ 1 | .15 |
| 111-4S15 | .015 | $\frac{3}{16}$ 1 | .15 |
| 111-4S2 | .02 | $\frac{3}{16}$ $1\frac{1}{4}$ | .15 |
| 111-4S22 | .022 | $\frac{3}{16}$ $1\frac{1}{4}$ | .18 |
| 111-4S333 | .033 | $\frac{3}{16}$ $1\frac{1}{4}$ | .18 |
| 111-4S47 | .047 | $\frac{3}{16}$ $1\frac{1}{4}$ | .18 |
| 111-4S5 | .05 | $\frac{3}{16}$ $1\frac{1}{4}$ | .18 |
| 111-4S68 | .068 | $\frac{3}{16}$ $1\frac{1}{4}$ | .21 |
| 111-4P1 | .1 | $\frac{1}{2}$ $1\frac{1}{2}$ | .21 |
| 111-4P15 | .15 | $\frac{1}{2}$ $1\frac{1}{2}$ | .24 |
| 111-4P22 | .22 | $\frac{3}{8}$ $1\frac{7}{8}$ | .30 |
| 111-4P25 | .25 | $\frac{3}{8}$ $1\frac{7}{8}$ | .33 |
| 111-4P33 | .33 | $\frac{3}{4}$ $1\frac{7}{8}$ | .39 |
| 111-4P47 | .47 | $\frac{3}{4}$ $2\frac{1}{4}$ | .48 |
| 111-4P5 | .5 | $\frac{3}{4}$ $2\frac{1}{4}$ | .51 |
| 111-4P68 | .68 | $\frac{3}{4}$ $2\frac{1}{4}$ | .69 |
| 111-6T1 | .0001 | $\frac{3}{16}$ 1 | .15 |

| Catalog Number | Cap. in Mfd. | Size in Inches Dia. Length | Dealer Net |
|----------------|--------------|-------------------------------|------------|
| 111-6T25 | .00025 | $\frac{3}{16}$ 1 | .15 |
| 111-6T4 | .0004 | $\frac{3}{16}$ 1 | .15 |
| 111-6T5 | .0005 | $\frac{3}{16}$ 1 | .15 |
| 111-6D1 | .001 | $\frac{3}{16}$ 1 | .15 |
| 111-6D15 | .0015 | $\frac{3}{16}$ 1 | .15 |
| 111-6D2 | .002 | $\frac{3}{16}$ 1 | .15 |
| 111-6D22 | .0022 | $\frac{3}{16}$ 1 | .15 |
| 111-6D3 | .003 | $\frac{3}{16}$ 1 | .15 |
| 111-6D33 | .0033 | $\frac{3}{16}$ 1 | .15 |
| 111-6D4 | .004 | $\frac{3}{16}$ 1 | .15 |
| 111-6D47 | .0047 | $\frac{3}{16}$ 1 | .15 |
| 111-6D5 | .005 | $\frac{3}{16}$ 1 | .15 |
| 111-6D6 | .006 | $\frac{3}{16}$ 1 | .15 |
| 111-6D68 | .0068 | $\frac{3}{16}$ 1 | .18 |
| 111-6S1 | .01 | $\frac{3}{16}$ 1 | .18 |
| 111-6S15 | .015 | $\frac{3}{16}$ $1\frac{1}{4}$ | .18 |
| 111-6S2 | .02 | $\frac{3}{16}$ $1\frac{1}{4}$ | .18 |
| 111-6S22 | .022 | $\frac{3}{16}$ $1\frac{1}{4}$ | .18 |
| 111-6S3 | .03 | $\frac{3}{16}$ $1\frac{1}{4}$ | .21 |
| 111-6S33 | .033 | $\frac{3}{16}$ $1\frac{1}{4}$ | .21 |
| 111-6S4 | .04 | $\frac{3}{16}$ $1\frac{1}{4}$ | .21 |
| 111-6S47 | .047 | $\frac{3}{16}$ $1\frac{1}{4}$ | .24 |
| 111-6S5 | .05 | $\frac{3}{16}$ $1\frac{1}{4}$ | .24 |
| 111-6S6 | .06 | $\frac{3}{16}$ $1\frac{1}{4}$ | .24 |
| 111-6S68 | .068 | $\frac{1}{2}$ $1\frac{1}{2}$ | .24 |
| 111-6P1 | .1 | $\frac{3}{8}$ $1\frac{7}{8}$ | .27 |
| 111-6P15 | .15 | $\frac{3}{8}$ $1\frac{7}{8}$ | .33 |
| 111-6P2 | .2 | $\frac{3}{4}$ $2\frac{1}{4}$ | .39 |
| 111-6P22 | .22 | $\frac{3}{4}$ $2\frac{1}{4}$ | .39 |
| 111-6P25 | .25 | $\frac{3}{4}$ $2\frac{1}{4}$ | .45 |
| 111-6P33 | .33 | $\frac{3}{4}$ $2\frac{1}{4}$ | .54 |

Type 151 Gold-Dip Mylar* Capacitors

A new Mylar Plastic Dipped Capacitor engineered for highest reliability and especially designed for printed board circuitry as well as conventional application. General Instrument Gold-Dip Capacitors Type 151 feature:

- ▲ New reliable Dipped Plastic Coating
- ▲ New Moisture Resistance
- ▲ -55°C to $+100^{\circ}\text{C}$ operation
- ▲ High insulation resistance
- ▲ 10% capacity tolerance



| Catalog Number | Capacity in Mfd. | D | L | S | Dealer Net |
|-----------------------------|------------------|----------------|----------------|----------------|------------|
| 200 Volts DC Working | | | | | |
| 151-2P1 | .1 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .21 |
| 151-2P15 | .15 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .21 |
| 151-2P22 | .22 | $\frac{1}{2}$ | $1\frac{1}{2}$ | $2\frac{1}{2}$ | .24 |
| 151-2P25 | .25 | $\frac{1}{2}$ | $1\frac{1}{2}$ | $2\frac{1}{2}$ | .27 |
| 151-2P47 | .47 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $1\frac{3}{2}$ | .36 |
| 151-2P5 | .5 | $\frac{7}{8}$ | $1\frac{3}{4}$ | $1\frac{3}{2}$ | .36 |
| 400 Volts DC Working | | | | | |
| 151-4S1 | .01 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-4S15 | .015 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-4S2 | .02 | $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{3}{4}$ | .15 |
| 151-4S22 | .022 | $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{3}{4}$ | .18 |
| 151-4P5 | .5 | $\frac{7}{8}$ | $1\frac{1}{2}$ | $1\frac{3}{2}$ | .36 |
| 151-4S33 | .033 | $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{3}{4}$ | .18 |
| 151-4S47 | .047 | $\frac{5}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .18 |
| 151-4S5 | .05 | $\frac{5}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .18 |
| 151-4S68 | .068 | $\frac{5}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .21 |
| 151-4P1 | .1 | $\frac{5}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .21 |
| 151-4P15 | .15 | $\frac{1}{2}$ | $1\frac{1}{2}$ | $2\frac{1}{2}$ | .24 |
| 151-4P22 | .22 | $\frac{7}{8}$ | $1\frac{1}{2}$ | $1\frac{3}{2}$ | .30 |
| 151-4P25 | .25 | $\frac{7}{8}$ | $1\frac{1}{2}$ | $1\frac{3}{2}$ | .33 |
| 600 Volts DC Working | | | | | |
| 151-6D1‡ | .001 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D15‡ | .0015 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D2‡ | .002 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D22‡ | .0022 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |

| Catalog Number | Capacity in Mfd. | D | L | S | Dealer Net |
|----------------|------------------|----------------|----------------|----------------|------------|
| 151-6D3‡ | .003 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D33‡ | .0033 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D4‡ | .004 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D47‡ | .0047 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D5‡ | .005 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .15 |
| 151-6D6 | .006 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .18 |
| 151-6D68 | .0068 | $\frac{3}{16}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | .18 |
| 151-6S1 | .01 | $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{3}{4}$ | .18 |
| 151-6S15 | .015 | $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{3}{4}$ | .18 |
| 151-6S2 | .02 | $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{3}{4}$ | .18 |
| 151-6S22 | .022 | $\frac{1}{2}$ | $\frac{7}{8}$ | $\frac{3}{4}$ | .18 |
| 151-6S3 | .03 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .21 |
| 151-6S33 | .033 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .21 |
| 151-6S4 | .04 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .21 |
| 151-6S47 | .047 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .24 |
| 151-6S5 | .05 | $\frac{3}{8}$ | $1\frac{1}{4}$ | $2\frac{1}{2}$ | .24 |
| 151-6S6 | .06 | $\frac{1}{2}$ | $1\frac{1}{2}$ | $2\frac{1}{2}$ | .24 |
| 151-6S68 | .068 | $\frac{1}{2}$ | $1\frac{1}{2}$ | $2\frac{1}{2}$ | .24 |
| 151-6P1 | .1 | $\frac{3}{8}$ | $1\frac{1}{2}$ | $2\frac{1}{2}$ | .27 |
| 151-6P15 | .15 | $\frac{3}{8}$ | $1\frac{1}{2}$ | $2\frac{1}{2}$ | .27 |
| 151-6P2 | .2 | $\frac{7}{8}$ | $1\frac{3}{4}$ | $1\frac{3}{2}$ | .33 |
| 151-6P22 | .22 | $\frac{7}{8}$ | $1\frac{3}{4}$ | $1\frac{3}{2}$ | .39 |
| 151-6P25 | .25 | $\frac{7}{8}$ | $1\frac{3}{4}$ | $1\frac{3}{2}$ | .39 |

‡Indicates Tolerance of $+20\%$

* DuPont Reg.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Type 107 Wrapped Mylar® Capacitors

Noninductive polyester film extended foil section, assembled in Mylar wrapper case. Ends filled with thermosetting Pyroset resin. Tinned leads firmly embedded in the resin and will not pull out. Sizes are greatly reduced. Very high insulation resistance, dielectric impervious to moisture.



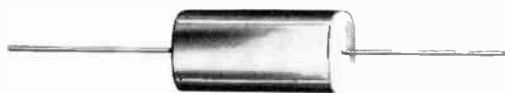
Temperature Range:
-30°C. to +110°C

Standard Tolerance.
.001 to .0047 Mfd. ±30%
.005 to 1.0 Mfd. ±20%

| Catalog No. | Capacity | Diameter | Length | Catalog No. | Capacity | Diameter | Length | Catalog No. | Capacity | Diameter | Length |
|------------------------|----------|----------|--------|------------------------|----------|----------|--------|------------------------|----------|----------|--------|
| 150 VDC Working | | | | 200 VDC Working | | | | 400 VDC Working | | | |
| 107V103 | .01 | .156 | 1/2 | 107C683 | .068 | .343 | 3/4 | 107E474 | .47 | .671 | 1 1/2 |
| 107V153 | .015 | .187 | 1/2 | 107C104 | .1 | .375 | 7/8 | 107E684 | .68 | .796 | 1 3/4 |
| 107V223 | .022 | .203 | 5/8 | 107C154 | .15 | .453 | 7/8 | 107E105 | 1. | .812 | 2 |
| 107V333 | .033 | .218 | 5/8 | 107C224 | .22 | .438 | 1 1/8 | 107E155 | 1.5 | .921 | 2 1/4 |
| 107V473 | .047 | .234 | 3/4 | 107C334 | .33 | .484 | 1 1/8 | 107E205 | 2. | 1.093 | 2 1/4 |
| 107V683 | .068 | .265 | 3/4 | 107C474 | .47 | .546 | 1 1/4 | 600 VDC Working | | | |
| 107V104 | .1 | .281 | 7/8 | 107C684 | .68 | .609 | 1 1/4 | 107F102 | .001 | .156 | 3/4 |
| 107V154 | .15 | .328 | 7/8 | 107C105 | 1. | .671 | 1 3/4 | 107F152 | .0052 | .171 | 3/4 |
| 107V224 | .22 | .328 | 1 | 107C155 | 1.5 | .828 | 1 3/4 | 107F222 | .0022 | .187 | 3/4 |
| 107V334 | .33 | .375 | 1 1/8 | 107C205 | 2. | .875 | 1 7/8 | 107E332 | .0033 | .203 | 3/4 |
| 107V474 | .47 | .468 | 1 1/4 | 400 VDC Working | | | | 107F472 | .0047 | .234 | 3/4 |
| 107V684 | .68 | .562 | 1 1/4 | 107E102 | .001 | .156 | 3/4 | 107F682 | .0068 | .265 | 3/4 |
| 107V105 | 1.00 | .593 | 1 1/2 | 107E152 | .0015 | .156 | 3/4 | 107F103 | .01 | .312 | 3/4 |
| 107V155 | 1.5 | .718 | 1 3/4 | 107E222 | .0022 | .156 | 3/4 | 107F153 | .015 | .312 | 7/8 |
| 107V205 | 2.00 | .812 | 1 3/4 | 107E332 | .0033 | .156 | 3/4 | 107F223 | .022 | .375 | 7/8 |
| 200 VDC Working | | | | 107E472 | .0047 | .187 | 3/4 | 107F333 | .033 | .406 | 1 |
| 107C102 | .001 | .156 | 1/2 | 107E682 | .0068 | .218 | 5/8 | 107F473 | .047 | .453 | 1 |
| 107C152 | .0015 | .156 | 1/2 | 107E103 | .01 | .250 | 5/8 | 107F683 | .068 | .531 | 1 |
| 107C222 | .0022 | .156 | 1/2 | 107E153 | .015 | .296 | 5/8 | 107F104 | .1 | .562 | 1 1/4 |
| 107C332 | .0033 | .156 | 1/2 | 107E223 | .022 | .312 | 3/4 | 107F154 | .15 | .671 | 1 1/4 |
| 107C472 | .0047 | .156 | 1/2 | 107E333 | .033 | .312 | 7/8 | 107F224 | .22 | .718 | 1 1/4 |
| 107C682 | .0068 | .156 | 1/2 | 107E473 | .047 | .343 | 7/8 | 107F334 | .33 | .756 | 2 |
| 107C103 | .01 | .171 | 1/2 | 107E683 | .068 | .375 | 1 | 107F474 | .47 | .859 | 2 |
| 107C153 | .015 | .203 | 1/2 | 107E104 | .1 | .421 | 1 | 107F684 | .68 | 1.016 | 2 |
| 107C223 | .022 | .250 | 3/4 | 107E154 | .15 | .468 | 1 1/4 | 107F105 | 1. | 1.125 | 2 1/2 |
| 107C333 | .033 | .250 | 3/4 | 107E224 | .22 | .546 | 1 1/4 | 107F155 | 1.5 | 1.234 | 3 |
| 107C473 | .047 | .296 | 3/4 | 107E334 | .33 | .593 | 1 1/4 | 107F205 | 2. | 1.421 | 3 |

Available ±10% tolerance (K) 107F205K 2.0 mfd. 600V ±10 ±20% tolerance (M) 107F205M 2.0 mfd. 600V ±20

Type 103 Flat Mylar® Capacitors



Smallest film capacitors made. Made with non-hygroscopic polyester dielectric and wrapper. Ends sealed with thermosetting resin. Capable of passing rigid humidity requirements (MIL-C-91). Will operate up to 125°C. Extremely high insulation resistance.

| Part No. | Cap. Mfd. | T | W | L | Part No. | Cap. Mfd. | T | W | L | Part No. | Cap. Mfd. | T | W | L |
|-----------------------------|-----------|------|-------|--------|-----------------------------|-----------|-------|-------|--------|-----------------------------|-----------|-------|-------|--------|
| 150 Working Volts DC | | | | | 400 Working Volts DC | | | | | 600 Working Volts DC | | | | |
| 103V102 | .001 | 3/16 | 3/16 | 1 1/16 | 103E102 | .001 | 3/16 | 3/16 | 1 3/16 | 103F102 | .001 | 3/16 | 3/16 | 1 3/16 |
| 103V152 | .0015 | 3/16 | 3/16 | 1 3/16 | 103E152 | .0015 | 3/16 | 3/16 | 1 3/16 | 103F152 | .0015 | 3/16 | 3/16 | 1 3/16 |
| 103V222 | .0022 | 3/16 | 3/16 | 1 3/16 | 103E222 | .0022 | 3/16 | 3/16 | 1 3/16 | 103F222 | .0022 | 3/16 | 3/16 | 1 3/16 |
| 103V332 | .0033 | 3/16 | 3/16 | 1 3/16 | 103E332 | .0033 | 3/16 | 3/16 | 1 3/16 | 103F332 | .0033 | 3/16 | 3/8 | 7/8 |
| 103V472 | .0047 | 3/16 | 3/16 | 1 3/16 | 103E472 | .0047 | 3/16 | 3/16 | 1 3/16 | 103F472 | .0047 | 3/16 | 3/8 | 7/8 |
| 103V682 | .0068 | 3/16 | 3/16 | 1 3/16 | 103E682 | .0068 | 3/16 | 3/16 | 1 3/16 | 103F682 | .0068 | 3/16 | 3/8 | 7/8 |
| 103V822 | .0082 | 3/16 | 3/16 | 1 3/16 | 103E822 | .0082 | 3/16 | 3/16 | 1 3/16 | 103F822 | .0082 | 1/4 | 3/8 | 7/8 |
| 103V103 | .01 | 3/16 | 3/16 | 1 3/16 | 103E103 | .01 | 3/16 | 3/16 | 1 3/16 | 103F103 | .01 | 1/4 | 3/8 | 7/8 |
| 103V153 | .015 | 3/16 | 3/8 | 1 3/16 | 103E153 | .015 | 3/16 | 3/8 | 1 3/16 | 103F153 | .015 | 3/16 | 1/2 | 7/8 |
| 103V223 | .022 | 3/16 | 3/16 | 1 3/16 | 103E223 | .022 | 3/16 | 3/16 | 1 3/16 | 103F223 | .022 | 3/16 | 1/2 | 1 1/8 |
| 103V333 | .033 | 3/16 | 1 1/2 | 1 3/16 | 103E333 | .033 | 3/16 | 3/16 | 1 3/16 | 103F333 | .033 | 3/16 | 1/2 | 1 1/8 |
| 103V473 | .047 | 3/16 | 3/8 | 1 3/16 | 103E473 | .047 | 1/4 | 1 1/2 | 1 3/16 | 103F473 | .047 | 3/16 | 1 1/2 | 1 1/8 |
| 103V683 | .068 | 3/16 | 3/8 | 1 3/16 | 103E683 | .068 | 3/16 | 1/2 | 1 1/8 | 103F683 | .068 | 3/16 | 1 1/2 | 1 1/4 |
| 103V823 | .082 | 3/16 | 3/8 | 1 3/16 | 103E823 | .082 | 3/16 | 1 1/2 | 1 1/4 | 103F823 | .082 | 3/8 | 5/8 | 1 3/8 |
| 103V104 | 0.1 | 1/4 | 1 1/2 | 1 3/16 | 103E104 | .1 | 3/16 | 1 1/2 | 1 1/4 | 103F104 | .1 | 1 1/2 | 3/2 | 1 3/8 |
| 103V154 | .15 | 1/4 | 3/4 | 1 1/8 | 103E154 | .15 | 3/16 | 1 1/2 | 1 1/4 | 103F154 | .15 | 3/8 | 3/2 | 1 7/8 |
| 103V224 | .22 | 1/4 | 1 1/2 | 1 1/8 | 103E224 | .22 | 3/8 | 1 1/2 | 1 7/8 | 103F224 | .22 | 1/2 | 3/2 | 1 7/8 |
| 103V334 | .33 | 3/16 | 1 1/2 | 1 1/4 | 103E334 | .33 | 3/16 | 3/4 | 1 7/8 | 103F334 | .33 | 1/2 | 3/2 | 2 1/8 |
| 103V474 | .47 | 3/16 | 3/2 | 1 1/4 | 103E474 | .47 | 1/2 | 7/8 | 1 7/8 | 103F474 | .47 | 3/8 | 1 1/2 | 2 1/8 |
| 103V684 | .68 | 3/16 | 3/2 | 1 1/4 | 103E684 | .68 | 1 1/2 | 3/8 | 2 1/8 | 103F684 | .68 | 1 1/4 | 1 3/2 | 2 1/4 |
| 103V824 | .82 | 3/16 | 3/4 | 1 1/4 | 103E824 | .82 | 1 1/2 | 3/2 | 2 3/8 | | | | | |
| 103V105 | 1.0 | 3/16 | 3/4 | 1 7/8 | 103E105 | 1.0 | 3/16 | 1 | 2 3/8 | | | | | |

ALSO AVAILABLE: Type 101 Flat Inserted Tab Construction.
Type 103 Flat Extended Foil Construction.
For further details write for latest Engineering Bulletin.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Glasseal Capacitors For Military and Commercial Application CPO4 and CPO5 to Mil-C-25C (Inserted Tabs)

G.I. Glasseal capacitors are subminiature metal cased tubular units which have been designed to meet severe and rigid operating requirements, especially where an important design consideration is limited space.

AVAILABLE IN
FOLLOWING CASE

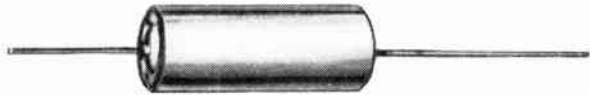
STYLES:

CP10

CP11

CP13

"Glasseals" have proven themselves to be unsurpassed in reliability over the entire operating temp. range from -55°C to $+125^{\circ}\text{C}$.



NOTE: The capacitors listed in this table have a capacitance tolerance of $\pm 10\%$.

| TYPE CPD4A1* Plain Metal Case | | | | TYPE CPO5A1* Metal Case with Insulating Sleeve | | | |
|----------------------------------|------|--|-----------------------|---|------|--|-------------------------|
| μF | WVDC | Char. K -55°C to $+125^{\circ}\text{C}$ | Size * D. x L. | μF | WVDC | Char. K -55°C to $+125^{\circ}\text{C}$ | Size * D. x L. |
| .001 | 600 | CP04A1KF102K3 | .235 x $\frac{3}{4}$ | .001 | 600 | CPO5A1KF102K3 | .298 x $1\frac{1}{16}$ |
| .0015 | 600 | CP04A1KF152K3 | .235 x $\frac{3}{4}$ | .0015 | 600 | CPO5A1KF152K3 | .298 x $1\frac{1}{16}$ |
| .0022 | 600 | CP04A1KF222K3 | .235 x $\frac{3}{4}$ | .0022 | 600 | CPO5A1KF222K3 | .298 x $1\frac{1}{16}$ |
| .0033 | 600 | CP04A1KF332K3 | .235 x $\frac{3}{4}$ | .0033 | 600 | CPO5A1KF332K3 | .298 x $1\frac{1}{16}$ |
| .0047 | 600 | CP04A1KF472K3 | .235 x $\frac{3}{4}$ | .0047 | 600 | CPO5A1KF472K3 | .298 x $1\frac{1}{16}$ |
| .0068 | 600 | CP04A1KF682K3 | .235 x $\frac{3}{4}$ | .0068 | 600 | CPO5A1KF682K3 | .298 x $1\frac{1}{16}$ |
| .01 | 400 | CP04A1KE103K3 | .235 x $\frac{3}{4}$ | .01 | 400 | CPO5A1KE103K3 | .298 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF103K3 | .312 x $\frac{7}{8}$ | | 600 | CPO5A1KF103K3 | .375 x $1\frac{1}{16}$ |
| .015 | 200 | CP04A1KC153K3 | .235 x $\frac{3}{4}$ | .015 | 200 | CPO5A1KC153K3 | .298 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF153K3 | .312 x $\frac{7}{8}$ | | 600 | CPO5A1KF153K3 | .375 x $1\frac{1}{16}$ |
| .022 | 200 | CP04A1KC223K3 | .235 x $\frac{3}{4}$ | .022 | 200 | CPO5A1KC223K3 | .298 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF223K3 | .312 x $\frac{7}{8}$ | | 600 | CPO5A1KF223K3 | .375 x $1\frac{1}{16}$ |
| .033 | 100 | CP04A1KB333K3 | .235 x $\frac{3}{4}$ | .033 | 100 | CPO5A1KB333K3 | .298 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE333K3 | .312 x $\frac{7}{8}$ | | 400 | CPO5A1KE333K3 | .375 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF333K3 | .400 x $\frac{1}{2}$ | | 600 | CPO5A1KF333K3 | .463 x $1\frac{1}{16}$ |
| .047 | 200 | CP04A1KC473K3 | .312 x $\frac{7}{8}$ | .047 | 200 | CPO5A1KC473K3 | .375 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE473K3 | .400 x $\frac{7}{8}$ | | 400 | CPO5A1KE473K3 | .463 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF473K3 | .400 x $1\frac{1}{8}$ | | 600 | CPO5A1KF473K3 | .463 x $1\frac{1}{16}$ |
| .068 | 200 | CP04A1KC683K3 | .312 x $\frac{7}{8}$ | .068 | 200 | CPO5A1KC683K3 | .375 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE683K3 | .403 x $1\frac{1}{8}$ | | 400 | CPO5A1KE683K3 | .463 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF683K3 | .400 x $1\frac{1}{8}$ | | 600 | CPO5A1KF683K3 | .463 x $1\frac{1}{16}$ |
| .1 | 100 | CP04A1KB104K3 | .312 x $\frac{7}{8}$ | .1 | 100 | CPO5A1KB104K3 | .375 x $1\frac{1}{16}$ |
| | 200 | CP04A1KC104K3 | .400 x $\frac{7}{8}$ | | 200 | CPO5A1KC104K3 | .463 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE104K3 | .400 x $1\frac{1}{8}$ | | 400 | CPO5A1KE104K3 | .463 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF104K3 | .562 x $1\frac{1}{8}$ | | 600 | CPO5A1KF104K3 | .625 x $1\frac{1}{16}$ |
| .15 | 100 | CP04A1KB154K3 | .400 x $\frac{7}{8}$ | .15 | 100 | CPO5A1KB154K3 | .463 x $1\frac{1}{16}$ |
| | 200 | CP04A1KC154K3 | .403 x $1\frac{1}{8}$ | | 200 | CPO5A1KC154K3 | .463 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE154K3 | .562 x $1\frac{1}{8}$ | | 400 | CPO5A1KE154K3 | .625 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF154K3 | .562 x $1\frac{1}{8}$ | | 600 | CPO5A1KF154K3 | .625 x $1\frac{1}{16}$ |
| .22 | 100 | CP04A1KB224K3 | .400 x $1\frac{1}{8}$ | .22 | 100 | CPO5A1KB224K3 | .463 x $1\frac{1}{16}$ |
| | 200 | CP04A1KC224K3 | .400 x $1\frac{1}{8}$ | | 200 | CPO5A1KC224K3 | .463 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE224K3 | .562 x $1\frac{1}{8}$ | | 400 | CPO5A1KE224K3 | .625 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF224K3 | .562 x $1\frac{1}{8}$ | | 600 | CPO5A1KF224K3 | .625 x $1\frac{1}{16}$ |
| .33 | 100 | CP04A1KB334K3 | .400 x $1\frac{1}{8}$ | .33 | 100 | CPO5A1KB334K3 | .463 x $1\frac{1}{16}$ |
| | 200 | CP04A1KC334K3 | .562 x $1\frac{1}{8}$ | | 200 | CPO5A1KC334K3 | .625 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE334K3 | .562 x $1\frac{1}{8}$ | | 400 | CPO5A1KE334K3 | .625 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF334K3 | .670 x $1\frac{1}{8}$ | | 600 | CPO5A1KF334K3 | .733 x $1\frac{1}{16}$ |
| .47 | 100 | CP04A1KB474K3 | .562 x $1\frac{1}{8}$ | .47 | 100 | CPO5A1KB474K3 | .625 x $1\frac{1}{16}$ |
| | 200 | CP04A1KC474K3 | .562 x $1\frac{1}{8}$ | | 200 | CPO5A1KC474K3 | .625 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE474K3 | .670 x $1\frac{1}{8}$ | | 400 | CPO5A1KE474K3 | .733 x $1\frac{1}{16}$ |
| | 600 | CP04A1KF474K3 | .750 x $2\frac{1}{8}$ | | 600 | CPO5A1KF474K3 | .813 x $2\frac{1}{8}$ |
| .68 | 100 | CP04A1KB684K3 | .562 x $1\frac{1}{8}$ | .68 | 100 | CPO5A1KB684K3 | .625 x $1\frac{1}{16}$ |
| | 200 | CP04A1KC684K3 | .562 x $1\frac{1}{8}$ | | 200 | CPO5A1KC684K3 | .625 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE684K3 | .750 x $2\frac{1}{8}$ | | 400 | CPO5A1KE684K3 | .813 x $2\frac{1}{8}$ |
| | 600 | CP04A1KF684K3 | 1.0 x $1\frac{1}{8}$ | | 600 | CPO5A1KF684K3 | 1.063 x $1\frac{1}{16}$ |
| 1.0 | 100 | CP04A1KB105K3 | .562 x $1\frac{1}{8}$ | 1.0 | 100 | CPO5A1KB105K3 | .625 x $1\frac{1}{16}$ |
| | 200 | CP04A1KC105K3 | .670 x $1\frac{1}{8}$ | | 200 | CPO5A1KC105K3 | .733 x $1\frac{1}{16}$ |
| | 400 | CP04A1KE105K3 | 1.0 x $1\frac{1}{8}$ | | 400 | CPO5A1KE105K3 | 1.063 x $1\frac{1}{16}$ |

*For case grounded reduce L dimension by $\frac{1}{16}$ ".

Above listing are ratings listed in Mil-C-25C. Other values are available in General Instrument Commercial Equivalents. For wide variety of case styles and mountings write for catalog.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Glasseal Capacitors For Military and Commercial Application (Cont'd.) CPO8 and CPO9 to Mil-C-25C (Extended Foil)

| TYPE CPO8A1 Plain Metal Case | | | | TYPE CPO9A1 Metal Case with Insulating Sleeve | | | |
|---------------------------------|------|----------------------------|-------------------|--|------|----------------------------|-------------------|
| μ F | WVDC | Char. K -55°C to +125°C | Size • D. x L. | μ F | WVDC | Char. K -55°C to +125°C | Size • D. x L. |
| .001 | 600 | CPO8A1KF102K3 | .235 x 3/4 | .001 | 600 | CPO9A1KF102K3 | .298 x 13/16 |
| .0015 | 600 | CPO8A1KF152K3 | .235 x 3/4 | .0015 | 600 | CPO9A1KF152K3 | .298 x 13/16 |
| .0022 | 600 | CPO8A1KF222K3 | .235 x 3/4 | .0022 | 600 | CPO9A1KF222K3 | .298 x 13/16 |
| .0033 | 400 | CPO8A1KE332K3 | .235 x 3/4 | .0033 | 400 | CPO9A1KE332K3 | .298 x 13/16 |
| | 600 | CPO8A1KF332K3 | .312 x 7/8 | | 600 | CPO9A1KF332K3 | .375 x 13/16 |
| .0047 | 200 | CPO8A1KC472K3 | .235 x 3/4 | .0047 | 200 | CPO9A1KC472K3 | .298 x 13/16 |
| | 600 | CPO8A1KF472K3 | .312 x 7/8 | | 600 | CPO9A1KF472K3 | .375 x 13/16 |
| .0068 | 200 | CPO8A1KC682K3 | .235 x 3/4 | .0068 | 200 | CPO9A1KC683K3 | .298 x 13/16 |
| | 600 | CPO8A1KF682K3 | .312 x 7/8 | | 600 | CPO9A1KF682K3 | .375 x 13/16 |
| .01 | 100 | CPO8A1KB103K3 | .235 x 3/4 | .01 | 100 | CPO9A1KB103K3 | .298 x 13/16 |
| | 600 | CPO8A1KF103K3 | .312 x 7/8 | | 600 | CPO9A1KF103K3 | .375 x 13/16 |
| .015 | 100 | CPO8A1KB153K3 | .235 x 3/4 | .015 | 100 | CPO9A1KB153K3 | .298 x 13/16 |
| | 400 | CPO8A1KE153K3 | .312 x 7/8 | | 400 | CPO9A1KE153K3 | .375 x 13/16 |
| | 600 | CPO8A1KF153K3 | .400 x 7/8 | | 600 | CPO9A1KF153K3 | .463 x 13/16 |
| .022 | 200 | CPO8A1KC223K3 | .312 x 7/8 | .022 | 600 | CPO9A1KC223K3 | .375 x 13/16 |
| | 600 | CPO8A1KF223K3 | .400 x 7/8 | | 200 | CPO9A1KF223K3 | .463 x 13/16 |
| .033 | 200 | CPO8A1KC333K3 | .312 x 7/8 | .033 | 200 | CPO9A1KC333K3 | .375 x 13/16 |
| | 400 | CPO8A1KE333K3 | .400 x 7/8 | | 400 | CPO9A1KE333K3 | .463 x 13/16 |
| | 600 | CPO8A1KF333K3 | .400 x 11/8 | | 600 | CPO9A1KF333K3 | .463 x 13/16 |
| .047 | 100 | CPO8A1KB473K3 | .312 x 7/8 | .047 | 100 | CPO9A1KB473K3 | .375 x 13/16 |
| | 200 | CPO8A1KC473K3 | .400 x 7/8 | | 200 | CPO9A1KC473K3 | .463 x 13/16 |
| | 400 | CPO8A1KE473K3 | .400 x 1 1/8 | | 400 | CPO9A1KE473K3 | .463 x 13/16 |
| | 600 | CPO8A1KF473K3 | .400 x 1 3/8 | | 600 | CPO9A1KF473K3 | .463 x 13/16 |
| .068 | 200 | CPO8A1KC683K3 | .400 x 7/8 | .068 | 200 | CPO9A1KC683K3 | .463 x 13/16 |
| | 400 | CPO8A1KE683K3 | .400 x 1 3/8 | | 400 | CPO9A1KE683K3 | .463 x 13/16 |
| | 600 | CPO8A1KF683K3 | .562 x 1 1/8 | | 600 | CPO9A1KF683K3 | .625 x 13/16 |
| .1 | 100 | CPO8A7KB104K3 | .400 x 7/8 | .1 | 100 | CPO9A1KB104K3 | .463 x 13/16 |
| | 200 | CPO8A1KC104K3 | .400 x 1 1/8 | | 200 | CPO9A1KC104K3 | .463 x 13/16 |
| | 400 | CPO8A1KE104K3 | .562 x 1 1/8 | | 400 | CPO9A1KE104K3 | .625 x 13/16 |
| | 600 | CPO8A1KF104K3 | .562 x 1 3/8 | | 600 | CPO9A1KF104K3 | .625 x 13/16 |
| .15 | 100 | CPO8A1KB154K3 | .400 x 1 1/8 | .15 | 100 | CPO9A1KB154K3 | .463 x 13/16 |
| | 200 | CPO8A1KC154K3 | .400 x 1 3/8 | | 200 | CPO9A1KC154K3 | .463 x 13/16 |
| | 400 | CPO8A1KE154K3 | .562 x 1 3/8 | | 400 | CPO9A1KE154K3 | .625 x 13/16 |
| | 600 | CPO8A1KF154K3 | .562 x 1 5/8 | | 600 | CPO9A1KF154K3 | .625 x 1 1/16 |
| .22 | 100 | CPO8A1KB224K3 | .400 x 1 3/8 | .22 | 100 | CPO9A1KB224K3 | .463 x 13/16 |
| | 200 | CPO8A1KC224K3 | .562 x 1 1/8 | | 200 | CPO9A1KC224K3 | .625 x 13/16 |
| | 400 | CPO8A1KE224K3 | .562 x 1 5/8 | | 400 | CPO9A1KE224K3 | .625 x 1 11/16 |
| | 600 | CPO8A1KF224K3 | .670 x 1 5/8 | | 600 | CPO9A1KF224K3 | .733 x 1 11/16 |
| .33 | 100 | CPO8A1KB334K3 | .562 x 1 1/8 | .33 | 100 | CPO9A1KB334K3 | .625 x 13/16 |
| | 200 | CPO8A1KC334K3 | .562 x 1 3/8 | | 200 | CPO9A1KC334K3 | .625 x 13/16 |
| | 400 | CPO8A1KE334K3 | .670 x 1 5/8 | | 400 | CPO9A1KE334K3 | .733 x 1 11/16 |
| | 600 | CPO8A1KF334K3 | .750 x 2 1/8 | | 600 | CPO9A1KF334K3 | .813 x 2 3/8 |
| .47 | 100 | CPO8A1KB474K3 | .562 x 1 3/8 | .47 | 100 | CPO9A1KB474K3 | .625 x 13/16 |
| | 200 | CPO8A1KC474K3 | .562 x 1 5/8 | | 200 | CPO9A1KC474K3 | .625 x 1 11/16 |
| | 400 | CPO8A1KE474K3 | .750 x 2 1/8 | | 400 | CPO9A1KE474K3 | .813 x 2 3/8 |
| | 600 | CPO8A1KF474K3 | .750 x 2 3/8 | | 600 | CPO9A1KF474K3 | .813 x 2 3/8 |
| .68 | 100 | CPO8A1KB684K3 | .562 x 1 5/8 | .68 | 100 | CPO9A1KB684K3 | .625 x 1 11/16 |
| | 200 | CPO8A1KC684K3 | .670 x 1 5/8 | | 200 | CPO9A1KC684K3 | .733 x 1 11/16 |
| 1.0 | 100 | CPO8A1KB105K3 | .670 x 1 5/8 | 1.0 | 100 | CPO9A1KB105K3 | .733 x 1 11/16 |
| | 200 | CPO8A1KC105K3 | .750 x 2 1/8 | | 200 | CPO9A1KC105K3 | .813 x 2 3/8 |

* For case grounded reduce L dimension by 1/16".

Above listings are ratings listed in Mil-C-25C. For complete listing of Hermetically sealed Capacitor write for catalog.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Type 155 Hi-Temp Metallized Paper Capacitors

Assembled in a plastic tube with plastic end-seals. Self-healing.
Low R-F impedance. Excellent P-F over wide temperature range.

Replaces M T R Product Line



Temperature Rating: -40°C . to $+100^{\circ}\text{C}$.
Standard Tolerance: -20% to $+30\%$.

| Catalog Number | Cap/Mfd | Size in inches Diameter | $\pm\frac{1}{16}$ " Length |
|------------------|---------|----------------------------|-------------------------------|
| 200 VOLTS | | | |
| 155C103M | .01 | $\frac{1}{4}$ | $1\frac{1}{16}$ |
| 155C203M | .02 | $\frac{1}{4}$ | $1\frac{1}{16}$ |
| 155C303M | .03 | $\frac{3}{16}$ | $1\frac{1}{16}$ |
| 155C503M | .05 | $\frac{3}{16}$ | $1\frac{1}{16}$ |
| 155C104M | .1 | $\frac{3}{8}$ | $1\frac{1}{16}$ |
| 155C254M | .25 | $\frac{1}{2}$ | $1\frac{1}{16}$ |
| 155C504M | .5 | $\frac{1}{2}$ | $1\frac{1}{8}$ |
| 155C105M | 1.0 | $\frac{3}{8}$ | $1\frac{1}{8}$ |
| 155C205M | 2.0 | $\frac{5}{8}$ | $1\frac{1}{8}$ |
| 400 VOLTS | | | |
| 155E103M | .01 | $\frac{1}{4}$ | $1\frac{1}{16}$ |
| 155E203M | .02 | $\frac{3}{8}$ | $1\frac{1}{16}$ |
| 155E303M | .03 | $\frac{3}{8}$ | $1\frac{1}{16}$ |
| 155E503M | .05 | $\frac{3}{8}$ | $1\frac{1}{16}$ |
| 155E104M | .1 | $\frac{3}{8}$ | $1\frac{1}{8}$ |

| Catalog Number | Cap/Mfd | Size in inches Diameter | $\pm\frac{1}{16}$ " Length |
|------------------|---------|----------------------------|-------------------------------|
| 155E254M | .25 | $\frac{3}{8}$ | $1\frac{1}{8}$ |
| 155E504M | .5 | $\frac{5}{8}$ | $1\frac{3}{8}$ |
| 155E105M | 1.0 | $\frac{3}{4}$ | $1\frac{3}{8}$ |
| 155E205M | 2.0 | $\frac{7}{8}$ | $2\frac{3}{8}$ |
| 600 VOLTS | | | |
| 155F103M | .01 | $\frac{3}{16}$ | $1\frac{1}{16}$ |
| 155F203M | .02 | $\frac{3}{8}$ | $1\frac{1}{16}$ |
| 155F303M | .03 | $\frac{3}{8}$ | $1\frac{1}{16}$ |
| 155F503M | .05 | $\frac{1}{2}$ | $1\frac{1}{16}$ |
| 155F104M | .1 | $\frac{7}{16}$ | $1\frac{1}{8}$ |
| 155F254M | .25 | $\frac{5}{8}$ | $1\frac{1}{8}$ |
| 155F504M | .5 | $\frac{3}{4}$ | $1\frac{1}{8}$ |
| 155F105M | 1.0 | $\frac{7}{8}$ | $1\frac{3}{8}$ |
| 155F205M | 2.0 | 1 | $2\frac{3}{8}$ |

Type MPGR Metal-Can-Hi-Temp Metallized Paper Capacitors MIL TYPE CH04 & 05 CHAR. M TO MIL-C-18312A

MPGR Variations

MPGR Basis type with grounded case.

MPGR1 With floating case. To order: add 1 after MPG— $\frac{1}{16}$ " to length.

MPGRV With insulating plastic sleeve. To order: add V after MPGR— $\frac{1}{16}$ " to Diameter— $\frac{1}{8}$ " to Length.

3MPGR With threaded end Bushing. To order: add 3 before MPGR.

6MPGR With soldered transverse bracket. To order: add 6 before MPGR.

7MPGR With soldered tangential bracket. To order: add 7 to MPGR.



Standard Tolerance: $\pm 20\%$
Temperature Rating: -55°C . to $+125^{\circ}\text{C}$.
Derating: 0% at $+100^{\circ}\text{C}$. 25% at $+125^{\circ}\text{C}$.

| Catalog Number | Cap. in UF | Size in inches Diameter | Length |
|---------------------------------------|------------|----------------------------|-----------------|
| MPGR Capacitors, Grounded Case | | | |
| 200 Volts DC Working | | | |
| MPGR2-S1 | .01 | .235 | $\frac{3}{4}$ |
| MPGR2-S15 | .015 | .235 | $\frac{3}{4}$ |
| MPGR2-S2 | .02 | .235 | $\frac{3}{4}$ |
| MPGR2-S22 | .022 | .235 | $\frac{3}{4}$ |
| MPGR2-S33 | .033 | .235 | $\frac{3}{4}$ |
| MPGR2-S4 | .04 | .235 | $\frac{3}{4}$ |
| MPGR2-S47 | .047 | .235 | $\frac{3}{4}$ |
| MPGR2-S5 | .05 | .235 | $\frac{3}{4}$ |
| MPGR2-S68 | .068 | .312 | $\frac{3}{4}$ |
| MPGR2-P1 | .1 | .312 | $\frac{3}{4}$ |
| MPGR2-P15 | .15 | .312 | $1\frac{1}{16}$ |
| MPGR2-P2 | .2 | .312 | $1\frac{1}{16}$ |
| MPGR2-P22 | .22 | .312 | $1\frac{1}{16}$ |
| MPGR2-P25 | .25 | .312 | $1\frac{1}{16}$ |
| MPGR2-P33 | .33 | .400 | $1\frac{1}{16}$ |
| MPGR2-P47 | .47 | .400 | $1\frac{1}{16}$ |
| MPGR2-P5 | .5 | .400 | $1\frac{1}{16}$ |
| MPGR2-P68 | .68 | .500 | $1\frac{1}{16}$ |
| MPGR2-1 | 1.0 | .562 | $1\frac{1}{16}$ |
| MPGR2-2 | 2.0 | .562 | $1\frac{3}{4}$ |
| 400 Volts DC Working | | | |
| MPGR4-S1 | .01 | .235 | $\frac{3}{4}$ |
| MPGR4-S15 | .015 | .235 | $\frac{3}{4}$ |
| MPGR4-S2 | .02 | .235 | $\frac{3}{4}$ |
| MPGR4-S22 | .022 | .235 | $\frac{3}{4}$ |
| MPGR4-S33 | .033 | .312 | $\frac{3}{4}$ |
| MPGR4-S4 | .04 | .312 | $\frac{3}{4}$ |
| MPGR4-S47 | .047 | .312 | $\frac{3}{4}$ |
| MPGR4-S5 | .05 | .312 | $\frac{7}{8}$ |
| MPGR4-S68 | .068 | .312 | $1\frac{1}{16}$ |

| Catalog Number | Cap. in UF | Size in inches Diameter | Length |
|-----------------------------|------------|----------------------------|-----------------|
| MPGR4-P1 | .1 | .400 | $1\frac{1}{16}$ |
| MPGR4-P15 | .15 | .500 | $1\frac{1}{16}$ |
| MPGR4-P2 | .2 | .500 | $1\frac{1}{16}$ |
| MPGR4-P22 | .22 | .500 | $1\frac{1}{16}$ |
| MPGR4-P25 | .25 | .500 | $1\frac{1}{16}$ |
| MPGR4-P33 | .33 | .562 | $1\frac{1}{4}$ |
| MPGR4-P47 | .47 | .562 | $1\frac{3}{4}$ |
| MPGR4-P5 | .5 | .562 | $1\frac{3}{4}$ |
| MPGR4-P68 | .68 | .670 | $1\frac{3}{4}$ |
| MPGR4-1 | 1.0 | .670 | $2\frac{1}{4}$ |
| MPGR4-2 | 2.0 | 1.000 | $1\frac{3}{4}$ |
| 600 Volts DC Working | | | |
| MPGR6-S1 | .01 | .235 | $\frac{3}{4}$ |
| MPGR6-S15 | .015 | .312 | $\frac{3}{4}$ |
| MPGR6-S2 | .02 | .312 | $\frac{3}{4}$ |
| MPGR6-S22 | .022 | .312 | $\frac{3}{4}$ |
| MPGR6-S33 | .033 | .400 | $\frac{3}{4}$ |
| MPGR6-S4 | .04 | .400 | $\frac{3}{4}$ |
| MPGR6-S47 | .047 | .400 | $\frac{3}{4}$ |
| MPGR6-S5 | .05 | .400 | $\frac{3}{4}$ |
| MPGR6-S68 | .068 | .400 | $1\frac{1}{16}$ |
| MPGR6-P1 | .1 | .400 | $1\frac{1}{16}$ |
| MPGR6-P15 | .15 | .500 | $1\frac{1}{16}$ |
| MPGR6-P2 | .2 | .562 | $1\frac{1}{4}$ |
| MPGR6-P22 | .22 | .562 | $1\frac{1}{4}$ |
| MPGR6-P25 | .25 | .562 | $1\frac{1}{4}$ |
| MPGR6-P33 | .33 | .562 | $1\frac{3}{4}$ |
| MPGR6-P47 | .47 | .670 | $1\frac{3}{4}$ |
| MPGR6-P5 | .5 | .670 | $1\frac{3}{4}$ |
| MPGR6-P68 | .68 | .670 | $2\frac{1}{4}$ |
| MPGR6-1 | 1.0 | .750 | $2\frac{1}{4}$ |
| MPGR6-1.5 | 1.5 | 1.000 | $2\frac{1}{4}$ |

For -55°C to $+85^{\circ}\text{C}$ order Type MPGRK. Available in same capacity and voltage ratings as shown above for Type MPGR. Same tube size for equivalent ratings.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Type MPTIK AND MPTIM Metal-Tube Metallized Paper Capacitors

HERMETICALLY SEALED — IMPREGNATED IN MINERAL OIL

-55°C TD +85° TOLERANCE -20% +30%

MPTIK, MPTIM VARIATIONS

MPTIK-MPTIM Basic types with floating case. To order: see Catalog Listing. Example: MPTIM1.5-3

MPTIK-MPTIM With grounded case. To order: delete letter I after MPT—subtract $\frac{1}{8}$ " from Length. Example: MPTK1.5-3MPTIKV-MPTIMV With insulating plastic sleeve. To order: add V after MPTIK or MPTIM— $\frac{1}{16}$ " to Diameter— $\frac{1}{8}$ " to Length. Example: MPTIKV1.5-3

4MPTIK-4MPTIM With riveted radial bracket. To order: add 4 before MPTIK or MPTIM Example: 4MPTIK1.5-3

4MPTIKV-4MPTIMV With insulating plastic sleeve and riveted radial bracket. To order: add 4 before and V after MPTIK or MPTIM—Example: 4MPTIKV1.5-3

7MPTIK-7MPTIM With soldered tangential bracket. To order: add 7 before MPTIK or MPTIM Example: 7MPTIK1.5-3

MPTIK-MPTIM CAPACITORS, FLOATING CASE

| Cat. No. | Cap. in UF | Diameter | Length | Cat. No. | Cap. in UF | Diameter | Length |
|-----------------------------|------------|----------------|------------------|-----------------------------|------------|------------------|------------------|
| 150 Volts DC Working | | | | 400 Volts DC Working | | | |
| MPTIK1.5-3 | 3.0 | $\frac{3}{4}$ | $1\frac{15}{16}$ | MPTIM4-P1 | .1 | $\frac{7}{16}$ | $1\frac{1}{4}$ |
| MPTIK1.5-4 | 4.0 | $\frac{7}{8}$ | $1\frac{15}{16}$ | MPTIM4-P25 | .25 | $\frac{5}{8}$ | $1\frac{1}{4}$ |
| MPTIK1.5-6 | 6.0 | 1 | $1\frac{15}{16}$ | MPTIM4-P5 | .5 | $\frac{5}{8}$ | $1\frac{15}{16}$ |
| 200 Volts DC Working | | | | MPTIM4-1 | 1.0 | $\frac{3}{4}$ | $2\frac{7}{16}$ |
| MPTIK2-S5 | .05 | $\frac{3}{8}$ | $2\frac{29}{32}$ | MPTIM4-2 | 2.0 | 1 | $2\frac{7}{16}$ |
| MPTIK2-P1 | .1 | $\frac{3}{8}$ | $2\frac{29}{32}$ | 600 Volts DC Working | | | |
| MPTIK2-P25 | .25 | $\frac{1}{2}$ | $2\frac{29}{32}$ | MPTIM6-S1 | .01 | $\frac{3}{8}$ | $2\frac{29}{32}$ |
| MPTIK2-P5 | .5 | $\frac{1}{2}$ | $1\frac{1}{4}$ | MPTIM6-S2 | .02 | $\frac{3}{8}$ | $2\frac{29}{32}$ |
| MPTIK2-1 | 1.0 | $\frac{5}{8}$ | $1\frac{3}{8}$ | MPTIM6-S3 | .03 | $\frac{3}{8}$ | $2\frac{29}{32}$ |
| MPTIK2-2 | 2.0 | $\frac{5}{8}$ | $1\frac{15}{16}$ | MPTIM6-S5 | .05 | $\frac{1}{2}$ | $2\frac{29}{32}$ |
| 400 Volts DC Working | | | | MPTIM6-Pi | .1 | $\frac{1}{2}$ | $1\frac{3}{8}$ |
| MPTIM4-S3 | .03 | $\frac{3}{8}$ | $2\frac{29}{32}$ | MPTIM6-P25 | .25 | $\frac{5}{8}$ | $1\frac{3}{8}$ |
| MPTIM4-S5 | .05 | $\frac{7}{16}$ | $2\frac{29}{32}$ | MPTIM6-P5 | .5 | $\frac{3}{4}$ | $1\frac{15}{16}$ |
| | | | | MPTIM6-1 | 1.0 | $1\frac{15}{16}$ | $2\frac{7}{16}$ |
| | | | | MPTIM6-2 | 2.0 | $1\frac{1}{8}$ | $2\frac{7}{16}$ |

Type 227 Metallized-Paper/Mylar[®] Glass-Sealed Metal Tubulars

MADE TO MEET MIL C-18312A CHAR. N



For operation at +125°C without derating. The finest capacitor of its type available.

Encased in hermetic, glass-sealed metal tubes. For complete listing write for Engineering Bulletin.

| Part No. | Cap. Mfd. | Dia. | Length | Part No. | Cap. Mfd. | Dia. | Length | Part No. | Cap. Mfd. | Dia. | Length |
|----------------------------|-----------|-------|------------------|-------------------------|-----------|------|----------------|-------------------------|-----------|-------|----------------|
| 100 Volts D-C. W.V. | | | | 400 V. D-C. W.V. | | | | 600 V. D-C. W.V. | | | |
| 227A1V305M | 3 | .670 | $1\frac{15}{16}$ | 227A1E103M | .01 | .312 | $\frac{7}{8}$ | 227A1F103M | .01 | .312 | $\frac{7}{8}$ |
| 227A1V405M | 4 | .750 | $1\frac{15}{16}$ | 227A1E123M | .012 | .312 | $\frac{7}{8}$ | 227A1F123M | .012 | .312 | $\frac{7}{8}$ |
| 227A1V605M | 6 | 1.000 | $1\frac{15}{16}$ | 227A1E183M | .018 | .312 | $\frac{7}{8}$ | 227A1F153M | .015 | .312 | $\frac{7}{8}$ |
| | | | | 227A1E223M | .022 | .312 | $\frac{7}{8}$ | 227A1F183M | .018 | .312 | $1\frac{1}{8}$ |
| 227A1C103M | .01 | .175 | $\frac{3}{4}$ | 227A1E273M | .027 | .312 | $1\frac{1}{8}$ | 227A1F223M | .022 | .312 | $1\frac{1}{8}$ |
| 227A1C123M | .012 | .195 | $\frac{3}{4}$ | 227A1E333M | .033 | .312 | $1\frac{1}{8}$ | 227A1F273M | .027 | .312 | $1\frac{1}{8}$ |
| 227A1C153M | .015 | .195 | $\frac{3}{4}$ | 227A1E393M | .039 | .400 | $1\frac{1}{8}$ | 227A1F333M | .033 | .312 | $1\frac{1}{8}$ |
| 227A1C183M | .018 | .235 | $\frac{3}{4}$ | 227A1E473M | .047 | .400 | $1\frac{1}{8}$ | 227A1F393M | .039 | .400 | $1\frac{1}{8}$ |
| 227A1C223M | .022 | .235 | $\frac{3}{4}$ | 227A1E563M | .056 | .400 | $1\frac{1}{8}$ | 227A1F473M | .047 | .400 | $1\frac{1}{8}$ |
| 227A1C273M | .027 | .235 | $\frac{3}{4}$ | 227A1E683M | .068 | .400 | $1\frac{1}{8}$ | 227A1F563M | .056 | .400 | $1\frac{1}{8}$ |
| 227A1C333M | .033 | .235 | $\frac{3}{4}$ | 227A1E823M | .082 | .500 | $1\frac{1}{8}$ | 227A1F683M | .068 | .400 | $1\frac{1}{8}$ |
| 227A1C393M | .039 | .312 | $\frac{7}{8}$ | 227A1E104M | .1 | .500 | $1\frac{1}{8}$ | 227A1F823M | .082 | .500 | $1\frac{1}{8}$ |
| 227A1C473M | .047 | .312 | $\frac{7}{8}$ | 227A1E124M | .12 | .500 | $1\frac{1}{8}$ | 227A1F104M | .1 | .500 | $1\frac{1}{8}$ |
| 227A1C563M | .056 | .312 | $\frac{7}{8}$ | 227A1E184M | .18 | .562 | $1\frac{1}{8}$ | 227A1F124M | .12 | .562 | $1\frac{1}{8}$ |
| 227A1C633M | .068 | .312 | $\frac{7}{8}$ | 227A1E224M | .22 | .562 | $1\frac{1}{8}$ | 227A1F154M | .15 | .562 | $1\frac{1}{8}$ |
| 227A1C823M | .082 | .312 | $\frac{7}{8}$ | 227A1E274M | .27 | .562 | $1\frac{1}{8}$ | 227A1F184M | .18 | .562 | $1\frac{1}{8}$ |
| 227A1C104M | .1 | .312 | $\frac{7}{8}$ | 227A1E334M | .33 | .670 | $1\frac{1}{8}$ | 227A1F224M | .22 | .562 | $1\frac{3}{8}$ |
| 227A1C124M | .12 | .312 | $1\frac{1}{8}$ | 227A1E394M | .39 | .670 | $1\frac{1}{8}$ | 227A1F274M | .27 | .562 | $1\frac{3}{8}$ |
| 227A1C154M | .15 | .312 | $1\frac{1}{8}$ | 227A1E474M | .47 | .670 | $1\frac{1}{8}$ | 227A1F334M | .33 | .562 | $1\frac{3}{8}$ |
| 227A1C184M | .18 | .400 | $\frac{7}{8}$ | 227A1E564M | .56 | .670 | $1\frac{1}{8}$ | 227A1F394M | .39 | .670 | $1\frac{3}{8}$ |
| 227A1C224M | .22 | .400 | $\frac{7}{8}$ | 227A1E684M | .68 | .670 | $1\frac{1}{8}$ | 227A1F474M | .47 | .670 | $1\frac{3}{8}$ |
| 227A1C274M | .27 | .400 | $1\frac{1}{8}$ | 227A1E824M | .82 | .750 | $1\frac{1}{8}$ | 227A1F564M | .56 | .670 | $1\frac{3}{8}$ |
| 227A1C334M | .33 | .400 | $1\frac{1}{8}$ | | | | | 227A1F684M | .68 | .670 | $1\frac{3}{8}$ |
| 227A1C394M | .39 | .500 | $1\frac{1}{8}$ | | | | | 227A1F824M | .82 | 1.000 | $1\frac{3}{8}$ |
| 227A1C474M | .47 | .500 | $1\frac{1}{8}$ | | | | | 227A1F105M | 1.0 | 1.000 | $1\frac{3}{8}$ |
| 227A1C564M | .56 | .500 | $1\frac{1}{8}$ | | | | | 227A1F155M | 1.5 | 1.000 | $1\frac{3}{8}$ |
| 227A1C684M | .68 | .500 | $1\frac{1}{8}$ | | | | | 227A1F205M | 2.0 | 1.000 | $2\frac{1}{8}$ |
| 227A1C824M | .82 | .562 | $1\frac{1}{8}$ | | | | | 227A1F255M | 2.5 | 1.000 | $2\frac{1}{8}$ |
| 227A1C105M | 1.0 | .562 | $1\frac{1}{8}$ | | | | | | | | |
| 227A1C155M | 1.5 | .562 | $1\frac{1}{8}$ | | | | | | | | |
| 227A1C205M | 2.0 | .670 | $1\frac{1}{8}$ | | | | | | | | |

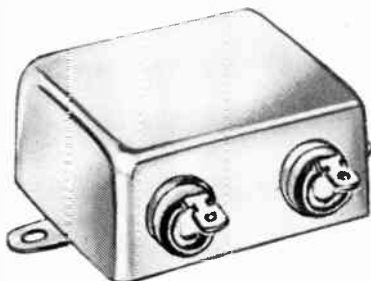
NOTE: Type 227's are Available in All Mil Styles, Mylar and Plastic Insulating Sleeves, Tolerances, and Ratings.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE MPDR BATH-TUB HI-TEMP METALLIZED PAPER CAPACITORS

MIL TYPE CH53 54 55 CHAR. N TO MIL-C-18312A



Temperature Rating: -55°C. to +125°C.
Standard Tolerance: ±20%.

MPDR Variations

MPDR with terminals on side.
MPDT with terminals on top.
MPDRB with terminals on bottom.

Derating: 0% at +100°C. 25% at +125°C.

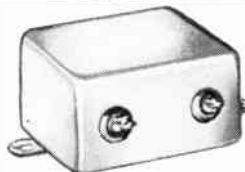
Assembled in hermetically sealed tinned bathtub type case. Impregnated in solid thermosetting resin. Vitrified ceramic (or glass) lug-type terminal seals. Self-healing. Low r-f impedance. Excellent power factor over a very wide temperature range.

Complete line of 55°C to 100°C available under part number MPDK and MPDM, dual or single section units.

| Catalog Number | Cap. in UF | Length | Size in inches | | Height |
|-----------------------------|------------|---------|----------------|--|--------|
| | | | Width | | |
| 150 VOLTS DC WORKING | | | | | |
| MPDR1.5-3 | 3.0 | 1 13/16 | 1 | | 3/4 |
| MPDR1.5-4 | 4.0 | 1 13/16 | 1 | | 7/8 |
| MPDR1.5-5 | 5.0 | 1 13/16 | 1 | | 7/8 |
| MPDR1.5-6 | 6.0 | 1 13/16 | 1 1/4 | | 7/8 |
| MPDR1.5-8 | 8.0 | 2 | 1 3/4 | | 3/4 |
| MPDR1.5-10 | 10.0 | 2 | 1 3/4 | | 1 1/4 |
| MPDR1.5-12 | 12.0 | 2 | 2 | | 7/8 |
| 200 VOLTS DC WORKING | | | | | |
| MPDR2-P5 | .5 | 1 13/16 | 1 | | 3/4 |
| MPDR2-1 | 1.0 | 1 13/16 | 1 | | 3/4 |
| MPDR2-2 | 2.0 | 1 13/16 | 1 | | 3/4 |
| 400 VOLTS DC WORKING | | | | | |
| MPDR4-P25 | .25 | 1 13/16 | 1 | | 3/4 |
| MPDR4-P5 | .5 | 1 13/16 | 1 | | 3/4 |
| MDPR4-1 | 1.0 | 1 13/16 | 1 | | 7/8 |
| MPDR4-2 | 2.0 | 2 | 1 3/4 | | 3/4 |
| MPDR4-3 | 3.0 | 2 | 1 3/4 | | 1 |
| MPDR4-4 | 4.0 | 2 | 2 | | 1 |
| 600 VOLTS DC WORKING | | | | | |
| MPDR6-P1 | .1 | 1 13/16 | 1 | | 3/4 |
| MPDR6-P25 | .25 | 1 13/16 | 1 | | 3/4 |
| MPDR6-P5 | .5 | 1 13/16 | 1 | | 3/4 |
| MPDR6-1 | 1.0 | 1 13/16 | 1 1/4 | | 7/8 |
| MPDR6-2 | 2.0 | 2 | 2 | | 7/8 |

Type PDM Bathtub-Type Oil-Paper Capacitors MIL TYPE CP53 54 55

Section assembled in hermetically sealed tin coated drawn-shell container. Mineral-oil impregnated and filled. Lug-type terminal seals. Meets requirements of MIL-C-25C.



Temperature Rating: -55°C. to +85°C.
Standard Tolerance: -10% to +20%

PDM Variations

PDM Similar to MIL Type CP53, with terminals on side. Example: PDM4-S5

PDMT (CP54) With terminals on top. To order: add T after PDM. Example: PDMT4-S5

PDMB (CP55) With terminals on the bottom. To order: add B after PDM. Example: PDMB4-S5

| Catalog Number | Cap. in UF | Length | Size in inches | | Height |
|-----------------------------------|------------|---------|----------------|--|--------|
| | | | Width | | |
| PDM SINGLE-CAPACITOR UNITS | | | | | |
| 400 Volts DC Working | | | | | |
| PDM4-S5 | .05 | 1 13/16 | 1 | | 3/4 |
| PDM4-P1 | .1 | 1 13/16 | 1 | | 3/4 |
| PDM4-P25 | .25 | 1 13/16 | 1 | | 3/4 |
| PDM4-P5 | .5 | 1 13/16 | 1 | | 1 1/4 |
| PDM4-1 | 1.0 | 2 | 1 3/4 | | 1 1/4 |
| PDM4-2 | 2.0 | 2 | 2 | | 1 3/8* |
| 600 Volts DC Working | | | | | |
| PDM6-S5 | .05 | 1 13/16 | 1 | | 3/4 |
| PDM6-P1 | .1 | 1 13/16 | 1 | | 3/4 |
| PDM6-P25 | .25 | 1 13/16 | 1 | | 3/4 |
| PDM6-P5 | .5 | 1 13/16 | 1 | | 1 |
| PDM6-1 | 1.0 | 2 | 1 3/4 | | 1 |
| PDM6-2 | 2.0 | 2 | 2 | | 1 3/8* |
| 1,000 Volts DC Working | | | | | |
| PDM10-S5 | .05 | 1 13/16 | 1 | | 3/4 |
| PDM10-P1 | .1 | 1 13/16 | 1 | | 3/4 |
| PDM10-P25 | .25 | 1 13/16 | 1 | | 1 1/4 |
| PDM10-P5 | .5 | 2 | 1 3/4 | | 7/8 |
| PDM10-1 | 1.0 | 2 | 2 | | 1 1/8* |

| Catalog Number | Cap. in UF | Length | Size in inches | | Height |
|---------------------------------|------------|---------|----------------|--|--------|
| | | | Width | | |
| PDM DUAL-CAPACITOR UNITS | | | | | |
| 400 Volts DC Working | | | | | |
| 2PDM4-S5 | .05-.05 | 1 13/16 | 1 | | 3/4 |
| 2PDM4-P1 | .1-.1 | 1 13/16 | 1 | | 3/4 |
| 2PDM4-P25 | .25-.25 | 1 13/16 | 1 | | 1 1/4 |
| 2PDM4-P5 | .5-.5 | 2 | 1 3/4 | | 1 1/4 |
| 2PDM4-1 | 1.0-1.0 | 2 | 2 | | 1 3/8* |

| Catalog Number | Cap. in UF | Length | Size in inches | | Height |
|---|------------|---------|----------------|--|--------|
| | | | Width | | |
| PDM SINGLE-CAPACITOR UNITS (continued) | | | | | |
| 600 Volts DC Working | | | | | |
| 2PDM6-S5 | .05-.05 | 1 13/16 | 1 | | 3/4 |
| 2PDM6-P1 | .1-.1 | 1 13/16 | 1 | | 3/4 |
| 2PDM6-P25 | .25-.25 | 1 13/16 | 1 | | 1 |
| 2PDM6-P5 | .5-.5 | 2 | 1 3/4 | | 1 1/4 |
| 2PDM6-1 | 1.0-1.0 | 2 | 2 | | 1 1/4 |
| 1,000 Volts DC Working | | | | | |
| 2PDM10-S5 | .05-.05 | 1 13/16 | 1 | | 3/4 |
| 2PDM10-P1 | .1-.1 | 1 13/16 | 1 | | 7/8 |
| 2PDM10-P25 | .25-.25 | 2 | 1 3/4 | | 7/8 |
| 2PDM10-P5 | .5-.5 | 2 | 2 | | 1 1/8* |

| Catalog Number | Cap. in UF | Length | Size in inches | | Height |
|-----------------------------------|-------------|---------|----------------|--|--------|
| | | | Width | | |
| PDM TRIPLE-CAPACITOR UNITS | | | | | |
| 400 Volts DC Working | | | | | |
| 3PDM4-P1 | .1-.1-.1 | 1 13/16 | 1 | | 1 1/4 |
| 3PDM4-P25 | .25-.25-.25 | 2 | 1 3/4 | | 7/8 |
| 3PDM4-P5 | .5-.5-.5 | 2 | 2 | | 1 |
| 600 Volts DC Working | | | | | |
| 3PDM6-P1 | .1-.1-.1 | 1 13/16 | 1 | | 1 1/4 |
| 3PDM6-P25 | .25-.25-.25 | 2 | 1 3/4 | | 7/8 |
| 3PDM6-P5 | .5-.5-.5 | 2 | 2 | | 1 |
| 1,000 Volts DC Working | | | | | |
| 3PDM10-P1 | .1-.1-.1 | 2 | 1 3/4 | | 7/8 |
| 3PDM10-P25 | .25-.25-.25 | 2 | 2 | | 1 1/8* |

* Add 1/16" to Height for units with top or bottom terminals.

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

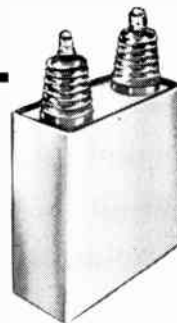
Type PJ High-Voltage Oil-Paper Capacitors 6000 thru 25,000 Volt Series

Section assembled in container of heavy gage steel, welded oil tight and hot tinned. Mineral oil impregnated and mineral oil filled. Case and terminals are bonded together. Low leakage current and negligible capacity change over wide range of operating temperature. For higher voltage ratings and engineering data write to Sales Engineering Department.

Temperature Range:
-55°C. to +85°C.
Capacity Tolerance:
±10%

Available in: Cat. No.

6,000 Volts DC Working PJ 60
7,500 Volts DC Working PJ 75
10,000 Volts DC Working PJ 100
12,500 Volts DC Working PJ 125
15,000 Volts DC Working PJ 150
20,000 Volts DC Working PJ 200
25,000 Volts DC Working PJ 250



Type PLM High-Voltage Oil-Paper Capacitors (CP70 SERIES)

Section assembled in lacquer-finished terneplate case. Mineral-oil impregnated and filled. Ceramic terminal insulators with screw studs. Designed for heavy-duty continuous service. Fulfills the exacting requirements of power-supply and filter applications. Meets electrical requirements of MIL-C-25C. For higher voltage ratings and engineering data write to Sales Engineering Department.

Temperature Rating:
-55°C. to +85°C.
Standard Tolerance:
±10%

PLM Variations

PLM Basic type similar to MIL Type CP70.
Example: PLM6-P5.
PLMF Similar to CP70 with CP07F footed bracket.
To order: add F after PLM. Example: PLMF6-P5.
PLMS Similar to CP70 with CP07S spade bracket.
To order: Add S after PLM. Example: PLMS6-P5.
PLMU With universal mounting bracket. To order:
add U after PLM. Example: PLMU6-P5.
PLMR With solder-lug MIL type B terminals (furnished only through 2,000 VDCW rating). To order: add R after PLM. Example: PLMR6-P5.



| Catalog Number | Cap. in UF | Case Size in inches | | |
|-------------------------------|------------|---------------------|-------|--------|
| | | Length | Width | Height |
| 600 Volts DC Working | | | | |
| PLM6-P5 | .5 | 1 1/8 | 1 1/8 | 1 5/8 |
| PLM6-1 | 1.0 | 1 3/8 | 1 3/8 | 2 1/4 |
| PLM6-2 | 2.0 | 1 3/8 | 1 3/8 | 3 1/4 |
| PLM6-3 | 3.0 | 1 3/8 | 1 3/8 | 4 3/4 |
| PLM6-4 | 4.0 | 2 1/2 | 1 3/8 | 3 3/2 |
| PLM6-5 | 5.0 | 2 1/2 | 1 3/8 | 4 1/4 |
| PLM6-6 | 6.0 | 2 1/2 | 1 3/8 | 4 3/4 |
| PLM6-8 | 8.0 | 3 3/4 | 1 1/4 | 4 1/4 |
| PLM6-10 | 10.0 | 3 3/4 | 1 3/4 | 4 |
| 1,000 Volts DC Working | | | | |
| PLM10-P1 | .1 | 1 3/8 | 1 3/8 | 1 5/8 |
| PLM10-P25 | .25 | 1 3/8 | 1 3/8 | 1 5/8 |
| PLM10-P5 | .5 | 1 3/8 | 1 3/8 | 2 1/4 |
| PLM10-1 | 1.0 | 1 3/8 | 1 3/8 | 2 7/8 |
| PLM10-2 | 2.0 | 1 3/8 | 1 3/8 | 4 3/4 |
| PLM10-3 | 3.0 | 2 1/2 | 1 3/8 | 4 1/4 |
| PLM10-4 | 4.0 | 3 3/4 | 1 1/4 | 3 7/8 |
| PLM10-5 | 5.0 | 3 3/4 | 1 1/4 | 4 3/4 |
| PLM10-6 | 6.0 | 3 3/4 | 1 3/4 | 4 |
| PLM10-8 | 8.0 | 3 3/4 | 1 3/4 | 4 3/4 |
| PLM10-10 | 10.0 | 3 3/4 | 2 1/4 | 4 3/4 |
| PLM10-12 | 12.0 | 3 3/4 | 2 1/4 | 5 1/8 |
| PLM10-15 | 15.0 | 3 3/4 | 3 3/8 | 4 3/4 |
| 1,500 Volts DC Working | | | | |
| PLM15-P5 | .5 | 1 3/8 | 1 3/8 | 2 7/8 |
| PLM15-1 | 1.0 | 1 3/8 | 1 3/8 | 4 3/4 |
| PLM15-2 | 2.0 | 2 1/2 | 1 3/8 | 4 3/4 |
| PLM15-3 | 3.0 | 3 3/4 | 1 1/4 | 4 3/4 |
| PLM15-4 | 4.0 | 3 3/4 | 1 3/4 | 4 1/4 |
| PLM15-5 | 5.0 | 3 3/4 | 2 1/4 | 4 1/2 |
| PLM15-6 | 6.0 | 3 3/4 | 2 1/4 | 4 3/4 |
| PLM15-8 | 8.0 | 3 3/4 | 2 1/2 | 5 3/4 |
| PLM15-10 | 10.0 | 3 3/4 | 3 3/8 | 5 1/2 |
| PLM15-12 | 12.0 | 4 3/8 | 3 3/4 | 4 3/4 |
| PLM15-15 | 15.0 | 4 3/8 | 3 3/4 | 6 |

| Catalog Number | Cap. in UF | Case Size in inches | | |
|-------------------------------|------------|---------------------|-------|--------|
| | | Length | Width | Height |
| 2,000 Volts DC Working | | | | |
| PLM20-P1 | .1 | 1 3/8 | 1 3/8 | 2 1/4 |
| PLM20-P25 | .25 | 1 3/8 | 1 3/8 | 2 7/8 |
| PLM20-P5 | .5 | 1 3/8 | 1 3/8 | 3 7/8 |
| PLM20-1 | 1.0 | 2 1/2 | 1 3/8 | 4 1/4 |
| PLM20-2 | 2.0 | 3 3/4 | 1 1/4 | 4 3/4 |
| PLM20-3 | 3.0 | 3 3/4 | 1 3/4 | 4 3/4 |
| PLM20-4 | 4.0 | 3 3/4 | 2 1/4 | 5 1/8 |
| PLM20-5 | 5.0 | 3 3/4 | 3 3/8 | 4 3/4 |
| PLM20-6 | 6.0 | 3 3/4 | 3 3/8 | 5 1/2 |
| PLM20-8 | 8.0 | 4 3/8 | 3 3/4 | 5 1/8 |
| PLM20-10 | 10.0 | 4 3/8 | 3 3/4 | 6 1/2 |
| PLM20-12 | 12.0 | 4 3/8 | 3 3/4 | 7 1/2 |
| 2,500 Volts DC Working | | | | |
| PLM25-P5 | .5 | 2 1/2 | 1 3/8 | 3 7/8 |
| PLM25-1 | 1.0 | 3 3/4 | 1 3/4 | 3 3/4 |
| PLM25-2 | 2.0 | 3 3/4 | 2 1/4 | 4 3/4 |
| PLM25-4 | 4.0 | 4 3/8 | 3 3/4 | 4 3/8 |
| PLM25-10 | 10.0 | 4 3/8 | 3 3/4 | 8 1/2 |
| 3,000 Volts DC Working | | | | |
| PLM30-1 | .1 | 1 3/8 | 1 3/8 | 2 7/8 |
| PLM30-P25 | .25 | 2 1/2 | 1 3/8 | 3 1/2 |
| PLM30-P5 | .5 | 2 1/2 | 1 3/8 | 4 3/4 |
| PLM30-1 | 1.0 | 3 3/4 | 2 1/4 | 4 1/2 |
| PLM30-2 | 2.0 | 3 3/4 | 3 3/8 | 4 3/4 |
| PLM30-4 | 4.0 | 4 3/8 | 3 3/4 | 6 1/2 |
| 4,000 Volts DC Working | | | | |
| PLM40-P1 | .1 | 3 3/4 | 2 1/4 | 2 3/4 |
| PLM40-P25 | .25 | 3 3/4 | 2 1/4 | 2 3/4 |
| PLM40-P5 | .5 | 3 3/4 | 2 1/4 | 4 3/4 |
| PLM40-1 | 1.0 | 3 3/4 | 3 3/8 | 4 3/4 |
| PLM40-2 | 2.0 | 4 3/8 | 3 3/4 | 6 |
| PLM40-4 | 4.0 | 4 3/8 | 3 3/4 | 9 5/8 |
| 5,000 Volts DC Working | | | | |
| PLM50-P5 | .5 | 3 3/4 | 2 1/4 | 5 1/8 |
| PLM50-1 | 1.0 | 4 3/8 | 3 3/4 | 5 1/8 |
| PLM50-2 | 2.0 | 4 3/8 | 3 3/4 | 9 5/8 |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

Type PKM Small-Base Oil-Paper Capacitors (CP61, CP63, CP65 also CP90 and CP91)

Section assembled in hermetically sealed tin coated container. Mineral-oil impregnated and filled. Lug-type terminal seals. Suitable for use in compact equipment. Meets electrical requirements of MIL-C-25C.

Temperature Rating: -55°C to + 85°C.
Standard Tolerance: -10% to + 20%

PKM VARIATIONS

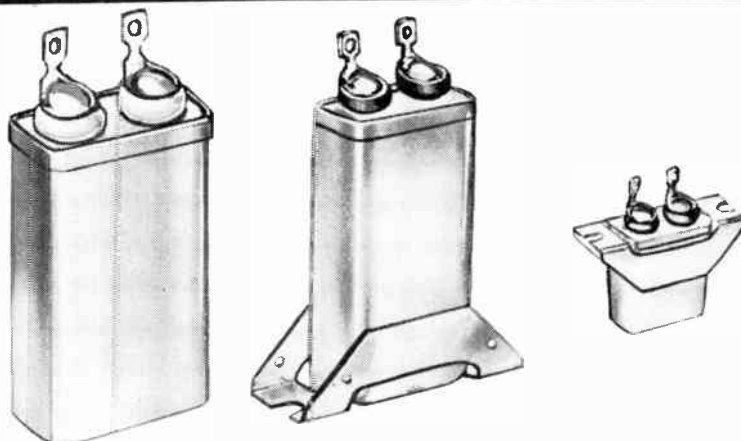
PKM Basic type similar to MIL Type CP61.
Example: PKM4-S5

PKMF Similar to CP61 with CP06F footed bracket.
To order: add F after PKM. Example: PKMF4-S5

PKMS Similar to CP61 with CP06S spade bracket.
To order: add S after PKM. Example: PKMS4-S5

PKMT Similar to CP63 with channel bracket on end opposite terminals.
To order: add T after PKM. Example: PKMT4-S5

PKMB Similar to CP65 with channel bracket on same end as terminals.
To order: add B after PKM. Example: PKMB4-S5



PKMT, PKMB Channel Bracket Dimensions:

Overall Length: 2 3/8"
Overall Width: 4 9/16" (max.).
Length between Mounting Slot Centers: 1 1/8"
Mounting Slot Width: 3/32"

| Catalog Number | Cap. in UF | Length | Size in inches Width | Height | Dealer Net |
|-----------------------------|------------|--------|-------------------------|--------|------------|
| 400 Volts DC Working | | | | | |
| PKM4-S5 | .05 | 1 3/8 | 47/64 | 1 3/8 | 1.73 |
| PKM4-P1 | .1 | 1 3/8 | 47/64 | 1 3/8 | 1.82 |
| PKM4-P25 | .25 | 1 3/8 | 47/64 | 1 3/8 | 1.87 |
| PKM4-P5 | .5 | 1 3/8 | 47/64 | 1 5/8 | 1.95 |
| PKM4-1 | 1.0 | 1 3/8 | 47/64 | 2 1/2 | 2.14 |
| 600 Volts DC Working | | | | | |
| PKM6-S5 | .05 | 1 3/8 | 47/64 | 1 3/8 | 1.76 |
| PKM6-P1 | .1 | 1 3/8 | 47/64 | 1 3/8 | 1.87 |

| Catalog Number | Cap. in UF | Length | Size in inches Width | Height | Dealer Net |
|-------------------------------|------------|--------|-------------------------|--------|------------|
| PKM6-P25 | .25 | 1 3/8 | 47/64 | 1 5/8 | 1.93 |
| PKM6-P5 | .5 | 1 3/8 | 47/64 | 2 | 2.00 |
| PKM6-1 | 1.0 | 1 3/8 | 47/64 | 2 3/4 | 2.24 |
| 1,000 Volts DC Working | | | | | |
| PKM10-S5 | .05 | 1 3/8 | 47/64 | 1 3/8 | 1.83 |
| PKM10-P1 | .1 | 1 3/8 | 47/64 | 1 3/8 | 1.91 |
| PKM10-P25 | .25 | 1 3/8 | 47/64 | 2 | 1.92 |
| PKM10-P5 | .5 | 1 3/8 | 47/64 | 2 1/2 | 2.43 |

Type PEM Small-Base Oil-Paper Capacitors (CP67, CP69)

Section assembled in hermetically sealed tin coated container. Mineral-oil impregnated and filled. Lug-type terminal seals. Suitable for use in compact equipment. Meets electrical requirements of MIL-C-25C.

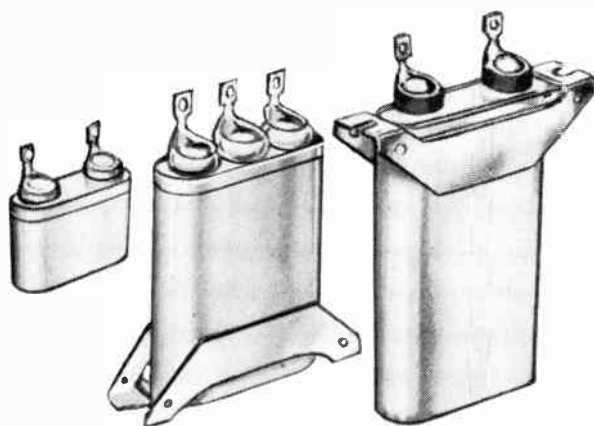
PEM Variations

PEM Basic type. To order: see Catalog Listing. Example: PEM6-S5
PEMT Similar to MIL Type CP67, with channel bracket on end opposite terminals. To order: add T after PEM. Example: PEMT6-S5
PEMB Similar to CP69, with channel bracket on same end as terminals. To order: add B after PEM. Example: PEMB6-S5

Standard Tolerance: -10% to +20%.
Temperature Rating: -55°C. to + 85°C.

PEMT, PEMB Channel Bracket Dimensions:

Overall Length: 2 3/8"
Overall Width: 4 1/16" (max.).
Length between Mounting Slot Centers: 2 1/8"
Mounting Slot Width: 3/32"



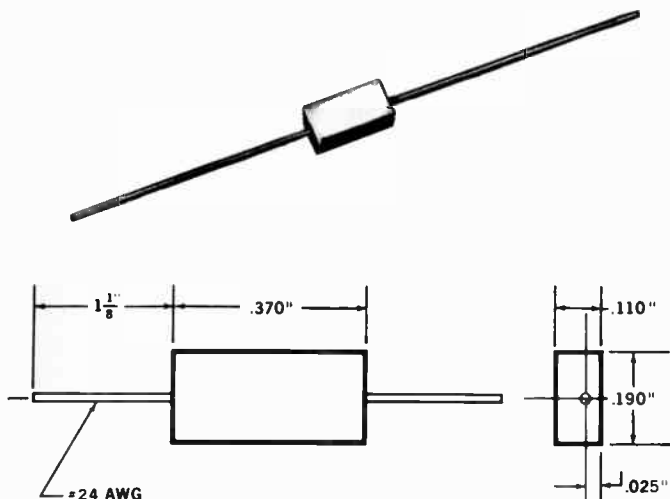
| Catalog Number | Cap. in UF | Length | Size in inches Width | Height | Dealer Net |
|-----------------------------------|------------|--------|-------------------------|--------|------------|
| PEM SINGLE-CAPACITOR UNITS | | | | | |
| 600 Volts DC Working | | | | | |
| PEM6-S5 | .05 | 1 3/8 | 5/8 | 1 3/8 | 1.86 |
| PEM6-P1 | .1 | 1 3/8 | 5/8 | 1 3/8 | 1.92 |
| PEM6-P25 | .25 | 1 3/8 | 5/8 | 1 1/2 | 1.95 |
| PEM6-P5 | .5 | 1 3/8 | 5/8 | 2 | 2.01 |
| PEM6-1 | 1.0 | 1 3/8 | 5/8 | 2 1/2 | 2.25 |
| 1,000 Volts DC Working | | | | | |
| PEM10-S5 | .05 | 1 3/8 | 5/8 | 1 3/8 | 1.89 |
| PEM10-P1 | .1 | 1 3/8 | 5/8 | 1 3/8 | 1.95 |
| PEM10-P25 | .25 | 1 3/8 | 5/8 | 1 1/2 | 2.01 |
| PEM10-P5 | .5 | 1 3/8 | 5/8 | 2 1/2 | 2.19 |
| PEM DUAL-CAPACITOR UNITS | | | | | |
| 600 Volts DC Working | | | | | |
| 2PEM6-S5 | .05-.05 | 1 3/8 | 5/8 | 1 3/8 | 2.64 |
| 2PEM6-P1 | .1-.1 | 1 3/8 | 5/8 | 1 1/2 | 2.69 |

| Catalog Number | Cap. in UF | Length | Size in inches Width | Height | Dealer Net |
|---|-------------|--------|-------------------------|--------|------------|
| PEM DUAL-CAPACITOR UNITS (cont.) | | | | | |
| 2PEM6-P25 | .25-.25 | 1 3/8 | 5/8 | 2 | 2.90 |
| 2PEM6-P5 | .5-.5 | 1 3/8 | 5/8 | 2 1/2 | 3.25 |
| 1,000 Volts DC Working | | | | | |
| 2PEM10-S5 | .05-.05 | 1 3/8 | 5/8 | 1 3/8 | 2.69 |
| 2PEM10-P1 | .1-.1 | 1 3/8 | 5/8 | 1 1/2 | 2.79 |
| 2PEM10-P25 | .25-.25 | 1 3/8 | 5/8 | 2 1/2 | 2.97 |
| PEM TRIPLE-CAPACITOR UNITS | | | | | |
| 600 Volts DC Working | | | | | |
| 3PEM6-S5 | .05-.05-.05 | 1 3/8 | 5/8 | 1 3/8 | 3.16 |
| 3PEM6-P1 | .1-.1-.1 | 1 3/8 | 5/8 | 1 1/2 | 3.25 |
| 3PEM6-P25 | .25-.25-.25 | 1 3/8 | 5/8 | 2 1/2 | 3.53 |
| 1,000 Volts DC Working | | | | | |
| 3PEM10-S5 | .05-.05-.05 | 1 3/8 | 5/8 | 1 1/2 | 3.25 |
| 3PEM10-P1 | .1-.1-.1 | 1 3/8 | 5/8 | 2 | 3.38 |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE MCM MISSILMITE

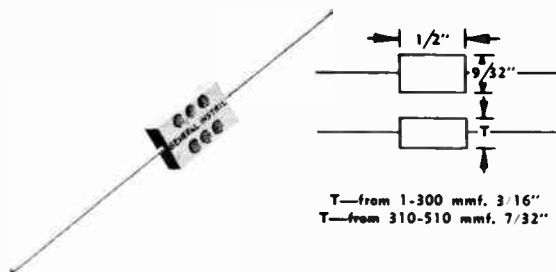


-55°C TO +125°C OPERATION MEETS & EXCEEDS MIL-C-5B
 500 VDCW 85°C
 300 VDCW 125°C

MISSILMITE subminiature molded mica capacitors are the **SMALLEST MOLDED MICA CAPACITORS EVER PRODUCED**, and are furnished in Characteristic "C", "D" and "E". MISSILMITES will withstand operating temperatures of -55°C to +125°C (standard ranges is from -55°C to +85°C).

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|-------------|----------|----------------------|--------|--------|
| | | ± 20% | ± 10% | ± 5% |
| *1 *2 *3 *4 | | | | |
| MCM10 - 050 | 5 | \$1.00 | - | - |
| MCM10 - 100 | 10 | 1.00 | \$1.20 | - |
| MCM10 - 120 | 12 | 1.00 | 1.20 | - |
| MCM10 - 150 | 15 | 1.00 | 1.20 | - |
| MCM10 - 180 | 18 | 1.00 | 1.20 | \$1.95 |
| MCM10 - 200 | 20 | 1.00 | 1.20 | 1.95 |
| MCM10 - 220 | 22 | 1.00 | 1.20 | 1.95 |
| MCM10 - 240 | 24 | 1.00 | 1.20 | 1.95 |
| MCM10 - 270 | 27 | 1.00 | 1.20 | 1.95 |
| MCM10 - 300 | 30 | 1.00 | 1.20 | 1.95 |
| MCM10 - 330 | 33 | 1.00 | 1.20 | 1.95 |
| MCM10 - 360 | 36 | 1.00 | 1.20 | 1.95 |
| MCM10 - 390 | 39 | 1.00 | 1.20 | 1.95 |
| MCM10 - 430 | 43 | 1.00 | 1.20 | 1.95 |
| MCM10 - 470 | 47 | 1.00 | 1.20 | 1.95 |
| MCM10 - 510 | 51 | 1.00 | 1.20 | 1.95 |
| MCM10 - 560 | 56 | 1.00 | 1.20 | 1.95 |
| MCM10 - 620 | 62 | 1.00 | 1.20 | 1.95 |
| MCM10 - 680 | 68 | 1.10 | 1.21 | 2.10 |
| MCM10 - 750 | 75 | 1.10 | 1.21 | 2.10 |
| MCM10 - 820 | 82 | 1.15 | 1.26 | 2.36 |
| MCM10 - 910 | 91 | 1.15 | 1.26 | 2.36 |
| MCM10 - 101 | 100 | 1.15 | 1.26 | 2.36 |
| MCM10 - 111 | 110 | 1.15 | 1.26 | 2.36 |
| MCM10 - 121 | 120 | 1.15 | 1.26 | 2.36 |
| MCM10 - 131 | 130 | 1.15 | 1.26 | 2.36 |
| MCM10 - 151 | 150 | 1.10 | 1.54 | 2.62 |
| MCM10 - 161 | 160 | 1.40 | 1.54 | 2.62 |
| MCM10 - 181 | 180 | 1.50 | 1.65 | 2.97 |
| MCM10 - 201 | 200 | 1.50 | 1.65 | 2.97 |
| MCM10 - 221 | 220 | 1.65 | 1.82 | 3.15 |
| MCM10 - 241 | 240 | 1.65 | 1.82 | 3.15 |

TYPE CM15 SILVERED MICA



T—from 1-300 mmf. 3/16"
 T—from 310-510 mmf. 7/32"

-55°C - +150°C
TO MIL-C-5B
 500 VDCW

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|-------------|----------|----------------------|-------------|-------------|
| | | "J" ± 5% | "G" ± 2% | "F" ± 1% |
| *1 *2 *3 *4 | | | | |
| CM15 - 100 | 10 | \$0.40 | - | - |
| CM15 - 120 | 12 | .40 | - | - |
| CM15 - 150 | 15 | .40 | - | - |
| CM15 - 180 | 18 | .40 | - | - |
| CM15 - 200 | 20 | .40 | - | - |
| CM15 - 220 | 22 | .40 | - | - |
| CM15 - 240 | 24 | .40 | \$0.46 | - |
| CM15 - 270 | 27 | .40 | .46 | - |
| CM15 - 300 | 30 | .40 | .46 | - |
| CM15 - 330 | 33 | .40 | .46 | - |
| CM15 - 360 | 36 | .40 | .46 | - |
| CM15 - 390 | 39 | .40 | .46 | - |
| CM15 - 430 | 43 | .40 | .46 | - |
| CM15 - 470 | 47 | .40 | .46 | - |
| CM15 - 510 | 51 | .40 | .46 | .50 |
| CM15 - 560 | 56 | .40 | .46 | .50 |
| CM15 - 620 | 62 | .40 | .46 | .50 |
| CM15 - 680 | 68 | .40 | .46 | .50 |
| CM15 - 750 | 75 | .40 | .46 | .50 |
| CM15 - 820 | 82 | .45 | .52 | .56 |
| CM15 - 910 | 91 | .45 | .52 | .56 |
| CM15 - 101 | 100 | .45 | .52 | .56 |
| CM15 - 111 | 110 | .45 | .52 | .56 |
| CM15 - 121 | 120 | .45 | .52 | .56 |
| CM15 - 131 | 130 | .45 | .52 | .56 |
| CM15 - 151 | 150 | .45 | .52 | .56 |
| CM15 - 161 | 160 | .50 | .58 | .63 |
| CM15 - 181 | 180 | .50 | .58 | .63 |
| CM15 - 201 | 200 | .50 | .58 | .63 |
| CM15 - 221 | 220 | .55 | .63 | .69 |
| CM15 - 241 | 240 | .55 | .63 | .69 |
| CM15 - 271 | 270 | .60 | .69 | .75 |
| CM15 - 301 | 300 | .60 | .69 | .75 |
| CM15 - 331 | 330 | .65 | .75 | .81 |
| CM15 - 361 | 360 | .70 | .81 | .88 |
| CM15 - 391 | 390 | .70 | .81 | .88 |
| CM15 - 431 | 430 | .75 | .86 | .94 |
| CM15 - 471 | 470 | .80 | .92 | 1.00 |
| CM15 - 511 | 510 | .80 | .92 | 1.00 |
| MCM15 - 561 | †560 | .80 | .92 | 1.00 |
| MCM15 - 621 | †620 | .85 | .98 | 1.06 |
| MCM15 - 681 | †680 | .90 | 1.04 | 1.13 |
| MCM15 - 751 | †750 | 1.00 | 1.15 | 1.25 |
| MCM15 - 821 | †820 | 1.10 | 1.27 | 1.38 |

†300 VDC

NOTE: Consult G. I. Listings to:

*1 Include applicable characteristic, (B, C, D, E, F).

*2 Include applicable tolerance letter, (K, J, G, F).

*3 Include applicable code letter for operating temperature range (N; 85°C; O; 125°C; P; 150°C).

*4 Include applicable vibration grade.

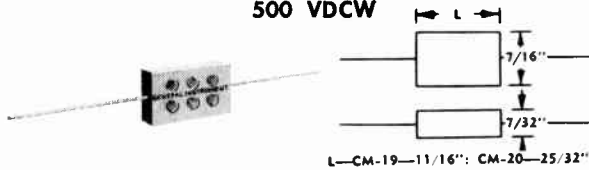
SPECIAL NOTE: For operating temperatures of 150°C, add 50% to above prices.

GENERAL INSTRUMENT CAPACITORS

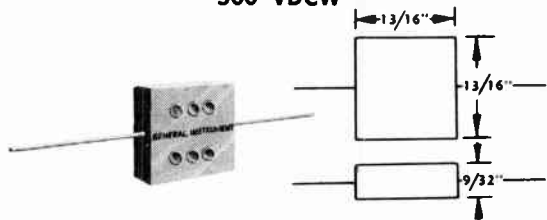
GENERAL INSTRUMENT CAPACITOR DIVISION

MOLDED SILVERED MICA CAPACITORS

TYPE CM20
500 VDCW



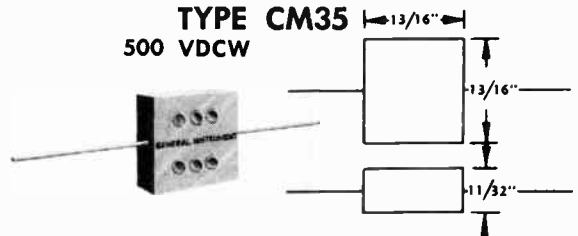
TYPE CM30
500 VDCW



| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|-------------------|----------|----------------------|-------------|-------------|
| | | "J" ± 5% | "G" ± 2% | "F" ± 1% |
| *1 *2 *3 *4 | | | | |
| CM20 - 050 - - - | 5 | \$0.40 | - | - |
| CM20 - 100 - - - | 10 | .40 | - | - |
| CM20 - 120 - - - | 12 | .40 | - | - |
| CM20 - 150 - - - | 15 | .40 | - | - |
| CM20 - 180 - - - | 18 | .40 | - | - |
| CM20 - 200 - - - | 20 | .40 | - | - |
| CM20 - 220 - - - | 22 | .40 | - | - |
| CM20 - 240 - - - | 24 | .40 | - | - |
| CM20 - 270 - - - | 27 | .40 | \$0.46 | - |
| CM20 - 300 - - - | 30 | .40 | .46 | - |
| CM20 - 330 - - - | 33 | .40 | .46 | - |
| CM20 - 360 - - - | 36 | .40 | .46 | - |
| CM20 - 390 - - - | 39 | .40 | .46 | - |
| CM20 - 430 - - - | 43 | .40 | .46 | - |
| CM20 - 470 - - - | 47 | .40 | .46 | - |
| CM20 - 500 - - - | 50 | .40 | .46 | \$0.50 |
| CM20 - 510 - - - | 51 | .40 | .46 | .50 |
| CM20 - 560 - - - | 56 | .40 | .46 | .50 |
| CM20 - 620 - - - | 62 | .40 | .46 | .50 |
| CM20 - 680 - - - | 68 | .40 | .46 | .50 |
| CM20 - 750 - - - | 75 | .40 | .46 | .50 |
| CM20 - 820 - - - | 82 | .40 | .46 | .50 |
| CM20 - 910 - - - | 91 | .40 | .46 | .50 |
| CM20 - 101 - - - | 100 | .40 | .46 | .50 |
| CM20 - 111 - - - | 110 | .45 | .52 | .56 |
| CM20 - 121 - - - | 120 | .45 | .52 | .56 |
| CM20 - 131 - - - | 130 | .45 | .52 | .56 |
| CM20 - 151 - - - | 150 | .45 | .52 | .56 |
| CM20 - 161 - - - | 160 | .45 | .52 | .56 |
| CM20 - 181 - - - | 180 | .45 | .52 | .56 |
| CM20 - 201 - - - | 200 | .45 | .52 | .56 |
| CM20 - 221 - - - | 220 | .45 | .52 | .56 |
| CM20 - 241 - - - | 240 | .55 | .63 | .69 |
| CM20 - 251 - - - | 250 | .55 | .63 | .69 |
| CM20 - 271 - - - | 270 | .55 | .63 | .69 |
| CM20 - 301 - - - | 300 | .55 | .63 | .69 |
| CM20 - 331 - - - | 330 | .55 | .63 | .69 |
| CM20 - 361 - - - | 360 | .55 | .63 | .69 |
| CM20 - 391 - - - | 390 | .65 | .75 | .81 |
| CM20 - 431 - - - | 430 | .65 | .75 | .81 |
| CM20 - 471 - - - | 470 | .70 | .81 | .88 |
| CM20 - 501 - - - | 500 | .70 | .81 | .88 |
| CM20 - 511 - - - | 510 | .70 | .81 | .88 |
| †CM20 - 561 - - - | 560 | .75 | .86 | .94 |
| †CM20 - 621 - - - | 620 | .75 | .86 | .94 |
| †CM20 - 681 - - - | 680 | .80 | .92 | 1.00 |
| †CM20 - 751 - - - | 750 | .80 | .92 | 1.00 |
| †CM20 - 821 - - - | 820 | .85 | .98 | 1.06 |
| †CM20 - 911 - - - | 910 | .85 | .98 | 1.06 |
| †CM20 - 102 - - - | 1000 | .90 | 1.04 | 1.13 |
| CM20 - 112 - - - | 1100 | .90 | 1.04 | 1.13 |
| CM20 - 122 - - - | 1200 | 1.00 | 1.15 | 1.25 |
| CM20 - 132 - - - | 1300 | 1.00 | 1.15 | 1.25 |
| CM20 - 152 - - - | 1500 | 1.10 | 1.27 | 1.38 |
| CM20 - 162 - - - | 1600 | 1.10 | 1.27 | 1.38 |
| CM20 - 182 - - - | 1800 | 1.20 | 1.38 | 1.50 |
| CM20 - 202 - - - | 2000 | 1.30 | 1.50 | 1.63 |
| CM20 - 222 - - - | 2200 | 1.40 | 1.61 | 1.75 |
| CM20 - 242 - - - | 2400 | 1.45 | 1.67 | 1.81 |
| CM20 - 252 - - - | 2500 | 1.50 | 1.73 | 1.88 |
| CM20 - 272 - - - | 2700 | 1.60 | 1.84 | 2.00 |
| CM20 - 302 - - - | 3000 | 1.80 | 2.07 | 2.25 |
| CM20 - 332 - - - | 3300 | 1.90 | 2.19 | 2.38 |
| CM20 - 362 - - - | 3600* | 1.90 | 2.19 | 2.38 |
| CM20 - 392 - - - | 3900* | 2.00 | 2.30 | 2.50 |
| CM20 - 432 - - - | 4300* | 2.10 | 2.42 | 2.63 |
| CM20 - 472 - - - | 4700* | 2.20 | 2.53 | 2.75 |
| CM20 - 502 - - - | 5000* | 2.30 | 2.65 | 2.88 |
| CM20 - 512 - - - | 5100* | 2.30 | 2.65 | 2.88 |

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|------------------|----------|----------------------|-------------|-------------|
| | | "J" ± 5% | "G" ± 2% | "F" ± 1% |
| *1 *2 *3 *4 | | | | |
| CM30 - 561 - - - | 560 | \$0.75 | \$0.86 | \$0.94 |
| CM30 - 621 - - - | 620 | .75 | .86 | .94 |
| CM30 - 681 - - - | 680 | .80 | .92 | 1.00 |
| CM30 - 751 - - - | 750 | .80 | .92 | 1.00 |
| CM30 - 821 - - - | 820 | .85 | .98 | 1.06 |
| CM30 - 911 - - - | 910 | .90 | 1.04 | 1.13 |
| CM30 - 102 - - - | 1000 | 1.00 | 1.15 | 1.25 |
| CM30 - 112 - - - | 1100 | 1.00 | 1.15 | 1.25 |
| CM30 - 122 - - - | 1200 | 1.15 | 1.32 | 1.44 |
| CM30 - 132 - - - | 1300 | 1.15 | 1.32 | 1.44 |
| CM30 - 152 - - - | 1500 | 1.25 | 1.44 | 1.56 |
| CM30 - 162 - - - | 1600 | 1.25 | 1.44 | 1.56 |
| CM30 - 182 - - - | 1800 | 1.25 | 1.44 | 1.56 |
| CM30 - 202 - - - | 2000 | 1.35 | 1.55 | 1.69 |
| CM30 - 222 - - - | 2200 | 1.35 | 1.55 | 1.69 |
| CM30 - 242 - - - | 2400 | 1.60 | 1.84 | 2.00 |
| CM30 - 252 - - - | 2500 | 1.60 | 1.84 | 2.00 |
| CM30 - 272 - - - | 2700 | 1.80 | 2.07 | 2.25 |
| CM30 - 302 - - - | 3000 | 1.90 | 2.19 | 2.38 |
| CM30 - 332 - - - | 3300 | 1.90 | 2.19 | 2.38 |
| MCM30-362 - - - | 3600 | 2.00 | 2.30 | 2.50 |
| MCM30-392 - - - | 3900 | 2.00 | 2.30 | 2.50 |
| MCM30-432 - - - | 4300 | 2.10 | 2.42 | 2.63 |
| MCM30-472 - - - | 4700 | 2.10 | 2.42 | 2.63 |
| MCM30-502 - - - | 5000 | 2.15 | 2.47 | 2.69 |
| MCM30-512 - - - | 5100 | 2.15 | 2.47 | 2.69 |
| MCM30-562 - - - | 5600 | 2.25 | 2.59 | 2.81 |
| MCM30-622 - - - | 6200 | 2.40 | 2.76 | 3.00 |

TYPE CM35
500 VDCW



| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|------------------|----------|----------------------|-------------|-------------|
| | | "J" ± 5% | "G" ± 2% | "F" ± 1% |
| *1 *2 *3 *4 | | | | |
| CM35 - 362 - - - | 3600 | \$2.00 | \$2.30 | \$2.50 |
| CM35 - 392 - - - | 3900 | 2.00 | 2.30 | 2.50 |
| CM35 - 432 - - - | 4300 | 2.10 | 2.42 | 2.63 |
| CM35 - 472 - - - | 4700 | 2.10 | 2.42 | 2.63 |
| CM35 - 512 - - - | 5100 | 2.15 | 2.47 | 2.69 |
| CM35 - 562 - - - | 5600 | 2.25 | 2.59 | 2.81 |
| CM35 - 622 - - - | 6200 | 2.40 | 2.76 | 3.00 |
| CM35 - 682 - - - | 6800* | 2.65 | 3.05 | 3.31 |
| CM35 - 752 - - - | 7500* | 2.80 | 3.22 | 3.50 |
| CM35 - 822 - - - | 8200* | 3.00 | 3.95 | 3.75 |
| CM35 - 912 - - - | 9100* | 3.20 | 3.68 | 4.00 |
| CM35 - 103 - - - | 10000* | 3.50 | 4.08 | 4.38 |

*300 VDC

NOTE: Consult G. I. Listings to:

- *1 Include applicable characteristic, (B, C, D, E, F).
- *2 Include applicable tolerance letter, (K, J, G, F).

- *3 Include applicable code letter for operating temperature range (N;85°C; O;125°C; P;150°C).

- *4 Include applicable vibration grade.

SPECIAL NOTE: For operating temperatures of 150°C, add 50% to above prices.

†MIL-C-5B Ratings

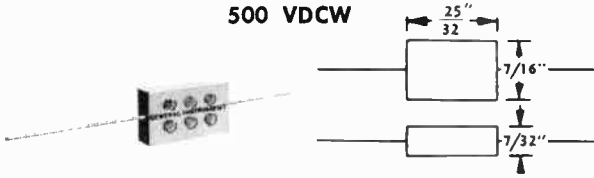
*300 VDC

GENERAL INSTRUMENT CAPACITORS

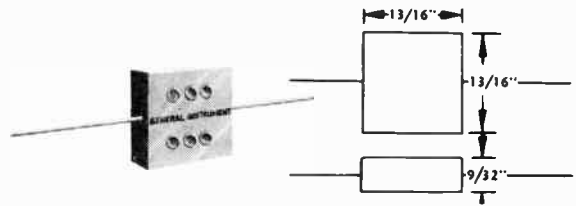
GENERAL INSTRUMENT CAPACITOR DIVISION

MOLDED FOIL CAPACITORS

TYPE CM20
500 VDCW



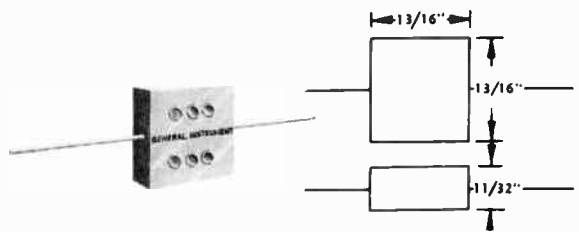
TYPE CM30
500 VDCW



| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|-------------|----------|----------------------|--------------|-------------|
| | | "M" ± 20% | "K" ± 10% | "J" ± 5% |
| *1*2*3 | | | | |
| CM20 B 050 | 5 | \$0.30 | \$0.33 | — |
| CM20 B 100 | 10 | .30 | .33 | \$0.38 |
| CM20 B 120 | 12 | .30 | .33 | .38 |
| CM20 B 150 | 15 | .30 | .33 | .38 |
| CM20 B 180 | 18 | .30 | .33 | .38 |
| CM20 B 200 | 20 | .30 | .33 | .38 |
| CM20 B 220 | 22 | .30 | .33 | .38 |
| CM20 B 240 | 24 | .30 | .33 | .38 |
| CM20 B 270 | 27 | .30 | .33 | .38 |
| CM20 B 300 | 30 | .30 | .33 | .38 |
| CM20 B 330 | 33 | .20 | .22 | .25 |
| CM20 B 360 | 36 | .20 | .22 | .25 |
| CM20 B 390 | 39 | .20 | .22 | .25 |
| CM20 B 430 | 43 | .20 | .22 | .25 |
| CM20 B 470 | 47 | .20 | .22 | .25 |
| CM20 B 500 | 50 | .20 | .22 | .25 |
| CM20 B 510 | 51 | .20 | .22 | .25 |
| CM20 B 560 | 56 | .20 | .22 | .25 |
| CM20 B 620 | 62 | .20 | .22 | .25 |
| CM20 B 680 | 68 | .20 | .22 | .25 |
| CM20 B 750 | 75 | .20 | .22 | .25 |
| CM20 B 820 | 82 | .20 | .22 | .25 |
| CM20 B 910 | 91 | .20 | .22 | .25 |
| CM20 B 101 | 100 | .20 | .22 | .25 |
| CM20 B 111 | 110 | .20 | .22 | .25 |
| CM20 B 121 | 120 | .20 | .22 | .25 |
| CM20 B 131 | 130 | .25 | .28 | .31 |
| CM20 B 151 | 150 | .25 | .28 | .31 |
| CM20 B 161 | 160 | .25 | .28 | .31 |
| CM20 B 181 | 180 | .25 | .28 | .31 |
| CM20 B 201 | 200 | .25 | .28 | .31 |
| CM20 B 221 | 220 | .25 | .28 | .31 |
| CM20 B 241 | 240 | .30 | .33 | .38 |
| CM20 B 251 | 250 | .30 | .33 | .38 |
| CM20 B 271 | 270 | .30 | .33 | .38 |
| CM20 B 301 | 300 | .30 | .33 | .38 |
| CM20 B 331 | 330 | .30 | .33 | .38 |
| CM20 B 361 | 360 | .30 | .33 | .38 |
| CM20 B 391 | 390 | .30 | .33 | .38 |
| CM20 B 431 | 430 | .30 | .33 | .38 |
| CM20 B 471 | 470 | .30 | .33 | .38 |
| CM20 B 501 | 500 | .30 | .33 | .38 |
| CM20 B 511 | 510 | .30 | .33 | .38 |
| †CM20 B 561 | 560 | .35 | .39 | .44 |
| †CM20 B 621 | 620 | .35 | .39 | .44 |
| †CM20 B 681 | 680 | .35 | .39 | .44 |
| †CM20 B 751 | 750 | .35 | .39 | .44 |
| †CM20 B 821 | 820 | .40 | .44 | .50 |
| †CM20 B 911 | 910 | .45 | .50 | .56 |
| †CM20 B 102 | 1000 | .45 | .50 | .56 |
| CM20 B 112 | 1100 | .50 | .55 | .63 |
| CM20 B 122 | 1200 | .50 | .55 | .63 |
| CM20 B 132 | 1300 | .50 | .55 | .63 |
| CM20 B 152 | 1500 | .60 | .66 | .75 |
| CM20 B 162 | 1600 | .60 | .66 | .75 |
| CM20 B 182 | 1800 | .70 | .77 | .88 |
| CM20 B 202 | 2000 | .75 | .83 | .94 |
| CM20 B 222 | 2200 | .80 | .88 | 1.00 |
| CM20 B 242 | 2400 | .85 | .94 | 1.06 |
| CM20 B 252 | 2500 | .90 | .99 | 1.13 |
| CM20 B 272 | 2700 | .95 | 1.05 | 1.19 |
| CM20 B 302 | 3000 | 1.00 | 1.10 | 1.25 |
| CM20 B 332 | 3300 | 1.05 | 1.16 | 1.31 |
| CM20 B 362 | 3600* | 1.00 | 1.10 | 1.25 |
| CM20 B 392 | 3900* | 1.05 | 1.16 | 1.31 |
| CM20 B 432 | 4300* | 1.10 | 1.21 | 1.38 |
| CM20 B 472 | 4700* | 1.20 | 1.32 | 1.50 |
| CM20 B 502 | 5000* | 1.25 | 1.38 | 1.56 |
| CM20 B 512 | 5100* | 1.25 | 1.38 | 1.56 |

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|------------|----------|----------------------|--------------|-------------|
| | | "M" ± 20% | "K" ± 10% | "J" ± 5% |
| *1*2*3 | | | | |
| CM30 B 511 | 510 | \$0.30 | \$0.36 | \$0.39 |
| CM30 B 561 | 560 | .30 | .36 | .39 |
| CM30 B 621 | 620 | .30 | .36 | .39 |
| CM30 B 681 | 680 | .30 | .36 | .39 |
| CM30 B 751 | 750 | .30 | .36 | .39 |
| CM30 B 821 | 820 | .30 | .36 | .39 |
| CM30 B 911 | 910 | .30 | .36 | .39 |
| CM30 B 102 | 1000 | .35 | .39 | .44 |
| CM30 B 112 | 1100 | .35 | .39 | .44 |
| CM30 B 122 | 1200 | .35 | .39 | .44 |
| CM30 B 132 | 1300 | .35 | .39 | .44 |
| CM30 B 152 | 1500 | .40 | .44 | .50 |
| CM30 B 162 | 1600 | .40 | .44 | .50 |
| CM30 B 182 | 1800 | .45 | .50 | .56 |
| CM30 B 202 | 2000 | .45 | .50 | .56 |
| CM30 B 222 | 2200 | .45 | .50 | .56 |
| CM30 B 242 | 2400 | .50 | .55 | .63 |
| CM30 B 252 | 2500 | .50 | .55 | .63 |
| CM30 B 272 | 2700 | .50 | .55 | .63 |
| CM30 B 302 | 3000 | .60 | .66 | .75 |
| CM30 B 332 | 3300 | .60 | .66 | .75 |
| CM30 B 362 | 3600 | .60 | .66 | .75 |
| CM30 B 392 | 3900 | .65 | .75 | .85 |
| CM30 B 432 | 4300 | .65 | .75 | .85 |
| CM30 B 472 | 4700 | .65 | .75 | .85 |
| CM30 B 502 | 5000 | .70 | .81 | .91 |
| CM30 B 512 | 5100 | .70 | .81 | .91 |
| CM30 B 562 | 5600 | .70 | .81 | .91 |
| CM30 B 622 | 6200 | .90 | 1.04 | 1.17 |

TYPE CM35 500 VDCW



| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | |
|------------|----------|----------------------|--------------|-------------|
| | | "J" ± 20% | "G" ± 10% | "F" ± 5% |
| *1*2*3 | | | | |
| CM36 B 362 | 3600 | \$.60 | \$.66 | \$.75 |
| CM35 B 392 | 3900 | .65 | .75 | .85 |
| CM35 B 432 | 4300 | .65 | .75 | .85 |
| CM35 B 472 | 4700 | .65 | .75 | .85 |
| CM35 B 512 | 5100 | .70 | .81 | .91 |
| CM35 B 562 | 5600 | .70 | .81 | .91 |
| CM35 B 622 | 6200 | .90 | 1.04 | 1.17 |
| CM35 B 682 | 6800* | .95 | 1.05 | 1.19 |
| CM35 B 752 | 7500* | 1.00 | 1.10 | 1.25 |
| CM35 B 822 | 8200* | 1.15 | 1.27 | 1.44 |
| CM35 B 912 | 9100* | 1.30 | 1.43 | 1.62 |
| CM35 B 103 | 10,000* | 1.40 | 1.54 | 1.75 |

NOTE: Consult G. I. Listings to:

*1 Include applicable tolerance letter, (K, J, M).

*2 Include applicable code letter for operating temperature range (N:85°C; O:125°C; P:150°C).

SPECIAL NOTE: For operating temperatures of 150°C, add 50% to above prices.

*300 VDCW

*300 VDC

*3 Include applicable vibration grade.

†MIL-C-5B Ratings

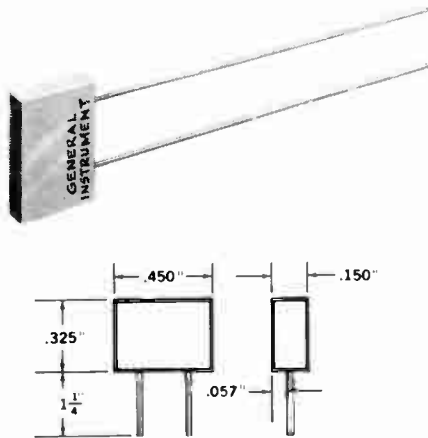
GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

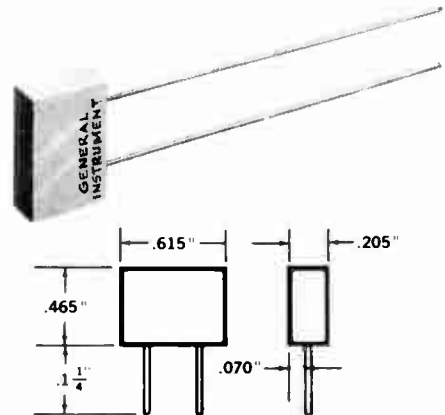
MOLDED RADIAL LEAD SILVERED MICA CAPACITORS

G.I.'s new "modern designed" MECAPS are the first MOLDED, radial-lead mica capacitors available with precisely controlled body dimensions. Being molded . . . not dipped or encapsulated, each capacitor is exactly the same size, and symmetrical, so units can be conveniently "stacked" in an assembly to reduce component space requirements. MECAPS are available taped for mechanical insertion, and with leads straight or crimped. These MECAPS meet and exceed MIL-C-5B specifications, can be furnished in "B", "C", "D", "E" and "F" characteristics. Operating temperatures from -55°C to 125°C (standard range is from -40°C to 85°C). MECAPS, with their consistently high quality, and many advantages of design, are no more expensive than dipped types.

TYPE PCM15 (FORMERLY TYPE RPQ)



TYPE PCM20 (FORMERLY TYPE RPO)



| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|----------|----------------------|---------------|----------------|----------------|
| | | ± 2% **G** | ± 5% **J** | ± 10% **K** | ± 20% **M** |
| *1 *2 *3 *4 | | | | | |
| PCM15 - 050 | 5 | - | - | \$0.33 | \$0.30 |
| PCM15 - 100 | 10 | - | - | .33 | .30 |
| PCM15 - 120 | 12 | - | \$0.40 | .33 | .30 |
| PCM15 - 150 | 15 | .40 | .40 | .33 | .30 |
| PCM15 - 180 | 18 | - | .40 | .33 | .30 |
| PCM15 - 200 | 20 | - | .40 | .33 | .30 |
| PCM15 - 220 | 22 | - | .40 | .33 | .30 |
| PCM15 - 240 | 24 | - | .40 | .33 | .30 |
| PCM15 - 270 | 27 | - | .40 | .33 | .30 |
| PCM15 - 300 | 30 | - | .40 | .33 | .30 |
| PCM15 - 330 | 33 | - | .40 | .22 | .20 |
| PCM15 - 360 | 36 | - | .40 | .22 | .20 |
| PCM15 - 390 | 39 | - | .40 | .22 | .20 |
| PCM15 - 430 | 43 | - | .40 | .22 | .20 |
| PCM15 - 470 | 47 | \$0.46 | .40 | .22 | .20 |
| PCM15 - 510 | 51 | .46 | .40 | .22 | .20 |
| PCM15 - 560 | 56 | .46 | .40 | .22 | .20 |
| PCM15 - 620 | 62 | .46 | .40 | .22 | .20 |
| PCM15 - 680 | 68 | .46 | .40 | .22 | .20 |
| PCM15 - 750 | 75 | .46 | .40 | .22 | .20 |
| PCM15 - 820 | 82 | .52 | .45 | .22 | .20 |
| PCM15 - 910 | 91 | .52 | .45 | .22 | .20 |
| PCM15 - 101 | 100 | .52 | .45 | .22 | .20 |
| PCM15 - 111 | 110 | .52 | .45 | .22 | .20 |
| PCM15 - 121 | 120 | .52 | .45 | .28 | .25 |
| PCM15 - 131 | 130 | .52 | .45 | .28 | .25 |
| PCM15 - 151 | 150 | .52 | .45 | .28 | .25 |
| PCM15 - 161 | 160 | .58 | .50 | .28 | .25 |
| PCM15 - 181 | 180 | .58 | .50 | .28 | .25 |
| PCM15 - 201 | 200 | .58 | .50 | .28 | .25 |
| PCM15 - 241 | 240 | .63 | .55 | .33 | .30 |
| PCM15 - 271 | 270 | .69 | .60 | .33 | .30 |
| PCM15 - 301 | 300 | .69 | .60 | .33 | .30 |
| PCM15 - 331 | 330 | .75 | .65 | .33 | .30 |
| PCM15 - 361 | 360 | .81 | .70 | .33 | .30 |
| PCM15 - 391 | 390 | .81 | .70 | .33 | .30 |
| PCM15 - 431 | 430* | .86 | .75 | .33 | .30 |
| PCM15 - 471 | 470* | .92 | .80 | .33 | .30 |
| PCM15 - 511 | 510* | .92 | .80 | .33 | .30 |

*300 VDC

NOTE: Consult G. I. Listings to:

*1 Include applicable characteristic, (B, C, D, E, F).

*2 Include applicable tolerance letter, (K, J, G, F).

*3 Include applicable code letter for operation temperature range (N:85°C; O:125°C; P:150°C).

*4 Include applicable vibration grade.

SPECIAL NOTE: For operating temperatures of 150°C, add 50% to above prices.

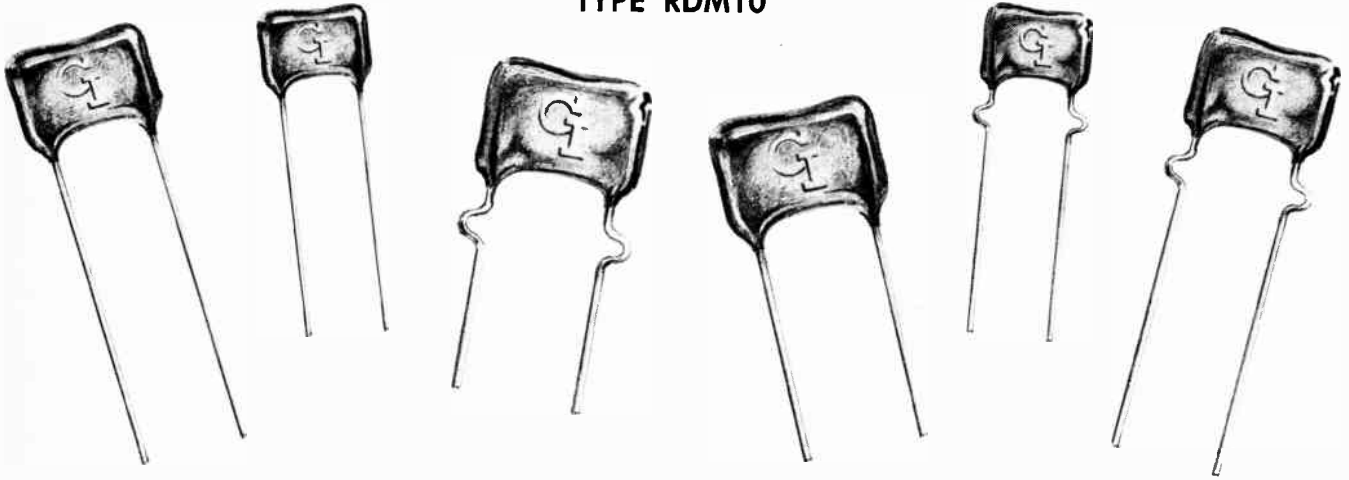
| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|----------|----------------------|---------------|----------------|----------------|
| | | ± 2% **G** | ± 5% **J** | ± 10% **K** | ± 20% **M** |
| *1 *2 *3 *4 | | | | | |
| PCM20 - 510 | 51 | \$0.46 | \$0.40 | \$0.22 | \$0.20 |
| PCM20 - 560 | 56 | .46 | .40 | .22 | .20 |
| PCM20 - 620 | 62 | .46 | .40 | .22 | .20 |
| PCM20 - 680 | 68 | .46 | .40 | .22 | .20 |
| PCM20 - 750 | 75 | .46 | .40 | .22 | .20 |
| PCM20 - 820 | 82 | .46 | .40 | .22 | .20 |
| PCM20 - 910 | 91 | .46 | .40 | .22 | .20 |
| PCM20 - 101 | 100 | .46 | .40 | .22 | .20 |
| PCM20 - 121 | 110 | .52 | .45 | .22 | .20 |
| PCM20 - 121 | 120 | .52 | .45 | .22 | .20 |
| PCM20 - 131 | 130 | .52 | .45 | .28 | .25 |
| PCM20 - 151 | 150 | .52 | .45 | .28 | .25 |
| PCM20 - 161 | 160 | .52 | .45 | .28 | .25 |
| PCM20 - 181 | 180 | .52 | .45 | .28 | .25 |
| PCM20 - 201 | 200 | .52 | .45 | .28 | .25 |
| PCM20 - 221 | 220 | .52 | .45 | .28 | .25 |
| PCM20 - 241 | 240 | .63 | .55 | .33 | .30 |
| PCM20 - 271 | 270 | .63 | .55 | .33 | .30 |
| PCM20 - 301 | 300 | .63 | .55 | .33 | .30 |
| PCM20 - 331 | 330 | .63 | .55 | .33 | .30 |
| PCM20 - 361 | 360 | .63 | .55 | .33 | .30 |
| PCM20 - 391 | 390 | .75 | .65 | .33 | .30 |
| PCM20 - 413 | 430 | .75 | .65 | .33 | .30 |
| PCM20 - 471 | 470 | .81 | .70 | .33 | .30 |
| PCM20 - 511 | 510 | .81 | .70 | .33 | .30 |
| PCM20 - 561 | 560 | .86 | .75 | .39 | .35 |
| PCM20 - 621 | 620 | .86 | .75 | .39 | .35 |
| PCM20 - 681 | 680 | .92 | .80 | .39 | .35 |
| PCM20 - 751 | 750 | .92 | .80 | .39 | .35 |
| PCM20 - 821 | 820 | .98 | .85 | .44 | .40 |
| PCM20 - 911 | 910 | .98 | .85 | .50 | .45 |
| PCM20 - 102 | 1000 | 1.04 | .90 | .50 | .45 |
| PCM20 - 110 | 1100 | 1.04 | .90 | .50 | .45 |
| PCM20 - 122 | 1200 | 1.15 | 1.00 | .55 | .50 |
| PCM20 - 132 | 1300 | 1.15 | 1.00 | .55 | .50 |
| PCM20 - 152 | 1500 | 1.27 | 1.10 | .66 | .60 |
| PCM20 - 162 | 1600 | 1.27 | 1.10 | .66 | .60 |
| PCM20 - 182 | 1800 | 1.38 | 1.20 | .77 | .70 |
| PCM20 - 202 | 2000 | 1.50 | 1.30 | .83 | .75 |
| PCM20 - 222 | 2200 | 1.61 | 1.40 | .88 | .80 |
| PCM20 - 242 | 2400 | 1.67 | 1.45 | .94 | .85 |
| PCM20 - 272 | 2700 | 1.84 | 1.60 | 1.05 | .95 |
| PCM20 - 302 | 3000 | 2.07 | 1.80 | 1.10 | 1.00 |
| PCM20 - 332 | 3300 | 2.19 | 1.90 | 1.16 | 1.05 |

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

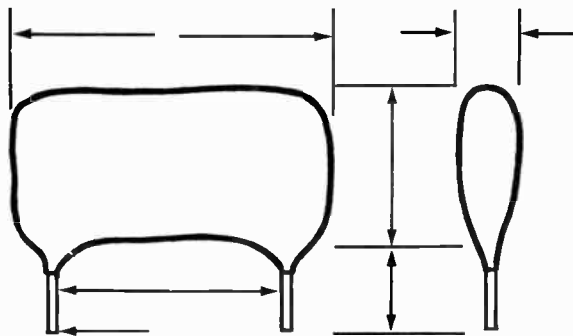
DIPPED SILVER MICA CAPACITORS

TYPE RDM10



G.I. Micaps are silvered mica capacitors having the same mica capacitor sections as the molded styles CM 15 and CM 20. They differ in that they are hermetically sealed by a dip coating method and have radial wire leads instead of axial leads. This latter feature results

in a shorter RF current path and greater ease of installation, making them specially suitable for use in printed circuitry. Micaps are smaller than the comparable molded types and are particularly applicable in the development of miniature equipment.



TO MIL-C-5B
CM-05-06-07

| | S ± 1/32 | LEAD WIRE GAGE |
|--------|-------------|----------------|
| RDM 10 | 9/64 | #24 |
| RDM 15 | 15/64 | #22 |
| RDM 19 | 11/32 | #20 |
| RDM 20 | 7/16 | #20 |
| RDM 30 | 7/16 | #18 |

All leads of Micaps capacitors are tinned brass except RDM10 which are copper-clad steel.

NOTE: Consult G. I. Listings to:

*1 Include applicable characteristic, (B, C, D, E, F).

*2 Include applicable tolerance letter, (K, J, G, F).

*3 Include applicable code letter for operation temperature range (N;85°C; O;125°C; P;150°C).

*4 Include applicable vibration grade.

SPECIAL NOTE: For operating temperatures of 150°C, add 50% to above prices.

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|-------------|----------------------|-------------|-------------|-------------|
| | | ± 10% "K" | ± 5% "J" | ± 2% "G" | ± 1% "F" |
| *1 *2 *3 *4 | | | | | |
| RDM10 - 010 | 1 | \$0.30 | - | - | - |
| RDM10 - 020 | 2 | .30 | - | - | - |
| RDM10 - 030 | 3 | .30 | - | - | - |
| RDM10 - 050 | 5 | .30 | - | - | - |
| RDM10 - 100 | 10 | .30 | \$0.33 | - | - |
| RDM10 - 120 | 12 | .35 | .39 | - | - |
| RDM10 - 150 | 15 | .35 | .39 | - | - |
| RDM10 - 180 | 18 | .35 | .39 | - | - |
| RDM10 - 200 | 20 | .35 | .39 | - | - |
| RDM10 - 220 | 22 | .35 | .39 | - | - |
| RDM10 - 240 | 24 | .35 | .39 | - | - |
| RDM10 - 270 | 27 | .35 | .39 | \$0.46 | - |
| RDM10 - 300 | 30 | .35 | .39 | .46 | - |
| RDM10 - 330 | 33 | .35 | .39 | .46 | - |
| RDM10 - 360 | 36 | .35 | .39 | .46 | - |
| RDM10 - 390 | 39 | .35 | .39 | .46 | - |
| RDM10 - 430 | 43 | .35 | .39 | .46 | - |
| RDM10 - 470 | 47 | .40 | .44 | .52 | - |
| RDM10 - 500 | 50 | .40 | .44 | .52 | \$0.64 |
| RDM10 - 510 | 51 | .40 | .44 | .52 | .64 |
| RDM10 - 560 | 56 | .40 | .44 | .52 | .64 |
| RDM10 - 620 | 62 | .40 | .44 | .52 | .64 |
| RDM10 - 680 | 68 | .40 | .44 | .52 | .64 |
| RDM10 - 750 | 75 | .40 | .44 | .52 | .64 |
| RDM10 - 820 | 82 | .40 | .44 | .52 | .64 |
| RDM10 - 910 | 91 | .40 | .44 | .52 | .64 |
| RDM10 - 101 | 100 | .40 | .44 | .52 | .64 |
| RDM10 - 111 | 110 | .40 | .44 | .52 | .64 |
| RDM10 - 121 | 120 | .45 | .50 | .59 | .72 |
| RDM10 - 131 | 130 | .45 | .50 | .59 | .72 |
| RDM10 - 151 | 150 | .50 | .55 | .65 | .80 |
| RDM10 - 161 | 160 | .55 | .61 | .72 | .88 |
| RDM10 - 181 | 180 | .60 | .66 | .78 | .96 |
| RDM10 - 201 | 200 | .60 | .66 | .78 | .96 |
| RDM10 - 221 | 220 | .65 | .72 | .85 | 1.04 |
| RDM10 - 241 | 240 | .70 | .77 | .91 | 1.12 |
| RDM10 - 251 | 250 | .70 | .77 | .91 | 1.12 |
| RDM10 - 271 | 270* | .70 | .77 | .91 | 1.12 |
| RDM10 - 301 | 300* | .75 | .83 | .98 | 1.20 |
| RDM10 - 331 | 330** | .75 | .83 | .98 | 1.20 |
| RDM10 - 361 | 360** | .80 | .88 | 1.04 | 1.28 |
| RDM10 - 391 | 390** | .85 | .94 | 1.11 | 1.36 |

*300 VDCW
**100 VDCW

GENERAL INSTRUMENT CAPACITORS

GENERAL INSTRUMENT CAPACITOR DIVISION

TYPE RDM15 FORMERLY TYPE MQ

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|-------------|----------------------|------------|------------|------------|
| | | ±10% "K" | ±5% "J" | ±2% "G" | ±1% "F" |
| *1 *2*3*4 | | | | | |
| RDM15 - 010 | 1 | \$0.25 | - | - | - |
| RDM15 - 020 | 2 | .25 | - | - | - |
| RDM15 - 030 | 3 | .25 | - | - | - |
| RDM15 - 050 | 5 | .25 | - | - | - |
| RDM15 - 100 | 10 | | \$0.28 | - | - |
| RDM15 - 120 | 12 | .25 | .28 | - | - |
| RDM15 - 150 | 15 | .25 | .28 | - | - |
| RDM15 - 180 | 18 | .25 | .28 | - | - |
| RDM15 - 200 | 20 | .25 | .28 | - | - |
| RDM15 - 220 | 22 | .25 | .28 | - | - |
| RDM15 - 240 | 24 | .25 | .28 | - | - |
| RDM15 - 270 | 27 | .25 | .28 | \$0.33 | - |
| RDM15 - 300 | 30 | .25 | .28 | .33 | - |
| RDM15 - 330 | 36 | .25 | .28 | .33 | - |
| RDM15 - 360 | 36 | .25 | .28 | .33 | - |
| RDM15 - 390 | 39 | .25 | .28 | .33 | - |
| RDM15 - 430 | 43 | .25 | .28 | .33 | - |
| RDM15 - 470 | 47 | .25 | .28 | .33 | - |
| RDM15 - 500 | 50 | .25 | .28 | .33 | \$0.40 |
| RDM15 - 510 | 51 | .25 | .28 | .33 | .40 |
| RDM15 - 560 | 56 | .25 | .28 | .33 | .40 |
| RDM15 - 620 | 62 | .25 | .28 | .33 | .40 |
| RDM15 - 680 | 68 | .25 | .28 | .33 | .40 |
| RDM15 - 750 | 75 | .25 | .28 | .33 | .40 |
| RDM15 - 820 | 82 | .25 | .28 | .33 | .40 |
| RDM15 - 910 | 91 | .25 | .28 | .33 | .40 |
| RDM15 - 101 | 100 | .25 | .28 | .33 | .40 |
| RDM15 - 111 | 110 | .30 | .33 | .39 | .48 |
| RDM15 - 121 | 120 | .30 | .33 | .39 | .48 |
| RDM15 - 131 | 130 | .30 | .33 | .39 | .48 |
| RDM15 - 151 | 150 | .30 | .33 | .39 | .48 |
| RDM15 - 161 | 160 | .35 | .39 | .46 | .56 |
| RDM15 - 181 | 180 | .35 | .39 | .46 | .56 |
| RDM15 - 201 | 200 | .35 | .39 | .46 | .56 |
| RDM15 - 221 | 220 | .40 | .44 | .52 | .64 |
| RDM15 - 241 | 240 | .40 | .44 | .52 | .64 |
| RDM15 - 251 | 250 | .40 | .44 | .52 | .64 |
| RDM15 - 271 | 270 | .45 | .50 | .59 | .72 |
| RDM15 - 301 | 300 | .45 | .50 | .59 | .72 |
| RDM15 - 331 | 330 | .50 | .55 | .65 | .80 |
| RDM15 - 361 | 360 | .50 | .55 | .65 | .80 |
| RDM15 - 391 | 390 | .55 | .61 | .72 | .88 |
| RDM15 - 431 | 430* | .55 | .61 | .72 | .88 |
| RDM15 - 471 | 470* | .60 | .66 | .78 | .96 |
| RDM15 - 501 | 500* | .60 | .66 | .78 | .96 |
| RDM15 - 511 | 510* | .60 | .66 | .78 | .96 |
| RDM15 - 561 | 560* | .65 | .72 | .85 | 1.04 |
| RDM15 - 621 | 620* | .70 | .77 | .91 | 1.12 |
| RDM15 - 681 | 680* | .75 | .83 | .98 | 1.20 |
| RDM15 - 751 | 750* | .80 | .88 | 1.04 | 1.28 |
| RDM15 - 821 | 820* | .85 | .94 | 1.11 | 1.36 |
| RDM15 - 911 | 910** | .95 | 1.04 | 1.24 | 1.43 |
| RDM15 - 102 | 1000** | 1.00 | 1.10 | 1.30 | 1.60 |

TYPE RDM19 500 VDCW FORMERLY TYPE MO

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|-------------|----------------------|------------|------------|------------|
| | | ±10% "K" | ±5% "J" | ±2% "G" | ±1% "F" |
| *1 *2*3*4 | | | | | |
| RDM19 - 101 | 100 | \$0.25 | \$0.28 | \$0.30 | \$0.38 |
| RDM19 - 111 | 110 | .30 | .28 | .36 | .45 |
| RDM19 - 121 | 120 | .30 | .33 | .36 | .45 |
| RDM19 - 131 | 130 | .30 | .33 | .36 | .45 |
| RDM19 - 151 | 150 | .30 | .33 | .36 | .45 |
| RDM19 - 161 | 160 | .30 | .33 | .36 | .45 |
| RDM19 - 181 | 180 | .30 | .33 | .36 | .45 |
| RDM19 - 201 | 200 | .30 | .33 | .36 | .45 |
| RDM19 - 221 | 220 | .30 | .33 | .36 | .45 |
| RDM19 - 241 | 240 | .35 | .39 | .42 | .53 |
| RDM19 - 251 | 250 | .35 | .39 | .42 | .53 |
| RDM19 - 271 | 270 | .40 | .44 | .48 | .60 |
| RDM19 - 301 | 300 | .40 | .44 | .48 | .60 |
| RDM19 - 331 | 330 | .40 | .44 | .48 | .60 |
| RDM19 - 361 | 360 | .45 | .50 | .54 | .68 |
| RDM19 - 391 | 390 | .45 | .50 | .54 | .68 |
| RDM19 - 431 | 430 | .45 | .50 | .54 | .68 |
| RDM19 - 471 | 470 | .50 | .55 | .60 | .75 |
| RDM19 - 501 | 500 | .50 | .55 | .60 | .75 |
| RDM19 - 511 | 510 | .50 | .55 | .60 | .75 |
| RDM19 - 561 | 560 | .55 | .61 | .66 | .83 |
| RDM19 - 621 | 620 | .55 | .61 | .66 | .83 |
| RDM19 - 681 | 680 | .60 | .66 | .72 | .90 |
| RDM19 - 751 | 750 | .60 | .66 | .72 | .90 |
| RDM19 - 821 | 820 | .60 | .66 | .72 | .90 |
| RDM19 - 911 | 910 | .65 | .72 | .78 | .98 |
| RDM19 - 102 | 1000 | .70 | .77 | .84 | 1.05 |
| RDM19 - 112 | 1100 | .70 | .77 | .84 | 1.05 |
| RDM19 - 122 | 1200 | .75 | .83 | .90 | 1.13 |
| RDM19 - 132 | 1300 | .80 | .88 | .96 | 1.20 |
| RDM19 - 152 | 1500 | .85 | .94 | 1.02 | 1.28 |

TYPE RDM19 CONT.

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|-------------|----------------------|------------|------------|------------|
| | | ±10% "K" | ±5% "J" | ±2% "G" | ±1% "F" |
| *1 *2*3*4 | | | | | |
| RDM19 - 162 | 1600 | .90 | .99 | 1.08 | 1.35 |
| RDM19 - 182 | 1800 | 1.00 | 1.10 | 1.20 | 1.50 |
| RDM19 - 202 | 2000 | 1.10 | 1.21 | 1.32 | 1.65 |
| RDM19 - 222 | 2200 | 1.20 | 1.32 | 1.44 | 1.80 |
| RDM19 - 242 | 2400 | 1.30 | 1.43 | 1.56 | 1.95 |
| RDM19 - 252 | 2500 | 1.35 | 1.49 | 1.62 | 2.03 |
| RDM19 - 272 | 2700 | 1.40 | 1.54 | 1.68 | 2.10 |
| RDM19 - 302 | 3000 | 1.50 | 1.65 | 1.80 | 2.25 |
| RDM19 - 332 | 3300 | 1.60 | 1.76 | 1.92 | 2.40 |
| RDM19 - 362 | 3600 | 1.70 | 1.87 | 2.04 | 2.55 |
| RDM19 - 392 | 3900 | 1.80 | 1.98 | 2.16 | 2.70 |
| RDM19 - 432 | 4300 | 1.90 | 2.09 | 2.28 | 2.85 |
| RDM19 - 472 | 4700 | 2.00 | 2.20 | 2.40 | 3.00 |
| RDM19 - 502 | 5000 | 2.10 | 2.31 | 2.52 | 3.15 |
| RDM19 - 512 | 5100 | 2.10 | 2.31 | 2.52 | 3.15 |
| RDM19 - 562 | 5600* | 2.20 | 2.42 | 2.64 | 3.30 |
| RDM19 - 622 | 6200* | 2.30 | 2.53 | 2.76 | 3.45 |
| RDM19 - 682 | 6800** | 2.30 | 2.53 | 2.76 | 3.45 |
| RDM19 - 752 | 7500** | 2.40 | 2.64 | 2.88 | 3.60 |
| RDM19 - 822 | 8200** | 2.50 | 2.75 | 3.00 | 3.75 |

TYPE RDM20 500 VDCW

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|-------------|----------------------|------------|------------|------------|
| | | ±10% "K" | ±5% "J" | ±2% "G" | ±1% "F" |
| *1 *2*3*4 | | | | | |
| RDM20 - 681 | 680 | \$0.50 | \$0.55 | \$0.60 | \$0.75 |
| RDM20 - 751 | 750 | .50 | .55 | .60 | .75 |
| RDM20 - 821 | 820 | .50 | .55 | .60 | .75 |
| RDM20 - 911 | 910 | .55 | .61 | .66 | .83 |
| RDM20 - 102 | 1000 | .60 | .66 | .72 | .90 |
| RDM20 - 112 | 1100 | .60 | .66 | .72 | .90 |
| RDM20 - 122 | 1200 | .65 | .72 | .78 | .98 |
| RDM20 - 132 | 1300 | .70 | .77 | .84 | 1.05 |
| RDM20 - 152 | 1500 | .75 | .83 | .90 | 1.13 |
| RDM20 - 162 | 1600 | .80 | .88 | .96 | 1.20 |
| RDM20 - 182 | 1800 | .90 | .99 | 1.08 | 1.35 |
| RDM20 - 202 | 2000 | .95 | 1.05 | 1.14 | 1.43 |
| RDM20 - 222 | 2200 | 1.05 | 1.16 | 1.26 | 1.58 |
| RDM20 - 242 | 2400 | 1.10 | 1.21 | 1.32 | 1.65 |
| RDM20 - 252 | 2500 | 1.10 | 1.21 | 1.32 | 1.65 |
| RDM20 - 272 | 2700 | 1.20 | 1.32 | 1.44 | 1.80 |
| RDM20 - 302 | 3000 | 1.30 | 1.43 | 1.56 | 1.95 |
| RDM20 - 332 | 3300 | 1.40 | 1.54 | 1.68 | 2.10 |
| RDM20 - 362 | 3600 | 1.50 | 1.65 | 1.80 | 2.25 |
| RDM20 - 392 | 3900 | 1.60 | 1.76 | 1.92 | 2.40 |
| RDM20 - 432 | 4300 | 1.70 | 1.87 | 2.04 | 2.55 |
| RDM20 - 472 | 4700 | 1.80 | 1.98 | 2.16 | 2.70 |
| RDM20 - 502 | 5000 | 1.95 | 2.09 | 2.28 | 2.85 |
| RDM20 - 512 | 5100 | 1.95 | 2.15 | 2.34 | 2.93 |
| RDM20 - 562 | 5600* | 2.00 | 2.20 | 2.40 | 3.00 |
| RDM20 - 622 | 6200* | 2.00 | 2.20 | 2.40 | 3.00 |
| RDM20 - 682 | 6800** | 2.10 | 2.31 | 2.52 | 3.15 |
| RDM20 - 752 | 7500** | 2.20 | 2.42 | 2.64 | 3.30 |
| RDM20 - 822 | 8200** | 2.40 | 2.64 | 2.88 | 3.60 |
| RDM20 - 912 | 9100** | 2.70 | 2.97 | 3.24 | 4.05 |
| RDM20 - 103 | 10000** | 3.00 | 3.30 | 3.60 | 4.50 |

TYPE RDM30 500 VDCW

| TYPE | CAP. PF. | LIST PRICE/TOLERANCE | | | |
|-------------|-------------|----------------------|------------|------------|------------|
| | | ±10% "K" | ±5% "J" | ±2% "G" | ±1% "F" |
| *1 *2*3*4 | | | | | |
| RDM30 - 432 | 4300 | \$1.60 | \$1.76 | \$1.92 | \$2.08 |
| RDM30 - 472 | 4700 | 1.70 | 1.87 | 2.04 | 2.21 |
| RDM30 - 502 | 5000 | 1.75 | 1.93 | 2.10 | 2.28 |
| RDM30 - 512 | 5100 | 1.75 | 1.93 | 2.10 | 2.28 |
| RDM30 - 562 | 5600 | 1.80 | 1.98 | 2.16 | 2.34 |
| RDM30 - 622 | 6200 | 1.90 | 2.09 | 2.28 | 2.47 |
| RDM30 - 682 | 6800 | 2.10 | 2.31 | 2.52 | 2.73 |
| RDM30 - 752 | 7500 | 2.30 | 2.53 | 2.76 | 2.99 |
| RDM30 - 822 | 8200 | 2.50 | 2.75 | 3.00 | 3.25 |
| RDM30 - 912 | 9100 | 2.70 | 2.97 | 3.24 | 3.51 |
| RDM30 - 103 | 10000 | 3.00 | 3.30 | 3.60 | 3.90 |
| RDM30 - 123 | 12000 | 3.50 | 3.85 | 4.20 | 4.55 |
| RDM30 - 133 | 13000 | 3.75 | 4.13 | 4.50 | 4.88 |
| RDM30 - 153 | 15000 | 4.25 | 4.68 | 5.10 | 5.53 |
| RDM30 - 163 | 16000 | 4.50 | 4.95 | 5.40 | 5.85 |
| RDM30 - 183 | 18000 | 5.00 | 5.50 | 6.00 | 6.50 |
| RDM30 - 203 | 20000 | 5.50 | 6.05 | 6.60 | 7.15 |
| RDM30 - 223 | 22000* | 5.70 | 6.27 | 6.84 | 7.41 |
| RDM30 - 243 | 24000* | 6.15 | 6.77 | 7.38 | 8.00 |
| RDM30 - 253 | 25000* | 6.40 | 7.04 | 7.68 | 8.32 |
| RDM30 - 273 | 27000* | 6.85 | 7.54 | 8.22 | 8.91 |
| RDM30 - 303 | 30000* | 7.50 | 8.25 | 9.00 | 9.75 |
| RDM30 - 333 | 33000** | 8.25 | 9.08 | 9.90 | 10.73 |
| RDM30 - 363 | 36000** | 9.00 | 9.90 | 10.80 | 11.70 |

NOTE: Consult G. I. Listings to:

*1 Include applicable characteristic, (B, C, D, E, F).

*2 Include applicable tolerance letter, (K, J, G, F).

*3 Include applicable code letter for operation temperature range
(N:85°C; O:125°C; P:150°C).

*4 Include applicable vibration grade.

SPECIAL NOTE: For operating temperatures of 150°C, add 50% to above prices.

*300 VDC
**100 VDC

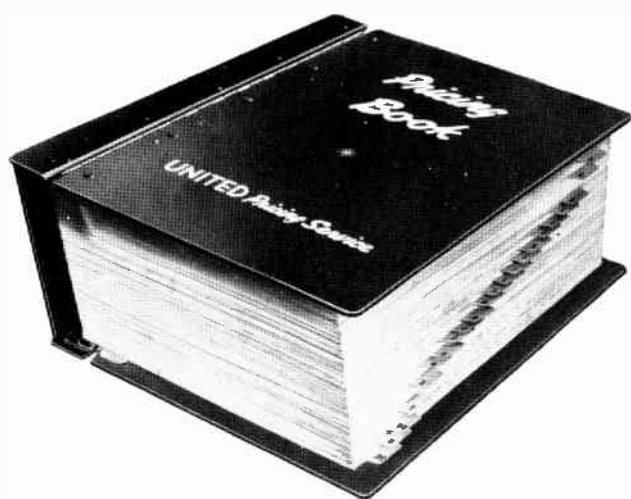
PRICES

All prices listed in The MASTER are subject to change without notice — they should not be considered final.

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Delivery is often dependent on availability of raw materials. Check with your distributor for delivery information at the time you place your order.

ITT Wet Tantalum Capacitors

Feature — low leakage current — long shelf life — maximum performance with minimum size. Manufactured in conformance to MIL specifications.

These High Reliability Tantalum Capacitors are designed for a wide range of applications, in the missile, airborne and mobile service, as well as conventional circuits where extreme reliability and minimum size are of prime importance.

The sintered anode slug, sealed in a fine-silver case with tantalum-oxide electrolyte, assures complete stability and trouble-free operation.

| TYPE MA For Average Temperature Use —55 C to +85 C Standard Tolerance: A+50% —15% B+20% —15% | | | | | | | | TYPE PA For High Temperature Use —55 C to +125 C Standard Tolerance: A+50 —15% B+20 —15% | | | | | | | | | | |
|---|-------------|------------------------------|----------------------------------|-------------------------------|--|------|--------------------------------------|---|-----------|-------------|------------------------------|----------------------------|------|---------------------------------|------|------|--------------------------------------|------------------------------------|
| Case Size | Code Number | Capacity MFD at 120 cps 25°C | Max. Working Voltage D-C at 85°C | Max. Surge Voltage D-C @ 85°C | Max. D-C Leakage at Rated Voltage Microamperes @ | | Max. E. S. R. at 120 cps OHMS @ 25°C | Max. Imped. at 120 cps OHMS @ 55°C | Case Size | Code Number | Capacity MFD at 120 cps 25°C | Max. Working Voltage D-C @ | | Max. D-C Leakage Microamperes @ | | | Max. E. S. R. at 120 cps OHMS @ 25°C | Max. Imped. at 120 cps OHMS @ 55°C |
| | | | | | 25°C | 85°C | | | | | | 125°C | 85°C | 125°C | | | | |
| T-1 | MA30D | 30 | 6 | 7 | 1.0 | 4.0 | 4.0 | 100 | T-1 | PA30B | 30 | 4 | 6 | 1.0 | 4.0 | 4.0 | 4.0 | 100 |
| | MA25F | 25 | 8 | 10 | 1.0 | 4.0 | 4.0 | 100 | | PA25C | 25 | 5 | 8 | 1.0 | 4.0 | 4.0 | 4.0 | 100 |
| | MA20G | 20 | 10 | 12 | 1.0 | 4.0 | 4.0 | 125 | | PA20E | 20 | 7 | 10 | 1.0 | 4.0 | 5.0 | 4.0 | 125 |
| | MA15J | 15 | 15 | 18 | 1.5 | 6.0 | 5.0 | 150 | | PA15G | 15 | 10 | 15 | 1.5 | 6.0 | 6.0 | 5.0 | 150 |
| | MA10L | 10 | 25 | 30 | 1.5 | 6.0 | 6.0 | 195 | | PA10J | 10 | 15 | 25 | 1.5 | 6.0 | 6.0 | 6.0 | 195 |
| | MA8M | 8 | 30 | 36 | 2.0 | 8.0 | 7.0 | 240 | | PA8K | 8 | 20 | 30 | 2.0 | 8.0 | 8.0 | 7.0 | 240 |
| | MA5Q | 5 | 50 | 60 | 2.0 | 8.0 | 8.0 | 365 | | PA5M | 5 | 30 | 50 | 2.0 | 8.0 | 8.0 | 8.0 | 365 |
| | MA4R | 4 | 60 | 72 | 2.0 | 10.0 | 8.7 | 415 | | PA4P | 4 | 40 | 60 | 2.0 | 10.0 | 12.0 | 8.7 | 415 |
| | MA3.5T | 3.5 | 75 | 87 | 2.5 | 10.0 | 9.0 | 515 | | PA3.5Q | 3.5 | 50 | 75 | 2.5 | 10.0 | 12.0 | 9.0 | 515 |
| | MA2.5V | 2.5 | 100 | 115 | 2.5 | 10.0 | 10.0 | 870 | | PA2.5S | 2.5 | 70 | 100 | 2.5 | 10.0 | 12.0 | 10.0 | 870 |
| MA1.75W | 1.75 | 125 | 140 | 3.0 | 12.0 | 13.5 | 980 | PA1.75U | 1.75 | 85 | 125 | 3.0 | 12.0 | 12.0 | 13.5 | 980 | | |
| T-2 | MA140D | 140 | 6 | 7 | 2.0 | 8.0 | 2.0 | 40 | T-2 | PA140B | 140 | 4 | 6 | 2.0 | 8.0 | 8.0 | 2.0 | 40 |
| | MA100G | 100 | 10 | 12 | 2.0 | 8.0 | 2.0 | 60 | | PA100E | 100 | 7 | 10 | 2.0 | 8.0 | 8.0 | 2.0 | 60 |
| | MA70J | 70 | 15 | 18 | 3.0 | 12.0 | 2.5 | 68 | | PA70G | 70 | 10 | 15 | 3.0 | 12.0 | 12.0 | 2.5 | 68 |
| | MA40M | 40 | 30 | 36 | 3.0 | 12.0 | 4.0 | 65 | | PA40K | 40 | 20 | 30 | 3.0 | 12.0 | 15.0 | 4.0 | 65 |
| | MA25Q | 25 | 50 | 60 | 4.0 | 16.0 | 4.0 | 95 | | PA25M | 25 | 30 | 50 | 4.0 | 16.0 | 20.0 | 4.0 | 95 |
| | MA20R | 20 | 60 | 72 | 4.0 | 16.0 | 4.3 | 105 | | PA20P | 20 | 40 | 60 | 4.0 | 16.0 | 20.0 | 4.3 | 105 |
| | MA15T | 15 | 75 | 87 | 5.0 | 20.0 | 5.0 | 145 | | PA15Q | 15 | 50 | 75 | 5.0 | 20.0 | 24.0 | 5.0 | 145 |
| | MA11V | 11 | 100 | 115 | 6.0 | 24.0 | 5.0 | 200 | | PA11S | 11 | 70 | 100 | 6.0 | 24.0 | 28.0 | 5.0 | 200 |
| | MA9W | 9 | 125 | 140 | 7.0 | 28.0 | 5.0 | 240 | | PA9U | 9 | 85 | 125 | 7.0 | 28.0 | 28.0 | 5.0 | 240 |
| | T-3 | MA330D | 330 | 6 | 7 | 3.0 | 12.0 | 2.0 | | 20 | T-3 | PA330B | 330 | 4 | 6 | 3.0 | 12.0 | 12.0 | 2.0 | 20 |
| MA250G | | 250 | 10 | 12 | 3.0 | 12.0 | 2.0 | 30 | PA250E | 250 | | 7 | 10 | 3.0 | 12.0 | 12.0 | 2.0 | 30 |
| MA175J | | 175 | 15 | 18 | 4.0 | 16.0 | 2.0 | 35 | PA175G | 175 | | 10 | 15 | 4.0 | 16.0 | 16.0 | 2.0 | 35 |
| MA100M | | 100 | 30 | 36 | 5.0 | 20.0 | 2.5 | 40 | PA100K | 100 | | 20 | 30 | 5.0 | 20.0 | 20.0 | 2.5 | 40 |
| MA60Q | | 60 | 50 | 60 | 5.0 | 20.0 | 3.0 | 45 | PA60M | 60 | | 30 | 50 | 5.0 | 20.0 | 24.0 | 3.0 | 45 |
| MA50R | | 50 | 60 | 72 | 5.0 | 20.0 | 4.0 | 50 | PA50P | 50 | | 40 | 60 | 5.0 | 20.0 | 24.0 | 4.0 | 50 |
| MA40T | | 40 | 75 | 87 | 6.0 | 24.0 | 4.7 | 60 | PA40Q | 40 | | 50 | 75 | 6.0 | 24.0 | 28.0 | 4.7 | 60 |
| MA30V | | 30 | 100 | 115 | 7.0 | 28.0 | 4.0 | 80 | PA30S | 30 | | 70 | 100 | 7.0 | 28.0 | 32.0 | 4.0 | 80 |
| MA25W | | 25 | 125 | 140 | 8.0 | 32.0 | 5.0 | 93 | PA25U | 25 | | 85 | 125 | 8.0 | 32.0 | 32.0 | 5.0 | 93 |

Refer to Specification Form #900018-1260

Refer to Specification Form #900019-1260

CASE TYPES and DIMENSIONS



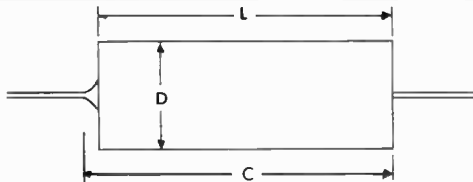
| | Body Length | Shoulder Diameter | Body Diameter | Lead Length | Lead Diameter |
|-----|-------------|-------------------|---------------|-------------|---------------|
| T-1 | 15/32 | 5/16 | 7/32 | 1-1/2 | .032 |
| T-2 | 11/16 | 15/32 | 9/32 | 2-1/4 | .042 |
| T-3 | 49/64 | 37/64 | 3/8 | 2-1/4 | .042 |

ITT Solid Anode Tantalum Capacitors

TYPE SM For average temperature use —55° C to +65° C
125° C operation requires derating.

FEATURES Wide operating temperature range — Hermetically sealed — Low leakage — Long shelf life
Meets MIL Specifications.

| CASE SIZE | Film Insul. | | | LEADS | |
|-----------|-------------|---------------|---------|---------------------|----------------------|
| | C ±.031 | D +.016 —.010 | L ±.031 | Length +1/4" —0.000 | Diameter ±.005 —.001 |
| S-1 | 0.394 | 0.129 | 0.254 | 1 1/2 | 0.020 |
| S-2 | 0.582 | 0.179 | 0.442 | 1 1/2 | 0.020 |
| S-3 | 0.794 | 0.283 | 0.654 | 1 1/2 | 0.025 |
| S-4 | 0.894 | 0.345 | 0.754 | 1 1/2 | 0.025 |



Part numbers shown are for Plastic Film Insulated Cases and 10% Tolerance.
For Non Insulated Sleeve, substitute letter 'A' for second character 'M'.
For Rigid Insulated Sleeve, substitute letter 'P' for second character 'A'.
Refer to Specification Form #900021-161
For 20% Tolerance (capacitance value in bold type), substitute the letter 'E' for last character 'F'. Refer to Specification Form #900021-161

ORDERING INFORMATION

| Capacity uf @ 120 CPS 25°C | CASE SIZE | Max. DC Working Voltage 6V | Max. DC Working Voltage 10V | Max. DC Working Voltage 15V | Max. DC Working Voltage 20V | Max. DC Working Voltage 35V |
|----------------------------|-----------|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1.0 | S1 | SM1.0DF | SM1.0GF | SM1.0JF | SM1.0KF | SM1.0NF |
| 1.2 | | SM1.2DF | SM1.2GF | SM1.2JF | SM1.2KF | SM1.2NF |
| 1.5 | | SM1.5DF | SM1.5GF | SM1.5JF | SM1.5KF | SM1.5NF |
| 1.8 | | SM1.8DF | SM1.8GF | SM1.8JF | SM1.8KF | SM1.8NF |
| 2.2 | | SM2.2DF | SM2.2GF | SM2.2JF | SM2.2KF | SM2.2NF |
| 2.7 | | SM2.7DF | SM2.7GF | SM2.7JF | SM2.7KF | SM2.7NF |
| 3.3 | | SM3.3DF | SM3.3GF | SM3.3JF | SM3.3KF | SM3.3NF |
| 3.9 | | SM3.9DF | SM3.9GF | SM3.9JF | SM3.9KF | SM3.9NF |
| 4.7 | | SM4.7DF | SM4.7GF | SM4.7JF | SM4.7KF | SM4.7NF |
| 5.6 | | SM5.6DF | SM5.6GF | SM5.6JF | SM5.6KF | SM5.6NF |
| 6.8 | SM6.8DF | SM6.8GF | SM6.8JF | SM6.8KF | SM6.8NF | |
| 8.2 | S2 | SM8.2DF | SM8.2GF | SM8.2JF | SM8.2KF | SM8.2NF |
| 10.0 | | SM10DF | SM10GF | SM10JF | SM10KF | SM10NF |
| 12.0 | | SM12DF | SM12GF | SM12JF | SM12KF | SM12NF |
| 15.0 | | SM15DF | SM15GF | SM15JF | SM15KF | SM15NF |
| 18.0 | | SM18DF | SM18GF | SM18JF | SM18KF | SM18NF |
| 22.0 | | SM22DF | SM22GF | SM22JF | SM22KF | SM22NF |
| 27.0 | | SM27DF | SM27GF | SM27JF | SM27KF | SM27NF |
| 33.0 | | SM33DF | SM33GF | SM33JF | SM33KF | SM33NF |
| 39.0 | | SM39DF | SM39GF | SM39JF | SM39KF | SM39NF |
| 47.0 | | SM47DF | SM47GF | SM47JF | SM47KF | SM47NF |
| 56.0 | S3 | SM56DF | SM56GF | SM56JF | SM56KF | SM56NF |
| 68.0 | | SM68DF | SM68GF | SM68JF | SM68KF | SM68NF |
| 82.0 | | SM82DF | SM82GF | SM82JF | SM82KF | SM82NF |
| 100.0 | | SM100DF | SM100GF | SM100JF | SM100KF | SM100NF |
| 120.0 | | SM120DF | SM120GF | SM120JF | SM120KF | SM120NF |
| 150.0 | | SM150DF | SM150GF | SM150JF | SM150KF | SM150NF |
| 180.0 | | SM180DF | SM180GF | SM180JF | SM180KF | SM180NF |
| 220.0 | | SM220DF | SM220GF | SM220JF | SM220KF | SM220NF |
| 270.0 | | SM270DF | SM270GF | SM270JF | SM270KF | SM270NF |
| 330.0 | | SM330DF | SM330GF | SM330JF | SM330KF | SM330NF |

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HAMMARLUND



STANDARD VARIABLE CAPACITORS

"APC" CAPACITORS

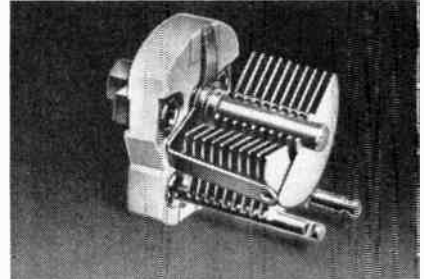
FEATURES—The "APC" trimmer capacitor originated by Hammarlund over twenty years ago is still widely recognized as the standard capacitor of its type. Its use is indicated in all classes of equipment where a compact, high quality air dielectric trimmer is required. It was designed to resist effects of temperature, moisture and vibration. Silicone treated steatite insulation is used to insure high leakage resistance.

CONSTRUCTION—Brass rotor and stator plates are soldered to brass supports. Nickel-plated phosphor bronze wiper assures positive rotor contact. All metal parts are nickel-plated. Terminals are hot-tin dipped. Tapped brass mounting studs fastened to silicone treated steatite base permit mounting capacitor without grounding the rotor.

SPECIFICATIONS—Straight line capacity characteristic. Available either with hexagonal collar on slotted shaft to permit rotor adjustments to be made with wrench or screwdriver or with 1/2" extended shaft for knob control or shaft coupling. (Type "B") "APC-C" Lock Type now also available through distributors. Air Gap is 0.015" nominal. Tested at 600 V. R.M.S., 60 cycles.

| Code | Capacity | | Plates | Net Price |
|---------|----------|------|--------|-----------|
| | Max. | Min. | | |
| APC-15 | 17. | 2.8 | 5 | \$1.25 |
| APC-25 | 25. | 3.0 | 7 | 1.35 |
| APC-50 | 50. | 3.9 | 14 | 1.55 |
| APC-75 | 75. | 4.6 | 20 | 1.70 |
| APC-100 | 100. | 5.5 | 27 | 1.85 |
| APC-140 | 140. | 6.7 | 37 | 2.15 |

"B" and "C" types slightly higher



"MAPC" CAPACITORS

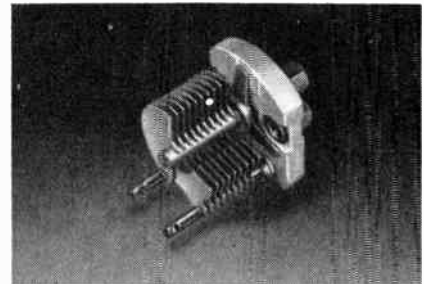
FEATURES—The "MAPC" capacitor is representative of Hammarlund's efforts to meet the demand for smaller dependable components. It is a scaled-down version of the popular "APC" with everything reduced except the quality and performance characteristics. For example, an "MAPC" is about half the size and weight of an "APC". Lower minimum capacities and low inductance make the "MAPC" suitable for VHF use.

CONSTRUCTION—The standard "APC" construction is used in this capacitor. Rotors and stators are fabricated by soldering brass plates to supporting members and nickel-plating the assemblies. Nickel-plated phosphor bronze wiper assures positive rotor contact. Tapped brass mounting studs fastened to silicone treated steatite base permit mounting capacitor without grounding rotor.

SPECIFICATIONS—Straight line capacity. Available either with screwdriver or socket wrench adjustment or with 7/16" extended shaft for knob control or shaft coupling. (Type "B") "MAPC-C" Lock Type now also available through distributors. Air Gap is 0.0135" nominal. Tested at 600 V. R.M.S., 60 cycles.

| Code | Capacity | | Plates | Net Price |
|----------|----------|------|--------|-----------|
| | Max. | Min. | | |
| MAPC-15 | 15. | 2.3 | 6 | \$1.01 |
| MAPC-25 | 25. | 2.6 | 10 | 1.10 |
| MAPC-35 | 35. | 2.9 | 14 | 1.10 |
| MAPC-50 | 50. | 3.2 | 19 | 1.19 |
| MAPC-75 | 75. | 3.9 | 29 | 1.28 |
| MAPC-100 | 100. | 4.5 | 38 | 1.44 |
| MAPC-140 | 140. | 5.5 | 52 | 1.62 |

"B" and "C" types slightly higher

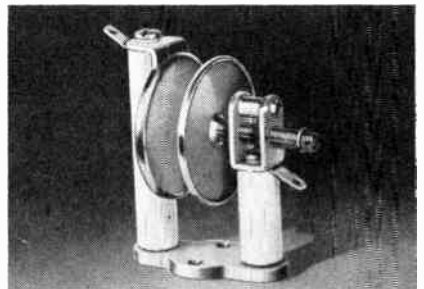


"NZ-10" CAPACITORS

FEATURES—The "NZ-10" is a compact transmitter neutralizing capacitor designed for easy and accurate adjustment. The rotor is attached to a fine-thread lead screw which may be adjusted with smooth and precise action by a screwdriver and locked securely by a readily accessible clamping screw. A stop prevents shorting of plates at maximum capacity. Long leakage paths to ground from both rotor and stator are provided. Glazed steatite insulators and smoothly rounded aluminum plates minimize flashover.

SPECIFICATIONS—Capacity is adjustable from 2.3 to 10 mmf. Peak voltage rating is 3000 V. at maximum capacity (minimum gap) position.

Net Price \$4.77

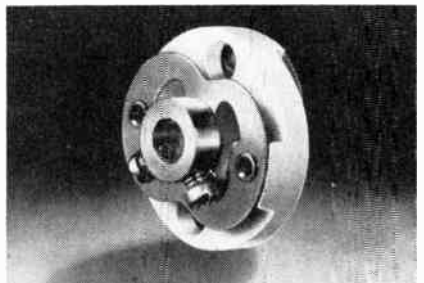


"FC" and "FNC" COUPLINGS

FEATURES—The "FC-46-S" is an insulated flexible coupling designed to provide for mechanical ganging of shafts even though angularly misaligned. The smallest dimensions have been incorporated consistent with the rugged construction necessary for general service. A high degree of electrical isolation is achieved through the use of silicone treated steatite insulation. Flashover voltage is approximately 5000 V. R.M.S. Brass hubs and spring temper phosphor bronze flexible arms are nickel plated. An exclusive and important feature of this coupling is its characteristic of uniform side-thrust through 360° of rotation. This eliminates tendency to vibrate at high speeds, minimizes bearing wear and assures accurate tracking.

The "FNC-46-S" is a non-insulated coupling for use where electrical continuity between shafts is required. The flexible arms are held securely to a nickel plated brass ring instead of an insulator.

| Standard Stock Types | | Net Price |
|----------------------|---------------------------------|-----------|
| CODE FC-46-S | Insulated flexible coupling | \$1.10 |
| CODE FNC-46-S | Non-insulated flexible coupling | .93 |

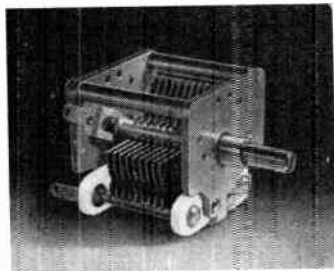




HAMMARLUND



STANDARD VARIABLE CAPACITORS



| Code | Capacity | | Plates | Net Price |
|-----------|----------|------|--------|-----------|
| | Max. | Min. | | |
| RMC-50-S | 50. | 7.3 | 7 | \$4.14 |
| RMC-100-S | 105. | 9.5 | 14 | 4.40 |
| RMC-140-S | 143.5 | 11.0 | 19 | 4.56 |
| RMC-325-S | 327. | 17.5 | 43 | 5.15 |

SPECIFICATIONS—Straight line capacity. Air gap is 0.0245" nominal. Tested at 1000 V. R.M.S., 60 cycles.

"RMC" CAPACITORS

FEATURES—The "RMC" was designed specifically for applications requiring an "MC" type tuning capacitor with very rigid construction. Its sturdy frame consists of heavy gauge aluminum end panels held together by three aluminum tie rods. It has a brass sleeve front bearing and a single ball thrust rear bearing for smooth tuning and a high degree of resetability. The rotor contact is a forked silver plated phosphor bronze spring wiping against a wide disc on the rotor. The plate shape and other constructional features are the same as on the "MC". Tapped holes in front panel and in mounting feet, as well as additional brackets for inverted mounting permit a wide variety of assembly methods. "M" type plates and ball-bearing construction can also be made available as specials.

"BFC" CAPACITORS

FEATURES—The "BFC" "butterfly" type capacitor has very low minimum capacity, low inductance and isolated rotor for use in VHF applications as a series capacitor with no rotor connection. For dual split-stator capacitor use, it has a low-loss positive rotor contact. Mechanical and electrical symmetry and stator terminal locations minimize circuit inductance.

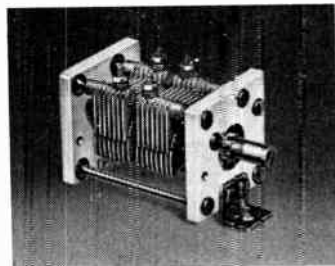
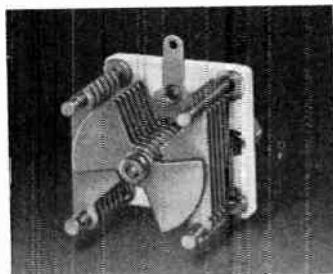
CONSTRUCTION—Brass rotors and stators are

soldered and nickel-plated. The contact wiper is heavily silver plated phosphor bronze. Tapped studs on the silicone treated steatite front panel permit mounting the capacitor without grounding the rotor. The sleeve type bearing is nickel-plated brass.

SPECIFICATIONS—Straight line capacity. 90° rotation from minimum to maximum capacity position. Air gap is 0.030" nominal. Tested at 1200 V. R.M.S., 60 cycles between rotor and each stator.

High Speed Ball-Bearing Models Also Are Available

| Code | Capacity/Section | | Series Capacity | | Plates | | Net Price |
|--------|------------------|------|-----------------|------|--------|------------|-----------|
| | Max. | Min. | Max. | Min. | Rotor | Ea. Stator | |
| BFC-12 | 14.5 | 3.4 | 7.6 | 2.2 | 4 | 3 | \$1.95 |
| BFC-25 | 27.3 | 4.8 | 14.1 | 2.9 | 7 | 6 | 2.25 |
| BFC-38 | 40.1 | 6.2 | 20.6 | 3.6 | 10 | 9 | 2.60 |
| BFC-50 | 52.4 | 7.6 | 27.1 | 4.3 | 13 | 12 | 2.75 |



SPECIAL CALIBRATED CAPACITORS

The "VU" type capacitors can be supplied in quantity lots specially calibrated to the nominal curve with a tolerance of ±0.15 mmf or 1/4%, whichever is greater.

| Dial % Rotation | Effective Series Capacity | | |
|-----------------|---------------------------|-------|-------|
| | VU-20 | VU-30 | VU-45 |
| 0 | 0. | 0. | 0. |
| 10 | .55 | .8 | 1.15 |
| 20 | 1.55 | 2.2 | 3.15 |
| 30 | 2.75 | 3.85 | 5.45 |
| 40 | 4.2 | 5.85 | 8.35 |
| 50 | 6.0 | 8.4 | 12.0 |
| 60 | 8.35 | 11.65 | 16.65 |
| 70 | 11.2 | 15.7 | 22.4 |
| 80 | 14.65 | 20.55 | 29.35 |
| 90 | 18.6 | 26.05 | 37.2 |
| 100 | 22.5 | 31.5 | 45.0 |

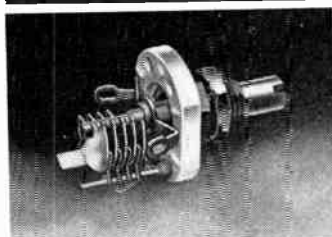
"VU" CAPACITORS

FEATURES—The "VU" is a uniquely designed UHF tuning capacitor using completely original concepts. With it, conventional "lumped constant" circuits, rather than tuned cavity techniques, can be efficiently used up to 500 megacycles. In addition to employing the capacitor sections in series to eliminate the rotor wiper, the design also utilizes Pyrex balls to form precision bearings and to completely isolate the rotor. Thus, noise generated by rubbing metal-to-metal contacts and variable resistance paths in the bearings have been totally eliminated. Circuit connections are made to threaded studs on each stator. This permits vacuum tube and inductor to be mounted adjacent to and on opposite sides of the capacitor to minimize circuit inductance. The symmetrical design is ideal for tuned circuits operating up to 500 mega-cycles.

CONSTRUCTION—Rotors and stators are of brass with plates soldered in precisely located grooves and then silver plated to increase the "Q" of the capacitor. The insulation is silicone treated steatite. All lengthwise frame members are of brass to minimize temperature effects. Base mounting brackets are provided.

SPECIFICATIONS—The capacity characteristic approaches a straight line frequency curve as indicated by nominal values in table at left. Air gap is .0168" nominal. Tested at 700 V. R.M.S., 60 cycles, between rotor and each stator.

| Code | Series Capacity | | Plates/Section | Net Price |
|-------|-----------------|------|----------------|-----------|
| | Eff. | Min. | | |
| VU-20 | 22.5 | 3.35 | 11 | 6.72 |
| VU-30 | 31.5 | 3.5 | 15 | 6.92 |
| VU-45 | 45.0 | 3.8 | 21 | 7.34 |



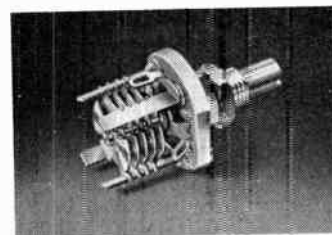
| Code | Capacity | | Plates | Net Price |
|--------|----------|------|--------|-----------|
| | Max. | Min. | | |
| MAC-5 | 5.4 | 1.3 | 5 | \$1.00 |
| MAC-10 | 9.6 | 1.5 | 9 | 1.05 |
| MAC-15 | 15.8 | 1.9 | 15 | 1.20 |
| MAC-20 | 21.5 | 2.2 | 21 | 1.35 |
| MAC-30 | 32.0 | 2.5 | 27 | 1.40 |

"MAC" and "MACBF" CAPACITORS

FEATURES—The "MAC" provides the low minimum capacity essential for use as a trimmer in the VHF range. It was engineered and designed to produce a rugged, stable, highly reliable miniature component for today's equipment.

CONSTRUCTION—Its silicone treated steatite base is only 3/4" x 5/8". Rotor and stator are soldered assemblies and are of brass, nickel-plated. Rotor and stator terminals are positioned to permit short leads. The threaded bearing is provided with flat sides to permit single hole mounting.

SPECIFICATIONS—Straight line capacity. Screw-driver adjustment. Air gap is 0.017" nominal and tested at 880 V. R.M.S., 60 cycles, except the MAC-30 which has an air gap of 0.0135" nominal and is tested at 600 V. R.M.S., 60 cycles. "MACBF" is the butterfly version of the "MAC". It is designed for dual split-stator capacitor use.



| Code | Capacity Sect. | | Plates | | Net Price |
|---------------------|----------------|------|--------|------------|-----------|
| | Max. | Min. | Rotor | Ea. Stator | |
| Butterfly | | | | | |
| MACBF-3 | 3.1 | 1.3 | 3 | 2 | \$1.40 |
| MACBF-5 | 5.0 | 1.6 | 5 | 4 | 1.60 |
| MACBF-8 | 7.9 | 2.0 | 8 | 7 | 1.80 |
| MACBF-11 | 10.8 | 2.4 | 11 | 10 | 2.00 |
| Differential | | | | | |
| MAC-5-5 | 5.4 | 1.3 | 3 | 2 | 1.38 |
| MAC-10-10 | 9.6 | 1.5 | 5 | 4 | 1.52 |
| MAC-15-15 | 15.8 | 1.9 | 8 | 7 | 1.68 |
| MAC-20-20 | 21.5 | 2.2 | 11 | 10 | 1.77 |



HAMMARLUND



STANDARD VARIABLE CAPACITORS

"MC", "MCA" and "MCD" CAPACITORS

FEATURES—The "MC" is a versatile single section tuning capacitor designed to give the equipment engineer a choice of mountings, connections and capacity characteristics. The threaded brass front bearing and tapped aluminum end brackets permit panel or base mounting. "MC-S" capacitors have a straight line capacity characteristic. "MC-M" units have offset plates resulting in a "Midline" characteristic which more equally spaces frequencies. "MC-X" units are wide-spaced for high voltages. Hammarlund "MC" capacitors, except for "MCA" types, have silver plated phosphor bronze wiping contact, silicone-treated stearite insulation, soldered nickel-plated brass rotors and stators, rotor shaft supported on bearings at both front and rear of capacitor.

The "MCD" is a split-stator panel-mounted capacitor with all the "MC" features. Stators have terminals on both sides. Stators on single-spaced capacitors are separated by a shield. Wide-spaced units have no shield. Multi-section capacitors can be designed for special applications.

A rotor stop is available on "MC" capacitors on special order.

SPECIFICATIONS—Straight line or "Midline" capacity characteristic. Single-spaced types have 0.0245" nominal air gap and are tested at 1000 V. R.M.S., 60 cycles. Wide-spaced ("X") types have 0.0715" nominal air gap and are tested at 1750 V. R.M.S., 60 cycles.

"HF" and "HFD" CAPACITORS

SINGLE SECTION CAPACITOR—The "HF" is a single section tuning capacitor employing "APC" rotor and stator design. Extra long sleeve bearing and positive contact nickel-plated phosphor bronze wiper make this unit ideally suited to high frequency applications. Silicone treated stearite insulation. Single hole or base mounting. Special spacing, capacity values, finishes and other modifications are available to manufacturers on special order.

DOUBLE SECTION CAPACITOR—The "HFD" dual capacitors, like the "HF" singles, incorporate advanced features providing for maximum efficiency at high frequency. Soldered brass plates are nickel-plated. Aluminum front and rear end panels are mounted on a heavy silicone treated stearite base. Front and rear bearings with wide individual silver plated phosphor bronze wipers for each section assure long life and maximum contact efficiency. Single hole panel mount or base mounting. Electrostatic shield between sections. Terminals are provided on both sides of each stator to permit mounting tube and inductor on opposite sides. Multi-section capacitors can also be made available to customer specifications.

SPECIFICATIONS—Straight line capacity. Single spaced types (HF and HFD) have 0.015" air gap and are tested at 600 V. R.M.S., 60 cycles. Wide spaced types (HF-X and HFD-X) have 0.045" air gap and are tested at 1400 V. R.M.S., 60 cycles.

"HFA", "HFA DIFFERENTIAL",

"HFA DUAL", and "HFB" CAPACITORS

SINGLE SECTION CAPACITORS—The "HFA" is a single section tuning capacitor similar to the "HF" except that larger plates permit wider air-gaps for the same capacitance values. Resultant higher breakdown ratings extend the use of the capacitor into the high frequency low-power transmitter field. A threaded sleeve bearing permits single hole mounting and the bracket supplied may be used for base mounting. A lug type terminal mounted with the bearing provides an efficient rotor connection.

DIFFERENTIAL TYPE CAPACITORS—The "HFA" type units are now available as standard items in the differential type construction. The unit is mounted with an ungrounded rotor making it suitable for a wide field of application. In addition to the features of the "HFA" the design also incorporates the use of a spring bronze silver plated wiping contact on the rotor.

DOUBLE SECTION CAPACITORS—The "HFA" and the "HFB" are dual balanced rotor capacitors employing front and rear panels plus a single ball rear thrust. Both units are applicable to transmitter design. The construction features are similar to the "HFA" and the "HFA Differential" type capacitors. Additional special feature employed on the "HFB" type incorporates the use of an insulated shaft extension on the rotor to safeguard against shock hazards with the application of high voltages.

SPECIFICATIONS—Straight line capacity. Air gaps and test voltages are as indicated in table. However, "HFB" breakdown voltages are doubled and capacitance values approximately halved when stator sections are connected in series.

| Code | Capacity | | Plates/ Section | Net Price |
|-----------|----------|------|--------------------|--------------|
| | Max. | Min. | | |
| MC-20-S | 20. | 5.5 | 3 | \$2.27 |
| MC-35-S | 35. | 6.0 | 5 | 2.31 |
| MC-50-M | 50. | 6.3 | 7 | 2.46 |
| MC-50-S | 50. | 6.5 | 7 | 2.48 |
| MC-75-M | 80. | 7.3 | 11 | 2.57 |
| MC-75-S | 80. | 8.0 | 11 | 2.55 |
| MC-100-M | 100. | 7.7 | 14 | 2.72 |
| MC-100-S | 100. | 8.3 | 14 | 2.69 |
| MC-140-M | 140. | 9.0 | 19 | 2.88 |
| MC-140-S | 140. | 10.0 | 19 | 2.85 |
| MC-200-M | 200. | 10.3 | 27 | 3.27 |
| MC-250-M | 250. | 12.0 | 34 | 3.41 |
| MC-325-M | 320. | 13.5 | 43 | 3.90 |
| MC-20-SX | 20. | 6.8 | 7 | 2.63 |
| MC-35-MX | 32. | 7.8 | 11 | 2.69 |
| MC-35-SX | 32. | 8.5 | 11 | 2.79 |
| MC-50-MX | 53. | 10.5 | 19 | 3.02 |
| MC-50-SX | 53. | 11.5 | 19 | 3.05 |
| MC-100-SX | 100. | 16.5 | 35 | 3.87 |
| MCA-20-S | 17.5 | 3.5 | 3 | 1.70 |
| MCA-35-S | 33.0 | 3.9 | 5 | 1.79 |
| MCA-50-S | 47.8 | 4.4 | 7 | 1.91 |
| MCA-75-S | 78.0 | 5.2 | 11 | 2.08 |
| MCA-100-S | 99.6 | 5.8 | 14 | 2.16 |
| MCA-140-S | 137.5 | 7.0 | 19 | 2.30 |
| MCD-50-M | 50. | 5.5 | 7 | 7.25 |
| MCD-100-M | 100. | 6.3 | 14 | 7.74 |
| MCD-100-S | 100. | 7.0 | 14 | 6.74 |
| MCD-140-M | 140. | 7.8 | 19 | 8.16 |
| MCD-35-MX | 31. | 6.0 | 11 | 7.44 |
| MCD-35-SX | 31. | 6.8 | 11 | 6.51 |

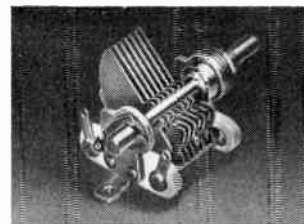
M—Midline plates S—Straightline plates
X—Wide-Spaced

| Code | Capacity | | Plates/ Section | Net Price |
|----------|----------|------|--------------------|--------------|
| | Max. | Min. | | |
| HF-15 | 17.5 | 2.8 | 5 | \$1.14 |
| HF-35 | 36. | 3.2 | 10 | 1.25 |
| HF-50 | 52 | 3.7 | 14 | 1.31 |
| HF-100 | 102. | 5.3 | 27 | 1.49 |
| HF-140 | 142. | 6.3 | 37 | 1.74 |
| HF-15-X | 15. | 3.6 | 10 | 1.29 |
| HF-30-X | 30. | 5.2 | 20 | 1.43 |
| HFD-25 | 25. | 2.9 | 7 | 4.37 |
| HFD-50 | 52. | 3.6 | 14 | 4.55 |
| HFD-100 | 102. | 5.0 | 27 | 4.98 |
| HFD-140 | 142. | 6.0 | 37 | 5.15 |
| HFD-15-X | 16. | 3.8 | 11 | 4.55 |
| HFD-30-X | 28.5 | 5.0 | 19 | 4.65 |

D—Split stator (Duals) X—Wide-Spaced

| Code | Capacity | | | Plates/ Section | Net Price |
|---------------|----------|------|---------|--------------------|--------------|
| | Max. | Min. | Spacing | | |
| HFA-100-A | 102 | 4.5 | 0.020 | 19 | \$2.13 |
| HFA-140-A | 145 | 6.0 | 0.020 | 27 | 2.35 |
| HFA-200-A | 200 | 8.0 | 0.020 | 38 | 2.76 |
| HFA-10-B | 9 | 2.3 | 0.030 | 3 | 1.62 |
| HFA-15-B | 16 | 2.8 | 0.030 | 5 | 1.71 |
| HFA-25-B | 25 | 3.0 | 0.030 | 7 | 1.74 |
| HFA-50-B | 50 | 4.3 | 0.030 | 14 | 1.92 |
| HFA-100-B† | 100 | 7.5 | 0.030 | 27 | 3.05 |
| HFA-15-E | 16 | 4.0 | 0.070 | 9 | 1.85 |
| Differentials | | | | | |
| HFA-10-10B | 9 | 2.3 | 0.030 | 3 | 2.00 |
| HFA-25-25B | 25 | 3.0 | 0.030 | 7 | 2.20 |
| HFA-50-50B | 50 | 4.3 | 0.030 | 14 | 2.50 |
| HFA-Duals | | | | | |
| HFA-25B | 27 | 5.0 | 0.030 | 7 | 3.59 |
| HFA-50B | 52 | 6.8 | 0.030 | 14 | 4.04 |
| HFA-100B | 100 | 8.0 | 0.030 | 27 | 4.94 |
| HFB-50-C | 50 | 9.0 | 0.050 | 11 | 7.85 |
| HFB-100-C | 105 | 14.0 | 0.050 | 23 | 9.24 |
| HFB-35-E* | 37 | 9.5 | 0.070 | 11 | 7.86 |
| HYB-65-E* | 63 | 12.5 | 0.070 | 19 | 8.69 |

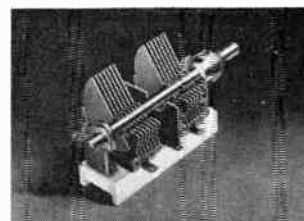
60 cycle test voltage:
 "HFA", "A" 800 V. R.M.S.; "B" 1200 V. R.M.S.
 "E" 1750 V. R.M.S.; "HFB", "C" 1500 V. R.M.S.
 "E" 3000 V. R.M.S.; plates have rounded edges.
 †Has front and rear supporting panels.



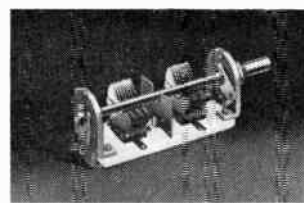
MC



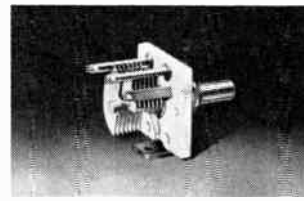
MCA



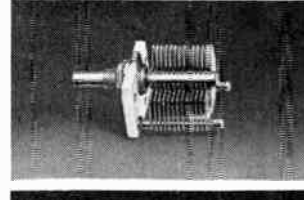
MCD



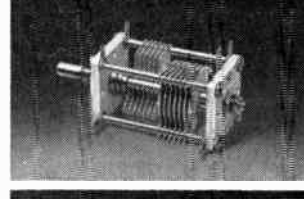
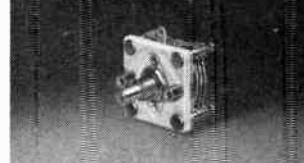
HFD



HF



HFA

HFA
DIFFERENTIALHFA
DUAL



HAMMARLUND



"CT" CAPACITORS MIL TYPES

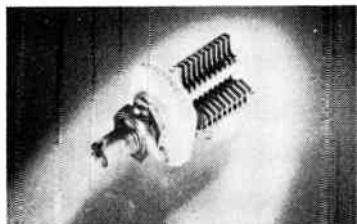
FEATURES—Compact, high quality air dielectric trimmer types designed to resist the effects of temperature, moisture and vibration. Silicone treated steatite insulation insures high leakage resistance.

CONSTRUCTION—All brass parts nickel-plated. Brass rotor and stator plates soldered to brass supports. Terminals hot-tin dipped. Tapped brass

mounting studs fastened to silicone treated steatite base eliminates grounding the rotor when mounting capacitor. CT06 types are bushing mounted for grounded rotor operation.

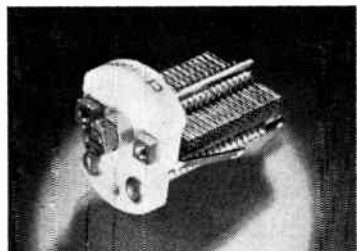
SPECIFICATIONS—CT types designed to meet military specification MIL-C-92.

TYPE CT06



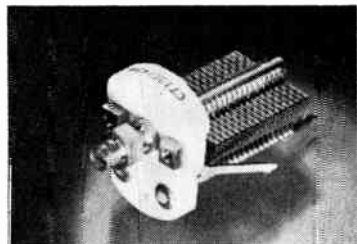
| Type designation | DC working voltage volts | Capacitance | | *Rotational life | †Length from mounting surface to end of stator rod |
|------------------|-----------------------------|--------------------------|--------------------------|------------------|--|
| | | minimum $\mu\mu\text{f}$ | maximum $\mu\mu\text{f}$ | | |
| CT06E004 | 500 | 1.3 | 4.0 | J, M | $\frac{10}{16}$ |
| CT06E013 | 500 | 2.1 | 12.9 | J, M | $\frac{59}{64}$ |
| CT06E017 | 500 | 2.4 | 16.8 | J, M | $\frac{13}{64}$ |
| CT06E019 | 500 | 3.0 | 19.0 | J, M | $\frac{13}{16}$ |

TYPE CT12



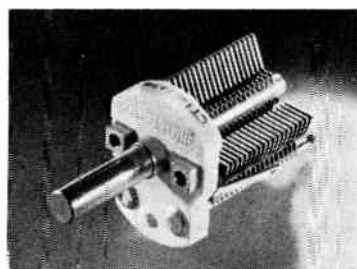
| Type designation | DC working voltage volts | Capacitance | | *Rotational life | †Length from mounting surface to end of stator rod |
|------------------|-----------------------------|--------------------------|--------------------------|------------------|--|
| | | minimum $\mu\mu\text{f}$ | maximum $\mu\mu\text{f}$ | | |
| CT12E042 | 500 | 5.0 | 42 | J, M | $\frac{13}{16}$ |
| CT12E075 | 500 | 6.0 | 75 | J, M | $\frac{1}{2}$ |
| CT12E099 | 500 | 7.5 | 99 | J, M | $\frac{11}{16}$ |
| CT12E135 | 500 | 9.0 | 135 | J, M | $\frac{13}{16}$ |
| CT12E143 | 500 | 9.0 | 143 | J, M | $\frac{13}{32}$ |
| CT12F010 | 600 | 3.0 | 10 | J, M | $\frac{13}{16}$ |
| CT12F025 | 600 | 4.0 | 25 | J, M | $\frac{13}{32}$ |
| CT12F042 | 600 | 5.0 | 42 | J, M | $\frac{13}{8}$ |
| CT12F075 | 600 | 6.0 | 75 | J, M | $\frac{15}{8}$ |
| CT12F099 | 600 | 7.5 | 99 | J, M | $\frac{17}{32}$ |
| CT12G009 | 700 | 4.0 | 9 | J, M | 1 |
| CT12G023 | 700 | 4.5 | 23 | J, M | $\frac{1}{4}$ |
| CT12G042 | 700 | 5.5 | 42 | J, M | $\frac{13}{4}$ |
| CT12G075 | 700 | 6.5 | 75 | J, M | 2 |

TYPE CT13



| Type designation | DC working voltage volts | Capacitance | | *Rotational life | †Length from mounting surface to end of stator rod |
|------------------|-----------------------------|--------------------------|--------------------------|------------------|--|
| | | minimum $\mu\mu\text{f}$ | maximum $\mu\mu\text{f}$ | | |
| CT13E0442 | 500 | 5.0 | 42 | J, M | $\frac{13}{16}$ |
| CT13E075 | 500 | 6.0 | 75 | J, M | $\frac{1}{2}$ |
| CT13E099 | 500 | 7.5 | 99 | J, M | $\frac{11}{16}$ |
| CT13E135 | 500 | 9.0 | 135 | J, M | $\frac{13}{16}$ |
| CT13E143 | 500 | 9.0 | 143 | J, M | $\frac{13}{32}$ |
| CT13F010 | 600 | 3.0 | 10 | J, M | $\frac{13}{16}$ |
| CT13F025 | 600 | 4.0 | 25 | J, M | $\frac{13}{32}$ |
| CT13F042 | 600 | 5.0 | 42 | J, M | $\frac{13}{8}$ |
| CT13F075 | 600 | 6.0 | 75 | J, M | $\frac{15}{8}$ |
| CT13F099 | 600 | 7.5 | 99 | J, M | $\frac{17}{32}$ |
| CT13G009 | 700 | 4.0 | 9 | J, M | 1 |
| CT13G023 | 700 | 4.5 | 23 | J, M | $\frac{1}{4}$ |
| CT13G042 | 700 | 5.5 | 42 | J, M | $\frac{13}{4}$ |
| CT13G075 | 700 | 6.5 | 75 | J, M | 2 |

TYPE CT15



| Type designation | DC working voltage volts | Capacitance | | *Rotational life | †Length from mounting surface to end of stator rod |
|------------------|-----------------------------|--------------------------|--------------------------|------------------|--|
| | | minimum $\mu\mu\text{f}$ | maximum $\mu\mu\text{f}$ | | |
| CT1-E042 | 500 | 5.0 | 42 | J, M | $\frac{13}{16}$ |
| CT1-E075 | 500 | 6.0 | 75 | J, M | $\frac{1}{2}$ |
| CT1-E090 | 500 | 7.5 | 99 | J, M | $\frac{11}{16}$ |
| CT1-E135 | 500 | 9.0 | 135 | J, M | $\frac{13}{16}$ |
| CT1-E143 | 500 | 9.0 | 143 | J, M | $\frac{13}{32}$ |
| CT1-F010 | 600 | 3.0 | 10 | J, M | $\frac{13}{16}$ |
| CT1-F025 | 600 | 4.0 | 25 | J, M | $\frac{13}{32}$ |
| CT1-F042 | 600 | 5.0 | 42 | J, M | $\frac{13}{8}$ |
| CT1-F075 | 600 | 6.0 | 75 | J, M | $\frac{15}{8}$ |
| CT1-F099 | 600 | 7.5 | 99 | J, M | $\frac{17}{32}$ |
| CT1-G009 | 700 | 4.0 | 9 | J, M | 1 |
| CT1-G023 | 700 | 4.5 | 23 | J, M | $\frac{1}{4}$ |
| CT1-G042 | 700 | 5.5 | 42 | J, M | $\frac{13}{4}$ |
| CT1-G075 | 700 | 6.5 | 75 | J, M | 2 |

*J=250 cycle rotational life—M=10,000 cycle rotational life
 †For dimensional drawings refer to military specifications MIL-C-92
 Suffix "J" or "M" to be added to type designation.
 CT14 1" shaft, CT15 1 1/2" shaft

PRICES ON REQUEST

SPECIAL VARIABLE CAPACITORS FOR ALL NEEDS

AVAILABLE MODIFICATIONS

Hammarlund's more than 50 years experience in the development and manufacture of capacitors has resulted in an endless knowledge of techniques. Such "know-how" includes the making of special capacitors using standard techniques and/or components, or giving birth to a completely new custom product—from concept through to production.

An example of this extended knowledge is the fact that Hammarlund now manufactures over 750 different types of APC capacitors.

These capacitors came into being as a result of the many modifications required by our customers for their specific applications. Any standard capacitor listed in this catalog can be modified to customer requirements. Such variations include end-panels, shaft diameter and lengths, bearings, special materials and finishes, special air gaps on most units, etc.

Custom made precision units to suit all electrical and environmental specifications can be fabricated on special order. The combinations are endless.



JFD ELECTRONICS CORPORATION

Components Division Brooklyn, New York

| model | type mount | capacitance range per measured per JFD -5177 | | D.C. working volts | dielectric strength measured at max rated cap | insulation resistance 500 VDC | Q factor measured at 1 mc. per JFD -5178 | temp. coeff. of capacitance P P M % | | material (dielectric-piston) | length (front of panel) | page no. |
|---|---------------------|--|-------------------------------|------------------------|---|-------------------------------|--|-------------------------------------|---------------------------------------|------------------------------|-------------------------|----------|
| | | min | max | | | | | +25° to -55° C | +125° to +125° C for glass for quartz | | | |
| SEALCAP MINIATURE PANEL MOUNT, PRINTED CIRCUIT, GLASS AND QUARTZ | | | | | | | | | | | | |
| SC131*, 141 & 151 | Prt. Ct. | 0.8 | 4.5 | 750 | 1500 VDC | 2x10 ⁸ Meg. | 500 | ±50 | Glass - Invar | 1 3/32" | 16 | |
| SC133*, 143 & 153 | Prt. Ct. | 0.8 | 8.5 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 500 | ±50 | Glass - Invar | 1 3/32" | 16 | |
| SC134* | Prt. Ct. | 0.7 | 12.0 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 500 | ±75 | Glass - Invar | 1 3/32" | 16 | |
| SC144 & 154 | Prt. Ct. | 0.8 | 12.0 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 500 | ±75 | Glass - Invar | 1 1/8" | 16 | |
| SC136*, 146 & 156 | Prt. Ct. | 0.8 | 18.0 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 3/32" | 16 | |
| SC139* | Prt. Ct. | 1.0 | 30.0 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 3/32" | 16 | |
| SC149 & 159 | Prt. Ct. | 0.8 | 30.0 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 3/32" | 16 | |
| QS171*, 181 & 191 | Prt. Ct. | 0.6 | 1.8 | 750 | 1500 VDC | 2x10 ⁸ Meg. | 1000 | +25 ±25 | Quartz - Invar | 1 3/32" | 17 | |
| QS173*, 183 & 193 | Prt. Ct. | 0.6 | 5.5 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 1500 | +25 ±25 | Quartz - Invar | 1 3/32" | 17 | |
| QS176*, 186 & 196 | Prt. Ct. | 0.6 | 9.5 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 1500 | +25 ±25 | Quartz - Invar | 1 3/32" | 17 | |
| QS179*, 189 & 199 | Prt. Ct. | 0.8 | 16.0 | 1250 | 2500 VDC | 10x10 ⁸ Meg. | 1500 | +25 ±25 | Quartz - Invar | 1 3/32" | 17 | |
| STANDARD SPLIT-STATOR PANEL MOUNT, GLASS AND QUARTZ | | | | | | | | | | | | |
| VC16G | Panel | (A) 0.5 (B) 0.8 | 5.0 2.5 | 500 | 1000 VDC | 10 ⁸ Meg. | 700 | ±50 | Glass - Invar | 1 1/2" | 22 | |
| VC17G | Panel | (A) 0.6 (B) 1.1 | 8.5 4.5 | 500 | 1000 VDC | 10 ⁸ Meg. | 700 | ±50 | Glass - Invar | 1 1/2" | 22 | |
| VC18G | Panel | (A) 0.7 (B) 1.8 | 14.0 7.5 | 500 | 1000 VDC | 10 ⁸ Meg. | 700 | ±50 | Glass - Invar | 1 1/2" | 22 | |
| VC80A | Panel | (A) 0.4 (B) 0.5 | 1.5 0.8 | 750 | 1500 VDC | 10 ⁸ Meg. | 1000 | +25 ±25 | Quartz - Invar | 7/8" | 22 | |
| VC81A | Panel | (A) 0.55 (B) 0.75 | 2.8 1.3 | 750 | 1500 VDC | 10 ⁸ Meg. | 1000 | +25 ±25 | Quartz - Invar | 3/4" | 22 | |
| VC82A | Panel | (A) 0.65 (B) 0.95 | 5.0 2.5 | 750 | 1500 VDC | 10 ⁸ Meg. | 1000 | +25 ±25 | Quartz - Invar | 1" | 22 | |
| VC83A | Panel | (A) 5.3 (B) 3.5 | 10.5 5.5 | 750 | 1500 VDC | 10 ⁸ Meg. | 1000 | +25 ±25 | Quartz - Invar | 1 1/2" | 22 | |
| MINIATURE SPLIT-STATOR SERIES | | | | | | | | | | | | |
| SP86G*, 206G & 216G | Prt. Ct. | (A) 0.8 (B) 0.8 | 4.2 2.0 | 750 | 1500 VDC | 10 ⁸ Meg. | 500 | ±50 | Glass - Invar | 1 3/32" | 23 | |
| SP87G*, 207G & 217G | Prt. Ct. | (A) 0.8 (B) 1.5 | 9.0 4.5 | 750 | 1500 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1" | 23 | |
| SP88G*, 208G & 218G | Prt. Ct. | (A) 1.0 (B) 2.0 | 14.0 7.0 | 750 | 1500 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 1/32" | 23 | |
| MINIATURE SPLIT-STATOR SEALCAP SERIES | | | | | | | | | | | | |
| SPS226G*, 236G & 246G | Prt. Ct. | (A) 0.8 (B) 0.8 | 4.2 2.0 | 750 | 1500 VDC | 10 ⁸ Meg. | 500 | ±50 | Glass - Invar | 1 1/8" | 24 | |
| SPS227G*, 237G & 247G | Prt. Ct. | (A) 0.8 (B) 1.5 | 9.0 4.5 | 750 | 1500 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 3/32" | 24 | |
| SPS228G*, 238G & 248G | Prt. Ct. | (A) 1.0 (B) 2.0 | 14.0 7.0 | 750 | 1500 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 3/32" | 24 | |
| DIFFERENTIAL SERIES, STANDARD PANEL MOUNT*, MINIATURE TYPES FOR PANEL MOUNT*, AND PRINTED CIRCUIT TYPES | | | | | | | | | | | | |
| DC401**, 411*, 421 & 431 | Prt. Ct. | (1) 0.7 (2) 2.0 | 3.0 3.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 3/4" | 20 | |
| DC403**, 413*, 423 & 433 | Prt. Ct. | (1) 0.8 (2) 2.5 | 8.0 8.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 3/4" | 20 | |
| DC404**, 414*, 424 & 434 | Prt. Ct. | (1) 0.8 (2) 3.0 | 12.0 12.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 3/4" | 20 | |
| DC406**, 416*, 426 & 436 | Prt. Ct. | (1) 0.9 (2) 3.5 | 16.0 16.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 3/4" | 20 | |
| DC409**, 419*, 429 & 439 | Prt. Ct. | (1) 1.5 (2) 5.0 | 28.0 28.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 3/8" | 20 | |
| MINIATURE DIFFERENTIAL SEALCAP SERIES | | | | | | | | | | | | |
| DS441*, 451 & 461 | Prt. Ct. | (1) 0.7 (2) 2.0 | 3.0 3.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 3/4" | 21 | |
| DS443*, 453 & 463 | Prt. Ct. | (1) 0.8 (2) 2.5 | 8.0 8.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 3/4" | 21 | |
| DS444*, 454 & 464 | Prt. Ct. | (1) 0.8 (2) 3.0 | 12.0 12.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 3/4" | 21 | |
| DS446*, 456 & 466 | Prt. Ct. | (1) 0.9 (2) 3.5 | 16.0 16.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 1/8" | 21 | |
| DS449*, 459 & 469 | Prt. Ct. | (1) 1.5 (2) 5.0 | 28.0 28.0 | 500 | 1000 VDC | 10 ⁸ Meg. | 500 | ±100 | Glass - Invar | 1 1/8" | 21 | |
| MAX-C SEALCAP SERIES | | | | | | | | | | | | |
| MC601*, 611 & 621 | Prt. Ct. | 1.0 | 14.0 | 1000 | 2000 VDC | 10 ⁸ Meg. | 500 | ±50 | Glass - Nickel Alloy Steel | 1 3/4" | 18 | |
| MC603*, 613 & 623 | Prt. Ct. | 1.0 | 28.0 | 1000 | 2000 VDC | 10 ⁸ Meg. | 500 | ±50 | Glass - Nickel Alloy Steel | 1 1/2" | 18 | |
| MC604*, 614 & 624 | Prt. Ct. | 1.0 | 42.0 | 1000 | 2000 VDC | 10 ⁸ Meg. | 500 | ±50 | Glass - Nickel Alloy Steel | 1 3/4" | 18 | |
| MC606*, 616 & 626 | Prt. Ct. | 1.0 | 60.0 | 1000 | 2000 VDC | 10 ⁸ Meg. | 500 | ±50 | Glass - Nickel Alloy Steel | 1 3/4" | 18 | |
| MC609*, 619 & 629 | Prt. Ct. | 1.0 | 90.0 | 1000 | 2000 VDC | 10 ⁸ Meg. | 500 | ±50 | Glass - Nickel Alloy Steel | 1 3/4" | 18 | |
| PC SERIES PANEL MOUNTS | | | | | | | | | | | | |
| PC35H030 | PANEL | 0.5 | 3 | 500 | | | | | | | 1 1/2" | 25 |
| PC35H080 | PANEL | 1 | 8 | 500 | | | | | | | 1 3/4" | 25 |
| PC35H160 | PANEL | 1 | 16 | 500 | | | | | | | 1 1/2" | 25 |
| PC35H300 | PANEL | 1 | 30 | 500 | | | | | | | 1 3/8" | 25 |
| These units meet the requirements of Mil. C-14409A | | | | | | | | | | | | |
| LC TUNERS* | | | | | | | | | | | | |
| | | self-resonating frequency (Mc) | nominal induct (microhenries) | nominal capacitance pf | Q factor | operating temperature °C | | | material | | length (front of panel) | |
| LC303* | .313, .323 & .333** | 400 MIN 725 MAX | .0248 MIN .0277 MAX | .54 MIN 6.56 MAX | 170-200 | -55 to +125 | | Glass - Invar | | 4 3/4" | | |
| LC304* | .314, .324 & .334** | 275 MIN 550 MAX | .0367 MIN .0396 MAX | .85 MIN 11.66 MAX | 150-175 | -55 to +125 | | Glass - Invar | | 5 1/2" | | |
| LC306* | .316, .326 & .336** | 200 MIN 500 MAX | .0507 MIN .0544 MAX | .86 MIN 20.19 MAX | 135-170 | -55 to +125 | | Glass - Invar | | 1 1/2" | | |
| LC309* | .319, .329 & .339** | 125 MIN 375 MAX | .0748 MIN .0798 MAX | .88 MIN 24.49 MAX | 145-155 | -55 to +125 | | Glass - Invar | | 1 1/2" | | |
| FOR JFD LC TUNERS, WITH SEALCAP CONSTRUCTION (LCS343, LCS353, AND LCS363 SERIES) SEE CATALOG T172 | | | | | | | | | | | | |
| **Standard panel mount *miniature panel mount †Length Applicable for Panel Mount Types Only. | | | | | | | | | | | | |
| FIXED METALIZED INDUCTORS FOR PANEL MOUNT, (LF1P SERIES), OR PRINTED CIRCUIT MOUNT, (LF2W SERIES), ARE AVAILABLE "OFF THE SHELF" IN 23 VALUES ON A 15 32 INCH GLASS DIAMETER THEY RANGE FROM .05 uh TO 2.00 uh. FIXED METALIZED INDUCTORS FOR PANEL MOUNT (LF3P SERIES), OR PRINTED CIRCUIT MOUNT (LF4W SERIES), ARE ALSO AVAILABLE "OFF THE SHELF" IN 22 VALUES ON A 19 64 INCH GLASS DIAMETER THESE RANGE FROM .05 uh TO 1.00 uh. THESE FOUR SERIES ARE DESCRIBED IN JFD CATALOG T172 | | | | | | | | | | | | |
| TANK CIRCUITS, (SERIES LC371), AVAILABLE IN FIVE MODELS COVERING FIVE OVERLAPPING RANGES BETWEEN 170 Mc AND 1000 Mc ARE ALSO DESCRIBED IN JFD CATALOG T172 | | | | | | | | | | | | |

**MORE
ENGINEERS
SPECIFY**

JFD

VARIABLE TRIMMER PISTON CAPACITORS LC TUNERS AND METALIZED INDUCTORS

For complete data on LC Tuners and Metalized Inductors, refer to Catalog No. T172.
For complete data on Delay Lines, refer to Catalog No. D82.
For custom modifications please contact the JFD sales engineering office or JFD Sales Representative nearest you as listed on page 32

| model | type mount | capacitance range of measured per JFD #5177 | | D.C. working volts | dielectric strength measured at max. rated cap. | insulation resistance 500 V D.C. | Q factor measured at 1 mc. per JFD #5178 | temp. coeff. of capacitance P.P.M./°C +25° to +125°C for glass -55° to +125°C for quartz | material (dielectric- Piston) | length (front of panel) | page no. | |
|--|---------------|---|------|--------------------|---|-------------------------------------|--|--|----------------------------------|-------------------------|----------|----|
| STANDARD PANEL MOUNT, GLASS AND QUARTZ | | | | | | | | | | | | |
| VC1G | Panel | 0.7 | 9.0 | 1250 | 2500 VDC | 10 ⁴ Meg. Min. | 500 | -60 to +10 | Glass - Invar | 1 1/2 | 7 | |
| VC4G | Panel | 0.8 | 18.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | +350 to +450 | Glass - Brass | 1 | 7 | |
| VC5G | Panel | 0.8 | 18.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | -20 to +40 | Glass - Invar | 1 | 7 | |
| VC11G | Panel | 0.6 | 14.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | -30 to +40 | Glass - Invar | 1 | 7 | |
| VC11GRA | Panel | 0.6 | 14.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | -40 to +50 | Glass - Invar | 1 | 7 | |
| VC11GRB | Panel | 0.6 | 14.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | +350 to +450 | Glass - Brass | 1 | 7 | |
| VC11GRC | Panel | 0.8 | 18.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | +20 to +100 | Glass - Invar | 1 | 7 | |
| VC30G | Panel | 0.8 | 30.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | -10 to +50 | Glass - Invar | 1 1/2 | 7 | |
| VC2 | Panel | 0.7 | 4.5 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | LARGELY IN EXCESS OF | +25 ±25 | Quartz - Invar | 3/4 | 7 | |
| VC5 | Panel | 0.6 | 6.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | | +25 ±25 | Quartz - Invar | 5/8 | 7 | |
| VC11 | Panel | 0.8 | 10.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | | +25 ±25 | Quartz - Invar | 1 | 7 | |
| VC12 | Panel | 9.0 | 21.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | OF | +25 ±25 | Quartz - Invar | 1 1/2 | 7 | |
| VC99 | Panel | 0.8 | 10.0 | 2500 | 5000 VDC | 10 ⁴ Meg. Min. | 2000 | +25 ±25 | Quartz - Invar | 1 1/2 | 25 | |
| SPLIT BUSHING SERIES PANEL MOUNT, PRINTED CIRCUIT, GLASS AND QUARTZ | | | | | | | | | | | | |
| VC3G | Panel | 0.7 | 9.0 | 1250 | 2500 VDC | 10 ⁴ Meg. Min. | 650 | +300 to +500 | Glass - Brass | 3/2 | 8 | |
| VC3GI | Panel | 0.7 | 9.0 | 1250 | 2500 VDC | 10 ⁴ Meg. Min. | 650 | +0 to -150 | Glass - Invar | 3/2 | 8 | |
| VC6GA | Panel | 0.7 | 17.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 750 | +400 to +600 | Glass - Brass | 1 1/2 | 8 | |
| VC6GI | Panel | 0.8 | 17.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 600 | -100 to +100 | Glass - Invar | 1 1/2 | 8 | |
| VC7G | Panel | 2.0 | 30.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 600 | -100 to +100 | Glass - Invar | 1 1/2 | 8 | |
| VC801GW | Prt. Ct. | 0.8 | 4.5 | 750 | 1500 VDC | 10 ⁴ Meg. | 500 | ±50 | Glass - Invar | 1 1/2 | 9 | |
| VC803GWA | Prt. Ct. | 0.8 | 8.5 | 750 | 1500 VDC | 10 ⁴ Meg. | 500 | ±50 | Glass - Invar | 1 1/2 | 9 | |
| VC804GWA | Prt. Ct. | 0.8 | 12.0 | 750 | 1500 VDC | 10 ⁴ Meg. | 500 | ±75 | Glass - Invar | 3/4 | 9 | |
| VC806GWA | Prt. Ct. | 0.8 | 18.0 | 750 | 1500 VDC | 10 ⁴ Meg. | 500 | ±100 | Glass - Invar | 1 1/2 | 9 | |
| VC809GWA | Prt. Ct. | 0.8 | 30.0 | 750 | 1500 VDC | 10 ⁴ Meg. | 500 | ±100 | Glass - Invar | 1 1/2 | 9 | |
| VC811QWA | Prt. Ct. | 0.6 | 1.8 | 750 | 1500 VDC | 10 ⁴ Meg. | 2000 | +25 ±25 | Quartz - Invar | 1 1/2 | 9 | |
| VC813QWA | Prt. Ct. | 0.6 | 5.0 | 750 | 1500 VDC | 10 ⁴ Meg. | 2000 | +25 ±25 | Quartz - Invar | 1 1/2 | 9 | |
| VC816QWA | Prt. Ct. | 0.6 | 9.5 | 750 | 1500 VDC | 10 ⁴ Meg. | 2000 | +25 ±25 | Quartz - Invar | 1 1/2 | 9 | |
| VC819QWA | Prt. Ct. | 0.6 | 16.0 | 750 | 1500 VDC | 10 ⁴ Meg. | 2000 | +25 ±25 | Quartz - Invar | 1 1/2 | 9 | |
| DIRECT TRAVERSE, LOW COST, HIGH QUALITY, PANEL MOUNT, PRINTED CIRCUIT, GLASS AND CERAMIC, FOR COMMERCIAL APPLICATIONS | | | | | | | | | | | | |
| VC13GB | Panel | 0.8 | 13.0 | 2500 | 5000 VDC | 10 ⁴ Meg. Min. | 500 | +225 to +375 | Glass - Ph. Bronze | 1 1/4 | 10 | |
| VC50CB | Panel | 5.0 | 50.0 | 1250 | 2500 VDC | 10 ⁴ Meg. Min. | 450 | +250 to +450 | Ceram - Ph. Bronze | 1 | 10 | |
| VC51CB | Prt. Ct. | 5.0 | 50.0 | 1250 | 2500 VDC | 10 ⁴ Meg. Min. | 450 | +250 to +450 | Ceram - Ph. Bronze | 1 1/4 | 10 | |
| VC52 | Panel | 1.0 | 12.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | +225 to +375 | Glass - Ph. Bronze | 1 | 10 | |
| VC53 | Prt. Ct. | 1.0 | 12.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | +225 to +375 | Glass - Ph. Bronze | 1 1/4 | 10 | |
| SPLIT BUSHING, PANEL MOUNT, PRINTED CIRCUIT, GLASS SUBMINIATURE SERIES | | | | | | | | | | | | |
| VC76 | Panel | 0.5 | 7.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 1 1/2 | 11 | |
| VC77 | Panel | 0.5 | 7.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 1 1/2 | 11 | |
| VC78 | Panel | 0.5 | 7.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 1 1/2 | 11 | |
| VC79 | Prt. Ct. | 0.5 | 7.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 3/4 | 11 | |
| PIN TRIM, PANEL MOUNT, PRINTED CIRCUIT, GLASS, "WORLD'S SMALLEST PISTON CAPACITOR" | | | | | | | | | | | | |
| PT901 | Panel | 0.5 | 2.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 3/4 | 12 | |
| PT902 | Panel | 0.5 | 3.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 1/2 | 12 | |
| PT903 | Panel | 0.5 | 5.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 3/4 | 12 | |
| PT904 | Panel | 0.5 | 7.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 1 | 12 | |
| PT911 | Prt. Ct. | 0.5 | 2.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 1 | 12 | |
| PT912 | Prt. Ct. | 0.5 | 3.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 3/4 | 12 | |
| PT913 | Prt. Ct. | 0.5 | 5.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 3/4 | 12 | |
| PT914 | Prt. Ct. | 0.5 | 7.0 | 500 | 1000 VDC | 10 ⁴ Meg. Min. | 500 | -- | Glass-Nickel Alloy Steel | 1 1/4 | 12 | |
| SLIDING PISTON, SPLIT BUSHING, PANEL MOUNT, GLASS | | | | | | | | | | | | |
| VC481 | Panel | 0.8 | 4.5 | 750 | 1500 | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 3/4 | 13 | |
| VC483 | Panel | 0.8 | 8.5 | 750 | 1500 | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 3/4 | 13 | |
| VC484 | Panel | 0.8 | 12.0 | 750 | 1500 | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 3/4 | 13 | |
| VC486 | Panel | 0.8 | 18.0 | 750 | 1500 | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 1 | 13 | |
| VC489 | Panel | 0.8 | 30.0 | 750 | 1500 | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 1 1/2 | 13 | |
| MINIATURE PANEL MOUNT, PRINTED CIRCUIT, GLASS AND QUARTZ * Panel Mount | | | | | | | | | | | | |
| VC20G* | VC9G, VC9GW | Prt. Ct. | 0.8 | 8.5 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 3/4 | 14 |
| VC21G* | VC10G, VC10GW | Prt. Ct. | 0.8 | 4.5 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±50 | Glass - Invar | 3/4 | 14 |
| VC22G* | Panel | 0.7 | 12.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±75 | Glass - Invar | 3/4 | 14 | |
| VC23G* | VC32G, VC32GW | Prt. Ct. | 0.8 | 18.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±100 | Glass - Invar | 1 | 14 |
| VC24G* | Panel | 1.0 | 30.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±100 | Glass - Invar | 1 1/2 | 14 | |
| VC31G, VC31GW | Prt. Ct. | 0.8 | 12.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±75 | Glass - Invar | 3/4 | 14 | |
| VC42G & VC42GW | Prt. Ct. | 1.0 | 21.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±100 | Glass - Invar | 1 1/2 | 14 | |
| VC43G, VC43GW | Prt. Ct. | 0.8 | 30.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 500 | ±100 | Glass - Invar | 1 1/2 | 14 | |
| MQ101*, 111 & 121 | Prt. Ct. | 0.6 | 1.8 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 1500 | -25 ±25 | Quartz - Invar | 3/4 | 15 | |
| MQ103*, 113 & 123 | Prt. Ct. | 0.6 | 5.5 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 1500 | +25 ±25 | Quartz - Invar | 3/4 | 15 | |
| MQ106*, 116 & 126 | Prt. Ct. | 0.6 | 9.5 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 1500 | -25 ±25 | Quartz - Invar | 1 | 15 | |
| MQ109*, 119 & 129 | Prt. Ct. | 0.8 | 16.0 | 750 | 1500 VDC | 10 ⁴ Meg. Min. | 1500 | +25 ±25 | Quartz - Invar | 1 1/2 | 15 | |

JFD Capacitors meet or exceed applicable requirements of MIL-C-14409A.

Jennings VACUUM

Vacuum Variable Capacitors

| FIG. | TYPE | | CAPACITY | PEAK VOLTAGE | RMS AMPERES ^① | | NOMINAL DIMENSIONS ^② | | |
|--------------|--------|--------|------------------|------------------------|--------------------------|-----------|---------------------------------|--------|--------|
| | NICKEL | COPPER | | | MMFD | KILOVOLTS | NICKEL | COPPER | LENGTH | DIAMETER |
| 2 to 5 KV | E | UCSL | 4-250 | 3, 5 | | 30 | 4 1/8 | 2 1/4 | |
| | B | USL | 5-500 | 3, 5 | | 40 | 5 1/2 | 2 3/8 | |
| | B | USLS | 5-465 shorting | 3, 5 | | 40 | 5 5/8 | 2 3/8 | |
| | B | USL | 10-1000 | 3, 5 | | 40 | 5 | 3 1/8 | |
| | A | UCSL | 5-750, 7-1000 | 3, 5 | | 42 | 7 5/8 | 3 1/8 | |
| | A | UCSL | 20-2000, 50-3000 | 2, 3 | | 42 | 8 3/8 | 3 1/8 | |
| 7.5 to 15 KV | E | UCSB | 5-100 | 7.5, 10, 15 | | 40 | 4 7/8 | 2 3/8 | |
| | I | UCSV | 8-110, 125-250 | 7.5, 10, 15 | | 40 | 5 1/4 | 2 7/8 | |
| | K | ATCS | 10-150, 15-200 | 7.5, 10, 15 | | 20 | 7 | 3 1/8 | |
| | L | UCS | 5-200, 10-300 | 7.5, 10, 15 | | 42 | 8 3/4 | 2 5/8 | |
| | L | UCS | 10-400, 25-500 | 7.5, 10, 15 | | 42 | 9 | 3 1/8 | |
| | A | UCSF | 5-250, 12-500 | 7.5, 10, 15 | | 45 | 7 3/4 | 3 5/8 | |
| | H | UCSX | 25-700, 25-1000 | 7.5, 10, 15 | | 45 | 9 7/8 | 3 3/4 | |
| | M | UCSXF | 12-1000, 15-1200 | 7.5, 10, 15 | | 45 | 10 | 4 3/8 | |
| | M | UCSXF | 20-1500, 50-2000 | 7.5, 10, 12 | | 45 | 10 | 5 1/8 | |
| 10 to 20 KV | C | ECS | 2-8, 3-30 | 10, 15 | | 20 | 4 | 1 3/8 | |
| | K T | TC | 5-25 | 20 | 10.5 | 20 | 6 5/8 | 2 1/4 | |
| | K | AT | ATC | 10-50, 15-75 | 20, 30 | 10.5 | 20 | 6 7/8 | 3 1/8 |
| | F | U | UC | 50-250 | 10, 15, 20 | 21 | 60 | 11 1/2 | 5 |
| | D | UX | UXC | 25-500 | 10, 15, 20 | 21 | 60 | 14 | 5 |
| | M | UXCF | | 10-250, 20-500 | 10, 15, 20 | | 45 | 9 7/8 | 4 3/8 |
| | J | VMM | VMMC | 50-1000, 100-2000 | 10, 15 | 35 | 125 | 15 7/8 | 6 1/8 |
| | G | VMMC | | 100-5000 | 7.5, 10, 15 | | 125 | 19 | 9 1/4 |
| 35 to 60 KV | I | UCSVH | 8-35 | 25, 35 | | 40 | 4 3/4 | 3 | |
| | F | UH | UHC | 10-75, 75-150 | 35, 45, 55, 60 | 21 | 60 | 12 | 5 |
| | D | UXH | UXHC | 25-150 | 35, 45, 55 | 21 | 60 | 14 5/8 | 5 |
| | H | UCSXH | | 10-200 | 35, 45 | | 45 | 10 | 4 1/2 |
| | M | UCSXHF | | 25-450 | 35, 40 | | 60 | 10 1/2 | 5 1/8 |
| | J | VMMHC | | 10-250, 25-450, 30-650 | 35, 45, 55 | | 125 | 17 | 8 1/8 |
| | N | VMMHCW | | 25-250, 50-400 | 35, 45, 55 | | 500 | 17 | 9 5/8 |
| 120 KV | G | VMMHC | 60-1000 | 35, 40, 45 | | 125 | 19 3/8 | 9 1/4 | |
| | G | VMMHHC | 25-200 | 120 | | 125 | 20 1/4 | 9 1/4 | |



① Current ratings can usually be doubled with forced air cooling. Water cooled units are also available
 ② Nominal Dimensions are for the largest unit of each type.
 NOTE: A series of adjustable capacitors are available to cover the range of 8 to 1000 mmfd at 10 KV.

Vacuum Transfer Relays



| Jennings Type | RA Series | RB7B | RB1D | RB2A | RB3 | RB4 | RE6B |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Contact arrangement | 1, 2, 3 & 4PDT | 2PDT | SPDT | 2PDT | 2PDT | 4PDT | SPDT |
| Rated operating voltage—dc or 60 cycle 16 mc | 300v | 7kv 3kv | 12 kv 8 kv | 20 kv 10 kv | 12 kv 8 kv | 20 kv 10 kv | 25 kv 12 kv |
| Test voltage— 60 cycle peak | 2000v | 9kv | 18 kv | 25 kv | 15 kv | 25 kv | 30 kv |
| Continuous current—rms amps— 60 cycle | 30, 40 amps | 14 amps | 15 amps | 20 amps | 30 amps | 20 amps | 25 amps |
| 2.5 mc | | 9 amps | 10 amps | 12 amps | 10 amps | 10 amps | 13 amps |
| 16 mc | | 4 amps | 6 amps | 6 amps | 6 amps | 6 amps | 8 amps |
| Contact resistance | .01 ohms max. | .01 ohms max. | .012 ohms max. | .01 ohms max. | .01 ohms max. | .01 ohms max. | .01 ohms max. |
| Contact capacitance | 17 mmfd | 1 mmfd | 0.5 mmfd | 1 mmfd | 1 mmfd | 1 mmfd | 1 mmfd |
| Capacitance to ground | 11 mmfd | 2 mmfd | 1.5 mmfd | 2.5 mmfd | 2.5 mmfd | 2.5 mmfd | 2.5 mmfd |
| Operate times | 25 msec max. | 15 msec max. | 18 ms max. | 20 ms max. | 20 ms max. | 45 ms max. | 25 ms max. |
| Release times | 9 msec max. | 4 msec max. | 8 ms max. | 10 ms max. | 8 ms max. | 10 ms max. | 10 ms max. |
| DC actuating coil—resistance+10% voltage | 225 ohms 26.5 vdc | 270 ohms 26.5 vdc | 265 ohms 26.5 vdc | 225 ohms 26.5 vdc | 120 ohms 26.5 vdc | 131 ohms 26.5 vdc | 120 ohms 26.5 vdc |
| Shock | 50G-11 ms | 30G-11 ms | 30G-11 ms | 30G-11 ms | 30G-11 ms | 30G-11 ms | 30G-11 ms |
| Vibration | 20G to 2000 cps | 10G to 2000 cps | 5G to 2000 cps | 5G to 2000 cps | 5G to 2000 cps | 5G to 500 cps | 10G to 400 cps |

NOTE: Most of the rf voltage and current ratings can be increased approx. 30% by the use of special brass terminals.

JENNINGS RADIO MANUFACTURING CORPORATION • SAN JOSE, CALIF.

3172013

CAPACITORS & RELAYS

Vacuum Fixed Capacitors

| FIG. | TYPE | | CAPACITY | PEAK VOLTAGE | RMS AMPERES ^① | | NOMINAL DIMENSIONS ^② | | |
|--------------|--------|--------|------------------------------|-----------------------------|--------------------------|--------|---------------------------------|------------------|-----------------|
| | NICKEL | COPPER | MMFD | KILOVOLTS | NICKEL | COPPER | LENGTH | DIAMETER | |
| 2 to 5 KV | L | JCSL | 100, 250 | 3, 5 | | 35 | 2 $\frac{5}{8}$ | 1 $\frac{7}{8}$ | |
| | M | JSLF | 250, 450 | 3, 5 | | 30 | 1 $\frac{3}{4}$ | 1 $\frac{7}{8}$ | |
| | B | JSLF | 1000, 1500, 2000 | 3, 5 | | 30 | 1 $\frac{5}{8}$ | 3 $\frac{1}{8}$ | |
| | B | JCSL | 500, 750, 1000, 1500, 2000 | 2, 3 | | 42 | 4 | 2 $\frac{7}{8}$ | |
| 7.5 to 15 KV | M | JCSF | 25, 40, 80, 120, 150 | 7.5, 10, 15 | | 30 | 1 $\frac{5}{8}$ | 1 $\frac{5}{8}$ | |
| | L | JCS2 | 10, 20, 25, 50, 75, 100, 150 | 7.5, 10, 15 | | 20 | 3 $\frac{1}{8}$ | 1 $\frac{7}{8}$ | |
| | B | JCS1 | 25, 50, 75, 100, 150 | 7.5, 10, 15 | | 50 | 3 $\frac{3}{4}$ | 2 $\frac{1}{8}$ | |
| | B | JCS | 250, 400, 500 | 7.5, 10, 15 | | 42 | 4 | 3 $\frac{1}{8}$ | |
| | A | JCS | 900, 1000 | 7.5, 10, 12 | | 42 | 4 $\frac{5}{8}$ | 3 $\frac{3}{8}$ | |
| | D | MC1 | 500, 750, 1000 | 10, 15 | | 75 | 4 $\frac{1}{8}$ | 4 $\frac{1}{8}$ | |
| | C | M | MC | 500, 750, 1000 | 10, 15, 20 | 21 | 120 | 8 $\frac{3}{8}$ | 5 |
| | J | MM | MMC | 1500, 2000 | 10, 15 | 35 | 125 | 9 $\frac{1}{4}$ | 6 $\frac{1}{8}$ |
| | F | | MMC1 | 2000 | 10, 15 | | 125 | 5 | 6 $\frac{1}{8}$ |
| | E | | MMC | 3000, 4000, 5000 | 10, 15 | | 125 | 13 | 9 $\frac{1}{4}$ |
| 17 to 30 KV | K | Y | 1, 2, 3, 4, 5 | 17 | | 7 | 3 $\frac{1}{4}$ | 3 $\frac{1}{4}$ | |
| | K | X | 5, 10, 15, 20, 25 | 17 | | 7 | 3 $\frac{1}{4}$ | 1 $\frac{1}{8}$ | |
| | N | W | 6, 12, 25, 50, 100 | 20, 25 | 10.5 | | 4 $\frac{5}{8}$ | 2 $\frac{1}{4}$ | |
| | I | | VCCA | 6, 12, 25, 50, 75, 100, 150 | 20, 30 | | 60 | 4 $\frac{1}{2}$ | 2 $\frac{3}{8}$ |
| | I | VC | VCCE | 6, 12, 25, 50, 75, 100, 150 | 20, 30, 35 | 14 | 60 | 6 $\frac{1}{2}$ | 2 $\frac{5}{8}$ |
| | I | VC | VCCE | 200, 250 | 20, 30 | 14 | 60 | 6 $\frac{1}{2}$ | 2 $\frac{5}{8}$ |
| | M | | JMF | 50, 75, 100 | 20, 30 | | 40 | 2 $\frac{3}{4}$ | 2 $\frac{1}{8}$ |
| | H | | JC2 | 25, 50, 75, 100 | 20, 30 | | 42 | 4 | 3 $\frac{1}{4}$ |
| 35 to 60 KV | C | ML | MLC | 500, 750, 1000 | 25, 30 | 21 | 125 | 9 $\frac{1}{4}$ | 5 |
| | A | | JHC | 75 | 50, 60 | | 42 | 4 | 3 $\frac{1}{2}$ |
| | G | | JC3 | 20, 40, 50, 60 | 35, 45, 55, 60 | | 140 | 8 $\frac{1}{4}$ | 3 $\frac{1}{2}$ |
| | G | | JC4 | 75, 100, 125 | 35, 45, 55, 60 | | 175 | 9 $\frac{1}{4}$ | 5 |
| | J | | JC5 | 200 | 35, 45, 55, 60 | | 225 | 11 $\frac{1}{4}$ | 7 |
| | G | | MMHC | 450 | 35, 45, 55 | | 125 | 9 $\frac{1}{4}$ | 6 $\frac{1}{8}$ |
| | E | | MMHC | 1000 | 35, 40, 45 | | 150 | 13 | 9 $\frac{1}{4}$ |



Type JCSF 150 mmfd 15 kv



Type JCSL 1500 mmfd 5 kv



Type MMC 2000 mmfd 15 kv

①Current ratings can usually be doubled with forced air cooling. Water cooled units are also available.

②Nominal Dimensions are for the largest unit of each type.

NOTE: Intermediate capacities, feed-thru capacitors, and glass insulators are available.

The all copper construction of Vacuum Fixed Capacitors give high current ratings, long life and stability of operation.

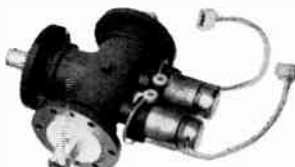
Vacuum Coaxial Relays

FOR 50 OHM 3/8 LINES

TYPE RC21F SPDT VACUUM RELAY

Impedance: 50 ohms.
 Frequency: (0-600 MC) —Crosstalk —VSWR
 200 MC —47.12 db —1.03
 225 MC —46.1 db —1.04
 250 MC —45.0 db —1.05
 300 MC —43.6 db —1.05
 400 MC —41.2 db —1.06
 500 MC —39.2 db —1.07
 600 MC —37.5 db —1.09

Power Rating: 3 megawatt pf. 20 kw average at 600 MC.
 Insertion Loss: 0.01 db max.



TYPE RC 10 VACUUM RELAY

A SPST latching relay for use at frequencies up to 60 mc at 50 kw average power. Simple fittings are available that permit assembling multiple units in crossbar networks in a minimum of space. As an example a 4 x 5 (4 inputs, 5 outputs) network can be assembled occupying less than 9 cu. ft. of space.



TYPE RC21F SPDT VACUUM RELAY

Size: 3 $\frac{1}{8}$ inch. Fittings: "RETMA," Flange type.
 Inner Connector: Anchor type. "EIA" Bullet to Jennings spring type.

Configuration "I": May be installed in place of "EIA" 50 ohm standard elbow without modification of existing coaxial line.
 Actuation: Electro-mechanical latching type. Momentary energize to open/close. 24 or 115 V DC or manual operation.

Indicator: Auxiliary Microswitches 2PDT. (Two each.)
 Transfer time: Less than 50 millisecond. Weight: 18 lbs. (approx.)

TYPE RC 10 LATCHING VACUUM RELAY

Characteristic Impedance: 50 ohms
 Power Rating: 50 kw average to 60 mc
 Frequency Range: 0 to 100 mc
 VSWR: 1.02 max. at 30 mc; 1.05 max. at 60 mc
 Crosstalk: Greater than —60 db isolation at 60 mc
 Actuating Voltage: 24, 48, 115 vdc
 Actuator: Latching type
 Position Indicators: SPDT or DPDT microswitches

High Voltage Measuring Equipment

MODEL JP 325 HIGH VOLTAGE PROBE

VOLTAGE RATINGS: 40, 50, or 60 KV peak.
 VOLTAGE DIVISION RATIO: 325 to 1 to termination of 3 ft. of RG-58 A U cable.
 INPUT IMPEDANCE:
 Resistance: above 10¹² ohms.
 Capacitance: 4 mmfd.

FREQUENCY RESPONSE: High frequency limited by that of measuring instrument. (Internal resonances are above 200 mc.) Low frequency response is 100 cps if operating into 10 megohm shunt resistance; 1000 cps if operating into 1 megohm shunt resistance.



MODEL J-1003 HIGH VOLTAGE VACUUM TUBE VOLTMETER

for use in pulse, rf and 60 cycle circuits at voltages up to 100 KV.

VOLTAGE RANGES (peak volts full scale):
 Single Ended: 2.5, 5, 10, 25, 50 KV.
 Double Ended: 2.5, 5, 10, 25, 50, 100 KV.
 (By using Type JCD Series capacitor, these ranges can be more than doubled.)

OSCILLOSCOPE CONNECTION:

300 to 1 division ratio.
 FREQUENCY RESPONSE: 10 cycles to 20 megacycles at full rated voltage and up to 50 megacycles for lower voltages with low harmonic content.
 INPUT IMPEDANCE: 10¹² ohms and 4 mmfd.
 CALIBRATION ACCURACY: — 3% of full scale.
 POWER SUPPLY: 117 volt, 50, 60 cy.
 DIMENSIONS: 16 $\frac{1}{4}$ x 11 $\frac{1}{2}$ x 9"



P. R. MALLORY & CO. Inc.
MALLORY

Electrolytic Capacitors

FP AND WP CAPACITORS

For top chassis mounting in filter and audio bypass circuits and TV applications. Extremely dependable under heavy ripple current and high surge voltage. All WP and FP capacitors are designed for high temperature (85° C) operation at full rated voltage. Single, dual, triple and quad section units encased in compact rubber sealed aluminum cases with self-contained mounting feature.



FP-WP—SINGLES

| Mallory No. | Cap., μ f | WV DC | * | Net Each | Mallory No. | Cap., μ f | WV DC | * | Net Each | Mallory No. | Cap., μ f | WV DC | * | Net Each | Mallory No. | Cap., μ f | WV DC | * | Net Each |
|-------------|---------------|-------|---|----------|-------------|---------------|-------|---|----------|-------------|---------------|-------|---|----------|-------------|---------------|-------|---|----------|
| WP530 | .5Z-1.0Z | 3NP | B | \$1.32 | WP064.2 | 150 | 50 | B | \$1.08 | FP125 | 15 | 250 | A | \$0.93 | FP142 | 10 | 450 | A | \$0.93 |
| WP540 | 1.0Z | 3NP | H | 2.40 | WP065 | 500 | 50 | F | 1.59 | WP125.5 | 140 | 250 | D | 1.74 | FP143 | 15 | 450 | B | 1.02 |
| WP505 | 60Z | 3NP | A | 1.20 | WP066 | 500 | 50 | D | 1.59 | WP125.9 | 150 | 250 | K | 1.71 | FP144 | 20 | 450 | B | 1.08 |
| WP035 | 225 | 15 | A | 1.05 | WP068 | 1500 | 50 | H | 2.31 | FP128 | 80 | 300 | D | 1.53 | FP145 | 30 | 450 | C | 1.17 |
| WP039 | 1000 | 15 | C | 1.53 | FP113 | 30 | 150 | A | .93 | FP129.1 | 100 | 300 | D | 1.74 | FP146 | 40 | 450 | C | 1.23 |
| WP041 | 2000 | 15 | G | 2.07 | FP115 | 50 | 150 | B | .99 | WP131.5 | 160 | 300 | G | 2.31 | FP148 | 60 | 450 | G | 1.68 |
| WP042 | 3000 | 15 | H | 2.10 | FP116 | 100 | 150 | C | 1.20 | WP132 | 200 | 300 | G | 2.58 | FP149 | 80 | 450 | G | 1.83 |
| WP052 | 40 | 25 | B | .86 | FP116.5 | 120 | 150 | D | 1.23 | FP135 | 30 | 350 | B | 1.14 | FP150 | 100 | 450 | H | 2.07 |
| WP055 | 100 | 25 | C | 1.53 | FP116.6 | 120 | 150 | F | 1.23 | FP137 | 50 | 350 | C | 1.26 | FP155 | 125 | 450 | J | 2.76 |
| WP057 | 500 | 25 | C | 1.53 | FP117 | 150 | 150 | F | 1.29 | FP137.2 | 60 | 350 | D | 1.32 | FP171 | 10 | 500 | B | .96 |
| WP059 | 1000 | 25 | F | 2.13 | FP117.5 | 150 | 150 | F | 1.29 | FP138 | 80 | 350 | G | 1.71 | FP173 | 20 | 500 | B | 1.11 |
| WP063 | 4 | 50 | A | .75 | FP118 | 200 | 150 | G | 1.47 | FP140 | 125 | 350 | H | 2.37 | FP175 | 30 | 500 | C | 1.20 |
| WP064 | 100 | 50 | B | .99 | FP119 | 300 | 150 | H | 1.68 | FP140.5 | 140 | 350 | H | 2.34 | FP176 | 40 | 500 | F | 1.50 |
| | | | | | FP121 | 120 | 200 | F | 1.41 | FP140.6 | 150 | 350 | H | 2.55 | FP177 | 40 | 500 | D | 1.50 |
| | | | | | FP122 | 125 | 200 | D | 1.47 | FP141 | 320 | 350 | I | 3.45 | FP187 | 90 | 500 | H | 2.10 |
| | | | | | WP123 | 500 | 200 | I | 2.19 | | | | | | | | | | |

FP-WP—DUALS

| Mallory No. | Capacity μ f | Working Volts DC | * | Net Each | Mallory No. | Capacity μ f | Working Volts DC | * | Net Each | Mallory No. | Capacity μ f | Working Volts DC | * | Net Each |
|-------------|---------------------|------------------|---|----------|-------------|------------------|------------------|---|----------|-------------|------------------|------------------|---|----------|
| WP204 | 250-1000 | 10-6 | F | \$1.71 | WP217.85 | 35-500 | 300-6 | C | \$1.68 | FP231 | 10-10 | 450-500 | B | \$1.14 |
| WP205 | .5Z-2.5Z/15750†-60† | 12-6 | I | 2.16 | FP217.86 | 30-20 | 300-50 | B | 1.14 | FP231.2 | 20-5 | 450-450 | B | 1.46 |
| WP200 | 1000-1000 | 15-15 | F | 2.64 | FP217.87 | 20-60 | 300-250 | D | 1.65 | FP231.3 | 20-10 | 450-450 | C | 1.32 |
| WP200.1 | 1000-1000 | 15-15 | D | 2.64 | FP217.88 | 40-40 | 300-300 | F | 1.77 | FP234 | 20-20 | 450-450 | D | 1.53 |
| WP200.23 | 1500-1000 | 16-10 | F | 2.55 | FP217.89 | 50-10 | 300-300 | F | 1.53 | FP237 | 30-30 | 450-450 | G | 1.83 |
| WP200.6 | 500-500 | 16-16 | B | 1.95 | FP217.9 | 75-75 | 300-300 | H | 2.28 | FP238 | 40-40 | 450-450 | H | 2.07 |
| WP200.18 | 800-200 | 16-16 | B | 1.68 | FP218 | 120-20 | 300-300 | H | 2.40 | FP239 | 50-40 | 450-450 | H | 2.19 |
| WP200.21 | 1000-500 | 16-16 | C | 2.28 | WP219 | 125-60 | 300-300 | G | 2.70 | FP240† | 50-50 | 450-450 | H | 2.31 |
| WP200.5 | 500-100 | 20-20 | B | 1.65 | FP219.7 | 150-100 | 300-300 | H | 3.11 | FP242 | 60-20 | 450-450 | H | 2.10 |
| WP200.7 | 500-200 | 20-20 | B | 1.80 | FP223 | 5-75 | 350-150 | D | 1.26 | FP242.5 | 60-60 | 450-450 | I | 2.70 |
| WP200.2 | 1000-2000 | 25-15 | H | 3.87 | FP225 | 15-15 | 350-350 | B | 1.35 | FP245 | 80-10 | 450-150 | H | 2.16 |
| WP201.1 | 40-40 | 25-25 | B | .93 | FP227 | 20-20 | 350-350 | C | 1.38 | FP245.2 | 80-20 | 450-150 | H | 2.34 |
| WP201.5 | 1000-1000 | 35-35 | G | 3.93 | FP227.3 | 30-30 | 350-350 | D | 1.74 | FP247 | 100-40 | 450-450 | I | 2.91 |
| WP202.1 | 50-50 | 50-50 | B | 1.02 | WP227.35 | 80-20 | 350-350 | D | 2.10 | FP248 | 100-60 | 450-450 | I | 3.51 |
| WP202.5 | 100-100 | 50-50 | B | 1.26 | FP227.4 | 80-20 | 350-350 | G | 2.10 | FP250 | 40-80 | 475-200 | G | 1.29 |
| WP205.6 | 50-500 | 150-5 | C | 1.41 | FP227.5 | 80-40 | 350-350 | H | 2.16 | FP252 | 20-100 | 475-250 | F | 2.79 |
| WP205.8 | 50-1000 | 150-8 | B | 1.71 | FP227.6 | 80-80 | 350-350 | I | 2.82 | FP255 | 20-100 | 475-300 | H | 2.70 |
| FP206 | 50-150 | 150-25 | C | 1.32 | FP227.7 | 80-100 | 350-350 | I | 2.69 | FP256 | 20-100 | 475-400 | I | 2.70 |
| FP208 | 20-20 | 150-150 | B | 1.02 | FP227.8 | 150-20 | 350-350 | H | 2.33 | FP258 | 15-15 | 475-475 | C | 1.41 |
| FP211 | 30-30 | 150-150 | B | 1.11 | FP229 | 35-100 | 400-50 | D | 1.56 | FP259 | 30-10 | 475-475 | D | 1.56 |
| FP210 | 40-20 | 150-150 | B | 1.08 | FP229.25 | 40-4 | 400-350 | E | 2.10 | FP260 | 40-10 | 475-475 | H | 1.86 |
| FP212 | 40-40 | 150-150 | B | 1.14 | FP229.3 | 75-75 | 400-400 | I | 2.91 | FP262 | 40-40 | 475-475 | H | 2.58 |
| FP213 | 50-30 | 150-150 | B | 1.29 | FP229.4 | 80-60 | 400-400 | I | 2.82 | FP263 | 60-40 | 475-475 | I | 2.73 |
| FP214 | 50-50 | 150-150 | C | 1.56 | WP229.5 | 120-40 | 400-400 | I | 3.15 | FP264.5 | 80-40 | 475-475 | I | 3.03 |
| FP214.5 | 75-75 | 150-150 | F | 1.56 | FP229.52 | 120-120 | 400-400 | I | 4.17 | FP266 | 80-50 | 475-475 | I | 3.12 |
| FP214.6 | 75-75 | 150-150 | E | 1.38 | FP229.53 | 40-50 | 450-50 | D | 1.73 | WP272 | 10-100 | 500-50 | B | 1.38 |
| FP216.2 | 80-40 | 150-150 | C | 1.38 | FP229.55 | 40-100 | 450-50 | E | 1.68 | FP277 | 60-80 | 500-150 | H | 2.25 |
| FP216.2 | 80-40 | 150-150 | C | 1.38 | FP229.6 | 50-100 | 450-50 | G | 1.80 | FP280 | 40-50 | 500-200 | C | 1.98 |
| FP215 | 125-100 | 150-150 | G | 2.04 | FP244 | 80-50 | 450-50 | H | 2.10 | FP282 | 10-10 | 500-500 | G | 1.17 |
| FP216.3 | 200-150 | 150-150 | I | 2.25 | FP229.8 | 80-100 | 450-50 | H | 2.25 | FP282.5 | 20-20 | 500-500 | F | 2.09 |
| FP216.4 | 200-200 | 150-150 | I | 2.40 | FP229.9 | 30-200 | 450-150 | H | 2.10 | FP283 | 30-10 | 500-500 | F | 1.56 |
| FP216.6 | 60-60 | 200-200 | D | 1.53 | FP229.9 | 20-50 | 450-250 | D | 1.68 | FP284 | 30-30 | 500-500 | G | 1.95 |
| FP216.1 | 200-5 | 200-200 | C | 1.65 | WP230.2 | 20-200 | 450-250 | F | 2.73 | FP290 | 40-40 | 500-500 | H | 2.58 |
| FP216.8 | 40-25 | 250-150 | C | 1.29 | FP230.3 | 40-10 | 450-300 | D | 1.56 | FP290 | 60-40 | 500-500 | J | 2.73 |
| FP217 | 20-20 | 250-250 | B | 1.14 | FP230.5 | 10-50 | 450-350 | D | 1.71 | | | | | |
| FP221 | 40-40 | 250-250 | D | 1.50 | FP230.6 | 10-100 | 450-350 | H | 2.40 | | | | | |
| FP217.7 | 150-150 | 250-250 | I | 3.09 | FP235 | 50-80 | 450-350 | G | 2.19 | | | | | |
| FP217.4 | 200-200 | 250-250 | I | 3.60 | WP230.9 | 5-5 | 450-450 | B | 1.02 | | | | | |

††Recommended for photoflash applications. Can is ungrounded. †Cycles.

FP-WP—TRIPLES

| Mallory No. | Capacity μ f | Working Volts DC | * | Net Each | Mallory No. | Capacity μ f | Working Volts DC | * | Net Each | Mallory No. | Capacity μ f | Working Volts DC | * | Net Each |
|-------------|------------------|------------------|---|----------|-------------|------------------|------------------|---|----------|-------------|------------------|------------------|---|----------|
| WP300.15 | 200-200-30 | 10-10-10 | B | \$1.35 | FP302.8 | 100-80-200 | 150-150-10 | G | \$2.16 | FP318.5 | 20-20-20 | 200-200-200 | C | \$1.50 |
| WP300.6 | 850-400-2.2 | 16-16-11.5 rms | C | 2.97 | FP302.9 | 80-20-100 | 150-150-15 | F | 1.68 | FP318.7 | 30-20-20 | 200-200-200 | C | 1.62 |
| WP300.7 | 850-400-4 | 16-16-11.5 rms | C | 2.97 | FP306 | 40-20-20 | 150-150-25 | B | 1.38 | FP318.74 | 40-40-20 | 200-200-200 | F | 1.77 |
| WP300.88 | 1000-400-4 | 16-16-11.5 rms | C | 2.16 | FP307 | 40-20-100 | 150-150-25 | C | 1.50 | WP318.77 | 60-60-40 | 200-200-200 | F | 2.16 |
| WP300.89 | 1000-400-4 | 16-16-11.5 rms | F | 2.58 | FP304 | 40-20-200 | 150-150-25 | C | 1.62 | FP318.8 | 250-200-100 | 200-200-200 | I | 4.02 |
| WP300.9 | 1000-500-4 | 16-16-11.5 rms | C | 3.12 | FP310 | 40-40-200 | 150-150-25 | D | 1.68 | FP319 | 80-40-50 | 250-150-50 | G | 1.98 |
| WP300.95 | 1000-200-200 | 25-25-25 | F | 2.96 | FP311 | 50-30-100 | 150-150-25 | C | 1.62 | FP360 | 15-20-20 | 250-150-150 | B | 1.50 |
| WP300.5 | 400-100-100 | 16-16-16 | B | 1.80 | WP308.1 | 40-40-250 | 150-150-25 | D | 1.89 | FP319.5 | 90-90-20 | 250-250-50 | H | 2.76 |
| WP300.8 | 500-100-100 | 16-16-16 | B | 2.64 | FP309 | 50-30-100 | 150-150-25 | C | 1.62 | WP319.6 | 60-5-100 | 250-250-50 | C | 1.80 |
| WP300.85 | 500-500-100 | 16-16-16 | B | 2.40 | FP311.05 | 50-50-20 | 150-150-25 | D | 1.59 | FP319.7 | 80-5-50 | 250-250-200 | F | 2.13 |
| WP300.87 | 700-200-100 | 16-16-16 | B | 1.89 | FP311.1 | 80-20-200 | 150-150-25 | B | 1.76 | FP319.8 | 20-20-20 | 250-250-250 | C | 1.56 |
| WP300.17 | 500-200-5 | 16-16-25 | B | 1.92 | FP311.15 | 80-40-300 | 150-150-25 | D | 1.65 | FP320 | 40-20-20 | 250-250-250 | D | 1.74 |
| WP520 | 40-40-40 | 25-25-25 | B | 1.29 | FP311.2 | 20-20-20 | 150-150-150 | B | 1.38 | FP321.5 | 40-40-40 | 250-250 | | |

MALLORY
P. R. MALLORY & CO. INC.

Electrolytic Capacitors

FP-WP—TRIPLES (CONTINUED)

| Mallory No. | Capacity μ f | Working Volts DC | * | Net Each |
|-------------|------------------|------------------|------|----------|
| WP326.71 | 140-100-100 | 300-300-50 | J | \$3.36 |
| FP326.74 | 140-10-200 | 300-300-150 | I | 3.30 |
| FP326.85 | 100-60-4 | 300-300-300 | H | 2.82 |
| FP326.87 | 120-60-40 | 300-300-300 | I | 3.33 |
| FP326.75 | 150-30-30 | 300-300-300 | I | 3.00 |
| FP326.78 | 140-100-20 | 300-300-300 | I | 3.45 |
| WP326.8 | 4-100-40 | 350-25-25 | B | 1.35 |
| FP327 | 40-100-25 | 350-50-25 | F | 1.92 |
| WP327.2 | 20-50-100 | 350-100-75 | D | 1.98 |
| FP327.3 | 60-200-30 | 350-150-150 | J | 2.82 |
| FP327.35 | 10-150-200 | 350-200-75 | F | 2.52 |
| FP327.4 | 125-5-100 | 350-200-75 | I | 3.18 |
| FP327.5 | 10-40-40 | 350-200-200 | D | 2.58 |
| FP327.6 | 30-20-100 | 350-250-50 | D | 1.95 |
| FP331 | 30-30-20 | 350-300-25 | D | 1.89 |
| FP327.8 | 30-50-20 | 350-300-25 | G | 2.16 |
| FP327.9 | 40-40-40 | 350-300-300 | G | 2.61 |
| WP- | | | | |
| 327.896 | 160-120-30 | 350-300-300 | I | 3.99 |
| FP328 | 15-10-20 | 350-350-25 | B | 1.50 |
| FP329.1 | 20-4-100 | 350-350-25 | C | 1.56 |
| FP329.5 | 20-20-20 | 350-350-25 | B | 1.68 |
| FP330 | 30-20-20 | 350-350-25 | D | 1.86 |
| FP330.13 | 20-10-50 | 350-350-25 | I | 3.06 |
| FP330.15 | 10-5-30 | 350-350-50 | B | 1.32 |
| FP330.2 | 10-5-150 | 350-350-50 | C | 1.62 |
| FP330.21 | 20-5-150 | 350-350-50 | D | 1.77 |
| FP330.23 | 30-10-400 | 350-350-50 | H | 3.39 |
| FP330.22 | 100-20-50 | 350-350-50 | H | 2.91 |
| FP- | | | | |
| 330.244 | 150-4-30 | 350-350-50 | G | 2.90 |
| FP330.25 | 30-20-100 | 350-350-150 | G | 2.40 |
| FP- | | | | |
| 330.248 | 70-40-50 | 350-350-150 | H | 2.64 |
| FP330.24 | 125-20-20 | 350-350-150 | H | 2.85 |
| FP330.29 | 30-5-100 | 350-350-200 | G | 2.25 |
| FP330.26 | 100-60-20 | 350-350-200 | I | 3.30 |
| FP330.27 | 125-60-40 | 350-350-200 | 3.54 | |
| FP330.28 | 100-60-100 | 350-350-200 | I | 3.36 |
| FP330.3 | 20-10-5 | 350-350-250 | B | 1.53 |
| FP330.5 | 10-10-10 | 350-350-350 | B | 1.44 |
| FP330.7 | 30-20-10 | 350-350-350 | D | 1.95 |
| FP330.9 | 60-50-50 | 350-350-350 | I | 2.94 |
| FP331.2 | 80-20-20 | 350-350-350 | G | 2.57 |
| FP331.3 | 80-60-60 | 350-350-350 | I | 3.33 |
| FP331.6 | 90-40-20 | 350-350-350 | I | 3.15 |
| WP331.7 | 100-40-5 | 350-350-350 | H | 2.82 |
| FP331.76 | 100-40-40 | 350-350-350 | I | 3.15 |
| FP331.8 | 100-60-40 | 350-350-350 | I | 3.39 |
| FP332.4 | 100-100-10 | 350-350-350 | I | 4.08 |
| WP332.44 | 140-140-20 | 350-350-350 | I | 4.16 |
| FP332.5 | 40-200-60 | 400-200-200 | I | 3.33 |
| FP332.7 | 10-4-40 | 400-200-25 | B | 1.32 |

| Mallory No. | Capacity μ f | Working Volts DC | * | Net Each |
|-------------|------------------|------------------|---|----------|
| FP333 | 10-50-30 | 400-350-25 | F | \$1.86 |
| FP333.05 | 100-10-200 | 450-350-25 | H | 2.99 |
| FP333.2 | 10-4-10 | 400-350-150 | D | 1.71 |
| FP333.3 | 80-40-150 | 400-400-50 | I | 3.09 |
| FP333.15 | 100-20-20 | 400-400-50 | H | 2.88 |
| FP333.5 | 20-10-40 | 400-400-350 | E | 2.04 |
| FP333.6 | 20-20-10 | 400-400-350 | D | 1.80 |
| FP333.7 | 60-30-20 | 400-400-350 | H | 2.73 |
| FP333.8 | 80-20-10 | 400-400-350 | H | 2.58 |
| FP333.85 | 100-10-80 | 400-400-350 | I | 3.66 |
| FP333.86 | 100-40-100 | 400-400-350 | I | 4.04 |
| FP333.88 | 50-30-4 | 400-400-400 | G | 2.31 |
| FP333.89 | 80-60-40 | 400-400-400 | J | 3.63 |
| FP333.9 | 90-10-5 | 400-400-400 | H | 2.64 |
| FP333.95 | 100-30-20 | 400-400-400 | I | 3.30 |
| WP334.6 | 20-500-500 | 450-25-25 | H | 3.21 |
| FP342 | 40-10-130 | 450-150-50 | G | 2.22 |
| FP343 | 40-100-50 | 450-150-50 | H | 2.37 |
| WP339.5 | 10-50-100 | 450-150-75 | D | 1.95 |
| FP340 | 20-50-100 | 450-150-75 | F | 2.04 |
| FP341 | 40-90-50 | 450-150-150 | H | 2.40 |
| FP341.2 | 10-100-200 | 450-200-25 | E | 2.04 |
| FP341.24 | 10-100-100 | 450-200-50 | D | 1.94 |
| FP341.28 | 10-150-100 | 450-200-150 | G | 2.55 |
| FP341.3 | 20-50-50 | 450-200-150 | G | 2.16 |
| FP341.5 | 20-60-100 | 450-250-25 | G | 2.19 |
| FP341.6 | 50-160-50 | 450-250-50 | I | 3.09 |
| FP341.8 | 10-80-80 | 450-250-250 | H | 2.61 |
| FP342.2 | 5-80-40 | 450-300-300 | H | 2.49 |
| FP342.5 | 30-15-40 | 450-350-25 | F | 1.92 |
| FP342.7 | 30-40-50 | 450-350-25 | E | 2.22 |
| FP342.8 | 80-50-100 | 450-350-200 | I | 3.51 |
| FP343.1 | 15-20-20 | 450-350-250 | D | 1.77 |
| FP343.4 | 20-15-15 | 450-350-350 | D | 1.95 |
| FP343.6 | 20-10-10 | 450-350-350 | G | 2.10 |
| FP343.9 | 10-30-150 | 450-400-250 | H | 1.80 |
| FP344.2 | 60-80-20 | 450-400-250 | I | 3.27 |
| FP344.4 | 4-40-40 | 450-400-300 | G | 2.22 |
| FP344.5 | 10-30-40 | 450-400-300 | G | 2.19 |
| FP345.2 | 10-10-20 | 450-450-25 | B | 1.44 |
| FP345.5 | 15-15-40 | 450-450-25 | C | 1.65 |
| FP345.8 | 20-20-20 | 450-450-25 | C | 1.83 |
| FP345.3 | 40-20-20 | 450-450-25 | G | 2.10 |
| FP346 | 40-10-20 | 450-450-25 | H | 2.37 |
| FP345.4 | 80-10-125 | 450-450-25 | H | 2.64 |
| FP364 | 80-40-100 | 450-450-25 | I | 3.06 |
| FP365 | 10-10-40 | 450-450-50 | C | 1.47 |
| FP366 | 20-10-50 | 450-450-50 | D | 1.71 |
| FP366.5 | 30-10-150 | 450-450-50 | G | 2.10 |
| FP367 | 35-25-100 | 450-450-50 | H | 2.37 |
| FP367.5 | 40-30-25 | 450-450-50 | G | 2.25 |
| FP368 | 60-40-75 | 450-450-50 | I | 2.76 |
| FP368.3 | 80-20-100 | 450-450-50 | I | 2.88 |

| Mallory No. | Capacity μ f | Working Volts DC | * | Net Each |
|-------------|------------------|------------------|---|----------|
| FP368.5 | 80-50-50 | 450-450-50 | I | \$3.12 |
| FP368.6 | 30-30-125 | 450-450-75 | H | 2.70 |
| FP368.68 | 10-4-20 | 450-450-150 | B | 1.50 |
| FP369.1 | 40-10-40 | 450-450-200 | H | 2.49 |
| FP370 | 40-10-80 | 450-450-200 | H | 2.34 |
| FP375 | 40-40-100 | 450-450-200 | I | 2.97 |
| FP375.2 | 15-10-120 | 450-450-300 | I | 2.70 |
| FP375.6 | 60-20-40 | 450-450-350 | I | 2.94 |
| FP375.7 | 20-10-15 | 450-450-400 | D | 1.86 |
| FP375.8 | 10-10-10 | 450-450-450 | C | 1.56 |
| FP376.1 | 15-15-10 | 450-450-450 | D | 1.77 |
| FP376.3 | 20-10-10 | 450-450-450 | D | 1.74 |
| FP376.5 | 20-20-20 | 450-450-450 | G | 2.16 |
| FP376.6 | 30-10-10 | 450-450-450 | F | 1.89 |
| FP376.7 | 30-30-30 | 450-450-450 | H | 2.67 |
| FP376.8 | 40-10-10 | 450-450-450 | H | 2.49 |
| FP376.9 | 40-40-20 | 450-450-450 | H | 2.67 |
| FP377.1 | 40-40-40 | 450-450-450 | J | 3.12 |
| FP377.2 | 50-40-30 | 450-450-450 | I | 2.94 |
| FP377.3 | 60-10-10 | 450-450-450 | H | 2.34 |
| FP377.6 | 60-30-10 | 450-450-450 | H | 2.70 |
| FP377.7 | 60-10-40 | 450-450-450 | I | 3.41 |
| FP378 | 80-40-20 | 450-450-450 | I | 3.24 |
| FP378.1 | 80-40-30 | 450-450-450 | I | 3.53 |
| FP378.4 | 80-40-40 | 450-450-450 | I | 3.66 |
| FP379.1 | 20-50-20 | 450-50-25 | D | 1.65 |
| FP381.1 | 80-80-50 | 475-150-50 | I | 2.91 |
| FP382.1 | 40-40-100 | 475-250-100 | H | 2.46 |
| FP384 | 20-20-40 | 475-300-25 | F | 1.86 |
| FP384.12 | 30-100-50 | 475-300-50 | H | 2.46 |
| FP384.14 | 5-100-200 | 475-300-150 | I | 3.09 |
| FP384.16 | 10-4-100 | 475-350-50 | B | 2.37 |
| FP384.2 | 10-4-40 | 475-350-300 | F | 1.80 |
| FP384.3 | 20-10-5 | 475-350-350 | C | 1.71 |
| FP384.5 | 10-45-100 | 475-450-50 | G | 2.19 |
| FP384.7 | 40-40-25 | 475-450-50 | H | 2.64 |
| FP385 | 10-40-100 | 475-450-200 | H | 2.52 |
| FP385.5 | 80-80-10 | 475-450-25 | C | 1.40 |
| FP386 | 10-10-5 | 475-475-25 | C | 1.47 |
| FP387.1 | 10-10-150 | 475-475-50 | D | 1.80 |
| FP388.1 | 25-10-20 | 475-475-50 | D | 1.77 |
| FP389.1 | 20-10-100 | 475-475-400 | I | 3.15 |
| FP391.1 | 20-20-60 | 475-475-450 | I | 2.91 |
| FP394 | 10-10-10 | 475-475-475 | D | 1.62 |
| FP396 | 30-30-20 | 475-475-475 | H | 2.67 |
| FP396.2 | 40-10-10 | 475-475-475 | G | 2.31 |
| FP396.1 | 40-20-20 | 475-475-475 | H | 2.85 |
| FP396.12 | 40-30-10 | 475-475-475 | H | 2.70 |
| FP396.14 | 40-30-30 | 475-475-475 | I | 3.09 |
| FP397 | 40-35-10 | 475-475-475 | H | 2.73 |
| FP398 | 10-40-40 | 500-450-450 | H | 2.49 |
| FP399 | 20-10-100 | 500-500-50 | K | 1.95 |
| FP399.5 | 40-20-20 | 500-500-500 | H | 2.85 |
| FP399.55 | 10-40-20 | 500-500-500 | J | 3.42 |

FP-WP—QUADS

| Mallory No. | Capacity μ f | Working Volts DC | * | Net Each |
|-------------|------------------|-------------------|---|----------|
| WP401.5 | 750-600-350-4 | 16-16-16-11.5 rms | F | \$3.24 |
| WP401.8 | 750-750-350-4 | 16-16-16-11.5 rms | F | 3.87 |
| FP403 | 50-20-150-30 | 150-150-15-15 | F | 1.92 |
| FP405.5 | 20-20-160-40 | 150-150-25-25 | F | 1.92 |
| WP405.5 | 50-40-160-40 | 150-150-25-25 | F | 2.01 |
| WP406 | 40-40-200-100 | 150-150-25-25 | F | 2.13 |
| FP407 | 30-20-20-200 | 150-150-150-10 | F | 1.86 |
| FP407.5 | 40-40-20-200 | 150-150-150-10 | F | 1.92 |
| FP408 | 60-40-20-200 | 150-150-150-10 | F | 2.07 |
| FP408.5 | 80-80-10-200 | 150-150-150-10 | F | 2.34 |
| FP408.7 | 300-30-10-100 | 150-150-150-10 | H | 2.73 |
| FP408.9 | 30-30-30-40 | 150-150-150-25 | F | 1.86 |
| FP409 | 40-40-30-20 | 150-150-150-25 | F | 1.86 |
| FP409.4 | 50-40-20-200 | 150-150-150-25 | F | 2.10 |
| FP409.6 | 50-40-10-50 | 150-150-150-25 | F | 1.89 |
| FP410 | 50-50-50-20 | 150-150-150-25 | G | 2.13 |
| FP410.3 | 60-40-20-20 | 150-150-150-25 | F | 1.98 |
| FP410.7 | 60-60-10-60 | 150-150-150-25 | | |

MALLORY

Electrolytic Capacitors

FP-WP—QUADS (CONTINUED)

| Mallory No. | Capacity, μ f | WVDC | * | Net Each |
|-------------|-------------------|-----------------|----|----------|
| FP420.39 | 100-40-25-25 | 350-350-350-350 | I | \$4.20 |
| FP420.41 | 40-120-10-150 | 400-250-250-50 | I | 3.48 |
| FP420.44 | 30-40-50-200 | 400-300-250-150 | I | 3.60 |
| FP420.43 | 80-80-100-100 | 400-350-25-25 | I | 3.78 |
| FP420.45 | 40-80-100-25 | 400-350-200-50 | I | 3.63 |
| FP420.46 | 80-40-20-20 | 400-350-300-300 | I | 3.48 |
| FP420.47 | 20-50-40-80 | 400-350-350-50 | H | 3.00 |
| FP420.5 | 30-60-20-100 | 400-400-15-15 | I | 2.04 |
| FP420.51 | 20-50-50-50 | 400-400-15-15 | F | 1.83 |
| FP420.53 | 20-5-20-20 | 400-400-25-25 | F | 1.83 |
| FP420.54 | 80-50-25-25 | 400-400-25-25 | H | 3.12 |
| FP420.56 | 50-25-100-20 | 400-400-50-25 | H | 2.79 |
| FP420.6 | 80-40-100-20 | 400-400-50-25 | I | 3.36 |
| FP420.7 | 100-10-30-20 | 400-400-50-50 | H | 3.06 |
| FP420.8 | 20-10-10-25 | 400-400-100-25 | F | 1.86 |
| WP420.9 | 20-10-100-100 | 400-400-100-100 | H | 3.15 |
| FP420.95 | 80-40-100-100 | 400-400-200-50 | I | 3.63 |
| FP421 | 5-5-50-80 | 400-400-300-250 | H | 2.79 |
| FP421.2 | 60-40-40-10 | 400-400-350-50 | I | 3.45 |
| FP421.3 | 100-10-20-20 | 400-400-350-50 | I | 3.27 |
| FP421.4 | 30-30-15-20 | 400-400-400-25 | H | 2.58 |
| FP421.6 | 80-40-30-40 | 400-400-400-25 | I | 3.57 |
| FP421.8 | 40-40-40-150 | 400-400-400-50 | I | 3.42 |
| WP421.85 | 40-80-10-100 | 400-400-400-200 | I | 3.36 |
| FP421.87 | 80-40-30-4 | 400-400-400-350 | I | 3.49 |
| FP421.9 | 50-40-30-20 | 400-400-400-400 | I | 3.39 |
| WP422 | 60-40-40-40 | 400-400-400-400 | I | 3.78 |
| FP422.1 | 20-80-20-50 | 450-200-200-50 | G | 2.46 |
| FP422.7 | 60-80-40-20 | 350-250-250-150 | I | 3.39 |
| FP422.8 | 25-100-10-60 | 450-300-300-50 | H | 3.06 |
| FP413X | 40-40-40-20 | 450-300-300-150 | H | 3.15 |
| FP422.9 | 10-100-20-20 | 450-300-300-300 | II | 1.15 |
| FP423.4 | 10-40-100-100 | 450-350-250-50 | H | 3.33 |
| WP423.5 | 10-140-100-20 | 450-350-300-300 | I | 3.87 |
| FP424.1 | 10-100-10-20 | 450-350-350-25 | H | 3.12 |
| FP424.3 | 20-80-50-100 | 450-350-350-50 | I | 3.60 |
| FP425 | 30-40-40-10 | 450-350-350-200 | H | 3.09 |
| FP425.6 | 40-100-20-10 | 450-350-350-350 | I | 3.84 |
| FP425.1 | 80-10-40-30 | 450-400-300-300 | I | 3.48 |
| FP426 | 20-15-20-20 | 450-450-25-25 | F | 2.07 |
| FP426.2 | 80-40-100-100 | 450-450-25-25 | I | 3.48 |
| FP426.5 | 20-20-60-100 | 450-450-150-25 | I | 3.55 |
| FP426.9 | 40-40-125-125 | 450-450-150-25 | I | 3.42 |
| FP427.5 | 10-10-60-100 | 450-450-200-50 | H | 2.31 |
| FP427.6 | 35-25-20-100 | 450-450-200-50 | G | 2.79 |
| FP427.65 | 40-40-100-60 | 450-450-200-200 | I | 3.63 |
| FP427.7 | 10-10-10-50 | 450-450-300-25 | F | 1.89 |
| FP427.9 | 20-20-20-10 | 450-450-350-350 | H | 2.49 |
| FP428 | 40-10-35-10 | 450-450-350-350 | H | 2.76 |
| FP428.4 | 40-40-30-30 | 450-450-350-350 | I | 3.54 |
| FP424 | 15-15-10-20 | 450-450-450-25 | F | 2.10 |
| FP428.9 | 30-30-10-125 | 450-450-450-25 | H | 2.58 |
| FP432 | 40-10-10-250 | 450-450-450-25 | H | 2.82 |
| FP431 | 40-15-10-25 | 450-450-450-25 | G | 2.46 |
| FP430.2 | 40-20-20-25 | 450-450-450-25 | H | 2.76 |
| FP436 | 40-20-20-40 | 450-450-450-25 | II | 2.79 |
| FP429 | 40-30-10-20 | 450-450-450-25 | H | 2.70 |
| FP429.2 | 40-40-30-100 | 450-450-450-25 | J | 3.21 |
| FP430.6 | 40-40-40-40 | 450-450-450-25 | I | 3.30 |
| FP430.9 | 60-40-10-10 | 450-450-450-25 | I | 3.60 |
| FP430.95 | 60-50-5-20 | 450-450-450-25 | I | 2.21 |
| FP430.97 | 20-20-20-20 | 450-450-450-50 | I | 2.49 |
| FP437 | 20-20-20-100 | 450-450-450-50 | G | 2.73 |

| Mallory No. | Capacity, μ f | WVDC | * | Net Each |
|-------------|-------------------|-----------------|----|----------|
| FP431.2 | 40-40-10-25 | 450-450-450-50 | H | \$2.82 |
| FP431.3 | 40-40-10-50 | 450-450-450-50 | I | 2.13 |
| FP431.35 | 04-10-20-40 | 450-450-450-50 | H | 3.03 |
| FP431.4 | 60-40-10-25 | 450-450-450-50 | I | 3.15 |
| FP431.7 | 40-40-10-100 | 450-450-450-100 | I | 3.18 |
| FP433 | 60-10-10-20 | 450-450-450-150 | II | 3.76 |
| FP432.4 | 40-40-30-10 | 450-450-450-200 | I | 3.21 |
| FP432.8 | 35-35-15-25 | 450-450-450-250 | H | 3.91 |
| FP432.9 | 40-20-10-100 | 450-450-450-250 | I | 3.51 |
| FP433.2 | 40-10-10-40 | 450-450-450-350 | II | 3.85 |
| FP433.4 | 40-20-20-20 | 450-450-450-350 | H | 3.00 |
| WP433.6 | 5-5-5-5 | 450-450-450-450 | F | 1.80 |
| FP434 | 10-10-10-10 | 450-450-450-450 | F | 2.01 |
| FP434.5 | 20-10-10-10 | 450-450-450-450 | F | 2.02 |
| FP444 | 20-20-20-20 | 450-450-450-450 | H | 2.82 |
| FP444.4 | 30-15-15-15 | 450-450-450-450 | H | 2.67 |
| FP444.5 | 30-20-20-10 | 450-450-450-450 | H | 2.76 |
| FP444.6 | 30-30-15-10 | 450-450-450-450 | H | 2.82 |
| FP444.8 | 30-30-20-20 | 450-450-450-450 | II | 3.12 |
| FP444.9 | 30-30-30-15 | 450-450-450-450 | I | 3.18 |
| FP444.54 | 40-20-20-4 | 450-450-450-450 | I | 2.79 |
| FP444.95 | 40-20-20-20 | 450-450-450-450 | H | 3.06 |
| FP445 | 35-35-10-5 | 450-450-450-450 | H | 2.76 |
| FP446 | 40-35-10-10 | 450-450-450-450 | H | 2.88 |
| FP447 | 40-40-20-20 | 450-450-450-450 | I | 3.33 |
| FP447.5 | 40-40-30-30 | 450-450-450-450 | I | 3.63 |
| WP447.7 | 40-40-40-40 | 450-450-450-450 | I | 3.78 |
| FP448 | 60-20-20-20 | 450-450-450-450 | I | 3.39 |
| FP448.5 | 60-30-10-2 | 450-450-450-450 | H | 3.06 |
| FP448.6 | 70-10-10-5 | 450-450-450-450 | I | 3.03 |
| FP450 | 80-10-10-10 | 450-450-450-450 | I | 3.66 |
| FP450.08 | 80-40-20-10 | 450-450-450-450 | I | 3.66 |
| FP450.16 | 80-40-20-20 | 450-450-450-450 | I | 3.66 |
| FP450.5 | 40-40-50-80 | 475-250-150-50 | H | 3.00 |
| FP451 | 10-100-10-100 | 475-300-300-25 | II | 2.94 |
| FP451.3 | 10-140-4-100 | 475-300-300-50 | I | 3.18 |
| FP452 | 20-80-20-10 | 475-300-300-300 | H | 3.00 |
| FP452.5 | 10-20-100-50 | 475-350-25-25 | F | 2.07 |
| FP453 | 20-40-80-100 | 475-350-200-100 | I | 3.27 |
| FP453.4 | 10-40-80-100 | 475-350-300-100 | I | 3.33 |
| FP453.8 | 10-30-5-80 | 475-350-350-50 | I | 3.22 |
| FP454.4 | 10-130-20-10 | 475-350-350-350 | I | 3.54 |
| FP454.2 | 20-60-40-10 | 475-350-350-350 | H | 3.12 |
| FP454.6 | 10-40-4-100 | 475-400-350-50 | G | 2.43 |
| FP454.8 | 10-80-40-100 | 475-400-400-50 | I | 3.48 |
| FP455.5 | 25-20-20-100 | 475-450-300-50 | I | 3.73 |
| FP456 | 25-20-40-100 | 475-450-300-50 | I | 3.93 |
| FP456.5 | 10-60-30-125 | 475-450-400-50 | I | 3.33 |
| FP457 | 10-50-30-30 | 475-450-450-25 | H | 2.85 |
| FP457.5 | 10-40-10-20 | 475-450-450-50 | G | 3.37 |
| FP459 | 10-40-10-100 | 475-450-450-50 | G | 3.58 |
| FP461 | 15-15-80-40 | 475-475-300-50 | H | 2.92 |
| FP463 | 50-30-20-20 | 475-475-300-300 | I | 2.97 |
| FP464.9 | 40-10-4-40 | 475-475-350-300 | H | 3.42 |
| FP467 | 20-10-20-100 | 475-475-450-25 | G | 2.52 |
| FP474 | 10-10-10-10 | 475-475-475-475 | F | 2.10 |
| FP474.5 | 20-20-10-10 | 475-475-475-475 | G | 2.61 |
| FP475 | 20-20-20-20 | 475-475-475-475 | H | 3.12 |
| FP475.5 | 40-10-10-10 | 475-475-475-475 | H | 2.79 |
| FP476 | 40-20-10-10 | 475-475-475-475 | H | 3.06 |
| FP485 | 10-20-10-4 | 500-300-300-300 | F | 1.98 |
| FP490 | 30-10-150-30 | 500-450-50-50 | G | 2.52 |
| FP495 | 40-40-8-8 | 500-500-500-500 | I | 3.42 |

FPF AND PWP PRINTED CIRCUIT TYPES

Identical to FP and WP types except designed for inserting terminals in printed circuit boards. Mounting lugs conform with EIA standard RS-154-A. Straight standard terminal $\frac{3}{8}$ " long. May be substituted in applications normally calling for an FP or WP type.

Mallory FPA Adapter Kit—Converts FP's for printed circuit applications on values not listed below. Net Each..... 27c

| Mallory Number | Capacity μ f | Working Volts DC | * | Net Each |
|----------------|------------------|------------------|---|----------|
| PWP030 | 750 | 6 | A | \$1.17 |
| PWP031 | 2500 | 10 | D | 1.74 |
| PWP036 | 400 | 15 | A | 1.17 |
| PWP056 | 400 | 25 | B | 1.38 |
| PWP060 | 1500 | 25 | D | 2.25 |
| PWP063.9 | 100 | 50 | A | 2.99 |
| PWP067 | 1250 | 50 | H | 2.25 |
| FPF116.8 | 14 | 150 | D | 1.26 |
| FPF122 | 160 | 200 | G | 1.26 |
| FPF144 | 20 | 450 | B | 1.08 |
| FPF176.5 | 40 | 500 | D | 1.50 |
| PWP200.13 | 1000-1000 | 16-10 | C | 2.43 |
| PWP200.3 | 250-250 | 20-20 | B | 1.71 |
| PWP200.6 | 500-100 | 20-20 | B | 1.77 |
| PWP200.4 | 800-250 | 20-20 | C | 2.40 |
| PWP201.13 | 400-200 | 25-25 | B | 1.80 |
| PWP201.15 | 1000-1000 | 25-25 | G | 3.90 |
| PWP201.3 | 1500-1500 | 25-25 | H | 4.14 |
| FPF213.1 | 50-30 | 150-150 | B | 1.20 |
| FPF214.3 | 70-30 | 150-150 | B | 1.32 |
| FPF214.4 | 80-40 | 150-150 | C | 1.35 |
| FPF214.7 | 100-50 | 150-150 | D | 1.62 |
| FPF216.4 | 200-200 | 150-150 | H | 2.40 |
| FPF216.45 | 50-100 | 200-150 | F | 1.68 |
| FPF216.5 | 40-20 | 200-200 | F | 1.23 |
| FPF216.1 | 200-5 | 200-200 | G | 2.16 |
| FPF217.86 | 10-10 | 300-300 | C | 1.17 |
| FPF217.11 | 2-20 | 450-400 | B | 1.17 |

| Mallory Number | Capacity μ f | Working Volts DC | * | Net Each |
|----------------|------------------|------------------|---|----------|
| FPF284.1 | 30-30 | 500-500 | H | \$1.95 |
| PWP300.3 | 250-250-50 | 16-16-16 | B | 1.95 |
| PWP300.4 | 500-250-250 | 16-16-16 | C | 2.58 |
| FPF302.38 | 70-30-100 | 150-150-10 | C | 1.68 |
| PWP302.55 | 80-60-250 | 150-150-10 | D | 2.04 |
| FPF302.75 | 90-40-400 | 150-150-10 | D | 2.10 |
| FPF311.1 | 40-20-20 | 150-150-25 | B | 1.38 |
| FPF311.12 | 70-30-20 | 150-150-25 | D | 2.40 |
| FPF311.63 | 50-30-40 | 150-150-150 | C | 1.92 |
| FPF311.53 | 60-60-40 | 150-150-150 | C | 1.83 |
| PWP311.75 | 80-60-20 | 150-150-150 | D | 1.86 |
| PWP315 | 80-100-40 | 160-160-160 | D | 2.04 |
| PWP326.16 | 10-20-10 | 300-150-150 | B | 1.29 |
| FPF326.4 | 60-10-25 | 300-300-25 | F | 2.25 |
| PWP326.77 | 150-100-30 | 300-300-300 | I | 3.81 |
| FPF327.95 | 20-20-1000 | 350-350-15 | F | 2.55 |
| FPF330.4 | 10-10-60 | 350-350-300 | F | 1.92 |
| FPF330.6 | 20-20-20 | 350-350-350 | D | 1.92 |
| FPF330.8 | 40-40-40 | 350-350-350 | H | 3.33 |
| FPF333.16 | 40-30-20 | 400-350-300 | G | 2.37 |
| FPF368.9 | 40-30-8 | 450-450-150 | G | 2.25 |
| FPF397.5 | 40-40-60 | 500-200-50 | G | 2.37 |
| FPF397.7 | 40-40-20 | 500-350-250 | H | 2.67 |
| FPF411.9 | 60-60-40-10 | 150-150-150-150 | G | 2.19 |
| FPF419.42 | 20-20-20-100 | 300-300-300-150 | G | 2.73 |
| FPF420.17 | 40-20-10-100 | 350-350-350-50 | G | 2.58 |
| FPF420.52 | 40-30-20-20 | 400-350-350-350 | H | 2.97 |

***SIZES**

| Key | Diameter | Length | Key | Diameter | Length |
|-----|-----------------|--------|-----|-------------------|-------------------|
| A | $\frac{3}{8}$ " | 2" | G | 1 $\frac{3}{8}$ " | 2 $\frac{1}{2}$ " |
| B | 1" | 2" | H | 1 $\frac{3}{8}$ " | 3" |
| C | 1" | | | | |

P. R. MALLORY & CO. Inc.
MALLORY

Electrolytic Capacitors

TYPES TC-TCD-TCS AND TCT TUBULAR DRY ELECTROLYTICS



Tolerance: Up to 50% WVDC, -10%
 +250% 51 through 350 WVDC, -10%
 +100% over 350 WVDC, -10%, +50%

Rated 85° C. except units marked *.
 65° C. All TC's with 1/8" dia. or more and TCD, TCS and TCT types have fixed mounting strap. Types TC and TCN are single section; have 3" bare solid copper tinned leads. Type TCD are dual common negative; have 7" insulated wire leads. Type TCS are dual separate section; have soldering lugs. Type TCT are triple common negative with 7" insulated wire leads.

| No. TC- | Cap., μf | WV DC | Size, In. Dia. x Lg. | Net Each |
|---------|----------|-------|----------------------|----------|
| N505† | 5 | 50 | 3/8 x 1 1/4 | \$0.90 |
| N5010† | 10 | 50 | 3/8 x 1 1/4 | .75 |
| N5099† | 100 | 50 | 3/8 x 1 1/4 | 1.29 |
| N510† | 4 | 150 | 3/8 x 1 1/4 | .75 |
| N1512† | 12 | 150 | 3/8 x 1 1/4 | 1.01 |
| N1540† | 40 | 150 | 3/8 x 1 1/4 | 1.30 |
| N1551† | 50 | 150 | 3/8 x 2 1/4 | 1.34 |
| N3520† | 20 | 350 | 1 1/4 x 2 1/4 | 1.08 |
| N511† | 10 | 450 | 1 1/4 x 2 1/4 | .99 |

†Non-polar.

TYPE TC SINGLE SECTION

| No. TC- | Cap., μf | WV DC | Size, In. Dia. x Lg. | Net Each |
|---------|----------|-------|----------------------|----------|
| 304 | 200 | 3 | 1 1/4 x 1 1/4 | \$0.69 |
| 305 | 500 | 3 | 1 1/4 x 1 1/4 | .84 |
| 310 | 1000 | 3 | 1 1/4 x 1 1/4 | 1.02 |
| 605 | 500 | 6 | 1 1/4 x 1 1/4 | .93 |
| 610 | 1000 | 15 | 1 1/4 x 2 1/4 | 1.14 |
| 1502 | 20 | 15 | 1 1/4 x 1 1/4 | .84 |
| 1505 | 500 | 15 | 1 1/4 x 2 1/4 | 1.05 |
| 1501 | 1000 | 15 | 1 1/4 x 2 1/4 | 1.08 |
| 22 | 10 | 25 | 7/8 x 2 1/4 | .60 |
| 26 | 25 | 25 | 7/8 x 3 1/4 | .60 |
| 29 | 50 | 25 | 7/8 x 1 1/4 | .66 |
| 2501 | 100 | 25 | 1 1/4 x 1 1/4 | .81 |
| 25015 | 150 | 25 | 1 1/4 x 1 1/4 | .87 |
| 2505 | 500 | 25 | 1 1/4 x 2 1/4 | 1.38 |
| 31 | 1 | 50 | 7/8 x 1 1/4 | .54 |
| 302 | 2 | 50 | 7/8 x 1 1/4 | .54 |
| 30 | 5 | 50 | 7/8 x 3/4 | .60 |
| 32 | 10 | 50 | 7/8 x 3/4 | .60 |
| 36 | 25 | 50 | 1 1/4 x 1 1/4 | .63 |
| 39 | 50 | 50 | 1 1/4 x 1 1/4 | .74 |
| 3501 | 100 | 50 | 1 1/4 x 1 1/4 | .84 |
| 50025 | 250 | 50 | 1 1/4 x 1 1/4 | 1.05 |
| 40 | 5 | 150 | 7/8 x 1 1/4 | .60 |
| 41 | 8 | 150 | 7/8 x 1 1/4 | .63 |
| 42 | 10 | 150 | 7/8 x 1 1/4 | .63 |
| 43 | 12 | 150 | 7/8 x 1 1/4 | .66 |
| 44 | 16 | 150 | 7/8 x 1 1/4 | .69 |
| 45 | 20 | 150 | 7/8 x 1 1/4 | .72 |
| 47 | 30 | 150 | 7/8 x 1 1/4 | .78 |
| 48 | 40 | 150 | 7/8 x 1 1/4 | .81 |
| 49 | 50 | 150 | 7/8 x 1 1/4 | .84 |
| 492 | 80 | 150 | 1 1/4 x 2 1/4 | .96 |
| 493 | 100 | 150 | 1 1/4 x 2 1/4 | 1.05 |
| 495 | 150 | 150 | 1 1/4 x 2 1/4 | 1.14 |
| 496 | 200 | 150 | 1 1/4 x 2 1/4 | 1.58 |
| 499 | 300 | 150 | 1 1/4 x 3 | 1.53 |
| 50X | 5 | 250 | 1 1/4 x 1 1/4 | .63 |
| 51 | 8 | 250 | 1 1/4 x 1 1/4 | .69 |
| 52 | 10 | 250 | 1 1/4 x 1 1/4 | .72 |
| 53 | 12 | 250 | 1 1/4 x 1 1/4 | .75 |
| 54 | 16 | 250 | 1 1/4 x 1 1/4 | .78 |
| 55 | 20 | 250 | 1 1/4 x 1 1/4 | .81 |
| 58 | 40 | 250 | 1 1/4 x 1 1/4 | 1.02 |
| 59 | 50 | 250 | 1 1/4 x 1 1/4 | 1.02 |
| 1265 | 100 | 250 | 1 1/4 x 2 1/4 | 1.47 |
| 595 | 2 | 350 | 7/8 x 1 1/4 | 1.26 |
| 60 | 5 | 350 | 1 1/4 x 1 1/4 | .63 |
| 61 | 8 | 350 | 1 1/4 x 1 1/4 | .72 |
| 62 | 10 | 350 | 1 1/4 x 1 1/4 | .75 |
| 63 | 12 | 350 | 1 1/4 x 1 1/4 | .78 |
| 64 | 16 | 350 | 1 1/4 x 1 1/4 | .84 |
| 65 | 20 | 350 | 1 1/4 x 1 1/4 | .87 |
| 68 | 60 | 350 | 1 1/4 x 2 1/4 | 1.17 |
| 69 | 100 | 350 | 1 1/4 x 4 | 1.86 |
| 692 | 150 | 350 | 1 1/4 x 3 1/4 | 3.16 |
| 695 | 2 | 450 | 1 1/4 x 1 1/4 | .66 |
| 697 | 4 | 450 | 1 1/4 x 1 1/4 | .97 |
| 70 | 5 | 450 | 1 1/4 x 1 1/4 | .72 |
| 71 | 8 | 450 | 1 1/4 x 1 1/4 | .75 |
| 72 | 10 | 450 | 1 1/4 x 1 1/4 | .78 |
| 73 | 12 | 450 | 1 1/4 x 1 1/4 | .81 |
| 74 | 16 | 450 | 1 1/4 x 1 1/4 | .84 |
| 75 | 20 | 450 | 1 1/4 x 1 1/4 | .87 |
| 77 | 30 | 450 | 1 1/4 x 2 1/4 | 1.02 |
| 78 | 40 | 450 | 1 1/4 x 2 1/4 | 1.08 |
| 79 | 50 | 450 | 1 1/4 x 2 1/4 | 1.26 |
| 795 | 60 | 450 | 1 1/4 x 2 1/4 | 1.38 |
| 80 | 80 | 450 | 1 1/4 x 4 | 1.68 |
| 805 | 100 | 450 | 1 1/4 x 3 | 1.92 |
| 81* | 10 | 500 | 1 1/4 x 1 1/4 | .81 |
| 82 | 10 | 500 | 1 1/4 x 3 | 1.62 |
| 83* | 20 | 500 | 1 1/4 x 1 1/4 | .96 |
| 84* | 30 | 500 | 1 1/4 x 2 1/4 | 1.05 |
| 90 | 4 | 600 | 3/4 x 2 1/4 | 2.30 |
| 92 | 10 | 600 | 3/4 x 2 1/4 | 1.77 |
| N308† | 5.22 | 3 | 1 1/4 x 2 | 1.32 |
| 420† | 1.52 | 4 | 1 1/4 x 2 1/4 | 2.10 |
| 421† | 1.52 | 6 | 1 1/4 x 2 1/4 | 1.80 |
| N105† | 5 | 10 | 7/8 x 1 1/4 | .69 |
| N106† | 6 | 10 | 7/8 x 1 1/4 | .69 |
| N108† | 8 | 10 | 7/8 x 1 1/4 | .69 |
| N1025† | 25 | 10 | 7/8 x 2 1/4 | .84 |
| N412† | 500 | 10 | 1 1/4 x 2 1/4 | 1.20 |
| N1550† | 500 | 15 | 1 1/4 x 2 1/4 | 1.32 |
| N415† | 1000 | 15 | 1 1/4 x 3 1/4 | 1.71 |
| N2516† | 16 | 25 | 7/8 x 1 1/4 | .60 |
| N425† | 100 | 25 | 1 1/4 x 1 1/4 | 1.02 |
| N502† | 2 | 50 | 7/8 x 1 1/4 | .69 |
| N503† | 3 | 50 | 7/8 x 1 1/4 | .72 |
| N504† | 4 | 50 | 7/8 x 1 1/4 | .75 |

†Non-polar. †15750 cps. †60 cps. †120 cps.

TCD DUAL COMMON NEGATIVE

| No. TCD- | Cap., μf | WVDC | Size, In. Dia. x Lg. | Net Each |
|----------|----------|---------|----------------------|----------|
| 204 | 250-1000 | 10-6 | 1 1/4 x 2 1/4 | \$1.68 |
| 16 | 500-100 | 16-16 | 1 1/4 x 2 1/4 | .78 |
| 26 | 25-25 | 25-25 | 1 1/4 x 1 1/4 | .84 |
| 40 | 10-10 | 100-100 | 1 1/4 x 1 1/4 | .87 |
| 45 | 20-20 | 150-150 | 1 1/4 x 1 1/4 | .99 |
| 47 | 30-30 | 150-150 | 1 1/4 x 1 1/4 | 1.11 |
| 485 | 40-20 | 150-150 | 1 1/4 x 1 1/4 | 1.05 |
| 475 | 40-30 | 150-150 | 1 1/4 x 1 1/4 | 1.08 |
| 48 | 40-40 | 150-150 | 1 1/4 x 2 1/4 | 1.11 |
| 497 | 50-30 | 150-150 | 1 1/4 x 2 1/4 | 1.17 |
| 49 | 50-50 | 150-150 | 1 1/4 x 2 1/4 | 1.26 |
| 50 | 60-20 | 150-150 | 1 1/4 x 2 1/4 | 1.32 |
| 4975 | 80-40 | 150-150 | 1 1/4 x 2 1/4 | 1.41 |
| 498 | 80-50 | 150-150 | 1 1/4 x 2 1/4 | 1.41 |
| 2155 | 100-100 | 150-150 | 1 1/4 x 4 | 1.92 |
| 46 | 30-20 | 200-200 | 1 1/4 x 2 1/4 | 1.17 |
| 2165 | 30-30 | 200-200 | 1 1/4 x 2 1/4 | 1.32 |
| 2169 | 50-75 | 250-50 | 1 1/4 x 2 1/4 | 1.44 |
| 2174 | 100-150 | 250-50 | 1 1/4 x 4 | 2.16 |
| 2173 | 8-8 | 250-250 | 1 1/4 x 3 1/4 | .96 |
| 52 | 10-10 | 250-250 | 1 1/4 x 2 1/4 | .99 |
| 55 | 20-20 | 250-250 | 1 1/4 x 2 1/4 | 1.11 |
| 2274 | 40-40 | 300-300 | 1 1/4 x 3 1/4 | 1.77 |
| 58 | 80-40 | 300-300 | 1 1/4 x 4 | 2.07 |
| 62 | 10-10 | 350-350 | 1 1/4 x 2 1/4 | 1.02 |
| 65 | 20-20 | 350-350 | 1 1/4 x 2 1/4 | 1.35 |
| 2297 | 40-50 | 450-50 | 1 1/4 x 3 1/4 | 1.50 |
| 2302 | 30-60 | 450-300 | 1 1/4 x 3 1/4 | 1.92 |
| 71 | 8-8 | 450-450 | 1 1/4 x 2 1/4 | 1.02 |
| 72 | 10-10 | 450-450 | 1 1/4 x 2 1/4 | 1.11 |
| 74 | 15-15 | 450-450 | 1 1/4 x 3 1/4 | 1.32 |
| 745 | 20-8 | 450-450 | 1 1/4 x 2 1/4 | 1.26 |
| 75 | 20-20 | 450-450 | 1 1/4 x 3 1/4 | 1.50 |
| 77 | 30-30 | 450-450 | 1 1/4 x 4 | 1.80 |
| 78 | 40-40 | 450-450 | 1 1/4 x 4 | 2.04 |

TCS DUAL SEPARATE SECTION

| No. TCS- | Cap. μf | WV DC* | Size, In. Dia. x Lg. | Net Each |
|----------|---------|--------|----------------------|----------|
| 44 | 15-15 | 150 | 1 1/4 x 2 1/4 | \$1.20 |
| 45 | 20-20 | 150 | 1 1/4 x 2 1/4 | 1.26 |
| 47 | 30-30 | 150 | 1 1/4 x 2 1/4 | 1.35 |
| 48 | 40-40 | 150 | 1 1/4 x 2 1/4 | 1.41 |
| 49 | 120-120 | 150 | 1 1/4 x 3 1/4 | 1.98 |
| 505 | 70-70 | 175 | 1 1/4 x 3 1/4 | 2.16 |
| 52 | 10-10 | 250 | 1 1/4 x 2 1/4 | 1.26 |
| 55 | 20-20 | 250 | 1 1/4 x 2 1/4 | 1.41 |
| 61 | 8-8 | 350 | 1 1/4 x 2 1/4 | 1.65 |
| 64 | 15-15 | 350 | 1 1/4 x 2 1/4 | 1.65 |
| 71 | 8-8 | 450 | 1 1/4 x 2 1/4 | 1.65 |
| 74 | 15-15 | 450 | 1 1/4 x 2 1/4 | 1.65 |
| 75 | 20-20 | 450 | 1 1/4 x 3 1/4 | 1.89 |

TCT TRIPLE COMMON NEGATIVE

| No. TCT- | Cap. μf | Volts† | Size, In. Dia. x L. | Net Each |
|----------|-----------|-------------|---------------------|----------|
| 3053 | 20-20-20 | 150-150-25 | 1 1/4 x 2 1/4 | \$1.23 |
| 3055 | 30-30-20 | 150-150-25 | 1 1/4 x 2 1/4 | 1.32 |
| 3094 | 50-30-200 | 150-150-25 | 1 1/4 x 2 1/4 | 1.65 |
| 3109 | 20-10-10 | 150-150-150 | 1 1/4 x 3 1/4 | 1.20 |
| 3112 | 20-20-20 | 150-150-150 | 1 1/4 x 3 1/4 | 1.29 |
| 3113 | 30-30-30 | 150-150-150 | 1 1/4 x 3 1/4 | 1.43 |
| 3114 | 40-20-20 | 150-150-150 | 1 1/4 x 2 1/4 | 1.35 |
| 3105 | 40-30-20 | 150-150-150 | 1 1/4 x 1 1/4 | 1.38 |
| 3116 | 40-40-20 | 150-150-150 | 1 1/4 x 2 1/4 | 1.41 |
| 3115 | 40-40-40 | 150-150-150 | 1 1/4 x 2 1/4 | 1.47 |
| 3107 | 50-30-20 | 150-150-150 | 1 1/4 x 2 1/4 | 1.41 |
| 3110 | 60-30-10 | 150-150-150 | 1 1/4 x 2 1/4 | 2.22 |
| 3119 | 60-50-20 | 150-150-150 | 1 1/4 x 2 1/4 | 1.62 |
| 3117 | 80-40-20 | 150-150-150 | 1 1/4 x 2 1/4 | 1.65 |
| 3118 | 80-50-50 | 150-150-150 | 1 1/4 x 4 | 1.86 |
| 3120 | 80-80-20 | 150-150-150 | 1 1/4 x 3 | 2.47 |
| 3285 | 40-30-40 | 350-250-150 | 1 1/4 x 4 | 1.98 |
| 3405 | 30-50-100 | 450-150-25 | 1 1/4 x 4 | 1.92 |
| 3432 | 30-30-30 | 450-350-250 | 1 1/4 x 4 | 2.25 |
| 3764 | 40-20-10 | 450-450-450 | 1 1/4 x 4 | 2.25 |

*Each section †Non-polarized.

CLIPS FOR TC CAPACITORS

| Mall. No. | Spring Clip for | Size, In. | Net Each |
|-----------|-----------------|-------------|----------|
| TH-13 | TC | 3/8-9/16 | 3c |
| TH-15 | TC | 5/8-1 1/4 | 3c |
| TH-17 | TC | 3/4-1 1/4 | 3c |
| TH-19 | TC and FP | 3/4-1 1/4 | 3c |
| TH-21 | TC | 7/8-1 1/4 | 3c |
| TH-23 | TC and FP | 1-1 1/4 | 3c |
| TH-25 | TC and FP | 1 1/4-1 1/4 | 6c |

TYPE TT TINY TUBULAR ELECTROLYTIC CAPACITORS

High purity, etched aluminum plate for low leakage current limits; high ratings and small size. Conforms to EIA standards RS-154-A. Axial leads 1 1/4" long. Temperature Range: -20°, +85° C. Tolerance: Up to 50% WVDC, -10%, +150%; above 50 WVDC, -10%, +100%.

| Mallory Number | Cap., μf | WV DC | Size, In.* Dia. x Lgth. | Net Each |
|----------------|----------|-------|-------------------------|----------|
| TT1X5 | 5 | 1 | 7/8 x 1 1/4 | \$0.75 |
| TT2X150 | 150 | 2 | 7/8 x 1 1/4 | .90 |
| TT3X10 | 10 | 3 | 7/8 x 1 1/4 | .75 |
| TT3X25 | 25 | 3 | 7/8 x 1 1/4 | .75 |
| TT3X40 | 40 | 3 | 7/8 x 1 1/4 | .75 |
| TT3X50 | 50 | 3 | 7/8 x 1 1/4 | .84 |
| TT3X110 | 110 | 3 | 7/8 x 1 1/4 | .84 |
| TT3X200 | 200 | 3 | 7/8 x 1 1/4 | .90 |
| TT3X250 | 250 | 3 | 7/8 x 1 1/4 | .96 |
| TT3X300 | 300 | 3 | 7/8 x 1 1/4 | .96 |
| TT6X2 | 2 | 6 | 7/8 x 1 1/4 | .75 |
| TT6X3 | 3 | 6 | 7/8 x 1 1/4 | .75 |
| TT6X4 | 4 | 6 | 7/8 x 1 1/4 | .75 |
| TT6X5 | 5 | 6 | 7/8 x 1 1/4 | .81 |
| TT6X8 | 8 | 6 | 7/8 x 1 1/4 | .81 |
| TT6X10 | 10 | 6 | 7/8 x 1 1/4 | .81 |
| TT6X15 | 15 | 6 | 7/8 x 1 1/4 | .84 |
| TT6X25 | 25 | 6 | 7/8 x 1 1/4 | .84 |
| TT6X30 | 30 | 6 | 7/8 x 1 1/4 | .84 |
| TT6X40 | 40 | 6 | 7/8 x 1 1/4 | |

MALLORY

Electrolytic Capacitors

HIGH TEMPERATURE WAX TUBULARS

Single-ended, wax-dipped cardboard sleeve for high capacity at high voltages and temperatures. FP construction; 5" flexible leads.



Tolerance: Up to 50 WVDC, -10% +25%; 51 to 350 WVDC, -10% +100%; over 351 WVDC, -10% +50%. No. WQ240 is double-ended.

| Mall. No. | Cap. μ f @ WVDC | Size, In. D. x L. | Net Each |
|-----------|-------------------------------------|-------------------|----------|
| WD270 | 120-120 @ 150 | 1 x 4 3/8 | \$2.61 |
| WD210 | 50-30 @ 150 | 7/8 x 2 3/8 | 1.17 |
| WD215 | 50-50 @ 150 | 7/8 x 2 3/8 | 1.26 |
| WD220 | 70-30 @ 150 | 7/8 x 2 3/8 | 1.29 |
| WD235 | 100-50 @ 150 | 1 x 3 3/8 | 1.59 |
| WD251 | 250-50 @ 150 | 1 1/8 x 2 3/8 | 1.98 |
| WS342 | 200 @ 200 | 1 1/8 x 3 3/8 | 1.74 |
| WS427 | 140 @ 300 | 1 1/4 x 3 3/8 | 1.89 |
| WS560 | 150 @ 400 | 1 1/4 x 4 3/8 | 2.79 |
| WS730 | 100 @ 450 | 1 1/4 x 3 3/8 | 2.76 |
| WT217 | 40-40-20 @ 150 | 1 x 2 3/8 | 1.41 |
| WT460 | 60-60-4 @ 350 | 1 1/4 x 3 3/8 | 3.15 |
| WD340 | 60-125 @ 200-50 | 1 1/8 x 2 3/8 | 1.44 |
| WD345 | 5-200 @ 200-200 | 1 1/8 x 3 3/8 | 2.13 |
| WD425 | 150-100 @ 300-300 | 1 1/8 x 3 3/8 | 2.31 |
| WD355 | 250-120 @ 200-200 | 1 1/8 x 3 3/8 | 2.82 |
| WD410 | 200-100 @ 300-50 | 1 1/8 x 4 3/8 | 2.94 |
| WD446 | 100-150 @ 350-300 | 1 1/8 x 4 3/8 | 3.42 |
| WD450 | 5-140 @ 350-350 | 1 1/8 x 4 3/8 | 2.25 |
| WT312 | 250-120-50 @ 150-150-25 | 1 1/8 x 3 3/8 | 2.61 |
| WT630 | 5-40-80 @ 450-400-400 | 1 1/8 x 4 3/8 | 2.73 |
| WT700 | 10-10-150 @ 150-150-50 | 1 1/8 x 2 3/8 | 1.65 |
| WT458 | 60-60-60 @ 350-350-300 | 1 1/4 x 4 3/8 | 2.85 |
| WT455 | 100-40-40 @ 350-350-250 | 1 1/8 x 4 3/8 | 3.42 |
| WT407 | 70-50-30 @ 300-300-250 | 1 1/4 x 3 3/8 | 2.52 |
| WT430 | 100-60-100 @ 300-300-50 | 1 1/4 x 4 3/8 | 3.06 |
| WT434 | 120-40-100 @ 300-300-50 | 1 1/4 x 4 3/8 | 3.09 |
| WT449 | 140-5-200 @ 350-300-200 | 1 1/8 x 4 3/8 | 4.11 |
| WT240 | 60-60-100 @ 150-150-25 | 1 1/8 x 2 3/8 | 2.73 |
| WT316 | 150-150-150 @ 150-150-150 | 1 1/8 x 4 3/8 | 2.91 |
| WT320 | 200-250-10 @ 150-150-150 | 1 1/4 x 4 3/8 | 2.73 |
| WT201 | 60-40-250 @ 150-150-15 | 1 x 2 3/8 | 1.95 |
| WT447 | 10-100-200 @ 350-150-150 | 1 1/8 x 3 3/8 | 2.55 |
| WQ209 | 60-40-20-200 @ 150-150-150-10 | 1 1/8 x 3 | 2.07 |
| WQ240 | 10-10-40-200 @ 150-150-150-35 | 1 1/8 x 2 3/8 | 1.95 |
| WQ290 | 60-50-40-20 @ 150-150-150-150 | 7/8 x 2 3/8 | 2.10 |
| WQ402 | 150-100-20-100 @ 300-300-300-25 | 1 1/4 x 4 3/8 | 4.17 |
| WQ775 | 10-20-20-40 @ 450-450-450-450 | 1 1/4 x 3 3/8 | 2.82 |
| WQ650 | 10-40-80-100 @ 450-300-400-50 | 1 1/4 x 4 3/8 | 3.30 |
| WQ505 | 5-30-140-200 @ 300-200-350-200 | 1 1/2 x 4 3/8 | 4.50 |
| WQ511 | 140-5-200-100 @ 350-300-200-150 | 1 1/2 x 4 3/8 | 4.92 |
| WQ525 | 50-40-20-50 @ 350-350-350-50 | 1 1/4 x 3 3/8 | 2.97 |
| WQ520 | 150-100-20-100 @ 350-350-350-50 | 1 1/4 x 4 3/8 | 4.77 |
| WQ640 | 10-80-40-40 @ 450-300-300-300 | 1 1/4 x 4 3/8 | 3.21 |
| WQ795 | 20-20-40-40 @ 450-450-450-450 | 1 1/4 x 4 3/8 | 3.27 |
| WQ230 | 40-40-20-20 @ 150-150-150-25 | 1 1/8 x 2 3/8 | 1.83 |
| WQ215 | 40-20-20-100 @ 150-150-150-25 | 1 1/8 x 2 3/8 | 1.98 |
| WQ250 | 60-40-40-20 @ 150-150-150-25 | 1 1/8 x 2 3/8 | 1.95 |
| WQ635 | 100-25-10-50 @ 300-450-300-50 | 1 1/8 x 3 3/8 | 2.82 |
| WQ405 | 120-40-40-10 @ 300-300-300-250 | 1 1/8 x 4 3/8 | 2.91 |
| WQ349 | 40-20-20-100 @ 350-300-250-50 | 1 1/8 x 2 3/8 | 2.70 |
| WV404 | 40-20-20-20-50 @ 300-300-300-300-50 | 1 1/4 x 3 3/8 | 3.21 |

ELECTROLYTIC CAPACITORS

Designed for antenna rotators.

| ST75 | 70 @ 50 v. AC | 1 1/8 x 2 3/8 | \$0.75 |
|-------|--------------------|---------------|--------|
| ST100 | 100-200 @ 50 v. AC | 1 x 2 3/8 | 1.02 |

PRINTED CIRCUIT HIGH TEMPERATURE WAX TUBULARS

Same as W Series, except designed for printed circuit applications.

PWD SERIES

| Mallory No. | Cap. μ f | WV DC* | Size, In. Dia. x L. | Net Each |
|-------------|--------------|--------|---------------------|----------|
| PWD211 | 50-30 | 150 | 1 x 2 | \$0.86 |
| PWD221 | 50-50 | 150 | 1 x 2 | .94 |
| PWD231 | 75-30 | 150 | 1 x 2 3/8 | .97 |
| PWD240 | 80-30 | 150 | 1 x 2 3/8 | .97 |
| PWD252 | 80-50 | 150 | 1 x 2 3/8 | 1.06 |
| PWD263 | 100-50 | 150 | 1 x 2 3/8 | 1.88 |

*WVDC each section.

PWT SERIES

| Mallory No. | Cap. μ f | WVDC | Size, In. Dia. x L. | Net Each |
|-------------|----------------------|------|---------------------|----------|
| PWT205 | 30-25-20 | 150* | 1 x 1 3/4 | \$1.73 |
| PWT225 | 50-30-20 | 150* | 1 x 2 | 1.83 |
| PWT245 | 60-20-5 | 150* | 1 x 3 | 1.77 |
| PWT260 | 60-80-20 | 150* | 1 x 2 3/8 | 2.01 |
| PWT275 | 80-10-150 150-150-25 | 150* | 1 x 2 3/8 | 2.03 |
| PWT285 | 80-60-250 150-150-25 | 150* | 1 1/8 x 2 3/8 | 2.19 |
| PWT360 | 60-120-20 200* | 150* | 1 1/8 x 2 3/8 | 2.55 |

*WVDC each section.

PET SERIES MINIATURE BAKELITE ELECTROLYTICS

Miniaturized version of FP and TC types designed for printed circuit applications. Low-impedance electrolyte assure long shelf and operating life, outstanding stability, and higher capacitance for the size. Enclosed in bakelite case with epoxy resin end seal. **Type PET-A** has axial leads 1 1/2" long. **Type PET** is single-end design for p-e board mounting; leads 1" long. **Temperature Range:** -30°C to +85°C. **Tolerance:** -10%, +150% at 25°C.

| Mallory No. PET- | Cap. μ f | WV DC | Size, In. | Net Each |
|------------------|--------------|-------|---------------|----------|
| 120 | 1000 | 1 | 3/8 x 1 1/8 | \$1.14 |
| 118 | 8 | 3 | 3/8 x 5/8 | .87 |
| 122 | 15 | 3 | 3/8 x 5/8 | .87 |
| 130 | 30 | 3 | 3/8 x 3/4 | .87 |
| 140 | 40 | 3 | 3/8 x 3/4 | .90 |
| 180 | 150 | 3 | 7/8 x 1 1/4 | .90 |
| 1260 | 60 | 6 | 7/8 x 3/4 | .96 |
| 1340 | 10 | 10 | 3/8 x 3/8 | .87 |
| 1400 | 100 | 10 | 3/8 x 7/8 | 1.08 |
| 1500 | 100 | 12 | 3/8 x 7/8 | 1.14 |
| 1535 | 6 | 15 | 3/8 x 5/8 | .90 |
| 1570 | 20 | 15 | 3/8 x 3/4 | .93 |
| 1575 | 50 | 15 | 7/8 x 3/4 | .99 |
| 1760 | 10 | 25 | 3/8 x 3/4 | .93 |
| 1930 | 2 | 50 | 3/8 x 3/8 | .90 |
| 1935 | 4 | 50 | 3/8 x 3/4 | .99 |
| 1960 | 25 | 50 | 7/8 x 1 | .99 |
| 1980 | 50 | 50 | 7/8 x 1 1/8 | 1.11 |
| 2290 | 100-40 | 6-3 | 1 1/2 x 3/8 | 1.26 |
| 2410 | 200-20 | 8-8 | 1 1/2 x 1 1/2 | 1.47 |
| 2365C* | 50-25 | 10-10 | 1 1/2 x 3/4 | 1.20 |
| 2370 | 50-50 | 10-10 | 1 1/2 x 1 | 1.29 |
| 3400 | 100-100-65 | 8-8-8 | 3/8 x 1 | 1.56 |
| A130 | 750 | 3 | 5/8 x 1 3/8 | 1.17 |
| A1675 | 65 | 18 | 7/8 x 1 1/8 | 1.02 |
| A2300 | 250-100 | 7-3 | 1 1/2 x 1 1/2 | 1.47 |
| A2385 | 80-50 | 10-10 | 1 1/2 x 1 1/2 | 1.35 |
| A2395 | 100-40 | 10-3 | 1 1/2 x 1 1/2 | 1.35 |

*Uses common positive construction.

BATHTUB DRY ELECTROLYTICS

For filter and bypass circuits under extreme operating conditions. Corrosion-resistant, hot-tinned steel case is hermetically sealed with internal insulation from case. Two solder lug terminals and mounting flanges. Temp. range, -55°C to +65°C. Tol.: Up to 50 WVDC, -10% +150%; 100-150 WVDC, -10% +100%; above 350 WVDC, -10%, +50%.

| Mall. No. | Cap. μ f | WV DC | Size, inches H. x W. x L. | Net Each |
|-----------|--------------|-------|---------------------------|----------|
| BS26 | 25 | 25 | 3/4 x 1 x 1 1/4 | \$2.70 |
| BS29 | 50 | 25 | 3/4 x 1 x 1 1/4 | 2.70 |
| BS36 | 25 | 50 | 3/4 x 1 x 1 1/4 | 2.70 |
| BS39 | 50 | 50 | 7/8 x 1 x 1 1/4 | 2.82 |
| BS45 | 20 | 150 | 7/8 x 1 x 1 1/4 | 2.82 |
| BS48 | 40 | 150 | 1 x 1 1/4 x 1 1/4 | 2.91 |
| BS62 | 10 | 300 | 7/8 x 1 x 1 1/4 | 2.85 |
| BS65 | 20 | 300 | 1 1/8 x 1 1/4 x 1 1/4 | 2.94 |
| BS81* | 8 | 500 | 1 x 1 3/8 x 2 | 3.45 |
| BS91* | 8 | 600 | 1 x 1 3/8 x 2 | 3.51 |

*Mtg. centers 2 3/8"; all others 2 1/8".

OCTAL BASE, PLUG-IN ELECTROLYTICS



Designed for military and communications parts replacement. Ideal for designers and builders. Meet all MIL-C-62 requirements. Plug-in base for easy replacement in standard octal tube socket. Can be mounted in any position; though if in inverted position, provisions should be made to hold unit securely in socket.

| Mallory No. | Cap. μ f | WV DC | Size, In. Dia. x L. | Net Each |
|-------------|--------------|------------|---------------------|----------|
| PB110 | 20 | 150 | 1 1/8 x 2 1/2 | \$2.37 |
| PB114 | 40 | 150 | 1 1/8 x 2 1/2 | 2.46 |
| PB139 | 100 | 350 | 1 1/8 x 3 1/2 | 3.51 |
| PB142 | 10 | 450 | 1 1/8 x 2 1/2 | 2.43 |
| PB144 | 20 | 450 | 1 1/8 x 2 1/2 | 2.43 |
| PB146 | 40 | 450 | 1 1/8 x 2 1/2 | 2.43 |
| PB149 | 80 | 450 | 1 1/8 x 2 1/2 | 2.43 |
| PB208 | 20-20 | 150 | 1 1/8 x 2 1/2 | 2.43 |
| PB212 | 40-40 | 150 | 1 1/8 x 2 1/2 | 2.43 |
| PB234 | 20-20 | 450 | 1 1/8 x 2 1/2 | 2.43 |
| PB238 | 40-40 | 450 | 1 1/8 x 2 1/2 | 2.43 |
| PB311.2 | 20-20-20 | 150 | 1 1/8 x 2 1/2 | 2.43 |
| PB345.8 | 20-20-20 | 450-450-25 | 1 1/8 x 2 1/2 | 2.43 |
| PB375.8 | 10-10-10 | 450 | 1 1/8 x 2 1/2 | 3.06 |

THREADED NECK DRY ELECTROLYTICS



Single and multiple separate-section capacitors operable to 65°C., encased in aluminum cans equipped with threaded necks for mounting. Type HD is heavy duty. Type HS is for high-surge voltage conditions, operable to 85°C. Type SR638 is lug-type dual. Type SR645 has special internal connections; one terminal common anode, one terminal negative to one section and case negative to the other section. RS, RM types have 8" and HS type has 5" flexible.

Insulated stranded-copper leads out the threaded neck end of case. Type HD is supplied with one solder lug terminal for positive; case is negative. Type SR has two positive-lug terminals with case common negative. Types RS, RM, HD and HS have threaded necks (3/16-16 for 1" dia., 3/16-16 for 1 1/8" dia.) equipped with Palnut and special washer. All 1" dia. units are supplied with turn-over washer for 1 1/8" clamp mounting. Type SR has 3/16-16 threaded molded neck with solid nut.

| Mallory No. | Cap. μ f | WV DC | Size, In. Dia. x L. | Net Each |
|-------------|--------------|-------|---------------------|----------|
| RS207 | 30 | 250 | 1 x 3 3/8 | \$1.23 |
| RS212 | 8 | 450 | 1 1/8 x 3 | 1.32 |
| RS213 | 8 | 450 | 1 1/8 x 2 3/8 | 1.24 |
| RS214 | 12 | 450 | 1 1/8 x 3 | 1.44 |
| RS215 | 12 | 450 | 1 x 2 3/8 | 1.44 |
| RS216 | 16 | 450 | 1 x 3 3/8 | 1.47 |
| RS217 | 16 | 450 | 1 1/8 x 3 | 1.47 |
| RS219 | 20 | 450 | 1 1/8 x 3 | 1.62 |
| RS223 | 30 | 450 | 1 1/8 x 3 | 1.80 |
| RS224 | 40 | 450 | 1 1/8 x 3 | 1.89 |
| HD684 | 10 | 450 | 1 x 3 | 1.38 |
| HS691 | 4 | 600 | 1 1/8 x 4 | 1.77 |
| HS693 | 8 | 600 | 1 1/8 x 3 3/8 | 1.89 |
| HS696 | 20 | 600 | 1 1/8 x 4 3/8 | 2.31 |
| RM262 | 8-8 | 450 | 1 1/8 x 3 | 1.80 |
| RM265 | 8-8-8 | 450 | 1 1/8 x 4 3/8 | 3.00 |
| SR638 | 8-8 | 450 | 1 1/8 x 2 3/8 | 1.80 |
| SR645 | 8-8 | 450 | 1 1/8 x 2 3/8 | 1.80 |

P. R. MALLORY & CO. Inc.
MALLORY

Capacitors, Hardware

HC, NP, LOW-VOLTAGE, HIGH CAPACITY DRY ELECTROLYTICS



HC, NP



HB



PL

TYPE HC POLARIZED TYPE

Supplied with a VR bracket for vertical mounting.

Capacity Tolerances: Up to 150 WVDC, -10%, +100%. Above 150 WVDC, -10%, +50%.

| Mallory No. HC- | Cap., μ f | WV DC | Size, In. Dia. x Lgth. | Net Each |
|-----------------|---------------|-------|------------------------|----------|
| 1020A | 2000 | 10 | 1 1/4 x 2 3/8 | \$3.36 |
| 1040A | 4000 | 10 | 1 1/4 x 3 3/8 | 4.60 |
| 1060A* | 6000 | 10 | 1 1/2 x 4 1/8 | 5.20 |
| 10100 | 10000 | 10 | 2 1/4 x 4 3/8 | 7.81 |
| 1520A | 2000 | 15 | 1 1/4 x 2 3/8 | 3.47 |
| 1540A | 4000 | 15 | 1 1/4 x 3 3/8 | 5.37 |
| 1560A | 6000 | 15 | 1 1/2 x 4 3/8 | 5.62 |
| 2060 | 6000 | 20 | 2 1/4 x 4 3/8 | 6.11 |
| 2060A | 6000 | 20 | 1 3/4 x 4 3/8 | 6.11 |
| 20250* | 25000 | 20 | 1 3/4 x 4 3/8 | 10.71 |
| 2510A | 1000 | 25 | 1 1/4 x 2 3/8 | 3.19 |
| 2520A | 2000 | 25 | 1 1/4 x 3 3/8 | 4.15 |
| 2540A | 4000 | 25 | 1 1/2 x 4 3/8 | 5.58 |
| 4040 | 4000 | 40 | 2 1/4 x 4 3/8 | 6.98 |
| 4040A | 4000 | 40 | 1 1/2 x 4 3/8 | 6.98 |
| 5005 | 500 | 50 | 1 1/4 x 3 3/8 | 3.33 |
| 5005A | 500 | 50 | 1 1/4 x 2 3/8 | 3.33 |
| 5010A | 1000 | 50 | 1 1/4 x 3 3/8 | 4.25 |
| 5020A | 2000 | 50 | 1 1/4 x 4 3/8 | 5.06 |
| 5040 | 4000 | 50 | 2 1/4 x 4 3/8 | 7.32 |
| 15010 | 1000 | 150 | 2 1/4 x 4 3/8 | 6.44 |
| 15010A | 1000 | 150 | 1 1/4 x 4 3/8 | 6.44 |
| 20005 | 500 | 200 | 2 1/4 x 4 3/8 | 5.53 |
| 20005A | 500 | 200 | 1 1/4 x 4 3/8 | 5.53 |
| 45003 | 300 | 450 | 2 1/4 x 4 3/8 | 8.47 |
| 2050-50 | 2 x 5000 | 20-20 | 2 1/4 x 4 3/8 | 8.00 |

*Aluminum can with solder lug terminals.

TYPE NP NON-POLARIZED TYPE

Supplied with a VR bracket for vertical mounting.

Capacity Tolerances: -25%, +25% except NP3003 is -15%, +25%.

| Mallory No. NP- | Cap., μ f | WV DC | Size, In. Dia. x Lgth. | Net Each |
|-----------------|---------------|-------|------------------------|----------|
| 1225A | 200 | 125 | 1 1/4 x 3 3/8 | \$4.04 |
| 1235A | 300 | 125 | 1 1/2 x 3 3/8 | 4.87 |
| 1255A | 500 | 125 | 1 1/2 x 4 3/8 | 6.30 |
| 3003A | 15 | 300 | 1 1/4 x 2 3/8 | 2.87 |
| 3008 | 50 | 300 | 1 1/4 x 3 3/8 | 5.25 |
| 3014A | 100 | 300 | 1 1/2 x 3 3/8 | 6.13 |
| 3025 | 200 | 300 | 2 1/4 x 3 3/8 | 7.00 |
| 4505 | 50 | 450 | 1 1/4 x 3 3/8 | 6.30 |
| 4510 | 100 | 450 | 2 1/4 x 4 3/8 | 7.70 |

HARDWARE FOR HC AND NP TYPES

| Mall. No. | Description | Size In. | Net Ea. |
|-----------|-----------------------------|----------|---------|
| PL-3 | Plastic end cap-on motor | 1 1/4 | 12c |
| PL-6 | Plastic end cap-on motor | 1 1/2 | 15c |
| PL-8 | Plastic end cap-on motor | 2 1/4 | 18c |
| PL-10 | Plastic end cap-on motor | 2 1/4 | 27c |
| PL-A3 | Plastic end cap-off motor | 1 1/4 | 12c |
| PL-A6 | Plastic end cap-off motor | 1 1/2 | 15c |
| PL-A8 | Plastic end cap-off motor | 2 1/4 | 18c |
| PL-A10 | Plastic end cap-off motor | 2 1/4 | 27c |
| HB-2 | Horiz. bkt. (plastic cases) | 3 1/4 | 15c |
| HB-4 | Horiz. bkt. (plastic cases) | 3 1/4 | 18c |
| HB-8 | Horiz. bkt. (plastic cases) | 4 1/4 | 21c |

COMPUTER GRADE CAPACITORS

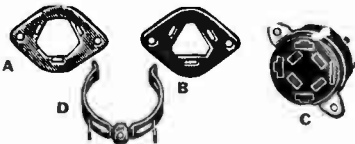
Ultra-reliable, high capacity aluminum electrolytic capacitors. Pressure sensitive safety vent. Temperature range, -20° C to +85° C. Capacity Tolerances: (U) 3-150 WVDC, -10% +75%; (T) 151-450 WVDC, -10% +50%. Furnished with Mylar* insulating sleeve and high post (3/32") 10-32 screw terminals.

†Can Size: Stock types shown below are furnished with "D" (2" x 4 1/2") or "F" (3" x 4 1/2") cans. Eight other can sizes and thousands of other ratings are available on special order. Ask for Bulletin 9-282.

| Mallory No. CG- | Cap., μ f | WVDC | Size | Net Each |
|-----------------|---------------|------|------|----------|
| 363U3D1 | 36000 | 3 | D | \$3.79 |
| 753U3F1 | 75000 | 3 | F | 6.05 |
| 2752U5D1 | 27500 | 5 | D | 3.69 |
| 653U5F1 | 65000 | 5 | F | 5.99 |
| 183U10D1 | 18000 | 10 | D | 3.65 |
| 4352U10D1 | 43500 | 10 | F | 6.89 |
| 143U15D1 | 14000 | 15 | D | 3.70 |
| 343U15F1 | 34000 | 15 | D | 5.34 |
| 852U25D1 | 8500 | 25 | D | 3.34 |
| 24U25F1 | 20000 | 25 | F | 6.80 |
| 452U50D1 | 4500 | 50 | D | 6.07 |
| 15U50F1 | 10000 | 50 | F | 5.74 |
| 3451U75D1 | 3450 | 75 | D | 3.45 |
| 822U75F1 | 8200 | 75 | F | 6.40 |
| 2251U100D1 | 2250 | 100 | D | 3.50 |
| 532U100F1 | 5300 | 100 | F | 5.91 |
| 1551U150D1 | 1550 | 150 | D | 3.48 |
| 362U150F1 | 3600 | 150 | F | 6.02 |
| 13T200D1 | 1000 | 200 | D | 3.87 |
| 2451T200F1 | 2450 | 200 | F | 5.83 |
| 82T250D1 | 800 | 250 | D | 4.05 |
| 192T250F1 | 1900 | 250 | F | 6.49 |
| 72T300D1 | 700 | 300 | D | 4.06 |
| 1651T300F1 | 1650 | 300 | F | 7.17 |
| 551T350D1 | 550 | 350 | D | 4.31 |
| 132T350F1 | 1300 | 350 | F | 6.98 |
| 3250T400D1 | 325 | 400 | D | 3.24 |
| 241T450D1 | 240 | 450 | D | 3.11 |

CAPACITOR HARDWARE

For FP or WP capacitors use MP, BP, PS and MW-100 units. For TC, FP, WP and other tubulars use VR brackets for vertical mtg. or TH spring clips for horizontal mtg.



| Mallory No. | Fig. | Size, Inches | Net | Mallory No. | Fig. | Size, Inches | Net |
|-------------|------------|---------------|-----|-------------|------|---------------|-----|
| MP-2 | A† | 3/4 | 3c | TH-13 | D | 3/8 | 3c |
| MP-4 | A† | 1 | 3c | TH-15 | D | 1/2 - 9/16 | 3c |
| MP-6 | A† | 1 1/2 | 3c | TH-17 | D | 5/8 - 11/16 | 3c |
| BP-2 | B† | 3/4 | 3c | TH-19 | D | 3/4 - 13/16 | 3c |
| BP-4 | B† | 1 | 3c | TH-21 | D | 7/8 - 15/16 | 3c |
| BP-4A | B† | 1 | 3c | TH-25 | D | 1 1/8 - 1 1/4 | 6c |
| BP-6 | B† | 1 1/2 | 3c | MW-100 | # | Mtg. Wrench | # |
| PS-4 | C | 1 | 42c | CE-1** | | 3/4 x 2 | 6c |
| PS-6 | C | 1 3/8 | 52c | CE-2** | | 1 x 1 1/2 | 6c |
| PSC-4 | Ret. Clamp | | 6c | CE-3** | | 1 x 2 | 6c |
| VR-1 | | 1-1 1/4 | 9c | CE-4** | | 1 x 3 | 6c |
| VR-3 | | 1 3/8 - 1 1/2 | 12c | CE-5** | | 1 3/8 x 2 | 6c |
| VR-4 | | 1 1/2 - 1 1/4 | 15c | CE-6** | | 1 3/8 x 3 | 6c |
| VR-6 | | 1 3/4 - 1 1/2 | 18c | CE-7** | | 1 x 2 1/2 | 6c |
| VR-8 | | 2-2 1/4 | 21c | CE-8** | | 1 x 4 | 6c |
| VR-10 | | 2 1/2 | 24c | CE-9** | | 1 1/8 x 2 1/2 | 6c |
| VR-12 | | 3 | 48c | CE-10** | | 1 1/4 x 4 | 6c |

†Metal. †Phenolic. **FP insulating sleeves, closed end type. /Net Each \$1.05.

PHOTOFLASH CAPACITORS

Mallory photoflash capacitors are especially engineered to meet the requirements of electronic flash circuits. All three types offer exceptionally low leakage and minimum charging resistance to provide maximum battery life.



Model HC45003—Plastic case, 2 1/8" dia. x 4 3/8", 300 μ f at 450 v. DC. Maximum Series Resistance: 0.8 ohm. Maximum DC Leakage (at 5 minutes): 5.5 ma. May be used with VR clamps, or HB bracket and PL caps for mounting (not included). Net Each **\$8.47**

Model FF45052—Plastic case, 2 1/8" dia. x 4 3/8", 525 μ f at 450 v. DC. Maximum Series Resistance: 0.35 ohm. Maximum DC Leakage (at 5 minutes): 2.0 ma. May be used with VR clamps, or HB bracket and PL cap for mounting (not included). Net Each **\$13.50**

Model FP240—Metal can, 1 3/8" x 3", dual section, 50 μ f each section at 450 v. DC. May be paralleled for 100 μ f or used with switch to provide high and low outputs. Maximum Series Resistance: 4.8 ohms. Maximum DC Leakage (at 5 minutes): 1.29 ma per section. May be used with TH-25 clip and CE-6 insulating tube (not included). Uses standard FP twist-prong terminals. Net Each **\$2.31**

MALLORY TANTALUM CAPACITORS

the industry's widest selection

FOIL
SOLID
WET-SLUG

Ask for Catalog 9-169

MALLORY
P. R. MALLORY & CO. INC.

Tantalum Capacitors



Mallory Tantalum Capacitors are specified by either the 13 digit Mallory number or the 12 digit MIL number where it applies.

TAF 254 M 150 N O A
a b c d e f g

"a"—Type.
"b"—Capacity in μf , first 2 digits are significant and 3rd shows zeros.
"c"—Tolerance: M, $\pm 20\%$; K, 10% , etc.
"d"—WVDC at designated temperature.
"e"—Polarized (P) or non-polarized (N).
"f"—Uninsulated (0) or Mylar* sleeve (1)
"g"—Size or configuration.
See appropriate specifications for explanation of MIL numbers or ask for **Mallory Cross-Reference**.

TANTALUM FOIL CAPACITORS
Furnished in both plain and etched foil types, polarized and non-polarized and either of two operating temperature ranges, -55° to $+85^\circ$ C and -55° to $+125^\circ$ C. All foil types except TAF non-polarized are specified by the appropriate MIL-C-3965 style number.

| Case Size | Uninsulated | | Insulated | |
|-----------|-------------|--------|-----------|----------|
| | Dia. | L. | Dia. | L. |
| A | 3/16" | 1 1/8" | 3/16" | 3 1/8" |
| B | 3/16" | 7/8" | 3/16" | 1 3/8" |
| C | 3/8" | 1 1/8" | 3/8" | 1 3/8" |
| D | 3/8" | 2 1/8" | 3/8" | 2 3/8" |
| E | 3/8" | 2 3/4" | 3/8" | 2 13/16" |

CL34/35 AND TAF PLAIN FOIL -55° TO $+85^\circ$ C

| Case Size | Net Each, Lots of | | | | |
|-----------|-------------------|---------|---------|---------|---------|
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$ 4.20 | \$ 2.55 | \$ 1.90 | \$ 1.40 | \$ 1.21 |
| B | 6.60 | 3.65 | 2.75 | 2.00 | 1.84 |
| C | 10.40 | 5.80 | 4.35 | 3.15 | 2.91 |
| D | 14.60 | 8.10 | 6.10 | 4.45 | 4.07 |
| E | 19.60 | 10.85 | 8.15 | 5.95 | 5.45 |

For Mylar* sleeve (CL35 and TAF "N1") add 10c to prices shown.

CL34/35—POLARIZED $+85^\circ$ C
CL34 LISTED BELOW
(USE CL35 FOR MYLAR* SLEEVE)

| Cap. μf | WVDC $+85^\circ$ C | Mallory Catalog No. | Case Size |
|--------------------|--------------------|---------------------|-----------|
| 10 | 3 | CL34BA100MP3 | A |
| 50 | 3 | CL34BA500MP3 | A |
| 8 | 6 | CL34BB080MP3 | B |
| 30 | 6 | CL34BB300MP3 | B |
| 100 | 6 | CL34BB101MP3 | C |
| 200 | 6 | CL34BB201MP3 | D |
| 300 | 6 | CL34BB301MP3 | E |
| 6 | 10 | CL34BD060MP3 | A |
| 25 | 10 | CL34BD250MP3 | B |
| 80 | 10 | CL34BD800MP3 | C |
| 160 | 10 | CL34BD161MP3 | D |
| 220 | 10 | CL34BD221MP3 | E |
| 4.5 | 15 | CL34BE4R5MP3 | A |
| 10 | 15 | CL34BE100MP3 | B |
| 18 | 15 | CL34BE180MP3 | B |
| 55 | 15 | CL34BE550MP3 | C |
| 110 | 15 | CL34BE111MP3 | D |
| 160 | 15 | CL34BE161MP3 | E |
| 2.5 | 30 | CL34BH2R5MP3 | A |
| 30 | 30 | CL34BH300MP3 | D |
| 60 | 30 | CL34BH600MP3 | E |
| 85 | 30 | CL34BH850MP3 | E |
| 1.5 | 50 | CL34BJ1R5MP3 | A |
| 6 | 50 | CL34BJ060MP3 | B |
| 20 | 50 | CL34BJ200MP3 | C |
| 40 | 50 | CL34BJ400MP3 | D |
| 55 | 50 | CL34BJ550MP3 | E |
| 1 | 75 | CL34BL010MP3 | A |
| 4 | 75 | CL34BL040MP3 | B |
| 14 | 75 | CL34BL140MP3 | C |
| 28 | 75 | CL34BL280MP3 | D |
| 40 | 75 | CL34BL400MP3 | E |
| 8 | 100 | CL34BN0R8MP3 | A |
| 3 | 100 | CL34BN030MP3 | B |
| 20 | 100 | CL34BN200MP3 | D |
| 30 | 100 | CL34BN300MP3 | E |
| 2 | 150 | CL34BQ0R5MP3 | A |
| 4 | 150 | CL34BQ020MP3 | B |
| 7 | 150 | CL34BQ040MP3 | C |
| 8 | 150 | CL34BQ080MP3 | D |
| 12 | 150 | CL34BQ120MP3 | D |
| 14 | 150 | CL34BQ140MP3 | D |
| 20 | 150 | CL34BQ200MP3 | E |

TAF—NON-POLARIZED $+85^\circ$ C
(CHANGE 12th DIGIT TO "1" FOR MYLAR* SLEEVE)

| Cap. μf | WVDC $+85^\circ$ C | Mallory Catalog No. | Case Size |
|--------------------|--------------------|---------------------|-----------|
| .25 | 150 | TAF254M150N0A | A |
| .4 | 100 | TAF404M100N0A | A |
| .5 | 75 | TAF504M075N0A | A |
| .6 | 60 | TAF604M060N0A | A |
| .8 | 50 | TAF804M050N0A | A |
| 1.0 | 150 | TAF105M150N0B | B |
| 1.4 | 30 | TAF145M030N0A | A |
| 1.5 | 25 | TAF155M025N0A | A |
| 1.5 | 100 | TAF155M100N0B | B |
| 2.0 | 75 | TAF205M075N0B | B |
| 2.5 | 15 | TAF255M015N0A | A |
| 2.5 | 60 | TAF255M060N0B | B |
| 3.0 | 10 | TAF305M010N0A | A |
| 3.0 | 50 | TAF305M050N0B | B |
| 3.5 | 150 | TAF355M150N0C | C |
| 5.0 | 6 | TAF505M006N0A | A |
| 5.0 | 100 | TAF505M100N0C | C |
| 5.5 | 30 | TAF555M030N0B | B |
| 6.0 | 25 | TAF605M025N0B | B |
| 7.0 | 75 | TAF705M075N0C | C |
| 7.0 | 150 | TAF705M150N0D | D |
| 8.5 | 60 | TAF855M060N0C | C |
| 10.0 | 15 | TAF106M015N0B | B |
| 10.0 | 50 | TAF106M050N0C | C |
| 10.0 | 100 | TAF106M100N0D | D |
| 10.0 | 150 | TAF106M150N0E | E |
| 14.0 | 75 | TAF146M075N0D | D |
| 15.0 | 100 | TAF156M100N0E | E |
| 16.0 | 10 | TAF166M010N0B | B |
| 17.0 | 60 | TAF176M060N0D | D |
| 18.0 | 30 | TAF186M030N0C | C |
| 20.0 | 25 | TAF206M025N0C | C |
| 20.0 | 50 | TAF206M050N0D | D |
| 20.0 | 75 | TAF206M075N0E | E |
| 24.0 | 60 | TAF246M060N0B | B |
| 25.0 | 6 | TAF256M006N0E | E |
| 30.0 | 50 | TAF306M050N0E | E |
| 35.0 | 15 | TAF356M015N0C | C |
| 36.0 | 30 | TAF366M030N0D | D |
| 40.0 | 25 | TAF406M025N0D | D |
| 45.0 | 30 | TAF456M030N0E | E |
| 55.0 | 10 | TAF556M010N0C | C |
| 60.0 | 25 | TAF606M025N0E | E |
| 70.0 | 15 | TAF706M015N0D | D |
| 85.0 | 6 | TAF856M006N0C | C |
| 100.0 | 15 | TAF107M015N0E | E |
| 110.0 | 10 | TAF117M010N0D | D |
| 150.0 | 10 | TAF157M010N0E | E |
| 170.0 | 6 | TAF177M006N0D | D |
| 250.0 | 6 | TAF257M006N0E | E |

CL30/31 AND CL32/33 PLAIN FOIL -55° TO $+125^\circ$ C

| Case Size | Net Each, Lots of | | | | |
|-----------|-------------------|---------|---------|---------|---------|
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$ 7.35 | \$ 4.20 | \$ 3.15 | \$ 2.30 | \$ 2.11 |
| B | 9.80 | 5.60 | 4.20 | 3.05 | 2.80 |
| C | 14.20 | 8.10 | 6.10 | 4.45 | 4.05 |
| D | 18.30 | 10.45 | 7.85 | 5.70 | 5.23 |
| E | 23.55 | 13.45 | 10.10 | 7.35 | 6.72 |

For Mylar* sleeve (CL31 and CL33), add 10c to prices shown.

CL30/31—POLARIZED $+125^\circ$ C
CL30 LISTED BELOW
(USE CL31 FOR MYLAR* SLEEVE)

| Cap. μf | WVDC $+125^\circ$ C | Mallory Catalog No. | Case Size |
|--------------------|---------------------|---------------------|-----------|
| 4.5 | 10 | CL30CD4R5MP3 | A |
| 18 | 10 | CL30CD180MP3 | B |
| 55 | 10 | CL30CD550MP3 | C |
| 110 | 10 | CL30CD111MP3 | D |
| 160 | 10 | CL30CD161MP3 | E |
| 3 | 15 | CL30CE030MP3 | A |
| 12 | 15 | CL30CE120MP3 | B |
| 35 | 15 | CL30CE350MP3 | C |
| 70 | 15 | CL30CE700MP3 | D |
| 100 | 15 | CL30CE101MP3 | E |
| 1.5 | 30 | CL30CH1R5MP3 | A |
| 6 | 30 | CL30CH060MP3 | B |
| 20 | 30 | CL30CH200MP3 | C |
| 40 | 30 | CL30CH400MP3 | D |
| 55 | 30 | CL30CH550MP3 | E |
| 1 | 50 | CL30CJ010MP3 | A |
| 4 | 50 | CL30CJ040MP3 | B |
| 14 | 50 | CL30CJ140MP3 | C |
| 28 | 50 | CL30CJ280MP3 | D |
| 40 | 50 | CL30CJ400MP3 | E |
| 8 | 60 | CL30CK0R8MP3 | A |
| 3 | 60 | CL30CK030MP3 | B |
| 10 | 60 | CL30CK100MP3 | C |
| 20 | 60 | CL30CK200MP3 | D |
| 30 | 60 | CL30CK300MP3 | E |
| 5 | 100 | CL30CN0R5MP3 | A |
| 2 | 100 | CL30CN020MP3 | B |
| 7 | 100 | CL30CN070MP3 | C |
| 14 | 100 | CL30CN140MP3 | D |
| 20 | 100 | CL30CN200MP3 | E |
| 35 | 150 | CL30CQ3R5MP3 | A |
| 1.5 | 150 | CL30CQ1R5MP3 | B |
| 5 | 150 | CL30CQ050MP3 | C |
| 10 | 150 | CL30CQ100MP3 | D |
| 15 | 150 | CL30CQ150MP3 | E |

CL32/33—NON-POLARIZED $+125^\circ$ C

CL32 LISTED BELOW
(USE CL33 FOR MYLAR* SLEEVE)

| Cap. μf | WVDC $+125^\circ$ C | Mallory Catalog No. | Case Size |
|--------------------|---------------------|---------------------|-----------|
| 2.5 | 10 | CL32CD2R5MN3 | A |
| 10 | 10 | CL32CD100MN3 | B |
| 35 | 10 | CL32CD350MN3 | C |
| 70 | 10 | CL32CD700MN3 | D |
| 100 | 10 | CL32CD101MN3 | E |
| 1.5 | 15 | CL32CE1R5MN3 | A |
| 6 | 15 | CL32CE060MN3 | B |
| 20 | 15 | CL32CE200MN3 | C |
| 40 | 15 | CL32CE400MN3 | D |
| 60 | 15 | CL32CE600MN3 | E |
| 8 | 30 | CL32CH0R8MN3 | A |
| 3 | 30 | CL32CH030MN3 | B |
| 10 | 30 | CL32CH100MN3 | C |
| 20 | 30 | CL32CH200MN3 | D |
| 30 | 30 | CL32CH300MN3 | E |
| .5 | 50 | CL32CJ0R5MN3 | A |
| 2 | 50 | CL32CJ020MN3 | B |
| 7 | 50 | CL32CJ070MN3 | C |
| 14 | 50 | CL32CJ140MN3 | D |
| 20 | 50 | CL32CJ200MN3 | E |
| .4 | 60 | CL32CK0R5MN3 | A |
| 1.5 | 60 | CL32CK1R5MN3 | B |
| 5 | 60 | CL32CK050MN3 | C |
| 10 | 60 | CL32CK100MN3 | D |
| 15 | 60 | CL32CK150MN3 | E |
| .25 | 100 | CL32CN2R5MN3 | A |
| 1 | 100 | CL32CN010MN3 | B |
| 3.5 | 100 | CL32CN3R5MN3 | C |
| 7 | 100 | CL32CN070MN3 | D |
| 10 | 100 | CL32CN100MN3 | E |
| .15 | 150 | CL32CQ1R5MN3 | A |
| .75 | 150 | CL32CQ0R5MN3 | B |
| 2.5 | 150 | CL32CQ2R5MN3 | C |
| 5 | 150 | CL32CQ050MN3 | D |
| 7.5 | 150 | CL32CQ07R5MN3 | E |

CL24/25 ETCHED FOIL POLARIZED $+85^\circ$ C

| Case Size | Net Each, Lots of | | | | |
|-----------|-------------------|---------|---------|---------|---------|
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$ 4.20 | \$ 2.55 | \$ 1.90 | \$ 1.40 | \$ 1.21 |
| B | 7.55 | 4.00 | 3.00 | 2.20 | 2.02 |
| C | 12.60 | 7.00 | 5.25 | 3.85 | 3.51 |
| D | 20.55 | 11.40 | 8.55 | 6.25 | 5.72 |
| E | 27.35 | 15.20 | 11.40 | 8.35 | 7.61 |

For Mylar* sleeve (CL25) add 10c to prices shown.

CL24/25—POLARIZED $+85^\circ$ C

CL24 LISTED BELOW
(USE CL25 FOR MYLAR* SLEEVE)

| Cap. μf | WVDC $+85^\circ$ C | Mallory Catalog No. | Case Size |
|--------------------|--------------------|---------------------|-----------|
| 15 | 15 | CL24BE150UP3 | A |
| 60 | 15 | CL24BE600UP3 | B |
| 200 | 15 | CL24BE201UP3 | C |
| 400 | 15 | CL24BE401UP3 | D |
| 580 | 15 | CL24BE581UP3 | E |
| 10 | 25 | CL24BG100UP3 | A |
| 40 | 25 | CL24BG400UP3 | B |
| 120 | 25 | CL24BG121UP3 | C |
| 250 | 25 | CL24BG251UP3 | D |
| 350 | 25 | CL24BG351UP3 | E |
| 8 | 30 | CL24BH080UP3 | A |
| 32 | 30 | CL24BH320UP3 | B |
| 110 | 30 | CL24BH111UP3 | C |
| 220 | 30 | CL24BH221UP3 | D |
| 300 | 30 | CL24BH301UP3 | E |
| 4.5 | 50 | CL24BJ4R5UP3 | A |
| 18 | 50 | CL24BJ180UP3 | B |
| 60 | 50 | CL24BJ600UP3 | C |
| 100 | 50 | CL24BJ101UP3 | D |
| 150 | 50 | CL24BJ151UP3 | E |
| 3 | 75 | CL24BL030UP3 | A |
| 12 | 75 | CL24BL120UP3 | B |
| 30 | 75 | CL24BL300UP3 | C |
| 70 | 75 | CL24BL700UP3 | D |
| 100 | 75 | CL24BL101UP3 | E |
| 2 | 100 | CL24BN020UP3 | A |
| 8 | 100 | CL24BN080UP3 | B |
| 25 | 100 | CL24BN250UP3 | C |
| 50 | 100 | CL24BN500UP3 | D |
| 70 | 100 | CL24BN700UP3 | E |
| 1 | 150 | CL24BQ010UP3 | A |
| 4 | 150 | CL24BQ040UP3 | B |
| 13 | 150 | CL24BQ130UP3 | C |
| 25 | 150 | CL24BQ250UP3 | D |
| 36 | 150 | CL24BQ360UP3 | E |

*Du Pont Trademark.

MALLORY Tantalum Capacitors

CL20/21 AND CL22/23—ETCHED FOIL —55° TO +125° C

| Case Size | Net Each, Lots of | | | | |
|-----------|-------------------|---------|---------|---------|---------|
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$ 7.35 | \$ 4.20 | \$ 3.15 | \$ 2.30 | \$ 2.11 |
| B | 10.50 | 6.00 | 4.50 | 3.28 | 3.00 |
| C | 16.15 | 9.25 | 6.95 | 5.05 | 4.62 |
| D | 24.55 | 14.00 | 10.50 | 7.70 | 7.01 |
| E | 31.75 | 18.15 | 13.60 | 9.95 | 9.07 |

For Mylar* sleeve (CL21 and CL23) add 10c to prices shown.

CL20/21—POLARIZED +125° C (USE CL21 FOR MYLAR* SLEEVE)

| Cap. μ f | WVDC +125° C | Mallory Catalog No. | Case Size |
|--------------|--------------|---------------------|-----------|
| 15 | 10 | CL20CD150UP3 | A |
| 60 | 10 | CL20CD600UP3 | B |
| 200 | 10 | CL20CD201UP3 | C |
| 400 | 10 | CL20CD401UP3 | D |
| 580 | 10 | CL20CD581UP3 | E |
| 10 | 15 | CL20CE100UP3 | A |
| 40 | 15 | CL20CE400UP3 | B |
| 120 | 15 | CL20CE121UP3 | C |
| 250 | 15 | CL20CE251UP3 | D |
| 350 | 15 | CL20CE351UP3 | E |
| 4.5 | 30 | CL20CH4R5TP3 | A |
| 18 | 30 | CL20CH180TP3 | B |
| 60 | 30 | CL20CH600TP3 | C |
| 100 | 30 | CL20CH101TP3 | D |
| 150 | 30 | CL20CH151TP3 | E |
| 3 | 50 | CL20CJ030TP3 | A |
| 12 | 50 | CL20CJ120TP3 | B |
| 30 | 50 | CL20CJ300TP3 | C |
| 70 | 50 | CL20CJ700TP3 | D |
| 100 | 50 | CL20CJ101TP3 | E |
| 2 | 60 | CL20CK020TP3 | A |
| 8 | 60 | CL20CK080TP3 | B |
| 25 | 60 | CL20CK250TP3 | C |
| 50 | 60 | CL20CK500TP3 | D |
| 70 | 60 | CL20CK700TP3 | E |
| 1 | 100 | CL20CN010SP3 | A |
| 4 | 100 | CL20CN040SP3 | B |
| 13 | 100 | CL20CN130SP3 | C |
| 25 | 100 | CL20CN250SP3 | D |
| 36 | 100 | CL20CN360SP3 | E |

CL22/23—NON-POLAR. +125° C (USE CL23 FOR MYLAR* SLEEVE)

| Cap. μ f | WVDC +125° C | Mallory Catalog No. | Case Size |
|--------------|--------------|---------------------|-----------|
| 10 | 10 | CL22CD100UN3 | A |
| 40 | 10 | CL22CD400UN3 | B |
| 120 | 10 | CL22CD121UN3 | C |
| 250 | 10 | CL22CD251UN3 | D |
| 350 | 10 | CL22CD351UN3 | E |
| 5 | 15 | CL22CE052UN3 | A |
| 20 | 15 | CL22CE200UN3 | B |
| 70 | 15 | CL22CE700UN3 | C |
| 140 | 15 | CL22CE141UN3 | D |
| 200 | 15 | CL22CE201UN3 | E |
| 2.5 | 30 | CL22CH2R5TN3 | A |
| 10 | 30 | CL22CH100TN3 | B |
| 30 | 30 | CL22CH300TN3 | C |
| 60 | 30 | CL22CH600TN3 | D |
| 80 | 30 | CL22CH800TN3 | E |
| 1.5 | 50 | CL22CJ1R5TN3 | A |
| 6 | 50 | CL22CJ060TN3 | B |
| 15 | 50 | CL22CJ150TN3 | C |
| 35 | 50 | CL22CJ350TN3 | D |
| 50 | 50 | CL22CJ500TN3 | E |
| 1 | 60 | CL22CK010TN3 | A |
| 4 | 60 | CL22CK040TN3 | B |
| 12 | 60 | CL22CK120TN3 | C |
| 25 | 60 | CL22CK250TN3 | D |
| 35 | 60 | CL22CK350TN3 | E |
| .5 | 100 | CL22CN0R5SN3 | A |
| 2 | 100 | CL22CN020SN3 | B |
| 6 | 100 | CL22CN060SN3 | C |
| 12 | 100 | CL22CN120SN3 | D |
| 18 | 100 | CL22CN180SN3 | E |

TAM SOLID ELECTROLYTE

Printed circuit solid electrolyte types with parallel leads (0.175" spacing) and plastic encapsulation. Tolerance: $\pm 20\%$. Temperature Range: -55° to $+85^\circ$ C.

| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Case Size |
|--------------|-------------|---------------------|-----------|
| 6.8 | 25 | TAM685M025P5C | C |
| 10 | 25 | TAM106M025P5C | C |
| 15 | 25 | TAM156M025P5C | C |
| 22 | 15 | TAM226M015P5C | C |
| 33 | 10 | TAM336M010P5C | C |
| 39 | 10 | TAM396M010P5C | C |
| 56 | 6 | TAM566M006P5C | C |

$\$.325"$ square, $.175"$ thick.

| Case Size | Net Each, Lots of | | | | |
|-----------|-------------------|--------|--------|---------|---------|
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| C | \$1.20 | \$0.96 | \$0.82 | \$0.69 | \$0.63 |

TAS SOLID ELECTROLYTE —80° TO +125° C

Commercial equivalent to MIL-C-26655/2 Style CS12 (uninsulated) and CS13 (insulated). Available in $\pm 20\%$ or $\pm 10\%$ tolerance. Items indicated by † are preferred CS12 (or CS13) values.

TAS CASE SIZES

| Case | Diameter | Length |
|------|----------|--------|
| A | .125" | .250" |
| C | .75" | .438" |
| F | .279" | .650" |
| G | .341" | .750" |

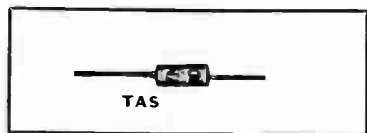
TAS $\pm 20\%$

| Case Size | Net Each, Lots of | | | | |
|-----------|-------------------|--------|--------|---------|---------|
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$1.43 | \$1.15 | \$0.98 | \$0.73 | \$0.69 |
| C | 1.52 | 1.22 | 1.03 | .75 | .71 |
| F | 2.50 | 2.00 | 1.69 | 1.24 | 1.19 |
| G | 4.64 | 3.72 | 3.14 | 2.45 | 2.34 |

For Mylar* sleeve ("P1") add 2c to prices shown.

Listed below are uninsulated case. For Mylar* sleeve (CS13), change 12th digit to "1" and add 2c to prices shown.

| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Case Size |
|--------------|-------------|---------------------|-----------|
| .33 | 6 | TAS334M006P0A | A |
| .33 | 10 | TAS334M010P0A | A |
| .33 | 15 | TAS334M015P0A | A |
| .33 | 20 | TAS334M020P0A | A |
| .33 | 35 | TAS334M035P0A† | A |
| .47 | 6 | TAS474M006P0A | A |
| .47 | 10 | TAS474M010P0A | A |
| .47 | 15 | TAS474M015P0A | A |
| .47 | 20 | TAS474M020P0A | A |
| .47 | 35 | TAS474M035P0A† | A |
| .68 | 6 | TAS684M006P0A | A |
| .68 | 10 | TAS684M010P0A | A |
| .68 | 15 | TAS684M015P0A | A |
| .68 | 20 | TAS684M020P0A | A |
| .68 | 35 | TAS684M035P0A† | A |
| 1 | 6 | TAS105M006P0A | A |
| 1 | 10 | TAS105M010P0A | A |
| 1 | 15 | TAS105M015P0A | A |
| 1 | 20 | TAS105M020P0A | A |
| 1 | 35 | TAS105M035P0A† | A |
| 1.5 | 6 | TAS155M006P0A | A |
| 1.5 | 10 | TAS155M010P0A | A |
| 1.5 | 15 | TAS155M015P0A | A |
| 1.5 | 20 | TAS155M020P0A | A |
| 1.5 | 35 | TAS155M035P0A† | A |
| 2.2 | 6 | TAS225M006P0A | A |
| 2.2 | 10 | TAS225M010P0A | A |
| 2.2 | 15 | TAS225M015P0A | A |
| 2.2 | 20 | TAS225M020P0A† | A |
| 2.2 | 35 | TAS225M035P0A† | A |
| 3.3 | 6 | TAS335M006P0A | A |
| 3.3 | 10 | TAS335M010P0A | A |
| 3.3 | 15 | TAS335M015P0A† | A |
| 3.3 | 20 | TAS335M020P0C | C |
| 3.3 | 35 | TAS335M035P0C† | C |
| 4.7 | 6 | TAS475M006P0A | A |
| 4.7 | 10 | TAS475M010P0A† | A |
| 4.7 | 15 | TAS475M015P0C | C |
| 4.7 | 20 | TAS475M020P0C | C |
| 4.7 | 35 | TAS475M035P0C† | C |
| 6.8 | 6 | TAS685M006P0A | A |
| 6.8 | 10 | TAS685M010P0C | C |
| 6.8 | 15 | TAS685M015P0C | C |
| 6.8 | 20 | TAS685M020P0C | C |
| 6.8 | 35 | TAS685M035P0C† | C |
| 10 | 6 | TAS106M006P0C | C |
| 10 | 10 | TAS106M010P0C | C |
| 10 | 15 | TAS106M015P0C | C |
| 10 | 20 | TAS106M020P0C | C |
| 10 | 35 | TAS106M035P0C† | C |
| 15 | 6 | TAS156M006P0C | C |
| 15 | 10 | TAS156M010P0C | C |
| 15 | 15 | TAS156M015P0C | C |
| 15 | 20 | TAS156M020P0C† | C |
| 15 | 35 | TAS156M035P0C† | C |
| 22 | 6 | TAS226M006P0C | C |
| 22 | 10 | TAS226M010P0C | C |
| 22 | 15 | TAS226M015P0C† | C |
| 22 | 20 | TAS226M020P0F | F |
| 22 | 35 | TAS226M035P0F† | F |
| 33 | 6 | TAS336M006P0C | C |
| 33 | 10 | TAS336M010P0C† | C |
| 33 | 15 | TAS336M015P0F | F |
| 33 | 20 | TAS336M020P0F† | F |
| 33 | 35 | TAS336M035P0C† | C |
| 47 | 6 | TAS476M006P0C | C |
| 47 | 10 | TAS476M010P0C | C |
| 47 | 15 | TAS476M015P0F | F |
| 47 | 20 | TAS476M020P0F† | F |
| 47 | 35 | TAS476M035P0C† | C |
| 68 | 6 | TAS686M006P0F | F |
| 68 | 10 | TAS686M010P0F | F |
| 68 | 15 | TAS686M015P0F† | F |
| 68 | 20 | TAS686M020P0G† | G |
| 68 | 35 | TAS686M035P0G | G |
| 100 | 6 | TAS107M006P0F | F |
| 100 | 10 | TAS107M010P0F† | F |



TAS $\pm 20\%$ (CONTINUED)

| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Case Size |
|--------------|-------------|---------------------|-----------|
| 100 | 15 | TAS107M015P0G | G |
| 100 | 20 | TAS107M020P0G† | G |
| 150 | 6 | TAS157M006P0F† | F |
| 150 | 10 | TAS157M010P0G | G |
| 150 | 15 | TAS157M015P0G† | G |
| 220 | 6 | TAS227M006P0G† | G |
| 220 | 10 | TAS227M010P0G† | G |
| 330 | 6 | TAS337M006P0G† | G |

TAS $\pm 10\%$

All $\pm 10\%$ values are preferred CS13 (or CS12) types.

| Case Size | Net Each, Lots of | | | | |
|-----------|-------------------|--------|--------|---------|---------|
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$1.72 | \$1.38 | \$1.17 | \$0.96 | \$0.91 |
| C | 1.92 | 1.54 | 1.30 | .97 | .92 |
| F | 3.30 | 2.64 | 2.23 | 1.65 | 1.57 |
| G | 6.12 | 4.90 | 4.14 | 3.21 | 3.07 |

TAS $\pm 10\%$ stocked with Mylar* sleeve only.

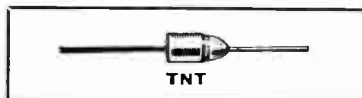
For uninsulated case (CS12), change 12th digit to "0" and deduct 2c from prices shown.

| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Case Size |
|--------------|-------------|---------------------|-----------|
| 5.6 | 6 | TAS565K006P1A | A |
| 6.8 | 6 | TAS685K006P1A | A |
| 47 | 6 | TAS476K006P1C | C |
| 56 | 6 | TAS566K006P1C | C |
| 150 | 6 | TAS157K006P1F | F |
| 180 | 6 | TAS187K006P1F | F |
| 270 | 6 | TAS277K006P1G | G |
| 330 | 6 | TAS377K006P1G | G |
| 3.9 | 10 | TAS395K010P1A | A |
| 4.7 | 10 | TAS475K010P1A | A |
| 27 | 10 | TAS276K010P1C | C |
| 33 | 10 | TAS336K010P1C | C |
| 39 | 10 | TAS396K010P1C | C |
| 82 | 10 | TAS826K010P1F | F |
| 100 | 10 | TAS107K010P1F | F |
| 120 | 10 | TAS127K010P1F | F |
| 180 | 10 | TAS187K010P1G | G |
| 220 | 10 | TAS227K010P1G | G |
| 2.7 | 15 | TAS275K015P1A | A |
| 3.3 | 15 | TAS335K015P1A | A |
| 18 | 15 | TAS186K015P1C | C |
| 22 | 15 | TAS226K015P1C | C |
| 29 | 15 | TAS296K015P1F | F |
| 56 | 15 | TAS566K015P1F | F |
| 68 | 15 | TAS686K015P1F | F |
| 120 | 15 | TAS127K015P1G | G |
| 150 | 15 | TAS157K015P1G | G |
| 1.2 | 20 | TAS125K020P1A | A |
| 1.5 | 20 | TAS155K020P1A | A |
| 1.8 | 20 | TAS185K020P1A | A |
| 2.2 | 20 | TAS225K020P1A | A |
| 8.2 | 20 | TAS825K020P1C | C |
| 10 | 20 | TAS106K020P1C | C |
| 12 | 20 | TAS126K020P1C | C |
| 15 | 20 | TAS156K020P1C | C |
| 27 | 20 | TAS276K020P1F | F |
| 33 | 20 | TAS336K020P1F | F |
| 39 | 20 | TAS396K020P1F | F |
| 47 | 20 | TAS476K020P1F | F |
| 56 | 20 | TAS566K020P1G | G |
| 68 | 20 | TAS686K020P1G | G |
| 82 | 20 | TAS826K020P1G | G |
| 100 | 20 | TAS107K020P1G | G |
| .33 | 35 | TAS334K035P1A | A |
| .39 | 35 | TAS394K035P1A | A |
| .47 | 35 | TAS474K035P1A | A |
| .56 | 35 | TAS564K035P1A | A |
| .68 | 35 | TAS684K035P1A | A |
| .82 | 35 | TAS824K035P1A | A |
| 1.0 | 35 | TAS105K035P1A | A |
| 1.2 | 35 | TAS125K035P1C | C |
| 1.5 | 35 | TAS155K035P1C | C |
| 1.8 | 35 | TAS185K035P1C | C |
| 2.2 | 35 | TAS225K035P1C | C |
| 2.7 | 35 | TAS275K035P1C | C |
| 3.3 | 35 | TAS335K035P1C | C |
| 3.9 | 35 | TAS395K035P1C | C |
| 4.7 | 35 | TAS475K035P1C | C |
| 5.6 | 35 | TAS565K035P1C | C |
| 6.8 | 35 | TAS685K035P1C | C |
| 8.2 | 35 | TAS825K035P1F | F |
| 10 | 35 | TAS106K035P1F | F |
| 12 | 35 | TAS126K035P1F | F |
| 15 | 35 | TAS156K035P1F | F |
| 18 | 35 | TAS186K035P1F | F |
| 22 | 35 | TAS226K035P1F | F |
| 27 | 35 | TAS276K035P1G | G |
| 33 | 35 | TAS336K035P1G | G |
| 39 | 35 | TAS396K035P1G | G |
| 47 | 35 | T | |

MALLORY
P. R. MALLORY & CO. INC.

Tantalum Capacitors

TNT-TAP-TAH MINIATURE PELLET TYPES



Metal case types with axial leads and epoxy end seals. Available with Mylar* sleeve; change 12th digit to "1" and add 5c to all prices shown. *Du Pont T.M.

| TNT +85° C | | | |
|--------------|-------------|---------------------|-----------|
| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Case Size |
| 2 | 50 | TNT205U050P0A | A |
| 4 | 50 | TNT405U050P0A | A |
| 5 | 50 | TNT605U050P0A | A |
| 6 | 35 | TNT805U050P0A | A |
| 8 | 50 | TNT1205U050P0A | A |
| 12 | 15 | TNT126U015P0A | A |
| 12 | 35 | TNT126U035P0B | B |
| 15 | 30 | TNT156U030P0B | B |
| 25 | 6 | TNT256U006P0A | A |
| 25 | 15 | TNT256U015P0B | B |
| 35 | 12 | TNT356U012P0B | B |
| 40 | 3 | TNT406U003P0A | A |
| 50 | 6 | TNT506U006P0B | B |
| 80 | 3 | TNT806U003P0B | B |

| TNT PRICES | | | | | |
|------------|-------------------|--------|--------|---------|---------|
| Case Size | Net Each, Lots of | | | | |
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$1.24 | \$0.99 | \$0.84 | \$0.714 | \$0.651 |
| B | 1.46 | 1.17 | .99 | .84 | .766 |

| TNT CASE SIZES | | |
|----------------|----------|--------|
| Case | Diameter | Length |
| A | .165" | .350" |
| B | .165" | .500" |

| TAP +85° C | | | |
|--------------|-------------|---------------------|-----------|
| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Case Size |
| 2 | 90 | TAP205U090P0A | A |
| 3.5 | 75 | TAP355U075P0A | A |
| 4 | 60 | TAP405U060P0A | A |
| 5 | 50 | TAP505U050P0A | A |
| 6 | 40 | TAP605U040P0A | A |
| 7 | 35 | TAP705U035P0A | A |
| 8 | 30 | TAP805U030P0A | A |
| 10 | 25 | TAP106U025P0A | A |
| 11 | 90 | TAP116U090P0B | B |
| 12 | 20 | TAP126U020P0A | A |
| 15 | 15 | TAP156U015P0A | A |
| 15 | 75 | TAP156U075P0B | B |
| 20 | 10 | TAP206U010P0A | A |
| 20 | 60 | TAP206U060P0B | B |
| 25 | 50 | TAP256U050P0B | B |
| 30 | 6 | TAP306U006P0A | A |
| 30 | 40 | TAP306U040P0B | B |
| 40 | 30 | TAP406U030P0B | B |
| 70 | 15 | TAP706U015P0B | B |
| 100 | 10 | TAP107U010P0B | B |
| 140 | 6 | TAP147U006P0B | B |

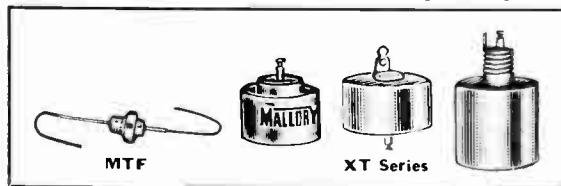
| TAP PRICES | | | | | |
|------------|-------------------|--------|--------|---------|---------|
| Case Size | Net Each, Lots of | | | | |
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$1.46 | \$1.17 | \$0.99 | \$0.84 | \$0.766 |
| B | 2.46 | 1.97 | 1.66 | 1.415 | 1.29 |

| TAP AND TAH CASE SIZES | | |
|------------------------|----------|--------|
| Case | Diameter | Length |
| A | .238" | .500" |
| B | .238" | .660" |
| C | .238" | .875" |

| TAH +125° C | | | |
|--------------|--------------|---------------------|-----------|
| Cap. μ f | WVDC +125° C | Mallory Catalog No. | Case Size |
| 2 | 60 | TAH205R060P0A | A |
| 3.5 | 50 | TAH355R050P0A | A |
| 4 | 40 | TAH405R040P0A | A |
| 5 | 30 | TAH505R030P0A | A |
| 6 | 25 | TAH605R025P0A | A |
| 7 | 23 | TAH705R023P0A | A |
| 8 | 20 | TAH805R020P0A | A |
| 10 | 15 | TAH106R015P0A | A |
| 11 | 60 | TAH116R060P0B | B |
| 12 | 13 | TAH126R013P0A | A |
| 15 | 10 | TAH156R010P0A | A |
| 15 | 50 | TAH156R050P0B | B |
| 20 | 7 | TAH206R007P0A | A |
| 20 | 40 | TAH206R040P0B | B |
| 25 | 30 | TAH256R030P0B | B |
| 30 | 4 | TAH306R004P0A | A |
| 30 | 25 | TAH306R025P0B | B |
| 30 | 60 | TAH306R060P0C | C |
| 40 | 20 | TAH406R020P0B | B |
| 40 | 50 | TAH406R050P0C | C |
| 50 | 40 | TAH506R040P0C | C |
| 60 | 30 | TAH606R030P0C | C |
| 70 | 10 | TAH706R010P0B | B |
| 100 | 7 | TAH107R007P0B | B |
| 100 | 20 | TAH107R020P0C | C |
| 140 | 4 | TAH147R004P0B | B |
| 170 | 10 | TAH177R010P0C | C |
| 250 | 7 | TAH257R007P0C | C |
| 330 | 4 | TAH337R004P0C | C |

| TAH PRICES | | | | | |
|------------|-------------------|--------|--------|---------|---------|
| Case Size | Net Each, Lots of | | | | |
| | 1-24 | 25-49 | 50-99 | 100-499 | 500-999 |
| A | \$2.20 | \$1.75 | \$1.48 | \$1.26 | \$1.15 |
| B | 3.68 | 2.94 | 2.49 | 2.12 | 1.935 |
| C | 7.05 | 5.65 | 4.76 | 4.50 | 3.72 |

HERMETICALLY SEALED—HIGH TEMPERATURE



| MTF -55° TO +150° C | | | | | |
|--|-------------|---------------------|--------------|-------------|---------------------|
| Axial leads, commercial equivalent to MIL-C-3965 Style CL14. | | | | | |
| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Cap. μ f | WVDC +85° C | Mallory Catalog No. |
| 11 | 90 | MTF116T090P0H | 40 | 30 | MTF406T030P0H |
| 15 | 75 | MTF156T075P0H | 70 | 15 | MTF706T015P0H |
| 20 | 60 | MTF206T060P0H | 100 | 10 | MTF107T010P0H |
| 25 | 50 | MTF256T050P0H | 140 | 6 | MTF147T006P0H |
| 30 | 40 | MTF306T040P0H | | | |

Any Model listed above Net Each, Lots of 1-24, \$6.76; 25-49, \$5.41; 50-99, \$4.56; 100-499, \$3.89.

| XTM -55° TO +175° C | | | | | |
|---------------------|-------------|----------------------|-------------------|---------|---------|
| Cap. μ f | WVDC +85° C | Mallory Catalog No.* | Net Each, Lots of | | |
| | | | 1-24 | 25-49 | 50-99 |
| 4 | 340 | XTM405T340P0A | \$16.20 | \$15.12 | \$14.04 |
| 5 | 255 | XTM505T255P0A | 12.96 | 12.10 | 11.23 |
| 8 | 170 | XTM805T170P0A | 9.90 | 9.24 | 8.56 |
| 16 | 90 | XTM166T090P0A | 6.56 | 6.12 | 5.68 |
| 25 | 60 | XTM256T060P0A | 6.56 | 6.12 | 5.68 |
| 40 | 35 | XTM406T035P0A | 6.56 | 6.12 | 5.68 |

*Suffix letter A indicates MIL-C-3965 20A, style CL-10. Also available in Style C-13; change suffix letter to D, add 5c to prices shown.

XTH-XTL-XTV HIGH TEMP.—HIGH CAPACITY
XTH, XTL, and XTV types are available in twelve case configurations. Only those cases which are normally stocked are shown here. All others are available on special order. Cases listed conform fully to MIL-C-3965B Styles CL10, 13, 14, 16, 17, and 18.

| XTH -55° TO +200° C | | | | | |
|---------------------|-------------|----------------------|-------------------|---------|---------|
| Cap. μ f | WVDC +85° C | Mallory Catalog No.† | Net Each, Lots of | | |
| | | | 1-24 | 25-49 | 50-99 |
| 7 | 630 | XTH705U630P0C | \$42.62 | \$39.78 | \$36.94 |
| 8 | 540 | XTH805U540P0C | 37.13 | 34.66 | 32.19 |
| 12 | 360 | XTH126U360P0C | 26.06 | 24.33 | 22.59 |
| 12 | 360 | XTH126U360P0L | 26.41 | 24.68 | 22.94 |
| 16 | 270 | XTH166U270P0C | 20.48 | 19.12 | 17.76 |
| 16 | 270 | XTH166U270P0L | 20.83 | 19.47 | 18.11 |
| 25 | 180 | XTH256U180P0C | 14.80 | 13.81 | 12.83 |
| 25 | 180 | XTH256U180P0L | 15.15 | 14.16 | 13.18 |
| 50 | 90 | XTH506U090P0C | 9.30 | 8.69 | 8.07 |
| 80 | 60 | XTH806U060P0C | 9.30 | 8.69 | 8.07 |
| 80 | 60 | XTH806U060P0L | 9.65 | 9.04 | 8.42 |
| 120 | 35 | XTH127U035P0C | 9.30 | 8.69 | 8.07 |
| 150 | 30 | XTH157U030P0C | 9.30 | 8.69 | 8.07 |
| 150 | 30 | XTH157U030P0L | 9.65 | 9.04 | 8.42 |
| 240 | 18 | XTH247U018P0L | 9.65 | 9.04 | 8.42 |

†C, MIL-C-3965/1D, CL-14; L, MIL-C-3965/1D, CL-16.

XTL -55° TO +200° C

| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Net Each, Lots of | | |
|--------------|-------------|---------------------|-------------------|---------|---------|
| | | | 1-24 | 25-49 | 50-99 |
| 3.5 | 630 | XTL355U630P0C* | \$34.30 | \$32.01 | \$29.73 |
| 4 | 540 | XTL405U540P0C* | 29.89 | 27.90 | 25.91 |
| 5 | 450 | XTL505U450P0C* | 25.70 | 23.99 | 22.28 |
| 6 | 360 | XTL605U360P0C* | 21.16 | 19.75 | 18.34 |
| 6 | 360 | XTL605U360P0L† | 21.50 | 20.10 | 18.69 |
| 8 | 270 | XTL805U270P0C* | 16.70 | 15.59 | 14.48 |
| 12 | 180 | XTL126U180P0C* | 12.38 | 11.56 | 10.64 |
| 12 | 180 | XTL126U180P0L† | 12.73 | 11.91 | 11.09 |
| 25 | 90 | XTL256U090P0C* | 8.24 | 7.69 | 7.15 |
| 40 | 60 | XTL406U060P0C* | 8.24 | 7.69 | 7.15 |
| 40 | 60 | XTL406U060P0L† | 8.59 | 8.04 | 7.50 |
| 75 | 30 | XTL756U030P0C* | 8.24 | 7.69 | 7.15 |
| 75 | 30 | XTL756U030P0L† | 8.59 | 8.04 | 7.50 |
| 120 | 18 | XTL127U018P0C* | 8.24 | 7.69 | 7.15 |

*Stock Items (MIL-C-3965/1D, Style CL-14). †Stock Items (MIL-C-3965/1D, Style CL-16).

XTV -55° TO +200° C

XTV listed by MIL-C-3965 19A Style CL17 ("C") and CL18 ("B") are stocked. Ten other case configurations available on special order.

| Cap. μ f | WVDC +85° C | Mallory Catalog No. | Net Each, Lots of | | |
|--------------|-------------|---------------------|-------------------|---------|---------|
| | | | 1-24 | 25-49 | 50-99 |
| 25 | 450 | XTV256T450P0B | \$79.55 | \$74.25 | \$68.95 |
| 40 | 270 | XTV406T270P0B | 49.55 | 46.25 | 42.95 |
| 60 | 180 | XTV606T180P0B | 35.00 | 32.67 | 30.34 |
| 120 | 90 | XTV127T090P0B | 19.55 | 18.25 | 16.95 |
| 190 | 40 | XTV197T040P0B | 13.55 | 12.65 | 11.75 |
| 200 | 60 | XTV207T060P0B | 19.55 | 18.25 | 16.95 |
| 220 | 75 | XTV227T075P0B | 30.05 | 28.05 | 26.05 |
| 290 | 40 | XTV297T040P0B | 19.55 | 18.25 | 16.95 |
| 350 | 60 | XTV357T060P0B | 30.05 | 28.05 | 26.05 |
| 450 | 75 | XTV457T075P0B | 43.55 | 40.65 | 37.75 |
| 500 | 40 | XTV507T040P0B | 30.05 | 28.05 | 26.05 |
| 700 | 60 | XTV707T060P0B | 43.55 | 40.65 | 37.75 |
| 750 | 60 | XTV757T060P0B | 43.55 | 40.65 | 37.75 |
| 1000 | 40 | XTV108T040P0B | 43.55 | 40.65 | 37.75 |
| 1300 | 30 | XTV138T030P0B | 43.55 | 40.65 | 37.75 |
| 25 | 450 | XTV256T450P0C | 79.55 | 74.25 | 68.95 |
| 40 | 270 | XTV406T270P0C | 49.55 | 46.25 | 42.95 |
| 60 | 180 | XTV606T180P0C | 35.00 | 32.67 | 30.34 |
| 120 | 90 | XTV127T090P0C | 19.55 | 18.25 | 16.95 |
| 200 | 60 | XTV207T060P0C | 19.55 | 18.25 | 16.95 |
| 220 | 75 | XTV227T075P0C | 30.05 | 28.05 | 26.05 |
| 350 | 60 | XTV357T060P0C | 30.05 | 28.05 | 26.05 |
| 290 | 40 | XTV297T040P0C | 19.55 | 18.25 | 16.95 |
| 370 | 30 | XTV377T030P0C | 19.55 | 18.25 | 16.95 |
| 450 | 75 | XTV457T075P0C | 43.55 | 40.65 | 37.75 |
| 500 | 40 | XTV507T040P0C | 30.05 | 28.05 | 26.05 |
| 650 | 30 | XTV657T030P0C | 30.05 | 28.05 | 26.05 |
| 700 | 60 | XTV707T060P0C | 43.55 | 40.65 | 37.75 |
| 750 | 60 | XTV757T060P0C | 43.55 | 40.65 | 37.75 |
| 1000 | 40 | XTV108T040P0C | 43.55 | 40.65 | 37.75 |
| 1300 | 30 | XTV138T030P0C | 43.55 | 40.65 | 37.75 |

MALLORY
P. R. MALLORY & CO. INC.

Mylar, Molded Capacitors

GEM SERIES MOLDED TUBULAR CAPACITORS



Molded tubular paper capacitors sealed against moisture with Epoxy resin and molded bakelite. Tolerance $\pm 20\%$ at 85°C except those marked (*), which have $\pm 10\%$ tolerance. Double tinned copperweld leads—20 gauge on case sizes up to $\frac{1}{2}$ " : 18 gauge over $\frac{1}{2}$ " case size. Use attached leads for mounting. TH clips available for large sizes.

| Cap. μf | 200 WVDC | | | 400 WVDC | | | 600 WVDC | | | 1000 WVDC | | |
|--------------------|----------------|----------|-----|----------------|----------|-----|----------------|----------|-----|----------------|----------|-----|
| | Mall. No. GEM- | Net Each | † | Mall. No. GEM- | Net Each | † | Mall. No. GEM- | Net Each | † | Mall. No. GEM- | Net Each | † |
| .001 | | | | 421 | A | 15c | 621 | A | 15c | 1021 | A | 30c |
| .0015 | | | | | | | 6215 | A | 15c | 10215 | A | 30c |
| .002 | | | | | | | 622 | A | 15c | 1022 | B | 30c |
| .0022 | | | | | | | 6222 | A | 15c | 10222 | B | 30c |
| .0025 | | | | | | | 6225 | A | 15c | | | |
| .003 | | | | | | | 623 | A | 15c | 1023 | B | 30c |
| .0033 | | | | | | | 6233 | A | 15c | | | |
| .004 | | | | | | | 624 | A | 15c | 1024 | B | 30c |
| .0047 | | | | | | | 6247 | A | 15c | 10247 | B | 30c |
| .005 | | | | 425 | A | 15c | 625 | B | 15c | 1025 | B | 30c |
| .006 | | | | | | | 626 | B | 15c | | | |
| .0068 | | | | | | | 6268 | B | 18c | 10268 | B | 30c |
| .007 | | | | | | | 627 | B | 18c | | | |
| .008 | | | | | | | 628 | B | 18c | | | |
| .0082 | | | | | | | 6282 | B | 18c | | | |
| .01 | | | | 411 | A | 15c | 611 | B | 18c | 1011 | C | 30c |
| .012 | | | | | | | 6112 | B | 18c | | | |
| .015 | | | | 4115 | B | 15c | 6115 | B | 18c | 10115 | D | 30c |
| .02 | | | | 412 | B | 15c | 612 | C | 18c | 1012 | D | 30c |
| .022 | | | | 4122 | B | 18c | 6122 | C | 18c | 10122 | D | 30c |
| .025 | | | | 4125 | B | 18c | 6125 | C | 21c | | | |
| .03 | | | | 413 | B | 18c | 613 | C | 21c | 1013 | E | 30c |
| .033 | | | | 4133 | C | 18c | 6133 | D | 21c | 10133 | E | 30c |
| .04 | | | | 414 | D | 18c | 614 | D | 21c | 1014 | E | 30c |
| .047 | | | | 4147 | C | 18c | 6147 | D | 24c | 10147 | E | 30c |
| .05 | | | | 415 | C | 18c | 615 | D | 24c | 1015 | E | 30c |
| .056 | | | | 416 | D | 21c | 6156 | E | 24c | | | |
| .06 | | | | 4168 | D | 21c | 616 | E | 24c | | | |
| .068 | | | | 401 | D | 21c | 6168 | E | 27c | 10168 | E | 39c |
| .1 | 201* | C | 21c | 401 | D | 21c | 601 | E | 27c | 1001* | F | 45c |
| .15 | 2015* | E | 21c | 4015* | E | 24c | 6015* | E | 30c | | | |
| .2 | | | | 402* | F | 27c | 602* | F | 42c | | | |
| .22 | 2022* | E | 24c | 4022* | F | 27c | 6022* | F | 42c | | | |
| .25 | 2025* | E | 24c | 4025* | F | 27c | 6025* | F | 42c | | | |
| .27 | | | | 4027* | F | 42c | 6027* | F | 42c | | | |
| .33 | 2033* | E | 30c | 4033* | F | 30c | 6033* | H | 42c | | | |
| .47 | 2047* | E | 36c | 4047* | H | 36c | 6047* | H | 48c | | | |
| .5 | 205* | E | 36c | 405* | H | 36c | 605* | H | 48c | | | |
| .68 | | | | | | | 6068* | G | 48c | | | |
| 1.0 | 21* | F | 54c | 41* | H | 75c | 61* | G | 75c | | | |

GEM MOLDED TUBULAR 1600 WVDC CAPACITORS

$\pm 10\%$ Tolerance

| Cap. μf | Mall. No. GEM- | Net Each | † | Cap. μf | Mall. No. GEM- | Net Each | † | Cap. μf | Mall. No. GEM- | Net Each | † |
|--------------------|----------------|----------|-----|--------------------|----------------|----------|-----|--------------------|----------------|----------|-----|
| .001 | 1621 | B | 39c | .005 | 1625 | D | 39c | .01 | 1611 | D | 42c |
| .0015 | 16215 | B | 39c | .0056 | 16256 | D | 39c | .0125 | 161125 | E | 42c |
| .002 | 1622 | B | 39c | .006 | 1626 | D | 39c | .02 | 1612 | E | 36c |
| .0025 | 16225 | B | 45c | .0068 | 16268 | D | 39c | .022 | 16122 | E | 45c |
| .003 | 1623 | C | 39c | .007 | 1627 | D | 39c | .03 | 1613 | E | 42c |
| .0033 | 16233 | C | 39c | .0075 | 16275 | D | 39c | .04 | 1614 | F | 42c |
| .004 | 1624 | C | 39c | .008 | 1628 | D | 39c | .05 | 1615 | F | 42c |
| .0047 | 16247 | D | 39c | .0082 | 16282 | D | 39c | .06 | 1616 | F | 42c |

GEM MOLDED TUBULAR HIGH VOLTAGE CAPACITORS

$\pm 20\%$ Tolerance

| Cap. μf | 3000 WVDC | | | 6000 WVDC | | | 10,000 WVDC | | | 15,000 WVDC | | |
|--------------------|----------------|----------|--------|----------------|----------|--------|----------------|----------|--------|----------------|----------|--------|
| | Mall. No. GEM- | Net Each | † | Mall. No. GEM- | Net Each | † | Mall. No. GEM- | Net Each | † | Mall. No. GEM- | Net Each | † |
| .0001 | 3031 | C | \$0.93 | | | | | | | 15031 | J | \$1.98 |
| .00025 | | | | | | | 125325† | E | \$1.32 | 150325 | K | 2.01 |
| .0005 | 3035 | C | .66 | 6X35 | D | \$0.81 | 10035 | E | .90 | 15035 | L | 2.04 |
| .001 | 3021 | C | .66 | 6X21 | E | .87 | 10021 | I | 1.26 | | | |
| .002 | | | | 6X22 | F | 1.05 | | | | | | |
| .003 | 3023 | D | .69 | 6X23 | F | 1.11 | | | | | | |
| .005 | 3025 | E | .69 | 6X25 | F | 1.26 | | | | | | |
| .0075 | | | | 6X275 | H | 1.26 | | | | | | |
| .01 | 3011 | E | .84 | 6X11 | H | 1.26 | | | | | | |
| .03 | 3013 | H | .84 | | | | | | | | | |
| .05 | 3015 | H | .96 | | | | | | | | | |

†12,500 WVDC.

MOLDED CAPACITOR CASE SIZES, INCHES

| Key | Dia. x L. | Key | Dia. x L. | Key | Dia. x L. | Key | Dia. x L. |
|-----|-----------------------------------|-----|-----------------------------------|-----|------------------------------------|-----|------------------------------------|
| A | $\frac{1}{8} \times 1$ | D | $\frac{1}{2} \times 1\frac{1}{2}$ | G | $1 \times 2\frac{1}{2}$ | J | $1\frac{1}{2} \times 2\frac{3}{4}$ |
| B | $\frac{3}{8} \times 1\frac{1}{4}$ | E | $\frac{5}{8} \times 1\frac{1}{2}$ | H | $1 \times 2\frac{3}{4}$ | K | $\frac{3}{4} \times 2\frac{1}{2}$ |
| C | $\frac{1}{2} \times 1\frac{1}{4}$ | F | $\frac{3}{4} \times 2\frac{1}{2}$ | I | $1\frac{1}{2} \times 2\frac{3}{4}$ | L | $\frac{3}{4} \times 2\frac{1}{2}$ |

ACE SERIES SINGLE ENDED MOLDED TUBULAR CAPACITORS

Same construction as "GEM" line. Designed for replacement use in automation and printed circuit radio and TV applications. Units provide substantial safety factor over original equipment components. Wire leads designed to fit automation and printed circuit chassis. Mounting by means of attached leads. Tolerance, $\pm 20\%$.

| Cap. μf | No. ACE- | WVDC | Size, In. Dia. x Lgth. | Net Each | Cap. μf | No. ACE- | WVDC | Size, In. Dia. x Lgth. | Net Each |
|--------------------|----------|------|-----------------------------------|----------|--------------------|----------|------|-----------------------------------|----------|
| .10 | 401 | 400 | $\frac{3}{8} \times 1\frac{1}{4}$ | 27c | .033 | 6133 | 600 | $\frac{1}{2} \times 1\frac{1}{4}$ | 24c |
| .001 | 621 | 600 | $\frac{3}{8} \times 1$ | 18c | .047 | 6147 | 600 | $\frac{1}{2} \times 1\frac{1}{4}$ | 27c |
| .0015 | 6215 | 600 | $\frac{3}{8} \times 1$ | 18c | .05 | 615 | 600 | $\frac{1}{2} \times 1\frac{1}{4}$ | 27c |
| .0022 | 6222 | 600 | $\frac{3}{8} \times 1$ | 18c | .068 | 6168 | 600 | $\frac{3}{8} \times 1\frac{1}{4}$ | 30c |
| .0033 | 6233 | 600 | $\frac{3}{8} \times 1$ | 18c | .10 | 601 | 600 | $\frac{1}{2} \times 1\frac{1}{4}$ | 30c |
| .0039 | 6239 | 600 | $\frac{3}{8} \times 1$ | 18c | .15 | 6015 | 600 | $\frac{3}{8} \times 1\frac{1}{4}$ | 30c |
| .0047 | 6247 | 600 | $\frac{3}{8} \times 1$ | 18c | .22 | 6022 | 600 | $\frac{3}{8} \times 1\frac{1}{4}$ | 30c |
| .01 | 611 | 600 | $\frac{3}{8} \times 1\frac{1}{4}$ | 21c | .01 | 1011 | 1000 | $\frac{1}{2} \times 1\frac{1}{4}$ | 30c |
| .015 | 6115 | 600 | $\frac{3}{8} \times 1\frac{1}{4}$ | 21c | .015 | 10115 | 1000 | $\frac{1}{2} \times 1\frac{1}{4}$ | 30c |
| .02 | 612 | 600 | $\frac{3}{8} \times 1\frac{1}{4}$ | 24c | .033 | 10133 | 1000 | $\frac{3}{8} \times 1\frac{1}{4}$ | 30c |
| .022 | 6122 | 600 | $\frac{3}{8} \times 1\frac{1}{4}$ | 24c | .047 | 10147 | 1000 | $\frac{3}{8} \times 1\frac{1}{4}$ | 30c |

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PVC POLYVINYL CHLORIDE

MYLAR® CAPACITORS

Moistureproof, flexible polyvinyl chloride-coated capacitors. High purity aluminum foil used throughout. Dielectric is 100% DuPont Mylar®. Leads are solid copper radial type; ideal for printed circuitry. Flexible moisture seal at leads. Feature low capacitance drift. Temperature range, -40°C to $+105^\circ\text{C}$; may be operated at 105°C at two times rated voltage with no derating. Tolerance, $\pm 10\%$.



100 WVDC UNITS

| Mallory No. PVC- | Cap. μf | Net Each | Mallory No. PVC- | Cap. μf | Net Each |
|------------------|--------------------|----------|------------------|--------------------|----------|
| 1118 | .018 | 24c | 1027 | .27 | 33c |
| 1122 | .022 | 24c | 1033 | .33 | 33c |
| 1133 | .033 | 24c | 104 | .40 | 33c |
| 114 | .04 | 24c | 1047 | .47 | 33c |
| 1147 | .047 | 24c | 105 | .5 | 45c |
| 1156 | .056 | 24c | 1056 | .56 | 45c |
| 1168 | .068 | 24c | 1068 | .68 | 48c |
| 101 | .10 | 24c | 11 | 1.0 | 57c |
| 1015 | .15 | 24c | 11P5 | 1.5 | 78c |
| 1022 | .22 | 27c | 12 | 2.0 | 96c |
| 1025 | .25 | 30c | | | |

200 WVDC UNITS

| Mallory No. PVC- | Cap. μf | Net Each | Mallory No. PVC- | Cap. μf | Net Each |
|------------------|--------------------|----------|------------------|--------------------|----------|
| 211 | .01 | \$0.24 | 2022 | .22 | \$0.36 |
| 2115 | .015 | .24 | 2025 | .25 | .36 |
| 212 | .02 | .24 | 2027 | .27 | .39 |
| 2122 | .022 | .24 | 2033 | .33 | .39 |
| 2133 | .033 | .24 | 204 | .40 | .42 |
| 214 | .04 | .24 | 2047 | .47 | .45 |
| 2147 | .047 | .24 | 205 | .5 | .45 |
| 215 | .05 | .24 | 2056 | .56 | .51 |
| 2156 | .056 | .27 | 2068 | .68 | .54 |
| 2168 | .068 | .27 | 21 | 1.0 | .78 |
| 201 | .10 | .27 | 21P5 | 1.5 | 1.02 |
| 2015 | .15 | .30 | 22 | 2.0 | 1.26 |

400 WVDC UNITS

| Mallory No. PVC- | Cap. μf | Net Each | Mallory No. PVC- | Cap. μf | Net Each |
|------------------|--------------------|----------|------------------|--------------------|----------|
| 4222 | .022 | 21c | 415 | .05 | 27c |
| 423 | .003 | 21c | 4156 | .056 | 27c |
| 4233 | .0033 | 21c | 4168 | .068 | 27c |
| 424 | .004 | 21c | 401 | .10 | 30c |
| 4247 | .0047 | 21c | 4015 | .15 | 30c |
| 4256 | .0056 | 21c | 4022 | .22 | 45c |
| 4268 | .0068 | 21c | 4025 | .25 | 45c |
| 411 | .01 | 21c | 4027 | .27 | 45c |
| 4115 | .015 | 21c | 4033 | .33 | 51c |
| 412 | .02 | 21c | 404 | .40 | 57c |
| 4122 | .022 | 21c | 4047 | .47 | 60c |
| 4133 | .033 | 21c | 405 | .5 | 69c |
| 414 | .04 | 27c | 4056 | .56 | 78c |
| 4147 | .047 | 27c | 4068 | .68 | 90c |

600 WVDC UNITS

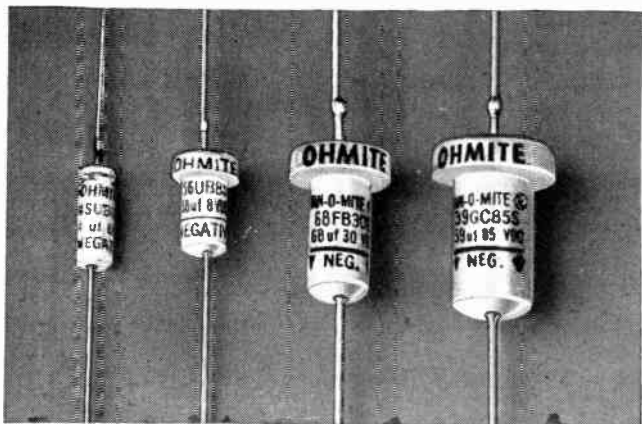
| Mallory No. PVC- | Cap. μf | Net Each | Mallory No. PVC- | Cap. μf | Net Each |
|------------------|--------------------|----------|------------------|--------------------|----------|
| 621 | .001 | 21c | 6122 | .022 | 24c |
| 6212 | .0012 | 21c | 6125 | .025 | 24c |
| 6215 | .0015 | 21c | 613 | .03 | 24c |
| 622 | .002 | 21c | 6133 | .033 | 24c |
| 6222 | .0022 | 21c | 6139 | .039 | 27c |
| 6225 | .0025 | 21c | 614 | .04 | 27c |
| 623 | .003 | 21c | 6147 | .047 | 27c |
| 6233 | .0033 | 21c | 615 | .05 | 27c |
| 6239 | .0039 | 21c | 6156 | .056 | 27c |
| 624 | .004 | 21c | 616 | .06 | 27c |
| 6247 | .0047 | 21c | 6168 | .068 | 30c |
| 625 | .005 | 21c | 6175 | .075 | 30c |
| 6256 | .0056 | 21c | 6182 | .082 | 30c |
| 626 | .006 | 21c | 601 | .10 | 30c |
| 6268 | .0068 | | | | |

OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



TANTALUM SLUG CAPACITORS — TAN-O-MITE® SERIES TS



1½" Leads 1½" Leads 2¼" Leads 2¼" Leads
Com'l Size SU, Com'l Size U, Com'l Size F, Com'l Size G,
MIL Size T1 MIL Size T1 MIL Size T2 MIL Size T3

The "slug" type of tantalum capacitor utilizes a porous anode of sintered tantalum; with axial leads. Intended for polar applications, these capacitors offer the best characteristics of all the types described on these pages. They exceed the vibration test of MIL-C-3965B, Grade 3, thereby meeting the requirements of Grades 1 and 2 as well.

Available from stock in two physical types—the "hat-shaped" type, 3 sizes (U,F,G) and the "straight-cylindrical" type, 1 size (SU) which, while smaller than size U, has the same range of capacitance and voltage. Hat-shape types are offered in two operating temperature ranges, -55°C to +85°C and -55°C to +125°C. Tolerances are shown in

footnote under price tables. All tolerances are not supplied on all stock capacitors — see footnotes under stock table. Units designed to meet MIL-C-3965B, are also stocked. Units insulated with plastic sleeve are available at slight extra cost. Stock listings below and on next page.

COMMERCIAL SLUG CAPACITORS 1-24 QTY. NET PRICES HAT-SHAPE — UNINSULATED*

| Case Size | Dimensions* | | 85°C Tolerance† | | 125°C Tolerance† | |
|-----------|-------------|-------|-----------------|--------|------------------|--------|
| | Dia. | Lgth. | S or M | K | S or M | K |
| U | 5/16 | 15/32 | \$2.94 | \$3.23 | \$4.12 | \$4.53 |
| F | 15/32 | 11/16 | 6.37 | 7.01 | 8.92 | 9.81 |
| G | 37/64 | 49/64 | 7.74 | 8.51 | 10.84 | 11.92 |

| Case Size | Dimensions* | | 85°C Tolerance† | | 125°C Tolerance† | |
|-----------|-------------|-------|-----------------|--------|------------------|--------|
| | Dia. | Lgth. | T | S or M | T | S or M |
| T1 | 5/16 | 15/32 | \$4.14 | \$4.56 | \$5.43 | \$5.97 |
| T2 | 15/32 | 11/16 | 8.40 | 9.24 | 10.94 | 12.04 |
| T3 | 37/64 | 49/64 | 10.20 | 11.22 | 13.30 | 14.63 |

*For plastic insulating sleeve (.015" wall thickness) add 10c each for case sizes U, F, G; add 5c for size SU.

†Tolerances — S = -15+20%; K = ±10%; M = ±20%. K and M tolerances only furnished on high capacitance units — see ‡, stock table below and on next page.

MIL-C-3965B SLUG CAPACITORS 1-24 QTY. NET PRICES MIL STYLE CL44 — UNINSULATED*

| Case Size | Dimensions* | | 85°C Tolerance† | | 125°C Tolerance† | |
|-----------|-------------|-------|-----------------|--------|------------------|--------|
| | Dia. | Lgth. | T | S or M | T | S or M |
| T1 | 5/16 | 15/32 | \$4.14 | \$4.56 | \$5.43 | \$5.97 |
| T2 | 15/32 | 11/16 | 8.40 | 9.24 | 10.94 | 12.04 |
| T3 | 37/64 | 49/64 | 10.20 | 11.22 | 13.30 | 14.63 |

| Case Size | Dimensions* | | 85°C Tolerance† | | 125°C Tolerance† | |
|-----------|-------------|-------|-----------------|--------|------------------|--------|
| | Dia. | Lgth. | T | S or M | T | S or M |
| T1 | 5/16 | 15/32 | \$4.14 | \$4.56 | — | — |

*For plastic insulating sleeve (.015" wall thickness)—MIL styles CL45, CL65—add 10c each.

†Tolerances — T = -15+50%; S = -15±20%; M = ±20%. M tolerance only furnished on high capacitance units — see ‡, stock table below and on next page.

HAT-SHAPE SLUG CAPACITORS — CASE SIZES U, F, G — MIL STYLES CL44, CL45 — CASE SIZES T1, T2, T3

| Mfd. | D.C. Volts | | Commercial | | MIL-C-3965B | | Mfd. | D.C. Volts | | Commercial | | MIL-C-3965B | |
|------|------------|-------|------------|-------------------------|-------------|--------------------------------|------|--------------|-------|------------|-------------------------|--------------|--------------------------------|
| | 85°C | 125°C | Case Size | Stock No. (Incomplete†) | Case Size | Type Designation (Incomplete*) | | 85°C | 125°C | Case Size | Stock No. (Incomplete†) | Case Size | Type Designation (Incomplete*) |
| | 30 | 6 | 4 | U | 30UB6 | T1 | | CL4_BB300_P3 | 15 | 15 | U | 15UB15 | T1 | CL4_BE150_P3 |
| 30 | 6 | 4 | U | 30UC4 | T1 | CL4_CB300_P3 | 15 | 10 | U | 15UC10 | T1 | CL4_CE150_P3 | |
| 68‡ | 6 | 4 | U | 68UB6 | T1 | CL4_BB680MP3 | 33‡ | 15 | U | 33UB15 | T1 | CL4_BE330MP3 | |
| 68‡ | 6 | 4 | U | 68UC4 | | | 33‡ | 10 | U | 33UC10 | | | |
| 140 | 6 | 4 | F | 140FB6 | T2 | CL4_BB141_P3 | 70 | 15 | F | 70FB15 | T2 | CL4_BE700_P3 | |
| 140 | 6 | 4 | F | 140FC4 | T2 | CL4_CB141_P3 | 70 | 10 | F | 70FC10 | T2 | CL4_CE700_P3 | |
| 270‡ | 6 | 4 | F | 270FB6 | T2 | CL4_BB271MP3 | 120‡ | 15 | F | 120FB15 | T2 | CL4_BE121MP3 | |
| 270‡ | 6 | 4 | F | 270FC4 | | | 120‡ | 10 | F | 120FC10 | | | |
| 330 | 6 | 4 | G | 330GB6 | T3 | CL4_BB331_P3 | 170 | 15 | G | 170GB15 | T3 | CL4_BE171_P3 | |
| 330 | 6 | 4 | G | 330GC4 | T3 | CL4_CB331_P3 | 170 | 10 | G | 170GC10 | T3 | CL4_CE171_P3 | |
| 560‡ | 6 | 4 | G | 560GB6 | T3 | CL4_BB561MP3 | 270‡ | 15 | G | 270GB15 | T3 | CL4_BE271MP3 | |
| 560‡ | 6 | 4 | G | 560GC4 | | | 270‡ | 10 | G | 270GC10 | | | |
| 25 | 8 | 5 | U | 25UB8 | T1 | CL4_BC250_P3 | 10 | 25 | U | 10UB25 | T1 | CL4_BG100_P3 | |
| 25 | 8 | 5 | U | 25UC5 | T1 | CL4_CC250_P3 | 10 | 17 | U | 10UC17 | T1 | CL4_CG100_P3 | |
| 56‡ | 8 | 5 | U | 56UB8 | T1 | CL4_BC560MP3 | 22‡ | 25 | U | 22UB25 | T1 | CL4_BG220MP3 | |
| 56‡ | 8 | 5 | U | 56UC5 | | | 22‡ | 17 | U | 22UC17 | | | |
| 220‡ | 8 | 5 | F | 220FB8 | T2 | CL4_BC221MP3 | 100‡ | 25 | F | 100FB25 | T2 | CL4_BG101MP3 | |
| 220‡ | 8 | 5 | F | 220FC5 | | | 100‡ | 17 | F | 100FC17 | | | |
| 430‡ | 8 | 5 | G | 430GB8 | T3 | CL4_BC431MP3 | 180‡ | 25 | G | 180GB25 | T3 | CL4_BG181MP3 | |
| 430‡ | 8 | 5 | G | 430GC5 | | | 180‡ | 17 | G | 180GC17 | | | |
| 20 | 10 | 7 | U | 20UB10 | T1 | CL4_BD200_P3 | 8 | 30 | U | 8UB30 | T1 | CL4_BH080_P3 | |
| 20 | 10 | 7 | U | 20UC7 | T1 | CL4_CD200_P3 | 8 | 20 | U | 8UC20 | T1 | CL4_CH080_P3 | |
| 47‡ | 10 | 7 | U | 47UB10 | T1 | CL4_BD470MP3 | 15‡ | 30 | U | 15UB30 | T1 | CL4_BH150MP3 | |
| 47‡ | 10 | 7 | U | 47UC7 | | | 15‡ | 20 | U | 15UC20 | | | |
| 100 | 10 | 7 | F | 100FB10 | T2 | CL4_BD101_P3 | 40 | 30 | F | 40FB30 | T2 | CL4_BH400_P3 | |
| 100 | 10 | 7 | F | 100FC7 | T2 | CL4_CD101_P3 | 40 | 20 | F | 40FC20 | T2 | CL4_CH400_P3 | |
| 180‡ | 10 | 7 | F | 180FB10 | T2 | CL4_BD181MP3 | 68‡ | 30 | F | 68FB30 | T2 | CL4_BH680MP3 | |
| 180‡ | 10 | 7 | F | 180FC7 | | | 68‡ | 20 | F | 68FC20 | | | |
| 250 | 10 | 7 | G | 250GB10 | T3 | CL4_BD251_P3 | 100 | 30 | G | 100GB30 | T3 | CL4_BH101_P3 | |
| 250 | 10 | 7 | G | 250GC7 | T3 | CL4_CD251_P3 | 100 | 20 | G | 100GC20 | T3 | CL4_CH101_P3 | |
| 390‡ | 10 | 7 | G | 390GB10 | T3 | CL4_BD391MP3 | 150‡ | 30 | G | 150GB30 | T3 | CL4_BH151MP3 | |
| 390‡ | 10 | 7 | G | 390GC7 | | | 150‡ | 20 | G | 150GC20 | | | |

†Complete stock no. as follows: Add K, S or M to indicate tolerance except on high-capacitance units for which use only K or M. Add "A" after tolerance letter if insulating sleeve is desired.

*Complete type designation as follows: For uninsulated insert "4" after "CL4_" or "CL6_" for insulated insert "5" instead. Insert S, T or M

before "_P" to indicate tolerance, except for high-capacitance units which are supplied only in M tolerance.

‡High-capacitance units.

Tolerances: K = ±10%; S = -15+20%; M = ±20%; T = -15+50%.

Continued Next Page

OHMITEresistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes**TANTALUM SLUG AND WIRE CAPACITORS****HAT-SHAPE CONTINUED**

| Mfd. | D.C. Volts | | Commercial | | MIL-C-3965B | | Mfd. | D.C. Volts | | Commercial | | MIL-C-3965B | |
|------|------------|-------|------------|-------------------------|-------------|--------------------------------|------|------------|-------|------------|-------------------------|--------------|--------------------------------|
| | 85°C | 125°C | Case Size | Stock No. (Incomplete†) | Case Size | Type Designation (Incomplete*) | | 85°C | 125°C | Case Size | Stock No. (Incomplete†) | Case Size | Type Designation (Incomplete*) |
| 5 | 50 | | U | 5UB50__ | T1 | CL4_BJ050_P3 | 40 | 75 | G | 40GB75__ | T3 | CL4_BL400_P3 | |
| 5 | 50 | 33 | U | 5UC33__ | T1 | CL4_CJ050_P3 | 40 | 75 | 50 | G | 40GC50__ | T3 | CL4_CL400_P3 |
| 10± | 50 | | U | 10UB50__ | T1 | CL4_BJ100MP3 | 56± | 75 | G | 56GB75__ | T3 | CL4_BL560MP3 | |
| 10± | 50 | 33 | U | 10UC33__ | | | 56± | 75 | 50 | G | 56GC50__ | | |
| 25 | 50 | | F | 25FB50__ | T2 | CL4_BJ250_P3 | 2.5 | 100 | U | 2R5UB100__ | T1 | CL4_BN2R5_P3 | |
| 25 | 50 | 33 | F | 25FC33__ | T2 | CL4_CJ250_P3 | 2.5 | 100 | 70 | U | 2R5UC70__ | T1 | CL4_CN2R5_P3 |
| 47± | 50 | | F | 47FB50__ | T2 | CL4_BJ470MP3 | 4.7± | 100 | U | 4R7UB100__ | T1 | CL4_BN4R7MP3 | |
| 47± | 50 | 33 | F | 47FC33__ | | | 4.7± | 100 | 70 | U | 4R7UC70__ | | |
| 60 | 50 | | G | 60GB50__ | T3 | CL4_BJ600_P3 | 11 | 100 | F | 11FB100__ | T2 | CL4_BN110_P3 | |
| 60 | 50 | 33 | G | 60GC33__ | T3 | CL4_CJ600_P3 | 11 | 100 | 70 | F | 11FC70__ | T2 | CL4_CN110_P3 |
| 82± | 50 | | G | 82GB50__ | T3 | CL4_BJ820MP3 | 22± | 100 | F | 22FB100__ | T2 | CL4_BN220MP3 | |
| 82± | 50 | 33 | G | 82GC33__ | | | 22± | 100 | 70 | F | 22FC70__ | | |
| 4 | 60 | | U | 4UB60__ | T1 | CL4_BK040_P3 | 30 | 100 | G | 30GB100__ | T3 | CL4_BN300_P3 | |
| 4 | 60 | 40 | U | 4UC40__ | T1 | CL4_CK040_P3 | 30 | 100 | 70 | G | 30GC70__ | T3 | CL4_CN300_P3 |
| 8.2± | 60 | | U | 8R2UB60__ | T1 | CL4_BK8R2MP3 | 43± | 100 | G | 43GB100__ | T3 | CL4_BN430MP3 | |
| 8.2± | 60 | 40 | U | 8R2UC40__ | | | 43± | 100 | 70 | G | 43GC70__ | | |
| 20 | 60 | | F | 20FB60__ | T2 | CL4_BK200_P3 | 1.7 | 125 | U | 1R7UB125__ | T1 | CL4_BP1R7_P3 | |
| 20 | 60 | 40 | F | 20FC40__ | T2 | CL4_CK200_P3 | 1.7 | 125 | 85 | U | 1R7UC85__ | T1 | CL4_CP1R7_P3 |
| 39± | 60 | | F | 39FB60__ | T2 | CL4_BK390MP3 | 3.6± | 125 | U | 3R6UB125__ | | | |
| 39± | 60 | 40 | F | 39FC40__ | | | 3.6± | 125 | 85 | U | 3R6UC85__ | | |
| 50 | 60 | | G | 50GB60__ | T3 | CL4_BK500_P3 | 9 | 125 | F | 9FB125__ | T2 | CL4_BP090_P3 | |
| 50 | 60 | 40 | G | 50GC40__ | T3 | CL4_CK500_P3 | 9 | 125 | 85 | F | 9FC85__ | T2 | CL4_CP090_P3 |
| 68± | 60 | | G | 68GB60__ | T3 | CL4_BK680MP3 | 22± | 125 | F | 22FB125__ | | | |
| 68± | 60 | 40 | G | 68GC40__ | | | 22± | 125 | 85 | F | 22FC85__ | | |
| 3.5 | 75 | | U | 3R5UB75__ | T1 | CL4_BL3R5_P3 | 25 | 125 | G | 25GB125__ | T3 | CL4_BP250_P3 | |
| 3.5 | 75 | 50 | U | 3R5UC50__ | T1 | CL4_CL3R5_P3 | 25 | 125 | 85 | G | 25GC85__ | T3 | CL4_CP250_P3 |
| 6.8± | 75 | | U | 6R8UB75__ | T1 | CL4_BL6R8MP3 | 39± | 125 | G | 39GB125__ | | | |
| 6.8± | 75 | 50 | U | 6R8UC50__ | | | 39± | 125 | 85 | G | 39GC85__ | | |
| 15 | 75 | | F | 15FB75__ | T2 | CL4_BL150_P3 | | | | | | | |
| 15 | 75 | 50 | F | 15FC50__ | T2 | CL4_CL150_P3 | | | | | | | |
| 33± | 75 | | F | 33FB75__ | T2 | CL4_BL330MP3 | | | | | | | |
| 33± | 75 | 50 | F | 33FC50__ | | | | | | | | | |

**STRAIGHT-CYLINDRICAL CAPACITORS — CASE SIZE SU
MIL STYLES CL64, CL65 — CASE SIZE T1**

| Mfd. | D.C. Volts 85°C | Commercial Case SU Stock No. (Incomplete†) | MIL-C-3965B Case T1 Type Designation (Incomplete*) | Mfd. | D.C. Volts 85°C | Commercial Case SU Stock No. (Incomplete†) | MIL-C-3965B Case T1 Type Designation (Incomplete*) |
|------|-----------------|--|--|------|-----------------|--|--|
| | | | | | | | |
| 68± | 6 | 68SUB6__ | CL6_BB680MP3 | 10± | 50 | 10SUB50__ | CL6_BJ100MP3 |
| 25 | 8 | 25SUB8__ | CL6_BC250_P3 | 4 | 60 | 4SUB60__ | CL6_BK040_P3 |
| 56± | 8 | 56SUB8__ | CL6_BC560MP3 | 8.2± | 60 | 8R2SUB60__ | CL6_BK8R2MP3 |
| 20 | 10 | 20SUB10__ | CL6_BD200_P3 | 3.5 | 75 | 3R5SUB75__ | CL6_BL3R5_P3 |
| 47± | 10 | 47SUB10__ | CL6_BD470MP3 | 6.8± | 75 | 6R8SUB75__ | CL6_BL6R8MP3 |
| 15 | 15 | 15SUB15__ | CL6_BE150_P3 | 2.5 | 100 | 2R5SUB100__ | CL6_BN2R5_P3 |
| 33± | 15 | 33SUB15__ | CL6_BE330MP3 | 4.7± | 100 | 4R7SUB100__ | CL6_BN4R7MP3 |
| 10 | 25 | 10SUB25__ | CL6_BG100_P3 | 1.7 | 125 | 1R7SUB125__ | CL6_BP1R7_P3 |
| 22± | 25 | 22SUB25__ | CL6_BG220MP3 | 3.6± | 125 | 3R6SUB125__ | |
| 8 | 30 | 8SUB30__ | CL6_BH080_P3 | | | | |
| 15± | 30 | 15SUB30__ | CL6_BH150MP3 | | | | |

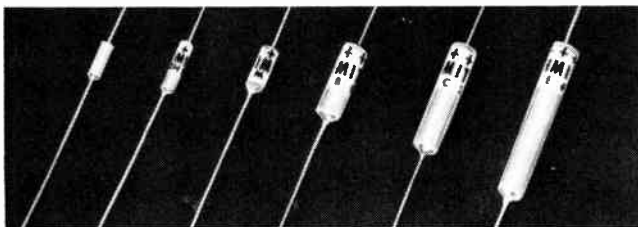
FOOTNOTES FOR SLUG CAPACITOR TABLES

†Complete stock no. as follows: Add K, S or M to indicate tolerance except on high-capacitance units for which use only K or M. Add "A" after tolerance letter if insulating sleeve is desired.

*Complete type designation as follows: For un-insulated insert "4" after "CL4_" or "CL6_" for insulated insert "5" instead. Insert S, T or M before "P" to indicate tolerance, except for high-capacitance units which are supplied only in M tolerance.

‡High-capacitance units.

Tolerances: K = ±10%; S = -15+20%; M = ±20%; T = -15+50%.

TANTALUM WIRE CAPACITORS — SERIES TW

| Size | Dia. | Lgth. | Size | Dia. | Lgth. |
|------|------|-------|------|------|-------|
| TK | .060 | .150 | M | .100 | .218 |
| TJ | .060 | .190 | B | .134 | .375 |
| HK | .075 | .150 | C | .134 | .562 |
| HJ | .075 | .190 | E | .134 | .812 |
| S | .080 | .234 | | | |

Smallest subminiature electrolytic capacitors available. The anode is specially processed tantalum wire sealed into a silver case. Axial leads are 2" long. Units are insulated with Mylar plastic sleeve. These polar type units are used in DC circuits where capacitance can exceed nominal circuit values (standard tolerance, -0 + 100%). Wide use in hearing aids and other subminiature apparatus. Operating

temperature range: -55°C to +85°C. Nine of thirteen available case sizes stocked.

| Mfd. | DCVV | Stock No.* | Net 1-24 | Mfd. | DCVV | Stock No.* | Net 1-24 |
|------|------|------------|----------|------|-------|------------|----------|
| 0.1 | 20 | R1TJ20 | \$1.65 | 4 | 3 | 4HJ3 | \$1.65 |
| | 60 | R1M60 | 1.65 | | 4 | 4S4 | 1.65 |
| 0.2 | 20 | R2TK20 | 1.65 | 5 | 20 | 4B20 | 1.78 |
| | 150 | R2E150 | 3.44 | | 30 | 5C30 | 2.56 |
| 0.5 | 10 | R5TK10 | 1.65 | 6 | 60 | 5E60 | 3.44 |
| | 16 | R5TJ16 | 1.65 | | 1.25 | 6HJ1R25 | 1.65 |
| | 20 | R5S20 | 1.65 | 8 | | 8S1R25 | 1.65 |
| | 80 | R5B80 | 2.19 | 4 | 8M4 | 1.65 | |
| 1.0 | 4 | 1TK4 | 1.65 | 10 | 8 | 10B8 | 1.78 |
| | 8 | 1HK8 | 1.65 | | 16 | 10C16 | 1.78 |
| | 10 | 1HJ10 | 1.65 | 30 | 10E30 | 3.44 | |
| | 20 | 1M20 | 1.65 | | 15 | 15M1R25 | 1.65 |
| 2 | 60 | 1B60 | 2.19 | 20 | 2 | 20B2 | 1.78 |
| | 80 | 1CR80 | 2.56 | 25 | 6 | 25C6 | 1.78 |
| | 1.25 | 2TK1R25 | 1.65 | 30 | 10 | 30E10 | 2.89 |
| | 4 | 2HJ4 | 1.65 | 50 | 2 | 50C2 | 1.78 |
| 3 | 8 | 2S8 | 1.65 | 60 | 4 | 60E4 | 2.89 |
| | 40 | 2B40 | 2.19 | 75 | 2 | 75E2 | 2.89 |
| | 1.25 | 3HK1R25 | 1.65 | | | | |
| | 80 | 3E80 | 3.44 | | | | |
| | 4 | 3HJ4 | 1.65 | | | | |

*MIDDLE LETTERS IN STOCK NO. INDICATE PHYSICAL SIZE.

OHMITE

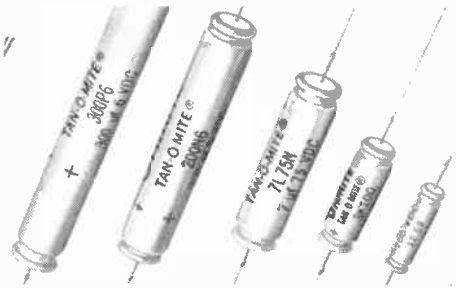
resistors · rheostats · tap switches · relays
variable transformers · tantalum capacitors
germanium diodes · r.f. chokes



TAN-O-MITE® SERIES TF TANTALUM FOIL CAPACITORS

**Polar & Non-Polar Electrolytic — Plain & Etched
MIL & Commercial — 55° C to +85° C**

In plain or etched foil. Polar units will withstand reversals up to 3.75 VDC. Temperature range -55° C to +85° C. Capacitance tolerance plain foil ±20%; etched foil less than 50 volts, -15 +75%; 50-99 volts, -15 +50%; 100-150 volts, -15 +30%. Considerably better leakage and power factor than wire type units. Meets MIL-C-3965B, Styles CL24, 25, 34, 35, also MIL vibration Grade 3 which covers Grades 1 & 2. Also available with plastic insulating sleeve .007" wall thickness, 1½" leads.



PRICES, DIMENSIONS

| Com'l. | Case Size MIL Styles CL34*-24* | Uninsulated* | | Net 1-24 Qty. | |
|--------|--------------------------------------|--------------|--------|---------------|-------------|
| | | Dia. | Lgth. | Plain Foil | Etched Foil |
| J | C1 | 3/16" | 1 1/8" | \$ 4.81 | \$ 4.81 |
| K | C2 | 3/16" | 7/8" | 7.33 | 8.06 |
| L | C3 | 3/16" | 1 1/8" | 11.60 | 13.32 |
| N | C4 | 3/8" | 2 1/8" | 16.24 | 22.74 |
| P | C5 | 3/8" | 2 3/4" | 21.74 | 30.44 |

*For plastic insulating sleeve (.007" wall thickness)—MIL Styles CL35, CL25—add 10¢ extra.

STOCK—PLAIN FOIL UNINSULATED‡

| DC Volts | Commercial | | | MIL-C-3965B | | |
|-------------|------------|------------|------------|-------------|-------------------|--|
| | Mfd. | Case | Stock No.‡ | Case | Type Designation‡ | |
| 3-50* | 10* | J | 10J3 | C1 | CL34BA100MP3 | |
| | 50* | K | 50K3 | C2 | CL34BA500MP3 | |
| | 3-7.5 | 10 | J | 10J3R75N† | | |
| | | 45 | K | 45K3R75N† | | |
| | | 140 | L | 140L3R75N† | | |
| 280 | | N | 280N3R75N† | | | |
| 400 | P | 400P3R75N† | | | | |
| 6 | 8 | J | 8J6 | C1 | CL34BB080MP3 | |
| | 30 | K | 30K6 | C2 | CL34BB300MP3 | |
| | 35 | K | 35K6 | | | |
| | 100 | L | 100L6 | C3 | CL34BB101MP3 | |
| | 200 | N | 200N6 | C4 | CL34BB201MP3 | |
| | 300 | P | 300P6 | C5 | CL34BB301MP3 | |
| | 7 | J | 7J6N† | | | |
| | 25 | K | 25K6N† | | | |
| | 85 | L | 85L6N† | | | |
| | 175 | N | 175N6N† | | | |
| 250 | P | 250P6N† | | | | |
| 10 | 6 | J | 6J10 | C1 | CL34BD060MP3 | |
| | 25 | K | 25K10 | C2 | CL34BD250MP3 | |
| | 80 | L | 80L10 | C3 | CL34BD800MP3 | |
| | 160 | N | 160N10 | C4 | CL34BD161MP3 | |
| | 220 | P | 220P10 | C5 | CL34BD221MP3 | |
| | 4 | J | 4J10N† | | | |
| | 16 | K | 16K10N† | | | |
| | 55 | L | 55L10N† | | | |
| | 110 | N | 110N10N† | | | |
| | 150 | P | 150P10N† | | | |

Continued next column

NOTES FOR FOIL STOCK TABLES

†Non-polar units. Non-polar units may be used as polar units.

‡For insulating sleeve add "S" to commercial stock number; on MIL designations, change "CL24" to "CL25," or "CL34" to "CL35."

*Regardless of polarity indicated, these low voltage units can be used as either polar or non-polar units.

STOCK—PLAIN FOIL (cont.)

UNINSULATED‡

| DC Volts | Commercial | | | | | MIL-C-3965B | | | | | |
|-------------|------------|------|------------|------|-------------------|-------------|------|------------|-----------|-------------------|--------------|
| | Mfd. | Case | Stock No.‡ | Case | Type Designation‡ | Mfd. | Case | Stock No.‡ | Case | Type Designation‡ | |
| | | | | | | | | | | | |
| 15 | 4.5 | J | 4R5J15 | C1 | CL34BE4R5MP3 | 15 | J | 15JE15 | C1 | CL24BE150UP3 | |
| | 10 | K | 10K15 | C2 | CL34BE100MP3 | | 60 | K | 60KE15 | C2 | CL24BE600UP3 |
| | 18 | K | 18K15 | C2 | CL34BE180MP3 | | 200 | L | 200LE15 | C3 | CL24BE201UP3 |
| | 55 | L | 55L15 | C3 | CL34BE550MP3 | | 400 | N | 400NE15 | C4 | CL24BE401UP3 |
| | 110 | N | 110N15 | C4 | CL34BE111MP3 | | 580 | P | 580PE15 | C5 | CL24BE581UP3 |
| | 160 | P | 160P15 | C5 | CL34BE161MP3 | | 10 | J | 10JE15N† | | |
| 25 | 2.5 | J | 2R5J15N† | | | 10 | K | 40KE15N† | | | |
| | 10 | K | 10K15N† | | | 120 | L | 120LE15N† | | | |
| | 35 | L | 35L15N† | | | 125 | L | 125LE15N† | | | |
| | 70 | N | 70N15N† | | | 250 | N | 250NE15N† | | | |
| | 100 | P | 100P15N† | | | 350 | P | 350PE15N† | | | |
| | 30 | 3 | J | 3J25 | | | 8 | J | 8JE30 | C1 | CL24BH080UP3 |
| 12 | | K | 12K25 | | | 32 | K | 32KE30 | C2 | CL24BH320UP3 | |
| 35 | | L | 35L25 | | | 110 | L | 110LE30 | C3 | CL24BH111UP3 | |
| 70 | | N | 70N25 | | | 120 | N | 120NE30 | C4 | CL24BH221UP3 | |
| 100 | | P | 100P25 | | | 300 | P | 300PE30 | C5 | CL24BH301UP3 | |
| 1.5 | | J | 1R5J25N† | | | 4.5 | J | 4R5JE30N† | | | |
| 6 | | K | 6K25N† | | | 18 | K | 18KE30N† | | | |
| 20 | | L | 20L25N† | | | 60 | N | 60NE30N† | | | |
| 40 | | N | 40N25N† | | | 120 | N | 120NE30N† | | | |
| 60 | | P | 60P25N† | | | 170 | P | 170PE30N† | | | |
| 50 | 2.5 | J | 2R5J30 | C1 | CL34BH2R5MP3 | 8 | J | 8JE30 | C1 | CL24BH080UP3 | |
| | 10 | K | 10K30 | | | 32 | K | 32KE30 | C2 | CL24BH320UP3 | |
| | 30 | L | 30L30 | C3 | CL34BH300MP3 | 110 | L | 110LE30 | C3 | CL24BH111UP3 | |
| | 60 | N | 60N30 | C4 | CL34BH600MP3 | 120 | N | 120NE30 | C4 | CL24BH221UP3 | |
| | 85 | P | 85P30 | C5 | CL34BH850MP3 | 300 | P | 300PE30 | C5 | CL24BH301UP3 | |
| | 1.4 | J | 1R4J30N† | | | 4.5 | J | 4R5JE30N† | | | |
| | 5.5 | K | 5R5K30N† | | | 18 | K | 18KE30N† | | | |
| | 18 | L | 18L30N† | | | 60 | N | 60NE30N† | | | |
| | 36 | N | 36N30N† | | | 120 | N | 120NE30N† | | | |
| | 45 | P | 45P30N† | | | 170 | P | 170PE30N† | | | |
| 75 | 1.5 | J | 1R5J50 | C1 | CL34BJ1R5MP3 | 4.5 | J | 4R5JE50 | C1 | CL24BJ4R5UP3 | |
| | 6 | K | 6K50 | C2 | CL34BJ060MP3 | 18 | K | 18KE50 | C2 | CL24BJ180UP3 | |
| | 20 | L | 20L50 | C3 | CL34BJ200MP3 | 60 | L | 60LE50 | C3 | CL24BJ600UP3 | |
| | 40 | N | 40N50 | C4 | CL34BJ400MP3 | 100 | N | 100NE50 | C4 | CL24BJ101UP3 | |
| | 55 | P | 55P50 | C5 | CL34BJ550MP3 | 150 | P | 150PE50 | C5 | CL24BJ151UP3 | |
| | 0.8 | J | R8J50N† | | | 2.5 | J | 2R5JE50N† | | | |
| | 10 | K | 3K50N† | | | 10 | K | 10KE50N† | | | |
| | 10 | L | 10L50N† | | | 30 | L | 30LE50N† | | | |
| | 20 | N | 20N50N† | | | 60 | N | 60NE50N† | | | |
| | 30 | P | 30P50N† | | | 80 | P | 80PE50N† | | | |
| 100 | 1.25 | J | 1R25J60 | | | 4 | J | 4JE60 | | | |
| | 5 | K | 5K60 | | | 15 | K | 15KE60 | | | |
| | 17 | L | 17L60 | | | 50 | N | 50LE60 | | | |
| | 34 | N | 34N60 | | | 88 | N | 88NE60 | | | |
| | 48 | P | 48P60 | | | 125 | P | 125PE60 | | | |
| | 0.6 | J | R6J60N† | | | 2 | J | 2JE60N† | | | |
| | 2.5 | K | 2R5K60N† | | | 7.5 | K | 7R5KE60N† | | | |
| | 8.5 | L | 8R5L60N† | | | 25 | L | 25LE60N† | | | |
| | 17 | N | 17N60N† | | | 50 | N | 50NE60N† | | | |
| | 24 | P | 24P60N† | | | 67 | P | 67PE60N† | | | |
| 150 | 1 | J | 1J75 | C1 | CL34BL010MP3 | 3 | J | 3JE75 | C1 | CL24BL030UP3 | |
| | 4 | K | 4K75 | C2 | CL34BL040MP3 | 12 | K | 12KE75 | C2 | CL24BL120UP3 | |
| | 14 | L | 14L75 | C3 | CL34BL140MP3 | 30 | L | 30LE75 | C3 | CL24BL300UP3 | |
| | 28 | N | 28N75 | C4 | CL34BL280MP3 | 70 | N | 70NE75 | C4 | CL24BL700UP3 | |
| | 40 | P | 40P75 | C5 | CL34BL400MP3 | 100 | P | 100PE75 | C5 | CL24BL101UP3 | |
| | 0.5 | J | R5J75N† | | | 1.5 | J | 1R5JE75N† | | | |
| | 2 | K | 2K75N† | | | 6 | K | 6KE75N† | | | |
| | 7 | L | 7L75N† | | | 15 | L | 15LE75N† | | | |
| | 14 | N | 14N75N† | | | 35 | N | 35NE75N† | | | |
| | 20 | P | 20P75N† | | | 50 | P | 50PE75N† | | | |
| 200 | 0.8 | J | R8J100 | C1 | CL34BN0R8MP3 | 2 | J | 2JE100 | C1 | CL24BN020UP3 | |
| | 3 | K | 3K100 | C2 | CL34BN030MP3 | 8 | K | 8KE100 | C2 | CL24BN080UP3 | |
| | 10 | L | 10L100 | C3 | CL34BN100MP3 | 25 | L | 25LE100 | C3 | CL24BN250UP3 | |
| | 20 | N | 20N100 | C4 | CL34BN200MP3 | 50 | N | 50NE100 | C4 | CL24BN500UP3 | |
| | 30 | P | 30P100 | C5 | CL34BN300MP3 | 70 | P | 70PE100 | C5 | CL24BN700UP3 | |
| | 0.4 | J | R4J100N† | | | 1 | J | 1JE100N† | | | |
| | 1.5 | K | 1R5K100N† | | | 4 | K | 4KE100N† | | | |
| | 5 | L | 5L100N† | | | 12 | L | 12LE100N† | | | |
| | 10 | N | 10N100N† | | | 25 | N | 25NE100N† | | | |
| | 15 | P | 15P100N† | | | 35 | P | 35PE100N† | | | |
| 300 | 0.5 | J | R5J150 | C1 | CL34BQ0R5MP3 | 1 | J | 1JE150 | C1 | CL24BQ010UP3 | |
| | 2 | K | 2K150 | C2 | CL34BQ020MP3 | | 4 | K | 4KE150 | C2 | CL24BQ040UP3 |
| | 4 | L | 4L150 | C3 | CL34BQ040MP3 | | 13 | L | 13LE150 | C3 | CL24BQ130UP3 |
| | 7 | L | 7L150 | C3 | CL34BQ070MP3 | | 25 | N | 25NE150 | C4 | CL24BQ250UP3 |
| | 8 | N | 8N150 | C4 | CL34BQ080MP3 | | 36 | P | 36PE150 | C5 | CL24BQ360UP3 |
| | 12 | N | 12N150 | C4 | CL34BQ120MP3 | | 0.5 | J | R5JE150N† | | |
| | 14 | N | 14N150 | C4 | CL34BQ140MP3 | | 2 | K | 2KE150N† | | |
| | 20 | P | 20P150 | C5 | CL34BQ200MP3 | | 6 | L | 6LE150N† | | |
| | 0.25 | J | R25J150N† | | | | 12 | N | 12NE150N† | | |
| | 1 | K | 1K150N† | | | | 18 | P | 18PE150N† | | |

STOCK—ETCHED FOIL

UNINSULATED‡

| DC Volts | Commercial | | | | | MIL-C-3965B | | | | | |
|-------------|------------|--------|------------|--------------|-------------------|-------------|--------|------------|----------|-------------------|--------------|
| | Mfd. | Case | Stock No.‡ | Case | Type Designation‡ | Mfd. | Case | Stock No.‡ | Case | Type Designation‡ | |
| | | | | | | | | | | | |
| 15 | 15 | J | 15JE15 | C1 | CL24BE150UP3 | 15 | J | 15JE15 | C1 | CL24BE150UP3 | |
| | 60 | K | 60KE15 | C2 | CL24BE600UP3 | | 60 | K | 60KE15 | C2 | CL24BE600UP3 |
| | 200 | L | 200LE15 | C3 | CL24BE201UP3 | | 200 | L | 200LE15 | C3 | CL24BE201UP3 |
| | 400 | N | 400NE15 | C4 | CL24BE401UP3 | | 400 | N | 400NE15 | C4 | CL24BE401UP3 |
| | 580 | P | 580PE15 | C5 | CL24BE581UP3 | | 580 | P | 580PE15 | C5 | CL24BE581UP3 |
| | 10 | J | 10JE15N† | | | | 10 | J | 10JE15N† | | |
| 25 | 10 | K | 40KE15N† | | | 10 | K | 40KE15N† | | | |
| | 120 | L | 120LE15N† | | | 120 | L | 120LE15N† | | | |
| | 125 | L | 125LE15N† | | | 125 | L | 125LE15N† | | | |
| | 250 | N | 250NE15N† | | | 250 | N | 250NE15N† | | | |
| | 350 | P | 350PE15N† | | | 350 | P | 350PE15N† | | | |
| | 10 | J | 10JE25 | C1 | CL24BG100UP3 | 10 | J | 10JE25 | C1 | CL24BG100UP3 | |
| 40 | K | 40KE25 | C2 | CL24BG400UP3 | 40 | K | 40KE25 | | | | |



PLANET SALES CORPORATION

BLOOMFIELD, NEW JERSEY

Universal Replacement Type Capacitors

"LYTICAP"

Single Section Electrolytics — Type "L"

Hermetically sealed in aluminum tubes, covered with red Kraftboard insulating jackets — tinned brass leads, guaranteed for one year.

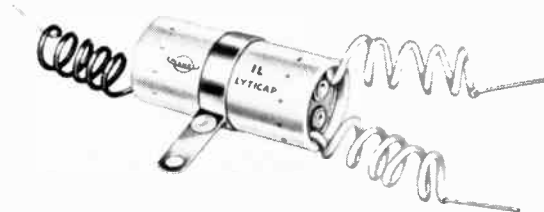


| CAT. NO. | MFD. | SIZE* | LIST PRICE |
|-----------------|------|---------------|------------|
| 500 WVDC | | | |
| L-5-500 | 5 | 3/4 x 1 5/8 | \$1.25 |
| L-10-500 | 10 | 7/8 x 2 1/4 | 1.35 |
| L-20-500 | 20 | 1 x 2 3/8 | 1.60 |
| L-30-500 | 30 | 1 x 2 1/2 | 1.75 |
| 450 WVDC | | | |
| L-2-450 | 2 | 5/8 x 1 1/8 | 1.10 |
| L-4-450 | 4 | 5/8 x 1 5/8 | 1.15 |
| L-8-450 | 8 | 3/4 x 1 5/8 | 1.25 |
| L-10-450 | 10 | 3/4 x 1 5/8 | 1.30 |
| L-12-450 | 12 | 7/8 x 1 5/8 | 1.35 |
| L-16-450 | 16 | 7/8 x 2 1/4 | 1.40 |
| L-20-450 | 20 | 1 x 2 1/4 | 1.55 |
| L-30-450 | 30 | 1 x 2 3/8 | 1.70 |
| L-40-450 | 40 | 1 x 2 1/2 | 1.80 |
| L-50-450 | 50 | 1 1/4 x 2 1/4 | 2.10 |
| L-60-450 | 60 | 1 1/4 x 2 1/4 | 2.40 |
| L-80-450 | 80 | 1 3/8 x 2 1/4 | 2.80 |
| L-100-450 | 100 | 1 3/8 x 2 1/2 | 3.20 |
| 350 WVDC | | | |
| L-8-350 | 8 | 5/8 x 1 5/8 | 1.20 |
| L-16-350 | 16 | 7/8 x 1 5/8 | 1.40 |
| L-20-350 | 20 | 7/8 x 1 5/8 | 1.45 |
| L-30-350 | 30 | 7/8 x 2 1/4 | 1.65 |
| L-40-350 | 40 | 1 x 2 1/4 | 1.75 |
| 250 WVDC | | | |
| L-5-250 | 5 | 5/8 x 1 5/8 | 1.00 |
| L-10-250 | 10 | 5/8 x 1 5/8 | 1.20 |
| L-20-250 | 20 | 3/4 x 1 5/8 | 1.35 |
| L-24-250 | 24 | 3/4 x 1 5/8 | 1.35 |
| L-30-250 | 30 | 3/4 x 1 5/8 | 1.45 |
| L-40-250 | 40 | 7/8 x 1 3/4 | 1.55 |
| 150 WVDC | | | |
| L-5-150 | 5 | 5/8 x 1 1/8 | \$1.00 |
| L-8-150 | 8 | 1/2 x 1 5/8 | 1.05 |
| L-10-150 | 10 | 1/2 x 1 5/8 | 1.05 |
| L-16-150 | 16 | 5/8 x 1 5/8 | 1.15 |
| L-20-150 | 20 | 5/8 x 1 5/8 | 1.20 |
| L-30-150 | 30 | 3/4 x 1 5/8 | 1.30 |
| L-40-150 | 40 | 3/4 x 1 5/8 | 1.35 |

| CAT. NO. | MFD. | SIZE* | LIST PRICE |
|--------------------------|------|---------------|------------|
| 150 WVDC (Cont'd) | | | |
| L-50-150 | 50 | 3/4 x 2 1/4 | 1.40 |
| L-60-150 | 60 | 3/4 x 2 1/4 | 1.50 |
| L-80-150 | 80 | 7/8 x 2 1/4 | 1.60 |
| L-100-150 | 100 | 7/8 x 2 3/8 | 1.75 |
| L-150-150 | 150 | 1 x 2 1/4 | 1.90 |
| L-200-150 | 200 | 1 1/4 x 3 1/4 | 2.20 |
| 50 WVDC | | | |
| L-1-50 | 1 | 1/2 x 1 1/8 | .90 |
| L-2-50 | 2 | 1/2 x 1 1/8 | .90 |
| L-3-50 | 3 | 1/2 x 1 1/8 | .90 |
| L-5-50 | 5 | 1/2 x 1 1/8 | 1.00 |
| L-10-50 | 10 | 1/2 x 1 1/8 | 1.00 |
| L-25-50 | 25 | 1/2 x 1 5/8 | 1.05 |
| L-50-50 | 50 | 5/8 x 1 5/8 | 1.20 |
| L-100-50 | 100 | 3/4 x 1 5/8 | 1.40 |
| L-150-50 | 150 | 7/8 x 1 5/8 | 1.55 |
| L-250-50 | 250 | 1 x 2 1/4 | 1.75 |
| L-500-50 | 500 | 1 x 3 | 2.75 |
| 25 WVDC | | | |
| L-10-25 | 10 | 1/2 x 1 1/8 | 1.00 |
| L-25-25 | 25 | 1/2 x 1 5/8 | 1.00 |
| L-50-25 | 50 | 5/8 x 1 5/8 | 1.10 |
| L-100-25 | 100 | 5/8 x 1 5/8 | 1.35 |
| L-250-25 | 250 | 7/8 x 2 1/4 | 1.70 |
| L-500-25 | 500 | 1 x 2 3/8 | 2.30 |
| 15 WVDC | | | |
| L-1000-15 | 1000 | 1 x 3 | 2.30 |
| 12 WVDC | | | |
| L-100-12 | 100 | 5/8 x 1 1/4 | 1.20 |
| L-250-12 | 250 | 3/4 x 2 1/4 | 1.45 |
| L-500-12 | 500 | 7/8 x 2 3/8 | 1.70 |
| 6 WVDC | | | |
| L-500-6 | 500 | 3/4 x 1 5/8 | 1.55 |
| L-1000-6 | 1000 | 7/8 x 2 1/4 | 1.90 |
| L-1500-6 | 1500 | 7/8 x 2 3/8 | 2.10 |
| L-2000-6 | 2000 | 1 x 2 3/8 | 2.30 |
| 3 WVDC | | | |
| L-500-3 | 500 | 5/8 x 1 5/8 | 1.55 |
| L-1000-3 | 1000 | 7/8 x 2 1/4 | 1.80 |
| L-1500-3 | 1500 | 7/8 x 2 1/4 | 2.10 |
| L-2000-3 | 2000 | 1 x 2 3/8 | 2.30 |

Dual Section Electrolytics — Type "IL"

Hermetically sealed in aluminum tubes with completely flexible leads. U/L Approved, plastic coated leads are rivetted directly to the condenser end disc, eliminating the use of rigid terminal risers, allowing capacitor to fit into smaller space and eliminating lead breakage. IL capacitors have wrap around mounting strap and are common negative, guaranteed for one year.



| CAT. NO. | MFD. | SIZE* | LIST PRICE |
|-----------------|---------|---------------|------------|
| 450 WVDC | | | |
| IL-2x8-450 | 8 + 8 | 7/8 x 2 1/4 | \$1.70 |
| IL-2x20-450 | 20 + 20 | 1 x 2 1/4 | 2.50 |
| IL-2x30-450 | 30 + 30 | 1 1/4 x 2 1/4 | 3.00 |
| IL-2x40-450 | 40 + 40 | 1 3/8 x 2 1/4 | 3.40 |
| IL-2x50-450 | 50 + 50 | 1 3/8 x 2 1/4 | 3.80 |

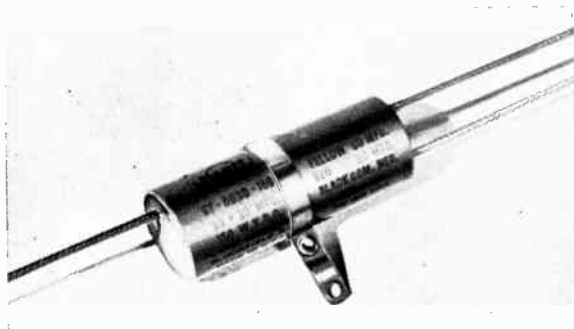
* Dimensions are for metal tubes. Add 1/8" to diameter and 1/8" to length for over-all dimensions over cardboard insulating tube.

| CAT. NO. | MFD. | SIZE* | LIST PRICE |
|-----------------|-----------|-------------|------------|
| 150 WVDC | | | |
| IL-2x20-150 | 20 - 20 | 3/4 x 1 5/8 | 1.65 |
| IL-2x30-150 | 30 + 30 | 7/8 x 1 5/8 | 1.80 |
| IL-4020-150 | 40 + 20 | 7/8 x 1 5/8 | 1.75 |
| IL-2x40-150 | 40 + 40 | 7/8 x 2 1/4 | 1.85 |
| IL-5030-150 | 50 + 30 | 7/8 x 2 1/4 | 1.95 |
| IL-2x50-150 | 50 + 50 | 1 x 2 1/4 | 2.10 |
| IL-8040-150 | 80 + 40 | 1 x 2 3/8 | 2.25 |
| IL-2x120-150-55 | 120 + 120 | 1 x 4 1/4 | 5.20 |

All Prices Subject to Change Without Notice

PLANET SALES CORPORATION

BLOOMFIELD, NEW JERSEY



Universal Replacement Type Capacitors Cardboard Tube Electrolytics — Type "CT"

Constructed in strong red cardboard tubes, wax impregnated — long insulated stranded leads of U/L approved wire — high temperature wax end-fill — wrap around mounting strap. Guaranteed for one year.

| CAT. NO. | MFD. | WVDC | SIZE | LIST PRICE |
|-------------------------------------|---------|------|---------------|------------|
| DUAL UNITS — COMMON NEGATIVE | | | | |
| CT-2x20-150 | 20+20 | 150 | 3/4 x 2 1/2 | \$1.65 |
| CT-2x30-150 | 30+30 | 150 | 7/8 x 2 1/2 | 1.80 |
| CT-4020-150 | 40+20 | 150 | 7/8 x 2 1/2 | 1.75 |
| CT-2x40-150 | 40+40 | 150 | 1 x 2 1/2 | 1.85 |
| CT-5030-150 | 50+30 | 150 | 1 x 2 1/2 | 1.95 |
| CT-2x50-150 | 50+50 | 150 | 1 x 3 | 2.10 |
| CT-8040-150 | 80+40 | 150 | 1 x 3 1/4 | 2.25 |
| CTC-100+50-150 | 100+50 | 150 | 1 x 3 3/8 | 2.50 |
| CT-2x100-150 | 100+100 | 150 | 1 3/8 x 3 3/8 | 3.20 |

| CAT. NO. | MFD. | WVDC | SIZE | LIST PRICE |
|---------------------------------------|------------|--------|---------------|------------|
| TRIPLE UNITS — COMMON NEGATIVE | | | | |
| CT-3x20-150 | 20+20+20 | 150 | 1 x 2 1/2 | \$2.20 |
| CT-302520-150 | 30+25+30 | 150 | 1 x 2 1/2 | 2.25 |
| CT-3x30-150 | 30+30+30 | 150 | 1 x 3 | 2.35 |
| CT-402020-150 | 40+20+20 | 150 | 1 x 3 | 2.25 |
| CT-403020-150 | 40+30+20 | 150 | 1 x 3 | 2.35 |
| CT-404020-150 | 40+40+20 | 150 | 1 x 3 | 2.40 |
| CT-3x40-150 | 40+40+40 | 150 | 1 x 3 1/4 | 2.45 |
| CT-503020-150 | 50+30+20 | 150 | 1 x 3 | 2.45 |
| CT-804020-150 | 80+40+20 | 150 | 1 x 3 3/8 | 2.75 |
| CT-302 | 30+20+20 | 150/25 | 1 x 2 1/2 | 2.10 |
| CT-303 | 40+30+20 | 150/25 | 1 x 3 | 2.20 |
| CT-304 | 50+50/20 | 150/25 | 1 x 3 1/4 | 2.50 |
| CT-305 | 50+30+20 | 150/25 | 1 x 3 | 2.35 |
| CTC-306 | 100+50/30 | 150/25 | 1 1/8 x 3 1/2 | 2.85 |
| CT-307 | 200+100/30 | 150/25 | 1 1/4 x 3 1/4 | 3.75 |



TRANSISTOR LYTICAPS TYPE "TL"

Type "TL" . . . Sub-miniature aluminum foil capacitors . . . hermetically sealed in aluminum tubes . . . clear plastic outer insulating sleeves . . . all mechanical internal connections . . . no "cold weld" or "pressure" connections . . . **engineered for quality** for replacement in all transistorized circuits.

THE COMPACT REPLACEMENT LINE

| Cat. No. | Mfg. | List |
|--|------|--------|
| 50 WVDC | | |
| (Also use for 25, 15, 12, 10, 6 and 3 volts) | | |
| TL-1-50 | 1 | \$1.30 |
| TL-2-50 | 2 | 1.35 |
| TL-3-50 | 3 | 1.35 |
| TL-4-50 | 4 | 1.35 |
| TL-5-50 | 5 | 1.45 |
| TL-6-50 | 6 | 1.45 |
| 25 WVDC | | |
| (Also use for 15, 12, 10, 6 and 3 volts) | | |
| TL-8-25 | 8 | 1.45 |
| TL-10-25 | 10 | 1.45 |
| TL-12-25 | 12 | 1.45 |

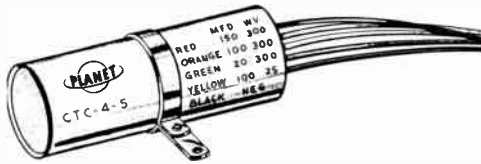
| Cat. No. | Mfg. | List |
|--------------------------------------|------|--------|
| 15 WVDC | | |
| (Also use for 12, 10, 6 and 3 volts) | | |
| TL-15-15 | 15 | \$1.45 |
| TL-20-15 | 20 | 1.45 |
| TL-25-15 | 25 | 1.45 |
| 12 WVDC | | |
| (Also use for 10, 6 and 3 volts) | | |
| TL-30-12 | 30 | 1.40 |
| 6 WVDC | | |
| (Also use for 3 volts) | | |
| TL-35-6 | 35 | 1.40 |
| TL-40-6 | 40 | 1.40 |
| 3 WVDC | | |
| TL-50-3 | 50 | 1.25 |

All Prices Subject to Change Without Notice



PLANET SALES CORPORATION

BLOOMFIELD, NEW JERSEY



Type "CTC" . . . cardboard tube electrolytics especially designed for exact replacement in television sets . . . one end closed . . . long insulated leads out other end . . . sealed with high melting point wax . . . guaranteed for one year . . . individually packaged.

| CAT. NO. | MFD. | WVDC | SIZE | LIST PRICE |
|-----------|----------------|-----------------|-----------------------------------|------------|
| CTC-1-5 | 300 | 150 | 1 $\frac{3}{8}$ x 3 $\frac{7}{8}$ | \$2.55 |
| CTC-1-10 | 150 | 200 | 1 $\frac{1}{2}$ x 3 $\frac{3}{4}$ | 3.95 |
| CTC-1-15 | 200 | 200 | 1 $\frac{3}{8}$ x 3 $\frac{3}{8}$ | 2.90 |
| CTC-1-20 | 140 | 300 | 1 $\frac{3}{8}$ x 3 $\frac{1}{2}$ | 3.15 |
| CTC-1-25 | 200 | 300 | 1 $\frac{1}{2}$ x 4 | 3.95 |
| CTC-2-1 | 10/100 | 100/3 | 3 $\frac{1}{4}$ x 1 $\frac{3}{4}$ | 1.90 |
| CTC-2-5 | 200+5 | 150 | 1 x 3 $\frac{7}{8}$ | 2.65 |
| CTC-2-6 | 200+5 | 200 | 1 $\frac{3}{8}$ x 3 $\frac{3}{8}$ | 3.55 |
| CTC-2-15 | 250+50 | 150 | 1 $\frac{3}{8}$ x 3 | 3.25 |
| CTC-2-20 | 80+120 | 200 | 1 $\frac{3}{8}$ x 3 | 3.85 |
| CTC-2-24 | 200+100 | 300/50 | 1 $\frac{1}{4}$ x 4 $\frac{1}{2}$ | 4.30 |
| CTC-2-25 | 150+100 | 300 | 1 $\frac{3}{8}$ x 4 $\frac{1}{2}$ | 5.35 |
| CTC-2-30 | 140+5 | 350 | 1 $\frac{1}{4}$ x 3 $\frac{7}{8}$ | 4.15 |
| CTC-3-1 | 30/.000+1000 | 100/15 | 1 $\frac{3}{8}$ x 3 $\frac{1}{2}$ | 3.60 |
| CTC-3-1.5 | 60+40/250 | 150/15 | 1 x 2 $\frac{7}{8}$ | 3.25 |
| CTC-3-2 | 60+60+60 | 300 | 1 $\frac{3}{8}$ x 3 $\frac{1}{2}$ | 4.70 |
| CTC-3-3 | 250+120/50 | 150/25 | 1 $\frac{3}{8}$ x 3 $\frac{7}{8}$ | 4.40 |
| CTC-3-4 | 250+200+10 | 150 | 1 $\frac{3}{8}$ x 3 $\frac{5}{8}$ | 4.60 |
| CTC-3-5 | 5/80+40 | 450/400 | 1 $\frac{3}{8}$ x 4 $\frac{1}{8}$ | 4.55 |
| CTC-3-7 | 50+30/250 | 150/10 | 1 x 2 $\frac{3}{4}$ | 2.75 |
| CTC-3-22 | 60+60+4 | 350 | 1 $\frac{3}{8}$ x 3 $\frac{1}{4}$ | 3.85 |
| CTC-4-1 | 40+20+20/100 | 150/25 | 1 $\frac{1}{8}$ x 3 | 3.05 |
| CTC-4-5 | 150+100+20/100 | 300/25 | 1 $\frac{5}{8}$ x 5 $\frac{1}{4}$ | 7.65 |
| CTC-4-10 | 120+40+40/10 | 300/250 | 1 $\frac{3}{8}$ x 4 $\frac{5}{8}$ | 6.20 |
| CTC-4-11 | 80+40/40/10 | 300/250/300 | 1 $\frac{3}{8}$ x 3 $\frac{1}{4}$ | 5.15 |
| CTC-4-15 | 140/5/200/30 | 350/300/200 | 1 $\frac{5}{8}$ x 4 $\frac{3}{8}$ | 7.65 |
| CTC-4-20 | 80/60/40/20 | 350/300/150 | 1 $\frac{5}{8}$ x 4 $\frac{1}{2}$ | 5.90 |
| CTC-4-21 | 140/5/200/100 | 350/300/200/150 | 1 $\frac{5}{8}$ x 4 $\frac{3}{8}$ | 8.20 |
| CTC-4-23 | 40/20/20/100 | 350/300/250/50 | 1 $\frac{3}{8}$ x 2 $\frac{7}{8}$ | 4.50 |
| CTC-4-24 | 80/40/100/10 | 400/300/50/400 | 1 $\frac{3}{8}$ x 4 | 5.45 |
| CTC-4-25 | 10/80/40/100 | 450/300/250/50 | 1 $\frac{3}{8}$ x 4 $\frac{1}{8}$ | 4.80 |
| CTC-4-26 | 10/80+40/100 | 450/300/50 | 1 $\frac{3}{8}$ x 4 $\frac{1}{8}$ | 4.95 |
| CTC-4-30 | 20/120/40/100 | 450/300/250/50 | 1 $\frac{1}{2}$ x 4 $\frac{3}{8}$ | 6.15 |
| CTC-4-35 | 10/80/40+40 | 450/300/250 | 1 $\frac{3}{8}$ x 4 $\frac{3}{8}$ | 4.95 |
| CTC-4-36 | 10/80+40+40 | 450/300 | 1 $\frac{3}{8}$ x 4 $\frac{3}{8}$ | 5.25 |
| CTC-4-40 | 40+40+20+20 | 450 | 1 $\frac{1}{2}$ x 4 $\frac{3}{8}$ | 5.45 |
| CTC-5-5 | 40+20+20+20/50 | 300/75 | 1 $\frac{3}{8}$ x 3 | 5.00 |



Type "SA" . . . small single section electrolytics for printed circuit boards . . . hermetically sealed in aluminum tubes covered with red kraftboard insulating jackets . . . extra heavy tinned terminals anchored for proper spacing by a high melting point wax . . . for 85°C operation . . . individually packaged. Recommended for TV, radio and industrial applications . . . guaranteed for one year.

| CAT. NO. | MFD. | WVDC | SIZE | LIST PRICE |
|----------------|------|------|-----------------------------------|------------|
| SINGLES | | | | |
| SA-8-3 | 8 | 3 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | \$1.05 |
| SA 50-6 | 50 | 6 | 1 $\frac{1}{8}$ x 1 $\frac{3}{4}$ | 1.05 |
| SA-100-6 | 100 | 6 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | 1.30 |
| SA-5-10 | 5 | 10 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | 1.05 |
| SA-25-10 | 25 | 10 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | 1.10 |
| SA-10-25 | 10 | 25 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | 1.10 |
| SA-50-25 | 50 | 25 | 1 $\frac{1}{8}$ x 2 $\frac{1}{8}$ | 1.20 |
| SA-100-25 | 100 | 25 | 2 $\frac{3}{32}$ x 2 | 1.45 |
| SA-1-50 | 1 | 50 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | 1.00 |
| SA-4-50 | 4 | 50 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | 1.10 |
| SA-10-50 | 10 | 50 | 3 $\frac{1}{8}$ x 1 $\frac{1}{8}$ | 1.10 |
| SA-25-50 | 25 | 50 | 1 $\frac{9}{32}$ x 2 | 1.15 |
| SA-50-50 | 50 | 50 | 1 $\frac{1}{8}$ x 2 $\frac{1}{8}$ | 1.30 |
| SA-100-50 | 100 | 50 | 2 $\frac{3}{32}$ x 2 | 1.50 |



Type "PCT" . . . constructed in strong red cardboard tubes, wax impregnated, one end closed, printed circuit board terminals.

Type "PCTL" . . . has insulated lead out top providing for low voltage section.

For 65°C operation . . . recommended for table and clock radios . . . individually packaged . . . guaranteed for one year.

| CAT. NO. | MFD. | WVDC | SIZE | LIST PRICE |
|----------------|---------|--------|---------------------|------------|
| DUALS | | | | |
| PCT-2-5 | 50+30 | 150 | 1 x 2 $\frac{1}{4}$ | 1.95 |
| PCT-2-10 | 50+50 | 150 | 1 x 2 $\frac{1}{4}$ | 2.10 |
| PCT-2-15 | 75+30 | 150 | 1 x 3 | 2.20 |
| PCT-2-20 | 100+50 | 150 | 1 x 3 $\frac{5}{8}$ | 2.50 |
| TRIPLES | | | | |
| PCTL-3-5 | 40+20/5 | 150/25 | 1 x 2 $\frac{3}{4}$ | 2.20 |
| PCTL-3-10 | 60+20/5 | 150/25 | 1 x 3 | 2.40 |

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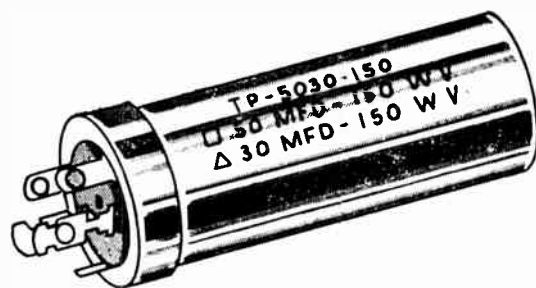
PLANET SALES CORPORATION

BLOOMFIELD, NEW JERSEY



Type "TP" . . . twist-prong can electrolytics with mounting ring and solder lug terminals. The mounting ring is grounded by two spot welded connections to the negative tab . . . for 85°C operation . . . complete with metal grounding plate . . . individually packaged. Guaranteed for one year.

Type "PTP" . . . same as Type "TP" except made with printed circuit board terminals.



| CAT. NO. | MFD. | WVDC | SIZE | LIST PRICE |
|----------------|---------|---------|---------|------------|
| SINGLES | | | | |
| TP-1-5 | 2000 | 12 | 1 x 3½ | \$3.25 |
| PTP-1-10 | 1000 | 15 | 1 x 2½ | 2.55 |
| PTP-1-15 | 50 | 150 | 1 x 2½ | 1.65 |
| TP-1-20 | 80 | 150 | 1 x 2 | 1.85 |
| PTP-1-25 | 100 | 150 | 1 x 2½ | 2.00 |
| TP-1-30 | 120 | 150 | 1 x 3 | 2.15 |
| TP-1-31 | 120 | 150 | 1¾ x 2½ | 2.15 |
| PTP-1-35 | 140 | 150 | 1 x 3½ | 2.15 |
| TP-1-40 | 150 | 150 | 1¾ x 2½ | 2.15 |
| TP-1-45 | 150 | 150 | 1 x 3 | 2.15 |
| TP-1-50 | 200 | 150 | 1¾ x 2½ | 2.45 |
| TP-1-55 | 300 | 150 | 1¾ x 4 | 2.80 |
| PTP-1-60 | 150 | 165 | 1 x 3½ | 2.35 |
| PTP-1-65 | 375 | 165 | 1¾ x 3½ | 4.25 |
| PTP-1-70 | 80 | 175 | 1 x 2½ | 1.95 |
| TP-1-75 | 125 | 350 | 1¾ x 3½ | 3.90 |
| TP-1-80 | 10 | 450 | 1 x 2 | 1.55 |
| TP-1-85 | 20 | 450 | 1 x 2 | 1.80 |
| TP-1-90 | 40 | 450 | 1 x 3 | 2.05 |
| TP-1-95 | 80 | 450 | 1¾ x 3 | 3.05 |
| DUALS | | | | |
| PTP-2-5 | 500+150 | 15 | 1 x 2 | \$3.25 |
| PTP-2-10 | 250+250 | 16 | 1 x 2 | 2.50 |
| TP-2-13 | 60+20 | 150 | 1 x 2½ | 2.15 |
| PTP-2-15 | 70+30 | 150 | 1 x 2½ | 2.20 |
| TP-2-20 | 50+50 | 150 | 1 x 2½ | 2.15 |
| PTP-2-25 | 50+30 | 150 | 1 x 2 | 2.00 |
| TP-2-30 | 50+30 | 150 | 1 x 2 | 2.00 |
| TP-2-35 | 40+40 | 150 | 1 x 2 | 1.90 |
| TP-2-40 | 20+20 | 150 | 1 x 2 | 1.70 |
| TP-2-45 | 100+80 | 200 | 1¾ x 2½ | 3.35 |
| TP-2-50 | 200+5 | 200 | 1¾ x 2½ | 3.40 |
| TP-2-55 | 30+30 | 250 | 1 x 2½ | 2.75 |
| TP-2-60 | 200+15 | 250 | 1¾ x 2½ | 4.00 |
| TP-2-65 | 30+10 | 300 | 1 x 3 | 2.40 |
| TP-2-70 | 60/10 | 300/200 | 1 x 3 | 3.15 |
| TP-2-75 | 125/100 | 350/10 | 1¾ x 3½ | 5.20 |
| TP-2-80 | 5/100 | 350/50 | 1 x 2 | 1.90 |
| PTP-2-85 | 10/10 | 350/50 | 1 x 2 | 2.00 |

| CAT. NO. | MFD. | WVDC | SIZE | LIST PRICE |
|----------------|----------------|------------|---------|------------|
| TP-2-90 | 100/80 | 350/175 | 1¾ x 3½ | \$4.60 |
| TP-2-95 | 100+50 | 350 | 1¾ x 3½ | 5.80 |
| TP-2-100 | 100+100 | 350 | 1¾ x 4 | 6.15 |
| TP-2-105 | 140+20 | 350 | 1¾ x 4 | 4.30 |
| TP-2-110 | 30+10 | 400 | 1 x 3 | 2.95 |
| TP-2-115 | 10+10 | 450 | 1 x 2 | 1.90 |
| TP-2-120 | 20+20 | 450 | 1 x 3 | 2.55 |
| TP-2-125 | 40+40 | 450 | 1¾ x 3 | 3.45 |
| TRIPLES | | | | |
| TP-3-5 | 90+40/400 | 150/10 | 1 x 3½ | \$5.25 |
| PTP-3-10 | 70+30/10 | 150/25 | 1 x 2½ | 2.55 |
| TP-3-15 | 40+40+40 | 150 | 1 x 2½ | 2.60 |
| PTP-3-20 | 50+25+150 | 150 | 1¾ x 2½ | 3.75 |
| TP-3-25 | 50+50+50 | 150 | 1 x 3 | 3.00 |
| TP-3-30 | 40+20+20 | 250 | 1 x 3 | 2.90 |
| TP-3-35 | 30+10/20 | 300/25 | 1 x 3 | 4.15 |
| PTP-3-40 | 60+10/25 | 300/25 | 1¾ x 2 | 4.85 |
| PTP-3-45 | 30/25/100 | 350/25/6 | 1 x 2½ | 4.65 |
| PTP-3-50 | 125/5/100 | 350/150/10 | 1¾ x 3½ | 6.60 |
| PTP-3-51 | 60/200+30 | 350/150 | 1¾ x 4 | 5.00 |
| TP-3-55 | 20+20/20 | 350/25 | 1 x 2 | 2.90 |
| TP-3-60 | 100+100/25 | 350/25 | 1¾ x 4½ | 7.00 |
| TP-3-65 | 80+40/100 | 350/50 | 1¾ x 4 | 6.50 |
| TP-3-70 | 10/40+40 | 350/200 | 1 x 3 | 3.25 |
| TP-3-75 | 80+40+40 | 350 | 1¾ x 4 | 7.95 |
| TP-3-80 | 30+10/20 | 400/25 | 1 x 3 | 2.85 |
| TP-3-82 | 10+10+10 | 450 | 1 x 3 | 2.60 |
| TP-3-85 | 40+40+40 | 450 | 1¾ x 4 | 4.90 |
| QUADS | | | | |
| PTP-4-5 | 250+30+20/100 | 150/10 | 1¾ x 3½ | \$5.30 |
| TP-4-6 | 100+10/200+30 | 300/150 | 1¾ x 4 | 5.90 |
| PTP-4-9 | 60+100/100/100 | 350/150/10 | 1¾ x 5 | 8.50 |
| PTP-4-10 | 100+60/60/40 | 350/200/75 | 1¾ x 4½ | 8.50 |
| TP-4-12 | 80+40+30/40 | 400/25 | 1¾ x 4 | 5.95 |
| TP-4-13 | 40+40/100+60 | 450/200 | 1¾ x 4 | 6.05 |
| TP-4-14 | 40+20+20/40 | 450/25 | 1¾ x 3 | 4.65 |
| TP-4-15 | 40+40+10/100 | 450/50 | 1¾ x 3½ | 5.45 |
| TP-4-20 | 20+20+20+20 | 450 | 1¾ x 3 | 4.50 |
| TP-4-25 | 30+30+30+30 | 450 | 1¾ x 4 | 5.65 |
| TP-4-30 | 40+40+40+40 | 450 | 1¾ x 4 | 6.45 |

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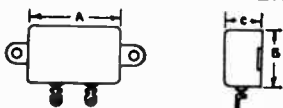


Plastic Capacitors, INC.

CHICAGO ILLINOIS

- Mfrs. of
- Plastic Film Capacitors
- Pulse Forming Networks
- High Voltage Power Supplies
- Paper Dielectric Capacitors

TYPE PX — CLOSE TOLERANCE BATH TUB CONTAINER



TYPE PX Capacitors are close tolerance polystyrene capacitors housed in hermetically sealed bathtub containers. Terminals are solder lugs mounted on glass solder seal bushings. Extended foil (non-inductive) construction is used.

CAPACITANCE TOLERANCE available is plus or minus 1%, 0.5%, 0.25% or 0.1%. Add the suffix "E" and the numbers 1 for 1%, 05 for 5%, 025 for 0.25% and 01 for 0.1% capacitance tolerance to the part number required.

| PART NUMBER | CAP. MFD. | VOLTS DC | CONTAINER SIZE | | |
|-------------|-----------|----------|----------------|-------|-------|
| | | | A | B | C |
| PX05-124 | .12 | 50 | 1 1/8 | 1 | 13/16 |
| PX05-154 | .15 | 50 | 1 1/8 | 1 | 13/16 |
| PX05-224 | .22 | 50 | 1 1/8 | 1 | 13/16 |
| PX05-254 | .25 | 50 | 1 3/4 | 1 | 3/4 |
| PX05-304 | .30 | 50 | 1 3/4 | 1 | 3/4 |
| PX05-334 | .33 | 50 | 1 3/4 | 1 | 3/4 |
| PX05-404 | .40 | 50 | 1 3/4 | 1 | 3/4 |
| PX05-474 | .47 | 50 | 1 3/4 | 1 1/4 | 7/8 |
| PX05-504 | .50 | 50 | 1 3/4 | 1 1/4 | 7/8 |
| PX05-604 | .60 | 50 | 1 3/4 | 1 1/4 | 7/8 |
| PX05-684 | .68 | 50 | 1 3/4 | 1 1/4 | 7/8 |
| PX05-804 | .80 | 50 | 1 3/4 | 1 1/4 | 7/8 |
| PX05-824 | .82 | 50 | 1 3/4 | 1 1/4 | 7/8 |
| PX05-105 | 1.0 | 50 | 2 | 1 3/4 | 7/8 |

POLYSTYRENE CAPACITORS

| PART NUMBER | CAP. MFD. | VOLTS DC | CONTAINER SIZE | | |
|-------------|-----------|----------|----------------|-------|-------|
| | | | A | B | C |
| PX05-205 | 2 | 50 | 2 | 2 | 1 1/8 |
| PX05-305 | 3 | 50 | 2 | 2 | 1 1/4 |
| PX05-405 | 4 | 50 | 2 | 2 | 1 1/2 |
| PX1-803 | .08 | 100 | 1 1/8 | 1 | 13/16 |
| PX1-823 | .082 | 100 | 1 1/8 | 1 | 13/16 |
| PX1-104 | 0.1 | 100 | 1 1/8 | 1 | 13/16 |
| PX1-124 | .12 | 100 | 1 3/4 | 1 | 3/4 |
| PX1-154 | .15 | 100 | 1 3/4 | 1 | 3/4 |
| PX1-204 | .20 | 100 | 1 3/4 | 1 | 3/4 |
| PX1-224 | .22 | 100 | 1 3/4 | 1 1/4 | 7/8 |
| PX1-254 | .25 | 100 | 1 3/4 | 1 1/4 | 7/8 |
| PX1-304 | .30 | 100 | 1 3/4 | 1 1/4 | 7/8 |
| PX1-334 | .33 | 100 | 1 3/4 | 1 1/4 | 7/8 |
| PX1-404 | .40 | 100 | 1 3/4 | 1 1/4 | 7/8 |
| PX1-474 | .47 | 100 | 2 | 1 3/4 | 7/8 |
| PX1-504 | .50 | 100 | 2 | 1 3/4 | 7/8 |
| PX1-604 | .60 | 100 | 2 | 1 3/4 | 7/8 |
| PX1-804 | .80 | 100 | 2 | 1 3/4 | 7/8 |
| PX1-824 | .82 | 100 | 2 | 2 | 1 1/8 |
| PX1-105 | 1.0 | 100 | 2 | 2 | 1 1/8 |
| PX2-303 | .03 | 200 | 1 1/8 | 1 | 13/16 |
| PX2-333 | .033 | 200 | 1 1/8 | 1 | 13/16 |
| PX2-403 | .04 | 200 | 1 1/8 | 1 | 13/16 |
| PX2-473 | .047 | 200 | 1 1/8 | 1 | 13/16 |
| PX2-503 | .05 | 200 | 1 1/8 | 1 | 13/16 |
| PX2-603 | .06 | 200 | 1 1/8 | 1 | 13/16 |
| PX2-683 | .068 | 200 | 1 1/8 | 1 | 13/16 |
| PX2-803 | .08 | 200 | 1 3/4 | 1 | 3/4 |
| PX2-823 | .082 | 200 | 1 3/4 | 1 | 3/4 |
| PX2-104 | 0.1 | 200 | 1 3/4 | 1 | 3/4 |
| PX2-124 | .12 | 200 | 1 3/4 | 1 1/4 | 7/8 |
| PX2-154 | .15 | 200 | 1 3/4 | 1 1/4 | 7/8 |
| PX2-204 | .20 | 200 | 1 3/4 | 1 1/4 | 7/8 |
| PX2-224 | .22 | 200 | 1 3/4 | 1 1/4 | 7/8 |
| PX2-254 | .25 | 200 | 1 3/4 | 1 1/4 | 7/8 |
| PX2-304 | .30 | 200 | 2 | 1 3/4 | 7/8 |
| PX2-334 | .33 | 200 | 2 | 1 3/4 | 7/8 |
| PX2-404 | .40 | 200 | 2 | 1 3/4 | 7/8 |
| PX2-474 | .47 | 200 | 2 | 1 3/4 | 7/8 |
| PX2-504 | .50 | 200 | 2 | 2 | 1 1/8 |

| PART NUMBER | CAP. MFD. | VOLTS DC | CONTAINER SIZE | | |
|-------------|-----------|----------|----------------|-------|-------|
| | | | A | B | C |
| PX2-604 | .60 | 200 | 2 | 2 | 1 1/8 |
| PX2-684 | .68 | 200 | 2 | 2 | 1 1/8 |
| PX2-804 | .80 | 200 | 2 | 2 | 1 1/8 |
| PX2-824 | .82 | 200 | 2 | 2 | 1 1/8 |
| PX2-105 | 1.0 | 200 | 2 | 2 | 1 1/4 |
| PX4-102 | .001 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-122 | .0012 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-152 | .0015 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-202 | .002 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-222 | .0022 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-302 | .003 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-332 | .0033 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-402 | .004 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-472 | .0047 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-502 | .005 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-602 | .006 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-682 | .0068 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-802 | .008 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-822 | .0082 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-103 | .01 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-123 | .012 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-153 | .015 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-203 | .02 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-223 | .022 | 400 | 1 1/8 | 1 | 13/16 |
| PX4-303 | .03 | 400 | 1 3/4 | 1 | 3/4 |
| PX4-333 | .033 | 400 | 1 3/4 | 1 | 3/4 |
| PX4-403 | .04 | 400 | 1 3/4 | 1 | 3/4 |
| PX4-473 | .047 | 400 | 1 3/4 | 1 1/4 | 7/8 |
| PX4-503 | .05 | 400 | 1 3/4 | 1 1/4 | 7/8 |
| PX4-603 | .06 | 400 | 1 3/4 | 1 1/4 | 7/8 |
| PX4-683 | .068 | 400 | 1 3/4 | 1 1/4 | 7/8 |
| PX4-803 | .08 | 400 | 1 3/4 | 1 1/4 | 7/8 |
| PX4-823 | .082 | 400 | 1 3/4 | 1 1/4 | 7/8 |
| PX4-104 | 0.1 | 400 | 2 | 1 3/4 | 7/8 |
| PX4-124 | .12 | 400 | 2 | 1 3/4 | 7/8 |
| PX4-154 | .15 | 400 | 2 | 1 3/4 | 7/8 |
| PX4-204 | .20 | 400 | 2 | 2 | 1 1/8 |
| PX4-224 | .22 | 400 | 2 | 2 | 1 1/8 |
| PX4-254 | .25 | 400 | 2 | 2 | 1 1/8 |
| PX4-304 | .3 | 400 | 2 | 2 | 1 1/4 |

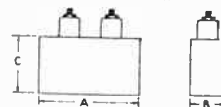
TYPE PM



TYPE PM polystyrene dielectric capacitors are hermetically sealed tubular capacitors with tinned copper wire axial leads. Sizes are given for the floating case style and 20% capacitance tolerance. Each part number shown should be ordered with the suffix "BW 20" added. Other styles and tolerances are also available.

| PART NUMBER | CAP. MFD. | VOLTS DC | SIZE | |
|-------------|-----------|----------|---------|---------|
| | | | D | L |
| PM05-402 | .004 | 50 | .175 | 3.4 |
| PM05-502 | .005 | 50 | .175 | 3.4 |
| PM05-602 | .006 | 50 | .175 | 3.4 |
| PM05-103 | .01 | 50 | .195 | 3.4 |
| PM05-203 | .02 | 50 | .312 | 7.8 |
| PM05-303 | .03 | 50 | .312 | 7.8 |
| PM05-403 | .04 | 50 | .312 | 7.8 |
| PM05-503 | .05 | 50 | .400 | 7.8 |
| PM05-603 | .06 | 50 | .400 | 7.8 |
| PM05-104 | 0.1 | 50 | .400 | 1 1/8 |
| PM05-204 | .2 | 50 | .562 | 1 1/8 |
| PM05-254 | .25 | 50 | .562 | 1 5/8 |
| PM05-304 | .3 | 50 | .562 | 1 5/8 |
| PM05-404 | .4 | 50 | .562 | 1 7/8 |
| PM05-504 | .5 | 50 | .670 | 1 5/8 |
| PM05-604 | .6 | 50 | .670 | 1 5/8 |
| PM05-105 | 1.0 | 50 | 1-13 16 | 1-13 16 |
| PM05-155 | 1.5 | 50 | 1.0 | 1-13 16 |
| PM1-302 | .003 | 100 | .175 | 3.4 |
| PM1-402 | .004 | 100 | .195 | 3.4 |
| PM1-502 | .005 | 100 | .195 | 3.4 |
| PM1-103 | .01 | 100 | .312 | 7.8 |
| PM1-203 | .02 | 100 | .312 | 7.8 |
| PM1-303 | .03 | 100 | .400 | 7.8 |
| PM1-403 | .04 | 100 | .400 | 7.8 |
| PM1-503 | .05 | 100 | .400 | 1 1/8 |
| PM1-104 | 0.1 | 100 | .562 | 1 1/8 |
| PM1-204 | .2 | 100 | .562 | 1 7/8 |
| PM1-254 | .25 | 100 | .670 | 1 5/8 |
| PM1-304 | .3 | 100 | .670 | 1-13 16 |
| PM1-404 | .4 | 100 | .750 | 1-13 16 |
| PM1-504 | .5 | 100 | 1.0 | 1-13 16 |
| PM1-604 | .6 | 100 | 1.0 | 1-13 16 |
| PM2-102 | .001 | 200 | .175 | 3.4 |
| PM2-202 | .002 | 200 | .195 | 3.4 |
| PM2-302 | .003 | 200 | .195 | 3.4 |
| PM2-402 | .004 | 200 | .235 | 3.4 |
| PM2-502 | .005 | 200 | .312 | 7.8 |
| PM2-103 | .01 | 200 | .312 | 7.8 |
| PM2-203 | .02 | 200 | .400 | 7.8 |
| PM2-303 | .03 | 200 | .562 | 1 1/8 |
| PM2-403 | .04 | 200 | .562 | 1 1/8 |
| PM2-503 | .05 | 200 | .562 | 1 1/8 |
| PM2-104 | 0.1 | 200 | .670 | 1 5/8 |
| PM2-204 | .2 | 200 | .750 | 1-13 16 |
| PM2-254 | .25 | 200 | .750 | 1-13 16 |
| PM2-304 | .3 | 200 | 1.0 | 1-13 16 |
| PM2-404 | .4 | 200 | 1.0 | 1-13 16 |
| PM4-402 | .004 | 400 | .312 | 7.8 |
| PM4-502 | .005 | 400 | .400 | 7.8 |
| PM4-103 | .01 | 400 | .400 | 1 1/8 |
| PM4-203 | .02 | 400 | .562 | 1 1/8 |
| PM4-303 | .03 | 400 | .562 | 1 1/8 |
| PM4-403 | .04 | 400 | .562 | 1 1/8 |
| PM4-503 | .05 | 400 | .562 | 1 1/8 |
| PM4-104 | 0.1 | 400 | .750 | 1-13 16 |
| PM4-204 | .2 | 400 | 1.0 | 1-13 16 |
| PM6-102 | .001 | 600 | .312 | 7.8 |
| PM6-202 | .002 | 600 | .312 | 7.8 |
| PM6-302 | .003 | 600 | .312 | 7.8 |
| PM6-402 | .004 | 600 | .312 | 7.8 |
| PM6-502 | .005 | 600 | .400 | 7.8 |

TYPE PD



TYPE PD capacitors are housed in hermetically sealed fabricated CP70 style containers and meet the most stringent environmental conditions. Windings are extended foil (non-inductive) construction.

CAPACITANCE TOLERANCE Standard tolerance is 5%. Also available are 2%, 1% and 0.5% tolerances.

| PART NUMBER | CAP. MFD. | VOLTS DC | CONTAINER SIZE | | |
|-------------|-----------|----------|----------------|--------|-------|
| | | | A | B | C |
| PD05-205 | 2 | 50 | 1 3/4 | 1 | 2 1/4 |
| PD05-305 | 3 | 50 | 1 3/4 | 1 | 2 1/2 |
| PD05-405 | 4 | 50 | 2 1/2 | 1 3/16 | 2 1/4 |
| PD05-505 | 5 | 50 | 2 1/2 | 1 3/16 | 2 1/2 |
| PD05-605 | 6 | 50 | 3 3/4 | 1 1/4 | 2 1/4 |
| PD05-805 | 8 | 50 | 3 3/4 | 1 1/4 | 2 1/2 |
| PD05-106 | 10 | 50 | 3 3/4 | 1 3/4 | 2 1/4 |
| PD1-105 | 1 | 100 | 1 3/4 | 1 | 2 1/4 |
| PD1-205 | 2 | 100 | 2 1/2 | 1 3/16 | 2 1/4 |
| PD1-305 | 3 | 100 | 2 1/2 | 1 3/16 | 3 |
| PD1-405 | 4 | 100 | 3 3/4 | 1 1/4 | 2 1/2 |
| PD1-505 | 5 | 100 | 3 3/4 | 1 1/4 | 3 |
| PD1-605 | 6 | 100 | 3 3/4 | 1 3/4 | 2 1/2 |
| PD1-805 | 8 | 100 | 3 3/4 | 2 1/4 | 2 1/2 |
| PD1-106 | 10 | 100 | 3 3/4 | 2 1/4 | 3 |
| PD2-105 | 1 | 200 | 1 | 1 3/4 | 3 |
| PD2-205 | 2 | 200 | 2 1/2 | 1 3/16 | 3 |
| PD2-305 | 3 | 200 | 3 3/4 | 1 1/4 | 3 |
| PD2-405 | 4 | 200 | 3 3/4 | 1 1/4 | 3 1/2 |
| PD2-505 | 5 | 200 | 3 3/4 | 1 3/4 | 3 1/2 |
| PD2-605 | 6 | 200 | 3 3/4 | 1 3/4 | 3 1/2 |
| PD2-805 | 8 | 200 | 3 3/4 | 2 1/4 | 3 1/2 |
| PD2-106 | 10 | 200 | 3 3/4 | 3 3/16 | 3 1/2 |
| PD4-254 | .25 | 400 | 1 3/4 | 1 | 2 1/4 |
| PD4-504 | .5 | 400 | 2 1/2 | 1 3/16 | 2 1/4 |
| PD4-105 | 1.0 | 400 | 3 3/4 | 1 1/4 | 2 1/2 |
| PD4-205 | 2 | 400 | 3 3/4 | 1 1/4 | 4 |
| PD4-305 | 3 | 400 | 3 3/4 | 1 3/4 | 4 |
| PD4-405 | 4 | 400 | 3 3/4 | 2 1/4 | 4 |
| PD4-505 | 5 | 400 | 3 3/4 | 3 3/16 | 4 |
| PD4-605 | 6 | 400 | 3 3/4 | 3 3/16 | 4 |
| PD4-805 | 8 | 400 | 3 3/4 | 4 9/16 | 4 |
| PD4-106 | 10 | 400 | 3 3/4 | 3 3/16 | 7 1/2 |
| PD6-254 | .25 | 600 | 1 3/4 | 1 | 2 1/2 |
| PD6-504 | .5 | 600 | 1 3/4 | 1 | 4 |
| PD6-105 | 1.0 | 600 | 2 1/2 | 1 3/16 | 4 |
| PD6-205 | 2 | 600 | 3 3/4 | 1 3/4 | 4 |
| PD6-305 | 3 | 600 | 3 3/4 | 2 1/4 | 4 |
| PD6-405 | 4 | 600 | 3 3/4 | 3 3/16 | 4 |
| PD6-505 | 5 | | | | |

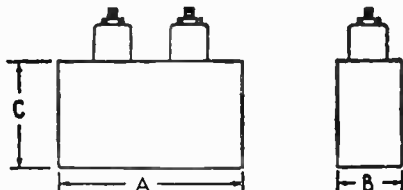


Plastic Capacitors, INC.

CHICAGO ILLINOIS

- Mfrs. of Plastic Film Capacitors
- Pulse Forming Networks
- High Voltage Power Supplies
- Paper Dielectric Capacitors

TYPE LK DC FILTER CAPACITORS



Type LK capacitors are an entirely new design which have been proved by rigorous testing in the laboratory and by usage in the field for several years. This is the first listing to be published.

Type LK capacitors are smaller and have a reliability factor which is unexcelled. Their primary usage is for DC filtering and DC blocking applications.

Temperature Range is minus 65°C to 105°C. With full rated voltage from -65°C to 85°C.

Life 25000 hours at rated voltage at 85°C.

Case is the CP70 style terne plate metal, primed and finished with a synthetic enamel.

ENVIRONMENTAL and other testing may be performed per MIL-C-25A, Characteristic E. Type LK exceeds the best characteristics of paper capacitors in a much smaller size. Comparison of sizes will show that the volume is much less than required for MIL-C-25A equivalents in Characteristic F and are better than characteristic E quality.

| PART NUMBER | CAP. MFD | VOLTS DC | CASE SIZE | | | PART NUMBER | CAP. MFD | VOLTS DC | CASE SIZE | | |
|-------------|----------|----------|-----------|--------|-------|-------------|----------|----------|-----------|--------|--------|
| | | | A | B | C | | | | A | B | C |
| LK10-504 | 0.5 | 1000 | 1 3/4 | 1 | 2 1/8 | LK 50-503 | .05 | 5000 | 1 3/4 | 1 | 2 1/8 |
| LK10-105 | 1.0 | 1000 | 1 3/4 | 1 | 2 1/8 | LK 50-104 | 0.1 | 5000 | 1 3/4 | 1 | 2 1/8 |
| LK10-205 | 2 | 1000 | 1 3/4 | 1 | 3 1/2 | LK 50-254 | .25 | 5000 | 1 3/4 | 1 | 3 |
| LK10-405 | 4 | 1000 | 1 3/4 | 1 | 5 3/4 | LK 50-504 | .5 | 5000 | 1 3/4 | 1 | 4 3/4 |
| LK10-605 | 6 | 1000 | 2 1/2 | 1 3/16 | 5 | LK 50-105 | 1.0 | 5000 | 2 1/2 | 1 3/16 | 5 |
| LK10-805 | 8 | 1000 | 2 1/2 | 1 3/16 | 6 1/4 | LK 50-205 | 2 | 5000 | 3 3/4 | 1 1/4 | 6 |
| LK10-106 | 10 | 1000 | 3 3/4 | 1 1/4 | 5 | LK 50-405 | 4 | 5000 | 3 3/4 | 2 1/4 | 6 1/4 |
| LK10-126 | 12 | 1000 | 3 3/4 | 1 1/4 | 5 3/4 | LK 50-605 | 6 | 5000 | 3 3/4 | 3 3/16 | 6 1/2 |
| LK10-156 | 15 | 1000 | 3 3/4 | 1 3/4 | 5 1/4 | LK 50-805 | 8 | 5000 | 4 9/16 | 3 3/4 | 6 1/4 |
| LK10-206 | 20 | 1000 | 3 3/4 | 1 3/4 | 6 1/4 | LK 50-106 | 10 | 5000 | 4 9/16 | 3 3/4 | 7 1/2 |
| LK20-104 | 0.1 | 2000 | 1 3/4 | 1 | 2 1/8 | LK 60-503 | .05 | 6000 | 3 3/4 | 1 1/4 | 2 1/4 |
| LK20-254 | .25 | 2000 | 1 3/4 | 1 | 2 1/8 | LK 60-104 | 0.1 | 6000 | 3 3/4 | 1 1/4 | 2 1/4 |
| LK20-504 | .5 | 2000 | 1 3/4 | 1 | 2 1/8 | LK 60-254 | .25 | 6000 | 3 3/4 | 1 1/4 | 2 1/2 |
| LK20-105 | 1.0 | 2000 | 1 3/4 | 1 | 3 1/4 | LK 60-504 | .5 | 6000 | 3 3/4 | 1 1/4 | 3 3/4 |
| LK20-205 | 2 | 2000 | 2 1/2 | 1 3/16 | 3 1/2 | LK 60-105 | 1.0 | 6000 | 3 3/4 | 1 1/4 | 6 1/2 |
| LK20-405 | 4 | 2000 | 2 1/2 | 1 3/16 | 5 1/2 | LK 60-205 | 2 | 6000 | 3 3/4 | 2 1/4 | 6 1/4 |
| LK20-605 | 6 | 2000 | 3 3/4 | 1 1/4 | 5 | LK 60-405 | 4 | 6000 | 4 9/16 | 3 3/4 | 6 |
| LK20-805 | 8 | 2000 | 3 3/4 | 1 1/4 | 6 1/4 | LK 60-605 | 6 | 6000 | 4 9/16 | 3 3/4 | 8 1/4 |
| LK20-106 | 10 | 2000 | 3 3/4 | 1 3/4 | 5 1/4 | LK 60-805 | 8 | 6000 | 4 9/16 | 3 3/4 | 10 1/4 |
| LK20-126 | 12 | 2000 | 3 3/4 | 1 3/4 | 6 1/4 | LK 60-106 | 10 | 6000 | 8 | 4 | 9 1/4 |
| LK20-156 | 15 | 2000 | 3 3/4 | 2 1/4 | 6 | LK 80-503 | .05 | 8000 | 3 3/4 | 1 1/4 | 2 1/4 |
| LK30-104 | 0.1 | 3000 | 1 3/4 | 1 | 2 1/8 | LK 80-104 | 0.1 | 8000 | 3 3/4 | 1 1/4 | 2 1/2 |
| LK30-254 | .25 | 3000 | 1 3/4 | 1 | 2 1/2 | LK 80-254 | .25 | 8000 | 3 3/4 | 1 1/4 | 3 3/4 |
| LK30-504 | .5 | 3000 | 1 3/4 | 1 | 3 1/4 | LK 80-504 | .5 | 8000 | 3 3/4 | 1 1/4 | 5 3/4 |
| LK30-105 | 1.0 | 3000 | 1 3/4 | 1 | 5 1/4 | LK 80-105 | 1.0 | 8000 | 3 3/4 | 1 3/4 | 7 |
| LK30-205 | 2 | 3000 | 2 1/2 | 1 3/16 | 5 1/2 | LK 80-205 | 2 | 8000 | 3 3/4 | 3 3/16 | 7 |
| LK30-405 | 4 | 3000 | 3 3/4 | 1 1/4 | 6 1/4 | LK 80-405 | 4 | 8000 | 4 9/16 | 3 3/4 | 10 |
| LK30-605 | 6 | 3000 | 3 3/4 | 1 3/4 | 6 1/4 | LK 80-605 | 6 | 8000 | 8 | 4 | 9 1/4 |
| LK30-805 | 8 | 3000 | 3 3/4 | 2 1/4 | 6 1/2 | LK 80-805 | 8 | 8000 | 13 1/2 | 4 1/8 | 7 |
| LK30-106 | 10 | 3000 | 3 3/4 | 3 3/16 | 5 3/4 | LK 80-106 | 10 | 8000 | 13 1/2 | 4 1/8 | 9 1/4 |
| LK40-503 | .05 | 4000 | 1 3/4 | 1 | 2 1/8 | LK100-503 | .05 | 10KV | 3 3/4 | 1 3/4 | 3 1/4 |
| LK40-104 | 0.1 | 4000 | 1 3/4 | 1 | 2 1/8 | LK100-104 | 0.1 | 10KV | 3 3/4 | 1 3/4 | 3 1/4 |
| LK40-254 | .25 | 4000 | 1 3/4 | 1 | 2 3/4 | LK100-254 | .25 | 10KV | 3 3/4 | 1 3/4 | 3 3/4 |
| LK40-504 | .5 | 4000 | 1 3/4 | 1 | 4 | LK100-504 | .5 | 10KV | 3 3/4 | 1 3/4 | 5 3/4 |
| LK40-105 | 1.0 | 4000 | 2 1/2 | 1 3/16 | 4 | LK100-105 | 1.0 | 10KV | 3 3/4 | 2 1/4 | 7 1/4 |
| LK40-205 | 2 | 4000 | 2 1/2 | 1 3/16 | 6 3/4 | LK100-205 | 2 | 10KV | 4 9/16 | 3 3/4 | 6 3/4 |
| LK40-405 | 4 | 4000 | 3 3/4 | 1 3/4 | 6 | LK100-405 | 4 | 10KV | 8 | 4 | 9 1/4 |
| LK40-605 | 6 | 4000 | 3 3/4 | 2 1/4 | 6 1/2 | LK100-605 | 6 | 10KV | 13 1/2 | 4 1/8 | 7 |
| LK40-805 | 8 | 4000 | 3 3/4 | 3 3/16 | 6 | LK100-805 | 8 | 10KV | 13 1/2 | 4 1/8 | 9 1/4 |
| LK40-106 | 10 | 4000 | 4 9/16 | 3 3/4 | 5 1/2 | LK100-106 | 10 | 10KV | 13 1/2 | 4 1/8 | 11 |

HIGH VOLTAGE POWER PACKS

HV SELENIUM RECTIFIER TYPE

HV STANDARD TYPE have as their major feature special tube wells which permit easy access for replacement of the rectifier tubes, 118 V 60 cycles input.

The HV STANDARD TYPE is designed for sea level to 10,000 feet operation in the temperature range of minus 40°C to plus 70°C. They must be operated in an upright position.

The height indicated is the height including the terminals.

We do not guarantee rectifier tube life.

| PART NUMBER | OUTPUT | | CASE SIZE | | OVERALL HEIGHT | NET PRICE |
|-------------|--------|-----|-----------|--------|----------------|-----------|
| | KV | MA. | L | W | | |
| HV50-502 | 0-5 | 5 | 6 5/8 | 4 3/8 | 7 1/4 | \$ 89.40 |
| HV100-102 | 0-10 | 1 | 7 1/2 | 5 | 7 1/4 | 108.00 |
| HV100-502 | 0-10 | 5 | 8 1/4 | 6 | 8 1/4 | 120.00 |
| HV150-102 | 0-15 | 1 | 7 1/2 | 5 | 8 | 118.80 |
| HV150-502 | 0-15 | 5 | 8 1/4 | 6 | 8 | 130.80 |
| HV200-102 | 0-20 | 1 | 7 1/2 | 5 | 8 1/2 | 138.00 |
| HV200-502 | 0-20 | 5 | 10 1/4 | 7 | 12 3/4 | 191.40 |
| HV300-102 | 0-30 | 1 | 8 3/4 | 6 3/4 | 11 | 207.00 |
| HV300-502 | 0-30 | 5 | 10 1/4 | 7 | 12 3/4 | 222.00 |
| HV500-502 | 0-50 | 5 | 12 1/2 | 11 | 17 1/2 | 426.00 |
| HV750-202 | 0-75 | 2 | 19 | 11 1/2 | 20 | 744.00 |

HV SELENIUM RECTIFIER TYPE is smaller than the HV SEALED TUBE.

INPUT 118 volts 60 to 400 cycles. HV SELENIUM RECTIFIER TYPE is designed to avoid rectifier type failures by the use of long life selenium rectifiers with an estimated life of 20,000 hours at 50°C temperature. Lower ambient temperature will increase life.

| PART NUMBER | OUTPUT | | CASE SIZE | | | NET PRICE |
|-------------|--------|-----|-----------|--------|-------|-----------|
| | KV | MA. | L | W | H | |
| HV20-202S | 2 | 2 | 3 3/4 | 3 3/16 | 5 1/2 | \$ 45.80 |
| HV50-302S | 0-5 | 3 | 3 3/4 | 4 9/16 | 5 1/2 | 70.60 |
| HV100-102S | 0-12 | 1 | 3 3/4 | 4 9/16 | 7 1/2 | 102.30 |
| HV150-102S | 0-15 | 1 | 3 3/4 | 4 9/16 | 8 1/2 | 134.00 |

HV SEALED TUBE TYPE HV SEALED TUBE TYPE is smaller than the HV STANDARD TYPE. INPUT 118 volts 60 to 400 cycles.

| PART NUMBER | OUTPUT | | CASE SIZE | | | NET PRICE |
|-------------|--------|-----|-----------|--------|-------|-----------|
| | KV | MA. | L | W | H | |
| HV20-202H | 2 | 2 | 3 3/4 | 3 3/16 | 5 1/2 | \$ 54.00 |
| HV50-302H | 5 | 3 | 3 3/4 | 4 9/16 | 6 | 74.40 |
| HV100-102H | 0-12 | 1 | 3 3/4 | 4 9/16 | 8 | 93.60 |
| HV150-102H | 0-15 | 1 | 3 3/4 | 4 9/16 | 9 | 108.00 |

This is but a partial listing of capacitances and voltages available.



Plastic Capacitors, INC.

CHICAGO ILLINOIS

- Mfrs. of
- Plastic Film Capacitors
 - Pulse Forming Networks
 - High Voltage Power Supplies
 - Paper Dielectric Capacitors

METALLIZED MYLAR* CAPACITORS

| PART | CAP. MFD. | VOLTS D.C. | SIZE | | NET PRICES | | |
|---------|-----------|------------|------|---------|------------|-------|-------|
| | | | D | L | 1/24 | 25/49 | 50/99 |
| AM2-103 | .01 | 200 | .174 | 5 8 | \$1.08 | \$.83 | \$.77 |
| AM2-153 | .015 | 200 | .174 | 5 8 | 1.08 | .83 | .77 |
| AM2-223 | .022 | 200 | .187 | 5 8 | 1.08 | .83 | .77 |
| AM2-333 | .033 | 200 | .235 | 5 8 | 1.15 | .88 | .82 |
| AM2-473 | .047 | 200 | .235 | 5 8 | 1.16 | .89 | .83 |
| AM2-683 | .068 | 200 | .235 | 13 16 | 1.16 | .90 | .83 |
| AM2-104 | 0.1 | 200 | .312 | 13 16 | 1.17 | .90 | .84 |
| AM2-154 | .15 | 200 | .312 | 13 16 | 1.18 | .91 | .84 |
| AM2-224 | .22 | 200 | .312 | 13 16 | 1.21 | .93 | .86 |
| AM2-334 | .33 | 200 | .400 | 13 16 | 1.36 | 1.05 | .97 |
| AM2-474 | .47 | 200 | .400 | 13 16 | 1.40 | 1.08 | 1.00 |
| AM2-684 | .68 | 200 | .400 | 1-1 8 | 1.46 | 1.13 | 1.04 |
| AM2-105 | 1.0 | 200 | .562 | 1-1 8 | 1.70 | 1.31 | 1.21 |
| AM2-155 | 1.5 | 200 | .562 | 1-5 16 | 1.85 | 1.43 | 1.32 |
| AM2-205 | 2 | 200 | .670 | 1-5 16 | 2.31 | 1.79 | 1.65 |
| AM2-305 | 3 | 200 | .670 | 1-9 16 | 2.65 | 2.05 | 1.89 |
| AM2-405 | 4 | 200 | .670 | 1-13 16 | 2.93 | 2.26 | 2.09 |
| AM2-505 | 5 | 200 | .750 | 1-13 16 | 3.08 | 2.38 | 2.20 |
| AM2-805 | 8 | 200 | 1.0 | 1-13 16 | 4.52 | 3.49 | 3.25 |
| AM2-106 | 10 | 200 | 1.0 | 2-5 16 | 5.81 | 4.49 | 4.15 |
| AM3-103 | .01 | 300 | .174 | 5 8 | 1.08 | .84 | .77 |
| AM3-153 | .015 | 300 | .174 | 5 8 | 1.08 | .84 | .77 |
| AM3-223 | .022 | 300 | .187 | 5 8 | 1.09 | .84 | .78 |
| AM3-333 | .033 | 300 | .235 | 5 8 | 1.14 | .88 | .81 |
| AM3-473 | .047 | 300 | .235 | 13 16 | 1.14 | .88 | .81 |
| AM3-683 | .068 | 300 | .312 | 13 16 | 1.18 | .91 | .84 |
| AM3-104 | 0.1 | 300 | .312 | 13 16 | 1.19 | .92 | .85 |
| AM3-154 | .15 | 300 | .400 | 13 16 | 1.29 | 1.00 | .92 |
| AM3-224 | .22 | 300 | .400 | 1-1 8 | 1.32 | 1.02 | .95 |
| AM3-334 | .33 | 300 | .400 | 1-1 8 | 1.38 | 1.07 | .99 |
| AM3-474 | .47 | 300 | .562 | 1-1 8 | 1.65 | 1.27 | 1.18 |
| AM3-684 | .68 | 300 | .562 | 1-1 8 | 1.75 | 1.35 | 1.25 |
| AM3-105 | 1.0 | 300 | .562 | 1-9 16 | 1.90 | 1.47 | 1.36 |
| AM3-155 | 1.5 | 300 | .670 | 1-9 16 | 2.41 | 1.86 | 1.72 |
| AM3-205 | 2 | 300 | .670 | 1-13 16 | 2.93 | 2.26 | 2.09 |
| AM3-305 | 3 | 300 | 1.0 | 1-5 16 | 3.40 | 2.63 | 2.43 |
| AM3-405 | 4 | 300 | 1.0 | 1-5 16 | 4.06 | 3.13 | 2.90 |
| AM3-605 | 7 | 300 | 1.0 | 2-5 16 | 6.11 | 4.72 | 4.37 |
| AM4-103 | .01 | 400 | .187 | 13 16 | 1.08 | .84 | .77 |
| AM4-153 | .015 | 400 | .235 | 13 16 | 1.09 | .84 | .78 |
| AM4-223 | .022 | 400 | .235 | 13 16 | 1.10 | .85 | .78 |
| AM4-333 | .033 | 400 | .312 | 13 16 | 1.12 | .87 | .80 |
| AM4-473 | .047 | 400 | .312 | 13 16 | 1.14 | .88 | .81 |
| AM4-683 | .068 | 400 | .400 | 13 16 | 1.23 | .95 | .88 |
| AM4-104 | 0.1 | 400 | .400 | 1-1 8 | 1.25 | .97 | .90 |
| AM4-154 | .15 | 400 | .400 | 1-1 8 | 1.29 | 1.03 | .96 |
| AM4-224 | .22 | 400 | .562 | 1-1 8 | 1.34 | 1.03 | .96 |
| AM4-334 | .33 | 400 | .562 | 1-1 8 | 1.59 | 1.23 | 1.14 |
| AM4-474 | .47 | 400 | .562 | 1-5 8 | 1.69 | 1.31 | 1.21 |
| AM4-684 | .68 | 400 | .670 | 1-5 8 | 2.05 | 1.58 | 1.46 |
| AM4-105 | 1 | 400 | .750 | 1-5 8 | 2.53 | 1.95 | 1.81 |
| AM4-155 | 1.5 | 400 | 1.0 | 1-5 8 | 3.05 | 2.36 | 2.18 |
| AM4-205 | 2 | 400 | 1.0 | 1-13 16 | 3.42 | 2.64 | 2.44 |
| AM4-305 | 3 | 400 | 1.0 | 1-5 16 | 4.65 | 3.59 | 3.33 |
| AM4-405 | 4 | 400 | 1.0 | 3-1 16 | 5.38 | 4.15 | 3.84 |

TYPE AM LISTING



METALLIZED MYLAR* has several advantages that are outstanding. The self-healing characteristics are well-known and extend the useful life of the capacitor. The second, and most over-looked feature, is the possibility of making full use of the highest volts-per-mil rating of the film by eliminating all the weak dielectric areas. This results in extra small size without sacrificing life, reliability and economy. Sizes and net prices are given for the floating case style and 20% capacitance tolerance. Each part number shown should be ordered with the suffix "BW" 20 added. Other styles and tolerances are also available.

200 VOLTS D.C.

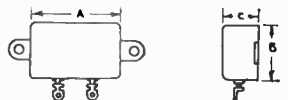
300 VOLTS D.C.

| PART NUMBER | CAP. MFD. | CASE SIZE | | | PART NUMBER | CAP. MFD. | CASE SIZE | | |
|-------------|-----------|-----------|-------|---------|-------------|-----------|-----------|-------|---------|
| | | A | B | C | | | A | B | C |
| AB2-504 | 0.5 | 1 1/8 | 1 | 13 1/16 | AB3-504 | 0.5 | 1 1/8 | 1 | 13 1/16 |
| AB2-105 | 1.0 | 1 1/8 | 1 | 13 1/16 | AB3-105 | 1.0 | 1 1/8 | 1 | 13 1/16 |
| AB2-205 | 2.0 | 1 1/8 | 1 | 13 1/16 | AB3-205 | 2.0 | 1 3/4 | 1 | 3 1/4 |
| AB2-405 | 4.0 | 1 3/4 | 1 | 3 1/4 | AB3-405 | 4.0 | 1 3/4 | 1 | 3 1/4 |
| AB2-505 | 5.0 | 1 3/4 | 1 | 3 1/4 | AB3-505 | 5.0 | 2 | 1 3/4 | 7 8 |
| AB2-605 | 6.0 | 1 3/4 | 1 1/4 | 7 8 | AB3-605 | 6.0 | 2 | 1 3/4 | 7 8 |
| AB2-805 | 8.0 | 1 3/4 | 1 1/4 | 7 8 | AB3-805 | 8.0 | 2 | 1 3/4 | 7 8 |
| AB2-106 | 10.0 | 2 | 1 3/4 | 7 8 | AB3-106 | 10.0 | 2 | 2 | 1 1/8 |
| AB2-126 | 12.0 | 2 | 1 3/4 | 7 8 | AB3-126 | 12.0 | 2 | 2 | 1 1/8 |
| AB2-156 | 15.0 | 2 | 1 3/4 | 7 8 | AB3-156 | 15.0 | 2 | 2 | 1 1/4 |
| AB2-206 | 20.0 | 2 | 2 | 1 1/4 | | | | | |
| AB2-306 | 30.0 | 2 | 2 | 1 1/4 | | | | | |

400 VOLTS D.C.

BATH TUB CONTAINER

| PART NUMBER | CAP. MFD. | CASE SIZE | | |
|-------------|-----------|-----------|-------|---------|
| | | A | B | C |
| AB4-104 | 0.1 | 1 1/8 | 1 | 13 1/16 |
| AB4-254 | 0.25 | 1 1/8 | 1 | 13 1/16 |
| AB4-504 | 0.5 | 1 1/8 | 1 | 13 1/16 |
| AB4-105 | 1.0 | 1 3/4 | 1 | 3 1/4 |
| AB4-205 | 2.0 | 1 3/4 | 1 1/4 | 7 8 |
| AB4-405 | 4.0 | 2 | 1 3/4 | 7 8 |
| AB4-505 | 5.0 | 2 | 2 | 1 1/8 |
| AB4-605 | 6.0 | 2 | 2 | 1 1/8 |
| AB4-805 | 8.0 | 2 | 2 | 1 1/4 |



TYPE AB Capacitors are metallized Mylar* elements hermetically sealed in a bathtub style container. The self-healing and clearing characteristics make possible the smallest high quality capacitor for the given rating.

TYPE AZ

Miniature Epoxy Sealed Capacitors

TYPE AZ capacitors are a rather recent development. Metallized Mylar* is used for the capacitor element. The protective housing is a specially formulated epoxy material such that a multiple dipped finish coating may be applied. The housing is relatively flexible, resistant to heat, and adheres well to the transfer band at the point of lead entry. All the fine electrical characteristics are maintained of the Mylar* film.

TYPE AZ capacitors are available in a tubular and a flat oval shape with either radial or axial tinned-copper wire leads. A short list of the 200 volt type (AZ2) follows. The complete part number consists of the letters AZ followed by the voltage in hundreds of volts capacitance is the standard designation and is hyphenated in the prefix plus a letter for the style; i.e. AZ2-104Z is a 200 volt 0.1 mfd. capacitor in the flat oval style.

| PART NUMBER | CAP. MFD. | W MAX. | T MAX. | L MAX. |
|-------------|-----------|--------|--------|--------|
| AZ2-273Z | .027 | 5 16 | 5 32 | 11 32 |
| AZ2-473Z | .047 | 11 32 | 3 16 | 11 32 |
| AZ2-104Z | 0.1 | 5 16 | 5 32 | 21 32 |
| AZ2-224Z | 0.22 | 7 16 | 1 4 | 21 32 |
| AZ2-334Z | 0.33 | 1 2 | 5 16 | 21 32 |
| AZ2-474Z | 0.47 | 7 16 | 5 16 | 29 32 |
| AZ2-105Z | 1.0 | 9 16 | 11 32 | 29 32 |

TYPE OT - TUBULAR TO 120KV



TYPE OT capacitors are designed for long life at high voltage in the medium temperature range. Type OT capacitors are the smallest and most economical capacitors available for high voltage DC filtering.

CASE is hermetically sealed and designed for operation under oil. Many of the lower voltage units may be operated in air. Many capacitance values at stated voltages are available in two physical sizes, providing the design engineer flexibility in placement of parts and circuit wiring.

MOUNTING. Must be mounted vertically, corona cap at top.

TEMPERATURE RANGE. Type OT capacitors will give long life in the temperature range of -40°C to 55°C with the rated voltage applied.

TERMINALS and mounting studs are axial 3/8-16x3/4" long.

| PART NUMBER | CAP. MFD. | KILO-VOLTS | D ±1/16 | L ±1/8 |
|-------------|-----------|------------|---------|--------|
| OT100-104 | .1 | 10 | 2 1/8 | 5 |
| OT100-254 | .25 | 10 | 2 3/4 | 5 3/4 |
| OT100-504 | .5 | 10 | 3 3/4 | 8 5/8 |
| OT200-203 | .02 | 20 | 1 1/2 | 7 5/8 |
| OT200-503 | .05 | 20 | 2 1/8 | 7 5/8 |
| OT200-104 | .1 | 20 | 2 3/4 | 8 7/8 |
| OT200-254 | .25 | 20 | 2 3/4 | 14 1/2 |
| OT200-254A | .25 | 20 | 3 3/4 | 9 3/4 |
| OT200-504 | .5 | 20 | 3 3/4 | 12 3/4 |
| OT300-103 | .01 | 30 | 1 1/2 | 8 5/8 |
| OT300-203 | .02 | 30 | 2 1/8 | 8 |
| OT300-203A | .02 | 30 | 1 1/2 | 11 5/8 |
| OT300-503 | .05 | 30 | 2 3/4 | 10 3/8 |
| OT300-104 | .1 | 30 | 2 3/4 | 13 7/8 |
| OT300-104A | .1 | 30 | 3 3/4 | 9 3/8 |
| OT300-254 | .25 | 30 | 3 3/4 | 18 |
| OT400-502 | .005 | 40 | 1 1/2 | 9 3/4 |
| OT400-103 | .01 | 40 | 1 1/2 | 12 3/4 |
| OT400-203 | .02 | 40 | 1 1/2 | 18 3/4 |
| OT400-203A | .02 | 40 | 2 1/8 | 11 3/4 |
| OT400-503 | .05 | 40 | 2 1/8 | 19 3/4 |
| OT400-503A | .05 | 40 | 3 3/4 | 13 3/4 |
| OT400-104 | 0.1 | 40 | 3 3/4 | 14 3/4 |
| OT500-202 | .002 | 50 | 1 1/2 | 8 |
| OT500-502 | .005 | 50 | 1 1/2 | 11 1/2 |
| OT500-103 | .01 | 50 | 1 1/2 | 16 1/2 |
| OT500-103A | .01 | 50 | 2 1/8 | 11 1/2 |
| OT500-203 | .02 | 50 | 2 3/4 | 11 1/2 |
| OT500-503 | .05 | 50 | 2 3/4 | 17 3/4 |
| OT500-503A | .05 | 50 | 3 3/4 | 11 1/2 |
| OT500-104 | 0.1 | 50 | 3 3/4 | 19 3/4 |
| OT600-202 | .002 | 60 | 1 1/2 | 10 3/8 |
| OT600-502 | .005 | 60 | 1 1/2 | 14 7/8 |
| OT600-502A | .005 | 60 | 2 1/8 | 7 8 |

| PART NUMBER | CAP. MFD. | KILO-VOLTS | D ±1/16 | L ±1/8 |
|-------------|-----------|------------|---------|--------|
| OT600-103 | .01 | 60 | 2 1/8 | 14 7/8 |
| OT600-103A | .01 | 60 | 2 3/4 | 11 7/8 |
| OT600-203 | .02 | 60 | 2 3/4 | 14 7/8 |
| OT600-203A | .02 | 60 | 3 3/4 | 10 3/8 |
| OT600-503 | .05 | 60 | 3 3/4 | 16 3/8 |
| OT600-104 | 0.1 | 60 | 3 3/4 | 27 1/4 |
| OT800-102 | .001 | 80 | 1 1/2 | 15 |
| OT800-202 | .002 | 80 | 1 1/2 | 15 |
| OT800-502 | .005 | 80 | 1 1/2 | 22 |
| OT800-502A | .005 | 80 | 2 1/8 | 15 |
| OT800-103 | .01 | 80 | 2 1/8 | 21 |
| OT800-103A | .01 | 80 | 2 3/4 | 15 |
| OT800-203 | .02 | 80 | 2 3/4 | 21 |
| OT800-203A | .02 | 80 | 3 3/4 | 15 |
| OT800-503 | .05 | 80 | 3 3/4 | 27 1/2 |
| OT1000-501 | .0005 | 100 | 1 1/2 | 15 5/8 |
| OT1000-102 | .001 | 100 | 1 1/2 | 15 5/8 |
| OT1000-202 | .002 | 100 | 1 1/2 | 20 5/8 |
| OT1000-202A | .002 | 100 | 2 1/8 | 15 5/8 |
| OT1000-502 | .005 | 100 | 2 1/8 | 20 5/8 |
| OT1000-502A | .005 | 100 | 2 3/4 | 15 5/8 |
| OT1000-103 | .01 | 100 | 2 3/4 | 20 5/8 |
| OT1000-103A | .01 | 100 | 3 3/4 | 15 5/8 |
| OT1000-203 | .02 | 100 | 3 3/4 | 20 5/8 |
| OT1000-303 | .03 | 100 | 3 3/4 | 25 3/8 |
| OT1200-501 | .0005 | 120 | 1 1/2 | 18 1/4 |
| OT1200-102 | .001 | 120 | 1 1/2 | 18 1/4 |
| OT1200-202 | .002 | 120 | 1 1/2 | 24 1/4 |
| OT1200-202A | .002 | 120 | 2 1/8 | 18 1/4 |
| OT1200-502 | .005 | 120 | 2 3/4 | 21 1/4 |
| OT1200-103 | .01 | 120 | 2 3/4 | 27 1/4 |
| OT1200-103A | .01 | 120 | 3 3/4 | 27 1/4 |
| OT1200-203 | .02 | 120 | 3 3/4 | 27 1/4 |

*DU PONT POLYESTER FILM

This is but a partial listing of capacitances and voltages available.

SANGAMO ELECTRIC COMPANY capacitors



TYPE DCM



(Mounting Bracket Optional)

Type DCM COMPUTER GRADE FILTER AND ENERGY STORAGE ELECTROLYTIC

The SANGAMO Type DCM is a high quality, long life, electrolytic capacitor, specially designed for use as an energy storage or filter capacitor. The Type DCM is enclosed in an aluminum can and is normally furnished with a clear plastic insulating sleeve. Aluminum terminals, which are permanently molded into the top, include #10-32 machine screws. A pressure-sensitive vent is provided as a safety mechanism in each top. In the listings, the Sangamo specification number has been adopted as the catalog number. The numbers "539" in the catalog number indicate the type as DCM. The new catalog numbers reflect the change in terminal spacings as noted in the table below. A footed, wrap-around mounting bracket is available at extra cost. For more complete information write for Engineering Bulletin 2231A.

| New Catalog Number | Old Catalog Number | Capacitance in mF. | Working Volts DC | Case Size | | Net Each 1-24* | New Catalog Number | Old Catalog Number | Capacitance in mF. | Working Volts DC | Case Size | | Net Each 1-24* |
|--------------------|--------------------|--------------------|------------------|-----------|--------|----------------|--------------------|--------------------|--------------------|------------------|-----------|--------|----------------|
| | | | | Diameter | Length | | | | | | Diameter | Length | |
| 539-2619-01 | 539-1807-01 | 33,000 | 5 | 2- 1/16 | 4-1/2 | \$ 7.56 | 539-2660-01 | 539-1335-01 | 4,000 | 100 | 2- 9/16 | 4-1/2 | \$ 9.96 |
| 539-2621-01 | 539-1768-01 | 125,000 | 5 | 3- 1/16 | 6 | 16.71 | 539-2661-01 | 539-1093-01 | 5,000 | 100 | 3- 1/16 | 4-1/2 | 10.71 |
| 539-2622-01 | 539-1811-01 | 10,000 | 10 | 1- 7/16 | 4-1/2 | 5.10 | 539-2663-01 | 539-1654-01 | 500 | 150 | 1- 7/16 | 3-1/2 | 3.84 |
| 539-2736-01 | 539-1812-01 | 15,000 | 10 | 1-13/16 | 4-1/2 | 5.73 | 539-2664-01 | 539-1861-01 | 700 | 150 | 1- 7/16 | 4-1/2 | 4.32 |
| 539-2623-01 | 539-1814-01 | 20,000 | 10 | 2- 1/16 | 4-1/2 | 7.77 | 539-2743-01 | 539-1864-01 | 1,000 | 150 | 1-13/16 | 4-1/2 | 4.83 |
| 539-2624-01 | 539-1769-01 | 35,000 | 10 | 2- 1/16 | 6 | 10.92 | 539-2744-01 | 539-1862-01 | 1,250 | 150 | 1-13/16 | 4-1/2 | 5.22 |
| 539-2626-01 | 539-1809-01 | 60,000 | 10 | 3- 1/16 | 4-1/2 | 15.39 | 539-2665-01 | 539-1763-01 | 2,000 | 150 | 2- 1/16 | 6 | 8.37 |
| 539-2627-01 | 539-1770-01 | 90,060 | 10 | 3- 1/16 | 6 | 19.77 | 539-2666-01 | 539-1222-01 | 2,500 | 150 | 2- 9/16 | 4-1/2 | 9.57 |
| 539-2628-01 | 539-1241-01 | 6,000 | 15 | 1- 7/16 | 4-1/2 | 4.23 | 539-2667-01 | 539-1625-01 | 4,000 | 150 | 3- 1/16 | 4-1/2 | 12.63 |
| 539-2737-01 | 539-1291-01 | 10,000 | 15 | 1-13/16 | 4-1/2 | 5.34 | 539-2668-01 | 539-1791-01 | 6,000 | 150 | 3- 1/16 | 6 | 15.18 |
| 539-2738-01 | 539-1825-01 | 14,000 | 15 | 1-13/16 | 4-1/2 | 6.96 | 539-2669-01 | 539-1847-01 | 500 | 200 | 1- 7/16 | 4-1/2 | 4.17 |
| 539-2629-01 | 539-1826-01 | 18,000 | 15 | 2- 1/16 | 4-1/2 | 8.49 | 539-2745-01 | 539-1702-01 | 750 | 200 | 1-13/16 | 4-1/2 | 5.37 |
| 539-2630-01 | 539-1771-01 | 25,000 | 15 | 2- 1/16 | 6 | 10.95 | 539-2670-01 | 539-1761-01 | 1,500 | 200 | 2- 1/16 | 6 | 7.65 |
| 539-2631-01 | 539-1827-01 | 33,000 | 15 | 2- 9/16 | 4-1/2 | 11.28 | 539-2671-01 | 539-2008-01 | 2,000 | 200 | 2- 9/16 | 4-1/2 | 9.18 |
| 539-2632-01 | 539-1817-01 | 40,000 | 15 | 3- 1/16 | 4-1/2 | 12.48 | 539-2672-01 | 539-1515-01 | 2,500 | 200 | 3- 1/16 | 4-1/2 | 10.80 |
| 539-2673-01 | 539-1740-01 | 50,000 | 15 | 3- 1/16 | 6 | 15.12 | 539-2746-01 | 539-2259-01 | 500 | 250 | 1-13/16 | 4-1/2 | 4.50 |
| 539-2634-01 | 539-1653-01 | 5,000 | 25 | 1- 7/16 | 4-1/2 | 4.74 | 539-2575-01 | 539-1762-01 | 1,000 | 250 | 2- 1/16 | 4-1/2 | 9.81 |
| 539-2635-01 | 539-1084-01 | 10,000 | 25 | 2- 1/16 | 4-1/2 | 7.26 | 539-2874-01 | 539-1885-01 | 1,500 | 250 | 2- 9/16 | 4-1/2 | 10.83 |
| 539-2636-01 | 539-2235-01 | 15,000 | 25 | 2- 1/16 | 6 | 10.20 | 539-2675-01 | 539-1949-01 | 275 | 300 | 1- 7/16 | 4-1/2 | 4.50 |
| 539-2637-01 | 539-2423-01 | 20,000 | 25 | 2- 9/16 | 4-1/2 | 10.59 | 539-2747-01 | 539-2260-01 | 450 | 300 | 1-13/16 | 4-1/2 | 5.10 |
| 539-2639-01 | 539-2118-01 | 40,000 | 25 | 3- 1/16 | 6 | 17.55 | 539-2676-01 | 539-1992-01 | 1,000 | 300 | 2- 9/16 | 4-1/2 | 11.22 |
| 539-2640-01 | 539-2236-01 | 1,500 | 35 | 1- 7/16 | 3-1/2 | 3.18 | 539-2677-01 | 539-2233-01 | 1,500 | 300 | 3- 1/16 | 4-1/2 | 17.73 |
| 539-2641-01 | 539-1893-01 | 4,000 | 35 | 1- 7/16 | 4-1/2 | 5.22 | 539-2584-01 | 539-2262-01 | 150 | 350 | 1- 7/16 | 3-1/2 | 4.08 |
| 539-2740-01 | 539-1889-01 | 5,000 | 35 | 1-13/16 | 4-1/2 | 5.85 | 539-2748-01 | 539-1920-01 | 350 | 350 | 1-13/16 | 4-1/2 | 5.52 |
| 539-2642-01 | 539-1892-01 | 8,000 | 35 | 2- 1/16 | 4-1/2 | 8.55 | 539-2678-01 | 539-1251-01 | 1,000 | 350 | 3- 1/16 | 4-1/2 | 11.73 |
| 539-2643-01 | 539-1777-01 | 10,000 | 35 | 2- 1/16 | 6 | 10.20 | 539-2749-01 | 539-2261-01 | 250 | 450 | 1-13/16 | 4-1/2 | 5.97 |
| 539-2644-01 | 539-1895-01 | 15,000 | 35 | 2- 9/16 | 4-1/2 | 11.22 | 539-2683-01 | 539-1863-01 | 300 | 450 | 2- 1/16 | 4-1/2 | 6.33 |
| 539-2645-01 | 539-1897-01 | 20,000 | 35 | 3- 1/16 | 4-1/2 | 11.46 | 539-2684-01 | 539-1803-01 | 500 | 450 | 2- 1/16 | 6 | 8.04 |
| 539-2646-01 | 539-1778-01 | 30,000 | 35 | 3- 1/16 | 6 | 12.84 | 539-2685-01 | 539-1080-01 | 600 | 450 | 2- 9/16 | 4-1/2 | 9.90 |
| 539-2647-01 | 539-1872-01 | 2,500 | 50 | 1- 7/16 | 4-1/2 | 4.08 | 539-2686-01 | 539-1167-01 | 800 | 450 | 3- 1/16 | 4-1/2 | 11.46 |
| 539-2741-01 | 539-1758-01 | 4,000 | 50 | 1-13/16 | 4-1/2 | 5.49 | | | | | | | |
| 539-2648-01 | 539-1697-01 | 5,000 | 50 | 2- 1/16 | 4-1/2 | 7.11 | | | | | | | |
| 539-2649-01 | 539-1781-01 | 8,000 | 50 | 2- 1/16 | 6 | 8.79 | | | | | | | |
| 539-2650-01 | 539-1832-01 | 10,000 | 50 | 2- 9/16 | 4-1/2 | 11.46 | | | | | | | |
| 539-2651-01 | 539-1820-01 | 15,000 | 50 | 3- 1/16 | 4-1/2 | 13.65 | | | | | | | |
| 539-2652-01 | 539-1782-01 | 20,000 | 50 | 3- 1/16 | 6 | 16.71 | | | | | | | |
| 539-2653-01 | 539-1229-01 | 1,000 | 75 | 1- 7/16 | 4-1/2 | 4.02 | | | | | | | |
| 539-2654-01 | 539-1836-01 | 3,000 | 75 | 2- 1/16 | 4-1/2 | 6.27 | | | | | | | |
| 539-2656-01 | 539-1698-01 | 5,000 | 75 | 2- 9/16 | 4-1/2 | 10.23 | | | | | | | |
| 539-2657-01 | 539-1783-01 | 10,000 | 75 | 3- 1/16 | 6 | 16.20 | | | | | | | |
| 539-2658-01 | 539-1871-01 | 1,000 | 100 | 1- 7/16 | 4-1/2 | 4.41 | | | | | | | |
| 539-2742-01 | 539-1859-01 | 1,500 | 100 | 1-13/16 | 4-1/2 | 4.83 | | | | | | | |
| 539-2659-01 | 539-1792-01 | 3,000 | 100 | 2- 1/16 | 6 | 9.42 | | | | | | | |

* O.E.M. prices for larger quantities are available on request.
† Reduced case sizes.

NOTE: Capacitor dimensions include insulating sleeve.

NOTE: All units are supplied with screw terminals.

NOTE: Mounting brackets are furnished at extra cost.

NOTE: New catalog numbers issued to reflect changes in terminal spacing as indicated in the table below.

| MOUNTING BRACKETS FOR TYPE DCM | Capacitor Diameter in inches | | Net Price | Case Diameter | Terminal spacing center to center | |
|--------------------------------|------------------------------|---------|-----------|---------------|-----------------------------------|-----------------|
| | 1-7/16 | 1-13/16 | | | New Catalog No. | Old Catalog No. |
| | .33 | .33 | | 1-7/16 | .500 | .547 |
| | .36 | .36 | | 1-13/16 | .750 | .750 |
| | .48 | .48 | | 2-1/16 | .875 | .937 |
| | .60 | .60 | | 2-9/16 | 1.125 | .875 |
| | | | | 3-1/16 | 1.25 | 1.375 |

NOTE: 1-7/16 bracket available with two feet only. All others available with two or three feet. Specify required number of feet.

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Type PL and Type PLP Electrolytics



TYPE PL
For Twist Tab
Mounting

The Sangamo Types PL and PLP, "Twist Tab", electrolytic capacitors are specially designed for television and electronic applications requiring long life and dependable performance at 85°C. They are sealed in round aluminum cans with the element tabs securely clamped and staked to the terminal lugs, thus assuring permanent, low resistive connections. In all cases the aluminum can and mounting ring are grounded. All units are manufactured to satisfy conditions of high ripple currents and high surge voltages.

The Type PLP has a combination base allowing interchangeable use for mounting in printed circuit boards and also for conventional twist tab mounting. For a complete listing of available ratings write for Catalog 2152E.



TYPE PLP
For Printed Circuit
Mounting

Types BK, BW, TS and BT Electrolytics



TYPE BK
with 7/8-16 threaded
neck and hex nut



TYPE BW
for bracket mounting

The Sangamo Types BK, BW, TS and BT which are furnished in aluminum containers, meet all specifications of Mil-C-62B. The Type BK corresponds to the military type CE41 & 42, the BW to CE31, 32 and 33, the TS to CE51, 52 and 53, and the BT to CE63 and 64. For complete listings and information on these types write for Bulletin 2233.



TYPE TS
with four pin octal base
for socket mounting



TYPE BT
with side or top
terminals

Type TR TELEPHONE GRADE HIGH RELIABILITY ELECTROLYTIC



SANGAMO Type TR "High Reliability" electrolytic capacitors are specially designed and manufactured for applications requiring an extremely high level of reliability over long periods of time. The Type TR is ideally suited for high-frequency filtering, by-passing and coupling applications in communications equipment, electronic industrial controls, laboratory test instruments, computers and similar equipment where a high degree of reliability for a minimum of 10 years is essential to the operation of the equipment in which it is used. The SANGAMO Type TR "High Reliability" capacitors are designed to operate throughout the temperature range from -20°C to +85°C. For more complete information write for Engineering Bulletin 2227. Metal or Bakelite mounting washers are available.

| Catalog Number | Capacitance in mF. | Working Voltage DC | Diameter in Inches | Length in Inches | Net Each 1-24* |
|------------------------|--------------------|--------------------|--------------------|------------------|----------------|
| SINGLE SECTION | | | | | |
| TR-620 | 2000 | 6 | 1-3/8 | 2-1/2 | \$4.81 |
| TR-0110 | 1000 | 15 | 1 | 4 | 4.53 |
| TR-0250 | 500 | 25 | 1 | 4 | 4.70 |
| TR-0520 | 200 | 50 | 1 | 3-1/2 | 4.37 |
| TR-1510 | 100 | 150 | 1 | 4 | 4.61 |
| TR-2550 | 50 | 250 | 1 | 3 | 4.17 |
| TR-3520 | 20 | 350 | 1 | 2-1/2 | 4.02 |
| TR-3550 | 50 | 350 | 1 | 4 | 4.39 |
| TR-4520 | 20 | 450 | 1 | 3 | 4.17 |
| TR-4550 | 50 | 450 | 1-3/8 | 3 | 4.81 |
| DUAL SECTIONS | | | | | |
| TRD-1550 | 50-50 | 150 | 1 | 4 | \$4.90 |
| TRD-2520 | 20-20 | 250 | 1 | 3-1/2 | 4.86 |
| TRD-4510 | 10-10 | 450 | 1 | 4 | 4.65 |
| TRD-4520 | 20-20 | 450 | 1-3/8 | 3-1/2 | 5.25 |
| TRD-4540 | 40-40 | 450 | 1-3/8 | 4 | 5.88 |
| TRIPLE SECTIONS | | | | | |
| TRT-1550 | 50-50-50 | 150 | 1-3/8 | 4 | \$5.69 |
| TRT-2540 | 40-40-40 | 250 | 1-3/8 | 4 | 5.91 |
| TRT-3520 | 20-20-20 | 350 | 1-3/8 | 4 | 5.75 |
| TRT-4520 | 20-20-20 | 450 | 1-3/8 | 4 | 6.08 |

* O.E.M. prices for larger quantities are available on request.

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

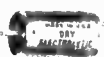
Types MT, MMT and MTD, Electrolytics



TYPE MT



TYPE MTD



TYPE MMT

SANGAMO Types MT, MTD and MMT are specially designed for radio and television applications and other electronic equipment operating at temperatures up to 85°C. They are encased in drawn aluminum containers with cardboard insulating sleeves on which polarity is clearly marked. The Type MMT, which is a miniature version of the MT, is ideally suited to meet the precise operating requirements of low voltage circuits. Because of their small physical size the MMT and MT, up to 3/4" diameter, are self-supported by means of reinforced bare tinned copper wire leads. The MT and MTD units are provided with mounting straps in 7/8" and 1" diameters.

| Catalog Number | Capacitance in mF. | Working Volts DC | Case Size | | Net Each 1-24* | Catalog Number | Capacitance in mF. | Working Volts DC | Case Size | | Net Each 1-24* |
|----------------------------------|--------------------|------------------|-----------|---------|----------------|----------------|--------------------|------------------|-----------|---------|----------------|
| | | | Diameter | Length | | | | | Diameter | Length | |
| SINGLE SECTION MT AND MMT | | | | | | | | | | | |
| MMT-325 | 25 | 3 | 3/8 | 1- 1/16 | \$0.53 | MT-1520 | 20 | 150 | 5/8 | 1- 1/16 | \$0.73 |
| MMT-350 | 50 | 3 | 3/8 | 1- 1/16 | 0.58 | MT-1525 | 25 | 150 | 5/8 | 1- 5/16 | 0.77 |
| MT-101 | 200 | 3 | 1/2 | 1- 1/16 | 0.78 | MT-1530 | 30 | 150 | 5/8 | 1- 5/16 | 0.81 |
| MT-103 | 500 | 3 | 5/8 | 1- 5/16 | 0.97 | MT-1540 | 40 | 150 | 5/8 | 1- 5/16 | 0.85 |
| MT-105 | 1000 | 3 | 3/4 | 1- 9/16 | 1.16 | MT-1550 | 50 | 150 | 3/4 | 1- 5/16 | 0.88 |
| MMT-605 | 5 | 6 | 3/8 | 1- 1/16 | 0.50 | MT-1560 | 60 | 150 | 3/4 | 1- 9/16 | 0.92 |
| MMT-625 | 25 | 6 | 3/8 | 1- 1/16 | 0.51 | MT-1580 | 80 | 150 | 3/4 | 1-13/16 | 1.00 |
| MMT-650 | 50 | 6 | 3/8 | 1- 1/16 | 0.59 | MT-15100 | 100 | 150 | 7/8 | 1- 9/16 | 1.13 |
| MMT-680 | 80 | 6 | 1/2 | 1- 1/16 | 0.66 | MT-15150 | 150 | 150 | 1 | 1- 9/16 | 1.23 |
| MT-107 | 100 | 6 | 1/2 | 1- 1/16 | 0.73 | MT-15200 | 200 | 150 | 1 | 2- 5/16 | 1.35 |
| MT-109 | 250 | 6 | 1/2 | 1- 5/16 | 0.93 | MT-15300 | 300 | 150 | 1 | 2- 7/8 | 1.46 |
| MT-111 | 500 | 6 | 5/8 | 1- 5/16 | 1.06 | MT-2504 | 4 | 250 | 1/2 | 1- 1/16 | 0.62 |
| MT-113 | 1000 | 6 | 3/4 | 1- 9/16 | 1.31 | MT-2508 | 8 | 250 | 5/8 | 1- 1/16 | 0.78 |
| MT-115 | 1500 | 6 | 3/4 | 1-13/16 | 1.43 | MT-2510 | 10 | 250 | 5/8 | 1- 5/16 | 0.81 |
| MT-117 | 2000 | 6 | 7/8 | 2- 1/16 | 1.62 | MT-2512 | 12 | 250 | 5/8 | 1- 5/16 | 0.83 |
| MT-119 | 100 | 12 | 1 1/2 | 1- 5/16 | 0.75 | MT-2516 | 16 | 250 | 5/8 | 1- 9/16 | 0.88 |
| MT-121 | 250 | 12 | 5/8 | 1- 5/16 | 0.99 | MT-2520 | 20 | 250 | 5/8 | 1-13/16 | 0.93 |
| MT-123 | 500 | 12 | 3/4 | 1- 5/16 | 1.15 | MT-2530 | 30 | 250 | 3/4 | 1-13/16 | 1.00 |
| MT-125 | 1000 | 12 | 7/8 | 2- 1/16 | 1.58 | MT-2540 | 40 | 250 | 7/8 | 1- 9/16 | 1.12 |
| MT-127 | 100 | 15 | 1/2 | 1- 5/16 | 0.76 | MT-25100 | 100 | 250 | 1 | 2- 5/16 | 1.44 |
| MT-129 | 250 | 15 | 5/8 | 1- 5/16 | 1.08 | MMT-3003 | 3 | 300 | 1/2 | 1- 1/16 | 0.69 |
| MT-131 | 500 | 15 | 3/4 | 1- 5/16 | 1.20 | MT-3504 | 4 | 350 | 5/8 | 1- 1/16 | 0.71 |
| MT-133 | 1000 | 15 | 7/8 | 2- 1/16 | 1.61 | MT-3508 | 8 | 350 | 5/8 | 1- 9/16 | 0.81 |
| MT-135 | 2000 | 15 | 1 | 2- 7/8 | 1.90 | MT-3510 | 10 | 350 | 5/8 | 1-13/16 | 0.86 |
| MMT-0210 | 10 | 25 | 3/8 | 1- 1/16 | 0.62 | MT-3516 | 16 | 350 | 3/4 | 1-13/16 | 0.96 |
| MMT-0220 | 20 | 25 | 3/8 | 1- 1/16 | 0.62 | MT-3520 | 20 | 350 | 7/8 | 1- 9/16 | 1.03 |
| MT-0225 | 25 | 25 | 1/2 | 1- 1/16 | 0.64 | MT-3530 | 30 | 350 | 1 | 1-13/16 | 1.17 |
| MT-0250 | 50 | 25 | 1/2 | 1- 1/16 | 0.68 | MT-3540 | 40 | 350 | 1 | 2- 1/16 | 1.21 |
| MT-02100 | 100 | 25 | 5/8 | 1- 1/16 | 0.84 | MT-3560 | 60 | 350 | 1 | 2- 7/8 | 1.32 |
| MT-02250 | 250 | 25 | 3/4 | 1- 5/16 | 1.15 | MMT-4501 | 1 | 450 | 3/8 | 1- 1/16 | 0.74 |
| MT-02500 | 500 | 25 | 3/4 | 1-13/16 | 1.57 | MT-4502A | 2 | 450 | 1/2 | 1- 1/16 | 0.75 |
| MT-0501 | 1 | 50 | 1/2 | 1- 1/16 | 0.57 | MMT-4503 | 3 | 450 | 1/2 | 1- 5/16 | 0.76 |
| MT-0502 | 2 | 50 | 1/2 | 1- 1/16 | 0.57 | MT-4504 | 4 | 450 | 5/8 | 1- 5/16 | 0.77 |
| MT-0504 | 4 | 50 | 1/2 | 1- 1/16 | 0.60 | MT-4508 | 8 | 450 | 3/4 | 1- 5/16 | 0.87 |
| MMT-0505 | 5 | 50 | 3/8 | 1- 1/16 | 0.60 | MT-4510 | 10 | 450 | 3/4 | 1- 9/16 | 0.87 |
| MMT-0510 | 10 | 50 | 3/8 | 1- 1/16 | 0.60 | MT-4512 | 12 | 450 | 3/4 | 1-13/16 | 0.94 |
| MT-0520 | 20 | 50 | 1/2 | 1- 1/16 | 0.63 | MT-4516 | 16 | 450 | 3/4 | 2- 5/16 | 0.99 |
| MT-0525 | 25 | 50 | 1/2 | 1- 1/16 | 0.64 | MT-4520 | 20 | 450 | 7/8 | 1-13/16 | 1.11 |
| MMT-0530 | 30 | 50 | 1/2 | 1- 5/16 | 0.69 | MT-4530 | 30 | 450 | 1 | 1-13/16 | 1.21 |
| MT-0550 | 50 | 50 | 5/8 | 1- 1/16 | 0.75 | MT-4540 | 40 | 450 | 1 | 2- 5/16 | 1.26 |
| MT-05100 | 100 | 50 | 5/8 | 1- 9/16 | 0.87 | MT-4550 | 50 | 450 | 1 | 2- 7/8 | 1.47 |
| MT-05150 | 150 | 50 | 3/4 | 1- 9/16 | 0.96 | MT-4560 | 60 | 450 | 1 | 3- 3/16 | 1.58 |
| MT-05250 | 250 | 50 | 7/8 | 1- 9/16 | 1.25 | MT-4580 | 80 | 450 | 1 | 3-11/16 | 1.79 |
| MT-1504 | 4 | 150 | 1/2 | 1- 1/16 | 0.62 | MT-4710 | 10 | 475 | 3/4 | 1-13/16 | 0.93 |
| MMT-1505 | 5 | 150 | 3/8 | 1- 1/16 | 0.62 | MT-4720 | 20 | 475 | 7/8 | 2- 5/16 | 1.46 |
| MT-1508 | 8 | 150 | 1 1/2 | 1- 1/16 | 0.65 | MT-5008 | 8 | 500 | 7/8 | 1- 9/16 | 0.93 |
| MT-1510 | 10 | 150 | 1/2 | 1- 1/16 | 0.66 | MT-5010 | 10 | 500 | 7/8 | 1- 9/16 | 0.99 |
| MT-1512 | 12 | 150 | 1/2 | 1- 5/16 | 0.68 | MT-5016 | 16 | 500 | 7/8 | 2- 1/16 | 1.07 |
| MT-1516 | 16 | 150 | 5/8 | 1- 1/16 | 0.72 | MT-5020 | 20 | 500 | 1 | 1-13/16 | 1.13 |
| DUAL SECTION MTD | | | | | | | | | | | |
| MTD-1520 | 20-20 | 150 | 7/8 | 1- 1/16 | \$1.17 | MTD-303 | 80-40 | 150 | 7/8 | 2- 1/16 | \$1.41 |
| MTD-1530 | 30-30 | 150 | 7/8 | 1- 9/16 | 1.21 | MTD-2520 | 20-20 | 250 | 7/8 | 1-13/16 | 1.29 |
| MTD-302 | 40-20 | 150 | 7/8 | 1- 9/16 | 1.23 | MTD-3520 | 20-20 | 350 | 1 | 2- 7/8 | 1.55 |
| MTD-304 | 40-30 | 150 | 7/8 | 1-13/16 | 1.25 | MTD-4508 | 8-8 | 450 | 7/8 | 1- 9/16 | 1.29 |
| MTD-1540 | 40-40 | 150 | 7/8 | 1-13/16 | 1.29 | MTD-4510 | 10-10 | 450 | 7/8 | 1-13/16 | 1.35 |
| MTD-301 | 50-30 | 150 | 7/8 | 1-13/16 | 1.29 | MTD-4520 | 20-20 | 450 | 1 | 2- 7/8 | 1.76 |
| MTD-1550 | 50-50 | 150 | 7/8 | 2- 1/16 | 1.35 | MTD-4530 | 30-30 | 450 | 1 | 3- 3/16 | 2.12 |
| | | | | | | MTD-4540 | 40-40 | 450 | 1 | 3-11/16 | 2.46 |

NOTE: Dimensions are for metal cases. Add 1/16" to diameter and 3/16" to length for cardboard insulating sleeve.

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* O.E.M. prices for larger quantities are available on request.

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Type MJ MOTOR STARTING ELECTROLYTIC



The SANGAMO Type MJ motor starting capacitor is designed for maximum capacitance per unit volume, heavy duty applications and long life--all of which provide dependable performance under performance under unusual environmental conditions.

These capacitors are encased in black plastic cases. A plastic end cap is available at extra cost. All Type MJR capacitors are equipped with combination lug and screw terminals adaptable for solder, quick disconnect or screw connections, making them ideal for the replacement market. For more complete engineering information write for Bulletin No. 2228.

| Catalog Number | Capacitance in mF. | Diameter in Inches | Length in Inches | Net Price 1-24* | Catalog Number | Capacitance in mF. | Diameter in Inches | Length in Inches | Net Price 1-24* |
|---------------------|--------------------|--------------------|------------------|-----------------|---------------------|--------------------|--------------------|------------------|-----------------|
| 110 VOLTS AC | | | | | 160 VOLTS AC | | | | |
| MJ-11021F | 21-25 | 1 7/16 | 2 3/4 | \$1.22 | MJ-16021F | 21-25 | 1-7/16 | 2-3/4 | \$1.55 |
| MJ-11025F | 25-30 | 1 7/16 | 2 3/4 | 1.23 | MJ-16025F | 25-30 | 1-7/16 | 2-3/4 | 1.61 |
| MJ-11030F | 30-36 | 1 7/16 | 2 3/4 | 1.26 | MJ-16030F | 30-36 | 1-7/16 | 2-3/4 | 1.69 |
| MJ-11036F | 36-43 | 1 7/16 | 2 3/4 | 1.30 | MJ-16036F | 36-43 | 1-7/16 | 2-3/4 | 1.78 |
| MJ-11043F | 43-53 | 1 7/16 | 2 3/4 | 1.35 | MJ-16043F | 43-53 | 1-7/16 | 2-3/4 | 1.90 |
| MJ-11047F | 47-56 | 1 7/16 | 2 3/4 | 1.37 | MJ-16047F | 47-56 | 1-7/16 | 2-3/4 | 1.97 |
| MJ-11053F | 53-64 | 1 7/16 | 2 3/4 | 1.40 | MJ-16053F | 53-64 | 1-7/16 | 3-3/8 | 2.07 |
| MJ-11064F | 64-77 | 1 7/16 | 2 3/4 | 1.49 | MJ-16064F | 64-77 | 1-7/16 | 3-3/8 | 2.25 |
| MJ-11072F | 72-88 | 1 7/16 | 2 3/4 | 1.53 | MJ-16072F | 72-88 | 1-7/16 | 3-3/8 | 2.46 |
| MJ-11088F | 88-108 | 1 7/16 | 2 3/4 | 1.64 | MJ-16088F | 88-108 | 1-13/16 | 3-3/8 | 2.80 |
| MJ-11108F | 108-130 | 1 7/16 | 2 3/4 | 1.78 | MJ-16108F | 108-130 | 1-13/16 | 3-3/8 | 3.12 |
| MJ-11124F | 124-149 | 1 7/16 | 2 3/4 | 1.87 | MJ-16124F | 124-149 | 1-13/16 | 3-3/8 | 3.40 |
| MJ-11130F | 130-156 | 1 7/16 | 2 3/4 | 1.91 | MJ-16130F | 130-156 | 1-13/16 | 3-3/8 | 3.47 |
| MJ-11145F | 145-175 | 1 7/16 | 2 3/4 | 2.02 | MJ-16145F | 145-175 | 1-13/16 | 3-3/8 | 3.73 |
| MJ-11161F | 161-193 | 1 7/16 | 3 3/8 | 2.20 | MJ-16161F | 161-193 | 1-13/16 | 4-3/8 | 4.11 |
| MJ-11189F | 189-227 | 1 7/16 | 3 3/8 | 2.42 | MJ-16189F | 189-227 | 1-13/16 | 4-3/8 | 4.59 |
| MJ-11216F | 216-259 | 1 7/16 | 3 3/8 | 2.67 | MJ-16216F | 216-259 | 1-13/16 | 4-3/8 | 4.93 |
| MJ-11233F | 233-280 | 1 13/16 | 3 3/8 | 2.83 | MJ-16233F | 233-280 | 1-13/16 | 4-3/8 | 5.21 |
| MJ-11243F | 243-292 | 1 13/16 | 3 3/8 | 2.92 | MJ-16243F | 243-292 | 1-13/16 | 4-3/8 | 5.37 |
| MJ-11270F | 270-324 | 1 13/16 | 3 3/8 | 3.06 | MJ-16270F | 270-324 | 2-9/16 | 4-3/8 | 6.07 |
| MJ-11340F | 340-408 | 1 13/16 | 3 3/8 | 3.55 | | | | | |
| MJ-11378F | 378-440 | 1 13/16 | 3 3/8 | 3.99 | 220 VOLTS AC | | | | |
| MJ-11400F | 400-480 | 1 13/16 | 3 3/8 | 4.20 | MJ-22021F | 21-25 | 1-7/16 | 2-3/4 | \$2.19 |
| MJ-11430F | 430-516 | 1 13/16 | 4 3/8 | 4.48 | MJ-22025F | 25-30 | 1-7/16 | 2-3/4 | 2.28 |
| MJ-11460F | 460-552 | 1 13/16 | 4 3/8 | 4.75 | MJ-22030F | 30-36 | 1-7/16 | 2-3/4 | 2.39 |
| MJ-11540F | 540-648 | 1 13/16 | 4 3/8 | 5.50 | MJ-22036F | 36-43 | 1-7/16 | 3-3/8 | 2.56 |
| MJ-11590F | 590-708 | 1 13/16 | 4 3/8 | 6.18 | MJ-22043F | 43-53 | 1-7/16 | 3-3/8 | 2.69 |
| 125 VOLTS AC | | | | | MJ-22047F | 47-56 | 1-7/16 | 3-3/8 | 2.80 |
| MJ-12021F | 21-25 | 1 7/16 | 2 3/4 | \$1.27 | MJ-22053F | 53-64 | 1-13/16 | 3-3/8 | 2.96 |
| MJ-12025F | 25-30 | 1 7/16 | 2 3/4 | 1.29 | MJ-22064F | 64-77 | 1-13/16 | 3-3/8 | 3.34 |
| MJ-12030F | 30-36 | 1 7/16 | 2 3/4 | 1.32 | MJ-22072F | 72-88 | 1-13/16 | 3-3/8 | 3.54 |
| MJ-12036F | 36-43 | 1 7/16 | 2 3/4 | 1.37 | MJ-22088F | 88-108 | 1-13/16 | 3-3/8 | 3.85 |
| MJ-12043F | 43-53 | 1 7/16 | 2 3/4 | 1.45 | MJ-22108F | 108-130 | 1-13/16 | 4-3/8 | 4.26 |
| MJ-12047F | 47-56 | 1 7/16 | 2 3/4 | 1.49 | MJ-22124F | 124-149 | 1-13/16 | 4-3/8 | 4.60 |
| MJ-12053F | 53-64 | 1 7/16 | 2 3/4 | 1.55 | MJ-22130F | 130-156 | 1-13/16 | 4-3/8 | 4.75 |
| MJ-12064F | 64-77 | 1 7/16 | 2 3/4 | 1.66 | MJ-22145F | 145-175 | 2-1/16 | 4-3/8 | 5.09 |
| MJ-12072F | 72-88 | 1 7/16 | 2 3/4 | 1.76 | MJ-22161F | 161-193 | 2-1/16 | 4-3/8 | 5.65 |
| MJ-12088F | 88-108 | 1 7/16 | 2 3/4 | 1.93 | 320 VOLTS AC | | | | |
| MJ-12108F | 108-130 | 1 7/16 | 2 3/4 | 2.14 | MJ-32021F | 21-25 | 1-7/16 | 3-3/8 | \$2.89 |
| MJ-12124F | 124-149 | 1 7/16 | 2 3/4 | 2.28 | MJ-32025F | 25-30 | 1-13/16 | 3-3/8 | 3.24 |
| MJ-12130F | 130-156 | 1 7/16 | 2 3/4 | 2.35 | MJ-32030F | 30-36 | 1-13/16 | 3-3/8 | 3.43 |
| MJ-12145F | 145-175 | 1-7/16 | 3 3/8 | 2.47 | MJ-32036F | 36-43 | 1-13/16 | 3-3/8 | 3.73 |
| MJ-12161F | 161-193 | 1 7/16 | 3 3/8 | 2.62 | MJ-32043F | 43-53 | 1-13/16 | 4-3/8 | 4.04 |
| MJ-12189F | 189-227 | 1 7/16 | 3 3/8 | 2.89 | MJ-32047F | 47-56 | 1-13/16 | 4-3/8 | 4.24 |
| MJ-12216F | 216-259 | 1 13/16 | 3 3/8 | 3.10 | MJ-32053F | 53-64 | 1-13/16 | 4-3/8 | 4.54 |
| MJ-12233F | 233-280 | 1 13/16 | 3 3/8 | 3.26 | MJ-32064F | 64-77 | 2-1/16 | 4-3/8 | 5.13 |
| MJ-12243F | 243-292 | 1 13/16 | 3 3/8 | 3.34 | MJ-32072F | 72-88 | 2-1/16 | 4-3/8 | 5.59 |
| MJ-12270F | 270-324 | 1 13/16 | 3 3/8 | 3.76 | MJ-32088F | 88-108 | 2-9/16 | 4-3/8 | 6.44 |
| MJ-12340F | 340-408 | 1 13/16 | 3 3/8 | 4.35 | MJ-32108F | 108-130 | 2-9/16 | 4-3/8 | 7.64 |
| MJ-12378F | 378-440 | 1 13/16 | 3 3/8 | 4.64 | | | | | |
| MJ-12400F | 400-480 | 1 13/16 | 4 3/8 | 4.81 | | | | | |
| MJ-12430F | 430-516 | 2 1/16 | 3 3/8 | 5.03 | | | | | |
| MJ-12460F | 460-552 | 2 1/16 | 3 3/8 | 5.33 | | | | | |
| MJ-12540F | 540-648 | 2 1/16 | 4 3/8 | 6.18 | | | | | |
| MJ-12590F | 590-708 | 2 1/16 | 4 3/8 | 6.83 | | | | | |

* O. E. M. prices for larger quantities are available on request.



| TYPE MJ End-Cap | |
|------------------------|-----------|
| Diameter in Inches | Net Price |
| 1-7/16 | \$.11 |
| 1-13/16 | .13 |
| 2-1/16 | .15 |
| 2-9/16 | .22 |

SANGAMO ELECTRIC COMPANY capacitors



GENERAL SPECIFICATIONS FOR MICA CAPACITORS

Mica capacitors have been continuously manufactured and improved by Sangamo for over 35 years. The quality of Sangamo mica capacitor is the result of long experience in the selection of superior grades of India ruby mica, and know-how in the formulation and selection of unique enclosing materials such as molding compounds. Our laboratory and manufacturing facilities are equipped with specialized

and modern equipment and are staffed to provide constant attention to continuing development of quality and customer Service. All Sangamo micas are designed to exceed the performance requirements of applicable Military Specifications such as Mil-C-5B and Mil-C-10950B.

NOTE: In line with industry standardization, pF is used in place of mmF.

MARKING

Sangamo wire lead mica capacitors can be marked by either ink stamping or color coding. Ink stamping can be supplied to the Sangamo identification or the Military des-

ignation, both of which are defined below. Color coding can be supplied for Mil-C-5 or E. I. A. Other ink stampings and color codes are available on request.

COMMERCIAL

INK STAMPING

Mil-C-5B

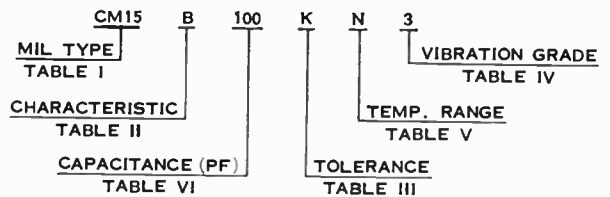
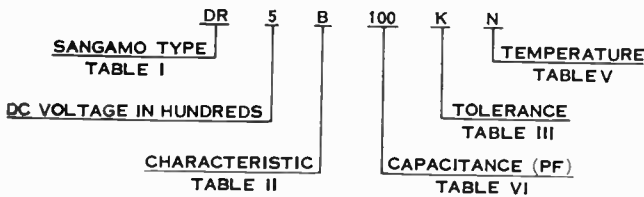


Table I Comparable Case Size

Table II Characteristic

| MIL Type | Sangamo Type |
|----------|--------------|
| CM15 | RR-DR |
| CM20 | KR |
| CM30 | C-CR |
| CM35 | CK-CRK |
| CM45 | HT |
| CM50 | HK |
| CM55 | AT |

| MIL Type | Sangamo Type |
|----------|--------------|
| CM60 | AK |
| CM65 | F1 |
| CM70 | F2 |
| CM75 | G1 |
| CM80 | G2 |
| CM85 | G3 |
| CM90 | G4 |
| CM95 | G5 |

| Letter designation | Temperature coefficient Parts/million/°C. | Capacitance drift |
|--------------------|---|---------------------------|
| B..... | Not specified | Not Specified |
| C..... | -200 to +200 | ± 0.5 percent |
| D..... | -100 to +100 | ± 0.3 percent |
| E..... | -20 to +100 | ± (0.1 percent + 0.1 pF) |
| F..... | 0 to +70 | ± (0.05 percent + 0.1 pF) |

Table III Tolerance

Table IV Vibration Grade

Table V Operating Temperature Range

| Letter designation | % Tolerance |
|--------------------|-------------|
| F | ± 1 |
| G | ± 2 |
| J | ± 5 |
| K | ± 10 |
| M | ± 20 |

| Symbol | Vibration Condition |
|--------|----------------------------------|
| 1 | Cycles per second (cps) 10 to 55 |
| 3 | 10 to 2,000 |

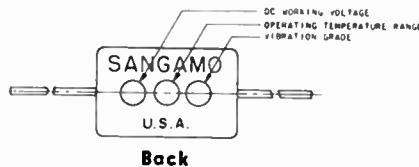
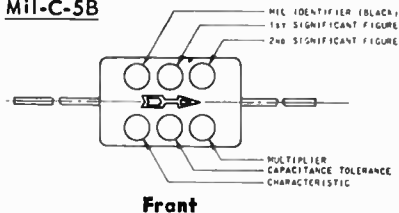
All Commercial units supplied to Vibration grade 3 at no additional charge

| Letter designation | Temperature Range °C |
|--------------------|----------------------|
| M | -55 to +70 |
| N | -55 to +85 |
| O | -55 to +125 |
| P | -55 to +150 |

Mil-C-5B

COLOR CODE

Mil-C-5A



Same as Mil-C-5B except

- 1) dots on reverse side are omitted (w.v.d.c., temp., vibration)
- 2) 5% tolerance coded GOLD
- 3) 20% tolerance coded BLACK

E. I. A.

Same as Mil-C-5A except

- 1) first dot coded WHITE
- 2) "A" characteristic coded BLACK
- 3) 10,000 multiplier coded YELLOW
- 4) 0.01 multiplier coded SILVER
- 5) 1% tolerance coded BROWN
- 6) 3% tolerance coded ORANGE

| Color | Character-istic | Capacitance | | Capacitance Tolerance Percent (±) | DC Working Voltage | Operating Temperature | Vibration Range |
|-----------------|-----------------|------------------------------|-------------|-----------------------------------|--------------------|-----------------------|-----------------|
| | | 1st & 2nd Significant Figure | Multiplier* | | | | |
| Black | --- | 0 | 1 | --- | --- | (M) -55° to +70°C | (1) 10-55 CPS |
| Brown | B | 1 | 10 | --- | --- | --- | --- |
| Red | C | 2 | 100 | 2(G) | --- | (N) -55° to +85°C | --- |
| Orange | D | 3 | 1000 | --- | 300 | --- | --- |
| Yellow | E | 4 | --- | --- | --- | (O) -55° to +125°C | (3) 10-2000 CPS |
| Green | F | 5 | --- | 5(J) | 500 | --- | --- |
| Blue | --- | 6 | --- | --- | --- | (P) -55° to +150°C | --- |
| Purple (Violet) | --- | 7 | --- | --- | --- | --- | --- |
| Grey | --- | 8 | --- | --- | --- | --- | --- |
| White | --- | 9 | --- | --- | --- | --- | --- |
| Gold | --- | --- | 0.1 | --- | --- | --- | --- |
| Silver | --- | --- | --- | 1(K) | --- | --- | --- |

*The Multiplier is the Factor by which the two Significant Figures are multiplied to yield the nominal capacitance. Capacitance: First 2 digits are significant figures. 3rd digit indicates number of zeros following significant figures.

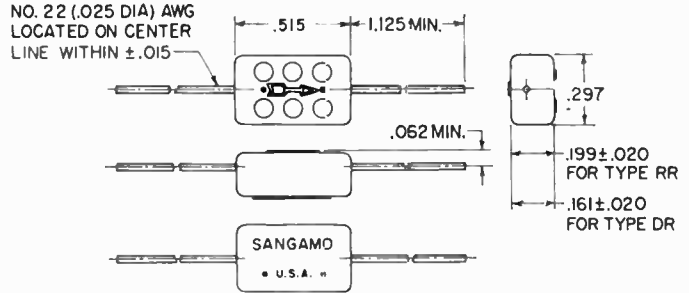
SANGAMO ELECTRIC COMPANY
capacitors



Type DR-RR SILVERED MICA



Type DR and RR capacitors are molded in red Humiditite. These units are normally supplied as $\pm 5\%$, "C" characteristic 20 pF and below, and "E" characteristic above 20 pF. Units can be supplied to $\pm 1/2$ pF or $\pm 1/2\%$ tolerance whichever is greater. For more complete engineering information write for Bulletin 2320



TYPE DR and RR
(125°C)
500 W.V.D.C.

| New Catalog Number* | Old Catalog Number | Applicable Military Specification* | Capacitance pF. | Net Price (1-49)** | | | New Catalog Number* | Old Catalog Number | Applicable Military Specification* | Capacitance pF. | Net Price (1-49)** | | |
|---------------------|--------------------|------------------------------------|-----------------|--------------------|---------------|---------------|---------------------|--------------------|------------------------------------|-----------------|--------------------|---------------|--------|
| | | | | Tolerance | | | | | | | Tolerance | | |
| | | | | $\pm 10\%$ (K) | $\pm 5\%$ (J) | $\pm 2\%$ (G) | | | | $\pm 10\%$ (K) | $\pm 5\%$ (J) | $\pm 2\%$ (G) | |
| DR5C050-0 | DR-1550 | ----- | 5 | \$.129 | \$.143 | \$.157 | DR5E101-0 | DR-1310 | CM15C101-03 | 100 | \$.150 | \$.167 | \$.184 |
| DR5C100-0 | DR-1410 | CM15B100-03 | 10 | .129 | .143 | .157 | DR5E111-0 | DR-1311 | CM15C111-03 | 110 | .162 | .179 | .197 |
| DR5C120-0 | DR-1412 | CM15B120-03 | 12 | .129 | .143 | .157 | DR5E121-0 | DR-1312 | CM15C121-03 | 120 | .162 | .179 | .197 |
| DR5C150-0 | DR-1415 | CM15B150-03 | 15 | .129 | .143 | .157 | DR5E131-0 | DR-1313 | CM15C131-03 | 130 | .173 | .191 | .210 |
| DR5C180-0 | DR-1418 | CM15B180-03 | 18 | .129 | .143 | .157 | DR5E151-0 | DR-1315 | CM15C151-03 | 150 | .173 | .191 | .210 |
| DR5E200-0 | DR-1420 | CM15C200-03 | 20 | .129 | .143 | .157 | DR5E161-0 | DR-1316 | CM15C161-03 | 160 | .183 | .203 | .223 |
| DR5E220-0 | DR-1422 | CM15C220-03 | 22 | .129 | .143 | .157 | DR5E181-0 | DR-1318 | CM15C181-03 | 180 | .195 | .215 | .236 |
| DR5E240-0 | DR-1424 | CM15C240-03 | 24 | .129 | .143 | .157 | DR5E201-0 | DR-1320 | CM15D201-03 | 200 | .195 | .215 | .236 |
| DR5E270-0 | DR-1427 | CM15C270-03 | 27 | .129 | .143 | .157 | DR5E221-0 | DR-1322 | CM15D221-03 | 220 | .206 | .228 | .251 |
| DR5E300-0 | DR-1430 | CM15C300-03 | 30 | .129 | .143 | .157 | DR5E241-0 | DR-1324 | CM15D241-03 | 240 | .217 | .240 | .264 |
| DR5E330-0 | DR-1433 | CM15C330-03 | 33 | .129 | .143 | .157 | DR5E251-0 | DR-1325 | ----- | 250 | .217 | .240 | .264 |
| DR5E360-0 | DR-1436 | CM15C360-03 | 36 | .129 | .143 | .157 | DR5E271-0 | DR-1327 | CM15D271-03 | 270 | .227 | .252 | .277 |
| DR5E390-0 | DR-1439 | CM15C390-03 | 39 | .129 | .143 | .157 | DR5E301-0 | DR-1330 | CM15D301-03 | 300 | .239 | .264 | .290 |
| DR5E430-0 | DR-1443 | CM15C430-03 | 43 | .129 | .143 | .157 | †DR3E331-0 | DR-06333 | ----- | 330 | .250 | .276 | .330 |
| DR5E470-0 | DR-1447 | CM15C470-03 | 47 | .129 | .143 | .157 | †DR3E361-0 | DR-06336 | ----- | 360 | .261 | .278 | .345 |
| DR5E500-0 | DR-1450 | ----- | 50 | .129 | .143 | .157 | †DR3E391-0 | DR-06339 | ----- | 390 | .271 | .300 | .360 |
| DR5E510-0 | DR-1451 | CM15C510-03 | 51 | .129 | .143 | .157 | RR5E391-0 | RR-1339 | CM15D391-03 | 390 | .283 | .312 | .375 |
| DR5E560-0 | DR-1456 | CM15C560-03 | 56 | .129 | .143 | .157 | RR5E431-0 | RR-1343 | CM15D431-03 | 430 | .285 | .321 | .390 |
| DR5E620-0 | DR-1462 | CM15C620-03 | 62 | .129 | .143 | .157 | RR5E471-0 | RR-06347 | ----- | 470 | .304 | .337 | .371 |
| DR5E680-0 | DR-1468 | CM15C680-03 | 68 | .140 | .155 | .186 | RR5E501-0 | RR-06350 | ----- | 500 | .315 | .348 | .383 |
| DR5E750-0 | DR-1475 | CM15C750-03 | 75 | .140 | .155 | .186 | RR5E511-0 | RR-06351 | ----- | 510 | .315 | .348 | .383 |
| DR5E820-0 | DR-1482 | CM15C820-03 | 82 | .150 | .167 | .200 | RR5E561-0 | RR-06356 | ----- | 560 | .336 | .370 | .450 |
| DR5E910-0 | DR-1491 | CM15C910-03 | 91 | .150 | .167 | .200 | | | | | | | |

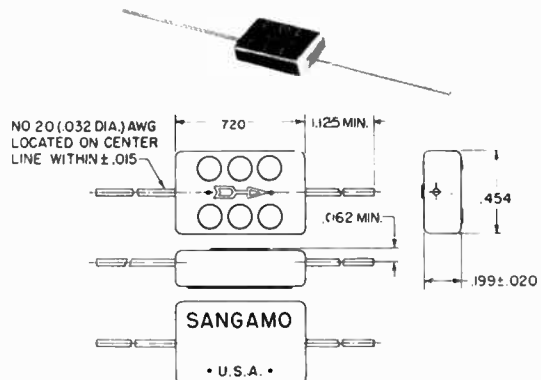
* Complete catalog number will include additional letter to designate capacitive tolerance. Example: DR5E270J0. Complete Military type designation will include additional letter for capacitive tolerance. Example: CM15C270J03.

** O.E.M. prices for larger quantities are available on request.

† Voltage rating 300 W.V.D.C.

Type KR MICA

Type KR capacitors are molded in Humiditite. These capacitors are normally supplied at $\pm 5\%$ tolerance, "C" characteristic 20 pF and below, and "E" characteristic above 20 pF. Units can be supplied to $\pm 1/2$ pF or $\pm 1/2\%$ tolerance whichever is greater. For more complete engineering information write for Bulletin 2320.



SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Type KR Mica - continued -

| New Catalog Number* | Old Catalog Number | Applicable Military Specification* | Capacitance pF. | Net Price (1-49)** | | | New Catalog Number* | Old Catalog Number | Applicable Military Specification* | Capacitance pF. | Net Price (1-49)** | | |
|---------------------|--------------------|------------------------------------|-----------------|--------------------|----------|----------------------|----------------------|--------------------|------------------------------------|-----------------|--------------------|----------|----------|
| | | | | Tolerance | | | | | | | Tolerance | | |
| | | | | ± 10% (K) | ± 5% (J) | ± 2% (G) | | | | | ± 10% (K) | ± 5% (J) | ± 2% (G) |
| 500 W.V.D.C. | | | | | | 1000 W.V.D.C. | | | | | | | |
| KR5C050-0 | KR-1550 | ----- | 5 | \$.145 | \$.159 | \$.175 | KR10E121-0 | KR-2312 | ----- | 120 | \$.167 | \$.184 | \$.203 |
| KR5C100-0 | KR-1410 | ----- | 10 | .145 | .159 | .175 | KR10E131-0 | KR-2313 | ----- | 130 | .167 | .184 | .203 |
| KR5C120-0 | KR-1412 | ----- | 12 | .145 | .159 | .175 | KR10E151-0 | KR-2315 | ----- | 150 | .167 | .184 | .203 |
| KR5C150-0 | KR-1415 | ----- | 15 | .145 | .159 | .175 | KR10E181-0 | KR-2318 | ----- | 180 | .167 | .184 | .203 |
| KR5C180-0 | KR-1418 | ----- | 18 | .145 | .159 | .175 | KR10E201-0 | KR-2320 | ----- | 200 | .188 | .207 | .228 |
| KR5C200-0 | KR-1420 | ----- | 20 | .145 | .159 | .175 | KR10E221-0 | KR-2322 | ----- | 220 | .188 | .207 | .228 |
| KR5E220-0 | KR-1422 | ----- | 22 | .145 | .159 | .175 | KR10E241-0 | KR-2324 | ----- | 240 | .188 | .207 | .228 |
| KR5E240-0 | KR-1424 | ----- | 24 | .145 | .159 | .175 | KR10E271-0 | KR-2327 | ----- | 270 | .188 | .207 | .228 |
| KR5E270-0 | KR-1427 | ----- | 27 | .145 | .159 | .175 | KR10E301-0 | KR-2330 | ----- | 300 | .209 | .230 | .253 |
| KR5E300-0 | KR-1430 | ----- | 30 | .145 | .159 | .175 | KR10E331-0 | KR-2333 | ----- | 330 | .209 | .230 | .253 |
| KR5E330-0 | KR-1433 | ----- | 33 | .145 | .159 | .175 | KR10E361-0 | KR-2336 | ----- | 360 | .209 | .230 | .253 |
| KR5E360-0 | KR-1436 | ----- | 36 | .145 | .159 | .175 | KR10E391-0 | KR-2339 | ----- | 390 | .230 | .253 | .279 |
| KR5E390-0 | KR-1439 | ----- | 39 | .145 | .159 | .175 | KR10E431-0 | KR-2343 | ----- | 430 | .230 | .253 | .279 |
| KR5E430-0 | KR-1443 | ----- | 43 | .145 | .159 | .175 | KR10E451-0 | KR-2345 | ----- | 450 | .230 | .253 | .279 |
| KR5E470-0 | KR-1447 | ----- | 47 | .145 | .159 | .175 | KR10E471-0 | KR-2347 | ----- | 470 | .230 | .253 | .279 |
| KR5E500-0 | KR-1450 | ----- | 50 | .145 | .159 | .175 | KR10E511-0 | KR-2351 | ----- | 510 | .251 | .277 | .305 |
| KR5E510-0 | KR-1451 | ----- | 51 | .145 | .159 | .175 | KR10E561-0 | KR-2356 | ----- | 560 | .251 | .277 | .305 |
| KR5E560-0 | KR-1456 | ----- | 56 | .145 | .159 | .175 | KR10E621-0 | KR-2362 | ----- | 620 | .271 | .300 | .330 |
| KR5E620-0 | KR-1462 | ----- | 62 | .145 | .159 | .175 | KR10E681-0 | KR-2368 | ----- | 680 | .293 | .325 | .357 |
| KR5E680-0 | KR-1468 | ----- | 68 | .145 | .159 | .175 | KR10E751-0 | KR-2375 | ----- | 750 | .293 | .325 | .357 |
| KR5E750-0 | KR-1475 | ----- | 75 | .145 | .159 | .175 | KR10E821-0 | KR-2382 | ----- | 820 | .313 | .345 | .380 |
| KR5E820-0 | KR-1482 | ----- | 82 | .145 | .159 | .175 | KR10E921-0 | KR-2392 | ----- | 920 | .334 | .370 | .407 |
| KR5E910-0 | KR-1491 | ----- | 91 | .145 | .159 | .175 | 1500 W.V.D.C. | | | | | | |
| KR5E101-0 | KR-1310 | ----- | 100 | .145 | .159 | .175 | KR15E750-0 | KR-3475 | ----- | 75 | \$.169 | \$.185 | \$.204 |
| KR5E111-0 | KR-1311 | ----- | 110 | .145 | .159 | .175 | KR15E820-0 | KR-3482 | ----- | 82 | .191 | .210 | .231 |
| KR5E121-0 | KR-1312 | ----- | 120 | .145 | .159 | .175 | KR15E910-0 | KR-3491 | ----- | 91 | .191 | .210 | .231 |
| KR5E131-0 | KR-1313 | ----- | 130 | .145 | .159 | .175 | KR15E101-0 | KR-3310 | ----- | 100 | .191 | .210 | .231 |
| KR5E151-0 | KR-1315 | ----- | 150 | .145 | .159 | .175 | KR15E111-0 | KR-3311 | ----- | 110 | .191 | .210 | .231 |
| KR5E161-0 | KR-1316 | ----- | 160 | .165 | .182 | .200 | KR15E121-0 | KR-3312 | ----- | 120 | .191 | .210 | .231 |
| KR5E181-0 | KR-1318 | ----- | 180 | .165 | .182 | .200 | KR15E131-0 | KR-3313 | ----- | 130 | .212 | .234 | .257 |
| KR5E201-0 | KR-1320 | ----- | 200 | .165 | .182 | .200 | KR15E151-0 | KR-3315 | ----- | 150 | .212 | .234 | .257 |
| KR5E221-0 | KR-1322 | ----- | 220 | .165 | .182 | .200 | KR15E161-0 | KR-3316 | ----- | 160 | .212 | .234 | .257 |
| KR5E241-0 | KR-1324 | ----- | 240 | .165 | .182 | .200 | KR15E181-0 | KR-3318 | ----- | 180 | .229 | .258 | .284 |
| KR5E251-0 | KR-1325 | ----- | 250 | .165 | .182 | .200 | KR15E201-0 | KR-3320 | ----- | 200 | .229 | .258 | .284 |
| KR5E271-0 | KR-1327 | ----- | 270 | .165 | .182 | .200 | KR15E221-0 | KR-3322 | ----- | 220 | .257 | .282 | .310 |
| KR5E301-0 | KR-1330 | ----- | 300 | .186 | .199 | .219 | KR15E231-0 | KR-3323 | ----- | 230 | .257 | .282 | .310 |
| KR5E331-0 | KR-1333 | ----- | 330 | .186 | .199 | .219 | KR15E251-0 | KR-3325 | ----- | 250 | .279 | .310 | .341 |
| KR5E361-0 | KR-1336 | ----- | 360 | .186 | .199 | .219 | KR15E271-0 | KR-3327 | ----- | 270 | .279 | .310 | .341 |
| KR5E391-0 | KR-1339 | ----- | 390 | .186 | .199 | .219 | KR15E301-0 | KR-3330 | ----- | 300 | .300 | .330 | .363 |
| KR5E401-0 | KR-1340 | ----- | 400 | .186 | .199 | .219 | KR15E331-0 | KR-3333 | ----- | 330 | .321 | .354 | .390 |
| KR5E431-0 | KR-1343 | CM20D431-03 | 430 | .205 | .227 | .250 | KR15E361-0 | KR-3336 | ----- | 360 | .321 | .354 | .390 |
| KR5E471-0 | KR-1347 | CM20D471-03 | 470 | .205 | .227 | .250 | KR15E391-0 | KR-3339 | ----- | 390 | .342 | .378 | .416 |
| KR5E501-0 | KR-1350 | ----- | 500 | .205 | .227 | .250 | KR15E411-0 | KR-3341 | ----- | 410 | .366 | .402 | .442 |
| KR5E511-0 | KR-1351 | ----- | 510 | .205 | .227 | .250 | 2500 W.V.D.C. | | | | | | |
| KR5E561-0 | KR-1356 | CM20D561-03 | 560 | .226 | .249 | .274 | KR25C150-0 | KR-5415 | ----- | 15 | \$.149 | \$.165 | \$.182 |
| KR5E601-0 | KR-1360 | ----- | 600 | .226 | .249 | .274 | KR25C180-0 | KR-5418 | ----- | 18 | .172 | .190 | .209 |
| KR5E621-0 | KR-1362 | CM20D621-03 | 620 | .226 | .249 | .274 | KR25C200-0 | KR-5420 | ----- | 20 | .172 | .190 | .209 |
| KR5E681-0 | KR-1368 | CM20D681-03 | 680 | .226 | .249 | .274 | KR25E220-0 | KR-5422 | ----- | 22 | .172 | .190 | .209 |
| KR5E701-0 | KR-1370 | ----- | 700 | .246 | .271 | .298 | KR25E240-0 | KR-5424 | ----- | 24 | .172 | .190 | .209 |
| KR5E751-0 | KR-1375 | CM20D751-03 | 750 | .246 | .271 | .298 | KR25E270-0 | KR-5427 | ----- | 27 | .172 | .190 | .209 |
| KR5E801-0 | KR-1380 | ----- | 800 | .246 | .271 | .298 | KR25E300-0 | KR-5430 | ----- | 30 | .172 | .190 | .209 |
| KR5E821-0 | KR-1382 | CM20D821-03 | 820 | .246 | .271 | .298 | KR25E330-0 | KR-5433 | ----- | 33 | .196 | .216 | .238 |
| KR5E901-0 | KR-1390 | ----- | 900 | .266 | .293 | .323 | KR25E360-0 | KR-5436 | ----- | 36 | .196 | .216 | .238 |
| KR5E911-0 | KR-1391 | CM20D911-03 | 910 | .266 | .293 | .323 | KR25E390-0 | KR-5439 | ----- | 39 | .196 | .216 | .238 |
| KR5E102-0 | KR-1210 | CM20D102-03 | 1000 | .286 | .315 | .346 | KR25E430-0 | KR-5443 | ----- | 43 | .196 | .216 | .238 |
| KR5E112-0 | KR-1211 | ----- | 1100 | .306 | .336 | .370 | KR25E470-0 | KR-5447 | ----- | 47 | .220 | .244 | .268 |
| KR5E122-0 | KR-1212 | ----- | 1200 | .306 | .336 | .370 | KR25E500-0 | KR-5450 | ----- | 50 | .220 | .244 | .268 |
| KR5E132-0 | KR-1213 | ----- | 1300 | .326 | .360 | .420 | KR25E510-0 | KR-5451 | ----- | 51 | .220 | .244 | .268 |
| KR5E152-0 | KR-1215 | ----- | 1500 | .345 | .381 | .442 | KR25E560-0 | KR-5456 | ----- | 56 | .220 | .244 | .268 |
| KR5E162-0 | KR-1216 | ----- | 1600 | .365 | .402 | .468 | KR25E620-0 | KR-5462 | ----- | 62 | .243 | .270 | .297 |
| KR5E182-0 | KR-1218 | ----- | 1800 | .387 | .425 | .468 | KR25E680-0 | KR-5468 | ----- | 68 | .243 | .270 | .297 |
| KR3E202-0 | KR-06220 | ----- | 2000 | .396 | .440 | .485 | KR25E750-0 | KR-5475 | ----- | 75 | .243 | .270 | .297 |
| KR3E222-0 | KR-06222 | ----- | 2200 | .416 | .461 | .510 | KR25E820-0 | KR-5482 | ----- | 82 | .267 | .297 | .327 |
| KR3E242-0 | KR-06224 | ----- | 2400 | .436 | .478 | .525 | KR25E910-0 | KR-5491 | ----- | 91 | .292 | .321 | .353 |
| KR3E252-0 | KR-06225 | ----- | 2500 | .436 | .478 | .525 | KR25E101-0 | KR-5310 | ----- | 100 | .292 | .321 | .353 |
| KR3E272-0 | KR-06227 | ----- | 2700 | .456 | .502 | .550 | KR25E111-0 | KR-5311 | ----- | 110 | .315 | .345 | .380 |
| KR3E302-0 | KR-06230 | ----- | 3000 | .475 | .524 | .575 | KR25E121-0 | KR-5312 | ----- | 120 | .315 | .345 | .380 |
| | | | | | | | KR25E131-0 | KR-5313 | ----- | 130 | .339 | .372 | .409 |

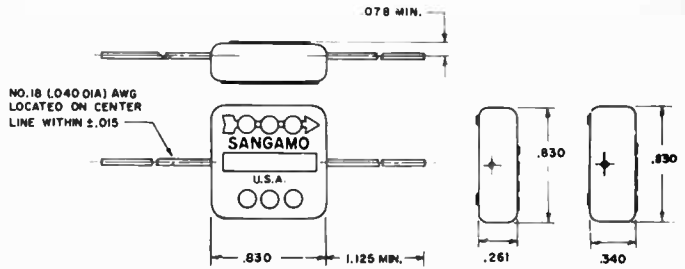
* Complete catalog number must include additional letter to indicate capacitive tolerance. Example: KR5C561J0. Complete military type designation will include additional letter for capacitive tolerance. Example: CM20D561J03

** O. E. M. prices for larger quantities are available on request. † Voltage rating 300 W.V.D.C.

SANGAMO ELECTRIC COMPANY
capacitors



Type C-CR MICA CAPACITOR



Type C foil mica capacitors are molded in tan Humiditite in either 10% or 20% tolerance. These units are only supplied as "B" characteristic.

Type CR silvered mica capacitors are molded in red Humiditite. These units are normally supplied as 5% tolerance and "C" characteristic. Units can

be supplied to $\pm 1/2$ pF or $\pm 1/2\%$ whichever is greater, as well as D, E or F characteristic.

Both Types C and CR are available in two thicknesses. Where the thicker version is required, the letter "K" should follow the type designation (for example CRK5C682-0). For additional engineering information write for Bulletin 2320.

TYPE C (Foil Mica)
(125° C)

| New Catalog Number* | Old Catalog Number | Applicable Military Specification* | Capacitance pF | Net Price (1-49)** | |
|-----------------------------|--------------------|------------------------------------|----------------|--------------------|----------------|
| | | | | Tolerance | |
| | | | | $\pm 20\%$ (M) | $\pm 10\%$ (K) |
| 500 W.V.D.C. | | | | | |
| .281" MAX. THICKNESS | | | | | |
| C5B47-0 | C-1347 | ----- | 470 | \$.185 | \$.203 |
| C5B50-0 | C-1350 | ----- | 500 | .185 | .203 |
| C5B51-0 | C-1351 | ----- | 510 | .185 | .203 |
| C5B56-0 | C-1356 | CM30B56-1-03 | 560 | .185 | .203 |
| C5B62-0 | C-1362 | CM30B62-1-03 | 620 | .205 | .225 |
| C5B68-0 | C-1368 | CM30B68-1-03 | 680 | .205 | .225 |
| C5B75-0 | C-1375 | CM30B75-1-03 | 750 | .205 | .225 |
| C5B80-0 | C-1380 | ----- | 800 | .205 | .225 |
| C5B82-0 | C-1382 | CM30B82-1-03 | 820 | .205 | .225 |
| C5B90-0 | C-1390 | ----- | 900 | .226 | .249 |
| C5B91-0 | C-1391 | CM30B91-1-03 | 910 | .226 | .249 |
| C5B102-0 | C-1210 | CM30B102-03 | 1000 | .226 | .249 |
| C5B112-0 | C-1211 | CM30B112-03 | 1100 | .226 | .249 |
| C5B122-0 | C-1212 | CM30B122-03 | 1200 | .247 | .272 |
| C5B132-0 | C-1213 | CM30B132-03 | 1300 | .247 | .272 |
| C5B152-0 | C-1215 | CM30B152-03 | 1500 | .267 | .294 |
| C5B162-0 | C-1216 | CM30B162-03 | 1600 | .267 | .294 |
| C5B182-0 | C-1218 | CM30B182-03 | 1800 | .267 | .316 |
| C5B202-0 | C-1220 | CM30B202-03 | 2000 | .302 | .332 |
| C5B222-0 | C-1222 | CM30B222-03 | 2200 | .302 | .332 |
| C5B242-0 | C-1224 | CM30B242-03 | 2400 | .328 | .361 |
| C5B252-0 | C-1225 | ----- | 2500 | .328 | .361 |
| C5B272-0 | C-1227 | CM30B272-03 | 2700 | .348 | .383 |
| C5B302-0 | C-1230 | CM30B302-03 | 3000 | .370 | .407 |
| C5B332-0 | C-1233 | CM30B332-03 | 3300 | .387 | .426 |
| C5B362-0 | C-1236 | ----- | 3600 | .411 | .452 |
| C5B392-0 | C-1239 | ----- | 3900 | .430 | .473 |
| C5B402-0 | C-1240 | ----- | 4000 | .453 | .498 |
| C5B432-0 | C-1243 | ----- | 4300 | .472 | .519 |
| C5B472-0 | C-1247 | ----- | 4700 | .491 | .540 |
| C5B502-0 | C-1250 | ----- | 5000 | .515 | .566 |
| C5B512-0 | C-1251 | ----- | 5100 | .530 | .583 |
| C5B562-0 | C-1256 | ----- | 5600 | .551 | .606 |
| C5B622-0 | C-1260 | ----- | 6000 | .600 | .660 |
| C5B622-0 | C-1262 | ----- | 6200 | .630 | .693 |
| C5B662-0 | C-1268 | ----- | 6800 | .550 | .605 |
| C5B752-0 | C-1275 | ----- | 7500 | .600 | .660 |
| †C3B82-0 | C-06280 | ----- | 8000 | .630 | .693 |
| †C3B822-0 | C-06282 | ----- | 8200 | .650 | .715 |
| †C3B912-0 | C-06291 | ----- | 9100 | .710 | .781 |
| †C3B952-0 | C-06295 | ----- | 9500 | .750 | .825 |

TYPE C (Foil Mica) (Continued)

| New Catalog Number* | Old Catalog Number | Applicable Military Specification* | Capacitance pF | Net Price (1-49)** | |
|-----------------------------|--------------------|------------------------------------|----------------|--------------------|----------------|
| | | | | Tolerance | |
| | | | | $\pm 20\%$ (M) | $\pm 10\%$ (K) |
| .359" MAX. THICKNESS | | | | | |
| CK5B802-0 | C-1280 | ----- | 8000 | \$.780 | \$.858 |
| CK5B822-0 | C-1282 | ----- | 8200 | .800 | .880 |
| CK5B912-0 | C-1291 | ----- | 9100 | .880 | .968 |
| CK5B103-0 | C-1110 | ----- | 10000 | .960 | 1.056 |
| †CK3B123-0 | C-06112 | ----- | 12000 | .930 | 1.023 |
| †CK3B133-0 | C-06113 | ----- | 13000 | 1.010 | 1.111 |
| †CK3B1452-0 | C-061145 | ----- | 14500 | 1.090 | 1.199 |

TYPE CR (Silvered Mica)
(125° C)

| New Catalog Number* | Old Catalog Number | Applicable Military Specification* | Capacitance pF | Net Price (1-49)** | | |
|-----------------------------|--------------------|------------------------------------|----------------|--------------------|---------------|---------------|
| | | | | Tolerance | | |
| | | | | $\pm 10\%$ (K) | $\pm 5\%$ (J) | $\pm 2\%$ (G) |
| 500 W.V.D.C. | | | | | | |
| .281" MAX. THICKNESS | | | | | | |
| CR5C471-0 | CR-1347 | ----- | 470 | \$.233 | \$.258 | \$.297 |
| CR5C501-0 | CR-1350 | ----- | 500 | .233 | .258 | .297 |
| CR5C511-0 | CR-1351 | ----- | 510 | .233 | .258 | .297 |
| CR5C561-0 | CR-1356 | CM30E561-03 | 560 | .233 | .258 | .297 |
| CR5C621-0 | CR-1362 | CM30E621-03 | 620 | .275 | .303 | .348 |
| CR5C681-0 | CR-1368 | CM30E681-03 | 680 | .275 | .303 | .348 |
| CR5C751-0 | CR-1375 | CM30E751-03 | 750 | .275 | .303 | .348 |
| CR5C801-0 | CR-1380 | ----- | 800 | .275 | .303 | .348 |
| CR5C821-0 | CR-1382 | CM30E821-03 | 820 | .275 | .303 | .348 |
| CR5C901-0 | CR-1390 | ----- | 900 | .326 | .349 | .401 |
| CR5C911-0 | CR-1391 | CM30E911-03 | 910 | .326 | .349 | .401 |
| CR5C102-0 | CR-1210 | CM30E102-03 | 1000 | .326 | .349 | .401 |
| CR5C112-0 | CR-1211 | CM30E112-03 | 1100 | .326 | .349 | .401 |
| CR5C122-0 | CR-1212 | CM30E122-03 | 1200 | .358 | .397 | .456 |
| CR5C132-0 | CR-1213 | CM30E132-03 | 1300 | .358 | .397 | .456 |
| CR5C152-0 | CR-1215 | CM30E152-03 | 1500 | .401 | .441 | .507 |
| CR5C162-0 | CR-1216 | CM30E162-03 | 1600 | .401 | .441 | .507 |
| CR5C182-0 | CR-1218 | CM30E182-03 | 1800 | .443 | .487 | .560 |
| CR5C202-0 | CR-1220 | CM30E202-03 | 2000 | .443 | .487 | .560 |
| CR5C222-0 | CR-1222 | CM30E222-03 | 2200 | .485 | .535 | .615 |
| CR5C242-0 | CR-1224 | CM30E242-03 | 2400 | .526 | .580 | .667 |
| CR5C252-0 | CR-1225 | ----- | 2500 | .526 | .580 | .667 |
| CR5C272-0 | CR-1227 | CM30E272-03 | 2700 | .569 | .625 | .719 |
| CR5C302-0 | CR-1230 | CM30E302-03 | 3000 | .607 | .670 | .770 |
| CR5C332-0 | CR-1233 | CM30E332-03 | 3300 | .650 | .720 | .828 |
| CR5C362-0 | CR-1236 | ----- | 3600 | .693 | .765 | .880 |

See notes on following page

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

TYPE CR - Silvered Mica (continued)

| New Catalog Number* | Old Catalog Number | Capacitance pF. | Net Price (1-49)** | | | New Catalog Number* | Old Catalog Number | Capacitance pF. | Net Price (1-49)** | | |
|----------------------------|--------------------|-----------------|--------------------|----------|----------------------------------|----------------------|--------------------|-----------------|--------------------|----------|----------|
| | | | Tolerance | | | | | | Tolerance | | |
| | | | ± 10% (K) | ± 5% (J) | ± 2% (G) | | | | ± 10% (K) | ± 5% (J) | ± 2% (G) |
| 500 W.V.D.C. | | | | | 2000 W.V.D.C. (Continued) | | | | | | |
| .281" MAX. THICKNESS | | | | | | | | | | | |
| CR5C392-0 | CR-1239 | 3900 | \$.735 | \$.810 | \$.882 | CR20C102-0 | CR-4210 | 1000 | \$.852 | \$.948 | \$1.042 |
| CR5C402-0 | CR-1240 | 4000 | .777 | .855 | .933 | CR20C112-0 | CR-4211 | 1100 | .899 | .992 | 1.094 |
| CR5C432-0 | CR-1243 | 4300 | .820 | .905 | .984 | CR20C122-0 | CR-4212 | 1200 | .992 | 1.083 | 1.196 |
| CR5C472-0 | CR-1247 | 4700 | .860 | .950 | 1.034 | CR20C132-0 | CR-4213 | 1300 | 1.037 | 1.154 | 1.275 |
| CR5C502-0 | CR-1250 | 5000 | .920 | .995 | 1.085 | CR20C152-0 | CR-4215 | 1500 | 1.175 | 1.302 | 1.432 |
| CR5C512-0 | CR-1251 | 5100 | .920 | .995 | 1.085 | CR20C162-0 | CR-4216 | 1600 | 1.275 | 1.353 | 1.496 |
| CR5C562-0 | CR-1256 | 5600 | .987 | 1.090 | 1.185 | CR20C182-0 | CR-4218 | 1800 | 1.367 | 1.511 | 1.661 |
| CR5C602-0 | CR-1260 | 6000 | 1.070 | 1.180 | 1.286 | CR20C202-0 | CR-4220 | 2000 | 1.507 | 1.663 | 1.834 |
| CR5C622-0 | CR-1262 | 6200 | 1.070 | 1.180 | 1.286 | CRK20C222-0 | CR-4222 | 2200 | 1.649 | 1.820 | 2.001 |
| CR5C682-0 | CR-06268 | 6800 | 1.110 | 1.230 | 1.335 | CRK20C242-0 | CR-4224 | 2400 | 1.787 | 1.974 | 2.172 |
| CR5C752-0 | CR-06275 | 7500 | 1.200 | 1.320 | 1.436 | CRK20C332-0 | CR-4233 | 3300 | 2.258 | 2.493 | 2.618 |
| CR5C802-0 | CR-06280 | 8000 | 1.281 | 1.410 | 1.537 | 2500 W.V.D.C. | | | | | |
| †CR3C822-0 | CR-06282 | 8200 | 1.281 | 1.410 | 1.537 | CR25C241-0 | CR-5324 | 240 | .434 | .481 | .530 |
| †CR3C902-0 | CR-06290 | 9000 | 1.404 | 1.640 | 1.686 | CR25C251-0 | CR-5325 | 250 | .434 | .481 | .530 |
| †CR3C103-0 | CR-06110 | 10000 | 1.432 | 1.686 | 1.840 | CR25C271-0 | CR-5327 | 270 | .434 | .481 | .530 |
| 359" MAX. THICKNESS | | | | | | | | | | | |
| CRK5C682-0 | CR-1268 | 6800 | 1.151 | 1.270 | 1.385 | CR25C301-0 | CR-5330 | 300 | .458 | .542 | .592 |
| CRK5C752-0 | CR-1275 | 7500 | 1.281 | 1.410 | 1.535 | CR25C331-0 | CR-5333 | 330 | .537 | .596 | .650 |
| CRK5C802-0 | CR-1280 | 8000 | 1.365 | 1.500 | 1.638 | CR25C361-0 | CR-5336 | 360 | .537 | .596 | .650 |
| CRK5C822-0 | CR-1282 | 8200 | 1.365 | 1.500 | 1.638 | CR25C391-0 | CR-5339 | 390 | .585 | .652 | .720 |
| CRK5C902-0 | CR-1290 | 9000 | 1.490 | 1.640 | 1.790 | CR25C431-0 | CR-5343 | 430 | .633 | .700 | .777 |
| CRK5C103-0 | CR-1110 | 10000 | 1.660 | 1.840 | 1.990 | CR25C471-0 | CR-5347 | 470 | .683 | .751 | .831 |
| CRK5C123-0 | CR-06112 | 12000 | 1.825 | 2.100 | 2.190 | CR25C501-0 | CR-5350 | 500 | .731 | .813 | .892 |
| †CRK3C153-0 | CR-06115 | 15000 | 2.241 | 2.475 | 2.690 | CR25C511-0 | CR-5351 | 510 | .731 | .813 | .892 |
| †CRK3C163-0 | CR-06116 | 16000 | 2.730 | 2.610 | 2.840 | CR25C561-0 | CR-5356 | 560 | .780 | .864 | .953 |
| 1000 W.V.D.C. | | | | | | | | | | | |
| CR10C122-0 | CR-2212 | 1200 | .497 | .550 | .613 | CR25C621-0 | CR-5362 | 620 | .824 | .920 | 1.111 |
| CR10C152-0 | CR-2215 | 1500 | .556 | .600 | .662 | CR25C681-0 | CR-5368 | 680 | .927 | 1.021 | 1.122 |
| CR10C182-0 | CR-2218 | 1800 | .628 | .690 | .764 | CR25C751-0 | CR-5375 | 750 | .974 | 1.073 | 1.188 |
| CR10C202-0 | CR-2220 | 2000 | .673 | .740 | .825 | CR25C821-0 | CR-5382 | 820 | 1.070 | 1.186 | 1.300 |
| CR10C222-0 | CR-2222 | 2200 | .715 | .790 | .873 | CR25C911-0 | CR-5391 | 910 | 1.165 | 1.300 | 1.433 |
| CR10C272-0 | CR-2227 | 2700 | .845 | .930 | 1.026 | CR25C102-0 | CR-5210 | 1000 | 1.265 | 1.404 | 1.544 |
| CR10C302-0 | CR-2223 | 3000 | .934 | 1.025 | 1.119 | CRK25C112-0 | CR-5211 | 1100 | 1.360 | 1.507 | 1.652 |
| CR10C332-0 | CR-2233 | 3300 | 1.020 | 1.110 | 1.222 | CRK25C122-0 | CR-5212 | 1200 | 1.457 | 1.611 | 1.773 |
| CR10C362-0 | CR-2236 | 3600 | 1.105 | 1.221 | 1.346 | CRK25C142-0 | CR-5214 | 1400 | 1.700 | 1.870 | 2.064 |
| CR10C422-0 | CR-2242 | 4200 | 1.237 | 1.362 | 1.508 | CRK25C152-0 | CR-5215 | 1500 | 1.790 | 1.980 | 2.185 |
| CRK10C512-0 | CR-2251 | 5100 | 1.453 | 1.603 | 1.763 | CRK25C172-0 | CR-5217 | 1700 | 1.979 | 2.178 | 2.380 |
| CRK10C622-0 | CR-2262 | 6200 | 1.757 | 1.944 | 2.140 | 3000 W.V.D.C. | | | | | |
| CRK10C682-0 | CR-2268 | 6800 | 1.970 | 2.186 | 2.403 | CR30C121-0 | CR-6312 | 120 | .348 | .391 | .420 |
| CRK10C742-0 | CR-2274 | 7400 | 2.031 | 2.271 | 2.504 | CR30C151-0 | CR-6315 | 150 | .398 | .443 | .493 |
| 1500 W.V.D.C. | | | | | | | | | | | |
| CR15C681-0 | CR-3368 | 680 | .466 | .522 | .574 | CR30C161-0 | CR-6316 | 160 | .450 | .502 | .554 |
| CR15C751-0 | CR-3375 | 750 | .466 | .522 | .574 | CR30C181-0 | CR-6318 | 180 | .450 | .502 | .554 |
| CR15C821-0 | CR-3382 | 820 | .524 | .567 | .626 | CR30C201-0 | CR-6320 | 200 | .500 | .563 | .620 |
| CR15C911-0 | CR-3391 | 910 | .562 | .610 | .675 | CR30C241-0 | CR-6324 | 240 | .550 | .611 | .671 |
| CR15C201-0 | CR-3210 | 1000 | .604 | .674 | .748 | CR30C251-0 | CR-6325 | 250 | .600 | .665 | .733 |
| CR15C122-0 | CR-3212 | 1200 | .645 | .718 | .780 | CR30C271-0 | CR-6327 | 270 | .600 | .665 | .733 |
| CR15C152-0 | CR-3215 | 1500 | .780 | .863 | .956 | CR30C301-0 | CR-6330 | 300 | .610 | .726 | .794 |
| CR15C182-0 | CR-3218 | 1800 | .919 | 1.011 | 1.111 | CR30C331-0 | CR-6333 | 330 | .700 | .780 | .862 |
| CR15C202-0 | CR-3220 | 2000 | 1.005 | 1.112 | 1.229 | CR30C361-0 | CR-6336 | 360 | .750 | .831 | .921 |
| CR15C222-0 | CR-3222 | 2200 | 1.051 | 1.167 | 1.287 | CR30C391-0 | CR-6339 | 390 | .800 | .892 | .983 |
| CR15C242-0 | CR-3224 | 2400 | 1.141 | 1.265 | 1.391 | CR30C431-0 | CR-6343 | 430 | .900 | 1.000 | 1.100 |
| CRK15C272-0 | CR-3227 | 2700 | 1.278 | 1.414 | 1.554 | CR30C471-0 | CR-6347 | 470 | .950 | 1.052 | 1.161 |
| CRK15C302-0 | CR-3223 | 3000 | 1.412 | 1.608 | 1.673 | CR30C501-0 | CR-6350 | 500 | 1.010 | 1.100 | 1.212 |
| CRK15C332-0 | CR-3233 | 3300 | 1.509 | 1.667 | 1.833 | CR30C511-0 | CR-6351 | 510 | 1.010 | 1.100 | 1.212 |
| CRK15C362-0 | CR-3236 | 3600 | 1.641 | 1.824 | 2.001 | CR30C561-0 | CR-6356 | 560 | 1.100 | 1.211 | 1.311 |
| CRK15C422-0 | CR-3242 | 4200 | 2.063 | 2.178 | 2.277 | CR30C621-0 | CR-6362 | 620 | 1.200 | 1.332 | 1.462 |
| 2000 W.V.D.C. | | | | | | | | | | | |
| CR20C431-0 | CR-4343 | 430 | .477 | .535 | .583 | CR30C681-0 | CR-6368 | 680 | 1.300 | 1.436 | 1.573 |
| CR20C471-0 | CR-4347 | 470 | .477 | .535 | .583 | CR30C751-0 | CR-6375 | 750 | 1.402 | 1.542 | 1.694 |
| CR20C501-0 | CR-4350 | 500 | .524 | .584 | .642 | CRK30C821-0 | CR-6382 | 820 | 1.552 | 1.713 | 1.880 |
| CR20C511-0 | CR-4351 | 510 | .524 | .584 | .642 | CRK30C911-0 | CR-6391 | 910 | 1.700 | 1.872 | 2.063 |
| CR20C561-0 | CR-4356 | 560 | .524 | .584 | .642 | CRK30C102-0 | CR-6210 | 1000 | 1.850 | 2.050 | 2.252 |
| CR20C621-0 | CR-4362 | 620 | .572 | .631 | .693 | CRK30C112-0 | CR-6211 | 1100 | 2.001 | 2.211 | 2.431 |
| CR20C681-0 | CR-4368 | 680 | .619 | .684 | .751 | CRK30C122-0 | CR-6212 | 1200 | 2.150 | 2.384 | 2.621 |
| CR20C751-0 | CR-4375 | 750 | .664 | .745 | .810 | CRK30C132-0 | CR-6213 | 1300 | 2.250 | 2.482 | 2.732 |
| CR20C821-0 | CR-4382 | 820 | .711 | .796 | .871 | CRK30C142-0 | CR-6214 | 1400 | 2.357 | 2.602 | 2.864 |
| CR20C911-0 | CR-4391 | 910 | .759 | .841 | .933 | CRK30C152-0 | CR-6215 | 1500 | 2.737 | 3.0152 | 3.148 |

* Complete Military Type designation will include additional letter for capacitive tolerance. Example: CM30E561J03. Complete catalog number will include additional letter to indicate capacitive tolerance. Example: CR5C561J0.

** O. E. M. prices for larger quantities are available on request.

† Voltage rating 300 W.V.D.C.

SANGAMO ELECTRIC COMPANY

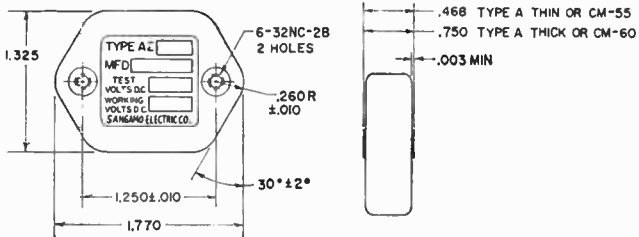
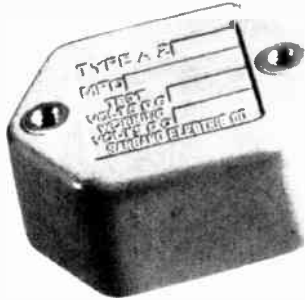
capacitors



ELECTRONIC COMPONENTS

Type A MICA

The Type A mica dielectric capacitor is enclosed in a molded bakelite case with threaded insert terminals. It is supplied in $\pm 10\%$ capacitive tolerance and "B" characteristic unless otherwise specified.



| New Catalog Number | Old Catalog Number | Applicable Military Specification † | Capacitance pF | Net Price 1-9* |
|---------------------|--------------------|-------------------------------------|----------------|----------------|
| 600 W.V.D.C. | | | | |
| AT6B500-N | AT-1450 | ----- | 50 | \$0.63 |
| AT6B101-N | AT-1310 | ----- | 100 | 0.63 |
| AT6B151-N | AT-1315 | ----- | 150 | 0.63 |
| AT6B201-N | AT-1320 | ----- | 200 | 0.63 |
| AT6B251-N | AT-1325 | ----- | 250 | 0.63 |
| AT6B301-N | AT-1350 | ----- | 500 | 0.63 |
| AT6B102-N | AT-1210 | ----- | 1,000 | 0.63 |
| AT6B202-N | AT-1220 | ----- | 2,000 | 0.71 |
| AT6B252-N | AT-1225 | ----- | 2,500 | 0.74 |
| AT6B302-N | AT-1230 | ----- | 3,000 | 0.81 |
| AT6B402-N | AT-1240 | ----- | 4,000 | 0.86 |
| AT6B502-N | AT-1250 | ----- | 5,000 | 0.92 |
| AT6B602-N | AT-1260 | ----- | 6,000 | 0.96 |
| AT6B802-N | AT-1280 | ----- | 8,000 | 1.08 |
| AT6B103-N | AT-1110 | ----- | 10,000 | 1.22 |
| AT6B153-N | AT-1115 | CM55-153-N3 | 15,000 | 1.32 |
| AT6B203-N | AT-1120 | CM55-203-N3 | 20,000 | 1.55 |
| AT6B253-N | AT-1125 | ----- | 25,000 | 1.89 |
| AT6B303-N | AT-1130 | CM55-303-N3 | 30,000 | 1.97 |
| AK6B403-N | AK-1140 | ----- | 40,000 | 2.54 |
| AK6B503-N | AK-1150 | ----- | 50,000 | 3.09 |
| AK6B603-N | AK-1160 | ----- | 60,000 | 3.51 |
| AK6B703-N | AK-1170 | ----- | 70,000 | 3.87 |

| New Catalog Number | Old Catalog Number | Applicable Military Specification † | Capacitance pF | Net Price 1-9* |
|----------------------|--------------------|-------------------------------------|----------------|----------------|
| 1200 W.V.D.C. | | | | |
| AT12B500-N | AT-2450 | ----- | 50 | \$0.70 |
| AT12B101-N | AT-2310 | ----- | 100 | 0.70 |
| AT12B151-N | AT-2315 | ----- | 150 | 0.70 |
| AT12B201-N | AT-2320 | ----- | 200 | 0.70 |
| AT12B251-N | AT-2325 | ----- | 250 | 0.70 |
| AT12B501-N | AT-2350 | ----- | 500 | 0.70 |
| AT12B102-N | AT-2210 | ----- | 1,000 | 0.83 |
| AT12B202-N | AT-2220 | ----- | 2,000 | 1.10 |
| AT12B252-N | AT-2225 | ----- | 2,500 | 1.22 |
| AT12B302-N | AT-2230 | ----- | 3,000 | 1.30 |
| AT12B402-N | AT-2240 | ----- | 4,000 | 1.34 |
| AT12B502-N | AT-2250 | ----- | 5,000 | 1.43 |
| AT12B602-N | AT-2260 | ----- | 6,000 | 1.50 |
| AT12B802-N | AT-2280 | ----- | 8,000 | 1.79 |
| AT12B103-N | AT-2110 | CM55-103-N3 | 10,000 | 2.05 |
| AT12B153-N | AT-2115 | ----- | 15,000 | 2.53 |
| AT12B183-N | AT-2118 | ----- | 18,000 | 2.86 |
| AK12B203-N | AK-2120 | CM6C-203-N3 | 20,000 | 3.07 |
| AK12B253-N | AK-2125 | ----- | 25,000 | 3.43 |
| AK12B303-N | AK-2130 | CM6C-303-N3 | 30,000 | 3.52 |
| AK12B403-N | AK-2140 | ----- | 40,000 | 3.90 |

| New Catalog Number | Old Catalog Number | Applicable Military Specification † | Capacitance pF | Net Price 1-9* |
|----------------------|--------------------|-------------------------------------|----------------|----------------|
| 2500 W.V.D.C. | | | | |
| AT25B500-N | AT-5450 | ----- | 50 | \$0.83 |
| AT25B101-N | AT-5310 | CM55-101-N3 | 100 | 0.83 |
| AT25B251-N | AT-5325 | ----- | 250 | 0.94 |
| AT25B501-N | AT-5350 | ----- | 500 | 1.11 |
| AT25B102-N | AT-5210 | CM55-102-N3 | 1,000 | 1.28 |
| AT25B202-N | AT-5220 | CM55-202-N3 | 2,000 | 1.85 |
| AT25B252-N | AT-5225 | ----- | 2,500 | 2.01 |
| AT25B302-N | AT-5230 | CM55-302-N3 | 3,000 | 2.21 |
| AT25B402-N | AT-5240 | ----- | 4,000 | 2.46 |
| AT25B502-N | AT-5250 | ----- | 5,000 | 2.70 |
| AT25B702-N | AT-5270 | ----- | 7,000 | 2.85 |
| AK25B802-N | AK-5280 | ----- | 8,000 | 2.98 |
| AK25B103-N | AK-5110 | CM6C-103-N1 | 10,000 | 3.18 |
| AK25B163-N | AK-5116 | CM6C-163-N1 | 16,000 | 3.51 |

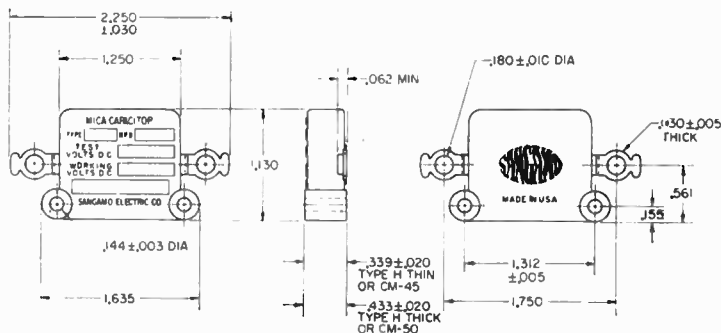
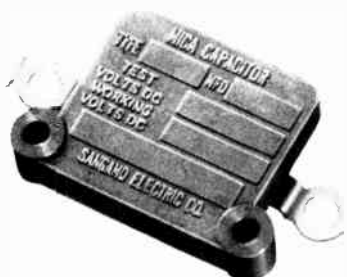
* O.E.M. prices for larger quantities are available on request.

† Refer to Mil-C-5B for listings of characteristics, tolerances, temperature ranges and vibration grade.

NOTE: Standard tolerance $\pm 10\%$. "B" characteristic unless otherwise specified.

NOTE: For $\pm 5\%$ tolerance (J) add 10% to above prices.
 For $\pm 2\%$ tolerance (G) add 50% to above prices.
 For "C" characteristics add 20% to above prices.
 For "D" characteristics add 20% to above prices.
 For "E" characteristics add 50% to above prices.

Type H MICA



The Type H mica dielectric capacitor is enclosed in a molded bakelite case with lug terminals. The capacitor can be screw mounted through untapped holes in the molded case. It is supplied in $\pm 10\%$ tolerance and "B" characteristic unless otherwise specified.

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

TYPE H - Mica Capacitor (continued)

| New Catalog Number* | Old Catalog Number | Applicable* Military Specification | Capacitance pF. | Net Price 1-9† | New Catalog Number* | Old Catalog Number | Applicable* Military Specification | Capacitance pF. | Net Price 1-9† |
|----------------------|--------------------|------------------------------------|-----------------|----------------|----------------------|--------------------|------------------------------------|-----------------|----------------|
| 600 W.V.D.C | | | | | 2500 W.V.D.C. | | | | |
| HT6B500-N | HT-1450 | ----- | 50 | \$.52 | HT25B510-N | HT-5451 | CM45B510-N3 | 51 | \$.83 |
| HT6B101-N | HT-1310 | ----- | 100 | .52 | HT25B101-N | HT-5310 | CM45B101-N3 | 100 | .83 |
| HT6B201-N | HT-1320 | ----- | 200 | .52 | HT25B201-N | HT-5320 | CM45B201-N3 | 200 | .83 |
| HT6B251-N | HT-1325 | ----- | 250 | .52 | HT25B241-N | HT-5324 | CM45B241-N3 | 240 | .88 |
| HT6B301-N | HT-1330 | ----- | 300 | .52 | HT25B301-N | HT-5330 | CM45B301-N3 | 300 | .91 |
| HT6B401-N | HT-1340 | ----- | 400 | .52 | HT25B401-N | HT-5340 | ----- | 400 | .95 |
| HT6B501-N | HT-1350 | ----- | 500 | .52 | HT25B511-N | HT-5351 | CM45B511-N3 | 510 | 1.05 |
| HT6B102-N | HT-1210 | ----- | 1000 | .52 | HT25B102-N | HT-5210 | CM45B102-N3 | 1000 | 1.22 |
| HT6B152-N | HT-1215 | ----- | 1500 | .52 | HT25B152-N | HT-5215 | CM45B152-N3 | 1500 | 1.55 |
| HT6B202-N | HT-1220 | ----- | 2000 | .56 | HT25B202-N | HT-5220 | ----- | 2000 | 1.80 |
| HT6B252-N | HT-1225 | ----- | 2500 | .58 | HT25B302-N | HT-5230 | ----- | 3000 | 2.13 |
| HT6B302-N | HT-1230 | ----- | 3000 | .63 | HK25B432-N | HK-5243 | CM50B432-N3 | 4300 | 2.45 |
| HT6B402-N | HT-1240 | ----- | 4000 | .66 | HK25B512-N | HK-5251 | CM50B512-N3 | 5100 | 2.78 |
| HT6B502-N | HT-1250 | ----- | 5000 | .67 | HK25B552-N | HK-5255 | ----- | 5500 | 2.95 |
| HT6B602-N | HT-1260 | ----- | 6000 | .77 | | | | | |
| HT6B702-N | HT-1270 | ----- | 7000 | .79 | | | | | |
| HT6B802-N | HT-1280 | ----- | 8000 | .83 | | | | | |
| HT6B103-N | HT-1110 | ----- | 10000 | .94 | | | | | |
| HT6B163-N | HT-1116 | ----- | 16000 | 1.16 | | | | | |
| HK6B203-N | HK-1120 | CM50B203-N3 | 20000 | 1.33 | | | | | |
| HK6B253-N | HK-1125 | ----- | 25000 | 1.57 | | | | | |
| HK6B303-N | HK-1130 | ----- | 30000 | 1.95 | | | | | |
| 1200 W.V.D.C. | | | | | | | | | |
| HT12B500-N | HT-2450 | ----- | 50 | \$.69 | | | | | |
| HT12B101-N | HT-2310 | ----- | 100 | .69 | | | | | |
| HT12B201-N | HT-2320 | ----- | 200 | .69 | | | | | |
| HT12B251-N | HT-2325 | ----- | 250 | .69 | | | | | |
| HT12B301-N | HT-2330 | ----- | 300 | .69 | | | | | |
| HT12B401-N | HT-2340 | ----- | 400 | .69 | | | | | |
| HT12B501-N | HT-2350 | ----- | 500 | .69 | | | | | |
| HT12B102-N | HT-2210 | ----- | 1000 | .77 | | | | | |
| HT12B152-N | HT-2215 | ----- | 1500 | 1.00 | | | | | |
| HT12B202-N | HT-2220 | ----- | 2000 | 1.05 | | | | | |
| HT12B252-N | HT-2225 | ----- | 2500 | 1.22 | | | | | |
| HT12B302-N | HT-2230 | ----- | 3000 | 1.33 | | | | | |
| HT12B402-N | HT-2240 | ----- | 4000 | 1.33 | | | | | |
| HT12B502-N | HT-2250 | ----- | 5000 | 1.44 | | | | | |
| HT12B602-N | HT-2260 | ----- | 6000 | 1.44 | | | | | |
| HT12B822-N | HT-2282 | ----- | 8200 | 1.69 | | | | | |
| HK12B103-N | HK-2110 | CM50B103-N3 | 10000 | 2.22 | | | | | |
| HK12B163-N | HK-2116 | CM50B163-N3 | 16000 | 2.48 | | | | | |

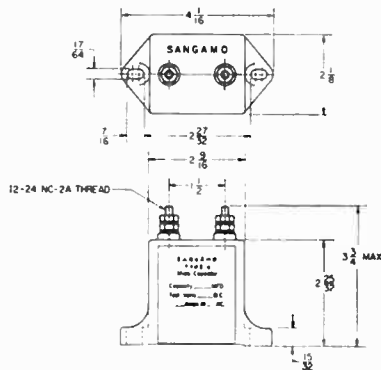
* Complete catalog number will include additional letter to indicate capacitive tolerance. Example: HT25B510JN. Complete Military type designation will include additional letter for capacitive tolerance. Example: CM45B510JN3.

† O.E.M. prices for larger quantities are available on request.

NOTE: For meter mounting bracket add letter "E" to type designation. (Example: HTE-1450). Add \$0.12 net each to above prices and specify case sizes.

NOTE: Standard tolerance $\pm 10\%$ and "B" characteristic unless otherwise specified. For $\pm 5\%$ tolerance add 10% to above prices. For $\pm 2\%$ tolerance add 50% to above prices.

Type E MICA



Available in $\pm 20\%$ tolerance only. This type capacitor specifically designed for amateur use only. Not recommended for commercial applications.

| Catalog Number | Capacitance pF. | WVDC | Net Price Each ALL Quantities |
|----------------|-----------------|-------|-------------------------------|
| E-1245 | 50 | 12500 | \$ 6.48 |
| E-1231 | 100 | 12500 | 6.48 |
| E-12325 | 250 | 12500 | 6.48 |
| E-1235 | 500 | 12500 | 6.48 |
| E-1221 | 1000 | 12500 | 6.48 |
| E-12215 | 1500 | 12500 | 7.56 |
| E-1222 | 2000 | 12500 | 9.00 |
| E-1022 | 2000 | 10000 | 9.36 |
| E-1022 | 2000 | 10000 | 9.72 |
| E-1023 | 3000 | 10000 | 10.74 |
| E-1024 | 4000 | 10000 | 11.66 |
| E-1025 | 5000 | 10000 | 5.80 |
| E-721 | 1000 | 7000 | 7.56 |
| E-722 | 2000 | 7000 | 8.28 |
| E-723 | 3000 | 7000 | 7.67 |
| E-711 | 10000 | 7000 | 11.66 |
| E-3524 | 4000 | 3500 | 11.66 |
| E-3525 | 5000 | 3500 | 13.54 |
| E-3511 | 10000 | 3500 | 11.59 |
| E-3512 | 20000 | 3500 | 13.54 |
| E-3515 | 50000 | 3500 | 11.59 |
| E-215 | 50000 | 2000 | 13.54 |
| E-201 | 100000 | 2000 | |

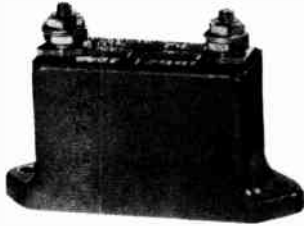
SANGAMO ELECTRIC COMPANY

capacitors



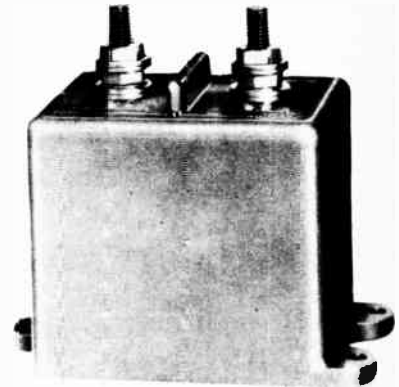
ELECTRONIC COMPONENTS

Types F1-F2-F3 MICA CAPACITORS



Type F1-F2

Types F1, F2, and F3 capacitors, the smallest of the Sangamo line of transmitting types, possess a range of voltage and current ratings suitable for many applications. They are housed in low loss molded bakelite cases. The mica and foil sections are permanently clamped, vacuum impregnated, and installed in the case in such a manner as to provide stable characteristics and adequate moisture proofing.



Type F3

| New Catalog Number* | Old Catalog Number | Applicable Military Specification | Capacitance pF. | Peak Working Voltage | Net Price 1-9** |
|---------------------|--------------------|-----------------------------------|----------------------|----------------------|-----------------|
| TYPE F1 | | | | | |
| F130B101-M | F1-331 | CM65B101-M1 | 100 | 3000 | \$ 4.99 |
| F130B201-M | F1-332 | CM65B201-M1 | 200 | 3000 | 4.99 |
| F130B241-M | F1-332A | CM65B241-M1 | 240 | 3000 | 4.99 |
| F130B501-M | F1-335 | CM65B501-M1 | 500 | 3000 | 4.99 |
| F130B102-M | F1-321 | CM65B102-M1 | 1000 | 3000 | 4.99 |
| F130B202-M | F1-322 | CM65B202-M1 | 2000 | 3000 | 4.99 |
| F120B302-M | F1-223 | CM65B302-M1 | 3000 | 2000 | 4.99 |
| F120B402-M | F1-224 | CM65B402-M1 | 4000 | 2000 | 4.99 |
| F120B512-M | F1-2251 | CM65B512-M1 | 5100 | 2000 | 4.99 |
| F120B602-M | F1-226 | ----- | 6000 | 2000 | 4.99 |
| F115B822-M | F1-15282 | CM65B822-M1 | 8200 | 1500 | 4.99 |
| F110B103-M | F1-111 | CM65B103-M1 | 10000 | 1000 | 4.99 |
| F110B203-M | F1-112 | CM65B203-M1 | 20000 | 1000 | 5.67 |
| F12B104-M | F1-02151 | CM65B513-M1 | 51000 | 250 | 5.67 |
| F12B104-M | F1-0201 | CM65B104-M1 | 100000 | 250 | 6.00 |
| TYPE F2 | | | | | |
| F250B101-M | F2-531 | CM70B101-M1 | 100 | 5000 | \$ 6.86 |
| F250B241-M | F2-532A | CM70B241-M1 | 240 | 5000 | 6.86 |
| F250B511-M | F2-5351 | CM70B511-M1 | 510 | 5000 | 6.86 |
| F250B601-M | F2-536 | ----- | 600 | 5000 | 6.86 |
| F240B102-M | F2-521 | CM70B102-M1 | 1000 | 5000 | 6.86 |
| F240B202-M | F2-522 | CM70B202-M1 | 2000 | 5000 | 6.86 |
| F240B302-M | F2-523 | ----- | 3000 | 5000 | 6.86 |
| F240B512-M | F2-3251 | CM70B512-M1 | 5100 | 3000 | 6.86 |
| F230B602-M | F2-326 | ----- | 6000 | 3000 | 6.86 |
| F220B103-M | F2-211 | CM70B103-M1 | 10000 | 2000 | 6.86 |
| F220B203-M | F2-212 | CM70B203-M1 | 20000 | 2000 | 6.86 |
| F215B513-M | F2-15151 | CM70B513-M1 | 51000 | 1500 | 9.58 |
| F25B104-M | F2-0501 | CM70B104-M1 | 100000 | 500 | 7.61 |
| F22B204-M | F2-0202 | ----- | 200000 | 250 | 10.00 |
| F22B154-M | F2-02025 | ----- | 250000 | 250 | 11.06 |
| TYPE F3 | | | | | |
| New Catalog Number* | Old Catalog Number | Capacitance pF. | Peak Working Voltage | Net Price 1-9** | |
| F380B251-M | F3-8325 | 250 | 8000 | \$14.65 | |
| F380B501-M | F3-835 | 500 | 8000 | 14.65 | |
| F380B102-M | F3-821 | 1000 | 8000 | 16.34 | |
| F380B202-M | F3-822 | 2000 | 8000 | 16.34 | |
| F380B302-M | F3-823 | 3000 | 8000 | 17.41 | |
| F380B502-M | F3-825 | 5000 | 8000 | 20.22 | |
| F380B103-M | F3-811 | 10000 | 8000 | 22.96 | |
| F340B503-M | F3-415 | 50000 | 4000 | 25.73 | |
| F320B104-M | F3-201 | 100000 | 2000 | 20.20 | |
| F36B254-M | F3-06025 | 250000 | 600 | 18.55 | |
| F36B504-M | F3-0605 | 500000 | 600 | 21.85 | |
| F34B105-M | F3-0410 | 1000000 | 400 | 34.03 | |

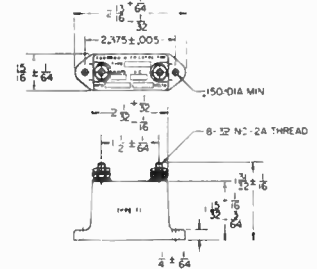
* Complete catalog number will include additional letter to indicate capacitive tolerance. Example: F130B101JM. Complete Type Military designation will include additional letter for capacitive tolerance. Example: CM65B101JM.

** Q. E. M. prices for larger quantities are available on request.

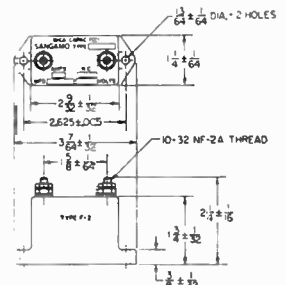
NOTES: Standard tolerance $\pm 5\%$.

"B" characteristic only in stock.

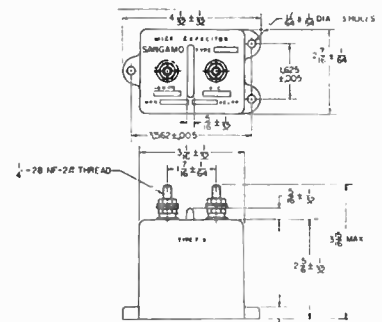
For $\pm 2\%$ tolerance add 20% to above prices.



TYPE F1



TYPE F2



TYPE F3

SANGAMO ELECTRIC COMPANY
capacitors



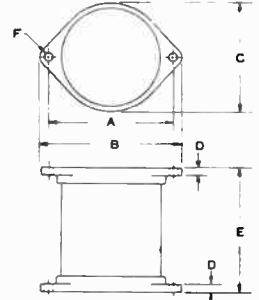
Types G1-G2-G3-G4-G5 MICA



Type G ceramic cased capacitors are intended for service where high voltage and R.F. current ratings are required, such as in commercial transmitting or induction heating applications. All possible steps are taken in design and manufacturing operations to insure permanence of quality. Terminal plates are designed to permit any usual connecting or mounting practices. Case sizes are in accordance with Mil-C-5B specification covering type CM75, 80, 85, 90 and 95. For additional engineering information write for Bulletin 2322.

TYPE G MICA CAPACITOR DIMENSIONS - INCHES

| Type | A | B | C | D | E | F |
|------|-------|---------|---------|-----|-------|-------|
| G1 | 3 1/4 | 3-13/16 | 2-13/16 | 1/4 | 2 1/2 | 17/64 |
| G2 | 4 1/4 | 5 | 3 1/2 | 1/4 | 3 | .272 |
| G3 | 5 3/4 | 6 1/2 | 5 | 3/8 | 4 | .377 |
| G4 | 5 3/4 | 6 1/2 | 5 | 3/8 | 5 1/4 | .377 |
| G5 | 8 | 9 | 6 3/4 | 1/2 | 10 | 13/32 |



TYPES G1, G2, G3, G4 and G5

| New Catalog Number | Old Catalog Number | Applicable Military Specification | Capacitance pF | Peak Working Voltage | Net Price 1-9* | New Catalog Number | Old Catalog Number | Applicable Military Specification | Capacitance pF | Peak Working Voltage | Net Price 1-9* |
|--------------------|--------------------|-----------------------------------|----------------|----------------------|----------------|--|--------------------|-----------------------------------|----------------|----------------------|----------------|
| TYPE G1 | | | | | | TYPE G3 (Continued) | | | | | |
| G160B100JM | G1-641 | ----- | 10 | 6000 | \$14.04 | G3100B622JM | G3-10262 | CM85B622JM1 | 6200 | 10000 | \$59.90 |
| G160B510JM | G1-6451 | CM75B510JM1 | 51 | 6000 | 15.53 | G3100B802JM | G3-1028 | ----- | 8000 | 10000 | 59.90 |
| G160B101JM | G1-631 | CM75B101JM1 | 100 | 6000 | 16.07 | G380B103JM | G3-1011 | CM85B103JM1 | 10000 | 8000 | 59.90 |
| G160B201JM | G1-632 | CM75B201JM1 | 200 | 6000 | 16.07 | G350B203JM | G3-512 | CM85B203JM1 | 20000 | 5000 | 59.90 |
| G160B401JM | G1-634 | ----- | 400 | 6000 | 17.68 | G330B303JM | G3-313 | CM85B303JM1 | 30000 | 3000 | 59.90 |
| G160B511JM | G1-6351 | CM75B511JM1 | 510 | 6000 | 18.47 | TYPE G4 | | | | | |
| G160B102JM | G1-621 | CM75B102JM1 | 1000 | 6000 | 18.47 | G4300B300JM | G4-3043 | ----- | 30 | 30000 | \$69.81 |
| G160B152JM | G1-6215 | CM75B152JM1 | 1500 | 6000 | 19.37 | G4300B500JM | G4-3045 | ----- | 50 | 30000 | 69.81 |
| G160B202JM | G1-622 | CM75B202JM1 | 2000 | 6000 | 19.37 | G4300B101JM | G4-3031 | CM90B101JM1 | 100 | 30000 | 87.45 |
| G160B302JM | G1-623 | CM75B302JM1 | 3000 | 6000 | 20.04 | G4300B151JM | G4-30315 | CM90B151JM1 | 150 | 30000 | 87.45 |
| G160B402JM | G1-624 | ----- | 4000 | 6000 | 20.04 | G4300B251JM | G4-30325 | ----- | 250 | 30000 | 91.95 |
| G160B502JM | G1-625 | ----- | 5000 | 6000 | 20.04 | G4300B501JM | G4-3035 | ----- | 500 | 30000 | 91.95 |
| G150B602JM | G1-526 | ----- | 6000 | 5000 | 20.37 | G4300B801JM | G4-3038 | ----- | 800 | 30000 | 91.95 |
| G150B103JM | G1-511 | ----- | 10000 | 5000 | 20.37 | G4300B102JM | G4-3021 | CM90B102JM1 | 1000 | 30000 | 95.25 |
| G140B153JM | G1-4115 | ----- | 15000 | 4000 | 20.37 | G4250B152JM | G4-25215 | CM90B152JM1 | 1500 | 25000 | 95.25 |
| G130B203JM | G1-312 | ----- | 20000 | 3000 | 20.37 | G4200B202JM | G4-2022 | CM90B202JM1 | 2000 | 20000 | 95.25 |
| TYPE G2 | | | | | | G4200B302JM | G4-2023 | CM90B302JM1 | 3000 | 20000 | 95.25 |
| G2100B101JM | G2-1031 | CM80B101JM1 | 100 | 10000 | \$25.96 | G4200B402JM | G4-2024 | ----- | 4000 | 20000 | 97.43 |
| G2100B151JM | G2-10315 | CM80B151JM1 | 150 | 10000 | 25.96 | G4150B502JM | G4-1525 | ----- | 5000 | 15000 | 100.51 |
| G2100B201JM | G2-1032 | CM80B201JM1 | 200 | 10000 | 25.96 | G4200B502JM | G4-2025 | ----- | 5000 | 20000 | 104.76 |
| G2100B241JM | G2-10324 | CM80B241JM1 | 240 | 10000 | 25.96 | G4150B602JM | G4-1526 | ----- | 6000 | 15000 | 104.76 |
| G2100B501JM | G2-1035 | ----- | 500 | 10000 | 25.96 | G4120B802JM | G4-1228 | ----- | 8000 | 12000 | 108.11 |
| G2100B102JM | G2-1021 | CM80B102JM1 | 1000 | 10000 | 25.96 | G4100B103JM | G4-1011 | CM90B103JM1 | 10000 | 10000 | 113.28 |
| G2100B122JM | G2-10212 | CM80B122JM1 | 1200 | 10000 | 25.96 | G460B203JM | G4-612 | CM90B203JM1 | 20000 | 6000 | 113.28 |
| G2100B152JM | G2-10215 | CM80B152JM1 | 1500 | 10000 | 25.96 | G450B403JM | G4-514 | ----- | 40000 | 5000 | 113.28 |
| G2100B202JM | G2-1022 | CM80B202JM1 | 2000 | 10000 | 25.96 | TYPE G5 | | | | | |
| G280B302JM | G2-823 | CM80B302JM1 | 3000 | 8000 | 25.96 | G5500B500JM | G5-5045 | ----- | 50 | 50000 | \$175.69 |
| G280B402JM | G2-824 | ----- | 4000 | 8000 | 25.96 | G5350B101JM | G5-3531 | CM95B101JM1 | 100 | 35000 | 183.68 |
| G250B502JM | G2-525 | ----- | 5000 | 5000 | 25.96 | G5350B251JM | G5-35325 | ----- | 250 | 35000 | 199.65 |
| G250B622JM | G2-5262 | CM80B622JM1 | 6200 | 5000 | 27.38 | G5350B401JM | G5-3534 | ----- | 400 | 35000 | 199.65 |
| G250B103JM | G2-511 | CM80B103JM1 | 10000 | 5000 | 27.38 | G5350B501JM | G5-3535 | ----- | 500 | 35000 | 215.62 |
| G240B153JM | G2-4115 | CM80B153JM1 | 15000 | 4000 | 27.38 | G5350B102JM | G5-3521 | CM95B102JM1 | 1000 | 35000 | 222.28 |
| G230B203JM | G2-312 | CM80B203JM1 | 20000 | 3000 | 27.38 | G5300B202JM | G5-3022 | CM95B202JM1 | 2000 | 30000 | 212.96 |
| TYPE G3 | | | | | | G5300B252JM | G5-30225 | ----- | 2500 | 30000 | 216.95 |
| G3200B510JM | G3-20451 | CM85B510JM1 | 51 | 20000 | \$43.92 | G5300B302JM | G5-3023 | CM95B302JM1 | 3000 | 30000 | 224.94 |
| G3200B101JM | G3-2031 | CM85B101JM1 | 100 | 20000 | 47.92 | G5250B502JM | G5-2525 | ----- | 5000 | 25000 | 235.59 |
| G3200B201JM | G3-2032 | CM85B201JM1 | 200 | 20000 | 51.91 | G5200B602JM | G5-2026 | ----- | 6000 | 20000 | 235.59 |
| G3200B241JM | G3-20324 | CM85B241JM1 | 240 | 20000 | 51.91 | G5150B103JM | G5-1511 | CM95B103JM1 | 10000 | 15000 | 235.59 |
| G3200B301JM | G3-2033 | CM85B301JM1 | 300 | 20000 | 51.91 | * O.E.M. prices for larger quantities are available on request. | | | | | |
| G3200B501JM | G3-2035 | ----- | 500 | 20000 | 59.15 | NOTE: Standard tolerance all Type G Capacitors ± 5%, B characteristic. | | | | | |
| G3200B801JM | G3-2038 | ----- | 800 | 20000 | 59.15 | | | | | | |
| G3200B102JM | G3-2021 | CM85B102JM1 | 1000 | 20000 | 55.90 | | | | | | |
| G3150B152JM | G3-15215 | CM85B152JM1 | 1500 | 15000 | 56.71 | | | | | | |
| G3150B202JM | G3-1522 | CM85B202JM1 | 2000 | 15000 | 56.71 | | | | | | |
| G3150B302JM | G3-1523 | ----- | 3000 | 15000 | 59.90 | | | | | | |
| G3150B402JM | G3-1524 | ----- | 4000 | 15000 | 59.90 | | | | | | |
| G3100B502JM | G3-1025 | ----- | 5000 | 10000 | 59.90 | | | | | | |

SANGAMO ELECTRIC COMPANY capacitors



ELECTRONIC COMPONENTS

Type M [®] BUTTON[®] CAPACITORS - Silvered Mica -



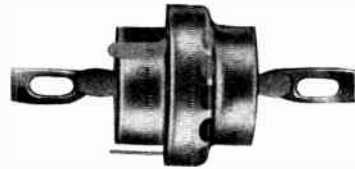
M63



M23



M72



MHC519



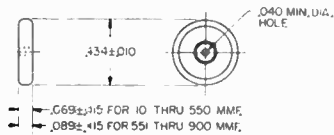
M100

SANGAMO Type M Silvered Mica Button[®] Capacitors are designed particularly for application in high frequency circuits. Their high "Q" is indicative of their low loss. These units meet all requirements for V.H.F. and U.H.F. applications and are constructed to be electrically and mechanically stable.

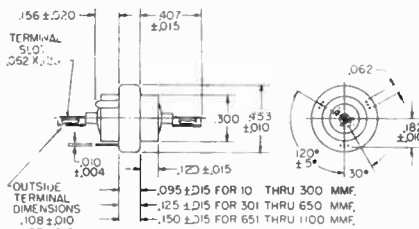
The silver-plated case design performs the dual purpose of shielding and being the low potential terminal. The high potential terminal through the center of the capacitor allows 360 degrees electrical

current distribution, resulting in extremely low series inductance and more efficient performance in high frequency applications.

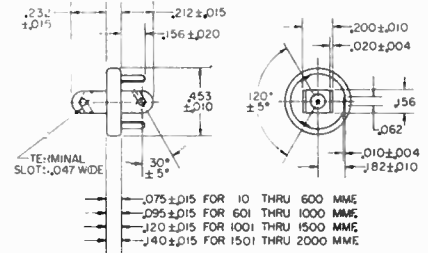
All units are normally furnished in characteristic "E" and in 500 working volts D.C. Case sizes are in accordance with Mil-C-10950B as general types CB11, CB21, CB75 and CB76. The Type MHC are hermetically sealed and will far exceed the environmental requirements of Mil-C-10950B. For more complete engineering information write for Bulletin 2311A.



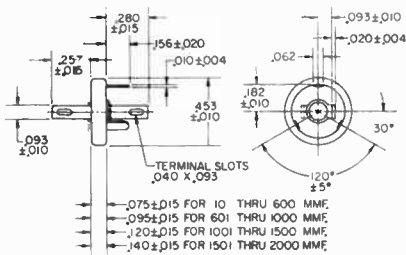
M100



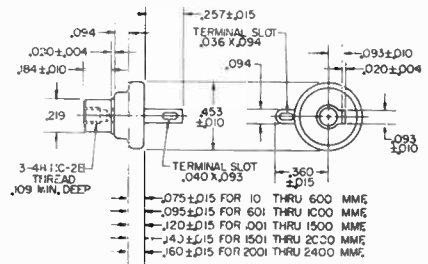
MHC519



M63



M23



M72

| Catalog Number | Capacitance pF. | Capacitive Tolerance | Net Price 1-49* | | | Catalog Number | Capacitance pF. | Capacitive Tolerance | Net Price 1-49* | | |
|----------------|-----------------|----------------------|------------------|--------|--------|----------------|-----------------|----------------------|------------------|--------|--------|
| | | | Type Designation | | | | | | Type Designation | | |
| | | | M23, M63 M72 | M100 | MHC519 | | | | M23, M63 M72 | M100 | MHC519 |
| M-415K | 15 | ± 10% | \$0.99 | \$0.93 | \$3.93 | M-330J | 300 | ± 5% | \$1.29 | \$1.23 | \$4.35 |
| M-415J | 15 | ± 5% | 1.26 | 1.20 | 4.77 | M-340K | 400 | ± 10% | 1.14 | 1.08 | 4.14 |
| M-425K | 25 | ± 10% | 0.99 | 0.93 | 3.93 | M-340J | 400 | ± 5% | 1.38 | 1.32 | 4.47 |
| M-425H | 25 | ± 5% | 1.26 | 1.20 | 4.20 | M-350K | 500 | ± 10% | 1.20 | 1.14 | 4.26 |
| M-450K | 50 | ± 10% | 0.99 | 0.93 | 3.93 | M-350J | 500 | ± 5% | 1.47 | 1.41 | 4.65 |
| M-450J | 50 | ± 5% | 1.26 | 1.20 | 4.20 | M-375K | 750 | ± 10% | 1.71 | 1.68 | 4.56 |
| M-310K | 100 | ± 10% | 0.99 | 0.93 | 3.93 | M-375J | 750 | ± 5% | 2.13 | 2.04 | 5.01 |
| M-310J | 100 | ± 5% | 1.26 | 1.20 | 4.20 | M-210K | 1000 | ± 10% | 2.01 | 1.92 | 4.80 |
| M-315K | 150 | ± 10% | 0.99 | 0.93 | 3.93 | M-210J | 1000 | ± 5% | 2.52 | 2.40 | 5.28 |
| M-315J | 150 | ± 5% | 1.26 | 1.20 | 4.20 | | | | | | |
| M-320K | 200 | ± 10% | 0.99 | 0.93 | 3.93 | | | | | | |
| M-320J | 200 | ± 5% | 1.26 | 1.20 | 4.20 | | | | | | |
| M-325K | 250 | ± 10% | 0.99 | 0.93 | 3.93 | | | | | | |
| M-325J | 250 | ± 5% | 1.26 | 1.20 | 4.20 | | | | | | |
| M-330K | 300 | ± 10% | 1.08 | 0.99 | 3.99 | | | | | | |

* O.E.M. prices for larger quantities are available on request.

NOTE: For complete Catalog Number add Type Designation.
Example: M23-415K.

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Type S

Subminiature hermetically sealed
metal tubular paper dielectric capacitors



SANGAMO Type S capacitors are designed to meet the demands for a high quality, hermetically sealed paper tubular capacitor. These units are encased in brass tubular cases finished with a high tin content alloy. Hermetic sealing is accomplished using glass-to-metal, solder seal terminals. The impregnant used in the Type S is Ethern-an oil of high thermal stability and superior electrical characteristics over the temperature range of -55°C to $+125^{\circ}\text{C}$. Styles listed below are supplied with the case floating (circuit $\text{---} \text{---} \text{---}$). To complete catalog and military type nomenclatures insert proper designation to indicate type desired in accordance with the following cross reference table.

| SANGAMO TYPE | MILITARY TYPE | Description |
|--------------|---------------|-----------------------------------|
| SBA | CP04 | bare case (tab construction) |
| SBB | CP05 | insulated case (tab construction) |
| SDA | CP08 | bare case (Extended foil) |
| SDB | CP09 | insulated case (Extended foil) |

The Type S is also available in many other designs. Case sizes are in accordance with Mil-C-25C specification. For more detailed information write for Bulletin 2421.

Types SBA (CP04) and SBB (CP05) Inserted Tab

| Catalog Number | Applicable Military Specification | Cap. pF. | Working Volts DC | Case Size* | Net Price 1-9** | Catalog Number | Applicable Military Specification | Cap. pF. | Working Volts DC | Case Size* | Net Price 1-9** |
|----------------|-----------------------------------|----------|------------------|------------|-----------------|----------------|-----------------------------------|----------|------------------|------------|-----------------|
| SB-1K01102K | ----- | .001 | 100 | A | \$1.55 | SB-1K04684K | CP-A1KE684K3 | .68 | 400 | M | \$3.63 |
| SB-1K01152K | ----- | .0015 | 100 | A | 1.55 | SB-1K04105K | CP-A1KE105K3 | 1.0 | 400 | P | 3.76 |
| SB-1K01222K | ----- | .0022 | 100 | A | 1.55 | SB-1K06102K | CP-A1KF102K3 | .001 | 600 | A | 1.67 |
| SB-1K01332K | ----- | .0033 | 100 | A | 1.55 | SB-1K06152K | CP-A1KF152K3 | .0015 | 600 | A | 1.67 |
| SB-1K01472K | ----- | .0047 | 100 | A | 1.55 | SB-1K06222K | CP-A1KF222K3 | .0022 | 600 | A | 1.67 |
| SB-1K01682K | ----- | .0068 | 100 | A | 1.55 | SB-1K06332K | CP-A1KF332K3 | .0033 | 600 | A | 1.72 |
| SB-1K01103K | ----- | .01 | 100 | A | 1.58 | SB-1K06472K | CP-A1KF472K3 | .0047 | 600 | A | 1.72 |
| SB-1K01153K | ----- | .015 | 100 | A | 1.58 | SB-1K06682K | CP-A1KF682K3 | .0068 | 600 | A | 1.72 |
| SB-1K01223K | ----- | .022 | 100 | A | 1.58 | SB-1K06103K | CP-A1KF103K3 | .01 | 600 | B | 1.76 |
| SB-1K01333K | CP-A1KB333K3 | .033 | 100 | A | 1.63 | SB-1K06153K | CP-A1KF153K3 | .015 | 600 | B | 1.80 |
| SB-1K01473K | ----- | .047 | 100 | B | 1.70 | SB-1K06223K | CP-A1KF223K3 | .022 | 600 | B | 1.80 |
| SB-1K01683K | ----- | .068 | 100 | B | 1.70 | SB-1K06333K | CP-A1KF333K3 | .033 | 600 | C | 1.87 |
| SB-1K01104K | CP-A1KB104K3 | .1 | 100 | B | 1.76 | SB-1K06473K | CP-A1KF473K3 | .047 | 600 | D | 1.89 |
| SB-1K01154K | CP-A1KB154K3 | .15 | 100 | C | 1.85 | SB-1K06683K | CP-A1KF683K3 | .068 | 600 | E | 1.98 |
| SB-1K01224K | CP-A1KB224K3 | .22 | 100 | D | 1.85 | SB-1K06104K | CP-A1KF104K3 | .1 | 600 | F | 2.11 |
| SB-1K01334K | CP-A1KB334K3 | .33 | 100 | E | 2.11 | SB-1K06154K | CP-A1KF154K3 | .15 | 600 | G | 2.20 |
| SB-1K01474K | CP-A1KB474K3 | .47 | 100 | F | 2.24 | SB-1K06224K | CP-A1KF224K3 | .22 | 600 | J | 2.38 |
| SB-1K01684K | CP-A1KB684K3 | .68 | 100 | G | 2.33 | SB-1K06334K | CP-A1KF334K3 | .33 | 600 | L | 2.64 |
| SB-1K01105K | CP-A1KB105K3 | 1.0 | 100 | J | 2.38 | SB-1K06474K | CP-A1KF474K3 | .47 | 600 | M | 2.97 |
| SB-1K02102K | ----- | .001 | 200 | A | 1.63 | SB-1K06684K | CP-A1KF684K3 | .68 | 600 | P | 3.70 |
| SB-1K02152K | ----- | .0015 | 200 | A | 1.63 | | | | | | |
| SB-1K02222K | ----- | .0022 | 200 | A | 1.63 | | | | | | |
| SB-1K02332K | ----- | .0033 | 200 | A | 1.63 | | | | | | |
| SB-1K02472K | ----- | .0047 | 200 | A | 1.63 | | | | | | |
| SB-1K02682K | ----- | .0068 | 200 | A | 1.63 | | | | | | |
| SB-1K02103K | ----- | .01 | 200 | A | 1.67 | | | | | | |
| SB-1K02153K | CP-A1KC153K3 | .015 | 200 | A | 1.67 | | | | | | |
| SB-1K02223K | CP-A1KC223K3 | .022 | 200 | A | 1.67 | | | | | | |
| SB-1K02333K | ----- | .033 | 200 | B | 1.74 | | | | | | |
| SB-1K02473K | CP-A1KC473K3 | .047 | 200 | B | 1.74 | | | | | | |
| SB-1K02683K | CP-A1KC683K3 | .068 | 200 | B | 1.78 | | | | | | |
| SB-1K02104K | CP-A1KC104K3 | .1 | 200 | C | 1.80 | | | | | | |
| SB-1K02154K | CP-A1KC154K3 | .15 | 200 | D | 1.83 | | | | | | |
| SB-1K02224K | CP-A1KC224K3 | .22 | 200 | E | 2.00 | | | | | | |
| SB-1K02334K | CP-A1KC334K3 | .33 | 200 | F | 2.16 | | | | | | |
| SB-1K02474K | CP-A1KC474K3 | .47 | 200 | G | 2.29 | | | | | | |
| SB-1K02684K | CP-A1KC684K3 | .68 | 200 | J | 2.42 | | | | | | |
| SB-1K02105K | CP-A1KC105K3 | 1.0 | 200 | P | 2.90 | | | | | | |
| SB-1K04102K | ----- | .001 | 400 | A | 1.67 | | | | | | |
| SB-1K04152K | ----- | .0015 | 400 | A | 1.67 | | | | | | |
| SB-1K04222K | ----- | .0022 | 400 | A | 1.67 | | | | | | |
| SB-1K04332K | ----- | .0033 | 400 | A | 1.70 | | | | | | |
| SB-1K04472K | ----- | .0047 | 400 | A | 1.70 | | | | | | |
| SB-1K04682K | ----- | .0068 | 400 | A | 1.70 | | | | | | |
| SB-1K04103K | CP-A1KE103K3 | .01 | 400 | A | 1.72 | | | | | | |
| SB-1K04153K | ----- | .015 | 400 | B | 1.78 | | | | | | |
| SB-1K04223K | ----- | .022 | 400 | B | 1.78 | | | | | | |
| SB-1K04333K | CP-A1KE333K3 | .033 | 400 | B | 1.78 | | | | | | |
| SB-1K04473K | CP-A1KE473K3 | .047 | 400 | C | 1.85 | | | | | | |
| SB-1K04683K | CP-A1KE683K3 | .068 | 400 | D | 1.89 | | | | | | |
| SB-1K04104K | CP-A1KE104K3 | .1 | 400 | E | 1.94 | | | | | | |
| SB-1K04154K | CP-A1KE154K3 | .15 | 400 | F | 2.11 | | | | | | |
| SB-1K04224K | CP-A1KE224K3 | .22 | 400 | G | 2.24 | | | | | | |
| SB-1K04334K | CP-A1KE334K3 | .33 | 400 | J | 2.29 | | | | | | |
| SB-1K04474K | CP-A1KE474K3 | .47 | 400 | L | 2.73 | | | | | | |

Types SDA (CP08) and SDB (CP09) Extended Foil

| | | | | | |
|-------------|--------------|-------|-----|---|--------|
| SD-1K01102K | ----- | .001 | 100 | A | \$1.62 |
| SD-1K01152K | ----- | .0015 | 100 | A | 1.62 |
| SD-1K01222K | ----- | .0022 | 100 | A | 1.62 |
| SD-1K01332K | ----- | .0033 | 100 | A | 1.63 |
| SD-1K01472K | ----- | .0047 | 100 | A | 1.63 |
| SD-1K01682K | ----- | .0068 | 100 | A | 1.64 |
| SD-1K01103K | CP-A1KB103K3 | .01 | 100 | A | 1.67 |
| SD-1K01153K | CP-A1KB153K3 | .015 | 100 | A | 1.67 |
| SD-1K01223K | ----- | .022 | 100 | B | 1.75 |
| SD-1K01333K | ----- | .033 | 100 | B | 1.75 |
| SD-1K01473K | CP-A1KB473K3 | .047 | 100 | B | 1.80 |
| SD-1K01683K | ----- | .068 | 100 | C | 1.81 |
| SD-1K01104K | CP-A1KB104K3 | .1 | 100 | C | 1.85 |
| SD-1K01154K | CP-A1KB154K3 | .15 | 100 | D | 1.85 |
| SD-1K01224K | CP-A1KB224K3 | .22 | 100 | E | 1.98 |
| SD-1K01334K | CP-A1KB334K3 | .33 | 100 | F | 2.20 |
| SD-1K01474K | CP-A1KB474K3 | .47 | 100 | G | 2.29 |
| SD-1K01684K | CP-A1KB684K3 | .68 | 100 | H | 2.46 |
| SD-1K01105K | CP-A1KB105K3 | 1.0 | 100 | K | 2.64 |
| SD-1K02102K | ----- | .001 | 200 | A | 1.68 |
| SD-1K02152K | ----- | .0015 | 200 | A | 1.68 |
| SD-1K02222K | ----- | .0022 | 200 | A | 1.68 |
| SD-1K02332K | ----- | .0033 | 200 | A | 1.69 |
| SD-1K02472K | CP-A1KC472K3 | .047 | 200 | A | 1.69 |
| SD-1K02682K | CP-A1KC682K3 | .068 | 200 | A | 1.72 |
| SD-1K02103K | ----- | .01 | 200 | B | 1.79 |
| SD-1K02153K | ----- | .015 | 200 | B | 1.80 |
| SD-1K02223K | CP-A1KC223K3 | .022 | 200 | B | 1.85 |
| SD-1K02333K | CP-A1KC333K3 | .033 | 200 | B | 1.85 |
| SD-1K02473K | CP-A1KC473K3 | .047 | 200 | C | 1.89 |
| SD-1K02683K | CP-A1KC683K3 | .068 | 200 | C | 1.89 |

See following page for notes

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SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Type S - continued -

| Catalog Number | Applicable Military Specification | Cap. mF. | Working Volts DC | Case Size* | Net Price 1-9** | Catalog Number | Applicable Military Specification | Cap. mF. | Working Volts DC | Case Size* | Net Price 1-9** |
|----------------|-----------------------------------|----------|------------------|------------|-----------------|----------------|-----------------------------------|----------|------------------|------------|-----------------|
| SD-1K02104K | CP-A1KC104K3 | .1 | 200 | D | \$1.91 | SD-1K04224K | CP-A1KE224K3 | .22 | 400 | H | \$2.33 |
| SD-1K02154K | CP-A1KC154K3 | .15 | 200 | E | 1.98 | SD-1K04334K | CP-A1KE334K3 | .33 | 400 | K | 2.55 |
| SD-1K02224K | CP-A1KC224K3 | .22 | 200 | F | 2.11 | SD-1K04474K | CP-A1KE474K3 | .47 | 400 | M | 2.95 |
| SD-1K02334K | CP-A1KC334K3 | .33 | 200 | G | 2.24 | SD-1K06102K | CP-A1KF102K3 | .001 | 600 | A | 1.76 |
| SD-1K02474K | CP-A1KC474K3 | .47 | 200 | H | 2.33 | SD-1K06152K | CP-A1KF152K3 | .0015 | 600 | A | 1.76 |
| SD-1K02684K | CP-A1KC684K3 | .68 | 200 | K | 2.64 | SD-1K06222K | CP-A1KF222K3 | .0022 | 600 | A | 1.76 |
| SD-1K02105K | CP-A1KC105K3 | 1.0 | 200 | M | 2.97 | SD-1K06332K | CP-A1KF332K3 | .0033 | 600 | B | 1.80 |
| SD-1K04102K | ----- | .001 | 400 | A | 1.73 | SD-1K06472K | CP-A1KF472K3 | .0047 | 600 | B | 1.87 |
| SD-1K04152K | ----- | .0015 | 400 | A | 1.74 | SD-1K06682K | CP-A1KF682K3 | .0068 | 600 | B | 2.06 |
| SD-1K04222K | ----- | .0022 | 400 | A | 1.74 | SD-1K06103K | CP-A1KF103K3 | .01 | 600 | B | 1.91 |
| SD-1K04332K | CP-A1KE332K3 | .0033 | 400 | A | 1.76 | SD-1K06153K | CP-A1KF153K3 | .015 | 600 | C | 1.94 |
| SD-1K04472K | ----- | .0047 | 400 | B | 1.83 | SD-1K06223K | CP-A1KF223K3 | .022 | 600 | C | 1.96 |
| SD-1K04682K | ----- | .0068 | 400 | B | 1.84 | SD-1K06333K | CP-A1KF333K3 | .033 | 600 | D | 1.96 |
| SD-1K04103K | ----- | .01 | 400 | B | 1.85 | SD-1K06473K | CP-A1KF473K3 | .047 | 600 | E | 2.02 |
| SD-1K04153K | CP-A1KE153K3 | .015 | 400 | B | 1.89 | SD-1K06683K | CP-A1KF683K3 | .068 | 600 | F | 2.16 |
| SD-1K04223K | ----- | .022 | 400 | C | 1.89 | SD-1K06104K | CP-A1KF104K3 | .1 | 600 | G | 2.20 |
| SD-1K04333K | CP-A1KE333K3 | .033 | 400 | C | 1.94 | SD-1K06154K | CP-A1KF154K3 | .15 | 600 | H | 2.33 |
| SD-1K04473K | CP-A1KE473K3 | .047 | 400 | D | 1.98 | SD-1K06224K | CP-A1KF224K3 | .22 | 600 | K | 2.64 |
| SD-1K04683K | CP-A1KE683K3 | .068 | 400 | E | 1.98 | SD-1K06334K | CP-A1KF334K3 | .33 | 600 | M | 2.95 |
| SD-1K04104K | CP-A1KE104K3 | .1 | 400 | F | 2.11 | SD-1K06474K | CP-A1KF474K3 | .47 | 600 | N | 3.08 |
| SD-1K04154K | CP-A1KE154K3 | .15 | 400 | G | 2.20 | | | | | | |

* Key to Case Sizes:

| Letter | Diameter | Length | Letter | Diameter | Length |
|--------|----------|--------|--------|----------|--------|
| A | .235 | 3/4 | H | .562 | 1-5/8 |
| B | .312 | 7/8 | J | .562 | 1-7/8 |
| C | .400 | 7/8 | K | .670 | 1-5/8 |
| D | .400 | 1-1/8 | L | .670 | 1-7/8 |
| E | .400 | 1-3/8 | M | .750 | 2-1/8 |
| F | .562 | 1-1/8 | N | .750 | 2-3/8 |
| G | .562 | 1-3/8 | P | 1.0 | 1-7/8 |

** O.E.M. prices for larger quantities are available on request.

NOTE: Above prices cover $\pm 10\%$ or $\pm 20\%$ tolerance.

NOTE: If insulating sleeve is required, add 5% to above prices.

NOTE: Capacitance values not listed herein but included in Mil-C-25C are also available.

Above dimensions do not include sleeve. For overall dimension of sleeve add 3/32" to length and .064" to diameter.

Type 33 MOLDED PAPER TUBULAR CAPACITORS

The SANGAMO "Telechief" is molded in Humiditite to provide unsurpassed moisture resistance, excellent seal and operation up to +125°C without derating. Small in physical size and rugged in construction, this tubular paper capacitor is suited for television, auto radio, and similar applications. The leads are firmly imbedded in the hard plastic case and have been specially designed to resist breakage. The Type 33 assures operating dependability under extremes of heat, humidity and physical stress.



| Catalog Number | Capacitance mF. | Working Voltage D.C. | Diameter In Inches | Length In Inches | Net Price 1-49* | Catalog Number | Capacitance mF. | Working Voltage D.C. | Diameter In Inches | Length In Inches | Net Price 1-49* |
|----------------|-----------------|----------------------|--------------------|------------------|-----------------|----------------|-----------------|----------------------|--------------------|------------------|-----------------|
| 330221 | .001 | 200 | 5/16 | 1 | \$.136 | 330622 | .002 | 600 | 5/16 | 1 | \$.140 |
| 330225 | .005 | 200 | 5/16 | 1 | .142 | 3306222 | .0022 | 600 | 5/16 | 1 | .144 |
| 330211 | .01 | 200 | 3/8 | 1-1/8 | .144 | 3306225 | .0025 | 600 | 5/16 | 1 | .142 |
| 330212 | .02 | 200 | 3/8 | 1-1/8 | .151 | 330623 | .003 | 600 | 5/16 | 1 | .143 |
| 3302147 | .047 | 200 | 7/16 | 1-1/4 | .168 | 3306233 | .0033 | 600 | 5/16 | 1 | .143 |
| 330215 | .05 | 200 | 7/16 | 1-1/4 | .170 | 330624 | .004 | 600 | 5/16 | 1 | .144 |
| 330201 | .1 | 200 | 1/2 | 1-1/2 | .192 | 3306247 | .0047 | 600 | 5/16 | 1 | .145 |
| 3302015 | .15 | 200 | 9/16 | 1-5/8 | .273 | 330625 | .005 | 600 | 5/16 | 1 | .146 |
| 3302022 | .22 | 200 | 9/16 | 2 | .314 | 330626 | .006 | 600 | 3/8 | 1-1/8 | .149 |
| 3302025 | .25 | 200 | 5/8 | 2 | .359 | 3306268 | .0068 | 600 | 3/8 | 1-1/8 | .150 |
| 3302047 | .47 | 200 | 3/4 | 2 | .484 | 330628 | .008 | 600 | 7/16 | 1-3/16 | .153 |
| 330205 | .5 | 200 | 3/4 | 2 | .488 | 330611 | .01 | 600 | 7/16 | 1-3/16 | .157 |
| 330421 | .001 | 400 | 5/16 | 1 | .137 | 3306115 | .015 | 600 | 7/16 | 1-3/16 | .165 |
| 330425 | .005 | 400 | 5/16 | 1 | .142 | 330612 | .02 | 600 | 7/16 | 1-1/4 | .174 |
| 330411 | .01 | 400 | 3/8 | 1-1/8 | .144 | 3306122 | .022 | 600 | 7/16 | 1-1/4 | .175 |
| 330412 | .02 | 400 | 7/16 | 1-3/16 | .153 | 3306125 | .025 | 600 | 15/32 | 1-1/2 | .177 |
| 3304122 | .022 | 400 | 7/16 | 1-3/16 | .155 | 330613 | .03 | 600 | 15/32 | 1-1/2 | .183 |
| 3304147 | .047 | 400 | 15/32 | 1-1/2 | .175 | 3306133 | .033 | 600 | 15/32 | 1-1/2 | .186 |
| 330415 | .05 | 400 | 15/32 | 1-1/2 | .183 | 330614 | .04 | 600 | 1/2 | 1-1/2 | .193 |
| 3304168 | .068 | 400 | 1/2 | 1-1/2 | .189 | 3306147 | .047 | 600 | 1/2 | 1-1/2 | .200 |
| 330401 | .1 | 400 | 9/16 | 1-5/8 | .213 | 330615 | .05 | 600 | 1/2 | 1-1/2 | .203 |
| 3304015 | .15 | 400 | 9/16 | 2 | .289 | 330616 | .06 | 600 | 9/16 | 1-5/8 | .222 |
| 330402 | .2 | 400 | 5/8 | 2 | .349 | 3306168 | .068 | 600 | 9/16 | 1-5/8 | .232 |
| 3304022 | .22 | 400 | 5/8 | 2 | .371 | 330601 | .1 | 600 | 9/16 | 2 | .277 |
| 3304025 | .25 | 400 | 5/8 | 2 | .408 | 3306015 | .15 | 600 | 5/8 | 2 | .442 |
| 330635 | .0005 | 600 | 5/16 | 1 | .143 | 330602 | .2 | 600 | 3/4 | 2 | .504 |
| 330621 | .001 | 600 | 5/16 | 1 | .138 | 3306022 | .22 | 600 | 3/4 | 2 | .545 |
| 3306215 | .0015 | 600 | 5/16 | 1 | .138 | 3306025 | .25 | 600 | 3/4 | 2 | .593 |

NOTE: Standard Tolerances: .0005 mF. up to .001 mF. $\pm 40\%$
.001 mF. up to .1 mF. $\pm 20\%$
.1 mF. and up $\pm 10\%$

* O.E.M. prices for larger quantities are available on request.

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Types 40-41-42-43

PAPER

Types
40
42



Types
41
43

Sangamo Types 40, 41, 42, and 43 paper dielectric capacitors are ideal for use in high voltage filter applications. Enclosed in aluminum containers, they mount to the chassis by means of a 3/4-16 threaded neck. In the Types 40 and 42, one connection is provided by an insulated terminal and the other is provided by the case and washer with a solder lug. In the Types 41 and 43, both terminals are completely insulated from the case. Each of the 4 types is provided with mounting nut and lock-washer. The Types 40 and 41 are impregnated with Diaclor to provide an F characteristic. Types 42 and 43 are impregnated with mineral oil to provide an E characteristic. All units are designed in accordance with electrical characteristics of Mil-C-25C. For more complete engineering information write for Bulletin 2424.

| Catalog Number | Capacitance mF. | Working Volts D.C. | Diameter In Inches | Length In Inches | | Net Price 1-9* | Catalog Number | Capacitance mF. | Working Volts D.C. | Diameter In Inches | Length In Inches | | Net Price 1-9* |
|--------------------|-----------------|--------------------|--------------------|------------------|---------|--------------------|----------------|-----------------|--------------------|--------------------|------------------|---------|----------------|
| | | | | Type 40 | Type 42 | | | | | | Type 41 | Type 43 | |
| TYPES 40-42 | | | | | | TYPES 41-43 | | | | | | | |
| 4-06-1 | 1 | 600 | 1-1/2 | 1-5/8 | 2 | \$3.81 | 4-06-1 | 1 | 600 | 1-1/2 | 1-5/8 | 2 | \$3.91 |
| 4-06-2 | 2 | 600 | 1-1/2 | 2-3/8 | 2-7/8 | 3.95 | 4-06-2 | 2 | 600 | 1-1/2 | 2-3/8 | 2-7/8 | 4.05 |
| 4-06-4 | 4 | 600 | 1-1/2 | 3-5/8 | 5-1/4 | 5.13 | 4-06-4 | 4 | 600 | 1-1/2 | 3-5/8 | 5-1/4 | 5.23 |
| 4-10-1 | 1 | 1000 | 1-1/2 | 2-3/8 | 2-7/8 | 3.54 | 4-10-1 | 1 | 1000 | 1-1/2 | 2-3/8 | 2-7/8 | 3.64 |
| 4-10-2 | 2 | 1000 | 1-1/2 | 3-5/8 | 5 | 4.54 | 4-10-2 | 2 | 1000 | 1-1/2 | 3-5/8 | 5 | 4.64 |
| 4-15-.25 | .25 | 1500 | 1-1/2 | 1-5/8 | 2 | 4.18 | 4-15-.25 | .25 | 1500 | 1-1/2 | 1-5/8 | 2 | 4.28 |
| 4-15-.5 | .5 | 1500 | 1-1/2 | 2-3/8 | 2-7/8 | 4.49 | 4-15-.5 | .5 | 1500 | 1-1/2 | 2-3/8 | 2-7/8 | 4.59 |
| 4-15-1 | 1 | 1500 | 1-1/2 | 3-3/8 | 4-1/2 | 4.95 | 4-15-1 | 1 | 1500 | 1-1/2 | 3-3/8 | 4-1/2 | 5.05 |

NOTE: Complete catalog number includes type designation. Example: 4206-1.

NOTE: Standard capacitive tolerance +20%, -10%.

* O.E.M. prices for larger quantities are available on request.

Type 50

PAPER



SANGAMO Type 50 paper dielectric capacitors are primarily intended for bypass applications. They are non-inductively wound, supplied in fractional capacitive values and will provide efficient and continuous operation in coupling and bypass circuits. These capacitors are impregnated with mineral oil and may be operated under severe humidity conditions at temperatures between -55° and 85°C. All units are designed in accordance with electrical characteristics of Mil-C-25C. For more complete engineering information write for Bulletin 2424.

| Catalog Number | Applicable Military Specification | Capacitance mF. | Dimensions in Inches | | | Net Price 1-9** |
|----------------------|-----------------------------------|-----------------|----------------------|-------|--------|-----------------|
| | | | Length | Width | Height | |
| 600 W.V.D.C. | | | | | | |
| 5006-.05 | ----- | .05 | 1-13/16 | 1 | 3/4 | \$1.68 |
| 5006-.1 | ----- | .1 | 1-13/16 | 1 | 3/4 | 1.80 |
| 5006-.25 | CP53B1EF254K1 | .25 | 1-13/16 | 1 | 3/4 | 1.83 |
| 5006-.5 | CP53B1EF504K1 | .5 | 1-13/16 | 1 | 1 | 1.95 |
| 5006-1.0 | CP53B1EF105K1 | 1.0 | 2 | 1-3/4 | 7/8 | 2.31 |
| *5006-2.0 | CP53B1EF205K1 | 2.0 | 2 | 2 | 1-1/8 | 3.00 |
| 5006-2 x .05 | CP53B4EF503V1 | .05-.05 | 1-13/16 | 1 | 3/4 | 2.76 |
| 5006-2 x .1 | CP53B4EF104V1 | .1-.1 | 1-13/16 | 1 | 3/4 | 2.43 |
| 5006-2 x .25 | CP53B4EF254V1 | .25-.25 | 1-13/16 | 1 | 7/8 | 2.46 |
| 5006-2 x .5 | CP53B4EF504V1 | .5-.5 | 2 | 1-3/4 | 7/8 | 2.76 |
| *5006-2 x 1.0 | CP53B4EF105V1 | 1.0-1.0 | 2 | 2 | 1-1/8 | 3.42 |
| 5006-3 x .1 | CP53B5EF104V1 | .1-.1-.1 | 1-13/16 | 1 | 3/4 | 2.73 |
| 5006-3 x .25 | CP53B5EF254V1 | .25-.25-.25 | 2 | 1-3/4 | 7/8 | 3.09 |
| *5006-3 x .5 | CP53B5EF504V1 | .5-.5-.5 | 2 | 2 | 1-1/8 | 3.75 |
| 1000 W.V.D.C. | | | | | | |
| 5010-.05 | CP53B1EG503K1 | .05 | 1-13/16 | 1 | 3/4 | \$1.80 |
| 5010-.1 | CP53B1EG104K1 | .1 | 1-13/16 | 1 | 3/4 | 1.83 |
| 5010-.25 | CP53B1EG254K1 | .25 | 1-13/16 | 1 | 7/8 | 1.89 |
| 5010-.5 | CP53B1EG504K1 | .5 | 2 | 1-3/4 | 7/8 | 2.07 |
| *5010-1.0 | CP53B1EG105K1 | 1.0 | 2 | 2 | 1-1/8 | 2.76 |
| 5010-2 x .05 | CP53B4EG503V1 | .05-.05 | 1-13/16 | 1 | 3/4 | 2.49 |
| 5010-2 x .1 | CP53B4EG104V1 | .1-.1 | 1-13/16 | 1 | 7/8 | 2.52 |
| 5010-2 x .25 | CP53B4EG254V1 | .25-.25 | 2 | 1-3/4 | 7/8 | 2.70 |
| *5010-2 x .5 | CP53B4EG504V1 | .5-.5 | 2 | 2 | 1-1/8 | 3.57 |
| 5010-3 x .1 | CP53B5EG104V1 | .1-.1-.1 | 2 | 1-3/4 | 7/8 | 3.09 |
| *5010-3 x .25 | CP53B5EG254V1 | .25-.25-.25 | 2 | 2 | 1-1/8 | 3.78 |

* For bottom or top terminal, case size becomes 2" x 2" x 1-1/4".

** O.E.M. prices for larger quantities are available on request.

NOTE: 1. Standard capacitive tolerance: +20% -10% on catalog items.

2. Units supplied with side terminals unless otherwise specified. For top terminals add the letters "RT" following the catalog number. Example: 5006-.05RT. For bottom terminals add "RB" to catalog number.

Military type designation changes from "CP53-----" to "CP54" and "CP55" respectively.

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Types 60-62-64-66-68 PAPER

Sangamo Types 60, 62, 64, 66 and 68 non-inductively wound paper capacitors are impregnated with mineral oil and hermetically sealed in drawn metal cans. The mineral oil assures dependable service between the temperature range of -55°C to +85°C. The standard capacitive tolerance is +20, -10% on catalog items. Mounting brackets are supplied as shown. All units are designed in accordance with electrical characteristics of MIL-C-25C. For more complete engineering information write for Bulletin 2423.



TYPE 60



TYPE 62



TYPE 64



TYPE 66



TYPE 68

| Catalog Number | Applicable Military Specification | Case Size* | | Capacitance mF. | Net Price 1-9 † | | |
|----------------------|-----------------------------------|---------------|------------|-----------------|-----------------|-----------------------|-----------------------|
| | | CP 90-63-65 | CP 67-69 | | CP90 Type 60 | CP63-65 Type 62-64 | CP67-69 Type 66-68 |
| | | Type 60-62-64 | Type 66-68 | | | | |
| 600 W.V.D.C. | | | | | | | |
| 6-V06-.01 | ----- | A1 | --- | .01 | \$1.74 | \$1.90 | \$---- |
| 6-V06-.05 | CP-B1EF503K1 | A1 | B1 | .05 | 1.86 | 1.94 | 2.27 |
| 6-V06-.1 | ----- | A2 | B1 | .1 | 1.94 | 2.02 | 2.36 |
| 6-V06-.25 | CP-B1EF254K1 | A3 | B2 | .25 | 2.01 | 2.09 | 2.43 |
| 6-V06-.5 | CP-B1EF504K1 | A4 | B3 | .5 | 2.08 | 2.16 | 2.52 |
| 6-V06-1.0 | CP-B1EF105K1 | A6 | B5 | 1.0 | 2.34 | 2.42 | 2.78 |
| 6-V06-2.0 | ----- | F | --- | 2.0 | 2.92 | 3.20 | --- |
| 6-X06-2 x .05 | CP-B4EF503V1 | --- | B1 | .05-.05 | --- | --- | 2.77 |
| 6-X06-2 x .1 | CP-B4EF104V1 | --- | B2 | .1-.1 | --- | --- | 2.85 |
| 6-X06-2 x .25 | CP-B4EF254V1 | --- | B3 | .25-.25 | --- | --- | 3.06 |
| 6-X06-2 x .5 | CP-B4EF504V1 | --- | B5 | .5-.5 | --- | --- | 3.34 |
| 6-Y06-3 x .05 | CP-B5EF503V1 | --- | B2 | .05-.05-.05 | --- | --- | 3.34 |
| 6-Y06-3 x .1 | CP-B5EF104V1 | --- | B2 | .1-.1-.1 | --- | --- | 3.42 |
| 6-Y06-3 x .25 | CP-B5EF254V1 | --- | B5 | .25-.25-.25 | --- | --- | 3.67 |
| 1000 W.V.D.C. | | | | | | | |
| 6-V10-.05 | CP-B1EG503K1 | A2 | B1 | .05 | \$1.93 | \$2.01 | \$2.32 |
| 6-V10-.1 | CP-B1EG104K1 | A2 | B2 | .1 | 2.00 | 2.08 | 2.39 |
| 6-V10-.25 | CP-B1EG254K1 | A4 | B3 | .25 | 2.06 | 2.14 | 2.46 |
| 6-V10-.5 | CP-B1EG504K1 | A6 | B5 | .5 | 2.25 | 2.33 | 2.68 |
| 6-V10-1.0 | ----- | F | --- | 1.0 | 2.55 | 2.63 | --- |
| 6-X10-2 x .05 | CP-B4EG503V1 | --- | B2 | .05-.05 | --- | --- | 2.83 |
| 6-X10-2 x .1 | CP-B4EG104V1 | --- | B3 | .1-.1 | --- | --- | 2.95 |
| 6-X10-2 x .25 | CP-B4EG254V1 | --- | B5 | .25-.25 | --- | --- | 3.13 |
| 6-Y10-3 x .05 | CP-B5EG503V1 | --- | B2 | .05-.05-.05 | --- | --- | 3.40 |
| 6-Y10-3 x .1 | CP-B5EG104V1 | --- | B4 | .1-.1-.1 | --- | --- | 3.52 |

* Key to case sizes. (All dimensions in inches.)

| Letter | Length | Width | Thickness | Letter | Length | Width | Thickness |
|--------|--------|--------|-----------|--|--------|-------|-----------|
| A1 | 1-1/16 | 1-5/16 | .725 | B1 | 1-1/16 | 1-3/4 | .580 |
| A2 | 1-3/8 | 1-5/16 | .725 | B2 | 1-1/2 | 1-3/4 | .580 |
| A3 | 1-5/8 | 1-5/16 | .725 | B3 | 2 | 1-3/4 | .580 |
| A4 | 2 | 1-5/16 | .725 | B4 | 2-1/2 | 1-3/4 | .580 |
| A6 | 2-3/4 | 1-5/16 | .725 | B5 | 2-3/4 | 1-3/4 | .580 |
| F | 2-1/4 | 1-3/16 | 1.188 | Add .75" max. to length for terminals. | | | |

† O.E.M. prices for larger quantities available on request.

NOTE: Complete Catalog Number will include type designation. Example: 62V06-.01. Complete military specification will include type designation CP90; CP91; CP63; or CP65. Example: CP90B1EF254K1.

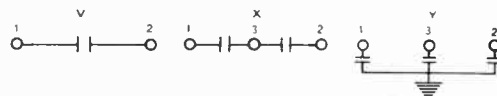
NOTE: Type 60 without bracket; Type 62 with channel bracket, 2 terminals on the top. Type 64 with channel bracket, 2 terminals at the bottom.

NOTE: Type 60 can be furnished with spade (S) or footed (F) bracket. When ordering, state type of bracket desired following Catalog Number. Add \$.20 to above price.

NOTE: Type 66 with channel bracket and the terminals at the top; Type 68 with channel bracket and the terminals at the bottom.

NOTE: Overall bracket dimensions for Type 62-64; Length 2-5/16", Width .766". Mounting screw slots center-to-center 1-5/16". Overall bracket dimensions for Type 66-68; Length 2-7/16", Width .640". Mounting screw slots center-to-center 2-1/8".

NOTE: Letter V, X and Y denote electrical circuit as follows:



SANGAMO ELECTRIC COMPANY capacitors



ELECTRONIC COMPONENTS

Type 71 PAPER

SANGAMO Type 71 paper dielectric capacitors are impregnated with Diaclor - a specially compounded, chemically pure, chlorinated dielectric oil, SANGAMO Diaclor is a synthetic impregnant whose characteristics can be controlled with great uniformity and possesses a high dielectric constant, high resistivity, low power factor, high dielectric strength and is non-flammable and non-explosive. The Type 71 is an excellent choice in medium and high voltage circuits where light weight per unit volume is an important factor. Each unit is finished with grey lacquer paint over a zinc chromate under coat. All units are built in accordance with applicable paragraphs of Specification Mil-C-25C. For more complete Engineering information write for catalog 2423.



TYPE A
SPADE BRACKET



TYPE B
FOOTED BRACKET

| Catalog Number | Case Size* | Applicable Military Specification | Case Size** | Capacitance mF. | Net Price 1-9 † |
|------------------|------------|-----------------------------------|-------------|-----------------|-----------------|
| 600 WVDC | | | | | |
| 7106-.5 | A1 | ----- | --- | .5 | \$ 2.39 |
| 7106-1 | S1 | ----- | --- | 1.0 | 2.54 |
| 7106-2 | S3 | CP70B1FF205K1 | A3 | 2.0 | 3.14 |
| 7106-4 | B2 | CP70B1FF405K1 | B3 | 4.0 | 4.39 |
| 7106-6 | T4 | CP70B1FF605K1 | B6 | 6.0 | 4.83 |
| 7106-8 | Y1 | CP70B1FF805K1 | C2 | 8.0 | 6.49 |
| 7106-10 | C2 | CP70B1FF106K1 | C4 | 10.0 | 6.99 |
| 1000 WVDC | | | | | |
| 7110-.1 | A1 | ----- | --- | .1 | \$ 2.31 |
| 7110-.25 | A1 | ----- | --- | .25 | 2.69 |
| 7110-.5 | S1 | ----- | --- | .5 | 2.78 |
| 7110-1 | S2 | CP70B1FG105K1 | A2 | 1.0 | 2.83 |
| 7110-2 | A5 | CP70B1FG205K1 | A5 | 2.0 | 3.60 |
| 7110-4 | T5 | CP70B1FG405K1 | B6 | 4.0 | 4.98 |
| 7110-6 | C2 | CP70B1FG605K1 | C4 | 6.0 | 6.19 |
| 7110-8 | Y3 | CP70B1FG805K1 | D2 | 8.0 | 7.32 |
| 7110-10 | D4 | CP70B1FG106K1 | D5 | 10.0 | 8.44 |
| 7110-12 | E3 | CP70B1FG126K1 | E4 | 12.0 | 9.54 |
| 7110-15 | X1 | CP70B1FG156K1 | F1 | 15.0 | 11.23 |
| 1500 WVDC | | | | | |
| 7115-.1 | A1 | ----- | --- | .5 | \$ 3.31 |
| 7115-1 | A4 | CP70B1FH105K1 | A5 | 1.0 | 3.39 |
| 7115-2 | T3 | CP70B1FH205K1 | B5 | 2.0 | 4.40 |
| 7115-4 | C3 | CP70B1FH405K1 | C4 | 4.0 | 6.54 |
| 7115-6 | V2 | CP70B1FH605K1 | D5 | 6.0 | 8.45 |
| 7115-8 | X1 | CP70B1FH805K1 | F1 | 8.0 | 10.62 |
| 7115-10 | Y1 | CP70B1FH106K1 | G2 | 10.0 | 12.29 |
| 7115-12 | G2 | CP70B1FH126K1 | G2 | 12.0 | 12.41 |
| 7115-15 | Z1 | CP70B1FH156K1 | J3 | 15.0 | 17.07 |
| 2000 WVDC | | | | | |
| 7120-.5 | A2 | ----- | --- | .1 | \$ 3.99 |
| 7120-.25 | S1 | ----- | --- | .25 | 4.18 |
| 7120-.5 | A3 | ----- | --- | .5 | 4.47 |
| 7120-1 | T2 | CP70E1FJ105K1 | B3 | 1.0 | 5.04 |
| 7120-2 | U2 | CP70E1FJ205K1 | C3 | 2.0 | 6.27 |
| 7120-4 | W1 | CP70E1FJ405K1 | E3 | 4.0 | 8.68 |
| 7120-6 | F1 | CP70E1FJ605K1 | G1 | 6.0 | 11.10 |
| 7120-8 | G2 | CP70E1FJ805K1 | G3 | 8.0 | 12.95 |
| 7120-10 | J3 | CP70E1FJ106K1 | J3 | 10.0 | 15.14 |
| 7120-12 | J4 | CP70E1FJ126K1 | J5 | 12.0 | 17.61 |

| Catalog Number | Case Size* | Applicable Military Specification | Case Size** | Capacitance mF. | Net Price 1-9 † |
|------------------|------------|-----------------------------------|-------------|-----------------|-----------------|
| 2500 WVDC | | | | | |
| 7125-.5 | B2 | CP70E1FK504K1 | B3 | .5 | \$ 5.97 |
| 7125-1 | U1 | CP70E1FK105K1 | D1 | 1.0 | 7.10 |
| 7125-2 | D5 | CP70E1FK205K1 | D5 | 2.0 | 9.71 |
| 7125-4 | E6 | ----- | --- | 4.0 | 13.99 |
| 7125-10 | J6 | CP70E1FK106K1 | J8 | 10.0 | 26.96 |
| 3000 WVDC | | | | | |
| 7130-.1 | S1 | CP70E1FL104K1 | B1 | .1 | \$ 7.64 |
| 7130-.25 | B1 | CP70E1FL254K1 | B2 | .25 | 8.13 |
| 7130-.5 | T4 | CP70E1FL504K1 | B5 | .5 | 8.90 |
| 7130-1 | C3 | CP70E1FL105K1 | E3 | 1.0 | 10.51 |
| 7130-2 | E4 | CP70E1FL205K1 | G1 | 2.0 | 13.69 |
| 7130-4 | Z1 | CP70E1FL405K1 | J3 | 4.0 | 19.38 |
| 4000 WVDC | | | | | |
| 7140-.1 | D1 | ----- | --- | .1 | \$ 7.95 |
| 7140-.25 | D1 | CP70E1FM254K1 | E1 | .25 | 8.63 |
| 7140-.5 | V1 | CP70E1FM504K1 | E3 | .5 | 9.94 |
| 7140-1 | W2 | CP70E1FM105K1 | E6 | 1.0 | 12.46 |
| 7140-2 | G4 | CP70E1FM205K1 | J4 | 2.0 | 17.10 |
| 7140-4 | J8 | CP70E1FM405K1 | J10 | 4.0 | 27.06 |
| 5000 WVDC | | | | | |
| 7150-.1 | D1 | ----- | --- | .1 | \$ 8.17 |
| 7150-.25 | D1 | ----- | --- | .25 | 9.04 |
| 7150-.5 | W2 | CP70E1FN504K1 | E4 | .5 | 10.79 |
| 7150-1 | Z1 | CP70E1FN105K1 | J2 | 1.0 | 14.90 |
| 7150-2 | Z3 | CP70E1FN205K1 | J6 | 2.0 | 22.55 |
| 6000 WVDC | | | | | |
| 7160-.1 | D1 | CP70E1FP104K1 | E2 | .1 | \$11.83 |
| 7160-.25 | D4 | CP70E1FP254K1 | E4 | .25 | 14.47 |
| 7160-.5 | E6 | CP70E1FP504K1 | J2 | .5 | 16.32 |
| 7160-1 | Z2 | CP70E1FP105K1 | J9 | 1.0 | 21.43 |
| 7500 WVDC | | | | | |
| 7175-.1 | D2 | CP70E1FR104K1 | E3 | .1 | \$14.79 |
| 7175-.25 | E4 | CP70E1FR254K1 | J1 | .25 | 15.58 |
| 7175-.5 | Y2 | CP70E1FR504K1 | J4 | .5 | 17.59 |

† O.E.M. prices for larger quantities available on request.

NOTE: Spade, footed or wrap-around brackets are available at additional cost. Designate bracket by adding type letter to catalog number. Example: 7106-.5C indicates unit with wrap-around bracket. See illustrations above.

NOTE: Above values and sizes are available in drawn seamless cans, as Type 72 (CP72). Example: 7206-.5A indicates unit in drawn can.

NOTE: All units 1500 W.V.D.C. and below are supplied with riveted silicone rubber bushing solder terminals. All units above 1500 W.V.D.C. are supplied with ceramic pillar terminals with removable solder lugs.

NOTE: Standard capacitive tolerance ± 10%.

NOTE: Voltage ratings up to 50 KV available upon request.

* Key to case sizes

| Case Size | Base Dimensions | Can Size | Base Dimensions | Can Size | Base Dimensions | Can Size |
|-----------|------------------------|--------------|------------------------|----------|------------------------|----------|
| | Width Thickness Height | | Width Thickness Height | | Width Thickness Height | |
| A1 | 1-13 16 | 1-1 16 1-5 8 | E3 | 3-3 4 | 2-1 4 | 3-7 8 |
| A2 | 1-13 16 | 1-1 16 2-1 4 | E4 | 3-3 4 | 2-1 4 | 4-1 2 |
| A3 | 1-13 16 | 1-1 16 2-7 8 | E6 | 3-3 4 | 2-4 4 | 5-1 8 |
| A4 | 1-13 16 | 1-1 16 3-1 4 | F1 | 3-3 4 | 2-1 2 | 6-3 4 |
| A5 | 1-13 16 | 1-1 16 3-7 8 | G1 | 3-3 4 | 3-3 16 | 6-1 2 |
| B1 | 2-1 2 | 1-3 16 2-1 2 | G2 | 3-3 4 | 4-3 4 | 7-5 2 |
| B2 | 2-1 2 | 1-3 16 2-7 8 | G3 | 3-3 4 | 5-1 8 | 8-1 4 |
| B3 | 2-1 2 | 1-3 16 3-1 2 | G4 | 3-3 4 | 5-1 2 | 9-3 4 |
| B5 | 2-1 2 | 1-3 16 4-1 4 | J1 | 6-9 16 | 3-3 4 | 3-7 8 |
| B6 | 2-1 2 | 1-3 16 4-3 4 | J2 | 6-9 16 | 3-3 4 | 4-3 4 |
| C1 | 3-3 4 | 1-1 4 3-7 8 | J3 | 6-9 16 | 3-3 4 | 4-3 4 |
| C2 | 3-3 4 | 1-1 4 4-1 4 | J4 | 6-9 16 | 3-3 4 | 5-1 8 |
| C3 | 3-3 4 | 1-1 4 4-3 4 | J5 | 6-9 16 | 3-3 4 | 5-1 2 |
| D1 | 3-3 4 | 1-3 4 3-1 4 | J6 | 6-9 16 | 3-3 4 | 6 |
| D2 | 3-3 4 | 1-3 4 3-7 8 | J8 | 6-9 16 | 3-3 4 | 7 |
| D4 | 3-3 4 | 1-3 4 4-1 4 | J9 | 6-9 16 | 3-3 4 | 7-1 2 |
| D5 | 3-3 4 | 1-3 4 4-3 4 | J10 | 6-9 16 | 3-3 4 | 8 |
| E1 | 3-3 4 | 2-1 4 2-3 4 | S1 | 1-13 16 | 1-1 16 | 2 |
| E2 | 3-3 4 | 2-1 4 3-3 8 | S2 | 1-13 16 | 1-1 16 | 2-1 8 |

NOTE: All dimensions in inches.

SANGAMO ELECTRIC COMPANY

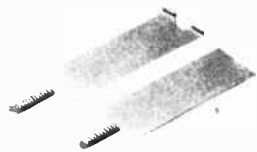
capacitors



ELECTRONIC COMPONENTS

Type 75

MOTOR-RUN AND BALLAST CAPACITORS



SPADE BRACKET



SANGAMO Type 75 paper dielectric capacitors are impregnated with Diaclor and designed for continuous A.C. duty in ambient temperatures up to 70°C. They are recommended for use in motor-run, ballast and light-duty power factor correction applications. For more complete engineering information write for Bulletin 2424.

| Cat. No. | Capacitance mF. | Working Voltage A.C. | Base Dimension | | Height H±1/16 | Terminal Spacing ±1/16 | Net Price 1-9* | Cat. No. | Capacitance mF. | Working Voltage A.C. | Base Dimension | | Height H±1/16 | Terminal Spacing ±1/16 | Net Price 1-9* |
|-----------|-----------------|----------------------|----------------|--------|---------------|------------------------|----------------|-----------|-----------------|----------------------|----------------|--------|---------------|------------------------|----------------|
| | | | W±1/16 | D±1/16 | | | | | | | W±1/16 | D±1/16 | | | |
| 7522-1 | 1 | 220 | 1-13/16 | 1-1/16 | 1-5/8 | 13/16 | \$ 4.80 | 7544-1 | 1 | 440 | 1-13/16 | 1-1/16 | 2-1/4 | 13/16 | \$ 4.43 |
| 7522-2 | 2 | 220 | 1-13/16 | 1-1/16 | 2-1/4 | 13/16 | 4.55 | 7544-2 | 2 | 440 | 1-13/16 | 1-1/16 | 3-1/4 | 13/16 | 5.63 |
| 7522-3 | 3 | 220 | 1-13/16 | 1-1/16 | 2-7/8 | 13/16 | 4.84 | 7544-3 | 3 | 440 | 1-13/16 | 1-1/16 | 4-3/4 | 13/16 | 6.55 |
| 7522-3.75 | 3.75 | 220 | 1-13/16 | 1-1/16 | 3-1/4 | 13/16 | 5.20 | 7544-3.75 | 3.75 | 440 | 2-1/2 | 1-3/16 | 3-7/8 | 1-1/8 | 6.79 |
| 7522-4 | 4 | 220 | 1-13/16 | 1-1/16 | 3-1/4 | 13/16 | 5.32 | 7544-4 | 4 | 440 | 2-1/2 | 1-3/16 | 3-7/8 | 1-1/8 | 6.88 |
| 7522-5 | 5 | 220 | 2-1/2 | 1-3/16 | 2-7/8 | 1-1/8 | 5.61 | 7544-5 | 5 | 440 | 2-1/2 | 1-3/16 | 4-3/4 | 1-1/8 | 8.01 |
| 7522-6 | 6 | 220 | 2-1/2 | 1-3/16 | 3-1/2 | 1-1/8 | 6.22 | 7544-6 | 6 | 440 | 3-3/4 | 1-1/4 | 4-1/4 | 2 | 8.93 |
| 7522-7.5 | 7.5 | 220 | 2-1/2 | 1-3/16 | 3-7/8 | 1-1/8 | 7.24 | 7544-8 | 8 | 440 | 3-3/4 | 1-1/4 | 4-1/4 | 2 | 10.12 |
| 7522-8 | 8 | 220 | 2-1/2 | 1-3/16 | 3-7/8 | 1-1/8 | 7.44 | 7544-10 | 10 | 440 | 3-3/4 | 2-1/4 | 3-3/8 | 2 | 11.30 |
| 7522-10 | 10 | 220 | 2-1/2 | 1-3/16 | 4-3/4 | 1-1/8 | 8.56 | 7544-12 | 12 | 440 | 3-3/4 | 2-1/4 | 3-7/8 | 2 | 12.49 |
| 7522-12 | 12 | 220 | 3-3/4 | 1-1/4 | 3-7/8 | 2 | 9.79 | 7544-15 | 15 | 440 | 3-3/4 | 2-1/4 | 4-1/2 | 2 | 13.65 |
| 7522-15 | 15 | 220 | 3-3/4 | 1-1/4 | 4-1/4 | 2 | 10.21 | 7544-20 | 20 | 440 | 3-3/4 | 3-3/16 | 4-1/8 | 2 | 16.51 |
| 7522-20 | 20 | 220 | 3-3/4 | 1-3/4 | 4 | 2 | 15.01 | 7544-25 | 25 | 440 | 3-3/4 | 3-3/16 | 4-3/4 | 2 | 20.37 |
| 7522-25 | 25 | 220 | 3-3/4 | 2-1/4 | 4-1/8 | 2 | 23.01 | 7544-30 | 30 | 440 | 3-3/4 | 3-3/16 | 5-1/2 | 2 | 24.39 |
| 7533-1 | 1 | 330 | 1-13/16 | 1-1/16 | 2-1/8 | 13/16 | 4.00 | 7566-1 | 1 | 660 | 1-13/16 | 1-1/16 | 3-7/8 | 13/16 | 4.83 |
| 7533-2 | 2 | 330 | 1-13/16 | 1-1/16 | 2-7/8 | 13/16 | 4.65 | 7566-2 | 2 | 660 | 2-1/2 | 1-3/16 | 3-7/8 | 1-1/8 | 6.07 |
| 7533-3 | 3 | 330 | 1-13/16 | 1-1/16 | 3-7/8 | 13/16 | 5.32 | 7566-4 | 4 | 660 | 3-3/4 | 1-1/4 | 4-3/4 | 2 | 7.52 |
| 7533-4 | 4 | 330 | 1-13/16 | 1-1/16 | 4-3/4 | 13/16 | 6.01 | 7566-5 | 5 | 660 | 3-3/4 | 1-3/4 | 4-1/4 | 2 | 8.65 |
| 7533-5 | 5 | 330 | 2-1/2 | 1-3/16 | 3-1/2 | 1-1/8 | 6.66 | 7566-6 | 6 | 660 | 3-3/4 | 1-3/4 | 4-3/4 | 2 | 9.35 |
| 7533-6 | 6 | 330 | 2-1/2 | 1-3/16 | 3-7/8 | 1-1/8 | 7.34 | 7566-8 | 8 | 660 | 3-3/4 | 2-1/4 | 3-7/8 | 2 | 11.30 |
| 7533-7 | 7 | 330 | 3-3/4 | 1-1/4 | 3-1/4 | 2 | 8.01 | 7566-10 | 10 | 660 | 3-3/4 | 3-3/16 | 4-1/8 | 2 | 13.13 |
| 7533-9 | 9 | 330 | 3-3/4 | 1-1/4 | 3-7/8 | 2 | 9.39 | | | | | | | | |
| 7533-10 | 10 | 330 | 3-3/4 | 1-1/4 | 3-7/8 | 2 | 10.11 | | | | | | | | |
| 7533-12 | 12 | 330 | 3-3/4 | 1-3/4 | 3-7/8 | 2 | 12.00 | | | | | | | | |
| 7533-15 | 15 | 330 | 3-3/4 | 1-3/4 | 4-1/4 | 2 | 13.33 | | | | | | | | |
| 7533-20 | 20 | 330 | 3-3/4 | 2-1/4 | 4-1/2 | 2 | 15.99 | | | | | | | | |
| 7533-25 | 25 | 330 | 3-3/4 | 2-1/2 | 4-3/4 | 2 | 20.01 | | | | | | | | |
| 7533-30 | 30 | 330 | 3-3/4 | 3-3/16 | 4-1/2 | 2 | 24.16 | | | | | | | | |

NOTE: All units supplied with riveted silicone rubber buswing terminals with solder lugs. Cup type terminal insulator available at no extra cost.
 NOTE: Standard Tolerance ±10%.
 NOTE: Spade type, footed or universal wrap-around bracket can be furnished at additional cost.
 *O.E.M. prices for larger quantities are available on request.

Type 80 MOTOR RUN AND BALLAST CAPACITORS



The SANGAMO Type 80 paper dielectric capacitor is designed for continuous duty in fluorescent-light ballast, heating, ventilating and air conditioning motor run applications. These units are impregnated with Diaclor and hermetically sealed in drawn oval metal containers. For more complete engineering information write for Bulletin 2424.

| Catalog Number | Capacitance mF. | Working Voltage A.C. | Base Dimension | | Height H±1/16 | Net Price 1-9* | Catalog Number | Capacitance mF. | Working Voltage A.C. | Base Dimension | | Height H±1/16 | Net Price 1-9* | | |
|----------------|-----------------|----------------------|----------------|--------|---------------|----------------|----------------|-----------------|----------------------|----------------|--------|---------------|----------------|--|--|
| | | | W±1/16 | D±1/16 | | | | | | W±1/16 | D±1/16 | | | | |
| 8022-2 | 2 | 236 | 2-1/16 | 1-1/4 | 2-1/4 | \$ 2.86 | 8033-20 | 20 | 330 | 2-13/16 | 2-1/8 | 5-3/16 | \$11.94 | | |
| 8022-3 | 3 | 236 | 2-1/16 | 1-1/4 | 2-1/4 | 2.99 | 8044-2 | 2 | 440 | 2-1/16 | 1-1/4 | 2-1/4 | 3.80 | | |
| 8022-4 | 4 | 236 | 2-1/16 | 1-1/4 | 2-7/8 | 3.26 | 8044-3 | 3 | 440 | 2-1/16 | 1-1/4 | 3-1/8 | 4.04 | | |
| 8022-5 | 5 | 236 | 2-1/16 | 1-1/4 | 2-7/8 | 3.65 | 8044-4 | 4 | 440 | 2-1/16 | 1-1/4 | 3-3/4 | 4.49 | | |
| 8022-6 | 6 | 236 | 2-1/16 | 1-1/4 | 3-3/4 | 4.40 | 8044-5 | 5 | 440 | 2-13/16 | 2-1/8 | 2-17/32 | 5.63 | | |
| 8022-7.5 | 7.5 | 236 | 2-13/16 | 2-1/8 | 2-17/32 | 6.44 | 8044-6 | 6 | 440 | 2-13/16 | 2-1/8 | 2-25/32 | 6.63 | | |
| 8022-10 | 10 | 236 | 2-13/16 | 2-1/8 | 3-1/32 | 7.46 | 8044-7 | 7 | 440 | 2-13/16 | 2-1/8 | 3-13/32 | 7.15 | | |
| 8022-15 | 15 | 236 | 2-13/16 | 2-1/8 | 4-5/32 | 8.09 | 8044-7.5 | 7.5 | 440 | 2-13/16 | 2-1/8 | 3-13/32 | 7.28 | | |
| 8022-20 | 20 | 236 | 2-13/16 | 2-1/8 | 4-7/8 | 11.77 | 8044-8 | 8 | 440 | 2-13/16 | 2-1/8 | 3-25/32 | 7.80 | | |
| 8033-2 | 2 | 330 | 2-1/16 | 1-1/4 | 2-1/4 | 3.10 | 8044-10 | 10 | 440 | 2-13/16 | 2-1/8 | 4-5/32 | 7.92 | | |
| 8033-3 | 3 | 330 | 2-1/16 | 1-1/4 | 2-7/8 | 3.14 | 8044-12.5 | 12.5 | 440 | 2-13/16 | 2-1/8 | 5-3/16 | 9.27 | | |
| 8033-3.75 | 3.75 | 330 | 2-1/16 | 1-1/4 | 3-1/8 | 3.25 | 8044-15 | 15 | 440 | 2-13/16 | 2-1/8 | 6-1/4 | 11.00 | | |
| 8033-4 | 4 | 330 | 2-1/16 | 1-1/4 | 3-1/8 | 3.26 | 8066-1 | 1 | 660 | 2-1/16 | 1-1/4 | 2-1/4 | 3.52 | | |
| 8033-5 | 5 | 330 | 2-1/16 | 1-1/4 | 3-3/4 | 4.19 | 8066-2 | 2 | 660 | 2-1/16 | 1-1/4 | 3-3/4 | 4.98 | | |
| 8033-6 | 6 | 330 | 2-1/16 | 1-1/4 | 3-3/4 | 5.34 | 8066-3 | 3 | 660 | 2-13/16 | 2-1/8 | 2-25/32 | 5.92 | | |
| 8033-7 | 7 | 330 | 2-13/16 | 2-1/8 | 3-1/32 | 6.38 | 8066-4 | 4 | 660 | 2-13/16 | 2-1/8 | 3-3/8 | 7.26 | | |
| 8033-7.5 | 7.5 | 330 | 2-13/16 | 2-1/8 | 3-1/32 | 6.74 | 8066-5 | 5 | 660 | 2-13/16 | 2-1/8 | 4-5/32 | 8.25 | | |
| 8033-8 | 8 | 330 | 2-13/16 | 2-1/8 | 3-3/8 | 7.02 | 8066-6 | 6 | 660 | 2-13/16 | 2-1/8 | 4-21/32 | 9.57 | | |
| 8033-10 | 10 | 330 | 2-13/16 | 2-1/8 | 3-3/8 | 7.54 | | | | | | | | | |
| 8033-12.5 | 12.5 | 330 | 2-13/16 | 2-1/8 | 4-5/32 | 7.95 | | | | | | | | | |
| 8033-14.5 | 14.5 | 330 | 2-13/16 | 2-1/8 | 4-21/32 | 8.09 | | | | | | | | | |
| 8033-15 | 15 | 330 | 2-13/16 | 2-1/8 | 4-21/32 | 9.13 | | | | | | | | | |
| 8033-17.5 | 17.5 | 330 | 2-13/16 | 2-1/8 | 5-3/16 | 9.90 | | | | | | | | | |

NOTE: All units supplied with riveted silicone rubber buswing terminals with solder lugs. Cup type terminal insulator available at no extra cost.
 NOTE: Standard Tolerance ±10%.
 NOTE: Add 3/32" to above dimensions for lip on can.
 *O.E.M. prices for larger quantities are available on request.

SANGAMO ELECTRIC COMPANY

capacitors



PLASTIC FILM CAPACITORS

Sangamo plastic film capacitors exhibit exceptional electrical characteristics which are necessary to meet the critical application requirements of the electronic industry. Sangamo's extensive experience with plastic films will enable you to select the most suitable capacitors in a variety of sizes, ratings, and

styles. The following is a representative listing of our hermetically sealed tubular construction capacitors which are manufactured with the highest grade of material to assure the most reliable product available. Other sizes, ratings, and styles are available upon request.

TYPE SPTX TEFLON® Film Capacitors

Construction
Extended
Foil

- * Dielectric-Teflon Film
- * Temperature Range
-55°C to +165°C Full Rating
-55°C to +200°C 50% De-Rating
- * Insulation Resistance-
100,000 megohm-microfarads
- * Dissipation Factor-0.05% maximum
- * Temperature Coefficient of Capacitance-200±20ppm/°C
- * Dielectric Absorption-.01% maximum



| Catalog Number | Capacitance m.F. | Working Voltage D.C. | Diameter In Inches | Length In Inches |
|----------------|------------------|----------------------|--------------------|------------------|
| SPTX0221 | .001 | 200 | .235 | 7/8 |
| SPTX0211 | .01 | 200 | .400 | 7/8 |
| SPTX0215 | .05 | 200 | .562 | 1-3/8 |
| SPTX0201 | .1 | 200 | .670 | 1-1/2 |
| SPTX02025 | .25 | 200 | .750 | 2 |
| SPTX0421 | .001 | 400 | .235 | 7/8 |
| SPTX0411 | .01 | 400 | .400 | 7/8 |
| SPTX0415 | .05 | 400 | .562 | 1-1/2 |
| SPTX0401 | .1 | 400 | .750 | 1-1/2 |
| SPTX04025 | .25 | 400 | 1.000 | 7/8 |
| SPTX0621 | .001 | 600 | .235 | 7/8 |
| SPTX0611 | .01 | 600 | .400 | 7/8 |
| SPTX0615 | .05 | 600 | .562 | 1-1/2 |
| SPTX0601 | .1 | 600 | 1.000 | 2 |

TYPE SPSX POLYSTYRENE Film Capacitors

Construction
Extended
Foil

- * Dielectric-Polystyrene Film
- * Temperature Range-
-55°C to +70°C Full Rating
- * Insulating Resistance-
100,000 megohm-microfarads
- * Dissipation Factor-.02% maximum
- * Temperature coefficient of capacitance-100±20ppm/°C
- * Stability ±0.1% maximum



| Catalog Number | Capacitance m.F. | Working Voltage D.C. | Diameter In Inches | Length In Inches |
|----------------|------------------|----------------------|--------------------|------------------|
| SPSX0121 | .001 | 100 | .235 | 13/16 |
| SPSX0111 | .01 | 100 | .235 | 13/16 |
| SPSX0101 | .1 | 100 | .400 | 1-1/8 |
| SPSX01022 | .22 | 100 | .562 | 1-1/8 |
| SPSX0221 | .001 | 200 | .235 | 13/16 |
| SPSX0211 | .01 | 200 | .312 | 7/8 |
| SPSX0201 | .1 | 200 | .562 | 1-3/8 |
| SPSX02022 | .22 | 200 | .670 | 1-7/8 |
| SPSX0421 | .001 | 400 | .235 | 13/16 |
| SPSX0411 | .01 | 400 | .312 | 1 |
| SPSX0401 | .1 | 400 | .562 | 1-7/8 |
| SPSX0621 | .001 | 600 | .235 | 1-3/16 |
| SPSX0611 | .01 | 600 | .400 | 1 |
| SPSX0601 | .1 | 600 | .670 | 1-5/8 |

NOTE:-Standard capacitive tolerance .001 m.F. to .047, ±20%; .047 m.F. and up, ±10%. Other tolerances available.

Type SPX Polyester FILM CAPACITORS



CONSTRUCTION:
EXTENDED FOIL

CIRCUIT ○ — ○ | — ○

- * Dielectric-Mylar Film
- * Temperature Range-55° to +85°C Full Rating
-55°C to +125°C 50% Derating
- * Insulation Resistance-50,000 megohm-microfarads
- * Dissipation Factor-1% maximum
- * Dielectric Absorption-0.1% maximum
- * Stability Retrace-±0.2% maximum

| Catalog Number | Capacitance m.F. | Working Voltage D.C. | Diameter In Inches | Length In Inches |
|----------------|------------------|----------------------|--------------------|------------------|
| SPX0121 | .001 | 100 | .235 | 13/16 |
| SPX01268 | .0068 | 100 | .235 | 13/16 |
| SPX0111 | .01 | 100 | .235 | 13/16 |
| SPX01122 | .022 | 100 | .235 | 13/16 |
| SPX01147 | .047 | 100 | .312 | 15/16 |
| SPX01168 | .068 | 100 | .312 | 15/16 |
| SPX0101 | .1 | 100 | .400 | 15/16 |
| SPX01022 | .22 | 100 | .400 | 1-5/16 |
| SPX01047 | .47 | 100 | .562 | 1-1/8 |
| SPX0110 | 1.0 | 100 | .562 | 1-7/8 |
| SPX0221 | .001 | 200 | .235 | 13/16 |
| SPX02268 | .0068 | 200 | .235 | 13/16 |
| SPX0211 | .01 | 200 | .235 | 13/16 |
| SPX02122 | .022 | 200 | .235 | 13/16 |
| SPX02147 | .047 | 200 | .312 | 15/16 |
| SPX02168 | .068 | 200 | .400 | 15/16 |
| SPX0201 | .1 | 200 | .400 | 1-1/16 |
| SPX02022 | .22 | 200 | .400 | 1-7/16 |
| SPX02047 | .47 | 200 | .562 | 1-7/16 |

| Catalog Number | Capacitance m.F. | Working Voltage D.C. | Diameter In Inches | Length In Inches |
|----------------|------------------|----------------------|--------------------|------------------|
| SPX0210 | 1.0 | 200 | .670 | 1-7/8 |
| SPX0421 | .001 | 400 | .235 | 13/16 |
| SPX04268 | .0068 | 400 | .312 | 13/16 |
| SPX0411 | .01 | 400 | .312 | 15/16 |
| SPX04122 | .022 | 400 | .400 | 15/16 |
| SPX04147 | .047 | 400 | .400 | 1-1/4 |
| SPX04168 | .068 | 400 | .400 | 1-3/8 |
| SPX0401 | .1 | 400 | .562 | 1-1/4 |
| SPX04022 | .22 | 400 | .670 | 1-1/2 |
| SPX04047 | .47 | 400 | .670 | 1-7/8 |
| SPX0621 | .001 | 600 | .235 | 13/16 |
| SPX06268 | .0068 | 600 | .312 | 15/16 |
| SPX0611 | .01 | 600 | .312 | 15/16 |
| SPX06122 | .022 | 600 | .400 | 1 |
| SPX06147 | .047 | 600 | .400 | 1-1/2 |
| SPX06168 | .068 | 600 | .562 | 1-1/8 |
| SPX0601 | .1 | 600 | .562 | 1-3/8 |
| SPX06022 | .22 | 600 | .670 | 1-7/8 |

NOTE:-Standard Tolerance ±10%

SANGAMO ELECTRIC COMPANY

capacitors



ELECTRONIC COMPONENTS

Type 33M MOLDED MYLAR® TUBULAR CAPACITORS



The Sangamo Type 33M, which uses a Mylar® dielectric is molded in thermosetting plastic to provide more stable capacitances, high insulating resistance, excellent seal and operation up to 125°C when the voltage is derated to 50% of the 85°C value.

They are specially recommended for use in test equipment, instrumentation and filter networks all of which require small physical size and dependability under extreme heat, humidity and physical stress. The Type 33M is manufactured to meet moisture requirements of Mil-C-91A specifications. For more complete Engineering information write for Bulletin TSC-206C.

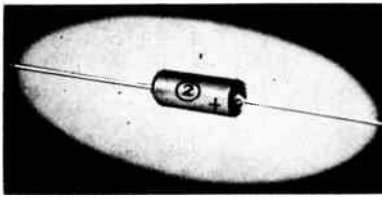
| Catalog Number | Capacitance mF. | Working Voltage D.C. | Diameter In Inches | Length In Inches | Net Price 1-49* | Catalog Number | Capacitance mF. | Working Voltage D.C. | Diameter In Inches | Length In Inches | Net Price 1-49* |
|----------------|-----------------|----------------------|--------------------|------------------|-----------------|----------------|-----------------|----------------------|--------------------|------------------|-----------------|
| 33MO121 | .001 | 100 | 5/16 | 1 | \$0.150 | 33MO4025 | .25 | 400 | 9/16 | 2 | \$0.457 |
| 33MO125 | .005 | 100 | 5/16 | 1 | 0.156 | 33MO405 | .5 | 400 | 3/4 | 2 | 0.710 |
| 33MO111 | .01 | 100 | 5/16 | 1 | 0.157 | 33MO635 | .0005 | 600 | 5/16 | 1 | 0.154 |
| 33MO112 | .02 | 100 | 5/16 | 1 | 0.165 | 33MO621 | .001 | 600 | 5/16 | 1 | 0.154 |
| 33MO1147 | .047 | 100 | 5/16 | 1 | 0.184 | 33MO6215 | .0015 | 600 | 5/16 | 1 | 0.154 |
| 33MO115 | .05 | 100 | 5/16 | 1 | 0.186 | 33MO622 | .002 | 600 | 5/16 | 1 | 0.154 |
| 33MO101 | .1 | 100 | 3/8 | 1-1/8 | 0.210 | 33MO6222 | .0022 | 600 | 5/16 | 1 | 0.157 |
| 33MO1015 | .15 | 100 | 7/16 | 1-3/16 | 0.300 | 33MO6225 | .0025 | 600 | 5/16 | 1 | 0.158 |
| 33MO1022 | .22 | 100 | 7/16 | 1-1/4 | 0.344 | 33MO623 | .003 | 600 | 5/16 | 1 | 0.159 |
| 33MO1025 | .25 | 100 | 7/16 | 1-1/4 | 0.394 | 33MO6233 | .0033 | 600 | 5/16 | 1 | 0.160 |
| 33MO1047 | .47 | 100 | 9/16 | 1-5/8 | 0.532 | 33MO624 | .004 | 600 | 5/16 | 1 | 0.161 |
| 33MO105 | .5 | 100 | 9/16 | 1-5/8 | 0.537 | 33MO6247 | .0047 | 600 | 5/16 | 1 | 0.161 |
| 33MO110 | 1.0 | 100 | 5/8 | 2 | 0.116 | 33MO625 | .005 | 600 | 5/16 | 1 | 0.162 |
| 33MO221 | .001 | 200 | 5/16 | 1 | 0.152 | 33MO626 | .006 | 600 | 5/16 | 1 | 0.163 |
| 33MO225 | .005 | 200 | 5/16 | 1 | 0.159 | 33MO6268 | .0068 | 600 | 5/16 | 1 | 0.168 |
| 33MO211 | .01 | 200 | 5/16 | 1 | 0.161 | 33MO628 | .008 | 600 | 5/16 | 1 | 0.169 |
| 33MO212 | .02 | 200 | 5/16 | 1 | 0.169 | 33MO611 | .01 | 600 | 3/8 | 1-1/8 | 0.172 |
| 33MO2147 | .047 | 200 | 3/8 | 1-1/8 | 0.188 | 33MO6115 | .015 | 600 | 3/8 | 1-1/8 | 0.176 |
| 33MO215 | .05 | 200 | 3/8 | 1-1/8 | 0.191 | 33MO612 | .02 | 600 | 7/16 | 1-3/16 | 0.185 |
| 33MO201 | .1 | 200 | 7/16 | 1-3/16 | 0.215 | 33MO6122 | .022 | 600 | 7/16 | 1-3/16 | 0.194 |
| 33MO2015 | .15 | 200 | 7/16 | 1-1/4 | 0.306 | 33MO6125 | .025 | 600 | 7/16 | 1-3/16 | 0.196 |
| 33MO2022 | .22 | 200 | 1/2 | 1-1/2 | 0.351 | 33MO613 | .03 | 600 | 7/16 | 1-1/4 | 0.200 |
| 33MO2025 | .25 | 200 | 1/2 | 1-1/2 | 0.369 | 33MO6133 | .033 | 600 | 7/16 | 1-1/4 | 0.206 |
| 33MO2047 | .47 | 200 | 9/16 | 2 | 0.542 | 33MO614 | .04 | 600 | 15/32 | 1-1/2 | 0.209 |
| 33MO205 | .5 | 200 | 9/16 | 2 | 0.547 | 33MO6147 | .047 | 600 | 15/32 | 1-1/2 | 0.217 |
| 33MO210 | 1.0 | 200 | 3/4 | 2 | 0.926 | 33MO615 | .05 | 600 | 15/32 | 1-1/2 | 0.225 |
| 33MO421 | .001 | 400 | 5/16 | 1 | 0.153 | 33MO616 | .06 | 600 | 9/16 | 1-5/8 | 0.228 |
| 33MO425 | .005 | 400 | 5/16 | 1 | 0.159 | 33MO6168 | .068 | 600 | 9/16 | 1-5/8 | 0.250 |
| 33MO411 | .01 | 400 | 5/16 | 1 | 0.161 | 33MO601 | .1 | 600 | 9/16 | 2 | 0.261 |
| 33MO412 | .02 | 400 | 3/8 | 1-1/8 | 0.172 | 33MO6015 | .15 | 600 | 5/8 | 2 | 0.311 |
| 33MO4122 | .022 | 400 | 3/8 | 1-1/8 | 0.173 | 33MO602 | .2 | 600 | 3/4 | 2 | 0.495 |
| 33MO4147 | .047 | 400 | 7/16 | 1-3/16 | 0.196 | 33MO6022 | .22 | 600 | 3/4 | 2 | 0.565 |
| 33MO415 | .05 | 400 | 7/16 | 1-3/16 | 0.204 | 33MO6025 | .25 | 600 | 3/4 | 2 | 0.611 |
| 33MO4168 | .068 | 400 | 15/32 | 1-1/2 | 0.209 | | | | | | |
| 33MO401 | .1 | 400 | 1/2 | 1-1/2 | 0.239 | | | | | | |
| 33MO4015 | .15 | 400 | 9/16 | 1-5/8 | 0.324 | | | | | | |
| 33MO402 | .2 | 400 | 9/16 | 2 | 0.391 | | | | | | |
| 33MO4022 | .22 | 400 | 9/16 | 2 | 0.416 | | | | | | |

NOTE: Standard Capacitive Tolerance:
.0005 mF. up to .001 mF. ± 40%
.001 mF. up to .04 mF. ± 20%
.04 mF. and up ± 10%

* O.E.M. prices for larger quantities are available on request.

SPRAGUE CAPACITORS

TYPE 150D SOLID-ELECTROLYTE TANTALEX® CAPACITORS



- Combine True Miniaturization with Characteristics Previously Unobtainable in Electrolytic Capacitors.
- Hermetically Sealed Metal Case.
- Solid Electrolyte Cannot Leak or Corrode, Even if Hermetic Seal is Accidentally Broken.
- Exhibit Stable Capacitance and Low Dissipation Factor over Temperature Range of -80°C

to $+85^{\circ}\text{C}$. With Appropriate Voltage Derating, May Be Operated to $+125^{\circ}\text{C}$.

- Listed Units have Plastic Sleeves. For Bare Case, end Cat. No. in "0" instead of "2" and subtract \$.05 from unit price.
- For complete technical data, refer to latest issue of Engineering Bulletin 3520.
- Also available in 50, 60 and 75 volt ratings.

| μF | Size Code | Catalog Number | |
|-----------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 6 WVDC — 8 VDC SURGE | | | |
| .22 | A | 150D224X0006A2 | 150D224X9006A2 |
| .27 | A | — | 150D274X9006A2 |
| .33 | A | 150D334X0006A2 | 150D334X9006A2 |
| .39 | A | — | 150D394X9006A2 |
| .47 | A | 150D474X0006A2 | 150D474X9006A2 |
| .56 | A | — | 150D564X9006A2 |
| .68 | A | 150D684X0006A2 | 150D684X9006A2 |
| .82 | A | — | 150D824X9006A2 |
| 1.0 | A | 150D105X0006A2 | 150D105X9006A2 |
| 1.2 | A | — | 150D125X9006A2 |
| 1.5 | A | 150D155X0006A2 | 150D155X9006A2 |
| 1.8 | A | — | 150D185X9006A2 |
| 2.2 | A | 150D225X0006A2 | 150D225X9006A2 |
| 2.7 | A | — | 150D275X9006A2 |
| 3.3 | A | 150D335X0006A2 | 150D335X9006A2 |
| 3.9 | A | — | 150D395X9006A2 |
| 4.7 | A | 150D475X0006A2 | 150D475X9006A2 |
| 5.6 | A | — | 150D565X9006A2 |
| 6.8 | A | 150D685X0006A2 | 150D685X9006A2 |
| 8.2 | B | — | 150D825X9006B2 |
| 10 | B | 150D106X0006B2 | 150D106X9006B2 |
| 12 | B | — | 150D126X9006B2 |
| 15 | B | 150D156X0006B2 | 150D156X9006B2 |
| 18 | B | — | 150D186X9006B2 |
| 22 | B | 150D226X0006B2 | 150D226X9006B2 |
| 27 | B | — | 150D276X9006B2 |
| 33 | B | 150D336X0006B2 | 150D336X9006B2 |
| 39 | B | — | 150D396X9006B2 |
| 47 | B | 150D476X0006B2 | 150D476X9006B2 |
| 56 | B | — | 150D566X9006B2 |
| 60 | B | 150D606X0006B2 | — |
| 68 | R | 150D686X0006R2 | — |
| 100 | R | 150D107X0006R2 | — |
| 120 | R | 150D127X0006R2 | — |
| 150 | R | 150D157X0006R2 | — |
| 180 | R | 150D187X0006S2 | — |
| 220 | S | 150D227X0006S2 | — |
| 330 | S | 150D337X0006S2 | — |

| μF | Size Code | Catalog Number | |
|-------------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 10 WVDC — 13 VDC SURGE | | | |
| .22 | A | 150D224X0010A2 | 150D224X9010A2 |
| .27 | A | — | 150D274X9010A2 |
| .33 | A | 150D334X0010A2 | 150D334X9010A2 |
| .39 | A | — | 150D394X9010A2 |
| .47 | A | 150D474X0010A2 | 150D474X9010A2 |
| .56 | A | — | 150D564X9010A2 |
| .68 | A | 150D684X0010A2 | 150D684X9010A2 |
| .82 | A | — | 150D824X9010A2 |
| 1.0 | A | 150D105X0010A2 | 150D105X9010A2 |
| 1.2 | A | — | 150D125X9010A2 |
| 1.5 | A | 150D155X0010A2 | 150D155X9010A2 |
| 1.8 | A | — | 150D185X9010A2 |
| 2.2 | A | 150D225X0010A2 | 150D225X9010A2 |
| 2.7 | A | — | 150D275X9010A2 |
| 3.3 | A | 150D335X0010A2 | 150D335X9010A2 |
| 3.9 | A | — | 150D395X9010A2 |
| 4.7 | A | 150D475X0010A2 | 150D475X9010A2 |
| 5.6 | B | — | 150D565X9010B2 |
| 6.8 | B | 150D685X0010B2 | 150D685X9010B2 |
| 8.2 | B | — | 150D825X9010B2 |
| 10 | B | 150D106X0010B2 | 150D106X9010B2 |
| 12 | B | — | 150D126X9010B2 |
| 15 | B | 150D156X0010B2 | 150D156X9010B2 |
| 18 | B | — | 150D186X9010B2 |
| 22 | B | 150D226X0010B2 | 150D226X9010B2 |
| 27 | B | — | 150D276X9010B2 |
| 33 | B | 150D336X0010B2 | 150D336X9010B2 |
| 39 | B | — | 150D396X9010B2 |
| 40 | B | 150D406X0010B2 | — |
| 68 | R | 150D686X0010R2 | — |
| 100 | R | 150D107X0010R2 | — |

| μF | Size Code | Catalog Number | |
|-------------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 120 | R | 150D127X0010R2 | — |
| 150 | S | 150D157X0010S2 | — |
| 220 | S | 150D227X0010S2 | — |
| 15 WVDC — 18 VDC SURGE | | | |
| .22 | A | 150D224X0015A2 | 150D224X9015A2 |
| .27 | A | — | 150D274X9015A2 |
| .33 | A | 150D334X0015A2 | 150D334X9015A2 |
| .39 | A | — | 150D394X9015A2 |
| .47 | A | 150D474X0015A2 | 150D474X9015A2 |
| .56 | A | — | 150D564X9015A2 |
| .68 | A | 150D684X0015A2 | 150D684X9015A2 |
| .82 | A | — | 150D824X9015A2 |
| 1.0 | A | 150D105X0015A2 | 150D105X9015A2 |
| 1.2 | A | — | 150D125X9015A2 |
| 1.5 | A | 150D155X0015A2 | 150D155X9015A2 |
| 1.8 | A | — | 150D185X9015A2 |
| 2.2 | A | 150D225X0015A2 | 150D225X9015A2 |
| 2.7 | A | — | 150D275X9015A2 |
| 3.3 | A | 150D335X0015A2 | 150D335X9015A2 |
| 3.9 | B | — | 150D395X9015B2 |
| 4.7 | B | 150D475X0015B2 | 150D475X9015B2 |
| 5.6 | B | — | 150D565X9015B2 |
| 6.8 | B | 150D685X0015B2 | 150D685X9015B2 |
| 8.2 | B | — | 150D825X9015B2 |
| 10 | B | 150D106X0015B2 | 150D106X9015B2 |
| 12 | B | — | 150D126X9015B2 |
| 15 | B | 150D156X0015B2 | 150D156X9015B2 |
| 18 | B | — | 150D186X9015B2 |
| 22 | B | 150D226X0015B2 | 150D226X9015B2 |
| 33 | R | 150D336X0015R2 | — |
| 47 | R | 150D476X0015R2 | — |
| 63 | R | 150D686X0015R2 | — |
| 100 | S | 150D107X0015S2 | — |
| 150 | S | 150D157X0015S2 | — |

| μF | Size Code | Catalog Number | |
|-------------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 20 WVDC — 23 VDC SURGE | | | |
| .0047 | A | 150D472X0020A2 | 150D472X9020A2 |
| .0056 | A | — | 150D562X9020A2 |
| .0068 | A | 150D682X0020A2 | 150D682X9020A2 |
| .0082 | A | — | 150D822X9020A2 |
| .01 | A | 150D103X0020A2 | 150D103X9020A2 |
| .012 | A | — | 150D123X9020A2 |
| .015 | A | 150D153X0020A2 | 150D153X9020A2 |
| .018 | A | — | 150D183X9020A2 |
| .022 | A | 150D223X0020A2 | 150D223X9020A2 |
| .027 | A | — | 150D273X9020A2 |
| .033 | A | 150D333X0020A2 | 150D333X9020A2 |
| .039 | A | — | 150D393X9020A2 |
| .047 | A | 150D473X0020A2 | 150D473X9020A2 |
| .056 | A | — | 150D563X9020A2 |
| .068 | A | 150D683X0020A2 | 150D683X9020A2 |
| .082 | A | — | 150D823X9020A2 |
| .1 | A | 150D104X0020A2 | 150D104X9020A2 |
| .12 | A | — | 150D124X9020A2 |
| .15 | A | 150D154X0020A2 | 150D154X9020A2 |
| .18 | A | — | 150D184X9020A2 |
| .22 | A | 150D224X0020A2 | 150D224X9020A2 |
| .27 | A | — | 150D274X9020A2 |
| .33 | A | 150D334X0020A2 | 150D334X9020A2 |
| .39 | A | — | 150D394X9020A2 |
| .47 | A | 150D474X0020A2 | 150D474X9020A2 |
| .56 | A | — | 150D564X9020A2 |
| .68 | A | 150D684X0020A2 | 150D684X9020A2 |
| .82 | A | — | 150D824X9020A2 |
| 1.0 | A | 150D105X0020A2 | 150D105X9020A2 |
| 1.2 | A | — | 150D125X9020A2 |
| 1.5 | A | 150D155X0020A2 | 150D155X9020A2 |
| 1.8 | A | — | 150D185X9020A2 |
| 2.2 | A | 150D225X0020A2 | 150D225X9020A2 |
| 2.7 | B | — | 150D275X9020B2 |
| 3.3 | B | 150D335X0020B2 | 150D335X9020B2 |

| μF | Size Code | Catalog Number | |
|-----|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 3.9 | B | — | 150D395X9020B2 |
| 4.7 | B | 150D475X0020B2 | 150D475X9020B2 |
| 5.6 | B | — | 150D565X9020B2 |
| 6.8 | B | 150D685X0020B2 | 150D685X9020B2 |
| 8.2 | B | — | 150D825X9020B2 |
| 10 | B | 150D106X0020B2 | 150D106X9020B2 |
| 12 | B | — | 150D126X9020B2 |
| .15 | B | 150D156X0020B2 | 150D156X9020B2 |
| 22 | R | 150D226X0020R2 | — |
| 33 | R | 150D336X0020R2 | — |
| 47 | R | 150D476X0020R2 | — |
| 68 | S | 150D686X0020S2 | — |
| 100 | S | 150D107X0020S2 | — |

| μF | Size Code | Catalog Number | |
|-------------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 35 WVDC — 40 VDC SURGE | | | |
| .0047 | A | 150D472X0035A2 | 150D472X9035A2 |
| .0056 | A | — | 150D562X9035A2 |
| .0068 | A | 150D682X0035A2 | 150D682X9035A2 |
| .0082 | A | — | 150D822X9035A2 |
| .01 | A | 150D103X0035A2 | 150D103X9035A2 |
| .012 | A | — | 150D123X9035A2 |
| .015 | A | 150D153X0035A2 | 150D153X9035A2 |
| .018 | A | — | 150D183X9035A2 |
| .022 | A | 150D223X0035A2 | 150D223X9035A2 |
| .027 | A | — | 150D273X9035A2 |
| .033 | A | 150D333X0035A2 | 150D333X9035A2 |
| .039 | A | — | 150D393X9035A2 |
| .047 | A | 150D473X0035A2 | 150D473X9035A2 |
| .056 | A | — | 150D563X9035A2 |
| .068 | A | 150D683X0035A2 | 150D683X9035A2 |
| .082 | A | — | 150D823X9035A2 |
| .10 | A | 150D104X0035A2 | 150D104X9035A2 |
| .12 | A | — | 150D124X9035A2 |
| .15 | A | 150D154X0035A2 | 150D154X9035A2 |
| .18 | A | — | 150D184X9035A2 |
| .22 | A | 150D224X0035A2 | 150D224X9035A2 |
| .27 | A | — | 150D274X9035A2 |
| .33 | A | 150D334X0035A2 | 150D334X9035A2 |
| .39 | A | — | 150D394X9035A2 |
| .47 | A | 150D474X0035A2 | 150D474X9035A2 |
| .56 | A | — | 150D564X9035A2 |
| .68 | A | 150D684X0035A2 | 150D684X9035A2 |
| .82 | A | — | 150D824X9035A2 |
| 1.0 | A | 150D105X0035A2 | 150D105X9035A2 |
| 1.2 | B | — | 150D125X9035B2 |
| 1.5 | B | 150D155X0035B2 | 150D155X9035B2 |
| 1.8 | B | — | 150D185X9035B2 |
| 2.2 | B | 150D225X0035B2 | 150D225X9035B2 |
| 2.7 | B | — | 150D275X9035B2 |
| 3.3 | B | 150D335X0035B2 | 150D335X9035B2 |
| 3.9 | B | — | 150D395X9035B2 |
| 4.7 | B | 150D475X0035B2 | 150D475X9035B2 |
| 5.6 | B | — | 150D565X9035B2 |
| 6.8 | B | 150D685X0035B2 | 150D685X9035B2 |
| 10 | R | 150D106X0035R2 | — |
| 15 | R | 150D156X0035R2 | — |
| 22 | R | 150D226X0035R2 | — |
| 33 | S | 150D336X0035S2 | — |
| 47 | S | 150D476X0035S2 | — |

DIMENSIONS AND NET PRICES (1-24*)

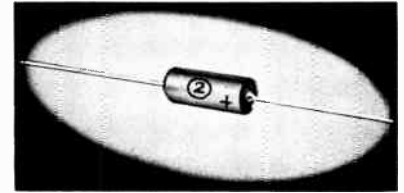
| Code | D. x L. | ±20% Tol. | ±10% Tol. |
|------|---------------|-----------------------|-----------------------|
| A | .104" x .312" | \$1.32 (thru .1μF) | \$1.72 (thru .1μF) |
| | | 1.48 (above .1μF) | 1.92 (above .1μF) |
| B | .190" x .500" | 1.54 | 2.00 |
| P | .285" x .759" | 2.54 | 3.30 |
| S | .347" x .859" | 4.72 | 6.12 |

SPRAGUE CAPACITORS

MIL-C-26655A SOLID ELECTROLYTE TUBULAR TANTALUM CAPACITORS

- Military Version of Type 150D. Truly Miniature With Characteristics Previously Unobtainable in Electrolytics.
- Hermetically Sealed Case, CS-12, Bare Tube; CS13, Insulating Sleeve

- Cannot Leak or Corrode—Solid Electrolyte Will Not Seep Even if Hermetic Seal is Accidentally Broken
- Temperature Range of $-80C$ to $+85C$. May Be Operated to $+125C$ With Appropriate Voltage Derating



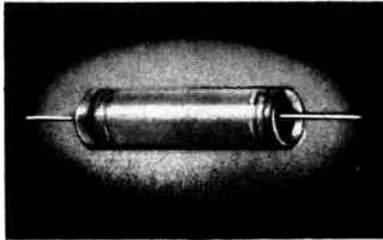
| Size | MILITARY DESIGNATION | Net Ea. |
|---------------------|--------------------------------------|---------|
| μF | Code $\pm 20\%$ Tol. $\pm 10\%$ Tol. | (1-24) |
| CS12—6 WVDC | | |
| 5.6 | A CS12AB5R6K | \$1.90 |
| 6.8 | A CS12AB6R8K | 1.90 |
| 6.8 | A CS12AB6R8M | 1.46 |
| 47 | B CS12AB470M | 1.98 |
| 47 | B CS12AB470M | 1.52 |
| 56 | B CS12AB560K | 1.98 |
| 150 | R CS12AB151K | 3.28 |
| 150 | R CS12AB151M | 2.52 |
| 180 | R CS12AB181K | 3.28 |
| 270 | S CS12AB271K | 6.10 |
| 330 | S CS12AB331K | 6.10 |
| 330 | S CS12AB331M | 4.70 |
| CS12—10 WVDC | | |
| 3.9 | A CS12AC3R9K | 1.90 |
| 4.7 | A CS12AC4R7K | 1.90 |
| 4.7 | A CS12AC4R7M | 1.46 |
| 27 | B CS12AC270K | 1.98 |
| 33 | B CS12AC330K | 1.98 |
| 33 | B CS12AC330M | 1.52 |
| 39 | B CS12AC390K | 1.98 |
| 82 | R CS12AC820K | 3.28 |
| 100 | R CS12AC101K | 3.28 |
| 100 | R CS12AC101M | 2.52 |
| 120 | R CS12AC121K | 3.28 |
| 180 | S CS12AC181K | 6.10 |
| 220 | S CS12AC221K | 6.10 |
| 220 | S CS12AC221M | 4.70 |
| CS12—15 WVDC | | |
| 2.7 | A CS12AD2R7K | 1.90 |
| 3.3 | A CS12AD3R3K | 1.90 |
| 3.3 | A CS12AD3R3M | 1.46 |
| 18 | B CS12AD180K | 1.98 |
| 22 | B CS12AD220K | 1.98 |
| 22 | B CS12AD220M | 1.52 |
| 56 | R CS12AD560M | 3.28 |
| 68 | R CS12AD680M | 3.28 |
| 68 | R CS12AD680M | 2.52 |
| 120 | S CS12AD121K | 6.10 |
| 150 | S CS12AD151K | 6.10 |
| 150 | S CS12AD151M | 4.70 |
| CS12—20 WVDC | | |
| 1.2 | A CS12AE1R2K | 1.90 |
| 1.5 | A CS12AE1R5K | 1.90 |
| 1.5 | A CS12AE1R5M | 1.46 |
| 1.8 | A CS12AE1R8K | 1.90 |
| 2.2 | A CS12AE2R2K | 1.90 |
| 2.2 | A CS12AE2R2M | 1.46 |
| 8.2 | B CS12AE8R2K | 1.98 |
| 10 | B CS12AE100K | 1.98 |
| 10 | B CS12AE100M | 1.52 |
| 12 | B CS12AE120K | 1.98 |
| 15 | B CS12AE150K | 1.98 |
| 15 | B CS12AE150M | 1.52 |
| 27 | R CS12AE270K | 3.28 |
| 33 | R CS12AE330K | 3.28 |
| 33 | R CS12AE330M | 2.52 |
| 39 | R CS12AE390K | 3.28 |
| 47 | R CS12AE470K | 3.28 |
| 47 | R CS12AE470M | 2.52 |
| 56 | S CS12AE560K | 6.10 |
| 68 | S CS12AE680K | 6.10 |
| 68 | S CS12AE680M | 4.70 |
| 82 | S CS12AE820K | 6.10 |
| 100 | S CS12AE101K | 6.10 |
| 100 | S CS12AE101M | 4.70 |
| CS12—35 WVDC | | |
| .33 | A CS12AF3R3K | 1.90 |
| .33 | A CS12AF3R3M | 1.46 |
| .39 | A CS12AF3R9K | 1.90 |
| .47 | A CS12AF4R7K | 1.90 |
| .47 | A CS12AF4R7M | 1.46 |
| .56 | A CS12AF5R6K | 1.90 |
| .68 | A CS12AF6R8K | 1.90 |
| .68 | A CS12AF6R8M | 1.46 |
| .82 | A CS12AF8R2K | 1.90 |
| 1.0 | A CS12AF101K | 1.90 |
| 1.0 | A CS12AF101M | 1.46 |
| 1.2 | B CS12AF1R2K | 1.98 |
| 1.5 | B CS12AF1R5K | 1.98 |
| 1.5 | B CS12AF1R5M | 1.52 |
| 1.8 | B CS12AF1R8K | 1.98 |
| 2.2 | B CS12AF2R2K | 1.98 |
| 2.2 | B CS12AF2R2M | 1.52 |
| 2.7 | B CS12AF2R7K | 1.98 |
| 3.3 | B CS12AF3R3K | 1.98 |

| Size | MILITARY DESIGNATION | Net Ea. |
|---------------------|--------------------------------------|---------|
| μF | Code $\pm 20\%$ Tol. $\pm 10\%$ Tol. | (1-24) |
| CS12—35 WVDC | | |
| 3.3 | B CS12AF3R3M | \$1.52 |
| 3.9 | B CS12AF3R9K | 1.98 |
| 4.7 | B CS12AF4R7K | 1.98 |
| 4.7 | B CS12AF4R7M | 1.52 |
| 5.6 | B CS12AF5R6K | 1.98 |
| 6.8 | B CS12AF6R8K | 1.98 |
| 6.8 | B CS12AF6R8M | 1.52 |
| 8.2 | R CS12AF8R2K | 3.28 |
| 10 | R CS12AF100K | 3.28 |
| 10 | R CS12AF100M | 2.52 |
| 12 | R CS12AF120K | 3.28 |
| 15 | R CS12AF150K | 3.28 |
| 15 | R CS12AF150M | 2.52 |
| 18 | R CS12AF180K | 3.28 |
| 22 | R CS12AF220K | 3.28 |
| 22 | R CS12AF220M | 2.52 |
| 27 | S CS12AF270K | 6.10 |
| 33 | S CS12AF330K | 6.10 |
| 33 | S CS12AF330M | 4.70 |
| 39 | S CS12AF390K | 6.10 |
| 47 | S CS12AF470K | 6.10 |
| 47 | S CS12AF470M | 4.70 |
| CS12—50 WVDC | | |
| 1.0 | A CS12AG010K | 2.46 |
| 1.0 | A CS12AG010M | 1.90 |
| 1.2 | B CS12AG1R2K | 2.60 |
| 1.5 | B CS12AG1R5K | 2.60 |
| 1.5 | B CS12AG1R5M | 2.00 |
| 1.8 | B CS12AG1R8K | 2.60 |
| 2.2 | B CS12AG2R2K | 2.60 |
| 2.2 | B CS12AG2R2M | 2.00 |
| 2.7 | B CS12AG2R7K | 2.60 |
| 3.3 | B CS12AG3R3K | 2.60 |
| 3.3 | B CS12AG3R3M | 2.00 |
| 3.9 | B CS12AG3R9K | 2.60 |
| 4.7 | B CS12AG4R7K | 2.60 |
| 4.7 | B CS12AG4R7M | 2.00 |
| CS13—6 WVDC | | |
| 5.6 | A CS13AB5R6K | 1.92 |
| 6.8 | A CS13AB6R8K | 1.92 |
| 6.8 | A CS13AB6R8M | 1.48 |
| 47 | B CS13AB470K | 2.00 |
| 47 | B CS13AB470M | 1.54 |
| 56 | B CS13AB560K | 2.00 |
| 150 | R CS13AB151K | 3.30 |
| 150 | R CS13AB151M | 2.54 |
| 180 | R CS13AB181K | 3.30 |
| 270 | S CS13AB271K | 6.12 |
| 330 | S CS13AB331K | 6.12 |
| 330 | S CS13AB331M | 4.72 |
| CS13—10 WVDC | | |
| 3.9 | A CS13AC3R9K | 1.92 |
| 4.7 | A CS13AC4R7K | 1.92 |
| 4.7 | A CS13AC4R7M | 1.48 |
| 27 | B CS13AC270K | 2.00 |
| 33 | B CS13AC330K | 2.00 |
| 33 | B CS13AC330M | 1.54 |
| 39 | B CS13AC390K | 2.00 |
| 82 | R CS13AC820K | 3.30 |
| 100 | R CS13AC101K | 3.30 |
| 100 | R CS13AC101M | 2.54 |
| 120 | R CS13AC121K | 3.30 |
| 180 | S CS13AC181K | 6.12 |
| 220 | S CS13AC221K | 6.12 |
| 220 | S CS13AC221M | 4.72 |
| CS13—15 WVDC | | |
| 2.7 | A CS13AD2R7K | 1.92 |
| 3.3 | A CS13AD3R3K | 1.92 |
| 3.3 | A CS13AD3R3M | 1.48 |
| 18 | B CS13AD180K | 2.00 |
| 22 | B CS13AD220K | 2.00 |
| 22 | B CS13AD220M | 1.54 |
| 56 | R CS13AD560K | 3.30 |
| 68 | R CS13AD680K | 3.30 |
| 68 | R CS13AD680M | 2.54 |
| 120 | S CS13AD121K | 6.12 |
| 150 | S CS13AD151K | 6.12 |
| 150 | S CS13AD151M | 4.72 |
| CS13—20 WVDC | | |
| 1.2 | A CS13AE1R2K | 1.92 |
| 1.5 | A CS13AE1R5K | 1.92 |
| 1.5 | A CS13AE1R5M | 1.48 |

| Size | MILITARY DESIGNATION | Net Ea. |
|-----------------------------|--------------------------------------|---------|
| μF | Code $\pm 20\%$ Tol. $\pm 10\%$ Tol. | (1-24) |
| CS13—20 WVDC | | |
| 1.8 | A CS13AE1R8K | \$1.92 |
| 2.2 | A CS13AE2R2K | 1.92 |
| 2.2 | A CS13AE2R2M | 1.48 |
| 8.2 | B CS13AE8R2K | 2.00 |
| 10 | B CS13AE100K | 2.00 |
| 10 | B CS13AE100M | 1.54 |
| 12 | B CS13AE120K | 2.00 |
| 15 | B CS13AE150K | 2.00 |
| 15 | B CS13AE150M | 1.54 |
| 27 | R CS13AE270K | 3.28 |
| 33 | R CS13AE330K | 3.28 |
| 33 | R CS13AE330M | 2.54 |
| 39 | R CS13AE390K | 3.30 |
| 47 | R CS13AE470K | 3.30 |
| 47 | R CS13AE470M | 2.54 |
| 56 | S CS13AE560K | 6.12 |
| 68 | S CS13AE680K | 6.12 |
| 68 | S CS13AE680M | 4.72 |
| 82 | S CS13AE820K | 6.12 |
| 100 | S CS13AE101K | 6.12 |
| 100 | S CS13AE101M | 4.72 |
| CS13—35 WVDC | | |
| .33 | A CS13AF3R3K | 1.92 |
| .33 | A CS13AF3R3M | 1.48 |
| .39 | A CS13AF3R9K | 1.92 |
| .47 | A CS13AF4R7K | 1.92 |
| .47 | A CS13AF4R7M | 1.48 |
| .56 | A CS13AF5R6K | 1.92 |
| .68 | A CS13AF6R8K | 1.92 |
| .68 | A CS13AF6R8M | 1.48 |
| .82 | A CS13AF8R2K | 1.92 |
| 1.0 | A CS13AF101K | 1.92 |
| 1.0 | A CS13AF101M | 1.48 |
| 1.2 | B CS13AF1R2K | 2.00 |
| 1.5 | B CS13AF1R5K | 2.00 |
| 1.5 | B CS13AF1R5M | 1.54 |
| 1.8 | B CS13AF1R8K | 2.00 |
| 2.2 | B CS13AF2R2K | 2.00 |
| 2.2 | B CS13AF2R2M | 1.54 |
| 2.7 | B CS13AF2R7K | 2.00 |
| 3.3 | B CS13AF3R3K | 2.00 |
| 3.3 | B CS13AF3R3M | 1.54 |
| 3.9 | B CS13AF3R9K | 2.00 |
| 4.7 | B CS13AF4R7K | 2.00 |
| 4.7 | B CS13AF4R7M | 1.54 |
| 5.6 | B CS13AF5R6K | 2.00 |
| 6.8 | B CS13AF6R8K | 2.00 |
| 6.8 | B CS13AF6R8M | 1.54 |
| 8.2 | R CS13AF8R2K | 3.30 |
| 10 | R CS13AF100K | 3.30 |
| 10 | R CS13AF100M | 2.54 |
| 12 | R CS13AF120K | 3.30 |
| 15 | R CS13AF150K | 3.30 |
| 15 | R CS13AF150M | 2.54 |
| 18 | R CS13AF180K | 3.30 |
| 22 | R CS13AF220K | 3.30 |
| 22 | R CS13AF220M | 2.54 |
| 27 | S CS13AF270K | 6.12 |
| 33 | S CS13AF330K | 6.12 |
| 33 | S CS13AF330M | 4.72 |
| 39 | S CS13AF390K | 6.12 |
| 47 | S CS13AF470K | 6.12 |
| 47 | S CS13AF470M | 4.72 |
| CS13—50 WVDC | | |
| 1.0 | A CS13AG010K | 2.48 |
| 1.0 | A CS13AG010M | 1.92 |
| 1.2 | B CS13AG1R2K | 2.62 |
| 1.5 | B CS13AG1R5K | 2.62 |
| 1.5 | B CS13AG1R5M | 2.02 |
| 1.8 | B CS13AG1R8K | 2.62 |
| 2.2 | B CS13AG2R2K | 2.62 |
| 2.2 | B CS13AG2R2M | 2.02 |
| 2.7 | B CS13AG2R7K | 2.62 |
| 3.3 | B CS13AG3R3K | 2.62 |
| 3.3 | B CS13AG3R3M | 2.02 |
| 3.9 | B CS13AG3R9K | 2.62 |
| 4.7 | B CS13AG4R7K | 2.62 |
| 4.7 | B CS13AG4R7M | 2.02 |
| SIZE CODE | | |
| A = .104" dia. x .312" long | | |
| B = .190" dia. x .500" long | | |
| R = .285" dia. x .759" long | | |
| S = .347" dia. x .859" long | | |

SPRAGUE CAPACITORS

85°C FOIL TANTALEX[®] CAPACITORS



- For applications where small physical size, stable electrical characteristics, and long service life are important.
- Type 110D and 112D also available marked to meet MIL-C-3965B. Order by complete military type designation.
- High capacitance stability even at low operating temperatures, unlike aluminum-foil electrolytics.
- Extremely low leakage current.
- Standard capacitance tolerance:

- Types 110D and 111D. $\pm 20\%$;
- Type 112D and 113D $+75, -15\%$.
- Listed units have plastic wrap. For bare case, end Cat. No. in "0" instead of "1" and subtract \$.10 from price.
- For complete technical data refer to latest issue Engineering Bulletin 3601.
- For prices on quantities from 25 to 999 pieces, see your Sprague Industrial Distributor.

| μF | Size Code | Catalog Number | Net Price (1-9) |
|------------------------------|-----------|----------------|-----------------|
| TYPE 110D | | | |
| POLARIZED PLAIN-FOIL | | | |
| 3 WORKING VOLTS 0-C | | | |
| 10 | D | 110D106X0003D1 | \$ 4.30 |
| 55 | G | 110D556X0003G1 | 6.70 |
| 160 | J | 110D167X0003J1 | 10.55 |
| 350 | M | 110D357X0003M1 | 14.70 |
| 440 | P | 110D447X0003P1 | 19.70 |
| 6 WORKING VOLTS D-C | | | |
| 8 | D | 110D805X0006D1 | 4.30 |
| 30 | G | 110D306X0006G1 | 6.70 |
| 35 | G | 110D356X0006G1 | 6.70 |
| 100 | J | 110D107X0006J1 | 10.55 |
| 200 | M | 110D207X0006M1 | 14.70 |
| 300 | P | 110D307X0006P1 | 19.70 |
| 10 WORKING VOLTS D-C | | | |
| 6 | D | 110D605X0010D1 | 4.30 |
| 25 | G | 110D256X0010G1 | 6.70 |
| 80 | J | 110D806X0010J1 | 10.55 |
| 160 | M | 110D167X0010M1 | 14.70 |
| 220 | P | 110D227X0010P1 | 19.70 |
| 15 WORKING VOLTS D-C | | | |
| 4.5 | D | 110D455X0015D1 | 4.30 |
| 12 | G | 110D186X0015G1 | 6.70 |
| 55 | J | 110D556X0015J1 | 10.55 |
| 110 | M | 110D117X0015M1 | 14.70 |
| 160 | P | 110D167X0015P1 | 19.70 |
| 25 WORKING VOLTS D-C | | | |
| 3 | D | 110D305X0025D1 | 4.30 |
| 12 | G | 110D126X0025G1 | 6.70 |
| 35 | J | 110D356X0025J1 | 10.55 |
| 70 | M | 110D706X0025M1 | 14.70 |
| 100 | P | 110D107X0025P1 | 19.70 |
| 30 WORKING VOLTS D-C | | | |
| 2.5 | D | 110D255X0030D1 | 4.30 |
| 10 | G | 110D106X0030G1 | 6.70 |
| 30 | J | 110D306X0030J1 | 10.55 |
| 60 | M | 110D606X0030M1 | 14.70 |
| 85 | P | 110D856X0030P1 | 19.70 |
| 50 WORKING VOLTS D-C | | | |
| 1.5 | D | 110D155X0050D1 | 4.30 |
| 6 | G | 110D605X0050G1 | 6.70 |
| 20 | J | 110D206X0050J1 | 10.55 |
| 40 | M | 110D406X0050M1 | 14.70 |
| 55 | P | 110D556X0050P1 | 19.70 |
| 60 WORKING VOLTS D-C | | | |
| 1.2 | D | 110D125X0060D1 | 4.30 |
| 5 | G | 110D505X0060G1 | 6.70 |
| 17 | J | 110D176X0060J1 | 10.55 |
| 34 | M | 110D346X0060M1 | 14.70 |
| 48 | P | 110D486X0060P1 | 19.70 |
| 75 WORKING VOLTS D-C | | | |
| 1 | D | 110D105X0075D1 | 4.30 |
| 4 | G | 110D405X0075G1 | 6.70 |
| 14 | J | 110D146X0075J1 | 10.55 |
| 28 | M | 110D286X0075M1 | 14.70 |
| 40 | P | 110D406X0075P1 | 19.70 |
| 100 WORKING VOLTS D-C | | | |
| .8 | D | 110D804X0100D1 | 4.30 |
| 3 | G | 110D305X0100G1 | 6.70 |
| 10 | J | 110D106X0100J1 | 10.55 |
| 20 | M | 110D206X0100M1 | 14.70 |
| 30 | P | 110D306X0100P1 | 19.70 |

| μF | Size Code | Catalog Number | Net Price (1-9) |
|---------------------------------|-----------|----------------|-----------------|
| 150 WORKING VOLTS D-C | | | |
| .5 | D | 110D504X0150D1 | \$ 4.30 |
| 1 | G | 110D105X0150G1 | 6.70 |
| 2 | G | 110D205X0150G1 | 6.70 |
| 7 | J | 110D705X0150J1 | 10.55 |
| 14 | M | 110D146X0150M1 | 14.70 |
| 20 | P | 110D206X0150P1 | 19.70 |
| 200 WORKING VOLTS D-C | | | |
| .35 | D | 110D354X8200D1 | 10.95 |
| 1.5 | G | 110D155X8200G1 | 14.35 |
| 5.0 | J | 110D505X8200J1 | 20.58 |
| 10.0 | M | 110D106X8200M1 | 25.41 |
| 15.0 | P | 110D156X8200P1 | 32.02 |
| 250 WORKING VOLTS 0-C | | | |
| .3 | D | 110D304X8250D1 | 10.95 |
| 1.2 | G | 110D125X8250G1 | 14.35 |
| 4.0 | J | 110D405X8250J1 | 20.58 |
| 8.0 | M | 110D805X8250M1 | 25.41 |
| 12.0 | P | 110D126X8250P1 | 32.02 |
| TYPE 111D | | | |
| NON-POLARIZED PLAIN-FOIL | | | |
| 6 WORKING VOLTS N.P. | | | |
| 5 | D | 111D505X0006D1 | 4.30 |
| 25 | G | 111D256X0006G1 | 6.70 |
| 85 | J | 111D856X0006J1 | 10.55 |
| 170 | M | 111D177X0006M1 | 14.70 |
| 250 | P | 111D257X0006P1 | 19.70 |
| 10 WORKING VOLTS N.P. | | | |
| 3 | D | 111D305X0010D1 | 4.30 |
| 16 | G | 111D166X0010G1 | 6.70 |
| 55 | J | 111D556X0010J1 | 10.55 |
| 110 | M | 111D117X0010M1 | 14.70 |
| 150 | P | 111D157X0010P1 | 19.70 |
| 15 WORKING VOLTS N.P. | | | |
| 2.5 | D | 111D255X0015D1 | 4.30 |
| 10 | G | 111D106X0015G1 | 6.70 |
| 35 | J | 111D356X0015J1 | 10.55 |
| 70 | M | 111D706X0015M1 | 14.70 |
| 100 | P | 111D107X0015P1 | 19.70 |
| 25 WORKING VOLTS N.P. | | | |
| 1.5 | D | 111D155X0025D1 | 4.30 |
| 6 | G | 111D605X0025G1 | 6.70 |
| 20 | J | 111D206X0025J1 | 10.55 |
| 40 | M | 111D406X0025M1 | 14.70 |
| 60 | P | 111D606X0025P1 | 19.70 |
| 30 WORKING VOLTS N.P. | | | |
| 1.4 | D | 111D145X0030D1 | 4.30 |
| 5.5 | G | 111D555X0030G1 | 6.70 |
| 18 | J | 111D186X0030J1 | 10.55 |
| 36 | M | 111D366X0030M1 | 14.70 |
| 45 | P | 111D456X0030P1 | 19.70 |
| 50 WORKING VOLTS N.P. | | | |
| .8 | D | 111D804X0050D1 | 4.30 |
| 3 | G | 111D305X0050G1 | 6.70 |
| 10 | J | 111D106X0050J1 | 10.55 |
| 20 | M | 111D206X0050M1 | 14.70 |
| 30 | P | 111D306X0050P1 | 19.70 |
| 60 WORKING VOLTS N.P. | | | |
| .6 | D | 111D604X0060D1 | 4.30 |
| 2.5 | G | 111D255X0060G1 | 6.70 |
| 8.5 | J | 111D855X0060J1 | 10.55 |
| 17 | M | 111D176X0060M1 | 14.70 |
| 24 | P | 111D246X0060P1 | 19.70 |

| μF | Size Code | Catalog Number | Net Price (1-9) |
|-------------------------------|-----------|----------------|-----------------|
| 75 WORKING VOLTS N.P. | | | |
| .5 | D | 111D504X0075D1 | \$4.30 |
| 2 | G | 111D205X0075G1 | 6.70 |
| 7 | J | 111D705X0075J1 | 10.55 |
| 14 | M | 111D146X0075M1 | 14.70 |
| 20 | P | 111D206X0075P1 | 19.70 |
| 100 WORKING VOLTS N.P. | | | |
| 4 | D | 111D404X0100D1 | 4.30 |
| 1.5 | G | 111D155X0100G1 | 6.70 |
| 5 | J | 111D505X0100J1 | 10.55 |
| 10 | M | 111D106X0100M1 | 14.70 |
| 15 | P | 111D156X0100P1 | 19.70 |
| 150 WORKING VOLTS N.P. | | | |
| .25 | D | 111D254X0150D1 | 4.30 |
| 1 | G | 111D105X0150G1 | 6.70 |
| 3.5 | J | 111D355X0150J1 | 10.55 |
| 7 | M | 111D705X0150M1 | 14.70 |
| 10 | P | 111D106X0150P1 | 19.70 |
| 200 WORKING VOLTS N.P. | | | |
| .15 | D | 111D154X8200D1 | 12.53 |
| .75 | G | 111D754X8200G1 | 16.52 |
| 2.5 | J | 111D255X8200J1 | 23.66 |
| 5.0 | M | 111D505X8200M1 | 29.15 |
| 7.5 | P | 111D755X8200P1 | 36.85 |
| 250 WORKING VOLTS N.P. | | | |
| .15 | D | 111D154X8250D1 | 12.53 |
| .6 | G | 111D604X8250G1 | 16.52 |
| 2.0 | J | 111D205X8250J1 | 23.66 |
| 4.0 | M | 111D405X8250M1 | 29.15 |
| 6.0 | P | 111D605X8250P1 | 36.85 |
| TYPE 112D | | | |
| POLARIZED ETCHED-FOIL | | | |
| 15 WORKING VOLTS D-C | | | |
| 15 | D | 112D156C7015D1 | 4.30 |
| 60 | G | 112D606C7015G1 | 7.65 |
| 200 | J | 112D207C7015J1 | 12.70 |
| 400 | M | 112D407C7015M1 | 20.65 |
| 580 | P | 112D587C7015P1 | 27.45 |
| 25 WORKING VOLTS D-C | | | |
| 10 | D | 112D106C7025D1 | 4.30 |
| 40 | G | 112D406C7025G1 | 7.65 |
| 120 | J | 112D127C7025J1 | 12.70 |
| 250 | M | 112D257C7025M1 | 20.65 |
| 350 | P | 112D357C7025P1 | 27.45 |
| 30 WORKING VOLTS D-C | | | |
| 8 | D | 112D805C7030D1 | 4.30 |
| 32 | G | 112D326C7030G1 | 7.65 |
| 120 | J | 112D117C7030J1 | 12.70 |
| 210 | M | 112D227C7030M1 | 20.65 |
| 300 | P | 112D307C7030P1 | 27.45 |
| 50 WORKING VOLTS D-C | | | |
| 4.5 | D | 112D455C7050D1 | 4.30 |
| 18 | G | 112D186C7050G1 | 7.65 |
| 60 | J | 112D606C7050J1 | 12.70 |
| 100 | M | 112D107C7050M1 | 20.65 |
| 150 | P | 112D157C7050P1 | 27.45 |
| 60 WORKING VOLTS D-C | | | |
| 4 | D | 112D405C7060D1 | 4.30 |
| 75 WORKING VOLTS D-C | | | |
| 3 | D | 112D305C7075D1 | 4.30 |
| 12 | G | 112D126C7075G1 | 7.65 |
| 30 | J | 112D306C7075J1 | 12.70 |
| 70 | M | 112D706C7075M1 | 20.65 |
| 100 | P | 112D107C7075P1 | 27.45 |

| μF | Size Code | Catalog Number | Net Price (1-9) |
|----------------------------------|-----------|----------------|-----------------|
| 100 WORKING VOLTS D-C | | | |
| 2 | D | 112D205C7100D1 | \$4.30 |
| 8 | G | 112D805C7100G1 | 7.65 |
| 25 | J | 112D256C7100J1 | 12.70 |
| 50 | M | 112D506C7100M1 | 20.65 |
| 70 | P | 112D706C7100P1 | 27.45 |
| 150 WORKING VOLTS D-C | | | |
| 1 | D | 112D105C7150D1 | 4.30 |
| 4 | G | 112D405C7150G1 | 7.65 |
| 13 | J | 112D136C7150J1 | 12.70 |
| 25 | M | 112D256C7150M1 | 20.65 |
| 36 | P | 112D366C7150P1 | 27.45 |
| TYPE 113D | | | |
| NON-POLARIZED ETCHED-FOIL | | | |
| 15 WORKING VOLTS N.P. | | | |
| 10 | D | 113D106C7015D1 | 4.30 |
| 40 | G | 113D406C7015G1 | 7.65 |
| 120 | J | 113D127C7015J1 | 12.70 |
| 250 | M | 113D257C7015M1 | 20.65 |
| 350 | P | 113D357C7015P1 | 27.45 |
| 25 WORKING VOLTS N.P. | | | |
| 5 | D | 113D505C7025D1 | 4.30 |
| 20 | G | 113D206C7025G1 | 7.65 |
| 70 | J | 113D706C7025J1 | 12.70 |
| 140 | M | 113D147C7025M1 | 20.65 |
| 200 | P | 113D207C7025P1 | 27.45 |
| 30 WORKING VOLTS N.P. | | | |
| 4.5 | D | 113D455C7030D1 | 4.30 |
| 18 | G | 113D186C7030G1 | 7.65 |
| 60 | J | 113D606C7030J1 | 12.70 |
| 120 | M | 113D127C7030M1 | 20.65 |
| 170 | P | 113D177C7030P1 | 27.45 |
| 50 WORKING VOLTS N.P. | | | |
| 2.5 | D | 113D255C7050D1 | 4.30 |
| 10 | G | 113D106C7050G1 | 7.65 |
| 30 | J | 113D306C7050J1 | 12.70 |
| 60 | M | 113D606C7050M1 | 20.65 |
| 80 | P | 113D806C7050P1 | 27.45 |
| 75 WORKING VOLTS N.P. | | | |
| 1.5 | D | 113D155C7075D1 | 4.30 |
| 6 | G | 113D605C7075G1 | 7.65 |
| 15 | J | 113D156C7075J1 | 12.70 |
| 35 | M | 113D356C7075M1 | 20.65 |
| 50 | P | 113D506C7075P1 | 27.45 |
| 100 WORKING VOLTS N.P. | | | |
| 1 | D | 113D105C7100D1 | 4.30 |
| 4 | G | 113D405C7100G1 | 7.65 |
| 12 | J | 113D126C7100J1 | 12.70 |
| 25 | M | 113D256C7100M1 | 20.65 |
| 35 | P | 113D356C7100P1 | 27.45 |
| 150 WORKING VOLTS N.P. | | | |
| .5 | D | 113D504C7150D1 | 4.30 |
| 2 | G | 113D205C7150G1 | 7.6 |

SPRAGUE CAPACITORS

125°C FOIL TANTALEX® CAPACITORS

- Small size, electrically stable, long life. For data, see latest Engineering Bulletin 3602.
- 120D, 122D available as MIL-C-3965-B units.
- Tol., 120D, 121D, ±20%; 122D, 123D, -15, +75%.
- Listed units have plastic wrap. For bare metal case units, end Cat. No. in "0" in-

stead of "1" and subtract \$.10 from the unit price.

SIZE CODE (Diam. x Length)

E (13/16" x 23/32"), H (19/64" x 15/16"),
K (25/64" x 15/32"), N (25/64" x 2 5/32"),
Q (25/64" x 2 25/32").



TYPE 120D POLARIZED PLAIN-FOIL

10 WORKING VOLTS D-C

| | | | |
|-----|---|----------------|--------|
| 4.5 | E | 120D455X0010E1 | \$7.47 |
| 18 | H | 120D186X0010H1 | 9.90 |
| 55 | K | 120D556X0010K1 | 14.28 |
| 110 | N | 120D117X0010N1 | 18.41 |
| 160 | Q | 120D167X0010Q1 | 23.64 |

15 WORKING VOLTS D-C

| | | | |
|-----|---|----------------|-------|
| 3 | E | 120D305X0015E1 | 7.47 |
| 12 | H | 120D126X0015H1 | 9.90 |
| 35 | K | 120D356X0015K1 | 14.28 |
| 70 | N | 120D706X0015N1 | 18.41 |
| 100 | Q | 120D107X0015Q1 | 23.64 |

30 WORKING VOLTS D-C

| | | | |
|-----|---|----------------|-------|
| 1.5 | E | 120D155X0030E1 | 7.47 |
| 6 | H | 120D605X0030H1 | 9.90 |
| 20 | K | 120D206X0030K1 | 14.28 |
| 40 | N | 120D406X0030N1 | 18.41 |
| 55 | Q | 120D556X0030Q1 | 23.64 |

50 WORKING VOLTS D-C

| | | | |
|----|---|----------------|-------|
| 1 | E | 120D105X0050E1 | 7.47 |
| 4 | H | 120D405X0050H1 | 9.90 |
| 14 | K | 120D146X0050K1 | 14.28 |
| 28 | N | 120D286X0050N1 | 18.41 |
| 40 | Q | 120D406X0050Q1 | 23.64 |

65 WORKING VOLTS D-C

| | | | |
|----|---|----------------|-------|
| .8 | E | 120D804X0065E1 | 7.47 |
| 3 | H | 120D305X0065H1 | 9.90 |
| 10 | K | 120D106X0065K1 | 14.28 |
| 20 | N | 120D206X0065N1 | 18.41 |
| 30 | Q | 120D306X0065Q1 | 23.64 |

100 WORKING VOLTS D-C

| | | | |
|----|---|----------------|------|
| .5 | E | 120D504X0100E1 | 7.47 |
|----|---|----------------|------|

150 WORKING VOLTS D-C

| | | | |
|-----|---|----------------|-------|
| .35 | E | 120D354X0150E1 | 7.47 |
| 1.5 | H | 120D155X0150H1 | 9.90 |
| 5 | K | 120D505X0150K1 | 14.28 |
| 10 | N | 120D106X0150N1 | 18.41 |
| 15 | Q | 120D156X0150Q1 | 23.64 |

200 WORKING VOLTS D-C

| | | | |
|------|---|----------------|-------|
| 1.0 | H | 120D105X8200H1 | 14.35 |
| 3.0 | K | 120D305X8200K1 | 20.58 |
| 7.0 | N | 120D705X8200N1 | 25.41 |
| 10.0 | Q | 120D106X8200Q1 | 32.02 |

TYPE 121D NON-POLARIZED PLAIN-FOIL

10 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|-------|
| 2.5 | E | 121D255X0010E1 | 7.47 |
| 10 | H | 121D106X0010H1 | 9.90 |
| 35 | K | 121D356X0010K1 | 14.28 |
| 70 | N | 121D706X0010N1 | 18.41 |
| 100 | Q | 121D107X0010Q1 | 23.64 |

15 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|-------|
| 1.5 | E | 121D155X0015E1 | 7.47 |
| 6 | H | 121D605X0015H1 | 9.90 |
| 20 | K | 121D206X0015K1 | 14.28 |
| 40 | N | 121D406X0015N1 | 18.41 |
| 60 | Q | 121D606X0015Q1 | 23.64 |

30 WORKING VOLTS N.P.

| | | | |
|----|---|----------------|-------|
| .8 | E | 121D804X0030E1 | 7.47 |
| 3 | H | 121D305X0030H1 | 9.90 |
| 10 | K | 121D106X0030K1 | 14.28 |
| 20 | N | 121D206X0030N1 | 18.41 |

50 WORKING VOLTS N.P.

| | | | |
|----|---|----------------|-------|
| .5 | E | 121D504X0050E1 | 7.47 |
| 2 | H | 121D205X0050H1 | 9.90 |
| 7 | K | 121D705X0050K1 | 14.28 |
| 14 | N | 121D146X0050N1 | 18.41 |
| 20 | Q | 121D206X0050Q1 | 23.64 |

65 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|-------|
| .4 | E | 121D404X0065E1 | 7.47 |
| 1.5 | H | 121D155X0065H1 | 9.90 |
| 5 | K | 121D505X0065K1 | 14.28 |
| 10 | N | 121D106X0065N1 | 18.41 |
| 15 | Q | 121D156X0065Q1 | 23.64 |

100 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|-------|
| .25 | E | 121D254X0100E1 | 7.47 |
| 1.0 | H | 121D105X0100H1 | 9.90 |
| 3.5 | K | 121D355X0100K1 | 14.28 |
| 7 | N | 121D705X0100N1 | 18.41 |
| 10 | Q | 121D106X0100Q1 | 23.64 |

150 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|-------|
| .15 | E | 121D154X0150E1 | 7.47 |
| .75 | H | 121D754X0150H1 | 9.90 |
| 2.5 | K | 121D255X0150K1 | 14.28 |
| 5.0 | N | 121D505X0150N1 | 18.41 |
| 7.5 | Q | 121D755X0150Q1 | 23.64 |

200 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|-------|
| 0.5 | H | 121D504X8200H1 | 16.52 |
| 1.5 | K | 121D155X8200K1 | 23.66 |
| 3.5 | N | 121D355X8200N1 | 29.15 |
| 5.0 | Q | 121D505X8200Q1 | 36.85 |

TYPE 122D POLARIZED ETCHED-FOIL

15 WORKING VOLTS D-C

| | | | |
|-----|---|----------------|--|
| 9 | E | 122D905C7015E1 | |
| 37 | H | 122D376C7015H1 | |
| 120 | K | 122D127C7015K1 | |
| 250 | N | 122D257C7015N1 | |
| 350 | Q | 122D357C7015Q1 | |

30 WORKING VOLTS D-C

| | | | |
|-----|---|----------------|--|
| 4.5 | E | 122D455C7030E1 | |
| 18 | H | 122D186C7030H1 | |
| 60 | K | 122D606C7030K1 | |
| 100 | N | 122D107C7030N1 | |
| 150 | Q | 122D157C7030Q1 | |

50 WORKING VOLTS D-C

| | | | |
|-----|---|----------------|--|
| 3 | E | 122D305C7050E1 | |
| 12 | H | 122D126C7050H1 | |
| 30 | K | 122D306C7050K1 | |
| 70 | N | 122D706C7050N1 | |
| 100 | Q | 122D107C7050Q1 | |

65 WORKING VOLTS D-C

| | | | |
|----|---|----------------|--|
| 2 | E | 122D205C7065E1 | |
| 8 | H | 122D805C7065H1 | |
| 25 | K | 122D256C7065K1 | |
| 50 | N | 122D506C7065N1 | |
| 70 | Q | 122D706C7065Q1 | |

100 WORKING VOLTS D-C

| | | | |
|----|---|----------------|--|
| 1 | E | 122D105C7100E1 | |
| 4 | H | 122D405C7100H1 | |
| 13 | K | 122D136C7100K1 | |
| 25 | N | 122D256C7100N1 | |
| 36 | Q | 122D366C7100Q1 | |

TYPE 123D NON-POLARIZED ETCHED-FOIL

10 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|--|
| 0.5 | E | 123D504C7100E1 | |
| 2 | H | 123D205C7100H1 | |
| 6 | K | 123D605C7100K1 | |
| 12 | N | 123D126C7100N1 | |
| 18 | Q | 123D186C7100Q1 | |

10 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|--|
| 10 | E | 123D106C7100E1 | |
| 40 | H | 123D406C7100H1 | |
| 120 | K | 123D127C7100K1 | |
| 250 | N | 123D257C7100N1 | |
| 350 | Q | 123D357C7100Q1 | |

15 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|--|
| 5 | E | 123D505C7015E1 | |
| 20 | H | 123D206C7015H1 | |
| 70 | K | 123D706C7015K1 | |
| 140 | N | 123D147C7015N1 | |
| 200 | Q | 123D207C7015Q1 | |

30 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|--|
| 2.5 | E | 123D255C7030E1 | |
| 10 | H | 123D106C7030H1 | |
| 30 | K | 123D306C7030K1 | |
| 60 | N | 123D606C7030N1 | |
| 80 | Q | 123D806C7030Q1 | |

50 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|--|
| 1.5 | E | 123D155C7050E1 | |
| 6 | H | 123D605C7050H1 | |
| 15 | K | 123D156C7050K1 | |
| 35 | N | 123D356C7050N1 | |
| 50 | Q | 123D506C7050Q1 | |

65 WORKING VOLTS N.P.

| | | | |
|----|---|----------------|--|
| 1 | E | 123D105C7065E1 | |
| 4 | H | 123D405C7065H1 | |
| 12 | K | 123D126C7065K1 | |
| 25 | N | 123D256C7065N1 | |
| 35 | Q | 123D356C7065Q1 | |

100 WORKING VOLTS N.P.

| | | | |
|-----|---|----------------|--|
| 0.5 | E | 123D504C7100E1 | |
| 2 | H | 123D205C7100H1 | |
| 6 | K | 123D605C7100K1 | |
| 12 | N | 123D126C7100N1 | |
| 18 | Q | 123D186C7100Q1 | |

125°C SINTERED-ANODE TANTALEX® CAPACITORS



- Meets 2000 cy. MIL Vibration Requirements
- Listed Units Have Plastic Wrap
- For Complete Data, See Engineering Bulletin 3701
- For Prices on 25 to 499 pieces, See Your Sprague Industrial Distributor.

| | | | | | |
|-----------|--|----------|------|---------|--------------|
| | | +20 | -15% | | |
| Case Size | | and ±20% | | Net Ea. | ±10% Net Ea. |
| C | | | | \$3.61 | \$4.05 |
| F | | | | 7.79 | 8.55 |
| T | | | | 9.39 | 10.51 |

For bare metal case change last digit of Cat. No. to 0 and subtract \$.05 from net price.

SIZE CODE: C=13/64" dia. x 33/64" L., F=19/64" Dia. x 45/64" L., T=25/64 dia. x 53/64" L.

GROUP 1: +20%, -15% and ±10% Capacitance Tolerance with plastic insulation tube

| μF | WVDC | Size Code | Catalog Number | | μF | WVDC | Size Code | Catalog Number | | μF | WVDC | Size Code | Catalog Number | |
|-----|------|-----------|----------------|----------------|-----|------|-----------|----------------|----------------|-----|------|-----------|----------------|----------------|
| | | | +20% | ±10% Tol. | | | | +20% | ±10% Tol. | | | | +20% | ±10% Tol. |
| 30 | 4 | C | 130D306C2004C2 | 130D306X9004C2 | 70 | 10 | F | 130D706C2010F2 | 130D706X9010F2 | 60 | 30 | T | 130D606C2030T2 | 130D606X9030T2 |
| 140 | 4 | F | 130D147C2004F2 | 130D147X9004F2 | 170 | 10 | T | 130D177C2010T2 | 130D177X9010T2 | 4 | 40 | C | 130D405C2040C2 | 130D405X9040C2 |
| 330 | 4 | T | 130D337C2004T2 | 130D337X9004T2 | 10 | 15 | C | 130D106C2015C2 | 130D106X9015C2 | 20 | 40 | F | 130D206C2040F2 | 130D206X9040F2 |
| 25 | 5 | C | 130D256C2005C2 | 130D256X9005C2 | 50 | 15 | F | 130D506C2015F2 | 130D506X9015F2 | 50 | 40 | T | 130D506C2040T2 | 130D506X9040T2 |
| 120 | 5 | F | 130D127C2005F2 | 130D127X9005F2 | 110 | 15 | T | 130D117C2015T2 | 130D117X9015T2 | 3.5 | 50 | C | 130D355C2050C2 | 130D355X9050C2 |
| 290 | 5 | T | 130D297C2005T2 | 130D297X9005T2 | 8 | 20 | C | 130D805C2020C2 | 130D805X9020C2 | 15 | 50 | F | 130D156C2050F2 | 130D156X9050F2 |
| 20 | 7 | C | 130D206C2007C2 | 130D206X9007C2 | 40 | 20 | F | 130D406C2020F2 | 130D406X9020F2 | 40 | 50 | T | 130D406C2050T2 | 130D406X9050T2 |
| 100 | 7 | F | 130D107C2007F2 | 130D107X9007F2 | 100 | 20 | T | 130D107C2020T2 | 130D107X9020T2 | 2.5 | 70 | C | 130D255C2070C2 | 130D255X9070C2 |
| 250 | 7 | T | 130D257C2007T2 | 130D257X9007T2 | 5 | 30 | C | 130D505C2030C2 | 130D505X9030C2 | 11 | 70 | F | 130D116C2070F2 | 130D116X9070F2 |
| 15 | 10 | C | 130D156C2010C2 | 130D156X9010C2 | 25 | 30 | F | 130D256C2030F2 | 130D256X9030F2 | 30 | 70 | T | 130D306C2070T2 | 130D306X9070T2 |

GROUP 2: ±20% and ±10% Capacitance Tolerance with plastic insulation tube

| μF | WVDC | Size Code | Catalog Number | | μF | WVDC | Size Code | Catalog Number | | μF | WVDC | Size Code | Catalog Number | |
|-----|------|-----------|----------------|----------------|-----|------|-----------|----------------|----------------|-----|------|-----------|----------------|----------------|
| | | | +20% | ±10% Tol. | | | | +20% | ±10% Tol. | | | | +20% | ±10% Tol. |
| 68 | 4 | C | 130D686X0004C2 | 130D686X9004C2 | 22 | 15 | C | 130D226X0015C2 | 130D226X9015C2 | 8.2 | 40 | C | 130D825X0040C2 | 130D825X9040C2 |
| 270 | 4 | F | 130D277X0004F2 | 130D277X9004F2 | 100 | 15 | F | 130D107X0015F2 | 130D107X9015F2 | 39 | 40 | F | 130D396X0040F2 | 130D396X9040F2 |
| 560 | 4 | T | 130D567X0004T2 | 130D567X9004T2 | 180 | 15 | T | 130D187X0015T2 | 130D187X9015T2 | 68 | 40 | T | 130D686X0040T2 | 130D686X9040T2 |
| 47 | 7 | C | 130D476X0007C2 | 130D476X9007C2 | 15 | 20 | C | 130D156X0020C2 | 130D156X9020C2 | 6.8 | 50 | C | 130D681X0050C2 | 130D681X9050C2 |
| 180 | 7 | F | 130D187X0007F2 | 130D187X9007F2 | 68 | 20 | F | 130D686X0020F2 | 130D686X9020F2 | 33 | 50 | F | 130D336X0050F2 | 130D336X9050F2 |
| 390 | 7 | T | 130D397X0007T2 | 130D397X9007T2 | 150 | 20 | T | 130D157X0020T2 | 130D157X9020T2 | 56 | 50 | T | 130D566X0050T2 | 130D566X9050T2 |
| 33 | | | | | | | | | | | | | | |

SPRAGUE CAPACITORS

TYPE 109D SINTERED-ANODE TANTALEX® CAPACITORS



- Intended for Applications Where Reliable Design in Military Equipment is Required.
- Double Spun TFE-fluorocarbon Elastomer High Temp. End Seals.
- Large Values of Capacitance in Small Physical Size.
- Listed Units Have Plastic Sleeves.
- May Be Operated at 85°C at Rated Voltage and to 105°C With 15% Voltage Derating.
- Will Meet 2000 Cycle Missile Vibration Requirements.
- For Complete Technical Data, Refer to Latest Issue of Engineering Bulletin 3700.
- For Prices on Quantities From 25 to 499 Pieces, See Your Sprague Industrial Distributor.

DIMENSIONS AND NET PRICES (1-24)

| Code | Dia. x Length | +10% | +20% | +20, -15% | +75, -15% |
|------|---------------|--------|--------|-----------|-----------|
| C | 3/16 x 29/64 | \$3.02 | \$2.75 | \$2.75 | \$1.53 |
| F | 9/32 x 41/64 | 6.53 | 5.90 | 5.90 | 3.43 |
| T | 3/8 x 49/64 | 7.97 | 7.16 | 7.16 | 4.35 |

For Bare Case, End Cat. No. in "0" instead of "2," and Subtract \$.05 From Price.

GROUP 1: Available in Capacitance Tolerances of ±10%, +20, -15%; +75, -15%

| μF | Size Code | Catalog Number | | |
|-----------------------------|-----------|----------------|----------------|----------------|
| | | ±10% | +20, -15% | +75, -15% |
| 6 WORKING VOLTS D-C | | | | |
| 27 | C | 109D276X9006C2 | 109D276C2006C2 | 109D276C7006C2 |
| 30 | C | 109D306X9006C2 | 109D306C2006C2 | 109D306C7006C2 |
| 120 | F | 109D127X9006F2 | 109D127C2006F2 | 109D127C7006F2 |
| 140 | F | 109D147X9006F2 | 109D147C2006F2 | 109D147C7006F2 |
| 290 | T | 109D297X9006T2 | 109D297C2006T2 | 109D297C7006T2 |
| 330 | T | 109D337X9006T2 | 109D337C2006T2 | 109D337C7006T2 |
| 8 WORKING VOLTS D-C | | | | |
| 22 | C | 109D226C2008C2 | 109D226X9008C2 | 109D226C7008C2 |
| 25 | C | 109D256C2008C2 | 109D256X9008C2 | 109D256C7008C2 |
| 100 | F | 109D107X9008F2 | 109D107C2008F2 | 109D107C7008F2 |
| 120 | F | 109D127X9008F2 | 109D127C2008F2 | 109D127C7008F2 |
| 260 | T | 109D276X9008T2 | 109D276C2008T2 | 109D276C7008T2 |
| 290 | T | 109D297X9008T2 | 109D297C2008T2 | 109D297C7008T2 |
| 10 WORKING VOLTS D-C | | | | |
| 18 | C | 109D186X9010C2 | 109D186C2010C2 | 109D186C7010C2 |
| 20 | C | 109D206X9010C2 | 109D206C2010C2 | 109D206C7010C2 |
| 85 | F | 109D856X9010F2 | 109D856C2010F2 | 109D856C7010F2 |
| 100 | F | 109D107X9010F2 | 109D107C2010F2 | 109D107C7010F2 |
| 220 | T | 109D227X9010T2 | 109D227C2010T2 | 109D227C7010T2 |
| 250 | T | 109D257X9010T2 | 109D257C2010T2 | 109D257C7010T2 |
| 15 WORKING VOLTS D-C | | | | |
| 13 | C | 109D136X9015C2 | 109D136C2015C2 | 109D136C7015C2 |
| 15 | C | 109D156X9015C2 | 109D156C2015C2 | 109D156C7015C2 |
| 55 | F | 109D556X9015F2 | 109D556C2015F2 | 109D556C7015F2 |
| 70 | F | 109D706X9015F2 | 109D706C2015F2 | 109D706C7015F2 |
| 150 | T | 109D157X9015T2 | 109D157C2015T2 | 109D157C7015T2 |
| 170 | T | 109D177X9015T2 | 109D177C2015T2 | 109D177C7015T2 |
| 25 WORKING VOLTS D-C | | | | |
| 9 | C | 109D905X9025C2 | 109D905C2025C2 | 109D905C7025C2 |
| 10 | C | 109D106X9025C2 | 109D106C2025C2 | 109D106C7025C2 |
| 45 | F | 109D456X9025F2 | 109D456C2025F2 | 109D456C7025F2 |
| 50 | F | 109D506X9025F2 | 109D506C2025F2 | 109D506C7025F2 |
| 100 | T | 109D107X9025T2 | 109D107C2025T2 | 109D107C7025T2 |
| 110 | T | 109D117X9025T2 | 109D117C2025T2 | 109D117C7025T2 |

| μF | Size Code | Catalog Number | | |
|------------------------------|-----------|----------------|----------------|----------------|
| | | ±10% | +20, -15% | +75, -15% |
| 30 WORKING VOLTS D-C | | | | |
| 7 | C | 109D705X9030C2 | 109D705C2030C2 | 109D705C7030C2 |
| 8 | C | 109D805X9030C2 | 109D805C2030C2 | 109D805C7030C2 |
| 35 | F | 109D356X9030F2 | 109D356C2030F2 | 109D356C7030F2 |
| 40 | F | 109D406X9030F2 | 109D406C2030F2 | 109D406C7030F2 |
| 80 | T | 109D806X9030T2 | 109D806C2030T2 | 109D806C7030T2 |
| 100 | T | 109D107X9030T2 | 109D107C2030T2 | 109D107C7030T2 |
| 50 WORKING VOLTS D-C | | | | |
| 4.5 | C | 109D455X9050C2 | 109D455C2050C2 | 109D455C7050C2 |
| 5 | C | 109D505X9050C2 | 109D505C2050C2 | 109D505C7050C2 |
| 22 | F | 109D226X9050F2 | 109D226C2050F2 | 109D226C7050F2 |
| 25 | F | 109D256X9050F2 | 109D256C2050F2 | 109D256C7050F2 |
| 55 | T | 109D556X9050T2 | 109D556C2050T2 | 109D556C7050T2 |
| 60 | T | 109D606X9050T2 | 109D606C2050T2 | 109D606C7050T2 |
| 60 WORKING VOLTS D-C | | | | |
| 3.6 | C | 109D365X9060C2 | 109D365C2060C2 | 109D365C7060C2 |
| 4 | C | 109D405X9060C2 | 109D405C2060C2 | 109D405C7060C2 |
| 18 | F | 109D186X9060F2 | 109D186C2060F2 | 109D186C7060F2 |
| 20 | F | 109D206X9060F2 | 109D206C2060F2 | 109D206C7060F2 |
| 45 | T | 109D456X9060T2 | 109D456C2060T2 | 109D456C7060T2 |
| 50 | T | 109D506X9060T2 | 109D506C2060T2 | 109D506C7060T2 |
| 75 WORKING VOLTS D-C | | | | |
| 3 | C | 109D305X9075C2 | 109D305C2075C2 | 109D305C7075C2 |
| 3.5 | C | 109D355X9075C2 | 109D355C2075C2 | 109D355C7075C2 |
| 13 | F | 109D136X9075F2 | 109D136C2075F2 | 109D136C7075F2 |
| 15 | F | 109D156X9075F2 | 109D156C2075F2 | 109D156C7075F2 |
| 35 | T | 109D356X9075T2 | 109D356C2075T2 | 109D356C7075T2 |
| 40 | T | 109D406X9075T2 | 109D406C2075T2 | 109D406C7075T2 |
| 100 WORKING VOLTS D-C | | | | |
| 2.5 | C | 109D255X9100C2 | 109D255C2100C2 | 109D255C7100C2 |
| 10 | F | 109D106X9100F2 | 109D106C2100F2 | 109D106C7100F2 |
| 11 | F | 109D116X9100F2 | 109D116C2100F2 | 109D116C7100F2 |
| 27 | T | 109D276X9100T2 | 109D276C2100T2 | 109D276C7100T2 |
| 30 | T | 109D306X9100T2 | 109D306C2100T2 | 109D306C7100T2 |

GROUP 2: Available in Capacitance Tolerances of ±20% and ±10%

These capacitors have approximately twice the capacitance of Group 1 Capacitors of the same physical size at a given voltage rating.

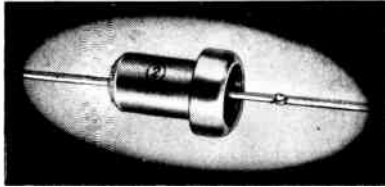
| μF | Size Code | Catalog Number | |
|-----------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 6 WORKING VOLTS D-C | | | |
| 68 | C | 109D686X0006C2 | 109D686X9006C2 |
| 270 | F | 109D277X0006F2 | 109D277X9006F2 |
| 560 | T | 109D567X0006T2 | 109D567X9006T2 |
| 8 WORKING VOLTS D-C | | | |
| 56 | C | 109D566X0008C2 | 109D566X9008C2 |
| 220 | F | 109D227X0008F2 | 109D227X9008F2 |
| 430 | T | 109D437X0008T2 | 109D437X9008T2 |
| 10 WORKING VOLTS D-C | | | |
| 47 | C | 109D476X0010C2 | 109D476X9010C2 |
| 180 | F | 109D187X0010F2 | 109D187X9010F2 |
| 390 | T | 109D397X0010T2 | 109D397X9010T2 |
| 15 WORKING VOLTS D-C | | | |
| 33 | C | 109D336X0015C2 | 109D336X9015C2 |

| μF | Size Code | Catalog Number | |
|-----------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 120 | F | 109D127X0015F2 | 109D127X9015F2 |
| 270 | T | 109D277X0015T2 | 109D277X9015T2 |
| 25 WORKING VOLTS D-C | | | |
| 22 | C | 109D226X0025C2 | 109D226X9025C2 |
| 100 | F | 109D107X0025F2 | 109D107X9025F2 |
| 180 | T | 109D187X0025T2 | 109D187X9025T2 |
| 30 WORKING VOLTS D-C | | | |
| 15 | C | 109D156X0030C2 | 109D156X9030C2 |
| 68 | F | 109D686X0030F2 | 109D686X9030F2 |
| 150 | T | 109D157X0030T2 | 109D157X9030T2 |
| 50 WORKING VOLTS D-C | | | |
| 10 | C | 109D106X0050C2 | 109D106X9050C2 |
| 47 | F | 109D476X0050F2 | 109D476X9050F2 |
| 82 | T | 109D826X0050T2 | 109D826X9050T2 |

| μF | Size Code | Catalog Number | |
|------------------------------|-----------|----------------|----------------|
| | | ±20% Tol. | ±10% Tol. |
| 60 WORKING VOLTS D-C | | | |
| 8.2 | C | 109D825X0060C2 | 109D825X9060C2 |
| 39 | F | 109D396X0060F2 | 109D396X9060F2 |
| 68 | T | 109D686X0060T2 | 109D686X9060T2 |
| 75 WORKING VOLTS D-C | | | |
| 6.8 | C | 109D685X0075C2 | 109D685X9075C2 |
| 33 | F | 109D336X0075F2 | 109D336X9075F2 |
| 56 | T | 109D566X0075T2 | 109D566X9075T2 |
| 100 WORKING VOLTS D-C | | | |
| 4.7 | C | 109D475X0100C2 | 109D475X9100C2 |
| 22 | F | 109D226X0100F2 | 109D226X9100F2 |
| 43 | T | 109D436X0100T2 | 109D436X9100T2 |

SPRAGUE CAPACITORS

85°C "CUP STYLE" TANTALEX® CAPACITORS



- -55°C to +85°C operation at full rating. 100°C operation with 15% derating.
- Stable in performance characteristics over entire temp. range.
- Large capacitance in small size.
- Extremely low leakage currents.
- 132D designed to withstand severe military vibration tests. Also available as CL44 and CL45 capacitors to meet MIL-C-3965B. See MIL listings elsewhere in these pages.
- 131D for industrial electronics is similar to 132D but designed for static use in ground equipment.
- For plastic tube on units, change "0" to "4" at end of Cat. No. and add \$.10 to price.
- For complete technical data refer to latest issue Engineering Bulletin 3710.
- For prices on quantities from 25 to 499 pieces, see your Sprague Industrial Distributor. Prices for types 131D and 133D available upon request.

| Size Code | Dimensions Dia. x Length | 1-24 Net Prices (Type 132D only) | |
|-----------|--------------------------|----------------------------------|-----------|
| | | +10% | -15, +20% |
| U | 7/32 x 15/32 | \$3.97 | \$2.70 |
| V | 9/32 x 11/16 | 6.48 | 5.85 |
| T | 3/8 x 49/64 | 8.92 | 7.11 |

INDUSTRIAL TYPE 131D

| 6 WVDC — 7 VDC SURGE | | | | 15 WVDC — 18 VDC SURGE | | | | 50 WVDC — 60 VDC SURGE | | | | 100 WVDC — 115 VDC SURGE | | | |
|-------------------------------|-----------|----------------|----------------|-------------------------------|-----------|----------------|----------------|-------------------------------|-----------|----------------|----------------|---------------------------------|-----------|----------------|----------------|
| μF | Size Code | Catalog Number | -15, +75% Tol. | μF | Size Code | Catalog Number | -15, +75% Tol. | μF | Size Code | Catalog Number | -15, +75% Tol. | μF | Size Code | Catalog Number | -15, +75% Tol. |
| 27 | U | 131D276C7006U0 | | 13 | U | 131D136C7015U0 | | 4.5 | U | 131D455C7050U0 | | 13 | V | 131D136C7075V0 | |
| 30 | U | 131D306C7006U0 | | 15 | U | 131D156C7015U0 | | 5 | U | 131D505C7050U0 | | 15 | V | 131D156C7075V0 | |
| 120 | V | 131D127C7006V0 | | 55 | V | 131D556C7015V0 | | 22 | V | 131D226C7050V0 | | 35 | T | 131D356C7075T0 | |
| 140 | V | 131D147C7006V0 | | 70 | V | 131D706C7015V0 | | 25 | V | 131D256C7050V0 | | 40 | T | 131D406C7075T0 | |
| 290 | T | 131D297C7006T0 | | 150 | T | 131D157C7015T0 | | 55 | T | 131D556C7050T0 | | 125 WVDC — 140 VDC SURGE | | | |
| 320 | T | 131D327C7006T0 | | 170 | T | 131D177C7015T0 | | 60 | T | 131D606C7050T0 | | 1.7 | U | 131D175C7125U0 | |
| 8 WVDC — 10 VDC SURGE | | | | 25 WVDC — 30 VDC SURGE | | | | 60 WVDC — 72 VDC SURGE | | | | 2 | U | 131D205C7100U0 | |
| 22 | U | 131D226C7008U0 | | 9 | U | 131D905C7025U0 | | 3.6 | U | 131D365C7060U0 | | 10 | V | 131D106C7100V0 | |
| 25 | U | 131D256C7008U0 | | 10 | U | 131D106C7025U0 | | 4 | U | 131D405C7060U0 | | 11 | V | 131D116C7100V0 | |
| 10 WVDC — 12 VDC SURGE | | | | 30 WVDC — 36 VDC SURGE | | | | 75 WVDC — 87 VDC SURGE | | | | 27 | T | 131D276C7100T0 | |
| 18 | U | 131D186C7010U0 | | 7 | U | 131D705C7030U0 | | 18 | V | 131D186C7060V0 | | 30 | T | 131D306C7100T0 | |
| 20 | U | 131D206C7010U0 | | 8 | U | 131D805C7030U0 | | 20 | V | 131D206C7060V0 | | 125 WVDC — 140 VDC SURGE | | | |
| 85 | V | 131D856C7010V0 | | 35 | V | 131D356C7030V0 | | 45 | T | 131D456C7060T0 | | 8 | V | 131D805C7125V0 | |
| 100 | V | 131D107C7010V0 | | 40 | V | 131D406C7030V0 | | 50 | T | 131D506C7060T0 | | 9 | V | 131D905C7125V0 | |
| 220 | T | 131D227C7010T0 | | 80 | T | 131D806C7030T0 | | 75 WVDC — 87 VDC SURGE | | | | 20 | T | 131D206C7125T0 | |
| 250 | T | 131D257C7010T0 | | 100 | T | 131D107C7030T0 | | 3.0 | U | 131D305C7075U0 | | 25 | T | 131D256C7125T0 | |
| | | | | | | | | 3.5 | U | 131D355C7075U0 | | | | | |

VIBRATION-PROOF TYPE 132D

| 6 WVDC — 7 VDC SURGE | | | | 25 WVDC — 30 VDC SURGE | | | | 75 WVDC — 87 VDC SURGE | | | | | | |
|-------------------------------|-----------|----------------|----------------|-------------------------------|-----|-----------|----------------|---------------------------------|----------------|---------------------------------|-----------|----------------|----------------|----------------|
| μF | Size Code | Catalog Number | +10% | -15, +20% Tol. | μF | Size Code | Catalog Number | +10% | -15, +20% Tol. | μF | Size Code | Catalog Number | +10% | -15, +20% Tol. |
| 30 | J | 132D306X9006U0 | 132D306C2006U0 | | 10 | U | 132D106X9025U0 | 132D106C2025U0 | | 3.5 | U | 132D355X9075U0 | 132D355C2075U0 | |
| 140 | V | 132D147X9006V0 | 132D147C2006V0 | | 40 | V | 132D406X9030V0 | 132D406C2030V0 | | 15 | V | 132D156X9075V0 | 132D156C2075V0 | |
| 320 | T | 132D327X9006T0 | 132D327C2006T0 | | 100 | T | 132D107X9030T0 | 132D107C2030T0 | | 40 | T | 132D406X9075T0 | 132D406C2075T0 | |
| 8 WVDC — 10 VDC SURGE | | | | 30 WVDC — 36 VDC SURGE | | | | 100 WVDC — 115 VDC SURGE | | | | | | |
| 25 | U | 132D256X9008U0 | 132D256C2008U0 | | 8 | U | 132D805X9030U0 | 132D805C2030U0 | | 2 | U | 132D205X9100U0 | 132D205C2100U0 | |
| 10 WVDC — 12 VDC SURGE | | | | 50 WVDC — 60 VDC SURGE | | | | 125 WVDC — 140 VDC SURGE | | | | | | |
| 20 | U | 132D206X9010U0 | 132D206C2010U0 | | 5 | U | 132D505X9050U0 | 132D505C2050U0 | | 11 | V | 132D116X9100V0 | 132D116C2100V0 | |
| 100 | V | 132D107X9010V0 | 132D107C2010V0 | | 25 | V | 132D256X9050V0 | 132D256C2050V0 | | 30 | T | 132D306X9100T0 | 132D306C2100T0 | |
| 250 | T | 132D257X9010T0 | 132D257C2010T0 | | 60 | T | 132D606X9050T0 | 132D606C2050T0 | | 125 WVDC — 140 VDC SURGE | | | | |
| 15 WVDC — 18 VDC SURGE | | | | 60 WVDC — 72 VDC SURGE | | | | 125 WVDC — 140 VDC SURGE | | | | | | |
| 15 | J | 132D156X9015U0 | 132D156C2015U0 | | 4 | U | 132D405X9060U0 | 132D405C2060U0 | | 1.7 | U | 132D175X9125U0 | 132D175C2125U0 | |
| 70 | V | 132D706X9015V0 | 132D706C2015V0 | | 20 | V | 132D206X9060V0 | 132D206C2060V0 | | 9 | V | 132D905X9125V0 | 132D905C2125V0 | |
| 170 | T | 132D177X9015T0 | 132D177C2015T0 | | 50 | T | 132D506X9060T0 | 132D506C2060T0 | | 25 | T | 132D256X9125T0 | 132D256C2125T0 | |

- -55°C to +125°C operation at full rating. May be up-rated 50% for operation at 85°C.
- Meet stringent requirements in military and missile applications.

125°C 'CUP STYLE' TANTALEX® CAPACITORS

- Sintered anode for unusual capacitance stability, large values of capacitance in small physical size.
- Non-tarnish finish to prevent discoloration during storage or use.
- For units with outer plastic insulating tube, substitute "4" for "0" at end of Cat. No.
- Housed in miniature silver thimble.

| 4 WORKING VOLTS D-C | | | | 5 WORKING VOLTS D-C | | | | 7 WORKING VOLTS D-C | | | | | | |
|-----------------------------|-----------|----------------|----------------|-----------------------------|-----------------------------|-----------|----------------|-----------------------------|-----------------------------|-----------------------------|-----------|----------------|----------------|------|
| μF | Size Code | Catalog Number | -15, +20% Tol. | +10% | μF | Size Code | Catalog Number | -15, +20% Tol. | +10% | μF | Size Code | Catalog Number | -15, +20% Tol. | +10% |
| 30 | U | 133D306C2004U0 | 133D306X9004U0 | | 25 | U | 133D256C2005U0 | 133D256X9005U0 | | 20 | U | 133D206C2007U0 | 133D206X9007U0 | |
| 140 | V | 133D147C2004V0 | 133D147X9004V0 | | 100 | V | 133D107C2007V0 | 133D107X9007V0 | | 100 | V | 133D107C2007V0 | 133D107X9007V0 | |
| 320 | T | 133D327C2004T0 | 133D327X9004T0 | | 250 | T | 133D257C2007T0 | 133D257X9007T0 | | 10 WORKING VOLTS D-C | | | | |
| 5 WORKING VOLTS D-C | | | | 7 WORKING VOLTS D-C | | | | 10 WORKING VOLTS D-C | | | | | | |
| 15 | U | 133D156C2010U0 | 133D156X9010U0 | | 70 | V | 133D706C2010V0 | 133D706X9010V0 | | 170 | T | 133D177C2010T0 | 133D177X9010T0 | |
| 70 | V | 133D706C2010V0 | 133D706X9010V0 | | 15 WORKING VOLTS D-C | | | | 50 WORKING VOLTS D-C | | | | | |
| 170 | T | 133D177C2010T0 | 133D177X9010T0 | | 10 | U | 133D106C2015U0 | 133D106X9015U0 | | 3.5 | U | 133D355C2050U0 | 133D355X9050U0 | |
| 7 WORKING VOLTS D-C | | | | 30 WORKING VOLTS D-C | | | | 70 WORKING VOLTS D-C | | | | | | |
| 20 | U | 133D206C2007U0 | 133D206X9007U0 | | 8 | U | 133D805C2020U0 | 133D805X9020U0 | | 15 | V | 133D156C2050V0 | 133D156X9050V0 | |
| 100 | V | 133D107C2007V0 | 133D107X9007V0 | | 40 | V | 133D406C2020V0 | 133D406X9020V0 | | 40 | T | 133D406C2050T0 | 133D406X9050T0 | |
| 250 | T | 133D257C2007T0 | 133D257X9007T0 | | 100 | T | 133D107C2020T0 | 133D107X9020T0 | | 85 WORKING VOLTS D-C | | | | |
| 10 WORKING VOLTS D-C | | | | 40 WORKING VOLTS D-C | | | | 85 WORKING VOLTS D-C | | | | | | |
| 15 | U | 133D156C2010U0 | 133D156X9010U0 | | 4 | U | 133D405C2040U0 | 133D405X9040U0 | | 1.7 | U | 133D175C2085U0 | 133D175X9085U0 | |
| 70 | V | 133D706C2010V0 | 133D706X9010V0 | | 20 | V | 133D206C2040V0 | 133D206X9040V0 | | 9 | V | 133D905C2085V0 | 133D905X9085V0 | |
| 170 | T | 133D177C2010T0 | 133D177X9010T0 | | 50 | T | 133D506C2040T0 | 133D506X9040T0 | | 25 | T | 133D256C2085T0 | 133D256X9085T0 | |

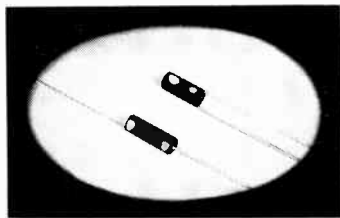
| 15 WORKING VOLTS D-C | | | | 20 WORKING VOLTS D-C | | | | 30 WORKING VOLTS D-C | | | | | | |
|-----------------------------|-----------|----------------|----------------|-----------------------------|-----------------------------|-----------|----------------|-----------------------------|-----------------------------|----|-----------|----------------|----------------|------|
| μF | Size Code | Catalog Number | -15, +20% Tol. | +10% | μF | Size Code | Catalog Number | -15, +20% Tol. | +10% | μF | Size Code | Catalog Number | -15, +20% Tol. | +10% |
| 10 | U | 133D106C2015U0 | 133D106X9015U0 | | 8 | U | 133D805C2020U0 | 133D805X9020U0 | | 5 | U | 133D505C2030U0 | 133D505X9030U0 | |
| 20 WORKING VOLTS D-C | | | | 30 WORKING VOLTS D-C | | | | 40 WORKING VOLTS D-C | | | | | | |
| 10 | U | 133D106C2015U0 | 133D106X9015U0 | | 25 | V | 133D256C2030V0 | 133D256X9030V0 | | 20 | V | 133D206C2040V0 | 133D206X9040V0 | |
| 30 WORKING VOLTS D-C | | | | 40 WORKING VOLTS D-C | | | | 50 WORKING VOLTS D-C | | | | | | |
| 8 | U | 133D805C2020U0 | 133D805X9020U0 | | 60 | T | 133D606C2030T0 | 133D606X9030T0 | | 4 | U | 133D405C2040U0 | 133D405X9040U0 | |
| 40 | V | 133D406C2020V0 | 133D406X9020V0 | | 40 WORKING VOLTS D-C | | | | 50 WORKING VOLTS D-C | | | | | |
| 100 | T | 133D107C2020T0 | 133D107X9020T0 | | 20 | V | 133D206C2040V0 | 133D206X9040V0 | | 20 | V | 133D206C2040V0 | 133D206X9040V0 | |
| 30 WORKING VOLTS D-C | | | | 40 WORKING VOLTS D-C | | | | 50 WORKING VOLTS D-C | | | | | | |
| 5 | U | 133D505C2030U0 | 133D505X9030U0 | | 50 | T | 133D506C2040T0 | 133D506X9040T0 | | 50 | T | 133D506C2040T0 | 133D506X9040T0 | |

| 50 WORKING VOLTS D-C | | | | 70 WORKING VOLTS D-C | | | | 85 WORKING VOLTS D-C | | | | | | |
|-----------------------------|-----------|----------------|----------------|-----------------------------|----|-----------|----------------|-----------------------------|------|-----|-----------|----------------|----------------|------|
| μF | Size Code | Catalog Number | -15, +20% Tol. | +10% | μF | Size Code | Catalog Number | -15, +20% Tol. | +10% | μF | Size Code | Catalog Number | -15, +20% Tol. | +10% |
| 3.5 | U | 133D355C2050U0 | 133D355X9050U0 | | 2 | U | 133D205C2070U0 | 133D205X9070U0 | | 1.7 | U | 133D175C2085U0 | 133D175X9085U0 | |
| 15 | V | 133D156C2050V0 | 133D156X9050V0 | | 11 | V | 133D116C2070V0 | 133D116X9070V0 | | 9 | V | 133D905C2085V0 | 133D905X9085V0 | |
| 40 | T | 133D406C2050T0 | 133D406X9050T0 | | 30 | T | 133D306C2070T0 | 133D306X9070T0 | | 25 | T | 133D256C2085T0 | 133D256X9085T0 | |
| 50 WORKING VOLTS D-C | | | | 70 WORKING VOLTS D-C | | | | 85 WORKING VOLTS D-C | | | | | | |

SPRAGUE CAPACITORS

TYPE 160D SOLID ELECTROLYTE TANTALEX® CAPACITORS

For Hearing Aids, Ultra-Miniature Radios, and Allied Applications

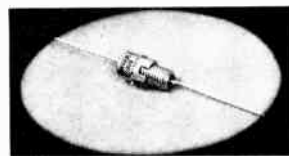


- Meet the need for a tiny, leakproof high-capacitance capacitor with long trouble-free service life.
- Solid, non-corrosive electrolyte—nothing to leak.
- Long shelf and service life.
- Completely moisture-proof—capacitor element sealed in polyester film tube with epoxy end-fill.
- Available with axial as well as single-ended leads.
- For complete technical data refer to latest issue Engineering Bulletin 3515.
- Prices available upon request.

| Case Size A—.065" D. x .150" L. | | | Case Size A—.065" D. x .150" L. | | | Case Size B—.065" D. x .190" L. | | | Case Size C—.065" D. x .240" L. | | |
|---------------------------------|------|----------|---------------------------------|------|----------|---------------------------------|------|----------|---------------------------------|------|----------|
| μF | WVDC | Cat. No. | μF | WVDC | Cat. No. | μF | WVDC | Cat. No. | μF | WVDC | Cat. No. |
| 3.0 | 2 | 160D28 | 0.2 | 15 | 160D32 | 8.0 | 2 | 160D19 | 10.0 | 2 | 160D22 |
| 2.0 | 4 | 160D27 | 0.15 | 15 | 160D33 | 5.0 | 4 | 160D36 | 8.0 | 4 | 160D18 |
| 1.5 | 4 | 160D29 | 0.1 | 15 | 160D34 | 4.0 | 4 | 160D10 | 5.0 | 8 | 160D39 |
| 1.0 | 8 | 160D25 | 0.05 | 15 | 160D35 | 2.0 | 8 | 160D20 | 4.0 | 8 | 160D24 |
| 0.8 | 8 | 160D41 | 0.01 | 15 | 160D42 | 1.5 | 8 | 160D37 | 2.0 | 15 | 160D23 |
| 0.5 | 15 | 160D30 | 0.02 | 15 | 160D43 | 1.0 | 15 | 160D21 | 1.5 | 15 | 160D40 |
| 0.4 | 15 | 160D31 | | | | 0.8 | 15 | 160D38 | | | |

TYPE 180D SOLID ELECTROLYTE TANTALEX® FEED-THRU CAPACITORS

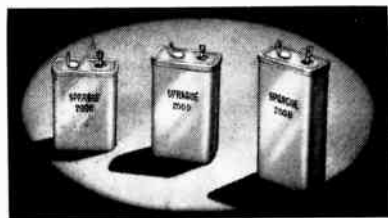
- Effectively bypasses r-f interference on low voltage d-c power circuits
- First of its kind available to designers. Positive mounting is assured with Sprague's new design.
- Large values of capacitance available in small physical size. Will carry 5 amperes d-c at 25C, 2 amperes d-c at 125C.
- Hermetically sealed in corrosion-resistant cases. Glass-to-metal solder seal terminals for maximum protection.
- Performance characteristics similar to Sprague Type 150D solid electrolyte Tantalex capacitors.
- Case measures .312 in. dia. x .689 in. long. Leads measure 1 1/2 inches.



| μF | WVDC | Surge VDC | Cat. No. |
|-----|------|-----------|--------------|
| 60 | 6 | 8 | 180D606X0006 |
| 39 | 10 | 13 | 180D396X0010 |
| 22 | 15 | 20 | 180D226X0015 |
| 15 | 20 | 26 | 180D156X0020 |
| 6.8 | 35 | 46 | 180D685X0035 |

- For complete technical data refer to latest issue Engineering Bulletin 3525.
- Prices available upon request.

TYPE 200D TANTAPAK® TANTALUM ELECTROLYTIC CAPACITORS



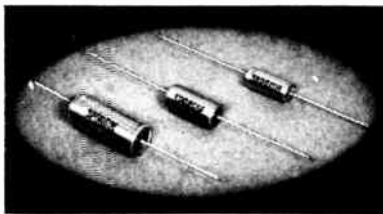
- For high capacitance, low voltage applications—meet difficult operating conditions. Dual rated for operation at both 85C and 125C.
- Find wide application in filtering, coupling, bypass, and time delay circuits in computer, missile, radar and fire control equipment.
- Porous anode construction offers better leakage and temperature coefficient characteristics than foil type capacitor section of comparable ratings.
- Superior to foil units at high temperatures and higher frequencies.
- For complete technical data refer to latest issue Engineering Bulletin 3705.
- Prices available upon request.

| Code | Height | Width | Thickness |
|------|--------|--------|-----------|
| A1 | 1 1/16 | 1 9/32 | 3/4 |
| A2 | 1 3/8 | 1 9/32 | 3/4 |
| A3 | 1 5/8 | 1 9/32 | 3/4 |
| A4 | 2 | 1 9/32 | 3/4 |
| A5 | 2 1/2 | 1 9/32 | 3/4 |

| μF | WVDC | | Size Code | Catalog Number | μF | WVDC | | Size Code | Catalog Number |
|------|------|-----|-----------|----------------|------|------|-----|-----------|----------------|
| | 125C | 85C | | | | 125C | 85C | | |
| 960 | 10 | 15 | A1 | 200D130 | 1000 | 30 | 45 | A4 | 200D173 |
| 1200 | 10 | 15 | A2 | 200D131 | 1100 | 30 | 45 | A5 | 200D174 |
| 1400 | 10 | 15 | A3 | 200D132 | 1000 | 35 | 50 | A5 | 200D180 |
| 2100 | 10 | 15 | A4 | 200D133 | 270 | 50 | 75 | A1 | 200D190 |
| 2400 | 10 | 15 | A5 | 200D134 | 330 | 50 | 75 | A2 | 200D191 |
| 520 | 20 | 30 | A1 | 200D150 | 400 | 50 | 75 | A3 | 200D192 |
| 660 | 20 | 30 | A2 | 200D151 | 600 | 50 | 75 | A4 | 200D193 |
| 820 | 20 | 30 | A3 | 200D152 | 660 | 50 | 75 | A5 | 200D194 |
| 1200 | 20 | 30 | A4 | 200D153 | 140 | 75 | 110 | A1 | 200D200 |
| 1300 | 20 | 30 | A5 | 200D154 | 180 | 75 | 110 | A2 | 200D201 |
| 430 | 30 | 45 | A1 | 200D170 | 220 | 75 | 110 | A3 | 200D202 |
| 550 | 30 | 45 | A2 | 200D171 | 320 | 75 | 110 | A4 | 200D203 |
| 660 | 30 | 45 | A3 | 200D172 | 360 | 75 | 110 | A5 | 200D204 |

SPRAGUE CAPACITORS

MIL-C-3965-B FOIL TANTALUM CAPACITORS TYPES CL24 and CL25



DIMENSIONS AND NET PRICES (1-24)

| Code | D. x L. | CL24 | CL25 |
|------|--------------|---------|---------|
| D | 3.16 x 11/16 | \$ 4.20 | \$ 4.30 |
| G | 9/32 x 7/8 | 7.55 | 7.65 |
| J | 3/8 x 1 7/16 | 12.60 | 12.70 |
| M | 3/8 x 2 1/8 | 20.55 | 20.65 |
| P | 3/8 x 2 3/4 | 27.35 | 27.45 |

- For -55°C to $+85^{\circ}\text{C}$ operation up to 150 volts in military and industrial electronic equipment.
- Low leakage current and stable temperature coefficient makes possible its use in many circuits where aluminum foil designs are undesirable.
- The electrolyte system used assures long operating and shelf life, ex-

cellent low temperature performance, chemical stability and inertness.

- MIL version of Sprague Type 112D.
- Type CL24 is a bare metal-case unit. If an outer insulating sleeve is desired, order Type CL25.
- For prices on quantities from 25 to 999 pieces, see your Sprague Industrial Distributor.

| μF | WVDC | Size Code | Military Designation* |
|---------------|------|-----------|---------------------------|
| 15 | 15 | D | CL24BE150UP3 CL25BE150UP3 |
| 60 | 15 | G | CL24BE600UP3 CL25BE600UP3 |
| 200 | 15 | J | CL24BE201UP3 CL25BE201UP3 |
| 400 | 15 | M | CL24BE401UP3 CL25BE401UP3 |
| 580 | 15 | P | CL24BE581UP3 CL25BE581UP3 |
| 10 | 25 | D | CL24BG100UP3 CL25BG100UP3 |
| 40 | 25 | G | CL24BG400UP3 CL25BG400UP3 |
| 120 | 25 | J | CL24BG121UP3 CL25BG121UP3 |
| 250 | 25 | M | CL24BG251UP3 CL25BG251UP3 |
| 350 | 25 | P | CL24BG351UP3 CL25BG351UP3 |
| 8 | 30 | D | CL24BH080UP3 CL25BH080UP3 |
| 32 | 30 | G | CL24BH320UP3 CL25BH320UP3 |

| μF | WVDC | Size Code | Military Designation* |
|---------------|------|-----------|---------------------------|
| 110 | 30 | J | CL24BH111UP3 CL25BH111UP3 |
| 220 | 30 | M | CL24BH221UP3 CL25BH221UP3 |
| 300 | 30 | P | CL24BH301UP3 CL25BH301UP3 |
| 4.5 | 50 | D | CL24BJ4R5UP3 CL25BJ4R5UP3 |
| 18 | 50 | G | CL24BJ180UP3 CL25BJ180UP3 |
| 60 | 50 | J | CL24BJ600UP3 CL25BJ600UP3 |
| 100 | 50 | M | CL24BJ101UP3 CL25BJ101UP3 |
| 150 | 50 | P | CL24BJ151UP3 CL25BJ151UP3 |
| 3 | 75 | D | CL24BL030UP3 CL25BL030UP3 |
| 12 | 75 | G | CL24BL120UP3 CL25BL120UP3 |
| 30 | 75 | J | CL24BL300UP3 CL25BL300UP3 |

| μF | WVDC | Size Code | Military Designation* |
|---------------|------|-----------|---------------------------|
| 70 | 75 | M | CL24BL700UP3 CL25BL700UP3 |
| 100 | 75 | P | CL24BL101UP3 CL25BL101UP3 |
| 2 | 100 | D | CL24BN020UP3 CL25BN020UP3 |
| 8 | 100 | G | CL24BN080UP3 CL25BN080UP3 |
| 25 | 100 | J | CL24BN250UP3 CL25BN250UP3 |
| 50 | 100 | M | CL24BN500UP3 CL25BN500UP3 |
| 70 | 100 | P | CL24BN700UP3 CL25BN700UP3 |
| 1 | 150 | D | CL24BQ010UP3 CL25BQ010UP3 |
| 4 | 150 | G | CL24BQ040UP3 CL25BQ040UP3 |
| 13 | 150 | J | CL24BQ130UP3 CL25BQ130UP3 |
| 25 | 150 | M | CL24BQ250UP3 CL25BQ250UP3 |
| 36 | 150 | P | CL24BQ360UP3 CL25BQ360UP3 |

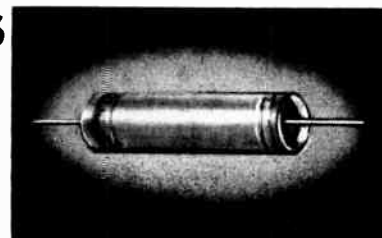
*Note: For vibration grade 1 or 2, change last digit of military designation to 1 or 2.

MIL-C-3965-B FOIL TANTALUM CAPACITORS TYPES CL34 and CL35

- For use in military and industrial electronic equipment. Designed to operate over the temperature range of 55°C to $+85^{\circ}\text{C}$ up to 150 volts.
- Long operation and shelf life, excellent low temperature performance, and optimum electrical characteristics.
- For use in circuits where aluminum foil units are unsatisfactory. Low

leakage current and good temperature coefficient.

- Type CL34 is a bare metal case unit. If an outer insulating sleeve is desired, order Type CL35.
- MIL version of Sprague Type 110D.
- For prices on quantities from 25 to 999 pieces, see your Sprague Industrial Distributor.



DIMENSIONS AND NET PRICES (1-24)

| Code | D. x L. | CL34 | CL35 |
|------|--------------|---------|---------|
| D | 3.16 x 11/16 | \$ 4.20 | \$ 4.30 |
| G | 9/32 x 7/8 | 6.60 | 6.70 |
| J | 3/8 x 1 7/16 | 10.45 | 10.55 |
| M | 3/8 x 2 1/8 | 14.60 | 14.70 |
| P | 3/8 x 2 3/4 | 19.60 | 19.70 |

| μF | WVDC | Size Code | Military Designation* |
|---------------|------|-----------|---------------------------|
| 10 | 3 | D | CL34BA100MP3 CL35BA100MP3 |
| 50 | 3 | G | CL34BA500MP3 CL35BA500MP3 |
| 8 | 6 | D | CL34BB080MP3 CL35BB080MP3 |
| 30 | 6 | G | CL34BB300MP3 CL35BB300MP3 |
| 100 | 6 | J | CL34BB101MP3 CL35BB101MP3 |
| 200 | 6 | M | CL34BB201MP3 CL35BB201MP3 |
| 300 | 6 | P | CL34BB301MP3 CL35BB301MP3 |
| 6 | 10 | D | CL34BD060MP3 CL35BD060MP3 |
| 25 | 10 | G | CL34BD250MP3 CL35BD250MP3 |
| 80 | 10 | J | CL34BD800MP3 CL35BD800MP3 |
| 160 | 10 | M | CL34BD161MP3 CL35BD161MP3 |
| 220 | 10 | P | CL34BD221MP3 CL35BD221MP3 |
| 4.5 | 15 | D | CL34BE4R5MP3 CL35BE4R5MP3 |
| 10 | 15 | G | CL34BE100MP3 CL35BE100MP3 |
| 18 | 15 | G | CL34BE180MP3 CL35BE180MP3 |

| μF | WVDC | Size Code | Military Designation* |
|---------------|------|-----------|---------------------------|
| 55 | 15 | J | CL34BE550MP3 CL35BE550MP3 |
| 110 | 15 | M | CL34BE111MP3 CL35BE111MP3 |
| 160 | 15 | P | CL34BE161MP3 CL35BE161MP3 |
| 2.5 | 30 | D | CL34BH2R5MP3 CL35BH2R5MP3 |
| 30 | 30 | J | CL34BH300MP3 CL35BH300MP3 |
| 60 | 30 | M | CL34BH600MP3 CL35BH600MP3 |
| 85 | 30 | P | CL34BH850MP3 CL35BH850MP3 |
| 1.5 | 50 | D | CL34BJ1R5MP3 CL35BJ1R5MP3 |
| 6 | 50 | G | CL34BJ060MP3 CL35BJ060MP3 |
| 20 | 50 | J | CL34BJ200MP3 CL35BJ200MP3 |
| 40 | 50 | M | CL34BJ400MP3 CL35BJ400MP3 |
| 55 | 50 | P | CL34BJ550MP3 CL35BJ550MP3 |
| 1 | 75 | D | CL34BL010MP3 CL35BL010MP3 |
| 4 | 75 | G | CL34BL040MP3 CL35BL040MP3 |
| 14 | 75 | J | CL34BL140MP3 CL35BL140MP3 |

| μF | WVDC | Size Code | Military Designation* |
|---------------|------|-----------|---------------------------|
| 28 | 75 | M | CL34BL280MP3 CL35BL280MP3 |
| 40 | 75 | P | CL34BL400MP3 CL35BL400MP3 |
| 0.8 | 100 | D | CL34BN0R8MP3 CL35BN0R8MP3 |
| 3 | 100 | G | CL34BN030MP3 CL35BN030MP3 |
| 10 | 100 | J | CL34BN100MP3 CL35BN100MP3 |
| 20 | 100 | M | CL34BN200MP3 CL35BN200MP3 |
| 30 | 100 | P | CL34BN300MP3 CL35BN300MP3 |
| 0.5 | 150 | D | CL34BQ0R5MP3 CL35BQ0R5MP3 |
| 2 | 150 | G | CL34BQ020MP3 CL35BQ020MP3 |
| 4 | 150 | G | CL34BQ040MP3 CL35BQ040MP3 |
| 7 | 150 | J | CL34BQ070MP3 CL35BQ070MP3 |
| 8 | 150 | J | CL34BQ080MP3 CL35BQ080MP3 |
| 12 | 150 | M | CL34BQ120MP3 CL35BQ120MP3 |
| 14 | 150 | M | CL34BQ140MP3 CL35BQ140MP3 |
| 20 | 150 | P | CL34BQ200MP3 CL35BQ200MP3 |

*Note: For vibration grade 1 or 2, change last digit of military designation to 1 or 2.

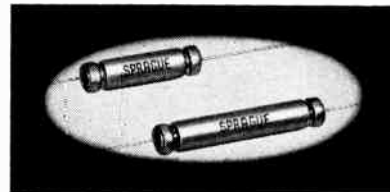
SPRAGUE CAPACITORS

MIL-C-3965B TUBULAR FOIL TANTALUM ELECTROLYTICS

- Meet Requirements of Military Specification MIL-C-3965B
- Small Electrically Stable Foil Tantalums, Long, Reliable Life
- Available in Industrial Equivalents as Types 120D, 121D, 122D
- Temperature Rating 125C
- Types Marked (*) Have Insulating Sleeves. All Others are Bare Case
- Capacitance Tolerance $\pm 20\%$

SIZE CODE (Diam x Length)

E (13/16" x 23/32"). H (19/64" x 15/16").
K (25/64" x 1 15/32"). N (25/64" x 2 5/32").
Q (25/64" x 2 25/32").



| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| TYPE CL20 | | | |
| POLARIZED ETCHED FOIL | | | |
| 10 WORKING VOLTS D-C | | | |
| 15 | E | CL20CD150UP3 | \$ 7.37 |
| 60 | H | CL20CD600UP3 | 10.49 |
| 200 | K | CL20CD201UP3 | 16.16 |
| 400 | N | CL20CD401UP3 | 24.54 |
| 580 | Q | CL20CD581UP3 | 31.75 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 15 WORKING VOLTS D-C | | | |
| 10 | E | CL20CE100UP3 | 7.37 |
| 40 | H | CL20CE400UP3 | 10.49 |
| 120 | K | CL20CE121UP3 | 16.16 |
| 250 | N | CL20CE251UP3 | 24.54 |
| 350 | Q | CL20CE351UP3 | 31.75 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 30 WORKING VOLTS D-C | | | |
| 4.5 | E | CL20CH4R5TP3 | 7.37 |
| 18 | H | CL20CH180TP3 | 10.49 |
| 60 | K | CL20CH600TP3 | 16.16 |
| 100 | N | CL20CH101TP3 | 24.54 |
| 150 | Q | CL20CH151TP3 | 31.75 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 50 WORKING VOLTS D-C | | | |
| 3 | E | CL20CJ030TP3 | 7.37 |
| 12 | H | CL20CJ120TP3 | 10.49 |
| 30 | K | CL20CJ300TP3 | 16.16 |
| 70 | N | CL20CJ700TP3 | 24.54 |
| 100 | Q | CL20CJ101TP3 | 31.75 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 60 WORKING VOLTS D-C | | | |
| 2 | E | CL20CK020TP3 | 7.37 |
| 8 | H | CL20CK080TP3 | 10.49 |
| 25 | K | CL20CK250TP3 | 16.16 |
| 30 | N | CL20CK500TP3 | 24.54 |
| 70 | Q | CL20CK700TP3 | 31.75 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| 100 WORKING VOLTS D-C | | | |
| 1 | E | CL20CN010SP3 | 7.37 |
| 4 | H | CL20CN040SP3 | 10.49 |
| 13 | K | CL20CN130SP3 | 16.16 |
| 25 | N | CL20CN250SP3 | 24.54 |
| 36 | Q | CL20CN360SP3 | 31.75 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| TYPE CL21* | | | |
| POLARIZED ETCHED FOIL | | | |
| 10 WORKING VOLTS D-C | | | |
| 15 | E | CL21CD150UP3 | 7.47 |
| 60 | H | CL21CD600UP3 | 10.59 |
| 200 | K | CL21CD201UP3 | 16.26 |
| 400 | N | CL21CD401UP3 | 24.64 |
| 580 | Q | CL21CD581UP3 | 31.85 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 15 WORKING VOLTS D-C | | | |
| 10 | E | CL21CE100UP3 | 7.47 |
| 40 | H | CL21CE400UP3 | 10.59 |
| 120 | K | CL21CE121UP3 | 16.26 |
| 250 | N | CL21CE251UP3 | 24.64 |
| 350 | Q | CL21CE351UP3 | 31.85 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 30 WORKING VOLTS D-C | | | |
| 4.5 | E | CL21CH4R5TP3 | 7.47 |
| 18 | H | CL21CH180TP3 | 10.59 |
| 60 | K | CL21CH600TP3 | 16.26 |
| 100 | N | CL21CH101TP3 | 24.64 |
| 150 | Q | CL21CH151TP3 | 31.85 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 50 WORKING VOLTS D-C | | | |
| 3 | E | CL21CJ030TP3 | 7.47 |
| 12 | H | CL21CJ120TP3 | 10.59 |
| 30 | K | CL21CJ300TP3 | 16.26 |
| 70 | N | CL21CJ700TP3 | 24.64 |
| 100 | Q | CL21CJ101TP3 | 31.85 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 60 WORKING VOLTS D-C | | | |
| 2 | E | CL21CK020TP3 | \$ 7.47 |
| 8 | H | CL21CK080TP3 | 10.59 |
| 25 | K | CL21CK250TP3 | 16.26 |
| 50 | N | CL21CK500TP3 | 24.64 |
| 70 | Q | CL21CK700TP3 | 31.85 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| 100 WORKING VOLTS D-C | | | |
| 1 | E | CL21CN010SP3 | 7.47 |
| 4 | H | CL21CN040SP3 | 10.59 |
| 13 | K | CL21CN130SP3 | 16.26 |
| 25 | N | CL21CN250SP3 | 24.64 |
| 36 | Q | CL21CN360SP3 | 31.85 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| TYPE CL30 | | | |
| POLARIZED PLAIN FOIL | | | |
| 10 WORKING VOLTS D-C | | | |
| 4.5 | E | CL30CD4R5MP3 | 7.37 |
| 18 | H | CL30CD180MP3 | 9.80 |
| 55 | K | CL30CD550MP3 | 14.18 |
| 110 | N | CL30CD111MP3 | 18.31 |
| 160 | Q | CL30CD161MP3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 15 WORKING VOLTS D-C | | | |
| 3 | E | CL30CE030MP3 | 7.37 |
| 12 | H | CL30CE120MP3 | 9.80 |
| 35 | K | CL30CE350MP3 | 14.18 |
| 70 | N | CL30CE700MP3 | 18.31 |
| 100 | Q | CL30CE101MP3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 30 WORKING VOLTS D-C | | | |
| 1.5 | E | CL30CH1R5MP3 | 7.37 |
| 6 | H | CL30CH060MP3 | 9.80 |
| 20 | K | CL30CH200MP3 | 14.18 |
| 40 | N | CL30CH400MP3 | 18.31 |
| 55 | Q | CL30CH550MP3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 50 WORKING VOLTS D-C | | | |
| 1 | E | CL30CJ010MP3 | 7.37 |
| 4 | H | CL30CJ040MP3 | 9.80 |
| 14 | K | CL30CJ140MP3 | 14.18 |
| 28 | N | CL30CJ280MP3 | 18.31 |
| 40 | Q | CL30CJ400MP3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 60 WORKING VOLTS D-C | | | |
| 0.8 | E | CL30CK0R8MP3 | 7.37 |
| 3 | H | CL30CK030MP3 | 9.80 |
| 10 | K | CL30CK100MP3 | 14.18 |
| 20 | N | CL30CK200MP3 | 18.31 |
| 30 | Q | CL30CK300MP3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| 100 WORKING VOLTS D-C | | | |
| 0.5 | E | CL30CN0R5MP3 | 7.37 |
| 2 | H | CL30CN020MP3 | 9.80 |
| 7 | K | CL30CN070MP3 | 14.18 |
| 14 | N | CL30CN140MP3 | 18.31 |
| 20 | Q | CL30CN200MP3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| 150 WORKING VOLTS D-C | | | |
| 0.35 | E | CL30CQR35MP3 | 7.37 |
| 1.5 | H | CL30CQ1R5MP3 | 9.80 |
| 5 | K | CL30CQ050MP3 | 14.18 |
| 10 | N | CL30CQ100MP3 | 18.31 |
| 15 | Q | CL30CQ150MP3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| TYPE CL31* | | | |
| POLARIZED PLAIN FOIL | | | |
| 10 WORKING VOLTS D-C | | | |
| 4.5 | E | CL31CD4R5MP3 | 7.47 |
| 18 | H | CL31CD180MP3 | 9.90 |
| 55 | K | CL31CD550MP3 | 14.28 |
| 110 | N | CL31CD111MP3 | 18.41 |
| 160 | Q | CL31CD161MP3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 15 WORKING VOLTS D-C | | | |
| 3 | E | CL31CE030MP3 | \$ 7.47 |
| 12 | H | CL31CE120MP3 | 9.90 |
| 35 | K | CL31CE350MP3 | 14.28 |
| 70 | N | CL31CE700MP3 | 18.41 |
| 100 | Q | CL31CE101MP3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 30 WORKING VOLTS D-C | | | |
| 1.5 | E | CL31CH1R5MP3 | 7.47 |
| 6 | H | CL31CH060MP3 | 9.90 |
| 20 | K | CL31CH200MP3 | 14.28 |
| 40 | N | CL31CH400MP3 | 18.41 |
| 55 | Q | CL31CH550MP3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 50 WORKING VOLTS D-C | | | |
| 1 | E | CL31CJ010MP3 | 7.47 |
| 4 | H | CL31CJ040MP3 | 9.90 |
| 14 | K | CL31CJ140MP3 | 14.28 |
| 28 | N | CL31CJ280MP3 | 18.41 |
| 40 | Q | CL31CJ400MP3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 60 WORKING VOLTS D-C | | | |
| 0.8 | E | CL31CK0R8MP3 | 7.47 |
| 3 | H | CL31CK030MP3 | 9.90 |
| 10 | K | CL31CK100MP3 | 14.28 |
| 20 | N | CL31CK200MP3 | 18.41 |
| 30 | Q | CL31CK300MP3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| 100 WORKING VOLTS D-C | | | |
| 0.5 | E | CL31CN0R5MP3 | 7.47 |
| 2 | H | CL31CN020MP3 | 9.90 |
| 7 | K | CL31CN070MP3 | 14.28 |
| 14 | N | CL31CN140MP3 | 18.41 |
| 20 | Q | CL31CN200MP3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| 150 WORKING VOLTS D-C | | | |
| 0.35 | E | CL31CQR35MP3 | 7.47 |
| 1.5 | H | CL31CQ1R5MP3 | 9.90 |
| 5 | K | CL31CQ050MP3 | 14.28 |
| 10 | N | CL31CQ100MP3 | 18.41 |
| 15 | Q | CL31CQ150MP3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|---------------------------------|-----------|--------------|----------------|
| TYPE CL32 | | | |
| NON-POLARIZED PLAIN FOIL | | | |
| 10 WORKING VOLTS D-C | | | |
| 2.5 | E | CL32CD2R5MN3 | 7.37 |
| 10 | H | CL32CD100MN3 | 9.80 |
| 35 | K | CL32CD350MN3 | 14.18 |
| 70 | N | CL32CD700MN3 | 18.31 |
| 100 | Q | CL32CD101MN3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 15 WORKING VOLTS D-C | | | |
| 1.5 | E | CL32CE1R5MN3 | 7.37 |
| 6 | H | CL32CE060MN3 | 9.80 |
| 20 | K | CL32CE200MN3 | 14.18 |
| 40 | N | CL32CE400MN3 | 18.31 |
| 60 | Q | CL32CE600MN3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 30 WORKING VOLTS D-C | | | |
| 0.8 | E | CL32CH0R8MN3 | 7.37 |
| 3 | H | CL32CH030MN3 | 9.80 |
| 10 | K | CL32CH100MN3 | 14.18 |
| 20 | N | CL32CH200MN3 | 18.31 |
| 30 | Q | CL32CH300MN3 | 23.54 |

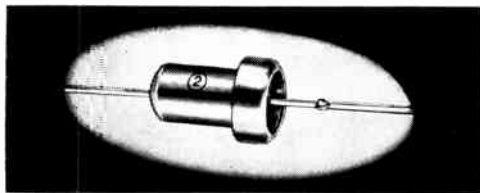
| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 50 WORKING VOLTS D-C | | | |
| 0.5 | E | CL32CJ0R5MN3 | 7.37 |
| 2 | H | CL32CJ020MN3 | 9.80 |
| 7 | K | CL32CJ070MN3 | 14.18 |
| 14 | N | CL32CJ140MN3 | 18.31 |
| 20 | Q | CL32CJ200MN3 | 23.54 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|------------------------------|-----------|--------------|----------------|
| 100 WORKING VOLTS D-C | | | |
| 0.25 | E | CL32CNR25MN3 | 7.37 |
| 1 | H | CL32CN010MN3 | 9.90 |
| 3.5 | K | CL32CN035MN3 | 14.28 |
| 7 | N | CL32CN070MN3 | 18.41 |
| 10 | Q | CL32CN100MN3 | 23.64 |

| μ F | Size Code | MIL Type | Net Ea. (1-24) |
|-----------------------------|-----------|--------------|----------------|
| 60 WORKING VOLTS D-C | | | |
| 0.4 | E | CL32CK0R4MN3 | \$ 7.37 |
| | | | |

SPRAGUE CAPACITORS

MIL-C-3965-B 'CUP-TYPE' TANTALEX® CAPACITORS TYPES CL44 and CL45



DIMENSIONS AND NET PRICES (1-24)

| Code | D. x L. | Tol. M | Tol. S | Tol. T |
|------|-----------------------------------|---------|---------|---------|
| U | $\frac{1}{2} \times \frac{1}{32}$ | \$ 4.23 | \$ 4.23 | \$ 3.78 |
| V | $\frac{1}{2} \times \frac{1}{16}$ | 8.28 | 3.28 | 7.65 |
| T | $\frac{3}{8} \times \frac{1}{16}$ | 10.35 | 10.35 | 9.45 |

- Type CL44 and CL45 Tantalex capacitors are manufactured to specification MIL-3965-B. Also available as Sprague Industrial Type 131D and 132D.
- Large capacitance values in small physical size.
- Intended for industrial, communication and ground military electronic equipment.
- Extremely low leakage currents and virtually no shelf aging.
- CL44 is a bare metal-case unit. CL45 has outer insulating sleeve.
- Capacitance tolerance: M = +20%, -20%; S = +30, -15%; T = +50, -15%.
- For prices on quantities from 25 to 499 pieces, see your Sprague Industrial Distributor.

TYPE CL44

| μ F | WVDC | Size Code | Type Number* | μ F | WVDC | Size Code | Type Number* | μ F | WVDC | Size Code | Type Number* | μ F | WVDC | Size Code | Type Number* |
|---------|------|-----------|--------------|---------|------|-----------|--------------|---------|------|-----------|--------------|---------|------|-----------|--------------|
| 30 | 6 | U | CL44BB300MP | 15 | 15 | U | CL44BE150SP | 5 | 50 | U | CL44BJ050TP | 40 | 75 | T | CL44BL400MP |
| 30 | 6 | U | CL44BB300SP | 15 | 15 | U | CL44BE150TP | 25 | 50 | V | CL44BJ250MP | 40 | 75' | T | CL44BL400SP |
| 30 | 6 | U | CL44BB300TP | 70 | 15 | V | CL44BE700MP | 25 | 50 | V | CL44BJ250SP | 40 | 75 | T | CL44BL400TP |
| 140 | 6 | V | CL44BB141MP | 70 | 15 | V | CL44BE700SP | 25 | 50 | V | CL44BJ250TP | 2.5 | 100 | U | CL44BN2R5MP |
| 140 | 6 | V | CL44BB141SP | 70 | 15 | V | CL44BE700TP | 60 | 50 | T | CL44BJ600MP | 2.5 | 100 | U | CL44BN2R5SP |
| 140 | 6 | V | CL44BB141TP | 170 | 15 | T | CL44BE171MP | 60 | 50 | T | CL44BJ600SP | 2.5 | 100 | U | CL44BN2R5TP |
| 330 | 6 | T | CL44BB331MP | 170 | 15 | T | CL44BE171SP | 60 | 50 | T | CL44BJ600TP | 11 | 100 | V | CL44BN110MP |
| 330 | 6 | T | CL44BB331SP | 170 | 15 | T | CL44BE171TP | 4 | 60 | U | CL44BK040MP | 11 | 100 | V | CL44BN110SP |
| 330 | 6 | T | CL44BB331TP | 10 | 25 | U | CL44BG100MP | 4 | 60 | U | CL44BK040SP | 11 | 100 | V | CL44BN110TP |
| 25 | 8 | U | CL44BC250MP | 10 | 25 | U | CL44BG100SP | 4 | 60 | U | CL44BK040TP | 30 | 100 | T | CL44BN300MP |
| 25 | 8 | U | CL44BC250SP | 10 | 25 | U | CL44BG100TP | 20 | 60 | V | CL44BK200MP | 30 | 100 | T | CL44BN300SP |
| 25 | 8 | U | CL44BC250TP | 8 | 30 | U | CL44BH080MP | 20 | 60 | V | CL44BK200SP | 30 | 100 | T | CL44BN300TP |
| 20 | 10 | U | CL44BD200MP | 8 | 30 | U | CL44BH080SP | 20 | 60 | V | CL44BK200TP | 1.7 | 125 | U | CL44BP1R7MP |
| 20 | 10 | U | CL44BD200SP | 8 | 30 | U | CL44BH080TP | 50 | 60 | T | CL44BK500MP | 1.7 | 125 | U | CL44BP1R7SP |
| 20 | 10 | U | CL44BD200TP | 40 | 30 | V | CL44BH400MP | 50 | 60 | T | CL44BK500SP | 1.7 | 125 | U | CL44BP1R7TP |
| 100 | 10 | V | CL44BD101MP | 40 | 30 | V | CL44BH400SP | 50 | 60 | T | CL44BK500TP | 9 | 125 | V | CL44BP090MP |
| 100 | 10 | V | CL44BD101SP | 40 | 30 | V | CL44BH400TP | 3.5 | 75 | U | CL44BL3R5MP | 9 | 125 | V | CL44BP090SP |
| 100 | 10 | V | CL44BD101TP | 100 | 30 | T | CL44BH101MP | 3.5 | 75 | U | CL44BL3R5SP | 9 | 125 | V | CL44BP090TP |
| 250 | 10 | T | CL44BD251MP | 100 | 30 | T | CL44BH101SP | 15 | 75 | V | CL44BL150MP | 25 | 125 | T | CL44BP250MP |
| 250 | 10 | T | CL44BD251SP | 100 | 30 | T | CL44BH101TP | 15 | 75 | V | CL44BL150SP | 25 | 125 | T | CL44BP250SP |
| 250 | 10 | T | CL44BD251TP | 5 | 50 | U | CL44BJ050MP | 15 | 75 | V | CL44BL150TP | 25 | 125 | T | CL44BP250TP |
| 15 | 15 | U | CL44BE150MP | 5 | 50 | U | CL44BJ050SP | 15 | 75 | V | CL44BL150TP | | | | |

For Vibration Grade 1, 2, or 3, add 1, 2, or 3 at end of Type Number.

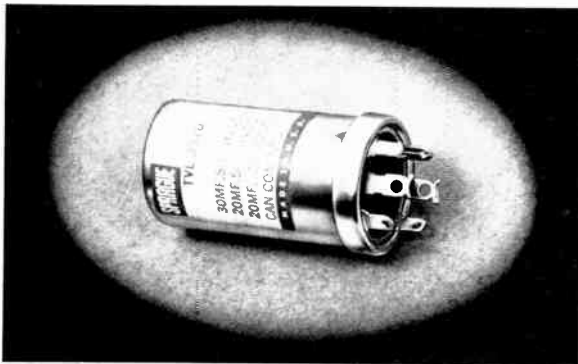
TYPE CL45

| μ F | WVDC | Size Code | Type Number* | μ F | WVDC | Size Code | Type Number* | μ F | WVDC | Size Code | Type Number* | μ F | WVDC | Size Code | Type Number* |
|---------|------|-----------|--------------|---------|------|-----------|--------------|---------|------|-----------|--------------|---------|------|-----------|--------------|
| 30 | 6 | U | CL45BB300MP | 15 | 15 | U | CL45BE150SP | 5 | 50 | U | CL45BJ050TP | 15 | 75 | V | CL45BL150TP |
| 30 | 6 | U | CL45BB300SP | 15 | 15 | U | CL45BE150TP | 25 | 50 | V | CL45BJ250MP | 40 | 75 | T | CL45BL400MP |
| 30 | 6 | U | CL45BB300TP | 70 | 15 | V | CL45BE700MP | 25 | 50 | V | CL45BJ250SP | 40 | 75 | T | CL45BL400SP |
| 140 | 6 | V | CL45BB141MP | 70 | 15 | V | CL45BE700SP | 25 | 50 | V | CL45BJ250TP | 40 | 75 | T | CL45BL400TP |
| 140 | 6 | V | CL45BB141SP | 70 | 15 | V | CL45BE700TP | 60 | 50 | T | CL45BJ600MP | 2.5 | 100 | U | CL45BN2R5MP |
| 140 | 6 | V | CL45BB141TP | 170 | 15 | T | CL45BE171MP | 60 | 50 | T | CL45BJ600SP | 2.5 | 100 | U | CL45BN2R5SP |
| 330 | 6 | T | CL45BB331MP | 170 | 15 | T | CL45BE171SP | 60 | 50 | T | CL45BJ600TP | 2.5 | 100 | U | CL45BN2R5TP |
| 330 | 6 | T | CL45BB331SP | 170 | 15 | T | CL45BE171TP | 4 | 60 | U | CL45BK040MP | 11 | 100 | V | CL45BN110MP |
| 330 | 6 | T | CL45BB331TP | 10 | 25 | U | CL45BG100MP | 4 | 60 | U | CL45BK040SP | 11 | 100 | V | CL45BN110SP |
| 25 | 8 | U | CL45BC250MP | 10 | 25 | U | CL45BG100SP | 4 | 60 | U | CL45BK040TP | 11 | 100 | V | CL45BN110TP |
| 25 | 8 | U | CL45BC250SP | 10 | 25 | U | CL45BG100TP | 20 | 60 | V | CL45BK200MP | 30 | 100 | T | CL45BN300MP |
| 25 | 8 | U | CL45BC250TP | 8 | 30 | U | CL45BH080MP | 20 | 60 | V | CL45BK200SP | 30 | 100 | T | CL45BN300SP |
| 20 | 10 | U | CL45BD200MP | 8 | 30 | U | CL45BH080SP | 20 | 60 | V | CL45BK200TP | 30 | 100 | T | CL45BN300TP |
| 20 | 10 | U | CL45BD200SP | 8 | 30 | U | CL45BH080TP | 50 | 60 | T | CL45BK500MP | 1.7 | 125 | U | CL45BP1R7MP |
| 20 | 10 | U | CL45BD200TP | 40 | 30 | V | CL45BH400MP | 50 | 60 | T | CL45BK500SP | 1.7 | 125 | U | CL45BP1R7SP |
| 100 | 10 | V | CL45BD101MP | 40 | 30 | V | CL45BH400SP | 50 | 60 | T | CL45BK500TP | 1.7 | 125 | U | CL45BP1R7TP |
| 100 | 10 | V | CL45BD101SP | 40 | 30 | V | CL45BH400TP | 3.5 | 75 | U | CL45BL3R5MP | 9 | 125 | V | CL45BP090MP |
| 100 | 10 | V | CL45BD101TP | 100 | 30 | T | CL45BH101MP | 3.5 | 75 | U | CL45BL3R5SP | 9 | 125 | V | CL45BP090SP |
| 250 | 10 | T | CL45BD251MP | 100 | 30 | T | CL45BH101SP | 3.5 | 75 | U | CL45BL3R5TP | 9 | 125 | V | CL45BP090TP |
| 250 | 10 | T | CL45BD251SP | 100 | 30 | T | CL45BH101TP | 15 | 75 | V | CL45BL150MP | 25 | 125 | T | CL45BP250MP |
| 250 | 10 | T | CL45BD251TP | 5 | 50 | U | CL45BJ050MP | 15 | 75 | V | CL45BL150SP | 25 | 125 | T | CL45BP250SP |
| 15 | 15 | U | CL45BE150MP | 5 | 50 | U | CL45BJ050SP | 15 | 75 | V | CL45BL150TP | 25 | 125 | T | CL45BP250TP |

For Vibration Grade 1, 2, or 3, add 1, 2, or 3 at end of Type Number.

SPRAGUE CAPACITORS

TVL TWIST-LOK[®] ELECTROLYTICS



- Hermetically Sealed in Aluminum Cans for Long Life and Dependable Performance in TV, Radio and Hi-Fi
- Designed for 85°C (185°F) Operation
- Stand Up Under Extremely High Temperatures Often Encountered in TV, Hi-Fi, and Auto Radio Cabinets
- Withstand High Surge Voltages
- Ideal for High Ripple Selenium Rectifier Circuits
- Can Be Safely Mounted "Above Ground" Using Phenolic Mounting Plate and Insulating Tube
- Easy to Mount — Unit Locks Firmly in Place with a Twist of the Tabs
- Furnished Complete with Both Phenolic and Metal Mounting Plates

The Twist-lok Capacitors listed here include only those ratings which would be applicable to industrial applications. For the complete line of more than 1000 Twist-loks, refer to Sprague Catalog C-614.

| μ F | WVDC | Dia. x Length | Cat. No. | Net | μ F | WVDC | Dia. x Length | Cat. No. | Net |
|---------------------|------|---------------|----------|--------|-------------------|---------|---------------|------------|--------|
| SINGLE UNITS | | | | | DUAL UNITS | | | | |
| 2000 | 6 | 1 3/8 x 2 | TVL-1115 | \$1.83 | 10 | 450 | 1 x 2 | TVL-1705 | \$.93 |
| 225 | 15 | 3/4 x 2 | TVL-1160 | 1.05 | 15 | 450 | 1 x 2 | TVL-1709 | 1.02 |
| 1000 | 15 | 1 x 2 1/2 | TVL-1165 | 1.53 | 20 | 450 | 1 x 2 | TVL-1714 | 1.08 |
| 2000 | 15 | 1 3/8 x 2 | TVL-1168 | 2.07 | 30 | 450 | 1 x 2 1/2 | TVL-1720 | 1.17 |
| 3000 | 15 | 1 3/8 x 3 | TVL-1170 | 2.55 | 40 | 450 | 1 x 3 | TVL-1725 | 1.23 |
| 4000 | 15 | 1 3/8 x 3 1/2 | TVL-1173 | 2.25 | 50 | 450 | 1 x 3 | TVL-1728 | 1.41 |
| 40 | 25 | 3/4 x 2 | TVL-1210 | .81 | 60 | 450 | 1 3/8 x 2 1/2 | TVL-1730 | 1.56 |
| 500 | 25 | 1 x 2 | TVL-1220 | 1.53 | 80 | 450 | 1 3/8 x 2 1/2 | TVL-1735 | 1.83 |
| 1000 | 25 | 1 3/8 x 2 | TVL-1230 | 2.13 | 100 | 450 | 1 3/8 x 3 | TVL-1750 | 2.07 |
| 100 | 50 | 3/4 x 2 | TVL-1317 | .99 | 125 | 450 | 1 3/8 x 4 | TVL-1760 | 2.31 |
| 150 | 50 | 3/4 x 2 1/2 | TVL-1320 | 1.08 | 40 | 475 | 1 3/8 x 2 | TVL-1820 | 1.50 |
| 250 | 50 | 1 x 2 1/2 | TVL-1324 | 1.20 | 10 | 500 | 1 x 2 | TVL-1940 | 1.02 |
| 500 | 50 | 1 3/8 x 2 1/2 | TVL-1330 | 1.59 | 20 | 500 | 1 x 2 1/2 | TVL-1943 | 1.11 |
| 1000 | 50 | 1 3/8 x 3 1/2 | TVL-1338 | 2.25 | 30 | 500 | 1 x 3 | TVL-1947 | 1.20 |
| 1500 | 50 | 1 3/8 x 4 | TVL-1341 | 2.64 | 40 | 500 | 1 x 3 1/2 | TVL-1950 | 1.50 |
| 30 | 150 | 1 x 2 | TVL-1408 | .93 | 80 | 500 | 1 3/8 x 3 | TVL-1958 | 2.16 |
| 50 | 150 | 1 x 2 | TVL-1415 | .99 | 90 | 500 | 1 3/8 x 3 1/2 | TVL-1960 | 2.10 |
| 80 | 150 | 1 x 2 1/2 | TVL-1420 | 1.11 | | | | | |
| 100 | 150 | 1 x 2 1/2 | TVL-1423 | 1.20 | | | | | |
| 120 | 150 | 1 x 2 1/2 | TVL-1425 | 1.29 | | | | | |
| 120 | 150 | 1 3/8 x 2 1/2 | TVL-1426 | 1.29 | | | | | |
| 140 | 150 | 1 x 3 | TVL-1428 | 1.29 | | | | | |
| 150 | 150 | 1 x 3 | TVL-1429 | 1.29 | | | | | |
| 150 | 150 | 1 3/8 x 3 | TVL-1430 | 1.29 | | | | | |
| 200 | 150 | 1 3/8 x 4 | TVL-1431 | 1.47 | | | | | |
| 300 | 150 | 1 3/8 x 3 1/2 | TVL-1434 | 1.68 | | | | | |
| 160 | 200 | 1 3/8 x 3 | TVL-1473 | 1.89 | | | | | |
| 20 | 250 | 1 x 2 | TVL-1509 | .96 | | | | | |
| 40 | 250 | 1 x 2 | TVL-1519 | 1.08 | | | | | |
| 100 | 250 | 1 x 3 | TVL-1535 | 1.62 | | | | | |
| 150 | 250 | 1 3/8 x 2 1/2 | TVL-1540 | 1.86 | | | | | |
| 200 | 250 | 1 3/8 x 3 1/2 | TVL-1547 | 2.19 | | | | | |
| 80 | 300 | 1 x 3 1/2 | TVL-1573 | 1.53 | | | | | |
| 100 | 300 | 1 x 4 | TVL-1578 | 1.74 | | | | | |
| 125 | 300 | 1 3/8 x 3 1/2 | TVL-1580 | 2.10 | | | | | |
| 150 | 300 | 1 3/8 x 3 1/2 | TVL-1584 | 2.10 | | | | | |
| 250 | 300 | 1 3/8 x 4 | TVL-1590 | 3.33 | | | | | |
| 30 | 350 | 1 x 2 | TVL-1617 | 1.14 | | | | | |
| 40 | 350 | 1 x 2 | TVL-1621 | 1.20 | | | | | |
| 50 | 350 | 1 x 2 | TVL-1622 | 1.26 | | | | | |
| 60 | 350 | 1 x 3 | TVL-1624 | 1.32 | | | | | |
| 80 | 350 | 1 3/8 x 2 | TVL-1630 | 1.71 | | | | | |
| 125 | 350 | 1 3/8 x 3 1/2 | TVL-1638 | 2.37 | | | | | |
| 150 | 350 | 1 3/8 x 4 | TVL-1642 | 2.37 | | | | | |
| 4 | 450 | 1 x 2 | TVL-1702 | .84 | | | | | |
| | | | | | 20-20 | 150-150 | 1 x 2 | TVL-2415 | \$1.02 |
| | | | | | 30-30 | 150-150 | 1 x 2 | TVL-2422 | 1.11 |
| | | | | | 40-20 | 150-150 | 1 x 2 | TVL-2425 | 1.11 |
| | | | | | 40-30 | 150-150 | 1 x 2 | TVL-2427 | 1.11 |
| | | | | | 40-40 | 150-150 | 1 x 2 1/2 | TVL-2428 | 1.14 |
| | | | | | 50-30 | 150-150 | 1 x 2 1/2 | TVL-2432 | 1.20 |
| | | | | | 50-50 | 150-150 | 1 x 2 1/2 | TVL-2435 | 1.29 |
| | | | | | 60-60 | 150-150 | 1 x 3 1/2 | TVL-2438 | 1.41 |
| | | | | | 70-30 | 150-150 | 1 x 2 1/2 | TVL-2439 | 1.32 |
| | | | | | 75-75 | 150-150 | 1 x 3 | TVL-2440 | 1.56 |
| | | | | | 80-40 | 150-150 | 1 3/8 x 2 1/2 | TVL-2442 | 1.38 |
| | | | | | 80-50 | 150-150 | 1 x 2 1/2 | TVL-2442.1 | 1.44 |
| | | | | | 80-80 | 150-150 | 1 3/8 x 2 | TVL-2442.4 | 1.59 |
| | | | | | 125-100 | 150-150 | 1 3/8 x 2 1/2 | TVL-2443.3 | 2.01 |
| | | | | | 150-80 | 150-150 | 1 3/8 x 2 1/2 | TVL-2443.5 | 1.83 |
| | | | | | 200-5 | 150-150 | 1 3/8 x 3 | TVL-2444 | 1.62 |
| | | | | | 200-125 | 150-150 | 1 3/8 x 3 1/2 | TVL-2445 | 2.25 |
| | | | | | 200-150 | 150-150 | 1 3/8 x 4 | TVL-2446 | 2.25 |
| | | | | | 200-200 | 150-150 | 1 3/8 x 4 | TVL-2447 | 2.40 |
| | | | | | 60-60 | 200-200 | 1 x 3 | TVL-2461 | 2.04 |
| | | | | | 60-60 | 200-200 | 1 3/8 x 2 | TVL-2462 | 2.04 |
| | | | | | 100-100 | 200-200 | 1 3/8 x 3 | TVL-2464 | 2.10 |
| | | | | | 200-5 | 200-200 | 1 3/8 x 2 | TVL-2470 | 1.83 |
| | | | | | 20-20 | 250-250 | 1 x 2 | TVL-2515 | 1.14 |
| | | | | | 40-40 | 250-250 | 1 x 2 | TVL-2520 | 1.50 |
| | | | | | 150-150 | 250-250 | 1 3/8 x 4 | TVL-2535 | 3.09 |
| | | | | | 200-200 | 250-250 | 1 3/8 x 4 | TVL-2538 | 3.63 |

SPRAGUE CAPACITORS

TVL TWIST-LOK ELECTROLYTICS, continued

| μF | WVDC | Dia. x Length | Cat. No. | Net | μF | WVDC | Dia. x Length | Cat. No. | Net |
|---------------|---------|---------------|------------|--------|---------------|-------------|---------------|------------|--------|
| 40-30 | 300-300 | 1 x 3 | TVL-2574 | \$1.59 | 80-10 | 250-250-250 | 1 x 3 | TVL-3543 | \$1.92 |
| 80-80 | 300-300 | 1 3/8 x 3 | TVL-2585 | 2.43 | 80-80-60 | 250-250-250 | 1 3/8 x 3 | TVL-3545 | 2.94 |
| 120-20 | 300-300 | 1 3/8 x 3 1/2 | TVL-2588 | 2.40 | 10-10-10 | 300-300-300 | 1 x 2 | TVL-3580 | 1.44 |
| 120-40 | 300-300 | 1 3/8 x 3 1/2 | TVL-2589 | 2.61 | 60-20-10 | 300-300-300 | 1 3/8 x 2 | TVL-3581 | 2.07 |
| 15-15 | 350-350 | 1 x 2 | TVL-2625 | 1.35 | 80-40-40 | 300-300-300 | 1 3/8 x 2 1/2 | TVL-3583 | 2.85 |
| 30-30 | 350-350 | 1 x 3 | TVL-2628 | 1.74 | 120-50-40 | 300-300-300 | 1 3/8 x 4 | TVL-3585 | 3.51 |
| 50-30 | 350-350 | 1 3/8 x 2 1/2 | TVL-2630 | 1.89 | 140-100-20 | 300-300-300 | 1 3/8 x 4 1/2 | TVL-3585.5 | 3.72 |
| 60-30 | 350-350 | 1 3/8 x 3 | TVL-2631 | 1.89 | 20-10-10 | 350-350-350 | 1 x 2 | TVL-3639.6 | 1.62 |
| 80-20 | 350-350 | 1 3/8 x 3 | TVL-2633 | 2.10 | 30-20-10 | 350-350-350 | 1 x 2 1/2 | TVL-3639.8 | 1.95 |
| 80-40 | 350-350 | 1 3/8 x 3 | TVL-2634 | 2.46 | 60-40-20 | 350-350-350 | 1 3/8 x 4 | TVL-3640 | 2.55 |
| 80-80 | 350-350 | 1 3/8 x 4 | TVL-2635 | 2.82 | 60-50-50 | 350-350-350 | 1 3/8 x 4 | TVL-3641 | 2.94 |
| 90-40 | 350-350 | 1 3/8 x 3 | TVL-2637 | 2.58 | 80-60-60 | 350-350-350 | 1 3/8 x 4 | TVL-3642 | 3.33 |
| 100-60 | 350-350 | 1 3/8 x 3 1/2 | TVL-2639 | 2.88 | 90-40-20 | 350-350-350 | 1 3/8 x 4 | TVL-3645 | 3.15 |
| 100-100 | 350-350 | 1 3/8 x 4 | TVL-2641 | 3.69 | 20-20-20 | 400-400-25 | 1 x 3 | TVL-3678 | 1.71 |
| 160-10 | 350-350 | 1 3/8 x 3 | TVL-2643 | 2.58 | 10-10-10 | 400-400-400 | 1 x 2 1/2 | TVL-3690 | 1.44 |
| 100-30 | 400-50 | 1 3/8 x 3 | TVL-2655 | 2.34 | 90-10-5 | 400-400-400 | 1 3/8 x 3 | TVL-3696 | 2.64 |
| 80-80 | 400-200 | 1 3/8 x 3 1/2 | TVL-2656 | 2.37 | 10-10-10 | 450-450-25 | 1 x 2 1/2 | TVL-3729 | 1.44 |
| 80-60 | 400-400 | 1 3/8 x 3 | TVL-2677 | 2.82 | 10-10-20 | 450-450-25 | 1 x 2 | TVL-3731 | 1.44 |
| 120-40 | 400-400 | 1 3/8 x 4 | TVL-2679 | 3.15 | 40-20-20 | 450-450-25 | 1 3/8 x 2 1/2 | TVL-3743.7 | 2.10 |
| 30-200 | 450-150 | 1 3/8 x 3 | TVL-2715 | 2.10 | 10-10-10 | 450-450-450 | 1 x 3 | TVL-3776 | 1.56 |
| 40-10 | 450-300 | 1 x 3 | TVL-2724 | 1.56 | 15-15-15 | 450-450-450 | 1 x 3 | TVL-3778.2 | 1.86 |
| 5-5 | 450-450 | 1 x 2 | TVL-2748 | 1.02 | 20-10-10 | 450-450-450 | 1 x 3 | TVL-3779 | 1.74 |
| 10-10 | 450-450 | 1 x 2 | TVL-2750 | 1.14 | 20-20-20 | 450-450-450 | 1 3/8 x 2 1/2 | TVL-3780 | 2.16 |
| 15-15 | 450-450 | 1 x 2 1/2 | TVL-2753 | 1.35 | 30-10-10 | 450-450-450 | 1 3/8 x 2 | TVL-3780.5 | 1.89 |
| 20-10 | 450-450 | 1 x 2 1/2 | TVL-2754 | 1.35 | 30-20-20 | 450-450-450 | 1 3/8 x 3 | TVL-3781 | 2.31 |
| 30-10 | 450-450 | 1 x 3 | TVL-2757 | 1.44 | 30-30-30 | 450-450-450 | 1 3/8 x 3 1/2 | TVL-3782 | 2.61 |
| 30-30 | 450-450 | 1 3/8 x 2 1/2 | TVL-2759 | 1.83 | 40-10-10 | 450-450-450 | 1 3/8 x 3 | TVL-3783 | 2.01 |
| 40-20 | 450-450 | 1 3/8 x 3 | TVL-2762 | 1.95 | 40-30-20 | 450-450-450 | 1 3/8 x 3 | TVL-3784 | 2.58 |
| 40-40 | 450-450 | 1 3/8 x 3 | TVL-2764 | 2.07 | 40-40-10 | 450-450-450 | 1 3/8 x 2 1/2 | TVL-3785 | 2.49 |
| 50-50 | 450-450 | 1 3/8 x 3 | TVL-2767 | 2.31 | 40-40-20 | 450-450-450 | 1 3/8 x 3 | TVL-3786 | 2.67 |
| 60-20 | 450-450 | 1 3/8 x 3 | TVL-2768 | 2.13 | 40-40-40 | 450-450-450 | 1 3/8 x 3 1/2 | TVL-3787 | 2.94 |
| 60-40 | 450-450 | 1 3/8 x 3 1/2 | TVL-2770 | 2.37 | 50-40-30 | 450-450-450 | 1 3/8 x 3 1/2 | TVL-3788 | 2.94 |
| 60-60 | 450-450 | 1 3/8 x 3 1/2 | TVL-2772 | 2.70 | 60-20-20 | 450-450-450 | 1 3/8 x 3 | TVL-3789 | 2.76 |
| 80-10 | 450-450 | 1 3/8 x 3 | TVL-2776 | 2.16 | 60-30-10 | 450-450-450 | 1 3/8 x 3 | TVL-3790 | 2.70 |
| 80-20 | 450-450 | 1 3/8 x 3 | TVL-2776.5 | 2.34 | 60-40-20 | 450-450-450 | 1 3/8 x 3 1/2 | TVL-3791 | 3.00 |
| 80-30 | 450-450 | 1 3/8 x 4 | TVL-2777 | 2.52 | 80-40-20 | 450-450-450 | 1 3/8 x 4 | TVL-3793 | 3.24 |
| 80-40 | 450-450 | 1 3/8 x 3 1/2 | TVL-2778 | 3.03 | 30-30-20 | 475-475-475 | 1 3/8 x 3 | TVL-3840 | 2.67 |
| 100-40 | 450-450 | 1 3/8 x 4 | TVL-2780 | 2.91 | 40-30-10 | 475-475-475 | 1 3/8 x 3 | TVL-3842.6 | 2.70 |
| 15-15 | 475-475 | 1 x 2 1/2 | TVL-2820 | 1.41 | 40-30-30 | 475-475-475 | 1 3/8 x 4 | TVL-3843 | 3.09 |
| 30-10 | 475-475 | 1 x 3 | TVL-2824 | 1.56 | 10-10-10 | 500-500-500 | 1 x 3 | TVL-3952 | 1.62 |
| 40-10 | 475-475 | 1 3/8 x 2 1/2 | TVL-2827 | 1.86 | 30-20-20 | 500-500-500 | 1 3/8 x 3 | TVL-3956 | 2.52 |
| 80-50 | 475-475 | 1 3/8 x 4 | TVL-2851 | 3.12 | 40-10-10 | 500-500-500 | 1 3/8 x 3 | TVL-3962 | 2.34 |
| 10-10 | 500-500 | 1 x 2 1/2 | TVL-2933 | 1.17 | 40-40-10 | 500-500-500 | 1 3/8 x 3 1/2 | TVL-3965 | 3.03 |
| 20-20 | 500-500 | 1 3/8 x 2 1/2 | TVL-2935 | 1.71 | | | | | |
| 30-10 | 500-500 | 1 3/8 x 3 | TVL-2936 | 1.56 | | | | | |
| 30-30 | 500-500 | 1 3/8 x 3 | TVL-2937 | 1.95 | | | | | |
| 40-40 | 500-500 | 1 3/8 x 3 | TVL-2940 | 2.58 | | | | | |
| 60-40 | 500-500 | 1 3/8 x 3 1/2 | TVL-2944 | 2.76 | | | | | |

TRIPLE UNITS

| | | | | |
|-------------|-------------|---------------|------------|--------|
| 40-20-20 | 150-150-25 | 1 x 2 1/2 | TVL-3422 | \$1.38 |
| 50-30-20 | 150-150-25 | 1 x 2 1/2 | TVL-3426.7 | 1.50 |
| 50-50-20 | 150-150-25 | 1 x 3 | TVL-3430 | 1.59 |
| 80-40-20 | 150-150-25 | 1 x 2 1/2 | TVL-3432 | 1.68 |
| 80-40-300 | 150-150-25 | 1 3/8 x 2 1/2 | TVL-3432.4 | 2.22 |
| 20-20-20 | 150-150-150 | 1 x 2 | TVL-3433 | 1.38 |
| 30-30-10 | 150-150-150 | 1 x 2 | TVL-3435 | 1.71 |
| 40-20-10 | 150-150-150 | 1 x 2 | TVL-3436 | 1.41 |
| 40-20-20 | 150-150-150 | 1 x 2 1/2 | TVL-3437 | 1.44 |
| 40-30-20 | 150-150-150 | 1 x 2 | TVL-3438 | 1.50 |
| 40-40-40 | 150-150-150 | 1 x 3 1/2 | TVL-3440 | 1.56 |
| 50-40-10 | 150-150-150 | 1 x 2 1/2 | TVL-3441 | 1.53 |
| 50-50-50 | 150-150-150 | 1 x 3 | TVL-3442 | 1.80 |
| 60-40-20 | 150-150-150 | 1 x 3 | TVL-3443 | 1.65 |
| 70-15-15 | 150-150-150 | 1 x 2 1/2 | TVL-3443.3 | 1.62 |
| 70-40-40 | 150-150-150 | 1 x 3 | TVL-3443.4 | 2.43 |
| 80-30-10 | 150-150-150 | 1 x 3 | TVL-3443.8 | 1.65 |
| 80-40-20 | 150-150-150 | 1 x 3 | TVL-3444 | 1.74 |
| 100-30-10 | 150-150-150 | 1 x 3 | TVL-3447 | 1.83 |
| 120-80-40 | 150-150-150 | 1 3/8 x 3 1/2 | TVL-3448 | 2.28 |
| 120-120-40 | 150-150-150 | 1 3/8 x 3 | TVL-3448.2 | 2.43 |
| 200-100-50 | 150-150-150 | 1 3/8 x 3 1/2 | TVL-3450 | 2.73 |
| 200-150-150 | 150-150-150 | 1 3/8 x 4 | TVL-3452 | 4.50 |
| 80-10-20 | 200-200-50 | 1 x 3 | TVL-3471 | 1.68 |
| 20-20-20 | 250-250-250 | 1 x 2 | TVL-3532 | 1.56 |
| 40-20-20 | 250-250-250 | 1 x 3 1/2 | TVL-3540 | 1.74 |

QUADRUPLE UNITS

| | | | | |
|---------------|-----------------|---------------|------------|--------|
| 40-40-40-30 | 150-150-150-150 | 1 3/8 x 2 | TVL-4441 | \$1.98 |
| 100-80-60-40 | 150-150-150-150 | 1 3/8 x 3 | TVL-4445 | 2.79 |
| 200-200-60-30 | 175-175-175-175 | 1 3/8 x 4 3/8 | TVL-4450 | 3.33 |
| 60-40-20-50 | 300-300-300-25 | 1 3/8 x 3 1/2 | TVL-4570 | 2.82 |
| 40-20-10-10 | 300-300-300-300 | 1 3/8 x 2 | TVL-4578 | 2.37 |
| 40-40-20-10 | 300-300-300-300 | 1 3/8 x 3 1/2 | TVL-4579 | 2.73 |
| 40-40-30-20 | 300-300-300-300 | 1 3/8 x 3 | TVL-4580 | 2.91 |
| 60-40-10-10 | 300-300-300-300 | 1 3/8 x 2 1/2 | TVL-4583 | 2.73 |
| 200-20-20-20 | 300-300-300-300 | 1 3/8 x 4 | TVL-4590 | 3.75 |
| 40-20-20-10 | 350-350-350-350 | 1 3/8 x 2 1/2 | TVL-4635 | 2.61 |
| 40-40-40-40 | 350-350-350-350 | 1 3/8 x 4 | TVL-4635.3 | 3.60 |
| 80-60-40-20 | 350-350-350-350 | 1 3/8 x 4 | TVL-4635.7 | 3.84 |
| 90-40-30-30 | 350-350-350-350 | 1 3/8 x 4 | TVL-4635.8 | 4.08 |
| 50-40-30-20 | 400-400-400-400 | 1 3/8 x 4 | TVL-4674 | 3.39 |
| 80-25-10-10 | 400-400-400-400 | 1 3/8 x 4 | TVL-4680 | 3.15 |
| 30-30-20-20 | 450-450-450-450 | 1 3/8 x 3 | TVL-4769.4 | 3.12 |
| 35-35-10-5 | 450-450-450-450 | 1 3/8 x 3 1/2 | TVL-4771 | 2.76 |
| 40-10-10-10 | 450-450-450-450 | 1 3/8 x 3 | TVL-4771.3 | 2.46 |
| 40-35-10-10 | 450-450-450-450 | 1 3/8 x 3 | TVL-4771.8 | 2.88 |
| 40-40-20-20 | 450-450-450-450 | 1 3/8 x 4 | TVL-4773 | 3.33 |
| 40-40-30-30 | 450-450-450-450 | 1 3/8 x 4 | TVL-4774 | 3.63 |
| 40-40-40-40 | 450-450-450-450 | 1 3/8 x 4 | TVL-4775 | 3.87 |
| 60-20-20-20 | 450-450-450-450 | 1 3/8 x 4 | TVL-4778 | 3.39 |
| 60-30-10-2 | 450-450-450-450 | 1 3/8 x 3 | TVL-4779 | 3.06 |
| 80-10-10-10 | 450-450-450-450 | 1 3/8 x 4 | TVL-4783 | 3.03 |
| 20-20-10-10 | 475-475-475-475 | 1 3/8 x 2 1/2 | TVL-4832 | 2.61 |
| 20-20-20-20 | 475-475-475-475 | 1 3/8 x 3 | TVL-4834 | 3.06 |
| 40-20-10-10 | 475-475-475-475 | 1 3/8 x 3 | TVL-4840 | 3.06 |
| 10-10-10-10 | 500-500-500-500 | 1 3/8 x 2 | TVL-4940 | 2.10 |
| 40-40-8-8 | 500-500-500-500 | 1 3/8 x 4 | TVL-4944 | 3.42 |

SPRAGUE CAPACITORS

PE OCTAL-BASE ELECTROLYTICS

- For Applications where Rapid Changing of Capacitors is Desired
- Will Fit Standard Octal-Base Tube Sockets
- Hermetically Sealed in Metal Cans for Long Life
- Will Stand Up Under High Temperatures, High Ripple Currents, High Surge Voltages

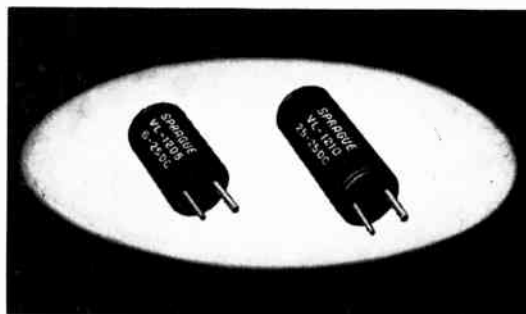


| Terminal Code | | |
|---------------|---------|---------|
| Sections | - | + |
| Single | 1 | 5 |
| Dual | 1 | 3,5 |
| Triple | 1 | 3,5,7 |
| Quadruple | Gnd Lug | 1,3,5,7 |

| μ F | WVDC | Diam. x Lgth. | Cat. No. | Net |
|-------------|----------------|----------------|----------|--------|
| 100 | 350 | 1 3/8 x 3 | PE-1636 | \$3.51 |
| 10 | 450 | 1 1/32 x 2 1/2 | PE-1705 | 2.43 |
| 20 | 450 | 1 5/32 x 2 1/2 | PE-1714 | 2.58 |
| 40 | 450 | 1 3/8 x 2 1/2 | PE-1725 | 2.73 |
| 80 | 450 | 1 3/8 x 3 1/2 | PE-1730 | 3.33 |
| 20-20 | 150-150 | 1 5/32 x 2 1/2 | PE-2415 | 2.52 |
| 40-40 | 150-150 | 1 5/32 x 2 1/2 | PE-2428 | 2.64 |
| 10-10 | 450-450 | 1 5/32 x 2 1/2 | PE-2750 | 2.64 |
| 20-20 | 450-450 | 1 3/8 x 2 1/2 | PE-2755 | 3.03 |
| 40-40 | 450-450 | 1 3/8 x 3 1/2 | PE-2764 | 3.57 |
| 10-10-10 | 450-450-450 | 1 5/32 x 2 1/2 | PE-3776 | 3.06 |
| 20-20-20 | 450-450-450 | 1 3/8 x 3 | PE-3780 | 3.66 |
| 30-30-10-20 | 450-450-450-50 | 1 3/8 x 3 1/2 | PE-4741 | 4.11 |

VL VERTI-LYTIC™ ELECTROLYTICS

- For Replacement of Units of this Type Found on Printed Wiring Boards in Original Equipment
- Sections Housed in Sturdy, Pre-Molded Phenolic Cases
- Resin End Fill Will Not Contaminate Electrolyte — Protects Against Drying or Entrance of External Moisture
- Low Leakage Current and Long Shelf Life
- Polarity Easily Determined by Larger Diameter of Negative Lead
- For Complete Technical Data, See Latest Issue of Sprague Engineering Bulletin 3060



| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|---------------|------------|---------------------------|-------------------------|--------|
| 3 WVDC | | | | |
| 1 | 3/8 x 3/4 | VL-1031 | 89D100 | \$.87 |
| 2 | 3/8 x 3/4 | VL-1032 | 89D101 | .87 |
| 3 | 3/8 x 3/4 | VL-1033 | 89D102 | .87 |
| 4 | 3/8 x 3/4 | VL-1034 | 89D103 | .87 |
| 5 | 3/8 x 3/4 | VL-1035 | 89D104 | .87 |
| 6 | 3/8 x 3/4 | VL-1036 | 89D105 | .87 |
| 8 | 3/8 x 3/4 | VL-1037 | 89D106 | .87 |
| 10 | 3/8 x 3/4 | VL-1038 | 89D107 | .87 |
| 15 | 3/8 x 3/4 | VL-1039 | 89D108 | .87 |
| 20 | 3/8 x 3/4 | VL-1040 | 89D109 | .87 |
| 25 | 3/8 x 3/4 | VL-1041 | 89D110 | .87 |
| 35 | 3/8 x 3/4 | VL-1043 | 89D111 | .90 |
| 50 | 3/8 x 3/4 | VL-1045 | 89D112 | .93 |
| 75 | 3/8 x 3/4 | VL-1048 | 89D113 | 1.02 |
| 100 | 3/8 x 7/8 | VL-1051 | 89D114 | 1.05 |
| 150 | 7/16 x 7/8 | VL-1055 | 89D115 | 1.05 |
| 200 | 7/16 x 7/8 | VL-1059 | 89D116 | 1.08 |
| 250 | 1/2 x 7/8 | VL-1063 | 89D117 | 1.17 |
| 290 | 1/2 x 7/8 | VL-1067 | 89D118 | 1.20 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|---------------|------------|---------------------------|-------------------------|------|
| 6 WVDC | | | | |
| 1 | 3/8 x 3/4 | VL-1080 | 89D119 | .87 |
| 2 | 3/8 x 3/4 | VL-1081 | 89D120 | .87 |
| 3 | 3/8 x 3/4 | VL-1082 | 89D121 | .87 |
| 4 | 3/8 x 3/4 | VL-1083 | 89D122 | .87 |
| 5 | 3/8 x 3/4 | VL-1084 | 89D123 | .87 |
| 6 | 3/8 x 3/4 | VL-1085 | 89D124 | .87 |
| 8 | 3/8 x 3/4 | VL-1086 | 89D125 | .87 |
| 10 | 3/8 x 3/4 | VL-1087 | 89D126 | .87 |
| 15 | 3/8 x 3/4 | VL-1088 | 89D127 | .87 |
| 20 | 3/8 x 3/4 | VL-1089 | 89D128 | .87 |
| 25 | 3/8 x 3/4 | VL-1090 | 89D129 | .87 |
| 35 | 3/8 x 3/4 | VL-1092 | 89D130 | .90 |
| 50 | 3/8 x 3/4 | VL-1094 | 89D131 | .93 |
| 75 | 3/8 x 7/8 | VL-1097 | 89D132 | 1.02 |
| 100 | 7/16 x 7/8 | VL-1100 | 89D133 | 1.05 |
| 150 | 1/2 x 7/8 | VL-1104 | 89D134 | 1.08 |
| 200 | 1/2 x 7/8 | VL-1108 | 89D135 | 1.17 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|----------------|------------|---------------------------|-------------------------|--------|
| 12 WVDC | | | | |
| 1 | 3/8 x 3/4 | VL-1120 | 89D136 | \$.87 |
| 2 | 3/8 x 3/4 | VL-1121 | 89D137 | .87 |
| 3 | 3/8 x 3/4 | VL-1122 | 89D138 | .87 |
| 4 | 3/8 x 3/4 | VL-1123 | 89D139 | .87 |
| 5 | 3/8 x 3/4 | VL-1124 | 89D140 | .90 |
| 6 | 3/8 x 3/4 | VL-1125 | 89D141 | .90 |
| 8 | 3/8 x 3/4 | VL-1126 | 89D142 | .90 |
| 10 | 3/8 x 3/4 | VL-1127 | 89D143 | .90 |
| 15 | 3/8 x 3/4 | VL-1128 | 89D144 | .93 |
| 20 | 3/8 x 3/4 | VL-1129 | 89D145 | .93 |
| 25 | 3/8 x 3/4 | VL-1130 | 89D146 | .93 |
| 35 | 3/8 x 3/4 | VL-1132 | 89D147 | .93 |
| 50 | 3/8 x 7/8 | VL-1134 | 89D148 | .99 |
| 75 | 7/16 x 7/8 | VL-1137 | 89D149 | 1.05 |
| 100 | 1/2 x 7/8 | VL-1140 | 89D150 | 1.14 |
| 140 | 1/2 x 7/8 | VL-1144 | 89D151 | 1.17 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|----------------|------------|---------------------------|-------------------------|------|
| 15 WVDC | | | | |
| 1 | 3/8 x 3/4 | VL-1160 | 89D152 | .87 |
| 2 | 3/8 x 3/4 | VL-1161 | 89D153 | .87 |
| 3 | 3/8 x 3/4 | VL-1162 | 89D154 | .87 |
| 4 | 3/8 x 3/4 | VL-1163 | 89D155 | .87 |
| 5 | 3/8 x 3/4 | VL-1164 | 89D156 | .90 |
| 6 | 3/8 x 3/4 | VL-1165 | 89D157 | .90 |
| 8 | 3/8 x 3/4 | VL-1166 | 89D158 | .90 |
| 10 | 3/8 x 3/4 | VL-1167 | 89D159 | .93 |
| 15 | 3/8 x 3/4 | VL-1168 | 89D160 | .93 |
| 20 | 3/8 x 3/4 | VL-1169 | 89D161 | .93 |
| 25 | 3/8 x 3/4 | VL-1170 | 89D162 | .93 |
| 35 | 3/8 x 7/8 | VL-1172 | 89D163 | .93 |
| 50 | 7/16 x 7/8 | VL-1174 | 89D164 | .99 |
| 75 | 1/2 x 7/8 | VL-1177 | 89D165 | 1.08 |
| 90 | 1/2 x 7/8 | VL-1180 | 89D166 | 1.17 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|----------------|-----------|---------------------------|-------------------------|-----|
| 25 WVDC | | | | |
| 1 | 3/8 x 3/4 | VL-1200 | 89D167 | .90 |
| 2 | 3/8 x 3/4 | VL-1201 | 89D168 | .90 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|---------------------|------------|---------------------------|-------------------------|--------|
| 25 WVDC ctd. | | | | |
| 3 | 3/8 x 3/4 | VL-1202 | 89D159 | \$.93 |
| 4 | 3/8 x 3/4 | VL-1203 | 89D170 | .99 |
| 5 | 3/8 x 3/4 | VL-1204 | 89D171 | .99 |
| 6 | 3/8 x 3/4 | VL-1205 | 89D172 | .99 |
| 8 | 3/8 x 3/4 | VL-1206 | 89D173 | .99 |
| 10 | 3/8 x 3/4 | VL-1207 | 89D174 | .99 |
| 15 | 3/8 x 3/4 | VL-1208 | 89D175 | .99 |
| 20 | 3/8 x 7/8 | VL-1209 | 89D176 | .99 |
| 25 | 3/8 x 7/8 | VL-1210 | 89D177 | .99 |
| 35 | 7/16 x 7/8 | VL-1212 | 89D178 | 1.05 |
| 50 | 1/2 x 7/8 | VL-1215 | 89D179 | 1.05 |
| 70 | 1/2 x 7/8 | VL-1218 | 89D180 | 1.17 |

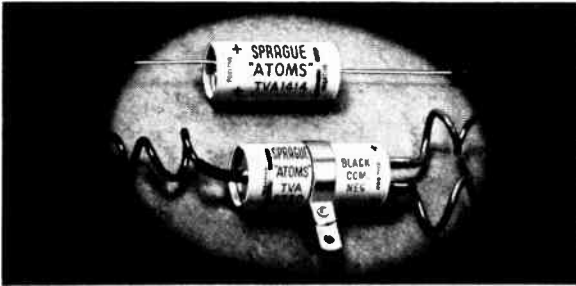
| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|----------------|------------|---------------------------|-------------------------|-----|
| 50 WVDC | | | | |
| 1 | 3/8 x 3/4 | VL-1300 | 89D181 | .90 |
| 2 | 3/8 x 3/4 | VL-1301 | 89D182 | .90 |
| 3 | 3/8 x 3/4 | VL-1302 | 89D183 | .93 |
| 4 | 3/8 x 3/4 | VL-1303 | 89D184 | .99 |
| 5 | 3/8 x 3/4 | VL-1304 | 89D185 | .99 |
| 6 | 3/8 x 3/4 | VL-1305 | 89D186 | .99 |
| 8 | 3/8 x 3/4 | VL-1306 | 89D187 | .99 |
| 10 | 3/8 x 7/8 | VL-1307 | 89D188 | .99 |
| 15 | 7/16 x 7/8 | VL-1308 | 89D189 | .99 |
| 20 | 7/16 x 7/8 | VL-1309 | 89D190 | .99 |
| 25 | 1/2 x 7/8 | VL-1310 | 89D191 | .99 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|-------------------|---------------|---------------------------|-------------------------|------|
| 6-6 WVDC | | | | |
| 100-30 | 7/16 x 1 1/16 | VL-2150 | ..... | 1.26 |
| 10-10 WVDC | | | | |
| 50-50 | 1/2 x 7/8 | VL-2250 | ..... | 1.17 |
| 80-80 | 1/2 x 7/8 | VL-2350 | ..... | 1.32 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|---------------------|--------------|---------------------------|-------------------------|------|
| 8-8-8 WVDC | | | | |
| 100-100-60 | 1/2 x 1 1/16 | VL-3320 | ..... | 2.07 |
| 10-10-3 WVDC | | | | |
| 50-50-15 | 1/2 x 7/8 | VL-3350 | ..... | 1.80 |

SPRAGUE CAPACITORS

ATOM ELECTROLYTICS



- The Smallest Dependable Standard Tubular—Designed for 85°C (185°F) Operation in Voltages to 475 WVDC
- Whether For AC-DC Sets, Auto Radios, Home Radio-phonograph Combinations, Or TV Sets, The SPRAGUE Line Will Handle All Your Replacement Requirements—No Dual Inventory Problems
- Have Low Leakage And Long Shelf Life
- Will Withstand High Temperatures, High Ripple Currents, High Surge Voltages
- Metal Case Construction with Outer Kraftboard Insulating Case Except as Noted by † Sign

| μF | WVDC | Diam. x Length* | Cat. No. | Net | μF | WVDC | Diam. x Length* | Cat. No. | Net |
|---------------------|------|-------------------|------------|-------|---|---------|-------------------|-----------|-------|
| SINGLE UNITS | | | | | | | | | |
| 50 | 6 | 3/8 x 1/4 | TVA-1100 | \$.57 | 10 | 250 | 9/16 x 1 1/16 | TVA-1504 | \$.72 |
| 100 | 6 | 1/2 x 1/8 | TVA-1101 | .72 | 12 | 250 | 9/16 x 1 1/16 | TVA-1505 | .75 |
| 250 | 6 | 5/8 x 1 1/16 | TVA-1102 | .81 | 16 | 250 | 5/8 x 1 1/16 | TVA-1507 | .78 |
| 500 | 6 | 5/8 x 2 3/16 | TVA-1103 | .93 | 20 | 250 | 1 1/16 x 1 1/16 | TVA-1508 | .87 |
| 1000 | 6 | 3/4 x 2 3/16 | TVA-1104 | 1.14 | 30 | 250 | 1 1/16 x 2 3/16 | TVA-1510 | .81 |
| 1500 | 6 | 1 3/16 x 2 1 1/16 | TVA-1105 | 1.26 | 40 | 250 | 3/4 x 2 3/16 | TVA-1511 | .93 |
| 2000 | 6 | 1 3/16 x 2 1 3/16 | TVA-1106 | 1.38 | 50 | 250 | 3/4 x 2 3/16 | TVA-1512 | 1.02 |
| 100 | 12 | 9/16 x 1 3/16 | TVA-1130 | .72 | 60 | 250 | 1 3/16 x 2 3/16 | TVA-1513 | 1.08 |
| 250 | 12 | 5/8 x 1 1 1/16 | TVA-1131 | .87 | 140 | 300 | 1 3/8 x 3 3/8 | TVA-1575† | 1.89 |
| 500 | 12 | 3/4 x 1 1 1/16 | TVA-1132 | 1.02 | 4 | 350 | 1/2 x 1 5/8 | TVA-1601 | .63 |
| 1000 | 12 | 1 3/16 x 2 3/16 | TVA-1133 | 1.35 | 8 | 350 | 5/8 x 1 1 1/16 | TVA-1603 | .72 |
| 100 | 15 | 5/8 x 1 3/16 | TVA-1160 | .75 | 10 | 350 | 1 1/16 x 1 1 1/16 | TVA-1604 | .75 |
| 250 | 15 | 5/8 x 1 1 1/16 | TVA-1161 | .93 | 12 | 350 | 3/4 x 1 1 1/16 | TVA-1605 | .78 |
| 500 | 15 | 1 1/16 x 2 3/16 | TVA-1162 | 1.05 | 16 | 350 | 5/8 x 1 1 1/16 | TVA-1607 | .84 |
| 1000 | 15 | 3/4 x 2 3/16 | TVA-1163 | 1.38 | 20 | 350 | 1 3/16 x 1 1 1/16 | TVA-1608 | .87 |
| 2 | 25 | 3/8 x 1/4 | TVA-1201 | .54 | 30 | 350 | 1 3/16 x 2 3/16 | TVA-1610 | .99 |
| 5 | 25 | 3/8 x 1/4 | TVA-1203 | .60 | 40 | 350 | 7/8 x 2 3/16 | TVA-1611 | 1.05 |
| 10 | 25 | 3/8 x 1/4 | TVA-1204 | .60 | 60 | 350 | 1 x 2 3/16 | TVA-1613 | 1.17 |
| 25 | 25 | 3/8 x 1/4 | TVA-1205 | .60 | 10 | 400NP | 1 1/16 x 2 1/16 | TVA-1650 | .90 |
| 50 | 25 | 9/16 x 1 3/16 | TVA-1206 | .66 | 1 | 450 | 7/16 x 1 1/8 | TVA-1700 | .66 |
| 100 | 25 | 9/16 x 1 1 1/16 | TVA-1207 | .81 | 2 | 450 | 7/16 x 1 3/8 | TVA-1701 | .66 |
| 250 | 25 | 3/4 x 1 1 1/16 | TVA-1208 | 1.02 | 4 | 450 | 9/16 x 1 1 1/16 | TVA-1702 | .69 |
| 500 | 25 | 3/4 x 2 3/16 | TVA-1209 | 1.38 | 8 | 450 | 1 1/16 x 1 1 1/16 | TVA-1704 | .75 |
| 1 | 50 | 3/8 x 1/4 | TVA-1300 | .54 | 10 | 450 | 1 1/16 x 1 1 1/16 | TVA-1705 | .78 |
| 2 | 50 | 3/8 x 1/4 | TVA-1301 | .54 | 12 | 450 | 3/4 x 1 1 1/16 | TVA-1706 | .81 |
| 5 | 50 | 3/8 x 1/4 | TVA-1303 | .60 | 16 | 450 | 3/4 x 2 3/16 | TVA-1708 | .84 |
| 10 | 50 | 3/8 x 1/4 | TVA-1304 | .60 | 20 | 450 | 3/4 x 2 3/16 | TVA-1709 | .93 |
| 20 | 50 | 7/16 x 1 3/8 | TVA-1305.5 | .60 | 30 | 450 | 7/8 x 2 3/16 | TVA-1711 | 1.02 |
| 25 | 50 | 7/16 x 1 3/8 | TVA-1306 | .63 | 40 | 450 | 7/8 x 2 1 1/16 | TVA-1712 | 1.08 |
| 50 | 50 | 9/16 x 1 1 1/16 | TVA-1308 | .72 | 50 | 450 | 7/8 x 3 3/16 | TVA-1713 | 1.26 |
| 100 | 50 | 1 1/16 x 1 1 1/16 | TVA-1310 | .84 | 60 | 450 | 1 x 3 1 1/16 | TVA-1714 | 1.41 |
| 150 | 50 | 3/4 x 1 1 1/16 | TVA-1311 | .93 | 80 | 450 | 1 x 3 1 1/16 | TVA-1716 | 1.68 |
| 250 | 50 | 1 5/16 x 1 1 1/16 | TVA-1312 | 1.05 | 100 | 450 | 1 3/8 x 4 1/8 | TVA-1718† | 1.92 |
| 500 | 50 | 1 x 1 1 1/16 | TVA-1315 | 1.44 | 10 | 475 | 3/4 x 1 1 3/16 | TVA-1802 | .81 |
| 4 | 150 | 3/8 x 1/4 | TVA-1402 | .60 | 20 | 475 | 7/8 x 2 3/16 | TVA-1804 | .96 |
| 5 | 150 | 3/8 x 1/4 | TVA-1403 | .60 | 8 | 500 | 7/8 x 1 1 1/16 | TVA-1902 | .78 |
| 8 | 150 | 3/8 x 1 3/8 | TVA-1405 | .63 | 10 | 500 | 7/8 x 1 1 1/16 | TVA-1903 | .81 |
| 10 | 150 | 3/8 x 1 3/8 | TVA-1406 | .63 | 16 | 500 | 1 3/16 x 2 3/16 | TVA-1905 | .90 |
| 12 | 150 | 1/2 x 1 3/8 | TVA-1407 | .66 | 20 | 500 | 1 x 2 3/16 | TVA-1906 | .96 |
| 16 | 150 | 9/16 x 1 1 1/16 | TVA-1409 | .69 | 8 | 600 | 1 x 3 1/16 | TVA-1962 | 1.71 |
| 20 | 150 | 9/16 x 1 1 1/16 | TVA-1410 | .72 | 10 | 600 | 1 x 3 1/16 | TVA-1963 | 1.77 |
| 25 | 150 | 5/8 x 1 1 1/16 | TVA-1411 | .75 | 16 | 600 | 1 x 4 1/16 | TVA-1965 | 2.07 |
| 30 | 150 | 5/8 x 1 1 1/16 | TVA-1412 | .78 | 20 | 600 | 1 x 4 1/16 | TVA-1966 | 2.13 |
| 40 | 150 | 3/4 x 1 1 1/16 | TVA-1413 | .81 | DUAL UNITS (COMMON NEGATIVE — 3 LEADS) | | | | |
| 50 | 150 | 1 3/16 x 1 1 1/16 | TVA-1414 | .84 | 10-10 | 25-25 | 7/8 x 1 3/16 | TVA-2210 | \$.84 |
| 60 | 150 | 7/8 x 1 1 1/16 | TVA-1415 | .90 | 10-10 | 50-50 | 7/8 x 1 3/16 | TVA-2315 | .84 |
| 80 | 150 | 7/8 x 1 1 3/16 | TVA-1418 | .96 | 8-8 | 150-150 | 7/8 x 1 3/16 | TVA-2415 | .90 |
| 100 | 150 | 7/8 x 2 3/16 | TVA-1420 | 1.05 | 16-16 | 150-150 | 7/8 x 1 3/16 | TVA-2420 | 1.08 |
| 150 | 150 | 1 x 2 3/16 | TVA-1422 | 1.14 | 20-12 | 150-150 | 7/8 x 1 3/16 | TVA-2425 | .96 |
| 200 | 150 | 1 x 3 1 3/16 | TVA-1423 | 1.32 | 20-20 | 150-150 | 7/8 x 1 3/16 | TVA-2428 | .99 |
| 300 | 150 | 1 3/8 x 3 3/8 | TVA-1425† | 1.53 | 30-20 | 150-150 | 7/8 x 1 1 1/16 | TVA-2421 | 1.02 |
| 150 | 200 | 1 3/8 x 3 3/8 | TVA-1447 | 1.53 | 30-30 | 150-150 | 7/8 x 1 1 1/16 | TVA-2434 | 1.08 |
| 200 | 200 | 1 3/8 x 3 3/8 | TVA-1480† | 1.74 | 40-20 | 150-150 | 7/8 x 1 1 1/16 | TVA-2438 | 1.05 |
| 4 | 250 | 7/16 x 1 3/8 | TVA-1501 | .60 | 40-30 | 150-150 | 7/8 x 1 1 3/16 | TVA-2442 | 1.08 |
| 8 | 250 | 1/2 x 1 3/8 | TVA-1503 | .69 | 40-40 | 150-150 | 7/8 x 1 1 3/16 | TVA-2445 | 1.11 |
| | | | | | 50-30 | 150-150 | 7/8 x 1 1 3/16 | TVA-2450 | 1.17 |
| | | | | | 50-50 | 150-150 | 7/8 x 2 3/16 | TVA-2453 | 1.26 |

*Add 1/16" to diameter and 1/8" to length to allow for outer insulating tube on all units except those marked (†) which are of Kraftboard construction.

SPRAGUE CAPACITORS

ATOM ELECTROLYTICS, continued

| μF | WVDC | Diam. x Length* | Cat. No. | Net |
|---------|---------|-----------------|-----------|--------|
| 80-30 | 150-150 | 7/8 x 2 1/16 | TVA-2460 | \$1.32 |
| 80-40 | 150-150 | 7/8 x 2 1/16 | TVA-2461 | 1.32 |
| 80-50 | 150-150 | 7/8 x 2 13/16 | TVA-2462 | 1.41 |
| 100-100 | 150-150 | 1 3/16 x 3 3/8 | TVA-2464† | 1.92 |
| 200-5 | 150-150 | 1 x 3 3/8 | TVA-2467† | 1.59 |
| 250-50 | 150-150 | 1 3/16 x 3 3/8 | TVA-2473 | 1.86 |
| 20-20 | 250-250 | 7/8 x 1 13/16 | TVA-2515 | 1.11 |
| 40-10 | 250-250 | 7/8 x 2 3/16 | TVA-2520 | 1.23 |
| 80-10 | 250-250 | 1 3/16 x 3 3/8 | TVA-2525 | 1.53 |
| 120-80 | 250-250 | 1 3/16 x 3 3/8 | TVA-2535† | 2.40 |
| 140-5 | 350-350 | 1 1/4 x 3 3/8 | TVA-2640† | 2.49 |
| 80-100 | 450-50 | 1 3/8 x 4 3/8 | TVA-2711† | 2.22 |
| 8-8 | 450-450 | 7/8 x 1 11/16 | TVA-2720 | 1.02 |
| 10-10 | 450-450 | 7/8 x 1 13/16 | TVA-2722 | 1.11 |
| 16-8 | 450-450 | 7/8 x 2 3/16 | TVA-2725 | 1.20 |
| 20-20 | 450-450 | 7/8 x 2 13/16 | TVA-2730 | 1.50 |
| 30-30 | 450-450 | 1 x 3 3/8 | TVA-2735 | 1.80 |
| 40-40 | 450-450 | 1 x 3 13/16 | TVA-2740 | 2.04 |
| 50-30 | 450-450 | 1 x 3 13/16 | TVA-2743 | 2.04 |

DUAL UNITS (SEPARATE SECTIONS — 4 LEADS)

| | | | | |
|---------|---------|----------------|----------|------|
| 20-20 | 150-150 | 1 x 2 3/8 | TU-220 † | 1.23 |
| 40-20 | 150-150 | 1 1/16 x 2 3/8 | TU-420 † | 1.32 |
| 16-16 | 250-250 | 1 x 2 3/8 | TU-216 † | 1.32 |
| 8-8 | 450-450 | 1 1/16 x 3 3/8 | TU-88 † | 1.29 |
| 16-16 | 450-450 | 1 3/8 x 3 3/8 | TU-1616† | 1.68 |
| 120-120 | 150-150 | 1 1/8 x 5 | TU-2120 | 2.07 |

TRIPLE UNITS

| | | | | |
|-----------|------------|---------------|------------|------|
| 30-30-100 | 150-150-12 | 7/8 x 1 13/16 | TVA-3419 | 1.38 |
| 20-20-20 | 150-150-25 | 7/8 x 1 3/8 | TVA-3415 | 1.47 |
| 40-20-20 | 150-150-25 | 7/8 x 1 11/16 | TVA-3422.9 | 1.53 |
| 40-30-20 | 150-150-25 | 7/8 x 1 13/16 | TVA-3423 | 1.56 |
| 40-40-20 | 150-150-25 | 7/8 x 2 3/16 | TVA-3425 | 1.59 |
| 40-40-100 | 150-150-25 | 7/8 x 2 7/16 | TVA-3427 | 1.68 |
| 50-30-20 | 150-150-25 | 7/8 x 2 3/16 | TVA-3430 | 1.59 |
| 50-30-100 | 150-150-25 | 7/8 x 2 7/16 | TVA-3432 | 1.68 |

| μF | WVDC | Diam. x Length | Cat. No. | Net |
|------------|-------------|-----------------|------------|--------|
| 50-30-200 | 150-150-25 | 1 x 2 3/16 | TVA-3433 | \$1.65 |
| 50-50-20 | 150-150-25 | 1 3/16 x 2 3/16 | TVA-3436 | 1.65 |
| 80-20-100 | 150-150-25 | 1 1/4 x 2 3/8 | TVA-3437† | 1.68 |
| 80-40-20 | 150-150-25 | 1 x 1 13/16 | TVA-3437.1 | 1.68 |
| 250-120-50 | 150-150-25 | 1 3/8 x 3 3/8 | TVA-3437.6 | 2.61 |
| 20-20-20 | 150-150-150 | 7/8 x 1 11/16 | TVA-3440 | 1.50 |
| 30-30-30 | 150-150-150 | 7/8 x 2 3/16 | TVA-3444 | 1.56 |
| 40-30-20 | 150-150-150 | 7/8 x 2 3/16 | TVA-3448 | 1.56 |
| 40-40-20 | 150-150-150 | 7/8 x 2 7/16 | TVA-3450 | 1.41 |
| 40-40-40 | 150-150-150 | 1 x 2 7/16 | TVA-3451 | 1.68 |
| 50-30-20 | 150-150-150 | 1 x 2 7/16 | TVA-3453 | 1.62 |
| 80-40-20 | 150-150-150 | 1 x 2 13/16 | TVA-3455 | 1.74 |
| 250-200-10 | 150-150-150 | 1 3/8 x 3 3/8 | TVA-3460 | 2.76 |
| 80-10-100 | 300-250-50 | 1 3/8 x 3 3/8 | TVA-3556† | 2.16 |
| 120-40-10 | 300-300-250 | 1 1/4 x 3 3/8 | TVA-3563† | 2.91 |
| 140-5-200 | 350-350-200 | 1 1/2 x 5 1/2 | TVA-3620† | 4.02 |
| 5-80-40 | 450-400-400 | 1 3/8 x 4 1/2 | TVA-3712† | 2.73 |
| 12-12-20 | 450-450-25 | 1 x 1 13/16 | TVA-3716 | 1.38 |
| 20-20-20 | 450-450-25 | 1 x 2 7/16 | TVA-3718 | 1.86 |
| 40-40-20 | 450-450-25 | 1 x 3 13/16 | TVA-3720 | 2.28 |

QUADRUPLE UNITS

| | | | | |
|---------------|-----------------|---------------|-----------|------|
| 120-40-40-10 | 300-300-300-250 | 1 3/8 x 4 3/8 | TVA-4584† | 3.72 |
| 140-5-200-30 | 350-300-200-150 | 1 1/2 x 4 3/8 | TVA-4576† | 3.63 |
| 140-5-200-30 | 350-300-200-200 | 1 1/2 x 5 1/2 | TVA-4607† | 4.59 |
| 80-60-40-20 | 350-350-300-150 | 1 1/2 x 4 3/8 | TVA-4618† | 3.54 |
| 80-10-40-100 | 400-400-300-50 | 1 3/8 x 4 1/2 | TVA-4659† | 3.27 |
| 10-80-40-100 | 450-300-250-50 | 1 3/8 x 4 1/2 | TVA-4705† | 2.88 |
| 20-120-40-100 | 450-300-250-50 | 1 3/8 x 4 3/8 | TVA-4706† | 3.69 |
| 10-80-40-40 | 450-300-250-250 | 1 3/8 x 4 3/8 | TVA-4708† | 2.97 |
| 10-20-20-10 | 450-300-300-300 | 1 3/8 x 3 3/8 | TVA-4712† | 2.10 |
| 20-20-20-10 | 450-450-450-450 | 1 3/8 x 3 3/8 | TVA-4742† | 2.55 |
| 40-20-20-10 | 450-450-450-450 | 1 3/8 x 4 3/8 | TVA-4748† | 2.82 |
| 40-40-20-20 | 450-450-450-450 | 1 1/2 x 4 1/2 | TVA-4750† | 3.27 |

QUINTUPLE UNITS

| | | | | |
|----------------|--------------------|-----------|-----------|------|
| 40-20-20-20-50 | 300-300-300-300-50 | 1 3/8 x 4 | TVA-5100† | 3.03 |
|----------------|--------------------|-----------|-----------|------|

*Add 1/16" to diameter and 1/8" to length to allow for outer insulating tube on all units except those marked (†) which are of cardboard construction.



TYPE HLVB HIGH-MF ELECTROLYTICS

- Designed for low-voltage filter circuits.
- Large values of capacitance in relatively small physical size.
- Molded phenolic case for physical protection and moisture resistance. Assures long and dependable service life.
- Easily and securely mounted with hardware listed below.

| μF | WVDC | Diam. x Length | Cat. No. | Net |
|-------|------|-----------------|------------|--------|
| 500 | 6 | 1 3/8 x 2 3/8 | HLVB-56 | \$1.83 |
| 1000 | 6 | 1 3/8 x 2 3/8 | HLVB-106 | 2.04 |
| 1500 | 6 | 1 3/8 x 2 3/8 | HLVB-156 | 2.16 |
| 2000 | 6 | 1 3/8 x 2 3/8 | HLVB-206 | 2.28 |
| 4000 | 10 | 1 3/8 x 3 3/8 | HLVB-4010 | 2.85 |
| 6000 | 10 | 1 3/8 x 3 3/8 | HLVB-6010 | 4.50 |
| 10000 | 10 | 1 13/16 x 4 3/8 | HLVB-10010 | 4.95 |
| 500 | 12 | 1 3/8 x 2 3/8 | HLVB-512 | 1.92 |
| 1000 | 12 | 1 3/8 x 2 3/8 | HLVB-1012 | 2.25 |
| 1500 | 12 | 1 3/8 x 2 3/8 | HLVB-1512 | 2.37 |
| 2000 | 12 | 1 3/8 x 2 3/8 | HLVB-2012 | 2.49 |
| 500 | 15 | 1 3/8 x 2 3/8 | HLVB-515 | 1.95 |
| 1000 | 15 | 1 3/8 x 2 3/8 | HLVB-1015 | 2.28 |
| 1500 | 15 | 1 3/8 x 2 3/8 | HLVB-1515 | 2.40 |
| 2000 | 15 | 1 3/8 x 2 3/8 | HLVB-2015 | 2.82 |
| 4000 | 15 | 1 3/8 x 4 3/8 | HLVB-4015 | 4.26 |
| 6000 | 15 | 1 13/16 x 4 3/8 | HLVB-6015 | 4.83 |
| 6000 | 20 | 2 1/16 x 4 3/8 | HLVB-6020 | 5.19 |
| 500 | 25 | 1 3/8 x 2 3/8 | HLVB-525 | 2.28 |
| 1000 | 25 | 1 3/8 x 2 3/8 | HLVB-1025 | 2.91 |
| 2000 | 25 | 1 3/8 x 4 3/8 | HLVB-2025 | 3.45 |
| 4000 | 25 | 1 13/16 x 4 3/8 | HLVB-4025 | 4.77 |
| 500 | 50 | 1 3/8 x 3 3/8 | HLVB-550 | 2.55 |
| 1000 | 50 | 1 13/16 x 3 3/8 | HLVB-1050 | 4.20 |
| 2000 | 50 | 1 13/16 x 4 3/8 | HLVB-2050 | 5.46 |
| 3000 | 50 | 1 13/16 x 4 3/8 | HLVB-3050 | 6.90 |

| μF | WVDC | Diam. x Length | Cat. No. | Net |
|------|------|-----------------|------------|------|
| 4000 | 50 | 2 1/8 x 4 3/8 | HLVB-4050 | 7.50 |
| 1000 | 150 | 1 13/16 x 4 3/8 | HLVB-10150 | 6.30 |
| 500 | 200 | 1 13/16 x 4 3/8 | HLVB-5200 | 5.88 |

HLVB MOUNTING HARDWARE HORIZONTAL "U" BRACKETS

| Capacitor Size Dio. x Length | Cat. No. | Net |
|---------------------------------|----------|--------|
| 1 3/8 x 2 3/8 | ABB-1 | \$1.18 |
| 1 3/8 x 3 3/8 | ABB-2 | .21 |
| 1 13/16 x 3 3/8 | | |
| 1 13/16 x 4 3/8 | ABB-3 | .24 |
| 2 1/8 x 4 3/8 | | |

END CAPS

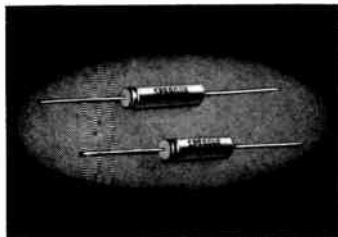
| Cap. Diam. | Cat. No. | Net |
|------------|----------|-----|
| 1 3/8 | ABC-2 | .15 |
| 1 13/16 | ABC-4 | .18 |
| 2 1/8 | ABC-6 | .21 |

VERTICAL MOUNTING CLAMPS

| Cap. Diam. | Cat. No. | Net |
|------------|----------|-----|
| 1 13/16 | CMC-2BA | .18 |
| 2 1/8 | CMC-32 | .36 |

SPRAGUE CAPACITORS

TE LITTL-LYTIC® ELECTROLYTICS



- Ultra-Small — Excellent, Dependable Replacement Units for Transistorized Equipment Presently on the Market
- Reliability at Reasonable Prices
- All-Welded Construction — No Pressure Joints to Cause "Open" or Intermittent Circuits
- No Corrosion as with Competitive Units
- Extremely Low Leakage Current, Long Shelf Life
- Withstand Temperatures Up to 85°C (185°F)
- Furnished with Clear Plastic Outer Insulating Sleeves
- Packed 5 to a Handy Rigid Klear Pak® Plastic Box

For Complete Technical Data, See Latest Sprague Engineering Bulletin 3110

| μF | D. x L.* | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net | μF | D. x L.* | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net | μF | D. x L.* | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|---------------|-------------|---------------------------|-------------------------|-------|----------------|-------------|---------------------------|-------------------------|-------|-----------------|-------------|---------------------------|-------------------------|-------|
| 1 WVDC | | | | | 10 WVDC | | | | | 25 WVDC | | | | |
| 5 | 1/4 x 1/16 | TE-1010 | | \$.75 | 10 | 1/4 x 1/16 | TE-1114 | | \$.81 | 1 | 1/4 x 1/16 | TE-1200 | 30D175A1 | \$.75 |
| 3 WVDC | | | | | 15 | 1/4 x 1/16 | TE-1116 | | .81 | 2 | 1/4 x 1/16 | TE-1201 | 30D176A1 | .78 |
| 1 | 1/4 x 1/16 | TE-1050 | 30D100A1 | .75 | 25 | 1/4 x 1/16 | TE-1118 | | .81 | 3 | 1/4 x 1/16 | TE-1201.1 | 30D177A1 | .78 |
| 2 | 1/4 x 1/16 | TE-1051 | 30D101A1 | .75 | 50 | 3/8 x 1/16 | TE-1119 | | .90 | 4 | 1/4 x 1/16 | TE-1201.2 | 30D178A1 | .78 |
| 3 | 1/4 x 1/16 | TE-1052 | 30D102A1 | .75 | 100 | 3/8 x 1/8 | TE-1119.3 | | 1.02 | 5 | 1/4 x 1/16 | TE-1202 | 30D179A1 | .84 |
| 4 | 1/4 x 1/16 | TE-1052.1 | 30D103A1 | .75 | 200 | 3/8 x 1/4 | TE-1119.6 | | 1.20 | 6 | 1/4 x 1/16 | TE-1203 | 30D180A1 | .84 |
| 5 | 1/4 x 1/16 | TE-1052.2 | 30D104A1 | .75 | 12 WVDC | | | | | 8 | 1/4 x 1/16 | TE-1203.5 | 30D181A1 | .87 |
| 6 | 1/4 x 1/16 | TE-1053 | 30D105A1 | .75 | 1 | 1/4 x 1/16 | TE-1120 | 30D140A1 | .75 | 10 | 1/4 x 1/16 | TE-1204 | 30D182A1 | .87 |
| 8 | 1/4 x 1/16 | TE-1052.5 | 30D106A1 | .75 | 2 | 1/4 x 1/16 | TE-1121 | 30D141A1 | .75 | 15 | 3/16 x 1/16 | TE-1205 | 30D183A1 | .87 |
| 10 | 1/4 x 1/16 | TE-1053 | 30D107A1 | .75 | 3 | 1/4 x 1/16 | TE-1122 | 30D142A1 | .75 | 20 | 3/16 x 1/16 | TE-1206 | | .90 |
| 15 | 1/4 x 1/16 | TE-1053.5 | 30D108A1 | .75 | 4 | 1/4 x 1/16 | TE-1123 | 30D143A1 | .75 | 25 | 3/8 x 1/16 | TE-1207 | 30D184A1 | .93 |
| 20 | 1/4 x 1/16 | TE-1054 | 30D109A1 | .75 | 5 | 1/4 x 1/16 | TE-1127 | 30D144A1 | .81 | 35 | 3/8 x 1/8 | TE-1208 | 30D185A1 | .99 |
| 25 | 1/4 x 1/16 | TE-1055 | 30D110A1 | .75 | 6 | 1/4 x 1/16 | TE-1127.1 | 30D145A1 | .81 | 50 | 3/8 x 1/8 | TE-1209 | 30D186A1 | 1.08 |
| 35 | 1/4 x 1/16 | TE-1056 | 30D111A1 | .75 | 8 | 1/4 x 1/16 | TE-1127.3 | 30D146A1 | .81 | 75 | 3/8 x 1/4 | TE-1210 | 30D187A1 | 1.17 |
| 40 | 1/4 x 1/16 | TE-1057 | | .75 | 10 | 1/4 x 1/16 | TE-1128 | 30D147A1 | .81 | 100 | 3/8 x 1/2 | TE-1211 | 30D188A1 | 1.26 |
| 50 | 1/4 x 1/16 | TE-1058 | 30D112A1 | .75 | 15 | 1/4 x 1/16 | TE-1129 | 30D148A1 | .84 | 50 WVDC | | | | |
| 75 | 3/16 x 1/16 | TE-1059 | 30D113A1 | .84 | 20 | 1/4 x 1/16 | TE-1130 | 30D149A1 | .84 | 1 | 1/4 x 1/16 | TE-1300 | 30D189A1 | .78 |
| 100 | 3/16 x 1/16 | TE-1059.5 | 30D114A1 | .84 | 25 | 1/4 x 1/16 | TE-1131 | 30D150A1 | .84 | 2 | 1/4 x 1/16 | TE-1301 | 30D190A1 | .81 |
| 110 | 3/8 x 1/16 | TE-1060 | | .84 | 35 | 3/16 x 1/16 | TE-1132 | 30D151A1 | .87 | 3 | 1/4 x 1/16 | TE-1302 | 30D191A1 | .81 |
| 150 | 3/8 x 1/16 | TE-1061 | 30D115A1 | .87 | 50 | 3/8 x 1/16 | TE-1133 | 30D152A1 | .93 | 4 | 1/4 x 1/16 | TE-1302.1 | 30D192A1 | .81 |
| 200 | 3/8 x 1/8 | TE-1064 | 30D116A1 | .90 | 75 | 3/8 x 1/8 | TE-1134 | 30D153A1 | .99 | 5 | 1/4 x 1/16 | TE-1303 | 30D193A1 | .87 |
| 250 | 3/8 x 1/8 | TE-1065 | 30D117A1 | .96 | 100 | 3/8 x 1/8 | TE-1135 | 30D154A1 | 1.05 | 6 | 3/16 x 1/16 | TE-1303.1 | 30D194A1 | .87 |
| 300 | 3/8 x 1/8 | TE-1066 | 30D118A1 | .99 | 150 | 3/8 x 1/4 | TE-1136 | 30D155A1 | 1.14 | 8 | 3/16 x 1/16 | TE-1303.3 | 30D195A1 | .90 |
| 400 | 3/8 x 1/4 | TE-1067 | 30D119A1 | 1.02 | 200 | 3/8 x 1/4 | TE-1137 | 30D156A1 | 1.23 | 10 | 3/16 x 1/16 | TE-1304 | 30D196A1 | .90 |
| 500 | 3/8 x 1/2 | TE-1068 | 30D120A1 | 1.05 | 250 | 3/8 x 1/2 | TE-1138 | 30D157A1 | 1.32 | 15 | 3/8 x 1/16 | TE-1304.2 | 30D197A1 | .90 |
| 6 WVDC | | | | | 15 WVDC | | | | | 100 WVDC | | | | |
| 1 | 1/4 x 1/16 | TE-1080 | 30D121A1 | .75 | 1 | 1/4 x 1/16 | TE-1148 | 30D158A1 | .75 | 1 | 3/8 x 1/16 | TE-1400 | 30D201A1 | .81 |
| 2 | 1/4 x 1/16 | TE-1081 | 30D122A1 | .75 | 2 | 1/4 x 1/16 | TE-1149 | 30D159A1 | .75 | 2 | 3/8 x 1/16 | TE-1401 | 30D202A1 | .84 |
| 3 | 1/4 x 1/16 | TE-1082 | 30D123A1 | .75 | 3 | 1/4 x 1/16 | TE-1150 | 30D160A1 | .75 | 3 | 3/8 x 1/16 | TE-1402 | 30D203A1 | .84 |
| 4 | 1/4 x 1/16 | TE-1083 | 30D124A1 | .75 | 4 | 1/4 x 1/16 | TE-1151 | 30D161A1 | .78 | 4 | 3/8 x 1/16 | TE-1403 | 30D204A1 | .84 |
| 5 | 1/4 x 1/16 | TE-1084 | 30D125A1 | .75 | 5 | 1/4 x 1/16 | TE-1152 | 30D162A1 | .84 | 5 | 3/8 x 1/16 | TE-1404 | 30D205A1 | .90 |
| 6 | 1/4 x 1/16 | TE-1085 | 30D126A1 | .75 | 6 | 1/4 x 1/16 | TE-1153 | 30D163A1 | .84 | 6 | 3/8 x 1/16 | TE-1405 | 30D206A1 | .90 |
| 8 | 1/4 x 1/16 | TE-1086 | 30D127A1 | .81 | 8 | 1/4 x 1/16 | TE-1154 | 30D164A1 | .84 | 8 | 3/8 x 1/16 | TE-1406 | 30D207A1 | .93 |
| 10 | 1/4 x 1/16 | TE-1087 | 30D128A1 | .81 | 10 | 1/4 x 1/16 | TE-1155 | 30D165A1 | .84 | 10 | 3/8 x 1/16 | TE-1407 | 30D208A1 | .93 |
| 15 | 1/4 x 1/16 | TE-1089 | 30D129A1 | .81 | 15 | 1/4 x 1/16 | TE-1156 | 30D166A1 | .87 | 15 | 3/8 x 1/4 | TE-1408 | 30D209A1 | .93 |
| 20 | 1/4 x 1/16 | TE-1090 | 30D130A1 | .81 | 20 | 1/4 x 1/16 | TE-1157 | 30D167A1 | .87 | 20 | 3/8 x 1/2 | TE-1409 | 30D210A1 | .96 |
| 25 | 1/4 x 1/16 | TE-1091 | 30D131A1 | .81 | 25 | 3/16 x 1/16 | TE-1157.1 | 30D168A1 | .87 | 150 WVDC | | | | |
| 30 | 1/4 x 1/16 | TE-1092 | | .84 | 30 | 3/16 x 1/16 | TE-1158 | | .90 | 1 | 3/8 x 1/16 | TE-1500 | 30D211A1 | .84 |
| 35 | 1/4 x 1/16 | TE-1093 | 30D132A1 | .84 | 35 | 3/8 x 1/16 | TE-1159 | 30D169A1 | .93 | 2 | 3/8 x 1/16 | TE-1501 | 30D212A1 | .87 |
| 40 | 1/4 x 1/16 | TE-1095 | | .84 | 50 | 3/8 x 1/16 | TE-1160 | 30D170A1 | .96 | 3 | 3/8 x 1/16 | TE-1502 | 30D213A1 | .87 |
| 50 | 3/16 x 1/16 | TE-1100 | 30D133A1 | .84 | 75 | 3/8 x 1/16 | TE-1161 | 30D171A1 | 1.02 | 4 | 3/8 x 1/16 | TE-1503 | 30D214A1 | .87 |
| 60 | 3/16 x 1/16 | TE-1101 | | .84 | 100 | 3/8 x 1/8 | TE-1162 | 30D172A1 | 1.08 | 5 | 3/8 x 1/16 | TE-1504 | 30D215A1 | .93 |
| 75 | 3/8 x 1/16 | TE-1101.5 | 30D134A1 | .87 | 150 | 3/8 x 1/4 | TE-1163 | 30D173A1 | 1.17 | 6 | 3/8 x 1/4 | TE-1505 | 30D216A1 | .93 |
| 100 | 3/8 x 1/16 | TE-1102 | 30D135A1 | .90 | 200 | 3/8 x 1/2 | TE-1164 | 30D174A1 | 1.26 | 8 | 3/8 x 1/4 | TE-1506 | 30D217A1 | .96 |
| 150 | 3/8 x 1/8 | TE-1103 | 30D136A1 | .93 | | | | | | 10 | 3/8 x 1/4 | TE-1507 | 30D218A1 | .96 |
| 200 | 3/8 x 1/4 | TE-1104 | 30D137A1 | .96 | | | | | | 12 | 3/8 x 1/2 | TE-1508 | 30D219A1 | .96 |
| 250 | 3/8 x 1/4 | TE-1105 | 30D138A1 | 1.02 | | | | | | | | | | |
| 300 | 3/8 x 1/2 | TE-1106 | 30D139A1 | 1.08 | | | | | | | | | | |

*Add 1/16" to dimensions to allow for insulating sleeve.

SPRAGUE CAPACITORS

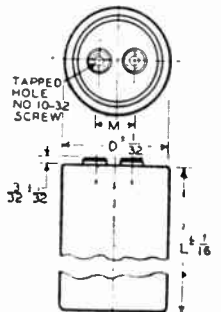
TYPE 36D POWERLYTIC® ALUMINUM ELECTROLYTICS



- For Maximum Capacitance in a Given Case Size.
 - Especially Suitable for Transistorized Circuitry where High Capacitance is Required.
 - Maximum Space Economy at Operating Temperatures Up To 65 C.
 - Low ESR and Leakage Currents. • Extremely Long Shelf Life.
 - Uses Most Reliable Seal Developed by Sprague for Aluminum Electrolytic Capacitors. Pressure-type Safety Vents Employing Silicone Rubber Are Used On All Cases.
 - High Screw Insert Terminal, 9/32" high. • Plastic Outer Tube.
- Superior Electrical and Life Characteristics Are Insured By Careful Raw Material Inspection, High Quality Control Standards and Close Manufacturing Supervision. For Complete Technical Data, Consult Sprague Engineering Bulletin 3431.

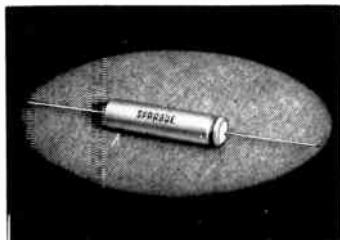
| μF | Size Code | WVDC | Catalog No. | Net Ea. (1-24) | μF | Size Code | WVDC | Catalog No. | Net Ea. (1-24) |
|-------|-----------|------|-------------|----------------|------|-----------|------|-------------|----------------|
| 3600 | A1 | 10 | 36D1026T | \$ 3.309 | 2000 | C2 | 75 | 36D1122T | \$ 6.300 |
| 7300 | A2 | 10 | 36D1027T | 3.915 | 6200 | D4 | 75 | 36D1127T | 12.510 |
| 11000 | A3 | 10 | 36D1029T | 4.458 | 1000 | A3 | 100 | 36D1133T | 4.623 |
| 27000 | D2 | 10 | 36D1033T | 8.610 | 4000 | D3 | 100 | 36D1139T | 11.100 |
| 2600 | A1 | 15 | 36D1039T | 3.318 | 900 | A3 | 150 | 36D1146T | 4.671 |
| 5300 | A2 | 15 | 36D1040T | 3.927 | 1300 | C2 | 150 | 36D1147T | 6.375 |
| 8000 | A3 | 15 | 36D1042T | 4.482 | 2000 | C3 | 150 | 36D1148T | 7.590 |
| 17000 | C3 | 15 | 36D1045T | 7.380 | 3400 | D3 | 150 | 36D1150T | 11.175 |
| 20000 | D2 | 15 | 36D1046T | 8.670 | 5300 | E3 | 150 | 36D1151T | 16.140 |
| 30000 | D3 | 15 | 36D1048T | 10.740 | 400 | A2 | 200 | 36D1154T | 4.119 |
| 35000 | D4 | 15 | 36D1049T | 12.060 | 600 | A3 | 200 | 36D1156T | 4.119 |
| 1500 | A1 | 25 | 36D1065T | 3.333 | 1600 | D2 | 200 | 36D1159T | 9.240 |
| 3100 | A2 | 25 | 36D1066T | 3.945 | 530 | A3 | 250 | 36D1166T | 4.764 |
| 4700 | A3 | 25 | 36D1068T | 4.512 | 1100 | C3 | 250 | 36D1168T | 7.635 |
| 7000 | C2 | 25 | 36D1070T | 6.135 | 240 | A2 | 300 | 36D1174T | 4.158 |
| 10000 | C3 | 25 | 36D1071T | 7.395 | 190 | A2 | 350 | 36D1184T | 4.176 |
| 17000 | D3 | 25 | 36D1074T | 10.800 | 1000 | D3 | 350 | 36D1190T | 11.325 |
| 27000 | E3 | 25 | 36D1076T | 15.420 | 330 | C3 | 450 | 36D1208T | 7.680 |
| 32000 | E4 | 25 | 36D1077T | 17.040 | 860 | E3 | 450 | 36D1211T | 16.560 |
| 23000 | E3 | 30 | 36D1089T | 15.540 | | | | | |
| 27000 | E4 | 30 | 36D1090T | 17.070 | | | | | |
| 2000 | A3 | 40 | 36D1094T | 4.560 | | | | | |
| 4000 | C2 | 40 | 36D1096T | 6.330 | | | | | |
| 6000 | C3 | 40 | 36D1097T | 7.440 | | | | | |
| 10000 | D3 | 40 | 36D1100T | 10.935 | | | | | |
| 12000 | D4 | 40 | 36D1101T | 12.330 | | | | | |
| 750 | A1 | 50 | 36D1104T | 3.360 | | | | | |
| 1500 | A2 | 50 | 36D1105T | 3.993 | | | | | |
| 2200 | A3 | 50 | 36D1107T | 4.593 | | | | | |
| 3300 | C2 | 50 | 36D1109T | 6.210 | | | | | |
| 5000 | C3 | 50 | 36D1110T | 7.470 | | | | | |
| 8600 | D3 | 50 | 36D1113T | 11.010 | | | | | |

| Size Code | Diameter | Length |
|-----------|----------|--------|
| A1 | 1 7/16 | 2 1/2 |
| A2 | 1 7/16 | 3 1/2 |
| A3 | 1 7/16 | 4 1/2 |
| C2 | 2 1/16 | 3 1/2 |
| C3 | 2 1/16 | 4 1/2 |
| D2 | 2 1/16 | 3 1/2 |
| D3 | 2 1/16 | 4 1/2 |
| D4 | 2 1/16 | 5 |
| E3 | 3 1/16 | 4 1/2 |
| E4 | 3 1/16 | 5 |



SPRAGUE CAPACITORS

TYPE 40D Miniature Extended-Life 85°C ELECTROLYTICS



- THE MOST RELIABLE TUBULAR ALUMINUM ELECTROLYTIC MANUFACTURED
- Premium quality. Service life of 10 years in actual circuit applications under typical operating conditions
- Special design and processing techniques result in ultra low leakage currents and high stability
- All critical terminations are welded to prevent open circuits even after extended service in the millivolt range
- Operating Temperature: -40°C to +85°C
- Units listed here have thermoplastic insulating sleeves; for rigid phenolic sleeve, change end of catalog number from A2 to A1; for bare metal tubes, delete last letter and digit
- Capacitance tolerance: -10, +100%
- Write for Engineering Bulletin No. 3205 to compare this outstanding capacitor with any other unit on the market.
- Prices available upon request.

| μF | D. x L. | Catalog Number |
|----------------------------|---------------|----------------|
| 3 WORKING VOLTS D-C | | |
| 1 | 3/16 x 3/4 | 40D100A2 |
| 2 | 3/16 x 3/4 | 40D101A2 |
| 3 | 3/16 x 3/4 | 40D102A2 |
| 4 | 3/16 x 3/4 | 40D103A2 |
| 5 | 3/16 x 3/4 | 40D104A2 |
| 6 | 3/16 x 3/4 | 40D105A2 |
| 8 | 3/16 x 3/4 | 40D106A2 |
| 10 | 3/16 x 3/4 | 40D107A2 |
| 15 | 3/16 x 3/4 | 40D108A2 |
| 20 | 3/16 x 3/4 | 40D109A2 |
| 25 | 3/16 x 3/4 | 40D110A2 |
| 35 | 3/16 x 3/4 | 40D111A2 |
| 50 | 3/16 x 3/4 | 40D112A2 |
| 75 | 3/16 x 3/4 | 40D113A2 |
| 100 | 3/16 x 3/8 | 40D114A2 |
| 150 | 3/16 x 1 | 40D115A2 |
| 200 | 3/16 x 1 1/16 | 40D116A2 |
| 225 | 3/16 x 1 1/16 | 40D117A2 |
| 250 | 3/16 x 1 1/16 | 40D118A2 |
| 300 | 3/16 x 1 1/16 | 40D119A2 |
| 6 WORKING VOLTS D-C | | |
| 1 | 3/16 x 3/4 | 40D120A2 |
| 2 | 3/16 x 3/4 | 40D121A2 |
| 3 | 3/16 x 3/4 | 40D122A2 |
| 4 | 3/16 x 3/4 | 40D123A2 |
| 5 | 3/16 x 3/4 | 40D124A2 |
| 6 | 3/16 x 3/4 | 40D125A2 |
| 8 | 3/16 x 3/4 | 40D126A2 |
| 10 | 3/16 x 3/4 | 40D127A2 |
| 15 | 3/16 x 3/4 | 40D128A2 |
| 20 | 3/8 x 3/4 | 40D129A2 |

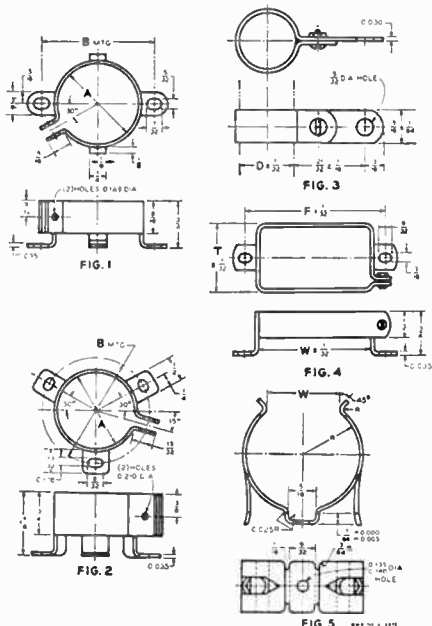
| μF | D. x L. | Catalog Number |
|-----------------------------|--------------|----------------|
| 25 | 3/8 x 3/4 | 40D130A2 |
| 35 | 3/8 x 3/4 | 40D131A2 |
| 50 | 3/8 x 3/4 | 40D132A2 |
| 75 | 3/8 x 3/8 | 40D133A2 |
| 100 | 3/8 x 1 | 40D134A2 |
| 150 | 3/8 x 1 1/16 | 40D135A2 |
| 175 | 3/8 x 1 1/16 | 40D136A2 |
| 200 | 3/8 x 1 1/16 | 40D137A2 |
| 250 | 3/8 x 1 1/16 | 40D138A2 |
| 12 WORKING VOLTS D-C | | |
| 1 | 3/8 x 3/4 | 40D139A2 |
| 2 | 3/8 x 3/4 | 40D140A2 |
| 3 | 3/8 x 3/4 | 40D141A2 |
| 4 | 3/8 x 3/4 | 40D142A2 |
| 5 | 3/8 x 3/4 | 40D143A2 |
| 6 | 3/8 x 3/4 | 40D144A2 |
| 8 | 3/8 x 3/4 | 40D145A2 |
| 10 | 3/8 x 3/4 | 40D146A2 |
| 15 | 3/8 x 3/4 | 40D147A2 |
| 20 | 3/8 x 3/4 | 40D148A2 |
| 25 | 3/8 x 3/4 | 40D149A2 |
| 35 | 3/8 x 3/4 | 40D150A2 |
| 50 | 3/8 x 3/8 | 40D151A2 |
| 75 | 3/8 x 1 | 40D152A2 |
| 100 | 3/8 x 1 | 40D153A2 |
| 150 | 3/8 x 1 1/16 | 40D154A2 |
| 200 | 3/8 x 1 1/16 | 40D155A2 |
| 15 WORKING VOLTS D-C | | |
| 1 | 3/8 x 3/4 | 40D156A2 |
| 2 | 3/8 x 3/4 | 40D157A2 |
| 3 | 3/8 x 3/4 | 40D158A2 |

| μF | D. x L. | Catalog Number |
|-----------------------------|---------------|----------------|
| 4 | 3/16 x 3/4 | 40D159A2 |
| 5 | 3/16 x 3/4 | 40D160A2 |
| 6 | 3/16 x 3/4 | 40D161A2 |
| 8 | 3/16 x 3/4 | 40D162A2 |
| 10 | 3/16 x 3/4 | 40D163A2 |
| 15 | 3/8 x 3/4 | 40D164A2 |
| 20 | 3/16 x 3/4 | 40D165A2 |
| 25 | 3/16 x 3/4 | 40D166A2 |
| 35 | 3/16 x 3/4 | 40D167A2 |
| 50 | 3/16 x 3/4 | 40D168A2 |
| 75 | 3/16 x 1 | 40D169A2 |
| 100 | 3/16 x 1 1/16 | 40D170A2 |
| 150 | 3/16 x 1 1/16 | 40D171A2 |
| 25 WORKING VOLTS D-C | | |
| 1 | 3/8 x 3/4 | 40D172A2 |
| 2 | 3/8 x 3/4 | 40D173A2 |
| 3 | 3/8 x 3/4 | 40D174A2 |
| 4 | 3/8 x 3/4 | 40D175A2 |
| 5 | 3/8 x 3/4 | 40D176A2 |
| 6 | 3/8 x 3/4 | 40D177A2 |
| 8 | 3/8 x 3/4 | 40D178A2 |
| 10 | 3/8 x 3/4 | 40D179A2 |
| 15 | 3/8 x 3/4 | 40D180A2 |
| 20 | 3/8 x 3/4 | 40D181A2 |
| 25 | 3/8 x 1 | 40D182A2 |
| 35 | 3/8 x 1 | 40D183A2 |
| 50 | 3/8 x 1 1/16 | 40D184A2 |
| 75 | 3/8 x 1 1/16 | 40D185A2 |
| 50 WORKING VOLTS D-C | | |
| 1 | 3/8 x 3/4 | 40D186A2 |
| 2 | 3/8 x 3/4 | 40D187A2 |

| μF | D. x L. | Catalog Number |
|------------------------------|--------------|----------------|
| 3 | 3/8 x 3/4 | 40D188A2 |
| 4 | 3/8 x 3/4 | 40D189A2 |
| 5 | 3/8 x 3/4 | 40D190A2 |
| 6 | 3/8 x 3/4 | 40D191A2 |
| 8 | 3/8 x 3/8 | 40D192A2 |
| 10 | 3/8 x 7/8 | 40D193A2 |
| 15 | 3/8 x 1 | 40D194A2 |
| 20 | 3/8 x 1 1/16 | 40D195A2 |
| 25 | 3/8 x 1 1/16 | 40D196A2 |
| 30 | 3/8 x 1 1/16 | 40D197A2 |
| 100 WORKING VOLTS D-C | | |
| 1 | 3/8 x 1 | 40D198A2 |
| 2 | 3/8 x 1 | 40D199A2 |
| 3 | 3/8 x 1 | 40D200A2 |
| 4 | 3/8 x 1 | 40D201A2 |
| 5 | 3/8 x 1 | 40D202A2 |
| 6 | 3/8 x 1 | 40D203A2 |
| 8 | 3/8 x 1 | 40D204A2 |
| 10 | 3/8 x 1 1/16 | 40D205A2 |
| 15 | 3/8 x 1 1/16 | 40D206A2 |
| 18 | 3/8 x 1 1/16 | 40D207A2 |
| 150 WORKING VOLTS D-C | | |
| 1 | 3/8 x 1 | 40D208A2 |
| 2 | 3/8 x 1 | 40D209A2 |
| 3 | 3/8 x 1 | 40D210A2 |
| 4 | 3/8 x 1 | 40D211A2 |
| 5 | 3/8 x 1 | 40D212A2 |
| 6 | 3/8 x 1 1/16 | 40D213A2 |
| 8 | 3/8 x 1 1/16 | 40D214A2 |
| 10 | 3/8 x 1 1/16 | 40D215A2 |

CAPACITOR HARDWARE

- Sprague Mounting Clamps and Straps Provide Quick, Dependable Means for Securing a Wide Variety of Capacitors and Resistors to a Mounting Surface
- All Clamps and Straps are Made from Plated Steel



VERTICAL MOUNTING CLAMPS FOR CYLINDRICAL CAPACITORS

| Cat. No. | A | B | Figure No. | Net Price | Cat. No. | A | B | Figure No. | Net Price |
|----------|-------|--------|------------|-----------|----------|-------|-------|------------|-----------|
| CMC-16 | 1 1/4 | 1 1/8 | 1 | \$.15 | CMC-28 | 1 3/4 | 2 3/8 | 1 | \$.18 |
| CMC-20 | 1 1/4 | 1 1/16 | 1 | .15 | CMC-28A | 1 3/4 | 2 3/8 | 2 | .18 |
| CMC-22 | 1 3/8 | 1 3/32 | 1 | .15 | CMC-32 | 2 | 2 1/2 | 2 | .36 |
| CMC-24 | 1 1/2 | 1 1/16 | 1 | .18 | CMC-40 | 2 1/2 | 3 | 2 | .36 |

WRAP AROUND CLAMPS FOR RECTANGULAR CAPACITORS

| Cat. No. | Dimensions T | W | F | Fig. No. | Net Price | Cat. No. | Dimensions T | W | F | Fig. No. | Net Price |
|----------|--------------|---------|-------|----------|-----------|----------|--------------|-------|-------|----------|-----------|
| RMC-17 | 1 1/16 | 1 13/16 | 2 1/4 | 4 | \$.30 | RMC-36 | 2 1/4 | 3 3/4 | 4 3/8 | 4 | \$.33 |
| RMC-19 | 1 3/16 | 2 1/2 | 3 | 4 | .30 | RMC-40 | 2 1/2 | 3 3/4 | 4 3/8 | 4 | .33 |
| RMC-20 | 1 1/4 | 3 3/4 | 4 3/8 | 4 | .30 | FMC-51 | 3 3/8 | 3 3/4 | 4 3/8 | 4 | .36 |
| RMC-28 | 1 3/4 | 3 3/4 | 4 3/8 | 4 | .30 | RMC-73 | 4 1/8 | 3 3/4 | 4 3/8 | 4 | .39 |

MOUNTING STRAPS FOR TUBULAR CAPACITORS

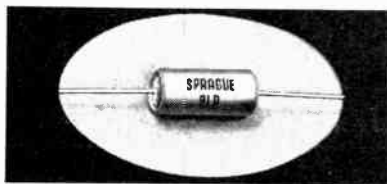
| Catalog No. | Tube Diameter | Figure No. | Net Price | Catalog No. | Tube Diameter | Figure No. | Net Price |
|-------------|---------------|------------|-----------|-------------|---------------|------------|-----------|
| TMS-4 | 1/4 | 3 | \$.04 | TMS-14 | 3/8 | 3 | \$.04 |
| TMS-5 | 3/8 | 3 | .04 | TMS-15 | 1 1/16 | 3 | .04 |
| TMS-6 | 3/8 | 3 | .04 | TMS-16 | 1 | 3 | .06 |
| TMS-7 | 3/8 | 3 | .04 | TMS-17 | 1 1/16 | 3 | .06 |
| TMS-8 | 1/2 | 3 | .04 | TMS-18 | 1 1/8 | 3 | .06 |
| TMS-9 | 3/8 | 3 | .04 | TMS-19 | 3/16 | 3 | .06 |
| TMS-10 | 3/8 | 3 | .04 | TMS-20 | 1 1/4 | 3 | .09 |
| TMS-11 | 1 1/16 | 3 | .04 | TMS-21 | 3/16 | 3 | .09 |
| TMS-12 | 3/4 | 3 | .04 | TMS-22 | 1 3/8 | 3 | .09 |
| TMS-13 | 1 3/16 | 3 | .04 | | | | |

HORIZONTAL MOUNTING CLIPS FOR CYLINDRICAL CAPACITORS

| Catalog No. | Capacitor Diameter | Figure No. | Net Price | Catalog No. | Capacitor Diameter | Figure No. | Net Price |
|-------------|--------------------|------------|-----------|-------------|--------------------|------------|-----------|
| UMC-6 | 3/8 | 5 | \$.04 | UMC-14 | 3/8 | 5 | \$.04 |
| UMC-8 | 1/2 | 5 | .04 | UMC-16 | 1 | 5 | .06 |
| UMC-10 | 3/8 | 5 | .04 | UMC-22 | 1 3/8 | 5 | .09 |
| UMC-12 | 3/4 | 5 | .04 | | | | |

SPRAGUE CAPACITORS

VITAMIN Q[®] SUBMINIATURE PAPER CAPACITORS



These capacitors are the most widely used of all paper capacitors in commercial and military electronic equipment. Her-

metically sealed in metal cases, they are electrically and mechanically designed to meet stringent operating requirements.

Impregnated with Vitamin Q, a substantially linear, controlled molecular weight, hydrocarbon polymer, which is exclusive with Sprague, these dependable capacitors are available for operation in two temperature ranges: -55°C to $+85^{\circ}\text{C}$ and -55°C to $+125^{\circ}\text{C}$. Because of their Vitamin Q impregnation, these subminiature capacitors have

a higher insulation resistance and longer life than comparable units with ordinary oils.

Sprague Subminiature paper capacitors exceed the performance requirements of military specification MIL-C-25A. A limited number of the ratings shown here are listed in the military specification and should be ordered by their MIL type designation where equipment specifications so require. (See page after next.)

Listed below are the most popular insulated section (ungrounded case) capacitors. For technical data on these and other types, ratings, and tolerances, as well as on wax-impregnated units for absolute minimum size, refer to the latest issue of Engineering Bulletin 2110.

For prices on quantities from 10 to 499, see your Sprague Industrial Distributor.

CHOICE OF INSERTED TAB OR EXTENDED FOIL CONSTRUCTION

In the past, inserted tab capacitors have not been recommended for low-voltage applications (e.g., below 10 volts) but recent improvements in design now make it possible to recommend them for operation at all voltages from 1 to rated, in nearly all applications.

From the application standpoint, the principal difference between the two construction types is that, at resonance, losses

are likely to be lower in the extended foil type. This is because the resistive component of impedance is likely to be higher at resonance in the inserted tab type of construction. Unless unusual circuit requirements make the losses at resonance a critical factor, the inserted tab construction is recommended, primarily because of the smaller size of the capacitor roll.

TYPE 91P, INSERTED TAB CONSTRUCTION, 85°C OPERATION

| μF | WVDC | Size D. x L. | Capacitance Tolerance $\pm 20\%$ | | | | Capacitance Tolerance $\pm 10\%$ | | | |
|---------------|------|-----------------|----------------------------------|-----------|-----------------------------|-----------|----------------------------------|-----------|-----------------------------|-----------|
| | | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve)* | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve)* | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .001 | 100 | .175 x 3/4 | 91P10201S2 | \$1.440 | 91P10201S4 | \$1.504 | 91P10291S2 | \$1.584 | 91P10291S4 | \$1.648 |
| | 200 | .235 x 3/4 | 91P10202S2 | 1.360 | 91P10202S4 | 1.424 | 91P10292S2 | 1.496 | 91P10292S4 | 1.560 |
| | 300 | .235 x 3/4 | 91P10203S2 | 1.380 | 91P10203S4 | 1.444 | 91P10293S2 | 1.518 | 91P10293S4 | 1.582 |
| | 400 | .235 x 3/4 | 91P10204S2 | 1.400 | 91P10204S4 | 1.464 | 91P10294S2 | 1.540 | 91P10294S4 | 1.604 |
| | 600 | .235 x 3/4 | 91P10206S2 | 1.420 | 91P10206S4 | 1.484 | 91P10296S2 | 1.562 | 91P10296S4 | 1.626 |
| .0015 | 100 | .175 x 3/4 | 91P15201S2 | 1.440 | 91P15201S4 | 1.504 | 91P15291S2 | 1.584 | 91P15291S4 | 1.648 |
| | 200 | .235 x 3/4 | 91P15202S2 | 1.360 | 91P15202S4 | 1.424 | 91P15292S2 | 1.496 | 91P15292S4 | 1.560 |
| | 300 | .235 x 3/4 | 91P15203S2 | 1.380 | 91P15203S4 | 1.444 | 91P15293S2 | 1.518 | 91P15293S4 | 1.582 |
| | 400 | .235 x 3/4 | 91P15204S2 | 1.400 | 91P15204S4 | 1.464 | 91P15294S2 | 1.540 | 91P15294S4 | 1.604 |
| | 600 | .235 x 3/4 | 91P15206S2 | 1.420 | 91P15206S4 | 1.484 | 91P15296S2 | 1.562 | 91P15296S4 | 1.626 |
| .0022 | 100 | .175 x 3/4 | 91P22201S2 | 1.440 | 91P22201S4 | 1.504 | 91P22291S2 | 1.584 | 91P22291S4 | 1.648 |
| | 200 | .235 x 3/4 | 91P22202S2 | 1.360 | 91P22202S4 | 1.424 | 91P22292S2 | 1.496 | 91P22292S4 | 1.560 |
| | 300 | .235 x 3/4 | 91P22203S2 | 1.380 | 91P22203S4 | 1.444 | 91P22293S2 | 1.518 | 91P22293S4 | 1.582 |
| | 400 | .235 x 3/4 | 91P22204S2 | 1.400 | 91P22204S4 | 1.464 | 91P22294S2 | 1.540 | 91P22294S4 | 1.604 |
| | 600 | .235 x 3/4 | 91P22206S2 | 1.420 | 91P22206S4 | 1.484 | 91P22296S2 | 1.562 | 91P22296S4 | 1.626 |
| .0033 | 100 | .175 x 3/4 | 91P33201S2 | 1.440 | 91P33201S4 | 1.504 | 91P33291S2 | 1.584 | 91P33291S4 | 1.648 |
| | 200 | .235 x 3/4 | 91P33202S2 | 1.360 | 91P33202S4 | 1.424 | 91P33292S2 | 1.496 | 91P33292S4 | 1.560 |
| | 300 | .235 x 3/4 | 91P33203S2 | 1.380 | 91P33203S4 | 1.444 | 91P33293S2 | 1.418 | 91P33293S4 | 1.582 |
| | 400 | .235 x 3/4 | 91P33204S2 | 1.400 | 91P33204S4 | 1.464 | 91P33294S2 | 1.540 | 91P33294S4 | 1.604 |
| | 600 | .235 x 3/4 | 91P33206S2 | 1.420 | 91P33206S4 | 1.484 | 91P33296S2 | 1.562 | 91P33296S4 | 1.626 |
| .0047 | 100 | .175 x 3/4 | 91P47201S2 | 1.480 | 91P47201S4 | 1.544 | 91P47291S2 | 1.628 | 91P47291S4 | 1.692 |
| | 200 | .235 x 3/4 | 91P47202S2 | 1.360 | 91P47202S4 | 1.424 | 91P47292S2 | 1.496 | 91P47292S4 | 1.560 |
| | 300 | .235 x 3/4 | 91P47203S2 | 1.380 | 91P47203S4 | 1.444 | 91P47293S2 | 1.518 | 91P47293S4 | 1.582 |
| | 400 | .235 x 3/4 | 91P47204S2 | 1.400 | 91P47204S4 | 1.464 | 91P47294S2 | 1.540 | 91P47294S4 | 1.604 |
| | 600 | .235 x 3/4 | 91P47206S2 | 1.420 | 91P47206S4 | 1.484 | 91P47296S2 | 1.562 | 91P47296S4 | 1.626 |
| .0068 | 100 | .175 x 3/4 | 91P68201S2 | 1.480 | 91P68201S4 | 1.554 | 91P68291S2 | 1.628 | 91P68291S4 | 1.692 |
| | 200 | .235 x 3/4 | 91P68202S2 | 1.360 | 91P68202S4 | 1.424 | 91P68292S2 | 1.496 | 91P68292S4 | 1.560 |
| | 300 | .235 x 3/4 | 91P68203S2 | 1.380 | 91P68203S4 | 1.444 | 91P68293S2 | 1.518 | 91P68293S4 | 1.582 |
| | 400 | .235 x 3/4 | 91P68204S2 | 1.400 | 91P68204S4 | 1.464 | 91P68294S2 | 1.540 | 91P68294S4 | 1.604 |
| | 600 | .235 x 3/4 | 91P68206S2 | 1.420 | 91P68206S4 | 1.484 | 91P68296S2 | 1.562 | 91P68296S4 | 1.626 |

*For Style 4 units add .0625" to diameter and 1/16" to length.

SPRAGUE CAPACITORS

TYPE 91P, continued

| μF | WVDC | Size D. x L. | Capacitance Tolerance ±20% | | | | Capacitance Tolerance ±10% | | | |
|------|------|-----------------|----------------------------|-----------|-----------------------------|-----------|----------------------------|-----------|-----------------------------|-----------|
| | | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve)* | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve)* | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .01 | 100 | .175 x 3/4 | 91P10301S2 | \$1.480 | 91P10301S4 | \$1.544 | 91P10391S2 | \$1.628 | 91P10391S4 | \$1.692 |
| | 200 | .235 x 3/4 | 91P10302S2 | 1.380 | 91P10302S4 | 1.444 | 91P10392S2 | 1.518 | 91P10392S4 | 1.582 |
| | 300 | .235 x 3/4 | 91P10303S2 | 1.400 | 91P10303S4 | 1.464 | 91P10393S2 | 1.540 | 91P10393S4 | 1.604 |
| | 400 | .235 x 3/4 | 91P10304S2 | 1.440 | 91P10304S4 | 1.464 | 91P10394S2 | 1.540 | 91P10394S4 | 1.604 |
| | 600 | .312 x 7/8 | 91P10306S2 | 1.440 | 91P10306S4 | 1.504 | 91P10396S2 | 1.584 | 91P10396S4 | 1.648 |
| .015 | 100 | .175 x 3/4 | 91P15301S2 | 1.480 | 91P15301S4 | 1.544 | 91P15391S2 | 1.628 | 91P15391S4 | 1.692 |
| | 200 | .235 x 3/4 | 91P15302S2 | 1.380 | 91P15302S4 | 1.444 | 91P15392S2 | 1.518 | 91P15392S4 | 1.582 |
| | 300 | .235 x 3/4 | 91P15303S2 | 1.400 | 91P15303S4 | 1.464 | 91P15393S2 | 1.540 | 91P15393S4 | 1.604 |
| | 400 | .312 x 7/8 | 91P15304S2 | 1.440 | 91P15304S4 | 1.504 | 91P15394S2 | 1.584 | 91P15394S4 | 1.648 |
| | 600 | .312 x 7/8 | 91P15306S2 | 1.480 | 91P15306S4 | 1.544 | 91P15396S2 | 1.628 | 91P15396S4 | 1.692 |
| .022 | 100 | .195 x 3/4 | 91P22301S2 | 1.480 | 91P22301S4 | 1.544 | 91P22391S2 | 1.628 | 91P22391S4 | 1.692 |
| | 200 | .235 x 3/4 | 91P22302S2 | 1.380 | 91P22302S4 | 1.444 | 91P22392S2 | 1.518 | 91P22392S4 | 1.582 |
| | 300 | .312 x 7/8 | 91P22303S2 | 1.480 | 91P22303S4 | 1.544 | 91P22393S2 | 1.628 | 91P22393S4 | 1.692 |
| | 400 | .312 x 7/8 | 91P22304S2 | 1.500 | 91P22304S4 | 1.564 | 91P22394S2 | 1.650 | 91P22394S4 | 1.714 |
| | 600 | .312 x 7/8 | 91P22306S2 | 1.520 | 91P22306S4 | 1.584 | 91P22396S2 | 1.672 | 91P22396S4 | 1.736 |
| .033 | 100 | .235 x 3/4 | 91P33301S2 | 1.440 | 91P33301S4 | 1.504 | 91P33391S2 | 1.584 | 91P33391S4 | 1.648 |
| | 200 | .312 x 7/8 | 91P33302S2 | 1.480 | 91P33302S4 | 1.544 | 91P33392S2 | 1.628 | 91P33392S4 | 1.648 |
| | 300 | .312 x 7/8 | 91P33303S2 | 1.480 | 91P33303S4 | 1.544 | 91P33393S2 | 1.628 | 91P33393S4 | 1.692 |
| | 400 | .312 x 7/8 | 91P33304S2 | 1.500 | 91P33304S4 | 1.564 | 91P33394S2 | 1.650 | 91P33394S4 | 1.714 |
| | 600 | .400 x 7/8 | 91P33306S2 | 1.560 | 91P33306S4 | 1.632 | 91P33396S2 | 1.716 | 91P33396S4 | 1.942 |
| .047 | 100 | .312 x 7/8 | 91P47301S2 | 1.460 | 91P47301S4 | 1.524 | 91P47391S2 | 1.606 | 91P47391S4 | 1.670 |
| | 200 | .312 x 7/8 | 91P47302S2 | 1.480 | 91P47302S4 | 1.544 | 91P47392S2 | 1.628 | 91P47392S4 | 1.648 |
| | 300 | .312 x 7/8 | 91P47303S2 | 1.520 | 91P47303S4 | 1.584 | 91P47393S2 | 1.672 | 91P47393S4 | 1.736 |
| | 400 | .400 x 7/8 | 91P47304S2 | 1.540 | 91P47304S4 | 1.612 | 91P47394S2 | 1.694 | 91P47394S4 | 1.766 |
| | 600 | .400 x 1 1/8 | 91P47306S2 | 1.560 | 91P47306S4 | 1.632 | 91P47396S2 | 1.716 | 91P47396S4 | 1.788 |
| .068 | 100 | .312 x 7/8 | 91P68301S2 | 1.460 | 91P68301S4 | 1.524 | 91P68391S2 | 1.606 | 91P68391S4 | 1.670 |
| | 200 | .312 x 7/8 | 91P68302S2 | 1.480 | 91P68302S4 | 1.544 | 91P68392S2 | 1.628 | 91P68392S4 | 1.648 |
| | 300 | .400 x 7/8 | 91P68303S2 | 1.560 | 91P68303S4 | 1.632 | 91P68393S2 | 1.716 | 91P68393S4 | 1.788 |
| | 400 | .400 x 1 1/8 | 91P68304S2 | 1.600 | 91P68304S4 | 1.672 | 91P68394S2 | 1.694 | 91P68394S4 | 1.832 |
| | 600 | .400 x 1 1/8 | 91P68306S2 | 1.680 | 91P68306S4 | 1.752 | 91P68396S2 | 1.848 | 91P68396S4 | 1.880 |
| .1 | 100 | .312 x 7/8 | 91P10401S2 | 1.480 | 91P10401S4 | 1.544 | 91P10491S2 | 1.628 | 91P10491S4 | 1.692 |
| | 200 | .400 x 7/8 | 91P10402S2 | 1.500 | 91P10402S4 | 1.572 | 91P10492S2 | 1.650 | 91P10492S4 | 1.722 |
| | 300 | .400 x 1 1/8 | 91P10403S2 | 1.640 | 91P10403S4 | 1.712 | 91P10493S2 | 1.804 | 91P10493S4 | 1.876 |
| | 400 | .400 x 1 1/8 | 91P10404S2 | 1.720 | 91P10404S4 | 1.792 | 91P10494S2 | 1.892 | 91P10494S4 | 1.964 |
| | 600 | .562 x 1 1/8 | 91P10406S2 | 1.760 | 91P10406S4 | 1.856 | 91P10496S2 | 1.936 | 91P10496S4 | 2.032 |
| .15 | 100 | .400 x 7/8 | 91P15401S2 | 1.580 | 91P15401S4 | 1.652 | 91P15491S2 | 1.738 | 91P15491S4 | 1.810 |
| | 200 | .400 x 1 1/8 | 91P15402S2 | 1.600 | 91P15402S4 | 1.672 | 91P15492S2 | 1.760 | 91P15492S4 | 1.830 |
| | 300 | .400 x 1 3/8 | 91P15403S2 | 1.720 | 91P15403S4 | 1.792 | 91P15493S2 | 1.892 | 91P15493S4 | 1.964 |
| | 400 | .562 x 1 1/8 | 91P15404S2 | 1.880 | 91P15404S4 | 1.976 | 91P15494S2 | 2.068 | 91P15494S4 | 2.164 |
| | 600 | .562 x 1 3/8 | 91P15406S2 | 1.900 | 91P15406S4 | 1.996 | 91P15496S2 | 2.090 | 91P15496S4 | 2.188 |
| .22 | 100 | .400 x 1 1/8 | 91P22401S2 | 1.640 | 91P22401S4 | 1.712 | 91P22491S2 | 1.804 | 91P22491S4 | 1.876 |
| | 200 | .400 x 1 3/8 | 91P22402S2 | 1.800 | 91P22402S4 | 1.872 | 91P22492S2 | 1.980 | 91P22492S4 | 2.052 |
| | 300 | .562 x 1 1/8 | 91P22403S2 | 1.840 | 91P22403S4 | 1.936 | 91P22493S2 | 2.024 | 91P22493S4 | 2.080 |
| | 400 | .562 x 1 3/8 | 91P22404S2 | 2.000 | 91P22404S4 | 2.072 | 91P22494S2 | 2.200 | 91P22494S4 | 2.296 |
| | 600 | .562 x 1 3/8 | 91P22406S2 | 2.040 | 91P22406S4 | 2.136 | 91P22496S2 | 2.244 | 91P22496S4 | 2.340 |
| .33 | 100 | .400 x 1 3/8 | 91P33401S2 | 1.880 | 91P33401S4 | 1.952 | 91P33491S2 | 2.068 | 91P33491S4 | 2.140 |
| | 200 | .562 x 1 1/8 | 91P33402S2 | 1.920 | 91P33402S4 | 2.016 | 91P33492S2 | 2.112 | 91P33492S4 | 2.208 |
| | 300 | .562 x 1 3/8 | 91P33403S2 | 2.000 | 91P33403S4 | 2.096 | 91P33493S2 | 2.200 | 91P33493S4 | 2.296 |
| | 400 | .562 x 1 3/8 | 91P33404S2 | 2.020 | 91P33404S4 | 2.116 | 91P33494S2 | 2.222 | 91P33494S4 | 2.318 |
| | 600 | .670 x 1 1/8 | 91P33406S2 | 2.240 | 91P33406S4 | 2.380 | 91P33496S2 | 2.464 | 91P33496S4 | 2.604 |
| .47 | 100 | .562 x 1 1/8 | 91P47401S2 | 2.000 | 91P47401S4 | 2.096 | 91P47491S2 | 2.200 | 91P47491S4 | 2.296 |
| | 200 | .562 x 1 3/8 | 91P47402S2 | 2.040 | 91P47402S4 | 2.136 | 91P47492S2 | 2.244 | 91P47492S4 | 2.340 |
| | 300 | .562 x 1 3/8 | 91P47403S2 | 2.440 | 91P47403S4 | 2.536 | 91P47493S2 | 2.684 | 91P47493S4 | 2.780 |
| | 400 | .670 x 1 1/8 | 91P47404S2 | 2.464 | 91P47404S4 | 2.604 | 91P47494S2 | 2.710 | 91P47494S4 | 2.850 |
| | 600 | .750 x 2 1/8 | 91P47406S2 | 2.680 | 91P47406S4 | 2.840 | 91P47496S2 | 2.948 | 91P47496S4 | 3.108 |
| .68 | 100 | .562 x 1 3/8 | 91P68401S2 | 2.080 | 91P68401S4 | 2.176 | 91P68491S2 | 2.288 | 91P68491S4 | 2.384 |
| | 200 | .562 x 1 3/8 | 91P68402S2 | 2.116 | 91P68402S4 | 2.212 | 91P68492S2 | 2.328 | 91P68492S4 | 2.424 |
| | 300 | .670 x 1 1/8 | 91P68403S2 | 2.600 | 91P68403S4 | 2.740 | 91P68493S2 | 2.860 | 91P68493S4 | 3.000 |
| | 400 | .750 x 2 1/8 | 91P68404S2 | 3.280 | 91P68404S4 | 3.440 | 91P68494S2 | 3.630 | 91P68494S4 | 3.768 |
| | 600 | 1.000 x 1 13/16 | 91P68406S2 | 3.360 | 91P68406S4 | 3.520 | 91P68496S2 | 3.696 | 91P68496S4 | 3.852 |
| 1.0 | 100 | .562 x 1 3/8 | 91P10501S2 | 2.520 | 91P10501S4 | 2.560 | 91P10591S2 | 2.772 | 91P10591S4 | 2.816 |
| | 200 | .670 x 1 1/8 | 91P10502S2 | 2.600 | 91P10502S4 | 2.740 | 91P10592S2 | 2.868 | 91P10592S4 | 3.000 |
| | 300 | .750 x 2 1/8 | 91P10503S2 | 3.360 | 91P10503S4 | 3.520 | 91P10593S2 | 3.696 | 91P10593S4 | 3.856 |
| | 400 | 1.000 x 1 13/16 | 91P10504S2 | 3.400 | 91P10504S4 | 3.600 | 91P10594S2 | 3.740 | 91P10594S4 | 3.940 |

*For Style 4 units add .0625" to diameter and 1/16" to length.

SPRAGUE CAPACITORS

TYPE 96P, INSERTED TAB CONSTRUCTION, 125°C OPERATION

| μF | WVDC | Size D. x L. | Capacitance Tolerance ±20% | | | | Capacitance Tolerance ±10% | | | |
|-------|------|-----------------|----------------------------|-----------|------------------------------|-----------|----------------------------|-----------|------------------------------|-----------|
| | | | Style 2 (bare metal case) | | Style 4 (w. plastic sleeve)* | | Style 2 (bare metal case) | | Style 4 (w. plastic sleeve)* | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .001 | 100 | .175 x 3/4 | 96P10201S2 | | 96P10201S4 | \$1.572 | 96P10291S2 | \$1.650 | 96P10201S4 | \$1.722 |
| | 200 | .235 x 3/4 | 96P10202S2 | 1.500 | 96P10202S4 | 1.512 | 96P10292S2 | 1.584 | 96P10202S4 | 1.656 |
| | 300 | .235 x 3/4 | 96P10203S2 | 1.480 | 96P10203S4 | 1.552 | 96P10293S2 | 1.628 | 96P10203S4 | 1.700 |
| | 400 | .235 x 3/4 | 96P10204S2 | 1.500 | 96P10204S4 | 1.572 | 96P10294S2 | 1.650 | 96P10204S4 | 1.722 |
| | 600 | .235 x 3/4 | 96P10206S2 | 1.520 | 96P10206S4 | 1.592 | 96P10296S2 | 1.672 | 96P10206S4 | 1.744 |
| .0012 | 600 | .235 x 11/16 | | | | | 96P12296S2 | 1.672 | 96P12296S4 | 1.744 |
| | 100 | .175 x 3/4 | 96P15201S2 | 1.500 | 96P15201S4 | 1.572 | 96P15291S2 | 1.650 | 96P15291S4 | 1.722 |
| | 200 | .235 x 3/4 | 96P15202S2 | 1.440 | 96P15202S4 | 1.512 | 96P15292S2 | 1.584 | 96P15292S4 | 1.656 |
| | 300 | .235 x 3/4 | 96P15203S2 | 1.480 | 96P15203S4 | 1.552 | 96P15293S2 | 1.628 | 96P15293S4 | 1.700 |
| | 400 | .235 x 3/4 | 96P15204S2 | 1.500 | 96P15204S4 | 1.572 | 96P15294S2 | 1.650 | 96P15294S4 | 1.722 |
| .0015 | 600 | .235 x 3/4 | 96P15206S2 | 1.520 | 96P15206S4 | 1.592 | 96P15296S2 | 1.672 | 96P15296S4 | 1.744 |
| | 100 | .175 x 3/4 | 96P22201S2 | 1.500 | 96P22201S4 | 1.572 | 96P22296S2 | 1.672 | 96P22296S4 | 1.744 |
| | 200 | .235 x 3/4 | 96P22202S2 | 1.440 | 96P22202S4 | 1.512 | 96P22292S2 | 1.650 | 96P22202S4 | 1.722 |
| | 300 | .235 x 3/4 | 96P22203S2 | 1.480 | 96P22203S4 | 1.512 | 96P22292S2 | 1.584 | 96P22202S4 | 1.656 |
| | 400 | .235 x 3/4 | 96P22204S2 | 1.500 | 96P22204S4 | 1.552 | 96P22293S2 | 1.628 | 96P22203S4 | 1.700 |
| .0018 | 600 | .235 x 3/4 | 96P22206S2 | 1.520 | 96P22206S4 | 1.592 | 96P22296S2 | 1.650 | 96P22204S4 | 1.722 |
| | 100 | .175 x 3/4 | 96P33201S2 | 1.500 | 96P33201S4 | 1.572 | 96P33296S2 | 1.716 | 96P33296S4 | 1.788 |
| | 200 | .235 x 3/4 | 96P33202S2 | 1.480 | 96P33202S4 | 1.572 | 96P33292S2 | 1.650 | 96P33292S4 | 1.722 |
| | 300 | .235 x 3/4 | 96P33203S2 | 1.480 | 96P33203S4 | 1.552 | 96P33292S2 | 1.628 | 96P33292S4 | 1.700 |
| | 400 | .235 x 3/4 | 96P33204S2 | 1.540 | 96P33204S4 | 1.612 | 96P33293S2 | 1.628 | 96P33293S4 | 1.700 |
| .0022 | 600 | .235 x 3/4 | 96P33206S2 | 1.560 | 96P33206S4 | 1.632 | 96P33296S2 | 1.694 | 96P33294S4 | 1.766 |
| | 100 | .175 x 3/4 | 96P47201S2 | 1.520 | 96P47201S4 | 1.592 | 96P39296S2 | 1.716 | 96P33296S4 | 1.788 |
| | 200 | .235 x 3/4 | 96P47202S2 | 1.480 | 96P47202S4 | 1.552 | 96P47291S2 | 1.672 | 96P47291S4 | 1.744 |
| | 300 | .235 x 3/4 | 96P47203S2 | 1.480 | 96P47203S4 | 1.552 | 96P47292S2 | 1.628 | 96P47292S4 | 1.700 |
| | 400 | .235 x 3/4 | 96P47204S2 | 1.540 | 96P47204S4 | 1.612 | 96P47293S2 | 1.628 | 96P47293S4 | 1.700 |
| .0027 | 600 | .235 x 3/4 | 96P47206S2 | 1.560 | 96P47206S4 | 1.632 | 96P47296S2 | 1.716 | 96P47294S4 | 1.766 |
| | 100 | .175 x 3/4 | 96P68201S2 | 1.520 | 96P68201S4 | 1.592 | 96P56296S2 | 1.716 | 96P47296S4 | 1.788 |
| | 200 | .235 x 3/4 | 96P68202S2 | 1.480 | 96P68202S4 | 1.552 | 96P68291S2 | 1.672 | 96P68291S4 | 1.744 |
| | 300 | .235 x 3/4 | 96P68203S2 | 1.520 | 96P68203S4 | 1.592 | 96P68292S2 | 1.628 | 96P68392S4 | 1.700 |
| | 400 | .235 x 3/4 | 96P68204S2 | 1.540 | 96P68204S4 | 1.612 | 96P68293S2 | 1.672 | 96P68393S4 | 1.744 |
| .0033 | 600 | .235 x 3/4 | 96P68206S2 | 1.560 | 96P68206S4 | 1.632 | 96P68296S2 | 1.716 | 96P68394S4 | 1.766 |
| | 100 | .175 x 3/4 | 96P10301S2 | 1.520 | 96P10301S4 | 1.592 | 96P82296S2 | 1.716 | 96P68396S4 | 1.788 |
| | 200 | .235 x 3/4 | 96P10302S2 | 1.480 | 96P10302S4 | 1.552 | 96P82292S2 | 1.650 | 96P82294S4 | 1.796 |
| | 300 | .235 x 3/4 | 96P10303S2 | 1.520 | 96P10303S4 | 1.592 | 96P82296S2 | 1.760 | 96P82296S4 | 1.840 |
| | 400 | .235 x 3/4 | 96P10304S2 | 1.560 | 96P10304S4 | 1.632 | 96P10391S2 | 1.672 | 96P10391S4 | 1.744 |
| .0039 | 600 | .235 x 3/4 | 96P10306S2 | 1.600 | 96P10306S4 | 1.680 | 96P10396S2 | 1.760 | 96P10392S4 | 1.800 |
| | 100 | .175 x 3/4 | 96P1301S2 | 1.520 | 96P1301S4 | 1.592 | 96P12392S2 | 1.672 | 96P10394S4 | 1.796 |
| | 200 | .235 x 3/4 | 96P1302S2 | 1.480 | 96P1302S4 | 1.552 | 96P12396S2 | 1.804 | 96P10396S4 | 1.840 |
| | 300 | .235 x 3/4 | 96P1303S2 | 1.520 | 96P1303S4 | 1.592 | 96P13391S2 | 1.672 | 96P13391S4 | 1.744 |
| | 400 | .235 x 3/4 | 96P1304S2 | 1.560 | 96P1304S4 | 1.632 | 96P13392S2 | 1.628 | 96P10392S4 | 1.700 |
| .0047 | 600 | .235 x 3/4 | 96P1306S2 | 1.600 | 96P1306S4 | 1.680 | 96P13396S2 | 1.760 | 96P10394S4 | 1.796 |
| | 100 | .175 x 3/4 | 96P15301S2 | 1.520 | 96P15301S4 | 1.592 | 96P1392S2 | 1.672 | 96P10396S4 | 1.840 |
| | 200 | .235 x 3/4 | 96P15302S2 | 1.500 | 96P15302S4 | 1.572 | 96P1396S2 | 1.804 | 96P12392S4 | 1.722 |
| | 300 | .235 x 3/4 | 96P15303S2 | 1.540 | 96P15303S4 | 1.612 | 96P1391S2 | 1.650 | 96P12396S4 | 1.884 |
| | 400 | .235 x 3/4 | 96P15304S2 | 1.600 | 96P15304S4 | 1.680 | 96P1392S2 | 1.628 | 96P15391S4 | 1.744 |
| .0056 | 600 | .235 x 3/4 | 96P15306S2 | 1.640 | 96P15306S4 | 1.720 | 96P1396S2 | 1.750 | 96P15392S4 | 1.766 |
| | 100 | .175 x 3/4 | 96P18391S2 | 1.520 | 96P18391S4 | 1.592 | 96P15396S2 | 1.804 | 96P15394S4 | 2.192 |
| | 200 | .235 x 3/4 | 96P18392S2 | 1.480 | 96P18392S4 | 1.552 | 96P15391S2 | 1.750 | 96P15396S4 | 1.884 |
| | 300 | .235 x 3/4 | 96P18393S2 | 1.520 | 96P18393S4 | 1.592 | 96P15391S2 | 1.804 | 96P15391S4 | 1.884 |
| | 400 | .235 x 3/4 | 96P18394S2 | 1.560 | 96P18394S4 | 1.632 | 96P15391S2 | 2.068 | 96P15391S4 | 2.156 |
| .0068 | 600 | .235 x 3/4 | 96P18396S2 | 1.560 | 96P18396S4 | 1.632 | 96P18392S2 | 1.650 | 96P18392S4 | 1.722 |
| | 100 | .175 x 3/4 | 96P22301S2 | 1.520 | 96P22301S4 | 1.592 | 96P18396S2 | 1.804 | 96P18396S4 | 1.884 |
| | 200 | .235 x 3/4 | 96P22302S2 | 1.500 | 96P22302S4 | 1.572 | 96P18391S2 | 1.672 | 96P18391S4 | 1.744 |
| | 300 | .235 x 3/4 | 96P22303S2 | 1.600 | 96P22303S4 | 1.680 | 96P22391S2 | 1.650 | 96P22392S4 | 1.722 |
| | 400 | .235 x 3/4 | 96P22304S2 | 1.620 | 96P22304S4 | 1.700 | 96P22392S2 | 1.760 | 96P22393S4 | 1.840 |
| .0082 | 600 | .235 x 3/4 | 96P22306S2 | 1.640 | 96P22306S4 | 1.720 | 96P22396S2 | 1.782 | 96P22394S4 | 1.862 |
| | 100 | .175 x 3/4 | 96P22301S2 | 1.520 | 96P22301S4 | 1.592 | 96P22396S2 | 1.804 | 96P22396S4 | 1.884 |
| | 200 | .235 x 3/4 | 96P22302S2 | 1.500 | 96P22302S4 | 1.572 | 96P22391S2 | 1.628 | 96P22391S4 | 1.700 |
| | 300 | .235 x 3/4 | 96P22303S2 | 1.600 | 96P22303S4 | 1.680 | 96P22392S2 | 1.782 | 96P22394S4 | 1.862 |
| | 400 | .235 x 3/4 | 96P22304S2 | 1.620 | 96P22304S4 | 1.700 | 96P22396S2 | 1.804 | 96P22396S4 | 1.884 |
| .01 | 600 | .235 x 3/4 | 96P22306S2 | 1.640 | 96P22306S4 | 1.720 | 96P22396S2 | 2.068 | 96P22391S4 | 2.156 |
| | 100 | .175 x 3/4 | 96P22301S2 | 1.520 | 96P22301S4 | 1.592 | 96P27391S2 | 1.628 | 96P27391S4 | 1.700 |
| | 200 | .235 x 3/4 | 96P22302S2 | 1.500 | 96P22302S4 | 1.572 | 96P27392S2 | 1.782 | 96P27394S4 | 1.862 |
| | 300 | .235 x 3/4 | 96P22303S2 | 1.600 | 96P22303S4 | 1.680 | 96P27396S2 | 1.870 | 96P27396S4 | 1.958 |
| | 400 | .235 x 3/4 | 96P22304S2 | 1.620 | 96P22304S4 | 1.700 | 96P27391S2 | 2.134 | 96P27391S4 | 2.222 |
| .012 | 600 | .235 x 3/4 | 96P22306S2 | 1.640 | 96P22306S4 | 1.720 | 96P27391S2 | 2.134 | 96P27391S4 | 2.222 |
| | 100 | .175 x 3/4 | 96P33301S2 | 1.520 | 96P33301S4 | 1.592 | 96P33391S2 | 1.628 | 96P33391S4 | 1.700 |
| | 200 | .235 x 3/4 | 96P33302S2 | 1.500 | 96P33302S4 | 1.572 | 96P33392S2 | 1.628 | 96P33391S4 | 1.700 |
| | 300 | .235 x 3/4 | 96P33303S2 | 1.600 | 96P33303S4 | 1.680 | 96P33392S2 | 1.760 | 96P33392S4 | 1.752 |
| | 400 | .235 x 3/4 | 96P33304S2 | 1.620 | 96P33304S4 | 1.700 | 96P33393S2 | 1.760 | 96P33393S4 | 1.840 |
| .015 | 600 | .235 x 3/4 | 96P33306S2 | 1.700 | 96P33306S4 | 1.788 | 96P33394S2 | 1.782 | 96P33394S4 | 1.862 |
| | 100 | .175 x 3/4 | 96P33301S2 | 1.480 | 96P33301S4 | 1.552 | 96P33396S2 | 1.870 | 96P33394S4 | 1.862 |
| | 200 | .235 x 3/4 | 96P33302S2 | 1.520 | 96P33302S4 | 1.600 | 96P33396S2 | 1.870 | 96P33396S4 | 1.958 |
| | 300 | .235 x 3/4 | 96P33303S2 | 1.600 | 96P33303S4 | 1.680 | 96P33391S2 | 2.134 | 96P33391S4 | 2.222 |
| | 400 | .235 x 3/4 | 96P33304S2 | 1.700 | 96P33304S4 | 1.788 | 96P33391S2 | 2.134 | 96P33391S4 | 2.222 |
| .018 | 600 | .235 x 3/4 | 96P33306S2 | 1.700 | 96P33306S4 | 1.788 | 96P33391S2 | 2.134 | 96P33391S4 | 2.222 |
| | 100 | .175 x 3/4 | 96P39391S2 | 1.520 | 96P39391S4 | 1.592 | 96P39392S2 | 1.716 | 96P39392S4 | 1.796 |
| | 200 | .235 x 3/4 | 96P39392S2 | 1.480 | 96P39392S4 | 1.552 | 96P39394S2 | 1.848 | 96P39394S4 | 1.936 |
| | 300 | .235 x 3/4 | 96P39393S2 | 1.600 | 96P39393S4 | 1.680 | 96P39396S2 | 1.892 | 96P39396S4 | 1.980 |
| | 400 | .235 x 3/4 | 96P39394S2 | 1.700 | 96P39394S4 | 1.788 | 96P39391S2 | 2.156 | 96P39391S4 | 2.244 |
| .022 | 600 | .235 x 3/4 | 96P39396S2 | 1.700 | 96P39396S4 | 1.788 | 96P39391S2 | 2.156 | 96P39391S4 | 2.244 |
| | 100 | .175 x 3/4 | 96P47301S2 | 1.480 | 96P47301S4 | 1.560 | 96P47391S2 | 1.628 | 96P47391S4 | 1.708 |
| | 200 | .235 x 3/4 | 96P47302S2 | 1.560 | 96P47302S4 | 1.640 | 96P47392S2 | 1.716 | 96P47392S4 | 1.796 |
| | 300 | .235 x 3/4 | 96P47303S2 | 1.640 | 96P47303S4 | 1.720 | 96P47393S2 | 1.804 | 96P47393S4 | 1.884 |
| | 400 | .235 x 3/4 | 96P47304S2 | 1.680 | 96P47304S4 | 1.768 | 96P47394S2 | 1.848 | 96P47394S4 | 1.936 |
| .027 | 600 | .235 x 3/4 | 96P47 | | | | | | | |

SPRAGUE CAPACITORS

TYPE 96P, continued

| μF | WVDC | Size D. x L. | Capacitance Tolerance ±20% | | | | Capacitance Tolerance ±10% | | | |
|------|------|-----------------|----------------------------|------------|-----------------------------|------------|----------------------------|------------|-----------------------------|------------|
| | | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve)* | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve)* | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .068 | 100 | .312 x 7/16 | 96P68301S2 | \$1.560 | 96P68301S4 | \$1.640 | 96P68391S2 | \$1.716 | 96P68391S4 | \$1.788 |
| | 200 | .312 x 7/16 | 96P68302S2 | 1.600 | 96P68302S4 | 1.680 | 96P68392S2 | 1.760 | 96P68392S4 | 1.840 |
| | 300 | .400 x 7/16 | 96P68303S2 | 1.680 | 96P68303S4 | 1.768 | 96P68393S2 | 1.848 | 96P68393S4 | 1.936 |
| | 400 | .400 x 1 1/16 | 96P68304S2 | 1.720 | 96P68304S4 | 1.808 | 96P68394S2 | 1.892 | 96P68394S4 | 1.980 |
| | 600 | .400 x 1 1/16 | 96P68306S2 | 1.800 | 96P68306S4 | 1.888 | 96P68396S2 | 1.980 | 96P68396S4 | 2.068 |
| | 1000 | .562 x 1 3/16 | --- | --- | --- | --- | 96P683910S2 | 2.420 | 96P683910S4 | 2.372 |
| .082 | 100 | .312 x 13/16 | --- | --- | --- | --- | 96P82391S2 | 1.760 | 96P82391S4 | 1.840 |
| | 200 | .400 x 13/16 | --- | --- | --- | --- | 96P82392S2 | 1.804 | 96P82392S4 | 1.892 |
| | 400 | .400 x 1 1/16 | --- | --- | --- | --- | 96P82394S2 | 1.936 | 96P82394S4 | 2.024 |
| | 600 | .562 x 1 1/16 | --- | --- | --- | --- | 96P82396S2 | 2.112 | 96P82396S4 | 2.240 |
| | 1000 | .562 x 1 1/16 | --- | --- | --- | --- | 96P823910S2 | 2.376 | 96P823910S4 | 2.504 |
| | 100 | .312 x 7/16 | 96P10401S2 | 1.600 | 96P10401S4 | 1.680 | 96P10491S2 | 1.760 | 96P10491S4 | 1.840 |
| .1 | 200 | .400 x 7/16 | 96P10402S2 | 1.640 | 96P10402S4 | 1.728 | 96P10492S2 | 1.804 | 96P10492S4 | 1.892 |
| | 300 | .400 x 1 1/16 | 96P10403S2 | 1.680 | 96P10403S4 | 1.768 | 96P10493S2 | 1.848 | 96P10493S4 | 1.936 |
| | 400 | .400 x 1 1/16 | 96P10404S2 | 1.760 | 96P10404S4 | 1.848 | 96P10494S2 | 1.936 | 96P10494S4 | 2.024 |
| | 600 | .562 x 1 1/16 | 96P10406S2 | 1.920 | 96P10406S4 | 2.048 | 96P10496S2 | 2.112 | 96P10496S4 | 2.240 |
| | 1000 | .562 x 1 1/16 | --- | --- | --- | --- | 96P104910S2 | 2.376 | 96P104910S4 | 2.504 |
| | 100 | .400 x 13/16 | --- | --- | --- | --- | 96P12491S2 | 1.848 | 96P12491S4 | 1.936 |
| .12 | 200 | .400 x 1 1/16 | --- | --- | --- | --- | 96P12492S2 | 1.826 | 96P12492S4 | 1.912 |
| | 400 | .562 x 1 1/16 | --- | --- | --- | --- | 96P12494S2 | 2.112 | 96P12494S4 | 2.332 |
| | 600 | .562 x 1 1/16 | --- | --- | --- | --- | 96P12496S2 | 2.200 | 96P12496S4 | 2.328 |
| | 1000 | .670 x 1 1/16 | --- | --- | --- | --- | 96P124910S2 | 2.464 | 96P124910S4 | 2.580 |
| | 100 | .400 x 7/16 | 96P15491S2 | 1.680 | 96P15401S4 | 2.768 | 96P15491S2 | 1.848 | 96P15491S4 | 1.936 |
| | .15 | 200 | .400 x 1 1/16 | 96P15492S2 | 1.660 | 96P15402S4 | 1.748 | 96P15492S2 | 1.826 | 96P15492S4 | 1.914 |
| 300 | | .400 x 1 1/16 | 96P15493S2 | 1.760 | 96P15403S4 | 1.848 | 96P15493S2 | 1.936 | 96P15493S4 | 2.024 |
| 400 | | .562 x 1 1/16 | 96P15494S2 | 1.920 | 96P15404S4 | 2.048 | 96P15494S2 | 2.112 | 96P15494S4 | 2.332 |
| 600 | | .562 x 1 1/16 | 96P15496S2 | 2.000 | 96P15406S4 | 2.128 | 96P15496S2 | 2.200 | 96P15496S4 | 2.328 |
| 1000 | | .670 x 1 1/16 | --- | --- | --- | --- | 96P154910S2 | 2.464 | 96P154910S4 | 2.580 |
| 100 | | .400 x 1 1/16 | --- | --- | --- | --- | 96P18491S2 | 1.848 | 96P18491S4 | 1.936 |
| .18 | 200 | .400 x 1 1/16 | --- | --- | --- | --- | 96P18492S2 | 2.002 | 96P18492S4 | 2.090 |
| | 400 | .562 x 1 1/16 | --- | --- | --- | --- | 96P18494S2 | 2.244 | 96P18494S4 | 2.372 |
| | 600 | .562 x 1 1/16 | --- | --- | --- | --- | 96P18496S2 | 2.376 | 96P18496S4 | 2.504 |
| | 1000 | .750 x 2 1/16 | --- | --- | --- | --- | 96P184910S2 | 2.640 | 96P184910S4 | 2.860 |
| | 100 | .400 x 1 1/16 | 96P22401S2 | 1.680 | 96P22401S4 | 1.768 | 96P22491S2 | 1.848 | 96P22491S4 | 1.936 |
| | .22 | 200 | .400 x 1 1/16 | 96P22402S2 | 1.820 | 96P22402S4 | 1.908 | 96P22492S2 | 2.002 | 96P22492S4 | 2.090 |
| 300 | | .562 x 1 1/16 | 96P22403S2 | 1.880 | 96P22403S4 | 2.008 | 96P22493S2 | 2.068 | 96P22493S4 | 2.196 |
| 400 | | .562 x 1 1/16 | 96P22404S2 | 2.040 | 96P22404S4 | 2.168 | 96P22494S2 | 2.244 | 96P22494S4 | 2.372 |
| 600 | | .562 x 1 1/16 | 96P22406S2 | 2.160 | 96P22406S4 | 2.288 | 96P22496S2 | 2.376 | 96P22496S4 | 2.504 |
| 1000 | | .750 x 2 1/16 | --- | --- | --- | --- | 96P224910S2 | 2.640 | 96P224910S4 | 2.860 |
| 100 | | .400 x 1 1/16 | --- | --- | --- | --- | 96P27491S2 | 2.112 | 96P27491S4 | 2.200 |
| .27 | 200 | .562 x 1 1/16 | --- | --- | --- | --- | 96P27492S2 | 2.156 | 96P27492S4 | 2.284 |
| | 400 | .562 x 1 1/16 | --- | --- | --- | --- | 96P27494S2 | 2.288 | 96P27494S4 | 2.416 |
| | 600 | .562 x 1 1/16 | --- | --- | --- | --- | 96P27496S2 | 2.640 | 96P27496S4 | 2.768 |
| | 1000 | .750 x 2 1/16 | --- | --- | --- | --- | 96P274910S2 | 2.904 | 96P274910S4 | 3.124 |
| | 100 | .400 x 1 1/16 | 96P33401S2 | 1.920 | 96P33401S4 | 2.008 | 96P33491S2 | 2.112 | 96P33491S4 | 2.200 |
| | .33 | 200 | .562 x 1 1/16 | 96P33402S2 | 1.960 | 96P33402S4 | 2.088 | 96P33492S2 | 2.156 | 96P33492S4 | 2.284 |
| 300 | | .562 x 1 1/16 | 96P33403S2 | 2.040 | 96P33403S4 | 2.168 | 96P33493S2 | 2.244 | 96P33493S4 | 2.372 |
| 400 | | .562 x 1 1/16 | 96P33404S2 | 2.080 | 96P33404S4 | 2.208 | 96P33494S2 | 2.288 | 96P33494S4 | 2.416 |
| 600 | | .670 x 1 1/16 | 96P33406S2 | 2.400 | 96P33406S4 | 2.560 | 96P33496S2 | 2.640 | 96P33496S4 | 2.768 |
| 1000 | | .750 x 1 1/16 | --- | --- | --- | --- | 96P334910S2 | 2.904 | 96P334910S4 | 3.124 |
| 100 | | .562 x 1 1/16 | --- | --- | --- | --- | 96P39491S2 | 2.244 | 96P39491S4 | 2.372 |
| .39 | 200 | .562 x 1 1/16 | --- | --- | --- | --- | 96P39492S2 | 2.288 | 96P39492S4 | 2.416 |
| | 400 | .670 x 1 1/16 | --- | --- | --- | --- | 96P39494S2 | 2.728 | 96P39494S4 | 2.948 |
| | 600 | .750 x 2 1/16 | --- | --- | --- | --- | 96P39496S2 | 2.970 | 96P39496S4 | 3.190 |
| | 1000 | 1.000 x 2 1/16 | --- | --- | --- | --- | 96P394910S2 | 3.234 | 96P394910S4 | 3.514 |
| | 100 | .562 x 1 1/16 | 96P47401S2 | 2.040 | 96P47401S4 | 2.178 | 96P47491S2 | 2.244 | 96P47491S4 | 2.372 |
| | .47 | 200 | .562 x 1 1/16 | 96P47402S2 | 2.080 | 96P47402S4 | 2.208 | 96P47492S2 | 2.288 | 96P47492S4 | 2.416 |
| 300 | | .562 x 1 1/16 | 96P47403S2 | 2.480 | 96P47403S4 | 2.608 | 96P47493S2 | 2.728 | 96P47493S4 | 2.888 |
| 400 | | .670 x 1 1/16 | 96P47404S2 | 2.480 | 96P47404S4 | 2.640 | 96P47494S2 | 2.728 | 96P47494S4 | 2.948 |
| 600 | | .750 x 2 1/16 | 96P47406S2 | 2.700 | 96P47406S4 | 2.840 | 96P47496S2 | 2.970 | 96P47496S4 | 3.190 |
| 1000 | | 1.000 x 2 1/16 | --- | --- | --- | --- | 96P474910S2 | 3.234 | 96P474910S4 | 3.514 |
| 100 | | .562 x 1 1/16 | --- | --- | --- | --- | 96P56491S2 | 2.332 | 96P56491S4 | 2.460 |
| .56 | 200 | .562 x 1 1/16 | --- | --- | --- | --- | 96P56492S2 | 2.420 | 96P56492S4 | 2.548 |
| | 400 | .750 x 2 1/16 | --- | --- | --- | --- | 96P56494S2 | 3.630 | 96P56494S4 | 3.850 |
| | 600 | 1.000 x 1 1/16 | --- | --- | --- | --- | 96P56496S2 | 3.696 | 96P56496S4 | 3.976 |
| | 100 | .562 x 1 1/16 | 96P68401S2 | 2.120 | 96P68401S4 | 2.248 | 96P68491S2 | 2.332 | 96P68491S4 | 2.460 |
| | 200 | .562 x 1 1/16 | 96P68402S2 | 2.200 | 96P68402S4 | 2.328 | 96P68492S2 | 2.420 | 96P68492S4 | 2.548 |
| | .68 | 300 | .670 x 1 1/16 | 96P68403S2 | 2.640 | 96P68403S4 | 2.800 | 96P68493S2 | 2.900 | 96P68493S4 | 3.064 |
| 400 | | .750 x 2 1/16 | 96P68404S2 | 3.300 | 96P68404S4 | 3.520 | 96P68494S2 | 3.630 | 96P68494S4 | 3.850 |
| 600 | | 1.000 x 1 1/16 | 96P68406S2 | 3.360 | 96P68406S4 | 3.640 | 96P68496S2 | 3.696 | 96P68496S4 | 3.976 |
| 100 | | .562 x 1 1/16 | --- | --- | --- | --- | 96P82491S2 | 2.816 | 96P82491S4 | 2.504 |
| 200 | | .670 x 1 1/16 | --- | --- | --- | --- | 96P82492S2 | 2.904 | 96P82492S4 | 3.064 |
| 400 | | 1.000 x 1 1/16 | --- | --- | --- | --- | 96P82494S2 | 3.762 | 96P82494S4 | 4.042 |
| 1.0 | 100 | .562 x 1 1/16 | 96P10501S2 | 2.156 | 96P10501S4 | 2.288 | 96P10591S2 | 2.816 | 96P10591S4 | 2.504 |
| | 200 | .670 x 1 1/16 | 96P10502S2 | 2.640 | 96P10502S4 | 2.800 | 96P10592S2 | 2.904 | 96P10592S4 | 3.064 |
| | 300 | .750 x 2 1/16 | 96P10503S2 | 3.400 | 96P10503S4 | 3.620 | 96P10593S2 | 3.740 | 96P10593S4 | 3.960 |
| | 400 | 1.000 x 1 1/16 | 96P10504S2 | 3.420 | 96P10504S4 | 3.700 | 96P10594S2 | 3.762 | 96P10594S4 | 4.042 |

*For Style 4 units add .0625" to diameter and 1/16" to length.

SPRAGUE CAPACITORS

TYPE 191P, EXTENDED FOIL CONSTRUCTION, 85°C OPERATION

| μF | WVDC | Size D. x L. | Capacitance Tolerance ±20% | | | | Capacitance Tolerance ±10% | | | |
|-------|------|-----------------|----------------------------|-----------|-----------------------------|-----------|----------------------------|-----------|-----------------------------|-----------|
| | | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve*) | | Style 2 (bare metal case) | | Style 4 (w/plastic sleeve*) | |
| | | | Cof. No. | Net (1-9) | Cof. No. | Net (1-9) | Cof. No. | Net (1-9) | Cof. No. | Net (1-9) |
| .001 | 100 | .175 x 3/4 | 191P10201S2 | \$1.480 | 191P10201S4 | \$1.544 | 191P10291S2 | \$1.628 | 191P10291S4 | \$1.692 |
| | 200 | .235 x 3/4 | 191P10202S2 | 1.388 | 191P10202S4 | 1.452 | 191P10292S2 | 1.527 | 191P10292S4 | 1.591 |
| | 300 | .235 x 3/4 | 191P10203S2 | 1.400 | 191P10203S4 | 1.464 | 191P10293S2 | 1.540 | 191P10293S4 | 1.604 |
| | 400 | .235 x 3/4 | 191P10204S2 | 1.440 | 191P10204S4 | 1.504 | 191P10294S2 | 1.584 | 191P10294S4 | 1.648 |
| | 600 | .235 x 3/4 | 191P10206S2 | 1.460 | 191P10206S4 | 1.524 | 191P10296S2 | 1.606 | 191P10296S4 | 1.670 |
| .0015 | 100 | .175 x 3/4 | 191P15201S2 | 1.480 | 191P15201S4 | 1.544 | 191P15291S2 | 1.628 | 191P15291S4 | 1.692 |
| | 200 | .235 x 3/4 | 191P15202S2 | 1.388 | 191P15202S4 | 1.452 | 191P15292S2 | 1.527 | 191P15292S4 | 1.591 |
| | 300 | .235 x 3/4 | 191P15203S2 | 1.400 | 191P15203S4 | 1.464 | 191P15293S2 | 1.540 | 191P15293S4 | 1.604 |
| | 400 | .235 x 3/4 | 191P15204S2 | 1.440 | 191P15204S4 | 1.504 | 191P15294S2 | 1.584 | 191P15294S4 | 1.648 |
| | 600 | .235 x 3/4 | 191P15206S2 | 1.460 | 191P15206S4 | 1.524 | 191P15296S2 | 1.606 | 191P15296S4 | 1.670 |
| .0022 | 100 | .175 x 3/4 | 191P22201S2 | 1.480 | 191P22201S4 | 1.544 | 191P22291S2 | 1.628 | 191P22291S4 | 1.692 |
| | 200 | .235 x 3/4 | 191P22202S2 | 1.388 | 191P22202S4 | 1.452 | 191P22292S2 | 1.527 | 191P22292S4 | 1.591 |
| | 300 | .235 x 3/4 | 191P22203S2 | 1.420 | 191P22203S4 | 1.484 | 191P22293S2 | 1.562 | 191P22293S4 | 1.626 |
| | 400 | .235 x 3/4 | 191P22204S2 | 1.480 | 191P22204S4 | 1.504 | 191P22294S2 | 1.584 | 191P22294S4 | 1.648 |
| | 600 | .235 x 3/4 | 191P22206S2 | 1.500 | 191P22206S4 | 1.524 | 191P22296S2 | 1.606 | 191P22296S4 | 1.670 |
| .0033 | 100 | .175 x 3/4 | 191P33201S2 | 1.480 | 191P33201S4 | 1.544 | 191P33291S2 | 1.628 | 191P33291S4 | 1.692 |
| | 200 | .235 x 3/4 | 191P33202S2 | 1.388 | 191P33202S4 | 1.452 | 191P33292S2 | 1.527 | 191P33292S4 | 1.591 |
| | 300 | .235 x 3/4 | 191P33203S2 | 1.420 | 191P33203S4 | 1.484 | 191P33293S2 | 1.562 | 191P33293S4 | 1.626 |
| | 400 | .235 x 3/4 | 191P33204S2 | 1.480 | 191P33204S4 | 1.504 | 191P33294S2 | 1.584 | 191P33294S4 | 1.648 |
| | 600 | .235 x 3/4 | 191P33206S2 | 1.500 | 191P33206S4 | 1.544 | 191P33296S2 | 1.628 | 191P33296S4 | 1.692 |
| .0047 | 100 | .175 x 3/4 | 191P47201S2 | 1.480 | 191P47201S4 | 1.544 | 191P47291S2 | 1.628 | 191P47291S4 | 1.692 |
| | 200 | .235 x 3/4 | 191P47202S2 | 1.388 | 191P47202S4 | 1.452 | 191P47292S2 | 1.527 | 191P47292S4 | 1.591 |
| | 300 | .235 x 3/4 | 191P47203S2 | 1.420 | 191P47203S4 | 1.484 | 191P47293S2 | 1.562 | 191P47293S4 | 1.626 |
| | 400 | .235 x 3/4 | 191P47204S2 | 1.480 | 191P47204S4 | 1.544 | 191P47294S2 | 1.628 | 191P47294S4 | 1.692 |
| | 600 | .235 x 3/4 | 191P47206S2 | 1.500 | 191P47206S4 | 1.564 | 191P47296S2 | 1.650 | 191P47296S4 | 1.714 |
| .0068 | 100 | .175 x 3/4 | 191P68201S2 | 1.480 | 191P68201S4 | 1.544 | 191P68291S2 | 1.628 | 191P68291S4 | 1.692 |
| | 200 | .235 x 3/4 | 191P68202S2 | 1.388 | 191P68202S4 | 1.452 | 191P68292S2 | 1.527 | 191P68292S4 | 1.591 |
| | 300 | .235 x 3/4 | 191P68203S2 | 1.420 | 191P68203S4 | 1.504 | 191P68293S2 | 1.562 | 191P68293S4 | 1.648 |
| | 400 | .235 x 3/4 | 191P68204S2 | 1.480 | 191P68204S4 | 1.544 | 191P68294S2 | 1.628 | 191P68294S4 | 1.692 |
| | 600 | .235 x 3/4 | 191P68206S2 | 1.500 | 191P68206S4 | 1.584 | 191P68296S2 | 1.672 | 191P68296S4 | 1.736 |
| .01 | 100 | .175 x 3/4 | 191P10301S2 | 1.480 | 191P10301S4 | 1.544 | 191P10391S2 | 1.628 | 191P10391S4 | 1.692 |
| | 200 | .235 x 3/4 | 191P10302S2 | 1.460 | 191P10302S4 | 1.524 | 191P10392S2 | 1.606 | 191P10392S4 | 1.670 |
| | 300 | .235 x 3/4 | 191P10303S2 | 1.480 | 191P10303S4 | 1.544 | 191P10393S2 | 1.628 | 191P10393S4 | 1.692 |
| | 400 | .235 x 3/4 | 191P10304S2 | 1.520 | 191P10304S4 | 1.584 | 191P10394S2 | 1.672 | 191P10394S4 | 1.736 |
| | 600 | .312 x 7/8 | 191P10306S2 | 1.540 | 191P10306S4 | 1.604 | 191P10396S2 | 1.694 | 191P10396S4 | 1.718 |
| .015 | 100 | .175 x 3/4 | 191P15301S2 | 1.440 | 191P15301S4 | 1.544 | 191P15391S2 | 1.584 | 191P15391S4 | 1.648 |
| | 200 | .235 x 3/4 | 191P15302S2 | 1.460 | 191P15302S4 | 1.524 | 191P15392S2 | 1.606 | 191P15392S4 | 1.670 |
| | 300 | .235 x 3/4 | 191P15303S2 | 1.500 | 191P15303S4 | 1.564 | 191P15393S2 | 1.650 | 191P15393S4 | 1.714 |
| | 400 | .312 x 7/8 | 191P15304S2 | 1.520 | 191P15304S4 | 1.584 | 191P15394S2 | 1.672 | 191P15394S4 | 1.736 |
| | 600 | .312 x 7/8 | 191P15306S2 | 1.560 | 191P15306S4 | 1.632 | 191P15396S2 | 1.716 | 191P15396S4 | 1.788 |
| .022 | 100 | .195 x 3/4 | 191P22301S2 | 1.440 | 191P22301S4 | 1.504 | 191P22391S2 | 1.584 | 191P22391S4 | 1.648 |
| | 200 | .235 x 3/4 | 191P22302S2 | 1.460 | 191P22302S4 | 1.524 | 191P22392S2 | 1.606 | 191P22392S4 | 1.670 |
| | 300 | .312 x 7/8 | 191P22303S2 | 1.500 | 191P22303S4 | 1.564 | 191P22393S2 | 1.650 | 191P22393S4 | 1.714 |
| | 400 | .312 x 7/8 | 191P22304S2 | 1.520 | 191P22304S4 | 1.584 | 191P22394S2 | 1.672 | 191P22394S4 | 1.744 |
| | 600 | .312 x 7/8 | 191P22306S2 | 1.560 | 191P22306S4 | 1.632 | 191P22396S2 | 1.716 | 191P22396S4 | 1.788 |

*For Style 4 units odd .0625" to diameter and 1/16" to length

SPRAGUE CAPACITORS

TYPE 191P, continued

| μF | WVDC | Size D. x L. | Capacitance Tolerance ±20% | | | | Capacitance Tolerance ±10% | | | |
|------|------|-----------------|----------------------------|-----------|------------------------------|-----------|----------------------------|-----------|------------------------------|-----------|
| | | | Style 2 (bare metal case) | | Style 4 (w /plastic sleeve*) | | Style 2 (bare metal case) | | Style 4 (w /plastic sleeve*) | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .033 | 100 | .235 x 3/4 | 191P33301S2 | \$1.600 | 191P33301S4 | \$1.504 | 191P33391S2 | \$1.584 | 191P33391S4 | \$1.648 |
| | 200 | .312 x 7/8 | 191P33302S2 | 1.480 | 191P33302S4 | 1.544 | 191P33392S2 | 1.628 | 191P33392S4 | 1.692 |
| | 300 | .312 x 7/8 | 191P33303S2 | 1.500 | 191P33303S4 | 1.564 | 191P33393S2 | 1.650 | 191P33393S4 | 1.722 |
| | 400 | .312 x 7/8 | 191P33304S2 | 1.520 | 191P33304S4 | 1.584 | 191P33394S2 | 1.672 | 191P33394S4 | 1.744 |
| | 600 | .400 x 7/8 | 191P33306S2 | 1.600 | 191P33306S4 | 1.672 | 191P33396S2 | 1.760 | 191P33396S4 | 1.832 |
| .047 | 100 | .312 x 7/8 | 191P47301S2 | 1.540 | 191P47301S4 | 1.584 | 191P47391S2 | 1.694 | 191P47391S4 | 1.758 |
| | 200 | .312 x 7/8 | 191P47302S2 | 1.560 | 191P47302S4 | 1.632 | 191P47392S2 | 1.716 | 191P47392S4 | 1.788 |
| | 300 | .312 x 7/8 | 191P47303S2 | 1.568 | 191P47303S4 | 1.640 | 191P47393S2 | 1.725 | 191P47393S4 | 1.797 |
| | 400 | .400 x 7/8 | 191P47304S2 | 1.600 | 191P47304S4 | 1.672 | 191P47394S2 | 1.760 | 191P47394S4 | 1.832 |
| | 600 | .400 x 1 1/8 | 191P47306S2 | 1.680 | 191P47306S4 | 1.752 | 191P47396S2 | 1.848 | 191P47396S4 | 1.920 |
| .068 | 100 | .312 x 7/8 | 191P68301S2 | 1.540 | 191P68301S4 | 1.584 | 191P68391S2 | 1.694 | 191P68391S4 | 1.766 |
| | 200 | .312 x 7/8 | 191P68302S2 | 1.560 | 191P68302S4 | 1.632 | 191P68392S2 | 1.716 | 191P68392S4 | 1.788 |
| | 300 | .400 x 7/8 | 191P68303S2 | 1.600 | 191P68303S4 | 1.672 | 191P68393S2 | 1.760 | 191P68393S4 | 1.832 |
| | 400 | .400 x 1 1/8 | 191P68304S2 | 1.660 | 191P68304S4 | 1.732 | 191P68394S2 | 1.826 | 191P68394S4 | 1.898 |
| | 600 | .400 x 1 3/8 | 191P68306S2 | 1.760 | 191P68306S4 | 1.856 | 191P68396S2 | 1.936 | 191P68396S4 | 2.032 |
| .1 | 100 | .312 x 7/8 | 191P10401S2 | 1.600 | 191P10401S4 | 1.672 | 191P10491S2 | 1.760 | 191P10491S4 | 1.832 |
| | 200 | .400 x 7/8 | 191P10402S2 | 1.604 | 191P10402S4 | 1.676 | 191P10492S2 | 1.764 | 191P10492S4 | 1.836 |
| | 300 | .400 x 1 1/8 | 191P10403S2 | 1.660 | 191P10403S4 | 1.732 | 191P10493S2 | 1.826 | 191P10493S4 | 1.898 |
| | 400 | .400 x 1 3/8 | 191P10404S2 | 1.720 | 191P10404S4 | 1.816 | 191P10494S2 | 1.892 | 191P10494S4 | 1.988 |
| | 600 | .562 x 1 1/8 | 191P10406S2 | 1.840 | 191P10406S4 | 1.936 | 191P10496S2 | 2.024 | 191P10496S4 | 2.120 |
| .15 | 100 | .400 x 7/8 | 191P15401S2 | 1.640 | 191P15401S4 | 1.712 | 191P15491S2 | 1.804 | 191P15491S4 | 1.875 |
| | 200 | .400 x 1 1/8 | 191P15402S2 | 1.700 | 191P15402S4 | 1.772 | 191P15492S2 | 1.870 | 191P15492S4 | 1.942 |
| | 300 | .400 x 1 3/8 | 191P15403S2 | 1.880 | 191P15403S4 | 1.976 | 191P15493S2 | 2.068 | 191P15493S4 | 2.164 |
| | 400 | .562 x 1 1/8 | 191P15404S2 | 1.900 | 191P15404S4 | 1.996 | 191P15494S2 | 2.090 | 191P15494S4 | 2.186 |
| | 600 | .562 x 1 3/8 | 191P15406S2 | 1.960 | 191P15406S4 | 2.056 | 191P15496S2 | 2.156 | 191P15496S4 | 2.472 |
| .22 | 100 | .400 x 1 1/8 | 191P22401S2 | 1.640 | 191P22401S4 | 1.712 | 191P22491S2 | 1.804 | 191P22491S4 | 1.876 |
| | 200 | .400 x 1 3/8 | 191P22402S2 | 1.840 | 191P22402S4 | 1.936 | 191P22492S2 | 2.024 | 191P22492S4 | 2.120 |
| | 300 | .562 x 1 1/8 | 191P22403S2 | 1.960 | 191P22403S4 | 2.055 | 191P22493S2 | 2.156 | 191P22493S4 | 2.252 |
| | 400 | .562 x 1 3/8 | 191P22404S2 | 2.040 | 191P22404S4 | 2.136 | 191P22494S2 | 2.244 | 191P22494S4 | 2.340 |
| | 600 | .562 x 1 3/8 | 191P22406S2 | 2.160 | 191P22406S4 | 2.300 | 191P22496S2 | 2.376 | 191P22496S4 | 2.516 |
| .33 | 100 | .400 x 1 3/8 | 191P33401S2 | 1.880 | 191P33401S4 | 1.976 | 191P33491S2 | 2.068 | 191P33491S4 | 2.164 |
| | 200 | .562 x 1 1/8 | 191P33402S2 | 2.000 | 191P33402S4 | 2.096 | 191P33492S2 | 2.200 | 191P33492S4 | 2.296 |
| | 300 | .562 x 1 3/8 | 191P33403S2 | 2.000 | 191P33403S4 | 2.096 | 191P33493S2 | 2.200 | 191P33493S4 | 2.296 |
| | 400 | .562 x 1 3/8 | 191P33404S2 | 2.120 | 191P33404S4 | 2.260 | 191P33494S2 | 2.332 | 191P33494S4 | 2.472 |
| | 600 | .670 x 1 3/8 | 191P33406S2 | 2.640 | 191P33406S4 | 2.800 | 191P33496S2 | 2.904 | 191P33496S4 | 3.000 |
| .47 | 100 | .562 x 1 1/8 | 191P47401S2 | 2.000 | 191P47401S4 | 2.096 | 191P47491S2 | 2.200 | 191P47491S4 | 2.296 |
| | 200 | .562 x 1 3/8 | 191P47402S2 | 2.040 | 191P47402S4 | 2.136 | 191P47492S2 | 2.240 | 191P47492S4 | 2.340 |
| | 300 | .562 x 1 3/8 | 191P47403S2 | 2.560 | 191P47403S4 | 2.700 | 191P47493S2 | 2.814 | 191P47493S4 | 2.956 |
| | 400 | .670 x 1 3/8 | 191P47404S2 | 2.640 | 191P47404S4 | 2.800 | 191P47494S2 | 2.904 | 191P47494S4 | 3.064 |
| | 600 | .750 x 2 1/8 | 191P47406S2 | 2.760 | 191P47406S4 | 2.920 | 191P47496S2 | 2.036 | 191P47496S4 | 3.196 |
| .68 | 100 | .562 x 1 3/8 | 191P68401S2 | 2.120 | 191P68401S4 | 2.216 | 191P68491S2 | 2.332 | 191P68491S4 | 2.428 |
| | 200 | .562 x 1 3/8 | 191P68402S2 | 2.360 | 191P68402S4 | 2.500 | 191P68492S2 | 2.596 | 191P68492S4 | 2.736 |
| | 300 | .670 x 1 3/8 | 191P68403S2 | 2.640 | 191P68403S4 | 2.800 | 191P68493S2 | 2.900 | 191P68493S4 | 3.064 |
| 1.0 | 100 | .562 x 1 3/8 | 191P10501S2 | 2.320 | 191P10501S4 | 2.460 | 191P10591S2 | 2.552 | 191P10591S4 | 2.692 |
| | 200 | .670 x 1 3/8 | 191P10502S2 | 2.680 | 191P10502S4 | 2.840 | 191P10592S2 | 2.946 | 191P10592S4 | 3.108 |

*For Style 4 units add .0625" to diameter and 1/8" to length

SPRAGUE CAPACITORS

TYPE 196P, EXTENDED FOIL CONSTRUCTION, 125°C OPERATION

| μF | WVDC | Size D. x L. | Capacitance Tolerance ±20% | | | | Capacitance Tolerance ±10% | | | |
|-------|--------------|-----------------|----------------------------|-----------|-----------------------------|--------------|----------------------------|--------------|-----------------------------|-----------|
| | | | Style 2 (bare metal case) | | Style 4 (w plastic sleeve*) | | Style 2 (bare metal case) | | Style 4 (w plastic sleeve*) | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .001 | 100 | .175 x 3/4 | 196P10201S2 | \$1.520 | 196P10201S4 | \$1.592 | 196P10291S2 | \$1.672 | 196P10291S4 | \$1.744 |
| | 200 | .235 x 3/4 | 196P10202S2 | 1.500 | 196P10202S4 | 1.572 | 196P10292S2 | 1.650 | 196P10292S4 | 1.722 |
| | 300 | .235 x 3/4 | 196P10203S2 | 1.560 | 196P10203S4 | 1.632 | 196P10293S2 | 1.716 | 196P10293S4 | 1.788 |
| | 400 | .235 x 3/4 | 196P10204S2 | 1.580 | 196P10204S4 | 1.652 | 196P10294S2 | 1.738 | 196P10294S4 | 1.810 |
| | 600 | .235 x 3/4 | 196P10206S2 | 1.600 | 196P10206S4 | 1.672 | 196P10296S2 | 1.760 | 196P10296S4 | 1.830 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P102910S2 | 2.024 | 196P102910S4 | 2.112 | |
| .0012 | 600 | .235 x 11/16 | --- | --- | --- | --- | 196P12296S2 | 1.760 | 196P12296S4 | 1.830 |
| | 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P122910S2 | 2.024 | 196P122810S4 | 2.112 |
| .0015 | 100 | .175 x 3/4 | 196P15201S2 | 1.520 | 196P15201S4 | 1.592 | 196P15291S2 | 1.672 | 196P15291S4 | 1.744 |
| | 200 | .235 x 3/4 | 196P15202S2 | 1.500 | 196P15202S4 | 1.572 | 196P15292S2 | 1.650 | 196P15292S4 | 1.722 |
| | 300 | .235 x 3/4 | 196P15203S2 | 1.560 | 196P15203S4 | 1.632 | 196P15293S2 | 1.716 | 196P15293S4 | 1.788 |
| | 400 | .235 x 3/4 | 196P15204S2 | 1.580 | 196P15204S4 | 1.652 | 196P15294S2 | 1.738 | 196P15294S4 | 1.810 |
| | 600 | .235 x 3/4 | 196P15206S2 | 1.600 | 196P15206S4 | 1.672 | 196P15296S2 | 1.760 | 196P15296S4 | 1.830 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P152910S2 | 2.024 | 196P152910S4 | 2.112 | |
| .0018 | 600 | .235 x 11/16 | --- | --- | --- | --- | 196P18296S2 | 1.760 | 196P18296S4 | 1.830 |
| | 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P182910S2 | 2.024 | 196P182910S4 | 2.112 |
| .0022 | 100 | .175 x 3/4 | 196P22201S2 | 1.520 | 196P22201S4 | 1.592 | 196P22291S2 | 1.672 | 196P22291S4 | 1.744 |
| | 200 | .235 x 3/4 | 196P22202S2 | 1.500 | 196P22202S4 | 1.572 | 196P22292S2 | 1.650 | 196P22292S4 | 1.722 |
| | 300 | .235 x 3/4 | 196P22203S2 | 1.560 | 196P22203S4 | 1.632 | 196P22293S2 | 1.716 | 196P22293S4 | 1.788 |
| | 400 | .235 x 3/4 | 196P22204S2 | 1.580 | 196P22204S4 | 1.652 | 196P22294S2 | 1.738 | 196P22294S4 | 1.810 |
| | 600 | .235 x 3/4 | 196P22206S2 | 1.600 | 196P22206S4 | 1.720 | 196P22296S2 | 1.760 | 196P22296S4 | 1.830 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P222910S2 | 2.024 | 196P222910S4 | 2.112 | |
| .0027 | 400 | .312 x 13/16 | --- | --- | --- | --- | 196P27294S2 | 1.760 | 196P27294S4 | 1.832 |
| | 600 | .235 x 11/16 | --- | --- | --- | --- | 196P27296S2 | 1.804 | 196P27296S4 | 1.884 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P272910S2 | 2.024 | 196P272910S4 | 2.112 | |
| .0033 | 100 | .175 x 3/4 | 196P33201S2 | 1.520 | 196P33201S4 | 1.592 | 196P33291S2 | 1.672 | 196P33291S4 | 1.744 |
| | 200 | .235 x 3/4 | 196P33202S2 | 1.540 | 196P33202S4 | 1.612 | 196P33292S2 | 1.694 | 196P33292S4 | 1.766 |
| | 300 | .235 x 3/4 | 196P33203S2 | 1.560 | 196P33203S4 | 1.632 | 196P33293S2 | 1.716 | 196P33293S4 | 1.788 |
| | 400 | .235 x 3/4 | 196P33204S2 | 1.600 | 196P33204S4 | 1.672 | 196P33294S2 | 1.760 | 196P33294S4 | 1.832 |
| | 600 | .312 x 7/8 | 196P33206S2 | 1.640 | 196P33206S4 | 1.720 | 196P33296S2 | 1.804 | 196P33296S4 | 1.884 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P332910S2 | 2.024 | 196P332910S4 | 2.112 | |
| .0039 | 200 | .235 x 11/16 | --- | --- | --- | --- | 196P39292S2 | 1.694 | 196P39292S4 | 2.766 |
| | 600 | .235 x 11/16 | --- | --- | --- | --- | 196P39296S2 | 1.870 | 196P39296S4 | 1.950 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P392910S2 | 2.134 | 196P392910S4 | 2.222 | |
| .0047 | 100 | .175 x 3/4 | 196P47201S2 | 1.520 | 196P47201S4 | 1.592 | 196P47291S2 | 1.672 | 196P47291S4 | 1.744 |
| | 200 | .235 x 3/4 | 196P47202S2 | 1.540 | 196P47202S4 | 1.612 | 196P47292S2 | 1.694 | 196P47292S4 | 1.766 |
| | 300 | .235 x 3/4 | 196P47203S2 | 1.560 | 196P47203S4 | 1.632 | 196P47293S2 | 1.716 | 196P47293S4 | 1.788 |
| | 400 | .235 x 3/4 | 196P47204S2 | 1.680 | 196P47204S4 | 1.760 | 196P47294S2 | 1.848 | 196P47294S4 | 1.928 |
| | 600 | .235 x 3/4 | 196P47206S2 | 1.700 | 196P47206S4 | 1.780 | 196P47296S2 | 1.870 | 196P47296S4 | 1.950 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P472910S2 | 2.134 | 196P472910S4 | 2.222 | |
| .0056 | 200 | .235 x 11/16 | --- | --- | --- | --- | 196P56292S2 | 1.716 | 196P56292S4 | 1.788 |
| | 600 | .235 x 11/16 | --- | --- | --- | --- | 196P56296S2 | 2.156 | 196P56296S4 | 1.972 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P562910S2 | 2.420 | 196P562910S4 | 2.244 | |
| .0068 | 100 | .175 x 3/4 | 196P68201S2 | 1.520 | 196P68201S4 | 1.592 | 196P68291S2 | 1.672 | 196P68291S4 | 1.744 |
| | 200 | .235 x 3/4 | 196P68202S2 | 1.560 | 196P68202S4 | 1.632 | 196P68292S2 | 1.716 | 196P68292S4 | 1.788 |
| | 300 | .235 x 3/4 | 196P68203S2 | 1.640 | 196P68203S4 | 1.720 | 196P68293S2 | 1.804 | 196P68293S4 | 1.884 |
| | 400 | .235 x 3/4 | 196P68204S2 | 1.680 | 196P68204S4 | 1.760 | 196P68294S2 | 1.848 | 196P68294S4 | 1.928 |
| | 600 | .235 x 3/4 | 196P68206S2 | 1.720 | 196P68206S4 | 1.800 | 196P68296S2 | 2.156 | 196P68296S4 | 1.972 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P682910S2 | 2.420 | 196P682910S4 | 2.244 | |
| .0082 | 100 | .175 x 11/16 | --- | --- | --- | --- | 196P82291S2 | 1.672 | 196P82291S4 | 1.744 |
| | 600 | .312 x 13/16 | --- | --- | --- | --- | 196P82296S2 | 1.914 | 196P82296S4 | 1.994 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P822910S2 | 2.178 | 196P822910S4 | 2.266 | |
| .01 | 100 | .175 x 3/4 | 196P10301S2 | 1.520 | 196P10301S4 | 1.592 | 196P10391S2 | 1.672 | 196P10391S4 | 1.744 |
| | 200 | .235 x 3/4 | 196P10302S2 | 1.640 | 196P10302S4 | 1.720 | 196P10392S2 | 1.804 | 196P10392S4 | 1.884 |
| | 300 | .235 x 3/4 | 196P10303S2 | 1.680 | 196P10303S4 | 1.760 | 196P10393S2 | 1.848 | 196P10393S4 | 1.928 |
| | 400 | .235 x 3/4 | 196P10304S2 | 1.720 | 196P10304S4 | 1.800 | 196P10394S2 | 1.892 | 196P10394S4 | 1.972 |
| | 600 | .312 x 7/8 | 196P10306S2 | 1.740 | 196P10306S4 | 1.820 | 196P10396S2 | 1.914 | 196P10396S4 | 1.994 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P103910S2 | 2.178 | 196P103910S4 | 2.266 | |
| .012 | 100 | .175 x 11/16 | --- | --- | --- | --- | 196P12391S2 | 1.672 | 196P12391S4 | 1.744 |
| | 400 | .312 x 13/16 | --- | --- | --- | --- | 196P12394S2 | 1.892 | 196P12394S4 | 1.972 |
| 600 | .312 x 13/16 | --- | --- | --- | --- | 196P12396S2 | 1.936 | 196P12396S4 | 2.024 | |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P123910S2 | 2.200 | 196P123910S4 | 2.288 | |
| .015 | 100 | .175 x 3/4 | 196P15301S2 | 1.520 | 196P15301S4 | 1.592 | 196P15391S2 | 1.672 | 196P15391S4 | 1.744 |
| | 200 | .235 x 3/4 | 196P15302S2 | 1.640 | 196P15302S4 | 1.720 | 196P15392S2 | 1.804 | 196P15392S4 | 1.884 |
| | 300 | .235 x 3/4 | 196P15303S2 | 1.700 | 196P15303S4 | 1.780 | 196P15393S2 | 1.870 | 196P15393S4 | 1.950 |
| | 400 | .312 x 7/8 | 196P15304S2 | 1.720 | 196P15304S4 | 1.800 | 196P15394S2 | 1.892 | 196P15394S4 | 1.972 |
| | 600 | .312 x 7/8 | 196P15306S2 | 1.760 | 196P15306S4 | 1.848 | 196P15396S2 | 1.936 | 196P15396S4 | 2.024 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P153910S2 | 2.200 | 196P153910S4 | 2.288 | |
| .018 | 200 | .235 x 11/16 | --- | --- | --- | --- | 196P18392S2 | 1.848 | 196P18392S4 | 1.928 |
| | 600 | .312 x 13/16 | --- | --- | --- | --- | 196P18396S2 | 1.958 | 196P18396S4 | 2.046 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P183910S2 | 2.222 | 196P183910S4 | 2.310 | |
| .022 | 100 | .195 x 3/4 | 196P22301S2 | 1.560 | 196P22301S4 | 1.640 | 196P22391S2 | 1.716 | 196P22391S4 | 1.796 |
| | 200 | .235 x 3/4 | 196P22302S2 | 1.680 | 196P22302S4 | 1.760 | 196P22392S2 | 1.848 | 196P22392S4 | 1.928 |
| | 300 | .312 x 7/8 | 196P22303S2 | 1.720 | 196P22303S4 | 1.800 | 196P22393S2 | 1.892 | 196P22393S4 | 1.994 |
| | 400 | .312 x 7/8 | 196P22304S2 | 1.760 | 196P22304S4 | 1.848 | 196P22394S2 | 1.936 | 196P22394S4 | 2.024 |
| | 600 | .312 x 7/8 | 196P22306S2 | 1.780 | 196P22306S4 | 1.868 | 196P22396S2 | 1.958 | 196P22396S4 | 2.046 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P223910S2 | 2.222 | 196P223910S4 | 2.310 | |
| .027 | 200 | .312 x 13/16 | --- | --- | --- | --- | 196P27392S2 | 1.848 | 196P27392S4 | 1.928 |
| | 400 | .312 x 13/16 | --- | --- | --- | --- | 196P27394S2 | 1.936 | 196P27394S4 | 2.024 |
| 600 | .400 x 13/16 | --- | --- | --- | --- | 196P27396S2 | 1.958 | 196P27396S4 | 2.046 | |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P273910S2 | 2.222 | 196P273910S4 | 2.350 | |
| .033 | 100 | .400 x 13/16 | 196P33301S2 | 1.600 | 196P33301S4 | 1.680 | 196P33391S2 | 1.760 | 196P33391S4 | 1.840 |
| | 200 | .562 x 1 1/8 | 196P33302S2 | 1.680 | 196P33302S4 | 1.760 | 196P33392S2 | 1.848 | 196P33392S4 | 1.928 |
| | 300 | .562 x 1 1/8 | 196P33303S2 | 1.740 | 196P33303S4 | 1.828 | 196P33393S2 | 1.910 | 196P33393S4 | 1.926 |
| | 400 | .562 x 1 1/8 | 196P33304S2 | 1.760 | 196P33304S4 | 1.848 | 196P33394S2 | 1.936 | 196P33394S4 | 2.024 |
| | 600 | .670 x 1 1/8 | 196P33306S2 | 1.780 | 196P33306S4 | 1.868 | 196P33396S2 | 1.958 | 196P33396S4 | 2.046 |
| 1000 | .400 x 13/16 | --- | --- | --- | --- | 196P333910S2 | 2.222 | 196P333910S4 | 2.350 | |

*Far Style 4 units add .0625" to diameter and 1/16" to length.

SPRAGUE CAPACITORS

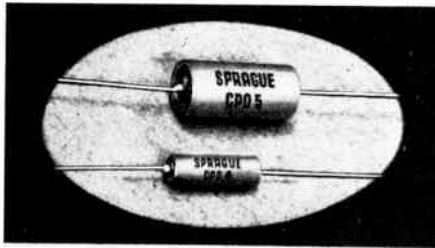
TYPE 196P, continued

| μF | WVDC | Size D. x L. | Capacitance Tolerance ±20% | | | | Capacitance Tolerance ±10% | | | | |
|------|--|--|---------------------------------------|-------------|-----------------------------|--------------|----------------------------|--------------|-----------------------------|-------------|-------|
| | | | Style 2 (bare metal case) | | Style 4 (w plastic sleeve*) | | Style 2 (bare metal case) | | Style 4 (w plastic sleeve*) | | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | |
| .039 | 100 | .312 x 1 ³ / ₁₆ | --- | --- | --- | --- | --- | 196P39391S2 | 1.804 | 196P39391S4 | 1.884 |
| | 200 | .312 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P39392S2 | 1.892 | 196P39392S4 | 1.980 | |
| | 400 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P39394S2 | 1.980 | 196P39394S4 | 2.068 | |
| | 600 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P39396S2 | 2.024 | 196P39396S4 | 2.112 | |
| | 1000 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P393910S2 | 2.288 | 196P393910S4 | 2.416 | |
| .047 | 100 | .312 x 3 ⁸ / ₆₄ | 196P47301S2 | 1.640 | 196P47301S4 | 1.720 | 196P47391S2 | 1.804 | 196P47391S4 | 1.884 | |
| | 200 | .312 x 3 ⁸ / ₆₄ | 196P47302S2 | 1.720 | 196P47302S4 | 1.808 | 196P47392S2 | 1.892 | 196P47392S4 | 1.980 | |
| | 300 | .312 x 3 ⁸ / ₆₄ | 196P47303S2 | 1.740 | 196P47303S4 | 1.828 | 196P47393S2 | 1.910 | 196P47393S4 | 2.002 | |
| | 400 | .400 x 3 ⁸ / ₆₄ | 196P47304S2 | 1.800 | 196P47304S4 | 1.888 | 196P47394S2 | 1.980 | 196P47394S4 | 2.068 | |
| | 600 | .400 x 1 ¹ / ₈ | 196P47306S2 | 1.840 | 196P47306S4 | 1.928 | 196P47396S2 | 2.024 | 196P47396S4 | 2.112 | |
| 1000 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P473910S2 | 2.288 | 196P473910S4 | 2.416 | | |
| .056 | 200 | .312 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P56392S2 | 1.892 | 196P56392S4 | 1.980 | |
| | 400 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P56394S2 | 1.980 | 196P56394S4 | 2.068 | |
| | 600 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P56396S2 | 2.156 | 196P56396S4 | 2.284 | |
| | 1000 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P563910S2 | 2.420 | 196P563910S4 | 2.548 | |
| | .068 | 100 | .312 x 3 ⁸ / ₆₄ | 196P68301S2 | 1.640 | 196P68301S4 | 1.728 | 196P68391S2 | 1.804 | 196P68391S4 | 1.892 |
| 200 | | .312 x 3 ⁸ / ₆₄ | 196P68302S2 | 1.720 | 196P68302S4 | 1.808 | 196P68392S2 | 1.892 | 196P68392S4 | 1.980 | |
| 300 | | .400 x 3 ⁸ / ₆₄ | 196P68303S2 | 1.740 | 196P68303S4 | 1.828 | 196P68393S2 | 1.910 | 196P68393S4 | 2.002 | |
| 400 | | .400 x 1 ¹ / ₈ | 196P68304S2 | 1.800 | 196P68304S4 | 1.888 | 196P68394S2 | 1.980 | 196P68394S4 | 2.068 | |
| 600 | | .400 x 1 ³ / ₁₆ | 196P68306S2 | 1.960 | 196P68306S4 | 2.088 | 196P68396S2 | 2.156 | 196P68396S4 | 2.284 | |
| 1000 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P683910S2 | 2.420 | 196P683910S4 | 2.548 | | |
| .082 | 100 | .312 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P82391S2 | 1.848 | 196P82391S4 | 1.936 | |
| | 200 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P82392S2 | 1.914 | 196P82392S4 | 2.002 | |
| | 400 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P82394S2 | 2.112 | 196P82394S4 | 2.240 | |
| | 600 | .562 x 1 ¹ / ₈ | --- | --- | --- | --- | 196P82396S2 | 2.200 | 196P82396S4 | 2.328 | |
| | 1000 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P823910S2 | 2.420 | 196P823910S4 | 2.580 | |
| .1 | 100 | .312 x 3 ⁸ / ₆₄ | 196P10401S2 | 1.680 | 196P10401S4 | 1.768 | 196P10491S2 | 1.848 | 196P10491S4 | 1.936 | |
| | 200 | .400 x 3 ⁸ / ₆₄ | 196P10402S2 | 1.740 | 196P10402S4 | 1.808 | 196P10492S2 | 1.914 | 196P10492S4 | 2.002 | |
| | 300 | .400 x 1 ¹ / ₈ | 196P10403S2 | 1.760 | 196P10403S4 | 1.828 | 196P10493S2 | 1.936 | 196P10493S4 | 2.024 | |
| | 400 | .400 x 1 ³ / ₁₆ | 196P10404S2 | 1.920 | 196P10404S4 | 1.888 | 196P10494S2 | 2.112 | 196P10494S4 | 2.240 | |
| | 600 | .562 x 1 ¹ / ₈ | 196P10406S2 | 2.000 | 196P10406S4 | 2.088 | 196P10496S2 | 2.200 | 196P10496S4 | 2.328 | |
| 1000 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P104910S2 | 2.420 | 196P104910S4 | 2.580 | | |
| .12 | 100 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P12491S2 | 1.848 | 196P12491S4 | 1.936 | |
| | 200 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P12492S2 | 1.980 | 196P12492S4 | 2.068 | |
| | 400 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P12494S2 | 2.200 | 196P12494S4 | 2.328 | |
| | 600 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P12496S2 | 2.332 | 196P12496S4 | 2.460 | |
| | 1000 | .670 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P124910S2 | 2.596 | 196P124910S4 | 2.876 | |
| .15 | 100 | .400 x 3 ⁸ / ₆₄ | 196P15401S2 | 1.680 | 196P15401S4 | 1.768 | 196P15491S2 | 1.848 | 196P15491S4 | 1.936 | |
| | 200 | .400 x 1 ¹ / ₈ | 196P15402S2 | 1.800 | 196P15402S4 | 1.888 | 196P15492S2 | 1.980 | 196P15492S4 | 2.068 | |
| | 300 | .400 x 1 ³ / ₁₆ | 196P15403S2 | 1.920 | 196P15403S4 | 2.008 | 196P15493S2 | 2.112 | 196P15493S4 | 2.240 | |
| | 400 | .562 x 1 ¹ / ₈ | 196P15404S2 | 2.000 | 196P15404S4 | 2.128 | 196P15494S2 | 2.200 | 196P15494S4 | 2.328 | |
| | 600 | .562 x 1 ³ / ₁₆ | 196P15406S2 | 2.120 | 196P15406S4 | 2.248 | 196P15496S2 | 2.332 | 196P15496S4 | 2.460 | |
| 1000 | .670 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P154910S2 | 2.596 | 196P154910S4 | 2.876 | | |
| .18 | 100 | .400 x 1 ¹ / ₈ | --- | --- | --- | --- | 196P18491S2 | 1.980 | 196P18491S4 | 2.068 | |
| | 200 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P18492S2 | 2.112 | 196P18492S4 | 2.240 | |
| | 400 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P18494S2 | 2.332 | 196P18494S4 | 2.460 | |
| | 600 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P18496S2 | 2.640 | 196P18496S4 | 2.800 | |
| | 1000 | .750 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P184910S2 | 2.904 | 196P184910S4 | 3.124 | |
| .22 | 100 | .400 x 1 ¹ / ₈ | 196P22401S2 | 1.800 | 196P22401S4 | 1.888 | 196P22491S2 | 1.980 | 196P22491S4 | 2.068 | |
| | 200 | .400 x 1 ³ / ₁₆ | 196P22402S2 | 1.920 | 196P22402S4 | 2.048 | 196P22492S2 | 2.112 | 196P22492S4 | 2.240 | |
| | 300 | .562 x 1 ¹ / ₈ | 196P22403S2 | 2.040 | 196P22403S4 | 2.168 | 196P22493S2 | 2.244 | 196P22493S4 | 2.372 | |
| | 400 | .562 x 1 ³ / ₁₆ | 196P22404S2 | 2.120 | 196P22404S4 | 2.252 | 196P22494S2 | 2.332 | 196P22494S4 | 2.460 | |
| | 600 | .562 x 1 ³ / ₁₆ | 196P22406S2 | 2.400 | 196P22406S4 | 2.680 | 196P22496S2 | 2.640 | 196P22496S4 | 2.800 | |
| 1000 | .750 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P224910S2 | 2.904 | 196P224910S4 | 3.124 | | |
| .27 | 100 | .400 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P27491S2 | 2.200 | 196P27491S4 | 2.328 | |
| | 200 | .562 x 1 ¹ / ₈ | --- | --- | --- | --- | 196P27492S2 | 2.240 | 196P27492S4 | 2.372 | |
| | 400 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P27494S2 | 2.552 | 196P27494S4 | 2.712 | |
| | 600 | .670 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P27496S2 | 2.948 | 196P27496S4 | 3.168 | |
| | 1000 | .750 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P274910S2 | 3.212 | 196P274910S4 | 3.492 | |
| .33 | 100 | .400 x 1 ³ / ₁₆ | 196P33401S2 | 2.000 | 196P33401S4 | 2.128 | 196P33491S2 | 2.200 | 196P33491S4 | 2.328 | |
| | 200 | .562 x 1 ¹ / ₈ | 196P33402S2 | 2.040 | 196P33402S4 | 2.168 | 196P33492S2 | 2.240 | 196P33492S4 | 2.372 | |
| | 300 | .562 x 1 ³ / ₁₆ | 196P33403S2 | 2.160 | 196P33403S4 | 2.288 | 196P33493S2 | 2.376 | 196P33493S4 | 2.504 | |
| | 400 | .562 x 1 ³ / ₁₆ | 196P33404S2 | 2.320 | 196P33404S4 | 2.480 | 196P33494S2 | 2.552 | 196P33494S4 | 2.712 | |
| | 600 | .670 x 1 ¹ / ₈ | 196P33406S2 | 2.680 | 196P33406S4 | 2.900 | 196P33496S2 | 2.948 | 196P33496S4 | 3.168 | |
| 1000 | .750 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P334910S2 | 3.212 | 196P334910S4 | 3.492 | | |
| .39 | 100 | .562 x 1 ¹ / ₈ | --- | --- | --- | --- | 196P39491S2 | 2.288 | 196P39491S4 | 2.416 | |
| | 200 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P39492S2 | 2.332 | 196P39492S4 | 2.460 | |
| | 400 | .670 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P39494S2 | 2.948 | 196P39494S4 | 3.168 | |
| | 600 | .750 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P39496S2 | 3.080 | 196P39496S4 | 2.860 | |
| | 1000 | 1.000 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P394910S2 | 3.344 | 196P394910S4 | 3.624 | |
| .47 | 100 | .562 x 1 ¹ / ₈ | 196P47401S2 | 2.080 | 196P47401S4 | 2.208 | 196P47491S2 | 2.288 | 196P47491S4 | 2.416 | |
| | 200 | .562 x 1 ³ / ₁₆ | 196P47402S2 | 2.120 | 196P47402S4 | 2.248 | 196P47492S2 | 2.332 | 196P47492S4 | 2.460 | |
| | 300 | .562 x 1 ³ / ₁₆ | 196P47403S2 | 2.580 | 196P47403S4 | 2.740 | 196P47493S2 | 2.838 | 196P47493S4 | 2.998 | |
| | 400 | .670 x 1 ¹ / ₈ | 196P47404S2 | 2.680 | 196P47404S4 | 2.900 | 196P47494S2 | 2.948 | 196P47494S4 | 3.168 | |
| | 600 | .750 x 2 ¹ / ₁₆ | 196P47406S2 | 2.800 | 196P47406S4 | 3.020 | 196P47496S2 | 3.080 | 196P47496S4 | 2.860 | |
| 1000 | 1.000 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P474910S2 | 3.344 | 196P474910S4 | 3.624 | | |
| .56 | 100 | .562 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P56491S2 | 2.464 | 196P56491S4 | 2.592 | |
| | 200 | .670 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P56492S2 | 2.640 | 196P56492S4 | 2.800 | |
| .68 | 100 | .562 x 1 ³ / ₁₆ | 196P68401S2 | 2.240 | 196P68401S4 | 2.368 | 196P68491S2 | 2.464 | 196P68491S4 | 2.592 | |
| | 200 | .562 x 1 ³ / ₁₆ | 196P68402S2 | 2.400 | 196P68402S4 | 2.560 | 196P68492S2 | 2.640 | 196P68492S4 | 2.800 | |
| | 300 | .670 x 1 ¹ / ₈ | 196P68403S2 | 2.680 | 196P68403S4 | 2.840 | 196P68493S2 | 2.680 | 196P68493S4 | 3.108 | |
| .82 | 100 | .670 x 1 ³ / ₁₆ | --- | --- | --- | --- | 196P82491S2 | 2.640 | 196P82491S4 | 2.800 | |
| | 200 | .750 x 2 ¹ / ₁₆ | --- | --- | --- | --- | 196P82492S2 | 2.970 | 196P82492S4 | 3.190 | |
| 1.0 | 100 | .562 x 1 ³ / ₁₆ | 196P10501S2 | 2.400 | 196P10501S4 | 2.560 | 196P10591S2 | 2.640 | 196P10591S4 | 2.800 | |
| | 200 | .670 x 1 ³ / ₁₆ | 196P10502S2 | 2.700 | 196P10502S4 | 1.920 | 196P10592S2 | 2.970 | 196P10592S4 | 3.190 | |

*For Style 4 units add .0625" to diameter and 1/16" to length.

SPRAGUE CAPACITORS

TYPE CP04 CAPACITORS TO MIL-C-25A



- Impregnation with Vitamin Q assures capacitors exceed MIL-C-25A performance requirements.
- Inserted tab construction for applications where minimum size is necessary.
- Positive hermetic closure of the metal cases assured by glass-to-metal solder-seal terminals.
- Type CP04 has plain metal case.
- Available in Characteristic E (-55°C to +85°C) or Characteristic K (-55°C to +125°C).
- Only popular insulated section (ungrounded case) capacitors are listed. For information on grounded case units, consult your Sprague Industrial Distributor.
- For prices on quantities from 10 to 499 pieces, see your Sprague Industrial Distributor.

| μF | WVDC | Size D. x L. | Characteristic E -55°C to +85°C | | | | Characteristic K -55°C to +125°C | | | |
|-------|------|-----------------|------------------------------------|------------------|--------------|------------------|-------------------------------------|------------------|--------------|------------------|
| | | | ±20% Tol. | | ±10% Tol. | | ±20% Tol. | | ±10% Tol. | |
| | | | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) |
| .001 | 600 | .235 x 3/4 | CP04A1EF102M | \$1.420 | CP04A1EF102K | \$1.560 | CP04A1KF102M | \$1.520 | CP04A1KF102K | \$1.672 |
| .0015 | 600 | .235 x 3/4 | CP04A1EF152M | 1.420 | CP04A1EF152K | 1.562 | CP04A1KF152M | 1.520 | CP04A1KF152K | 1.672 |
| .0022 | 600 | .235 x 3/4 | CP04A1EF222M | 1.420 | CP04A1EF222K | 1.562 | CP04A1KF222M | 1.520 | CP04A1KF222K | 1.672 |
| .0033 | 600 | .235 x 3/4 | CP04A1EF332M | 1.420 | CP04A1EF332K | 1.562 | CP04A1KF332M | 1.560 | CP04A1KF332K | 1.716 |
| .0047 | 600 | .235 x 3/4 | CP04A1EF472M | 1.420 | CP04A1EF472K | 1.562 | CP04A1KF472M | 1.560 | CP04A1KF472K | 1.716 |
| .0068 | 600 | .235 x 3/4 | CP04A1EF682M | 1.420 | CP04A1EF682K | 1.562 | CP04A1KF682M | 1.560 | CP04A1KF682K | 1.716 |
| .01 | 400 | .235 x 3/4 | CP04A1EE103M | 1.420 | CP04A1EE103K | 1.540 | CP04A1KE103M | 1.560 | CP04A1KE103K | 1.716 |
| | 600 | .312 x 7/8 | CP04A1EF103M | 1.440 | CP04A1EF103K | 1.584 | CP04A1KF103M | 1.600 | CP04A1KF103K | 1.760 |
| .015 | 200 | .235 x 3/4 | CP04A1EC153M | 1.380 | CP04A1EC153K | 1.518 | CP04A1KC153M | 1.500 | CP04A1KC153K | 1.650 |
| | 600 | .312 x 7/8 | CP04A1EF153M | 1.480 | CP04A1EF153K | 1.628 | CP04A1KF153M | 1.640 | CP04A1KF153K | 1.804 |
| .022 | 200 | .235 x 3/4 | CP04A1EC223M | 1.380 | CP04A1EC223K | 1.518 | CP04A1KC223M | 1.500 | CP04A1KC223K | 1.650 |
| | 600 | .312 x 7/8 | CP04A1EF223M | 1.520 | CP04A1EF223K | 1.672 | CP04A1KF223M | 1.640 | CP04A1KF223K | 1.804 |
| .033 | 100 | .235 x 3/4 | CP04A1EB333M | 1.440 | CP04A1EB333K | 1.584 | CP04A1KB333M | 1.480 | CP04A1KB333K | 1.628 |
| | 400 | .312 x 7/8 | CP04A1EE333M | 1.500 | CP04A1EE333K | 1.650 | CP04A1KE333M | 1.620 | CP04A1KE333K | 1.782 |
| | 600 | .400 x 7/8 | CP04A1EF333M | 1.560 | CP04A1EF333K | 1.716 | CP04A1KF333M | 1.700 | CP04A1KF333K | 1.870 |
| .047 | 200 | .312 x 7/8 | CP04A1EC473M | 1.480 | CP04A1EC473K | 1.628 | CP04A1KC473M | 1.560 | CP04A1KC473K | 1.716 |
| | 400 | .400 x 7/8 | CP04A1EE473M | 1.540 | CP04A1EE473K | 1.694 | CP04A1KE473M | 1.680 | CP04A1KE473K | 1.848 |
| | 600 | .400 x 1 1/8 | CP04A1EF473M | 1.560 | CP04A1EF473K | 1.716 | CP04A1KF473M | 1.720 | CP04A1KF473K | 1.892 |
| .068 | 200 | .312 x 7/8 | CP04A1EC683M | 1.480 | CP04A1EC683K | 1.628 | CP04A1KC683M | 1.600 | CP04A1KC683K | 1.760 |
| | 400 | .400 x 1 1/8 | CP04A1EE683M | 1.600 | CP04A1EE683K | 1.694 | CP04A1KE683M | 1.720 | CP04A1KE683K | 1.892 |
| | 600 | .400 x 1 3/8 | CP04A1EF683M | 1.680 | CP04A1EF683K | 1.848 | CP04A1KF683M | 1.800 | CP04A1KF683K | 1.980 |
| .1 | 100 | .312 x 7/8 | CP04A1EB104M | 1.480 | CP04A1EB104K | 1.628 | CP04A1KB104M | 1.600 | CP04A1KB104K | 1.760 |
| | 200 | .400 x 7/8 | CP04A1EC104M | 1.500 | CP04A1EC104K | 1.650 | CP04A1KC104M | 1.640 | CP04A1KC104K | 1.804 |
| | 400 | .400 x 1 1/8 | CP04A1EE104M | 1.720 | CP04A1EE104K | 1.892 | CP04A1KE104M | 1.760 | CP04A1KE104K | 1.936 |
| | 600 | .562 x 1 1/8 | CP04A1EF104M | 1.760 | CP04A1EF104K | 1.936 | CP04A1KF104M | 1.920 | CP04A1KF104K | 2.112 |
| .15 | 100 | .400 x 7/8 | CP04A1EB154M | 1.580 | CP04A1EB154K | 1.738 | CP04A1KB154M | 1.680 | CP04A1KB154K | 1.848 |
| | 200 | .400 x 1 1/8 | CP04A1EC154M | 1.600 | CP04A1EC154K | 1.760 | CP04A1KC154M | 1.660 | CP04A1KC154K | 1.826 |
| | 400 | .562 x 1 1/8 | CP04A1EE154M | 1.880 | CP04A1EE154K | 2.068 | CP04A1KE154M | 1.920 | CP04A1KE154K | 2.112 |
| | 600 | .562 x 1 3/8 | CP04A1EF154M | 1.900 | CP04A1EF154K | 2.090 | CP04A1KF154M | 2.000 | CP04A1KF154K | 2.200 |
| .22 | 100 | .400 x 1 1/8 | CP04A1EB224M | 1.640 | CP04A1EB224K | 1.804 | CP04A1KB224M | 1.680 | CP04A1KB224K | 1.848 |
| | 200 | .400 x 1 3/8 | CP04A1EC224M | 1.800 | CP04A1EC224K | 1.980 | CP04A1KC224M | 1.820 | CP04A1KC224K | 2.002 |
| | 400 | .562 x 1 3/8 | CP04A1EE224M | 2.000 | CP04A1EE224K | 2.200 | CP04A1KE224M | 2.040 | CP04A1KE224K | 2.244 |
| | 600 | .562 x 1 7/8 | CP04A1EF224M | 2.040 | CP04A1EF224K | 2.244 | CP04A1KF224M | 2.160 | CP04A1KF224K | 2.376 |
| .33 | 100 | .400 x 1 3/8 | CP04A1EB334M | 1.880 | CP04A1EB334K | 2.068 | CP04A1KB334M | 1.920 | CP04A1KB334K | 2.112 |
| | 200 | .562 x 1 1/8 | CP04A1EC334M | 1.920 | CP04A1EC334K | 2.112 | CP04A1KC334M | 1.960 | CP04A1KC334K | 2.156 |
| | 400 | .562 x 1 3/8 | CP04A1EE334M | 2.020 | CP04A1EE334K | 2.222 | CP04A1KE334M | 2.080 | CP04A1KE334K | 2.288 |
| | 600 | .670 x 1 3/8 | CP04A1EF334M | 2.240 | CP04A1EF334K | 2.464 | CP04A1KF334M | 2.400 | CP04A1KF334K | 2.640 |
| .47 | 100 | .562 x 1 1/8 | CP04A1EB474M | 2.000 | CP04A1EB474K | 2.200 | CP04A1KB474M | 2.040 | CP04A1KB474K | 2.244 |
| | 200 | .562 x 1 3/8 | CP04A1EC474M | 2.040 | CP04A1EC474K | 2.244 | CP04A1KC474M | 2.080 | CP04A1KC474K | 2.288 |
| | 400 | .670 x 1 3/8 | CP04A1EE474M | 2.464 | CP04A1EE474K | 2.710 | CP04A1KE474M | 2.480 | CP04A1KE474K | 2.728 |
| | 600 | .750 x 2 1/8 | CP04A1EF474M | 2.680 | CP04A1EF474K | 2.948 | CP04A1KF474M | 2.700 | CP04A1KF474K | 2.970 |
| .68 | 100 | .562 x 1 3/8 | CP04A1EB684M | 2.080 | CP04A1EB684K | 2.288 | CP04A1KB684M | 2.120 | CP04A1KB684K | 2.332 |
| | 200 | .562 x 1 7/8 | CP04A1EC684M | 2.116 | CP04A1EC684K | 2.328 | CP04A1KC684M | 2.200 | CP04A1KC684K | 2.420 |
| | 400 | .750 x 2 1/8 | CP04A1EE684M | 2.280 | CP04A1EE684K | 3.630 | CP04A1KE684M | 3.300 | CP04A1KE684K | 3.630 |
| | 600 | 1.0 x 1 7/8 | CP04A1EF684M | 3.360 | CP04A1EF684K | 3.696 | CP04A1KF684M | 3.360 | CP04A1KF684K | 3.696 |
| 1.0 | 100 | .562 x 1 7/8 | CP04A1EB105M | 2.520 | CP04A1EB105K | 2.772 | CP04A1KB105M | 2.056 | CP04A1KB105K | 2.816 |
| | 200 | .670 x 1 7/8 | CP04A1EC105M | 2.600 | CP04A1EC105K | 2.860 | CP04A1KC105M | 2.640 | CP04A1KC105K | 2.904 |
| | 400 | 1.0 x 1 7/8 | CP04A1EE105M | 3.400 | CP04A1EE105K | 3.740 | CP04A1KE105M | 3.420 | CP04A1KE105K | 3.762 |

SPRAGUE CAPACITORS

TYPE CP04 CAPACITORS TO MIL-C-25C

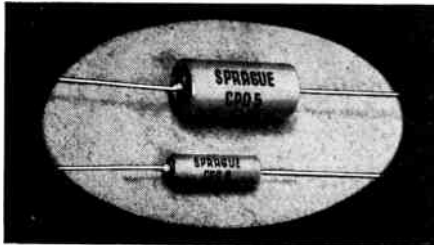
(±10% CAPACITANCE TOLERANCE, CHARACTERISTIC K)

| μF | WVDC | D. x L. | Cat. No.* | Net (1-9) | μF | WVDC | D. x L. | Cat. No.* | Net (1-9) |
|-------|------|--------------|---------------|-----------|------|------|---------------|---------------|-----------|
| .001 | 600 | .235 x 3/4 | CP04A1KF102K3 | \$1.672 | | | | | |
| .0012 | 600 | .235 x 3/4 | CP04A1KF122K3 | 1.672 | | | | | |
| .0015 | 600 | .235 x 3/4 | CP04A1KF152K3 | 1.672 | | | | | |
| .0018 | 600 | .235 x 3/4 | CP04A1KF182K3 | 1.672 | | | | | |
| .0022 | 600 | .235 x 3/4 | CP04A1KF222K3 | 1.672 | | | | | |
| .0027 | 600 | .235 x 3/4 | CP04A1KF272K3 | 1.716 | | | | | |
| .0033 | 600 | .235 x 3/4 | CP04A1KF332K3 | 1.716 | | | | | |
| .0039 | 600 | .235 x 3/4 | CP04A1KF392K3 | 1.716 | | | | | |
| .0047 | 600 | .235 x 3/4 | CP04A1KF472K3 | 1.716 | | | | | |
| .0056 | 600 | .235 x 3/4 | CP04A1KF562K3 | 1.716 | | | | | |
| .0068 | 600 | .235 x 3/4 | CP04A1KF682K3 | 1.716 | | | | | |
| .0082 | 400 | .235 x 3/4 | CP04A1KE822K3 | 1.716 | | | | | |
| | 600 | .312 x 7/8 | CP04A1KF822K3 | 1.760 | | | | | |
| .01 | 400 | .235 x 3/4 | CP04A1KE103K3 | 1.716 | | | | | |
| | 600 | .312 x 7/8 | CP04A1KF103K3 | 1.760 | | | | | |
| .012 | 200 | .235 x 3/4 | CP04A1KC123K3 | 1.672 | | | | | |
| | 600 | .312 x 7/8 | CP04A1KF123K3 | 1.804 | | | | | |
| .015 | 200 | .235 x 3/4 | CP04A1KC153K3 | 1.650 | | | | | |
| | 600 | .312 x 7/8 | CP04A1KF153K3 | 1.804 | | | | | |
| | 1000 | .400 x 7/8 | CP04A1KG153K3 | 2.068 | | | | | |
| .018 | 200 | .235 x 3/4 | CP04A1KC183K3 | 1.650 | | | | | |
| | 600 | .312 x 7/8 | CP04A1KF183K3 | 1.804 | | | | | |
| | 1000 | .400 x 1 1/8 | CP04A1KG183K3 | 2.068 | | | | | |
| .022 | 200 | .235 x 3/4 | CP04A1KC223K3 | 1.650 | | | | | |
| | 600 | .312 x 7/8 | CP04A1KF223K3 | 1.804 | | | | | |
| | 1000 | .400 x 1 1/8 | CP04A1KG223K3 | 2.068 | | | | | |
| .027 | 100 | .235 x 3/4 | CP04A1K8273K3 | 1.628 | | | | | |
| | 400 | .312 x 7/8 | CP04A1KE273K3 | 1.782 | | | | | |
| | 600 | .400 x 7/8 | CP04A1KF273K3 | 1.870 | | | | | |
| | 1000 | .400 x 1 1/8 | CP04A1KG273K3 | 2.134 | | | | | |
| .033 | 100 | .235 x 3/4 | CP04A1K8333K3 | 1.628 | | | | | |
| | 400 | .312 x 7/8 | CP04A1KE333K3 | 1.782 | | | | | |
| | 600 | .400 x 7/8 | CP04A1KF333K3 | 1.870 | | | | | |
| | 1000 | .400 x 1 1/8 | CP04A1KG333K3 | 2.134 | | | | | |
| .039 | 200 | .312 x 7/8 | CP04A1KC393K3 | 1.716 | | | | | |
| | 400 | .400 x 7/8 | CP04A1KE393K3 | 1.848 | | | | | |
| | 600 | .400 x 1 1/8 | CP04A1KF393K3 | 1.892 | | | | | |
| | 1000 | .562 x 1 1/8 | CP04A1KG393K3 | 2.156 | | | | | |
| .047 | 200 | .312 x 7/8 | CP04A1KC473K3 | 1.716 | | | | | |
| | 400 | .400 x 7/8 | CP04A1KE473K3 | 1.848 | | | | | |
| | 600 | .400 x 1 1/8 | CP04A1KF473K3 | 1.892 | | | | | |
| | 1000 | .562 x 1 1/8 | CP04A1KG473K3 | 2.156 | | | | | |
| .056 | 200 | .312 x 7/8 | CP04A1KC563K3 | 1.760 | | | | | |
| | 400 | .400 x 1 1/8 | CP04A1KE563K3 | 1.892 | | | | | |
| | 600 | .400 x 1 1/8 | CP04A1KF563K3 | 1.980 | | | | | |
| | 1000 | .562 x 1 1/8 | CP04A1KG563K3 | 2.244 | | | | | |
| .068 | 200 | .312 x 7/8 | CP04A1KC683K3 | 1.760 | | | | | |
| | 400 | .400 x 1 1/8 | CP04A1KE683K3 | 1.892 | | | | | |
| | 600 | .400 x 1 1/8 | CP04A1KF683K3 | 1.980 | | | | | |
| | 1000 | .562 x 1 1/8 | CP04A1KG683K3 | 2.420 | | | | | |
| .082 | 100 | .312 x 7/8 | CP04A1K8823K3 | 1.760 | | | | | |
| | 200 | .400 x 7/8 | CP04A1KC823K3 | 1.804 | | | | | |
| | 400 | .400 x 1 1/8 | CP04A1KE823K3 | 1.936 | | | | | |
| | 600 | .562 x 1 1/8 | CP04A1KF823K3 | 2.112 | | | | | |
| | 1000 | .562 x 1 1/8 | CP04A1KG823K3 | 2.376 | | | | | |
| | | | | | 100 | | .312 x 7/8 | CP04A1K8104K3 | \$1.760 |
| | | | | | 200 | | .400 x 7/8 | CP04A1KC104K3 | 1.804 |
| .1 | | | | | 400 | | .400 x 1 1/8 | CP04A1KE104K3 | 1.936 |
| | | | | | 600 | | .562 x 1 1/8 | CP04A1KF104K3 | 2.112 |
| | | | | | 1000 | | .562 x 1 1/8 | CP04A1KG104K3 | 2.376 |
| | | | | | 100 | | .400 x 7/8 | CP04A1K8124K3 | 1.848 |
| | | | | | 200 | | .400 x 1 1/8 | CP04A1KC124K3 | 1.826 |
| .12 | | | | | 400 | | .562 x 1 1/8 | CP04A1KE124K3 | 2.112 |
| | | | | | 600 | | .562 x 1 1/8 | CP04A1KF124K3 | 2.200 |
| | | | | | 1000 | | .670 x 1 1/8 | CP04A1KG124K3 | 2.464 |
| | | | | | 100 | | .400 x 7/8 | CP04A1K8154K3 | 1.848 |
| | | | | | 200 | | .400 x 1 1/8 | CP04A1KC154K3 | 1.826 |
| .15 | | | | | 400 | | .562 x 1 1/8 | CP04A1KE154K3 | 2.112 |
| | | | | | 600 | | .562 x 1 1/8 | CP04A1KF154K3 | 2.200 |
| | | | | | 1000 | | .670 x 1 1/8 | CP04A1KG154K3 | 2.464 |
| | | | | | 100 | | .400 x 1 1/8 | CP04A1K8184K3 | 1.848 |
| | | | | | 200 | | .400 x 1 1/8 | CP04A1KC184K3 | 2.002 |
| .18 | | | | | 400 | | .562 x 1 1/8 | CP04A1KE184K3 | 2.244 |
| | | | | | 600 | | .562 x 1 1/8 | CP04A1KF184K3 | 2.376 |
| | | | | | 1000 | | .750 x 2 1/8 | CP04A1KG184K3 | 2.640 |
| | | | | | 100 | | .400 x 1 1/8 | CP04A1K8224K3 | 1.848 |
| | | | | | 200 | | .400 x 1 1/8 | CP04A1KC224K3 | 2.002 |
| .22 | | | | | 400 | | .562 x 1 1/8 | CP04A1KE224K3 | 2.244 |
| | | | | | 600 | | .562 x 1 1/8 | CP04A1KF224K3 | 2.376 |
| | | | | | 1000 | | .750 x 2 1/8 | CP04A1KG224K3 | 2.640 |
| | | | | | 100 | | .400 x 1 1/8 | CP04A1K8274K3 | 2.112 |
| | | | | | 200 | | .562 x 1 1/8 | CP04A1KC274K3 | 2.156 |
| .27 | | | | | 400 | | .562 x 1 1/8 | CP04A1KE274K3 | 2.288 |
| | | | | | 600 | | .670 x 1 1/8 | CP04A1KF274K3 | 2.640 |
| | | | | | 1000 | | .750 x 2 1/8 | CP04A1KG274K3 | 2.904 |
| | | | | | 100 | | .400 x 1 1/8 | CP04A1K8334K3 | 2.112 |
| | | | | | 200 | | .562 x 1 1/8 | CP04A1KC334K3 | 2.156 |
| .33 | | | | | 400 | | .562 x 1 1/8 | CP04A1KE334K3 | 2.288 |
| | | | | | 600 | | .670 x 1 1/8 | CP04A1KF334K3 | 2.640 |
| | | | | | 1000 | | .750 x 2 1/8 | CP04A1KG334K3 | 2.904 |
| | | | | | 100 | | .562 x 1 1/8 | CP04A1K8394K3 | 2.244 |
| | | | | | 200 | | .562 x 1 1/8 | CP04A1KC394K3 | 2.288 |
| .39 | | | | | 400 | | .670 x 1 1/8 | CP05A1KE394K3 | 2.728 |
| | | | | | 600 | | .750 x 2 1/8 | CP04A1KF394K3 | 2.970 |
| | | | | | 1000 | | 1.000 x 2 1/8 | CP04A1KG394K3 | 3.234 |
| | | | | | 100 | | .562 x 1 1/8 | CP04A1K8474K3 | 2.244 |
| | | | | | 200 | | .562 x 1 1/8 | CP04A1KC474K3 | 2.288 |
| .47 | | | | | 400 | | .670 x 1 1/8 | CP04A1KE474K3 | 2.728 |
| | | | | | 600 | | .750 x 2 1/8 | CP04A1KF474K3 | 2.970 |
| | | | | | 1000 | | 1.000 x 2 1/8 | CP04A1KG474K3 | 3.234 |
| | | | | | 100 | | .562 x 1 1/8 | CP04A1K5864K3 | 2.332 |
| .56 | | | | | 200 | | .562 x 1 1/8 | CP04A1KC564K3 | 2.420 |
| | | | | | 400 | | .750 x 2 1/8 | CP04A1KE564K3 | 3.630 |
| | | | | | 600 | | 1.000 x 1 1/8 | CP04A1KF564K3 | 3.696 |
| | | | | | 100 | | .562 x 1 1/8 | CP04A1K8684K3 | 2.332 |
| .68 | | | | | 200 | | .562 x 1 1/8 | CP04A1KC684K3 | 2.420 |
| | | | | | 400 | | .750 x 2 1/8 | CP04A1KE684K3 | 3.630 |
| | | | | | 600 | | 1.000 x 1 1/8 | CP04A1KF684K3 | 3.696 |
| | | | | | 100 | | .562 x 1 1/8 | CP04A1K8824K3 | 2.816 |
| .82 | | | | | 200 | | .670 x 1 1/8 | CP04A1KC824K3 | 2.904 |
| | | | | | 400 | | 1.000 x 1 1/8 | CP04A1KE824K3 | 3.762 |
| | | | | | 100 | | .562 x 1 1/8 | CP05A1K8105K3 | 2.816 |
| 1.0 | | | | | 200 | | .670 x 1 1/8 | CP05A1KC105K3 | 2.904 |
| | | | | | 400 | | 1.000 x 1 1/8 | CP04A1KE105K3 | 3.762 |

*For Vibration Grade 1, change last digit of cat. no. to 1

SPRAGUE CAPACITORS

TYPE CP05 CAPACITORS TO MIL-C-25A



- Vitamin Q impregnation assures performance above and beyond MIL-C-25A requirements.
- Inserted tab construction for applications where minimum size is necessary.
- Positive hermetic closure of the metal cases assured by glass-to-metal solder-seal terminals.
- Type CP05 has insulating sleeve.
- Available in Characteristic E (-55°C to $+85^{\circ}\text{C}$) or Characteristic K (-55°C to $+125^{\circ}\text{C}$).
- Only popular insulated section (ungrounded case) capacitors are listed. For information on grounded case units, consult your Sprague Industrial Distributor.
- For prices on quantities from 10 to 499 pieces, see your Sprague Industrial Distributor.

| μF | WVDC | Size D. x L. | Characteristic E -55°C to $+85^{\circ}\text{C}$ | | | | Characteristic K -55°C to $+125^{\circ}\text{C}$ | | | |
|---------------|------|------------------------|--|-----------|-----------------|-----------|---|-----------|-----------------|-----------|
| | | | $\pm 20\%$ Tol. | | $\pm 10\%$ Tol. | | $\pm 20\%$ Tol. | | $\pm 10\%$ Tol. | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .001 | 600 | .298 x $\frac{1}{16}$ | CP05A1EF102M | \$1.484 | CP05A1EF102K | \$1.626 | CP05A1KF102M | \$1.592 | CP05A1KF102K | \$1.744 |
| .0015 | 600 | .298 x $\frac{1}{16}$ | CP05A1EF152M | 1.484 | CP05A1EF152K | 1.626 | CP05A1KF152M | 1.592 | CP05A1KF152K | 1.744 |
| .0022 | 600 | .298 x $\frac{1}{16}$ | CP05A1EF222M | 1.484 | CP05A1EF222K | 1.626 | CP05A1KF222M | 1.592 | CP05A1KF222K | 1.744 |
| .0033 | 600 | .298 x $\frac{1}{16}$ | CP05A1EF332M | 1.484 | CP05A1EF332K | 1.626 | CP05A1KF332M | 1.632 | CP05A1KF332K | 1.788 |
| .0047 | 600 | .298 x $\frac{1}{16}$ | CP05A1EF472M | 1.484 | CP05A1EF472K | 1.626 | CP05A1KF472M | 1.632 | CP05A1KF472K | 1.788 |
| .0068 | 600 | .298 x $\frac{1}{16}$ | CP05A1EF682M | 1.484 | CP05A1EF682K | 1.626 | CP05A1KF682M | 1.632 | CP05A1KF682K | 1.788 |
| .01 | 400 | .298 x $\frac{1}{16}$ | CP05A1EE103M | 1.464 | CP05A1EE103K | 1.604 | CP05A1KE103M | 1.632 | CP05A1KE103K | 1.796 |
| | 600 | .375 x $\frac{1}{16}$ | CP05A1EF103M | 1.504 | CP05A1EF103K | 1.648 | CP05A1KF103M | 1.680 | CP05A1KF103K | 1.840 |
| .015 | 200 | .298 x $\frac{1}{16}$ | CP05A1EC153M | 1.504 | CP05A1EC153K | 1.648 | CP05A1KC153M | 1.572 | CP05A1KC153K | 1.722 |
| | 600 | .375 x $\frac{1}{16}$ | CP05A1EF153M | 1.544 | CP05A1EF153K | 1.692 | CP05A1KF153M | 1.720 | CP05A1KF153K | 1.884 |
| .022 | 200 | .298 x $\frac{1}{16}$ | CP05A1EC223M | 1.564 | CP05A1EC223K | 1.714 | CP05A1KC223M | 1.572 | CP05A1KC223K | 1.722 |
| | 600 | .375 x $\frac{1}{16}$ | CP05A1EF223M | 1.584 | CP05A1EF223K | 1.736 | CP05A1KF223M | 1.720 | CP05A1KF223K | 1.884 |
| .033 | 100 | .298 x $\frac{1}{16}$ | CP05A1EB333M | 1.504 | CP05A1EB333K | 1.648 | CP05A1KB333M | 1.552 | CP05A1KB333K | 1.700 |
| | 400 | .375 x $\frac{1}{16}$ | CP05A1EE333M | 1.564 | CP05A1EE333K | 1.714 | CP05A1KE333M | 1.700 | CP05A1KE333K | 1.862 |
| | 600 | .463 x $\frac{1}{16}$ | CP05A1EF333M | 1.932 | CP05A1EF333K | 1.942 | CP05A1KF333M | 1.788 | CP05A1KF333K | 1.958 |
| .047 | 200 | .375 x $\frac{1}{16}$ | CP05A1EC473M | 1.544 | CP05A1EC473K | 1.648 | CP05A1KC473M | 1.560 | CP05A1KC473K | 1.796 |
| | 400 | .463 x $\frac{1}{16}$ | CP05A1EE473M | 1.612 | CP05A1EE473K | 1.766 | CP05A1KE473M | 1.768 | CP05A1KE473K | 1.936 |
| | 600 | .463 x $\frac{1}{16}$ | CP05A1EF473M | 1.632 | CP05A1EF473K | 1.788 | CP05A1KF473M | 1.808 | CP05A1KF473K | 1.980 |
| 0.068 | 200 | .375 x $\frac{1}{16}$ | CP05A1EC683M | 1.544 | CP05A1EC683K | 1.648 | CP05A1KC683M | 1.640 | CP05A1KC683K | 1.840 |
| | 400 | .463 x $\frac{1}{16}$ | CP05A1EE683M | 1.672 | CP05A1EE683K | 1.832 | CP05A1KE683M | 1.808 | CP05A1KE683K | 1.980 |
| | 600 | .463 x $\frac{1}{16}$ | CP05A1EF683M | 1.752 | CP05A1EF683K | 1.880 | CP05A1KF683M | 1.888 | CP05A1KF683K | 2.068 |
| .1 | 100 | .375 x $\frac{1}{16}$ | CP05A1EB104M | 1.544 | CP05A1EB104K | 1.692 | CP05A1KB104M | 1.680 | CP05A1KB104K | 1.840 |
| | 200 | .463 x $\frac{1}{16}$ | CP05A1EC104M | 1.572 | CP05A1EC104K | 1.722 | CP05A1KC104M | 1.728 | CP05A1KC104K | 1.892 |
| | 400 | .463 x $\frac{1}{16}$ | CP05A1EE104M | 1.792 | CP05A1EE104K | 1.964 | CP05A1KE104M | 1.848 | CP05A1KE104K | 2.024 |
| | 600 | .625 x $\frac{1}{16}$ | CP05A1EF104M | 1.856 | CP05A1EF104K | 2.032 | CP05A1KF104M | 2.048 | CP05A1KF104K | 2.240 |
| .15 | 100 | .463 x $\frac{1}{16}$ | CP05A1EB154M | 1.652 | CP05A1EB154K | 1.810 | CP05A1KB154M | 1.768 | CP05A1KB154K | 1.936 |
| | 200 | .463 x $\frac{1}{16}$ | CP05A1EC154M | 1.672 | CP05A1EC154K | 1.830 | CP05A1KC154M | 1.748 | CP05A1KC154K | 1.914 |
| | 400 | .625 x $\frac{1}{16}$ | CP05A1EE154M | 1.976 | CP05A1EE154K | 2.164 | CP05A1KE154M | 2.048 | CP05A1KE154K | 2.332 |
| | 600 | .625 x $\frac{1}{16}$ | CP05A1EF154M | 1.996 | CP05A1EF154K | 2.188 | CP05A1KF154M | 2.128 | CP05A1KF154K | 2.328 |
| .22 | 100 | .463 x $\frac{1}{16}$ | CP05A1EB224M | 1.712 | VP05A1EB224K | 1.876 | CP05A1KB224M | 1.768 | CP05A1KB224K | 1.936 |
| | 200 | .463 x $\frac{1}{16}$ | CP05A1EC224M | 1.872 | CP05A1EC224K | 2.052 | CP05A1KC224M | 1.908 | CP05A1KC224K | 2.090 |
| | 400 | .625 x $\frac{1}{16}$ | CP05A1EE224M | 2.072 | CP05A1EE224K | 2.296 | CP05A1KE224M | 2.168 | CP05A1KE224K | 2.372 |
| | 600 | .625 x $\frac{1}{16}$ | CP05A1EF224M | 2.136 | CP05A1EF224K | 2.340 | CP05A1KF224M | 2.288 | CP05A1KF224K | 2.504 |
| .33 | 100 | .463 x $\frac{1}{16}$ | CP05A1EB334M | 1.952 | CP05A1EB334K | 2.140 | CP05A1KB334M | 2.008 | CP05A1KB334K | 2.200 |
| | 200 | .625 x $\frac{1}{16}$ | CP05A1EC334M | 2.016 | CP05A1EC334K | 2.208 | CP05A1KC334M | 2.088 | CP05A1KC334K | 2.284 |
| | 400 | .625 x $\frac{1}{16}$ | CP05A1EE334M | 2.116 | CP05A1EE334K | 2.318 | CP05A1KE334M | 2.208 | CP05A1KE334K | 2.416 |
| | 600 | .733 x $\frac{1}{16}$ | CP05A1EF334M | 2.380 | CP05A1EF334K | 2.604 | CP05A1KF334M | 2.560 | CP05A1KF334K | 2.768 |
| .47 | 100 | .625 x $\frac{1}{16}$ | CP05A1EB474M | 2.096 | CP05A1EB474K | 2.296 | CP05A1KB474M | 2.048 | CP05A1KB474K | 2.372 |
| | 200 | .625 x $\frac{1}{16}$ | CP05A1EC474M | 2.136 | CP05A1EC474K | 2.340 | CP05A1KC474M | 2.208 | CP05A1KC474K | 2.416 |
| | 400 | .733 x $\frac{1}{16}$ | CP05A1EE474M | 2.604 | CP05A1EE474K | 2.850 | CP05A1KE474M | 2.640 | CP05A1KE474K | 2.948 |
| | 600 | .813 x $\frac{2}{16}$ | CP05A1EF474M | 2.840 | CP05A1EF474K | 3.108 | CP05A1KF474M | 2.840 | CP05A1KF474K | 3.190 |
| .68 | 100 | .625 x $\frac{1}{16}$ | CP05A1EB684M | 2.176 | CP05A1EB684K | 2.384 | CP05A1KB684M | 2.248 | CP05A1KB684K | 2.460 |
| | 200 | .625 x $\frac{1}{16}$ | CP05A1EC684M | 2.212 | CP05A1EC684K | 2.424 | CP05A1KC684M | 2.328 | CP05A1KC684K | 2.548 |
| | 400 | .813 x $\frac{2}{16}$ | CP05A1EE684M | 3.440 | CP05A1EE684K | 3.768 | CP05A1KE684M | 4.520 | CP05A1KE684K | 3.850 |
| | 600 | 1.063 x $\frac{1}{16}$ | CP05A1EF684M | 3.520 | CP05A1EF684K | 3.852 | CP05A1KF684M | 3.640 | CP05A1KF684K | 3.976 |
| 1.0 | 100 | .625 x $\frac{1}{16}$ | CP05A1EB105M | 2.616 | CP05A1EB105K | 2.868 | CP05A1KB105M | 2.688 | CP05A1KB105K | 2.944 |
| | 200 | .733 x $\frac{1}{16}$ | CP05A1EC105M | 2.740 | CP05A1EC105K | 3.000 | CP05A1KC105M | 2.800 | CP05A1KC105K | 3.064 |
| | 400 | 1.063 x $\frac{1}{16}$ | CP05A1EE105M | 3.600 | CP05A1EE105K | 3.940 | CP05A1KE105M | 3.700 | CP05A1KE105K | 4.042 |

SPRAGUE CAPACITORS

TYPE CP05 CAPACITORS TO MIL-C-25C

(±10% CAPACITANCE TOLERANCE, CHARACTERISTIC K)

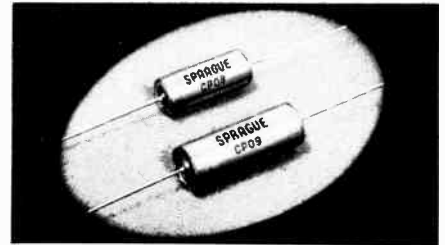
| μF | WVDC | D. x L. | Cat. No.* | Net (1-9) | μF | WVDC | D. x L. | Cat. No.* | Net (1-9) |
|-------|------|--|---------------|-----------|------|--|---------------|-----------|-----------|
| .001 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF102K3 | \$1.744 | 600 | .625 x 1 ³ / ₁₆ | CP05A1KF823K3 | | \$2.240 |
| .0012 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF122K3 | 1.744 | 1000 | .625 x 1 ¹ / ₁₆ | CP05A1KG823K3 | | 2.504 |
| .0015 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF152K3 | 1.744 | 100 | .463 x 1 ³ / ₁₆ | CP05A1KB104K3 | | 1.840 |
| .0018 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF182K3 | 1.744 | 200 | .463 x 1 ³ / ₁₆ | CP05A1KC104K3 | | 1.892 |
| .0022 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF222K3 | 1.744 | 400 | .463 x 1 ³ / ₁₆ | CP05A1KE104K3 | | 2.024 |
| .0027 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF272K3 | 1.778 | 600 | .625 x 1 ³ / ₁₆ | CP05A1KF104K3 | | 2.240 |
| .0033 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF332K3 | 1.788 | 1000 | .625 x 1 ¹ / ₁₆ | CP05A1KG104K3 | | 2.504 |
| .0039 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF392K3 | 1.788 | 100 | .463 x 1 ³ / ₁₆ | CP05A1KB124K3 | | 1.936 |
| .0047 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF472K3 | 1.788 | 200 | .463 x 1 ³ / ₁₆ | CP05A1KC124K3 | | 1.914 |
| .0056 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF562K3 | 1.788 | 400 | .625 x 1 ³ / ₁₆ | CP05A1KE124K3 | | 2.332 |
| .0068 | 600 | .298 x 1 ³ / ₁₆ | CP05A1KF682K3 | 1.788 | 600 | .625 x 1 ³ / ₁₆ | CP05A1KF124K3 | | 2.328 |
| .0082 | 400 | .298 x 1 ³ / ₁₆ | CP05A1KE822K3 | 1.796 | 1000 | .733 x 1 ¹ / ₁₆ | CP05A1KG124K3 | | 2.580 |
| | 600 | .375 x 1 ³ / ₁₆ | CP05A1KF822K3 | 1.840 | 100 | .463 x 1 ³ / ₁₆ | CP05A1KB154K3 | | 1.936 |
| .01 | 400 | .298 x 1 ³ / ₁₆ | CP05A1KE103K3 | 1.796 | 200 | .463 x 1 ³ / ₁₆ | CP05A1KC154K3 | | 1.914 |
| | 600 | .375 x 1 ³ / ₁₆ | CP05A1KF103K3 | 1.840 | 400 | .625 x 1 ³ / ₁₆ | CP05A1KE154K3 | | 2.332 |
| .012 | 200 | .298 x 1 ³ / ₁₆ | CP05A1KC123K3 | 1.722 | 600 | .625 x 1 ³ / ₁₆ | CP05A1KF154K3 | | 2.328 |
| | 600 | .375 x 1 ³ / ₁₆ | CP05A1KF123K3 | 1.884 | 1000 | .733 x 1 ¹ / ₁₆ | CP05A1KG154K3 | | 2.580 |
| .015 | 200 | .298 x 1 ³ / ₁₆ | CP05A1KC153K3 | 1.722 | 100 | .463 x 1 ³ / ₁₆ | CP05A1KB184K3 | | 1.936 |
| | 600 | .375 x 1 ³ / ₁₆ | CP05A1KF153K3 | 1.884 | 200 | .463 x 1 ³ / ₁₆ | CP05A1KC184K3 | | 2.090 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP05A1KG153K3 | 2.156 | 400 | .625 x 1 ³ / ₁₆ | CP05A1KE184K3 | | 2.372 |
| .018 | 200 | .298 x 1 ³ / ₁₆ | CP05A1KC183K3 | 1.722 | 600 | .625 x 1 ³ / ₁₆ | CP05A1KF184K3 | | 2.504 |
| | 600 | .375 x 1 ³ / ₁₆ | CP05A1KF183K3 | 1.884 | 1000 | .813 x 2 ³ / ₁₆ | CP05A1KG184K3 | | 2.860 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP05A1KG183K3 | 2.156 | 100 | .463 x 1 ³ / ₁₆ | CP05A1KB224K3 | | 1.936 |
| .022 | 200 | .298 x 1 ³ / ₁₆ | CP05A1KC223K3 | 1.722 | 200 | .463 x 1 ³ / ₁₆ | CP05A1KC224K3 | | 2.090 |
| | 600 | .375 x 1 ³ / ₁₆ | CP05A1KF223K3 | 1.884 | 400 | .625 x 1 ³ / ₁₆ | CP05A1KE224K3 | | 2.372 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP05A1KG223K3 | 2.156 | 600 | .625 x 1 ³ / ₁₆ | CP05A1KF224K3 | | 2.504 |
| .027 | 100 | .298 x 1 ³ / ₁₆ | CP05A1KB273K3 | 1.700 | 1000 | .813 x 2 ³ / ₁₆ | CP05A1KG224K3 | | 2.860 |
| | 400 | .375 x 1 ³ / ₁₆ | CP05A1KE273K3 | 1.862 | 100 | .463 x 1 ³ / ₁₆ | CP05A1KB274K3 | | 2.200 |
| | 600 | .463 x 1 ³ / ₁₆ | CP05A1KF273K3 | 1.958 | 200 | .463 x 1 ³ / ₁₆ | CP05A1KC274K3 | | 2.284 |
| | 1000 | 1.463 x 1 ³ / ₁₆ | CP05A1KG273K3 | 2.222 | 400 | .625 x 1 ³ / ₁₆ | CP05A1KE274K3 | | 2.416 |
| .033 | 100 | .298 x 1 ³ / ₁₆ | CP05A1KB333K3 | 1.700 | 600 | .733 x 1 ³ / ₁₆ | CP05A1KF274K3 | | 2.768 |
| | 400 | .375 x 1 ³ / ₁₆ | CP05A1KE333K3 | 1.862 | 1000 | .813 x 2 ¹ / ₁₆ | CP05A1KG274K3 | | 3.124 |
| | 600 | .463 x 1 ³ / ₁₆ | CP05A1KF333K3 | 1.958 | 100 | .463 x 1 ³ / ₁₆ | CP05A1KB334K3 | | 2.200 |
| | 1000 | 1.463 x 1 ³ / ₁₆ | CP05A1KG333K3 | 2.222 | 200 | .625 x 1 ³ / ₁₆ | CP05A1KC334K3 | | 2.284 |
| .039 | 200 | .375 x 1 ³ / ₁₆ | CP05A1KC393K3 | 1.796 | 400 | .625 x 1 ³ / ₁₆ | CP05A1KE334K3 | | 2.416 |
| | 400 | .463 x 1 ³ / ₁₆ | CP05A1KE393K3 | 1.936 | 600 | .733 x 1 ³ / ₁₆ | CP05A1KF334K3 | | 2.768 |
| | 600 | .463 x 1 ³ / ₁₆ | CP05A1KF293K3 | 1.980 | 1000 | .813 x 2 ¹ / ₁₆ | CP05A1KG334K3 | | 3.124 |
| | 1000 | .625 x 1 ³ / ₁₆ | CP05A1KG393K3 | 2.284 | 100 | .625 x 1 ³ / ₁₆ | CP05A1KB394K3 | | 2.372 |
| .047 | 200 | .375 x 1 ³ / ₁₆ | CP05A1KC473K3 | 1.796 | 200 | .625 x 1 ³ / ₁₆ | CP05A1KC394K3 | | 2.416 |
| | 400 | .463 x 1 ³ / ₁₆ | CP05A1KE473K3 | 1.936 | 400 | .733 x 1 ³ / ₁₆ | CP05A1KE394K3 | | 2.948 |
| | 600 | .463 x 1 ³ / ₁₆ | CP05A1KF473K3 | 1.980 | 600 | .813 x 2 ³ / ₁₆ | CP05A1KF394K3 | | 3.190 |
| | 1000 | .625 x 1 ³ / ₁₆ | CP05A1KG473K3 | 2.284 | 1000 | 1.063 x 2 ³ / ₁₆ | CP05A1KG394K3 | | 3.514 |
| .056 | 200 | .375 x 1 ³ / ₁₆ | CP05A1KC563K3 | 1.840 | 100 | .625 x 1 ³ / ₁₆ | CP05A1KB474K3 | | 2.372 |
| | 400 | .463 x 1 ³ / ₁₆ | CP05A1KE563K3 | 1.972 | 200 | .625 x 1 ³ / ₁₆ | CP05A1KC474K3 | | 2.416 |
| | 600 | .463 x 1 ³ / ₁₆ | CP05A1KF563K3 | 2.068 | 400 | .733 x 1 ³ / ₁₆ | CP05A1KE474K3 | | 2.948 |
| | 1000 | .625 x 1 ³ / ₁₆ | CP05A1KG563K3 | 2.372 | 600 | .813 x 2 ³ / ₁₆ | CP05A1KF474K3 | | 3.190 |
| .068 | 200 | .375 x 1 ³ / ₁₆ | CP05A1KC683K3 | 1.840 | 1000 | 1.063 x 2 ³ / ₁₆ | CP05A1KG474K3 | | 3.514 |
| | 400 | .463 x 1 ³ / ₁₆ | CP05A1KE683K3 | 1.980 | 100 | .625 x 1 ³ / ₁₆ | CP05A1KB564K3 | | 2.460 |
| | 600 | .463 x 1 ³ / ₁₆ | CP05A1KF683K3 | 2.068 | 200 | .625 x 1 ³ / ₁₆ | CP05A1KC564K3 | | 2.548 |
| | 1000 | .625 x 1 ³ / ₁₆ | CP05A1KG683K3 | 2.372 | 400 | .813 x 2 ³ / ₁₆ | CP05A1KE564K3 | | 3.850 |
| .082 | 100 | .375 x 1 ³ / ₁₆ | CP05A1KB823K3 | 1.840 | 600 | 1.063 x 1 ³ / ₁₆ | CP05A1KF564K3 | | 3.976 |
| | 200 | .463 x 1 ³ / ₁₆ | CP05A1KC823K3 | 1.892 | 100 | .625 x 1 ³ / ₁₆ | CP05A1KB684K3 | | 2.460 |
| | 400 | .463 x 1 ³ / ₁₆ | CP05A1KE823K3 | 2.024 | 200 | .625 x 1 ³ / ₁₆ | CP05A1KC684K3 | | 2.548 |
| | | | | | 400 | .813 x 2 ³ / ₁₆ | CP05A1KE684K3 | | 3.850 |
| | | | | | 600 | 1.063 x 1 ³ / ₁₆ | CP05A1KF684K3 | | 3.976 |
| | | | | | 100 | .625 x 1 ³ / ₁₆ | CP05A1KB824K3 | | 2.944 |
| | | | | | 200 | .733 x 1 ³ / ₁₆ | CP05A1KC824K3 | | 3.064 |
| | | | | | 400 | 1.063 x 1 ³ / ₁₆ | CP05A1KE824K3 | | 4.042 |
| | | | | | 100 | .625 x 1 ³ / ₁₆ | CP05A1KB105K3 | | 2.944 |
| | | | | | 200 | .733 x 1 ³ / ₁₆ | CP05A1KC105K3 | | 3.064 |
| | | | | | 400 | 1.063 x 1 ³ / ₁₆ | CP05A1KE105K3 | | 4.042 |

*For Vibration Grade 1, change last digit of Catalog Number to 1.

SPRAGUE CAPACITORS

TYPE CP08 CAPACITORS TO MIL-C-25A

- Vitamin Q impregnation assures performance above and beyond MIL-C-25A requirements.
- Positive hermetic closure of the metal cases with glass-to-metal solder-seal terminals.
- Available in Characteristic E (-55°C to +85°C) or Characteristic K (-55°C to +125°C).
- Type CP08 has plain metal case.
- Extended foil (so-called non-inductive section) construction.
- Listed below are popular insulated section (ungrounded case) capacitors. Consult your Sprague Industrial Distributor for information on grounded case units.
- For prices on quantities from 10 to 499 pieces, see your Sprague Industrial Distributor.



| μF | WVDC | Size D. x L. | Characteristic E -55°C to +85°C | | | | Characteristic K -55°C to +125°C | | | |
|-------|------|-----------------|------------------------------------|-----------|--------------|-----------|-------------------------------------|-----------|--------------|-----------|
| | | | ±20% Tol. | | ±10% Tol. | | ±20% Tol. | | ±10% Tol. | |
| | | | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) | Cat. No. | Net (1-9) |
| .001 | 600 | .235 x 3/4 | CP08A1EF102M | \$1.764 | CP08A1EF102K | \$1.940 | CP08A1KF102M | \$1.976 | CP08A1KF102K | \$2.174 |
| .0015 | 600 | .235 x 3/4 | CP08A1EF152M | 1.764 | CP08A1EF152K | 1.940 | CP08A1KF152M | 1.976 | CP08A1KF152K | 2.174 |
| .022 | 600 | .235 x 3/4 | CP08A1EF222M | 1.764 | CP08A1EF222K | 1.940 | CP08A1KF222M | 1.976 | CP08A1KF222K | 2.174 |
| .0033 | 400 | .235 x 3/4 | CP08A1EE332M | 1.764 | CP08A1EE332K | 1.940 | CP08A1KE332M | 1.976 | CP08A1KE332K | 2.174 |
| | 600 | .312 x 7/8 | CP08A1EF332M | 1.840 | CP08A1EF332K | 2.024 | CP08A1KF332M | 2.060 | CP08A1KF332K | 2.266 |
| .0047 | 200 | .235 x 3/4 | CP08A1EC472M | 1.712 | CP08A1EC472K | 1.883 | CP08A1KC472M | 1.920 | CP08A1KC472K | 2.112 |
| | 600 | .312 x 7/8 | CP08A1EF472M | 1.848 | CP08A1EF472K | 2.033 | CP08A1KF472M | 2.068 | CP08A1KF472K | 2.275 |
| .0068 | 200 | .235 x 3/4 | CP08A1EC682M | 1.712 | CP08A1EC682K | 1.883 | CP08A1KC682M | 1.920 | CP08A1KC682K | 2.112 |
| | 600 | .312 x 7/8 | CP08A1EF682M | 1.860 | CP08A1EF682K | 2.046 | CP08A1KF682M | 2.084 | CP08A1KF682K | 2.292 |
| .01 | 100 | .235 x 3/4 | CP08A1EB103M | 1.688 | CP08A1EB103K | 1.857 | CP08A1KB103M | 1.892 | CP08A1KB103K | 2.081 |
| | 600 | .312 x 7/8 | CP08A1EF103M | 1.868 | CP08A1EF103K | 2.055 | CP08A1KF103M | 2.092 | CP08A1KF103K | 2.301 |
| .015 | 100 | .235 x 3/4 | CP08A1EE153M | 1.700 | CP08A1EB153K | 1.870 | CP08A1KB153M | 1.904 | CP08A1KB153K | 2.094 |
| | 400 | .312 x 7/8 | CP08A1EE153M | 1.868 | CP08A1EE153K | 2.055 | CP08A1KE153M | 2.092 | CP08A1KE153K | 2.301 |
| | 600 | .400 x 7/8 | CP08A1EF153M | 1.940 | CP08A1EF153K | 2.134 | CP08A1KF153M | 2.176 | CP08A1KF153K | 2.394 |
| .022 | 200 | .312 x 7/8 | CP08A1EC223M | 1.816 | CP08A1EC223K | 1.998 | CP08A1KC223M | 2.036 | CP08A1KC223K | 2.240 |
| | 600 | .400 x 7/8 | CP08A1EF223M | 1.952 | CP08A1EF223K | 2.147 | CP08A1KF223M | 2.188 | CP08A1KF223K | 2.407 |
| .033 | 200 | .312 x 7/8 | CP08A1EC333M | 1.828 | CP08A1EC333K | 2.011 | CP08A1KC333M | 2.048 | CP08A1KC333K | 2.253 |
| | 400 | .400 x 7/8 | CP08A1EE333M | 1.920 | CP08A1EE333K | 2.112 | CP08A1KE333M | 2.152 | CP08A1KE333K | 2.367 |
| | 600 | .400 x 1 1/8 | CP08A1EF333M | 1.964 | CP08A1EF333K | 2.160 | CP08A1KF333M | 2.200 | CP08A1KF333K | 2.420 |
| .047 | 100 | .312 x 7/8 | CP08A1EB473M | 1.784 | CP08A1EB473K | 1.962 | CP08A1KB473M | 2.000 | CP08A1KB473K | 2.200 |
| | 200 | .400 x 7/8 | CP08A1EC473M | 1.868 | CP08A1EC473K | 2.055 | CP08A1KC473M | 2.092 | CP08A1KC473K | 2.301 |
| | 400 | .400 x 1 1/8 | CP08A1EE473M | 1.952 | CP08A1EE473K | 2.147 | CP08A1KE473M | 2.188 | CP08A1KE473K | 2.407 |
| | 600 | .400 x 1 3/8 | CP08A1EF473M | 2.040 | CP08A1EF473K | 2.244 | CP08A1KF473M | 2.288 | CP08A1KF473K | 2.517 |
| .068 | 200 | .400 x 7/8 | CP08A1EC683M | 1.884 | CP08A1EC683K | 2.072 | CP08A1KC683M | 2.108 | CP08A1KC683K | 2.289 |
| | 400 | .400 x 1 1/8 | CP08A1EE683M | 2.016 | CP08A1EE683K | 2.218 | CP08A1KE683M | 2.260 | CP08A1KE683K | 2.486 |
| | 600 | .562 x 1 1/8 | CP08A1EF683M | 2.168 | CP08A1EF683K | 2.385 | CP08A1KF683M | 2.428 | CP08A1KF683K | 2.671 |
| .1 | 100 | .400 x 7/8 | CP08A1EB104M | 1.828 | CP08A1EB104K | 2.011 | CP08A1KB104M | 2.048 | CP08A1KB104K | 2.253 |
| | 200 | .400 x 1 1/8 | CP08A1EC104M | 1.888 | CP08A1EC104K | 2.077 | CP08A1KC104M | 2.116 | CP08A1KC104K | 2.328 |
| | 400 | .562 x 1 1/8 | CP08A1EE104M | 2.120 | CP08A1EE104K | 2.332 | CP08A1KE104M | 2.372 | CP08A1KE104K | 2.609 |
| | 600 | .562 x 1 3/8 | CP08A1EF104M | 2.244 | CP08A1EF104K | 2.468 | CP08A1KF104M | 2.512 | CP08A1KF104K | 2.763 |
| .15 | 100 | .400 x 1 1/8 | CP08A1EB154M | 1.860 | CP08A1EB154K | 2.046 | CP08A1KB154M | 2.084 | CP08A1KB154K | 2.292 |
| | 200 | .400 x 1 3/8 | CP08A1EC154M | 1.996 | CP08A1EC154K | 2.196 | CP08A1KC154M | 2.236 | CP08A1KC154K | 2.460 |
| | 400 | .562 x 1 3/8 | CP08A1EE154M | 2.244 | CP08A1EE154K | 2.468 | CP08A1KE154M | 2.516 | CP08A1KE154K | 2.768 |
| | 600 | .562 x 1 7/8 | CP08A1EF154M | 2.396 | CP08A1EF154K | 2.636 | CP08A1KF154M | 2.684 | CP08A1KF154K | 2.952 |
| .22 | 100 | .400 x 1 3/8 | CP08A1EB224M | 1.940 | CP08A1EB224K | 2.134 | CP08A1KB224M | 2.176 | CP08A1KB224K | 2.398 |
| | 200 | .562 x 1 1/8 | CP08A1EC224M | 2.120 | CP08A1EC224K | 2.332 | CP08A1KC224M | 2.372 | CP08A1KC224K | 2.609 |
| | 400 | .562 x 1 3/8 | CP08A1EE224M | 2.352 | CP08A1EE224K | 2.587 | CP08A1KE224M | 2.636 | CP08A1KE224K | 2.900 |
| | 600 | .670 x 1 7/8 | CP08A1EF224M | 2.648 | CP08A1EF224K | 2.913 | CP08A1KF224M | 2.964 | CP08A1KF224K | 3.260 |
| .33 | 100 | .562 x 1 1/8 | CP08A1EB334M | 2.088 | CP08A1EB334K | 2.297 | CP08A1KB334M | 2.340 | CP08A1KB334K | 2.574 |
| | 200 | .562 x 1 3/8 | CP08A1EC334M | 2.244 | CP08A1EC334K | 2.468 | CP08A1KC334M | 2.516 | CP08A1KC334K | 2.768 |
| | 400 | .670 x 1 3/8 | CP08A1EE334M | 2.584 | CP08A1EE334K | 2.842 | CP08A1KE334M | 2.892 | CP08A1KE334K | 3.181 |
| | 600 | .750 x 2 1/8 | CP08A1EF334M | 2.768 | CP08A1EF334K | 3.045 | CP08A1KF334M | 3.096 | CP08A1KF334K | 3.406 |
| .47 | 100 | .562 x 1 3/8 | CP08A1EB474M | 2.208 | CP08A1EB474K | 2.429 | CP08A1KB474M | 2.472 | CP08A1KB474K | 2.719 |
| | 200 | .562 x 1 7/8 | CP08A1EC474M | 2.376 | CP08A1EC474K | 2.614 | CP08A1KC474M | 2.660 | CP08A1KC474K | 2.926 |
| | 400 | .750 x 2 1/8 | CP08A1EE474M | 2.728 | CP08A1EE474K | 3.001 | CP08A1KE474M | 2.056 | CP08A1KE474K | 3.362 |
| | 600 | .750 x 2 3/8 | CP08A1EF474M | 2.936 | CP08A1EF474K | 3.230 | CP08A1KF474M | 3.288 | CP08A1KF474K | 3.617 |
| 68 | 100 | .562 x 1 3/8 | CP08A1EB684M | 2.328 | CP08A1EB684K | 2.559 | CP08A1KB684M | 2.608 | CP08A1KB684K | 2.869 |
| | 200 | .670 x 1 3/8 | CP08A1EC684M | 2.584 | CP08A1EC684K | 2.842 | CP08A1KC684M | 2.892 | CP08A1KC684K | 3.181 |
| 1.0 | 100 | .670 x 1 7/8 | CP08A1EB105M | 2.584 | CP08A1EB105K | 2.842 | CP08A1KB105M | 2.892 | CP08A1KB105K | 3.181 |
| | 200 | .750 x 2 1/8 | CP08A1EC105M | 2.708 | CP08A1EC105K | 2.979 | CP08A1KC105M | 3.032 | CP08A1KC105K | 3.335 |

SPRAGUE CAPACITORS

TYPE CP08 CAPACITORS TO MIL-C-25C

(± 10% CAPACITANCE TOLERANCE, CHARACTERISTIC K)

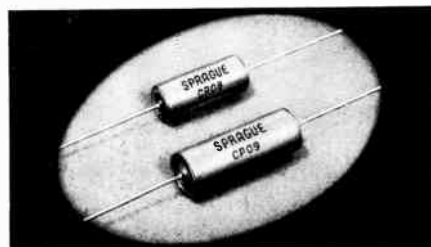
| μF | WVDC | D. x L. | Cat. No.* | Net (1-9) | μF | WVDC | D. x L. | Cat. No.* | Net (1-9) |
|-------|--------------|---------------|---------------|-----------|--------------|---------------|---------------|---------------|-----------|
| .001 | 600 | .235 x 3/4 | CP08A1KF102K3 | \$1.760 | .033 | 200 | .312 x 7/8 | CP08A1KC333K3 | \$1.848 |
| | 1000 | .400 x 7/8 | CP08A1KG102K3 | 2.024 | | 400 | .400 x 7/8 | CP08A1KE333K3 | 1.936 |
| .0012 | 600 | .235 x 3/4 | CP08A1KF122K3 | 1.760 | | 600 | .400 x 1 1/8 | CP08A1KF333K3 | 1.958 |
| | 1000 | .400 x 7/8 | CP08A1KG122K3 | 2.024 | | 1000 | .562 x 1 1/8 | CP08A1KG333K3 | 2.222 |
| .0015 | 600 | .235 x 3/4 | CP08A1KF152K3 | 1.760 | .039 | 100 | .312 x 7/8 | CP08A1K8393K3 | 1.804 |
| | 1000 | .400 x 7/8 | CP08A1KG152K3 | 2.024 | | 200 | .400 x 7/8 | CP08A1KC393K3 | 1.892 |
| .0018 | 600 | .235 x 3/4 | CP08A1KF182K3 | 1.760 | | 400 | .400 x 1 1/8 | CP08A1KE393K3 | 1.980 |
| | 1000 | .400 x 7/8 | CP08A1KG182K3 | 2.024 | | 600 | .400 x 1 1/8 | CP08A1KF393K3 | 2.024 |
| .0022 | 600 | .235 x 3/4 | CP08A1KF222K3 | 1.760 | 1000 | .562 x 1 1/8 | CP08A1KG393K3 | 2.288 | |
| | 1000 | .400 x 7/8 | CP08A1KG222K3 | 2.024 | .047 | 100 | .312 x 7/8 | CP08A1KB473K3 | 1.804 |
| .0027 | 400 | .235 x 3/4 | CP08A1KE272K3 | 1.760 | | 200 | .400 x 7/8 | CP08A1KC473K3 | 1.892 |
| | 600 | .312 x 7/8 | CP08A1KF272K3 | 1.804 | | 400 | .400 x 1 1/8 | CP08A1KE473K3 | 1.980 |
| 1000 | .400 x 7/8 | CP08A1KG272K3 | 2.024 | 600 | | .400 x 1 1/8 | CP08A1KF473K3 | 2.024 | |
| .0033 | 400 | .235 x 3/4 | CP08A1KE332K3 | 1.760 | 1000 | .562 x 1 1/8 | CP08A1KG473K3 | 2.288 | |
| | 600 | .312 x 7/8 | CP08A1KF332K3 | 1.804 | .056 | 200 | .400 x 7/8 | CP08A1KC563K3 | 1.892 |
| | 1000 | .400 x 7/8 | CP08A1KG332K3 | 2.024 | | 400 | .400 x 1 1/8 | CP08A1KE563K3 | 1.980 |
| .0039 | 200 | .235 x 3/4 | CP08A1KC392K3 | 1.694 | | 600 | .562 x 1 1/8 | CP08A1KF563K3 | 2.156 |
| | 600 | .312 x 7/8 | CP08A1KF392K3 | 1.870 | | 1000 | .562 x 1 1/8 | CP08A1KG563K3 | 2.420 |
| 1000 | .400 x 7/8 | CP08A1KG392K3 | 2.134 | .068 | 200 | .400 x 7/8 | CP08A1KC683K3 | 1.892 | |
| .0047 | 200 | .235 x 3/4 | CP08A1KC472K3 | | 1.694 | 400 | .400 x 1 1/8 | CP08A1KE683K3 | 1.980 |
| | 600 | .312 x 7/8 | CP08A1KF472K3 | | 1.870 | 600 | .562 x 1 1/8 | CP08A1KF683K3 | 2.156 |
| 1000 | .400 x 7/8 | CP08A1KG472K3 | 2.134 | | 1000 | .562 x 1 1/8 | CP08A1KG683K3 | 2.420 | |
| .0056 | 200 | .235 x 3/4 | CP08A1KC562K3 | 1.716 | .082 | 100 | .400 x 7/8 | CP08A1K8823K3 | 1.848 |
| | 600 | .312 x 7/8 | CP08A1KF562K3 | 1.892 | | 200 | .400 x 1 1/8 | CP08A1KC823K3 | 1.914 |
| | 1000 | .400 x 7/8 | CP08A1KG562K3 | 2.156 | | 400 | .562 x 1 1/8 | CP08A1KE823K3 | 2.112 |
| .0068 | 200 | .235 x 3/4 | CP08A1KC682K3 | 1.716 | | 600 | .562 x 1 1/8 | CP08A1KF823K3 | 2.200 |
| | 600 | .312 x 7/8 | CP08A1KF682K3 | 1.892 | 1000 | .670 x 1 1/8 | CP08A1KG823K3 | 2.420 | |
| | 1000 | .400 x 7/8 | CP08A1KG682K3 | 2.156 | .1 | 100 | .400 x 7/8 | CP08A1K8104K3 | 1.848 |
| 0082 | 100 | .235 x 3/4 | CP08A1KB822K3 | 1.672 | | 200 | .400 x 1 1/8 | CP08A1KC104K3 | 1.914 |
| | 600 | .312 x 7/8 | CP08A1KF822K3 | 1.914 | | 400 | .562 x 1 1/8 | CP08A1KE104K3 | 2.112 |
| 1000 | .400 x 7/8 | CP08A1KG822K3 | 2.178 | 600 | | .562 x 1 1/8 | CP08A1KF104K3 | 2.200 | |
| .01 | 100 | .235 x 3/4 | CP08A1K8103K3 | 1.672 | 1000 | .670 x 1 1/8 | CP08A1KG104K3 | 2.420 | |
| | 600 | .312 x 7/8 | CP08A1KF103K3 | 1.914 | .12 | 100 | .400 x 1 1/8 | CP08A1KB124K3 | 1.848 |
| | 1000 | .400 x 7/8 | CP08A1KG103K3 | 2.178 | | 200 | .400 x 1 1/8 | CP08A1KC124K3 | 1.980 |
| .012 | 100 | .235 x 3/4 | CP08A1K8123K3 | 1.672 | | 400 | .562 x 1 1/8 | CP08A1KE124K3 | 2.200 |
| | 400 | .312 x 7/8 | CP08A1KE123K3 | 1.892 | | 600 | .562 x 1 1/8 | CP08A1KF124K3 | 2.332 |
| 600 | .400 x 7/8 | CP08A1KF123K3 | 1.936 | 1000 | .670 x 1 1/8 | CP08A1KG124K3 | 2.596 | | |
| 1000 | .400 x 1 1/8 | CP08A1KG123K3 | 2.200 | .15 | 100 | .400 x 1 1/8 | CP08A1K8154K3 | 1.848 | |
| .015 | 100 | .235 x 3/4 | CP08A1K8153K3 | | 1.672 | 200 | .400 x 1 1/8 | CP08A1KC154K3 | 1.980 |
| | 400 | .312 x 7/8 | CP08A1KE153K3 | | 1.892 | 400 | .562 x 1 1/8 | CP08A1KE154K3 | 2.200 |
| 600 | .400 x 7/8 | CP08A1KF153K3 | 1.936 | | 600 | .562 x 1 1/8 | CP08A1KF154K3 | 2.332 | |
| 1000 | .400 x 1 1/8 | CP08A1KG153K3 | 2.200 | 1000 | .670 x 1 1/8 | CP08A1KG154K3 | 2.596 | | |
| .018 | 200 | .312 x 7/8 | CP08A1KC183K3 | 1.848 | .18 | 100 | .400 x 1 1/8 | CP08A1KB184K3 | 1.980 |
| | 600 | .400 x 7/8 | CP08A1KF183K3 | 1.958 | | 200 | .562 x 1 1/8 | CP08A1KC184K3 | 2.112 |
| | 1000 | .400 x 1 1/8 | CP08A1KG183K3 | 2.222 | | 400 | .562 x 1 1/8 | CP08A1KE184K3 | 2.332 |
| .022 | 200 | .312 x 7/8 | CP08A1KC223K3 | 1.848 | | 600 | .670 x 1 1/8 | CP08A1KF184K3 | 2.640 |
| | 600 | .400 x 7/8 | CP08A1KF223K3 | 1.958 | 1000 | .750 x 2 1/8 | CP08A1KG184K3 | 2.904 | |
| 1000 | .400 x 1 1/8 | CP08A1KG223K3 | 2.222 | .22 | 100 | .400 x 1 1/8 | CP08A1KB224K3 | 1.980 | |
| .027 | 200 | .312 x 7/8 | CP08A1KC273K3 | | 1.848 | 200 | .562 x 1 1/8 | CP08A1KC224K3 | 2.112 |
| | 400 | .400 x 7/8 | CP08A1KE273K3 | | 1.936 | 400 | .562 x 1 1/8 | CP08A1KE224K3 | 2.332 |
| 600 | .400 x 1 1/8 | CP08A1KF273K3 | 1.958 | | 600 | .670 x 1 1/8 | CP08A1KF224K3 | 2.640 | |
| 1000 | .562 x 1 1/8 | CP08A1KG273K3 | 2.222 | 1000 | .750 x 2 1/8 | CP08A1KG224K3 | 2.904 | | |
| .27 | 200 | .312 x 7/8 | CP08A1K8274K3 | 2.200 | .27 | 100 | .562 x 1 1/8 | CP08A1K8274K3 | 2.200 |
| | 400 | .400 x 7/8 | CP08A1KE274K3 | 2.240 | | 200 | .562 x 1 1/8 | CP08A1KC274K3 | 2.240 |
| | 600 | .400 x 1 1/8 | CP08A1KF274K3 | 2.552 | | 400 | .670 x 1 1/8 | CP08A1KE274K3 | 2.552 |
| | 1000 | .562 x 1 1/8 | CP08A1KG274K3 | 3.212 | | 600 | .750 x 2 1/8 | CP08A1KF274K3 | 2.948 |

*For Vibration Grade 1, change last digit in Catalog Number to 1.

SPRAGUE CAPACITORS

TYPE CP09 CAPACITORS TO MIL-C-25A

- Vitamin Q impregnation assures performance above and beyond MIL-C-25A requirements.
- Positive hermetic closure of the metal cases with glass-to-metal solder-seal terminals.
- Available in Characteristic E (−55°C to +85°C) or Characteristic K (−55°C to +125°C).
- Type CP09 has insulating sleeve.
- Extended foil, non-inductive section construction.
- Listed below are popular insulated section (ungrounded case) capacitors. Consult your Sprague Industrial Distributor for information on grounded case units.
- For prices on quantities from 10 to 499 pieces, see your Sprague Industrial Distributor.



| μF | WVDC | Size D. x L. | Characteristic E −55°C to +85°C | | | | Characteristic K −55°C to +125°C | | | |
|-------|------|---------------------------------------|------------------------------------|------------------|--------------|------------------|-------------------------------------|------------------|--------------|------------------|
| | | | ±20% Tol. | | ±10% Tol. | | ±20% Tol. | | ±10% Tol. | |
| | | | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) |
| .001 | 600 | .298 x 1 ¹ / ₁₆ | CP09A1EF102M | \$1.524 | CP09A1EF102K | \$1.670 | CP09A1KF102M | \$1.672 | CP09A1KF102K | \$1.830 |
| .0015 | 600 | .298 x 1 ¹ / ₁₆ | CP09A1EF152M | 1.524 | CP09A1EF152K | 1.670 | CP09A1KF152M | 1.672 | CP09A1KF152K | 1.830 |
| .0022 | 600 | .298 x 1 ¹ / ₁₆ | CP09A1EF222M | 1.524 | CP09A1EF222K | 1.670 | CP09A1KF222M | 1.672 | CP09A1KF222K | 1.830 |
| .0033 | 400 | .298 x 1 ¹ / ₁₆ | CP09A1EE332M | 1.504 | CP09A1EE332K | 1.648 | CP09A1KE332M | 1.672 | CP09A1KE332K | 1.832 |
| | 600 | .375 x 1 ¹ / ₁₆ | CP09A1EF332M | 1.544 | CP09A1EF332K | 1.692 | CP09A1KF332M | 1.720 | CP09A1KF332K | 1.884 |
| .0047 | 200 | .298 x 1 ¹ / ₁₆ | CP09A1EC472M | 1.452 | CP09A1EC472K | 1.591 | CP09A1KC472M | 1.612 | CP09A1KC472K | 1.766 |
| | 600 | .375 x 1 ¹ / ₁₆ | CP09A1EF472M | 1.564 | CP09A1EF472K | 1.714 | CP09A1KF472M | 1.780 | CP09A1KF472K | 1.950 |
| .0068 | 200 | .298 x 1 ¹ / ₁₆ | CP09A1EC682M | 1.452 | CP09A1EC682K | 1.591 | CP09A1KC682M | 1.632 | CP09A1KC682K | 1.788 |
| | 600 | .375 x 1 ¹ / ₁₆ | CP09A1EF682M | 1.584 | CP09A1EF682K | 1.736 | CP09A1KF682M | 1.800 | CP09A1KF682K | 1.972 |
| .01 | 100 | .298 x 1 ¹ / ₁₆ | CP09A1EB103M | 1.544 | CP09A1EB103K | 1.692 | CP09A1KB103M | 1.592 | CP09A1KB103K | 1.744 |
| | 600 | .375 x 1 ¹ / ₁₆ | CP09A1EF103M | 1.604 | CP09A1EF103K | 1.718 | CP09A1KF103M | 1.820 | CP09A1KF103K | 1.994 |
| .015 | 100 | .298 x 1 ¹ / ₁₆ | CP09A1EB153M | 1.544 | CP09A1EB153K | 1.648 | CP09A1KB153M | 1.592 | CP09A1KB153K | 1.744 |
| | 400 | .375 x 1 ¹ / ₁₆ | CP09A1EE153M | 1.584 | CP09A1EE153K | 1.736 | CP09A1KE153M | 1.800 | CP09A1KE153K | 1.972 |
| | 600 | .463 x 1 ¹ / ₁₆ | CP09A1EF153M | 1.632 | CP09A1EF153K | 1.788 | CP09A1KF153M | 1.848 | CP09A1KF153K | 2.024 |
| .022 | 200 | .375 x 1 ¹ / ₁₆ | CP09A1EC223M | 1.524 | CP09A1EC223K | 1.670 | CP09A1KC223M | 1.760 | CP09A1KC223K | 1.928 |
| | 600 | .463 x 1 ¹ / ₁₆ | CP09A1EF223M | 1.632 | CP09A1EF223K | 1.788 | CP09A1KF223M | 1.868 | CP09A1KF223K | 2.046 |
| .033 | 200 | .375 x 1 ¹ / ₁₆ | CP09A1EC333M | 1.544 | CP09A1EC333K | 1.692 | CP09A1KC333M | 1.760 | CP09A1KC333K | 1.928 |
| | 400 | .463 x 1 ¹ / ₁₆ | CP09A1EE333M | 1.584 | CP09A1EE333K | 1.744 | CP09A1KE333M | 1.848 | CP09A1KE333K | 2.024 |
| | 600 | .463 x 1 ¹ / ₁₆ | CP09A1EF333M | 1.672 | CP09A1EF333K | 1.832 | CP09A1KF333M | 1.868 | CP09A1KF333K | 2.046 |
| .047 | 100 | .375 x 1 ¹ / ₁₆ | CP09A1EB473M | 1.584 | CP09A1EB473K | 1.758 | CP09A1KB473M | 1.720 | CP09A1KB473K | 1.884 |
| | 200 | .463 x 1 ¹ / ₁₆ | CP09A1EC473M | 1.632 | CP09A1EC473K | 1.788 | CP09A1KC473M | 1.808 | CP09A1KC473K | 1.980 |
| | 400 | .463 x 1 ¹ / ₁₆ | CP09A1EE473M | 1.672 | CP09A1EE473K | 1.832 | CP09A1KE473M | 1.888 | CP09A1KE473K | 2.068 |
| | 600 | .463 x 1 ¹ / ₁₆ | CP09A1EF473M | 1.752 | CP09A1EF473K | 1.920 | CP09A1KF473M | 1.928 | CP09A1KF473K | 2.112 |
| .068 | 200 | .463 x 1 ¹ / ₁₆ | CP09A1EC683M | 1.632 | CP09A1EC683K | 1.788 | CP09A1KC683M | 1.808 | CP09A1KC683K | 1.980 |
| | 400 | .463 x 1 ¹ / ₁₆ | CP09A1EE683M | 1.732 | CP09A1EE683K | 1.898 | CP09A1KE683M | 1.880 | CP09A1KE683K | 2.068 |
| | 600 | .625 x 1 ¹ / ₁₆ | CP09A1EF683M | 1.856 | CP09A1EF683K | 2.032 | CP09A1KF683M | 2.088 | CP09A1KF683K | 2.284 |
| .1 | 100 | .463 x 1 ¹ / ₁₆ | CP09A1EB104M | 1.672 | CP09A1EB104K | 1.832 | CP09A1KB104M | 1.768 | CP09A1KB104K | 1.936 |
| | 200 | .463 x 1 ¹ / ₁₆ | CP09A1EC104M | 1.676 | CP09A1EC104K | 1.836 | CP09A1KC104M | 1.828 | CP09A1KC104K | 2.002 |
| | 400 | .625 x 1 ¹ / ₁₆ | CP09A1EE104M | 1.816 | CP09A1EE104K | 1.988 | CP09A1KE104M | 2.048 | CP09A1KE104K | 2.240 |
| | 600 | .625 x 1 ¹ / ₁₆ | CP09A1EF104M | 1.936 | CP09A1EF104K | 2.120 | CP09A1KF104M | 2.128 | CP09A1KF104K | 2.328 |
| .15 | 100 | .463 x 1 ¹ / ₁₆ | CP09A1EB154M | 1.712 | CP09A1EB154K | 1.876 | CP09A1KB154M | 1.768 | CP09A1KB154K | 1.936 |
| | 200 | .463 x 1 ¹ / ₁₆ | CP09A1EC154M | 1.772 | CP09A1EC154K | 1.942 | CP09A1KC154M | 1.888 | CP09A1KC154K | 2.068 |
| | 400 | .625 x 1 ¹ / ₁₆ | CP09A1EE154M | 1.996 | CP09A1EE154K | 2.186 | CP09A1KE154M | 2.128 | CP09A1KE154K | 2.328 |
| | 600 | .625 x 1 ¹ / ₁₆ | CP09A1EF154M | 2.056 | CP09A1EF154K | 2.472 | CP09A1KF154M | 2.248 | CP09A1KF154K | 2.460 |
| .22 | 100 | .463 x 1 ¹ / ₁₆ | CP09A1EB224M | 1.712 | CP09A1EB224K | 1.876 | CP09A1KB224M | 1.888 | CP09A1KB224K | 2.068 |
| | 200 | .625 x 1 ¹ / ₁₆ | CP09A1EC224M | 1.936 | CP09A1EC224K | 2.120 | CP09A1KC224M | 2.048 | CP09A1KC224K | 2.240 |
| | 400 | .625 x 1 ¹ / ₁₆ | CP09A1EE224M | 2.136 | CP09A1EE224K | 2.340 | CP09A1KE224M | 2.252 | CP09A1KE224K | 2.460 |
| | 600 | .733 x 1 ¹ / ₁₆ | CP09A1EF224M | 2.300 | CP09A1EF224K | 2.516 | CP09A1KF224M | 2.680 | CP09A1KF224K | 2.800 |
| .33 | 100 | .625 x 1 ¹ / ₁₆ | CP09A1EB334M | 1.976 | CP09A1EB334K | 2.164 | CP09A1KB334M | 2.128 | CP09A1KB334K | 2.328 |
| | 200 | .625 x 1 ¹ / ₁₆ | CP09A1EC334M | 2.096 | CP09A1EC334K | 2.296 | CP09A1KC334M | 2.168 | CP09A1KC334K | 2.372 |
| | 400 | .733 x 1 ¹ / ₁₆ | CP09A1EE334M | 2.260 | CP09A1EE334K | 2.472 | CP09A1KE334M | 2.480 | CP09A1KE334K | 2.712 |
| | 600 | .813 x 2 ¹ / ₁₆ | CP09A1EF334M | 2.800 | CP09A1EF334K | 3.000 | CP09A1KF334M | 2.900 | CP09A1KF334K | 3.168 |
| .47 | 100 | .625 x 1 ¹ / ₁₆ | CP09A1EB474M | 2.096 | CP09A1EB474K | 2.296 | CP09A1KB474M | 2.208 | CP09A1KB474K | 2.416 |
| | 200 | .625 x 1 ¹ / ₁₆ | CP09A1EC474M | 2.136 | CP09A1EC474K | 2.340 | CP09A1KC474M | 2.248 | CP09A1KC474K | 2.460 |
| | 400 | .813 x 2 ¹ / ₁₆ | CP09A1EE474M | 2.800 | CP09A1EE474K | 3.064 | CP09A1KE474M | 2.900 | CP09A1KE474K | 3.168 |
| | 600 | .813 x 2 ¹ / ₁₆ | CP09A1EF474M | 2.920 | CP09A1EF474K | 3.196 | CP09A1KF474M | 3.029 | CP09A1KF474K | 2.860 |
| .68 | 100 | .625 x 1 ¹ / ₁₆ | CP09A1EB684M | 2.216 | CP09A1EB684K | 2.428 | CP09A1KB684M | 2.368 | CP09A1KB684K | 2.592 |
| | 200 | .733 x 1 ¹ / ₁₆ | CP09A1EC684M | 2.500 | CP09A1EC684K | 2.736 | CP09A1KC684M | 2.560 | CP09A1KC684K | 2.800 |
| 1.0 | 100 | .733 x 1 ¹ / ₁₆ | CP09A1EB105M | 2.460 | CP09A1EB105K | 2.692 | CP09A1KB105M | 2.560 | CP09A1KB105K | 2.800 |
| | 200 | .813 x 2 ¹ / ₁₆ | CP09A1EC105M | 2.840 | CP09A1EC105K | 3.108 | CP09A1KC105M | 2.920 | CP09A1KC105K | 3.160 |

SPRAGUE CAPACITORS

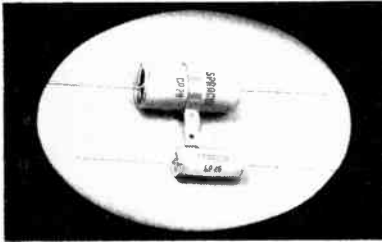
TYPE CP09 CAPACITORS TO MIL-C-25C

(±10% CAPACITANCE TOLERANCE, CHARACTERISTIC K)

| μF | WVDC | D. x L. | Cat. No. | Net (1-9) | μF | WVDC | D. x L. | Cat. No. | Net (1-9) |
|-------|------|---------------------------------------|---------------|-----------|------|------|---------------------------------------|---------------|-----------|
| .001 | 600 | .298 x 1 ³ / ₁₆ | CP09A1KF102K3 | \$1.830 | | 200 | .375 x 1 ³ / ₁₆ | CP09A1KC273K3 | \$1.928 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG102K3 | 2.112 | | 400 | .463 x 1 ³ / ₁₆ | CP09A1KE273K3 | 2.024 |
| .0012 | 600 | .298 x 1 ³ / ₁₆ | CP09A1KF122K3 | 1.830 | .027 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF273K3 | 2.046 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG122K3 | 2.112 | | 1000 | .625 x 1 ³ / ₁₆ | CP09A1KG273K3 | 2.350 |
| .0015 | 600 | .298 x 1 ³ / ₁₆ | CP09A1KF152K3 | 1.830 | .033 | 200 | .375 x 1 ³ / ₁₆ | CP09A1KC333K3 | 1.928 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG152K3 | 2.112 | | 400 | .463 x 1 ³ / ₁₆ | CP09A1KE333K3 | 2.024 |
| .0018 | 600 | .298 x 1 ³ / ₁₆ | CP09A1KF182K3 | 1.830 | .039 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF333K3 | 2.046 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG182K3 | 2.112 | | 1000 | .625 x 1 ³ / ₁₆ | CP09A1KG333K3 | 2.350 |
| .0022 | 600 | .298 x 1 ³ / ₁₆ | CP09A1KF222K3 | 1.830 | .039 | 100 | .375 x 1 ³ / ₁₆ | CP09A1K8393K3 | 1.884 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG222K3 | 2.112 | | 200 | .463 x 1 ³ / ₁₆ | CP09A1KC393K3 | 1.980 |
| .0027 | 400 | .298 x 1 ³ / ₁₆ | CP09A1KE272K3 | 1.832 | .047 | 400 | .463 x 1 ³ / ₁₆ | CP09A1KE393K3 | 2.068 |
| | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF272K3 | 1.884 | | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF393K3 | 2.112 |
| .0033 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KG272K3 | 2.112 | .047 | 1000 | .625 x 1 ³ / ₁₆ | CP09A1KG393K3 | 2.416 |
| | 400 | .298 x 1 ³ / ₁₆ | CP09A1KE332K3 | 1.832 | | 100 | .375 x 1 ³ / ₁₆ | CP09A1K8473K3 | 1.884 |
| .0033 | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF332K3 | 1.884 | .056 | 200 | .463 x 1 ³ / ₁₆ | CP09A1KC563K3 | 1.980 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG332K3 | 2.112 | | 400 | .463 x 1 ³ / ₁₆ | CP09A1KE563K3 | 2.068 |
| .0039 | 200 | .298 x 1 ³ / ₁₆ | CP09A1KC392K3 | 1.766 | .056 | 600 | .625 x 1 ³ / ₁₆ | CP09A1KF563K3 | 2.284 |
| | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF392K3 | 1.950 | | 1000 | .625 x 1 ¹ / ₁₆ | CP09A1KG563K3 | 2.548 |
| .0039 | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG392K3 | 2.222 | .068 | 200 | .463 x 1 ³ / ₁₆ | CP09A1KC683K3 | 1.980 |
| | 200 | .298 x 1 ³ / ₁₆ | CP09A1KC472K3 | 1.766 | | 400 | .463 x 1 ³ / ₁₆ | CP09A1KE683K3 | 2.068 |
| .0047 | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF472K3 | 1.950 | .068 | 600 | .625 x 1 ³ / ₁₆ | CP09A1KF683K3 | 2.284 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG472K3 | 2.222 | | 1000 | .625 x 1 ¹ / ₁₆ | CP09A1KG683K3 | 2.548 |
| .0056 | 200 | .298 x 1 ³ / ₁₆ | CP09A1KC562K3 | 1.788 | .082 | 100 | .463 x 1 ³ / ₁₆ | CP09A1K8823K3 | 1.936 |
| | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF562K3 | 1.972 | | 200 | .463 x 1 ³ / ₁₆ | CP09A1KC823K3 | 2.002 |
| .0056 | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG562K3 | 2.244 | .082 | 400 | .625 x 1 ³ / ₁₆ | CP09A1KE823K3 | 2.240 |
| | 200 | .298 x 1 ³ / ₁₆ | CP09A1KC682K3 | 1.788 | | 600 | .625 x 1 ³ / ₁₆ | CP09A1KF823K3 | 2.328 |
| .0068 | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF682K3 | 1.972 | .082 | 1000 | .733 x 1 ¹ / ₁₆ | CP09A1KG823K3 | 2.580 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG682K3 | 2.244 | | 100 | .463 x 1 ³ / ₁₆ | CP09A1K8104K3 | 1.936 |
| .0082 | 100 | .298 x 1 ³ / ₁₆ | CP09A1K8822K3 | 1.744 | .1 | 200 | .463 x 1 ³ / ₁₆ | CP09A1KC104K3 | 2.002 |
| | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF822K3 | 1.994 | | 400 | .625 x 1 ³ / ₁₆ | CP09A1KE104K3 | 2.240 |
| .0082 | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG822K3 | 2.266 | .1 | 600 | .625 x 1 ³ / ₁₆ | CP09A1KF104K3 | 2.328 |
| | 100 | .298 x 1 ³ / ₁₆ | CP09A1K8103K3 | 1.744 | | 1000 | .733 x 1 ¹ / ₁₆ | CP09A1KG104K3 | 2.580 |
| .01 | 600 | .375 x 1 ³ / ₁₆ | CP09A1KF103K3 | 1.994 | .12 | 100 | .463 x 1 ³ / ₁₆ | CP09A1K8124K3 | 1.936 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG103K3 | 2.266 | | 200 | .463 x 1 ³ / ₁₆ | CP09A1KC124K3 | 2.068 |
| .012 | 100 | .298 x 1 ³ / ₁₆ | CP09A1K8123K3 | 1.744 | .12 | 400 | .625 x 1 ³ / ₁₆ | CP09A1KE124K3 | 2.328 |
| | 400 | .375 x 1 ³ / ₁₆ | CP09A1KE123K3 | 1.972 | | 600 | .625 x 1 ¹ / ₁₆ | CP09A1KF124K3 | 2.460 |
| .012 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF123K3 | 2.024 | .12 | 1000 | .733 x 1 ¹ / ₁₆ | CP09A1KG124K3 | 2.876 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG123K3 | 2.288 | | 100 | .463 x 1 ³ / ₁₆ | CP09A1K8154K3 | 1.936 |
| .015 | 100 | .298 x 1 ³ / ₁₆ | CP09A1K8153K3 | 1.744 | .15 | 200 | .463 x 1 ³ / ₁₆ | CP09A1KC154K3 | 2.068 |
| | 400 | .375 x 1 ³ / ₁₆ | CP09A1KE153K3 | 1.972 | | 400 | .625 x 1 ³ / ₁₆ | CP09A1KE154K3 | 2.328 |
| .015 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF153K3 | 2.024 | .15 | 600 | .625 x 1 ¹ / ₁₆ | CP09A1KF154K3 | 2.460 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG153K3 | 2.288 | | 1000 | .733 x 1 ¹ / ₁₆ | CP09A1KG154K3 | 2.876 |
| .018 | 200 | .375 x 1 ³ / ₁₆ | CP09A1KC183K3 | 1.928 | .18 | 100 | .463 x 1 ³ / ₁₆ | CP09A1K8184K3 | 2.068 |
| | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF183K3 | 2.046 | | 200 | .625 x 1 ³ / ₁₆ | CP09A1KC184K3 | 2.240 |
| .018 | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG183K3 | 2.310 | .18 | 400 | .625 x 1 ¹ / ₁₆ | CP09A1KE184K3 | 2.460 |
| | 200 | .375 x 1 ³ / ₁₆ | CP09A1KC223K3 | 1.928 | | 600 | .733 x 1 ¹ / ₁₆ | CP09A1KF184K3 | 2.800 |
| .022 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF223K3 | 2.046 | .22 | 1000 | .813 x 2 ³ / ₁₆ | CP09A1KG184K3 | 3.124 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG223K3 | 2.310 | | 100 | .463 x 1 ³ / ₁₆ | CP09A1K8224K3 | 2.068 |
| .022 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF224K3 | 2.046 | .22 | 200 | .625 x 1 ³ / ₁₆ | CP09A1KC224K3 | 2.240 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG224K3 | 2.310 | | 400 | .625 x 1 ¹ / ₁₆ | CP09A1KE224K3 | 2.460 |
| .022 | 600 | .463 x 1 ³ / ₁₆ | CP09A1KF224K3 | 2.046 | .22 | 600 | .733 x 1 ¹ / ₁₆ | CP09A1KF224K3 | 2.800 |
| | 1000 | .463 x 1 ³ / ₁₆ | CP09A1KG224K3 | 2.310 | | 1000 | .813 x 2 ³ / ₁₆ | CP09A1KG224K3 | 3.124 |

SPRAGUE CAPACITORS

MIL-C-25A CAPACITORS — TYPES CP26 and CP28



- Impregnated with specially processed mineral oil to exceed performance requirements of Specification MIL-C-25A
- Type CP26 has outer insulating sleeve Type CP28 has insulating sleeve plus metal strap for radial mounting.
- Hermetically sealed for protection against leakage and contamination

- Meet temperature characteristic E (-55°C to $+85^{\circ}\text{C}$ operation)
- Capacitor sections are insulated from metal cases
- For prices on quantities from 25 to 499 pieces, see your Sprague Industrial Distributor

NOTE: Capacitors listed below have a capacitance tolerance of $\pm 10\%$. For $\pm 20\%$ units, change last letter in catalog number from K to M and subtract \$.025 from unit net price.

| TYPE CP26 (without Mounting Bracket) | | | | | TYPE CP28 (Radial Mounting Bracket) | | | | |
|--------------------------------------|-------|---------------------------------------|--------------|-----------------|-------------------------------------|-------|---------------------------------------|--------------|-----------------|
| μF | Volts | Diam. x Length | Cat. No. | Net Each (1-24) | μF | Volts | Diam. x Length | Cat. No. | Net Each (1-24) |
| .006 | 600 | $\frac{1}{2} \times 1\frac{3}{16}$ | CP26A1EF602K | \$.906 | .1 | 600 | $1\frac{1}{16} \times 2\frac{1}{16}$ | CP28A1EF104K | \$1.109 |
| .01 | 600 | $\frac{1}{2} \times 1\frac{3}{16}$ | CP26A1EF103K | .906 | .25 | 600 | $1\frac{1}{16} \times 2\frac{3}{16}$ | CP28A1EF254K | 1.498 |
| .02 | 600 | $\frac{1}{2} \times 1\frac{13}{16}$ | CP26A1EF203K | .919 | .5 | 600 | $1\frac{1}{16} \times 2\frac{13}{16}$ | CP28A1EF504K | 1.851 |
| .05 | 600 | $1\frac{1}{16} \times 1\frac{11}{16}$ | CP26A1EF503K | .998 | | | | | |
| .5 | 200 | $1\frac{1}{16} \times 2\frac{3}{16}$ | CP26A1EC504K | 1.797 | | | | | |

MIL-C-25A CAPACITORS — TYPES CP40 and CP41

- Designed and manufactured for service life and performance characteristics exceeding MIL requirements
- Type CP40 has screw and nut connection on positive terminal, can is negative Type CP41 has two solder-lug terminals, with capacitor section insulated from metal case

- Impregnated with specially processed mineral oil for characteristic E operation — Will withstand wide temperature variations (-55°C to $+85^{\circ}\text{C}$)
- Hermetically sealed in metal cases, with threaded screw necks for mounting purposes
- For prices on quantities from 10 to 99 pieces, see your Sprague Industrial Distributor.



NOTE: Capacitors listed below have a capacitance tolerance of $\pm 10\%$. For $\pm 20\%$ units, change last letter in catalog number from K to M.

| TYPE CP40 (One Terminal) | | | | | TYPE CP41 (Two Terminals) | | | | |
|--------------------------|-------|------------------------------------|--------------|----------------|---------------------------|-------|------------------------------------|--------------|----------------|
| μF | Volts | Diam. x Length | Cat. No. | Net Each (1-9) | μF | Volts | Diam. x Length | Cat. No. | Net Each (1-9) |
| 2.0 | 600 | $1\frac{1}{2} \times 3\frac{3}{8}$ | CP40C2EF205K | \$4.619 | 2.0 | 600 | $1\frac{1}{2} \times 3\frac{3}{8}$ | CP41B1EF204K | \$4.789 |
| 4.0 | 600 | $1\frac{1}{2} \times 5\frac{1}{4}$ | CP40C2EF405K | 5.554 | 4.0 | 600 | $1\frac{1}{2} \times 5\frac{1}{4}$ | CP41B1EF405K | 5.724 |



MIL-C-25A CAPACITORS—TYPE CP53

- Impregnated with specially processed mineral oil to exceed performance requirements of MIL-C-25A
- Hermetically sealed, with silicone rubber compression terminals
- Rated for -55°C to $+85^{\circ}\text{C}$ operation

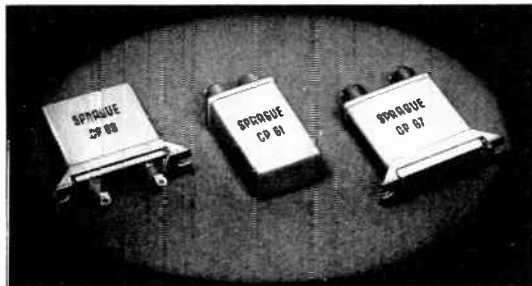
- Drawn metal cases have mounting flanges as integral part of containers
- Single and dual capacitance units have insulated sections — triple capacitance units have grounded cases
- For prices on quantities from 10 to 499 pieces, see your Sprague Industrial Distributor.

NOTE: Capacitors listed below have capacitance tolerances of $+20\%$, -10% (V) or $\pm 10\%$ (K). For $\pm 20\%$ units, change last letter in catalog number from K to M or V to M.

| μF | Volts | L. x W. x H. | Cat. No. | Net Each (1-9) | μF | Volts | L. x W. x H. | Cat. No. | Net Each (1-9) |
|---------------------------|-------|--|--------------|----------------|---------------------------|-------|--|--------------|----------------|
| Single Capacitance | | | | | Dual Capacitance | | | | |
| .05 | 600 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B1EF503K | \$1.792 | .05 + .05 | 600 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B4EF503V | \$2.476 |
| .05 | 1000 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B1EG503K | 1.840 | .05 + .05 | 1000 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B4EG503V | 2.526 |
| .1 | 600 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B1EF104K | 1.849 | .1 + .1 | 600 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B4EF104V | 2.507 |
| .1 | 1000 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B1EG104K | 1.956 | .1 + .1 | 1000 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B4EG104V | 2.529 |
| .25 | 600 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B1EF254K | 1.912 | .25 + .25 | 600 | $1\frac{13}{16} \times 1 \times 1$ | CP53B4EF254V | 2.589 |
| .25 | 1000 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B1EG254K | 2.022 | .25 + .25 | 1000 | $2 \times 1\frac{3}{4} \times \frac{7}{8}$ | CP53B4EG254V | 2.832 |
| .5 | 400 | $1\frac{13}{16} \times 1 \times \frac{7}{8}$ | CP53B1EE504K | 2.019 | .5 + .5 | 600 | $2 \times 1\frac{3}{4} \times 1$ | CP53B4EF504V | 2.945 |
| .5 | 600 | $1\frac{13}{16} \times 1 \times 1$ | CP53B1EF504K | 2.066 | .5 + .5 | 1000 | $2 \times 2 \times 1\frac{1}{8}$ | CP53B4EG504V | 3.711 |
| .5 | 1000 | $2 \times 1\frac{3}{4} \times \frac{7}{8}$ | CP53B1EG504K | 2.161 | 1.0 + 1.0 | 600 | $2 \times 2 \times 1\frac{1}{8}$ | CP53B4EF105V | 3.487 |
| 1.0 | 600 | $2 \times 1\frac{3}{4} \times 1$ | CP53B1EF105K | 2.410 | Triple Capacitance | | | | |
| 1.0 | 1000 | $2 \times 2 \times 1\frac{1}{8}$ | CP53B1EG105K | 2.901 | .05 + .05 + .05 | 600 | $1\frac{13}{16} \times 1 \times \frac{3}{4}$ | CP53B5EF503V | 2.819 |
| 2.0 | 100 | $2 \times 1\frac{3}{4} \times \frac{7}{8}$ | CP53B1EB205K | 2.639 | .1 + .1 + .1 | 600 | $1\frac{13}{16} \times 1 \times \frac{7}{8}$ | CP53B5EF104V | 2.876 |
| 2.0 | 200 | $2 \times 2 \times 1$ | CP53B1EC205K | 2.895 | .5 + .5 + .5 | 600 | $2 \times 2 \times 1\frac{1}{8}$ | CP53B5EF504V | 3.881 |
| 2.0 | 600 | $2 \times 2 \times 1\frac{1}{8}$ | CP53B1EF205K | 3.216 | | | | | |
| 4.0 | 100 | $2 \times 2 \times 1\frac{1}{8}$ | CP53B1EB405K | 3.267 | | | | | |

SPRAGUE CAPACITORS

TYPE CP61, CP67, CP69, CP91 CAPACITORS to MIL-C-25A



- Mineral Oil Impregnated for Minimum Capacitance Change with Temperature
- Hermetically Sealed in Drawn Metal Cases
- Have Silicone Rubber Compression Terminals for Positive Prevention Against Entrance of Moisture or Leakage of Impregnant
- Designed and Manufactured for Service Life Beyond Specification Requirements
- Units Listed are Most Popular Ratings. Complete Military Line Available from Sprague
- CP61 and CP91 require separate mounting brackets.
- CP67 and CP69 have integral channel brackets
- For prices on quantities from 10 to 499 pieces, see your Sprague Industrial Distributor

NOTE: These units have capacitance tolerances of $\pm 10\%$ (K) or $\pm 20, -10\%$ (V). For $\pm 20\%$ units, change the last letter in the catalog number from K to M or V to M.

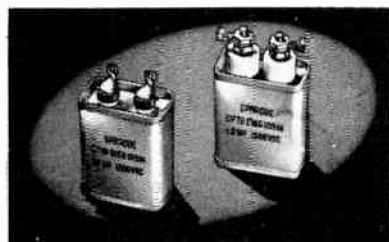
| μF | WVDC | CAT. NO. | SIZE | NET EA. (1-9) | Mounting Brackets* CAT. NO. |
|------------------|------|--------------|--|---------------|-----------------------------|
| TYPE CP61 | | | | | |
| .05 | 600 | CP6101EF03K | $1\frac{1}{4} \times 1\frac{1}{4} \times 1\frac{1}{4}$ | \$1.752 | CP06-FA1 |
| .1 | 600 | CP61B1EF104K | $1\frac{1}{4} \times 1\frac{1}{4} \times 1\frac{3}{8}$ | 1.869 | CP06-FA2 |
| .25 | 600 | CP61B1EF254K | $1\frac{1}{4} \times 1\frac{1}{4} \times 1\frac{3}{8}$ | 1.920 | CP06-FA3 |
| .5 | 600 | CP61B1EF504K | $1\frac{1}{4} \times 1\frac{1}{4} \times 2$ | 1.998 | CP06-FA4 |
| 1.0 | 600 | CP61B1EF105K | $1\frac{1}{4} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 2.235 | CP06-FA5 |
| .1 + .1 | 600 | CP61B6EF104K | $1\frac{1}{4} \times 1\frac{1}{4} \times 1\frac{3}{8}$ | 2.439 | CP06-FA3 |
| .25 + .25 | 600 | CP61B6EF254V | $1\frac{1}{4} \times 1\frac{1}{4} \times 2$ | 2.580 | CP06-FA4 |
| .5 + .5 | 600 | CP61B6EF504V | $1\frac{1}{4} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 2.733 | CP06-FA6 |

| μF | WVDC | CAT. NO. | SIZE | NET EA. (1-9) | Mounting Brackets* CAT. NO. |
|------------------|------|--------------|---|---------------------|-----------------------------|
| TYPE CP91 | | | | | |
| .05 | 600 | CP91B1EF503K | $1\frac{1}{4} \times \frac{3}{8} \times 1\frac{1}{4}$ | Prices upon request | CP091-FB1 |
| .1 | 600 | CP91B1EF104K | $1\frac{1}{4} \times \frac{3}{8} \times 1\frac{3}{8}$ | | CP091-FB2 |
| .25 | 600 | CP91B1EF254K | $1\frac{1}{4} \times \frac{3}{8} \times 1\frac{3}{8}$ | | CP091-FB3 |
| .5 | 600 | CP91B1EF504K | $1\frac{1}{4} \times \frac{3}{8} \times 2$ | | CP091-FB4 |
| 1.0 | 600 | CP91B1EF105K | $1\frac{1}{4} \times \frac{3}{8} \times 2\frac{1}{4}$ | | CP091-FB6 |
| .1 + .1 | 600 | CP91B6EF104V | $1\frac{1}{4} \times \frac{3}{8} \times 1\frac{3}{8}$ | | CP091-FB3 |
| .25 + .25 | 600 | CP91B6EF254V | $1\frac{1}{4} \times \frac{3}{8} \times 2$ | | CP091-FB4 |
| .5 + .5 | 600 | CP91B6EF504V | $1\frac{1}{4} \times \frac{3}{8} \times 2\frac{1}{4}$ | | CP091-FB6 |

| μF | WVDC | CAT. NO. | SIZE | NET EA. (1-9) | Mounting Brackets* CAT. NO. |
|---|------|--------------|--|---------------|-----------------------------|
| TYPE CP67 Terminals opposite channel bracket | | | | | |
| .1 | 600 | CP67B1EF104K | $1\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{1}{4}$ | 2.235 | Integral Channel Brackets |
| .25 | 600 | CP67B1EF254K | $1\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ | 2.298 | |
| .5 | 600 | CP67B1EF504K | $1\frac{3}{4} \times 4\frac{1}{4} \times 2$ | 2.400 | |
| 1.0 | 600 | CP67B1EF105K | $1\frac{3}{4} \times 4\frac{1}{4} \times 2\frac{1}{4}$ | 2.631 | |

| μF | WVDC | CAT. NO. | SIZE | NET EA. (1-9) | Mounting Brackets* CAT. NO. |
|---|------|--------------|--|---------------|-----------------------------|
| TYPE CP69 Terminals on same end as channel bracket | | | | | |
| .05 | 600 | CP69B1EF503K | $1\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{1}{4}$ | 2.133 | Integral Channel Brackets |
| .1 | 600 | CP69B1EF104K | $1\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{1}{4}$ | 2.235 | |
| .25 | 600 | CP69B1EF254K | $1\frac{3}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ | 2.298 | |
| .5 | 600 | CP69B1EF504K | $1\frac{3}{4} \times 4\frac{1}{4} \times 2$ | 2.400 | |
| 1.0 | 600 | CP69B1EF105K | $1\frac{3}{4} \times 4\frac{1}{4} \times 2\frac{1}{4}$ | 2.631 | |

*Footed Brackets are listed; for spade type change F in Catalog No. to S



TYPE CP70 CAPACITORS to MIL-C-25A

- Ruggedly Constructed for Exacting Heavy-Duty Applications
- Long Life and Reliable Service under High Ambient Temperatures
- Terminals have Ceramic Pillar Insulators (E) or Rubber Compression Seals (B)
- Impregnated with a Specially Processed Mineral Oil to Withstand Severe Operating Conditions
- Char. F Units Recommended Primarily for Ground Equipment Where no Low Temperatures are Encountered
- For Prices on Quantities From 10 to 99 Pieces, See Your Sprague Industrial Distributor.

NOTE: These units have a capacitance tolerance of $\pm 10\%$. For $\pm 20\%$ tolerance, change the last letter in the catalog number from K to M.

| μF | WVDC | Char. E (E Term.) | | | Net Ea. (1-9) | Char. F (B Term.) | | | Net Ea. (1-9) | Char. E (B Term.) | | | Net Ea. (1-9) |
|---------|------|-------------------|--|----------|---------------|--|-----------|--------------|--|-------------------|--|----------|---------------|
| | | Cat. No. | W x T x H | | | Cat. No. | W x T x H | | | Cat. No. | W x T x H | | |
| .1 | 1600 | CP70E1EG104K | $1\frac{1}{2} \times 1\frac{1}{4} \times 1\frac{3}{8}$ | \$ 2.705 | | | | | | | | | |
| .1 | 2F00 | CP70E1EJ104K | $2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 4.129 | | | | | | | | | |
| .25 | 1F00 | CP70E1EG254K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 3.058 | | | | | | | | | |
| .25 | 2F00 | CP70E1EJ254K | $2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 4.470 | | | | | | | | | |
| .5 | 700 | CP70E1EF504K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 2.919 | | | | | | | | | |
| .5 | 1F00 | CP70E1EG504K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 3.245 | | | | | | CP70B1EG504K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | \$ 3.108 | |
| .5 | 1F00 | CP70E1EH504K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 3.950 | | | | | | CP70B1EF105K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 3.058 | |
| .5 | 2F00 | CP70E1EJ504K | $2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 4.644 | | | | | | CP70B1EG105K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 3.676 | |
| .5 | 2F00 | CP70E1EK504K | $2\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{1}{8}$ | 6.987 | | | | | | | | | |
| 1.0 | 400 | CP70E1EF105K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 3.614 | | | | | | | | | |
| 1.0 | 1400 | CP70E1EG104K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 4.138 | | | | | | | | | |
| 1.0 | 1400 | CP70E1EH105K | $1\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 4.643 | | | | | | | | | |
| 1.0 | 2J00 | CP70E1EJ105K | $2\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 5.670 | | | | | | | | | |
| 1.0 | 2500 | CP70E1EK105K | $3\frac{1}{4} \times 1\frac{1}{4} \times 3\frac{1}{8}$ | 7.970 | | | | | | | | | |
| 2.0 | 600 | CP70E1EF205K | $1\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{1}{4}$ | 4.288 | CP70B1FF205K | $1\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{3}{8}$ | \$ 3.770 | CP70B1EF205K | $1\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{1}{4}$ | 3.963 | | | |
| 2.0 | 1000 | CP70E1EG205K | $1\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 5.405 | CP70B1FG205K | $1\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 4.502 | CP70B1EG205K | $1\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 4.726 | | | |
| 2.0 | 1500 | CP70E1EH205K | $2\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 6.535 | | | | CP70B1EH205K | $2\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 5.509 | | | |
| 2.0 | 2000 | CP70E1EJ205K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 6.707 | | | | | | | | | |
| 2.0 | 2500 | CP70E1EK205K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 12.884 | | | | | | | | | |
| 4.0 | 500 | CP70E1EF405K | $2\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 5.675 | CP70B1FF405K | $2\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{1}{2}$ | 5.258 | CP70B1EF405K | $2\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 5.522 | | | |
| 4.0 | 1000 | CP70E1EG405K | $3\frac{1}{4} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 6.844 | CP70B1FG405K | $2\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 6.225 | CP70B1EG405K | $3\frac{1}{4} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 6.383 | | | |
| 4.0 | 1500 | CP70E1EH405K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{1}{4}$ | 8.770 | | | | CP70B1EH405K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{1}{4}$ | 8.202 | | | |
| 4.0 | 2000 | CP70E1EJ405K | $3\frac{1}{4} \times 2\frac{1}{4} \times 5\frac{1}{8}$ | 9.451 | | | | | | | | | |
| 4.0 | 2500 | CP70E1EK405K | $4\frac{1}{8} \times 3\frac{3}{4} \times 4\frac{3}{8}$ | 17.957 | | | | | | | | | |
| 6.0 | 500 | CP70E1EF605K | $3\frac{1}{4} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 6.865 | CP70B1FF605K | $2\frac{1}{2} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 6.231 | CP70B1EF605K | $3\frac{1}{4} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 6.546 | | | |
| 6.0 | 1000 | CP70E1EG605K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4$ | 8.461 | CP70B1FG605K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 7.747 | CP70B1EG605K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4$ | 8.130 | | | |
| 6.0 | 1500 | CP70E1EH605K | $3\frac{1}{4} \times 2\frac{1}{4} \times 4\frac{3}{4}$ | 10.661 | | | | CP70B1EH605K | $3\frac{1}{4} \times 2\frac{1}{4} \times 4\frac{3}{4}$ | 10.529 | | | |
| 6.0 | 2000 | CP70E1EJ605K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{1}{4}$ | 8.424 | CP70B1FF805K | $3\frac{1}{4} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 7.751 | CP70B1EF805K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{1}{4}$ | 8.139 | | | |
| 8.0 | 1000 | CP70E1EH805K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 9.055 | CP70B1FG805K | $3\frac{1}{4} \times 1\frac{1}{4} \times 3\frac{3}{8}$ | 9.156 | CP70B1EG805K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 8.930 | | | |
| 8.0 | 1500 | CP70E1EK805K | $3\frac{1}{4} \times 2\frac{1}{4} \times 4\frac{3}{4}$ | 13.066 | | | | CP70B1EH805K | $3\frac{1}{4} \times 2\frac{1}{4} \times 5\frac{1}{4}$ | 12.936 | | | |
| 10.0 | 600 | CP70E1EF106K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4$ | 9.108 | CP70B1FF106K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 8.367 | CP70B1EF106K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4$ | 8.781 | | | |
| 10.0 | 1000 | CP70E1EG106K | $3\frac{1}{4} \times 2\frac{1}{4} \times 4\frac{3}{4}$ | 10.989 | CP70B1FG106K | $3\frac{1}{4} \times 1\frac{1}{4} \times 4\frac{3}{4}$ | 10.078 | CP70B1EG106K | $3\frac{1}{4} \times 2\frac{1}{4} \times 4\frac{3}{4}$ | 10.821 | | | |
| 10.0 | 1500 | CP70E1EH106K | $3\frac{1}{4} \times 3\frac{1}{4} \times 5\frac{1}{2}$ | 15.639 | | | | CP70B1EH106K | $3\frac{1}{4} \times 3\frac{1}{4} \times 5\frac{1}{2}$ | 13.791 | | | |
| 12.0 | 1000 | CP70E1EG126K | $3\frac{1}{4} \times 2\frac{1}{4} \times 5\frac{1}{8}$ | 11.888 | | | | CP70B1EG126K | $3\frac{1}{4} \times 2\frac{1}{4} \times 5\frac{1}{8}$ | 11.750 | | | |
| 15.0 | 1000 | CP70E1EK156K | $3\frac{1}{4} \times 3\frac{1}{4} \times 4\frac{3}{4}$ | 13.149 | | | | | | | | | |

SPRAGUE CAPACITORS

118P DIFILM[®] METALLIZED CAPACITORS



- The Best of Their Type Possible to Produce at the Present State of the Art
- Rated for Operation at 125°C WITHOUT VOLTAGE DERATING
- Unique Dual Dielectric — a Combination of Metallized Paper and of Polyester Film, Impregnated With Special High-Temperature Mineral Wax
- Subjected to Stringent Quality Control During Manufacture
- Higher Insulation Resistance Than Any Other Metallized Paper Capacitors—at 125°C, Minimum Product of Insulation Resistance and Capacitance is 10 Megohm-microfarads for 200 V Units or 40 Megohm-microfarads for 400 and 600 V Units
- Capacitor Sections are Effectively of Non-inductive Construction, Resulting in Capacitors Unmatched in Performance Quality by any Other Metallized Capacitors
- Hermetically Sealed, with Glass-to-metal Solder-seal Terminals
- Have Unusual Self-healing Characteristics, in the Rare Event of Capacitor Dielectric Breakdown
- May be Used at Extremely Low Voltages Where Metallized Paper Construction has Previously Been Unsatisfactory
- For Complete Performance Characteristics, see Latest Issue of Engineering Bulletin 2211
- For Units With Outer Plastic Insulating Sleeves, Change Last Digit of Cat. No. From 2 to 4 and add \$.075 to Price.
- Capacitors Listed Below Are Ungrafted Case (Insulating Section) Units Without Outer Insulating Sleeves. For Information on Other Styles Consult Your Sprague Industrial Distributor
- For Prices on Quantities From 25 to 999 Pieces, see your Sprague Industrial Distributor.

| μF | D. x L. | ± 20% Tol. | | ± 10% Tol. | |
|-----------------|--------------|-------------|-----------------|-------------|-----------------|
| | | Cat. No. | Net Each (1-24) | Cat. No. | Net Each (1-24) |
| 200 WVDC | | | | | |
| .01 | .175 x 1/16 | 118P10302S2 | \$1.500 | 118P10392S2 | \$1.950 |
| .012 | .195 x 1/16 | | | 118P12392S2 | 1.950 |
| .015 | .195 x 1/16 | 118P15302S2 | 1.554 | 118P15392S2 | 1.950 |
| .018 | .235 x 1/16 | | | 118P18392S2 | 1.950 |
| .022 | .235 x 1/16 | 118P22302S2 | 1.500 | 118P22392S2 | 1.950 |
| .027 | .235 x 1/16 | | | 118P27392S2 | 1.950 |
| .033 | .235 x 1/16 | 118P33302S2 | 1.500 | 118P33392S2 | 1.950 |
| .039 | .312 x 1/16 | | | 118P39392S2 | 1.959 |
| .047 | .312 x 1/16 | 118P47302S2 | 1.518 | 118P47392S2 | 1.968 |
| .056 | .312 x 1/16 | | | 118P56392S2 | 1.980 |
| .068 | .312 x 1/16 | 118P68302S2 | 1.566 | 118P68392S2 | 2.016 |
| .082 | .312 x 1/16 | | | 118P82392S2 | 2.025 |
| .1 | .312 x 1/16 | 118P10402S2 | 1.584 | 118P10492S2 | 2.034 |
| .12 | .312 x 1/16 | | | 118P12492S2 | 2.040 |
| .15 | .312 x 1/16 | 118P15402S2 | 1.620 | 118P15492S2 | 2.070 |
| .18 | .400 x 1/16 | | | 118P18492S2 | 2.070 |
| .22 | .400 x 1/16 | 118P22402S2 | 1.620 | 118P22492S2 | 2.070 |
| .27 | .400 x 1/16 | | | 118P27492S2 | 2.145 |
| .33 | .400 x 1/16 | 118P33402S2 | 1.770 | 118P33492S2 | 2.220 |
| .39 | .500 x 1/16 | | | 118P39492S2 | 2.280 |
| .47 | .500 x 1/16 | 118P47402S2 | 1.875 | 118P47492S2 | 2.325 |
| .56 | .500 x 1/16 | | | 118P56492S2 | 2.370 |
| .68 | .500 x 1/16 | 118P68402S2 | 1.950 | 118P68492S2 | 2.400 |
| .82 | .562 x 1/16 | | | 118P82492S2 | 2.475 |
| 1.0 | .562 x 1/16 | 118P10502S2 | 2.100 | 118P10592S2 | 2.550 |
| 1.5 | .562 x 1/16 | 118P15502S2 | 3.165 | 118P15592S2 | 3.165 |
| 2.0 | .670 x 1/16 | 118P20502S2 | 3.840 | 118P20592S2 | 4.290 |
| 3.0 | .670 x 1/16 | 118P30502S2 | 4.050 | 118P30592S2 | 4.500 |
| 4.0 | .750 x 1/16 | 118P40502S2 | 4.350 | 118P40592S2 | 4.800 |
| 5.0 | 1.000 x 1/16 | 118P50502S2 | 4.800 | 118P50592S2 | 5.250 |
| 6.0 | 1.000 x 1/16 | 118P60502S2 | 5.550 | 118P60592S2 | 6.000 |
| 8.0 | 1.000 x 1/16 | 118P80502S2 | 5.700 | 118P80592S2 | 6.150 |
| 10.0 | 1.000 x 2/16 | 118P10602S2 | 6.120 | 118P10692S2 | 6.570 |
| 12.0 | 1.000 x 2/16 | 118P12602S2 | 6.960 | 118P12692S2 | 7.410 |

| μF | D. x L. | ± 20% Tol. | | ± 10% Tol. | |
|-----------------|--------------|-------------|-----------------|-------------|-----------------|
| | | Cat. No. | Net Each (1-24) | Cat. No. | Net Each (1-24) |
| 400 WVDC | | | | | |
| .01 | .312 x 1/16 | 118P10304S2 | \$1.518 | 118P10394S2 | \$1.968 |
| .015 | .312 x 1/16 | 118P15304S2 | 1.518 | 118P15394S2 | 1.968 |
| .022 | .312 x 1/16 | 118P22304S2 | 1.554 | 118P22394S2 | 2.004 |
| .033 | .312 x 1/16 | 118P33304S2 | 1.554 | 118P33394S2 | 2.004 |
| .047 | .400 x 1/16 | 118P47304S2 | 1.554 | 118P47394S2 | 2.004 |
| .068 | .400 x 1/16 | 118P68304S2 | 1.554 | 118P68394S2 | 2.100 |
| .1 | .500 x 1/16 | 118P10404S2 | 1.860 | 118P10494S2 | 2.310 |
| .15 | .500 x 1/16 | 118P15404S2 | 1.920 | 118P15494S2 | 2.370 |
| .22 | .562 x 1/16 | 118P22404S2 | 1.980 | 118P22494S2 | 2.430 |
| .33 | .562 x 1/16 | 118P33404S2 | 2.055 | 118P33494S2 | 2.505 |
| .47 | .670 x 1/16 | 118P47404S2 | 2.319 | 118P47494S2 | 2.799 |
| .68 | .670 x 1/16 | 118P68404S2 | 2.640 | 118P68494S2 | 3.090 |
| 1.0 | .750 x 1/16 | 118P10504S2 | 2.943 | 118P10594S2 | 3.393 |
| 1.5 | 1.000 x 1/16 | 118P15504S2 | 3.840 | 118P15594S2 | 4.290 |
| 2.0 | 1.000 x 1/16 | 118P20504S2 | 4.500 | 118P20594S2 | 4.950 |
| 3.0 | 1.000 x 2/16 | 118P30504S2 | 5.400 | 118P30594S2 | 5.850 |
| 600 WVDC | | | | | |
| .01 | .312 x 1/16 | 118P10306S2 | 1.560 | 118P10396S2 | 2.010 |
| .015 | .312 x 1/16 | 118P15306S2 | 1.575 | 118P15396S2 | 2.025 |
| .022 | .312 x 1/16 | 118P22306S2 | 1.590 | 118P22396S2 | 2.040 |
| .033 | .312 x 1/16 | 118P33306S2 | 1.590 | 118P33396S2 | 2.040 |
| .047 | .400 x 1/16 | 118P47306S2 | 1.614 | 118P47396S2 | 2.064 |
| .068 | .400 x 1/16 | 118P68306S2 | 1.710 | 118P68396S2 | 2.160 |
| .1 | .500 x 1/16 | 118P10406S2 | 1.890 | 118P10496S2 | 2.340 |
| .15 | .562 x 1/16 | 118P15406S2 | 1.980 | 118P15496S2 | 2.430 |
| .22 | .562 x 1/16 | 118P22406S2 | 2.115 | 118P22496S2 | 2.565 |
| .33 | .562 x 1/16 | 118P33406S2 | 2.400 | 118P33496S2 | 2.850 |
| .47 | .670 x 1/16 | 118P47406S2 | 2.625 | 118P47496S2 | 3.075 |
| .68 | .670 x 1/16 | 118P68406S2 | 2.880 | 118P68496S2 | 3.330 |
| 1.0 | 1.000 x 1/16 | 118P10506S2 | 3.900 | 118P10596S2 | 4.350 |
| 1.5 | 1.000 x 1/16 | 118P15506S2 | 4.140 | 118P15596S2 | 4.590 |
| 2.0 | 1.000 x 2/16 | 118P20506S2 | 5.100 | 118P20596S2 | 5.550 |
| 2.5 | 1.000 x 2/16 | 118P25506S2 | 5.850 | 118P25596S2 | 6.300 |

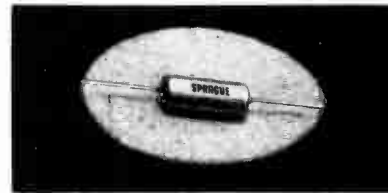
SPRAGUE CAPACITORS

121P METALLIZED PAPER CAPACITORS

- Designed to operate at 125°C WITHOUT VOLTAGE DERATING — extremely important in military and industrial equipment where higher temperatures are encountered.
- Quality of these capacitors is surpassed only by Type 118P units described on opposite page.
- High insulation resistance — at 85°C, minimum product of insulation resistance and capacitance is 20 megohm-microfarads. At 125°C, minimum product is 1.0 megohm-microfarads.
- Hermetically sealed with glass-to-metal solder-seal terminals — capacitor cases are of corrosion

resistant materials — similar in appearance to Type 118P.

- May be operated at low voltages, unlike many other metallized capacitors.
- For complete performance data, see latest issue of Engineering Bulletin 2210.
- Capacitors listed below are ungrounded case (insulated section) units without outer insulating sleeves. For information on other styles consult your Sprague Industrial Distributor.
- For prices on quantities from 25 to 999 pieces, see your Sprague Industrial Distributor.



- For units with outer plastic insulating sleeve, change last digit in cat. no. from 2 to 4 and add \$.075 to price.

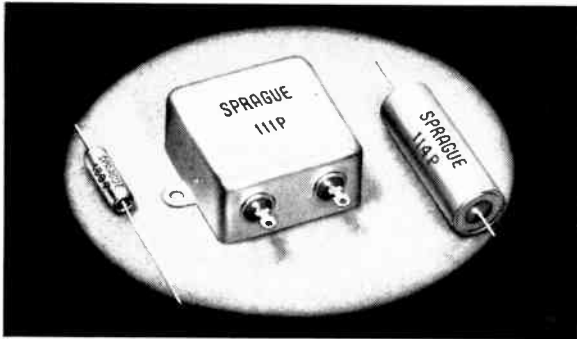
| μF | D. x L. | ± 20% Tol. | | ± 10% Tol. | |
|-----------------|---------------|---------------|------------------------|---------------|-----------------|
| | | Cat. No. | Net Price | Cat. No. | Net Each (1-24) |
| 150 WVDC | | | | | |
| 1.5 | .562 x 1 1/8 | 121P15501R5S2 | Available upon request | 121P15591R5S2 | \$2.730 |
| 2.0 | .562 x 1 1/8 | 121P20501R5S2 | | 121P20591R5S2 | 3.000 |
| 2.5 | .562 x 1 1/8 | 121P25501R5S2 | | 121P25591R5S2 | 3.090 |
| 3.0 | .670 x 1 1/8 | 121P30501R5S2 | | 121P30591R5S2 | 3.450 |
| 3.5 | .670 x 1 1/8 | 121P35501R5S2 | | 121P35591R5S2 | 3.660 |
| 4.0 | .670 x 1 1/8 | 121P40501R5S2 | | 121P40591R5S2 | 3.720 |
| 5.0 | .670 x 1 1/8 | 121P50501R5S2 | | 121P50591R5S2 | 4.080 |
| 6.0 | .750 x 1 1/8 | 121P60501R5S2 | | 121P60591R5S2 | 4.440 |
| 8.0 | .750 x 2 1/8 | 121P80501R5S2 | | 121P80591R5S2 | 5.160 |
| 10 | .750 x 2 1/8 | 121P10601R5S2 | | 121P10691R5S2 | 5.970 |
| 12 | 1.000 x 1 1/8 | 121P12601R5S2 | | 121P12691R5S2 | 6.750 |
| 14 | 1.000 x 2 1/8 | 121P14601R5S2 | | 121P14691R5S2 | 7.530 |
| 16 | 1.000 x 2 1/8 | 121P16601R5S2 | | 121P16691R5S2 | 8.010 |
| 18 | 1.000 x 2 1/8 | 121P18601R5S2 | | 121P18691R5S2 | 9.120 |

| μF | D. x L. | ± 20% Tol. | | ± 10% Tol. | |
|-----------------|---------------|-------------|------------------------|-------------|------------------------|
| | | Cat. No. | Net Price | Cat. No. | Net Each (1-24) |
| 200 WVDC | | | | | |
| .047 | .235 x 3/8 | 121P47302S2 | Available upon request | 121P47392S2 | Available upon request |
| .056 | .312 x 3/8 | 121P68302S2 | | 121P56392S2 | |
| .068 | .312 x 3/8 | | | 121P68392S2 | |
| .082 | .312 x 3/8 | 121P10402S2 | | 121P82392S2 | |
| .1 | .312 x 3/8 | | | 121P10492S2 | |
| .12 | .312 x 3/8 | 121P15402S2 | | 121P12492S2 | |
| .15 | .312 x 3/8 | | | 121P15492S2 | |
| .18 | .312 x 1 1/8 | 121P22402S2 | | 121P18492S2 | |
| .22 | .312 x 1 1/8 | | | 121P22492S2 | |
| .27 | .400 x 1 1/8 | 121P33402S2 | | 121P27492S2 | |
| .33 | .400 x 1 1/8 | | | 121P33492S2 | |
| .39 | .400 x 1 1/8 | 121P47402S2 | | 121P39492S2 | |
| .47 | .400 x 1 1/8 | | | 121P47492S2 | |
| .56 | .500 x 1 1/8 | 121P68402S2 | | 121P56492S2 | |
| .68 | .500 x 1 1/8 | | | 121P68492S2 | |
| .82 | .562 x 1 1/8 | 121P10502S2 | | 121P82492S2 | |
| 1.0 | .562 x 1 1/8 | | | 121P10592S2 | |
| 1.5 | .562 x 1 3/8 | 121P15502S2 | | 121P15592S2 | |
| 2.0 | .562 x 1 3/8 | | 121P20592S2 | | |
| 2.5 | .670 x 1 1/8 | 121P25502S2 | 121P25592S2 | | |
| 3.0 | .670 x 1 1/8 | | 121P30592S2 | | |
| 3.5 | .750 x 1 1/8 | 121P35502S2 | 121P35592S2 | | |
| 4.0 | .750 x 1 1/8 | | 121P40592S2 | | |
| 5.0 | .750 x 2 1/8 | 121P50502S2 | 121P50592S2 | | |
| 6.0 | .750 x 2 1/8 | | 121P60592S2 | | |
| 8.0 | 1.000 x 1 1/8 | 121P80502S2 | 121P80592S2 | | |
| 10 | 1.000 x 2 1/8 | | 121P10602S2 | | |
| 12 | 1.000 x 2 1/8 | 121P12602S2 | 121P12692S2 | | |

| μF | D. x L. | ± 20% Tol. | | ± 10% Tol. | |
|-----------------|--------------|-------------|------------------------|-------------|------------------------|
| | | Cat. No. | Net Price | Cat. No. | Net Each (1-24) |
| 400 WVDC | | | | | |
| .01 | .235 x 3/8 | 121P10304S2 | Available upon request | 121P10394S2 | Available upon request |
| .012 | .312 x 3/8 | 121P15304S2 | | 121P12394S2 | |
| .015 | .312 x 3/8 | | | 121P15394S2 | |
| .018 | .312 x 3/8 | 121P22304S2 | | 121P18394S2 | |
| .022 | .312 x 3/8 | | | 121P22394S2 | |
| .027 | .312 x 3/8 | 121P33304S2 | | 121P27394S2 | |
| .033 | .312 x 3/8 | | | 121P33394S2 | |
| .039 | .312 x 1 1/8 | 121P47304S2 | | 121P39394S2 | |
| .047 | .312 x 1 1/8 | | | 121P47394S2 | |
| .056 | .312 x 1 1/8 | 121P68304S2 | | 121P56394S2 | |
| .068 | .312 x 1 1/8 | | | 121P68394S2 | |
| .082 | .400 x 1 1/8 | 121P82394S2 | | 121P82394S2 | |

| μF | D. x L. | ± 20% Tol. | | ± 10% Tol. | |
|-----------------|---------------|-------------|------------------------|-------------|------------------------|
| | | Cat. No. | Net Price | Cat. No. | Net Price ea. |
| 600 WVDC | | | | | |
| .1 | .400 x 1 1/8 | 121P10404S2 | Available upon request | 121P10494S2 | Available upon request |
| .12 | .400 x 1 1/8 | 121P15404S2 | | 121P12494S2 | |
| .15 | .400 x 1 1/8 | | | 121P15494S2 | |
| .18 | .500 x 1 1/8 | 121P22404S2 | | 121P18494S2 | |
| .22 | .500 x 1 1/8 | | | 121P22494S2 | |
| .27 | .562 x 1 1/8 | 121P33404S2 | | 121P27494S2 | |
| .33 | .562 x 1 1/8 | | | 121P33494S2 | |
| .39 | .562 x 1 1/8 | 121P47404S2 | | 121P39494S2 | |
| .47 | .562 x 1 1/8 | | | 121P47494S2 | |
| .56 | .670 x 1 1/8 | 121P68404S2 | | 121P56494S2 | |
| .68 | .670 x 1 1/8 | | | 121P68494S2 | |
| .82 | .670 x 1 1/8 | 121P10504S2 | | 121P82494S2 | |
| 1.0 | .670 x 1 1/8 | | | 121P10594S2 | |
| 1.5 | .750 x 2 1/8 | 121P15504S2 | | 121P15594S2 | |
| 2.0 | 1.000 x 1 1/8 | | | 121P20504S2 | |
| 2.5 | 1.000 x 2 1/8 | 121P25504S2 | | 121P25594S2 | |
| 3.0 | 1.000 x 2 1/8 | | | 121P30504S2 | |
| 3.5 | 1.000 x 2 1/8 | 121P35504S2 | | 121P35594S2 | |

SPRAGUE CAPACITORS



METAL-CLAD FILM CAPACITORS

Polystyrene film dielectric capacitors have the lowest dielectric absorption of all film capacitors. The exceptionally high insulation resistance will generally exceed 10,000,000 megohm-microfarads. They have extremely low power factor, close capacitance tolerance, high capacitance stability with temperature change and high operating temperatures. The unusual properties of these capacitors make them particularly suitable for circuit applications demanding such characteristics. All capacitors listed here are hermetically sealed in metal cases.

114P STYRACON™ TUBULARS

Specially processed polystyrene film dielectric • Operating temperature range, -55°C to $+85^{\circ}\text{C}$ • High insulation resistance • Low dielectric absorption (under .05%) • High capacitance stability (less than $\pm 2\%$ drift) • Extremely low power factor (high Q) • Units listed below have capacitance

tolerance of $\pm 5\%$. For $\pm 20\%$, change 8th digit in catalog number from 5 to 0; for $\pm 10\%$ change to 9; for $\pm 2\%$ change to 2; for $\pm 1\%$ change to 1 • Units listed below have plastic insulating sleeves. For plain metal case, change last digit in catalog number from 4 to 2 • For complete technical data, refer to latest issue of Engineering Bulletin 2510 • Prices available upon request.

| 200 WVDC | | | 400 WVDC | | | 600 WVDC | | |
|---------------|------------------------|-------------|---------------|------------------------|-------------|---------------|------------------------|-------------|
| μF | Diam. x Length | Cat. No. | μF | Diam. x Length | Cat. No. | μF | Diam. x Length | Cat. No. |
| .001 | .235 x $\frac{7}{8}$ | 114P10252S4 | .001 | .235 x $\frac{7}{8}$ | 114P10254S4 | .001 | .400 x $\frac{7}{8}$ | 114P10256S4 |
| .0015 | .235 x $\frac{7}{8}$ | 114P15252S4 | .0015 | .312 x $\frac{7}{8}$ | 114P15254S4 | .0015 | .400 x $1\frac{1}{8}$ | 114P15256S4 |
| .0022 | .235 x $\frac{7}{8}$ | 114P22252S4 | .0022 | .312 x $\frac{7}{8}$ | 114P22254S4 | .0022 | .400 x $1\frac{1}{8}$ | 114P22256S4 |
| .0033 | .312 x $\frac{7}{8}$ | 114P33252S4 | .0033 | .312 x $\frac{7}{8}$ | 114P33254S4 | .0033 | .400 x $1\frac{1}{8}$ | 114P33256S4 |
| .0047 | .312 x $\frac{7}{8}$ | 114P47252S4 | .0047 | .400 x $\frac{7}{8}$ | 114P47254S4 | .0047 | .400 x $1\frac{1}{8}$ | 114P47256S4 |
| .0068 | .400 x $\frac{7}{8}$ | 114P68252S4 | .0068 | .400 x $1\frac{1}{8}$ | 114P68254S4 | .0068 | .400 x $1\frac{1}{8}$ | 114P68256S4 |
| .01 | .400 x $1\frac{1}{8}$ | 114P10352S4 | .01 | .400 x $1\frac{1}{8}$ | 114P10354S4 | .01 | .400 x $1\frac{1}{8}$ | 114P10356S4 |
| .015 | .400 x $1\frac{1}{8}$ | 114P15352S4 | .015 | .400 x $1\frac{1}{8}$ | 114P15354S4 | .015 | .400 x $1\frac{1}{8}$ | 114P15356S4 |
| .022 | .400 x $1\frac{1}{8}$ | 114P22352S4 | .022 | .562 x $1\frac{1}{8}$ | 114P22354S4 | .022 | .562 x $1\frac{1}{8}$ | 114P22356S4 |
| .033 | .562 x $1\frac{1}{8}$ | 114P33352S4 | .033 | .562 x $1\frac{1}{8}$ | 114P33354S4 | .033 | .562 x $1\frac{1}{8}$ | 114P33356S4 |
| .047 | .562 x $1\frac{1}{8}$ | 114P47352S4 | .047 | .562 x $1\frac{1}{8}$ | 114P47354S4 | .047 | .562 x $1\frac{1}{8}$ | 114P47356S4 |
| .068 | .562 x $1\frac{1}{8}$ | 114P68352S4 | .068 | .670 x $1\frac{1}{8}$ | 114P68354S4 | .068 | .670 x $1\frac{1}{8}$ | 114P68356S4 |
| .1 | .670 x $1\frac{1}{8}$ | 114P10452S4 | .1 | .750 x $2\frac{1}{8}$ | 114P10454S4 | .1 | .750 x $2\frac{1}{8}$ | 114P10456S4 |
| .15 | .750 x $2\frac{1}{8}$ | 114P15452S4 | .15 | .750 x $2\frac{1}{8}$ | 114P15454S4 | .15 | .750 x $2\frac{1}{8}$ | 114P15456S4 |
| .22 | .750 x $2\frac{1}{8}$ | 114P22452S4 | .22 | 1.000 x $2\frac{1}{8}$ | 114P22454S4 | .22 | 1.000 x $2\frac{1}{8}$ | 114P22456S4 |
| .33 | 1.000 x $2\frac{1}{8}$ | 114P33452S4 | .33 | 1.000 x $2\frac{1}{8}$ | 114P33454S4 | .33 | 1.000 x $2\frac{1}{8}$ | 114P33456S4 |
| .47 | 1.000 x $2\frac{1}{8}$ | 114P47452S4 | .47 | 1.000 x $2\frac{1}{8}$ | 114P47454S4 | .47 | 1.000 x $2\frac{1}{8}$ | 114P47456S4 |

111P STYRACON™ BATHTUBS

Same electrical characteristics as Type 114P • Drawn metal bathtub cases • Listed units have capacitance tolerance of $\pm 5\%$. For $\pm 20\%$, change last letter in catalog number from J to M; for $\pm 10\%$ change to K; for $\pm 2\%$ change to G; for $\pm 1\%$ change to F • For complete technical data, refer to latest issue of Engineering Bulletin 2510 • Prices available upon request.

| μF | WVDC | L. x W. x H. | Cat. No. | μF | WVDC | L. x W. x H. | Cat. No. |
|---------------|------|--|----------|---------------|------|--|----------|
| 1.5 | 50 | 2 x $1\frac{3}{4}$ x 1 | 111P7J | 2.0 | 200 | 2 $\frac{1}{16}$ x $2\frac{1}{16}$ x $2\frac{1}{16}$ | 111P16J |
| 2.0 | 50 | 2 x 2 x $1\frac{1}{4}$ | 111P8J | .68 | 400 | 2 x 2 x $1\frac{1}{4}$ | 111P17J |
| 3.0 | 50 | 2 x 2 x $1\frac{1}{2}$ | 111P9J | 1.0 | 400 | 2 x 2 x $1\frac{1}{2}$ | 111P18J |
| 5.0 | 50 | 2 $\frac{3}{16}$ x $2\frac{1}{16}$ x $2\frac{1}{16}$ | 111P10J | 1.5 | 400 | 2 $\frac{3}{16}$ x $2\frac{1}{16}$ x $2\frac{1}{16}$ | 111P19J |
| 1.0 | 100 | 2 x $1\frac{3}{4}$ x $\frac{7}{8}$ | 111P11J | .33 | 600 | 2 x $1\frac{3}{4}$ x 1 | 111P20J |
| 2.0 | 100 | 2 x 2 x $1\frac{1}{2}$ | 111P12J | .47 | 600 | 2 x 2 x $1\frac{1}{2}$ | 111P21J |
| 3.0 | 100 | 2 $\frac{3}{16}$ x $2\frac{1}{16}$ x $2\frac{1}{16}$ | 111P13J | .68 | 600 | 2 x 2 x $1\frac{1}{2}$ | 111P22J |
| .68 | 200 | 2 x $1\frac{3}{4}$ x 1 | 111P14J | 1.0 | 600 | 2 $\frac{3}{16}$ x $2\frac{1}{16}$ x $2\frac{1}{16}$ | 111P4J |
| 1.0 | 200 | 2 x 2 x $1\frac{1}{4}$ | 111P15J | | | | |

139P FILMITE 'F' TUBULARS

For circuit applications requiring constant capacitance with varying temperatures • Practically zero capacitance change at temperatures from -10°C to $+85^{\circ}\text{C}$. May be operated at $+125^{\circ}\text{C}$ with not more than 2.5% capacitance change • Operating temperature: -55°C to $+125^{\circ}\text{C}$ • Insulation

resistance and dielectric absorption characteristics approach those of polystyrene capacitors • Listed units have capacitance tolerance of $\pm 5\%$. For $\pm 20\%$ change 8th digit in catalog number from 5 to 0; for $\pm 10\%$, change to 9; for $\pm 2\%$, change to 2 • For complete technical data, refer to latest issue of Engineering Bulletin 2560 • Prices available upon request.

| 200 WVDC | | | 400 WVDC | | | 600 WVDC | | |
|---------------|------------------------|-------------|---------------|------------------------|-------------|---------------|------------------------|-------------|
| μF | Diam. x Length | Cat. No. | μF | Diam. x Length | Cat. No. | μF | Diam. x Length | Cat. No. |
| .001 | .235 x $\frac{3}{4}$ | 139P10252S4 | .001 | .235 x $\frac{3}{4}$ | 139P10254S4 | .001 | .235 x $\frac{3}{4}$ | 139P10256S4 |
| .0015 | .235 x $\frac{3}{4}$ | 139P15252S4 | .0015 | .235 x $\frac{3}{4}$ | 139P15254S4 | .0015 | .312 x $\frac{7}{8}$ | 139P15256S4 |
| .0022 | .235 x $\frac{3}{4}$ | 139P22252S4 | .0022 | .312 x $\frac{7}{8}$ | 139P22254S4 | .0022 | .312 x $\frac{7}{8}$ | 139P22256S4 |
| .0033 | .312 x $\frac{7}{8}$ | 139P33252S4 | .0033 | .312 x $\frac{7}{8}$ | 139P33254S4 | .0033 | .312 x $\frac{7}{8}$ | 139P33256S4 |
| .0047 | .312 x $\frac{7}{8}$ | 139P47252S4 | .0047 | .312 x $\frac{7}{8}$ | 139P47254S4 | .0047 | .312 x $\frac{7}{8}$ | 139P47256S4 |
| .0068 | .312 x $\frac{7}{8}$ | 139P68252S4 | .0068 | .312 x 1 | 139P68254S4 | .0068 | .400 x 1 | 139P68256S4 |
| .01 | .312 x 1 | 139P10352S4 | .01 | .400 x $\frac{7}{8}$ | 139P10354S4 | .01 | .400 x $1\frac{1}{8}$ | 139P10356S4 |
| .015 | .400 x $\frac{7}{8}$ | 139P15352S4 | .015 | .400 x 1 | 139P15354S4 | .015 | .400 x $1\frac{1}{8}$ | 139P15356S4 |
| .022 | .400 x 1 | 139P22352S4 | .022 | .400 x $1\frac{1}{8}$ | 139P22354S4 | .022 | .562 x $1\frac{1}{8}$ | 139P22356S4 |
| .033 | .400 x $1\frac{1}{8}$ | 139P33352S4 | .033 | .562 x $1\frac{1}{8}$ | 139P33354S4 | .033 | .562 x $1\frac{1}{8}$ | 139P33356S4 |
| .047 | .500 x $1\frac{1}{8}$ | 139P47352S4 | .047 | .562 x $1\frac{1}{8}$ | 139P47354S4 | .047 | .670 x $1\frac{1}{8}$ | 139P47356S4 |
| .068 | .562 x $1\frac{1}{8}$ | 139P68352S4 | .068 | .670 x $1\frac{1}{8}$ | 139P68354S4 | .068 | .750 x $1\frac{1}{8}$ | 139P68356S4 |
| .1 | .670 x $1\frac{1}{8}$ | 139P10452S4 | .1 | .750 x $1\frac{1}{8}$ | 139P10454S4 | .1 | .750 x $2\frac{1}{8}$ | 139P10456S4 |
| .15 | .750 x $1\frac{1}{8}$ | 139P15452S4 | .15 | .750 x $2\frac{1}{8}$ | 139P15454S4 | .15 | 1.000 x $2\frac{1}{8}$ | 139P15456S4 |
| .22 | .750 x $2\frac{1}{8}$ | 139P22452S4 | .22 | 1.000 x $1\frac{1}{8}$ | 139P22454S4 | .22 | 1.000 x $1\frac{1}{8}$ | 139P22456S4 |
| .33 | 1.000 x $1\frac{1}{8}$ | 139P33452S4 | .33 | 1.000 x $2\frac{1}{8}$ | 139P33454S4 | | | |
| .47 | 1.000 x $2\frac{1}{8}$ | 139P47452S4 | | | | | | |

140P FILMITE 'F' BATHTUBS

Same electrical characteristics as Type 139P • Drawn metal bathtub cases • Listed units have capacitance tolerance of $\pm 5\%$. For $\pm 20\%$, change last letter in catalog number from J to M; for $\pm 10\%$ change to K; for $\pm 2\%$ change to G; for $\pm 1\%$ change to F • For complete technical data, refer to latest issue of Engineering Bulletin 2560 • Prices available upon request.

| μF | WVDC | L. x W. x H. | Cat. No. |
|---------------|------|--|----------|
| .68 | 200 | 2 x 2 x 1 | 140P1J |
| 1.0 | 200 | 2 x 2 x $1\frac{1}{2}$ | 140P2J |
| .47 | 400 | 2 x 2 x 1 | 140P3J |
| .68 | 400 | 2 x 2 x $1\frac{1}{2}$ | 140P4J |
| 1.0 | 400 | 2 $\frac{3}{16}$ x $2\frac{1}{16}$ x $1\frac{3}{16}$ | 140P5J |
| .33 | 600 | 2 x 2 x 1 | 140P6J |
| .47 | 600 | 2 x 2 x $1\frac{1}{2}$ | 140P7J |
| .68 | 600 | 2 $\frac{3}{16}$ x $2\frac{1}{16}$ x $1\frac{3}{16}$ | 140P8J |
| 1.0 | 600 | 2 $\frac{3}{16}$ x $2\frac{1}{16}$ x $2\frac{1}{16}$ | 140P9J |

SPRAGUE CAPACITORS

FILM CAPACITORS, continued

127P FILMITE 'E' TUBULARS

Operating temperature range, -55°C to $+150^{\circ}\text{C}$ • Even at 150°C , insulation resistance is higher than that of best paper capacitors • These capacitor: use polyester-film dielectric • Dissipation factor will not exceed

1.3% • Extended foil construction for low series resistance • For complete technical data, refer to latest issue of Engineering Bulletin 2410 • For prices on quantities from 10 to 499 pieces, see your Sprague Industrial Distributor • Dimensions shown are for units with sleeves, for plain cases, subtract $\frac{1}{16}$ " from length and .032" from diameter.

| μF | WVDC | Size D. x L. | $\pm 20\%$ Cap. Tol. | | | | $\pm 10\%$ Cap. Tol. | | | |
|---------------|------|----------------------|----------------------|------------------|------------------|------------------|----------------------|------------------|------------------|------------------|
| | | | Plain Case | | w/plastic sleeve | | Plain Case | | w/plastic sleeve | |
| | | | Cat. No. | Net (1-9) ea. | Cat. No. | Net (1-9) ea. | Cat. No. | Net (1-9) ea. | Cat. No. | Net (1-9) ea. |
| .0068 | 200 | .235 x $\frac{1}{4}$ | 127P68202S2 | \$3.156 | 127P68202S4 | \$3.316 | 127P68292S2 | \$3.472 | 127P68292S4 | \$3.648 |
| .01 | 200 | .235 x $\frac{1}{4}$ | 127P10302S2 | 3.312 | 127P10302S4 | 3.472 | 127P10392S2 | 3.642 | 127P10392S4 | 3.819 |
| .015 | 200 | .235 x $\frac{1}{4}$ | 127P15302S2 | 3.340 | 127P15302S4 | 3.500 | 127P15392S2 | 3.674 | 127P15392S4 | 3.850 |
| .022 | 200 | .235 x $\frac{1}{4}$ | 127P22302S2 | 3.352 | 127P22302S4 | 3.512 | 127P22392S2 | 3.687 | 127P22392S4 | 3.863 |
| .033 | 200 | .312 x $\frac{1}{4}$ | 127P33302S2 | 3.388 | 127P33302S4 | 3.548 | 127P33392S2 | 3.727 | 127P33392S4 | 3.903 |
| .047 | 200 | .312 x $\frac{1}{4}$ | 127P47302S2 | 3.436 | 127P47302S4 | 3.596 | 127P47392S2 | 3.780 | 127P47392S4 | 3.956 |
| .068 | 200 | .312 x $\frac{1}{4}$ | 127P68302S2 | 3.484 | 127P68302S4 | 3.644 | 127P68392S2 | 3.832 | 127P68392S4 | 4.008 |
| .1 | 200 | .400 x $\frac{1}{4}$ | 127P10402S2 | 3.496 | 127P10402S4 | 3.656 | 127P10492S2 | 3.846 | 127P10492S4 | 4.022 |
| .15 | 200 | .400 x $\frac{1}{4}$ | 127P15402S2 | 3.688 | 127P15402S4 | 3.848 | 127P15492S2 | 4.057 | 127P15492S4 | 4.233 |
| .22 | 200 | .400 x $\frac{1}{4}$ | 127P22402S2 | 3.924 | 127P22402S4 | 4.084 | 127P22492S2 | 4.316 | 127P22492S4 | 4.492 |
| .33 | 200 | .400 x $\frac{1}{4}$ | 127P33402S2 | 4.172 | 127P33402S4 | 4.332 | 127P33492S2 | 4.589 | 127P33492S4 | 4.765 |
| .47 | 200 | .562 x $\frac{1}{4}$ | 127P47402S2 | 4.392 | 127P47402S4 | 4.552 | 127P47492S2 | 4.831 | 127P47492S4 | 5.007 |
| .68 | 200 | .562 x $\frac{1}{4}$ | 127P68402S2 | 4.804 | 127P68402S4 | 4.964 | 127P68492S2 | 5.284 | 127P68492S4 | 5.460 |
| 1.0 | 200 | .562 x $\frac{1}{4}$ | 127P10502S2 | 5.344 | 127P10502S4 | 5.504 | 127P10592S2 | 5.878 | 127P10592S4 | 6.054 |

141P FILMITE 'G' TUBULARS

TFE fluorocarbon film dielectric • Operating temperature range, -55°C to $+200^{\circ}\text{C}$ • Unusually high insulation resistance (in excess of 100,000 megohm-microfarads at 25°C) • Low dielectric absorption • Low dissipation factor (less than .02%) • Excellent humidity resistance • Small capacitance

change with temperature • Units listed below have capacitance tolerance of $\pm 10\%$. For $\pm 20\%$, change 8th digit in catalog number from 9 to 0; For $\pm 5\%$ change to 5; For $\pm 2\%$ change to 2; For $\pm 1\%$ change to 1 • Units listed below have plastic insulating sleeves. For plain metal case, change last digit in catalog number from 4 to 2 • For complete technical data, refer to latest issue of Engineering Bulletin 2610 • Prices available upon request.

| μF | Diam. x Length | Cat. No. | μF | Diam. x Length | Cat. No. | μF | Diam. x Length | Cat. No. |
|-----------------|----------------------|-------------|-----------------|-----------------------|-------------|-----------------|-----------------------|--------------|
| 200 WVDC | | | 400 WVDC | | | 600 WVDC | | |
| .0015 | .235 x $\frac{1}{4}$ | 141P15292S4 | .1 | .670 x $\frac{1}{4}$ | 141P10494S4 | .0047 | .400 x $\frac{1}{4}$ | 141P47296S4 |
| .0039 | .312 x $\frac{1}{4}$ | 141P39292S4 | .12 | .750 x $\frac{1}{4}$ | 141P12494S4 | .0056 | .400 x $\frac{1}{4}$ | 141P56296S4 |
| .0047 | .312 x $\frac{1}{4}$ | 141P47292S4 | .15 | .750 x $\frac{1}{4}$ | 141P15494S4 | .0068 | .400 x $\frac{1}{4}$ | 141P68296S4 |
| .0082 | .400 x $\frac{1}{4}$ | 141P82292S4 | .18 | 1.000 x $\frac{1}{4}$ | 141P18494S4 | .0082 | .400 x $\frac{1}{4}$ | 141P82296S4 |
| .01 | .400 x $\frac{1}{4}$ | 141P10392S4 | .22 | 1.000 x $\frac{1}{4}$ | 141P22494S4 | .01 | .400 x $\frac{1}{4}$ | 14. P10396S4 |
| .012 | .400 x $\frac{1}{4}$ | 141P12392S4 | .27 | 1.000 x $\frac{1}{4}$ | 141P27494S4 | .012 | .400 x $\frac{1}{4}$ | 141P12396S4 |
| .015 | .400 x $\frac{1}{4}$ | 141P15392S4 | .33 | 1.000 x $\frac{1}{4}$ | 141P33494S4 | .015 | .400 x $\frac{1}{4}$ | 141P15396S4 |
| .018 | .400 x $\frac{1}{4}$ | 141P18392S4 | 600 WVDC | | | .018 | .562 x $\frac{1}{4}$ | 141P18396S4 |
| .022 | .400 x $\frac{1}{4}$ | 141P22392S4 | .001 | .235 x $\frac{1}{4}$ | 141P10296S4 | .022 | .562 x $\frac{1}{4}$ | 141P22396S4 |
| .027 | .562 x $\frac{1}{4}$ | 141P27392S4 | .0012 | .312 x $\frac{1}{4}$ | 141P12296S4 | .027 | .562 x $\frac{1}{4}$ | 141P27396S4 |
| .033 | .562 x $\frac{1}{4}$ | 141P33392S4 | .0015 | .312 x $\frac{1}{4}$ | 141P15296S4 | .033 | .562 x $\frac{1}{4}$ | 141P33396S4 |
| .039 | .562 x $\frac{1}{4}$ | 141P39392S4 | .0018 | .312 x $\frac{1}{4}$ | 141P18296S4 | .039 | .562 x $\frac{1}{2}$ | 141P39396S4 |
| .047 | .562 x $\frac{1}{4}$ | 141P47392S4 | .0022 | .312 x $\frac{1}{4}$ | 141P22296S4 | .047 | .562 x $\frac{1}{2}$ | 141P47396S4 |
| .056 | .562 x $\frac{1}{2}$ | 141P56392S4 | .0027 | .312 x $\frac{1}{4}$ | 141P27296S4 | .056 | .562 x $\frac{1}{2}$ | 141P56396S4 |
| .068 | .562 x $\frac{1}{2}$ | 141P68392S4 | .0033 | .312 x $\frac{1}{4}$ | 141P33296S4 | .068 | .562 x $\frac{1}{2}$ | 141P68396S4 |
| .082 | .562 x $\frac{1}{2}$ | 141P82392S4 | .0039 | .400 x $\frac{1}{4}$ | 141P39296S4 | .082 | 1.000 x $\frac{1}{4}$ | 141P82396S4 |
| .1 | .562 x $\frac{1}{2}$ | 141P10492S4 | | | | .1 | 1.000 x $\frac{1}{4}$ | 141P10496S4 |
| | | | | | | .12 | 1.000 x $\frac{1}{4}$ | 141P12496S4 |
| | | | | | | .15 | 1.000 x $\frac{1}{4}$ | 141P15496S4 |

142P FILMITE 'G' OVALS

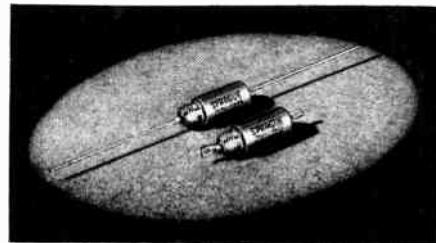
Same electrical characteristics as Type 141P • Drawn metal oval cases • Listed units have capacitance tolerance of $\pm 5\%$. For $\pm 20\%$, change last letter in catalog number from J to M; for $\pm 10\%$ change to K; for $\pm 2\%$ change to G; for $\pm 1\%$ change to F • For complete technical data, refer to latest issue of Engineering Bulletin 2610 • Prices available upon request.

| μF | WVDC | W. x T. x H. | Cat. No. |
|---------------|------|--|----------|
| .68 | 200 | $2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{8}$ | 142PJ |
| 1.0 | 200 | $2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 142PJ |
| .68 | 400 | $2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{2}$ | 142PJ |
| 1.0 | 400 | $2\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{1}{8}$ | 142PJ |
| .33 | 600 | $2\frac{1}{2} \times 1\frac{1}{4} \times 2\frac{1}{4}$ | 142PJ |
| .47 | 600 | $2\frac{1}{2} \times 1\frac{1}{4} \times 3\frac{1}{2}$ | 142PJ |

SPRAGUE CAPACITORS

TYPE 102P, 103P 'THRU-PASS' CAPACITORS

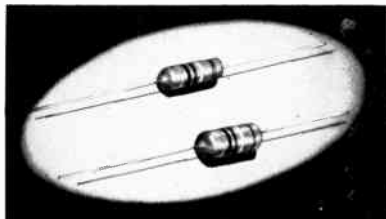
- Designed for Radio Interference Reduction in Radar and Communication Equipment
- Performance Closer to That of Theoretically Ideal Capacitor than Any Other Paper Capacitor Ever Made
- Three-Terminal Feed-Thru Design — Connect in a Circuit in Same Manner as Low-Pass Filter
- Hermetically Sealed, with Glass-to-Metal Solder-Seal Terminals
- Impregnated with Vitamin Q, for High Insulation Resistance and Minimum Capacitance Change with Temperature
- Type 102P is Designed for Operation from -55°C to $+85^{\circ}\text{C}$; Type 103P for -55°C to $+125^{\circ}\text{C}$
- Capacitors listed below have wire leads. For tab terminals, which are also available, see your Sprague Industrial Distributor.
- For complete technical data, refer to latest issue of Engineering Bulletin 8015
- Prices available upon request



| μF | Size Diam. x Length | Catalog Number | |
|-----------------|------------------------|----------------------|-----------------------|
| | | 85°C | 125°C |
| 100 WVDC | | | |
| .001 | .400 x $\frac{3}{4}$ | 102P101 | 103P101 |
| .0047 | .400 x $\frac{3}{4}$ | 102P106 | 103P106 |
| .01 | .400 x $\frac{3}{4}$ | 102P111 | 103P111 |
| .047 | .400 x $\frac{3}{4}$ | 102P116 | 103P116 |
| .1 | .400 x $\frac{7}{8}$ | 102P121 | 103P121 |
| .22 | .400 x $1\frac{1}{8}$ | 102P126 | 103P126 |
| .33 | .562 x $1\frac{1}{8}$ | 102P131 | 103P131 |
| .47 | .562 x $1\frac{3}{8}$ | 102P136 | 103P136 |
| .68 | .562 x $1\frac{3}{8}$ | 102P141 | 103P141 |
| 1.0 | .670 x $1\frac{3}{8}$ | 102P146 | 103P146 |
| 200 WVDC | | | |
| .001 | .400 x $\frac{3}{4}$ | 102P102 | 103P102 |
| .0047 | .400 x $\frac{3}{4}$ | 102P107 | 103P107 |
| .01 | .400 x $\frac{3}{4}$ | 102P112 | 103P112 |
| .047 | .400 x $\frac{7}{8}$ | 102P117 | 103P117 |
| .1 | .400 x $1\frac{1}{8}$ | 102P122 | 103P122 |
| .22 | .562 x $1\frac{1}{8}$ | 102P127 | 103P127 |
| .33 | .562 x $1\frac{1}{8}$ | 102P132 | 103P132 |
| .47 | .562 x $1\frac{1}{8}$ | 102P137 | 103P137 |
| .68 | .670 x $1\frac{1}{8}$ | 102P142 | 103P142 |
| 1.0 | .750 x $2\frac{1}{8}$ | 102P147 | 103P147 |
| 300 WVDC | | | |
| .001 | .400 x $\frac{3}{4}$ | 102P103 | 103P103 |
| .0047 | .400 x $\frac{3}{4}$ | 102P108 | 103P108 |
| .01 | .400 x $\frac{3}{4}$ | 102P113 | 103P113 |

| μF | Size Diam. x Length | Catalog Number | |
|-----------------------------|------------------------|----------------------|-----------------------|
| | | 85°C | 125°C |
| 300 WVDC (Continued) | | | |
| .047 | .400 x $1\frac{1}{8}$ | 102P118 | 103P118 |
| .1 | .400 x $1\frac{3}{8}$ | 102P123 | 103P123 |
| .22 | .562 x $1\frac{3}{8}$ | 102P128 | 103P128 |
| .33 | .562 x $1\frac{3}{8}$ | 102P133 | 103P133 |
| .47 | .670 x $1\frac{3}{8}$ | 102P138 | 103P138 |
| .68 | .750 x $2\frac{1}{8}$ | 102P143 | 103P143 |
| 400 WVDC | | | |
| .001 | .400 x $\frac{3}{4}$ | 102P104 | 103P104 |
| .0047 | .400 x $\frac{3}{4}$ | 102P109 | 103P109 |
| .01 | .400 x $\frac{3}{4}$ | 102P114 | 103P114 |
| .047 | .400 x $1\frac{3}{8}$ | 102P119 | 103P119 |
| .1 | .562 x $1\frac{1}{8}$ | 102P124 | 103P124 |
| .22 | .562 x $1\frac{1}{8}$ | 102P129 | 103P129 |
| .33 | .670 x $1\frac{1}{8}$ | 102P134 | 103P134 |
| .47 | .750 x $2\frac{1}{8}$ | 102P139 | 103P139 |
| .68 | .750 x $2\frac{1}{8}$ | 102P144 | 103P144 |
| 600 WVDC | | | |
| .001 | .400 x $\frac{3}{4}$ | 102P105 | 103P105 |
| .0047 | .400 x $\frac{3}{4}$ | 102P110 | 103P110 |
| .01 | .400 x $\frac{3}{4}$ | 102P115 | 103P115 |
| .047 | .400 x $1\frac{3}{8}$ | 102P120 | 103P120 |
| .1 | .562 x $1\frac{1}{8}$ | 102P125 | 103P125 |
| .22 | .670 x $1\frac{1}{8}$ | 102P130 | 103P130 |
| .33 | .750 x $2\frac{1}{8}$ | 102P135 | 103P135 |
| .47 | .750 x $2\frac{1}{8}$ | 102P140 | 103P140 |

TYPE 65P PROKAR[®] MOLDED TUBULARS

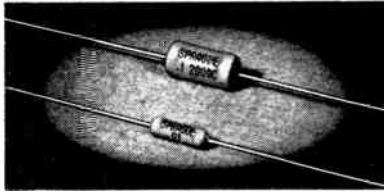


- For Applications Requiring Small Paper Capacitors for Continuous Operation at High Temperatures
- No Voltage Derating Required for 125°C Operation
- Impregnated with an Exclusive Sprague Organic Material which Polymerizes to Form a Solid Capacitor Section
- Sections Molded in Mineral-Filled High-Temperature Plastic — All cases are $1\frac{1}{16}$ " long
- Capacitance Tolerance of these Capacitors is $\pm 5\%$
- For complete technical data, refer to latest issue of Engineering Bulletin 2100.
- For prices on quantities from 25 to 499 pieces, see your Sprague Industrial Distributor.

| μF | WVDC | Diam. | Cat. No. | Net (1-24) ea. |
|---------------|------|-------|----------|----------------|
| .01 | 200 | .175 | 65P10352 | \$.90 |
| .015 | 200 | .195 | 65P15352 | .90 |
| .02 | 200 | .250 | 65P20352 | 1.20 |
| .022 | 200 | .250 | 65P22352 | 1.20 |
| .03 | 200 | .250 | 65P30352 | 1.20 |
| .033 | 200 | .250 | 65P33352 | 1.20 |
| .039 | 200 | .375 | 65P39352 | 1.50 |
| .047 | 200 | .375 | 65P47352 | 1.50 |
| .051 | 200 | .375 | 65P51352 | 1.50 |
| .056 | 200 | .375 | 65P56352 | 1.50 |
| .062 | 200 | .375 | 65P62352 | 1.50 |
| .082 | 200 | .375 | 65P82352 | 1.50 |

| μF | WVDC | Diam. | Cat. No. | Net (1-24) ea. |
|---------------|------|-------|----------|----------------|
| .091 | 200 | .375 | 65P91352 | 1.50 |
| .1 | 200 | .375 | 65P10452 | 1.50 |
| .001 | 300 | .175 | 65P10253 | .90 |
| .0015 | 300 | .175 | 65P15253 | .90 |
| .002 | 300 | .175 | 65P20253 | .90 |
| .0039 | 300 | .175 | 65P39253 | .90 |
| .0047 | 300 | .175 | 65P47253 | .90 |
| .0051 | 300 | .175 | 65P51253 | .90 |
| .0056 | 300 | .175 | 65P56253 | .90 |
| .0068 | 300 | .175 | 65P68253 | .90 |
| .0082 | 300 | .195 | 65P82253 | .90 |
| .0091 | 300 | .195 | 65P91253 | .90 |

SPRAGUE CAPACITORS



TYPE 192P PACER[®] FILMITE[™] 'E' CAPACITORS

For Minimum Size In Commercial And Industrial Electronics

- Completely New Construction—Extended Foil Film Sections Terminate in End Caps With Wire Leads Assuring Best Possible Non-inductive Section.
- Controlled Dimensions Permit Use of Automatic Insertion Equipment for Installing Pacer Capacitors on Printed Wiring Boards.
- Pacers are Wound With Ultra-thin Polyester Film Dielectric and Thin Gage Foil Under Controlled Atmospheric Conditions.
- Entire Assembly Protected by Hard, Durable Orange Epoxy Coating. Rated for Operation from -55°C to $+85^{\circ}\text{C}$.
- Also Available in Klee-Paks. For Complete Technical Data, Refer to Latest Issue of Sprague Engineering Bulletin 2066.

| μF | D. | x | L. | Catalog Number | Net ea. (1-24) | μF | D. | x | L. | Catalog Number | Net ea. (1-24) |
|----------------------|------|---|----------------|----------------|-------------------|----------------------|------|---|----------------|----------------|-------------------|
| 200 VOLTS D-C | | | | | | 200 VOLTS D-C | | | | | |
| .001 | .138 | | $\frac{1}{16}$ | 192P10292 | \$.27 | .012 | .204 | | $\frac{1}{16}$ | 192P12392 | \$.30 |
| .0012 | .138 | | $\frac{1}{16}$ | 192P12292 | .27 | .015 | .204 | | $\frac{1}{16}$ | 192P15392 | .30 |
| .0015 | .138 | | $\frac{1}{16}$ | 192P15292 | .27 | .018 | .204 | | $\frac{1}{16}$ | 192P18392 | .30 |
| .0018 | .170 | | $\frac{1}{16}$ | 192P18292 | .27 | .022 | .204 | | $\frac{1}{16}$ | 192P22392 | .30 |
| .0022 | .170 | | $\frac{1}{16}$ | 192P22292 | .27 | .027 | .225 | | $\frac{1}{16}$ | 192P27392 | .33 |
| .0027 | .170 | | $\frac{1}{16}$ | 192P27292 | .27 | .033 | .225 | | $\frac{1}{16}$ | 192P33392 | .33 |
| .0033 | .170 | | $\frac{1}{16}$ | 192P33292 | .27 | .039 | .290 | | $\frac{1}{2}$ | 192P39392 | .36 |
| .0039 | .170 | | $\frac{1}{16}$ | 192P39292 | .27 | .047 | .290 | | $\frac{1}{2}$ | 192P47392 | .39 |
| .0047 | .170 | | $\frac{1}{16}$ | 192P47292 | .27 | .056 | .290 | | $\frac{3}{16}$ | 192P56392 | .39 |
| .0056 | .170 | | $\frac{1}{16}$ | 192P56292 | .27 | .068 | .290 | | $\frac{3}{16}$ | 192P68392 | .42 |
| .0068 | .170 | | $\frac{1}{16}$ | 192P68292 | .27 | .082 | .318 | | $\frac{3}{16}$ | 192P82392 | .45 |
| .0082 | .170 | | $\frac{1}{2}$ | 192P82292 | .30 | .1 | .318 | | $\frac{3}{16}$ | 192P10492 | .45 |
| .01 | .170 | | $\frac{1}{2}$ | 192P10392 | .30 | | | | | | |

TYPE 155P & 156P MOLDED METALLIZED PAPER CAPACITORS

Moderate Cost Approach to Commercial and Industrial Electronic Miniaturization

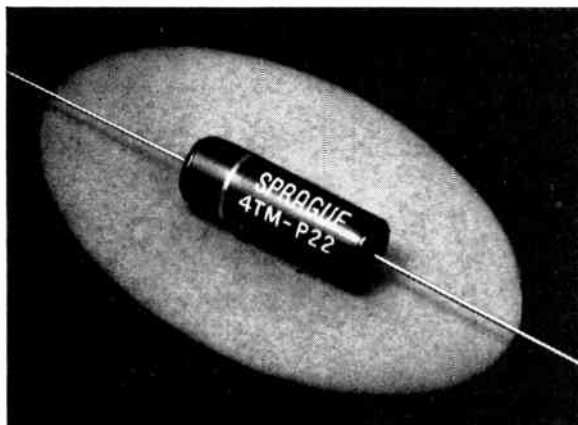
- Superior to Most Competitive Units—Will Withstand Tests of Twice-rated Voltage Providing Extra Safety Factor for the Equipment Designer.
- Superior to Paper-jacketed or Film-wrapped Metallized Capacitors Under Conditions of High Humidity. Useful in Low-noise Level Circuits—Self-generated Noise is Practically Non-existent.
- Type 155P are Molded in Case—Type 156P are in Premolded Cases, Sealed With Epoxy, Bonding Tightly to Lead and Case. Also Available in Klee-Paks. For Complete Technical Data, Refer to Latest Issue of Sprague Bulletin 2330.



| μF | D. | x | L. | Ordering Information | Net ea. (1-24) | μF | D. | x | L. | Ordering Information | Net ea. (1-24) | μF | D. | x | L. | Ordering Information | Net ea. (1-24) |
|----------------------|----------------|---|----------------|----------------------|-------------------|------------------------------|----------------|---|----------------|----------------------|-------------------|------------------------------|----------------|---|----------------|----------------------|-------------------|
| 200 VOLTS D-C | | | | | | 200 VOLTS D-C (Cont.) | | | | | | 400 VOLTS D-C (Cont.) | | | | | |
| .01 | $\frac{1}{16}$ | | 1 | 155P .01-200 | \$.42 | 7.0 | $\frac{3}{16}$ | | $2\frac{1}{2}$ | 156P 7.0-200 | \$3.33 | 1.0 | $\frac{3}{16}$ | | $2\frac{1}{4}$ | 156P 1.0-400 | \$1.29 |
| .015 | $\frac{1}{16}$ | | 1 | 155P .015-200 | .42 | 7.5 | $\frac{3}{16}$ | | $2\frac{1}{2}$ | 156P 7.5-200 | 3.51 | 1.5 | $\frac{7}{16}$ | | $2\frac{1}{2}$ | 156P 1.5-400 | 1.59 |
| .02 | $\frac{1}{16}$ | | 1 | 155P .02-200 | .42 | 8.0 | 1 | | $2\frac{1}{2}$ | 156P 8.0-200 | 3.75 | 2.0 | $\frac{7}{16}$ | | $2\frac{1}{2}$ | 156P 2.0-400 | 1.80 |
| .022 | $\frac{1}{16}$ | | 1 | 155P .022-200 | .42 | 8.5 | 1 | | $2\frac{1}{2}$ | 156P 8.5-200 | 3.90 | 2.5 | 1 | | $2\frac{1}{2}$ | 156P 2.5-400 | 2.25 |
| .03 | $\frac{1}{16}$ | | 1 | 155P .03-200 | .45 | 9.0 | 1 | | $2\frac{1}{2}$ | 156P 9.0-200 | 4.05 | | | | | | |
| .033 | $\frac{1}{16}$ | | 1 | 155P .033-200 | .45 | 9.5 | 1 | | $2\frac{1}{2}$ | 156P 9.5-200 | 4.20 | 600 VOLTS D-C | | | | | |
| .047 | $\frac{1}{16}$ | | 1 | 155P .047-200 | .45 | 400 VOLTS D-C | | | | | | .01 | $\frac{1}{16}$ | | 1 | 155P .01-600 | .45 |
| .05 | $\frac{1}{16}$ | | 1 | 155P .05-200 | .45 | .01 | $\frac{1}{16}$ | | 1 | 155P .01-400 | .42 | .015 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .015-600 | .45 |
| .068 | $\frac{1}{16}$ | | 1 | 155P .068-200 | .45 | .015 | $\frac{1}{16}$ | | 1 | 155P .015-400 | .42 | .02 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .02-600 | .45 |
| .1 | $\frac{1}{16}$ | | 1 | 155P .1-200 | .45 | .02 | $\frac{1}{16}$ | | 1 | 155P .02-400 | .42 | .022 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .022-600 | .45 |
| .15 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .15-200 | .45 | .022 | $\frac{1}{16}$ | | 1 | 155P .022-400 | .42 | .03 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .03-600 | .48 |
| .22 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .22-200 | .45 | .025 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .025-400 | .42 | .033 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .033-600 | .48 |
| .25 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .25-200 | .66 | .03 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .03-400 | .42 | .04 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .04-600 | .51 |
| .33 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .33-200 | .66 | .033 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .033-400 | .42 | .047 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .047-600 | .51 |
| .47 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .47-200 | .66 | .04 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .04-400 | .42 | .05 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .05-600 | .51 |
| .5 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P .5-200 | .78 | .047 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .047-400 | .42 | .06 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .06-600 | .51 |
| .68 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P .68-200 | .78 | .05 | $\frac{3}{16}$ | | $1\frac{1}{4}$ | 155P .05-400 | .45 | .068 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .068-600 | .51 |
| 1.0 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P 1.0-200 | 1.05 | .068 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .068-400 | .45 | .1 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P 1-600 | .57 |
| 1.5 | $\frac{5}{8}$ | | $1\frac{1}{2}$ | 155P 1.5-200 | 1.20 | .1 | $\frac{7}{16}$ | | $1\frac{1}{4}$ | 155P .1-400 | .51 | .15 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P .15-600 | .72 |
| 2.0 | $\frac{5}{8}$ | | $1\frac{1}{2}$ | 155P 2.0-200 | 1.41 | .15 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P .15-400 | .66 | .2 | $\frac{3}{8}$ | | $1\frac{1}{2}$ | 155P .2-600 | .90 |
| 2.5 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P 2.5-200 | 1.65 | .2 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P .2-400 | .69 | .22 | $\frac{3}{8}$ | | $1\frac{1}{2}$ | 155P .22-600 | .90 |
| 3.0 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P 3.0-200 | 1.80 | .22 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P .22-400 | .69 | .25 | $\frac{3}{8}$ | | $1\frac{1}{2}$ | 155P .25-600 | .90 |
| 3.5 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P 3.5-200 | 2.10 | .25 | $\frac{1}{2}$ | | $1\frac{1}{2}$ | 155P .25-400 | .72 | .33 | $\frac{3}{8}$ | | $1\frac{1}{2}$ | 155P .33-600 | .93 |
| 4.0 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P 4.0-200 | 2.22 | .33 | $\frac{5}{8}$ | | $1\frac{1}{2}$ | 155P .33-400 | .72 | .47 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P .47-600 | 1.14 |
| 4.5 | $\frac{7}{8}$ | | $2\frac{1}{2}$ | 156P 4.5-200 | 2.40 | .47 | $\frac{5}{8}$ | | $1\frac{1}{2}$ | 155P .47-400 | .90 | .5 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P .5-600 | 1.14 |
| 5.0 | $\frac{7}{8}$ | | $2\frac{1}{2}$ | 156P 5.0-200 | 2.55 | .5 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 155P .5-400 | .93 | .68 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P .68-600 | 1.14 |
| 5.5 | $\frac{7}{8}$ | | $2\frac{1}{2}$ | 156P 5.5-200 | 2.70 | .68 | $\frac{3}{4}$ | | $2\frac{1}{4}$ | 156P .68-400 | 1.05 | 1.0 | $\frac{7}{8}$ | | $2\frac{1}{2}$ | 156P 1.0-600 | 1.38 |
| 6.0 | $\frac{7}{8}$ | | $2\frac{1}{2}$ | 156P 6.0-200 | 3.00 | | | | | | | 1.5 | 1 | | $2\frac{1}{2}$ | 156P 1.5-600 | 1.89 |
| 6.5 | $\frac{7}{8}$ | | $2\frac{1}{2}$ | 156P 6.5-200 | 3.15 | | | | | | | | | | | | |

SPRAGUE CAPACITORS

DIFILM® BLACK BEAUTY® MOLDED TUBULARS



DUAL DIELECTRIC ULTRA-RELIABLE DUAL-MARKED
WINDING

ROCK-HARD LEAKPROOF TOUGH MOLDED
CONSTRUCTION HOUSING

LOOK FOR THE RED MARKINGS
ON THE BLACK CASE

- Developed Especially for Long Life Under High Humidity and Temperature Operating Conditions
- Dual Dielectric (film and paper) Combines Best Features of Both Polyester Film and Paper Capacitors
- Exclusive HCX® Solid Impregnant Construction Produces Rock-hard Capacitor Section
- Won't Leak or Drip

- No Derating for 105°C Operation
- Mica-filled, Non-flammable Molded Case. Won't Crack when Dropped; Soldering won't Harm it
- Every Capacitor Marked Twice. No Twisting the Case to Read Ratings
- Also Available in Handy Sprague Kleer-Pak®
- **Capacitance Tolerance:** ±10% from .001 μF up
Except 2TM-M1 = 20%

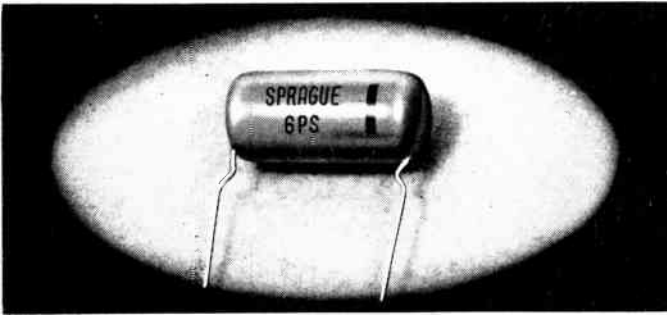
For Complete Technical Data, See Latest Sprague Engineering Bulletin 2025

The World's Best Molded Tubular at No Extra Cost!

| μF | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net | μF | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net | μF | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|-----------------|--------------|---------------------------|-------------------------|-------|-------------------------|--------------|---------------------------|-------------------------|-------|-------------------------|--------------|---------------------------|-------------------------|-------|
| 200 WVDC | | | | | 400 WVDC (Cont.) | | | | | 600 WVDC (Cont.) | | | | |
| .01 | 5/16 x 1 | 2TM-S10 | 160P10392 | \$.15 | .04 | 7/16 x 1 1/4 | 4TM-S40 | ..... | \$.18 | .0022 | 5/16 x 1 | 6TM-D22 | 160P22296 | \$.15 |
| .02 | 3/8 x 1 1/4 | 2TM-S20 | ..... | .15 | .047 | 7/16 x 1 1/4 | 4TM-S47 | 160P47394 | .18 | .0025 | 5/16 x 1 | 6TM-D25 | ..... | .15 |
| .022 | 3/8 x 1 1/4 | 2TM-S22 | 160P22392 | .15 | .05 | 7/16 x 1 1/4 | 4TM-S50 | ..... | .18 | .003 | 5/16 x 1 | 6TM-D30 | ..... | .15 |
| .047 | 7/16 x 1 1/4 | 2TM-S47 | 160P47392 | .15 | .068 | 1/2 x 1 1/2 | 4TM-S68 | 160P68394 | .21 | .0033 | 5/16 x 1 | 6TM-D33 | 160P33296 | .15 |
| .05 | 7/16 x 1 1/4 | 2TM-S50 | ..... | .15 | .1 | 1/2 x 1 1/2 | 4TM-P10 | 160P10494 | .21 | .004 | 3/8 x 1 1/4 | 6TM-D40 | ..... | .15 |
| .1 | 1/2 x 1 1/2 | 2TM-P10 | 160P10492 | .21 | .15 | 3/8 x 1 7/8 | 4TM-P15 | 160P15494 | .24 | .0047 | 3/8 x 1 1/4 | 6TM-D47 | 160P47296 | .15 |
| .15 | 1/2 x 1 1/2 | 2TM-P15 | 160P15492 | .21 | .2 | 5/8 x 1 7/8 | 4TM-P20 | ..... | .27 | .005 | 3/8 x 1 1/4 | 6TM-D50 | ..... | .15 |
| .22 | 5/8 x 1 7/8 | 2TM-P22 | 160P22492 | .24 | .22 | 5/8 x 1 7/8 | 4TM-P22 | 160P22494 | .27 | .006 | 3/8 x 1 1/2 | 6TM-D60 | ..... | .15 |
| .25 | 5/8 x 1 7/8 | 2TM-P25 | ..... | .24 | .25 | 3/4 x 2 1/4 | 4TM-P25 | ..... | .30 | .0068 | 3/8 x 1 1/4 | 6TM-D68 | 160P68296 | .18 |
| .47 | 3/4 x 2 1/4 | 2TM-P47 | 160P47492 | .36 | .47 | 3/4 x 2 1/4 | 4TM-P47 | 160P47494 | .45 | .008 | 3/8 x 1 1/4 | 6TM-D80 | ..... | .18 |
| .5 | 3/4 x 2 1/4 | 2TM-P50 | ..... | .36 | .5 | 3/4 x 2 1/4 | 4TM-P50 | ..... | .45 | .01 | 3/8 x 1 1/4 | 6TM-S10 | 160P10396 | .18 |
| 1.0 | 3/4 x 2 1/4 | 2TM-M1 | 160P10592 | .63 | 1.0 | 1 x 2 1/2 | 4TM-M1 | 160P10594 | .75 | .015 | 3/8 x 1 1/4 | 6TM-S15 | 160P15396 | .18 |
| 400 WVDC | | | | | 600 WVDC | | | | | | | | | |
| .001 | 5/16 x 1 | 4TM-D10 | 160P10294 | .15 | .0001 | 5/16 x 1 | 6TM-T10 | ..... | .15 | .022 | 7/16 x 1 1/4 | 6TM-S22 | 160P22396 | .18 |
| .005 | 5/16 x 1 | 4TM-D50 | ..... | .15 | .00025 | 5/16 x 1 | 6TM-T25 | ..... | .15 | .025 | 7/16 x 1 1/2 | 6TM-S25 | ..... | .18 |
| .01 | 3/8 x 1 1/4 | 4TM-S10 | 160P10394 | .15 | .0004 | 5/16 x 1 | 6TM-T40 | ..... | .15 | .03 | 7/16 x 1 1/4 | 6TM-S30 | ..... | .21 |
| .015 | 3/8 x 1 1/4 | 4TM-S15 | 160P15394 | .15 | .0005 | 5/16 x 1 | 6TM-T50 | ..... | .15 | .033 | 7/16 x 1 1/4 | 6TM-S33 | 160P33396 | .21 |
| .02 | 3/8 x 1 1/4 | 4TM-S20 | ..... | .15 | .001 | 5/16 x 1 | 6TM-D10 | 160P10296 | .15 | .035 | 7/16 x 1 1/4 | 6TM-S35 | ..... | .21 |
| .022 | 3/8 x 1 1/4 | 4TM-S22 | 160P22394 | .18 | .0015 | 5/16 x 1 | 6TM-D15 | 160P15296 | .15 | .04 | 1/2 x 1 1/2 | 6TM-S40 | ..... | .21 |
| .025 | 7/16 x 1 1/4 | 4TM-S25 | ..... | .18 | .002 | 5/16 x 1 | 6TM-D20 | ..... | .15 | .047 | 1/2 x 1 1/2 | 6TM-S47 | 160P47396 | .24 |
| .03 | 7/16 x 1 1/4 | 4TM-S30 | ..... | .18 | | | | | | | | | | |

SPRAGUE CAPACITORS

DIFILM[®] ORANGE DROP[®] DIPPED TUBULARS



- Especially Made for Exact, Original Replacement
- Dual Dielectric (Film-paper) Solidly Impregnated With Exclusive HCX[™]—Produces Rock-Hard Capacitor Section

- Outperforms Any Other Dipped Tubular Capacitor
- Crimped Wire Leads for Correct Spacing When Mounted On Printed Wiring Boards.
- Voltage Ratings From 200 VDC to 1000 VDC
- Outside Foil on All Units Identified by Black Stripping
- Double Dipped in Bright Orange Epoxy Resin—Beats Heat and Humidity
- Won't Leak or Drip
- Also Available in Handy Sprague Kleer-Pak[™] Boxes
- Write for Engineering Bulletin No. 2004

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|----------------------|--------------------------------------|---------------------------|-------------------------|-------|
| 200 VOLTS D-C | | | | |
| .02 | $\frac{3}{8} \times \frac{7}{8}$ | 2PS-S20 | ..... | \$.15 |
| .022 | $\frac{25}{64} \times \frac{7}{8}$ | 2PS-S22 | 220P22392 | .15 |
| .047 | $\frac{29}{64} \times \frac{7}{8}$ | 2PS-S47 | 220P47392 | .15 |
| .05 | $\frac{15}{32} \times \frac{7}{8}$ | 2PS-S50 | ..... | .15 |
| .1 | $\frac{31}{64} \times \frac{13}{16}$ | 2PS-P10 | 220P10492 | .21 |
| .15 | $\frac{9}{16} \times \frac{13}{16}$ | 2PS-P15 | 220P15492 | .21 |
| .2 | $\frac{19}{32} \times \frac{13}{16}$ | 2PS-P20 | ..... | .24 |
| .22 | $\frac{39}{64} \times \frac{13}{16}$ | 2PS-P22 | 220P22492 | .24 |
| .25 | $\frac{9}{8} \times \frac{13}{16}$ | 2PS-P25 | ..... | .24 |
| .33 | $\frac{5}{8} \times \frac{13}{8}$ | 2PS-P33 | 220P33492 | .30 |
| .47 | $\frac{45}{64} \times \frac{13}{8}$ | 2PS-P47 | 220P47492 | .36 |
| .5 | $\frac{23}{32} \times \frac{13}{8}$ | 2PS-P50 | ..... | .36 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|----------------------|--------------------------------------|---------------------------|-------------------------|-----|
| 400 VOLTS D-C | | | | |
| .01 | $\frac{13}{32} \times \frac{11}{16}$ | 4PS-S10 | 220P10394 | .15 |
| .015 | $\frac{29}{64} \times \frac{11}{16}$ | 4PS-S15 | 220P15394 | .15 |
| .02 | $\frac{13}{32} \times \frac{7}{8}$ | 4PS-S20 | ..... | .15 |
| .022 | $\frac{27}{64} \times \frac{7}{8}$ | 4PS-S22 | 220P22394 | .18 |
| .025 | $\frac{7}{16} \times \frac{7}{8}$ | 4PS-S25 | ..... | .18 |
| .03 | $\frac{29}{64} \times \frac{7}{8}$ | 4PS-S30 | ..... | .18 |
| .033 | $\frac{15}{32} \times \frac{7}{8}$ | 4PS-S33 | 220P33394 | .18 |
| .04 | $\frac{27}{64} \times \frac{13}{16}$ | 4PS-S40 | ..... | .18 |
| .047 | $\frac{29}{64} \times \frac{13}{16}$ | 4PS-S47 | 220P47394 | .18 |
| .05 | $\frac{29}{64} \times \frac{13}{16}$ | 4PS-S50 | ..... | .18 |
| .056 | $\frac{31}{64} \times \frac{13}{16}$ | 4PS-S56 | 220P56394 | .21 |
| .068 | $\frac{33}{64} \times \frac{13}{16}$ | 4PS-S68 | 220P68394 | .21 |
| .075 | $\frac{33}{64} \times \frac{13}{16}$ | 4PS-S75 | ..... | .21 |
| .1 | $\frac{37}{64} \times \frac{13}{16}$ | 4PS-P10 | 220P10494 | .21 |
| .15 | $\frac{39}{64} \times \frac{13}{16}$ | 4PS-P15 | 220P15494 | .24 |
| .2 | $\frac{19}{32} \times \frac{13}{8}$ | 4PS-P20 | ..... | .27 |
| .22 | $\frac{39}{64} \times \frac{13}{8}$ | 4PS-P22 | 220P22494 | .27 |
| .25 | $\frac{41}{64} \times \frac{13}{8}$ | 4PS-P25 | ..... | .30 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|----------------------|--------------------------------------|---------------------------|-------------------------|-----|
| 600 VOLTS D-C | | | | |
| .001 | $\frac{21}{64} \times \frac{11}{16}$ | 6PS-D10 | 220P10296 | .15 |
| .0012 | $\frac{21}{64} \times \frac{11}{16}$ | 6PS-D12 | 220P12296 | .15 |
| .0015 | $\frac{21}{64} \times \frac{11}{16}$ | 6PS-D15 | 220P15296 | .15 |
| .0018 | $\frac{21}{64} \times \frac{11}{16}$ | 6PS-D18 | 220P18296 | .15 |
| .002 | $\frac{21}{64} \times \frac{11}{16}$ | 6PS-D20 | ..... | .15 |
| .0022 | $\frac{21}{64} \times \frac{11}{16}$ | 6PS-D22 | 220P22296 | .15 |
| .0025 | $\frac{21}{64} \times \frac{11}{16}$ | 6PS-D25 | ..... | .15 |
| .0027 | $\frac{11}{32} \times \frac{11}{16}$ | 6PS-D27 | 220P27296 | .15 |
| .003 | $\frac{11}{32} \times \frac{11}{16}$ | 6PS-D30 | ..... | .15 |
| .0033 | $\frac{23}{64} \times \frac{11}{16}$ | 6PS-D33 | 220P33296 | .15 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|------------------------------|--------------------------------------|---------------------------|-------------------------|-------|
| 600 VOLTS D-C (cont.) | | | | |
| .0039 | $\frac{3}{8} \times \frac{11}{16}$ | 6PS-D39 | 220P39296 | \$.15 |
| .004 | $\frac{3}{8} \times \frac{11}{16}$ | 6PS-D40 | ..... | .15 |
| .0047 | $\frac{29}{64} \times \frac{11}{16}$ | 6PS-D47 | 220P47296 | .15 |
| .005 | $\frac{29}{64} \times \frac{11}{16}$ | 6PS-D50 | ..... | .15 |
| .0056 | $\frac{29}{64} \times \frac{11}{16}$ | 6PS-D56 | 220P56296 | .15 |
| .006 | $\frac{13}{32} \times \frac{11}{16}$ | 6PS-D60 | ..... | .15 |
| .0068 | $\frac{13}{32} \times \frac{11}{16}$ | 6PS-D68 | 220P68296 | .18 |
| .0075 | $\frac{29}{64} \times \frac{7}{8}$ | 6PS-D75 | ..... | .18 |
| .008 | $\frac{29}{64} \times \frac{7}{8}$ | 6PS-D80 | ..... | .18 |
| .0082 | $\frac{3}{8} \times \frac{7}{8}$ | 6PS-D82 | 220P82296 | .18 |
| .01 | $\frac{29}{64} \times \frac{7}{8}$ | 6PS-S10 | 220P10396 | .18 |
| .012 | $\frac{29}{64} \times \frac{7}{8}$ | 6PS-S12 | 220P12396 | .18 |
| .015 | $\frac{27}{64} \times \frac{7}{8}$ | 6PS-S15 | 220P15396 | .18 |
| .02 | $\frac{31}{64} \times \frac{7}{8}$ | 6PS-S20 | ..... | .18 |
| .022 | $\frac{31}{64} \times \frac{7}{8}$ | 6PS-S22 | 220P22396 | .18 |
| .025 | $\frac{17}{32} \times \frac{7}{8}$ | 6PS-S25 | ..... | .21 |
| .027 | $\frac{7}{16} \times \frac{13}{16}$ | 6PS-S27 | 220P27396 | .21 |
| .03 | $\frac{7}{16} \times \frac{13}{16}$ | 6PS-S30 | ..... | .21 |
| .033 | $\frac{15}{32} \times \frac{13}{16}$ | 6PS-S33 | 220P33396 | .21 |
| .035 | $\frac{15}{32} \times \frac{13}{16}$ | 6PS-S35 | ..... | .21 |
| .039 | $\frac{31}{64} \times \frac{13}{16}$ | 6PS-S39 | 220P39396 | .21 |
| .04 | $\frac{1}{2} \times \frac{13}{16}$ | 6PS-S40 | ..... | .21 |
| .047 | $\frac{17}{32} \times \frac{13}{16}$ | 6PS-S47 | 220P47396 | .24 |
| .05 | $\frac{17}{32} \times \frac{13}{16}$ | 6PS-S50 | ..... | .24 |
| .056 | $\frac{35}{64} \times \frac{13}{16}$ | 6PS-S56 | 220P56396 | .24 |
| .06 | $\frac{9}{16} \times \frac{13}{16}$ | 6PS-S60 | ..... | .24 |
| .068 | $\frac{37}{64} \times \frac{13}{16}$ | 6PS-S68 | 220P68396 | .27 |
| .075 | $\frac{9}{16} \times \frac{13}{16}$ | 6PS-S75 | ..... | .27 |
| .082 | $\frac{37}{64} \times \frac{13}{16}$ | 6PS-S82 | 220P82396 | .27 |
| .1 | $\frac{9}{8} \times \frac{13}{16}$ | 6PS-P10 | 220P10496 | .27 |
| .15 | $\frac{45}{64} \times \frac{13}{8}$ | 6PS-P15 | 220P15496 | .30 |
| .2 | $\frac{3}{4} \times \frac{13}{8}$ | 6PS-P20 | ..... | .39 |
| .22 | $\frac{23}{32} \times \frac{13}{8}$ | 6PS-P22 | 220P22496 | .42 |
| .25 | $\frac{13}{16} \times \frac{13}{8}$ | 6PS-P25 | ..... | .45 |

| μ F | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|-----------------------|--------------------------------------|---------------------------|-------------------------|-----|
| 1000 VOLTS D-C | | | | |
| .001 | $\frac{21}{64} \times \frac{11}{16}$ | 10PS-D10 | 220P102910 | .30 |
| .0015 | $\frac{11}{32} \times \frac{11}{16}$ | 10PS-D15 | 220P152910 | .30 |
| .002 | $\frac{3}{8} \times \frac{11}{16}$ | 10PS-D20 | ..... | .30 |
| .0022 | $\frac{3}{8} \times \frac{11}{16}$ | 10PS-D22 | 220P222910 | .30 |
| .003 | $\frac{11}{32} \times \frac{7}{8}$ | 10PS-D30 | ..... | .30 |
| .004 | $\frac{3}{8} \times \frac{7}{8}$ | 10PS-D40 | ..... | .30 |
| .0047 | $\frac{13}{32} \times \frac{7}{8}$ | 10PS-D47 | 220P472910 | .30 |
| .005 | $\frac{13}{32} \times \frac{7}{8}$ | 10PS-D50 | ..... | .30 |

SPRAGUE CAPACITORS

BF ISO FARAD® PLASTIC FILM CAPACITORS

For Applications Where the Best in Tubulars is None Too Good



- Isofarad Quality is a Must in Color TV Synchroguide Circuits, Horizontal and Vertical Oscillators, Bridge and Parallel T Circuits and Other Tuned Circuit Applications Requiring Close Tolerance and Zero Temperature Coefficient of Capacitance
- Superior to Silvered Mica Capacitors in Most Applications, Yet Considerably Less Expensive
- Constant Capacitance—Will Not Change More Than $\pm 0.5\%$ from Room Temperature to $+80^\circ\text{C}$ at Maximum Rated Voltage Will Withstand Operating Temperatures to 85°C (185°F)
- **Capacitance Tolerance: $\pm 5\%$**
- Also Available in Handy Sprague Kleer-Pak® Boxes
- For Complete Technical Data, See Latest Sprague Engineering Bulletin 2073

| μF | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net | μF | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|-----------------|------------------------------------|---------------------------|-------------------------|-------|-------------------------|-----------------------------------|---------------------------|-------------------------|-------|
| 500 WVDC | | | | | 500 WVDC (cont.) | | | | |
| .001 | $\frac{3}{8} \times 1$ | 5BF-D10 | 145P10255 | \$.45 | .022 | $\frac{1}{2} \times 1\frac{1}{2}$ | 5BF-S22 | 145P22355 | \$.90 |
| .0012 | $\frac{3}{8} \times 1$ | 5BF-D12 | 145P12255 | .45 | .027 | $\frac{3}{8} \times 1\frac{1}{8}$ | 5BF-S27 | 145P27355 | .90 |
| .0015 | $\frac{3}{8} \times 1$ | 5BF-D15 | 145P15255 | .45 | .033 | $\frac{3}{8} \times 1\frac{1}{8}$ | 5BF-S33 | 145P33355 | 1.08 |
| .0018 | $\frac{3}{8} \times 1$ | 5BF-D18 | 145P18255 | .45 | .039 | $\frac{3}{8} \times 1\frac{1}{8}$ | 5BF-S39 | 145P39355 | 1.08 |
| .0022 | $\frac{3}{8} \times 1$ | 5BF-D22 | 145P22255 | .45 | .047 | $\frac{3}{8} \times 1\frac{1}{8}$ | 5BF-S47 | 145P47355 | 1.26 |
| .0027 | $\frac{3}{8} \times 1$ | 5BF-D27 | 145P27255 | .45 | .056 | $\frac{3}{8} \times 1\frac{1}{8}$ | 5BF-S56 | 145P56355 | 1.26 |
| .0033 | $\frac{3}{8} \times 1$ | 5BF-D33 | 145P33255 | .45 | .068 | $\frac{3}{8} \times 1\frac{1}{8}$ | 5BF-S68 | 145P68355 | 1.59 |
| .0039 | $\frac{3}{8} \times 1$ | 5BF-D39 | 145P39255 | .48 | .082 | $\frac{3}{4} \times 1\frac{1}{4}$ | 5BF-S82 | 145P82355 | 2.16 |
| .0047 | $\frac{3}{8} \times 1$ | 5BF-D47 | 145P47255 | .48 | .1 | $\frac{3}{4} \times 2\frac{1}{4}$ | 5BF-P10 | 145P10455 | 2.16 |
| .0056 | $\frac{3}{8} \times 1\frac{1}{4}$ | 5BF-D56 | 145P56255 | .48 | .12 | $\frac{7}{8} \times 2\frac{1}{2}$ | 5BF-P12 | 145P12455 | 2.94 |
| .0068 | $\frac{3}{8} \times 1\frac{1}{4}$ | 5BF-D68 | 145P68255 | .48 | .15 | $\frac{7}{8} \times 2\frac{1}{2}$ | 5BF-P15 | 145P15455 | 2.94 |
| .0082 | $\frac{7}{16} \times 1\frac{1}{4}$ | 5BF-D82 | 145P82255 | .48 | .18 | $\frac{7}{8} \times 2\frac{1}{2}$ | 5BF-P18 | 145P18455 | 4.05 |
| .01 | $\frac{7}{16} \times 1\frac{1}{4}$ | 5BF-S10 | 145P10355 | .54 | .22 | $\frac{7}{8} \times 2\frac{1}{2}$ | 5BF-P22 | 145P22455 | 4.05 |
| .012 | $\frac{1}{2} \times 1\frac{1}{4}$ | 5BF-S12 | 145P12355 | .54 | .27 | $1 \times 2\frac{1}{2}$ | 5BF-P27 | 145P27455 | 4.95 |
| .015 | $\frac{1}{2} \times 1\frac{1}{4}$ | 5BF-S15 | 145P15355 | .75 | .33 | $1 \times 2\frac{1}{2}$ | 5BF-P33 | 145P33455 | 4.95 |
| .018 | $\frac{1}{2} \times 1\frac{1}{2}$ | 5BF-S18 | 145P18355 | .75 | | | | | |

WF YELLOW-JACKET® FILMITE® 'E' CAPACITORS

- Excellent for Use in Transistorized Circuits and Low-Voltage Electron Tube Circuits
- Extended Foil Type Sections, Wound from Selected, Ultra-Thin Polyester Film and Thin Gauge Foil
- Outer Plastic Film Wrap and Resin End Seals Protect Against Moisture and Humidity
- "Smaller Than Small" — These Capacitors Will Fit Anywhere
- Rated to 200 WVDC — Capacitance Tolerance: $\pm 10\%$
- Designed for Operation to 85°C (185°F)
- Available in Kleer-Pak® Boxes.



| μF | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net | μF | D. x L. | Sprague Products Cat. No. | Sprague O.E.M. Part No. | Net |
|-----------------|------------------------------------|---------------------------|-------------------------|-------|-------------------------|------------------------------------|---------------------------|-------------------------|-------|
| 200 WVDC | | | | | 200 WVDC (cont.) | | | | |
| .01 | $\frac{1}{8} \times \frac{1}{16}$ | 2WF-S10 | 148P10392 | \$.57 | .12 | $\frac{2}{16} \times \frac{1}{16}$ | 2WF-P12 | 148P12492 | \$.63 |
| .012 | $\frac{1}{8} \times \frac{1}{16}$ | 2WF-S12 | 148P12392 | .57 | .15 | $\frac{2}{16} \times \frac{1}{16}$ | 2WF-P15 | 148P15492 | .63 |
| .015 | $\frac{1}{8} \times \frac{1}{16}$ | 2WF-S15 | 148P15392 | .57 | .18 | $\frac{2}{16} \times \frac{1}{16}$ | 2WF-P18 | 148P18492 | .66 |
| .018 | $\frac{1}{8} \times \frac{1}{16}$ | 2WF-S18 | 148P18392 | .57 | .22 | $\frac{2}{16} \times \frac{1}{16}$ | 2WF-P22 | 148P22492 | .66 |
| .022 | $\frac{1}{8} \times \frac{1}{16}$ | 2WF-S22 | 148P22392 | .57 | .27 | $\frac{1}{16} \times \frac{1}{16}$ | 2WF-P27 | 148P27492 | .66 |
| .027 | $\frac{7}{32} \times \frac{1}{16}$ | 2WF-S27 | 148P27392 | .57 | .33 | $\frac{1}{16} \times \frac{1}{16}$ | 2WF-P33 | 148P33492 | .66 |
| .033 | $\frac{7}{32} \times \frac{1}{16}$ | 2WF-S33 | 148P33392 | .60 | .39 | $\frac{3}{16} \times \frac{1}{16}$ | 2WF-P39 | 148P39492 | .72 |
| .039 | $\frac{1}{4} \times \frac{1}{16}$ | 2WF-S39 | 148P39392 | .60 | .47 | $\frac{3}{16} \times \frac{1}{16}$ | 2WF-P47 | 148P47492 | .72 |
| .047 | $\frac{1}{4} \times \frac{1}{16}$ | 2WF-S47 | 148P47392 | .60 | .56 | $\frac{3}{16} \times \frac{1}{16}$ | 2WF-P56 | 148P56492 | .90 |
| .056 | $\frac{1}{4} \times \frac{1}{16}$ | 2WF-S56 | 148P56392 | .60 | .68 | $\frac{3}{16} \times \frac{1}{16}$ | 2WF-P68 | 148P68492 | .90 |
| .068 | $\frac{1}{4} \times \frac{1}{16}$ | 2WF-S68 | 148P68392 | .60 | .82 | $\frac{1}{16} \times \frac{1}{16}$ | 2WF-P82 | 148P82492 | .90 |
| .082 | $\frac{3}{16} \times \frac{1}{16}$ | 2WF-S82 | 148P82392 | .60 | 1.0 | $\frac{1}{16} \times \frac{1}{16}$ | 2WF-M1 | 148P10592 | .90 |
| .1 | $\frac{3}{16} \times \frac{1}{16}$ | 2WF-P10 | 148P10492 | .63 | | | | | |

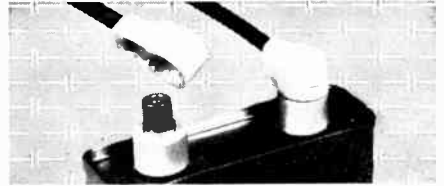
SPRAGUE CAPACITORS



TYPE CR RECTANGULAR OILS

- Hermetically sealed in Rugged Rectangular Metal Cans
- Oil-Impregnated and Oil-Filled
- Extremely High Insulation Resistance
- Will Withstand High Surge Voltages and High Ambient Temperatures
- Widely Used in Transmitter Power Supplies and Other High-Voltage Applications

- Furnished With Adapters (as shown below) to Fit Standard Transmitting Tube Plate Caps



| μF | WVDC | T. x W. x L. | Cat. No. | Net | μF | WVDC | T. x W. x L. | Cat. No. | Net |
|------|------|-----------------------|----------|--------|------|------|-----------------------|----------|---------|
| .5 | 600 | 1 1/8 x 1 1/8 x 2 1/4 | CR-056 | \$2.82 | 3.0 | 2000 | 1 1/4 x 3 3/4 x 4 3/4 | CR-32 | \$ 7.92 |
| 1.0 | 600 | 1 1/8 x 1 1/8 x 2 1/4 | CR-16 | 3.48 | 4.0 | 2000 | 2 1/4 x 3 3/4 x 3 3/8 | CR-42 | 9.09 |
| 2.0 | 600 | 1 1/8 x 1 1/8 x 2 1/4 | CR-26 | 4.29 | 6.0 | 2000 | 3 3/8 x 3 3/4 x 4 1/2 | CR-62 | 12.06 |
| 3.0 | 600 | 1 1/8 x 1 1/8 x 2 1/4 | CR-36 | 4.95 | 10.0 | 2000 | 4 3/8 x 3 3/4 x 4 3/4 | CR-102 | 18.33 |
| 4.0 | 600 | 1 3/8 x 2 1/2 x 3 1/2 | CR-46 | 5.46 | .1 | 2500 | 1 3/8 x 2 1/2 x 2 1/2 | CR-0125 | 6.09 |
| 6.0 | 600 | 1 3/8 x 2 1/2 x 4 3/4 | CR-66 | 6.78 | .5 | 2500 | 1 1/4 x 3 3/4 x 3 1/4 | CR-0525 | 6.93 |
| 8.0 | 600 | 1 1/4 x 3 3/4 x 3 3/8 | CR-86 | 8.10 | 1.0 | 2500 | 1 3/4 x 3 3/4 x 3 1/4 | CR-125 | 7.92 |
| 10.0 | 600 | 1 1/4 x 3 3/4 x 4 3/4 | CR-106 | 9.09 | 2.0 | 2500 | 1 3/4 x 3 3/4 x 4 3/4 | CR-225 | 12.87 |
| .1 | 1000 | 1 1/8 x 1 1/8 x 1 3/8 | CR-011 | 2.49 | 4.0 | 2500 | 4 3/8 x 3 3/4 x 4 3/8 | CR-425 | 18.00 |
| .25 | 1000 | 1 1/8 x 1 1/8 x 2 1/4 | CR-0251 | 2.82 | .1 | 3000 | 1 3/8 x 2 1/2 x 2 1/2 | CR-013 | 8.43 |
| .5 | 1000 | 1 1/8 x 1 1/8 x 2 1/4 | CR-051 | 2.97 | .25 | 3000 | 1 3/8 x 2 1/2 x 2 3/8 | CR-0253 | 8.91 |
| 1.0 | 1000 | 1 1/8 x 1 1/8 x 2 1/4 | CR-11 | 3.81 | .5 | 3000 | 1 3/8 x 2 1/2 x 4 1/4 | CR-053 | 10.08 |
| 2.0 | 1000 | 1 1/8 x 1 1/8 x 3 3/8 | CR-21 | 4.95 | 1.0 | 3000 | 2 1/4 x 3 3/4 x 3 3/8 | CR-13 | 12.06 |
| 4.0 | 1000 | 1 3/8 x 2 1/2 x 4 3/4 | CR-41 | 6.27 | 2.0 | 3000 | 3 3/8 x 3 3/4 x 4 1/2 | CR-23 | 15.03 |
| 8.0 | 1000 | 1 1/4 x 3 3/4 x 4 3/4 | CR-81 | 9.09 | 4.0 | 3000 | 4 3/8 x 3 3/4 x 4 3/4 | CR-43 | 22.11 |
| 10.0 | 1000 | 1 3/4 x 3 3/4 x 4 3/4 | CR-101 | 10.08 | .1 | 4000 | 2 1/4 x 3 3/4 x 2 3/4 | CR-014 | 10.80 |
| 12.0 | 1000 | 2 1/4 x 3 3/4 x 4 1/2 | CR-121 | 10.89 | .25 | 4000 | 2 1/4 x 3 3/4 x 2 3/4 | CR-0254 | 12.00 |
| 15.0 | 1000 | 2 1/2 x 3 3/4 x 4 3/4 | CR-151 | 12.06 | .5 | 4000 | 2 1/4 x 3 3/4 x 3 3/8 | CR-054 | 13.80 |
| .5 | 1500 | 1 1/8 x 1 1/8 x 2 3/8 | CR-0515 | 3.81 | 1.0 | 4000 | 2 1/4 x 3 3/4 x 5 1/8 | CR-14 | 17.40 |
| 1.0 | 1500 | 1 1/8 x 1 1/8 x 3 3/8 | CR-115 | 4.47 | 2.0 | 4000 | 4 3/8 x 3 3/4 x 5 1/8 | CR-24 | 23.40 |
| 2.0 | 1500 | 1 3/8 x 2 1/2 x 4 1/4 | CR-215 | 6.12 | .2 | 5000 | 1 3/4 x 3 3/4 x 3 3/8 | CR-025 | 12.00 |
| 4.0 | 1500 | 1 1/4 x 3 3/4 x 4 3/4 | CR-415 | 8.43 | .5 | 5000 | 2 1/4 x 3 3/4 x 4 1/2 | CR-055 | 15.00 |
| 5.0 | 1500 | 1 1/4 x 3 3/4 x 4 3/4 | CR-515 | 9.09 | 1.0 | 5000 | 4 3/8 x 3 3/4 x 4 3/8 | CR-15 | 20.40 |
| 8.0 | 1500 | 2 1/2 x 3 3/4 x 4 3/4 | CR-815 | 12.54 | 2.0 | 5000 | 4 3/8 x 3 3/4 x 6 | CR-25 | 31.20 |
| 10.0 | 1500 | 3 3/8 x 3 3/4 x 4 3/4 | CR-1015 | 15.03 | .1 | 6000 | 2 1/4 x 3 3/4 x 3 3/8 | CR-0160 | 16.20 |
| .1 | 2000 | 1 3/8 x 2 1/2 x 2 1/2 | CR-012 | 3.96 | .2 | 6000 | 1 3/4 x 3 3/4 x 4 1/4 | CR-0260 | 18.00 |
| .25 | 2000 | 1 3/8 x 2 1/2 x 2 1/2 | CR-0252 | 4.29 | 1.0 | 6000 | 4 3/8 x 3 3/4 x 7 1/2 | CR-160 | 29.40 |
| .5 | 2000 | 1 3/8 x 2 1/2 x 2 3/8 | CR-052 | 4.47 | .1 | 7500 | 2 1/4 x 3 3/4 x 3 3/8 | CR-0175 | 17.40 |
| 1.0 | 2000 | 1 3/8 x 2 1/2 x 3 1/2 | CR-12 | 5.46 | .2 | 7500 | 1 3/4 x 3 3/4 x 4 3/4 | CR-0275 | 19.80 |
| 2.0 | 2000 | 1 1/4 x 3 3/4 x 4 1/4 | CR-22 | 6.45 | | | | | |

SCREWBASE PC OILS



- Oil-Impregnated
- Oil-Filled
- Screwbase Can For Easy Single Hole Mounting
- Small Size — Will Fit Tight Spaces

| μF | WVDC | Diam. x Lgth. | Cat. No. | Net |
|-----|------|---------------|----------|--------|
| 2 | 600 | 1 1/2 x 2 7/8 | PC-26 | \$3.24 |
| 3 | 600 | 1 1/2 x 3 1/2 | PC-36 | 3.69 |
| 4 | 600 | 1 1/2 x 4 1/2 | PC-46 | 4.26 |
| 1 | 1000 | 1 1/2 x 2 3/8 | PC-11 | 3.00 |
| 2 | 1000 | 1 1/2 x 4 1/2 | PC-21 | 3.78 |
| 0.5 | 1500 | 1 1/2 x 2 3/8 | PC-515 | 3.51 |
| 1 | 1500 | 1 1/2 x 3 3/8 | PC-115 | 3.78 |

TYPE BP BATHTUB CAPACITORS

- For Applications Where Severe Operating Conditions Are Encountered
- Hermetically Sealed for Extra Protection
- Seamless Drawn Metal Can
- Oil-Filled and Oil-impregnated for Long, Dependable Service Life
- Convenient Mounting Ears are Integral Part of Metal Container

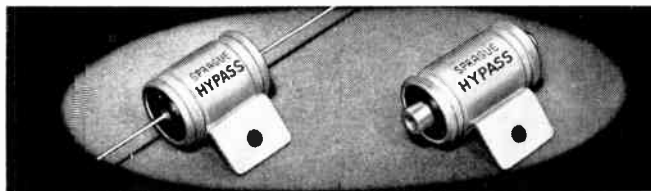


| μF | L. x W. x H. | Cat. No. | Net |
|-----------------|-------------------|----------|--------|
| 400 WVDC | | | |
| .1 | 1 1/8 x 1 x 3/4 | BP-1 | \$1.32 |
| .25 | 1 1/8 x 1 x 3/4 | BP-25 | 1.50 |
| .5 | 1 1/8 x 1 x 3/4 | BP-50 | 1.59 |
| 1.0 | 2 x 1 3/4 x 1 1/2 | BP-10 | 1.89 |
| .1 + .1 | 1 1/8 x 1 x 3/4 | BP-21 | 1.98 |
| .25 + .25 | 1 1/8 x 1 x 3/4 | BP-225 | 2.16 |
| .5 + .5 | 2 x 1 3/4 x 1 1/2 | BP-250 | 2.49 |
| .1 + .1 + .1 | 1 1/8 x 1 x 3/4 | BP-31 | 2.40 |
| 600 WVDC | | | |
| .05 | 1 1/8 x 1 x 3/4 | BP-56 | 1.74 |
| .1 | 1 1/8 x 1 x 3/4 | BP-16 | 1.77 |
| .25 | 1 1/8 x 1 x 3/4 | BP-256 | 1.86 |
| .5 | 1 1/8 x 1 x 3/4 | BP-506 | 1.98 |
| 1.0 | 2 x 1 3/4 x 1 1/2 | BP-106 | 2.25 |
| 2.0 | 2 x 2 x 1 1/2 | BP-206 | 3.00 |
| .05 + .05 | 1 1/8 x 1 x 3/4 | BP-2056 | 2.19 |

| μF | L. x W. x H. | Cat. No. | Net |
|------------------|-------------------|----------|--------|
| .1 + .1 | 1 1/8 x 1 x 3/4 | BP-216 | \$2.22 |
| .25 + .25 | 1 1/8 x 1 x 3/4 | BP-2256 | 2.25 |
| .5 + .5 | 2 x 1 3/4 x 1 1/2 | BP-2506 | 2.58 |
| 1.0 + 1.0 | 2 x 2 x 1 1/2 | BP-116 | 3.18 |
| .1 + .1 + .1 | 1 1/8 x 1 x 3/4 | BP-316 | 2.52 |
| .25 + .25 + .25 | 2 x 1 3/4 x 1 1/2 | B2-3256 | 2.85 |
| .5 + .5 + .5 | 2 x 2 x 1 1/2 | BP-356 | 3.45 |
| 1000 WVDC | | | |
| .05 | 1 1/8 x 1 x 3/4 | BP-51 | 1.83 |
| .1 | 1 1/8 x 1 x 3/4 | BP-11 | 1.89 |
| .25 | 1 1/8 x 1 x 3/4 | BP-251 | 1.95 |
| .5 | 2 x 1 3/4 x 1 1/2 | BP-501 | 2.13 |
| 1.0 | 2 x 2 x 1 1/2 | BP-101 | 2.64 |
| .05 + .05 | 1 1/8 x 1 x 3/4 | BP-2051 | 2.31 |
| .1 + .1 | 1 1/8 x 1 x 3/4 | BP-211 | 2.40 |
| .25 + .25 | 2 x 1 3/4 x 1 1/2 | BP-2251 | 2.52 |
| .5 + .5 | 2 x 2 x 1 1/2 | BP-2501 | 3.27 |
| .1 + .1 + .1 | 1 1/8 x 1 x 3/4 | BP-311 | 2.76 |
| .25 + .25 + .25 | 2 x 2 x 1 1/2 | BP-3251 | 3.30 |

SPRAGUE FILTERS

HYPASS[®] CAPACITORS



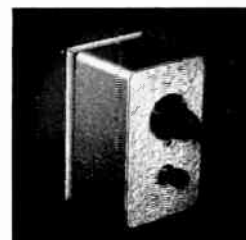
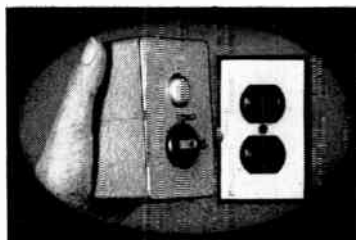
- Exclusive Sprague 3-terminal Network Feed-thru Capacitors
- Bypass V-H-F Currents Where Ordinary Capacitors are Ineffective
- Suppress TVI from Short-wave Transmitters, Diathermy Machines, Electronic Heating Apparatus, etc.
- Eliminate Interference caused by Line-conducted Radiation Between Neighboring TV Sets
- Install Leads in Series with Circuit Being Filtered and Ground the Case

| μF | Amps. | WVDC | Dia. x Length | Cat. No. | Net |
|------|-------|----------|--|----------|--------|
| .5 | 40 | 50 | 1 x 1 ¹³ / ₁₆ | *48P18 | \$2.28 |
| .25 | 20 | 200 | 3/4 x 1 ¹³ / ₁₆ | *48P10 | 1.56 |
| .5 | 20 | 200 | 1 x 1 ¹³ / ₁₆ | *48P14 | 1.89 |
| .1 | 20 | 250(VAC) | 1 ¹ / ₁₆ x 1 ¹³ / ₁₆ | *48P9 | 1.56 |
| .1 | 20 | 400 | 1 ¹ / ₁₆ x 1 ¹³ / ₁₆ | *48P6 | 1.53 |
| .1 | 20 | 400 | 1 ¹ / ₁₆ x 1 ¹³ / ₁₆ | †80P1 | 1.74 |
| .002 | 15 | 600 | 1/4 x 1 ³ / ₈ | 46P12 | 1.29 |
| .005 | 15 | 600 | 1/4 x 1 ³ / ₈ | 46P8 | 1.29 |
| .01 | 20 | 600 | 7/16 x 1 ¹ / ₄ | 47P6 | 1.41 |
| .02 | 20 | 600 | 7/16 x 1 ¹ / ₂ | 47P8 | 1.44 |
| .1 | 20 | 600 | 1 ¹ / ₁₆ x 1 ¹³ / ₁₆ | *48P8 | 1.56 |
| .1 | 20 | 600 | 1 ¹ / ₁₆ x 1 ¹³ / ₁₆ | *†80P3 | 1.77 |
| .25 | 20 | 600 | 1 x 1 ¹³ / ₁₆ | *48P12 | 1.65 |
| .5 | 20 | 600 | 1 x 2 ¹ / ₄ | *48P16 | 2.10 |
| .005 | 20 | 1000 | 7/16 x 1 ¹ / ₄ | 47P12 | 1.44 |
| .01 | 20 | 1000 | 7/16 x 1 ¹ / ₂ | 47P13 | 1.56 |
| .005 | 20 | 2500 | 1 x 1 ¹ / ₁₆ | 47P14 | 1.74 |
| .01 | 20 | 2500 | 1 x 1 ¹ / ₁₆ | 47P15 | 1.86 |
| .002 | 20 | 5000 | 1 x 1 ¹ / ₁₆ | 47P16 | 1.92 |

*Has female screw terminals

†Bulkhead mounting

TYPE F-400 MIRACLE FILTEROL[®]



A LINE FILTER THAT REALLY WORKS

- Effectively Suppresses Radio Interference by Filtering Power Lines of Receivers and Appliances
- Maximum Noise Eliminating Efficiency because of Practically Zero Length of Ground Lead
- Plugs into Standard Duplex Wall Outlet — Captive Screw Fastens Filterol F-400 to Outlet for Safe, Secure Mounting
- Direct Wall-Mounting Provides Neat Installation — No Unsightly Cord — Receiver or Appliance Plugs into Standard Outlet on Face of F-400,
- Will Also Operate at Slightly Reduced Efficiency in Older Homes where Wiring is of Knob and Tube or 2-Conductor Non-Metallic Sheathed Cable Type by Using the External Grounding Post Provided for this Purpose
- Handsomely Finished in Tan Hammerloid Baked Enamel
- Rated at 5 Amperes, 125 Volts AC or DC

TYPE F-400 FILTEROL \$7.45 net

TYPE IF FILTERS



IF-15 IF-11 IF-21 IF-S1 IF-37

IF-15 — TRIPLE-SECTION FILTER for small motor-operated devices such as fans, drills, etc. designed to prevent shocks from discharge of filter capacitors.

IF-11 — DUAL HIGH-CAPACITY FILTER designed for use on motors over 1 hp up to 220 volts ac-dc. Also used on high-current arcing devices.

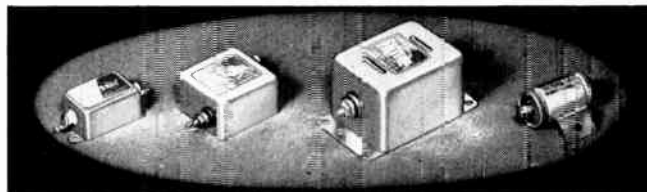
IF-21 — COMPACT DUAL FILTER for use on fractional horsepower motors with case grounded to motor frame. Also used across line terminals of motors.

IF-S1 — SINGLE SECTION 2-LEAD FILTER for use across make-and-break contacts, such as thermostats, circuit breakers, etc.

IF-37 — 3-SECTION DELTA-CONNECTED FILTER especially designed for fluorescent fixtures. Also used on governor-type motors. UL Approved.

| Cat. No. | Volts AC or DC | Dia. x Length | Net |
|----------|----------------|---|--------|
| IF-15 | 220 | 1 x 2 ³ / ₁₆ | \$1.56 |
| IF-11 | 220 | 1 ³ / ₈ x 5 ¹ / ₄ | 4.68 |
| IF-21 | 220 | 1 x 2 ³ / ₁₆ | 1.05 |
| IF-S1 | 220 | 3/4 x 2 ¹ / ₁₆ | 1.69 |
| IF-37 | 220 | 1 x 2" | 1.35 |

FILTEROL[®] FILTERS



FILTEROL 1 FILTEROL 2 FILTEROL 3 FILTEROL 4

Filterol Types 1, 2, and 3 — Designed for connection in series with power supply lines to interference-producing devices ... A 3-terminal network with the case as one terminal ... The selected filter should have a rating higher than the continuous operating current of the offending device ... A single Filterol connected to the high side of the line is usually sufficient ... In severe cases a Filterol in each leg of the power line may be necessary ... For three or four-wire systems, a Filterol in each wire is necessary.

Filterol Type 4 — A new, exclusive Sprague development incorporating a Sprague HYPASS[®] Capacitor ... Provides exceptionally high attenuation at frequencies above 5 megacycles ... Intended for small devices with continuous current ratings up to 20 amperes.

| Cat. No. | Amps. | Volts AC or DC | Size | Net |
|------------|-------|----------------|---|---------|
| Filterol 1 | 1 | 115 | 7/8 x 1 ¹ / ₄ x 1 ³ / ₄ | \$ 8.10 |
| Filterol 2 | 10 | 115 | 1 ¹ / ₈ x 2 x 2 | 8.88 |
| Filterol 3 | 35 | 115 | 1 ⁷ / ₈ x 2 ⁷ / ₈ x 2 ³ / ₈ | 16.44 |
| Filterol 4 | 20 | 115 | 1" dia. x 1 ¹³ / ₁₆ " long | 1.83 |

SPRAGUE CAPACITORS

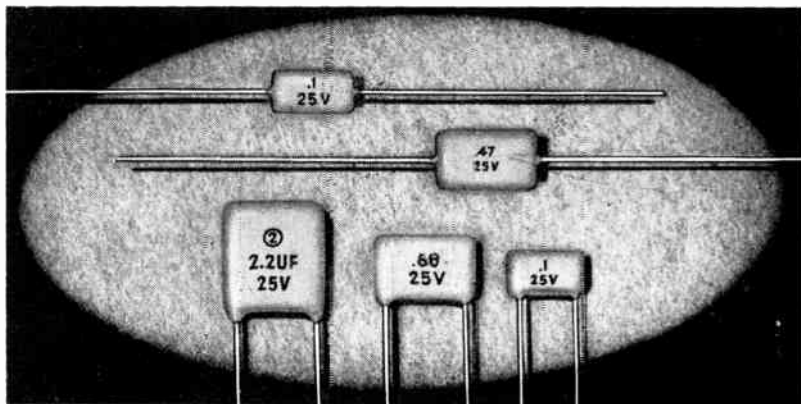
MONOLYTHIC[®] LAYER-BUILT CERAMIC CAPACITORS

Types 3C and 4C—Formulation N030

- Temperature Compensating Units, N030 Dielectric Offers Greater Capacitance Per Unit Volume and Greater Stability Than Previously Available.
- Highly Reliable, Small in Size, Axial or Radial Leads.
- Temperature Coefficient Guaranteed Less Than $\pm .6\%$ Between -55C and $+125\text{C}$.

Types 3C, 4C, 5C—Formulation C23

- High-K General Application—High Capacitances in Small Physical Size, Axial or Radial Leads.
- Well Suited for By-pass and Filtering Applications
- For Complete Technical Data, See Latest Sprague Engineering Bulletin 6212 (N030) or 6201 (C23)



Type 3C, 4C Monolythic Ceramic Capacitors—Formulation N030—Temperature Compensating—200 V

| μF | Tol. | Cat. No. | Net. Ea. (1-24) | μF | Tol. | Cat. No. | Net. Ea. (1-24) | μF | Tol. | Cat. No. | Net. Ea. (1-24) | μF | Tol. | Cat. No. | Net. Ea. (1-24) |
|-----------------------------|------|-----------|-----------------|---------------|------|-----------|-----------------|---------------|------|-----------|-----------------|---------------|------|-----------|-----------------|
| TYPE 3C AXIAL LEADS | | | | | | | | | | | | | | | |
| 51 | 5% | 3C5105BH1 | \$1.400 | 330 | 2% | 3C3312BH1 | \$2.920 | 220C | 10% | 4C2229BH1 | \$2.320 | 120 | 2% | 3C1212BH3 | \$2.560 |
| 51 | 2% | 3C5102BH1 | 2.440 | 360 | 5% | 3C3615BH1 | 1.900 | 2200 | 5% | 4C2225BH1 | 3.800 | 130 | 5% | 3C1315BH3 | 1.600 |
| 56 | 10% | 3C5609BH1 | .840 | 360 | 2% | 3C3612BH1 | 3.000 | 2200 | 2% | 4C2222BH1 | 6.520 | 130 | 2% | 3C1312BH3 | 2.560 |
| 56 | 5% | 3C5605BH1 | 1.400 | 390 | 10% | 3C3919BH1 | 1.200 | 2400 | 5% | 4C2425BH1 | 4.140 | 150 | 10% | 3C1519BH3 | 1.000 |
| 56 | 2% | 3C5602BH1 | 2.480 | 390 | 5% | 3C3915BH1 | 1.900 | 2400 | 2% | 4C2422BH1 | 6.800 | 150 | 5% | 3C1515BH3 | 1.600 |
| 62 | 5% | 3C6205BH1 | 1.400 | 390 | 2% | 3C3912BH1 | 3.000 | 2700 | 10% | 4C2729BH1 | 2.660 | 150 | 2% | 3C1512BH3 | 2.560 |
| 62 | 2% | 3C6202BH1 | 2.480 | 430 | 5% | 3C4315BH1 | 1.980 | 2700 | 5% | 4C2725BH1 | 4.140 | 160 | 5% | 3C1615BH3 | 1.600 |
| 68 | 10% | 3C6809BH1 | .840 | 430 | 2% | 3C4312BH1 | 3.040 | 3000 | 5% | 4C3025BH1 | 4.560 | 160 | 2% | 3C1612BH3 | 2.560 |
| 68 | 5% | 3C6805BH1 | 1.400 | 470 | 10% | 3C4719BH1 | 1.200 | 3000 | 2% | 4C3022BH1 | 7.440 | 180 | 10% | 3C1819BH3 | 1.020 |
| 68 | 2% | 3C6802BH1 | 2.480 | 470 | 5% | 3C4715BH1 | 1.980 | 3000 | 2% | 4C3022BH1 | 7.440 | 180 | 5% | 3C1815BH3 | 1.640 |
| 75 | 5% | 3C7505BH1 | 1.400 | 470 | 2% | 3C4712BH1 | 3.080 | 3300 | 10% | 4C3329BH1 | 2.760 | 180 | 2% | 3C1812BH3 | 2.560 |
| 75 | 2% | 3C7502BH1 | 2.480 | 510 | 5% | 3C5115BH1 | 1.980 | 3300 | 5% | 4C3325BH1 | 4.560 | 200 | 5% | 3C2015BH3 | 1.700 |
| 82 | 10% | 3C8209BH1 | .840 | 510 | 2% | 3C5112BH1 | 3.080 | 3300 | 2% | 4C3322BH1 | 7.720 | 200 | 2% | 3C2012BH3 | 2.560 |
| 82 | 5% | 3C8205BH1 | 1.400 | 560 | 10% | 3C5619BH1 | 1.200 | 3600 | 5% | 4C3625BH1 | 6.620 | 220 | 10% | 3C2219BH3 | 1.060 |
| 82 | 2% | 3C8202BH1 | 2.480 | 560 | 5% | 3C5615BH1 | 1.980 | 3600 | 2% | 4C3622BH1 | 8.240 | 220 | 5% | 3C2215BH3 | 1.740 |
| 91 | 5% | 3C9105BH1 | 1.400 | 560 | 2% | 3C5612BH1 | 3.080 | 3900 | 10% | 4C3929BH1 | 4.380 | 220 | 2% | 3C2212BH3 | 2.760 |
| 91 | 2% | 3C9102BH1 | 2.480 | 620 | 5% | 3C6215BH1 | 1.980 | 3900 | 5% | 4C3925BH1 | 6.620 | 240 | 5% | 3C2415BH3 | 1.740 |
| 100 | 10% | 3C1019BH1 | 1.080 | 620 | 2% | 3C6212BH1 | 3.240 | 3900 | 2% | 4C3922BH1 | 11.080 | 240 | 2% | 3C2412BH3 | 2.760 |
| 100 | 5% | 3C1015BH1 | 1.680 | 680 | 10% | 3C6819BH1 | 1.200 | 4300 | 5% | 4C4325BH1 | 7.240 | 270 | 10% | 3C2719BH3 | 1.120 |
| 100 | 2% | 3C1012BH1 | 2.480 | 680 | 5% | 3C6815BH1 | 1.980 | 4300 | 2% | 4C4322BH1 | 11.820 | 270 | 5% | 3C2715BH3 | 1.820 |
| 110 | 5% | 3C1115BH1 | 1.686 | 680 | 2% | 3C6812BH1 | 3.240 | 4700 | 10% | 4C4729BH1 | 4.380 | 270 | 2% | 3C2712BH3 | 2.840 |
| 110 | 2% | 3C1112BH1 | 2.640 | 750 | 5% | 3C7515BH1 | 2.040 | 4700 | 5% | 4C4725BH1 | 7.240 | 300 | 5% | 3C3015BH3 | 1.820 |
| 120 | 10% | 3C1219BH1 | 1.080 | 750 | 2% | 3C7512BH1 | 3.360 | 4700 | 2% | 4C4722BH1 | 12.260 | 300 | 2% | 3C3012BH3 | 2.840 |
| 120 | 5% | 3C1215BH1 | 1.686 | 820 | 10% | 4C8219BH1 | 1.320 | 5100 | 5% | 4C5125BH1 | 7.280 | 330 | 10% | 3C3319BH3 | 1.120 |
| 120 | 2% | 3C1212BH1 | 2.640 | 820 | 5% | 4C8215BH1 | 2.160 | 5100 | 2% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.820 |
| 130 | 5% | 3C1315BH1 | 1.686 | 820 | 2% | 4C8212BH1 | 3.520 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 130 | 2% | 3C1312BH1 | 2.640 | 820 | 2% | 4C8212BH1 | 3.520 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.820 |
| 150 | 10% | 3C1519BH1 | 1.080 | 910 | 5% | 4C9115BH1 | 2.240 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 150 | 5% | 3C1515BH1 | 1.686 | 910 | 2% | 4C9112BH1 | 3.680 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.820 |
| 150 | 2% | 3C1512BH1 | 2.640 | 1000 | 10% | 4C1029BH1 | 1.360 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 160 | 5% | 3C1615BH1 | 1.686 | 1000 | 5% | 4C1025BH1 | 2.240 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.820 |
| 160 | 2% | 3C1612BH1 | 2.640 | 1000 | 2% | 4C1022BH1 | 3.680 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 180 | 10% | 3C1819BH1 | 1.100 | 1100 | 5% | 4C1125BH1 | 2.340 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.820 |
| 180 | 5% | 3C1815BH1 | 1.720 | 1100 | 2% | 4C1122BH1 | 3.840 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 180 | 2% | 3C1812BH1 | 2.640 | 1200 | 10% | 4C1229BH1 | 1.480 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.820 |
| 200 | 5% | 3C2015BH1 | 1.780 | 1200 | 5% | 4C1225BH1 | 2.440 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 200 | 2% | 3C2012BH1 | 2.640 | 1200 | 2% | 4C1222BH1 | 4.000 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.820 |
| 220 | 10% | 3C2219BH1 | 1.140 | 1300 | 5% | 4C1325BH1 | 2.500 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 220 | 5% | 3C2215BH1 | 1.820 | 1300 | 2% | 4C1322BH1 | 4.100 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.900 |
| 220 | 2% | 3C2212BH1 | 2.840 | 1500 | 10% | 4C1529BH1 | 1.620 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 240 | 5% | 3C2415BH1 | 1.820 | 1500 | 5% | 4C1525BH1 | 2.680 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.900 |
| 240 | 2% | 3C2412BH1 | 2.840 | 1500 | 2% | 4C1522BH1 | 4.380 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 270 | 10% | 3C2719BH1 | 1.200 | 1600 | 5% | 4C1625BH1 | 2.780 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.900 |
| 270 | 5% | 3C2715BH1 | 1.900 | 1600 | 2% | 4C1622BH1 | 4.540 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 270 | 2% | 3C2712BH1 | 2.920 | 1800 | 10% | 4C1829BH1 | 1.880 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.900 |
| 300 | 5% | 3C3015BH1 | 1.900 | 1800 | 5% | 4C1825BH1 | 2.940 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 300 | 2% | 3C3012BH1 | 2.920 | 1800 | 2% | 4C1822BH1 | 4.800 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.900 |
| 330 | 10% | 3C3319BH1 | 1.200 | 2000 | 5% | 4C2025BH1 | 3.800 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 2% | 3C3312BH3 | 2.840 |
| 330 | 5% | 3C3315BH1 | 1.900 | 2000 | 2% | 4C2022BH1 | 6.260 | 5100 | 5% | 4C5122BH1 | 12.960 | 330 | 5% | 3C3315BH3 | 1.900 |
| TYPE 3C RADIAL LEADS | | | | | | | | | | | | | | | |
| 51 | 5% | 3C5105BH3 | 1.320 | 750 | 5% | 3C7505BH3 | 1.320 | 110 | 10% | 3C1019BH3 | 1.000 | 750 | 5% | 4C7515BH3 | 1.960 |
| 51 | 2% | 3C5102BH3 | 2.360 | 750 | 2% | 3C7502BH3 | 2.400 | 110 | 2% | 3C1112BH3 | 2.560 | 750 | 2% | 4C7512BH3 | 3.280 |
| 56 | 10% | 3C5609BH3 | .760 | 820 | 10% | 3C8209BH3 | .760 | 120 | 10% | 3C1219BH3 | 1.000 | 820 | 10% | 4C8219BH3 | 1.240 |
| 56 | 5% | 3C5605BH3 | 1.320 | 820 | 5% | 3C8205BH3 | 1.320 | 120 | 5% | 3C1215BH3 | 1.600 | 820 | 5% | 4C8215BH3 | 1.600 |
| 56 | 2% | 3C5602BH3 | 2.400 | 820 | 2% | 3C8202BH3 | 2.400 | 120 | 2% | 3C1212BH3 | 2.400 | 820 | 2% | 4C8212BH3 | 1.240 |
| 62 | 5% | 3C6205BH3 | 1.320 | 91 | 5% | 3C9105BH3 | 1.320 | 110 | 5% | 3C1115BH3 | 1.600 | 910 | 5% | 4C9115BH3 | 1.900 |
| 62 | 2% | 3C6202BH3 | 2.400 | 91 | 2% | 3C9102BH3 | 2.400 | 110 | 2% | 3C1112BH3 | 2.560 | 910 | 2% | 4C9112BH3 | 3.160 |
| 68 | 10% | 3C6809BH3 | .760 | 91 | 10% | 3C9109BH3 | .760 | 100 | 10% | 3C1015BH3 | 1.600 | 680 | 10% | 4C6819BH3 | 1.120 |
| 68 | 5% | 3C6805BH3 | 1.320 | 91 | 5% | 3C9105BH3 | 1.320 | 100 | 5% | 3C1015BH3 | 1.600 | 680 | 5% | 4C6815BH3 | 1.900 |
| 68 | 2% | 3C6802BH3 | 2.400 | 91 | 2% | 3C9102BH3 | 2.400 | 100 | 2% | 3C1012BH3 | 2.400 | 680 | 2% | 4C6812BH3 | 3.160 |
| 75 | 5% | 3C7505BH3 | 1.320 | 91 | 5% | 3C9105BH3 | 1.320 | 110 | 5% | 3C1115BH3 | 1.600 | 750 | 5% | 4C7515BH3 | 1.960 |
| 75 | 2% | 3C7502BH3 | 2.400 | 91 | 2% | 3C9102BH3 | 2.400 | 110 | 2% | 3C1112BH3 | 2.560 | 750 | 2% | 4C7512BH3 | 3.280 |
| 82 | 10% | 3C8209BH3 | .760 | 91 | 10% | 3C9109BH3 | .760 | 120 | 10% | 3C1219BH3 | 1.000 | 820 | 10% | 4C8219BH3 | 1.240 |
| 82 | 5% | 3C8205BH3 | 1.320 | 91 | 5% | 3C9105BH3 | 1.320 | 120 | 5% | 3C1215BH3 | 1.600 | 820 | 5% | 4C8215BH3 | 1.600 |
| 82 | 2% | 3C8202BH3 | 2.400 | 91 | 2% | 3C9102BH3 | 2.400 | 120 | 2% | 3C1212BH3 | 2.400 | 820 | 2% | 4C8212BH3 | 1.240 |
| TYPE 4C RADIAL LEADS | | | | | | | | | | | | | | | |
| 750 | 5% | 4C7515BH3 | 1.960 | 750 | 5% | 4C7515BH3 | 1.960 | 750 | 5% | 4C7515BH3 | 1.960 | 750 | 5% | 4C7515BH3 | 1.960 |
| 750 | 2% | 4C7512BH3 | 3.280 | 750 | 2% | 4C7512BH3 | 3.280 | 750 | 2% | 4C7512BH3 | 3.280 | 750 | 2% | 4C7512BH3 | 3.280 |

SPRAGUE CAPACITORS

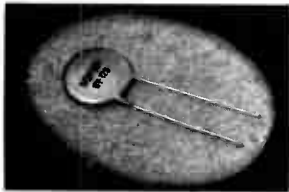
MONOLYTHIC[®] CERAMIC CAPACITORS, TYPE 4C RADIAL LEADS (Cont.)

| μ F | Tol. | Cat. No. | Net. Ea. (1-24) | μ F | Tol. | Cat. No. | Net. Ea. (1-24) | μ F | Tol. | Cat. No. | Net. Ea. (1-24) | μ F | Tol. | Cat. No. | Net. Ea. (1-24) |
|---------|------|-----------|--------------------|---------|------|-----------|--------------------|---------|------|-----------|--------------------|---------|------|-----------|--------------------|
| 820 | 5% | 4C8215BH3 | \$2.080 | 1300 | 5% | 4C1325BH3 | \$2.420 | 2200 | 10% | 4C2229BH3 | \$2.240 | 3300 | 2% | 4C3322BH3 | \$7.640 |
| 820 | 2% | 4C8212BH3 | 3.440 | 1300 | 2% | 4C1322BH3 | 4.020 | 2200 | 5% | 4C2225BH3 | 3.720 | 3600 | 5% | 4C3625BH3 | 6.540 |
| 910 | 5% | 4C9115BH3 | 2.160 | 1500 | 10% | 4C1529BH3 | 1.540 | 2200 | 2% | 4C2222BH3 | 6.440 | 3600 | 2% | 4C3622BH3 | 8.160 |
| 910 | 2% | 4C9112BH3 | 3.600 | 1500 | 5% | 4C1525BH3 | 2.600 | 2400 | 5% | 4C2425BH3 | 4.060 | 3900 | 10% | 4C3929BH3 | 4.300 |
| 1000 | 10% | 4C1029BH3 | 1.280 | 1500 | 2% | 4C1522BH3 | 4.300 | 2400 | 2% | 4C2422BH3 | 6.720 | 3900 | 5% | 4C3925BH3 | 6.540 |
| 1030 | 5% | 4C1025BH3 | 2.160 | 1600 | 5% | 4C1625BH3 | 2.700 | 2700 | 10% | 4C2729BH3 | 2.580 | 3900 | 2% | 4C3922BH3 | 11.000 |
| 1000 | 2% | 4C1022BH3 | 3.600 | 1600 | 2% | 4C1622BH3 | 4.460 | 2700 | 5% | 4C2725BH3 | 4.060 | 4300 | 5% | 4C4325BH3 | 7.160 |
| 1100 | 5% | 4C1125BH3 | 2.260 | 1800 | 10% | 4C1829BH3 | 1.800 | 2700 | 2% | 4C2722BH3 | 6.900 | 4300 | 2% | 4C4322BH3 | 11.740 |
| 1100 | 2% | 4C1122BH3 | 3.760 | 1800 | 5% | 4C1825BH3 | 2.860 | 3000 | 5% | 4C3025BH3 | 4.480 | 4700 | 10% | 4C4729BH3 | 4.300 |
| 1200 | 10% | 4C1229BH3 | 1.400 | 1800 | 2% | 4C1822BH3 | 4.720 | 3000 | 2% | 4C3022BH3 | 7.360 | 4700 | 5% | 4C4725BH3 | 7.160 |
| 1200 | 5% | 4C1225BH3 | 2.360 | 2000 | 5% | 4C2025BH3 | 3.720 | 3300 | 10% | 4C3329BH3 | 2.680 | 4700 | 2% | 4C4722BH3 | 12.180 |
| 1200 | 2% | 4C1222BH3 | 3.920 | 2000 | 2% | 4C2022BH3 | 6.180 | 3300 | 5% | 4C3325BH3 | 4.480 | 5100 | 5% | 4C5125BH3 | 7.200 |
| | | | | | | | | | | | | 5100 | 2% | 4C5122BH3 | 12.880 |

TYPE 3C, 4C, 5C Monolythic Ceramic Capacitors—High-K Formulation C23 $\pm 20\%$ Cap. Tol.

| μ F | VDC | Cat. No. | Net Ea. (1-24) | μ F | VDC | Cat. No. | Net Ea. (1-24) | μ F | VDC | Cat. No. | Net Ea. (1-24) | μ F | VDC | Cat. No. | Net Ea. (1-24) |
|---------------------|-----|----------|-------------------|---------|-----|----------|-------------------|--------------------|-----|----------|-------------------|---------|-----|----------|-------------------|
| RADIAL LEADS | | | | | | | | | | | | | | | |
| .01 | 25 | 3C3 | \$1.740 | .47 | 25 | 4C47 | \$4.064 | .15 | 50 | 5C51 | \$1.200 | .033 | 25 | 3C10 | \$1.820 |
| .015 | 25 | 3C6 | 1.740 | .68 | 25 | 4C50 | 5.136 | .22 | 50 | 5C52 | 1.380 | .047 | 25 | 3C13 | 1.820 |
| .022 | 25 | 3C9 | 1.740 | .1 | 25 | 5C7 | .800 | .33 | 50 | 5C53 | 2.000 | .068 | 25 | 3C16 | 1.920 |
| .033 | 25 | 3C12 | 1.740 | .15 | 25 | 5C8 | .920 | .47 | 50 | 5C54 | 2.520 | .1 | 25 | 3C19 | 2.000 |
| .047 | 25 | 3C15 | 1.740 | .22 | 25 | 5C9 | 1.060 | AXIAL LEADS | | | | .15 | 25 | 4C36 | 2.260 |
| .068 | 25 | 3C18 | 1.840 | .33 | 25 | 5C10 | 1.200 | .01 | 25 | 3C1 | 1.820 | .22 | 25 | 4C39 | 2.460 |
| .1 | 25 | 3C21 | 1.920 | .47 | 25 | 5C11 | 1.380 | .015 | 25 | 3C4 | 1.820 | .33 | 25 | 4C42 | 3.100 |
| .15 | 25 | 4C38 | 2.180 | .68 | 25 | 5C12 | 1.480 | | | | | | | | |
| .22 | 25 | 4C41 | 2.380 | 1.0 | 25 | 5C13 | 1.960 | | | | | | | | |
| .33 | 25 | 4C44 | 3.020 | 1.5 | 25 | 5C14 | 2.520 | | | | | | | | |
| | | | | 2.2 | 25 | 5C15 | 3.020 | | | | | | | | |
| | | | | .1 | 50 | 5C50 | 1.060 | | | | | | | | |

HYPERCON[®] CERAMIC DISCS



- Ultra-miniature Ceramic Discs Ideal for use in Transistorized Circuitry
- Superior to Electrolytic Capacitors of Similar Capacitance Values because of the Very Low Power Factor of Hypercons
- Designed for By-pass and Coupling Applications but Particularly Well-suited for any Low Voltage use Where High Capacitance and Low Power Factor are Important Considerations
- Tolerance: 3 Volt Series; GMV; 12 Volt Series, $\pm 80 - 20\%$

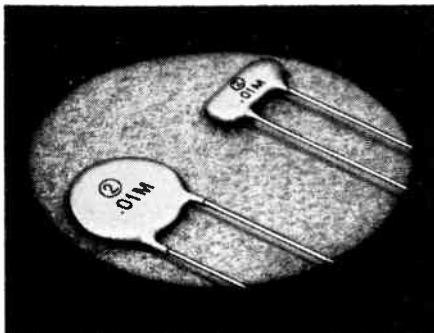
| μ F | Cat. No. | Net Ea. |
|---------------------|----------|---------|
| 3 VOLTS D-C | | |
| .1 | HY-120 | \$.54 |
| .22 | HY-125 | .33 |
| .47 | HY-130 | .33 |
| 1.0 | HY-135 | .45 |
| 2.2 | HY-150 | .54 |
| 12 VOLTS D-C | | |
| .047 | HY-310 | .33 |
| .1 | HY-320 | .33 |
| .22 | HY-325 | .45 |
| .33 | HY-327 | .48 |
| .47 | HY-330 | .54 |

SPECIAL APPLICATION CERA-MITE[®] DISC CAPACITORS

| AC APPLICATIONS | | | BUFFER APPLICATIONS | | | MINIATURIZED DISCS | | | TV YOKE CAPACITORS | | | |
|--|-----------|-------|--|----------|-------|---|-------|----------|--|---------|------------|-------|
| <ul style="list-style-type: none"> • Rated at 125 VAC • Std. Tolerance $\pm 20\%$ • For AC Line Bypass Application Meets Underwriters Laboratory Requirements. Unlike Standard DC Rated Discs. | | | <ul style="list-style-type: none"> • Rated at 2000 WVDC • Std. Tolerance $\pm 20\%$ | | | <ul style="list-style-type: none"> • High-K Type for Coupling and Bypass | | | <ul style="list-style-type: none"> • 30 TCY rated at 3000 WVDC • 50 TCY rated at 5000 WVDC • Std. Tolerance $\pm 10\%$ | | | |
| μ F | Cat. No. | Net | μ F | Cat. No. | Net | μ F | Volts | Cat. No. | Net | μ F | Cat. No. | Net |
| .001 | 125L-D10 | \$.15 | .001 | BL-D10 | \$.21 | .005 | 50 | TG-D50 | \$.27 | 50 | 30TCY-Q50 | \$.24 |
| .0015 | 125L-D15 | .15 | .002 | BL-D20 | .21 | .01 | 50 | TG-S10 | .39 | 75 | 30TCY-Q75 | .24 |
| .002 | 125L-D20 | .15 | .003 | BL-D30 | .21 | .02 | 50 | TG-S20 | .39 | 100 | 30TCY-T10 | .24 |
| .0047 | 125L-D47 | .18 | .004 | BL-D40 | .21 | .025 | 50 | TG-S25 | .39 | 135 | 30TCY-T135 | .24 |
| .005 | 125L-D50 | .18 | .005 | BL-D50 | .21 | .03 | 50 | TG-S30 | .39 | 150 | 30TCY-T15 | .24 |
| .01 | 125L-S10 | .18 | .006 | BL-D60 | .21 | .05 | 50 | TG-S50 | .42 | 180 | 30TCY-T18 | .24 |
| .015 | 125L-S15 | .30 | .007 | BL-D70 | .21 | .1 | 50 | TG-P10 | .54 | 50 | 50TCY-Q50 | .30 |
| .02 | 125L-S20 | .30 | .0075 | BL-D75 | .21 | .005 | 100 | TH-D50 | .27 | 75 | 50TCY-Q75 | .30 |
| 2 x .005 | 125L-2D50 | .30 | .008 | BL-D80 | .21 | .01 | 100 | TH-S10 | .39 | 100 | 50TCY-T10 | .30 |
| 2 x .01 | 125L-2S10 | .33 | .01 | BL-S10 | .21 | .02 | 100 | TH-S20 | .39 | 135 | 50TCY-T135 | .30 |
| | | | | | | .025 | 100 | TH-S25 | .39 | 150 | 50TCY-T15 | .30 |
| | | | | | | .03 | 100 | TH-S30 | .39 | 180 | 50TCY-T18 | .30 |
| | | | | | | .05 | 100 | TH-S50 | .42 | | | |
| | | | | | | .1 | 100 | TH-P10 | .54 | | | |

SPRAGUE CAPACITORS

CERA-MITE[®] CERAMIC CAPACITORS



- Tiny, Tough, Dependable In Every Application
- Low Self-Inductance Of Silvered Flat-plate Design Means Very High By-pass Efficiency In All TV Circuits
- Flat-plate Construction Permits Higher Self-resonant Frequency Than Tubular Ceramic Or Molded Mica Capacitors
- Tough Moisture-proof Coating Protects Against Short-circuiting And Assures Good Performance Under Severe Conditions Of Humidity And Vibration
- Cera-mite Capacitors Easily Fit Into Tight Spaces, Even Across Subminiature Tube Sockets
- Designed For 85°C (185°F) Continuous Operation

GENERAL APPLICATION TYPES

- Excellent Where Temperature Coefficient Is Not Important, Such As By-pass and Coupling Applications
- Ideal For Replacing Older Types Of General Application Capacitors Such as Molded Micacs, Tubular Ceramics, etc.

| μF | Cat. No. | Net | μF | Cat. No. | Net | μF | Cat. No. | Net | μF | Cat. No. | Net | μF | Cat. No. | Net |
|--|----------|-----|---------------|----------|-------|--|-----------|-------|--|----------|-------|---|----------|-------|
| 500 WVDC (plates) Std. Tolerance: $\pm 20\%$ | | | 220 | 5GA-T22 | \$.15 | 3000 WVDC (discs) Standard Tolerances: 1.5 $\mu\text{F} \pm .25 \mu\text{F}$ thru 5 $\mu\text{F} \pm .5 \mu\text{F}$ thru 68 $\mu\text{F} \pm 10\%$ thru .002 $\mu\text{F} \pm 20\%$ | | | 500 | 30GA-T50 | \$.24 | 75 | 60GA-Q75 | \$.30 |
| .001 | 5GAB-D10 | .21 | 240 | 5GA-T24 | .15 | 1.5 | 30GA-V15 | \$.24 | 560 | 30GA-T56 | .24 | 82 | 60GA-Q82 | .30 |
| .0022 | 5GAB-D22 | .27 | 250 | 5GA-T25 | .15 | 3.3 | 30GA-V33 | .24 | 680 | 30GA-T68 | .24 | 100 | 60GA-T10 | .30 |
| .0047 | 5GAB-D47 | .27 | 270 | 5GA-T27 | .15 | 4.7 | 30GA-V47 | .24 | 750 | 30GA-T75 | .24 | 120 | 60GA-T12 | .30 |
| .01 | 5GAB-S10 | .39 | 300 | 5GA-T30 | .15 | 5 | 30GA-V50 | .24 | 820 | 30GA-T82 | .24 | 150 | 60GA-T15 | .30 |
| .022 | 5GAB-S22 | .39 | 330 | 5GA-T33 | .15 | 6 | 30GA-V60 | .24 | .001 | 30GA-D10 | .24 | 180 | 60GA-T18 | .30 |
| .047 | 5GAB-S47 | .42 | 350 | 5GA-T35 | .15 | 6.8 | 30GA-V68 | .24 | .0012 | 30GA-D12 | .24 | 200 | 60GA-T20 | .30 |
| .1 | 5GAB-P10 | .45 | 360 | 5GA-T36 | .15 | 7.5 | 30GA-V75 | .24 | .0015 | 30GA-D15 | .24 | 220 | 60GA-T22 | .30 |
| .15 | 5GAB-P15 | .48 | 390 | 5GA-T39 | .15 | 8.2 | 30GA-V82 | .24 | .002 | 30GA-D20 | .24 | 250 | 60GA-T25 | .33 |
| 1000 WVDC (discs) Std. Tolerance: $\pm 20\%$ | | | 400 | 5GA-T40 | .15 | 10 | 30GA-V80 | .24 | .0022 | 30GA-D22 | .24 | 270 | 60GA-T27 | .33 |
| 5 | 5GA-V50 | .15 | 470 | 5GA-T47 | .15 | 12 | 30GA-V12 | .24 | .0025 | 30GA-D25 | .24 | 300 | 60GA-T30 | .33 |
| 6 | 5GA-V60 | .15 | 500 | 5GA-T50 | .15 | 15 | 30GA-V15 | .24 | .0027 | 30GA-D27 | .24 | 330 | 60GA-T33 | .33 |
| 7.5 | 5GA-V75 | .15 | 560 | 5GA-T56 | .15 | 18 | 30GA-V18 | .24 | .003 | 30GA-D30 | .24 | 390 | 60GA-T39 | .33 |
| 8 | 5GA-V80 | .15 | 600 | 5GA-T60 | .15 | 20 | 30GA-V20 | .24 | .0033 | 30GA-D33 | .24 | 400 | 60GA-T40 | .33 |
| 10 | 5GA-Q10 | .15 | 680 | 5GA-T68 | .15 | 22 | 30GA-V22 | .24 | .0039 | 30GA-D39 | .24 | 470 | 60GA-T47 | .33 |
| 12 | 5GA-Q12 | .15 | 750 | 5GA-T75 | .15 | 25 | 30GA-V25 | .24 | .004 | 30GA-D40 | .24 | 500 | 60GA-T50 | .33 |
| 15 | 5GA-Q15 | .15 | 800 | 5GA-T80 | .15 | 27 | 30GA-V27 | .24 | .0047 | 30GA-D47 | .24 | 560 | 60GA-T56 | .33 |
| 18 | 5GA-Q18 | .15 | 820 | 5GA-T82 | .15 | 30 | 30GA-V30 | .24 | .005 | 30GA-D50 | .27 | 680 | 60GA-T68 | .33 |
| 20 | 5GA-Q20 | .15 | .001 | 5GA-D10 | .15 | 33 | 30GA-V33 | .24 | .006 | 30GA-D60 | .27 | 750 | 60GA-T75 | .33 |
| 22 | 5GA-Q22 | .15 | .0012 | 5GA-D12 | .15 | 39 | 30GA-V39 | .24 | .0068 | 30GA-D68 | .27 | 820 | 60GA-T82 | .33 |
| 25 | 5GA-Q25 | .15 | .0013 | 5GA-D13 | .15 | 47 | 30GA-V47 | .24 | .008 | 30GA-D80 | .27 | .001 | 60GA-D10 | .36 |
| 27 | 5GA-Q27 | .15 | .0015 | 5GA-D15 | .15 | 50 | 30GA-V50 | .24 | .0082 | 30GA-D82 | .27 | .0012 | 60GA-D12 | .36 |
| 30 | 5GA-Q30 | .15 | .0016 | 5GA-D16 | .15 | 56 | 30GA-V56 | .24 | .01 | 30GA-S10 | .27 | .0015 | 60GA-D15 | .36 |
| 33 | 5GA-Q33 | .15 | .0018 | 5GA-D18 | .15 | 60 | 30GA-V60 | .24 | 6000 WVDC (discs) Standard Tolerance: $\pm 20\%$ | | | .0022 | 60GA-D22 | .36 |
| 39 | 5GA-Q39 | .15 | .002 | 5GA-D20 | .15 | 68 | 30GA-V68 | .24 | 1.5 | 60GA-V15 | .30 | 7500 WVDC (discs) Standard Tolerances: 4.7 $\mu\text{F} \pm .5 \mu\text{F}$ thru 18 $\mu\text{F} \pm 10\%$ thru 470 $\mu\text{F} \pm 20\%$ | | |
| 47 | 5GA-Q47 | .15 | .0022 | 5GA-D22 | .15 | 75 | 30GA-V75 | .24 | 4.7 | 60GA-V47 | .30 | 4.7 | 75GA-V47 | .30 |
| 50 | 5GA-Q50 | .15 | .0025 | 5GA-D25 | .15 | 82 | 30GA-V82 | .24 | 6.8 | 60GA-V68 | .30 | 8.2 | 75GA-V82 | .30 |
| 56 | 5GA-Q56 | .15 | .0027 | 5GA-D27 | .15 | 100 | 30GA-V100 | .24 | 8.2 | 60GA-V82 | .30 | 10 | 75GA-Q10 | .30 |
| 68 | 5GA-Q68 | .15 | .003 | 5GA-D30 | .15 | 120 | 30GA-V120 | .24 | 10 | 60GA-Q10 | .30 | 12 | 75GA-Q12 | .30 |
| 75 | 5GA-Q75 | .15 | .0033 | 5GA-D33 | .15 | 150 | 30GA-V150 | .24 | 12 | 60GA-Q12 | .30 | 15 | 75GA-Q15 | .30 |
| 82 | 5GA-Q82 | .15 | .0039 | 5GA-D39 | .15 | 180 | 30GA-V180 | .24 | 15 | 60GA-Q15 | .30 | 18 | 75GA-Q18 | .30 |
| 91 | 5GA-Q91 | .15 | .004 | 5GA-D40 | .15 | 200 | 30GA-V200 | .24 | 18 | 60GA-Q18 | .30 | 20 | 75GA-Q20 | .30 |
| 100 | 5GA-T10 | .15 | .0043 | 5GA-D43 | .18 | 220 | 30GA-V220 | .24 | 20 | 60GA-Q20 | .30 | 22 | 75GA-Q22 | .30 |
| 120 | 5GA-T12 | .15 | .0047 | 5GA-D47 | .18 | 250 | 30GA-V250 | .24 | 22 | 60GA-Q22 | .30 | 30 | 75GA-Q30 | .30 |
| 130 | 5GA-T13 | .15 | .005 | 5GA-D50 | .18 | 270 | 30GA-V270 | .24 | 25 | 60GA-Q25 | .30 | 33 | 75GA-Q33 | .30 |
| 150 | 5GA-T15 | .15 | .01 | 5GA-S10 | .18 | 300 | 30GA-V300 | .24 | 27 | 60GA-Q27 | .30 | 39 | 75GA-Q39 | .30 |
| 180 | 5GA-T18 | .15 | .015 | 5GA-S15 | .18 | 330 | 30GA-V330 | .24 | 30 | 60GA-Q30 | .30 | 47 | 75GA-Q47 | .30 |
| 200 | 5GA-T20 | .15 | .02 | 5GA-S20 | .18 | 390 | 30GA-V390 | .24 | 33 | 60GA-Q33 | .30 | 50 | 75GA-Q50 | .30 |
| | | | | | | 400 | 30GA-V400 | .24 | 39 | 60GA-Q39 | .30 | 56 | 75GA-Q56 | .30 |
| | | | | | | 470 | 30GA-V470 | .24 | 47 | 60GA-Q47 | .30 | 60 | 75GA-T10 | .30 |
| | | | | | | | | | 68 | 60GA-Q68 | .30 | 470 | 75GA-T47 | .30 |

SPRAGUE CAPACITORS

CERA-MITE CERAMIC CAPACITORS, continued

HIGH-K TYPES

- Designed for By-pass and Coupling Applications Where Additional Capacitance Will Not Affect Circuit Operation
- Smallest Physical Size
- 5HK-S15 thru 5HK-P10, 5HK-2S20, 500 WVDC, Capacitance Tolerance: $\pm 80-20\%$
- All Other 5HK Types are Rated at 1000 WVDC, With a GMV Capacitance Tolerance

| μF | Cat. No. | Net | μF | Cat. No. | Net |
|---------------------|----------|-------|---------------|----------|-------|
| SINGLE UNITS | | | | | |
| .001 | 5HK-D10 | \$.15 | .022 | 5HK-S22 | \$.39 |
| .0015 | 5HK-D15 | .15 | .025 | 5HK-S25 | .39 |
| .002 | 5HK-D20 | .15 | .03 | 5HK-S30 | .39 |
| .0022 | 5HK-D22 | .15 | .04 | 5HK-S40 | .42 |
| .0025 | 5HK-D25 | .15 | .05 | 5HK-S50 | .42 |
| | | | .1 | 5HK-P10 | .96 |
| DUAL UNITS | | | | | |
| .0033 | 5HK-D33 | .15 | 2 x .001 | 5HK-2D10 | .24 |
| .004 | 5HK-D40 | .15 | 2 x .0015 | 5HK-2D15 | .24 |
| .0047 | 5HK-D47 | .15 | 2 x .002 | 5HK-2D20 | .24 |
| .005 | 5HK-D50 | .15 | 2 x .0022 | 5HK-2D22 | .24 |
| .0068 | 5HK-D68 | .15 | 2 x .004 | 5HK-2D40 | .27 |
| .01 | 5HK-S10 | .18 | 2 x .0047 | 5HK-2D47 | .27 |
| .015 | 5HK-S15 | .24 | 2 x .01 | 5HK-2S10 | .30 |
| .02 | 5HK-S20 | .36 | 2 x .02 | 5HK-2S20 | .42 |

TEMPERATURE-STABLE TYPES

- Used Where Minimum Capacitance Change With Temperature is Important
- Standard Capacitance Tolerance: $\pm 10\%$ Except 10TS-S15, 10TS-S20, $\pm 15\%$
- Rated at 1000 WVDC

| μF | Cat. No. | Net | μF | Cat. No. | Net | μF | Cat. No. | Net |
|---------------|----------|-------|---------------|----------|-------|---------------|----------|-------|
| 3.3 | 10TS-V33 | \$.15 | 100 | 10TS-T10 | \$.15 | .001 | 10TS-D10 | \$.15 |
| 5 | 10TS-V50 | .15 | 120 | 10TS-T12 | .15 | .0012 | 10TS-D12 | .15 |
| 6 | 10TS-V60 | .15 | 130 | 10TS-T13 | .15 | .0013 | 10TS-D13 | .15 |
| 6.8 | 10TS-V68 | .15 | 150 | 10TS-T15 | .15 | .0015 | 10TS-D15 | .15 |
| 7.5 | 10TS-V75 | .15 | 180 | 10TS-T18 | .15 | .0016 | 10TS-D16 | .15 |
| 8 | 10TS-V80 | .15 | 200 | 10TS-T20 | .15 | .0018 | 10TS-D18 | .15 |
| 10 | 10TS-Q10 | .15 | 220 | 10TS-T22 | .15 | .002 | 10TS-D20 | .15 |
| 12 | 10TS-Q12 | .15 | 240 | 10TS-T24 | .15 | .0022 | 10TS-D22 | .15 |
| 15 | 10TS-Q15 | .15 | 250 | 10TS-T25 | .15 | .0025 | 10TS-D25 | .15 |
| 18 | 10TS-Q18 | .15 | 270 | 10TS-T27 | .15 | .0027 | 10TS-D27 | .15 |
| 20 | 10TS-Q20 | .15 | 300 | 10TS-T30 | .15 | .003 | 10TS-D30 | .15 |
| 22 | 10TS-Q22 | .15 | 330 | 10TS-T33 | .15 | .0033 | 10TS-D33 | .15 |
| 25 | 10TS-Q25 | .15 | 350 | 10TS-T35 | .15 | .0039 | 10TS-D39 | .15 |
| 27 | 10TS-Q27 | .15 | 360 | 10TS-T36 | .15 | .004 | 10TS-D40 | .15 |
| 30 | 10TS-Q30 | .15 | 390 | 10TS-T39 | .15 | .0043 | 10TS-D43 | .18 |
| 33 | 10TS-Q33 | .15 | 400 | 10TS-T40 | .15 | .0047 | 10TS-D47 | .18 |
| 39 | 10TS-Q39 | .15 | 470 | 10TS-T47 | .15 | .005 | 10TS-D50 | .18 |
| 47 | 10TS-Q47 | .15 | 500 | 10TS-T50 | .15 | .0056 | 10TS-D56 | .18 |
| 50 | 10TS-Q50 | .15 | 560 | 10TS-T56 | .15 | .0068 | 10TS-D68 | .18 |
| 56 | 10TS-Q56 | .15 | 600 | 10TS-T60 | .15 | .0075 | 10TS-D75 | .18 |
| 68 | 10TS-Q68 | .15 | 680 | 10TS-T68 | .15 | .01 | 10TS-S10 | .18 |
| 75 | 10TS-Q75 | .15 | 750 | 10TS-T75 | .15 | .015 | 10TS-S15 | .18 |
| 82 | 10TS-Q82 | .15 | 800 | 10TS-T80 | .15 | .02 | 10TS-S20 | .18 |
| 91 | 10TS-Q91 | .15 | 820 | 10TS-T82 | .15 | | | |

NPO TYPES

- Zero Temperature coefficient Capacitors used Where Capacitance Change with Temperature is Undesirable
- Superior to Silvered-mica Types in Stability, High "Q", and Insulation Resistance
- Rated at 1000 WVDC
- Standard Capacitance Tolerance of $5\mu\text{F}$ and up: $\pm 5\%$. On $4.7\mu\text{F}$ and below: $\pm .25\mu\text{F}$
- Units listed below are discs

| μF | Cat. No. | Net | μF | Cat. No. | Net |
|---------------|-----------|-------|---------------|------------|-------|
| 1 | 10TCC-V10 | \$.30 | 27 | 10TCC-Q27 | \$.30 |
| 1.2 | 10TCC-V12 | .30 | 30 | 10TCC-Q30 | .30 |
| 1.5 | 10TCC-V15 | .30 | 33 | 10TCC-Q33 | .30 |
| 1.8 | 10TCC-V18 | .30 | 39 | 10TCC-Q39 | .33 |
| 2.2 | 10TCC-V22 | .30 | 47 | 10TCC-Q47 | .33 |
| 2.7 | 10TCC-V27 | .30 | 50 | 10TCC-Q50 | .33 |
| 3.3 | 10TCC-V33 | .30 | 56 | 10TCC-Q56 | .33 |
| 3.9 | 10TCC-V39 | .30 | 68 | 10TCC-Q68 | .33 |
| 4.7 | 10TCC-V47 | .30 | 75 | 10TCC-Q75 | .33 |
| 5 | 10TCC-V50 | .30 | 82 | 10TCC-Q82 | .33 |
| 5.6 | 10TCC-V56 | .30 | 100 | 10TCC-T10 | .33 |
| 6.8 | 10TCC-V68 | .30 | 120 | 10TCC-T12 | .36 |
| 8.2 | 10TCC-V82 | .30 | 150 | 10TCC-T15 | .36 |
| 10 | 10TCC-Q10 | .30 | 175 | 10TCC-T175 | .30 |
| 12 | 10TCC-Q12 | .30 | 180 | 10TCC-T18 | .36 |
| 15 | 10TCC-Q15 | .30 | 200 | 10TCC-T20 | .42 |
| 18 | 10TCC-Q18 | .30 | 220 | 10TCC-T22 | .42 |
| 20 | 10TCC-Q20 | .30 | 270 | 10TCC-T27 | .48 |
| 22 | 10TCC-Q22 | .30 | 300 | 10TCC-T30 | .48 |
| 25 | 10TCC-Q25 | .30 | 330 | 10TCC-T33 | .48 |

TEMPERATURE-COMPENSATING TYPES

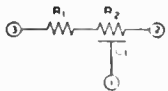
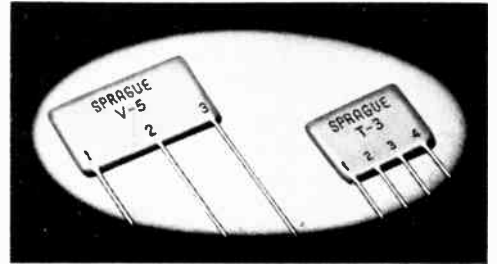
- Eliminate Oscillator Drift in TV, FM, VHF, and AM Receivers
- Negative Temperature Coefficient is 150 ppm/°C for N150 types, 220 ppm/°C for N220, 330 ppm/°C for N330, and 750 ppm/°C for N750 types
- Rated at 1000 WVDC
- Standard Capacitance Tolerance of $5\mu\text{F}$ and up; $\pm 5\%$. On $4.7\mu\text{F}$ and below: $\pm .25\mu\text{F}$.

| μF | Cat. No. | Net | μF | Cat. No. | Net | μF | Cat. No. | Net |
|---------------|-----------|-------|---------------|-----------|-------|---------------|-----------|-------|
| N150 | | | N750 | | | | | |
| 5 | 10TCP-V50 | \$.30 | 15 | 10TCR-Q15 | \$.30 | 2.2 | 10TCU-V22 | \$.30 |
| 6.8 | 10TCP-V68 | .30 | 18 | 10TCR-Q18 | .30 | 3.3 | 10TCU-V33 | .30 |
| 8.2 | 10TCP-V82 | .30 | 22 | 10TCR-Q22 | .30 | 5 | 10TCU-V50 | .30 |
| 10 | 10TCP-Q10 | .30 | 27 | 10TCR-Q27 | .30 | 10 | 10TCU-Q10 | .30 |
| 12 | 10TCP-Q12 | .30 | 33 | 10TCR-Q33 | .30 | 12 | 10TCU-Q12 | .30 |
| 15 | 10TCP-Q15 | .30 | 39 | 10TCR-Q39 | .33 | 15 | 10TCU-Q15 | .30 |
| 18 | 10TCP-Q18 | .30 | 47 | 10TCR-Q47 | .33 | 18 | 10TCU-Q18 | .30 |
| 22 | 10TCP-Q22 | .30 | 56 | 10TCR-Q56 | .33 | 20 | 10TCU-Q20 | .30 |
| 27 | 10TCP-Q27 | .30 | 68 | 10TCR-Q68 | .33 | 22 | 10TCU-Q22 | .30 |
| 33 | 10TCP-Q33 | .30 | 82 | 10TCR-Q82 | .33 | 25 | 10TCU-Q25 | .30 |
| 39 | 10TCP-Q39 | .33 | 100 | 10TCR-T10 | .33 | 27 | 10TCU-Q27 | .30 |
| 47 | 10TCP-Q47 | .33 | 120 | 10TCR-T12 | .36 | 33 | 10TCU-Q33 | .30 |
| 56 | 10TCP-Q56 | .33 | 150 | 10TCR-T15 | .36 | 39 | 10TCU-Q39 | .30 |
| 68 | 10TCP-Q68 | .33 | N330 | | | 47 | 10TCU-Q47 | .30 |
| 82 | 10TCP-Q82 | .33 | 10 | 10TCS-Q10 | .30 | 56 | 10TCU-Q56 | .30 |
| 100 | 10TCP-T10 | .33 | 12 | 10TCS-Q12 | .30 | 68 | 10TCU-Q68 | .30 |
| 120 | 10TCP-T12 | .36 | 15 | 10TCS-Q15 | .30 | 75 | 10TCU-Q75 | .30 |
| 150 | 10TCP-T15 | .36 | 18 | 10TCS-Q18 | .30 | 82 | 10TCU-Q82 | .30 |
| N220 | | | 22 | 10TCS-Q22 | .30 | 100 | 10TCU-T10 | .30 |
| 3 | 10TCR-V30 | .30 | 27 | 10TCS-Q27 | .30 | 120 | 10TCU-T12 | .30 |
| 3.3 | 10TCR-V33 | .30 | 33 | 10TCS-Q33 | .30 | 150 | 10TCU-T15 | .30 |
| 3.9 | 10TCR-V39 | .30 | 39 | 10TCS-Q39 | .33 | 180 | 10TCU-T18 | .30 |
| 4.7 | 10TCR-V47 | .30 | 47 | 10TCS-Q47 | .33 | 200 | 10TCU-T20 | .30 |
| 5 | 10TCR-V50 | .30 | 56 | 10TCS-Q56 | .33 | 220 | 10TCU-T22 | .30 |
| 5.6 | 10TCR-V56 | .30 | 68 | 10TCS-Q68 | .33 | 270 | 10TCU-T27 | .30 |
| 6.8 | 10TCR-V68 | .30 | 82 | 10TCS-Q82 | .33 | 330 | 10TCU-T33 | .30 |
| 8.2 | 10TCR-V82 | .30 | 100 | 10TCS-T10 | .33 | 390 | 10TCU-T39 | .36 |
| 10 | 10TCR-Q10 | .30 | 120 | 10TCS-T12 | .36 | 470 | 10TCU-T47 | .42 |
| 12 | 10TCR-Q12 | .30 | 150 | 10TCS-T15 | .36 | 560 | 10TCU-T56 | .48 |
| | | | | | | 680 | 10TCU-T68 | .48 |

SPRAGUE PRINTED CIRCUITS

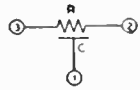
BULPLATE[®] and MULTI-COMP[®] PRINTED CIRCUITS

- Bulplates (rectangular plates) and Multi-comps (circular discs) are especially designed to save space and reduce assembly time
- Combinations of resistors and capacitors of maximum compactness
- Integral connections are "printed" and brought out to external leads which are anchored to the basic ceramic plate
- Completed units are protected by a tough moisture-proof coating
- Maximum voltage to be applied across these units is 250 volts d-c, except on D-1 which is rated at 100 volts d-c
- Types V-14 and V-15 are Multi-comp disc-type units — All others are Bulplate rectangular plates



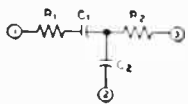
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | R ₁ | R ₂ | Net |
|----------|----------------|----------------|----------------|------|
| V1/V3 | .012μF | 22KΩ | 16.4KΩ | \$75 |



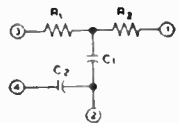
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | R ₁ | Net |
|----------|----------------|----------------|------|
| V-4 | .012μF | 16.4KΩ | \$78 |



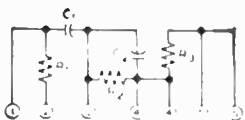
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | R ₁ | R ₂ | Net |
|----------|----------------|----------------|----------------|----------------|------|
| V-5 | .0047μF | .0047μF | 22KΩ | 10KΩ | \$78 |



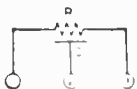
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | R ₁ | R ₂ | Net |
|----------|----------------|----------------|----------------|----------------|------|
| V-9 | .0025μF | .00033μF | 33KΩ | 15KΩ | \$54 |



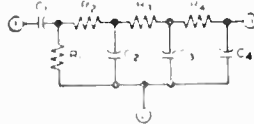
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|--------|
| V-12 | .05μF | .002μF | 1000Ω | 1000Ω | 10KΩ | \$2.40 |



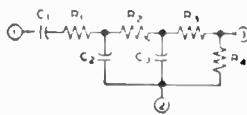
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | R ₁ | Net |
|----------|----------------|----------------|------|
| V-14 | .001μF | 70KΩ | \$42 |
| V-15 | .001μF | 90KΩ | .42 |



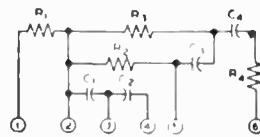
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | R ₁ | R ₂ | R ₃ | R ₄ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| V-2 | .01μF | .002μF | .005μF | .005μF | 22KΩ | 22KΩ | 8.2KΩ | 8.2KΩ | \$1.08 |



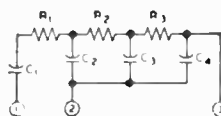
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | R ₂ | R ₃ | R ₄ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| V-6 | .004μF | .01μF | .01μF | 10KΩ | 10KΩ | 10KΩ | 100KΩ | \$75 |



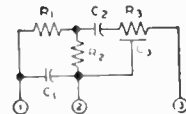
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | R ₁ | R ₂ | R ₃ | R ₄ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| V-7 | .00018μF | .00013μF | .0008μF | .0008μF | 47KΩ | 47KΩ | 68KΩ | 100KΩ | \$75 |



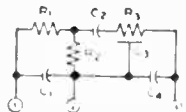
VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| V-8 | .01μF | .002μF | .005μF | .005μF | 22KΩ | 8.2KΩ | 8.2KΩ | \$90 |



VERTICAL INTEGRATOR

| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| V-10 | .00015μF | .005μF | .004μF | .004μF | 33KΩ | 33KΩ | 90KΩ | \$1.29 |

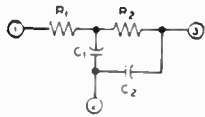


VERTICAL INTEGRATOR

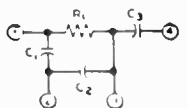
| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| V-11 | .00015μF | .005μF | .004μF | 33KΩ | 33KΩ | 90KΩ | \$1.26 |

SPRAGUE PRINTED CIRCUITS

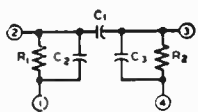
BULPLATE and MULTI-COMP PRINTED CIRCUITS, continued


VERTICAL INTEGRATOR

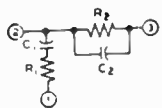
| Cat. No. | C ₁ | C ₂ | R ₁ | R ₂ | Net |
|----------|----------------|----------------|----------------|----------------|-------|
| V-16 | .001 μ F | .002 μ F | 82K Ω | 39K Ω | \$.90 |


VERTICAL INTEGRATOR

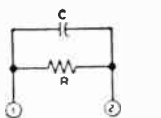
| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | Net |
|----------|----------------|----------------|----------------|----------------|-------|
| V-17 | .001 μ F | .004 μ F | .01 μ F | 22K Ω | \$.75 |


TRIODE COUPLING

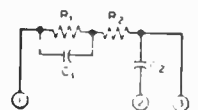
| Cat. No. | C ₁ | C _{2-C₃} | R ₁ | R ₂ | Net |
|----------|----------------|------------------------------|----------------|----------------|-------|
| T-1 | .01 μ F | 250 μ F | 500K Ω | 500K Ω | \$.63 |
| T-2 | .01 μ F | 250 μ F | 250K Ω | 500K Ω | .63 |
| T-3 | .005 μ F | 250 μ F | 500K Ω | 500K Ω | .63 |
| T-4 | .005 μ F | 250 μ F | 250K Ω | 500K Ω | .63 |


RETRACE SUPPRESSION

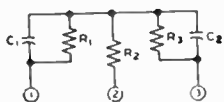
| Cat. No. | C ₁ | C ₂ | R ₁ | R ₂ | Net |
|----------|----------------|----------------|----------------|----------------|-------|
| RS-2 | .005 μ F | .002 μ F | 10K Ω | 1M Ω | \$.78 |
| RS-3 | .01 μ F | .01 μ F | 2.7K Ω | 56K Ω | .78 |


PARALLEL RESISTOR-CAPACITOR

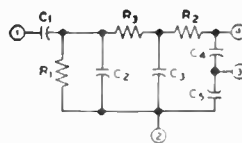
| Cat. No. | C ₁ | R ₁ | Net |
|----------|----------------|----------------|-------|
| PRC-1 | 330 μ F | 220K Ω | \$.30 |


SYNC TAKEOFF

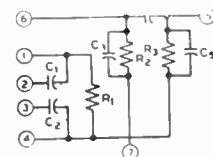
| Cat. No. | C ₁ | C ₂ | R ₁ | R ₂ | Net |
|----------|----------------|----------------|----------------|----------------|-------|
| ST-5 | .005 μ F | .0014 μ F | 4700K Ω | 220K Ω | \$.60 |


SYNC TAKEOFF

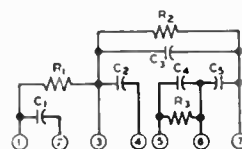
| Cat. No. | C ₁ | C ₂ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|-------|
| ST-12 | .00033 μ F | .00033 μ F | 270K Ω | 2.2M Ω | 460K Ω | \$.75 |
| ST-15 | .00033 μ F | .00033 μ F | 1M Ω | 2.2M Ω | 270K Ω | .75 |


VERTICAL INTEGRATOR

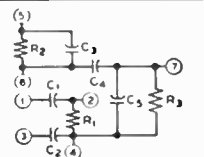
| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | C ₅ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| V-13 | .0051 μ F | .01 μ F | .0022 μ F | .001 μ F | 470 μ F | 47K Ω | 33K Ω | 82K Ω | \$1.14 |


DETECTOR TRIODE COUPLING

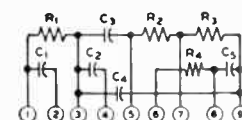
| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | C ₅ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| DT-1 | .0022 μ F | 220 μ F | 220 μ F | .0047 μ F | 220 μ F | 6.8M Ω | 470K Ω | 470K Ω | \$.90 |
| DT-2 | .005 μ F | 220 μ F | 220 μ F | .005 μ F | 220 μ F | 6.8M Ω | 470K Ω | 470K Ω | .90 |
| DT-3 | .002 μ F | 220 μ F | 500 μ F | .005 μ F | 500 μ F | 6.8M Ω | 470K Ω | 470K Ω | .90 |
| DT-4 | .002 μ F | 220 μ F | 250 μ F | .005 μ F | 250 μ F | 6.8M Ω | 470K Ω | 470K Ω | .90 |
| DT-5 | .005 μ F | 220 μ F | 250 μ F | .005 μ F | 250 μ F | 6.8M Ω | 470K Ω | 470K Ω | .90 |
| DT-6 | .005 μ F | 220 μ F | 250 μ F | .005 μ F | 250 μ F | 10M Ω | 470K Ω | 470K Ω | .90 |


DETECTOR TRIODE COUPLING

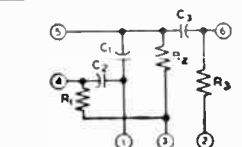
| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | C ₅ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| DT-8 | .002 μ F | 400 μ F | 220 μ F | .00022 μ F | 5000 μ F | 6.8M Ω | 470K Ω | 470K Ω | \$.93 |


DETECTOR PENTODE COUPLING

| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | C ₅ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| DP-1 | .002 μ F | 400 μ F | 220 μ F | .005 μ F | 220 μ F | 6.8M Ω | 470K Ω | 470K Ω | \$.75 |


DETECTOR TRIODE COUPLING

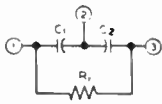
| Cat. No. | C ₁ | C _{2, C₃} | C ₄ | C ₅ | R ₁ | R ₂ | R ₃ | R ₄ | Net |
|----------|----------------|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| DT-9 | .002 μ F | 400 μ F | 220 μ F | .005 μ F | 220 μ F | 6.8M Ω | 470K Ω | 470K Ω | \$.75 |


PENTODE COUPLING

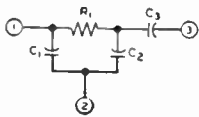
| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| P-2 | 100 μ F | .0047 μ F | .0047 μ F | 4.7M Ω | 1.0M Ω | 2.2M Ω | \$.96 |

SPRAGUE PRINTED CIRCUITS

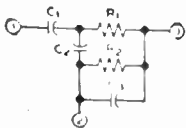
BULPLATE and MULTI-COMP PRINTED CIRCUITS, continued


DIODE FILTER

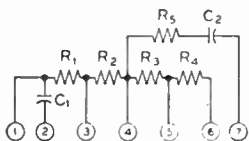
| Cat. No. | C ₁ | C ₂ | R ₁ | Net |
|----------|----------------|----------------|----------------|-------|
| D-1 | 100 μ F | 100 μ F | 47K Ω | \$4.2 |
| D-2 | 150 μ F | 150 μ F | 47K Ω | .42 |
| D-3 | 50 μ F | 50 μ F | 47K Ω | .42 |
| D-4 | 100 μ F | 100 μ F | 100K Ω | .42 |


DIODE FILTER

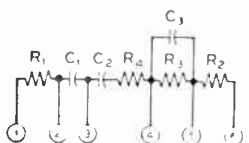
| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | Net |
|----------|----------------|----------------|----------------|----------------|-------|
| D-5 | 330 μ F | 680 μ F | .01 μ F | 100K Ω | \$7.5 |


VERTICAL FEEDBACK

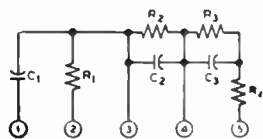
| Cat. No. | C ₁ , C ₂ | C ₃ | R ₁ , R ₂ | Net |
|----------|---------------------------------|----------------|---------------------------------|-------|
| VF-1 | .001 μ F | .002 μ F | 100K Ω | \$7.8 |


VERTICAL FEEDBACK

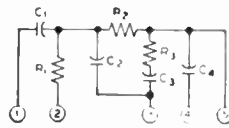
| Cat. No. | C ₁ , C ₂ | R ₁ | R ₂ | R ₃ | R ₄ | R ₅ | Net |
|----------|---------------------------------|----------------|----------------|----------------|----------------|----------------|-----|
| VF-2 | .01 μ F | 6.8M Ω | 520K Ω | 470K Ω | 680K Ω | 1K Ω | .14 |


VERTICAL FEEDBACK

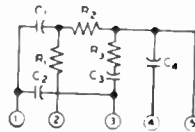
| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| VF-3 | .0033 μ F | .002 μ F | .0047 μ F | 2.2K Ω | 27K Ω | 180K Ω | \$1.02 |


PHASE COMPARATOR

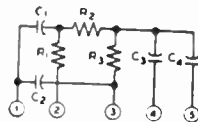
| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ , R ₂ | R ₃ | R ₄ | Net |
|----------|----------------|----------------|----------------|---------------------------------|----------------|----------------|-------|
| C-1 | 82 μ F | 100 μ F | 1000 μ F | 680K Ω | 4.7K Ω | 200K Ω | \$7.5 |


HORIZONTAL NETWORK

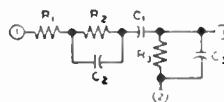
| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HN-1 | .001 μ F | .0015 μ F | 390 μ F | .003 μ F | 10K Ω | 39K Ω | 5.6K Ω | \$1.05 |


HORIZONTAL NETWORK

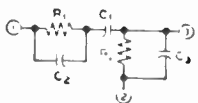
| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HN-2 | .001 μ F | .002 μ F | 390 μ F | .003 μ F | 15K Ω | 39K Ω | 5.6K Ω | \$1.02 |


HORIZONTAL NETWORK

| Cat. No. | C ₁ | C ₂ | C ₃ | C ₄ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| HN-3 | .001 | | 390 μ F | .003 μ F | 8.2K Ω | 39K Ω | 8.2K Ω | \$1.02 |


SYNC TAKEOFF

| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | R ₂ | R ₃ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| ST-1 | .01 μ F | .00027 μ F | 25 μ F | 10K Ω | 330K Ω | 2200 Ω | \$.90 |
| ST-2 | .01 μ F | .00027 μ F | 25 μ F | 10K Ω | 220K Ω | 2200 Ω | .90 |


SYNC TAKEOFF

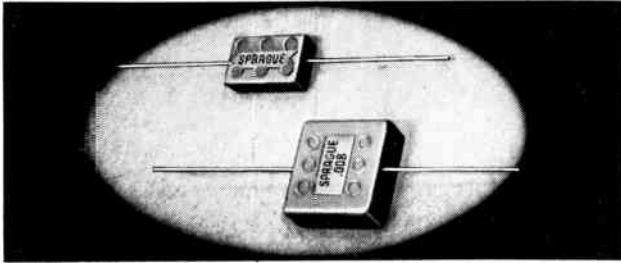
| Cat. No. | C ₁ | C ₂ | C ₃ | R ₁ | R ₂ | Net |
|----------|----------------|----------------|----------------|----------------|----------------|--------|
| ST-3 | .01 μ F | .00027 μ F | 25 μ F | 220K Ω | 2200 Ω | \$.90 |

FOR SPRAGUE'S COMPLETE LINE OF 179 PRINTED CIRCUITS, SEE LATEST ISSUE OF CATALOG C-614

SPRAGUE CAPACITORS

MICA CAPACITORS

TYPE MS and 1FM MICAS



TYPE MS — SILVERED MICA
(Standard Capacitance Tolerance $\pm 5\%$)

| MF | Cat. No. | Net Ea. | MF | Cat. No. | Net Ea. | MF | Cat. No. | Net Ea. |
|------------------------------|----------|---------|---------|----------|---------|-----------------------------|----------|---------|
| 500 WVDC, 1000 V Test | | | | | | | | |
| .00005 | MS-55 | \$.27 | .000120 | MS-312 | \$.27 | .001300 | MS-213 | \$.75 |
| .00010 | MS-41 | .24 | .000130 | MS-313 | .27 | .001500 | MS-215 | .81 |
| .00012 | MS-41.2 | .24 | .000150 | MS-315 | .27 | .001600 | MS-216 | .81 |
| .00015 | MS-41.5 | .24 | .000180 | MS-318 | .27 | .002000 | MS-22 | .81 |
| .00018 | MS-41.8 | .24 | .000200 | MS-32 | .27 | .002200 | MS-222 | .90 |
| .00020 | MS-42 | .24 | .000220 | MS-322 | .27 | .002400 | MS-224 | 1.08 |
| .00022 | MS-42.2 | .24 | .000240 | MS-324 | .33 | .002500 | MS-225 | 1.08 |
| .00024 | MS-42.4 | .24 | .000250 | MS-325 | .33 | .002700 | MS-227 | 1.14 |
| .00025 | MS-42.5 | .24 | .000270 | MS-327 | .33 | .003000 | MS-23 | 1.23 |
| .00027 | MS-42.7 | .24 | .000300 | MS-33 | .33 | .003300 | MS-233 | 1.23 |
| .00030 | MS-43 | .24 | .000330 | MS-333 | .33 | .003600 | MS-236 | 1.26 |
| .00033 | MS-43.3 | .24 | .000360 | MS-336 | .33 | .003900 | MS-239 | 1.29 |
| .00036 | MS-43.6 | .24 | .000390 | MS-339 | .39 | .004000 | MS-24 | 1.29 |
| .00039 | MS-43.9 | .24 | .000400 | MS-34 | .39 | .004300 | MS-243 | 1.29 |
| .00040 | MS-44 | .24 | .000430 | MS-343 | .39 | .004700 | MS-247 | 1.29 |
| .00043 | MS-44.3 | .24 | .000470 | MS-347 | .42 | .005000 | MS-25 | 1.35 |
| .00044 | MS-44.4 | .24 | .005000 | MS-35 | .42 | .005100 | MS-251 | 1.35 |
| .00047 | MS-44.7 | .24 | .000510 | MS-351 | .42 | .005600 | MS-256 | 1.50 |
| .00050 | MS-45 | .24 | .000560 | MS-356 | .45 | .006000 | MS-26 | 1.44 |
| .00051 | MS-45.1 | .24 | .000600 | MS-36 | .48 | .006200 | MS-262 | 1.56 |
| .00056 | MS-45.6 | .24 | .000620 | MS-362 | .48 | 300 WVDC, 600 V Test | | |
| .00060 | MS-46 | .24 | .000680 | MS-368 | .51 | .006800 | MS-268 | 1.56 |
| .00062 | MS-46.2 | .24 | .000700 | MS-37 | .51 | .007000 | MS-27 | 1.56 |
| .00068 | MS-46.8 | .24 | .000750 | MS-375 | .54 | .007500 | MS-275 | 1.68 |
| .00070 | MS-47 | .24 | .000800 | MS-38 | .57 | .008000 | MS-28 | 1.68 |
| .00075 | MS-47.5 | .24 | .000820 | MS-382 | .57 | .008000 | MS-28 | 1.68 |
| .00082 | MS-48.2 | .24 | .000900 | MS-39 | .60 | .008000 | MS-28 | 1.68 |
| .00091 | MS-49.1 | .24 | .000910 | MS-391 | .60 | .008000 | MS-28 | 1.68 |
| .00100 | MS-31 | .24 | .001000 | MS-21 | .66 | .009000 | MS-29 | 1.86 |
| .00110 | MS-31.1 | .24 | .001100 | MS-211 | .72 | .009100 | MS-291 | 1.86 |
| | | | .001200 | MS-212 | .78 | .010000 | MS-11 | 2.04 |

TYPE 1FM
(Standard Capacitance Tolerance $\pm 20\%$)

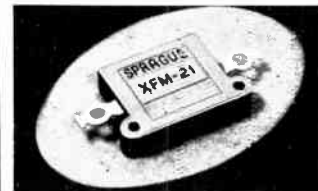
| MF | Cat. No. | Net Ea. | MF | Cat. No. | Net Ea. | MF | Cat. No. | Net Ea. |
|------------------------------|----------|---------|---------|----------|---------|-----------------------------|----------|---------|
| 500 WVDC, 1000 V Test | | | | | | | | |
| .00010 | 1FM-41 | \$.15 | .000150 | 1FM-315 | \$.12 | .001500 | 1FM-215 | \$.18 |
| .00012 | 1FM-41.2 | .15 | .000160 | 1FM-316 | .12 | .001600 | 1FM-216 | .18 |
| .00015 | 1FM-41.5 | .15 | .001800 | 1FM-318 | .12 | .001800 | 1FM-218 | .24 |
| .00018 | 1FM-41.8 | .15 | .002000 | 1FM-32 | .12 | .002000 | 1FM-22 | .24 |
| .00020 | 1FM-42 | .15 | .000220 | 1FM-322 | .15 | .002200 | 1FM-222 | .24 |
| .00022 | 1FM-42.2 | .15 | .000240 | 1FM-324 | .15 | .002400 | 1FM-224 | .30 |
| .00024 | 1FM-42.4 | .15 | .000250 | 1FM-325 | .15 | .002500 | 1FM-225 | .30 |
| .00027 | 1FM-42.7 | .15 | .000270 | 1FM-327 | .15 | .002700 | 1FM-227 | .30 |
| .00030 | 1FM-43 | .15 | .000300 | 1FM-33 | .15 | .003000 | 1FM-23 | .30 |
| .00033 | 1FM-43.3 | .15 | .000330 | 1FM-333 | .15 | .003300 | 1FM-233 | .36 |
| .00036 | 1FM-43.6 | .15 | .000350 | 1FM-335 | .15 | .003600 | 1FM-236 | .36 |
| .00039 | 1FM-43.9 | .15 | .000360 | 1FM-336 | .15 | .003900 | 1FM-239 | .36 |
| .00040 | 1FM-44 | .15 | .000390 | 1FM-339 | .15 | .004000 | 1FM-24 | .33 |
| .00043 | 1FM-44.3 | .12 | .000400 | 1FM-34 | .15 | .004300 | 1FM-243 | .36 |
| .00044 | 1FM-44.4 | .12 | .000430 | 1FM-343 | .15 | .004700 | 1FM-247 | .36 |
| .00047 | 1FM-44.7 | .12 | .000470 | 1FM-347 | .15 | .005000 | 1FM-25 | .36 |
| .00050 | 1FM-45 | .12 | .000500 | 1FM-35 | .15 | .005100 | 1FM-251 | .36 |
| .00051 | 1FM-45.1 | .12 | .000510 | 1FM-351 | .15 | .005600 | 1FM-256 | .39 |
| .00056 | 1FM-45.6 | .12 | .000560 | 1FM-356 | .15 | .006000 | 1FM-26 | .39 |
| .00062 | 1FM-46.2 | .12 | .000620 | 1FM-362 | .15 | .006200 | 1FM-262 | .39 |
| .00068 | 1FM-46.8 | .12 | .000680 | 1FM-368 | .15 | 300 WVDC, 600 V Test | | |
| .00075 | 1FM-47.5 | .12 | .000700 | 1FM-37 | .15 | .006800 | 1FM-268 | .51 |
| .00082 | 1FM-48.2 | .12 | .000750 | 1FM-375 | .18 | .007000 | 1FM-27 | .51 |
| .00091 | 1FM-49.1 | .12 | .000820 | 1FM-382 | .18 | .007500 | 1FM-275 | .51 |
| .00100 | 1FM-31 | .12 | .000910 | 1FM-391 | .18 | .008000 | 1FM-28 | .60 |
| .00110 | 1FM-31.1 | .12 | .001000 | 1FM-21 | .18 | .008200 | 1FM-282 | .60 |
| .00120 | 1FM-31.2 | .12 | .001100 | 1FM-211 | .18 | .009000 | 1FM-29 | .60 |
| | | | .001200 | 1FM-212 | .18 | .009100 | 1FM-291 | .60 |
| | | | .001300 | 1FM-213 | .18 | .010000 | 1FM-11 | .72 |

MS and 1FM Dimensions

| Catalog Numbers | L x W x T | Catalog Numbers | L x W x T |
|-----------------------|---|-------------------------|---|
| MS-55 through MS-356 | $2\frac{1}{2} \times 1\frac{1}{2} \times \frac{7}{32}$ | 1FM-41 through 1FM-356 | $3\frac{1}{4} \times 1\frac{1}{2} \times \frac{7}{32}$ |
| MS-36 through MS-236 | $2\frac{1}{2} \times 2\frac{1}{2} \times \frac{9}{32}$ | 1FM-362 through 1FM-236 | $3\frac{1}{4} \times 2\frac{1}{4} \times \frac{9}{32}$ |
| MS-239 through MS-282 | $2\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{32}$ | 1FM-239 through 1FM-282 | $3\frac{1}{4} \times 2\frac{1}{4} \times 1\frac{1}{32}$ |
| MS-29 through MS-11 | $1 \times \frac{3}{8} \times \frac{3}{16}$ | 1FM-29 through 1FM-11 | $1 \times \frac{3}{8} \times \frac{3}{16}$ |

- Each Mica Capacitor Section Receives a Radio Frequency Test Before Molding
- Careful Selection and Electrical Grading of Raw Mica Assures Maximum Quality
- Section Foils on Foil Micacs are Connected to Terminals through Special Low-resistance R-F Bonds
- R-F Current Tested for Peak Ratings After Impregnation and Molding

TYPES XFM, YFM and ZFM



(Standard Capacitance Tolerance $\pm 10\%$)

| MF | Cat. No. | Net Ea. |
|------------------------------------|----------|---------|
| XFM — 600 WVDC, 1200 V TEST | | |
| .00005 | XFM-45 | \$.72 |
| .0001 | XFM-31 | .72 |
| .0002 | XFM-32 | .72 |
| .00025 | XFM-325 | .72 |
| .0003 | XFM-33 | .72 |
| .0004 | XFM-34 | .72 |
| .0005 | XFM-35 | .72 |
| .001 | XFM-21 | .72 |
| .0015 | XFM-215 | .72 |
| .002 | XFM-22 | .78 |
| .0025 | XFM-225 | .78 |
| .003 | XFM-23 | .87 |
| .004 | XFM-24 | .90 |
| .005 | XFM-25 | .93 |
| .006 | XFM-26 | 1.08 |
| .007 | XFM-27 | 1.11 |
| .008 | XFM-28 | 1.14 |
| .01 | XFM-11 | 1.29 |
| .02 | XFM-12 | 1.83 |
| .03 | XFM-13 | 2.67 |

| Catalog Numbers | L x W x T |
|--------------------|---|
| XFM-45 thru XFM-11 | $1\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{32}$ |
| XFM-12 thru XFM-13 | $1\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{16}$ |

| MF | Cat. No. | Net Ea. |
|-------------------------------------|----------|---------|
| YFM — 1200 WVDC, 2500 V TEST | | |
| .00005 | YFM-45 | .96 |
| .0001 | YFM-31 | .96 |
| .0002 | YFM-32 | .96 |
| .00025 | YFM-325 | .96 |
| .0003 | YFM-33 | .96 |
| .0004 | YFM-34 | .96 |
| .0005 | YFM-35 | .96 |
| .001 | YFM-21 | 1.08 |
| .0015 | YFM-215 | 1.38 |
| .002 | YFM-22 | 1.44 |
| .0025 | YFM-225 | 1.68 |
| .003 | YFM-23 | 1.83 |
| .004 | YFM-24 | 1.83 |
| .005 | YFM-25 | 1.98 |
| .006 | YFM-26 | 1.98 |
| .007 | YFM-27 | 2.07 |
| .008 | YFM-28 | 2.31 |
| .01 | YFM-11 | 3.06 |

| Catalog Numbers | L x W x T |
|--------------------|---|
| YFM-45 thru YFM-24 | $1\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{32}$ |
| YFM-25 thru YFM-11 | $1\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{16}$ |

| MF | Cat. No. | Net Ea. |
|-------------------------------------|----------|---------|
| ZFM — 2500 WVDC, 5000 V TEST | | |
| .00005 | ZFM-45 | 1.14 |
| .0001 | ZFM-31 | 1.14 |
| .0002 | ZFM-32 | 1.14 |
| .00025 | ZFM-325 | 1.32 |
| .0003 | ZFM-33 | 1.35 |
| .0004 | ZFM-34 | 1.38 |
| .0005 | ZFM-35 | 1.44 |
| .001 | ZFM-21 | 1.68 |
| .0015 | ZFM-215 | 2.13 |
| .002 | ZFM-22 | 2.49 |
| .003 | ZFM-23 | 2.94 |
| .004 | ZFM-24 | 3.39 |
| .005 | ZFM-25 | 3.84 |

| Catalog Numbers | L x W x T |
|--------------------|---|
| ZFM-45 thru ZFM-22 | $1\frac{1}{8} \times 1\frac{1}{8} \times 1\frac{1}{32}$ |
| ZFM-23 thru ZFM-25 | $1\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{16}$ |

TYPES 7FM, 8FM and 9FM



(Standard Capacitance Tolerance $\pm 10\%$)

| MF | Cat. No. | Net Ea. |
|------------------------------------|----------|---------|
| 7FM — 600 WVDC, 1200 V TEST | | |
| .00005 | 7FM-45 | \$.87 |
| .0001 | 7FM-31 | .87 |
| .00015 | 7FM-31.5 | .87 |
| .0002 | 7FM-32 | .87 |
| .00025 | 7FM-32.5 | .87 |
| .0005 | 7FM-35 | .87 |
| .001 | 7FM-21 | .87 |
| .002 | 7FM-22 | .99 |
| .0025 | 7FM-22.5 | 1.02 |
| .003 | 7FM-23 | 1.11 |
| .004 | 7FM-24 | 1.20 |
| .005 | 7FM-25 | 1.26 |
| .006 | 7FM-26 | 1.32 |
| .008 | 7FM-28 | 1.47 |
| .01 | 7FM-11 | 1.68 |
| .015 | 7FM-11.5 | 1.83 |
| .02 | 7FM-12 | 2.13 |
| .03 | 7FM-13 | 2.73 |
| .04 | 7FM-14 | 3.51 |
| .05 | 7FM-15 | 4.26 |
| .06 | 7FM-16 | 4.83 |

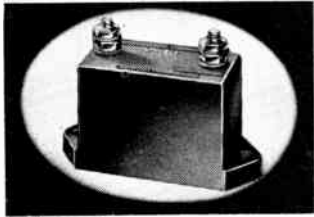
| Catalog Numbers | L x W x T |
|--------------------|--|
| 7FM-45 thru 7FM-13 | $1\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{16}$ |
| 7FM-14 thru 7FM-16 | $1\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{8}$ |

| MF | Cat. No. | Net Ea. |
|-------------------------------------|----------|---------|
| 8FM — 1200 WVDC, 2500 V TEST | | |
| .00005 | 8FM-45 | .96 |
| .0001 | 8FM-31 | .96 |
| .00015 | 8FM-31.5 | .96 |
| .0002 | 8FM-32 | .96 |
| .00025 | 8FM-32.5 | .96 |
| .0005 | 8FM-35 | .96 |
| .001 | 8FM-21 | 1.14 |
| .002 | 8FM-22 | 1.50 |
| .0025 | 8FM-22.5 | 1.68 |
| .003 | 8FM-23 | 1.77 |
| .004 | 8FM-24 | 1.86 |
| .005 | 8FM-25 | 1.98 |
| .006 | 8FM-26 | 2.07 |
| .008 | 8FM-28 | 2.46 |
| .01 | 8FM-11 | 2.82 |
| | | |

SPRAGUE CAPACITORS

MICA CAPACITORS, continued

TYPES 1MC & 2MC



(Standard Capacity Tolerance ±5%)

MF VAC Peak Cat. No. Net

TYPE 1MC

Dimensions — 2" L. x 1 1/8" W. x 1 1/32" H.

| MF | VAC Peak | Cat. No. | Net |
|--------|----------|----------|---------|
| .00005 | 3000 | 1MC-45 | \$ 7.56 |
| .0001 | 3000 | 1MC-31 | 7.56 |
| .00015 | 3000 | 1MC-31.5 | 7.56 |
| .0002 | 3000 | 1MC-32 | 7.56 |
| .00025 | 3000 | 1MC-32.5 | 7.56 |
| .0003 | 3000 | 1MC-33 | 7.56 |
| .0004 | 3000 | 1MC-34 | 7.56 |
| .0005 | 3000 | 1MC-35 | 7.56 |
| .0006 | 3000 | 1MC-36 | 7.56 |
| .0007 | 3000 | 1MC-37 | 7.56 |
| .0008 | 3000 | 1MC-38 | 7.56 |
| .001 | 3000 | 1MC-21 | 7.56 |
| .0015 | 3000 | 1MC-21.5 | 7.56 |
| .002 | 3000 | 1MC-22 | 7.56 |
| .003 | 2000 | 1MC-23 | 7.56 |
| .004 | 2000 | 1MC-24 | 7.56 |
| .005 | 2000 | 1MC-25 | 7.56 |
| .006 | 2000 | 1MC-26 | 7.56 |
| .007 | 2000 | 1MC-27 | 7.56 |
| .008 | 1500 | 1MC-28 | 7.56 |
| .01 | 1000 | 1MC-11 | 7.56 |
| .015 | 1000 | 1MC-11.5 | 7.56 |
| .02 | 1000 | 1MC-12 | 8.58 |
| .03 | 500 | 1MC-13 | 8.58 |
| .04 | 500 | 1MC-14 | 8.58 |
| .05 | 250 | 1MC-15 | 8.58 |
| .1 | 250 | 1MC-1 | 9.06 |

TYPE 2MC

Dimensions — 2 1/4" L. x 1 1/4" W. x 1 1/8" H.

| MF | VAC Peak | Cat. No. | Net |
|--------|----------|----------|---------|
| .00005 | 5000 | 2MC-45 | \$10.38 |
| .0001 | 5000 | 2MC-31 | 10.38 |
| .00015 | 5000 | 2MC-31.5 | 10.38 |
| .0002 | 5000 | 2MC-32 | 10.38 |
| .00025 | 5000 | 2MC-32.5 | 10.38 |
| .0003 | 5000 | 2MC-33 | 10.38 |
| .0004 | 5000 | 2MC-34 | 10.38 |
| .0005 | 5000 | 2MC-35 | 10.38 |
| .0006 | 5000 | 2MC-36 | 10.38 |
| .0007 | 5000 | 2MC-37 | 10.38 |
| .0008 | 5000 | 2MC-38 | 10.38 |
| .001 | 5000 | 2MC-21 | 10.38 |
| .0015 | 5000 | 2MC-21.5 | 10.38 |
| .002 | 5000 | 2MC-22 | 10.38 |
| .003 | 3000 | 2MC-23 | 10.38 |
| .004 | 3000 | 2MC-24 | 10.38 |
| .005 | 3000 | 2MC-25 | 10.38 |
| .006 | 3000 | 2MC-26 | 10.38 |
| .007 | 3000 | 2MC-27 | 10.38 |
| .008 | 2000 | 2MC-28 | 10.38 |
| .01 | 2000 | 2MC-11 | 10.38 |
| .015 | 2000 | 2MC-11.5 | 10.38 |
| .02 | 2000 | 2MC-12 | 10.38 |
| .03 | 1500 | 2MC-13 | 10.38 |
| .04 | 1500 | 2MC-14 | 10.38 |
| .05 | 1500 | 2MC-15 | 10.38 |
| .06 | 1000 | 2MC-16 | 11.16 |
| .07 | 1000 | 2MC-17 | 11.16 |
| .08 | 500 | 2MC-18 | 11.52 |
| .1 | 500 | 2MC-1 | 11.52 |

TYPES 1CC, 2CC, 3CC & 4CC

(Standard Capacity Tolerance ±5%)

MF Cat. No. Net

TYPE 1CC

Dimensions — 2 1/8" D. x 2 1/2" H.

| MF | Cat. No. | Net |
|----------------------|----------|---------|
| 6000 VAC Peak | | |
| .00005 | 1CC-45 | \$22.92 |
| .000075 | 1CC-47.5 | 24.00 |
| .0001 | 1CC-31 | 24.36 |
| .00015 | 1CC-31.5 | 24.36 |
| .0002 | 1CC-32 | 24.36 |
| .00025 | 1CC-32.5 | 24.36 |
| .0003 | 1CC-33 | 26.61 |
| .0004 | 1CC-34 | 26.61 |
| .0005 | 1CC-35 | 27.99 |
| .0006 | 1CC-36 | 27.99 |
| .0007 | 1CC-37 | 27.99 |
| .0008 | 1CC-38 | 27.99 |
| .001 | 1CC-21 | 27.99 |
| .0015 | 1CC-21.5 | 29.34 |
| .002 | 1CC-22 | 29.34 |
| .003 | 1CC-23 | 30.36 |
| .004 | 1CC-24 | 30.36 |

4000 VAC Peak

| | | |
|------|--------|-------|
| .005 | 1CC-25 | 30.36 |
| .006 | 1CC-26 | 30.87 |
| .007 | 1CC-27 | 30.37 |
| .008 | 1CC-28 | 30.87 |
| .01 | 1CC-11 | 30.87 |

3000 VAC Peak

| | | |
|------|---------|-------|
| .015 | 1CC-115 | 30.87 |
|------|---------|-------|

2000 VAC Peak

| | | |
|------|---------|-------|
| .02 | 1CC-12 | 30.87 |
| .025 | 1CC-125 | 31.08 |

1500 VAC Peak

| | | |
|-----|--------|-------|
| .03 | 1CC-13 | 33.45 |
| .04 | 1CC-14 | 35.10 |
| .05 | 1CC-15 | 36.45 |
| .06 | 1CC-16 | 37.68 |

1000 VAC Peak

| | | |
|-----|--------|-------|
| .07 | 1CC-17 | 38.55 |
| .08 | 1CC-18 | 39.45 |
| .1 | 1CC-1 | 41.10 |

TYPE 2CC

Dimensions — 3 1/2" D. x 3" H.

10,000 VAC Peak

| | | |
|---------|----------|-------|
| .00005 | 2CC-45 | 39.33 |
| .000075 | 2CC-47.5 | 39.33 |
| .0001 | 2CC-31 | 39.33 |
| .00015 | 2CC-31.5 | 39.33 |
| .0002 | 2CC-32 | 39.33 |
| .0003 | 2CC-33 | 39.33 |
| .0004 | 2CC-34 | 39.33 |
| .0005 | 2CC-35 | 39.33 |
| .0006 | 2CC-36 | 39.33 |
| .0007 | 2CC-37 | 29.33 |
| .0008 | 2CC-38 | 39.33 |
| .001 | 2CC-21 | 39.33 |
| .0015 | 2CC-21.5 | 39.33 |
| .002 | 2CC-22 | 39.33 |

8000 VAC Peak

| | | |
|------|--------|-------|
| .003 | 2CC-23 | 39.33 |
| .004 | 2CC-24 | 39.33 |

6000 VAC Peak

| | | |
|------|--------|-------|
| .005 | 2CC-25 | 39.33 |
|------|--------|-------|

5000 VAC Peak

| | | |
|------|--------|-------|
| .006 | 2CC-26 | 41.49 |
| .007 | 2CC-27 | 41.49 |
| .008 | 2CC-28 | 41.49 |
| .01 | 2CC-11 | 41.49 |

MF Cat. No. Net

4000 VAC Peak

| | | |
|------|---------|-------|
| .015 | 2CC-115 | 41.49 |
|------|---------|-------|

3000 VAC Peak

| | | |
|------|---------|-------|
| .02 | 2CC-12 | 41.49 |
| .025 | 2CC-125 | 43.20 |

2000 VAC Peak

| | | |
|-----|--------|-------|
| .03 | 2CC-13 | 44.10 |
| .04 | 2CC-14 | 46.68 |
| .05 | 2CC-15 | 48.45 |
| .06 | 2CC-16 | 49.80 |

1500 VAC Peak

| | | |
|-----|--------|-------|
| .07 | 2CC-17 | 51.00 |
| .08 | 2CC-18 | 51.90 |
| .1 | 2CC-1 | 54.00 |

TYPE 3CC

Dimensions — 5" D. x 4" H.

20,000 VAC Peak

| | | |
|---------|----------|-------|
| .00005 | 3CC-45 | 66.54 |
| .000075 | 3CC-47.5 | 72.60 |
| .0001 | 3CC-31 | 72.60 |
| .00015 | 3CC-31.5 | 78.66 |
| .0002 | 3CC-32 | 78.66 |
| .0003 | 3CC-33 | 78.66 |
| .0004 | 3CC-34 | 82.29 |
| .0005 | 3CC-35 | 82.29 |
| .0006 | 3CC-36 | 82.29 |
| .0007 | 3CC-37 | 82.29 |
| .0008 | 3CC-38 | 82.29 |
| .001 | 3CC-21 | 84.69 |

15,000 VAC Peak

| | | |
|-------|----------|-------|
| .0015 | 3CC-21.5 | 85.92 |
| .002 | 3CC-22 | 85.92 |

12,000 VAC Peak

| | | |
|------|--------|-------|
| .003 | 3CC-23 | 90.75 |
| .004 | 3CC-24 | 90.75 |

10,000 VAC Peak

| | | |
|------|--------|-------|
| .005 | 3CC-25 | 90.75 |
| .006 | 3CC-26 | 90.75 |
| .007 | 3CC-27 | 90.75 |
| .008 | 3CC-28 | 90.75 |

8000 VAC Peak

| | | |
|-----|--------|-------|
| .01 | 3CC-11 | 90.75 |
|-----|--------|-------|

5000 VAC Peak

| | | |
|------|---------|-------|
| .015 | 3CC-115 | 90.75 |
| .02 | 3CC-12 | 90.75 |

3000 VAC Peak

| | | |
|------|---------|-------|
| .025 | 3CC-125 | 90.75 |
| .03 | 3CC-13 | 90.75 |
| .04 | 3CC-14 | 90.75 |
| .05 | 3CC-15 | 90.75 |
| .06 | 3CC-16 | 95.10 |

2000 VAC Peak

| | | |
|-----|--------|--------|
| .07 | 3CC-17 | 98.40 |
| .08 | 3CC-18 | 103.20 |
| .1 | 3CC-1 | 109.20 |



MF Cat. No. Net

TYPE 4CC

Dimensions — 5" D. x 5 1/4" H.

30,000 VAC Peak

| | | |
|--------|----------|----------|
| .0001 | 4CC-31 | \$126.18 |
| .00015 | 4CC-31.5 | 126.18 |
| .0002 | 4CC-32 | 132.70 |
| .0003 | 4CC-33 | 132.70 |
| .0004 | 4CC-34 | 132.70 |
| .0005 | 4CC-35 | 132.70 |
| .0006 | 4CC-36 | 132.70 |
| .0007 | 4CC-37 | 132.70 |
| .0008 | 4CC-38 | 132.70 |
| .001 | 4CC-21 | 132.70 |

25,000 VAC Peak

| | | |
|-------|----------|--------|
| .0015 | 4CC-21.5 | 137.46 |
|-------|----------|--------|

20,000 VAC Peak

| | | |
|------|--------|--------|
| .002 | 4CC-22 | 137.46 |
| .003 | 4CC-23 | 137.46 |

15,000 VAC Peak

| | | |
|------|--------|--------|
| .004 | 4CC-24 | 140.61 |
| .005 | 4CC-25 | 145.20 |
| .006 | 4CC-26 | 151.35 |
| .007 | 4CC-27 | 156.00 |

12,000 VAC Peak

| | | |
|------|--------|--------|
| .008 | 4CC-28 | 156.00 |
| .009 | 4CC-29 | 156.00 |

10,000 VAC Peak

| | | |
|-----|--------|--------|
| .01 | 4CC-11 | 163.46 |
|-----|--------|--------|

8000 VAC Peak

| | | |
|------|----------|--------|
| .015 | 4CC-11.5 | 163.46 |
|------|----------|--------|

6000 VAC Peak

| | | |
|-----|--------|--------|
| .02 | 4CC-12 | 163.46 |
| .03 | 4CC-13 | 163.46 |

5000 VAC Peak

| | | |
|-----|--------|--------|
| .04 | 4CC-14 | 163.46 |
| .05 | 4CC-15 | 163.46 |
| .06 | 4CC-16 | 174.00 |

4000 VAC Peak

| | | |
|-----|--------|--------|
| .07 | 4CC-17 | 180.00 |
|-----|--------|--------|

3000 VAC Peak

| | | |
|-----|--------|--------|
| .08 | 4CC-18 | 184.80 |
| .1 | 4CC-1 | 195.60 |

CAPACITORS

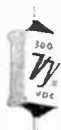
stable • rugged • low loss • miniature
low noise • humidity immunity
wide temperature range

VTM solid state PORCELAIN CAPACITORS

Conforms with MIL-C-11272B



AXIAL-RADIAL
VY 12



AXIAL
VY 17



RADIAL
VY 04

The superior electrical and mechanical characteristics exhibited by Vitramon® capacitors are attributes of their solid state composition — fine silver electrodes molecularly fused within a solid block of high grade porcelain, forming a monolithic unit that requires no case or hermetic seal.



"Layering" of electrodes makes possible a much greater active dielectric area within the same cubic content. Perfect bonding of materials minimizes loss and noise and results in greater stability over a temperature range of —55°C to 200°C.

Vitramon® capacitors are used extensively in guided missiles, jet ignition, proximity fuses, and in radar, servo, guidance, fire control, telemetering, and carrier telephone systems.

STANDARD TYPES AND VALUES

All series A, AR and R are available in the following values from factory or distributor stocks in 10%, 5%, 2% and 1% tolerances.

| | |
|--|-------------------------------|
| VY 12C or VY 13C | VY 16C or VY 17C |
| 0.5 to 200 mmf at 500 vdc | 220 to 470 mmf at 500 vdc |
| 220 to 300 mmf at 300 vdc | 510 to 1000 mmf at 300 vdc |
| VY 21C or VY 22C | VY 31C or VY 32C |
| 510 to 1000 mmf at 500 vdc | 1100 to 3300 mmf at 500 vdc |
| 1100 to 2400 mmf at 300 vdc* | 3600 to 6800 mmf at 300 vdc** |
| VY 05C | 680 to 1200 mmf at 50 vdc |
| 300 to 620 mmf at 100 vdc | VY 04C |
| 0.5 to 22 mmf at 500 vdc | 110 to 220 mmf at 100 vdc |
| 24 to 100 mmf at 300 vdc | 240 to 510 mmf at 50 vdc |
| *2200 and 2400 not available in - Axial Series | |
| **6200 and 6800 not available in - Axial-Radial Series | |

HIGH RELIABILITY SPECIFICATION S-1002B

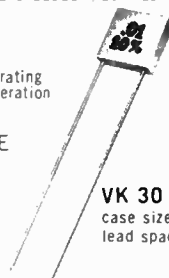
Every VITRAMON® Capacitor purchased against our High Reliability Specification S-1002B is accompanied by a detailed documentation verifying a reliability of better than 0.5% per 1000 hours. Continuous control testing of in-process material for all parameters, including 300,000 unit hours of life tests every six weeks, has consistently demonstrated an A.Q.L. for VITRAMON® Capacitors 12 times higher than Mil Specifications.

VK[®] micro-miniature CERAMIC CAPACITORS

Conforms with MIL-C-11015C 18A/19A



VK 20
case size: 0.2" square
lead spacing: 0.2"



VK 30
case size: 0.3" square
lead spacing: 0.2"

10-10,000 mmf
200 vdc without derating
—55 C to 150 C operation

MOLDED CASE

GENERAL CHARACTERISTICS

Temperature Co-efficient: Maximum deviation from 25°C measurement over range of —55°C to +150°C is ± 15%.

Voltage Co-efficient: Negative at the average rate of 0.025% per volt above 25 vdc for values through 680 mmf, and 0.1% per volt above 680 mmf.

Insulation Resistance: Minimum of 1,000 ohmfarads (100,000 megohms) at 25°C and 10 ohmfarads (1,000 megohms) at 150°C. Dissipation Factor (at 1 kc): Less than 1.5% at 25°C and less than 1.0% at 150°C through 680 mmf; from 820 through 10,000 mmf, DF is less than 2.5% and 1.5% respectively.

Lead Strength: Withstands a force of five pounds exerted in the direction of the leads as required by MIL-C-11015B.

Dip-soldering: All units thermal shock proofed, may be dip-soldered up to the case at 600°F.

Dielectric Strength: A potential of 400% of rated voltage may be applied for 10 seconds at 25°C.

| Part Number | Capacity mmf. | Part Number | Capacity mmf. | Part Number | Capacity mmf. |
|-------------|---------------|-------------|---------------|-------------|---------------|
| VK 20CW100* | 10 | VK 20CW330* | 33 | VK 20CW101* | 100 |
| VK 20CW120* | 12 | VK 20CW390* | 39 | VK 20CW121* | 120 |
| VK 20CW150* | 15 | VK 20CW470* | 47 | VK 20CW151* | 150 |
| VK 20CW180* | 18 | VK 20CW560* | 56 | VK 20CW181* | 180 |
| VK 20CW220* | 22 | VK 20CW680* | 68 | VK 20CW221* | 220 |
| VK 20CW270* | 27 | VK 20CW820* | 82 | VK 20CW271* | 270 |
| Part Number | Capacity mmf. | Part Number | Capacity mmf. | Part Number | Capacity mmf. |
| VK 20CW331* | 330 | VK 30CW122* | 120C | VK 30CW392* | 390 |
| VK 20CW391* | 390 | VK 30CW152* | 1500 | VK 30CW472* | 4700 |
| VK 20CW471* | 470 | VK 30CW182* | 180C | VK 30CW562* | 5600 |
| VK 20CW561* | 560 | VK 30CW222* | 220C | VK 30CW682* | 6800 |
| VK 20CW681* | 680 | VK 30CW272* | 2700 | VK 30CW822* | 8200 |
| VK 20CW821* | 820 | VK 30CW332* | 3300 | VK 30CW103* | 10000 |
| VK 20CW102* | 1000 | | | | |

*Tolerance code to be added to complete part number.

K = 10%, M = 20%.

NOTE: When ordering against MIL Specifications, substitute CK 05 for VK 20 and CK 06 for VK 30 in Part Number.

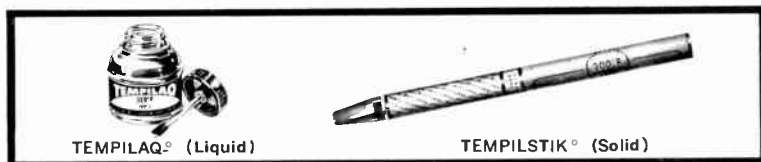
ALL AVAILABLE WITH EPOXY COATING FOR COMPLETE ASSEMBLY ENCAPSULATION

Same electrical characteristics as standard "VK" series. Each unit coated with a resilient protective compound. Leads .016 Diam. (nominal); .032 max. recommended hole diam. Dimensions: 10-100 mmf., .12" square; 120-470 mmf., .145" square; 560-1000 mmf., .170" square; 1200-10,000 mmf., .270" square. When ordering, substitute VK 21 for VK 20 and VK 31 for VK 30.

VITRAMON® INCORPORATED
BRIDGEPORT, CONNECTICUT

ALPHA-TEMPIL^o Temperature Indicators

Marketed to the Electronic Industry by Alpha Wire and Sold Nationally Through Alpha Distributors.

TEMPILAQ^o (Liquid)TEMPILSTIK^o (Solid)

Measure surface heat with better than 1% accuracy — at a cost of less than 1 cent per application!

Typical Applications

- Determining critical temperatures of electronic components.
- Monitoring metal-to-glass sealing temperatures of vacuum tubes.
- Measuring shaft bearing and rotating component temperatures.
- Preventive maintenance to detect overheating.
- Studying temperature rise of transmitter tubes.
- Detecting overloads in power switches and electrical equipment.
- Testing cooling and ventilation efficiency.
- Measuring temperature on surface of circuit elements adjacent to heated component.
- Checking efficiency of heat sinks used in soldering.
- Safeguarding against hot spots in environmental testing ovens.
- Testing temperature of soldering irons and other heated devices.
- Simulating heat dissipation tests.
- Working within prescribed metallurgical temperature limits.

ALPHA-TEMPIL^o products tell you instantly when any critical temperature is reached. Below rated temperature, the TEMPIL^o mark is dull and chalky. When exact temperature is reached, the mark liquifies sharply and becomes glossily transparent... a change easy to recognize. Components throughout the entire circuit can be temperature-checked to $\pm 1\%$ without expensive and complex thermocouples. Complete temperature profiles of any component can be determined by using several different TEMPILSTIK^o or TEMPILAQ^o marks.

Characteristics

- Accuracy** — Within plus or minus 1% of stated temperature rating.
- Response** — Melting action begins within a millisecond of reaching desired temperature.
- Permanence** — Once melted, TEMPIL^o heat indicators remain glossily transparent... do not revert to the original dull, chalky appearance.
- Readability** — Melting action is fast and unmistakable.
- Shelf life** — Lasts indefinitely.

Using TEMPIL^o temperature indicators...

TEMPILAQ^o: Apply a thin dab to the surface to be heated. This will dry almost instantly to a dull mark, ready for use.

TEMPILSTIK^o: For temperatures below 500°F, stroke a mark on the working surface before beginning the heating cycle. For higher temperatures, stroke the surface occasionally during heating.

Prices:

| | | | |
|---|---------|---|-------------|
| TEMPILAQ ^o — 2 oz. bottle..... | \$ 2.00 | TEMPILSTIK ^o — Individual 5/4" stick |\$2.00 |
| 1 pt. bottle..... | 12.00 | Optional metal holder designed | |
| Thinner* 2 oz..... | 1.00 | for TEMPILSTIK ^o | \$.50 |
| 1 pt..... | 6.00 | | |

*Thinner: dilutes TEMPILAQ^o to desired consistency for special application, or replaces evaporated solvent.

**Alpha Temperature Indicating Kits**

- Ideal for laboratory, prototype or production use
- Packaged in handy durable metal storage case

KIT NO. TEMP-200 Temp. range 175° F (79° C) to 294° F (146° C)

KIT NO. TEMP-300 Temp. range 300° F (149° C) to 388° F (198° C)

KIT NO. TEMP-400 Temp. range 400° F (204° C) to 525° F (274° C)

CONTENTS:

10 — 1/2 oz. bottles of TEMPILAQ^o in systematically spaced temperature ranges.

20 sample TEMPILSTIKS^o (Pellet form) in the same systematically spaced temperature ranges as the TEMPILAQ^o.

2 — 1/2 oz. bottles of thinner for TEMPILAQ^o. Price **\$18.00** Each Kit

Ordering Information:

All TEMPILAQ^o and TEMPILSTIK^o products are available from stock. When ordering please refer to the specific part number indicating LAQ for TEMPILAQ^o or STK for TEMPILSTIK^o. It is important to note that the part number you order is also the Fahrenheit Temperature Rating.

| Alpha No. * | F° | C° |
|-------------|-----|-----|
| 100 | 100 | 38 |
| 103 | 103 | 39 |
| 106 | 106 | 41 |
| 109 | 109 | 43 |
| 113 | 113 | 45 |
| 119 | 119 | 48 |
| 125 | 125 | 52 |
| 131 | 131 | 55 |
| 138 | 138 | 59 |
| 144 | 144 | 62 |
| 150 | 150 | 66 |
| 156 | 156 | 69 |
| 163 | 163 | 73 |
| 169 | 169 | 76 |
| 175 | 175 | 79 |
| 182 | 182 | 83 |
| 188 | 188 | 87 |
| 194 | 194 | 90 |
| 200 | 200 | 93 |
| 206 | 206 | 97 |
| 213 | 213 | 101 |
| 219 | 219 | 104 |
| 225 | 225 | 107 |
| 231 | 231 | 111 |
| 238 | 238 | 114 |
| 244 | 244 | 118 |
| 250 | 250 | 121 |
| 256 | 256 | 124 |
| 263 | 263 | 128 |
| 269 | 269 | 132 |
| 275 | 275 | 135 |
| 282 | 282 | 139 |
| 288 | 288 | 142 |
| 294 | 294 | 146 |
| 300 | 300 | 149 |
| 306 | 306 | 152 |
| 313 | 313 | 156 |
| 319 | 319 | 159 |
| 325 | 325 | 163 |
| 331 | 331 | 166 |
| 338 | 338 | 170 |
| 344 | 344 | 173 |
| 350 | 350 | 177 |
| 363 | 363 | 184 |
| 375 | 375 | 191 |
| 388 | 388 | 198 |
| 400 | 400 | 204 |
| 413 | 413 | 212 |
| 425 | 425 | 218 |
| 438 | 438 | 226 |
| 450 | 450 | 232 |

| Alpha No. * | F° | C° |
|-------------|------|------|
| 463 | 463 | 239 |
| 475 | 475 | 246 |
| 488 | 488 | 253 |
| 500 | 500 | 260 |
| 525 | 525 | 274 |
| 550 | 550 | 288 |
| 575 | 575 | 302 |
| 600 | 600 | 316 |
| 650 | 650 | 343 |
| 700 | 700 | 371 |
| 750 | 750 | 399 |
| 800 | 800 | 427 |
| 850 | 850 | 454 |
| 900 | 900 | 482 |
| 932 | 932 | 500 |
| 950 | 950 | 510 |
| 977 | 977 | 525 |
| 1000 | 1000 | 538 |
| 1022 | 1022 | 550 |
| 1050 | 1050 | 566 |
| 1100 | 1100 | 593 |
| 1150 | 1150 | 621 |
| 1200 | 1200 | 649 |
| 1250 | 1250 | 677 |
| 1300 | 1300 | 704 |
| 1350 | 1350 | 732 |
| 1400 | 1400 | 760 |
| 1425 | 1425 | 774 |
| 1450 | 1450 | 788 |
| 1480 | 1480 | 804 |
| 1500 | 1500 | 816 |
| 1550 | 1550 | 843 |
| 1600 | 1600 | 871 |
| 1650 | 1650 | 899 |
| 1700 | 1700 | 927 |
| 1750 | 1750 | 954 |
| 1800 | 1800 | 982 |
| 1850 | 1850 | 1010 |
| 1900 | 1900 | 1038 |
| 1950 | 1950 | 1066 |
| 2000 | 2000 | 1093 |
| 2050 | 2050 | 1121 |
| 2100 | 2100 | 1149 |
| 2150 | 2150 | 1177 |
| 2200 | 2200 | 1204 |
| 2250 | 2250 | 1232 |
| 2300 | 2300 | 1260 |
| 2350 | 2350 | 1288 |
| 2400 | 2400 | 1316 |
| 2450 | 2450 | 1343 |
| 2500 | 2500 | 1371 |

*Add prefix LAQ for liquid type or STK for solid type

CAIG LABORATORIES INC.

New Hyde Park, L. I., N. Y.

Cramolin® products

CRAMOLIN fluid is a combination protection and cleaning preparation. It is preferably applied on contacts already in use, or on apparatus where contact deficiency has occurred and where these contacts should be protected against oxidation. May be used on old and new contacts, and with other CRAMOLIN products.

CRAMOLIN-SPECIAL fluid is not a cleaning preparation, however, it does provide the essential protection needed. It is mainly used in the manufacture of new instruments or apparatus where the improvement of performance is desired as well as to preserve and increase the life of the apparatus. Should be used on new contacts or those contacts that have been previously cleaned with CRAMOLIN.

CRAMOLIN-PASTE is a semi-solid form and is also a combination protection and cleaning preparation. Usually used for high amperage and/or high voltage use. Can be used after applications of CRAMOLIN for good results.

Ask or write for Bulletin C-200 for complete Technical Data.

FEATURES

- CLEANER
- LUBRICANT
- PRESERVATIVE
- ANTI-CORROSIVE

**PRICES**

| DESCRIPTION | CRAMOLIN (Red Color) | CRAMOLIN- SPECIAL (Blue Color) | CRAMOLIN- PASTE |
|-----------------------|-------------------------|--------------------------------------|--------------------|
| 2 oz. Glass Bottle | \$1.95 | \$2.25 | |
| ½ pint, Glass Bottle | 6.75 | 7.50 | |
| 1 pint, Glass Bottle | 13.00 | 14.50 | |
| 1 quart, Glass Bottle | 25.50 | 28.00 | |
| ¼ Kg Can (½ lb.) | | | \$2.90 |
| 6 oz. Spray | 3.00 | 3.50 | |
| Engineers Kit | 6.75 | | |

HERE ARE 14 REASONS WHY CRAMOLIN IS THE MODERN CONCEPT ON IMPROVING CONTACT PERFORMANCE

1. Reduces contact resistances to their minimum values.
2. Reduces sparking of brushes on commutators.
3. Improves performance of contacts and collector rings.
4. Protects against salt air and sulfidic atmosphere and will not absorb moisture.
5. Applied on moving parts, Cramolin will stay on. Cramolin contains a chemical compound which is strongly attracted by metal surfaces and cannot be removed completely, even by high pressure friction.
6. Fungus growth will not develop on Cramolin-films, because Cramolin contains mineral and synthetic ingredients only.
7. Cramolin is not aggressive on baked varnishes, although it may affect some nitro-cellulose lacquers.
8. Max. effective operating temperature range is -34°C to $+150^{\circ}\text{C}$.
9. Cramolin can be safely used at a relative humidity of 95% and temperatures up to 100°C .
10. Cramolin will perform equally as well under air pressure as well as in a vacuum.
11. Insulation resistance of 10^{13} ohms between contacts at distance of 1 cm on Trolitul (phenol-formaldehyde resin).
12. Tests have indicated that no injurious secondary effects arise.
13. Cramolin may be applied on old contacts without special precautions. All non-metallic layers, dust, resin, etc., will be dissolved and removed at once by rubbing it off, or by operating the contact several times.
14. Under general operating conditions Cramolin should be reapplied after two to three years (on high frequency and low current contacts). In highly corrosive atmosphere (containing acid, sulphide, etc.) reapplication should take place after one year. If the air contains unusual quantities of ammonia, contacts should be treated with Cramolin-Special.

NEW*Cramolin
Spray R***\$3.00**

6 oz. can



6" Extension Spray Tube — FREE!

Now — for those who prefer the spray can method of application. CRAMOLIN SPRAY R has same properties as CRAMOLIN FLUID. Packaged in neat spray can with automatic valve. Equipped with a whirl spray head, which will apply CRAMOLIN — breath thin — to most remote areas. The Hygrade propellant and speedy evaporating solvent leaves only a microfilm of actual CRAMOLIN on contact area.

EACH KIT CONTAINS:

- 2 OZ. CRAMOLIN
- 2 OZ. CRAMOLIN-SPECIAL
- ½ LB. CRAMOLIN-PASTE
- TECHNICAL GUIDE TO PROPERTIES & APPLICATIONS

\$6.75complete
plus postage**NEW Cramolin
ENGINEERS PRODUCT KIT**

The Engineers Kit provides the experimenter the opportunity to evaluate the best combination of CRAMOLIN product preservatives for his own particular contact problems.

THE NEW MIRACLE T. V. TUNER CLEANER

CHEMICALLY ENGINEERED FOR ELECTRONIC TECHNICIANS

HUSH[®]

Chemically engineered for that tuner and switching mechanism. Hush comes in a 6 oz. pressure can with sufficient pressure to reach all contacts to wash-a-way that dirt, leaving clean and positive contacts, protected with a lasting lubricant film and with no powder residue.

FREE 6" Plastic Extender With Every Can

6 oz. ECONOMY SPRAY CAN \$2.25

Hush also available in 2 oz., 8 oz. and 32 oz. containers. Net



"Spray It and Forget It"



16 ounces \$1.95 Net

STOPS

Corrosion

Corona Loss

Short Circuits

NEW TRANSPARENT PLASTIC SEALER

INSULATES and WATER PROOFS

with HIGH DIELECTRIC STRENGTH



A FEW
DROPS
DOES THE
JOB

2 oz. Net 79c
(32 oz. sizes available)

SINCE 1949 THE ORIGINAL

SUPER EVER-QUIET[®]

VOLUME CONTROL and CONTACT RESTORER

EVER-QUIET is a free-flowing liquid that leaves no power residue. Scientifically designed to seep around the shaft and penetrate the control or potentiometer, cleaning the contacts and leaving a safe protecting film.

EVER-QUIET is harmless to metals, wire or carbon.

FREE 6" Plastic Extender With Every Can

6 oz. SPRAY CAN \$1.59 Net

EVER-KLEER T.V. Picture Tubes, Protecting Glass Cleaner

CHEMICAL ELECTRONIC ENGINEERING, INC.

MATAWAN, NEW JERSEY

CHEMTRONICS

ELECTRONIC CHEMICALS FOR SERVICEMEN



302 820 850 870 880 830 840 810 301

TROL-AID CONTROL AND ELECTRICAL CONTACT CLEANER

CHEMTRONICS' TROL-AID is a highly successful control and contact cleaner. A multi-purpose product, TROL-AID cleans as well as lubricates electronic controls and switches, thus extending their operational life. Cat. No. 820 Net Wt. 8 oz. Dealer Net \$1.98
Convenient "CADDY SIZE" Cat. No. 302 Net Wt. 3 oz. Dealer Net 98c

FROST-AID FOR LOCATING THERMAL INTERMITTENT COMPONENTS

FROST AID is used to instantly cool and pinpoint suspected intermittent resistors, condensers, coils, and other components, for instant detection . . . thus saving hours of trial and error operations. FROST-AID is very effective in chilling leads of transistors and phono cartridges to reduce possibility of heat damage during soldering. Cat. No. 850 Net Wt. 8 oz. Dealer Net \$1.98

CHEM-OIL A NEW PENETRATING & LUBRICATING OIL • FROZEN YOKE REMOVER

Electronic CHEM-OIL is a revolutionary new penetrating and lubricating oil based on an exclusive formula of chemicals and oils, highly recommended for use in record changers, tape recorders and instruments . . . and also as a "FROZEN YOKE REMOVER". Cat. No. 870 Net Wt. 8 oz. Dealer Net \$1.79

WIPE-A-WAY A NEW WATERLESS HAND CLEANER

CHEMTRONICS' WIPE-A-WAY is an exclusive formulated waterless hand cleaner. Immediately removes grease, grime, and cements . . . ideal for every type of hand cleaning problem. Contains no harsh abrasives or strong chemicals, and is fortified with activated lanolin and germ-killing trichlorophenate. Cat. No. 860 Net Wt. 6 oz. Dealer Net \$1.49

SOL-VENT A UNIVERSAL SOLVENT AND THINNER FOR ALL CEMENTS

SOL-VENT is a non-inflammable, non-toxic, all purpose thinner and solvent especially prepared to thin all types of cements, liquid insulators and dopes. Cat. No. 880 Net Wt. 8 oz. Dealer Net 98c

NO-ARC HI-VOLTAGE INSULATOR WITH 20,000 VOLTS DIELECTRIC STRENGTH

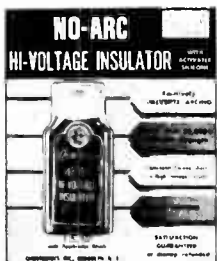
A revolutionary approach to Hi-Voltage insulation and protective coating for H.V. transformers, yokes, HV leads and printed circuits. Waterproofs and protects exposed wiring, etc. Employs NEW JET STREAM ACTION—Not a Spray. MEETS MIL-C-12599 Cat. No. 830 Net Wt. 8 oz. Dealer Net \$2.79

MASK-N-GLAS GLASS AND PLASTIC CLEANER AND POLISHER

Another CHEMTRONICS Service-Aid is the new MASK-N-GLAS Cleaner and Polisher. This exclusive anti-static glass and plastic cleaner is a non-staining, non-abrasive dirt and grime remover . . . for the cleaning of TV masks, safety glass and picture tubes. Cat. No. 840 Net Wt. 6 oz. Dealer Net \$1.79

TUN-O-LUBE MIRACLE ACTIVATED TUNER CLEANER

CHEMTRONICS' "Non-Drift" TUN-O-LUBE with activated TC-3 is a non-inflammable, non-toxic tuner cleaner . . . designed to clean and lubricate all type of tuners in one operation. Cat. No. 810 Net Wt. 8 oz. Dealer Net \$1.98
Convenient "CADDY SIZE" Cat. No. 301 Net Wt. 3 oz. Dealer Net 98c



CHEMTRONICS NO-ARC

MEETS MIL-C-12599
The same high quality, Hi-Voltage insulation and protection provided in the aerosol can above. Provides excellent HV insulation protection for HV transformers, yokes, etc. Supplied with brush applicator.

Cat. No. 501-1
2 oz. Bottle
Dealer Net 98c



CHEMTRONICS TV-RADIO CEMENT

is an unexcelled high grade cement especially prepared for repairing speakers. It can also be used for glass or bakelite.

Cat. No. 502-2
2 oz. Bottle
Dealer Net 55c



CHEMTRONICS ALL-PURPOSE GLUE

The best all-purpose glue for servicemen. Stronger, faster drying, easy to use. Dries to a permanent clear bond. Excellent for joining plastic, glass, wood and metals.

Cat. No. 503-6
2 oz. Bottle
Dealer Net 55c



CHEMTRONICS TAPE RECORDER CLEANER

With miracle activated TR-2 is scientifically designed to clean heads, tape guides, capstan rollers and all other critical parts. Improves fidelity, eliminates tape squeal.

Cat. No. 504-3
2 oz. Bottle
Dealer Net 83c



CHEMTRONICS TUN-O-LUBE

A bottled version of the high quality aerosol unit described above. The extremely popular non-drift, miracle activated cleaner—cleans and lubricates all types of tuner. Non-inflammable, non-toxic

Cat. No. 545-4
2 oz. Bottle
Dealer Net 79c



CHEMTRONICS TROL-AID

Equivalent of the Aerosol version described above. A highly successful control and contact cleaner; cleans as well as lubricates. Eyedropper included.

Cat. No. 506-5
2 oz. Bottle
Dealer Net 79c

BOTTLED ITEMS ALSO AVAILABLE IN PINTS, QUARTS AND GALLONS



CHEMTRONICS INC.

BROOKLYN, N. Y.



ECONOMICAL! A LITTLE DOES A LOT!
 6 oz. spray can
\$350 Net
 with FREE 5" plastic extender
 push button assembly

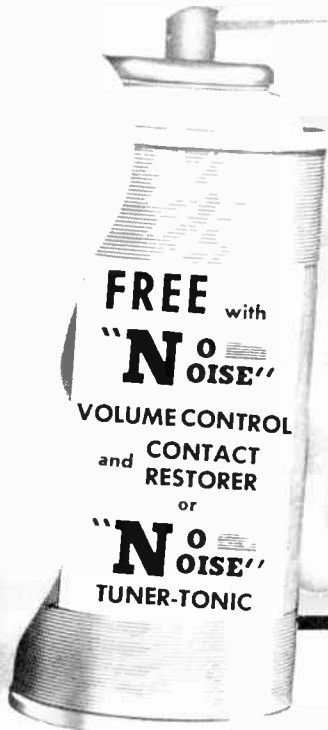
LUBRICATES
 • CLEANS
 • CONDITIONS ALL
 ELECTRICAL CONTACTS

electronic chemical **EC-44**
 new formula . . .

always insist on . . . **PROVED BRAND NAMES**

ask by name for
GENUINE

PRODUCTS



now available

5" PLASTIC EXTENDER
 with Push Button Assembly

Fastens easily and securely for the finest pin-point applications. Invaluable on all kinds of jobs. Positively won't cause shorts.

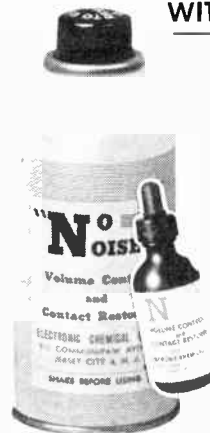
ALL "NO-NOISE" PRODUCTS SOLD WITH MONEY BACK GUARANTEE



"NO NOISE"
Tuner-Tonic
 with
Perma-Film

- Economical - a little does a lot.
- Cleans, lubricates, restores all tuners - including wafer type.
- Non-toxic, non-inflammable.
- Use for TV, radio and FM.

6 oz. Aerosol Can
 NET To Servicemen **\$3.25**



"NO NOISE"

Volume Control and Contact Restorer

- CLEANS
 - PROTECTS
 - LUBRICATES
- NOT A CARBON TET SOLUTION

2 oz. Bottle **\$1**
 6 oz. Spray Can **\$2.25**

NET To Servicemen

At Your DISTRIBUTOR Only

ELECTRONIC CHEMICAL Corp.

JERSEY CITY, NEW JERSEY

electronic chemical
 • new formula **EC-44**

Economical! A little does a lot!
 6 oz. spray can **\$350** Net

LUBRICATES • CLEANS
 CONDITIONS
 ALL ELECTRICAL CONTACTS
 with FREE 5" plastic extender
 push button assembly



CHEMICALS AND KITS

GC Chemicals (Cements, Thinners, Paints, Oils, Varnishes, etc.), are available in handy 2-oz. bottles with brush-in-caps. Also supplied in larger sizes.



G-C RADIO-TELEVISION SERVICE CEMENT—This high grade cement is specially prepared for Radio, Television and Speaker Work. Unexcelled for cementing and replacing cones on dynamic speakers, repairing rattling or torn cones, cementing voice coils, spiders, etc.
Cat. No. 30-2 2-oz. Net \$.48

G-C PLASTIC CEMENT—Excellent for cementing broken plastic cabinets, cementing grille cloth in place, cementing dial and glass crystal assemblies, cementing knots in dial, cords, etc.
Cat. No. 32-2A 2-oz. Net \$.48

G-C "BAKELITE" CEMENT—This cement is especially made for cementing "BAKELITE" to "BAKELITE" and to other materials.
Cat. No. 32-2 2-oz. Net \$.70

G-C "VINYLITE" CEMENT—This new G-C Cement based upon "VINYLITE" vinyl resins, has great adhesion, high tackiness and extreme flexibility.
Cat. No. 58-2 2-oz. Net \$.48

G-C HOUSEHOLD and MODEL CEMENT—Fast-drying cement, suitable for many uses. Excellent "Household Cement"; will cement wood, paper, plastics, metal, china, crockery, ceramics, etc.
Cat. No. 45-2 2-oz. Net \$.48

G-C FABRIC AND GRILLE CLOTH CEMENT—For cementing grille cloth and fabrics to either metal, plastic or wood cabinets.
Cat. No. 22-2 2-oz. Net \$.53

G-C WOOD CABINET GLUE—This is the ordinary well-known wood glue that is used in repair of furniture, chairs, radio cabinets, etc.
Cat. No. 39-2 2-oz. Net \$.48

G-C No. 28 CEMENT THINNER—This thinner is made of same solvents as G-C Service Cement and makes the best thinner for G-C Service Cement.
Cat. No. 28-2 2-oz. Net \$.45

G-C RADIO SERVICE SOLVENT—The best solvent for loosening cement on speaker cones, frames, etc., made to dissolve all types of cements. Can also be used as a thinner for G-C Cement and other cements.
Cat. No. 31-2 2-oz. Net \$.45

G-C No. 29 LACQUER THINNER—Solvent for thinning all lacquers, lacquer enamels, telephone black and gray, touch-up lacquers.
Cat. No. 29-2 2-oz. Net \$.45

G-C No. 67 PAINT THINNER—Excellent for Ruf-Koat, Krome-Koat, B-K Cement, Insulating Varnish and Rubber Cements.
Cat. No. 67-2 2-oz. Net \$.45

G-C No. 41 Q-DOPE THINNER—Excellent solvent for Polystyrene, Q-Dope and any other Polystyrene Coil Dopes and Cements. Will soften and dissolve polystyrene rous, sheets, etc. Clear water-white solvent will not change characteristics of original materials.
Cat. No. 41-2 2-oz. Net \$.45

G-C RUBBER-TO-METAL & PHONO DRIVE CEMENT—Specially prepared for cementing rubber phono and dial drives to shafts and pulleys.
Cat. No. 35-2 2-oz. Net \$.53

G-C PLIOBOND CEMENT—Bonds anything to anything—iron, steel, plastic, glass, aluminum, cotton, vinyl sheets, stainless steel, etc. A truly universal cement.
Cat. No. 43-2 2-oz. Net \$.53

G-C ELECTRICAL AND RESISTOR CEMENT—Here's the heat-proof cement that hardens like porcelain, same as used on resistors, flat irons, electrical appliances, etc.
Cat. No. 27-2 2-oz. Net \$.48

G-C ACRYLIC-PLEXIGLASS CEMENT—Specially prepared for cementing Lucite, Plexiglass and other acrylic materials.
Cat. No. 40-2 2-oz. Net \$.53

G-C NE-O-PRENE CEMENT—For cementing neoprene rubber to neoprene or neoprene to other products, such as metal, wood, paper, etc.
Cat. No. 52-2 2-oz. Net \$.53

G-C VINYL PLASTIC FABRIC CEMENT—Made for cementing vinyl plastic sheets together. Ideal for vinyl insulating tubings, patching plastic rain coats, covers, etc.
Cat. No. 16-2 2-oz. Net \$.53

G-C LABEL CEMENT—Here's a label cement that will make labels stick to anything—metal, glass, wood, tin, etc.
Cat. No. 46-2 2-oz. Net \$.48

G-C TV HIGH VOLTAGE CORONA DOPE—Prevents corona shorts on high voltage circuits in Television sets.
Cat. No. 47-2 2-oz. Net \$.72

G-C REO-X TV CORONA DOPE—Prevents corona shorts in high voltage circuits in TV sets. Coat surfaces and sharp corners to stop corona effect.
Cat. No. 50-2 2-oz. Net \$.72

G-C TV TUBE KOAT—For recoating the outside of TV picture tubes that have become scratched or the surface is peeling.
Cat. No. 49-2 2-oz. Net \$.72

G-C TV LINE SEAL FOR UHF AND VHF—Outdoor special acrylic sealer for sealing TV wires, terminals, screws, antennas, junction boxes.
Cat. No. 17-2 2-oz. Net \$.53

G-C PHONO NON-SLIP COMPOUND—Prevents slippage of phono drives on changers, tape recorders, and all types of recorder drives.
Cat. No. 86-2 2-oz. Net \$.90

G-C REO GLYPTAL INSULATING VARNISH—Most common of all protective insulating coatings, used on all solder connections, high voltage points, anti-corona.
Cat. No. 90-2 2-oz. Net \$.57

NON-SLIP COMPOUND FOR RADIO DIALS—Powder Compound for treating friction type dial drives such as cords, cables and belts.
Cat. No. 1210 Non-Slip, 2-oz. Net \$.45

LIQUID NON-SLIP—Penetrating and fast-drying liquid dressing. Shrinks fibres, prolongs life of cables and belts and prevents slipping.
Cat. No. 1211 1/2-oz. Net \$.33

G-C OE-OX-10—Cleans and prevents oxidation on sensitive circuit contacts. Use in Television, Radio, Telephone, Relays, Instruments, etc.
Cat. No. 19-1 1-oz. Net \$.67
19-2 2-oz. Net \$.97

G-C CONTACT AND CRYSTAL CLEANER—A fast-evaporating cleaner specially prepared for cleaning contacts and crystals. Cleans easily and will not injure delicate parts, crystals, etc.
Cat. No. 127-2 2-oz. Net \$.45

NEW G-C ELECTRONIC CONTACT CLEANER—Most popular all-purpose contact cleaner on the market. Fast drying and fast acting. Leaves a non-corrosive film on the contacts that insures long, trouble-free action.
Cat. No. 210-2 2-oz. Net \$.53

G-C OE-NOIZ ELECTRONIC TV CONTACT AND OETENT CLEANER—Stops Noise on all types of contacts, volume controls, tuners, detents, switches, relays, etc.
Cat. No. 51-2 2-oz. Net \$.97

G-C CARBON CONTROL CLEANER—Makes it easy to repair most noisy volume controls, tone controls, switches, band switches, push-buttons—in fact, most all types of moving contacts. A special chemical that both removes oxidation and minimizes future trouble by coating the contacts.
Cat. No. 212-2 2-oz. Net \$.45

G-C CARBON TETRA-CHLORIDE—100% pure Carbon Tetra-Chloride, non-explosive and non-flammable. For cleaning electrical controls and contacts.
Cat. No. 211-2 2-oz. Net \$.38

G-C LUBE-REX—The best contact cleaner on the market. Fine for attenuators, push-button switches, all-wave switches, contacts, etc. Cleans contacts and prevents corrosion.
Cat. No. 1206 2-oz. Net \$.45

G-C GRAFOLINE—Insures proper and lasting repairs for all air-exposed contacts, switches, and wire-wound volume controls—wherever dust and dirt affect the quiet action of adjustable radio parts or controls.
Cat. No. 120-2 2-oz. Net \$.53

G-C CARBON-X—A practical method to touch up those worn and noisy spots on carbon volume controls.
Cat. No. 1205 2-oz. Net \$.80

G-C CONTACT DOPE—Ideal contact cleaner for electronic switches, controls and contacts. Specially prepared to resist corrosion and oxidation on contacts.
Cat. No. 1214 2-oz. Net \$.48

G-C NON-CORROSIVE LIQUID SOLDERING FLUX—Best quality non-corrosive flux for all types of radio and electrical soldering, for copper, brass, steel, nickel, etc.
Cat. No. 42-2 2-oz. Net \$.48

G-C Q-DOPE (COIL DOPE)—Specially prepared for coating, doping, sealing, cementing and impregnating coils and paints in "Very High" and "Ultra High" frequency ranges.
Cat. No. 37-2 2-oz. Net \$.48

G-C LIQUIDOPE—Gives coils a tough protective film that insures firmness and prevents characteristic changes due to weather.
Cat. No. 36-2 2-oz. Net \$.53

G-C INSULATING & DIPPING VARNISH—Produces a smooth, tough film that is water-proof, oil-proof and non-corrosive. Recommended for treating field coils, noisy or buzzing transformers and choke coils.
Cat. No. 56-2 2-oz. Net \$.53

G-C FUNGUS VARNISH—Used on all types of Radio, Electronics and Communication equipment to prevent moisture absorption and fungus growth, when equipment is used in hot and humid climates.
Cat. No. 57-2 2-oz. Net \$.57

G-C STRIP-X—Removes insulating enamel from wires for easy soldering. Use on magnet wire, etc.
Cat. No. 26-2 2-oz. Net \$.67

G-C RECO-STATIC CHASER—Minimize dust accumulation on records and picture tube. Reduces dust attracting static electricity.
Cat. No. 48-2 2-oz. Net \$.45

G-C MAG-NETIK RECORDING HEAD CLEANER—Cleans without injury to the recording head that gradually lose their sensitivity if oxide accumulates.
Cat. No. 53-1 1-oz. Net \$.57
53-2 2-oz. Net \$.97

G-C RUF-KOAT—The only finish that will air dry and give you a professional wrinkle job without baking. Colors: Black, Gray and Brown (Specify Color).
Cat. No. 60-2 2-oz. Net \$.67

G-C No. 14-2 PRINT-KOTE SILICONE RESIN—After repairing or replacing parts in printed circuits, protect the panel joints and parts. Fast air drying.
Cat. No. 14-2 2-oz. Net \$1.30

G-C No. 13-2 PRINT-KOTE SOLVENT FOR SILICONE RESIN—The only solvent for G-C 14-2 Silicone Resin. Will dissolve and remove silicone resin from printed circuits.
Cat. No. 13-2 2-oz. Net \$.37

G-C PRINT-KOTE SOLDERING FLUX—Non-corrosive liquid flux for easy soldering and repairing of printed circuits.
Cat. No. 12-2 2-oz. Net \$.50

G-C CEMENT SAMPLER KIT—A sampler kit containing a complete selection for every application. Kit includes 2-oz. samples of Service, Pli-O-Bond, Acrylic, Plastic, Bakelite, Vinylite, Grille Cloth, Model, Wood, Rubber-to-Metal, Electrical and Resistor, Neoprene, Label and Vinyl Cements. Ideal for research and development.
Cat. No. 345 Net \$5.97



G-C RADIO AND TELEVISION CEMENT—High grade speaker cement in a handy tube for those who prefer to use a tube. Cement can be applied directly from tube on the parts to be cemented without the use of a brush. Also used for television work, sealing nuts, bolts, etc., on antennas, rotators, etc.
Cat. No. 34-2

2-oz. tube Net \$.48



CHEMICALS AND KITS



(A) G-C TV CHEMICAL KIT—A complete kit of essential chemicals needed for servicing TV sets. Complete in a handy metal box you can carry with you on the job or keep in the shop. Cat. No. 904 TV Chemical Kit Net \$6.30

(B) G-C E.I.A. COLOR CODING KIT—Complete kit of all standard E.I.A. colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Grey and White. Brushes furnished and E.I.A. color chart is on box. Cat. No. 677 Color Coding Kit Net \$1.47

(C) G-C DIAL AND SIGNAL LIGHT COLORING—Long-lasting coloring for signal systems, radio dials, decorative lighting, etc. Instant drying. Bright, durable colors of Red, Green, Blue, Amber, Purple and solvent.

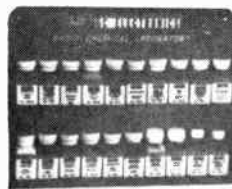


Cat. No. 66-5 Kit of 5, no purple Net \$1.23
66-6 Kit of 6 Net \$1.43

(D) G-C DIAL AND APPLIANCE OIL—A fine free-running oil for lubricating dial mechanisms, loosening and freeing controls, shafts, etc. Also use on small motors, appliances, etc. Cat. No. 1245 4-oz. Net \$.67

(E) G-C RADIO-TV CHEMICAL LAB—Twenty 2-oz. bottles in permanent rack that can be placed on your bench or hung on the wall. Every needed chemical and cement is included for all kinds of repairs, speakers, coils, contacts, dials, controls, etc. Cat. No. 997 Net \$12.75

(F) G-C DELUXE RADIO-TV CHEMICAL LAB—For service shop and industrial plant. Complete



practical laboratory designed to the needs of all service men in their everyday work. Ideal for the service man, engineer, experimenter, etc. Cat. No. 998 Net \$16.17

(G) G-C ROOF-SEAL COMPOUND—Eliminate callbacks on roof antenna installations by sealing all contacts or fastenings; to the roof. Cat. No. 18-16 Pint Net \$.92

(M) G-C LUMINOUS LITE-KOAT KIT—Long-life, non-poisonous luminous coating that absorbs light in daytime and glows in the dark. Coat or stripe dials, knobs, switch plates, meter boxes, key holes, panels, instruments, hallways, staircases, etc.

Cat. No. 184-0 Net \$3.23



(J) G-C ELECTRONIC CONTACT CLEANER HYPODERMIC NEEDLE INJECTOR—Here's a handy applicator made on the hypodermic principle to inject cleaners and oils into shafts, controls and tight places. Cat. No. 8383 Net \$.48

(K) G-C DE-OX-ID KIT WITH NEEDLE INJECTOR—Kit contains 2 oz. bottle of De-Ox-Id and a hypodermic needle type injector for making it easy to apply. Cat. No. 8460 Net \$1.42

G-C CONTROL KLEENER—Cleans and lubricates Volume, Brightness, Tone and other controls. Also good for push buttons, switches, contacts and tuners. Cat. No. 65-16 16-oz. Net \$1.95

(L) G-C NON-TOXIC ELECTRO-TET CLEANER—Chlorothene, one of the least toxic of the Chlorinated Solvents. Closely parallels Carbon Tetrachloride, but much safer. Non-inflammable and fast drying. Cat. No. 10-G 1 Gallon Net \$7.08

G-C KLEEN-TEX CLEANER—A safe, slow-burning, high flash, inexpensive cleaner for motors, chassis, vacuum cleaners, etc. Removes grease, oil, wax and tars. Cat. No. 11-G 1-Gallon Net \$3.27

(M) G-C SOLDERING PASTE—New high quality, non-corrosive soldering paste for radio and electrical work. Cat. No. 1207 2-oz. Net \$.42



(N) G-C PHONO-TURNTABLE MOTOR & GEAR LUBRICANT—A new special lubricant for phonographs. Formulated so that the lubricant clings to the surface of the parts. Eliminate trouble on phono repairs by using the best. Cat. No. 1223 2-oz. Net \$.53

(O) TRANSISTOR Z5 SILICONE COMPOUND—G-C Silicone Compound is applied to transistor and chassis at the factory. IT MUST BE RE-APPLIED to transistor and chassis when replacing transistors. Cat. No. 8101 1-oz. Net \$2.10

(P) G-C RUF-KOAT WRINKLE VARNISH—The only finish that will air dry and give you a professional wrinkle job without baking. Colors: Black, Gray and Brown (Specify Color). Cat. No. 60-2 2-oz. Net \$.67

(Q) RUF-KOAT SPRAY-KOAT—In power spray cans. Cat. No. 60-12 12-oz. Black Net \$2.25
60-13 12-oz. Gray \$2.25

(R) G-C FELT-KOAT FLOCK FINISH SPRAY KITS—The new G-C method of applying flock with the G-C patented gun. It distributes flock evenly and blows each fibre into the undercoat vertically with great power. The flock in reality "flocks to the undercoat in a heavy velvet coat." Cat. No. 180-2 Deluxe Kit Complete Net \$11.10

(S) G-C FELT-KOAT FLOCK—Genuine rayon flock 1/8" length fibers. Colors available: Brown, Taupe, Blue, Black, Ivory, Red, Green and Gold. Specify Color wanted. Cat. No. 180-5 Flock, Kit Size, 2-oz. Sifter/Can Net \$1.07



(T) G-C FLOCK SIZING UNDERCOAT—A neutral base undercoat. This is first applied to the surface being flocked and then the flock spread over the wet surface. Cat. No. 180-4 4-oz. Net \$.72

(V) G-C FELT-KOAT SPECIAL FLOCK PATENTED BLOWER GUN—This gun distributes the flock evenly and blows each fibre into the undercoat vertically with great force, thereby giving a smooth, velvet finish. Cat. No. 180-3 Flock Blower Gun Net \$4.50

(W) G-C CONTROL GUN KIT—Cleans and lubricates noisy volume controls. Constructed of solid aluminum—will not rust. Cat. No. 9285 Net \$4.50

(X) CONTACT BURNISHING TOOL KIT—A complete kit for the servicing of relays, switches, etc. where critical contact points must be kept clean for ideal operating conditions. Cat. No. 9339 Complete Kit Net \$.75

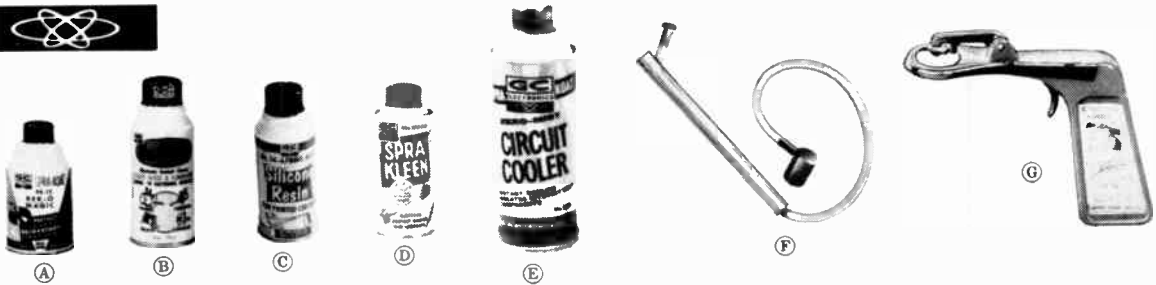


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CHEMICALS AND KITS



(A) **NEW REK-O-MAGIC ANTI-STATIC SPRAY**—Eliminates abrasive dust that ruins records. Cleans and keeps clean. Easy to use.
Cat. No. 98-12 12 oz. Net \$1.88

(B) **DE-OX-ID**—Electrical contact cleaner for silver, detent and radar contacts. Use in television, radio, telephone, relays, instruments, etc., the greatest development in electronic contact fluids.
Cat. No. 19-6 6 oz. Net \$2.33

(C) **K-27 PRINT-KOTE**—T-V Silicone resin for printed circuits. This is the original clear silicone resin as used by manufacturers on all printed circuit sets. It insulates, protects and

prevents shorts.

Cat. No. 14-6 6 oz. Net \$2.42

(D) **SPRA-KLEEN**—Eliminates noise due to dust, dirt and corrosion on electrical contacts the easy way. Just spray onto contacts or controls.
No. 8666 6 oz. Spray Can Net \$.99

NEW 16 OUNCE KING SIZE THAT SPRAYS UP-SIDE DOWN. A full 16 ounces that works equally well right side up or upside down for those hard to reach places.
No. 8666-16 16 oz. Spray Can Net \$1.95

(E) **ZERO-MIST SPRA KOAT**—Instantly locates defective circuit components of an intermittent nature due to temperature change. Circuits

cooled instantly . . . intermittent components isolated.

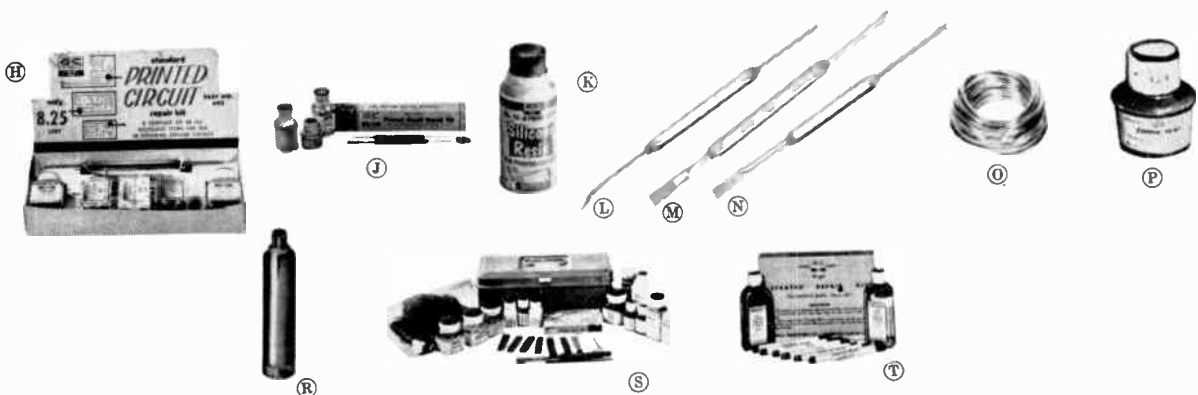
Cat. No. 8667 16-oz. Net \$2.42

(F) **G-C FLEX-SOL SPRA-CAN EXTENSION**—The device that adapts Spra-Cans to ANY use. Now you can reach and clean controls and tuners without removing them from the chassis. Speeds up and simplifies bench work.

Cat. No. 9344-1 Net \$.68

(G) **NEW GUN TYPE SPRAY CAN HANDLE**—Converts any spray can to a professional spray gun. The easy method of applying paints, service chemicals, cleaners, special finishes, etc. is made even easier!

Cat. No. 9288 Net \$.89



(H) **NEW G-C STANDARD PRINTED CIRCUIT KIT**—Includes one box each of foil, solder washers, solder wire, one solder probe tool and brush, silicone resin lacquer and solvent, tweezers and complete instructions.
Cat. No. 682 Net \$4.95

(I) **G-C MASTER PRINTED CIRCUIT KIT**—Includes all items in G-C standard kit plus one Ungar Soldering iron with one special tip and a 6-oz. spray can G-C No. 14-6 Print-Kote Silicone Resin Spray and complete instructions.
Cat. No. 683 Net \$9.50

(J) **G-C No. 680—PRINTED CIRCUIT SILICONE RESIN SERVICE KIT**—Here's a complete kit with the materials you need to repair any Printed Circuits in radio and TV sets using Printed Circuits. Used by leading set manufacturers.
Cat. No. 680 Net \$5.85

G-C No. 681—TV PRINTED CIRCUIT SILICONE RESIN SERVICE KIT—No. 681 kit is the same kit as No. 680, except the 21-1 Pure Silver Print is not included in kit.
Cat. No. 681 Net \$3.48

(K) **G-C PRINT-KOTE SILICONE RESIN SPRAY**—Genuine Silicone Resin as used by leading TV set manufacturers to protect printed circuits. After repairing or replacing parts in printed circuit sets.
Cat. No. 14-6 6-oz. Net \$2.42

(L) **G-C No. 9093 PRINT-KOTE SOLDER AID PROBE**—Handy, fine point probe specially designed to

aid in probing and soldering printed circuits.

Cat. No. 9093 Net \$1.00

(M) **G-C No. 9094 PRINT-KOTE BRUSH AND SCRAPER**—Fine stainless steel brush and hardened steel scraper are required to scrape and clean the Silicone Resin from printed circuits before any repair can be made.
Cat. No. 9094 Net \$.98

(N) **G-C HEAVY DUTY SOLDERING AID TOOL**—One end has a stiff wire brush for cleaning wire and terminal strip before soldering, and the other end is machined to hold the wires while being soldered.
Cat. No. 9088 Net \$1.00

(O) **G-C PRINT-KOTE SOLDER**—Special non-corrosive flux and low-melting solder combined with Pure Silver.
Cat. No. 9131 11-foot Coil Net \$.52

(P) **G-C SILVER PRINT**—Same Pure Silver compounded as used by manufacturers in printed circuit design. Repair those printed circuits, touch up circuit around eyelets, rivets, parts, etc.
Cat. No. 21-1 ½ Troy oz. Net \$2.47
21-2 1 Troy oz. \$4.75

NEW G-C COPPERPRINT—Excellent for repairing printed circuits. A high conductive, fast drying compound to touch up printed circuits.
Cat. No. 20-2 2 oz. Net \$1.43

(R) **G-C SCRATCH STIKS**—Available for Walnut, Mahogany and Light Wood. Removes scratches on all shades and colors of woods—makes them vanish like magic.

Cat. No. 909-W Net \$.48

(S) **G-C No. 900 MASTER DELUXE CABINET REPAIR KIT**—With this Master Repair Kit all repairs can be made even for the most exacting customer. All of the essentials for a really satisfactory repair job are included in this Kit. Our new spirit stains, varnishes and enamels are included in this kit (all spirit solvent).
Cat. No. 900 Master Deluxe Kit Net \$9.10

G-C No. 901 CABINET REPAIR KIT—Here's a kit that is second to none. It is a complete kit that will meet any emergency or do any repair job. With this kit you can repair wood cabinets, as well as plastic and bakelite cabinets, knobs, etc. On dents or nicks you can use the shellac sticks and melt them in with the spatula and alcohol lamp.

Cat. No. 901 Net \$6.57

No. 907 MASTER CABINET TOUCH-UP KIT—A high-grade, complete fast Touch-Up Kit for repairing scratches and dents on radio cabinets and furniture.

Cat. No. 907 Touch-Up Kit Net \$4.78

(T) **G-C MAGIC SCRATCH REMOVER KIT**—This kit is a combination of 6 shades of Scratch Crayon fillers and Light and Dark Scratch Fluid.
Cat. No. 915 Net \$2.25



KRYLON SPRAYS SPEED YOUR WORK

No fuss — no muss

1. CLEANER-LUBRICANT—For tuners, volume controls, switches. Provides long-lasting protection from corrosion. Removes dirt and gummy deposits. Leaves a non-drying film lubricant. Comes with 5-in. plastic tube for hard-to-reach areas. 16 oz., only \$1.95; 6 oz., 98c.

2. RUST MAGIC—Tough, penetrating primer. Stops rust, protects metal. Dry in 20 minutes . . . top coat in 2 hours. Compatible with lacquers, enamels, vinyls, acrylic latex finishes, etc. 16 oz., \$1.79. Also available for brush application.

3. DULLING SPRAY—A "must" in TV and photographic studios. Reduces glare and reflections from shiny surfaces. Simplifies lighting. Use for both black & white and color work. Semi-drying, removable. 16 oz., \$1.95.

4. SILICONE ALL-PURPOSE SPRAY—Stops sticking and squeaking of doors, windows, drawers, hinges. Lubricates and protects at same time. Retards rust on metals. Repels water. 16 oz., \$1.95; 6 oz., 98c.

5. RUST RELEASE—Penetrating oil spray, instantly and easily frees rusted bolts and nuts that a wrench can't budge. Lubricates as it penetrates. Easy to use. 16 oz., \$1.69; 6 oz., 98c.

6. CRYSTAL CLEAR—Acrylic spray coating for TV, radio, electronic use. Protects against humidity and dust. Prevents rusting and pitting. Has high dielectric strength. 16 oz., \$1.95; 6 oz., 98c.

7. BEAUTIFUL COLORS—Choice of 26 regular enamel colors and 7 glowing fluorescent paints. Use for repainting, color coding, touch-up or safety. Indoors or outdoors. Enamels: 16 oz., \$1.79; 6 oz., 98c. Fluorescents: 16 oz., \$2.79; 6 oz., \$1.19.

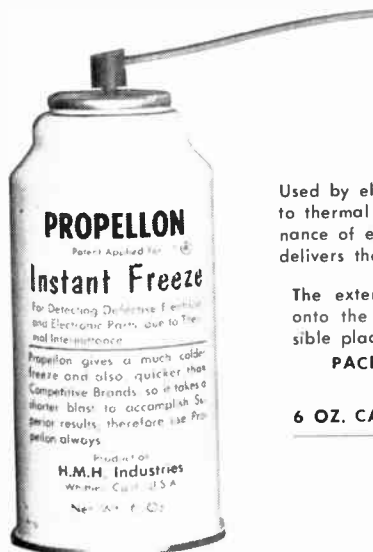
8. HIGH-HEAT ALUMINUM—Withstands temperatures up to 500°F for long periods . . . up to 1000° for intermittent periods. Exceptional film thickness. 16 oz., \$2.49.

If you prize it . . . KRYLON-ize it!

Contact your radio-TV jobber or write for Krylon's new industrial products catalog

KRYLON INC., NORRISTOWN, PA.

Heeger, Inc., Los Angeles, California, as national sales administrators, present the following chemicals that have found favor with engineers, laboratory technicians and production in industry, to assist them in procuring the best proven material to enable them to arrive at the best results.



From the laboratories of
H. M. H. INDUSTRIES

PROPELLON INSTANT FREEZE

Used by electronic engineers and technicians for detecting defective electronic and electrical parts, due to thermal intermittance. Valuable in the laboratory, field testing, service bench or field work, maintenance of equipment and in the electronic and electrical analysis of trouble. Propellon "Instant Freeze" delivers the lowest temperature practical for above uses. Odorless, non-toxic and non-flammable.

The extender facilitates in directing the spray directly onto the area tested. Also aids in getting into inaccessible places.

PACKED IN 6 OZ. CANS WITH 12" EXTENDER
FREE WITH EACH CAN

6 OZ. CAN WITH 12" EXTENDER ea. \$1.45

From BEAVER LABORATORIES

GTC-59

GLASS TREATMENT COMPOUND

Produces super-smooth surfaces on glass and plastics. Water repellent, smear proof and anti-static and imparts a lustrous glaze that stays dust and dirt free 10 times longer.

1. Cleans and degreases in one application.
2. Deposits tough, super-smooth and water repellent protective hard surface.
3. Cancels static fields which attract dirt and dust.
4. Keeps surface free of carbon dust build-up and other foreign matter 10 times longer.

Satisfaction guaranteed.

6 oz. bottle with sprayer 1.00 16 oz. can 2.00 32 oz. can 3.50 Gal. can 12.00



From the laboratories of
HASCOL ENTERPRISES

LOC-JAW

A SCIENTIFICALLY COMPOUNDED ADHERENT FORMULA

"Loc-Jaw" is an "Epoxy" base compound for bonding metal to metal, glass to metal, glass to glass, glass to wood, wood to wood, metal to wood, etc. Properly proportioned, it hermetically seals small parts and connections. After setting, it actively resists salt water and salt air, gasoline, chemicals and solvents

INDIVIDUAL PLASTIC CONTAINER ea. 50c

of all types and withstands temperatures up to 300° F. Applicable to many industrial uses. Packed in its own plastic container and applicator. Indispensable where an adherent or sealer is needed.

BAG OF 10 per bag 4.50



From BEAVER LABORATORIES
LIQUI-TAPE
LIQUID INSULATING TAPE

A superior insulating compound that's faster and easier to use. This unique product was developed to meet the specialized demands of industry. Close spacing, moisture barriers, mechanical seals and electrical insulation are only a few of the uses for Liqui-Tape. May be applied after hard to get at equipment is installed. Dries to a hard pliable surface that will not crack, chip or peel.

SOME OF MANY USES

Damp proofing, for added insulation, motor winding, electrical connections, sealing compound, tool handles, rust proofing, all terminal connections, cementing compound, shock proofing, anti-corona compound, weather seal.

2 oz. Bottle \$ 1.00 32 oz. Bottle \$10.00
16 oz. Bottle \$ 6.00 Gallon \$26.75

From HASCOL LABORATORIES
SAL-MET

NON-CORROSIVE FLUX

- SOLDERS COPPER TO ALUMINUM
- ALUMINUM TO ALUMINUM
- SOLDERS ALL METALS

A scientific laboratory non-corrosive flux for soldering all metals. By using "SAL-MET," copper can be soldered to aluminum, aluminum to aluminum, copper to steel, copper to copper; in fact, any metal to metal is possible. No special preparation on material to be soldered. Use conventional solder, applied with quick heat, regular soldering iron, torch or pot.

1 oz. Tubes ea. .72c
1 lb. Can ea. \$5.65



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SPRAY CHEMICALS



KLEEN-TUNE TUNER CLEANER

Completely cleans and lubricates all tuners. Kleen-Tune is a non-flammable, non-toxic cleaner . . . formulated to clean, lubricate and renew all styles of TV tuners in one simple operation.

Kleen-Tune provides a protective film against noise and oxidation and is not harmful to other components. Just apply Kleen-Tune, then work the control a few times. Kleen-Tune does the rest. Saves time and money.

Kleen-Tune is easy to apply, dries quickly and gives complete satisfaction to the serviceman and customer.

Cat. No. 40-800 Net \$1.98
Std. Pkg.: 12

TUBE CADDY SIZE

KLEEN-TUBE TUNER CLEANER

Same High Quality Tuner cleaner in a 3 oz. spray can that fits in tube caddies.

Cat. No. 40-300 Net \$.98



INSUL-VOLT

HI-VOLTAGE INSULATOR WITH SURE SHOT CONFINED STREAM

Insul-Volt is specifically designed to meet the requirements of Military Specification MIL-V-1137-A, Grade BA, Types M & N.

Insul-Volt is positive insulation against Hi-Voltage leaks, arcing and corona shorts such as Hi-Voltage sections of TV sets, or any electrical apparatus requiring this superior protection.

Insul-Volt is formulated and recommended for application and use on transformers, electrical motors, generators and other types of electrical windings, operating at a maximum temperature of 275°F.

Insul-Volt is flexible, heat and acid resistant and impervious to oil, grease and moisture. Insul-Volt is an excellent protection for any exposed wiring or open connection requiring positive lasting insulation. Insul-Volt when applied properly will provide better than 20,000 volts and up of dielectric strength. Follow directions carefully to insure maximum Hi-Voltage dielectric strength.

Cat. No. 40-804 8 Oz. Spray Can Net \$2.79
Std. Pkg.: 12



FREEZE-MIST CIRCUIT COOLER

Saves hours locating defective intermittent circuit components caused by temperature changes. Walsco Freeze-Mist cools instantly pinpointing faulty capacitors, resistors, transistors, cold solder and oxidized junctions, etc. due to temperature variances. Plus thousands of other uses in electronic field.

Cat. No. 40-800 8 oz. Spray Can Net \$1.98
Std. Pkg.: 12



PEN-A-LUBE

VERY FINE PENETRATING & LUBRICATING OIL FROZEN YOKE REMOVER

Pen-A-Lube is a formulation of very fine penetrates and lubricants formulated for those hard to get at spots.

Pen-A-Lube is highly recommended as a lubricant for use on delicate instruments, record changes, tape recorders and stereo controls.

Pen-A-Lube's exacting formulation gives you positive action against rust and corrosion. Pen-A-Lubrication as a liquid wrench for loosening badly rusted or frozen parts such as frozen yokes or rusty control nuts and screws has been found to be highly effective.

Pen-A-Lube provides the answers to questions concerning rust, penetration, lubrication and is a very fine all purpose light machine oil.

Cat. No. 40-812 8 oz. Spray Can Net \$1.79
Std. Pkg.: 12



OX-NOX

VOLUME CONTROL & CONTACT CLEANER

Ox-Nox is the answer for removing oxidation and noise from volume controls and electrical contacts. Ox-Nox cleans, lubricates and restores controls and tuning condensers back to like new operating condition.

Ox-Nox is a non-flammable and non-toxic cleaner and lubricant. Ox-Nox is blended to provide against oxidation and noise.

Cat. No. 40-802 8 Oz. Spray Can Net \$1.98
Std. Pkg.: 12

TUBE CADDY SIZE OX-NOX

VOLUME CONTROL & CONTACT CLEANER

Same High Quality cleaner in handy 3 oz. tube caddy sized spray can.

Cat. No. 40-302 Net \$.98



KLEEN-VUE

ANTI-STATIC — TUBE AND SHIELD CLEANER & POLISHER

Kleen-Vue is an anti-static, non-staining and non-abrasive tube and shield cleaner and polisher for glass, plastic and wood.

Kleen-Vue gives you the wanted protection against dust, dirt and grime. Kleen-Vue does not leave a filmy coating but imparts a crystal clear view.

Kleen-Vue is sprayed on lightly and wiped dry with a clean cloth leaving a crystal clear view.

Cat. No. 40-806 8 Oz. Spray Can Net \$1.79
Std. Pkg.: 12



KLEEN-UP

WATERLESS HAND CLEANER

Walsco's own waterless hand cleaner Kleen-Up is so simple to use — just press the button. Using a handful of suds, wash hands and wipe off with clean towel.

Kleen-Up is ideal for every type of hand cleaning problem whether it's grease, grime, cement or ink. Kleen-Up does not contain harsh abrasives or strong irritating chemicals.

Kleen-Up is formulated from high grade liquid detergents fortified with lanolin and germ killing trichlorophenate with an aromatic additive. Kleen-Up is considered a very fine hand and skin conditioner and regular use is not harmful.

Cat. No. 40-810 8 Oz. Spray Can Net \$1.49
Std. Pkg.: 12



UNI-SOL

UNIVERSAL SOLVENT & THINNER FOR CEMENTS, LACQUERS AND LIQUID INSULATORS

Uni-Sol is the all purpose fast acting solvent to loosen and remove most cements, liquid insulators and thinners and all commercial lacquers.

Uni-Sol is a specially engineered safe solvent and thinner prepared as a loosening agent in speaker repair to remove old cones, frames, spiders and voice coils.

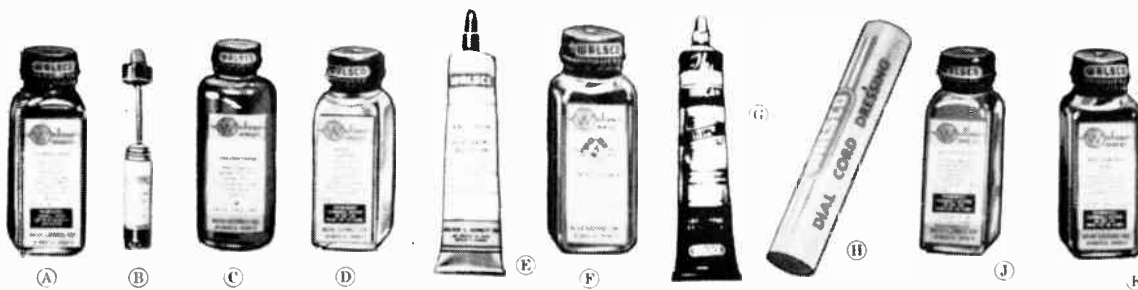
Walsco's Uni-Sol is highly recommended for use as a general purpose all around loosening and thinning agent.

Cat. No. 40-814 8 Oz. Can Net \$.98
Std. Pkg.: 12





CHEMICALS



(A) WALSCO CONTACTENE

Lubricates as it cleans; fast acting, quick drying. Eliminate volume control noise with this specially compounded electronic contact cleaner. Absolutely anti-oxidant.

| | | |
|----------------|------------------|------------|
| Cat. No. 80-02 | 2-oz. bottle | Net \$.53 |
| 80-04 | 4-oz. bottle | .67 |
| 80-08 | 8-oz. bottle | 1.13 |
| 80-16 | 16-oz. can | 1.50 |
| 80-06 | 6-oz. spray can | .98 |
| 80-12 | 16-oz. spray can | 1.95 |

(B) CONTACTENE INJECTOR

A fine surgical-grade steel needle. Designed to be inserted into places where ordinary applicators cannot reach. Makes lubrication of most volume controls and other parts possible without unsoldering or dismantling.

Cat. No. 989 Net \$.45

(C) CHLOROTHENE (NON-TOXIC)

An amazing, new powerful solvent for all-purpose cleaning of any electronic component, switch, chassis, etc. Quickly dissolves grease, dirt, oils, tar, and waxes. Safe even indoors, under normal conditions.

| | | |
|-----------------|---------------|------------|
| Cat. No. 113-04 | 4-oz. bottle | Net \$.57 |
| 113-16 | 16-oz. bottle | Net 1.32 |

(D) WALSCO RADIO CEMENT

A fast drying, elastic adhesive that will not become brittle with age. Compounded especially for speaker repair. Not affected by cold or high temperature, moisture or oil.

| | | |
|----------------|----------------|------------|
| Cat. No. 50-01 | 1 1/4 oz. tube | Net \$.48 |
| 50-02 | 2 oz. bottle | .48 |
| 50-04 | 4 oz. bottle | .72 |
| 50-08 | 8 oz. bottle | 1.27 |
| 50-16 | 1 pt. bottle | 2.18 |

(E) WALSCOLUB-B

Electrically neutral lubricant that prevents corrosion. Walscolub-B makes for smooth, noise-free operation of electrical contacts, band switches, attenuators, push button tuners, remote control switches and other contacts.

Cat. No. 22-01 1 1/4 oz. tube Net \$.48

(F) WALSCO "NO-OX"

A liquid, non-gumming chemical that dissolves corrosion with amazing speed without the use of drastic solvents. Lubricates and protects slide contacts long after application.

| | | |
|-----------------|-----------------|------------|
| Cat. No. 100-01 | 1 oz. bottle | Net \$.67 |
| 100-02 | 2 oz. bottle | .97 |
| 100-16 | 1 pt. bottle | 7.50 |
| 100-33 | 1 gal. can | 38.17 |
| 100-34 | 5 gal. can | 177.99 |
| 100-06 | 6 oz. spray can | 2.33 |

(G) WALSCO "LUBRIPLATE"

Super lubricant, grease type, protective. Lubriplate reduces friction loss, prevents rust and corrosion. Extends bearing life 50% . . . increases mechanical efficiency 20% over ordinary lubricant.

Cat. No. 23-02 2 oz. tube Net \$.67

(H) DIAL CORD FRICTION STICK

To prevent slipping, simply rub Walsco Friction Stick on dial cord or belt. Increase grip, lengthens life of cord.

Cat. No. 259-01 Net \$.25

(J) WALSCO GLYPTAL

An outstanding insulating varnish. Resists heat, oils and acid. High arc resistance makes it essential in electrical and electronic application.

Cat. No. 134-02 2 oz. bottle Net \$.57
134-08 8 oz. bottle 1.65

(K) WALSCO RED CORONA DOPE

Positively stops high voltage "Corona". Protects against "shorts" in high voltage circuits of TV sets. Completely coat surfaces and sharp corners to stop dangerous corona effect.

Cat. No. 198-02 2 oz. bottle Net \$.72



AIR-DRY WRINKLE VARNISH

Factory like finish without baking. Can be used on wood or metal. Gives a hard tough, durable finish. Covers in one, easy to apply coat.

| | | |
|-----------------|-------------------------|------------|
| Cat. No. 145-02 | Black, 2 oz. jar | Net \$.67 |
| 145-06 | Black, 6 oz. jar | 1.87 |
| 145-12 | Black, 16 oz. Spray can | 2.25 |
| 145-33 | Black, 1 Gallon Can | 15.17 |
| 146-02 | Gray, 2 oz. jar | .67 |
| 146-06 | Gray, 6 oz. jar | 1.87 |
| 146-12 | Gray, 16 oz. Spray can | 2.25 |
| 146-33 | Gray, 1 Gallon Can | 15.17 |

WALSCO SOLVENT AND THINNERS

| TYPE CEMENT | USE SOLVENT | CAT. NO. | QTY. | NET |
|-------------------------|-------------|----------|--------|--------|
| Plastic Cement | *Cement | 201-02 | 2 oz. | \$.45 |
| Radio Cement | Solvent | 201-04 | 4 oz. | .72 |
| | | 201-08 | 8 oz. | .82 |
| | | 201-16 | 16 oz. | 1.32 |
| | | 201-33 | 1 gal. | 4.80 |
| Polystyrene Cement | Polystyrene | 202-02 | 2 oz. | .45 |
| | Solvent | 202-04 | 4 oz. | .67 |
| | | 202-33 | 1 gal. | 3.68 |
| Vinylite Cement | Lacquer | 203-02 | 2 oz. | .48 |
| Radio Cement | | 203-33 | 1 gal. | 4.95 |
| Crystallizing Lacquer | | 203-34 | 5 gal. | 21.30 |
| Fungus Lacquer | | | | |
| Telephone Black & Grey | | | | |
| Light Bulb Coloring | | | | |
| Anti-Corona Lacquer | | | | |
| CR-Tubecoat | | | | |
| Rubber Cement | | 204-04 | 4 oz. | .67 |
| Wrinkle Varnish | Thinner | 204-33 | 1 gal. | 3.68 |
| Flock Undercoat | | | | |
| Elec. & Resistor Cement | | | | |
| Wood Glue | Water | | | |
| Aluma-Flux | | | | |

* Cement Solvent should be used to loosen hardened cement on speaker cones, voice coils, etc.. Solvent will discolor Plastic and Radio Cements if used as a thinner; Lacquer Thinner is recommended for this purpose.

"QUIETROLE" . . .

the original
LUBRICANT
CLEANER

TRADE MARK REG. U.S. PAT. OFF.

SPRAY ^{or} DROP IT...



the New QUIETROLE SPRAY-PACK

or the

QUIETROLE BOTTLE with the Eye Dropper

"QUIETROLE" is the preferred, standard product of the industry! Your guarantee for quieting noisy television and radio controls, switches and other moving parts is QUIETROLE. Here is the original, non-inflammable, most reliable lubricant-cleaner on the market today—developed through years of factual and authentic research.

There is no substitute for **QUALITY . . . get QUIETROLE TODAY**

A First of the Industry . . . A Twelve Year Plus Record of Proven Superiority. Built to Meet a Demand, Not a Price

QUIETROLE BOTTLE

| Size | Cat. No. | Min. Order | Min. Re-order | Distr. Net Resale Price |
|-------|----------|------------|---------------|-------------------------|
| 2 oz. | 10-2 | 24 | 24 | \$1.69 |
| 4 oz. | 10-3 | 16 | 8 | 2.54 |
| 8 oz. | 10-4 | 8 | 6 | 5.07 |

Effective Savings on Gross Lot Purchase
10-2 Size

QUIETROLE SPRAY-PACK (CAN)

| | | | | |
|-------|------|----|----|------|
| 6 oz. | 10-5 | 12 | 12 | 2.79 |
|-------|------|----|----|------|

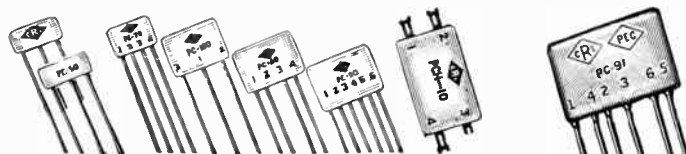


Mfd. by

QUIETROLE COMPANY, SPARTANBURG, S. C.

Centralab.

Packaged Circuits



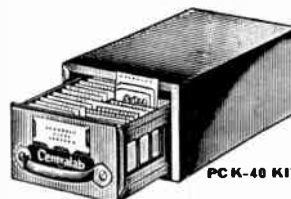
PACKAGED ELECTRONIC CIRCUITS

These compact units contain resistors, capacitors, conductors and in some instances, inductance integrally bound to a ceramic base plate. Completely sealed against moisture, temperature change and shock. Write for your free copy of the current Packaged Electronic Circuit Guide.

| CRL No. | Description | Net Each |
|---------|------------------------------|----------|
| PC-2 | Single Resistor | \$0.60 |
| PC-21 | Series Resistor | .60 |
| PC-30 | Series R-C Network | .60 |
| PC-33 | Series R-C Network | .60 |
| PC-36 | Parallel R-C Network | .60 |
| PC-37 | Parallel R-C Network | .60 |
| PC-50 | Diode Filter | .60 |
| PC-51 | Diode Filter | .60 |
| PC-52 | Diode Filter | .60 |
| PC-60 | Parallel R-C Network | .60 |
| PC-61 | Parallel R-C Network | .60 |
| PC-70 | Triode Couplate* | .60 |
| PC-71 | Triode Couplate* | .60 |
| PC-80 | Triode Couplate* | .60 |
| PC-81 | Triode Couplate* | .60 |
| PC-82 | Triode Couplate* | .60 |
| PC-84 | Triode Couplate* | .60 |
| PC-90 | Pentode Couplate* | .90 |
| PC-91 | Pentode Couplate* | .90 |
| PC-92 | Pentode Couplate* | .90 |
| PC-100 | Vertical Integrator | .75 |
| PC-101 | Vertical Integrator | 1.05 |
| PC-104 | Vertical Integrator | .75 |
| PC-105 | Vertical Integrator | .75 |
| PC-106 | Vertical Integrator | .75 |
| PC-110 | R-C Filter Bypass | .60 |
| PC-111 | R-C Filter Bypass | .90 |
| PC-150 | Audio Detector Couplate* | .90 |
| PC-151 | Audio Detector Couplate* | .90 |
| PC-154 | Audio Detector Couplate* | .90 |
| PC-157 | Audio Detector Couplate* | .90 |
| PC-158 | Audio Detector Couplate* | .90 |
| PC-159 | Audio Detector Couplate* | .90 |
| PC-160 | Pentode Diode Couplate* | 1.20 |
| PC-165 | Pentode Diode Couplate* | 1.20 |
| PC-166 | Pentode Diode Couplate* | 1.20 |
| PC-175 | R-C Network | 1.20 |
| PC-176 | Integrator | .60 |
| PC-177 | R-C Network | .90 |
| PC-178 | R-C Network | .60 |
| PC-179 | Sound IF Network | .90 |
| PC-184 | R-C Network | .75 |
| PC-185 | R-C Network | .75 |
| PC-186 | Integrator | .75 |
| PC-190 | Backandall Tone Control | 1.05 |
| PC-260 | Sync. Take-off | .90 |
| PC-262 | Sync. Take-off | .90 |
| PC-263 | Sync. Take-off | .90 |
| PC-264 | Sync. Take-off | .90 |
| PC-304 | R-C Network | .75 |
| PC-305 | Elect. Organ Network | 1.20 |
| PC-306 | R-C Network | .75 |
| PC-307 | R-C Network | .60 |
| PC-308 | Horizontal Oscillator | 1.05 |
| PC-309 | Retrace Suppression Network | .75 |
| PC-310 | First Audio Couplate* | .90 |
| PC-311 | Vertical Feed-Back | .75 |
| PC-312 | Vertical Integrator | .75 |
| PC-313 | Audio Detector Couplate* | .90 |
| PC-314 | Retrace Suppression Network | .75 |
| PC-315 | Audio Detector Couplate* | .90 |
| PC-316 | Sync. Take-off | 1.20 |
| PC-317 | Audio Couplate* | .60 |
| PC-318 | Audio Det. Pentode Couplate* | 1.20 |
| PC-319 | Phase Comparator | .75 |
| PC-320 | Discriminator Network | .75 |
| PC-321 | Sync. Sep. Grid Network | .60 |
| PC-322 | Electronic Organ Network | .75 |
| PC-323 | Electronic Organ Network | .75 |
| PC-324 | Compentrol Network | .75 |
| PC-325 | Compentrol Network | .75 |
| PC-326 | Diode Filter | .60 |
| PC-327 | Pentode Diode Couplate* | 1.05 |
| PC-328 | Pentode Diode Couplate* | .90 |
| PC-329 | Sound IF Network | .75 |
| PC-330 | Sync. Take-off | .90 |
| PC-331 | Diode-Triode Couplate* | .75 |
| PC-332 | R-C Network | .75 |
| PC-333 | Vertical Integrator | .90 |
| PC-334 | Audio Network | .60 |
| PC-336 | Retrace Suppression | .75 |
| PC-337 | Phase Comparator | .90 |

| CRL No. | Description | Net Each |
|---------|--------------------------------------|----------|
| PC-338 | Sync. Time K Network | \$0.90 |
| PC-339 | Sync. Time K Network | .90 |
| PC-340 | AGC Voltage Divider | .75 |
| PC-341 | Series R-C Network | .60 |
| PC-342 | FM Balanced Ratio Detector | 1.20 |
| PC-343 | Diode-Pentode Couplate* | 1.20 |
| PC-344 | Loudness Contour Network | .90 |
| PC-345 | Loudness Contour Network | .90 |
| PC-346 | Loudness Contour Network | .75 |
| PC-347 | Phono Input Network | .75 |
| PC-348 | Diode-Triode Couplate* | .75 |
| PC-349 | R-C Network | .60 |
| PC-350 | Integrator Network | .90 |
| PC-351 | De-Emphasis Network | .60 |
| PC-352 | Sync. Circuit Resistor Bank | .75 |
| PC-353 | Horizontal AFC Network | .75 |
| PC-354 | Ratio Detector Network | 1.05 |
| PC-355 | Sync. Coupling Network | 1.05 |
| PC-356 | Tone Control Network | .75 |
| PC-357 | Phase Detector Network | .90 |
| PC-358 | Sync. Coupling Network | 1.05 |
| PC-359 | Balanced Dual Capacitor | .60 |
| PC-360 | Antenna Isolation Network | .60 |
| PC-361 | Ant. Filter Output Coupling Network | .60 |
| PC-362 | Sync. Take-off Network | .75 |
| PC-363 | Tone Control Network | .60 |
| PC-364 | Horizontal AFC Network | .90 |
| PC-365 | Ant. Filter Output Coupling Network | .60 |
| PC-366 | Ground Chassis Circuit | .75 |
| PC-367 | Horiz. Oscillator and Phase Detector | 1.20 |
| PC-368 | Vertical Integrator | .75 |
| PC-369 | Phase Comparator Network | .75 |
| PC-370 | Horizontal Oscillator Network | .90 |
| PC-371 | Audio Couplate* | .75 |
| PC-372 | Audio Couplate* | .60 |
| PC-373 | Audio Coupling Network | .90 |
| PC-374 | Vertical Integrator | .90 |
| PC-375 | Phase Comparator Network | .90 |
| PC-376 | Retrace Suppression Network | .75 |
| PC-377 | Antenna Isolation Network | .60 |
| PC-378 | Tone Control Network | .90 |
| PC-379 | Audio Coupling Network | .90 |
| PC-380 | De-Coupling Network | .90 |
| PC-381 | Sync. Coupling Network | .75 |
| PC-382 | Parallel R-C Network | .60 |
| PC-383 | Parallel R-C Network | .60 |
| PC-384 | Series R-C Network | .60 |
| PC-385 | Vertical Integrator | .90 |
| PC-386 | Vertical Feedback Network | .90 |
| PC-387 | IF De-Coupling Network | 1.05 |
| PC-388 | Yoke Balancing Network | .90 |
| PC-389 | Yoke Balancing Network | 1.05 |
| PC-390 | Audio Detector Couplate* | .90 |
| PC-391 | Sync. Take-off Network | .75 |
| PC-392 | Integrator Network | .75 |
| PC-393 | Tone Control Network | .75 |
| PC-394 | Horizontal Oscillator Network | 1.20 |
| PC-395 | Vertical Integrator | 1.20 |
| PC-396 | Video Coupling Network | 1.05 |
| PC-397 | Sound Detector Couplate* | .90 |
| PC-400 | Audio Coupling Network | 1.05 |
| PC-402 | Twin T Rumble Filter Network | 1.20 |
| PC-403 | Flip Flop Network | .75 |
| PC-404 | Compentrol Network | .75 |
| PC-405 | Compentrol Network | .60 |
| PC-406 | Audio Network | .60 |
| PC-407 | Integrator Network | .60 |
| PC-408 | Integrator Network | 1.20 |
| PC-409 | Phase Detector Network | 1.20 |

*Registered Trade Mark.



PCK-40 PACKAGED ELECTRONIC CIRCUIT KIT

Contains 40 PEC units in 13 of the most frequently used types. All units packaged in transparent plastic with identification clearly visible. Supplied in one-drawer, sturdy steel cabinet with attractive blue baked enamel finish. Size: 11 1/4" x 6 1/2" x 4 1/2". Shpg. Wt., 5 lbs. 8 oz. **\$34.25**
CRL No. PCK-40 Net Each...

KIT CONTAINS

| Quan. | Part No. | Quan. | Part No. |
|-------|----------|-------|----------|
| 2 | PC-51 | 5 | PC-150 |
| 2 | PC-81 | 2 | PC-151 |
| 10 | PC-100 | 2 | PC-158 |
| 2 | PC-101 | 2 | PC-165 |
| 5 | PC-104 | 2 | PC-387 |
| 2 | PC-105 | 2 | PC-408 |
| 2 | PC-106 | | |

PCH-4 TV ATTENUATOR SWITCH

Permits proper attenuation required for best TV reception through use of "H" pads. Eliminates tearing of image due to high powered nearby stations. Six switching positions from regular antenna to 60 db loss. Comes complete with knob, leads, dial plate and container **\$6.00**
CRL No. PCH-4—Net Each...

CRL No. PCH-10 (10 db), PCH-20 (20 db), PCH-30 (30 db) or PCH-40 (40 db). **90¢**
"H" Pads—Net Each...

CRL No. PCH-100—Set of 4 "H" pads; one each of above in plastic box. **\$3.60**
Net Per Set

TA-12-B FOUR-STAGE PACKAGED TRANSISTOR AMPLIFIER

Complete, ultra-miniature audio amplifier has 4 stages, yet only 0.531" dia. x .228" thick. Patented layered construction assembles resistors, capacitors and transistors in extremely compact and efficient amplifier. Ideal for pocket radios, recorders, mike amplifiers, hearing aids, etc. Gain: 78 db min. at 1 kc. Power Output: Up to 0.5 mw. Frequency Characteristic: ± 5 db, 300-20,000 cps. Input Imped.: 2,500 ohms, nom. Signal-to-Noise: 30 db below signal for signal input of 25 µv at 1 kc, max. Input shorted to ground for no signal noise. Supply Voltage: 1.34 v. mercury cell. Current Drain: 1.6 to 2.2 ma, nom. Design Load: 1,000 ohms imp. at 1 kc; 450 ohms max. DC resistance.

CRL No. TA-12-B—Complete **\$45.00**
with instructions. Net Each...

TYPE RC TUBE-R-CAPS®

Radial lead ceramic tubular capacitor and resistor in parallel in the same space as a tubular capacitor alone.

| CRL No. | Capacitor | | Ohms | Resistor | | Size, in. Dia. x L. | Net Each |
|---------|-----------|-----------|--------------|-----------|----------|---------------------|----------|
| | µf | Tolerance | | Tolerance | Rating | | |
| RC-421 | 56 | ± 10% | 47K | ± 20% | 1/4 waf. | .260 x 5.03 | 18c |
| RC-428 | 150 | GMV | 3.3 meg. | ± 30% | 1/4 watt | .260 x 7.90 | 18c |
| RC-431 | 330 | ± 20% | 220K | ± 20% | 1/4 watt | .260 x 7.90 | 18c |
| RC-465 | 470 | ± 20% | 470K | ± 20% | 1/4 watt | .260 x 5.03 | 18c |
| RC-471 | 470 | GMV | 3-1 meg. | ± 20% | 1/4 watt | .280 x 9.10 | 18c |
| RC-476 | 800 | GMV | 22K | ± 20% | 1/4 watt | .260 x 5.03 | 18c |
| RC-485 | 4700 | +80, -20% | 180 | ± 20% | 1/4 watt | .260 x 7.90 | 18c |
| RC-490 | 4700 | +80, -20% | .75-1.5 meg. | ± 20% | 1/4 watt | .330 x 9.10 | 18c |

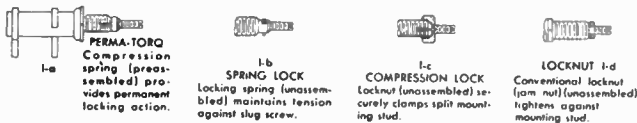
CAMBION

The guaranteed electronic components



COIL FORMS

CERAMIC AND PHENOLIC COIL FORMS



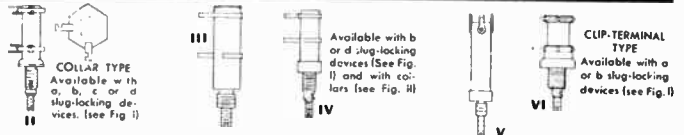
Tuning slugs supplied assembled; mounting hardware unassembled. Available wound to specifications in any quantity. Order the following items from CHARTS I and II.

| Cam-ion No. | Fig. | Mounting Stud L. x Thread x Base Dia. | Ht. Above Panel | Body O. D. | Collar O. D. | Net 1-49* |
|-------------|-----------|---------------------------------------|-----------------|------------|--------------|-----------|
| LS3* | III | 1/4" x 1/4-28 x none | 1 1/2" | 3/4" | 3/4" | \$.46 |
| LS4* | V | 3/8" x 1/4-28 x 3/16" | 2.0" | 1/2" | 3/4" | \$.68 |
| LS5† | I-b, II-b | 3/32" x 1/4-28 x 1/2" | 1 1/2" | .375" | 3/8" | \$.64 |
| PLS5† | I-a, II-a | 3/32" x 1/4-28 x 1/2" hex | 1 1/2" | .375" | 3/8" | \$.64 |
| LS5† | I-c, II-c | 3/32" x 1/4-28 x 1/2" hex | 1 1/2" | .375" | 3/8" | \$.66 |
| LS6† | I-b, II-b | 3/32" x 10-32 x 3/8" | 1 1/2" | .260" | 1/2" | \$.59 |
| PLS6† | I-a, II-a | 3/32" x 10-32 x 3/8" hex | 1 1/2" | .260" | 1/2" | \$.59 |
| LS6† | I-c, II-c | 3/32" x 10-32 x 3/8" hex | 1 1/2" | .260" | 1/2" | \$.61 |
| LS7† | I-b, II-b | 3/32" x 1/4-28 x 3/8" | 1 1/2" | .500" | 1 1/2" | \$.69 |
| PLS7† | I-a, II-a | 3/32" x 1/4-28 x 3/8" hex | 1 1/2" | .500" | 1 1/2" | \$.69 |
| LS7† | I-c, II-c | 3/32" x 1/4-28 x 3/8" hex | 1 1/2" | .500" | 1 1/2" | \$.71 |
| LS8† | VI-b | 3/32" x 1/4-28 x 1/2" | .290" | 3/8" | 3/4" | \$.85 |
| PLS8† | VI-a | 3/32" x 1/4-28 x 1/2" hex | .290" | 3/8" | 3/4" | \$.85 |
| LSM* | IV-d | 1/4" x 8-32 x 1/4" | 1 1/2" | 1/4" | 1 1/2" | \$.65 |
| LSML* | IV-b | 1/4" x 10-32 x 3/16" | 1 1/2" | 1/4" | 1 1/2" | \$.65 |
| LST† | I-d, II-d | 1/4" x 8-32 x 1/4" hex | 1 1/2" | .205" | 3/8" | \$.54 |
| LST† | I-b, II-b | 1/4" x 8-32 x 1/4" hex | 1 1/2" | .205" | 3/8" | \$.54 |
| LST† | I-a, II-a | 1/4" x 8-32 x 1/4" hex | 1 1/2" | .205" | 3/8" | \$.54 |
| SLST† | I-c, II-c | 3/64" x 8-32 x 1/4" hex | 1 1/2" | .205" | 3/8" | \$.56 |

Order the following from Chart III.

| | | | | | | | |
|-------|-----------|--------------------------|--------|-------|------|--------|----|
| 2770† | I-a, II-a | 1/32" x 10-32 x 1/4" hex | 2 1/2" | .205" | 3/8" | 2 1/4" | ** |
| 2771† | I-a, II-a | 3/64" x 12-28 x 3/8" hex | 1 1/2" | .260" | 1/2" | 1 1/2" | ** |

*Body material, phenolic. †Body material, ceramic. ‡Space between collars (-2C4L, -2C2L). §Ring terminals only. ¶Clip terminals only. **See Chart III for prices.



| CHART I | | CHART II | | | |
|-----------------|--------------------|-------------------------------|----------------|-----------|--------------------|
| Part No. Suffix | *Collars/Terminals | LSM Types LS6 Types LS8 Types | LS3† LS5 Types | LST Types | Frequency Range MC |
| -2C4L | 2/2 ea. | -F | -C | -I | 0.2-1.5† |
| -2C2L | 2/1 ea. | -E | -B | -H | 1-20‡ |
| -C2L | 1 top/2 | -O | -N | -P | 20-50‡ |
| -CB2L | 1 bot./2 | -O | -A | -G | 30 and up‡ |
| | | -2018B | -2018C | -2018A | 100 and up |
| | | -NS | -NS | -NS | No slug |

*Silicone fiberglass collars, solder terminals. †For brass load, add L to part no. suffix, as LS3-CL. ‡Powdered iron slug. Specify slug-locking device, collar and frequency when ordering. For examples: PLS6-2C4L/E—PermaTorq® locking device, 2 collars with 2 terminals each, 1-20 frequency. LST-CB2L/2018A—Locknut type, 1 collar at bottom with 2 terminals, 100 and up frequency. SLS7—Compression lock, ring terminals (no collar), no slug. LS3, LS4, and LS8 are not available with collars.

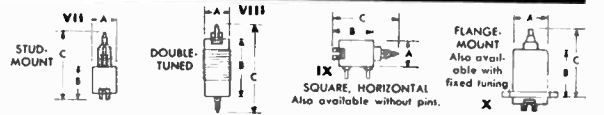
Ordering involves the use of the basic number and two suffixes. Suffix One determines the frequency range; Suffix Two determines the collar, ring and terminal combinations and the price. (i.e., 2770-1-2). Suffix One: -1) 0.2-1.5 mc; -2) 1-20 mc; -3) 20-50 mc; -4) 30 mc or more; -5) 100 mc or more; -6) 2-40 mc; -7) 40-300 mc.

| 2nd Suffix | Description | Net Each, 1-49* 2770-* | 2771-* |
|------------|------------------------------|------------------------|--------|
| -1 | 2 ring terminals | \$.80 | \$1.23 |
| -2 | 2 collars, 4 terminals | .94 | 1.39 |
| -3 | 2 collars, 2 terminals | .94 | 1.39 |
| -4 | 1 top collar, 2 terminals | .87 | 1.31 |
| -5 | 1 bottom collar, 2 terminals | .87 | 1.31 |

*Be sure to include both first and second suffixes when ordering.

SHIELDED COIL FORMS

Supplied with tuning slug assembled; all other parts in bulk. Mounting hardware included. Material: Housing LS9, LS10, LS14, brass with nickel plate; LS11 brass with cadmium plate; all others aluminum with alodine finish. Board, Silicone-fiberglass.



| Paper-Phenolic | Net 1-49* | Part No. and Body Material | Net 1-49* | Fig. | Size, Inches A x B x C | Flange Dia., In. Max. Min. | Terminals | Winding Area, Max. L x O.D. (Inches) | Freq. | Tuning Tool | Notes |
|----------------|-----------|----------------------------|-----------|------|------------------------|----------------------------|-----------|--------------------------------------|----------|-------------|------------------|
| LS9 | \$.90 | LS9-1 | \$.96 | VII | 3/16 x 3/8 x 1 1/4 | 3/16 | 2-6 | 1 1/4 x 1 1/4 | Chart I | 2033 | Mtg. stud 1/4-28 |
| LS10 | 1.03 | LS10-1 | 1.17 | VII | 5/8 x 5/8 x 2 1/4 | 5/8 | 2-6 | 1 3/2 x 2 3/4 | Chart I | 1971 | Mtg. stud 3/8-32 |
| LS11 | .86 | LS11-1 | .98 | VII | 1 1/2 x 1 1/2 x 1 1/2 | 1 1/2 | 2-4 | 1 3/4 x 1 3/4 | Chart I | 2375 | Mtg. stud 12-28 |
| | | LS14 | 2.50 | VIII | 2 1/2 x 1 1/2 x 1 1/2 | 2 1/2 | 4-6 | 2 3/2 x 2 3/4 | Chart I | 2375 | 12-32 thread |
| 2560 | 1.41 | 2561 | 1.47 | IX | 1/2 sq. x 1/2 x 1 1/2 | 1/2 | 2-6 | 1 1/4 x 1 1/4 | Chart II | 2033 | Without pins |
| 2565 | 1.69 | 2566 | 1.75 | IX | 3/8 x 3/8 x 1 1/2 | 3/8 | 2-6 | 1 1/4 x 1 1/4 | Chart II | 2033 | With pins |
| 2585 | 2.00 | 2586 | 2.10 | IX | 1/2 x 1/2 x 1 1/2 | 1/2 | 2-6 | 1 1/4 x 1 1/4 | Chart II | 2516 | Without pins |
| 2590 | 2.30 | 2591 | 2.40 | X | 3/8 x 3/8 x 1 1/2 | 3/8 | 2-6 | 1 1/4 x 1 1/4 | Chart II | 2516 | Without pins |
| 2665 | 1.41 | 2666 | 1.53 | IX | 3/8 x 3/8 x 1 1/2 | 3/8 | 2-6 | 1 1/4 x 1 1/4 | Chart II | 2375 | With pins |
| 2670 | 1.69 | 2671 | 1.82 | IX | 3/8 x 3/8 x 1 1/2 | 3/8 | 2-4 | 1 1/4 x 1 1/4 | Chart II | 2375 | Without pins |
| 2685 | .86 | 2686 | .91 | IX | 3/8 x 3/8 x 1 1/2 | 3/8 | 2-4 | 1 1/4 x 1 1/4 | Chart II | 2375 | With pins |
| 2690 | .99 | 2691 | 1.11 | X | 3/8 x 3/8 x 1 1/2 | 3/8 | 2-6 | 1 1/4 x 1 1/4 | Chart II | ..... | Fixed |
| 2695 | .86 | 2696 | .98 | X | 1/2 x 1/2 x 1 1/2 | 1/2 | 2-4 | 1 1/4 x 1 1/4 | Chart II | ..... | Fixed |

*Not Available. See Printed Circuit Coil Form Section for No. LS12.

| CHART I | | | | | CHART II | | | | |
|---------|------|------|------------|----------|----------|----|-----|-----|-----|
| LS9 | LS10 | LS11 | LS14 | Freq. MC | 2 | 3 | 4 | 5 | 6 |
| -T | -F | -X | -X | 0.2-1.5* | -1 | -5 | -9 | -13 | -17 |
| -S | -E | -W | -W | 1-20 | -2 | -6 | -10 | -14 | -18 |
| -U | -O | -Y | -Y | 20-50* | -3 | -7 | -11 | -15 | -19 |
| -R | -D | -V | Not avail. | 30 & up* | -4 | -8 | -12 | -16 | -20 |

Note: From descriptive charts that not all shielded coil forms are available with all terminal quantities.

PRINTED CIRCUIT COIL FORMS



| No. | Fig. | A† In. | Body O.D. | B‡ In. | Terms. Collar | C In. | D In. | Freq. Chart | Net 1-49* |
|---------|------|--------|-----------|--------|---------------|-------|--------|-------------|-----------|
| 2270† | XII | 3/8 | .260" | 3/16 | 2 | .500 | .200 | I | \$.74 |
| 2271† | XII | 3/8 | .260" | 3/16 | 2 | .700 | .200 | I | .74 |
| 2500† | XIII | 1 1/4 | .260" | 1 1/8 | 2 | 1.200 | .200 | I | .98 |
| 2501† | XI | 3/8 | .260" | 3/16 | 5 | .404 | .72 | I | .29 |
| 2525† | XIII | 1 1/4 | .205" | 3/16 | 2 | .400 | .300 | II | .96 |
| 2530† | XIII | 1 1/4 | .260" | 1/2 | 2 | .600 | .300 | II | 1.09 |
| 2540† | XIII | 2 1/4 | .375" | 3/8 | 2 | .700 | .400 | II | 1.16 |
| 2550† | XIII | 3 1/4 | .500" | 1 1/2 | 2 | 1.300 | .400 | II | 1.35 |
| SPC-11† | XI | 3/8 | .260" | 3/16 | 2/6 | .404 | Ch. IV | III | .29 |
| SPC-12† | XI | 3/8 | .260" | 3/16 | 2/6 | .404 | Ch. IV | III | .29 |
| LS12* | XIV | 3/8 | .260" | 3/16 | 2/6 | .136 | ♦ | III | .76 |

*Body material: Phenolic. †Body material: Ceramic. ‡tuning cores. †Overall length, less terminals. ‡Distance between collars. *Length between mtg. terminal centers. †Width between mtg. terminal centers. ‡Mtg. dia. ♦Basic circle rad. *†No collar. Note: Figs. XI and XII: Kel-F Locking insert available (supplied unassembled). Specify by adding suffix L to part number, e.g., 2500-L, SPC-11-A-2L. Fig. IV: Supplied with tuning slug assembled; all other parts in bulk. Mounting hardware is included.

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★WRITE FOR DISCOUNTS ON LARGER QUANTITIES

| CHART I | | CHART II | |
|----------|------------------------|----------|---------------------------|
| Dash No. | Frequency Range MC | Dash No. | Frequency Range MC |
| -1 | 0.2-1.5 pwd. iron core | -1 | 0.2-1.5 pwd. iron slug |
| -2 | 1-20 pwd. iron core | -2 | 1-20 pwd. iron slug |
| -3 | 20-50 pwd. iron core | -3 | 20-50 pwd. iron slug |
| -4 | 30-150 pwd. iron core | -4 | 30 and up, pwd. iron slug |
| -5 | 100 and up, brass core | -5 | 100 and up, brass slug |
| -NS | No core | -NS | No slug |

*Specify frequency in combination with number of terminals when ordering. For example: LS12-4B—4 terminals, 1-20 frequency.



COMPONENTS

SERIES 2082 CHOKES (FIG. A)

Wound on phenolic coil forms; varnish finish. Body 1/2" long. Leads 1 1/2" long.

| Cambion Number | Ind. μ h | Q | Max. O.D. | Net Each 1-9" |
|----------------|--------------|----|-----------|---------------|
| 2082-1 | 6.8 | 25 | 3/16" | 43c |
| 2082-2 | 10 | 20 | 3/16" | 43c |
| 2082-3 | 15 | 15 | 3/16" | 43c |
| 2082-4 | 22 | 15 | 3/16" | 43c |
| 2082-5 | 33 | 15 | 3/8" | 43c |
| 2082-6 | 47 | 15 | 3/8" | 43c |
| 2082-7 | 68 | 12 | 3/8" | 45c |
| 2082-8 | 100 | 12 | 7/16" | 45c |
| 2082-9 | 150 | 20 | 7/16" | 45c |
| 2082-10 | 220 | 20 | 7/16" | 46c |
| 2082-11 | 330 | 20 | 7/16" | 46c |
| 2082-12 | 470 | 20 | 7/16" | 46c |
| 2082-13 | 680 | 30 | 7/16" | 49c |
| 2082-14 | 1000 | 35 | 7/32" | 52c |

SERIES 2950 CHOKES (FIG. B)

Equivalent to MS91189-1 thru -13 respectively. Epoxy encapsulated. Body 3/16" l. x 3/32" D.D.; leads 1 1/2" long. Color coded. Inductance, $\pm 10\%$ unless otherwise noted.

| Cambion Number | Ind. μ h | Min. Q | DC Ma | Net Each 1-9" |
|----------------|--------------|--------|-------|---------------|
| 2950-1 | 1.1* | 60 | 2800 | 99c |
| 2950-2 | 2.2* | 65 | 1800 | 91c |
| 2950-3 | 3.3 | 50 | 1500 | 91c |
| 2950-4 | 4.7 | 45 | 1100 | 99c |
| 2950-5 | 6.8 | 40 | 800 | 99c |
| 2950-6 | 10 | 40 | 600 | 99c |
| 2950-7 | 15 | 40 | 500 | 99c |
| 2950-8 | 22 | 30 | 1500 | 91c |
| 2950-9 | 33 | 45 | 1100 | 91c |
| 2950-10 | 47 | 70 | 700 | 91c |
| 2950-11 | 82 | 85 | 600 | 91c |
| 2950-12 | 100 | 85 | 500 | 91c |
| 2950-13 | 120 | 85 | 400 | 91c |

*Inductance, $\pm 20\%$.

SERIES 2960 CHOKES (FIG. B)

Wound on powdered iron coil forms; varnish finish. Body 3/8" long; leads 1 1/4" long. Max. D.D. 3/16". MIL Type LT7K.

| Cambion® Part No. | Inductance μ h | Q Min. | DC MA | Net Each 1-9" |
|-------------------|--------------------|--------|-------|---------------|
| 2960-1 | .15 | 55 | 2,500 | \$1.16 |
| 2960-2 | .22 | 55 | 2,100 | 1.16 |
| 2960-3 | .33 | 55 | 2,000 | 1.16 |
| 2960-4 | .47 | 55 | 1,050 | 1.16 |
| 2960-5 | .68 | 40 | 700 | 1.16 |
| 2960-6 | 1.00 | 35 | 600 | 1.16 |
| 2960-7 | 1.50 | 30 | 500 | 1.16 |
| 2960-8 | 2.20 | 30 | 350 | 1.16 |
| 2960-9 | 2.70 | 30 | 300 | 1.16 |
| 2960-10 | 3.30 | 30 | 725 | 1.16 |

These parts conform to MS 75008-1 thru -20 per MIL-C-15305B

SERIES 2952 AND 2953 CHOKES

Wound on phenolic choke form. Inductance tolerance, $\pm 15\%$. Leads 1 1/2" long. Body 1/2" l., 2952 series; 1" l., 2953 series.

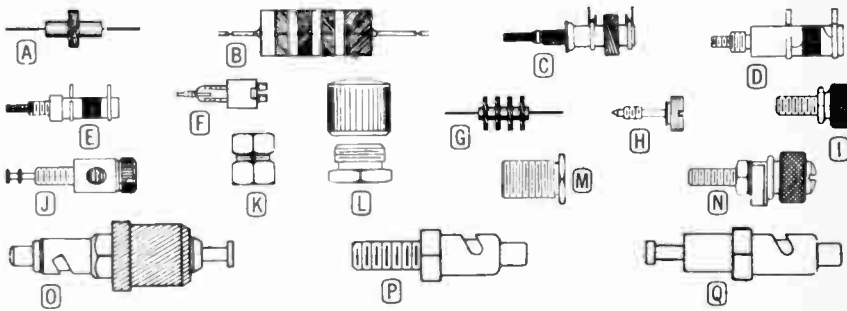
| Cambion Number | Fig. | Inductance | Q | Max. Oia. | Net Ea., 1-9" |
|----------------|------|------------------------|-------------|-----------|---------------|
| 2952-1 | A | 1.0 μ h at 7.9 mc | 55 \pm 10 | .180" | 48c |
| 2952-2 | A | 10 μ h at 7.9 mc | 28 \pm 5 | .300" | 53c |
| 2952-3 | A | 50 μ h at 2.5 mc | 18 \pm 4 | .320" | 58c |
| 2952-4 | A | 100 μ h at 2.5 mc | 16 \pm 4 | .345" | 64c |
| 2952-5 | A | 500 μ h at 790 kc | 27 \pm 6 | .400" | 69c |
| 2952-6 | A | 1000 μ h at 790 kc | 40 \pm 8 | .415" | 74c |
| 2953-1 | G | 0.5 mh at 790 kc | 17 \pm 3 | .535" | 76c |
| 2953-2 | G | 1.0 mh at 250 kc | 45 \pm 8 | .535" | 81c |
| 2953-3 | G | 2.5 mh at 250 kc | 55 \pm 10 | .550" | 90c |
| 2953-4 | G | 5 mh at 250 kc | 60 \pm 12 | .515" | 99c |

CAMBION COILS

Varnish finish. Wound on ceramic and phenolic coil forms.

| Cambion Number | Fig. | Ind. Range μ h | Q Mean | Coil Form | Net Ea. 1-9" |
|----------------|------|--------------------|--------|-------------|--------------|
| 2060-1 | C | 2.0-3.7 | 60 | PLS6-2C2L/D | \$1.06 |
| 2060-2 | C | 3.5-7.0 | 65 | PLS6-2C2L/D | 1.06 |
| 2060-3 | C | 6.5-10.6 | 70 | PLS6-CB2L/E | 1.16 |
| 2060-4 | C | 10-18 | 79 | PLS6-CB2L/E | 1.16 |
| 2060-5 | C | 16-28 | 83 | PLS6-CB2L F | 1.23 |
| 2060-6 | C | 28-63 | 85 | PLS6-CB2L F | 1.32 |
| 2060-7 | C | 61-122 | 80 | PLS6-CB2L F | 1.42 |
| 2060-8 | C | 120-243 | 85 | PLS6-CB2L F | 1.51 |
| 2060-9 | C | 238-450 | 85 | PLS6-CB2L F | 1.59 |
| 2060-10 | C | 440-800 | 85 | PLS6-CB2L F | 1.64 |
| LS3-1mc | D | 250-650 | 15 | LS3/CL | 1.12 |
| LS3-3mc | D | 45-95 | 20 | LS3/BL | 1.10 |
| LS3-5mc | D | 30-70 | 20 | LS3/BL | 1.07 |
| LS3-10mc | D | 5-10 | 20 | LS3/BL | 1.03 |
| LS3-30mc | D | 0.45-0.7 | 40 | LS3/AL | 1.00 |
| LS3-60mc | D | 0.098-0.1 | 35 | LS3/AL | .93 |
| LSM-1mc | E | 725-1250 | 30 | LSM F | 1.12 |
| LSM-3mc | E | 70-110 | 30 | LSM E | 1.10 |
| LSM-5mc | E | 45-75 | 30 | LSM E | 1.07 |
| LSM-10mc | E | 2-4 | 40 | LSM E | 1.03 |
| LSM-30mc | E | 0.28-0.35 | 55 | LSM D | 1.00 |
| LSM-60mc | E | 0.09-0.1 | 30 | LSM D | .93 |

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PANEL HARDWARE

Nickel plate finish (unless otherwise noted) on brass. Dial lock and binding post supplied with mounting hardware. Binding post finished in bright alloy plate.

| Cambion Number | Fig. | Description | Stud Size Suffix* | Thread | Stud lgth. | Cap Size Dia. x H. | Body Ht. | Net 1-9" |
|----------------|------|--------------|-------------------|--------|------------|--------------------|----------|----------|
| 1786* | H | Capt. screw | 1/8" # | 1/4" # | 1/4-20 | 1 1/8" x 3/8" | 3/8" | \$.73 |
| 1120† | J | Thumb screw | 6-32 | 8-32 | 10-32 | 3/8" x 3/8" | 1/2" | .25 |
| 1775 | I | Bind. post | 3/16" | 1/8" | 10-32 | 3/8" x 3/8" | 3/8" | .43 |
| 1774 * | K | Shaft lock | 3/16" | 1/8" | 3/8-32 | 3/8" x 1/2" | 3/16" | .25 |
| 2038 * | K | Shaft lock | 3/16" | 1/8" | 1/4-32 | 3/8" x 3/8" | 3/8" | .20 |
| 2142 * | L | Bush. & cvr. | 3/16" | 1/8" | 1/2-32 | 3/8" x 1/2" | 3/8" | .39 |
| 1818▲ | M | Panel bush. | 3/16" | 1/8" | 1/4-28 | 3/8" x 1/2" | 1/8" | .16 |
| 2117◆ | M | Panel bush. | 3/16" | 1/8" | 3/8-32 | 1/2" x 1/2" | 1/8" | .19 |
| 1552◆◆ | N | Dial lock | 3/16" | 1/8" | 8-32 | 1/2" x 3/8" | 1 3/32" | .39 |

*Add appropriate suffix to number (example: 1120-A) to indicate stud size desired. †Available with black oxide finish, add suffix -BD. ‡Add suffix -1, -2 or -3 (instead of -A, -B, or -C respectively), to indicate stud size desired. §Hex. size. *Also available with nickel plate or black oxide finish; specify by adding suffix -02 for nickel plate, -12 for black oxide to number (example: 1786-1-12). ▲1/8" shaft. ◆1/4" shaft. ◆◆ For dials 1/8" from panel.

SPRING-LOADED DIODE CLIPS

Brass construction; stud base type has nickel plated finish; feed thru and press-mount types have bright alloy finish. Press-mount type (Fig. D) has teflon insulator; mounts in .205" dia. hole in panels 1/16" to 1/8" thick.

| Cambion Number | Fig. | Size, In. H. x Base Dia. | Slot Width | Wire Gauge Min. | Wire Gauge Max. | Shank Dia. or Thread | Panel Thck. | Tooling PSP 45 | Net 1-9" |
|----------------|------|--------------------------|------------|-----------------|-----------------|----------------------|-------------|----------------|----------|
| 2146 | P | 1 1/2 x 3/8" | .040" | 36 | 20 | 2-16 | 3/32" | | \$.24 |
| 2247 | Q | 1 1/2 x 3/8" | .040" | 36 | 20 | .116" | † | PSA-40 | .24 |
| 2329 | P | 1 1/2 x 3/8" | .055" | 22 | 17 | 2-16 | 3/32" | | .35 |
| 2330 | Q | 1 1/2 x 3/8" | .055" | 22 | 17 | .116" | † | PSA-44 | .35 |
| 2339 | P | 2 3/32 x 3/8" | .085" | 19 | 13 | 3-8 | 3/16" | | .43 |
| 2340 | Q | 2 3/32 x 3/8" | .085" | 19 | 13 | .116" | † | PSA-41 | .43 |
| 2405 | D | 5/16 x 1/4" | .085" | 19 | 13 | 3/32" | 1/8" | | .43 |
| 2422 | D | 3/8 x 1/4" | .055" | 22 | 17 | 3/32" | 1/8" | | .57 |
| 2424 | D | 2 7/64 x 1/4" | .040" | 36 | 20 | 3/32" | 1/8" | | .48 |

*Hex size. †Specify by adding suffix (example: 2247-1): -1, 1/32", -2, 1/16", -3, 3/32", -4, 1/8", -5, 3/16".

SERIES 1500 COILS (FIG. F)

Varnish impregnated coils. Windings and powdered iron components are complete moisture-proofed. Standard LS9, 10 and 11 mounting hardware supplied unassembled. Rated 500 v. rms dielectric strength. Type 1505: 1.498" h. x 0.438" O.D. Slug threaded 2-56; second section, 1/4-28. Type 1506: 2.146" h. x .625" D.D. Slug threaded 3-48; section, 3/8-32 threaded. Type 1507: 1.146" h. x .344" D.D. Slug threaded 0-80; section 12-28 threaded.

| Cambion Number | Inductance | | Min. Q at Induct. of Min. | OC Ma | Net Each 1-9" | |
|----------------|-----------------|-----------------|---------------------------|-------|---------------|--------|
| | Minimum μ h | Maximum μ h | | | | |
| 1505-1 | .55 | 25mc | 1.0 | 25mc | 80 70 500 | \$2.30 |
| 1505-2 | .9 | 25mc | 1.75 | 7.9mc | 75 70 250 | 2.30 |
| 1505-3 | 1.7 | 7.9mc | 3.5 | 7.9mc | 45 60 125 | 2.30 |
| 1505-4 | 3.2 | 7.9mc | 8.3 | 7.9mc | 50 75 50 | 2.30 |
| 1505-5 | 7.8 | 7.9mc | 16 | 2.5mc | 50 90 50 | 2.50 |
| 1505-6 | 14.5 | 2.5mc | 33 | 2.5mc | 55 90 50 | 2.50 |
| 1505-7 | 30 | 2.5mc | 73 | 2.5mc | 25 50 50 | 2.20 |
| 1505-8 | 66 | 2.5mc | 160 | 790kc | 20 60 50 | 2.20 |
| 1505-9 | 144 | 790kc | 430 | 790kc | 30 50 50 | 2.20 |
| 1505-10 | 400 | 790kc | 1.0* | 250kc | 30 40 50 | 2.20 |
| 1506-1 | 1.0* | 250kc | 2.2* | 250kc | 40 50 100 | 2.75 |
| 1506-2 | 2.0* | 250kc | 4.7* | 250kc | 40 45 80 | 2.75 |
| 1506-3 | 4.5* | 250kc | 11* | 250kc | 35 35 60 | 3.17 |
| 1506-4 | 9.0* | 79kc | 22* | 79kc | 30 35 50 | 3.17 |
| 1506-5 | 20* | 79kc | 40* | 79kc | 30 35 40 | 3.17 |
| 1507-1 | .11 | 25mc | .165 | 25mc | 55 70 640 | 2.20 |
| 1507-2 | .16 | 25mc | .28 | 25mc | 60 70 640 | 2.20 |
| 1507-3 | .27 | 25mc | .55 | 25mc | 60 60 640 | 2.20 |
| 1507-4 | .5 | 25mc | 1.1 | 25mc | 70 50 500 | 2.20 |
| 1507-5 | .9 | 7.9mc | 2.0 | 7.9mc | 35 40 250 | 2.20 |
| 1507-6 | 1.6 | 7.9mc | 3.6 | 7.9mc | 45 40 150 | 2.20 |
| 1507-7 | 3.5 | 7.9mc | 8.0 | 7.9mc | 45 45 100 | 2.20 |

*Millihenries

★WRITE FOR DISCOUNTS ON LARGER QUANTITY ORDERS.



MILLER MOLDED COILS CONFORM TO MIL-C-15305 B

"MICRO MITE" SERIES 9210
MOLDED R. F. CHOKES

Mold Size: .155 ± .010 diameter; .375 ± .010 length.
Leads: AWG # 22 TCW; 1.44 ± .125 length.
Power Rating: 1/2 Watt Max. at 90° C.

| PART NO. | L | Q | TEST FREQ. (Mc) | Fo | Rdc. | Ma. | CORE | NET |
|----------|----------|------|-----------------|-----------|------|------|------|-------|
| NO. | uh | MIN. | MIN. | MIN. (Mc) | MAX. | MAX. | MTL. | PRICE |
| 9210-54 | 39 ± 5% | 50 | 2.5 | 10.3 | 2.50 | 320 | IRON | .60 |
| 9210-56 | 36 ± 5% | 50 | 2.5 | 10.3 | 2.60 | 315 | IRON | .60 |
| 9210-58 | 43 ± 5% | 50 | 2.5 | 10.3 | 2.65 | 310 | IRON | .90 |
| 9210-60 | 47 ± 5% | 50 | 2.5 | 10.0 | 2.70 | 305 | IRON | .90 |
| 9210-62 | 51 ± 5% | 50 | 2.5 | 9.7 | 2.75 | 300 | IRON | .90 |
| 9210-64 | 56 ± 5% | 50 | 2.5 | 9.5 | 2.80 | 295 | IRON | .90 |
| 9210-66 | 62 ± 5% | 45 | 2.5 | 9.0 | 2.95 | 290 | IRON | .90 |
| 9210-68 | 68 ± 5% | 45 | 2.5 | 8.7 | 3.25 | 285 | IRON | .90 |
| 9210-70 | 75 ± 5% | 45 | 2.5 | 8.5 | 3.40 | 275 | IRON | .90 |
| 9210-72 | 82 ± 5% | 45 | 2.5 | 8.0 | 3.55 | 270 | IRON | .90 |
| 9210-74 | 91 ± 5% | 45 | 2.5 | 7.7 | 3.70 | 265 | IRON | .90 |
| 9210-76 | 100 ± 5% | 45 | 2.5 | 7.7 | 4.00 | 260 | IRON | .96 |
| 9210-78 | 110 ± 5% | 60 | .790 | 7.3 | 4.45 | 255 | IRON | .96 |
| 9210-80 | 120 ± 5% | 65 | .790 | 6.7 | 4.65 | 250 | IRON | .96 |
| 9210-82 | 130 ± 5% | 65 | .790 | 6.7 | 4.95 | 240 | IRON | .96 |
| 9210-84 | 150 ± 5% | 65 | .790 | 6.5 | 5.30 | 235 | IRON | .96 |
| 9210-86 | 160 ± 5% | 65 | .790 | 6.5 | 5.90 | 230 | IRON | .99 |
| 9210-88 | 180 ± 5% | 65 | .790 | 6.3 | 6.20 | 225 | IRON | .99 |
| 9210-90 | 200 ± 5% | 65 | .790 | 6.0 | 6.40 | 215 | IRON | .99 |
| 9210-92 | 220 ± 5% | 65 | .790 | 5.5 | 7.20 | 210 | IRON | .99 |
| 9210-94 | 240 ± 5% | 65 | .790 | 5.3 | 7.60 | 205 | IRON | .99 |

"MICRO MITE" SERIES 9220
MOLDED R. F. CHOKES

| MOLD SIZE | MOLD DIAMETER | MOLD LENGTH | LEAD SIZE | LEAD LENGTH | MAX. WATT AT 90° C. |
|-----------|---------------|-------------|-----------|-------------|---------------------|
| A | .150 ± .010 | .440 ± .010 | AWG #22 | 1.44 ± .125 | 1/2 |
| B | .125 ± .010 | .560 ± .010 | AWG #21 | 1.44 ± .125 | 1/2 |
| C | .240 ± .010 | .740 ± .010 | AWG #20 | 1.44 ± .125 | 1/2 |

| PART NO. | L | Q | TEST FREQ. (Mc) | Fo | Rdc. | Ma. | MOLD | CORE | NET |
|----------|------------|------|-----------------|-----------|------|------|------|------|--------|
| NO. | uh | MIN. | MIN. | MIN. (Mc) | MAX. | MAX. | SIZE | MTL. | PRICE |
| 9220-00 | 270 ± 5% | 65 | .790 | 4.7 | 7.8 | 205 | A | IRON | \$1.05 |
| 9220-02 | 300 ± 5% | 65 | .790 | 4.5 | 8.3 | 200 | A | IRON | 1.05 |
| 9220-04 | 330 ± 5% | 65 | .790 | 4.5 | 8.7 | 195 | A | IRON | 1.05 |
| 9220-06 | 360 ± 5% | 65 | .790 | 4.0 | 9.0 | 190 | A | IRON | 1.17 |
| 9220-08 | 390 ± 5% | 65 | .790 | 4.0 | 9.5 | 185 | A | IRON | 1.17 |
| 9220-10 | 420 ± 5% | 65 | .790 | 4.0 | 10.0 | 180 | A | IRON | 1.17 |
| 9220-12 | 470 ± 5% | 65 | .790 | 3.7 | 10.7 | 175 | A | IRON | 1.17 |
| 9220-14 | 500 ± 5% | 65 | .790 | 3.7 | 11.0 | 170 | A | IRON | 1.17 |
| 9220-16 | 560 ± 5% | 65 | .790 | 3.3 | 11.5 | 165 | A | IRON | 1.20 |
| 9220-18 | 620 ± 5% | 60 | .790 | 3.0 | 12.5 | 160 | A | IRON | 1.20 |
| 9220-20 | 680 ± 5% | 60 | .790 | 3.0 | 13.0 | 155 | A | IRON | 1.20 |
| 9220-22 | 750 ± 5% | 55 | .790 | 3.0 | 14.0 | 150 | A | IRON | 1.20 |
| 9220-24 | 820 ± 5% | 55 | .790 | 2.8 | 14.5 | 145 | A | IRON | 1.26 |
| 9220-26 | 910 ± 5% | 55 | .790 | 2.7 | 15.0 | 140 | A | IRON | 1.26 |
| 9220-28 | 1000 ± 5% | 55 | .790 | 2.6 | 16.0 | 135 | A | IRON | 1.26 |
| 9220-30 | 1100 ± 5% | 60 | .250 | 2.7 | 20.0 | 135 | B | IRON | 1.35 |
| 9220-32 | 1200 ± 5% | 60 | .250 | 2.7 | 21.0 | 130 | B | IRON | 1.35 |
| 9220-34 | 1300 ± 5% | 60 | .250 | 2.6 | 21.5 | 130 | B | IRON | 1.35 |
| 9220-36 | 1500 ± 5% | 65 | .250 | 2.3 | 23.5 | 125 | B | IRON | 1.35 |
| 9220-38 | 1600 ± 5% | 65 | .250 | 2.2 | 24.0 | 120 | B | IRON | 1.35 |
| 9220-40 | 1800 ± 5% | 65 | .250 | 2.2 | 26.0 | 120 | B | IRON | 1.35 |
| 9220-42 | 2000 ± 5% | 65 | .250 | 2.0 | 27.5 | 115 | B | IRON | 1.35 |
| 9220-44 | 2200 ± 5% | 70 | .250 | 2.0 | 28.5 | 110 | B | IRON | 1.35 |
| 9220-46 | 2400 ± 5% | 70 | .250 | 1.9 | 30.0 | 110 | B | IRON | 1.35 |
| 9220-48 | 2700 ± 5% | 70 | .250 | 1.9 | 31.5 | 105 | B | IRON | 1.35 |
| 9220-50 | 3000 ± 5% | 70 | .250 | 1.8 | 33.5 | 100 | B | IRON | 1.35 |
| 9220-52 | 3300 ± 5% | 70 | .250 | 1.6 | 36.0 | 100 | B | IRON | 1.35 |
| 9220-54 | 3600 ± 5% | 70 | .250 | 1.5 | 37.5 | 95 | B | IRON | 1.35 |
| 9220-56 | 3900 ± 5% | 80 | .250 | 1.5 | 41.0 | 95 | C | IRON | 1.41 |
| 9220-58 | 4300 ± 5% | 80 | .250 | 1.5 | 43.0 | 90 | C | IRON | 1.41 |
| 9220-60 | 4700 ± 5% | 80 | .250 | 1.4 | 45.0 | 90 | C | IRON | 1.41 |
| 9220-62 | 5000 ± 5% | 80 | .250 | 1.3 | 46.0 | 85 | C | IRON | 1.41 |
| 9220-64 | 5600 ± 5% | 80 | .250 | 1.3 | 49.5 | 80 | C | IRON | 1.50 |
| 9220-66 | 6200 ± 5% | 80 | .250 | 1.2 | 51.5 | 80 | C | IRON | 1.50 |
| 9220-68 | 6800 ± 5% | 80 | .250 | 1.2 | 54.0 | 80 | C | IRON | 1.50 |
| 9220-70 | 7500 ± 5% | 80 | .250 | 1.2 | 57.0 | 80 | C | IRON | 1.50 |
| 9220-72 | 8200 ± 5% | 80 | .250 | 1.1 | 59.5 | 75 | C | IRON | 1.59 |
| 9220-74 | 9100 ± 5% | 80 | .250 | 1.0 | 64.0 | 75 | C | IRON | 1.59 |
| 9220-76 | 10000 ± 5% | 80 | .250 | 1.0 | 66.5 | 75 | C | IRON | 1.59 |

MILLER SERIES 9310

(MS 162225)
Mold Size: .155 ± .010 diameter; .375 ± .010 length.
Leads: AWG #22 TCW; 1.437 ± .125 length.
Power Rating: 1/2 Watt Max. at 90° C.

| PART NO. | L | Q | TEST FREQ. (Mc) | Fo | Rdc. | Ma. | CORE | NET |
|----------|------------|------|-----------------|-----------|------|------|----------|-------|
| NO. | uh | MIN. | MIN. | MIN. (Mc) | MAX. | MAX. | MTL. | PRICE |
| 9310-00 | .15 ± 20% | 45 | 25 | 325 | .03 | 2630 | PHENOLIC | \$.60 |
| 9310-02 | .22 ± 20% | 45 | 25 | 455 | .05 | 2235 | PHENOLIC | .60 |
| 9310-04 | .33 ± 20% | 45 | 25 | 390 | .09 | 1490 | PHENOLIC | .60 |
| 9310-06 | .47 ± 20% | 45 | 25 | 310 | .12 | 1340 | PHENOLIC | .60 |
| 9310-08 | .68 ± 20% | 45 | 25 | 250 | .14 | 1165 | PHENOLIC | .60 |
| 9310-10 | .87 ± 20% | 55 | 25 | 210 | .22 | 930 | PHENOLIC | .60 |
| 9310-12 | 1.00 ± 10% | 50 | 25 | 200 | .25 | 875 | PHENOLIC | .60 |
| 9310-14 | 1.20 ± 10% | 35 | 7.9 | 180 | .42 | 675 | PHENOLIC | .60 |
| 9310-16 | 1.50 ± 10% | 35 | 7.9 | 160 | .50 | 600 | PHENOLIC | .60 |
| 9310-18 | 1.80 ± 10% | 35 | 7.9 | 145 | .65 | 500 | PHENOLIC | .60 |
| 9310-20 | 2.20 ± 10% | 35 | 7.9 | 135 | .95 | 400 | PHENOLIC | .60 |
| 9310-22 | 2.70 ± 10% | 35 | 7.9 | 120 | 1.20 | 370 | PHENOLIC | .60 |
| 9310-24 | 3.30 ± 10% | 35 | 7.9 | 110 | 2.00 | 325 | PHENOLIC | .66 |
| 9310-26 | 3.90 ± 10% | 35 | 7.9 | 100 | 2.30 | 300 | PHENOLIC | .66 |
| 9310-28 | 4.70 ± 10% | 35 | 7.9 | 90 | 2.60 | 270 | PHENOLIC | .66 |
| 9310-30 | 5.60 ± 10% | 45 | 7.9 | 60 | .32 | 780 | IRON | .66 |
| 9310-32 | 6.80 ± 10% | 50 | 7.9 | 55 | .50 | 600 | IRON | .66 |
| 9310-34 | 8.20 ± 10% | 50 | 7.9 | 50 | .60 | 540 | IRON | .66 |
| 9310-36 | 10.0 ± 10% | 55 | 7.9 | 45 | .90 | 460 | IRON | .66 |
| 9310-38 | 12.0 ± 10% | 65 | 2.5 | 42 | 1.10 | 375 | IRON | .66 |
| 9310-40 | 15.0 ± 10% | 65 | 2.5 | 40 | 1.30 | 350 | IRON | .66 |
| 9310-42 | 18.0 ± 10% | 75 | 2.5 | 34 | 2.25 | 300 | IRON | .66 |
| 9310-44 | 22.0 ± 10% | 75 | 2.5 | 30 | 2.50 | 275 | IRON | .66 |
| 9310-46 | 24.0 ± 5% | 60 | 2.5 | 25 | 2.50 | 260 | IRON | .75 |
| 9310-48 | 27.0 ± 5% | 60 | 2.5 | 25 | 2.60 | 260 | IRON | .75 |
| 9310-50 | 30.0 ± 5% | 65 | 2.5 | 19 | 2.80 | 245 | IRON | .75 |
| 9310-52 | 33.0 ± 5% | 65 | 2.5 | 19 | 2.90 | 230 | IRON | .75 |

For a Complete Listing of MILLER PRODUCTS ask for a copy of our Latest General Catalog on your Company Letterhead.

MILLER SERIES 9320 (MS 16224) (MS 75008)
Mold Size: 0.185 ± .010 diameter; 0.437 ± .010 length.
Leads: AWG #22 TCW; 1.437 ± .125 length. Power Rating: 1/2 Watt Max. at 90° C.

| PART NO. | L | Q | TEST FREQ. (Mc) | Fo | Rdc. | Ma. | CORE | NET |
|----------|------------|------|-----------------|-----------|------|------|----------|-------|
| NO. | uh | MIN. | MIN. | MIN. (Mc) | MAX. | MAX. | MTL. | PRICE |
| 9320-00 | .15 ± 20% | 65 | 25 | 600 | .03 | 3400 | PHENOLIC | \$.60 |
| 9320-02 | .22 ± 20% | 60 | 25 | 470 | .04 | 2950 | PHENOLIC | .60 |
| 9320-04 | .33 ± 20% | 60 | 25 | 390 | .05 | 2500 | PHENOLIC | .60 |
| 9320-06 | .47 ± 20% | 60 | 25 | 320 | .08 | 1875 | PHENOLIC | .60 |
| 9320-08 | .68 ± 20% | 65 | 25 | 240 | .12 | 1400 | PHENOLIC | .60 |
| 9320-10 | 1.00 ± 10% | 60 | 25 | 190 | .25 | 900 | PHENOLIC | .60 |
| 9320-12 | 1.50 ± 10% | 40 | 7.9 | 150 | .50 | 720 | PHENOLIC | .60 |
| 9320-14 | 2.20 ± 10% | 40 | 7.9 | 130 | .90 | 460 | PHENOLIC | .60 |
| 9320-16 | 2.70 ± 10% | 40 | 7.9 | 120 | 1.10 | 450 | PHENOLIC | .60 |
| 9320-18 | 3.30 ± 10% | 35 | 7.9 | 68 | .12 | 1300 | IRON | .66 |
| 9320-20 | 3.90 ± 10% | 35 | 7.9 | 62 | .16 | 1100 | IRON | .66 |
| 9320-22 | 4.70 ± 10% | 40 | 7.9 | 58 | .22 | 915 | IRON | .66 |
| 9320-24 | 5.60 ± 10% | 40 | 7.9 | 50 | .30 | 900 | IRON | .66 |
| 9320-26 | 6.80 ± 10% | 40 | 7.9 | 45 | .40 | 800 | IRON | .66 |
| 9320-28 | 8.20 ± 10% | 40 | 7.9 | 43 | .45 | 770 | IRON | .66 |
| 9320-30 | 10.0 ± 10% | 40 | 7.9 | 40 | .60 | 690 | IRON | .66 |
| 9320-32 | 12.0 ± 10% | 55 | 2.5 | 35 | .85 | 480 | IRON | .66 |
| 9320-34 | 15.0 ± 10% | 60 | 2.5 | 30 | 1.20 | 480 | IRON | .66 |
| 9320-36 | 22.0 ± 10% | 65 | 2.5 | 24 | 2.00 | 375 | IRON | .66 |
| 9320-38 | 27.0 ± 10% | 70 | 2.5 | 22 | 2.80 | 300 | IRON | .66 |

MILLER SERIES 9330 (MS 16222)
Mold Size: 0.215 ± .010 diameter; 0.560 ± .010 length.
Leads: AWG #22 TCW; 1.437 ± .125 length. Power Rating: 1/2 Watt Max. at 90° C.

| PART NO. | L | Q | TEST FREQ. (Mc) | Fo | Rdc. | Ma. | CORE | NET |
|----------|------------|------|-----------------|-----------|------|------|----------|-------|
| NO. | uh | MIN. | MIN. | MIN. (Mc) | MAX. | MAX. | MTL. | PRICE |
| 9330-00 | .47 ± 20% | 70 | 25 | 280 | .06 | 2000 | PHENOLIC | \$.66 |
| 9330-02 | .68 ± 20% | 70 | 25 | 240 | .07 | 1275 | PHENOLIC | .66 |
| 9330-04 | 1.00 ± 10% | 70 | 25 | 200 | .13 | 1180 | PHENOLIC | .66 |
| 9330-06 | 1.50 ± 10% | 45 | 7.9 | 160 | .28 | 1080 | PHENOLIC | .66 |
| 9330-08 | 2.20 ± 10% | 45 | 7.9 | 135 | .50 | 700 | PHENOLIC | .66 |
| 9330-10 | 2.70 ± 10% | 45 | 7.9 | 120 | .65 | 660 | PHENOLIC | .66 |
| 9330-12 | 3.30 ± 10% | 45 | 7.9 | 105 | 1.00 | 600 | PHENOLIC | .66 |
| 9330-14 | 3.90 ± 10% | 45 | 7.9 | 100 | 1.20 | 640 | PHENOLIC | .66 |
| 9330-16 | 4.70 ± 10% | 45 | 7.9 | 90 | 1.50 | 590 | PHENOLIC | .66 |
| 9330-18 | 5.60 ± 10% | 35 | 7.9 | 55 | .13 | 1500 | IRON | .75 |
| 9330-20 | 6.80 ± 10% | 35 | 7.9 | 50 | .20 | 1250 | IRON | .75 |
| 9330-22 | 8.20 ± 10% | 35 | 7.9 | 44 | .22 | 1190 | IRON | .75 |
| 9330-24 | 10.0 ± 10% | 35 | 7.9 | 42 | .26 | 990 | IRON | .75 |
| 9330-26 | 12.0 ± 10% | 45 | 2.5 | 14 | .45 | 245 | IRON | .75 |
| 9330-28 | 15.0 ± 10% | 45 | 2.5 | 32 | .52 | 730 | IRON | .75 |
| 9330-30 | 1 | | | | | | | |

Miller

Industrial Adjustable R.F. Coils



Ceramic Adjustable R.F. Coils



The forms used in this series feature terminal rings machined from the ceramic form material. Coils wound on these forms exhibit high Q and good stability. The adjusting core is held rigidly at any setting through the use of a newly designed tension device on the bushing.

Sub Miniature Adjustable R.F. Coils

Dimensions (form) 7/32" dia. x 19/32" long

| Part No. | L Max. ± 5% | L Min. ± 10% | Net Price |
|-----------|---------------------------|--------------|-----------|
| 40A000CBI | Coil Form w/hdw. and Core | | \$1.14 |
| 40A107CBI | .125 uh | .091 uh | 1.68 |
| 40A157CBI | .188 uh | .124 uh | 1.68 |
| 40A227CBI | .275 uh | .184 uh | 1.68 |
| 40A337CBI | .413 uh | .265 uh | 1.68 |
| 40A477CBI | .587 uh | .327 uh | 1.71 |
| 40A687CBI | .850 uh | .482 uh | 1.71 |
| 40A827CBI | 1.02 uh | .630 uh | 1.86 |
| 40A106CBI | 1.25 uh | .730 uh | 1.80 |
| 40A156CBI | 1.88 uh | 1.06 uh | 1.80 |
| 40A226CBI | 2.75 uh | 1.50 uh | 1.83 |
| 40A336CBI | 4.13 uh | 2.15 uh | 1.83 |
| 40A476CBI | 5.87 uh | 3.00 uh | 1.92 |
| 40A686CBI | 8.50 uh | 4.40 uh | 1.92 |
| 40A826CBI | 10.2 uh | 5.25 uh | 1.92 |
| 40A105CBI | 12.5 uh | 8.06 uh | 1.98 |
| 40A155CBI | 18.8 uh | 11.9 uh | 1.98 |
| 40A225CBI | 27.5 uh | 17.1 uh | 2.04 |
| 40A335CBI | 41.3 uh | 26.6 uh | 2.04 |
| 40A475CBI | 58.7 uh | 39.0 uh | 2.13 |
| 40A685CBI | 85.0 uh | 58.0 uh | 2.13 |
| 40A825CBI | 102 uh | 69.0 uh | 2.31 |
| 40A104CBI | 125 uh | 84.0 uh | 2.31 |
| 40A000CBI | Bulk pack per 100 | | 99.00 |

Miniature Adjustable R.F. Coils

Dimensions (form) 1/4" dia. x 13/16" long

| Part No. | L Max. ± 5% | L Min. ± 10% | Net Price |
|-----------|---------------------------|--------------|-----------|
| 41A000CBI | Coil Form w/hdw. and Core | | \$1.20 |
| 41A106CBI | 1.25 uh | .69 uh | 1.80 |
| 41A156CBI | 1.87 uh | 1.20 uh | 1.80 |
| 41A226CBI | 2.75 uh | 1.42 uh | 1.80 |
| 41A336CBI | 4.10 uh | 2.00 uh | 1.83 |
| 41A476CBI | 5.80 uh | 2.80 uh | 1.83 |
| 41A686CBI | 8.50 uh | 4.00 uh | 1.83 |
| 41A826CBI | 10.0 uh | 4.50 uh | 1.86 |
| 41A105CBI | 12.5 uh | 6.50 uh | 1.86 |
| 41A155CBI | 18.7 uh | 10.8 uh | 1.86 |
| 41A225CBI | 27.5 uh | 15.2 uh | 1.86 |
| 41A335CBI | 41.0 uh | 26.0 uh | 1.92 |
| 41A475CBI | 58.0 uh | 32.5 uh | 1.92 |
| 41A685CBI | 85.0 uh | 48.5 uh | 1.98 |
| 41A825CBI | 100 uh | 61.0 uh | 1.98 |
| 41A104CBI | 125 uh | 65.0 uh | 2.04 |
| 41A154CBI | 187 uh | 110 uh | 2.04 |
| 41A224CBI | 275 uh | 160 uh | 2.13 |
| 41A334CBI | 410 uh | 253 uh | 2.13 |
| 41A474CBI | 580 uh | 390 uh | 2.25 |
| 41A684CBI | 850 uh | 560 uh | 2.31 |
| 41A824CBI | 1.00 mh | 670 uh | 2.37 |
| 41A103CBI | 1.25 mh | 700 uh | 2.46 |
| 41A000CBI | Bulk pack per 100 | | 108.60 |

Standard Adjustable R.F. Coils

Dimensions (form) 3/8" dia. x 1" long

| Part No. | L Max. ± 5% | L Min. ± 10% | Net Price |
|-----------|---------------------------|--------------|-----------|
| 42A000CBI | Coil Form w/hdw. and Core | | \$1.26 |
| 42A106CBI | 1.25 uh | .68 uh | 1.80 |
| 42A156CBI | 1.87 uh | 1.00 uh | 1.80 |
| 42A226CBI | 2.75 uh | 1.35 uh | 1.80 |
| 42A336CBI | 4.10 uh | 2.12 uh | 1.83 |
| 42A476CBI | 5.80 uh | 2.40 uh | 1.83 |
| 42A686CBI | 8.50 uh | 3.60 uh | 1.86 |
| 42A826CBI | 10.0 uh | 4.45 uh | 1.86 |
| 42A105CBI | 12.5 uh | 6.05 uh | 1.98 |
| 42A155CBI | 18.7 uh | 9.40 uh | 1.98 |
| 42A225CBI | 27.5 uh | 12.9 uh | 2.01 |
| 42A335CBI | 41.0 uh | 18.8 uh | 2.01 |
| 42A475CBI | 58.0 uh | 27.5 uh | 2.16 |
| 42A685CBI | 85.0 uh | 37.5 uh | 2.19 |
| 42A825CBI | 100 uh | 45.0 uh | 2.25 |
| 42A104CBI | 125 uh | 54.0 uh | 2.34 |
| 42A154CBI | 187 uh | 92.0 uh | 2.34 |
| 42A224CBI | 275 uh | 123 uh | 2.34 |
| 42A334CBI | 410 uh | 200 uh | 2.37 |

| | | | |
|-----------|-------------------|---------|--------|
| 42A474CBI | 580 uh | 300 uh | 2.37 |
| 42A684CBI | 850 uh | 430 uh | 2.37 |
| 42A824CBI | 1.00 mh | 510 uh | 2.43 |
| 42A103CBI | 1.25 mh | 780 uh | 2.43 |
| 42A153CBI | 1.87 mh | 1.10 mh | 2.46 |
| 42A223CBI | 2.90 mh | 1.66 mh | 2.46 |
| 42A333CBI | 4.10 mh | 2.40 mh | 2.46 |
| 42A473CBI | 5.80 mh | 3.46 mh | 2.52 |
| 42A683CBI | 8.50 mh | 5.25 mh | 2.52 |
| 42A823CBI | 10.0 mh | 6.00 mh | 2.61 |
| 42A102CBI | 12.5 mh | 9.20 mh | 2.61 |
| 42A000CBI | Bulk pack per 100 | | 112.20 |

Jumbo Adjustable R.F. Coils

Dimensions (form) 1/2" dia. x 1-7/16" long

| Part No. | L Max. ± 5% | L Min. ± 10% | Net Price |
|-----------|---------------------------|--------------|-----------|
| 43A000CBI | Coil Form w/hdw. and Core | | \$1.32 |
| 43A105CBI | 12.5 uh | 5.70 uh | 1.95 |
| 43A155CBI | 18.7 uh | 9.00 uh | 1.95 |
| 43A225CBI | 27.5 uh | 12.0 uh | 1.95 |
| 43A335CBI | 41.0 uh | 17.0 uh | 1.98 |
| 43A475CBI | 58.0 uh | 25.0 uh | 1.98 |
| 43A685CBI | 85.0 uh | 38.0 uh | 2.25 |
| 43A825CBI | 100 uh | 42.0 uh | 2.25 |
| 43A104CBI | 125 uh | 65.0 uh | 2.25 |
| 43A154CBI | 187 uh | 95.0 uh | 2.25 |
| 43A224CBI | 275 uh | 138 uh | 2.37 |
| 43A334CBI | 410 uh | 205 uh | 2.37 |
| 43A474CBI | 580 uh | 240 uh | 2.40 |
| 43A684CBI | 850 uh | 370 uh | 2.40 |
| 43A824CBI | 1.00 mh | 450 uh | 2.40 |
| 43A103CBI | 1.25 mh | 600 uh | 2.40 |
| 43A153CBI | 1.87 mh | 900 uh | 2.46 |
| 43A223CBI | 2.75 mh | 1.30 mh | 2.46 |
| 43A333CBI | 4.10 mh | 1.95 mh | 2.49 |
| 43A473CBI | 5.80 mh | 2.90 mh | 2.49 |
| 43A683CBI | 8.50 mh | 4.30 mh | 2.55 |
| 43A823CBI | 10.0 mh | 5.10 mh | 2.55 |
| 43A102CBI | 12.5 mh | 6.50 mh | 2.58 |
| 43A152CBI | 18.7 mh | 9.80 mh | 2.58 |
| 43A222CBI | 27.5 mh | 13.0 mh | 2.61 |
| 43A332CBI | 41.0 mh | 20.0 mh | 2.61 |
| 43A472CBI | 58.0 mh | 29.0 mh | 2.64 |
| 43A682CBI | 85.0 mh | 42.0 mh | 2.70 |
| 43A822CBI | 100 mh | 50.0 mh | 2.76 |
| 43A101CBI | 125 mh | 66.0 mh | 2.97 |
| 43A000CBI | Bulk pack per 100 | | 118.80 |

Resinite Adjustable R.F. Coils



Resinite is a phenolic impregnated tubing which can be certified to MIL-P-79B type PBG. This material combines good mechanical and electrical characteristics along with the noncorrosive properties of cellulose acetate.

Miniature Adjustable R.F. Coils

Dimensions (form) 1/4" dia. x 13/16" long

| Part No. | L Max. ± 5% | L Min. ± 10% | Net Price |
|-----------|---------------------------|--------------|-----------|
| 20A000RBI | Coil Form w/hdw. and Core | | \$.63 |
| 20A107RBI | .125 uh | .079 uh | .87 |
| 20A157RBI | .187 uh | .119 uh | .87 |
| 20A227RBI | .275 uh | .170 uh | .87 |
| 20A337RBI | .410 uh | .240 uh | .90 |
| 20A477RBI | .580 uh | .310 uh | .90 |
| 20A687RBI | .850 uh | .430 uh | .90 |
| 20A827RBI | 1.00 uh | .580 uh | .90 |
| 20A106RBI | 1.25 uh | .670 uh | .90 |
| 20A156RBI | 1.87 uh | .900 uh | .90 |
| 20A226RBI | 2.75 uh | 1.60 uh | .90 |
| 20A336RBI | 4.10 uh | 2.00 uh | .90 |
| 20A476RBI | 5.80 uh | 2.80 uh | .93 |
| 20A686RBI | 8.50 uh | 3.80 uh | .93 |
| 20A826RBI | 10.0 uh | 4.70 uh | .93 |
| 20A105RBI | 12.5 uh | 6.40 uh | .93 |
| 20A155RBI | 18.7 uh | 9.20 uh | .93 |
| 20A225RBI | 27.5 uh | 12.0 uh | .93 |
| 20A335RBI | 41.0 uh | 19.0 uh | .93 |
| 20A475RBI | 58.0 uh | 27.0 uh | .93 |
| 20A685RBI | 85.0 uh | 37.0 uh | .93 |
| 20A825RBI | 100 uh | 53.0 uh | .93 |
| 20A104RBI | 125 uh | 65.0 uh | .93 |
| 20A154RBI | 187 uh | 92.0 uh | .93 |
| 20A224RBI | 275 uh | 140 uh | .96 |
| 20A334RBI | 410 uh | 215 uh | .96 |
| 20A474RBI | 580 uh | 310 uh | .96 |
| 20A684RBI | 850 uh | 450 uh | .96 |
| 20A824RBI | 1.00 mh | 620 uh | .96 |
| 20A103RBI | 1.25 mh | 830 uh | .96 |

Standard Adjustable R.F. Coils

Dimensions (form) 3/8" dia. x 1 1/8" long

| Part No. | L Max. ± 5% | L Min. ± 10% | Net Price |
|-----------|---------------------------|--------------|-----------|
| 21A000RBI | Coil Form w/hdw. and Core | | \$.66 |
| 21A106RBI | 1.25 uh | 0.68 uh | .90 |
| 21A156RBI | 1.87 uh | 1.00 uh | .90 |
| 21A226RBI | 2.75 uh | 1.35 uh | .90 |
| 21A336RBI | 4.10 uh | 2.12 uh | .90 |
| 21A476RBI | 5.80 uh | 2.40 uh | .90 |
| 21A686RBI | 8.50 uh | 3.60 uh | .93 |
| 21A826RBI | 10.0 uh | 4.45 uh | .93 |
| 21A105RBI | 12.5 uh | 6.05 uh | .93 |
| 21A155RBI | 18.7 uh | 9.40 uh | .93 |
| 21A225RBI | 27.5 uh | 12.9 uh | .93 |
| 21A335RBI | 41.0 uh | 18.8 uh | .93 |
| 21A475RBI | 58.0 uh | 27.5 uh | .96 |
| 21A685RBI | 85.0 uh | 37.5 uh | .96 |
| 21A825RBI | 100 uh | 45.0 uh | .96 |
| 21A104RBI | 125 uh | 54.0 uh | .96 |
| 21A154RBI | 187 uh | 92.0 uh | .99 |
| 21A224RBI | 275 uh | 123 uh | .99 |
| 21A334RBI | 410 uh | 200 uh | 1.02 |
| 21A474RBI | 580 uh | 300 uh | 1.02 |
| 21A684RBI | 850 uh | 430 uh | 1.05 |
| 21A824RBI | 1.00 mh | 510 uh | 1.05 |
| 21A103RBI | 1.25 mh | 780 uh | 1.08 |
| 21A153RBI | 1.87 mh | 1.10 mh | 1.08 |
| 21A223RBI | 2.75 mh | 1.66 mh | 1.11 |
| 21A333RBI | 4.10 mh | 2.40 mh | 1.11 |
| 21A473RBI | 5.80 mh | 3.46 mh | 1.23 |
| 21A683RBI | 8.50 mh | 5.25 mh | 1.32 |
| 21A823RBI | 10.0 mh | 6.00 mh | 1.41 |
| 21A102RBI | 12.5 mh | 9.20 mh | 1.50 |

Jumbo Adjustable R.F. Coils

Dimensions (form) 1/2" dia. x 1 7/16" long

| Part No. | L Max. ± 5% | L Min. ± 10% | Net Price |
|-----------|---------------------------|--------------|-----------|
| 22A000RBI | Coil Form w/hdw. and Core | | \$.81 |
| 22A105RBI | 12.5 uh | 5.70 uh | 1.23 |
| 22A155RBI | 18.7 uh | 9.00 uh | 1.23 |
| 22A225RBI | 27.5 uh | 12.0 uh | 1.26 |
| 22A335RBI | 41.0 uh | 17.0 uh | 1.26 |
| 22A475RBI | 58.0 uh | 24.5 uh | 1.29 |
| 22A685RBI | 85.0 uh | 38.0 uh | 1.29 |
| 22A825RBI | 100 uh | 41.0 uh | 1.32 |
| 22A104RBI | 125 uh | 65.0 uh | 1.32 |
| 22A154RBI | 187 uh | 94.0 uh | 1.35 |
| 22A224RBI | 275 uh | 138 uh | 1.35 |
| 22A334RBI | 410 uh | 205 uh | 1.38 |
| 22A474RBI | 580 uh | 290 uh | 1.38 |
| 22A684RBI | 850 uh | 430 uh | 1.41 |
| 22A824RBI | 1.00 mh | 595 uh | 1.41 |
| 22A103RBI | 1.25 mh | 760 uh | 1.44 |
| 22A153RBI | 1.87 mh | 1.04 mh | 1.44 |
| 22A223RBI | 2.75 mh | 1.56 mh | 1.44 |
| 22A333RBI | 4.10 mh | 2.30 mh | 1.47 |
| 22A473RBI | 5.80 mh | 3.40 mh | 1.47 |
| 22A683RBI | 8.50 mh | 5.00 mh | 1.47 |
| 22A823RBI | 10.0 mh | 4.20 mh | 1.50 |
| 22A102RBI | 12.5 mh | 5.30 mh | 1.50 |
| 22A152RBI | 18.7 mh | 8.20 mh | 1.62 |
| 22A222RBI | 27.5 mh | 12.7 mh | 1.62 |
| 22A332RBI | 41.0 mh | 17.8 mh | 1.65 |
| 22A472RBI | 58.0 mh | 27.5 mh | 1.68 |
| 22A682RBI | 85.0 mh | 42.0 mh | 1.71 |
| 22A822RBI | 100 mh | 51.0 mh | 1.80 |
| 22A101RBI | 125 mh | 64.0 mh | 1.95 |

Economy Adjustable R.F. Chokes



Through the use of a recently developed Nylon molding process we are able to offer an inexpensive line of adjustable chokes. They can be adjusted from either the top or bottom. This lends a degree of flexibility to your design. Mounting is achieved by means of a metal clip in a 1/8" hole.



Miller



Industrial R.F. Chokes and Filters

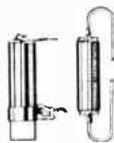
Encapsulated R.F. Chokes



The following series of R.F. chokes range in value from 0.1 uh to 50 mh. Basically identical to our standard series of axial lead R.F. chokes bearing the equivalent number, these coils are encapsulated in epoxy resin and conform to MIL-C-15305B.

| Part No. | L* | R Max. | Current MA | Net Price |
|----------|-----------|--------|------------|-----------|
| 4580-E | 0.1 uh. | .012 | 300 | \$1.26 |
| 4582-E | 0.15 uh. | .015 | 300 | 1.26 |
| 4584-E | 0.22 uh. | .021 | 300 | 1.26 |
| 4586-E | 0.33 uh. | .023 | 300 | 1.26 |
| 4588-E | 0.47 uh. | .026 | 300 | 1.26 |
| 4590-E | 0.68 uh. | .036 | 300 | 1.26 |
| 4592-E | 0.75 uh. | .040 | 300 | 1.26 |
| 4594-E | 0.82 uh. | .042 | 300 | 1.26 |
| 4602-E | 1.0 uh. | .06 | 300 | 1.26 |
| 4604-E | 1.5 uh. | .096 | 300 | 1.26 |
| 4606-E | 2.4 uh. | .192 | 300 | 1.26 |
| 4608-E | 3.9 uh. | .6 | 300 | 1.26 |
| 4609-E | 5.5 uh. | .83 | 300 | 1.26 |
| 4610-E | 6.2 uh. | .90 | 300 | 1.29 |
| 4611-E | 8.2 uh. | 1.34 | 300 | 1.29 |
| 4612-E | 10.0 uh. | 1.8 | 200 | 1.29 |
| 4622-E | 10.0 uh. | .072 | 300 | 1.32 |
| 4624-E | 15.0 uh. | .144 | 300 | 1.32 |
| 4626-E | 24.0 uh. | .336 | 300 | 1.35 |
| 4628-E | 39.0 uh. | .78 | 300 | 1.35 |
| 4629-E | 55.0 uh. | 1.10 | 300 | 1.35 |
| 4630-E | 62.0 uh. | 1.2 | 300 | 1.35 |
| 4631-E | 82.0 uh. | 1.92 | 300 | 1.35 |
| 4632-E | 100.0 uh. | 2.4 | 200 | 1.35 |
| 4642-E | 0.10 mh. | 4.92 | 125 | 1.50 |
| 4644-E | 0.15 mh. | 6.84 | 125 | 1.50 |
| 4646-E | 0.24 mh. | 8.16 | 125 | 1.50 |
| 4648-E | 0.39 mh. | 12.0 | 125 | 1.56 |
| 4649-E | 0.55 mh. | 13.2 | 125 | 1.98 |
| 4650-E | 0.62 mh. | 15.1 | 125 | 1.98 |
| 4651-E | 0.75 mh. | 16.4 | 125 | 1.98 |
| 4652-E | 1.0 mh. | 19.8 | 125 | 1.98 |
| 4662-E | 1.0 mh. | 8.4 | 125 | 2.01 |
| 4664-E | 1.5 mh. | 10.8 | 125 | 2.04 |
| 4666-E | 2.4 mh. | 14.4 | 125 | 2.13 |
| 4668-E | 3.9 mh. | 20.4 | 125 | 2.19 |
| 4669-E | 5.5 mh. | 26.4 | 125 | 2.31 |
| 4670-E | 6.2 mh. | 39.6 | 100 | 2.31 |
| 4671-E | 8.2 mh. | 54.0 | 100 | 2.37 |
| 4672-E | 10.0 mh. | 56.4 | 50 | 2.70 |
| 6302-E | 2.5 mh. | 9.36 | 200 | 2.28 |
| 6304-E | 5.0 mh. | 14.9 | 200 | 2.37 |
| 6306-E | 10.0 mh. | 36.0 | 125 | 2.52 |
| 6308-E | 25.0 mh. | 83.4 | 75 | 2.70 |
| 6310-E | 50.0 mh. | 133 | 75 | 2.94 |

Frequency Selective R.F. Chokes



Designed for maximum efficiency and highest impedance at specific operating frequencies this group of R.F. chokes eliminates the designer's task of attempting to choose the best coil for a particular application from miscellaneous and often insufficient design data. Designed to cover the major Amateur, Industrial, and Citizens bands the coils will also operate efficiently at frequencies approximating the recommended frequencies.

The RFC-3.5, RFC-7, and RFC-14 are the standoff type, mounted by a single 6-32 screw. All other coils are mounted with axial leads.

| Part No. | L* | Freq. Mc. | Fig. | Net Pr. |
|----------|---------|-----------|------|---------|
| RFC-3.5 | 266 uh | 1.8-5 | 1 | \$1.20 |
| RFC-7 | 208 uh | 3-13 | 1 | 1.04 |
| RFC-14 | 84 uh | 7-20 | 1 | .69 |
| RFC-21 | 38.5 uh | 15-30 | 2 | .60 |
| RFC-28 | 24 uh | 25-40 | 2 | .60 |
| RFC-50 | 8.2 uh | 30-90 | 2 | .60 |
| RFC-144 | 1.72 uh | 75-180 | 2 | .51 |
| RFC-220 | .82 uh | 160-340 | 2 | .51 |
| RFC-420 | .22 uh | 325-500 | 2 | .51 |

Sub-Miniature R.F. Chokes



An extremely versatile series of iron core R.F. chokes designed to meet the industries' demand for high reliability, ultra-miniature components. The coils are ideally suited to network and filter design, delay lines, and computer applications. Rated at 50 milliamperes.

| Part No | L* | Min. Q @ F | Net Pr. |
|----------|---------|--------------|---------|
| 70F106A1 | 1 uh | 41 @ 7.9 Mc. | \$.57 |
| 70F126A1 | 1.2 uh | 44 @ 7.9 Mc. | .57 |
| 70F156A1 | 1.5 uh | 48 @ 7.9 Mc. | .57 |
| 70F186A1 | 1.8 uh | 39 @ 7.9 Mc. | .57 |
| 70F226A1 | 2.2 uh | 48 @ 7.9 Mc. | .57 |
| 70F276A1 | 2.7 uh | 39 @ 7.9 Mc. | .57 |
| 70F336A1 | 3.3 uh | 48 @ 7.9 Mc. | .57 |
| 70F396A1 | 3.9 uh | 44 @ 7.9 Mc. | .57 |
| 70F476A1 | 4.7 uh | 46 @ 7.9 Mc. | .57 |
| 70F566A1 | 5.6 uh | 44 @ 7.9 Mc. | .57 |
| 70F686A1 | 6.8 uh | 44 @ 7.9 Mc. | .57 |
| 70F756A1 | 7.5 uh | 40 @ 7.9 Mc. | .57 |
| 70F826A1 | 8.2 uh | 40 @ 7.9 Mc. | .57 |
| 70F916A1 | 9.1 uh | 40 @ 7.9 Mc. | .57 |
| 70F105A1 | 10 uh | 48 @ 2.5 Mc. | .66 |
| 70F125A1 | 12 uh | 52 @ 2.5 Mc. | .66 |
| 70F155A1 | 15 uh | 52 @ 2.5 Mc. | .66 |
| 70F185A1 | 18 uh | 52 @ 2.5 Mc. | .66 |
| 70F225A1 | 22 uh | 51 @ 2.5 Mc. | .66 |
| 70F255A1 | 25 uh | 48 @ 2.5 Mc. | .66 |
| 70F275A1 | 27 uh | 49 @ 2.5 Mc. | .66 |
| 70F335A1 | 33 uh | 50 @ 2.5 Mc. | .66 |
| 70F395A1 | 39 uh | 48 @ 2.5 Mc. | .66 |
| 70F475A1 | 47 uh | 48 @ 2.5 Mc. | .66 |
| 70F565A1 | 56 uh | 45 @ 2.5 Mc. | .66 |
| 70F685A1 | 68 uh | 45 @ 2.5 Mc. | .66 |
| 70F755A1 | 75 uh | 40 @ 2.5 Mc. | .66 |
| 70F825A1 | 82 uh | 44 @ 2.5 Mc. | .66 |
| 70F915A1 | 91 uh | 39 @ 2.5 Mc. | .66 |
| 70F104A1 | 100 uh | 40 @ 790 Kc. | .66 |
| 70F124A1 | 120 uh | 44 @ 790 Kc. | .66 |
| 70F154A1 | 150 uh | 44 @ 790 Kc. | .66 |
| 70F184A1 | 180 uh | 45 @ 790 Kc. | .66 |
| 70F204A1 | 200 uh | 45 @ 790 Kc. | .66 |
| 70F224A1 | 220 uh | 45 @ 790 Kc. | .66 |
| 70F254A1 | 250 uh | 46 @ 790 Kc. | .66 |
| 70F274A1 | 270 uh | 45 @ 790 Kc. | .66 |
| 70F304A1 | 300 uh | 42 @ 790 Kc. | .66 |
| 70F334A1 | 330 uh | 47 @ 790 Kc. | .66 |
| 70F354A1 | 350 uh | 44 @ 790 Kc. | .66 |
| 70F394A1 | 390 uh | 42 @ 790 Kc. | .75 |
| 70F474A1 | 470 uh | 47 @ 790 Kc. | .75 |
| 70F504A1 | 500 uh | 42 @ 790 Kc. | .75 |
| 70F564A1 | 560 uh | 39 @ 790 Kc. | .75 |
| 70F684A1 | 680 uh | 44 @ 790 Kc. | .75 |
| 70F754A1 | 750 uh | 35 @ 790 Kc. | .75 |
| 70F824A1 | 820 uh | 42 @ 790 Kc. | .75 |
| 70F914A1 | 910 uh | 35 @ 790 Kc. | .75 |
| 70F103A1 | 1.00 mh | 40 @ 790 Kc. | .75 |
| 70F123A1 | 1.20 mh | 37 @ 250 Kc. | .75 |
| 70F153A1 | 1.50 mh | 40 @ 250 Kc. | .75 |
| 70F183A1 | 1.80 mh | 40 @ 250 Kc. | .75 |
| 70F223A1 | 2.20 mh | 40 @ 250 Kc. | .81 |
| 70F253A1 | 2.50 mh | 48 @ 250 Kc. | .84 |
| 70F273A1 | 2.70 mh | 50 @ 250 Kc. | .84 |
| 70F333A1 | 3.30 mh | 56 @ 250 Kc. | .84 |
| 70F393A1 | 3.90 mh | 47 @ 250 Kc. | .84 |
| 70F473A1 | 4.70 mh | 54 @ 250 Kc. | .84 |
| 70F563A1 | 5.60 mh | 46 @ 250 Kc. | .84 |
| 70F683A1 | 6.80 mh | 51 @ 250 Kc. | .84 |
| 70F753A1 | 7.50 mh | 44 @ 250 Kc. | .84 |
| 70F823A1 | 8.20 mh | 48 @ 250 Kc. | .99 |
| 70F913A1 | 9.10 mh | 37 @ 250 Kc. | .99 |
| 70F102A1 | 10.0 mh | 48 @ 250 Kc. | .99 |

Encapsulated Adjustable R.F. Coils



This series of encapsulated coils offer the maximum possible performance from an adjustable type of inductor. The coil is wound on an epoxy form which is placed inside an epoxy cup and this area filled with epoxy resin. In this manner a complete seal against moisture is achieved and good mechanical stability is assured.

| Part No. | L Max. | L Min. | Net Price |
|-----------|---------|---------|-----------|
| 50A106EB1 | 1.25 uh | 0.62 uh | \$3.60 |
| 50A156EB1 | 1.87 uh | 0.98 uh | 3.60 |

| | | | |
|-----------|----------|---------|------|
| 50A226EB1 | 2.75 uh | 1.26 uh | 3.60 |
| 50A336EB1 | 4.10 uh | 1.82 uh | 3.63 |
| 50A476EB1 | 5.87 uh | 2.56 uh | 3.63 |
| 50A686EB1 | 8.50 uh | 3.80 uh | 3.63 |
| 50A826EB1 | 10.2 uh | 4.40 uh | 3.63 |
| 50A105EB1 | 12.5 uh | 5.40 uh | 3.69 |
| 50A155EB1 | 18.8 uh | 7.80 uh | 3.69 |
| 50A225EB1 | 27.5 uh | 11.7 uh | 3.78 |
| 50A335EB1 | 41.3 uh | 18.8 uh | 3.78 |
| 50A475EB1 | 58.7 uh | 26.5 uh | 3.81 |
| 50A685EB1 | 85.0 uh | 36.0 uh | 3.81 |
| 50A825EB1 | 102 uh | 44.0 uh | 3.84 |
| 50A104EB1 | 125 uh | 63.0 uh | 4.23 |
| 50A154EB1 | 187 uh | 92.0 uh | 4.26 |
| 50A224EB1 | 275 uh | 130 uh | 4.26 |
| 50A334EB1 | 410 uh | 200 uh | 4.29 |
| 50A474EB1 | 580 uh | 280 uh | 4.29 |
| 50A684EB1 | 850 uh | 400 uh | 4.32 |
| 50A824EB1 | 1.00 mh | 540 uh | 4.32 |
| 50A103EB1 | 1.25 mh | 770 uh | 4.35 |
| 50A153EB1 | 1.87 mh | 950 uh | 4.35 |
| 50A223EB1 | 2.75 mh | 1.58 mh | 4.38 |
| 50A333EB1 | 4.13 mh | 2.40 mh | 4.38 |
| 50A473EB1 | 5.80 mh | 3.35 mh | 4.44 |
| 50A683EB1 | 8.50 mh | 5.20 mh | 4.44 |
| 50A823EB1 | 10.00 mh | 6.20 mh | 4.44 |

Printed Circuit Air Core R.F. Chokes



The following R.F. Chokes have been designed to offer a wide range of inductance values for use in printed circuit applications. Our standard stock of these coils is impregnated with a high grade coil varnish to prevent moisture absorption. On special orders we can supply these items treated with fungus resistant material, or encapsulated in epoxy resin to meet MIL-C-15305-8.

| Part No. | L* | DC | Current | Net Price |
|----------|-----------|-----------|---------|-----------|
| 970 | 1.0 mh. | 20.6 ohms | 125 ma. | \$.57 |
| 971 | 1.2 mh. | 23.8 ohms | 125 ma. | .57 |
| 972 | 1.5 mh. | 26.4 ohms | 125 ma. | .57 |
| 973 | 1.8 mh. | 29.6 ohms | 125 ma. | .60 |
| 974 | 2.2 mh. | 32.9 ohms | 125 ma. | .60 |
| 975 | 2.7 mh. | 37.4 ohms | 125 ma. | .60 |
| 976 | 3.3 mh. | 41.8 ohms | 125 ma. | .63 |
| 977 | 3.9 mh. | 46.7 ohms | 125 ma. | .63 |
| 978 | 4.7 mh. | 51.8 ohms | 125 ma. | .63 |
| 979 | 5.6 mh. | 57.6 ohms | 125 ma. | .63 |
| 980 | 6.8 mh. | 64.4 ohms | 125 ma. | .66 |
| 981 | 8.2 mh. | 73.0 ohms | 100 ma. | .66 |
| 982 | 10.0 mh. | 81.6 ohms | 100 ma. | .72 |
| 983 | 12.0 mh. | 92.4 ohms | 100 ma. | .75 |
| 984 | 15.0 mh. | 105 ohms | 100 ma. | .78 |
| 985 | 18.0 mh. | 117 ohms | 100 ma. | .81 |
| 986 | 22.0 mh. | 130 ohms | 75 ma. | .93 |
| 987 | 27.0 mh. | 145 ohms | 75 ma. | .96 |
| 988 | 33.0 mh. | 161 ohms | 75 ma. | 1.02 |
| 989 | 39.0 mh. | 177 ohms | 75 ma. | 1.05 |
| 990 | 47.0 mh. | 201 ohms | 50 ma. | 1.08 |
| 991 | 56.0 mh. | 226 ohms | 50 ma. | 1.14 |
| 992 | 68.0 mh. | 261 ohms | 50 ma. | 1.20 |
| 993 | 82.0 mh. | 297 ohms | 50 ma. | 1.26 |
| 994 | 100.0 mh. | 333 ohms | 50 ma. | 1.32 |

Ceramic Form R.F. Chokes



A series of high quality fixed coils wound on a silicone impregnated steatite form. The coils are the standoff type and are mounted by a single 6-32 screw. They find primary application

in low power transmitters and associated equipment where relatively high current capacity and low distributed capacitance are important.

| Part Number | L* | Rated Current | Net Price |
|-------------|----------|---------------|-----------|
| 4552 | 0.25 mh. | 150 ma. | \$.75 |
| 4553 | 0.50 mh. | 150 ma. | .75 |
| 4554 | 1.0 mh. | 150 ma. | .81 |
| 4555 | 2.5 mh. | 150 ma. | .93 |
| 4556 | 5.0 mh. | 150 ma. | .96 |
| 4557 | 0.25 mh. | 300 ma. | .81 |
| 4558 | 0.50 mh. | 300 ma. | .81 |
| 4559 | 1.0 mh. | 300 ma. | .99 |
| 4560 | 2.5 mh. | 300 ma. | 1.08 |
| 4561 | 5.0 mh. | 300 ma. | 1.14 |

*TOLERANCE 0.1 TO 1.0 UH ± 20%, 1.1 TO 10 UH ± 10%, OVER 10 UH ± 5%

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J. W. MILLER COMPANY Los Angeles 3, Calif.



Miller

Radio Frequency Chokes



R.F. Chokes with Axial Leads

These chokes cover an inductance range from .1 microhenry to 10 millihenries in 5 decades with 8 coils per decade. Inductance values increase in steps of approximately 50%. Either single layer or 3-pi universal windings are used to insure low distributed capacity. Chokes are wound on low-loss molded phenolic or powdered iron core forms and are impregnated with a moisture- and fungus-resistant varnish. The type of powdered iron used allows the chokes to operate at all frequencies up into the ultra-high frequency region.

Dimensions: Phenolic form $\frac{3}{8}$ " diameter x $\frac{3}{4}$ " long. Iron core form $\frac{3}{8}$ " diameter x $\frac{7}{8}$ " long. Leads are $1\frac{1}{2}$ " long.

| Phenolic Form Single Layer Windings | | | | |
|--|------|-----------|-----|---------|
| Cat. No. | uh.* | Ohms Max. | ma | Net Pr. |
| 4580 | 0.1 | .012 | 300 | \$.45 |
| 4582 | 0.15 | .014 | 300 | .45 |
| 4584 | 0.22 | .024 | 300 | .45 |
| 4586 | 0.33 | .023 | 300 | .45 |
| 4588 | 0.47 | .026 | 300 | .45 |
| 4590 | 0.68 | .036 | 300 | .45 |
| 4592 | 0.75 | .039 | 300 | .45 |
| 4594 | 0.82 | .042 | 300 | .45 |
| 4602 | 1. | .060 | 300 | .45 |
| 4604 | 1.5 | .096 | 300 | .45 |
| 4606 | 2.4 | .192 | 300 | .45 |
| 4608 | 3.9 | .600 | 300 | .45 |
| 4609 | 5.5 | .828 | 300 | .48 |
| 4610 | 6.2 | .900 | 300 | .48 |
| 4611 | 8.2 | 1.34 | 300 | .48 |
| 4612 | 10 | 1.80 | 200 | .48 |

| Iron Core Form Single Layer Windings | | | | |
|---|------|-----------|-----|---------|
| Cat. No. | uh.* | Ohms Max. | ma | Net Pr. |
| 4622 | 10 | .072 | 300 | \$.51 |
| 4624 | 15 | .144 | 300 | .51 |
| 4626 | 24 | .336 | 300 | .54 |
| 4628 | 39 | .780 | 300 | .54 |
| 4629 | 55 | 1.10 | 300 | .57 |
| 4630 | 62 | 1.20 | 300 | .57 |
| 4631 | 82 | 1.92 | 300 | .57 |
| 4632 | 100 | 2.40 | 200 | .57 |

| Phenolic Form 3-Section Windings | | | | |
|-------------------------------------|------|-----------|-----|---------|
| Cat. No. | mh* | Ohms Max. | ma | Net Pr. |
| 4642 | 0.1 | 4.92 | 125 | \$.57 |
| 4644 | 0.15 | 6.84 | 125 | .57 |
| 4646 | 0.24 | 8.16 | 125 | .57 |
| 4648 | 0.39 | 12.0 | 125 | .63 |
| 4649 | 0.55 | 13.2 | 125 | .63 |
| 4650 | 0.62 | 15.1 | 125 | .63 |
| 4651 | 0.75 | 16.4 | 125 | .63 |
| 4652 | 1.0 | 19.8 | 125 | .63 |

| Iron Core Form 3-Section Windings | | | | |
|--------------------------------------|-----|-----------|-----|---------|
| Cat. No. | mh* | Ohms Max. | ma | Net Pr. |
| 4662 | 1 | 8.4 | 125 | \$.66 |
| 4664 | 1.5 | 10.8 | 125 | .69 |
| 4666 | 2.4 | 14.4 | 125 | .75 |
| 4668 | 3.9 | 20.4 | 125 | .81 |
| 4669 | 5.5 | 26.4 | 125 | .93 |
| 4670 | 6.2 | 39.6 | 125 | .93 |
| 4671 | 8.2 | 54.0 | 125 | 1.11 |
| 4672 | 10 | 56.4 | 50 | 1.29 |

| Ferrite Core R.F. Chokes | | | | |
|--------------------------|-----|-----------|-----|---------|
| Cat. No. | mh* | Ohms Max. | ma | Net Pr. |
| 6302 | 2.5 | 9.36 | 200 | \$.81 |
| 6304 | 5 | 14.9 | 200 | .93 |
| 6306 | 10 | 36.0 | 125 | 1.08 |
| 6308 | 25 | 83.4 | 75 | 1.26 |
| 6310 | 50 | 133 | 75 | 1.44 |



Adjustable Ceramic Forms and R.F. Coils

Permeability tuned coils wound on silicone impregnated ceramic forms. Hardware necessary for assembly is supplied.

| Standard Adjustable Ceramic Form and R.F. Coils | | | | |
|--|--------------|-----------|-----------|--|
| Dimensions (form): $\frac{3}{8}$ " diameter x $1\frac{1}{4}$ " long. | | | | |
| Cat. No. | Microhenries | Form only | Net Price | |
| 4400 | | | \$1.14 | |
| 4403 | 0.9- | 1.6 | 1.62 | |
| 4404 | 1.5- | 3.2 | 1.65 | |
| 4405 | 3.1- | 6.8 | 1.68 | |
| 4406 | 6.7- | 15 | 1.74 | |
| 4407 | 14.8- | 31 | 1.80 | |
| 4408 | 30 - | 69 | 1.83 | |
| 4409 | 68 - | 130 | 1.89 | |
| 4410 | 126 - | 250 | 1.92 | |
| 4411 | 245 - | 475 | 1.95 | |
| 4412 | 450 - | 800 | 1.98 | |
| 4413 | 750 - | 1400 | 2.01 | |
| 4414 | 1300 - | 2100 | 2.01 | |

≡ 4400 comes complete with hardware and core*
≡ 4400 Bulk packed per 100 Net Price 99.00

| Miniature Adjustable R.F. Coils | | | | |
|---|--------------|-----------|-----------|--|
| Dimensions (form): $\frac{1}{4}$ " diameter x $\frac{7}{8}$ " long. | | | | |
| Cat. No. | Microhenries | Form only | Net Price | |
| 4500 | | | \$1.05 | |
| 4501 | .4- | .8 | 1.50 | |
| 4502 | 1.0- | 1.6 | 1.50 | |
| 4503 | 1.6- | 2.8 | 1.56 | |
| 4504 | 2.8- | 5 | 1.59 | |
| 4505 | 5 - | 9 | 1.65 | |
| 4506 | 9 - | 16 | 1.71 | |
| 4507 | 16 - | 24 | 1.77 | |
| 4508 | 24 - | 35 | 1.80 | |
| 4509 | 35 - | 60 | 1.83 | |
| 4511 | 60 - | 120 | 1.86 | |
| 4512 | 110 - | 200 | 1.89 | |
| 4513 | 190 - | 330 | 1.92 | |
| 4514 | 320 - | 500 | 1.95 | |
| 4514-1 | 480 - | 800 | 2.01 | |

≡ 4500 comes complete with hardware and core*
≡ 4500 Bulk packed per 100 Net Price 81.00

| Sub-Miniature Adjustable R.F. Coils | | | | |
|--|--------------|-----------|-----------|--|
| Dimensions (form): $\frac{3}{16}$ " diameter x $\frac{5}{8}$ " long. | | | | |
| Cat. No. | Microhenries | Form only | Net Price | |
| 4300 | | | \$1.05 | |
| 4301 | 0.17- | 0.27 | 1.50 | |
| 4302 | 0.27- | 0.41 | 1.50 | |
| 4303 | 0.40- | 0.65 | 1.56 | |
| 4304 | 0.64- | 0.95 | 1.59 | |
| 4305 | 0.94- | 1.55 | 1.65 | |
| 4306 | 1.5 - | 2.57 | 1.71 | |
| 4307 | 2.5 - | 4.40 | 1.77 | |
| 4308 | 4.3 - | 7.15 | 1.80 | |
| 4309 | 7.1 - | 12.5 | 1.83 | |
| 4310 | 12.4 - | 20.3 | 1.86 | |
| 4311 | 20.1 - | 32.8 | 1.89 | |
| 4312 | 32.5 - | 51.5 | 1.92 | |
| 4313 | 51. - | 102. | 1.95 | |
| 4314 | 101. - | 180. | 1.95 | |
| 4315 | 178. - | 300. | 1.95 | |

≡ 4300 comes complete with hardware and core*
≡ 4300 Bulk packed per 100 Net Price 81.00

Quantity orders can be wound to your specific requirements with extended inductances and Q values other than those shown. Your inquiries invited.

*When ordering forms alone, the type of core should be specified by the addition of a suffix taken from the following.

| Suffix | Frequency Range of Core Material |
|--------|----------------------------------|
| Y | 50-1000 kc. |
| R | 1- 30 Mc. |
| W | 30- 300 Mc |



Multiple Pi Chokes

These Multiple Pi duo-lateral chokes have a low distributed capacity of 1.2-1.3 mmf. The current carrying capacity is comparatively high for this type of choke.

| Multiple Pi Chokes | | | | |
|-----------------------|-----|-----------|-----|-----------|
| Inductance tol. ± 5%. | | | | |
| Cat. No. | Mh. | Ohms Max. | MA | Net Price |
| 4531-0 | .25 | 9.6 | 200 | \$.75 |
| 4531 | .5 | 14.4 | 200 | .75 |
| 4531-1 | 1 | 20.4 | 200 | .75 |
| 4532 | 1.5 | 25.2 | 200 | .78 |
| 4537 | 2.5 | 33.6 | 200 | .81 |
| 4538 | 5 | 50.4 | 125 | .96 |
| 4539 | 7.5 | 98.4 | 125 | 1.08 |
| 4540 | 10 | 114 | 125 | 1.20 |
| 4541 | 25 | 192 | 125 | 1.41 |

≡ 4537 Bulk packed per 100 — Net Pr. 66.00
R.F. Chokes wound to closer tolerances if required in lots of 100 pieces or more at slightly higher prices.



Unshielded Chokes

These single section R.F. Chokes are ideally suited for general purpose applications in receiver and filter circuit. Solder lug terminals and single hole mounting. Inductance tol. ± 5%.

| Air Core Type | | | | |
|---|------|-----------|-----|-----------|
| Dimensions: $1\frac{1}{8}$ " diameter x $\frac{5}{8}$ " long. | | | | |
| Cat. No. | Mh. | Ohms Max. | MA | Net Price |
| 610 | .25 | 9.6 | 125 | \$.60 |
| 615 | .5 | 14.4 | 125 | .60 |
| 620 | .75 | 19.2 | 125 | .60 |
| 622 | 1.0 | 21.6 | 125 | .60 |
| 630 | 1.5 | 25.2 | 125 | .66 |
| 640 | 2.5 | 34.8 | 125 | .75 |
| 650 | 5.0 | 52.8 | 125 | .75 |
| 660 | 7.5 | 66.0 | 125 | .78 |
| 670 | 10 | 81.0 | 125 | .81 |
| 680 | 12.5 | 92.5 | 125 | .84 |
| 690 | 15 | 102 | 125 | .87 |
| 691 | 20 | 120 | 125 | .96 |
| 692 | 30 | 156 | 100 | .99 |
| 693 | 60 | 240 | 100 | 1.14 |
| 694 | 80 | 264 | 100 | 1.23 |

| Center Tapped Types | | | | |
|---------------------|-----|-----------|-----|-----------|
| Cat. No. | Mh. | Ohms Max. | MA | Net Price |
| 670-T | 10 | 80.4 | 125 | .87 |
| 691-T | 20 | 120 | 125 | .99 |
| 693-T | 60 | 240 | 100 | 1.32 |

| Iron Core Type | | | | |
|---|-------|-----------|-----|-----------|
| These chokes are similar in construction to the No. 600 series except that they are wound on powdered iron cores. Inductance tol. ± 5%. | | | | |
| Cat. No. | Mh. | Ohms Max. | MA | Net Price |
| 951 | .5 | 8.40 | 125 | \$.78 |
| 952 | 1.0 | 13.2 | 125 | .84 |
| 953 | 2.5 | 22.8 | 125 | .93 |
| 954 | 5.0 | 34.8 | 125 | 1.05 |
| 955 | 7.5 | 44.4 | 125 | 1.14 |
| 956 | 10.0 | 56.4 | 125 | 1.20 |
| 957 | 25.0 | 99.5 | 100 | 1.32 |
| 958 | 50.0 | 156 | 100 | 1.50 |
| 959 | 75.0 | 204 | 100 | 1.65 |
| 960 | 100.0 | 240 | 100 | 1.86 |
| 961 | 150.0 | 312 | 100 | 1.98 |



Shielded Chokes

Single section wound R.F. Chokes assembled in round aluminum shield with two spade bolts for mounting. Solder lug terminals.

| Iron Core Type | | | | |
|---|------|-----------|-----|-----------|
| Dimensions: $1\frac{1}{4}$ " dia. x $1\frac{1}{8}$ " high | | | | |
| Cat. No. | Mh. | Ohms Max. | MA | Net Price |
| 851 | .5 | 9.60 | 125 | \$1.17 |
| 852 | 1.0 | 13.2 | 125 | 1.23 |
| 853 | 2.5 | 24.0 | 125 | 1.26 |
| 854 | 5.0 | 37.2 | 125 | 1.32 |
| 855 | 7.5 | 50.4 | 125 | 1.38 |
| 856 | 10.0 | 56.4 | 125 | 1.50 |
| 857 | 25.0 | 112 | 125 | 1.65 |

| Dimensions: $1\frac{1}{8}$ " dia. x $1\frac{1}{8}$ " high | | | | |
|---|-------|-----------|-----|-----------|
| Cat. No. | Mh. | Ohms Max. | MA | Net Price |
| 858 | 50.0 | 192 | 100 | 1.71 |
| 859 | 75.0 | 228 | 100 | 1.89 |
| 860 | 100.0 | 384 | 100 | 2.04 |
| 861 | 150.0 | 576 | 100 | 2.31 |

*TOLERANCE 0.1 TO 1.0 UH ± 20%, 1.1 TO 10 UH ± 10%, OVER 10 UH ± 5%

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J. W. MILLER COMPANY Los Angeles 3, Calif.



Miller

Television Components



Single Pi R.F. Coils

These fixed inductors are wound on a mineral filled phenolic form which has axial leads. The coils are impregnated with an R.F. varnish to assure against moisture absorption.



| Part No. | L* | Q | Min. Fo. Mc | Net Price |
|----------|---------|----|-------------|-----------|
| 72F105AP | 10 uh | 23 | 13 | \$.60 |
| 72F125AP | 12 uh | 21 | 12 | .60 |
| 72F155AP | 15 uh | 20 | 11 | .60 |
| 72F185AP | 18 uh | 20 | 9.8 | .60 |
| 72F225AP | 22 uh | 18 | 9.6 | .60 |
| 72F275AP | 27 uh | 17 | 8.9 | .60 |
| 72F335AP | 33 uh | 16 | 8.1 | .60 |
| 72F395AP | 39 uh | 15 | 7.5 | .60 |
| 72F475AP | 47 uh | 14 | 7.2 | .60 |
| 72F565AP | 56 uh | 13 | 6.5 | .60 |
| 72F685AP | 68 uh | 12 | 6.1 | .60 |
| 72F825AP | 82 uh | 12 | 5.8 | .60 |
| 72F104AP | 100 uh | 20 | 5.3 | .69 |
| 72F124AP | 120 uh | 19 | 5.0 | .69 |
| 72F154AP | 150 uh | 18 | 4.6 | .69 |
| 72F184AP | 180 uh | 17 | 4.3 | .69 |
| 72F224AP | 220 uh | 17 | 4.0 | .75 |
| 72F274AP | 270 uh | 16 | 3.5 | .75 |
| 72F334AP | 330 uh | 16 | 3.3 | .81 |
| 72F394AP | 390 uh | 16 | 3.1 | .81 |
| 72F474AP | 470 uh | 15 | 2.9 | .84 |
| 72F564AP | 560 uh | 14 | 2.6 | .84 |
| 72F684AP | 680 uh | 14 | 2.4 | .84 |
| 72F824AP | 820 uh | 13 | 2.2 | .84 |
| 72F103AP | 1000 uh | 28 | 1.9 | .84 |

Video Peaking Coils, Filament Choke

No. 6175 Filament Choke— $\frac{3}{32}$ " dia. x $\frac{7}{8}$ " long; Video Peaking Coils— $\frac{3}{16}$ " dia. x $\frac{3}{8}$ " long.

| Cat. No. | Use | —uhy | Resistor | Net Price |
|----------|----------|------|----------|-----------|
| 6175 | Filament | 0.8 | None | \$.57 |
| 6152 | Peaking | 20 | None | .57 |
| 6176 | Peaking | 36 | None | .57 |
| 6110 | Peaking | 60 | None | .57 |
| 6172 | Peaking | 73 | None | .57 |
| 6177 | Peaking | 93 | None | .57 |
| 6112 | Peaking | 100 | None | .57 |
| 6178 | Peaking | 120 | 22K | .57 |
| 6153 | Peaking | 120 | None | .57 |
| 6120 | Peaking | 155 | None | .57 |
| 6179 | Peaking | 180 | 39K | .57 |
| 6180 | Peaking | 180 | None | .57 |
| 6154 | Peaking | 200 | None | .57 |
| 6173 | Peaking | 250 | 22K | .57 |
| 6181 | Peaking | 250 | None | .57 |
| 6130 | Peaking | 275 | None | .57 |
| 6155 | Peaking | 300 | None | .57 |
| 6132 | Peaking | 330 | None | .57 |
| 6134 | Peaking | 375 | None | .57 |
| 6136 | Peaking | 420 | None | .57 |
| 6138 | Peaking | 470 | None | .57 |
| 6174 | Peaking | 500 | None | .57 |
| 6144 | Peaking | 550 | None | .57 |
| 6146 | Peaking | 600 | None | .57 |
| 6148 | Peaking | 700 | None | .57 |
| 6156 | Peaking | 800 | None | .57 |
| 6157 | Peaking | 950 | None | .57 |

21.25 MC Television I.F. Transformers

Dimensions: 6185-6186-6187 $\frac{7}{8}$ " Sq. x $2\frac{1}{4}$ " high
6170, 6190 and 6191 $\frac{7}{8}$ " sq. x $2\frac{1}{4}$ " hi
6184 and 6192 $1\frac{1}{8}$ " x $1\frac{1}{8}$ " x $2\frac{1}{2}$ " high.
6261 and 6262 $\frac{3}{4}$ " sq. x 2" high clip mtg.

| Item | Freq. | Net Pr. |
|------|-----------------------------|-----------------|
| 6185 | 21.8 MC Conv. I.F. Trans. | 21.25 MC \$2.04 |
| 6186 | 25.3 MC 1st Pix I.F. Trans. | 27.25 MC 2.04 |
| 6187 | 22.3 MC 2nd Pix I.F. Trans. | 19.75 MC 1.65 |
| 6190 | 1st Sound I.F. Trans. | 21.25 MC 1.80 |
| 6191 | 2nd Sound I.F. Trans. | 21.25 MC 1.80 |
| 6192 | Sound Disc. Trans. | 21.25 MC 2.16 |
| 6184 | Sound Ratio Det. Trans. | 21.25 MC 2.52 |
| 6170 | Sound Disc. Trans. | 21.25 MC 2.46 |
| 6261 | Sound Disc. Trans. | 21.25 MC 2.43 |
| 6262 | Sound Ratio Det. Trans. | 21.25 MC 2.43 |



Picture I.F. Inductors Unshielded

Dimensions: $\frac{1}{2}$ " max. a.d. x $1\frac{1}{2}$ " long.

| Cat. No. | Description | Freq. | Net Pr. |
|----------|----------------------------|----------|---------|
| 6188 | 3rd Pix I.F. Trans. | 25.2 MC | \$.99 |
| 6189 | Video Detector I.F. Trans. | 23.4 MC | .99 |
| 6193 | Cathode Sound Trap | 21.25 MC | 1.50 |
| 6171 | Tunable Choke | 21-25 MC | .96 |
| 6171A | Tunable Choke | 25-29 MC | .96 |

24 MC Unshielded Picture I.F. Transformers



For use as replacement units in television receivers where unshielded coils are called for and standard circuitry is employed. Mounting clip to fit $\frac{1}{8}$ " hole in chassis.

| Cat. No. | Description | Trap | Price |
|----------|--------------------------------|----------|--------|
| 6245 | 25.5 MC First I.F. | 27.25 MC | \$1.86 |
| 6246 | 22 MC Second I.F. | 21.2 MC | 1.86 |
| 6247 | 21.25 MC Cathode Trap | | 1.86 |
| 6248 | 24.5 MC Video Det. I.F. | | 1.17 |
| 6249 | 21-25 MC Bifilar Wound I.F. | | 1.17 |
| 6250 | 25-29 MC Bifilar Wound I.F. | | 1.17 |
| 6251 | 21-25 MC Bifilar I.F. Shielded | | 1.65 |
| 6252 | 25-29 MC Bifilar I.F. Shielded | | 1.65 |
| 6253 | 21-30 MC Bifilar I.F. | 20-30 MC | 2.13 |
| 6254 | 22-32 MC Bifilar I.F. | 24-29 MC | 2.13 |



"40 MC" TV Picture I.F. Transformers

Converter transformer and 1st pix I.F. grid transformer have 75-ohm link winding.

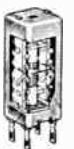
Dimensions: 6215-16-17-18 $\frac{7}{8}$ " Sq. x $2\frac{1}{4}$ " high
6240 $1\frac{1}{8}$ " Sq. x $2\frac{3}{8}$ " high

| Description | Trap | Net Pr. |
|-------------|---------------------------|---------------|
| 6215 | Converter I.F. Trans. | \$1.80 |
| 6216 | 1st Pix I.F. Grid Trans. | 39.25 MC 2.16 |
| 6217 | 1st Pix I.F. Plate Trans. | 41.25 MC 2.16 |
| 6218 | 2nd Pix I.F. Grid Trans. | 47.25 MC 2.04 |
| 6240 | Video Detector with Diode | 43.7 MC 4.80 |



Unshielded

| Max. Dim: | 3/42 O.D. x 2 1/2" long. Mtg. hole 1/8" |
|-----------|---|
| 6219 | 40-46 MC. 3rd, 4th, 5th I.F. \$.99 |
| 6220 | 40-46 MC. Converter I.F. .99 |
| 6221 | 40-46 MC. First I.F. 41.25 MC. 1.92 |
| 6222 | 42-48 MC. Second I.F. 47.25 MC. 1.92 |
| 6223 | 40-46 MC. Third I.F. 39.25 MC. 1.92 |
| 6224 | 39-46 MC. Fourth I.F. .02 |
| 6225 | 36-49 MC. Single winding I.F. 1.14 |
| 6226 | Hi Q Trap 40-46 MC. 1.02 |



Miniature 44 MC Picture Trans.

Converter and 1st pix I.F. Grid transformer have 75 ohm link winding. Dimensions: $\frac{3}{4}$ " Square x 2" high.

| Description | Trap | Net Price |
|-------------|---------------------|---------------|
| 6230 | Converter I.F. | \$1.65 |
| 6231 | 44 MC First I.F. | 1.65 |
| 6232 | 42.5 MC Second I.F. | 41.25 MC 1.44 |
| 6233 | 45.5 MC Third I.F. | 47.25 MC 1.74 |
| 6234 | 44 MC Fourth I.F. | 1.35 |



Adjustable Ion Trap

Due to its adjustable feature, which allows the magnetic field to be varied between 32-55 gauss, this trap will, in most instances, replace the older style ion traps having a specific magnetic field.

| | | |
|------|---------------------|--------|
| 6295 | Adjustable Ion Trap | \$.90 |
|------|---------------------|--------|



4.5 MC Intercarrier Sound Components

Dimensions 1466-67-68: $1\frac{1}{8}$ " x $1\frac{1}{8}$ " x $2\frac{1}{8}$ " high.
#1469, 1470 and 1480 Unshielded, Mounting hole $\frac{1}{8}$ "
1470-A and 1481 $\frac{3}{4}$ " x $\frac{3}{4}$ " x 2" hi
#1498 $1\frac{3}{8}$ " x $1\frac{3}{8}$ " x $2\frac{1}{2}$ " high
1483-84-95-86-87 $\frac{7}{8}$ " Sq. x $2\frac{1}{4}$ " high

| Cat. No. | Item | Freq. | Net Pr. |
|----------|-----------------------------|--------|---------|
| 1466 | Input or Inter. I.F. Trans. | 4.5 MC | \$1.98 |
| 1467 | Sound Discrim. Trans. | 4.5 MC | 2.31 |
| 1468 | Sound Ratio Det. Trans. | 4.5 MC | 2.46 |
| 1469 | Sound Pick Off Coil | 4.5 MC | .99 |
| 1470 | Sound Trap Unshielded | 4.5 MC | .99 |
| 1470-A | Sound Trap Shielded | 4.5 MC | 1.26 |
| 1480 | Quadrature Coil | 4.5 MC | .99 |
| 1481 | Quadrature Coil Sh'l'd. | 4.5 MC | 1.29 |
| 1482IFT | Sound I.F. Trap | 4.5 MC | 1.35 |
| 1483IF | Sound I.F. | 4.5 MC | 1.80 |
| 1484RD | Sound Ratio Det | 4.5 MC | 2.10 |
| 1485RD | Sound Ratio Det | 4.5 MC | 2.10 |
| 1486RD | Sound Ratio Det | 4.5 MC | 2.10 |
| 1487RD | Sound Ratio Det | 4.5 MC | 2.10 |
| 1488RD | Sound Ratio Det | 4.5 MC | 2.25 |
| 1489RD | Sound Ratio Det | 4.5 MC | 2.25 |
| 1498 | Sound Ratio Det. Trans. | 4.5 MC | 2.43 |



Linearity & Width Controls

Dimensions: $\frac{3}{4}$ " x $2\frac{1}{2}$ " Max. The coils will mount in either a $\frac{3}{16}$ " or $\frac{7}{16}$ " hole with adapter supplied.

| Cat. No. | Inductance Range Millihenries | Net Price |
|----------|-----------------------------------|-----------|
| 6313 | .5-5 | \$1.32 |
| 6314 | 2-18 | 1.23 |
| 6315 | 4-30 | 1.32 |
| 6316 | 4-30 (2.8-6.5 AGC) | 1.80 |
| 6317 | 3.2-9 (1.7-1.31 AGC) | 1.65 |
| 6318 | .3-3 | 1.11 |
| 6319 | 8-60 | 1.65 |
| 6320 | .3-3 Tapped | 1.14 |
| 6321 | 1-5 Tapped | 1.32 |
| 6322 | 1.5-10 | 1.23 |
| 6323 | .5-5 Tapped | 1.14 |
| 6324 | 60-130 Tapped | 1.65 |
| 6325 | 4.2-30 (1.78-1.37 AGC) | 1.65 |
| 6326 | 2.5-19 Parallel (1.18-1.7 Series) | 2.25 |
| 6327 | 4-30 Parallel (.225-2.4 Series) | 2.25 |
| 6328 | 9-24 (1.9-1.1 AGC) | 1.65 |
| 6329 | 2-2-10 Tapped | 1.50 |
| 6330 | 45-215 | 1.80 |
| 6331 | 4-30 Parallel (.080-.7 Series) | 2.10 |
| 6195 | .185-1 | .99 |
| 6196 | .054-.245 | .84 |
| 6196-A | .054-.5 Tapped | .96 |
| 6197 | .55-2.3 Tapped | .96 |
| 6198 | .17-.61 | .84 |
| 6199-A | 1.3-4.1 Tapped | 1.02 |
| 6199-B | .5-1.7 | .99 |



Horizontal Oscillator & Sync. Control Coils

Dimensions: $1\frac{1}{8}$ " x $1\frac{1}{8}$ " x $2\frac{1}{2}$ " high.
6212 Unshielded, Mounting hole $\frac{1}{8}$ "
6211 and 6324 Unshielded, Mounting hole $\frac{1}{8}$ "—6183 may be reversed in shield for tap or bottom mounting. 6183-A coils reversed on form to tune Horiz. Osc. through chassis.

| Cat. No. | Item | Net Price |
|----------|------------------------------------|-----------|
| 6194 | Osc. & A.F.C. Discrim. Trans. | \$2.04 |
| 6182 | Osc. and Sync. Control Coil | 1.65 |
| 6183 | Osc. and Sync. Stabilizer Coil | 2.10 |
| 6210 | Sync. Stabilizer Coil 16-42 mh | 1.65 |
| 6211 | Sync. Stabilizer tapped 16-42 mh | 1.65 |
| 6212 | Horiz. Osc. tapped 12-35 mh | 1.65 |
| 6324 | Horiz. Osc. tapped 60-130 mh | 1.65 |
| 6183-A | Horiz. Osc. coil position reversed | 2.10 |

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Miller

R. F. and I. F. Transformers



Miniature Adjustable R.F. Coils

These high Q adjustable iron core coils are for general replacement use.

Dimensions:

| | |
|-------------------|------------------------|
| 70-A and 70-RF | 1/2" dia x 1 1/2" long |
| 69-Osc and 70-Osc | 1/2" dia x 1 1/8" long |
| 67-Osc | 3/8" dia x 1 3/8" long |
| 71-RF | 3/8" dia x 1 3/4" long |

| Cat. No. | Item | Net Price |
|----------|--|--------------------|
| 67-Osc | Oscillator Stage Autodyne type | 540-1600 kc \$1.29 |
| 69-Osc | Oscillator Stage Capacity coupled type | 540-1600 kc 1.14 |
| 70-A | Antenna Stage | 540-1600 kc 1.14 |
| 70-RF | R.F. Stage | 540-1600 kc 1.14 |
| 70-Osc | Oscillator Stage | 540-1600 kc 1.14 |
| 71-RF | R.F. Coil | 540-1600 kc 1.80 |



Universal Adjustable Oscillator Coil

These adjustable iron core oscillator coils are for general replacement use.

Dimensions: 5/8" x 1 1/2" high.

| Cat. No. | Use | Freq. Range | Net Price |
|----------|------------------|------------------------------------|-----------|
| 71-Osc | Oscillator Stage | R.F. 500-1800 KC (I.F. 100-550 KC) | \$1.65 |



High-Q Ferrite Antenna Coil

Supplied with mounting bracket

Dimensions: 3/8" diameter x 2 1/4" long.

| Cat. No. | Use | Freq. Range | Net Price |
|----------|---------------|-------------|-----------|
| 6300 | Antenna Stage | 540-1700 KC | \$.90 |



Adjustable FM R.F. Coils

Dimensions: 1/2" O.D. x 1 1/8" long. Net. Pr.

| | | |
|------|------------------------------------|--------|
| 1447 | 88-108 MC Antenna Coil | \$1.20 |
| 1448 | 88-108 MC R.F. Coil | 1.20 |
| 1449 | 88-108 MC Osc. Coil (10.7 MC I.F.) | 1.20 |



Unshielded High-Q R.F. Coils

A complete line of Unshielded Permeability tuned coils for replacement use or as the front end components in new receiver design. These 5495 series coils can be shielded in our #5-33 shields (1 1/8" sq.) with very little loss in Q. Mounting is by means of a single 1/4" hole. Dimensions (form): 3/8" x 2". Ranges shown are for use with a 365 mmfd. variable tuning condenser.

Long Wave Coils (140-420 KC)

| Cat. No. | Use | Net Price |
|-----------|----------------------|-----------|
| X-5495-A | Antenna Stage | \$1.65 |
| X-5495-RF | RF Stage | 1.65 |
| X-5495-C | Standard Osc. 455 KC | 1.65 |
| X-5496-C | Tapped Osc. 455 KC | 1.65 |

Broadcast Band Coils (540-1700 KC)

| | | |
|-----------|----------------------|------|
| A-5495-A | Antenna Stage | 1.65 |
| A-5495-RF | RF Stage | 1.65 |
| A-5495-C | Standard Osc. 455 KC | 1.65 |
| A-5496-C | Tapped Osc. 455 KC | 1.65 |

Medium Wave Coils (1.7-5.5 MC)

| | | |
|-----------|----------------------|------|
| B-5495-A | Antenna Stage | 1.65 |
| B-5495-RF | RF Stage | 1.65 |
| B-5495-C | Standard Osc. 455 KC | 1.65 |
| B-5496-C | Tapped Osc. 455 KC | 1.65 |

Short Wave Broadcast Coils (5-18 MC)

| | | |
|-----------|----------------------|------|
| C-5495-A | Antenna Stage | 1.65 |
| C-5495-RF | RF Stage | 1.65 |
| C-5495-C | Standard Osc. 455 KC | 1.65 |
| C-5496-C | Tapped Osc. 455 KC | 1.65 |

High Frequency Coils (12-36 MC)

| | | |
|-----------|----------------------|------|
| D-5495-A | Antenna Stage | 1.65 |
| D-5495-RF | RF Stage | 1.65 |
| D-5495-C | Standard Osc. 455 KC | 1.65 |
| D-5496-C | Tapped Osc. 455 KC | 1.65 |

Miniature J-Tran Top Tuned I.F. Transformers



The standard J-TRAN series of miniature I.F. transformers has hollow hexagonal-hole cores and thereby, with the aid of a suitable tuning tool (≈ 182), permits either double or single ended tuning. The transformer is mounted with a unique snap fastener which is permanently attached to the shield.

Dimensions: 3/4" by 3/4" by 2"

* (With diode filter capacitors)

| Cat. No. | Item | Net Price |
|----------|-----------------------------------|-----------|
| 14-H1 | 262 kc Input I.F. | \$1.74 |
| 14-H2 | 262 kc Output I.F. | 1.74 |
| 14-H6 | 262 kc Output I.F.* | 1.80 |
| 14-C1 | 455 kc Input I.F. | 1.62 |
| 14-C2 | 455 kc Output I.F. | 1.62 |
| 14-C6 | 455 kc Output I.F.* | 1.71 |
| 14-C7 | 455 kc Input I.F. Battery Radios | 1.62 |
| 14-C8 | 455 kc Output I.F. Battery Radios | 1.62 |
| 14-C9 | 455 kc Input I.F. AC-DC Radios | 1.62 |
| 14-C10 | 455 kc Output I.F. AC-DC Radios | 1.62 |
| 6270 | 4.5 Mc Input or Interstage | 1.74 |
| 6271 | 4.5 Mc Ratio Detector | 2.97 |

Miniature Printed Circuit Top Tuned I.F. Transformers



The printed circuit series of miniature J-TRAN I.F. transformers is similar to the standard J-TRAN shown in that both cores may be tuned from either end of the shield.

Dimensions: 3/4" by 3/4" by 2"

* (With diode filter capacitors)

| Cat. No. | Item | Net Price |
|----------|-----------------------------------|-----------|
| 16-PH1 | 262 kc Input I.F. | \$1.71 |
| 16-PH2 | 262 kc Output I.F. | 1.71 |
| 16-PH6 | 262 kc Output I.F.* | 1.80 |
| 16-PC1 | 455 kc Input I.F. | 1.65 |
| 16-PC2 | 455 kc Output I.F. | 1.65 |
| 16-PC6 | 455 kc Output I.F.* | 1.74 |
| 16-PC7 | 455 kc Input I.F. Battery Radios | 1.65 |
| 16-PC8 | 455 kc Output I.F. Battery Radios | 1.65 |
| 16-PC9 | 455 kc Input I.F. AC-DC Radios | 1.65 |
| 16-PC10 | 455 kc Output I.F. AC-DC Radios | 1.65 |
| 6270-PC | 4.5 Mc Input or Interstage | 1.74 |
| 6271-PC | 4.5 Mc Ratio Detector | 2.97 |



Universal I.F. Transformers

For general replacement purposes in auto receivers and many types of household and portable receivers.

Dimensions: 1 1/4" square x 2 1/2" high.

| Cat. No. | Freq. | KC Range | Use | Net Price |
|----------|-------|----------|-----------------|-----------|
| 312-H1 | 262 | 250-275 | Input | \$1.89 |
| 312-H2 | 262 | 250-275 | Interstage | 1.89 |
| 312-H4 | 262 | 250-275 | Output | 1.89 |
| 312-H6 | 262 | 250-275 | Output & Filter | 2.13 |
| 312-C1 | 455 | 440-470 | Input | 1.89 |
| 312-C2 | 455 | 440-470 | Interstage | 1.89 |
| 312-C4 | 455 | 440-475 | Output | 1.89 |
| 312-C6 | 455 | 440-470 | Output & Filter | 2.13 |

Type No. 412 Iron Core Transformers

Dimensions: 1 1/4" square x 2 1/2" high.

| Cat. No. | Freq. | KC Range | Use | Net Price |
|----------|-------|----------|------------|-----------|
| 412-H1 | 262 | 250-275 | Input | \$1.89 |
| 412-H2 | 262 | 250-275 | Interstage | 1.89 |
| 412-H4 | 262 | 250-275 | Output | 1.89 |
| 412-C1 | 455 | 440-470 | Input | 1.89 |
| 412-C2 | 455 | 440-470 | Interstage | 1.89 |
| 412-C4 | 455 | 440-470 | Output | 1.89 |



Miniature I.F. Trans.

Designed for experimental use and for general replacement in "personal" radio receivers, this series of shell core permeability tuned transformers are becoming increasingly popular. Tuning from top and bottom of the shield. Transformers are available for all standard I.F.

* (With diode filter capacitors)

Dimensions: 3/4" by 3/4" by 2" high.

| Cat. No. | Item | Net Price |
|----------|---------------------------------|-----------|
| 12-H1 | 262 KC Input I.F. Trans. | \$1.74 |
| 12-H2 | 262 KC Output I.F. Trans. | 1.74 |
| 12-H6 | 262 KC Output I.F. Trans.* | 1.80 |
| 12-C1 | 455 KC Input 16 KC @ 6db | 1.62 |
| 12-C2 | 455 KC Output 21 KC @ 6db | 1.62 |
| 12-C6 | 455 KC Output I.F. Trans. | 1.71 |
| 12-C7 | 455 KC Input I.F. Battery | 1.62 |
| 12-C8 | 455 KC Output I.F. Battery | 1.62 |
| 12-C9 | 455 KC Input I.F. AC-DC | 1.62 |
| 12-C10 | 455 KC Output I.F. AC-DC | 1.62 |
| 12-C12 | 455 KC Tapped Pri. I.F. Trans. | 1.95 |
| 12-C30 | 455 KC Input 11.4 KC @ 6db | 1.62 |
| 12-C31 | 455 KC Output 13.6 KC @ 6db | 1.62 |
| 12-C45 | 455 KC Discriminator | 2.37 |
| 13-W1 | 1500 KC Input or Interstage | 1.65 |
| 13-W2 | 1500 KC Output I.F. Trans. | 1.65 |
| 1463 | 10.7 MC Input or Interstage | 1.95 |
| 1464 | 10.7 MC Discriminator | 2.25 |
| 1465 | 10.7 MC Ratio Detector | 2.34 |
| 1464-WB | 10.7 MC Disc. 900 KC. P/P | 2.25 |
| 1465-WB | 10.7 MC Ratio Det. 800 KC. P/P | 2.34 |
| 1725 | 455 kc Xtal Filter I.F. Input | 1.95 |
| 1726 | 455 kc Xtal Filter I.F. Output | 1.95 |
| 6203 | 4.5 MC Input or Interstage | 1.98 |
| 6204 | 4.5 MC Discriminator | 2.25 |
| 6205 | 4.5 MC Ratio Detector | 2.25 |
| 6260 | 21.25 MC I.F. Trans. | 2.55 |
| 6261 | 21.25 MC Discriminator | 2.43 |
| 6262 | 21.25 MC Ratio Detector | 2.43 |
| 6230 | TV Converter I.F. | 1.65 |
| 6231 | TV 44 MC First I.F. Trap | 1.65 |
| 6232 | TV 42.5 MC Second I.F. 41.25 MC | 1.44 |
| 6233 | TV 45.5 MC Third I.F. 47.25 MC | 1.74 |
| 6234 | TV 44 MC Fourth I.F. | 1.35 |

Miniature Printed Circuit I.F. Trans.

Same as our regular miniature I.F. transformers shown above, except for terminals and mounting. Supplied in all standard frequencies.

* (With diode filter capacitors)

Dimensions: 3/4" sq. x 2" high.

| Dimensions: | Item | Net Price |
|-------------|-----------------------------------|-----------|
| 13-PH1 | 262 KC Input I.F. Trans. | \$1.71 |
| 13-PH2 | 262 KC Output I.F. Trans. | 1.71 |
| 13-PH6 | 262 KC Output I.F. Trans. * | 1.80 |
| 13-PC1 | 455 KC Input I.F. Trans. | 1.65 |
| 13-PC2 | 455 KC Output I.F. Trans. | 1.65 |
| 13-PC6 | 455 KC Output I.F. Trans. * | 1.74 |
| 13-PC7 | 455 KC Input I.F. Trans. Battery | 1.65 |
| 13-PC8 | 455 KC Output I.F. Trans. Battery | 1.65 |
| 13-PC9 | 455 KC Input I.F. Trans. AC-DC | 1.65 |
| 13-PC10 | 455 KC Output I.F. Trans. AC-DC | 1.65 |
| 1463-PC | 10.7 MC Input or Interstage | 1.95 |
| 1464-PC | 10.7 MC Discriminator Trans. | 2.25 |
| 1465-PC | 10.7 MC Ratio Detector Trans. | 2.34 |
| 6203-PC | 4.5 MC Input or Interstage | 1.98 |
| 6204-PC | 4.5 MC Discriminator Trans. | 2.25 |
| 6205-PC | 4.5 MC Ratio Detector Trans. | 2.25 |
| 6230-PC | TV 44 MC Converter I.F. Trans. | 1.86 |
| 6231-PC | TV 44 MC First I.F. Trans. Trap | 1.86 |
| 6232-PC | TV 42.5 MC Second I.F. 41.25 MC | 1.68 |
| 6233-PC | TV 45.5 MC Third I.F. 47.25 MC | 1.86 |
| 6234-PC | TV 44 MC Fourth I.F. Trans. | 1.65 |

Sub-Miniature I.F. Trans.



Through the use of a Ferrite shell core material these Sub-Miniature I.F. Transformers offer the gain and bandwidth characteristics previously obtained in only larger I.F. assemblies. (For Battery or AC-DC Radios.)

Dimensions: 1/2" sq. x 1 1/2" high.

| Item | Net Price |
|-------|---------------------------------|
| 10-C1 | 455 KC Input I.F. Trans. \$1.68 |
| 10-C2 | 455 KC Output I.F. Trans. 1.68 |

For a Complete Listing of MILLER PRODUCTS ask for a copy of our Latest General Catalog.

J. W. MILLER COMPANY Los Angeles 3, Calif.



Miller



Transistor Components and R. F. Coils



Wide Range Adjustable Inductors

Due to the wide range of these coils they will find immediate application in many prototype designs where the exact value of the required inductance is not known.

Dimensions: Max. dia. $\frac{3}{8}$ " x $1\frac{1}{8}$ " long both types
Inductance measured at 1000 cycles

Untapped Inductors

| Cat. No. | L Min. | L Max. | Net Price |
|----------|---------|---------|-----------|
| 9001 | 35 uh | .300 mh | \$1.11 |
| 9002 | .150 mh | 1.00 mh | 1.44 |
| 9003 | .500 mh | 3.50 mh | 1.65 |
| 9004 | 1.75 mh | 10.0 mh | 1.65 |
| 9005 | 5.00 mh | 20.0 mh | 1.77 |
| 9006 | 10.0 mh | 50.0 mh | 1.89 |
| 9007 | 25.0 mh | 130 mh | 1.95 |
| 9008 | 65.0 mh | 300 mh | 2.07 |

Tapped Osc. Inductors

| Cat. No. | L Min. | L Max. | Net Price |
|----------|---------|---------|-----------|
| 9011 | 35 uh | .300 mh | \$1.29 |
| 9012 | .150 mh | 1.00 mh | 1.59 |
| 9013 | .500 mh | 3.50 mh | 1.80 |
| 9014 | 1.75 mh | 10.0 mh | 1.80 |
| 9015 | 5.00 mh | 20.0 mh | 1.89 |
| 9016 | 10.0 mh | 50.0 mh | 2.07 |
| 9017 | 25.0 mh | 130 mh | 2.07 |
| 9018 | 65.0 mh | 300 mh | 2.25 |



Midget Variable Condensers

Shaft dia. $\frac{1}{4}$ " x 1" long.

The #2110, 2-gang variable condenser antenna section has a range of 10-130 mmf. The oscillator section has a range of 10-78 mmf. The #2111, #2112 and #2113 are the standard size condensers having a range of 10-365 mmf. Mounting is provided by tapped holes in the frame of the condensers. Counterclock rotation for capacity increase.

| Cat. No. | Sections | Dimensions | Net Price |
|----------|----------|---|-----------|
| 2110 | 2 | $1\frac{1}{8}$ " x $1\frac{3}{8}$ " x $1\frac{1}{16}$ " | 1.98 |
| 2111 | 1 | $1\frac{1}{8}$ " x $1\frac{3}{8}$ " x $1\frac{1}{16}$ " | 1.95 |
| 2112 | 2 | $2\frac{3}{16}$ " x $1\frac{1}{16}$ " x $1\frac{1}{16}$ " | 2.40 |
| 2113 | 3 | $3\frac{3}{16}$ " x $1\frac{1}{16}$ " x $1\frac{1}{16}$ " | 3.30 |

F.M. Variable Capacitor



This 3-gang 7-plate variable capacitor is rigidly constructed with widely spaced (.042 Air Gap) plates to assure highest stability. The plate cantour results in an almost linear frequency versus rotation characteristics. Although the capacitor is supplied with 3 trimmer capacitors attached, it is recommended that the oscillator trimmer be replaced with a small NPO adjustable ceramic. The tuning capacitor has a $\frac{1}{4}$ " diameter shaft $1\frac{1}{16}$ " long. Capacitor range is 6.6-23 mmf. Trimmer capacitor will add to these values.

Dimensions: $3\frac{3}{16}$ " x $1\frac{1}{16}$ " x $1\frac{1}{16}$ "

| Cat. No. | Item | Net Price |
|----------|----------------------------|-----------|
| 1461-B5 | 3-Gang FM Tuning Capacitor | \$3.60 |



Sub-Miniature Variable Condenser

Shaft Dia. $\frac{1}{4}$ " x $\frac{1}{2}$ " Long

It was necessary to use a four point suspension for the capacitor frame to insure against the frame becoming distorted and resultant shorting of plates. R.F. Cap. (11 Plates) 5.3 mmf—122.4 mmf
Os. Cap. (9 Plates) 4.2 mmf—78.6 mmf
Effective trimmer range: 1.8—8 mmf

| Cat. No. | Sections | Dimensions | Net Price |
|----------|----------|---|-----------|
| 2109 | 2 | $1\frac{1}{8}$ " x $1\frac{1}{8}$ " x $\frac{3}{4}$ " | \$2.10 |

Adjustable Padder Condensers



Used as adjustable oscillator padding condenser in super-het receivers to insure proper three-point tracking. They also find application as the horizontal drive control in television receivers. $\frac{1}{4}$ " single hole mounting.

Dimensions: $\frac{7}{8}$ " x 1" x $\frac{3}{8}$ " thick.

| Cat. No. | Capacity Range | Net Price |
|----------|----------------|-----------|
| 160-A | 360-1000 mmfd. | \$.84 |
| 160-B | 50-400 mmfd. | .75 |
| 160-C | 200-600 mmfd. | .84 |
| 160-D | 10-160 mmfd. | .66 |
| 160-E | 25-280 mmfd. | .72 |

Standard Transistor Antenna Rod



Dimensions: $\frac{3}{4}$ " x 9".

| Cat. No. | Q @ 790 KC | Freq. Range | Tuning Cond. Max. Capacity | Net Price |
|----------|------------|-------------|----------------------------|-----------|
| 2000 | 450 | 540-1650 KC | 365 mmf. | \$1.95 |

Miniature Transistor Antenna Rods



Dimensions: $\frac{3}{4}$ " x $3\frac{3}{4}$ ".

| Cat. No. | Q @ 790 KC | Freq. Range | Tuning Cond. Max. Capacity | Net Price |
|----------|------------|-------------|----------------------------|-----------|
| 2001 | 550 | 540-1650 KC | 365 mmf. | \$1.80 |
| 2003 | 500 | 540-1650 KC | 130 mmf. | 1.80 |

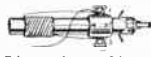
Ferrite-Strip Transistor Antenna Rods



Dimensions: $\frac{1}{4}$ " x $\frac{3}{4}$ " x $3\frac{3}{4}$ "

| Cat. No. | Q @ 790 KC | Freq. Range | Tuning Cond. Max. Capacity | Net Price |
|----------|------------|-------------|----------------------------|-----------|
| 2004 | 500 | 540-1650 KC | 365 mmf. | \$1.80 |
| 2005 | 450 | 540-1650 KC | 130 mmf. | 1.80 |

Sub-Miniature Transistor Antenna Rods



Dimensions: $\frac{1}{2}$ " x $2\frac{1}{2}$ ".

| Cat. No. | Q @ 790 KC | Freq. Range | Tuning Cond. Max. Capacity | Net Price |
|----------|------------|-------------|----------------------------|-----------|
| 2002 | 250 | 540-1650 KC | 250-450 mmf. | \$1.11 |
| 2007 | 220 | 540-1650 KC | 100-250 mmf. | 1.44 |

Sub-Miniature Transistor I.F. Transformers & Matching Osc.



A high impedance, tapped primary winding coupled to a low impedance secondary provides optimum energy transfer.

Dimensions: $\frac{3}{8}$ " sq. x $\frac{5}{8}$ " high.

| Cat. No. | Freq. | Impedance | Use | Net Price |
|----------|-----------------------------------|---------------|--------|-----------|
| 9-C1 | 455 KC | 25K—600 Ohms | Input | \$2.40 |
| 9-C2 | 455 KC | 25K—1000 Ohms | Output | 2.40 |
| 2021 | Oscillator (Tuning Cap. 78 mmfd.) | | | 2.10 |

Miniature Transistor I.F. Transformers



Designed to have the proper impedance match when used with the transistors on our data sheets.

Dimensions: $\frac{1}{2}$ " sq. x $\frac{3}{4}$ " high.

| Cat. No. | Freq. | Impedance | Use | Net Price |
|----------|--------|----------------|--------|-----------|
| 2031 | 455 KC | 10K—600 Ohms | Input | \$2.10 |
| 2032 | 455 KC | 10K—1000 Ohms | Output | 2.10 |
| 2041 | 455 KC | 25K—600 Ohms | Input | 2.10 |
| 2042 | 455 KC | 25K—1000 Ohms | Output | 2.10 |
| 2043 | 455 KC | 70K—4000 Ohms | Input | 2.10 |
| 2044 | 455 KC | 30K—4000 Ohms | Output | 2.10 |
| 2045 | 455 KC | 70K—500 Ohms | Input | 2.10 |
| 2051 | 455 KC | 100K—1000 Ohms | Input | 2.10 |

Unshielded Miniature Transistor Oscillators



The 2020 oscillator coil (Revised 5-lug) is designed for use in a converter oscillator circuit. The 2023 oscillator coil (6-lug) is far use where a separate transistor is used for the oscillator and another transistor for the mixer.

Dimensions: $\frac{3}{8}$ " x 1" high

| Cat. No. | Cond. Max. Capacity | I.F. Freq. | Net Price |
|----------|---------------------|------------|-----------|
| 2020 | 365 mmf. | 455 KC | \$1.65 |
| 2022 | 78-100 mmf. | 455 KC | 1.65 |
| 2023 | 365 mmf. | 455 KC | 1.65 |

F.M. Transistor I.F. Transformers



This series of high quality I.F., Discriminator, and Ratio Detector transformers makes it possible for the first time to construct a completely self-contained battery operated F.M. receiver which compares favorably with its vacuum tube counterpart.

Dimensions: $\frac{3}{4}$ " sq. x 2" high.

| Cat. No. | Freq. | Use | Net Price |
|----------|---------|---------------------|-----------|
| 1463-T1 | 10.7 Mc | First I.F. Input | \$2.28 |
| 1463-T2 | 10.7 Mc | Second I.F. Instage | 2.37 |
| 1463-T3 | 10.7 Mc | Third I.F. Output | 2.37 |
| 1464-TD | 10.7 Mc | Discriminator | 2.55 |
| 1465-TRD | 10.7 Mc | Ratio Detector | 4.80 |

Printed Circuit Style

| | | | |
|------------|---------|---------------------|--------|
| 1463-T1-PC | 10.7 Mc | First I.F. Input | \$2.28 |
| 1463-T2-PC | 10.7 Mc | Second I.F. Instage | 2.37 |
| 1463-T3-PC | 10.7 Mc | Third I.F. Output | 2.37 |
| 1465-TRDPC | 10.7 Mc | Ratio Detector | 4.80 |

Sub-Miniature Style

I.F. Trans. Dimensions: $1\frac{1}{2}$ " sq. x $\frac{1}{2}$ " high
Ratio Det. Dimensions: $1\frac{1}{2}$ " x $\frac{3}{4}$ " x $\frac{1}{2}$ " high

| Cat. No. | Freq. | Use | Net Price |
|----------|---------|---------------------|-----------|
| 2070 | 10.7 Mc | First I.F. Input | \$2.25 |
| 2071 | 10.7 Mc | Second I.F. Instage | 2.25 |
| 2072 | 10.7 Mc | Third I.F. Output | 2.25 |
| 2073 | 10.7 Mc | Ratio Detector | 2.70 |

Improved 10.7 Mc. Transistor I.F. Transformers

Dimensions: $\frac{3}{4}$ " Sq. x 2" High

| Cat. No. | Freq. | Use | Net Price |
|----------|---------|----------------------|-----------|
| 1601 | 10.7 Mc | First I.F. Input | \$2.28 |
| 1602 | 10.7 Mc | Second I.F. Instage | 2.37 |
| 1603 | 10.7 Mc | Third I.F. Output | 2.37 |
| 1604 | 10.7 Mc | Discriminator | 2.55 |
| 1605 | 10.7 Mc | Ratio Det. w/ Diodes | 4.80 |
| 1606 | 10.7 Mc | Ratio Detector | 2.34 |

Micro Miniature Transistor I.F. Trans. & Matching Oscillator



Construction is ultra small, rugged and mechanically stable. Tuning being effected by means of a sturdy threaded cap core which engages a threaded coil support.

Dimensions: $\frac{9}{32}$ " sq. x $1\frac{1}{32}$ " high

| Cat. No. | Freq. | Impedance | Use | Net Price |
|----------|---|----------------|---------|-----------|
| 2061 | 455 kc | 50k - 800 ohms | Input | \$2.10 |
| 2062 | 455 kc | 30k - 500 ohms | Instage | 2.10 |
| 2063 | 455 kc | 20k - 5k ohms | Output | 2.10 |
| 2060 | Oscillator (Tuning cap. 78 to 100 mmfd, max.) | | | 2.10 |

Mini Miniature Transistor I.F. Trans. & Matching Oscillator



Similar in style to the Micro Miniature, these transformers are a little larger in size, with built-in capacitors for higher available Q.

Dimensions: $1\frac{1}{32}$ " sq. x $\frac{1}{2}$ " high

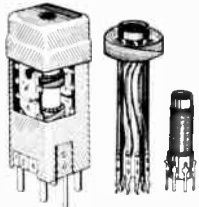
| Cat. No. | Freq. | Impedance | Use | Net Price |
|----------|---|----------------|---------|-----------|
| 2066 | 455 kc | 50k - 800 ohms | Input | \$2.10 |
| 2067 | 455 kc | 30k - 500 ohms | Instage | 2.10 |
| 2068 | 455 kc | 20k - 5k ohms | Output | 2.10 |
| 2065 | Oscillator (Tuning cap. 78 to 110 mmfd, max.) | | | 2.10 |

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J. W. MILLER COMPANY Los Angeles 3, Calif.

MILLER Exact Replacement Components

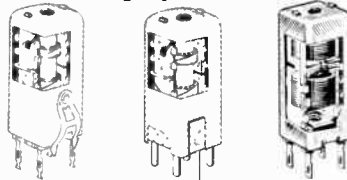
Replacement for Original T.V. and Home Radio Equipment



The following special parts have been manufactured as exact replacements for the set manufacturers shown, so as to assure top performance.

| Cat. No. | O.E.M. Part No. | Net Price | |
|--|--------------------------|--------------|-----------|
| Admiral | | | |
| 1471-A | 72B185-2 | \$1.95 | |
| 1472-A | 72C132-19 | 1.35 | |
| 6332 | 94C17-4 | 2.01 | |
| 7701 | 72B31-2 | 2.37 | |
| Crosley | | | |
| 7101 | 157856-1 | \$1.80 | |
| Dumont | | | |
| 7103-DE | 20004441 | \$2.25 | |
| 7104-DE | 20004511 | 2.10 | |
| Emerson | | | |
| 6339-E | 708275 | \$1.50 | |
| 6340-E | 716102 | 1.65 | |
| 7112-E | 708276 | 2.25 | |
| General Electric and Hotpoint | | | |
| 12-C11 | RTL-143 and 163 | \$1.62 | |
| 12-C13 | RTL-172 | 2.10 | |
| 6206-PC | RTD-026 (WT56X38) | 2.97 | |
| 6207-PC | RTD-025 (WT56X37) | 2.49 | |
| 6208-PC | RTD-020 | 2.97 | |
| 6209-G1 | RTD-024 (WT56X36) | 2.85 | |
| 6334-G | RL1-305 | 1.29 | |
| 6335-G | WT36X402 | 1.29 | |
| Hallcrafters | | | |
| 1482 IFT | 51B1996 | \$1.35 | |
| 7101 | 51A1859 | 1.80 | |
| Muntz | | | |
| 7111-M | LO-0076 | \$2.25 | |
| Philco | | | |
| 6209-P1 | 32-4721 | \$5.70 | |
| 6209-P2 | 32-4689-1, 2 | 2.85 | |
| 6209-P3 | 32-4735-1, 2 | 2.85 | |
| 7102-P | 32-4688-10 | 2.10 | |
| R.C.A. | | | |
| 1483 IF | 76437 | \$1.80 | |
| 1484 RD | 102692 | 2.10 | |
| 1485 RD | 102644 | 2.10 | |
| 1486 RD | 102253 | 2.10 | |
| 1487 RD | 100364 | 2.10 | |
| 1488 RD | 79141 | 2.25 | |
| 1489 RD | 101219 | 2.25 | |
| 6333 | 103103 | 1.76 | |
| 6336-R | 107284 | 2.10 | |
| Westinghouse | | | |
| Westinghouse | | | |
| 12-C14 | 235V025H-11, 2 (V157661) | \$2.10 | |
| 68 Osc | 230V039H-01 (V15764-1) | 1.65 | |
| 6204-W3 | V12128-1, 2, 3 | 4.05 | |
| Replacement Antennas | | | |
| <p>These replacement loops can be used in a large number of the imported Broadcast Band Portable Receivers.</p> <p>Dimensions: ± 2008 1/4" x 3/4" x 2 3/16" ± 2009 3/16" x 1/2" x 2 1/8"</p> | | | |
| Cat No. | Freq. Range | Tuning Cap. | Net Price |
| 2008 | 540-1650 kc | 200-240 mmfd | \$1.65 |
| 2009 | 540-1650 kc | 120-140 mmfd | 1.65 |

Exact Replacements for Original Auto Radio Equipment



In addition to our regular replacement line of I.F. transformers we are now offering the following special replacement items, as well as the exact replacement I.F. transformers for those parts which were supplied by the original manufacturer.

| Cat No. | O.E.M. Part No. | Net Price |
|---------------------------------------|---|-----------|
| Bendix | | |
| 6501 | 2090737-1 | \$2.25 |
| 6502 | 2090237-2 | 2.25 |
| 6503 | 2090237-3 | 2.25 |
| 6504 | 2090237-4 | 2.25 |
| 6505 | 2090237-5 | 2.25 |
| 6506 | 2090239-1 | 2.10 |
| 6507 | 2090239-2 | 2.10 |
| 6508 | 2090239-3 | 2.10 |
| 6509 | 2090907-2 | 2.10 |
| 6510 | 2090908-3 | 2.25 |
| 6511 | 2090907-3 | 2.10 |
| 6513 | 2090908-4 | 2.25 |
| 6514 | 2090907-5 | 2.10 |
| 6515 | 2090908-5 | 2.25 |
| Deleco | | |
| 6540 | 1221253 | \$2.10 |
| 6541 | 1221255 | 2.10 |
| Motorola | | |
| 6550 | 24C485553 | \$2.10 |
| 6551 | 24C485354 | 1.95 |
| 6552 | 24C485555 | 1.95 |
| 6553 | 24DS63300 (Mopar) | 1.95 |
| General Replacement | | |
| 6581 | 455 kc I.F. Output with Diode Filter | \$1.89 |
| 6582 | 455 kc I.F. Input | 1.80 |
| 6583 | 455 kc I.F. Output | 1.80 |
| 6584 | 262 kc I.F. Input | 1.92 |
| 6585 | 262 kc I.F. Output with Diode Filter | 1.98 |
| Antenna Matching Coils (Balun) | | |
| | | |
| Cat No. | O.E.M. Part No. | Net Price |
| 7301 | R.C.A. 1959 and 1960 | \$.69 |
| 7302 | Philco 32-4432-3 | 1.53 |
| 7303 | Motorola 74420, Olympic, Silverstone | .60 |
| 7304 | R.C.A. 1955, 1956, 1957 | .69 |
| 7305 | R.C.A. 1955, 1956, 1957 | .69 |
| 7306 | R.C.A. 1955, 1956, 1957 | .69 |
| 7307 | G.E. RLA-043, RLA-045, Hotpoint | 1.53 |
| 7308 | G.E. WT37X8, RLA-042 | 1.53 |
| 7309 | G.E. WT37X10, RLA-044 | 1.56 |
| 7310 | G.E. RLA-047, Hotpoint | 1.53 |
| 7311 | G.E. RLA-050, Hotpoint | 1.29 |
| 7312 | G.E. RLA-053, Hotpoint | 1.59 |
| 7313 | G.E. RLA-046, Westinghouse V-19024-7, -9, Truelone | .96 |
| 7314 | Philco 32-4799, G.E., Standard Coil | 2.16 |
| 7315 | Philco 32-4725-1, -3 | 1.14 |
| 7316 | Philco 76-11489-1, Silverstone, Sylvania, Westinghouse | 1.23 |
| 6103 | G.E. RLA-041 | .93 |
| 6104 | R.C.A. 73591, 78396, Motorola 24B720936 | .69 |
| 6200 | Philco 32-4725-3, -5, -6 | 1.35 |
| 6202 | Philco 32-4432-1, -2, -3, Westinghouse V-8621-1, -2, -3, -4 | 1.35 |

Replacement for Color T.V.



The following series of components are intended as exact replacements in the various models of color T.V. sets that R.C.A. has produced. With other manufacturers entering the field, but still depending on R.C.A. for a large number of basic components it is felt that these parts will be useful.

| No. | Use | O.E.M. Part No. | Net Price |
|--------|--------------------|-----------------|-----------|
| 6021 | Chroma BP Trans. | 78887 | \$2.10 |
| 6022 | Chroma BP Coil | 78888 | 1.53 |
| 6023 | Burst Trans. | 78886 | 3.30 |
| 6024 | 3.58 Mc. Output | 78889 | 2.64 |
| 6025 | Sync. and Phase | 100430 | 4.80 |
| 6026 | Chroma Ref. Osc. | 78891 | 3.30 |
| 6027 | 3.58 Mc. Trap | * 78892 | 1.65 |
| 6028 | 3.58 Mc. Ch. Sync. | * 78892 | 1.65 |
| 6029-R | First Chroma | 105213 | 3.96 |
| 6030-R | Burst Amp. | 105214 | 2.52 |
| 6031-R | Video I.F. | 106385 | 1.17 |
| 6032-R | Video I.F. | 106386 | 1.26 |
| 6033-R | Video I.F. | 106387 | 1.26 |
| 6034-R | Video I.F. | 105292 | 1.08 |
| 6035-R | Video I.F. | 105293 | 1.08 |
| 6036-R | Video I.F. & Trap | 105294 | 4.32 |
| 6337-R | Horiz. Waveform | 102195 | 1.20 |
| 6338-R | Horiz. Linearity | 105196 | 1.98 |
| 7105-R | 4.5 Mc. Sound I.F. | 105286 | 1.17 |
| 7106-R | 4.5 Mc. Sound I.F. | 105287 | 3.00 |
| 7107-R | 4.5 Mc. Quadrature | 105288 | 1.80 |
| 7108-R | 4.5 Mc. Sound I.F. | 106381 | 1.29 |
| 7109-R | 4.5 Mc. Sound I.F. | 106382 | 3.06 |
| 7110-R | 4.5 Mc. Quadrature | 106383 | 2.04 |

*Resistors and Capacitors are included.

F.M. Stereo Multiplex Inductors



Basically the system involves pick-up of sound by two microphones, the left (L) and right (R). Subsequently the two audio signals are combined in such a way that L plus R frequency modulates an F-M carrier in the conventional way while L minus R amplitude modulates a 38KC stereophonic sub-carrier, and the resulting double side-band AM signal (23-53KC) with suppressed carrier. Likewise frequency modulates the FM carrier. A 19KC pilot sub-carrier signal also frequency modulates the FM carrier and at the receiver provides a means of controlling the frequency and phase of the 38 KC carrier for re-insertion. When broadcasting Stereo Multiplex the region of 53 to 75KC is allotted to the station for SCA signals.

In the receiver the output of the F-M detector comprises the L+R audio signal, the 19KC pilot sub-carrier, and the 23-53KC A-M modulated (L-R), suppressed carrier signal. It is then required to separate the 23-53KC signal by means of a suitable filter, generate a 38KC signal under the control of the 19KC pilot sub-carrier, re-insert the sub-carrier, and detect the resulting signal. This yields L-R. This must then be combined in a suitable matrix with the L+R signal in such a manner that the L signal appears at one output terminal and the R signal at another.

| Cat. No. | Description | Net Price |
|----------|--------------------------|-----------|
| 1351 | Low Pass Filter | \$1.95 |
| 1352 | BP Filter Series Element | 1.80 |
| 1353 | BP Filter Shunt Element | 1.80 |
| 1354 | Locked Osc. 19 kc. | 1.86 |
| 1355 | Output Trans. 38 kc. | 2.25 |

Printed Circuit Multiplex Inductors

The following coils are electrically the same as the regular point to point wiring type listed above. The printed circuit board PCM can be adopted for use with either the regular coils or the printed circuit type.

| Cat. No. | Description | Net Price |
|----------|--------------------------|-----------|
| 1351-PCM | Low Pass Filter | \$1.95 |
| 1352-PCM | BP Filter Series Element | 1.80 |
| 1353-PCM | BP Filter Shunt Element | 1.80 |
| 1354-PCM | Locked Osc. 19 kc. | 1.86 |
| 1355-PCM | Output Trans. 38 kc. | 2.25 |
| PCM | Printed Circuit Board | 5.55 |

For a Complete Listing of MILLER PRODUCTS ask for a copy of our Latest General Catalog.

J. W. MILLER COMPANY Los Angeles 3, Calif.

air dux

AIR WOUND COILS

Illumitronic Engineering has developed a complete, versatile series of air core inductors designed especially for the amateur rig, or for prototypes of RF transmission equipment. These coils may be used for pi output circuits, conventional LC output circuits, interstage and oscillator circuits. The series consists of a standard coil type, a variable pitch type, and an indented type, in a range of diameters from 1/2 inch to 3 inches. All Air Dux® coils are constructed of tinned (silver or formvar) copper wire wound on large low loss polystyrene rods for the highest mechanical strength and lowest electrical losses.

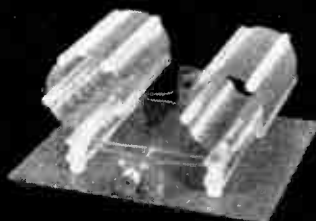


air dux®

| Cat. No. T or S | Dia. | TPI | Wire Size | Length of Coil | Net Price |
|-----------------|-------|-----|-----------|----------------|---------------|
| 404 | | 4 | 18 | | |
| 406 | | 6 | 18 | | |
| 408 | 1/2 | 8 | 18 | | |
| 410 | | 10 | 18 | 2 | .40 |
| 416 | | 16 | 20 | | |
| 432 | | 32 | 24 | | (Silver .80) |
| 504 | | 4 | 16 | | |
| 506 | | 6 | 18 | | |
| 508 | 5/8 | 8 | 18 | | |
| 510 | | 10 | 18 | 2 | .45 |
| 516 | | 16 | 20 | | |
| 532 | | 32 | 24 | | (Silver .85) |
| 604 | | 4 | 16 | | |
| 606 | | 6 | 18 | | |
| 608 | 3/4 | 8 | 18 | | |
| 610 | | 10 | 18 | 2 | .50 |
| 616 | | 16 | 20 | | |
| 632 | | 32 | 24 | | (Silver .90) |
| 804 | | 4 | 16 | | |
| 806 | | 6 | 18 | | |
| 808 | 1 | 8 | 18 | | |
| 810 | | 10 | 18 | 3 | .65 |
| 816 | | 16 | 20 | | |
| 832 | | 32 | 24 | | (Silver 1.10) |
| 1004 | | 4 | 14 | | |
| 1006 | | 6 | 14 | | |
| 1008 | 1 1/4 | 8 | 16 | | |
| 1010 | | 10 | 18 | 10 | 1.65 |
| 1016 | | 16 | 20 | | |
| *1032 | | 32 | 24 | | |
| 1204 | | 4 | 14 | | |
| 1206 | | 6 | 14 | | |
| 1208 | 1 1/2 | 8 | 16 | | |
| 1210 | | 10 | 18 | 10 | 1.80 |
| 1216 | | 16 | 20 | | |
| *1232 | | 32 | 24 | | |
| 1404 | | 4 | 14 | | |
| 1406 | | 6 | 14 | | |
| 1408 | 1 3/4 | 8 | 14 | | |
| 1410 | | 10 | 16 | 10 | 1.90 |
| 1416 | | 16 | 18 | | |
| *1432 | | 32 | 24 | | |
| 1604 | | 4 | 12 | | |
| 1606 | | 6 | 14 | | |
| 1608 | 2 | 8 | 14 | 10 | 1.95 |
| 1610 | | 10 | 16 | | |
| 1616 | | 16 | 18 | | |
| 2004 | | 4 | 12 | | |
| 2006 | 2 1/2 | 6 | 12 | | |
| 2008 | | 8 | 14 | 10 | 2.25 |
| 2010 | | 10 | 16 | | |
| 2404 | | 4 | 10 | | |
| 2406 | 3 | 6 | 12 | | |
| 2408 | | 8 | 14 | 10 | 3.40 |
| 2410 | | 10 | 14 | | |

air dux® BALUN

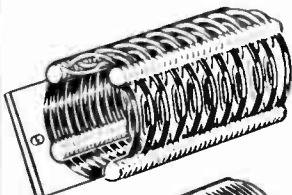
Unbalanced coax lines used on most transmitters can be matched to balanced lines of either 75 or 300 ohms impedance by using the B2009 air dux coils. May be used with transmitters and receivers without adjustment over the frequency range of 80 through 10 meters and will handle power inputs up to 200 watts.



Two coils required.
Coax connector not included.

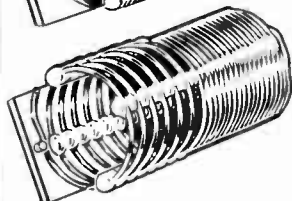
| NO. | DESCRIPTION | NET EA. |
|--------|--------------------|---------|
| B2009 | Coil with hardware | 3.36 |
| MB2009 | Mounting plate | 1.95 |

Indented pi dux®



| Cat. No. | Dia. | TPI | Wire Size | Length of Coil | L uh. | Net |
|----------|-------|-----|-----------|----------------|-------|------|
| 816A | 1 | 16 | 18 | 3 1/2 | 18.0 | 1.25 |
| 1014A | 1 1/4 | 14 | 18 | 2 3/32 | 18.3 | 1.50 |
| 1212A | 1 1/2 | 12 | 16 | 2 3/4 | 18.3 | 1.70 |
| 1411A | 1 3/4 | 11 | 14 | 2 5/8 | 18.0 | 1.90 |
| 1609A | 2 | 9 | 14 | 3 | 18.1 | 2.10 |
| 2007A | 2 1/2 | 7 | 12 | 3 1/4 | 18.6 | 2.60 |
| 2406A | 3 | 6 | 10 | 3 5/16 | 18.7 | 3.25 |

vari-pitch pi dux®



| Cat. No. | Dia. | TPI | Wire Size | Length of Coil | L uh. | Net |
|----------|-------|---------|-----------|----------------|-------|------|
| 820D10 | 1 | 20 & 10 | 18 | 3 1/4 | 18.0 | 1.25 |
| 1212D6 | 1 1/2 | 12 & 6 | 14 | 3 13/16 | 18.6 | 2.00 |
| 1608D6 | 2 | 8 & 6 | 12 | 4 1/8 | 18.1 | 2.70 |
| 2008D5 | 2 1/2 | 8 & 5 | 12 | 3 3/4 | 18.2 | 3.25 |
| 2408D4 | 3 | 8 & 4 | 10 | 3 3/4 | 18.6 | 3.95 |

2 new pi dux assemblies

The 500 and 1000 watt pi dux assemblies are compact yet conservatively rated. The high frequency coil sections are silver plated for high tank circuit efficiency. A complete technical sheet is included with each assembly.



1 KW pi dux

#195-1 500 watt pi dux Assembly net 5.95
#195-2 1 KW pi dux Assembly net 14.50

"T" series air dux are Tinned copper wire. (Add "T" after Cat. No.)

"S" series are SILVER PLATED copper wire. (Add "S" after Cat. No.)

1000 thru 2400 series silver coils are available at double the costs shown.

Complete technical charts and graphs on air dux and pi dux are available on sheets T.H. 6 and 7.

Formvar coils available at higher costs.

Special Designs available. For information, contact us or consult your local distributor.

products by **illumitronic**  **engineering**

CAPTIVE HARDWARE

CHOKES

National is a leading manufacturer of radio frequency chokes, producing both standards and unique designs such as our new Ferrite Bead Choke which disappears from your circuit electrically at low frequencies. Hundreds of values are kept in-stock at all times for immediate shipment. National engineers will also custom design to your specifications on short notice. You will find National chokes stocked locally by all leading distributors.

National's unique approach to stainless steel captive hardware has caused an overnight revolution. A hexagonal head forced into the thin aluminum causes the parent material to cold flow into a special cavity. The hardware is thus permanently captured so it can't push, pull or torque out even under abnormal pressures, giving a stainless steel thread which will allow insertion and removal of screws many times. A wide variety of configurations in nuts and studs is available from stock.

COIL FORMS

If you require complete flexibility in choice of coil forms, your logical source is National. We manufacture perhaps the widest variety available anywhere. New forms are constantly being added. National's enormous stocking facilities assure fast delivery when you need it.

KNOBS

Whether it's Mil-Spec or Commercial Knobs you want, National makes a complete line to suit your every design need. More than 200 different Commercial Knobs styles are available . . . many *in stock* for immediate shipment. Our Custom Department will give you immediate service to fill specialized needs. National Mil-Spec knobs are made to specification MS91528. All types and styles are available for immediate delivery. National will custom mark dials for Mil-Spec knobs in any size required.

DIALS & DRIVES

National is a long-established leader in the design and manufacture of mechanical devices for electronic equipment such as vernier drive mechanisms, precision gear drives and vernier dials. National can quickly adapt its vernier mechanisms to dials marked to your specifications. All mechanical component parts are made to exacting standards and undergo extensive quality control inspection to insure complete reliability in the finished product.



WANT MORE INFORMATION? National has complete specifications and drawings available on all lines. In addition to those mentioned above, National carries tremendous stock of a large variety of other components such as: ceramic tube sockets, crystal sockets, ceramic platecaps, terminals, shaft locks, couplings, ceramic insulators, and dial locks. National also makes a new kind of cable called *Elasticable* which can stretch to triple its relaxed length. Elasticable is available in a single or multiple conductor cable, covered in nylon or neoprene. For more information on an application of specific interest to you, write directly to our Component Sales Department.



National Radio Co., Inc.

A Wholly Owned Subsidiary of National Company, Inc.
Dept. Melrose 76, Mass. Normandy 5-4800 TWX-1000-U
World's leading manufacturer of component parts for the electronic industry.



NORTH HILLS ELECTRONICS, INC.

GLEN COVE, LONG ISLAND, NEW YORK

ADJUSTABLE COILS and COIL FORMS

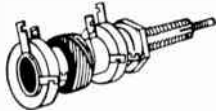
Cover Every Frequency Range from Audio to 200mc

These high quality coils enable engineers and experimenters to save valuable development time by filling a vast number of requirements with standard components from stock. All coils have the following features:

- All metal parts plated to MIL specifications.
- Built-in "perma-tune" tension for smooth "stay-pul" tuning.
- Litz wound higher inductance ranges.
- Two extra terminals for tie points or additional winding.
- Moisture and fungus resistant impregnant per MIL-V-173-A.
- Color coded ranges.

COILS ON CERAMIC FORM PER JAN-I-10

Subminiature 1100 Series



- $\frac{3}{8}$ " above mounting surface
- Mounting — $\frac{1}{64}$ " hole
- For R.F. and I.F. applications

| Part No. | Nominal Microhenries | Average Q | mc |
|----------|----------------------|-----------|-----|
| 1100-A | 0.9-1.4 | 45 @ | 7.9 |
| 1100-B | 1.4-1.9 | 50 @ | 7.9 |
| 1100-C | 1.9-2.6 | 55 @ | 7.9 |
| 1100-D | 2.6-3.7 | 65 @ | 7.9 |
| 1100-E | 3.7-5.5 | 65 @ | 7.9 |
| 1100-F | 5.5-7.4 | 70 @ | 7.9 |
| 1100-G | 7.4-12.5 | 64 @ | 5.0 |
| 1100-H | 12.5-18.0 | 72 @ | 5.0 |
| 1100-I | 18.0-28.0 | 74 @ | 5.0 |
| 1100-J | 28.0-38.0 | 72 @ | 5.0 |
| 1100-K | 38.0-55.0 | 75 @ | 2.5 |

Miniature 1000 Series



- $\frac{7}{8}$ " above mounting surface
- Mounting — #10 hole
- For R.F. and I.F. applications

| Part No. | Nominal Microhenries | Average Q | mc |
|----------|----------------------|-----------|-----|
| 1000-A | 1.0-1.6 | 70 @ | 7.9 |
| 1000-B | 1.6-2.7 | 80 @ | 7.9 |
| 1000-C | 2.7-4.5 | 85 @ | 7.9 |
| 1000-D | 4.5-8.5 | 85 @ | 7.9 |
| 1000-E | 8.5-14.5 | 75 @ | 2.5 |
| 1000-F | 14.5-22 | 65 @ | 2.5 |
| 1000-G | 22-29 | 65 @ | 2.5 |
| 1000-H | 29-55 | 85 @ | 2.5 |
| 1000-I | 55-110 | 80 @ | 2.5 |
| 1000-J | 110-185 | 85 @ | .79 |
| 1000-K | 185-305 | 85 @ | .79 |
| 1000-L | 305-515 | 85 @ | .79 |
| 1000-M | 515-820 | 85 @ | .79 |
| 1000-N | 820-1100 | 75 @ | .79 |

Transmitter 1300 Series



- $1\frac{1}{4}$ " above mounting surface
- Mounting — $\frac{1}{4}$ " hole
- For low power transmitters and high Q receiver circuits

| Part No. | Nominal Microhenries | Average Q | mc |
|----------|----------------------|---------------------|----|
| 1300-A | | For use from 90-200 | mc |
| 1300-B | | For use from 40-90 | mc |
| 1300-C | | For use from 20-40 | mc |
| 1300-D | 0.7-1.1 | 130 @ | 20 |
| 1300-E | 1.1-1.7 | 150 @ | 18 |
| 1300-F | 1.7-2.7 | 150 @ | 16 |
| 1300-G | 2.7-4.5 | 150 @ | 14 |
| 1300-H | 4.5-6.8 | 150 @ | 12 |
| 1300-I | 6.8-10.8 | 150 @ | 10 |
| 1300-J | 10.8-17.0 | 150 @ | 7 |
| 1300-K | 17.0-29.0 | 125 @ | 5 |
| 1300-L | 29.0-45.0 | 125 @ | 4 |
| 1300-M | 45.0-75.0 | 125 @ | 3 |

COILS ON MICA FILLED FORMS PER MIL-P-14-D

Standard 120 Series



- $1\frac{1}{4}$ " above mounting surface
- Mounting #10 hole
- For R.F. and I.F. applications

| Part No. | Nominal Microhenries | Average Q | mc |
|----------|----------------------|-----------|-----|
| 120-A | 2-3 | 75 @ | 7.9 |
| 120-B | 3-5 | 85 @ | 7.9 |
| 120-C | 5-9 | 90 @ | 7.9 |
| 120-D | 9-18 | 75 @ | 7.9 |
| 120-E | 18-36 | 75 @ | 2.5 |
| 120-F | 36-64 | 75 @ | 2.5 |
| 120-G | 64-105 | 90 @ | 2.5 |
| 120-H | 105-200 | 90 @ | 2.5 |
| 120-I | 200-500 | 90 @ | .79 |
| 120-J | 500-1000 | 90 @ | .79 |
| 120-K | 1000-2000 | 70 @ | .79 |

Printed Circuit P-120 Series



- Snaps into single 0.4" hole for dip soldering
- $1\frac{1}{4}$ " long

| Part No. | Nominal Microhenries | Average Q | mc |
|----------|----------------------|-----------|-----|
| P-120-A | 2-3 | 75 @ | 7.9 |
| P-120-B | 3-5 | 85 @ | 7.9 |
| P-120-C | 5-9 | 90 @ | 7.9 |
| P-120-D | 9-18 | 75 @ | 7.9 |
| P-120-E | 18-36 | 75 @ | 2.5 |
| P-120-F | 36-64 | 75 @ | 2.5 |
| P-120-G | 64-105 | 90 @ | 2.5 |
| P-120-H | 105-200 | 90 @ | 2.5 |
| P-120-I | 200-500 | 90 @ | .79 |
| P-120-J | 500-1000 | 90 @ | .79 |
| P-120-K | 1000-2000 | 70 @ | .79 |

Shielded, Encapsulated SE-120

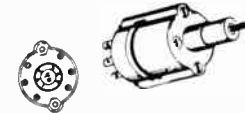


- Magnetic shielding cup
- Ruggedized construction
- $1\frac{1}{4}$ " long

| Part No. | Nominal Microhenries | Average Q | mc |
|----------|----------------------|-----------|-----|
| SE-120-A | 2-3 | 75 @ | 7.9 |
| SE-120-B | 3-5 | 85 @ | 7.9 |
| SE-120-C | 5-9 | 90 @ | 7.9 |
| SE-120-D | 9-18 | 75 @ | 7.9 |
| SE-120-E | 18-36 | 75 @ | 2.5 |
| SE-120-F | 36-64 | 75 @ | 2.5 |
| SE-120-G | 64-105 | 90 @ | 2.5 |
| SE-120-H | 105-200 | 90 @ | 2.5 |
| SE-120-I | 200-500 | 90 @ | .79 |
| SE-120-J | 500-1000 | 90 @ | .79 |

ENCAPSULATED CUP-CORE COILS

Audio and Ultrasonic 700 Series



- $1\frac{1}{2}$ " above mounting surface
- Mounting Centers — Two #6 holes spaced $1\frac{1}{4}$ "
- Magnetically shielded—High Q
- For standard or printed circuits

| Part No. | Nominal Millihenries | Average Q | kc |
|----------|----------------------|-----------|-----|
| 700-A | 1.5-3 | 120 @ | 200 |
| 700-B | 3-7 | 120 @ | 150 |
| 700-C | 7-13 | 110 @ | 100 |
| 700-D | 13-25 | 110 @ | 60 |
| 700-E | 25-50 | 110 @ | 40 |
| 700-F | 50-100 | 125 @ | 20 |
| 700-G | 100-250 | 125 @ | 20 |
| 700-H | 250-500 | 125 @ | 5 |
| 700-I | 500-1000 | 125 @ | 5 |

SHIELDED COILS

900 Series



- $\frac{7}{16}$ " Diameter
- Shielded and Encapsulated

| Part No. | Nominal Microhenries | Average Q | mc |
|----------|----------------------|-----------|-----|
| 900-A | 0.5-0.8 | 80 @ | 25 |
| 900-B | 0.8-1.3 | 70 @ | 18 |
| 900-C | 1.3-2.0 | 60 @ | 15 |
| 900-D | 2.0-4.0 | 70 @ | 8 |
| 900-E | 4.0-7.0 | 70 @ | 5 |
| 900-F | 7.0-12.0 | 70 @ | 4 |
| 900-G | 12.0-20.0 | 70 @ | 3 |
| 900-H | 20.0-35.0 | 70 @ | 2.5 |
| 900-I | 35.0-60.0 | 70 @ | 2.0 |
| 900-J | 60.0-100.0 | 70 @ | 1.0 |

1500 Series



- $\frac{3}{8}$ " Diameter
- Shielded and Encapsulated

| Part No. | Nominal Microhenries | Average Q | kc |
|----------|----------------------|-----------|-----|
| 1500-A | .100-.175 | 80 @ | 790 |
| 1500-B | .175-.300 | 80 @ | 790 |
| 1500-C | .300-.500 | 80 @ | 790 |
| 1500-D | .500-.800 | 75 @ | 790 |
| 1500-E | .800-1.15 | 55 @ | 500 |
| 1500-F | 1.15-1.50 | 55 @ | 250 |
| 1500-G | 1.50-2.50 | 55 @ | 250 |
| 1500-H | 2.50-3.50 | 50 @ | 250 |
| 1500-I | 3.50-7.50 | 40 @ | 250 |

See SECTION 5600 for Wideband RF Transformers.

DISTRIBUTOR INQUIRIES INVITED • SPECIAL COILS WOUND TO SPECIFICATIONS

REPLACEMENT COMPONENTS

WORKMAN
SARASOTA, FLORIDA

Electronic
PRODUCTS, INC.

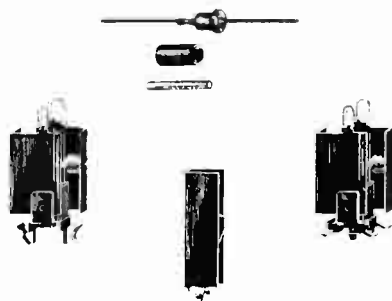


TRANSISTORS



| MODEL | DESCRIPTION | List | Dealer |
|--------|----------------------------|-------|--------|
| 99BE6 | PNP Conv. Osc. | 1.65 | .99 |
| 99BA6 | PNP I.F. Amplifier | 1.65 | .99 |
| 99AT6 | PNP Audio Driver | 1.65 | .99 |
| 99B5 | PNP Audio Output | 1.65 | .99 |
| BE6 | PNP Conv. Osc. | 3.75 | 2.25 |
| BA6 | PNP I.F. Amplifier | 3.40 | 2.04 |
| AT6 | PNP Audio Driver | 3.25 | 1.95 |
| B5 | PNP Audio Output | 3.25 | 1.95 |
| BE6A | PNP Conv. Osc. | 4.35 | 2.61 |
| BA6A | PNP I.F. Amplifier | 3.75 | 2.25 |
| AT6A | PNP Audio Driver | 3.60 | 2.16 |
| B5A | PNP Audio Output | 3.75 | 2.25 |
| CK722 | PNP Output | 1.33 | .79 |
| 15V.MG | PNP 15 V.-medium gain | 1.75 | 1.05 |
| 20V.LG | PNP 20V.-low gain | 2.10 | 1.26 |
| 20V.MG | PNP 20V.-medium gain | 2.60 | 1.56 |
| 20V.HG | PNP 20V.-high gain | 3.25 | 1.95 |
| 30V.LG | PNP 30V.-low gain | 3.50 | 2.10 |
| 30V.MG | PNP 30V.-medium gain | 4.70 | 2.82 |
| 30V.HG | PNP 30V.-high gain | 5.35 | 3.21 |
| 3MC | PNP max. freq. 3MC | 5.00 | 3.00 |
| 6MC | PNP max. freq. 6MC | 7.95 | 4.77 |
| 12MC | PNP max. freq. 12MC | 12.00 | 7.20 |
| 20MC | PNP max. freq. 20MC | 15.80 | 9.48 |
| SA7 | NPN Conv. Osc. | 5.20 | 3.12 |
| SK7 | NPN I.F. Amplifier | 4.70 | 2.82 |
| SQ7 | NPN Gen'l. Purp. Audio Fr. | 4.50 | 2.70 |
| 99SA7 | NPN Conv. Osc. Mixer | 1.65 | .99 |
| 99SK7 | NPN I.F. Amplifier | 1.65 | .99 |
| 99SQ7 | NPN Gen'l. Purp. Audio Fr. | 1.65 | .99 |
| 99L6 | NPN Audio Output | 1.65 | .99 |
| 99RK6 | PNP 6 Pck | — | 4.45 |
| 99RK9 | PNP and NPN 9 Pk. | — | 9.95 |

SILICON RECTIFIERS



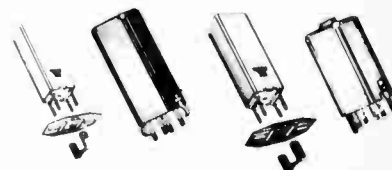
| MODEL | DESCRIPTION | List | Dealer |
|---------|-------------------------|------|--------|
| S-500B | 500 MA 400 PIV adapter | 1.85 | 1.11 |
| S-500D | 500 MA 400 PIV | 2.00 | 1.20 |
| S-750 | 750 MA 450 PIV adapter | 2.75 | 1.65 |
| S-200 | 200-400 MA 1 pack | .45 | .27 |
| S-200A | 200-400 MA 2 pack | .90 | .54 |
| S500C | 500 MA 400 PIV | .90 | .54 |
| S10 | Half Wave Assembly | 3.25 | 1.95 |
| S11 | Silicon Voltage Doubler | 4.95 | 2.97 |
| S12 | Silicon Voltage Doubler | 4.95 | 2.97 |
| GROUP B | | | |
| SA1 | Polarized Adapters 6 Pk | 1.60 | .96 |

ANTENNA COILS



| MODEL | DESCRIPTION | List | Dealer |
|---------|--------------------------------|------|--------|
| T400-2 | 2 pcs. Admiral, RCA | 2.00 | 1.20 |
| T401-2 | 2 pcs. Philco | 3.20 | 1.92 |
| T402-2 | 2 pcs. Bendix, Motorola, etc. | 1.50 | .90 |
| T403-2 | 2 pcs. Motorola, Philco, etc. | 2.00 | 1.20 |
| T404-2 | 2 pcs. RCA | 2.00 | 1.20 |
| T405-2 | 2 pcs. RCA | 2.00 | 1.20 |
| T406-2 | 2 pcs. RCA | 2.00 | 1.20 |
| T407-1 | Bendix, G.E., West'house, etc. | 1.55 | .93 |
| T408-1 | G.E., Hotpoint | 2.25 | 1.35 |
| T409-1 | G.E., Hotpoint | 2.25 | 1.35 |
| T410-1 | G.E., Hotpoint, Admiral | 2.30 | 1.38 |
| T411-1 | G.E., Hotpoint | 2.25 | 1.35 |
| T412-1 | G.E., Hotpoint | 2.75 | 1.65 |
| T413-1 | G.E., Hotpoint | 2.35 | 1.41 |
| T414-1 | G.E., Hallicrofter, etc. | 1.40 | .84 |
| T415-2 | 2 pcs. Philco, RCA, etc. | 3.65 | 2.19 |
| T416-1 | Matching Trans. 72/300Ω | 3.00 | 1.80 |
| T417-1 | Matching Trans. 52/300Ω | 3.00 | 1.80 |
| T418-1 | Admiral, Philco, G.E. | 3.20 | 1.92 |
| T419-2 | 2 pcs. Philco | 3.40 | 2.04 |
| T420-2 | 2 pcs. Philco | 2.70 | 1.62 |
| T421-2 | 2 pcs. Philco | 2.70 | 1.62 |
| T422-2 | 2 pcs. Philco | 2.70 | 1.62 |
| T423-2 | 2 pcs. Philco | 2.70 | 1.62 |
| T424-1 | Admiral | 1.85 | 1.11 |
| T425-1 | Motorola | 2.70 | 1.62 |
| T426-1 | Westinghouse | 1.60 | .96 |
| T427-1 | General Electric | 3.70 | 2.22 |
| T428-1 | General Electric | 2.15 | 1.29 |
| T429-1 | General Electric | 3.85 | 2.31 |
| T430-1 | General Electric | 3.85 | 2.31 |
| T431-1 | General Electric | 3.25 | 1.95 |
| T432-1 | General Electric | 2.00 | 1.20 |
| T433-1 | General Electric | 4.00 | 2.40 |
| T434-1 | General Electric | 2.10 | 1.26 |
| T435-1 | General Electric | 2.20 | 1.32 |
| T436-1 | General Electric | 2.20 | 1.32 |
| T437-1 | General Electric | 2.20 | 1.32 |
| T438-1 | Admiral | 2.00 | 1.20 |
| T439-1 | Admiral | 2.20 | 1.32 |
| T440-1 | Admiral | 2.95 | 1.77 |
| T441-1 | Admiral | 2.05 | 1.23 |
| T442-1 | Zenith | 2.20 | 1.32 |
| T443-1 | G.E., Philco | 2.95 | 1.77 |
| T444-1 | Philco | .95 | .57 |
| T445-1 | Philco | 1.80 | 1.08 |
| T446-1 | Admiral | 2.95 | 1.77 |
| T447-1 | Westinghouse | 2.80 | 1.68 |
| T448-1 | Westinghouse | 4.50 | 2.73 |
| T450-1 | Westinghouse | 2.45 | 1.47 |
| T451-1 | Westinghouse | 2.95 | 1.77 |
| T453-1 | RCA | 3.00 | 1.80 |
| T454-1 | RCA | 3.00 | 1.80 |
| T455-1 | General Electric | 5.40 | 3.24 |
| T457-1 | Airline | 1.55 | .93 |
| T460-1 | General Electric | 3.70 | 2.22 |
| T461-1 | Magnavox | 3.20 | 1.92 |
| T462-1 | Motorola | 2.10 | 1.26 |
| T466-1 | RCA | 3.25 | 1.95 |
| T467-1 | Zenith | 2.70 | 1.62 |
| T468-1 | Westinghouse | 2.20 | 1.32 |
| T469-1 | Westinghouse | 3.60 | 2.16 |
| T470-1 | Westinghouse | 2.60 | 1.56 |
| T471-2 | CBS | 2.00 | 1.20 |
| T473-1 | Dumont | 3.25 | 1.95 |
| T474-1 | Silvertone | 2.85 | 1.71 |
| T476-1 | Zenith | 1.15 | .69 |
| T477-1 | Admiral | 2.00 | 1.20 |
| T478-2 | Philco | 3.20 | 1.92 |
| TB501-1 | IRCA | 3.70 | 2.22 |

I. F. TRANSFORMERS



| MODEL | DESCRIPTION | List | Dealer |
|---------|-----------------------------|------|--------|
| TC601-1 | 2nd I.F. | 4.95 | 2.97 |
| TC622-1 | 1st I.F. | 4.95 | 2.97 |
| TC623-1 | 2nd I.F. | 4.95 | 2.97 |
| TC624-1 | Output I.F. | 4.95 | 2.97 |
| TC625-1 | Output I.F. | 4.95 | 2.97 |
| TC626-1 | Discriminator | 4.95 | 2.97 |
| T604-2 | 262 KC Input I.F. | 3.70 | 2.22 |
| T606-2 | 262 KC Output I.F./filter | 3.70 | 2.22 |
| T607-2 | 455 KC Input I.F. | 3.70 | 2.22 |
| T609-2 | 455 KC Output I.F./filter | 3.70 | 2.22 |
| T611-2 | 455 KC Output I.F. for bat. | 3.70 | 2.22 |
| T646-2 | 455 KC Input for AC/DC | 3.70 | 2.22 |
| T655-2 | 262 KC Input I.F. | 3.70 | 2.22 |
| T656-2 | 262 KC Output I.F./filter | 3.70 | 2.22 |
| T657-2 | 455 KC Output I.F./filter | 3.70 | 2.22 |
| T664-2 | 455 KC Input I.F. for bat. | 3.70 | 2.22 |

COILS

OVER

3000

NUMBERS

IN STOCK

Exact Replacements

FOR OVER 200 MANUFACTURERS INCLUDING

| | |
|----------|---------------|
| G. E. | BENDIX |
| PHILCO | CBS |
| MOTOROLA | EMERSON |
| ZENITH | HALLICRAFTERS |
| ADMIRAL | MAGNAVOX |
| RCA | SYLVANIA |

COILS

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. FOR A COMPLETE LISTING OF EXACT REPLACEMENT COILS ASK YOUR JOBBER FOR OUR COIL CROSS REFERENCE.

ALL NEW ATR Karadio

"the oldest name in auto radio"

With Excellent Tone, Sensitivity, and Volume!

- HAND WIRED—NO PRINTED CIRCUITRY
- EQUIVALENT 8 TUBE PERFORMANCE
- FINGER-TIP TONE CONTROL
- AUTOMATIC VOLUME CONTROL

TRANSISTOR-POWERED

ATR Karadio MODEL 400 SERIES



Easily installed in-dash or under-dash. Superheterodyne circuit utilizing 4 tubes (two dual purpose tubes) together with two (2) transistors... pulls in those distant stations with good tone and volume. Supplied with separate 5" x 7" speaker which is installed in original automobile speaker compartment for high fidelity performance. Neutral gray-tan baked enamel finish. Overall size 6 1/2" deep x 6 1/2" wide x 2" high. Shipping weight, 6 lbs.

| DESCRIPTION | KARADIO MODEL | LIST PRICE | DEALER PRICE |
|-----------------------------|---------------|------------|--------------|
| Universal 12-Volt Neg. Gnd. | 401 | \$39.95 | \$31.96 |
| Universal 12-Volt Pos. Gnd. | 402 | 39.95 | 31.96 |

TUBE-OPERATED



ATR Karadio MODEL 600 SERIES

Easily installed in-dash or under-dash. Amplifier power-supply chassis may be separated from tuner chassis for installation flexibility and easy servicing. Utilizes 6-tube superheterodyne circuit (2 dual-purpose tubes) with 8-tube performance... pulls in those distant stations with good tone and volume. Supplied with separate 5" x 7" speaker which is installed in original automobile speaker compartment for high fidelity performance. Neutral gray-tan baked enamel finish. Overall size 4" deep x 6 1/2" wide x 2" high. Tuner Chassis with Amplifier Chassis, 2 3/4" deep x 6 1/2" wide x 3 1/4" high. Shipping weight 7 lbs. WILL DUTPERFORM MOST SETS!

| DESCRIPTION | KARADIO MODEL | LIST PRICE | DEALER PRICE |
|-------------------------------|---------------|------------|--------------|
| Universal 12-Volt No Polarity | 612 | \$39.95 | \$31.96 |
| Universal 6-Volt No Polarity | 606 | 39.95 | 31.96 |



ATR Karadio MODEL TR/K-1279 SERIES

Easily installed in-dash or under-dash. Utilizes 6-tube superheterodyne circuit with 8-tube performance... pulls in those distant stations with good tone and volume. Has built-in Alnico 5 magnet PM speaker. Neutral gray-tan baked enamel finish. Overall size 7" deep, 4" high, and 6 1/2" wide. Shipping weight, 7 lbs.

| DESCRIPTION | KARADIO MODEL | LIST PRICE | DEALER PRICE |
|-------------------------------|---------------|------------|--------------|
| Universal 12-Volt No Polarity | TR K-1279-12 | \$44.95 | \$33.57 |
| Universal 6-Volt No Polarity | TR K-1279-6 | 44.95 | 33.57 |

ATR TRUCK Karadio



Easily installed in cab of truck or boat by simply drilling one (1) hole. Overhead mounting adds extra safety to driving. Utilizes 6-tube superheterodyne circuit with 8-tube performance... pulls in those distant stations with good tone and volume. Has built-in Alnico 5 magnet PM speaker. Neutral gray-tan baked enamel finish. Overall size radio set only, 7" deep, 4" high, and 6 1/2" wide. Comes complete with antenna as shown. Shipping weight 10 1/2 lbs. Perfect for all trucks.

| DESCRIPTION | KARADIO MODEL | LIST PRICE | DEALER PRICE |
|--------------------|---------------|------------|--------------|
| All Trucks 12-Volt | TR-1279-12A | \$59.95 | \$41.96 |
| All Trucks 6-Volt | TR-1279-6A | 59.95 | 41.96 |

ATR CUSTOMIZED Karadio

ATR CUSTOMIZED Karadios for the American cars and imports listed herein utilize Model 600 series Model 400 series or Model TR K-1279 series KARADIO as applicable for the battery voltage system and make of car specified in most cases the Model 600 series KARADIO may be utilized. If there is a preference for the Model 400 series, this may be made available by so specifying, for 12 volt systems.



ATR CUSTOMIZED KARADIOS FOR AMERICAN CARS

| YEAR | DESCRIPTION | KARADIO MODEL | LIST PRICE | DEALER PRICE |
|---------|-----------------------------|---------------|------------|--------------|
| 1962-61 | Buick Special | BKS502 | \$46.95 | \$35.25 |
| 1958-55 | Buick | BKS504 | 45.95 | 33.97 |
| 1960-59 | Chevrolet | CT505 | 45.95 | 33.97 |
| 1958 | Chevrolet | CT506 | 45.95 | 33.97 |
| 1954-55 | Chevrolet | CT508 | 45.95 | 33.97 |
| 1954-55 | Chevrolet | CT510 | 45.95 | 33.97 |
| 1962-60 | Chev GMC Truck | GMC511 | 45.95 | 33.97 |
| 1959-55 | Chev. GMC 101 Dnly | GMC512 | 46.95 | 35.25 |
| 1962 | Chevy II | CT514 | 47.95 | 35.87 |
| 1962-60 | Comet | COT515 | 46.95 | 34.97 |
| 1962-60 | Corvair | COR516 | 49.95 | 36.97 |
| 1959 | Chrysler | CHR518 | 47.95 | 35.87 |
| 1961-60 | Desoto | DES520 | 47.95 | 35.87 |
| 1959 | Desoto | DES522 | 47.95 | 35.87 |
| 1962 | Dodge Dodge Dart | DGE524 | 47.95 | 35.87 |
| 1961-60 | Dodge Dodge Dart | DGE526 | 47.95 | 35.87 |
| 1962-60 | Ford | F0530 | 45.95 | 33.97 |
| 1959-57 | Ford | F0532 | 45.95 | 33.97 |
| 1954 | Ford | F0533 | 45.95 | 33.97 |
| 1962-60 | Ford | FAL534 | 45.95 | 33.97 |
| 1962 | Ford Fairlane "500" | FD536 | 45.95 | 33.97 |
| 1962 61 | Ford Econoline Truck | FETS37 | 46.95 | 35.25 |
| 1961 | Int'l Truck "100" | INT539 | 46.95 | 35.25 |
| 1962 | Lancer | LR538 | 45.95 | 33.97 |
| 1962 | Mercury Meteor | MT540 | 47.95 | 35.87 |
| 1961 | Mercury Meteor 600-800 only | MT542 | 47.95 | 35.87 |
| 1962-61 | Oldsmobile F-85 | OE543 | 46.95 | 35.25 |
| 1962-60 | Plymouth | PH544 | 45.95 | 33.97 |
| 1958 | Plymouth | PH546 | 47.95 | 35.87 |
| 1956 | Plymouth | PH548 | 46.95 | 34.97 |
| 1955 | Plymouth | PH549 | 46.95 | 34.97 |
| 1962-61 | Pontiac Tempest | PCT550 | 46.95 | 35.25 |
| 1960-59 | Pontiac | PC552 | 47.95 | 35.87 |
| 1962-61 | Rambler American | RA554 | 46.95 | 35.25 |
| 1960-58 | Rambler American | RA556 | 46.95 | 35.25 |
| 1962-60 | Rambler | RB558 | 46.95 | 35.25 |
| 1959-58 | Rambler | RR560 | 46.95 | 35.25 |
| 1962 | Studebaker Lark | STL562 | 46.95 | 35.25 |
| 1961 | Studebaker Lark | STL564 | 46.95 | 35.25 |
| 1960-59 | Studebaker Lark | STL566 | 46.95 | 35.25 |
| 1962-61 | Valiant | VAL568 | 45.95 | 33.97 |

ATR CUSTOMIZED KARADIOS FOR IMPORT CARS

| YEAR | DESCRIPTION | KARADIO MODEL | LIST PRICE | DEALER PRICE |
|---------|--------------------------------------|---------------|------------|--------------|
| 1960-62 | Austin A-55 | AA569 | \$46.95 | \$34.97 |
| 1957-59 | Borgward Isabella | BD570 | 45.95 | 33.97 |
| 1959 | Goliath | GH571 | 45.95 | 33.97 |
| 1958 | Goliath | GH572 | 45.95 | 33.97 |
| 1956-59 | DKW | DW573 | 45.95 | 33.97 |
| 1960-62 | English Ford, Consul, Zephyr, Zodiac | EF574 | 48.95 | 36.67 |
| 1957-59 | English Ford, Consul, Zephyr, Zodiac | EF575 | 48.95 | 36.67 |
| 1958-62 | Fiat | FT576 | 45.95 | 33.97 |
| 1957-58 | Hillman Minx | HM577 | 45.95 | 33.97 |
| 1958-62 | Hillman-Minx | HMS78 | 45.95 | 33.97 |
| 1958-62 | Karmen Ghia | KG579 | 45.95 | 33.97 |
| 1960 | Mercedes Benz 220S | MB580 | 46.95 | 35.25 |
| 1958-60 | Mercedes Benz 190SL | MB581 | 46.95 | 35.25 |
| 1958-62 | MGA | MG582 | 45.95 | 33.97 |
| 1957-62 | Morris Minor | MM583 | 46.95 | 34.97 |
| 1958-59 | Opel | OL584 | 46.95 | 34.97 |
| 1958-59 | Peugot | PT585 | 45.95 | 33.97 |
| 1957-58 | Renault Dauphine | RT586 | 45.95 | 33.97 |
| 1959-62 | Renault Dauphine | RT587 | 45.95 | 33.97 |
| 1959-60 | SAB | SAB588 | 46.95 | 35.25 |
| 1958-60 | Simca Aronde | SA589 | 47.95 | 35.87 |
| 1959-60 | Elysee (12 Neg) | EE590 | 47.95 | 35.87 |
| 1962 | Triumph Sedan TR4 | TR591 | 46.95 | 35.25 |
| 1955-62 | Triumph TR 3 (12 Pus) | TR592 | 47.95 | 35.87 |
| 1958-60 | Versailles (12 Neg) | V593 | 45.95 | 33.97 |
| 1953-57 | Volkswagen (6 Neg) | VN594 | 45.95 | 33.97 |
| 1958-62 | Volkswagen (6 Neg) | VN595 | 45.95 | 33.97 |
| 1953-62 | Microbus (6 Neg) | VB596 | 45.95 | 33.97 |
| 1957-59 | Volvo 2-Door (6 Neg) | VO597 | 45.95 | 33.97 |
| 1960-62 | Volvo 1225 (6 Neg) | VO598 | 45.95 | 33.97 |
| 1962 | Volvo Sport (6 Neg) | VO599 | 45.95 | 31.97 |

ATR FULL CUSTOM Karadio



Illustrated is FULL CUSTOM Karadio for 1960-61 Ford and Falcon cars.

Blends perfectly with dashboard same as original equipment. Supplied with 6" x 9" speaker

Illustrated is FULL CUSTOM Karadio designed specifically for 1961-62 Chevrolet. Blends perfectly with dashboard same as original equipment. All FULL CUSTOM Karadios listed herein supplied with separate 6" x 9" speaker which is installed in original automobile speaker compartment for high fidelity performance, tone and volume.

| YEAR | DESCRIPTION | KARADIO MODEL | LIST PRICE | DEALER PRICE |
|---------|-----------------|---------------|------------|--------------|
| 1962-61 | Buick Special | BKS410 | 49.95 | 36.97 |
| 1962-61 | Chevrolet | CT412 | 49.95 | 36.97 |
| 1962-60 | Corvair | CR414 | 49.95 | 36.97 |
| 1962-60 | Comet | CO1416 | 49.95 | 36.97 |
| 1962 | Dodge Dart | DE418 | 49.95 | 36.97 |
| 1962-60 | Falcon | FAL420 | 49.95 | 36.97 |
| 1962-60 | Ford | FD422 | 49.95 | 36.97 |
| 1962 | Lancer | LR424 | 49.95 | 36.97 |
| 1962 | Mercury | MY426 | 49.95 | 36.97 |
| 1962-61 | Oldsmobile F-85 | DEF428 | 49.95 | 36.97 |
| 1962 | Plymouth | PH430 | 49.95 | 36.97 |
| 1962-61 | Pontiac Tempest | PCT432 | 49.95 | 36.97 |
| 1962 | Valiant | VT434 | 49.95 | 36.97 |

The FULL CUSTOM Karadios listed herein utilize the Model 400 Series, Transistor-Powered KARADIO. If there is a preference for the Model 600 Series, Tube-Type, this may be made available by so specifying.

ATR Karadios are built to look and fit like original equipment with sleek, modern styling and solid construction. They offer many customized features and provide highest quality fidelity—yet cost far less than comparably designed units. The ATR Customized Karadio comes complete with car speaker ready to install... and is the ideal way to add fun and value to your small import or American automobile!

The KARADIOS as listed for the American cars are supplied with separate external 6" x 9" or 5" x 7" speakers depending on installation requirements. The KARADIOS as listed for the imports, are supplied with separate external 5" x 7" to 5" speakers depending on the installation requirements. The KARADIOS listed herein come either with neutral gray-tan baked enamel finish or natural lead coated steel finish. The choice of finish also depends on the car and installation requirements. All of the ATR KARADIO models listed herein are equipped with variable tone control, trim plate or bezel, generator condenser, distributor suppressor, hardware, and speaker as required.

Each radio is packaged in one carton complete. Shipping weight of all of the above listed Customized KARADIOS and FULL CUSTOM KARADIOS is 8 lbs with the exception of the KARADIO for Corvair which is 10 lbs.

Type 35 Telescopic chrome plated antenna available for any of the above KARADIOS. Extends to 35" complete with 48" cable. If antenna is desired, please so specify and this will be shipped as a separate item. Additional pricing for the antenna is as follows: List Price \$2.95 Dealer Price \$2.07 Shipping Weight 1 lb.

All prices and specifications subject to change without notice.

Trade-marks of ATR Electronics, Inc. Registered in the U.S. Patent Office.

ATR TRUCK Karadio

most versatile truck-auto-boat radio ever designed!

FEATURES

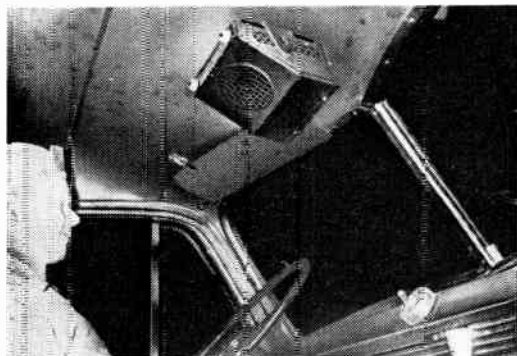
- The in-line position of the speaker in this compact 6-pound radio permits more sound to reach the listener, so that the volume need not be turned up to the point of distortion even when driving fast.
- A fixed-length antenna (optional equipment) connected to the receiver by a 12-inch lead permits proper matching of the antenna to the receiver under all conditions, thus increasing the set's sensitivity.
- Finger-tip tone control to adjust tone as you desire.
- Automatic volume control to keep signals strong and steady.
- Its powerful 6-tube circuit (actual 8-tube performance) outperforms most larger and bulkier sets!
- The life of the radio has been increased considerably due to specially designed yoke-type flat-spring-mounting and excellent ventilation.
- The ATR Karadio is simple to service—merely take off two easily accessible thumb nuts and remove the entire set.
- The unit can be installed quickly and easily—drill ONE hole . . . connect ONE wire, and the set is ready for use.
- Overhead mounting adds extra safety to driving, because the driver never has to take his eyes off the road to tune or adjust the set.
- Yoke-type tilt bracket mount permits radio to be adjusted to curvature of any cab or as desired by driver.
- Sturdy lock-nut and washers hold radio set mount securely to cab top through $\frac{5}{8}$ " hole drilled in ceiling.
- 33" stainless steel antenna bends in any direction.
- Set is peaked to maximum efficiency with given length of aerial.
- Antenna lead only 12" in length.

For performance, dependability, and economy—the ATR Karadio is the finest, most versatile truck-auto-boat radio ever designed!

SPECIFICATIONS

- Large, easy-to-read dial.
- Extra large Alnico 5 Magnet PM Speaker.
- 6-Tube Superheterodyne Circuit (utilizes 2 dual purpose tubes) with 8-Tube Performance . . . pulls in those distant stations.
- Uses tube-type rectifier for longer uninterrupted service.
- No battery polarity input problem.
- 3-Section Super "Magne-Wave" Tuner.
- Increased sensitivity assures more powerful reception at greater distances.
- 6 or 12 volt storage battery operation, low battery drain.

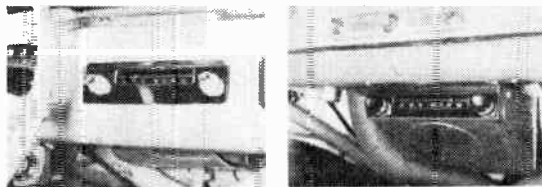
Neutral Gray-Ton, baked enamel finish. Overall size, 7" deep, 4" high, and 6 $\frac{1}{2}$ " wide. Net weight, radio set, 6 lbs., shipping weight, complete with antenna, 10 $\frac{1}{2}$ pounds.



ATR TRUCK KARADIO is perfect for your truck! New self-contained, single-unit overhead airplane-style radio can be easily installed in the cab roof of any make or model truck, or if you prefer, in-dash or under-dash.

EASY TO INSTALL

1. Drill one $\frac{5}{8}$ " hole in ceiling.
2. Tighten antenna with lock-nut assembly and connect one wire.



The ATR KARADIO is ideal for small import cars or compact American cars! Unit is completely self-contained—extremely compact! Can be mounted in-dash or under-dash—wherever space permits!

TR-1279-6A, 6-Volt Model . . . Dealer Price \$41.96

TR-1279-12A, 12-Volt Model Dealer Price \$41.96

33" stainless steel antenna, spring mounted bends in any direction.

Rubber washer and lock-nut assembly provides watertight, trouble-free roof installation.

Yoke-type flat bracket-spring protects set against vibration.

Short antenna lead only $\frac{1}{4}$ the length normally required.

Yoke-type bracket-mount permits tilting of radio to any required angle.

**Hand Wired
No Printed
Circuitry**

**AVAILABLE
WITH OR
WITHOUT
ANTENNA,
AS DESIRED.**

**FOR 6-VOLT
OR 12-VOLT
BATTERY
SYSTEM.**

Finger-Tip Tuning Control

Large, easy-to read dial.

Oversize, powerful Alnico 5 Magnet PM Speaker.

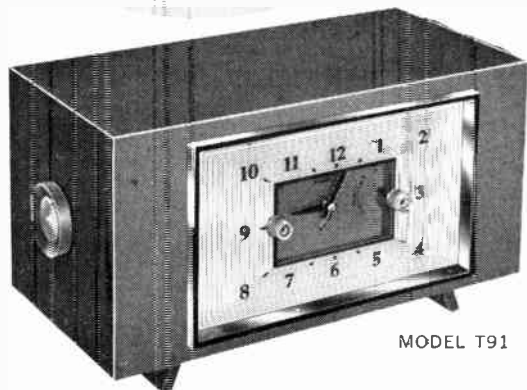
Volume Control

Tone control

JOBBERS ATTENTION: See Page 646 in this ATR Section and Page 1030 in Section 4000 for your Catalog Needs!

ATR

Ultra Modern TABLE RADIOS



MODEL T91

CLOCK RADIO WITH BUILT-IN SALES APPEAL

Excitingly styled clock radio—trim, modern cabinet in ebony or ivory plastic . . . rich gold-color trim and clock numerals. Powerful 5-tubes AM radio chassis with built-in "Magna-Plate" antenna. Full-toned 4" PM speaker. Popular features include: *Musical Alarm*—radio turns on automatically at any pre-set time; *Sleep Selector*—lulls user to sleep, turns radio off automatically during 60 minute period after retiring; *Automatic Appliance Timer*—outlet on back of radio times any electric appliance automatically (up to 1100 watts). Cabinet 10½ in. wide, 5 in. high, 5½ in. deep. Wt. approx. 8 lbs. A WONDERFUL TONIC FOR NEW SALES . . . BIGGER PROFITS!

Model T-91 Clock Radio, Black Dealer Price \$22.45
 Model T-91 Clock Radio, Ivory Dealer Price \$23.15

CLOCK SPECIFICATIONS ON MODEL T91 ONLY

- Genuine Telechron Movement . . . Accurate, Quiet, and Long-Lived.
- Self-Starting . . . Never Needs Winding, Oiling, or Regulating.
- Simplified Clock Controls for Radio and Sleep Switch.
- 1100 Watt Controlled Appliance Outlet.
- Automatic Buzzer Alarm Sounds Approximately 10 Minutes After Sleep-Switch Turns On Radio.
- Gold-Plated Bezel and Numerals on Large Bone-White Dial. Dial Size 4¼" x 7¼"
- UL Approved

GENERAL SPECIFICATIONS PERTAINING TO ALL ATR TABLE RADIOS

- **Advanced Super-heterodyne Circuit**—Increased selectivity and sensitivity with improved tube types . . . High audio output . . . Automatic volume control . . . two gang variable condenser.
- **Sealed Alnico 5 PM Dynamic Speaker**—Full range frequency . . . Power without distortion . . . Balanced tone quality.
- **Automatic Volume Control**—Maintains uniform volume on local and long distance reception.
- **Genuine Magna-Wand Ferrite Antenna**—Magna-Wand used in conjunction with Hi-Q Iron Core IF Coils for extreme sensitivity and selectivity . . . High signal-to-noise ratio.
- **Power Line Noise Filter**—Minimum interference from household appliances, motors, etc.
- **Wave Band:** 540 to 1600 KC
- **Tubes—**

| | |
|------------------------------|----------------|
| 12BA6—456 KC IF Amplifier | 12BE6—Mixer |
| 12AV6—2nd detector-1st Audio | 35W4—Rectifier |
| 50C5—Audio Power Output | |
- **Power Supply:** 115 Volts, 60 Cycles AC
- **Cabinet**—Beautiful compression molded bakelite with shadow box effect dial and complementing golden knobs and trim. Resistant to heat.

HAND WIRED — NO PRINTED CIRCUITRY



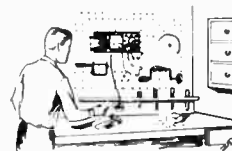
MODEL T87



for Kitchen



for Den



for Workshop

ATR "TILT-A-STAND" RADIO MOUNT ON THE WALL—UNDER A SHELF— OR SET ON A TABLE

PERFECT for every room in YOUR home

A NEW HIGH IN RADIO USEFULNESS . . . It rotates a full 360° on a beautiful golden pedestal. Pedestal is notched for screws, giving unlimited mounting possibilities. THE HANDIEST RADIO EVER! The gleaming molded bakelite cabinet is enhanced by a contrasting recessed grill and rich golden dial pointer and controls. Distinctive dial with large Roman numerals.

Excitingly new and different . . . radio is mounted on sturdy, gleaming brass-finished stand. Radio tilts up or down easily to any desired angle. Keyhole slot in stand makes this versatile performer easy to mount on wall out of way of small hands. Perfect for den, kitchen, or bedroom. Power-packed 5-tubes chassis. Built-in loop antenna. Automatic volume control. Full 4" Alnico 5 speaker. Distinctive Roman numerals on dial. Size: 9½" W x 4" D x 5¾" H. AC/DC. U.L. approved. Weight 5½ lbs.

Model T-87 (Tilt-A-Stand), Black . . . Dealer Price \$17.47
 Model T-87 (Tilt-A-Stand), Red . . . Dealer Price \$18.10

JOBBER ATTENTION: See Page 646 in this ATR Section and Page 1030 in Section 4000 for your Catalog Needs!

FOR THOSE WHO WANT THE FINEST!

ATR TV

15 FULL-DOOR and 12 OPEN FACE
DE LUXE CONSOLE TELEVISION SETS
. . . to choose from!

FEATURING THE ULTIMATE IN HIGH-QUALITY, AUTHENTICALLY-STYLED, FINE-FURNITURE CABINETS AND THE FULL-TRANSFORMER SUPER-POWERED ATR No. 2600 CHASSIS.

Includes push-pull high-fidelity audio system; dual extended-range, large permanent magnet speakers; spot-light tuning; giant 265 square inches 90° aluminized 21" picture tube; and super VHF tuner for high sensitivity fringe area reception.

The Biltmore

by **ATR**

Pictured:
Model
26007 LD-4
in mahogany



Distinctively styled in genuine walnut, mahogany or blonde Korina. Hand rubbed to a gleaming, hard finish of lasting beauty. Features the superb No. 2600 ATR chassis. Dimensions: 24½" wide, 36½" high and 20" deep. Concealed casters for mobility.

- UNSURPASSED
IN BEAUTY
- UNEQUALLED
IN
PERFORMANCE
- UNMATCHED
IN
QUALITY
CONSTRUCTION



Model No. 26002
(Illustrated)

Provincial by **ATR**

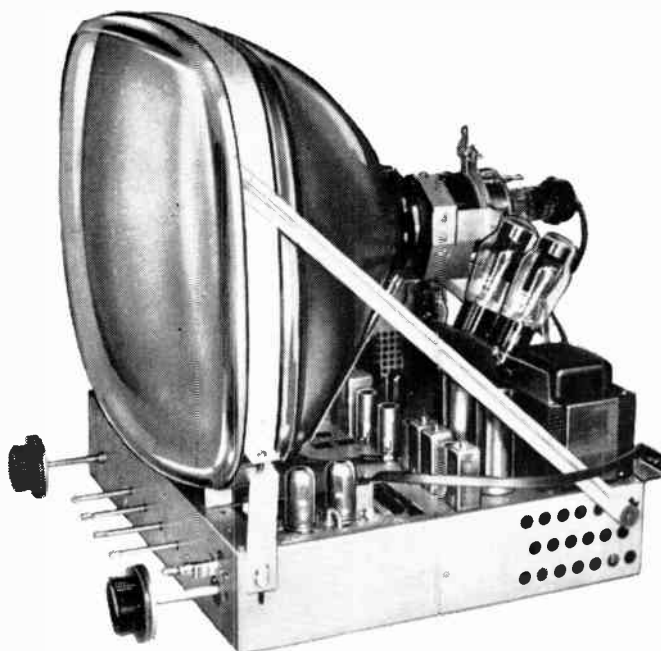
Cabinet has concealed casters for easy mobility. Available in 18th Century Mahogany, Early American Antique Maple and French Provincial in Cherrywood with Fruitwood finish. Dimensions: 24½" wide, 36½" high, and 20" deep. Rich finishes are applied and hand rubbed to smooth lustrous beauty.

ATR TV

**SUPER-POWERED ATR
No. 2600 FULL-TRANSFORMER
CHASSIS**
For Maximum Dependability
and Performance

SPECIALLY DESIGNED BY ATR FOR
MOVIE-CLEAR, SHARPEST PICTURES WITH
MAXIMUM PICTURE STABILITY
DESIGN AND CONSTRUCTION INCLUDE
EXTRA VALUE FEATURES THAT MAKE
FOR QUALITY PLUS . . .

- 18,000 volts of quality picture power
- Super-powered full-transformer
26 tube chassis
- Extended-range speakers of heavy
duty construction
- Automatic gain control
- 4-Stage 41 MC IF amplifier
- Interference rejector
- Push-pull audio system
- Permanent-magnet focus
- Higher gain video amplifier



- Wider band width
- Precision interlace
- Highest quality components including
molded capacitors
- Improved dependable long life ATR
circuitry
- Front tuning of all important control
functions

JOBBER'S ATTENTION: See Page 646 in this ATR Section and Page 1030 in Section 4000 for your Catalog Needs!

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BLONDER * TONGUE

Newark, N. J.

AVAILABLE IN CANADA FROM: BENCO TELEVISION ASSOCIATES LTD. REXDALE, ONTARIO

MASTER & COMMUNITY ANTENNA SYSTEM COMPONENTS

for motels, hotels, apartments, houses, schools, communities, etc.

SINGLE CHANNEL AMPLIFIERS

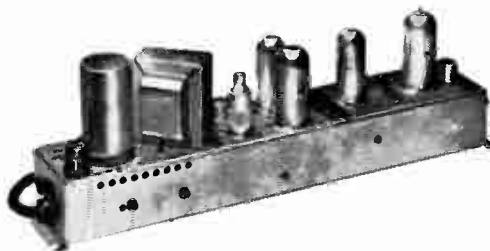
MODEL MCSc AGC CONTROLLED AMPLIFIER

An MCSc is available for each VHF channel and the MCSc-FM covers the entire FM band. Each MCSc has a built-in, fuse-protected power supply. MCSc units also have built-in mixing networks so that the output of each MCSc in a system may be plugged into the next MCSc; at the final output all of the channels are being fed into one coaxial cable.

AGC action enables MCSc units to provide uniform outputs even though the strengths of the inputs vary. Two operating controls (Gain & AGC) increase the versatility of these amplifiers.

Gain: at least 46 db, ch. 2-6; 38 db, ch. 7-10; 35 db; 11-13. Max. output; 1.0 volts (for less than 1% cross-modulation); 2 volts (for less than 3% cross-modulation).

Net MCSc—\$89.00. MCSc-FM—\$180.00



MODEL CB MAST-MOUNTED PREAMPLIFIER

Completely weatherproof. Amplifies any specified VHF channel. Low noise. 21 db minimum gain on lo band; 18 db minimum on high band (when 1 output is used). Max. output 0.5 volts for less than 1% cross-modulation. 300 ohm input; two 75 ohm mixing outputs. Net \$39.00

MODEL PA HIGH-GAIN FAST AGC PREAMPLIFIER

Designed for the head-end of community, and apartment systems where the signal received is very low. Incorporates a low noise cascode input, together with a high gain AGC circuit. Can be used with inputs as low as 50 microvolts. Provides an output of 50,000 microvolts for input signals of 50 microvolts and over. When the PA Amplifier is used alone to feed an apartment system, the output may be turned up to give as high as 1.0 volt output. Net \$175.55

PA-LN—Very low noise PA with 7077 ceramic triodes.

Net \$356.40



MODEL CA VHF SINGLE CHANNEL LINE AMPLIFIER

Designed for re-amplification and distribution of VHF and FM signals in community and large apartment systems. Has 60 db gain. Incorporates full AGC circuit for minimum cable losses and steady signal at all times. Minimum input for cascading is 1,000 microvolts; maximum input 30,000 microvolts. With full 6 megacycle bandwidth, up to 20 units can be cascaded without picture deterioration. Input and output impedances are 75 ohms.

Net \$150.48

MODEL UA-1 UNISTRIP TV/FM AMPLIFIER

Efficient two-tube amplifier for specified channel. Has 35 db gain, 75 ohm single input, dual 75 ohm output. Built-in level control, full 6 megacycle bandwidth, maximum 1 volt output. Requires use with single-unit Minipak or triple-unit Unipak power supply.

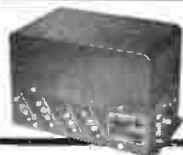
Net \$42.90

NEW! HIGH OUTPUT AMPLIFIERS (2 models)

MODEL CAP-2—Used in high level distribution systems. Features 3 volts maximum output, mixing outputs, 65 db gain, built-in RF filter and AGC control. Net \$183.00

MODEL HTA-2—Used in high level distribution systems. Features 10 volts maximum output, mixing outputs and built-in RF filter. Net \$470.00

BROADBAND AMPLIFIERS



MODEL DA8-B 8 OUTPUT DISTRIBUTION AMPLIFIER

MODEL DA8-B—Provides 8 amplified, isolated TV outputs from one input. Choice of 75 ohm or 300 ohm input and output. 10 db minimum gain. Gain control. Net \$63.00

MODEL PM-1 PACEMAKER 35 DB TV/FM AMPLIFIER

Broadband amplifier for master TV systems offers gain of up to 35 db. A well ventilated amplifier for indoor use, it has a power drain of less than 50 watts. It may be used outdoors if a weatherproof container is provided. It will operate at peak efficiency even when being used for as many as 100 TV and/or FM sets at a time. Gain: 35 db, channels 2-6; 30 db, 7-13; Noise figure: 6 db average; Max. output 2 volts per band.

Net \$69.80



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Newark, N. J.

AVAILABLE IN CANADA FROM: BENCO TELEVISION ASSOCIATES LTD. REXDALE, ONTARIO

MASTER & COMMUNITY ANTENNA SYSTEM COMPONENTS

for motels, hotels, apartments, houses, schools, communities, etc.

BROADBAND AMPLIFIERS**MODEL AB-3 MAST-MOUNTED TV/FM AMPLIFIER (with remote power supply)**

MODEL AB-3—Low-noise amplifier virtually eliminates snow. Can be used in a fringe area home installation, or as a pre-amplifier in a master TV system.

The remote power supply sends AC power up the mast mounted amplifier on the same down-lead that carries the antenna signal down. It provides the correct power to the amplifier for any length of connecting cable up to one mile (when open twin-lead is used). Amplifier uses low noise frame-grid tubes. Provides 25 db minimum gain on all VHF-TV and FM stations. Choice of 300 ohm or 75 ohm output. Stripless terminals for 300 ohm twinlead; solderless "quick-connect" terminals for 75 ohm coax. No balun is needed because the input is matched to 300 ohm antennas.

Net \$66.00

MODEL HAB

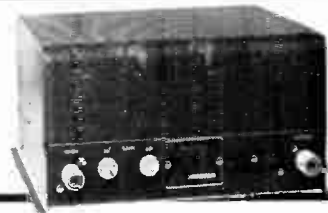
MODEL HAB—For use in master, community and home TV systems. 25 db min. gain. Bct† 300 ohms inputs and outputs. Separate hi and lo band gain controls. Uses frame grid tubes. Max. Output (across 75 ohms): 0.9 volts for less than 1% cross modulation (low band); 0.6 volts for less than 1% cross modulation (high band); 2.5 volts for less than 3% cross modulation (low band); 1.0 volts for less than 3% cross modulation (high band).

Net \$43.65

**MODEL MLA-B 40 DB TV AMPLIFIER**

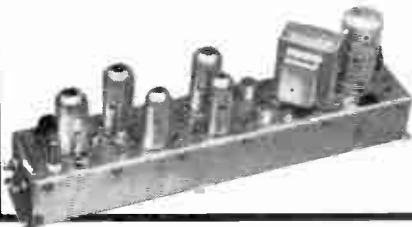
MODEL MLA-B—Broadband VHF amplifier with all the features essential for easy installation and superior reception in large or small TV systems. More than 40 db amplification on all VHF channels. Separate high and low band t and gain controls.

MAX. OUTPUT (across 75 ohms) 2.0 volts per band for less than 1% cross-modulation. 3.5 volts per band for less than 3% cross modulation. Net \$93.00

**AUDIO MASTER TV SOUND ORIGINATOR**

Originates TV signal for any specified VHF channel. Ideally integrated with MATV or CATV distribution system. Provides crystal-controlled unmodulated video carrier plus a sound carrier which can be modulated by tuner, microphone, recorder, etc. Audio carrier is 4.5 mc above vid. o frequency (TV Standards). Output impedance 75 ohms.

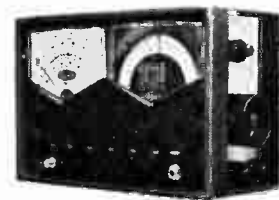
Net \$175.00

**TRANSISTOR FIELD STRENGTH AND WATTMETER**

Model FSP-3—Fully Transistorized, Truly Portable—weighs 10 lbs., Battery-Powered. Ideal instrument for field or lab use. Frequency: 52-220 mc in one range; Sensitivity: 5 microvolts minimum readable signal and 60 microvolts full scale; Bandwidth: 3 db points, percentage Modulation

Ranges: 0 to 5% and 0 to 50%. Measurement Range: 0 microvolts to 3 volts; in 18 ranges micro-microwatts to 10 watts in 10 ranges. Input impedance 75 ohm unbalanced and 300 ohm balanced.

Net \$445.50

**WEATHERPROOF HOUSING**

MODEL MRH-A—Weatherproof and radiation-proof enclosure for Master TV equipment. Has perforated mounting surface and adjustable support brackets. Front-opening sealed door and sturdy hasp. Irridite-finish, cadmium-plated steel. 18 1/4" x 14" x 6"

Net \$43.50

MODEL MWH-2—Same as MRH-A but not radiation-proof.

Net \$32.95

**AC LINE FILTER**

MODEL MLF—60 db RF isolation between amplifier and power line. Two AC receptacles, one power cable input connector. Mounts in any housing.

Net \$12.45

Indoor Breezeway Housing

MODEL BH-1—Fully ventilated. Perforated mounting surface. Keyed slots for vertical or horizontal mounting. Provision for locking. 20" x 27" x 10 1/2"

Net \$31.50

Unicase Outdoor Housing

Weather-proof housing for one UPK-1 power supply and associated equipment. 17 1/2" x 10 1/2" x 6"

Net \$24.65

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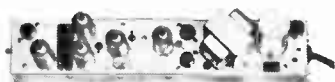
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AVAILABLE IN CANADA FROM: BENCO TELEVISION ASSOCIATES LTD. REXDALE, ONTARIO

MASTER & COMMUNITY ANTENNA SYSTEM COMPONENTS

for motels, hotels, apartments, houses, schools, communities, etc.

CONVERTERS



—Featuring built-in power supplies and mixing circuits for compact, inexpensive head end systems. These units provide amplification as well as conversion.

UHF TO VHF

CRYSTAL CONTROLLED

MODEL MUC — Converts specified UHF channel to specified VHF channel. Gain: 15 to 30 db (depending on conversion). Oscillator Stability: total change less than 0.01% over ambient temperature range 0°F to 110°F. Connections: 300 ohm input and two 75 ohm mixing outputs. Net \$235.00

MODEL CO-3—UHF to V-F Converter. Converts specified UHF channel to specified VHF channel. Has built-in UHF preamplifier, regulated power supply, stability 0-100 degrees 0.0025%; frequency accuracy 0.006%. Net \$424.60



ECONOMY

MODEL UC-2—Ideal for small systems. While it is not crystal controlled, it is quite stable when installed indoors. The UC-2 has a built-in power supply and two 75 ohm mixing outputs for maximum flexibility. When one output is used, it provides a minimum of 6 to 10 db gain, depending on conversion (3 db less when both outputs are used or terminated). The input is matched to 300 ohms. Net \$102.

VHF to UHF

CRYSTAL CONTROLLED

MODEL CO-2—Lo to hi, hi to lo, lo to lo, or hi to hi channel conversions with few exceptions. Conversion chart available. Provides off-channel conversions such as: lowering Channel 2 by 1 megacycle to provide an extra guard between Channels 2 and 3. Model CO-2. Net \$263.80

MODEL MLC—converts a specified VHF low channel (2-6) to another specified VHF low channel (2-6). Gain: 20 to 40 db depending on conversion. Oscillator stability: Total change less than .01% over temperature range 0°F to 110°F. Connections: 75 ohm input and two 75 ohm mixing outputs. Net \$246.00

MODEL MVC—converts a specified VHF high channel (7-13) to a specified VHF low channel (2-6). Oscillator stability: Total change less than 0.01% over temperature range of 0°F to 110°F. Connections: 75 ohm input and two 75 ohm mixing outputs. Net \$246.00

ECONOMY

MODEL UV-1 UNIVERTER—LO-to-HI, HI-to-LO Channel Converter. Converts specified VHF channels to specified UHF channels. Uses Minipak or Unipak power supply. Net \$92.93

Minipak—power supply for one Univerter. Net \$23.55

Model UPK-2—UNIPAK—power supply for 3 Univerters. Net \$48.95

ATTENUATORS

VARIABLE ATTENUATORS

MODEL SA-3—0 to 38 db. Laboratory accuracy. Steps of 6 db, 12 db, and 20 db. 75 ohm input and output. QD connectors. Net \$9.25

MODEL SA-7—0 to 62 db in steps of 1 db. Laboratory accuracy. 75 ohm input and output. "UHF" SO-239 type connectors. Net \$21.00

MAT—0 to 45 db in 3 db steps. 75 ohm input and output. UHF type connectors. Net \$14.60

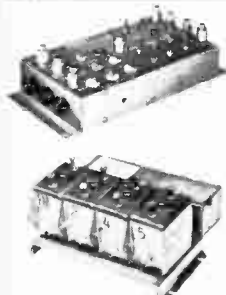
VAT—Steps of 3, 6, 9, 14, 20 and 23 db. 75 ohm input and output. Benconnectors. Net \$15.85

FIXED ATTENUATORS

LAT—Fixed. Specify 3 db, 6 db, 10 db, 14 db or 20 db. 75 ohm input and output. Benconnectors. Net \$4.90

FA—Specify 3, 6, 10 or 20 dbs. Net \$2.70

MIXERS, FILTERS & TRAPS



UNIMIX FILTER NETWORK—Can combine or separate 7 VHF TV channel signals without appreciable loss or interaction. The UNIMIX will accommodate 3 low band channels and four high band channels. Factory aligned to channels 2, 4, 6, 7, 9, 11 and 13. It can be aligned in the field to handle any VHF channel.

Also serves to equalize the seven antenna inputs by the use of plug-in attenuators. *(FM may be substituted for channel 6—order UNIMIX-FM which will pass all FM stations). Net \$54.80

MX-SERIES FILTERED MIXER/SPLITTERS—MODELS MX-2 THRU 13—Bandpass filters pretuned to one of 13 TV channels. Used either separately or with MX mixing bases to form mixers or splitters. 75 ohms input and output. At least 6 db down 9 mc from center of channel. Net \$5.75

BAND PASS FILTER—75 ohm band pass filter. Includes 2 traps. Traps alternate undesired frequencies by 80 db. Trap frequencies should be specified when ordering. Net \$110.90

75 OHM TRAP, MODEL Hi-Q-75—60 db attenuation of undesired frequency. Available for

each sound and picture carrier.

MWT-1—FM trap can be tuned to trap out any FM frequency. Net \$6.00

MWT-2—Lo Band FM trap can be tuned to attenuate any frequency from 54 thru 108 mc. Less than 0.25 db loss. Net \$34.40

MOEEL MX-FM—Same type as MX-2-13, pretuned to pass entire FM band. At least 8 db down 12 mc from center of channel. Net \$5.75

MOEEL MX-LB—Lo band mixing base mounts MX series filters. Accommodates up to four lo band filters. Up to three hi band filters can be mixed; insertion loss increases with more than two hi band filters. Net \$11.90

MOEEL MX-HB—Hi band mixing base mounts up to four hi band filters only. Net \$11.90

MOEEL MX-M—Used to mix or split hi band and lo band signals. Can also be used without MX series filters. 20 db minimum isolation between branches. Net \$5.35

OUTDOOR SINGLE-BROADBAND MIXER MOEEL CM-2 —Mixes or splits single channel with broadband. Specify channels. Net \$6.40

MWT-3—Hi Band trap can be tuned to attenuate any frequency from 134 thru 216 mc. Less than 0.25 db loss. Net \$34.40

FM EQUALIZER—6 traps cover entire FM band. Net \$96.80

engineered and manufactured by

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Newark, N. J.

AVAILABLE IN CANADA FROM: BENCO TELEVISION ASSOCIATES LTD. REXDALE, ONTARIO

PRODUCTS TO IMPROVE HOME TV RECEPTION**MAST-MOUNTED SIGNAL BOOSTERS**

TRANSISTOR MAST-MOUNTED 4-SET TV/FM BOOSTER, Model AB-4C—The world's most compact, powerful booster... a complete amplifier distribution system that will improve TV reception on up to 4 TV or FM sets. It consists of a transistor booster which is designed for mast mounting or anywhere along the lead-in for superior signal-to-noise ratio, powered by a separate power supply which can be installed in the house.

The Transistor circuit provides lowest noise, maintenance free operation—no tubes to burn out or replace—no heat dissipation problems. 17 db average gain on channel 2; 15 db on channel 6; 8.5 db average gain on high band (7-13) when used for one set. 4 set coupler incorporated in remote power supply distributes fully isolated amplified signals on up to 4 TV or FM sets.

Net \$22.80

MODEL AB-4—Same as AB-4C except with battery power supply that uses 4 low-cost flashlight batteries.

Net \$19.95

TUBED VHF TV BOOSTER, Model AB-2 (with RP-2 remote power supply)

All-channel VHF booster mounted at the antenna, is housed in weatherproof housing, and can be located 500 ft. from remote on-off control at TV set. Provides more than 9 db gain on all VHF channels. Single down lead carries AC power up to the amplifier and also conducts the amplified signal to the set. Uses frame-grid 6JDB tube for highest signal-to-noise ratio. Convenient swing down case simplifies maintenance. Employs 300 ohm, stripless terminals.

Net \$34.95

**IN-THE-HOME SIGNAL BOOSTERS**

TRANSISTOR 4-SET TV/FM BOOSTER, MODEL IT-4—The IT-4 "Quad booster" designed around a rugged, long-life transistor, is very inexpensive to operate and requires almost no maintenance. The transistor takes so little power that it need never be turned off. Specially designed for weak signal areas, the "Quad booster" provides crisp, brilliant pictures for as many as four TV or FM sets from a single antenna. Used for one set it increases signal strength 3 to 8 times. Used for two, three or four sets, it has amplifying power to spare and provides necessary isolation between sets.

Net \$19.80



3-SET TV/FM BOOSTER, MODEL B-33 Low-cost combination booster-distribution system provides clear, sharp reception for up to 3 TV or FM sets from one antenna. The B-33 more than doubles signal voltage for a single set, with excellent isolation.

Its frame-grid tube amplifier is ideal where there are both strong and weak signals because it can handle strong signals without overloading.

Net \$13.60

TV/FM POWER BOOSTER, MODEL BTA Low cost amplifier improves TV (black & white or color) and FM reception. Increases signal strength (7 to 9 db, channel: 2-14-4-8 db FM). 6 db average noise figure. Features: stripless 300 ohm terminals for easy installation; low-noise, frame grid tube.

Net \$10.95

4-SET TV/FM BOOSTER, MODEL B-24c Triples signal power to one set. Also acts as an amplified coupler to operate up to 4 TV or FM sets. Provides proper impedance match and isolation between sets and increases picture power when used with 2 or 3 sets. With 4 sets it insures that each TV or FM set receives more than 90% of the signal power picked up by the antenna.

Net \$16.65

**EXACT-MATCH COUPLERS**

2-SET COUPLER MODEL A-102—Delivers more signal to each TV or FM set, with greater inter-set isolation than other couplers. Isolation: 10-20 db. Net \$1.95

4-SET COUPLER MODEL A-104—Directional coupler with flat response from 50-220 mc. Feeds 4 VHF receivers from

one antenna, or mixes 4 antennas into one line. Isolation: 12-20 db. Net \$2.75

HI-LO ANTENNA COUPLER MODEL A-105 Combines high and low band VHF antennas, or provides separate high and low output from a single antenna. Isolation: 21 db. \$2.75

OUTDOOR MOUNTING KIT MODEL A-100

Provides hardware, bracket and strap assembly for mast mounting of A-102, A-104, A-105, A-107. Net \$6.66

UHF PRODUCTS**ULTRAVERTER UHF CONVERTER Model BTU-2**

Deluxe two-tube converter with low-noise frame-grid F amplifier. Tunes UHF channels 70 to 83. For all UHF receiving areas, especially fringe and translator applications. Has 5 to 8 db gain. Output on channel 5 or 6. Features stripless 300 ohm terminals, speed and fine tuning knobs, shielded three sections "ultra tuner," pilot light. Net \$28.00

UHF CONVERTER Model 99R

Supplies UHF reception for VHF receivers in primary signal areas. Tunes complete UHF range from 470 to 890 mc. Converts to VHF channel 5 or 6. Features three section tuners; 300 ohm stripless VHF and UHF terminals, and drift-compensated circuitry. Net \$17.40

AMPLIFIER UHF CONVERTER, Model BT-70

Similar to BTU-2 but designed especially for translator and MPATL area conversions. Low noise. Vernier tuning. Net \$30.95

**UHF MAST-MOUNTED BOOSTER, Model UB**

Six standard models cover specific UHF channels from 14 to 83. Uses two low-noise EC88/6DL4 frame-grid tubes which increase signal voltage by at least 14 db. Remote AC power supply sends a safe 24 volts to the mast-mounted amplifier on the same down-lead that conducts the signal. Automatically shuts off when most TV receivers are turned off. 300 ohm stripless terminals. Net \$62.00

UBP Similar to UB but 300 ohm input, 75 ohm output. Net \$80.00

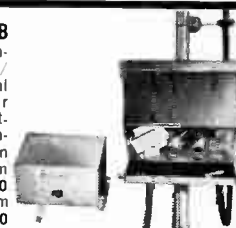
UBC Custom IIB. Choice of frequency ranges and connectors.

UHF-VHF ANTENNA COUPLER MODEL A-107

Combines UHF and VHF antennas, or provides separate VHF and UHF output from a single antenna. Isolation: 15 db. Net \$2.95

UHF HYBRID COUPLER MODEL UDC-1

UHF 300 ohm hybrid coupler. Channels 70-83 only. Net \$3.15



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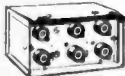
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AVAILABLE IN CANADA FROM: BENCO TELEVISION ASSOCIATES LTD. REXDALE, ONTARIO

SPLITTERS, TAPOFFS, FEED-THRUS, BALUNS, CONNECTORS**INDOOR TAPOFFS (12 db and 17 db isolation)**

| MODEL | TYPE OF MOUNTING | TYPE OF INPUT CONNECTORS | NO. OF OUTPUTS | TYPE OF OUTPUT CONNECTORS | ISOLATION | THRU LINE LOSS PER OUTPUT | NET PRICE |
|-----------|------------------------|--------------------------|----------------|---------------------------|-----------|---------------------------|-----------|
| TS-771B | Surface | QD | (1) | QD | 17 db | 0.7 db | \$2.95 |
| TS-771A | Surface | QD | (1) | QD | 12 db | 0.7 db | 3.60 |
| TF-771B | Flush | Stripless bridge | (1) | QD | 17 db | 0.7 db | 2.55 |
| TF-771BS | Flush, stainless steel | Stripless bridge | (1) | QD | 12 db | 0.7 db | 2.80 |
| T01-75 | Flush | Bridge | (1) | Auto Type | 17 db | 0.7 db | 3.75 |
| IS01-S | Flush, stainless steel | Bridge | (1) | Auto Type | 17 db | 0.7 db | 2.85 |
| TF-771AS | Flush, stainless steel | Stripless bridge | (1) | QD | 12 db | 0.7 db | 3.75 |
| TF-772B | Flush | Stripless bridge | (2) | QD | 17 db | 0.35 db | 3.75 |
| TF-772A | Flush | Stripless bridge | (2) | QD | 12 db | 0.7 db | 3.75 |
| T02-75 | Surface | QD | (2) | Auto Type | 17 db | 0.35 db | 4.80 |
| TS-731B | Surface | QD | (1) | Stripless Screws | 17 db | 0.7 db | 2.95 |
| TF-731B | Flush | Bridge | (1) | Stripless Screws | 17 db | 0.7 db | 2.15 |
| TSP-731A | Surface | Stripless bridge | (1) | Stripless Plug | 12 db | 0.7 db | 3.85 |
| TFP-731A | Flush | Stripless bridge | (1) | Stripless Plug | 12 db | 0.7 db | 3.30 |
| T02-300 | Surface | Bridge | (2) | Stripless Screws | 17 db | 0.35 db | 4.80 |
| T0-774A | Surface | QD | (4) | QD | 17 db | 0.6 db | 8.50 |
| T01-75S | Flush, stainless steel | QD | (1) | Auto Type | 17 db | 0.7 db | 3.30 |
| TFP-731BL | Flush | Stripless bridge | (1) | Stripless Plug | 17 db | 0.4 db | 3.90 |
| TF 771BL | Flush | Stripless bridge | (1) | QD | 17 db | 4.0 db | 3.45 |
| TSP-731BL | Surface | QD | (1) | Stripless Plug | 17 db | 0.4 db | 4.10 |
| TS-771BL | Surface | QD | (1) | QD | 17 db | 0.4 db | 3.60 |

**OUTDOOR TAPOFFS**

MIT-4—Four 75 ohm outputs from 75 ohm thru line. SO-239 connectors. 17 db isolation. 0.35 db thru loss, per output. Net \$17.50

MT-11—Spliceless. One 75 ohm tapoff from RG-11 U cable. Available with 12 db, 17 db or 23 db isolation loss. Net \$3.95

MT0-11—Spliceless. One 75 ohm tapoff from RG-11 U cable. Available with 12 db, 17 db or 23 db isolation loss. Net \$5.20

4T-75—Four 75 ohm outputs from 75 ohm thru line. Available with 12 db, 20 db or 30 db isolation. Net \$12.55

ST-4—Single 75 ohm output from 75 ohm thru line. Available with 12 db, 16 db, 20 db or 30 db isolation. Net \$6.40

FEED-THRU OUTLETS

TF-771 — Flush-mounted, feed-thru wall plate. Input and output both 75 ohms. Net \$1.85

TF-331 — Flush-mounted, feed-thru wall plate. Input and output both 300 ohms. Net \$1.05

TSP-331 — Surface-mounted box. 200 ohm input and 300 ohm stripless plug output. Net \$2.35

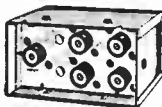
SPLITTERS

MDC-2 — Outdoor 2-way Hybrid Splitter. Splits or combines two 75 ohm cables. Weather protected. SO-239 connectors. Net \$8.60

TS-772 — Indoor surface mounted 2-way Hybrid Splitter. Splits or combines two 75 ohm cables. QD connectors. Net \$3.45

MDC-4 — Outdoor 4-way Hybrid Splitter. Splits or combines four 75 ohm cables. Weather protected. SO-239 connectors. Net \$17.50

TS-774 — Indoor surface mounted 4-way splitter. Splits four 75 ohm cables. QD connectors. Net \$5.10



2SP-75 — Outdoor 2-way Hybrid Splitter. Splits or combines two 75 ohm cables. Weatherproof. Net \$8.50

3SP-75 — Outdoor 3-way Hybrid Splitter. Splits or combines three 75 ohm cables. Weatherproof. Net \$10.45

4SP-75 — Outdoor 4-way transformer type splitter. Splits four 75 ohm cables. Weatherproof. Net \$10.35

AN-275 — Combines and splits VHF hi band

and lo band. 75 ohm. Net \$29.95

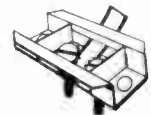
2SP-300 — Indoor or outdoor 2-way splitter. Splits two 300 ohm lines. Weatherproof. Net \$4.95

4SP-300 — Indoor or outdoor 4-way splitter. Splits four 300 ohm lines. Weatherproof. Net \$6.40

HL-300 — Indoor or outdoor hi-lo splitter. Splits or combines hi band and lo band 300 ohm lines. Net \$29.95

***TERMINAL CONNECTORS**

75 OHM QD (SOLDERLESS)



300 OHM STRIPLESS PLUG



300 OHM STRIPLESS SCREWS



75 OHM STRIPLESS BRIDGE

CABLE CONNECTORS

P-11S "UHF" type solderless male plug for RG-11/U cable. Net \$1.00

P-59S "UHF" type solderless male plug for RG-59 U cable. Net \$1.00

MC "UHF" type cable connector. Connects two male plugs or one plug and an MPT-75 terminator. Net \$1.75

CL-1111 Couples two RG-11 U cables together. Net \$1.85

CL-1159 Couples RG-11 U cable to RG-59 U Cable. Net \$1.85

CL-5959 Couples two RG-59 U cables together. Net \$1.85

AC-1000 Feed-thru bushing. Use with CL-5959, CL-1111, CL-1159. Net \$2.30

MJ-300 Female plug for 300 ohm twin lead. Net \$.70

MP-300 Male plug for 300 ohm twin lead. Net \$.70

M-63 Male coupler mates with M-64. Net \$2.70

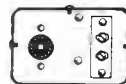
M-64 Female coupler mates with M-63, M-72, M-73, M-74. Net \$2.00

M-71 Male plug for RG-11 U cable. Mates with M-64. Net \$2.30

M-72 Male plug for RG-11, U double shield cable. Mates with M-64. Net \$2.30

M-73 Male plug for RG-59 U cable. Mates with M-64. Net \$.45

M-74 Male plug for BAL-11F cable. Mates with M-64. Net \$3.20

MATCHING TRANSFORMERS

MB Outdoor balun matches 75 ohms to 300 ohms or vice versa. Net \$6.00



TM Indoor, set mounted. Matches 75 ohms to 300 ohms or vice versa. Net \$2.20



TS-731 Indoor, surface mounted. Matches 75 ohms to 300 ohms or vice versa. Net \$2.45



TF-731 Indoor, flush mounted. Matches 75 ohms to 300 ohms or vice versa. Net \$2.80

AMT—Outdoor broadband balun matches 75 ohms to 300 ohms or vice versa. Weatherproof; has 300 ohm solderless plug. Net \$6.60

SMT—Indoor, set mounted. Matches 75 ohm to 300 ohms or vice versa. Net \$2.60

ACMT—Single channel outdoor balun. UHF and VHF, specify channel. Matches 75 ohms to 300 ohms or vice versa. Weatherproof; has 300 ohms solderless plug. Net \$8.25

engineered and manufactured by

BLONDER-TONGUE

Newark, N. J.

AVAILABLE IN CANADA FROM: BENCO TELEVISION ASSOCIATES LTD. REXDALE, ONTARIO

CLOSED CIRCUIT TV CAMERAS-MONITORS-ACCESSORIES**BLONDER-TONGUE TRANSISTOR TV CAMERAS**

Provide superior TV pictures. Designed to withstand the most rugged handling in industrial, institutional and educational applications. Two basic models, the new low cost, TC-1 and the deluxe TTVC-1 are available in several variations for specific applications. Both have built-in automatic light compensators.

| MODEL | TC-1V | TC-1RF | TTVC-1-1 | TTVC-1 (2 thru 6) | TTVC-1R-1 | TTVC-1R (2 thru 6) | TTVC-1SN | TTVC-1SNR-1 | TTVC-1SNR-2 |
|-----------------------------------|-------------------------|--------------------------------|-------------------|----------------------|-------------------|-----------------------|-------------------|-------------------|-------------------|
| Horiz. Freq. | 15,750 cps | 15,750 cps | *15,750 cps | *15,750 cps | *15,750 cps | *15,750 cps | ① | ① | ① |
| Vert. Freq. | ††60 cps | ††60 cps | †60 cps | †60 cps | †60 cps | †60 cps | ① | ① | ① |
| RF Output | — | adj. 2-6 100,000 uv min. | — | *50,000 uv min. | — | *50,000 uv min. | — | — | — |
| Video Output | 1.25v(p-p) | — | 1.25v(p-p) | 1.25v(p-p) | 1.25v(p-p) | 1.25v(p-p) | 1.25v(p-p) | 1.25v(p-p) | 1.25v(p-p) |
| Video resolution | 600 lines | — | 650 lines | 650 lines | 650 lines | 650 lines | 650 lines | 650 lines | 650 lines |
| resolution RF | — | ② | — | ② | — | ② | — | — | — |
| Range of Light Compensation | 1000/1 | 1000/1 | 2000/1 | 2000/1 | 2000/1 | 2000/1 | 2000/1 | 2000/1 | — |
| Illumination Requirements | **½ ft. candle | **½ ft. candle | **½ ft. candle | **½ ft. candle | **½ ft. candle | **½ ft. candle | **½ ft. candle | **½ ft. candle | **½ ft. candle |
| EIA Studio Net | No | No | No | No | No | No | Yes | Yes | Yes |
| Remote Controls | No | No | No | No | Yes | Yes | No | Yes | Yes |
| Dimensions | 8 7/8 x 11 1/2 x 4 1/4" | | | | | | | | |
| Net Price | \$850. | \$850. | \$1950 | \$1995 | \$2500 | \$2560 | \$2100 | \$2740 | \$3000 |

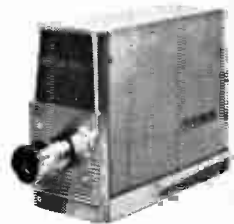
* crystal controlled

†† minimum usable for most applications (reflected light)

† choice of 2:1 or random interlace, 60 cycle line locked

① accepts EIA sync. pulses 15,750 cps & 60 cps nominal

② same as video but is usually limited by TV set to approx. 350 lines

**VIEWFINDER CAMERA**

DESERVER-2, MODEL EV-1 CAMERA MONITOR—A compact portable camera viewfinder combination. Can be mounted on a heavy-duty tripod and friction head. TTVC-1 camera is built together with an 8" electronic viewfinder. Has "take" lights in front. Has HT-10 turret to accommodate up to 4 C-Mount lenses. 1" F1.9 lens supplied. Provision for optional in-earcom and remote control. The operator sees what the camera is viewing. Features easy setup, handy focus control.

MODEL EV-1-SNR—Same as EV-1 but accepts studio net pulses and is remote control.

**CCTV ACCESSORIES**

MODEL HT-10 Lens Turret—allows quick change of camera lens. Holds up to 4 C-Mount lenses.

MODEL RT-10 Same as HT-10 except motorized and remote controlled.

MODEL RF-10 A Remote focus control for TTVC-1. SOUND ADDER—Adds sound to output of RF camera, forming complete TV channel.

ACCESSORIES: Pan and tilt mechanisms; tripods; explosion-proof housing; zoom, telephoto, wide-angle lenses—plus video and RF distribution equipment.

BLONDER-TONGUE MONITORS

BLONDER-TONGUE PROJECTION VIDEO MONITOR, MODEL PVM Projects a large, high quality TV picture onto a screen. (The unit is supplied with optics intended for a 4 1/2' x 6' picture. Optics for 6' x 8' or 4' x 12' pictures are available on special order.) System Standards: 15,750 cps horizontal scan; 60 cps vertical scan. Resolution: 500 television lines

on an EIA test pattern when operated at correct throw distance.

DIRECT VIEW MONITORS

CC-28 8" Video Monitor (cabinet)
CC-29 14" Video Monitor (cabinet)

CC-30 21" Video Monitor (cabinet)
CC-31 Twin 8" Video Monitor (rack-mount)
CC-32 14" Video Monitor (19" rack-mount)
CC-33 17" Video Monitor (rack-mount)
DVM-17 17" Video Monitor (cab net)
DVM-17SN 17" Video Monitor (cabinet)
for studio use

BLONDER-TONGUE PORTA-STUDIOS for originating complete TV channels

Mobile television consoles, easily operated by one man. Either model may be used to originate a complete TV channel, both sound and picture. Specify VHF channel 2 thru 13 desired. Programs thus originated can be viewed on any standard TV receiver connected to the Porta-Studio, directly or through a master TV system.

THE ST-1 CONSISTS OF: 1. A transistor camera equipped with an F1.9 lens, and a light bar with two 150 w floodlights—all mounted on a heavy duty friction head. 2. A 17" video monitor. 3. An audio amplifier with input for two microphones (one microphone supplied). Volume of each microphone can be controlled separately. Provision for audio monitoring includes a speaker,

an ear phone jack and a VU meter. 4. An audio-video modulator which converts the picture picked up by the cameras and the sound picked up by the microphones into a complete TV channel (2-13). 5. A high gain (35 to 46db, AGC controlled RF amplifier. Output of this unit is factory set at 0.5 volts video and 0.2 sound. 6. All necessary cables, switches and controls.

THE ST-2 is similar but it provides inputs for two transistor cameras (one camera supplied with unit). To display both cameras, dual 8" monitors are used—in place of the single 17" monitor on the ST-1. The operator can switch from camera to camera and "take lights" indicate which camera is in use.

**LOCK-JAX WALL PLATES AND TAPOFFS**

LJ-1 Tumbler lock cover fits over any Lock-Jax unit or standard single wallplate. Net \$5.85

LJ-2 Blank wall plate with direct connection for thru line. Net \$4.00

LJ-6 Video thru unit for video camera, amplifier or monitor, with shorting switch. Net \$9.10

LJ-11 Single 17 db tapoff with toroidal ferrite transformer. Net \$7.30

LJ-12 Double 17 db tapoff similar to LJ-11. Net \$10.15

Cesco Amateur-Citizens' Band-

REFLECTOMETERS, MINIBRIDGE, PHONE PATCHES



STANDING WAVE REFLECTOMETERS MODELS CM-52 AND CM-75

Mutual inductance and capacity coupling are employed between linear conductors for continuous measurement of standing waves on transmission lines. For continuous line insertion 25 to 1,000 watts, at frequencies from 3 to 200 mc. Operates on power input of 10 watts, 7 mc and up. Requires only five watts input, 25 mc and up. Line insertion loss, less than 1 db at 30 mc. Ideal for inserting in to coax feed lines at antenna for visual reading in SWR while making antenna adjustments; SWR observed immediately, at all times, without adjustment of Reflectometer. No balancing adjustments, no reversing. Prevents false loading from antenna tuner, match box, pi network, etc. Reduces line reflection, making possible increased radiated power. Uses 0-100 ua meter calibrated directly in standing wave ratio and relative power. Each unit hand calibrated and perfectly balanced. Includes loading control and forward to reflected power reversing toggle switch. With 83-1R (SO-239) connectors at each end. Gray hammer-tone aluminum case, 3" w. x 2 1/4" d. x 5 1/4" h. Shipped with key-type mounting on back and full instructions. **Cesco Model CM-52 (52-ohm coax line) or CM-75 (75-ohm coax line)—Net Each \$29.95**
Cesco Model CM-75 Equipped with UG-58U Connector—Net Each \$34.95

MODELS CM-52-2 AND CM-75-2

Dual units electrically identical to CM-52 and CM-75 but built in two units for remote control. With 10 ft. cable and plug wired to control and indicator unit. Either 52-ohm or 75-ohm phase unit may be used with control and indicator unit; permits purchasing second phase unit separately, when required. Size, Control unit, 3 7/8" w. x 2 7/8" x 2 3/4" with sloping panel; Phase Unit, 2 1/4" w. x 2 1/4" d. x 5 1/4" h. **Cesco Model CM-52-2 (52-ohm coax line) or CM-75-2 (75-ohm coax line)—Net Each \$34.95**
Cesco Model CM-75-2 Equipped with UG-58U Connector—Net Ea. \$39.95
Cesco Model CM-52-2 or CM-75-2 Phase Unit — Less Control unit, Net Each \$12.95
Cesco Model CM-52-2 or CM-75-2 Special—Same as standard dual unit but with control panel for Collins grille or built-in installation. Net Each \$34.95

MODEL CL-52-72 MINIBRIDGE

Resistive type device for observing standing waves when adjusting antenna matching networks. For 52, 72 or 75 ohm coax lines and small

amounts of RF excitation or grid dip oscillator. Requires external indicator, such as 0-100 ua meter (as in Simpson multi-meter). Hammer-tone gray aluminum case, 2 1/4" w. x 1 1/2" d. x 4 1/2" h. Complete with instructions, SWR graph and antenna tuning procedures. **\$12.95**
Cesco Model CL-52-72—Net Each

TELEPHONE PATCHES

All Cesco Tel-O-Patch Models are useable with SSB equipment in manual or MOX control position.

"ORIGINAL" TEL-O-PATCH

High quality sound receiving and transmitting unit for low-Z lines in amateur and experimental use. Provides undistorted voice reproduction, perfect intelligibility at 100% modulation. Eliminates feedback, hum, noise, etc. Designed for high gain input, can be adapted to low gain input. Works on any receiver having output impedance of 500-5,000 ohms. Mounts on receiver or operating desk by means of reversible mounting plate. Provides standard phone jack output; Amphenol 75-PC1M connector for input. Size, 2" w. x 4" d. x 4" h. Complete with instructions, diagrams, mounting screws. **\$14.95**
Cesco "Original" Tel-O-Patch—Net Each

"SUPREME" TEL-O-PATCH

Combination transmit-receive control and phone patch. For custom and commercial equipment. Undistorted voice reproduction at 100% modulation. For any receiver with output impedance of 500-5,000 ohms; and for high gain transmitter inputs (can be adapted to low gain). Separate On-Off control; standard phone jack output; Amphenol 75-PC1M mike connector input; Amphenol 4-contact plug and socket for transmit-receive control; reversible mounting plate. Size, 2" w. x 4" d. x 4" h. Complete with instructions, diagram, mounting screws. **\$24.95**
Cesco "Supreme" Tel-O-Patch—Net Each

"REGENCY" TEL-O-PATCH

To be used with units such as 32V-KW1-75A, Globe King, B & W, Ranker, Valient 500, or similar high quality equipment with push-to-talk operation. No modifying, ready for use. Eliminates feedback, hum, noise; voice reproduction undistorted at 100% modulation. For any receiver with 500-5,000 ohms output impedance and for high gain input; can be converted to low gain. Lever-action telephone type switch controls both transmitter and modulation; separate On-Off switch. Size, 2" w. x 4" d. x 4" h. Complete with 3' cord and 80MCM plug installation instructions, diagram, and mounting screws (mounting plate is reversible). **\$24.95**
Cesco "Regency" Tel-O-Patch—Net Each

ANTENNA MOUNTING AND MATCHING ACCESSORIES, NOISE FILTERS

"OXEN YOKE" BEAM ANTENNA CLAMP

For element sizes 3/4" to 1 1/2" in diameter and booms 1 1/2" to 3" in diameter. All components completely interchangeable, permitting element and boom selection to your requirements. For continuous or cut elements at center; all channel lock assembly. Specify element size and boom size when ordering. **\$22.99**
Net Each

UNIVERSAL BOOM MOUNTING

For 1 1/2" to 3" diameter boom sizes and 1 1/4" or 1 1/2" masts. Complete mounting consists of two mast plates (1 1/4" or 1 1/2"), two boom yokes, two "U" bolts. Specify mast and boom sizes when ordering. **\$5.95**
Net Each

HEAVY DUTY UNIVERSAL BOOM MOUNTING

For 2' to 3" O.D. water pipe or tubing mast. All channel lock assembly. For single or stacked arrays. Has on mounting plate, four yokes and four "U" bolts. (Specify mast or pipe size when ordering.) **Net \$8.95**



QUAD MOUNT

One-piece, durable, aluminum alloy cast spider to mount quad arms to boom. 1/8" shaped spiders permit use of bamboo or aluminum tubing of 1" to 1 1/2" diameter. Clamp-type, 2" diameter hub can be adjusted after assembly. Boom drilling not required. **Net Each \$6.95**

COAX DIPOLE DRI-FIT CONNECTOR



Ideal connector for dipole antennas. Completely moisture-proof, one-piece aluminum alloy construction. Handles power to maximum legal limits. Can be installed easily in a few minutes. For use with coaxial cables RG-8, RG-58, RG-11 or RG-59, or with 300-ohm twin lead. Has eye pull up for inverted V's. Weight, 2 oz. **\$2.95**
Net Each

VOLTAGE REGULATOR FILTER

MODEL VR-30

A fixed type L/C combination for the elimination of noise created by points of generator control relay in the voltage regulator which is prevalent in communication receivers. No tuning or adjusting required. Unit is not voltage critical. Works on 6-12-24 and 32 volt systems. **Net Price \$2.95**



GENERATOR NOISE FILTERS

Turntable for 6, 12 or 24 volt generators; stops noise in mobile gear caused by generator brushes. For aircraft, amateur, C-B and industrial mobile uses. Conservatively rated at 30 amps. Phenolic coil form, brass hardware and die cast mtg. bracket. Easily installed.



Cesco Model 3-30 (Standard, 3-30 mc)
Cesco Model 30-60 HF—30 to 60 mcs
Cesco Model 75-160 VHF—75 to 160 mcs—Net Each \$2.95
Cesco Model 2-3 (Marine, 2-3 mc)—Net Each \$5.95

Industrial-Communication Products

TRANSCHECK, TEL-O-RECORD, FIELDOMETERS



CITIZENS' BAND TRANSCHECK

Test instrument, designed for use with Citizens' Band transmitters, checks transmitter power output and antenna efficiency. Can be used for resonating or tuning power output plate circuit and adjusting antenna loading capacitor to assume maximum output. Ideal for determining accuracy of 50-ohm coaxial transmission line match to the antenna. Comes complete with drawings and information on applications and use. Hammertone finish, aluminum case 4 7/8" h. x 2 1/8" w.

Cesco Model CB-52-C—With coax connector. Net Each..... **\$1995**
Cesco Model CB-52-S—Auto spade connector. Net Each..... **\$18.95**

INLINE TRANSCHECK

The Inline Transcheck, a patented development by CESCO employing a miniature true coaxial cylindrical unit utilizing mutual inductance and capacity coupling between linear conductors for conducting test, measuring power output and standing wave ratio on Citizen Band transmitters operating in the 26 and 27 MC bands. No power loss or detuning is created when placed in line for continuous use. All units are supplied with detailed instruction book.

Cesco Model CB-52-T—Net Each **\$29.95**

ELECTROMATIC TEL-O-RECORD TELEPHONE PICK-UP AND CONTROL

Automatic, transistorized control has circuitry and control relays to start and stop motor, make or break B+ circuit of any recording device. Recorder must have sufficient starting torque to run with switches in record position. When off, recorder automatically returns to manual operation. May be used on remote phones up to five miles away from the parent phone. Permits the recorder to operate unattended. Built-in power supply is well filtered; operates from 115 v. AC, 60 cps. Size 5" h. x 4" w. x 3" d. **Cesco Model ET-1**—For intermittent recording. Net Each. **\$7995**

Cesco Model ET-2—Special model for applications where recorder is used exclusively for phone recording. Net Each **\$79.95**

TEL-O-RECORD PICK-UP AND TRANSFER

Records phone messages on tape, wire or disc recorders. Also used for paging systems. Records both sides of a conversation. By secondary lines, parallel terminated, many sources may feed the mike input on a paging amplifier; when used this way, phone must be partly dialed to remove dial tone before speaking. High quality transformer will not load phone line, free of distortion and hum. Aluminum, gray hammertone box has slip-on mounting bracket. Complete with cords, plugs and installation instructions.

Cesco Model ST-1—Net Each **\$1495**

CITIZENS' BAND ANTENNAS AND ACCESSORIES

DUO-POLE GROUND PLANE ANTENNA

Provides broad, equal, groundwave circular coverage for good communications even with low power output. Aircraft aluminum construction. Grounded quarter-wave foldback lightning safety factor. Adjustable element ring locks. Factory resonated at 27,085 or channel 11; works well over all channels with low VSWR, 1.2:1 or less. Special feedline terminals molases in casting. Nominal base impedance 52 ohms. Shipping carton only 68" long. Shipping Weight, 7 1/2 lbs.

Cesco Duo-Pole Antenna—Net Each **\$2997**
Industrial Version, Any Specified Frequency, 25-175 mc.
Also Available at Same Price.

C-B BEAM ANTENNAS

Factory pre-tuned beam antenna with exclusive Aeromatch for increased power output. Extruded aluminum tubing with 1 1/2" boom; elements have 1/2" dia. center sections, 3/4" dia. inserts. Elements mount either horizontally or vertically. Resonated at 27,085 mc; low SWR. Assembles in minutes with permanently secured locking rings. Lightweight; will rotate with any TV rotator. Shipping carton only 86" long.

Cesco 3-Element Beam—Gain 7 db; boom 10" long. Shipping Weight, 8 lbs. Net Each **\$2995**

Cesco 4-Element Beam—Gain, 8 db; boom 15" long. Shipping Weight, 11 lbs. Net Each **\$3995**

Cesco 5-Element Beam—Gain, 9 db; boom 20" long. Shipping Weight, 13 1/4 lbs. Net Each **\$4995**

QUAD ARM KITS

Allows easy fabrication of durable, cubical quad antenna. Each arm has one 1 1/4" aluminum section with end swaged to 1" dia., plus one or two fiberglass telescoping sections. Stainless steel clamp holds fiberglass section to aluminum tube. Detailed instruction book supplied.

Cesco Model QB-2 Quad Arm Kit—With eight arms of one section aluminum tubing and one section fiberglass, each. Makes 10- and 15-meter quad antenna. Net Each **\$5995**

Cesco Model QB-3 Quad Arm Kit—Same, but with two sections of fiberglass per arm, and an epoxy resin for joining the fiberglass tubes. Makes 10-, 15-, and 20-meter quad or single 20-meter antenna. Net Each **\$8995**

CESCO FIELDOMETERS

Wide spectrum, sensitive field strength analyzer and field measuring device works satisfactorily at 1 kc to 1000 mc radiated frequencies, without using plug-in coils. Sensitive 0-100 ua meter withstands heavy shock without damage. Ultra-sensitive models also available. Shunt-type sensitivity control prevents off-scale readings or overload in strong fields.

MODEL MC FIELDOMETER

Ideal for tune-up of mobile, amateur, police, aircraft and industrial uses. Indicates transmitted signal at all times. Has capacity wand, sensitivity control and ua meter. U-shaped mounting bracket fits dash at windshield rim or rear-view mirror. Pivoted case 3 1/2" h. x 2 3/4" w. x 1 1/2" d.

Cesco Model MC—Net Each **\$2495**
Cesco Model MC-20—Net Each **\$3995**

MODELS HCE AND HCE-20 FIELDOMETERS

Fixed-capacity type portable hand unit with 0-100 ua meter and sensitivity control on handle end. Capacity wand and components covered by sero-w on 4 1/4" lg. plastic cover. Handle 4 1/4" long. Provision made for plug-in interchange for capacity wand to electrostatic, peak resonant broad-skirted wands (available on special order for any specified frequency). Case size same as Model MC.

Cesco Model HCE—Net Each **\$2995**
Cesco Model HCE-20—Same as above, but with ultrasensitive 0-20 ua meter. Net Each **\$4495**

MODELS LCE AND LCE-20 FIELDOMETERS

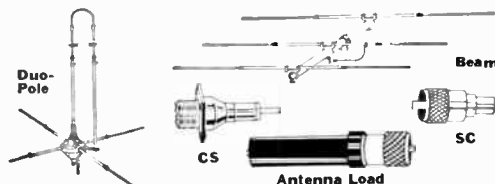
Same as Model HCE, but designed for laboratory use. Indicator and sensitivity controls mount in portable, slanted meter case 3 3/4" h. x 2 3/4" w. x 2 3/4" d. Comes with corded probe four ft. long and capacity wand (convertible to electrostatic type with plug-in resonant wand available).

Cesco Model LCE—Net Each **\$2995**
Cesco Model LCE-20—Same as above, but with ultrasensitive 0-20 ua meter. Net Each **\$4495**

MODEL MCP PROBE ADAPTER

Corded probe, capacitive-type adapter for use with any multi-tester having basic movement of 0-50 or 0-100 ua. Meter must be brought to separate terminals (as found on Simpson Model 280 and similar types). **Cesco Model MCP**—Net Each **\$1295**

DUO-POLE GROUND PLANE ANTENNA



CABLE ADAPTERS

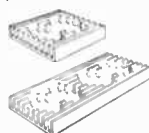
Cesco Model CS—Permanent connector comprises 83-IR, SO-239 coaxial socket and auto radio type spade lug. One-piece construction. Net Each **\$129**

Cesco Model SC—Rugged, permanent adapter connects auto radio spade plug to coaxial socket 83-IR or SO-239. No floating pins. Net Each **\$1.29**

PHANTOM ANTENNA LOAD

Non-inductive 52-ohm substitute antenna load has adequate power rating for any C-B transceiver in the 26-27 mc. range. Suited for testing and repairing citizens band units. Also useable as a coaxial line terminator. **Cesco Phantom Antenna Load**—Net Each **\$149**

\$1.25 ea.



\$1.95 ea.

TRANSISTOR HEAT SINKS

Cesco's unique method of producing heat sinks from mach plate green sand aluminum castings increases heat radiating efficiency with less heat sink area. Heat sinks are poured from a special aluminum bullion with a copper additive which produces an even heat flow over the entire surface area.

Heat sinks are fabricated standard in several types. Other patterns of fabrications are available on quantities of twenty-four (24) or more. Each Heat Sink is packaged with a transistor mechanical data sheet.

Clegg VHF AMATEUR COMMUNICATIONS EQUIPMENT

CLEGG ZEUS VHF TRANSMITTER FOR 6 AND 2 METERS



A highly efficient, AM, high power VHF transmitter for full coverage of the amateur 6 and 2 meter bands and associated Mars frequencies. Maximum TVI suppression.

Automatic modulation control with up to 18 db of speech clipping provides magnificent audio with "talk power" greater than many kilowatt rigs.

This beautiful unit with its ultra-stable VFO is the ultimate in VHF equipment for amateur and Mars operation.

CLEGG INTERCEPTOR VHF RECEIVER FOR 6 AND 2 METERS



Designed for the serious operator on these bands, the INTERCEPTOR, with cabinet and panel exactly matching the famous ZEUS transmitter, offers performance features unmatched by presently available equipment for these frequencies.

For example, here is a receiver with virtually no cross modulation. Nuvistor RF stages give an extremely low noise figure and sensitivity better than .25 microvolts. Stability is ideal for exacting requirements of SSB and CW.

CLEGG 99'er TRANSCEIVER FOR 6 METERS



This famous little transmitter-receiver is ideal for both fixed station and mobile operation. Small in size, low in cost, and tops in performance, the 99'er offers operating features unequalled in far more costly equipments. The double conversion superhet receiver provides extreme selectivity, sensitivity and freedom from images and cross modulation. The transmitter section employs an ultra-stable crystal oscillator which may also be controlled by external VFO. An efficient, fully modulated 8 watt final works into a flexible Pi network tank circuit. A large S meter also serves for transmitter tune-up procedure.

SEE THESE NEW STARS ON THE VHF HORIZON!

Continuing its leadership in the field of V.H.F. ham gear Clegg Laboratories announces the release of several sparkling new units for this most exciting area of the ham spectrum.

Among them are the "Mercury," a medium power sideband transmitter for 6 meters and the Thors VI and II . . . 50 watt transceivers for 6 and 2 meters respectively.

Featuring digital type frequency control and crystal lattice filter, the "Mercury" is by itself, an outstanding performer on 6 meter sideband. It can also be used to drive a linear final to maximum legal input.

The Thor VI transceiver includes both BFO and Crystal

frequency control in the 50 watt transmitter section which can be used either for AM or CW type emission. The double conversion superhet receiver section includes a BFO for CW and sideband reception, and will feature extreme sensitivity, selectivity, low noise level and freedom from overload. The Thor II is a 2 meter counterpart of Thor VI and a brilliant performer on its band.

Together with the famous trio listed above, these new Clegg products are specifically tailored and designed to meet the exacting demands of the vast number of hams either entering or switching to VHF . . . the most rapidly expanding area of ham communications.

Write for complete information

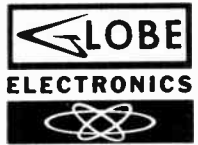
Clegg LABORATORIES

DIVISION OF TRANSISTOR DEVICES, INC., OF CEDAR GROVE, N. J.

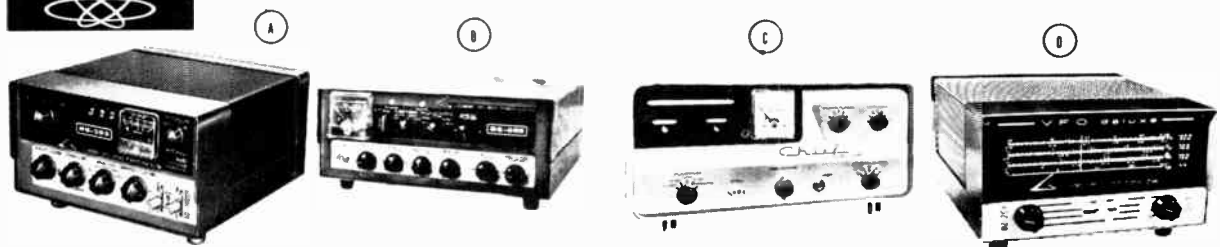
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SECTION 1900



COMMUNICATIONS and CITIZENS BAND EQUIPMENT



(A) AMATEUR TRANSMITTER • SIMPLE TO TUNE • 3 X'TAL POSITION • COMPACT • RUGGED • FUNCTIONAL • FIRST QUALITY
 -HG-303-Input Power 75 Watts (Nominal) • 6116 Transmitting Tube in final • Modular Construction • Dual Power Supplies • Provision For Matching VFO • Grid Block Keying • Wide Range Pi-Net Coupling To Antenna • Low Voltage Switching • Provision for "Plug-In" Modulator Addition • Recessed Crystal Socket On Front Panel • 8 Silicon Rectifiers in High Voltage Supply-Full Wave Bridge Configuration • Dual Scale Personal Meter Movement • Instant Change From Crystal to VFO • Provision for 2 Extra Internal Crystal Selected by Front Panel Switch.

Cat. No. 65-130 Amateur Net \$109.95

(B) MODEL HG-602 VHF TRANSMITTER - CUSTOM TAILORED FOR PEAK PERFORMANCE POWER - Metered R. F. Stages • Silver plated final tank coils • Either AM or C. W. Operation • Class AB2 - Push-Pull Plate Modulation using "Novar" RCA 7868 - as Modulators • Adjustable Speech Clipper Filter • Tuned Military Type Construction • Iridited Chassis • Attractive Modern Styling.
 Frequency Range is 50-51 mc and 141-148 mc with sufficient overlays to cover MARS and Civil Air Patrol Frequencies.
 All R. F. Stages are metered. Class AB2 Push-Pull Modulation. Adjustable Speech Clipped Filter with frequency response (300-3000 cps ±3 db) provides greater "Audio Power" without over-modulation. Completely shielded for TVI suppression.

Cat. No. 65-140 Amateur Net \$179.95

(C) CHIEF DELUXE TRANSMITTER KIT, SELF-CONTAINED 90-WATT TRANSMITTER FOR CW; BANDSWITCHING 10-80 METERS - 75 Watt Meter Indication for novice use. New 1300 MMFD variable loading condenser • Modified grid block keying for maximum safety (cathode keying with VFO) • Provision for plate or screen modulator input by simple

(E) STAR DUAL CONVERSION 5 CHANNEL CB TRANS-CEIVER - The first unqualified new design in the transceiver field. Dynamic new dual conversion, superhetrodyne circuitry eliminates adjacent channel interference... increases operating range. This is the very finest... imper- formance... in con- struction... in dura- bility... plus many other features. Deliv- ered COMPLETE, ready to operate with one set of crystals, AC line cord, DC Power Cord, Micro- phone.



Size: 4 1/2" x 9" x 9 1/2"
 Cat. No. 65-120 12 volt model Amateur Net \$159.95
 Cat. No. 65-122 6 volt model Amateur Net \$159.95
 NOTE: Both models operate on std. 110 volt house current.

plug-in • No modification necessary to add Globe VFO or modulators • Built-in power supply • Standard coaxial antenna fittings • No sharp cabinet edges • Compact construction 3-color diagrams simplify kit construction.

Size: 15 1/4" x 6 1/4" x 11 1/4"

Cat. No. 65-406 Amateur Net \$59.95

(D) VARIABLE FREQUENCY OSCILLATOR - Covers 6 thru 160 Meter Bands - Beautifully styled. Easily read D14 Scales. Complete with self-contained, well-filtered power supply. Voltage regulated and temperature compensated for utmost stability.

SPECIFICATIONS

Operating frequency divided into 4 Bands.
 Band A - 160-80 Meter - 1.75 - 2.0 MC.
 Band B - 10-10 Meter - 7.0 - 7.425 MC.
 Band C - 20-15 Meter - 0 - 7.175 MC.
 Band D - 6 Meter - .333 - 9.0 MC.
 Stability: 100 cps after 20 min. warm-up. Average DC input of final stage 2.5 watts.
 Band A - 140 V.P.P. Band C - 105 V.P.P.
 Band B - 115 V.P.P. Band D - 145 V.P.P.
 • Oscillator: Electron coupled clapp • Stage Employed: Oscillator, Cathode Follower, output • Stage with tuned plate circuit • Filament voltage: 6 VAC
 • Max. DC Voltage: 185 V. Keying: Cathode of Oscillator Stage.
 Size: 4 1/2" H x 9 1/2" D x 9 1/2" W

Cat. No. 65-401 Amateur Net \$89.95



(F) SCREEN MODULATOR KIT - Phone operation at economy level - Ideal for use with the Globe Chief transmitter, with instructions for use with similar CW transmitter. Permits radio-telephone operation at unheard of low cost. Self-contained, rintered circuit board with all parts and complete comprehensive instructions.

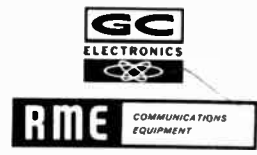
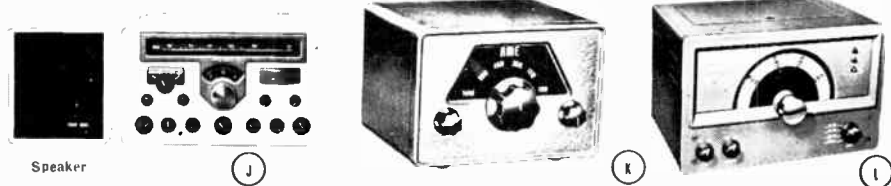
Cat. No. 65-421 Amateur Net \$11.95

(H) GLOBE POCKETPHONE - New portable high styled two-way radio that actually fits into your pocket. Exclusive "power-pak" rechargeable Globe's new Pocketphone can also be used with battery that lasts a year or more. 101 uses the company's CP-100 two-way radio or CB-200 Broadcaster Deluxe two-way Citizens Band radio for longer range. Licensing not required for transmission between 2 pocketphones only.

Size: 1 1/2" x 2 3/4" x 6 1/4"

Cat. No. Net
 65-300 Globe Pocketphone complete with rechargeable batteries ready to use \$125.00
 65-307 Carrying Case 4.95
 65-508 Earphone Attachment 2.95
 65-511 Replacement Battery Pack 19.95
 65-515 Replacement Recharger 3.95

Send today for the free catalogs that show the most complete line of C-B and Amateur Products available anywhere.



(J) RME 6900 RECEIVER - Optimum performance on every circuit is assured by meticulous attention to all details. • 10 multi-purpose tubes to do the work of 15 • Advanced circuitry and engineering • Audio noise limiter • Noise pulses never reach the AGC system, adjustable to clip at any modulation depth. • Resultant oscillator stability versus line voltage shift will please the most critical user. • Silicon diode power rectifiers lower ambient operating temperature. Improve regulation and provide longer, component life • Separate BFO injection control permits adjusting injection voltage. • Mode- master switch provides unified control at five individual functions: simultane- ously, automatically adjusting the AGC time constant to maintain optimum receiver performance.

Cat. No. 65-450 Amateur Net \$369.00

(K) RME 6901 SPEAKER - Designed to complement the appearance of Model 6900 and other quality receivers. Neat, modern design finished in gray and charcoal. Response characteristics are tailored for optimum readability in communication. Speaker impedance, 4 ohms nominal.
 Size: 10" H x 6 1/2" D x 8 1/2" W

Cat. No. 65-151 Amateur Net \$19.50

(L) RME PRESELECTOR - The best receivers, perfectly aligned and properly matched into your antenna should give optimum performance. RME DR23 low-noise r-f amplifier substantially improves the performance of any receiver! It provides minimum gain throughout all ham bands. Consists of

one tuned input circuit which matches input impedance of 50- to 75-ohms unbalanced or 300-ohms balanced, followed by two stages of low-noise, neutralized broad band push-pull 636 amplifiers. Push-pull 636 impedance matching stage delivers the amplified signal to the receiver with output impedance of 150-ohms unbalanced or 300-ohms balancer. Unique combination of selective and wide-band RF amplifiers permits optimum use of mechanical, crystal, or audio filters. Input circuits match any standard antenna.

Size: 7 1/2" W x 6" D x 5" H

Cat. No. 65-154 Amateur Net \$49.50

(L) RME VHF 126 VERY HIGH FREQUENCY CONVERTER - Specifically designed to extend the range of any communications receiver through the 6, 2, and 1 1/2 meter amateur bands. With its own power supply utilizing the low-frequency RF stages and audio of your present receiver. Simple to install. It converts very high frequencies to a fixed frequency of 7 mc which is then fed to the receiver, amplified, and detected in the normal manner. For the two higher frequency ranges, double conversion results. Image response is practically eliminated on all ranges. RME dual speed tuning control provides fast or micrometer tuning. Heavy steel cabinet and chassis give adequate shielding to all RF circuits to prevent leak-through from unwanted external signals and to minimize radiation.

Cat. No. 65-452 Amateur Net \$239.00

the new ideas
in communications
are born at . . .



hallicrafters

Precision Built Short Wave and Special Purpose Receivers



SX-62A (Less speaker)

Broadcast 550-1620 kc. three S/W bands 1.62-32 Mc, FM 27-109 Mc. Wide vision dial, one band lights at a time, temperature compensated, voltage regulated, six-position selectivity, phone jack. Fourteen tubes plus one rectifier and one voltage

regulator—105/125V. 50/60 cycle AC. Satin black steel cabinet, gray and silver trim—20" x 10½" x 16". Shipping wt. 66 lbs. approx. Use R-48 speaker. (U/L approved.).....**\$430.00**



S-118

Broadcast 495-1620 kc, three S/W bands 1.6-31. Mc and low frequency band 185 to 420 kc. Slide rule dial and electrical bandspread. Ferrite loop on BC and low frequency band. Built-in speaker, B.F.O., A.N.L., head

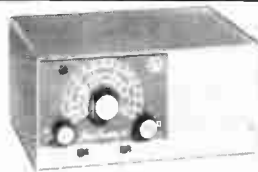
phone jack, phono input/tuner output socket, socket for external d.c. power. Five tubes plus two silicon diodes. Size 14½" x 5½" x 8½", 105-125 volts 50/60 AC. Shipping wt. 19 lbs.....**\$99.95**



S-94 or S-95

S-94: 30-50 Mc and S-95: 152-173 Mc. Super sensitive, increased audio power output, adj. built-in relay squelch system. Low noise R.F. amplifier, separate high gain d.c. amp. for squelch system. Ideal for Civilian Defense. Phone tip jacks. Eight

tubes plus one rectifier—105/125V. 50/60 cycle AC/DC. Mobile operation possible with external power converter. Gray steel cabinet, silver and red trim. 12⅞" x 7" x 7¼". Shipping wt. 12½ lbs.....**\$69.95**



S-119

Sky Buddy II. 3 tubes, AM band plus 2.0-16.5 Mc short wave bands. Superheterodyne circuit. Built-in speaker with provision for headphones. Planetary drive for easy

tuning. Transformer operated. 115V 60 cycle AC. Steel gray cabinet. 10½" x 5" x 7½". Shipping wt. 9 lbs.....**\$49.95 wired**

S-119K (Kit)

Same as S-119 except in kit form.....**\$39.95 (KIT)**



S-108

Broadcast 540-1680 kc, three S/W bands 1680 kc-34 Mc. Slide rule bandspread dial calibrated on 10. 15. 20, 40 and 80 meter amateur

bands. Temp. compensated oscillator. Headphone jack. Seven tubes plus rectifier. 105/125V. 50/60 cycle. Gray steel cabinet, silver trim. 8½" x 18½" x 11". Shipping wt. 35 lbs. (U/L approved.).....**\$139.95**



S-120

Broadcast 550-1600 kc, three S/W bands 1600 kc.—30 Mc. Three antennas ferrite loop for broadcast, adjustable whip for S/W and wire antenna. Front panel headphone

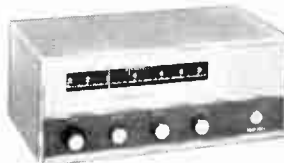
jack, disconnects built-in speaker when headphones are plugged in. Four tubes plus selenium rectifier. 105/125V AC/DC. Gray steel cabinet with silver trim. 13½" x 5½" x 8¾". Shipping wt. 11¾ lbs. (U/L approved.).....**\$69.95**



SX-100 (Less Speaker)

Broadcast 538-1580 kc, three S/W 1720 kc-34 Mc. Double conversion superheterodyne over the entire frequency range. Precision gear drives, selectable side band reception of both suppressed and full carrier, delayed AVC, CW operation with AVC on or off. Calibrated band-

spread. "S" meter, phone jack on front panel. Twelve tubes plus one rectifier and one voltage regulator—105/125V. 50/60 cycle AC. Gray and black steel cabinet, silver trim, piano hinge top—Tee-Notch Filter to reduce heterodynes. Built-in 100 kc crystal calibrator. Antenna trimmer. Logging dials on tuning knobs. 18⅜" x 8½" x 10⅝". Shipping wt. 43 lbs. approx. (U/L approved. Certified for FCDA matching funds. OCDM Item #R-16.).....**\$325.00**



CRX-1

CRX-1 30-50 Mc and CRX-2 151-174 Mc receivers for split channel, narrow band FM. Triple conversion. Manual tuning and 2 crystal positions (crystals not included). Adjustable squelch. Built-in speaker with provision for external speaker. High speed and vernier tuning controls. 105/125V. 50/60 cycle AC.

Mobile operation possible with external power converter. 13½" x 6" x 8¾". Gray steel cabinet with silver trim. Shipping wt. 15 lbs.....**\$99.95**

CRX-2

151-174 Mc Version of CRX-1.....**\$109.95**

CRX-3

108-135 Mc high quality AM VHF receiver. 118V 50/60 cycle AC....**\$94.95**



SX-110 (Less speaker)

Broadcast 540-1680 kc, three S/W bands 1680 kc-34 Mc. Slide rule bandspread dial calibrated on 10. 15. 20, 40 and 80 meter amateur

bands. Antenna trimmer. "S" meter. Crystal filter. Seven tubes plus one rectifier—105/125V. 50/60 cycles AC. Gray steel cabinet, silver trim. Uses R-48 speaker, 8½" x 18½" x 11". Shipping wt. 35 lbs. (U/L approved.).....**\$169.95**



R-48

Matching 5½" x 7½" speaker for Hallicrafters or other receiver having a 3.2 ohm output. 3.16 oz. magnet produces a fully saturated air gap and distortion-free reproduction. A fidelity switch permits selection of full fidelity response

or voice frequency for communications reception. For use with SX-62A, SX-100 and SX-110. Gray steel cabinet. 6¾" x 13¼" x 8¼". Shipping wt. 9 lbs.....**\$19.95**



HAMMARLUND



COMMUNICATIONS EQUIPMENT

NEW HQ-100 A



A modestly priced general coverage receiver with excellent CW and SSB reception due to independently controlled continuously variable BFO and Q-multiplier. Continuous tuning from 540 KCS to 30 MCS. Outstanding sensitivity and selectivity — electrical bandwidth directly calibrated. Voltage and temperature regulated. S meter. Exclusive Auto-Response. Automatic noise limiter. Ten tube superheterodyne circuit. (Single conversion).

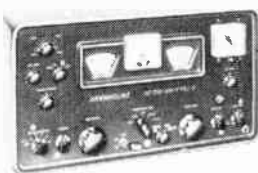
24-hour clock timer optional

\$189.00

Amateur Net

\$10.00 Extra

NEW HQ-145 X



General coverage receiver for SWL and hams with built-in provision for single crystal controlled channel. Tunes from 540 KCS to 30 MCS. Electrical bandwidth in all ham bands in frequency range. Dual conversion from 10.0 MCS to 30.0 MCS. 60 db slot filter and six

position crystal filter. Eleven tube superheterodyne with automatic noise limiter. High sensitivity. Optional 100 KC plug-in calibrator.

\$269.00

Amateur Net

24-hour clock timer optional

\$10.00 Extra

NEW MR-50X

NEW MR-60X



Identical units except for frequency ranges covered. MR-50 X has range of 147-174 MC. MR-60 X — 25-54 MCS. Offers true split channel performance with optional multi-channel operation. Entirely self

contained with whip antenna — provision for external antenna. Selective call option. High sensitivity. Crystal controlled to fixed, pre-determined channels for optimum reception. Ideal for civil, industrial, or commercial use.

\$199.00

Net

MR-51X

MR-61X MONITOR RECEIVERS

Similar to MR-50X, MR-60X, Identical frequency ranges. Slightly less selectivity as a result of employing L/C circuitry replacing crystal lattice filter. Supplied to specific frequency with crystal.

NOTE: All monitor receivers available in up to 6 channels

\$149.95

Net

NEW HQ-110A



12 tube superheterodyne dual-conversion receiver covering all amateur bands from 160 to 6 meters — with optimum reception of CW and SSB signals through separate linear detector. New design includes such extras as:

- Significantly tighter mechanical and electrical stability.
- Accessory socket for pre-amp or converter application.
- Expanded dial — with 144-148 MC calibrations for use with 2 meter converters.
- Separate 6 meter coax input for rapid shift from VHF to LF operation.

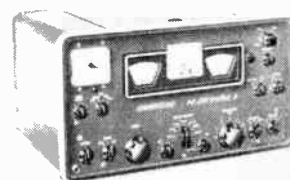
\$249.00

Amateur Net

24 hour clock-timer \$10 optional

NEW HQ-170A

The Single Sideband Specialist. 17 tube superheterodyne design — dual and triple conversion. Tunes 6, 10, 15, 20, 40, 80 and 160 meter amateur bands plus 2 meter calibration. NEW features include:



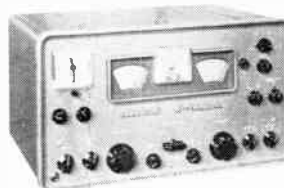
- Significantly better electrical and mechanical stability
- Silicon rectifiers for cooler, high-efficiency operation
- 2 meter calibration for converter use
- Accessory outlet and a system socket.

\$369.00

Amateur Net

24 hour clock-timer \$10 optional.

HQ-180



A general coverage SSB receiver that provides professional performance at an amateur price. 13 tube superheterodyne, 540 KCS to 30 MCS coverage. Bandspread. H.F. crystal filter—slot filter. Separate product detector.

Tuned IF amplifier. Selectable side-band. BFO control. Selectable decay fast attack AVC. Crystal calibrator. Automatic noise limiter. In fact, everything and more that you would expect to find in the very best general coverage SSB receiver.

\$429.00

Amateur Net

24-hour clock timer optional

\$10.00 Extra



HAMMARLUND



COMMUNICATIONS EQUIPMENT

NEW HX-50 COMPACT, FILTER-TYPE TRANSMITTER

The "Fabulous-50" offers a new concept in transmitter design. Built to provide every feature you have ever wanted, this unit is conservatively rated at 130 watts Two-Tone P.E.P. and CW input. The HX-50 covers all amateur bands 80 to 10 meters and in addition provides a 160 meter band switch position for use with an optionally available kit. Significant overlap of internal VFO ranges is provided by crystal or external VFO operation. Slide rule dial has band-in-use indication and is calibrated every 10 KC. Readability to approximately 2 KC. Stability after warmup is less than 250 cps.



\$399.50

Amateur Net

HX-500 SSB TRANSMITTER

Advanced design 100 watt transmitter for amateur use. Covers 3.5, 7, 14, 21, 28, 29, and 30 MCS bands. Separate dial scale for each band. All crystals included. Read-out to 200 cps or better. Stability after warmup better than 100 cps. Choice of upper, lower, or both sidebands, CW, FM, FSK, for RTTY, plus 40 cps identification keyed shift. 50 db or better carrier and sideband suppression. Automatic VOX/ anti VOX system. Dollar for dollar, the finest amateur transmitter ever offered.



\$695.00

Amateur Net



SP-600 COMMUNICATIONS RECEIVER

A commercial/military quality receiver tuning from 540 KCS to 54 MCS in six bands. Operation on any one of 6 crystal controlled fixed frequencies. Stability .001%

at 54 MCS. Extremely high image rejection. Ideal for diversity or point-to-point reception. Also available in other frequency ranges for laboratory, military, or communications reception. Price range from \$1140.00 up—dependent on frequency ranges and features desired.

SPC-10 SSB CONVERTER

Self contained unit for conversion of any standard communications receiver having an IF frequency of 450 to 500 KCS—but especially adapted for use with the Hammarlund SP-600. Professional quality SSB and new selectivity performance on AM-MCW. Selectable 1, 2 or 3 KC bandwidth per sideband. 0.5, 2, 4 or 6 KC double sideband.

\$375.00

Amateur Net

RDF-10

Three band radio directional finder, marine, broadcast, and beacon. Ten transistors, modern circuitry, for extra sensitivity. Self-contained standard flashlight size battery supply. Low-drain — long battery life. Calibrated directional antenna for accurate, and always dependable.



pin-point "fix". Simple, sure,

\$179.00

Complete
(less batteries)

NEW HQ-105 TR CITIZEN-HAM BAND TRANSCEIVER WITH GENERAL COVERAGE RECEIVER

Citizens band transceiver with built-in provision for ham band operation. Five watt input transmitter, 100% modulation — for CB or 10 Meter operation. Receiver continuously tunable from 540 KCS to 30 MCS. Direct dial calibrated electrical band-spread. Dial markings every 10 KCS on 80, 40, and 20 meter bands; every 20 KCS on 15 meter band; and every 50 KCS on 10 meter band. Q-multiplier, BFO. Auto-Response. Automatic noise limiter. Eleven tube transceiver design.



\$219.50

Amateur Net

24-hour clock timer optional **\$10.00 Extra**



HQ-105 TRS

Identical to HQ-105 TR except that a speaker is installed in the area provided for the 24 hour clock timer.

\$224.50

Net

OCT-X

8 CHANNEL PUSH BUTTON CB SELECTOR (Model CB-8)

Instantly converts HQ-105 TR transmitter to 8 crystal, 8 channel selectable frequencies. Mount-in-a-minute design permits mounting to top or either side of unit. Push button design.



Completely eliminates annoyance and possible discourtesy of going through busy channels with a live transmitter. Simple plug-in construction permits instantaneous crystal replacement. Three set of gummed-back channel markers are supplied covering the entire range of CB channels.

\$15.95

Less crystals



HAMMARLUND



COMMUNICATIONS EQUIPMENT

NEW CB-23



The ONLY "Full-Time" Citizens Band Transceiver

Think of it! Every Citizens band channel (27 MCS-Class D) transmit or receive — right at your fingertips.

Exclusively Hammarlund's, the NEW CB-23 is a dual conversion super heterodyne transceiver that features the full range of CB channels. No tuning — no

hunting for your channel — with the unique CB-23 you can switch directly to the desired channel with crystal-fixed accuracy. There is nothing more to buy. Price includes every crystal — just plug it into any convenience outlet, or attach to a mobile 12 volt system — and you're on the air. Deluxe communications microphone and cables for both 117v AC and 12v. DC are also included.

\$229.50

Available Oct. 1962

ADDED FEATURE

±3 KC fine tune adjustment for receiver section only. No effect in transmitter frequencies.

NEW

HXL-1 LINEAR AMPLIFIER



Ruggedly built to give a lifetime of service, the Hammarlund HXL-1 sets all new standards of performance in SSB, CW and AM. Conservatively rated at 1 KW P.E.P. input, the HXL-1 offers complete coverage — 80 to 10 meters — with provision for

addition of 160 meters. Features efficient grounded-grid circuit using single, high dissipation tube.

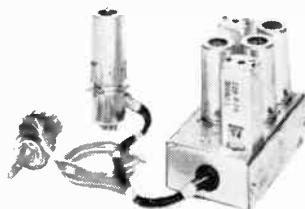
\$375.00

Amateur Net

Available Oct. 1962

IF-NOISE SILENCER

Essentially plug-in 3 tube circuit designed primarily for use with the Hammarlund HQ-170 and HQ-180 communication receivers. Renders receivers inoperative during short duration of any individual noise pulse. Lapse or "hole" not noticeable because of extremely short duration. Excellent where severe noises must be contended with.



ignition or other pulse-type

\$33.50

Amateur Net

CRYSTAL CALIBRATORS

Crystal calibrators providing markers for dial calibration every 100 KCS.

XC-100 for general usage **\$15.95** Amateur Net

XC-100 for HQ-140-X, HQ-140-XA, HQ-120 and HQ-129 **\$17.95** Amateur Net

HX-100 plug-in calibrator for HQ-145 and HQ-145-X **\$15.95** Amateur Net

CR-1 WORLD WIDE RECEIVER

The CR-1 "World-Wide" receiver features the most recent advances in electronic packaging and design by including new compactron tubes to deliver the finest world-wide reception.

Wide frequency range covers from 540 KCS to 30 MCS. Actual ranges of the four-band CR-1 are: 540 KCS to 1620 KCS, 17 MCS to 5.0 MCS, 5.0 MCS to 14.0 MCS, and 13 MCS to 30 MCS — thus including standard broadcast and all short wave bands. Superheterodyne design and modern circuitry combined with unusual flexibility permits reception of CW (code) and AM (broadcast and shortwave bands). Additionally, the CR-1 may be used as a CD "Alert" receiver by switching to CD position. In this position, the CR-1 will receive normal voice signals as long as the transmitting station is "On-Air". However, (as in the case of a CD alert) if the station leaves the air, it will emit a high pitched audio note to focus attention to an "Alert" condition.

\$59.95

Available Oct./Nov. 1962



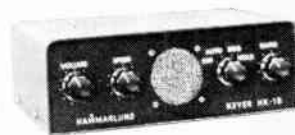
Net

ELECTRONIC KEYSER HK-1B

This compact, fully transistorized code generator combines every desirable feature of electronic sending with distinctive dot/dash control to give your messages your "Personal Touch." Provides a full range of speeds to match individual proficiency. Features automatic, semi-automatic (bug) or straight key operation. Volume adjustable sidetone signal for monitoring or code practice. Approximately 8 to 50 WPM speed range with variable dot/dash ratio. Battery operation and compact size — only 7" wide, 4½" deep and 2¾" high.

\$39.95

Amateur Net



NEW

ACA-1 COMPRESSOR

The ACA-1 is a small compact AVC type audio compression amplifier comprising a built-in power supply; 1 KC tone oscillator for transmitter alignment; 90 to 3000 cps. audio filter of the passive network type; and input/output terminals for both high and low impedance circuits.

This new Hammarlund compressor is designed to be used between the microphone and the input of a radio transmitter, PA amplifier, telephone line, or any other audio device to automatically prevent over-modulation, flat-topping and blasting caused by uncontrolled audio peaks.

Compression action permits weaker audio tones to reach higher voice levels, resulting in greatly increased "talk-power" and readability.

\$49.50

Available Oct./Nov. 1962

Tentative price



SPEAKERS



S-100 speaker for use with HQ-100A, HQ-110A, and HQ-105-TR

\$14.95 Amateur Net

S-200 speaker for use with HQ-145-X, HQ-170A, HQ-180

\$19.95 Amateur Net

**It's so easy to order
from this catalog . . .**

When ordering products shown in this book
or writing for additional information, please
be sure to specify:

- 1. Manufacturer's Catalog Numbers
and Page Numbers.**
- 2. The Year and Edition of This
MASTER.**

This will avoid confusion and expedite delivery.

Thank you!

The
Radio - Electronic
MASTER

AIR VARIABLE CAPACITORS

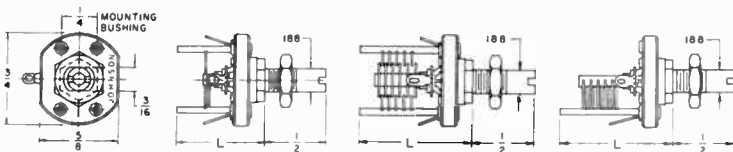
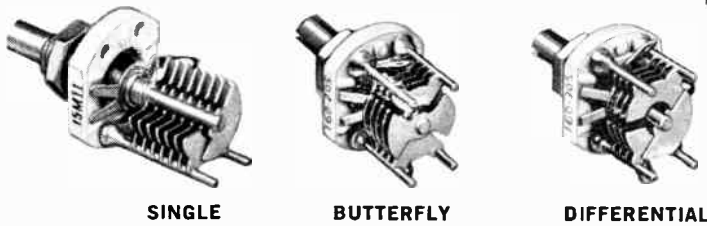
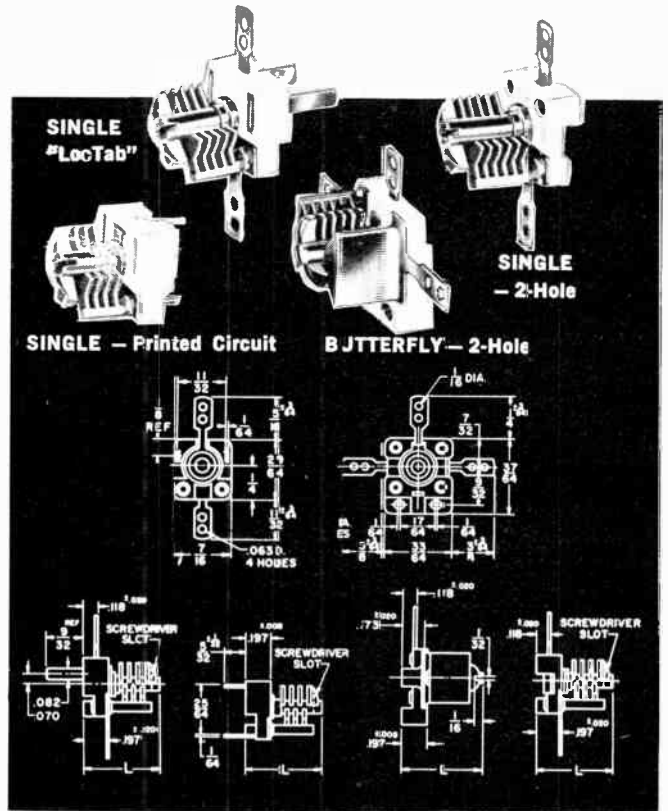
Whatever the choice . . . sub-miniature capacitors for printed circuit use—or large, heavy duty types . . . time and again engineers specify Johnson Air Variables!

More than 11 basic capacitor types are readily available in a wide selection of single section, dual section, butterfly and differential models. Units range in size from the diminutive sub-miniature Type "U" capacitors, to large, rugged heavy duty "C" and "D" types. Standard stock capacitors in a wide range of plate spacings, capacity per section, breakdown ratings, and finishes will meet many military and commercial applications . . . specials to your specifications are also available in production quantities.

TYPE "U" AND "UB" CAPACITORS

These tiny Type "U" and "UB" sub-miniature air variable capacitors require less than 0.2 and 0.3 square inch area respectively for chassis or panel mounting. Rotors and stators are precision machined from one piece of solid brass for outstanding mechanical stability and uniformity. Unit offers high "Q" (greater than 1500 at 1 mc), high torque-to-mass ratio, and low temperature coefficient—provides absolute freedom from moisture entrapment found in trimmer capacitors of enclosed or solid dielectric type. All metal parts silver plated—ceramic steatite Grade L-4 or better. Exceptionally uniform delta C and voltage characteristics. Extra heavy end rotor plate protects against accidental damage during handling. No special tools required for installation—slotted end accommodates large screwdriver for quick adjustment. Choice of wide, double pierced or printed circuit style terminals; and "LocTab," printed circuit, or two-hole mounting styles. Specials and Two hole mounting are available only in production quantities.

Note: When ordering "LocTab" add-1 to Cat. No.; Printed Circuit add-5 and 2-hole mounting add-7*



TYPE "M" CAPACITORS

These small Type "M" miniature air variable capacitors are excellent for use in compact equipment. Bridge type stator terminal provides an extremely low inductance path to both stator supports. Soldered plate construction, oversize bearing, and heavily anchored stator supports insure extreme rigidity. Large beryllium copper compression rotor contact provides steady torque—and rotor stays "put" where set. Rotor contact and all other metal parts are nickel plated—steatite insulator is DC-200 treated. Mounting bushing threaded with 1/4-32 flats to prevent turning—mounting nut furnished. Peak voltage 1250 volts on .017" spaced units; 850 volts on 160-130 which is spaced .013". 3/16" diameter shaft* slotted for screwdriver adjustment. Available in production quantities with the following features: locking bearings; 180° stop; various shaft extensions; high torque; silver or other platings.
*Instrument type tuning knob to fit 3/16" shaft available.

SPECIFICATIONS AND PRICES

TYPE "U" AND "UB" CAPACITORS

| Cat. No. | Nominal Cap. per Sec. | | Plates per Sec. | L | Net Price | | |
|--|-----------------------|------|-----------------|--------|-----------|----------------|-------------|
| | Max. | Min. | | | "LocTab" | Print. Circuit | 2 Hole Mng. |
| SINGLE SECTION—Air Gap .010"—850 Volt Peak Breakdown | | | | | | | |
| 189-1 | 3.5 | 1.2 | 4 | 29/64" | \$0.50 | \$0.66 | \$0.85* |
| 189-2 | 5.4 | 1.3 | 6 | 1/2" | .52 | .68 | .87* |
| 189-3 | 7.3 | 1.4 | 8 | 3/4" | .54 | .70 | .90* |
| 189-4 | 9.1 | 1.5 | 10 | 13/32" | .56 | .72 | .93* |
| 189-5 | 11.0 | 1.7 | 12 | 5/8" | .58 | .74 | .97* |
| 189-6 | 13.0 | 1.8 | 14 | 43/64" | .60 | .76 | 1.00* |
| SINGLE SECTION—Air Gap .016"—1300 Volt Peak Breakdown | | | | | | | |
| 189-26 | 4.1 | 1.3 | 6 | 1/2" | \$0.75 | \$1.00 | \$1.09* |
| 189-27 | 6.7 | 1.6 | 10 | 5/8" | .85 | 1.10 | 1.17* |
| 189-28 | 8.9 | 1.8 | 14 | 3/4" | .95 | 1.20 | 1.24* |
| BUTTERFLY—Air Gap .010"—850 Volt Peak Breakdown | | | | | | | |
| 189-201 | 4.5 | 2.4 | 9 | 13/32" | Not Av. | \$1.75 | \$1.75* |
| 189-202 | 5.5 | 2.5 | 15 | 5/8" | Not Av. | 1.85 | 1.85* |
| 189-203 | 8.5 | 3.0 | 21 | 11/16" | Not Av. | 2.00 | 2.00* |

*Available only in Production Quantities.

TYPE "M" CAPACITORS

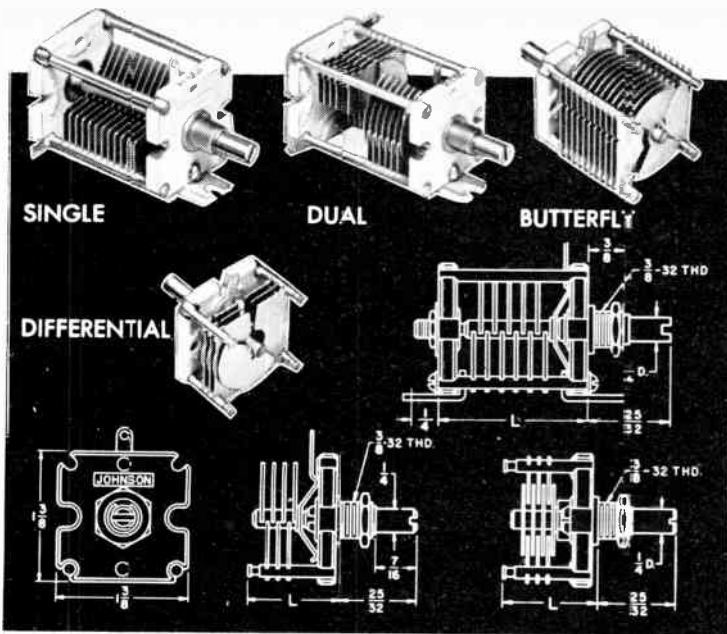
| Cat. No. | Nom. Cap. per Sec. | | Plates per Sec. | L | Net Price |
|-----------------------|--------------------|------|-----------------|---------|-----------|
| | Max. | Min. | | | |
| SINGLE SECTION | | | | | |
| 160-102 | 5 | 1.5 | 5 | 45/64" | \$0.90 |
| 160-104 | 8.7 | 1.8 | 9 | 13/16" | .95 |
| 160-107 | 14.2 | 2.3 | 15 | 1" | 1.00 |
| 160-110 | 19.6 | 2.7 | 21 | 1 1/16" | 1.10 |
| 160-130 | 32 | 3 | 24 | 1 1/8" | 1.20 |
| BUTTERFLY | | | | | |
| 160-203 | 3.1 | 1.5 | 5 | 45/64" | \$1.20 |
| 160-205 | 5.1 | 1.8 | 9 | 13/16" | 1.30 |
| 160-208 | 8 | 2.2 | 16 | 1" | 1.45 |
| 160-211 | 10.8 | 2.7 | 22 | 1 1/16" | 1.60 |
| DIFFERENTIAL | | | | | |
| 160-303 | 5.0 | 1.5 | 5 | 45/64" | \$1.25 |
| 160-305 | 8.7 | 1.8 | 9 | 13/16" | 1.45 |
| 160-308 | 14.2 | 2.3 | 15 | 1" | 1.65 |
| 160-311 | 19.6 | 2.7 | 21 | 1 1/16" | 1.85 |



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U.S.A.

TYPE "L" CAPACITORS

Ideal choice for applications requiring extreme stability and strength practically impervious to shock and vibration. Rotor bearings and stator support rods soldered directly to heavy 3/16" thick steatite insulator. Special split-sleeve tension bearing and silver-plated beryllium copper contact provide constant torque and smooth capacity variation. Heavy brass soldered plates and large diameter tie rods provide excellent rigidity. Removable chassis mounting brackets can be used to mount auxiliary equipment. Plating is heavy nickel - plate spacing .030". Peak voltage rating is 1500 volts. Also available with .020", .060", and .080" spacing as well as special platings, shaft lengths and stator terminal locations in production quantities. Bearings threaded 3/8-32", mounting nut provided. Models with 6-32 tapped mounting posts soldered to end frame also available on special order.



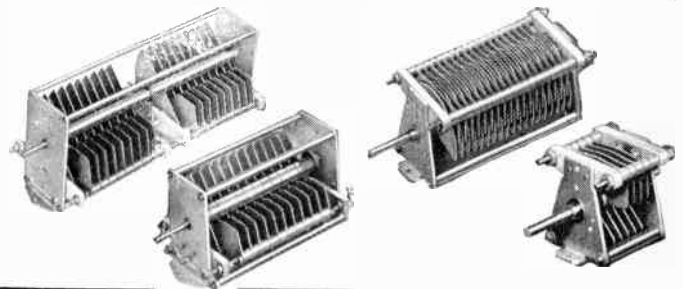
| Cat. No. | Nom. Cap. per Sec. Max. | Min. | Plates per Sec. | L | Net Price |
|--|-------------------------|------|-----------------|----------|-----------|
| SINGLE SECTION - Single End Plate | | | | | |
| 167-1 | 11 | 2.8 | 3 | 3/4" | \$1.80 |
| 167-2 | 27 | 3.5 | 7 | 4 1/4" | 1.90 |
| 167-3 | 51 | 4.6 | 13 | 1 1/4" | 2.10 |
| 167-4 | 75 | 5.7 | 19 | 1 1/4" | 2.30 |
| SINGLE SECTION - Double End Plate | | | | | |
| 167-11 | 99 | 6.8 | 25 | 2 1/2" | 3.70 |
| 167-12 | 202 | 11.6 | 51 | 3 21/64" | 4.70 |
| BUTTERFLY | | | | | |
| 167-21 | 10.5 | 2.8 | 5 | 55/64" | 2.15 |
| 167-22 | 26 | 4.3 | 12 | 1 1/4" | 2.50 |
| 167-23 | 51 | 6.8 | 23 | 1 3/4" | 3.05 |
| DIFFERENTIAL | | | | | |
| 167-31 | 11 | 2.8 | 3 | 3/4" | 2.20 |
| 167-32 | 27 | 3.5 | 7 | 4 1/4" | 2.40 |
| 167-33 | 51 | 4.6 | 13 | 1 1/4" | 2.75 |
| DUAL SECTION | | | | | |
| 167-51 | 27 | 5.0 | 7 | 1 1/2" | 3.75 |
| 167-52 | 51 | 6.5 | 13 | 2 15/64" | 4.15 |
| 167-53 | 99 | 9.8 | 25 | 3 3/16" | 5.20 |

TYPE "C" AND "D" CAPACITORS

Heavy .051" aluminum plates and 3/16" diameter aluminum tie rods; large, laminated rotor brushes; 1/4" cadmium-plated steel shafts; laminated phosphor bronze contact springs; and steatite insulation. Type "C" - overall width: 5 1/2" - height: 5 1/2" - height bottom to shaft center: 3 3/4". Type "D" - overall width: 4 1/4" - height: 4" - height bottom to shaft center: 2 3/4". Dual types have center rotor connection for better balance. End frames tapped 6-32, 3 holes, for panel mounting - brackets furnished for chassis mounting.

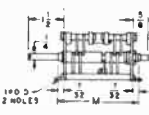
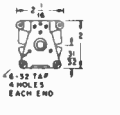
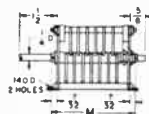
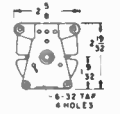
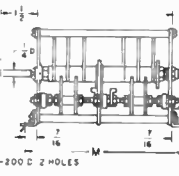
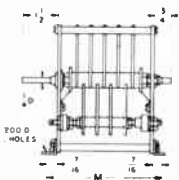
TYPE "E" AND "F" CAPACITORS

Large amount of capacity per cubic inch and extremely low capac to chassis. Heavy aluminum plates .032" thick with rounded edges and large 1/4" tie rods; stainless steel shafts; sturdy phosphor bronze contact springs; and center rotor contact on dual types. End frames tapped 8-32, 3 holes for panel mounting - brackets furnished for chassis mounting.



SPECIFICATIONS AND PRICES

| Cat. No. | Pkg. Volt- age | Nom. Cap. /Sec. Max. Min. | Air Gap | Plates per Sec. M | Net Price |
|------------------------------|----------------|---------------------------|----------|-------------------|-----------|
| TYPE C SINGLE SECTION | | | | | |
| 152-1 | 7000 | 252 | 34 .175" | 24 7 11/16" | \$27.95 |
| 152-2 | 7000 | 496 | 56 .175" | 47 13 1/4" | 23.95 |
| 152-6 | 11000 | 103 | 30 .350" | 17 9 15/16" | 14.95 |
| 152-8 | 13000 | 51 | 24 .500" | 10 8 7/8" | 12.95 |
| 152-9 | 13000 | 102 | 42 .500" | 21 14 1/2" | 13.95 |
| TYPE C DUAL SECTION | | | | | |
| 152-501 | 4500 | 204 | 21 .125" | 15 9 15/16" | 19.95 |
| 152-502 | 4500 | 290 | 26 .125" | 21 11 3/4" | 22.95 |
| 152-503 | 7000 | 198 | 27 .175" | 19 13 1/4" | 22.75 |
| 152-504 | 7000 | 305 | 37 .175" | 29 17 21/32" | 29.95 |
| 152-505 | 9000 | 147 | 30 .250" | 19 15 21/32" | 25.45 |
| 152-507 | 11000 | 50 | 18 .350" | 8 11 3/4" | 17.25 |
| 152-509 | 11000 | 103 | 32 .350" | 17 17 21/32" | 24.50 |
| TYPE D SINGLE SECTION | | | | | |
| 153-6 | 3500 | 496 | 36 .080" | 39 7 11/16" | 16.95 |
| 153-8 | 4500 | 146 | 23 .125" | 17 5 21/32" | 11.75 |
| 153-11 | 7000 | 98 | 23 .175" | 15 5 21/32" | 11.50 |
| 153-12 | 7000 | 151 | 31 .175" | 23 7 11/16" | 13.70 |
| 153-13 | 7000 | 244 | 45 .175" | 37 11 3/4" | 16.95 |
| 153-15 | 9000 | 53 | 20 .250" | 10 5 21/32" | 10.60 |
| 153-16 | 9000 | 73 | 25 .250" | 14 6 11/16" | 11.50 |
| 153-17 | 9000 | 99 | 30 .250" | 19 8 7/8" | 12.95 |
| 153-18 | 9000 | 149 | 43 .250" | 29 11 1/4" | 15.50 |
| TYPE D DUAL SECTION | | | | | |
| 153-501 | 3500 | 95 | 13 .080" | 8 5 21/32" | 13.30 |
| 153-502 | 3500 | 147 | 15 .080" | 12 6 11/16" | 14.95 |
| 153-503 | 3500 | 202 | 19 .080" | 16 8 7/8" | 17.95 |
| 153-504 | 3500 | 291 | 24 .080" | 23 10 11/16" | 20.25 |
| 153-505 | 3500 | 496 | 38 .080" | 39 14 7/8" | 28.30 |
| 153-506 | 4500 | 155 | 24 .125" | 17 10 11/16" | 18.50 |
| 153-507 | 4500 | 198 | 27 .125" | 23 13 1/4" | 20.95 |
| 153-508 | 7000 | 52 | 15 .175" | 8 6 11/16" | 13.70 |
| 153-509 | 7000 | 72 | 17 .175" | 11 8 7/8" | 15.25 |
| 153-510 | 7000 | 97 | 22 .175" | 15 10 1/4" | 17.40 |
| 153-511 | 7000 | 151 | 31 .175" | 23 14 7/8" | 22.40 |
| 153-513 | 9000 | 52 | 19 .250" | 19 10 11/16" | 15.95 |
| 153-514 | 9000 | 72 | 30 .250" | 19 15 21/32" | 21.50 |



| Cat. No. | Pkg. Volt- age | Nom. Cap. /Sec. Max. Min. | Air Gap | Plates per Sec. M | Net Price |
|------------------------------|----------------|---------------------------|----------|-------------------|-----------|
| TYPE E SINGLE SECTION | | | | | |
| 154-1 | 2000 | 244 | 12 .045" | 23 3 7/8" | \$ 7.40 |
| 154-2 | 2000 | 353 | 15 .045" | 33 3 31/64" | 8.35 |
| 154-3 | 2000 | 488 | 19 .045" | 45 4 29/64" | 9.80 |
| 154-7 | 3000 | 100 | 11 .075" | 15 3" | 6.60 |
| 154-8 | 3000 | 154 | 14 .075" | 23 3 3/8" | 7.55 |
| 154-9 | 3000 | 251 | 20 .075" | 37 5 5/8" | 9.20 |
| 154-10 | 3000 | 347 | 25 .075" | 51 6 7/8" | 10.95 |
| 154-11 | 4500 | 98 | 9 .125" | 9 2 3/4" | 6.10 |
| 154-12 | 4500 | 53 | 11 .125" | 12 3 1/2" | 6.55 |
| 154-13 | 4500 | 74 | 13 .125" | 17 4 1/2" | 7.00 |
| 154-14 | 4500 | 101 | 16 .125" | 23 4 31/64" | 7.70 |
| 154-15 | 4500 | 145 | 20 .125" | 33 6 17/64" | 8.80 |
| 154-16 | 4500 | 241 | 32 .125" | 55 10" | 11.50 |
| TYPE E DUAL SECTION | | | | | |
| 154-502 | 2000 | 312 | 13 .045" | 29 7 3/8" | 13.80 |
| 154-503 | 3000 | 52 | 8 .075" | 8 4 1/2" | 9.20 |
| 154-504 | 3000 | 72 | 8 .075" | 11 4 31/64" | 9.75 |
| 154-505 | 3000 | 99 | 10 .075" | 15 5 13/64" | 10.70 |
| 154-506 | 3000 | 153 | 13 .075" | 23 7 1/2" | 12.95 |
| 154-507 | 3000 | 196 | 15 .075" | 29 8 3/8" | 14.40 |
| 154-508 | 4500 | 52 | 10 .125" | 12 6 13/64" | 9.45 |
| 154-509 | 4500 | 74 | 12 .125" | 17 7 7/8" | 11.60 |
| 154-510 | 4500 | 100 | 15 .125" | 23 9 23/64" | 13.25 |
| TYPE F SINGLE SECTION | | | | | |
| 155-1 | 2000 | 35 | 7 .045" | 6 1 29/64" | 5.50 |
| 155-2 | 2000 | 54 | 8 .045" | 9 2 1/4" | 5.75 |
| 155-3 | 2000 | 68 | 8 .045" | 11 2 7/8" | 5.95 |
| 155-4 | 2000 | 106 | 10 .045" | 17 2 11/16" | 6.55 |
| 155-5 | 2000 | 154 | 12 .045" | 25 3 3/8" | 7.30 |
| 155-6 | 2000 | 252 | 17 .045" | 41 4 1/2" | 8.95 |
| 155-8 | 3000 | 52 | 9 .075" | 13 2 3/4" | 6.25 |
| 155-9 | 3000 | 67 | 11 .075" | 17 3 1/4" | 6.60 |
| 155-10 | 3000 | 99 | 14 .075" | 25 4 1/8" | 7.35 |
| 155-11 | 3000 | 148 | 18 .075" | 37 5 5/8" | 8.75 |
| TYPE F DUAL SECTION | | | | | |
| 155-501 | 2000 | 53 | 7 .045" | 9 3 15/64" | 9.10 |
| 155-502 | 2000 | 66 | 7 .045" | 11 4 1/4" | 9.70 |
| 155-503 | 2000 | 104 | 9 .045" | 17 5 5/8" | 10.95 |
| 155-504 | 2000 | 153 | 11 .045" | 25 6 13/64" | 12.95 |
| 155-505 | 2000 | 202 | 14 .045" | 33 7 5/8" | 14.35 |
| 155-506 | 3000 | 51 | 8 .075" | 13 5 1/4" | 10.40 |
| 155-507 | 3000 | 66 | 10 .075" | 17 6 1/8" | 11.50 |
| 155-508 | 3000 | 99 | 13 .075" | 25 7 7/8" | 13.35 |



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U. S. A.

TUBE SOCKETS

To simplify selection of sockets and to provide complete specifications for standard, industrial and military requirements, wherever applicable, Johnson tube sockets have been categorized under a socket standardization program. General specifications are listed on the following pages - detailed specifications on the complete socket line are covered in Socket Standardization Booklet 536. Should you desire a copy for Engineering Department use, please make your request on company letterhead.



124-212

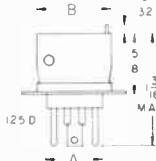
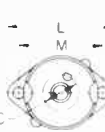
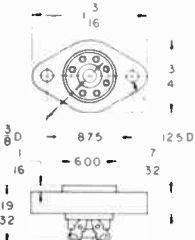


119-843

120-277



120-267



MINIATURE SOCKETS

Wafer type, steatite socket for miniature 7 pin tubes such as the 1RS, 1S5, 6CB6, etc. E.I.A. base number E7-1. Silver-plated phosphor bronze contacts.

Cat. No. 120-267 \$0.50

Standard shield base type 7 pin miniature socket. E.I.A. base number E7-1. Two piece steatite construction with silver-plated phosphor bronze contacts, hot tin-dipped terminal ends. Shield base is nickel-plated brass.

| Cat. No. | Pins | L | M | C | A | B | Net Price |
|----------|------|---------|-------|-------|-------|-------|-----------|
| 120-277 | 7 | 1 7/64" | 7/16" | .375" | .625" | .770" | \$0.66 |

SOCKET FOR 833 AND 833A

Special socket assembly with steatite base and a pair of head radiating tube cap connectors. Knurled thumb nuts on socket base for fast, easy tube installation. Base design minimizes strain on tube envelope and prevents breakage. Head radiating plate connectors, aluminum 4 3/8" flexible laminated leads. One pair included.

Cat. No. 124-212... Net Price \$9.00

Heat radiating plate connectors. Available separately.

Cat. No. 119-843 \$1.50

SOCKETS FOR 4X150A, 4X150D, 4X250B, 4CX250B, 4X250F, 7034, 7035

For use with high power transmitting tubes. Available in many designs - with or without, low inductance screen grid by-pass capacitors. Basic socket molded of low dielectric loss-factor Kel-F plastic. Control grid contact "guide" machined for high alignment accuracy, tapped for 6-32 machine screw. Contacts are low-resistance silver-plated beryllium copper. Tube pin contacts heat treated to provide positive contact pressure and extended life. Annealed soldering tabs may be easily bent or formed. Additional specifications and information available on Data Sheet 755.

Rugged light weight basic socket with silver-plated brass mounting saddle. Cathode terminals insulated. Four elongated .140" x .234" mounting holes to accommodate mounting circle diameters from 2 7/16" to 2 1/2". Mounts below chassis in 1 7/8" diameter hole.

Cat. No. 124-107-1 Net Price \$5.65

Same as 124-107-1 except cathode terminals grounded. Four mounting holes .136" diameter on circle of 2 7/16" diameter.

Cat. No. 124-108-1 Net Price \$5.95

Low cost, light weight basic socket without metal mounting ring. Cathode terminals insulated. Mounts below chassis in 1 7/8" diameter hole.

Cat. No. 124-109-1 Net Price \$5.00

Basic socket with mounting ring and low-inductance 2700 mmf. screen grid by-pass capacitor; cathode terminals insulated. Mounts above chassis through 2 1/2" diameter hole with 3 clips drilled for 6-32 screws. Provision for mounting socket skirt directly to 1.625" O.D. outer conductor of coaxial-type line.

Cat. No. 124-110-1 Net Price \$11.70

Same as 124-110-1 except cathode terminals grounded.

Cat. No. 124-112-1 Net Price \$12.00

Same as 124-108-1, less metal mounting saddle. Low inductance grounding of cathode terminals No. 2, 4, 6, and 8 through integral combination grounding and mounting lugs. Mounts below chassis in 1 7/8" diameter hole.

Cat. No. 124-114-1 Net Price \$5.65

Basic socket with mounting ring and smaller low-inductance 1100 mmf. screen grid by-pass capacitor. Requires less mounting space than other screen grid by-pass type sockets. Withstands 1500 volts DC under applicable test specifications. Cathode terminals insulated. Recessed silver-plated beryllium copper screen grid contacts provide positive electrical contact and low inductance. Mounts above chassis through 2 1/2" diameter hole with 3 clips drilled for 6-32 screws. Provision for mounting socket skirt directly to 1.625" O.D. outer conductor of coaxial-type line.

Cat. No. 124-115-1 Net Price \$13.00

Same as 124-115-1, except cathode terminals grounded.

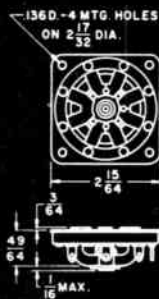
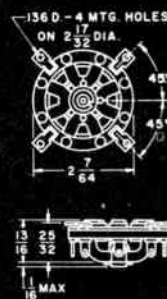
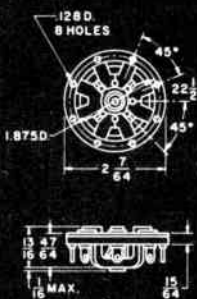
Cat. No. 124-116-1 Net Price \$13.50



124-109-1

124-114-1

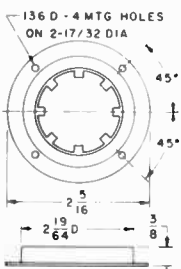
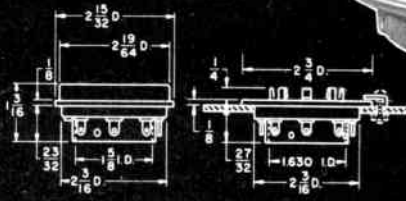
124-107-1



124-115-1



124-110-1



124-111-1



124-113-1



High quality heat resistant steatite chimney for use with 124-107-1, 124-108-1, 124-109-1, 124-110-1, 124-112-1, and 124-114-1 sockets. Tapered construction directs air flow through tube cooling fins. Maximum base diameter 2 7/8".

Cat. No. 124-111-1 Net Price \$0.45

1450 mmf. circular silvered-mica screen grid by-pass capacitor mounted within a low-loss silicone resin sealed silver-plated drawn brass housing. Low inductance silver-plated beryllium copper screen grid contact fingers are heat treated to provide positive contact pressure as well as extended life. Capacitor dielectric strength tested at 1000 volts DC. Unique design permits replacement of screen grid by-pass capacitor by merely removing 4 mounting screws; socket rewiring unnecessary. Fully complies with MIL-C-10950A. For use with 124-107-1, 124-108-1, 124-109-1, 124-114-1, and similar sockets.

Cat. No. 124-113-1 Net Price \$5.00



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U. S. A.

SOCKETS – GENERAL SPECIFICATIONS

Standard – Commercial grade for general requirements. Bayonet sockets have porcelain bases, glazed top and sides with .0002 cadmium-plated phosphor bronze contacts. Wafer sockets have glazed steatite bases, DC-200 treated. Contacts are plated brass with steel springs. Shells and shields are etched aluminum.

Industrial – Higher quality than Standard types. Glazed steatite bases, DC-200 treated. Contacts .0005 silver-plated – on Bayonet sockets are phosphor bronze with beryllium copper springs . . . phosphor bronze or beryllium copper on Wafers. Shells and shields are aluminum, iridite No. 14 treated. (Except 123-206-100.) Fungus resistant cushion washers under contacts.

Military – Top quality for military requirements. Glazed L-4 steatite bases, DC-200 treated. Phosphor bronze contacts and beryllium copper springs. .001 silver-plated on Wafers – Bayonet sockets have .0005 silver-plated beryllium copper contacts. Aluminum shields on shielded Wafers are iridite No. 14 treated – bayonet shells are brass. .0003 nickel-plated. Threaded hardware .0002 nickel-plated, unthreaded hardware .0003. Hot tin-tipped terminals. Fungus resistant cushion washers. (Glass base melamine on Wafers.) Wafer sockets protected for 200 hour salt spray test.

HEAVY DUTY MEDIUM 4 PIN BAYONET

For tubes such as the 866A or 811A with E.I.A. Base No. A4-10. Designed with extra heavy side wiping contacts and extended creepage paths to resist high voltage breakdown. Solder or threaded stud terminals – nuts furnished.

| Cat. No. | Type | Net Price |
|-------------|------------|-----------|
| 123-209-1 | Standard | \$1.70 |
| 123-209-100 | Industrial | 3.40 |
| 123-209-200 | Military | 4.05 |

MEDIUM 4 PIN BAYONET

Compact, economical socket for tubes with E.I.A. Base No. A4-10. Phosphor bronze side wiping contacts and extended creepage paths. Solder or threaded stud terminals – nuts furnished.

| Cat. No. | Type | Net Price |
|-------------|------------|-----------|
| 123-210-1 | Standard | \$1.65 |
| 123-210-100 | Industrial | 3.35 |
| 123-210-200 | Military | 4.00 |

JUMBO 4 PIN BAYONET

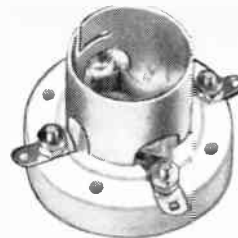
Popular "50 watt" socket for tubes such as the 872A, 211, and others with E.I.A. Base No. A4-29. Double wiping filament contacts handle heavy current. Solder or threaded stud terminals – nuts furnished.

| Cat. No. | Type | Net Price |
|-------------|------------|-----------|
| 123-211-1 | Standard | \$2.15 |
| 123-211-100 | Industrial | 3.95 |
| 123-211-200 | Military | 4.90 |

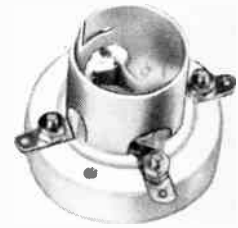
SUPER JUMBO 4 PIN SOCKET

Heavy duty socket for high voltages and/or heavy current. Accommodates 8008, 5C22, FG104, GL146, and others with E.I.A. Base No. A4-18. Special high current insertion type spring contacts – three heavy retaining springs in nickel-plated brass shell hold tube securely. Two mounting holes recessed to prevent flashover. Screw terminals – screws furnished.

| Cat. No. | Type | Net Price |
|-------------|------------|-----------|
| 123-206-100 | Industrial | \$5.15 |
| 123-206-200 | Military | 5.65 |



123-209



123-210



123-211



123-206

STANDARD WAFER SOCKETS

Insulated with Grade L-4 steatite, or better. Countersunk rivets and bossed mounting holes permit sub-panel mounting. Brass contacts with cadmium-plated steel springs. Locating grooves facilitate tube insertion.

| Cat. No. | Type | A | B | C | E | For Tube | Net Price |
|-------------|------------|--------|-------|----------|--------|----------|-----------|
| 122-224-1 | Standard | 9/16" | 1/4" | 1 11/16" | 7/8" | 4 Pin | \$0.76 |
| 122-224-100 | Industrial | 9/16" | 1/4" | 1 11/16" | 7/8" | 4 Pin | .89 |
| 122-224-200 | Military | 9/16" | 1/4" | 1 11/16" | 7/8" | 4 Pin | 1.05 |
| 122-225-1 | Standard | 9/16" | 1/4" | 1 11/16" | 59/64" | 5 Pin | .83 |
| 122-225-200 | Military | 9/16" | 1/4" | 1 11/16" | 59/64" | 5 Pin | 1.20 |
| 122-226-1 | Standard | 9/16" | 1/4" | 1 11/16" | 59/64" | 6 Pin | .94 |
| 122-226-200 | Military | 9/16" | 1/4" | 1 11/16" | 59/64" | 6 Pin | 1.30 |
| 122-227-1 | Standard | 9/16" | 1/4" | 1 13/16" | 31/32" | 7 Pin | 1.00 |
| 122-227-200 | Military | 9/16" | 1/4" | 1 13/16" | 31/32" | 7 Pin | 1.50 |
| 122-228-1 | Standard | 15/32" | 3/16" | 1 11/16" | 57/64" | Octal | 1.05 |
| 122-228-200 | Military | 15/32" | 3/16" | 1 11/16" | 57/64" | Octal | 1.60 |

SUPER JUMBO 4 PIN SOCKET

Heavy duty steatite insulated 4 pin wafer – for super jumbo base tubes such as the 8008, and many rectifier and thyratron types with E.I.A. Base Nos. A4-15, A4-16, and A4-18. Long, parallel contacts are designed to withstand high currents.

| Cat. No. | Type | A | B | L | Net Price |
|-------------|------------|----------|-------|--------|-----------|
| 122-244-1 | Standard | 1 11/16" | 9/32" | 2 3/8" | \$1.75 |
| 122-244-100 | Industrial | 1 11/16" | 9/32" | 2 3/8" | 2.00 |
| 122-244-200 | Military | 1 11/16" | 9/32" | 2 3/8" | 2.35 |

SEPTAR SOCKETS

Designed for 7 pin tubes such as the 7094, with E.I.A. Base No. E7-2. Furnished with a separate aluminum shield ring.

| Cat. No. | Type | L | Net Price |
|-------------|------------|--------|-----------|
| 122-247-1 | Standard | 2 3/8" | \$1.75 |
| 122-247-100 | Industrial | 2 3/8" | 1.95 |
| 122-247-200 | Military | 2 3/8" | 2.20 |
| 122-248-1 | Standard | 2 3/8" | 1.60 |
| 122-248-100 | Industrial | 2 3/8" | 1.80 |
| 122-248-200 | Military | 2 3/8" | 2.10 |

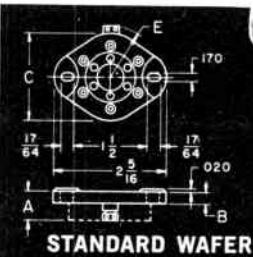
VHF SEPTAR SOCKETS

Takes 1/3 less space than previously available types – permits compact design with medium button septar bases such as the 5894, 6524, and 6252 with E.I.A. Base No. E7-20. Molded contact recesses in base prevents turning. Aluminum shell sub-mounts tube for maximum input and output shielding. 3/8" holes provide adequate ventilation.

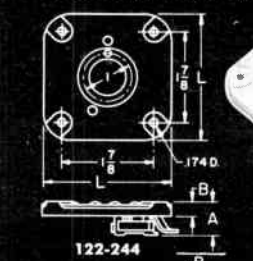
| Cat. No. | Type | Net Price |
|-------------|------------|-----------|
| 122-105-100 | Industrial | \$1.60 |
| 122-105-200 | Military | 1.90 |

For tubes with medium molded flare septar base such as the 826, 832, 4D32, PL6549, PL-177A, 7-65 with E.I.A. Base No. E7-2. Industrial type has 5 and military type has 7 retainer springs. With ventilated shield. Provision for mounting button mica capacitors directly to socket. Special terminals permit direct mounting of grid coils – two holes provided for mounting of bus bar neutralizing leads.

| Cat. No. | Type | Net Price |
|-------------|------------|-----------|
| 122-101-100 | Industrial | \$2.70 |
| 122-101-200 | Military | 3.20 |



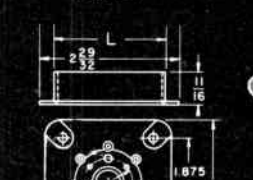
STANDARD WAFER



122-244



122-237



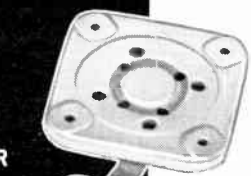
122-247



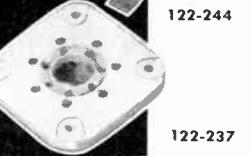
122-247 122-248



Standard



122-244



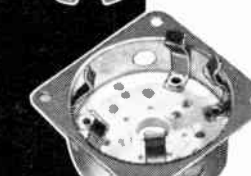
122-237



122-247



122-248



122-105



122-101



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U. S. A.

NYLON CONNECTORS

NOTE: Nylon connectors are available in 13 standard colors, White as shown in pricing, plus 12 other colors. Colors should be specified by increasing 5th and 6th digits of the Catalog Number listed for White per the chart below. (Example: To order 105-801 in Yellow rather than White, increase 5th and 6th digits by 06 ending up with 105-807. To order 105-681-16 in Violet rather than White, increase 5th and 6th digits by 11, ending up with 105-692-16.)

| Increase 5th and 6th Digits by: | Color | Increase 5th and 6th Digits by: | Color | Increase 5th and 6th Digits by: | Color |
|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|----------|
| 01 | Red | 05 | Orange | 09 | Dk. Blue |
| 02 | Black | 06 | Yellow | 10 | Ivory |
| 03 | Dk. Green | 07 | Brown | 11 | Violet |
| 04 | Lt. Blue | 08 | Lt. Green | 12 | Grey |

DELUXE NYLON TIP JACK

(U.S. Pat. No. 2,704,357)

Molded nylon body with recessed silver-plated machined beryllium copper contact. Hot tin-dipped solder terminal. Current rating: 10 amps. Voltage breakdown: 11,000 volts DC. Capacity to 1/8" panel: 2.0 mmf. 1/4"-32 nut furnished.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-601 | White (13 colors available—see above) | \$0.20 |

STANDARD TIP JACK

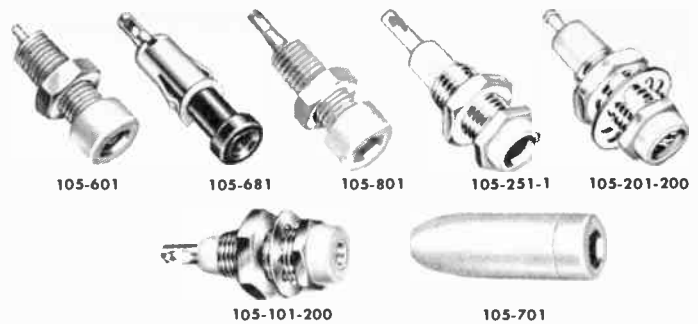
Molded nylon body with recessed, cadmium-plated formed phosphor bronze contact. Current rating: 10 amps. Voltage breakdown: 9,000 volts DC. Capacity to 1/8" panel: 2.0 mmf. 1/4"-32 nut furnished.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-801 | White (13 colors available—see above) | \$0.13 |

RAPID-MOUNT NYLON TIP JACK

Low cost — fast mounting! Snap "speed clip" into hole in .061" to .069" thick panels and insert jack. Silver-plated phosphor bronze contact. Voltage breakdown: 7,000 volts DC. Capacity to 1/8" panel: 3.8 mmf. Current rating: 10 amps.

| Cat. No. | Color | Net Price |
|------------|---------------------------------------|-----------|
| 105-681-16 | White (13 colors available—see above) | \$0.11 |



METAL-CLAD NYLON TIP JACKS—STANDARD

Nylon body, nickel-plated machined brass jacket. Formed, silver-plated phosphor bronze contact. Current rating: 10 amps. Voltage breakdown: 7,000 volts DC. Capacity to 1/8" panel: 3.8 mmf. 1/4"-32 nut and lock washer furnished.

| Cat. No. | Color | Net Price |
|-----------|---------------------------------------|-----------|
| 105-251-1 | White (13 colors available—see above) | \$0.17 |

METAL-CLAD NYLON TIP JACKS—MILITARY

Complies with MS-16108 of MIL STD-242A. Heavy nickel-plated brass jacket. Silver-plated, machined beryllium copper contact. Current rating: 10 amps. Voltage breakdown: 8,000 volts DC. Capacity to 1/8" panel: 3.8 mmf. 1/4"-32 nut and lock washer furnished.

| Cat. No. | Color | Net Price |
|-------------|---------------------------------------|-----------|
| 105-201-200 | White (13 colors available—see above) | \$0.26 |

Economy grade, 105-101-200, same as above but lower price. Formed contact. Voltage breakdown: 5,000 volts DC.

| Cat. No. | Color | Net Price |
|-------------|---------------------------------------|-----------|
| 105-101-200 | White (13 colors available—see above) | \$0.21 |

NYLON JACK AND SLEEVE ASSEMBLY

Includes Deluxe Tip Jack (105-601 to 105-613), less mounting nut, with inside threaded molded nylon sleeve. Ideal for patch cords, or insulated rear connection of panel mounted tip jack.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-701 | White (13 colors available—see above) | \$0.20 |

NYLON SOLDERLESS TIP PLUG (Patent Pending)

Completely insulated, molded nylon sleeve. Recessed metal head prevents exposure of metal surfaces when engaged in any standard tip jack. All metal parts are nickel-plated brass. Designed for solderless connection of up to 16 gauge stranded wire. Fits all standard tip jacks. Current rating: 10 amps.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-301 | White (13 colors available—see above) | \$0.15 |

NYLON BANANA PLUGS (Patent Pending)

Compact, high voltage insulated plug for a wide variety of applications. Designed for fast, solderless connection of up to 16 gauge stranded wire. Body and pin are constructed of one-piece, nickel-plated brass with high grade nickel silver springs. Sleeve is molded nylon. Current rating: 10 amps.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 108-301 | White (13 colors available—see above) | \$0.19 |

DUAL BANANA PLUG (Patent Pending)

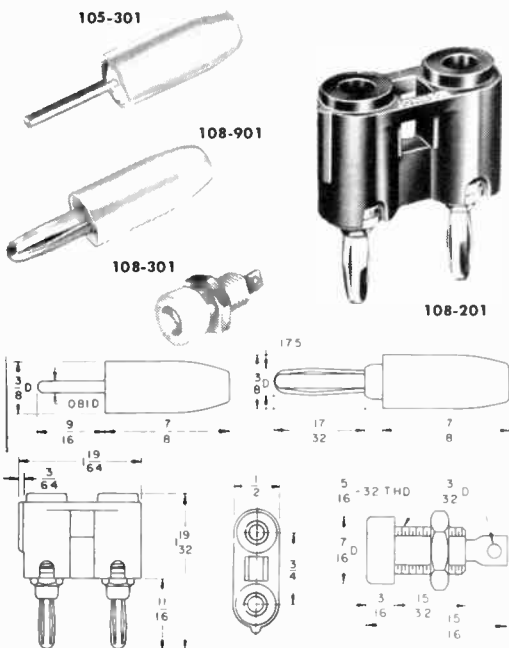
Extremely versatile solderless dual banana plug. Molded nylon body incorporates polarity indication and strain relief hole for wire leads. Springs are high quality nickel silver — bodies are nickel-plated. Accurately machined brass studs extend the full length of pins for extra strength. Voltage breakdown: 10,000 volts DC. Capacity plug to plug: 1.3 mmf. Current carrying capacity: 15 amps.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 108-201 | White (13 colors available—see above) | \$0.60 |

NYLON BANANA JACK

Completely insulated, molded nylon body with cadmium-plated insert. Accommodates banana plugs of nominal .175" diameter. Voltage breakdown: 12,500 volts DC. Capacity to 1/4" panel: 2.4 mmf. nominal. Mounts in 3/4" diameter circular, "D", or double flat hole (1/4" across flats). Single nut furnished for mounting — no other mounting hardware needed.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 108-901 | White (13 colors available—see above) | \$0.10 |



NYLON "SIX-WAY" BINDING POST (U.S. Pat. No. 2,806,999)

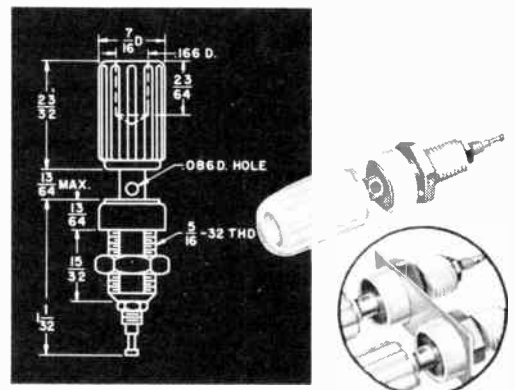
Compact, insulated, pre-assembled binding post. Molded nylon body with silver-plated shank. Thumb nut self-captivated. Connection made at solder stud, or lug may be slipped over threaded portion and secured with a nut. Single nut furnished for mounting — no other hardware needed. Single banana plug fits hole in top of binding post. Insulation resistance greater than 200 meg. after MIL-T-5422B humidity test. Voltage breakdown: 8,000 volts DC. Capacity to 1/8" panel: 3.3 mmf. Current carrying capacity: 15 amps. Mounts in 3/4" diameter circular hole, "D", or double flat hole (1/4" across flats).

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 111-101 | White (13 colors available—see above) | \$0.30 |

MOUNTING PLATE

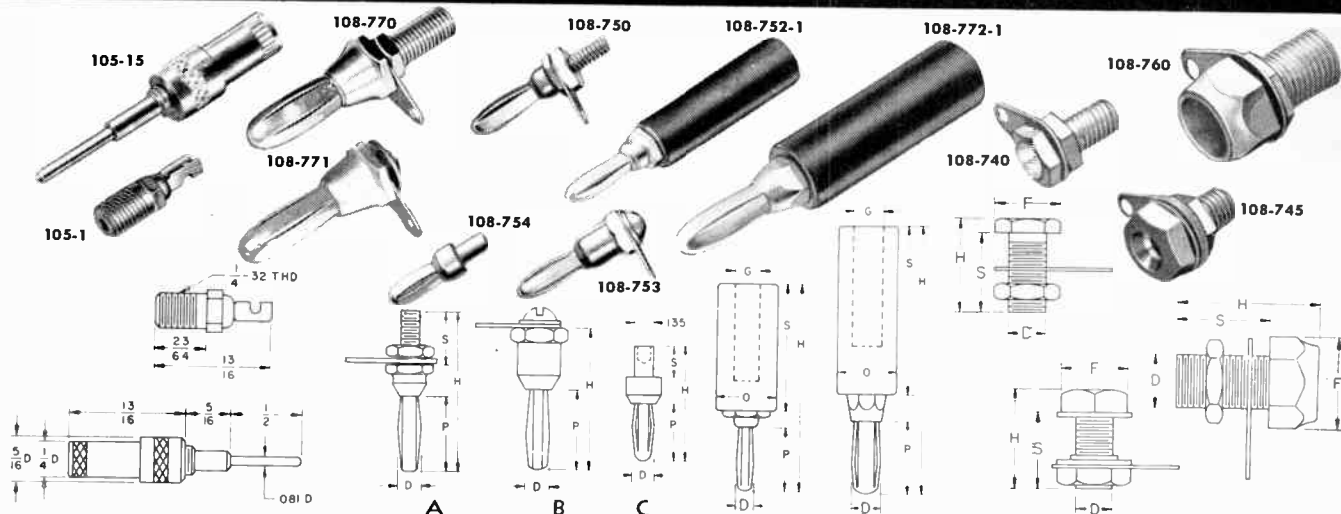
Pre-punched, etched aluminum mounting plate for accurate mounting of two nylon binding posts, or banana jacks in 3/4" diameter holes on exact 3/4" centers.

| Cat. No. | Net Price |
|----------|-----------|
| 111-20 | \$0.02 |



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U.S.A.

MISCELLANEOUS CONNECTORS



HEADLESS TIP JACK

Headless tip jack for insulated mounting surfaces. Hex shoulder for tightening. Beryllium copper, cadmium-plated contact.

Cat. No. 105-1 Net Price \$0.11

SOLDERLESS PHONE TIP PLUGS

Solderless phone tip plugs with knurled nickel-plated brass body and sleeve - construction permits leads to be firmly secured without soldering. $\frac{3}{16}$ " pin ... last $\frac{1}{2}$ " of tip .081" diameter. For use with all standard tip jacks.

Cat. No. 105-15 Net Price \$0.18

STANDARD BANANA PLUGS

This group of standard banana plugs has accurately machined brass studs which extend the full length of the plugs, providing extra strength. Springs are nickel-silver - highly resistant to corrosion. Bodies and hardware .0001 nickel-plated. All banana plugs listed below, are available with beryllium copper springs and nickel, cadmium, or silver plating, when desired. A wide selection of miniature solder-type plugs is also available on special order - however quantities in special platings or plugs should be sufficiently large for economical production runs. Solder terminal and nut or screw furnished.

| Cat. No. | Dwg. | S | P | D | H | Thread | Net Price |
|-----------|------|-----------------|-------------------|-------|-------------------|--------|-----------|
| 108-750 | A | $\frac{3}{8}$ " | $\frac{17}{32}$ " | .175" | $1\frac{1}{8}$ " | 6-32 | \$0.13 |
| 108-750-2 | A | $\frac{3}{4}$ " | $\frac{17}{32}$ " | .175" | $1\frac{1}{2}$ " | 6-32 | .14 |
| 108-753 | B | ... | $\frac{17}{32}$ " | .175" | $1\frac{3}{16}$ " | 6-32 | .14 |

This banana plug is similar to the standard types listed above, except that it is designed for riveting. Springs are beryllium copper, cadmium-plated.

| | | | | | | | |
|---------|---|------------------|-------------------|-------|-------------------|-------|--------|
| 108-754 | C | $\frac{7}{32}$ " | $\frac{13}{32}$ " | .155" | $1\frac{3}{16}$ " | | \$0.09 |
|---------|---|------------------|-------------------|-------|-------------------|-------|--------|

Jumbo type banana plugs with accurately machined brass studs extending full length of the pins. Nickel-silver springs. Bodies and hardware .0001 nickel-plated. With solder lug and nut or screw.

| | | | | | | | |
|---------|---|-----------------|-----------------|-------|--------------------|--------------------|--------|
| 108-770 | A | $\frac{3}{8}$ " | $\frac{3}{4}$ " | .300" | $1\frac{25}{32}$ " | $\frac{1}{4}$ "-28 | \$0.32 |
| 108-771 | B | ... | $\frac{3}{4}$ " | .300" | $1\frac{1}{8}$ " | 10-32 | .34 |

STANDARD INSULATED BANANA PLUGS

These standard size insulated banana plugs are equipped with plastic handles, brass nickel-plated bodies, and nickel-silver springs. The 108-752-1 has a black plastic handle - the 108-752-2 has a red plastic handle.

| Cat. No. | S | P | D | H | G | O | Net Price |
|-----------|------------------|-------------------|-------|------------------|------------------|------------------|-----------|
| 108-752-1 | $1\frac{1}{8}$ " | $\frac{17}{32}$ " | .175" | $2\frac{1}{4}$ " | $\frac{7}{32}$ " | $\frac{7}{16}$ " | \$0.30 |
| 108-752-2 | $1\frac{3}{8}$ " | $\frac{17}{32}$ " | .175" | $2\frac{1}{4}$ " | $\frac{7}{32}$ " | $\frac{7}{16}$ " | .30 |

JUMBO INSULATED BANANA PLUGS

These jumbo size insulated banana plugs are similar in design to the standard types listed above, but are somewhat larger in size. With brass nickel-plated bodies, and nickel-silver springs. The 108-772-1 has a black plastic handle - the 108-772-2 has a red plastic handle.

| Cat. No. | S | P | D | H | G | O | Net Price |
|-----------|------------------|-----------------|-------|--------------------|-----------------|-----------------|-----------|
| 108-772-1 | $1\frac{3}{4}$ " | $\frac{3}{4}$ " | .300" | $2\frac{25}{32}$ " | $\frac{3}{8}$ " | $\frac{3}{8}$ " | \$0.53 |
| 108-772-2 | $1\frac{3}{4}$ " | $\frac{3}{4}$ " | .300" | $2\frac{25}{32}$ " | $\frac{3}{8}$ " | $\frac{3}{8}$ " | .53 |

STANDARD BANANA JACKS

High quality machined brass banana jack. Nickel-plated. Furnished complete with solder terminal and nut.

| Cat. No. | F | D | S | H | Hole Dia. | Thread | Net Price |
|----------|-----------------|-----------------|-------------------|------------------|-----------|--------------------|-----------|
| 108-740 | $\frac{3}{8}$ " | $\frac{1}{4}$ " | $\frac{17}{32}$ " | $\frac{5}{16}$ " | .166" | $\frac{1}{4}$ "-28 | \$0.12 |

High quality machined brass banana jacks with plastic head molded to body. Nickel-plated. Furnished complete with solder terminal and nut. The 108-745-1 is equipped with red plastic head - the 108-745-2 is equipped with black plastic head.

| | | | | | | | |
|-----------|------------------|-----------------|-------------------|-------------------|-------|--------------------|--------|
| 108-745-1 | $\frac{7}{16}$ " | $\frac{1}{4}$ " | $\frac{31}{64}$ " | $\frac{21}{32}$ " | .166" | $\frac{1}{4}$ "-28 | \$0.22 |
| 108-745-2 | $\frac{7}{16}$ " | $\frac{1}{4}$ " | $\frac{31}{64}$ " | $\frac{21}{32}$ " | .166" | $\frac{1}{4}$ "-28 | .22 |

This jumbo banana jack will accommodate plugs such as the 108-770 and the 108-771 listed above. Machined brass, nickel-plated. Furnished complete with solder terminal and nut.

| | | | | | | | |
|---------|------------------|-----------------|-------------------|----|-------|--------------------|--------|
| 108-760 | $\frac{9}{16}$ " | $\frac{3}{8}$ " | $2\frac{1}{32}$ " | 1" | .277" | $\frac{3}{8}$ "-32 | \$0.32 |
|---------|------------------|-----------------|-------------------|----|-------|--------------------|--------|

NYLON PRINTED CIRCUIT PLUGS AND JACKS

Designed for use in printed circuits. Tough, low-loss nylon construction. Horizontal and vertical tip jacks designed to accommodate .080" tip plug. Choice of 13 colors for coded applications, see color ordering information on preceding page.

HORIZONTAL JACK

Unique design accepts .080" dia. tip plug in either end, or from top or bottom! Silver-plated beryllium copper formed contact. Two terminals.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-751 | White (13 colors, see preceding page) | \$0.08 |

VERTICAL JACK

Mounts through single .052" hole, requires minimum mounting area. Silver-plated, machined beryllium copper-contact.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-851 | White (13 colors, see preceding page) | \$0.11 |

SUB-MINIATURE TIP PLUG

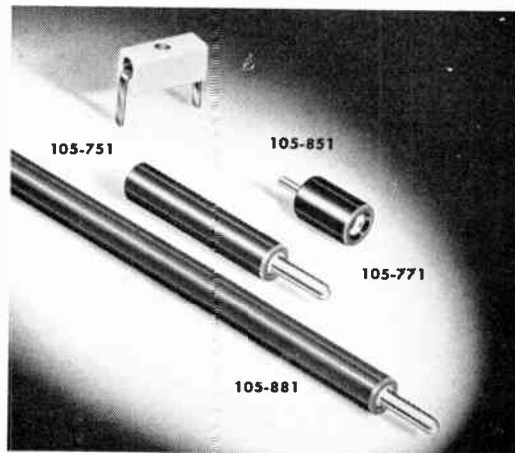
For use with miniature jack, .080" dia. tip. Nickel-plated machined brass body, solder type lead connection.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-771 | White (13 colors, see preceding page) | \$0.14 |

LONG HANDLE TIP PLUG

For use with horizontal, vertical, or standard .080" diameter tip jacks. Four-inch nylon handle for ready access to "hard to reach" test points. Nickel-plated machined brass body, solder type lead connection.

| Cat. No. | Color | Net Price |
|----------|---------------------------------------|-----------|
| 105-881 | White (13 colors, see preceding page) | \$0.25 |



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U. S. A.

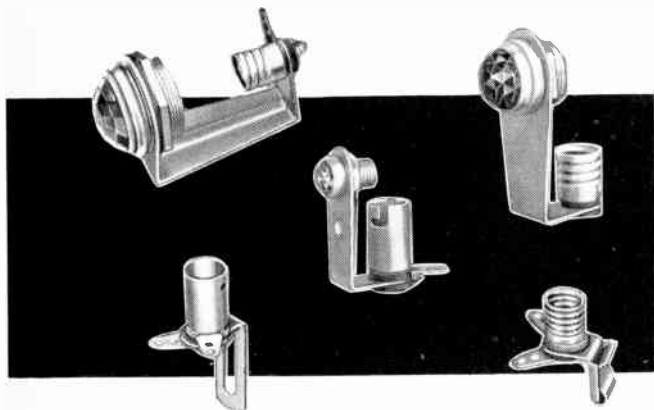


PILOT LIGHTS

Cut valuable specification time by selecting your panel indicators from Johnson's "preferred" line. This group contains more than 47 separate assemblies carefully selected from Johnson's standard line by many of the nation's top design and development personnel. Available in a wide variety of types, these "preferred" units are immediately available at parts distributors throughout the country, for original equipment or in-the-field replacement.

Available Types Include: Continuous Indication Neon Types; models for High and Low Voltage Incandescent bulbs; Standard or Wide Angle Glass and Lucite Jewels in Clear, Red, Green, Amber, Blue or Opal. Specials, including those meeting military specifications are also available in production quantities.

NOTE: For detailed specifications and prices on "preferred" types as well as the complete line of Johnson Pilot Lights, write for your copy of our newest Pilot Light Catalog. See how easy it is to select the "right" pilot light . . . fast!

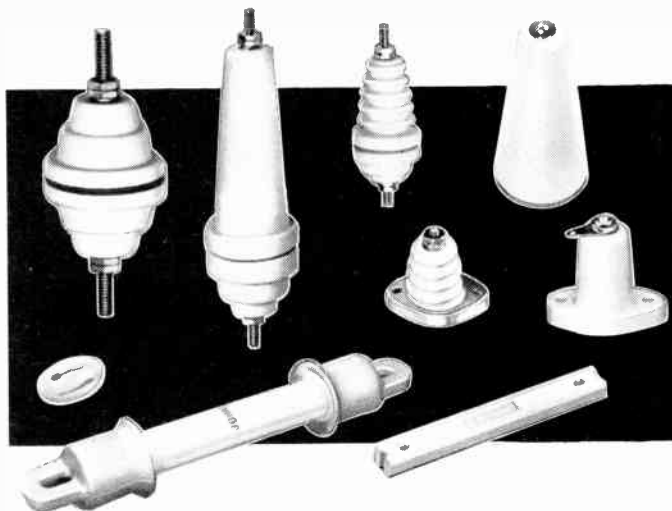


STEATITE AND PORCELAIN INSULATORS

Available in a wide line of standard types, Johnson low-loss steatite and porcelain insulators are readily available for almost any electronic application. Fracture resistant, dense molded and glazed for low moisture absorption, Johnson stand-off and feed-thru types are designed with extended creepage paths for maximum voltage breakdown ratings — heavy integral mounting bases withstand high compression loads and considerable lateral stress. Insulators are equipped with heavily nickel-plated brass hardware — excellent for exposed applications . . . feed-thru types are available with jacks to accommodate Johnson or other standard banana plugs.

Complete Line Includes the Following: Insulated Thru-Panel Bushings; Thru-Panel Insulators; Antenna Strain Insulators; Feeder Insulators; Steatite Cone Insulators; Steatite and Porcelain Stand-off Insulators; Lead-In Bushings; and Feed-Thru Bowl Assemblies.

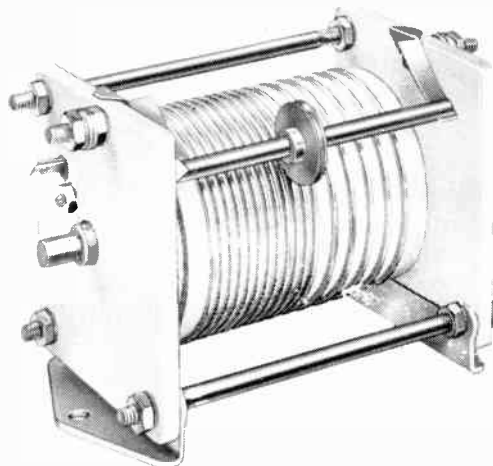
NOTE: Our current Components Catalog lists detailed specifications and prices on the complete Johnson insulator line. Write today for your free copy.



"229" WIRE-WOUND VARIABLE INDUCTORS

Steatite insulated variable inductors for amateur transmitters or low power commercial equipment. Variable pitch, tinned copper wire windings on grooved steatite forms. 1/4" shafts extend 1/2" both ends. "L" dimension over mounting feet.

| Cat. No. | Inductance | Current in Amps | Mounting Dimensions | Overall Dimensions | | | Wire Size | Net Price |
|----------|------------|-----------------|---------------------|--------------------|--------|----------|-----------|-----------|
| | | | | L | W | H | | |
| 229-201 | 10 uh | 3 | 3 1/16" | 4 3/8" | 2 1/2" | 2 31/32" | No. 14 | \$10.75 |
| 229-202 | 18 uh | 5 | 5 1/32" | 5 29/32" | 2 1/2" | 2 31/32" | No. 12 | 11.75 |
| 229-203 | 28 uh | 5 | 6 23/32" | 7 3/32" | 2 1/2" | 2 31/32" | No. 12 | 12.50 |



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U. S. A.

KNOBBS AND DIALS

A distinctive line of matching knobs and dials. Black phenolic molded parts (meet MIL-P-14) are used on all knobs except the Collet group. Available in three basic knob diameters, 1 1/8", 1 5/8", and 2 3/8" — with matching black molded phenolic skirts or beveled satin aluminum skirts with an anodized finish and deeply etched and filled contrasting markings. Accurately centered brass inserts for 1/4" shafts on all types, except instrument and Collet knobs. Variations such as special shaft sizes, scales or indicators available in production quantities. Complete line includes: Instrument Knobs; basic Knobs; Spinner Knobs; Skirted Knobs; a selection of Dials; Vernier Dials; Counter Dial; and three types of Collet Knob. Detailed specifications and prices are listed in our current Electronic Components Catalog — write today for your free copy.

COLLET KNOBS

These new molded knobs and dials for 1/8" shafts offer fresh, modern styling with a tough, shock-proof high quality nylon body. Available in 13 bright colors — ideal for laboratory and test instruments, radio transmitters, etc. Collet and nickel-plated locking screw provide firm internal attachment.

NOTE: Collet knobs are available in 13 standard colors, White as shown in pricing, plus 12 other colors. Colors should be specified by increasing 5th and 6th digits of the Catalog Number listed for White per the chart below. (Example: To order 116-401 in Yellow rather than White, increase 5th and 6th digits by 06 ending up with 116-407.

| Increase 5th and 6th Digits by: | Color | Increase 5th and 6th Digits by: | Color | Increase 5th and 6th Digits by: | Color |
|---------------------------------|-----------|---------------------------------|-----------|---------------------------------|----------|
| 01 | Red | 05 | Orange | 09 | Dk. Blue |
| 02 | Black | 06 | Yellow | 10 | Ivory |
| 03 | Dk. Green | 07 | Brown | 11 | Violet |
| 04 | Lt. Blue | 08 | Lt. Green | 12 | Grey |

BASIC KNOB

| Cat. No. | Color | Illustration | Net Price |
|----------|---------------------------------------|--------------|-----------|
| 116-401 | White (13 colors available—see above) | 1 | \$0.19 |

POINTER KNOB

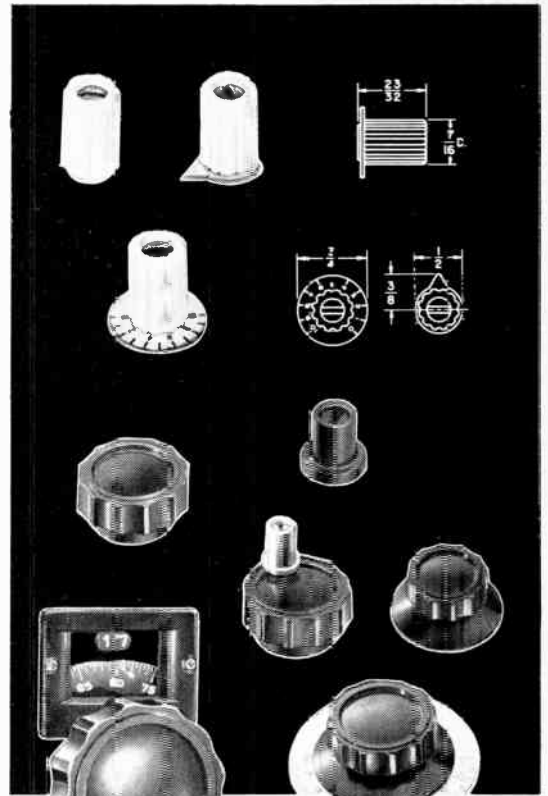
| | | | |
|---------|---------------------------------------|---|--------|
| 116-501 | White (13 colors available—see above) | 2 | \$0.24 |
|---------|---------------------------------------|---|--------|

DIAL KNOB 10-0/180°

| | | | |
|---------|---------------------------------------|---|--------|
| 116-551 | White (13 colors available—see above) | 3 | \$0.42 |
|---------|---------------------------------------|---|--------|

DIAL KNOB 10-0/270°

| | | | |
|---------|---------------------------------------|---|--------|
| 116-601 | White (13 colors available—see above) | 3 | \$0.42 |
|---------|---------------------------------------|---|--------|



MISCELLANEOUS HARDWARE



SHAFT COUPLINGS— High quality, low-loss insulation — all metal parts accurately machined and suitably finished. Phosphor bronze springs on -250 and -251 series provides flexibility without backlash and adjust to minor shaft misalignments. Rigid types such as the -258 and -262 series meet requirements of accurate shaft alignment and high torque. The -259 is a bar type coupling recommended for high voltages or very high frequencies — the -264 is a small bakelite insulated shaft coupling for DC or low voltage RF applications.

| Cat. No. | DC Breakdown | Type | Overall Length | Max. Diameter | Couples Shafts | Net Price |
|-----------|--------------|------------|----------------|---------------|----------------|-----------|
| 104-250 | 4000 | Flexible | 1 1/2" | 1 11/32" | 1/4" to 1/4" | \$1.00 |
| 104-250-3 | 4000 | Flexible | 1 3/8" | 1 11/32" | 1/4" to 3/8" | 1.20 |
| 104-251 | 8000 | Flexible | 1 15/32" | 2 7/32" | 3/8" to 3/8" | 1.55 |
| 104-251-2 | 8000 | Flexible | 1 15/32" | 2 7/32" | 1/4" to 1/4" | 1.55 |
| 104-251-3 | 8000 | Flexible | 1 15/32" | 2 7/32" | 1/4" to 3/8" | 1.55 |
| 104-252 | 7000 | Rigid | 1 1/4" | 1 1/8" | 1/4" to 1/4" | .81 |
| 104-258 | ... | Rigid | 3/4" | 9/16" | 1/4" to 1/4" | .37 |
| 104-259 | 8000 | Semi-Flex. | 3 3/8" | 1 11/32" | 1/4" to 1/4" | 2.15 |
| 104-262 | 5000 | Semi-Flex. | 7/8" | 2" | 1/4" to 1/4" | 1.30 |
| 104-264 | 750 | Semi-Flex. | 3/4" | 1 1/32" | 1/4" to 1/4" | .78 |

CRYSTAL SOCKETS — Excellent for low capacity, high voltage, and high temperature operation. Use as crystal sockets, antenna relay connectors, or VFO input connectors. Glazed steatite, Grade L-4 or better, DC-200 impregnated. For pins .051" diameter, 1/4" long. Capacity between terminals with socket engaged is less than 1/2 mmf. Mounting hole also permits attachment of strain relief cord. Rated 5000 volts breakdown, 10 amp. current carrying capacity. Socket accepts type HC-6/U crystal holder.

| | | |
|--------------------|---|------------------|
| Cat. No. 126-105 | Silver-plated phosphor bronze contacts | Net Price \$0.17 |
| Cat. No. 126-105-2 | Silver-plated beryllium copper contacts | Net Price .19 |

PANEL BEARING ASSEMBLIES — Panel bearings for 1/4" shafts and rigid 3" and 6" nickel-plated brass shafts assembled in panel bearings. Shafts are 1/4"; bearings are furnished complete with 3/8"-24 nut and can be mounted on panels up to 3/8" thick. Special shaft length and locking type bearing assemblies available on special order.

| Cat. No. | Net Price |
|-----------------------------|-----------|
| 115-255 Panel Bearing Only | \$0.19 |
| 115-256 Bearing and Shaft | .37 |
| 115-256-2 Bearing and Shaft | .50 |

FLEXIBLE SHAFTS — For out-of-line or up to 90° angular control. Phosphor bronze, non-rusting flexible shafts with 1/32" nickel-plated brass hubs.

| | | |
|------------------|----------|------------------|
| Cat. No. 115-253 | 3" Shaft | Net Price \$0.57 |
| Cat. No. 115-254 | 6" Shaft | Net Price \$0.83 |

RADIO FREQUENCY CHOKES — High reactance over entire range. Coils wound with enamelled silk-covered wire on steelite cores impregnated with high grade RF lacquer. For intermittent use current ratings listed may be increased.

| Cat. No. | Frequency | Current | Induct. (1 mc.) | Ohms DC | Length | Net Price |
|----------|--------------|---------|-----------------|---------|---------|-----------|
| 102-750 | 1.7 to 30 mc | 150 ma | .83 mh | 5 | 1 1/2" | \$1.60 |
| 102-752 | 1.7 to 30 mc | 500 ma | 1.0 mh | 5.2 | 2 7/8" | 2.30 |
| 102-754 | 1.7 to 30 mc | 750 ma | .9 mh | 4 | 4 5/16" | 3.40 |
| 101-760 | VHF | 250 ma | 6.8 uh | .33 | 1 1/2" | .72 |



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U.S.A.

Keys and Practice Sets

DELUXE SEMI-AUTOMATIC KEYS

Adjustable from lowest to highest speeds, this handsomely finished semi-automatic key has a smooth, easy action. Vibrator, posts, circuit closing switch, and all machine parts heavily chrome plated. Five adjustments with lock nuts—molded plastic paddles adjust separately to best height. Steel base 6 1/4" x 3 1/2" x 1/2"—complete with adjustable weight and rubber feet.

| | |
|-----------------|--|
| Cat. No. | Amateur Net |
| 114-500 | 1/8" contacts, black wrinkle base. \$18.95 |
| 114-501 | 1/4" contacts, polished chrome base. 22.95 |

SPECIAL SEMI-AUTOMATIC KEY

Many operating features—attractively finished, black wrinkle enamel base. All hardware and vibrator heavily chrome plated. Same vibrator as on deluxe key. Easy action, adjustable from lowest to highest speeds. 1/8" coin silver contacts—circuit closing switch—rubber mounting feet.

| | |
|-----------------|--|
| Cat. No. | Amateur Net |
| 114-520 | Special Model, Semi-Automatic. \$15.95 |

HEAVY DUTY KEYS

Heavy die cast base, chrome plated key arm. Well insulated for heavy duty service. Large 1/4" coin silver contacts. Improved Navy-type knob. Adjustable steel bearings and spring design give light keying touch.

| | |
|-----------------|---|
| Cat. No. | Amateur Net |
| 114-320 | Black wrinkle enamel base. \$4.70 |
| 114-321 | Polished chrome plated base. 5.85 |

STANDARD KEYS

Heavy die cast base. Smooth adjustable bearings. Provision for plugging in semi-automatic keys. 1/8" coin silver contacts. A high quality key at a low cost.

| | |
|-----------------|--|
| Cat. No. | Amateur Net |
| 114-310 | Black wrinkle, no switch. \$3.25 |
| 114-310-3 | Black wrinkle with switch. 3.95 |
| 114-311 | Chrome plated, no switch. 5.30 |
| 114-311-3 | Chrome plated with switch. 6.20 |

HIGH SPEED STANDARD KEYS

Fully adjustable spring tension, contact spacing and bearings. Brass base and binding posts—instrument lacquer finish. .072" platinum contacts.

| | |
|-----------------|---|
| Cat. No. | Amateur Net |
| 114-100 | R48 Key, satin brass, no switch. \$6.45 |
| 114-100-3 | M100 Key, satin brass with switch. 7.35 |

PRACTICE KEY

An inexpensive practice key—perfect in design for the average beginner. All the metal parts are nickel plated. Furnished with an adjustable key arm, spring and smooth action bearings. Contacts are of 1/8" coin silver.

| | |
|-----------------|--------------------------------------|
| Cat. No. | Amateur Net |
| 114-300 | Molded phenolic base. \$2.25 |

PHENOLIC BASE KEYS

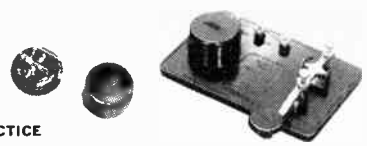
High quality key with adjustable bearings. Improved spring-pigtail connection. 1/8" coin silver contacts—nickel plated metal parts.

| | |
|-----------------|---|
| Cat. No. | Amateur Net |
| 114-301 | Molded phenolic base, no switch. \$2.50 |

CORD AND WEDGE

Cord and wedge for easy attachment of semi-automatic key across circuit-closing switch of a standard hand key. Used almost universally by railroad telegraphers—ideal for amateur service where both hand key and semi-automatic are used.

| | |
|-----------------|--------------------------------|
| Cat. No. | Amateur Net |
| 114-380 | Cord and wedge. \$1.15 |



PRACTICE SET

Constant frequency buzzer and key on a 4" x 6" molded bakelite base. Buzzer tone is fully adjustable. Coin silver contacts. Uses two dry cells or "C" battery. Connect singly or in pairs for code practice.

| | |
|-----------------------------------|------------------------------|
| Cat. No. | Amateur Net |
| 114-450 | Practice Set. \$4.95 |
| Buzzer only as used on set above. | |
| 114-400 | Buzzer. \$1.85 |



TELEGRAPH SOUNDER

Designed for instant response, brass sounder provides clear, resonant tone. Steel bar frame, black enamel finish. Brass bridge and adjustment screws, instrument lacquer finish. Sounder plate is black lacquered steel. Mahogany finished wood base, brass binding posts and rubber mounting feet.

| | |
|-----------------|-----------------------------------|
| Cat. No. | Amateur Net |
| 114-112 | Sounder (4 ohms). \$10.45 |
| 114-113 | Sounder (20 ohms). 11.25 |



LEARNER SET

Telegraph practice set. Bar frame steel, brass bridge and adjustment screws. Brass lacquer finish. Brass sounding bar—black lacquered steel sounder plate. Adjustable black nickel-plated key arm. High impact polystyrene base, black matte finish, brass binding posts, rubber feet.

| | |
|-----------------|---------------------------|
| Cat. No. | Amateur Net |
| 114-110 | (4 ohms). \$14.95 |
| 114-111 | (20 ohms). 15.45 |

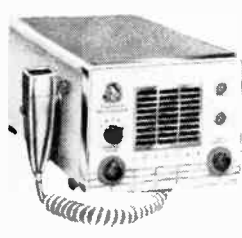


PONY RELAY

Polished, plated steel armature—all other metal parts brass with lacquer finish. Heavy duty magnets. Mahogany finish wood sub-base—cast iron black enamel base.

| | |
|-----------------|----------------------------|
| Cat. No. | Amateur Net |
| 114-105 | (20 ohms). \$13.95 |

Citizens Band and Industrial Radio Equipment



Messenger
Personal Messenger

Hundreds of uses—ideal for builders, contractors or other "on the job" applications. Used by hunters, fishermen, or sportsmen. Anyone can operate . . . no examination necessary . . . license issued by the FCC on request.

"MESSENGER 202"

Every feature you could want for solid, low-cost 25 to 50 mc. Industrial Radio. Plenty of range for most industrial applications. Basic design and circuit performance-proved under thousands of exacting, mobile, marine, and field conditions with outstanding results!



Amateur Equipment

First choice of amateurs the world over

Amateur Radio is "adventure"—and the fortunate amateur owning Viking equipment enjoys the maximum amount of operating pleasure and performance. Since the first Viking transmitter was built, amateurs everywhere have looked to the E. F. Johnson Company for leadership in transmitter design. Today, Johnson offers the industry's most complete line of amateur transmitters and station accessories . . . a line that's "first choice of amateurs the world over!"

Complete 28 page Amateur catalog with detailed specifications available. See your distributor, or write today!



E. F. JOHNSON COMPANY
WASECA, MINNESOTA, U. S. A.

MOST COMPLETE LINE OF CITIZENS BAND EQUIPMENT ANYWHERE!



TR327, A & B RADIOTELEPHONES

Each of these three "D" Phones is quality-engineered to qualify for a specific use on Citizens (11-meters) Band and may be easily licensed for this purpose or used without license under FCC Part 15 (100mw power limitation). No examination or special skill is required on the part of the operator.

All three CB transceivers incorporate Wescon Award-winning design with multiple-function tubes; universal power supply; snap-in-or-out mountings; sealed plug-in relay; exclusive front panel, power output, peak control; crystal control and signal level meter on both transmit and receive; automatic noise limiter; automatic volume control; positive squelch; large 4½" speaker; high audio output of 2½ watts; and two-tone gray cabinet with tough, epoxy-base finish. Size: 10½" wide x 8½" deep x 5½" high. Weight: 16 lbs.

FOR INDUSTRIAL AND COMMERCIAL USE, the TR327 (6VDC/117VAC or 12VDC/117VAC) offers unusually dependable service with 4 crystal controlled channels on both transmit and receive.

FOR BOATING OR OTHER APPLICATION WHERE STANDARD BROADCAST IS DESIRED, the TR327A (6VDC/117VAC or 12VDC/117VAC) adds to its 4 crystal controlled channels, Standard Broadcast Band for music, news and sports.

FOR THE CITIZENS BAND ENTHUSIAST, the TR327B (6VDC/117VAC or 12VDC/117VAC) features tuneable coverage of all 23 CB channels, highest quality performance, outstanding stability, and precise calibration as well as maximum convenience and ease of operation.

TR330 HAND PHONE

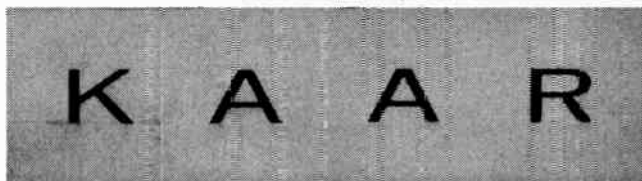
This handsome, portable CB transceiver is a winner of both the Alcoa and Wescon Design awards. It's skillfully engineered for peak performance, convenient one-hand operation, and rugged resistance to the hazards of industrial and sports application. In addition to its obvious advantages of domestic manufacture, this unit offers: aluminum case for higher transmitting frequency and less RF leakage; two-tone, epoxy-base "lifetime" finish; fully transistorized circuitry; squelch; one-hand, push-to-talk operation; jack for optional earphone listening; collapsible antenna; large speaker; four battery options to offer from 50-300 hours operating life; battery-saver circuit; military-type crystals; and a range from up to a mile on land and several miles over water. Size: 2½" wide x 2½" deep x 10" long. Weight: less than 2 lbs.



CONALERT III



This radio unit is carefully engineered to monitor CONELRAD, radio warning system for Civil Defense and weather warnings. It fulfills FCC requirements for all radio stations and serves as a round-the-clock warning system for police, hospitals, ports, harbors, airlines, school systems, institutions, industry, public services, and remote areas. It features: five preset



Over a Quarter Century of Excellence
in Radio Communications

Palo Alto, California

"IMP" INDUSTRIAL MOBILE PHONE



This is the perfect combination of economy and quality in an industrial radiotelephone. Carefully engineered with every advantage of a rugged, mobile phone, it also functions with complete efficiency as a base station or

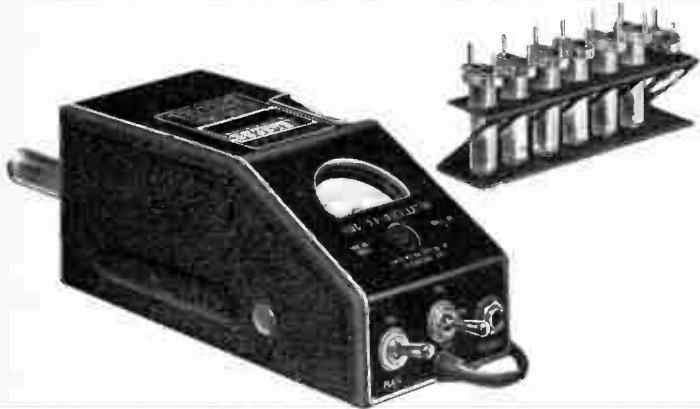
mobile PA system. Any commercial enterprise may license this unit under FCC Parts 10 (public safety), 11 (industrial), 16 (transportation), or 9 (aircraft). Its reliable, 2-way communication stops deadheading and back tracking in any service vehicle by providing continuous supervision and dispatch. The "IMP" features: minimum installation cost since it can be installed by regular plant personnel; straightforward circuitry that cuts maintenance costs; reliable components; rugged, shock-resistant construction; multiple-function tubes; frequency stability better than .005%; power input of 3 watts for industrial use; continuously adjustable squelch; 2 watts of audio output with less than 10% harmonic distortion; series impulse type noise silencer; and push-to-talk carbon mike. Standard package includes: transmitter-receiver, power supply unit; shock mounted base; all crystals; power cable for 6 and 12VDC operation; power cable for 117VAC operation; mike and antenna. Completely tuned and ready to operate on assigned frequencies, are Models TR426 on 152-174mc and TR426A on 108-142mc (amplitude modulated). Size: 12½" x 8¼" wide x 5¼" high, less antenna and shock base. Shipping weight: 25½ lbs.

broadcast channels including 640 kc and 1240 kc for silent or audible monitoring; automatic visual and audible alarm; fail-safe external alarm actuated in case of power or component failure; optional crystal control; OCDM approval; excellent audio quality equal to any home radio; and Wescon Award winning design. In operation, loss of carrier input lights red indicator lamp on front panel, energizes 6.3 VAC external alarm circuit, closes switch contacts for external alarm circuit, automatically switches speaker in for audible monitoring of Conelrad messages which follow carrier break, keeps alarm activated until manually reset by operator. Fail-safe alarm is activated immediately upon failure of any major tube or component...this unit guards itself, too! Operates on 117 volts, 50-60 cycles AC. Cabinet model (117R905) size: 13½" wide x 7½" high x 9" deep. Rack model (117R906) size: 19" wide x 8¼" high x 9¾" deep. Weight: 21 lbs. Shipping weight: 27 lbs.

KAAR EQUIPMENT FOR OTHER USES AND
"TAILORED" COMMUNICATIONS SYSTEMS

Kaar quality engineering and dependability are also available in communications equipment for Marine, Specialized Industrial and Airport use. The Kaar reputation for excellence is behind every radio communications system it "tailors" to the specific needs of a customer. Let Kaar solve your communications problems, too.

"Designed for Performance"®



MILLEN NO. 90651 GRID DIP METER

The No. 90651 MILLEN GRID DIP METER is compact and completely self contained. The AC power supply is of the "transformer" type. The drum dial has seven calibrated uniform length scales from 1.7 MC to 300 MC with generous over laps plus an arbitrary scale for use with special application inductors. Internal terminal strip permits battery operation for antenna measurement.

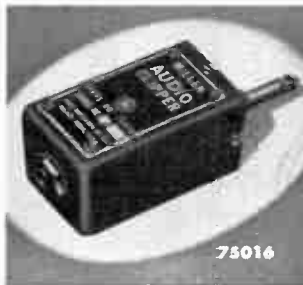
No. 90651, with tube.....

Additional Inductors for Lower Frequencies

- No. 46702 — 925 to 2000 KC
- No. 46703 — 500 to 1050 KC
- No. 46704 — 325 to 600 KC
- No. 46705 — 220 to 350 KC



90751



75016



90281



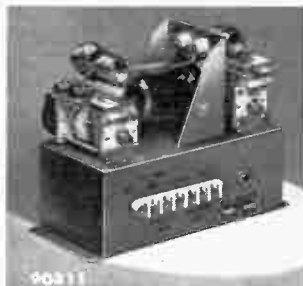
90201



90672



46672



90811



75012

TONE MODULATOR — The No. 90751 Tone Modulator is a small package containing a transistor audio oscillator and its mercury battery, which plugs into the phone jack of a Grid Dip Meter to modulate the signal at approximately 800 cycles for applications requiring a modulated signal. Dimensions: only 2 3/4 x 1 1/8 x 1 1/8 in.
No. 90751, less battery

AUDIO CLIPPER — The No. 75016 Audio Clipper is a small plug-in symmetrical type clipper with self-contained mercury batteries. It may be used to clip noise for C-W reception as well as for A-M or SSB, or it may be used to clip a sine wave input to form a square wave output. Dimensions: only 2 3/4 x 1 1/8 x 1 1/8 in.
No. 75016, less batteries

ANTENNA BRIDGE — The Milles 90672 Antenna Bridge is an accurate and sensitive bridge for measuring impedances in the range of 5 to 500 ohms (or 20 to 2000 ohms with balun) at radio frequencies up to 140 mc. The variable element is an especially designed differential variable capacitor capable of high accuracy and permanency of calibration. Readily driven by No. 90651 Grid Dipper.
No. 90672

BALUNS — The No. 46672 (1 for each amateur band) wound Balun is an accurate 2 to 1 turns ratio, high Q auto transformer with the residual reactances tuned out and with very tight coupling between the two halves of the total winding. The points of series and parallel resonance are selected so that each Balun provides an accurate 4 to 1 impedance ratio over the entire band of frequencies for which it was designed. Suitable for use with the No. 90672 Antenna Bridge or medium power transmitters.
No. 46672-80/40/20/15/10

HIGH VOLTAGE POWER SUPPLY — The No. 90281 high voltage power supply has a d.c. output of 700 volts, with maximum current of 235 ma. In addition, a.c. filament power of 6.3 volts at 4 amperes is also available so that this power supply is an ideal unit for use with transmitters, such as the Milles No. 90801, as well as general laboratory purposes. The power supply uses two No. 816 rectifiers. The panel is standard 8 3/4" x 19" rack mounting.
No. 90281, less tubes

REGULATED POWER SUPPLY — A compact, uncased, regulated power supply, either for table use in the laboratory or for incorporation as an integral part of larger equipment. 250 v.d.c. unregulated at 115 ma. 105 v.d.c. regulated at 35 ma. Minus 105 v.d.c. regulated bias at 4 ma. 6.3 v. a.c. at 4.2 amps.
No. 90201, with tubes

HIGH FREQUENCY RF AMPLIFIER — A physically small unit capable of a power output of 70 to 85 watts on Phane or 87 to 110 watts on C-W an 20, 15, 10, 6 or 2 meter amateur bands. Provision is made for quick band shift by means of the No. 48000 series VHF plug-in coils. The No. 90811 unit uses either an 829-B or 3E29.
No. 90811 with 10 meter band coils, less tube

PHASE-SHIFT NETWORK — A complete and laboratory aligned pair of phase-shift networks in a single compact 2" x 1 7/16" x 4" case with characteristics so as to provide a phase shift between the two networks of 90° ± 1.3° over a frequency range of 225 cycles to 2750 cycles. Well adapted for use in either single sideband transmitter or receiver. Possible to obtain a 40 db suppression of the unwanted sideband. The No. 75012 precision adjusted phase-shift network eliminates necessity of complicated lab equipment for network adjustment.
No. 75012

JAMES M MILLEN

MALDEN · MASSACHUSETTS

The No. 90923 oscilloscope is an extremely compact (3½ inches high) rack panel general purpose oscilloscope utilizing the type 3XP — 3 x 1½ inch rectangular face tube. The No. 90923 is complete with vertical and horizontal amplifiers for balanced deflection and a very linear sweep generator.

Miniature input terminals are on both the front panel and the rear for vertical amplifier input, horizontal amplifier input and synchronizing input. The linear sweep generator covers two cycles per second to 30 kcs. per second in seven overlapping ranges. The trace is unusually sharp and bright due to 2040 volts accelerating potential.

The No. 90923 is ideally suited for many applications, and in particular, for production test. Its small panel uses up very little space in a test rack and the mu-metal shield around the cathode ray tube shields it against magnetic fields so that the oscilloscope may be used accurately in locations with strong stray magnetic fields. The cathode ray tube is of the mono-accelerator type in which the electron beam is accelerated at the electron gun so that field distortions are minimized and excellent deflection linearity is achieved as well as a very uniform spot size over the entire area which the beam scans.

MILLEN NO. 90923 RACK MOUNTED OSCILLOSCOPE



MILLEN ONE INCH MODULE OSCILLOSCOPES — Miniaturized, packaged panel mounting cathode ray oscilloscope designed for use in instrumentation in place of the conventional "painter type" moving coil meters uses the 1" tube. Panel bezel matches in size and type the standard 2" square meters. Magnitude, phase displacement, wave shape, etc. are constantly visible on scope.

No. 90901, 1CP1, less tube No. 90911, 1EP1, less tube

FLAT FACE OSCILLOSCOPE — 90905-B 5-inch Rack Mounting Basic Oscilloscope features include: balanced deflection, front panel input terminals, rear panel input terminals, astigmatism control, blanking input terminals, flat face precision tolerance Dumont 5ADP1 tube.

BASIC OSCILLOSCOPES — The No. 90902, No. 90903 and No. 90905 Rack Panel Oscilloscopes, for two, three and five inch tubes, respectively, are inexpensive basic units comprising power supply, brilliancy and centering controls, safety features, magnetic shielding, switches, etc. As a transmitter monitor, no additional equipment or accessories are required. By the addition of such units as sweeps, pulse generators, amplifiers, servo sweeps, etc., all of which can be constructed on companion rack panels, the scope unit may be expanded to serve any conceivable industrial or laboratory application.

SCOPE AMPLIFIER — SWEEP UNIT — Vertical and horizontal amplifiers along with hardtube, saw tooth sweep generator. Complete with power supply mounted on a standard 5¼" rack panel. No. 90921, with tubes

POWER SUPPLY FOR OSCILLOSCOPE — 750 volts d.c. at 3 ma. and 6.3 volts a.c. at 600 ma. 117 volts 50-60 cycle input. Designed especially for use with No. 90901 and No. 90911 one inch instrumentation oscilloscopes. 4½ in. high x 1⅞ x 2⅞. Octal plug for input and output. Entire assembly including rectifier is encapsulated. No. 90202, Power Supply (complete)

BEZELS FOR CATHODE RAY TUBES — Standard types are of satin finish black plastic. 5" size has neoprene support cushion and green lucite filter. 3" and 2" sizes have integral cushioning. No. 80075 (5") 80073 (3") 80072 (2") 80071 (1")

WORM DRIVE UNIT — Cast aluminum frame may be panel or base mounted. Spring loaded split gears to minimize back lash. Standard ratio 10/1. Also in 48/1 on request.

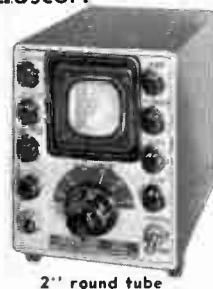
No. 10000 — (state ratio)

RIGHT ANGLE DRIVE — Extremely compact, with provisions for many methods of mounting. Ideal for operating potentiometers, switches, etc., that must be located, for short leads, in remote parts of chassis. No. 10012

AMATEUR BAND MONITOR OSCILLOSCOPE

- A-M or LSB ● 3.5 to 54 Mc.
- Blanks out on Standby
- Individual coil for each band

SCOPE — No. 90932 is a complete oscilloscope for monitoring the modulated r-f output of a transmitter. Built-in link-coupled tuned circuits cover all amateur bands 3.5 to 54 mc. All circuits and accessories are built-in. The monitor will display the r-f envelope and/or the trapezoidal monitoring pattern of single side band transmitters or amplitude modulated transmitters. It shows the linearity or non-linearity of Class-B r-f amplifiers, the parasitic oscillation, neutralization, and r-f output.



2" round tube

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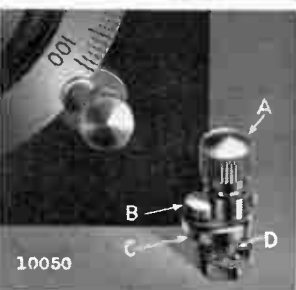
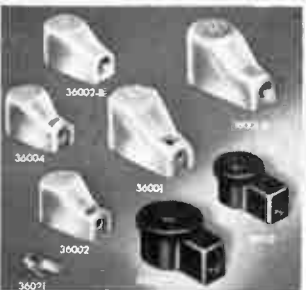


TUBE SOCKETS DESIGNED FOR APPLICATION — MODERN SOCKETS FOR MODERN TUBES! Long Flashover path to chassis permits use with transmitting tubes, 866 rectifiers, etc. Long leakage path between contacts. Contacts are type proven by hundreds of millions already in government, commercial and broadcast service, to be extremely dependable. Sockets may be mounted either with or without metal flange. Mounts in standard size chassis hole. All types have barrier between contacts and chassis. All but octal and crystal sockets also have barriers between individual contacts in addition.

Voltage regulator dual contact bayonet socket, 33991 black phenolic insulation and 33992 with low loss mica filled phenolic insulation.

MILLEN TUBE SOCKETS

| No. | Description | No. | Description |
|-------|-----------------------------------|-------|-------------------|
| 33002 | Crystal Socket 3/4" x .125" | 33004 | 4 Pin Tube Socket |
| 33102 | Crystal Socket .487" x .095" | 33005 | 5 Pin Tube Socket |
| 33202 | Crystal Socket 1/2" x .125" | 33006 | 6 Pin Tube Socket |
| 33302 | Crystal Socket .487" x .050" | 33008 | 8 Pin Tube Socket |
| 33407 | Miniature Socket only, ceramic | 33991 | Socket for 991 |
| 33409 | Naval Socket only, ceramic | 33992 | Socket for 991 |
| 33307 | Miniature Socket, Shield, ceramic | 33207 | 829 Socket |
| 33309 | Naval Socket, Shield, ceramic | 33305 | Acorn Socket |
| 33405 | 5 Pin Socket Eimac | | |



FLEXIBLE COUPLINGS — The No. 39000 series of Millen "Designed for Application" flexible coupling units include, in addition to improved versions of the conventional types, also such exclusive original designs as the No. 39001 Insulated universal joint and the No. 39006 "slide-action" coupling (in both steatite and bakelite insulation). The No. 39006 "slide-action" coupling permits longitudinal shaft motion, eccentric shaft motion and out-of-line operation, as well as angular drive without backlash. The No. 39005 and 39005-B (high torque) are similar to the No. 39001, but are not insulated. The steatite insulated No. 39001 has a special anti-backlash pivot and socket grip feature. All of the above illustrated units are for 1/4" shaft and are standard production type units. The No. 39016 incorporates features which have long been desired in a flexible coupling. No Backlash — Higher Flexibility — Higher Breakdown Voltage — Smaller Diameter — Shorter Length — Higher Alignment Accuracy — Higher Resistance to Mechanical Shock — Solid Insulating Barrier Diaphragm — Molded as a Single Unit.

CERAMIC PLATE OR GRID CAPS — Soldering lug and contact one-piece. Lug ears annealed and solder dipped to facilitate each combination "mechanical plus soldered" connection of cable.

No. 36001 — 3/16" No. 36002 — 3/8" No. 36004 — 1/4"

SAFETY TERMINAL — Combination high voltage terminal and thru-bushing Tapered contact pin fits firmly into conical socket providing large area, low resistance connection. Pin is swivel mounted in cap to prevent twisting of lead wire.

No. 37001, Black or Red No. 37501, Low loss

STEATITE TERMINAL STRIPS — Terminal and lug are one piece. Lugs are turret type and are free floating so as not to strain L4 ceramic on wide temperature variations. Easy to mount with series of round holes. 1400 volt and 3500 volt series.

POSTS, PLATES, AND PLUGS — The No. 37200 series, including both insulated and non-insulated binding posts with associated plates and plugs, provide various combinations to meet most requirements. The posts have captive heads and keyed mounting. The No. 37291 and No. 37223 are standard in black or red with other colors on special order. No. 37201, No. 37202, and No. 37204 and No. 37222 are available in black, red, or low loss. The No. 37202 is also available in steatite.

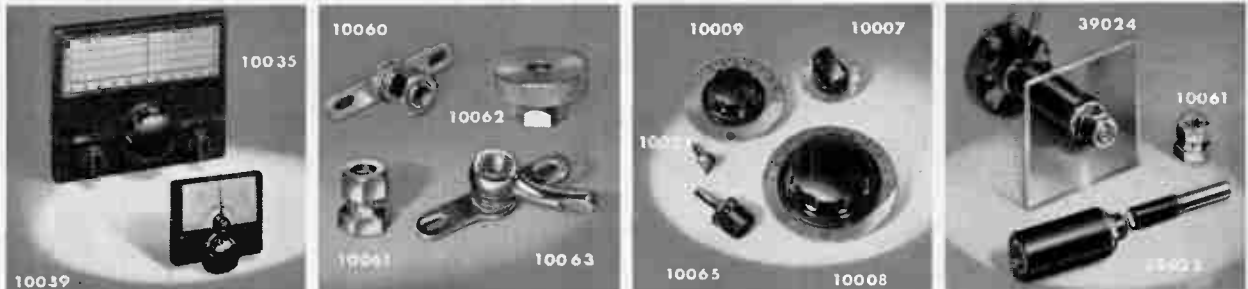
| No. | Description | No. | Description |
|-------|----------------------------------|-------|------------------------------|
| 37201 | Single plates, pr..... | 37212 | Dual plug..... |
| 37291 | Single plates (tapered), pr..... | 37222 | Non-insulated binding post |
| 37202 | Dual plates, pr..... | 37223 | Insulated binding posts..... |
| 37204 | Double dual plates, pr..... | | |

DIAL LOCK — Compact, easy to mount, positive in action, does not alter dial setting in operational Rotation of knob "A" depresses finger "B" and "C" without imparting any rotary motion to Dial. Single hole mounted.

No. 10050.....

TUBE CLAMP — No. 33087 is easy to use, easy to install, effective in function. Available in special sizes for all types of tubes. Single hole mounting. Spring steel, cadmium plated.

"Designed for Application"®

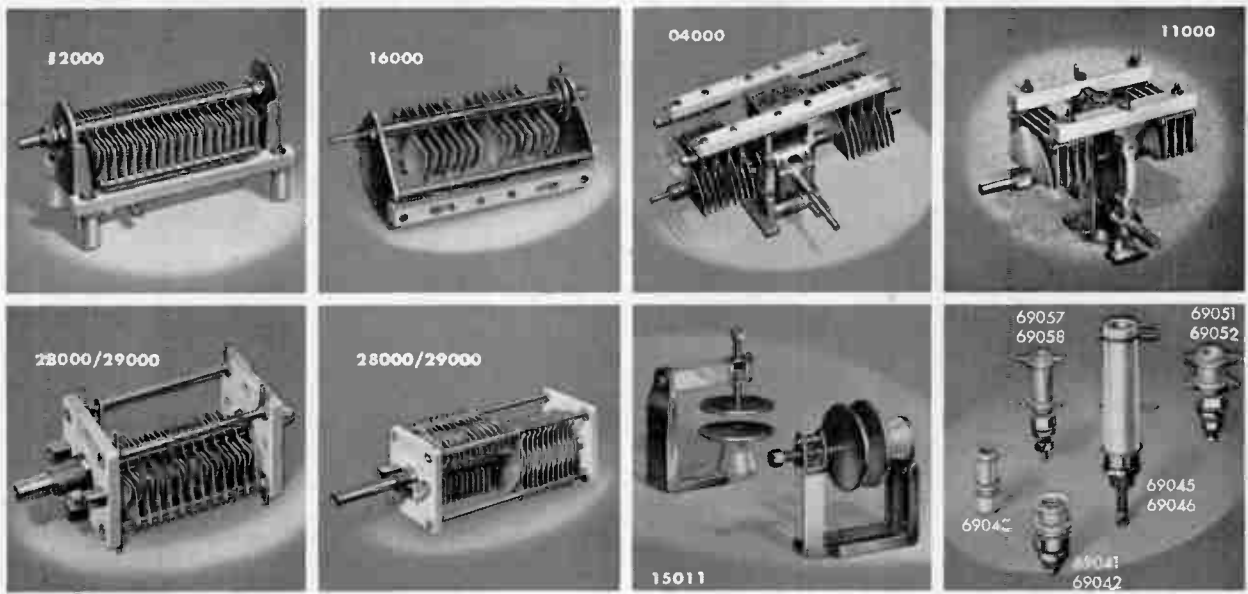


PANEL DIALS — The No. 10035 illuminated panel dial has 12 to 1 ratio; size, 8½" x 6½". Small No. 10039 has 8 to 1 ratio; size, 4" x 3¼". Both are of compact mechanical design, easy to mount and have totally self-contained mechanism, thus eliminating back of panel interference. Provision for mounting and marking auxiliary controls, such as switches, potentiometers, etc., provided on the No. 10035. Standard finish, either size, flat black art metal.

SHAFT LOCKS — In addition to the original No. 10060 and No. 10061 "DESIGNED FOR APPLICATION" shaft locks, we can also furnish such variations as the No. 10062 and No. 10063 for easy thumb operation as illustrated above. The No. 10061 instantly converts any plain ¼" shaft" valve control, condenser, etc. from "plain" to "shaft locked" type. Easy to mount.

DIALS AND KNOBS — Just a few of the many stock types of small dials and knobs are illustrated herewith. 10007 is 1½" diameter, 10009 is 2¾" and 10008 is 3½".

HIGH VOLTAGE INSULATED SHAFT EXTENSION — No. 10061 shaft locks and the No. 39023 insulated high voltage potentiometer extension mountings are available as a single integrated unit — the No. 39024. The proper shaft length is independent of the panel thickness. The standard shaft has provision for screw driver adjustment. Special shaft arrangements are available for industrial applications. Extension shaft and insulated coupling are mated as a single unit to provide accuracy of alignment and ease of installation. No. 39023, non locking type No. 39024, locking type



12000 and 16000 SERIES TRANSMITTING CONDENSERS — Rigid heavy channeled aluminum end plates. Isolantite insulation, polished or silver edges. One piece rator contact spring and connection lug. Compact, easy to mount with connector lugs in convenient locations. Same plate sizes as 11000 series above. The 16000 series has same plate sizes as 04000 series. Also has constant impedance, heavy current, multiple finger rator contactor of new design. Both 12000 and 16000 series available in single and double sections and many capacities and plate spacing.

28000-29000 SERIES VARIABLE AIR CAPACITORS — "Designed for Application," double bearings, seatite end plates, cadmium or silver plated brass plates. Single or double section .022" or .066" air gap. End plate size: 1½" x 1½". Rator plate radius: ¾". Shaft lock, rear shaft extension, special mounting brackets, etc., to meet your requirements. The 28000 series has semi-circular rator plate shape. The 29000 series has approximately straight frequency line rator plate shape. Prices quoted on request. Many stock sizes.

NEUTRALIZING CAPACITOR — Designed originally for use in our own No. 90881 Power Amplifier, the No. 15011 disc neutralizing capacitor has such unique features as rigid channel frame, horizontal or vertical mounting, fine thread over-size lead screw with stop to prevent shunting and rator lock. Heavy rounded-edged polished aluminum plates are 2" diameter. Glazed seatite insulation. No. 15011.....

04000 and 11000 SERIES TRANSMITTING CONDENSERS — Another member of the "Designed for Application" series of transmitting variable air capacitors is the 04000 series with peak voltage ratings of 3000, 6000, and 9000 volts. Right angle drive, 1-1 ratio. Adjustable drive shaft angle for either vertical or slanting panels. Sturdy construction, thick, round-edged, polished aluminum plates with 1¼" radius. Constant impedance, heavy current, multiple finger rator contactor of new design. Available in all normal capacities. The 11000 series has 16/1 ratio center drive and fixed angle drive shaft.

PERMEABILITY TUNED CERAMIC FORMS — In addition to the popular shielded plug-in permeability tuned forms, 74000 series, the 69040 series of ceramic permeability tuned unshielded forms are available as standard stock items. Winding diameters available from 3/8" to 1/2" and winding space from 1/32" to 1/2".

- | | |
|------------------------------|------------------------------|
| No. 69041—(Copper Slug)..... | No. 69052—(Iron Core)..... |
| No. 69042—(Iron Core)..... | No. 69054—(Iron Core)..... |
| No. 69043—(Copper Slug)..... | No. 69055—(Copper Slug)..... |
| No. 69044—(Iron Core)..... | No. 69056—(Iron Core)..... |
| No. 69045—(Copper Slug)..... | No. 69057—(Copper Slug)..... |
| No. 69046—(Iron Core)..... | No. 69058—(Iron Core)..... |
| No. 69047—(Copper Slug)..... | No. 69061—(Copper Slug)..... |
| No. 69048—(Iron Core)..... | No. 69062—(Iron Core)..... |
| No. 69051—(Copper Slug)..... | |

'Designed for Application'[®]

MINIATURIZED HIGH RELIABILITY VARIABLE CAPACITORS

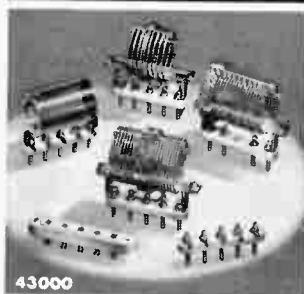
NO. 25000 SERIES

MACHINED FROM SOLID BARS OF EXTRUDED BRASS

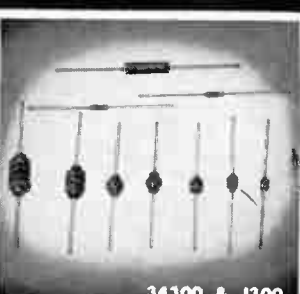


Modern demands for miniature precision, high Q variable air dielectric capacitors with high reliability require that all of the stator plates be machined from a solid block of brass and that all of the rotor plates be machined from a solid block of brass. Staked, soldered, or washer-spaced types of construction are adequate for larger capacitors with wider air gaps but are entirely inadequate for miniature high reliability capacitors for use at high frequencies. The stator terminal is an integral part of the stator. This results from extruding the exact shape required. The rotor shaft is an integral part of the rotor, thus alignment of shaft with rotor is perfect and there are no pins or press fits.

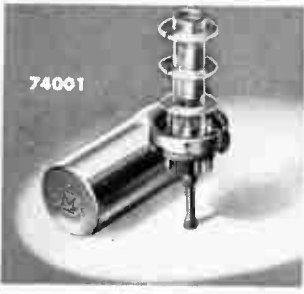
Special capacitors which can be manufactured using all or part of the tooling for standard capacitors are designed and manufactured to order.



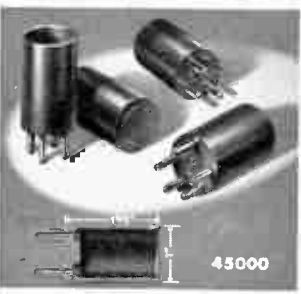
43000



34300 & J300



74001



45000



74400



61000

TRANSMITTING TANK COILS — A full line — all popular wattages for all bands. Send for special catalog sheet.
Nos. 42000, 43000, 44000, 48000.....

TUNABLE COIL FORM — Standard octal base of low loss mica-filled bakelite, polystyrene 1/2" diameter coil form, heavy aluminum shield, iron tuning slug of high frequency type, suitable for use up to 35 mc. Adjusting screw protrudes through center hole of standard octal socket.
No. 74001, with iron core.....
No. 74002, less iron core.....

RF CHOKES — Many have copied, few have equalled, and none have surpassed the genuine original design Millen Designed for Application series of midrange RF Chokes. The more popular styles now in constant production are illustrated herewith. Special styles and variations to meet unusual requirements quickly furnished.
No. 34100 — 2.5 mh., 250 ma..... No. 34105 — 1.0 mh., 300 ma.....
No. 34101 — 2.5 mh., 250 ma..... No. 34106 — 1.0 mh., 300 ma.....
No. 34102 — 2.5 mh., 250 ma..... No. 34107 — 1.0 mh., 300 ma.....
No. 34103 — 2.5 mh., 250 ma..... No. 34108 — 1.0 mh., 300 ma.....
No. 34104 — 2.5 mh., 250 ma..... No. 34109 — 1.0 mh., 300 ma.....

MILLEN COIL FORMS — Made of low loss mica filled brown bakelite. Guide funnel makes for easy threading of leads through pins.
No. 45000.....
No. 45004.....
No. 45005.....

SPECIAL RF CHOKES — Figures 1 and 4 illustrate special types of RF chokes available on order. The popular 34300 and 34200 series are shown in figures 2 and 3 respectively.

OCTAL BASE AND SHIELD — Low loss phenolic base with octal socket plug and aluminum shield can 1 1/16" x 1 7/8" x 3 1/16".
No. 74400.....

MINIATURE POWDERED IRON CORE RF INDUCTANCES — The No. J300 — Miniature powdered iron core inductances. 0.107 in. dia. x 3/8 in. long. Inductances from 3.3 microhenries to 2.5 millihenries ± 5%. EIA standard values plus 25, 50, 150, 250, 350, 500, and 2500 microhenries. Three layer solenoids from 39 to 350 microhenries. 1/4 in. wide single pi from 360 to 2500 microhenries. Special coils on order.

PHENOLIC FORM RF INDUCTANCES — The No. 34300 inductances — Phenolic coil form with axial leads. Inductances from 0.15 microhenry to 2.5 millihenries ± 5%. EIA standard values plus 25, 50, 150, 250, 350, 500, and 2500 microhenries. Solenoids from 0.15 to 16 microhenries. Single pi from 18 to 300 microhenries. Multiple pi for higher inductances. Forms 7/32" dia. x 7/16 in. long, 3/16" x 3/8", 1/4" x 3/4", and 1/4" x 1". Special coils on order.

MINIATURE IF TRANSFORMERS — Extremely high Q — approximately 200 — Variable Coupling — (under, critical, and over) with all adjustments on top. Small size 1 1/16" x 1 9/16" x 1 7/8" malded terminal base. Air capacitor tuned. Coils completely enclosed in cup cores. Tapped primary and secondary. Rugged construction. High electrical stability.
No. 61455, 455 kc. Universal Trans.....
No. 61453, 455 kc. BFO.....
No. 61160, 1600 kc. Universal Trans.....
No. 61163, 1600 kc. BFO.....

JAMES MILLEN

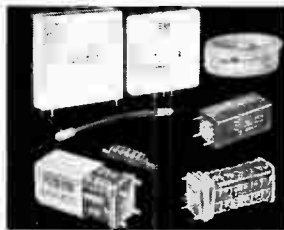
MALDEN · MASSACHUSETTS

1961-1962 ELECTRONIC ENGINEERS' MASTER

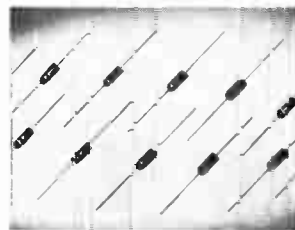
In this new edition is a listing of James Millen Manufacturing Co., Inc. products available to purchasing agents and engineers. The listing includes: OSCILLOSCOPES: Module, Basic, Industrial, Miniature Synchroscope, Compact Rack-Mounted, Modulation Monitor Scopes, and Accessories. MAGNETIC SHIELDS: Mu-Metal and Nicaloi in stock sizes or custom-made. GRID DIP METERS: Industrial and Standard, and Tone



Modulator. MINIATURIZED COMPONENTS: Knobs, Drives, Dials, Shaft Locks, Shaft Bearings, Shaft Extensions, Couplings, Binding Posts and Plugs, Terminal Strips, and Inductors. DELAY LINES. The descriptions of each of these product groups show a partial listing of the components and equipment available from stock or custom-designed and manufactured according to specifications submitted to our Custom Design Engineers. The ELECTRONIC ENGINEERS' MASTER illustrates the Millen products for the industrial purchasing agent and engineer to consider when completing their requirements.



DELAY LINES AND NETWORKS — Flexible Distributed Parameter and Lumped Parameter Assemblies. Flexible cable may be supplied with molded ends. Hermetically-sealed lines in metal cases. Also available as encapsulated cast epoxy assembly. Assemblies designed to your specs.



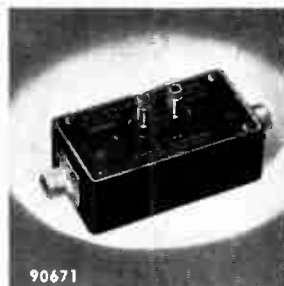
MINIATURE INDUCTANCES — J301 encapsulated and non-encapsulated series are: extremely small — hermetically sealed — wound on axial lead Carbonyl cores — color coded. Also available are 34301 Standard Encapsulated inductances; and J302 encapsulated series for printed wiring.



90711



90801



90671



31000



90711



90801



90915



90952

VARIABLE FREQUENCY OSCILLATOR — With 6SK7 temperature-compensated, electron coupled oscillator of exceptional stability and low drift, a 6SK7 broad-band buffer or frequency doubler, a 6AG7 tuned amplifier which tracks with the oscillator tuning, and a regulated power supply. Output sufficient to drive a 6146 is available on 160, 80 and 40 meters and reduced output is available on 20 meters. No. 90711, less tubes

90-WATT EXCITER-TRANSMITTER — Includes features and shielding for TVI reduction, bandswitching for 4-7-14-21-28 mc. bands; circuit metering. Conservatively rated for use as transmitter or exciter for high power PA stages. 5763 oscillator-buffer-multiplier and 6146 power amplifier. No. 90801, less tubes Rack Mounted

40-WATT MODULATOR — Designed for use with 90801 transmitter. 12AX7 speech amplifier-6C4 voltage amplifier-class AB1 6146s. Suitable for modulating transmitters with power input up to 80 watts. Gain is ample for the use of low level, high impedance crystal or dynamic microphones. Frequency response is adjusted for good communication intelligibility with limited side bands. 3 1/2" panel height. No. 90831, less tubes Rack Mounted

RF POWER AMPLIFIER — 500 watt amplifier may be used as the basis of a high power amateur transmitter. Amplifier is wired for use with the popular "812A" type tubes (others may be used.) Sturdy mechanical construction on 10 1/2" relay rack panel. Plug-in inductors furnished for operation on 10-15-20-40-80 meter bands. The standard Millen 90801 exciter unit is an ideal driver for the No. 90881. No. 90881, with one set of coils, but less tubes

STANDING WAVE RATIO BRIDGE — Provides easy and inexpensive measurement of S.W.R. on coaxial cable. As assembled the bridge is set up for 52 ohm line. An accurate 75 ohm resistor is mounted inside the case for substitution in the circuit when 75 ohm line is used. No. 90671

INDUSTRIAL OSCILLOSCOPE — Completely insulated front panel and case. Double shielded against magnetic field. Excellent linearity. Sharp focus over entire 4"x4" useful scan. The vertical and horizontal amplifiers are stable d.c. amplifiers and are identical, thus permitting accurate phase measurements. No. 90915 uses 5AQ — 1, 2, 7 or 11 flat face, precision tolerance C.R. tube. Response of either amplifier D.C. to 100 kc. +0-10%

MINIATURE SYNCHROSCOPE-OSCILLOSCOPE — 7 1/2 x 5 3/8 x 13", 17 pounds. Band width 10 cy. to 1000 Kc. Sweep 6 to 300 micro-seconds per inch. No. 90952

STAND-OFF INSULATORS — available in a variety of sizes.



MU-METAL and/or NICALOI SHIELDS — Far cathode ray and multiplier photo tubes. Standard shields and bezels for the more popular tubes are available from stock. Our Custom Shield design and fabrication department is at the service of our customers for the development of shields for specialized application.

JAMES MILLEN

MALDEN · MASSACHUSETTS

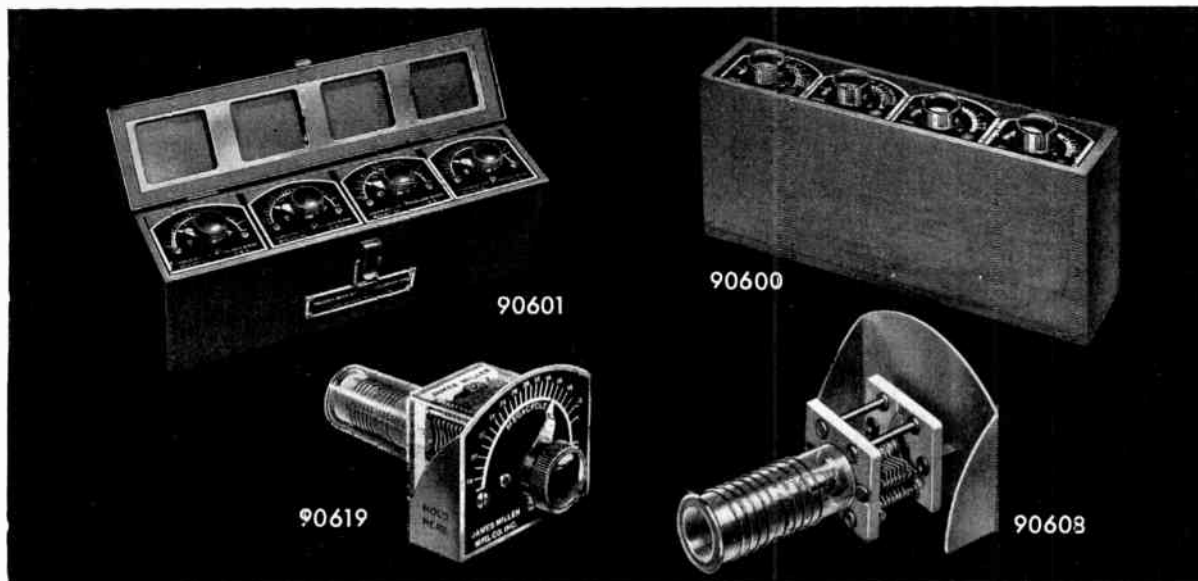


MINIATURIZED COMPONENTS

DESIGNED for APPLICATION miniaturized components developed for use in our own equipment such as the 90901 Oscilloscope, are now available for separate sale. Many of these parts are similar, in most details except size, to their equivalents in our standard component parts group. In certain devices where complete miniaturization is not paramount, a combination of standard and miniature components may possibly be used to advantage. For convenience, we have also listed on this page the extremely small sized coil forms from our standard catalog.

| CODE | DESCRIPTION |
|------|---|
| A001 | Bar knob for $\frac{1}{8}$ " shaft. $\frac{1}{2}$ " high by $\frac{3}{4}$ " long. |
| A006 | Fluted black plastic knob with brass insert for $\frac{1}{8}$ " shaft. $\frac{1}{2}$ " high by $\frac{3}{4}$ " diameter. |
| A007 | $\frac{1}{4}$ " black plastic dial knob with brass insert for $\frac{1}{8}$ " shaft. $\frac{3}{8}$ " diameter dial. $\frac{1}{4}$ " high. |
| A008 | $\frac{1}{4}$ " black plastic knob. Same as no. A007 except for style. |
| A012 | Right angle drive for $\frac{1}{8}$ " shafts. Single hole mounting. |
| A014 | 1" bar dial for $\frac{1}{8}$ " shaft. $\frac{1}{2}$ " high. 180° or 280° dials for clockwise or counter-clockwise rotation. |
| A015 | 1" fluted knob dial for $\frac{1}{8}$ " shaft. $\frac{1}{2}$ " high. Same dial plates as no. A014. |
| A017 | $1\frac{1}{2}$ " diameter fluted black plastic knob for $\frac{1}{8}$ " shaft. |
| A018 | Knob, same as no. A007 except with $\frac{3}{4}$ " diameter skirt. |
| A019 | Knob, same as no. A007, but without dial. |
| A021 | Miniature metal index for miniature dials. |
| A050 | Miniature dial lock. |
| A061 | Shaft lock for $\frac{1}{8}$ " diameter shaft. $\frac{1}{4}$ "-32 bushing. Nickel plated brass. |
| A062 | Shaft lock with knurled locking nut. |
| A066 | Shaft bearing for $\frac{1}{8}$ " diameter shafts. Nickel plated brass. Fits $1\frac{1}{4}$ " diameter hole. |

| CODE | DESCRIPTION |
|----------|---|
| E001 | Steatite ceramic standoff or tie-point. Integral mounting eyelet. 0.205" overall diameter. |
| E201 | Black or red plastic binding post plates for No. E222. |
| E202 | Black or red plastic plates for two binding posts spaced $\frac{1}{2}$ ". |
| E212 | Black or red plastic plug for two binding posts spaced $\frac{1}{2}$ ". |
| E222 | Metal binding post with jack top. |
| E302A | to E306A Steatite ceramic terminal strips. $\frac{3}{8}$ " wide. Terminals spaced $\frac{1}{8}$ " on centers. Screw type or solder type thru-terminals. |
| J300-3.3 | to J300-2500 Complete line of miniature inductances 3.3 to 2500 microhenries. $\frac{3}{8}$ " long. Diameter 0.115" to 0.297". |
| M001 | Insulated universal joint style flexible coupling for $\frac{1}{8}$ " dia. shafts. |
| M003 | Solid coupling for $\frac{1}{8}$ " dia. shafts. Nickel plated brass. |
| M004 | Universal joint style flexible coupling for $\frac{1}{8}$ " diameter shafts. Inverted hubs for short length. Not insulated. |
| M005 | Universal joint style flexible coupling for $\frac{1}{8}$ " diameter shafts. External hub for maximum flexibility. Not insulated. |
| M006 | Universal joint style flexible coupling for $\frac{1}{8}$ " diameter shafts. Spring finger. Steatite ceramic insulation. |
| M008 | Plastic insulated coupling with nickel plated brass inserts for $\frac{1}{8}$ " diameter shafts. |
| M017 | Plastic insulated flexible coupling for $\frac{1}{8}$ " diameter shafts. $1\frac{1}{2}$ " long by $1\frac{1}{4}$ " diameter. Bronze yoke. |
| M023 | Insulated shaft extension for $\frac{1}{8}$ "-32 bushing and $\frac{1}{8}$ " shaft. For mounting sub-miniature potentiometer. |
| M024 | Locking insulated shaft extension similar to no. M023. |
| 69043 | Steatite ceramic coil form. Adjustable core. Winding space $\frac{1}{4}$ " diameter by $1\frac{3}{4}$ " long. Mounting 4-40 hole. |
| 69044 | Steatite ceramic coil form. Adjustable core. Winding space 0.187" diameter by $\frac{3}{8}$ " long. No. 10-32 mounting. |



Midget Absorption Frequency Meters

Many amateurs and experimenters do not realize that one of the most useful "tools" of the commercial transmitter designer is a series of very small absorption type frequency meters. These handy instruments can be packed into small shield compartments, coil cans, corners of chassis, etc., to check harmonics; parasitics; oscillator-doubler, etc., tank tuning; and a host of other such applications. Quickly enables the design engineer to find out what is really "going on" in a circuit.

Types 90604 thru 90610 are extremely small and designed primarily for engineering laboratory use where they will be handled

with reasonable care. The most useful combination being the group of four under code Na. 90600 and covering the total range of from 3.0 to 140 megacycles. When purchased in sets of four under code Na. 90600 a convenient carrying and storage case is included. Series 90601 are slightly larger and very much more rugged. They are further protected by a cantour fitting transparent polystyrene case to protect against damage and dirt. This latter series is designed primarily for field use and are not quite as convenient for laboratory use as the 90605 thru 90608 types. All types have dials directly calibrated in frequency.

| Code | Description | Net Price |
|-------|---|-----------|
| 90604 | Range 160 to 210 mc. | |
| 90605 | Range 3.0 to 10 mc. | |
| 90606 | Range 9.0 to 23 mc. | |
| 90607 | Range 23 to 60 mc. | |
| 90608 | Range 50 to 140 mc. | |
| 90609 | Range 130 to 170 mc. | |
| 90610 | Range 105 to 150 mc. | |
| 90611 | Range 1.5 to 3.5 mc. | |
| 90612 | Range 3.5 to 8 mc. | |
| 90613 | Range 8 to 18.5 mc. | |
| 90614 | Range 8 to 41 mc. | |
| 90619 | Range 0.35 to 1.0 mc.—Neon Indicator | |
| 90620 | Range 0.15 to 0.35 mc.—Neon Indicator | |
| 90625 | Range 2 to 6 mc.—Neon Indicator | |
| 90626 | Range 5.5 to 15 mc.—Neon Indicator | |
| 90600 | Complete set of 90605 thru 90608, in case | |
| 90601 | Complete set Field type Frequency Meters in metal carrying case 1.5 to 40 mc. | |

METROPOLITAN NEW YORK
John DiBlasi Associates, Inc.
90 Main St.
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L. D. Lowery, Inc.
7801 West Chester Pike
Broomall, Pa.

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4508 Annapolis Rd.
Peace Cross
Bladensburg, Md.

INDIANAPOLIS
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Loomis
820 E. 64th St.

SAN FRANCISCO
Moulthroo and Hunter
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MFG. CO., INC.
AND FACTORY

150 EXCHANGE ST., MALDEN, MASSACHUSETTS, U. S. A.

Philmore Guaranteed ELECTRONIC EQUIPMENT

NEW DELUXE "PORTAPHONE" 9-TRANSISTOR CITIZENS' BAND WALKIE-TALKIE

COMPLETELY WIRED AND
TESTED - READY TO OPERATE
NOT A KIT



No license requirement. No tests, forms, call signs, or age limit. Fits in the palm of your hand!

For short range UNLICENSED* communication on the 27 Mc Citizens' Band. Crystal-controlled 2-stage transmitter, and crystal-controlled full superhet receiver provide reliable communication up to ONE MILE in normal terrain, and up to FIVE MILES under favorable conditions!

FOR SPORTS • BOATING
• ON THE FARM

A perfect, low cost communications system for industrial plants, hospitals, construction sites, etc. Fun to use for sports, boating, on the farm, and from room-to-room in the house. Fits comfortably in the shirt or coat pocket, and low receiver battery drain allows unit to be left on for paging or baby sitting chores.

Simple controls are On-Off Volume knob, and push-to-talk transmit switch. Private listening is provided for by lightweight earphone, which cuts out the speaker when plugged into its jack.

Powered by ONE inexpensive flat 9-volt battery, which can easily be replaced without opening up the entire unit. Provisions are made for the use of a rechargeable battery, or battery-size eliminator for extended use. The telescoping antenna extends 45 inches from the case, and folds out of sight when not in use.

Each unit is aligned on channel 9 (27.065 Mc) for both transmit and receive. Plug-in type crystals are used, so that crystals for other channels of operation may be inserted. Power input is just under 100 milliwatts, and controlled to .005%, fully meeting FCC specifications for unlicensed, limited radiation devices.

THE PORTAPHONE IS HOUSED In an attractive brown wrinkle aluminum case with gold anodized aluminum trim. Total weight WITH BATTERY is only 12 ounces for comfortable use! Its 9 transistors, diode, battery, 2-inch PM speaker, antenna, transformers and numerous ultra-miniature electronic components are precision engineered on a rugged printed circuit board into a cabinet which measures only 6" high, 2 1/2" wide and 1 3/8" deep. The entire unit is about the size of two regular packs of cigarettes!

AMERICAN-MADE CRYSTALS are used exclusively. Each set pre-aligned and tested at our factory in Richmond Hill, N. Y.

Supplied complete with transmit and receive crystals for Channel 9, earphone, battery, built-in antenna, leather carrying case with convenient belt clip and shoulder strap.

MODEL TC90.....Net \$39.95

TRANSISTORIZED CODE PRACTICE OSCILLATOR KIT



Has Built-In Loudspeaker—
Operates With or Without
Earphones!

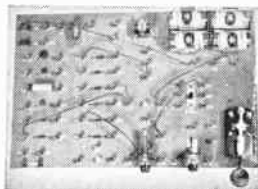
Utilizes a stable feed-back principle designed for trouble-free performance and simple, foolproof operation. Some features:

- Battery Drain Interlock automatically disconnects the battery when the key is unplugged.
- Variable Tone Control with On-Off Switch.
- Phone Jack for silent operation, using earphones.
- Simple-To-Follow step-by-step instructions, requiring no previous knowledge in kit-building.
- More than 50 Hours of Operation on one set of batteries, eliminating the use of AC current. (Uses 3 regular penlite batteries.)

Model TCO-209.....Amateur Net \$7.50
(Less battery, key & earphone)

Philmore Electronics & Electricity EXPERIMENTAL "20-IN-1" KIT

Sensational New Teaching Lab for Students of All Ages!



Designed to give experimenters of all ages an insight into the field of electronics and science. The series of twenty practical, exciting, and informative experiments, each progressively more detailed, leading toward the understanding of basic scientific principles, have been separated into six sections:

- **NO SOLDERING • CONSTRUCTIVE and ENTERTAINING • COMPLETELY SAFE • PRACTICAL, USEFUL.**
- Electronics includes the wiring of an electronic timer, burglar alarm, and electronic flasher with comprehensive theoretical explanation.
- Radio Electronics features the wiring of a one transistor radio, two transistor radio, code transmitter, and voice transmitter.
- Audio Electronics features the wiring of a combination audio oscillator and signal probe, an intercom system, and a lie detector game.
- Experiments with Magnetism features projects involving conductors, insulators, ionization, series resistance, and parallel resistance with theoretical calculations for each.
- Experiments with Electricity involves the construction of an electromagnet, a demonstration of magnetic fields.
- Constructing Indicating Devices features the construction of a galvanometer and experimental applications as an ammeter and voltmeter.

These progressive experiments that "teach while doing" utilize experiments on a high school and college level yet are understandable and may be followed by younger students. Ease of operation and construction serves to keep interest at a high level.

All tools are included and no soldering is required. Hook-up wire is merely placed between the proper spring terminals to make the project operate. It is completely safe from electrical shock and mechanical hazard. Many of the projects can be put to practical use upon completion.

MODEL EK20-1 COMPLETE.....Net \$19.95
(Less Batteries. F.E.T. Paid)

IMPROVED MODEL 3 TUBE AC-DC PHONO AMPLIFIER



Features NEW hum-reducing component and circuit layout, NEW shielded Phono-Input Jack, NEW shockproof switching and chassis isolation.

Neat, compact fully assembled, less tubes. Designed for direct mounting by control shafts to the turntable motor board or front panel.

Controls include smooth-acting volume control, with Double-pole ON-OFF switch for complete shockproofing; full-range, smooth acting tone control; and standard RCA type input jack for phono or microphone cartridge.

Tube complement necessary for operation: 1 — 12AV6 voltage amplifier; 1 — 50C5 power amplifier; 1 — 35W4 rectifier. For operation on 110 volt, AC or DC.

Model PA-590 (Less Tubes. F.E.T. Paid).....Net \$4.80

NEW IMPROVED THREE TUBE (Including Rectifier Tube) TWO-BAND AC-DC RADIO KIT



Provides signal strength sufficient to drive a 3 1/2" PM speaker.

Simplified instructions, fully illustrated with pictorial and schematic diagrams, speed assembly. Chassis is completely punched and plated. Panel is attractive gray hammer-tone, with white silk-screened lettering and dial. Here is a professional radio kit that is perfect for the beginner in radio. When assembled, you have a TWO BAND set, covering the standard broadcast band (550-1650 KC) and SHORT WAVE band (3-13 MC).

No. 7001-CR.....Net \$15.50
(Complete with PM speaker, less tubes. F.E.T. Paid)
Uses 1 each: 35W4, 50C5 and 12AU6 tubes.

PHILMORE COMMUNICATIONS RECEIVER KIT



Precision engineered, budget priced All-Wave receiver. Designed for bench or rack-panel installation.

- Highly sensitive, five-tube superhetrodyne circuit with individual, adjustable coils for each band.
- Four band operation covering all frequencies up to 30 megacycles, and amateur bands from 10 to 160 meters.
- Full electrical bandwidth on each band.
- Includes RF Gain Control, AVC Defeat, and Stand-by-CW Switching.
- Built-in S-meter.
- A built in B.F.O.
- Built in noise limiter.
- Built in speaker.

TUBE COMPLIMENT — (1 each) 6 x 4 Rectifier; 6BE6 Converter and Oscillator; 6AZ8 IF Amplifier and "S" Meter Drive; 6AV6 Detector and Audio Amplifier; 6AQ5 Audio Power Amplifier. Supplied complete with tubes and "S" meter.

MODEL CR-5AC KIT.....Amateur Net \$49.95
(Complete, less cabinet. F.E.T. Paid)

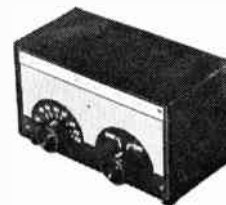
OPTIONAL CABINET

Heavy gauge steel.
Size: 15 1/2" wide, 6 1/2" high, 10" deep.

MODEL CR CABINET (F.E.T. Paid).....Amateur Net \$9.45

UHF-TV CONVERTER

- Extremely sharp pictures in local and fringe areas.
- Double tuned RF and diode mixer.



- Takes only minutes to install at the antenna terminals of any TV set. No internal installation required.
- No drift, distortion-free performance with direct tuning control.
- Cabinet: walnut with red satin and beige panel. Size: 6 7/8" wide x 4 1/4" high x 3 1/2" deep. Weight: 2 lbs. 8 oz.

Specifications and Highlights:

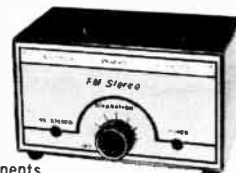
- Operates from 400 mc. to 1000 mc.
- No drift.
- 300 ohm input and output impedance.
- Double tuned RF and diode mixer.
- Image rejection ratio: — 25 db. min.
- Signal to noise ratio: — 30 db. min.
- Provides simple screwdriver connections for UHF antenna, VHF antenna and TV set.
- Output on channel 5 (55 mc. to 72 mc.).
- Output on channel 6 (76 mc. to 82 mc.).
- Simple two-position switch with pilot lamp indicator gives visual indication of UHF operation.
- Converter is automatically turned off when in VHF position.

Specifically engineered to bring in UHF television channels 14 through 83 in both local and fringe areas. No internal installation is required.

MODEL UHF-2 (Completely Wired)Net \$29.95

MULTIPLEX ADAPTER KIT

- Self-Powered
- Operates on 105-125 VAC 60 cy.
- FM Beacon Light to Indicate FM Stereo
- Maximum Separation
- No Store-Cast Interference
- Pre-aligned components
- Compact — Multiple Tube Design
- Variable Separation Control



Adaptable to any wide band FM or FM-AM Tuner. Automatically switches from monaural to stereo whenever a stereo signal is present, and INDICATES STEREO by Beacon Lamp!

Kit includes compact plastic walnut cabinet 6 7/8" W x 3 7/8" H x 3 1/2" D. Handsome 2-color Panel in red satin and gold finish. Step-by-step instructions and diagrams.

Model MA-40 Complete with cabinet and Tubes
Audio Philie Net \$29.95, Tax Paid.

Philmore *Guaranteed* ELECTRONIC COMPONENTS



CODE PRACTICE SET

A complete code practice system, comprising our #B53 Telegraph Key and our #HF20 Buzzer, compactly mounted on a solid molded phenolic base. Terminals for earphones are provided. Requires only a single 1½-volt battery. Screw adjustment provides variable tone.

No. CP250 Less Battery.....Net \$1.60

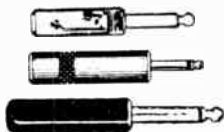
"K-TRANS" I.F. TRANSFORMERS



155KC. set of input and output I.F. transformers. Designed for small portable sets, and transistorized circuits. Exceptional high gain, iron core, double tuned. ¾" square can x 1 7/8" high. Supplied with spring clip for mounting to chassis. Available with 4 lug, 5 lug and 6 lug terminal connections.

- No. 1909C-4 Set of Input and output — 4 Lugs.....Net \$1.45 per set
- No. 1909C-5 Set of Input and output — 5 Lugs.....Net 1.65 per set
- No. 1909C-6 Set of Input and output — 6 Lugs.....Net 1.80 per set

LONG SLIM PHONE PLUGS



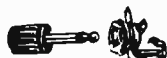
A compact plug for panel mounting space economy. Has two screw type terminals. Supplied with red

or black barrel, or shielded barrel. All parts nickel plated. Fits all standard type jacks. Length of barrel — 1 5/8" Diameter of barrel — 1/2" Overall Length — 2 7/8"

- No. 523W Red or Black Plug (please specify color) Net \$.21 ea.
- No. 523WS Shielded Plug.....Net .35 ea.

SUBMINIATURE PLUG AND JACK

Phone plug for thin 2-conductor cable. Length of plug is 1 1/8". The single closed circuit jack mounts in 1/4" hole, into panels up to 1/8" thick. Supplied as a set.



No. 702.....Net, per set \$1.18

TOGGLE SWITCHES

Bot Handle



Manufactured by H. & H. for Philmore. Rated at 3 Amps, 125 Volts, 1 Amp, 250 Volts. Laminated insulation. Serves many uses. Furnished nickel-plated, with two mounting nuts. UL Approved.

- | No. | Description | Net |
|------|------------------------|--------|
| 2206 | SPST 1 1/2" Shank..... | \$.66 |
| 2209 | SPDT 1 1/2" Shank..... | .87 |
| 2212 | DPST 1 1/2" Shank..... | 1.26 |
| 2215 | DPDT 1 1/2" Shank..... | 1.44 |

SUBMINIATURE VARIABLE CONDENSER



1 gang 365. Mmfd. Suitable for clockwise or counter-clockwise rotation. Overall 1" square. Depth 3/8". Supplied with standard 1/4" knob shaft, 1" long including bushing. Panel mount, interleaved insulation prevents shorting between plates.

No. 1949G.....Net \$.50

SLIM CRYSTAL MICROPHONE



Popular all-purpose microphone, can be used as a hand mike, lavalier mike, or on desk or floor stand. As lavalier mike it rests comfortably on the chest, permitting free use of hand. Lavalier cords and bracket are included. A chrome finished swivelled mike holder is supplied for desk or floor stand use, threaded 9/16"-27. Detachable 6-ft. shielded plastic cable. Built-in on-off switch. Satin chrome finish. Frequency response 100 to 9000 CPS. Output level — 52 db. High impedance. Individually packaged.

No. 100C.....Net \$4.60

SUBMINIATURE PUSHBUTTON SWITCH



S.P.S.T. normally open momentary switch. Completely enclosed housing. Mounts in 1/4" hole, in panels up to 1/8" thick. Supplied with red plastic button and mounting nut.

No. 2289.....Net \$.24

SHIELDED RCA TYPE EXTENSION PHONO CONNECTOR SET



Consists of phono plug and phono in-line jack both with removable shield handles. Both plug and jack have built-in cable connectors and are fully nickel plated.

Model No. MSII.....Net, per set \$.30

HI-FI TURNOVER CRYSTAL CARTRIDGE WITH TONE ARM



Contains the CX401 cartridge with two Sapphire needles. Includes arm rest and hardware. Spring counter balanced aluminum arm. Needles are very easily replaceable. Individually boxed.

No. C401.....Net \$2.90

LIGHTWEIGHT DYNAMIC EARPHONES



Ideal for private listening on transistor sets, hearing aids, radio sets and TV sets. These compact ear-phones are equipped with slim metal ear support for completely comfortable listening. Two plastic removable earplugs are supplied (one large for adults, one small for children). A miniature phone plug and 3-ft. of flexible plastic cord are included. Individually packaged in vinylite bag.

- | No. | Impedance | Net |
|-----|-----------|--------|
| P7 | 8 ohms | \$.50 |
| P8 | 15 ohms | .50 |
| P9 | 1000 ohms | .60 |
| P10 | 2000 ohms | .70 |

HI-FI STEREO HEADPHONES

with JUNCTION BOX



Enjoy the thrilling realism of Hi-Fi Stereo sound in full privacy.

The internal construction of these phones is a radical departure from conventional headphones, since it actually consists of 2 miniature Hi-Fi dynamic speakers housed in special acoustic enclosures.

The earpieces and headband are padded with soft foam rubber cushions for comfort.

Features:

- Complete with Junction Box for overload protection and ease of attachment to Stereo Amplifier.
- 30-1500 cycle frequency response
- 8 Ohm Impedance — each phone
- Standard 3 circuit phone plug
- 5 Ft. Gray plastic covered cable

Model SP1 Audiophile.....Net \$15.95 each

MINIATURE PM SPEAKERS



For Transistor and subminiature tube applications. Available in three sizes, all 8-ohm impedance. Exact replacement for most Transistor Radios in use. Speakers are full round without flange. Individually boxed.

- | | Net |
|------------------|--------|
| TS20 2"..... | \$1.35 |
| TS21 2 1/4"..... | 1.35 |
| TS25 2 1/2"..... | 1.40 |
- F.E.T. Paid

ALLIGATOR CLIP



Nickel plated, with Screw connection. Strong spring with hard bite. 2" long. No soldering necessary.

No. 10120.....Net \$4.50 per C

NEON PANEL LAMPS



Gives direct indication on 115 and 230 volts AC-DC lines. Totally enclosed with Jewel and lamp, 1" long. Mounts in 3/4" panel hole. Complete with mounting nut and washer. Uses external resistor 100K ohms for 115 volt, and 270K ohms for 230 volt.

Available in the following colors: Red, Clear or Yellow lens. Individually boxed. Please specify color.

No. NL50.....Net \$.42

CAMEL HAIR RECORD BRUSH



Clips to most pickup arms, automatically cleans record grooves ahead of stylus. Soft camels' hair will not scratch the most delicate record surface. Individually packaged. 12 to a Display Card.

No. CHB1.....Net \$.16 Ea.

PHILMORE MFG. CO. INC. Richmond Hill, N. Y.

We will be pleased to send our latest Catalog upon request.

PIERPONT**CLOSED
CIRCUIT****TELEVISION****EQUIPMENT**

INDUSTRIAL TELEVISION CAMERA

A complete video camera for operation of up to 12 monitors or receivers over 1000 feet of RG-59VU cable. Remote control of focus and picture optional.

- OUTPUT—Video 1.5 VP-P, Sync. neg. 75 ohm R.F.—100MV CH 2 to 6 tunable
- RESOLUTION—400 lines (center) 350 lines (edge)
- LIGHT CONTROL—Automatic electronic control
- LENS—1 inch f1.9 ("C" mount)
- POWER REQUIREMENT—117V, 60 cycle, 50W
- CONNECTOR—SO-239

DIMENSIONS 4½"W.x6"H.x11"L.

SHIPPING WEIGHT 15 lbs.

MODEL CAM-2P

NET PRICE

\$599.00

8" Industrial Television Monitor

Engineered and styled as a perfect companion for Model CAM-2P camera. Simple installation and operation. Ideal for desk or shelf mounting.

- INPUT—.5 to 3V Video sync. neg. • POWER REQUIREMENT—117V, 60 cycle, 95W. • CONNECTORS—2—SO-239 bridged
- VIDEO BAND WIDTH—7 MC Flat (600 lines) • HANDWIRED CHASSIS-POWER TRANSFORMER.

DIMENSIONS 10¼"W.x8"H.x11"L.

SHIPPING WEIGHT 22 lbs.

MODEL TM-3P

MODEL TM-4P

17" INDUSTRIAL TV MONITOR electrically equivalent to Model TM-3P

NET PRICE
\$249.00

NET PRICE \$299.00



SECURITY TELEVISION CAMERA

A specially designed, wall-mounted, tamper-proof version of Model CAM-2P with the same electrical specifications.

- Mounts from front. Trim panel is hinged and locked. • Safety glass window easily replaceable • Wide angle lens with dust proof seal • Easy to adjust and maintain • Designed for use in elevators, showrooms, lobbies or any surveillance area where appearance, safety and tamper-proofing is required.

DIMENSIONS of Stainless Steel Trim Panel—9"W.x13"H.x1½"D.

DIMENSIONS of Wall Cut-Out (behind surface)—6"W.x13"H.x3"D.

SHIPPING WEIGHT 20 lbs.

MODEL CAM-5P

NET PRICE

\$749.00

ALSO AVAILABLE

VIDEO DISTRIBUTION AMPLIFIER • OUTPUT—3 V.P.P. (non-reversing) into 75 ohms • RESPONSE—10 MC flat-adjustable hi-peaking • Rack mounted on 3½" aluminum panel

MODEL VDA-3P

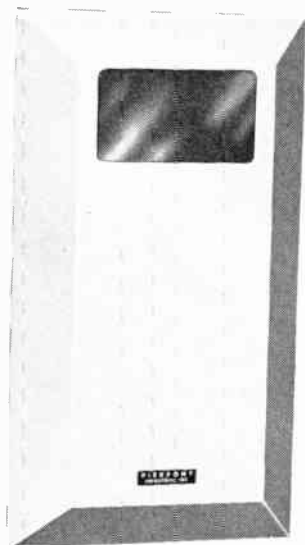
5" VIDEO MONITOR—Rack mounted

8" VIDEO MONITOR—Rack mounted

NET PRICE \$129.00

NET PRICE \$249.00

NET PRICE \$269.00

**PIERPONT INDUSTRIES, INC.**EAST ELMHURST,
69, N. Y.



CITIZENS' BAND RADIO

CITIZENS' BAND ANTENNAS

RCA PERSONAL-COM 300 Type 17678A

With the Personal-Com 300, RCA makes available a truly practical 27 megacycle portable Transceiver. Completely transistorized, the light-weight Personal-Com 300 operates from a self-contained rechargeable battery, and is housed within a sturdy high-impact resistant plastic case attractively finished in gleaming black and silver.

Designed for one-hand operation, the VOLUME-ON-OFF switch and PUSH-TO-TALK button are so placed that they can both be operated with the thumb of one hand.

The RCA Personal-Com 300 is the ideal communications facility for business or personal use on construction sites, loading platforms, farms, camps, hunting lodges or aboard your boat.

The Personal-Com 300 (17678A) comes complete with battery, battery charger, leather carrying case with strap and telescoping antenna.

The Personal-Com 300 is furnished to operate on channel seven, but the use of plug-in crystals permits changing, in the field, to any of the channels in the 27 mc band, from 26.975 mc to 27.225 mc.

FEATURES:

- Power input — 90 milliwatts for short range, unlicensed operation
- Completely self-contained transceiver for operation on any single frequency in 27 megacycle band
- Small, compact, lightweight—just 7 3/8" high, 2 7/8" wide, 1 1/8" deep, weighs slightly more than one pound including battery
- Attractively styled, impact resistant plastic case with telescoping antenna
- Excellent voice reproduction — quality two-inch diameter 100 ohm speaker
- Provision for use of external earphone
- Superheterodyne receiver with tuned radio frequency amplifier
- Certified to comply with Part 15 of the rules and regulations of the FCC
- Variety of optional accessories available

\$149.95*



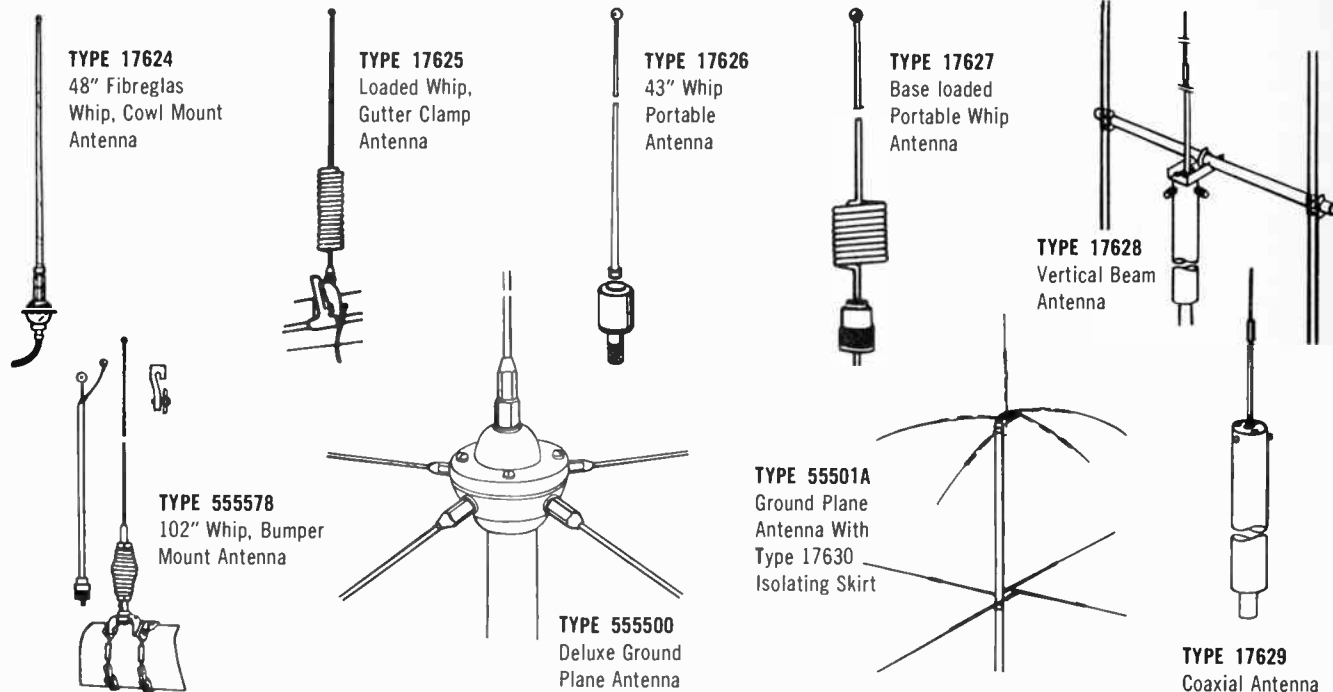
CITIZENS' BAND ANTENNAS

| Type | Description | Price * |
|-----------------------|--|-----------------|
| Base Station | | |
| 17628 | Vertical Beam | \$75.00* |
| 17629 | Coaxial | 33.25* |
| 17630 | Isolating Skirt for Ground Plane-555501A | 18.95* |
| 17666 | Half Wave Length End-Fed, Shunted | 47.38* |
| 555500 | Ground Plane, Deluxe | 70.35* |
| 555501A | Ground Plane | 26.65* |
| Mobile | | |
| 17624 | 48" Fiberglass Whip, Cowl Mount, Cable and Plug | \$16.60* |
| 17624A | 48" Fiberglass Whip only | 12.00* |
| 17668 | 60" Center Loaded Whip, Cowl Mount, Cable and Plug | 16.60* |
| 17669 | 60" Center Loaded Whip, Trunk Mount, Cable and Plug | 16.60* |
| 17670 | 50" Base Loaded Whip, Roof-Top Mount, Cable and Plug | 26.13* |
| 555578 | 102" Whip, Bumper Mount, Cable and Plug | 33.88* |
| 555579 | 102" Whip, Swivel Ball mount, Cable and Plug | 31.50* |
| Marine | | |
| 17667 | Ground Plane, Cable and Plug | \$56.75* |
| 555580 | 108" Whip, Swivel Ball Mount, Cable and Plug | 31.50* |
| Portable or Temporary | | |
| 17625 | Loaded Whip, Automotive Gutter Clamp, Cable and Plug | \$19.25* |
| 17626 | 43" Whip, Tuneable Coil and Plug | 27.35* |
| 17627 | Base Loaded, Portable Whip and Plug | 12.95* |
| 17637 | Center Loaded (Used with Personal Com "300") | 6.75* |

PERSONAL-COM 300 ACCESSORIES

| | | |
|---------|---|---------------|
| 17622 | Battery Charger, Single Capacity (Used with one 17619-A Personal-Com "300") | 18.50* |
| 17622A | Battery Charger, Dual Capacity, (Used with two 17619 A Personal-Com "300") | 25.95* |
| 17636 | Carrying Case, Leather | 6.65* |
| 3450244 | Transmitting Crystal—Channels 2 thru 22 | 3.50* |
| 3450245 | Receiving Crystal—Channels 2 thru 22 | 3.50* |

* Optional List Price



the ultimate in citizens band radio . . .

\$249.95 each, list

VOCALINE COMMAIRE ED - 276

Transistorized 6-channel mobile and
base transceiver



With the introduction of the new Commaire ED-276, Vocaline achieves the most advanced Citizens Band radio available anywhere today. It represents a total departure from all other units both in reliability of performance and variety of practical operating facilities. The entire unit mounts quickly for rugged mobile use or operates as a handsome free-standing base unit. Receiver is a transistorized double conversion superheterodyne unit, with high receiver selectivity achieved through use of ceramic filters. Transmitter provides a full 3 watts output, with 100% modulation.

OTHER FEATURES

3-stage AGC, eliminates blasting and fading; harnessed assembly for easy servicing; transistorized power supply; combined "S" meter, frequency spotter and RF power indicator on front panel; 22-channel tuning; 5 fixed transmit and receive channels with 6th position on selector switch for front panel crystal; receiver fixed/tune switch; exclusive receiver fine tuning; combined squelch and sensitivity control and many more.

\$249.95 list

SPECIFICATIONS:

22 transistors — 8 diodes — 3 tubes
Receiver Sensitivity — better than 0.2 μv . for a 6 db signal plus noise/noise ratio
Selectivity — 40 db down at ± 6 kc — adjacent channel rejection 55 db down
Audio Output — 5 watts (0.15 μv signal, 30% modulated at 400 cps will provide 3 watts)

Squelch Range — 85 db (0.1 μv — 2000 μv)

A. G. C. — Input signal voltage change of 80 db will allow 1.6 db audio output voltage change.

Transmitter — Full 5 watts input — 3 watts output

Modulation — 100% capability

POWER CONSUMPTION

| | | |
|---|----------|-----------|
| No signal, filaments off | 117 VAC | 12 VDC |
| Average volume on signal, filaments off | 23 watts | 60 ma. |
| No signal, filaments on | 24 watts | 100 ma. |
| Transmit, 100% modulation | 35 watts | 1.05 amp. |
| | 40 watts | 4.5 amp. |

World's First Long-Range Portable Self-Powered, 2-Way CB Radio With AM Receiver

VOCALINE COMMAIRE PT-27

AM broadcast band . . . 4 fixed channels and tunable receiver . . . self-powered . . . portable

WEATHER! NEWS! COMMUNICATIONS! IDEAL FOR ALL SPORTSMEN!

Perfect for hunting, fishing, camping . . . can be used for business, industry, farming . . . a variety of applications.

- 100% modulation
- 18 transistors (and 5 diodes) for matchless performance
- double conversion, superheterodyne receiver
- temperature-compensated circuits
- exceptional sensitivity — 0.1 microvolt (variable)
- outstanding selectivity — 40 db down at ± 10 KC
- equal range of 5-watt high quality CB units

- lightweight — only 11½ lbs. with batteries
- compact — 9" x 4" x 11"
- superior Silent-Aire Squelch
- Built-in charger
- 10 controls for maximum flexibility
- no installation required
- leather carrying strap

\$250.00 each, list



IDEAL FOR
HOME,
OFFICE,
PLANT

VOCATRON

CC-60 WIRELESS INTERCOM

- No wires needed—just plug in and talk
- Patented new squelch circuit—eliminates squawk
- Compact—3" x 8" x 6"
- Draws less current than a light bulb
- Distinctive and functional appearance

\$109 pair, \$54.50 each

New Multi-Channel Convenience In
Citizens Band Radio Communication

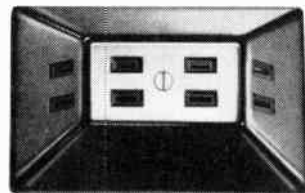
VOCALINE COMMAIRE

4-CHANNEL
model
ED-27M
(27 MC.)



- Selective & Sensitive Receiver
- Patented Silent-Aire Squelch
- Single Crystal Receiver
- Transistorized Power Supply and Unmatched Audio Circuitry
- Convenience of conference-phone flexibility plus uniform performance throughout the entire 22-channel citizens band
- Ideal for business, industry, boating and sports

\$189.50 each, list



4 SAFE
OUTLETS IN ONE!

PERMA-PLUG

- Ends messy wiring
- Won't pull out when you pull out plugs
- U.L. Approved
- Proven seller—attractive display units provided

69c Brown 79c Ivory

VOCALINE COMPANY OF AMERICA, INC. / COMPLETE LINE OF ACCESSORIES,
ANTENNAS AVAILABLE

OLD SAYBROOK, CONN.

whatever electronic products

you require...



...you'll find it

faster in

this catalog...

...the world's largest catalog

of electronic

products

sold through

distributors

The

Radio-Electronic

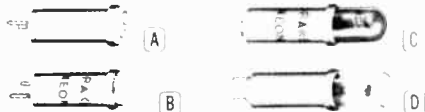
MASTER



BI-PIN CARTRIDGE LAMPS

CHICAGO 31 ILLINOIS

REPLACEABLE BI-PIN CARTRIDGE LAMPS FOR COMPUTER AND READOUT USES



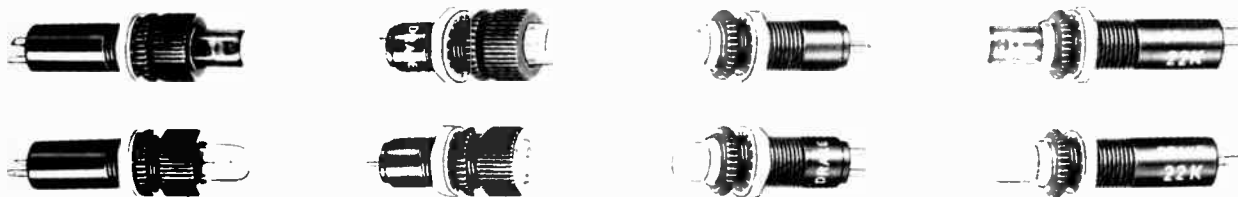
| NEON LAMPS | | | | | | | | | | |
|------------|--------------|----------------|-----|----------------------|-------|------------------------|----------------------------------|--|-------------------|------------|
| Fig. No. | Drake Number | Starting Volts | | Design Current (MA.) | Watts | C.P. at Design Current | Average Life at Des. Cur. (Hrs.) | Resist. Req. for Des. Cur. at Norm. Circ. V. | Built-in Resistor | List Price |
| | | AC | DC | | | | | | | |
| A | 1-503 | 65 | 90 | 0.3 | 1 25 | .003 | 25M | 220K | | 1.44 |
| B | 1-603 | " | " | 0.3 | 1 25 | .003 | 25M | 220K | | 1.44 |
| C | 1-703 | " | " | 0.6 | 1 15 | .006 | 25M | 100K | | 1.35 |
| D | 1-803 | " | " | 0.6 | 1 15 | .006 | 25M | 100K | | 1.35 |
| C | 2-703 | 65 | 90 | 1.1 | 1 8 | .010 | 10M | 56K | x | 1.80 |
| D | 2-803 | " | " | 1.1 | 1 8 | .010 | 5M | 56K | x | 1.80 |
| A | 4-503 | 95 | 135 | 0.8 | 1 10 | .012 | 25M | 68K | | 1.44 |
| B | 4-603 | " | " | 0.8 | 1 10 | .012 | 25M | 68K | | 1.44 |
| C | 5-703 | " | " | 2.6 | 1 3 | .034 | 10M | 22K | x | 1.80 |
| D | 5-803 | " | " | 2.6 | 1 3 | .034 | 10M | 22K | x | 1.80 |

Save space on crowded panels. Wide choice of filter shapes and colors (Red, Yellow, Green, Blue, White, Colorless). Neon types with or without built-in resistors. Incandescent types available in wide range of low voltages. Selected units have low power drain, can be driven with transistors.

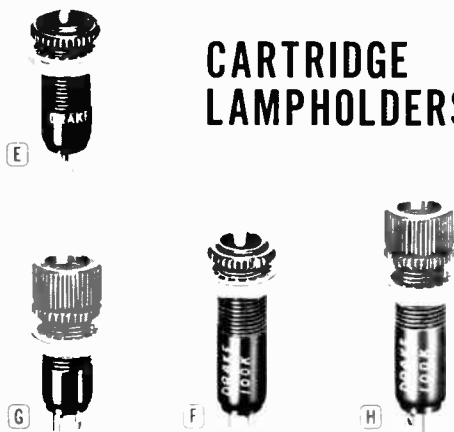
Lamps fit DRAKE or any other cartridge base lampholders. Easily replaced from front of panel. Lamps sealed into clear anodized aluminum casings. Two stainless steel terminals; Nylon insulation. Low cost printing of 1, 2 or 3 digits, letters or symbols on flat face filters, up to 12 pt. type. Legends are pin-indexed for fast installation and replacement, with automatic line-up. These and other Bi-Pin Cartridge Lamps available in single units or multiple-unit blocks. Built to withstand environmental requirements of MIL-STD-202B per MIL-L-3661A.

| INCANDESCENT LAMPS | | | | | | | |
|--------------------|--------------------|--------------------|--------------|------------------------|---------------------|---------------------|------------|
| Fig. No. | DRAKE NUMBER | | Design Volts | Design Current (Amps.) | Average Life (Hrs.) | Candle Power (C.P.) | List Price |
| | Transparent Filter | Translucent Filter | | | | | |
| B | 6-603 | 6-604 | 6 | .20 | 500 | .63 | \$1.74 |
| C | 6-703 | 6-704 | 6 | .20 | 500 | .63 | 1.74 |
| B | 11-603 | 11-604 | 28 | .04 | 1000 | .34 | 1.92 |
| C | 11-703 | 11-704 | 28 | .04 | 1000 | .34 | 1.92 |

★ COMPLETE CARTRIDGE UNITS (ORDER LAMPS AND LAMPHOLDERS SEPARATELY) ★



CARTRIDGE LAMPHOLDERS



Exclusive advanced design for "D" hole mounting cuts costs, saves assembly time, provides standardized legend alignment. Extra savings by using DRAKE Lampholder *without collars*.

Small size—mount in $\frac{3}{8}$ " dia. hole on $\frac{21}{32}$ " centers. Sturdy black anodized aluminum body, collar and facing nut—cadmium and Cronak plated steel lockwasher and hex nut—molded phenolic insulation—silver plated-gold flashed spring brass terminals, identified with letters A and B for DC operation with seasoned lamps. Exclusive DRAKE *E-Z-Tite* knurled facing nut (#20 wrench) for fast, secure panel installation. Both contacts insulated from mounting. Max. Amps.: 1—Max. Watts: 75—Test Voltage: 1,000 AC @ 60 cps. Available with or without built-in $\frac{1}{10}$ watt current limiting resistor for use with neon cartridges.

DRAKE Cartridge Lampholders accept all Bi-Pin Cartridge Lamps now on the market.

| Fig. No. | DRAKE NUMBER | | | | | Built-in Resistor (Ohms) - 10% | Max. Current (MA.) |
|----------|----------------|------------|----------|-------------|------------|--------------------------------|--------------------|
| | Without Collar | List Price | Fig. No. | With Collar | List Price | | |
| E | 4428-000 | \$1.74 | G | 4428-001 | \$1.95 | | 1.0 |
| F | 4438-000 | 2.31 | H | 4438-001 | 2.43 | 22K | 2.04 |
| | 4438-002 | 2.31 | | 4438-003 | 2.43 | 47K | 1.40 |
| | 4438-004 | 2.31 | | 4438-005 | 2.43 | 56K | 1.27 |
| | 4438-006 | 2.31 | | 4438-007 | 2.43 | 100K | .95 |

| PROJECTIONS FROM PANEL FACE — LAMP INSTALLED | | | | |
|--|--------------------|-------------------|-------------------|-------------------|
| Filter Shape | Without Collar | | With Collar | |
| | Front | Rear | Front | Rear |
| Flush | $\frac{7}{32}$ " | $1\frac{1}{64}$ " | $\frac{3}{8}$ " | $\frac{5}{64}$ " |
| Short Cylindrical | $\frac{3}{8}$ " | $1\frac{1}{8}$ " | $1\frac{1}{32}$ " | $1\frac{1}{32}$ " |
| Long Cylindrical | $1\frac{19}{32}$ " | $1\frac{3}{8}$ " | $\frac{3}{4}$ " | $1\frac{1}{32}$ " |
| Long Macrodome | $\frac{3}{4}$ " | $1\frac{3}{8}$ " | $4\frac{7}{64}$ " | $1\frac{1}{32}$ " |

ALL ILLUSTRATIONS APPROX. $\frac{3}{4}$ ACTUAL SIZE ★ ALWAYS SPECIFY FILTER COLORS

COMPUTER INDICATOR LIGHTS

DRAKE



CHICAGO 31 ILLINOIS



"ECONOGLO" NEON GLOW INDICATOR LIGHTS

Excellent for LOW COST 120V applications or as D. C. circuit components. Available with or without series resistors. Mount from front of panel. Equipped with 2" wire leads. Plain macrodome also available; substitute lens code 303 for 323 when ordering.

| Fig. No. | Drake Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Built-in Resistor (Ohms) | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|-----------------|-----------|--------------------------|--------------------------|--------------------------|--------------------|----------------------|------------------|------------|
| A | R116-323 or 303 | 1 1/32" | 3/8" | 1 5/32" | 100K | 3/16" | 1/4" | 1 7/32" | \$.46 |
| B | R117-604 | 1 1/32" | 1/4" | 3/8" | 100K | 1/2" | 1/16" | 1 1/16" | .57 |

LENS DESCRIPTION CODE (last three Drake Number digits): See Section 3900.
For HI-BRIGHTNESS Lamps, prefix Drake Number with letter "H".



"MINEON" NEON GLOW INDICATOR LIGHTS

Similar to "ECONOGLO" types, except mounted in black anodized aluminum body with solder lugs or turret terminals. Drake E-Z-Tite facing nut, and No. 20 wrench, make assembly fast.

| Fig. No. | DRAKE NUMBER | | | | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Built-in Resistor (Ohms) | Mounting Hole Dia. | Maximum Panel Thickness | Mounting Centers |
|----------|--------------|------------|-------------|------------|-----------|--------------------------|--------------------------|--------------------------|--------------------|-------------------------|------------------|
| | Pin Lugs | List Price | Turret Lugs | List Price | | | | | | | |
| C | R118-644 | \$1.65 | R119-644 | \$2.26 | 1 1/32" | 9/32" | 1 1/16" | 100K | 3/8" | 3/8" | 5/8" |

LENS DESCRIPTION CODE (last three Drake Number digits): See Section 3900.
For HI-BRIGHTNESS Lamps, prefix Drake Number with letter "H".

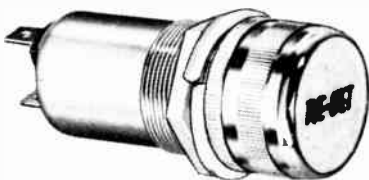
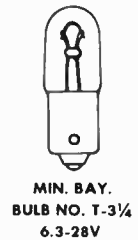


"DELUXE MOLDED" INDICATOR LIGHTS

For detailed description, see DRAKE pages, Section 3900

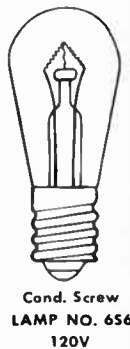
| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lugs | Built-in Resistor (Ohms) | List Price |
|----------|--------------|------------------|-----------|--------------------------|--------------------------|--------|--------------------------|------------|
| D | 5203-232-544 | LH78-LC20 | 1/2" | 1 5/32" | 1 5/8" | Solder | 22K | \$2.28 |
| E | 5204-238-320 | LH78-LC20 | 3/8" | 2 7/32" | 1 1/2" | Solder | 27K | 2.90 |

LENS DESCRIPTION CODE (last three Drake Number digits): See Section 3900.



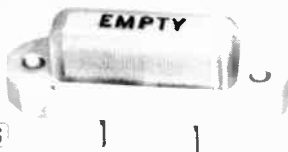
HEAVY DUTY INDICATOR LIGHTS

Ruggedly made for severe duty. Polished chrome plated screw-on lens holder. Pop-forward lamp easily replaced from front of panel. Mount from front or rear of panels up to 3/16" thick, in 1" dia. hole on 1 3/8" centers.



| Fig. No. | Drake Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Face | Lamp | List Price |
|----------|----------------|-----------|-------------|--------------------------|--------------------------|-------------|------------|
| F | B1478L-ISE-550 | 1" | Cond. Screw | 3/4" | 2 5/32" | 656 or 10C7 | \$2.91 |

LENS DESCRIPTION CODE (last three Drake Number digits): See Section 3900.



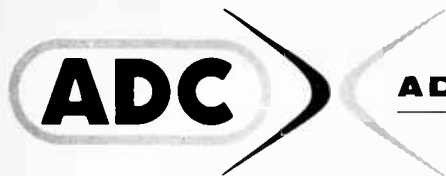
"FLUSHLITE" INDICATOR LIGHTS

A "one-of-a-kind" unit—all nylon with built-in series resistor. Exceptional appearance.

| Fig. No. | Drake Number | Lens Size | Length in Front of Panel | Length Behind Panel Face | Built-In Resistor (Ohms) | Lamp | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------------|------------------|--------------------------|--------------------------|--------------------------|---------------|----------------------|------------------|------------|
| G | 110-022 (Hi-Brite) | 1 3/32" x 1 1/4" | 1 1/32" or 9/16" | 1 7/32" or 3/16" | 22K | Hi-Brite Neon | 1 1/32" Rear Mtd. | 3/16" or 1 7/8" | \$.83 |



TURN TO SECTION 3900
for detailed information about many other
DRAKE INDICATOR LIGHTS — LENSES — LAMP HOLDERS



ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

PLUGS



PJ-5 PJ-1 PJ-3 PJ-6 D7200 PJ-327

PJ-5 Equivalent, PJ-055, WE-47, fits 1/4" phone jacks. Black plastic shell. Screw terminals. Two conductor.

Net \$.78

PJ-1 Equivalent WE-241, heavy duty die cast frame. Black phenolic shell. Self aligning plug prongs on 5/8" center for use with all standard jack panels. Two tip conductors, plus sleeve connection common to both sleeves.

Net \$2.55

PJ-3 Equivalent PJ-051, WE-310. Designed for use with 1/4" tip, ring and sleeve jacks. Molded insulation, red plastic shell. Three conductor.

Net \$2.40

PJ-6 Equivalent WE-213. Designed for applications requiring two separate 3 conductor circuits. Popularly used with operator's intercom/monitor headsets. Black shell notched for polarity identification. Self aligning plug prongs on 11/16" centers.

Net \$9.78

D7200 Equivalent WE-315B. Four prong, self aligning plug. Molded insulation. Brass shell notched for polarity is nickel plated and connected to plug stems to provide shielding for tip conductors. For use with four PJ-318 double jacks mounted on 5/8" centers. Five conductors.

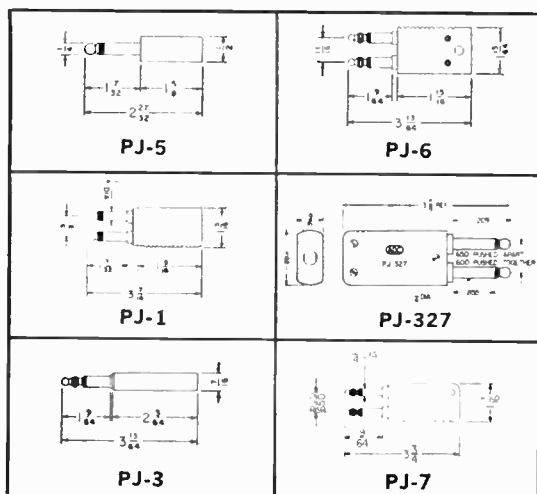
Net \$14.70

PJ-327 Equivalent WE-327. The PJ-327 Twin Plugs provides two electrically independent, 2 conductor plugs in a black plastic shell which is notched to indicate polarity. Self aligning plug sleeves are on 5/8" centers. Designed and constructed in accordance with Specification MIL-P-612A.

Net \$2.55

PJ-7 Twin type plug with tip, ring and sleeve conductors on 5/8" centers for use with all standard jack panels. Designed to mate with three conductor jacks having 1/4" diameter sleeves. Molded insulation. Black phenolic shell is notched to indicate polarity.

Net \$7.20



PATCH CORDS



| Length | Cord With PJ-1 Plugs | Net Price | Cord With PJ-5 Plugs | Net Price | Replacement Cords Only | Net Price |
|---------|----------------------|-----------|----------------------|-----------|------------------------|-----------|
| 6-inch | PJ-10 1/2 | \$6.38 | PJ-50 1/2 | \$3.48 | PJ-20 1/2 | \$1.11 |
| 1-foot | PJ-11 | 6.60 | PJ-51 | 3.63 | PJ-21 | 1.50 |
| 2-feet | PJ-12 | 6.75 | PJ-52 | 3.84 | PJ-22 | 1.65 |
| 3-feet | PJ-13 | 6.90 | PJ-53 | 4.11 | PJ-23 | 1.74 |
| 4-feet | PJ-14 | 7.13 | PJ-54 | 4.44 | PJ-24 | 1.80 |
| 5-feet | PJ-15 | 7.28 | PJ-55 | 4.77 | PJ-25 | 1.89 |
| 6-feet | PJ-16 | 7.58 | PJ-56 | 5.25 | PJ-26 | 2.49 |
| 10-feet | PJ-10 | 8.10 | PJ-50 | 5.82 | PJ-20 | 3.15 |

| Length | Cord With PJ-3 Plugs | Net Price | Replacement Cords Only | Net Price |
|--------|----------------------|-----------|------------------------|-----------|
| 2-feet | PJ-82 | \$8.70 | PJ-62 | \$2.10 |
| 4-feet | PJ-84 | 9.30 | PJ-64 | 2.40 |
| 6-feet | PJ-86 | 9.90 | PJ-66 | 2.82 |

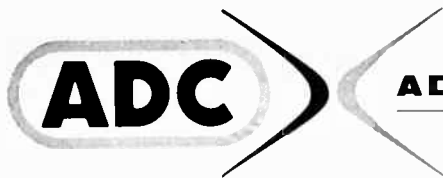
ADC patch cords have become standards in the communications industry. Unmatched in quality, these shielded cords are made of tinned copper conductor wire with a heavy braided cover reinforced at each end. These cords, as well as cord assemblies with PJ-1 double plugs, PJ-5 or PJ-3 single plugs and standard black patch cords with shields grounded both ends, are considered standard. Unshielded cords or assemblies with shields grounded one end only available on special order. Gray, red, other color cords available on special order.

Four tinsel wire conductors plus shield (shield grounded to both sleeves of PJ-7 plugs). Conductors are rubber insulated. Heavy black braided glazed cotton cover overall.

| Length | Cord with PJ-7 Plugs |
|--------|----------------------|
| 1 foot | PJ-171 |
| 2 feet | PJ-172 |
| 3 feet | PJ-173 |
| 4 feet | PJ-174 |
| 5 feet | PJ-175 |
| 6 feet | PJ-176 |

Four tinsel wire conductors, thermoplastic insulated. Slate colored Nylon braided cover overall resists wear.

| Patch Cords Length | Nylon Cord With PJ-327 Plugs |
|--------------------|------------------------------|
| 1 foot | PJ-181 |
| 2 feet | PJ-182 |
| 3 feet | PJ-183 |
| 4 feet | PJ-184 |
| 5 feet | PJ-185 |
| 6 feet | PJ-186 |



ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

JACKS.....



TELEPHONE TYPE

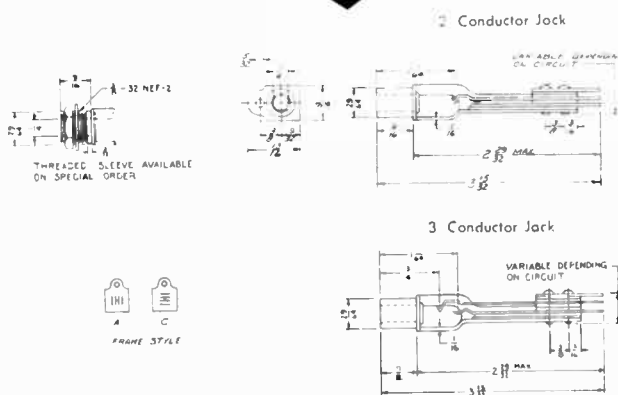
ADC is recognized as a leading supplier of long frame, telephone type jacks. As evidence of their outstanding quality, ADC jacks are used by the country's foremost manufacturers of communication equipment. The unique, ADC one piece frame is strong, dimensionally stable and readily interchangeable both mechanically and electrically with commonly used jacks. Plating withstands 50-hour salt spray tests. Coin silver contacts are welded to nickel silver springs. Lugs are hot tin dipped. Insulation is high grade phenolic.

| Schematic Diagram | Jacks | W. E. Equiv. | Frame Style | Net Price |
|-------------------|--------|--------------|-------------|-----------|
| | PJ-115 | 215-A | A | \$.90 |
| | PJ-116 | 216-A | A | .90 |
| | PJ-117 | 217-A | A | .90 |
| | PJ-123 | 223-A | A | .60 |
| | PJ-125 | 225-A | A | 1.02 |
| | PJ-202 | None | C | 1.02 |
| | PJ-203 | 303-A | A | .78 |
| | PJ-204 | None | A | 1.02 |
| | PJ-205 | 240-A | A | 1.32 |
| | PJ-206 | 242-A | A | 1.32 |
| | PJ-207 | 285-A | A | 1.50 |
| | PJ-208 | 284-A | A | 1.50 |
| | PJ-209 | 411-A | A | 1.02 |
| | PJ-226 | 226-A | A | 1.02 |
| | PJ-237 | 237-A | A | .87 |
| | PJ-238 | 238-A | A | .66 |
| | PJ-240 | 240-C | C | 1.23 |
| | PJ-241 | 241-A | A | 1.02 |
| | PJ-242 | 242-C | C | 1.23 |
| | PJ-318 | 218-A | A | .66 |
| | PJ-336 | 236-C | C | 1.14 |
| | PJ-338 | 438-C | C | 1.23 |
| | PJ-339 | 239-A | A | .92 |
| | PJ-418 | 218-C | C | .69 |

MILITARY JACKS

Designed to meet the rugged, exacting requirements of military applications. These ADC jacks are made in accordance with Mil-J-641B specifications. Highest quality materials and closely held tolerances on dimensions conform with military specifications.

| Schematic Diagram | Mil Jacks | Net Price | Schematic Diagram | Mil Jacks | Net Price |
|-------------------|-----------|-----------|-------------------|-----------|-----------|
| | JJ-015 | 1.17 | | JJ-073 | 1.50 |
| | JJ-016 | .90 | | JJ-074 | 1.17 |
| | JJ-017 | 1.17 | | JJ-075 | 1.50 |
| | JJ-019 | 1.41 | | JJ-077 | 1.71 |
| | JJ-022 | .75 | | JJ-078 | 1.71 |
| | JJ-024 | .75 | | JJ-084 | 1.05 |
| | JJ-035 | 1.17 | | JJ-085 | 1.05 |
| | JJ-042 | 1.02 | | JJ-086 | .66 |
| | JJ-072 | 1.05 | | JJ-087 | 1.17 |

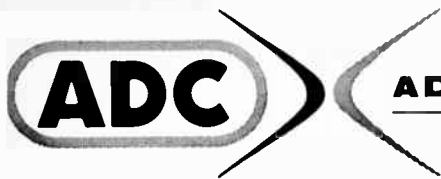


TERMINAL BLOCKS



| Type | No. Rows | No. Terminals | Net Price |
|--------|----------|---------------|-----------|
| PJ-101 | 1 | 20 | \$3.45 |
| PJ-102 | 2 | 40 | 4.65 |
| PJ-103 | 3 | 60 | 5.85 |
| PJ-104 | 4 | 80 | 7.05 |
| PJ-105 | 5 | 100 | 8.25 |
| PJ-106 | 6 | 120 | 9.45 |

Molded of durable black phenolic plastic material. Terminals are .040" plated brass. Rows of terminals are graduated in length for ease of wiring, and are identified by numbering along the top row. Base 3" x 6-1/16".



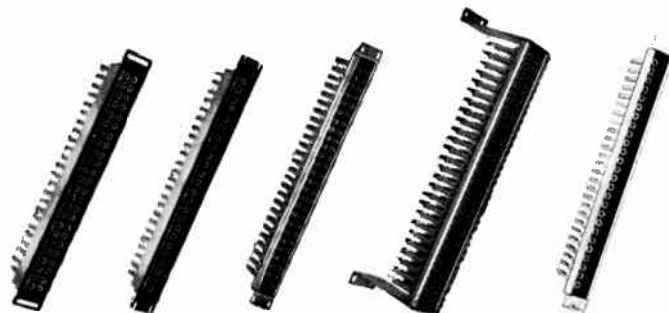
ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

JACK PANELS...

ADC offers the most complete assortment of jack panels available today. ADC panels are used in television and broadcasting stations, recording studios, industrial paging systems, and communication equipment of all kinds where there is a need to efficiently switch and distribute audio signals. Molded of solid phenolic, reinforced with steel to provide maximum rigidity and strength. Jacks are spaced to permit use of any standard double plug with $\frac{3}{8}$ " spacing. Mounting brackets and designation strips furnished with each panel. All panels designed to fit standard 19" relay rack. Consult ADC for your standard and special jack panel requirements.

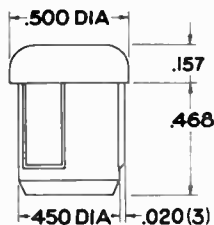


- PJ-31
- PJ-33
- PJ-30
- PJ-35
- PJ-36
- PJ-341
- PJ-343
- PJ-340
- PJ-350
- PJ-360
- PJ-391
- PJ-393
- PJ-390
- PJ-395
- PJ-396

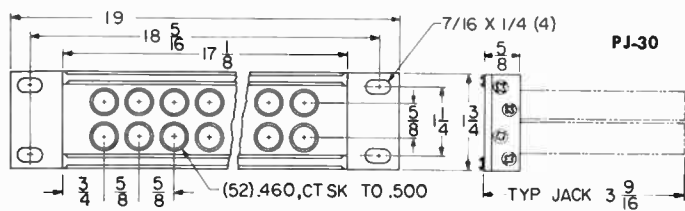
HOLE PLUG

Molded of black polyethylene plastic. Fits all ADC standard jack panels. Made to plug unused jack mounting holes in jack panels.

PJ-29 Net \$.15

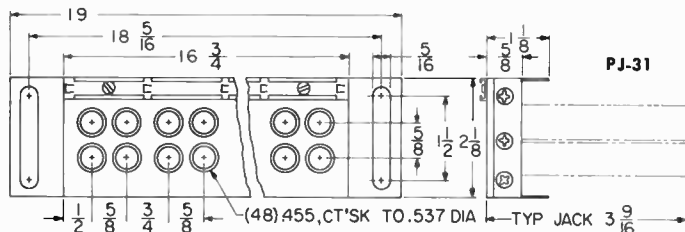


| Panel less Jacks | Net Price | Panel with PJ-318 Jacks | Net Price | Panel with PJ-339 Jacks | Net Price |
|------------------|-----------|-------------------------|-----------|-------------------------|-----------|
| PJ-30 | \$12.90 | PJ-340 | \$49.50 | PJ-390 | \$64.80 |
| PJ-31 | 9.45 | PJ-341 | 42.75 | PJ-391 | 57.30 |
| PJ-33 | 8.52 | PJ-343 | 25.14 | PJ-393 | 32.40 |
| PJ-35 | 15.60 | PJ-350 | 52.50 | PJ-395 | 67.50 |
| PJ-36 | 8.70 | PJ-360 | 27.90 | PJ-396 | 35.10 |



PJ-30

Double panel. Holds 52 jacks—requires 1 3/4" panel space. Double designation strip. Brackets for flush rack mounting. All jack mounting holes on $\frac{3}{8}$ " centers.

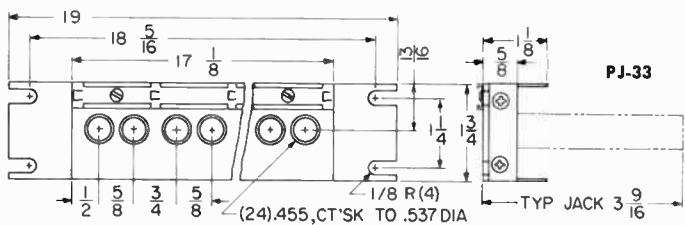


PJ-35

Double panel. Same as PJ-30 except with stand off brackets to hold panel 7" in front of mounting rack.

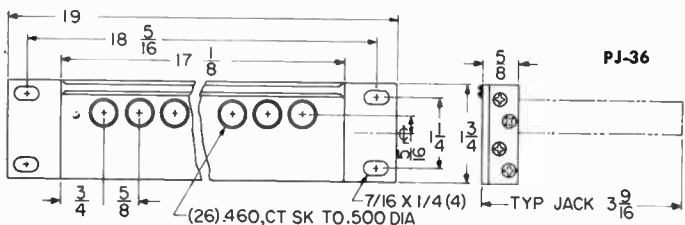
PJ-31

Double panel. Holds 48 jacks. Holes spaced to prevent patching adjacent circuits. Requires 2 1/8" panel space.



PJ-33

Single panel. Holds 24 jacks. Holes spaced to prevent patching adjacent circuits. Requires 1 3/4" panel space.



PJ-36

Single panel. Holds 26 jacks—requires 1 3/4" panel space. Brackets for flush rack mounting. All jack mounting holes on $\frac{3}{8}$ " centers.

Panels with mil jacks and other telephone type jacks also available.

CANNON AUDIO PLUGS for low level circuit applications



Cannon Audio Plugs are designed for use on audio/video and other low level circuit applications in the electronic/industrial fields where reliability, quiet operation and the elimination of mechanical interference are necessary. Some common uses are: microphones, tape recorders, medical instruments, cameras and test instrumentation computers.

XLR PLUG SERIES

The XLR incorporates the most advanced audio/electronic design concepts. Small and compact, it features resilient insulators on the socket side plus resilient ribs for shock protection and quiet operation.

Shells are zinc (receptacles), steel or zinc (plugs), with satin nickel finish. Insulators are rigid molded plastic (pin side), resilient polychloroprene (socket side). Contacts are brass, silver plated. Coupling is by the latch-lock method.

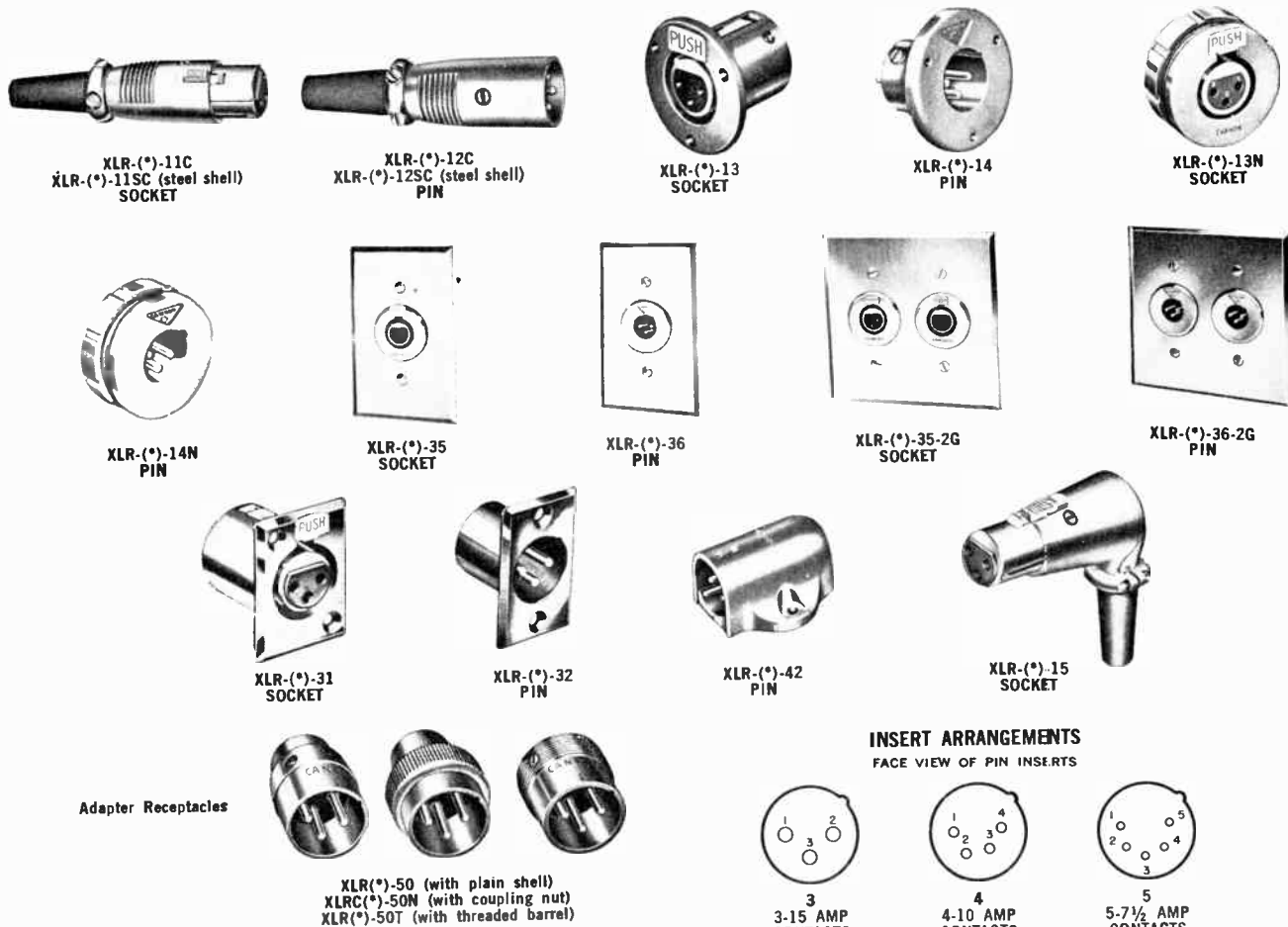
FEATURES

• QUIET OPERATION

Thick zinc cross sections for shell strength plus resilient insulators and resilient ribs on the socket side, insure elimination of mechanical interference from shock.

• EASY TO WORK WITH

Finger grips for positive handling. Integral cable clamp with two clamping positions for positive grip on cable sizes from 7/32 to 5/16 of an inch. Large internal space for ease of wiring.



*Add insert arrangement to complete ordering number.

P PLUG SERIES

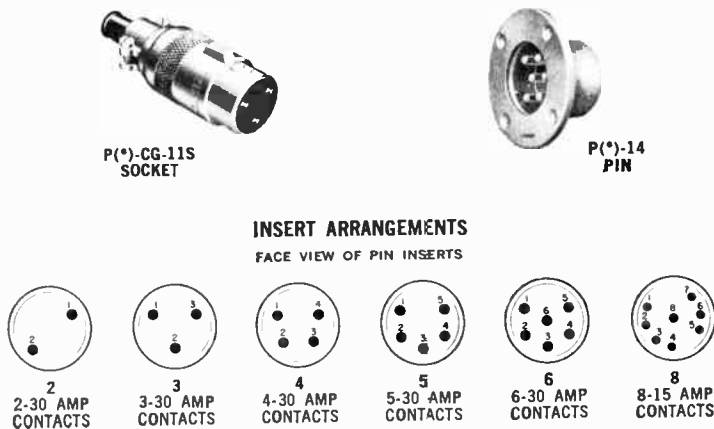
The Cannon P is a versatile plug in terms of the wide range of insert arrangements offered. It is a proven plug, and has been the standard of quality in the audio field for many years. Socket contacts are full floating and precision-made from milled bar stock.

Shells are zinc (receptacles), steel or zinc (plugs), with satin chrome finish. Insulators are phenolic. Contacts are brass, silver plated. Coupling is by the latch-lock method.

Other P Series plugs not shown.

- P(*)-CG-12S Straight cord plug. (Pin)
- P(*)-13 Flush panel receptacle. (Socket)
- P(*)-CG-15 90° angle cord plug. (Socket)
- P(*)-CG-16 90° angle cord plug. (Pin)
- P(*)-17 Surface panel receptacle. (Socket)
- P(*)-18 Surface panel receptacle. (Pin)
- P(*)-23 Straight cord plug. (Socket)
- P(*)-24 Straight cord plug. (Pin)
- P(*)-35 Single gang wall receptacle. (Socket)
- P(*)-36 Single gang wall receptacle. (Pin)
- P(*)-35-2G Two gang wall receptacle. (Socket)
- P(*)-36-2G Two gang wall receptacle. (Pin)
- P(*)-41 Microphone mounting receptacle. (Socket)
- P(*)-42 Microphone mounting receptacle. (Pin)

*Add insert arrangement to complete ordering number.



CANNON ELECTRIC COMPANY • SEE YOUR CANNON AUTHORIZED DISTRIBUTOR

Birnbach

GIANT, STANDARD, MIDGET BANANA JACKS and PHONE TIPS



VARIATIONS OF STANDARD PLUGS AVAILABLE TO ORDER. PLATED TO GOV'T. SPECS.

GIANT PLUG No. 396

Body is hexed brass, nickel plated. Fits all giant banana jacks. Complete with nickel plated screw and soldering lug. Rated at 25 amps.

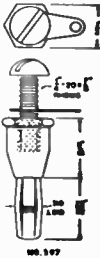
Cat. No. Spring Std. Pkg.
396 Phos. Brz. 25
396B Beryl. Cop. 25



GIANT PLUG No. 397

Body is hexed brass, nickel plated. Fits all giant banana jacks. Complete with nickel plated screw and soldering lug. Heavy duty, 25 amp. rating.

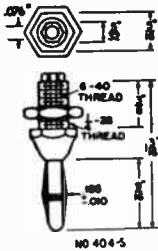
Cat. No. Spring Std. Pkg.
397 Phos. Brz. 25
397B Beryl. Cop. 25



BANANA PLUG No. 404S

Hexed brass nickel pl. Complete with hex brass n.pl. nut. Has solderless Scrulok connection. Fits all standard banana plugs. Spring is four-leaved phosphor bronze nickel plated. Rated at 5 amps.

Cat. No. Std. Pkg.
404S 100
Scrulok Banana Plug



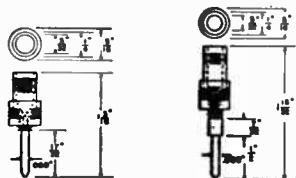
BANANA PLUG No. 400

Hexed brass nickel plated. Fits all standard banana plugs. Complete with hex brass n.pl. nut and tinned copper lug. Spring is four-leaved nickel plated. Rated at 5 amps. Stand. pkg. 100

Cat. No. Spring Dim. "A"
400 Phos. Bronze 1/4"
400A Phos. Bronze 3/8"
400B Beryl. Copper 1/2"

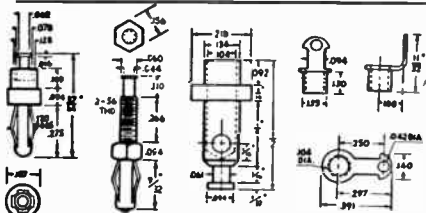


SOLDERLESS PHONE TIPS No. 23 and No. 24



Brass, nickel plated. Wire fits thru body of tip, tightened around screw with nickel plated knurled nut. Fits all standard phone tip jacks.

Cat. No. Std. Pkg.
23—Junior Solderless Phone Tip 100
24—Senior Solderless Phone Tip 100



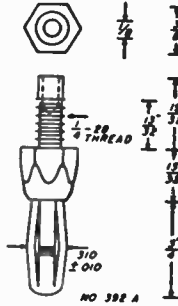
SUB MINIATURE BANANA PLUGS & JACKS
One piece beryllium copper springs insure positive and lasting contact. Silver plated overall.

| Cat. No. | Description | Std. Pkg. |
|----------|-----------------|-----------|
| 590 | Rivet Type Plug | 100 |
| 591 | Screw Type Plug | 100 |
| 592 | Force Fit Jack | 100 |
| 593 | Rivet Type Jack | 100 |

GIANT PLUG No. 392A

Body is hexed brass nickel plated. Rated at 25 amps. Has large soldering well in threaded shank. Fits all Giant Banana Jacks.

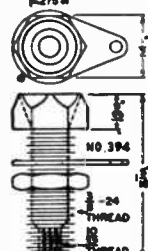
Cat. No. Spring Std. Pkg.
392A Phos. Brz. 25



GIANT JACK No. 394

Hexed brass nickel plated. Fits all Giant Banana Plugs. Mounts in 3/8" hole in panels up to 3/8" thick. Complete with n.pl. nut and tinned copper lug.

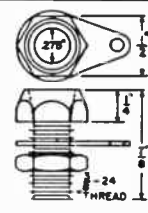
Cat. No. Std. Pkg.
394 Giant Jack 25



GIANT JACK No. 395

Fits all giant banana plugs. Hexed brass head nickel plated overall. Mounts in 3/8" hole. Complete with nut and tinned copper lug.

Cat. No. Std. Pkg.
395 Giant Jack 25



BANANA PLUG No. 414

Hexed brass, nickel plated. One-piece construction. Four-leaved phosphor bronze spring. Complete with brass hexed nut n.pl. Rated at 5 amps. Fits all standard banana jacks.

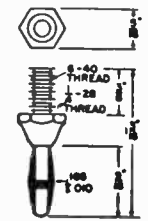
Cat. No. Spring Std. Pkg.
414 Phos. Brz. 100



BANANA PLUG No. 404A

Hexed brass and four-leaved phosphor bronze spring all nickel plated. Rated at 5 amps. Fits all standard banana jacks.

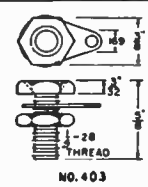
Cat. No. Std. Pkg.
404A Banana Plug 100



BANANA JACK No. 403

Hexed brass n.pl., with brass n.pl. hex nut and tinned copper lug. Mounts in 1/4" hole in panels up to 3/8" thick. Fits standard plugs.

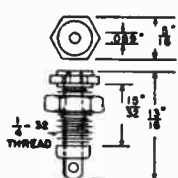
Cat. No. Std. Pkg.
403 Banana Jack 100



PHONE TIP JACK No. 26

Brass nickel pl. body. Double phosphor bronze springs, hot tinned. Fits standard phone tip plugs. Mounts in 1/4" hole in panels up to 3/8" thick. Complete with hex n.pl. brass nut.

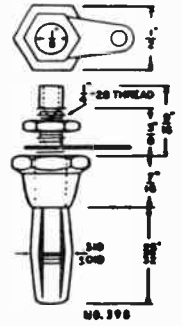
Cat. No. Std. Pkg.
26 Phone Tip Jack 100



GIANT PLUG No. 398

Body is hexed brass, n.pl. nut and tinned copper lug. Has large soldering well in threaded shank. Used in high amperage circuits rated at 25 amps. Fits all giant banana jacks.

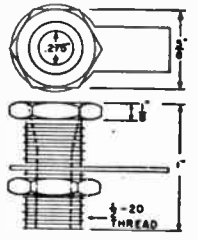
Cat. No. Spring Std. Pkg.
398 Phos. Brz. 25
398B Beryl. Cop. 25



GIANT JACK No. 399

Hexed brass nickel plated. Complete with hex brass n.pl. nut and tinned copper lug. Fits all giant banana plugs. Mounts in 1/2" hole in panels up to 3/8" thick.

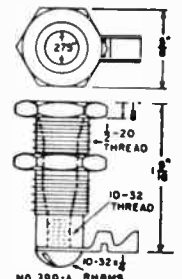
Cat. No. Std. Pkg.
399 Gt. Jack 25



GIANT JACK No. 399A

Hexed brass nickel plated. Mounts in 1/2" hole. Fits panels up to 3/4" thick. Tapped at end with screw and lug connection. Complete with hex brass n.pl. nut, screw and hot tinned copper lug.

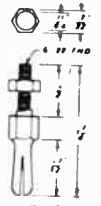
Cat. No. Std. Pkg.
399A Gt. Jack 25



BANANA PLUG No. 416

Hexed brass nickel plated. Cross slotted for positive contact. One-piece construction. Fits all standard banana jacks. Complete with hexed brass n.pl. nut.

Cat. No. Std. Pkg.
416 Banana Plug 100



BANANA PLUG No. 401

Hexed brass nickel plated. One-piece four-leaved spring. Complete with brass n.pl. screw and tinned copper lug. Rated at 5 amps. Fits all standard banana jacks.

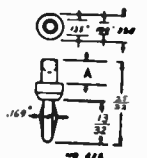
Cat. No. Spring Std. Pkg.
401 Phos. Brz. 100
401B Beryl. Cop. 100



MIDGET BANANA PLUG RIVET TYPE—No. 426

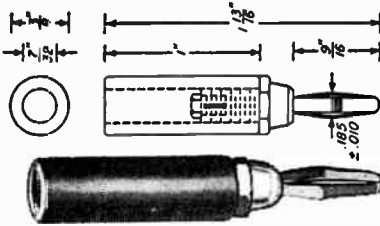
Brass silver plated body. One-piece four-leaved phosphor bronze spring silver plated. Also made to Rigid Jan specs.

Cat. No. "A" St. Pkg.
426 3/32" 100
426A 3/32" 100
Midget Banana Plug Rivet Type

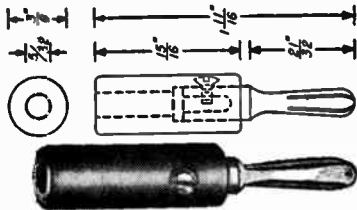




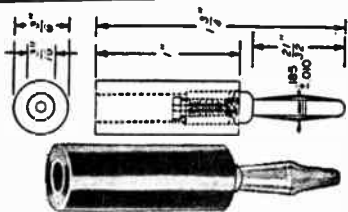
INSULATED BANANA — GIANT — PLUGS and JACKS



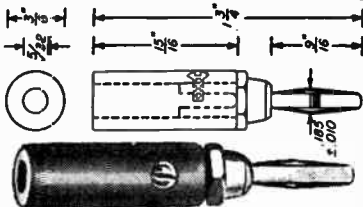
INSULATED BANANA PLUG
Hexed brass N. Pl. spring type. Fits standard banana jacks. Scrulok solderless connection. Molded handle. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Spring Std. Pkg.
404 Phos. Brz. 50
404-CB Beryl. Cop. 50



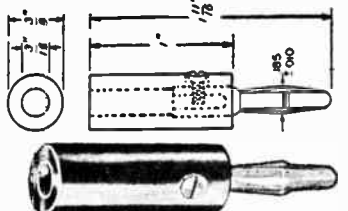
INSULATED BANANA PLUG
Split type plug brass n. pl. fits standard banana jacks. Set screw. Solderless connection. Molded handle. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Std. Pkg.
604 Banana Plug 50



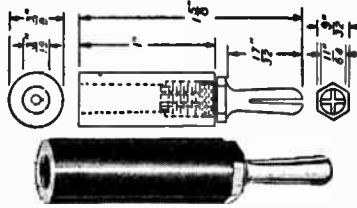
INSULATED BANANA PLUG
Brass n.p.l. plug. Fits standard banana jacks. Spring type. Scrulok solderless connection. Molded handle. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Spring Std. Pkg.
465 Phos. Brz. 50
465-B Beryl. Cop. 50



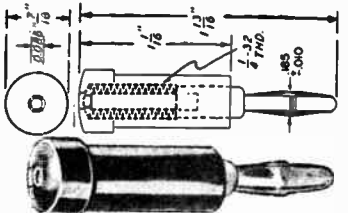
SPRING BANANA PLUG
Hexed brass n.p.l. plug. Set screw solderless connection. 404-BC Beryllium springs, highly resilient. Molded handle. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Spring Std. Pkg.
404-B Phos. Brz. 50
404-BC Beryl. Cop. 50



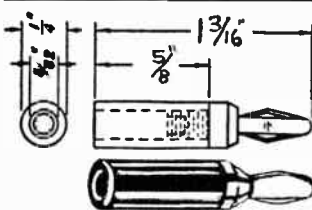
INSULATED BANANA PLUG
Plug brass n.p.l. set screw solderless connection. Spring type. Fits standard banana jacks. Molded handle. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Hdl. Spring Std. Pkg.
466 1" Ph. Brz. 50
466A 1 1/2" Ph. Brz. 50



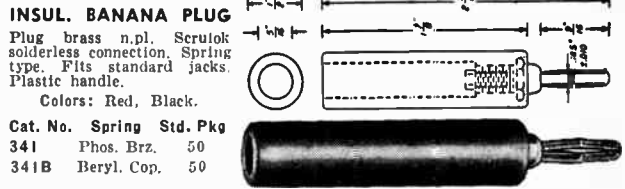
INSULATED BANANA PLUG
Split type, brass n.p.l. Scrulok solderless connection. Fits standard jacks. Molded handle. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Std. Pkg.
606 Banana Plug 50



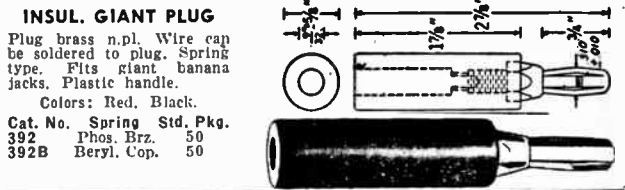
TIP PLUG TO BANANA PLUG ADAPTER
Fits standard banana jacks. Adapter for phone tip to banana plug. Molded handle. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Spring Std. Pkg.
467 Phos. Brz. 50
467B Beryl. Cop. 50



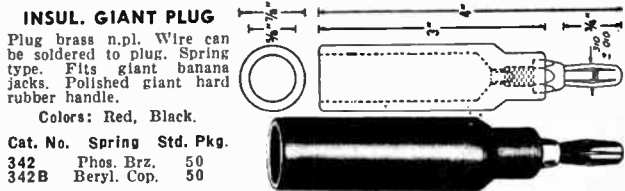
INSULATED MIDGET BANANA PLUG
Spring Type. Fits all standard Banana Jacks. Beryllium spring retains resiliency after thousands of insertions. Wire soldered directly into Plug. Available in Red or Black only. Specify color. Std. pkg. 50.
No. Spring Material Plating
455 Phosphor Bronze Nickel
455BC Beryllium Copper Silver



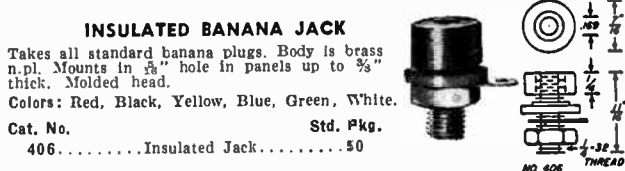
INSUL. BANANA PLUG
Plug brass n.p.l. Scrulok solderless connection. Spring type. Fits standard jacks. Plastic handle. Colors: Red, Black.
Cat. No. Spring Std. Pkg.
341 Phos. Brz. 50
341B Beryl. Cop. 50



INSUL. GIANT PLUG
Plug brass n.p.l. Wire cap be soldered to plug. Spring type. Fits giant banana jacks. Plastic handle. Colors: Red, Black.
Cat. No. Spring Std. Pkg.
392 Phos. Brz. 50
392B Beryl. Cop. 50



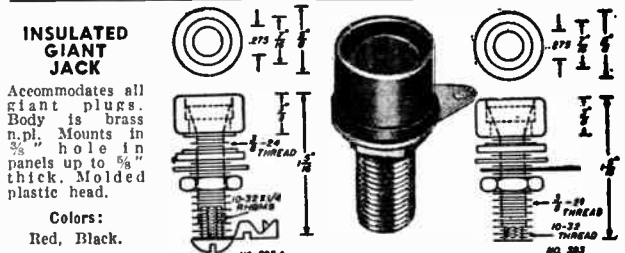
INSUL. GIANT PLUG
Plug brass n.p.l. Wire can be soldered to plug. Spring type. Fits giant banana jacks. Polished giant hard rubber handle. Colors: Red, Black.
Cat. No. Spring Std. Pkg.
342 Phos. Brz. 50
342B Beryl. Cop. 50



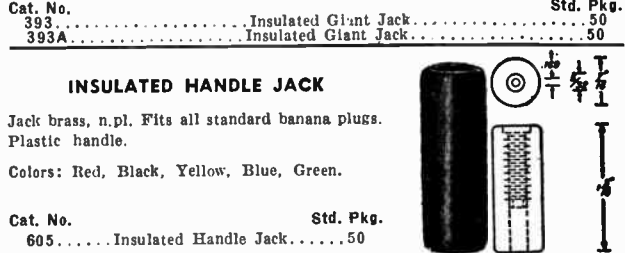
INSULATED BANANA JACK
Takes all standard banana plugs. Body is brass n.p.l. Mounts in 5/8" hole in panels up to 3/8" thick. Molded head. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Std. Pkg.
406.....Insulated Jack.....50



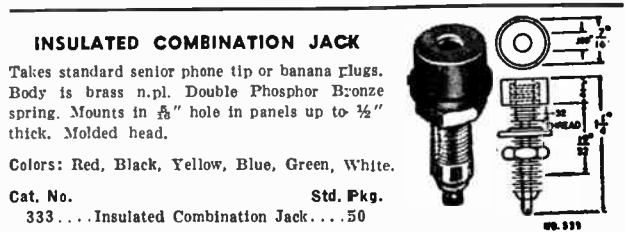
INSULATED BANANA JACK
Accommodates all standard banana plugs. Body is brass n.p.l. Mounts in 5/8" hole in panels up to 3/8" thick. Complete with all hardware. Molded head. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Std. Pkg.
391.....Insulated Jack.....50



INSULATED GIANT JACK
Accommodates all giant plugs. Body is brass n.p.l. Mounts in 5/8" hole in panels up to 3/8" thick. Molded plastic head. Colors: Red, Black.
Cat. No. Std. Pkg.
393.....Insulated Giant Jack.....50
393A.....Insulated Giant Jack.....50



INSULATED HANDLE JACK
Jack brass, n.p.l. Fits all standard banana plugs. Plastic handle. Colors: Red, Black, Yellow, Blue, Green.
Cat. No. Std. Pkg.
605.....Insulated Handle Jack.....50



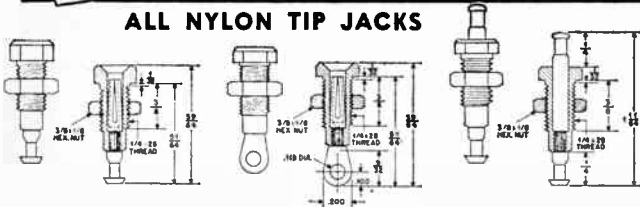
INSULATED COMBINATION JACK
Takes standard senior phone tip or banana plugs. Body is brass n.p.l. Double Phosphor Bronze spring. Mounts in 5/8" hole in panels up to 3/8" thick. Molded head. Colors: Red, Black, Yellow, Blue, Green, White.
Cat. No. Std. Pkg.
333.....Insulated Combination Jack.....50

Birnbach

INSULATED PHONE TIPS, TIP JACKS TEST PRODS



ALL NYLON TIP JACKS



No. 1180 Completely Molded Nylon Jack. Fits all standard phone tip plugs. Contact recessed in head for safe contact. Hexagon head for grip in tightening. Mounts in $\frac{3}{8}$ " hole in panels up to $\frac{1}{4}$ " thick. Meets following requirements: 1. Salt Spray Test—Withstands 100 hours. 2. Rated Voltage & Current—1000 volts peak at 5 amps. max. 3. Test Voltage—9000 volts DC peak. 4. Insulation Resistance—5000 megohms. 5. Operating Temperature—55 to +150 C. 6. Nominal Capacity—2.0 mmf. 7. Material Specifications—A. Body: Nylon Grade FM 10001. A. Center Contact: Numbers 1180 and 1182 Heat Treated Beryllium Copper Silver plated per Spec 72-53. Number 1184 Brass, Tin Pl. C. Hex Nut: Brass Nickel Pl. 8. Colors—Red, Black, Orange, Green, Blue, White, Brown, Yellow, Grey & Purple. Specify Color.

| No. | Type | Std. Pkg. |
|------|----------------|-----------|
| 1180 | Wrap Around | 25 |
| 1182 | Spade Terminal | 25 |
| 1184 | Feed Through | 25 |

SENIOR SOLDERLESS PHONE TIP

Brass nickel plated. Fits standard phone tip jacks. Wire fastens under knurled nut. Molded handle.

Colors: Red, Black, Yellow, Blue, Green, White.

Cat. No. 409 Sr. Std. Pkg. 50

JUNIOR SOLDERLESS PHONE TIP

Same as above except 2" overall length. Specify colors.

Cat. No. 415 Jr. Std. Pkg. 50

SCRULOK PHONE TIP

Brass nickel plated. Fits standard phone tip jacks. Scrulok solderless connection. Molded handle.

Colors: Red, Black, Yellow, Blue, Green, White.

Cat. No. 412 Std. Pkg. 50

NEEDLE POINT PLUG

Brass nickel plated body. Needle point tip. Accommodates standard banana plug in molded plastic handle.

Colors: Red, Black.

Cat. No. 330 Std. Pkg. 50

SCRULOK PHONE TIP

Fits standard phone tip jacks. Plug is brass, nickel plated. Has Scrulok solderless connection. Molded handle.

Colors: Red, Black, Yellow, Blue, Green, White.

Cat. No. 419 Std. Pkg. 50

PHONE TIP

Plugs into standard phone tip jacks. Brass nickel plated plug. Accommodates standard banana plug in molded plastic handle.

Colors: Red, Black, Yellow, Blue, Green, White.

Cat. No. 331 Std. Pkg. 50

PHONE TIP JACK

Fits all standard phone tips. Body is brass, n.pl. Double Phosphor Bronze springs. Mounts in $\frac{5}{8}$ " hole in panels up to $\frac{3}{8}$ " thick. Molded head.

Colors: Red, Black, Yellow, Blue, Green, White.

Cat. No. 407 Std. Pkg. 50

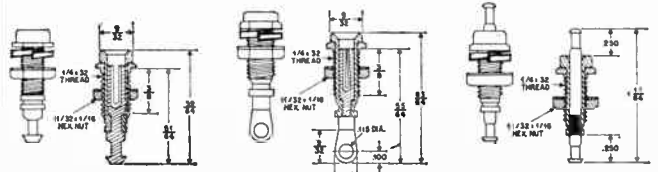
BRASS NICKEL PLATED TIPS

Fits all standard phone tip jacks.

| Cat. No. | Std. Pkg. |
|------------------------------|-----------|
| 402 — Standard Phone Tip | 100 |
| 402A — Phone Tip Larger Diam | 100 |
| 402B — Heavy Duty Phone Tip | 100 |

NYLON TIP JACK WITH METAL SHELL

Made to Meet MS-16108 Spec.



No. 1190 Molded Nylon Tip Jack. Metal shell eliminates possibility of stripping threads during assembly. Meets following requirements: 1. Salt Spray Test—Withstands 100 hours. 2. Rated Voltage & Current—1000 volt peak @ 5 amps. maximum. 3. Test Voltage—2500 peak. 4. Insulation Resistance—5000 megohms. 5. Operating Conditions—A. Continuous: 23 hours on, 1 hour off; B. Elevation: Up to 15,000 feet; C. Temperature: -55 to +85 C; D. Humidity: Up to 95%. 6. Material Specifications—A. Insulator: Nylon, Grade FM 10001; B. Shell & Nut: Brass Nickel Plated Per Spec 72-53; C. Lockwasher: Phosphor Bronze Nickel Plated Per Spec 72-53; D. Center Contact: Numbers 1190 and 1192 Heat Treated Bery. Copper Silver Plated per Spec 72-53. Number 1194 Brass, Tin Plated. 7. Non-Operating Conditions—A. Elevation: Up to 50,000 feet; B. Temperature: Continuous exposure for 72 hours @ +160 F and 240 hours @ -80 F; C. Humidity: Up to 100%. 8. Colors—Red, Black, Orange, Green, Blue, White, Brown, Yellow, Grey & Purple. Specify Color.

| No. | Type | Std. Pkg. |
|------|----------------|-----------|
| 1190 | Wrap Around | 25 |
| 1192 | Spade Terminal | 25 |
| 1194 | Feed Through | 25 |

BAKELITE PENCIL TEST PROD

Body is brass nickel plated with steel n.pl. needle. Has Scrulok solderless connection. Bakelite handle.

Colors: Red, Black.

Cat. No. 411 Bakelite Pencil Test Prod. Std. Pkg. 12

SCRULOK NEEDLEPOINT TEST PRODS

Phenolic insulated prod, has Scrulok solderless connection. Body is brass nickel plated with steel n.pl. needle. Colors: Red, Black.

| Cat. No. | (A) Overall | (B) Handle Length | Std. Pkg. |
|----------|-------------|-------------------|-----------|
| 417 | 5-3/32" | 4" | 50 |
| 418 | 6-3/32" | 5" | 50 |

HEAVY DUTY HI-VOLTAGE TEST PROD HANDLE

Tip is heavy brass nickel plated. Bakelite finger guard. Accommodates IN-34 diode and condenser for use as RF Probe. Colors, Red, Black.

Cat. No. 559 6" H.V. Test Prod. Handles. Std. Pkg. 20

SOLDERLESS TEST PRODS

Body is brass nickel plated with solderless knurled nut connection. Heavy duty needlepoint, nickel plated. Colors: Red, Black.

| Cat. No. | (A) Overall | (B) Handle Length | Std. Pkg. |
|----------|-------------|-------------------|-----------|
| 410 | 5 1/8" | 4" | 50 |
| 343 | 6 1/8" | 5" | 50 |

NEEDLEPOINT TEST PRODS

Brass nickel plated body with steel plated needle. Chuck threaded in end of handle is removable for replacing needles. Polished cast phenolic handle.

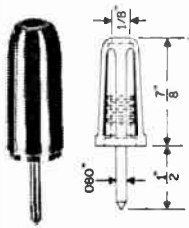
| Cat. No. | (A) Overall | (B) Handle Length | Std. Pkg. |
|----------|-------------|-------------------|-----------|
| 344 | 4-15/16" | 4" | 50 |
| 345 | 5-15/16" | 5" | 50 |

Birnbach

PHONE TIPS, TIP JACKS TEST PRODS



NEW NYLON INSULATED PLUG



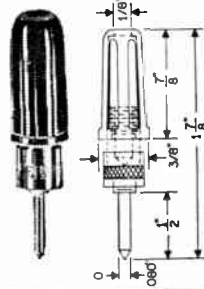
Molded of tough low-loss Nylon—provides high voltage insulation. Withstands extreme temperature changes without chipping or cracking. This series fits all standard Banana Jacks and standard Phone Tip Jacks.

Nylon Solderless Short Tip Plug. Molded nylon handle, recessed metal head provides flush contact without metal exposure in any standard tip jack brass nickel plated plug. Solderless wire fits thru handle.

Cat. No. 1169 Std. Pkg. 100

Specify color as indicated above.

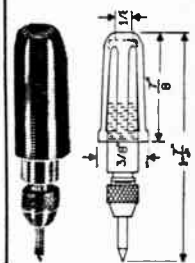
NYLON SOLDERLESS TIP PLUG



Molded Nylon handle. Brass N.Pl. Solderless plug. Wire fits thru body of tip and is wrapped around screw portion and then tightened. Fits all standard tip jacks.

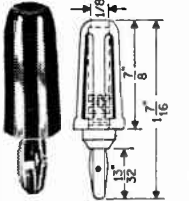
Cat. No. 1170 Std. Pkg. 100

Specify color as indicated above.



NYLON BANANA PLUG—MIDGET

Molded Nylon Handle Brass N.Pl. Wire can be soldered directly into stud. Fits all Standard Banana Jacks.



| Cat. No. | Spring Material | Plating | Std. Pkg. |
|----------|-----------------|---------------|-----------|
| 1172 | Phosphor | Nickel Bronze | 100 |
| 1173 | Phosphor | Silver Bronze | 100 |
| 1174 | Beryllium | Nickel Copper | 100 |
| 1175 | Beryllium | Silver | 100 |

Specify color as indicated in Color Code at right.

COLOR CODE FOR NYLON HANDLE PLUGS

Add to Catalog Numbers

| | |
|---------------|---------------|
| —01 White | —08 Brown |
| —02 Red | —09 Lt. Green |
| —03 Black | —10 Dk. Blue |
| —04 Dk. Green | —11 Ivory |
| —05 Lt. Blue | —12 Violet |
| —06 Orange | (Purple) |
| —07 Yellow | —13 Grey |

PHONE NEEDLE TIP PLUG

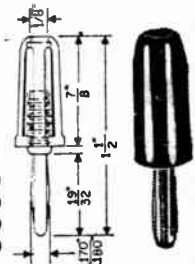
Molded Nylon Handle, Brass N.Pl. Plug. Has removable chuck for easy replacement of needles. Needle makes positive contact thru insulation or corrosion.

Cat. No. 1171 Std. Pkg. 100

Specify color as indicated above.

NYLON BANANA PLUG

Molded Nylon handle, Brass N.Pl. plug. Springs Phosphor Bronze or Beryllium Copper. Nickel or Silver plated. Wire can be soldered into plug or brass stud.



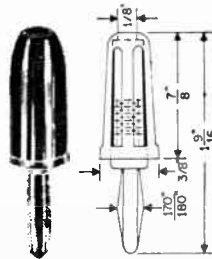
| Cat. No. | Spring | Plating | Std. Pkg. |
|----------|-------------|---------|-----------|
| 1160 | Phos. Brz. | Nickel | 100 |
| 1161 | Phos. Brz. | Silver | 100 |
| 1162 | Beryl. Cop. | Nickel | 100 |
| 1163 | Beryl. Cop. | Silver | 100 |

Specify color as indicated in color code above.

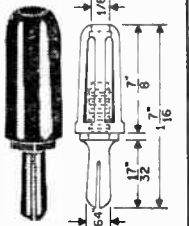
Same as above with Solderless Scrulock Connection.

| | | | |
|------|------------------|--------|-----|
| 1164 | Phosphor Bronze | Nickel | 100 |
| 1165 | Phosphor Bronze | Silver | 100 |
| 1166 | Beryllium Cooper | Nickel | 100 |
| 1167 | Beryllium Copper | Silver | 100 |

Specify color as indicated above.



NYLON BANANA PLUG



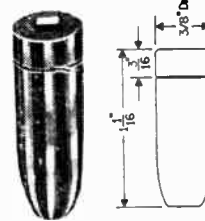
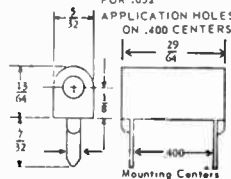
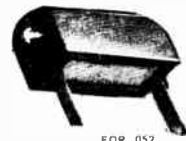
Molded Nylon handle, brass N.P. plug, split type with solderless scrulock connection.

Cat. No. 1168 Std. Pkg. 100

PRINTED CIRCUIT TEST JACKS

Designed for permanent, soldered assembly to printed circuit boards. Nylon bodies. Has gold over silver plated Beryllium copper contacts which provide low resistance contact. Takes standard .080" diameter test probes. Colors: Red, Black, Green, Brown, Yellow, Blue, Purple, Grey, Orange, White.

| Cat. No. | Std. Pkg. |
|---------------------------|-----------|
| 1177 Printed Circuit Jack | 25 |



NYLON HANDLE JACK

Made with our Nylon Tip Jack #1180 without mounting nut inside of threaded molded nylon insulated sleeve.

Cat. No. 1179 Nylon Handle Jack 100

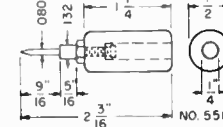
Specify color as indicated above.

HEAVY DUTY HIGH VOLTAGE TEST PROD HANDLES — No. 558

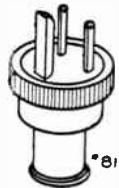
These bakelite prods are the same as used on the meter end of high voltage test leads Cat. No. 562. Tips are heavy brass with nickel plating.

Colors: Red, Black.

Cat. No. 558—1 1/4" H.V. Test Prod Handles. 20 Std. Pkg.



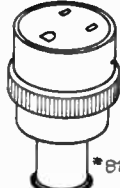
ADAPTER PLUGS



NEW TYPE 3 PRONG PLUG

| NO. | LIST PRICE | STD. PKGE. |
|------|------------|------------|
| 814T | .90 | 100 |

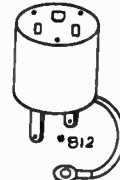
Two parallel blades plus ground pin for safe grounding of appliance.



FEMALE CONNECTOR

| NO. | LIST EA. | STD. PKGE. |
|-----|----------|------------|
| 811 | 2.25 | 25 |

For new type 3 prong plug. Female mate to No. 814T.



ADAPTER FOR USING NEW TYPE 3 PRONG PLUG IN STANDARD OUTLET

| NO. | LIST EA. | STD. PKGE. |
|-----|----------|------------|
| 812 | .75 | 100 |

BIRNBACH TRANSMITTING SOCKETS

Medium 4 Pin Bayonet and Jumbo 4 Pin Bayonet

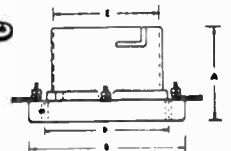
No. 434—"50 watt" socket for medium power bayonet based tubes such as 575A, 805, 810, 838, 845, 872A, 8000 and others with Retma Base No. A4-29. Has heavy phosphor bronze cadmium plated double wiping filament contacts will handle heavy currents. Terminals designed for solder or screw connections. Two mounting holes. Has polished nickel plated brass shell; white glazed porcelain base.

No. 435—"10 watt" socket for economy, has heavy phosphor bronze, cadmium plated side wiping contacts; white glazed porcelain base; heavy plated brass shell. Two mounting holes, for medium 4 pin bayonet based tubes such as 3B25, 3B28, 10Y, 801A, 808, 809, 811A, 812A, 834, 836, 850, 865, 866A, 1616, 8005 with Retma Base No. A4-10.

| Cat. No. | Watt Socket | A | B | D | E | Mtg. Holes | Pin | Tube Base | Std. Pkg. |
|----------|-------------|---------|--------|----------|--------|------------|-----|------------|-----------|
| 434 | 50 | 2-9/32" | 3/8" | 2-17/16" | 1.886" | 2 | 4 | Std. Jumbo | 25 |
| 435 | 10 | 1 7/8" | 2 1/4" | 2-1/16" | 1.386" | 2 | 4 | Med. Bay | 25 |



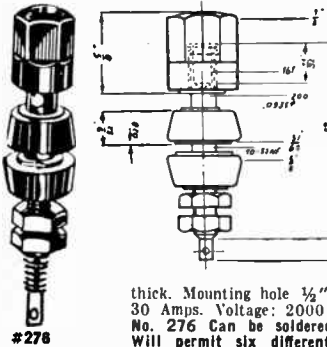
Nos. 434-435





ALLIGATOR CLIPS — TEST CLIPS — SPADE LUGS — BINDING POSTS

BINDING POST



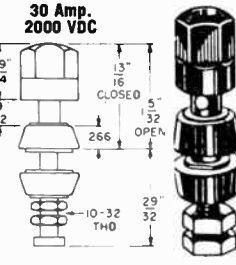
#278

thick. Mounting hole 1/2". Capacity: 30 Amps. Voltage: 2000 V.A.C. RMS Test. No. 276 Can be soldered directly to stud. Will permit six different methods of connection above panel and three below panel. Cat. No. Std. Pkg. 276 Nickel Plated Red, Black, Yellow, Green, White, Blue, Brown, Grey

NEW! BIRNBACH "Multi-Use" Binding Posts Safe-Positive-Heavy Duty

Rugged, versatile "Multi-Use" binding post made of molded phenolic with molded-in brass inserts in head and washer for complete insulation above panel. For use on panels 1/16" to 3/4" thick. Mounting hole 1/2". Capacity: 30 Amps. Voltage: 2000 V.A.C. RMS Test. No. 276 Can be soldered directly to stud. Will permit six different methods of connection above panel and three below panel. Cat. No. Std. Pkg. 276 Nickel Plated Red, Black, Yellow, Green, White, Blue, Brown, Grey

BINDING POST



275

#274

WRAP AROUND TYPE Std. Pkg.

275 Stand. Nickel Plated Red, Black, Yellow, Green, White, Blue, Brown, Grey 100

NOTES:

A Banana Plug Receptacle, .161 I. D.; B Head non-removable from Stud; C Molded in Brass Bushing in Head; D Molded in Brass Bushing in Washers; E For Panels 1/16" to 3/4" thick; F Drill 1/2" hole for mounting washers; G Wire Hole is at right angle to Flat on insulated Washers; H Production Punch for keyed Slot for mounting Washers.

STANDARD DUTY 5-WAY BINDING POST



#278

Cat. No.

278

279*

*Same as above, but normally grounded. (Without bottom insulating section.)

Molded-in brass bushings for complete insulation. Useful for standard duty work. Available in Red or Black. Specify color. Body is brass nickel plated.

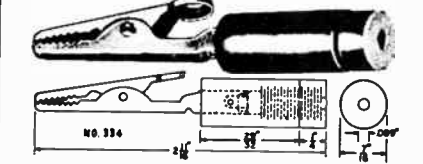


#279

6 AMPS

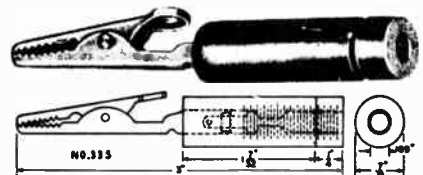
Description

278 Red or Black 100
279* Red or Black 100



ALLIGATOR CLIP WITH PHONE TIP JACK

Handle has our No. 31 clip and our No. 407 tip jack in rear for all standard phone tip plugs. Colors: Red, Black. Cat. No. Std. Pkg. 334—Alligator Clip with Phone Tip Jack 50 336—Same as above except with our #31C screw type Copper Alligator Clip 50



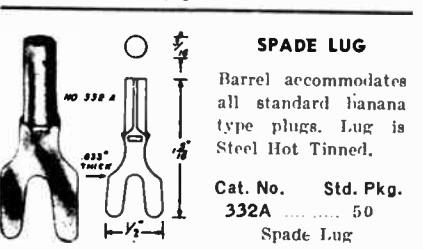
ALLIGATOR CLIP COMBINATION JACK

Insulated alligator clip is composed of our #31, steel, cadmium plated Alligator Clip with our #333 Combination Jack in rear allowing the adaptation of both standard senior phone tip plugs and banana plugs to Alligator Clips. Colors: Red, Black. Cat. No. Std. Pkg. 335—Alligator Clip Combination Jack 50 337—Same as above except with our #31C screw type Copper Alligator Clip 50



ALL INSULATED ALLIGATOR CLIP

Steel Cadmium plated alligator clip. All metal parts covered with vinyl plastic insuring against shock. Solder Type connection. Red or Black. Specify color. Cat. No. 123 Std. pkg. 50 **PHONE TIP TO CLIP ADAPTER** Same as above with spring in rear of handle enabling the adapting of standard phone tip plugs to alligator clips. Red or Black. Specify color. Cat. No. 124 Std. pkg. 50



SPADE LUG

Barrel accommodates all standard banana type plugs. Lug is Steel Hot Tinned. Cat. No. Std. Pkg. 332A 50 Spade Lug

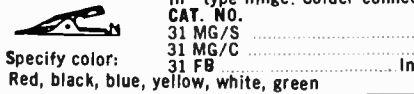
INSULATED ALLIGATOR CLIP

Made of steel, cadmium plated. Insulated handle allows use of all banana plugs. Has small soldering lip. Colors: Red, Black. Cat. No. Std. Pkg. 310 Insulated Alligator Clip 50 310B 1 1/2" Insulated Alligator Clip 50



MICRO-GATOR CLIPS

The Alligator Clip With the Microscopic Tip. Use it where no other clip can go—for tight spots, printed circuits, etc. Length 1 1/2". Jaw spread, 1/2". Tiny tip, 1/32" across. New extra strong "keyed in" type hinge. Solder connection with clinching ears to relieve strain on wire. CAT. NO. TYPE STD. PKGE. 31 MG/S Steel, Cad. Plated 50 31 MG/C Solid Copper 50 31 FB Insulator Boots to Fit 50 31 MG/S or 31 MG/C



Specify color: Red, black, blue, yellow, white, green

INSULATED ALLIGATOR CLIP (Screw Type)

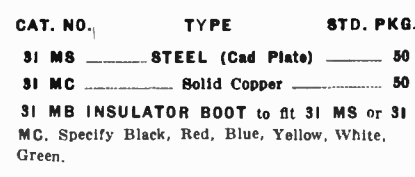
Made of steel, cadmium plated. Accurately matching jaws for tight grip. Has screw for solderless connection. Banana plug fits into rear of clip. Insulated handle. Cat. No. Colors: Red, Black. Std. Pkg. 310S Insulated Alligator Clip 50



310C—Insulated Copper Alligator Clip 50

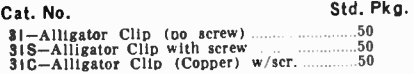
MINIATURE ALLIGATOR CLIPS

Very small and compact • Useful where space is important. Accurately matching jaws for finger-tight grip. Length 1-3/32" Jaws open to 3/16". Has lip for soldering. CAT. NO. TYPE STD. PKGE. 31 MS STEEL (Cad Plate) 50 31 MC Solid Copper 50 31 MB INSULATOR BOOT to fit 31 MS or 31 MC. Specify Black, Red, Blue, Yellow, White, Green.



ALLIGATOR CLIP (Screw Type)

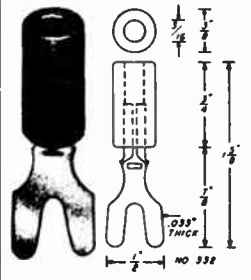
Made of cadmium plated steel. The jaws match accurately, permitting them to grip all kinds of wire securely. Has screw for solderless wire connection. Banana plug fits into rear of clip. Cat. No. Std. Pkg. 31—Alligator Clip (no screw) 50 31S—Alligator Clip with screw 50 31C—Alligator Clip (Copper) w/sr. 50



ALLIGATOR CLIP VINYL INSULATOR BOOT



Extremely flexible. Made to fit Nos. 31, 31S, 31C. Colors: White, Red, Black, Yellow, Blue Green. Cat. No. Std. Pkg. 31R—Vinyl Insulator 50



INSULATED SPADE LUG

Accommodates all standard banana plugs into the rear of lug enabling same to be adapted to a spade lug. Lug is Steel Hot Tinned. Colors: Red or Black Cat. No. 332 Std. Pkg. 50

BIRNBACH TEST CLIPS

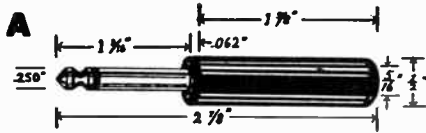
The teeth mesh correctly permitting good contact to be made. The No. 27-C is a solid copper clip with a brass screw designed for high frequency work.



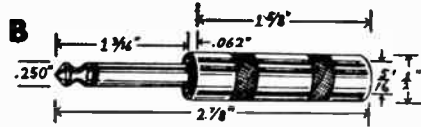
| Cat. No. | Length | Jaw Spread | Capacity | Std. Pkg. |
|--------------------|--------|------------|----------|-----------|
| 27—Pee Wee | 1 1/2" | 3/8" | 5 Amp. | 50 |
| 28—Midget | 2" | 1/8" | 10 Amp. | 50 |
| 29—Medium | 2 7/8" | 1" | 25 Amp. | 50 |
| 30—Large | 4" | 1 1/4" | 50 Amp. | 50 |
| 27C—Pee Wee Copper | 1 1/2" | 3/8" | 10 Amp. | 50 |
| 27R—Rubber Sleeve | — | — | — | 50 |

Birnbach

**STANDARD AND MINIATURE
TELEPHONE TYPE
JACKS • PLUGS • SHAFT LOCKS • TEST LEADS**



No. 251



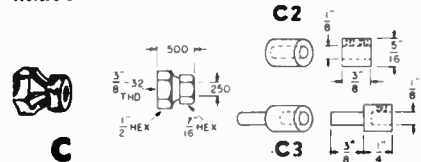
No. 252

TELEPHONE TYPE PLUGS

This standard two conductor plug fits all standard jacks. All metal parts brass with nickel plating except for contact screw. Barrel is molded bakelite. Red or Black.

A — BAKELITE DOUBLE PHONE PLUG
Cat. No. 251 Std. Pkg. 25

B — SHIELDED PHONE PLUG
Cat. No. 252 Std. Pkg. 25



C

SHAFT LOCKS

C — WRENCH TYPE

Brass, nickel plated. 1/2" length overall. Rear: 1/2" hex brass with 3/8-32 thread. Front: 1/2" hex brass.

Cat. No. 546 — For 1/4" Shaft Std. Pkg. 25

D — THUMB TYPE

Brass, nickel plated. 1/2" length overall. Rear: 1/2" hex brass with 3/8-32 thread. Front: 1" diam. knurled nut.

Cat. No. 547 — For 1/4" Shaft Std. Pkg. 25

MINIATURE SHAFT ACCESSORIES

Brass Nickel plated for 1/8" shafts.

C1 — MINIATURE LOCK—WRENCH TYPE

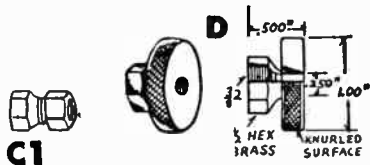
Cat. No. 546A Std. Pkg. 25

C2 — MINIATURE BRASS COUPLER

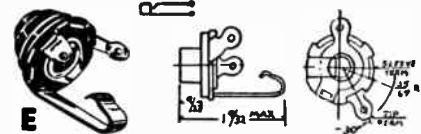
with allen head set screws
Cat. No. 531A Std. Pkg. 25

C3 — MINIATURE SHAFT EXTENDER

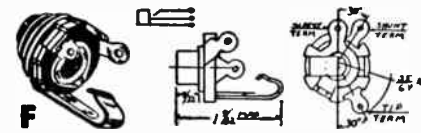
with allen head set screws
Cat. No. 538A Std. Pkg. 25



C1



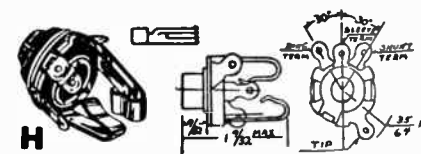
E



F



G



H

TELEPHONE TYPE JACKS

The body is brass nickel plated. Small, rugged and they are designed for long life, with low contact resistance snap springs made specially from nickel silver alloy which is corrosion resistant. Mounts in 3/8" hole.

- E — Cat. No. 257 — Open Circuit Two Conductor Std. Pkg. 25
- F — Cat. No. 258 — Single Closed Circuit Two Conductor Std. Pkg. 25
- G — Cat. No. 259 — Open Circuit Three Conductor Std. Pkg. 25
- H — Cat. No. 260 — Single Closed Circuit Three Conductor Std. Pkg. 25

TEST LEADS

J — BIRNBACH HEAVY DUTY HIGH VOLTAGE TEST LEADS

Overall length 60". Tips are heavy solid brass nickel plated. Rugged, dependable heavy duty bakelite prods. Color coded Red and Black. Uses our Hi Volt kinkless test lead wire.

Cat. No. 562 — Heavy Duty High Voltage Test Leads Std. Pkg. 10

K — ALLIGATOR CLIP TEST LEADS

Black and Red kinkless test lead wire with Alligator Clips at each end.

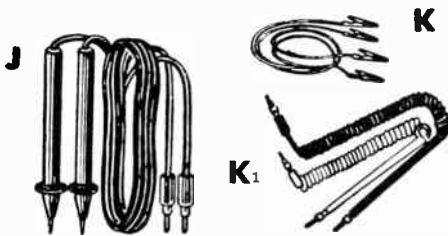
| Cat. No. | Wire Length | Std. Pkg. |
|----------|-------------|-----------|
| 675 | 12" | 25 |
| 676 | 24" | 25 |
| 677 | 36" | 25 |
| 678 | 48" | 25 |

SPECIAL ASSEMBLIES AVAILABLE TO ORDER

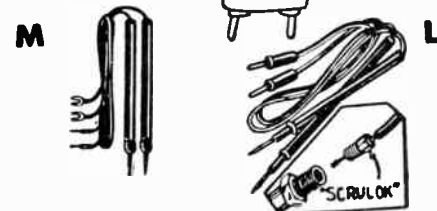
L — DELUXE AND BAKELITE PENCIL TYPE TEST LEADS

No. 408 Bakelite pencil test leads, color coded, Red, Black, all with kinkless test lead wire. Overall length 60". #560 and #561 polished cast phenolic resin handles, solderless type tips. 50" long. Color coded Red, Black.

| Cat. No. | Std. Pkg. |
|--|-----------|
| 408 — Bakelite Pencil Type Test Leads, 6" handles | 10 |
| 560 — Deluxe Solderless Prod Test Leads, 5" handles | 25 |
| 561 — DeLuxe Needlepoint Prod Test Leads, 5" handles | 25 |



J



M

K1 — STRETCH LEADS

Kink-Proof Retracted 9" Coil

No tangling or knotting of wires. Lead coil only 9", extends to 6 feet.

Cat. No. 564 Solderless phone tip, retractile wire, solderless prod. Std. Pkg. 10.

L — PUSH BUTTON KINKLESS TEST LEADS

556 Solderless phone tip one end, push button tip other end. Std. Pkg. 12
557 Solderless phone tip; one end, push button banana plug other end. Std. Pkg. 12

M — BIRNBACH NEEDLEPOINT TEST LEADS

Have Red and Black 4" fibre handles. Use kinkless lead wire. Overall length 50". Good, dependable low priced leads.

| Cat. No. | Std. Pkg. |
|--|-----------|
| 420 — Needlepoint Phone Tip Test Leads | 25 |
| 421 — Needlepoint Spade Lug Test Leads | 25 |
| 422 — Solderless Phone Tip Test Leads | 25 |
| 423 — Solderless Spade Lug Test Leads | 25 |

N — CRYSTAL SOCKET

Glazed ceramic base. Phosphor bronze silver plated contacts spaced .486". Pin diameter .051, mtg. hole .125. Std. Pkg. 25.

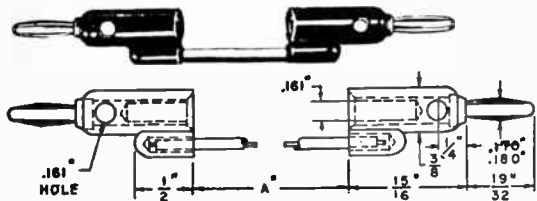
Cat. No. 595 Crystal Socket

Birnbach

PATCH CORDS PHONO JACK & PLUGS - PHONO SPLICE/TIP



MOLDED "STACKING TYPE" PATCH CORDS



1. Never ending banana plug receptacle.
2. Interconnects unlimited amount of multiple circuits.
3. Positive and lasting contact for all standard banana plugs.
4. Four leaved heat treated beryllium copper spring.
 - a. 360 degrees spring contact
 - b. maintains resiliency after thousands of insertions.
5. Supplied in Red, Black, Yellow or Green. (Specify Color) (Special colors on request)
6. Handle molded to body and to wire.
7. 10,000 volt rubber covered flexible wire.
 - a. 65 strands #36 insulated to an O.D. of .140.



Provides a never-ending banana plug receptacle to interconnect an unlimited amount of multiple circuits. The cross hole is designed for positive contact of all standard banana plugs. Fits all standard banana jacks. Four-leaved phosphor bronze nickel plated spring. Red or Black assemblies. Specify color. Std. pkg. 10.

| Cat. No. | Wire Length | Pkg. |
|-----------------|-------------|------|
| Cat. No. 653-8 | 8" | 12 |
| Cat. No. 653-12 | 12" | 12 |
| Cat. No. 653-24 | 24" | 12 |
| Cat. No. 653-36 | 36" | 12 |

| Cat. No. | ("A") Wire | Std. Pkg. |
|----------|------------|-----------|
| 655-8 | 8 inches | 12 |
| 655-12 | 12 inches | 12 |
| 655-24 | 24 inches | 12 |
| 655-36 | 36 inches | 12 |

PHONO-JACKS

Small, compact . . . where space is at a premium.



| Cat. No. | Std. Pkg. |
|--|-----------|
| 597 | 50 |
| Space Saver . . . Rivets and grounds to chassis. | |
| Cat. No. 598 | 50 |

PHONE TIP PLUG SPLICE



Takes all standard phone tip plugs excellent for quick connections or test lead extensions.

Colors: Red, Black, Yellow, Green.

| | |
|---|--------------|
| Cat. No. 619 — Insulated Banana Plug Splice | Std. pkg. 25 |
|---|--------------|

IN-LINE PHONE TIP JACK

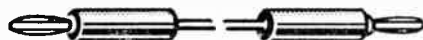


Takes all standard phone tip plugs. Can be used as lead extension.

Colors: Red, Black, Yellow, Green.

| | |
|---|--------------|
| Cat. No. 624 — Insulated-In-Line Tip Jack | Std. pkg. 25 |
|---|--------------|

BIRNBACH PATCH CORDS



Birnbach No. 465 Banana Plugs connected to our kinkless test lead wire. Used to interconnect circuits. Fits all standard banana jacks. Specify red or black.

| Cat. No. | Wire Length | Std. Pkg. |
|----------|-------------|-----------|
| 607 | 12" | 25 |
| 608 | 24" | 25 |
| 609 | 36" | 25 |
| 610 | 48" | 25 |

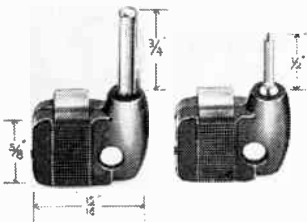
SHIELDED EXTENSION JACK



Cadmium plated brass shell with black bakelite insert. Length is 2-7/16". Insulates for solder grip contact. Mates with No. 248 Phono Plug.

| Cat. No. | Std. Pkg. |
|----------------------------|-----------|
| 246—In-line Extension Jack | 100 |

PUSH BUTTON PHONE TIP PLUGS AND BANANA PLUGS



Description: Wire is fastened easily, speedily, and securely without soldering. Simply by pressing the push buttons the bare wire can be inserted into the opening of the plug.

| Cat. No. | Description | Std. Pkg. |
|----------|---|-----------|
| 121 | Push Button Phone Tip Plug, Red and Black | 100 |
| 122 | Push Button Banana Plug, Red, Black, Yellow, Green, White | 100 |

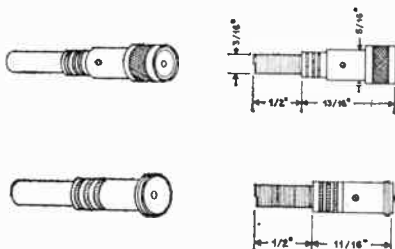
No. 121 Phone Tip Plug will fit all Standard Phone Tip Jacks. No. 122 Banana Plug will fit all Standard Banana Jacks.

MINIATURE MICROPHONE CONNECTOR

Single contact female.

| | |
|--------------------------------|--------------|
| No. 134 Miniature Female Conn. | Std. pkg. 50 |
|--------------------------------|--------------|

| | |
|------------------------------|--------------|
| No. 135 Miniature Male Conn. | Std. pkg. 50 |
|------------------------------|--------------|

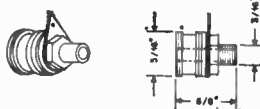


MINIATURE CHASSIS CONNECTOR

Single Contact Male

Complete with insulating washer and lug. Mounts in 3/4" hole. Mates with No. 134.

| | |
|---------------------------------|--------------|
| No. 136 Miniature Chassis Conn. | Std. pkg. 50 |
|---------------------------------|--------------|



BIRNBACH THREADED RODS



These brass nickel plated threaded rods are standard parts of our insulator assemblies.

| Cat. No. | Length | Thread | Std. Pkg. |
|----------|--------|--------|-----------|
| 16 | 4" | 1/4-20 | 1000 |
| 17 | 5 1/2" | 1/4-20 | 1000 |
| 18 | 10" | 1/4-20 | 1000 |
| 113 | 15" | 1/4-20 | 1000 |
| 114 | 1 3/8" | 10-32 | 1000 |
| 115 | 1 5/8" | 10-32 | 1000 |
| 116 | 2 1/4" | 10-32 | 1000 |
| 117 | 8" | 10-32 | 1000 |
| 118 | 8" | 8-32 | 1000 |
| 119 | 8" | 6-32 | 1000 |
| 15 | 2" | 6-32 | 1000 |

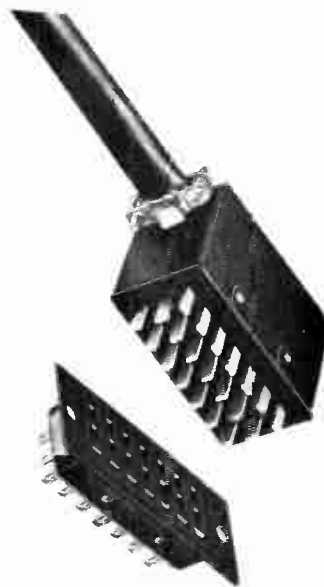
Birnbach**"BEAUPUG" PLUG AND SOCKET LINE**

NEW Quality BIRNBACH "BEAUPUGS" PLUGS and SOCKETS

Our 1300 Series, now available in 15, 18, 21, 24, 27, 30 and 33 contact configurations have cadmium plated brass knife contacts; socket has double spring design phosphor bronze contacts; male contact is $\frac{3}{64}$ " thick by $\frac{5}{32}$ " wide brass. Bodies compression molded bakelite; back plates, XXXP laminated phenolic to NEMA standards; and are adhered to the body by epoxy resin which eliminates vertical drive pins (they are dimensionally interchangeable with the C-J 300 Series.) For greater economy, protection and utility the new molded high density polyethylene backshell is outstanding; this "Beauplug" series is attractive in appearance; highly impact resistant; non rusting, highly resistant to most acids and alkalis and is of one-piece molded construction thereby eliminating the use of additional insulating materials since it has excellent dielectric properties.

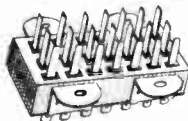
Connectors are rated at 750 V RMS and 10 amperes contact resistance is .003 ohms maximum. (Note — the third and fourth digit in the Part Number indicates the number of contacts.)

All Plugs are polarized to assist in correct insertion and removal. Plug numbering is opposite. Heavy duty locating or ground pin replaces contacts in position 14 on 1324, 1327, 1330; it is in position 17 on 1333. The ground pin and its socket are machined brass, heavily plated, with a 20 Amps current capacity.



NOW AVAILABLE — 2, 3, 4, 6, 8, 10, 12 Contact Plugs and Sockets — Write for Latest Catalog

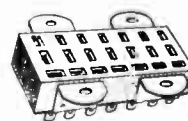
PLUG WITH ANGLE BRACKETS



| Cat. No. | Contacts |
|-----------|----------|
| P-1315-AB | 15 |
| P-1318-AB | 18 |
| P-1321-AB | 21 |
| P-1324-AB | 24 |
| P-1327-AB | 27 |
| P-1330-AB | 30 |
| P-1333-AB | 33 |

Standard pkge. 5

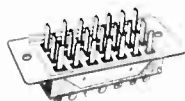
SOCKET WITH ANGLE BRACKETS



| Cat. No. | Contacts |
|-----------|----------|
| S-1315-AB | 15 |
| S-1318-AB | 18 |
| S-1321-AB | 21 |
| S-1324-AB | 24 |
| S-1327-AB | 27 |
| S-1330-AB | 30 |
| S-1333-AB | 33 |

Standard pkge. 5

PLUG WITH SHALLOW OR SURFACE BRACKETS



| Cat. No. | Contacts |
|-----------|----------|
| P-1315-SB | 15 |
| P-1318-SB | 18 |
| P-1321-SB | 21 |
| P-1324-SB | 24 |
| P-1327-SB | 27 |
| P-1330-SB | 30 |
| P-1333-SB | 33 |

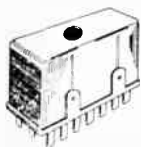
Standard pkge. 5

SOCKETS WITH SHALLOW OR SURFACE BRACKETS



| Cat. No. | Contacts |
|-----------|----------|
| S-1315-SB | 15 |
| S-1318-SB | 18 |
| S-1321-SB | 21 |
| S-1324-SB | 24 |
| S-1327-SB | 27 |
| S-1330-SB | 30 |
| S-1333-SB | 33 |

Standard pkge. 5

Birnbach**"BEAUPUG" 1300 SERIES • ACCESSORIES****PLUG WITH FLARED HOLE IN TOP OF CAP**

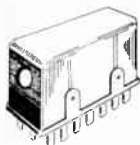
| Cat. No. | Contacts |
|------------|----------|
| P-1315-FHT | 15 |
| P-1318-FHT | 18 |
| P-1321-FHT | 21 |
| P-1324-FHT | 24 |
| P-1327-FHT | 27 |
| P-1330-FHT | 30 |
| P-1333-FHT | 33 |

Standard pkg. 5

**SOCKET, FLARED HOLE IN TOP OF CAP**

| Cat. No. | Contacts |
|------------|----------|
| S-1315-FHT | 15 |
| S-1318-FHT | 18 |
| S-1321-FHT | 21 |
| S-1324-FHT | 24 |
| S-1327-FHT | 27 |
| S-1330-FHT | 30 |
| S-1333-FHT | 33 |

Standard pkg. 5

**PLUG WITH FLARED HOLE IN END OF CAP**

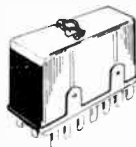
| Cat. No. | Contacts |
|------------|----------|
| P-1315-FHE | 15 |
| P-1318-FHE | 18 |
| P-1321-FHE | 21 |
| P-1324-FHE | 24 |
| P-1327-FHE | 27 |
| P-1330-FHE | 30 |
| P-1333-FHE | 33 |

Standard pkg. 5

**SOCKET, FLARED HOLE IN END OF CAP**

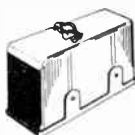
| Cat. No. | Contacts |
|------------|----------|
| S-1315-FHE | 15 |
| S-1318-FHE | 18 |
| S-1321-FHE | 21 |
| S-1324-FHE | 24 |
| S-1327-FHE | 27 |
| S-1330-FHE | 30 |
| S-1333-FHE | 33 |

Standard pkg. 5

**PLUG, CABLE CLAMP IN TOP OF CAP**

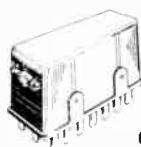
| Cat. No. | Contacts |
|------------|----------|
| P-1315-CCT | 15 |
| P-1318-CCT | 18 |
| P-1321-CCT | 21 |
| P-1324-CCT | 24 |
| P-1327-CCT | 27 |
| P-1330-CCT | 30 |
| P-1333-CCT | 33 |

Standard pkg. 5

**SOCKET, CABLE CLAMP IN TOP OF CAP****S-1315-CCT**

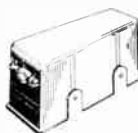
| Cat. No. | Contacts |
|------------|----------|
| S-1315-CCT | 15 |
| S-1318-CCT | 18 |
| S-1321-CCT | 21 |
| S-1324-CCT | 24 |
| S-1327-CCT | 27 |
| S-1330-CCT | 30 |
| S-1333-CCT | 33 |

Standard pkg. 5

**PLUG, CABLE CLAMP IN END OF CAP**

| Cat. No. | Contacts |
|------------|----------|
| P-1315-CCE | 15 |
| P-1318-CCE | 18 |
| P-1321-CCE | 21 |
| P-1324-CCE | 24 |
| P-1327-CCE | 27 |
| P-1330-CCE | 30 |
| P-1333-CCE | 33 |

Standard pkg. 5

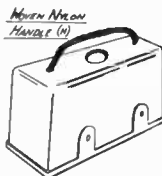
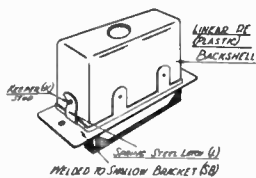
**SOCKET, CABLE CLAMP IN END OF CAP**

| Cat. No. | Contacts |
|------------|----------|
| S-1315-CCE | 15 |
| S-1318-CCE | 18 |
| S-1321-CCE | 21 |
| S-1324-CCE | 24 |
| S-1327-CCE | 27 |
| S-1330-CCE | 30 |
| S-1333-CCE | 33 |

Standard pkg. 5

ACCESSORIES FOR THE BIRNBACH "BEAUPUG" 1300 SERIES**LATCH (-L) and KEEPER (-K)**

LATCHES (-L) are installed on Shallow Brackets where a constant engagement of Plug and Socket must be insured, such as in Mobile Radio equipment. Usual installations call for a latch on each end of the Shallow Bracket as shown. Example: this is an S-1321-SB-L (21 contact Socket, Surface Bracket & Latch) KEEPERS (-K) are the studs on the Backshells which engage latches. Mating part here is S-1321-FHT-K

**HANDLE**

HANDLE (H) is generally used with the larger plugs or sockets using backshells. It is a simple device, made of woven Nylon cord, and can be almost entirely retracted inside the backshell. No metal parts are used, preventing any chance of shorts. Example: adding the handle to the Socket above, would be S-1321-FHT-H

HANDLES FOR BACKSHELL, designated -H (Example: P-1324-CCT-H) -H Handle only
 LATCHES FOR SURFACE BRACKET, -L (Example: S-1315-SB-L) -L Latches only
 KEEPER STUDS FOR BACKSHELL, (Mates with Latches on Surface Brackets) Designated -K (Example: P-1315-CCT-K) -K Keeper Studs



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

CINCH OCTAL SOCKETS

MOLDED OCTAL

1 1/8" MOUNTING CENTERS



8AB

Molded from high dielectric black bakelite or mica-filled low loss bakelite. Solder coated brass contacts and sturdy steel press-on type saddle with 4 ground lugs. Mounts in 1" chassis hole.

| No. | Description | List Price |
|-----|-------------|-------------|
| 8AB | Black | Each \$.165 |
| 8AM | Mica-Filled | Each .21 |

MOLDED OCTAL

1 1/2" MOUNTING CENTERS



8EB

Same as 8A series molded octal above except has clinch-on type saddle with 4 ground lugs and mounts in 1 1/8" chassis hole. Available in black, mica-filled bakelite, or ceramic.

| No. | Description | List Price |
|-----|-------------|-------------|
| 8EB | Black | Each \$.17 |
| 8EM | Mica-Filled | Each .215 |
| 8EC | Ceramic | Each .75 |

RETAINER RING



A crimped retaining ring formed of spring steel that will securely anchor sockets designed for ring mounting. Standard finish is cadmium.

| No. | Description | List Price |
|-----|-------------------|-------------|
| 8RO | .020 Spring Steel | Each \$0.58 |

RING MOUNT OCTAL



8R1

Molded from high dielectric black bakelite. Solder coated brass contacts. Used extensively on test equipment, public address amplifiers and on other apparatus where sockets are exposed. Molded keyway in side engages key in chassis hole, preventing socket from turning. Mounts in 1 1/8" chassis hole. Crimped retainer ring is furnished with these sockets.

| No. | Description | Mtg. hole diam. | List Price |
|-----|-------------------|-----------------|-------------|
| 8R1 | For 1/8" Chassis | Black | Each \$.31 |
| 8R2 | For 1/8" Chassis | Black | .31 |
| 8R3 | For 1/8" Chassis | Mica-Filled | .368 |
| 8R4 | For 3/32" Chassis | Black | .31 |
| 8R5 | For 3/32" Chassis | Mica-Filled | .368 |
| 8R6 | For 1/8" Chassis | Mica-Filled | .368 |

ADAPTOR PLATE



When the hole in the chassis is too large to use the 8RO retainer ring, then the 8AP adaptor plate is anchored to the chassis and the 8RO retainer ring holds the ring mounted socket to the adaptor plate.

| No. | List Price |
|-----|-------------|
| 8AP | Each \$.08 |

ALL MOLDED OCTAL SOCKET



8XB

This new all molded octal socket offers a complete one piece construction, the saddle and body are a single casting. The standard socket is molded of general purpose Bakelite. Contacts are of brass, cadmium plated. The 8XM has mica filled phenolic insulation and the contacts are of brass, cadmium plated. Mounting hole centers are 1 3/8".

| No. | Description | Mtg. hole diam. | List Price |
|-----|-------------|-----------------|------------|
| 8XB | Black | .144 | \$1.145 |
| 8XM | Mica | .144 | .22 |

MIL-TYPE OCTAL

1 1/2" MOUNTING CENTERS



8JC-2

Molded from mica-filled low loss bakelite. Silver plated phosphor bronze contacts with hot tinned tails. Heavy brass saddle nickel plated with 4 ground lugs, hot tinned. Conforms to MIL-12883-A Specs.

| No. | Description | Mtg. Hole | Mil. Type No. | List Price |
|--------|-------------|-----------|---------------|------------|
| 8JC-2 | Ceramic | .156 Dia. | TS101C01 | \$1.43 |
| 8JCN-2 | Ceramic | 6-32 Tap | TS101C02 | 1.80 |
| 8JM-2 | Mica | .126 Dia. | TS101P01 | .708 |
| 8JMN-2 | Mica | 6-32 Tap | TS101P02 | 1.08 |

CINCH CAPACITOR "PLUG-IN" SOCKETS



No. 2C5

Designed for use with Mallory and Magnavox 1" FP type condensers. Molded from high dielectric black bakelite. Sturdy steel mounting saddle has 4 ground lugs. 1 1/2" mounting centers. 3 recessed center contacts for extended prongs of condenser and two outer contacts flush with surface for short prongs of condenser. All contacts are solder coated for fast, easy soldering.

List Price
Each \$.725



No. 2C7

Designed for use with Mallory and Magnavox 1 3/8" FP type condensers. Molded from high dielectric black bakelite. Sturdy steel saddle has 1 3/32" mounting centers. Four recessed center contacts for extended prongs of condenser and three outer contacts flush with surface for short prongs of condenser. All contacts are solder coated.

List Price
Each \$1.13

CRYSTAL SOCKETS

2 PRONG 3/64" CENTERS



2KB

Molded from high dielectric black bakelite or mica-filled low loss bakelite. Silver plated beryllium copper contacts on 3/64" centers. .120" diameter recessed mounting hole. Socket body is 3/32" long, 3/16" thick, and 3/64" high. For use with FT243 type crystal.

| No. | Description | List Price |
|-----|-------------|-------------|
| 2KB | Black | Each \$.249 |
| 2KM | Mica-Filled | Each .279 |

4 PRONG



Molded from mica-filled low loss bakelite. Silver plated beryllium copper contacts on 3/64" centers. .140 diameter mounting hole recessed 3/64" from surface in 3/16" diameter hole. Socket body is 2/32" long, 3/64" wide, and 1/2" high. Designed for use with two No. FT243 type crystals.

| No. | List Price |
|-----|-------------|
| 2K4 | Each \$.448 |



2K1B

2 PRONG 1/2" CENTERS

Molded from high dielectric black bakelite or mica-filled low loss bakelite. Silver plated phosphor bronze contacts on 1/2" centers. No. 4-40 tap mounting hole. 1 1/8" long, 3/8" wide and 3/16" high. For No. CR-1 and CR-7 type crystals.

| No. | Description | List Price |
|------|-------------|--------------|
| 2K1B | Black | Each \$2.475 |

Made of ceramic material. Silver plated beryllium copper contacts with hot tinned tails, mounted on .486" centers. 1/8" mounting hole, 7/8" long, 3/8" wide and 9/8" high overall. Similar to above except the tails extend straight down. For No. CR-7 and BH-6 crystals.

| No. | Description | List Price |
|------|-------------|------------|
| 2K2C | Ceramic | Each .505 |



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

7 PIN MINIATURE SOCKETS AND SHIELDS



MOLDED SADDLE SOCKETS

Top Mount

Molded from high dielectric black bakelite, mica-filled low loss bakelite. Cadmium plated steel saddle with 7/8" mounting centers and .093 diameter mounting holes. Solder coated brass contacts. Designed for mounting through top of chassis in 3/8" diameter hole. Will securely hold all standard seven-pin miniature tubes.

| No. | Description | List Price |
|------|-------------|-------------|
| 7AB1 | Black | Each \$.156 |
| 7AM1 | Mica-Filled | Each .188 |

Military Versions: Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Description | MIL Type No. | List Price |
|-------|-------------|--------------|------------|
| 7JM-1 | Mica | TS102P02 | Each \$.50 |
| 7JC-1 | Ceramic | TS102C02 | Each .653 |



MOLDED SADDLE SOCKETS

Bottom Mount

Molded from high dielectric black bakelite or mica-filled low loss bakelite. Cadmium plated steel saddle with 7/8" mounting centers. .093 diameter mounting holes. Solder-coated positive-grip brass contacts. Designed for mounting through bottom of chassis in 3/8" diameter hole. For use with all standard seven-pin miniature tubes.

| No. | Description | List Price |
|-----|-------------|-------------|
| 7EB | Black | Each \$.156 |
| 7EM | Mica-Filled | Each .188 |

Military Versions: Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Description | MIL Type No. | List Price |
|-------|-------------|--------------|-------------|
| 7JM-3 | Mica | TS102P03 | Each \$.399 |
| 7JC-3 | Ceramic | TS102C03 | Each .653 |



WAFER TYPE SOCKET

Laminations consist of 1/2" top plate and 3/4" bottom plate made from high grade chocolate XP Bakelite. Solder coated brass contacts and center shield.

| No. | Mtg. Centers | Mtg. Hole | List Price |
|------|--------------|-----------|------------|
| 7W2A | 7/8" | .093 | \$1.14 |
| 7WL2 | 1" | .093 | .114 |
| 7WL4 | 1 1/8" | .136 | .134 |



SHIELD BASES

Snap-on Type: Base is made of hardened carbon steel supplying adequate spring retentivity on shield. Base has 7/8" mounting centers with mounting holes that coincide with those for miniature 7-pin sockets as established by E. I. A. standards.

| No. | Description | List Price |
|------|-------------|-------------|
| 7SB3 | 1 1/2" | Each \$.058 |



For J-Slot Type: Durable steel shield bases designed for use with "J" slot type shields illustrated at left. 7/8" mounting centers.

| No. | Description | List Price |
|------|-------------|------------|
| 7SB1 | 5/8" | Each \$.09 |
| 7SB2 | 3/8" | Each .12 |



TUBE SHIELD SNAP-ON TYPE

Shield fits over and outside of shield base. Indentation on shield locks into ridge on base of 7SB3 as shown above.

| No. | Description | List Price |
|-----|-------------|------------|
| 7S1 | 1 3/4" High | Each \$.15 |



SHIELD BASE SOCKETS

Shield base is attached to socket body for mounting through top of chassis. Molded from high dielectric black bakelite, mica-filled low loss bakelite or ceramic material. Solder coated brass contacts and center shield. Cadmium plated steel shield base

with 7/8" mounting centers. Use No. 7S2, 7S3, or 7S4 shields illustrated at right with these sockets.

| No. | Description | List Price |
|------|----------------------|-------------|
| 7XB1 | Black | Each \$.284 |
| 7XM1 | Mica-filled Bakelite | Each .321 |
| 7XC | Ceramic | Each .55 |

Military Versions: Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Description | MIL Type No. | List Price |
|-------|-------------|--------------|-------------|
| 7JC-2 | Ceramic | TS102C01 | Each \$.615 |
| 7JM-2 | Mica | TS102P01 | Each .455 |



J-SLOT TUBE SHIELDS

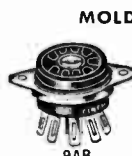
Durable steel shields complete with tube securing spring. "J" slot feature designed to fit securely with Cinch shield base type sockets, such as 7X series shown at left. Also fit 7SB type shield bases shown in end column at right.

| No. | Description | List Price |
|-----|---------------|-------------|
| 7S2 | 1 3/8" Length | Each \$.184 |
| 7S3 | 1 3/4" Length | Each .194 |
| 7S4 | 2 1/4" Length | Each .296 |

Military Versions: Durable brass nickel plated shields complete with non-magnetic stainless steel spring. Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Description | MIL Type No. | List Price |
|--------|---------------|--------------|-------------|
| 7SJ2-1 | 1 3/8" Length | TS102U01 | Each \$.286 |
| 7SJ3-1 | 1 3/4" Length | TS102U02 | Each .321 |
| 7SJ4-1 | 2 1/4" Length | TS102U03 | Each .356 |

9 PIN MINIATURE SOCKETS AND SHIELDS



MOLDED SADDLE SOCKETS

Top Mount

Molded from high dielectric black bakelite or mica-filled low loss bakelite. Designed for mounting through top of chassis in 3/4" diameter hole. 1 1/8" mounting centers with .093 diameter mounting holes. Solder coated brass contacts and center shield.

| No. | Description | List Price |
|-----|-------------|-------------|
| 9AB | Black | Each \$.208 |
| 9AM | Mica-Filled | Each .241 |

Military Versions: Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Description | MIL Type No. | List Price |
|-------|-------------|--------------|-------------|
| 9JM-1 | Mica | TS103P02 | Each \$.425 |
| 9JC-1 | Ceramic | TS103C02 | Each .69 |



MOLDED SADDLE TYPE

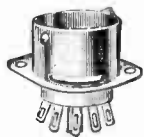
Bottom Mount

Molded from high dielectric black bakelite or mica-filled low loss bakelite. Designed for mounting through bottom of chassis in 3/4" diameter hole. 1 1/8" mounting centers with .093 diameter mounting holes. Solder-coated brass contacts and center shield.

| No. | Description | List Price |
|-----|-------------|-------------|
| 9EB | Black | Each \$.208 |
| 9EM | Mica-Filled | Each .241 |

Military Versions: Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Description | MIL Type No. | List Price |
|-------|-------------|--------------|-------------|
| 9JM-3 | Mica | TS103P03 | Each \$.425 |
| 9JC-3 | Ceramic | TS103C03 | Each .69 |



SHIELD BASE SOCKETS

Molded from high dielectric black bakelite, mica-filled low loss bakelite, or ceramic material. One piece cadmium plated steel shield base and saddle with .093 diameter mounting holes on 1 1/8" centers. Solder-coated brass contacts and center shield.

Mounts through top of chassis in 3/4" diameter hole. Use Cinch 9S type shields, shown at right, with these sockets.

| No. | Description | List Price |
|-----|-------------|-------------|
| 9XB | Black | Each \$.348 |
| 9XM | Mica | Each .378 |
| 9XC | Ceramic | Each .595 |

Military Versions: Phosphor bronze contacts. Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Description | MIL Type No. | List Price |
|-------|-------------|--------------|-------------|
| 9JM-2 | Mica | TS103P01 | Each \$.496 |
| 9JC-2 | Ceramic | TS103C01 | Each .685 |



SHIELD BASE

Durable steel shield base designed for use with shields illustrated at right. 1 1/8" mounting centers. May be used with any 9 pin wafer or saddle type sockets shown.

| No. | List Price |
|-----|------------|
| 9S1 | Each \$.12 |



WAFER TYPE

Has two laminations consisting of 3/4" top plate and 3/4" bottom plate made from 1 1/8" mounting centers with .093 diameter holes. Solder coated brass contacts and center shield.

| No. | Mtg. Centers | List Price |
|-----|--------------|------------|
| 9W1 | 1 1/8" | Each \$.14 |
| 9W2 | 1 3/8" | Each .155 |



J-SLOT TUBE SHIELDS

Made from durable steel. Complete with tube securing spring. "J" slot feature designed to fit securely with Cinch 9X series shield base sockets and 9SB-1 shield base, both illustrated at left.

| No. | Description | List Price |
|-----|---------------|------------|
| 9S1 | 1 1/2" Length | \$.272 |
| 9S2 | 1 3/4" Length | .274 |
| 9S3 | 2 3/8" Length | .499 |

Military Versions: Durable brass nickel-plated shields with tube-securing spring. Same as above except materials and finishes are those required by MIL-12883-A specifications.

| No. | Length | MIL Type No. | List Price |
|--------|--------|--------------|-------------|
| 9SJ1-1 | 1 1/2" | TS103U01 | Each \$.351 |
| 9SJ2-1 | 1 3/4" | TS103U02 | Each .386 |
| 9SJ3-1 | 2 3/8" | TS103U03 | Each .421 |

Please Note: Listings of the strap nuts used in conjunction with 7 and 9 pin miniature sockets can be found at the foot of the next page.

CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

MOLDED CONNECTOR PLUGS AND SOCKETS

8 CONTACT PLUG



Molded from high dielectric black Bakelite. Pins are nickel-plated and have tapered ends for easy insertion. Mounts on 1/4" chassis using No. 1018 retaining ring, or can be used with No. 16F cap shown below. Will fit any standard octal socket.

No. 8PB

List Price Each **\$.325**

11 CONTACT PLUG



Molded from high dielectric black Bakelite. Pins are nickel-plated and have tapered ends for easy insertion. Mounts on 1/4" chassis using No. 1018 retaining ring. Can be used with No. 16F cap shown below. Will fit No. 11RB socket shown at right.

No. 11PB

List Price Each **\$.450**

11 CONTACT SOCKET



Molded from high dielectric black Bakelite. Solder coated brass contacts. Mounts on 1/4" chassis using No. 1018 retaining ring. Can be used with No. 16F Cap shown below. Used with No. 11PB plug shown at left.

No. 11RB

List Price Each **\$.530**

CONNECTOR PLUG



This plug consists of two prongs mounted on a piece of Bakelite. The prongs are the same as used in No. 2RP-1. Mounting plate is of 1/16" natural XP Bakelite 1 5/8" x 3/4". The .135 mounting holes are on 1/4" centers. An inexpensive current supply connector for TV sets.

No. 2FP

List Ea. **\$.144**

RECESSED PLUG



Recessed sub-panel mounting type plug similar to No. 2RP except that the contact is one piece. Underwriter Approved for 125 Volts 7 amperes. Same dimensions as 2RP.

No. 2RP-1

List Ea. **\$.197**

110-250 VOLT SOCKET (Underwriters Listed)



When space is at a premium use this 110-250 volt 2 prong socket. Rated at 15 Amp., 110 V. or 10 Amp., 250 V. Molded from high dielectric black bakelite. Solder coated brass contacts on 1/2" centers designed to accept any 2 prong standard electric plug. Mounts in 3/4" x 3/8" hole. .144 diameter mounting holes on 1/4" centers. Ideal for radio chassis and many other applications.

No. 2R2

List Price Each **\$.315**

LAMINATED CONNECTOR PLUGS AND SOCKETS



18G



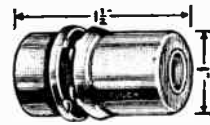
6K2



5K2



18E



Assembled

These low cost plugs and sockets are ideal for a multitude of applications. A "Cinch" where space is at a premium. Complete assembly of plug, socket, male and female shell will close to a compact unit of 1 1/2" long. Polarized — Nickel plated brass tube pins — Solder coated brass contacts. Plugs, sockets and shells have lock feature which prevents turning in shells.

"See also battery plug listings adjacent to barrier strip listings elsewhere in this catalog."

PLUGS

| Part No. | No. Prongs | Use Skt.No. | Use Shell No. | List Price |
|----------|------------|-------------|---------------|------------|
| 5K2 | 2 | 6K2 | 18E | .153 |
| 5K3 | 3 | 6K3 | 18E | .183 |
| 5K4 | 4 | 6K4 | 18E | .213 |
| 5K5 | 5 | 6K5 | 18E | .243 |
| 5K6 | 6 | 6K6 | 18F | .273 |

SOCKETS

| Part No. | No. Prongs | Use Skt.No. | Use Shell No. | List Price |
|----------|------------|-------------|---------------|------------|
| 6K2 | 2 | 5K2 | 18G | .299 |
| 6K3 | 3 | 5K3 | 18G | .309 |
| 6K4 | 4 | 5K4 | 18G | .336 |
| 6K5 | 5 | 5K5 | 18G | .388 |
| 6K6 | 6 | 5K6 | 18H | .423 |

PLUG CAPS AND SHELLS

For Battery Plugs, Connector Plugs and Sockets Shown Above



Cadmium plated brass shell with rolled edge on 3/8" diameter neck opening. Outside diameter at base .625. Four 1/8" prongs coincide with notches on plugs. Designed for use with Cinch No. 5A1, 5B1, 5AB2, and 5AB3 type battery plugs.

No. 18A-1

List Price Each **\$.041**



Made of steel, cadmium plated. Designed to snap on 8 and 11 prong sockets which are grooved for a 1/8" chassis. There is a screwdriver slot at the bottom to facilitate easy removal. Rubber grommet has a 3/16" dia. hole.

No. 16F

List Price Each **\$.925**



Cadmium plated brass shells complete with fibre insulator. Available with 3/8" or 1/2" diameter hole with rolled edge. Inside diameter 3/32". 1/2" high. For use with Cinch No. 5C1, 5C2, 5AB6, 5AB7, 5AB8, 5K2, 5K3, 5K4, 5K5, and 5K6 type plugs.

| No. | Description | List Price |
|-----|--------------------|--------------------|
| 18E | 3/8" Diameter Hole | Each \$.158 |
| 18F | 1/2" Diameter Hole | Each .471 |



Cadmium plated brass shell complete with fibre insulator. Same as Cinch No. 18B shell except has 1/2" neck with 3/8" hole riveted to base. For use with same plugs as No. 18B.

No. 18J-1

List Price Each **\$.223**



Cadmium plated brass shell with 3/4" diameter opening on top of shell. Outside diameter at base .625. Four 1/8" prongs coincide with notches on plugs. 1/2" high. Designed for use with Cinch No. 5A1, 5B1, 5AB2, and 5AB3 type battery plugs.

No. 18B-1

List Price Each **\$.041**



Cadmium plated steel shells complete with fibre insulator. Available with 3/8" or 1/2" diameter hole with rolled edge. Inside diameter 3/32". 3/8" high. For use with Cinch No. 6K2, 6K3, 6K4, 6K5, and 6K6 type sockets.

| No. | Description | List Price |
|-----|--------------------|--------------------|
| 18G | 3/8" Diameter Hole | Each \$.159 |
| 18H | 1/2" Diameter Hole | Each .409 |

STRAP NUTS



NO. 7SN

Cadmium plated brass strap nuts are designed for use in mounting sockets with saddles or shield bases. One strap nut takes the place of two conventional type nuts. Mounting centers 7/8". For 7 contact sockets.

List **\$.28**

Same as No. 7SN except mounting centers are 1 1/8" and are for 9 contact sockets.

List **\$.305**



NO. 9SN



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

SOCKETS FOR SPECIAL PURPOSE TUBES

MAGNAL — 11 PRONG



Molded from mica-filled low loss bakelite. Socket is 1³³/₃₂" wide and 1¹/₄" high. Full floating silver plated beryllium copper contacts designed to insure easy insertion of tubes and yet provided excellent electrical connections. For use with 5BP1 and 2AP1 type cathode ray tubes.

| No. | Description | List Price |
|------|---------------------|-------------|
| 3M11 | Mica Socket | Each \$6.00 |
| 3R11 | Steel Mounting Ring | Each .40 |

DIHEPTAL — 14 PRONG



Molded from high dielectric black bakelite or mica-filled low loss bakelite. 2¹/₂" wide and 1¹/₈" high. Possesses same features as Cinch Magnal socket shown at left.

| No. | Description | List Price |
|------|---------------------|-------------|
| 3B14 | Black Socket | Each \$1.40 |
| 3M14 | Mica Socket | Each 1.80 |
| 3R14 | Steel Mounting Ring | Each .40 |

DUODECAL — 12 PRONG



Slightly larger in diameter than the tube base and only slightly longer than the tube pin. A new feature incorporates wire strain relief as an integral part of the contact. Molded from high dielectric black bakelite. For use with 10BP4, 2BP1, 5TP4, etc., type tubes. Also RCA 6199 tube.

| No. | Description | List Price Ea. |
|------|--------------------------|----------------|
| 3B12 | | \$.80 |
| 3M12 | Same as 3B12 except Mica | 2.40 |

SECOND ANODE CONNECTOR



For diheptal based tubes. Cadmium plated brass contact surrounded by rubber insulator 3/4" wide and 1¹/₈" long. Snaps over .096 diameter prong on side of diheptal tubes.

| No. | List Price |
|-----|-------------|
| 3A1 | Each \$.90 |

CETRON TUBE SOCKET



This socket is designed for use with Cetron Tubes CE701 and CE702 in such applications as electric eye doors and motion picture projectors. Contacts are of special alloy spring brass. May be mounted by press fit, gluing or by means of mounting ring 2MR.

| No. | Casting Material | List Ea. |
|-----|------------------|----------|
| 2B2 | Black | \$1.20 |
| 2M2 | Mica | 1.75 |

NUVISTOR SOCKETS



Five-contact socket. Socket body is of low-loss phenolic insulation (MFE). Cadmium-plated cold-rolled steel saddle. Contacts are of copper alloy with cadmium plating. Crimp-Mounting Type. Fastened to chassis by two tabs. Non-polarized.

| No. | List Ea. |
|-------|----------|
| 5NS | \$.23 |
| 5NS-1 | \$.355 |
| 5NS-2 | \$.175 |

PHOTO-MULTIPLIER SOCKET



20 contact socket for RCA photo-multiplier tube Nos. 6810, C7187A, C7212 and 7265. Casting material is MAI-60 Alkyd Glass Fibre. JETEC No. is 20-102.

| | |
|-----------|------------------|
| No. 20-PM | List, Ea. \$6.67 |
|-----------|------------------|

VIDICON SOCKET



7 contact socket for RCA Vidicon Tube Nos. 6198 and 7038. Casting material is mica. Contacts are silver-plated phosphor bronze. JETEC No. is E8-11.

| | |
|----------|------------------|
| No. 7-VT | List, Ea. \$2.80 |
|----------|------------------|

JACKS AND PLUGS FOR RADIO, TV, PHONOGRAPH APPLICATIONS

PHONO JACKS



Standard Type: Precision-engineered for many uses, such as phonographs, radios, amplifiers. Single-prong positive-grip phono jack mounted on 1/16" chocolate colored bakelite disc with 1/16" mounting centers. Use Cinch No. 13A phono plug with this jack.

| | |
|---------|-----------------------|
| No. 81A | List Price, Ea. \$210 |
|---------|-----------------------|



Laminated Type: Same as above except that it has a ceramic bushing and three laminated bakelite insulation plates with brass mounting plate. Mounting holes are 1/16" diameter.

| | |
|---------|------------------------|
| No. 81G | List Price, Ea. \$.695 |
|---------|------------------------|



PHONO PLUGS

R.C.A. Type. For many audio and radio applications. Nickel plated 1/8" diameter tube pin.

| No. | Pin Length | Jack Type | List, Ea. |
|-----|------------|---------------|-----------|
| 13A | 3/16" | 81A, 81B, 81G | \$1.30 |
| 13E | 1/16" | 81E | .132 |



DOUBLE PHONO JACK

Two positive grip phono jacks mounted on 1/16" bakelite panel with 1/16" mounting centers. Jacks are spaced on 1/2" centers. Panel is 1 1/2" x 1/2". Used on recording units, receivers, etc. Use Cinch No. 13A phono plug with this jack.

| | |
|---------|-----------------------|
| No. 81B | List Price Each \$375 |
|---------|-----------------------|

ANTENNA CONNECTORS



Flange Type: Motorola-type shielded jack. Sturdy steel flange with 1/16" mtg. centers with .136 dia. mtg. holes. Solder-coated shell, flange and contact.

Can be mounted with screws or rivets. Used extensively on auto radios. Use Cinch No. 13B antenna plug with this jack.

| | |
|---------|-----------------|
| No. 81A | List, Ea. \$210 |
|---------|-----------------|



Shell Type: Same as above except without flange. This connector may be soldered into position. Accepts No. 13B plug.

| | |
|---------|-----------------|
| No. 81C | List, Ea. \$240 |
|---------|-----------------|



ANTENNA PLUG

Motorola type. Nickel plated 1/8" tube pin extends 1/32" from cadmium plated split brass shell whose 8 cutting edges provide positive grounded connection when inserted into a Cinch No. 81C or 81F connector.

| | |
|---------|-----------------------|
| No. 13B | List Price Each \$288 |
|---------|-----------------------|

INSULATED PIN PLUG



Nickel plated 1/8" brass tube pin 3/16" long, assembled to 1/32" long fibre insulator. May be used with Cinch No. 81A and 81B type phono jacks or with No. 49 series contact strips illustrated on page F-35.

| | |
|-----------|------------------------|
| No. 13C-1 | List Price Each \$.225 |
|-----------|------------------------|

SHIELDED EXTENSION JACK



Cadmium plated brass shell 2 1/4" long with black bakelite insert providing insulation for solder coated brass positive grip contact. Use Cinch No. 13E Phono plug with this jack.

| | |
|---------|-----------------------|
| No. 81E | List Price Each \$487 |
|---------|-----------------------|



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

CINCH TRANSISTOR SOCKETS

POWER TRANSISTOR SOCKETS



No. 2TS-1



No. 2TS-2



No. 2TS-3

Laminated Type: Top and bottom plates are of natural XP Bakelite, vacuum wax impregnated. Contacts are of brass, cadmium plated. Formed thread for 6-20 screw. .104/.110 dia. hole in CR steel plate. Provides easy attachment to a heat sink.

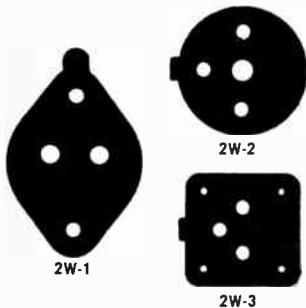
No. 2TS2 is identical with 24324 except it is equipped with Integral eyelets for easy assembly to chassis.

No. 2TS-1 List Ea. \$.163
No. 2TS-2 List Ea. .179

Molded Type: Casting molded of general purpose Bakelite. Contacts are of phosphor bronze, cadmium plated. This transistor socket may be used with the following EIA base designations: E 3-14, E 3-15, E 3-25, E 3-32, E 3-38, E 3-39, E 3-42, E 3-43, E 3-44, E 2-51, E 3-53, E 4-13, E 4-24, E 4-31, E 4-43, E 4-52, ET 103-D.

No. 2TS-3 List Ea. \$.15

POWER TRANSISTOR HEAT SINKS



These hard anodized aluminum insulator wafers are for use with Power Transistors. They have high thermal conductivity, high dielectric resistance, high abrasion resistance and high corrosion resistance.

| No. | Description | List Ea. |
|------|--|----------|
| 2W-1 | For Motorola transistor 2N-179, 2N-176 and 2N-554. | \$.92 |
| 2W-2 | For Delco transistor 2N-174. | .42 |
| 2W-3 | For Texas Instrument transistor 2N-389. | .42 |

GENERAL PURPOSE TRANSISTOR SOCKET



New transistor socket designed to the triangular base layout .2" x .1" (JETEC-30) contact centers, as well as the three contact in line (.048 x .192 contact centers.) This socket was originally designed for an all-transistor television set. However, its future applications are many; industrial communications, test equipment, bread board circuits, etc. Casting is molded of general purpose Bakelite, contacts are of phosphor bronze, cadmium plated.

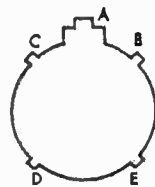
No. 2TS-4

List Ea. \$.282

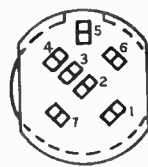
UNIVERSAL TRANSISTOR SOCKETS



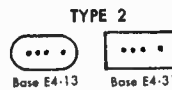
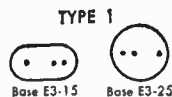
No. 7-UTS



CHASSIS LAYOUT



CONTACT LAYOUT



TYPE 5

Universal transistor sockets for use with all transistor bases described below. Casting is mica-filled phenolic "MFE". Contacts are beryllium copper, gold plated. May be used with either one or two-sided 1/16" printed circuit boards. See diagrams above for contacts and tab layouts.

| Code | Base Types | Tabs Used (See Diag.) | Cont. Pos. Used | List Pr. |
|--------|------------|-----------------------|-----------------|----------|
| 7UTS | All | A,B,C,O,E | 1,3,4,7 | \$1.125 |
| 7UTS-1 | 1 & 3 | C,O,E | 1,3,4,7 | .75 |
| 7UTS-3 | 3 | C,O,E | 1,4,7 | .675 |
| 7UTS-4 | 4 | A,B,C,O,E | 1,4,5,6,7 | .90 |
| 7UTS-5 | 5 | B,O,E | 1,6,7 | .675 |
| 7UTS-6 | 1 & 3 | C,O,E | 1,3,4,7 | .75 |

PRINTED CIRCUIT EDGE CONNECTORS

Designed for minimum printed circuit card wear, low insertion force and positive contact with the printed circuit board. Insulation is glass-filled diallyl phthalate, type GD1 30 per MIL-M-19833. Contacts are of phosphor bronze with .00003 Min. Sel-Rex gold plated. Types 250, 251 and 252 utilize bifurcated contacts, permitting two flexing surfaces instead of one for positive contact. Bifurcated

contacts are especially recommended for added contact reliability where vibration or printed circuit board irregularities would otherwise cause trouble. Connectors meet requirements of MIL-C-21097A (SHIPS) where applicable.

Note: One plastic polarizing key is furnished unassembled with each connector listed below.



No. 50-6A-2

Type 250. Bifurcated contacts, single row. Conventional wiring tails.

| Code | Cont. Pos. | No. of Cont. | List Ea. |
|----------|------------|--------------|----------|
| 50-6A-2 | 6 | 6 | \$1.50 |
| 50-10A-2 | 10 | 10 | 2.00 |
| 50-12A-2 | 12 | 12 | 2.25 |
| 50-15A-2 | 15 | 15 | 2.63 |
| 50-18A-2 | 18 | 18 | 3.00 |
| 50-22A-2 | 22 | 22 | 3.50 |



No. 50-12A-3

Type 251. Bifurcated contacts, double row. Conventional wiring tails.

| Code | Cont. Pos. | No. of Cont. | List Ea. |
|----------|------------|--------------|----------|
| 50-12A-3 | 6 | 12 | \$1.50 |
| 50-20A-3 | 10 | 20 | 2.00 |
| 50-24A-3 | 12 | 24 | 2.25 |
| 50-30A-3 | 15 | 30 | 2.63 |
| 50-36A-3 | 18 | 36 | 3.00 |
| 50-44A-3 | 22 | 44 | 3.50 |



No. 50-123-1

Type 252. Bifurcated contacts, double row. Contact tails designed for dip soldering, and will fit into .051 diameter holes.

| Code | Cont. Pos. | No. of Cont. | List Ea. |
|----------|------------|--------------|----------|
| 50-12B-1 | 6 | 12 | \$1.68 |
| 50-20B-1 | 10 | 20 | 2.32 |
| 50-24B-1 | 12 | 24 | 2.64 |
| 50-30B-1 | 15 | 30 | 3.12 |
| 50-36B-1 | 18 | 36 | 3.60 |
| 50-44B-1 | 22 | 44 | 4.24 |

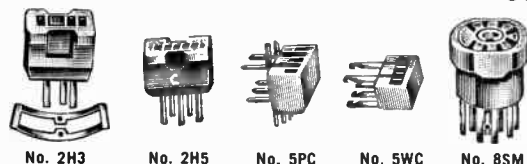


No. 50-12B-2

Type 253. Standard contacts, double row. Contact tails are for wire-wrapping.

| Code | Cont. Pos. | No. of Cont. | List Ea. |
|----------|------------|--------------|----------|
| 50-12B-2 | 6 | 12 | \$2.55 |
| 50-20B-2 | 10 | 20 | 3.31 |
| 50-24B-2 | 12 | 24 | 3.69 |
| 50-30B-2 | 15 | 30 | 4.26 |
| 50-36B-2 | 18 | 36 | 4.83 |
| 50-44B-2 | 22 | 44 | 5.59 |

SUB-MINIATURE SOCKETS



No. 2H3

No. 2H5

No. 5PC

No. 5WC

No. 8SM

This socket is the same as No. 8SM shown above except that it is furnished with a mounting plate.



No. 8SM-P

Use extensively for hearing aids, radios and other electronic apparatus which require sub-miniature tubes. Molded from mica-filled low loss bakelite with silver plated beryllium copper contacts. Available with 3, 5, 6, 7 or 8 contacts. Four prong tubes use No. 2H5 five prong socket. No. 2H5 can be used as a transistor socket. No. 5PC for printed circuits. No. 5WC for wired circuits.

| No. | Description | List Price |
|-------|-------------|-------------|
| *2H3 | 3 Prong | Each \$.347 |
| *2H5 | 5 Prong | Each .373 |
| *2H6 | 6 Prong | Each .497 |
| *2H7 | 7 Prong | Each .517 |
| 5PC | 5 Prong | Each .66 |
| 5WC | 5 Prong | Each .626 |
| *8SM | 8 Prong | Each .70 |
| 8SM-P | 8 Prong | Each .90 |

*Mtg. Ring included.



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

CINCH RELAY SOCKETS

14-CONTACT TOP-MOUNTED SOCKET



A 14 contact relay socket. Casting is of mica insulation. Contacts are of beryllium copper, silver plated with hot tinned tails. Mounting centers 1 $\frac{1}{8}$ ".

No. 14RS List Ea. \$1.23

20-CONTACT TOP-MOUNTED SOCKET



Contacts are of beryllium copper, silver-plated with hot tinned tails. Steel saddle. 1 $\frac{1}{8}$ " mounting centers.

No. 20RS List Ea. \$2.86

BOTTOM-MOUNTED SOCKETS



20 Contact Socket. Casting is of mica insulation. Contacts are of beryllium copper, silver-plated with hot-tinned tails. Mounting centers 1 $\frac{1}{8}$ ".

No. 20RS-1 List Ea. \$2.86

14 Contact Socket. Same as above except contacts 15 to 20 omitted.

No. 14RS-1 List Ea. \$2.20

16 Contact Socket. Same as above except 15, 17, 18 and 20 omitted.

No. 16RS-1 List Ea. \$2.40

8-CONTACT RELAY SOCKET



This relay socket is molded of mica filled phenolic and is attached to the chassis with a cold rolled steel clip that is cadmium plated. The contacts are of beryllium copper, silver plated P-31-3. The mounting clip No. 20731 is furnished with each socket.

This socket fits the following relays: Advance MV-2C, AEMCO 95-3274, Brubaker K110A, Filfors P.26.A1.P.6A, G. E. D200A & G-203A, Potter & Brumfield SL and Ace Relay No. 50-6-A (single contact type).

No. 8RS List Price Ea. \$.75

CINCH NOVAR SOCKETS



9NS-B

Sockets developed by Cinch in conjunction with the Novar Tube. Since physical dimensions are the same as octal sockets, layouts and cutouts for octal sockets will accommodate Novar Sockets. Contact specifications provide maximum fatigue strength and mating force with tube pins. Performance meets or surpasses EIA standards.

BOTTOM-MOUNT SOCKETS

Molded from high dielectric black bakelite or mica-filled low-loss bakelite. Cadmium-plated brass contacts. 1 $\frac{1}{2}$ " mounting centers.

| Code | Material | List Pr., Ea. |
|-------|----------|---------------|
| 9NS-B | Black | \$.152 |
| 9NS-M | Mica | .184 |



9NS-B1

TOP-MOUNT SOCKETS

Molded from high dielectric black bakelite or mica-filled low-loss bakelite. Cadmium-plated brass contacts. 1 $\frac{1}{2}$ " mounting centers.

| Code | Material | List Pr., Ea. |
|--------|----------|---------------|
| 9NS-B1 | Black | \$.152 |
| 9NS-M1 | Mica | .184 |

STAND-OFF TYPE PRINTED CIRCUIT SOCKETS

These stand-off sockets rest on the shoulder of the contact tail, providing an air gap for cooling and eliminating the possibility of a moisture trap. Designed for $\frac{1}{16}$ " printed circuit boards having bottom circuitry.



7PC-B1

SEVEN-PIN MINIATURE SOCKET

Brass contacts with hot tin finish. Casting is general purpose black phenolic. Special tabs prevent tube shields from contacting the printed wire chassis. Center shields provide mechanical retention of the socket in the chassis.

7PC-B1 List Pr., Ea. \$.105
Same as above without special tabs.
7PCB List Pr., Ea. \$.118



9PC-B1

NOVAL SOCKET

9 pin socket having brass contacts with hot tin finish. Casting is general purpose black phenolic. Special tabs prevent tube shields from contacting the printed wire chassis.

9PC-B1 List Pr., Ea. \$.143
Same as above without special tabs.
9PCB List Pr., Ea. \$.158



OCTAL SOCKET

Brass contacts with hot tinned finish. Casting is general purpose black.

8PC-B List Pr., Ea. \$.13

PRINTED CIRCUIT SOCKETS WITH SHIELD BASES



SEVEN-PIN MINIATURE SOCKET

7PC-M2 List Pr., Ea. \$1.58

These stand-off sockets have an attached bayonet-type shield base with ground tab. For use with $\frac{1}{16}$ " printed circuit boards. Castings are low-loss mica-filled phenolic (MFE). Contacts are phosphor bronze with a hot-tinned finish. Center shield and ground tab are brass, hot-tinned, and base is brass, nickel-plated.

NOVAL SOCKET

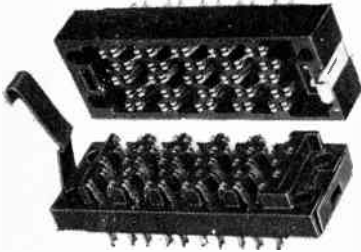
Nine-pin base. Similar to 7PC-M2 shown at right.

9PC-M2 List Pr., Ea. \$1.95



CINCH HINGE CONNECTORS

37F50

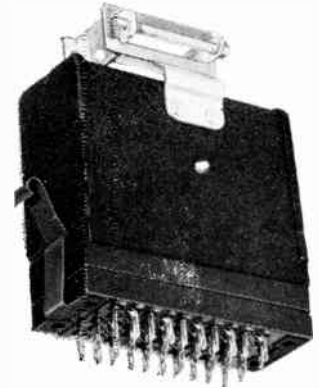


37M50L

Plug and socket bodies showing contact arrangement.

Cinch Hinge Connectors eliminate contact damage caused by the high insertion and extraction forces encountered with ordinary multi-contact (20-100) connectors. Ideal for use in space-limited areas.

These plugs and sockets offer a maximum number of contacts in a minimum amount of space. Easy engagement and disengagement an outstanding feature. The plug and socket units are easily engaged with normal pressure, and the lock holds them securely together. Releasing the lock the units separate by the spring action of the contacts. A simple locking device insures positive contact. Wiping contact action keeps contacts clean at all times. Either the plug or socket body fit into the cap.



50 contact plug and socket with cap and standard lock.

Plug with Lock

| Code No. | Cont. | Center Dim. | | List Pr., Ea. |
|----------|-------|-------------|--------------|---------------|
| | | Mtg. | Overall Dim. | |
| 37M20L | 20 | 1.375 | 1.750 | \$3.00 |
| 37M30L | 30 | 1.812 | 2.187 | 3.55 |
| 37M40L | 40 | 2.250 | 2.625 | 4.10 |
| 37M50L | 50 | 2.687 | 3.026 | 4.65 |
| 37M60L | 60 | 3.125 | 3.500 | 5.20 |
| 37M70L | 70 | 3.562 | 3.937 | 5.75 |
| 37M80L | 80 | 4.000 | 4.375 | 6.30 |
| 37M90L | 90 | 4.438 | 4.812 | 6.85 |
| 37M100L | 100 | 4.875 | 5.250 | 7.40 |

Socket with Lock

| Code No. | Cont. | Center Dim. | | List Pr., Ea. |
|----------|-------|-------------|--------------|---------------|
| | | Mtg. | Overall Dim. | |
| 37F20L | 20 | 1.375 | 1.750 | \$3.00 |
| 37F30L | 30 | 1.812 | 2.187 | 3.55 |
| 37F40L | 40 | 2.250 | 2.625 | 4.10 |
| 37F50L | 50 | 2.687 | 3.062 | 4.65 |
| 37F60L | 60 | 3.125 | 3.500 | 5.20 |
| 37F70L | 70 | 3.562 | 3.937 | 5.75 |
| 37F80L | 80 | 4.000 | 4.375 | 6.30 |
| 37F90L | 90 | 4.438 | 4.812 | 6.85 |
| 37F100L | 100 | 4.875 | 5.250 | 7.40 |

Plug without Lock

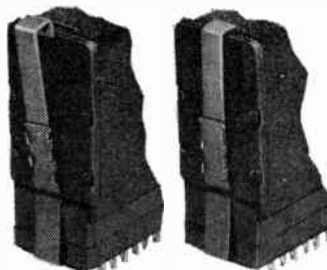
| Code No. | Cont. | Center Dim. | | List Pr., Ea. |
|----------|-------|-------------|--------------|---------------|
| | | Mtg. | Overall Dim. | |
| 37M20 | 20 | 1.375 | 1.750 | \$2.70 |
| 37M30 | 30 | 1.812 | 2.187 | 3.25 |
| 37M40 | 40 | 2.250 | 2.625 | 3.80 |
| 37M50 | 50 | 2.687 | 3.062 | 4.35 |
| 37M60 | 60 | 3.125 | 3.500 | 4.90 |
| 37M70 | 70 | 3.562 | 3.937 | 5.45 |
| 37M80 | 80 | 4.000 | 4.375 | 6.00 |
| 37M90 | 90 | 4.438 | 4.812 | 6.55 |
| 37M100 | 100 | 4.875 | 5.250 | 7.10 |

Socket without Lock

| Code No. | Cont. | Center Dim. | | List Pr., Ea. |
|----------|-------|-------------|--------------|---------------|
| | | Mtg. | Overall Dim. | |
| 37F20 | 20 | 1.375 | 1.750 | \$2.70 |
| 37F30 | 30 | 1.812 | 2.187 | 3.25 |
| 37F40 | 40 | 2.250 | 2.625 | 3.80 |
| 37F50 | 50 | 2.687 | 3.062 | 4.35 |
| 37F60 | 60 | 3.125 | 3.500 | 4.90 |
| 37F70 | 70 | 3.562 | 3.937 | 5.45 |
| 37F80 | 80 | 4.000 | 4.375 | 6.00 |
| 37F90 | 90 | 4.438 | 4.812 | 6.55 |
| 37F100 | 100 | 4.875 | 5.250 | 7.10 |

ALTERNATE LOCK
No. 37AL

For more secure locking, the lock shown below can be supplied. This lock has a hook at the top that fits into a cut-out in the cap and when inserted and pushed down, prevents accidental unlocking of the cap. It is easily lifted up for unlocking.



Lifting up top section releases same prior to unlocking. Pulling out on spring unlocks assembly.

Lock in closed position. Cannot be accidentally opened. A positive locking arrangement.

50 contact plug and socket with cap and alternate lock.

PLUG CAPS

These caps are furnished with liners, cable clamps and designed to take the alternate lock when required.

Caps are finished in black wrinkle and the cable clamps are of steel cadmium plated. Liners are of formed fibre. The cable entrance hole is in the top of the cap.

| Code No. | No. of Contacts Dn Connector | Hole Size | List Pr., Ea. |
|----------|------------------------------|----------------|---------------|
| 37C20 | 20 | 3/4" | \$4.20 |
| 37C30 | 30 | 1 1/8 x 1" | 4.25 |
| 37C40 | 40 | 1 3/8 x 1" | 4.30 |
| 37C50 | 50 | 1 3/8 x 1" | 4.35 |
| 37C60 | 60 | 1 3/8 x 1 1/2" | 4.40 |
| 37C70 | 70 | 1 3/8 x 1 1/2" | 4.45 |
| 37C80 | 80 | 1 3/8 x 1 1/2" | 4.50 |
| 37C90 | 90 | 1 3/8 x 1 1/2" | 4.55 |
| 37C100 | 100 | 1 3/8 x 1 1/2" | 4.60 |

The castings of the above plugs and sockets are of black Bakelite, type CFG. The contacts are of phosphor bronze, cadmium plated. (.0001)

If the alternate lock, shown at the right, is required it should be ordered as a separate item.

Electrical Rating

| | Volts ACRMS | DC |
|-------------------------------|--------------|------|
| Adjacent Terminals | 930 | 1300 |
| To Ground | 1400 | 2000 |
| Current Rating | 4.5 Amperes | |
| Contact Resistance | | |
| Current Rated At | 020 Ohms | |
| Insulation Resistance | 1000 Megohms | |
| Capacitance adjacent contacts | .75 MMF | |



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

"300" SERIES PLUGS AND SOCKETS

The "300" series is from the famous line of "Jones" plugs and sockets which have been a standard of the electrical / electronic industry for over a generation. Designed for medium duty applications, ratings are 730 Volts RMS, 10 amperes, with a contact resistance of .003 ohms maximum. Insulating material is made of molded bakelite. Plug-socket polarization is designed to prohibit engaging any mate other than one of an equal number of contacts.

Plugs and sockets are arranged for either cap or panel mounting. Phosphor bronze contacts are used, plug prongs being 1/32" wide by 1/4" thick. Metal caps and fibre linings are formed. Caps are finished in black crystal.

Small in size with good separation between contacts. Made in sizes of 2 to 33 contacts. All Plugs and Sockets are polarized so that Plugs of one size cannot fit into Sockets of another size. Body of Molded Bakelite. Phosphor bronze "knife-switch" type Socket contacts engage both sides of flat Plug contacts—double contact area. Plug prongs are 1/32" wide by 1/4" thick. Formed metal caps are finished in Black Crystal. Fibre linings for caps are also formed. Plugs and Sockets arranged for either cap or panel mounting. Two contact Plugs and Sockets are round as shown at the right, all others are rectangular. Illustrated are the P-302-CCT and S-302-AB. Standard 24 to 33 contact Plugs have a special long polarizing pin in approximate center position to assist in correct insertion and removal.

2 to 12 contacts now utilize **MONOBLOCK** construction! Illustrated at right are the two-contact P-302-CCT plug and S-302-AB socket. Plugs and sockets having from 3-12 contacts are as illustrated below. All plugs and sockets from 2-12 contacts now utilize one-piece "MONOBLOCK" construction but are interchangeable with the old two-piece type.

MONOBLOCK construction eliminates internal moisture traps. Furthermore, MONOBLOCK'S new patented* snap-in socket contacts permit external prewiring, removal and replacement of individual contacts if necessary. Contacts are "locked-in" to withstand wiring stress.

24 to 33 contacts. Plugs have special polarizing pin to facilitate correct positioning of mating plug and socket. See illustrations on adjacent page.

*U. S. patent nos. 2688123 and 2980881.



Plug with Angle Brackets



P-306-AB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-302-AB | 2 | \$.33 |
| P-303-AB | 3 | .41 |
| P-304-AB | 4 | .45 |
| P-306-AB | 6 | .56 |
| P-308-AB | 8 | .66 |
| P-310-AB | 10 | .75 |
| P-312-AB | 12 | .83 |

Socket with Angle Brackets



S-306-AB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-302-AB | 2 | \$.36 |
| S-303-AB | 3 | .43 |
| S-304-AB | 4 | .48 |
| S-306-AB | 6 | .60 |
| S-308-AB | 8 | .75 |
| S-310-AB | 10 | .89 |
| S-312-AB | 12 | 1.03 |

Plug with Deep Bracket



P-306-DB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-302-DB | 2 | \$.83 |
| P-303-DB | 3 | .90 |
| P-304-DB | 4 | .97 |
| P-306-DB | 6 | 1.05 |
| P-308-DB | 8 | 1.14 |
| P-312-DB | 12 | 1.33 |

Socket with Deep Bracket

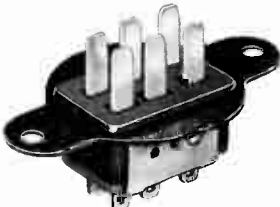


S-306-DB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-302-DB | 2 | \$.87 |
| S-303-DB | 3 | .93 |
| S-304-DB | 4 | .99 |
| S-306-DB | 6 | 1.11 |
| S-308-DB | 8 | 1.25 |
| S-312-DB | 12 | 1.54 |

The ten contact is not available in this series

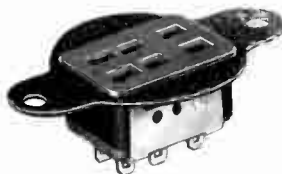
Plug with Flush Plate



P-306-FP

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-302-FP | 2 | \$.58 |
| P-303-FP | 3 | .63 |
| P-304-FP | 4 | .68 |
| P-306-FP | 6 | .77 |
| P-308-FP | 8 | .88 |
| P-310-FP | 10 | .97 |
| P-312-FP | 12 | 1.05 |

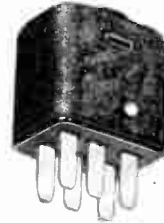
Socket with Flush Plate



S-306-FP

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-302-FP | 2 | \$.59 |
| S-303-FP | 3 | .66 |
| S-304-FP | 4 | .71 |
| S-306-FP | 6 | .81 |
| S-308-FP | 8 | .97 |
| S-310-FP | 10 | 1.11 |
| S-312-FP | 12 | 1.25 |

Plug, Flared Hole in Cap



P-306-FHT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-302-FHT | 2 | \$.56 |
| P-303-FHT | 3 | .61 |
| P-304-FHT | 4 | .68 |
| P-306-FHT | 6 | .77 |
| P-308-FHT | 8 | .88 |
| P-310-FHT | 10 | .99 |
| P-312-FHT | 12 | 1.12 |

Socket, Flared Hole in Cap



S-306-FHT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-302-FHT | 2 | \$.58 |
| S-303-FHT | 3 | .63 |
| S-304-FHT | 4 | .69 |
| S-306-FHT | 6 | .81 |
| S-308-FHT | 8 | .98 |
| S-310-FHT | 10 | 1.13 |
| S-312-FHT | 12 | 1.29 |

Plug with Recessed Plate



P-306-RP

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-302-RP | 2 | \$.67 |
| P-303-RP | 3 | .72 |
| P-304-RP | 4 | .79 |
| P-306-RP | 6 | .90 |
| P-308-RP | 8 | 1.04 |
| P-310-RP | 10 | 1.20 |
| P-312-RP | 12 | 1.32 |

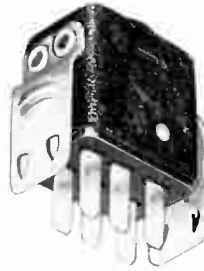
Socket with Recessed Plate



S-306-RP

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-302-RP | 2 | \$.69 |
| S-303-RP | 3 | .76 |
| S-304-RP | 4 | .81 |
| S-306-RP | 6 | .98 |
| S-308-RP | 8 | 1.14 |
| S-310-RP | 10 | 1.32 |
| S-312-RP | 12 | 1.50 |

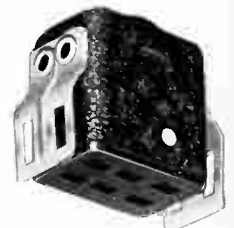
Plug, Flared Hole in Cap and with Latches



P-306-FHT-L

| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| P-302-FHT-L | 2 | \$.76 |
| P-303-FHT-L | 3 | .81 |
| P-304-FHT-L | 4 | .89 |
| P-306-FHT-L | 6 | .98 |
| P-308-FHT-L | 8 | 1.08 |
| P-310-FHT-L | 10 | 1.21 |
| P-312-FHT-L | 12 | 1.32 |

Socket, Flared Hole in Cap and with Keepers



S-306-FHT-K

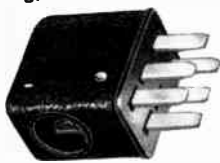
| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| S-302-FHT-K | 2 | \$.77 |
| S-303-FHT-K | 3 | .83 |
| S-304-FHT-K | 4 | .90 |
| S-306-FHT-K | 6 | 1.03 |
| S-308-FHT-K | 8 | 1.20 |
| S-310-FHT-K | 10 | 1.34 |
| S-312-FHT-K | 12 | 1.50 |



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

"300" SERIES PLUGS AND SOCKETS

Plug, Flared Hole in End



P-306-FHE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-306-FHE | 6 | \$.77 |
| P-308-FHE | 8 | .88 |
| P-310-FHE | 10 | .99 |
| P-312-FHE | 12 | 1.12 |

Socket, Flared Hole in End



S-306-FHE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-306-FHE | 6 | \$.81 |
| S-308-FHE | 8 | .98 |
| S-310-FHE | 10 | 1.13 |
| S-312-FHE | 12 | 1.29 |

Small size of caps of 302, 303 and 304 will not permit FHE type.

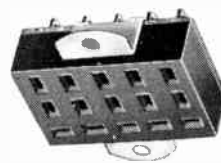
Plug with Angle Brackets



P-315-AB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-315-AB | 15 | \$1.10 |
| P-318-AB | 18 | 1.37 |
| P-321-AB | 21 | 1.72 |
| P-324-AB | 24 | 2.08 |
| P-327-AB | 27 | 2.45 |
| P-330-AB | 30 | 2.81 |
| P-333-AB | 33 | 3.16 |

Socket with Angle Brackets



S-315-AB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-315-AB | 15 | \$1.28 |
| S-318-AB | 18 | 1.55 |
| S-321-AB | 21 | 1.91 |
| S-324-AB | 24 | 2.27 |
| S-327-AB | 27 | 2.63 |
| S-330-AB | 30 | 3.01 |
| S-333-AB | 33 | 3.36 |

Plug, Cable Clamp in Cap



P-306-CCT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-302-CCT | 2 | \$.76 |
| P-303-CCT | 3 | .81 |
| P-304-CCT | 4 | .89 |
| P-306-CCT | 6 | .98 |
| P-308-CCT | 8 | 1.08 |
| P-310-CCT | 10 | 1.21 |
| P-312-CCT | 12 | 1.32 |

Socket, Cable Clamp in Cap



S-306-CCT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-302-CCT | 2 | \$.77 |
| S-303-CCT | 3 | .83 |
| S-304-CCT | 4 | .90 |
| S-306-CCT | 6 | 1.03 |
| S-308-CCT | 8 | 1.20 |
| S-310-CCT | 10 | 1.34 |
| S-312-CCT | 12 | 1.54 |

Plug with End Brackets



P-315-EB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-315-EB | 15 | \$1.10 |
| P-318-EB | 18 | 1.37 |
| P-321-EB | 21 | 1.72 |
| P-324-EB | 24 | 2.08 |
| P-327-EB | 27 | 2.45 |
| P-330-EB | 30 | 2.81 |
| P-333-EB | 33 | 3.16 |

Sockets with End Brackets



S-315-EB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-315-EB | 15 | \$1.28 |
| S-318-EB | 18 | 1.55 |
| S-321-EB | 21 | 1.91 |
| S-324-EB | 24 | 2.27 |
| S-327-EB | 27 | 2.63 |
| S-330-EB | 30 | 3.01 |
| S-333-EB | 33 | 3.36 |

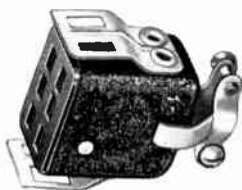
Plug, Cable Clamp in Cap and with Latches



P-306-CCT-L

| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| P-302-CCT-L | 2 | \$.97 |
| P-303-CCT-L | 3 | 1.02 |
| P-304-CCT-L | 4 | 1.10 |
| P-306-CCT-L | 6 | 1.20 |
| P-308-CCT-L | 8 | 1.28 |
| P-310-CCT-L | 10 | 1.40 |
| P-312-CCT-L | 12 | 1.55 |

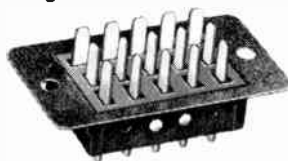
Socket, Cable Clamp in Cap and with Keepers



S-306-CCT-K

| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| S-302-CCT-K | 2 | \$.98 |
| S-303-CCT-K | 3 | 1.04 |
| S-304-CCT-K | 4 | 1.11 |
| S-306-CCT-K | 6 | 1.24 |
| S-308-CCT-K | 8 | 1.39 |
| S-310-CCT-K | 10 | 1.56 |
| S-312-CCT-K | 12 | 1.71 |

Plug with Shallow Brackets



P-315-SB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-315-SB | 15 | \$1.63 |
| P-318-SB | 18 | 2.01 |
| P-321-SB | 21 | 2.37 |
| P-324-SB | 24 | 2.81 |
| P-327-SB | 27 | 3.16 |
| P-330-SB | 30 | 3.62 |
| P-333-SB | 33 | 3.99 |

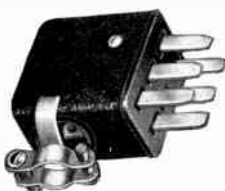
Sockets with Shallow Brackets



S-315-SB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-315-SB | 15 | \$1.83 |
| S-318-SB | 18 | 2.18 |
| S-321-SB | 21 | 2.55 |
| S-324-SB | 24 | 3.01 |
| S-327-SB | 27 | 3.36 |
| S-330-SB | 30 | 3.82 |
| S-333-SB | 33 | 4.18 |

Plug, Cable Clamp in End



P-306-CCE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-306-CCE | 6 | \$.98 |
| P-308-CCE | 8 | 1.08 |
| P-310-CCE | 10 | 1.21 |
| P-312-CCE | 12 | 1.32 |

Socket, Cable Clamp in End



S-306-CCE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-306-CCE | 6 | \$1.03 |
| S-308-CCE | 8 | 1.20 |
| S-310-CCE | 10 | 1.34 |
| S-312-CCE | 12 | 1.54 |

Plug with Deep Bracket



P-315-DB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| P-315-DB | 15 | \$1.63 |
| P-318-DB | 18 | 2.01 |
| P-321-DB | 21 | 2.37 |
| P-324-DB | 24 | 2.81 |
| P-327-DB | 27 | 3.16 |
| P-330-DB | 30 | 3.63 |
| P-333-DB | 33 | 3.99 |

Socket with Deep Bracket



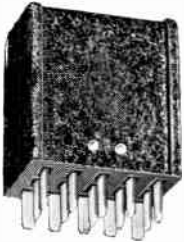
S-315-DB

| No. | Contacts | List Price Each |
|----------|----------|-----------------|
| S-315-DB | 15 | \$1.83 |
| S-318-DB | 18 | 2.18 |
| S-321-DB | 21 | 2.55 |
| S-324-DB | 24 | 3.01 |
| S-327-DB | 27 | 3.36 |
| S-330-DB | 30 | 3.82 |
| S-333-DB | 33 | 4.18 |



"300" SERIES PLUGS AND SOCKETS

Plug with Flared Hole in Top of Cap



P-315-FHT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-315-FHT | 15 | \$1.45 |
| P-318-FHT | 18 | 1.82 |
| P-321-FHT | 21 | 2.17 |
| P-324-FHT | 24 | 2.63 |
| P-327-FHT | 27 | 3.01 |
| P-330-FHT | 30 | 3.46 |
| P-333-FHT | 33 | 3.82 |

Socket with Flared Hole in Top of Cap



S-315-FHT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-315-FHT | 15 | \$1.63 |
| S-318-FHT | 18 | 2.01 |
| S-321-FHT | 21 | 2.37 |
| S-324-FHT | 24 | 2.83 |
| S-327-FHT | 27 | 3.18 |
| S-330-FHT | 30 | 3.64 |
| S-333-FHT | 33 | 4.00 |

Plug with Cable Clamp in Top of Cap



P-315-CCT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-315-CCT | 15 | \$1.72 |
| P-318-CCT | 18 | 2.08 |
| P-321-CCT | 21 | 2.45 |
| P-324-CCT | 24 | 2.89 |
| P-327-CCT | 27 | 3.28 |
| P-330-CCT | 30 | 3.82 |
| P-333-CCT | 33 | 4.09 |

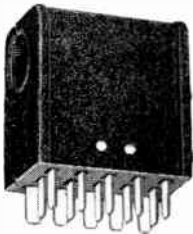
Socket with Cable Clamp in Top of Cap



S-315-CCT

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-315-CCT | 15 | \$1.51 |
| S-318-CCT | 18 | 2.27 |
| S-321-CCT | 21 | 2.63 |
| S-324-CCT | 24 | 3.10 |
| S-327-CCT | 27 | 3.46 |
| S-330-CCT | 30 | 4.00 |
| S-333-CCT | 33 | 4.28 |

Plug with Flared Hole in End of Cap



P-315-FHE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-315-FHE | 15 | \$1.45 |
| P-318-FHE | 18 | 1.82 |
| P-321-FHE | 21 | 2.17 |
| P-324-FHE | 24 | 2.63 |
| P-327-FHE | 27 | 3.01 |
| P-330-FHE | 30 | 3.46 |
| P-333-FHE | 33 | 3.82 |

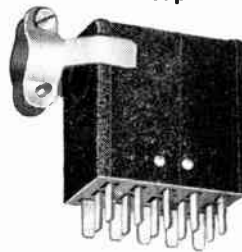
Socket with Flared Hole in End of Cap



S-315-FHE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-315-FHE | 15 | \$1.63 |
| S-318-FHE | 18 | 2.01 |
| S-321-FHE | 21 | 2.37 |
| S-324-FHE | 24 | 2.83 |
| S-327-FHE | 27 | 3.18 |
| S-330-FHE | 30 | 3.64 |
| S-333-FHE | 33 | 4.00 |

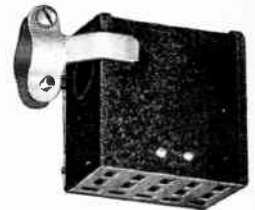
Plug with Cable Clamp in End of Cap



P-315-CCE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-315-CCE | 15 | \$1.72 |
| P-318-CCE | 18 | 2.08 |
| P-321-CCE | 21 | 2.45 |
| P-324-CCE | 24 | 2.89 |
| P-327-CCE | 27 | 3.28 |
| P-330-CCE | 30 | 3.82 |
| P-333-CCE | 33 | 4.09 |

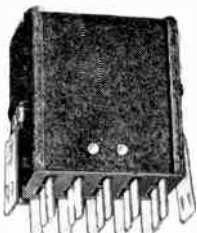
Socket with Cable Clamp in End of Cap



S-315-CCE

| No. | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-315-CCE | 15 | \$1.51 |
| S-318-CCE | 18 | 2.27 |
| S-321-CCE | 21 | 2.63 |
| S-324-CCE | 24 | 3.10 |
| S-327-CCE | 27 | 3.46 |
| S-330-CCE | 30 | 4.00 |
| S-333-CCE | 33 | 4.28 |

Plug with Flared Hole in Top of Cap with Latches



P-315-FHT-L

| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| P-315-FHT-L | 15 | \$1.63 |
| P-318-FHT-L | 18 | 2.01 |
| P-321-FHT-L | 21 | 2.37 |
| P-324-FHT-L | 24 | 2.83 |
| P-327-FHT-L | 27 | 3.18 |
| P-330-FHT-L | 30 | 3.64 |
| P-333-FHT-L | 33 | 4.00 |

Socket with Flared Hole in Top of Cap and with Keepers



S-315-FHT-K

| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| S-315-FHT-K | 15 | \$1.83 |
| S-318-FHT-K | 18 | 2.18 |
| S-321-FHT-K | 21 | 2.55 |
| S-324-FHT-K | 24 | 3.02 |
| S-327-FHT-K | 27 | 3.38 |
| S-330-FHT-K | 30 | 3.83 |
| S-333-FHT-K | 33 | 4.20 |

Plug with Cable Clamp in Top of Cap and with Latches



P-315-CCT-L

| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| P-315-CCT-L | 15 | \$1.91 |
| P-318-CCT-L | 18 | 2.27 |
| P-321-CCT-L | 21 | 2.63 |
| P-324-CCT-L | 24 | 3.10 |
| P-327-CCT-L | 27 | 3.46 |
| P-330-CCT-L | 30 | 4.00 |
| P-333-CCT-L | 33 | 4.28 |

Socket with Cable Clamp in Top of Cap and with Keepers



S-315-CCT-K

| No. | Contacts | List Price Each |
|-------------|----------|-----------------|
| S-315-CCT-K | 15 | \$2.10 |
| S-318-CCT-K | 18 | 2.46 |
| S-321-CCT-K | 21 | 2.83 |
| S-324-CCT-K | 24 | 3.29 |
| S-327-CCT-K | 27 | 3.64 |
| S-330-CCT-K | 30 | 3.83 |
| S-333-CCT-K | 33 | 4.45 |



"400" SERIES PLUGS AND SOCKETS

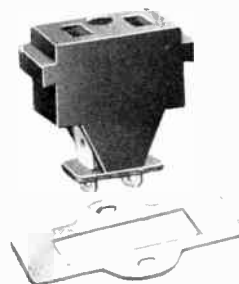
(Formerly "Heavy Duty")

GENERAL SPECIFICATIONS

Made in 2, 4, 6, 8, 10 and 12 contacts. All Plugs and Sockets are polarized. Body of molded Bakelite. Phosphor bronze "knife-switch" type Socket contacts engage both sides of flat Plug Contacts—double contact area. Plug prongs are $\frac{1}{4}$ " wide by $\frac{1}{16}$ " thick. Caps are finished in Black Crystal and equipped with fibre lining. Plugs and Sockets arranged for cap or panel mounting.

Note: Standard angle brackets cannot be attached to S-402-AB due to narrow block and insufficient material for screw threads. A special bracket is supplied (Type 46) See illustration. The Socket fits into this bracket which is attached to panel.

Check the No. 2400 Series Plugs and Sockets listed on pages F-42 and F-43 which are similar to the 400 Series except their design increases the creepage distances and therefore can take higher voltages.



S-402-AB (No. 46 Bracket)

PLUG — Less Angle Brackets

Drilled and Tapped Unless Otherwise Specified



P-406-LAB

| Code | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-402-LAB | 2 | \$.46 |
| P-404-LAB | 4 | .64 |
| P-406-LAB | 6 | .83 |
| P-408-LAB | 8 | 1.01 |
| P-410-LAB | 10 | 1.22 |
| P-412-LAB | 12 | 1.40 |

SOCKET — Less Angle Brackets

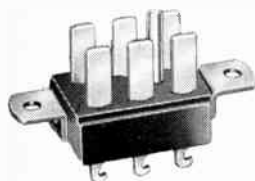
Drilled and Tapped Unless Otherwise Specified



S-406-LAB

| Code | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-402-LAB | 2 | \$.57 |
| S-404-LAB | 4 | .83 |
| S-406-LAB | 6 | 1.24 |
| S-408-LAB | 8 | 1.40 |
| S-410-LAB | 10 | 1.66 |
| S-412-LAB | 12 | 1.94 |

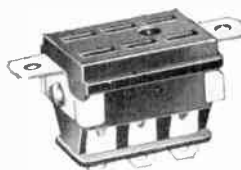
PLUG — With Angle Brackets



P-406-AB

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| P-402-AB | 2 | \$.83 |
| P-404-AB | 4 | 1.01 |
| P-406-AB | 6 | 1.22 |
| P-408-AB | 8 | 1.40 |
| P-410-AB | 10 | 1.59 |
| P-412-AB | 12 | 1.75 |

SOCKET — With Angle Brackets



S-406-AB

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| S-402-AB | 2 | \$.94 |
| S-404-AB | 4 | 1.22 |
| S-406-AB | 6 | 1.48 |
| S-408-AB | 8 | 1.75 |
| S-410-AB | 10 | 2.05 |
| S-412-AB | 12 | 2.31 |

PLUG — With Shallow Bracket for Flush Mounting



P-406-SB

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| P-402-SB | 2 | \$1.01 |
| P-404-SB | 4 | 1.59 |
| P-406-SB | 6 | 2.14 |
| P-408-SB | 8 | 1.86 |
| P-410-SB | 10 | 2.14 |
| P-412-SB | 12 | 2.42 |

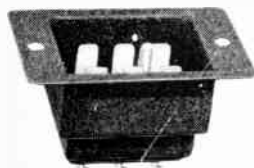
Socket — With Shallow Bracket for Flush Mounting



S-406-SB

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| S-402-SB | 2 | \$1.12 |
| S-404-SB | 4 | 1.48 |
| S-406-SB | 6 | 1.86 |
| S-408-SB | 8 | 2.22 |
| S-410-SB | 10 | 2.58 |
| S-412-SB | 12 | 2.95 |

PLUG — With Deep Brackets for Recessed Mounting



P-406-DB

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| P-402-DB | 2 | \$1.01 |
| P-404-DB | 4 | 1.30 |
| P-406-DB | 6 | 1.59 |
| P-408-DB | 8 | 1.86 |
| P-410-DB | 10 | 2.14 |
| P-412-DB | 12 | 2.42 |

SOCKET — With Deep Bracket for Recessed Mounting



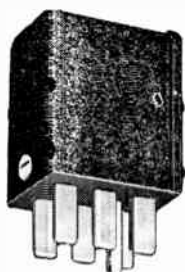
S-406-DB

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| S-402-DB | 2 | \$1.12 |
| S-404-DB | 4 | 1.48 |
| S-406-DB | 6 | 1.86 |
| S-408-DB | 8 | 2.22 |
| S-410-DB | 10 | 2.58 |
| S-412-DB | 12 | 2.95 |



"400" SERIES PLUGS AND SOCKETS

(Formerly "Heavy Duty")



P-406-FHT

PLUG — With Flared Hole in Top

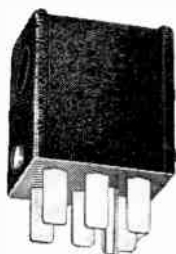
| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| P-402-FHT | 2 | \$.94 |
| P-404-FHT | 4 | 1.22 |
| P-406-FHT | 6 | 1.48 |
| P-408-FHT | 8 | 1.75 |
| P-410-FHT | 10 | 2.04 |
| P-412-FHT | 12 | 2.30 |



S-406-FHT

SOCKET — With Flared Hole in Top

| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| S-402-FHT | 2 | \$1.03 |
| S-404-FHT | 4 | 1.41 |
| S-406-FHT | 6 | 1.76 |
| S-408-FHT | 8 | 2.14 |
| S-410-FHT | 10 | 2.51 |
| S-412-FHT | 12 | 2.89 |



P-406-FHE

PLUG — With Flared Hole in End

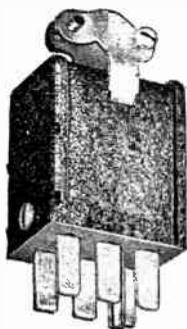
| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| P-402-FHE | 2 | \$.94 |
| P-404-FHE | 4 | 1.22 |
| P-406-FHE | 6 | 1.48 |
| P-408-FHE | 8 | 1.75 |
| P-410-FHE | 10 | 2.04 |
| P-412-FHE | 12 | 2.30 |



S-406-FHE

SOCKET — With Flared Hole in End

| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| S-402-FHE | 2 | \$1.03 |
| S-404-FHE | 4 | 1.41 |
| S-406-FHE | 6 | 1.76 |
| S-408-FHE | 8 | 2.14 |
| S-410-FHE | 10 | 2.51 |
| S-412-FHE | 12 | 2.89 |



P-406-CCT

PLUG — With Cable Clamp in Top

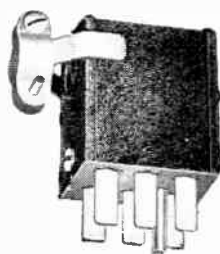
| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| P-402-CCT | 2 | \$1.30 |
| P-404-CCT | 4 | 1.59 |
| P-406-CCT | 6 | 1.86 |
| P-408-CCT | 8 | 2.12 |
| P-410-CCT | 10 | 2.39 |
| P-412-CCT | 12 | 2.67 |



S-406-CCT

SOCKET — With Cable Clamp in Top

| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| S-402-CCT | 2 | \$1.41 |
| S-404-CCT | 4 | 1.76 |
| S-406-CCT | 6 | 2.14 |
| S-408-CCT | 8 | 2.51 |
| S-410-CCT | 10 | 2.89 |
| S-412-CCT | 12 | 3.25 |



P-406-CCE

PLUG — With Cable Clamp in End

| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| P-402-CCE | 2 | \$1.30 |
| P-404-CCE | 4 | 1.59 |
| P-406-CCE | 6 | 1.86 |
| P-408-CCE | 8 | 2.12 |
| P-410-CCE | 10 | 2.39 |
| P-412-CCE | 12 | 2.67 |



S-406-CCE

SOCKET — With Cable Clamp in End

| Code No. | Contacts | List Price Each |
|-----------|----------|--------------------|
| S-402-CCE | 2 | \$1.41 |
| S-404-CCE | 4 | 1.76 |
| S-406-CCE | 6 | 2.14 |
| S-408-CCE | 8 | 2.51 |
| S-410-CCE | 10 | 2.89 |
| S-412-CCE | 12 | 3.25 |

"2400" SERIES PLUGS AND SOCKETS

The 2400 Series Plugs and Sockets are designed for highest electrical and mechanical efficiency, and although they carry the same rating as the 400 Series, they will actually handle considerably higher currents due to their improved construction.

An entirely new type of socket contact has been designed. Four individual flexing surfaces make positive contact over practically their entire length. Note in the illustration how they exert maximum pressure at every point. Also note unique method of anchoring terminals in the block—they cannot be moved up or down.

This design provides greater contact surface, increased pressure, with smoother action.

Socket contacts are of phosphor bronze, cadmium plated. Male contacts are of heavy brass 1/4" x 1/16", cadmium plated.



The contact to contact, and contact to ground distance has been considerably increased by mounting the contacts into recessed pockets with a Bakelite barrier surrounding and extending above. This method is used on both the top and bottom sides of both plugs and sockets, greatly increasing the leakage path.

The outside dimensions of corresponding plug and socket bodies are the same and can, therefore, be changed from brackets to caps, or vice versa.

Two styles of brackets are furnished "SB" (shallow bracket) for flush mounting and "DB" (deep bracket) for recessed mounting. Caps are furnished with flared hole in top or end, or with cable clamps in top or end. Unless otherwise specified, the following size cable entrance holes will be supplied:

| | | |
|------------|------------|------------|
| 2402—3/8" | 2406—3/16" | 2410—3/16" |
| 2404—3/16" | 2408—3/16" | 2412—3/8" |

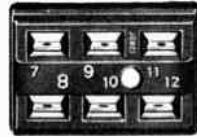
As noted above, the 2400 Series is furnished in 2, 4, 6, 8, 10, and 12 contacts. All plugs and sockets are polarized.

Plug and socket bodies are of molded bakelite. The fibre linings in the caps are the same for both plugs and sockets.

A shoulder extends around the face side of plug and socket presenting a finished appearance when mounted in bracket or cap.

On account of this shoulder extending around the entire face of the body blocks, angle brackets cannot be used with the 2400 Series Plugs or Sockets.

The entire 2400 Series is interchangeable with the 400 Series as 2400 Plugs fit corresponding 400 Sockets, and 400 Plugs fit corresponding 2400 Sockets.



Solder connecting side of Plug Body showing Recessed Pockets with Barriers around contacts. Plug contacts are also in Recessed Pockets on opposite side.

Solder connecting side of Socket Body showing Recessed Pockets with Barriers around contacts. Socket contacts are also in Recessed Pockets on opposite side.

PLUG—Less Mounting Bracket Drilled and Tapped Unless Otherwise Specified



| Code | Contacts | List Price Each |
|--------|----------|-----------------|
| P-2402 | 2 | \$.63 |
| P-2404 | 4 | .83 |
| P-2406 | 6 | 1.04 |
| P-2408 | 8 | 1.25 |
| P-2410 | 10 | 1.45 |
| P-2412 | 12 | 1.68 |

P-2406

SOCKET—Less Mounting Bracket Drilled and Tapped Unless Otherwise Specified



| Code | Contacts | List Price Each |
|--------|----------|-----------------|
| S-2402 | 2 | \$.72 |
| S-2404 | 4 | .95 |
| S-2406 | 6 | 1.15 |
| S-2408 | 8 | 1.39 |
| S-2410 | 10 | 1.60 |
| S-2412 | 12 | 1.83 |

S-2406

PLUG—With Shallow Bracket for Flush Mounting



| Code | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-2402-SB | 2 | \$1.12 |
| P-2404-SB | 4 | 1.32 |
| P-2406-SB | 6 | 1.54 |
| P-2408-SB | 8 | 1.74 |
| P-2410-SB | 10 | 1.99 |
| P-2412-SB | 12 | 2.18 |

P-2406-SB

SOCKET—With Shallow Bracket for Flush Mounting



| Code | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-2402-SB | 2 | \$1.23 |
| S-2404-SB | 4 | 1.44 |
| S-2406-SB | 6 | 1.67 |
| S-2408-SB | 8 | 1.90 |
| S-2410-SB | 10 | 2.14 |
| S-2412-SB | 12 | 2.37 |

S-2406-SB

PLUG—With Deep Bracket for Recessed Mounting



| Code | Contacts | List Price Each |
|-----------|----------|-----------------|
| P-2402-DB | 2 | \$1.23 |
| P-2404-DB | 4 | 1.42 |
| P-2406-DB | 6 | 1.62 |
| P-2408-DB | 8 | 1.84 |
| P-2410-DB | 10 | 2.06 |
| P-2412-DB | 12 | 2.29 |

P-2406-DB

SOCKET—With Deep Bracket for Recessed Mounting



| Code | Contacts | List Price Each |
|-----------|----------|-----------------|
| S-2402-DB | 2 | \$1.31 |
| S-2404-DB | 4 | 1.55 |
| S-2406-DB | 6 | 1.74 |
| S-2408-DB | 8 | 2.00 |
| S-2410-DB | 10 | 2.24 |
| S-2412-DB | 12 | 2.46 |

S-2406-DB

"2400" SERIES PLUGS AND SOCKETS



P-2406-FHT

PLUG—With Flared Hole in Top

| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| P-2402-FHT | 2 | \$1.23 |
| P-2404-FHT | 4 | 1.42 |
| P-2406-FHT | 6 | 1.62 |
| P-2408-FHT | 8 | 1.84 |
| P-2410-FHT | 10 | 2.06 |
| P-2412-FHT | 12 | 2.31 |



S-2406-FHT

SOCKET—With Flared Hole in Top

| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| S-2402-FHT | 2 | \$1.31 |
| S-2404-FHT | 4 | 1.55 |
| S-2406-FHT | 6 | 1.74 |
| S-2408-FHT | 8 | 2.00 |
| S-2410-FHT | 10 | 2.24 |
| S-2412-FHT | 12 | 2.46 |



P-2406-FHE

PLUG—With Flared Hole in End

| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| P-2402-FHE | 2 | \$1.23 |
| P-2404-FHE | 4 | 1.42 |
| P-2406-FHE | 6 | 1.62 |
| P-2408-FHE | 8 | 1.84 |
| P-2410-FHE | 10 | 2.06 |
| P-2412-FHE | 12 | 2.31 |



S-2406-FHE

SOCKET—With Flared Hole End

| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| S-2402-FHE | 2 | \$1.31 |
| S-2404-FHE | 4 | 1.55 |
| S-2406-FHE | 6 | 1.74 |
| S-2408-FHE | 8 | 2.00 |
| S-2410-FHE | 10 | 2.24 |
| S-2412-FHE | 12 | 2.46 |



P-2412-CCT

PLUG—With Cable Clamp in Top

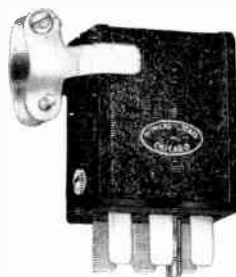
| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| P-2402-CCT | 2 | \$1.58 |
| P-2404-CCT | 4 | 1.79 |
| P-2406-CCT | 6 | 2.00 |
| P-2408-CCT | 8 | 2.19 |
| P-2410-CCT | 10 | 2.42 |
| P-2412-CCT | 12 | 2.67 |



S-2406-CCT

SOCKET—With Cable Clamp in Top

| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| S-2402-CCT | 2 | \$1.70 |
| S-2404-CCT | 4 | 1.90 |
| S-2406-CCT | 6 | 2.11 |
| S-2408-CCT | 8 | 2.35 |
| S-2410-CCT | 10 | 2.59 |
| S-2412-CCT | 12 | 2.83 |



P-2406-CCE

PLUG—With Cable Clamp in End

| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| P-2402-CCE | 2 | \$1.58 |
| P-2404-CCE | 4 | 1.79 |
| P-2406-CCE | 6 | 2.00 |
| P-2408-CCE | 8 | 2.19 |
| P-2410-CCE | 10 | 2.42 |
| P-2412-CCE | 12 | 2.67 |



S-2406-CCE

SOCKET—With Cable Clamp in End

| Code No. | Contacts | List Price Each |
|------------|----------|--------------------|
| S-2402-CCE | 2 | \$1.70 |
| S-2404-CCE | 4 | 1.90 |
| S-2406-CCE | 6 | 2.11 |
| S-2408-CCE | 8 | 2.35 |
| S-2410-CCE | 10 | 2.59 |
| S-2412-CCE | 12 | 2.83 |



"500" SERIES PLUGS AND SOCKETS

Designed for 3,000 volts and 25 amperes per contact. Circuit characteristics, however, may alter this rating one way or the other.

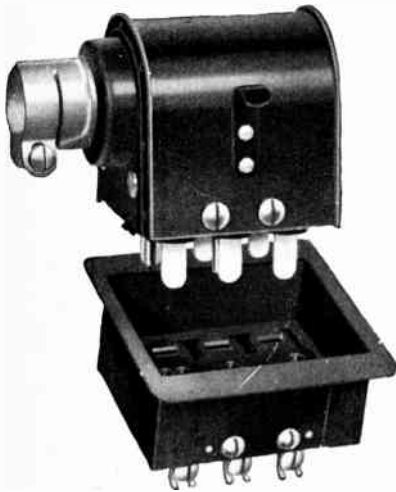
Long leakage path from terminal to terminal, and terminal to ground. Contacts are brass and phosphor bronze, silver plated. Metal parts of caps and brackets are steel, parkerized (rust-proofed). Plug and socket blocks are interchangeable in caps and brackets.

All sizes are polarized in a manner to prevent a smaller plug being inserted in a larger socket. Thus different sizes may be used on one installation without danger of making wrong connections.

Extreme care has been taken to make terminal connections under cap very accessible both for original wiring and subsequent inspection. The cap is insulated with canvas bakelite. Plug prong cross section $\frac{3}{16}$ " x $\frac{3}{32}$ ".

IMPORTANT: For safety with high voltages DEEP BRACKETS should always be used on one plug or socket, when the other plug or socket has a CAP. SHALLOW BRACKETS are for use only in connecting two units, each unit having plug or socket with SHALLOW BRACKET.

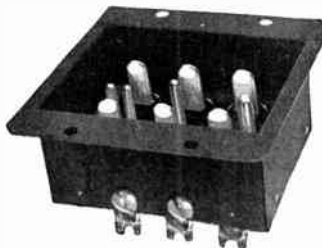
P-506-CE
(Plug with Cap)
(BX Clamp shown
but not furnished)



S-506-DB
(Socket with Deep Bracket)



S-506-CE
(Socket with Cap)



P-506-DB
(Plug with Deep Bracket)

Cable Entrance: Because of the great variation in type and size of cables, we have considered it best not to supply cable clamps of any kind. The cap end is made to accommodate standard BX clamps which may be obtained at any electrical jobbing house. The cap end will be furnished with round hole from $\frac{1}{2}$ " diameter and $\frac{1}{4}$ " diameter in steps of $\frac{1}{8}$ ", if the size required is given on order. If no size is given, plain cap end with center punch locating center will be shipped.

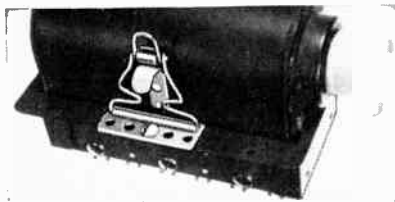


P-506-SB
(Plug with Shallow Bracket)



S-506-SB
(Socket with Shallow Bracket)

LOCKS FOR 500 SERIES PLUGS AND SOCKETS



No. 500-L Locks

Locks shown above are used in connection with any DEEP BRACKET and cap combination.

The locks securely hold the units together, but they can be released instantly.

The mounting plates are made to fit all DEEP BRACKETS, and are fastened by the same screws or rivets that hold the deep brackets to the panel. Can not be used on shallow brackets. Sold in pairs only.

PLUG With Cap

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| P-502-CE | 2 | \$ 4.21 |
| P-504-CE | 4 | 6.06 |
| P-506-CE | 6 | 7.91 |
| P-508-CE | 8 | 9.77 |
| P-510-CE | 10 | 11.62 |
| P-512-CE | 12 | 13.46 |

SOCKET With Cap

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| S-502-CE | 2 | \$ 4.21 |
| S-504-CE | 4 | 6.06 |
| S-506-CE | 6 | 7.91 |
| S-508-CE | 8 | 9.77 |
| S-510-CE | 10 | 11.62 |
| S-512-CE | 12 | 13.46 |

PLUG With Deep Bracket

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| P-502-DB | 2 | \$ 3.71 |
| P-504-DB | 4 | 5.31 |
| P-506-DB | 6 | 6.90 |
| P-508-DB | 8 | 8.51 |
| P-510-DB | 10 | 10.11 |
| P-512-DB | 12 | 11.72 |

SOCKET With Deep Bracket

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| S-502-DB | 2 | \$ 3.71 |
| S-504-DB | 4 | 5.31 |
| S-506-DB | 6 | 6.90 |
| S-508-DB | 8 | 8.51 |
| S-510-DB | 10 | 10.11 |
| S-512-DB | 12 | 11.72 |

PLUG With Shallow Bracket

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| P-502-SB | 2 | \$ 3.71 |
| P-504-SB | 4 | 5.31 |
| P-506-SB | 6 | 6.90 |
| P-508-SB | 8 | 8.51 |
| P-510-SB | 10 | 10.11 |
| P-512-SB | 12 | 11.72 |

SOCKET With Shallow Bracket

| Code | Contacts | List Price Each |
|----------|----------|-----------------|
| S-502-SB | 2 | \$ 3.71 |
| S-504-SB | 4 | 5.31 |
| S-506-SB | 6 | 6.90 |
| S-508-SB | 8 | 8.51 |
| S-510-SB | 10 | 10.11 |
| S-512-SB | 12 | 11.72 |



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

TELEVISION WALL PLATES

302 SERIES



The 302 series wall plates are made of steel with a heavy chrome plate and provide a convenient junction between antenna lead in and television set. They all fit a standard outlet box. Mounting screws furnished. S-302-WPC provides connection for antenna lead in. S-302-4WPC provides connections for antenna lead in and up to 8 contact rotor.

Jones P-302-FHT plug can be used for the antenna socket and a P-304-FHT or P-308-FHT for the rotor socket.

| | List Price Each | | |
|------------|-----------------|-----------|--|
| S-302-8WPC | S-302-4WPC | S-302-WPC | |
| \$2.99 | \$2.78 | \$2.30 | |

LOW LOSS POLYSTYRENE® PLATE

This plate covers every requirement for an up-to-date TV connector. Molded of Polystyrene, it assures perfect reception in fringe areas where low loss is of vital importance. One plate provides connections for UHF and VHF and has a knock out provision for the mounting of a standard S-308-AB socket in case a rotor is used. Fits a standard outlet box or can be attached to the wall. Mounting screws for both the plate and socket are furnished. Supplied in brown or Ivory.

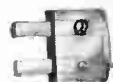
| Code | Color | List Price |
|------|-------|------------|
| WPI | Ivory | \$1.63 |
| WPB | Brown | 1.63 |

POLYSTYRENE® PLUG

The plug is molded of clear polystyrene® and matches the 300 Ohm transmission line assuring maximum performance.



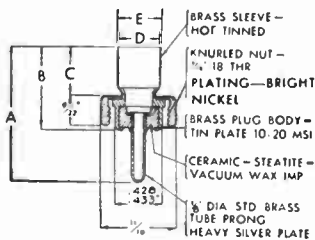
No. WPB



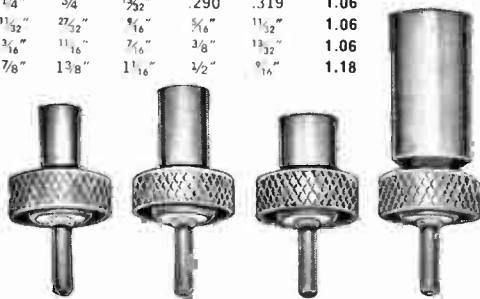
No. TVP-2
List Price Plug \$.37

SERIES 101 PLUGS

The entire No. 101 Series of Plugs are identical with the exception of the cable ferrule which is furnished in four sizes as listed below. All metal parts are of brass. These Plugs fit all of the No. 101 Series Sockets. A low loss Plug and Socket ideal for high frequency connections.



| | A | B | C | D | E | List Price Ea. |
|-------------|---------|---------|---------|-------|---------|----------------|
| P-101-1/4" | 1 1/4" | 3/4" | 1 5/32" | 1/4" | 5/32" | \$.87 |
| P-101-.290 | 1 1/4" | 3/4" | 1 5/32" | .290 | .319 | 1.06 |
| P-101-5/16" | 1 1/32" | 23/32" | 5/16" | 5/16" | 11/32" | 1.06 |
| P-101-3/8" | 1 3/16" | 1 1/16" | 7/16" | 3/8" | 1 1/32" | 1.06 |
| P-101-1/2" | 1 7/8" | 1 3/8" | 1 1/8" | 1/2" | 5/16" | 1.18 |



P-101-1/4" P-101-5/16" P-101-3/8" P-101-1/2"

SERIES 101 SOCKETS

The No. 101 Series Sockets are furnished in three types as shown below. Base is of Brass with Bright Nickel Plated finish. Brass contact is Silver Plated. Insulation of low loss natural color XXX Bakelite. Meets Navy Specifications. The S-101-D is similar to the S-101 except that the Bakelite is recessed in the base. S-101-D Mod. is the same as S-101-D except that two sides of the base are milled as shown. Mounting Holes No. 101—No. 41 drill on 1 1/16" centers. Mounting holes No. 101-D and 101-D Mod. No. 30 drill on 1 3/16" centers.



S-101 S-101-D S-101-D Mod

| List Price Each | List Price Each | List Price Each |
|-----------------|-----------------|-----------------|
| \$.77 | \$1.18 | \$1.18 |

(Above Illustrations are Actual Size)

SERIES 201



PLUGS

SOCKETS

The No. 201 Series Plugs are of the same design as the No. 101 but are of heavier stock and larger. Made in one size only with 3/8" ferrule. All metal parts are of Brass, same finish as No. 101 Series and Wax Impregnated Ceramic Insulation. Over-all length 1 1/16". Prong diameter 5/32". Fits only the 201 Socket.

The 201 Socket is similar to the S-101-D except larger. Brass base is Bright Nickel Plated. Brass contact is Silver Plated. Insulation is of low loss natural color XXX Bakelite.

Mountings holes—No. 30 drill on 1" centers.

| Code | List Price Ea. | Code | List Price Ea. |
|-----------|----------------|-------|----------------|
| P-201-3/8 | \$1.36 | S-201 | \$1.46 |

SERIES 202

PLUGS

SOCKETS

The 202 Series Plugs and Sockets are made in two contacts only. Metal parts are of Brass with Bright Nickel Plate. Insulation is of Molded Bakelite. Phosphor Bronze "Knife Switch" type Socket Contacts engage both sides of flat Plug Contacts—double contact area. Formed Fibre linings in caps. Polarized. Knurled nut has 3/4"-27 thread.

Socket Mounting Holes. No. 30 drill on 1" centers. The S-202-CCT-THR has been added to this series and when used with the P-202-CCT will make an ideal microphone connector.



P-202-CCT—\$1.08 (as shown above)

S-202-CCT—\$1.10 (Socket instead of Plug)

P-202-FHT—\$.87 (Same as above less Cable Clamps)

S-202-FHT—\$.89 (Same except Socket)

List Prices

S-202-B—\$1.28 (Socket for Base Mtg.)

P-202-B—\$1.23 (Same as above except with Plug)

S-202-CCT-THR—\$1.46 (as shown above)

Used with P-202-CCT as an extension connection

HOW To REDUCE Unnecessary Costs -- SAVE the difference...with

Fast... Reliable... E-Z-HOOK TEST CONNECTORS

— At New Lower Money-Saving Prices.—



U.S. PATENT NO. 2702892

Value Engineered for Maximum Efficiency, Performance, and Savings.

Here is your solution for the costly delays and aggravation caused by inefficient clips that slip and short out or jump off. These efficient "Positive Grip—No Slip" E-Z-HOOKs eliminate the distraction... convert the time now unnecessarily wasted in re-connecting or repairing any resulting damage into... pleasant, profitable, productive effort. One, of many, reasons why E-Z-HOOKs is the finest investment you can make in faster, safer, easier, more trouble-free Testing. Satisfactory Service Guaranteed.....

MINIATURE CLIP & TEST LEADS

• Make Impossible

Connections... Easy

Now enjoy famous E-Z-HOOK reliability and performance on your small, sub-miniature jobs, too. Easily make test connections never before possible. Tiny E-Z-HOOK with the new "Hypo Action" gives you the small size and positive control needed to make such tedious work easier, more efficient, pleasant and profitable. Use "Q" Bails two ways—1, as a versatile low voltage test connector, 2, as a tiny mechanical hand to handle small parts. Will save you hours of unnecessary delays and aggravation hooking small springs, stringing dial cords, holding remote wires and similar applications. Durably constructed of the finest materials—Red Nylon insulation, Stainless Steel spring, & Beryllium Copper conductor to assure reliable performance. Also available on 32" —Ready-to-Plug-In—Test Leads of flexible Red and Black striped, 24 AWG (19:36) thermoplastic wire—Standard or Banana Tip. Over all length 2 1/4". Maximum width of hook only .079". Wt. 1.6th oz.



HALF SIZE



FULL SIZE

| | | | |
|-----------|--|-----|-----|
| No. X-100 | E-Z-HOOK 'Q' Ball Mini-HOOK (No Lead) | ea. | .49 |
| No. AX-1 | E-Z-HOOK 'Q' Ball Test Lead (32"—Std. Tip) | ea. | .89 |
| No. BX-1 | E-Z-HOOK 'Q' Ball Test Lead (32"—Ban. Tip) | ea. | .94 |

SCOPE - METER PROBES

• Now—Special Probes assembled in minutes

Never before such efficiency and convenience in a replacement probe... SPECIAL TERMINALS speeds assembly, makes it easier... E-Z-HOOK for easy time-saving care-free connections... SCREW-ON COVER for ready access and repair... STRAIN-RELIEF prolongs life of single or shielded leads. For Professional or Production use. Finest streamlined feather-weight construction of rust proof Stainless, durable Zytel Nylon (slide), tough Tenite (body) in Red, Black, Blue, Green, Orange, & Silver. Lgth. 4 3/4", O.D. 15-32", Wt. 1-3 oz. Na. 54-1 E-Z-HOOK Custom PROBE ea. .89 Na. 54-2 E-Z-HOOK Custom PROBE (Gold Plated) ea. 1.09



Custom PROBE

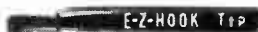


BUILT-IN TERMINAL For easy assembly

TEST PROD TIP ADAPTERS

• For testing as you like it
• Sharp point to an E-Z-HOOK in seconds

Handiest, most trouble-free adapter you can get. Convenient E-Z-HOOK Tip slips easily on, or off, — in seconds! Doubles regular test prod utility, 1, as a sharp point for probing, 2, as an extra hand when needed. Safer, too!... remote connections made easily while your hand stays out in the clear — safe from shock. A smart investment in trouble-free design. Exclusive spring chuck eliminates loose, wobbly fit on Prod... insures pleasant, irritation-free performance. Made of rust-proof Stainless Steel, Brass, and tough Zytel Nylon in Red, Black, Blue, Green, Orange, and Yellow. Lgth. 2 1/16", O.D. 19-64", Wt. 1-8 oz. Na. 51-1 E-Z-HOOK Tip (Tec—10-32 female thread) ea. .69 Na. 55-0 E-Z-HOOK Tip (Needle—.060") ea. .69 Na. 56-1 E-Z-HOOK Tip (Standard—.080") ea. .69 Na. 59-4 E-Z-HOOK Tip (Banana—Standard.) ea. .69



E-Z-HOOK Tip



SLIPS EASILY ON - OFF



Trouble Eliminator 4 springs insure firm grip

Time Saving—Carefree Connections

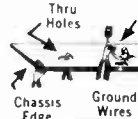
Easy As 1, 2, THREE!...

1. Place end against test point
2. Press forward lightly
3. Release



CONNECTS ANYWHERE!!

No connection problems with E-Z-HOOKs. Use any handy wire, hole, or edge... and, best of all, they stay connected.



CAN'T PULL OFF!!

E-Z-HOOKs clamp over, around — not on... the harder you pull, the tighter they hold.



POSITIVE TWO-FINGER CONTROL!!

Pressure action stabilizes end... gives you positive control in tight spots, even deep in the chassis.



ELIMINATES SHORTS!!

Enjoy worry-free checks. Small hook wire & tough nylon... gives two-fold, full time protection. 9 pin socket



TROUBLE-FREE DESIGN!!

Practical performance. Fits large, small, round or irregular... with no sharp edges or teeth to cut or mor.



HARNESS - BREAD - BOARD CLIPS

Save Up to 30% in Board Construction Time!

No need to waste valuable time drilling holes, placing screws, nuts, & washers. The "Nail" Clip drives into wood like a nail! Pulls out as easy. Make Eng. Changes in seconds. Use them to speed Processing—Save Construction & Production time.



Easy finger-tip operation speeds wire placing — makes it easier. Patented E-Z-HOOK holds firmly — won't cut nick or damage wire ends. L. 1 3/16". Made of tough Stainless Steel and Durable Nylon.

New "Perfa" Clips For Perforated Boards

E-Z-HOOK "Nail" Clips

Snap the "Perfa" Clips into place & enjoy the ease and efficiency in your bread-board experiments only E-Z-HOOKs provide: — Quick, easy finger-tip operation — No tools required to place or remove — No sharp edges to nick or cut. Same sturdy construction as "Nail" Clips, but designed for use in .093" holes.

| | | | |
|--------------|---|-------------|-------------|
| No. 81-1 | E-Z-HOOK "Nail" Clip (Use T-20 Tool) | 24¢ ea. | 10 for 1.98 |
| No. K8150T-1 | "Nail" Clip Kit (50 Clips, Tool & Instr.) | Wt. 2 oz. | ea. 8.95 |
| No. T-20 | E-Z-HOOK "Nail" Clip Driving Tool | Wt. 1-3 oz. | ea. .35 |
| No. 85-1 | E-Z-HOOK "Perfa" Clip (.093" holes) | 24¢ ea. | 10 for 1.98 |

JUMPER - GROUND - METER CLIPS

• Convert needless delays... to pleasant productive checks



Let carefree E-Z-HOOK Clips help speed your checks... make it easier. They quickly pay for themselves in savings.

Easy slip-on design saves in assembly and maintenance... safe solder connection and strain relief assures longer trouble-free lead life.

Made of tough Stainless, durable Nylon in colors for easy lead identification: Red, Black, Blue, Green, Orange, Yellow. Lgth. 2 1/8", OD 5-8", Wt. 1-13 oz.

| | | | |
|----------|-----------------------------|-----|-----|
| No. 61-1 | E-Z-HOOK Clip (Standard) | ea. | .39 |
| No. 61-2 | E-Z-HOOK Clip (Gold Plated) | ea. | .59 |

PARTS SUBSTITUTION CLIPS

• Eliminate Guessing



You can be sure! — when you substitute, and this E-Z-H Sub is just the thing to use... quick, easy, temporary connections in seconds... no lead twisting or solder tacking to damage parts or wiring. Speeds trouble-shooting, makes it easier... saves hours and dollars in valuable production time and material.



Solderless Clips Eliminate Broken Lugs

Long-lasting Zytel Nylon and tough Stainless Steel. In colors for easy lead identification: Red, Black, Blue, Green, Orange, and Yellow. Length 2 1/2", O.D. 19-64", Weight 1-12th oz.

| | | | |
|----------|--------------|-----|-----|
| No. 71-1 | E-Z-HOOK Sub | ea. | .49 |
|----------|--------------|-----|-----|

E-Z-HOOK TEST PRODUCTS

Covington, Ky.

In Canada:- Len Finkler, Ltd. Toronto 19, Ont.

HOW TO ORDER INFORMATION

To Order:- Order E-Z-HOOKs direct from Factory or get them from your convenient Parts Distributor.

Factory Delivery:- Usually shipped - via Parcel Post - within 10 days.

Terms:- Rated Firms -- 2% 10th E.D.M. - Net 30 Days. F.O.B. Covington, Ky.

Prices:- All Prices Net U.S.A., and Subject to Change Without Notice. All Patent Rights Reserved.

(In Canada order from Len Finkler Ltd., 2 Tycoos Dr., Toronto 19)

ELCO**SALES DIVISION**

OF ELCO CORPORATION

WILLOW GROVE, PA. • W. LOS ANGELES, CAL.

SEE YOUR NEAREST
AUTHORIZED ELCOneer
 FOR PRICES

ELCO VARICONS*

are considered by users to be the most reliable, versatile and production-oriented connector system ever introduced. They offer a unique, patented fork-like design with 4 coined mating surfaces; they provide various tail end terminations for any conventional or solderless wiring technique; they are available in the widest range of sizes and models.

VARICONS* also offer safe and positive cable retention and simplicity of installation via cable clamps. Other standard accessories such as covers, screw-actuation, etc., are also available.

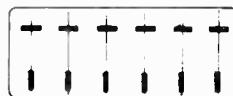
VARICONS* contacts are identical in male and female design; are always under pressure in use; cannot be over-stressed or over-strained. Excellent retention is maintained even after thousands of insertions and withdrawals; are free floating inside their housings; offer countless contact arrangements. In a word, their applications is as limitless as the ingenuity of the user.

GENERAL SPECIFICATIONS

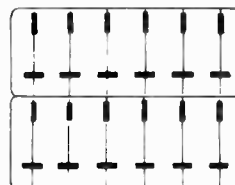
CONTACTS—Silver plated and cadmium plated. Cadmium plated hardware chromated for use in marine atmosphere.

COVERS—wrinkle finish, painted blue. Also available in other colors on special quantity orders. **CURRENT RATING**—20 amps, 115 volts, 30° temperature rise. **VOLTAGE RATING**—1500 volts at sea level; 750 volts 3.4 in/Hg; 1300 sea level. **CONTACT RESISTANCE**—.002 ohm.

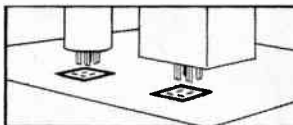
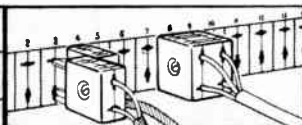
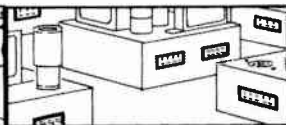
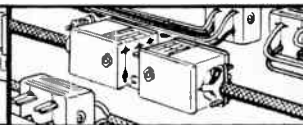
INSULATION RESISTANCE—25,000 meg. minimum, dry. PREFIX "M"—indicates male; PREFIX "F"—indicates Female; PREFIX "R"—indicates Ruggedized Ends, 12 contacts or over.



EXAMPLE OF
SINGLE TIER



EXAMPLE OF
DOUBLE TIER

PLUG-IN APPLICATIONS**PANEL APPLICATIONS****CHASSIS APPLICATIONS****CABLE APPLICATIONS****VARICON* CONNECTORS**

A



B



C



D



E



F

**SINGLE TIER
 WITH STANDARD BRACKETS
 (FIGS. A, B)**

Available in double tier for 20, 24, 28, 32 and 36 contacts. Male type (Fig. B) mates with female type (Fig. A) and Clamp Type (Fig. C); (also see other listings). Female unit also mates with Clamp Type (Fig. D).

| Elco No. | Contacts |
|-----------|----------|
| M10220-1 | 2 |
| F10220-1 | 2 |
| M10420-1 | 4 |
| F10420-1 | 4 |
| M10620-1 | 6 |
| F10620-1 | 6 |
| M10820-1 | 8 |
| F10820-1 | 8 |
| M11020-1 | 10 |
| F11020-1 | 10 |
| RM11220-1 | 12 |
| RF11220-1 | 12 |
| RM11420-1 | 14 |
| RF11420-1 | 14 |
| RM11620-1 | 16 |
| RF11620-1 | 16 |
| RM11820-1 | 18 |
| RF11820-1 | 18 |

**SINGLE TIER
 WITH COVERS AND CLAMPS
 (FIGS. C, D)**

Male unit (Fig. D) mates with female unit (Fig. C), plus standard bracket type (Fig. A) and recessed housing type (Fig. F). Female unit also mates with standard bracket type (Fig. B) and recessed housing type (Fig. E).

| Elco No. | Contacts |
|----------|----------|
| M10425 | 4 |
| F10425 | 4 |
| M10624 | 6 |
| F10624 | 6 |
| M10824 | 8 |
| F10824 | 8 |
| M11024 | 10 |
| F11024 | 10 |
| RM11224 | 12 |
| RF11224 | 12 |
| RM11424 | 14 |
| RF11424 | 14 |
| RM11624 | 16 |
| RF11624 | 16 |
| RM11824 | 18 |
| RF11824 | 18 |

**SINGLE TIER
 WITH RECESSED HOUSING
 (FIGS. E, F)**

Units available in double tier for 20, 24, 28, 32 and 36 contacts. Male unit (Fig. E) does not mate with female unit (Fig. F); mates with cover and Clamp Type (Fig. C) only. Female unit mates with cover and Clamp Type (Fig. D) only.

| Elco No. | Contacts |
|----------|----------|
| F10226 | 2 |
| F10226 | 2 |
| M10426 | 4 |
| F10426 | 4 |
| M10626 | 6 |
| F10626 | 6 |
| M10826 | 8 |
| F10826 | 8 |
| M11026 | 10 |
| F11026 | 10 |
| RM11226 | 12 |
| RF11226 | 12 |
| RM11426 | 14 |
| RF11426 | 14 |
| RM11626 | 16 |
| RF11626 | 16 |
| RM11826 | 18 |
| RF11826 | 18 |

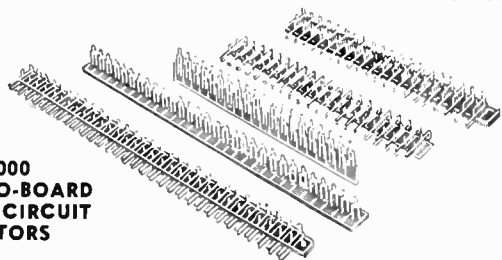
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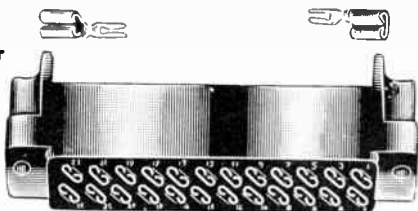
WILLOW GROVE, PA. • W. LOS ANGELES, CAL.

SEE YOUR NEAREST
AUTHORIZED **ELCO**neer
FOR PRICES**PRINTED CIRCUIT CONNECTORS****SERIES 5000
BOARD-TO-BOARD
PRINTED CIRCUIT
CONNECTORS**

Employ same "Varicon Reliability Principle" as conventional Varicons for like contact, four coined mating surfaces. Supplied in disposable plastic strips at .200" spacing. One to 60 contacts to a strip. Staking of the contacts to the printed circuit board is made in accordance with modern mass-production techniques with special staking tools. Tools are available from ELCO either unmounted, for application to customer die set, or completely mounted in ELCO die set, as desired. Staking of contacts to the printed circuit board, and thereby to the printed circuit line assures a solid, low resistance contact, rigidly held in place. Dip soldering the board automatically makes an additional connection between contact and board thus creating an unsurpassed reliability for the joint. Over 65 pounds are required to tear a contact from the board if staked and soldered, 50 pounds if staked only, and 25 pounds if only soldered. For small-size modules brackets can be supplied separately. It is recommended that larger modules be guided by integral parts of the equipment. Contacts: Phosphor bronze. Finish: Gold flash over nickel plate. Contact Resistance: .002 ohm max. Insertion and withdrawal. Force: 8 oz. per contact, average. Contact Life: Unchanged after 5000 insertions and withdrawals.

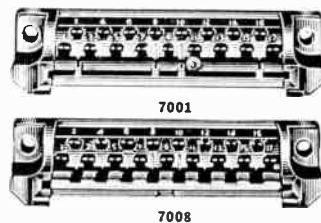
| Elco No. | Component No. | Description |
|--------------------------------|---------------|---------------------|
| CS-X ^o -A-.200 | 5101.0613 | 45° for 1/16" board |
| CS-X ^o -B-.200 | 5101.0623 | 45° for 3/32" board |
| CS-X ^o -C-.200-5201 | 5201.0213 | Standoff for 1/16" |
| CS-X ^o -D-.200-5201 | 5201.0223 | Stand-off for 3/32" |
| CS-X ^o -G-200 | 7001.0413 | Lower board 1/16" |
| CS-X ^o -H-.200 | 7001.1513 | Lower board 1/16" |
| CS-X ^o -I-.200 | 7001.0423 | Lower board 3/32" |
| CS-X ^o -J-.200 | 7001.1523 | Lower board 3/32" |
| CS-X ^o -K-.200 | 7001.0513 | Upper board 1/16" |
| CS-X ^o -L-.200 | 7001.0523 | Upper board 3/32" |
| CS-X ^o -Q-.200 | 5001.1913 | 1/16" board |
| CS-X ^o -R-.200 | 5001.1923 | 3/32" board |

*Place number of contacts required in place of X, e.g., strip of 30 contacts of 5101.0613 contact, CS-30-A-.200. **W/o wire hole.

**SERIES 7009
VARITWIN-PIN⁺
PRINTED CIRCUIT
CONNECTORS**

Female Connector Body: Constructed of one-piece molding. Insulator material is Diallyl Phthalate per MIL-M-18794-SDG. Guides integrally molded with the connector body insure perfect mating of the printed circuit module card with the connector. Mounting of connector accomplished by two .128" diameter mounting holes, one at either end of the connector. Width of connector is .580"; permits mounting of adjacent connectors on .600" centers. Contact configuration: Two rows of contacts on .200" spacing, with .125" between rows; one row offset .100" from the other, allowing .100" spacing of contacts on the module card. Varitwin-Pin Contacts have bifurcated terminations and each will accept two Series 53 taper pins. Terminal end of the contact with its dual positions, lies on a 53° angle with respect to the connector axis, and is recessed 95% into the connector body. Module card is 1/16" thick. Polarization accomplished simply by insertion of a polyethylene polarization tab; no loss of contact position is incurred. Male Connector: Printed Circuit module card is punched or drilled and ELCO contacts staked and soldered in, forming the male part of the connector. Hole pattern for the ELCO printed circuit contact lies on a .100" grid, and should be held to plus or minus .003" tolerance, non-accumulative, for hole location. Hole diameter is .052", .000", -.004". Current Rating: 10 amps. Contact Resistance (at rated current): 0.003 ohm, max. Contact Material and Plating: Phosphor bronze (per QQ-P-330 Grade "A"), nickel plate (0.0002"), gold flash (0.000010" to 0.000015"). Military Specification: MIL-E-19600A (WEP).

| FEMALE (VARI-TWIN PIN) | | MALE-ON STRIPS (WIRE HOLE) | |
|--------------------------|----------|----------------------------|----------|
| Elco No. 7009 | Contacts | Elco No. 7009 | Contacts |
| 7009-24-5-1-22 | 24 | 7009-CS-24-GK | 24 |
| 7009-34-5-1-22 | 34 | 7009-CS-34-GK | 34 |
| 7009-40-5-1-22 | 40 | 7009-CS-40-GK | 40 |
| 5006.3414 Polarizing Tab | | | |

**SERIES 7001
AND 7008
CONNECTORS**

Subminiature Printed Circuit Varicon Connector with contacts arranged in two tiers. Lower tier has one contact more than upper tier. Contacts are located on .100" centers. Male member of connector consists of contacts supplied on plastic strips. Contacts are then placed into pre-punched or drilled holes in module board and stake directly into P-C card. Plastic is then removed with ELCO Heat Platen. Female portion of connector is a Diallyl-Phthalate insulator housing the contacts with which the module board is mated. Connector is designed for 1/16" thick P-C board with molded guides for properly mating the contacts. Sizes available for 17, 23, 29, 35, 41 and 47 contact units. 7001 and 7008 Series connectors differ in two basic respects: (1) The module card of the 7008 is .100" wider (.050" on each side) and .050" longer (added to the connector end of the card). (2) Polarization: On the 7001 Series, a tabular metal pin is used for polarization at odd contact numbers, i.e., 3, 5, 7, etc. Use of the first and last positions for polarization is not recommended. Pins are factory assembled. On the 7008 series, a polyethylene insert is inserted into the card slot at even contact numbers, i.e., 2, 4, 6, etc. These can be factory assembled, or furnished loose for your own inserting. Current Rating: 7 amps. Contact Resistance: .005 ohm, max. Contact Material: Phosphor bronze, nickel plated and gold flashed. Military Specification: MIL-E-19600A (WEP) para 3.5.5.

| Type 7001 | Contacts | Type 7001 | Contacts |
|-----------------|----------|-----------------|----------|
| 7001-17-5-1-1° | 17(a) | 7001-35-5-1-1° | 35(a) |
| 7001-17-5-1-11 | 17(b) | 7001-35-5-1-11° | 35(b) |
| 7001-A-17-1 | 17(c) | 7001-A-35-1 | 35(c) |
| 7001-23-5-1-1° | 23(a) | 7001-41-5-1-1° | 41(a) |
| 7001-23-5-1-11° | 23(b) | 7001-41-5-1-11° | 41(b) |
| 7001-A-23-1 | 23(c) | 7001-A-41-1 | 41(c) |
| 7001-29-5-1-1° | 29(a) | 7001-47-5-1-1° | 47(a) |
| 7001-29-5-1-11° | 29(b) | 7001-47-5-1-11° | 47(b) |
| 7001-A-29-1 | 29(c) | 7001-A-47-1 | 47(c) |

To obtain 7008 Series Connector, substitute 7008 in place of 7001, e.g., 7008-17-5-1-11. Contact type termination: (a) .078" base taper tab (b) .098" base taper tab w/wire hole. (c) Module board contacts.

**SERIES 7015
FEMALE
CONNECTOR**

Similar to ELCO Series 7008, except contacts are new Varilok crimp-type, self-locking design, No. 8017.0313. Available in 17, 23, 29, 35, 41 contact models for 1/16" module boards, with board guides. Polarizing tab may be located on same center line as contacts having even numbers, 2, 4, 6, etc.

| Mfr's Type | Contacts |
|--------------------------|----------|
| 7015-17-5-1-27 | 17 |
| 7015-23-5-1-27 | 23 |
| 7015-29-5-1-27 | 29 |
| 7015-35-5-1-27 | 35 |
| 7015-41-5-1-27 | 41 |
| 5006.3414 Polarizing Tab | |
| 8017.0313 Varilok | |

Varilok contacts must be ordered separately.
See 8017 Rack and Panel Connectors for Tools.

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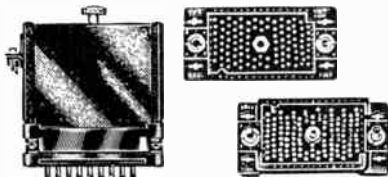
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SEE YOUR NEAREST
 AUTHORIZED **ELCO**ner
 FOR PRICES

CONNECTORS, COMPONENTS AND ENCLOSURES**8017 RACK AND PANEL OR CABLE CONNECTORS WITH VARILOK* CRIMP TYPE CONTACTS**

Series 8017, featuring the industry's most versatile and reliable contact—the Varikon, is applied in a connector providing the highest contact density (75, 100 & 130 contacts available). This connector is available with the new ELCO Varilok, a crimp type self-locking contact. Can accommodate all sizes of wire from 18 gauge to 30 gauge. Varilok contacts must be ordered separately. Varilok hand crimping tool (T1728-1) and extraction tool (T1810) also available. Above connector has actuating screw device for positive lock against vibration plus easiest engagement and disengagement. Actuating shaft insulated with rubber sleeve. Contacts and contact rows are at .150" spacing. Contacts are phosphor bronze, nickel plated, gold flashed. Contacts in use are always under pressure and cannot be overstressed or overstrained. Excellent retention maintained, even after several thousand insertions and withdrawals. Insulators are glass-filled, diallyl phthalate. Covers are steel, baked black wrinkle finish with side cable clamp entrance. Unit has 36 variations. Contacts are identical by letters (four columns) and numbers (four polarization positions with a theoretical possibility of over 100 polarizing rows) at front and in recessed figures at rear of connector. MS—Male with actuating screw. F—Female. CS—Cover with side cable clamp outlet. Current Rating: 5 amps. Contact Resistance: .005 ohm, max.

| Elco Type | No. of Contacts | Contact Type Termination | Elco Type | No. of Contacts | Contact Type Termination |
|-----------------|-----------------|--------------------------|-----------------|-----------------|--------------------------|
| MS8017-75-6-CS | 75 | Wire Hole | F8017-100-6 | 100 | Wire Hole |
| MS8017-75-1-CS | 75 | Varilok | F8017-100-1 | 100 | Varilok |
| F8017-75-6 | 75 | Wire Hole | MS8017-130-6-CS | 130 | Wire Hole |
| F8017-75-1 | 75 | Varilok | MS8017-130-1-CS | 130 | Varilok |
| MS8017-100-6-CS | 100 | Wire Hole | F8017-130-6 | 130 | Wire Hole |
| MS8017-100-1-CS | 100 | Varilok | F8017-130-1 | 130 | Varilok |

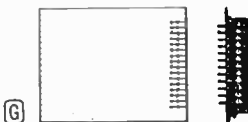
*Patent Pending. Varilok contact must be ordered separately.
 ELCO No. 8017.0313NPGF Varilok Contact Loose
 ELCO No. T1810 Extraction Tool
 ELCO No. T1728-1 Hand Crimping Tool
 ELCO No. T1742 Insertion Tool

SERIES 9011, 9012 GUIDE STRIPS

Guide strips are ideal time and labor savers designed for use in printed circuit packaging. Reduce engineering and production costs. Printed circuit modules are guided smoothly and accurately when insertion is made into the unit. Guide strips are for 1/16" boards, at .750" spacing, and are made of glass filled Diallyl Phthalate. Series 9011 guide strips are assembled as "building blocks." Sectional arrangement allow the designer to include as many strips as the equipment may require, in increments of seven guide locations. Series 9012 guide strips are wider and longer than series 9011, and can be utilized in a similar fashion.

| Elco No. | Description |
|------------|-------------------------|
| *9011.3011 | Right Guide—2" high |
| 9011.3021 | Center Guide—2" high |
| *9011.3031 | Left Guide—2" high |
| 9012.3029 | Right Guide—3 3/4" high |
| 9012.3019 | Left Guide—3 3/4" high |

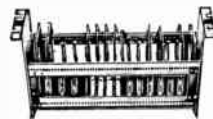
*Right hand and left hand guide may be substituted for each other.

ELCO-VECTOR PLUGBORD AND RECEPTACLES

Ideal for printed circuit prototypes, plug-in test circuits and computer cards. Saves time and money. Permits circuit changes with simple hand tools. Several boards may be used in conjunction with each other by wiring connections between receptacles. BOARD MATERIAL: Epoxy paper 1/16" thick; suffix WE (example: 837WE) indicates Epoxy glass board. Pattern "G", 0.062 holes on alternate 0.1" grid.

CONTACTS—ELCO Varikon Contacts, phosphor bronze, .0002 nickel plated and gold flashed on both board and receptacle.

RECEPTACLE—One piece glass filled Diallyl Phthalate insulator with .078 base taper tab termination. Models R612-1 and R616-1 supplied without P. C. Board Guides, Model R635 with Guides. USE: Graph paper 10 squares per inch, may be used for initial circuit layout. Push-in terminals are then positioned on board as designed in layout. Contacts are soldered to staked eyelets on bottom edge for terminations. Bare wire may be used for inter-component connections.

VARIPAK* II PC CARD ENCLOSURE

Universal-type printed circuit card enclosure. Aluminum rack holds boards and connectors in alignment for compact, efficient staking of circuitry. Enclosure fits any standard relay rack or cabinet. Ideal for development work where quick, easy modifications of circuitry is required. New circuit boards can be filed away for future use. Enclosure provides handy building block for fast assembly of special circuits, decreasing wiring time to a minimum. Unit offers wide applications in both laboratory and plant. Varipak is perfect unit for testing prototypes of original circuitry. Use 4.50" wide printed circuit card with units listed below. Height of unit is 5.218" and adjustable 1" either way. Polycarbonate guides are available to accept different thicknesses of printed circuit cards. (See polycarbonate guide listings and guide plates.) Unit measures 19" long with standard mounting slots pre-cut.

| ELCO No. | Style | Dimensions*, Inches | |
|-----------|-------|---------------------|-------|
| | | 1 | 2 |
| 9016-2-P | A | 4.00 | 5.50 |
| 9016-6-P | B | 5.50 | 8.50 |
| 9016-10-P | C | 7.00 | 8.50 |
| 9016-14-P | D | 8.00 | 11.00 |

*1 Depth of guide plate; 2 Depth of Mounting Hanger.
 Above units have "blank" connector panels; if 3/4" blank mounting straps are required, change "P" to "S", e.g., 9016-6-S.

POLYCARBONATE GUIDES FOR VARIPAK II

Printed circuit cards slide into slots on guide, are firmly held in rack. Guides are polycarbonate and designed to snap in place in any of the 82 positions, provided in the guide slots. Choice of three thicknesses to accommodate boards of different sizes. All guides are supplied with snap rivets.

| Size, In.* | Style Type* | | | | Size, In. |
|------------|-------------|------|------|------|-----------|
| | A | B | C | D | |
| 1/16 | 1201 | 1204 | 1207 | 1210 | 1/16 |
| 3/32 | 1202 | 1205 | 1208 | 1211 | 3/32 |
| 1/8 | 1203 | 1206 | 1209 | 1212 | 1/8 |

*Order guides in accordance with the style of your Varipak.

COMPONENTS FOR VARIPAK II

FRONT PANEL—Provides finished appearance to the Varipak and offers instrument panel to which gauges and instruments may be mounted.
 ELCO No. 9016-2201

MARKER STRIP—Make of flexible white-poly-vinyl chloride, 16 3/4" long. Marker strip is inserted in the top of guide plate and used for indicating location of guides and/or printed circuit cards.
 ELCO No. 9016-2402

HAND STAKER

Offers laboratory and prototype staking of ELCO printed circuit Varikon contacts. Accommodates staking of most types of contacts presently available on model shop or laboratory basis. Punches for microcon and miniature printed circuit contacts. Rating: 1/4 ton. Ram Dimensions: 1/2" x 1/2" x 2 1/2". Ram Stroke: 13/16". Height of Opening: 1 1/4". Throat Depth from Center of Ram: 1". Working Surface: 2" x 2 3/8".
 ELCO No. HS-1

HEATING PLATEN

Designed for removal of plastic strips from Varikon Printed Circuit Contacts. ELCO Varikon printed circuit contacts are supplied on plastic strips to facilitate handling and staking to printed circuit cards. Heating Platen T-1751 is designed for easy removal of the plastic strips after contact staking and soldering operations are completed. Platen is 10" long.
 ELCO No. T-1751

PLUGBORD FIG. G

| ELCO/Vector No. | Contacts | Size, In. Width x Lgth. |
|-----------------|----------|-------------------------|
| 812 | 16 | 4 1/2 x 6 1/2 |
| 812WE | 16 | 4 1/2 x 6 1/2 |
| 837 | 12 | 3 x 4 1/2 |
| 837WE | 12 | 3 x 4 1/2 |
| 848WE | 35 | 4 1/2 x 6 1/2 |

RECEPTACLES

| ELCO/Vector No. | Contacts | ELCO No. |
|-----------------|----------|---------------|
| R612-1 | 12 | 5009-12-5-2-1 |
| R616-1 | 16 | 5009-16-5-2-1 |
| R635 | 35 | 7008-35-5-1-1 |

ACCESSORY HARDWARE

| ELCO No. | Description |
|----------|-------------|
| T28 | Terminals |
| 15.22 | Eyelets |
| P.91 | Pusher Tool |

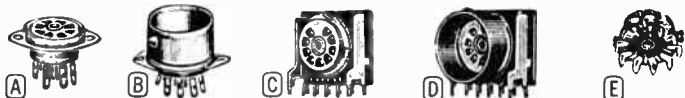
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*T.M. ELCO CORPORATION



SOCKETS



14-PIN MILITARY RELAY SOCKET TS1405P01

Flat saddle type, top mounting .125" mounting hole. Phosphor bronze silver plated tin-dipped. ELCO No. 423PHSPDT—Net Each, Lots of 1-499, .33; 500-1499, .21; 1500-4999, .18.

MIL SOCKETS (FIGS. A & B)

All 7-pin, 9-pin, and octal sockets available per MIL-S-12883-A Specifications. All base shield sockets fit "J" slot shields. Contacts are phosphor bronze, silver plated, tin dipped. BOT—Bottom mounted saddle. TOP—Top mounted saddles.

MILITARY SOCKETS PER MIL-S-12883-A

PHSPDT=Phosphor Bronze, Silver Plated, Tin Dipped CER=Ceramic BR=Brass, Cad. Plated

7-PIN BASE SHIELD TYPE

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS102C01 | 238PHSPDT | PHSPDT | Cer | Yes | 227.20 | 143.45 | 126.25 |
| TS102P01 | 235PHSPDT | PHSPDT | Mica | Yes | 157.41 | 99.40 | 87.45 |

7-PIN SADDLE—TOP MOUNTED

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS102C02 | 982PHSPDT | PHSPDT | Cer | Yes | 214.45 | 135.40 | 119.15 |
| TS102P02 | 983PHSPDT | PHSPDT | Mica | Yes | 138.10 | 87.20 | 76.75 |

7-PIN SADDLE—BOTTOM MOUNTED W/GROUND LUGS

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS102C03 | 986PHSPDT | PHRPTD | Cer | Yes | 214.45 | 135.40 | 119.15 |
| TS102P03 | 987PHSPDT | PHSPDT | Mica | Yes | 138.10 | 87.20 | 76.75 |

9-PIN BASE SHIELD TYPE

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS103C01 | 176PHSPDT | PHSPDT | Cer | Yes | 253.35 | 159.95 | 140.75 |
| TS103P01 | 169PHSPDT | PHSPDT | Mica | Yes | 177.21 | 111.88 | 98.45 |

9-PIN SADDLE TOP MOUNTED

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS103C02 | 984PHSPDT | PHSPDT | Cer | Yes | 245.35 | 154.90 | 136.30 |
| TS103P02 | 985PHSPDT | PHSPDT | Mica | Yes | 150.10 | 94.75 | 83.40 |

9-PIN SADDLE—BOTTOM MOUNTED W/GROUND LUGS

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS103C03 | 988PHSPDT | PHSPDT | Cer | Yes | 245.35 | 154.90 | 136.30 |
| TS103P03 | 989PHSPDT | PHSPDT | Mica | Yes | 150.10 | 94.75 | 83.40 |

OCTAL SOCKETS BOTTOM MOUNTED W/GROUND LUGS

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS101C01 | 338PHSPDT | PHSPDT | Cer | No | 389.75 | 246.05 | 216.55 |
| TS101P01 | 335PHSPDT | PHSPDT | Mica | No | 274.25 | 173.15 | 152.35 |

OCTAL SOCKETS BOTTOM MOUNTED W/GROUND LUGS AND TAPPED BUSHINGS

| Military No. | Model No. | Contact Material | Insulator Material | Center Shield | 1-499 | 500-1499 | 1500-4999 |
|--------------|-----------|------------------|--------------------|---------------|--------|----------|-----------|
| TS101C02 | 337PHSPDT | PHSPDT | Cer | No | 454.40 | 286.90 | 252.45 |
| TS101P02 | 336PHSPDT | PHSPDT | Mica | No | 347.70 | 219.50 | 193.15 |

AN ELCO EXCLUSIVE! E-Z MATE SOCKETS

ELCO'S E-Z Mate Socket design saves time, tubes, tempers via an ingenious positioning key at top of socket which permits tube to "find" insertion point almost automatically. Hence, tubes may be inserted in "blind" or formerly inaccessible locations. All 7- and 9-pin base-shield and saddle type sockets (except ceramic) will be delivered in E-Z mate design AT NO EXTRA COST when available. If E-Z Mate specifically desired, add notation when ordering. Conforms to MIL 12883-A.

NEW LOWERED SOCKET PRICES

ELCO Sockets are now available at prices considerably less than before—with absolutely no lowering of our famous quality standards. These lowered prices are made possible by our new, larger manufacturing plants and the resultant production economies. We are happy to pass these dollar savings on to you.

RIGHT-ANGLE PRINTED CIRCUIT CONTINUOUS-CONTACT SOCKETS (FIG. C & D)

Units listed are for 1/16" glass filled epoxy boards. Types listed have mica insulation. Beryllium copper contacts standard.

| ELCO No. | Description | Net Ea., Lots of— | | |
|----------------|-----------------------------|-------------------|---------|---------|
| | | 1-99 | 100-499 | 500-999 |
| 4006-3-EG-1/16 | 7-Pin Mica, w/o shield base | 1.96 | 1.22 | 1.04 |
| 4007-3-EG-1/16 | 7-Pin Mica, w/shield base | 2.52 | 1.57 | 1.34 |
| 4008-3-EG-1/16 | 9-pin Mica, w/o shield base | 2.00 | 1.25 | 1.07 |
| 4009-3-EG-1/16 | 9-Pin Mica, w/shield base | 1.83 | 1.69 | 1.45 |



JAN SHIELD

Jan shield for 7- and 9-pin sockets per JAN-S-28A. All shields have "J" slot design to fit over eight military base shield type sockets. Brass, nickel plated. Shipping weight, 1 oz.

| ELCO No. | MIL No. | Ht., In. | Per 1000 | | |
|----------|----------|----------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 121* | TS102U01 | 1 3/8 | 116.80 | 76.70 | 61.95 |
| 120* | TS102U02 | 1 3/8 | 122.75 | 80.60 | 65.10 |
| 149* | TS102U03 | 2 1/4 | 142.25 | 93.60 | 75.60 |
| 193** | TS103U01 | 1 1/2 | 134.65 | 88.40 | 71.40 |
| 191** | TS103U02 | 1 1/2 | 140.60 | 92.30 | 74.55 |
| 195** | TS103U03 | 2 3/8 | 168.30 | 110.50 | 89.25 |

STAND-OFF E-Z MATE P-C SOCKETS (FIG. E)

Stand-off E-Z Mate type mica sockets for surface mounting on P-C cards. The 7- and 9-pin miniature sockets are available with knob-like appendages. Phosphor bronze lead plated contact.

| ELCO No. | Pin | Per 1000 | | |
|----------|-----|----------|----------|-----------|
| | | 1-499 | 500-1499 | 1500-4999 |
| 3708-2-2 | 7 | 187.70 | 118.50 | 104.28 |
| 3908-2-2 | 9 | 203.64 | 128.56 | 113.14 |

SERIES 3300 SUBMINIATURE TRANSISTOR SOCKETS



Multi-purpose for use with 3- or 4-pin inline, 3-pin circular, or 4-pin circular transistors. Low-loss mica-filled phenolic body; contacts gold flashed over silver-plated beryllium copper.

| ELCO No. | Pin Diag. | Mtg. Type | Per 1000 | | |
|----------|-----------|-----------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 3301 | 1 | Saddle | 176.90 | 111.70 | 98.30 |
| 3304 | 1 | P. C. | 143.55 | 90.65 | 79.75 |
| 3303 | 1 | Ring | 144.54 | 91.25 | 80.30 |
| 3305 | 1 | P. C. | 144.13 | 91.00 | 80.10 |
| 3307 | 2 | Ring | 172.44 | 108.90 | 95.80 |
| 3308 | 2 | P. C. | 170.05 | 107.40 | 94.50 |
| 3313 | 3 | Ring | 201.90 | 127.45 | 112.15 |

STRAP NUTS

| ELCO No. | Description | Per 1000 | | |
|----------|-------------|----------|----------|-----------|
| | | 1-499 | 500-1499 | 1500-4999 |
| 288 | 7 pin brass | 58.50 | 36.92 | 32.49 |
| 289 | 7 pin steel | 51.72 | 28.90 | 28.73 |
| 290 | 9 pin brass | 61.22 | 38.65 | 34.01 |
| 291 | 9 pin steel | 52.95 | 33.43 | 29.41 |





MINIATURE SOCKETS

7- and 9-pin Sockets with saddles or shield-base. 7-pin have 7/8" mounting centers; 9-pin have 1 1/8" mounting centers. All sockets have Brass Cadmium Plate contacts unless otherwise suffixed as follows: PH=Phosphor Bronze; SP=Silver Plate; TD=Tin Dipped; BC=Beryllium Copper; TL=Tin Lead. Sockets have either .093" or .125" rivet hole in saddle or base shield per last 3 numbers of model. Insulator Materials: GP=General Purpose Phenolic; M=Mica.

7-PIN RMA SADDLE TYPE BOTTOM MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|---------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 100.125 | GP | Yes | 81.77 | 51.63 | 45.43 |
| 109.125 | GP | No | 71.08 | 44.88 | 39.49 |

7-PIN JAN SADDLE TYPE TOP MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|-----------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 241PH.093 | Mica | Yes | 107.91 | 68.13 | 59.95 |
| 243.093 | Mica | No | 68.31 | 43.13 | 37.95 |

7-PIN PRINTED CIRCUIT W/SHIELD BASE FOR 1/16" BOARD

| Model | Insulator Material | Center Shield | Per 1000 | | |
|---------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 622PHSP | Mica | No | 585.00 | 400.00 | 350.00 |

9-PIN RMA SADDLE TYPE TOP MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|-----------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 274.125 | Mica | No | 109.40 | 69.05 | 60.80 |
| 280PH.125 | Mica | No | 96.60 | 61.00 | 53.70 |

9-PIN ELCO SHIELD BASE TYPE TOP MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|---------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 282.125 | GP | Yes | 132.35 | 83.55 | 73.55 |
| 285.125 | GP | No | 118.65 | 74.90 | 65.90 |

9-PIN UHF PRINTED CIRCUIT STAND-OFF

| Model | Insulator Material | Center Shield | Per 1000 | | |
|------------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 3901PHSPTD | Mica | No | 135.65 | 85.65 | 75.35 |

7-PIN RMA SADDLE TYPE W/GROUND LUGS BOTTOM MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|-----------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 300.125 | GP | Yes | 84.55 | 53.38 | 46.97 |
| 305.125 | Mica | Yes | 84.15 | 53.15 | 46.75 |
| 309.125 | GP | No | 71.87 | 45.38 | 39.93 |
| 316.125 | Mica | No | 74.75 | 47.20 | 41.55 |
| 316PH.125 | Mica | No | 82.70 | 52.20 | 45.95 |
| 316BC.125 | Mica | No | 124.05 | 78.30 | 68.90 |

7-PIN ELCO SHIELD BASE TYPE TOP MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|-----------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 151PH.125 | Mica | Yes | 128.40 | 81.05 | 71.35 |
| 154PH.125 | Mica | No | 122.30 | 77.20 | 67.95 |

7-PIN UHF PRINTED CIRCUIT STAND-OFF

| Model | Insulator Material | Center Shield | Per 1000 | | |
|------------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 3701PHSPTD | Mica | No | 109.90 | 69.40 | 61.05 |

7-PIN SOCKET UHF MINIATURE BOTTOM MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|-----------------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 510S-PHSPTD.125 | Mica | No | 151.50 | 95.65 | 84.15 |
| 510PHSPTD.125 | Mica | No | 156.75 | 98.95 | 87.05 |

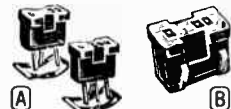
9-PIN SOCKET UHF MINIATURE BOTTOM MOUNTING

| Model | Insulator Material | Center Shield | Per 1000 | | |
|----------------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 512-PHSPTD.125 | Mica | No | 204.93 | 129.38 | 113.85 |
| 512-S-PH.125 | Mica | No | 191.07 | 120.63 | 106.15 |

9-PIN PRINTED CIRCUIT W/SHIELD BASE FOR 1/16" BOARD

| Model | Insulator Material | Center Shield | Per 1000 | | |
|-------|--------------------|---------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 623BC | Mica | No | 675.00 | 450.00 | 400.00 |

SUBMINIATURE SOCKETS



Low loss, mica filled insulating material. Contacts are silver plated beryllium copper with gold flash.

| ELCO No. | Pins or Description | Fig. | Per 1000 | | |
|----------|---------------------|------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 799BC | 3, P-C§ | A | 103.95 | 68.25 | 63.00 |
| 803BC | 4* | A | 109.90 | 72.15 | 66.60 |
| 777 | 770 retainer | | 20.00 | 10.40 | 9.60 |
| 786BC | 3, P-C§ | B | 113.85 | 74.75 | 69.00 |
| 805BC | 4* | B | 119.80 | 78.65 | 72.60 |

*Linotetr transistor. §Subminiature point contacts.

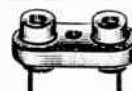
SUBMINIATURE RELAY SOCKET



Mates with Elgin MV2C, G.E. 352791, Ace 201, Brubaker K11 series plug-in relays. Units also mate with Potter and Brumfield, Kurman and many others. Rated 1 amp, 1200 v. rms. Beryllium copper contacts gold flashed over silver plate.

| ELCO No. | Description | Fig. | Per 1000 | | |
|----------|--------------|------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 887BC | Relay Socket | D | 267.30 | 168.75 | 148.50 |
| 886 | Retainer | D | 22.00 | 12.50 | 11.00 |

JAN CRYSTAL SOCKET



| ELCO No. | Description | Per 1000 | | |
|------------|-------------|----------|----------|-----------|
| | | 1-499 | 500-1499 | 1500-4999 |
| 430PHSPTD* | | 104.94 | 66.25 | 58.30 |
| 430BC | | 119.10 | 75.19 | 66.17 |

*TS0205C01

SHIELD BASES

Brass tin lead 7- and 9-pin base shield. Mounting holes, .125" dia.

| ELCO No. | Pins or Description | Per 1000 | | |
|----------|---------------------|----------|----------|-----------|
| | | 1-499 | 500-1499 | 1500-4999 |
| BR129TL | 7 pin | 58.70 | 37.06 | 32.62 |
| BR179TL | 9 pin | 76.45 | 48.25 | 42.46 |

CORRUGATED MIL SHIELD INSERTS

Reduce tube temperature by blackened (Elcodized) surface from tube envelope to shield. Cadmium plated beryllium copper.

| ELCO No. | Pin | Use with Jan Shield | Per 1000 | | |
|----------|-----|---------------------|----------|----------|-----------|
| | | | 1-499 | 500-1499 | 1500-4999 |
| 929 | 7 | TS102U01 | 112.35 | 90.80 | 83.75 |
| 930 | 7 | TS102U02 | 127.60 | 103.15 | 95.15 |
| 931 | 7 | TS102U03 | 158.20 | 127.85 | 117.95 |
| 932 | 9 | TS103U01 | 136.50 | 110.35 | 101.80 |
| 933 | 9 | TS103U02 | 164.25 | 132.75 | 122.45 |
| 934 | 9 | TS103U03 | 188.80 | 152.35 | 140.80 |

"EL" SERIES AUDIO CONNECTORS

Rugged, high-quality, low-priced connectors for audio and general purpose applications. Satin-finished, nickel-plated, zinc shells feature positive key and groove polarization, and push-action latchlock. Silver-plated contacts rated for 300 v. AC; 3-contact type for #14 wire, rated 16 amps; 4-contact types for #16 wire, rated 10 amps. Cable types accommodate up to 5/16" dia. wire.



| ELCO No. | No. of Contacts | Description | Net Each, Lots of | | | |
|----------|-----------------|---------------|-------------------|-------|-------|---------|
| | | | 1-9 | 10-24 | 25-29 | 100-249 |
| EL2214-3 | 3 | Cable, female | 0.93 | 0.84 | 0.78 | 0.62 |
| EL2214-4 | 4 | Cable, female | 1.29 | 1.16 | 1.08 | .86 |
| EL2216-3 | 3 | Cable, male | .90 | .81 | .75 | .60 |
| EL2216-4 | 4 | Cable, male | 1.20 | 1.08 | 1.00 | .80 |
| EL2215-3 | 3 | Panel, female | .93 | .84 | .78 | .62 |
| EL2215-4 | 4 | Panel, female | 1.29 | 1.16 | 1.08 | .86 |
| EL2213-3 | 3 | Panel, male | .72 | .65 | .60 | .48 |
| EL2213-4 | 4 | Panel, male | 1.02 | .92 | .85 | .68 |

IF IT'S NEW... IF IT'S NEWS... IT'S FROM



T.M. ELCO CORPORATION



LA GRANGE, ILLINOIS

GRAYHILL BINDING POSTS

All metal parts are nickel plated brass. Insulating washers are non-turn "D" style phenolic to MIL-M-14. Integral solder stud plus two hex nuts for solder lug connections. All posts may be used on panels up to 3/16" thick and are shipped completely assembled.

29-3 SCREW TYPE

For 1/2" dia. mounting hole. 3/8" dia. insulating washers for use in existing equipment or where wider spacing is desirable. Available in red, black, white, yellow, blue, gray, green and brown.

29-3 (Red or Black) \$0.40 ea.
29-3 (Choice of 6 colors) \$0.45 ea.

29-1 SCREW TYPE

For 3/8" dia. mounting hole. 1/2" dia. insulating washers. Allows closer spacing of posts. Available in red, white, yellow, blue, gray, green and brown.

29-1 (Red or Black) \$0.40 ea.
29-1 (Choice of 6 colors) \$0.45 ea.

29-33 SPRING LOADED

For 1/2" mounting hole. 3/8" dia. insulating washers. Spring loaded head gives 24 oz. of contact force. Designed for rapid connections. Available in red, black.

29-33 (Red or Black) \$0.40 ea.

29B11 For use with 29-1 posts. Makes an assembled unit with two posts on 3/4" centers. Molded phenolic to MIL-M-14.

29B11-1 (Black)-2911-2 (Red) \$0.10 ea.

29-41

Binding Plug (screw type) conforms to same standard as the binding posts. Mounted on a standard banana plug.

2941R (Red) 2941 B (Black) \$0.50 ea.

29-43

Binding Plug (spring loaded). Head gives 24 oz. contact force. Designed for rapid connections.

29-43R (Red) 29-43 (Black) \$0.50 ea.

29-42

Twin Binding Plug. Two binding plugs mounted on a molded phenolic base. Banana plugs are on standard 3/4" centers. Sold as a completely assembled unit with two screw type heads.

29-44 Same as 29-42 except with spring loaded heads. \$1.25 ea.

TEST CLIPS

The basic clip is available in 4 types of mounting. Designed for panel mounting on test equipment to allow rapid connections without manual opening and closing of jaws. Hex nut allows for tension adjustment of each clip. Clips are nickel plated brass. Length of test clip (excluding mounting base) is 1 1/8".



2-0 Threaded stud. \$0.20 ea.

2-1 Banana plug. \$0.35 ea.

2-4 Threaded stud with insulating washers. \$0.35 ea.

2-6 Pin plug. \$0.35 ea.

MINIATURE TEST CLIPS

A miniature version of the standard test clip, with the same construction and design, but extends only 3/4" above the mounting surface.



2-20 Threaded Stud \$0.25 ea.

2-21 Banana Plug \$0.40 ea.

2-24 Threaded Stud with Molded Phenolic Insulating Washers \$0.40 ea.

ULTRA-MINIATURE TEST CLIPS

No. 2-41. For simplified, rapid testing of "pig-tail" components. Hex nut allows for tension adjustment. Nickel plated brass with nickel plated, heat treated beryllium copper spring. Panel area required, exclusive of nut; single unit, 3/16" x 1/8"—double unit, 1/4" x 1/8". Extends 3/16" above mounting surface.



2-41 Single Clip \$0.25 ea.

2-42 Double Clip \$0.30 ea.

TEST CLIP ADAPTERS

2-2 For testing resistors, capacitors and other pigtail type components. Banana plugs are on standard 3/4" centers. All metal parts are nickel plated brass. Mounting board is molded phenolic to MIL-M-14. Hex nut under clip allows for tension adjustment of individual clips. Test clip extends 1 1/8" above board.

2-7 Similar to the 2-2 except that banana plugs are adjustable from 3/4" to 1 1/4" centers. \$1.50 ea.



INSULATED TEST CLIPS

COMPLETELY INSULATED (including hinge pin) eliminating the danger of shorting. Molded parts are phenolic to MIL-M-14. .008" thick silver overlay at point of contact. Terminal is silver plated brass. Contact resistance .0015 ohms. All units tested at 500 volts to insure complete insulation.



16-B (Black) 16-R (Red)

\$0.85 ea.

TRANSISTOR SOCKET 22-11

Designed for JETEC 30 packaging. Leads fit on 100 MIL grid for printed circuit. Socket fits through 3/8" drilled or punched hole and may be fastened with rivets or #2 screws. Terminal numbers are molded into bottom of socket and top face has key rib for alignment with transistor tab. Contacts are wrap around type, silver plated beryllium copper with gold flash. Base is molded mica-filled phenolic per MIL-M-14.



Type MFE No. 22-11

\$0.35 ea.

TRANSISTOR SOCKETS

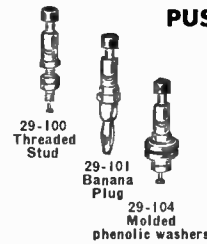
No. 22-16 socket is designed for soldering directly into printed circuits, or to fit in a punched "D" hole and be fastened by a Waldes-Kohinoor Truaric ring No. 5115-31 (obtainable from Waldes-Kohinoor or their distributors). Available with either 3 or 4 terminals (specify).



No. 22-16 (3 terminals) \$0.30 ea.
No. 22-16 (4 terminals) \$0.35 ea.

PUSH POST

No. 29-100. Designed to provide fast positive connections, this post is operated by depressing the plunger, inserting lead, and releasing plunger. Spring pressure assures firm positive contact. Only 3/4" overall height above mounting surface. Nickel plated brass parts. Red or black molded button cap.



No. 29-125 same as 29-100, except without button cap and with stainless steel spring for high temps to 600° F.
29-100 (Red or Black) \$0.35 ea.
29-101 (Red or Black) \$0.50 ea.
29-104 (Red or Black) \$0.50 ea.
29-125 (No button cap) \$0.35 ea.

SERIES 31 TEST JACKS

Designed for use on printed circuit boards as test points. Accommodates standard phone tip plugs from .081" to .0825" dia. Rivets to board like an eyelet. Rivet dia. is .114". Jack is silver plated brass with gold flash. Retaining ring is cadmium plated spring steel. Extends 1/4" above circuit board.



31-1 (for 1/16" board) \$0.25 ea.
31-2 (for 3/32" board) \$0.25 ea.
31-3 (for 1/8" board) \$0.25 ea.

PLASTIC SLEEVES FOR SERIES 31 TEST JACKS

Sleeves snap on and permanently lock in place over test jacks. Molded of thermo-setting plastic. Overall dimensions .24" dia. x .29" high. Available in black, red, green, gray, brown, blue, yellow and white.



31B—(Specify Color) \$0.10 ea.

COIL FORMS

(Pat. No. 2,653,992)
MOLDED OF MICA FILLED PHENOLIC per MIL-M-14. Type MFE with leads of tinned solid copper wire. \$0.20 ea.



| PART NO. | LENGTH | DIAMETER | LEAD WIRE DIA. |
|-----------------|-----------|----------|----------------|
| (28YY1003) | -1 .500" | .125" | .025" |
| (With Posts) | -2 .625" | .187" | .032" |
| | -3 .750" | .187" | .032" |
| | -4 .500" | .250" | .040" |
| 28YY1006 | -5 .750" | .250" | .040" |
| (Without Posts) | -6 1.000" | .250" | .040" |
| | -7 .500" | .156" | .032" |
| | -10 .375" | .107" | .025" |

STAND OFF INSULATORS

Body of insulator is molded of mica filled phenolic per MIL-M-14, Type MFE. Terminals are silver plated brass. Overall length excluding mounting stud is 15/16". Diameter is 5/16".

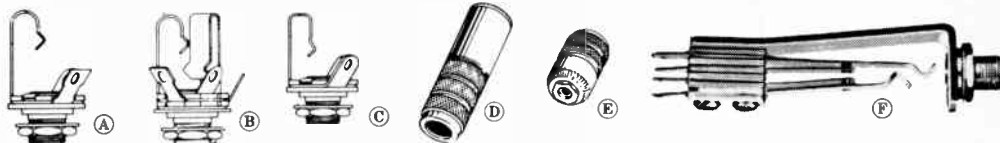


18-1 (Female) \$0.35 ea.
18-2 (Male) \$0.40 ea.



ELECTROCRAFT COMPONENTS

PHONE JACKS • PHONO PIN PLUGS
AND JACKS • CONNECTORS



GC Electrocraft Jacks require a minimum panel space and depth behind panel. Parts are keyed and mechanically interlocked. Springs are made of nickel silver, with phenolic spaces and brass, nickel plated mounting bushings. Panel mounting jacks furnished with nickel plated steel washers and nickel plated brass mounting nut.

Closed circuit, 2-conductor .210" ID Sleeve—fits plugs 33-630/2.

Cat. No. 33-702 Net \$.30
Cat. No. 33-702-BU Net 26.67/C

(B) PANEL MOUNTING 3-CONDUCTOR PHONE JACKS—Open circuit, 3-conductor.

Cat. No. 33-708 Net \$.33
Cat. No. 33-708-BU Net 31.32/C

Single closed circuit, 3-conductor.

Cat. No. 33-710 Net \$.45
Cat. No. 33-710-BU Net 43.31/C

Open circuit, 3-conductor, MIL type JI-033.

Cat. No. 33-712 Net \$.42
Cat. No. 33-712-BU Net 39.98/C

(C) MINIATURE PANEL MOUNTING JACKS—These jacks mate with plugs 33-660 through 33-670. Open circuit, 2-conductor.

Cat. No. 33-720 Net \$.23
Cat. No. 33-720-BU Net 20.48/C

Closed circuit, 2-conductor.

Cat. No. 33-722 Net \$.27
Cat. No. 33-722-BU Net 24.98/C

(O & E) CORO MOUNTED JACKS—Often referred to as "extension jacks" or "In-line jacks."

2-conductor, open circuit style, with solder lug terminals and metal (shielded) handle.

Cat. No. 33-730 Net \$.83
Cat. No. 33-730-BU Net 77.51/C

2-conductor, open circuit style, with solder lug terminals and black plastic handle.

Cat. No. 33-732 Blk Net \$.60
Cat. No. 33-732-BU Net 55.83/C

2-conductor, open circuit, screw type terminal, with metal (shielded) handle.

Cat. No. 33-734 Net \$.93
Cat. No. 33-734-BU Net 90.00/C

2-conductor, open circuit, screw type terminals, with black plastic handle.

Cat. No. 33-736 Blk Net \$.68
Cat. No. 33-736-BU Net 66.60/C

3-conductor, open circuit style, with solder lug terminals and metal (shielded) handle.

Cat. No. 33-740 Net \$ 1.08
Cat. No. 33-740-BU Net 99.90/C

3-conductor, open circuit style, with screw type terminal and metal (shielded) handle.

Cat. No. 33-742 Net \$ 1.17
Cat. No. 33-742-BU Net 110.01/C

Miniature type, mates with plugs #33-660 through #33-670, with solder lugs and metal (shielded) handle.

Cat. No. 33-746 Net \$.72
Cat. No. 33-746-BU Net 70.01/C

(F) LONG FRAME JACKS—2-conductor, open circuit.

Cat. No. 33-750 Net \$.45
Cat. No. 33-750-BU Net 44.16/C

3-conductor, single closed circuit.

Cat. No. 33-752 Net \$.63
Cat. No. 33-752-BU Net 61.65/C

3-conductor, single closed circuit ring grounded.

Cat. No. 33-754 Net \$.63
Cat. No. 33-754-BU Net 61.65/C

2-conductor, open circuit w/insulated break.

Cat. No. 33-756 Net \$.63
Cat. No. 33-756-BU Net 61.65/C

3-conductor, 2 closed circuit.

Cat. No. 33-758 Net \$.72
Cat. No. 33-758-BU Net 70.80/C

2-conductor, closed circuit w/insulated make.

Cat. No. 33-760 Net \$.72
Cat. No. 33-760-BU Net 70.80/C

PHONE JACKS

(A) PANEL MOUNTING, TWO-CONDUCTOR PHONE JACKS—Open circuit, 2-conductor.

Cat. No. 33-690 Net \$.23
Cat. No. 33-690-BU Net 20.48/C

Closed circuit, 2-conductor.

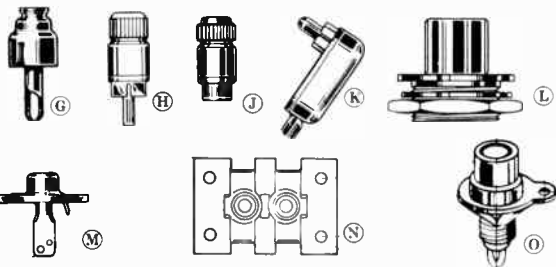
Cat. No. 33-692 Net \$.27
Cat. No. 33-692-BU Net 24.98/C

Open circuit, 2-conductor, MIL type, JI-034.

Cat. No. 33-694 Net \$.37
Cat. No. 33-694-BU Net 34.17/C

Open circuit, 2-conductor .210" ID Sleeve fits plugs 33-630/2.

Cat. No. 33-700 Net \$.27
Cat. No. 33-700-BU Net 24.98/C



PHONO PIN PLUGS AND JACKS

These plugs and jacks are universally used for audio connections, phonographs, pre-amplifiers and amplifiers in connection with single conductor shielded cable.

(G) PHONE PLUGS—Solder type.

Cat. No. 33-770 Net \$.07
Cat. No. 33-770-BU Net 4.80/C

(H) PHONO PLUGS—Combination clamp, solder type, with removable metal (shielded) handle.

Cat. No. 33-772 Net \$.30
Cat. No. 33-772-BU Net 28.50/C

(J) PHONO JACK, CORO MOUNTED—Combination clamp and solder, terminal; removable metal (shielded) handle.

Cat. No. 33-774 Net \$.37
Cat. No. 33-774-BU Net 34.17/C

(K) SOLOERLESS PHONO PLUGS—Positive, noise-free pressure connection. Right angle style, designed for regular shielded cable with approximately 3/4" OD.

Grey plastic shell.
Cat. No. 33-776 Net \$.27
Cat. No. 33-776-BU Net 23.40/C

Black plastic shell.
Cat. No. 33-778 Net \$.27
Cat. No. 33-778-BU Net 23.40/C

Red plastic shell.
Cat. No. 33-780 Net \$.27
Cat. No. 33-780-BU Net 23.40/C

Yellow plastic shell.
Cat. No. 33-782 Net \$.27
Cat. No. 33-782-BU Net 23.40/C

Blue plastic shell.
Cat. No. 33-784 Net \$.27
Cat. No. 33-784-BU Net 23.40/C

(L) PHONO JACK, SINGLE HOLE MOUNTING—Supplied with washer and mounting nut.

Cat. No. 33-790 Net \$.22
Cat. No. 33-790-BU Net 19.17/C

(M) PHONO JACK—Fastens to chassis with 2 rivets or 2 screws.

W/oval, space saving metal mounting plate.

Cat. No. 33-792 Net \$.07
Cat. No. 33-792-BU Net 5.40/C

With regular round mounting plate.

Cat. No. 33-796 Net \$.08
Cat. No. 33-796-BU Net 7.50/C

(N) DOUBLE PHONO PIN JACK

Cat. No. 33-800 Net \$.13
Cat. No. 33-800-BU Net 12.00/C

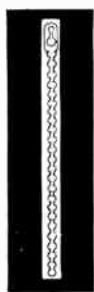
TRIPLE PHONO PIN JACK

Cat. No. 33-802 Net \$.15
Cat. No. 33-802-BU Net 14.10/C

(O) SINGLE HOLE PANEL PHONO JACK—Mounts in 1/2" hole, requires only one hole drilled. With washer, nut and solder lug for ground.

Cat. No. 33-804 Net \$.18
Cat. No. 33-804-BU Net 16.20/C

These ties provide an efficient, time-saving method of cabling and lacing. Made entirely of plastic. May be used in hard-to-reach places. Their use requires no experience.



Made of Polypropylene. Tough and flexible for commercial use and where temperatures do not exceed 175°F. 4 1/4" long. Sold in vials of 40 ties.

Cat. No. 34-432 Red Net \$.98

Cat. No. 34-436 Yellow Net \$.98

Cat. No. 34-440 Blue Net \$.98

Also available in polypropylene and nylon in 10-inch lengths

STANDARD MICROPHONE CONNECTORS

Designed for use with single conductor, shielded microphone cable. Bodies, lock nuts and mounting nuts: brass, nickel plated; contact terminals, brass, hot-tinned; insulation is high-grade phenolic.

(P) CORO MOUNTED MICROPHONE CONNECTORS—Flexible spring protects cable; center conductor solders to contact; braid is clamped securely by set screw.

Male connector.
Cat. No. 33-810 Net \$.27
Cat. No. 33-810-BU Net 23.33/C

(Q) FEMALE CONNECTOR.

Cat. No. 33-812 Net \$.37
Cat. No. 33-812-BU Net 26.33/C

(R) PANEL MOUNTED MICROPHONE CONNECTORS—May be insulated with suitable fibre washers; mates with No. 33-812 connector.

Single contact connector.
Cat. No. 33-814 Net \$.22
Cat. No. 33-814-BU Net 18.37/C

(S) MICROPHONE AND CHASSIS CONNECTOR—Closed circuit type which grounds center contact when cable connector removed.

Cat. No. 33-816 Net \$.27
Cat. No. 33-816-BU Net 25.68/C

(T) COUPLING NUT—Converts #33-810 male connector to 812 female type.

Cat. No. 33-818 Net \$.09
Cat. No. 33-818-BU Net 8.33/C

(U) CAP FOR PANEL CONNECTORS—Protects unused connectors from mechanical damage and dust.

Cat. No. 33-820 Net \$.45
Cat. No. 33-820-BU Net 42.48/C

(V) MINIATURE MICROPHONE CONNECTORS—Made to the same specifications and of same materials as standard size connectors. Cord mounted male connector.

Cat. No. 33-826 Net \$.27
Cat. No. 33-826-BU Net 23.33/C

(W) Cord mounted female connector.

Cat. No. 33-828 Net \$.37
Cat. No. 33-828-BU Net 26.67/C

(X) Panel mounted connector.

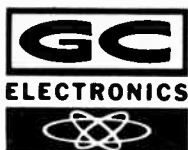
Cat. No. 33-830 Net \$.22
Cat. No. 33-830-BU Net 17.67/C

(Y) COUPLING NUT—Converts male connector #33-826 to female connector #33-828.

Cat. No. 33-832 Net \$.07
Cat. No. 33-832-BU Net 5.48/C

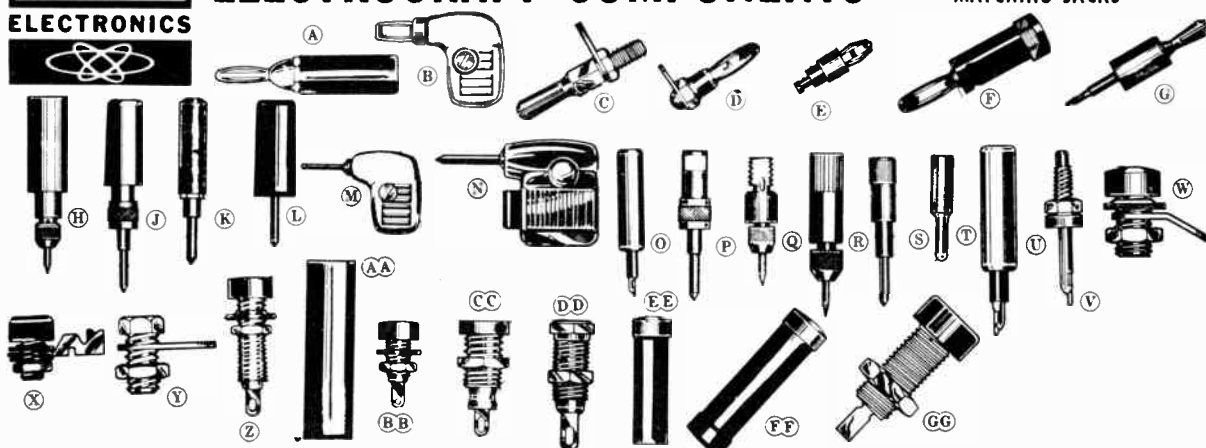
ELECTROCRAFT CABLE TIES

NOTE: ELECTROCRAFT PRODUCTS ARE AVAILABLE IN ADDITIONAL COLORS — WRITE GC FOR COMPLETE DETAILS.



ELECTROCRAFT COMPONENTS

BANANA PLUGS - TIP PLUGS MATCHING JACKS



BANANA PLUGS

Electrocraft plugs are carefully designed, accurately molded and machined of best available material and rigidly inspected. Except as otherwise noted, all Banana Plugs are made to standard industry dimensions and mate with jacks with an 0.161" bore. Design provides for sufficient spring tension to assure good holding power and minimum contact resistance.

(A) BANANA PLUG—Four leaved, phosphor brnzn, nickel plated spring; hex brass body, separate internal brass stud.

Cat. No. 33-000 Red Net \$.23
Cat. No. 33-000-BU Net \$21.00/C
Cat. No. 33-002 Blk Net \$.23
Cat. No. 33-002-BU Net \$21.00/C

BANANA PLUG—Four leaved, phosphor bronze, nickel plated spring; lead wire connection with set screw through plastic handle.

Cat. No. 33-006 Red Net \$.20
Cat. No. 33-006-BU Net \$18.00/C
Cat. No. 33-008 Blk Net \$.20
Cat. No. 33-008-BU Net \$18.00/C

BANANA PLUG—Unbreakable plastic handle, cross slotted, nickel plated brass body; separate internal brass stud.

Cat. No. 33-012 Red Net \$.20
Cat. No. 33-012-BU Net \$18.00/C
Cat. No. 33-014 Blk Net \$.20
Cat. No. 33-014-BU Net \$18.00/C

BANANA PLUG—cross slotted, nickel plated brass body; lead wire connection with set screw through plastic handle.

Cat. No. 33-018 Red Net \$.20
Cat. No. 33-018-BU Net \$18.00/C
Cat. No. 33-020 Blk Net \$.20
Cat. No. 33-020-BU Net \$18.00/C

BANANA PLUG—Midget type, unbreakable plastic handle, four leaved, nickel plated, phosphor bronze spring, lead wire connection solders to drilled body.

Cat. No. 33-024 Red Net \$.27
Cat. No. 33-024-BU Net \$24.00/C
Cat. No. 33-026 Blk Net \$.27
Cat. No. 33-026-BU Net \$24.00/C

(B) BANANA PLUG—Right angle "Gun" tip (meter plug), molded plastic handle (2 half-shells), four leaved, phosphor bronze, nickel plated springs; lead wire solders to body.

Cat. No. 33-046 Red Net \$.38
Cat. No. 33-046-BU Net \$36.00/C
Cat. No. 33-048 Blk Net \$.38
Cat. No. 33-048-BU Net \$36.00/C

(C) BANANA PLUG—Threaded shank type; slotted nickel plated brass body; supplied with terminal lug and hex nut.

Cat. No. 33-060 Net \$.15
Cat. No. 33-060-BU Net \$13.20/C

(D) BANANA PLUG—Panel mounting type; four leaved, phosphor bronze, nickel plated spring; #6-32 tapped body.

Cat. No. 33-062 Net \$.17
Cat. No. 33-062-BU Net \$15.00/C

BANANA PLUG—Threaded shank type; four leaved, phosphor bronze, nickel plated spring.

Cat. No. 33-064 Net \$.17
Cat. No. 33-064-BU Net \$15.00/C

BANANA PLUG—Panel mounting type; cross slotted, nickel plated brass body, tapped #6-32; supplied

with screw and terminal lug.
Cat. No. 33-066 Net \$.17
Cat. No. 33-066-BU Net \$15.00/C

(E) BANANA PLUG—Sub-miniature type, four leaved, beryllium copper, silver plated spring; body rivets to terminal board and wire solders to turret terminal. Fits jacks with .104" ID.

Cat. No. 33-068 Net \$.20
Cat. No. 33-068-BU Net \$18.00/C

(F) BANANA PLUG ADAPTOR—Adapts tip plug to banana plug; insulated handle, standard tip jack one end; other end four leaved banana plug.

Cat. No. 33-072 Red Net \$.33
Cat. No. 33-072-BU Net \$30.00/C
Cat. No. 33-074 Blk Net \$.33
Cat. No. 33-074-BU Net \$30.00/C

(G) BANANA PLUG-KLIPZON ADAPTOR—One end cross slotted; brass, nickel plated banana plug; other end "Klipzon" self holding wire piercing tip.

Cat. No. 33-076 Red Net \$.48
Cat. No. 33-076-BU Net \$45.00/C
Cat. No. 33-078 Blk Net \$.48
Cat. No. 33-078-BU Net \$45.00/C

ADAPTER, KLIPZON TIP TO BANANA PLUG—For connection of test leads terminated with Klipzon prods to equipment with banana jacks.

Cat. No. 33-080 Red Net \$.38
Cat. No. 33-080-BU Net \$36.00/C
Cat. No. 33-082 Blk Net \$.38
Cat. No. 33-082-BU Net \$36.00/C

TIP PLUGS
The following Tip Plugs are, unless otherwise noted, made to the standard industry specifications of .080" pin diameter. Careful machining, close tolerances and the use of brass alloy assures good contact and service ability.

(H) PHONO NEEDLE TIP PLUG—Insulated handle; nickel plated brass body; chuck design to hold .058 phono needle which is easily replaceable. Wire solders to body.

Cat. No. 33-100 Red Net \$.17
Cat. No. 33-100-BU Net \$15.00/C
Cat. No. 33-102 Blk Net \$.17
Cat. No. 33-102-BU Net \$15.00/C

(I) INSULATED TIP PLUG—Solderless type, wire tightens securely under knurled collar. Handle is unbreakable plastic and body is machined brass, nickel plated.

Cat. No. 33-106 Red Net \$.17
Cat. No. 33-106-BU Net \$15.00/C
Cat. No. 33-108 Blk Net \$.17
Cat. No. 33-108-BU Net \$15.00/C

(K) SUB-MINIATURE PHONO TIP PLUG—Standard tip, extra-small diameter, machined bone fibre insulated handle. Wire solders to nickel plated, brass body.

Cat. No. 33-112 Red Net \$.20
Cat. No. 33-112-BU Net \$18.00/C
Cat. No. 33-114 Blk Net \$.20
Cat. No. 33-114-BU Net \$18.00/C

(L) INSULATED SHRT TIP PLUG—Unbreakable plastic handle; wire solders to brass nickel plated body.

Cat. No. 33-118 Red Net \$.13
Cat. No. 33-118-BU Net \$12.00/C
Cat. No. 33-120 Blk Net \$.13
Cat. No. 33-120-BU Net \$12.00/C

(M) RIGHT ANGLE TIP PLUG—Two insulated plastic handle half shells assemble with one screw and nut. Maximum wire insulation ¼"; wire solders to body.

Cat. No. 33-128 Red Net \$.30

Cat. No. 33-128-BU Net \$27.00/C
Cat. No. 33-130 Blk Net \$.30
Cat. No. 33-130-BU Net \$27.00/C

(N) "TRIGGER-QUIK" TIP PLUG—right angle plug, similar to 33-128 and 33-130. Spring loaded solderless wire connection, "trigger" design. 1 Red and 1 Black plug per pair.

Cat. No. 33-132 Red Net \$.42
Cat. No. 33-132-BU Net \$39.00/C
Cat. No. 33-134 Blk Net \$.42
Cat. No. 33-134-BU Net \$39.00/C

Cat. No. *33-136 Pkg. Net \$.72
*20 pair per package display.

(O) KLIPZON MINI-PROD—Insulated tip plug can be snapped securely on wires. Incorporates sharp point to pierce insulation; fits standard tip jacks; wire solders to body.

Cat. No. 33-138 Red Net \$.38
Cat. No. 33-138-BU Net \$36.00/C
Cat. No. 33-140 Blk Net \$.38
Cat. No. 33-140-BU Net \$36.00/C

(P) SOLDERLESS TIP PLUG—All metal. Precision machined brass, nickel plated; wire fastens under knurled collar.

Cat. No. 33-146 Net \$.12
Cat. No. 33-146-BU Net \$10.20/C

(Q) PHONO NEEDLE TIP PLUG—Nickel plated brass body with ¼" thread; chuck design to hold phono needle.

Cat. No. 33-148 Net \$.15
Cat. No. 33-148-BU Net \$13.20/C

(R) PUSH-ON NEEDLE CHUCK—Nickel plated brass. Knurled body for press fit into Test Prod handles drilled with ¼" hole.

Cat. No. 33-150 Net \$.15
Cat. No. 33-150-BU Net \$13.20/C

(S) HEAVY DUTY PHONE TIP PLUG—Nickel plated brass; knurled shank for press fit into Test Prod handles, drilled with ¼" hole.

Cat. No. 33-152 Net \$.12
Cat. No. 33-152-BU Net \$10.20/C

(T) STANDARD HOLLOW PHONE TIP—Drawn brass, bright nickel plated.

Cat. No. 33-154 Net \$.12
Cat. No. 33-154-BU Net \$3.50/C

STANDARD SOLID PHONE TIP—Brass, bright nickel plated.

Cat. No. 33-156 Net \$.15
Cat. No. 33-156-BU Net \$4.20/C

(U) KLIPZON MINI-PROD ADAPTOR—Converts standard Tip Plug and Test Prod to self holding Klipzon wire piercing prod.

Cat. No. 33-160 Red Net \$.38
Cat. No. 33-160-BU Net \$36.00/C
Cat. No. 33-162 Blk Net \$.38
Cat. No. 33-162-BU Net \$36.00/C

(V) KLIPZON PANEL MOUNTS—Wire holding patented Klipzon Test Prod with threaded shank (6-32 x ¾") for panel mount. Designed for test setups.

Cat. No. 33-164 Net \$.48
Cat. No. 33-164-BU Net \$45.00/C

BANANA AND TIP PLUG JACKS
Jacks are made to standard industry specifications. On Banana Jacks, the bore is .163" which fits all standard Banana Plugs. Tip Plug Jacks have built in spring contacts and are designed for all standard tip plugs with .080" diameter.

(W) BANANA JACK—Molded phenolic head; nickel plated brass body; extruded fibre washer, lock washer, heavy duty solder lug and mounting nut.

Cat. No. 33-180 Red Net \$.15
Cat. No. 33-180-BU Net \$13.20/C
Cat. No. 33-182 Blk Net \$.15
Cat. No. 33-182-BU Net \$13.20/C

(X) BANANA JACK, HEAVY DUTY—Molded phenolic head; nickel plated brass body; extruded fibre washer, lock washer, heavy duty solder lug and mounting nut.

Cat. No. 33-186 Red Net \$.17
Cat. No. 33-186-BU Net \$15.00/C
Cat. No. 33-188 Blk Net \$.17
Cat. No. 33-188-BU Net \$15.00/C

(Y) BANANA JACK—ALL METAL brass nickel plated body; supplied with solder lug and hex mounting nut. Mounts in ¼" hole; fits panels up to ¾" thick.

Cat. No. 33-192 Net \$.12
Cat. No. 33-192-BU Net \$10.20/C

(Z) BANANA-TIP JACK COMBINATION—Molded phenolic head; brass nickel plated body. Phosphor bronze spring. Supplied with extruded fibre washer and mounting nut.

Cat. No. 33-194 Red Net \$.18
Cat. No. 33-194-BU Net \$16.20/C
Cat. No. 33-196 Blk Net \$.18
Cat. No. 33-196-BU Net \$16.20/C

(AA) BANANA PLUG SPLICE—Insulated plastic handle, brass insert for coupling 2 standard Banana Plugs.

Cat. No. 33-200 Red Net \$.27
Cat. No. 33-200-BU Net \$24.00/C
Cat. No. 33-202 Blk Net \$.27
Cat. No. 33-202-BU Net \$24.00/C

(BB) STANDARD TIP JACK—Molded phenolic plastic head; nickel plated brass body with phosphor bronze spring; supplied with extruded fibre washer.

Cat. No. 33-210 Red Net \$.15
Cat. No. 33-210-BU Net \$13.20/C
Cat. No. 33-212 Blk Net \$.15
Cat. No. 33-212-BU Net \$13.20/C

(CC) TIP JACK, ALL-INSULATED—Head and body molded of nylon, in one piece; phosphor bronze spring; supplied with mounting nut; mounts in ¾" hole.

Cat. No. 33-216 Red Net \$.20
Cat. No. 33-216-BU Net \$18.00/C
Cat. No. 33-218 Blk Net \$.20
Cat. No. 33-218-BU Net \$18.00/C

(DD) TIP JACK, ALL METAL—Brass nickel plated body; phosphor bronze spring.

Cat. No. 33-226 Net \$.12
Cat. No. 33-226-BU Net \$10.20/C

(EE) TIP JACK, IN-LINE STYLE—Insulated handle, brass nickel plated body; phosphor bronze spring.

Cat. No. 33-228 Red Net \$.23
Cat. No. 33-228-BU Net \$21.00/C
Cat. No. 33-230 Blk Net \$.23
Cat. No. 33-230-BU Net \$21.00/C

(FF) TIP PLUG SPLICE—Insulated; brass nickel plated body; phosphor bronze springs.

Cat. No. 33-232 Red Net \$.30
Cat. No. 33-232-BU Net \$27.00/C
Cat. No. 33-234 Blk Net \$.30
Cat. No. 33-234-BU Net \$27.00/C

(GG) NYLON TIP JACK—Nylon insulated body with machined beryllium copper contact, silver plated contact recessed in head, hot tin dipped solder terminal.

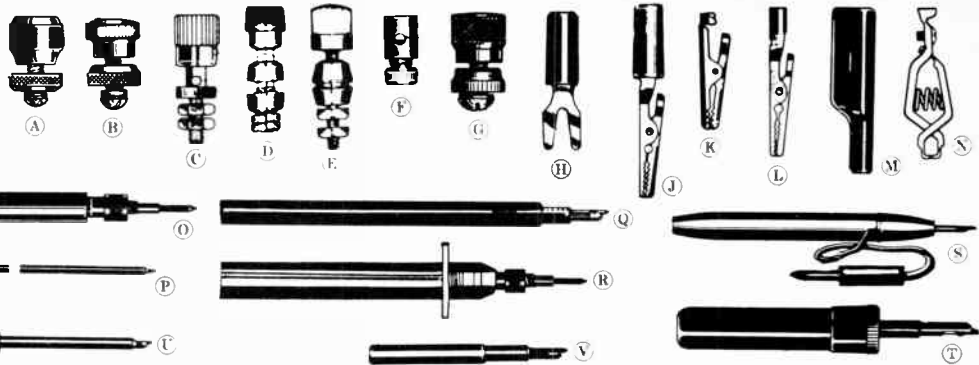
Cat. No. 33-240 Blk Net \$.30
Cat. No. 33-240-BU Net \$21.00/C
Cat. No. 33-242 Red Net \$.30
Cat. No. 33-242-BU Net \$21.00/C

NOTE: ELECTROCRRAFT PRODUCTS ARE AVAILABLE IN ADDITIONAL COLORS — WRITE GC FOR COMPLETE DETAILS.



ELECTROCRAFT COMPONENTS

BINDING POSTS-SPADE LUGS-CLIPS
TEST PRODS, LEADS, ADAPTORS

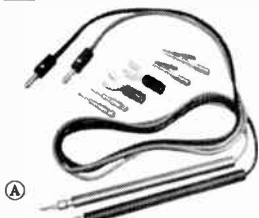


(A) **BINDING POST** — Brass nickel plated body; supplied with 8-32 mounting screw and lock washer. Cat. No. 33-250 Red Net \$.17
 Cat. No. 33-250-BU Net \$13.80/C
 Cat. No. 33-252 Blk Net \$.17
 Cat. No. 33-252-BU Net \$13.80/C
 (B) **BINDING POST** — Brass nickel plated body supplied with #8-32 mounting screw and lock washer. Cat. No. 33-254 Net \$.17
 Cat. No. 33-254-BU Net \$13.80/C
 (C) **BINDING POST-COMBINATION TYPE**—Accepts banana plug, tip plug, bare wire or spade lug. Threaded #8-32 mounting stud 1/2" long; supplied with 2 hex nuts. Cat. No. 33-256 Red Net \$.20
 Cat. No. 33-256-BU Net \$18.00/C
 Cat. No. 33-258 Blk Net \$.20
 Cat. No. 33-258-BU Net \$18.00/C
BINDING POST-COMBINATION TYPE —Similar in construction to 33-256/8 except with molded shoulder-type plastic washers to insulate post from chassis. Cat. No. 33-260 Red Net \$.27
 Cat. No. 33-260-BU Net \$24.00/C
 Cat. No. 33-262 Blk Net \$.27
 Cat. No. 33-262-BU Net \$24.00/C
 (D) **BINDING POST-INSULATED UNIVERSAL TYPE**—Non-removable, molded brass; brass nickel plated body with threaded #8-32 mounting stud. Cat. No. 33-264 Red Net \$.28
 Cat. No. 33-264-BU Net \$27.00/C
 Cat. No. 33-266 Blk Net \$.28
 Cat. No. 33-266-BU Net \$27.00/C
 (E) **HEAVY DUTY BINDING POST**—Machined brass nickel plated body; supplied with a thick molded insulating spacer; shoulder keys into chassis mounting hole and positively prevents post from turning. Cat. No. 33-268 Red Net \$.45
 Cat. No. 33-268-BU Net \$42.00/C
 Cat. No. 33-270 Blk Net \$.45
 Cat. No. 33-270-BU Net \$42.00/C
HEAVY DUTY BINDING POST—Identical in design to binding post No. 33-268/270, except end of stud milled flat and drilled for solder connection. Cat. No. 33-272 Red Net \$.45
 Cat. No. 33-272-BU Net \$42.00/C
 Cat. No. 33-274 Blk Net \$.45
 Cat. No. 33-274-BU Net \$42.00/C
 (F) **BINDING POST, ALL METAL**—Brass nickel plated body and knurled

cap; accepts banana plug, phone tip or wire. Cat. No. 33-282 Net \$.13
 Cat. No. 33-282-BU Net \$12.00/C
 (G) **BINDING POST-ALL METAL** — Heavy brass nickel plated body and knurled cap; #8-32 x 1/2" mounting screw and lock washer supplied. Cat. No. 33-284 Net \$.17
 Cat. No. 33-284-BU Net \$15.00/C
 (H) **SPADE LUG PLUG, INSULATED**—Molded plastic handle; tapered "fork" fits binding posts and terminal screws up to #10 size. Cat. No. 33-300 Red Net \$.13
 Cat. No. 33-300-BU Net \$10.80/C
 Cat. No. 33-302 Blk Net \$.13
 Cat. No. 33-302-BU Net \$10.80/C
 (J) **ALLIGATOR CLIP-INSULATED HANDLE**—3/8" jaw opening; made of cadmium plated steel with unbreakable plastic handle. Cat. No. 33-310 Red Net \$.10
 Cat. No. 33-310-BU Net \$7.20/C
 Cat. No. 33-312 Blk Net \$.10
 Cat. No. 33-312-BU Net \$7.20/C
ALLIGATOR CLIP, SCREW CONNECTION—Molded plastic handle, cadmium plated steel jaws with maximum 3/8" opening. Cat. No. 33-314 Red Net \$.12
 Cat. No. 33-314-BU Net \$8.40/C
 Cat. No. 33-316 Blk Net \$.12
 Cat. No. 33-316-BU Net \$8.40/C
ALLIGATOR CLIP, SOLID COPPER—Identical to #33-314/16, except solid copper for higher current carrying capacity. Cat. No. 33-318 Red Net \$.13
 Cat. No. 33-318-BU Net \$10.20/C
 Cat. No. 33-320 Blk Net \$.13
 Cat. No. 33-320-BU Net \$10.20/C
ALLIGATOR CLIP—With extra long insulated handle; cadmium plated steel jaws which open to maximum 3/8". Cat. No. 33-322 Red Net \$.23
 Cat. No. 33-322-BU Net \$21.00/C
 Cat. No. 33-324 Blk Net \$.23
 Cat. No. 33-324-BU Net \$21.00/C
INSULATED ALLIGATOR CLIP ADAPTORS—Completely insulated with black molded plastic. Cat. No. 33-326 Net \$.48
 Cat. No. 33-326-BU Net \$45.00/C
 Cat. No. 33-328 Net \$.60
 Cat. No. 33-328-BU Net \$54.00/C
ALLIGATOR CLIP ADAPTOR—Accommodates standard tip plug or banana plug.

Cat. No. 33-330 Red Net \$.42
 Cat. No. 33-330-BU Net \$39.00/C
 Cat. No. 33-332 Blk Net \$.42
 Cat. No. 33-332-BU Net \$39.00/C
ALLIGATOR CLIP ADAPTOR—Adapts standard tip plug to alligator clip. Cat. No. 33-334 Red Net \$.33
 Cat. No. 33-334-BU Net \$30.00/C
 Cat. No. 33-336 Blk Net \$.33
 Cat. No. 33-336-BU Net \$30.00/C
ALLIGATOR-KLIPZON PROD ADAPTOR—Adapts Klipzon Mini-Prod connectors and standard tip plugs to Alligator clip. Cat. No. 33-338 Red Net \$.38
 Cat. No. 33-338-BU Net \$36.00/C
 Cat. No. 33-340 Blk Net \$.38
 Cat. No. 33-340-BU Net \$36.00/C
 (K) **MINI-GATOR CLIP (MUELLER)**—Very small alligator clip for applications where space is a factor. Cat. No. 33-342 Net \$.08
 Cat. No. 33-342-BU Net \$7.20/C
 Cat. No. 33-344 Net \$.08
 Cat. No. 33-344-BU Net \$7.20/C
 (L) **ALLIGATOR CLIP-ALL METAL** —Cadmium plated jaws with 3/8" opening. Cat. No. 33-346 Net \$.07
 Cat. No. 33-346-BU Net \$5.40/C
ALLIGATOR CLIP-ALL METAL—For solderless connection of wire by means of a #6-32 binding head screw. Cat. No. 33-348 Net \$.07
 Cat. No. 33-348-BU Net \$6.00/C
 Cat. No. 33-350 Net \$.10
 Cat. No. 33-350-BU Net \$9.00/C
 (M) **ALLIGATOR CLIP INSULATOR**—Flexible molded vinyl insulator fits over most standard alligator clips. Cat. No. 33-360 Red Net \$.07
 Cat. No. 33-360-BU Net \$4.80/C
 Cat. No. 33-362 Blk Net \$.07
 Cat. No. 33-362-BU Net \$4.80/C
 (N) **BATTERY CONNECTING & TESTING CLIP**—5 amp rating; steel cadmium plated jaws with 1/2" spread. Cat. No. 33-370 Net \$.07
 Cat. No. 33-370-BU Net \$6.00/C
BATTERY CONNECTING & TESTING CLIP—10 amp rating; steel cadmium plated jaws with 3/4" spread. Cat. No. 33-372 Net \$.07
 Cat. No. 33-372-BU Net \$6.00/C
 (O) **DELUXE TEST PROD 5/16"**—Solderless design; wire fits through handle and is fastened to tip with knurled collar.

Cat. No. 33-380 Red Net \$.35
 Cat. No. 33-382 Blk Net \$.35
LONG TEST PROD, NEEDLE POINT TYPE—Extra safe design due to long unbreakable plastic handle; replaceable phono needle tip. Cat. No. 33-384 Red Net \$.33
 Cat. No. 33-386 Blk Net \$.33
THIN HANDLE TEST PROD—With solderless wire connection; extruded plastic handle, press fitted on nickel plated brass test tip. Cat. No. 33-392 Red Net \$.23
 Cat. No. 33-394 Blk Net \$.23
 (P) **LONG REACH TEST PROD**—Has 4" very thin insulated extension beyond handle. Needle point assembly; brass nickel plated. Cat. No. 33-396 Red Net \$.27
 Cat. No. 33-398 Blk Net \$.27
 (Q) **KLIPZON TEST PROD**—Klipzon tip clips on wire or chassis; sharp point, easily penetrates insulation or corrosion; thin plastic handle. Cat. No. 33-400 Red Net \$.67
 Cat. No. 33-402 Blk Net \$.67
 (R) **HIGH VOLTAGE TEST PROD**—Heavy-duty type; has guard ring to prevent accidental touching of tip; handle accepts wires up to 3/8" diameter. Cat. No. 33-408 Red Net \$.75
 Cat. No. 33-408-BU Net \$72.00/C
 Cat. No. 33-410 Blk Net \$.75
 Cat. No. 33-410-BU Net \$72.00/C
 (S) **KLIPZON CRYSTAL PROD KIT**—Self-holding prod, complete with Germanium Diode and other parts to assemble low capacity crystal probe. Cat. No. 33-412 Red Net \$1.83
 Cat. No. 33-414 Blk Net \$1.83
 (T) **KLIPZON JUMBO PROD HANDLE**—Tip pierces insulation. Self-holding point clips on wires (up to .220" diameter); chassis, screws, terminals, etc. Cat. No. 33-416 Red Net \$.68
 Cat. No. 33-418 Blk Net \$.68
 (U) **KLIPZON LONGIE ADAPTOR**—Long, slender self-holding point with needle to pierce insulation. Cat. No. 33-420 Red Net \$.48
 Cat. No. 33-422 Blk Net \$.48
 (V) **KLIPZON JUMBO ADAPTOR**—Adapts regular tip plug or test prod to self holding Klipzon type. Cat. No. 33-424 Red Net \$.67
 Cat. No. 33-426 Blk Net \$.67



(A) **UNIVERSAL TEST LEADS**—50" flexible cable; one end 6" break-resistant plastic handle, with solderless tip plug; other end terminated in banana plug; supplied with alligator clip, spade lugs and phono tip plugs, fit the banana plug end. Cat. No. 33-450-S Net \$1.80

UNIVERSAL "NEEDLEPOINT" TEST LEADS—One end 6" break-resistant Test Prod, with phono needle type test prod; other end terminated with banana plug; furnished with spade



lugs, alligator clips and phono tip plug, fit on banana plug. Cat. No. 33-452-S Net \$1.80
 (B) **"THRIFTY" TEST LEADS**—50" flexible kink-proof cable; one end 4" insulated test prod with solderless wire connections; other ends terminated in standard phone tips. Cat. No. 33-454-S Net \$.75
 (C) **HEAVY DUTY TEST LEADS**—50" flexible kink-proof cable; 7 1/2" long, heavy-duty unbreakable test prod,



reach with 5" insulated test prod, very thin extension; other end terminated in right angle, meter-type insulated tip plug. Cat. No. 33-464-S Net \$1.27
 (D) **STRETCH TYPE TEST LEADS**—Kink-proof, spiral-type 9" cable; extended length 6 feet; one end 6 3/8" heavy duty test prod with solderless wire connection; other end insulated, solderless tip plug. Cat. No. 33-470-S Net \$2.97
WRITE for free GC Catalog.



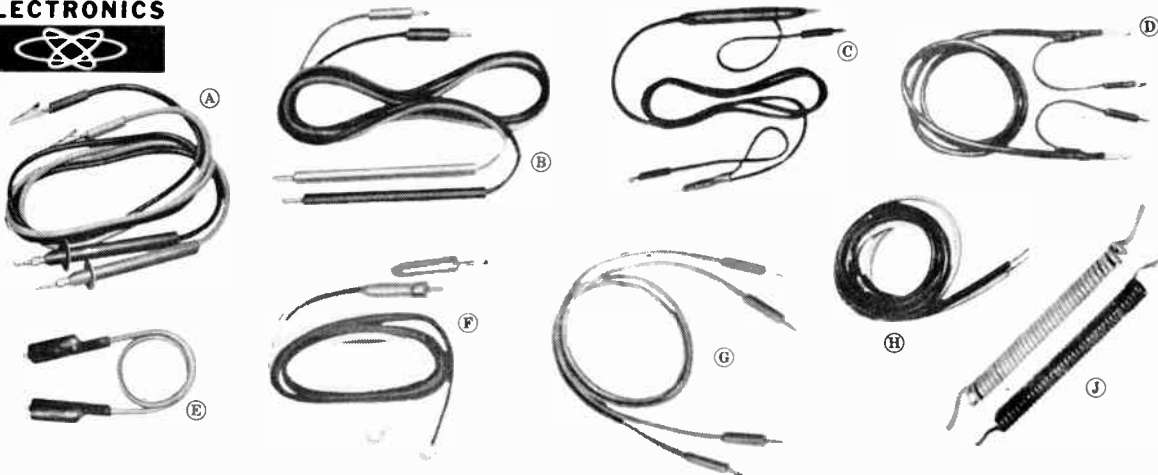
lugs, alligator clips and phono tip plug, fit on banana plug. Cat. No. 33-452-S Net \$1.80
 (B) **"THRIFTY" TEST LEADS**—50" flexible kink-proof cable; one end 4" insulated test prod with solderless wire connections; other ends terminated in standard phone tips. Cat. No. 33-454-S Net \$.75
 (C) **HEAVY DUTY TEST LEADS**—50" flexible kink-proof cable; 7 1/2" long, heavy-duty unbreakable test prod,

NOTE: ELECTROCRAFT PRODUCTS ARE AVAILABLE IN ADDITIONAL COLORS — WRITE GC FOR COMPLETE DETAILS.



ELECTROCRAFT COMPONENTS

TEST LEADS · PHONE PLUGS



(A) **HIGH VOLTAGE TEST LEADS**—48" heavy insulated high tension wire (22,000/V).

Pair of 1 red, 1 black, with tip plugs.
Cat. No. 33-472-S Net \$2.40

Pair of 1 red, 1 black, with insulated spade lugs.
Cat. No. 33-474-S Net \$2.40

Pair of 1 red, 1 black, with alligator clips.
Cat. No. 33-476-S Net \$2.48

(B) **KLIPZON TEST LEADS**—48" flexible, kink-proof cable; one end slim handle, self-holding and insulation piercing, other end Klipzon Tip Plugs. Klipzon prods and tips fit standard tip jacks, have sharp needle point to penetrate wire insulation, corrosion. Pair of 1 red and 1 black.
Cat. No. 33-480-S Net \$2.03

KLIPZON TEST LEADS—Same as above, but with standard Phone Tip Plugs.
Cat. No. 33-482-S Net \$1.65

KLIPZON TEST LEADS—Same as above, but other end insulated banana plug.
Cat. No. 33-484-S Net \$1.95

(C) **KLIPZON CRYSTAL PROBE**—Germanium diode probe with self-holding points, for measuring high frequency voltages; flexible lead wires are terminated on meter end with Klipzon tip plug.
Cat. No. 33-486-S Net \$4.35

KLIPZON CRYSTAL PROBE—Crystal probe on one end, plus ground lead terminated on each end with tip plug.
Cat. No. 33-488-S Net \$4.35

(D) **KLIPZON SHIELDED LOW CAPACITY**—36" low capacity, coaxial type lead, with self-holding insulation piercing, tip prods.
Cat. No. 33-490-S Net \$2.97

(E) **ALLIGATOR CLIP JUMPER LEADS**—Flexible, kink-proof, lead wires, terminate at each end with fully insulated steel nickel plated alligator clips.
Pair of 1 red and 1 black, 12" long.
Cat. No. 33-500-S Net \$.92

Pair of 1 red and 1 black, 24" long.
Cat. No. 33-502-S Net \$.95

TEST LEADS

Pair of 1 red and 1 black, 36" long.
Cat. No. 33-504-S Net \$1.05

Pair of 1 red and 1 black, 48" long.
Cat. No. 33-506-S Net \$1.10

(F) **HEAVY DUTY KLIPZON TEST LEADS**—48" 16-gauge, heavy insulated lead wires, terminated on one end with Klipzon Jumbo prod handles.
Cat. No. 33-492-S Net \$2.55

(G) **KLIPZON JUMPER LEADS**—Flexible, kink-proof cable, with patented tips, which clip on wires and terminals, have sharp insulation and corrosion piercing points.
Cat. No. 33-510, 12" Net \$.77

Cat. No. 33-512, 12" Net \$.77

Cat. No. 33-514, 24" Net \$1.12

Cat. No. 33-516, 24" Net \$1.12

(H) **TEST LEAD WIRE**—Flexible, rubber-coated and kink-resistant replacement wire for test leads. Package of two, 50" length, red & black, 6000/V insulation.
Cat. No. 33-518-S Net \$.60

Package of two, 48" length, red & black, 22,000/V test leads.

Cat. No. 33-520-S Net \$.87

(J) **STRETCH LEAD WIRE**—Coiled wire, for all applications. Package contains 1 red and 1 black lead. 9" long—stretches to 6 Ft.

Cat. No. 33-522-S Net \$1.95

TEST LEAD PLUG INTERCHANGE KIT



— Contains pairs of alligator clips, banana plugs, spade lugs and phone tips, (1 each in red and black) to adapt standard test leads to many different types.

Cat. No. 33-530

Net \$2.25



(A) **TWO-CONDUCTOR PHONE PLUG, SCREW TERMINALS**—Standard size plug. With black plastic handle.

Cat. No. 33-600 Bk Net \$.45

Cat. No. 33-600-BU Net \$42.48/C

With red plastic handle.

Cat. No. 33-602 Red Net \$.45

Cat. No. 33-602-BU Net \$42.48/C

Metal (shielded) handle.

Cat. No. 33-604 Net \$.63

Cat. No. 33-604-BU Net \$60.00/C

(B) **TWO-CONDUCTOR PHONE PLUG, COMB. CLAMP & SOLDER LUG TERMINALS**—Large "grounding" terminal clamps around cable insulation or shield, and acts as strain relief.

With black plastic handle.

Cat. No. 33-606 Bk Net \$.42

Cat. No. 33-606-BU Net \$39.90/C

With red plastic handle

Cat. No. 33-608 Red Net \$.42

Cat. No. 33-608-BU Net \$39.90/C

Metal (shielded) handle.

Cat. No. 33-610 Net \$.60

Cat. No. 33-610-BU Net \$51.60/C

TWO-CONDUCTOR PHONE PLUG, PLAIN SOLDER PLUGS—Standard size plug. With black plastic handle.

Cat. No. 33-612 Bk Net \$.33

Cat. No. 33-612-BU Net \$30.60/C

"STUBBY" SHIELDED TWO-CONDUCTOR PHONE PLUG—Standard phone plug with special, short metal handle.

Cat. No. 33-614 Net \$.53

Cat. No. 33-614-BU Net \$51.30/C

PHONE PLUGS

STANDARD SHIELDED TWO-CONDUCTOR PHONE PLUG—Regular plug with metal (shielded) handle.

Cat. No. 33-616 Net \$.60

Cat. No. 33-616-BU Net \$57.00/C

TWO-CONDUCTOR PHONE PLUG, TYPE PJ-055B—Made in accordance with military specifications; solder terminal and screw connection.

Cat. No. 33-618 Net \$.83

Cat. No. 33-618-BU Net \$77.40/C

SHORT FINGER, TWO-CONDUCTOR PHONE PLUG—Special short finger (barrel) type plug to connect microphone or telephone pickup to Revere/Wollensack tape recorders.

Cat. No. 33-620 Net \$.72

Cat. No. 33-620-BU Net \$63.30/C

LARGE HANDLE TWO-CONDUCTOR PHONE PLUG—With black plastic handle, 1½" long.

Cat. No. 33-622 Bk Net \$.45

Cat. No. 33-622-BU Net \$42.30/C

With red plastic handle, 1½" long.

Cat. No. 33-624 Red Net \$.45

Cat. No. 33-624-BU Net \$42.30/C

Metal (shielded) handle, 1" long.

Cat. No. 33-626 Net \$.67

Cat. No. 33-626-BU Net \$63.00/C

Metal (shielded) handle, 2¼" long.

Cat. No. 33-628 Net \$.72

Cat. No. 33-628-BU Net \$69.00/C

"THIN FINGER" TWO-CONDUCTOR PHONE PLUGS—"Undersize" finger (barrel) diameter of .206" for applications where polarized input is desired to distinguish between different connections.

With black plastic handle.

Cat. No. 33-630 Bk Net \$.45

Cat. No. 33-630-BU Net \$41.40/C

With metal (shielded) handle.

Cat. No. 33-632 Net \$.60

Cat. No. 33-632-BU Net \$51.00/C

3-CONDUCTOR PHONE PLUG; COMB. CLAMP AND SOLDER LUG TERMINALS.

With black plastic handle.

Cat. No. 33-640 Bk Net \$.63

Cat. No. 33-640-BU Net \$58.35/C

With metal (shielded) handle.

Cat. No. 33-642 Net \$.78

Cat. No. 33-642-BU Net \$73.35/C

3-CONDUCTOR PHONE PLUG, SCREW TERMINALS.

With black plastic handle.

Cat. No. 33-644 Bk Net \$.72

Cat. No. 33-644-BU Net \$67.50/C

With red plastic handle.

Cat. No. 33-646 Red Net \$.72

Cat. No. 33-646-BU Net \$67.50/C

With metal (shielded) handle.

Cat. No. 33-648 Net \$.83

Cat. No. 33-648-BU Net \$77.40/C

(C) **3-CONDUCTOR PHONE PLUG, LARGE HANDLE**—Accommodate large diameter cables, with room in handle for wired-in resistors or capacitors.

Cat. No. 33-650 Net \$.78

Cat. No. 33-650-BU Net \$72.00/C

(D) **3-CONDUCTOR PHONE PLUG, TYPE PJ-06B**—With solder terminals and screw connection.

Cat. No. 33-654 Net \$2.17

Cat. No. 33-654-BU Net \$209.99/C

(E) **MINIATURE PHONE PLUGS; COMB. CLAMP AND SOLDER LUG TERMINALS**—Two-conductor style, tested for 500/V breakdown.

With metal (shielded) handle.

Cat. No. 33-660 Net \$.60

Cat. No. 33-660-BU Net \$51.66/C

With black plastic handle.

Cat. No. 33-662 Bk Net \$.42

Cat. No. 33-662-BU Net \$40.02/C

With red plastic handle.

Cat. No. 33-664 Red Net \$.42

Cat. No. 33-664-BU Net \$40.02/C

(F) **MINIATURE PHONE PLUGS; COMB. CLAMP AND SCREW TERMINALS**—Same plugs as listed above except for different style terminals.

With metal (shielded) handle.

Cat. No. 33-666 Net \$.63

Cat. No. 33-666-BU Net \$59.85/C

With black plastic handle.

Cat. No. 33-668 Bk Net \$.45

Cat. No. 33-668-BU Net \$42.51/C

With red plastic handle.

Cat. No. 33-670 Red Net \$.45

Cat. No. 33-670-BU Net \$42.51/C

NOTE: ELECTROCRAFT PRODUCTS ARE AVAILABLE IN ADDITIONAL COLORS — WRITE GC FOR COMPLETE DETAILS.



ELECTROCRAFT COMPONENTS ADAPTORS · SWITCHES



GC Electronics Adaptors are designed for quickly interchanging various cable connectors; these handy devices are small, yet sturdy and of attractive modern design.

(A) PHONO JACK INPUT, STANOARO PHONE PLUG OUTPUT:

- Cat. No. 33-850 Net \$.75
 - Cat. No. 33-850-BU Net \$67.50/C
- PHONO JACK INPUT, STANOARO PHONE PLUG OUTPUT, HEAVY OUTY METAL SHIELOED TYPE.**
- Cat. No. 33-852 Net \$.87
 - Cat. No. 33-852-BU Net \$78.30/C

(B) PHONO JACK INPUT, MALE MICROPHONE CONNECTOR OUTPUT:

- Cat. No. 33-854 Net \$.67
- Cat. No. 33-854-BU Net \$59.40/C

PHONO JACK INPUT, FEMALE MICROPHONE CONNECTOR OUTPUT:

- Cat. No. 33-854-BU Net \$59.40/C

PUSH-BUTTON SWITCHES

All styles are momentary (non-locking) design, and are made with long-wearing nickel silver springs, carefully adjusted. Insulation is high grade phenolic.

STANOARO SMALL PUSH BUTTON SWITCHES—Can also be supplied with silver contacts for 3 amp, 115/V. AC rating (on special orders in production quantities). Single "make"; black button.



- Cat. No. 34-000 Net \$.53
- Cat. No. 34-000-BU Net \$51.66/C

Single "make"; red button.

- Cat. No. 34-002 Net \$.53
- Cat. No. 34-002-BU Net \$51.66/C

Single "break"; black button.

- Cat. No. 34-004 Net \$.53
- Cat. No. 34-004-BU Net \$51.66/C

Single "break"; red button.

- Cat. No. 34-006 Net \$.53
- Cat. No. 34-006-BU Net \$51.66/C

Single "break-make"; black button.

- Cat. No. 34-008 Net \$.60
- Cat. No. 34-008-BU Net \$57.51/C

Single "break-make"; red button.

- Cat. No. 34-010 Net \$.60
- Cat. No. 34-010-BU Net \$57.51/C

MINIATURE PUSH BUTTON SWITCHES

—Made of the same materials and to the same specifications as standard small switches listed above. Single "make"; black button.

- Cat. No. 34-020 Net \$.53
- Cat. No. 34-020-BU Net \$51.66/C

Single "make"; red button.

- Cat. No. 34-022 Net \$.53
- Cat. No. 34-022-BU Net \$51.66/C

Single "break" black button.

- Cat. No. 34-024 Net \$.53
- Cat. No. 34-024-BU Net \$51.66/C

Single "break-make"; black button.

- Cat. No. 34-026 Net \$.60
- Cat. No. 34-026-BU Net \$57.51/C

STRAIGHT FRAME PUSH BUTTON SWITCHES

— Fine silver contacts with minimum resistance rated at 3 amp, 115/V. AC, non-inductive load. Standard push button is black. Single "make-break".



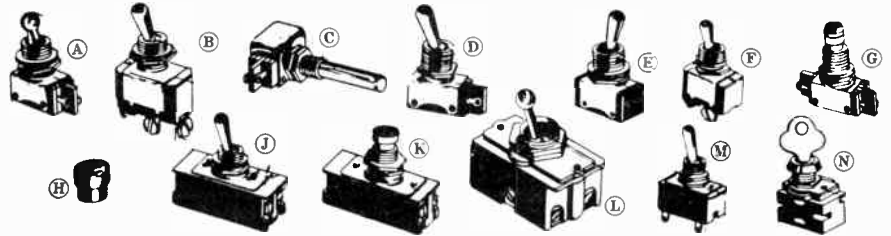
- Cat. No. 34-032 Net \$.72
- Cat. No. 34-032-BU Net \$69.00/C
- Double "make".
- Cat. No. 34-034 Net \$.78
- Cat. No. 34-034-BU Net \$75.00/C

- Cat. No. 33-856 Net \$.75
 - Cat. No. 33-856-BU Net \$67.50/C
- (C) FEMALE MICROPHONE CONNECTOR INPUT, STANOARO PHONE PLUG OUTPUT:**
- Cat. No. 33-858 Net \$.30
 - Cat. No. 33-858-BU Net \$27.00/C
- (D) MINIATURE PHONE JACK INPUT, STANOARO PHONE PLUG OUTPUT:**
- Cat. No. 33-860 Net \$.87
 - Cat. No. 33-860-BU Net \$78.30/C
- (E) COUPLER, CONNECTS 2 FEMALE MICROPHONE CONNECTORS.**
- Cat. No. 33-862 Net \$.42
 - Cat. No. 33-862-BU Net \$37.80/C
- (F) COUPLER, CONNECTS 2 MALE MICROPHONE CONNECTORS.**
- Cat. No. 33-864 Net \$.48
 - Cat. No. 33-864-BU Net \$43.20/C
- (G) STANOARO PHONE JACK INPUT,**

ADAPTORS

- PHONO PLUG OUTPUT:**
- Cat. No. 33-866 Net \$.87
 - Cat. No. 33-866-BU Net \$78.30/C
- (H) STANOARO PHONE JACK INPUT, FEMALE MICROPHONE CONNECTOR OUTPUT:**
- Cat. No. 33-868 Net \$1.05
 - Cat. No. 33-868-BU Net \$94.50/C
- STANOARO PHONE JACK INPUT, MALE MICROPHONE CONNECTOR OUTPUT:**
- Cat. No. 33-870 Net \$.98
 - Cat. No. 33-870-BU Net \$89.10/C
- (J) MALE MICROPHONE CONNECTOR INPUT, PHONO PLUG OUTPUT:**
- Cat. No. 33-872 Net \$.75
 - Cat. No. 33-872-BU Net \$67.50/C
- (K) "Y" ADAPTOR—Input: 2 phono jacks (in parallel); output: phono plug.**
- Cat. No. 33-880 Net \$1.05
 - Cat. No. 33-880-BU Net \$94.50/C

- "Y" ADAPTOR—Input: 2 phono jacks (in parallel); output: single phono jack.**
- Cat. No. 33-882 Net \$1.05
 - Cat. No. 33-882-BU Net \$94.50/C
- (L) "Y" ADAPTOR—Input: 2 phono jacks (in parallel); output: standard phone plug.**
- Cat. No. 33-884 Net \$1.13
 - Cat. No. 33-884-BU Net \$102.60/C
- (M) "Y" ADAPTOR—Input: 2 male mike connectors (in parallel); output: standard phone plug.**
- Cat. No. 33-886 Net \$1.13
 - Cat. No. 33-886-BU Net \$102.60/C
- (N) "Y" ADAPTOR—Input: 2 male microphone connectors (in parallel); output: female microphone connector.**
- Cat. No. 33-888 Net \$.98
 - Cat. No. 33-888-B Net \$89.63/C



- Double "break".
 - Cat. No. 34-036 Net \$.78
 - Cat. No. 34-036-BU Net \$75.00/C
- Double "break-make".
- Cat. No. 34-038 Net \$.93
 - Cat. No. 34-038-BU Net \$90.00/C

ARROW-HART SWITCHES

These switches, made by A. H. & H. for GC Electrocraft, are UL approved. The threaded sleeves are slotted to positively prevent turning of switch if used in keyed hole.

- (A) BALL HANDLE TOGGLE SWITCH**—Light duty; SPST types rated 3 amps, 250/V; all others 1 amp, 250/V, 3 amps, 125/V. AC-DC.
- SPST — 1/2" Shank. Net \$.72
 - Cat. No. 34-050
 - SPST — 1" Shank. Net \$.87
 - Cat. No. 34-052
 - SPDT — 1/2" Shank. Net \$.90
 - Cat. No. 34-054
 - SPDT — 1" Shank. Net \$1.12
 - Cat. No. 34-056
 - DPST — 1/2" Shank. Net \$1.28
 - Cat. No. 34-058
 - DPST — 1" Shank. Net \$1.47
 - Cat. No. 34-060
 - DPDT — 1/2" Shank. Net \$1.47
 - Cat. No. 34-062
 - DPDT — 1" Shank. Net \$1.62
 - Cat. No. 34-064

- (B) MEDIUM OUTY, NEUTRAL CENTER TOGGLE SWITCH**—Rating 10 amps 250/V; 15 amps 125/V; 3/4 horsepower.
- SPDT — 1/2" Shank. Net \$.98
 - Cat. No. 34-066
 - DPDT — 1/2" Shank. Net \$1.53
 - Cat. No. 34-068

- (C) ROTARY SWITCH**—Laminated insulation; rating — SPST models, 3 amps, 25/V; all others 1 amp, 250/V-3 amps, 125/V. AC-DC.
- SPST — 3/8" Shank. Net \$.90
 - Cat. No. 34-070
 - SPST — 1" Shank. Net \$1.12
 - Cat. No. 34-072

- SPDT — 3/8" Shank. Net \$1.08
- Cat. No. 34-074
- SPDT — 1" Shank. Net \$1.17
- Cat. No. 34-076
- DPST — 1" Shank. Net \$1.58
- Cat. No. 34-078
- DPDT — 3/8" Shank. Net \$1.65
- Cat. No. 34-080
- DPDT — 1" Shank. Net \$1.65
- Cat. No. 34-082

- (D) BAT HANDLE TOGGLE SWITCH**—Light duty, laminated phenolic insulation. Rating SPST types, 3 amps, 250/V; all others 1 amp, 250/V — 3 amps, 125/V; AC-DC.
- SPST — 1/2" Shank. Net \$.72
 - Cat. No. 34-086
 - SPDT — 1/2" Shank. Net \$.90
 - Cat. No. 34-088
 - DPST — 1/2" Shank. Net \$1.28
 - Cat. No. 34-090
 - DPDT — 1/2" Shank. Net \$1.47
 - Cat. No. 34-092

- (E) WIRE LEAD TOGGLE SWITCH**—Same switch as series listed above but with 6" wire leads.
- SPST — 1/2" Shank. Net \$.93
 - Cat. No. 34-094
 - SPST — 3/8" Shank. Net \$.93
 - Cat. No. 34-096

- (F) PUSH "ON" — PUSH "OFF" SWITCH**—Laminated phenolic insulation; rating 3 amps, 250/V; 6 amps, 125/V. AC-DC. SPST.
- Cat. No. 34-098 Net \$1.28

- (G) PUSH BUTTON, MOMENTARY SWITCH**—2-circuit type; one circuit is normally "on" — the other is "off". Laminated phenolic insulation, rated at 1 amp, 125/V. Solder terminals.
- Cat. No. 34-100 Net \$.98

- (H) Red plastic push button for above switch. Black plastic push button for above switch.**

- Cat. No. 34-102 Net \$.25
 - Cat. No. 34-104 Net \$.25
- (J) MEDIUM OUTY TOGGLE SWITCH**—Quick make and break design, rating 6 amp, 250/V; 12 amp, 125/V; 12 amps, 125/V; 1 HP. DPST.
- Cat. No. 34-106 Net \$1.35

- (K) HEAVY OUTY PUSH BUTTON SWITCH: MOMENTARY ACTION**—Molded plastic housing; rating 8 amps, 25/V; 16 amps, 125-250V; 1 HP. Push button switch.
- Cat. No. 34-108 Net \$2.02

- (L) HEAVY DUTY TOGGLE SWITCH**—240/V AC; transmitters, etc. Rating SPDT model 10 amps, 250/V; 15 amps, 125/V; other two types 5 amps, 250/V; 10 amps, 125/V. DPDT.
- Cat. No. 34-110 Net \$ 4.92
 - 3 PDT. Net \$ 7.57
 - Cat. No. 34-112
 - 4 PDT. Net \$10.08
 - Cat. No. 34-114

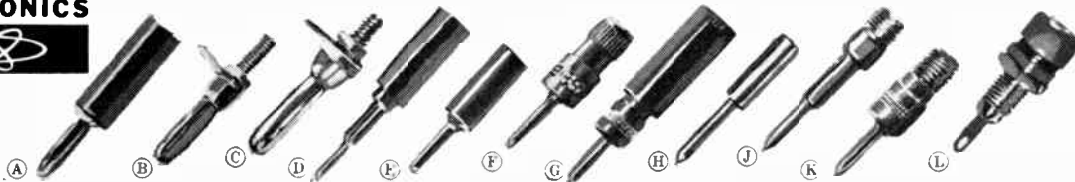
- (M) DELUXE TOGGLE SWITCH**—1000/V rms — 60 cycle is desired. Rating SPDT model, 1 amp, 250/V; 6 amps, 125/V. All others 3 amp, 250/V; 6 amp, 125/V.
- SPST — 1/2" Shank. Net \$1.27
 - Cat. No. 34-120
 - SPDT — 1/2" Shank. Net \$1.43
 - Cat. No. 34-122
 - DPST — 1/2" Shank. Net \$1.80
 - Cat. No. 34-124
 - DPDT — 1/2" Shank. Net \$1.95
 - Cat. No. 34-126

- (N) LOCK SWITCH**—Removable key; sleeve length 3/32"; rating 3 amps, 250/V; 6 amps, 125/V. With key removable in open position only.
- Cat. No. 34-150 Net \$2.13
 - With key removable in open or closed position. Net \$2.13
 - Cat. No. 34-152
 - Key only. Net \$.20
 - Cat. No. 34-154

NOTE: ELECTROCRAFT PRODUCTS ARE AVAILABLE IN ADDITIONAL COLORS — WRITE GC FOR COMPLETE DETAILS.



ELECTROCRAFT COMPONENTS PLUGS • CABLE CLAMPS



BANANA PLUGS

These Banana Plugs meet standard Industry specifications, mate with jacks with 0.163" bore.

(A) **BANANA PLUG** — Unbreakable plastic handle; four leaved, nickel plated phosphor bronze spring.

| | | | | |
|----------|------------|-----|----------|-----------|
| Cat. No. | 33-032-1BU | Red | Dir. Net | \$18.00/C |
| | 33-032-2BU | Blk | | 18.00/C |
| | 33-032-3BU | Yel | | 18.00/C |
| | 33-032-4BU | Grn | | 18.00/C |
| | 33-032-5BU | Blu | | 18.00/C |

(B) **BANANA PLUG** — Threaded shank; four leaved, nickel plated phosphor bronze spring. Term. Lug & hex nut.

| | | | |
|----------|-----------|----------|-----------|
| Cat. No. | 33-034-BU | Dir. Net | \$15.00/C |
|----------|-----------|----------|-----------|

(C) **BANANA PLUG** — Threaded shank; four leaved, nickel plated phosphor bronze spring. Term. lug & hex nut.

| | | | |
|----------|-----------|----------|-----------|
| Cat. No. | 33-058-BU | Dir. Net | \$15.00/C |
|----------|-----------|----------|-----------|

TIP PLUGS

These Tip Plugs are made to standard industry specifications of .080" diameter. Handles are unbreakable plastic.

(D) **HEAVY DUTY PHONE TIP PLUG** — Standard tip, large diameter for soldering heavy duty wire into nickel plated brass body.

| | | | | |
|----------|------------|-----|----------|-----------|
| Cat. No. | 33-110-1BU | Red | Dir. Net | \$15.00/C |
| | 33-110-2BU | Blk | | 15.00/C |
| | 33-110-3BU | Yel | | 15.00/C |
| | 33-110-4BU | Grn | | 15.00/C |
| | 33-110-5BU | Blu | | 15.00/C |

(E) **INSULATED HOLLOW TIP PLUG** — Drawn brass, nickel plated, solder type.

| | | | | |
|----------|------------|-----|----------|-----------|
| Cat. No. | 33-116-1BU | Red | Dir. Net | \$10.20/C |
| | 33-116-2BU | Blk | | 10.20/C |

(F) **"JR." SOLDERLESS PHONE TIP**—Press fit; nickel plated brass body; wire fastens under knurled collar.

| | | | |
|----------|-----------|----------|-----------|
| Cat. No. | 33-142-BU | Dir. Net | \$ 9.60/C |
|----------|-----------|----------|-----------|

(G) **"JR." SOLDERLESS PHONE TIP**—Threaded nickel plated brass body; wire fastens under knurled collar.

| | | | | |
|----------|------------|-----|----------|-----------|
| Cat. No. | 33-144-1BU | Red | Dir. Net | \$15.00/C |
| | 33-144-2BU | Blk | | 15.00/C |
| | 33-144-3BU | Yel | | 15.00/C |
| | 33-144-4BU | Grn | | 15.00/C |
| | 33-144-5BU | Blu | | 15.00/C |

(H) **HEAVY DUTY PHONE TIP PLUG** — Brass; bright nickel plated, solder type.

| | | | |
|----------|-----------|----------|-----------|
| Cat. No. | 33-158-BU | Dir. Net | \$26.40/C |
|----------|-----------|----------|-----------|

(J) **HEAVY DUTY PHONE TIP PLUG**—Soldering well in nickel plated brass body large enough for standard banana plugs; threaded to fit into plastic handle.

| | | | |
|----------|-----------|----------|-----------|
| Cat. No. | 33-170-BU | Dir. Net | \$10.20/C |
|----------|-----------|----------|-----------|

(K) **"JR." SOLDERLESS PHONE TIP** — Nickel plated brass body; wire fastens under knurled collar; threaded to fit into plastic handle.

| | | | |
|----------|-----------|----------|-----------|
| Cat. No. | 33-172-BU | Dir. Net | \$11.40/C |
|----------|-----------|----------|-----------|

(L) **INSULATED TIP JACK**—Molded Plastic head and washer; brass, nickel plated body with hex nut. Requires 5/16" hole; fits panels up to 1/4" thick.

| | | | | |
|----------|------------|-----|----------|-----------|
| Cat. No. | 33-208-1BU | Red | Dir. Net | \$18.00/C |
| | 33-208-2BU | Blk | | 18.00/C |
| | 33-208-3BU | Yel | | 18.00/C |
| | 33-208-4BU | Grn | | 18.00/C |
| | 33-208-5BU | Blu | | 18.00/C |

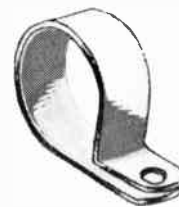
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NOTE: ELECTROCRAFT PRODUCTS ARE AVAILABLE IN ADDITIONAL COLORS — WRITE GC FOR COMPLETE DETAILS.

ELECTROCRAFT PLASTIC CABLE CLAMPS



Electrocraft Cable Clamps are used for fastening cables, harnesses, tubing, etc. Lightweight, durable, with excellent electrical and mechanical properties. Two materials: (1) Ethyl Cellulose, for normal industrial and commercial uses—where temperatures range from -40° F. to 185° F. (2) Nylon (Zytel), for extreme durability and high resistance to temperature (-60° F. to 300° F.) and most chemicals.



ETHYL CELLULOSE CABLE CLAMPS

Transparent (light yellowish) plastic. Meets specifications AN742. Plastic thickness is .063".

NYLON (ZYTEL) CABLE CLAMPS

Natural color (translucent white) Nylon. Thickness is .050" on 1/2" dia. and smaller clamps, .060" on 3/8" and larger.

ETHYL CELLULOSE CLAMPS

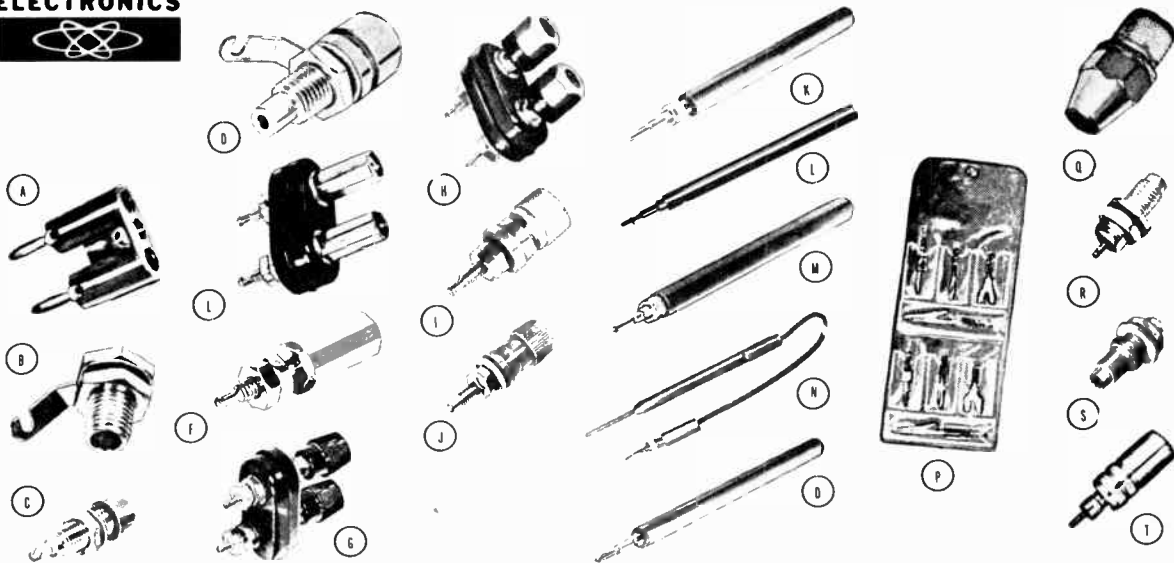
| For Cable D.D. | Cat. No. | Dir. Net Per C | Cat. No. | Dir. Net Per M |
|----------------|----------|----------------|----------|----------------|
| 1/8" | 34-300C | \$2.33 | 34-300-M | \$19.80 |
| 3/16" | 34-304C | 2.40 | 34-304-M | 19.92 |
| 1/4" | 34-308C | 2.58 | 34-308-M | 21.97 |
| 5/16" | 34-312C | 2.85 | 34-312-M | 24.23 |
| 3/8" | 34-316C | 3.00 | 34-316-M | 25.50 |
| 7/16" | 34-320C | 3.30 | 34-320-M | 27.83 |
| 1/2" | 34-324C | 3.60 | 34-324-M | 29.63 |
| 5/8" | 34-328C | 4.20 | 34-328-M | 34.68 |
| 3/4" | 34-332C | 4.50 | 34-332-M | 36.00 |
| 7/8" | 34-336C | 4.80 | 34-336-M | 39.83 |
| 1 1/8" | 34-340C | 5.10 | 34-340-M | 42.71 |
| 1 1/4" | 34-344C | 5.40 | 34-344-M | 44.76 |
| 1 1/2" | 34-348C | 5.70 | 34-348-M | 48.36 |
| 1 3/4" | 34-352C | 6.00 | 34-352-M | 51.60 |
| 2" | 34-356C | 6.30 | 34-356-M | 55.08 |
| 2 1/4" | 34-358C | 6.60 | 34-358-M | 58.20 |

NYLON (ZYTEL) CLAMPS

| For Cable D.D. | Cat. No. | Dir. Net Per C | Cat. No. | Dir. Net Per M |
|----------------|----------|----------------|----------|----------------|
| 1/8" | 34-370C | \$3.60 | 34-370-M | \$30.00 |
| 3/16" | 34-374C | 3.93 | 34-374-M | 31.77 |
| 1/4" | 34-378C | 4.17 | 34-378-M | 34.73 |
| 5/16" | 34-382C | 4.68 | 34-382-M | 38.37 |
| 3/8" | 34-386C | 4.83 | 34-386-M | 40.32 |
| 7/16" | 34-390C | 5.13 | 34-390-M | 42.63 |
| 1/2" | 34-394C | 5.47 | 34-394-M | 45.38 |
| 5/8" | 34-398C | 6.72 | 34-398-M | 62.26 |
| 3/4" | 34-402C | 7.50 | 34-402-M | 65.63 |
| 7/8" | 34-406C | 7.80 | 34-406-M | 77.33 |
| 1" | 34-410C | 8.40 | 34-410-M | 75.00 |
| 1 1/8" | 34-414C | 9.00 | 34-414-M | 81.00 |
| 1 1/4" | 34-418C | 10.50 | 34-418-M | 96.00 |



ELECTROCRAFT NEW PRODUCTS



(A) **DUAL BANANA PLUG**—Four leaved, phosphor bronze, nickel plated spring and steel, cadmium plate screw.
Cat. No. 33-010-BU Blk Net \$.72.00/C

(B) **BANANA JACK**—A hex brass nickel plated body recessed head and supplied with nut and lug.
Cat. No. 33-184-BU Blk Net \$10.20/C

(C) **TIP JACK**—Featuring positive hold hex lock between molded head and jack body.
Cat. No. 33-190 Red Net \$.17

33-190-1BU Red Net \$15.00/C
33-190-2BU Blk Net \$15.00/C
33-190-3BU Yel Net \$15.00/C
33-190-4BU Grn Net \$15.00/C
33-190-5BU Blu Net \$15.00/C
33-190 Blk Net \$.17

(D) **MINIATURE BANANA JACK**—Molded nylon head and insulating washer provide excellent isolation from panel. Fits $\frac{3}{16}$ " mounting hole; for panels up to $\frac{1}{4}$ " thick.
Cat. No. 33-220-1BU Red Net \$18.00/C

33-220-2BU Blk Net \$18.00/C
33-220-3BU Yel Net \$18.00/C
33-220-4BU Grn Net \$18.00/C
33-220-5BU Blu Net \$18.00/C

(E) **DUAL BINDING POST**—Assembly with metal posts, can accept standard dual banana plug and wire.
Cat. No. 33-276-BU Net \$60.00/C

(F) **BINDING POST**—5-way metal, has wrap-around solder stud, 8-32 thread.
Cat. No. 33-286-BU Net \$21.60/C

(G) **DUAL BINDING POST**—Insulated, 5-way, assembly with black insulated fluted heads. Supplied with 4 hex nuts, two flat washers.
Cat. No. 33-288-BU Net \$54.00/C

(H) **DUAL BINDING POST**—Insulated head, washer of molded black styrene, drilled to accept standard phone tips, forward or sideways. Brass, nickel plated body, molded nylon, hex head with brass nickel plated insert.
Cat. No. 33-290-BU Blk Net \$66.00/C

33-292-BU one head red Net \$66.00/C
one head blk

(I) **NYLON BINDING POST**—Grounding type, with molded nylon, non-removable head takes direct solder connection to stud.
Cat. No. 33-294-1BU Red Net \$26.40/C

33-294-2BU Blk Net \$26.40/C

(J) **NYLON BINDING POST**—All metal parts are brass insulated. Molded Nylon head (non-removable). Takes direct solder connection to stud.
Cat. No. 33-296-1BU Red Net \$26.40/C

33-296-2BU Blk Net \$26.40/C

(K) **SOLDERLESS FIBRE TEST PROD**—Bone fibre handle, machined to nickel plated brass tip. Features .245" inside diameter for heavy duty wire.
Cat. No. 33-376-1BU Red Net \$30.00/C

33-376-2BU Blk Net \$30.00/C

(L) **HEAVY DUTY TEST PROD**—Threaded type, extra sturdy brass, nickel-plated tip with red or black molded plastic handle.
Cat. No. 33-378-1BU Red Net \$33.00/C

33-378-2BU Blk Net \$33.00/C

(M) **SOLDERLESS TEST PROD**—Threaded prod with 5" long plastic handle, nickel plated phone tip, wire fits through handle, wraps around screw portion.
Cat. No. 33-404-1BU Red Net \$30.00/C

33-404-2BU Blk Net \$30.00/C

(N) **RETRACTABLE TEST PROD**—Retractable tip, this exclusive feature allows complete testing of printed circuitry without shorting or shock to the user.
Cat. No. 33-465-1 Red Net \$1.65

33-465-2 Blk Net \$1.65

(O) **SUBMINIATURE TEST PROD**—Handle bone fibre, brass nickel plated tip, easily assembled due to threading.
Cat. No. 33-388-1BU Net \$24.00/C

33-388-2BU Net \$24.00/C

(P) **UNIVERSAL TEST LEAD KIT**—Two 55" leads and 12 interchangeable testing tips and connectors. Convert test leads to many different types. Has 4 phone tips, 2 alligator clips, 2 needle tips, 2 banana plugs, 2 spade lugs.
Cat. No. 33-528 Net \$2.40

(Q) **MALE COAXIAL CONNECTORS**—Low-cost solderless connector. Mates with No. 33-836 receptacle or 33-838 female coupler.
Cat. No. 33-834-BU Net \$48.00/C

(R) **FEMALE CHASSIS FITTING**—Silver-plated, low-loss insulated coaxial cable connector.
Cat. No. 33-836-BU Net \$48.00/C

(S) **FEMALE COUPLER**—Highly conductive, silver-plated cable connector. Mates at either end with No. 33-834 connector.
Cat. No. 33-838-BU Net \$60.00/C

(T) **MINIATURE PHONE JACK INPUT, STANDARD PHONO PLUG OUTPUT.**
Cat. No. 33-865 Net \$.87

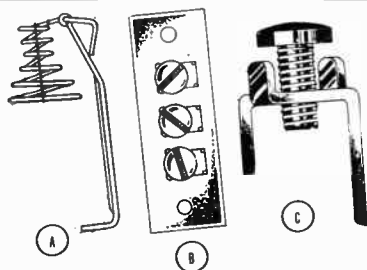
FREE CATALOG AND LITERATURE



Free Catalogs and Literature on the complete GC-ELECTROCRAFT line of components. Illustrations, complete specifications and dimensioned drawings on every product. Send Today.

GOVERNMENT AND INDUSTRIAL INQUIRIES INVITED

ENGINEERING AND PRODUCTION FACILITIES AT YOUR SERVICE



(A) **MINIATURE SPRINGS**—Guards miniature tubes and provides 2 way support. Direct axial pressure downward plus a sideways support to keep the tube upright and perpendicular to the chassis. Resilient spring maintains life and action indefinitely.

| | | |
|-----------|-----------------------------|-----------|
| Cat. No. | Tube Size | Net |
| 33-900-BU | for 7 pin, 2 inch long tube | \$10.20/C |
| 33-901-BU | for 1 pin, 1 1/2 inch tube | 10.20/C |
| 33-902-BU | for 7 pin, 1 1/8 inch tube | 10.20/C |
| 33-903-BU | for 9 pin, 1 1/2 inch tube | 10.80/C |

(B) **HEAVY DUTY TERMINAL BOARDS**—Brass. Cadmium plated lugs, .042 thick on 1/2" centers. Numbered terminals. X. P. Bakelite Strip 7/8"

wide, 3/32" Thick. Nickel plated 8-32 x 3/8 brass screw.

| | | |
|-----------|------------|-----------|
| Cat. No. | Terminal | Net |
| 33-930-BU | 2 Terminal | \$20.40/C |
| 33-931-BU | 3 Terminal | 28.20/C |
| 33-932-BU | 4 Terminal | 34.20/C |
| 33-934-BU | 5 Terminal | 40.20/C |
| 33-935-BU | 6 Terminal | 46.20/C |
| 33-936-BU | 7 Terminal | 52.20/C |
| 33-937-BU | 8 Terminal | 58.80/C |

(C) **TERMINAL LUGS AND SCREWS**—Designed for heavy duty terminal strips. Brass hot tinned lugs with screw inserted.

Cat. No. 33-940-BU Net \$5.40/C

ELECTROCRAFT PRODUCTS ARE AVAILABLE IN ADDITIONAL COLORS—WRITE GC FOR COMPLETE DETAILS.



I.E.H. MFG. CO., INC.

Subsidiary of Industrial Electronic Hardware Corp.
New York N. Y.

SOCKETS LAMINATED

A complete line of laminated sockets and molded sockets for all replacement or OEM purposes. The stringent "I.H." Standard of Quality is your guarantee of top performance in all applications.

MINIATURE LAMINATED WAFER SOCKETS

Tops and bottoms are made from laminated Bakelite wafers. Contacts are Spring Brass, and are Cadmium Plated for easy soldering. A sturdy, inexpensive socket with rugged, reliable performance.



| Model Number | Mtg. Ctrs. | Center Shield | Ground Strap | List Price per C |
|--|------------|---------------|--------------|------------------|
| 7-PIN MINIATURE LAMINATED WAFER SOCKETS | | | | |
| LS-201 | 7/8" | No | No | \$11.00 |
| LS-202 | 7/8" | Yes | No | 11.50 |
| LS-203 | 7/8" | Yes | Yes | 12.00 |
| LS-204 | 1" | No | No | 11.00 |
| LS-205 | 1" | Yes | No | 11.50 |
| LS-206 | 1" | Yes | Yes | 12.00 |
| LS-207 | 1 1/8" | No | No | 13.00 |
| LS-208 | 1 1/8" | Yes | No | 13.50 |
| LS-209 | 1 1/8" | Yes | Yes | 14.00 |
| Standard packing: 50 per box | | | | |
| OCTAL MINIATURE LAMINATED WAFER SOCKETS | | | | |
| LS-210 | 1 1/8" | No | No | 10.00 |
| LS-211 | 1 1/2" | No | No | 10.00 |
| Standard packing: 50 per box | | | | |
| NOVAL MINIATURE LAMINATED WAFER SOCKETS | | | | |
| LS-212 | 1 1/8" | No | No | 13.00 |
| LS-213 | 1 1/8" | Yes | No | 13.50 |
| LS-214 | 1 1/8" | Yes | Yes | 14.00 |
| LS-215 | 1 1/8" | No | No | 14.00 |
| LS-216 | 1 1/8" | Yes | No | 14.50 |
| LS-217 | 1 1/8" | Yes | Yes | 15.00 |
| Standard packing: 50 per box | | | | |

VS-218

VIBRATOR SOCKETS

Three-prong Vibrator socket for use in most auto radios

Standard packing: 25 per box

14.00

SOCKETS MOLDED

STANDARD MINIATURE MOLDED SOCKETS

Molded from high di-electric general purpose black Bakelite, or low-loss Mica-filled Bakelite. Contacts are Spring Brass, Cadmium-Plated for easy soldering. Other grades of material or plating are available, quotations on request.

7-PIN MINIATURE MOLDED SOCKETS Standard Packing: 25 per box.

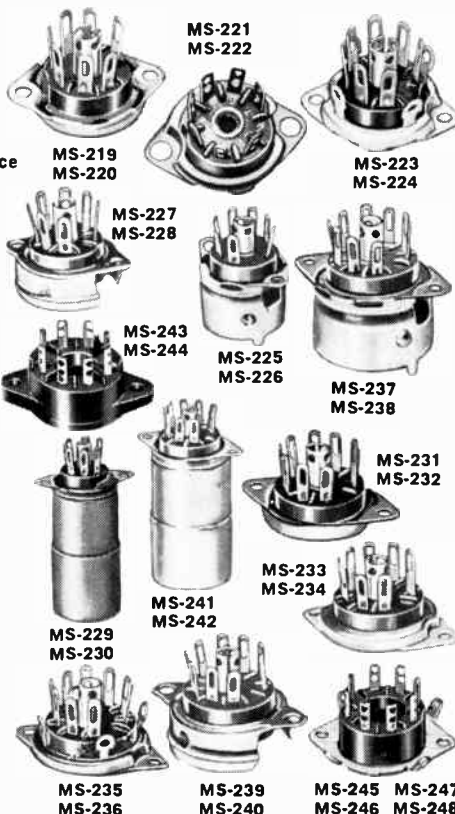
| Model Number | Material | Mount | Mtg. Ctrs. | Mtg. Diameter | Holes | Tube Base | Shield | List Price per C |
|--------------|---------------------------------------|--------|------------|---------------|-------------|-----------|--------|------------------|
| MS-219 | Bakelite | Top | 7/8" | .098 | No | No | No | \$14.00 |
| MS-220 | Mica-Filled Bakelite | Top | 7/8" | .098 | No | No | No | 17.00 |
| MS-221 | Bakelite | Bottom | 7/8" | .098 | No | No | No | 14.00 |
| MS-222 | Mica-Filled Bakelite | Bottom | 7/8" | .098 | No | No | No | 17.00 |
| MS-223 | Bakelite (with grd. lugs) | Bottom | 7/8" | .098 | No | No | No | 15.00 |
| MS-224 | Mica-Filled Bakelite (with grd. lugs) | Bottom | 7/8" | .098 | No | No | No | 18.00 |
| MS-225 | Bakelite | Top | 7/8" | .125 | J-slot | No | No | 28.00 |
| MS-226 | Mica-Filled Bakelite | Top | 7/8" | .125 | J-slot | No | No | 35.00 |
| MS-227 | Bakelite | Top | 7/8" | .125 | Snap-on | No | No | 16.00 |
| MS-228 | Mica-Filled Bakelite | Top | 7/8" | .125 | Snap-on | No | No | 20.00 |
| MS-229 | Bakelite | Top | 1" | .095 | Collapsible | No | No | 37.50 |
| MS-230 | Mica-Filled Bakelite | Top | 1" | .095 | Collapsible | No | No | 40.50 |

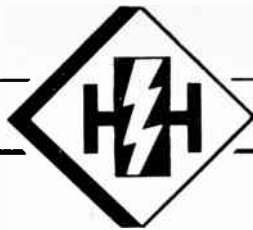
9-PIN MINIATURE MOLDED SOCKETS Standard Packing: 25 per box.

| | | | | | | | | |
|--------|---------------------------------------|--------|--------|------|-------------|----|----|---------|
| MS-231 | Bakelite | Top | 1 1/8" | .095 | No | No | No | \$20.00 |
| MS-232 | Mica-Filled Bakelite | Top | 1 1/8" | .095 | No | No | No | 23.00 |
| MS-233 | Bakelite | Bottom | 1 1/8" | .095 | No | No | No | 20.00 |
| MS-234 | Mica-Filled Bakelite | Bottom | 1 1/8" | .095 | No | No | No | 23.00 |
| MS-235 | Bakelite (with grd. lugs) | Bottom | 1 1/8" | .095 | No | No | No | 22.00 |
| MS-236 | Mica-Filled Bakelite (with grd. lugs) | Bottom | 1 1/8" | .095 | No | No | No | 25.00 |
| MS-237 | Bakelite | Top | 1 1/8" | .125 | J-slot | No | No | 30.00 |
| MS-238 | Mica-Filled Bakelite | Top | 1 1/8" | .125 | J-slot | No | No | 33.00 |
| MS-239 | Bakelite | Top | 1 1/8" | .125 | Snap-on | No | No | 24.00 |
| MS-240 | Mica-Filled Bakelite | Top | 1 1/8" | .125 | Snap-on | No | No | 27.00 |
| MS-241 | Bakelite | Top | 1 1/8" | .095 | Collapsible | No | No | 40.50 |
| MS-242 | Mica-Filled Bakelite | Top | 1 1/8" | .095 | Collapsible | No | No | 43.50 |

OCTAL MINIATURE MOLDED SOCKETS Standard Packing: 25 per box.

| | | | | | | | | |
|--------|---------------------------------------|-----|--------|------|------------|----|----|---------|
| MS-243 | Bakelite | Top | 1 1/2" | .140 | All Molded | No | No | \$14.00 |
| MS-244 | Mica-Filled Bakelite | Top | 1 1/2" | .140 | All Molded | No | No | 18.00 |
| MS-245 | Bakelite | Top | 1 1/2" | .137 | Saddle | No | No | 14.00 |
| MS-246 | Mica-Filled Bakelite | Top | 1 1/2" | .137 | Saddle | No | No | 18.00 |
| MS-247 | Bakelite (with grd. lugs) | Top | 1 1/2" | .137 | Saddle | No | No | 14.00 |
| MS-248 | Mica-Filled Bakelite (with grd. lugs) | Top | 1 1/2" | .137 | Saddle | No | No | 18.00 |





I.E.H. MFG. CO., INC.

Subsidiary of Industrial Electronic Hardware Corp.
New York N. Y.

SOCKETS PRINTED CIRCUIT

A complete line of printed circuit sockets manufactured with meticulous care to provide maximum insulation resistance and minimum frequency loss. Automatic assembly assures uniformity and quality control required for automation processes. Variations of models listed as well as other designs can be made to your special order.

LAMINATED SOCKETS Standard Packing: 25 per box

SPECIFICATIONS: Wafers — NEMA Spec. Grade XP Laminated Phenolic. Contacts — Spring Temper Brass, Cadmium Plated. Center Shield — Tempered Steel, Cadmium Plated. (Other grades of Material, Wax Impregnation, or Plating available on request.)

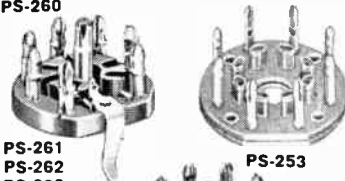
| Model Number | Contacts | Pin Circle Diameter | Pin Mtg. Holes | Center Shield | Ground Strap | List Price per C |
|--------------|----------|---------------------|----------------|---------------|--------------|------------------|
| PS-249 | 7 | .687 | .093 | N | N | \$13.00 |
| PS-250 | 7 | .687 | .093 | Y | N | 13.50 |
| PS-251 | 7 | .687 | .093 | Y | Y | 17.50 |
| PS-253 | Octal | 1.125 | .093 | N | N | 30.00 |
| PS-254 | 9 | .781 | .093 | N | N | 16.00 |
| PS-255 | 9 | .781 | .093 | Y | N | 16.50 |
| PS-256 | 9 | .781 | .093 | Y | Y | 20.50 |

MOLDED SOCKETS Standard Packing: 25 per box

SPECIFICATIONS: Casting — General Purpose Phenolic or Low-Loss Mica Filled Phenolic. Contacts — Spring Temper Brass, Cadmium Plated. Center Shield — Brass, Cadmium Plated. Ground Strap — Tempered Steel, Cadmium Plated. (Other grades of Material, Wax Impregnation, or Plating available on request.)

| Model Number | Contacts | Material | Pin Circle Diameter | Mtg. Holes | Center Shield | Ground Strap | List Price per C |
|--------------|----------|----------------------|---------------------|------------|----------------------------|--------------|------------------|
| PS-258 | 7 | Bakelite | .687 | .093 | N | N | \$14.50 |
| PS-259 | 7 | Mica-filled Bakelite | .687 | .093 | N | N | 17.50 |
| PS-260 | 7 | Bakelite | .687 | .093 | Y | N | 16.00 |
| PS-261 | 7 | Mica-filled Bakelite | .687 | .093 | Y | N | 18.50 |
| PS-262 | 7 | Bakelite | .687 | .093 | Y | Y | 19.00 |
| PS-263 | 7 | Mica-filled Bakelite | .687 | .093 | Y | Y | 22.50 |
| PS-264 | 7 | Bakelite | .687 | .093 | w/Collapsible Tube Shield. | 42.50 | |
| PS-265 | 7 | Mica-filled Bakelite | .687 | .093 | Tube Shield. | 45.00 | |
| PS-266 | Octal | Bakelite | | | N | N | 20.00 |
| PS-267 | Octal | Mica-filled Bakelite | | | N | N | 23.50 |
| PS-268 | 9 | Bakelite | .781 | .093 | N | N | 19.50 |
| PS-269 | 9 | Mica-filled Bakelite | .781 | .093 | N | N | 21.00 |
| PS-270 | 9 | Bakelite | .781 | .093 | Y | N | 20.00 |
| PS-271 | 9 | Mica-filled Bakelite | .781 | .093 | Y | N | 23.50 |
| PS-272 | 9 | Bakelite | .781 | .093 | Y | Y | 24.00 |
| PS-273 | 9 | Mica-filled Bakelite | .781 | .093 | Y | Y | 26.50 |
| PS-274 | 9 | Bakelite | .781 | .093 | w/Collapsible Tube Shield. | 48.00 | |
| PS-275 | 9 | Mica-filled Bakelite | .781 | .093 | Tube Shield. | 51.00 | |

PS-258
PS-259
PS-260



PS-261
PS-262
PS-263

PS-253

PS-254
PS-255
PS-256

PS-264
PS-265

PS-249
PS-250
PS-251

PS-268
PS-269
PS-270
PS-271
PS-272
PS-273

PS-274
PS-275

PS-266
PS-267

SOCKETS TRANSISTOR

SPECIFICATIONS: Casting — Low Loss Mica Filled Phenolic. Contacts — Beryllium Copper, Tin Coated. Printed Circuit Types can be heat-sealed. Triangular openings for easy insertion of Transistors. Supplied with Spring-type retaining rings of Tempered Steel, Cadmium Plated.

Note: TS-279 (Power Transistor Socket) made of NEMA Spec. Grade XP Laminated Phenolic Wafers. Other grades of material or plating available on request.

| Model Number | Description | List Price per C |
|--------------|---|------------------|
| TS-276 | General Purpose Universal Transistor Socket | \$25.00 |
| TS-277 | Printed Circuit Transistor Socket | 28.50 |
| TS-278 | Printed Circuit Transistor Socket with spring tail terminations | 28.50 |
| TS-279 | Power Transistor Socket | 12.00 |
| TS-294 | 3-pin Printed Circuit Socket | 30.00 |

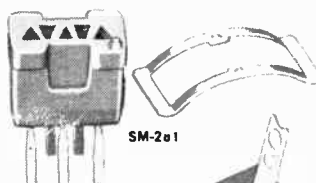
Standard Packing: 25 per box

SOCKETS SUB-MINIATURE

SPECIFICATIONS: Casting — Low Loss Mica Filled Phenolic. Contacts — Beryllium Copper, Tin Coated. Triangular openings for easy insertion of Tubes. Supplied with Spring-type retaining rings of Tempered Steel, Cadmium Plated. Other grades of Material or Plating available on request.

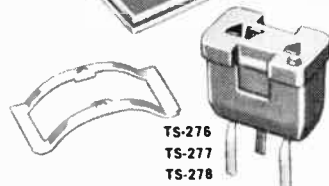
| Model Number | Description | List Price per C |
|--------------|-------------------------------------|------------------|
| SM-281 | 5-Contact Sub-Miniature Tube Socket | \$27.50 |
| SM-282 | 6-Contact Sub-Miniature Tube Socket | 30.00 |
| SM-283 | 7-Contact Sub-Miniature Tube Socket | 32.00 |

Standard Packing: 25 per box

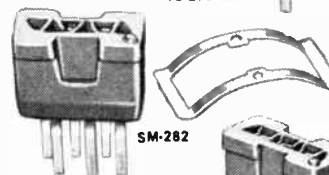


SM-281

TS-279



TS-276
TS-277
TS-278



SM-282

SM-283



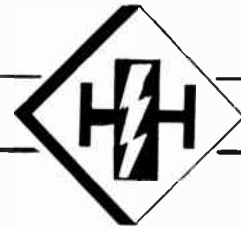
TS-294



TERMINAL STRIPS

I.E.H. MFG. CO., INC.

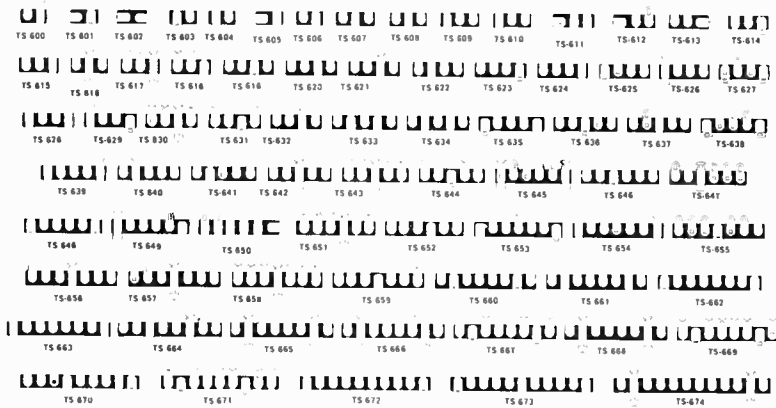
Subsidiary of Industrial Electronic Hardware Corp.
New York N. Y.



We are equipped to meet every Terminal Strip requirement. Some of the most popular combinations are shown here. Special combinations on request. Lugs are Cadmium-plated

steel, mounted on NEMA Spec. Grade XP Laminated Phenolic strips, 3/8" wide by 1/8" thick, with 3/8" spacing. Brackets have .140 diameter mounting holes, for No. 6 screw.

| Model Number | Price Per C | Model Number | Price Per C | Model Number | Price Per C | Model Number | Price Per C | Model Number | Price Per C | Model Number | Price Per C | | |
|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------|------------------|
| TS-600 | 3.25 | TS-612 | 4.00 | TS-624 | 5.00 | TS-636 | 6.00 | TS-648 | 8.25 | TS-660 | 9.00 | TS-672 | 12.00 |
| TS-601 | 3.50 | TS-613 | 4.00 | TS-625 | 5.00 | TS-637 | 6.00 | TS-649 | 8.25 | TS-661 | 9.75 | TS-673 | 12.00 |
| TS-602 | 4.00 | TS-614 | 4.00 | TS-626 | 5.00 | TS-638 | 8.00 | TS-650 | 17.00 | TS-662 | 9.75 | TS-674 | 12.50 |
| TS-603 | 3.25 | TS-615 | 4.50 | TS-627 | 6.00 | TS-639 | 8.00 | TS-651 | 8.25 | TS-663 | 9.75 | TS-675 | 12.50 |
| TS-604 | 3.25 | TS-616 | 4.50 | TS-628 | 6.00 | TS-640 | 6.00 | TS-652 | 8.25 | TS-664 | 9.75 | | |
| TS-605 | 4.00 | TS-617 | 4.50 | TS-629 | 6.00 | TS-641 | 6.00 | TS-653 | 8.25 | TS-665 | 9.75 | | |
| TS-606 | 3.00 | TS-618 | 4.50 | TS-630 | 6.00 | TS-642 | 6.50 | TS-654 | 8.25 | TS-666 | 10.00 | | Standard Packing |
| TS-607 | 4.00 | TS-619 | 5.00 | TS-631 | 6.00 | TS-643 | 6.50 | TS-655 | 8.25 | TS-667 | 10.00 | | 100 per box |
| TS-608 | 4.00 | TS-620 | 5.00 | TS-632 | 6.00 | TS-644 | 6.50 | TS-656 | 8.25 | TS-668 | 10.00 | | |
| TS-609 | 4.00 | TS-621 | 5.00 | TS-633 | 7.00 | TS-645 | 7.50 | TS-657 | 9.00 | TS-669 | 11.00 | | |
| TS-610 | 4.00 | TS-622 | 5.00 | TS-634 | 7.00 | TS-646 | 7.50 | TS-658 | 9.00 | TS-670 | 11.00 | | |
| TS-611 | 5.75 | TS-623 | 5.00 | TS-635 | 8.50 | TS-647 | 8.25 | TS-659 | 9.00 | TS-671 | 11.00 | | |



SCREW TYPE TERMINAL STRIPS

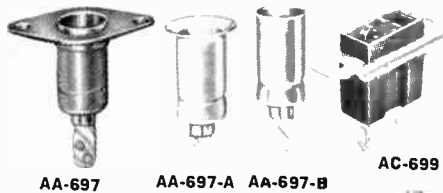
Lugs — Cadmium-Plated Steel, spaced 3/8" Strips — XP Laminated Bakelite, 1/8" thick by 3/8" wide

| Model No. | Terminals | Mtg. Ctr. | List Price per C |
|-----------|-----------|-----------|------------------|
| ST-676 | 2 | 1 3/4" | \$10.00 |
| ST-677 | 3 | 1 3/4" | 15.00 |
| ST-678 | 4 | 2 3/8" | 19.00 |
| ST-679 | 5 | 2 3/8" | 22.00 |
| ST-680 | 6 | 3 1/8" | 28.00 |
| ST-681 | 7 | 3 1/2" | 35.00 |
| ST-682 | 8 | 3 1/2" | 39.00 |
| ST-683 | 9 | 4 3/8" | 44.00 |
| ST-684 | 10 | 4 1/8" | 48.00 |

SHORTING LINK — Add "L" to number 3.00



MISCELLANEOUS



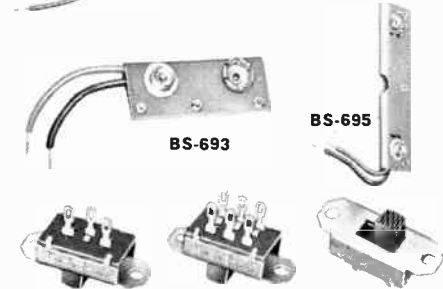
| Model Number | Description | List Price per C |
|--------------|--------------------------|------------------|
| AA-697 | With Saddle-type flange. | \$22.00 |
| AA-697-A | With flange. | 13.00 |
| AA-697-B | Shell type. | 13.00 |



| Model Number | Description | List Price per C |
|--------------|---|------------------|
| LC-698 | Recessed type male used with standard T.V. power cord female connector. | \$13.00 |
| LC-698-A | Mate for female T.V. power cord. Made of Laminated Phenolic. | 9.00 |



| Model Number | Description | List Price per C |
|--------------|---------------------------------|------------------|
| SC-700 | 2-prong, with mounting bracket. | \$13.00 |



| Model No. | Mtg. Centers | Description | BATTERY STRAPS (Use this chart for Battery Reference) | | | List Price per C |
|-----------|--------------|------------------|---|---------|--------|------------------|
| | | | Eveready | Burgess | R.C.A. | |
| BS-691 | 1/2" | 9, 67 1/2 V | 216 | 2U6 | VS-312 | \$25.00 |
| | | | 246 | 2N6 | 305 | |
| | | | 416 | UX-5 | 318 | |
| | | | 266 | M-6 | | |
| BS-692 | 3/8" | 9 V | 495 | N60X | VS-316 | \$30.00 |
| | | | 479 | P60 | 216 | |
| | | | 437 | XX-50 | 217 | |
| | | | 477 | P45 | 218 | |
| BS-693 | 1/8" | 67 1/2, 75, 90 V | 276 | D6 | VS-306 | \$30.00 |
| | | | 455 | XX-30 | VS-055 | |
| | | | 457 | K45 | 082 | |
| | | | 467 | XX-45 | 016 | |
| BS-696 | 2 1/2" | 90 V | 490 | N-60 | VS-090 | \$30.00 |

Standard packing 50 per carton (except Slide Switches and Battery Straps — 25 per carton)

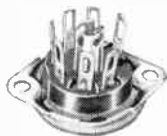


I.E.H. MFG. CO., INC.

Subsidiary of Industrial Electronic Hardware Corp.
New York N. Y.



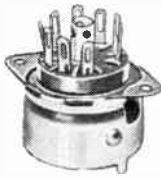
TS-102P01



TS-102P02



TS-102P03



TS-103P01



TS-103P02



TS-103P03

MIL SOCKETS:

| Model Number | Description | List Price Per C |
|--------------|-----------------------------------|------------------|
| TS-102P01 | 7-pin Mica, Shield Base Type..... | \$45.00 |
| TS-102P02 | 7-pin Mica, Saddle Type..... | 36.00 |
| TS-102P03 | 7-pin Mica, Saddle Type..... | 36.00 |
| TS-103P01 | 9-pin Mica, Shield Base Type..... | 64.00 |
| TS-103P02 | 9-pin Mica, Saddle Type..... | 38.00 |
| TS-103P03 | 9-pin Mica, Saddle Type..... | 38.00 |

TUBE RETAINER SOCKETS:

| Model Number | Description | List Price Per C |
|--------------|--------------------|------------------|
| TR-702 | 7-pin Sockets..... | \$30.00 |
| TR-703 | 9-pin Sockets..... | 33.50 |

NUVISTOR SOCKET:

| | | |
|--------|------------------------------|--------|
| NV-287 | For 5-pin Nuvistor base..... | 27.50 |
| NV-294 | For 7-pin Nuvistor base..... | 220.00 |

COMPACTRON SOCKET:

| | | |
|----------|--|-------|
| CM-288 | For Printed Circuit..... | 33.50 |
| CM-288-W | Chassis mount, Wafer..... | 33.50 |
| CM-292 | All Molded, Saddle mtg. ctrs. 1.312"; mtg. holes .144"..... | 33.50 |

CRYSTAL SOCKET:

| | | |
|--------|---|-------|
| CS-284 | .486" centers, for No. CR-7 and BH 6 crystals. Ceramic, silver-plated beryllium copper contacts with hot tinned tails | 25.00 |
|--------|---|-------|

NOVAR SOCKETS:

| Model Number | Saddle | Mtg. Ctrs. | Mtg. Holes | List Price Per C |
|--------------|----------------------------|------------|------------|------------------|
| NV-289 | Molded | 1.312" | .144" | \$25.00 |
| NV-290 | Steel | 1.5" | .136" | 32.50 |
| NV-291 | Printed Circuit Type | | | 32.50 |

WIRE TERMINATION SOCKETS:

| Model Number | Description | List Price Per C |
|--------------|-----------------------------|------------------|
| WS-295 | 7-pin Printed Circuit | \$30.00 |
| WS-296 | 9-pin Printed Circuit | 35.00 |

WIRE WRAP TERMINALS:

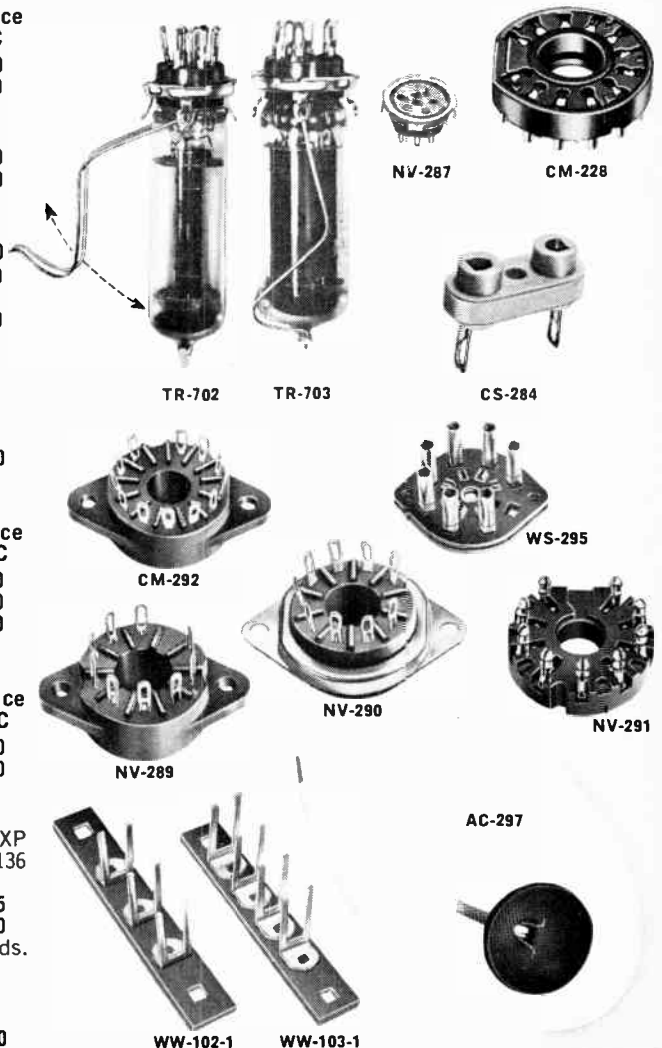
Cadmium-Plated Steel Terminals, mounted on XP Laminated Phenolic Strips, 3/8" high, 1/8" thick, .136 mounting holes.

| | | |
|----------|----------------------------|-------|
| WW-702-1 | 1/2" spacing, 2 lugs | 12.75 |
| WW-703-2 | 3/8" spacing, 2 lugs | 12.50 |

Available with any number of lugs to suit your needs.

ANODE CONNECTOR:

| | | |
|--------|--|-------|
| AC-297 | Clip type connector, Suction Cup Insulation | 47.50 |
|--------|--|-------|



JAVEX ELECTRONICS

REDLANDS, CALIF.
BROOKLYN, N. Y.
MONTREAL, CANADA

ALL JAVEX products are of highest quality and are guaranteed to SELL. Should any JAVEX item fail to give satisfaction in operation or quality, it may be returned for replacement, credit, or full refund.

TV, RADIO, HI-FI, STEREO, AUDIO, ELECTRICAL, ELECTRONIC COMPONENTS
UL WHERE NECESSARY, NEMA STANDARD UNILINE OR SIERRA DESIGN
ON ALL WALL PLATES. IVORY OR BROWN.

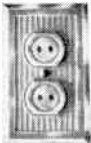
SINGLE OUTLET TV WALL PLATE



For extreme simplicity, convenience and efficiency in any TV or FM installation using 300 ohm transmission line Unilinc or Sierra design wall plates to match any existing decor. Use with XP-2 or MPX plugs. All plates are complete with mounting screws. Solderless. Hi-Side for surface mounting, Regular for wall box installation.

WP-1NET PRICE \$.89

Also furnished for double outlet—WP-2, for rotators with 2 & 4 wire—WP-2-4, and in 6, 8 & 10 wire—WP-6, WP-8, WP-10, with separate plate & receptacle in double TV outlet and rotator combinations as below, and in regular 3/8" hole phone P.P.



DUPLEX TV RECEPTACLE WITH WALL PLATE

For two 2-wire sockets or one 2-wire and one 4-wire socket. Use with XP-2 and XP-4 or MPX plugs.

DUX-2-2NET PRICE \$1.18

DUX-2-4NET PRICE \$1.29



MULTI-SET TV ISOLATOR

MI-50 isolator on a wall plate acting as a single or double TV outlet, with mounting screws and plugs. Solderless.

MI-TV-1NET PRICE \$1.97

(1 outlet)

MI-TV-2NET PRICE \$2.37

(2 outlets)

MULTI-SET TV ISOLATOR



Ideal for hotels, motels, and Multi-Set installations. One isolator required at each TV set. Size 1 1/4" x 2" x 3/8" high. Solderless.

MI-50NET PRICE \$1.77

MPX Magi-Plug Available Separately
NET PRICE \$1.29

COMPLETE AC-TV WALL PLATES



One TV receptacle plus one AC receptacle of standard UL rating and a 2-gang duplex wall plate.

AC-TV-2-2NET PRICE \$1.42

(two 2-wire TV outlets plus AC outlet)

AC-TV-2-4NET PRICE \$1.61

(one 2-wire TV outlet and one 4-wire Rotor outlet plus AC outlet).



VOLUME ('L' PAD) CONTROL

For Hi-Fi and other remote multiple installations where individual loud speaker volume control is necessary 'L' pad type. 8 & 16 ohm.

CONTROL ONLY

LC-8 or LC-16NET PRICE \$1.77

WITH PLATE

LCP-8 or LCP-16NET PRICE \$2.07

LCP-dual. 2-L pads, 8 or 16 ohmsNET PRICE \$3.40

ALSO — TENNA-SHINGLES, HIGH VOLTAGE PROBES, CRYSTAL HOLDERS, AC RECEPTACLES, BAKELITE WALL BOXES AND JAVEX MINI-PLATES AND SOCKETS. WRITE FOR CATALOG.

DUPLEX OUTLET RECEPTACLE



This receptacle is supplied in two styles for TV-FM, rotors, etc. Complete with mounting screws. Solderless. Use with XP-2 and XP-4 or MPX plugs.

DU-2-2NET PRICE \$.77

DU-2-4NET PRICE \$.95

COMBINATION SWITCHING & VOLUME ('L' PAD) OUTLET PLATES



Plate with 5 pos., 2 pole switch.

WPSNET PRICE \$2.14

5 pos., 2 pole switch and 2 wire outlet.

WPS-1NET PRICE \$2.37

WPS-dual. 2-5 pos. 2 pole switchesNET PRICE \$3.40

WLSNET PRICE \$3.83

5 pos., 2 pole switch, plus 8 or 16 ohm L pad.

WPL-1NET PRICE \$2.37

8 or 16 ohm 'L' pad plus front outlet jack.

TENNA-TUBE THRU-WALL



Connect any VHF-UHF lead-in, regular or special twin, RG, ladder, co-axial, oval, and round leads.

TT WITHOUT PLATENET PRICE \$.89

TT-2 WITH PLATE & PLUGNET PRICE \$1.67

TT-4 WITH PLATE & PLUGNET PRICE \$1.86

FOR 4 WIRE

PLUGS



Sparkling molded acrylic resin of the most handsome quality. 3/4" x 3/8" high, with easy grip sides. Solderless.

XP-2 2 WireNET PRICE \$.18

XP-4 4 WireNET PRICE \$.35

XP-9 9 WireNET PRICE \$1.04

2 AND 4 WIRE LINE SPLICERS

S-2NET \$.12 S-4NET \$.23

4 & 7 WIRE LINE CONNECTORS

LP-4NET PRICE \$1.01

LP-7NET PRICE \$1.01

SUPER AC CONNECTOR



BAKELITE FOR 2 WIRE AC SERVICE.
RATED 10 AMPS @ 250 VOLT

SMK-2NET PRICE \$.41

OCTAL PLUG & SOCKET



Fits Octal Sockets. Screw cap. Finest Precision Bakelite Molding.

SP-8 PlugNET PRICE \$.56

SC-8 SocketNET PRICE \$.56

MINIATURE PHONE PLUG & JACK



Tinest and finest set for open or closed circuits. Screw on caps, less 3/8" dia., 1" long overall.

SMJNET PRICE \$.56

TEST LEADS

Red & Black Vinyl in
3 Combinations



SL-1 Pin tips and prodsNET PRICE \$1.01

SL-3 Pin tip and alligator clipsNET PRICE \$1.01

SL-5 Alligator clips both endsNET PRICE \$1.01

4 PLUG PHONO JACK STRIP

With molded flexible covers for strain relief.

PJ-4 4 jack stripNET PRICE \$.89

PJ-C Phono Plug coversNET PRICE \$.23

PIN TIPS & JACKS — PT RED & BLACK

NET PRICE \$.89 set

2 POLE — 5 POSITION MICRO SWITCH

TMSNET PRICE \$1.18

CONNECTOR CABLES — PHONO STYLE

PQ Plug to stripped ends 48"NET PRICE \$1.01

PJ Plug to Jax 48"NET PRICE \$1.18

PY Plug to dual 'Y' Jax 6"NET PRICE \$1.18

MULTI-SELECTOR CONTROL

One input — 5 output, or vice versa

MCNET PRICE \$2.55

"OPEN HOLE" WALL PLATE BRACKETS

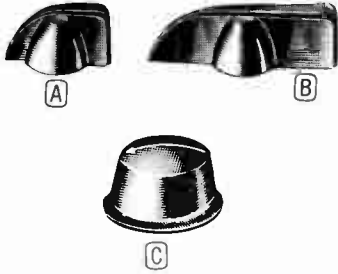
WBNET PRICE \$.41 per set

YOU CAN ALWAYS DEPEND ON A JAVEX PRODUCT

P. R. MALLORY & CO. Inc.
MALLORY

Knobs, Dials, Jacks

KNOBBS



ROUND AND BAR KNOBS

| Mall. No. | Fig. | Description | Net |
|-----------|-------|--------------------------|-----|
| 364 | ..... | 1 1/8" dia. round, black | 9c |
| 365-1 | B | 2 1/4" bar knob, black | 21c |
| 366-1 | A | 1 1/2" bar knob, black | 15c |
| 366-R-1 | A | 1 1/2" bar knob, red | 15c |
| 367-1 | C | 1 1/2" dia. round, black | 21c |
| 368-1 | C | 1 1/2" dia. round, black | 18c |

DIAL PLATES



Aluminum dial plates with figures etched on solid black background. 1 1/8" dia., 1/16" hole, figures 3/64" high, .020" thick.

| Mallory No. -20° Spacing | Mallory No. -30° Spacing | Marking | Net Each |
|--------------------------|--------------------------|-------------|----------|
| ..... | 372 | 1 to 2 | 12c |
| 453 | 373 | 1 to 3 | 12c |
| 454 | 374 | 1 to 4 | 12c |
| 455 | 375 | 1 to 5 | 12c |
| 456 | 376 | 1 to 6 | 12c |
| 457 | 377 | 1 to 7 | 12c |
| 458 | 378 | 1 to 8 | 12c |
| 459 | 379 | 1 to 9 | 12c |
| 460 | 380 | 1 to 10 | 12c |
| 461 | 381 | 1 to 11 | 12c |
| 462 | 382 | 1 to 12 | 12c |
| 463 | ..... | 1 to 13 | 12c |
| 464 | ..... | 1 to 14 | 12c |
| 465 | ..... | 1 to 15 | 12c |
| 466 | ..... | 1 to 16 | 12c |
| 467 | ..... | 1 to 17 | 12c |
| 468 | ..... | 1 to 18 | 12c |
| 472 | ..... | Off 1 to 2 | 12c |
| 473 | 383 | Off 1 to 3 | 12c |
| 474 | 384 | Off 1 to 4 | 12c |
| 475 | 385 | Off 1 to 5 | 12c |
| 476 | 386 | Off 1 to 6 | 12c |
| 477 | 387 | Off 1 to 7 | 12c |
| 478 | 388 | Off 1 to 8 | 12c |
| 479 | 389 | Off 1 to 9 | 12c |
| 480 | 390 | Off 1 to 10 | 12c |
| 481 | ..... | Off 1 to 11 | 12c |
| 482 | ..... | Off 1 to 12 | 12c |
| 483 | ..... | Off 1 to 13 | 12c |
| 484 | ..... | Off 1 to 14 | 12c |
| 485 | ..... | Off 1 to 15 | 12c |
| 486 | ..... | Off 1 to 16 | 12c |
| ..... | 394* | 1 to 24 | 12c |
| ..... | Special 487† | 1 to 5 | 12c |
| ..... | Special 488‡ | 1 to 4 | 12c |
| ..... | Special | ..... | ..... |

Spacing between numerals: *15°, †60°, ‡90°.

JACKS AND PLUGS

PHONE JACKS



Long Frame



Midget



Junior

Long frame jacks are mounted horizontally to frame. Junior jack is made with frame and spring stack at right angles, with short springs, requiring only 1/4" behind panel. Both above models mount in a single hole in up to 1/4" thick panel. Midget jack is very compact and infant jack is smallest made, but is for 2-way phone plug only. Midget and infant jacks mount in 1/4" hole in panel up to 1/4" thick. All jacks made with cadmium plated frames, bushings and special alloy springs are nickel-plated, silver contacts. Complete with mounting nuts and washers.

SC PHONE JACKS



Mallory No. SC-1A Phone Jack—Equivalent of Military No. JJ-034. Same spring arrangement as No. 1 long frame jack. Designed to receive following plugs: Mallory No. 75; Western Electric Nos. 47A and 47B; Signal Corps Nos. PL-47, PL-48, PL-55, PL-148, PL-155, PL-125; JAN plugs PJ-055, PJ-155, PJ-634, PJ-636 and PJ-047. Net Each **36c**

Mallory No. JJ-034—JAN-J-641 version of SC-1A. Net Each **39c**

Mallory No. SCA-2B—Microphone Jack. Equivalent of Military Jack No. JJ-033. Same spring arrangements as No. 2B long frame jack. Designed to receive the following plugs: Western Electric No. 109 and Signal Corps Nos. PL-68 and PL-168. JAN Plugs PJ-068, PJ-168, and PJ-309. Net Each **42c**

Mallory No. JJ-033—JAN-J-641 version of above. Net Each **48c**

XP JACKS



| Long Fr. | Junior | Infant and Midget | |
|----------|---------|-------------------|---------|
| Mal. No. | Net Ea. | Mal. No. | Net Ea. |
| 1 | 45c | 701 | 45c |
| 2 | 57c | 702 | 51c |
| 2A | 57c | 702A | 57c |
| 2B | 57c | 702B | 57c |
| 3 | 60c | 703 | 60c |
| | | 703A | 60c |
| 3B | 60c | 703B | 60c |
| | | 703C | 60c |
| | | 704 | 69c |
| | | 704A | 69c |
| 4B | 75c | 704B | 69c |
| 5 | 90c | 705 | 75c |
| 6 | 1.05 | | |



For telephone switchboard and industrial applications requiring a compact jack for close strip panel mounting. Special frame angle provides greater support. Plain, unthreaded bushing; jack mounts by use of screw through panel mounting plate at bushing base. Bushing fits all standard two and three conductor Mallory plugs. Springs assembled horizontally to frame. Bushings and springs nickel-plated; cadmium-plated steel frame; fine silver contacts.

Mallory No. XP1—Open circuit type. Net Each **63c**

Mallory No. XP2B—Three circuit microphone type. Net Each **75c**

Mallory No. XP3B—Single circuit, make before break type. Net Each **90c**

PHONE PLUGS



| Mal. No. | Circuit | Shell | Net Each |
|----------|---------|---|----------|
| 55 | ..... | Adapts mike con. to stand. jack | \$0.30 |
| 75 | 2-way | Phenolic tie-cord anchor, shielded | .45 |
| 75A | 2-way | Nickel, 2-piece, tie-cord anchor, built-in cble. clp. | 1.05 |
| 75N | 2-way | Nickel, tie-cord anchor, shielded | .66 |
| 76 | 3-way | Phenolic | .66 |
| 76A | 3-way | Nickel, 2-piece, built-in cble. clp. | 1.17 |
| 85 | 2-way | Miniature phone plug, shielded | .36 |

EXTENSION JACKS



| Mallory No. | Circuit | Shell | Net Each |
|-------------|---------|--------------------------------|----------|
| 100 | 2-way | Fiber | \$0.84 |
| 100N | 2-way | 1-piece nickel | 1.08 |
| 100A | 2-way | 2-piece nickel, built-in clamp | 1.50 |

PLUGS AND JACKS TO MILITARY SPECIFICATIONS AVAILABLE ON SPECIAL ORDER



CONNECTING CABLES

with *Lenite*

MOLDED PLUGS and JACKS

FOR HI-FI, TUNERS, AMPLIFIERS, PRE-AMPLIFIERS, RECORDERS, SPEAKERS, SPEAKER EXTENSIONS, RECORD CHANGERS, PUBLIC ADDRESS SYSTEMS, AUDIO EQUIPMENT, RADIO AND STEREOPHONIC SYSTEMS

SHIELDED

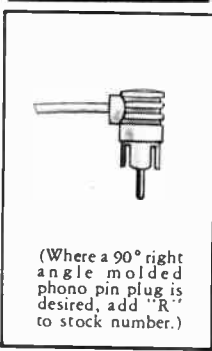
SHIELDED CONNECTING CABLES WITH MOLDED PHONO PIN PLUGS AND MOLDED PHONO PIN JACKS



| | | | |
|---|-------------|------|---------|
| Shielded cable. Molded Phono Pin Plug each end. | C101 | 18" | NET .54 |
| | C102 | 36" | .63 |
| | C103 | 72" | .81 |
| | C104 | 120" | 1.11 |



| | | | |
|---|-------------|------|---------|
| Shielded cable. Molded Phono Pin Plug; Stripped & Tinned. | C105 | 18" | NET .39 |
| | C106 | 36" | .48 |
| | C107 | 72" | .66 |
| | C108 | 120" | .96 |



The silver-gray cable is of high-quality, low-capacitance type for minimum loss. Used for interconnecting tuners, pre-amps, amplifiers, record changers, recorders and accessories, wherever Phono Pin Jack or Plug is used.



| | | | |
|--|-------------|------|---------|
| Shielded cable. Molded Phono Pin Plug; Phono Pin Jack. | C201 | 18" | NET .63 |
| | C202 | 36" | .72 |
| | C203 | 72" | .90 |
| | C204 | 120" | 1.20 |



| | | | |
|---|-------------|------|---------|
| Shielded cable. Molded Phono Pin Jack each end. | C401 | 18" | NET .84 |
| | C402 | 36" | .93 |
| | C403 | 72" | 1.11 |
| | C404 | 120" | 1.41 |

Plugs into standard 3/16" Centers dual phono jacks on all stereo amplifiers. Used for interconnecting stereo record changers, amplifiers and accessories.

MOLDED DUAL PHONO PIN PLUG FOR ALL STEREO AMPLIFIERS



Two conductor shielded stereo cable. Molded dual phono pin plug; stripped and tinned.

| | | | |
|--|---------------|-----|----------|
| | SP8003 | 3' | NET 1.68 |
| | SP8006 | 6' | 1.95 |
| | SP8010 | 10' | 2.31 |

Two conductor shielded stereo cable. Molded dual phono pin plugs each end.

| | | | |
|--|---------------|-----|----------|
| | SP8403 | 3' | NET 2.19 |
| | SP8406 | 6' | 2.46 |
| | SP8410 | 10' | 2.82 |

MOLDED PHONE PLUGS

A fully SHIELDED MOLDED standard phone plug, available either straight or right angle, with gray, low-capacitance 100% shielded

cable. The newly designed gray molded handle is grooved for ease in gripping, and permits easy insertion into a recessed jack.



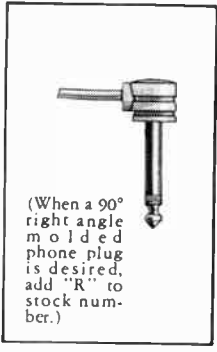
| | | | |
|--|--------------|-----|----------|
| Shielded cable. Molded SHIELDED Phone Plug; Phono Pin Plug | C4406 | 6' | NET 1.11 |
| | C4410 | 10' | 1.35 |
| | C4415 | 15' | 1.65 |



| | | | |
|---|--------------|-----|----------|
| Shielded cable. Molded SHIELDED Phone Plug; Phono Pin Jack. | C4506 | 6' | NET 1.17 |
| | C4510 | 10' | 1.41 |
| | C4515 | 15' | 1.71 |



| | | | |
|--|--------------|-----|---------|
| Shielded cable. Molded SHIELDED Phone Plug; Stripped and Tinned. | C4006 | 6' | NET .96 |
| | C4010 | 10' | 1.20 |
| | C4015 | 15' | 1.50 |



| | | | |
|--|--------------|-----|----------|
| Shielded cable. Molded SHIELDED Phone Plug each end. | C4306 | 6' | NET 1.32 |
| | C4310 | 10' | 1.56 |
| | C4315 | 15' | 1.86 |
| | C4325 | 25' | 2.46 |



| | | | |
|---|--------------|-----|----------|
| Shielded cable. Molded SHIELDED Phone Plug; Molded SHIELDED Phone Jack. | C4606 | 6' | NET 1.71 |
| | C4610 | 10' | 1.89 |
| | C4615 | 15' | 2.19 |



| | | | |
|---|--------------|-----|----------|
| Shielded cable. Molded SHIELDED Phone Plug; Lugs. | C4106 | 6' | NET 1.02 |
| | C4110 | 10' | 1.26 |
| | C4115 | 15' | 1.56 |

MICROPHONE CONNECTORS

L-T has developed a new molded connector which is interchangeable with the present type now on the market. Molded grip with the cable molded directly onto the polished nickel plated brass connector. BOTH the conductor AND shield are soldered to the connector prior to molding, insuring noise-free operation. Heavy duty co-axial shielded cable, low loss, with a nominal capacitance

of approximately 25 mmf/ft. For use with microphones, pre-amps, test equipment, VTVM, oscilloscopes, recorders, custom Hi-Fi installations or wherever a standard microphone connector is used. The coupling ring may be screwed back to convert connector from female to male type. Molded in gray to match the silver-gray cable.



| | | | |
|--|-------------|-----|----------|
| Shielded cable. Molded Male and Female Microphone Connector. | E906 | 6' | NET 1.29 |
| | E912 | 12' | 1.71 |
| | E925 | 25' | 2.64 |



| | | | |
|---|-------------|----|---------|
| Shielded cable. Molded Microphone Connector; Molded Phono Pin Plug. | E801 | 1' | NET .74 |
| | E803 | 3' | .90 |
| | E806 | 6' | 1.11 |



| | | | |
|---|--------------|-----|---------|
| Shielded cable. Molded Microphone Connector; Stripped and Tinned. | E1106 | 6' | NET .99 |
| | E1110 | 10' | 1.29 |
| | E1125 | 25' | 2.40 |



| | | | |
|---|--------------|-----|----------|
| Shielded cable. Molded Microphone Connector; Molded Phone Plug. | E1306 | 6' | NET 1.29 |
| | E1310 | 10' | 1.59 |
| | E1325 | 25' | 2.76 |

ALL PRICES QUOTED ARE U.S.A. PRICES



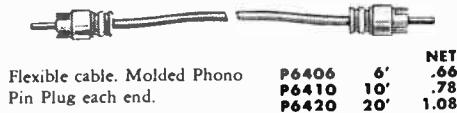
MOLDED PLUGS and JACKS for SPEAKER EXTENSIONS with *Lenite*

FOR SPEAKER EXTENSIONS, AUDIO RECORDING, LOW IMPEDANCE PATCHING, VOICE COIL, RECORDING, SPEAKER LINES, VOLTAGE LINES, ETC.

PARALLEL CABLE (Not Shielded)

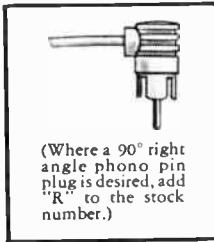
Flexible cable (not shielded) with molded phono pin plug for voice coil recording, speaker extensions, audio

output, low impedance lines, etc. When the right angle type is desired, add "R" to the stock number.

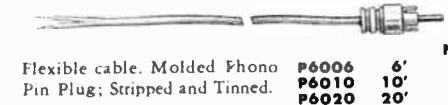


Flexible cable. Molded Phono Pin Plug each end.

| | | |
|-------|-----|------|
| P6406 | 6' | .66 |
| P6410 | 10' | .78 |
| P6420 | 20' | 1.08 |



(Where a 90° right angle phono pin plug is desired, add "R" to the stock number.)



Flexible cable. Molded Phono Pin Plug; Stripped and Tinned.

| | | |
|-------|-----|-----|
| P6006 | 6' | .45 |
| P6010 | 10' | .57 |
| P6020 | 20' | .87 |



Flexible cable. Molded Phono Pin Plug; Clips.

| | | |
|-------|-----|------|
| P6206 | 6' | .75 |
| P6210 | 10' | .87 |
| P6220 | 20' | 1.17 |



Flexible cable. Molded Phono Pin Plug; Lugs.

| | | |
|-------|-----|-----|
| P6106 | 6' | .51 |
| P6110 | 10' | .63 |
| P6120 | 20' | .93 |

Molded Phone Plug, either right angle or straight, with flexible cable (unshielded) for use with radio voice coil

recording, speakers, headphones, audio output, or other low impedance circuits. Silver-gray cable and plugs.



Flexible cable. Molded Phone Plug each end.

| | | |
|-------|-----|------|
| P7306 | 6' | 1.26 |
| P7310 | 10' | 1.38 |
| P7320 | 20' | 1.68 |



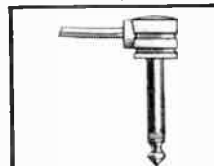
Flexible cable. Molded Phone Plug; Stripped and Tinned.

| | | |
|-------|-----|------|
| P7006 | 6' | .75 |
| P7010 | 10' | .87 |
| P7020 | 20' | 1.17 |



Flexible cable. Molded Phone Plug; Molded Phono Pin Plug.

| | | |
|-------|-----|------|
| P7406 | 6' | .96 |
| P7410 | 10' | 1.08 |
| P7420 | 20' | 1.38 |



Flexible cable. Molded Phone Plug; Phono Pin Jack.

| | | |
|-------|-----|------|
| P7506 | 6' | 1.02 |
| P7510 | 10' | 1.14 |
| P7520 | 20' | 1.44 |

EXACT DUPLICATE CABLES for ORIGINAL EQUIPMENT REPLACEMENT

Molded Male Plugs; with Molded Female Receptacles, Molded Octal Plugs, etc. (as widely used on Record Changers and Audio and TV equipment).
Write for Exact Duplicate Replacement Catalog.
Cable Assemblies manufactured to specifications for O. E. M.

ADAPTERS & CONNECTORS

| | | | | |
|--|---|---|---|---|
| <p>C400 Phono Pin Jack; Phono Pin Jack. C400.....NET .60</p> | <p>P55A Phono Pin Jack; Phone Plug. P55A.....NET .75</p> | <p>M75P Male Mic; Phone Plug. M75P.....NET .30</p> | <p>MP Mic; Phono Pin Plug. MP.....NET .60</p> | <p>C800 Mic; Mic. C800.....NET .60</p> |
| <p>A754 Two Phono Pin Jacks; Phono Pin Plug. A754.....NET 1.20</p> | <p>A753 Phone Jack; Phono Pin Jack. A753.....NET 1.05</p> | <p>A750 Phone Jack; Phono Pin Plug. A750.....NET 1.05</p> | <p>A780 Phono Pin Jack; 2 Prong Polarized Plug 1/4" centers. A780.....NET .75</p> | <p>A751 Mic Connector; Phono Pin Jack. A751.....NET .75</p> |
| <p>A779 Mic Connector; Clips. NET .75</p> | <p>A782 Phone Plug; Clips. NET .75</p> | <p>A778 Phono Pin Jack; Clips. NET .75</p> | <p>A781 Phone Jack; Clips. NET 1.05</p> | <p>A752 Mic Connector; Phone Jack. A752.....NET 1.05</p> |

ALL PRICES QUOTED ARE U.S.A. PRICES

Mosley**TV Installation Accessories****FLUSH MOUNTED TV SOCKETS**

Easy-to-install, attractive wall plate TV sockets for every installation requirement. Ivory or brown plates are styled to harmonize with existing electrical plates. Available in types for single, dual or triple lead-in lines and for single and dual lines plus 4-wire rotor cable. Packaged with mating plug(s), F-9 mounting brackets and full instructions.

| | | Net |
|---------|----------------------------------|--------|
| F-1PK | 1 - 300 ohm lead | \$1.23 |
| F-11PK | 2 - 300 ohm leads | 1.69 |
| F-111PK | 3 - 300 ohm leads | 1.77 |
| F-14PK | 1 - 300 ohm lead & 4-wire rotor | 2.21 |
| F-114PK | 2 - 300 ohm leads & 4-wire rotor | 2.21 |

"ANTI-STUB" TV/FM WALL PLATE OUTLETS

Similar to F-1PK, above, but with switch to disconnect system beyond outlet being used. Prevents "stub-effect". Silver plated positive action contacts. Brown or ivory polystyrene. With polarized plug and mounting hardware.

Type FD-1PK Net, \$1.32

MOUNTING HARDWARE

Type F-9, Mounting Brackets of heavy gauge steel for installing F-Series Sockets in walls of existing buildings. Requires rectangular opening 1 3/4" wide by 4" long.

Type F-9 Net, \$.23



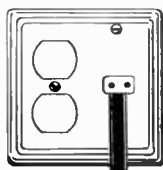
Type F-8 Plaster Ring for installing F-Series Sockets in new construction. Mounts easily and quickly to wood studing. Adjustable for plaster thicknesses up to 1 1/2". Heavy plated steel.

Type F-8 Net, \$.26

SURFACE MOUNTED SOCKETS

Surface mounted sockets resemble flush wall plate types but may be used for either concealed wiring or where TV line is brought along surface of wall. No wall opening required. In brown or ivory polystyrene. Supplied with mating plug(s) and wood screws.

| | | Net |
|----------|----------------------------------|--------|
| SM-1PK | 1 - 300 ohm lead | \$1.04 |
| SM-11PK | 2 - 300 ohm leads | \$1.42 |
| SM-111PK | 3 - 300 ohm leads | \$1.58 |
| SM-14PK | 1 - 300 ohm lead & 4-wire rotor | \$2.32 |
| SM-114PK | 2 - 300 ohm leads & 4-wire rotor | \$2.32 |

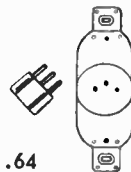
AC/TV WALL PLATE SOCKETS

Combination TV lead-in outlet and plate for double convenience outlet. Ideal for installation during new construction or remodeling. Metal barrier plate, supplied separates AC and TV services to comply with electrical codes. Install in ganged electrical boxes. Brown or ivory. With mating plug(s) and mounting screws.

| | | Net |
|----------|----------------------------------|--------|
| AC-1PK | Single 300 ohm lead | \$1.24 |
| AC-11PK | Dual 300 ohm lead | 1.65 |
| AC-111PK | Triple 300 ohm lead | 2.19 |
| AC-14PK | One 300 ohm lead & 4-wire rotor | 2.19 |
| AC-114PK | Two 300 ohm leads & 4-wire rotor | 2.63 |

TV/FM WALL PLATE OUTLETS

Permits all electrical and TV/FM outlets to be matched. Designed to fit standard, single or double convenience outlet plates, either plastic or metal. Brown or ivory polystyrene.



| | | |
|---------|--|-------------|
| FY-1 | Single 300 ohm TV/FM outlet | Net, \$.64 |
| FY-1PK | Single 300 ohm TV/FM outlet with mating plug and hardware | Net, \$1.01 |
| FY-14 | Single 300 ohm TV/FM outlet and 4-wire rotor socket | Net, \$.83 |
| FY-14PK | Single 300 ohm TV/FM outlet and 4-wire rotor socket w/mating plugs and hdwe. | Net, \$1.62 |

STEREO TV/FM WALL PLATE OUTLETS

For use in areas where FM can be received with TV antenna. Resistor-type 2 set coupler built-in to isolate TV from FM permitting simultaneous reception without interaction.

Type WPS-11PK Net, \$1.39

AUDIO PAD PLATE w/KNOB

Attractive brown or ivory polystyrene plate with satin finished anodized aluminum dial face and modern indicator knob. Use to assemble L-pad, T-pad, Fader, etc., for audio and Hi-Fi systems. Less control.

Type FAV-1 Net, \$1.04

**ATTENUATOR PLATE with SPEAKER JACK**

Same as Type FAV-1. Plug and jack have been supplied for additional external speaker unit. Less control.

Type FAV-2 Net, \$1.54

FLUSH SPEAKER SWITCH PLATE

High quality 6 position switch plate selects any speaker or combination of speakers in remote locations. Heavy duty push button switches on brown or ivory plate. Complete with plated machine screws and instructions.

Type FAS-6 Net, \$5.67

SPEAKER WALL PLATE OUTLETS

Brown or ivory polystyrene flush mounting outlets. Speaker socket and plug polarized and solderless. Ideal for custom Hi-Fi installations where remote speakers are not permanently installed. Complete with mounting brackets and instructions.

Type FAS-1PK Single Net, \$1.77

Type FAS-11PK Double Net, \$1.93

**3-POSITION SPEAKER SWITCH**

Three position speaker switch for Hi-Fi or Stereo Speaker Systems. Will operate single speaker system, remote system or both. Type FSS-2 is supplied with external plug and jack for additional speaker.

Type FSS-1 Net, \$2.38

Type FSS-2 Net, \$2.54

**TV/FM INTERCHANGEABLE OUTLET**

Permits all electrical and TV/FM outlets to be matched. Designed to fit interchangeable type electrical plates styles 91041 Brown, 92041 Ivory and 97011 Stainless Steel. Molded of low loss polystyrene in brown or ivory. Supplied with Mosley 303 Polarized 300 ohm Transmission Line Plug.

FG-1PK 300 ohm TV/FM Outlet/Plug Net \$.58

TV Installation Accessories

300 OHM CONNECTORS



Precision molded low loss 300 ohm connectors for UHF and VHF transmission lines. Constant impedance. Solderless.

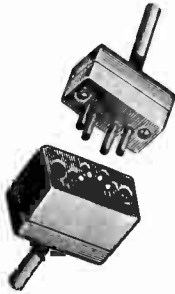
Type 301. Line Plug Net, \$.20
 Type 311. Line Socket \$.20
 Type 321. Polarized, pair \$.40
 Type 304. Input Adapter \$.20
 Type 27-S. Flat-line Splicer \$.12
 Type 29-S. Round to flat Splicer . . \$.14



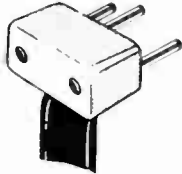
MULTI-WIRE CONNECTORS

For rotor cable connections and many other low voltage uses. No set screws in line plugs and line sockets. Brown or ivory.

Type 354. 4-wire Base Socket
 Net, \$.91
 Type 364. 4-wire Line Socket
 Net, \$.64
 Type 374. 4-wire Line Plug
 Net, \$.50



300 OHM TV PLUG



300 ohm plug, one piece construction and utilizing set screws to hold line. Supplied with 3 pins to mate with AC-TV series plates but middle pin is removable to use with Mosley 2-pin sockets. Brown or ivory.

Type 303 Net, \$.20

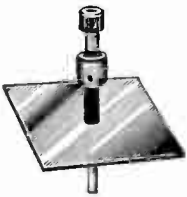
UNIVERSAL TV SOCKET

Compact, neat plug-in socket for FM or TV lead-in line. Use as line tap or terminal socket. Low loss polystyrene, constant impedance design for 300 ohm line. In brown or ivory. Complete with mating plug.

Type 343PK Net, \$.67



ROOF-THRU



8" x 9" copper flashing with polystyrene feed through bushing permits direct weather-proof roof entrance of flat TV line and rotor cable. Easy to install.

Type 624 Net, \$3.88
 Type 623. Similar to Type 624 but for round or oval 300 ohm line only.
 Type 623 Net, \$3.88

WALL-THRU



Neat, low loss wall entrance for all popular oval, round or flat transmission lines. Fits walls up to 13" thick. Type 343 TV Socket mounts on inside plate. Brown or ivory.

Type 625 Net, \$1.29
 Type 625PK. Above, with TV Socket and Plug. Net, \$1.99

TV ANTENNA SWITCHES

Top quality rotary TV Antenna Switches for UHF and VHF. Silver-to-silver contacts and constant impedance design assures low insertion loss. Solderless. Brown or ivory.

Type F-40. 2-way Switch Net, \$1.36
 Type F-20. 3-way Switch Net, \$2.48



WALL FEED



Install at gable end or under roof overhang to provide weatherproof TV lead-in entrance into attic. Ideal for house trailer installations. Ivory or brown polystyrene plate with weatherhood and 2" tube. In trailer installation cut tube

flush with inside wall and install Type 343 TV Socket directly over opening. Type 626 Net, \$.84
 Type 626PK. Above with TV Socket & Plug . . Net, \$1.53

MULTI-SET COUPLERS

"Tiny-Mite" Multi-set Coupler and plug-in socket with plug. Resistor type tap-off unit will operate two TV sets from one antenna. Neat, compact. In brown or ivory.

Type 912 Net, \$1.16



Dual Match 2-Set Coupler. Efficient resistor type coupler outperforms many coil type units and provides exceptionally good isolation between sets. Solderless. Brown or ivory case. Intended for primary signal areas.

Type 902 Net, \$1.96



4-Set Coupler. Resistor type, printed circuit coupler designed for metropolitan areas, the major multi-set markets. Ideal for motels, small apartments, etc.

Type PC-4 Ivory Net \$ 3.04



2-Set Coupler. Unique, compact, two set printed circuit coupler. Designed to minimize set interaction and radiation.

Type PC-2 Ivory Net \$ 1.42



72-300 OHM TRANSFORMER

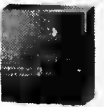


Balun type transformer matches 72 to 300 ohm or 300 to 72 ohm. Can be installed at set or directly on antenna. Solderless. Weather sealed polystyrene case.

Type 90 Net, \$2.38

TUNABLE WAVE TRAPS

High Q series resonant wave traps for eliminating interference patterns and cross-talk on TV and FM. Use on any receiver input, 50 to 600 ohms, balanced or unbalanced. Solderless. Install on set terminal strip. Choose type with range including frequency of interfering station.



. Net, \$3.04

| | | | |
|-------|----------------|--------|----------------|
| WT-7 | 6.8 - 8.5 mcs. | WT-41 | 27 - 55 mcs. |
| WT-14 | 13.8 - 16 mcs. | WT-78 | 47 - 110 mcs. |
| WT-21 | 16 - 28 mcs. | WT-165 | 100 - 230 mcs. |

MOSLEY "Y-TY"



Solderless strain relief connector prevents transmission line from breaking at the antenna. Easy to install, fits all types line. Use Type 263-L for antennas with terminals more than 4" apart.

Type 263-S. "Y-TY" Net, \$.43
 Type 263-L. "Y-TY" Net, \$.43

POLYETHYLENE TV CONDUIT

Black polyethylene tubing makes ideal conduit for running TV and FM transmission lines within walls. Simplifies replacement of hidden wires. 3/4" inside diameter. Flexible, easy to install. Many other applications such as intercom and other low voltage cables.

No. 80-25. 25 feet Net, \$5.25
 No. 80-50. 50 feet Net, \$10.50
 No. 80-100. 100 feet Net, \$21.00

See MOSLEY Antennas and other Amateur Components listed in section 1200 of this book.

mueller clips

a complete line of
ALLIGATOR TEST & BATTERY CLIPS

Mueller Electric Co. CLEVELAND 14, OHIO



"60 SERIES" ALLIGATOR CLIPS

No. 60—CONVENTIONAL TYPE

Accurately made, slim jaws, fine meshing teeth. Convenient, round thumb grip, barrel connection for banana plug. Equipped with small soldering tip. Strong spring with a hard bite. Cadmium plated. 2" long.

EACH NET.....\$0.07 LOTS OF 10.....\$0.046



No. 60-S—SCREW CONNECTION

Eliminates necessity for soldering. Otherwise same as No. 60.

EACH NET.....\$0.08 LOTS OF 10.....\$0.052



No. 60-CS—COPPER ALLIGATOR CLIP

Solid copper version of No. 60-S. Screw connection. 2" long. 10 per box.

EACH NET.....\$0.12 LOTS OF 10.....\$0.08

No. 60PR-2—SPECIAL BARREL

FOR TEST PROD OR PHONE TIP

Barrel crimped to provide friction fit on standard test prod or phone tip. Holds prod on test, frees hand for other work.

EACH NET.....\$0.10 LOTS OF 10.....\$0.066



No. 62 FLEXIBLE VINYL INSULATOR

Red and black insulators for Alligator Clips 60, 60-S, 60-CS, 60PR-2.

EACH NET.....\$0.05 LOTS OF 10.....\$0.035



No. 60-HS—STEEL ALLIGATOR CLIP WITH INSULATED HANDLE

Same as No. 60-S except equipped with red and black insulating sleeves on end. Very convenient for distinguishing leads. Has screw connection also. Cadmium plated. 2 1/4" long. Shipped half red, half black.

EACH NET.....\$0.11 LOTS OF 10.....\$0.075



No. 60-CHS—COPPER ALLIGATOR CLIP, INSULATED HANDLE

Solid copper version of No. 60-HS. Screw connection. Shipped with half red, half black insulating sleeves. 10 per box.

EACH NET.....\$0.15 LOTS OF 10.....\$0.10

"70 SERIES" ALLIGATOR CLIPS

U.S. Patent No. 2,762,028

A modern, streamlined version of our standard size Alligator Clips. Features simplified design, fast connection of wire with cord strain relief ears, patented hinge construction and lower cost. Mueller's traditionally snappy spring, full jaw spread, fine meshing teeth, round thumb grip and trim shape give most wanted features for test work in close quarters.

No. 70—FOR SOLDERED CONNECTION

Steel, cadmium plated. 1 1/4" long.

EACH NET.....\$0.07 LOTS OF 10.....\$0.042



No. 70-S—SCREW CONNECTION

Otherwise same as No. 70.

EACH NET.....\$0.08 LOTS OF 10.....\$0.048



No. 70-CS—COPPER SCREW CONNECTION

Solid copper version of No. 70-S.

EACH NET.....\$0.11 LOTS OF 10.....\$0.075

No. 72—SKIN-TIGHT INSULATOR

FOR 70 SERIES ALLIGATOR CLIPS:

For the first time complete, skin-tight, one-piece insulation for a standard size Alligator Clip! Covers entire clip right down to nose. Special tip slot permits full jaw opening without exposing teeth.

EACH NET.....\$0.05 LOTS OF 10.....\$0.035



WEE-PEE-WEE No. BB

Entirely Non-ferrous.

An extremely small clip for fine testing in radio and electrical work. Light-Weight; thin-nosed; spring-temper phosphor bronze. Ideal for close-wound coils. 1 1/4" long; jaw spread 3/8". 10 per box.

EACH NET.....\$0.22 LOTS OF 10.....\$0.15

Use No. 93 Insulator.

NEW! MICRO-GATOR CLIP

(Smallest Insulated Clip Ever Made)

U.S. Patent No. 2,762,028

Trademark Reg.



Micro-Gator

The alligator clip with the microscopic tip! This is the alligator clip you now can use where no other clip will do... on printed circuits, in tight spots and on tiny terminals too crowded for anything but its microscopic tip. It offers the speed, free-handed ease and convenience associated with other Mueller alligator clips. The Micro-gator is truly small (takes 30 to weigh an ounce!) including separate skin-tight insulator (the tip is no bigger than the head of a pin)! Yet the Micro-gator has ample thumb grip, and plenty of bite to stand up straight on the smallest terminals. Ample 1/2" jaw spread. Solder connection. Skin-tight flexible vinyl insulator (sold separately) has "lip-action" tip slot so that jaws stay covered whether open or closed.



Micro-Gator with Insulator

No. 34 (Steel, cadmium plated)

EACH NET.....\$0.06 LOTS OF 10.....\$0.04

No. 34 C (Solid Copper)

EACH NET.....\$0.07 LOTS OF 10.....\$0.05

No. 36 (Insulator for Nos. 34 and 34-C)

EACH NET.....\$0.05 LOTS OF 10.....\$0.03

MINI-GATOR CLIP

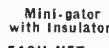
U.S. Patent No. 2,762,028

Trademark Reg.



Mini-gator

Indispensable for testing or incorporation into miniaturized equipment. Skin-tight flexible Vinyl insulator (sold separately) covers completely—has slotted "lip action" tip. Clip weighs 1/20th oz., has tiny 1/16" O.D. nose, but ample 3/8" jaw spread. Crimping ears. Solder connection. Surprisingly strong bite penetrates corrosion and coatings.



Mini-gator with Insulator

No. 30 (Steel, cadmium plated)

EACH NET.....\$0.06 LOTS OF 10.....\$0.04

No. 30-C (Solid Copper)

EACH NET.....\$0.07 LOTS OF 10.....\$0.05

No. 32 (Insulator for Nos. 30 and 30-C)

EACH NET.....\$0.05 LOTS OF 10.....\$0.03

COMPLETELY INSULATED ALLIGATOR CLIPS

Patent Pending

No. 63 or 63-C Clip

Sold only as a unit, with factory-applied insulators.



A radically new development that doubles the usefulness of Alligator Clips! Completely insulated right down to the nose. Flexible 2-piece skin-type vinyl insulator of high dielectric strength, with "lip action" slotted nose that permits opening of clip without exposing metal. Insulator nose is only 15/64" O.D. The tight fitting sheath preserves all the slimmness of the Alligator Clip, still giving complete protection against shorts in even the tightest spots. These clips could be bunched together—touching all around—without danger of shorting. Screw connection easily made by slipping insulator forward.

No. 63—INSULATED ALLIGATOR CLIP (STEEL)

Composed of Mueller No. 60-S Alligator Clip steel, cadmium plated, screw connection, complete with 2-piece vinyl insulator. Shipped half with red insulators, half black. 10 per box.

EACH NET.....\$0.19 LOTS OF 10.....\$0.13

No. 63-C—INSULATED ALLIGATOR CLIP (COPPER)

Composed of Mueller No. 60-CS Alligator Clip, solid copper, screw connection. Shipped half with red insulators, half black. 10 per box.

EACH NET.....\$0.22 LOTS OF 10.....\$0.15

CROCODILE CLIPS



No. 85 or 85-C Clip with No. 87 Insulator



No. 85-T Clip

No. 85—A very small clip with slender, elongated jaws for getting into tight places in radio or electrical test work. Screw connection. 2 3/8" long.

EACH NET.....\$0.09 LOTS OF 10.....\$0.06

No. 85-C—Same as No. 85, except solid copper. A radio frequency, entirely non-ferrous test clip. 10 per box.

EACH NET.....\$0.16 LOTS OF 10.....\$0.12

No. 85-T—Crocodile "Tip-Clip"—equipped with standard phone tip on one jaw, otherwise same as No. 85. Ideal for use as a prod. for ordinary clip connections and for connections to insulated binding posts having non-removable heads. 2 3/8" long. 10 per box.

EACH NET.....\$0.22 LOTS OF 10.....\$0.15

Use No. 87 Insulators for clips 85, 85-C and 85-T. Red and Black. Cover entire clip except nose. Protect against short and shock. Help to distinguish leads.



mueller clips

a complete line of
ALLIGATOR TEST & BATTERY CLIPS
Mueller Electric Co. CLEVELAND 14, OHIO

TEST CLIPS

No. 45 PEE WEE



A very small test clip for radio, ignition, meter and similar work. 1 1/2" long. Jaw spread 3/8". Steel, cadmium plated.

EACH NET.....\$0.07 LOTS OF 10.....\$0.05

No. 45-C Solid Copper R.F. Test Clip



Solid copper radio frequency test clip. Phosphor bronze spring, brass screw. Will not heat up in high frequency test work, entirely non-ferrous. 1 1/2" long. 10 per box.

EACH NET.....\$0.14 LOTS OF 10.....\$0.095

Use No. 47 Insulator for clips 45 and 45-C.

No. 48-B



A small test and battery clip for radio use and general testing purposes. 2" long. Jaw spread 7/16". Steel, cadmium plated. 10 per box.

EACH NET.....\$0.11 LOTS OF 10.....\$0.074

No. 48C—Solid Copper. Same size as 48-B.

EACH NET.....\$0.15 LOTS OF 10.....\$0.11

No. 50-C Needle Clip



Solid bronze. Needle pierces insulation of wire for quick test contact. 2 1/4" long. 10 per box.

EACH NET.....\$0.28 LOTS OF 10.....\$0.20

No. 51-C—Large crocodile clip. Same as 50-C but without needle. 10 per box.

EACH NET.....\$0.19 LOTS OF 10.....\$0.13

Use No. 49 Insulator for Clips 48-B, 48-C, 50-C and 51-C.

No. 27



A high grade test clip with meshing teeth on three sides of jaws. For laboratory and shop test work 2 7/8" long. Jaw spread 5/8". Steel, cadmium plated. 10 per box.

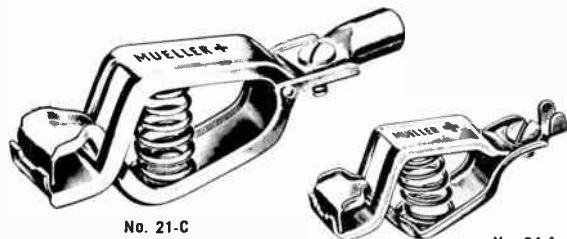
EACH NET.....\$0.13 LOTS OF 10.....\$0.09

No. 27-C—Solid copper. Same size as No. 27. 10 per box.

EACH NET.....\$0.23 LOTS OF 10.....\$0.16

Use No. 29 Insulator for clips 27 and 27-C.

LARGER SIZES OF CLIPS



No. 21-C

No. 24-A

All packed 10 per box.

| | Each Net | Lots of 10 |
|--|----------|------------|
| No. 24-A—25 Amp. Steel, lead plated, 2 7/8" long | \$0.23 | \$0.16 |
| No. 24-C—50 Amp. Solid Copper, 2 7/8" long | .38 | .27 |
| No. 21-A—50 Amp. Steel, lead plated, 4" long | .40 | .28 |
| No. 21-C*—100 Amp. Solid Copper, 4 1/2" long | .97 | .68 |
| No. 11-A*—100 Amp. Steel, lead plated, 6" long | 1.06 | .75 |
| No. 11-C*—200 Amp. Solid Copper, 6" long | 1.81 | 1.27 |
| No. 33-C*—300 Amp. Solid Copper, 7 3/4" long | 3.35 | 2.35 |

(*Furnished with detachable lug connection for easy securing to large cables.)

GROUND CLAMP



The ClamPipe will not spread, bend or lop over when applied. Point of large case hardened screw bites through corrosion into clean metal to insure good contact. Applicable to pipe 3/8" to 1 3/8" O.D. The best ground clamp on the market!

CLAMPIPE
No. 58

EACH NET.....\$0.20 LOTS OF 10.....\$0.14

FLEXIBLE INSULATORS FOR CLIPS



A convenient protection against short circuit and electric shock. Colors help to distinguish leads. Packed half red and half black to indicate polarity. Long tail prevents breakage of wire. Constructed so that clip is held in firmly. NOW AVAILABLE also in blue, white, yellow and green at 10% above regular price are insulators marked * below.

| Insulator No. | For Use with Clip No. | Each Net | Lots of 10 |
|---------------|--|----------|------------|
| 13* | 11-A, 11-C | \$0.80 | \$0.56 |
| 23* | 21-A, 21-C | .40 | .28 |
| 26* | 24-A, 24-C | .21 | .15 |
| 29* | 27, 27-C | .13 | .09 |
| 32* | 30, 30-C | .05 | .03 |
| 35 | 33-C | 2.93 | 2.05 |
| 36* | 34, 34-C | .05 | .03 |
| 47* | 45, 45-C | .06 | .04 |
| 49* | 48-B, 48-C, 50-C, 51 C | .09 | .065 |
| 62* | 60, 60-S, 60-CS, 60PR-2 (also 70 Series) | .05 | .035 |
| 72* | 70, 70-S, 70-CS | .05 | .035 |
| 87* | 85, 85-C, 85-T | .06 | .04 |
| 93 | 88 | .12 | .08 |

*Also available in blue, white, yellow and green.

MUELLER QUALITY BATTERY BOOSTER CABLES

Highest quality cables, equipped with famous Hippo-Clips, for boosting "dead" 6 or 12-volt vehicle batteries with an external battery. Cables are pure copper, finely stranded for high flexibility and covered with rubber insulation which stays flexible in the coldest weather and resists oil, grease and acid. 413 strands of No. 30 wire in the 4-gauge cable and 259 strands of No. 30 wire in the 6-gauge cable. The many fine features of the Hippo-Clips alone are listed elsewhere on this page. The clips are both soldered to the cable and clinched around the cable insulation by means of clinching ears.

Packaged: pair of cables with clips in a bright, attractive display carton. Standard shipping container 10 cartons.

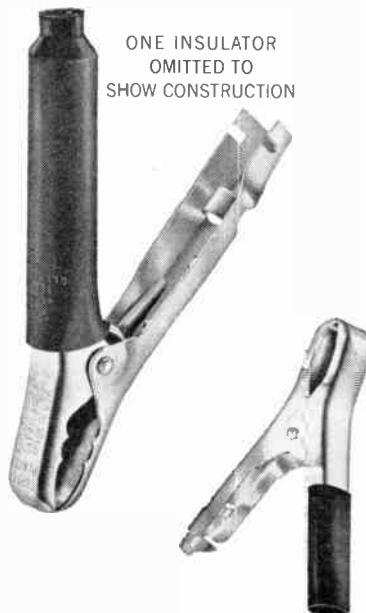
No. 8A6—8 ft., 6-gauge, with No. 41A Hippo-Clips (Steel, bright copper plated)
LIST PRICE PER PAIR\$7.50

No. 12A6—12 ft., 6-gauge, with No. 41A Hippo-Clips (Steel, bright copper plated)
LIST PRICE PER PAIR\$10.00



No. 12C4—12 ft., 4-gauge, with No. 41C Hippo-Clips (Solid Copper)
LIST PRICE PER PAIR\$19.00

ONE INSULATOR OMITTED TO SHOW CONSTRUCTION



HIPPO-CLIP

HIPPO-CLIP—For battery booster cables and fast chargers. Proved higher quality and superior design. Built-in solder strap and clinching ears for fast, sure cable connection. Supplied with vinyl handle insulators in red or black. Full 1-9/16" jaw spread, 6" long.

List price ea.
No. 41-A Steel, bright copper plated, 100 amp\$.75
No. 41-C Solid Copper, 200 amp1.50

NEW! PIGMY HIPPO-CLIP

PIGMY HIPPO-CLIP—A new small plier clip for battery operated equipment and automotive test. Flat, wide handle allows positive grip. Won't "squirt away." Built-in solder strap and wire clinching ears. Supplied with vinyl handle insulators in red or black. Ample 1 1/8" jaw spread, 3" long.

List price ea.
No. 46-A Steel bright copper plated, 50 amp\$.25
No. 46-C Solid Copper, 75 amp40

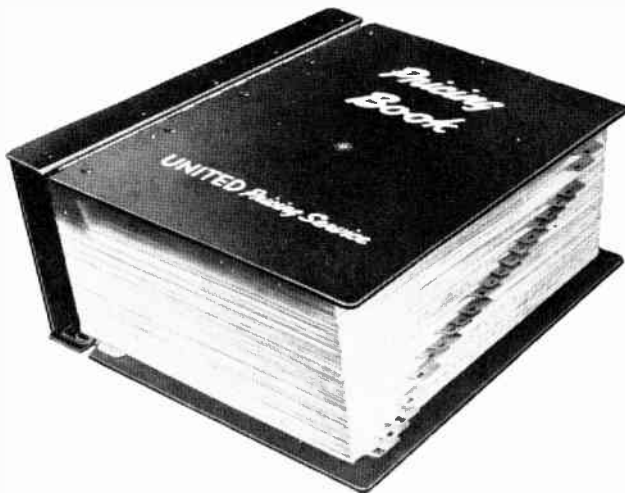
PRICES

All prices listed in The MASTER are subject to change without notice — they should not be considered final.

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DELIVERY

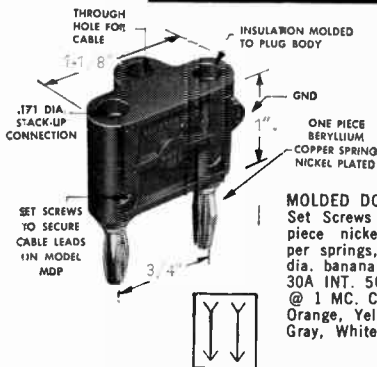
Delivery is often dependent on availability of raw materials. Check with your distributor for delivery information at the time you place your order.



POMONA Electronics CO., INC., POMONA, CALIFORNIA

MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

3/4" MOLDED DOUBLE PLUG STACK-UP ACCESSORIES



MODEL MDP

MOLDED DOUBLE PLUG, 3/4" SPACED
Set Screws secure cable leads. One piece nickel plated beryllium copper springs, for use with st'd. .166 dia. banana jacks. Rated: 15A CONT. 30A INT. 5000 WVDC, Cap. 0.8 μf @ 1 MC. Colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White.

NET .75



MODEL 1269

BNC RECEPTACLE ADAPTDR
Adapts 3/4" spaced jacks to BNC plug.
Color—Black

NET 2.85



MODEL 1270

BNC PLUG ADAPTDR
Adapts 3/4" spaced jacks to BNC receptacle.
Color—Black

NET 3.85



MODEL MDP-ST

Similar to Model MDP, except has solder turret terminals.
Color—Black

NET .85



MODEL 1340

TNC RECEPTACLE ADAPTER
Adapts 3/4" spaced jacks to TNC plug.
Color: Black.

NET 5.85



MODEL MDP-X

4 TERMINAL ISOLATION PLUG
Suitable for design of attenuators, filters, pads, networks, etc.
Color—Red

NET 3.25



MODEL 1275 50 OHM TYPE

MODEL 1277 70 OHM TYPE

MODEL 1279 93 OHM TYPE

MICRODOT RECEPTACLE ADAPTDRS, SCREW-ON TYPE
Adapts 3/4" spaced jacks to Microdot miniature coaxial plugs, screw-on type. Color: Green, 50 Ohm; Violet, 70 Ohm; White, 93 Ohm.

NET 5.85



MODEL 1330

COMPONENT MOUNTING PLUG
Ideal for lab standards, R & D, etc. Features recess for small components, internal set screws firmly secure lead wires. Colors: Black, Red.

NET .75

MODEL 1330-ST Same as above except with solder turret terminals.
NET .85



MODEL 1276

MICRODOT RECEPTACLE ADAPTDR, SLIDE-ON TYPE
Adapts 3/4" spaced jacks to Microdot coaxial miniature plugs, slide-on type, universally adapts to 50, 70 or 93 Ohm type plug. Color: Black.

NET 5.85



MODEL MDP-S

Molded shorting bar 3/4" spaced, noise free, solder bonded internally.
Color: Cream, Black, Red.

NET .95

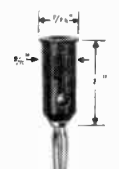


MODEL MDP-R

MOLDED PRECISION RESISTORS 1% tolerance, deposited carbon, values—500, 1, 0.2, 0.25, 0.5, 1, 2, 5, 10 Megohms. Each value color identified. 3/4" spaced.

NET 2.75

(SPECIAL VALUES UPON REQUEST)



MODEL 1325

SINGLE BANANA PLUG
Solderless type, with stack-up feature. Simplifies assembly of test cords by use of internal set screws. Colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White.

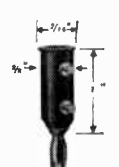
NET .50



MODEL 1285

PHONE PLUG ADAPTDR
Adapts phone jack to 3/4" spaced binding posts.
Color: Black

NET 4.85



MODEL 1390

COMPONENT MOUNTING PLUG
Top stack-up jack isolated from lower plug. Permits mounting of resistors, diodes, etc., on solder turret terminals. Useful in computer, general lab circuit design and testing, etc. Colors: Black, Red.

NET .95

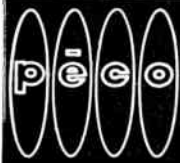


MODEL 1296

BNC BINDING POST ADAPTDR
Adapts a BNC receptacle to 3/4" spaced binding posts.
Color: Black

NET 4.85

OTHER COLORS AVAILABLE ON QUANTITY ORDERS



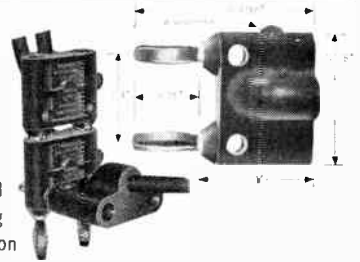
POMONA Electronics CO., INC., POMONA, CALIFORNIA

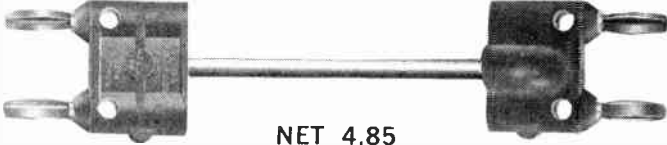

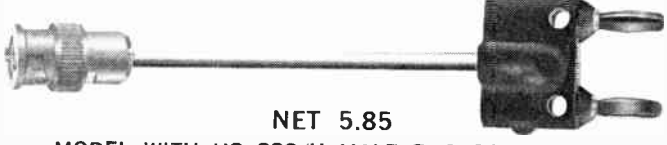



MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

3/4" MOLDED DOUBLE PLUG PATCH CORD & TEST LEADS

| TWO COND. TWISTED PAIR | SHIELDED MICROPHONE CABLE | COAXIAL SHIELDED CABLE | CABLE LGTHS. IN INCHES * |
|--|---|--|--------------------------|
| 18 gauge wire 65/36 stranding. Vinyl insulation. Vinyl jacket. Nom. Capacity 30 mmf/ft. | Polyethylene insulation. Vinyl jacket. Nom. Capacity 25 mmf/ft. | Polyethylene insulation. Vinyl jacket. Nom. Capacity 28.5 mmf/ft. RG58C/U. | * |

- Molded polyethylene plug body fully insulated
- Permits parallel multiple stacking
- Ground connection clearly marked
- One piece beryllium copper spring
- Solder bonded noise-free connection
- Fits standard banana jacks



| MODEL NO. | MODEL NO. | MODEL NO. | | |
|--|--|--|--------------------------|--|
| 2BA-18 2BA-24 2BA-30 2BA-36 | 2BB-18 2BB-24 2BB-30 2BB-36 | 2BC-18 2BC-24 2BC-30 2BC-36 | 18" 24" 30" 36" |  NET 4.85 MODEL WITH DOUBLE PLUGS BOTH ENDS |
| 2BA-AL-18 2BA-AL-24 2BA-AL-30 2BA-AL-36 | 2BB-AL-18 2BB-AL-24 2BB-AL-30 2BB-AL-36 | 2BC-AL-18 2BC-AL-24 2BC-AL-30 2BC-AL-36 | 18" 24" 30" 36" |  NET 5.85 MODEL WITH ALLIGATOR CLIPS |
| | 2BB-BNC-18 2BB-BNC-24 2BB-BNC-30 2BB-BNC-36 | 2BC-BNC-18 2BC-BNC-24 2BC-BNC-30 2BC-BNC-36 | 18" 24" 30" 36" |  NET 5.85 MODEL WITH UG 88C U MALE BNC CONNECTOR |
| 2BA-PP-18 2BA-PP-24 2BA-PP-30 2BA-PP-36 | 2BB-PP-18 2BB-PP-24 2BB-PP-30 2BB-PP-36 | 2BC-PP-18 2BC-PP-24 2BC-PP-30 2BC-PP-36 | 18" 24" 30" 36" |  NET 7.50 MODEL WITH PHONE TIPS |
| | 2BB-UHF-18 2BB-UHF-24 2BB-UHF-30 2BB-UHF-36 | 2BC-UHF-18 2BC-UHF-24 2BC-UHF-30 2BC-UHF-36 | 18" 24" 30" 36" |  NET 5.85 MODEL WITH MALE PLUG UHF CONNECTOR PL259 |
| 2BA-MG-18 2BA-MG-24 2BA-MG-30 2BA-MG-36 | 2BB-MG-18 2BB-MG-24 2BB-MG-30 2BB-MG-36 | 2BC-MG-18 2BC-MG-24 2BC-MG-30 2BC-MG-36 | 18" 24" 30" 36" |  NET 5.85 MODEL WITH MINIGATOR CLIPS |

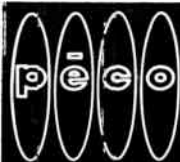
NOTE: 2BA and 2BB Series. Standard color, gray cable and molded double plug. 36" length available also as a standard item with colored cable and molded double plug to match: Black, Brown, Red Orange, Yellow, Green, Blue, Violet, Gray and White.

Other lengths also available in color, to order.

Minimum 25 pieces per color, per model, per length at no extra cost.





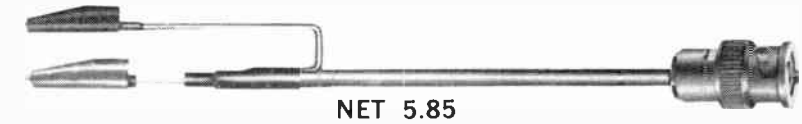

NOTE: 2BC Series, color black only, cable and molded double plug.

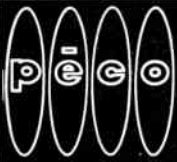
* Other lengths and cable types than those specified available upon request.



POMONA *Electronics* CO., INC., POMONA, CALIFORNIA
MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

PECO CONNECTING LEADS

| SHIELDED MICROPHONE CABLE | | SHIELDED COAXIAL CABLE | | CABLE LGTHS. IN INCHES * | <p>*NOTE: Lengths other than those specified available upon request. These models also available on special order in the following cable types: RG55A/U, RG59B/U, RG62A/U, and RG62B/U, etc.</p> |
|---|-------------|--|---|--------------------------|--|
| Polyethylene insulation. Vinyl jacket. Nom. Capacity 25 mmf/ft. | | Polyethylene insulation. Vinyl jacket. RG58C/U. Nom. Cap. 28.5 mmf/ft. | | | |
| MODEL NO. | MODEL NO. | | | | |
| AL-B-UHF-18 | AL-C-UHF-18 | 18" |  <p>NET 5.85 ALLIGATOR CLIPS TO PL259 UHF CONNECTOR</p> | | |
| AL-B-UHF-24 | AL-C-UHF-24 | 24" | | | |
| AL-B-UHF-30 | AL-C-UHF-30 | 30" | | | |
| AL-B-UHF-36 | AL-C-UHF-36 | 36" | | | |
| UHF-B-18 | UHF-C-18 | 18" |  <p>NET 5.85 PL259 UHF MALE CONNECTOR BOTH ENDS</p> | | |
| UHF-B-24 | UHF-C-24 | 24" | | | |
| UHF-B-30 | UHF-C-30 | 30" | | | |
| UHF-B-36 | UHF-C-36 | 36" | | | |
| BNC-B-18 | BNC-C-18 | 18" |  <p>NET 5.85 UG88C/U MALE BNC CONNECTOR BOTH ENDS</p> | | |
| BNC-B-24 | BNC-C-24 | 24" | | | |
| BNC-B-30 | BNC-C-30 | 30" | | | |
| BNC-B-36 | BNC-C-36 | 36" | | | |
| AL-B-BNC-18 | AL-C-BNC-18 | 18" |  <p>NET 5.85 ALLIGATOR CLIPS TO UG88C/U MALE BNC CONNECTOR</p> | | |
| AL-B-BNC-24 | AL-C-BNC-24 | 24" | | | |
| AL-B-BNC-30 | AL-C-BNC-30 | 30" | | | |
| AL-B-BNC-36 | AL-C-BNC-36 | 36" | | | |
| MG-B-BNC-18 | MG-C-BNC-18 | 18" |  <p>NET 5.85 MINIGATOR CLIPS TO UG88C/U MALE BNC CONNECTOR</p> | | |
| MG-B-BNC-24 | MG-C-BNC-24 | 24" | | | |
| MG-B-BNC-30 | MG-C-BNC-30 | 30" | | | |
| MG-B-BNC-36 | MG-C-BNC-36 | 36" | | | |
| MG-B-UHF-18 | MG-C-UHF-18 | 18" |  <p>NET 5.85 MINIGATOR CLIPS TO MALE PLUG UHF PL259 CONNECTOR</p> | | |
| MG-B-UHF-24 | MG-C-UHF-24 | 24" | | | |
| MG-B-UHF-30 | MG-C-UHF-30 | 30" | | | |
| MG-B-UHF-36 | MG-C-UHF-36 | 36" | | | |



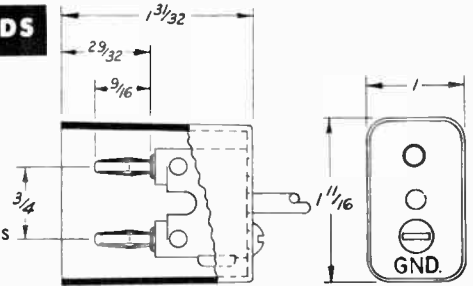
POMONA Electronics CO., INC., POMONA, CALIFORNIA


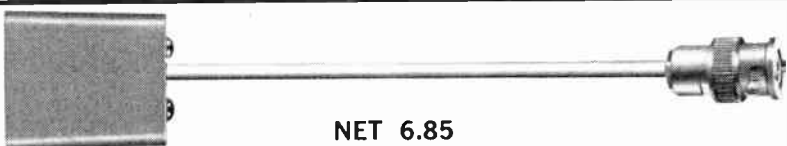

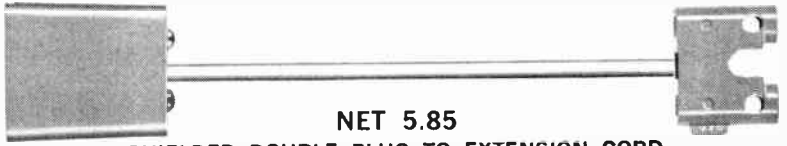
MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

3/4" SHIELDED DOUBLE PLUG PATCH CORD & TEST LEADS

| | | |
|--|---|--|
| <p>SHIELDED MICROPHONE CABLE</p> <p>Polyethylene insulation. Vinyl jacket. Nom. Capacity 25 mmf/ft. (Color: gray)</p> | <p>SHIELDED COAXIAL CABLE</p> <p>Polyethylene insulation. Vinyl jacket. RG58C/U. Nom. Cap. 28.5 mmf/ft. (Color: black)</p> | <p>CABLE LGTHS. IN INCHES *</p> |
|--|---|--|

- Molded polyethylene plug body fully insulated
- GND. clearly molded in shell
- One piece, heat treated beryllium copper spring
- Solder bonded noise free connection
- Fits standard .166 diameter banana jacks
- Aluminum shell, black anodized



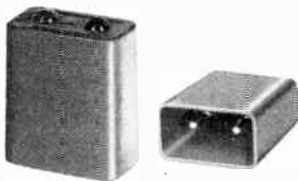
| MODEL NO. | MODEL NO. | | |
|-----------|-----------|-----|---|
| 1550-B-18 | 1550-C-18 | 18" |  <p>NET 5.85 SHIELDED DOUBLE PLUG BOTH ENDS</p> |
| 1550-B-24 | 1550-C-24 | 24" | |
| 1550-B-30 | 1550-C-30 | 30" | |
| 1550-B-36 | 1550-C-36 | 36" | |
| 1555-B-18 | 1555-C-18 | 18" |  <p>NET 6.85 SHIELDED DOUBLE PLUG TO MALE BNC UG88C/U</p> |
| 1555-B-24 | 1555-C-24 | 24" | |
| 1555-B-30 | 1555-C-30 | 30" | |
| 1555-B-36 | 1555-C-36 | 36" | |
| 1556-B-18 | 1556-C-18 | 18" |  <p>NET 6.85 SHIELDED DOUBLE PLUG TO MALE UHF PL259</p> |
| 1556-B-24 | 1556-C-24 | 24" | |
| 1556-B-30 | 1556-C-30 | 30" | |
| 1556-B-36 | 1556-C-36 | 36" | |
| 1551-B-18 | 1551-C-18 | 18" |  <p>NET 5.85 SHIELDED DOUBLE PLUG TO EXTENSION CORD</p> |
| 1551-B-24 | 1551-C-24 | 24" | |
| 1551-B-30 | 1551-C-30 | 30" | |
| 1551-B-36 | 1551-C-36 | 36" | |

*Lengths and cable types other than those shown available upon request.

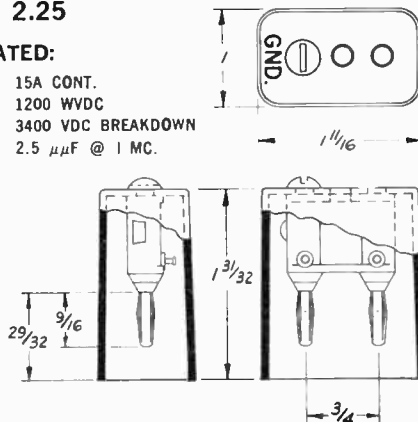
SHIELDED DOUBLE PLUG

MODEL 1433

NET 2.25



RATED:
15A CONT.
1200 WVDC
3400 VDC BREAKDOWN
2.5 μF @ 1 MC.



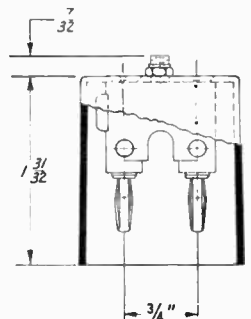
- Shielded double plug, 3/4" spaced
- Aluminum shell, black anodized
- Gold flashed solder turret terminals for reliable cable connections
- One piece nickel plated beryllium copper spring for use with standard .166 diameter banana jacks
- GND. clearly molded in shell
- Cable hole 5/32" diameter

MICRODOT ADAPTER

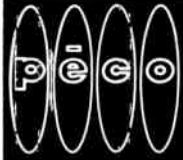
WITH SHIELDED DOUBLE PLUG



MODEL 1575
NET 6.85



Shielded double plug; Microdot adapter. Adapts 3/4" spaced jacks to Microdot coaxial miniature screw-on type plug, 50 Ohm. Color: Black.



POMONA Electronics CO., INC., POMONA, CALIFORNIA

MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

CONNECTING LEADS AND TEST ACCESSORIES

TWO COND. TWISTED PAIR

18 gauge wire 65/36 stranding. Vinyl insulation. Vinyl jacket. Nom. Capacity 30 mmf./ft. (Color: gray)

SHIELDED MICROPHONE CABLE




Polyethylene insulation. Vinyl jacket. Nom. Capacity 25 mmf./ft. (Color: gray)

SHIELDED COAXIAL CABLE

Polyethylene insulation. Vinyl jacket. RG58C/U. Nom. Cap. 28.5 mmf./ft. (Color: black)

- MODEL 1592 used as extension cord with 3/4" spaced jacks molded to cable.
- MODEL 1547 patch cord, molded 3/4" double banana plug with .080 diam. x 1/2" molded phone tips other end.
- MODEL 1569 patch cord, molded 3/4" double banana plug with test prod and ground clip.

NOTE: Lengths and cable types other than those shown available upon request.

| MODEL NO. | MODEL NO. | MODEL NO. | |
|-------------------------------|-------------------------------|-------------------------------|--|
| 1592-A-48 CABLE LENGTH 48" | 1592-B-48 CABLE LENGTH 48" | 1592-C-48 CABLE LENGTH 48" |  <p>NET 3.85</p> <p>3/4" SPACED MOLDED JACK TO STRIPPED AND TINNED LEADS</p> |
| 1547-A-24 CABLE LENGTH 24" | 1547-B-24 CABLE LENGTH 24" | 1547-C-24 CABLE LENGTH 24" | |
| 1547-A-36 CABLE LENGTH 36" | 1547-B-36 CABLE LENGTH 36" | 1547-C-36 CABLE LENGTH 36" |  <p>NET 5.85</p> <p>DOUBLE PLUG WITH MOLDED PHONE TIPS</p> |
| 1569-A-48 CABLE LENGTH 48" | 1569-B-48 CABLE LENGTH 48" | | |
| | | |  <p>NET 5.85</p> <p>DOUBLE PLUG WITH TEST PROD AND MINIGATOR CLIP</p> |



INSULATED ALLIGATOR CLIPS BOTH ENDS

18 ga., 65 x 36, extra flexible PVC insulated wire. .140" O.D. Clip, steel, cad plated. Colors: Red or Black; other colors and lengths available to order. NET .95

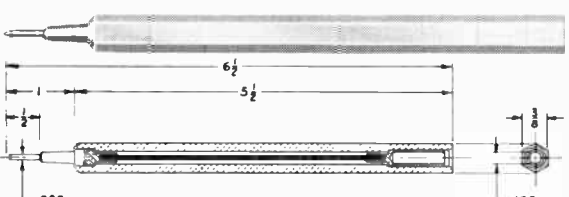
| MODEL NO. | LENGTH |
|-----------|--------|
| AL-B-4 | 4" |
| AL-B-12 | 12" |
| AL-B-24 | 24" |
| AL-B-36 | 36" |



INSULATED MINIGATOR CLIPS BOTH ENDS

18 ga., 65 x 36, extra flexible PVC insulated wire. .140" O.D. Clip, steel, cad plated. Colors: Red or Black; other colors and lengths available to order. NET .95

| MODEL NO. | LENGTH |
|-----------|--------|
| MG-B-4 | 4" |
| MG-B-12 | 12" |
| MG-B-24 | 24" |
| MG-B-36 | 36" |



TEST PROBE WITH BANANA JACK RECEPTACLE

1589 Black • 1589-2 Red NET 1.50

.080 diam. tip. Nickel plated. Heavy duty insulated handle. Banana jack in handle connected to tip. Permits use of standard banana plugs for circuit testing as a test prod. Colors: Red or Black.

INSULATED BANANA JACK ASSEMBLY

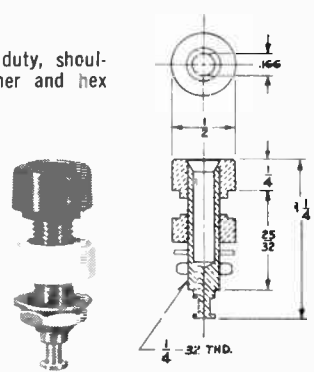
MODEL 1581

NET .25

Body, brass, silver plated. Heavy duty, shouldered ceramic insulator. Lockwasher and hex nut included.

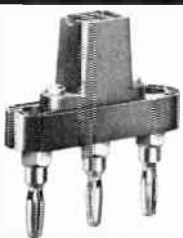
Features:

- Insulator head molded to body
- Closed entry receptacle
- Mounts in 3/8" diam. hole, panels up to 3/8" thick.
- For use with standard banana plugs
- Solder turret terminal
- Rated, 2500 WVDC



- 1581 — Black
- 1581-1 — Brown
- 1581-2 — Red
- 1581-3 — Orange
- 1581-4 — Yellow

- 1581-5 — Green
- 1581-6 — Blue
- 1581-7 — Violet
- 1581-8 — Gray
- 1581-9 — White



TRANSISTOR TEST ADAPTER

For Use with .017 Dia. Leads MODEL 1472

NET 5.85

Banana Plugs on 3/4" spacing. Heavy duty molded phenolic construction. Socket contacts and Banana Springs of beryllium copper.



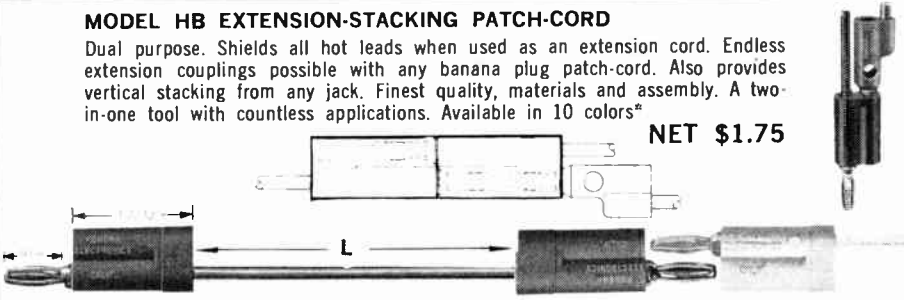
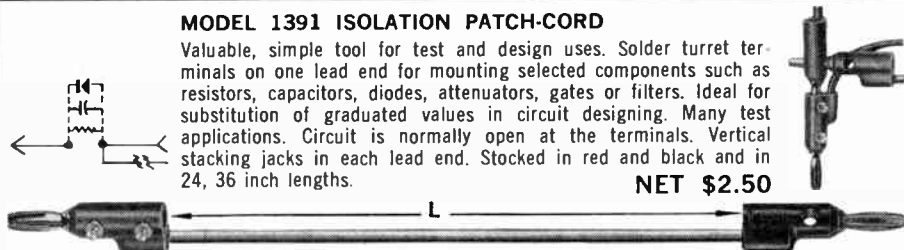
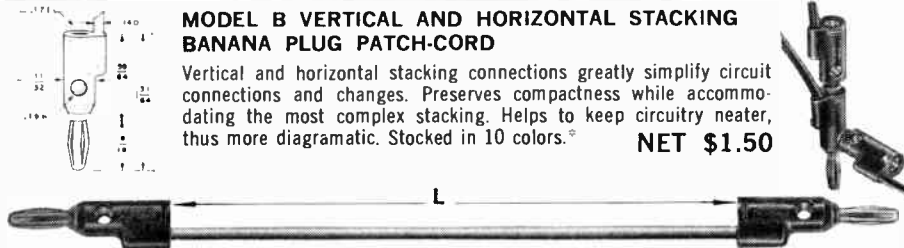
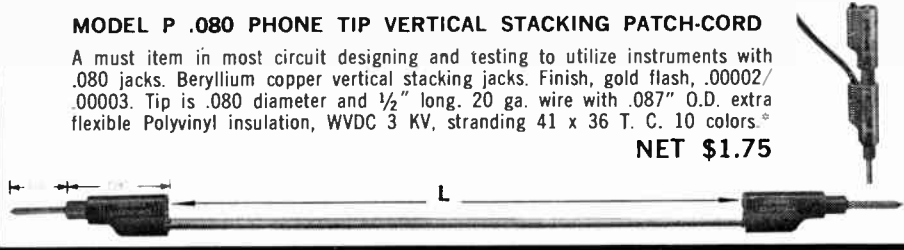
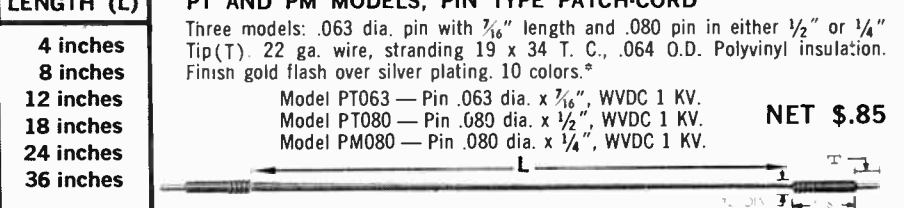
POMONA Electronics CO., INC., POMONA CALIFORNIA
 MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

PATCH-CORDS & STACK-UP CONNECTING LEADS

PECO BANANA TYPE PATCH-CORDS ARE QUALITY TOOLS FOR QUALITY TECHNICIANS
WIRE DESCRIPTION: MODELS HB, 1391 & B STACK-UP PATCH CORDS.

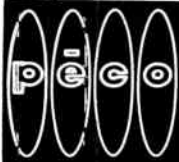
Polyvinyl extra flexible insulation on all wires. The insulating jacket molds the plug, solder connection and wire insulation into a long lasting single piece. Banana plugs are one piece heat treated beryllium copper spring. Contact resistance less than 0.001 ohm per

plug in standard .166" dia. banana jacks. Current carrying capacity, 15 amps. cont. and 30 amps. int. 18 ga. wire, stranding 65 x 36 T. C., with .140" insulation O. D., 7500 WVDC, breakdown 15 KV. Reliable solder bonded connections withstand pull test in excess of 50 lbs.

| <table border="1"> <thead> <tr> <th>MODEL NO.</th> <th>LENGTH (L)</th> </tr> </thead> <tbody> <tr> <td>HB-4</td> <td>4 inches</td> </tr> <tr> <td>HB-8</td> <td>8 inches</td> </tr> <tr> <td>HB-12</td> <td>12 inches</td> </tr> <tr> <td>HB-18</td> <td>18 inches</td> </tr> <tr> <td>HB-24</td> <td>24 inches</td> </tr> <tr> <td>HB-36</td> <td>36 inches</td> </tr> </tbody> </table> <p>(specify color)*</p> | MODEL NO. | LENGTH (L) | HB-4 | 4 inches | HB-8 | 8 inches | HB-12 | 12 inches | HB-18 | 18 inches | HB-24 | 24 inches | HB-36 | 36 inches | | <p>MODEL HB EXTENSION-STACKING PATCH-CORD</p> <p>Dual purpose. Shields all hot leads when used as an extension cord. Endless extension couplings possible with any banana plug patch-cord. Also provides vertical stacking from any jack. Finest quality, materials and assembly. A two-in-one tool with countless applications. Available in 10 colors*</p> <p>NET \$1.75</p>  |
|---|------------|------------|------------|-----------------------------|----------|-----------------------------|----------|---|-----------|--------------------------------|-----------|--------------------------------|-----------|--------------------------------|-----------|--|
| MODEL NO. | LENGTH (L) | | | | | | | | | | | | | | | |
| HB-4 | 4 inches | | | | | | | | | | | | | | | |
| HB-8 | 8 inches | | | | | | | | | | | | | | | |
| HB-12 | 12 inches | | | | | | | | | | | | | | | |
| HB-18 | 18 inches | | | | | | | | | | | | | | | |
| HB-24 | 24 inches | | | | | | | | | | | | | | | |
| HB-36 | 36 inches | | | | | | | | | | | | | | | |
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| MODEL NO. | LENGTH (L) | | | | | | | | | | | | | | | |
| 1391-24 | 24 inches | | | | | | | | | | | | | | | |
| 1391-36 | 36 inches | | | | | | | | | | | | | | | |
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| MODEL NO. | LENGTH (L) | | | | | | | | | | | | | | | |
| B-4 | 4 inches | | | | | | | | | | | | | | | |
| B-8 | 8 inches | | | | | | | | | | | | | | | |
| B-12 | 12 inches | | | | | | | | | | | | | | | |
| B-18 | 18 inches | | | | | | | | | | | | | | | |
| B-24 | 24 inches | | | | | | | | | | | | | | | |
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| MODEL NO. | LENGTH (L) | | | | | | | | | | | | | | | |
| P-4 | 4 inches | | | | | | | | | | | | | | | |
| P-8 | 8 inches | | | | | | | | | | | | | | | |
| P-12 | 12 inches | | | | | | | | | | | | | | | |
| P-18 | 18 inches | | | | | | | | | | | | | | | |
| P-24 | 24 inches | | | | | | | | | | | | | | | |
| P-36 | 36 inches | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>MODEL NO.</th> <th>LENGTH (L)</th> </tr> </thead> <tbody> <tr> <td>PT063-4 PT080-4 PM080-4</td> <td>4 inches</td> </tr> <tr> <td>PT063-8 PT080-8 PM080-8</td> <td>8 inches</td> </tr> <tr> <td>PT063-12 PT080-12 PM080-12</td> <td>12 inches</td> </tr> <tr> <td>PT063-18 PT080-18 PM080-18</td> <td>18 inches</td> </tr> <tr> <td>PT063-24 PT080-24 PM080-24</td> <td>24 inches</td> </tr> <tr> <td>PT063-36 PT080-36 PM080-36</td> <td>36 inches</td> </tr> </tbody> </table> <p>(specify color)*</p> | | MODEL NO. | LENGTH (L) | PT063-4 PT080-4 PM080-4 | 4 inches | PT063-8 PT080-8 PM080-8 | 8 inches | PT063-12 PT080-12 PM080-12 | 12 inches | PT063-18 PT080-18 PM080-18 | 18 inches | PT063-24 PT080-24 PM080-24 | 24 inches | PT063-36 PT080-36 PM080-36 | 36 inches | <p>PT AND PM MODELS, PIN TYPE PATCH-CORD</p> <p>Three models: .063 dia. pin with 7/16" length and .080 pin in either 1/2" or 1/4" Tip(T). 22 ga. wire, stranding 19 x 34 T. C., .064 O.D. Polyvinyl insulation. Finish gold flash over silver plating. 10 colors.*</p> <p>Model PT063 — Pin .063 dia. x 7/16", WVDC 1 KV. Model PT080 — Pin .080 dia. x 1/2", WVDC 1 KV. Model PM080 — Pin .080 dia. x 1/4", WVDC 1 KV.</p> <p>NET \$.85</p>  |
| MODEL NO. | LENGTH (L) | | | | | | | | | | | | | | | |
| PT063-4 PT080-4 PM080-4 | 4 inches | | | | | | | | | | | | | | | |
| PT063-8 PT080-8 PM080-8 | 8 inches | | | | | | | | | | | | | | | |
| PT063-12 PT080-12 PM080-12 | 12 inches | | | | | | | | | | | | | | | |
| PT063-18 PT080-18 PM080-18 | 18 inches | | | | | | | | | | | | | | | |
| PT063-24 PT080-24 PM080-24 | 24 inches | | | | | | | | | | | | | | | |
| PT063-36 PT080-36 PM080-36 | 36 inches | | | | | | | | | | | | | | | |

*Colors: Stocked in 10 colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White.

Production of other lengths contingent upon quantities desired. Order by model, length (inches), and color, e.g., B-72, Red.



POMONA Electronics CO., INC., POMONA, CALIFORNIA
MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

SOCKET SAVERS®

REDUCED HEIGHT FOR PORTABLE EQUIPMENT • MAXIMUM HEIGHT ABOVE EQUIPMENT 1/16 INCHES

The Socket Saver® is designed to be installed on tube checkers and other electronic equipment to prevent wear and tear of sockets on original equipment. They are easy to install and remove. This

eliminates the necessity of replacing and rewiring sockets on original equipment. Built of quality materials, BERYLLIUM COPPER LONG LIFE CONTACTS to give maximum service.



**MODEL SS-7
SEVEN PIN
MINIATURE
NET 1.75**

U. S. PAT. NO. 2952003



**MODEL SS-9
NINE PIN
MINIATURE
NET 1.75**

U. S. PAT. NO. 2952003



**MODEL SS-8
8 PIN OCTAL
NET 1.75**

MODEL SS-789 KIT, Set of Three NET 5.25

MODEL SS-11, 11 PIN OCTAL STYLE NET 1.95

TEST SOCKET TUBE ADAPTERS

Peco Test Socket Tube Adapters are ideal for making measurements of voltage, resistance, audio and video without tracing complicated circuits from the bottom of the chassis. They feature: Extended test tabs for easy use with either alligator clips or test prods; Low loss MICA-FILLED molded phenolic construction per MIL-M-14,

MFE. Power factor less than 0.010 at 10 Mc; High insulation resistance, the I. R. exceeds 500,000 megohms at 40% R.H., at 24 C; Distributed capacity, inter-element approximately 1 micro-micro farad; High voltage operation, voltage breakdown elements exceeds 1700 volts AC or DC.

MODEL TVS-789 KIT, Set of Three. NET 5.25
SPECIAL ADAPTERS DESIGNED TO YOUR SPECIFICATIONS.



**MODEL TVS-7
SEVEN PIN MINIATURE
NET 1.65 ea.**



**MODEL TVS-9
NINE PIN MINIATURE
NET 1.85**



**MODEL TVS-8
EIGHT PIN OCTAL
NET 1.75**

TRANSISTOR SOCKET



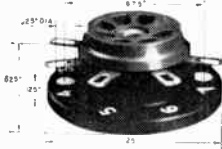
MODEL XS-T4

Peco XS-T4, surface mounted socket, designed for JEDEC 30 type transistor. Features include: closed-entry, silver plated, beryllium copper contacts; contact numbers and location tab molded into top of socket. Easily mounted with two #2 screws. All connections are made on top of chassis, making socket readily adaptable to enclosed-unit circuits. Socket is molded of low-loss mica-filled phenolic per MIL-M-14, type MFE.

NET .45 ea.

SURFACE MOUNTED BREADBOARD SOCKETS

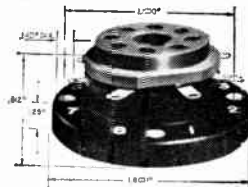
ideal for electronic and experimental use



**MODEL XS-7
SEVEN PIN MINIATURE
NET .49 ea.**



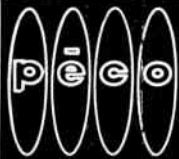
**MODEL XS-9
NINE PIN MINIATURE
NET .57 ea.**



**MODEL XS-8
EIGHT PIN OCTAL
NET .57 ea.**

Surface Mounted Breadboard Sockets are used for experimental circuit design, portable and enclosed units, plug-in and packaged assemblies. They feature: An insulated base to prevent connections from shorting to chassis; Eliminates double chassis design; Circuits may be wired in an enclosed unit; The base connections are num-

bered for easy identification; Grade-A phosphor bronze spring contacts; Standard center to center mounting holes; For ease of installation the 7 and 9 Pin Miniatures may be mounted either in the center or on the sides, the 8 Pin Octal is mounted on the sides; Small mounting holes permit the re use of experimental chassis.

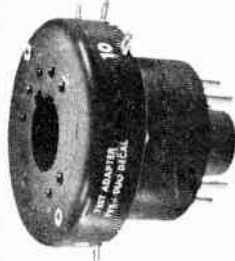


POMONA Electronics CO., INC., POMONA, CALIFORNIA
MANUFACTURERS OF ELECTRONIC TEST ACCESSORIES

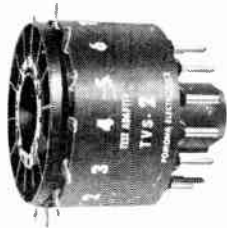
TEST SOCKET CATHODE RAY TUBE ADAPTERS

The PECO Test Socket Adapters are ideal for making measurements of voltage, resistance, and video from the base of the picture tube. The test socket adapter is inserted between the CR Tube base and its socket.

This completes the circuit and makes all connections readily accessible. Measurements can be made without tracing circuit wiring to test points below the chassis, thereby saving valuable time and increasing efficiency in trouble shooting.



MODEL TVS-1
 DUO DECAL
 For Television picture tubes
NET 1.95 ea.



MODEL TVS-2
 NEO-DIHEPTAL
 For color Television picture tubes
NET 7.45 ea.



MODEL TVS-3
 EIGHTAR (.040 PINS)
 For 110" Television picture tubes
NET 2.55 ea.



MODEL TVS-4
 7 PIN (.093 PINS)
 For 110" Television picture tubes
NET 1.95 ea.

TUBE SOCKET CONVERSION ADAPTERS

110" CRT SOCKET ADAPTER TO DUO DECAL BASE.
 FOR TESTING NEW NARROW-NECK 110" TUBES.

Modernize your present test equipment with this simple adapter, no rewiring necessary. Just plug in adapter to convert to 110" socket. Used for testing, ageing, and lifetesting. Model 110-S has .820 pin-circle diameter (7 pins .093 diameter) similar to 17BVP4, etc. Model 110-R has .600 pin-circle diameter (.040 pins) similar to 17BZP4, etc.

Model 110 P is similar to Model 110-R except that it is wired to test 110" Semi-Flat S-F series 17DAP4/SF17, 21EAP4/SF21, etc.



MODEL 110-S
NET 1.55 ea.



MODEL 110-P
MODEL 110-R
NET 1.55 ea.

VIBRATOR TEST ADAPTERS

FOR CHECKING ANY STANDARD 3 OR 4 PRONG VIBRATOR, 6 OR 12 VOLT

The Vibrator Test Adapter simplifies servicing of auto radios by eliminating the vibrator as a possible source of trouble. Features compact rugged phenolic construction. Instantly shows when contacts are sticking or open. Will indicate starting voltage. Eliminates all guesswork.



MODEL DA-34
 3 OR 4 PRONG
 6-12 VOLT
NET 4.95 ea.



MODEL 4A
 4 PRONG 6-12 VOLT
NET 3.25 ea.

MODEL 3D
 3 PRONG 12 VOLT
NET 3.25 ea.

TUNER TV TEST SOCKET TUBE ADAPTERS

IT'S TALL • IT'S SLIM • IT FITS

extra height—exact fit—clears shields—
 ready access to socket connections
 exposed operation saves time

A MUST for every modern TV Service Shop.

MODEL 1449
9 HIGH
 9 pin, Miniature



NET \$1.95

MODEL 1447
7 HIGH
 7 pin, Miniature



NET \$1.85

FOR USE WITH TUNERS HAVING CAPTIVE OR TELESCOPING TUBE SHIELDS

The 7 or 9-HIGH adapter rises above the shields and places testing in the open. Shields or tuner covers do not have to be removed. All construction is the highest quality. Interelement distributed capacity is approximately 1.5 micro-micro farad. Voltage breakdown elements exceed 1800 V. AC or DC. The insulation resistance exceeds 5x10⁵ megohms at 40% R.H. at 24°C.

CONNECTORS**UHF • BNC**

These units are satisfactory at frequencies ranging from 200 to 500 megacycles but are not constant impedance connectors. They may be used at peak voltages up to 500 volts and some special units at 5000 volts. These are not weatherproof connectors except in the case of the MX-913/U cap and chain.

Adapters are available for use with other coaxial series such as the "N" and "BNC." We have available several high voltage applications which apply on the SO-239 receptacle and on the PL-259, PL-259A plugs. These units eliminate and replace the large cable connectors which formerly were needed for voltages up to 5000 volts. At the same time there are also many plate variations and modifications of the SO-239 receptacle. The PL-259 and PL-259A adapters are also available with different cable openings which eliminate reducing adapters and other accessories.



| MILITARY NUMBER | DESCRIPTION | FOR RG/U CABLES |
|------------------|-------------------|------------------------------|
| PL 259 HI VOL.** | PLUG (HI VOLTAGE) | 8, 9, 10, 11, 12, 13, 63, 65 |
| PL 259A* | PLUG | 8, 9, 10, 11, 12, 13, 63, 65 |
| PL 259A** | PLUG (TEFLON) | 8, 9, 10, 11, 12 |
| PL 274‡ | ADAPTER, BULKHEAD | |
| SO 239* | RECEPTACLE | |
| SO 239A** | RECEPTACLE | |
| 49190† | PLUG | 8, 9, 10, 11, 12, 13, 63, 65 |
| 49191† | ADAPTER, STRAIGHT | |
| 49193 | HOOD | 8, 9, 10, 11, 12, 13, 63, 65 |
| 49194* | RECEPTACLE | |
| 49195* | PLUG | 8, 9, 10, 11, 12, 13, 63, 65 |
| 49484* | PLUG | 55, 59, 62, 71 |
| 491049‡ | ADAPTER, BULKHEAD | |

| MILITARY NUMBER | DESCRIPTION | FOR RG/U CABLES |
|-----------------|-------------------|------------------------------|
| UG 106/U | HOOD | 8, 9, 10, 11, 12, 13, 63, 65 |
| UG 175/U | ADAPTER, REDUCING | 58 |
| UG 176/U | ADAPTER, REDUCING | 59, 62, 71 |
| UG 177/U | HOOD | 29, 55, 58 |
| UG 203/U* | PLUG | 55, 59, 62, 71 |
| UG 363/U‡ | ADAPTER, BULKHEAD | |
| M 360 | HOOD | 8, 9, 10, 11, 12, 13, 63, 65 |
| PL 258‡ | ADAPTER, STRAIGHT | |
| PL 259* | PLUG | 8, 9, 10, 11, 12, 13, 63, 65 |
| PL 259 TEFLON** | PLUG (TEFLON) | 8, 9, 10, 11, 12, 13, 63, 65 |

These fittings are small, lightweight, weatherproof, quick connect and disconnect connectors. They are designed for use with small R.F. cables, such as RG-55/U, RG-58/U, RG-58A/U, RG-59/U, RG-62/U and RG-71/U, and may be used for application where the peak voltage does not exceed 500 volts.

The BNC connectors are constant impedance, 50 ohm connectors, yielding an excellent electrical performance up to 10,000 mcs. There has been great usage of these units for aircraft test equipment. Adapters are also available between the BNC and other coaxial connector series. We can offer many modifications of these standard types in accordance with a specified requirement. These connectors are manufactured in strict conformance with Military Specification MIL-C-3608.



| MILITARY NUMBER | DESCRIPTION | FOR RG/U CABLES |
|-----------------|---|-----------------|
| UG 88/U‡‡ | PLUG | 55, 58 |
| UG 88B/U‡‡ | PLUG | 55, 58 |
| UG 88C/U‡‡ | PLUG | 55, 58 |
| UG 88D/U‡‡ | PLUG | 55, 58 |
| UG 89/U‡‡ | JACK | 55, 58 |
| UG 89A/U‡‡ | JACK | 55, 58 |
| UG 89B/U‡‡ | JACK | 55, 58 |
| UG 89C/U‡‡ | JACK | 55, 58 |
| UG 185/U‡‡ | RECEPTACLE (TURRET LUG) | |
| UG 254A/U† | RECEPTACLE BULKHEAD PRESSURIZED | |
| UG 260/U† | PLUG | 59, 62, 71 |
| UG 260A/U† | PLUG | 59, 62, 71 |
| UG 260B/U** | PLUG | 59, 62, 71 |
| UG 260C/U** | PLUG | 59, 62, 71 |
| UG 261/U† | JACK | 59, 62, 71 |
| UG 261A/U† | JACK | 59, 62, 71 |
| UG 261B/U** | JACK | 59, 62, 71 |
| UG 261C/U** | JACK | 59, 62, 71 |
| UG 262/U† | PANEL JACK | 59, 62, 71 |
| UG 262A/U† | PANEL JACK | 59, 62, 71 |
| UG 262B/U** | PANEL JACK | 59, 62, 71 |
| UG 262C/U** | PANEL JACK | 59, 62, 71 |
| UG 274A/U** | ADAPTER TEE | |
| UG 274B/U** | ADAPTER TEE (BERYLLIUM CONTACT SLEEVE) | |
| UG 290/U* | RECEPTACLE | |
| UG 290A/U** | RECEPTACLE | |
| UG 291/U** | PANEL JACK | 55, 58 |
| UG 291A/U** | PANEL JACK | 55, 58 |
| UG 291B/U** | PANEL JACK | 55, 58 |
| UG 291C/U** | PANEL JACK | 55, 58 |
| UG 306/U** | ADAPTER RIGHT ANGLE | |
| UG 306A/U** | ADAPTER RIGHT ANGLE | |
| UG 414/U** | ADAPTER STRAIGHT — FLANGE MOUNT FEED THRU | |

| MILITARY NUMBER | DESCRIPTION | FOR RG/U CABLES |
|-----------------|---|-----------------|
| UG 414A/U** | ADAPTER STRAIGHT — FLANGE MOUNT FEED THRU | |
| UG 447/U† | RECEPTACLE | |
| UG 491A/U** | ADAPTER | |
| UG 491B/U** | ADAPTER | |
| UG 492A/U** | ADAPTER BULKHEAD PRESSURIZED | |
| UG 492B/U** | ADAPTER BULKHEAD PRESSURIZED | |
| UG 535/U | JACK RECEPTACLE RIGHT ANGLE FLANGE MOUNT | |
| UG 535A/U | PLUG RECEPTACLE RIGHT ANGLE SINGLE HOLE MOUNT | |
| UG 589/U‡‡ | PLUG | |
| UG 624/U** | JACK BULKHEAD | 59, 62, 71 |
| UG 625/U‡‡ | JACK RECEPTACLE SINGLE HOLE MOUNT | |
| UG 625A/U | JACK RECEPTACLE SINGLE HOLE MOUNT | |
| UG 625B/U | JACK RECEPTACLE SINGLE HOLE MOUNT | |
| UG 657/U‡‡ | RECEPTACLE BULKHEAD PRESSURIZED RUBBER SEAL | |
| UG 909/U** | JACK BULKHEAD | 55, 58 |
| UG 909A/U** | JACK BULKHEAD | 55, 58 |
| UG 910/U** | JACK BULKHEAD | 59, 62, 71 |
| UG 910A/U** | JACK BULKHEAD | 59, 62, 71 |
| UG 911/U | JACK RECEPTACLE PRESSURIZED | |
| UG 911A/U | JACK RECEPTACLE PRESSURIZED IMPROVED | |
| UG 912/U | JACK RECEPTACLE PRESSURIZED IMPROVED | |
| UG 913/U** | PLUG RIGHT ANGLE | 55, 58 |
| UG 913A/U** | PLUG RIGHT ANGLE | 55, 58 |
| UG 914/U** | ADAPTER STRAIGHT | |
| UG 1094/U** | RECEPTACLE BULKHEAD | |
| UG 1098/U** | RECEPTACLE RIGHT ANGLE | |
| UG 1174/U** | PLUG RECEPTACLE RIGHT ANGLE | |
| CW 123/U | CAP AND CHAIN | |
| CW 123A/U | CAP AND CHAIN | |
| CW 155/U | CAP | |
| CW 155A/U | CAP | |
| CW 159/U | SHORTING PLUG | |
| CW 282/U | CAP AND CHAIN | |

Dielectrics are as follows: * Mica Filled Bakelite. † Styrene. ** Teflon. ‡‡ Rexolite.

saxton
components division



NEW YORK, N. Y.



hirschmann · plugs · sockets · terminals



6-36 POLE MULTIPLE CONNECTORS



SMALL, MULTI-POLE CONNECTORS



PICK-UP PLUGS AND SOCKETS



THIRD-HAND PROBE CONNECTORS



FULL CONTACT PLUGS



SOCKET WITH SWITCH



BUNCH-PIN PLUGS FLEX-HANDLES



BINDING POSTS & TERMINALS



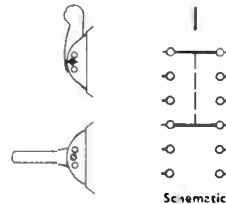
ALLIGATOR CLIPS

sound/transducers



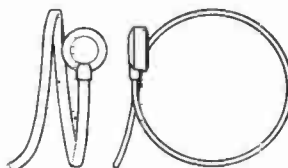
HEADSETS: stereo or mono monitoring for maximum intelligibility. Lightweight units available in a variety of styles with choice of ear-pads, earloops, eartips, lucite earcups, cords and plugs. Impedance range 15 to 8000 ohms.

MINIATURE SWITCHES: for low voltage applications. These switches are subjected to the most stringent mechanical and metallurgical inspections and can be employed with full confidence on the widest range of electrical equipment.



EARPHONES: quality magnetic transducers in flesh or grey; power, frequency or sensitivity to fit the application. Standard U.S. polarized-type cord connection. Impedances from 3.2 to 8000 ohms.

CONTACT THROAT MICROPHONES/HEART BEAT MICROPHONES: effective for use in surroundings with high background sound levels because only the operator's voice is registered. Microphone diaphragm is held in place by a light steel band covered by soft plastic. Impedances: 50, 120, 200 and 500 ohms. In grey only.



language lab headsets

To meet the growing demands of this active field, Rye Sound has prepared a complete line of aircrew headsets, microphone insets, boom-arm microphones, noise-cancellation mikes in divers combinations. These headsets are of the finest quality, offer maximum intelligibility, wearing ease, operating freedom and flexibility.





PLATING: 0.0001 Gold over 0.0001 Copper.

MATING CONNECTORS: All Screw-On (Snap-On) plugs will mate with all Screw-On (Snap-On) jacks & receptacles of the same resistance rating.

U. S. Pat. No. 2,937,360

SUB-MINIATURE R. F. CONNECTORS

*Designed for use with 50 ohm sub-miniature cables such as the RG-188/U or RG-174/U.

| | 50 OHM | 75 OHM |
|--|--------------|-----------------|
| STRAIGHT CABLE PLUG (Screw-On) (Screw-On) | 3000* | 3030† |
| A | 78 approx. | 13/16 approx. |
| C | .116 dia. | .161 dia. |
| D | 7/32 HEX | 5/16 HEX |
| E | 7/32 HEX | 11/32 HEX |
| F | 10-32, NF-2B | 5/16-32, NEF-2B |
| G | 10-32, NF-2A | 9/32-40, NS-2A |

| | 50 OHM | 75 OHM |
|------------------------------|--------------|-----------------|
| CABLE JACK (Screw-On) | 3001* | 3031† |
| A | 7 8 approx. | 27 32 approx. |
| C | .116 dia. | .161 dia. |
| D | 7 32 HEX | 5 16 HEX |
| F | 10-32, NF-2A | 5 16-32, NEF-2A |
| G | 10-32, NF-2A | 9 32-40, NS-2A |

| | 50 OHM | 75 OHM |
|--|--------------|-----------------|
| BULKHEAD RECEPTACLE WITH LOCKING NUT OUTSIDE THE PANEL (Screw-On) | 3002 | 3032 |
| A | 19/32 | 19 32 |
| D | 1/4 HEX | 3/8 HEX |
| F | 10-32, NF-2A | 5 16-32, NEF-2A |
| H | .397 | .397 |
| L | 13/64 dia. | 21 64 dia. |
| M | 1/8 min. | 13/64 |
| Q | 3/64 | 3/64 |

| | 50 OHM | 75 OHM |
|---------------------------------|--------------|-----------------|
| BULKHEAD JACK (Screw-On) | 3003* | 3033† |
| A | 7/8 approx. | 7/8 approx. |
| C | .116 dia. | .161 dia. |
| D | 7/32 HEX | 11/32 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| G | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .402 | .402 |
| L | 13/64 dia. | 21/64 dia. |
| M | 1/8 min. | 13/64 |
| Q | 3/64 | 3/64 |

| | 50 OHM | 75 OHM |
|-----------------------------------|--------------|-----------------|
| CABLE FEED-THRU (Screw-On) | 3004 | 3034 |
| A | .671 | .671 |
| D | 1/4 HEX | 3/8 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| G | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .397 | .397 |
| L | 13/64 dia. | 21/64 dia. |
| M | 1/8 min. | 13/64 |
| Q | 3/64 | 3/64 |

| | 50 OHM | 75 OHM |
|------------------------------------|--------------|-----------------|
| RIGHT ANGLE PLUG (Screw-On) | 3005* | 3035† |
| A | 3/4 approx. | 27/32 approx. |
| C | .116 dia. | .161 dia. |
| D | 7/32 HEX | 5/16 HEX |
| E | 7/32 HEX | 11/32 HEX |
| F | 10-32, NF-2B | 5/16-32, NEF-2B |
| G | 10-32, NF-2A | 9/32-40, NS-2A |
| I | 5/8 | .725 |

| | 50 OHM | 75 OHM |
|-------------------------------------|--------------|-----------------|
| CABLE TERMINATION (Screw-On) | 3006* | 3036† |
| A | 3/4 approx. | 23/32 approx. |
| C | .116 dia. | .161 dia. |
| D | 7/32 HEX | 11/32 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| G | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .277 | .277 |
| L | 13/64 dia. | 21/64 dia. |
| M | 1/8 min. | 13/64 |
| Q | 3/64 | 3/64 |

| | 50 OHM | 75 OHM |
|--|--------------|-----------------|
| STRAIGHT PRINTED WIRING BOARD RECEPTACLE (Screw-On) | 3007 | 3037 |
| A | .448 | .448 |
| D | 5/16 HEX | 3/8 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .155 | .155 |
| J | .040 | .040 |
| K | .200 | .200 |

†Designed for use with many of the 75 ohm sub-miniature cables and 95 ohm sub-miniature cables.

| | 50 OHM | 75 OHM |
|---|--------------|-----------------|
| RIGHT ANGLE PRINTED WIRING BOARD RECEPTACLE (Screw-On) | 3008 | 3038 |
| A | 1/2 | 21/32 |
| D | 5/16 HEX | 1/2 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .155 | .155 |
| I | .587 | .706 |
| J | .040 | .040 |
| K | .200 | .250 |
| N | .215 | .300 |

| | 50 OHM | 75 OHM |
|---|-----------------|-----------------|
| RIGHT ANGLE BULKHEAD RECEPTACLE (Screw-On) | 3009 | 3039 |
| A | 41/64 approx. | 25/32 approx. |
| D | 11/32 HEX | 1/2 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| G | 5/16-32, NEF-2A | 3/8-32, NEF-2A |
| H | .198 | .230 |
| I | .619 | .706 |
| N | .187 | .250 |
| R | .025/.030 FLAT | .025/.030 FLAT |

| | 50 OHM | 75 OHM |
|---|--------------|-----------------|
| TEE ADAPTOR, PLUG INLET, 2 JACK OUTLETS (Screw-On) | 3014 | 3044 |
| A | .844 | .907 |
| D | 5/16 CUBE | 3/8 CUBE |
| E | 7/32 HEX | 11/32 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| G | 10-32, NF-2B | 5/16-32, NEF-2B |
| I | 21/32 | 45/64 |

| | 50 OHM | 75 OHM |
|--------------------------------------|---------------|----------------|
| STRAIGHT CABLE PLUG (Snap-On) | 3100* | 3130† |
| A | 27/32 approx. | 27/32 approx. |
| C | .116 dia. | .161 dia. |
| D | 7/32 HEX | 5/16 HEX |
| G | 10-32, NF-2A | 9/32-40, NS-2A |

| | 50 OHM | 75 OHM |
|-----------------------------|--------------|----------------|
| CABLE JACK (Snap-On) | 3101* | 3131† |
| A | 7/8 approx. | 27/32 approx. |
| C | .116 dia. | .161 dia. |
| D | 7/32 HEX | 5/16 HEX |
| G | 10-32, NF-2A | 9/32-40, NS-2A |

| | 50 OHM | 75 OHM |
|---|--------------|-----------------|
| BULKHEAD RECEPTACLE WITH LOCKING NUT OUTSIDE THE PANEL (Snap-On) | 3102 | 3132 |
| A | 19/32 | 19/32 |
| D | 1/4 HEX | 3/8 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .397 | .397 |
| L | 13/64 dia. | 21/64 dia. |
| M | 1/8 min. | 13/64 |
| Q | 3/64 | 3/64 |

| | 50 OHM | 75 OHM |
|--------------------------------|--------------|-----------------|
| BULKHEAD JACK (Snap-On) | 3103* | 3133† |
| A | 7/8 approx. | 27/32 approx. |
| C | .116 dia. | .161 dia. |
| D | 7/32 HEX | 11/32 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| G | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .402 | .402 |
| L | 13/64 dia. | 21/64 dia. |
| M | 1/8 min. | 13/64 |
| Q | 3/64 | 3/64 |

| | 50 OHM | 75 OHM |
|----------------------------------|--------------|-----------------|
| CABLE FEED-THRU (Snap-On) | 3104 | 3134 |
| A | .671 | .671 |
| D | 1/4 HEX | 3/8 HEX |
| F | 10-32, NF-2A | 5/16-32, NEF-2A |
| H | .397 | .397 |
| L | 13/64 dia. | 21/64 dia. |
| M | 1/8 min. | 13/64 |
| Q | 3/64 | 3/64 |



**SUB-MINIATURE
R. F. CONNECTORS**

*Designed for use with 50 ohm sub-miniature cables such as the RG-188/U or RG-174/U.

†Designed for use with many of the 75 ohm sub-miniature cables and 95 ohm sub-miniature cables.

| | 50 OHM | 75 OHM | | 50 OHM | 75 OHM |
|--|-------------------|-----------------|--|----------------|-----------------|
| RIGHT ANGLE PLUG (Snap-On) | 3105* | 3135† | BULKHEAD JACK (Crimp Type, Screw-On) | 6003* | 6033† |
| | A 3/4 approx. | 27/32 approx. | | A 1-1/16 | 1-1/8 |
| | C .116 dia. | .161 dia. | | B .260 | .260 |
| | D 7/32 HEX | 5/16 HEX | | C .067 dia. | .109 dia. |
| | G 10-32, NF-2A | 9/32-40, NS-2A | | D 7/32 HEX | 11/32 HEX |
| | I 43/64 | 3/4 | | F 10-32, NF-2A | 5/16-32, NEF-2A |
| | | | | H .390 | .390 |
| | | | | P .375 | .400 |
| | | | | T 7/32 HEX | 5/16 HEX |
| | | | | U .020 FLAT | .030 FLAT |
| STRAIGHT PRINTED WIRING BOARD RECEPTACLE (Snap-On) | 3107 | 3137 | RIGHT ANGLE PLUG (Crimp Type, Screw-On) | 6005* | 6035† |
| | A .448 | .448 | | A 5/8 | 23/32 |
| | D 5/16 HEX | 3/8 HEX | | B .260 | .260 |
| | H .155 | .155 | | C .067 dia. | .109 dia. |
| | J .040 | .040 | | D 1/4 CUBE | 5/16 CUBE |
| | K .200 | .200 | | E 7/32 HEX | 11/32 HEX |
| | | | | F 10-32, NF-2B | 5/16-32, NEF-2B |
| | | | | I 5/8 | 23/32 |
| | | | | P .375 | .400 |
| | | | | T 7/32 HEX | 11/32 HEX |
| RIGHT ANGLE PRINTED WIRING BOARD RECEPTACLE (Snap-On) | 3108 | 3138 | CABLE TERMINATION (Crimp Type, Screw-On) | 6006* | 6036† |
| | A 1/2 | 21/32 | | A 11/16 | 23/32 |
| | D 5/16 HEX | 3/8 HEX | | B .260 | .260 |
| | H .155 | .155 | | C .067 dia. | .109 dia. |
| | I .587 | .706 | | D 7/32 HEX | 11/32 HEX |
| | J .040 | .040 | | F 10-32, NF-2A | 5/16-32, NEF-2A |
| | K .200 | .250 | | H .177 | .177 |
| | N .215 | .300 | | P .375 | .400 |
| | | | | U .020 FLAT | .030 FLAT |
| RIGHT ANGLE BULKHEAD RECEPTACLE (Snap-On) | 3109 | 3139 | STRAIGHT CABLE PLUG (Crimp Type, Snap-On) | 6100* | 6130† |
| | A 41/64 approx. | 25/32 approx. | | A 1" | 1-1/16 |
| | D 11/32 HEX | 1/2 HEX | | B .260 | .260 |
| | G 5/16-32, NEF-2A | 3/8-32, NEF-2A | | C .067 dia. | .109 dia. |
| | H .198 | .230 | | D 7/32 HEX | 5/16 HEX |
| | I .619 | .706 | | P .375 | .400 |
| | N .187 | .250 | | T 7/32 HEX | 5/16 HEX |
| | R .025/.030 FLAT | .025/.030 FLAT | | | |
| TEE ADAPTOR, PLUG INLET, 2 JACK OUTLETS (Snap-On) | 3114 | 3144 | CABLE JACK (Crimp Type, Snap-On) | 6101* | 6131† |
| | A .844 | .907 | | A 1-1/16 | 1-1/8 |
| | D 5/16 CUBE | 3/8 CUBE | | B .260 | .260 |
| | I 5/8 | 43/64 | | C .067 dia. | .109 dia. |
| | | | | D 7/32 HEX | 5/16 |
| | | | | P .375 | .400 |
| | | | | T 7/32 HEX | 5/16 HEX |
| STRAIGHT CABLE PLUG (Crimp Type, Screw-On) | 6000* | 6031† | BULKHEAD JACK (Crimp Type, Snap-On) | 6103* | 6133† |
| | A 1-1/64 | 1-7/64 | | A 1-1/16 | 1-1/8 |
| | B .260 | .260 | | B .260 | .260 |
| | C .067 dia. | .109 dia. | | C .067 dia. | .109 dia. |
| | D 7/32 HEX | 5/16 HEX | | D 7/32 HEX | 11/32 HEX |
| | E 7/32 HEX | 11/32 HEX | | F 10-32, NF-2A | 5/16-32, NEF-2A |
| | F 10-32, NF-2B | 5/16-32, NEF-2B | | H .390 | .390 |
| | P .375 | .400 | | P .375 | .400 |
| | T 7/32 HEX | 5/16 HEX | | T 7/32 HEX | 5/16 HEX |
| | | | | U .020 FLAT | .030 FLAT |
| CABLE JACK (Crimp Type, Screw-On) | 6001* | 6031† | RIGHT ANGLE PLUG (Crimp Type, Snap-On) | 6105* | 6135† |
| | A 1-1/16 | 1-1/8 | | A 5/8 | 23/32 |
| | B .260 | .260 | | B .260 | .260 |
| | C .067 dia. | .109 dia. | | C .067 dia. | .109 dia. |
| | D 7/32 HEX | 5/16 HEX | | D 1/4 CUBE | 5/16 CUBE |
| | F 10-32, NF-2A | 5/16-32, NEF-2A | | I 39/64 | 11/16 |
| | P .375 | .400 | | P .375 | .400 |
| | T 7/32 HEX | 5/16 HEX | | T 7/32 HEX | 5/16 HEX |

CRIMP-ON ASSEMBLY TOOL — Part No. CT-6

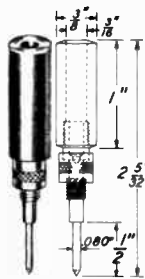
TYPICAL SPEC CABLES FOR USE WITH "CONHEX" CONNECTORS

| | | | |
|-----------|--|----------|--|
| RG-161/U | 3000, -1, -3, -5, -6 — 3100, -1, -3, -5 | RG-187/U | 3000SB, -1SB, -3SB, -5SB, -6SB 3100SB, -1SB, -3SB, -5SE, -6SB |
| RG-174/U | 3000, -1, -3, -5, -6 — 3100, -1, -3, -5 | RG-188/U | 3000, -1, -3, -5, -6 — 3100, -1, -3, -5 6000, -1, -3, -5, -6 — 6100, -1, -3, -5 |
| RG-179/U | 3000, -1, -3, -5, -6 — 3100, -1, -3, -5 | RG-195/U | 3030, -31, -33, -35, -36 — 3130, -31, -33, -35 6030, -31, -33, -35, -36 — 6130, -31, -33, -35 |
| RG-179A/U | 3000, -1, -3, -5, -6 — 3100, -1, -3, -5 | | |
| RG-180/U | 3030, -31, -33, -35, -36 — 3130, -31, -33, -35 | | |



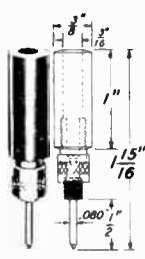
HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



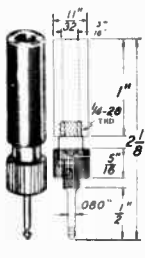
INSULATED TIP PLUG Solderless
HANDLE: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through body of tip then wrapped around screw portion and tightened with knurled collar. Threaded type. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | Type | NET Per C |
|-----|--------|-----------|
| 200 | Senior | \$15.00 |



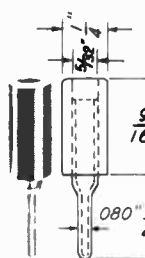
INSULATED TIP PLUG Solderless
HANDLE: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through body of tip then wrapped around screw portion and tightened with knurled collar. Threaded type. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | Type | NET Per C |
|-----|--------|-----------|
| 201 | Junior | \$15.00 |



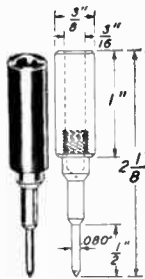
INSULATED TIP PLUG Signal Corps Approved
HANDLE: ETHYL CELLULOSE, Type EM-1, per MIL-P-3412, Red, Black. **SPECIFY COLOR**
PLUG: Steel, case hardened to Signal Corps specs.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Recess at end of prod tip holds plugs more firmly in jack spring. Prevents tip from falling out when in an inverted position.
 Std. Pkg. 50

| No. | Handle | NET Per C |
|-----|--------|-----------|
| 250 | 1 1/2" | \$54.00 |
| 358 | 3" | \$84.00 |



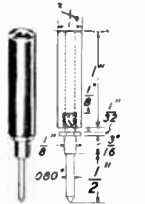
INSULATED TIP PLUG Solder Type
HANDLE: MOLDED BUTYRATE, per MIL-P-1048A, Type 3, Class MS, Red or Black. **SPECIFY COLOR**
BODY: Brass, nickel plated our No. 158.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Drawn hollow tip for easy soldering. Fits standard phone tip jack.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 237 | \$10.20 |



INSULATED TIP PLUG Heavy Duty Type
HANDLE: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
PLUG: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Large diameter well enables soldering of heavy duty wire directly into plug. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 229 | \$15.00 |



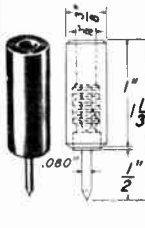
SUB-MINIATURE TIP PLUG
HANDLE: FIBRE, per MIL-F-148A, Grade CH, Red, Black. **SPECIFY COLOR**
TIP: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Ideally suited for checking sub-miniature equipment. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 270 | \$18.00 |



INSULATED SHORT TIP PLUG Solderless
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
PLUG: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Inserts flush to insulate handle, no metal exposed; eliminates possibility of shock or grounding. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 203 | \$12.00 |



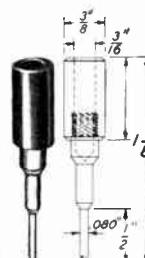
INSULATED SHORT TIP PLUG Solderless
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
PLUG: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through handle and body of tip then wrapped around screw portion. Inserts flush to insulated handle, no metal exposed, eliminates possibility of shock or grounding. Fits standard phone tip jacks.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 283 | \$13.20 |



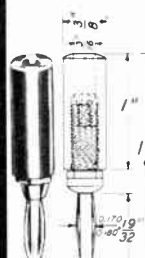
INSULATED TIP PLUG Phone Needle
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Removable chuck for easy replacement of broken needle. Needle pierces corrosion or plating for positive reading.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 216 | \$15.00 |



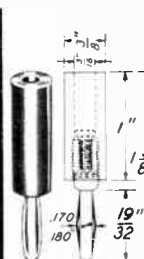
ADAPTER Banana Plug to Tip Plug
HANDLE: MACHINED BUTYRATE, per MIL-P-1048A, Type 1, Class II. **SPECIFY COLOR**
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Accepts standard banana plugs, adapts to standard tip plug.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 215 | \$15.00 |



INSULATED BANANA PLUG
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
PLUG: Hex brass, nickel or silver plated.
SPRING: Four-leaved phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to plug for solderless connection. Fits standard banana jacks.
 Std. Pkg. 100

| No. | Spring Material | Plating | NET Per C |
|-----|------------------|---------|-----------|
| 212 | Phosphor Bronze | Nickel | \$21.00 |
| 232 | Phosphor Bronze | Silver | 24.00 |
| 242 | Beryllium Copper | Nickel | 30.00 |
| 262 | Beryllium Copper | Silver | 33.00 |



INSULATED BANANA PLUG
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
PLUG: Brass, nickel or silver plated.
SPRING: Four-leaved phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to plug for solderless connection. Fits standard banana jacks.
 Std. Pkg. 100

| No. | Spring Material | Plating | NET Per C |
|-----|------------------|---------|-----------|
| 211 | Phosphor Bronze | Nickel | \$18.00 |
| 261 | Phosphor Bronze | Silver | 21.00 |
| 271 | Beryllium Copper | Nickel | 24.00 |
| 281 | Beryllium Copper | Silver | 27.00 |



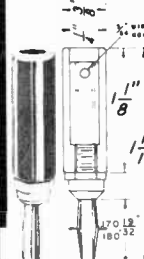
INSULATED BANANA PLUG Solderless
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
PLUG: Hex brass, nickel or silver plated.
SPRING: Four-leaved phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; Wire fits through handle and body of tip then wrapped around screw portion. Fits standard banana jacks.
 Std. Pkg. 50

| No. | Spring Material | Plating | NET Per C |
|-----|------------------|---------|-----------|
| 295 | Phosphor Bronze | Nickel | \$18.00 |
| 296 | Phosphor Bronze | Silver | 21.00 |
| 297 | Beryllium Copper | Nickel | 24.00 |
| 298 | Beryllium Copper | Silver | 27.00 |



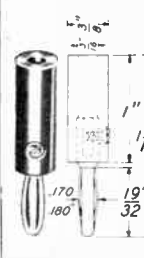
INSULATED BANANA PLUG With Internal Spring Collett
HANDLE: MACHINED BUTYRATE, per MIL-P-1048A, Type 1, Class II. **SPECIFY COLOR**
BODY: Hex brass, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Spring collett provides quick connect and disconnect of wire or standard phone tip. Tin wire for secure contact. Fits standard banana jack.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 239 | \$39.00 |



INSULATED BANANA PLUG Solderless
HANDLE: MACHINED BUTYRATE, per MIL-P-1048A, Type 1, Class II. **SPECIFY COLOR**
BODY: Hex brass, nickel plated with mating brass spacer.
SPRING: Four-leaved phosphor bronze, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Cross drilled hole in spacer enables quick solderless connection of wire to plug. Fits standard banana jacks.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 236 | \$33.00 |



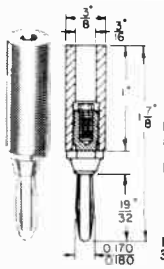
INSULATED BANANA PLUG With Side Screw
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
PLUG: Brass, nickel plated.
SPRING: Four-leaved phosphor bronze or beryllium copper, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Set screw secures wire without soldering. Fits standard banana jacks.
 Std. Pkg. 100

| No. | Spring | NET Per C |
|-----|------------------|-----------|
| 204 | Phosphor Bronze | \$18.00 |
| 254 | Beryllium Copper | 27.00 |

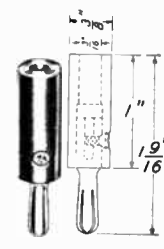
HERMAN H. SMITH, INC.



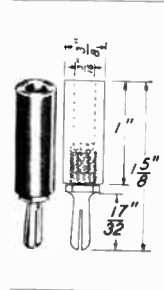
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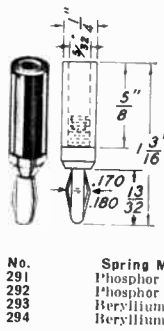
HIGH TEMPERATURE BANANA PLUG
HANDLE: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CFG. Yellow, Green, Blue, White per LC-726-1.
SPECIFY COLOR
PLUG: Hex brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Withstands temperature to 1200 degrees F. Full resiliency—non-oxidizing. Excellent for thermocouple connection on plastic extruding die heads.
 No. 388
NET Per C \$72.00



INSULATED BANANA PLUG Split Type With Side Screw
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CFG. Yellow, Green, Blue, White per LC-726-1.
SPECIFY COLOR
PLUG: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Cross-slotted for spring tension. Set screw secures wire, without soldering. Fits standard banana jacks.
 No. 213
NET Per C \$18.00

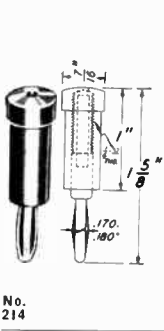


INSULATED BANANA PLUG Split Type With Internal Stud
HANDLE: MOLDED THERMOSETTING plastic, Red & Black per MIL-P-14 CFG. Yellow, Green, Blue, White per LC-726-1.
SPECIFY COLOR
PLUG: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Cross-slotted for spring tension. Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to plug for solderless connection. Fits standard banana jacks.
 No. 253
NET Per C \$18.00

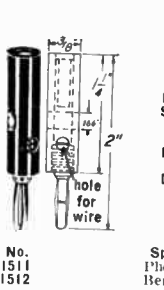


INSULATED BANANA PLUG Midget Type
HANDLE: MACHINED BUTYRATE, per MIL-P-1048A, Type 1, Class II. Red, Black, Yellow or Green.
SPECIFY COLOR
PLUG: Brass, nickel or silver plated.
SPRING: Phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Wire soldered directly into stud. Fits standard banana jacks.

| No. | Spring Material | Plating | NET Per C |
|-----|------------------|---------|-----------|
| 291 | Phosphor Bronze | Nickel | \$18.00 |
| 292 | Phosphor Bronze | Silver | 21.00 |
| 293 | Beryllium Copper | Nickel | 24.00 |
| 294 | Beryllium Copper | Silver | 27.00 |



ADAPTER Tip Plug to Banana Plug
HANDLE: MOLDED BUTYRATE, per MIL-L-P249A, Type 3, Class 3, Class MS. Red or Black.
SPECIFY COLOR
CAP: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CFG.
PLUG: Brass, nickel plated.
CONTACT: Phosphor Bronze.
SPRING: Four-leaved phosphor bronze, nickel plated.
JACK: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Accepts standard phone tip plugs and adapts to standard banana plugs.
 No. 214
NET Per C \$30.00



STACK BANANA PLUG Solderless
HANDLE: MACHINED BUTYRATE, per MIL-P-1048A, Type I, Class II. Red, Black, Yellow or Green.
SPECIFY COLOR
PLUG: Brass, nickel plated.
BODY: Four-leaved phosphor bronze or beryllium copper, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
SCREW: Steel, cadmium plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless connection. Accepts standard banana plugs in top and side. Interconnects unlimited amount of multiple circuits.
 No. 1511

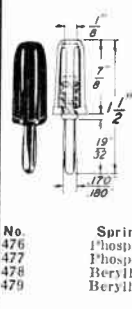
| Spring Material | NET Per C |
|------------------|-----------|
| Phosphor Bronze | \$27.00 |
| Beryllium Copper | 30.00 |

 No. 1512
NET Per C \$30.00

- 101 WHITE
- 102 RED
- 103 BLACK
- 104 DARK GREEN (Forest)
- 105 LIGHT BLUE
- 106 ORANGE
- 107 YELLOW
- 108 BROWN (Ecur)
- 109 LIGHT GREEN (Jungle)
- 110 DARK BLUE (Royal)
- 111 IVORY
- 112 VIOLET (Purple)
- 113 GREY

NYLON HANDLE PLUGS

COLOR CODE SUFFIX — Add to Catalog Number as Required

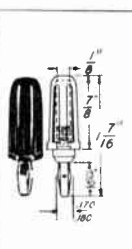


NYLON BANANA PLUG
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
PLUG: Brass, nickel plated.
SPRING: Phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to plug for solderless connection. Fits standard banana jacks.
 No. 476

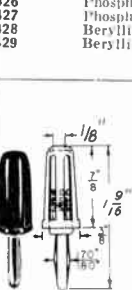
| Spring Material | Plating | NET Per C |
|------------------|---------|-----------|
| Phosphor Bronze | Nickel | \$21.00 |
| Phosphor Bronze | Silver | 24.00 |
| Beryllium Copper | Nickel | 27.00 |
| Beryllium Copper | Silver | 30.00 |



NYLON BANANA PLUG Split Type
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
PLUG: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Cross-slotted for spring tension. Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to plug for solderless connection. Fits standard banana jacks.
 No. 494
NET Per C \$18.00



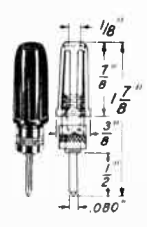
NYLON BANANA PLUG Midget
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
PLUG: Brass, nickel or silver plated.
SPRING: Phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Wire soldered directly into stud. Fits standard banana jacks.
 No. 492
NET Per C \$15.00



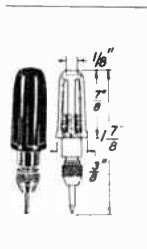
NYLON BANANA PLUG Solderless
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
PLUG: Brass, nickel or silver plated.
SPRING: Phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; Wire fits through handle and body of tip than wrapped around screw portion. Inserts flush to handle; no metal exposed; eliminates possibility of shock or grounding. Fits standard banana jacks.
 No. 491
NET Per C \$13.80



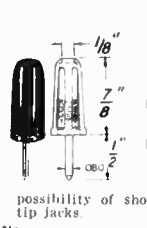
STACK BANANA PLUG
BODY: MOLDED POLYSTYRENE, per MIL-L-P116, Type I for electrical characteristics. Red or Black.
SPECIFY COLOR
PLUG: Brass, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
SCREW: Steel, cadmium plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Internal set screw for wire or phone tip connection. Can be stacked for multiple connections.
 No. 324
NET Per C \$48.00



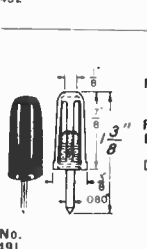
NYLON TIP PLUG Solderless
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
PLUG: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through body of tip then wrapped around screw portions and tightened with knurled collar. Threaded type. Fits standard phone tip jacks.
 No. 490
NET Per C \$16.80



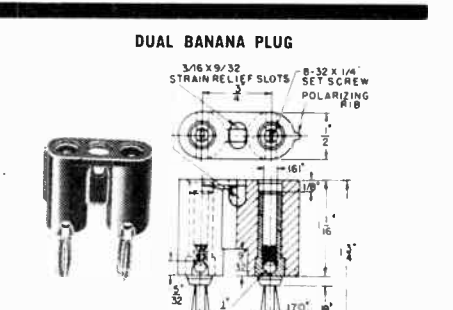
NYLON TIP PLUG Photo Needle
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Removable chuck for easy replacement of broken needles. Needle pierces corrosion or plating for positive reading.
 No. 193
NET Per C \$16.80



NYLON SHORT TIP PLUG Solderless
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
PLUG: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; Wire fits through handle and body of tip then wrapped around screw portion. Inserts flush to handle, no metal exposed; eliminates possibility of shock or grounding. Fits standard phone tip jacks.
 No. 492
NET Per C \$15.00



NYLON SHORT TIP PLUG
HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
PLUG: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Inserts flush to insulated handle, no metal exposed; eliminates possibility of shock or grounding. Fits standard phone tip jacks.
 No. 491
NET Per C \$13.80



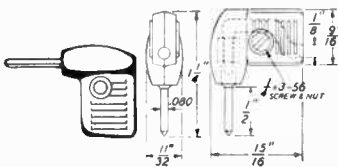
DUAL BANANA PLUG
BODY: MOLDED POLYSTYRENE, per MIL-L-P416, Type I for electrical characteristics. Red or Black.
SPECIFY COLOR
PLUG: Brass, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
SCREW: Steel, cadmium plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 5K Volts 60 cycle AC continuous working voltage. CAPACITANCE 1.0 mufd. between conductors.
DESCR.: Mates with standard dual binding post 3/8" centers. Polarity indicated on top and side. Wire held with internal set screw. Can be stacked for multiple connections.
 No. 210
NET Per C \$72.00

HERMAN H. SMITH, INC.



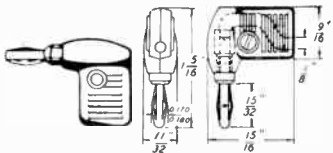
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METER TIP PLUG



HANDLE: MOLDED THERMOSETTING plastic, per MIL-P-11 CPG, Red and Black. **SPECIFY COLOR**
TIP: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Molded in two halves for easy assembly with screw and nut. Fits standard phone tip jacks. **Std. Pkg. 50**
No. 235 **NET Per C**
235D Display of 24 Pairs **NET \$12.96**

METER BANANA PLUG



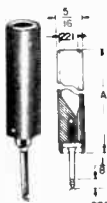
HANDLE: MOLDED THERMOSETTING plastic, per MIL-P-11 CPG, Red and Black. **SPECIFY COLOR**
PLUG: Brass, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Molded in two halves for easy assembly with screw and nut. Fits standard banana jacks. **Std. Pkg. 50**
No. 255 **NET Per C**
255D Display of 24 Pairs **NET \$17.20**

DUAL SHORTING PLUG



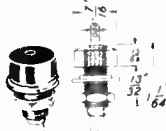
BODY: Molded Red or Black Polystyrene, per MIL-L-P416, Type I. **SPECIFY COLOR**
PLUG: Brass, nickel plated.
SPRING: Four-leaved beryllium copper, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 5 KV 60 cycle AC continuous working voltage.
DESCR.: Internally shorted plug mates with standard dual binding posts on 3/16" centers. Used for grounding or shorting input and output connections. Can be stacked for additional current rating. Rear banana jack holes allow connection to shorted posts. **Std. Pkg. 25**
No. 1516 **NET Per C**
1516D **\$72.00**

SUB-MINIATURE TIP PLUG AND TEST PROD



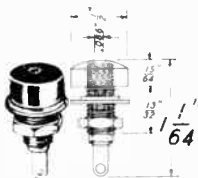
HANDLE: Molded Nylon, per MIL-P-20693A. Available in Red or Black. **SPECIFY COLOR**
TIP: Brass. Silver plated.
DESCR.: Solderless assembly. Ideal for use with sub-miniature printed-circuit tip jacks. Sharp tip breaks flux or oxide coating on printed-circuit pattern for positive contact when used as prod. Grooved head or prod makes positive contact when laid across wires. Fits all standard .080" tip jacks. **Std. Pkg. 25**
No. 348 **Handle (A)** **Overall (B)** **NET**
349 1 inch 1 1/2 inch **\$15.00**
 4 inches 1 3/4 inch **\$30.00**

INSULATED PHONE TIP JACK



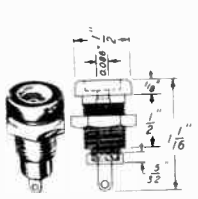
HEAD: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
SPRING: Phosphor bronze.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 1.0 mmf.
DESCR.: Positive contact with standard phone tip plugs. Supplied complete with hex nut and fibre washer. Mounts in 3/16" hole in panels up to 3/8" thick. Accepts standard phone tip plugs. **Std. Pkg. 100**
No. 202 **NET Per C**
202 **\$13.20**

INSULATED PHONE TIP JACK



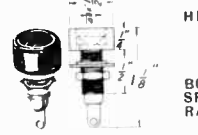
HEAD: MACHINED BUTYRATE, per MIL-L-P311, Type I, class MH. Red, Black, Yellow, Green, Blue. **SPECIFY COLOR**
BODY: Brass, nickel plated.
SPRING: Phosphor bronze.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 1.0 mmf.
DESCR.: Complete with hex nut and fibre washer. Mounts in 3/16" hole in panels up to 3/8" thick. Accepts standard phone tip plugs. **Std. Pkg. 50**
No. 223 **NET Per C**
223 **\$21.00**

MOLDED NYLON TIP JACK



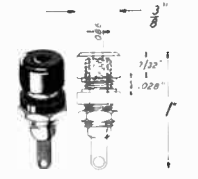
BODY: MOLDED NYLON, per MIL-P-20693A, Red, Black, Yellow, Green, Blue. **SPECIFY COLOR**
CONTACT: Phosphor bronze.
CAP: Brass, nickel plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty. 3 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 3.0 mmf.
DESCR.: Mounts in 3/16" hole in panels up to 3/16" thick. Accepts standard phone tip plugs. **Std. Pkg. 100**
No. 240 **NET Per C**
240 **\$18.00**

INSULATED TIP JACK



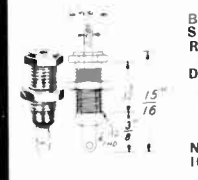
HEAD: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
SPRING: Phosphor bronze.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 1.0 mmf.
DESCR.: Supplied complete with hex nut and fibre washer. Mounts in 3/16" hole in panels up to 3/8" thick. Accepts standard phone tip plugs. **Std. Pkg. 50**
No. 282 **NET Per C**
282 **\$15.00**

INSULATED PHONE TIP JACK



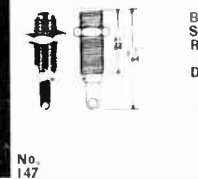
HEAD: MOLDED NYLON, per MIL-P-20693A. With molded nylon washer. Red, Black, Yellow, Green, Blue. **SPECIFY COLOR**
BODY: Brass, nickel plated.
SPRING: Phosphor bronze.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 1.0 mmf.
DESCR.: Extended portion of head and washer provides excellent insulation from panel. Supplied with hex nut. Mounts in 3/16" hole in panels up to 3/8" thick. Accepts standard tip plugs. **Std. Pkg. 100**
No. 241 **NET Per C**
241 **\$18.00**

PHONE TIP JACK



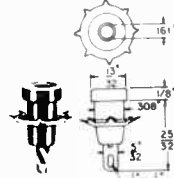
BODY: Brass, nickel plated.
SPRING: Phosphor bronze.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Positive contact with standard phone tip plugs. Supplied with hex nut. Mounts in 3/16" hole in panels up to 3/8" thick. **Std. Pkg. 100**
No. 107 **NET Per C**
107 **\$10.20**

HEADLESS PHONE TIP JACK



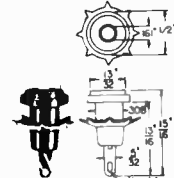
BODY: Brass, nickel plated.
SPRING: Phosphor bronze.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut. Used with plastic moulded instrument cases, where Jack body is screwed into case. Accepts standard phone tip plugs. **Std. Pkg. 100**
No. 147 **NET Per C**
147 **\$6.00**

"SPEEDI-MOUNT" BANANA JACKS Small Head



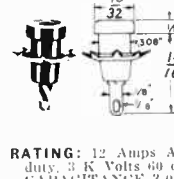
BODY: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-11 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
CONTACT: Brass, cadmium plated.
WASHER: Steel cadmium plated, internal and external tooth.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty. 3 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 1.0 mmf.
DESCR.: Unusual dished lockwasher permits fast assembly. Teeth embed into jack and panels, prevent pulling out and turning. Mounts in 3/16" hole in panels up to 3/16" thick. Accepts standard banana plug. **Std. Pkg. 100**
No. 398 **Head** **NET Per C**
 1 3/32" **\$6.60**

Large Head



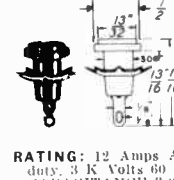
BODY: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-11 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
CONTACT: Brass, cadmium plated.
WASHER: Steel cadmium plated, internal and external tooth.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty. 3 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 1.0 mmf.
DESCR.: Unusual dished lockwasher permits fast assembly. Teeth embed into jack and panels, prevent pulling out and turning. Mounts in 3/16" hole in panels up to 3/16" thick. Accepts standard banana plug. **Std. Pkg. 100**
No. 399 **Head** **NET Per C**
 1 1/2" **\$6.60**

"SPEEDI-MOUNT" TIP JACKS Small Head



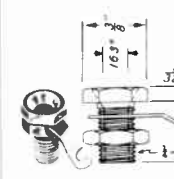
BODY: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
SPRING: Phosphor bronze.
WASHER: Steel cadmium plated, internal and external tooth.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty. 3 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 3.0 mmf.
DESCR.: Unusual dished lockwasher permits fast assembly. Teeth embed into jack and panels, prevents pulling out and turning. Mounts in 3/16" hole in panels up to 3/16" thick. Accepts standard phone tip plugs. **Std. Pkg. 100**
No. 279 **Head** **NET Per C**
 1 3/32" **\$6.60**

Large Head



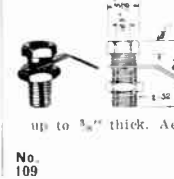
BODY: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
SPRING: Phosphor bronze.
WASHER: Steel cadmium plated, internal and external tooth.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty. 3 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 3.0 mmf.
DESCR.: Unusual dished lockwasher permits fast assembly. Teeth embed into jack and panels, prevents pulling out and turning. Mounts in 3/16" hole in panels up to 3/16" thick. Accepts standard phone tip plugs. **Std. Pkg. 100**
No. 299 **Head** **NET Per C**
 1 1/2" **\$6.60**

BANANA JACK



BODY: Hex brass nickel plated with recessed head.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut and brass thinned lug. Mounts in 3/16" hole; fits panels up to 3/16" thick. Accepts standard banana plugs. **Std. Pkg. 100**
No. 101 **NET Per C**
101 **\$10.20**

BANANA JACK

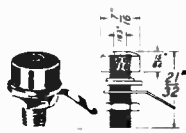


BODY: Hex brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut and brass thinned lug. Mounts in 3/16" hole in panels up to 3/16" thick. Accepts standard banana plugs. **Std. Pkg. 100**
No. 109 **NET Per C**
109 **\$10.20**

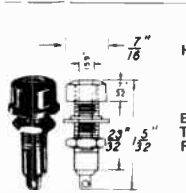


HERMAN H. SMITH, INC.

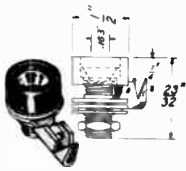
"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



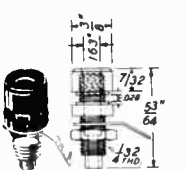
INSULATED BANANA JACK
HEAD: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 4.0 mmfd.
DESCR.: Supplied with hex nut, fibre washer, and brass tinned lug. Mounts in 3/16" hole in panels up to 3/8" thick. Accepts standard banana plugs. **Std. Pkg. 100**
NET Per C \$13.20



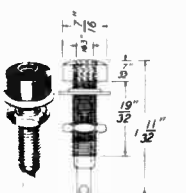
INSULATED BANANA JACK With Solder Tab
HEAD: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
TAB: Brass, cadmium plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 4.0 mmfd.
DESCR.: Supplied with hex nut and fibre washer. Mounts in 3/16" hole in panels up to 3/8" thick. Solder direct to tab. Accepts standard banana plugs. **Std. Pkg. 100**
NET Per C \$15.00



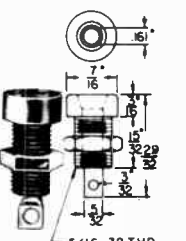
INSULATED BANANA JACK
HEAD: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 4.0 mmfd.
DESCR.: Supplied with hex nut, fibre washer, lockwasher and brass tinned lug. Mounts in 3/16" hole in panels up to 3/8" thick. Jack body recessed for snug contact. Accepts standard banana plugs. **Std. Pkg. 100**
NET Per C \$15.00



INSULATED MIDGET BANANA JACK
HEAD: MOLDED NYLON, per MIL-P-20693A. With molded nylon washer. Red, Black, Yellow, Green, Blue.
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 4.0 mmfd.
DESCR.: Extruded portion of head and washer provides excellent insulation from panel. Supplied with hex nut, brass tinned lug. Mounts in 3/16" hole in panels up to 3/8" thick. Accepts standard banana plugs. **Std. Pkg. 100**
NET Per C \$18.00



INSULATED JACK Combination Type
HEAD: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CPG, Yellow, Green, Blue, White per LC-726-1. **SPECIFY COLOR**
BODY: Brass, nickel plated.
SPRING: Phosphor bronze.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 4.0 mmfd.
DESCR.: Supplied with hex nut and fibre washer. Accepts standard phone tip plugs or standard banana plugs. **Std. Pkg. 100**
NET Per C \$16.20

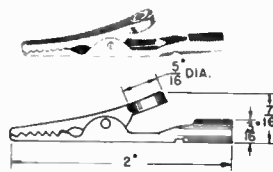


NYLON BANANA JACKS Full Round Body
BODY: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
CONTACT: Brass, cadmium plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 5.0 mmfd.
DESCR.: Mounts in 3/16" hole in panels up to 3/16" thick. Accepts standard banana plugs. Wide temperature and humidity range. **Std. Pkg. 50**
NET Per C \$12.00
NET Per C \$12.00

Same as above, except "Double D" body mounts in round or punched hole to fit.
NET Per C \$12.00

COLOR CODE SUFFIX
 Add to Catalog Number as required
 - 101 WHITE - 106 ORANGE
 - 102 RED - 107 YELLOW
 - 103 BLACK - 108 BROWN
 - 104 GREEN - 112 PURPLE
 - 105 BLUE - 113 GREY

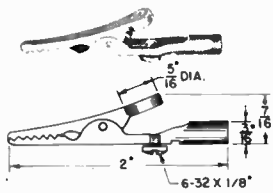
ALLIGATOR CLIPS Solder Connection



RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: 3/8" jaw opening. Jaws match accurately and grip securely. Accepts standard banana plugs in rear.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 300 | Steel, Cad. Pl. | \$5.00 |
| 380 | Solid Copper | 7.50 |
| 332 | Brass N.P. | 10.40 |

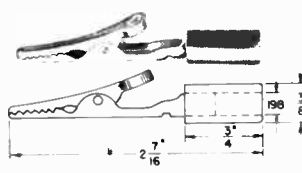
Screw Connection



RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: 3/8" jaw opening. Supplied with screw for solderless connection when required. Jaws match accurately and grip securely. Accepts standard banana plugs in rear.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 350 | Steel, Cad. Pl. | \$5.80 |
| 360 | Solid Copper | 8.40 |
| 339 | Brass N.P. | 13.00 |

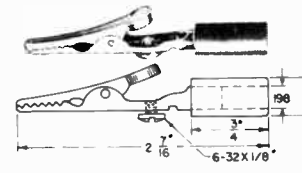
INSULATED ALLIGATOR CLIPS Solder Connection



HANDLE: MOLDED BUTYRATE, per MIL-L-P339A, Type 3, Class MS, Red or Black. **SPECIFY COLOR**
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: 3/8" jaw opening. Jaws match accurately and grip securely. Accepts standard banana plugs in rear.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 301 | Steel, Cad. Pl. | \$8.50 |
| 381 | Solid Copper | 10.50 |
| 354 | Brass N.P. | 15.00 |

Screw Connection



HANDLE: MOLDED BUTYRATE, per MIL-L-P339A, Type 3, Class MS, Red or Black. **SPECIFY COLOR**
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: 3/8" jaw opening. Supplied with screw for solderless connection when required. Jaws match accurately and grip securely. Accepts standard banana plugs in rear.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 351 | Steel, Cad. Pl. | \$9.50 |
| 361 | Solid Copper | 11.00 |
| 362 | Brass N.P. | 19.00 |

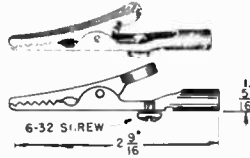
JUMBO ALLIGATOR CLIPS Solder Connection



RATING: 10 Amps AC for 10°C Temp. rise, continuous duty. 392.
 15 Amps AC for 10°C Temp. rise, continuous duty. 396.
DESCR.: 3/8" jaw opening. Jaws match accurately. For heavy terminal use.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 392 | Steel, Cad. Pl. | \$15.00 |
| 396 | Solid Copper | 18.00 |

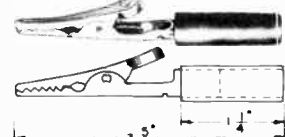
Screw Connection



RATING: 10 Amps AC for 10°C Temp. rise, continuous duty. 368.
 15 Amps AC for 10°C Temp. rise, continuous duty. 356.
DESCR.: 3/8" jaw opening. Jaws match accurately. Supplied with screw for solderless connection. For heavy terminal use.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 368 | Steel, Cad. Pl. | \$18.00 |
| 356 | Solid Copper | 21.00 |

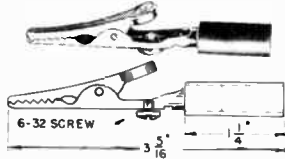
INSULATED JUMBO ALLIGATOR CLIPS Solder Connection



HANDLE: MACHINED BUTYRATE, per MIL-P-10408A, Type I, Class II, Red or Black. **SPECIFY COLOR**
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty. 393.
 15 Amps AC for 10°C Temp. rise, continuous duty. 397.
DESCR.: 3/8" jaw opening. Jaws match accurately. For heavy terminal use.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 393 | Steel, Cad. Pl. | \$21.00 |
| 397 | Solid Copper | 24.00 |

Screw Connection



HANDLE: MACHINED BUTYRATE, per MIL-P-10408A, Type I, Class II, Red or Black. **SPECIFY COLOR**
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty. 369.
 15 Amps AC for 10°C Temp. rise, continuous duty. 357.
DESCR.: 3/8" jaw opening. Jaws match accurately. Supplied with screw for solderless connection. For heavy terminal use.
Std. Pkg. 100

| No. | Type | NET Per C |
|-----|-----------------|-----------|
| 369 | Steel, Cad. Pl. | \$24.00 |
| 356 | Solid Copper | 27.00 |

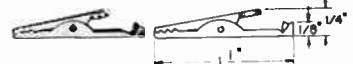
ALLIGATOR CLIP BOOTS



MATERIAL: MOLDED VINYL PLASTIC, Red, Black, Yellow, Green, Blue or White. **SPECIFY COLOR**
RATING: 1 K Volts 60 cycle AC continuous working voltage.
DESCR.: Fully insulated clip while allowing maximum jaw opening. No. 331 for use on standard size alligator clips such as our No. 300, No. 389 for use on miniature alligator clips, such as our No. 338.

| No. | Description | 10 | 100 |
|-----|-------------|--------|--------|
| 331 | Standard | \$4.80 | \$4.00 |
| 389 | Miniature | 0.00 | 0.00 |

MIDGET ALLIGATOR CLIP



DESCR.: 3/16" jaw opening. Jaws match accurately and grip securely. Unique SMITH spring construction. Solder connection and ears for crimping.
Std. Pkg. 100

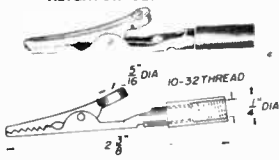
| No. | Type | NET Ea. |
|-----|-----------------|---------|
| 338 | Steel, Cad. Pl. | \$0.07 |
| 367 | Copper | 0.00 |

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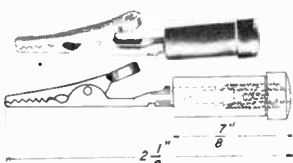
ALIGATOR CLIP ADAPTER



BUSHING: Brass, nickel plated.
CLIP: Steel cadmium plated.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
OESCR.: Adapts standard solderless tips to alligator clip. This novel quick-adapter is a must for all types of bench work.
 Std. Pkg. 50

No. 310 NET Per C \$13.20

ALLIGATOR CLIP ADAPTERS

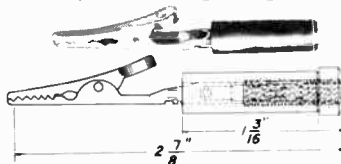


Phone Tip to Alligator Clip

HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR.
CAP: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CFG.
CLIP: Steel, cadmium plated or solid copper.
BODY: Brass.
SPRING: Phosphor bronze.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Jack in rear permits adapting standard phone tip plugs to alligator clips.
 Std. Pkg. 25

| No. | Description | NET Per C |
|-----|-------------|-----------|
| 304 | Steel Clip | \$33.00 |
| 334 | Copper Clip | 36.00 |

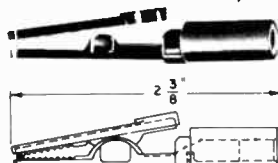
Phone Tip or Banana Plug to Alligator Clip



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR.
CLIP: Steel, cadmium plated or solid copper.
BODY: Brass.
SPRING: Phosphor bronze.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Combination Jack in rear, permits the adapting standard phone tip plug or banana plugs to alligator clip.
 Std. Pkg. 25

| No. | Description | NET Per C |
|-----|-------------|-----------|
| 305 | Steel Clip | \$39.00 |
| 335 | Copper Clip | 42.00 |

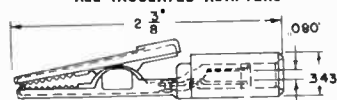
All Insulated Clip



INSULA: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR.
CLIP: Steel cadmium plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage.
DESCR.: All metal parts fully insulated with molded plastic. Insures against shock or grounding. Solder tip connection.
 Std. Pkg. 25

No. 337 NET Per C \$24.00

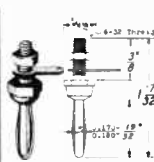
ALL INSULATED ADAPTERS



Phone Tip to Alligator Clip

INSULA: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR.
CLIP: Steel, cadmium plated.
BODY: Brass.
CONTACT: Phosphor bronze.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty.
OESCR.: All metal parts fully insulated with molded plastic. Insures against shock or grounding. Jack in rear permits adapting standard phone tip plugs to alligator clips.
 Std. Pkg. 25

No. 336 NET Per C \$36.00

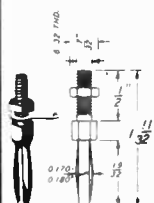


No. 102

BANANA PLUG

BODY: HEX BRASS, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
OESCR.: Supplied with hex nut and phosphor bronze lug. Threaded stud for panel mounting. Fits standard banana jacks.
 Std. Pkg. 100

NET Per C \$15.00

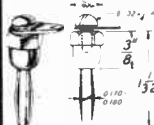


No. 103

BANANA PLUG

BODY: HEX BRASS, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
OESCR.: Supplied with hex nut and phosphor bronze lug. Threaded stud for panel mounting. Fits standard banana jacks.
 Std. Pkg. 100

NET Per C \$15.00



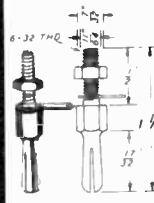
No. 100

BANANA PLUG

BODY: HEX BRASS, nickel plated.
SPRING: Four-leaved phosphor bronze or beryllium copper, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with screw and phosphor bronze tinned lug. Internal female permits use on all size panels. Fits standard banana jacks.
 Std. Pkg. 100

NET Per C \$15.00

Spring Material
 Phosphor Bronze \$15.00
 Beryllium Copper 24.00

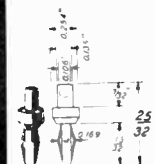


No. 104

BANANA PLUG Split Type

BODY: HEX BRASS, nickel plated, cross-slotted.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Fits all standard banana jacks. Supplied with hex nut and phosphor bronze lug, threaded stud for panel mounting. Fits standard banana jacks.
 Std. Pkg. 100

NET Per C \$13.20



No. 121

MIDGET BANANA PLUG Rivet Type

BODY: BRASS, silver plated.
SPRING: Four-leaved phosphor bronze, silver plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Can be furnished in varying types to meet Jan specs. Fits all standard banana jacks.
 Std. Pkg. 100

NET Per C \$16.20

MIL-SPEC. TYPE

Same as above, made to meet Signal Corps Drawings SC-C2231.
 Std. Pkg. 100

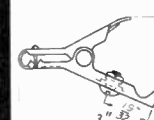
No. 122 NET Per C \$18.00

BATTERY TEST CLIP



MATERIAL: Steel, electro plated.
 Std. Pkg. 100

| No. | Spread | Lgth. | Rating | Spring | 100 | 10 |
|-----|--------|--------|--------|--------|------|-----|
| 365 | 1/16" | 1 1/2" | 5 amp | 7 lbs | 4.20 | .05 |
| 366 | 3/16" | 2" | 10 amp | 10 lbs | 6.00 | .07 |

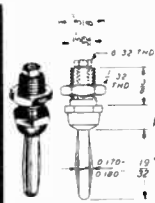


No. 315

TL137 TEST CLIP Signal Corps Approved

RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Steel, nickel plated. Made in accordance with government specs. 3/4" jaw opening.
 Std. Pkg. 25

NET Per C \$42.00

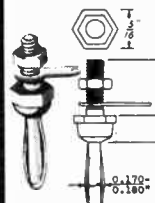


No. 135

Spring Material
 Phosphor Bronze
 Beryllium Copper

BANANA PLUG
BODY: HEX BRASS, nickel plated.
SPRING: Phosphor bronze or beryllium copper, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
OESCR.: Supplied with hex nut. Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to plug for solderless connection.
 Std. Pkg. 50

NET Per M \$16.20
 NET Per M \$27.00

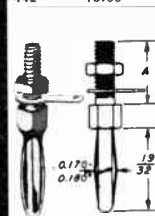


PHOS. BR. SPRING
 Nickel Plated Overall

| No. | NET Per C | A | B |
|-----|-----------|-----------|--------|
| 131 | \$15.00 | 6-32x3/4" | 1 1/2" |
| 432 | 15.00 | 6-32x3/4" | 1 1/2" |
| 433 | 15.00 | 6-32x3/4" | 1 1/2" |
| 434 | 15.00 | 8-32x3/4" | 1 1/2" |
| 435 | 15.00 | 8-32x3/4" | 1 1/2" |
| 436 | 15.00 | 8-32x3/4" | 1 1/2" |

PHOS. BR. SPRING
 Silver Plated Overall

| No. | NET Per C | A | B | No. | NET Per C |
|-----|-----------|-----------|--------|-----|-----------|
| 437 | \$18.00 | 6-32x3/4" | 1 1/2" | 449 | \$21.00 |
| 438 | 18.00 | 6-32x3/4" | 1 1/2" | 450 | 21.00 |
| 439 | 18.00 | 6-32x3/4" | 1 1/2" | 451 | 21.00 |
| 440 | 18.00 | 8-32x3/4" | 1 1/2" | 452 | 21.00 |
| 441 | 18.00 | 8-32x3/4" | 1 1/2" | 454 | 21.00 |
| 442 | 18.00 | 8-32x3/4" | 1 1/2" | 453 | 21.00 |



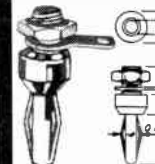
PHOS. BR. SPRING
 Nickel Plated Overall

| No. | NET Per C | A | B | No. | NET Per C |
|-----|-----------|-----------|--------|-----|-----------|
| 401 | \$15.00 | 6-32x3/4" | 1 1/2" | 414 | \$18.00 |
| 403 | 15.00 | 6-32x3/4" | 1 1/2" | 415 | 18.00 |
| 404 | 15.00 | 6-32x3/4" | 1 1/2" | 416 | 18.00 |
| 405 | 15.00 | 8-32x3/4" | 1 1/2" | 417 | 18.00 |
| 406 | 15.00 | 8-32x3/4" | 1 1/2" | 418 | 18.00 |
| 407 | 15.00 | 8-32x3/4" | 1 1/2" | 419 | 18.00 |

PHOS. BR. SPRING
 Silver Plated Overall

| No. | NET Per C | A | B | No. | NET Per C |
|-----|-----------|-----------|--------|-----|-----------|
| 408 | \$18.00 | 6-32x3/4" | 1 1/2" | 420 | \$21.00 |
| 409 | 18.00 | 6-32x3/4" | 1 1/2" | 421 | 21.00 |
| 410 | 18.00 | 6-32x3/4" | 1 1/2" | 422 | 21.00 |
| 411 | 18.00 | 8-32x3/4" | 1 1/2" | 423 | 21.00 |
| 412 | 18.00 | 8-32x3/4" | 1 1/2" | 424 | 21.00 |
| 413 | 18.00 | 8-32x3/4" | 1 1/2" | 425 | 21.00 |

PHOS. BR. SPRING
 Nickel Plated Overall



PHOS. BR. SPRING
 Nickel Plated Overall

| No. | NET Per C | A | B | No. | NET Per C |
|-----|-----------|-----------|--------|-----|-----------|
| 460 | \$15.00 | 4-40x3/4" | 1 1/2" | 468 | \$18.00 |
| 461 | 15.00 | 4-40x3/4" | 1 1/2" | 469 | 18.00 |
| 462 | 15.00 | 6-32x3/4" | 1 1/2" | 470 | 18.00 |
| 463 | 15.00 | 6-32x3/4" | 1 1/2" | 471 | 18.00 |

PHOS. BR. SPRING
 Silver Plated Overall

| No. | NET Per C | A | B | No. | NET Per C |
|-----|-----------|-----------|--------|-----|-----------|
| 464 | \$18.00 | 4-40x3/4" | 1 1/2" | 472 | \$21.00 |
| 465 | 18.00 | 4-40x3/4" | 1 1/2" | 473 | 21.00 |
| 466 | 18.00 | 6-32x3/4" | 1 1/2" | 474 | 21.00 |
| 467 | 18.00 | 6-32x3/4" | 1 1/2" | 475 | 21.00 |

BANANA PLUG

BODY: HEX BRASS, nickel or silver plated.
SPRING: Phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
OESCR.: Supplied with hex nut and tinned phosphor bronze lug threaded stud for panel mounting. Fits standard banana jacks.
 Std. Pkg. 50

NET Per M \$16.20
 NET Per M \$27.00

BANANA PLUG

PHOS. BR. SPRING Nickel Plated Overall

| No. | NET Per C | A | B |
|-----|-----------|--------|--------|
| 443 | \$18.00 | 1 1/2" | 1 1/2" |
| 444 | 18.00 | 1 1/2" | 1 1/2" |
| 445 | 18.00 | 1 1/2" | 1 1/2" |
| 446 | 18.00 | 1 1/2" | 1 1/2" |
| 447 | 18.00 | 1 1/2" | 1 1/2" |
| 448 | 18.00 | 1 1/2" | 1 1/2" |

BERYL. COP. SPRING Nickel Plated Overall

PHOS. BR. SPRING Silver Plated Overall

| No. | NET Per C | A | B |
|-----|-----------|--------|--------|
| 449 | \$21.00 | 1 1/2" | 1 1/2" |
| 450 | 21.00 | 1 1/2" | 1 1/2" |
| 451 | 21.00 | 1 1/2" | 1 1/2" |
| 452 | 21.00 | 1 1/2" | 1 1/2" |
| 454 | 21.00 | 1 1/2" | 1 1/2" |
| 453 | 21.00 | 1 1/2" | 1 1/2" |

BANANA PLUG

BODY: HEX BRASS, nickel or silver plated.
SPRING: Phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut and tinned phosphor bronze lug threaded stud for panel mounting. Fits standard banana jacks.
 Std. Pkg. 50

BANANA PLUG

PHOS. BR. SPRING Nickel Plated Overall

| No. | NET Per C | A | B |
|-----|-----------|--------|--------|
| 414 | \$18.00 | 1 1/2" | 1 1/2" |
| 415 | 18.00 | 1 1/2" | 1 1/2" |
| 416 | 18.00 | 1 1/2" | 1 1/2" |
| 417 | 18.00 | 1 1/2" | 1 1/2" |
| 418 | 18.00 | 1 1/2" | 1 1/2" |
| 419 | 18.00 | 1 1/2" | 1 1/2" |

BERYL. COP. SPRING Silver Plated Overall

PHOS. BR. SPRING Silver Plated Overall

| No. | NET Per C | A | B |
|-----|-----------|--------|--------|
| 420 | \$21.00 | 1 1/2" | 1 1/2" |
| 421 | 21.00 | 1 1/2" | 1 1/2" |
| 422 | 21.00 | 1 1/2" | 1 1/2" |
| 423 | 21.00 | 1 1/2" | 1 1/2" |
| 424 | 21.00 | 1 1/2" | 1 1/2" |
| 425 | 21.00 | 1 1/2" | 1 1/2" |

MIDGET BANANA PLUG

BODY: BRASS, nickel or silver plated.
SPRING: Phosphor bronze or beryllium copper, nickel or silver plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut and tinned phosphor bronze lug threaded stud for panel mounting. Fits standard banana jacks.
 Std. Pkg. 50

BANANA PLUG

PHOS. BR. SPRING Nickel Plated Overall

| No. | NET Per C | A | B |
|-----|-----------|--------|--------|
| 468 | \$18.00 | 1 1/2" | 1 1/2" |
| 469 | 18.00 | 1 1/2" | 1 1/2" |
| 470 | 18.00 | 1 1/2" | 1 1/2" |
| 471 | 18.00 | 1 1/2" | 1 1/2" |

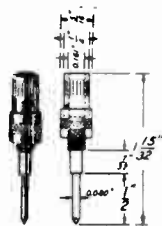
BERYL. COP. SPRING Silver Plated Overall

PHOS. BR. SPRING Silver Plated Overall

| No. | NET Per C | A | B |
|-----|-----------|--------|--------|
| 472 | \$21.00 | 1 1/2" | 1 1/2" |
| 473 | 21.00 | 1 1/2" | 1 1/2" |
| 474 | 21.00 | 1 1/2" | 1 1/2" |
| 475 | 21.00 | 1 1/2" | 1 1/2" |

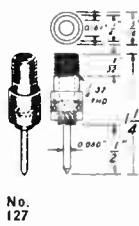
HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



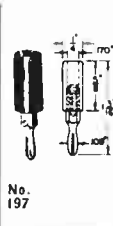
SOLDERLESS TIP PLUG
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through body of tip then wrapped around screw portion and tightened with knurled collar. Force fit type. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | Type | NET Per C |
|-----|--------|-----------|
| 105 | Senior | \$10.20 |



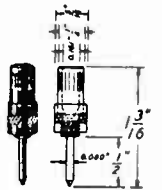
SOLDERLESS TIP PLUG
Threaded Jr.
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through body of tip, then wrapped around screw portion and tightened with assembly in plastic handle. Fits knurled collar. Threaded for easy standard phone tip jacks.
 Std. Pkg. 50

| No. | Type | NET Per C |
|-----|--------|-----------|
| 127 | Junior | \$11.40 |



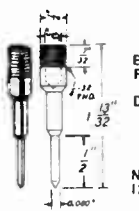
INSULATED BANANA PLUG
Sub Miniature
HANDLE: MACHINED BUTYRATE, per MIL-L-1344, Type I, Class MH. Red or Black. SPECIFY COLOR
PLUG: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Cross-slotted for spring tension. Wire solders directly into plug. Fits standard midjet banana jacks.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 197 | \$15.00 |



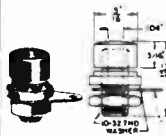
SOLDERLESS TIP PLUG
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through body of tip then wrapped around screw portion and tightened with knurled collar. Force fit type. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | Type | NET Per C |
|-----|--------|-----------|
| 106 | Junior | \$9.60 |



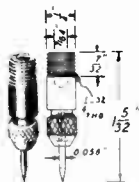
HEAVY DUTY TIP PLUG
Threaded
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Extra large well for soldering. Rear of plug accepts standard banana plugs. Fits standard phone tip jacks. Threaded for easy assembly in plastic handle.
 Std. Pkg. 50

| No. | Type | NET Per C |
|-----|----------|-----------|
| 125 | Threaded | \$10.20 |



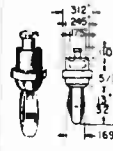
INSULATED BANANA JACK
Sub Miniature
HEAD: MACHINED BUTYRATE, per MIL-L-1344, Type I, Class MH. Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 750 Volts 60 cycle AC continuous working voltage. CAPACITANCE 6.0 mfd.
DESCR.: Supplied with hex nut, fibre washer and tinned lug. Mounts in 1/8" hole in panels up to 1/8" thick. Accepts standard midjet banana plugs.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 196 | \$15.00 |



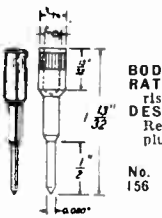
NEEDLE TIP AND CHUCK
BODY: Brass, nickel plated.
NEEDLE: Steel, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Removable chuck for easy replacement. Needle pierces plating or corrosion for positive re-etching.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 128 | \$13.20 |



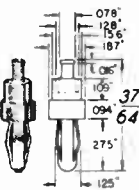
RIVET TYPE BANANA PLUG
Wrap Around Type
BODY: BRASS, nickel plated.
SPRING: Four leaved beryllium copper, nickel plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Rivets to panel or bakelite board. Wire wraps around stud and is then soldered.
 Std. Pkg. 100

| No. | "X" Dim. | Panel | NET Per C |
|------|----------|-------|-----------|
| 2082 | .105 | 1/16" | \$18.00 |
| 2083 | .135 | 3/32" | 18.00 |
| 2084 | .165 | 1/8" | 18.00 |



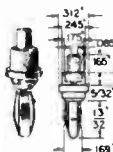
HEAVY DUTY TIP PLUG
Force-Fit
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Extra large well for soldering. Rear of plug accepts standard banana plugs. Fits all standard phone tip jacks.
 Std. Pkg. 25

| No. | Type | NET Per C |
|-----|-----------|-----------|
| 156 | Force Fit | \$10.20 |



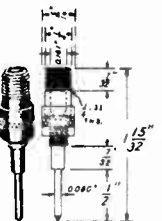
SUB MINIATURE BANANA PLUG
Rivet Type
BODY: BRASS, silver plated.
SPRING: Four leaved beryllium copper, silver plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: One piece beryllium copper spring insures positive and lasting contact.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 191 | \$15.00 |



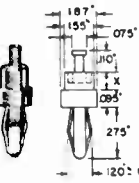
RIVET TYPE BANANA PLUG
Solder Well Type
BODY: BRASS, nickel plated.
SPRING: Four leaved beryllium copper, nickel plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Rivets to panel or bakelite board. Wire solders to well in rear of plug.
 Std. Pkg. 100

| No. | "X" Dim. | Panel | NET Per C |
|------|----------|-------|-----------|
| 2067 | .105 | 1/16" | \$18.00 |
| 2068 | .135 | 3/32" | 18.00 |
| 2069 | .165 | 1/8" | 18.00 |



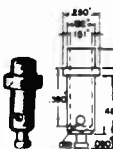
SOLDERLESS TIP PLUG
Threaded Sr.
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless; wire fits through body of tip, then wrapped around screw portion and tightened with knurled collar. Threaded for easy assembly in plastic handle. Fits standard phone tip jacks.
 Std. Pkg. 100

| No. | Type | NET Per C |
|-----|--------|-----------|
| 124 | Senior | \$12.00 |



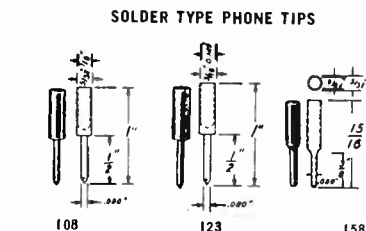
Swager Type
SUB MINIATURE BANANA PLUG
BODY: BRASS, silver plated.
SPRING: Four leaved beryllium copper, silver plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: One piece beryllium copper spring insures positive and lasting contact.
 Std. Pkg. 100

| No. | "X" Dim. | Panel | NET Per C |
|------|----------|-------|-----------|
| 2073 | .105 | 1/16" | \$15.00 |
| 2074 | .135 | 3/32" | 15.00 |
| 2075 | .165 | 1/8" | 15.00 |



PANEL MOUNT BANANA JACK
BODY: BRASS, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Accepts all standard banana plugs. These jacks are riveted directly to chassis or bakelite board.
 Std. Pkg. 100

| No. | "X" Dim. | Panel | NET Per C |
|------|----------|-------|-----------|
| 2079 | .101 | 1/16" | \$10.80 |
| 2080 | .131 | 3/32" | 10.80 |
| 2081 | .161 | 1/8" | 10.80 |

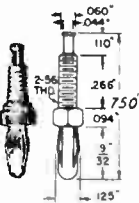


SOLDER TYPE PHONE TIPS

Brass, Nickel Plated

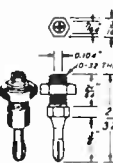
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.

| No. | Type | NET Per C |
|-----|------------|-----------|
| 108 | Standard | \$21.00 |
| 123 | Large I.D. | 25.40 |
| 158 | Drawn | 15.00 |



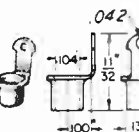
SUB MINIATURE BANANA PLUG
BODY: BRASS, silver plated.
SPRING: Four leaved beryllium copper, silver plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: One piece beryllium copper spring insures positive and lasting contact.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 192 | \$15.00 |



MIDGET BANANA PLUG
BODY: BRASS, nickel plated, cross-slotted.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Cross-slotted, supplied with hex nut. Fits our No. 112 midjet jack.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 111 | \$10.20 |



SUB MINIATURE BANANA JACK
BODY: BRASS, silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: This jack is riveted directly to chassis or to printed circuit board for easy assembly.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 194 | \$9.00 |



MIDGET BANANA JACK
BODY: BRASS, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut. Accepts our No. 111 midjet plug.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 112 | \$7.80 |



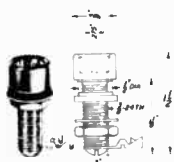
HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



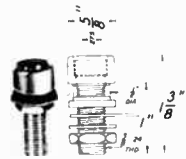
INS. GIANT BANANA PLUG
HANDLE: MACHINED PHENOLIC plastic, per MIL-P-77B, Type I, Red or Black. **SPECIFY COLOR**
BODY: Hex brass, nickel plated.
SPRING: Six-leaved, phosphor bronze, nickel plated.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Large deep internal well for soldering heavy duty wire. Recessed so that no metal portions are exposed when plugged into mating jack, in order to prevent shocks or arcing.

No. 285
 Std. Pkg. 50
 NET Per C \$46.20



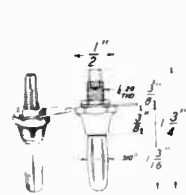
INS. GIANT BANANA JACK
HEAD: MACHINED BUTYRATE, per MIL-L-1344, Type 1, class MIL, Red or Black. **SPECIFY COLOR**
BODY: Hex brass, nickel plated.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 7.0 mmfd.
DESCR.: Supplied with hex nut, fibre washer, lockwasher, screw and thinned copper lug. Jack body recessed for snug contact. Mounts in 1/2" hole in panel up to 3/8" thick.

No. 286
 Std. Pkg. 50
 NET Per C \$42.00



INS. GIANT BANANA JACK
HEAD: MACHINED BUTYRATE, per MIL-L-1344, Type 1, class MIL, Red or Black. **SPECIFY COLOR**
BODY: Brass, nickel plated.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 7.0 mmfd.
DESCR.: Supplied with hex nut, fibre washer, lockwasher and brass thinned lug. Jack body recessed for snug contact. Mounts in 1/2" hole in panel up to 3/8" thick.

No. 287
 Std. Pkg. 50
 NET Per C \$42.00



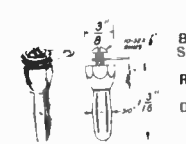
GIANT BANANA PLUG
BODY: HEX BRASS, nickel plated.
SPRING: Six-leaved phosphor bronze, nickel plated.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Plug portion of #285 plug. Supplied with hex nut and brass thinned lug. Large deep internal well for soldering heavy duty wire.

No. 185
 Std. Pkg. 25
 NET Per C \$30.00



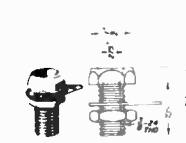
GIANT BANANA PLUG
BODY: HEX BRASS, nickel plated.
SPRING: Six-leaved phosphor bronze, nickel plated.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with screw and brass thinned lug. Internal female permits use on all size panels.

No. 186
 Std. Pkg. 25
 NET Per C \$30.00



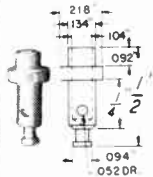
GIANT BANANA PLUG
BODY: HEX BRASS, nickel plated.
SPRING: Six-leaved phosphor bronze, nickel plated.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with screw and brass thinned lug. Female permits use on all size panels. Internal screw.

No. 188
 Std. Pkg. 25
 NET Per C \$30.00



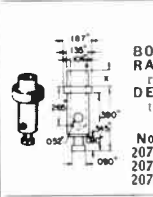
GIANT BANANA JACK
BODY: HEX BRASS, nickel plated.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut and brass thinned lug. Mounts in 3/8" hole in panel up to 1/2" thick.

No. 187
 Std. Pkg. 25
 NET Per C \$30.00



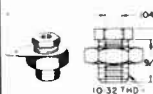
SUB MINIATURE BANANA JACK
BODY: BRASS, silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: This jack is riveted directly to chassis or to printed circuit board for easy assembly.

No. 193
 Std. Pkg. 50
 NET Per C \$9.00



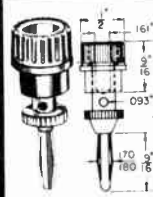
SUB MINIATURE BANANA JACK Panel Mount
BODY: BRASS, silver plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: These jacks are riveted directly to chassis or bakelite board.

| No. | "X" Dim. | Panel | NET Per C |
|------|----------|-------|-----------|
| 2076 | 103 | 1/16" | \$9.00 |
| 2077 | 135 | 1/8" | 9.00 |
| 2078 | 145 | 3/16" | 9.00 |



SUB MINIATURE BANANA JACK
BODY: HEX BRASS, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied with hex nut and thinned lug. Mounts in .196 (±.010) hole in panels up to 1/8" thick. Accepts standard midjet banana plugs.

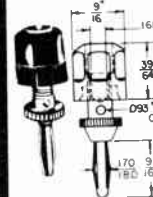
No. 195
 Std. Pkg. 100
 NET Per C \$7.80



COMBINATION BINDING POST AND BANANA PLUG
HEAD: CAPTIVE, Molded Butyrate, per MIL-L-P-349A, Type 3, Class MS, Red or Black. **SPECIFY COLOR**
BODY: Brass, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
RATING: 15 AMPS AC for 10°C Temp. rise, continuous duty.

DESCR.: Converts any panel-mounted banana jack into a five-way binding post termination. Accepts phone tip, spade lug, banana plug, alligator clip, or solid or stranded wire.

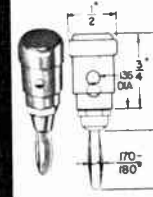
No. 233
 Std. Pkg. 25
 NET Per C \$27.00



COMBINATION NYLON BINDING POST AND BANANA PLUG
HEAD: CAPTIVE, Molded Nylon, per MIL-P-2093A. Available in Red, Black, Yellow, Green, Blue, White. **Molded in brass nickel plated insert.** **SPECIFY COLOR**
BODY: Brass, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.

DESCR.: Converts any panel-mounted banana jack into a nylon five-way binding post termination. Accepts phone tips, spade lugs, banana plug, alligator clips, or solid or stranded wires.

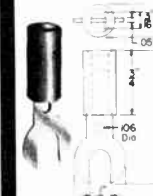
No. 234
 Std. Pkg. 25
 NET Per C \$27.00



COMBINATION PUSH POST AND BANANA PLUG
HEAD: Captive, brass nickel plated.
CAP: Molded Styrene, per MIL-L-1416, Type 1, Black.
BODY: Brass, nickel plated.
SPRING: Four-leaved phosphor bronze, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.

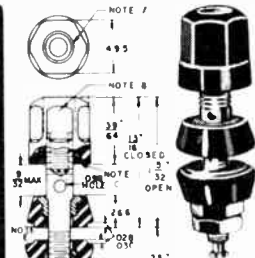
DESCR.: Converts any panel-mounted banana jack into a spring loaded push-post. Accepts standard phone tip, solid or stranded wire, and locks them in place on release of pressure on cap.

No. 2714
 Std. Pkg. 25
 NET Per C \$42.00



INSULATED SPADE LUG
HANDLE: MOLDED BUTYRATE per MIL-L-1349A, Type 3, Class MS, Red or Black. **SPECIFY COLOR**
LUG: Brass, .030 thick, nickel plated.
RATING: 30 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: 1/4" I.D. fits all standard Multi-purpose binding posts. Accepts up to #20 insulated wire, which solders in front body.

No. 400
 Std. Pkg. 100
 NET Per C \$12.00



BINDING POST Multi-Purpose

NOTES:
 A Banana Plug Receptacle, 161 I.D.
 B Head non-removable from stud
 C Molded-in Brass Bushing in Head.
 D Milled-in Brass Bushing in Washers.
 E For Panels 1/4" to 1/2" thick.
 F Drill 1/2" hole for mounting washers.
 G Wire Hole is at right angle to Flat on Insulated Washers. (Sample Washer Sent on Request.)
RATING: 30 Amps AC for 10°C Temp. rise, continuous duty. 2 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 5.0 mmfd.
CURRENT: 30 amps safe current carrying capacity.
ACCEPTS: Phone tip plug, spade lug, banana plug, alligator clip or wire strand.
DESCR.: MOLDED NYLON, per MIL-P-20693A, head and washer completely insulates post from panel. Mounts in 1/2" or keyed hole as indicated. Wrap around type - direct solder connection to stud. Metal parts brass.
COLORS: Red, Black, Yellow, Green, Blue, White. **Specify color.**

No. 257
 Std. Pkg. 100
 NET Per C \$36.00



BINDING POST Five-Way Grounding Type

HEAD: CAPTIVE, MOLDED BUTYRATE, per MIL-L-1349A, Type 3, Class MS, Red or Black. **SPECIFY COLOR**
BODY: Brass, nickel plated.
ACCEPTS: Phone tip plug, spade lug, banana plug, alligator clip or wire strand.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage, when insulated from panel as recommended. CAPACITANCE 5.0 mmfd.
DESCR.: Can be completely insulated from panel by using our 2155 and 2163 fibre washers supplied with 2 hex nuts.

No. 220 Description 8-32 x 1/2 Stud NET Per C \$18.00
 230 6-32 x 3/8 Stud 18.00
 391 Rivet Type 15.00

With brass nickel plated insert in head
 280 8-32 Stud \$24.00
 264 6-32 Stud 24.00
 394 Rivet Type 15.00



All Insulated Type

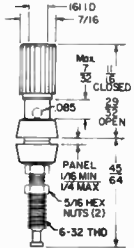
HEAD: CAPTIVE, MOLDED BUTYRATE, per MIL-L-1349A, Type 3, Class MS, Red or Black. **SPECIFY COLOR**
BODY: Brass, nickel plated.
WASHERS: MOLDED BUTYRATE, per MIL-L-1349A, Type 3, Class MS, with brass inserts.
ACCEPTS: Phone tip plug, spade lug, banana plug, alligator clip or wire strand.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 3.0 mmfd.
DESCR.: Mounts in 3/8" hole in panel with milled slot for locking, supplied with two hex nuts.

No. 260 Description 8-32 Stud NET Per C \$27.00
 259 6-32 Stud 27.00

With brass nickel plated insert in head
 290 8-32 Stud \$33.00
 231 6-32 Stud 33.00

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NYLON BINDING POST Insulated

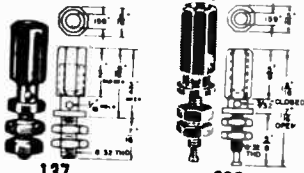
HEAD: CAPTIVE, MOLDED NYLON, per MIL-P-20693A, with brass Gold-Plated Insert.
BODY: Brass, Gold Plated
WASHERS: MOLDED NYLON, per MIL-P-20693A, with brass Gold-plated inserts.
ACCEPTS: Phone tip plug, spade lug, banana plug, alligator clip, or wire strand.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 3.0 mmfd.

DESCR.: Molded washers completely insulate post from panel. Miniature washers and narrow fluted head require minimum panel space. Mounts in 1/4" round or 1/2" hole in panel as indicated. Wrap-around solder terminal on stud for direct connection.

COLORS: Red, Black, Yellow, Green, Blue, White.
SPECIFY COLOR
Std. Pkg. 100
NET Per C \$33.00

No. 1517

BINDING POST Metal Five-Way



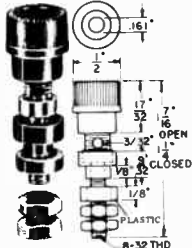
137

208

HEAD: CAPTIVE: Hex brass, nickel plated.
BODY: Brass, nickel plated.
ACCEPTS: Phone tip, spade lug, banana plug, alligator clip or wire strand.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage, when insulated from panel as recommended. CAPACITANCE 5.0 mmfd.
DESCR.: Can be completely insulated from panel by using our 2155 and 2163 flat washers. Supplied with two hex nuts.

| No. | Description | NET Per C |
|-----|-------------|-----------|
| 137 | Standard | \$21.00 |

BINDING POST Five-Way With Molded Mounting Washers All Insulated Type

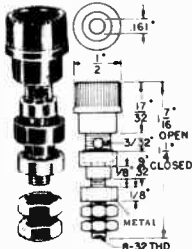


HEAD: CAPTIVE, MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black.
SPECIFY COLOR
BODY: Brass, nickel plated.
WASHERS: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS.
ACCEPTS: Phone tip plug, spade lug, banana plug, alligator clip or wire strand.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 5.0 mmfd.

DESCR.: Mounts in 1/4" hole in panel. Supplied with one hex nut.
Std. Pkg. 100
NET Per C \$24.00

No. 366

Grounding Type

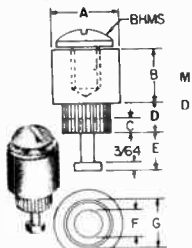


HEAD: CAPTIVE, MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black.
SPECIFY COLOR
BODY: Brass, nickel plated.
WASHERS: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS. Mounting Washer - Molded plastic. Back-up Washer - Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Mounts in 1/4" hole in panel. Grounded to panel by back-up washer. Supplied with one hex nut.

Std. Pkg. 100
NET Per C \$24.00

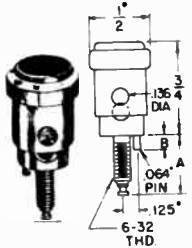
No. 387

COMBINATION TERMINALS



MATERIAL: BRASS, nickel plated.
DESCR.: Combination Screw and Turret Terminal. Knurled shank prevents turning. Supplied complete with BHMS and Internal Tooth Lockwasher, unassembled.

| No. | A | B | C | D | E | F | G | Bhms | Thk. | Net Panel Per |
|------|-----|-----|-----|------|------|------|------|-------|------|---------------|
| 2045 | 3/4 | 1/2 | 3/8 | 1/4 | 1/8 | 1/16 | 2.20 | 6-32 | 3/32 | 7.80 |
| 2046 | 1/2 | 3/8 | 1/4 | 1/8 | 1/16 | 1/32 | 2.50 | 8-32 | 1/8 | 7.80 |
| 2047 | 3/8 | 1/4 | 1/8 | 1/16 | 1/32 | 1/64 | 2.57 | 10-32 | 1/16 | 7.80 |



SPRING LOADED BINDING POSTS

HEAD: CAPTIVE, Brass nickel plated.
CAP: STYRENE, per MIL-L-P416, Type I, Black.
BDDY: Brass, nickel plated.
PIN: Nickel Silver.
ACCEPTS: Standard phone tip or wire in side hole and locks them in place on release of pressure on cap.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Side dowel pin locates and prevents post from turning when mounted in panel.

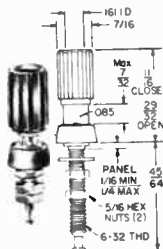
| With Dowel Pin | | | Less Dowel Pin | | |
|----------------|------|---------------|----------------|---------------|---------------|
| A | B | No. NET Per C | No. NET Per C | No. NET Per C | No. NET Per C |
| 1/4" | 1/8" | 2701 \$36.00 | 2801 \$30.00 | 2802 \$33.00 | 2803 \$36.00 |
| 3/8" | 1/4" | 2702 39.00 | 2802 33.00 | 2803 36.00 | 2804 39.00 |
| 1/2" | 3/8" | 2703 42.00 | 2803 36.00 | 2804 39.00 | 2805 42.00 |
| 5/8" | 1/2" | 2704 45.00 | 2804 39.00 | 2805 42.00 | 2806 45.00 |
| 3/4" | 5/8" | 2705 48.00 | 2805 42.00 | 2806 45.00 | 2807 48.00 |
| 7/8" | 3/4" | 2706 51.00 | 2806 45.00 | 2807 48.00 | 2808 51.00 |
| 1" | 7/8" | 2707 54.00 | 2807 48.00 | 2808 51.00 | |
| 1 1/4" | 1" | 2708 57.00 | 2808 51.00 | | |

Same as above less threaded stud. Supplied with 6-32 internal mounting thread.

| No. | Description | NET Per C |
|------|-------------------------|-----------|
| 2709 | With 1/2" lg. Wowel Pin | \$33.00 |
| 2809 | Without Dowel Pin | 27.00 |



METAL BINDING POST Grounded

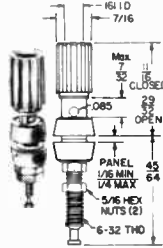


No. 1518

HEAD: CAPTIVE, Fluted Brass, Gold-plated.
BODY: Brass, Gold-plated.
WASHER: MOLDED BLACK NYLON, per MIL-P-20693A, with brass Gold-plated insert.
ACCEPTS: Phone tip plug, spade lug, banana plug, alligator clip, or wire strand.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Fluted-head metal post to match our No. 1517. For use where direct ground connection is made to panel or chassis. Supplied with brass, gold-plated flat metal washer for grounding.

Std. Pkg. 100
NET Per C \$27.00

METAL BINDING POST Insulated

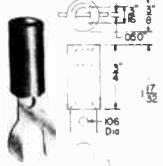


No. 1519

HEAD: CAPTIVE, Fluted Brass, Gold-plated.
BODY: Brass, Gold-plated.
WASHER: MOLDED BLACK NYLON, per MIL-P-20693A, with brass Gold-plated insert.
ACCEPTS: Phone tip plug, spade lug, banana plug, alligator clip, or wire strand.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts, 60 cycle AC continuous working voltage. CAPACITANCE 3.0 mmfd.

DESCR.: Fluted-head metal post to match our No. 1517. Molded washers insulate post from panel for use where internal ground circuit is isolated from chassis or panel.
Std. Pkg. 100
NET Per C \$27.00

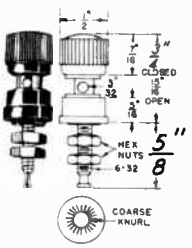
INSULATED SPADE LUG



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black.
SPECIFY COLOR
LUG: Brass, .050 thick, nickel plated.
RATING: 30 Amps AC for 10°C Temp. rise, continuous duty.

DESCR.: 3/4" I.D. fits all standard Multi-purpose binding posts. Accepts up to 2x10 insulated wire, which solders in front hole.
Std. Pkg. 100
NET Per C \$12.00

No. 400



NYLON BINDING POSTS Grounding Type

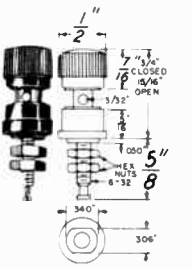
HEAD: CAPTIVE, MOLDED NYLON, per MIL-P-20693A, Red or Black with brass nickel plated insert.
SPECIFY COLOR
WASHER: Molded nylon with brass nickel plated insert.
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage, when insulated from panel as recommended. CAPACITANCE 6.0 mmfd.

DESCR.: Supplied with 2 hex nuts. Grounds to panel but supplied with nylon washer for uniformity of height with No. 378 when used on same panel. Can be insulated from panel by using our No. 2150 shoulder washer.

Std. Pkg. 100
NET Per C \$26.40

No. 377

ALL INSULATED

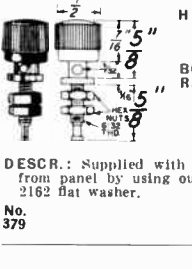


HEAD: CAPTIVE, MOLDED NYLON, per MIL-P-20693A, Red or Black with brass nickel plated insert.
SPECIFY COLOR
WASHER: Molded nylon with brass nickel plated insert.
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage, when insulated from panel as recommended. CAPACITANCE 4.0 mmfd.

DESCR.: Supplied with two hex nuts. Boss washer insulates post from chassis when used with bakelite washer supplied.
Std. Pkg. 100
NET Per C \$26.40

No. 378

GROUNDING TYPE

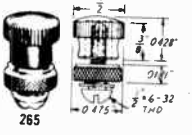


HEAD: CAPTIVE, MOLDED NYLON, per MIL-P-20693A, Red or Black with brass nickel plated insert.
SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 K Volts 60 cycle AC continuous working voltage, when insulated from panel as recommended. CAPACITANCE 7.0 mmfd.

DESCR.: Supplied with two hex nuts. Can be insulated from panel by using our No. 2150 shoulder washer and 2162 flat washer.
Std. Pkg. 100
NET Per C \$21.00

No. 379

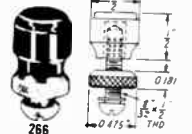
BINDING POST



HEAD: MOLDED THERMOSETTING plastic, per MIL-P-14CFG, with molded-in brass threaded insert. Red or Black. **SPECIFY COLOR**
WASHER: Brass, nickel plated
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied complete with screw and lockwasher.
Std. Pkg. 100
NET Per C \$15.00

No. 265

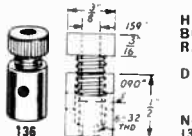
BINDING POST



HEAD: MOLDED THERMOSETTING plastic, per MIL-P-14CFG, with molded-in brass threaded insert. Red or Black. **SPECIFY COLOR**
WASHER: Brass, nickel plated
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied complete with screw and lockwasher.
Std. Pkg. 100
NET Per C \$18.00

No. 266

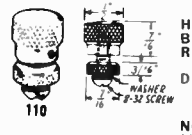
METAL BINDING POST



HEAD: BRASS, nickel plated.
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Accept standard phone tips or banana plugs.
Std. Pkg. 50
NET Per C \$12.00

No. 136

METAL BINDING POST



HEAD: BRASS, nickel plated.
BODY: Brass, nickel plated.
RATING: 15 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Supplied complete with screw and lockwasher.
Std. Pkg. 25
NET Per C \$15.00

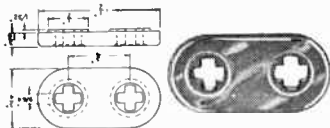
No. 110

SEND FOR OUR COMPLETE CATALOG #63 CONTAINING DETAILED DESCRIPTIONS, DIAGRAMS AND ENGINEERING DATA ON SMITH ELECTRONIC COMPONENTS.

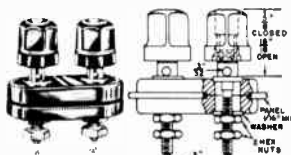


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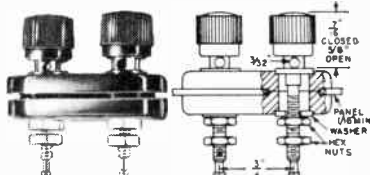
"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



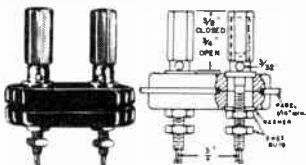
DUAL ASSEMBLY With Insulated Head



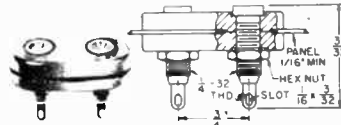
DUAL ASSEMBLY With Nylon Heads



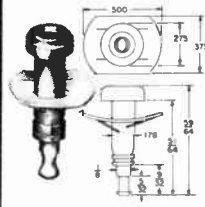
DUAL METAL BINDING POST



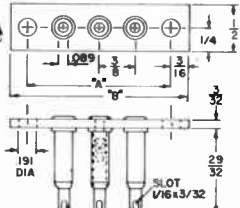
DUAL BANANA JACK ASSEMBLY



NYLON TEST JACK



PIN JACK STRIPS



STRIP: LAMINATED PHENOLIC, XP, Black, Meets Federal Spec. L-L-31, Type I.

BDDY: Brass, nickel plated.

SPRING: Phosphor bronze.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 1 KV, 60 cycle AC continuous working voltage.

DESCR.: From 2 to 10 pin jacks assembled on 3/8" centers on a heavy-duty board. Provides positive contact with standard phone tip plugs. Mounting holes accept screws up to #8.

| No. | Jacks | Mtg. Ctrs. ("A") | Length ("B") | NET Per C |
|------|-------|------------------|--------------|-----------|
| 1982 | 2 | 1 1/8" | 1 1/2" | \$21.00 |
| 1983 | 3 | 1 1/2" | 1 7/8" | 27.00 |
| 1984 | 4 | 1 7/8" | 2 1/4" | 36.00 |
| 1985 | 5 | 2 1/4" | 2 5/8" | 45.00 |
| 1986 | 6 | 2 5/8" | 3" | 51.00 |
| 1987 | 7 | 3" | 3 3/8" | 60.00 |
| 1988 | 8 | 3 3/8" | 3 3/4" | 69.00 |
| 1989 | 9 | 3 3/4" | 4 1/4" | 75.00 |
| 1990 | 10 | 4 1/4" | 4 1/2" | 84.00 |

BDDY: Nylon, Grade FM 10001, SPECIFY COLOR

CONTACT: Phosphor bronze-silver plated. End nut needed for easy soldering.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 3 KV 60 cycle AC continuous working voltage.

DESCR.: Mounts in 3/8" hole with Tinnerman Speed Nut for fast permanent assembly. Teeth embed into jack body, preventing pulling out and turning. Accepts standard phone tip plugs.

| No. | NET Per C |
|------|-----------|
| 1598 | \$25.00 |

BLACK STYRENE INSULATOR

WASHER: STYRENE, per MIL-L-P416, Type I.

RATING: 2 K Volts 60 cycle AC continuous working voltage.

DESCR.: Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 1/4" thick.

Std. Pkg. 100

No. 207

NET Per C \$6.00

WASHER: MOLDED black STYRENE, per MIL-L-P416, Type I, cross slotted (+) to accept standard phone tips in post either forward, back or sideways.

BDDY: Brass, nickel plated.

HEAD: Captive: MOLDED NYLON, per MIL-P-20693A, with molded in brass insert.

RATING: 15 Amps AC for 10°C Temp. rise, continuous working voltage. CAPACITANCE 2.0 mmf, between conductors, 3.0 mmf, to panel.

DESCR.: Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 1/4" thick. Supplied with 4 hex nuts, 2 flat washers.

| No. | Description | NET Per C |
|-------|-------------------------|-----------|
| 284BB | Two Black Heads | \$60.00 |
| 284RR | Two Red Heads | 60.00 |
| 284RB | One Red, One Black Head | 60.00 |

WASHER: MOLDED black STYRENE, per MIL-L-P416, Type I, cross slotted (+) to accept standard phone tips in post either forward, or sideways.

BDDY: Brass, nickel plated.

HEAD: Captive: Hex brass, nickel plated.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 2 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 2.0 mmf, between conductors, 3.0 mmf, to panel.

DESCR.: Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 1/4" thick. Accommodates single or dual banana plugs. Supplied with 4 hex nuts, 2 flat washers.

| No. | NET Per C |
|-----|-----------|
| 209 | \$60.00 |

WASHER: MOLDED black STYRENE, per MIL-L-P416, Type I.

BDDY: Brass, nickel plated.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 2 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 2.0 mmf, between conductors, 4.0 mmf, to panel.

DESCR.: Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 1/4" thick. Accommodates standard and dual banana plugs. Supplied with two hex nuts and brass thinned lugs.

| No. | NET Per C |
|-----|-----------|
| 489 | \$48.00 |

WASHER: MOLDED black STYRENE, per MIL-L-P416, Type I, cross slotted (+) to accept standard phone tips in post either forward or sideways.

BDDY: Brass, nickel plated.

HEAD: Captive: MOLDED NYLON, per MIL-P-20693A, with molded in brass insert.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 2 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 2.0 mmf, between conductors, 3.0 mmf, to panel.

DESCR.: Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 1/4" thick. Accommodates single or dual banana plugs. Supplied with 4 hex nuts, 2 flat washers.

| No. | Description | NET Per C |
|-------|-------------------------|-----------|
| 269BB | Two Black Heads | \$66.00 |
| 269RR | Two Red Heads | 66.00 |
| 269RB | One Red, One Black Head | 66.00 |

WASHER: MOLDED black STYRENE, per MIL-L-P416, Type I, cross slotted (+) to accept standard phone tips in post either forward or sideways.

BDDY: Brass, nickel plated.

HEAD: Captive: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 2 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 2.0 mmf, between conductors, 3.0 mmf, to panel.

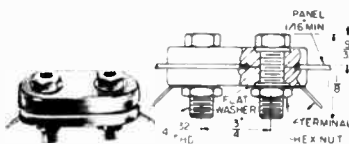
DESCR.: Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 1/4" thick. Accommodates single or dual banana plugs. Supplied with 4 hex nuts, 2 flat washers.

| Description | NET Per C | NET Each |
|-------------|-------------------------|----------|
| 224BB | Two Black Heads | \$54.00 |
| 224RR | Two Red Heads | 54.00 |
| 224RB | One Red, One Black Head | 54.00 |

Same as above with brass nickel plated insert in head

| | | |
|-------|-------------------------|-------|
| 263BB | Two Black Heads | 66.00 |
| 263RR | Two Red Heads | 66.00 |
| 263RB | One Red, One Black Head | 66.00 |

DUAL TIP JACK ASSEMBLY



WASHER: MOLDED black STYRENE, per MIL-L-P416, Type I.

BDDY: Recessed, brass, nickel plated.

RATING: 15 Amps AC for 10°C Temp. rise, continuous duty. 2 K Volts 60 cycle AC continuous working voltage. CAPACITANCE 2.0 mmf, between conductors, 4.0 mmf, to panel.

DESCR.: Mounts in two 1/2" holes on 3/4" mounting centers in panels up to 1/4" thick. Accommodates standard phone tip plugs. Supplied with two hex nuts.

| No. | NET Per C |
|-----|-----------|
| 418 | \$54.00 |

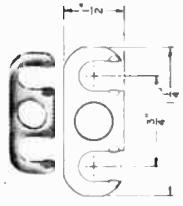
SHORTING LINK

MATERIAL: Spring brass, nickel plated, .033" thick.

RATING: 50 Amps AC continuous duty, for 10°C Temp. rise.

DESCR.: Snaps over contact barrels of dual binding posts with standard 3/4" mounting centers for positive shorting. Snap-in feature allows use in any position without falling off. Rotates on either post for open-circuit use, retaining snap-in feature. Center hole allows easy insertion or removal.

| Std. Pkg. 50 | NET Per C |
|--------------|-----------|
| | \$6.00 |



| No. | NET Per C |
|-----|-----------|
| 327 | \$6.00 |



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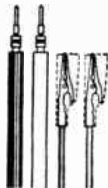
"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



SOLOERLESS TIP TEST LEAD

HANDLE: PROD: MOLDED TENITE 4" long x 3/8" O.D. Red and Black (No. 302).
TIP: Solderless: Brass, nickel plated.

| No. | Meter End | Std. Pkg. 6 | NET Per Pr. |
|-----|---------------------------|-------------|-------------|
| 600 | Phone Tips (No. 158) | | \$.87 |
| 601 | Spade Lugs (No. 129) | | .87 |
| 602 | Alligator Clips (No. 300) | | .93 |



ALLIGATOR CLIP TEST LEAD

HANDLE: PROD: MOLDED TENITE 4" long x 3/8" O.D. Red and Black (No. 302).

TIPS: Solderless: Brass, nickel plated.
CLIPS: Steel, cadmium plated (No. 300).
BOOT: Vinyl Plastic, Red and Black (No. 331).

| No. | NET Per Pr. |
|-----|-------------|
| 672 | \$1.26 |

"UNIVERSAL TEST LEAD" Completely Interchangeable



Fifty Leads in One! One lead can make any required test lead combination. All parts adapt into prod handle or tip handle. Complete as shown. With plastic kit. Std. Pkg. 6

| No. | NET Ea. |
|-----|---------|
| 699 | \$2.40 |



PHONO NEEDLE TEST LEAD

HANDLE: PROD: MOLDED TENITE 1" long x 3/8" O.D. Red and Black (No. 317).
BODY: Brass, nickel plated.
NEEDLE: Steel, nickel plated.

| No. | Meter End | NET Per Pr. |
|-----|---------------------------|-------------|
| 613 | Phone Tips (No. 158) | \$.87 |
| 614 | Spade Lugs (No. 129) | .87 |
| 615 | Alligator Clips (No. 300) | .93 |



CROCOILE CLIP TEST LEAD

CLIP: STEEL, cadmium plated.
BOOT: Vinyl plastic, Red and Black.
HANDLE: Spade Lug: Molded tenite 3/8" long x 3/8" O.D. Red and Black (No. 218).

| No. | NET Per Pr. |
|-----|-------------|
| 671 | \$1.20 |



ALL SOLOERLESS TEST LEAD

HANDLE: PROD: MOLDED TENITE 4" long x 3/8" O.D. Red and Black (No. 630).
PLUG: Molded Bakelite 1" long x 3/8" O.D. Red and Black (No. 200).
TIP: Solderless: Brass, nickel plated.

| No. | NET Per Pr. |
|-----|-------------|
| 603 | \$1.26 |



CROCOILE CLIP TEST LEAD

CLIP: STEEL, cadmium plated
BOOT: Vinyl plastic, Red and Black.
ELBOW: Molded bakelite, Red and Black (No. 235).

| No. | NET Per Pr. |
|-----|-------------|
| 675 | \$1.14 |

"UNIVERSAL TEST LEAD" Miniature Accessories Completely Interchangeable



Fifty Leads in One. One lead can make any required test lead combination. All parts adapt into prod handle or meter tip. Supplied with miniature tips, clips, banana plugs and spade tips. Complete as shown. With plastic kit. Std. Pkg. 6

| No. | NET Ea. |
|-----|---------|
| 679 | \$2.40 |



HIGH TENSION TEST LEAD

HANDLE: PROD: FIBRE 5" long x 1/2" O.D. Red and Black (No. 636).
PLUG: Fibre 1" long x 1/2" O.D. Red and Black.
TIP: Brass, nickel plated.

| No. | Meter End | NET Per Pr. |
|-----|----------------------|-------------|
| 620 | Ins. Phone Tips | \$1.98 |
| 621 | Ins. Spade Lugs | 1.98 |
| 622 | Ins. Alligator Clips | 2.40 |



ALLIGATOR CLIP TEST LEAD

| No. | Wire | NET Per Pr. |
|-----|-----------|-------------|
| 604 | 12 inches | \$.57 |
| 605 | 24 inches | .63 |
| 606 | 36 inches | .72 |
| 607 | 48 inches | .81 |



TEST LEAD KIT

OESCR.: Each kit is supplied with one pair of test leads. One end test prods, other end ins. banana plugs.

FITTINGS: Two each: Phone tips, alligator clips, spade lugs. Std. Pkg. 6

| No. | Type | NET Ea. |
|-----|------------------|---------|
| 610 | Solderless Prods | \$1.20 |
| 611 | Needle Tip Prods | 1.80 |



SHORT TIP TEST LEAD

HANDLE: PROD: MOLDED TENITE 4" long x 3/8" O.D. Red and Black (No. 303).
PLUG: Molded Bakelite 1" long x 3/8" O.D. Red and Black (No. 203).
TIP: Brass, nickel plated.

| No. | NET Per Pr. |
|-----|-------------|
| 624 | \$1.05 |



INSULATED ALLIGATOR CLIP TEST LEADS

| No. | Wire | NET Per Pr. |
|-----|-----------|-------------|
| 629 | 12 inches | \$.81 |
| 657 | 24 inches | .87 |
| 658 | 36 inches | .96 |
| 659 | 48 inches | 1.02 |



ALLIGATOR CLIP TEST LEAD

HANDLES: (CLIP) MOLDED TENITE 3/8" long x 3/8" O.D. Red and Black (No. 301).
PLUG: Molded bakelite 1" long x 3/8" O.D. Red and Black (No. 200).
CLIPS: Steel, cadmium plated (No. 301).
TIPS: Solderless: Brass, nickel plated.

| No. | NET Per Pr. |
|-----|-------------|
| 627 | \$.99 |



SLIM HANDLE TEST LEAD

HANDLE: MACHINED TENITE 5" long x 1/16" O.D. Red and Black.
TIPS: Prod: Brass, nickel plated.
METER END: Drawn brass, nickel plated (No. 158).

| No. | NET Per Pr. |
|-----|-------------|
| 670 | \$.66 |



SUB MINIATURE TEST LEAD

HANDLES: PROD: BONE FIBRE 1" long x 1/4" O.D. Red and Black (No. 322).
PLUG: Bone fibre 1" long x 1/4" O.D. Red and Black (No. 270).
TIPS: Brass, nickel plated.

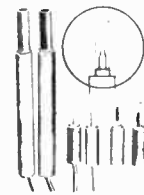
| No. | NET Per Pr. |
|-----|-------------|
| 678 | \$1.26 |



BANANA PLUG TEST LEAD

HANDLES: PROD: MOLDED TENITE 4" long x 3/8" O.D. Red and Black (No. 302).
PLUG: Molded bakelite 1" long x 3/8" O.D. Red and Black (No. 211).
TIP: Solderless: Brass, nickel plated.
BODY: Brass, nickel plated.
SPRING: Four leaved phosphor bronze, nickel plated.

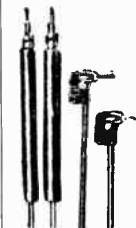
| No. | NET Per Pr. |
|-----|-------------|
| 623 | \$1.50 |



SHIELOEO TEST LEADS

HANDLE: MACHINED TENITE 3/16" O.D. x 4 1/2" lg. Red and Black.
TIP: Prod tip brass, nickel plated. Meter end, see type.
OESCR.: Plugs insert flush to insulated handle. Prods have retractable cover leaving no metal exposed. Eliminates possibility of shock or grounding. Supplied with either phone tip or banana plug meter ends. Other variations on special order.

| No. | Type | NET Per Pr. |
|-----|---------------------------|-------------|
| 616 | Phone Tip End (No. 203) | \$1.80 |
| 617 | Banana Plug End (No. 211) | 1.86 |



METER TEST LEADS Solderless Prod

HANDLE: MOLDED TENITE 4" long x 3/8" O.D. Red and Black (No. 302).
TIP: Solderless: Brass, nickel plated.
ELBOW: Molded bakelite, Red and Black (##235, Phone Tip; ##255, Banana Tip).
BODY: Brass, nickel plated.
SPRING: Four leaved, phosphor bronze, nickel plated.

| No. | Type | NET Per Pr. |
|-----|---------------------|-------------|
| 625 | Phone Tip Meter Tip | \$1.35 |
| 695 | Banana Meter Tip | 1.50 |



Needle Prod

HANDLE: MOLDED TENITE 4" long x 3/8" O.D. Red and Black (No. 317).
NEEDLE: Steel, nickel plated.
ELBOW: Molded bakelite, Red and Black (##235, Phone Tip; ##255, Banana Tip).
BODY: Brass, nickel plated.
SPRING: Four leaved, phosphor bronze, nickel plated.

| No. | Type | NET Per Pr. |
|-----|---------------------|-------------|
| 626 | Phone Tip Meter Tip | \$1.35 |
| 686 | Banana Meter Tip | 1.50 |



SLIM JIM TEST LEAD

HANDLE: MOLDED TENITE 4" long x 3/8" O.D. Red and Black.
PROBE: Steel, cadmium plated.
INSULATOR: Vinyl spaghetti tubing, Red and Black.
ELBOWS: Molded bakelite, Red and Black (No. 235).
TIPS: Brass, nickel plated.

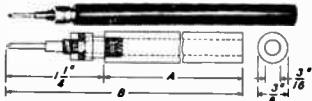
| No. | NET Per Pr. |
|-----|-------------|
| 698 | \$1.14 |

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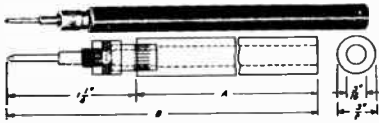
SOLDERLESS TEST PRDD—Threaded Type



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless: Wire fits through handle and body of plug then wrapped around screw portion and tightened with knurled collar.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 302 | 4" | 5 1/4" | \$30.00 |
| 303 | 5 1/2" | 6 3/4" | 33.00 |

SOLDERLESS TEST PRDD—Force Fit Type



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless: Wire fits through handle and body of plug then wrapped around screw portion and tightened with knurled collar.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 382 | 4" | 5 1/4" | \$24.00 |
| 383 | 5 1/2" | 6 3/4" | 27.00 |

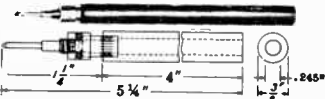
SOLDERLESS TEST PRDD—Force Fit Type Extra Large Inside Diameter



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless: Wire fits through handle and body of plug then wrapped around screw portion and tightened with knurled collar. Extra large I.D. for heavy duty wire.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 352 | 4" | 5 1/4" | \$24.00 |
| 353 | 5 1/2" | 6 3/4" | 27.00 |

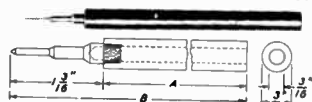
SOLDERLESS FIBRE TEST PRDD Extra Large Inside Diameter



HANDLE: FIBRE, per MIL-F-1148A, Grade CH, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless: Wire fits through handle and body of plug then wrapped around screw portion and tightened with knurled collar. Large I.D. permits use of heavy duty wire.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 329 | 4" | 5 1/4" | \$30.00 |

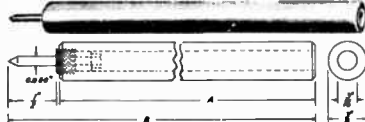
HEAVY DUTY TEST PRDD—Threaded Type



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Large diameter well enables soldering of heavy duty wire directly into plug. Fits standard phone tip jacks.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 319 | 4" | 5 1/4" | \$30.00 |
| 329 | 5 1/2" | 6 3/4" | 33.00 |

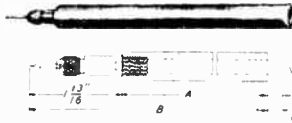
SHORT TIP TEST PRDD



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Inserts flush with insulated handle, no metal exposed; eliminates possibility of shock or grounding. Fits standard phone tip jacks.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 363 | 4" | 4 1/2" | \$21.00 |
| 364 | 5 1/2" | 6 1/2" | 24.00 |

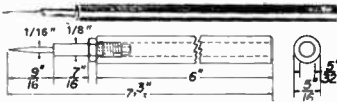
PHONO NEEDLE TEST PRDD



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, cont. duty.
DESCR.: Removable chuck for easy replacement of broken needles. Needle pierces corrosion or plating for positive reading.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 317 | 4" | 4 1/2" | \$30.00 |
| 318 | 5 1/2" | 6 1/2" | 33.00 |

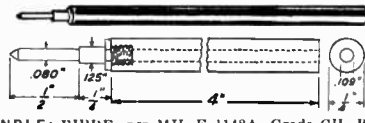
SOLDERLESS PHONO NEEDLE TEST PRDD



HANDLE: XX BAKELITE, lacquered, per MIL-P-79, Form TR, Red or Black. SPECIFY COLOR
BODY: Brass, nickel plated.
NEEDLE: Phono needle, steel.
RATING: 12 Amps AC for 10°C Temp. rise, cont. duty.
DESCR.: Wire can be soldered to brass stud or directly into plug itself. Stud also locks wire to pellet for solderless connections.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 314 | 4" | 5 3/4" | \$75.00 |
| 313 | 6" | 7 3/4" | 75.00 |

SUB-MINIATURE TEST PRDD



HANDLE: FIBRE, per MIL-F-1148A, Grade CH, Red or Black. SPECIFY COLOR
TIP: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, cont. duty.
DESCR.: All types for easy assembly. Ideally suited for checking all three sub-miniature equipment.
Std. Pkg. 25

| No. | NET Per C |
|-----|-----------|
| 322 | \$24.00 |

PENCIL TYPE SOLDERLESS TEST PRDD



HANDLE: MACHINED BUTYRATE, per MIL-P-16408, Type I, Class 2, Red or Black. SPECIFY COLOR
PLUG: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless: Wire fits through handle and body of plug, then wraps around screw portion and is tightened with knurled collar.
Std. Pkg. 2

| No. | Force Fit Type | NET Per C |
|-----|------------------------------|-----------|
| 384 | TEST PROBE HIGH VOLTAGE TYPE | \$21.00 |

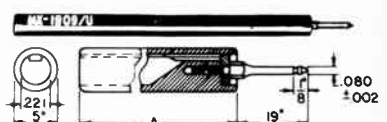
Force Fit Type TEST PROBE HIGH VOLTAGE TYPE



HANDLE: FIBRE, per MIL-F-1148A, Grade CH, Red or Black. SPECIFY COLOR
PROBE: Brass, nickel plated.
RATING: 12 Amps AC for 10°C Temp. rise, continuous duty. 15 KV 60 cycle AC continuous working voltage.
DESCR.: Heavy insulated fibre probe with flash-over shield for high-voltage applications. Large internal I.D. accommodates shielded cable or R.F. networks. Heavy duty removal tip.
Std. Pkg. 10

| No. | NET Ea. |
|------|---------|
| 630 | \$.72 |
| 630D | 8.64 |

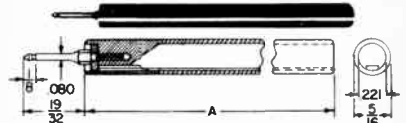
NYLON HANDLE PRODS AND TIPS



HANDLE: MOLDED NYLON, per MIL-P-20693A. Specify color as coded above.
TIP: Brass, silver plated.
RATING: 10 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Solderless. Made to meet Signal Corps Drawing SC-C-82761.
Std. Pkg. 25

| No. | Sig. Corps. Drawing and Part No. | Size ("A") | Color | NET Per C |
|-----|----------------------------------|------------|-------|-----------|
| 176 | MX-1906/U | 1" | Red | \$54.00 |
| 177 | MX-1907/U | 1" | Black | 54.00 |
| 178 | MX-1908/U | 4" | Red | 60.00 |
| 179 | MX-1910/U | 4" | Black | 60.00 |

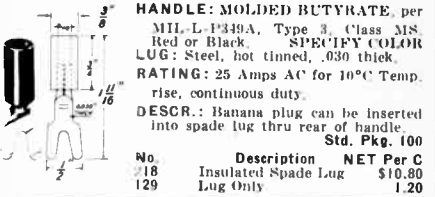
SUB-MINIATURE TEST PRDD



HANDLE: Molded Nylon, per MIL-P-20693A, Available in Red or Black. SPECIFY COLOR
TIP: Brass, Silver plated.
DESCR.: Solderless assembly. Ideal for use with sub-miniature printed-circuit tip jacks. Sharp tip breaks flux or oxide coating on printed-circuit pattern for positive contact when used as prod. Grooved head of prod makes positive contact when laid across wires. Fits all standard .080" tip jacks.
Std. Pkg. 25

| No. | Handle (A) | Overall (B) | NET Per C |
|-----|------------|-------------|-----------|
| 348 | 1" | 1 1/2" | \$15.00 |
| 349 | 4" | 4 1/2" | 30.00 |

INSULATED SPADE LUG



HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red or Black. SPECIFY COLOR
LUG: Steel, hot tinned, .030 thick.
RATING: 25 Amps AC for 10°C Temp. rise, continuous duty.
DESCR.: Banana plug can be inserted into spade lug thru rear of handle.
Std. Pkg. 100

| No. | Description | NET Per C |
|-----|---------------------|-----------|
| 118 | Insulated Spade Lug | \$10.80 |
| 129 | Lug Only | 1.20 |

RADIO CHASSIS PUNCHES

An assortment of round, square, "D", and Keyed holes can be punched by inserting in drilled pilot hole, and turning with wrench. Finished hole is smooth, accurately sized without burrs. Round punches are provided with center-line markings for enlarging holes larger than pilot hole. Individually packed in re-usable plastic box for keeping punch sharp and rust-free.

ROUND HOLE PUNCHES

| No. | Hole Size | NET Ea. | No. | Hole Size | NET Ea. |
|------|-----------|---------|------|-----------|---------|
| 3801 | 1/16" | \$2.60 | 3814 | 1 1/2" | \$3.00 |
| 3802 | 3/32" | 2.60 | 3815 | 1 3/4" | 3.60 |
| 3803 | 1/8" | 2.60 | 3816 | 1 7/8" | 3.60 |
| 3804 | 5/32" | 2.60 | 3817 | 1 7/8" | 4.10 |
| 3805 | 3/16" | 2.60 | 3818 | 1 3/4" | 4.85 |
| 3806 | 1/4" | 2.60 | 3819 | 1 3/4" | 5.50 |
| 3807 | 7/32" | 2.60 | 3820 | 1 3/4" | 6.85 |
| 3808 | 1/2" | 2.85 | 3821 | 1 3/4" | 7.40 |
| 3809 | 1 1/8" | 2.85 | 3822 | 1 3/4" | 11.00 |
| 3810 | 1 1/4" | 3.00 | 3823 | 1 3/4" | 7.95 |
| 3811 | 1 1/2" | 3.00 | 3824 | 1 3/4" | 13.00 |
| 3812 | 1 3/4" | 3.00 | 3825 | 2 1/4" | 18.00 |
| 3813 | 1 3/4" | 3.00 | 3826 | 3" | 25.00 |

SQUARE PUNCHES

| | | | | | |
|------|--------|------|------|------|------|
| 3827 | 1 1/2" | 4.85 | 3830 | 7/8" | 6.55 |
| 3828 | 5/8" | 5.00 | 3831 | 1" | 6.80 |
| 3829 | 3/4" | 5.70 | | | |

"KEY" PUNCHES

| | | | | | |
|------|--------|------|------|--------|------|
| 3832 | 1 1/2" | 5.00 | 3834 | 1 1/4" | 5.80 |
| 3833 | 1 3/4" | 5.00 | 3835 | 1 1/4" | 6.55 |

METER HOLE PUNCH

| | | |
|------|--------|-------|
| 3836 | 1 1/2" | 12.50 |
|------|--------|-------|

"D" PUNCHES

| | | | | | |
|------|--------------|------|------|--------------|------|
| 3837 | 1/2 x 1 1/2" | 4.50 | 3838 | 5/8 x 1 1/2" | 4.75 |
|------|--------------|------|------|--------------|------|

BALL BEARING DRIVE SCREWS

Reduces friction and effort when punching round holes 1 1/4" and larger. For use only with Round punches listed above.

| No. | Use With Nos. | NET Ea. |
|------|---------------|---------|
| 3839 | 3804 to 3808 | \$1.00 |
| 3840 | 3809 to 3817 | 1.10 |
| 3841 | 3818 to 3819 | 2.60 |
| 3842 | 3820 to 3824 | 2.75 |
| | and 3836 | |
| 3843 | 3825 to 3826 | 5.15 |

CHASSIS PUNCH SET

A set of 7 of the most often used chassis punch sizes for electronic construction. Packed in a plastic platform box to keep punches sharp and rust-free. Contains the following sizes: 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4".

| No. | NET Ea. |
|------|---------|
| 3844 | \$21.00 |



HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

CABLE TYPES AVAILABLE

| | WIRE "A" | WIRE "B" | WIRE "C" |
|-------------|--|-------------------|------------------------|
| DESCRIPTION | 2-cond. tw. 18 ga. 65/36 str. Shielded audio cable | Coaxial Cable | Coaxial Cable |
| INSULATION | Vinyl | Polyethylene | Polyethylene |
| JACKET | Vinyl, Color Grey | Vinyl, Color Grey | Vinyl, Color Black |
| NOM. CAP. | 30 mmf./ft. | 25 mmf./ft. | 28.5 mmf./ft. RG58C/U. |



DOUBLE PLUG TO DOUBLE PLUG

HANDLE: MOLDED POLYSTYRENE, per MIL-L-P416, Type I for electrical characteristics.
BODY: Brass, nickel plated.
SPRING: Four-leaved beryllium copper, nickel plated.
WIRE: As specified above.
DESCR.: Mates with standard dual binding post having 3/8" center. Polarity indicated by the word GROUND molded on side. Interconnects unlimited number of multiple circuits top and side. Each end terminates with molded double banana plug.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1530-24 | 1540-24 | 1580-24 | 21" | \$2.28 |
| 1530-36 | 1540-36 | 1580-36 | 36" | 2.40 |
| 1530-48 | 1540-48 | 1580-48 | 48" | 2.52 |



DOUBLE PLUG TO PHONE TIPS

HANDLE: MOLDED POLYSTYRENE, per MIL-L-P416, Type I for electrical characteristics.
BODY: Brass, nickel plated.
SPRING: Four-leaved beryllium copper, nickel plated.
WIRE: As specified above.
PLUG: Our No. 203.
DESCR.: Mates with standard dual binding post having 3/8" center. Polarity indicated by the word GROUND molded on side. One end terminates with double banana plug, other end with insulated tip plug, one red and one black.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1533-24 | 1543-24 | 1583-24 | 21" | \$1.68 |
| 1533-36 | 1543-36 | 1583-36 | 36" | 1.80 |
| 1533-48 | 1543-48 | 1583-48 | 48" | 1.92 |



DOUBLE PLUG TO ALLIGATOR CLIPS

HANDLE: MOLDED POLYSTYRENE, per MIL-L-P416, Type I for electrical characteristics.
BODY: Brass, nickel plated.
SPRING: Four-leaved beryllium copper, nickel plated.
INSUL.: Molded vinyl plastic (No. 331).
WIRE: As specified above.
DESCR.: Mates with standard dual binding post having 3/8" center. Polarity indicated by the word GROUND molded on side. One end terminates with double banana plug, other end with insulated alligator clips, one red, one black.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1531-24 | 1541-24 | 1581-24 | 21" | \$1.68 |
| 1531-36 | 1541-36 | 1581-36 | 36" | 1.80 |
| 1531-48 | 1541-48 | 1581-48 | 48" | 1.92 |



DOUBLE PLUG TO STRIPPED & TINNED LEADS

HANDLE: MOLDED POLYSTYRENE, per MIL-L-P416, Type I for electrical characteristics.
BODY: Brass, nickel plated.
SPRING: Four-leaved beryllium copper, nickel plated.
WIRE: As specified above.
DESCR.: Mates with standard dual binding post having 3/8" center. Polarity indicated by the word GROUND molded on side. One end terminates with double banana plug, other end stripped and tinned.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1532-24 | 1542-24 | 1582-24 | 21" | \$1.32 |
| 1532-36 | 1542-36 | 1582-36 | 36" | 1.44 |
| 1532-48 | 1542-48 | 1582-48 | 48" | 1.56 |



PL 259A TO ALLIGATOR CLIPS

CONN.: PL 259A.
CLIPS: Steel Cad. Plated (3300).
INSUL.: Molded Vinyl (3331).
WIRE: As specified above.
DESCR.: For testing of wave patterns, etc. One end terminates with PL 259A other end with insulated alligator clips, one red, one black.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1536-24 | 1546-24 | 1586-24 | 21" | \$3.96 |
| 1536-36 | 1546-36 | 1586-36 | 36" | 4.08 |
| 1536-48 | 1546-48 | 1586-48 | 48" | 4.20 |



UC 913/U TO UC 913/U

CONN.: UC 913/U.
WIRE: As specified above.
DESCR.: Used for patching and jumping. Each end terminates with UC 913/U.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1538-24 | 1548-24 | 1588-24 | 21" | \$6.00 |
| 1538-36 | 1548-36 | 1588-36 | 36" | 6.12 |
| 1538-48 | 1548-48 | 1588-48 | 48" | 6.24 |



DOUBLE PLUG TO UG 88C/U

HANDLE: MOLDED POLYSTYRENE, per MIL-L-P416, Type I for electrical characteristics.
BODY: Brass, nickel plated.
SPRING: Four-leaved beryllium copper, nickel plated.
WIRE: As specified above.
CONN.: UG 88C/U.
DESCR.: Mates with standard dual binding post having 3/8" center. Polarity indicated by the word GROUND molded on side. One end terminates with double banana plug, other end with UG 88C/U.

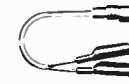
| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1544-24 | 1544-24 | 1584-24 | 21" | \$2.88 |
| 1544-36 | 1544-36 | 1584-36 | 36" | 3.00 |
| 1544-48 | 1544-48 | 1584-48 | 48" | 3.12 |



DOUBLE PLUG TO PL 259A

HANDLE: MOLDED POLYSTYRENE, per MIL-L-P416, Type I for electrical characteristics.
BODY: Brass, nickel plated.
SPRING: Four-leaved beryllium copper, nickel plated.
WIRE: As specified above.
CONN.: PL-259A.
DESCR.: Mates with standard dual binding post having 3/8" center. Polarity indicated by the word GROUND molded on side. One end terminates with double banana plug, other end with PL-259A.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1545-24 | 1545-24 | 1585-24 | 21" | \$3.00 |
| 1545-36 | 1545-36 | 1585-36 | 36" | 3.12 |
| 1545-48 | 1545-48 | 1585-48 | 48" | 3.24 |



UG 88C/U ALLIGATOR CLIPS

CONN.: UG88C/U.
CLIPS: Steel Cad. Plated (3300).
INSUL.: Molded Vinyl (3331).
WIRE: As specified above.
DESCR.: For testing of wave patterns etc. One end terminates with UG 88C/U other end with insulated alligator clips, one red, one black.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1537-24 | 1537-24 | 1587-24 | 24" | \$4.08 |
| 1537-36 | 1537-36 | 1587-36 | 36" | 4.08 |
| 1537-48 | 1537-48 | 1587-48 | 48" | 4.20 |

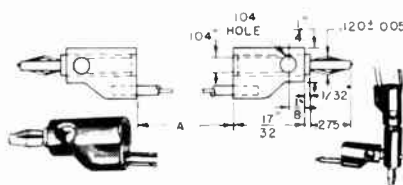


UG 88C/U TO UG 88C/U

CONN.: UG 88C/U.
WIRE: As specified above.
DESCR.: Used for patching and jumping. Each end terminates with UG 88C/U.

| No. Wire "A" | No. Wire "B" | No. Wire "C" | Lgth. | NET Ea. |
|--------------|--------------|--------------|-------|---------|
| 1539-24 | 1539-24 | 1589-24 | 21" | \$4.20 |
| 1539-36 | 1539-36 | 1589-36 | 36" | 4.32 |
| 1539-48 | 1539-48 | 1589-48 | 48" | 4.34 |

SUB-MINIATURE "CROSS PATCH" PATCH CORDS



WIRE: General purpose, where operating voltage does not exceed 300 volts R.M.S. Temperature range: -40°C. to +105°C. 22 AWG 150/44; 19.0 ohms Max. D.C. Resistance per 1000 ft. at 68°F.
HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class M5. (See color code).
BODY: Brass, silver plated.
SPRING: Four-leaved beryllium copper, silver plated.
DESCR.: Interconnects unlimited number of multiple circuits. Positive, lasting contact for banana plugs on top and side. Special lengths on request.

| No. | Wire ("A") | Length | NET Per C |
|---------|------------|--------|-----------|
| 1590-6 | 6 inches | | \$60.00 |
| 1590-12 | 12 inches | | 69.00 |
| 1590-18 | 18 inches | | 75.00 |
| 1590-24 | 24 inches | | 84.00 |

SOLDERLESS COAXIAL CABLE CONNECTORS

For RG-8/U, RG-11/U, RG-13/U and RG-59/U Cables
 Designed to use the inner conductor of the coaxial cable for the male pin. Can be wrench tightened for positive contact. Brass, silver plated.

| Crimp Type | Male Connectors | Female Chassis Fitting |
|------------|---|--|
| 1652 | Both types mate with female chassis fitting 1660 and Female Coupling 1680. Designed for quick and easy assembly using 1752 Crimping Tool. Withstands 350-lb pull when assembled. Packaged individually, with instruction sheet. | Mates with 1652 connector. Mounts in 3/8" hole. Threaded stem is 3/8". |
| 1656 | For Cables RG-59/U Display of 24 Display of 24 Crimping Tool | NET Ea. \$.48 11.52 11.52 3.00 |

| No. | Female Coupling | NET Ea. |
|-------|-----------------------|---------|
| 1660 | Individually Packaged | \$.48 |
| 1660D | Display of 24 | 11.52 |

| No. | Female Coupling | NET Ea. |
|-------|-----------------------|---------|
| 1680 | Individually Packaged | \$.60 |
| 1680D | Display of 24 | 14.40 |

UHF COAXIAL CABLE CONNECTORS
Solder Type
 R.F. Connectors for use with RG-8, 9, 10, 11, 12, 63, 65/U coaxial cables.

| No. | Straight Coaxial Connector | NET Per C |
|------|----------------------------|-----------|
| 1713 | PL-259 | \$67.50 |
| 1714 | RG-259A | 94.50 |

| No. | Chassis Type Coaxial Receptacle | NET Ea. |
|------|---------------------------------|---------|
| 1715 | SO-230 | \$67.50 |

| No. | Coaxial Junction | NET Ea. |
|------|------------------|----------|
| 1716 | PL-258 | \$121.50 |

RF COAXIAL CABLE CONNECTORS



| No. | RF Coaxial Cable Connectors | NET Ea. |
|------|-----------------------------|---------|
| 1710 | Plug | \$4.81 |
| 1718 | 90° Plug | 2.70 |
| 1709 | 1 G-290AA/U Receptacle | 1.08 |
| 1710 | 1 G-8913/U Jack | 1.35 |

HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



MOLDED "CROSS PATCH" PATCH CORD

HANDLE: MOLDED BUTYRATE, per MIL-L-P349A, Type 3, Class MS, Red, Black, Yellow, Green Assemblies. SPECIFY COLOR

BODY: Brass, nickel plated.

SPRING: Four-leaved beryllium copper, nickel plated.

WIRE: 10,000-volt rubber covered flexible wire, 65 strands ± 36 insulated to an O.D. of .140.

DESCR.: Interconnects unlimited number of multiple circuits. Positive, lasting contact for all banana plugs on top and side. **Std. Pkg. 10**

| 3/16" Plug Spring | | 1/32" Plug Spring | |
|-------------------|------------|-------------------|--------------------|
| No. | Wire ("A") | NET Per C | NET Per C |
| 1510-8 | 8" | \$90.00 | 1515-8 8" \$90.00 |
| 1510-12 | 12" | 96.00 | 1515-12 12" 96.00 |
| 1510-24 | 24" | 96.00 | 1515-24 24" 96.00 |
| 1510-36 | 36" | 102.00 | 1515-36 36" 102.00 |

"CROSS PATCH" PATCH CORD

HANDLE: MACHINED BUTYRATE, per MIL-P-1408A, Type I, Class II, Red or Black assemblies. SPECIFY COLOR

BODY: Brass, nickel plated.

SPRING: Four-leaved, beryllium copper, brass, nickel plated.

WIRE: 10,000 volt rubber covered flexible wire 65 strands ± 36 insulated to an O.D. of .140.

DESCR.: Provides a never ending banana plug receptacle, and can be used to interconnect an unlimited amount of multiple circuits. Accepts standard banana plug inside. **Std. Pkg. 10**

| No. | Wire Length | NET Per C |
|-----|-------------|-----------|
| 680 | 8 inches | \$82.00 |
| 681 | 12 inches | 93.00 |
| 682 | 24 inches | 99.00 |
| 683 | 36 inches | 105.00 |

PATCH CORD

HANDLE: MOLDED THERMOSETTING plastic, Red and Black per MIL-P-14 CFG, Yellow, Green per MIL-P-14 CFG. SPECIFY COLOR

BODY: Brass, nickel plated.

SPRING: Four-leaved beryllium copper, nickel plated.

WIRE: 10,000 volt rubber covered flexible wire 65 strands ± 36 insulated to an O.D. of .140.

DESCR.: Uses our standard No. 271 banana plug to interconnect circuits. Fits standard banana jack. **Std. Pkg. 10**

| No. | Wire Length | NET Per C |
|-----|-------------|-----------|
| 690 | 8 inches | \$48.00 |
| 691 | 12 inches | 54.00 |
| 692 | 24 inches | 60.00 |
| 693 | 36 inches | 66.00 |

NYLON HANDLE PATCH CORD

HANDLE: MOLDED NYLON, per MIL-P-20693A, Red, Black, Yellow Green. SPECIFY COLOR

BODY: Brass, nickel plated.

SPRING: Four-leaved beryllium copper, nickel plated.

WIRE: 10,000 volt rubber covered flexible wire 65 strands ± 36 insulated to an O.D. of .140.

DESCR.: Uses our standard No. 478 banana plug to interconnect circuits. Fits standard banana jacks. **Std. Pkg. 10**

| No. | Wire Length | NET Per C |
|---------|-------------|-----------|
| 1520-8 | 8 inches | \$54.00 |
| 1520-12 | 12 inches | 60.00 |
| 1520-24 | 24 inches | 66.00 |
| 1520-36 | 36 inches | 72.00 |

TEST LEAD WIRE

Supplied in 100-ft. coils, Red and Black. SPECIFY COLOR

| No. | Type | Cond. | Strands | Wall | Voltage | D.D. | Ea. |
|-----|----------|-------|---------|-------|---------|-------|--------|
| 660 | Standard | 20 | 3/4 | .040" | 5,000 | .125" | \$1.95 |
| 768 | Hv. Duty | 18 | 3/8 | .047" | 12,000 | .150" | 3.00 |

HIGH-CURRENT PATCH CORD

HANDLE: MACHINED PHENOLIC plastic, per MIL-P-77B, Type I, Red or Black assemblies. SPECIFY COLOR

BODY: Brass, nickel plated.

SPRINGS: Six-leaved, phosphor bronze, nickel plated.

WIRE: ± 10 , PVC insulated stranded wire, 105 strands ± 30 tinned copper wire, insulated to an O.D. of .215".

RATING: 25 Amps AC for 10°C Temp. rise, continuous duty.

DESCR.: Heavy duty patch cords for use in high-current applications where minimum voltage-drop in patched connections is required. Tapered recessed plug so that no metal portions are exposed when plugged into mating jacks. **Std. Pkg. 10**

| No. | Wire ("A") | NET Per C |
|---------|------------|-----------|
| 1591-8 | 8 inches | \$135.00 |
| 1591-12 | 12 inches | 135.00 |
| 1591-24 | 24 inches | 140.00 |
| 1591-36 | 36 inches | 145.00 |

NYLON LACING CORD

MIL-T-713A, Type S, Composition P, Classes 3, 2 and 1, Supplied in 1-lb. tubes.

| Natural Color | | | |
|---------------|-------|--------|---------|
| No. | Class | Test | Yardage |
| 734 | 1 | 70 lb. | 600 |
| 735 | 2 | 48 lb. | 800 |
| 736 | 3 | 32 lb. | 1140 |

| Black Color | | | |
|-------------|-------|--------|---------|
| No. | Class | Test | Yardage |
| 791 | 1 | 70 lb. | 600 |
| 792 | 2 | 48 lb. | 800 |
| 793 | 3 | 32 lb. | 1140 |

NYLON LACING TAPE

Flat nylon tape fungus treated as provided in MIL-T-713A. Has all the application advantages of braided tape but at a much lower cost. Supplied in one pound tubes in natural color.

| No. | Width | Yardage | NET Ea. |
|-----|-------|---------|---------|
| 743 | 1/2" | 620 | \$5.10 |

LINEN LACING CORD

Mildew proofed, Spec. MIL-T-713-A, Type N.

| Natural Color | | | | |
|---------------|-------|-----|-------|------|
| No. | Tube | Ply | Class | Ydg. |
| 725 | 4 oz. | 4 | — | 210 |
| 726 | 8 oz. | 4 | — | 425 |
| 727 | 1 lb. | 4 | — | 850 |
| 728 | 4 oz. | 6 | 3 | 150 |
| 729 | 8 oz. | 6 | 3 | 300 |
| 730 | 1 lb. | 6 | 3 | 600 |
| 737 | 4 oz. | 8 | 2 | 115 |
| 738 | 8 oz. | 8 | 2 | 235 |
| 739 | 1 lb. | 8 | 2 | 470 |
| 731 | 4 oz. | 9 | — | 100 |
| 732 | 8 oz. | 9 | — | 200 |
| 733 | 1 lb. | 9 | — | 400 |
| 740 | 4 oz. | 12 | 1 | 75 |
| 741 | 8 oz. | 12 | 1 | 150 |
| 742 | 1 lb. | 12 | 1 | 300 |

| Black Color | | | | |
|-------------|-------|-----|-------|------|
| No. | Tube | Ply | Class | Ydg. |
| 794 | 1 lb. | 4 | — | 850 |
| 795 | 1 lb. | 6 | — | 600 |
| 796 | 1 lb. | 8 | — | 470 |
| 797 | 1 lb. | 9 | — | 400 |
| 798 | 1 lb. | 12 | — | 300 |

DACRON LACING CORD

Conforms to the physical requirements of MIL-T-713A. Greater tensile strength with minimal stretch than nylon. Fungus, acid and abrasion resistance. Supplied in 1 lb. tubes in natural color.

| No. | Class | Test | Yardage | NET Ea. |
|-----|-------|---------|---------|---------|
| 722 | 1 | 78 lbs. | 750 | \$9.60 |
| 723 | 2 | 57 lbs. | 1000 | 9.90 |
| 724 | 3 | 37 lbs. | 1500 | 10.20 |

"CLEAPS"

(Connectors for Joining Severed Wires)

MATERIAL: Brass, cadmium plated.

WIRE SIZE: For wires, .010" to .050" (B&S Gauge 16 to 30).

DESCR.: Used to splice cut leads of condensers, resistors, etc., in process of trouble-shooting. Insert wire in each tapered end and solder thru center opening. Packaged 10 per envelope. **Std. Pkg. 100**

| No. | NET Per C |
|------|-----------|
| 1270 | \$3.00 |

ALLIGATOR CLIP TEST LEAD

HANDLES: CLIP: Molded Tenite 3/4" long x 3/8" O.D. Red and Black (No. 301)

CLIPS: Steel, cadmium plated.

ELBOWS: Molded Bakelite, Red and Black. (No. 255). **Std. Pkg. 6**

| No. | NET Per Pr. |
|-----|-------------|
| 647 | \$1.20 |

CROCODILE CLIP TEST LEAD

CLIPS: Steel, cadmium plated.

BOOTS: Vinyl plastic, Red and Black.

ELBOWS: Molded Bakelite, Red and Black (No. 255). **Std. Pkg. 6**

| No. | NET Per Pr. |
|-----|-------------|
| 648 | \$1.14 |

ALLIGATOR CLIP TEST LEAD

HANDLES: CLIP and LUG: Molded Tenite 3/4" long x 3/8" O.D. Red and Black.

CLIPS: Steel, cadmium plated (No. 301).

LUGS: Steel, hot tinned (No. 129).

| No. | NET Per C |
|-----|-----------|
| 649 | \$1.20 |

AUTOMATIC WIRE STRIPPERS

For Industrial Production. Electrical and Electronic Servicing, Laboratories. Single Squeeze operation - Easy Grip - Precision Action - Adjustable Blades. FOR WIRE SIZES, ± 8 to ± 30 STRANDED OR SOLID.

OPEN-SHUT TYPE

For Stripping Solid Wires

| No. | Wire Size | NET Ea. |
|------|-----------|---------|
| 1320 | 10 to 22 | \$5.30 |
| 1321 | 14 to 30 | 5.30 |
| 1322 | 16 to 22 | 5.30 |
| 1323 | 16 to 18 | 5.30 |
| 1324 | 8 to 10 | 5.30 |
| 1325 | POSJ-18 | 5.30 |
| 1326 | 300 ohm | 5.30 |

TRIGGER TYPE

Strips Solid or Stranded Wire

| No. | Wire Size | NET Ea. |
|------|-----------|---------|
| 1330 | 10 to 22 | \$6.60 |
| 1331 | 14 to 30 | 6.60 |
| 1332 | 16 to 22 | 6.60 |
| 1333 | 10 to 18 | 6.60 |
| 1334 | 8 to 10 | 6.60 |
| 1335 | POSJ-18 | 6.60 |
| 1336 | 300 ohm | 6.60 |

FULLY AUTOMATIC TYPE

Strips Solid or Stranded Wire

| No. | Wire Size | NET Ea. |
|------|-----------|---------|
| 1340 | 8 to 22 | \$6.60 |
| 1341 | 14 to 30 | 6.60 |
| 1342 | 16 to 22 | 6.60 |
| 1343 | 10 to 18 | 6.60 |
| 1344 | 8 to 10 | 6.60 |
| 1345 | POSJ-18 | 6.60 |
| 1346 | 300 ohm | 6.60 |

ADJUSTABLE STOP INCLUDED WITH EACH STRIPPER

- Speeds Production Stripping
- Eliminates Wire Waste

Easy to put on and take off. Ideal for production work where many wires must be stripped to exactly the same length. Max. length of stripping with stop, 3/4".

Supplied free with every stripper

REPLACEMENT BLADES are available for all wire strippers. Add suffix "B" to catalog number of stripper for required replacement blade, 1320 series and 1330 series blades are interchangeable.

All Blades \$1.17 Each



HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

PANEL INDICATORS

Indicators supplied with faceted jewels in Red, Green, Amber, Blue, Opal and White. SPECIFY COLOR. Std. Pkg. 10

| 1/2" JEWEL—Mounts in 7/16" Hole | | Type | NET Per C |
|---------------------------------|-------------------------|------|-----------|
| 1900 | Miniature Screw | | \$27.00 |
| 1901 | Candelabra | | \$3.00 |
| 1902 | Candelabra w/Univ. Bkt. | | \$4.80 |
| 1903 | Bayonet | | \$7.00 |
| 1904 | Bayonet w/Univ. Bkt | | \$30.00 |
| 1912 | 1/2" Jewel Only | | \$21.00 |

| 3/4" JEWEL—Mounts in 11/16" Hole | | Type | NET Per C |
|----------------------------------|-----------------|------|-----------|
| 1905 | Miniature Screw | | \$57.00 |
| 1906 | Bayonet | | \$60.00 |
| 1907 | Candelabra | | \$60.00 |
| 1914 | 3/4" Jewel Only | | \$42.00 |

| 3/8" JEWEL—Mounts in 5/16" Hole | | Type | NET Per C |
|---------------------------------|-----------------|------|-----------|
| 1908 | Miniature Screw | | \$27.00 |
| 1909 | Bayonet | | \$28.80 |
| 1941 | 3/8" Jewel Only | | \$21.00 |

OPEN TYPE

Jewel Removable From Front

| 1/2" JEWEL—Mounts in 11/16" Hole | | Type | NET Per C |
|----------------------------------|---------------------------|------|-----------|
| 1920 | Miniature Screw Open Type | | \$39.00 |
| 1921 | Bayonet Open Type | | \$39.00 |
| 1942 | Bayonet, 1" Bkt. | | \$4.00 |
| 1943 | 1/2" Jewel Only | | \$25.20 |

| 1" JEWEL—Mounts in 1" Hole | | Type | NET Per C |
|----------------------------|-----------------|------|-----------|
| 1917 | Miniature Screw | | \$96.00 |
| 1918 | Bayonet | | \$6.00 |
| 1919 | Candelabra | | \$102.00 |
| 1916 | 1" Jewel Only | | \$75.00 |

NEON INDICATORS

U.L. Approved. Supplies 180 degree light spread. Available in Red, Amber, White, Yellow and Clear caps. Neon removable from front. Candelabra screw base; 105-125 volts 1" mtg. clearance hole. Std. Pkg. 10

| No. | Type | NET Per C |
|------|-------------------------------------|-----------|
| 1953 | Lens Cap Only | \$171.00 |
| 1954 | Built-in 56K ohm, 1/2 watt resistor | \$70.20 |
| | 11/16" mtg. clearance hole. | |
| 1955 | | \$135.00 |
| 1956 | Lens Cap Only | \$22.20 |

INDICATOR ASSEMBLIES

Enclosed Type
U.L. Approved. Available in Red, Green, Amber, Blue, Yellow, Clear and White. Std. Pkg. 10

| No. | Type | NET Per C |
|------|---|-----------|
| 1957 | Candelabra screw base; 1" mtg. clearance hole; 1" indicator. Uses No. 1916 Jewel. | \$172.20 |
| 1958 | Bayonet base; 11/16" mtg. clearance hole; 1/2" indicator. Uses No. 1943 jewel. | \$128.40 |

SNAP-IN BULB CONNECTOR

Designed for use with the new Twin Pin Baseless Miniature Lamps (G.E. #10-25 volts, #13-6.3 volts, or #15-7.0 volts). Easily assembled to any unit for indicating purposes. Withstands excessive temperatures. Snaps into a .500x.296 rectangular hole in panels .032 to .062 thick. Bezel — brass, cad. plated; contacts — brass, silver plated. Std. Pkg. 25
No. 1504 NET Per C \$10.20

PILOT LIGHT SHIELD

DESCR.: Prevents glare when used in radio receiver meters, etc. Ribbed bottom holds shield securely in place on bulb. Std. Pkg. 100

| No. | Type | NET Per C |
|------|--------------------------|-----------|
| 1963 | Brass (ad. Plate) | \$5.60 |
| 1968 | Plain Brass | \$3.30 |
| 1969 | Plated Brass (ad. Plate) | \$4.20 |

PILOT LIGHT SOCKETS

Clip-On Type

Can be used by clipping on to variable condenser or chassis. All brackets are cadmium plated. Std. Pkg. 50

| No. | Type | NET Per C |
|------|-----------------------------|-----------|
| 1922 | Miniature Screw Up Clip | \$9.30 |
| 1923 | Miniature Screw Down Clip | \$9.30 |
| 1924 | Miniature Bayonet Up Clip | \$9.30 |
| 1925 | Miniature Bayonet Down Clip | \$9.30 |
| 1926 | Candelabra Up Clip | \$10.20 |
| 1927 | Candelabra Down Clip | \$10.20 |
| 1938 | Clip-in Socket | \$9.30 |

PILOT LIGHT SOCKETS

Bracket Type

| No. | Type | NET Per C |
|------|--------------------------------|-----------|
| 1928 | Miniature Screw Up Bracket | \$9.30 |
| 1929 | Miniature Screw Down Bracket | \$9.30 |
| 1930 | Miniature Bayonet Up Bracket | \$9.30 |
| 1931 | Miniature Bayonet Down Bracket | \$9.30 |
| 1932 | Candelabra Up Bracket | \$10.20 |
| 1933 | Candelabra Down Bracket | \$10.20 |

UNMOUNTED TYPE SOCKETS

| No. | Type | NET Per C |
|------|------------------------|-----------|
| 1934 | Miniature Screw Base | \$9.30 |
| 1935 | Miniature Bayonet Base | \$9.30 |
| 1936 | Candelabra Base | \$10.20 |

NAVY TYPE LAMP SOCKETS

75W-125V Bayonet Base
Vibration-proof socket for surface mounting. Made to rigid specifications of black phenolic. Has bayonet sleeve of brass and double contacts of heavy spring phosphor bronze. Std. Pkg. 10
No. 1950 NET Per C \$84.00

SCREW BASE

Made of black phenolic to strict requirements. Instead of usual screw shell has phosphor bronze wire coiled spring for perfect contact and elimination of vibration. Designed for soldering wire leads. Std. Pkg. 10
No. 1951 NET Per C \$84.00

SCREW BASE

Easily wired and mounted. A very practical unit made of black phenolic to rigid specifications. Has phosphor bronze spring contact to assure positive contact and elimination of vibration. Std. Pkg. 10
No. 1952 NET Per C \$84.00

MINI-SHIELDS FOR MINI-TUBES

These Mini-Shields fit snugly on all Mini-Tubes. Serrations in base clip prevent shielded tube from jiggling or working loose. Available in two sizes for 1 1/2" & 2" long tubes. Std. Pkg. 50

| No. | Type | NET Per C |
|-----|-------------------|-----------|
| 550 | for 1 1/2" tube | \$7.80 |
| 551 | for 2" tube | 6.60 |
| 553 | 3 prong base clip | \$3.30 |
| 554 | single clips | 1.98 |

MINI-SHIELDS FOR MINI-TUBES

Maintains a direct axial pressure downwards plus a sideways support that keeps the tube upright and perpendicular to the chassis. The spring action is constant and resilient permanently. Std. Pkg. 50

| No. | Type | NET Per C |
|-----|---------|-----------|
| 560 | Short | \$10.20 |
| 561 | Medium | 10.20 |
| 562 | Long | 10.20 |
| 563 | 9 Prong | 10.80 |

SPACE SAVER APPLIANCE RECEPTACLES

Mounting holes 1 1/4" centers from #6 screw. Mounts from either top or bottom of mounting bracket. Has barrier to prevent shorts. Fully approved by U.L. for 15A-125V, AC and DC. Std. Pkg. 50

| No. | Type | NET Per C |
|------|--------------------------|-----------|
| 1299 | With soldering terminals | \$12.00 |
| 1279 | With 8" wire leads | \$22.80 |

MINIATURE WAFER SOCKETS

Miniature bakelite sockets with brass cadmium plated contacts. XI' bakelite top plate 1/16" thick, bottom plate 3/64" thick; high grade spring brass cadmium plated contact; .095 dia. mounting holes. Std. Pkg. 50

| No. | Description | MTG. Cen. | NET Per C |
|-----|-----------------------|-----------|-----------|
| 880 | Eyelet only | 7/8" | \$6.60 |
| 881 | Eyelet and Shield | 7/8" | 6.90 |
| 882 | Grid Strap and Shield | 7/8" | 7.20 |
| 887 | Eyelet only | 1" | 6.60 |
| 888 | Eyelet and Shield | 1" | 6.90 |
| 889 | Grid Strap and Shield | 1" | 7.20 |

| SEVEN PIN | | NET Per C |
|-----------|-----------------------|-----------|
| 890 | Eyelet only | \$ 8.60 |
| 891 | Eyelet and Shield | 8.90 |
| 892 | Grid Strap and Shield | 9.30 |

MOLDED MINIATURE SOCKETS

Molded from either high dielectric black general purpose bakelite or low loss mica-filled bakelite. Both types supplied with center pin. .093 dia. mtg. holes. Std. Pkg. 50

| GENERAL PURPOSE BLACK BAKELITE | | Pin | Mtg. Ctrs. | Mtg. Hole | NET Per C |
|--------------------------------|--------------|-----|------------|-----------|-----------|
| 895 | Bottom Mount | 7 | 7/8" | 5/8" | \$9.00 |
| 896 | Top Mount | 7 | 7/8" | 5/8" | 9.00 |
| 897 | Bottom Mount | 9 | 1 1/8" | 3/4" | 10.80 |
| 898 | Top Mount | 9 | 1 1/8" | 3/4" | 10.80 |

| LOW LOSS MICA-FILLED BAKELITE | | Pin | Mtg. Ctrs. | Mtg. Hole | NET Per C |
|-------------------------------|--------------|-----|------------|-----------|-----------|
| 883 | Bottom Mount | 7 | 7/8" | 5/8" | 11.40 |
| 884 | Top Mount | 7 | 7/8" | 5/8" | 11.40 |
| 885 | Bottom Mount | 9 | 1 1/8" | 3/4" | 15.20 |
| 886 | Top Mount | 9 | 1 1/8" | 3/4" | 15.20 |

TUBE PIN STRAIGHTENERS



MATERIAL: MOLDED BLACK STYRENE.
DESCR.: Can be mounted from top with #4 wood screw or screw and nut, or from rear thru hole in plate with supporting bracket. Std. Pkg. 50

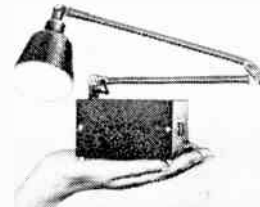
| No. | Type | A | B | C | D | NET Per C |
|-----|-------|--------|--------|------|------|-----------|
| 893 | 7-Pin | 3 3/4" | 1 1/8" | 1/8" | 1/4" | \$5.40 |
| 894 | 9-Pin | 4 3/4" | 5/8" | 1/8" | 1/4" | 5.40 |
| 899 | Set | | | | | 10.20 |

CRYSTAL SOCKET

Suitable for Citizen's Band

Glazed ceramic base. Phosphor bronze silver plated contacts spaced .486". Pin diameter .051. mtg. hole .125. Std. Pkg. 25 NET Per C \$13.00
No. 1945

PRECISION WORK LAMP



PRECISION WORK LAMP

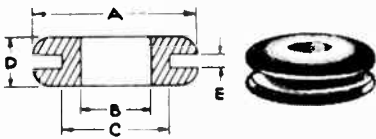
Provides glare-free, concentrated lighting for critical assembly and inspection. Articulated arm has three joints on base. The light shade, made of cork and aluminum, is only 2 1/2" in diameter, and can be used with or without a magnifier. Bayonet base bulb is standard GE No. 1133. Designed for 115V, 60 cycle AC. NET Each \$17.50
No. 1275

HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



RUBBER GROMMETS



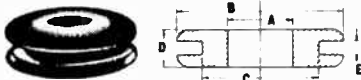
| No. | A | B | C | D | E | NET Per C |
|------|---------|--------|-------|-------|-------|-----------|
| 2185 | 3/16" | 1/8" | 3/16" | 3/16" | 1/16" | \$2.31 |
| 2172 | 3/16" | 3/16" | 3/16" | 3/16" | 1/16" | 1.98 |
| 2170 | 5/8" | 3/4" | 3/8" | 1/4" | 1/16" | 2.31 |
| 2174 | 5/8" | 5/8" | 7/16" | 1/4" | 1/16" | 2.16 |
| 2175 | 1 1/16" | 3/8" | 1/2" | 1/4" | 1/16" | 2.31 |
| 2177 | 3/4" | 7/8" | 3/4" | 1/4" | 1/16" | 2.16 |
| 2186 | 1 1/16" | 1 1/2" | 3/4" | 3/4" | 1/16" | 4.20 |
| 2187 | 1 1/16" | 5/8" | 7/8" | 3/4" | 1/16" | 4.20 |
| 2188 | 1 1/16" | 3/4" | 3/4" | 3/4" | 1/16" | 4.20 |
| 2189 | 1" | 3/4" | 7/8" | 3/2" | 1/16" | 5.10 |

VINYL GROMMETS

DESCR.: Exceptional aging qualities. High dielectric properties. Oil resistant. Durometer hardness 45 to 85.

| No. | A | B | C | D | E | NET Per C |
|------|--------|------|------|------|-------|-----------|
| 2145 | 1 1/2" | 1" | 1/4" | 3/4" | 1/16" | \$.90 |
| 2146 | 3/4" | 3/8" | 3/8" | 1/2" | 1/16" | .96 |
| 2147 | 3/4" | 3/8" | 3/8" | 1/4" | 1/16" | 1.32 |
| 2148 | 5/8" | 3/4" | 1/2" | 1/4" | 1/16" | 1.50 |
| 2149 | 1 1/4" | 1/2" | 5/8" | 3/2" | 1/16" | 2.28 |

GROMMETS



Formerly listed by Radio Essentials, Inc., and American Radio Hardware Inc. (Their catalog numbers as below, minus first digit.)

| No. | A | B | C | D | E | NET Per C |
|-------|--------|--------|--------|--------|-------|-----------|
| 91100 | 3/8" | 1 1/2" | 1/2" | 1 1/2" | 3/16" | \$7.50 |
| 91101 | 7/8" | 1 1/2" | 1 1/4" | 5/8" | 3/16" | 13.20 |
| 91102 | 3/2" | 5/8" | 1 1/2" | 3/8" | 3/16" | 3.15 |
| 91103 | 3/2" | 7/8" | 1 1/2" | 3/8" | 3/16" | 3.00 |
| 91104 | 1 1/4" | 7/8" | 3/8" | 1 1/2" | 3/16" | 5.40 |
| 91105 | 5/8" | 1 1/4" | 3/2" | 1 1/2" | 3/16" | 14.40 |
| 91106 | 3/16" | 5/8" | 1/2" | 1/2" | 3/16" | 6.60 |
| 91107 | 3/8" | 5/8" | 7/16" | 3/4" | 3/16" | 3.30 |
| 91108 | 1/4" | 5/8" | 7/16" | 1 1/2" | 3/16" | 4.20 |
| 91109 | 3/8" | 1 1/4" | 7/8" | 3/8" | 1/4" | 13.50 |
| 91110 | 1 3/4" | 3/4" | 1 1/2" | 7/8" | 3/16" | 4.20 |
| 91111 | 3/8" | 7/8" | 1 1/2" | 1 1/2" | 3/16" | 6.60 |
| 91112 | 4/8" | 1 5/8" | 1 1/2" | 3/4" | 3/16" | 7.05 |
| 91113 | 2 1/4" | 1 1/2" | 1 1/2" | 3/4" | 1/16" | 2.85 |
| 91114 | 1 1/4" | 1 1/2" | 3/4" | 3/4" | 1/16" | 2.34 |
| 91115 | 1 1/4" | 3/4" | 3/8" | 1 1/2" | 3/16" | 4.05 |
| 91116 | 3/4" | 3/4" | 3/8" | 3/8" | 1/8" | 4.35 |
| 91117 | 3/8" | 3/4" | 1 1/2" | 3/4" | 1/8" | 3.15 |
| 91118 | 3/4" | 3/4" | 1 1/2" | 3/4" | 1/8" | 2.40 |
| 91119 | 1 1/4" | 3/4" | 1 1/2" | 1 1/4" | 1/8" | 2.55 |
| 91120 | 1 3/4" | 5/8" | 7/8" | 1 1/4" | 1/8" | 3.00 |
| 91121 | 3/8" | 1 1/4" | 1 1/2" | 1 1/4" | 1/8" | 2.85 |
| 91122 | 3/4" | 1 1/2" | 1 1/2" | 3/2" | 1/8" | 2.85 |
| 91123 | 3/2" | 1 1/4" | 1 1/2" | 7/8" | 1/4" | 3.60 |
| 91124 | 3/4" | 3/4" | 3/4" | 1 1/4" | 1/16" | 3.45 |

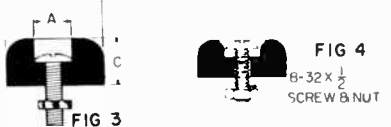
RECESS RUBBER BUMPERS

Std. Pkg. 100



| No. | Fig. | A | B | C | NET Per C |
|------|------|-----------------------------|--------|-------|-----------|
| 2192 | 1 | 7/32" | 1 1/2" | 1/4" | \$1.50 |
| 2193 | 1 | 1/4" | 3/4" | 3/16" | 1.95 |
| 2194 | 1 | 9/32" | 3/4" | 3/16" | 3.00 |
| 2184 | 1 | 9/32" | 3/4" | 7/32" | 3.00 |
| 2195 | 2 | With molded-in metal washer | 3/8" | 3/8" | 4.80 |

With Screw



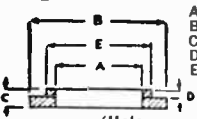
Supplied complete with 1/2" mounting screw and hex nut for panels up to 1/4" thick. Specify longer screw for thicker panels. Std. Pkg. 100

| No. | Fig. | A | B | C | Screw | NET Per C |
|------|------|-----------------------------|--------|------|-------|-----------|
| 2196 | 3 | 1/2" | 1 1/2" | 6-32 | 6-32 | \$6.60 |
| 2197 | 3 | 3/4" | 9/8" | 6-32 | 6-32 | 6.90 |
| 2198 | 3 | 7/8" | 8/4" | 6-32 | 6-32 | 7.50 |
| 2199 | 3 | 7/8" | 8/4" | 6-32 | 6-32 | 7.50 |
| 2195 | 4 | With molded-in metal washer | 3/8" | 3/8" | 8-32 | 9.30 |

FIBRE SHOULDER WASHERS

All material based on N.E. M.A. Standard and A.S.P.M. Spec. D-710.

Std. Pkg. 1000



A. Inside Diameter
B. Outside Diameter
C. Thickness Overall
D. Height of Shoulder
E. Diameter of Shoulder

| No. | A (Hole) | B | C | D | E | NET Per M |
|------|-------------|------|------|------|------|-----------|
| 2150 | .140 No. 6 | .375 | .093 | .031 | .237 | \$6.90 |
| 2151 | .110 No. 4 | .250 | .062 | .031 | .187 | 5.70 |
| 2152 | .136 No. 6 | .250 | .093 | .031 | .187 | 6.00 |
| 2153 | .136 No. 6 | .312 | .093 | .031 | .187 | 6.60 |
| 2154 | .250 1/4" | .500 | .068 | .028 | .312 | 7.20 |
| 2155 | .172 No. 8 | .375 | .093 | .031 | .246 | 6.60 |
| 2156 | .196 No. 10 | .375 | .093 | .031 | .308 | 6.60 |
| 2159 | .265 1/4" | .500 | .097 | .031 | .365 | 7.20 |
| 2157 | .375 3/8" | .750 | .093 | .031 | .500 | 8.70 |
| 2158 | .385 3/8" | .625 | .093 | .031 | .500 | 8.40 |

FLAT FIBRE WASHERS

All material based on N.E.M.A. Standard and A.S.P.M. Spec. D-710.

Std. Pkg. 1000



| No. | (Hole Size) | I.D. | O.D. | Thickness | NET Per M |
|------|-------------|------|------|-----------|-----------|
| 2160 | No. 6 | .136 | .250 | 1/16 | \$5.70 |
| 2161 | No. 4 | .110 | .250 | 1/16 | 5.70 |
| 2162 | No. 6 | .140 | .375 | 1/16 | 5.10 |
| 2163 | No. 8 | .172 | .375 | 1/16 | 5.10 |
| 2164 | No. 10 | .196 | .375 | 1/16 | 5.10 |
| 2165 | 1/4" | .250 | .500 | 1/16 | 5.40 |
| 2166 | 1/4" | .250 | .500 | 3/32 | 5.70 |
| 2167 | 5/16" | .312 | .500 | 1/16 | 5.40 |
| 2168 | 3/8" | .385 | .625 | 1/16 | 6.60 |
| 2169 | 3/8" | .375 | .750 | 1/16 | 8.40 |

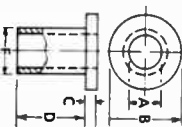
NYLON FLAT WASHERS

NATURAL COLOR

| No. | I.D. (A) | O.D. (B) | Thick (C) | NET Per M |
|------|------------|----------|-----------|-----------|
| 2514 | ±4(.115) | .281 | .047 | \$18.00 |
| 2515 | ±6(.140) | .312 | .047 | 18.60 |
| 2516 | ±8(.170) | .375 | .062 | 21.00 |
| 2517 | ±10(.200) | .437 | .062 | 22.20 |
| 2518 | 1/4"(.260) | .562 | .062 | 24.00 |

NYLON SPACER BUSHINGS

NATURAL COLOR



| No. | I.D. (A) | B | C | D | E | NET Per M |
|------|------------|------|------|-----|------|-----------|
| 2534 | ±(.115) | .235 | 3/64 | 1/4 | .147 | \$21.00 |
| 2535 | ±(.140) | .290 | 3/64 | 1/4 | .170 | 21.00 |
| 2536 | ±(.170) | .344 | 1/16 | 3/8 | .205 | 22.00 |
| 2537 | ±(.200) | .399 | 1/16 | 3/8 | .260 | 24.00 |
| 2538 | 1/4"(.260) | .513 | 1/16 | 3/8 | .312 | 27.00 |

NYLON SCREWS

BINDING ROUND HEAD FILLISTER HEAD FLAT WASHER HEADLESS



| Size | No. | No. | No. | No. | No. | NET Per M |
|-------------|------|------|------|------|------|-----------|
| 4-40x1/4" | 2500 | 2520 | 2540 | 2580 | 2560 | \$30.00 |
| 4-40x3/8" | 2501 | 2521 | 2541 | 2581 | 2561 | 33.00 |
| 4-40x1/2" | 2502 | 2522 | 2542 | 2582 | 2562 | 31.20 |
| 6-32x1/4" | 2503 | 2523 | 2543 | 2583 | 2563 | 30.60 |
| 6-32x1/2" | 2504 | 2524 | 2544 | 2584 | 2564 | 30.60 |
| 6-32x3/4" | 2505 | 2525 | 2545 | 2585 | 2565 | 31.20 |
| 6-32x1" | 2506 | 2526 | 2546 | 2586 | 2566 | 31.20 |
| 6-32x1 1/4" | 2507 | 2527 | 2547 | 2587 | 2567 | 31.80 |
| 6-32x1 1/2" | 2508 | 2528 | 2548 | 2588 | 2568 | 30.60 |
| 8-32x1" | 2510 | 2530 | 2550 | 2590 | 2570 | 31.20 |
| 8-32x1 1/2" | 2511 | 2531 | 2551 | 2591 | 2571 | 31.20 |
| 8-32x2" | 2512 | 2532 | 2552 | 2592 | 2572 | 31.80 |

NYLON HEX NUTS

Std. Pkg. 100



| No. | Size | NET Per C |
|------|-------|-----------|
| 2554 | 4-40 | \$6.00 |
| 2555 | 6-32 | 6.30 |
| 2556 | 8-32 | 6.60 |
| 2557 | 10-32 | 6.90 |

SNAP-LOCK PLASTIC GROMMETS

- Snaps in Place—FAST!
- Stays Put—LOCKED IN!



Two identical halves snap tight, lock in place. Provides a rigid bearing surface, greater dielectric, extreme chemical and wear resistance. Identical halves form complete grommet. Color, black.

| No. | A | B | C | D | E | NET Per C |
|------|-------|------|------|-------|------|-----------|
| 2178 | 3/16" | 3/8" | 1/2" | 1/4" | 1/4" | \$2.76 |
| 2179 | 1/4" | 3/8" | 3/4" | 3/16" | 1/4" | 2.88 |
| 2180 | 3/8" | 1/2" | 5/8" | 1/16" | 1/4" | 3.00 |

SPACERS

Brass Cadmium Plated

These brass bushings are ideal for use in raising sub panels, chassis, condensers, transformers, etc. Hole in bushing to accommodate a #4, #6, or #8 screw. Std. Pkg. 100



| Length | for #4 Screw | for #6 Screw | for #8 Screw | NET Per C |
|--------|--------------|--------------|--------------|-----------|
| 1/4" | 2340 | 2100 | 2105 | \$3.30 |
| 3/8" | 2341 | 2101 | 2106 | 4.35 |
| 1/2" | 2342 | 2102 | 2107 | 5.28 |
| 3/4" | 2343 | 2103 | 2108 | 6.30 |
| 1" | 2344 | 2104 | 2109 | 7.20 |
| 1 1/4" | 2345 | 2110 | 2115 | \$5.28 |
| 1 1/2" | 2346 | 2111 | 2116 | 6.30 |
| 1 3/4" | 2347 | 2112 | 2117 | 7.20 |
| 2" | 2348 | 2113 | 2118 | 8.25 |
| 2 1/4" | 2349 | 2114 | 2119 | 9.30 |

THREADED SPACERS

Brass Cadmium Plated

1/4" O.D. Threaded 4-40, 6-32 and 8-32.



| Length | THD No. | THD No. | THD No. | NET Per C |
|--------|---------|---------|---------|-----------|
| 1/4" | 2376 | 2120 | 2125 | \$3.90 |
| 3/8" | 2377 | 2121 | 2126 | 4.95 |
| 1/2" | 2378 | 2122 | 2127 | 6.00 |
| 3/4" | 2379 | 2123 | 2128 | 7.20 |
| 1" | 2374 | 2124 | 2129 | 8.25 |

HEX SPACERS

Brass Cadmium Plated

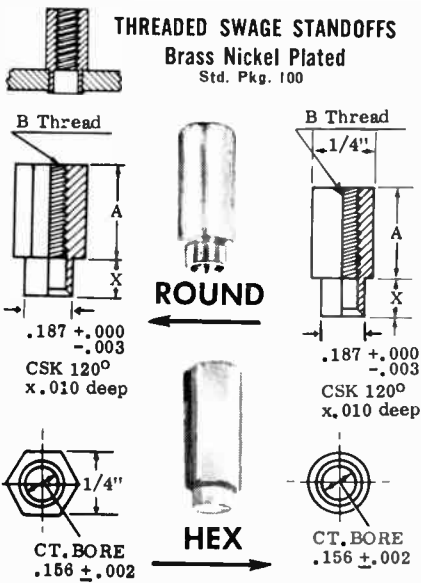
Std. Pkg. 100



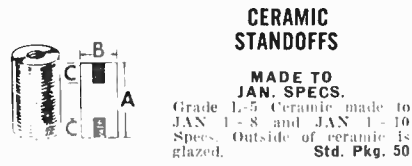
| Length | for #4 Screw | for #6 Screw | for #8 Screw | NET Per C |
|--------|--------------|--------------|--------------|-----------|
|--------|--------------|--------------|--------------|-----------|

HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



| ROUND | | | | HEX | | | |
|-------|-------|-----|------|------|------|-------|-----|
| No. | Per C | A | B | X | No. | Per C | A |
| 4100 | 4.50 | 1/4 | 4/10 | .105 | 4200 | 5.10 | 1/4 |
| 4101 | 4.50 | 1/4 | 4/40 | .135 | 4201 | 5.10 | 1/4 |
| 4102 | 4.50 | 1/4 | 4/40 | .165 | 4202 | 5.10 | 1/4 |
| 4103 | 5.10 | 3/8 | 4/10 | .105 | 4203 | 5.70 | 3/8 |
| 4104 | 5.10 | 3/8 | 4/10 | .135 | 4204 | 5.70 | 3/8 |
| 4105 | 5.10 | 3/8 | 4/10 | .165 | 4205 | 5.70 | 3/8 |
| 4106 | 5.70 | 1/2 | 4/10 | .105 | 4206 | 6.45 | 1/2 |
| 4107 | 5.70 | 1/2 | 4/40 | .135 | 4207 | 6.45 | 1/2 |
| 4108 | 5.70 | 1/2 | 4/40 | .165 | 4208 | 6.45 | 1/2 |
| 4109 | 6.90 | 5/8 | 4/10 | .105 | 4209 | 7.35 | 5/8 |
| 4110 | 6.90 | 5/8 | 4/10 | .135 | 4210 | 7.35 | 5/8 |
| 4111 | 6.90 | 5/8 | 4/10 | .165 | 4211 | 7.35 | 5/8 |
| 4112 | 8.10 | 3/4 | 4/10 | .105 | 4212 | 8.40 | 3/4 |
| 4113 | 8.10 | 3/4 | 4/10 | .135 | 4213 | 8.40 | 3/4 |
| 4114 | 8.10 | 3/4 | 4/40 | .165 | 4214 | 8.40 | 3/4 |
| 4115 | 10.50 | 1 | 4/40 | .105 | 4215 | 11.10 | 1 |
| 4116 | 10.50 | 1 | 4/40 | .135 | 4216 | 11.10 | 1 |
| 4117 | 10.50 | 1 | 4/40 | .165 | 4217 | 11.10 | 1 |
| 4118 | 4.50 | 1/4 | 6/32 | .105 | 4218 | 5.10 | 1/4 |
| 4119 | 4.50 | 1/4 | 6/32 | .135 | 4219 | 5.10 | 1/4 |
| 4120 | 4.50 | 1/4 | 6/32 | .165 | 4220 | 5.10 | 1/4 |
| 4121 | 5.10 | 3/8 | 6/32 | .105 | 4221 | 5.70 | 3/8 |
| 4122 | 5.10 | 3/8 | 6/32 | .135 | 4222 | 5.70 | 3/8 |
| 4123 | 5.10 | 3/8 | 6/32 | .165 | 4223 | 5.70 | 3/8 |
| 4124 | 5.70 | 1/2 | 6/32 | .105 | 4224 | 6.45 | 1/2 |
| 4125 | 5.70 | 1/2 | 6/32 | .135 | 4225 | 6.45 | 1/2 |
| 4126 | 5.70 | 1/2 | 6/32 | .165 | 4226 | 6.45 | 1/2 |
| 4127 | 6.90 | 5/8 | 6/32 | .105 | 4227 | 7.35 | 5/8 |
| 4128 | 6.90 | 5/8 | 6/32 | .135 | 4228 | 7.35 | 5/8 |
| 4129 | 6.90 | 5/8 | 6/32 | .165 | 4229 | 7.35 | 5/8 |
| 4130 | 8.10 | 3/4 | 6/32 | .105 | 4230 | 8.40 | 3/4 |
| 4131 | 8.10 | 3/4 | 6/32 | .135 | 4231 | 8.40 | 3/4 |
| 4132 | 8.10 | 3/4 | 6/32 | .165 | 4232 | 8.40 | 3/4 |
| 4133 | 10.50 | 1 | 6/32 | .105 | 4233 | 11.10 | 1 |
| 4134 | 10.50 | 1 | 6/32 | .135 | 4234 | 11.10 | 1 |
| 4135 | 10.50 | 1 | 6/32 | .165 | 4235 | 11.10 | 1 |
| 4136 | 4.50 | 1/4 | 8/32 | .105 | 4236 | 5.10 | 1/4 |
| 4137 | 4.50 | 1/4 | 8/32 | .135 | 4237 | 5.10 | 1/4 |
| 4138 | 4.50 | 1/4 | 8/32 | .165 | 4238 | 5.10 | 1/4 |
| 4139 | 5.10 | 3/8 | 8/32 | .105 | 4239 | 5.70 | 3/8 |
| 4140 | 5.10 | 3/8 | 8/32 | .135 | 4240 | 5.70 | 3/8 |
| 4141 | 5.10 | 3/8 | 8/32 | .165 | 4241 | 5.70 | 3/8 |
| 4142 | 5.70 | 1/2 | 8/32 | .105 | 4242 | 6.45 | 1/2 |
| 4143 | 5.70 | 1/2 | 8/32 | .135 | 4243 | 6.45 | 1/2 |
| 4144 | 5.70 | 1/2 | 8/32 | .165 | 4244 | 6.45 | 1/2 |
| 4145 | 6.90 | 5/8 | 8/32 | .105 | 4245 | 7.35 | 5/8 |
| 4146 | 6.90 | 5/8 | 8/32 | .135 | 4246 | 7.35 | 5/8 |
| 4147 | 6.90 | 5/8 | 8/32 | .165 | 4247 | 7.35 | 5/8 |
| 4148 | 8.10 | 3/4 | 8/32 | .105 | 4248 | 8.40 | 3/4 |
| 4149 | 8.10 | 3/4 | 8/32 | .135 | 4249 | 8.40 | 3/4 |
| 4150 | 8.10 | 3/4 | 8/32 | .165 | 4250 | 8.40 | 3/4 |
| 4151 | 10.50 | 1 | 8/32 | .105 | 4251 | 11.10 | 1 |
| 4152 | 10.50 | 1 | 8/32 | .135 | 4252 | 11.10 | 1 |
| 4153 | 10.50 | 1 | 8/32 | .165 | 4253 | 11.10 | 1 |



| No. | Type | A | B | C | Thd. | NET Per C |
|------|----------|--------|------|-------|--------|-----------|
| 2600 | NS5W0104 | 1/2" | 3/8" | 5/32" | 6-32 | \$13.20 |
| 2601 | NS5W0105 | 5/8" | 3/8" | 1/4" | 6-32 | 15.00 |
| 2602 | NS5W0106 | 3/4" | 3/8" | 1/4" | 6-32 | 18.00 |
| 2603 | NS5W0108 | 1" | 3/8" | 3/8" | 6-32 | 21.00 |
| 2604 | NS5W0110 | 1 1/4" | 3/8" | 3/8" | 6-32 | 24.00 |
| 2605 | NS5W0112 | 1 1/2" | 3/8" | 3/8" | 6-32 | 25.20 |
| 2606 | NS5W0116 | 2" | 3/8" | 3/8" | 6-32 | 28.20 |
| 2607 | NS5W0205 | 5/8" | 1/2" | 3/4" | 8-32 | 15.00 |
| 2608 | NS5W0206 | 3/4" | 1/2" | 1/4" | 8-32 | 18.00 |
| 2609 | NS5W2008 | 1" | 1/2" | 3/8" | 8-32 | 21.00 |
| 2610 | NS5W0210 | 1 1/4" | 1/2" | 3/8" | 8-32 | 24.00 |
| 2611 | NS5W0212 | 1 1/2" | 1/2" | 3/8" | 8-32 | 25.20 |
| 2612 | NS5W0216 | 2" | 1/2" | 3/8" | 8-32 | 28.20 |
| 2613 | NS5W0220 | 2 1/2" | 1/2" | 3/8" | 8-32 | 30.00 |
| 2614 | NS5W0224 | 3" | 1/2" | 3/8" | 8-32 | 33.00 |
| 2615 | NS5W0308 | 1" | 3/4" | 3/8" | 10-32 | 18.00 |
| 2616 | NS5W0310 | 1 1/4" | 3/4" | 3/8" | 10-32 | 21.00 |
| 2617 | NS5W0312 | 1 1/2" | 3/4" | 3/8" | 10-32 | 24.00 |
| 2618 | NS5W0316 | 2" | 3/4" | 3/8" | 10-32 | 28.20 |
| 2619 | NS5W0320 | 2 1/2" | 3/4" | 3/8" | 10-32 | 33.00 |
| 2620 | NS5W0324 | 3" | 3/4" | 3/8" | 10-32 | 39.00 |
| 2621 | NS5W0332 | 4" | 3/4" | 3/8" | 10-32 | 45.20 |
| 2622 | NS5W0410 | 1 1/4" | 1" | 1/2" | 1/4-20 | 33.00 |
| 2623 | NS5W0412 | 1 1/2" | 1" | 1/2" | 1/4-20 | 39.00 |
| 2624 | NS5W0416 | 2" | 1" | 1/2" | 1/4-20 | 48.20 |
| 2625 | NS5W0420 | 2 1/2" | 1" | 1/2" | 1/4-20 | 48.00 |
| 2626 | NS5W0424 | 3" | 1" | 1/2" | 1/4-20 | 54.00 |
| 2627 | NS5W0432 | 4" | 1" | 1/2" | 1/4-20 | 66.00 |
| 2628 | NS5W0440 | 5" | 1" | 1/2" | 1/4-20 | 78.00 |
| 2629 | NS5W0448 | 6" | 1" | 1/2" | 1/4-20 | 90.00 |

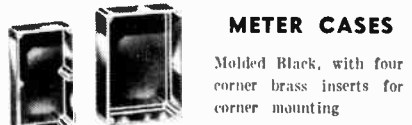


| No. | A | B | C | Thd. | NET Per C |
|------|--------|------|--------|--------|-----------|
| 2640 | 1/4" | 1/4" | A.I.L. | 6-32 | \$10.20 |
| 2641 | 1/2" | 1/4" | 5/32" | 6-32 | 15.00 |
| 2642 | 3/8" | 3/8" | 5/32" | 6-32 | 10.20 |
| 2643 | 1/2" | 3/8" | 3/16" | 6-32 | 10.80 |
| 2644 | 1/2" | 1/2" | 3/4" | 6-32 | 12.00 |
| 2645 | 3/4" | 1/2" | 1/4" | 6-32 | 12.00 |
| 2646 | 1" | 1/2" | 3/8" | 6-32 | 12.00 |
| 2647 | 1 1/2" | 1/2" | 3/8" | 6-32 | 13.80 |
| 2648 | 2 1/2" | 1/2" | 1/2" | 6-32 | 13.80 |
| 2649 | 2 1/2" | 3/4" | 3/4" | 1/4-20 | 13.80 |
| 2650 | 1" | 3/4" | 3/4" | 1/4-20 | 30.00 |



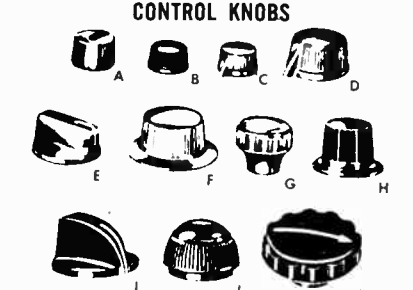
Molded bakelite lever knobs with 1/4" brass insert, complete with set screw. Std. Pkg. 25

| No. | Style | Length | Height | Color | NET Per C |
|------|-------|--------|--------|--------|-----------|
| 2232 | A | 1 5/8" | 1 1/2" | Black | \$22.20 |
| 2233 | A | 1 5/8" | 1 1/2" | Walnut | 22.80 |
| 2234 | B | 1 5/8" | 1 1/2" | Black | 38.40 |
| 2235 | B | 1 5/8" | 1 1/2" | Walnut | 38.40 |
| 2236 | C | 2 1/2" | 5/8" | Black | 24.00 |
| 2237 | C | 2 1/2" | 5/8" | Walnut | 24.00 |
| 2238 | D | 2 1/2" | 5/8" | Black | 43.20 |
| 2239 | D | 2 1/2" | 5/8" | Walnut | 43.80 |



Molded Black, with four corner brass inserts for corner mounting. Std. Pkg. 5

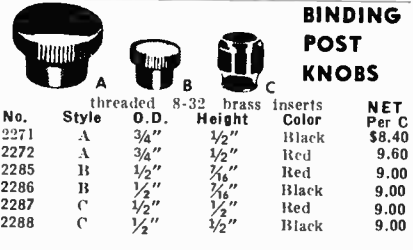
| No. | Case Size | NET Each |
|------|------------------------------|-------------|
| 2255 | 3 3/4" x 6 1/4" x 2" | 6-32 \$1.03 |
| 2257 | 5-9/32" x 6-13/16" x 2-5/16" | 4-36 1.28 |
| 2289 | 7" x 8" x 2 3/4" | 6-32 2.40 |
| 2256 | Cover for 2255 | .59 |
| 2260 | Cover for 2257 | 1.02 |



Molded bakelite control knobs, supplied with 1/4" molded hole; complete with set screw. *Recessed for locknut. Std. Pkg. 25

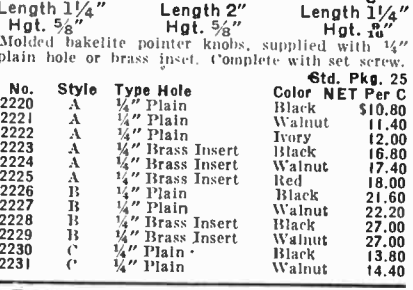
| No. | Style | O.D. | Height | Color | NET Per C |
|-------|-------|--------|--------|--------|-----------|
| 2240 | A | 3/4" | 1 1/2" | Black | \$12.00 |
| 2241 | A | 3/4" | 1 1/2" | Walnut | 12.00 |
| 2242 | B | 1 1/4" | 1 1/2" | Black | 9.60 |
| 2243 | B | 1 1/4" | 1 1/2" | Walnut | 9.60 |
| 2244 | B | 1" | 1 1/2" | Black | 13.20 |
| 2245 | B | 1" | 1 1/2" | Walnut | 13.80 |
| 2275† | B | 1 1/4" | 1 1/2" | Black | 21.60 |
| 2276† | B | 1 1/4" | 1 1/2" | Red | 21.60 |
| 2246 | C | 1 1/4" | 1 1/2" | Black | 9.60 |
| 2247 | C | 1 1/4" | 1 1/2" | Walnut | 9.60 |
| 2273† | C | 1 1/4" | 1 1/2" | Black | 21.60 |
| 2274† | C | 1 1/4" | 1 1/2" | Red | 22.20 |
| 2248* | D | 1" | 1 1/2" | Black | 16.80 |
| 2249* | D | 1" | 1 1/2" | Walnut | 17.40 |
| 2250* | E | 1 1/8" | 1 1/2" | Black | 14.40 |
| 2251* | E | 1 1/8" | 1 1/2" | Walnut | 15.00 |
| 2252* | F | 1 1/2" | 1 1/2" | Black | 17.40 |
| 2253* | F | 1 1/2" | 1 1/2" | Walnut | 18.00 |
| 2254* | F | 1 1/2" | 1 1/2" | Ivory | 19.20 |
| 2258 | G | 7/8" | 3/4" | Black | 15.00 |
| 2259 | G | 7/8" | 3/4" | Walnut | 15.60 |
| 2265 | H | 2 1/2" | 1 1/2" | Black | 13.80 |
| 2266 | H | 2 1/2" | 1 1/2" | Red | 14.40 |
| 2267 | J | 1 3/8" | 5/8" | Black | 12.60 |
| 2268 | J | 1 3/8" | 5/8" | Red | 13.80 |
| 2269 | K | 7/8" | 5/8" | Black | 14.40 |
| 2270 | K | 7/8" | 5/8" | Red | 18.60 |
| 2283 | L | 7/8" | 1 1/2" | Black | 19.20 |
| 2284 | L | 7/8" | 1 1/2" | Red | 19.80 |

† Supplied with brass insert.



threaded 8-32 brass inserts. Std. Pkg. 25

| No. | Style | O.D. | Height | Color | NET Per C |
|------|-------|------|--------|-------|-----------|
| 2271 | A | 3/4" | 1/2" | Black | \$8.40 |
| 2272 | A | 3/4" | 1/2" | Red | 9.60 |
| 2285 | B | 1/2" | 3/16" | Red | 9.00 |
| 2286 | B | 1/2" | 3/16" | Black | 9.00 |
| 2287 | C | 1/2" | 1/2" | Red | 9.00 |
| 2288 | C | 1/2" | 1/2" | Black | 9.00 |



Molded bakelite pointer knobs, supplied with 1/4" plain hole or brass inset. Complete with set screw. Std. Pkg. 25

| No. | Style | Type Hole | Color | NET Per C |
|------|-------|--------------|--------|-----------|
| 2220 | A | 1/4" Plain | Black | \$10.80 |
| 2221 | A | 1/4" Plain | Walnut | 11.40 |
| 2222 | A | 1/4" Plain</ | | |

HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



INSTRUMENT KNOBS



Plain Moulded black bakelite instrument knobs with molded in brass insert for 1/4" shafts. **Style B** pointer knobs have white vinyl pointer. **Style C** skirt type have white indicator line. **Style D** same as style A except with protruding brass insert for mounting special dials and pointers.

| No. | Style | O.D. | Pointer Size | Height | NET Per C |
|-------------------|-------|--------|----------------|--------|-----------|
| 2200 | A | 1 1/4" | | 5/8" | \$28.20 |
| 2201 | A | 1 3/8" | | 1 1/8" | 29.40 |
| 2202 | A | 1 5/8" | | 3/4" | 33.60 |
| 2203 | A | 2 3/8" | | 7/8" | 48.00 |
| 2204 | B | 1 1/4" | 3/4" pointer | 1 1/8" | 44.40 |
| 2205 | B | 1 3/8" | 1 1/8" pointer | 1 3/8" | 45.00 |
| 2206 | B | 1 5/8" | 1 3/8" pointer | 1 3/8" | 48.00 |
| 2207 | B | 2 3/8" | 1 3/8" pointer | 1 3/8" | 64.20 |
| 2208 | C | 1 1/4" | 1 1/2" Skirt | 1 1/8" | 53.40 |
| 2209 | C | 1 3/8" | 1 3/4" Skirt | 1 3/8" | 55.20 |
| 2210 | C | 1 5/8" | 2 1/8" Skirt | 2 3/8" | 65.40 |
| 2211 | C | 2 3/8" | 3" Skirt | 1 1/2" | 85.80 |
| 2212 | D | 1 1/4" | | 2 3/8" | 34.80 |
| 2213 | D | 1 3/8" | | 2 5/8" | 35.40 |
| 2214 | D | 1 5/8" | | 2 7/8" | 40.20 |
| 2215 | D | 2 3/8" | | 3 1/8" | 55.20 |
| SKIRT ONLY | | | | | |
| 2216 | | 1 1/2" | Skirt only | | 10.80 |
| 2217 | | 1 3/4" | Skirt only | | 12.60 |
| 2218 | | 2 1/8" | Skirt only | | 14.40 |
| 2219 | | 3" | Skirt only | | 21.00 |

INSTRUMENT KNOBS

Matte Finish — Made to Meet MS-91531
Molded Black, Matte finish bakelite instrument knobs, with molded-in brass insert for 1/4" shafts. All knobs supplied with two (2) Allen-head set-screws. **Style B** pointer knobs have white vinyl pointer. **Style C** skirt knobs have white indicator line on skirt.

| No. | Style | O.D. | Pointer size | Height | NET Per C |
|------|-------|--------|----------------|--------|-----------|
| 2460 | A | 1 1/4" | | 5/8" | \$81.00 |
| 2461 | A | 1 3/8" | | 7/8" | 99.00 |
| 2462 | A | 2 3/8" | | 7/8" | 122.00 |
| 2463 | B | 1 1/4" | 3/4" pointer | 1 1/8" | 92.00 |
| 2464 | B | 1 3/8" | 1 1/8" pointer | 1 3/8" | 106.00 |
| 2465 | B | 1 5/8" | 1 3/8" pointer | 1 3/8" | 132.00 |
| 2466 | C | 1 1/4" | 1 1/2" skirt | 1 1/8" | 123.00 |
| 2467 | C | 1 3/8" | 1 3/4" skirt | 1 3/8" | 152.00 |
| 2468 | C | 2 3/8" | 3" skirt | 1 1/2" | 191.00 |

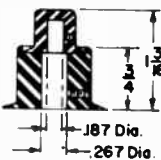
FLUTED INSTRUMENT KNOBS



Molded black bakelite fluted instrument knobs, supplied with white-filled line on crown and skirt, opposite set-screw. Supplied with 1/4" plain hole with set-screw.

| No. | Skirt Dia. | Height | NET Per C |
|------|-------------------------------------|--------|-----------|
| 2391 | 3/4" | 1 1/2" | \$18.00 |
| 2392 | 1 1/4" | 1 3/4" | 18.60 |
| 2393 | 1 3/8" | 1 7/8" | 18.60 |
| 2394 | 1 1/2" | 2" | 19.20 |
| 2395 | 2" | 2 1/8" | 44.00 |
| 2396 | With 1/8" plain hole with set-screw | 1 1/2" | 18.00 |

CONCENTRIC FLUTED INSTRUMENT KNOBS



Molded black and Red bakelite dual-concentric fluted instrument knobs. Outside knob is black with white filled line on skirt. Inner knob is red with white-filled line on skirt and crown. Both knobs supplied with set-screws.

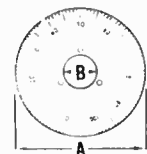
| No. | NET Per C |
|------|-----------|
| 2397 | \$32.40 |



CONTROL PLATES

MATERIAL: Brass Black Satin Finish, Etched silver numerals.
DIMENSION: 1 3/32" I.D. x O.D. as specified.
Std. Pkg. 5

| Clock-wise Calib. 0-100 No. | Counter-clockwise Calib. 100-0 No. | Degrees | O.D. | NET Per C |
|-----------------------------|------------------------------------|---------|--------|-----------|
| 2900 | 2906 | 180 | 2" | \$45.00 |
| 2901 | 2907 | 270 | 2 1/8" | 45.00 |
| 2902 | 2908 | 325 | 2" | 45.00 |
| 2903 | 2909 | 180 | 3 1/8" | 90.00 |
| 2904 | 2910 | 270 | 3 1/2" | 90.00 |
| 2905 | 2911 | 325 | 3 3/8" | 90.00 |



DIAL PLATES

MATERIAL: Brass Chrome Silver Finish.
DESCR.: Mounting Holes 9/64".
Std. Pkg. 5

| Clock-wise Calib. 0-100 No. | Counter-clockwise Calib. 100-0 No. | Degrees | A | B | NET Per C |
|-----------------------------|------------------------------------|---------|--------|--------|-----------|
| 2912 | 2928 | 180 | 1 1/8" | 3/8" | \$45.00 |
| 2913 | 2929 | 270 | 1 1/8" | 3/8" | 45.00 |
| 2914 | 2930 | 325 | 1 1/8" | 3/8" | 45.00 |
| 2915 | 2931 | 360 | 1 1/8" | 3/8" | 45.00 |
| 2916 | 2932 | 180 | 1 3/4" | 3/4" | 60.00 |
| 2917 | 2933 | 270 | 1 3/4" | 3/4" | 60.00 |
| 2918 | 2934 | 325 | 1 3/4" | 3/4" | 60.00 |
| 2919 | 2935 | 360 | 1 3/4" | 3/4" | 60.00 |
| 2920 | 2936 | 180 | 2 3/4" | 3/4" | 75.00 |
| 2921 | 2937 | 270 | 2 3/4" | 3/4" | 75.00 |
| 2922 | 2938 | 325 | 2 3/4" | 3/4" | 75.00 |
| 2923 | 2939 | 360 | 2 3/4" | 3/4" | 75.00 |
| 2924 | 2940 | 180 | 4" | 1 1/2" | 120.00 |
| 2925 | 2941 | 270 | 4" | 1 1/2" | 120.00 |
| 2926 | 2942 | 325 | 4" | 1 1/2" | 120.00 |
| 2927 | 2943 | 360 | 4" | 1 1/2" | 120.00 |



DIAL AND KNOB ASSEMBLY

DIAL: Brass Chrome Silver Finish.
KNOB: Molded Bakelite with 1/4" Brass insert.

| Clock-wise Calib. 0-100 No. | Counter-clockwise Calib. 100-0 No. | Degrees | O.D. | NET Each |
|-----------------------------|------------------------------------|---------|--------|----------|
| 2960 | 2976 | 180 | 1 1/4" | \$1.35 |
| 2961 | 2977 | 270 | 1 1/4" | 1.35 |
| 2962 | 2978 | 325 | 1 1/4" | 1.35 |
| 2963 | 2979 | 360 | 1 1/4" | 1.35 |
| 2964 | 2980 | 180 | 1 3/8" | 1.41 |
| 2965 | 2981 | 270 | 1 3/8" | 1.41 |
| 2966 | 2982 | 325 | 1 3/8" | 1.41 |
| 2967 | 2983 | 360 | 1 3/8" | 1.41 |
| 2968 | 2984 | 180 | 2 3/8" | 1.41 |
| 2969 | 2985 | 270 | 2 3/8" | 3.00 |
| 2970 | 2986 | 325 | 2 3/8" | 3.00 |
| 2971 | 2987 | 360 | 2 3/8" | 3.00 |
| 2972 | 2988 | 180 | 4" | 3.45 |
| 2973 | 2989 | 270 | 4" | 3.45 |
| 2974 | 2990 | 325 | 4" | 3.45 |
| 2975 | 2991 | 360 | 4" | 3.45 |

VERNIER DIAL MARKERS

MATERIAL: Brass Chrome Silver Finish. Supplied with hardware.
Std. Pkg. 5

| No. | For Dials | Dial O.D. | NET Per C |
|------|-----------|-----------|-----------|
| 2944 | 180 | 1 1/4" | \$30.00 |
| 2945 | 270 | 1 1/4" | 30.00 |
| 2946 | 325 | 1 1/4" | 30.00 |
| 2947 | 360 | 1 1/4" | 30.00 |
| 2948 | 180 | 1 3/8" | 30.00 |
| 2949 | 270 | 1 3/8" | 30.00 |
| 2950 | 325 | 1 3/8" | 30.00 |
| 2951 | 360 | 1 3/8" | 30.00 |
| 2952 | 180 | 2 3/8" | 30.00 |
| 2953 | 270 | 2 3/8" | 30.00 |
| 2954 | 325 | 2 3/8" | 30.00 |
| 2955 | 360 | 2 3/8" | 30.00 |
| 2956 | 180 | 4" | 30.00 |
| 2957 | 270 | 4" | 30.00 |
| 2958 | 325 | 4" | 30.00 |
| 2959 | 360 | 4" | 30.00 |

DIAL PLATES



2261 **2262** **2290**
DIAL: BRASS, chrome silver 1 3/8" O.D.
KNOB: Molded bakelite black (our 2250).
DESCR.: For matching dials on instruments, receivers, amplifiers. Dial has clear black etched numbers. Knob fits 1/4" shaft.
Std. Pkg. 10

| No. | Type | NET Each |
|-----------------------------------|---------------------|----------|
| 2261 | 10 to 0 180 Degrees | \$5.75 |
| 2262 | 10 to 0 270 Degrees | 75 |
| DIAL PLATES ONLY 1/2" I.D. | | |
| 2263 | 10 to 0 180 Degrees | 45 |
| 2264 | 10 to 0 270 Degrees | 45 |

KNOB DIAL PLATE

DIAL: Nickel silver, 1 5/8" O.D.
KNOB: Molded bakelite.
DESCR.: Engraved numerals, varnish coated. 10 to 0, in 360 degrees. Knob fits 1/4" shaft.
Std. Pkg. 10
NET Each \$7.75

MICROPHONE CONNECTORS



BODY: BRASS, nickel plated.
SPRING: Steel, cadmium plated.
INSUL.: XXXP Bakelite.
EYELET: Brass, hot tinned for easy soldering.
Standard Type 5/16"-27 Thread
DESCR.: Designed for use with single conductor cable. Microphone connectors provided with flexible protector spring. Cable clamped firmly to connector by hollow point set screw.

| No. | Type | Length | NET Per C |
|-----|-----------------------|--------|-----------|
| 115 | Single Contact Male | 1 3/4" | \$21.00 |
| 116 | Single Contact Female | 2" | 31.80 |

CHASSIS CONNECTORS

Mount in .385 hole grounded; .500 hole insulated with shoulder washer.
117 Single Contact Male 5/8" 21.00
114 Closed Circuit Male 3/4" 30.00

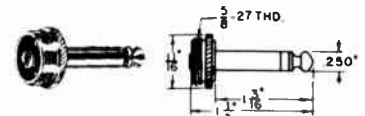
MINIATURE MICROPHONE CONNECTORS

3/16"-32 THREAD
DESCR.: Ideal for lapel microphone, musical instruments, etc., wherever small cable is used. Accepts cable up to 3/16" diameter. **Std. Pkg. 50**
No. Type Length NET Per C
484 Single Contact Female 1 1/4" \$36.00
485 Single Contact Male 1 1/4" 70.00

CHASSIS CONNECTOR

Mounts in 3/16" hole grounded; 1/4" hole insulated with shoulder washer.
486 Single Contact Male 5/8" 21.00

PHONE PLUG ADAPTER



BODY: BODY, Tip, Sleeve—Brass, nickel plated.
INSUL.: XXXP Bakelite.
DESCR.: Mates with No. 116 microphone connector. Fits standard phone jacks.
Std. Pkg. 25
NET Per C \$30.00

CAP AND CHAIN

DESCR.: BRASS, nickel plated. Seals chassis connectors against dust. Eliminates noisy connections. Used with any threaded one or two conductor chassis unit.
Std. Pkg. 10
No. 118 5/16"-27 Thread NET Per C \$36.00

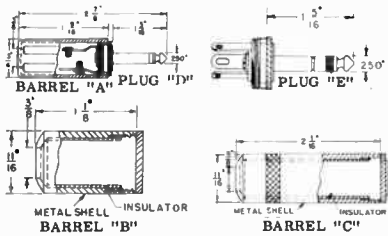
HERMAN H. SMITH, INC.



"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

STANDARD PHONE PLUGS

BODY: Body, tip, and sleeve—Brass, nickel plated.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty, 750 Volts 60 cycle AC working voltage.
DESCR.: Fits standard phone jacks. Molded styrene separator insures maximum insulation between elements.
LUGS: 2 circuit plugs are screw terminals with ribbed clips and cord anchor. 3 circuit plugs are solder lugs.
 Std. Pkg. 25



Bakelite Barrel



BARREL: MOLDED THERMOSETTING plastic, per MIL-P-14 CFG. Red and Black. SPECIFY COLOR

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 222 | 2 | Screw | D | A | \$39.00 |
| 227 | 3 | Solder | E | A | 84.00 |

Shielded Barrel

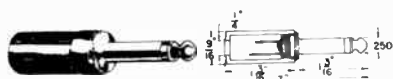


BARREL: BRASS, nickel plated with tubular insert.

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 252 | 2 | Screw | D | B | \$54.00 |
| 272 | 2 | Screw | D | C | 66.00 |
| 228 | 3 | Solder | E | B | 90.0- |
| 238 | 3 | Solder | E | C | 111.00 |

STANDARD PHONE PLUG

Baby Bakelite Barrel



BARREL: MOLDED THERMOSETTING plastic, per MIL-P-14 CFG. Red and Black. SPECIFY COLOR

BODY: Body, tip, sleeve—Brass, nickel plated.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty, 750 Volts 60 cycle AC continuous working voltage.
DESCR.: Molded styrene separator insures maximum insulation between conductors. Fits standard phone jacks.
 Std. Pkg. 25

| No. | Circuit | Terminals | NET Per C |
|-----|---------|-----------|-----------|
| 243 | Two | Solder | \$24.00 |

PJ055 AND PJ068 PLUGS



BARREL: MOLDED plastic.
BODY: Body, tip, sleeve—Machined brass.
TERM.: Brass, hot tinned.

INSUL.: Ethyl cellulose type EM-1 MIL-P-3112.
DESCR.: Designed especially for high quality communications equipment and to meet the exacting requirements of the armed services. Parts are assembled together in a mold, providing a finished plug with complete continuity of thermo plastic insulation between the tip rod and plug sleeve.
 Std. Pkg. 25

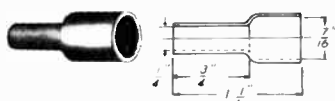
| No. | Type | Each |
|-----|--------|--------|
| 217 | PJ055B | \$1.35 |
| 247 | PJ068B | 3.65 |

CORD CLAMP STRAIN RELIEF

MATERIAL: Cold Rolled Steel, per QQ-S-636, Finish zinc per Spec. 7253, Table II, Type I.
DESCR.: Used on Government cord assemblies, for Strain Relief, Dust and Moisture Seal.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 747 | \$1.80 |

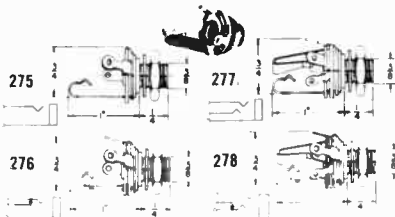
TELEPHONE CORD SLEEVE



MATERIAL: Neoprene in accordance with Grade SC415A-FP per MIL-R-3065.
DESCR.: Used on Government cord assemblies, for Strain Relief, Dust and Moisture Seal.
 Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 748 | \$6.60 |

TELEPHONE JACKS



BUSHING: BRASS, nickel plated.
INSUL.: Bakelite, type PBE-P per MIL-P-3115B
SPRING: Nickel-Silver alloy, spring temper. New tapered design provides for ease of insertion while eliminating possibility of shorts.

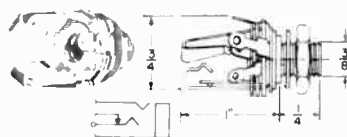
SLEEVE TERM.: Brass, hot tinned.

RATING: 10 Amps AC for 10°C Temp. rise, continuous duty, 1.2 K Volts 60 cycle AC continuous working voltage.

DESCR.: Notched insulating washers accurately locate all parts, and eliminate possibility of shorts and arc over. Springs designed for firm, low-resistance electrical contact. Bushings 1/2" long, threaded 3/32". Mounts in 3/8" hole in panels up to 3/32" thick. Overall diameter 7/8", require 1" clearance behind panel. Supplied with 1/2" hex brass nut and 3/8" steel panel washer, all nickel plated.

| No. | Circuit | NET Per C |
|-----|------------------------|-----------|
| 275 | Two Conductor Open | \$27.00 |
| 276 | Two Conductor Closed | 30.00 |
| 277 | Three Conductor Open | 36.00 |
| 278 | Three Conductor Closed | 45.00 |

STEREO TELEPHONE JACK



A new jack specially designed for switching-out speakers when connecting stereo headphones, and for switching three-wire stereo input circuits. Dual, normally-closed switch contacts open both stereo circuits independently when three circuit plug is inserted.

| No. | Circuit | NET Per C |
|-----|-----------------------------|-----------|
| 268 | Three Conductor Dual Closed | \$54.00 |

IN-LINE EXTENSION JACK

Bakelite Barrel



BARREL: MOLDED THERMOSETTING plastic, per MIL-P-14 CFG. Red and Black. SPECIFY COLOR

BODY: Brass, nickel plated.

RATING: 10 Amps AC for 10°C Temp. rise, continuous duty, 1 K Volts 60 cycle AC continuous working voltage.

SPRING: Nickel, silver, special alloy, spring temper.

INSUL.: XXP Bakelite.

DESCR.: For microphone and Hi-Fi extension cords. Mates with standard phone plugs.
 Std. Pkg. 50

| No. | Type | NET Per C |
|-----|-------------------|-----------|
| 274 | Solder Connection | \$54.00 |
| 288 | Screw Connection | 66.00 |

Shielded Barrel



BARREL: Brass, nickel plated, with tubular insulator.

BODY: Brass, nickel plated.

RATING: 10 Amps AC for 10°C Temp. rise, continuous duty, 1 K Volts 60 cycle AC continuous working voltage.

SPRING: Nickel, silver, special alloy, spring temper.

INSUL.: XXP Bakelite.

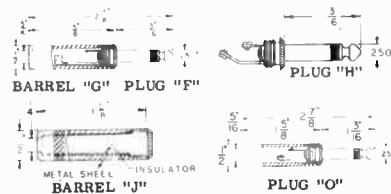
DESCR.: For microphone and Hi-Fi extension cords. Mates with standard phone plugs.
 Std. Pkg. 25

| No. | Type | NET Per C |
|-----|-------------------|-----------|
| 273 | Solder Connection | \$75.00 |
| 289 | Screw Connection | 84.00 |

SLIM PHONE PLUGS

Cable Clamp Style

BODY: Body, tip, and sleeve—Brass, nickel plated.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty, 750 Volts 60 cycle AC continuous working voltage.
DESCR.: Fits standard phone jacks. Molded styrene separator insures maximum insulation between elements.
 Std. Pkg. 25



Bakelite Barrel



BARREL: MOLDED THERMOSETTING plastic, per MIL-P-14 CFG. Red and Black. SPECIFY COLOR

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 225 | 2 | Solder | F | G | \$39.00 |
| 307 | 2 | Screw | H | G | 45.00 |

Shielded Barrel



BARREL: BRASS, nickel plated with tubular insert.

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 226 | 2 | Solder | I | J | \$60.00 |
| 316 | 2 | Screw | I | J | 63.00 |

ECONOMY TYPE

BODY: Body, tip, sleeve—Brass, nickel plated.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty, 750 Volts 60 cycle AC continuous working voltage.
DESCR.: An inexpensive modified version of our popular #225 and 225 plugs shown above. Features two small solder lugs.
 Std. Pkg. 25

Bakelite Barrel

BARREL: MOLDED BAKELITE, Red or Black. SPECIFY COLOR

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 320 | 2 | Solder | O | G | \$30.00 |

Shielded Barrel

BARREL: BRASS, nickel plated with tubular insert.

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 330 | 2 | Solder | O | J | \$39.00 |

MINIATURE PHONE PLUG



HANDLE: MOLDED plastic, Black.

BODY: Body, tip, sleeve—Brass, nickel plated.

TERM.: Brass, hot tin dipped.

RATING: 5 Amps AC for 10°C Temp. rise, continuous duty, 350 Volts 60 cycle AC continuous working voltage.

DESCR.: Designed for use with hearing aids, small meters, etc. Solder terminals.
 Std. Pkg. 50

| No. | NET Per C |
|-----|-----------|
| 480 | \$42.00 |

Shielded Barrel



BARREL: BRASS, nickel plated with tubular insulator.

BODY: Body, tip, sleeve—Brass, nickel plated.

RATING: 5 Amps AC for 10°C Temp. rise, continuous duty, 350 Volts 60 cycle AC continuous working voltage.

DESCR.: Designed for use with hearing aids, small meters, etc. Solder terminals.
 Std. Pkg. 50

| No. | Circuit | NET Per C |
|-----|---------------|-----------|
| 481 | Two Conductor | \$51.00 |



HERMAN H. SMITH, INC.

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IMPROVED "TURRET-CENTER" STYLE

BOOY: Body, Tip, Ring, and sleeve - Brass, nickel plated.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty. 1.5 KV 60 cycle AC continuous working voltage.

DESCR.: New, improved construction has co-axial "turret-terminal" tip lug and widely separated contacts for maximum voltage ratings. Styrene separator, Mylar sleeves, and Nylon bushings used for increased performance. Fits standard phone jacks.

Std. Pkg. 25



Bakelite Barrel

BARREL: Molded Bakelite, Red or Black. SPECIFY COLOR

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 171 | 1 | Solder | K | G | 3 |
| 172 | 1 | Screw | L | G | 45 |
| 308 | 1 | Solder | M | G | 63 |
| 309 | 1 | Screw | N | G | 72 |

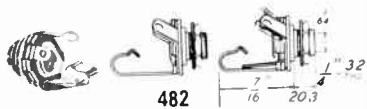
Shielded Barrel



BARREL: BRASS, nickel plated with tubular insert.

| No. | Circuit | Terminals | Plug | Barrel | NET Per C |
|-----|---------|-----------|------|--------|-----------|
| 173 | 1 | Solder | K | J | \$60.00 |
| 174 | 1 | Screw | L | J | 63.00 |
| 311 | 1 | Solder | M | J | 78.00 |
| 312 | 1 | Screw | N | J | 84.00 |

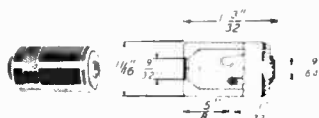
MINIATURE TELEPHONE JACKS



BUSHING: BRASS, nickel plated.
INSUL.: XXXP bakelite, type "PBE" per MIL-P-3115A.
SPRING: Nickel silver alloy, spring temper.
TERM.: Brass, hot tinned.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty. 500 Volts 60 cycle AC continuous working voltage.
DESCR.: Notched insulation washers interlock springs and lugs, eliminate possibility of shifting which results in electrical shorts. Springs firmly hold mating plug. Supplied with hex brass nut and steel mounting washer all nickel plated.

| No. | Circuit | NET Per C |
|-----|-----------------------|-----------|
| 482 | Two Conductor, Open | \$24.00 |
| 483 | Two Conductor, Closed | 27.00 |

MINIATURE EXTENSION JACK Shielded



BARREL: Brass, nickel plated.
BODY: Brass, nickel plated.
SPRING: Nickel silver alloy, spring temper.
INSUL.: Bakelite.
RATING: 5 Amps AC for 10°C Temp. rise, continuous duty. 500 Volts 60 cycle AC continuous working voltage.
DESCR.: Mates with Miniature Phone Plugs.

| No. | NET Per C |
|-----|-----------|
| 487 | \$72.00 |

EQUIPMENT HANDLES

MATERIALS AND FINISH SPECIFICATIONS

The following specifications are met by all panel handles, ferrules, and hardware when applicable:

Materials:

Brass: In accordance with Federal Spec. QQ-B-626, Composition 22, 1/2 Hard.
Aluminum: In accordance with Federal Spec. QQ-A-365, Composition A, Type 3.
Steel: Cold-Rolled, in accordance with QQ-S-633B, Grade FS-1010.

Finishes:

Nickel Plate: Polished Nickel Plate, in accordance with Federal Spec. QQ-N-290, Class I, Type VI.
 Black Oxide: In accordance with MIL-F-495A.
 Satin Etch: Commercial finish.
 Black Anodize: In accordance with MIL-A-8625A.
 Optical Black: Color in accordance with Fed. Std. 595, Type 37058. Paint complies with Fed. Spec. TT-E-527.

Note:

Aluminum Handles, either round or oval, and matching ferrules, can be supplied anodized in colors per MIL-A-8625A on special order.

PANEL HANDLES

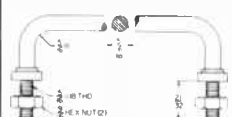


Brass Panel Handles, finished as shown, with internal 10-32 thread. Individually packaged.

Std. Pkg. 10

| No. | Mtg. Ctrs. (A) | Height (B) | Tap Depth (C) | Finish | NET Ea. |
|------|----------------|------------|---------------|--------------|---------|
| 2058 | 2 1/2" | 1 1/2" | 1 1/2" | Nickel Plate | \$60 |
| 1600 | 2 1/2" | 1 1/2" | 1 1/2" | Black Oxide | .60 |
| 2050 | 3" | 1 1/2" | 1 1/2" | Nickel Plate | .63 |
| 1601 | 3" | 1 1/2" | 1 1/2" | Black Oxide | .63 |
| 2057 | 3 1/2" | 1 1/2" | 1 1/2" | Nickel Plate | .63 |
| 1602 | 3 1/2" | 1 1/2" | 1 1/2" | Black Oxide | .63 |
| 2059 | 3 1/2" | 1 1/2" | 1 1/2" | Nickel Plate | .60 |
| 1603 | 3 1/2" | 1 1/2" | 1 1/2" | Black Oxide | .60 |
| 2056 | 3 1/2" | 1 1/2" | 1 1/2" | Nickel Plate | .72 |
| 1604 | 3 1/2" | 1 1/2" | 1 1/2" | Black Oxide | .72 |
| 2051 | 4" | 1 1/2" | 1 1/2" | Nickel Plate | .75 |
| 1605 | 4" | 1 1/2" | 1 1/2" | Black Oxide | .75 |
| 2052 | 4 1/2" | 1 1/2" | 1 1/2" | Nickel Plate | .78 |
| 1606 | 4 1/2" | 1 1/2" | 1 1/2" | Black Oxide | .78 |

PANEL HANDLES

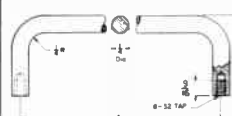


Brass Panel Handles, finished as shown with male threaded stud. Supplied complete with matching ferrules, and brass, nickel plated hex nuts. Mount in 1/2" panel holes. Individually packaged.

Std. Pkg. 10

| No. | Mtg. Ctrs. (A) | Height (B) | Finish | NET Ea. |
|------|----------------|------------|--------------|---------|
| 1607 | 2" | 2 1/2" | Nickel Plate | \$81 |
| 1608 | 2" | 2 1/2" | Black Oxide | .81 |
| 1609 | 3" | 2 1/2" | Nickel Plate | .84 |
| 1610 | 3" | 2 1/2" | Black Oxide | .84 |
| 1611 | 4" | 2 1/2" | Nickel Plate | .87 |
| 1612 | 4" | 2 1/2" | Black Oxide | .87 |
| 2053 | 1 1/2" | 2 1/2" | Nickel Plate | .90 |
| 1613 | 1 1/2" | 2 1/2" | Black Oxide | .90 |
| 1614 | 6" | 2 1/2" | Nickel Plate | .98 |
| 1615 | 6" | 2 1/2" | Black Oxide | .98 |

PANEL HANDLES

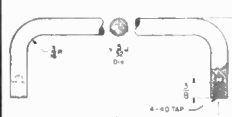


1/2" Diameter panel handles. Brass and Aluminum, finished as shown, with internal 8-32 thread. Individually packaged.

Std. Pkg. 10

| No. | Mtg. Ctrs. (A) | Height (B) | Material | Finish | NET Ea. |
|------|----------------|------------|----------|--------------|---------|
| 1616 | 2" | 1 1/2" | Brass | Nickel Plate | \$60 |
| 1617 | 2" | 1 1/2" | Brass | Black Oxide | .60 |
| 1618 | 3" | 1 1/2" | Aluminum | Satin | .60 |
| 619 | 3" | 1 1/2" | Aluminum | Blk. Anodize | .60 |
| 1620 | 3" | 1 1/2" | Brass | Nickel Plate | .63 |
| 1621 | 3" | 1 1/2" | Brass | Black Oxide | .63 |
| 1622 | 3" | 1 1/2" | Aluminum | Satin | .63 |
| 1623 | 3" | 1 1/2" | Aluminum | Blk. Anodize | .63 |
| 1624 | 1" | 1 1/2" | Brass | Nickel Plate | .69 |
| 1625 | 1" | 1 1/2" | Brass | Black Oxide | .69 |
| 1626 | 1" | 1 1/2" | Aluminum | Satin | .69 |
| 1627 | 1" | 1 1/2" | Aluminum | Blk. Anodize | .69 |
| 1628 | 4" | 1 1/2" | Brass | Nickel Plate | .75 |
| 1629 | 6" | 1 1/2" | Brass | Black Oxide | .75 |
| 1630 | 6" | 1 1/2" | Aluminum | Satin | .75 |
| 1631 | 6" | 1 1/2" | Aluminum | Blk. Anodize | .75 |

PANEL HANDLES

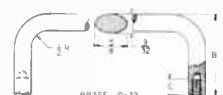


1/2" Diameter panel handles. Brass and Aluminum, finished as shown, with internal 1-10 thread. Individually packaged.

Std. Pkg. 10

| No. | Mtg. Ctrs. (A) | Height (B) | Material | Finish | NET Ea. |
|------|----------------|------------|----------|--------------|---------|
| 1632 | 1 1/2" | 1" | Brass | Nickel Plate | \$82 |
| 1633 | 1 1/2" | 1" | Brass | Black Oxide | .82 |
| 1634 | 1 1/2" | 1" | Aluminum | Satin | .82 |
| 1635 | 1 1/2" | 1" | Aluminum | Blk. Anodize | .82 |
| 1636 | 2" | 1" | Brass | Nickel Plate | .86 |
| 1637 | 2" | 1" | Brass | Black Oxide | .86 |
| 1638 | 2" | 1" | Aluminum | Satin | .86 |
| 1639 | 2" | 1" | Aluminum | Blk. Anodize | .86 |
| 1640 | 3" | 1" | Brass | Nickel Plate | .90 |
| 1641 | 3" | 1" | Brass | Black Oxide | .90 |
| 1642 | 3" | 1" | Aluminum | Satin | .90 |
| 1643 | 3" | 1" | Aluminum | Blk. Anodize | .90 |

OVAL PANEL HANDLES

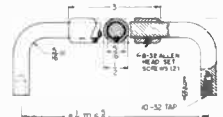


Flat, oval panel handles in Brass and Aluminum, finished as shown. Brass handles have internal 10-32 thread. Aluminum handles have internal 10-24 thread. Individually packaged.

Std. Pkg. 10

| No. | Mtg. Ctrs. (A) | Height (B) | Tap Depth (C) | Material | Finish | NET Ea. |
|------|----------------|------------|---------------|----------|--------------|---------|
| 1644 | 3" | 1 1/2" | 1 1/2" | Brass | Nickel Plate | \$1.35 |
| 1645 | 3" | 1 1/2" | 1 1/2" | Brass | Black Oxide | 1.35 |
| 1646 | 3" | 1 1/2" | 1 1/2" | Aluminum | Blk. Anodize | 1.03 |
| 1647 | 3 1/2" | 1 1/2" | 1 1/2" | Brass | Nickel Plate | 1.52 |
| 1648 | 3 1/2" | 1 1/2" | 1 1/2" | Brass | Black Oxide | 1.52 |
| 1649 | 3 1/2" | 1 1/2" | 1 1/2" | Aluminum | Blk. Anodize | 1.10 |
| 1651 | 4 1/2" | 1 1/2" | 1 1/2" | Brass | Nickel Plate | 1.73 |
| 1653 | 4 1/2" | 1 1/2" | 1 1/2" | Brass | Black Oxide | 1.73 |
| 1654 | 4 1/2" | 1 1/2" | 1 1/2" | Aluminum | Blk. Anodize | 1.20 |
| 1655 | 4 1/2" | 1 1/2" | 1 1/2" | Brass | Nickel Plate | 1.91 |
| 1657 | 4 1/2" | 1 1/2" | 1 1/2" | Brass | Black Oxide | 1.91 |
| 1658 | 4 1/2" | 1 1/2" | 1 1/2" | Aluminum | Blk. Anodize | 1.31 |

ADJUSTABLE HANDLES

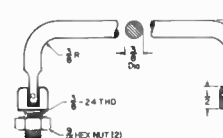


Adjustable Brass Panel handles, with mounting center range from 1/2" to 6/8". Finished as shown. Internal 10-32 thread, supplied with Allen-Head locking screws. Individually packaged.

Std. Pkg. 10

| No. | Finish | NET Ea. |
|------|--------------|---------|
| 1659 | Nickel Plate | \$2.60 |
| 1661 | Black Oxide | 2.60 |

FOLDING HANDLES

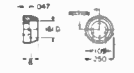


Folding Brass panel handles, with spring-loaded detents which snap into upright or left-or-right folded position. Finished as shown. Supplied with brass, nickel plated hex nuts. Mounts in 3/8" panel holes. Individually packaged.

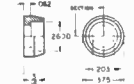
Std. Pkg. 10

| No. | Finish | NET Ea. |
|------|--------------|---------|
| 1662 | Nickel Plate | \$2.28 |
| 1663 | Black Oxide | 2.28 |

FERRULES



No. 1664



No. 1668



No. 2054



No. 2055

Brass and Aluminum ferrules, finished as shown, to match handles listed above. Std. Pkg. 50

FOR 5/32" DIA. HANDLES

| No. | Material | Finish | NET Per C |
|------|----------|--------------|-----------|
| 1664 | Brass | Nickel Plate | \$15.00 |
| 1665 | Brass | Black Oxide | 15.00 |
| 1666 | Aluminum | Satin | 15.00 |
| 1667 | Aluminum | Blk. Anodize | 15.00 |

FOR 1/4" DIA. HANDLES

| No. | Material | Finish | NET Per C |
|------|----------|--------------|-----------|
| 1668 | Brass | Nickel Plate | \$15.00 |
| 1669 | Brass | Black Oxide | 15.00 |
| 1670 | Aluminum | Satin | 15.00 |
| 1671 | Aluminum | Blk. Anodize | 15.00 |

FOR 5/16" DIA. HANDLES

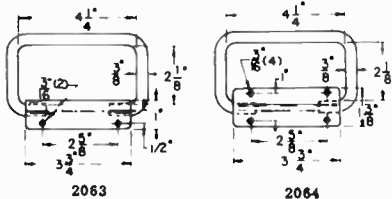
| No. | Material | Finish | NET Per C |
|------|----------|--------------|-----------|
| 2054 | Brass | Nickel Plate | \$9.60 |
| 1672 | Brass | Black Oxide | 9.60 |
| 2055 | Brass | Nickel Plate | 15.00 |
| 1673 | Brass | Black Oxide | 15.00 |



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MIL. SPEC. HANDLES



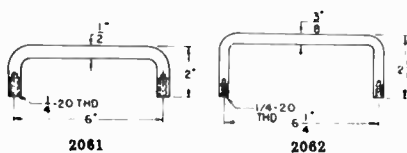
MATERIAL: Aluminum.
FINISH: Alodine per MIL-C-5541 Spec. Sprayed to MIL-E-15090. Gloss gray color 1640 per MIL SPEC. PTC-595.

| No. | Type | NET Ea. |
|------|--------------|---------|
| 2063 | Half Bracket | \$1.35 |
| 2064 | Pull Bracket | 1.35 |

With Transflux Plastic Protector

| | | |
|------|--------------|--------|
| 2048 | Half Bracket | \$1.08 |
| 2049 | Pull Bracket | 1.08 |

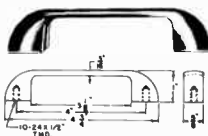
HANDLES



Steel handles painted with Optical Black finish.

| No. | Diameter | NET Ea. |
|------|----------|---------|
| 2061 | 1/2" | \$1.08 |
| 2062 | 3/8" | 1.20 |

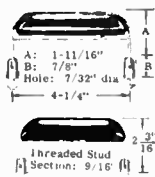
OVAL HANDLE



Die Cast Zamac Handle. Brush chrome plated.

| No. | NET Per C |
|------|-----------|
| 2065 | \$90.00 |

MOLDED GRIP HANDLES



HANDLE: Moulded high impact Styrene, Fungus Resistant.
HDWRE.: Steel, Nickel plated.
DESCR.: Rounded palm fitting design. Attaches to case with machine screws.

| No. | Color | Each |
|------|-------|--------|
| 2085 | Black | \$1.75 |
| 2086 | Grey | 1.75 |

HANDLE: Moulded high impact Styrene, Fungus Resistant.
HDWRE.: Steel, Nickel plated.
DESCR.: Rounded palm fitting design. Attaches to case with washers and nuts supplied. Will support 100 lb.

| No. | Color | Std. Lgth. | NET Ea. |
|------|-------|------------|---------|
| 2087 | Black | 5/8" | \$1.05 |
| 2088 | Grey | 5/8" | 1.05 |

SPRING GLIDE HANDLE



HANDLE: Genuine leather, contoured BLACK, matching stitching, 8" long.
CAPS: Steel, chrome plated.
DESCR.: Strong, silent spring glide, frequency of decibel extremes will not induce handle rattle. Handle moves up for comfortable carrying down when not in use. Std. Pkg. 10

| No. | Color | NET Ea. |
|------|-------|---------|
| 2089 | Black | \$2.40 |

RETRACTO-LINK HANDLES



HANDLE: Genuine leather, matching stitching, BLACK.
HDWRE.: Steel, nickel plated.
DESCR.: Assemblies are shaped with all hardware installed except for decorative cover caps which are packed separately. Supplied in two styles—different lengths.

| No. | Length | Ea. |
|------|--------|--------|
| 2090 | 4 1/2" | \$2.10 |
| 2091 | 5 1/2" | 2.10 |
| 2092 | 6 1/2" | 2.10 |

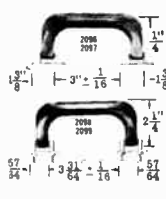
ATTACHES WITH PRONGS THAT BEND INSIDE CASE

| No. | Length | Ea. |
|------|--------|--------|
| 2093 | 4 1/2" | \$2.10 |
| 2094 | 5 1/2" | 2.10 |
| 2095 | 6 1/2" | 2.10 |

ATTACHES WITH RIVETS OR SCREWS

| No. | Length | Ea. |
|------|--------|--------|
| 2093 | 4 1/2" | \$2.10 |
| 2094 | 5 1/2" | 2.10 |
| 2095 | 6 1/2" | 2.10 |

MOLDED GRIP HANDLES



HANDLE: Moulded High Impact Styrene.
HDWRE.: Steel, nickel plated.
DESCR.: Designed for economy and rugged use.

Std. Pkg. 10

ATTACHES WITH RIVETS OR SCREWS

| No. | Color | NET Per C |
|------|-------|-----------|
| 2096 | Black | \$45.00 |
| 2097 | Grey | 45.00 |

ATTACHES WITH THREADED STUD

| | | |
|------|-------|-------|
| 2098 | Black | 84.00 |
| 2099 | Grey | 84.00 |

BAKELITE HANDLE



| No. | Thread | O.D. | Mtg. | Color | NET Per C |
|------|--------|--------|--------|-------|-----------|
| 2281 | 8-32 | 4 1/4" | 2 7/8" | Black | \$14.40 |
| 2282 | 8-32 | 4 1/4" | Center | Red | 15.60 |

NYLON LOCKING CLAMP



Wedge and ratchet design makes for positive holding and locking. Accommodates cables from 1/8" to 1 3/4". No knot tying, just slip clamp around cable, insert tongue and pull tight.

Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 800 | \$9.00 |

NYLON MOUNTING TABS



For use with No. 800 locking clamp when premounted assembly points are desired. Furnished with .203 mounting hole.

Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 801 | \$3.00 |

NYLON PERFORATED STRAPPING



For bundling of wire, cable and tubing. Time saver for harnessing. Use No. 803 ratchet buckle for fast assembly. Supplied on 50' rolls.

| No. | NET Per Roll |
|-----|--------------|
| 802 | \$15.00 |

NYLON RATCHET BUCKLE



For No. 802 strapping. Quick and easier assembly with this ingenious item.

Std. Pkg. 100

| No. | NET Per C |
|-----|-----------|
| 803 | \$10.20 |

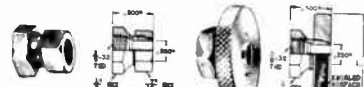
FOR 1/2" STRAPPING



Used with strapping for fast assembly.

| No. | NET Ea. |
|-----|---------|
| 804 | \$18.00 |

SHAFT LOCKS



| No. | Shaft | Std. Pkg. | NET Per C |
|-----|-------|-----------|-----------|
| 181 | 3/8" | 100 | \$24.00 |

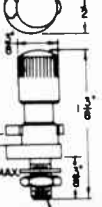
Miniature Wrench Type

| | | | |
|-----|------|----|-------|
| 183 | 1/8" | 25 | 24.00 |
|-----|------|----|-------|

Thumb Type

| | | | |
|-----|------|----|-------|
| 182 | 1/4" | 25 | 33.00 |
|-----|------|----|-------|

DIAL LOCK



HEAD: Captive: Brass, nickel plated.

BODY: Brass nickel plated.

DESCR.: Prevents detuning of the dial when locked by means of the captive knurled nut.

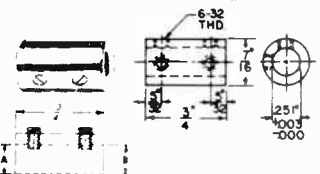
Supplied with hex nut & lockwasher.

Std. Pkg. 25

| No. | NET Per C |
|-----|-----------|
| 199 | \$66.00 |

COUPLERS

Brass and Insulated



| No. | A | B | D.O. | Material | NET Per C |
|-----|------|------|------|------------|-----------|
| 120 | 1/4" | 1/4" | 1/4" | Brass N.P. | \$18.00 |
| 140 | 3/8" | 3/8" | 1/2" | Fibre | 15.00 |
| 131 | 1/2" | 1/2" | 1/2" | Brass N.P. | 18.00 |
| 141 | 3/8" | 3/8" | 1/2" | Fibre | 15.00 |
| 133 | 1/2" | 1/2" | 1/2" | Brass N.P. | 18.00 |
| 142 | 3/8" | 3/8" | 1/2" | Fibre | 15.00 |

With Two Set Screws

| No. | A | B | D.O. | Material | NET Per C |
|-----|------|------|------|------------|-----------|
| 138 | 1/4" | 1/4" | 1/4" | Brass N.P. | 39.00 |

With Four Set Screws

| No. | A | B | D.O. | Material | NET Per C |
|-----|------|------|------|------------|-----------|
| 180 | 1/4" | 1/4" | 1/4" | Brass N.P. | \$24.00 |

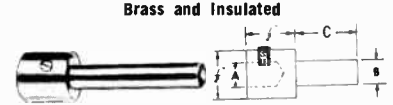
MINIATURE COUPLER

With Allen Head Set Screws

| No. | A | B | D.O. | Material | NET Per C |
|-----|------|------|------|------------|-----------|
| 180 | 1/4" | 1/4" | 1/4" | Brass N.P. | \$24.00 |

EXTENDERS

Brass and Insulated



| No. | A | B | C | Material | NET Per C |
|-----|------|------|------|------------|-----------|
| 150 | 1/4" | 1/4" | 1/4" | Brass N.P. | \$19.80 |
| 130 | 3/8" | 3/8" | 1/2" | Fibre | 27.00 |
| 132 | 1/2" | 1/2" | 1/2" | Brass N.P. | 19.80 |
| 134 | 3/8" | 3/8" | 1/2" | Fibre | 27.00 |

Long Shaft Type

| No. | A | B | C | Material | NET Per C |
|-----|------|------|------|------------|-----------|
| 160 | 1/4" | 1/4" | 1/4" | Brass N.P. | \$18.00 |
| 161 | 3/8" | 3/8" | 1/2" | Fibre | 18.00 |
| 162 | 1/2" | 1/2" | 1/2" | Brass N.P. | 18.00 |
| 163 | 3/8" | 3/8" | 1/2" | Fibre | 18.00 |

Short Shaft Type

| No. | A | B | C | Material | NET Per C |
|-----|------|------|------|------------|-----------|
| 160 | 1/4" | 1/4" | 1/4" | Brass N.P. | \$18.00 |
| 161 | 3/8" | 3/8" | 1/2" | Fibre | 18.00 |
| 162 | 1/2" | 1/2" | 1/2" | Brass N.P. | 18.00 |
| 163 | 3/8" | 3/8" | 1/2" | Fibre | 18.00 |

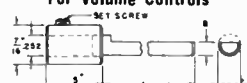
MINIATURE EXTENDER

With Allen Head Set Screws

| No. | A | B | Material | NET Per C |
|-----|------|------|------------|-----------|
| 189 | 1/8" | 1/8" | Brass N.P. | \$18.00 |

SHAFT EXTENDERS

For Volume Controls



| No. | A | B | NET Per C |
|------|------|------|-----------|
| 2352 | 1/4" | 1/4" | \$21.00 |
| 2354 | 3/8" | 3/8" | 24.00 |
| 2355 | 1/2" | 1/2" | 27.00 |

BUSHING EXTENDERS

For Volume Controls



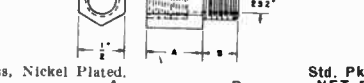
| No. | A | B | NET Per C |
|------|------|------|-----------|
| 2351 | 1/4" | 1/4" | \$21.00 |
| 2353 | 3/8" | 3/8" | 24.00 |
| 2355 | 1/2" | 1/2" | 27.00 |

SHAFT LOCKS

Brass, Nickel Plated.

| No. | A | B | NET Per C |
|------|--------|--------|-----------|
| 2350 | 1/4" | 1/4" | \$21.00 |
| 2351 | 3/8" | 3/8" | 24.00 |
| 2352 | 1/2" | 1/2" | 27.00 |
| 2353 | 1 1/4" | 1 1/4" | 36.00 |
| 2354 | 1 1/2" | 1 1/2" | 36.00 |
| 2355 | 2" | 2" | 36.00 |

FLEXIBLE SHAFTS



| No. | Size "A" | Description | NET Per C |
|-----|----------|-------------------|-----------|
| 151 | 3" | With 1/4" hub | \$45.00 |
| 152 | 6" | With 1/4" hub | 60.00 |
| 153 | 3 3/8" | With 1/4" coupler | 90.00 |
| 154 | 6 3/8" | With 1/4" coupler | 105.00 |

High quality phosphor bronze non-magnetic, non-rusting flexible shafts. Remote control when necessary to mount condensers and potentiometers away from panel at unusual angles. Turns at any angle up to 90°; free from back lash.

SHAFT WRENCH



| No. | NET Per C |
|-----|-----------|
| 999 | \$45.00 |

Specially designed double end wrench, offset. One end for volume control nuts; other end for toggle switch nuts. Steel, Cadmium Plated.

Std. Pkg. 25

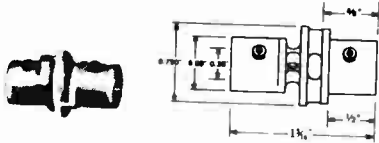
| No. | NET Per C |
|-----|-----------|
| 999 | \$21.00 |

HERMAN H. SMITH, INC.



"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

NYLON FLEXIBLE SHAFT COUPLING



DESCR.: Molded nylon with molded-in brass bushings. Hi-temp nylon not influenced by moisture. Designed for long reach shaft coupling. Supplied with 2 Allen head set screws.

| No. | Std. Pkg. 25 | NET Ea. |
|-----|--------------|---------|
| 164 | | \$1.05 |

BRASS THREADED RODS



| 1-Ft. Length No. | NET Ea. | Threaded | 2-Ft. Length No. | NET Ea. |
|------------------|---------|----------|------------------|---------|
| | | | | |
| 1400-1 | \$.24 | 6-32 | 1400-2 | \$.48 |
| 1401-1 | .24 | 8-32 | 1401-2 | .48 |
| 1402-1 | .36 | 10-32 | 1402-2 | .72 |
| 1403-1 | .54 | 1/4-20 | 1403-2 | 1.08 |

NYLON THREADED RODS

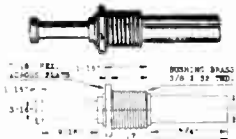


| 1-Ft. Length No. | NET Ea. | Threaded | 2-Ft. Length No. | NET Ea. |
|------------------|---------|----------|------------------|---------|
| | | | | |
| 1420-1 | \$.90 | 6-32 | 1420-2 | \$1.08 |
| 1421-1 | 1.02 | 8-32 | 1421-2 | 2.04 |
| 1422-1 | 1.08 | 10-32 | 1422-2 | 2.16 |
| 1423-1 | 1.20 | 1/4-20 | 1423-2 | 2.40 |

PLAIN RODS

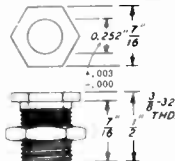
Brass Fibre and Nylon

| No. | Type | Length | Dia. | NET Ea. |
|------|------------|--------|------|---------|
| 1404 | Brass N.P. | 6" | 1/8" | \$.20 |
| 1405 | Brass N.P. | 12" | 1/8" | .40 |
| 1406 | Fibre | 8" | 1/8" | .15 |
| 1407 | Fibre | 12" | 1/8" | .30 |
| 1408 | Nylon | 8" | 1/8" | .30 |
| 1049 | Nylon | 12" | 1/8" | .45 |



DIAL DRIVE ASSEMBLY
Brass, Nickel Plated
Std. Pkg. 25

| | |
|---------|-------------------|
| No. 126 | NET Per C \$24.00 |
|---------|-------------------|



PANEL BEARINGS
Brass, Nickel Plated

| No. | Type | Std. Pkg. | NET Per C |
|-----|-----------|-----------|-----------|
| 119 | Standard | 100 | \$15.00 |
| 184 | Miniature | 25 | 15.00 |



CAPTIVE SCREW & BUSHING
Large Head
BODY: BRASS, nickel plated.
DESCR.: Supplied with panel bushing as shown. Used extensively for quick removal of panels from chassis. Non-removable from panel.

| No. | Panel Bushing Length (L) | NET Per C |
|--------|--------------------------|-----------|
| 2375-A | 1/2" | \$75.00 |
| 2365-B | 3/8" | 75.00 |
| 2365-C | 5/16" | 75.00 |



CAPTIVE SCREW & BUSHING
Small Head
BODY: BRASS, nickel plated.
DESCR.: Supplied with panel bushing as shown. Used extensively for quick removal of panels from chassis. Non-removable from panel.

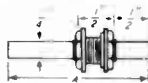
| No. | Panel Bushing Length (L) | NET Per C |
|--------|--------------------------|-----------|
| 2375-A | 1/2" | \$60.00 |
| 2375-B | 3/8" | 60.00 |
| 2375-C | 5/16" | 60.00 |

THUMB SCREW

BODY: BRASS, nickel plated.
DESCR.: Used extensively for quick removal of panels from chassis.

| No. | Thread | Std. Pkg. 25 | NET Per C |
|------|--------|--------------|-----------|
| 2366 | 6-32 | | \$24.00 |
| 2367 | 8-32 | | 24.00 |
| 2368 | 10-32 | | 24.00 |

PANEL BEARING ASSEMBLY



Use our standard #119 Panel Bearing. Nickel plated overall.

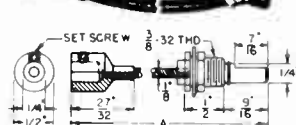
| No. | Length "A" | Std. Pkg. 25 | NET Per C |
|-----|------------|--------------|-----------|
| 148 | 3" | | \$33.00 |
| 149 | 4" | | 39.00 |

MINIATURE PANEL BEARING ASSEMBLY

Miniature 1/8" shaft assembly, using our standard #184 Panel Bearing. Brass, nickel plated overall.

| No. | Length "A" | Std. Pkg. 25 | NET Per C |
|------|------------|--------------|-----------|
| 1448 | 2" | | \$39.00 |
| 1449 | 4" | | 39.00 |

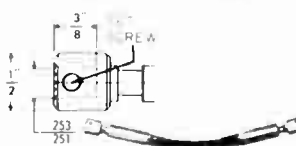
BI-DIRECTIONAL FLEXIBLE SHAFT AND PANEL BEARING



Combination of 1/4" Coupler at one end and Panel Bearing Assembly at other. High quality phosphor bronze non-magnetic, non-rusting flexible shaft, turns at any angle up to 90°. Free from backlash.

| No. | Length "A" | NET Ea. |
|-----|------------|---------|
| 165 | 4 1/2" | \$1.35 |
| 166 | 7 1/2" | 1.50 |

FLEXIBLE SHAFT ASSEMBLY

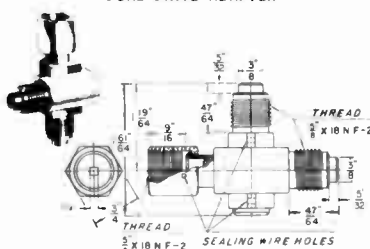


With Casing

Bi-directional high quality flexible shaft. Cable casing acts as a support and reduces amount of deflection in cable. Metal parts steel cadmium plated.

| No. | Length | NET Ea. |
|-----|--------|---------|
| 169 | 12" | \$6.00 |
| 170 | 12" | 6.30 |

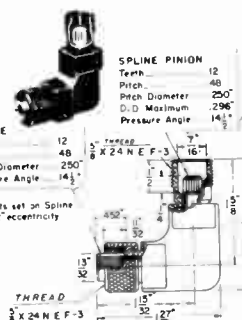
DUAL DRIVE ADAPTER



Designed primarily to be utilized to drive more than one unit from the same power source and/or to provide two gear ratios from the same source. Right hand rotation. Gear Ratio 1:1.

| | |
|---------|-----------------|
| No. 167 | NET Ea. \$15.00 |
|---------|-----------------|

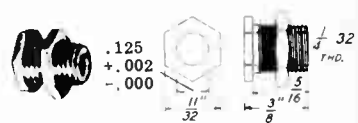
RIGHT ANGLE ADAPTER



Non-magnetic, designed to provide a connection for flexible shaft control where space limitations do not permit a connection without bending the shaft into too small a radius. Gear ratio 1:1.

| No. | NET Ea. |
|-----|---------|
| 168 | \$30.00 |

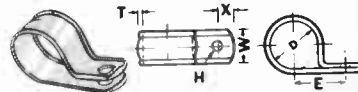
MINIATURE PANEL BEARING



Mounts in 1/4" hole.

| | | |
|---------|--------------|-------------------|
| No. 184 | Std. Pkg. 25 | NET Per C \$15.00 |
|---------|--------------|-------------------|

PLASTIC CABLE CLIPS



These clips are well known for ability to withstand age, moisture, corrosion, shock and vibration. This tough, light weight, durable clip withstands temperatures from -60 to +175 degrees F. Made to MIL Std. 212A (Ships)

T .060 - W 1/2" - X 7.32" - H .204

| No. | Hole (D) | E | NET Per C | NET Per M |
|-----|----------|-------|-----------|-----------|
| 831 | 3/16 | .360 | \$2.34 | \$19.20 |
| 832 | 1/8 | .425 | 2.40 | 19.80 |
| 833 | 3/16 | .457 | 2.58 | 21.60 |
| 834 | 1/4 | .498 | 2.85 | 24.00 |
| 835 | 5/16 | .529 | 3.00 | 25.20 |
| 836 | 3/8 | .560 | 3.30 | 27.60 |
| 837 | 1/2 | .592 | 3.60 | 30.00 |
| 838 | 5/8 | .623 | 4.20 | 34.20 |
| 839 | 3/4 | .654 | 4.50 | 39.60 |
| 840 | 7/8 | .732 | 4.80 | 42.60 |
| 841 | 1 | .783 | 5.10 | 44.40 |
| 842 | 1 1/8 | .815 | 5.40 | 48.00 |
| 843 | 1 1/4 | .908 | 5.70 | 51.60 |
| 844 | 1 3/8 | .970 | 6.00 | 54.60 |
| 845 | 1 1/2 | 1.062 | 6.30 | 58.20 |

Standard Package 100

NYLON

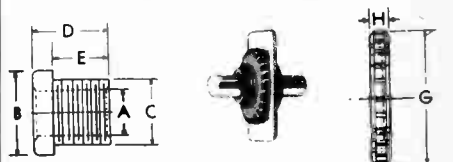
These strong and tough molded nylon clamps hold their shape under severest stress. Do not support combustion. Withstands temperatures from -60 to +250 degrees F. Made to MIL-17091A Amend. 2

1/8" to 1/2" (D) 9 1/2" to 1 1/4" (D)

| No. | Hole (D) | E | NET Per C | NET Per M |
|-----|----------|-------|-----------|-----------|
| 771 | 3/16 | .310 | \$3.60 | \$30.00 |
| 772 | 1/8 | .373 | 3.90 | 31.80 |
| 773 | 3/16 | .407 | 4.20 | 34.80 |
| 774 | 1/4 | .418 | 4.65 | 38.40 |
| 775 | 5/16 | .479 | 4.80 | 40.20 |
| 776 | 3/8 | .510 | 5.10 | 42.60 |
| 777 | 1/2 | .542 | 5.40 | 45.00 |
| 778 | 5/8 | .623 | 6.60 | 55.80 |
| 779 | 3/4 | .651 | 7.20 | 65.40 |
| 780 | 7/8 | .752 | 7.50 | 69.00 |
| 781 | 1 | .783 | 8.10 | 75.00 |
| 782 | 1 1/8 | .845 | 8.70 | 81.00 |
| 783 | 1 1/4 | .908 | 10.20 | 96.00 |
| 784 | 1 3/8 | 1.062 | 12.00 | 108.00 |
| 785 | 1 1/2 | 1.062 | 13.80 | 120.00 |

Standard Package 100

INSULATED RUBBER GROMMETS

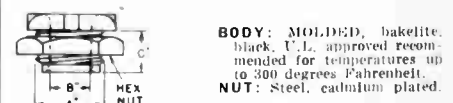


Std. Pkg. 25

Black Phenolic-Matte Finish

| No. | BUSHING | | | COLLAR | | | NET Per C |
|-----|---------|--------|--------|--------|--------|--------|-----------|
| | A | B | C | D | E | G | |
| 931 | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" | 1 1/8" | \$17.40 |
| 932 | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" | 18.00 |
| 933 | 1 3/8" | 1 3/8" | 1 3/8" | 1 3/8" | 1 3/8" | 1 3/8" | 19.80 |
| 934 | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 21.60 |
| 935 | 1 5/8" | 1 5/8" | 1 5/8" | 1 5/8" | 1 5/8" | 1 5/8" | 21.60 |

BAKELITE INSULATING BUSHINGS



BODY: MOLDED, bakelite, black, U.L. approved recommended for temperatures up to 300 degrees Fahrenheit.
NUT: Steel, cadmium plated.

| No. | A | B | C | NET Per C |
|------|--------|--------|--------|-----------|
| 2136 | 1 1/2" | 1 1/2" | 1 1/2" | \$8.40 |
| 2137 | 1 3/4" | 1 3/4" | 1 3/4" | 9.00 |
| 2138 | 2 1/4" | 2 1/4" | 2 1/4" | 9.60 |
| 2139 | 2 3/4" | 2 3/4" | 2 3/4" | 10.20 |

HERMAN H. SMITH, INC.



"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



INTERNATIONAL MORSE CODE COURSES

5 RECORDS IN ALBUM—78 R.P.M.
Ten Lessons Up to 15 Words Per Minute
The complete album includes 5 records and 20-page SMITH Instruction Book

The very latest in scientific code-teaching techniques! The SMITH system uses the proven EAR & EYE method, with carefully graduated lessons based on military teaching procedures.

| No. | Description | NET Each |
|------|--------------------------------------|----------|
| 2400 | Complete Album with Instruction Book | \$6.00 |
| 2415 | 20-Page Instruction Book Only | .48 |



SINGLE RECORD 33-1/3 R.P.M.

TEN LESSONS UP TO 15 WORDS PER MINUTE
Complete on Two Sides

This twelve inch long play record contains all ten of the Code Course Lessons listed above, five on each side. 20-Page SMITH Instruction Book is included, and the record is housed in attractive, sturdy jacket with International Morse Code table on reverse side.
No. 2420 NET Each \$4.80



ADVANCED CODE COURSE

Single Record—33 1/3 R.P.M.
TWELVE LESSONS 16 to 25 Words Per Minute

Specially prepared to increase skills in copying code at high speeds. 12 step-by-step lessons are provided plus specific directions with each.

20 page Advanced Code Instruction Book included. Record comes in sturdy jacket with International Morse Code table on reverse side.
No. 2435 Advanced Code Course complete with 20 page instruction Book NET \$4.80

BEGINNERS AND ADVANCED CODE COURSES IN COMBINATION PACKAGE

Advanced Code Course #2435 PLUS Beginners' Code Course #2420 (see above) both complete with 20-page instruction books, attractively packaged in combination carton.
No. 2436 NET \$9.00



CODE PRACTICE OSCILLATOR & MONITOR

Ideal for the beginner as well as the experienced operator, this versatile instrument can be used as a code practice oscillator, as a keying monitor to check ICW signals, or as a monitor for phone signals.

Two tubes are used, in an up to date circuit that provides continuously variable tone and volume. Self-contained PM speaker affords ample volume for group use, with phone jack available for individual headphone listening. The handsome Hammertone finish cabinet has additional provision for wall mounting, an exclusive SMITH feature that eliminates need for valuable desk space. The unit is designed for use on 110 Volts AC or DC, and is supplied complete with two tubes.

| No. | Description | NET Each |
|------|-------------|----------|
| 2425 | Kit | \$13.50 |
| 2426 | Wired | 18.00 |

* These Items Subject to Special Jobber Discount



COMPACT — INGENIOUS — HANDSOME!

Perfect for the beginner! High frequency buzzer has variable pitch adjustment. Sturdy fully adjustable key and terminal binding posts, all plated. Uses one standard flashlight cell. All elements mounted on heavy molded bakelite base 6 3/4" x 2 3/4". Supplied less battery.
No. 2443 NET Each \$3.30

BUZZER ONLY

Complete with black bakelite cover.
No. 2444 NET Each \$1.20



TELEGRAPH KEY

A well-built, smooth operating key, low priced, ideal for the beginner. Molded bakelite base and knob. Simple adjustments. All metal parts plated, 1/8" silver contacts. Base size 3 3/4" x 1 1/8"
No. 2442 NET Each \$9.99

HIGH SENSITIVITY HEADPHONES



The latest in deluxe design, with many features of more expensive types. Featherweight construction assures fatigue-free use. Alnico V magnets, dual coil construction provide excellent tonal fidelity. Adjustable vinyl covered headband, molded plastic cases. Cord equipped with phone tips.

| No. | Description | Ohms | NET Each |
|------|-------------|------|----------|
| 2441 | Single | 1000 | \$1.65 |
| 2440 | Double | 2000 | 1.35 |
| 2446 | Single | 2-4 | 3.30 |
| 2447 | Double | 4-8 | 1.20 |
| 2448 | Single | 2000 | 1.80 |
| 2449 | Double | 4000 | 3.00 |

FOR STEREO USE

Same as above, except each phone has leads brought out separately.

| | | | |
|------|--------|------|------|
| 2477 | Double | 2000 | 3.00 |
| 2478 | Double | 4-8 | 3.00 |
| 2479 | Double | 4000 | 3.30 |

RUBBER EAR CUSHIONS



Finest quality soft rubber ear cushions, fit all standard earphones. For comfortable listening over long periods of time.
No. 2410 Per Pair \$3.90



PLUG-IN COILS

For Short Wave and Broadcast
Molded bakelite, black. Precision wound low loss forms. Four prongs. Equipped with special rim making it easy to insert and pull out. Grooved for color coding.

| No. | Description | NET Each |
|------|------------------------------|----------|
| 2408 | No Winding | \$1.36 |
| 2413 | Set of 4—9 1/2 to 217 Meters | 3.00 |
| 2414 | Set of 2—190 to 500 Meters | 2.40 |
| 2412 | No Winding - Ribbed, 6-Prong | .60 |



JUNIOR CODE OSCILLATOR

For Headset Only

A neat, compact little unit that provides a clean audio tone. Ideal for code practice. It is equipped with two standard telephone jacks, to take phone plugs of the type used in an improved circuit, designed for operation on 110 volts AC or DC. Available in wired or kit form, either type supplied with tube.

| No. | Description | NET Each |
|------|-------------|----------|
| 2430 | Kit | \$6.60 |
| 2431 | Wired | 8.70 |

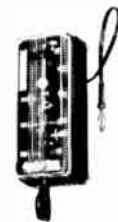
both key and headset. A single 12AX7 tube is used in an improved circuit, designed for operation on 110 volts AC or DC. Available in wired or kit form, either type supplied with tube.



COMPLETE MULTI-VIBRATOR COURSE

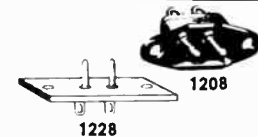
"AutoTutor" Modern Teaching Technique, using new "re-inforced learning" principles. Designed as a refresher course for the practicing technician or engineer; as a detailed exploration of Multi-vibrators, for student electronic technician. Complete course consists of 4 hi-fi unbreakable 33 1/3 RPM recordings, a 56-page instruction book, illustrations and checksheets, in attractive album package.

No. 2450 NET \$12.60



Semi-Automatic TELEGRAPH KEY

A well-constructed easy-operating automatic key at a very low price! Provides numerous adjustments to suit any operator. Well balanced, has large control lever, tension adjustments on both dot and dash sides, scale type weight on pendulum arm. Molded bakelite weighted base is equipped with suction cup feet. A really substantial, good looking Key that the Hams will Love at First Sight! Complete with Cord and Wedge. Dustproof cover.
No. 2445 NET \$12.00



INTERLOCK PLUGS

| No. | Std. Pkg. 100 Type | NET Per C |
|------|--------------------|-----------|
| 1208 | Recessed | \$7.80 |
| 1228 | Flush | 5.40 |



AMERICAN-FOREIGN PLUG ADAPTERS

Streamlined bakelite plug adapters. Adapts from American to Foreign type.

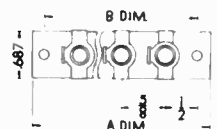
| No. | Female End | Male End | NET Per C |
|-----|-------------|-------------|-----------|
| 852 | American | Continental | \$24.00 |
| 856 | American | British | 24.00 |
| 851 | Continental | Plug | 18.00 |

SCRATCH AWL



Scratch awl with unbreakable amber handle. Overall length 5". A "must" in a serviceman's tool kit.
No. 814 NET Per C \$36.00

MULTIPLE PHONO JACKS



Individual phono jacks (no interconnected grounds) mounted on narrow width bakelite strip.

| No. | No. of Jacks | Dimensions "A" | Dimensions "B" | Std. Pkg. 50 | NET Per C |
|------|--------------|----------------|----------------|--------------|-----------|
| 1261 | 1 | 1 3/8" | 1.000 | | \$4.80 |
| 1262 | 2 | 2 9/16" | 1.625 | | 8.70 |
| 1263 | 3 | 2 5/8" | 2.250 | | 14.10 |
| 1264 | 4 | 3 1/4" | 2.875 | | 17.10 |
| 1265 | 5 | 3 7/8" | 3.500 | | 21.60 |
| 1266 | 6 | 4 1/2" | 4.125 | | 25.20 |
| 1267 | 7 | 5 1/8" | 4.750 | | 29.40 |
| 1268 | 8 | 5 3/4" | 5.375 | | 33.60 |



HERMAN H. SMITH, INC.

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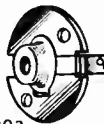
PHONO PLUGS



RCA Type Phone Plug. For use with record players, recording and reproducing equipment, etc. Extra large hole in cap (175%) for coaxial cable. Std. Pkg. 100

| No. | Type | NET Per C |
|------|----------------------------|-----------|
| 1201 | Long Pin (1" overall) | \$3.60 |
| 1202 | Short Pin (13/16" overall) | 3.60 |

PHONO JACKS



Female for No. 1201 plug. Single prong positive grip jack mounted on 1/16" bakelite with 11/16" mounting centers. Std. Pkg. 100

| No. | NET Per C |
|--------|------------------------|
| 1203 | \$4.20 |
| 1203-1 | Insulating Washer 1.80 |



Small, compact... where space is at a premium. 7/16" Mtg. Ctrs.

| No. | NET Per C |
|------|-----------|
| 1223 | \$7.20 |



Space Saver... Rivets and grounds to chassis. Mounts in 19/64" hole.

| No. | NET Per C |
|------|-----------|
| 1233 | \$6.60 |

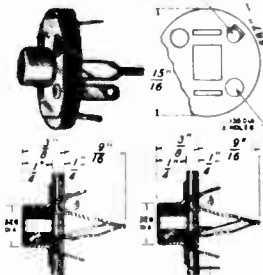
PANEL MOUNT PHONO JACK



Mounts in 29/64" hole (.453) with nut and washer. Easy installation for the home Hi-Fi enthusiast.

| No. | NET Per C |
|------|-----------|
| 1247 | \$21.00 |

STEREO PHONO JACKS



Used for stereo input, phono-graph input and amplifier connections. Switches out single track audio for double track stereo when phono plug is inserted.

| No. | Circuit | NET Per C |
|------|----------------|-----------|
| 1215 | 2-Cond. Closed | \$21.00 |
| 1216 | 3-Cond. Closed | 27.00 |

HANDY GRIP PHONO PLUG



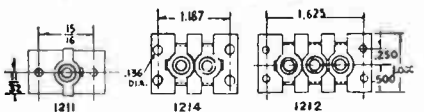
Quick connect: strip wire, solder inner conductor to pin and either solder braid to lug or crimp to lug. Fits all standard phono jacks.

| No. | NET Per C |
|------|-----------|
| 1246 | \$9.00 |

PHONO JACKS



Used on recording units, phono plays, etc. Std. pkg. 50



| No. | NET Per C |
|---------------------------------------|-----------|
| 1211—Single Jack | \$ 7.20 |
| 1214—Double Jack | 9.60 |
| 1212—Triple Jack | 15.00 |
| 1214-1—Insulating Washer for No. 1214 | 2.40 |

SHIELDED EXTENSION JACK



Brass shell, cadmium plated, 1 7/8" long, with black bakelite insert. Provides insulation for solder-coated positive grip contact. Uses No. 1201 phono plug. Std. Pkg. 50

| No. | NET Per C |
|------|-----------|
| 1237 | \$27.00 |



| No. | Type | NET Per C |
|------|--|-----------|
| 1200 | Motorola Type Plug | \$10.20 |
| 1240 | Motorola Type Plug | \$10.20 |
| 1207 | Antenna Connector, Takes 1200 Plug | 18.00 |
| 1204 | Lead-in Adapter, converts Motorola pin plug to Delco | 9.00 |
| 1235 | Female for #1200 plug, without flange | 7.20 |

Auto Radio IGNITION SUPPRESSORS



| No. | Type | NET Per C |
|-----|------------------------------|-----------|
| 805 | Snap-On Type Suppressor | \$27.00 |
| 806 | Univ. Type with Double Thrd. | 27.00 |
| 807 | Angle Type Suppressor | 33.00 |
| 808 | Distributor Screw Type | 45.00 |
| 809 | Distributor Plug-in Type | 36.00 |
| 810 | Double Screw Type | 27.00 |

AUTO RADIO CONDENSERS



Eliminates radio interference caused by auto electrical system. Fits all cars — Proven quality — Guaranteed long life.

| No. | Cap. | Type | NET Per C |
|-----|---------|----------------|-----------|
| 811 | .5 MFD | General, Univ. | \$60.00 |
| 812 | .25 MFD | Universal | 54.00 |

WIRED FUSE RETAINER



Simply cut wire, strip, and put in line. Will accommodate either 3 A.G. 20 amp. or SFE 14 amp. fuse.

| No. | NET Each |
|----------------------|----------|
| 1304 | \$ 30 |
| 1304-D—Display of 24 | 7.20 |

ANTENNA CONNECTOR



For use as connection of auto radio antenna lead-in to auto radio receiver.

| No. | NET Per C |
|------|-----------|
| 1300 | \$17.00 |

FUSE RETAINER



Recommended for use in auto radio power supply cables.

| No. | NET Per C |
|------|-----------|
| 1301 | \$10.20 |

PARTS FOR CONNECTOR & RETAINER

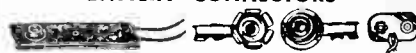
| No. | Type | NET Per C |
|------|----------------------------|-----------|
| 1305 | Male Cap for #1300 & #1301 | \$1.98 |
| 1306 | Female Shell for #1300 | 2.31 |
| 1307 | Contact for #1300 & #1301 | 3.30 |
| 1308 | Spring for #1300 & #1301 | .66 |
| 1309 | Washer for #1300 & #1301 | .33 |
| 1310 | Insulating Tube for #1301 | .60 |
| 1311 | Female Shell for #1301 | 3.30 |

BATTERY PLUGS



| No. | Voltage | Ever-ready No. | RCA No. | Philco No. | NET Per C |
|-----|---------------|----------------|---------|------------|-----------|
| 915 | 1 1/2 "A" | 711 | VS001 | | |
| | | 742 | VS005 | P91, P96 | |
| | | 713 | VS007 | P8F1 | |
| | | 1052P | VS008 | | 150.00 |
| 916 | 7/8 "A" | 687 | VS003 | | 6.60 |
| 917 | 6 "A", 90 "B" | | VS011 | P60ASF4 | 6.00 |
| 918 | 6 "A", 90 "B" | | VS016 | P11AFL | 6.60 |

BATTERY CONNECTORS



| No. | Volts | Eveready No. | Std. Pkg. | NET Per C |
|------|--------|--------------------|-----------|-----------|
| 1205 | 67 1/2 | 467, 455, 457 | 25 | \$18.00 |
| 1206 | 90 | 490 | 25 | 24.00 |
| 1210 | 67 1/2 | 477, 437, 479, 495 | 25 | 18.00 |
| 1217 | 7 1/2 | 707 | 25 | 18.00 |
| 1218 | 9 | 276 | 25 | 18.00 |
| 1219 | 4 1/2 | 243 | 25 | 24.00 |
| 1234 | 45 | 216, 246, 415, 416 | 25 | 24.00 |
| 1296 | | Female | 100 | 4.50 |
| 1297 | | Male | 100 | 4.50 |

MINIATURE HUM BALANCING CONTROLS



Rheostat rated at 2 watts, grounded rotor, tolerance ± 20%. Screwdriver slot adjustment from front or rear. Useful for hum balancing, centering, hold and locking, linearity, AGC sensitivity, etc.

| No. | Total Res. Ohms | NET Per C |
|------|-----------------|-----------|
| 2291 | 50 | \$30.00 |
| 2292 | 100 | 39.00 |
| 2293 | 300 | 39.00 |
| 2294 | 500 | 39.00 |
| 2295 | 700 | 39.00 |
| 2296 | 1000 | 39.00 |
| 2297 | 2000 | 39.00 |
| 2298 | 3000 | 39.00 |
| 2299 | 4000 | 39.00 |

HEX AND SPLINE KEYS

Made of special alloy steel, tempered to avoid brittleness and impose maximum resistance to torsional strain. Ends ground for easy insertion.

| No. | Screw | Hex | NET Per C |
|-----|--------|------|-----------|
| 340 | No. 2 | .031 | \$7.80 |
| 341 | No. 3 | .050 | 7.80 |
| 342 | No. 4 | .062 | 7.80 |
| 343 | No. 5 | .078 | 7.80 |
| 344 | No. 6 | .093 | 9.00 |
| 345 | No. 8 | .125 | 9.00 |
| 346 | No. 10 | .156 | 9.00 |

SPLINE KEYS

| No. | Screw | O. D. | NET Per C |
|-----|------------|-------|-----------|
| 370 | No 4 | .058 | \$7.80 |
| 371 | No 5 | .068 | 7.80 |
| 372 | No 6 | .075 | 7.80 |
| 373 | No 8 | .093 | 7.80 |
| 374 | No 10 | .109 | 9.00 |
| 375 | No. 1 1/4" | .143 | 9.00 |
| 376 | No. 3/16" | .182 | 9.00 |

HEX AND SPLINE KEY KITS

Attractive tearproof vinyl plastic kit with individual pockets for each of six keys in kit. Std. Pkg. 25.

| No. | NET Per C |
|-----|-----------|
| 355 | \$100.00 |
| 385 | \$100.00 |
| 395 | \$100.00 |
| 390 | \$100.00 |
| 395 | \$200.00 |

DISPLAY CARDS

| No. | NET Each | |
|------|-----------------------------------|---------|
| 355D | Display of 24 Hex Kits No. 355 | \$24.00 |
| 385D | Display of 24 Spline Kits No. 385 | 24.00 |
| 390D | Display of 24 Comb. Kits No. 390 | 24.00 |
| 395D | Display of 20 Comb. Kits No. 395 | 40.00 |

NYLON STRAIN RELIEF BUSHINGS

One piece construction. Eliminates grommets, wire knots and costly labor. Completely insulates wire from chassis and prevents cord pull push and twist. No. 937 ideal for small mike cables; No. 938 for line cords; No. 939 for Co-Ax Wire.

| No. | Wire Size | A | B | C | D | NET Per C |
|-----|-------------|------|------|------|-------|-----------|
| 937 | 1/8 - 3/16" | .375 | .440 | .415 | 1/16" | \$3.60 |
| 938 | SP-1 & SP-1 | .437 | .468 | .406 | 1/16" | 3.60 |
| 939 | .235-.265 | .500 | .560 | .438 | 1/32" | 4.20 |



No. 940 Setting Pliers NET Each \$10.20



HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

BRASS MACHINE SCREWS Round Head Nickel Plated

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|-------------|-------|-----------|
| 1044M | \$6.31 | 4-36 x 1/4" | 1044C | \$8.80 |
| 1045M | 7.14 | 4-36 x 3/8" | 1045C | .88 |
| 1046M | 8.05 | 4-36 x 1/2" | 1046C | .98 |
| 1047M | 6.31 | 4-40 x 1/4" | 1047C | .80 |
| 1048M | 6.72 | 4-40 x 3/8" | 1048C | .61 |
| 1049M | 8.05 | 4-40 x 1/2" | 1049C | .98 |
| 1050M | 8.55 | 6-32 x 1/4" | 1050C | 1.03 |
| 1051M | 9.05 | 6-32 x 3/8" | 1051C | 1.08 |
| 1052M | 10.29 | 6-32 x 1/2" | 1052C | 1.20 |
| 1056M | 12.62 | 8-32 x 1/4" | 1056C | 1.43 |
| 1057M | 13.28 | 8-32 x 3/8" | 1057C | 1.50 |
| 1058M | 15.11 | 8-32 x 1/2" | 1058C | 1.68 |

BINDING HEAD SCREWS Steel Nickel Plated

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|-------------|-------|-----------|
| 1425M | \$6.25 | 6-32 x 1/4" | 1425C | \$1.05 |
| 1426M | 6.75 | 6-32 x 3/8" | 1426C | 1.15 |
| 1427M | 7.25 | 6-32 x 1/2" | 1427C | 1.20 |
| 1428M | 8.00 | 8-32 x 1/4" | 1428C | 1.35 |
| 1429M | 8.65 | 8-32 x 3/8" | 1429C | 1.50 |
| 1430M | 9.30 | 8-32 x 1/2" | 1430C | 1.55 |

RACK SCREWS Oval Head, Steel, Nickel Plated



Specially recommended for mounting panels in racks and cabinets. Available in gross packages or packed 1000 to the box.

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|--------------|-------|-----------|
| 1111M | \$7.22 | 10-32 x 1/2" | 1111C | \$9.90 |
| 1112M | 8.63 | 10-32 x 3/4" | 1112C | 1.03 |

COUNTERSUNK WASHERS Brass, Nickel Plated



Recommended for use with Rack Screws designated above.

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|------|-------|-----------|
| 1115M | \$3.07 | 6 | 1115C | \$4.48 |
| 1116M | 3.24 | 6 | 1116C | .50 |
| 1117M | 5.40 | 10 | 1117C | 1.03 |

FLAT WASHERS Brass Nickel Plated

| No. | NET Per M | Size | Material | No. | NET Per C |
|-------|-----------|--------------|-----------|-------|-----------|
| 1149M | \$6.60 | 1x3/4x.037" | Brass | 1149C | \$8.83 |
| 1150M | 4.80 | 6x3/4x.012" | Phos. Br. | 1150C | .65 |
| 1151M | 4.80 | 8x3/4x.012" | Phos. Br. | 1151C | .65 |
| 1152M | 6.60 | 10x3/4x.037" | Brass | 1152C | .83 |



STEEL SPADE BOLTS

Steel, cadmium plated finish, threaded 6-32, thread length 3/4", length overall 3/4".

| No. | NET Per M | NET Per C |
|------|-----------|-----------|
| 1500 | | \$10.20 |

ORILL & TAP KIT



- Hams
- Laboratories
- Servicemen

Specially designed for electronic bench duty, this kit contains the most popular sizes of taps and corresponding tap and body drills for precise and speedy work. Drill and tap size identifications are engraved on the steel cadmium plated drill stand, to facilitate correct replacement as needed. Contains: 4-40, 6-32, 8-32, 10-32 Taps with eight corresponding tap and body drills.

| No. | NET Ea. |
|-----|----------------|
| 750 | Kit \$9.00 |
| 749 | Stand Only .66 |

Replacement Drills Available



VOLUME CONTROL AND TOGGLE SWITCH NUTS Nickel Plated Std. Pkg. 500

| No. | Type | Dimensions | Per M |
|------|------------------|-----------------|---------|
| 1195 | Vol. Cont. Brass | 3/4-32x1/2x3/32 | \$25.00 |
| 1199 | Vol. Cont. Steel | 3/4-32x1/2x3/32 | 20.00 |
| 1196 | Toggle Sw. Hex | 15-32x3/16x3/16 | 30.00 |
| 1197 | Toggle Sw. Ring | 15-32x3/16x3/16 | 50.00 |

LOCK WASHERS Steel, Cadmium Plated Internal Teeth

| No. | NET Per M | Type | No. | NET Per C |
|-------|-----------|--------|-------|-----------|
| 1127M | \$3.50 | No. 4 | 1127C | \$.51 |
| 1128M | 3.50 | No. 6 | 1128C | .51 |
| 1129M | 3.83 | No. 8 | 1129C | .55 |
| 1130M | 3.83 | No. 10 | 1130C | .55 |
| 1132M | 5.00 | 1 1/4" | 1132C | .67 |
| 1131M | 8.50 | 3/4" | 1131C | 1.02 |

| No. | NET Per M | Type | No. | NET Per C |
|-------|-----------|--|-------|-----------|
| 1145M | \$8.50 | Narrow Rim Control Shaft Lockwasher Internal Teeth | 1145C | \$1.02 |
| 1146M | \$8.50 | Narrow Rim Toggle Switch Lockwasher Internal Teeth | 1146C | \$1.02 |

External Teeth

| No. | NET Per M | Type | No. | NET Per C |
|-------|-----------|--------|-------|-----------|
| 1139M | \$3.50 | No. 4 | 1139C | \$.51 |
| 1140M | 3.50 | No. 6 | 1140C | .51 |
| 1141M | 3.83 | No. 8 | 1141C | .55 |
| 1142M | 3.83 | No. 10 | 1142C | .55 |
| 1144M | 5.83 | 1 1/4" | 1144C | .67 |
| 1143M | 8.50 | 3/4" | 1143C | 1.02 |

HEXAGON NUTS Brass, Nickel Plated

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|---------------|-------|-----------|
| 1188M | \$9.33 | 4-36 x 1/4" | 1188C | \$1.10 |
| 1189M | 9.25 | 4-40 x 1/4" | 1189C | 1.10 |
| 1189M | 9.17 | 6-32 x 3/8" | 1189C | 1.08 |
| 1190M | 11.08 | 6-32 x 1/2" | 1190C | 1.28 |
| 1192M | 11.08 | 8-32 x 1/4" | 1192C | 1.28 |
| 1193M | 12.08 | 10-32 x 3/16" | 1193C | 1.38 |
| 1187M | 18.00 | 1/2-32 | 1187C | 1.97 |

Steel, Cadmium Plated

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|--------------|-------|-----------|
| 1179M | \$5.25 | 6-32 x 1/4" | 1179C | \$.70 |
| 1180M | 5.55 | 6-32 x 3/8" | 1180C | .72 |
| 1181M | 5.70 | 8-32 x 1/16" | 1181C | .73 |

Steel, Nickel Plated

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|--------|-------|-----------|
| 1186M | 13.20 | 1/4-32 | 1186C | \$1.50 |

SELF TAPPING SCREWS CADMIUM PLATED

| Round Head—Type A—Sharp Point | | | | | |
|-------------------------------|-----------|----------|-------|-----------|--|
| No. | NET Per M | Size | No. | NET Per C | |
| 1801M | \$6.00 | 4 x 1/2" | 1801C | \$.77 | |
| 1802M | 6.67 | 4 x 3/4" | 1802C | .83 | |
| 1803M | 7.00 | 6 x 3/8" | 1803C | .87 | |
| 1804M | 8.10 | 6 x 1/2" | 1804C | .98 | |
| 1805M | 7.50 | 8 x 3/8" | 1805C | .92 | |
| 1806M | 9.45 | 8 x 1/2" | 1806C | 1.12 | |

Round Head—Type Z—Blunt Point

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|----------|-------|-----------|
| 1807M | \$7.00 | 1 x 1/2" | 1807C | \$.87 |
| 1808M | 7.00 | 6 x 1/4" | 1808C | .87 |
| 1809M | 7.00 | 6 x 3/8" | 1809C | .87 |
| 1810M | 8.10 | 6 x 1/2" | 1810C | .98 |
| 1811M | 7.50 | 8 x 3/8" | 1811C | .92 |
| 1812M | 9.45 | 8 x 1/2" | 1812C | 1.12 |

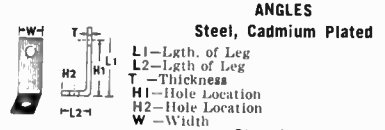
Slotted Hex Head—Type B—Blunt Point

| No. | NET Per M | Size | No. | NET Per C |
|-------|-----------|------------|-------|-----------|
| 1830M | \$9.45 | 6 x 1 1/4" | 1830C | \$1.12 |
| 1831M | 9.45 | 6 x 3/4" | 1831C | 1.12 |
| 1832M | 9.45 | 6 x 1 1/2" | 1832C | 1.12 |
| 1833M | 7.50 | 8 x 3/8" | 1833C | .92 |
| 1834M | 9.45 | 8 x 1 1/2" | 1834C | 1.12 |

SPRING GRID CLIP

Small and large type grid clip used to replace clips that have lost their tension due to heat causing poor contact. Available in bulk or 24, \$4.15. List envelopes on attractive display card.

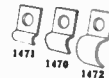
| No. | Type | Per C | Display | NET Per C |
|------|----------|--------|---------|-----------|
| 1288 | 1X2-6BQ8 | \$8.00 | 1288D | \$6.48 |
| 1289 | 1B3-6BQ6 | 8.00 | 1289D | 6.48 |



| No. | "L1" | "L2" | "T" | "H1" | "H2" | "W" | "H1" Hole | "H2" Hole | Net Per C |
|------|--------|--------|-------|--------|--------|------|-----------|-----------|-----------|
| 1444 | 7/16" | 7/16" | .032" | 1 1/4" | 1 1/4" | 3/8" | 3/8" | 3/8" | \$7.22 |
| 1445 | 1/2" | 1/2" | .050" | 1 1/2" | 1 1/2" | 1/2" | 3/8" | 3/8" | .90 |
| 1446 | 3/4" | 3/4" | .030" | 2 1/4" | 2 1/4" | 1/2" | 3/8" | 3/8" | .90 |
| 1447 | 1 1/8" | 1 1/8" | .050" | 3 1/4" | 3 1/4" | 1/2" | 3/8" | 3/8" | 1.02 |



| No. | Material | Size | NET Per C |
|------|------------|---------------|-----------|
| 1474 | Brass N.P. | 1/2" x 1/2" | \$1.80 |
| 1475 | Brass N.P. | 3/8" x 3/8" | 3.60 |
| 1476 | Steel H.T. | 3/4" x 3/4" | 1.50 |
| 1477 | Steel H.T. | 3/8" x 1 1/8" | 1.50 |



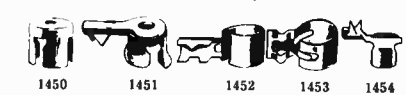
| No. | Length | Width | Cable | NET Per C |
|------|--------|-------|-------|-----------|
| 1471 | 3/8" | 3/8" | 3/8" | \$.78 |
| 1470 | 3/8" | 3/8" | 1/8" | .84 |
| 1472 | 1" | 3/8" | 1/2" | .90 |

FAHNESTOCK SPRING BATTERY CLIPS



| No. | Type | Length | NET Per C |
|-----|--------|--------|-----------|
| 539 | Single | 5/8" | \$1.20 |
| 533 | Single | 3/4" | 1.44 |
| 534 | Single | 1" | 2.10 |
| 535 | Double | 1 1/2" | 2.40 |
| 536 | Double | 2 1/4" | 9.60 |

GRID CAPS



| No. | Tube Type | NET Per C |
|------|------------------|-----------|
| 1450 | 3/8" Glass Tubes | \$1.20 |
| 1451 | 3/8" Glass Tubes | 1.20 |
| 1452 | 3/8" Glass Tubes | 1.20 |
| 1433 | 3/8" Glass Tubes | 1.20 |
| 1454 | 1/4" Mini Tubes | 1.20 |



| No. | Type | Length | Hole | NET Per C |
|------|------------|--------|--------|-----------|
| 1460 | Double Cup | 1 3/8" | No. 10 | \$1.98 |
| 1461 | Double Cup | 1 1/8" | 3/4" | 2.10 |



| No. | Type | NET Per C |
|-----|-----------|-----------|
| 530 | Single | \$12.00 |
| 531 | Double | 21.00 |
| 532 | Clip Only | 1.50 |



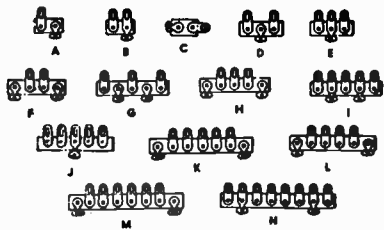
| No. | NET Ea. |
|------|------------------------------|
| 529 | Kit \$9.00 |
| 529D | Display of 24 No. 529 \$8.99 |

HERMAN H. SMITH, INC.



"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

TIE DOWN TERMINAL STRIPS



Standard Type

LUG: BRASS, cadmium plated, spaced $\frac{3}{16}$ " centers.
STRIP: X.P. Bakelite, $\frac{3}{16}$ " wide x .016 thick.
MOUNT.: .140 I.D. for No. 6 screw.

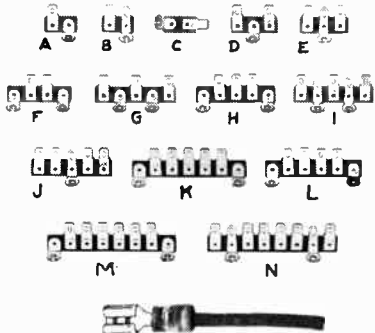
Miniature Type

LUG: BRASS, cadmium plated, spaced $\frac{1}{4}$ " centers.
STRIP: X.P. Bakelite, $\frac{3}{16}$ " wide x .016 thick.
MOUNT.: .096 I.D. for No. 3 screw or $\frac{3}{32}$ rivet.

| No. | NET Per C | Illustration | No. | NET Per C |
|-----|-----------|--------------|------|-----------|
| 861 | \$2.10 | A | 1061 | \$2.40 |
| 862 | 2.10 | B | 1062 | 2.70 |
| 849 | 2.40 | C | — | — |
| 863 | 2.40 | D | 1063 | 3.30 |
| 864 | 2.40 | E | 1064 | 3.60 |
| 867 | 3.60 | F | 1067 | 3.90 |
| 865 | 4.20 | G | 1065 | 5.25 |
| 853 | 4.80 | H | 1073 | 5.25 |
| 868 | 4.20 | I | 1068 | 5.70 |
| 866 | 3.60 | J | 1066 | 5.40 |
| 860 | 4.95 | K | 1060 | 6.60 |
| 869 | 5.10 | L | 1069 | 6.00 |
| 848 | 5.85 | M | 1078 | 7.80 |
| 870 | 5.85 | N | 1070 | 8.10 |

Standard Package 100

"QUICK-CONNECT" TERMINAL STRIPS



| No. | III. | NET Per C | No. | III. | NET Per C | No. | III. | NET Per C |
|------|------|-----------|------|------|-----------|------|------|-----------|
| 1085 | A | \$2.82 | 1090 | F | \$4.80 | 1095 | K | \$9.60 |
| 1086 | B | 3.00 | 1091 | G | 4.80 | 1097 | L | 8.10 |
| 1087 | C | 2.82 | 1092 | H | 4.80 | 1098 | M | 10.80 |
| 1088 | D | 4.20 | 1093 | I | 6.30 | 1099 | N | 11.40 |
| 1089 | E | 4.50 | 1094 | J | 6.60 | | | |

No. 1376 Terminal Strip Connectors NET Per C \$3.30

BRACKET TYPE TERMINAL STRIPS



LUGS: BRASS, cadmium plated, spaced $\frac{3}{16}$ " centers.
BRACKETS: Brass, cadmium plated.
STRIPS: X.P. Bakelite $\frac{3}{16}$ " wide x .062 thick.
MOUNT.: .140 I.D. for No. 6 screw.

| No. | Fig. | Lugs | NET Per C | Std. Pkg. 100 |
|------|------|------|-----------|---------------|
| 1077 | A | 2 | \$6.36 | |
| 1079 | C | 3 | 6.60 | |
| 1080 | B | 3 | 6.60 | |
| 1081 | B | 4 | 7.20 | |
| 1082 | B | 5 | 7.80 | |
| 1083 | B | 6 | 8.40 | |

SCREW TYPE TERMINAL BOARD



LUGS: BRASS, hot tinned, spaced $\frac{1}{16}$ " centers.
SCREW: Steel, cadmium plated 6-32x $\frac{3}{8}$.
STRIP: X.P. Bakelite $\frac{3}{16}$ " wide x .062 thick.

| No. | Terminals | Mounting Center | Std. Pkg. | NET Per C |
|-----|-----------|--------------------|-----------|-----------|
| 872 | 2 | 1 $\frac{1}{16}$ " | 50 | \$6.00 |
| 873 | 3 | 1 $\frac{3}{16}$ " | 50 | 9.00 |
| 874 | 4 | 2 $\frac{1}{16}$ " | 25 | 11.20 |
| 875 | 5 | 2 $\frac{3}{16}$ " | 25 | 13.20 |
| 876 | 6 | 3 $\frac{1}{16}$ " | 25 | 16.80 |
| 877 | 7 | 3 $\frac{3}{16}$ " | 25 | 21.00 |
| 878 | | Shorting Link | | 1.80 |

SOLDER TYPE LUGS—Hot Tinned



| No. | Material | L. | Thick. | Hole | NET Per M |
|---------|----------|-------------------|--------|-----------------|-----------|
| 1484 | Ph. Br. | $\frac{5}{16}$ " | .020" | No. 6 | \$5.70 |
| 1485-4 | Ph. Br. | $\frac{9}{16}$ " | .012" | No. 4 | 5.40 |
| 1485-6 | Ph. Br. | $\frac{9}{16}$ " | .012" | No. 6 | 5.40 |
| 1485-8 | Ph. Br. | $\frac{9}{16}$ " | .012" | No. 8 | 5.40 |
| 1485-10 | Ph. Br. | $\frac{9}{16}$ " | .012" | No. 10 | 5.40 |
| 1486-4 | Ph. Br. | $\frac{13}{16}$ " | .012" | No. 4 | 5.40 |
| 1486-6 | Ph. Br. | $\frac{13}{16}$ " | .012" | No. 6 | 5.40 |
| 1486-8 | Ph. Br. | $\frac{13}{16}$ " | .012" | No. 8 | 5.40 |
| 1486-10 | Ph. Br. | $\frac{13}{16}$ " | .012" | No. 10 | 5.40 |
| 1488-4 | Ph. Br. | $\frac{9}{16}$ " | .012" | No. 4 | 4.35 |
| 1488-6 | Ph. Br. | $\frac{9}{16}$ " | .012" | No. 6 | 4.35 |
| 1488-8 | Ph. Br. | $\frac{9}{16}$ " | .012" | No. 8 | 4.35 |
| 1489 | Brass | $\frac{7}{8}$ " | .015" | No. 8 | 6.00 |
| 1490 | Brass | $\frac{3}{4}$ " | .020" | No. 10 | 6.60 |
| 1491 | Copper | $\frac{15}{16}$ " | .020" | No. 10 | 10.50 |
| 1493 | Brass | $\frac{11}{16}$ " | .027" | $\frac{1}{4}$ " | 16.80 |
| 1494-6 | Brass | $\frac{5}{8}$ " | .020" | No. 6 | 5.40 |
| 1494-8 | Brass | $\frac{5}{8}$ " | .020" | No. 8 | 5.40 |
| 1495 | Brass | $\frac{5}{8}$ " | .020" | No. 8 | 6.60 |
| 1496 | Brass | $\frac{3}{4}$ " | .020" | $\frac{1}{4}$ " | 10.20 |
| 1497 | Brass | $\frac{7}{8}$ " | .017" | $\frac{3}{8}$ " | 24.00 |

Std. Pkg. 1000

SOLDER LUG ASSORTMENT

A complete assortment of the most widely used Solder Lug styles, with hole sizes from $\frac{3}{4}$ thru $\frac{11}{16}$. Packed in a re-usable clear plastic compartmented box.

| No. | Approx Quantity of Terminals | NET |
|------|------------------------------|--------|
| 1546 | 1400 | \$9.00 |

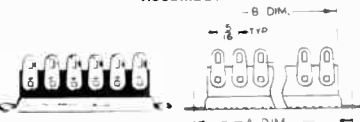
"T" TYPE TERMINAL STRIPS



LUGS: BRASS, cadmium plated, spaced $\frac{3}{16}$ " centers.
STRIP: X.P. Bakelite $\frac{3}{16}$ " wide x .062 thick
MOUNT.: .140 I.D. for No. 6 screw.

| No. | Lugs | NET Per C | Std. Pkg. 100 |
|-----|------|-----------|---------------|
| 815 | 1 | \$3.90 | |
| 816 | 2 | 5.10 | |
| 817 | 3 | 6.30 | |
| 818 | 4 | 7.50 | |
| 819 | 5 | 8.70 | |

TERMINAL STRIP ASSEMBLY



LUG: Brass, cadmium plated.
BASE: Brass, cadmium plated, Mounting holes for No. 6 screw.
STRIP: X.P. Bakelite

| No. | Terminals | Dimensions "A" | Dimensions "B" | NET Per C | Std. Pkg. 100 |
|------|-----------|----------------|--------------------|-----------|---------------|
| 3002 | 2 | 1.000 | $\frac{5}{16}$ " | \$6.00 | |
| 3003 | 3 | 1.312 | $\frac{13}{16}$ " | 6.90 | |
| 3004 | 4 | 1.625 | 1 $\frac{1}{16}$ " | 7.80 | |
| 3005 | 5 | 1.937 | 1 $\frac{1}{8}$ " | 8.70 | |
| 3006 | 6 | 2.250 | 1 $\frac{3}{16}$ " | 9.60 | |
| 3007 | 7 | 2.562 | 1 $\frac{5}{16}$ " | 10.50 | |
| 3008 | 8 | 2.875 | 2 $\frac{1}{16}$ " | 11.40 | |
| 3009 | 9 | 3.187 | 2 $\frac{3}{16}$ " | 12.30 | |
| 3010 | 10 | 3.500 | 2 $\frac{1}{2}$ " | 13.20 | |
| 3011 | 11 | 3.812 | 2 $\frac{7}{16}$ " | 14.10 | |
| 3012 | 12 | 4.125 | 2 $\frac{3}{4}$ " | 15.00 | |



TERMINAL LUGS & SCREWS

Recommended for heavy duty terminal strips. Lugs are tapped with screw inserted. Brass hot tinned. Std. Pkg. 100

| No. | NET Per C |
|------|-----------|
| 1478 | \$3.96 |
| 1479 | 5.40 |

LOCKING TYPE TERMINAL LUGS



BRASS HOT TINNED

| No. | L | Thick | Hole | Std. Pkg. 1000 | NET Per M |
|---------|-------------------|-------|--------|----------------|-----------|
| 1410-4 | $\frac{7}{8}$ " | .018" | No. 4 | | \$9.00 |
| 1410-6 | $\frac{7}{8}$ " | .018" | No. 6 | | 9.00 |
| 1410-8 | $\frac{7}{8}$ " | .018" | No. 8 | | 9.00 |
| 1410-10 | $\frac{7}{8}$ " | .018" | No. 10 | | 9.00 |
| 1411-4 | $\frac{47}{64}$ " | .020" | No. 4 | | 10.20 |
| 1411-6 | $\frac{47}{64}$ " | .020" | No. 6 | | 9.00 |
| 1411-8 | $\frac{47}{64}$ " | .020" | No. 8 | | 9.00 |
| 1412-4 | $\frac{3}{8}$ " | .018" | No. 4 | | 9.00 |
| 1412-6 | $\frac{3}{8}$ " | .018" | No. 6 | | 8.40 |
| 1412-8 | $\frac{3}{8}$ " | .018" | No. 8 | | 8.40 |
| 1413-4 | $\frac{25}{32}$ " | .018" | No. 4 | | 8.40 |
| 1413-6 | $\frac{25}{32}$ " | .018" | No. 6 | | 9.00 |
| 1413-8 | $\frac{25}{32}$ " | .018" | No. 8 | | 9.00 |
| 1414-4 | $\frac{13}{16}$ " | .018" | No. 4 | | 9.00 |
| 1414-6 | $\frac{13}{16}$ " | .018" | No. 6 | | 9.00 |
| 1414-8 | $\frac{13}{16}$ " | .018" | No. 8 | | 9.00 |
| 1414-10 | $\frac{13}{16}$ " | .018" | No. 10 | | 9.00 |
| 1415-4 | $\frac{41}{64}$ " | .018" | No. 4 | | 9.00 |
| 1415-6 | $\frac{41}{64}$ " | .018" | No. 6 | | 9.00 |
| 1415-8 | $\frac{41}{64}$ " | .018" | No. 8 | | 9.00 |
| 1416-4 | $\frac{11}{16}$ " | .020" | No. 4 | | 9.00 |
| 1416-6 | $\frac{11}{16}$ " | .020" | No. 6 | | 9.00 |
| 1416-8 | $\frac{11}{16}$ " | .020" | No. 8 | | 9.00 |

LOCKING TYPE TERMINAL LUGS

Brass Electro Plated

| No. | Hole Size | Thick | Length | NET Per M |
|------|-----------------|-------|--------------------|-----------|
| 1465 | No. 4 | .020" | $\frac{41}{64}$ " | \$10.20 |
| 1466 | No. 6 | .020" | $\frac{37}{64}$ " | 10.20 |
| 1467 | No. 8 | .020" | $\frac{3}{8}$ " | 10.20 |
| 1468 | $\frac{3}{4}$ " | .020" | 1 $\frac{1}{16}$ " | 12.00 |

LOCKING TERMINAL LUG ASSORTMENT

A complete assortment of the most widely used Locking Terminal Lug styles, with hole sizes from $\frac{3}{4}$ thru $\frac{11}{16}$. Packed in a re-usable clear plastic compartmented box.

| No. | Approx. Quantity of Terminals | NET |
|------|-------------------------------|--------|
| 1547 | 900 | \$9.00 |



CONTACT STRIPS

CONTACTS: STEEL, cadmium plated, spring tension spaced $\frac{3}{16}$ " centers.
STRIP: X.P. Bakelite $\frac{3}{16}$ " wide x .062 thick.
BRACKET: Steel cadmium plated .140 I.D. for No. 6 screw.
DESCR.: Quick connect and disconnect. Spring tension contacts for .125 dia. contact pins. Single hole mounting. Even number contacts have mg. bracket in center; odd number contacts have extra contact on right. Special contacts on request.

| No. | Contacts | Std. Pkg. | NET Per C |
|-----|----------|-----------|-----------|
| 822 | 2 | 100 | \$6.60 |
| 823 | 3 | 50 | 8.40 |
| 824 | 4 | 25 | 10.20 |
| 825 | 5 | 25 | 12.00 |
| 826 | 6 | 25 | 15.00 |
| 827 | Pin Only | 100 | 1.20 |



HEAVY DUTY TERMINAL BOARDS

LUG: BRASS, cadmium plated .042 thick spaced $\frac{1}{2}$ " centers. Terminals numbered.
STRIP: X.P. Bakelite $\frac{3}{16}$ " wide x $\frac{3}{32}$ " thick, numbered.
SCREW: Brass, nickel plated 8-32 x $\frac{3}{16}$ ".

| No. | Terminals | Mtg. Center | NET Per C |
|-----|-----------|-------------------|-----------|
| 902 | 2 | 1 $\frac{1}{2}$ " | \$20.40 |
| 903 | 3 | 2" | 28.20 |
| 904 | 4 | 2 $\frac{1}{2}$ " | 34.20 |
| 905 | 5 | 3" | 40.80 |
| 906 | 6 | 3 $\frac{1}{2}$ " | 46.20 |
| 907 | 7 | 4" | 52.20 |
| 908 | 8 | 4 $\frac{1}{2}$ " | 58.80 |
| 909 | 9 | 5" | 64.80 |
| 910 | 10 | 5 $\frac{1}{2}$ " | 70.80 |
| 911 | 11 | 6" | 76.80 |
| 912 | 12 | 6 $\frac{1}{2}$ " | 82.80 |



EYELET TYPE SOLDER LUGS

| No. | Length | Hole | NET Per M |
|------|-----------------|---------------------|-----------|
| 1480 | $\frac{3}{8}$ " | $\frac{3}{64}$ Slot | \$3.30 |
| 1481 | $\frac{3}{8}$ " | $\frac{1}{16}$ | 7.20 |

Std. Pkg. 1000

HERMAN H. SMITH, INC.



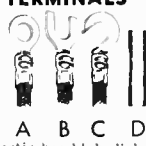
"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

SOLDERLESS TERMINALS



Pre-Insulated Diamond Grip
Color-coded for wire size. Std. Pkg. 100

| Wire Size | RING TONGUE (A) | | | | | | NET Per C |
|-----------|---------------------------|---------|-----------|---|----------------|-------------|-----------|
| | No. | AMP No. | Stud Size | Tongue Width | Overall Length | Stud Clear. | |
| 22 | 1550 | 320882 | 4 | 3/16 | 2 1/2 | 3/32 | \$9.00 |
| | 1551 | 31881 | 6 | 1/8 | 2 1/2 | 3/32 | 9.00 |
| to | 1552 | 31886 | 8 | 5/32 | 2 1/2 | 3/32 | 9.00 |
| | 1553 | 31887 | 10 | 3/16 | 2 1/2 | 3/32 | 9.00 |
| 16 | 1554 | 31894 | 1/4 | 1/2 | 1 1/4 | 2/64 | 9.60 |
| 14 | 1555 | 32441 | 4 | 1/4 | 1 1/4 | 1/64 | 9.00 |
| | 1556 | 32442 | 6 | 1/4 | 1 1/4 | 1/64 | 9.00 |
| to | 1557 | 31902 | 8 | 1/2 | 2 1/2 | 3/32 | 9.00 |
| | 1558 | 322238 | 10 | 3/8 | 2 1/2 | 3/32 | 9.00 |
| 16 | 1559 | 31906 | 1/4 | 1/2 | 1 1/4 | 1/16 | 9.60 |
| | FLANGED SPADE (B) | | | | | | |
| 22-16 | 1560 | 32562 | 6 | 1/4 | 2 1/2 | 1/64 | \$9.00 |
| | 1561 | 32498 | 8 | 3/8 | 2 1/2 | 1/64 | 9.60 |
| to | 1562 | 320861 | 6 | 1/4 | 2 1/2 | 1/64 | 9.00 |
| 14-16 | 1563 | 320862 | 8 | 1/4 | 2 1/2 | 1/64 | 9.00 |
| | 1564 | 320863 | 10 | 1/4 | 2 1/2 | 1/64 | 9.00 |
| | SPADE TONGUE (C) | | | | | | |
| 22-16 | 1565 | 34541 | 6 | 1/4 | 5/8 | 1/64 | \$9.00 |
| | 1566 | 32053 | 8 | 3/8 | 5/8 | 1/64 | 9.00 |
| to | 1567 | 32054 | 10 | 3/8 | 5/8 | 1/64 | 9.00 |
| 14-16 | 1568 | 35559 | 6 | 1/4 | 4/4 | 1/64 | 9.00 |
| | 1569 | 321233 | 8 | 1/4 | 4/4 | 1/64 | 9.00 |
| 16 | 1570 | 32060 | 10 | 3/8 | 5/8 | 1/64 | 9.00 |
| | HOOK TONGUE (D) | | | | | | |
| 22-16 | 1571 | 34313 | 6 | 1/4 | 4 1/4 | 1/64 | \$9.00 |
| | 1572 | 32456 | 8 | 1/2 | 5 1/4 | 3/32 | 9.00 |
| 14-16 | 1573 | 320381 | 6 | 1/4 | 2 1/2 | 3/32 | \$9.00 |
| | 1574 | 320306 | 8 | 1/2 | 2 1/2 | 3/32 | 10.20 |
| | 1575 | 35481 | 10 | 1/2 | 2 1/2 | 3/32 | 10.20 |
| 18-14 | 1576 | 47100 | .250 | Faston Receptacle (E) w/insulation support \$ 3.30 | | | |
| | BUTT CONNECTOR (F) | | | | | | |
| 22-16 | 1548 | 320559 | .125 | I.D. | | | \$6.00 |
| 16-14 | 1549 | 320562 | .150 | I.D. | | | \$6.00 |



"PLASTI-GRIP" (P.G.)
Insulated, strong, special plastic has high dielectric strength. Applied with single operation of press dies or hand tools. High tensile strength. High conductivity copper, electro-tinned. Color coded for wire size. Std. Pkg. 100

| Wire Size | RING TONGUE (A) | | | | | | NET Per C |
|-----------|---------------------------|---------|-----------|----------|-------|--------|-----------|
| | No. | AMP No. | Stud Size | Tong. W. | L. | Clear. | |
| 22 | 2750 | 34141 | 4 | 3/32 | 2 1/2 | 3/32 | \$6.60 |
| | 2751 | 34142 | 6 | 1/8 | 2 1/2 | 3/32 | 6.60 |
| to | 2752 | 34145 | 8 | 5/32 | 2 1/2 | 3/32 | 6.60 |
| | 2753 | 34146 | 10 | 3/8 | 2 1/2 | 3/32 | 6.60 |
| 16 | 2754 | 34150 | 1/4 | 1/2 | 1 1/4 | 2/64 | 7.80 |
| | 2755 | 34151 | 3/8 | 1/2 | 1 1/4 | 2/64 | 7.80 |
| | 2756 | 34152 | 1/2 | 1/2 | 1 1/4 | 2/64 | 7.80 |
| 16 | 2757 | 34157 | 4 | 1/4 | 1 1/4 | 3/32 | \$6.60 |
| | 2758 | 34158 | 6 | 1/4 | 1 1/4 | 3/32 | 6.60 |
| to | 2759 | 34160 | 8 | 1/2 | 2 1/2 | 3/32 | 6.60 |
| | 2760 | 34161 | 10 | 1/2 | 2 1/2 | 3/32 | 6.60 |
| 14 | 2761 | 34162 | 1/4 | 1/2 | 1 1/4 | 2/64 | 7.80 |
| | 2762 | 34163 | 3/8 | 1/2 | 1 1/4 | 2/64 | 7.80 |
| | 2763 | 34164 | 1/2 | 1/2 | 1 1/4 | 2/64 | 7.80 |
| | SPADE TONGUE (B) | | | | | | |
| 22 | 2764 | 34153 | 6 | 1/2 | 4 3/4 | 1/64 | \$6.60 |
| to | 2765 | 34155 | 8 | 3/8 | 5 1/4 | 1/64 | 6.60 |
| 16 | 2766 | 34156 | 10 | 3/8 | 5 1/4 | 1/64 | 6.60 |
| 16 | 2767 | 34165 | 6 | 3/8 | 5/8 | 1/64 | \$5.70 |
| to | 2768 | 34166 | 8 | 3/8 | 5/8 | 1/64 | 6.60 |
| 14 | 2769 | 34167 | 10 | 3/8 | 5/8 | 1/64 | 6.60 |
| | HOOK TONGUE (C) | | | | | | |
| 20-16 | 2770 | 34501 | 6 | 3/32 | 4 3/4 | 3/64 | \$6.60 |
| | 2771 | 321699 | 8 | 1/2 | 5 3/4 | 3/32 | 6.60 |
| 16-14 | 2772 | 320263 | 8 | 1/2 | 5 3/4 | 1/64 | \$9.60 |
| | BUTT CONNECTOR (D) | | | | | | |
| 22-16 | 2773 | 34070 | .125 | I.D. | | 1 | \$8.10 |
| 16-14 | 2774 | 34071 | .160 | I.D. | | 1 1/4 | 8.10 |



"SOLISTRAND" Non-Insulated
The only terminal designed for use with solid, stranded or irregularly shaped wires, or combinations of wires. Corrosion resistant, high strength, electro-tinned; versatile — widely adaptable. Std. Pkg. 100

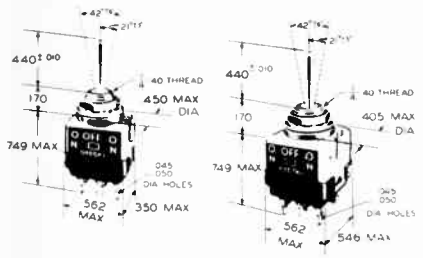
| Wire Size | RING TONGUE (A) | | | | | | NET Per C |
|-----------|---------------------------|---------|-----------|----------|-------|--------|-----------|
| | No. | AMP No. | Stud Size | Tong. W. | L. | Clear. | |
| 22 | 2850 | 32989 | 4 | 3/32 | 2 1/2 | 3/32 | \$4.20 |
| | 2851 | 34194 | 6 | 1/8 | 2 1/2 | 3/32 | 4.20 |
| to | 2852 | 32990 | 8 | 5/32 | 2 1/2 | 3/32 | 4.80 |
| | 2853 | 33214 | 10 | 3/8 | 2 1/2 | 3/32 | 4.80 |
| 16 | 2854 | 33215 | 1/4 | 1/2 | 1 1/4 | 2/64 | 6.60 |
| | 2855 | 33452 | 3/8 | 1/2 | 1 1/4 | 2/64 | 6.60 |
| | 2856 | 33453 | 1/2 | 1/2 | 1 1/4 | 2/64 | 6.60 |
| 16 | 2857 | 32991 | 4 | 1/4 | 1 1/4 | 3/32 | \$4.80 |
| | 2858 | 34197 | 6 | 1/4 | 1 1/4 | 3/32 | 4.80 |
| to | 2859 | 32992 | 8 | 3/8 | 2 1/2 | 3/32 | 4.80 |
| | 2860 | 320093 | 10 | 3/8 | 2 1/2 | 3/32 | 4.80 |
| 14 | 2861 | 33218 | 1/4 | 1/2 | 1 1/4 | 2/64 | 6.60 |
| | 2862 | 33454 | 3/8 | 1/2 | 1 1/4 | 2/64 | 6.60 |
| | 2863 | 33455 | 1/2 | 1/2 | 1 1/4 | 2/64 | 6.60 |
| | SPADE TONGUE (B) | | | | | | |
| 22 | 2864 | 32897 | 6 | 1/2 | 5/8 | 1/64 | \$4.20 |
| to | 2865 | 32898 | 8 | 1/2 | 5/8 | 1/64 | 4.20 |
| 16 | 2866 | 32899 | 10 | 1/2 | 5/8 | 1/64 | 4.20 |
| 16 | 2867 | 32903 | 6 | 1/2 | 5/8 | 1/64 | \$4.20 |
| to | 2868 | 32904 | 8 | 1/2 | 5/8 | 1/64 | 4.20 |
| 14 | 2869 | 32905 | 10 | 1/2 | 5/8 | 1/64 | 4.20 |
| | BUTT CONNECTOR (C) | | | | | | |
| 22-16 | 2870 | 31818 | .110 | I.D. | | 3/64 | \$5.10 |
| 16-14 | 2871 | 31819 | .170 | I.D. | | 3/64 | 5.10 |

HAND CRIMPING TOOL



Makes strong, solderless connections; cuts and strips wire, and has threaded bolt cutter. No. 1579 7.20 NET Each

C-H MINIATURE MILITARY SWITCHES

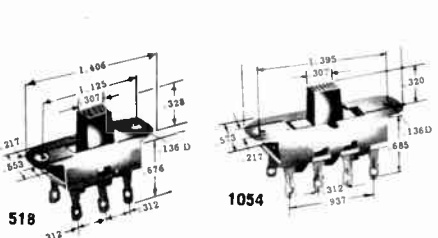


Extremely compact, highly reliable power or dry circuit switches. Usable as a pre-set switch in aircraft recognition systems; for walkie-talkies; for electronic instruments and communication systems.
RATINGS: 2 Amps @ 28 V.D.C. 1 Amp @ 50 V.D.C. 2 Amps @ 115 V.A.C.
MINIMUM RATING: 30 Microamps, @ 50 Milli-volts.

| SINGLE POLE | | |
|----------------|--|-------------------------|
| WEIGHT: | 5.0 Grams. | |
| CUBIC CONTENT: | .147 cubic inches "behind panel" volume. | |
| HHS | C-H | Circuit |
| 1841 | 8866K1 | SP1DT On-Off-On |
| 1842 | 8866K2 | SP1DT Mom-On-Off-Mom-On |
| 1843 | 8866K3 | SP1DT On-Off-Mom-On |
| 1844 | 8866K4 | SP1DT On-None-On |
| 1845 | 8866K5 | SP1DT On-Off-None |
| 1846 | 8866K6 | SP1DT None-Off-Mom-On |
| 1847 | 8866K7 | SP1DT On-None-Off |
| DOUBLE POLE | | |
| WEIGHT: | 6.5 grams. | |
| CUBIC CONTENT: | .230 cubic inches "behind panel" volume. | |
| HHS | C-H | Circuit |
| 1851 | 8867K1 | DP1DT On-Off-On |
| 1852 | 8867K2 | DP1DT Mom-On-Off-Mom-On |
| 1853 | 8867K3 | DP1DT On-Off-Mom-On |
| 1854 | 8867K4 | DP1DT On-None-On |
| 1855 | 8867K5 | DP1DT On-Off-None |
| 1856 | 8867K6 | DP1DT None-Off-Mom-On |
| 1857 | 8867K7 | DP1DT On-None-Off |

CONTINENTAL-WIRT

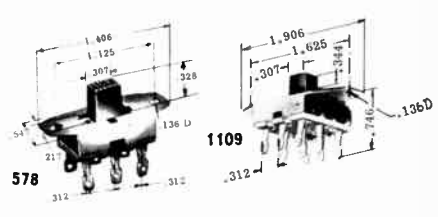
SLIDE SWITCHES



With Detent
UL APPROVED
General purpose switches, used on hi-fi equipment, test instruments, etc. Steel cadmium plated housings. Black phenolic buttons. Std. Pkg. 25

| No. | Circuit | Rating @ 125 Volts | | NET Per C |
|---------------------------------|---------|--------------------|---------|-----------|
| | | AC Amps | DC Amps | |
| 515 | SP1ST | .75 | .75 | \$11.40 |
| 516 | SP1DT | .75 | .75 | 12.00 |
| 517 | DP1ST | .75 | .75 | 15.00 |
| 518 | DP1DT | .75 | .75 | 18.00 |
| 1105 | SP1ST | 6.0 | 1.0 | 14.40 |
| 1106 | SP1DT | 6.0 | 1.0 | 15.00 |
| 1107 | DP1ST | 6.0 | 1.0 | 24.00 |
| 1108 | DP1DT | 6.00 | 1.0 | 27.00 |
| With Spring Return | | | | |
| No. | Circuit | Rating 125V ACOC | | NET Per C |
| 568 | SP1ST | .5 Amp | .5 Amp | \$24.00 |
| 569 | SP1DT | .5 Amp | .5 Amp | 28.80 |
| TRIPLE THROW With Detent | | | | |
| No. | Circuit | Rating 125V ACOC | | NET Per C |
| 1053 | SP1ST | .5 Amp | .5 Amp | \$28.80 |
| 1054 | DP1ST | .5 Amp | .5 Amp | 30.00 |

SLIDE SWITCHES



With Detent
CENTER OFF
Rating 125V ACOC
NET Per C
577 SP 3-Position .5 Amp \$28.80
578 DP 3-Position .5 Amp 30.00

| MULTI-POLE SWITCHES With Detent | | | | |
|--|---------|--------------------|-----|-----------|
| No. | Circuit | Rating @ 125 Volts | | NET Per C |
| 1109 | 3P1DT | 3.0 | 1.0 | \$48.00 |
| 1110 | 3P1DT | .5 | .5 | 27.00 |
| Unique construction, all poles are in the same plane, more compact, easier wiring. Std. Pkg. 25 | | | | |
| Same as above but 1.00" wide | | | | |
| Same as above but 1.005" wide | | | | |
| 1104 | DP1DT | .5 | .5 | 60.00 |
| SLIDE SWITCH SHIELD | | | | |
| For terminal protection or electrostatic shielding. Shield is made of steel, cadmium plated, with fibre insulation. Std. Pkg. 25 No. 519 Each \$10 | | | | |



HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

TURRET TERMINALS

Terminals shown below are "stock" items, available for speedy delivery. All brass, silver-plated, precision made. See next page for Suggested Resale Prices. For quantities over 15,000 request special prices. Inquiries are invited, for special types and sizes to particular requirements. L indicates Shank Length of Lug. T indicates Thickness of mounting boards
Minimum package 100

| <p>2000</p> <p>HOLLOW LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2000A</td><td>.075</td><td>1/32</td></tr> <tr><td>2000B</td><td>.105</td><td>1/16</td></tr> <tr><td>2000C</td><td>.135</td><td>1/8</td></tr> <tr><td>2000D</td><td>.165</td><td>1/4</td></tr> <tr><td>2000E</td><td>.195</td><td>3/8</td></tr> <tr><td>2000F</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2000A | .075 | 1/32 | 2000B | .105 | 1/16 | 2000C | .135 | 1/8 | 2000D | .165 | 1/4 | 2000E | .195 | 3/8 | 2000F | .230 | 1/2 | <p>2001</p> <p>SHORT TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2001A</td><td>.075</td><td>1/32</td></tr> <tr><td>2001B</td><td>.105</td><td>1/16</td></tr> <tr><td>2001C</td><td>.135</td><td>1/8</td></tr> <tr><td>2001D</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2001A | .075 | 1/32 | 2001B | .105 | 1/16 | 2001C | .135 | 1/8 | 2001D | .165 | 1/4 | <p>2002</p> <p>DOUBLE END TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2002A</td><td>.105</td><td>1/16</td></tr> <tr><td>2002B</td><td>.135</td><td>1/8</td></tr> <tr><td>2002C</td><td>.165</td><td>1/4</td></tr> <tr><td>2002D</td><td>.195</td><td>3/8</td></tr> <tr><td>2002E</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2002A | .105 | 1/16 | 2002B | .135 | 1/8 | 2002C | .165 | 1/4 | 2002D | .195 | 3/8 | 2002E | .230 | 1/2 | <p>2003</p> <p>DOUBLE END LUG, LONG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2003A</td><td>.105</td><td>1/16</td></tr> <tr><td>2003B</td><td>.135</td><td>1/8</td></tr> <tr><td>2003C</td><td>.165</td><td>1/4</td></tr> <tr><td>2003D</td><td>.195</td><td>3/8</td></tr> <tr><td>2003E</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2003A | .105 | 1/16 | 2003B | .135 | 1/8 | 2003C | .165 | 1/4 | 2003D | .195 | 3/8 | 2003E | .230 | 1/2 | <p>2004</p> <p>SLOTTED TERMINAL LUG SHORT</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2004A</td><td>.075</td><td>1/32</td></tr> <tr><td>2004B</td><td>.105</td><td>1/16</td></tr> <tr><td>2004C</td><td>.135</td><td>1/8</td></tr> <tr><td>2004D</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2004A | .075 | 1/32 | 2004B | .105 | 1/16 | 2004C | .135 | 1/8 | 2004D | .165 | 1/4 | <p>2005</p> <p>HOLLOW KNURLED LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2005A</td><td>.105</td><td>1/16</td></tr> <tr><td>2005B</td><td>.135</td><td>1/8</td></tr> <tr><td>2005C</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2005A | .105 | 1/16 | 2005B | .135 | 1/8 | 2005C | .165 | 1/4 | <p>2006</p> <p>SHORT TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2006A</td><td>.075</td><td>1/32</td></tr> <tr><td>2006B</td><td>.105</td><td>1/16</td></tr> <tr><td>2006C</td><td>.135</td><td>1/8</td></tr> <tr><td>2006D</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2006A | .075 | 1/32 | 2006B | .105 | 1/16 | 2006C | .135 | 1/8 | 2006D | .165 | 1/4 | | | |
|---|------|------|---|-------|------|------|-------|------|------|-------|------|-----|-------|------|-----|--|------|-----|---|-------|------|---|-------|------|------|-------|------|------|-------|------|------|-------|------|-----|---|------|-----|--|-------|------|---|---|------|------|-------|-------|------|--|-------|------|-------|-------|------|-------|-------|------|---|--|------|-----|-------|-------|------|--|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|---|---|------|-----|-------|-------|------|-------|-------|------|---|-------|------|-------|---|------|---|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|---|------|-----|---|-------|------|------|-------|------|------|-------|------|------|-------|------|-----|-------|------|-----|
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000A | .075 | 1/32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000B | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000C | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000E | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000F | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2001A | .075 | 1/32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2001B | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2001C | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2001D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2002A | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2002C | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002D | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002E | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2003C | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2006D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>2007</p> <p>SHORT DOUBLE END LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2007A</td><td>.075</td><td>1/32</td></tr> <tr><td>2007B</td><td>.105</td><td>1/16</td></tr> <tr><td>2007C</td><td>.135</td><td>1/8</td></tr> <tr><td>2007D</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2007A | .075 | 1/32 | 2007B | .105 | 1/16 | 2007C | .135 | 1/8 | 2007D | .165 | 1/4 | <p>2008</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2008A</td><td>.075</td><td>1/32</td></tr> <tr><td>2008B</td><td>.105</td><td>1/16</td></tr> <tr><td>2008C</td><td>.135</td><td>1/8</td></tr> <tr><td>2008D</td><td>.165</td><td>1/4</td></tr> <tr><td>2008E</td><td>.195</td><td>3/8</td></tr> <tr><td>2008F</td><td>.230</td><td>1/2</td></tr> <tr><td>2008G</td><td>.293</td><td>3/4</td></tr> </tbody> </table> | No. | L | T | 2008A | .075 | 1/32 | 2008B | .105 | 1/16 | 2008C | .135 | 1/8 | 2008D | .165 | 1/4 | 2008E | .195 | 3/8 | 2008F | .230 | 1/2 | 2008G | .293 | 3/4 | <p>2009</p> <p>TERMINAL LUG</p> <p>No. 2009</p> | <p>2010</p> <p>SPLIT TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2010A</td><td>.075</td><td>1/32</td></tr> <tr><td>2010B</td><td>.105</td><td>1/16</td></tr> <tr><td>2010C</td><td>.135</td><td>1/8</td></tr> <tr><td>2010D</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2010A | .075 | 1/32 | 2010B | .105 | 1/16 | 2010C | .135 | 1/8 | 2010D | .165 | 1/4 | <p>2011</p> <p>DOUBLE END TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2011A</td><td>.105</td><td>1/16</td></tr> <tr><td>2011B</td><td>.135</td><td>1/8</td></tr> <tr><td>2011C</td><td>.165</td><td>1/4</td></tr> <tr><td>2011D</td><td>.195</td><td>3/8</td></tr> <tr><td>2011E</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2011A | .105 | 1/16 | 2011B | .135 | 1/8 | 2011C | .165 | 1/4 | 2011D | .195 | 3/8 | 2011E | .230 | 1/2 | <p>2012</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2012A</td><td>.105</td><td>1/16</td></tr> <tr><td>2012B</td><td>.135</td><td>1/8</td></tr> <tr><td>2012C</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2012A | .105 | 1/16 | 2012B | .135 | 1/8 | 2012C | .165 | 1/4 | <p>2013</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2013A</td><td>.075</td><td>1/32</td></tr> <tr><td>2013B</td><td>.105</td><td>1/16</td></tr> <tr><td>2013C</td><td>.135</td><td>1/8</td></tr> <tr><td>2013D</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2013A | .075 | 1/32 | 2013B | .105 | 1/16 | 2013C | .135 | 1/8 | 2013D | .165 | 1/4 | | | | | | | | | | | | | | | | | | |
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| 2007A | .075 | 1/32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2007C | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2007D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2008F | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2010D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2011A | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011B | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011C | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011D | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011E | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2012B | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2012C | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2013A | .075 | 1/32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2013B | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2013C | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2013D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>2014</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2014A</td><td>.105</td><td>1/16</td></tr> <tr><td>2014B</td><td>.135</td><td>1/8</td></tr> <tr><td>2014C</td><td>.165</td><td>1/4</td></tr> <tr><td>2014D</td><td>.195</td><td>3/8</td></tr> <tr><td>2014E</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2014A | .105 | 1/16 | 2014B | .135 | 1/8 | 2014C | .165 | 1/4 | 2014D | .195 | 3/8 | 2014E | .230 | 1/2 | <p>2015</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2015A</td><td>.135</td><td>1/8</td></tr> <tr><td>2015B</td><td>.165</td><td>1/4</td></tr> <tr><td>2015C</td><td>.195</td><td>3/8</td></tr> <tr><td>2015D</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2015A | .135 | 1/8 | 2015B | .165 | 1/4 | 2015C | .195 | 3/8 | 2015D | .230 | 1/2 | <p>2016</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2016A</td><td>.105</td><td>1/16</td></tr> <tr><td>2016B</td><td>.135</td><td>1/8</td></tr> <tr><td>2016C</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2016A | .105 | 1/16 | 2016B | .135 | 1/8 | 2016C | .165 | 1/4 | <p>2017</p> <p>HOLLOW KNURLED LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2017A</td><td>.105</td><td>1/16</td></tr> <tr><td>2017B</td><td>.135</td><td>1/8</td></tr> <tr><td>2017C</td><td>.165</td><td>1/4</td></tr> <tr><td>2017D</td><td>.195</td><td>3/8</td></tr> </tbody> </table> | No. | L | T | 2017A | .105 | 1/16 | 2017B | .135 | 1/8 | 2017C | .165 | 1/4 | 2017D | .195 | 3/8 | <p>2018</p> <p>HOLLOW TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2018A</td><td>.075</td><td>1/32</td></tr> <tr><td>2018B</td><td>.105</td><td>1/16</td></tr> <tr><td>2018C</td><td>.135</td><td>1/8</td></tr> <tr><td>2018D</td><td>.165</td><td>1/4</td></tr> <tr><td>2018E</td><td>.195</td><td>3/8</td></tr> <tr><td>2018F</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2018A | .075 | 1/32 | 2018B | .105 | 1/16 | 2018C | .135 | 1/8 | 2018D | .165 | 1/4 | 2018E | .195 | 3/8 | 2018F | .230 | 1/2 | <p>2019</p> <p>SPLIT TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2019A</td><td>.075</td><td>1/32</td></tr> <tr><td>2019B</td><td>.105</td><td>1/16</td></tr> <tr><td>2019C</td><td>.135</td><td>1/8</td></tr> <tr><td>2019D</td><td>.165</td><td>1/4</td></tr> <tr><td>2019E</td><td>.195</td><td>3/8</td></tr> <tr><td>2019F</td><td>.230</td><td>1/2</td></tr> </tbody> </table> | No. | L | T | 2019A | .075 | 1/32 | 2019B | .105 | 1/16 | 2019C | .135 | 1/8 | 2019D | .165 | 1/4 | 2019E | .195 | 3/8 | 2019F | .230 | 1/2 | <p>2020</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2020A</td><td>.075</td><td>1/32</td></tr> <tr><td>2020B</td><td>.105</td><td>1/16</td></tr> <tr><td>2020C</td><td>.135</td><td>1/8</td></tr> <tr><td>2020D</td><td>.165</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2020A | .075 | 1/32 | 2020B | .105 | 1/16 | 2020C | .135 | 1/8 | 2020D | .165 | 1/4 |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014A | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014B | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014C | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014D | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014E | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2015A | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2015B | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2015C | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2015D | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2016A | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2016B | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2016C | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2017A | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2017B | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2017C | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2017D | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018A | .075 | 1/32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018B | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018C | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018E | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018F | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2019A | .075 | 1/32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019B | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019C | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019E | .195 | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019F | .230 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020A | .075 | 1/32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020B | .105 | 1/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020C | .135 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020D | .165 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



TURRET TERMINALS

| <p>2021</p> <p>MINIATURE SPADE LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2021A</td><td>.037</td><td>1/4</td></tr> <tr><td>2021B</td><td>.053</td><td>1/2</td></tr> <tr><td>2021C</td><td>.084</td><td>1/4</td></tr> <tr><td>2021D</td><td>.115</td><td>3/2</td></tr> <tr><td>2021E</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2021A | .037 | 1/4 | 2021B | .053 | 1/2 | 2021C | .084 | 1/4 | 2021D | .115 | 3/2 | 2021E | .147 | 1/8 | <p>2022</p> <p>MINIATURE HOLLOW LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2022A</td><td>.037</td><td>1/4</td></tr> <tr><td>2022B</td><td>.053</td><td>1/2</td></tr> <tr><td>2022C</td><td>.084</td><td>1/4</td></tr> <tr><td>2022D</td><td>.115</td><td>3/2</td></tr> <tr><td>2022E</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2022A | .037 | 1/4 | 2022B | .053 | 1/2 | 2022C | .084 | 1/4 | 2022D | .115 | 3/2 | 2022E | .147 | 1/8 | <p>2023</p> <p>MINIATURE HOLLOW SPLIT LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2023A</td><td>.037</td><td>1/4</td></tr> <tr><td>2023B</td><td>.053</td><td>1/2</td></tr> <tr><td>2023C</td><td>.084</td><td>1/4</td></tr> <tr><td>2023D</td><td>.115</td><td>3/2</td></tr> <tr><td>2023E</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2023A | .037 | 1/4 | 2023B | .053 | 1/2 | 2023C | .084 | 1/4 | 2023D | .115 | 3/2 | 2023E | .147 | 1/8 | <p>2024</p> <p>MINIATURE DOUBLE TIE LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2024A</td><td>.037</td><td>1/4</td></tr> <tr><td>2024B</td><td>.053</td><td>1/2</td></tr> <tr><td>2024C</td><td>.084</td><td>1/4</td></tr> <tr><td>2024D</td><td>.115</td><td>3/2</td></tr> <tr><td>2024E</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2024A | .037 | 1/4 | 2024B | .053 | 1/2 | 2024C | .084 | 1/4 | 2024D | .115 | 3/2 | 2024E | .147 | 1/8 | <p>2025</p> <p>MINIATURE THROUGH LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2025A</td><td>.075</td><td>1/2</td></tr> <tr><td>2025B</td><td>.105</td><td>1/4</td></tr> <tr><td>2025C</td><td>.135</td><td>3/2</td></tr> <tr><td>2025D</td><td>.165</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2025A | .075 | 1/2 | 2025B | .105 | 1/4 | 2025C | .135 | 3/2 | 2025D | .165 | 1/8 | <p>2026</p> <p>MINIATURE THROUGH LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2026A</td><td>.075</td><td>1/2</td></tr> <tr><td>2026B</td><td>.105</td><td>1/4</td></tr> <tr><td>2026C</td><td>.135</td><td>3/2</td></tr> <tr><td>2026D</td><td>.165</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2026A | .075 | 1/2 | 2026B | .105 | 1/4 | 2026C | .135 | 3/2 | 2026D | .165 | 1/8 | <p>2027</p> <p>MINIATURE LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2027A</td><td>.037</td><td>1/4</td></tr> <tr><td>2027B</td><td>.054</td><td>1/2</td></tr> <tr><td>2027C</td><td>.084</td><td>1/4</td></tr> <tr><td>2027D</td><td>.115</td><td>3/2</td></tr> <tr><td>2027E</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2027A | .037 | 1/4 | 2027B | .054 | 1/2 | 2027C | .084 | 1/4 | 2027D | .115 | 3/2 | 2027E | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------|-------------------|--------------------|-------|------|-----|-------|------|-----|-------|------|-----|-------|------|-----|---|------|-----|--|-------|------|---|-------|------|-----|-------|------|-----|-------|------|-----|---|------|-----|-------|-------|------|--|-------|------|-------|-------|------|---|-------|------|-----|--|------|-----|-------|-------|------|-------|-------|------|--|-------|------|-------|-------|------|-------|---|------|---|-------|-------|------|-------|-------|------|-------|-------|------|--|-------|------|-------|--|------|-----------------|---------------|-------------------|--------------------|-------|---------|--|---------|------|------|--|-------|------|-------|-------|-------|-------|-------|-------|--|-------|------|-------|-------|------|------|---|-------|------|-------|-------|------|------|-------|-------|------|-------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|-------|-------|-------|
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2021A | .037 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2021B | .053 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2021C | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2021D | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2021E | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022A | .037 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022B | .053 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022C | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022D | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022E | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2023A | .037 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2023B | .053 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2023C | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2023D | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2023E | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2024A | .037 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2024B | .053 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2024C | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2024D | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2024E | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2025A | .075 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2025B | .105 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2025C | .135 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2025D | .165 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2026A | .075 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2026B | .105 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2026C | .135 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2026D | .165 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2027A | .037 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2027B | .054 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2027C | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2027D | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2027E | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>2028</p> <p>FEED-THRU TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2028A</td><td>.054</td><td>1/2</td></tr> <tr><td>2028B</td><td>.084</td><td>1/4</td></tr> <tr><td>2028C</td><td>.115</td><td>3/2</td></tr> <tr><td>2028D</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2028A | .054 | 1/2 | 2028B | .084 | 1/4 | 2028C | .115 | 3/2 | 2028D | .147 | 1/8 | <p>2029</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2029A</td><td>.054</td><td>1/2</td></tr> <tr><td>2029B</td><td>.084</td><td>1/4</td></tr> <tr><td>2029C</td><td>.115</td><td>3/2</td></tr> <tr><td>2029D</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2029A | .054 | 1/2 | 2029B | .084 | 1/4 | 2029C | .115 | 3/2 | 2029D | .147 | 1/8 | <p>2030</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2030A</td><td>.054</td><td>1/2</td></tr> <tr><td>2030B</td><td>.084</td><td>1/4</td></tr> <tr><td>2030C</td><td>.115</td><td>3/2</td></tr> <tr><td>2030D</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2030A | .054 | 1/2 | 2030B | .084 | 1/4 | 2030C | .115 | 3/2 | 2030D | .147 | 1/8 | <p>2031</p> <p>FEED TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2031A</td><td>.054</td><td>1/2</td></tr> <tr><td>2031B</td><td>.084</td><td>1/4</td></tr> <tr><td>2031C</td><td>.115</td><td>3/2</td></tr> <tr><td>2031D</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2031A | .054 | 1/2 | 2031B | .084 | 1/4 | 2031C | .115 | 3/2 | 2031D | .147 | 1/8 | <p>2032</p> <p>TERMINAL LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2032A</td><td>.054</td><td>1/2</td></tr> <tr><td>2032B</td><td>.084</td><td>1/4</td></tr> <tr><td>2032C</td><td>.115</td><td>3/2</td></tr> <tr><td>2032D</td><td>.147</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2032A | .054 | 1/2 | 2032B | .084 | 1/4 | 2032C | .115 | 3/2 | 2032D | .147 | 1/8 | <p>SUGGESTED RESALE PRICES OF TURRET TERMINALS</p> <table border="1"> <thead> <tr> <th>Cat. No. Series</th> <th>100-999 Per C</th> <th>1,000-4,999 Per M</th> <th>5,000-15,000 Per M</th> </tr> </thead> <tbody> <tr><td>2000</td><td>\$ 1.50</td><td>\$12.50</td><td>\$10.00</td></tr> <tr><td>2001</td><td>1.50</td><td>12.50</td><td>10.00</td></tr> <tr><td>2002</td><td>3.30</td><td>27.50</td><td>22.00</td></tr> <tr><td>2003</td><td>4.20</td><td>35.00</td><td>28.00</td></tr> <tr><td>2004</td><td>2.52</td><td>21.00</td><td>16.80</td></tr> <tr><td>2005</td><td>2.06</td><td>18.00</td><td>14.40</td></tr> <tr><td>2006</td><td>1.02</td><td>8.50</td><td>6.80</td></tr> <tr><td>2007</td><td>1.38</td><td>11.50</td><td>9.20</td></tr> <tr><td>2008</td><td>1.62</td><td>13.50</td><td>10.80</td></tr> <tr><td>2009</td><td>2.52</td><td>21.00</td><td>16.80</td></tr> <tr><td>2010</td><td>2.40</td><td>20.00</td><td>16.00</td></tr> <tr><td>2011</td><td>3.60</td><td>30.00</td><td>24.00</td></tr> <tr><td>2012</td><td>2.10</td><td>17.50</td><td>14.00</td></tr> <tr><td>2013</td><td>1.08</td><td>9.00</td><td>7.20</td></tr> <tr><td>2014</td><td>1.38</td><td>11.50</td><td>9.20</td></tr> <tr><td>2015</td><td>4.20</td><td>35.00</td><td>28.00</td></tr> <tr><td>2016</td><td>1.62</td><td>13.50</td><td>10.80</td></tr> <tr><td>2017</td><td>2.40</td><td>20.00</td><td>16.00</td></tr> <tr><td>2018</td><td>3.00</td><td>25.00</td><td>20.00</td></tr> <tr><td>2019</td><td>2.70</td><td>22.50</td><td>18.00</td></tr> <tr><td>2020</td><td>1.50</td><td>12.50</td><td>10.00</td></tr> <tr><td>2021</td><td>1.50</td><td>12.50</td><td>10.00</td></tr> <tr><td>2022</td><td>1.50</td><td>12.50</td><td>10.00</td></tr> <tr><td>2023</td><td>2.70</td><td>22.50</td><td>18.00</td></tr> <tr><td>2024</td><td>1.80</td><td>15.00</td><td>12.00</td></tr> <tr><td>2025</td><td>2.70</td><td>22.50</td><td>18.00</td></tr> <tr><td>2026</td><td>2.70</td><td>22.50</td><td>18.00</td></tr> <tr><td>2027</td><td>1.20</td><td>10.00</td><td>8.00</td></tr> <tr><td>2028</td><td>3.30</td><td>26.50</td><td>22.00</td></tr> <tr><td>2029</td><td>2.10</td><td>17.50</td><td>14.00</td></tr> <tr><td>2030</td><td>1.62</td><td>13.50</td><td>10.80</td></tr> <tr><td>2031</td><td>1.62</td><td>13.50</td><td>10.80</td></tr> <tr><td>2032</td><td>3.30</td><td>27.50</td><td>22.00</td></tr> <tr><td>2033</td><td>3.60</td><td>30.00</td><td>24.00</td></tr> <tr><td>2034</td><td>4.20</td><td>35.00</td><td>28.00</td></tr> <tr><td>2035</td><td>4.50</td><td>37.50</td><td>30.00</td></tr> <tr><td>2036</td><td>3.90</td><td>32.50</td><td>26.00</td></tr> <tr><td>2037</td><td>9.00</td><td>75.00</td><td>60.00</td></tr> <tr><td>2038</td><td>10.20</td><td>85.00</td><td>68.00</td></tr> </tbody> </table> <p>ADDITIONAL NUMBERS</p> <p>We invite your inquiries on other types of turret terminals not shown here.</p> | | Cat. No. Series | 100-999 Per C | 1,000-4,999 Per M | 5,000-15,000 Per M | 2000 | \$ 1.50 | \$12.50 | \$10.00 | 2001 | 1.50 | 12.50 | 10.00 | 2002 | 3.30 | 27.50 | 22.00 | 2003 | 4.20 | 35.00 | 28.00 | 2004 | 2.52 | 21.00 | 16.80 | 2005 | 2.06 | 18.00 | 14.40 | 2006 | 1.02 | 8.50 | 6.80 | 2007 | 1.38 | 11.50 | 9.20 | 2008 | 1.62 | 13.50 | 10.80 | 2009 | 2.52 | 21.00 | 16.80 | 2010 | 2.40 | 20.00 | 16.00 | 2011 | 3.60 | 30.00 | 24.00 | 2012 | 2.10 | 17.50 | 14.00 | 2013 | 1.08 | 9.00 | 7.20 | 2014 | 1.38 | 11.50 | 9.20 | 2015 | 4.20 | 35.00 | 28.00 | 2016 | 1.62 | 13.50 | 10.80 | 2017 | 2.40 | 20.00 | 16.00 | 2018 | 3.00 | 25.00 | 20.00 | 2019 | 2.70 | 22.50 | 18.00 | 2020 | 1.50 | 12.50 | 10.00 | 2021 | 1.50 | 12.50 | 10.00 | 2022 | 1.50 | 12.50 | 10.00 | 2023 | 2.70 | 22.50 | 18.00 | 2024 | 1.80 | 15.00 | 12.00 | 2025 | 2.70 | 22.50 | 18.00 | 2026 | 2.70 | 22.50 | 18.00 | 2027 | 1.20 | 10.00 | 8.00 | 2028 | 3.30 | 26.50 | 22.00 | 2029 | 2.10 | 17.50 | 14.00 | 2030 | 1.62 | 13.50 | 10.80 | 2031 | 1.62 | 13.50 | 10.80 | 2032 | 3.30 | 27.50 | 22.00 | 2033 | 3.60 | 30.00 | 24.00 | 2034 | 4.20 | 35.00 | 28.00 | 2035 | 4.50 | 37.50 | 30.00 | 2036 | 3.90 | 32.50 | 26.00 | 2037 | 9.00 | 75.00 | 60.00 | 2038 | 10.20 | 85.00 | 68.00 |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2028B | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2028C | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2029B | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2029C | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2031A | .054 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2031B | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2031C | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2031D | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2032A | .054 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2032B | .084 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2032C | .115 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2032D | .147 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cat. No. Series | 100-999 Per C | 1,000-4,999 Per M | 5,000-15,000 Per M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000 | \$ 1.50 | \$12.50 | \$10.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2001 | 1.50 | 12.50 | 10.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002 | 3.30 | 27.50 | 22.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2003 | 4.20 | 35.00 | 28.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2004 | 2.52 | 21.00 | 16.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2005 | 2.06 | 18.00 | 14.40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2006 | 1.02 | 8.50 | 6.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2007 | 1.38 | 11.50 | 9.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2008 | 1.62 | 13.50 | 10.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2009 | 2.52 | 21.00 | 16.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2010 | 2.40 | 20.00 | 16.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011 | 3.60 | 30.00 | 24.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2012 | 2.10 | 17.50 | 14.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2013 | 1.08 | 9.00 | 7.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014 | 1.38 | 11.50 | 9.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2015 | 4.20 | 35.00 | 28.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2016 | 1.62 | 13.50 | 10.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2017 | 2.40 | 20.00 | 16.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018 | 3.00 | 25.00 | 20.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019 | 2.70 | 22.50 | 18.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020 | 1.50 | 12.50 | 10.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2021 | 1.50 | 12.50 | 10.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2022 | 1.50 | 12.50 | 10.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2023 | 2.70 | 22.50 | 18.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2024 | 1.80 | 15.00 | 12.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2025 | 2.70 | 22.50 | 18.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2026 | 2.70 | 22.50 | 18.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2027 | 1.20 | 10.00 | 8.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2028 | 3.30 | 26.50 | 22.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2029 | 2.10 | 17.50 | 14.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2030 | 1.62 | 13.50 | 10.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2031 | 1.62 | 13.50 | 10.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2032 | 3.30 | 27.50 | 22.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2033 | 3.60 | 30.00 | 24.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2034 | 4.20 | 35.00 | 28.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2035 | 4.50 | 37.50 | 30.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2036 | 3.90 | 32.50 | 26.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2037 | 9.00 | 75.00 | 60.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2038 | 10.20 | 85.00 | 68.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>2033</p> <p>RECEPTACLE LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2033A</td><td>.075</td><td>1/2</td></tr> <tr><td>2033B</td><td>.105</td><td>1/4</td></tr> <tr><td>2033C</td><td>.135</td><td>3/2</td></tr> <tr><td>2033D</td><td>.165</td><td>1/8</td></tr> <tr><td>2033E</td><td>.195</td><td>3/2</td></tr> <tr><td>2033F</td><td>.230</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2033A | .075 | 1/2 | 2033B | .105 | 1/4 | 2033C | .135 | 3/2 | 2033D | .165 | 1/8 | 2033E | .195 | 3/2 | 2033F | .230 | 1/4 | <p>2034</p> <p>RECEPTACLE LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2034A</td><td>.075</td><td>1/2</td></tr> <tr><td>2034B</td><td>.105</td><td>1/4</td></tr> <tr><td>2034C</td><td>.135</td><td>3/2</td></tr> <tr><td>2034D</td><td>.165</td><td>1/8</td></tr> <tr><td>2034E</td><td>.195</td><td>3/2</td></tr> <tr><td>2034F</td><td>.230</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2034A | .075 | 1/2 | 2034B | .105 | 1/4 | 2034C | .135 | 3/2 | 2034D | .165 | 1/8 | 2034E | .195 | 3/2 | 2034F | .230 | 1/4 | <p>2035</p> <p>RECEPTACLE LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2035A</td><td>.075</td><td>1/2</td></tr> <tr><td>2035B</td><td>.105</td><td>1/4</td></tr> <tr><td>2035C</td><td>.135</td><td>3/2</td></tr> <tr><td>2035D</td><td>.165</td><td>1/8</td></tr> <tr><td>2035E</td><td>.195</td><td>3/2</td></tr> <tr><td>2035F</td><td>.230</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2035A | .075 | 1/2 | 2035B | .105 | 1/4 | 2035C | .135 | 3/2 | 2035D | .165 | 1/8 | 2035E | .195 | 3/2 | 2035F | .230 | 1/4 | <p>2036</p> <p>RECEPTACLE LUG</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2036A</td><td>.075</td><td>1/2</td></tr> <tr><td>2036B</td><td>.105</td><td>1/4</td></tr> <tr><td>2036C</td><td>.135</td><td>3/2</td></tr> <tr><td>2036D</td><td>.165</td><td>1/8</td></tr> <tr><td>2036E</td><td>.195</td><td>3/2</td></tr> <tr><td>2036F</td><td>.230</td><td>1/4</td></tr> </tbody> </table> | No. | L | T | 2036A | .075 | 1/2 | 2036B | .105 | 1/4 | 2036C | .135 | 3/2 | 2036D | .165 | 1/8 | 2036E | .195 | 3/2 | 2036F | .230 | 1/4 | <p>2037</p> <p>TAPERED TERMINAL</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2037A</td><td>.105</td><td>1/4</td></tr> <tr><td>2037B</td><td>.135</td><td>3/2</td></tr> <tr><td>2037C</td><td>.165</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2037A | .105 | 1/4 | 2037B | .135 | 3/2 | 2037C | .165 | 1/8 | <p>2038</p> <p>TAPERED TERMINAL</p> <table border="1"> <thead> <tr> <th>No.</th> <th>L</th> <th>T</th> </tr> </thead> <tbody> <tr><td>2038A</td><td>.105</td><td>1/4</td></tr> <tr><td>2038B</td><td>.135</td><td>3/2</td></tr> <tr><td>2038C</td><td>.165</td><td>1/8</td></tr> </tbody> </table> | No. | L | T | 2038A | .105 | 1/4 | 2038B | .135 | 3/2 | 2038C | .165 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. | L | T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2033A | .075 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2033B | .105 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2033C | .135 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2033D | .165 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2033E | .195 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2033F | .230 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2034A | .075 | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2034C | .135 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2036B | .105 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2036C | .135 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2037B | .135 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2037C | .165 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2038A | .105 | 1/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2038B | .135 | 3/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2038C | .165 | 1/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TEFLON TERMINALS



SMITH TEFLON Terminals are designed for use as precision components in critical electronic applications such as Computers • Microwave • UHF-VHF • Missiles • Satellites

BODY: Pure virgin Teflon, meeting all requirements of MIL-P-19468 and AMS Specification 3651B.

TERMINALS: Precision machined of brass, meeting specification QQ-B-626, Composition 22, and gold-plated for maximum solderability and resistance to corrosion and tarnish.

DESCRIPTION: Terminals are easily inserted into punched or drilled holes, and are self-locking.

— Miniature and sub-miniature sizes allow for maximum space utilization.

— Excellent resistance to thermal and mechanical shock, vibration, corrosive atmospheres, moisture absorption.

— Exceptionally high dielectric strength for use well up into Kilovolt region, depending on size and design.

COLOR CODE SUFFIX (add to catalog number as required).

- 101 WHITE[®] — 104 GREEN — 107 YELLOW — 112 PURPLE
- 102 RED — 105 BLUE — 108 BROWN — 113 GREY
- 103 BLACK — 106 ORANGE

*White is natural Teflon, and will be supplied if no color is specified. Coloring does not affect electrical, mechanical, thermal or physical characteristics of Teflon.

REVERSED STYLES. Most popular types are listed below. We can supply most standard REVERSED on request. Send us your requirements for ANY style not shown and we will advise at once on availability

| Std. Cat. No. | Reverse Cat. No. | Fig. | A | B | C | D | DIMENSIONS | | | | | | NET Per C | | |
|---------------|------------------|---------|------|------|------|------|------------|------|------|------|------|------|-----------|---|---------|
| | | | | | | | L | E | F | G | H | J | | K | |
| 7800 | 1 | | .093 | .100 | .210 | .040 | 0.350 | .125 | .040 | | | | | | \$10.00 |
| 7801 | 1 | | .148 | .062 | .210 | .078 | 0.350 | .172 | .040 | | | | | | 11.00 |
| 7802 | 1 | | .148 | .075 | .210 | .050 | 0.335 | .172 | .040 | | | | | | 9.00 |
| | | 8703 1R | .148 | .100 | .125 | .040 | 0.265 | .172 | .040 | | | | | | 11.00 |
| 7804 | 1 | 8704 1R | .148 | .100 | .210 | .040 | 0.350 | .172 | .040 | | | | | | 9.00 |
| 7805 | 1 | | .148 | .110 | .210 | .050 | 0.375 | .172 | .040 | | | | | | 9.00 |
| | | 8706 1R | .148 | .250 | .210 | .040 | 0.500 | .172 | .040 | | | | | | 13.00 |
| 7807 | 1 | | .172 | .100 | .210 | .040 | 0.350 | .195 | .040 | | | | | | 11.00 |
| 7808 | 1 | | .179 | .100 | .210 | .040 | 0.350 | .200 | .040 | | | | | | 11.00 |
| 7820 | 2 | 8720 2R | .148 | .100 | .210 | .040 | 0.350 | .172 | .040 | .080 | .100 | .050 | .020 | | 10.00 |
| 7821 | 2 | | .148 | .125 | .210 | .040 | 0.375 | .172 | .040 | .080 | .100 | .050 | .020 | | 10.00 |
| 7822 | 2 | | .148 | .125 | .210 | .093 | 0.428 | .172 | .040 | .080 | .100 | .050 | .020 | | 12.00 |
| 7823 | 2 | | .148 | .140 | .154 | .040 | 0.334 | .172 | .046 | .093 | .046 | .048 | .020 | | 11.00 |
| 7824 | 2 | | .148 | .140 | .154 | .040 | 0.334 | .172 | .046 | .093 | .046 | .048 | .020 | | 14.00 |
| 7825 | 2 | | .148 | .165 | .250 | .040 | 0.455 | .172 | .040 | .093 | .093 | .097 | .020 | | 12.00 |
| 7826 | 2 | | .148 | .250 | .210 | .040 | 0.500 | .172 | .040 | .080 | .100 | .050 | .020 | | 11.00 |
| 7827 | 2 | | .148 | .250 | .250 | .040 | 0.540 | .172 | .040 | .093 | .093 | .097 | .020 | | 12.00 |
| | | 8728 2R | .171 | .155 | .210 | .040 | 0.405 | .188 | .040 | .080 | .100 | .050 | .020 | | 10.00 |
| 7829 | 2 | | .179 | .100 | .210 | .040 | 0.350 | .200 | .040 | .080 | .100 | .050 | .020 | | 12.00 |
| 7830 | 2 | | .185 | .100 | .210 | .040 | 0.350 | .218 | .040 | .080 | .100 | .050 | .020 | | 12.00 |
| 7831 | 2 | | .185 | .125 | .210 | .040 | 0.375 | .218 | .040 | .080 | .100 | .050 | .020 | | 12.00 |
| | | 8735 3R | .148 | .187 | .227 | .040 | 0.455 | .172 | .040 | .080 | .187 | | .020 | | 12.00 |
| 7836 | 3 | | .172 | .125 | .120 | .075 | 0.320 | .200 | .048 | .090 | .080 | | .020 | | 11.00 |
| 7840 | 4 | | .148 | .110 | .250 | .125 | 0.482 | .172 | .040 | .093 | .093 | .097 | .020 | | 12.00 |
| 7841 | 4 | | .165 | .150 | .156 | .125 | 0.431 | .187 | .046 | .093 | .046 | .050 | .020 | | 12.00 |
| 7842 | 4 | | .165 | .150 | .156 | .187 | 0.493 | .187 | .046 | .093 | .046 | .050 | .020 | | 13.00 |
| 7843 | 4 | | .165 | .150 | .156 | .250 | 0.556 | .187 | .046 | .093 | .046 | .050 | .020 | | 14.00 |
| 7844 | 4 | | .165 | .150 | .250 | .125 | 0.522 | .187 | .040 | .093 | .093 | .097 | .020 | | 12.00 |
| 7845 | 4 | | .165 | .150 | .250 | .187 | 0.584 | .187 | .040 | .093 | .093 | .097 | .020 | | 13.00 |
| 7846 | 4 | | .165 | .150 | .281 | .187 | 0.616 | .187 | .046 | .125 | .093 | .095 | .031 | | 13.00 |
| 7847 | 4 | | .165 | .150 | .281 | .400 | 0.831 | .187 | .046 | .125 | .093 | .095 | .031 | | 18.00 |
| 7848 | 4 | | .171 | .150 | .156 | .125 | 0.431 | .187 | .046 | .093 | .046 | .050 | .020 | | 12.00 |
| 7849 | 4 | | .215 | .187 | .281 | .500 | 0.968 | .250 | .046 | .125 | .093 | .095 | .031 | | 22.00 |
| 7850 | 4 | | .215 | .187 | .281 | .800 | 1.268 | .250 | .046 | .125 | .093 | .095 | .031 | | 30.00 |
| 7855 | 5 | | .171 | .150 | .203 | .125 | 0.478 | .187 | .078 | .148 | .046 | | .156 | | 12.00 |
| 7856 | 5 | | .171 | .150 | .203 | .187 | 0.540 | .187 | .078 | .148 | .046 | | .156 | | 13.00 |
| 7857 | 5 | | .171 | .150 | .203 | .250 | 0.603 | .187 | .078 | .148 | .046 | | .156 | | 14.00 |
| 7858 | 5 | | .171 | .150 | .203 | .400 | 0.753 | .187 | .078 | .148 | .046 | | .156 | | 18.00 |
| 7859 | 5 | | .217 | .187 | .203 | .500 | 0.890 | .250 | .078 | .148 | .046 | | .156 | | 22.00 |
| 7860 | 5 | | .217 | .187 | .203 | .800 | 1.190 | .250 | .078 | .148 | .046 | | .156 | | 30.00 |
| 7900 | 6 | | .093 | .100 | .210 | .040 | 0.515 | .125 | .040 | | | | | | 11.00 |
| 7901 | 6 | | .125 | .060 | .125 | .040 | 0.335 | .150 | .040 | | | | | | 11.00 |
| 7902 | 6 | | .148 | .050 | .210 | .050 | 0.515 | .172 | .040 | | | | | | 10.00 |
| 7903 | 6 | | .148 | .100 | .210 | .040 | 0.443 | .172 | .040 | | | | | | 11.00 |
| 7904 | 6 | | .148 | .100 | .210 | .040 | 0.515 | .172 | .040 | | | | | | 10.00 |
| 7905 | 6 | | .148 | .100 | .210 | .040 | 0.725 | .172 | .040 | | | | | | 11.00 |
| 7906 | 6 | | .148 | .110 | .210 | .050 | 0.535 | .172 | .040 | | | | | | 10.00 |
| 7907 | 6 | | .148 | .160 | .210 | .040 | 0.535 | .172 | .040 | | | | | | 12.00 |
| 7908 | 6 | | .169 | .100 | .460 | .040 | 2.500 | .219 | .040 | | | | | | 14.00 |
| 7909 | 6 | | .172 | .100 | .210 | .040 | 0.515 | .195 | .040 | | | | | | 11.00 |
| 7910 | 6 | | .218 | .100 | .210 | .040 | 0.515 | .250 | .040 | | | | | | 13.00 |

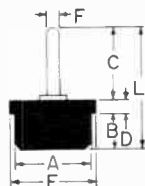


FIG 1

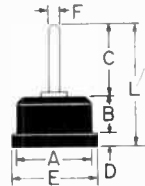


FIG 1R

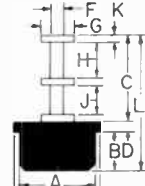


FIG 2



FIG 2R



FIG 3

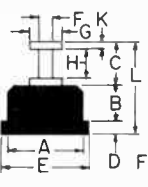


FIG 3R

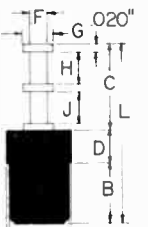


FIG 4

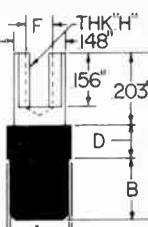


FIG 5

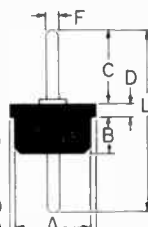


FIG 6

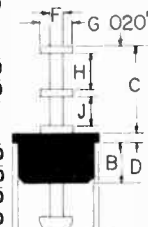
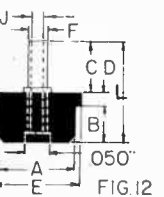
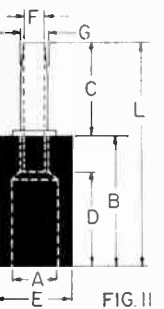
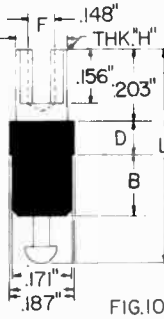
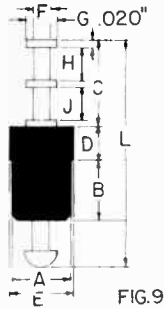
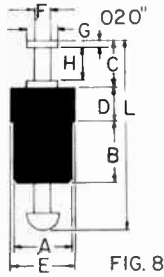
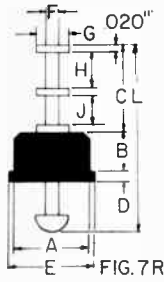


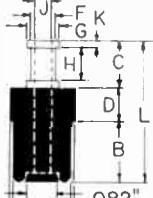
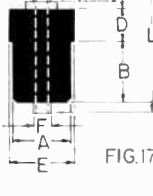
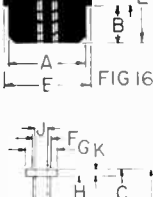
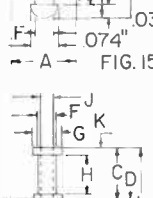
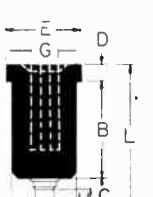
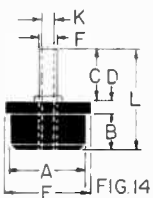
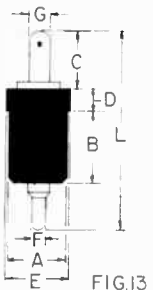
FIG 7



TEFLON TERMINALS

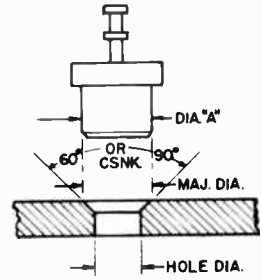


| Std. Cat. No. | Fig. | Reverse Cat. No. | Fig. | A | B | C | D | L | E | F | G | H | J | K | NET Per C |
|---------------|------|------------------|------|------|------|------|------|-------|------|------|------|------|------|------|-----------|
| 7915 | 7 | | | .093 | .100 | .210 | .040 | 0.500 | .125 | .040 | .080 | .100 | .050 | .020 | \$11.00 |
| 7916 | 7 | 9716 | 7R | .148 | .100 | .210 | .040 | 0.500 | .172 | .040 | .080 | .100 | .050 | .020 | 11.00 |
| 7917 | 7 | | | .148 | .100 | .210 | .040 | 0.531 | .172 | .040 | .080 | .100 | .050 | .020 | 11.00 |
| 7918 | 7 | | | .148 | .125 | .210 | .040 | 0.531 | .172 | .040 | .080 | .100 | .050 | .020 | 12.00 |
| 7919 | 7 | | | .148 | .125 | .210 | .093 | 0.609 | .172 | .040 | .080 | .100 | .050 | .020 | 14.00 |
| 7920 | 7 | | | .148 | .125 | .210 | .093 | 0.609 | .172 | .040 | .080 | .100 | .050 | .020 | 13.00 |
| 7921 | 7 | | | .148 | .165 | .210 | .040 | 0.500 | .172 | .040 | .080 | .100 | .050 | .020 | 12.00 |
| 7922 | 7 | | | .179 | .100 | .210 | .040 | 0.500 | .200 | .040 | .080 | .100 | .050 | .020 | 13.00 |
| 7923 | 7 | | | .185 | .125 | .210 | .040 | 0.531 | .218 | .040 | .080 | .100 | .050 | .020 | 13.00 |
| 7925 | 8 | | | .148 | .100 | .093 | .040 | 0.443 | .172 | .040 | .080 | .062 | | .020 | 12.00 |
| 7926 | 8 | | | .148 | .100 | .125 | .040 | 0.350 | .172 | .040 | .080 | .062 | | .020 | 13.00 |
| 7927 | 8 | | | .171 | .150 | .125 | .250 | 0.740 | .187 | .050 | .093 | .062 | | .031 | 18.00 |
| 7928 | 8 | | | .171 | .171 | .133 | .063 | 0.540 | .187 | .050 | .093 | .062 | | .031 | 14.00 |
| 7929 | 8 | | | .171 | .212 | .125 | .187 | 0.740 | .187 | .050 | .093 | .062 | | .031 | 18.00 |
| 7930 | 8 | | | .171 | .275 | .125 | .250 | 0.865 | .187 | .050 | .093 | .062 | | .031 | 20.00 |
| 7931 | 8 | | | .171 | .400 | .125 | .375 | 1.115 | .187 | .050 | .093 | .062 | | .031 | 24.00 |
| 7932 | 8 | | | .171 | .825 | .125 | .800 | 1.965 | .250 | .050 | .125 | .062 | | .031 | 44.00 |
| 7933 | 8 | | | .185 | .210 | .133 | .093 | 0.640 | .215 | .046 | .093 | .093 | | .020 | 18.00 |
| 7935 | 9 | | | .148 | .165 | .250 | .187 | 0.836 | .172 | .040 | .093 | .095 | .095 | .020 | 18.00 |
| 7936 | 9 | | | .148 | .230 | .250 | .125 | 0.836 | .172 | .040 | .093 | .095 | .095 | .020 | 18.00 |
| 7937 | 9 | | | .171 | .150 | .250 | .250 | 0.836 | .187 | .040 | .093 | .095 | .095 | .020 | 18.00 |
| 7938 | 9 | | | .171 | .212 | .250 | .187 | 0.836 | .187 | .040 | .093 | .095 | .095 | .020 | 18.00 |
| 7939 | 9 | | | .264 | .100 | .210 | .040 | 0.531 | .312 | .040 | .080 | .100 | .050 | .020 | 14.00 |
| 7941 | 10 | | | .171 | .212 | .203 | .187 | 0.821 | .187 | .078 | .148 | .046 | | .156 | 22.00 |
| 7942 | 10 | | | .171 | .275 | .203 | .250 | 0.947 | .187 | .078 | .148 | .046 | | .156 | 24.00 |
| 7948 | 11 | | | .128 | .375 | .270 | .270 | 0.645 | .218 | .062 | .080 | | | | 16.00 |
| 7950 | 12 | | | .148 | .179 | .120 | .046 | 0.345 | .172 | .040 | .040 | | | | 20.00 |
| 7951 | 12 | | | .185 | .281 | .120 | .046 | 0.437 | .218 | .054 | .080 | .053 | | .037 | 19.00 |
| 7952 | 12 | | | .185 | .400 | .187 | .050 | 0.637 | .218 | .054 | .080 | .104 | | .037 | 19.00 |
| 7955 | 13 | | | .185 | .287 | .250 | .046 | 0.906 | .218 | .030 | .050 | | | | 15.00 |
| 7956 | 13 | | | .185 | .287 | .250 | .046 | 2.083 | .218 | .030 | .050 | | | | 13.00 |
| 7960 | 14 | | | .093 | .060 | .125 | .040 | 0.225 | .125 | .040 | | | | .030 | 11.00 |
| 7961 | 14 | | | .148 | .053 | .207 | .050 | 0.310 | .172 | .040 | | | | .030 | 11.00 |
| 7962 | 14 | | | .148 | .160 | .207 | .040 | 0.407 | .172 | .040 | | | | .030 | 15.00 |
| 7963 | 14 | | | .171 | .110 | .207 | .050 | 0.367 | .218 | .085 | | | | .063 | 13.00 |
| 7965 | 15 | | | .218 | .100 | .147 | .040 | 0.287 | .250 | .060 | | | | .030 | 14.00 |
| 7967 | 16 | | | .125 | .080 | .133 | .060 | 0.273 | .150 | .060 | .090 | .093 | .030 | .020 | 13.00 |
| 7969 | 17 | | | .148 | .100 | .133 | .040 | 0.303 | .172 | .060 | .090 | .093 | .030 | .020 | 13.00 |
| 7971 | 18 | | | .171 | .155 | .133 | .093 | 0.381 | .188 | .082 | .125 | .093 | .062 | .020 | 15.00 |
| 7973 | 19 | | | .218 | .375 | .281 | .250 | 1.187 | .250 | .062 | .125 | .093 | .093 | .031 | 25.00 |



INSTALLATION PROCEDURE

1. For chassis or panels 1/8" (.125") or less in thickness, punch or drill hole .013" ± .002" LESS than the diameter of the bushing (dimension "A" in the tables). Minimum protrusion of assembled terminal should be .040" (dimension "B" less chassis thickness) for greater holding power. Recommendations for panels greater than .125" thick are available on request.
2. Countersink the insertion side of the chassis. For chassis thicker than .040" use 60° countersink. For chassis less than .040" thick use 90° countersink. Countersink depth should be such that "Maj. Dia." shown in drawing is equal to bushing diameter (Dimension "A") of the terminal.
3. Insert terminal in countersunk side of chassis, and press until shoulder of terminal seats against chassis.



HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

CUTLER-HAMMER SWITCHES

TOGGLE SWITCHES STANDARD DUTY

15 Amps, 125 Volts AC, UL Approved 15/32" shank; slow make and break; bakelite case. AC rated only for longer life and greater capacity.

BACK CONNECTED LUG TERMINALS

| No. | C-H No. | Type | NET Each |
|-----|---------|------|----------|
| 966 | 7501K13 | SPST | \$.69 |
| 967 | 7503K4 | SPDT | .81 |
| 968 | 7561K4 | DPST | 1.08 |
| 969 | 7565K5 | DPDT | 1.26 |
| 970 | 7611K2 | TPST | 2.19 |
| 971 | 7615K2 | TPDT | 2.70 |

BACK CONNECTED SCREW TERMINALS

| No. | C-H No. | Type | NET Each |
|-----|---------|------|----------|
| 972 | 7500K14 | SPST | \$.81 |
| 973 | 7504K4 | SPDT | .96 |
| 974 | 7560K5 | DPST | 1.26 |
| 975 | 7564K6 | DPDT | 1.56 |
| 976 | 7610K2 | TPST | 2.55 |
| 977 | 7614K2 | TPDT | 3.24 |

CENTER OFF STANOARD DUTY TOGGLE SWITCHES

BACK CONNECTED LUG TERMINALS

| No. | C-H No. | Type | NET Each |
|-----|---------|------|----------|
| 978 | 7503K13 | SPDT | \$.81 |
| 979 | 7563K4 | DPDT | 1.26 |
| 980 | 7613K2 | TPDT | 2.70 |

BACK CONNECTED SCREW TERMINALS

| No. | C-H No. | Type | NET Each |
|-----|---------|------|----------|
| 981 | 7502K13 | SPDT | \$.96 |
| 982 | 7562K4 | DPDT | 1.56 |
| 983 | 7612K2 | TPDT | 3.24 |

TOGGLE SWITCHES LIGHT OUTY

AC-DC, UL Approved; 15/32" shank; quick make — quick break; bakelite case. Unusually small size for electrical capacity. Std. Pkg. 10

BACK CONNECTED LUG TERMINALS SMALL BAT HANDLE 15/32" LONG

| No. | C-H No. | Current Rating Type | 125 V. | 250 V. | NET Each |
|-----|---------|---------------------|---------|---------|----------|
| 950 | 8280K16 | SPST | 3 Amps. | 3 Amps. | \$.69 |
| 951 | 831K18 | SPST | 6 Amps. | 3 Amps. | .81 |
| 952 | 8282K14 | SPDT | 3 Amps. | 1 Amp. | .87 |
| 953 | 8284K14 | 2 Ctr. | 3 Amps. | 1 Amp. | .93 |
| 954 | 8360K7 | DPST | 3 Amps. | 3 Amps. | 1.26 |
| 955 | 8370K7 | DPST | 6 Amps. | 3 Amps. | 1.38 |
| 956 | 8363K7 | DPDT | 3 Amps. | 3 Amps. | 1.44 |
| 957 | 8373K7 | DPDT | 6 Amps. | 3 Amps. | 1.56 |

STANDARD BAT HANDLE 1 1/16" LONG

| No. | C-H No. | Type | Current Rating | NET Each |
|------|----------|--------|----------------|----------|
| 1160 | 8908K146 | SPST | 3 Amps. | \$.69 |
| 1161 | 8908K417 | SPST | 6 Amps. | .81 |
| 1162 | 8908K148 | SPDT | 3 Amps. | .87 |
| 1163 | 8908K149 | 2 Ctr. | 3 Amps. | .93 |
| 1164 | 8908K150 | DPST | 3 Amps. | 1.26 |
| 1165 | 8908K151 | DPST | 6 Amps. | 1.38 |
| 1166 | 8908K152 | DPDT | 3 Amps. | 1.44 |
| 1167 | 8908K453 | DPDT | 6 Amps. | 1.56 |

SIDE CONNECTED SCREW TERMINALS

| No. | C-H No. | Current Rating Type | 125 V. | 250 V. | NET Each |
|-----|---------|---------------------|---------|---------|----------|
| 958 | 8285K8 | SPST | 3 Amps. | 3 Amps. | \$.84 |
| 959 | 8306K8 | SPST | 6 Amps. | 3 Amps. | .96 |
| 960 | 8297K8 | SPDT | 3 Amps. | 1 Amp. | 1.11 |
| 961 | 8372K7 | DPST | 6 Amps. | 3 Amps. | 1.65 |
| 962 | 8365K7 | DPDT | 3 Amps. | 3 Amps. | 1.89 |
| 963 | 8375K7 | DPDT | 6 Amps. | 3 Amps. | 2.01 |

WIRE LEADS— SIX INCHES LONG

| No. | C-H No. | Current Rating Type | 125 V. | 250 V. | NET Each |
|-----|---------|---------------------|---------|---------|----------|
| 964 | 8290K16 | SPST | 3 Amps. | 3 Amps. | \$.84 |
| 965 | 8391K8 | SPST | 6 Amps. | 3 Amps. | .96 |

PUSH BUTTON MOMENTARY SWITCHES

AC-DC, UL Approved, 15/32" shank; rated at 1/4 Amp, 125 volts — 1/4 Amp, 250 volts.

| No. | C-H No. | Type | Term. | NET Each |
|-----|---------|-------------|-------|----------|
| 992 | 8411K4 | SP Norm. On | Lug | \$.48 |
| 993 | 8411K3 | SP Norm. On | Screw | .54 |
| 994 | 8411K8 | SP Norm. Cl | Lug | .36 |
| 995 | 8411K7 | SP Norm. Cl | Screw | .39 |

TOGGLE SWITCHES HEAVY DUTY

AC-DC, UL Approved; 15/32" shank; quick make-quick break; bakelite case. Screw Terminals.



| No. | C-H No. | Current Rating Type | 125 V. | 250 V. | NET Each |
|------|---------|---------------------|--------|--------|----------|
| 984* | 7321K3 | SPST 12 A | 6 A | 6 A | \$1.32 |
| 985* | 7320K3 | DPST 12 A | 6 A | 6 A | 1.32 |
| 986+ | 7361K5 | SPST 15 A* | 10 A | 10 A | 2.31 |
| 987+ | 7360K8 | DPST 15 A* | 10 A | 10 A | 2.31 |
| 988± | 7402K4 | DPST | 20 A | 20 A | 3.24 |

* 1 Hp — 125/250V, +1 1/2 Hp — 125/250V.
± 1 1/2 Hp — 125V, 2 Hp — 250V.

FOUR POLE SWITCHES



AC-DC GOVERNMENT APPROVED PER MIL-S-6745, 15/32" shank. Rated 10 amps, 115 volt AC—20 amps, 28 volts DC (Nominal rating per pole) SEALED LEVER Std. Pkg. 10

| No. | C-H No. | Type | Terminals | NET Each |
|-----|---------|-------|-------------|----------|
| 944 | 7661K6 | 4 PNT | Solder Lugs | \$4.56 |
| 945 | 7665K4 | 4 PNT | Solder Lugs | 5.61 |
| 946 | 7660K8 | 4 PNT | Screw Term. | 4.95 |
| 947 | 7664K3 | 4 PNT | Screw Term. | 6.15 |

CENTER OFF

| | | | | |
|-----|--------|-------|-------------|--------|
| 948 | 7663K5 | 4 PNT | Solder Lugs | \$5.61 |
| 949 | 7662K5 | 4 PNT | Screw Term. | 6.15 |

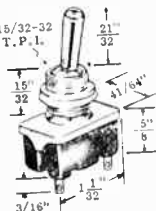
PUSH BUTTON SWITCHES

Push to make—Push to break AC-DC, UL Approved; 11/16" shank; bakelite case. Pushing the button once closes the contacts. Pushing it again opens the contacts. Rated at 6 Amps, 125 Volts; 3 Amps, 250 Volts. Std. Pkg. 10



| No. | C-H No. | Type | Term. | NET Each |
|-----|---------|------|-------|----------|
| 989 | 7206K4 | SPST | Lug | \$.96 |
| 990 | 7205K4 | SPST | Screw | 1.08 |
| 991 | 7207K4 | SPST | Wire | 1.08 |

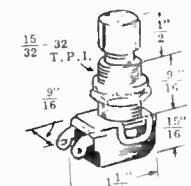
MIDGET TOGGLE SWITCH



Bat lever. Molded phenolic base. 15/32 x 1/16" long. Slotted sleeve, nickel finish. Supplied with hex nut and knurled nut. Back connected silver plated solder contacts. Rated 1 amp, 250 volts; 3 amps, 125 volts. Std. Pkg. 10

| No. | Circuit | NET Each |
|-----|---------|----------|
| 920 | SPST | \$.93 |
| 921 | SPDT | 1.11 |
| 922 | 2 Ctr. | 1.14 |
| 923 | DPST | 1.35 |
| 924 | DPDT | 1.56 |

MIDGET MOMENTARY SWITCH



Molded Phenolic Base 15/32 x 1/16" slotted sleeve, Nickel Finish. Supplied with hex nut and knurled nut. Side connected silver plated solder contacts. Rated at 3 amps, 120 volts A.C. Supplied less button; order button separately. Std. Pkg. 10

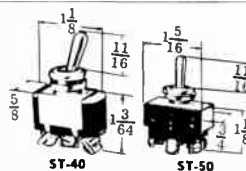
| No. | Circuit | NET Each |
|-----|---------|----------|
| 925 | SPST | \$.75 |
| 926 | 2 Ctr. | .81 |

Normally Closed (ON)

| | | |
|-----|---------|----------|
| No. | Circuit | NET Each |
| 927 | SPST | \$.75 |

Normally Open (OFF)

"ST" SWITCHES



Nominal Rating Per. Pole: 10 Amps, 115 V. AC 20 Amps, 28V. DC Std. Pkg. 10

ST-40 SERIES—Single Pole With Screw Terminals

| HHS | C-H | JAN Type | Circuit | NET Each |
|------|---------|----------|------------------------|----------|
| 1720 | 8801K13 | ST40A | SPST On-None-Off | \$1.68 |
| 1721 | 8813K12 | ST40B | SPST On-None-Mom-Off | 1.86 |
| 1722 | 8811K12 | ST40C | SPST On-None-Mom-On | 1.86 |
| 1723 | 8810K12 | ST40D | SPDT On-None-On | 2.04 |
| 1724 | 8800K13 | ST40E | SPDT On-Off-On | 2.04 |
| 1725 | 8804K12 | ST40F | SPDT On-None-Mom-On | 2.19 |
| 1726 | 8812K13 | ST40G | SPDT Mom-On-Off-Mom-On | 2.19 |
| 1727 | 8809K13 | ST40H | SPDT Off-On-Mom-On | 2.19 |

All ST-40 Switches have Sealed Lever.

ST-42 SERIES—Single Pole With Solder Lugs

| HHS | C-H | JAN Type | Circuit | Each |
|------|--------|----------|------------------------|--------|
| 1730 | 8803K6 | ST42A | SPST On-None-Off | \$1.26 |
| 1731 | 8819K5 | ST42B | SPST On-None-Mom-Off | 1.38 |
| 1732 | 8817K5 | ST42C | SPST On-None-Mom-On | 1.38 |
| 1733 | 8816K5 | ST42D | SPDT On-None-On | 1.47 |
| 1734 | 8802K6 | ST42E | SPDT On-Off-On | 1.47 |
| 1735 | 8805K5 | ST42F | SPDT On-None-Mom-On | 1.82 |
| 1736 | 8818K5 | ST42G | SPDT Mom-On-Off-Mom-On | 1.82 |
| 1737 | 8815K6 | ST42H | SPDT Off-On-Mom-On | 1.62 |

ST-50 SERIES—Double Pole With Screw Terminals

| HHS | C-H | JAN Type | Circuit | NET Each |
|------|---------|----------|------------------------|----------|
| 1740 | 8822K8 | ST50K | DPST* On-None-Off | \$2.25 |
| 1741 | 8828K5 | ST50L | DPST On-None-Mom-Off | 2.70 |
| 1742 | 8826K5 | ST50M | DPST Off-None-Mom-On | 2.70 |
| 1743 | 8824K8 | ST50N | DPDT* On-None-On | 2.70 |
| 1744 | 8820K10 | ST50P | DPDT* On-Off-On | 2.70 |
| 1745 | 8830K5 | ST50R | DPDT On-None-Mom-On | 2.94 |
| 1746 | 8831K4 | ST50S | DPDT Mom-On-Off-Mom-On | 2.94 |
| 1747 | 8832K4 | ST50T | DPDT* On-Off-Mom-On | 2.94 |

* These switches are equipped with Sealed Lever.

ST-52 SERIES—Double Pole With Solder Lugs

| HHS | C-H | JAN Type | Circuit | Each |
|------|--------|----------|------------------------|--------|
| 1760 | 8823K5 | ST52K | DPST On-None-Off | \$1.50 |
| 1761 | 8829K5 | ST52L | DPST On-None-Mom-Off | 1.68 |
| 1762 | 8827K5 | ST52M | DPST Off-None-Mom-On | 1.68 |
| 1763 | 8825K5 | ST52N | DPDT On-None-On | 1.68 |
| 1764 | 8821K5 | ST52P | DPDT On-Off-On | 1.68 |
| 1765 | 8831K5 | ST52R | DPDT On-None-Mom-On | 1.95 |
| 1766 | 8835K3 | ST52S | DPDT Mom-On-Off-Mom-On | 1.95 |
| 1767 | 8833K3 | ST52T | DPDT On-Off-Mom-On | 1.95 |

MAGIC MARKERS



HEAVY OPAQUE for the Electronics Industry. Completely NEW, with Speedy type "DM" heavy opaque ink, answers industry's demand for a marking device that marks clearly and easily on porous or non-porous surfaces that are abrasive, grainy, dirty or oily. Unbreakable squeeze bottle.

Box of 12 all one color, SPECIFY COLOR by adding suffix to Catalog Number as coded on chart below. White, Black, Yellow only.

| No. | Standard Package | NET Per Box |
|-------|--|-------------|
| 3896* | Box of 12 | \$21.48 |
| 3896* | Box of 12 Assorted Colors. Contains 1 Black, 1 White 4 Yellow. | 1.68 |
| No. | Standard Package | NET Per Box |
| 3896A | Box of 12 | \$21.48 |

JUMBO 2 1/2 times capacity. Over 7 miles of writing. Lowest cost per mile of writing, of all other ready-to-write devices. Instant dry, waterproof, all-purpose.

Box of 12 all one color, SPECIFY COLOR by adding suffix to Catalog Number as coded on chart below.

| No. | Standard Package | NET Per Box |
|-------|--|-------------|
| 3895* | Box of 12 | \$16.20 |
| 3895* | Box of 12 Assorted Colors. Contains 3 Black, 3 Red, 1 each Yellow, Orange, Purple, Brown, Blue, Green. | 1.62 |
| No. | Standard Package | NET Per Box |
| 3895A | Box of 12 | \$16.20 |

ALL-PURPOSE Write, letter, label, draw, color on any surface or material. Dries instantly, waterproof, permanent. No loose ink. Built-in cap holder in base.

Box of 12, all one color, SPECIFY COLOR by adding suffix to catalog Number as coded below.

| No. | Standard Package | NET Per Box |
|-------|---|-------------|
| 3897* | Box of 12 | \$5.88 |
| 3897* | Box of 12 Assorted Colors. Contains 3 black, 3 Red, 1 each Yellow, Orange, Purple, Brown, Blue, Green. | 1.62 |
| No. | Standard Package | NET Per Box |
| 3897A | Box of 12 | \$5.88 |
| 3897A | Display of 24 Assorted Colors. Contains 12 Black, 3 Red, 3 Blue, 2 Green, 1 each Yellow, Orange, Purple, Brown. | 1.62 |
| No. | Standard Package | NET Each |
| 3897D | Display of 24 | \$11.76 |

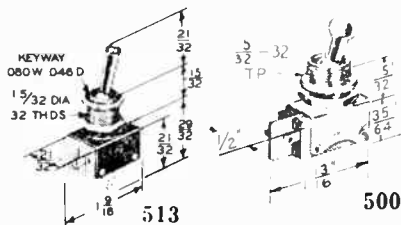
HERMAN H. SMITH, INC.



"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

ARROW HART & HEGEMAN SWITCHES

SMALL CANOPY TYPE SWITCHES



Laminated type 15/32-32 slotted sleeve, nickel finish. Supplied with hex nut and knurled nut. Solder terminals. SPST rated at 3 amps-250 volts AC-DC; all other rated at 1 amp-250 volts, 3 amps-125 volts AC-DC. Std. pkg. 10

BAT LEVER POSITIVE ACTION

| 15/32" long shaft | | CIRCUIT | | 13/32" long shaft | |
|-------------------|----------|---------|-----|-------------------|----------|
| No. | NET Each | | | No. | NET Each |
| 510 | \$.69 | SPST | 584 | \$.69 | |
| 511 | .87 | SPDT | 585 | .87 | |
| 542 | .93 | 2-Circ. | 586 | .93 | |
| 542 | 1.26 | DPST | 587 | 1.26 | |
| 513 | 1.44 | DPDT | 588 | 1.44 | |

BAT LEVER MOMENTARY ACTION

| 15/32" long shaft | | CIRCUIT | | 13/32" long shaft | |
|----------------------|----------|---------------------|------|-------------------|----------|
| Normally Closed (DN) | | Normally Open (OFF) | | | |
| No. | NET Each | | | No. | NET Each |
| 1020 | \$1.11 | SPST | 1024 | \$1.11 | |
| 1021 | 1.29 | SPDT | | | |
| 1022 | 1.68 | DPST | 1025 | 1.68 | |
| 1023 | 1.86 | DPDT | | | |

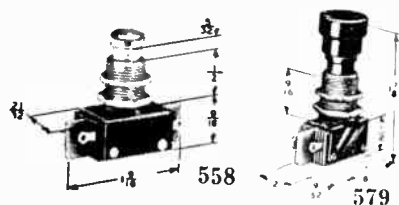
BALL LEVER POSITIVE ACTION

| 15/32" long shaft | | CIRCUIT | | 3/4" long shaft | |
|-------------------|----------|---------|-----|-----------------|----------|
| No. | NET Each | | | No. | NET Each |
| 500 | \$.69 | SPST | 501 | \$.84 | |
| 502 | .87 | SPDT | 503 | 1.08 | |
| 540 | .87 | 2-Circ. | 541 | 1.08 | |
| 504 | .26 | DPST | 505 | 1.44 | |
| 506 | 1.44 | DPDT | 507 | 1.59 | |

6" WIRE LEADS POSITIVE ACTION

| 15/32" long shaft | | CIRCUIT | | BAT LEVER | |
|-------------------|----------|---------|------|-----------|----------|
| BALL LEVER | NET Each | | | | NET Each |
| 1010 | \$.84 | SPST | 1015 | \$.84 | |
| 1011 | 1.17 | SPDT | 1016 | 1.17 | |
| 1012 | 1.29 | 2-Circ. | 1017 | 1.29 | |
| 1013 | 1.65 | DPST | 1018 | 1.65 | |
| 1014 | 2.01 | DPDT | 1019 | 2.01 | |

MOMENTARY PUSH SWITCHES



Laminated type 15/32-32 x 9/16" slotted sleeve, nickel finish. Supplied with hex nut and knurled nut. All switches accept snap on button. SPST rated at 3 amps-250 volts AC-DC. All others rated at 1 amp-250 volts, 3 amps-125 volts AC-DC. SUPPLIED LESS BUTTON: ORDER BUTTON SEPARATELY.

QUICK MAKE AND BREAK

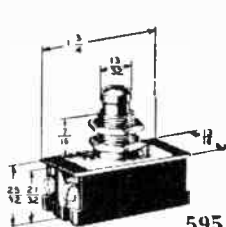
| Normally Closed (ON) | | CIRCUIT | | Normally Open (OFF) | |
|----------------------|----------|---------|-----|---------------------|----------|
| No. | NET Each | | | No. | NET Each |
| 552 | \$1.35 | SPST | 555 | \$1.35 | |
| 556 | 1.56 | SPDT | | | |
| 557 | 1.53 | 2-Circ. | | | |
| 564 | 1.86 | DPST | 558 | 1.86 | |
| 559 | 2.07 | DPDT | | | |

SLOW MAKE AND BREAK

Rated at 1 amp.-125 volts AC

| Normally Closed (ON) | | CIRCUIT | | Normally Open (OFF) | |
|----------------------|----------|---------|-----|---------------------|----------|
| No. | NET Each | | | No. | NET Each |
| 582 | \$.75 | SPST | 579 | \$.75 | |
| 580 | .96 | 2-Circ. | | | |

STANDARD DUTY MOMENTARY PUSH SWITCHES

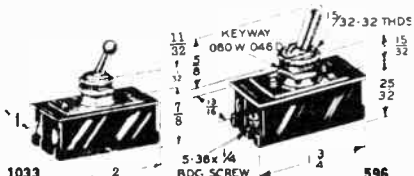


Molded phenolic base. 15/32-32 x 7/16" long slotted sleeve, nickel finish. Screw terminals. Supplied with hex nuts.

Two circ. rated at 3 amps-250 volts, 6 amps-125 volts AC-DC. All others rated at 6 amps-250 volts, 12 amps-125 volts AC-DC. DPST also rated at 1 HP at 250 volts AC-DC.

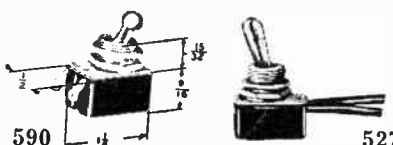
| Normally Closed (ON) | | CIRCUIT | | Normally Open (OFF) | |
|----------------------|----------|---------|-----|---------------------|----------|
| No. | NET Each | | | No. | NET Each |
| 1026 | \$1.98 | SPST | 544 | \$1.98 | |
| 1027 | 1.98 | SPDT | | | |
| 1028 | 1.98 | 2-Circ. | | | |
| 1029 | 1.98 | DPST | 595 | 1.98 | |

STANDARD DUTY TOGGLE SWITCHES QUICK MAKE AND BREAK



| BALL LEVER | | CIRCUIT | | BAT LEVER | |
|------------|----------|---------|-----|-----------|----------|
| No. | NET Each | | | No. | NET Each |
| 1030 | \$1.32 | SPST | 597 | \$1.32 | |
| 1031 | 1.32 | SPDT | 598 | 1.32 | |
| 1032 | 1.32 | 2-Circ. | 599 | 1.32 | |
| 1033 | 1.32 | DPST | 596 | 1.32 | |

MIDGET SIZE TOGGLE SWITCHES



Molded phenolic base. 15/32-32 x 15/32" long slotted sleeve, nickel finish. Side connected silver plated solder contacts. Supplied with hex nut and knurled nut. SPST rated at 3 amps-250 volts; 6 amps-125 volts; all others rated at 1 amp-250 volts, 6 amps-125 volts.

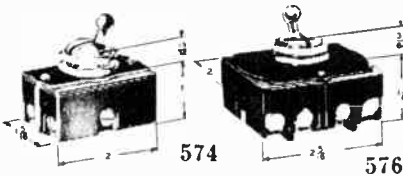
| BALL LEVER | | CIRCUIT | | BAT LEVER | |
|------------|----------|---------|-----|-----------|----------|
| No. | NET Each | | | No. | NET Each |
| 590 | \$.78 | SPST | 591 | \$.78 | |
| 589 | .99 | SPDT | 592 | .99 | |
| 594 | 1.02 | 2-Circ. | 593 | 1.02 | |

6" WIRE LEADS

| BALL LEVER | | CIRCUIT | | BAT LEVER | |
|------------|----------|---------|-----|-----------|----------|
| No. | NET Each | | | No. | NET Each |
| 526 | \$.96 | SPST | 527 | \$.96 | |
| 538 | 1.26 | SPDT | 528 | 1.26 | |
| 543 | 1.41 | 2-Circ. | 514 | 1.41 | |

EXTRA HEAVY DUTY POWER SWITCHES

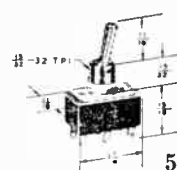
3 POSITION—POSITIVE CENTER OFF



Slotted sleeve 3/4-32, nickel finish. Screw terminals. Supplied with 2 hex nuts. Rated at 5 amps-250 volts, 10 amps-125 volts plus IIP rating shown below. Std. pkg. 5

| No. | Circuit | Description | NET Each |
|-----|---------|----------------------------------|----------|
| 574 | DPDT | 3/4 HP 250 volts AC-DS | \$ 4.89 |
| 575 | TPDT | 1/2 HP 115/230 volts AC, 3 phase | 7.53 |
| 576 | 4PDT | 1/2 HP 115/230 volts AC, 2 phase | 10.05 |

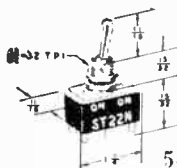
INTERMEDIATE SIZE TOGGLE SWITCHES



Molded phenolic base. 15/32-32 x 15/32" long slotted sleeve, nickel finish. Supplied with hex nut and knurled nut. Back connected silver plated solder contacts. SPDT rated at 1 amp-250 volts, 6 amps-125 volts AC-DC; all others rated at 3 amps-250 volts, 6 amps-125 volts AC-DC.

| POSITIVE ACTION | | CIRCUIT | | MOMENTARY ACTION | |
|-----------------|----------|---------|-----|------------------|----------|
| No. | NET Each | | | No. | NET Each |
| 520 | \$.93 | SPST | 524 | OFF | \$1.32 |
| 521 | 1.11 | SPDT | 549 | OFF | 1.50 |
| 583 | 1.14 | 2-Circ. | | | |
| 523 | 1.35 | DPST | 537 | OFF | 1.89 |
| | 1.56 | DPDT | 525 | OFF | 2.07 |

ST TYPE TOGGLE SWITCHES



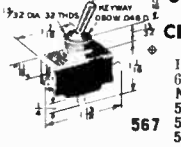
MEETS AN SPEC. JAN-23
Rated at 3 amps-250 volts, 6 amps-125 volts AC-DC.

| No. | AWS No. | CIRCUIT | Position | NET Each |
|------|---------|---------|----------|----------|
| 545 | ST 12A | SPST | OFF-ON | \$1.23 |
| 546 | ST 12D | SPDT | ON-ON | 1.41 |
| 1040 | ST 12V | 2-Circ. | ON-OFF | 1.44 |
| 547 | ST 22K | DPST | OFF-ON | 1.77 |
| 548 | ST 22N | DPDT | ON-ON | 1.92 |

MOMENTARY NORMALLY OPEN (OFF)

| | | | | |
|------|--------|------|--------|--------|
| 1041 | ST 12C | SPST | OFF-ON | \$1.62 |
| 1042 | ST 22M | DPST | OFF-ON | 2.13 |

3 POSITION

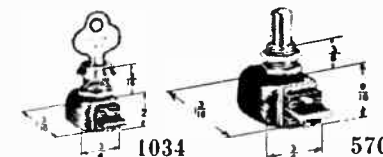


CENTER OFF

Rated at 3 amps-250 volts, 6 amps-125 volts AC-DC.

| No. | CIRCUIT | NET Each |
|-----|---------|----------|
| 566 | SPDT | \$1.68 |
| 565 | 2-Circ. | 1.89 |
| 567 | DPDT | 2.07 |

CANOPY TYPE ROTARY SWITCHES



Laminated type. 11/32-32 x 15/32" sleeve, nickel finish. Solder lugs. Supplied with hex nut and dress nut. SPST rated at 3 amps-250 volts AC-DC, all others rated at 1 amp-250 volts, 3 amps-125 volts AC-DC. Key removable in OFF position only on SPST and DPST—key removable in both positions on all others. 1 1/8" shaft.

| KEY TYPE | CIRCUIT | ROTARY TYPE |
|----------|-----------|-------------------|
| 1034 | \$1.32 | SPST 570 |
| 1035 | NET 1.50 | SPDT 571 |
| 1036 | Each 1.53 | 2-Circ. Each 1.05 |
| 1037 | 1.89 | DPST 572 |
| 1038 | 2.07 | DPDT 573 |

SWITCH ACCESSORIES

| No. | Description | NET Per C |
|------|-------------------------------|-----------|
| 508 | ON-OFF name plate | \$ 5.40 |
| 509 | HI-LO name plate | 5.40 |
| 581 | Snap-On Button (Red or Black) | 14.40 |
| 1146 | Narrow Rim Lockwasher | .78 |
| 1170 | Key—Remove off position | 21.00 |
| 1171 | Key—Remove both positions | 21.00 |
| 1172 | Locking Ring | 2.40 |
| 1196 | Hex Nut—Brass N.P. | 1.80 |
| 1197 | Ring Nut—Brass N.P. | 3.00 |
| 1198 | Dress Nut—Brass N.P. | 18.00 |



ARROW, HART & HEGEMAN

"SNAP ACTING"

MOMENTARY CONTACT

SWITCHES

PRECISION SNAP-ACTING SWITCH A precision snap-acting switch is a mechanically operated electric switch having predetermined and accurately controlled characteristics, and having contacts other than the blade and jaw, or mercury type, where the maximum separation between any butting contacts is 1/16 inch.

MOMENTARY CONTACT SWITCH A momentary contact switch is a switch which returns from the operated condition to its normal circuit

condition when the actuating force is removed

ACTUATOR An actuator is the mechanism of the switch or enclosure which, when moved as intended, will operate the contacts

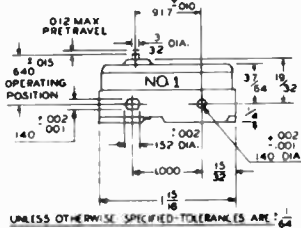
OPERATING FORCE Operating force is that straight line force in the designated direction applied to the actuator to cause the switch contacts to snap to the operated contact position.

PRETRAVEL Pretravel is the distance or angle through which the actuator moves from the actuator free position to the actuator operating position

OVERTRAVEL Overtravel is the movement of the actuator beyond the operating position

MOVEMENT DIFFERENTIAL Movement differential is the distance or angle from the operating position to the releasing position

HIGH SENSITIVITY PIN TYPE



OPERATING CHARACTERISTICS

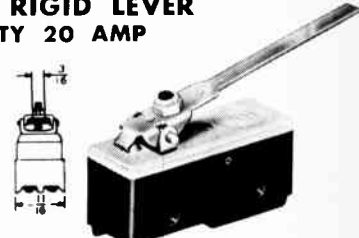
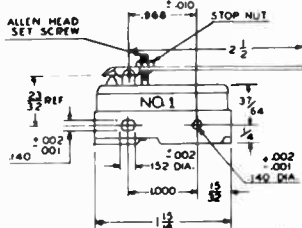
Operating Force..... 7 to 12 oz.
Pretravel..... .012" max.
Overtravel..... .005" min.
Diff. Travel..... .0002 to .0008 in.

RATINGS

*LIMIT LOAD to 1 10 Amp, 125 V., A.C. or 10 Watts, 125 V., A.C. or 5 Watts, 25 V., D.C.

| WITH TERMINALS: | S.P. NDRM. OPEN | | S.P. NDRM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4701 | \$5.82 | 4705 | \$5.82 | 4709 | \$6.06 |
| Screws, Cup Washers | 4702 | 5.94 | 4706 | 5.94 | 4710 | 6.15 |
| Screws, Lock Washers | 4703 | 5.94 | 4707 | 5.94 | 4711 | 6.15 |
| Quick Connect | 4704 | 5.82 | 4708 | 5.82 | 4712 | 6.06 |

ADJUSTABLE RIGID LEVER HEAVY DUTY 20 AMP



OPERATING CHARACTERISTICS

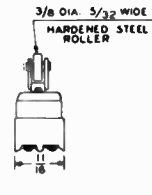
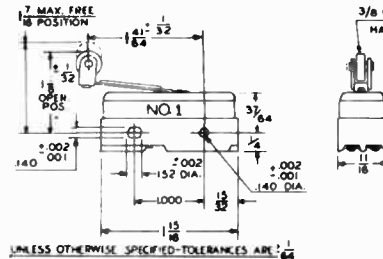
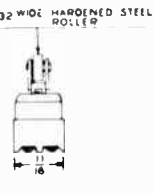
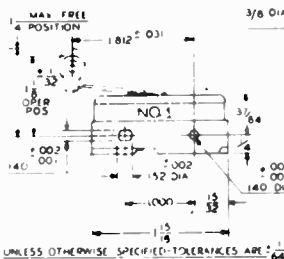
Operating Force..... 2 1/2 oz. max.
Pretravel..... 3/8" max.
Overtravel..... .078" min.
Diff. Travel..... .109" max.

RATINGS

20 A., 480 V., A.C. 1/4 A., 250 V., D.C.
10 A., 125 V., AC "L" Load 1 H.P., 120 V., A.C.
1/2 A., 125 V., D.C. 2 H.P., 240 V., A.C.

| WITH TERMINALS: | S.P. NDRM. OPEN | | S.P. NDRM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4721 | \$2.64 | 4725 | \$2.64 | 4729 | \$2.88 |
| Screws, Cup Washers | 4722 | 2.76 | 4726 | 2.76 | 4730 | 3.00 |
| Screws, Lock Washers | 4723 | 2.76 | 4727 | 2.76 | 4731 | 3.00 |
| Quick Connect | 4724 | 2.64 | 4728 | 2.64 | 4732 | 2.88 |

ROLLER LEAF ACTUATOR



GENERAL PURPOSE 15 AMP

RATINGS

15 Amp., 480 V., A.C.
1/2 Amp., 125 V., D.C.
1/4 Amp., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 5 oz. max.
Pretravel..... 3/8" max.
Overtravel..... not over 1/16 in.
Diff. Travel..... .050" max.

| WITH TERMINALS: | S.P. NDRM. OPEN | | S.P. NDRM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4501 | \$2.19 | 4533 | \$2.19 | 4565 | \$2.49 |
| Screws, Cup Washers | 4502 | 2.25 | 4534 | 2.25 | 4566 | 2.52 |
| Screws, Lock Washers | 4503 | 2.25 | 4535 | 2.25 | 4567 | 2.52 |
| Quick Connect | 4504 | 2.19 | 4536 | 2.19 | 4568 | 2.49 |

HEAVY DUTY 20 AMP

RATINGS

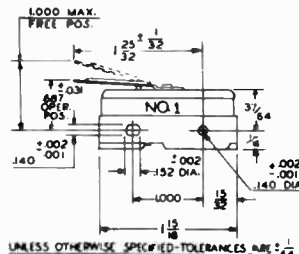
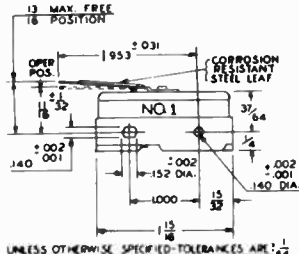
20 A., 480 V., A.C. 1/4 A., 250 V., D.C.
10 A., 125 V., AC "L" Load 1 H.P., 120 V., A.C.
1/2 A., 125 V., D.C. 2 H.P., 240 V., A.C.

OPERATING CHARACTERISTICS

Operating Force..... 9 oz. max.
Pretravel..... 1 1/2" max.
Overtravel..... not over 1/16 in.
Diff. Travel..... .065" max.

| WITH TERMINALS: | S.P. NDRM. OPEN | | S.P. NDRM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4601 | \$2.25 | 4633 | \$2.25 | 4665 | \$2.58 |
| Screws, Cup Washers | 4602 | 2.31 | 4634 | 2.31 | 4666 | 2.64 |
| Screws, Lock Washers | 4603 | 2.31 | 4635 | 2.31 | 4667 | 2.64 |
| Quick Connect | 4604 | 2.25 | 4636 | 2.25 | 4668 | 2.58 |

FLEXIBLE LEAF ACTUATOR



GENERAL PURPOSE 15 AMP

RATINGS

15 Amp., 480 V., A.C.
1/2 Amp., 125 V., D.C.
1/4 Amp., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 5 oz. max.
Pretravel..... 3/8" max.
Overtravel..... not over 1/16 in.
Diff. Travel..... .050" max.

| WITH TERMINALS: | S.P. NDRM. OPEN | | S.P. NDRM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4505 | \$1.62 | 4537 | \$1.62 | 4569 | \$1.95 |
| Screws, Cup Washers | 4506 | 1.68 | 4538 | 1.68 | 4570 | 2.07 |
| Screws, Lock Washers | 4507 | 1.68 | 4539 | 1.68 | 4571 | 2.07 |
| Quick Connect | 4508 | 1.62 | 4540 | 1.62 | 4572 | 1.95 |

HEAVY DUTY 20 AMP

RATINGS

20 A., 480 V., A.C. 1/4 A., 250 V., D.C.
10 A., 125 V., AC "L" Load 1 H.P., 120 V., A.C.
1/2 A., 125 V., D.C. 2 H.P., 240 V., A.C.

OPERATING CHARACTERISTICS

Operating Force..... 9 oz. max.
Pretravel..... 1 1/2" max.
Overtravel..... not over 1/16 in.
Diff. Travel..... .065" max.

| WITH TERMINALS: | S.P. NDRM. OPEN | | S.P. NDRM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4605 | \$1.68 | 4637 | \$1.68 | 4669 | \$2.07 |
| Screws, Cup Washers | 4606 | 1.74 | 4638 | 1.74 | 4670 | 2.13 |
| Screws, Lock Washers | 4607 | 1.74 | 4639 | 1.74 | 4671 | 2.13 |
| Quick Connect | 4608 | 1.68 | 4640 | 1.68 | 4672 | 2.07 |

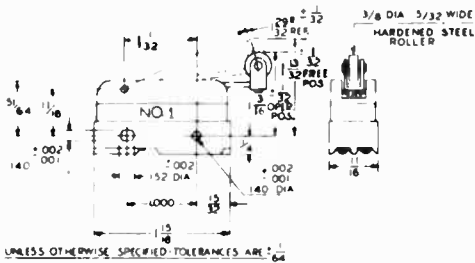


ARROW, HART & HEGEMAN

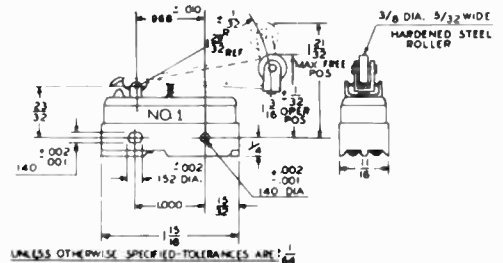
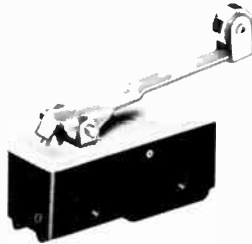
"SNAP ACTING"

MOMENTARY CONTACT

SWITCHES



STANDARD ROLLER



HEAVY DUTY 20 AMP

GENERAL PURPOSE 15 AMP

RATINGS

15 Amp., 480 V., A.C.
1/2 Amp., 125 V., D.C.
1/4 Amp., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 3 1/2 oz. max.
Pretravel..... 1/32" max.
Overtravel..... .156" min.
Diff. Travel..... .004 to .040 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.O.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4521 | \$2.52 | 4553 | \$2.52 | 4585 | \$2.88 |
| Screws, Cup Washers | 4522 | 2.64 | 4554 | 2.64 | 4586 | 3.00 |
| Screws, Lock Washers | 4523 | 2.64 | 4555 | 2.64 | 4587 | 3.00 |
| Quick Connect | 4524 | 2.52 | 4556 | 2.52 | 4588 | 2.88 |

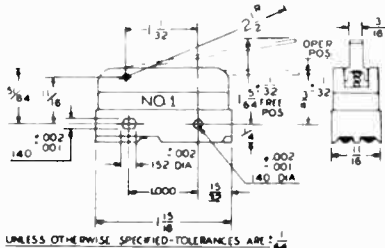
RATINGS

20 A, 480 V., A.C. 1/4 A, 250 V., D.C.
10 A, 125 V., A.C. L Load 1 HP, 120 V., A.C.
1/2 A, 125 V., D.C. 2 HP, 240 V., A.C.

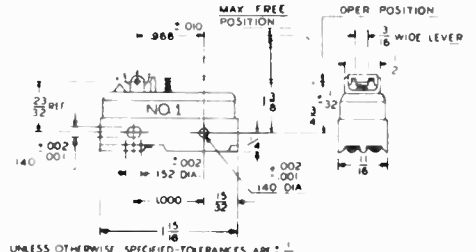
OPERATING CHARACTERISTICS

Operating Force..... 2 1/2 oz. max.
Pretravel..... 1/32" max.
Overtravel..... 1/16" min.
Diff. Travel..... .085" max.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.O.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4621 | \$2.64 | 4653 | \$2.64 | 4685 | \$3.00 |
| Screws, Cup Washers | 4622 | 2.70 | 4654 | 2.70 | 4686 | 3.06 |
| Screws, Lock Washers | 4623 | 2.70 | 4655 | 2.70 | 4687 | 3.06 |
| Quick Connect | 4624 | 2.64 | 4656 | 2.64 | 4688 | 3.00 |



RIGID HINGE



HEAVY DUTY 20 AMP

RATINGS

15 Amp., 480 V., A.C.
1/2 Amp., 125 V., D.C.
1/4 Amp., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 2 1/2 oz.
Pretravel..... 1/32" max.
Overtravel..... .219" min.
Diff. Travel..... .007 to .050 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.O.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4525 | \$1.95 | 4557 | \$1.95 | 4589 | \$2.31 |
| Screws, Cup Washers | 4526 | 2.01 | 4558 | 2.01 | 4590 | 2.37 |
| Screws, Lock Washers | 4527 | 2.01 | 4559 | 2.01 | 4591 | 2.37 |
| Quick Connect | 4528 | 1.95 | 4560 | 1.95 | 4592 | 2.31 |

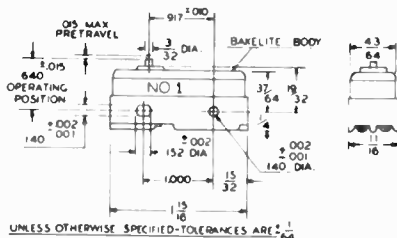
RATINGS

20 A, 480 V., A.C. 1/4 A, 250 V., D.C.
10 A, 125 V., A.C. L Load 1 HP, 120 V., A.C.
1/2 A, 125 V., D.C. 2 H.P., 250 V., A.C.

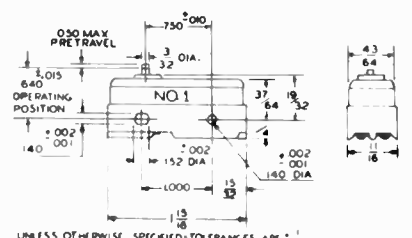
OPERATING CHARACTERISTICS

Operating Force..... 2 1/2 oz. max.
Pretravel..... 1/32" max.
Overtravel..... .078" min.
Diff. Travel..... .109" max.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.O.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4625 | \$2.07 | 4657 | \$2.07 | 4689 | \$2.37 |
| Screws, Cup Washers | 4626 | 2.13 | 4658 | 2.13 | 4690 | 2.43 |
| Screws, Lock Washers | 4627 | 2.13 | 4659 | 2.13 | 4691 | 2.43 |
| Quick Connect | 4628 | 2.07 | 4660 | 2.07 | 4692 | 2.37 |



PIN TYPE



HEAVY DUTY 20 AMP

RATINGS

15 A., 480 V., A.C.
1/2 A., 125 V., D.C.
1/4 A., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 9 to 13 oz.
Pretravel..... .015" max.
Overtravel..... .005" min.
Diff. Travel..... .0004 to .002 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.O.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4529 | \$1.50 | 4561 | \$1.50 | 4593 | \$1.77 |
| Screws, Cup Washers | 4530 | 1.56 | 4562 | 1.56 | 4594 | 1.89 |
| Screws, Lock Washers | 4531 | 1.56 | 4563 | 1.56 | 4595 | 1.89 |
| Quick Connect | 4532 | 1.50 | 4564 | 1.50 | 4596 | 1.77 |

RATINGS

20 A., 480 V., A.C. 1/4 A., 250 V., D.C.
10 A., 125 V., A.C. L Load 1 H.P., 120 V., A.C.
1/2 A., 125 V., D.C. 2 H.P., 250 V., A.C.

OPERATING CHARACTERISTICS

Operating Force..... 14 to 22 oz.
Pretravel..... .050" max.
Overtravel..... .010" min.
Diff. Travel..... .002 to .0075 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.O.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4629 | \$1.56 | 4661 | \$1.56 | 4693 | \$1.86 |
| Screws, Cup Washers | 4630 | 1.62 | 4662 | 1.62 | 4694 | 1.95 |
| Screws, Lock Washers | 4631 | 1.62 | 4663 | 1.62 | 4695 | 1.95 |
| Quick Connect | 4632 | 1.56 | 4664 | 1.56 | 4696 | 1.86 |

It's Sound Planning to "SPECIFY SMITH"



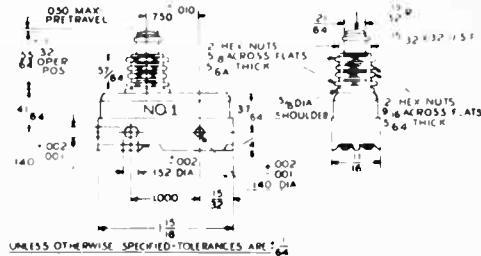
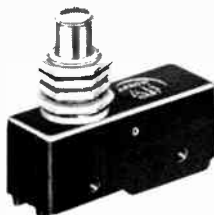
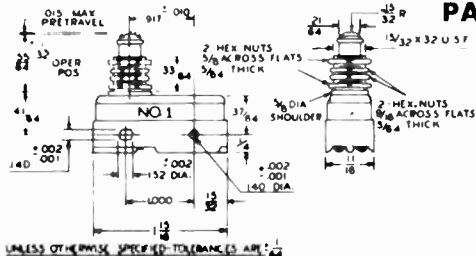
ARROW, HART & HEGEMAN

"SNAP ACTING"

MOMENTARY CONTACT

SWITCHES

PANEL MOUNTED TYPE



GENERAL PURPOSE 15 AMP

RATINGS

15 Amp., 480 V., A.C.
1/2 Amp., 125 V., D.C.
1/4 Amp., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 9 to 13 oz.
Pretravel..... 1/64 max.
Overtravel..... 1/32 min.
Diff. Travel..... .0004 to .002 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4509 | \$3.54 | 4541 | \$3.54 | 4573 | \$3.96 |
| Screws, Cup Washers | 4510 | 3.57 | 4542 | 3.57 | 4574 | 4.02 |
| Screws, Lock Washers | 4511 | 3.57 | 4543 | 3.57 | 4575 | 4.02 |
| Quick Connect | 4512 | 3.54 | 4544 | 3.54 | 4576 | 3.96 |

HEAVY DUTY 20 AMP

RATINGS

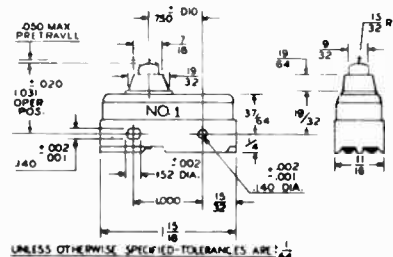
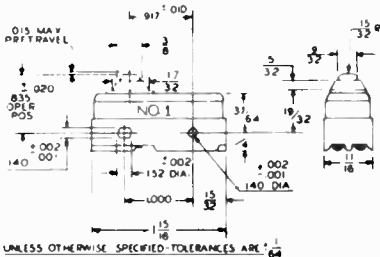
20 A, 480 V., A.C. 1/4 A, 250 V., D.C.
10 A, 125 V., A.C. 1 Load 1 H.P., 120 V., A.C.
1/2 A, 125 V., D.C. 2 H.P., 240 V., A.C.

OPERATING CHARACTERISTICS

Operating Force..... 14 to 22 oz.
Pretravel..... .050" max.
Overtravel..... .219" min.
Diff. Travel..... .002 to .0075 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4609 | \$3.63 | 4641 | \$3.63 | 4673 | \$4.08 |
| Screws, Cup Washers | 4610 | 3.69 | 4642 | 3.69 | 4674 | 4.14 |
| Screws, Lock Washers | 4611 | 3.69 | 4643 | 3.69 | 4675 | 4.14 |
| Quick Connect | 4612 | 3.63 | 4644 | 3.63 | 4676 | 4.08 |

SHORT OVERTRAVEL BUTTON



GENERAL PURPOSE 15 AMP

RATINGS

15 Amp., 480 V., A.C.
1/2 Amp., 125 V., D.C.
1/4 Amp., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 9 to 13 oz.
Pretravel..... 1/64" max.
Overtravel..... 1/16" min.
Diff. Travel..... .0004 to .002 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4513 | \$1.86 | 4545 | \$1.86 | 4577 | \$2.19 |
| Screws, Cup Washers | 4514 | 1.89 | 4546 | 1.89 | 4578 | 2.25 |
| Screws, Lock Washers | 4515 | 1.89 | 4547 | 1.89 | 4579 | 2.25 |
| Quick Connect | 4516 | 1.86 | 4548 | 1.86 | 4580 | 2.19 |

HEAVY DUTY 20 AMP

RATINGS

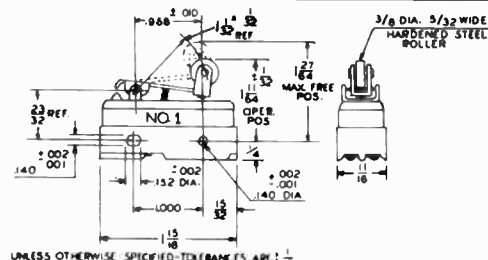
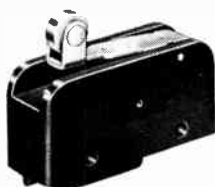
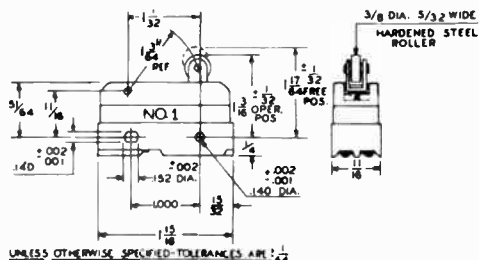
20 A, 480 V., A.C. 1/4 A, 250 V., D.C.
10 A, 125 V., A.C. 1 Load 1 H.P., 120 V., A.C.
1/2 A, 125 V., D.C. 2 H.P., 240 V., A.C.

OPERATING CHARACTERISTICS

Operating Force..... 14 to 22 oz.
Pretravel..... .050" max.
Overtravel..... .093" min.
Diff. Travel..... .002 to .0075 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4613 | \$1.89 | 4645 | \$1.89 | 4677 | \$2.25 |
| Screws, Cup Washers | 4614 | 1.95 | 4646 | 1.95 | 4678 | 2.31 |
| Screws, Lock Washers | 4615 | 1.95 | 4647 | 1.95 | 4679 | 2.31 |
| Quick Connect | 4616 | 1.89 | 4648 | 1.89 | 4680 | 2.25 |

SHORT ROLLER



GENERAL PURPOSE 15 AMP

RATINGS

15 Amp., 480 V., A.C.
1/2 Amp., 125 V., D.C.
1/4 Amp., 250 V., D.C.

OPERATING CHARACTERISTICS

Operating Force..... 6 oz. max.
Pretravel..... 3/64" max.
Overtravel..... 1/32" min.
Diff. Travel..... .003 to .020 in.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4517 | \$2.52 | 4549 | \$2.52 | 4581 | \$2.88 |
| Screws, Cup Washers | 4518 | 2.64 | 4550 | 2.64 | 4582 | 3.00 |
| Screws, Lock Washers | 4519 | 2.64 | 4551 | 2.64 | 4583 | 3.00 |
| Quick Connect | 4520 | 2.52 | 4552 | 2.52 | 4584 | 2.88 |

HEAVY DUTY 20 AMP

RATINGS

20 A, 480 V., A.C. 1/4 A, 250 V., D.C.
10 A, 125 V., A.C. 1 Load 1 H.P., 120 V., A.C.
1/2 A, 125 V., D.C. 2 H.P., 240 V., A.C.

OPERATING CHARACTERISTICS

Operating Force..... 6 oz. max.
Pretravel..... 1/4" max.
Overtravel..... 1/12" min.
Diff. Travel..... 3/64" max.

| WITH TERMINALS: | S.P. NORM. OPEN | | S.P. NORM. CLOSED | | S.P.D.T | |
|----------------------|-----------------|---------|-------------------|---------|---------|---------|
| | No. | NET Ea. | No. | NET Ea. | No. | NET Ea. |
| Solder Lugs | 4617 | \$2.64 | 4649 | \$2.64 | 4681 | \$3.00 |
| Screws, Cup Washers | 4618 | 2.70 | 4650 | 2.70 | 4682 | 3.06 |
| Screws, Lock Washers | 4619 | 2.70 | 4651 | 2.70 | 4683 | 3.06 |
| Quick Connect | 4620 | 2.64 | 4652 | 2.64 | 4684 | 3.00 |

HERMAN H. SMITH, INC. Brooklyn 10, N. Y.

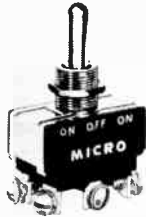


HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

"UL" LISTED "TS" TOGGLE SWITCHES

"UL" listed "Commercial" type are identical to military type except for bat handle finish. Bright chrome plated to enhance panel appearance. Also certified by the Canadian Standards Association (CSA).
Std. Pkg. 10



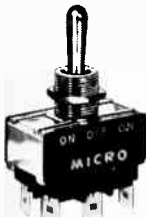
| RATING "A" | | RATING "B" | | RATING "C" | |
|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|
| 15 Amps., 125-250 VAC | 1/2 HP, 125 VAC | 10 Amps., 125-250 VAC | 1/4 HP, 125 VAC | 15 Amps., 125-250 VAC | 1/2 HP, 125 VAC |
| | 1 HP, 250 VAC | | 1/2 HP, 250 VAC | | 3/4 HP, 250 VAC |

HHS MICRO CIRCUIT Rating NET Each

| 1 POLE SCREW TERMINALS | | Rating | NET Each |
|---------------------------|------------------------------|--------|----------|
| 3331 | 11TS15-1 ON-OFF-ON | A | \$2.18 |
| 3332 | 11TS15-2 ON-NONE-OFF | A | 1.82 |
| 3333 | 11TS15-3 ON-NONE-ON | B | 2.02 |
| 3334 | 11TS15-6 OFF-NONE-ON(MOM) | B | 2.18 |
| 3335 | 11TS15-61 NONE-OFF-ON(MOM) | B | 2.02 |
| 3336 | 11TS15-7 ON(MOM)-OFF-ON(MOM) | B | 2.37 |

QUICK CONNECT TERMINALS

| | | | |
|------|------------------------------|---|--------|
| 3337 | 11TS95-1 ON-OFF-ON | A | \$2.11 |
| 3338 | 11TS95-2 ON-NONE-OFF | A | 1.76 |
| 3339 | 11TS95-21 ON-OFF-NONE | A | 1.76 |
| 3340 | 11TS95-3 ON-NONE-ON | A | 2.11 |
| 3341 | 11TS95-4 ON-NONE-OFF(MOM) | B | 1.95 |
| 3342 | 11TS95-5 ON-OFF-ON(MOM) | B | 2.31 |
| 3343 | 11TS95-6 OFF-NONE-ON(MOM) | B | 1.95 |
| 3344 | 11TS95-61 NONE-OFF-ON(MOM) | B | 1.95 |
| 3345 | 11TS95-7 ON(MOM)-OFF-ON(MOM) | B | 2.31 |
| 3346 | 11TS95-8 ON-NONE-ON(MOM) | B | 2.31 |



| 2 POLE SCREW TERMINALS | | Rating | NET Each |
|---------------------------|-------------------------------|--------|----------|
| 3347 | 11TS115-1 ON-OFF-ON | A | \$2.05 |
| 3348 | 11TS115-2 ON-NONE-OFF | A | 1.72 |
| 3349 | 11TS115-3 ON-NONE-ON | A | 2.05 |
| 3350 | 11TS115-4 ON-NONE-OFF(MOM) | B | 1.92 |
| 3351 | 11TS115-7 ON(MOM)-OFF-ON(MOM) | B | 2.24 |

2 POLE

| SCREW TERMINALS | | Rating | NET Each |
|-----------------|------------------------------|--------|----------|
| 3352 | 12TS15-1 ON-OFF-ON | A | \$2.93 |
| 3353 | 12TS15-2 ON-NONE-OFF | A | 2.44 |
| 3354 | 12TS15-21 ON-OFF-NONE | A | 2.44 |
| 3355 | 12TS15-3 ON-NONE-ON | A | 2.93 |
| 3356 | 12TS15-4 ON-NONE-OFF(MOM) | C | 2.93 |
| 3357 | 12TS15-5 ON-OFF-ON(MOM) | C | 3.15 |
| 3358 | 12TS15-6 OFF-NONE-ON(MOM) | C | 2.93 |
| 3359 | 12TS15-61 NONE-OFF-ON(MOM) | C | 2.93 |
| 3360 | 12TS15-7 ON(MOM)-OFF-ON(MOM) | C | 3.15 |
| 3361 | 12TS15-8 ON-NONE-ON(MOM) | C | 3.15 |

QUICK CONNECT TERMINALS

| | | | |
|------|------------------------------|---|--------|
| 3362 | 12TS95-1 ON-OFF-ON | A | \$2.76 |
| 3363 | 12TS95-2 ON-NONE-OFF | A | 2.31 |
| 3364 | 12TS95-21 ON-OFF-NONE | A | 2.31 |
| 3365 | 12TS95-3 ON-NONE-ON | A | 2.76 |
| 3366 | 12TS95-4 ON-NONE-OFF(MOM) | C | 2.83 |
| 3367 | 12TS95-5 ON-OFF-ON(MOM) | C | 3.02 |
| 3368 | 12TS95-6 OFF-NONE-ON(MOM) | C | 2.83 |
| 3369 | 12TS95-61 NONE-OFF-ON(MOM) | C | 2.83 |
| 3370 | 12TS95-7 ON(MOM)-OFF-ON(MOM) | C | 3.02 |
| 3371 | 12TS95-8 ON-NONE-ON(MOM) | C | 3.02 |

SOLOER TERMINALS

| | | | |
|------|-------------------------------|---|--------|
| 3372 | 12TS115-1 ON-OFF-ON | A | \$2.63 |
| 3373 | 12TS115-2 ON-NONE-OFF | A | 2.24 |
| 3374 | 12TS115-21 ON-OFF-NONE | A | 2.24 |
| 3375 | 12TS115-3 ON-NONE-ON | A | 2.63 |
| 3376 | 12TS115-4 ON-NONE-OFF(MOM) | C | 2.73 |
| 3377 | 12TS115-5 ON-OFF-ON(MOM) | C | 2.89 |
| 3378 | 12TS115-6 OFF-NONE-ON(MOM) | C | 2.73 |
| 3379 | 12TS115-61 NONE-OFF-ON(MOM) | C | 2.73 |
| 3380 | 12TS115-7 ON(MOM)-OFF-ON(MOM) | C | 2.89 |
| 3381 | 12TS115-8 ON-NONE-ON(MOM) | C | 2.89 |



3-HOLE MOUNTED "TS" TOGGLE SWITCHES

"AN" Type tested and approved under MIL specs. "JAN" Type conform to JAN-S-23. Sealed Lever.
Std. Pkg. 10

RATING: CURRENT CAPACITY (AMPS)

| | CON-TINU-OUS | RESISTIVE LOAD | | | | LAMP LOAD | | | INDUCTIVE LOAD | | |
|---|--------------|----------------|---------|---------|---------|-----------|---------|--------|----------------|--------|---------|
| | | 30 vdc | 125 vdc | 250 vdc | 115 vdc | 30 vdc | 125 vdc | 30 vdc | 125 vdc | 30 vdc | 125 vdc |
| A | 55 | 40 | .75 | .5 | 20 | 7.5 | 7 | 7 | 20 | 15 | |
| B | 55 | 30 | .75 | .5 | 20 | 7.5 | 5 | 4 | 18 | 11 | |
| C | 55 | 40 | .75 | .5 | 25 | 8 | 10 | 7 | 20 | 15 | |
| D | 55 | 30 | .75 | .5 | 20 | 7 | 7 | 4 | 18 | 11 | |

1 POLE (MIL-S-6745)

| HHS | MICRO | "AN" No. | "JAN" No. | CIRCUIT | Rating | NET Each |
|------|----------|----------|-----------|---------------------|--------|----------|
| 3301 | 31TS1-1 | 3022-1 | ST45E | ON-OFF-ON | A | \$2.57 |
| 3302 | 31TS1-2 | 3022-2 | ST45A | ON-NONE-OFF | A | 2.11 |
| 3303 | 31TS1-3 | 3022-3 | ST45O | ON-NONE-ON | A | 2.57 |
| 3304 | 31TS1-21 | --- | --- | ON-OFF-NONE | A | 2.11 |
| 3305 | 31TS1-4 | 3022-9 | ST45B | ON-NONE-OFF(MOM) | B | 2.34 |
| 3306 | 31TS1-5* | --- | ST45H | ON-OFF-ON(MOM) | B | 2.76 |
| 3307 | 31TS1-6 | 3022-8 | ST45C | OFF-NONE-ON(MOM) | B | 2.34 |
| 3308 | 31TS1-7 | 3022-7 | ST45G | ON(MOM)-OFF-ON(MOM) | B | 2.76 |
| 3309 | 31TS1-8 | 3022-11 | ST45F | ON(NONE)-ON(MOM) | B | 2.76 |
| 3310 | 31TS2-5 | 3022-6 | --- | ON-OFF-ON(MOM) | B | 2.96 |
| 3311 | 31TS1-61 | --- | --- | NONE-OFF-ON(MOM) | B | 2.34 |

*Has a jumper across the stationary contact terminals.

2 POLE (MIL-S-3950A)

| HHS | MICRO | "MS" No. | CIRCUIT | Rating | NET Each |
|------|-----------|------------|---------------------|--------|----------|
| 3312 | 532TS1-1 | MS25103-21 | ON-OFF-ON | C | \$5.33 |
| 3313 | 532TS1-3 | MS25103-23 | ON-NONE-ON | C | 5.33 |
| 3314 | 532TS1-21 | MS25103-24 | ON-OFF-NONE | C | 4.45 |
| 3315 | 532TS1-5 | MS25103-31 | ON-OFF-ON(MOM) | O | 5.79 |
| 3316 | 532TS1-7 | MS25103-27 | ON(MOM)-OFF-ON(MOM) | O | 5.79 |
| 3317 | 532TS1-8 | MS25103-26 | ON-NONE-ON(MOM) | O | 5.79 |
| 3318 | 532TS1-41 | MS25103-25 | ON-OFF(MOM)-NONE | O | 4.88 |
| 3319 | 532TS1-61 | MS25103-28 | NONE-OFF-ON(MOM) | O | 5.23 |

RATING: CURRENT CAPACITY (AMPS)

| | CON-TINU-OUS | RESISTIVE LOAD | | | LAMP LOAD | | | INDUCTIVE LOAD | | |
|---|--------------|----------------|---------|---------|-----------|---------|--------|----------------|--------|---------|
| | | 30 vdc | 125 vdc | 250 vdc | 30 vdc | 125 vdc | 30 vdc | 125 vdc | 30 vdc | 125 vdc |
| E | 30 | 25 | .22 | 5 | 3 | 15 | 15 | | | |
| F | 20 | 20 | .20 | 5 | 4 | 12 | 15 | | | |
| G | 20 | 18 | .11 | 4 | 2 | 10 | 8 | | | |

3 POLE (MIL-S-3950A)

| HHS | MICRO | "MS" No. | CIRCUIT | Rating | NET Each |
|------|-----------|------------|-------------|--------|----------|
| 3320 | 533TS1-1 | MS25105-21 | ON-OFF-ON | E | \$4.97 |
| 3321 | 533TS1-3 | MS25105-23 | ON-NONE-ON | E | 4.97 |
| 3322 | 533TS1-21 | MS25105-24 | ON-OFF-NONE | E | 4.16 |

4 POLE (MIL-S-6745)

| HHS | MICRO | "AN" No. | CIRCUIT | Rating | NET Each |
|------|----------|----------|---------------------|--------|----------|
| 3323 | 34TS1-1 | 3227-1 | ON-OFF-ON | F | \$6.66 |
| 3324 | 34TS1-2 | 3227-2 | ON-NONE-OFF | F | 5.33 |
| 3325 | 34TS1-3 | 3227-3 | ON-NONE-ON | F | 6.66 |
| 3326 | 34TS1-21 | 3227-9 | ON-OFF-NONE | F | 7.83 |
| 3327 | 34TS1-5 | 3227-5 | ON-OFF-ON(MOM) | G | 8.03 |
| 3328 | 34TS1-6 | 3227-8 | OFF-NONE-ON(MOM) | G | 7.22 |
| 3329 | 34TS1-7 | 3227-7 | ON(MOM)-OFF-ON(MOM) | G | 8.03 |
| 3330 | 34TS1-61 | 3227-10 | NONE-OFF-ON(MOM) | G | 7.22 |

SEALED "TS" TOGGLE SWITCHES

RATING: CURRENT CAPACITY (AMPS)

| | CON-TINU-OUS | RESISTIVE LOAD | | | | LAMP LOAD | | | INDUCTIVE LOAD | | |
|---|--------------|----------------|---------|---------|---------|-----------|---------|--------|----------------|--------|---------|
| | | 30 vdc | 125 vdc | 250 vdc | 115 vdc | 30 vdc | 125 vdc | 30 vdc | 125 vdc | 30 vdc | 125 vdc |
| A | 40 | 20 | .75 | .5 | 15 | 6 | 5 | 3 | 15 | 10 | |
| B | 40 | 15 | .75 | .5 | 15 | 6 | 4 | 2 | 10 | 7 | |
| C | 30 | 30 | .75 | .5 | 25 | 9 | 7 | 4 | 15 | 15 | |
| D | 30 | 20 | .75 | .5 | 15 | 6 | 5 | 2 | 10 | 8 | |

These switches have a panel seal in addition to all other "TS" features. When mounted, the seal provides a dust, liquid and moisture seal at the panel.
Std. Pkg. 10

HHS MICRO CIRCUIT Rating NET Each

| 1 POLE SCREW TYPE TERMINALS | | Rating | NET Each |
|--------------------------------|-----------------------------|--------|----------|
| 3201 | 21TS1-1 ON-OFF-ON | A | \$3.45 |
| 3202 | 21TS1-2 ON-NONE-OFF | A | 3.06 |
| 3203 | 21TS1-3 ON-NONE-ON | A | 3.45 |
| 3204 | 21TS1-21 ON-OFF-NONE | A | 3.06 |
| 3205 | 21TS1-5 ON-OFF-ON(MOM) | B | 3.61 |
| 3206 | 21TS1-6 OFF-NONE-ON(MOM) | B | 3.25 |
| 3207 | 21TS1-7 ON(MOM)-OFF-ON(MOM) | B | 3.61 |
| 3208 | 21TS1-8 ON-NONE-ON(MOM) | B | 3.61 |

SOLOER TYPE TERMINALS

| | | | |
|------|------------------------------|---|--------|
| 3211 | 21TS11-1 ON-OFF-ON | A | \$3.28 |
| 3212 | 21TS11-2 ON-NONE-OFF | A | 2.96 |
| 3213 | 21TS11-3 ON-NONE-ON | A | 3.28 |
| 3214 | 21TS11-4 ON-NONE-OFF(MOM) | B | 3.15 |
| 3215 | 21TS11-5 ON-OFF-ON(MOM) | B | 3.48 |
| 3216 | 21TS11-6 OFF-NONE-ON(MOM) | B | 3.15 |
| 3217 | 21TS11-7 ON(MOM)-OFF-ON(MOM) | B | 3.48 |
| 3218 | 21TS11-8 ON-NONE-ON(MOM) | B | 3.48 |



HHS MICRO CIRCUIT Rating NET Each

| 2 POLE SCREW TYPE TERMINALS | | Rating | NET Each |
|--------------------------------|------------------------------|--------|----------|
| 3221 | 212TS1-1 ON-OFF-ON | C | \$4.13 |
| 3222 | 212TS1-2 ON-NONE-OFF | C | 3.64 |
| 3223 | 212TS1-3 ON-NONE-ON | C | 4.13 |
| 3224 | 212TS1-21 ON-OFF-NONE | C | 3.64 |
| 3225 | 212TS1-4 ON-NONE-OFF(MOM) | O | 3.13 |
| 3226 | 212TS1-5 ON-OFF-ON(MOM) | O | 4.39 |
| 3227 | 212TS1-6 OFF-NONE-ON(MOM) | D | 4.13 |
| 3228 | 212TS1-7 ON(MOM)-OFF-ON(MOM) | O | 4.39 |
| 3229 | 212TS1-8 ON-NONE-ON(MOM) | O | 4.39 |

SOLOER TYPE TERMINALS

| | | | |
|------|-------------------------------|---|--------|
| 3231 | 212TS11-1 ON-OFF-ON | C | \$3.84 |
| 3232 | 212TS11-2 ON-NONE-OFF | C | 3.45 |
| 3233 | 212TS11-3 ON-NONE-ON | C | 3.84 |
| 3234 | 212TS11-4 ON-NONE-OFF(MOM) | O | 3.93 |
| 3235 | 212TS11-5 ON-OFF-ON(MOM) | O | 4.06 |
| 3236 | 212TS11-6 OFF-NONE-ON(MOM) | O | 3.93 |
| 3237 | 212TS11-7 ON(MOM)-OFF-ON(MOM) | O | 4.06 |
| 3238 | 212TS11-8 ON-NONE-ON(MOM) | O | 4.06 |



HERMAN H. SMITH, INC.

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"



ROCKER-ACTUATED TOGGLE SWITCHES

Combines advantages of Toggle Switch circuitry and current capacity with pushbutton control. Snag-proof keys prevent false actuation. Translucent plastic keys feature edge light indication. Lower half of key emits soft glow from light source in panel. Enables easy identification of actuator position. Transparent plastic keys mounted above flush. An insert with signs, symbols, or letters can be placed under the key.

Temperature range -65°F to +160°F. Sealed between bushing and rocker actuator, and between cover and case. **Std. Pkg. 10**

RATING: CURRENT CAPACITY (AMPS)

| | CON-TINU- OUS | RESISTIVE LOAD | | | | LAMP LOAD | | | INDUCTIVE LOAD | |
|---|---------------|----------------|---------|---------|---------|-----------|---------|--------|----------------|----|
| | | 30 vdc | 115 vdc | 250 vdc | 115 vac | 30 vdc | 115 vdc | 30 vdc | 115 vac | |
| A | 45 | 20 | .75 | .5 | 15 | 6 | 5 | 3 | 15 | 10 |
| B | 45 | 15 | .75 | .5 | 15 | 6 | 4 | 2 | 10 | 7 |
| C | 40 | 20 | .75 | .5 | 15 | 6 | 7 | 4 | 15 | 15 |
| D | 40 | 18 | .75 | .5 | 11 | 6 | 5 | 2 | 10 | 8 |
| E | 40 | 20 | .75 | .5 | 15 | 6 | 5 | 4 | 12 | 15 |
| F | 40 | 18 | .75 | .5 | 11 | 6 | 4 | 2 | 10 | 8 |

| HHS | MICRO | CIRCUIT | Rating | NET Each |
|------------------------|---------|---------------------|--------|----------|
| 1 POLE | | | | |
| TRANSLUCENT KEY | | | | |
| 3401 | 1TP1-1 | ON-OFF-ON | A | \$ 8.58 |
| 3402 | 1TP1-2 | ON-NONE-OFF | A | 8.58 |
| 3403 | 1TP1-3 | ON-NONE-ON | A | 8.58 |
| 3404 | 1TP1-21 | ON-OFF-NONE | A | 8.87 |
| 3405 | 1TP1-31 | ON-ON-NONE | A | 8.87 |
| 3406 | 1TP1-4 | ON-NONE-OFF(MOM) | B | 8.58 |
| 3407 | 1TP1-5 | ON-OFF-ON(MOM) | B | 8.58 |
| 3408 | 1TP1-6 | OFF-NONE-ON(MOM) | B | 8.58 |
| 3409 | 1TP1-7 | ON(MOM)-OFF-ON(MOM) | B | 8.58 |
| 3410 | 1TP1-8 | ON-NONE-ON(MOM) | B | 8.58 |
| 3411 | 1TP1-41 | ON(OFF)(MOM)-NONE | B | 8.87 |
| 3412 | 1TP1-51 | ON(MOM)-ON-NONE | B | 8.87 |
| 3413 | 1TP1-61 | NONE-OFF-ON(MOM) | B | 8.87 |
| TRANSPARENT KEY | | | | |
| 3414 | 1TP4-1 | DN-OFF-ON | A | \$10.30 |
| 3415 | 1TP4-2 | DN-NONE-OFF | A | 10.30 |
| 3416 | 1TP4-3 | DN-NONE-ON | A | 10.30 |
| 3417 | 1TP4-21 | DN-OFF-NONE | A | 10.60 |
| 3418 | 1TP4-31 | DN-ON-NONE | A | 10.60 |
| 3419 | 1TP4-4 | DN-NONE-OFF(MOM) | B | 10.30 |
| 3420 | 1TP4-5 | DN-OFF-ON(MOM) | B | 10.30 |
| 3421 | 1TP4-6 | OFF-NONE-ON(MOM) | B | 10.30 |
| 3422 | 1TP4-7 | ON(MOM)-OFF-ON(MOM) | B | 10.30 |
| 3423 | 1TP4-8 | DN-NONE-ON(MOM) | B | 10.30 |
| 3424 | 1TP4-41 | DN-OFF(MOM)-NONE | B | 10.60 |
| 3425 | 1TP4-51 | DN(MOM)-ON-NONE | B | 10.60 |
| 3426 | 1TP4-61 | NONE-OFF-ON(MOM) | B | 10.60 |

| HHS | MICRO | CIRCUIT | Rating | NET Each |
|------------------------|---------|---------------------|--------|----------|
| 2 POLE | | | | |
| TRANSLUCENT KEY | | | | |
| 3427 | 2TP1-1 | ON-OFF-ON | C | \$ 9.98 |
| 3428 | 2TP1-2 | ON-NONE-OFF | C | 9.98 |
| 3429 | 2TP1-3 | ON-NONE-ON | C | 9.98 |
| 3430 | 2TP1-21 | ON-OFF-NONE | C | 10.21 |
| 3431 | 2TP1-31 | ON-ON-NONE | C | 10.21 |
| 3432 | 2TP1-4 | ON-NONE-OFF(MOM) | D | 9.98 |
| 3433 | 2TP1-5 | DN-OFF-ON(MOM) | D | 9.98 |
| 3434 | 2TP1-6 | OFF-NONE-ON(MOM) | D | 9.98 |
| 3435 | 2TP1-7 | ON(MOM)-OFF-ON(MOM) | D | 9.98 |
| 3436 | 2TP1-8 | DN-NONE-ON(MOM) | D | 9.98 |
| 3437 | 2TP1-41 | DN-OFF(MOM)-NONE | D | 10.21 |
| 3438 | 2TP1-51 | DN(MOM)-ON-NONE | D | 10.34 |
| 3439 | 2TP1-61 | NONE-OFF-ON(MOM) | D | 10.21 |

| HHS | MICRO | CIRCUIT | Rating | NET Each |
|------------------------|---------|----------------------|--------|----------|
| TRANSPARENT KEY | | | | |
| 3440 | 2TP4-1 | DN-OFF-ON | C | \$11.70 |
| 3441 | 2TP4-2 | DN-NONE-OFF | C | 11.70 |
| 3442 | 2TP4-3 | DN-NONE-ON | C | 11.70 |
| 3443 | 2TP4-21 | ON-OFF-NONE | C | 11.93 |
| 3444 | 2TP4-31 | ON-ON-NONE | C | 11.93 |
| 3445 | 2TP4-4 | ON-NONE-OFF(MOM) | D | 11.70 |
| 3446 | 2TP4-5 | ON-OFF-ON(MOM) | D | 11.70 |
| 3447 | 2TP4-6 | OFF-NONE-ON(MOM) | D | 11.70 |
| 3448 | 2TP4-7 | ON(NONE)-OFF-ON(MOM) | D | 11.70 |
| 3449 | 2TP4-8 | DN-NONE-ON(MOM) | D | 11.70 |
| 3450 | 2TP4-41 | DN-OFF(MOM)-NONE | D | 11.93 |
| 3451 | 2TP4-51 | ON(MOM)-ON-NONE | D | 12.06 |
| 3452 | 2TP4-61 | NONE-OFF-ON(MOM) | D | 11.93 |

| HHS | MICRO | CIRCUIT | Rating | NET Each |
|------------------------|---------|---------------------|--------|----------|
| 4 POLE | | | | |
| TRANSLUCENT KEY | | | | |
| 3453 | 4TP1-1 | ON-OFF-ON | E | \$12.29 |
| 3454 | 4TP1-2 | ON-NONE-OFF | E | 12.29 |
| 3455 | 4TP1-3 | ON-NONE-ON | E | 12.29 |
| 3456 | 4TP1-21 | ON-OFF-NONE | E | 12.48 |
| 3457 | 4TP1-31 | ON-ON-NONE | E | 12.48 |
| 3458 | 4TP1-4 | ON-NONE-OFF(MOM) | F | 12.29 |
| 3459 | 4TP1-5 | ON-OFF-ON(MOM) | F | 12.29 |
| 3460 | 4TP1-6 | OFF-NONE-ON(MOM) | F | 12.29 |
| 3461 | 4TP1-7 | ON(MOM)-OFF-ON(MOM) | F | 12.29 |
| 3462 | 4TP1-8 | DN-NONE-ON(MOM) | F | 12.29 |
| 3463 | 4TP1-41 | DN-OFF(MOM)-NONE | F | 13.49 |
| 3464 | 4TP1-51 | ON(MOM)-ON-NONE | F | 12.48 |
| 3465 | 4TP1-61 | NONE-OFF-ON(MOM) | F | 12.48 |
| TRANSPARENT KEY | | | | |
| 3466 | 4TP4-1 | ON-OFF-ON | E | \$14.01 |
| 3467 | 4TP4-2 | ON-NONE-OFF | E | 14.01 |
| 3468 | 4TP4-3 | ON-NONE-ON | E | 14.01 |
| 3469 | 4TP4-21 | ON-OFF-NONE | E | 14.20 |
| 3470 | 4TP4-31 | ON-ON-NONE | E | 14.98 |
| 3471 | 4TP4-4 | ON-NONE-OFF(MOM) | F | 14.01 |
| 3472 | 4TP4-5 | ON-OFF-ON(MOM) | F | 14.01 |
| 3473 | 4TP4-6 | OFF-NONE-ON(MOM) | F | 14.01 |
| 3474 | 4TP4-7 | DN(MOM)-OFF-ON(MOM) | F | 14.01 |
| 3475 | 4TP4-8 | DN-NONE-ON(MOM) | F | 14.01 |
| 3476 | 4TP4-41 | DN-OFF(MOM)-NONE | F | 15.24 |
| 3477 | 4TP4-51 | ON(MOM)-ON-NONE | F | 14.01 |
| 3478 | 4TP4-61 | NONE-OFF-ON(MOM) | F | 14.20 |

BUSHING-MOUNTED TOGGLE SWITCHES

Tested and approved under MIL-S-3950A. Silicone sealed between cover and case, and between bushing and toggle lever. Integral terminals provide stronger wiring connections. Wide temperature range of -85°F to +250°F. **Std. Pkg. 10**

RATING: CURRENT CAPACITY (AMPS)

| | CON-TINU- OUS | RESISTIVE LOAD | | | | LAMP LOAD | | | INDUCTIVE LOAD | |
|---|---------------|----------------|---------|---------|---------|-----------|---------|--------|----------------|----|
| | | 30 vdc | 115 vdc | 250 vdc | 115 vac | 30 vdc | 115 vdc | 30 vdc | 115 vac | |
| A | 45 | 20 | .75 | .5 | 15 | 6 | 5 | 3 | 15 | 10 |
| B | 45 | 15 | .75 | .5 | 15 | 6 | 4 | 2 | 10 | 7 |
| C | 40 | 20 | .75 | .5 | 15 | 6 | 7 | 4 | 15 | 15 |
| D | 40 | 18 | .75 | .5 | 11 | 6 | 5 | 2 | 10 | 8 |

| HHS | MICRO | "MS" No. | CIRCUIT | Rating | NET Each |
|--------------------------|---------|------------|------------------|--------|----------|
| 1 POLE (MS 24523) | | | | | |
| 3101 | 1TL1-1 | MS24523-21 | ON-OFF-ON | A | \$4.16 |
| 3102 | 1TL1-2 | MS24523-22 | ON-NONE-OFF | A | 4.16 |
| 3103 | 1TL1-3 | MS24523-23 | ON-NONE-ON | A | 4.16 |
| 3104 | 1TL1-21 | MS24523-24 | ON-OFF-NONE | A | 4.42 |
| 3105 | 1TL1-31 | MS24523-25 | ON-ON-NONE | A | 4.42 |
| 3106 | 1TL1-4 | MS24523-29 | ON-NONE-OFF(MOM) | B | 4.16 |
| 3107 | 1TL1-5 | MS24523-31 | ON-OFF-ON(MOM) | B | 4.16 |
| 3108 | 1TL1-6 | MS24523-30 | OFF-NONE-ON(MOM) | B | 4.16 |
| 3109 | 1TL1-7 | MS24523-27 | ON(OFF)-ON(MOM) | B | 4.16 |
| 3110 | 1TL1-8 | MS24523-26 | ON-NONE-ON(MOM) | B | 4.42 |
| 3111 | 1TL1-41 | MS24523-25 | ON-OFF(MOM)-NONE | B | 4.42 |
| 3112 | 1TL1-51 | MS24523-32 | ON(MOM)-ON-NONE | B | 4.42 |
| 3113 | 1TL1-61 | MS24523-28 | NONE-OFF-ON(MOM) | B | 4.42 |

| HHS | MICRO | "MS" No. | CIRCUIT | Rating | NET Each |
|--------------------------|---------|------------|---------------------|--------|----------|
| 2 POLE (MS 24524) | | | | | |
| 3114 | 2TL1-1 | MS24524-21 | DN-OFF-ON | C | \$5.53 |
| 3115 | 2TL1-2 | MS24524-22 | DN-NONE-OFF | C | 5.53 |
| 3116 | 2TL1-3 | MS24524-23 | DN-NONE-ON | C | 5.53 |
| 3117 | 2TL1-21 | MS24524-24 | DN-OFF-NONE | C | 5.75 |
| 3118 | 2TL1-31 | MS24524-25 | DN-ON-NONE | C | 5.75 |
| 3119 | 2TL1-4 | MS24524-29 | DN-NONE-OFF(MOM) | D | 5.53 |
| 3120 | 2TL1-5 | MS24524-31 | DN-OFF-ON(MOM) | D | 5.53 |
| 3121 | 2TL1-6 | MS24524-30 | DN-NONE-ON(MOM) | D | 5.53 |
| 3122 | 2TL1-7 | MS24524-27 | DN(MOM)-OFF-ON(MOM) | D | 5.53 |
| 3123 | 2TL1-8 | MS24524-26 | DN-NONE-ON(MOM) | D | 5.53 |
| 3124 | 2TL1-41 | MS24524-25 | DN-OFF(MOM)-NONE | D | 5.75 |
| 3125 | 2TL1-51 | MS24524-32 | ON(MOM)-ON-NONE | D | 5.88 |
| 3126 | 2TL1-61 | MS24524-28 | NONE-OFF-ON(MOM) | D | 5.75 |

| HHS | MICRO | "MS" No. | CIRCUIT | Rating | NET Each |
|--------------------------|---------|------------|---------------------|--------|----------|
| 4 POLE (MS 24525) | | | | | |
| 3127 | 4TL1-1 | MS24525-21 | ON-OFF-ON | C | \$7.77 |
| 3128 | 4TL1-2 | MS24525-22 | ON-NONE-OFF | C | 7.77 |
| 3129 | 4TL1-3 | MS24525-23 | ON-NONE-ON | C | 7.83 |
| 3130 | 4TL1-21 | MS24525-24 | ON-OFF-NONE | C | 8.03 |
| 3131 | 4TL1-31 | MS24525-25 | ON-ON-NONE | C | 8.81 |
| 3132 | 4TL1-4 | MS24525-29 | ON-NONE-OFF(MOM) | D | 7.77 |
| 3133 | 4TL1-5 | MS24525-31 | ON-OFF-ON(MOM) | D | 7.83 |
| 3134 | 4TL1-6 | MS24525-30 | OFF-NONE-ON(MOM) | D | 7.77 |
| 3135 | 4TL1-7 | MS24525-27 | ON(MOM)-OFF-ON(MOM) | D | 7.83 |
| 3136 | 4TL1-8 | MS24525-26 | DN-NONE-ON(MOM) | D | 7.83 |
| 3137 | 4TL1-41 | MS24525-25 | DN-OFF(MOM)-NONE | D | 8.03 |
| 3138 | 4TL1-51 | MS24525-32 | DN(MOM)-ON-NONE | D | 9.07 |
| 3139 | 4TL1-61 | MS24525-28 | NONE-OFF-ON(MOM) | D | 8.03 |

BUSHING-MOUNTED "TS" TOGGLE SWITCHES

Tested and approved under MIL-S-3950A. Terminals plated to enable conversion for solder use by removing screws. Sealed toggle lever **Std. Pkg. 10**

RATING: CURRENT CAPACITY (AMPS)

| | CON-TINU- OUS | RESISTIVE LOAD | | | | LAMP LOAD | | | INDUCTIVE LOAD | |
|---|---------------|----------------|---------|---------|---------|-----------|---------|--------|----------------|----|
| | | 30 vdc | 125 vdc | 250 vdc | 125 vac | 30 vdc | 125 vdc | 30 vdc | 125 vac | |
| A | 40 | 20 | .75 | .5 | 15 | 6 | 5 | 3 | 15 | 10 |
| B | 40 | 15 | .75 | .5 | 15 | 6 | 4 | 2 | 10 | 7 |
| C | 30 | 30 | .75 | .5 | 25 | 9 | 7 | 4 | 15 | 15 |
| D | 30 | 20 | .75 | .5 | 15 | 6 | 5 | 2 | 10 | 8 |

| HHS | MICRO | "MS" No. | CIRCUIT | Rating | NET Each |
|--------------------------|-----------|------------|---------------------|--------|----------|
| 1 POLE (MS 35058) | | | | | |
| 3141 | 511TS1-1 | MS35058-21 | ON-OFF-ON | A | \$2.18 |
| 3142 | 511TS1-2 | MS35058-22 | ON-NONE-OFF | A | 2.18 |
| 3143 | 511TS1-3 | MS35058-23 | ON-NONE-ON | A | 2.18 |
| 3144 | 511TS1-21 | MS35058-24 | ON-OFF-NONE | A | 1.82 |
| 3145 | 511TS1-4 | MS35058-29 | ON-NONE-OFF(MOM) | B | 2.02 |
| 3146 | 511TS1-5 | MS35058-31 | ON-OFF-ON(MOM) | B | 2.37 |
| 3147 | 511TS1-6 | MS35058-30 | OFF-NONE-ON(MOM) | B | 2.02 |
| 3148 | 511TS1-7 | MS35058-27 | ON(MOM)-OFF-ON(MOM) | B | 2.37 |
| 3149 | 511TS1-8 | MS35058-26 | DN-NONE-ON(MOM) | B | 2.37 |
| 3150 | 511TS1-61 | MS35058-28 | NONE-OFF-ON(MOM) | B | 2.02 |
| 3151 | 511TS1-41 | MS35058-25 | ON-OFF(MOM)-NONE | B | 2.02 |

| HHS | MICRO | "MS" No. | CIRCUIT | Rating | NET Each |
|--------------------------|----------|------------|-------------|--------|----------|
| 2 POLE (MS 35059) | | | | | |
| 3152 | 512TS1-1 | MS35059-21 | ON-OFF-ON | C | \$2.93 |
| 3153 | 512TS1-2 | MS35059-22 | ON-NONE-OFF | C | 2 |

SECTION 2100



HERMAN H. SMITH, INC.

Exclusive Distributors of **KULKA BARRIER TERMINAL BLOCKS** To Radio Parts Jobbers Only

With Sewer Terminals



With One-Sided Solder Terminals



With Two-Sided Solder Terminals



With Bottom Solder Terminals



With Side And Bottom Terminals



With Bottom Terminals



| To Series Number Add Suffix | 600-2 | | | | | To Series Number Add Suffix | 600-3/4ST-2 | | | | | 600-ST-2 | | | | | 600-Y-2 | | | | | To Series Number Add Suffix | 600-XY-2 | | | | | 600-Z-2 | | | | |
|-----------------------------|--------------------------|---------|---------|---------------------|------------------------|-----------------------------|--------------------------|---------|---------|---------------------|------------------------|--------------------------|---------|---------|---------------------|------------------------|--------------------------|---------|---------|---------------------|------------------------|-----------------------------|--------------------------|---------|---------|---------------------|------------------------|--------------------------|---------|---------|---------------------|------------------------|
| | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' 'MDG' 'B' | MAI-60 'D' 'GDI-30 'H' | | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' 'MDG' 'B' | MAI-60 'D' 'GDI-30 'H' | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' 'MDG' 'B' | MAI-60 'D' 'GDI-30 'H' | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' 'MDG' 'B' | MAI-60 'D' 'GDI-30 'H' | | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' 'MDG' 'B' | MAI-60 'D' 'GDI-30 'H' | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' 'MDG' 'B' | MAI-60 'D' 'GDI-30 'H' |

Height 1 1/2", Width 7/8", Thickness 1/4", Terminals 3/8" Centers, 5/16" Mtg., 5-40 x 1/4 Screws.

| 600-SERIES | 600- | | | | | Suffix | 600-3/4ST- | | | | | 600-ST- | | | | | 600-Y- | | | | | Suffix | 600-YSY- | | | | | 600-Z- | | | | |
|------------|------|------|------|------|------|--------|------------|------|------|------|------|---------|------|------|------|------|--------|-----|------|------|------|--------|----------|-----|------|------|------|--------|------|--|--|--|
| -1 | .15 | .16 | .30 | .42 | .50 | -1 | .19 | .20 | .38 | .45 | .53 | -1 | .23 | .24 | .46 | .53 | .61 | -1 | .23 | .24 | .46 | .53 | .61 | -1 | .23 | .24 | .46 | .53 | .61 | | | |
| -2 | .24 | .25 | .40 | .56 | .68 | -2 | .32 | .33 | .64 | .76 | .89 | -2 | .43 | .41 | .80 | .92 | 1.05 | -2 | .43 | .41 | .80 | .92 | 1.05 | -2 | .43 | .41 | .80 | .92 | 1.05 | | | |
| -3 | .33 | .36 | .66 | .91 | 1.09 | -3 | .44 | .47 | .88 | 1.00 | 1.18 | -3 | .60 | .63 | 1.20 | 1.32 | 1.50 | -3 | .60 | .63 | 1.20 | 1.32 | 1.50 | -3 | .60 | .63 | 1.20 | 1.32 | 1.50 | | | |
| -4 | .42 | .46 | .84 | 1.15 | 1.38 | -4 | .57 | .61 | 1.14 | 1.30 | 1.58 | -4 | .73 | .81 | 1.46 | 1.62 | 1.85 | -4 | .73 | .81 | 1.46 | 1.62 | 1.85 | -4 | .73 | .81 | 1.46 | 1.62 | 1.85 | | | |
| -5 | .51 | .56 | 1.02 | 1.40 | 1.68 | -5 | .69 | .74 | 1.38 | 1.58 | 1.83 | -5 | .93 | .98 | 1.86 | 2.08 | 2.34 | -5 | .93 | .98 | 1.86 | 2.08 | 2.34 | -5 | .93 | .98 | 1.86 | 2.08 | 2.34 | | | |
| -6 | .59 | .65 | 1.18 | 1.62 | 1.94 | -6 | .83 | .89 | 1.66 | 1.86 | 2.18 | -6 | 1.07 | 1.17 | 2.14 | 2.34 | 2.66 | -6 | 1.07 | 1.17 | 2.14 | 2.34 | 2.66 | -6 | 1.07 | 1.17 | 2.14 | 2.34 | 2.66 | | | |
| -7 | .68 | .75 | 1.36 | 1.89 | 2.27 | -7 | .95 | 1.02 | 1.90 | 2.14 | 2.51 | -7 | 1.23 | 1.34 | 2.46 | 2.70 | 3.07 | -7 | 1.23 | 1.34 | 2.46 | 2.70 | 3.07 | -7 | 1.23 | 1.34 | 2.46 | 2.70 | 3.07 | | | |
| -8 | .77 | .85 | 1.54 | 2.11 | 2.53 | -8 | 1.08 | 1.16 | 2.16 | 2.42 | 2.84 | -8 | 1.40 | 1.52 | 2.80 | 3.16 | 3.58 | -8 | 1.40 | 1.52 | 2.80 | 3.16 | 3.58 | -8 | 1.40 | 1.52 | 2.80 | 3.16 | 3.58 | | | |
| -9 | .86 | .95 | 1.72 | 2.36 | 2.83 | -9 | 1.21 | 1.30 | 2.42 | 2.72 | 3.24 | -9 | 1.57 | 1.70 | 3.14 | 3.44 | 3.91 | -9 | 1.57 | 1.70 | 3.14 | 3.44 | 3.91 | -9 | 1.57 | 1.70 | 3.14 | 3.44 | 3.91 | | | |
| -10 | .95 | 1.05 | 1.90 | 2.61 | 3.13 | -10 | 1.33 | 1.43 | 2.66 | 2.99 | 3.55 | -10 | 1.73 | 1.87 | 3.46 | 3.76 | 4.28 | -10 | 1.73 | 1.87 | 3.46 | 3.76 | 4.28 | -10 | 1.73 | 1.87 | 3.46 | 3.76 | 4.28 | | | |
| -11 | 1.03 | 1.13 | 2.06 | 2.83 | 3.40 | -11 | 1.45 | 1.55 | 2.90 | 3.25 | 3.86 | -11 | 1.89 | 2.03 | 3.78 | 4.13 | 4.69 | -11 | 1.89 | 2.03 | 3.78 | 4.13 | 4.69 | -11 | 1.89 | 2.03 | 3.78 | 4.13 | 4.69 | | | |
| -12 | 1.12 | 1.23 | 2.24 | 3.08 | 3.70 | -12 | 1.58 | 1.69 | 3.16 | 3.54 | 4.20 | -12 | 2.06 | 2.21 | 4.12 | 4.50 | 5.11 | -12 | 2.06 | 2.21 | 4.12 | 4.50 | 5.11 | -12 | 2.06 | 2.21 | 4.12 | 4.50 | 5.11 | | | |
| -13 | 1.21 | 1.33 | 2.42 | 3.32 | 3.98 | -13 | 1.71 | 1.83 | 3.42 | 3.82 | 4.54 | -13 | 2.23 | 2.39 | 4.46 | 4.86 | 5.52 | -13 | 2.23 | 2.39 | 4.46 | 4.86 | 5.52 | -13 | 2.23 | 2.39 | 4.46 | 4.86 | 5.52 | | | |
| -14 | 1.31 | 1.44 | 2.62 | 3.60 | 4.32 | -14 | 1.84 | 1.97 | 3.68 | 4.13 | 4.90 | -14 | 2.40 | 2.57 | 4.60 | 5.05 | 5.77 | -14 | 2.40 | 2.57 | 4.60 | 5.05 | 5.77 | -14 | 2.40 | 2.57 | 4.60 | 5.05 | 5.77 | | | |
| -15 | 1.40 | 1.54 | 2.80 | 3.85 | 4.62 | -15 | 1.96 | 2.10 | 3.92 | 4.41 | 5.18 | -15 | 2.56 | 2.74 | 5.12 | 5.61 | 6.38 | -15 | 2.56 | 2.74 | 5.12 | 5.61 | 6.38 | -15 | 2.56 | 2.74 | 5.12 | 5.61 | 6.38 | | | |
| -16 | 1.49 | 1.64 | 2.98 | 4.10 | 4.93 | -16 | 2.09 | 2.24 | 4.18 | 4.70 | 5.53 | -16 | 2.73 | 2.92 | 5.46 | 5.98 | 6.70 | -16 | 2.73 | 2.92 | 5.46 | 5.98 | 6.70 | -16 | 2.73 | 2.92 | 5.46 | 5.98 | 6.70 | | | |
| -17 | 1.57 | 1.70 | 3.14 | 4.31 | 5.17 | -17 | 2.21 | 2.37 | 4.42 | 4.96 | 5.82 | -17 | 2.89 | 3.09 | 5.78 | 6.32 | 7.18 | -17 | 2.89 | 3.09 | 5.78 | 6.32 | 7.18 | -17 | 2.89 | 3.09 | 5.78 | 6.32 | 7.18 | | | |
| -18 | 1.66 | 1.83 | 3.32 | 4.56 | 5.47 | -18 | 2.34 | 2.51 | 4.68 | 5.25 | 6.16 | -18 | 3.06 | 3.27 | 6.12 | 6.69 | 7.60 | -18 | 3.06 | 3.27 | 6.12 | 6.69 | 7.60 | -18 | 3.06 | 3.27 | 6.12 | 6.69 | 7.60 | | | |
| -19 | 1.75 | 1.93 | 3.50 | 4.81 | 5.77 | -19 | 2.46 | 2.64 | 4.92 | 5.52 | 6.48 | -19 | 3.22 | 3.44 | 6.44 | 7.04 | 8.00 | -19 | 3.22 | 3.44 | 6.44 | 7.04 | 8.00 | -19 | 3.22 | 3.44 | 6.44 | 7.04 | 8.00 | | | |
| -20 | 1.84 | 2.03 | 3.68 | 5.06 | 6.07 | -20 | 2.60 | 2.78 | 5.20 | 5.82 | 6.83 | -20 | 3.40 | 3.70 | 6.80 | 7.42 | 8.43 | -20 | 3.40 | 3.70 | 6.80 | 7.42 | 8.43 | -20 | 3.40 | 3.70 | 6.80 | 7.42 | 8.43 | | | |
| -21 | 1.93 | 2.13 | 3.86 | 5.30 | 6.36 | -21 | 2.72 | 2.90 | 5.44 | 6.10 | 7.16 | -21 | 3.56 | 3.90 | 7.12 | 7.78 | 8.84 | -21 | 3.56 | 3.90 | 7.12 | 7.78 | 8.84 | -21 | 3.56 | 3.90 | 7.12 | 7.78 | 8.84 | | | |
| -22 | 2.02 | 2.23 | 4.04 | 5.55 | 6.66 | -22 | 2.86 | 3.07 | 5.68 | 6.40 | 7.51 | -22 | 3.74 | 3.98 | 7.48 | 8.04 | 9.15 | -22 | 3.74 | 3.98 | 7.48 | 8.04 | 9.15 | -22 | 3.74 | 3.98 | 7.48 | 8.04 | 9.15 | | | |

Height 1 1/2", Width 7/8", Thickness 1/4", Terminals 3/8" Centers, 5/16" Mtg., 6-32 x 1/4 Screws.

| 600A-SERIES | 600A- | | | | | Suffix | 600A-3/4ST- | | | | | 600A-ST- | | | | | 600A-Y- | | | | | Suffix | 600A-YSY- | | | | | 600A-Z- | | | | |
|-------------|-------|------|------|------|------|--------|-------------|------|------|------|------|----------|------|------|------|------|---------|-----|------|------|------|--------|-----------|-----|------|------|------|---------|------|--|--|--|
| -1 | .16 | .18 | .32 | .47 | .56 | -1 | .20 | .22 | .40 | .50 | .59 | -1 | .24 | .26 | .48 | .54 | .63 | -1 | .24 | .26 | .48 | .54 | .63 | -1 | .24 | .26 | .48 | .54 | .63 | | | |
| -2 | .25 | .28 | .50 | .70 | .91 | -2 | .33 | .37 | .66 | .83 | .97 | -2 | .41 | .45 | .82 | .91 | 1.05 | -2 | .41 | .45 | .82 | .91 | 1.05 | -2 | .41 | .45 | .82 | .91 | 1.05 | | | |
| -3 | .36 | .40 | .72 | 1.00 | 1.20 | -3 | .47 | .51 | .94 | 1.10 | 1.30 | -3 | .63 | .63 | 1.26 | 1.39 | 1.59 | -3 | .63 | .63 | 1.26 | 1.39 | 1.59 | -3 | .63 | .63 | 1.26 | 1.39 | 1.59 | | | |
| -4 | .46 | .51 | .92 | 1.26 | 1.51 | -4 | .61 | .66 | 1.22 | 1.43 | 1.68 | -4 | .81 | .82 | 1.62 | 1.80 | 2.05 | -4 | .81 | .82 | 1.62 | 1.80 | 2.05 | -4 | .81 | .82 | 1.62 | 1.80 | 2.05 | | | |
| -5 | .56 | .62 | 1.12 | 1.54 | 1.85 | -5 | .74 | .80 | 1.48 | 1.74 | 2.04 | -5 | .98 | 1.00 | 1.96 | 2.16 | 2.48 | -5 | .98 | 1.00 | 1.96 | 2.16 | 2.48 | -5 | .98 | 1.00 | 1.96 | 2.16 | 2.48 | | | |
| -6 | .65 | .72 | 1.30 | 1.79 | 2.15 | -6 | .89 | .96 | 1.78 | 2.05 | 2.40 | -6 | 1.17 | 1.20 | 2.34 | 2.57 | 2.92 | -6 | 1.17 | 1.20 | 2.34 | 2.57 | 2.92 | -6 | 1.17 | 1.20 | 2.34 | 2.57 | 2.92 | | | |
| -7 | .75 | .83 | 1.50 | 2.06 | 2.47 | -7 | 1.02 | 1.10 | 2.04 | 2.32 | 2.77 | -7 | 1.34 | 1.38 | 2.68 | 2.94 | 3.35 | -7 | 1.34 | 1.38 | 2.68 | 2.94 | 3.35 | -7 | 1.34 | 1.38 | 2.68 | 2.94 | 3.35 | | | |
| -8 | .85 | .94 | 1.70 | 2.33 | 2.80 | -8 | 1.16 | 1.25 | 2.27 | 2.57 | 3.15 | -8 | 1.52 | 1.57 | 3.04 | 3.34 | 3.80 | -8 | 1.52 | 1.57 | 3.04 | 3.34 | 3.80 | -8 | 1.52 | 1.57 | 3.04 | 3.34 | 3.80 | | | |
| -9 | 1.05 | 1.16 | 2.10 | 2.88 | 3.46 | -9 | 1.30 | 1.40 | 2.60 | 3.00 | 3.52 | -9 | 1.70 | 1.76 | 3.40 | 3.67 | 4.19 | -9 | 1.70 | 1.76 | 3.40 | 3.67 | 4.19 | -9 | 1.70 | 1.76 | 3.40 | 3.67 | 4.19 | | | |
| -10 | 1.13 | 1.25 | 2.26 | 3.12 | 3.74 | -10 | 1.43 | 1.54 | 2.86 | 3.30 | 3.87 | -10 | 1.87 | 1.94 | 3.74 | 4.11 | 4.68 | -10 | 1.87 | 1.94 | 3.74 | 4.11 | 4.68 | -10 | 1.87 | 1.94 | 3.74 | 4.11 | 4.68 | | | |
| -11 | 1.23 | 1.36 | 2.46 | 3.38 | 4.06 | -11 | 1.55 | 1.67 | 3.10 | 3.58 | 4.20 | -11 | 2.03 | 2.11 | 4.06 | 4.46 | 5.08 | -11 | 2.03 | 2.11 | 4.06 | 4.46 | 5.08 | -11 | 2.03 | 2.11 | 4.06 | 4.46 | 5.08 | | | |
| -12 | 1.33 | 1.47 | 2.66 | 3.65 | 4.38 | -12 | 1.69 | 1.82 | 3.38 | 3.90 | 4.57 | -12 | 2.21 | 2.30 | 4.42 | 4.86 | 5.53 | -12 | 2.21 | 2.30 | 4.42 | 4.86 | 5.53 | -12 | 2.21 | 2.30 | 4.42 | 4.86 | 5.53 | | | |
| -13 | 1.44 | 1.60 | 2.88 | 3.96 | 4.75 | -13 | 1.83 | 1.97 | 3.66 | 4.21 | 4.94 | -13 | 2.39 | 2.49 | 4.78 | 5.25 | 5.96 | -13 | 2.39 | 2.49 | 4.78 | 5.25 | 5.96 | -13 | 2.39 | 2.49 | 4.78 | 5.25 | 5.96 | | | |
| -14 | 1.54 | 1.71 | 3.08 | 4.23 | 5.08 | -14 | 1.97 | 2.13 | 3.94 | 4.54 | 5.33 | -14 | 2.57 | 2.69 | 5.14 | 5.65 | 6.44 | -14 | 2.57 | 2.69 | 5.14 | 5.65 | 6.44 | -14 | 2.57 | 2.69 | 5.14 | 5.65 | 6.44 | | | |
| -15 | 1.64 | 1.82 | 3.28 | 4.51 | 5.41 | -15 | 2.10 | 2.27 | 4.20 | 4.85 | 5.69 | -15 | 2.74 | 2.87 | 5.48 | 6.02 | 6.86 | -15 | 2.74 | 2.87 | 5.48 | 6.02 | 6.86 | -15 | 2.74 | 2.87 | 5.48 | 6.02 | 6.86 | | | |
| -16 | 1.73 | 1.91 | 3.46 | 4.74 | 5.69 | -16 | 2.24 | 2.42 | 4.48 | 5.17 | 6.07 | -16 | 2.92 | 3.08 | 5.84 | 6.42 | 7.32 | -16 | 2.92 | 3.08 | 5.84 | 6.42 | 7.32 | -16 | 2.92 | 3.08 | 5.84 | 6.42 | 7.32 | | | |
| -17 | 1.83 | 2.02 | 3.66 | 5.02 | 6.02 | -17 | 2.37 | 2.55 | 4.74 | 5.46 | 6.40 | -17 | 3.09 | 3.23 | 6.18 | 6.79 | 7.78 | -17 | 3.09 | 3.23 | 6.18 | 6.79 | 7.78 | -17 | 3.09 | 3.23 | 6.18 | 6.79 | 7.78 | | | |
| -18 | 1.93 | 2.13 | 3.86 | 5.29 | 6.35 | -18 | 2.51 | 2.70 | 5.02 | 5.78 | 6.78 | -18 | 3.27 | 3.42 | 6.54 | 7.15 | 8.15 | -18 | 3.27 | 3.42 | 6.54 | 7.15 | 8.15 | -18 | 3.27 | 3.42 | 6.54 | 7.15 | 8.15 | | | |
| -19 | 2.03 | 2.24 | 4.06 | 5.57 | 6.68 | -19 | 2.64 | 2.84 | 5.28 | 6.18 | 7.23 | -19 | 3.44 | 3.60 | 6.88 | 7.56 | 8.61 | -19 | 3.44 | 3.60 | 6.88 | 7.56 | 8.61 | -19 | 3.44 | 3.60 | 6.88 | 7.56 | 8.61 | | | |
| -20 | 2.13 | 2.35 | 4.26 | 5.83 | 7.00 | -20 | 2.78 | 3.00 | 5.56 | 6.40 | 7.51 | -20 | 3.62 | 3.80 | | | | | | | | | | | | | | | | | | |

HERMAN H. SMITH, INC.



Exclusive Distributors of **KULKA BARRIER TERMINAL BLOCKS** To Radio Parts Jobbers Only

WITH SCREW TERMINALS



WITH ONE-SIDED SOLDER TERMINALS



WITH TWO-SIDED SOLDER TERMINALS



To Series Number Add Suffix

| General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | |
|--------------------------|---------|---------|-----------|------------|--------------------------|---------|---------|-----------|------------|
| | | | MDG 'B' | MAI-60 'D' | | | | MDG 'B' | MAI-60 'D' |

Height 3/4", Width 1 1/2", Thickness 3/8", Terminals 1/16" Centers, 3/16" Mtg., 10-32 x 3/8" Screws.

| 603-SERIES | 603- | | | | 603-3/4-ST- | | | | 603-ST- | | | | | | |
|------------|--------|--------|--------|--------|-------------|--------|--------|--------|---------|--------|--------|--------|--------|--------|-------|
| | \$.55 | \$.61 | \$1.10 | \$1.51 | \$1.81 | \$.66 | \$.72 | \$1.32 | \$1.62 | \$1.92 | \$.77 | \$.83 | \$1.43 | \$1.73 | |
| -1 | .94 | 1.03 | 1.88 | 2.58 | 3.10 | 1.13 | 1.22 | 2.26 | 2.77 | 3.28 | 1.60 | 1.73 | 3.20 | 3.91 | 4.63 |
| -2 | 1.32 | 1.45 | 2.64 | 3.63 | 4.36 | 1.60 | 1.73 | 3.20 | 3.91 | 4.63 | 2.07 | 2.24 | 4.14 | 5.06 | 6.00 |
| -3 | 1.71 | 1.88 | 3.42 | 4.70 | 5.64 | 2.07 | 2.24 | 4.14 | 5.06 | 6.00 | 2.53 | 2.73 | 5.06 | 6.18 | 7.23 |
| -4 | 2.09 | 2.30 | 4.18 | 5.75 | 6.90 | 2.53 | 2.73 | 5.06 | 6.18 | 7.23 | 3.00 | 3.25 | 6.00 | 7.34 | 8.70 |
| -5 | 2.48 | 2.73 | 4.96 | 6.82 | 8.18 | 3.00 | 3.25 | 6.00 | 7.34 | 8.70 | 3.46 | 3.75 | 6.92 | 8.46 | 10.02 |
| -6 | 2.86 | 3.15 | 5.72 | 7.86 | 9.43 | 3.46 | 3.75 | 6.92 | 8.46 | 10.02 | 3.92 | 4.25 | 7.48 | 9.60 | 11.38 |
| -7 | 3.25 | 3.58 | 6.50 | 8.93 | 10.72 | 3.92 | 4.25 | 7.48 | 9.60 | 11.38 | 4.40 | 4.77 | 8.80 | 10.75 | 12.74 |
| -8 | 3.63 | 3.99 | 7.26 | 9.99 | 11.99 | 4.40 | 4.77 | 8.80 | 10.75 | 12.74 | 4.80 | 5.23 | 9.60 | 11.83 | 14.03 |
| -9 | 4.02 | 4.45 | 8.04 | 11.05 | 13.26 | 4.80 | 5.23 | 9.60 | 11.83 | 14.03 | | | | | |
| -10 | | | | | | | | | | | | | | | |

Height 1 1/8", Width 2", Thickness 1/2", Terminals 7/8" Centers, 3/4" Mtg., 12-32 x 3/8" Screws.

| 604-SERIES | 604- | | | | 604-3/4-ST- | | | | 604-ST- | | | | | | |
|------------|--------|--------|--------|--------|-------------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
| | \$.90 | \$.99 | \$1.80 | \$2.47 | \$2.96 | \$1.10 | \$1.19 | \$2.20 | \$2.67 | \$3.15 | \$1.25 | \$1.35 | \$2.40 | \$2.90 | \$3.40 |
| -1 | 1.65 | 1.82 | 3.30 | 4.53 | 5.44 | 2.00 | 2.17 | 4.00 | 4.92 | 5.82 | 2.40 | 2.60 | 4.80 | 5.80 | 6.80 |
| -2 | 2.40 | 2.64 | 4.80 | 6.60 | 7.92 | 2.90 | 3.14 | 5.80 | 7.10 | 8.42 | 2.80 | 3.00 | 5.60 | 6.80 | 8.00 |
| -3 | 3.15 | 3.46 | 6.30 | 8.66 | 10.39 | 3.80 | 4.11 | 7.60 | 9.31 | 11.03 | 3.70 | 3.90 | 7.00 | 8.50 | 10.00 |
| -4 | 3.90 | 4.29 | 7.80 | 10.72 | 12.86 | 4.70 | 5.09 | 9.40 | 11.52 | 13.66 | 4.60 | 4.90 | 9.00 | 10.80 | 12.60 |
| -5 | 4.65 | 5.11 | 9.30 | 12.78 | 15.34 | 5.60 | 6.06 | 11.20 | 13.73 | 16.27 | 5.50 | 5.80 | 10.80 | 12.80 | 14.80 |
| -6 | 5.40 | 5.94 | 10.30 | 14.85 | 17.82 | 6.50 | 7.04 | 13.00 | 15.95 | 18.91 | 6.40 | 6.70 | 12.80 | 15.00 | 17.20 |
| -7 | 6.15 | 6.76 | 12.30 | 16.91 | 20.29 | 7.40 | 8.01 | 14.80 | 18.16 | 21.54 | 7.30 | 7.60 | 14.60 | 17.00 | 19.40 |
| -8 | | | | | | | | | | | | | | | |

Height 1 1/8", Width 2 1/2", Thickness 3/8", Terminals 1 1/8" Centers, 7/8" Mtg. 1/4-28 x 1/2" Screws

| 605-SERIES | 605- | | | | 605-3/4-ST- | | | | 605-ST- | | | | | | |
|------------|--------|--------|--------|--------|-------------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
| | \$1.25 | \$1.38 | \$2.50 | \$3.43 | \$4.12 | \$1.45 | \$1.58 | \$2.90 | \$3.63 | \$4.31 | \$1.60 | \$1.70 | \$3.00 | \$3.60 | \$4.20 |
| -1 | 2.40 | 2.64 | 4.80 | 6.60 | 7.92 | 2.80 | 3.04 | 5.60 | 7.00 | 8.32 | 3.20 | 3.40 | 6.40 | 7.60 | 8.80 |
| -2 | 3.50 | 3.85 | 7.00 | 9.62 | 11.54 | 4.20 | 4.55 | 8.40 | 10.32 | 12.24 | 4.60 | 4.90 | 9.20 | 11.00 | 12.80 |
| -3 | 4.70 | 5.17 | 9.40 | 12.92 | 15.50 | 5.60 | 6.07 | 11.20 | 13.82 | 16.40 | 6.00 | 6.30 | 12.00 | 14.40 | 16.80 |
| -4 | 5.80 | 6.38 | 11.60 | 15.95 | 19.14 | 7.00 | 7.50 | 14.00 | 17.15 | 20.33 | 7.40 | 7.70 | 14.80 | 17.60 | 20.40 |
| -5 | 7.00 | 7.70 | 14.00 | 19.25 | 23.10 | 8.30 | 9.00 | 16.60 | 20.55 | 24.30 | 8.70 | 9.00 | 17.40 | 20.60 | 24.00 |
| -6 | | | | | | | | | | | | | | | |

599 SERIES NARROW WIDTH TERMINAL BLOCK

Single Screw Terminal. Height 1 1/2", Width 3/4", Thickness 1/4". Terminals 3/8" Centers, .156 dia mtg. holes: 5-40 x 1/4" brass nickel plated screws.

| To Series Number Add Suffix | 599- | | | | 599-3/4-ST- | | | | 599-ST- | | | | | | |
|-----------------------------|--------------------------|---------|---------|-----------|-------------|--------------------------|---------|---------|-----------|------------|--------------------------|---------|---------|-----------|------------|
| | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | GDI-30 'H' | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | GDI-30 'H' | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | GDI-30 'H' |
| -1 | .15 | .16 | .30 | .42 | .50 | .19 | .20 | .38 | .45 | .53 | .25 | .26 | .42 | .50 | .58 |
| -2 | .24 | .25 | .50 | .69 | .82 | .32 | .33 | .64 | .76 | .89 | .38 | .39 | .64 | .76 | .89 |
| -3 | .33 | .36 | .66 | .91 | 1.09 | .44 | .47 | .88 | 1.00 | 1.18 | .50 | .53 | .94 | 1.10 | 1.26 |
| -4 | .42 | .46 | .84 | 1.15 | 1.38 | .57 | .61 | 1.14 | 1.30 | 1.53 | .62 | .66 | 1.22 | 1.44 | 1.66 |
| -5 | .51 | .56 | 1.02 | 1.40 | 1.68 | .69 | .74 | 1.38 | 1.58 | 1.85 | .74 | .79 | 1.52 | 1.80 | 2.08 |
| -6 | .59 | .65 | 1.18 | 1.62 | 1.94 | .83 | .89 | 1.66 | 1.86 | 2.18 | .88 | .94 | 1.78 | 2.10 | 2.42 |
| -7 | .68 | .75 | 1.36 | 1.89 | 2.27 | .95 | 1.02 | 1.90 | 2.14 | 2.51 | .99 | 1.06 | 2.00 | 2.36 | 2.72 |
| -8 | .77 | .85 | 1.54 | 2.11 | 2.53 | 1.08 | 1.16 | 2.16 | 2.42 | 2.84 | 1.11 | 1.19 | 2.22 | 2.62 | 3.02 |
| -9 | .86 | .95 | 1.72 | 2.36 | 2.83 | 1.21 | 1.30 | 2.42 | 2.72 | 3.19 | 1.24 | 1.33 | 2.48 | 2.92 | 3.36 |
| -10 | .95 | 1.05 | 1.90 | 2.61 | 3.13 | 1.33 | 1.43 | 2.66 | 2.99 | 3.51 | 1.36 | 1.46 | 2.72 | 3.20 | 3.68 |
| -11 | 1.03 | 1.13 | 2.06 | 2.83 | 3.40 | 1.45 | 1.55 | 2.90 | 3.25 | 3.81 | 1.48 | 1.58 | 2.96 | 3.48 | 4.00 |
| -12 | 1.12 | 1.23 | 2.24 | 3.08 | 3.70 | 1.58 | 1.69 | 3.16 | 3.54 | 4.15 | 1.60 | 1.71 | 3.22 | 3.78 | 4.34 |
| -13 | 1.21 | 1.33 | 2.42 | 3.32 | 3.98 | 1.71 | 1.83 | 3.42 | 3.82 | 4.48 | 1.73 | 1.85 | 3.50 | 4.08 | 4.66 |
| -14 | 1.31 | 1.44 | 2.62 | 3.60 | 4.32 | 1.84 | 1.97 | 3.68 | 4.13 | 4.85 | 1.86 | 2.00 | 3.76 | 4.36 | 5.00 |
| -15 | 1.40 | 1.54 | 2.80 | 3.85 | 4.62 | 1.96 | 2.10 | 3.92 | 4.41 | 5.18 | 1.98 | 2.13 | 4.04 | 4.66 | 5.32 |
| -16 | 1.49 | 1.64 | 2.98 | 4.10 | 4.92 | 2.09 | 2.24 | 4.18 | 4.70 | 5.52 | 2.11 | 2.27 | 4.26 | 4.90 | 5.64 |
| -17 | 1.57 | 1.73 | 3.14 | 4.31 | 5.17 | 2.21 | 2.37 | 4.42 | 4.96 | 5.82 | 2.23 | 2.40 | 4.54 | 5.20 | 6.00 |
| -18 | 1.66 | 1.83 | 3.32 | 4.56 | 5.47 | 2.34 | 2.51 | 4.68 | 5.25 | 6.16 | 2.36 | 2.54 | 4.82 | 5.50 | 6.32 |
| -19 | 1.75 | 1.93 | 3.50 | 4.81 | 5.77 | 2.46 | 2.64 | 4.92 | 5.52 | 6.48 | 2.48 | 2.67 | 5.06 | 5.76 | 6.60 |
| -20 | 1.84 | 2.03 | 3.68 | 5.06 | 6.07 | 2.60 | 2.78 | 5.20 | 5.82 | 6.83 | 2.62 | 2.81 | 5.30 | 6.02 | 6.90 |
| -21 | 1.93 | 2.13 | 3.86 | 5.30 | 6.36 | 2.72 | 2.90 | 5.44 | 6.10 | 7.16 | 2.74 | 2.93 | 5.54 | 6.26 | 7.20 |
| -22 | 2.02 | 2.23 | 4.04 | 5.55 | 6.66 | 2.86 | 3.07 | 6.14 | 6.40 | 7.51 | 2.88 | 3.09 | 5.78 | 6.54 | 7.60 |

699 SERIES NARROW WIDTH TERMINAL BLOCK

Single Screw Terminal. Height 1/2", Width 5/8", Thickness 3/8", Terminals 3/16" Centers, .175 Dia. Mtg. Holes 6-32 x 1/4" Brass Nickel Plated Screws.

| To Series Number Add Suffix | 699- | | | | 699-3/4-ST- | | | | 699-ST- | | | | | | |
|-----------------------------|--------------------------|---------|---------|-----------|-------------|--------------------------|---------|---------|-----------|------------|--------------------------|---------|---------|-----------|------------|
| | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | GDI-30 'H' | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | GDI-30 'H' | General Purpose Bakelite | CFG 'C' | MFE 'M' | MME 'GMF' | GDI-30 'H' |
| -1 | .20 | .22 | .40 | .55 | .66 | .24 | .26 | .48 | .59 | .69 | .30 | .32 | .54 | .66 | .78 |
| -2 | .31 | .34 | .62 | .85 | 1.02 | .41 | .44 | .82 | .95 | 1.11 | .36 | .39 | .66 | .81 | .96 |
| -3 | .42 | .46 | .84 | 1.15 | 1.38 | .57 | .61 | 1.14 | 1.30 | 1.52 | .42 | .46 | .84 | 1.08 | 1.32 |
| -4 | .54 | .59 | 1.08 | 1.48 | 1.78 | .74 | .79 | 1.48 | 1.68 | 1.96 | .48 | .53 | .96 | 1.20 | 1.44 |
| -5 | .64 | .72 | 1.28 | 1.76 | 2.11 | .90 | .98 | 1.80 | 2.02 | 2.36 | .54 | .59 | 1.08 | 1.32 | 1.56 |
| -6 | .75 | .83 | 1.50 | 2.06 | 2.47 | 1.07 | 1.15 | 2.14 | 2.38 | 2.78 | .60 | .66 | 1.26 | 1.50 | 1.74 |
| -7 | .88 | .97 | 1.76 | 2.42 | 2.90 | 1.23 | 1.32 | 2.46 | 2.77 | 3.25 | .66 | .72 | 1.44 | 1.68 | 1.92 |
| -8 | .99 | 1.09 | 1.98 | 2.72 | 3.26 | 1.40 | 1.50 | 2.80 | 3.13 | 3.67 | .72 | .78 | 1.56 | 1.80 | 2.04 |
| -9 | 1.10 | 1.21 | 2.20 | 3.02 | 3.62 | 1.56 | 1.67 | 3.12 | 3.48 | 4.08 | .78 | .84 | 1.68 | 1.92 | 2.16 |
| -10 | 1.22 | 1.34 | 2.44 | 3.35 | 4.02 | 1.73 | 1.85 | 3.46 | 3.86 | 4.53 | .84 | .90 | 1.80 | 2.04 | 2.28 |
| -11 | 1.33 | 1.46 | 2.66 | 3.65 | 4.38 | 1.89 | 2.02 | 3.78 | 4.21 | 4.93 | .90 | .96 | 1.92 | 2.16 | 2.40 |
| -12 | 1.44 | 1.58 | 2.98 | 3.96 | 4.75 | 2.06 | 2.20 | 4.12 | 4.58 | 5.36 | .96 | 1.02 | 2.04 | 2.28 | 2.52 |
| -13 | 1.56 | 1.72 | 3.12 | 4.20 | 5.15 | 2.22 | 2.38 | 4.44 | 4.95 | 5.79 | 1.02 | 1.08 | 2.16 | 2.40 | 2.64 |
| -14 | 1.67 | 1.84 | 3.34 | 4.50 | 5.51 | 2.39 | 2.56 | 4.78 | 5.31 | 6.22 | 1.08 | 1.14 | 2.28 | 2.52 | 2.76 |
| -15 | 1.78 | 1.96 | 3.56 | 4.90 | 5.88 | 2.55 | 2.73 | 5.10 | 5.72 | 6.70 | 1.14 | 1.20 | 2.40 | 2.64 | 2.88 |
| -16 | 1.90 | 2.09 | 3.80 | 5.22 | 6.26 | 2.72 | 2.91 | 5.42 | 6.09 | 7.13 | 1.20 | 1.26 | 2.52 | 2.76 | 2.99 |
| -17 | 2.01 | 2.21 | 4.02 | 5.52 | 6.62 | 2.88 | 3.08 | 5.76 | 6.45 | 7.55 | 1.26 | 1.32 | 2.64 | 2.88 | 3.11 |
| -18 | 2.12 | 2.33 | 4.24 | 5.83 | 7.00 | 3.05 | 3.26 | 6.10 | 6.80 | 7.96 | 1.32 | 1.38 | 2.76 | 2.99 | 3.22 |
| -19 | 2.24 | 2.46 | 4.48 | 6.16 | 7.39 | 3.21 | 3.43 | 6.42 | 7.19 | 8.41 | 1.38 | 1.44 | 2.88 | 3.11 | 3.34 |
| -20 | 2.35 | 2.59 | 4.70 | 6.46 | 7.75 | 3.38 | 3.62 | 6.76 | 7.54 | 8.82 | 1.44 | 1.50 | 3.00 | 3.22 | 3.45 |
| -21 | 2.47 | 2.72 | 4.94 | 6.79 | 8.15 | 3.55 | 3.80 | 7.10 | 7.92 | 9.27 | 1.50 | 1.56 | 3.12 | 3.34 | 3.57 |
| -22 | 2.59 | 2.85 | 5.18 | 7.12 | 8.54 | 3.72 | 3.98 | 7.44 | 8.30 | 9.72 | 1.56 | 1.62 | 3.24 | 3.45 | 3.69 |
| -23 | 2.71 | 2.98 | 5.42 | 7.45 | 8.94 | 3.89 | 4.16 | 7.78 | 8.68 | 10.16 | 1.62 | 1.68 | 3.36 | 3.57 | 3.80 |

409 SERIES SUBMINIATURE TERMINAL BLOCK



HERMAN H. SMITH, INC.

Exclusive Distributors of **KULKA BARRIER TERMINAL BLOCKS** To Radio Parts Jobbers Only

FLAT STYLE



For faster, better wiring of multiple connections to terminal blocks. Lugs are double eyeletted to prevent shift. Upturned ends of lugs acts as extra lock. Made of laminated black XP Phenolic (also supplied in XXXP natural Phenolic and GMG Glass Cloth Melamine resin per MIL-P-15037B).

Supplied in two styles, flat or angle—each style either right hand or left hand mounting.

ANGLE STYLE



650 SERIES

Connecting strip for 600 series terminal block. Strips are 3/32" thick, 3/4" wide, 3/8" centers.

| Left Clamp Catalog No. | Right Clamp Catalog No. | Number of Terminals | Price Each |
|------------------------|-------------------------|---------------------|------------|
| 650-L-2 | 650-R-2 | 2 | .13 |
| 650-L-3 | 650-R-3 | 3 | .20 |
| 650-L-4 | 650-R-4 | 4 | .25 |
| 650-L-5 | 650-R-5 | 5 | .32 |
| 650-L-6 | 650-R-6 | 6 | .39 |
| 650-L-7 | 650-R-7 | 7 | .45 |
| 650-L-8 | 650-R-8 | 8 | .51 |
| 650-L-9 | 650-R-9 | 9 | .57 |
| 650-L-10 | 650-R-10 | 10 | .64 |
| 650-L-11 | 650-R-11 | 11 | .70 |
| 650-L-12 | 650-R-12 | 12 | .76 |
| 650-L-13 | 650-R-13 | 13 | .83 |
| 650-L-14 | 650-R-14 | 14 | .89 |
| 650-L-15 | 650-R-15 | 15 | .96 |
| 650-L-16 | 650-R-16 | 16 | 1.04 |
| 650-L-17 | 650-R-17 | 17 | 1.08 |
| 650-L-18 | 650-R-18 | 18 | 1.16 |
| 650-L-19 | 650-R-19 | 19 | 1.21 |
| 650-L-20 | 650-R-20 | 20 | 1.28 |
| 650-L-21 | 650-R-21 | 21 | 1.33 |
| 650-L-22 | 650-R-22 | 22 | 1.38 |

| | | | |
|-----------|-----------|----|------|
| 650-AL-2 | 650-AR-2 | 2 | .19 |
| 650-AL-3 | 650-AR-3 | 3 | .29 |
| 650-AL-4 | 650-AR-4 | 4 | .37 |
| 650-AL-5 | 650-AR-5 | 5 | .47 |
| 650-AL-6 | 650-AR-6 | 6 | .57 |
| 650-AL-7 | 650-AR-7 | 7 | .66 |
| 650-AL-8 | 650-AR-8 | 8 | .75 |
| 650-AL-9 | 650-AR-9 | 9 | .84 |
| 650-AL-10 | 650-AR-10 | 10 | .94 |
| 650-AL-11 | 650-AR-11 | 11 | 1.03 |
| 650-AL-12 | 650-AR-12 | 12 | 1.12 |
| 650-AL-13 | 650-AR-13 | 13 | 1.22 |
| 650-AL-14 | 650-AR-14 | 14 | 1.31 |
| 650-AL-15 | 650-AR-15 | 15 | 1.41 |
| 650-AL-16 | 650-AR-16 | 16 | 1.49 |
| 650-AL-17 | 650-AR-17 | 17 | 1.59 |
| 650-AL-18 | 650-AR-18 | 18 | 1.70 |
| 650-AL-19 | 650-AR-19 | 19 | 1.78 |
| 650-AL-20 | 650-AR-20 | 20 | 1.88 |
| 650-AL-21 | 650-AR-21 | 21 | 1.96 |
| 650-AL-22 | 650-AR-22 | 22 | 2.08 |

651 SERIES

Connecting strip for 601 series terminal block. Strips are 3/32" thick, 5/8" wide, 7/16" centers.

| Left Clamp Catalog No. | Right Clamp Catalog No. | Number of Terminals | Price Each |
|------------------------|-------------------------|---------------------|------------|
| 651-L-2 | 651-R-2 | 2 | .14 |
| 651-L-3 | 651-R-3 | 3 | .21 |
| 651-L-4 | 651-R-4 | 4 | .26 |
| 651-L-5 | 651-R-5 | 5 | .33 |
| 651-L-6 | 651-R-6 | 6 | .40 |
| 651-L-7 | 651-R-7 | 7 | .46 |
| 651-L-8 | 651-R-8 | 8 | .52 |
| 651-L-9 | 651-R-9 | 9 | .58 |
| 651-L-10 | 651-R-10 | 10 | .65 |
| 651-L-11 | 651-R-11 | 11 | .72 |
| 651-L-12 | 651-R-12 | 12 | .77 |
| 651-L-13 | 651-R-13 | 13 | .84 |
| 651-L-14 | 651-R-14 | 14 | .91 |
| 651-L-15 | 651-R-15 | 15 | .97 |
| 651-L-16 | 651-R-16 | 16 | 1.03 |
| 651-L-17 | 651-R-17 | 17 | 1.09 |
| 651-L-18 | 651-R-18 | 18 | 1.17 |
| 651-L-19 | 651-R-19 | 19 | 1.22 |
| 651-L-20 | 651-R-20 | 20 | 1.29 |
| 651-L-21 | 651-R-21 | 21 | 1.36 |
| 651-L-22 | 651-R-22 | 22 | 1.43 |
| 651-L-23 | 651-R-23 | 23 | 1.50 |

| | | | |
|-----------|-----------|----|------|
| 651-AL-2 | 651-AR-2 | 2 | .20 |
| 651-AL-3 | 651-AR-3 | 3 | .30 |
| 651-AL-4 | 651-AR-4 | 4 | .38 |
| 651-AL-5 | 651-AR-5 | 5 | .48 |
| 651-AL-6 | 651-AR-6 | 6 | .58 |
| 651-AL-7 | 651-AR-7 | 7 | .67 |
| 651-AL-8 | 651-AR-8 | 8 | .76 |
| 651-AL-9 | 651-AR-9 | 9 | .85 |
| 651-AL-10 | 651-AR-10 | 10 | .95 |
| 651-AL-11 | 651-AR-11 | 11 | 1.05 |
| 651-AL-12 | 651-AR-12 | 12 | 1.13 |
| 651-AL-13 | 651-AR-13 | 13 | 1.23 |
| 651-AL-14 | 651-AR-14 | 14 | 1.33 |
| 651-AL-15 | 651-AR-15 | 15 | 1.42 |
| 651-AL-16 | 651-AR-16 | 16 | 1.51 |
| 651-AL-17 | 651-AR-17 | 17 | 1.60 |
| 651-AL-18 | 651-AR-18 | 18 | 1.71 |
| 651-AL-19 | 651-AR-19 | 19 | 1.79 |
| 651-AL-20 | 651-AR-20 | 20 | 1.89 |
| 651-AL-21 | 651-AR-21 | 21 | 1.99 |
| 651-AL-22 | 651-AR-22 | 22 | 2.09 |
| 651-AL-23 | 651-AR-23 | 23 | 2.19 |

652 SERIES

Connecting strip for 602 series terminal block. Strips are 3/32" thick, 5/8" wide, 9/16" centers.

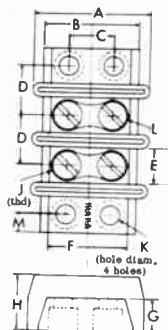
| Left Clamp Catalog No. | Right Clamp Catalog No. | Number of Terminals | Price Each |
|------------------------|-------------------------|---------------------|------------|
| 652-L-2 | 652-R-2 | 2 | .17 |
| 652-L-3 | 652-R-3 | 3 | .23 |
| 652-L-4 | 652-R-4 | 4 | .29 |
| 652-L-5 | 652-R-5 | 5 | .35 |
| 652-L-6 | 652-R-6 | 6 | .43 |
| 652-L-7 | 652-R-7 | 7 | .48 |
| 652-L-8 | 652-R-8 | 8 | .55 |
| 652-L-9 | 652-R-9 | 9 | .61 |
| 652-L-10 | 652-R-10 | 10 | .68 |
| 652-L-11 | 652-R-11 | 11 | .74 |
| 652-L-12 | 652-R-12 | 12 | .80 |
| 652-L-13 | 652-R-13 | 13 | .86 |
| 652-L-14 | 652-R-14 | 14 | .94 |
| 652-L-15 | 652-R-15 | 15 | .99 |
| 652-L-16 | 652-R-16 | 16 | 1.06 |
| 652-L-17 | 652-R-17 | 17 | 1.11 |
| 652-L-18 | 652-R-18 | 18 | 1.16 |
| 652-L-19 | 652-R-19 | 19 | 1.21 |
| 652-L-20 | 652-R-20 | 20 | 1.26 |
| 652-L-21 | 652-R-21 | 21 | 1.31 |
| 652-L-22 | 652-R-22 | 22 | 1.36 |
| 652-L-23 | 652-R-23 | 23 | 1.41 |
| 652-L-24 | 652-R-24 | 24 | 1.46 |
| 652-L-25 | 652-R-25 | 25 | 1.51 |
| 652-L-26 | 652-R-26 | 26 | 1.56 |

| | | | |
|-----------|-----------|----|------|
| 652-AL-2 | 652-AR-2 | 2 | .23 |
| 652-AL-3 | 652-AR-3 | 3 | .32 |
| 652-AL-4 | 652-AR-4 | 4 | .41 |
| 652-AL-5 | 652-AR-5 | 5 | .50 |
| 652-AL-6 | 652-AR-6 | 6 | .61 |
| 652-AL-7 | 652-AR-7 | 7 | .69 |
| 652-AL-8 | 652-AR-8 | 8 | .79 |
| 652-AL-9 | 652-AR-9 | 9 | .89 |
| 652-AL-10 | 652-AR-10 | 10 | .98 |
| 652-AL-11 | 652-AR-11 | 11 | 1.07 |
| 652-AL-12 | 652-AR-12 | 12 | 1.16 |
| 652-AL-13 | 652-AR-13 | 13 | 1.25 |
| 652-AL-14 | 652-AR-14 | 14 | 1.36 |
| 652-AL-15 | 652-AR-15 | 15 | 1.44 |
| 652-AL-16 | 652-AR-16 | 16 | 1.54 |
| 652-AL-17 | 652-AR-17 | 17 | 1.62 |
| 652-AL-18 | 652-AR-18 | 18 | 1.72 |
| 652-AL-19 | 652-AR-19 | 19 | 1.82 |
| 652-AL-20 | 652-AR-20 | 20 | 1.92 |
| 652-AL-21 | 652-AR-21 | 21 | 2.02 |
| 652-AL-22 | 652-AR-22 | 22 | 2.12 |
| 652-AL-23 | 652-AR-23 | 23 | 2.22 |
| 652-AL-24 | 652-AR-24 | 24 | 2.32 |
| 652-AL-25 | 652-AR-25 | 25 | 2.42 |
| 652-AL-26 | 652-AR-26 | 26 | 2.52 |

ELECTRICAL RATING CHART

Rated Voltage Taken at 1/2 Voltage Breakdown

| Type Number | Rated Voltage Without Marker Strip | Rated Voltage With Marker Strip | Current Rating | Maximum Wire Sizes With Solder or Solderless Lugs |
|-------------|------------------------------------|---------------------------------|----------------|---|
| 409 | 750V RMS | 1500V RMS | 2 Amp | Lug for #26 to 22 Go |
| 410 | 1000V RMS | 2000V RMS | 5 Amp | Lug for #20 to 18 Go |
| 411 | 1000V RMS | 2000V RMS | 5 Amp | Lug for #20 to 18 Go |
| 599 | 1100V RMS | 2500V RMS | 15 Amp | Lug for #22 to 16 Go |
| 600 | 1100V RMS | 2500V RMS | 15 Amp | Lug for #22 to 16 Go |
| 601 | 1100V RMS | 3000V RMS | 20 Amp | Lug for #16 to 14 Go |
| 602 | 1600V RMS | 3300V RMS | 30 Amp | Lug for #14 to 12 Go |
| 603 | 1700V RMS | 3000V RMS | 50 Amp | Lug for #6 Go |
| 604 | 1800V RMS | 3400V RMS | 70 Amp | Lug for #4 Go |
| 605 | 2100V RMS | 3800V RMS | 90 Amp | Lug for #2 Go |
| 609 | 1000V RMS | 2000V RMS | 10 Amp | Lug for #20 to 18 Go |
| 699 | 1100V RMS | 2000V RMS | 20 Amp | Lug for #16 to 14 Go |



NAVY TERMINAL BOARDS



Made According to BUREAU OF SHIPS Drawings No. 9000 -S6505F-73214 Rev. 5 and Spec. MIL-T-16784 (Ships).

| Part No. | Type Desig. | NET Each | Part No. | Type Desig. | NET Each |
|----------|-------------|----------|----------|-------------|----------|
| 73801 | 3TB10 | \$10.00 | 73827 | 10TB12 | 4.75 |
| 73602 | 4TB8 | 4.10 | 73828 | 10TB18 | 5.25 |
| 73603 | 4TB20 | 7.50 | 73829 | 10TB28 | 8.88 |
| 73804 | 5TB8 | 7.50 | 73630 | 11TB4 | 3.68 |
| 73805 | 5TB10 | 8.50 | 73631 | 11TB6 | 4.20 |
| 73608 | 5TB12 | 9.00 | 73632 | 11TB9 | 5.20 |
| | | | 73633 | 11TB14 | 6.60 |
| 73607 | 6TB6 | 3.40 | 73634 | 15TB10 | 4.00 |
| 73608 | 6TB10 | 3.75 | 73635 | 15TB24 | 6.50 |
| 73609 | 6TB24 | 7.05 | | | |
| 73610 | 7TB8 | 5.00 | 73636 | 16TB4 | 3.60 |
| 73811 | 7TB12 | 6.25 | 73637 | 16TB10 | 6.50 |
| 73612 | 8TB2 | 1.20 | 73638 | 17TB4 3, 4 | 5.00 |
| 73813 | 8TB2C | .80 | 73639 | 17TB10 3, 4 | 9.00 |
| 73614 | 8TB2M | 1.00 | 73640 | 25TB2 | 1.80 |
| 73615 | 8TB6 | 2.30 | 73841 | 25TB5 | 2.10 |
| 73616 | 8TB6M | 1.80 | 73642 | 25TB6 | 2.30 |
| 73617 | 8TB6M | 2.00 | 73643 | 25TB7 | 2.50 |
| 73818 | 8TB8 | 2.86 | 73644 | 25TB9 | 2.90 |
| 73619 | 8TB8C | 2.30 | 73645 | 25TB10 | 3.10 |
| 73620 | 8TB8M | 2.60 | 73846 | 25TB12 | 3.50 |
| 73821 | 8TB10 | 3.50 | 73647 | 26TB2 3 | 2.00 |
| 73622 | 8TB10C | 2.80 | | | |
| 73823 | 8TB10M | 3.20 | 73648 | 26TB6 3 | 3.25 |
| | | | 73649 | 26TB8 3 | 3.80 |
| 73624 | 9TB2 | 2.00 | 73650 | 26TB10 3 | 4.40 |
| 73625 | 9TB4 | 2.25 | 73651 | 26TB12 3 | 5.00 |
| 73828 | 10TB8 | 4.25 | 73652 | 27TB12 | 7.00 |

Send for our Engineering Data Brochure on the complete line of Kulka Navy Terminal Boards and Hardware.

DIMENSIONAL DRAWING OF TERMINAL BLOCKS

| Series No. | A | B | C | D | E | F | G | H | J | K | L | M | Max. Tms. |
|------------|----------|----------|------|--------|-------|--------|------|-------|--------|------|------|-------|-----------|
| 409 | 3/16 | 1/4 | — | 3/16 | 3/4 | 3/16 | 3/2 | 1/4 | 0-80 | .093 | 1/8 | 1/4 | 21 |
| 410 | 3/8 | 5/8 | 1/4 | 1/4 | 3/16 | 5/8 | 3/2 | 3/16 | 2-56 | .125 | 3/16 | 1/8 | 22 |
| 411 | 1 1/2 | 1 3/2 | — | 1/4 | 3/16 | 1 1/2 | 3/2 | 3/16 | 2-56 | .125 | 3/16 | 1/8 | 22 |
| 599 | 3/8 | 3/8 | — | 3/8 | 1 1/4 | 3/2 | 1/4 | 1 3/2 | 5-40 | .156 | 1/4 | 3/4 | 22 |
| 600 | 7/8 | 1 1/16 | 3/16 | 3/8 | 1 1/4 | 3/2 | 1/4 | 1 3/2 | 5-40 | .156 | 1/4 | 3/4 | 22 |
| 601 | 1 1/8 | 7/8 | 3/4 | 3/16 | 3/4 | 3/4 | 3/4 | 1/2 | 6-32 | .175 | 1/4 | 5/2 | 23 |
| 602 | 1 3/8 | 1 1/16 | 1/2 | 3/16 | 3/4 | 7/8 | 3/8 | 5/8 | 8-32 | .209 | 3/16 | 1 1/4 | 26 |
| 603 | 1 1 3/16 | 1 3/16 | 5/8 | 1 1/16 | 1 1/2 | 1 1/16 | 1/4 | 3/4 | 10-32 | .165 | 3/8 | 3/2 | 10 |
| 604 | 2 | 1 1/2 | 3/4 | 7/8 | 3/16 | 1 1/4 | 1/2 | 3/4 | 12-32 | .195 | 3/8 | 1 1/4 | 8 |
| 605 | 2 1/2 | 1 1 3/16 | 7/8 | 3/8 | 1/4 | 3/8 | 3/2 | 1/2 | 4-40 | .156 | 3/16 | 1 1/4 | 13 |
| 609 | 3/8 | 3/8 | — | 1 1/8 | 1 1/2 | 1 1/2 | 3/8 | 1 1/8 | 1/4-29 | .209 | 1/2 | 3/16 | 6 |
| 699 | 1 1/16 | 1/2 | — | 3/16 | 3/4 | 1 1/2 | 3/16 | 1/2 | 6-32 | .156 | 1/4 | 3/2 | 23 |

TERMINAL LUGS Std. Pkg. 100

| Series | One-Sided -3/4STL | Two-Sided -STL | Bent -YL | Flag -SLF | Spade -SLS | Hole -SLH | Outside Bent -ZL | Comb. YL-3/4STL -XYL | Long Bent -YSYL | Jumper -J | Straddle Plate -SP |
|--------|-------------------|----------------|----------|-----------|------------|-----------|------------------|----------------------|-----------------|-----------|--------------------|
| 409 | | | 44.00 M | | | | | | | | |
| 410 | 44.00 M | 44.00 M | | | | | | | | | |
| 599 | 44.00 M | | | 30 | | | | | | | |

HERMAN H. SMITH, INC.



Exclusive Distributors of **KULKA BARRIER TERMINAL BLOCKS** To Radio Parts Jobbers Only

FIBRE AND XP BAKELITE MARKER STRIPS

Marker strips are supplied to fit each size terminal block — either plain or imprinted — in vulcanized fibre or Bakelite (1/32" thick).

| Cat. No. | Fibre Per C | Imp. Fibre Per C | XP Bake. Per C | Imp. XP Bake. Per C | Cat. No. | Fibre Per C | Imp. Fibre Per C | XP Bake. Per C | Imp. XP Bake. Per C |
|-------------------------|-------------|------------------|----------------|---------------------|---------------------|-------------|------------------|----------------|---------------------|
| 410-411-600-600A | | | | | 601-Y-601-XY | | | | |
| MS600-1 | \$ 2.80 | \$ 7.90 | \$ 3.40 | \$ 8.40 | MS601-Y-1 | \$ 7.20 | \$12.00 | \$ 7.60 | \$12.60 |
| MS600-2 | 3.90 | 8.80 | 4.60 | 9.60 | MS601-Y-2 | 8.20 | 13.20 | 9.10 | 14.10 |
| MS600-3 | 4.70 | 9.70 | 5.70 | 10.70 | MS601-Y-3 | 9.50 | 14.50 | 10.60 | 15.60 |
| MS600-4 | 5.70 | 10.70 | 6.80 | 11.80 | MS601-Y-4 | 10.80 | 15.80 | 12.10 | 17.10 |
| MS600-5 | 6.60 | 11.60 | 8.00 | 13.00 | MS601-Y-5 | 12.00 | 17.00 | 13.70 | 18.70 |
| MS600-6 | 7.60 | 12.60 | 9.10 | 14.10 | MS601-Y-6 | 13.30 | 18.30 | 15.20 | 20.20 |
| MS600-7 | 8.50 | 13.50 | 10.20 | 15.20 | MS601-Y-7 | 14.50 | 19.50 | 16.70 | 21.70 |
| MS600-8 | 9.50 | 14.50 | 11.40 | 16.40 | MS601-Y-8 | 15.80 | 20.80 | 18.20 | 23.20 |
| MS600-9 | 10.40 | 15.40 | 12.50 | 17.50 | MS601-Y-9 | 17.10 | 22.10 | 19.70 | 24.70 |
| MS600-10 | 11.40 | 16.40 | 13.70 | 18.70 | MS601-Y-10 | 18.30 | 23.30 | 21.30 | 26.30 |
| MS600-11 | 12.30 | 17.30 | 14.80 | 19.80 | MS601-Y-11 | 19.60 | 24.60 | 22.80 | 27.80 |
| MS600-12 | 13.30 | 18.30 | 15.90 | 20.90 | MS601-Y-12 | 20.90 | 25.90 | 24.30 | 29.30 |
| MS600-13 | 14.20 | 19.20 | 17.10 | 22.10 | MS601-Y-13 | 22.10 | 27.10 | 25.80 | 30.80 |
| MS600-14 | 15.20 | 20.20 | 18.20 | 23.20 | MS601-Y-14 | 23.40 | 28.40 | 27.30 | 32.30 |
| MS600-15 | 16.10 | 21.10 | 19.40 | 24.40 | MS601-Y-15 | 24.70 | 29.70 | 28.80 | 33.80 |
| MS600-16 | 17.10 | 22.10 | 20.50 | 25.50 | MS601-Y-16 | 25.90 | 30.90 | 30.40 | 35.40 |
| MS600-17 | 18.00 | 23.00 | 21.60 | 26.60 | MS601-Y-17 | 27.20 | 32.20 | 31.90 | 36.90 |
| MS600-18 | 19.00 | 24.00 | 22.80 | 27.80 | MS601-Y-18 | 28.50 | 33.50 | 33.40 | 38.40 |
| MS600-19 | 19.90 | 25.00 | 23.90 | 28.90 | MS601-Y-19 | 29.70 | 34.70 | 34.90 | 39.90 |
| MS600-20 | 20.90 | 26.00 | 25.00 | 30.00 | MS601-Y-20 | 31.00 | 36.00 | 36.40 | 41.40 |
| MS600-21 | 21.80 | 27.00 | 26.20 | 31.20 | MS601-Y-21 | 32.30 | 37.30 | 37.90 | 42.90 |
| MS600-22 | 22.70 | 28.00 | 27.40 | 32.40 | MS601-Y-22 | 33.60 | 38.60 | 39.40 | 44.40 |
| | | | | | MS601-Y-23 | 34.90 | 39.90 | 40.90 | 45.90 |

410-Y-600-Y-600-XY-600A-Y-600A-XY

| | | | | |
|------------|---------|---------|---------|---------|
| MS600-Y-1 | \$ 6.60 | \$11.60 | \$ 7.20 | \$12.20 |
| MS600-Y-2 | 7.60 | 12.60 | 8.30 | 13.30 |
| MS600-Y-3 | 8.50 | 13.50 | 9.50 | 14.50 |
| MS600-Y-4 | 9.50 | 14.50 | 10.60 | 15.60 |
| MS600-Y-5 | 10.40 | 15.40 | 11.80 | 16.80 |
| MS600-Y-6 | 11.40 | 16.40 | 12.90 | 17.90 |
| MS600-Y-7 | 12.30 | 17.30 | 14.00 | 19.00 |
| MS600-Y-8 | 13.30 | 18.30 | 15.20 | 20.20 |
| MS600-Y-9 | 14.20 | 19.20 | 16.30 | 21.30 |
| MS600-Y-10 | 15.20 | 20.20 | 17.50 | 22.50 |
| MS600-Y-11 | 16.10 | 21.10 | 18.60 | 23.60 |
| MS600-Y-12 | 17.10 | 22.10 | 19.70 | 24.70 |
| MS600-Y-13 | 18.00 | 23.00 | 20.90 | 25.90 |
| MS600-Y-14 | 19.00 | 24.00 | 22.00 | 27.00 |
| MS600-Y-15 | 19.90 | 25.00 | 23.10 | 28.10 |
| MS600-Y-16 | 20.90 | 26.00 | 24.30 | 29.30 |
| MS600-Y-17 | 21.80 | 27.00 | 25.40 | 30.40 |
| MS600-Y-18 | 22.80 | 28.00 | 26.60 | 31.60 |
| MS600-Y-19 | 23.70 | 29.00 | 27.70 | 32.70 |
| MS600-Y-20 | 24.70 | 30.00 | 28.80 | 33.80 |
| MS600-Y-21 | 25.60 | 31.00 | 30.00 | 35.00 |
| MS600-Y-22 | 26.50 | 32.00 | 31.20 | 36.20 |

601-699

| | | | | |
|----------|---------|---------|---------|---------|
| MS601-1 | \$ 3.20 | \$ 8.20 | \$ 3.80 | \$ 8.80 |
| MS601-2 | 4.40 | 9.40 | 5.30 | 10.30 |
| MS601-3 | 5.70 | 10.70 | 6.80 | 11.80 |
| MS601-4 | 7.00 | 12.00 | 8.30 | 13.30 |
| MS601-5 | 8.20 | 13.20 | 9.90 | 14.90 |
| MS601-6 | 9.50 | 14.50 | 11.40 | 16.40 |
| MS601-7 | 10.80 | 15.80 | 12.90 | 17.90 |
| MS601-8 | 12.00 | 17.00 | 14.40 | 19.40 |
| MS601-9 | 13.30 | 18.30 | 15.90 | 20.90 |
| MS601-10 | 14.50 | 19.50 | 17.50 | 22.50 |
| MS601-11 | 15.80 | 20.80 | 19.00 | 24.00 |
| MS601-12 | 17.10 | 22.10 | 20.50 | 25.50 |
| MS601-13 | 18.30 | 23.30 | 22.00 | 27.00 |
| MS601-14 | 19.60 | 24.60 | 23.50 | 28.50 |
| MS601-15 | 20.90 | 25.90 | 25.00 | 30.00 |
| MS601-16 | 22.10 | 27.10 | 26.60 | 31.60 |
| MS601-17 | 23.40 | 28.40 | 28.10 | 33.10 |
| MS601-18 | 24.70 | 29.70 | 29.60 | 34.60 |
| MS601-19 | 25.90 | 30.90 | 31.10 | 36.10 |
| MS601-20 | 27.20 | 32.20 | 32.60 | 37.60 |
| MS601-21 | 28.50 | 33.50 | 34.10 | 39.10 |
| MS601-22 | 29.80 | 34.80 | 35.50 | 40.50 |
| MS601-23 | 31.10 | 36.10 | 37.00 | 42.00 |

603

| | | | | |
|----------|---------|---------|---------|---------|
| MS603-1 | \$ 7.60 | \$12.60 | \$ 9.10 | \$14.10 |
| MS603-2 | 9.40 | 14.40 | 11.20 | 16.20 |
| MS603-3 | 11.10 | 16.10 | 13.40 | 18.40 |
| MS603-4 | 12.90 | 17.90 | 15.60 | 20.60 |
| MS603-5 | 14.70 | 19.70 | 17.80 | 22.80 |
| MS603-6 | 16.40 | 21.40 | 19.70 | 24.70 |
| MS603-7 | 18.20 | 23.20 | 21.90 | 26.90 |
| MS603-8 | 20.00 | 25.00 | 24.00 | 29.00 |
| MS603-9 | 21.80 | 26.80 | 26.10 | 31.10 |
| MS603-10 | 23.50 | 28.50 | 28.20 | 33.20 |

604

| | | | | |
|---------|---------|---------|---------|---------|
| MS604-1 | \$ 7.70 | \$12.70 | \$ 9.20 | \$14.20 |
| MS604-2 | 11.70 | 16.70 | 14.10 | 19.10 |
| MS604-3 | 15.50 | 20.50 | 18.60 | 23.60 |
| MS604-4 | 19.30 | 24.30 | 23.20 | 28.20 |
| MS604-5 | 23.10 | 28.10 | 27.70 | 32.70 |
| MS604-6 | 26.90 | 31.90 | 32.30 | 37.30 |
| MS604-7 | 30.70 | 35.70 | 36.80 | 41.80 |
| MS604-8 | 34.50 | 39.50 | 41.40 | 46.40 |

NOTE: XXXP Bakelite Markers are 25% more than XP Bakelite Markers.

602

| | | | | |
|----------|---------|---------|---------|---------|
| MS602-1 | \$ 3.50 | \$ 8.50 | \$ 4.20 | \$ 9.20 |
| MS602-2 | 5.10 | 10.10 | 6.10 | 11.10 |
| MS602-3 | 6.60 | 11.60 | 8.00 | 13.00 |
| MS602-4 | 8.20 | 13.20 | 9.90 | 14.90 |
| MS602-5 | 9.80 | 14.80 | 11.80 | 16.80 |
| MS602-6 | 11.40 | 16.40 | 13.70 | 18.70 |
| MS602-7 | 13.00 | 18.00 | 15.60 | 20.60 |
| MS602-8 | 14.50 | 19.50 | 17.50 | 22.50 |
| MS602-9 | 16.10 | 21.10 | 19.40 | 24.40 |
| MS602-10 | 17.70 | 22.70 | 21.30 | 26.30 |
| MS602-11 | 19.30 | 24.30 | 23.10 | 28.10 |
| MS602-12 | 20.90 | 25.90 | 25.00 | 30.00 |
| MS602-13 | 22.50 | 27.50 | 26.90 | 31.90 |
| MS602-14 | 24.00 | 29.00 | 28.80 | 33.80 |
| MS602-15 | 25.60 | 30.60 | 30.70 | 35.70 |
| MS602-16 | 27.20 | 32.20 | 32.60 | 37.60 |
| MS602-17 | 28.80 | 33.80 | 34.50 | 39.50 |
| MS602-18 | 30.40 | 35.40 | 36.50 | 41.50 |
| MS602-19 | 32.00 | 37.00 | 38.50 | 43.50 |
| MS602-20 | 33.60 | 38.60 | 40.40 | 45.40 |
| MS602-21 | 35.20 | 40.20 | 42.30 | 47.30 |
| MS602-22 | 36.80 | 41.80 | 44.30 | 49.30 |
| MS602-23 | 38.40 | 43.40 | 46.30 | 51.30 |
| MS602-24 | 40.00 | 45.00 | 48.20 | 53.20 |
| MS602-25 | 41.60 | 46.60 | 50.20 | 55.20 |
| MS602-26 | 43.20 | 48.20 | 52.20 | 57.20 |

602-Y-602-XY

| | | | | |
|------------|---------|---------|---------|---------|
| MS602-Y-1 | \$ 7.30 | \$12.30 | \$ 8.00 | \$13.00 |
| MS602-Y-2 | 8.90 | 13.90 | 9.90 | 14.90 |
| MS602-Y-3 | 10.40 | 15.40 | 11.80 | 16.80 |
| MS602-Y-4 | 12.00 | 17.00 | 13.70 | 18.70 |
| MS602-Y-5 | 13.60 | 18.60 | 15.60 | 20.60 |
| MS602-Y-6 | 15.20 | 20.20 | 17.50 | 22.50 |
| MS602-Y-7 | 16.80 | 21.80 | 19.40 | 24.40 |
| MS602-Y-8 | 18.30 | 23.30 | 21.30 | 26.30 |
| MS602-Y-9 | 19.90 | 24.90 | 23.10 | 28.10 |
| MS602-Y-10 | 21.50 | 26.50 | 25.00 | 30.00 |
| MS602-Y-11 | 23.10 | 28.10 | 26.90 | 31.90 |
| MS602-Y-12 | 24.70 | 29.70 | 28.80 | 33.80 |
| MS602-Y-13 | 26.30 | 31.30 | 30.70 | 35.70 |
| MS602-Y-14 | 27.80 | 32.80 | 32.60 | 37.60 |
| MS602-Y-15 | 29.40 | 34.40 | 34.50 | 39.50 |
| MS602-Y-16 | 31.00 | 36.00 | 36.40 | 41.40 |
| MS602-Y-17 | 32.60 | 37.60 | 38.30 | 43.30 |
| MS602-Y-18 | 34.20 | 39.20 | 40.20 | 45.20 |
| MS602-Y-19 | 35.80 | 40.80 | 42.10 | 47.10 |
| MS602-Y-20 | 37.40 | 42.40 | 44.00 | 49.00 |
| MS602-Y-21 | 39.00 | 44.00 | 45.90 | 50.90 |
| MS602-Y-22 | 40.60 | 45.60 | 47.80 | 52.80 |
| MS602-Y-23 | 42.20 | 47.20 | 49.70 | 54.70 |
| MS602-Y-24 | 43.80 | 48.80 | 51.60 | 56.60 |
| MS602-Y-25 | 45.40 | 50.40 | 53.50 | 58.50 |
| MS602-Y-26 | 47.00 | 52.00 | 55.40 | 60.40 |

605

| | | | | |
|---------|---------|---------|---------|---------|
| MS605-1 | \$ 8.20 | \$13.20 | \$ 9.90 | \$14.90 |
| MS605-2 | 14.50 | 19.50 | 17.50 | 22.50 |
| MS605-3 | 20.90 | 25.90 | 25.00 | 30.00 |
| MS605-4 | 27.20 | 32.20 | 32.60 | 37.60 |
| MS605-5 | 33.50 | 38.50 | 40.20 | 45.20 |
| MS605-6 | 39.80 | 44.80 | 47.80 | 52.80 |

EXTRA SERVICES

| | 600-1-2 | 603 | 604 | 605 |
|----------------------|---------|-----|-----|-----|
| Phillips Screws | .01 | .02 | .05 | .05 |
| Sems Screws | .03 | .03 | .04 | .05 |
| Phillips Sems Screws | .04 | .06 | .08 | .09 |
| K Monel Sems | .05 | .05 | .05 | .05 |
| Fungus Varnish | .05 | .05 | .05 | .05 |
| Staked Screws | .05 | .05 | .05 | .05 |
| Stamped End | .10 | .10 | .10 | .10 |

List Prices shown are per screw or per end. All other series prices in first column.

"ST" SERIES Made to Spec. JAN-S-23
NOMINAL RATING: 20 amps., 125 V.A.C.
10 amps., 250 V.A.C.



HERMAN H. SMITH, INC

"It's Sound Planning to Specify SMITH for ELECTRONIC COMPONENTS"

JUMPER CORDS



Male Phono Plug (our No. 1201) with finger-grip handle on each end. Std. pkg. 6

| No. | Length | NET Each |
|---------|------------|----------|
| No. 631 | 18 inches | \$.75 |
| No. 632 | 21 inches | .78 |
| No. 633 | 26 inches | .84 |
| No. 634 | 48 inches | .96 |
| No. 635 | 72 inches | 1.05 |
| No. 636 | 120 inches | 1.50 |

STEREO JUMPER CORD

745 15 feet \$1.20

EXTENSION CORDS



Male Phono Plug (our No. 1201) with finger-grip handle on end. Female In-Line Jack (our No. 1237) other end. Std. pkg. 6

| No. | Length | NET Each |
|---------|------------|----------|
| No. 641 | 18 inches | \$.99 |
| No. 642 | 21 inches | 1.02 |
| No. 643 | 36 inches | 1.08 |
| No. 644 | 48 inches | 1.20 |
| No. 645 | 72 inches | 1.29 |
| No. 646 | 120 inches | 1.62 |

PHONO PLUG CONNECTOR CORDS



Male Phono Plug (our No. 1201) with finger-grip handle, one end. Spade lugs other end. Std. pkg. 6

No. 668 72 inches NET Each .72

Male Phono Plug (our No. 1201) with finger-grip handle, one end. Other end stripped and tinned. Std. pkg. 6

| No. | Length | NET Each |
|---------|-----------|----------|
| No. 637 | 36 inches | \$.66 |
| No. 638 | 72 inches | .84 |



Male Phono Plug (our No. 1201) with finger-grip handle, one end. Insulated alligator clips other end. Std. pkg. 6

| No. | Length | NET Each |
|---------|-----------|----------|
| No. 673 | 36 inches | \$.72 |
| No. 674 | 72 inches | .90 |

PHONE PLUG CONNECTOR CORDS



Male Phone Plug (our No. 225) one end. Spade Lugs other end. Std. pkg. 6

No. 665 72 inches \$1.08 Ea.



Male Phone Plug (our No. 225) one end. Other end stripped and tinned. Std. pkg. 6

No. 667 72 inches \$1.20 Ea.



Male Phone Plug (our No. 225) one end. Insulated alligator clips other end. Std. pkg. 6

No. 664 72 inches \$1.29 Ea.



Male Phone Plugs (our No. 225) on each end. Std. Pkg. 6

No. 677 72 inches \$1.85 Ea.



FEED THRU

Accepts phono plug on Each End Std. Pkg. 10

No. 661 \$.72 Ea.

CONNECTOR CORDS

For Imported Hi-Fi Equipment



Two banana plugs one end, stripped and tinned other end. Std. pkg. 6

No. 709 72 inches \$1.02 Ea.



Two banana plugs one end, phone plug other end. Std. pkg. 6

No. 710 72 inches \$1.44 Ea.



Two banana plugs one end, phono plug other end. Std. pkg. 6

No. 711 72 inches \$1.20 Ea.



Two banana plugs one end, phono jack other end. Std. pkg. 6

No. 712 72 inches \$1.38 Ea.



Two banana plugs one end, in-line banana jacks other end. Std. pkg. 6

No. 713 72 inches \$1.62 Ea.



Two banana plugs one end, ins. alligator clips other end. Std. pkg. 6

No. 714 72 inches \$1.38 Ea.

INPUT-OUTPUT CORDS



Male Phono Plug (our No. 1201) with finger-grip handle, one end. Male Phone Plug (our No. 225) other end. Std. pkg. 6

No. 662 72 inches \$1.88 Ea.



Male Phone Plug (our No. 225) one end. Female In-Line Jack (our No. 1237) other end. Std. pkg. 6

No. 663 72 inches \$1.80 Ea.

EXTENSION CORD



Male Phono Plug (our No. 1201) one end. In-Line Jack (our No. 274) other end. Std. pkg. 6

No. 639 72 inches \$1.44 Ea.



Male Phone Plug (our No. 225) one end. In-Line Jack (our No. 274) other end. Std. pkg. 6

No. 669 72 inches \$1.98 Ea.

PHONO PLUG TO PHONE PLUG ADAPTER



Adapts standard phono plug to phone plug with built in resistor to adapt either crystal or magnetic pickups. Std. pkg. 10.

No. 707 With Resistor \$1.59 Ea.

No. 708 Without Resistor \$.90 Ea.

HI-FI CORDS FOR REVERE EQUIPMENT

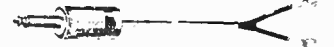
These cords are designed for use exclusively with Revere Tape Recorders and Hi-Fi equipment all using the special type phone plug 3/16" O.D. necessary for use with this type equipment.

CONNECTOR CORDS



3/16" O.D. phone plug one end, other end stripped and tinned. Std. pkg. 6

No. 700 120 inches \$2.10 Ea.



3/16" O.D. phone plug one end, other end spade lugs. Std. pkg. 6

No. 701 120 inches \$2.22 Ea.



3/16" O.D. phone plug one end, insulated alligator clips other end. Std. pkg. 6

No. 702 120 inches \$2.43 Ea.

EXTENSION CORDS



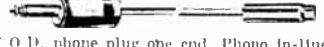
3/16" phone plug one end, Reverse type In-line jack other end. Std. pkg. 6

No. 703 120 inches \$4.98 Ea.



3/16" O.D. phone plug one end, Standard In-line jack other end. Std. pkg. 6

No. 704 120 inches \$2.88 Ea.



3/16" O.D. phone plug one end, Phono In-line jack other end. Std. pkg. 6

No. 705 120 inches \$2.64 Ea.

INPUT-OUTPUT



3/16" O.D. phone plug one end, Standard phone plug other end. Std. pkg. 6

No. 706 120 inches \$2.64 Ea.

CONNECTOR CORD FOR WEBCOR TAPE RECORDER



Three way phone plug with built in resistor to cut down on audio one end, insulated alligator clips other end. Std. pkg. 6

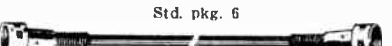
No. 676 120 inches \$2.34 Ea.

COAXIAL EXTENSION CABLE



| No. | Length | Std. pkg. 6 | Price |
|---------|------------|-------------|------------|
| No. 687 | 36 inches | | \$1.44 Ea. |
| No. 688 | 72 inches | | \$1.80 Ea. |
| No. 689 | 114 inches | | \$2.58 Ea. |

COAXIAL JUMPER CABLE



| No. | Length | Std. pkg. 6 | Price |
|---------|------------|-------------|------------|
| No. 694 | 36 inches | | \$1.62 Ea. |
| No. 696 | 72 inches | | \$1.98 Ea. |
| No. 697 | 114 inches | | \$2.52 Ea. |



HI-FI WIRE

| Cond. | Strand. | Wall |
|---------|---------|------------|
| 22 | 7/30 | .062 |
| Cap. | Shield | O.D. |
| 37 Mmf. | Spiral | .140 |
| No. 765 | 100-ft. | \$2.10 Ea. |



HERMAN H. SMITH, INC.

Exclusive Distributors of **KULKA BARRIER TERMINAL BLOCKS** To Radio Parts Jobbers Only

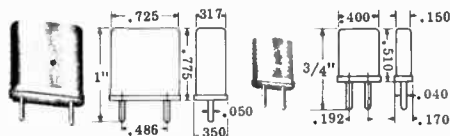
CITIZENS BAND CRYSTALS

Extremely accurate crystals, designed to meet FCC tolerance of $\pm .005\%$. Recommended for use with 3rd overtone type oscillator having approximately 32 mmd. input capacities. (For use with other oscillators a trimming capacitor may be necessary). These crystals match most Class D equipment in use today.

All crystals are stamped with channel number, frequency, and use (transmitting or receiving).
Std. Pkg. 5

MINIATURE HOLDER TYPE HC-6/U

SUBMINIATURE HOLDER TYPE HC-18/U



TRANSMITTING CRYSTALS

| Channel Number | Frequency Megacycles | Holder Type | |
|----------------|----------------------|-------------|-------------|
| | | HC-6/U No. | HC-18/U No. |
| 1 | 26.965 | 3601 | 3624 |
| 2 | 26.975 | 3602 | 3625 |
| 3 | 26.985 | 3603 | 3626 |
| 4 | 27.005 | 3604 | 3627 |
| 5 | 27.015 | 3605 | 3628 |
| 6 | 27.025 | 3606 | 3629 |
| 7 | 27.035 | 3607 | 3630 |
| 8 | 27.055 | 3608 | 3631 |
| 9 | 27.065 | 3609 | 3632 |
| 10 | 27.075 | 3610 | 3633 |
| 11 | 27.085 | 3611 | 3634 |
| 12 | 27.105 | 3612 | 3635 |
| 13 | 27.115 | 3613 | 3636 |
| 14 | 27.125 | 3614 | 3637 |
| 15 | 27.135 | 3615 | 3638 |
| 16 | 27.155 | 3616 | 3639 |
| 17 | 27.165 | 3617 | 3640 |
| 18 | 27.175 | 3618 | 3641 |
| 19 | 27.185 | 3619 | 3642 |
| 20 | 27.205 | 3620 | 3643 |
| 21 | 27.215 | 3621 | 3644 |
| 22 | 27.225 | 3622 | 3645 |
| 23* | 27.255 | 3623 | 3646 |

Each NET \$2.75

RECEIVING CRYSTAL

(.55 Kc Below Transmitting Frequency)

| Channel Number | Frequency Megacycles | Holder Type | |
|----------------|----------------------|-------------|-------------|
| | | HC-6/U No. | HC-18/U No. |
| 1 | 26.510 | 3647 | 3670 |
| 2 | 26.520 | 3648 | 3671 |
| 3 | 26.530 | 3649 | 3672 |
| 4 | 26.550 | 3650 | 3673 |
| 5 | 26.560 | 3651 | 3674 |
| 6 | 26.570 | 3652 | 3675 |
| 7 | 26.580 | 3653 | 3676 |
| 8 | 26.600 | 3654 | 3677 |
| 9 | 26.610 | 3655 | 3678 |
| 10 | 26.620 | 3656 | 3679 |
| 11 | 26.630 | 3657 | 3680 |
| 12 | 26.650 | 3658 | 3681 |
| 13 | 26.660 | 3659 | 3682 |
| 14 | 26.670 | 3660 | 3683 |
| 15 | 26.680 | 3661 | 3684 |
| 16 | 26.700 | 3662 | 3685 |
| 17 | 26.710 | 3663 | 3686 |
| 18 | 26.720 | 3664 | 3687 |
| 19 | 26.730 | 3665 | 3688 |
| 20 | 26.750 | 3666 | 3689 |
| 21 | 26.760 | 3667 | 3690 |
| 22 | 26.770 | 3668 | 3691 |
| 23* | 26.800 | 3669 | 3692 |

Each NET \$2.75

*Channel 23 is used on a shared basis with Class C Radio Control devices, which are allowed higher power levels than class D Citizens' Band Radio.

Booklet of complete title lists of all Panelabels available on request.

"PANELABELS" Modern Panel Title Decals



New size type face on all word titles to match modern instrument panels and sound equipment.

Packaged individually in clear plastic boxes — sheets fully visible for instant selection — box itself can be used as water tray for applying the decals.

Standard Packages of 6.

Please order by catalog number.

NET, EACH PACKAGE\$1.50

TRANSMITTER

For industrial prototype use, Hams, Citizens' Banders. Also for Microwave and Broadcast Stations.

No. 3700 **BLACK**
No. 3701 **WHITE**

RECEIVER

Hams, Citizens' Banders, industrial prototypes, Hi-Fi and Experimenter applications.

No. 3702 **BLACK**
No. 3703 **WHITE**
No. 3704 **RED**
No. 3705 **GOLD**

DIALS

For all uses in transmitters, Ham and Citizens' Band industrial prototypes, Hi-Fi, electricians, experimenters.

No. 3706 **BLACK**
No. 3707 **WHITE**
No. 3708 **RED**
No. 3709 **GOLD**

ALPHABETS

Most popular item in the line! For all general uses above.

3710 2-inch **BLACK**
3711 2-inch **WHITE**
3712 2-inch **RED**
3713 2-inch **GOLD**
3714 3/8-inch **BLACK**
3715 3/8-inch **WHITE**
3716 3/8-inch **RED**
3717 3/8-inch **GOLD**
3718 Assorted **BLACK**
3719 Assorted **WHITE**
3720 Assorted **RED**
3721 Assorted **GOLD**

INSTRUMENTS

Primarily for Technicians, Hams and industrial use.

No. 3722 **BLACK**
No. 3723 **WHITE**

HI-FI AND STEREO

For experimenters, commercial sound distributors, industrial prototypes.

No. 3724 **BLACK**
No. 3725 **WHITE**
No. 3726 **RED**
No. 3727 **GOLD**

SOUND SYSTEMS

For industrial use by commercial sound distributors, custom installers, electricians and experimenters.

No. 3728 **BLACK**
No. 3729 **WHITE**
No. 3730 **RED**
No. 3731 **GOLD**

TRANSISTORS AND DIODES

Used by Hams, experimenters, technicians, and industrial prototype use. Includes complete list of transistor and diode numbers plus symbols of PNP, NPN, 4 and 5 element transistors, diode symbols.

No. 3732 **BLACK**
No. 3733 **WHITE**

ELECTRICAL DISTRIBUTION

Used primarily by electricians and custom installers on the job and in distribution panel design.

No. 3734 **BLACK**
No. 3735 **WHITE**

TEFLON* SPAGHETTI TUBING

Teflon tubing is ideal for slip-on insulation in electrical and electronics applications. Its exceptional insulating properties provide greater reliability and resistance to high temperatures. Due to its resistance to soldering temperatures, shrink-back during soldering is virtually eliminated.

SMITH Teflon tubing is available in most AWG sizes from ± 30 to ± 0 , in three basic wall thicknesses: Standard (.011 to .020"), Thin Wall (.009 to .015"), and Lightweight (.006 to .012"). Specific wall thickness for various AWG sizes is detailed in the table. All sizes are available in Natural Teflon, and any of 10 colors as indicated in the Color Code chart.

SMITH Teflon Spaghetti Tubing meets or exceeds the requirements of MIL-I-22129B, and colors conform to MIL STD-104. Standard and Thin-Wall tubing in sizes AWG ± 30 to ± 8 , and Lightweight tubing in sizes AWG ± 28 to ± 9 are supplied in 100-foot dustproof, re-useable reels, polyethylene covered and closed with a special polyethylene plug. Sizes to AWG ± 0 are carefully packaged in 50 foot coils to prevent distortion of the tubing.

*Registered Trademark, E.I. DuPont DeNemours & Co.



COLOR CODE CHART

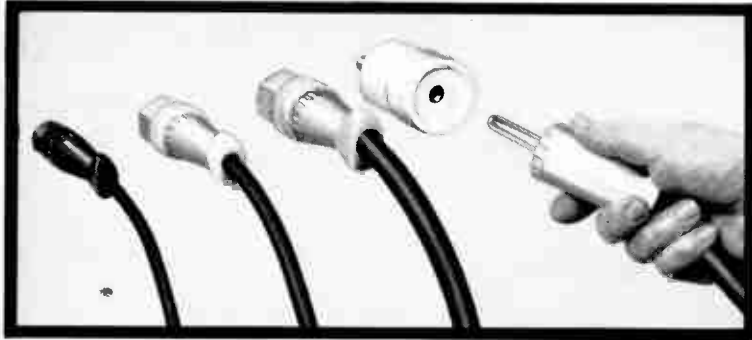
- 101 WHITE
- 102 RED
- 103 BLACK
- 104 GREEN
- 105 BLUE
- 106 ORANGE
- 107 YELLOW
- 108 BROWN
- 112 PURPLE
- 113 GREY
- 115 NATURAL

(If no color is specified, Natural Teflon (-115) will be supplied.)

SPECIFY COLOR

| LIGHTWEIGHT | | | | | | THINWALL | | | | | | STANDARD WALL | | | | | | |
|---------------|-----------|----------|----------------|---------------|---------|---------------|-----------|----------|----------------|---------------|---------|---------------|-----------|----------|----------------|---------------|---------|--|
| Awg Wire Size | Nom. I.D. | Cat. No. | Nom. Wall Thk. | Std. Pkg. Ft. | NET Ea. | Awg Wire Size | Nom. I.D. | Cat. No. | Nom. Wall Thk. | Std. Pkg. Ft. | NET Ea. | Awg Wire Size | Nom. I.D. | Cat. No. | Nom. Wall Thk. | Std. Pkg. Ft. | NET Ea. | |
| 30 | .012 | | | 30 | .012 | 30 | .012 | 7702-30 | .009 | 100 | \$10.53 | 30 | .012 | | | | | |
| 28 | .015 | 7703-28 | .006 | 100 | \$7.63 | 28 | .015 | 7702-28 | .009 | 100 | 9.20 | 28 | .015 | | | | | |
| 26 | .018 | 7703-26 | .006 | 100 | 7.75 | 26 | .018 | 7702-26 | .008 | 100 | 8.88 | 26 | .018 | | | | | |
| 24 | .022 | 7703-24 | .006 | 100 | 8.13 | 24 | .022 | 7702-24 | .010 | 100 | 9.63 | 24 | .022 | | | | | |
| 22 | .027 | 7703-22 | .006 | 100 | 9.38 | 22 | .027 | 7702-22 | .010 | 100 | 10.75 | 22 | .027 | | | | | |
| 20 | .034 | 7703-20 | .006 | 100 | 11.13 | 20 | .034 | 7702-20 | .012 | 100 | 13.63 | 20 | .034 | | | | | |
| 19 | .038 | 7703-19 | .006 | 100 | 12.38 | 19 | .038 | 7702-19 | .012 | 100 | 14.68 | 19 | .038 | | | | | |
| 18 | .042 | 7703-18 | .006 | 100 | 13.38 | 18 | .042 | 7702-18 | .012 | 100 | 15.75 | 18 | .042 | | | | | |
| 17 | .047 | 7703-17 | .006 | 100 | 14.88 | 17 | .047 | 7702-17 | .012 | 100 | 17.38 | 17 | .047 | | | | | |
| 16 | .053 | 7703-16 | .006 | 100 | 16.13 | 16 | .053 | 7702-16 | .012 | 100 | 19.00 | 16 | .053 | | | | | |
| 15 | .059 | 7703-15 | .008 | 100 | 16.75 | 15 | .059 | 7702-15 | .012 | 100 | 19.63 | 15 | .059 | | | | | |
| 14 | .066 | 7703-14 | .008 | 100 | 18.50 | 14 | .066 | 7702-14 | .012 | 100 | 21.00 | 14 | .066 | | | | | |
| 13 | .076 | 7703-13 | .008 | 100 | 22.25 | 13 | .076 | 7702-13 | .012 | 100 | 23.75 | 13 | .076 | | | | | |
| 12 | .085 | 7703-12 | .008 | 100 | 24.38 | 12 | .085 | 7702-12 | .012 | 100 | 25.50 | 12 | .085 | | | | | |
| 11 | .095 | 7703-11 | .008 | 100 | 27.38 | 11 | .095 | 7702-11 | .012 | 100 | 28.38 | 11 | .095 | | | | | |
| 10 | .106 | 7703-10 | .008 | 100 | 29.50 | 10 | .106 | 7702-10 | .012 | 100 | 30.50 | 10 | .106 | | | | | |
| 9 | .118 | 7703-09 | .008 | 50 | 16.63 | 9 | .118 | 7702-09 | .015 | 100 | 44.00 | 9 | .118 | | | | | |
| 8 | .125 | 7703-08 | .008 | 50 | 17.68 | 8 | .125 | 7702-08 | .015 | 100 | 45.00 | 8 | .125 | | | | | |
| 7 | .133 | 7703-07 | .008 | 50 | 18.44 | 7 | .133 | 7702-07 | .015 | 100 | 24.32 | 7 | .133 | | | | | |
| 6 | .148 | 7703-06 | .008 | 50 | 20.00 | 6 | .148 | 7702-06 | .015 | 50 | 26.63 | 6 | .148 | | | | | |
| 5 | .166 | 7703-05 | .010 | 50 | 25.88 | 6 | .166 | 7702-05 | .015 | 50 | 29.75 | 6 | .166 | | | | | |
| 4 | .186 | 7703-04 | .010 | 50 | 28.38 | 5 | .186 | 7702-04 | .015 | 50 | 33.50 | 5 | .186 | | | | | |
| 3 | .208 | 7703-03 | .010 | 50 | 31.38 | 4 | .208 | 7702-03 | .015 | 50 | 36.75 | 4 | .208 | | | | | |
| 2 | .234 | 7703-02 | .010 | 50 | 34.50 | 3 | .234 | 7702-02 | .015 | 50 | 40.75 | 3 | .234 | | | | | |
| 1 1/2 | .250 | 7703-01 | .010 | 50 | 36.69 | 1 1/2 | .250 | 7702-01 | .015 | 50 | 43.75 | 1 1/2 | .250 | | | | | |
| 1 1/4 | .263 | 7703-01 | .010 | 50 | 37.57 | 2 | .263 | 7702-02 | .015 | 50 | 45.50 | 2 | .263 | | | | | |
| 1 | .294 | 7703-01 | .010 | 50 | 41.19 | 1 | .294 | 7702-01 | .015 | 50 | 50.69 | 1 | .294 | | | | | |
| 3/4 | .312 | 7703-01 | .012 | 50 | 48.69 | 3/4 | .312 | 7702-01 | .015 | 50 | 55.12 | 3/4 | .312 | | | | | |
| 0 | .330 | 7703-00 | .012 | 50 | 49.63 | 0 | .330 | 7702-00 | .015 | 50 | 56.12 | 0 | .330 | | | | | |

SUPERCON® Electrical Connectors



- CURRENT CARRYING PARTS GOLD-PLATED
- SIMPLIFIED, QUICK ASSEMBLY

Socket and pin types single-conductor plugs and receptacles available. Plugs have a functionally designed grip for handling ease and convenience. Wiring connection to the same plug can be either soldered or solderless. Cable-fastening screws permit a range of cable sizes to be accommodated by the plug. Plug grips are of a simple, two-piece threaded construction for quick assembly. All plastic parts of a receptacle are molded of the same color nylon to permit more rapid and accurate circuit identification front and back of panel when installed. Six colors are available.

| COLOR | PIN PLUGS | | | | SOCKET PLUGS | | | |
|--------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|------------------|
| | 25 AMPERE TYPES | 50 AMPERE TYPES | 100 AMPERE TYPES | 250 AMPERE TYPES | 25 AMPERE TYPES | 50 AMPERE TYPES | 100 AMPERE TYPES | 250 AMPERE TYPES |
| BLACK | PP25GB | PP50GB | PP100GB | PP250GB | PS25GB | PS50GB | PS100GB | PS250GB |
| YELLOW | PP25GY | PP50GY | PP100GY | PP250GY | PS25GY | PS50GY | PS100GY | PS250GY |
| RED | PP25GR | PP50GR | PP100GR | PP250GR | PS25GR | PS50GR | PS100GR | PS250GR |
| BLUE | PP25GBL | PP50GBL | PP100GBL | PP250GBL | PS25GBL | PS50GBL | PS100GBL | PS250GBL |
| GREEN | PP25GGN | PP50GGN | PP100GGN | PP250GGN | PS25GGN | PS50GGN | PS100GGN | PS250GGN |
| WHITE | PP25GWT | PP50GWT | PP100GWT | PP250GWT | PS25GWT | PS50GWT | PS100GWT | PS250GWT |

| | 25 AMPERE TYPES | 50 AMPERE TYPES | 100 AMPERE TYPES | 250 AMPERE TYPES | 25 AMPERE TYPES | 50 AMPERE TYPES | 100 AMPERE TYPES | 250 AMPERE TYPES |
|--------|------------------------|-----------------------|-----------------------|---------------------|--------------------------------|-----------------------|-------------------------------|---------------------|
| | | | | | | | | |
| | 2 21/32 5/32 | 3 3/16 1/4 | 3 3/8 5/16 | 4 15/16 3/8 | 2 23/32 | 3 3/8 | 3 13/16 | 5 |
| | | | | | | | | |
| | 13/16 3/16 13/16 | 1 1/4 1/4 3 1/2 | 1 1/2 1/4 2 1/4 | 2 5/16 3 9/16 | 13/16 5/32 3/16 13/16 | 1 1/4 1/4 1 1/4 | 1 1/2 5/16 1/4 2 1/4 | 2 5/16 3 9/16 |
| PANEL: | 3/16 MAX. | 1/4 MAX. | 1/4 MAX. | 1/4 MAX. | 3/16 MAX. | 1/4 MAX. | 1/4 MAX. | 1/4 MAX. |
| HOLE: | 11/16 | 1 | 1 3/16 | 1 9/16 | 11/16 | 1 | 1 3/16 | 1 9/16 |
| BLACK | RS25GB | RS50GB | RS100GB | RS250GB | RP25GB | RP50GB | RP100GB | RP250GB |
| YELLOW | RS25GY | RS50GY | RS100GY | RS250GY | RP25GY | RP50GY | RP100GY | RP250GY |
| RED | RS25GR | RS50GR | RS100GR | RS250GR | RP25GR | RP50GR | RP100GR | RP250GR |
| BLUE | RS25GBL | RS50GBL | RS100GBL | RS250GBL | RP25GBL | RP50GBL | RP100GBL | RP250GBL |
| GREEN | RS25GGN | RS50GGN | RS100GGN | RS250GGN | RP25GGN | RP50GGN | RP100GGN | RP250GGN |
| WHITE | RS25GWT | RS50GWT | RS100GWT | RS250GWT | RP25GWT | RP50GWT | RP100GWT | RP250GWT |

SOCKET RECEPTACLES

PIN RECEPTACLES

DUB-L-PLUG Dual Electrical Connectors

DUB-L-PLUG Dual Electrical Connectors are designed for making safe, rapid connections to binding posts mounted on 3/4" centers. All conducting metal parts are gold-plated. Completely recessed integral banana plugs prevent accidental shorting; captive black and white thumbnuts facilitate circuit and polarity identification.

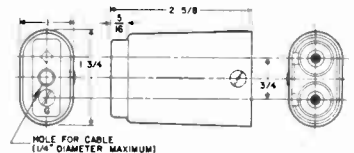
| NYLON BODY COLOR | INSULATED TYPE | SHIELDED/INSULATED TYPE |
|------------------|----------------|-------------------------|
| BLACK | IPG2BC | SPGK2BC |
| RED | IPG2RC | — |
| WHITE | IPG2WTC | — |
| BLUE | IPG2BLC | — |
| YELLOW | IPG2YC | — |
| GREEN | IPG2GNC | — |

SHIELDED/INSULATED

Has sturdy, die-cast chrome-plated case, removable grounding banana plug, black nylon body.



TYPE SPGK2BC

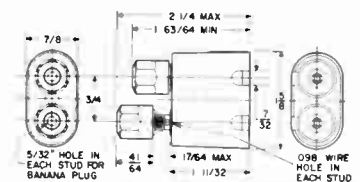


INSULATED TYPES

Have wire slots to permit stacking if desired. Available with bodies in choice of six colors.



TYPE IPG2BC



THE SUPERIOR ELECTRIC COMPANY
Bristol, Connecticut, U.S.A.

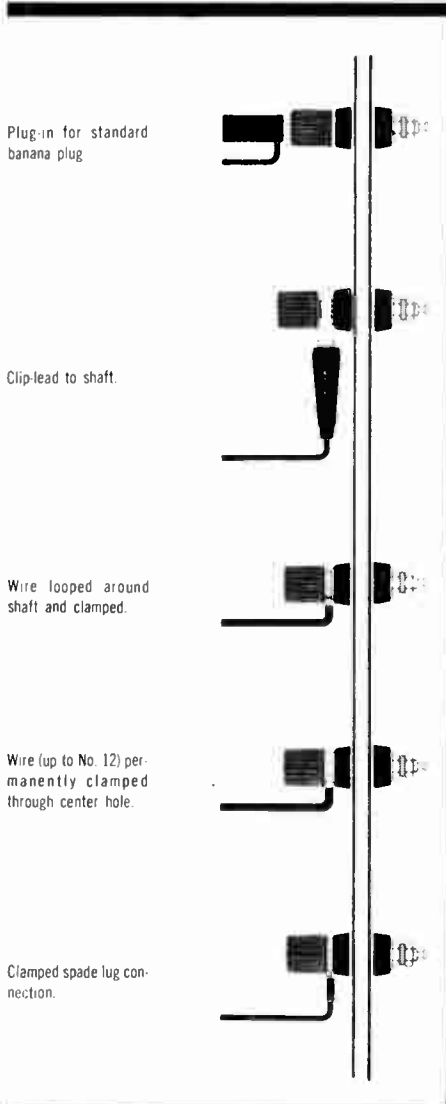
SEE OTHER SUPERIOR ELECTRIC PRODUCT PAGES IN SECTIONS 3500 AND 4000

SUPERIOR 5-WAY® Binding Posts

● 5 WAYS TO CONNECT

● GOLD-PLATED BRASS PARTS

● RANGE OF COLORS



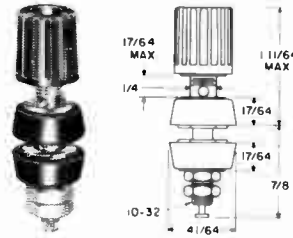
Plug-in for standard banana plug

Clip-lead to shaft.

Wire looped around shaft and clamped.

Wire (up to No. 12) permanently clamped through center hole.

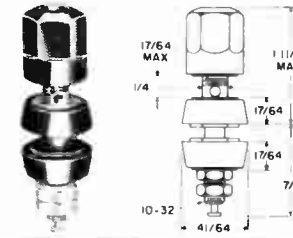
Clamped spade lug connection.



FLUTED NUT TYPES

Plastic parts of standard (not miniature) size types molded of Lexan polycarbonate resin; brass parts are gold-plated. Rated for 30 amperes, 1000 volts working. Nickel-plated brass types available on special order.

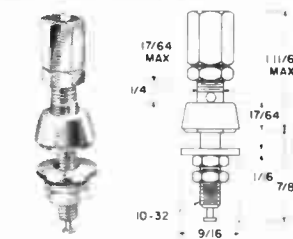
| COLOR | RED | BLUE | GREEN | WHITE | BLACK | YELLOW |
|-------------|--------|---------|---------|---------|--------|--------|
| FLUTED TYPE | DF31RC | DF31BLC | DF31GNC | DF31WTC | DF31BC | DF31YC |



HEX NUT TYPES

Rated for 30 amperes, 1000 volts working. Brass parts are gold-plated; plastic parts are of nylon compounded to meet military specifications MIL-P-20693, Type IV. Nickel-plated brass types available on order.

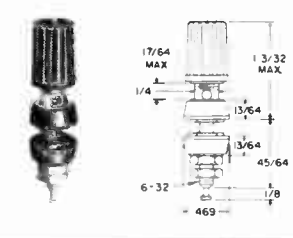
| COLOR | RED | BLUE | GREEN | WHITE | BLACK | YELLOW |
|----------|--------|---------|---------|---------|--------|--------|
| HEX TYPE | DF30RC | DF30BLC | DF30GNC | DF30WTC | DF30BC | DF30YC |



GROUNDING TYPE

For making rapid connections to ground. Made of finely machined brass nickel-plated and polished. Panel grounding collar frozen to shaft has "D" type shoulder for locking in keyed panel hole.

| | |
|--------|---------------|
| TYPE | GP30NC |
| FINISH | NICKEL-PLATED |



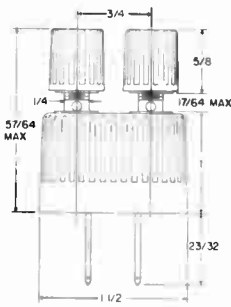
MINIATURE TYPES

Fluted nut design only. Rated for 15 amperes, 1000 volts working. Gold-plated brass parts; nylon plastic parts compounded to meet military specification MIL-P-20693, Type IV. Types with nickel-plated brass available also.

| COLOR | RED | BLUE | GREEN | WHITE | BLACK | YELLOW |
|-------|--------|---------|---------|---------|--------|--------|
| TYPE | DF21RC | DF21BLC | DF21GNC | DF21WTC | DF21BC | DF21YC |

DUAL ADAPTER TYPE

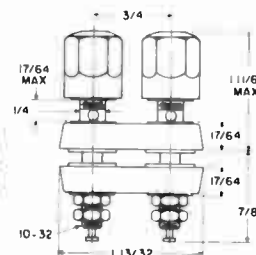
Facilitates line voltage connections from output receptacles to binding posts. Has integral parallel-blade plug. Rating is 15 amperes, 125 volts. Brass parts are gold-plated.



| | |
|------|---------------|
| TYPE | DAP15BWC |
| NUTS | WHITE & BLACK |
| BODY | BLACK |

DOUBLE ASSEMBLY TYPES

For instrument and equipment panels requiring binding posts mounted on 3/4" centers. Rated for a current capacity of 30 amperes and a working voltage of 1000 volts. Brass parts are gold-plated. Panel insulators in black only.



| TYPE | NUTS |
|-------------|---------------|
| DF30-2-BWTC | WHITE & BLACK |
| DF30-2-BBC | BLACK |
| DF30-2-BRC | RED & BLACK |

FOR MORE DETAILED INFORMATION about specifications and technical data on SUPERCON Electrical Connectors, SUPERIOR 5-WAY Binding Posts and DUB-L-PLUG Dual Electrical Connectors write for Electrical Connector bulletin.



TRIMM

AUDIO JACK PANELS

Extensively used in the broadcast field, on instrumentation systems, communication networks, etc. Listed below are the most common of a large variety of standard types. Jacks as ordinarily supplied (mounted on panels) have offset ground lugs, which considerably reduces wiring cost of installation. Straight ground lugs (duplicating W.E. jacks) available. Types 96-71 and 96-72 used with tip, ring, and sleeve plugs (No. 516 and No. 517); others usually used with twin plugs (No. 506) but will fit standard two-circuit plugs.



| Code No. | Mfg. Strip Type | Uses Qty. Jacks | Jack Type | List |
|----------|-----------------|-----------------|-----------|---------|
| 96-01 | 96-21 | 24 | 90L-02 | \$47.50 |
| 96-02 | 96-22 | 48 | 90L-02 | 77.25 |
| 96-03 | 96-23 | 48 | 90L-02 | 84.50 |
| 96-06 | 96-26 | 26 | 90L-02 | 50.75 |
| 96-07 | 96-27 | 52 | 90L-02 | 82.75 |
| 96-71 | 96-21 | 24 | 90L-26 | 58.80 |
| 96-77 | 96-27 | 52 | 90L-26 | 102.45 |
| 96-72 | 96-22 | 48 | 90L-26 | 99.00 |
| 96-73 | 96-23 | 48 | 90L-26 | 106.25 |
| 96-76 | 96-26 | 26 | 90L-26 | 60.70 |

JACK MOUNTING STRIPS — LESS JACKS

Used where non-standard jacks, lamp sockets, turn keys, push keys, video jacks, etc., are desired to be mounted onto a jack strip. Listed below are the most common types normally used on standard jack panel assemblies. Strips have steel reinforcing rib on both sides, end mounting brackets, and one designation strip (type JP-30 except where noted) including cards and windows. All fit standard 19" racks. Numerous other types available.

| Code No. | Rows | Jack Holes | Width | List |
|----------|------|------------|--------|---------|
| 96-21 | 1 | 24 | 1 3/4" | \$21.00 |
| 96-22 | 2 | 48 | 2 1/8" | 24.00 |
| 96-23 | 2 | 48 | 3 1/2" | 31.25 |
| *96-26 | 1 | 26 | 1 3/4" | 22.00 |
| *96-27 | 2 | 52 | 1 3/4" | 25.00 |

* No. 96-26 normally has 1 (JP-34) designation strip.
* No. 96-27 has 2 (JP-34) designation strips; types JP-31 and JP-32 can also be used on these.

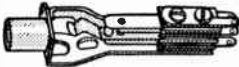
DESIGNATION STRIPS

Listed below are the most common designation strips. Others differing in length and accepting up to 5 rows of typing can be produced.

| Code No. | Size | List |
|--|---------------------------|--------|
| JP-30—Individual windows for each of 12 pairs of jacks | 15/32" wide x 16 3/4" lg. | \$1.60 |
| JP-34—One long window | 1/4" wide x 17" lg. | 2.75 |
| JP-35—One long window | 15/32" wide x 16 3/4" lg. | 1.60 |
| JP-39—One long window (Lucite) | 1/4" wide x 17" lg. | 2.75 |

"90" SERIES JACKS

Commonly known as the telephone jack. Extensively used on jack panels. Bushing fits 29/64" dia. hole. Available in two modifications, generally referred to as the "A" and "C" frame. These differ only in the orientation of the springs with respect to the plane of the jack mounting. Frame of steel, cadmium plated with dichromate treatment. Bushing of brass, natural finish standard (nickel plated to order). Springs of nickel silver, terminals hot tinned. Standard contacts are silver with diffused gold coating. Numerous special contacts available. Straight ground lug illustrated, offset lug available by changing of "S" in code number to "L". Dash numbers up to "—24" fit two-circuit plugs; "—25" to "—49" three-circuit 0.250" dia. plugs; and "—50" to "—74" three-circuit 0.206" dia. plugs.



| Code No. | List | Code No. | List |
|-------------|--------|------------|--------|
| No. 90S-01 | \$1.05 | No. 90S-12 | \$1.60 |
| No. 90S-02 | 1.20 | No. 90S-14 | 2.50 |
| No. 90S-06 | 1.40 | No. 90S-25 | 1.20 |
| No. 90S-08 | 1.40 | No. 90S-26 | 1.60 |
| No. 90S-09 | 1.50 | No. 90S-27 | 1.80 |
| No. 90S-09A | 1.50 | No. 90S-50 | 1.40 |
| No. 90S-10 | 1.80 | No. 90S-51 | 1.80 |

See Bulletin R-35/5 for more information. Refer to facing page for circuit identification.

TELEPHONE TYPE PLUGS

High temperature (over 500°) and high impact injection molded Insulation used on all these plugs, interlocking all parts of plug into a single unit. Precision machined to minimize jack bushing wear. All are 0.250" dia. except plug No. 508, which is 0.206" dia.

| Code No. | W.E. Equivalent | Description | List |
|----------|-----------------|-----------------------|--------|
| No. 500 | 347A | Single, two-circuit | \$2.00 |
| No. 502 | | Single, two-circuit | 1.85 |
| No. 504 | 327 | Twin, four-circuit | 4.50 |
| No. 505 | 289B | Twin, four-circuit | 4.50 |
| No. 506 | 241A | Twin, three-circuit | 4.50 |
| No. 508 | 309 | Single, three-circuit | 2.50 |
| No. 516 | 310 | Single, three-circuit | 2.50 |
| No. 517 | 291 | Single, three-circuit | 2.70 |
| No. 523 | 353A | Twin, six-circuit | 8.90 |

VIDEO JACK PANELS

A variety of standard as well as special panels are regularly produced. The jacks used in these mount in the same hole size as standard telephone types and can be assembled on any of our regular mounting strips described elsewhere. Listed below are several standard types of panels as usually used in broadcast stations. All use the No. 89-02 jack except panel No. 99-80 which uses No. 89-32 type jacks. The "99" series use an aluminum, sandwich-like panel construction. The "96" series use standard 3/8" thick bakelite panels. Of these, those with "—80" numbers are intended for direct attachment of the cable. Those with "—90" numbers have, behind the main panel, a sub-panel on which are mounted Amphenol No. 83-1R connectors from which wiring may be run to the coaxial jacks. Wiring not installed by TRIMM unless specified by purchaser.

| Code No. | Jacks | Jack Mounting Strip | List |
|-------------|---|---------------------|----------|
| No. 99-80 | 12 Jacks, 1 row | 99-20 | \$185.00 |
| No. 96-82 | 48 Jacks, 2 rows | 96-22 | 554.00 |
| No. 96-85 | 24 Jacks, 2 rows | 96-25 | 303.00 |
| No. 96-89 | 12 Groups of 3 jacks (36 total) | 96-29 | 421.00 |
| No. 96-92-2 | 48 Jacks, 2 rows, plus 24 connectors in sub-chassis | 96-22 | 660.00 |

Other types with sub-chassis regularly available to fit individual requirements.

AUDIO PATCH CORDS

A superior line of patch cords featuring a braided nylon outer covering insuring long cord life and neat appearance. Cords normally shielded with shield connected to plug at one end only. Also available less shielding or with shield connected at both ends of cord. Black cords are standard but blue, green, grey (slate), red, brown, and white can be supplied at extra cost. Lengths of 4, 5, 6, and 10 ft. also supplied. Plugs used are described under "Telephone Plug" section.



No. 840 Series—The accepted standard in the broadcast field. Used also in instrumentation and communication systems. TRIMM No. 506 "Twin" plugs used.

| Code No. | List |
|--|---------|
| No. 840-1-PP | \$11.70 |
| No. 840-2-PP | 12.00 |
| No. 840-3-PP | 12.30 |
| No. 841 Series—Uses TRIMM No. 517 plugs which have a special contour allowing the ring spring to make contact before the normally closed tip contact spring is opened. | |
| No. 841-1-PP | 9.00 |
| No. 841-2-PP | 9.30 |
| No. 841-3-PP | 9.60 |

No. 851 Series—Uses standard telephone switchboard type plugs, TRIMM No. 516 (W.E. 310). Tip spring of jack seats in grooved ball-shaped tip of plug.

| Code No. | List |
|--------------|------|
| No. 851-1-PP | 9.00 |
| No. 851-2-PP | 9.30 |
| No. 851-3-PP | 9.60 |

Replacement cords for above available. See TRIMM Bulletin R-36/7 for listing.

VIDEO PATCH CORDS

Single cords (849 series) use No. 530-2 plugs and RG-59A/U cable. Note use of 531 series plug in place of patch cords. Length in feet between plugs shown by 1.5 (18" cord); 2; etc. Other RG cable types available.



| Code No. | List |
|------------------|---------|
| No. 849-1.5X-PPG | \$18.00 |
| No. 849-2X-PPG | 18.40 |
| No. 849-3X-PPG | 18.80 |

COAXIAL JACKS AND PLUGS



Used for video, pulse, and special RF applications, serving the analogous function as telephone jacks serve for audio patching systems. Quick disconnect and patching with only extremely slight discontinuity. Circuits carried through concentrically arranged inner and outer conductors. All contacts and conducting surfaces gold plated. Where applicable are simultaneously compatible with both W.E. and RCA types. Available to fit a wide assortment of RG cable types, only the most common being listed below. See Bulletin R-40 for details of construction.

| Code No. | RG Cable | Notes | List |
|-----------|----------|--------------------------------|---------|
| No. 89-01 | 58 | Jack | \$10.75 |
| No. 89-02 | 59 | Jack; fits W.E. & RCA | 10.75 |
| No. 89-04 | 62 | Jack | 10.75 |
| No. 89-05 | 11 | Jack | 11.00 |
| No. 89-06 | 8 | Jack | 11.00 |
| No. 89-32 | | Jack; BNC UG-88/U on rear end. | 11.00 |
| No. 530-1 | 58 | Plug | 7.00 |
| No. 530-2 | 59 | Plug | 7.00 |
| No. 530-4 | 62 | Plug | 7.00 |
| No. 530-5 | 11 | Plug | 8.25 |
| No. 531-2 | | Plug; bridging, 70 ohm. | 15.06 |

TRIMM

PLUGS • JACKS • TERMINAL BLOCKS



STANDARD PHONE PLUGS

The standard radio phone plug, widely used on P.A. equipment, tape recorders, radios, etc. Designed to fit all standard jacks and available in two-circuit and three-circuit types. The two-circuit "511" series is supplied with binding head screws for termination and has a molded bakelite shell or metal shell when shielded plugs are required. The "513" series are three-circuit types. The "515" adapter couples Amphenol type mike plug to standard phone jack.

| | | | |
|-----------|--|------|--------|
| No. 511 | —Black plastic shell | List | \$.69 |
| No. 511-1 | —Red plastic shell | | .69 |
| No. 511-2 | —Shielded, single piece shell | | 1.17 |
| No. 511-3 | —Shielded, two piece shell | | 1.77 |
| No. 511-4 | —Shielded, stubby shell | | .97 |
| No. 511-5 | —Two-circuit, shielded, stubby shell. Has long tip to sleeve insulator which leaves "ring" spring open when inserted in three-circuit jack | | 1.09 |
| No. 513 | —Three-circuit, black plastic shell | | 1.09 |
| No. 513-1 | —Three-circuit, red plastic shell | | 1.09 |
| No. 513-2 | —Three-circuit, shielded, single piece shell | | 1.59 |
| No. 513-3 | —Three-circuit, shielded, two piece shell | | 2.19 |
| No. 513-4 | —Three-circuit, shielded, stubby shell | | 1.40 |
| No. 515 | —Adapter | | .47 |

TELEPHONE TYPE PLUGS

For detailed description, see facing page, under Audio Section.

"514" MIN-A-PLUG



Developed especially for shielded microphone cable. Wing type terminal clamps directly onto cord shield. Center conductor solders to lug. Also widely used for ordinary cords.

| | | | |
|-----------|--|------|--------|
| No. 514 | —Black plastic shell | List | \$.67 |
| No. 514-1 | —Red plastic shell | | .67 |
| No. 514-2 | —Shielded, single piece shell | | 1.07 |
| No. 514-4 | —Shielded, stubby shell | | .97 |
| No. 514-6 | —Black plastic shell, screw terminals | | .69 |
| No. 514-7 | —Red plastic shell, screw terminals | | .69 |
| No. 514-8 | —Shielded, single piece shell, screw terminals | | 1.09 |

"512" FLAT TYPE PLUG



Compact, non-protruding design. Ideal for group hearing aid systems, centralized radio systems, etc. Body molded of phenolic plastic. All exposed edges rounded. Provision for stay cord anchorage. Fits standard jacks.

| | | | |
|-----------|--------|------|--------|
| No. 512 | —Black | List | \$.87 |
| No. 512-1 | —Red | | .87 |

"518" PLUG — "562" JACK



Two-circuit miniature disconnect plug and jack series. Ideal for small size cordage. Plugs have two grooved, parallel pins which engage with multi-leafed contract springs in jack. No. 518 and 562 have acetate half shells cemented together. No. 518-7 and 562-7 have molded bakelite shells held together with screws.

| | | | |
|-----------|-------|------|--------|
| No. 518 | —Plug | List | \$.60 |
| No. 518-7 | —Plug | | .80 |
| No. 562 | —Jack | | 1.00 |
| No. 562-7 | —Jack | | 1.10 |

"525" CONNECTORS

The "525" series provides means of attaching headset cords, or any two wires, to single contact mike plugs (Amphenol 75-MC series of plugs). Main body of connector is similar to handle of "511" series plug. Connector held to receptacle by threaded retaining ring.

| | | | |
|---------|------------|------|--------|
| No. 525 | —Connector | List | \$.87 |
|---------|------------|------|--------|

"501" PLUG



Widely used for high quality communication equipment. Commonly known as PJ-055. Features a one-piece tip-rod construction preventing loosening or separating of parts while in service. Nylon Insulation Interlocks all parts of plug.

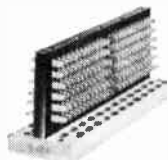
| | | | |
|------------|--|------|---------|
| No. 501 | —Black plastic shell | List | \$ 1.40 |
| No. 501-1 | —Red plastic shell | | 1.40 |
| No. 501-2 | —Shielded shell | | 1.90 |
| No. 501-10 | —Black plastic shell embossed with PJ-055B | | 1.40 |

"509" PLUG

For use on microphone circuits and usually identified as PJ-068. Tip, ring, and sleeve circuits are insulated and interlocked by injected nylon. Sleeve diameter is 0.206".

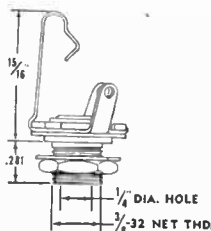
| | | | |
|------------|---|------|---------|
| No. 509 | —Black plastic shell | List | \$ 2.95 |
| No. 509-10 | —Black plastic shell embossed with PJ-068 | | 3.00 |

TERMINAL BLOCKS



Referred to as telephone "Christmas Tree" type. Terminals are notched top and bottom, electro-tin plated and individually removable. New "wire-wrap" type terminals available. All types available from one to ten rows high. Special terminal arrangements upon request. No. 421 series has twenty terminals per row; No. 425 series, twenty-four terminals per row; No. 427 series, twenty-six terminals per row. Hard maple base. Numerous variations available.

six terminals per row. Hard maple base. Numerous variations available.



"95" SERIES JACKS

Widely used on P.A. amplifiers, tape recorders, short wave radios, servicemen test instruments, etc. Used where space behind panel is limited. Jack is mounted by a threaded bushing which fits a 3/8" dia. hole. Springs are nickel silver and are held in place by interlocking insulators. Circuit types can be identified by referring to "Jack Circuits" as shown below.

| | | | |
|-----------|--|------|--------|
| No. 95-01 | —Open circuit, two conductor | List | \$.45 |
| No. 95-02 | —Closed circuit, two conductor | | .54 |
| No. 95-25 | —Open circuit, three conductor (for 0.250" dia. plugs) | | .60 |
| No. 95-50 | —Open circuit, three conductor (for 0.206" dia. plugs) | | .65 |

"90" SERIES JACKS

See facing page, under Audio section, for detailed description.

"91" SERIES JACKS



A long frame jack having a threaded bushing which can be used for mounting as well as by a mounting screw. Can be mounted in panels up to 1/4" thick. The most common circuits are shown below, but most other circuits can be supplied.

| | | | |
|-----------|--|------|--------|
| No. 91-01 | | List | \$.75 |
| No. 91-02 | | | .95 |
| No. 91-25 | | | .95 |
| No. 91-26 | | | 1.20 |

"92" SERIES JACKS



Twin jacks, used in microwave systems and certain carrier frequency applications requiring activation of crossover contact springs by insertion of single plug in either jack bushing. Uses 100% palladium cross-bar contacts. Two-circuit plugs used on types 92-1009 and 92-1029 (equivalent to W.E. 410A and 410D respectively). Three-circuit plugs (0.250" dia.) used on 92-1030 (equivalent to W.E. 482A).

| | | | |
|-------------|-----------------------|------|---------|
| No. 92-1009 | | List | \$ 3.50 |
| No. 92-1029 | —Gold plated contacts | | 4.35 |
| No. 92-1030 | | | 4.80 |

"93" SERIES JACKS

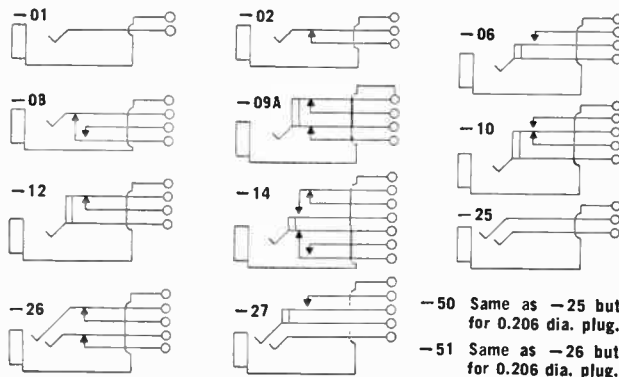


A short frame jack with springs mounted parallel to panel. Used particularly where depth behind panel is limited, on such applications as intercom systems, P.A. amplifiers, etc. Mounting is by means of threaded bushing 3/8" diameter, rigidly attached to a steel frame. May be mounted on panels up to 3/16" thick. Contact springs of nickel silver, terminals hot tinned. See diagrams below for circuits.

| | | | | | |
|-----------|------|--------|-----------|------|--------|
| No. 93-01 | List | \$.70 | No. 93-25 | List | \$.85 |
| No. 93-02 | | .85 | No. 93-26 | | 1.10 |

JACK CIRCUITS

All TRIMM jacks have a standardized coding consisting of the Jack series number plus a dash number indicating spring arrangement, a few of which are shown below.





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UPCR SERIES

Single Row Printed Card Receptacle
Number of contacts—(Beryllium Copper)
6, 10, 15, 18, 22
Solder wire hole size $1/16" \times 3/32"$
Voltage breakdown between contacts—sea level
2500 V A.C. RMS.
Current rating 5 amps.
Polarizing pins and contacts—snap-in or out design permitting easy interchangeability.
Pat. #2,853,689.



UPCR-D. Double Row Printed Card

Receptacle. Solder Type Terminals
Card range thickness accommodation
UPCR-D .052—.072 (nom. $1/16"$)
UPCR-93D .080—.104 (nom. $3/32"$)
Number of contacts (Beryllium Copper)
6, 10, 15, 18, 22 per row, (2) rows
Solder wire hole size $3/64" \times 3/32"$
Voltage breakdown between contacts—sea level
2500 V A.C. RMS.
Current rating 5 amps.



Pat. #2,909,755

UPCR-DT. Double Row Printed Card Receptacle. Taper Tab Terminals

UPCR-DT uses ± 78 taper tab
Card range thickness accommodation
UPCR-DT .052—.072 (nom. $1/16"$)
UPCR-93 DT .080—.104 (nom. $3/32"$)
Number of contacts (Beryllium Copper)
6, 10, 15, 18, 22 per row, (2) rows
Voltage breakdown between contacts—sea level
2500 V A.C. RMS.
Current rating 5 amps.
Polarizing pins and contacts—snap-in or out design permitting easy interchangeability.
Pat. #2,909,755



UPCR-DW. Double Row Printed Card Receptacle. "Wire-Wrap" Terminals

UPCR-DW .052—.072 (nom. $1/16"$)
UPCR-93 DW .080—.104 (nom. $3/32"$)
Number of contacts (Beryllium Copper)
6, 10, 15, 18, 22 per row, (2) rows
Voltage breakdown between contacts—sea level
2500 V A.C. RMS.
Current rating 5 amps.
Polarizing pins and contacts—snap-in or out design permitting easy interchangeability.
Pat. #2,909,755
* T.M. of Gardner-Denver Co.



UPCR-RD. Double Row Printed Card Receptacle. Dip Solder. Right Angle Terminals

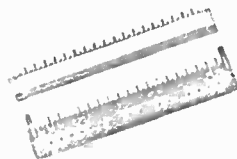
Card range thickness accommodation
UPCR-RD .052—.072 (nom. $1/16"$)
UPCR-93 RD .080—.104 (nom. $3/32"$)
Number of contacts (Beryllium Copper)
6, 10, 15, 18, 22 per row, (2) rows
Voltage breakdown between contacts—sea level
2500 V A.C. RMS.
Current rating 5 amps.



Pat. #2,909,755

MPC SERIES—Micro Miniature Printed Circuit Connectors

Number of contacts 15, 23, 33, 37, 49
Maximum wire size ± 26 AWG Wire
Voltage breakdown between contacts—sea level
3100 V. A.C., RMS.
Current rating 3 amps.



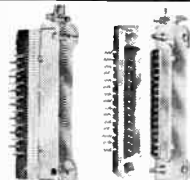
UPCR-SD. Double Row Printed Card Receptacle. Scatter Solder Dip Terminals

Card range thickness accommodation
UPCR-SD .052—.072 (nom. $1/16"$)
UPCR-93 SD .080—.104 (nom. $3/32"$)
Number of contacts (Beryllium Copper)
6, 10, 15, 18, 22 per row, (2) rows
Voltage breakdown between contacts—sea level
2500 V A.C. RMS.
Current rating 5 amps.
Pat. #2,909,755



UPCC-SLH SERIES. Hooded Screw Lock

UPCC-M2SL Male Chassis Screw Lock
UPCC-F2HSL Female Hooded Mating Unit Available
7, 11, 15, 19, 23, 32 contacts
Voltage Breakdown between contacts—sea level
2500 V. A.C. RMS.
Male — available solder dip, wire solder turret, taper tab terminals
Female — available wire solder, turret tab terminals
Pat. #2,953,767



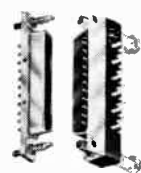
UPCC SERIES. Printed Circuit Connector

Card range thickness accommodation—
Male Dip Solder
UPCC-M () A $1/16"$
UPCC-M () B $1/8"$
UPCC-M () C $1/4"$
UPCC-F () female ± 20 AWG wire
UPCC-FDN () Solder dip terminals
Maximum wire size—female ± 20 AWG wire
Number of contacts 7, 11, 15, 19, 23, 32
Voltage Breakdown between contacts—sea level
2500 V. A.C. RMS.
Current rating 7.5 amps.



UPCC-SL SERIES. Printed Circuit Screw Lock

Card range thickness accommodation—
Male Dip Solder
UPCC MSL () A $1/16"$
UPCC MSL () B $1/8"$
UPCC MSL () C $1/4"$
UPCC-FSL () female ± 20 AWG wire
UPCC-FD-SL () Solder dip terminals
Number of contacts 7, 11, 15, 19, 23, 32
Voltage Breakdown between contacts—sea level
2500 V. A.C. RMS.
Current rating 7.5 amps.



Pat. #2,953,767

990-SL SERIES. Power Screw Lock

Number of contacts 7, 10, 15, 18
Maximum wire size ± 16 AWG, wire
Voltage breakdown between contacts—sea level
5300 V. A.C. RMS.
Current rating 13 amps.
990-SL-SDL (solderless) uses ± 53 taper pin
Patent #2,761,108. Double lead threads. "Twice the speed with double lead."



MH SERIES. Miniature Hex

Number of contacts 4, 5, 7, 9
Maximum wire size ± 20 AWG wire
Voltage breakdown between contacts—sea level
1215 V. A.C. RMS.
Current rating 7.5 amps.
MH-SDL (solderless) uses ± 37 taper receptacle
Also available HMM Hermetic Seal. Plug Series.



Pat. #2,848,702

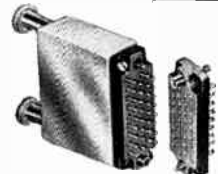
SMI SERIES. Subminiature

Number of contacts 5, 7, 11, 14, 20, 26, 29, 34, 42, 50, 75
Maximum wire size ± 20 AWG wire
Voltage Breakdown between contacts—sea level
1950 V. A.C. RMS.
Current rating 7.5 amps.
SMI-SDL (solderless) uses ± 37 taper receptacle
Other configurations upon request.



SMI-SL SERIES. Subminiature Screw Lock

Number of contacts 5, 7, 11, 14, 20, 26, 29, 34, 42, 50, 75
Maximum wire size ± 20 AWG wire
Voltage Breakdown between contacts—sea level
1950 V. A.C. RMS.
Current rating 7.5 amps.
SMI-SL-SDL (solderless) uses ± 37 taper receptacle
Other configurations upon request.
Pat. #2,761,108



GENERAL NOTE
All Sub-miniature (SMI), Miniature (MI), 980, 990 series Connectors, available with Solder Type, Solderless Type (SDL) and Turret Type (TU) Terminals

Connectors are available with molded bodies made of asbestos-filled me'amine, glass-filled alkyd, asbestos or glass-filled diallyl phthalate, or mica-filled bakelite. All connectors meet or surpass all applicable sections of MIL-Q-9858, MIL-C-8384B, MS, MIL-C-21097A, MIL-C-25955 and NAS specifications. Rigid quality control is applied on a 100% basis for inspection and testing. All solder cups can be provided with 60-40 solder or projecting terminals can be solder dipped.



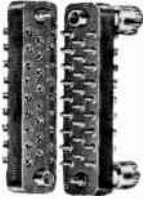
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U. S. COMPONENTS

AVIONICS • AUTOMATION • COMMUNICATION • CONTROLS • INSTRUMENTATION
MISSILES • PORTABLE EQUIPMENT • PRINTED CIRCUITS • TEST APPARATUS

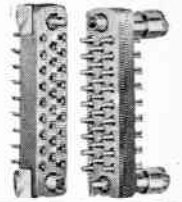


SMI-K SERIES

Subminiature Hoodless Knob Type Screw Lock
Number of contacts 5, 7, 11, 14, 20, 26, 29, 34, 42, 50, 75
Maximum wire size #20 AWG wire
Voltage Breakdown between contacts—sea level 1950 V. A.C. RMS.
Current rating 7.5 amps.
SMI-K-SDL (solderless) uses #37 taper receptacle
Pat. 2,761,108. Other configurations on request.

SMI-KC SERIES

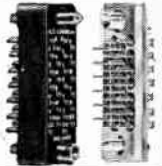
Subminiature Hoodless Knob Type Screw Lock
Reentrancy female contact Anti-Rotation Brackets
Number of contacts 5, 7, 11, 14, 20, 26, 29, 34, 42, 50, 75
Maximum wire size #20 AWG wire
Voltage Breakdown between contacts—sea level 1950 V. A.C. RMS.
Current rating 7.5 amps.
SMI-K-SDL (solderless) uses #37 taper receptacle
Pat. 2,761,108. Other configurations on request.



MI-SERIES. Miniature
Number of contacts 7, 12 (8-4), 14, 18, 20, 21, 26, 34, 41, 50, 75
Maximum wire size #20 AWG wire
Voltage breakdown between contacts—sea level 2800 V A.C. RMS.
Current rating 7.5 amps
MI-SDL (solderless) uses #37 taper receptacle
MIP Series #18 wire — MIW Series #16 wire

HMI SERIES. Hermetic Seal Miniature

Number of contacts 7, 12 (8-4), 14, 18, 20, 21, 26, 34, 41, 50, 75
Maximum wire size #20 AWG wire
Voltage breakdown between contacts—sea level 2200 V A.C. RMS.
Current rating 7.5 amps.
Mates with corresponding MI-F (female) series connectors.

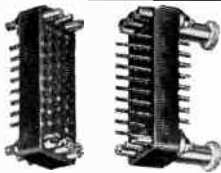
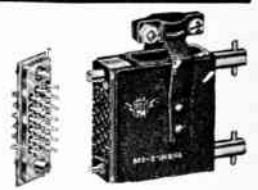


MI-SL SERIES. Miniature Screw Lock
Number of contacts 7, 12 (8-4), 14, 18, 20, 21, 26, 34, 41, 50, 75
Maximum wire size #20 AWG wire
Voltage breakdown between contacts—sea level 2800 V A.C. RMS.
Current rating 7.5 amps.
MI-SL-SDL (solderless) uses #37 taper receptacle
Pat. #2,761,108
ALSO AVAILABLE FOR #18 AWG WIRE
6-32—Double or single lead threads can be furnished.

Pat. #2,761,108

HMI-SL SERIES Hermetic Seal Miniature Screw Lock

Number of contacts 7, 12 (8-4), 14, 18, 20, 21, 26, 34, 41, 50
Maximum wire size #20 AWG wire
Voltage breakdown between contacts—sea level 2200 V A.C. RMS.
Current rating 7.5 amps.
Mates with corresponding MI-FSL (female screw lock) series connectors.
6-32—Double or single lead threads can be furnished.

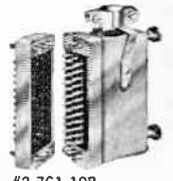


MI-KSL SERIES
Miniature Hoodless Knob Type Screw Lock
Number of contacts 7, 12 (8-4), 14, 18, 20, 21, 26, 34, 41, 50, 75
Maximum wire size #20 AWG wire
Voltage breakdown between contacts—sea level 2800 V A.C. RMS.
Current rating 7.5 amps.
MI-K-SDL (solderless) uses #37 taper receptacle
ALSO AVAILABLE FOR #18 AWG WIRE

Pat. #2,761,108

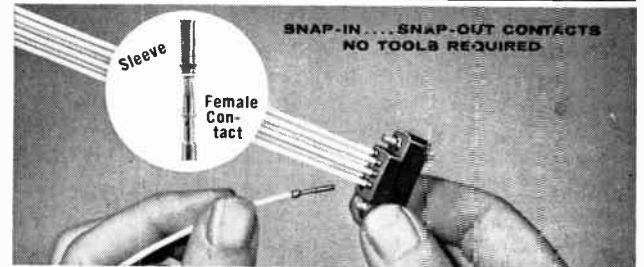
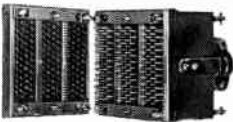
MI-BSL "FBI" SERIES

Miniature Bracket Screw Lock
Number of contacts 34, 41, 50, 75
Maximum wire size #20 AWG wire
Voltage breakdown between contacts—sea level 2800 V A.C. RMS.
Current rating 7.5 amps.
Hoods aluminum anodized
Brackets die-cast aluminum
MI-BSL-SDL (solderless) uses #37 taper receptacle
Pat. #2,761,108;
#2,845,603; #2,845,604



MI-MBSL SERIES

Miniature Bracket Modular Screw Lock
Number of contacts 123, 150, 225
Maximum wire size #20 AWG wire
Voltage Breakdown between contacts—sea level 2800 V. A.C. RMS.
Current rating 7.5 amps.
Hoods aluminum anodized
Brackets die-cast aluminum
MI-MBSL-SDL (solderless) uses #37 taper receptacle
ALSO AVAILABLE FOR #18 AWG WIRE
Pat. #2,761,108; #2,845,603; #2,933,713;
#2,845,604; Additional Patents Pending.
Other configurations upon request.

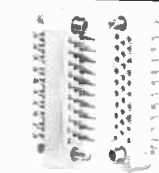


MRO-MRA. Miniature Round
Number of contacts 7, 9
Maximum wire size #20 AWG wire
Voltage breakdown between contacts—sea level 1215 V A.C. RMS.
Current rating 7.5 amps.
MRO-SDL—MRA-SDL (solderless) uses #37 taper receptacle

ALSO AVAILABLE FOR #18 AWG WIRE

REMI SERIES—Standard and Screwlock
Number of contacts 7, 12 (8-4), 14, 18, 20, 21, 26, 34, 41, 50, 75
Type of contact crimp style, removable with "snap-in, snap-out" feature
Wire sizes accommodated #20, #22 A.W.G. (#18 if required)
Pats. applied for

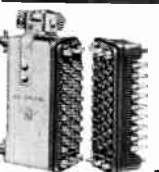
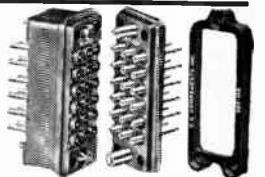
REMI counterparts of our MI, MI-SL, MI-KSL, MI-BSL and MI-MBSL SERIES can be provided.



UMI SERIES—Ultra Miniature Series
Number of Contacts 5, 7, 9, 11, 14, 20, 26, 29, 34, 44, 50
Max. Wire Size #22 AWG Wire
Voltage breakdown between contacts—sea level 1330 V. A.C., RMS.
Current rating 3 amps.
ALSO AVAILABLE IN UMI-SL SCREWLOCK SERIES

980 SERIES. Power-Guide Pin Spring Release

Number of contacts 12, 18, 24, 34
Maximum wire size #16 AWG wire
Voltage breakdown between contacts—sea level 4000 V A.C. RMS.
Current rating 13 amps.
980-SL-SDL (solderless) uses #53 taper pin
Patent #2,658,182



980-SL SERIES. Power Screw Lock
Number of contacts 12, 18, 24, 34
Maximum wire size #16 AWG wire
Voltage breakdown between contacts—sea level 4000 V A.C. RMS.
Current rating 13 amps.
980-SDL (solderless) uses #53 taper pin
Patents #2,658,182; #2,761,108

990 and 990S (Short Contacts) SERIES.

Power
Number of contacts 7, 10, 15, 18
Maximum wire size #16 AWG wire
Voltage breakdown between contacts—sea level 5300 V A.C. RMS.
Current rating 13 amps.
990-SDL (solderless) uses #53 taper pin

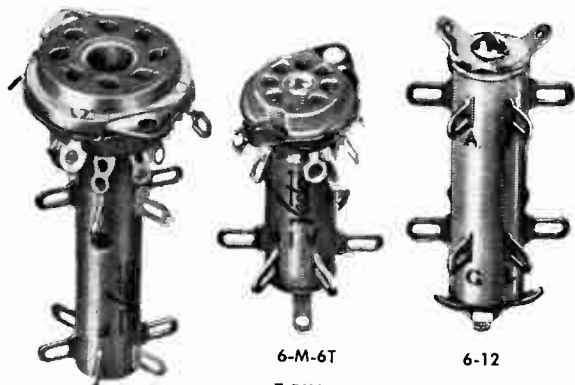


U. S. COMPONENTS, INC.
NEW YORK, N. Y. • Cable Address: COMPONENTS, N. Y.

Vector Electronic Company

GLENDALE, CALIFORNIA

POST SOCKET TURRETS



10-0-12T

OCTAL

6-M-6T

7-PIN

6-12

TERMINAL

VECTOR SOCKET TURRETS AND TERMINAL TURRETS simplify electronic construction. Faster wiring, greater component density and higher reliability are assured by their use. Military types (premium grade) have MIL sockets with beryllium copper silver plated socket contacts, brass nickel plated hot tin dipped saddles and glass silicone turret post with fused tin brass terminals. Commercial types have mica filled sockets, hot tin dipped steel saddle, XXXP Phenolic turret post with brass fused tin terminals.

ORDERING INFORMATION

| CATALOG NUMBERS | | TURRET DETAILS | | | | NET PRICE |
|------------------|----------------|----------------|-------------|--------------|---------------------|-----------------|
| Commercial Types | Military Types | Height | No. of Term | No. of Rings | Space Between Rings | Comm. Type 1-19 |

OCTAL SOCKET-TURRETS

| | | | | | | |
|-----------|-----|--------|----|---|--------|-----|
| 6-0-6T | 680 | 1 1/2" | 6 | 1 | — | .54 |
| ♦ 8-0-9T | 681 | 2" | 9 | 2 | 1" | .60 |
| 8-0-12T | 682 | 2" | 12 | 2 | 1" | .63 |
| ♦ 10-0-9T | 683 | 2 1/2" | 9 | 2 | 1 3/8" | .63 |
| 10-0-12T | 684 | 2 1/2" | 12 | 2 | 1 3/8" | .66 |

7-PIN SOCKET TURRETS

| | | | | | | |
|-----------|-----|--------|----|---|--------|-----|
| ♦ 6-M-6T | 687 | 1 1/2" | 6 | 1 | — | .63 |
| ♦ 8-M-9T | 688 | 2" | 9 | 2 | 1" | .69 |
| 8-M-12T | 689 | 2" | 12 | 2 | 1" | .72 |
| 10-MB-12T | 690 | 2 1/2" | 12 | 2 | 1 3/8" | .81 |

9-PIN SOCKET TURRETS

| | | | | | | |
|-----------|-----|--------|----|---|--------|-----|
| 6-N-6T | 693 | 1 1/2" | 6 | 1 | — | .63 |
| ♦ 8-N-9T | 694 | 2" | 9 | 2 | 1" | .69 |
| 8-N-12T | 695 | 2" | 12 | 2 | 1" | .72 |
| 10-NB-12T | 696 | 2 1/2" | 12 | 2 | 1 3/8" | .81 |

TERMINAL-TURRETS

| | | | | | | |
|---------|-----|--------|----|---|--------|-----|
| 6-12 | 676 | 1 1/2" | 12 | 2 | 3/8" | .45 |
| ♦ 8-12 | 677 | 1 7/8" | 12 | 2 | 1" | .48 |
| ♦ 10-12 | 678 | 2 1/2" | 12 | 2 | 1 3/8" | .51 |

NOTE: Tolerance on dimensions $\pm 1/16$ "

♦ Indicates preferred types

Longer or shorter types and other terminal configurations can be readily made to order.

TRANSISTOR TURRETS



7-A-12T-440

8-A-12T

#654

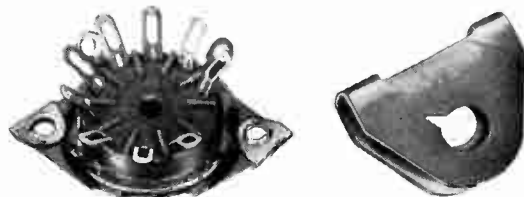
Supplied without wiring

TRANSISTOR SOCKET TURRETS enable user to mount one transistor and other necessary circuit components on a post structure. Sockets furnished accommodate 3-in-line or "top-hat" type transistors. Units furnished with saddle or recessed 4-40 Knurl nut in end opposite socket.

TRANSISTOR WAFER TURRET: Holds four transistors on wafer punched to take JEDEC or in-line leads. 5-40 screw projects 3/16" Min. beyond bottom ground lug for chassis mounting.

| Catalog No. | Height | Space Between Rings | Space Between Wafers | Saddle | Knurl Nut | Net Price 1-19 |
|-------------|--------|---------------------|----------------------|--------|-----------|----------------|
| 6-A-12T | 1 1/2" | 7/8" | — | YES | NO | 1.06 |
| 7-A-12T-440 | 1 3/4" | 7/8" | — | NO | YES | 1.04 |
| 8-A-12T | 2" | 1 3/8" | — | YES | NO | 1.08 |
| 652 | 2" | 1" | 1 1/16" | NO | NO | .81 |
| 654 | 2 1/2" | 1 3/8" | 2 3/16" | NO | NO | .87 |

SOCKET SADDLE NUTS



U nut designed especially to slip over and clamp on socket saddles provide convenient means for quickly screwing sockets to chassis. Two types are available, No. 4-40 U which fits No. 4-40 screws and No. 4Z U which fits a No. 4 sheet metal screw. The latter is stronger since it is of thicker metal than the former. Screws should be hardened steel for both nuts to avoid stripping and are also listed below: Material is cad. plated steel. Bags of 50 each.

| Cat. No. | Thread | Screw Length | Net Price 1-19 Bags |
|-------------------|--------|--------------|---------------------|
| ♦ 4-40 U Nut | 4-40 | — | 1.00 |
| 4-Z U Nut | 4 Z | — | 1.25 |
| 4-40 x 1/4" Screw | 4-40 | 1/4" | .60 |
| 4Z x 1/4" Screw | 4 Z | 1/4" | .40 |

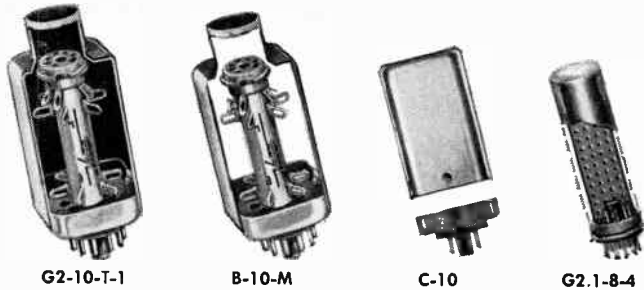
TUBE BASE SHIELDS

TUBE BASE SHIELDS are intended to be mounted above the socket as a base for conventional bayonet type tube shields.



| CATALOG NO. | | DESCRIPTION | NET PRICE 1-19 |
|-------------|----------|---------------------------|----------------|
| Commercial | Military | | |
| ♦ S7 | — | 7 Pin Steel Cad. Plated | .05 |
| S7.17 | — | 7 Pin Steel Cad. Iridited | .06 |
| — | S7.22 | 7 Pin Brass Nickel Plated | .17 |
| ♦ S9 | — | 9 Pin Steel Cad. Plated | .05 |
| S9.17 | — | 9 Pin Steel Cad. Iridited | .06 |
| — | S9.22 | 9 Pin Brass Nickel Plated | .17 |

SMALL ROUND OR SQUARE PLUG INS



SMALL ROUND & SQUARE PLUG-INS for amplifiers, counters, oscillators, flip flops, and other circuits can be easily assembled and packaged from the wide variety of readily available Vector Plug-in Units and Cases. Cases are deep-drawn aluminum with caustic etch finish. Plugs are tube base type; Octal 8 pins for B, C, and G2 types, 9 pin Noval for G2.1 size, and 7 pin miniature for G2.2. Sockets are mica filled phenolic, with brass cad. plated contacts. Military types (premium grade) have MIL sockets with beryllium copper silver plated contacts. (Add J to catalog number for this).

| Catalog Number | Type of Plug | Type of Socket | Internal Structure | Dimensions Height | Size | Net Price 1-19 |
|----------------|--------------|----------------|--------------------|-------------------|-------------|----------------|
| B-8 | Octal 8 | None | None | 2" | 1 1/8" Sq. | .99 |
| B-10 | Octal 8 | None | None | 2 1/2" | 1 1/8" Sq. | 1.03 |
| B-10-M | Octal 8 | 7 P. Min. | Turret | 2 1/2" | 1 1/8" Sq. | 1.91 |
| B-10-N | Octal 8 | 9 P. Nov. | Turret | 2 1/2" | 1 1/8" Sq. | 1.95 |
| B-10-T | Octal 8 | None | Turret | 2 1/2" | 1 1/8" Sq. | 1.65 |
| B-10-4 | Octal 8 | None | Strip "A" | 2 1/2" | 1 1/8" Sq. | 1.82 |
| C-10 | Octal 8 | None | None | 2 1/2" | 2" Sq. | 1.16 |
| C-12 | Octal 8 | None | None | 3" | 2" Sq. | 1.20 |
| C-12-M | Octal 8 | 7 P. Min. | Turret | 3" | 2" Sq. | 2.24 |
| C-12-N | Octal 8 | 9 P. Nov. | Turret | 3" | 2" Sq. | 2.27 |
| C-12-T | Octal 8 | None | Turret | 3" | 2" Sq. | 1.88 |
| C-12-4 | Octal 8 | None | Strip "A" | 3" | 2" Sq. | 2.85 |
| C-10-NN | Octal 8 | 9 p. Nov. (2) | Turret | 2 1/2" | 2" Sq. | 3.01 |
| C-12-NN | Octal 8 | 9 p. Nov. (2) | Turret | 3" | 2" Sq. | 3.04 |
| G2-10 | Octal 8 | None | None | 2 1/2" | 1 1/4" Dia. | .97 |
| G2-10-M | Octal 8 | 7 P. Min. | Post | 2 1/2" | 1 1/4" Dia. | 1.66 |
| G2-10-N | Octal 8 | 9 P. Nov. | Post | 2 1/2" | 1 1/4" Dia. | 1.69 |
| G2-10-4 | Octal 8 | None | Strip "D" | 2 1/2" | 1 1/4" Dia. | 1.85 |
| G2-10-T-1 | Octal 8 | None | Wafer | 2 1/2" | 1 1/4" Sq. | 1.68 |
| G2.1-8F | 9 P. Nov. | None | None | 2" | 3/4" Dia. | 1.35 |
| G2.1-8-N | 9 P. Nov. | 9 P. Nov. | Post | 2" | 3/4" Dia. | 2.04 |
| G2.1-8-4 | 9 P. Nov. | None | Strip "G" | 2" | 3/4" Dia. | 1.90 |
| G2.2-8F | 7 P. Min. | None | None | 2" | 5/8" Dia. | 1.21 |
| G2.2-8-M | 7 P. Min. | 7 P. Min. | Post | 2" | 5/8" Dia. | 1.93 |
| G2.2-8-4 | 7 P. Min. | None | Strip "G" | 2" | 5/8" Dia. | 1.88 |

NOTE: Strip "A" has .093" holes sp. 0.265". Strip "D" has .093" holes spaced 0.2" x 0.25". Strip "G" has 1/8" holes spaced 0.141" to fit JETEC transistor leads. "Wafer" is 1" diameter as used on transistor turret #654.

MULTI-USE PLUG-IN-KIT:



TUBE SOCKET TYPE

TRANSISTOR TYPE

MULTI USE PLUG-IN KITS enable the user to readily wire and package a wide variety of circuits. Kits consist of an aluminum case with plug and accessories for mounting (a) Tube Sockets, or (b) Transistor type assemblies. For the tube circuits the Lip-Loc Case units (see left fig.) are used. These include the following parts: Mounted noval sockets, shield bases, 2 Zip wiring decks, and 11-pin Octal plug plus extra components as follows: equal number of 7-pin miniature sockets, shield bases and adapter mounting rings; plug buttons to close unused socket holes; one extra unpunched base with spacers and screws for mounting larger plugs such as the Amphenol Blue Line (not supplied in kit); one extra zip wiring deck. The extra components may be readily installed as required in place of the furnished items.

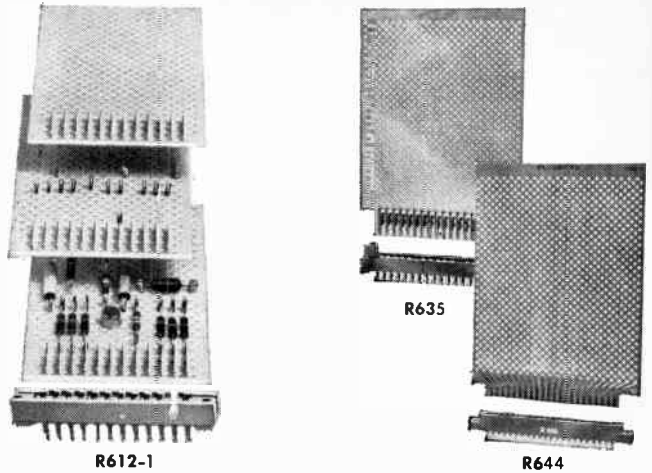
For transistor and printed circuit assemblies the Frame-Loc type case shown at the right above is used with Elco Varicon 16 pin plug and optional perforated epoxy-paper center wall with 1/8" holes on alternate centers of a 0.1" grid. T28 Push-In Terminals supplied (not installed).

Material specifications are as follows: case, caustic etch on aluminum; sockets, mica-filled phenolic, commercial grade; terminal strips and spacers are phenolic for tube units and epoxy-paper for transistor units. Overall height of all units is 3".

| Cat. No. | Sockets | Base Dimen. | Deck Spacing (2 Decks) | Number Terminals per Deck | Base Price 1-19 |
|----------|---------|-----------------|------------------------|---------------------------|-----------------|
| 4-EK3 | 3N & 3M | 1 5/8" x 3 7/8" | 1 1/4" | 22 | 5.97 |
| 5-E2K3 | 4N & 4M | 1.68" x 4.82" | 1 1/4" | 30 | 6.57 |
| 6-E1K3 | 5N & 5M | 1 5/8" x 5 7/8" | 1 1/4" | 38 | 7.17 |
| 4-HK3 | None | 1" x 4" | 1 Wall | — | 5.60 |
| 5-HK3 | None | 1" x 5" | 1 Wall | — | 5.74 |
| 6-HK3 | None | 1" x 6" | 1 Wall | — | 6.19 |

Many other case sizes and structures are obtainable at the factory.

PLUGBOARDS



Use Plugboards for test circuits, P.C. prototypes, short runs or modular Plug-ins. Lay out circuitry as desired using Push in terminals, solder, and plug-in. Components and wiring can be arranged and changed as required. Plugboards can be punched, sawed, and drilled. Materials used are 1/8" thick epoxy paper per MIL-P-22323 Type PEE, G-10 epoxy glass per MIL-P-18177, copper clad epoxy glass per MIL-P-13949-B Type FLGE-91 and copper clad epoxy paper per MIL-P-13949 Type PX. All boards have punched 1/8" diameter holes on alternate 0.1" centers. Use Vector T-28 MINI-KLIPS, T15.23 eyelets, or turned terminals. Elco Varicon or P.C. Plug contacts supplied on board. Copper clad boards, without contacts, shown below can be etched by user. For easy circuit layout, order pads of 8 1/2" x 11" R173-G grid paper with printed hole layout pattern. Receptacles listed are molded glass-filled diallyl phthalate.

| Catalog Number | Description | Net Price 1-19 |
|----------------|--|----------------|
| 812 | 4 1/2" x 6 1/2" Epoxy Paper, 16 Varicon Contacts | \$2.73 |
| 812WE | 4 1/2" x 6 1/2" Epoxy Glass, 16 Varicon Contacts | 3.23 |
| R616-1 | Molded Receptacle for above, 16 Contacts | 2.38 |
| 837 | 3" x 4 1/2" Epoxy Paper, 12 Varicon Contacts | 2.13 |
| 837WE | 3" x 4 1/2" Epoxy Glass, 12 Varicon Contacts | 2.36 |
| R612-1 | Molded Receptacle for above | 1.64 |
| 838 | 4 1/2" x 6 1/2" Epoxy Paper, 43 Etched Contacts, 2 sides | 3.34 |
| 838A | 4 1/2" x 6 1/2" Epoxy Paper, 22 Etched Contacts, 1 side | 2.57 |
| 838AWE | 4 1/2" x 6 1/2" Epoxy Glass, 22 Etched Contacts, 1 side | 3.19 |
| 838PWE | 4 1/2" x 6 1/2" Epoxy Glass, 22 Etched Contacts and Etched pad layout, 1 side | 3.56 |
| R644 | Molded Receptacle for 838, 838A, 838AWE, 838PWE, 44 Contacts, 2 rows double readout type | 2.62 |
| 838C | Copper Clad 1 side, Epoxy Paper sim. to 838A, no etching | 1.50 |
| 838D | Copper Clad 2 sides, Epoxy Paper sim. to 838, no etching | 1.75 |
| 848WE | 4 1/2" x 6 1/2" Epoxy Glass, 35 Varicon Contacts | 5.58 |
| R635 | Molded Receptacle for above, 35 Contacts | 6.93 |

TUBE BASE PLUGS

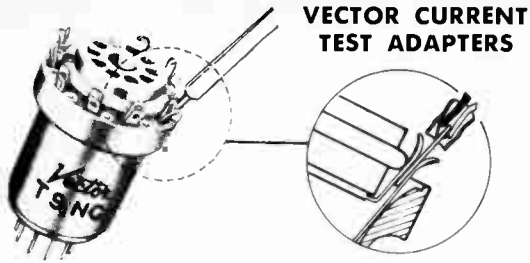


Vector tube base plugs have Mica-filled phenolic castings and phosphor bronze cadmium plated pins. The wide variety of pin configurations on the top side of the plugs allow design features not possible with other types of plugs. Plugs may be mounted as follows:

1. With a 4-40 or 5-40 screw through the center.
2. With a split retainer ring around plug, in a plate or chassis. Retainer rings are indicated by adding "R" after "K" or "P" in the catalog number.
3. With a stamped metal saddle B36-4 for 7-pin, B37-4 for 9-pin, B38-2 for 14-pin.
4. Round shells may be attached by screws and threaded 1/2 inserts in plug periphery, except plugs with a keyway. Add "F" after "K" or "P" in the catalog number. (See Plug-in Can Section for complete units).

| Cat. No. | Type | A | B | C | D | E | F | G | Net Price 1-19 |
|----------|---------------------------------|------|-------|-------|------|------|------|------|----------------|
| P7 | 7-pin min. | 1/2" | .300" | .265" | 1/8" | .621 | .568 | .125 | .47 |
| P9 | 9-pin noval | 1/2" | .300" | .265" | 1/8" | .748 | .700 | .125 | .52 |
| P7A | 7-pin min. | 3/8" | .300" | .265" | 1/8" | .621 | .568 | .125 | .47 |
| P9A | 9-pin noval | 3/8" | .300" | .265" | 1/8" | .748 | .700 | .125 | .52 |
| K1.302 | (Same as P7 exc. no centerpost) | | | | | | | | .47 |
| K1.402 | (Same as P9 exc. no centerpost) | | | | | | | | .52 |
| | Min. hooked | | | | | | | | |
| K1.334 | Pin | .150 | .300" | .265" | 1/8" | .621 | .568 | .125 | .59 |
| | Noval | | | | | | | | |
| K1.434 | hooked pin | .162 | .300" | .265" | 1/8" | .748 | .700 | .125 | .64 |
| P8L | Loctal | 1/4" | 3/8" | 1/2" | 100 | 1.17 | 1.00 | .110 | .95 |
| K1.14 | 14 pin | 1/2" | .300" | .265" | 1/8" | .750 | .700 | None | .63 |

Add R after "P" or "K" for retainer ring. .45

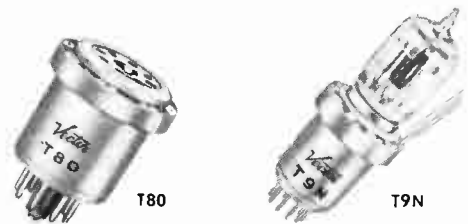


VECTOR CURRENT TEST ADAPTERS

Versatile VECTOR CURRENT TEST ADAPTERS make possible tube circuit current or voltage measurements without cutting leads or making computations. All measurements may be made from the tube side of the electronic equipment without disturbing the chassis.

| Cat. No. | Type | Net Price 1-19 |
|----------|--|----------------|
| T-7-M-C | 7 Pin Min. | 2.20 |
| T-8-0-C | 8 Pin Octal | 2.45 |
| T-9-N-C | 9 Pin Noval | 2.45 |
| P-2 | Dual Sided Plug-in Probe, Required for above | .75 |
| T-789-C | Set of Above 3 Adapters with P-2 Probe in Case | 8.40 |

TUBE SOCKET TEST ADAPTERS



Insert Tube Socket Test Adapters in sockets to make tube side voltage, resistance and wave form checks. Special hole in recessed test tab grips P-1 probe and reduces danger of shock while freeing operator's hand. Alligator clips hold readily on tab and socket. Molded tan phenolic shell and Mica-filled sockets with beryllium copper, silver plated contacts for long life.

| Catalog Number | Socket Type | Net Price 1-19 |
|----------------|---------------------------|----------------|
| T-8-0 | Octal | 1.60 |
| T-7-M | 7-pin Miniature | 1.65 |
| T-9-N | 9-pin Noval | 1.85 |
| T-789 | Set of above three in kit | 5.90 |
| P-1 | Probe for above | .39 |

SOCKET EXTENDERS

Socket extenders provide a replaceable unit for use in tube testers and expensive meters. Wear is shifted from the socket in the tester to the one in the extender so that when it is worn out a new one can be easily inserted. Sockets have beryllium copper silver plated contacts for long life. An all molded outside shell is used with socket leads soldered to plug pins. All units provided with 1 3/4" long screw to hold unit firmly in place if desired.



| Cat. No. | Socket Type | Net Price 1-19 |
|----------|----------------|----------------|
| #1262 | Octal 8 | 1.75 |
| #1263 | 9 P. Noval | 1.75 |
| #1264 | 7 P. Miniature | 1.75 |

CABLE CONNECTOR PLUGS

CABLE CONNECTOR PLUGS permit connecting cables to miniature and noval tube sockets. Aluminum shells are fitted to 7-pin and 9-pin plugs. In type "C" a rubber grommet (with 1/4" hole) is mounted in the side wall and a center screw holds the assembly together. In type "D" a Heyco strain relief grommet is mounted in the end of the shell and the base screws hold the shell on the plug. Approx. length (exc. pins) 2.125".



| End Outlet Cat. No. | Side Outlet Cat. No. | No. of pins | Outside Diam. | Net Price 1-19 | |
|---------------------|----------------------|-------------|---------------|----------------|-------------|
| | | | | End Outlet | Side Outlet |
| P70 | P7C | 7 | 5/8" | 1.50 | 1.08 |
| P9D | P9C | 9 | 3/4" | 1.59 | 1.20 |

(Similar connectors for other tube type supplied to order).

SOCKET CHANGE ADAPTERS

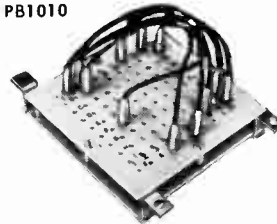
SOCKET CHANGE ADAPTERS facilitate use of unlike tube bases in existing sockets where a change of tube types is required. To be wired by user. Add "S" to number for an outer shell which may be cemented in place.



| Cat. No. | Socket | Plug | Net Price 1-19 |
|----------|-----------|-----------|----------------|
| T 780 | 7 P. Min. | Octal 8 | 1.05 |
| T 79 | 7 P. Min. | 9 P. Nov. | 1.02 |
| T 807 | Octal 8 | 7 P. Min. | 1.23 |
| T 809 | Octal 8 | 9 P. Nov. | 1.23 |
| T 97 | 9 P. Nov. | 7 P. Min. | 1.02 |
| T 980 | 9 P. Nov. | Octal 8 | 1.05 |

PATCH BOARDS

PB1010



PATCH CORD K2.06



JUMPER PLUG K2.02-1

VECTOR PATCH-BOARDS provide simple, but reliable low-cost units for multiple connection, single conductor patching on computers and test equipment. Standard units are made up in blocks of 100 contacts spaced on .265" centers. Horizontal rows are lettered alphabetically. Vertical columns are numbered. Boards furnished with "Z" type brackets and drilled mounting holes in back panel for flush mounting. Special size patchboards available to order.

Specifications:

PB1010: Panels epoxy paper, ivory color, .093" thick with printed black numbers and letters. Receptacle contact beryllium copper, silver plated with gold flash, 2 holes for soldering on leads.

PB1010-1: Panels epoxy paper, black, with printed white numbers and letters.

Patchcards: Plug .087-.091 diameter by .468" long, nickel plating. W stranded number 20 gauge wire, vinyl cloth braid insulation. 6" black, 9" yellow, 15" blue.

Dimensions: PB1010, PB1010-1, 3 1/4" x 3 1/4" x 7/8".

| Cat. No. | Description | Net Price 1-19 |
|----------|---|----------------|
| PB1010 | Patchboard, 100 Contacts Ivory Color | \$10.75 |
| PB1010-1 | Patchboard, 100 Contacts Black Color | 10 95 |
| K2.02-1 | Jumper Plug, (25 per bundle) | 2.50 |
| K2.06 | Patchcord Single Conductor 6" (25 per bundle) | 2.00 |
| K2.09 | Patchcord Single Conductor 9" (25 per bundle) | 2.25 |
| K2.15 | Patchboard Single Conductor 15" (25 per bundle) | 2.50 |

EXPERIMENTER'S TEST ADAPTERS

EXPERIMENTER'S TEST ADAPTERS. These are similar to the Socket Test Adapter but are less the shells and tabs so that connections can be cross-connected in any desired way. User must solder connections (Outer shells available at factory — add "S" to number to obtain).



| Cat. No. | Socket Type | Net Price 1-19 |
|----------|---------------------------|----------------|
| TX-8-0 | Octal | 1.30 |
| TX-7-M | Miniature | .80 |
| TX-9-N | Noval | .85 |
| TX-789 | Set of above three in kit | 3.25 |

TX-8-0

Timers



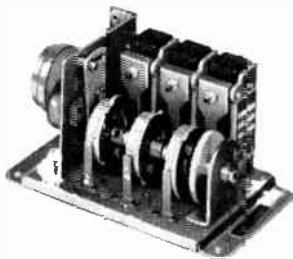
PARSIPPANY, N. J.

RECYCLING

TIME DELAY

INTERVAL

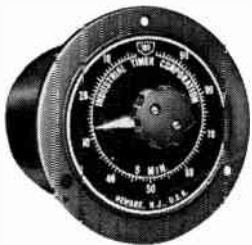
RUNNING TIME METERS



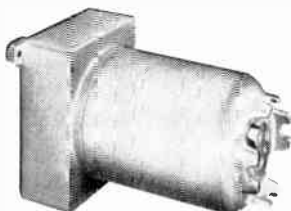
Recycling Cam Timers, 1 to 20 load switches, 2/3 sec. to 72 hours in 600 steps. Details in Bulletin #200, 201, 202, & 203.



Tandem Recycling Timer, interchangeable elements, time cycles from 1/60 sec. to 3 hours. Details in Bulletin #500.



Percentage Timer, dial adjustable for ON-OFF percentage of given time cycle. Details in Bulletin #500.



Explosion Proof Cam Timers, 1 to 20 load switches, 2/3 sec. to 72 hours. Details in Bulletin #800.



Series SF, 1/10 sec. to 5 minutes, Auto-Reset, 10 amp. contact rating, Bock mounted. Details in Bulletin #300.



Series H, 1/10 sec. to 5 min., Auto-Reset, 10 amp. contact rating, flush mounted. Bulletin #300.



Series TD, 1/10 sec. to 5 min., Auto-Reset, 10 amp. contact rating, mounts through a hole. Bulletin #300.



Series TDAF, 1/60 sec. to 3 hours, instant reset, 10 amp. contact rating, flush mounting. Bulletin #300.



Series TDAB, 1/60 sec. to 3 hours, instant reset, 10 amp. contact rating, bock mounted or available in case. Bulletin #300.



Series R, Hermetically Sealed, Ruggedized, time cycles from 1 sec. to 60 hours, 5 amp. contact rating. Details in Bulletin #600.



Series TH, Thermol Time Delay Switch, 10 amp. contact rating, time cycles from 15 sec. to 2 minutes, snap action switch. Details in Bulletin #301.



Series PAB, 1/60 sec. to 3 hours, auto-reset, 15 amp. contact rating, available in housing, or bock mount, extremely accurate. Bulletin #400.



Series P, 1/10 sec. to 5 min., self powered, auto-reset, 10 amp. contact rating. Bulletin #400.



Series M, 1 minute only, 10 amp. contact rating, auto-reset. Bulletin #400.



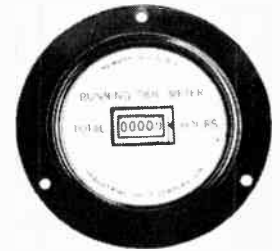
Series RS, 15 minutes to 60 hours, 20 amp. contact rating, manual set. Request Bulletin #400.



Series PAF, 1/60 sec. to 3 hours, instant reset, 15 amp. contact rating, panel mounting, extremely accurate. Bulletin #401.



Series SAR, Auto-reset Signaling Timer, time cycles from 15 min. to 3 hours. Bulletin #402.



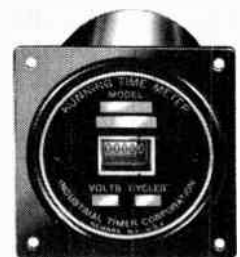
Series C-2, 1/10 sec. count to 1 hour count. Bulletin #700.



Series C-5, Time totalizer, reset to zero type, counts available from 1 sec to 1 hour. Bulletin #700.



Series TTXP, Explosion Proof, external reset. Bulletin #800.



Series T3, Hermetically sealed and ruggedized, same counts as Series C-2. Complete details in Bulletin #600.

Send for our Complete
Timing Controls Catalog,
free upon request . . .

**BRISTOL MOTORS****DIVISION OF
VOCALINE**

SYNCHRONOUS MOTORS AND TIMERS

Versatility is the characteristic which design engineers need—and find—in Bristol Synchronous Motors and Timing Devices. Bristol's unusually broad experience and range of design and manufacturing skills are particularly valuable where special requirements must be met.

The devices shown are among the most widely used. All can be mounted in any position, and take a minimum of space. Materials are selected on the basis of their suitability to provide long service, and perform well under a variety of conditions.

Bristol engineering service is available for applications that require custom design and manufacture.

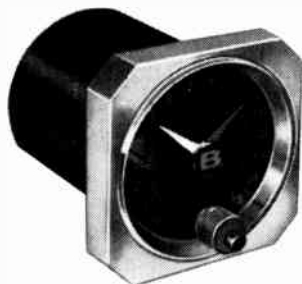
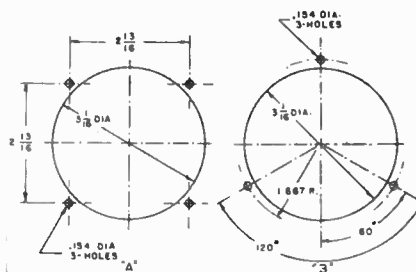


Series 6100 Time Delay Relay. Universal Time Delay Relay provides self-holding solenoid starting with adjustable timed contact operation. Type 6110 provides three types of load contacts which give seven types of load circuit operation in a single unit. This model may be wired up to one of four basic types of operation: momentary start, automatic reset; momentary start, manual reset; sustained switching; and tandem or cascaded operation. Size: 3" in diameter by 5 $\frac{1}{8}$ " long. Timer case bezel $\frac{1}{32}$ " thick x 3 $\frac{3}{8}$ " inches square. Universal mounting allows standard 3-stud or 4-stud panel mounting. 115 VAC — Price \$44.00 each.

TWO TYPES OF FRAMES WITH INTERCHANGEABLE OIAL FACES PROVIDE 4 COMBINATIONS! (See 6200 Series)

**Full Scale Available from 6 Sec. to 24 Hours
Interchangeable Mounting**

The 6100 series timers are provided with removable threaded studs. Timers are normally mounted with four studs, Figure A. Threaded holes are provided for alternate three-hole mounting, Figure B.



6200 Time Delay Relay. Companion to the 6100 series timers. This model is operated by a manual push button start on the face of the timer and provides unusual circuit versatility. This unit times out to the zero position and remains timed out until started by the manual push button. This timer does not reset on power failure. Size, 3 inches in diameter x 3 $\frac{1}{4}$ " long. Intended for lower cost variable delay timer operations. 115 VAC — Price \$27.00 each.

TWO TYPES OF FRAMES WITH INTERCHANGEABLE OIAL FACES PROVIDE 4 COMBINATIONS!



STYLE A



STYLE B



STYLE C



STYLE D

New "Bristol-Vision" Dial Design
Features square-dial plate, provides background contrast for better viewing. Pointer-position knob is easily adjusted without covering hands.

Rugged Dial Frame

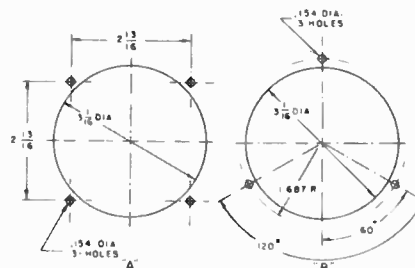
Die-cast in gleaming, rust-and-corrosion-resistant Zamac. Light weight; modern, clean lines.

Bevelled Glass Dial Face

Non-scratch surface won't buckle or deform over wide range of environmental conditions. Fully sealed for permanent protection against dust.

**Full Scale Available from 6 Sec. to 24 Hours
Interchangeable Mounting**

The 6200 series timers are provided with removable threaded studs. Timers are normally mounted with four studs, Figure A. Threaded holes are provided for alternate three-hole mounting, Figure B.



VOCALINE COMPANY OF AMERICA, INC.

Timers and Motors to meet special applications are available from distributors. See Vocaline Bristol Motors Catalog for complete line of motors and timers.

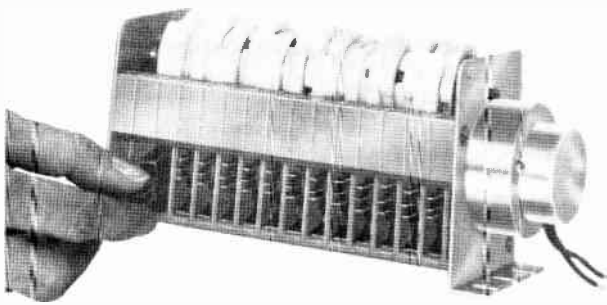
**IMMEDIATE DELIVERY FROM FRANCHISED
VOCALINE BRISTOL MOTORS DISTRIBUTORS**



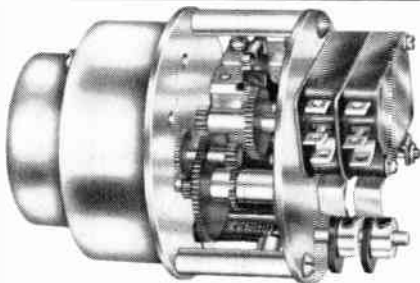
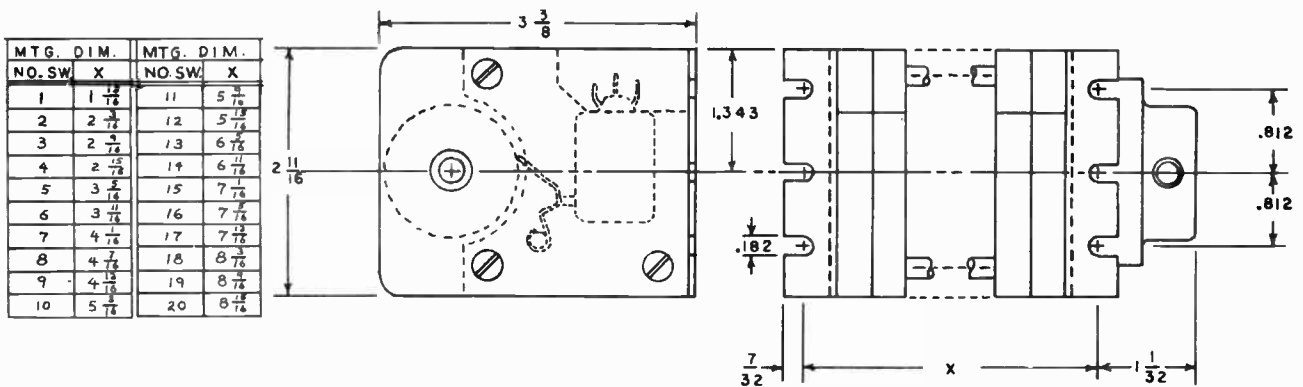


BRISTOL MOTORS

DIVISION OF VOCALINE



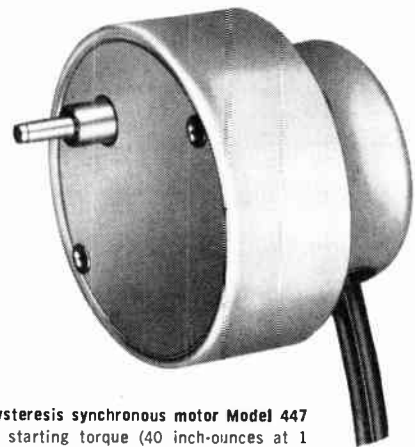
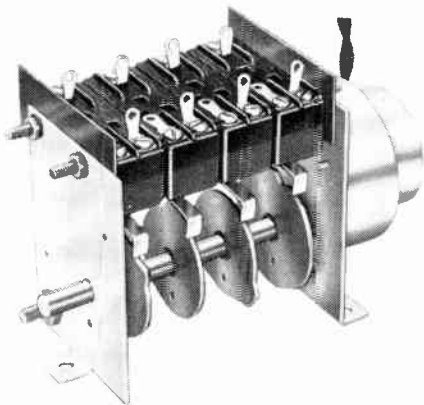
Model 4700 replaceable switch repeat cycle timer is a multi-contact program timer which permits easy switch replacement without the necessity of disassembling. In addition one turn of the calibrated adjusting screw provides a 2% variation of cam time sequence. Switches are rated at 5 amps-115 volts. Standard switch timer available in speeds of 1 rev. per minute, 1 rev. per 5 minutes, 1 rev. 30 minutes, 1 rev. per hour. Price — 4 Switch — \$22.00
8 Switch — \$30.00



Bristol time delay relay series TDR-100 features instantaneous reset action (under 1/5 second) for such applications as photographic timers, electronic circuit safety, alarms, signals, etc. Repeat accuracy better than 1% full scale. Standard unit has two switches rated at 10 amps-non inductive, 5 amps inductive load. Timing sequence may be changed by positioning of set screw cams. Standard time setting full-scale is one hour but may be adjusted to as low as 2 minutes. 115 VAC — Price \$31.45.

Repeat cycle or program timer RCT-100 is a multi-contact timer with high repeat accuracy. Switches are double pole-single throw and rated 20 amps 115-230 volts. Cams are 180 Degrees dual/adjustable for easy setting. Standard 4 switch unit available with motor speeds of 1 rev. per minute, 1 rev. per 5 min. 1 rev. per 30 minutes, and 1 rev per hour. 115 VAC.

Price \$27.20

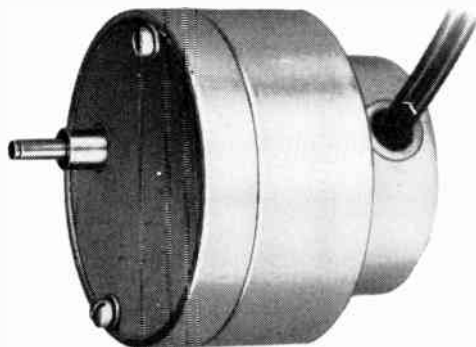


The Bristol hysteresis synchronous motor Model 447 features high starting torque (40 inch-ounces at 1 RPM) and considerably higher running torque. The Model 447 is 2 inches in diameter by 1 $\frac{3}{4}$ " deep and is available off the shelf for 115 Volts A.C. operation in the following speeds: 1 RPM, 2 RPM, 4 RPM, 5 RPM, 10 RPM, 15 RPM, 30 RPM, 60 RPM. Be sure to specify clockwise or counter-clockwise rotation (Rotation is determined facing motor output shaft) Price \$5.00 each.



VOCALINE COMPANY OF AMERICA, INC.

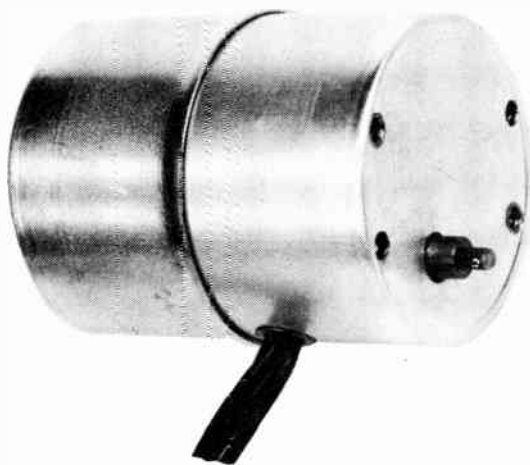


**BRISTOL MOTORS /****DIVISION OF
VOCALINE***SYNCHRONOUS MOTORS AND TIMERS*

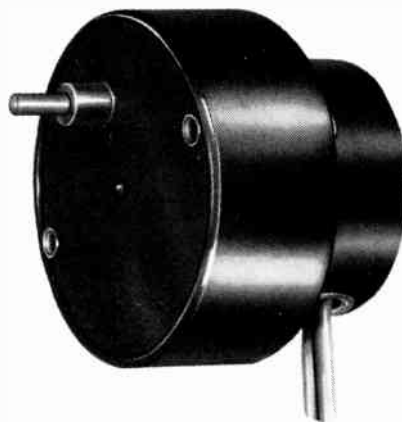
The Bristol Model 420 is a low speed version of Model 447 and develops high torque. The motor's gear train is rated at 20 inch-ounces for continuous operation and 5 inch pounds for static loading or intermittent duty. Size is 2" in diameter by 1 $\frac{3}{4}$ " deep. The following speeds are available for 115 volt operation in both clockwise and counter-clockwise rotation — 1 rev. 30 minutes, 1 rev. per hour, 1 rev. per 6 hours, 1 rev. per 12 hours, 1 rev. per 24 hours, 1 rev. per 30 days. Price \$7.50 each.



Bristol Model 830 hysteresis synchronous reversible motor develops 100 inch-ounce starting torque at 1 RPM. This motor employs a resistor and condenser as a phase shift network and these components are included in the price. Available off the shelf in same speeds as Model 447 for 115 volt A.C. operation — \$12.50 each.

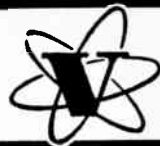


The Bristol Series 900 reversible instrument drive motor provides the highest starting and running torque of any motor in the Bristol line. Starting torque is 225 inch ounces at 1 RPM. This motor utilizes a phase shift network of a resistor and capacitor. These components are provided with each motor. Available speeds for 115 VAC operation 5 RPM, 10 RPM, 15 RPM, 30 RPM, 60 RPM. Price \$25.00.



Bristol shift motor Model 450. This motor features a solenoid action clutch which disengages the rotor from gear train when motor is not energized allowing easy manual positioning or resetting of the output shaft. Develops 9 inch ounce starting torque. Available at 1 RPM, 2 RPM, 4 RPM, and 10 RPM for 115 volt operation. Be sure to specify clockwise or counter-clockwise rotation. Price \$7.50 each.

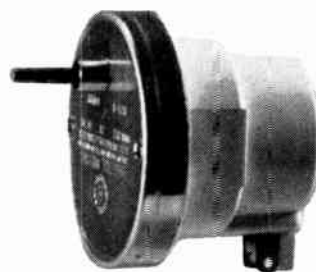
*AVAILABLE "OFF THE SHELF"***VOCALINE COMPANY OF AMERICA, INC.**

**BRISTOL MOTORS****DIVISION OF
VOCALINE***MOTORS AND TIMERS*

Bristol Model 318 D.C. motor for 12 VDC or 24 VDC operation. The self-contained transistorized inverter system is moulded into the housing. Originally developed for airborne equipment where its freedom from radio interference was an essential requirement. Output speed accuracy plus or minus 10%. Starting torque 16 inch ounces at 1 RPM. Operating ambient range plus 50 Degrees C to minus 30 Degrees C. Model 318 has 2" diameter and is 2 3/8" deep and weighs less than 9 ounces. Nominal speeds 1 RPM, 10 RPM, 30 RPM, and 60 RPM.

Price — 12 Volt — \$30.00

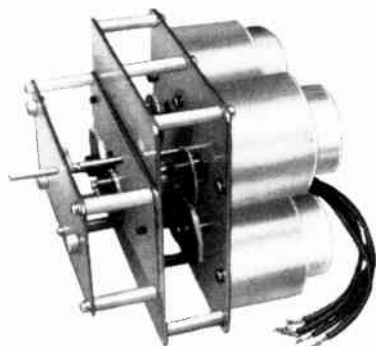
24 Volt — \$35.00

*BATTERY MOTOR*

Bristol Model 311 battery motor is a conventional brush-type battery motor which will operate from two standard 1.5 volt flashlight batteries ("D" cells). This motor provides extended battery life due to low current drain and is self starting. Speed is proportional to input voltage. Available in speeds of 1, 4, 6, 10, 20, 30, and 60 RPM. Priced \$5.00.

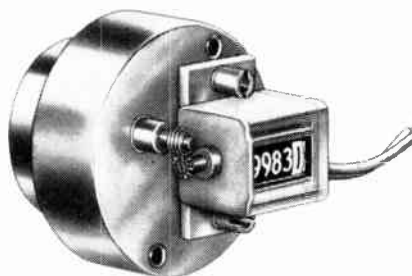
**Bristol
dual speed unit
DSU-100**

Two Model 830 reversible motors are connected through a common external gear train. The speed of the output shaft of the dual speed unit equals the sum or the difference of the input motor speeds depending upon their relative rotation. Standard speeds 1, 2, 3, 4 RPM. Price \$25.00.

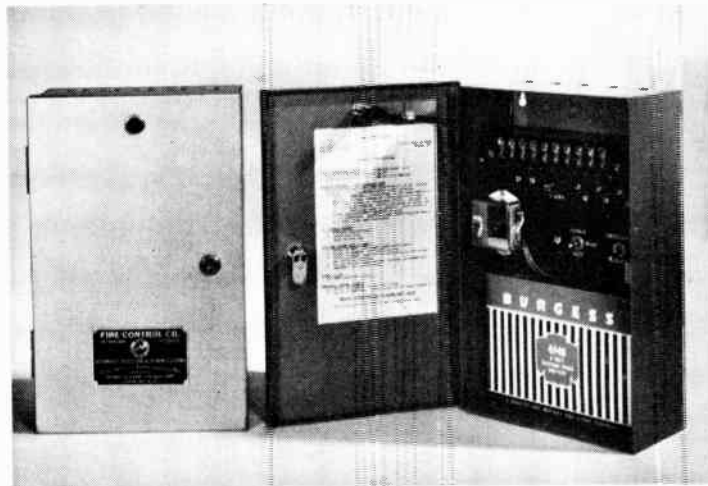


Bristol multiple speed drive — MSU-40. Four reversible motors, coupled to a common output shaft through three differentials, provide, through electrical switching, any speed between 1 RPM and 40 RPM in increments of 1 RPM. 115 VAC — Price \$115.00 each.

Bristol elapsed time indicators Model ET-1B. A Bristol motor coupled to a small, non-reset counter records operating hours registered in hours and tenths of hours up to 9999.9. Two inches in diameter by 2 1/2" in depth. 115 VAC — Price \$16.00 each.

*IMMEDIATE DELIVERY FROM FRANCHISED DISTRIBUTORS***VOCALINE COMPANY OF AMERICA, INC.**

AUTOMATIC FIRE DETECTION AND ALARM SYSTEMS



Control Unit #SC-600R Underwriters' Laboratories' Approved

COMPARE!

SPECIAL FEATURES MEET AND EXCEED
NATIONAL FIRE CODES PAMPHLET #72

MAIN POWER SUPPLY

Input 110-125 Volts AC, 60 Cycles. Maximum current 0.25 ampere. Transformed and rectified to 6 Volts DC, maximum load 2.0 amperes. The Supply is **electrically supervised** so that a failure will sound immediate trouble alarm and automatically transfer to Emergency Power, thus assuring continuity of fire protection. When power is restored, the System automatically returns to Main Power Supply.

EMERGENCY POWER SUPPLY

6 Volt dry battery, Burgess #4F4H or equivalent. Maximum load under alarm condition 2.0 amperes. Order locally.

DETECTOR CIRCUIT

6 Volts DC, maximum current 0.15 ampere. Maximum wire run 5000 ft. #18/2. This Double-Loop Safety Circuit is **electrically supervised** so that a wire break will sound immediate trouble alarm. Emergency circuits compensate for such fault (see N/E Switch), thus assuring continuity of fire protection. Use UL Approved Fire Detector Cable #18/2 for substantial savings in installation.

ALARM CIRCUITS

6 Volts DC, maximum load 1.5 amperes. If only one bell is used, it is **electrically supervised** so that a failure will sound immediate trouble alarm. If two or more bells are used, and/or Annunciator #A-604 is added to the System, they are alternately-connected to the two alarm circuits provided. Use #14/2 wire.

NORMAL/EMERGENCY SWITCH

- Provides emergency circuit adjustment.
- A) Compensates for wire break in Detector Loop, permitting full response from every Detector until repairs are made.
 - B) Silences Trouble Buzzer but maintains Red Light to show emergency condition.

TEST/RESET/SILENCE SWITCH

- Provides simple operating procedure.
- A) Test the System.
 - B) Silence all Firebells and transfer to Red Light.
 - C) Reset to normal supervised operation.

CABINET

14" x 9" x 4". Gray Hammertone. Surface Mount. Cylinder lock, 2 keys.

FIRE CONTROL CO.



WILMINGTON 1, DEL.

**PRICE
BREAK-
THROUGH
!!!**

**NOW YOU CAN OFFER A PREMIUM-QUALITY, ALL-UL-APPROVED
FIRE ALARM SYSTEM AT LOWEST COST, EVEN IN THE HOME MARKET!!**
ORDER THE BASIC SYSTEM—COVERS AVERAGE 3 BEDROOM RANCH HOUSE

\$120⁰⁰ NET

- 1 Control Unit #SC-600R
- 1 Underdome Inside Bell #A-6"
- 6 FyrGuard Detectors #3S
- 4 FyrGuard Detectors #3H

Same System, but substituting #501 & #502 Detectors **\$132.50**

UL APPROVED! The finest quality underdome bells made today. Clear pitch, firm tone. Low current draw. Flush easy-mount on all standard outlet boxes. Use #14/2 wire.



INSIDE BELLS #A

WEATHERPROOF BELLS #AP

| | |
|-----------|---------|
| 6" | \$18.00 |
| 8" | 21.00 |
| 10" | 24.00 |

NET EACH

| | |
|-----------|---------|
| 6" | \$19.50 |
| 8" | 22.50 |
| 10" | 25.50 |



UL APPROVED! The famous Spot Fire Locators. Combination Rate-of-Rise & Fixed-Temperature Automatic Detectors. The standard in the industry and specified in commercial, industrial, and military installations.

Rated to cover 2500 sq. ft. (Room Area 50' x 50').

Use #501 in offices, showrooms, living rooms, bedrooms, etc.

Use #502 in high temperature areas: furnace room, kitchen, attic.

NET EACH \$3.25 Case Lot of 50, **NET EACH \$3.00**

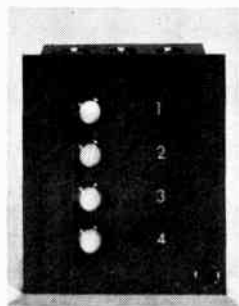
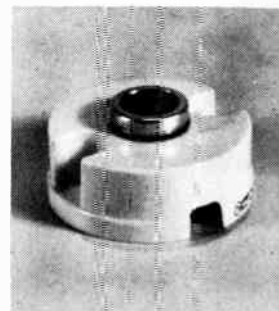
UL APPROVED! FyrGuard Automatic Detectors, Fixed-Temperature. A small, unobtrusive and economical fire detector. It is the most widely-used unit in home fire alarm installations.

Rated to cover 400 sq. ft. (Room Area 20' x 20').

Use #3S in living rooms, bedrooms, closets, halls, etc.

Use #3H in high temperature areas: furnace room, kitchen, attic.

NET EACH \$2.00 Case Lot of 50, **NET EACH \$1.75**



UL APPROVED! 4 Zone Annunciator with all Detector Circuits **electrically supervised**. Simple tie-in connections to Control Unit #SC-600R. Optional, for use where large installations require quick identification of the fire area.

Gray Hammertone Cabinet, Flush Mount: 7" x 6" x 3".

Annunciator #A-604, **NET \$45.00**

UL APPROVED! #5C Manual Pull Station, non-code. Add where required. Wire into Detector Circuit exactly as an Automatic Detector. Flush mount on all handy boxes.

#5C, **NET EACH \$7.50.** Back Box for surface mount **\$2.00**

UL APPROVED! #18/2 Fire Detector Cable. Ivory plastic parallel cord specified for Detector Circuits. 250' Coil, **NET \$4.00**



FIRE CONTROL CO.



WILMINGTON 1, DEL.

PR Crystals

Since  1934

USE  AND KNOW WHERE YOU ARE

PRICE LIST

Effective June 1, 1962
Subject to Change Without Notice



FOR AMATEUR SERVICE

Z-2 Crystals are supplied **only** in the following bands and calibrated **integral kilocycles only, no fractions.**



| Type | Frequency Range | For | Price | Type | Frequency Range | Price | |
|--------------------|------------------|----------------|--------|---------------------|----------------------|----------------------------|--------|
| Z-2 Fundamental | 3500 to 4000 Kc. | ±500 Cycles | \$2.95 | Z-9A 3d Overtone | 24000 to 24666 Kc. | \$3.95 | |
| | 7000 to 7425 Kc. | | | | 25000 to 27000 Kc. | | |
| | 8000 to 8222 Kc. | | | 40M. | Z-9A 5th Overtone | 50000 to 54000 Kc. ±15 Kc. | \$4.95 |
| | 8334 to 9000 Kc. | | | 2M. 6M. | | | |

(All Z-2 Crystals calibrated with a load of 32 mmfd.)

SPECIAL CRYSTALS



Type Z-6A, Frequency Standard
.486" pin spacing; .050" pins

100 Kc. \$6.95



Type Z-1, MARS and CAP
Calibrated to .005%

Official assigned transmitter frequencies in the range.

1600 to 10000 Kc. \$3.45

Type Z-1, TV Marker Crystals

Channels 2 through 13 \$6.45
4.5 Mc. Inter-carrier, .01% \$2.95
5.0 Mc. Signal Generator, .01% \$2.95
10.7 Mc. FM, IF, .01% \$2.95



Type 2XP

Suitable for converters, experimental, etc. Same holder dimensions as Type Z-2.

1600 to 12000 Kc. ±5Kc. (Fund.) \$3.45
12001 to 25000 Kc. ±10 Kc. (3d Overtone) \$4.45

COMMERCIAL TYPES

Available from 100 Kc. to 70 Mc. Prices on request.

CITIZENS BAND CLASS "D"

Type Z-9R, Transmitter

FCC Assigned Frequencies in Megacycles.

| | | | | |
|--------|--------|--------|--------|--------|
| 26.965 | 27.025 | 27.085 | 27.155 | 27.215 |
| 26.975 | 27.035 | 27.105 | 27.165 | 27.225 |
| 26.985 | 27.055 | 27.115 | 27.175 | 27.255 |
| 27.005 | 27.065 | 27.125 | 27.185 | |
| 27.015 | 27.075 | 27.135 | 27.205 | |



Be sure to specify manufacturer and model number of equipment. Calibrated .005%. Each \$2.95

Citizens Band Class "D" Type Z-9R, Receiver

In ordering Receiver Crystals, specify I. F. Frequency, also whether receiver oscillator is above or below Transmitter Frequency. Be sure to specify manufacturer and model number of equipment. Calibrated .005%. Each \$2.95

Type Z-9R, RADIO CONTROL

FCC Assigned Frequencies in Megacycles.

| | | |
|--------|--------|--------|
| 26.995 | 27.095 | 27.195 |
| 27.045 | 27.145 | 27.255 |



Be sure to specify manufacturer and model number of equipment. Calibrated .005%. Each \$2.95

VHF Type Z-9R, AIRCRAFT

For LEAR, NARCO and similar equipment operating in the 121 Mc. region, requiring crystals in 30 Mc. range. Each \$4.95



ACCESSORIES

| | |
|--|-----|
| Single Sockets for Z-9, Z-9A, Z-9R | 25c |
| Single Sockets for Z-1, Z-2, and 2XP | 30c |
| Dual Sockets for Z-1, Z-2 and 2XP | 35c |
| Adapters, to adapt Z-1, Z-2 and 2XP to 3/4" Socket | 40c |

ALL PR CRYSTALS ARE UNCONDITIONALLY GUARANTEED.

PETERSEN RADIO Company, Inc., Council Bluffs, Iowa

TEXAS CRYSTALS...FOR EVERY PURPOSE



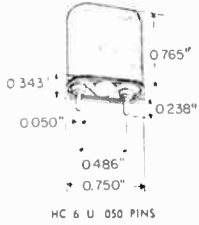
Made to order crystals in pressure type holders can be supplied in five types as shown. All TEXAS CRYSTALS are cut, lapped, and etched to exact frequencies. They are supplied for oscillator circuits having 32 MMFD capacity, unless otherwise ordered, as the crystal frequency will vary with capacity of the circuit.

CRYSTALS MADE TO ORDER

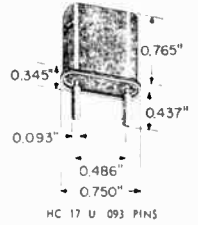
| | | |
|---------------------|-----------|--------|
| M 1,001 to 1,600 KC | .005% TOL | \$4.50 |
| 1,601 to 2,600 KC | .005% TOL | \$2.75 |
| 2,600 to 9,000 KC | .005% TOL | \$2.50 |
| 9,000 to 10,000 KC | .005% TOL | \$3.00 |

Low frequency crystals from 1001 KC to 2100 KC are space mounted—all others are pressure mounted. The advantage of the pressure mount crystal is its ability to handle more current (up to 50 Milliwatts) without fracture. Order by frequency, type holder, tolerance, and circuit capacity (if known) or type of equipment in which it is to be used.

HERMETICALLY SEALED CRYSTALS MADE TO ORDER



In recent years, manufacturers have engineered new equipment utilizing the hermetically sealed plated crystal (HC6/U). This crystal is either gold or silver plated, the plating acting as electrode. These crystals should be used in circuits designed for them as the maximum current capacity is 10 milliwatts (5 milliwatts for overtone type). High stability of frequency is a characteristic of this crystal. All TEXAS CRYSTALS are made to conform with military specifications. When ordering for G. E.,



Matarala, Link, etc., for split channel operation, a sample of both transmitting and receiving crystals known to be correct, be sent us with order specifying exact crystal frequency desired. We will correlate crystals and return your samples. Type HC6-U has .050 pins and fits CE-1 socket. Type HC17/U is the same physical size except the pins are .093 diameter. Specify type circuit, if known. Order by fundamental frequency, type circuit, type holder. All plated crystals are .005% tolerance.

| | | |
|------------------------|-------------------------|-------------------|
| 1,000 KC to 1,400 KC | (Fundamental Frequency) | Prices on Request |
| 1,401 KC to 2,000 KC | (Fundamental Frequency) | \$5.00 ea. |
| 2,001 KC to 2,500 KC | (Fundamental Frequency) | 4.00 ea. |
| 2,501 KC to 5,000 KC | (Fundamental Frequency) | 3.50 ea. |
| 5,001 KC to 10,000 KC | (Fundamental Frequency) | 3.25 ea. |
| 10,001 KC to 15,000 KC | (Fundamental Frequency) | 3.75 ea. |
| 15 MC to 20 MC | (Fundamental Frequency) | 5.00 ea. |

OVERTONE CRYSTALS

| | | |
|-----------------|-------------------------|------------|
| 15 MC to 30 MC | Third Overtone | \$3.85 ea. |
| 30 MC to 40 MC | Third Overtone | 4.10 ea. |
| 45 MC to 65 MC | Third or Fifth Overtone | 4.50 ea. |
| 65 MC to 100 MC | Fifth Overtone | 6.00 ea. |



HC-6 U

\$2.95
EACH

CLASS "D" CITIZEN BAND CRYSTALS 23 Frequencies—3rd Overtone—.005% TOL.

All "Citizen Band" crystals supplied in HC-6/U holders. Pin spacing .493—Pin dia. .050—Frequencies listed in megacycles. Use circuit recommended in our catalog. Order by frequency.



CE-1 20c
Ceramic Low Loss
Socket for HC-6/U
Holder — 1/2" Pin
Spacing .050"
Holes.

| CHANNEL | CHANNEL | CHANNEL | CHANNEL | CHANNEL |
|----------|----------|-----------|-----------|-----------|
| 26.965 1 | 27.005 4 | 27.065 9 | 27.105 12 | 27.175 18 |
| 26.975 2 | 27.015 5 | 27.075 10 | 27.115 13 | 27.185 19 |
| 26.985 3 | 27.025 6 | 27.085 11 | 27.125 14 | 27.205 20 |
| | 27.035 7 | | 27.135 15 | 27.215 21 |
| | 27.055 8 | | 27.155 16 | 27.225 22 |
| | | | 27.165 17 | 27.255 23 |

Can be supplied with .093 pins—15c extra. Available in counter display unit

We supply crystals for every popular make of Citizen Band Transceivers

SUB MINATURE CRYSTALS TYPE HC18/U



Miniature type

Sub Miniature Crystals will operate in the same circuits as HC6/U and HC17/U Crystals. They were designed for use where space is a factor. Supplied in either Pin Type or Wire Leads (1/2" length for soldering directly into circuit). Be sure to specify Pin Type or Wire Leads.

| | |
|---------------------|--------|
| Fund Freq. Overtone | |
| 8MC to 12MC | \$3.95 |
| 12MC to 17MC | 4.50 |
| 20MC to 30MC | 3.95 |
| 30MC to 40MC | 4.25 |
| 40MC to 65MC | 4.65 |

CR24/U (BARREL TYPE) CRYSTALS



CR24/U

Designed for the Armed Services the CR24/U is a Pressure Type "AT" Crystal which will accommodate more current than the plated crystal. From 15 to 25MC the crystal is a third overtone—From 25.001 to 60MC the crystal is a fifth overtone.

All Frequencies from 15MC to 50 MC \$5.95

TEXAS AMATEUR CRYSTALS

All Texas amateur crystals are lapped and etched to frequency and supplied in FT 243 holders. They can be supplied in MC7, FT171 or DC34 holders for 25c extra per crystal.....\$1.50 each

AIRCRAFT CRYSTALS

All crystals are supplied at 1/4 operating frequency unless otherwise specified. Tolerance .005%. Order by final frequency and type equipment. Be sure to designate HC6/U holder, or 'miniature' type.

Frequencies in stack from 118 MC to 130 MC
Type HC6/U—all frequencies\$3.85 each
Miniature type—all frequencies 4.75 each
Note: Above crystals can be supplied with wire leads for soldering directly to equipment at 25c per crystal extra.
AIRPORT OWNERS AND SERVICE DEPARTMENTS WRITE FOR QUANTITY PRICES

MARINE CRYSTALS

Supplied in 4 types of holders—FT243, MC7, CR1/AR, HC6/U. .005% tolerance. Order by frequency for transmitter for transmitter types and actual crystal frequency for receiver (including 455 KC IF).
ANY MARINE FREQUENCY FROM 2000 XC to 3200 KC
IN FT243, FT171, MC7 or CR1AR\$2.50
HERMETICALLY SEALED CRYSTALS FOR MARINE IN ANY FREQUENCY (Specify either .050 or .093 pins) 3.50

TEXAS LOW FREQUENCY CRYSTALS

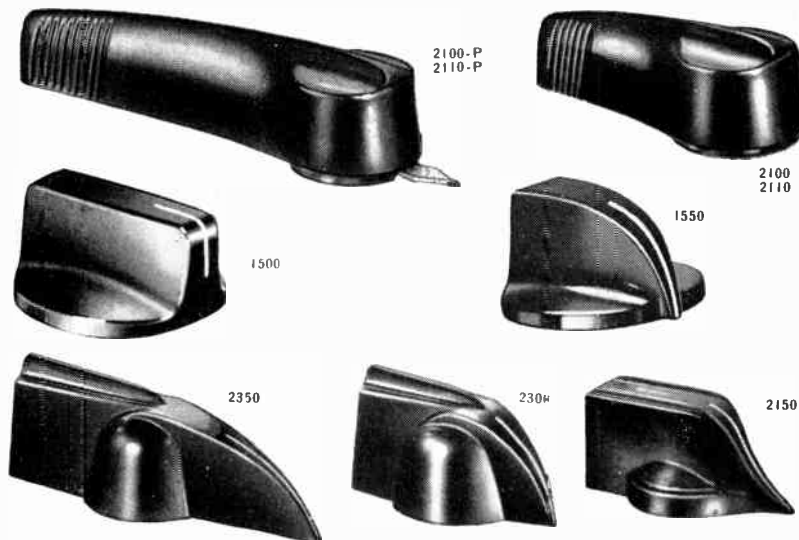
Our own manufacture at military tolerances in HC6/U and HC13/U holders.

| | | | |
|--------------|--------|---------------|--------|
| 80 to 99KC | \$6.50 | 371 to 540KC | \$3.95 |
| 100 to 199KC | 4.50 | 541 to 729KC | 4.50 |
| 200 to 370KC | 4.25 | 730 to 1000KC | 3.55 |

Harry Davies Molding Co.

Molders of Plastics

POINTER AND BAR KNOBS



No. 1500. Dia. 1 1/8", hgt. 9/16", 3/4" molded hole, set screw or knurled hole mounting, locknut recess, indicator line filled or unfilled.

No. 1550. Dia. 1-1/8", hgt. 5/8", 1/4" molded hole or metal insert, set screw, spring or knurled hole mounting, locknut recess

No. 2100. Length 2 1/2", hgt. 5/8", width 3/4", 1/4" molded hole or metal insert, set screw mounting, locknut recess.

No. 2110. Length 1 5/8", hgt. 19/32", width 3/4", 1/4" molded hole or metal insert, set screw or knurled hole mounting, locknut recess

No. 2100-P. Length 2 1/2", hgt. 5/8", width 3/4", 1/4" metal insert and 5/16" pointer, set screw mounting.

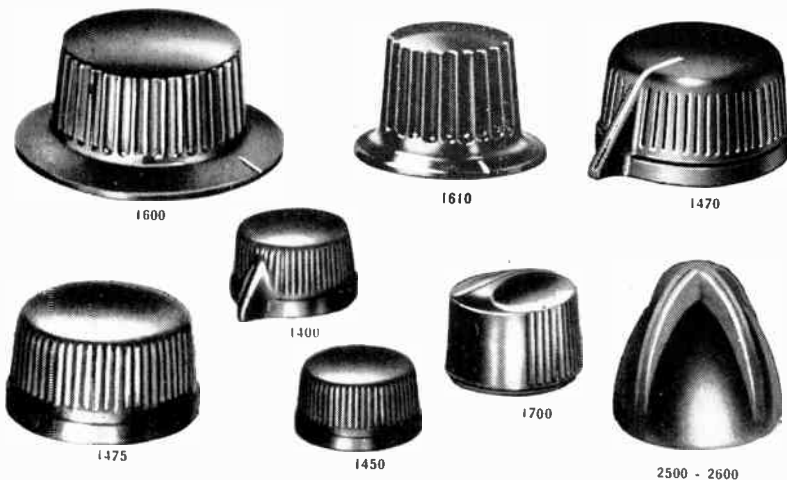
No. 2110-P. Length 1 5/8", hgt. 19/32", width 3/4", 1/4" metal insert and 5/16" pointer, set screw mounting.

No. 2150. Length 1 1/4", hgt. 9/16", 1/4" molded hole, set screw mounting, locknut recess.

No. 2300. Length 1 1/4", hgt. 5/8", 1/4" molded hole, also 1/4" metal insert, set screw or knurled hole mounting, locknut recess.

No. 2350. Length 2", hgt. 5/8", 1/4" molded hole or metal insert, set screw mounting, locknut recess.

CONTROL KNOBS



No. 1406. Dia. 11/16", hgt. 13/32", 1/8" or 1/4" molded hole or brass insert, set screw, spring or knurled hole mounting.

No. 1450. Dia. 11/16", hgt. 13/32", 1/8" or 1/4" molded hole or brass insert, set screw, spring or knurled hole mounting.

No. 1470. Dia. 1", hgt. 1/2", 1/4" molded hole or brass insert, set screw, spring or knurled hole mounting, indicator line filled or unfilled, locknut recess.

No. 1475. Dia. 1", hgt. 1/2", 1/4" molded hole or brass insert, set screw, spring or knurled hole mounting, locknut recess.

No. 1600. Dia. 1 1/2", hgt. 11/16", 1/4" molded hole or metal insert, set screw mounting, locknut recess, indicator line filled or unfilled.

No. 1610. Dia. 15/16", hgt. 5/8", 1/4" or 1/8" molded hole or metal insert, set screw mounting, locknut recess, indicator line filled or unfilled.

No. 1700. Dia. 3/4", hgt. 19/32", 1/4" molded hole or brass insert, set screw, spring or knurled hole mounting.

No. 2500. Dia. 3/4", hgt. 3/4", 1/4" molded hole, set screw, spring or knurled hole mounting.

No. 2600. Dia. 3/4", hgt. 3/4", 1/4" molded hole, set screw, spring or knurled hole mounting.

PUSH BUTTONS



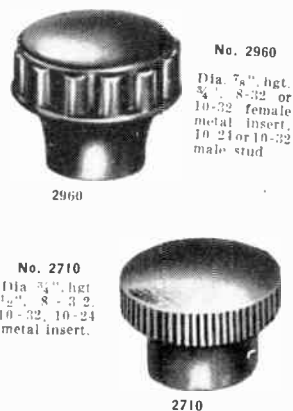
No. 1800. Dia. 7/16", hgt. 1" to 1 3/4", touch tuning, plain or recessed top, push on, to fit flatted shaft .050" x .187" patented friction fit. Also with studs of various lengths.

No. 5149-A. Hgt. 1/4" to 1/2", oval touch tuning. Push-on to fit flatted shaft .050" x .187".

No. 1750. Dia. 31/64", hgt. 9/16" to 1 1/16", touch tuning, push on, to fit flatted shaft .050" x .187".

No. 1770. Dia. 31/64", hgt. 1/2" to 3/4", 6-32 or 8-32 female metal insert, 8-32 male stud.

TERMINAL NUTS



No. 2960

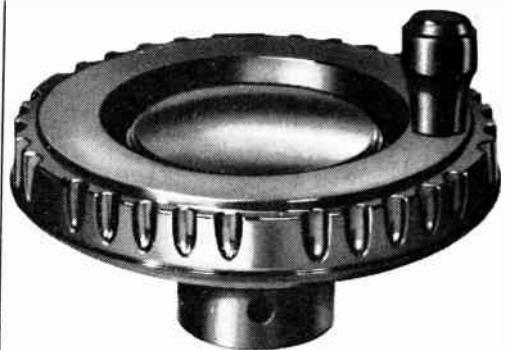
Dia. 7/8", hgt. 3/4", 8-32 or 10-32 female metal insert, 10-24 or 10-32 male stud

No. 2710

Dia. 3/4", hgt. 1/2", 8-32, 10-32, 10-24 metal insert.

2710

SPINNER KNOBS



No. 99. Dia. 3 3/4", hgt. 1 1/2", 3/8" or 1/2" molded hole or metal insert. Set screw mounting, with or without spinner.

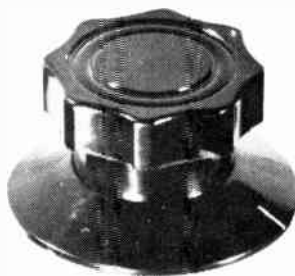
Harry Davies Molding Co.

Molders of Plastics

INSTRUMENT KNOBS



4100
4101
4102
4103



4104
4107
4108
4109



4100
4101
4102
4103

This series can be furnished in compliance with MS 91531.

| Part No. | Knob Dia. | Knob Hgt. | Part No. | Knob Dia. | Skirt Dia. |
|----------|-----------|-----------|----------|-----------|------------|
| 4100 | 1 5/8" | 5/8" | 4104 | 1 1/2" | 1 1/2" |
| 4101 | 1 3/8" | 1 1/2" | 4107 | 1 3/8" | 1 3/8" |
| 4102 | 1 3/8" | 3/8" | 4108 | 1 5/8" | 2 1/2" |
| 4103 | 2 3/8" | 7/8" | 4109 | 2 3/8" | 3" |

Entire series available with 1/4" molded hole or metal insert, set screw mounting. White vinylite pointer available. Pointer lengths, 5/8", 3/4", 7/8", 1 1/4", 1 1/2", 1 3/4", 1 1/2".

Skirt available with or without indicator line filled. Branding stamps constructed to your specifications.

NEW FLUTED INSTRUMENT KNOBS



1910



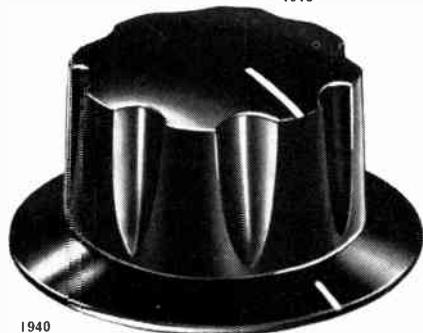
1913



1920



1930



1940



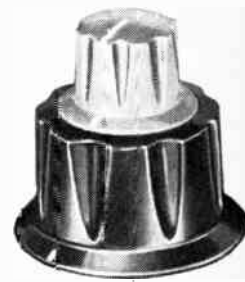
1919



1925



1915



No. 1910. Dia. 3/4", hgt. 1/2", 1/4" or 1/4", molded hole or brass insert, set screw, spring or knurled hole mounting.

No. 1913. Dia. 1 3/8", hgt. 5/8", 1/4" molded hole or brass insert. Set screw mounting.

No. 1915. Dia. 1 1/4", hgt. 1 3/8". Dual concentric control. 1/4" molded hole or brass insert.

No. 1919. Length 1 1/4", hgt. 5/8", 1/4" molded hole or brass insert. Set screw mounting.

No. 1920. Dia. 1 1/4", hgt. 3/4", 1/4" molded hole or brass insert, set screw, spring or knurled hole mounting.

No. 1925. Dia. 1 1/4", hgt. 3/4", 1/4" molded hole or brass insert. Set screw mounting with or without decorative inlay.

No. 1930. Dia. 1 1/4", hgt. 7/8", 1/4" molded hole or brass insert, set screw, spring or knurled hole mounting.

No. 1940. Dia. 2", hgt. 1 3/8", 1/4" molded hole or brass insert. Set screw mounting.

METER CASE AND COVERS



240



241

No. 240. 2" hgt. x 3 3/4" wide x 6 1/4" long. (Outside Dimensions) - 1/4" (Wall Thickness).

No. 241. Mating cover with interlocking lip for No. 240 series cases.

No. 260. 2 1/2" height x 5 1/2" wide x 6 1/4" long. (Outside Dimensions) - 5/32" (Wall Thickness).

No. 261. Mating cover with interlocking lip for No. 260 case.

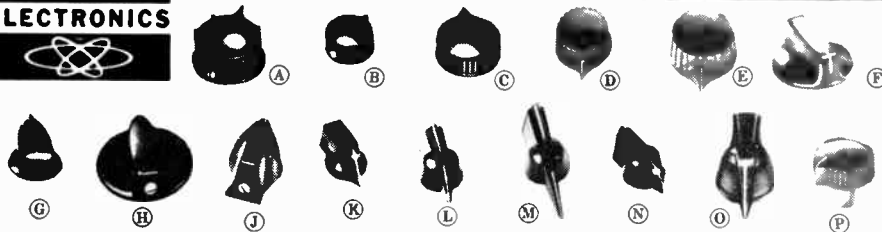
Knobs shown are only part of our stock on hand. Our stock molds are interchangeable and meet most requirements with only minor tooling variations. Let us quote on your specifications.

Write
for
Free
Catalog

**Harry Davies
Molding Co.**
CHICAGO, ILLINOIS



REPLACEMENT KNOBS



POINTER KNOBS

(A) TENITE POINTER KNOB—1" Diameter, 1/2" Height, Fits 1/4" shafts.

Knurl
Cat. No. 24-464 Walnut Net \$.08
24-466 Ivory .08

Set Screw
Cat. No. 24-468 Walnut Net \$.17
24-470 Ivory .17

(B) TENITE POINTER KNOB — 3/8" Diameter, 3/8" Height, Fits 1/4" shafts.

Knurl
Cat. No. 24-472 Walnut Net \$.07
24-474 Ivory .07

Set Screw
Cat. No. 24-476 Walnut Net \$.13
24-478 Ivory .13

(C) TENITE POINTER KNOB — 1 1/8" Diameter, 3/8" Height, Fits 1/4" shafts.

Knurl
Cat. No. 24-480 Walnut Net \$.07
24-482 Ivory .07

(D) BAKELITE POINTER KNOB — 1" Diameter, 1/2" Height, Fits 1/4" shafts.

No Insert—Set Screw
Cat. No. 24-484 Walnut Net \$.13
24-486 Black .13

With Insert—Set Screw
Cat. No. 24-488 Walnut Net \$.30
24-490 Black .30

(E) BAKELITE POINTER KNOB—1 1/4" Diameter, 5/8" Height, Fits 1/4" shafts.

No Insert—Set Screw
Cat. No. 24-492 Walnut Net \$.22
24-494 Black .22
24-496 Ivory .22

Brass Insert—Set Screw

Cat. No. 24-498 Walnut Net \$.33
24-500 Black .33
24-502 Ivory .33

(F) BAKELITE POINTER KNOB—Line filled, 1 1/8" Diameter, 3/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-504 Walnut Net \$.22
24-506 Black .22
24-508 Red .22
24-510 Ivory .22

(G) BAKELITE POINTER KNOB—1 3/8" Length, 3/4" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-512 Walnut Net \$.15
24-514 Black .15

(H) TENITE POINTER KNOB — 1 1/4" Diameter, 3/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-516 Walnut Net \$.23
24-518 Black .23
24-520 Red .23
24-522 White .23

(J) BAKELITE POINTER KNOB—1 1/4" Length, 1 1/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-524 Black Net \$.22
24-526 Red .22
24-528 Ivory .22

(K) BAKELITE POINTER KNOB—1 1/4" Length, 3/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-530 Black Net \$.18
24-532 Walnut .18
24-534 Red .18
24-536 Ivory .18

(L) BAKELITE POINTER KNOB—1 1/4" Length, 5/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-538 Black Net \$.17
24-540 Walnut .17
24-542 Red .17
24-544 Ivory .17

Set Screw
Cat. No. 24-538 Black Net \$.17
24-540 Walnut .17
24-542 Red .17
24-544 Ivory .17

(M) BAKELITE BRASS INSERT — 2" Length, 5/8" Height, Fits 1/4" shafts.

No Insert—Set Screw
Cat. No. 24-546 Black Net \$.30
24-548 Walnut .30
24-550 Red .30
24-552 Ivory .30

Brass Insert—Set Screw
Cat. No. 24-554 Black Net \$.38
24-556 Walnut .38
24-558 Red .38
24-560 Ivory .38

(N) BAKELITE BRASS INSERT—1 1/4" Length, 5/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-562 Black Net \$.23
24-564 Walnut .23
24-566 Red .23

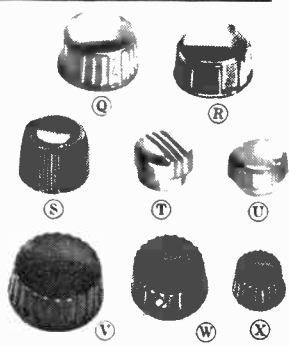
(O) BAKELITE POINTER KNOB—1 1/4" Length, 5/8" Height, Fits 1/4" shafts.

No Insert—Set Screw
Cat. No. 24-570 Walnut Net \$.13
24-572 Black .13
24-574 Red .13
24-576 Ivory .13

Brass Insert—Set Screw
Cat. No. 24-578 Walnut Net \$.22
24-580 Black .22
24-582 Red .22
24-584 Ivory .22

(P) PLASTIC POINTER KNOB — 1 3/8" Diameter, 1/2" shank extension for 1/4" knurled shaft.

Knurl
Cat. No. 24-586 Walnut Net \$.08
24-588 Ivory .08



(Q) BAKELITE KNOB—1 1/8" Diameter, 3/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-772 Walnut Net \$.22
24-774 Ivory .22

(R) BAKELITE KNOB—1" Diameter, 3/8" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-776 Walnut Net \$.20
24-778 Ivory .20

(S) TENITE KNOB — 1" Diameter, 1 1/8" Height, Fits 1/4" shaft.

Knurl
Cat. No. 24-780 Walnut Net \$.10
24-782 Ivory .10

Spring Type
Cat. No. 24-784 Walnut Net \$.10
24-786 Ivory .10

(T) BAKELITE KNOB—7/8" Diameter, 5/8" Height, Fits 1/4" shaft.

Set Screw
Cat. No. 24-788 Walnut Net \$.27
24-790 Ivory .27

(U) BAKELITE KNOB—7/8" Diameter, 5/8" Height, Fits 1/4" shaft.

Set Screw
Cat. No. 24-792 Walnut Net \$.12

(V) BAKELITE KNOB—1 1/4" Diameter, 5/8" Height, Fits 1/4" shaft.

Set Screw—No Insert
Cat. No. 24-796 Walnut Net \$.23
24-798 Black .23

Brass Insert—Set Screw
Cat. No. 24-800 Walnut Net \$.27
24-802 Black .27

(W) BAKELITE KNOB—1" Diameter, 1/2" Height, Fits 1/4" shaft.

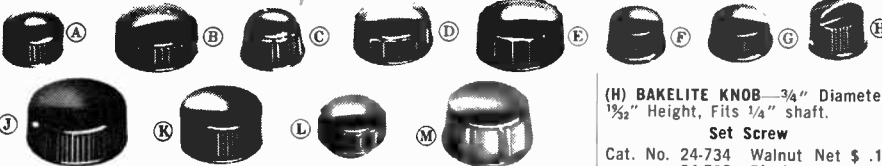
Set Screw—No Insert
Cat. No. 24-804 Black Net \$.20
24-806 Red .20

Brass Insert—Set Screw
Cat. No. 24-808 Black Net \$.22
24-810 Red .22

(X) BAKELITE KNOB—5/8" Diameter, 1 3/2" Height, Fits 1/4" shaft.

Set Screw—No Insert
Cat. No. 24-812 Walnut Net \$.12
24-814 Black .12
24-816 Red .13
24-818 Ivory .13

Set Screw—Brass Insert
Cat. No. 24-820 Walnut Net \$.18
24-822 Black .18
24-824 Red .18
24-826 Ivory .18



(A) TENITE KNOB—3/32" Diameter, 1 3/2" Height, Fits 1/4" shaft.

Knurl
Cat. No. 24-666 Walnut Net \$.08
24-668 Ivory .08

Set Screw
Cat. No. 24-670 Walnut Net \$.15
24-672 Ivory .15

(B) TENITE KNOB—1 3/8" Diameter, 3/8" Height, Fits 1/4" shaft.

Knurl
Cat. No. 24-674 Walnut Net \$.08
24-676 Ivory .08

Spring Type
Cat. No. 24-678 Walnut Net \$.08
24-680 Ivory .08

(C) TENITE KNOB—3/4" Diameter, 1/2" Height, Fits 1/4" shaft.

Knurl
Cat. No. 24-682 Walnut Net \$.08
24-684 Ivory .08

Set Screw
Cat. No. 24-686 Walnut Net \$.12
24-688 Ivory .12

(D) TENITE KNOB—1 3/8" Diameter, 3/8" Height, Fits 1/4" shaft.

Knurl
Cat. No. 24-690 Walnut Net \$.08
24-692 Ivory .08

Spring Type
Cat. No. 24-694 Walnut Net \$.08

(E) TENITE KNOB—1 1/8" Diameter, 3/8" Height, Fits 1/4" shafts.

Knurl
Cat. No. 24-700 Walnut List \$.08
24-702 Ivory .08

Spring Type
Cat. No. 24-704 Walnut Net \$.08
24-706 Ivory .08

Set Screw
Cat. No. 24-708 Walnut Net \$.15
24-710 Ivory .15

(F) BAKELITE KNOB—1 1/8" Diameter, 1 3/2" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-712 Walnut Net \$.13
24-714 Black .13
24-716 Red .13
24-718 Ivory .13

Set Screw with Arrow
Cat. No. 24-720 Walnut Net \$.20
24-722 Black .20
24-724 Red .26
24-726 Ivory .20

(G) BAKELITE KNOB—1" Diameter, 1/2" Height, Fits 1/4" shafts.

Set Screw
Cat. No. 24-728 Black Net \$.22
24-730 Red .22
24-732 Ivory .22

(H) BAKELITE KNOB—3/4" Diameter, 1 3/2" Height, Fits 1/4" shaft.

Set Screw
Cat. No. 24-734 Walnut Net \$.18
24-736 Black .18
24-738 Ivory .18

(J) TENITE KNOB—1 3/8" Diameter, 1/2" Height, Fits 1/4" shaft.

Knurl
Cat. No. 24-740 Walnut Net \$.10
24-742 Ivory .10

(K) TENITE KNOB—1 1/4" Diameter, 1/2" Height, Fits 1/4" shaft.

Knurl
Cat. No. 24-744 Walnut Net \$.08
24-746 Ivory .08

Set Screw with Arrow
Cat. No. 24-748 Walnut Net \$.08
24-750 Ivory .08

(L) BAKELITE KNOB—7/8" Diameter, 1/2" Height, Fits 1/4" shaft.

Set Screw
Cat. No. 24-752 Walnut Net \$.20
24-754 Black .20
24-756 Ivory .22

Set Screw with Arrow
Cat. No. 24-758 Walnut Net \$.27
24-760 Black .27
24-762 Ivory .27

(M) BAKELITE KNOB—1" Diameter, 3/8" Height, Fits 1/4" shaft.

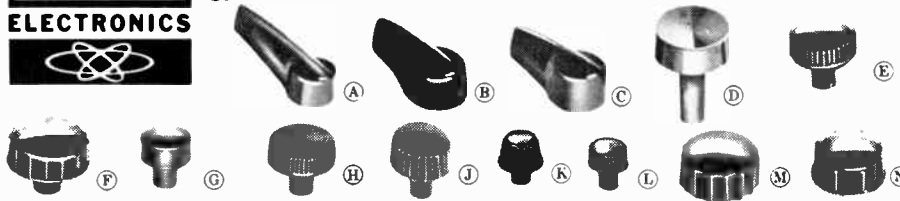
Set Screw
Cat. No. 24-764 Walnut Net \$.17
24-766 Ivory .17



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GEE-LAR REPLACEMENT KNOBS



(A) BAKELITE KNOB—2½" Length, 5/8" Height, Fits ¼" shafts.

NO INSERT—SET SCREW
Cat. No. 24-590 Black Net \$.27
24-592 Walnut .27

BRASS INSERT—SET SCREW
Cat. No. 24-594 Black Net \$.33
24-596 Walnut .33

(B) BAKELITE KNOB—1½" Length, 1/32" Height, Fits ¼" shafts.

SET SCREW
Cat. No. 24-598 Black Net \$.22
24-600 Walnut .22

(C) BAKELITE BRASS INSERT—1½" Length, 1/32" Height, Fits ¼" shafts.

SET SCREW
Cat. No. 24-602 Black Net \$.33
24-604 Walnut .33

(O) TENITE KNOB—1¾" Shank, 1 1/8" Diameter, 3/8" Height, Fits ¼" shafts.

KNURL
Cat. No. 24-606 Walnut Net \$.12
24-608 Ivory .12

(E) TENITE KNOB—1¾" Diameter, 1/16" Height, ½" Shank Extension, Fits ¼" shafts.

KNURL
Cat. No. 24-610 Walnut Net \$.08
24-612 Ivory .08

(F) TENITE KNOB—1¼" Diameter, 3/16" Height, ½" Shank Extension, Fits ¼" shafts.

KNURL
Cat. No. 24-614 Walnut Net \$.12
24-616 Ivory .12

(G) TENITE KNOB—¾" Diameter, 3/16" Height, ½" Shank Extension, Fits ¼" shafts.

KNURL
Cat. No. 24-618 Walnut Net \$.08
24-620 Ivory .08

(H) TENITE KNOB—1¾" Diameter, 3/8" Height, ½" Shank Extension, Fits ¼" shafts.

KNURL
Cat. No. 24-622 Walnut Net \$.10
24-624 Ivory .10

(J) PLASTIC KNOB—1¾" Diameter,

½" Shank Extension for ¼" Knurled Shaft.

KNURL
Cat. No. 24-626 Walnut Net \$.08
24-628 Ivory .08

(K) PLASTIC KNOB MIDGET TYPE—¾" Diameter, 3/8" Shank Extension, Fits ¼" shafts.

KNURL
Cat. No. 24-634 Walnut Net \$.08
24-636 Ivory .08

(L) PLASTIC KNOB MIDGET TYPE—23/32" Diameter, ½" Shank Extension, Fits ¼" shafts.

KNURL
Cat. No. 24-638 Walnut Net \$.08
24-640 Ivory .08

(M) TENITE KNOB—1½" Diameter, ½" Height, Fits ¼" shafts.

KNURL
Cat. No. 24-642 Walnut Net \$.08
24-644 Ivory .08

SPRING TYPE
Cat. No. 24-646 Walnut Net \$.15
24-648 Ivory .15

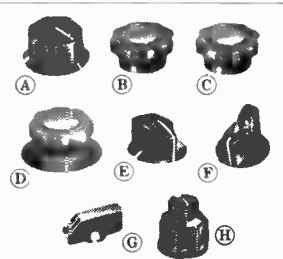
SET SCREW
Cat. No. 24-650 Walnut Net \$.15
24-652 Ivory .15

(N) TENITE KNOB—1" Diameter, 3/8" Height, Fits ¼" shafts.

KNURL
Cat. No. 24-654 Walnut Net \$.08
24-656 Ivory .08

SPRING TYPE
Cat. No. 24-658 Walnut Net \$.12
24-660 Ivory .12

SET SCREW
Cat. No. 24-662 Walnut Net \$.15
24-664 Ivory .15



GEE-LAR KURZ-KASCH KNOBS

(A) POINTER KNOBS—Indicator line, ¾" Diameter, 3/16" Height.

Cat. No. 25-034 Net \$.45
1" Diameter, 1/32" Height.

Cat. No. 25-036 Net \$.52
1¼" Diameter, 3/32" Height.

Cat. No. 25-038 Net \$.52
1½" Diameter, 3/4" Height.

Cat. No. 25-040 Net \$.52
2" Diameter, 7/8" Height.

Cat. No. 25-042 Net \$.97
No Indicator Line.

1½" Diameter, 3/4" Height.
Cat. No. 25-044 Net \$.48

2" Diameter, 7/8" Height.
Cat. No. 25-046 Net \$.93

(B) POINTER KNOBS—1" Diameter, 5/8" Height, 3/4" Pointer.

Cat. No. 25-048 Net \$.67
1½" Diameter, 5/8" Height, 3/4" Pointer.

Cat. No. 25-050 Net \$.67
1¾" Diameter, 1/16" Height, 1 1/8" Pointer.

Cat. No. 25-052 Net \$.90
1½" Diameter, 3/4" Height, 1 1/8" Pointer.

Cat. No. 25-054 Net \$.90
2¾" Diameter, 7/8" Height, 1 1/8" Pointer.

Cat. No. 25-056 Net \$ 1.22
1" Diameter, 5/8" Height.

Cat. No. 25-058 Net \$.57
1½" Diameter, 5/8" Height.

Cat. No. 25-060 Net \$.68
1¾" Diameter, 1/16" Height.

Cat. No. 25-062 Net \$.90
1½" Diameter, 3/4" Height.

Cat. No. 25-064 Net \$.75
2¾" Diameter, 7/8" Height.

Cat. No. 25-066 Net \$ 1.08
1" Diameter, 1 1/8" Skirt.

Cat. No. 25-068 Net \$ 1.33
1¾" Diameter, 23/32" Height, 1 1/4" Skirt.

Cat. No. 25-070 Net \$ 1.28
1½" Diameter, 7/8" Height, 2 1/8" Skirt.

Cat. No. 25-072 Net \$ 1.45
2¾" Diameter, 1 1/8" Height, 3" Skirt.

Cat. No. 25-074 Net \$ 2.25
1" Diameter, 5/8" Height.

(E) POINTER KNOB BRASS INSERT—1 1/8" Diameter, 5/8" Height, 1 Set Screw.

Cat. No. 25-078 Net \$.15
1 1/2" Length, 5/8" Height, 1 Set Screw.

(G) BAR KNOB NO BRASS INSERT—1 1/2" Length, 5/8" Height, 1 Set Screw.

Cat. No. 25-080 Net \$.30
1 1/4" Diameter, 1 1/4" Height.

(H) DUAL CONTROL—1" Diameter, 1 1/4" Height.

Cat. No. 25-086 Net \$.98



GEE-LAR KURZ-KASCH

(A) POINTER KNOB BRASS INSERT—1¼" Length, 5/8" Height, MIL Spec. AN3219-1.

Cat. No. 25-088 Black Net \$.28
25-092 Black Net \$.37

(C) BAR KNOB BRASS INSERT—1¼" Length, 23/32" Height, Black only.

Cat. No. 25-098 Black Net \$.80
25-100 Black Net \$.75

(E) BRASS INSERT NO ARROW—¾" Diameter, 2 1/4" Height, Black only.

Cat. No. 25-102 Black Net \$.42
25-104 Black Net \$.38

(F) BRASS INSERT WITH ARROW—1 1/8" Diameter, 3/8" Height, Black only.

Cat. No. 25-106 Black Net \$.43
25-108 Black Net \$.38

(H) POINTER KNOB 1/8" BRASS INSERT—¾" Diameter, 7/8" Height.

Cat. No. 25-116 Black Net \$.47
25-118 Black Net \$.42

(J) BAKELITE POINTER KNOB—1 1/8" Diameter, 1 1/2" Height, Fine serrations, Fits ¼" shaft.

SET SCREW
Cat. No. 24-430 Walnut Net \$.13
24-432 Black .13

24-434 Red .15
24-436 Ivory .15

(K) BAKELITE POINTER KNOB—1 1/8" Diameter, 1 1/2" Height, Fits ¼" shaft.

NO INSERT—SET SCREW
Cat. No. 24-440 Walnut Net \$.12
24-442 Black .12

24-444 Red .12
24-446 Ivory .12

WITH BRASS INSERT
Cat. No. 24-448 Walnut Net \$.18
24-450 Black .18

24-452 Red .18
24-454 Ivory .25

(L) POINTER BAR KNOB BRASS BUSHING—2¾" Length, Fits ¼" shaft, Metal pointer can be removed.

SET SCREW
Cat. No. 24-456 Black Net \$.50
24-458 Walnut .55

(M) POINTER BAR KNOB BRASS BUSHING 1 5/8" Length, Fits ¼" shaft, Metal pointer can be removed.

SET SCREW
Cat. No. 24-460 Black Net \$.50
24-462 Walnut .50

(N) BAKELITE POINTER KNOB—1¾" Diameter, 7/8" Height, with molded white arrow, brass bushing, Black only.

Cat. No. 25-000 Set Screw Type Net \$.43

(O) BAKELITE WITH BRASS INSERT—1 1/2" Diameter, 3/4" Height, Indicator line, Black only.

Cat. No. 25-002 Set Screw Type Net \$.30

(P) BAKELITE SKIRT KNOBS—1 1/2" Skirt Diameter, 1 1/8" Height.

Cat. No. 25-004 Set Screw Type Net \$.23

(Q) POINTER KNOBS—1 1/8" Diameter, 5/8" Height, 3/4" Pointer.

Cat. No. 25-006 Net \$.60
1 3/8" Diameter, 1 1/8" Height, 1 1/8" Pointer.

Cat. No. 25-008 Net \$.62
1 5/8" Diameter, 3/4" Height, 1 1/8" Pointer.

Cat. No. 25-010 Net \$.68
2 3/8" Diameter, 7/8" Height, 1 1/8" Pointer.

Cat. No. 25-012 Net \$.78
(R) SKIRT KNOBS—1 1/8" Diameter, 1 1/8" Height, 1 1/2" Skirt.

Cat. No. 25-014 Net \$.75
1 1/8" Diameter, 1 1/8" Height, 1 3/4" Skirt.

Cat. No. 25-016 Net \$.75

1 3/8" Diameter, 7/8" Height, 1 1/2" Skirt.

Cat. No. 25-018 Net \$.77
1 3/8" Diameter, 7/8" Height, 1 3/4" Skirt.

Cat. No. 25-020 Net \$.77
1 5/8" Diameter, 23/32" Height, 2 1/8" Skirt.

Cat. No. 25-022 Net \$.90
2 3/8" Diameter, 1 1/2" Height, 3" Skirt.

Cat. No. 25-024 Net \$ 1.25

(S) BAKELITE KNOB—1 1/8" Diameter, 5/8" Height.

Cat. No. 25-026 Net \$.37
1 3/8" Diameter, 1 1/8" Height.

Cat. No. 25-028 Net \$.42
1 5/8" Diameter, 3/4" Height.

Cat. No. 25-030 Net \$.48
2 3/8" Diameter, 7/8" Height.

Cat. No. 25-032 Net \$.67



GEE-LAR KURZ-KASCH PUSH BUTTON KNOBS

PUSH BUTTON KNOB—1 1/2" Diameter, 1 1/2" Height, 3/8" Hole Depth, Black only. Tapered sides.

Cat. No. 25-118 Black Net \$.12

PUSH BUTTON RECESSED TOP—1 1/2" Diameter, 1 1/2" Height, 3/8" Hole Depth, Top recessed for selector tab, Black only.

Cat. No. 25-120 Black Net \$.12

PUSH BUTTON KNOB—1 1/8" Diameter, 1 1/2" Height, 3/8" Hole Depth, Black only.

Cat. No. 25-122 Black Net \$.12

PUSH BUTTON KNOB—1 1/8" Diameter, 5/8" Height, 3/8" Hole Depth, Black only.

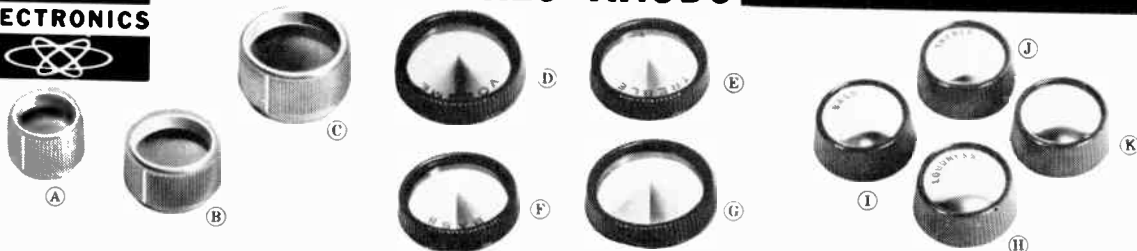
Cat. No. 25-124 Black Net \$.13

PUSH BUTTON RECESSED TOP—1 1/8" Diameter, 5/8" Height, 3/8" Hole Depth, Top recessed for selector tab, Black only.

Cat. No. 25-126 Black Net \$.13



HI-FI AND STEREO KNOBS



HI-FI STEREO KNOB SERIES—For Hi-Fi Stereo Cabinets and Custom Installations. Precision made of TENITE with sparkling brass top ring inserts and indicator lines. Set screw type.

Cat. No. 24-012 Set of 3, Black Net \$.97
24-014 Set of 3, Ivory Net \$.97

INDIVIDUAL KNOBS

"A" Small
1" Diameter, 3/8" Height, Fits 1/4" shaft.
Cat. No. 24-000 Black Net \$.30
24-002 Ivory .30

"B" Medium
1 3/8" Diameter, 3/8" Height, Fits 1/4" shaft.
Cat. No. 24-004 Black Net \$.33
24-006 Ivory .33

"C" Large
1 1/2" Diameter, 7/8" Height, Fits 1/4" shaft.

Cat. No. 24-008 Black Net \$.40
24-010 Ivory .40

AUDIO-PHILE KNOB SERIES—For Hi-Fi Custom Installations. TENITE with brass inserts. Indicated for Volume, Treble, Bass or Plain.

Cat. No. 24-024 Set of 4, Maroon Net \$1.42

"D" Volume
1 1/2" Diameter, 3/8" Height, Fits Knurl shaft.
Cat. No. 24-016 Maroon Net \$.40

"E" Treble
1 1/2" Diameter, 3/8" Height, Fits Knurl shaft.
Cat. No. 24-018 Maroon Net \$.40

"F" Bass
1 1/2" Diameter, 3/8" Height, Fits Knurl shaft.
Cat. No. 24-020 Maroon Net \$.40

"G" Plain
1 1/2" Diameter, 3/8" Height, Fits Knurl shaft.
Cat. No. 24-022 Maroon Net \$.30

HIGH-FIDELITY KNOB SERIES TENITE—with handsome, individually marked brass inserts for Volume, Bass, Treble and Plain.

Cat. No. 24-034 Set of 4, Maroon Net \$1.35

"H" Loudness
1 1/2" Diameter, 1/2" Height, For .250 Diameter and .156 Flat Spring Type Shaft.
Cat. No. 24-026 Maroon Net \$.35

"I" Bass
1 1/2" Diameter, 1/2" Height, For .250 Diameter and .156 Flat Spring Type Shaft.
Cat. No. 24-028 Maroon Net \$.35

"J" Treble
1 1/2" Diameter, 1/2" Height, For .250 Diameter and .156 Flat Spring Type Shaft.
Cat. No. 24-030 Maroon Net \$.35

"K" Plain
1 1/2" Diameter, 1/2" Height, For .250 Diameter and .156 Flat Spring Type Shaft.
Cat. No. 24-032 Maroon Net \$.33



(A) TENITE PLATED GOLD INLAY—1 1/4" Diameter, 1/2" Height, Fits 1/4" shaft.

SPRING TYPE

Cat. No. 24-070 Walnut Net \$.30
24-072 Ivory .30

(B) TENITE PLATED GOLD INLAY—1" Diameter, 5/8" Height, Fits 1/4" shaft.

KNURL TYPE

Cat. No. 24-074 Walnut Net \$.22
24-076 Ivory .22

(C) TENITE PLATED GOLD INLAY—1" Diameter, 1/2" Height, Fits 1/4" shaft.

KNURL TYPE

Cat. No. 24-082 Walnut Net \$.20
24-080 Ivory .20

KNURL TYPE

Cat. No. 24-078 Walnut Net \$.20
24-080 Ivory .20

(D) TENITE PLATED GOLD INLAY—1" Diameter, 3/8" Height, Fits 1/4" shaft.

KNURL TYPE

Cat. No. 24-082 Walnut Net \$.22
24-084 Ivory .22

SPRING TYPE

Cat. No. 24-086 Walnut Net \$.23
24-088 Ivory .23

SET SCREW

Cat. No. 24-090 Walnut Net \$.30
24-092 Ivory .30

(E) TENITE PLATED GOLD INLAY—

3/4" Diameter, 3/8" Height, Fits 1/4" shaft.

KNURL TYPE

Cat. No. 24-094 Walnut Net \$.18
24-096 Ivory .18

SPRING TYPE

Cat. No. 24-098 Walnut Net \$.23
24-100 Ivory .23

(F) TENITE PLATED GOLD INLAY—1 3/8" Diameter, 1/2" Height, Fits 1/4" shaft.

KNURL TYPE

Cat. No. 24-102 Walnut Net \$.23
24-104 Ivory .23

SET SCREW

Cat. No. 24-106 Walnut Net \$.37

(G) TENITE PLATED GOLD INLAY—1" Diameter, 1 1/8" Height, Fits 1/4" shaft.

SET SCREW

Cat. No. 24-110 Walnut Net \$.33
24-112 Ivory .33

(H) TENITE PLATED GOLD INLAY—1 3/8" Diameter, 1/2" Height, Fits 1/4" shaft.

KNURL TYPE

Cat. No. 24-114 Walnut Net \$.25
24-116 Ivory .25

SET SCREW

Cat. No. 24-118 Walnut Net \$.32
24-120 Ivory .32

GENERAL ELECTRIC KNOB REPLACEMENTS



(A) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. G 1001, Color Black & Gold.
Cat. No. 27-064 Channel Knob Net \$.92

CHANNEL SELECTOR KNOB

Original Mfg.'s Part No. G 1002, Color Black & Silver.
Cat. No. 27-066 Channel Knob Net \$.92

(B) FINE TUNING KNOB—Original Mfg.'s Part No. G 1003, Color Silver.
Cat. No. 27-068 Fine Tuning Net \$.92

(C) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. GWT43x246, Color Green & Gold.
Cat. No. 27-070 Channel Knob Net \$1.25

(D) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. GWT43x269, Color Clear & Gold.
Cat. No. 27-072 Channel Knob Net \$2.10

(E) FINE TUNING KNOB—Original Mfg.'s Part No. WT43x40 (RDK222), Color Fawn.
Cat. No. 27-074 Fine Tuning Net \$.57

(F) OFF-ON VOLUME KNOB—Original Mfg.'s Part No. WT43x41 (RDK223), Color Fawn.
Cat. No. 27-076 Off-On Volume Net \$.75

(G) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x42 (RDK224), Color Fawn.
Cat. No. 27-078 Channel Knob Net \$.87

(H) PICTURE VOLUME KNOB—Original Mfg.'s Part No. WT43x43 (RDK225), Color Fawn.
Cat. No. 27-080 Picture Volume Net \$.57

(J) OFF-ON VOLUME KNOB—Original Mfg.'s Part No. WT43x53 (RDK263), Color Brown & Fawn.
Cat. No. 27-082 Off-On Volume Net \$1.00

CHANNEL SELECTOR KNOB

Original Mfg.'s Part No. WT43x54 (RDK264), Color Brown & Fawn.
Cat. No. 27-084 Channel Knob Net \$1.50

(K) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x76 (RDK331), Color Brown & Gold.
Cat. No. 27-086 Channel Knob Net \$1.92

CHANNEL SELECTOR KNOB

Original Mfg.'s Part No. WT43x152 (RDK455), Color Brown.
Cat. No. 27-090 Channel Knob Net \$2.85

(L) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x139 (RDK434), Color Brown & Gold.
Cat. No. 27-092 Channel Knob Net \$2.10

CHANNEL SELECTOR KNOB

Original Mfg.'s Part No. WT43x141 (RDK438), Color Fawn & Gold.
Cat. No. 27-094 Channel Knob Net \$2.28

(M) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x159 (RDK469), Color Brown.
Cat. No. 27-096 Channel Knob Net \$1.77

(N) ON-OFF VOLUME OR BRIGHTNESS—Original Mfg.'s Part No. WT43x158 (RDK467), Color Mahogany & Gold.
Cat. No. 27-462 On-Off Volume Net \$1.27

ON-OFF VOLUME OR BRIGHTNESS—Original Mfg.'s Part No. WT43x163 (RDK473), Color Brown.
Cat. No. 27-464 On-Off Volume Net \$1.00

CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x164 (RDK474), Color Mahogany.
Cat. No. 27-466 Channel Knob Net \$1.50

ON-OFF VOLUME KNOB—Original Mfg.'s Part No. WT43x165 (RDK475), Color Mahogany & Gold.
Cat. No. 27-468 On-Off Volume Net \$1.27

UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x169 (RDK479), Color Mahogany & Gold.
Cat. No. 27-470 UHF Channel Net \$1.77

(O) PICTURE TUNING KNOB—Original Mfg.'s Part No. WT43x171 (RDK490), Color Clear.
Cat. No. 27-472 Picture Knob Net \$.90

UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x176 (RDK521), Color Mahogany & Gold.
Cat. No. 27-474 UHF Channel Net \$1.77

Continued next page



REPLACEMENT KNOBS

GENERAL ELECTRIC KNOB REPLACEMENTS . . . See previous page for illustrations

CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x179 (RDK524), Color Mahogany. Cat. No. 27-476 Channel Knob Net \$1.50

UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x182 (RDK527), Color Gold. Cat. No. 27-478 UHF Channel Net \$1.77

(P) CONTRAST TUNING KNOB—Original Mfg.'s Part No. WT43x184 (RDK530), Color Clear. Cat. No. 27-480 Contrast Tuning Net \$.90

UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x187 (RDK540), Color Navy Blue. Cat. No. 27-482 UHF Channel Net \$1.17

UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x192 (RDK550), Color Bronze & Gold. Cat. No. 27-484 UHF Channel Net \$1.77

UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x194 (RDK552), Color Peacock Blue & Gold. Cat. No. 27-486 UHF Channel Net \$1.77

(Q) BRIGHTNESS KNOB—Original Mfg.'s Part No. WT43x209 (RDK569), Color Navy Blue. Cat. No. 27-488 Brightness Knob Net \$1.00

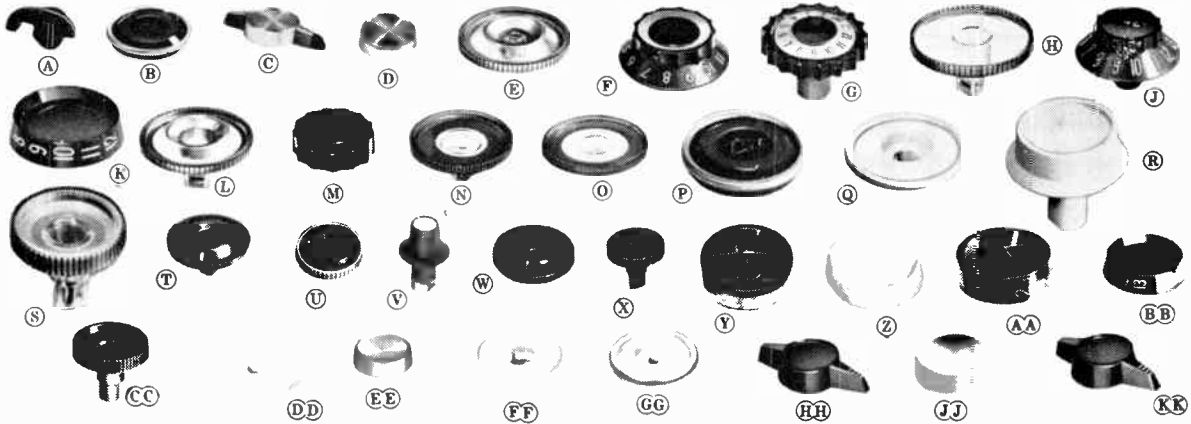
UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x207 (RDK568), Color Cream & Gold. Cat. No. 27-490 UHF Channel Net \$1.77

VHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x217 (RDK587), Color Cream & Gold. Cat. No. 27-492 VHF Channel Net \$1.77

UHF CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. WT43x219 (RDK599), Color Green & Gold. Cat. No. 27-494 UHF Channel Net \$1.77

(R) BRIGHTNESS KNOB—Original Mfg.'s Part No. WT43x226 (RDK609), Color Clear. Cat. No. 27-496 Brightness Knob Net \$.42

RCA EXACT TV REPLACEMENT KNOBS



(A) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 76770, Color Dark Maroon & Gold. Cat. No. 27-200 Channel Knob Net \$.76

(B) FINE TUNING KNOB—Original Mfg.'s Part No. 77707, Color Brown with Polished Brass Shell. Cat. No. 27-202 Fine Tuning Net \$1.57

(C) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 77708, Color Red with Polished Brass Shell. Cat. No. 27-204 Channel Knob Net \$1.50

(D) ON-OFF VOLUME KNOB—Original Mfg.'s Part No. 77710, Color Black with Polished Brass Shell. Cat. No. 27-206 On-Off Volume Net \$1.57

(E) FINE TUNING KNOB—Original Mfg.'s Part No. 79464, Color Gold & Maroon. Cat. No. 27-208 Fine Tuning Net \$1.26

(F) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 79466, Colors Amber, Gray, Maroon & Gold. Cat. No. 27-210 Channel Knob Net \$1.77

(G) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 100627, Color Maroon & Polished Brass. Cat. No. 27-212 Channel Knob Net \$2.70

(H) FINE TUNING KNOB—Original Mfg.'s Part No. 100629, Color Clear with Gold Edge. Cat. No. 27-214 Fine Tuning Net \$1.27

(J) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 100637, Color Brown. Cat. No. 27-216 Channel Knob Net \$1.77

(K) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 100944, Color Dark Wine. Cat. No. 27-218 Channel Knob Net \$1.35

(L) FINE TUNING KNOB—Original Mfg.'s Part No. 101015, Color Gold & Maroon. Cat. No. 27-220 Fine Tuning Net \$1.26

(M) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 101150, Color Dark Wine. Cat. No. 27-222 Channel Knob Net \$.90

(N) FINE TUNING KNOB—Original Mfg.'s Part No. 101154, Color Gold & Maroon. Cat. No. 27-224 Fine Tuning Net \$1.00

(O) FINE TUNING KNOB—Original Mfg.'s Part No. 101276, Color Gold & Maroon. Cat. No. 27-226 Fine Tuning Net \$1.26

(P) BRIGHTNESS KNOB—Original Mfg.'s Part No. 77709, Color Brown & Gold. Cat. No. 27-700 Brightness Net \$1.35

(Q) FINE TUNING KNOB—Original Mfg.'s Part No. 77717, Color Beige & Gold. Cat. No. 27-702 Fine Tuning Net \$1.35

BRIGHTNESS KNOB—Original Mfg.'s Part No. 77718, Color Beige & Gold. Cat. No. 27-704 Brightness Net \$1.35

(R) ON-OFF VOLUME KNOB—Original Mfg.'s Part No. 100621, Color Gray. Cat. No. 27-706 On-Off Volume Net \$.67

ON-OFF VOLUME KNOB—Original Mfg.'s Part No. 101138, Color Brown. Cat. No. 27-708 On-Off Volume Net \$.67

(S) BRIGHTNESS KNOB—Original Mfg.'s Part No. 101124, Color Clear & Gold. Cat. No. 27-710 Brightness Net \$1.17

(T) FINE TUNING KNOB—Original Mfg.'s Part No. 100639, Color Brown. Cat. No. 27-712 Fine Tuning Net \$1.26

(U) CONTRAST-BRIGHTNESS—Original Mfg.'s Part No. 79470, Color Mahogany. Cat. No. 27-714 Contrast-Bright-Net \$1.50

(V) HORIZONTAL CONTROL KNOB—Original Mfg.'s Part No. 101010, Color Maroon. Cat. No. 27-716 Horizontal Net \$.82

(W) FINE TUNING KNOB—Original Mfg.'s Part No. 79864, Color Brown. Cat. No. 27-718 Fine Tuning Net \$1.26

(X) CONTRAST KNOB—Original Mfg.'s Part No. 100622, Color Mahogany. Cat. No. 27-720 Contrast Net \$.82

CONTRAST KNOB—Original Mfg.'s Part No. 100623, Color Gray. Cat. No. 27-722 Contrast Net \$.82

(Y) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 104304, Color Mahogany. Cat. No. 27-724 Channel Knob Net \$1.35

(Z) UHF CHANNEL SELECTOR—Original Mfg.'s Part No. 104305, Color Mahogany. Cat. No. 27-726 Channel Knob Net \$1.35

UHF CHANNEL SELECTOR—Original Mfg.'s Part No. 104306, Color Gray. Cat. No. 27-728 Channel Knob Net \$1.35

(AA) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 102503, Color Gray. Cat. No. 27-730 Channel Knob Net \$3.00

CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 102502, Color Mahogany. Cat. No. 27-732 Channel Knob Net \$3.00

(BB) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 104303, Color Gray. Cat. No. 27-734 Channel Knob Net \$1.35

(CC) CONTRAST KNOB—Original Mfg.'s Part No. 104386, Color Maroon. Cat. No. 27-736 Contrast Knob Net \$.82

(DD) BRIGHTNESS KNOB—Original Mfg.'s Part No. 79080, Color Beige. Cat. No. 27-738 Brightness Knob Net \$1.35

(EE) ON-OFF VOLUME KNOB—Original Mfg.'s Part No. 77710M, Color Mahogany & Gold. Cat. No. 27-740 On-Off Volume Net \$1.35

VOLUME KNOB—Original Mfg.'s Part No. 79445, Color Beige & Gold. Cat. No. 27-742 Volume Knob Net \$1.35

VOLUME KNOB—Original Mfg.'s Part No. 79471, Color Mahogany & Gold. Cat. No. 27-744 Volume Knob Net \$1.35

(FF) FINE TUNING KNOB—Original Mfg.'s Part No. 79077, Color Beige. Cat. No. 27-746 Fine Tuning Net \$1.35

(GG) BRIGHTNESS KNOB—Original Mfg.'s Part No. 77718M, Color Mahogany & Gold. Cat. No. 27-748 Brightness Knob Net \$1.35

FINE TUNING KNOB—Original Mfg.'s Part No. 77717M, Color Mahogany & Gold. Cat. No. 27-750 Fine Tuning Net \$1.35

(HH) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 79222BL, Color Black. Cat. No. 27-752 Channel Knob Net \$1.17

CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 79222, Color Mahogany. Cat. No. 27-754 Channel Knob Net \$1.17

(JJ) ON-OFF VOLUME KNOB—Original Mfg.'s Part No. 77710B, Color Beige & Gold. Cat. No. 27-756 On-Off Volume Net \$1.35

(KK) CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 77708B, Color Beige & Gold. Cat. No. 27-758 Channel Knob Net \$1.35

CHANNEL SELECTOR KNOB—Original Mfg.'s Part No. 77708M, Color Brown & Gold. Cat. No. 27-760 Channel Knob Net \$1.35

ALSO AVAILABLE

Replacement Knobs for
Admiral
Crosley
Emerson
Ho:point
Motorola
Muntz
Olympic
Philco
Westinghouse
Zenith



ELECTRONIC COMPONENTS

GC TV-RADIO DIAL CABLES

Nylon cord with a fiberglass core. All especially treated to prevent stretching and slipping. G-C Cords No. 75, 75-A and 74 will handle 90% of replacements. 25-Ft., 50-Ft., 100-Ft. Spools are supplied in permanent, clear plastic containers.

G-C No. 75 STANDARD THIN NYLON CDRD .028" Diameter—Used on 95% of the latest sets manufactured. Made of finest braided Nylon over a Fiberglass Core. It is pre-stretched and chemically treated.

| | | |
|----------------|----------------|------------|
| Cat. No. 75-25 | 25 ft. spool | Net \$.75 |
| 75-50 | 50 ft. spool | 1.43 |
| 75-100 | 100 ft. spool | 2.37 |
| 75-1000 | 1000 ft. spool | 15.57 |

G-C No. 75-A EXTRA THIN NYLON CDRD .025" Diameter—Used on Motorola, RCA, GE, Sentinel, Stromberg Carlson and others. Extra thin, made of finest braided Nylon, chemically treated.

| | | |
|-----------------|--------------|------------|
| Cat. No. 75A-25 | 25 ft. spool | Net \$.75 |
| 75A-50 | 50 ft. spool | 1.43 |



G-C No. 74 MEDIUM NYLON CDRD .040" Diameter—Used on models of RCA, Philco, Majestic, Wells Gardner, etc. Made of finest braided Nylon over a Spun Fiberglass Core.

| | | |
|----------------|---------------|------------|
| Cat. No. 74-25 | 25 ft. spool | Net \$.75 |
| 74-50 | 50 ft. spool | 1.43 |
| 74-100 | 100 ft. spool | 2.37 |

G-C No. 70 BRAIDED BRONZE CABLE .035" Diameter—Braided phosphor bronze cable made over a Fiberglass core for greater strength and flexibility. Will not unravel.

| | | |
|----------------|----------------|-------|
| Cat. No. 70-25 | 25 ft. spool | 19.77 |
| 70-50 | 50 ft. spool | 1.43 |
| 70-100 | 100 ft. spool | 2.70 |
| 70-1000 | 1000 ft. spool | 22.20 |

G-C No. 73 HEAVY NYLON CORD .062" Diameter—This is a heavier cord such as used on models of Philco, Silver Marshall, Majestic, Brunswick, etc.

| | | |
|----------------|----------------|------------|
| Cat. No. 73-25 | 25 ft. spool | Net \$1.02 |
| 73-50 | 50 ft. spool | 1.73 |
| 73-100 | 100 ft. spool | 2.97 |
| 73-1000 | 1000 ft. spool | 24.90 |

G-C No. 71 42-STRAND BRONZE CABLE .040" Diameter—42-strand twisted phosphor bronze cable used on Majestic, Bosch, Philco, etc. 42 fine strands braided over a cotton core.

| | | |
|----------------|----------------|------------|
| Cat. No. 71-25 | 25 ft. spool | Net \$1.23 |
| 71-50 | 50 ft. spool | 1.88 |
| 71-100 | 100 ft. spool | 3.52 |
| 71-1000 | 1000 ft. spool | 25.80 |

G-C No. 76 SPECIAL THIN BRONZE CABLE .023" Diameter—Extra thin braided bronze cable such as is used on GE and RCA sets. Also used for speaker cones, pigtailed, etc.

| | | |
|----------------|----------------|------------|
| Cat. No. 76-25 | 25 ft. spool | Net \$.97 |
| 76-50 | 50 ft. spool | 1.43 |
| 76-100 | 100 ft. spool | 2.70 |
| 76-1000 | 1000 ft. spool | 20.47 |

G-C COLOR TV NO-STRETCH DIAL CORD

EXTRA FINE .025" Diameter—Supplied on metal spools.

| | | |
|----------------|---------------|------------|
| Cat. No. 87-25 | 25 ft. spool | Net \$.90 |
| 87-100 | 100 ft. spool | 2.70 |

STANDARD .028" Diameter—Supplied on metal spools.

| | | |
|----------------|---------------|------------|
| Cat. No. 88-25 | 25 ft. spool | Net \$.90 |
| 88-100 | 100 ft. spool | 2.70 |

MEDIUM .040" Diameter—Supplied on metal spools.

| | | |
|----------------|---------------|------------|
| Cat. No. 89-25 | 25 ft. spool | Net \$.90 |
| 89-100 | 100 ft. spool | 2.70 |

(A) G-C DIAL CABLE TDDL—A handy tool to aid in replacing worn out cables or cables slipped off of drums, to replace dial cord springs also.

Cat. No. 5096 Net \$.53

(B) G-C DIAL CORD NON-SLIP DRESSING STICK—Simply rub the stick on cord and job is done. Prevents and stops slipping.

Cat. No. 1212 Net \$.25



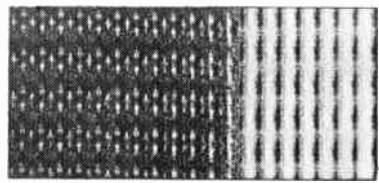
G-C SWED. STEEL SPEAKER SHIMS—Four sizes are furnished in a handy gold-lettered partitioned snap case. .004, .006, .008 and .010 in. Instructions included with kit.

Cat. No. 701 Net \$.53



G-C ORNAMENTAL METAL GRILLE SCREEN—Made of heavy metal, finished in beautiful "Brushed Brass-Rich Gold Color" and lacquered for durability.

| | | |
|---------------|---------|------------|
| Cat. No. 9252 | 12"x18" | Net \$2.10 |
| 9253 | 18"x24" | 3.67 |
| 9254 | 24"x36" | 6.27 |
| 9255 | 24"x48" | 8.67 |
| 9256 | 36"x48" | 11.70 |



G-C PLASTIC SARAN WOVEN GRILLE CLOTH—A beautiful "lumite" plastic woven cloth in attractive patterns. Easily cleaned with a damp cloth. Won't stain, rot or mildew.

| | | |
|---------------|-----------------------|------------|
| Cat. No. 8736 | 12"x18" Bronze & Gold | Net \$.98 |
| 8739 | 36"x36" Bronze & Gold | Net \$5.55 |
| 8737 | 12"x18" Ecru & Ivory | Net \$.98 |
| 8740 | 36"x36" Ecru & Ivory | Net \$5.55 |

G-C GRILLE CLOTH ASSORTMENT—All patterns are modern and the assortment will provide for nearly all of the smaller and moderate size speaker grille openings.

Cat. No. 9114 Net \$1.08

G-C TV GRILLE CLOTH—New, modern patterns specially selected to blend in with the best of television cabinets. Gold metallic braid makes this an outstanding TV grille cloth. Colors: Walnut, Mahogany and Blonde. (Specify color when ordering).

| | | |
|-----------------|--------------------------|------------|
| Cat. No. 8656-E | Envelope 18"x24" | Net \$1.92 |
| 8657-E | Envelope 24"x36" | 3.50 |
| 8658-E | Envelope 36"x36" | 5.13 |
| 8659 | 36" Wide, per yard, bulk | 4.97 |

G-C RADIO CABINET SPEAKER GRILLE CLOTH—The cloth is supplied in light and dark shades in patterns for both small and large cabinets. It is also available in the light and ivory shades for light wood and plastic cabinets. Colors: Walnut, Mahogany, Ivory, (Specify Color Wanted).

| | | |
|----------------|----------------------------|------------|
| Cat. No. 949-1 | 1-Yard Packages | Net \$3.78 |
| 949-1R | 40" Wide Cont. Length, Yd. | 3.60 |
| 949-2R | 50" Wide Cont. Length, Yd. | 3.90 |
| 940 | 18"x20" | .90 |
| 941 | 9"x18" | .45 |
| 942 | 12"x12" | .48 |
| 943 | 14"x18" | .60 |
| 944 | 24"x13" | .82 |
| 945 | 18"x13" | .53 |
| 955 | 18"x25" | 1.35 |



(B) G-C RADIODIAL BELTS—G-C Belt are approved replacements for all sets. They are made of the very best quality belting material and will not stretch. Especially treated to prevent slipping.

Cat. No. 101 thru 195 Net \$.30

G-C SERVICEMEN'S KIT—Kits contain more popular belts, belt scale and complete listing of over 1100 models. Cat. No. G-25 Net \$8.37

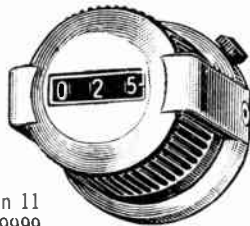
(D) G-C WIRE MARKERS—Handy wire markers needed for tracing circuits, marking wires in replacing parts, etc. Nos. 1 to 33—3 full strips included to kit. Cat. No. 9229 Net \$1.00

(E) G-C MOTOROLA TV DIAL BELT—Replacement belt as used on Motorola TV Tuners. Original replacement part. Cat. No. 196 Net \$.30

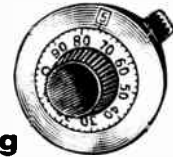
(F) G-C RCA TUNER BELT—Belt used on RCA Tuners such as 8T, 8TC, 8TK, 9TC, etc.

Cat. No. 195 Net \$.30

(G) G-C RCA-TV CHANNEL INDICATOR DRIVE BELT—Exact replacement for 1956 model RCA TV sets. Cat. No. 197 Net \$1.10

SPECTROL**MULTIDIAL[®]****Turns Counting Dials****MODEL 25
Digital
Dial**

- 3-digit dial reads to 1099 in 11 turns • 4-digit dial reads to 9999 in 100 turns • Fine calibrations allow setting to 1/10 of a digit accuracy • 2 to 1 gear ratio between setting knob and device shaft allows extremely fine settings • Available for 1/4", 3/16", and 1/8" diameter shafts • Mounts directly to panel with no auxiliary hardware needed • Satin chrome finish with black plastic turning knob • Standard 10-turn, 3-digit dial price, 1-9 quantities, \$14.25 • Standard 100-turn, 4-digit dial price, 1-9 quantities, \$19.75

**MODEL 11
Precision
Turns-Counting
Dial**

- Diameter 1" • Number of turns 10 • Shaft diameters 1/4", 3/16", 1/8" • Protrusion from panel 7/8" • Brake mechanism One-finger lever action • Finish Satin chrome with black plastic turning knob • Base price in 1-9 quantities: \$7.75

**MODEL 10
Precision
Turns-Counting
Dial**

- Diameter 1" • Number of turns 10 • Shaft diameters 1/4", 3/16", 1/8" • Protrusion from panel 1" • Brake mechanism One-finger lever action • Finish Black anodized aluminum • Base price in 1-9 quantities: \$8.75

**MODEL 20
Precision
Turns-Counting
Dial**

- Diameter 1 1/16" • Number of turns 10 • Shaft diameters 1/4", 3/16", 1/8" • Protrusion from panel 1" • Brake mechanism: One-finger lever action • Finish Black anodized aluminum • Base price in 1-9 quantities: \$7.50

**MODEL 30
Precision
Turns-Counting
Dial**

- Diameter 1 1/16" • Number of turns 10 • Shaft diameters 1/4", 3/16", 1/8" • Protrusion from panel 1" • Brake mechanism One-finger lever action • Finish Satin chrome with black plastic turning knob • Base price in 1-9 quantities: \$5.75

SPECTROL**ELECTRONICS CORPORATION**

SAN GABRIEL, CALIFORNIA

PLAINVIEW, L.I., NEW YORK

BRAMPTON (TORONTO), ONTARIO, CANADA



DIAL CORDS • CABLES • BELTS

Same quality as used on original equipment, in variety of sizes and types and conveniently packaged.



"SPECIAL THIN"

Diameter .025", Breaking Strength 15 lbs.
 Cat. No. 656-02 25 feet Net \$.75
 Cat. No. 656-10 100 feet Net 2.37
 Cat. No. 656-50 500 feet Net 8.58

MEDIUM

Diameter .040", Breaking Strength 35 lbs.
 Cat. No. 652-02 25 feet Net \$.75
 Cat. No. 652-10 100 feet Net 2.37
 Cat. No. 652-50 500 feet Net 10.57

PHOSPHOR BRONZE CABLE

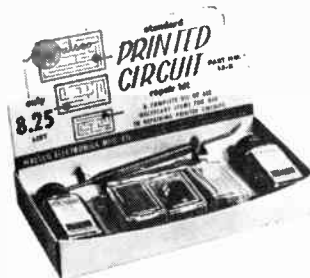
42-strand, .032" diameter, 40 lb. breaking strength. Numerous strands give cable extraordinary flexibility.
 Cat. No. 662-02 25 feet Net \$ 1.23
 Cat. No. 662-10 100 feet Net 3.52
 Cat. No. 662-50 500 feet Net 16.20



WALSCO SAFETY GLASS REMOVER

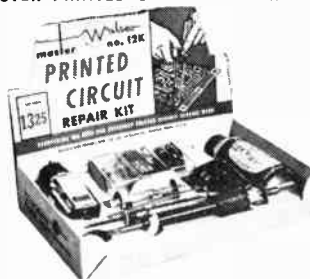
Chrome plated, steel handle is combined with two powerful, long lasting suction cups to insure trouble free removal of safety glass on TV sets.
 Cat. No. 2575 Net \$.30

PRINTED CIRCUIT ACCESSORIES STANDARD PRINTED CIRCUIT REPAIR KIT



Contains one box each of foil, solder washers, solder wire, 1 solder-ease tool, fiber glass brush, printed circuit insulating varnish and solvent, tweezers and complete instructions.
 Cat. No. 13-K Net \$4.95

MASTER PRINTED CIRCUIT REPAIR KIT



Contains all items above plus 1 Ungar soldering iron with 1 special tip and a 6 oz. spray can of printed circuit insulating varnish. Also includes practice wiring board.
 Cat. No. 12-K Net \$9.50

BRAIDED BRONZE CABLE

16-strand, .039" D.D., 50 lb. breaking strength. Good flexibility, excellent abrasion resistance.
 Cat. No. 660-02 25 feet Net \$.97
 Cat. No. 660-50 500 feet Net 2.70
 Cat. No. 654-02 25 feet Net 12.00

STANDARD

Diameter .032", Breaking Strength 20 lbs.
 Cat. No. 654-02 100 feet Net \$.75
 Cat. No. 654-10 100 feet Net 2.37
 Cat. No. 654-50 50 feet Net 8.58

HEAVY

(Used on many Philco and Majestic sets.) Diameter .060".
 Cat. No. 650-02 25 feet Net \$1.02
 Cat. No. 650-10 100 feet Net 2.97

THIN BRONZE CABLE

An extra-thin cable with diameter of only .022". Surprisingly strong and flexible. Non-raveling.
 Cat. No. 664-02 25 feet Net \$.97
 Cat. No. 664-10 100 feet Net 2.70
 Cat. No. 664-50 500 feet Net 12.00

DIAL CORD CLIPS



This assortment of 24 Walsco Dial Cord Clips contains the proper sizes for all standard thicknesses of cords.
 Cat. No. 7745-F Net \$.36

FLAT NYLON LACING CORD



The new, waxed and fungus resistant flat cord for tying harnesses, wrapping coils, etc. Will not cut wire insulation. Breaking strength 50 lbs., approx. width, .085", approx. thickness, .0125".

Cat. No. 666-15 150 ft. spool Net \$2.97
 Cat. No. 666-75 750 ft. spool Net 9.00

STANDARD LACING CORD

Meets specifications JAN T-713—type N—Class 3. In natural gray color. Approximately .040". Min. tensile strength 32 lbs., low stretch.

Cat. No. 665-10 100 ft. spool Net \$1.05
 Cat. No. 665-45 450 ft. spool Net 2.00
 Cat. No. 665-80 1800 ft. spool Net 6.60

PRINTED CIRCUIT ACCESSORIES



(A) PRINTED CIRCUIT REPAIR SOLDER — Especially compounded 11" solder wire with flux core to give a perfect solder joint and flow quickly and easily at lower temperatures required for printed circuit work.
 Cat. No. 649 Net \$.52

(B) PRINTED CIRCUIT REPAIR FOIL — Copper foil with thermo-plastic backing 24 sq. in. For use in repair of damaged or burned out sections of a printed circuit. Bonds permanently to panel with heat of soldering iron.
 Cat. No. 647 Net \$.48

(C) PRINTED CIRCUIT SOLDER WASHERS — Supplies the exact amount solder and flux when replacing components on printed circuit board. Center hole permits passage of most standard wire leads. Box of 60 washers.
 Cat. No. 648 Net \$.60

(D) PRINTED CIRCUIT INSULATING VARNISH — A special formula insulating varnish designed for the protection of printed circuits after they have been worked upon in repair or replacement of parts.

Cat. No. 120-02W 2 oz. bottle with brush Net \$1.30
 Cat. No. 120-06 6 oz. spray can \$2.42 each

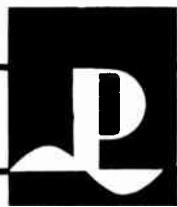
(E) WALSOCO SILVER AND COPPER PRINT — "No more wires" when you use Silver or Copper Print. The same "Pure Silver" or Copper compound as used in Printed Circuit design.
 Cat. No. 36 1/2 Troy oz. Silver Print Net \$2.47
 Cat. No. 36-1 1 Troy oz. Silver Print Net \$4.75
 Cat. No. 37-02 2 oz. bottle Copper Print Net \$1.43

(F) PRINTED CIRCUIT SOLDER-AID TOOL — Has probe on one end for tightening contacts, etc., and a fork on opposite end for handling wires or wire leads while soldering and unsoldering. 8" long plastic handle.
 Cat. No. 2530 Net \$1.00

SEND FOR COMPLETE CATALOG...

shows hundreds of Walsco Electronic Products.



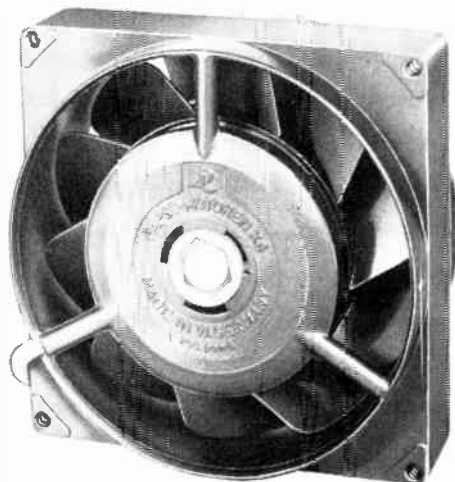


PAMOTOR FANS

**New! MINIATURE
AXIAL FANS**

...up to 4 times

greater cooling efficiency!



| Characteristic | PAMOTOR Model 1000 | Conventional Fan |
|---|--|------------------------|
| Type of Motor | induction (capacitor-type squirrel cage) | shaded-pole |
| Housing | die cast warp-free Zymec | plastic |
| Output @ 60 cps (0 back pressure) (.25" back pressure) (.3" back pressure) | 125 cfm 75 cfm 50 cfm | 100 cfm 20 cfm 0 |
| Output @ 50 cps (0 back pressure) (.25" back pressure) | 100 cfm 62.5 cfm | 75 cfm 5 cfm |
| Operating Temp. Range | -55°C to +85°C | -18°C to +44°C |

The PAMOTOR Model 1000 Miniature Fan is completely interchangeable with conventional units now in use (4 1/8" center-to-center mounting holes). But the similarity ends there.

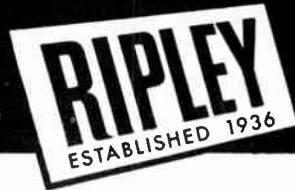
check this comparison chart!

The Model 1000 Fan meets MIL-T-4522E Environmental specifications. Inside-outside rotating motor design gives flywheel effect, resulting in constant, quiet fan speed. Large surface sleeve bearings mean minimum maintenance, maximum reliability.

For complete specifications and name of nearest stocking distributor, write to:

PAMOTOR, Inc.
San Francisco, Calif.

Superior ...
RIPLEY COMPANY, INC.

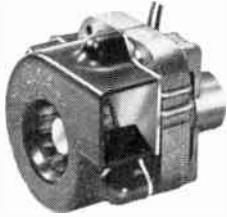


through Research
MIDDLETOWN, CONN.

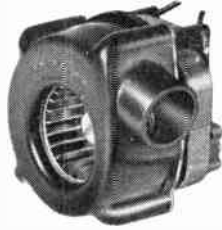
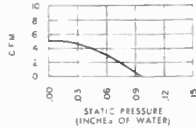
SPACE-SAVING Precision Bearing MOTOR-BLOWERS

A new line of compact Motor-Blowers are now available with air deliveries ranging from 5 to 19 cfm free air output. Designed to fill the requirement where space is a problem and a minimum of 5-year maintenance-free performance is imperative. The precision bearing "power-pac" motor with permanent sealed-in lubrication requires no oiling and operates at

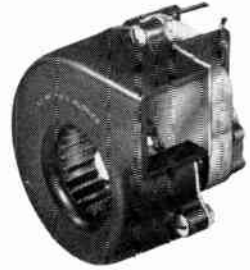
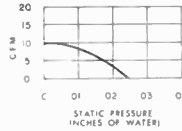
an extremely low noise level. The unit can be mounted in any position. The low input wattage required is a cost saving factor of particular advantage in multiple installations. The metal wheels are carefully balanced and individually matched to assure maximum efficiency and quietness of operation. Blower housings are high-impact phenolic.



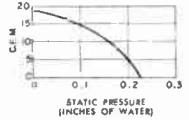
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No. 2

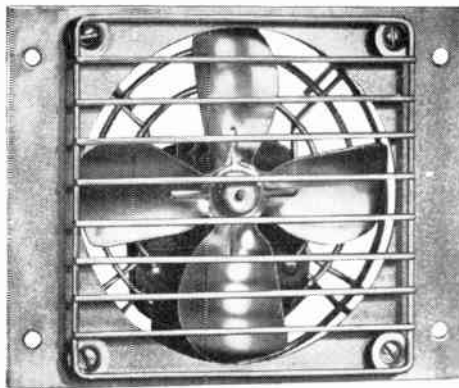


No. 2 1/2



| MODEL NUMBER | TYPE | INPUT VOLTAGE | WATTS | DUTY CYCLE | RPM | OUTPUT FREE AIR CFM | DIMENSIONS | | | | LIST PRICE | |
|--------------|-------|--------------------|-------|------------|------|---------------------|------------|---|--------|---|------------|--------|
| | | | | | | | H | x | W | x | | D |
| UK-1500 | 1 1/2 | 115 V. AC-60 Cycle | 7.5 | Continuous | 3400 | 5 | 2 15/16" | x | 3 5/8" | x | 3 1/16" | \$9.69 |
| UK-2000 | 2 | 115 V. AC-60 Cycle | 7.5 | Continuous | 3300 | 10 | 3 3/4" | x | 3 1/2" | x | 3 1/4" | \$9.78 |
| UK-2500 | 2 1/2 | 115 V. AC-60 Cycle | 8 | Continuous | 3250 | 19 | 4 3/8" | x | 3 7/8" | x | 3 1/4" | \$9.90 |

For applications demanding maintenance-free reliability in excess of 5-years!

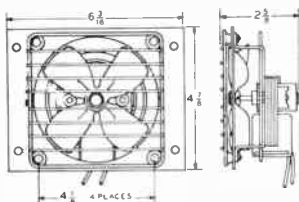


AXIAL FAN MODEL 4.25

THE BIG VALUE IN RUGGEDNESS, COMPACTNESS & HIGH EFFICIENCY

Specifically designed for electronic and instrumentation cooling with tight space requirements — this quiet, dependable 100 CFM "Power-Pac" Axial Fan is recommended for applications where compactness, high-level performance, mounting flexibility and economical price are imperative. "Power-Pack" motor with sealed-in lubrication requires no oiling or maintenance.

Typical applications include: Computers, Electronic Transmitters, Receivers, Radar, TV Cameras, Hi-Fi Equipment, Tape Recorders, Light Projectors, Amplifiers, Test Equipment, Telephone Booths.

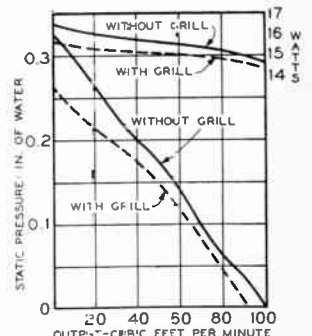


SPACE SAVING DESIGN

Overall mounting plate size is 4 7/8" x 6 3/16" and depth is 2 5/8". Total weight of complete assembly is 1 1/2 pounds. All metal fire-proof construction.

100 CFM CAPACITY

High output of 100 CFM free air delivery. For larger air volumes, two or more units may be mounted in parallel. Note chart for high performance over wide range of static pressures. Unit designed for operation on 50/60 cycles.



Superior ...
RIPLEY COMPANY, INC.

RIPLEY
ESTABLISHED 1936

through Research
MIDDLETOWN, CONN.

L-R BLOWERS — "Mighty-Mites"



No. 1

High impact Phenolic Housing. Weight 1 ounce. Wheel is 1" in dia. Standard shaft bores, $\frac{1}{8}$ " or $\frac{3}{16}$ ". Overall height $2\frac{3}{16}$ ". Overall width $2\frac{1}{8}$ ". Depth $\frac{63}{64}$ ". Blower outlet $\frac{63}{64}$ " wide by $\frac{1}{16}$ " high.

List Price \$3.64 ea.



No. 1 1/2

High impact Phenolic Housing. Weight 2 1/2 ounces. Wheel is 1 1/2" dia. Standard shaft bores, $\frac{3}{16}$ " or $\frac{1}{4}$ ". Overall height 3". Overall width $2\frac{7}{8}$ ". Depth 1". Blower outlet 1" wide by $1\frac{3}{16}$ " high.

List Price \$4.44 ea.



No. 2

High impact Phenolic Housing. Weight 5 ounces. Wheel is 2" dia. Standard shaft bores, $\frac{3}{16}$ " or $\frac{1}{4}$ ". Overall height $3\frac{3}{4}$ ". Overall width $3\frac{1}{2}$ ". Depth $1\frac{3}{8}$ ". Blower outlet $1\frac{1}{8}$ " diameter.

List Price \$4.53 ea.



No. 2 1/2

High impact Phenolic Housing. Weight 5 1/2 ounces. Wheel is 2" in dia. Standard shaft bores, $\frac{3}{16}$ " or $\frac{1}{4}$ ". Overall height $4\frac{3}{8}$ ". Overall width $3\frac{7}{8}$ ". Depth $1\frac{1}{16}$ ". Blower outlet $1\frac{1}{16}$ " wide by $1\frac{1}{32}$ " high.

List Price \$4.65 ea.

No. 2.7

Rigid Steel Housing. Weight 8 1/2 ounces. Wheel is 2 1/2" in dia. Standard shaft bores, $\frac{1}{4}$ " or $\frac{3}{16}$ ". Overall height $4\frac{5}{8}$ ". Overall width $4\frac{13}{32}$ ". Depth $1\frac{33}{64}$ ". Blower outlet $1\frac{33}{64}$ " wide by $1\frac{3}{4}$ " high.

List Price \$4.90 ea.



No. 2 3/4

Rigid Steel Housing. Weight 10 ounces. Wheel is 2 1/2" in dia. Standard shaft bores, $\frac{1}{4}$ " or $\frac{3}{16}$ ". Overall height $4\frac{5}{8}$ ". Overall width $4\frac{13}{32}$ ". Depth $2\frac{5}{64}$ ". Blower outlet $2\frac{5}{64}$ " wide by $1\frac{3}{4}$ " high.

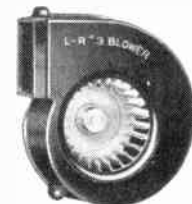
List Price \$4.90 ea.



No. 3

High impact Phenolic Housing. Weight 12 1/2" ounces. Wheel is 3" in dia. Standard shaft bores, $\frac{1}{4}$ " or $\frac{3}{16}$ ". Overall height $6\frac{1}{16}$ ". Overall width $5\frac{1}{2}$ ". Depth $2\frac{3}{8}$ ". Blower outlet $2\frac{3}{8}$ " wide by $2\frac{1}{2}$ " high.

List Price \$5.36 ea.



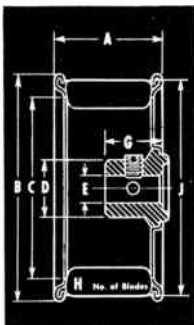
L-R Whirlwind BLOWER WHEELS

A key factor in the superior efficiency of any blower is the wheel utilized in the housing. The Ripley Company provides the utmost in equipment and engineering "know-how" to produce small blower wheels of the highest standard and quality. Manufactured from the finest material available, precision engineered and rigidly inspected to meet your most exacting requirements. Standard wheels are cadmium plated steel. Other material and finishes available. Available for CW or CCW Rotation.

DIMENSIONS AND SPECIFICATIONS

| Wheel Size Dia. | Width | Used in Blower No. | A Width ($\pm\frac{1}{32}$) | B Dia. ($\pm\frac{1}{32}$) | C Dia. ($\pm\frac{1}{64}$) | D Dia. ($\pm.005$) | E* (+.001 - .000) | F Set Screw | G ($\pm.010$) | H Number of Blades | J Dia. ($\pm\frac{1}{32}$) |
|-----------------|--------------------|--------------------|-------------------------------|------------------------------|------------------------------|----------------------|-------------------|-------------|-----------------|--------------------|------------------------------|
| 1 | x $2\frac{1}{16}$ | 1 | $\frac{5}{8}$ | 1 | $1\frac{1}{16}$ | .3125 | .125, .1875 | 5-40 | .3125 | 10 | $1\frac{1}{16}$ |
| 1 1/2 | x $2\frac{1}{8}$ | 1 1/2 | $\frac{5}{8}$ | 1 1/2 | $1\frac{3}{16}$ | .5625 | .1875, .250 | 8-32 | .5156 | 16 | $1\frac{13}{32}$ |
| 2 | x $3\frac{1}{8}$ | 2, 2 1/2 | $3\frac{1}{8}$ | 2 | $1\frac{3}{8}$ | .5625 | .1875, .250 | 8-32 | .5156 | 24 | $1\frac{29}{32}$ |
| 2 1/2 | x $3\frac{1}{4}$ | 2.7 | $3\frac{1}{8}$ | 2 1/2 | 2 1/2 | .750 | .250, .3125 | 8-32 | .6562 | 31 | $2\frac{1}{16}$ |
| 2 1/2 | x $1\frac{13}{32}$ | 2 3/4 | $1\frac{13}{32}$ | 2 1/2 | 2 1/2 | .750 | .250, .3125 | 8-32 | .6562 | 28 | $2\frac{1}{16}$ |
| 3 | x $1\frac{29}{32}$ | 3 | 1 7/8 | 3 | $2\frac{1}{8}$ | .750 | .250, .3125 | 10-32 | .6562 | 24 | $2\frac{1}{16}$ |
| 3 1/2 | x $1\frac{29}{32}$ | | 1 7/8 | $3\frac{13}{16}$ | 3 1/8 | .9375 | .250, .3125 | 1/4-28 | .750 | 30 | $3\frac{3}{4}$ |

*Standard Bore — Other Sizes Available.



ROTATION

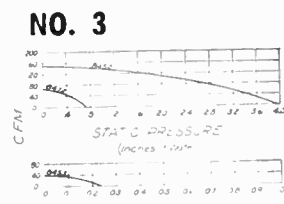
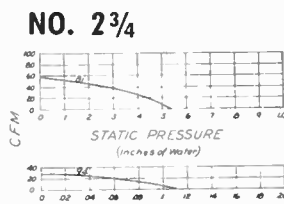
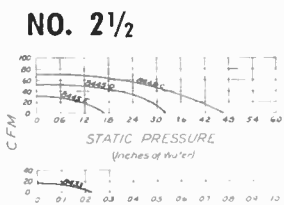
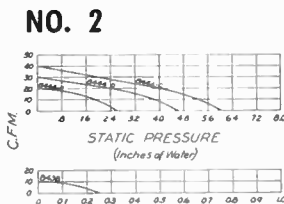
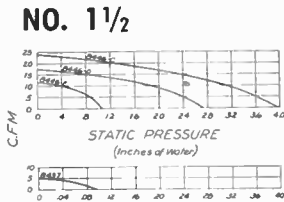
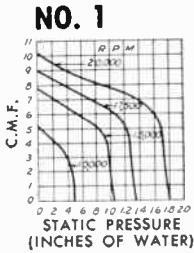
is determined viewing closed end of wheel

Superior ...
RIPLEY COMPANY, INC.

RIPLEY
ESTABLISHED 1936

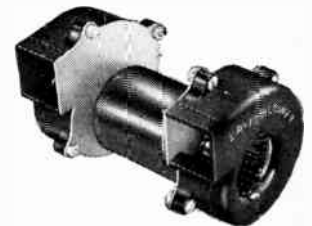
through Research
MIDDLETOWN, CONN.

L-R MOTOR & BLOWER ASSEMBLIES

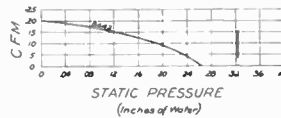


| Model No. | Type | Input Voltage | Watts | Duty Cycle | R.P.M. | Output Dimensions Free | | | List Price |
|-----------|-------|-------------------|-------|--------------|--------|------------------------|-------------|------------|------------|
| | | | | | | Air C.F.M. | Length O.A. | Motor Dia. | |
| 8474 | 1 | 27.5V. DC | 8 | Continuous | 18,000 | 9 | 2 1/4 | 7/8 | \$49.00 |
| 8437 | 1 1/2 | 115V. AC-60 Cycle | 15 | Continuous | 3,150 | 4 | 4 1/4 | 2 1/4 | 13.29 |
| 8446-E | 1 1/2 | 115V. AC/DC | 25 | Intermittent | 8,000 | 12 | 4 1/2 | 2 1/2 | 17.96 |
| 8446-D | 1 1/2 | 115V. AC/DC | 45 | Intermittent | 11,000 | 17 | 4 1/2 | 2 1/2 | 17.96 |
| 8446-C | 1 1/2 | 115V. AC/DC | 70 | Intermittent | 15,000 | 23 | 4 1/2 | 2 1/2 | 17.96 |
| 8438 | 2 | 115V. AC-60 Cycle | 16 | Continuous | 3,100 | 10 | 4 1/2 | 2 1/4 | 13.48 |
| 8444-E | 2 | 115V. AC/DC | 27 | Intermittent | 6,500 | 20 | 4 1/4 | 2 1/2 | 18.14 |
| 8444-D | 2 | 115V. AC/DC | 53 | Intermittent | 10,000 | 30 | 4 1/4 | 2 1/2 | 18.14 |
| 8444-C | 2 | 115V. AC/DC | 90 | Intermittent | 13,000 | 40 | 4 1/4 | 2 1/2 | 18.14 |
| 8433 | 2 1/2 | 115V. AC-60 Cycle | 17 | Continuous | 2,800 | 17 | 4 1/2 | 2 1/4 | 13.60 |
| 8445-E | 2 1/2 | 115V. AC/DC | 30 | Intermittent | 6,000 | 35 | 4 1/2 | 2 1/2 | 18.26 |
| 8445-D | 2 1/2 | 115V. AC/DC | 55 | Intermittent | 9,000 | 53 | 4 1/2 | 2 1/2 | 18.26 |
| 8445-C | 2 1/2 | 115V. AC/DC | 105 | Intermittent | 12,000 | 70 | 4 1/2 | 2 1/2 | 18.26 |
| 94 | 2 3/4 | 115V. AC-60 Cycle | 26 | Continuous | 1,600 | 28 | 5 1/4 | 3 1/4 | 16.50 |
| 81 | 2 3/4 | 115V. AC-60 Cycle | 40 | Continuous | 3,100 | 58 | 5 1/4 | 2 1/4 | 16.50 |
| 8453 | 3 | 115V. AC-60 Cycle | 35 | Continuous | 1,600 | 40 | 5 1/2 | 3 1/4 | 16.95 |
| 8472 | 3 | 115V. AC-60 Cycle | 40 | Continuous | 3,100 | 77 | 6 1/4 | 2 1/4 | 16.05 |
| 8452 | 3 | 115V. AC/DC | 120 | Intermittent | 6,000 | 150 | 6 3/4 | 2 3/4 | 22.40 |

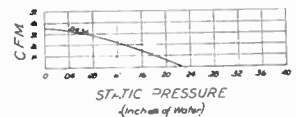
L-R BLOWERS DUAL ASSEMBLY



NO. 2 Dual



NO. 2 1/2 Dual



| Model No. | Type | Input Voltage | Watts | Duty Cycle | R.P.M. | Output Dimensions Free | | | List Price |
|-----------|------------|-------------------|-------|------------|--------|------------------------|-------------|------------|------------|
| | | | | | | Air C.F.M. | Length O.A. | Motor Dia. | |
| 8442 | 2 Dual | 115V. AC-60 Cycle | 18 | Continuous | 3,000 | 10-10 | 5 1/4 | 2 1/4 | \$19.52 |
| 8434 | 2 1/2 Dual | 115V. AC-60 Cycle | 20 | Continuous | 2,800 | 17-17 | 5 1/4 | 2 1/4 | 20.59 |

**It's so easy to order
from this catalog . . .**

When ordering products shown in this book
or writing for additional information, please
be sure to specify:

- 1. Manufacturer's Catalog Numbers
and Page Numbers.**
- 2. The Year and Edition of This
MASTER.**

This will avoid confusion and expedite delivery.

Thank you!

The
Radio - Electronic
MASTER



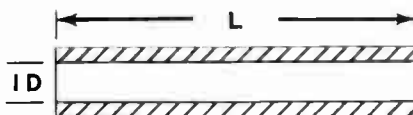
SPACERS

DESCRIPTION:

- Precision Machined Ends
- Controlled Lengths
- Four Materials
- Four Finishes
- Delivery From Stock

APPLICATIONS:

- Electronic Assemblies
- Gear Trains—Mechanisms
- Switches



For material and Finish
Add Dash Letter to Part No.

| | MATERIAL | FINISH |
|---|---------------------------|---------------------------|
| A | BRASS | NICKEL PLATE |
| B | ALUMINUM | IRIDITE |
| C | CORROSION RESISTANT STEEL | PASSIVATE |
| D | COLD ROLLED STEEL | CADMIUM PLATE AND IRIDITE |

* Fully Stocked By Distributors

| Angler Type | Screw Clearance | L ±.005 Length | OD ±.005 Outside Diameter | ID ±.008 Inside Diameter |
|-------------|-----------------|----------------|---------------------------|--------------------------|
| S-105 | #4 | .250 | .250 | .124 |
| S-115 | #4 | .500 | .250 | .124 |
| S-145 | #6 | .250 | .250 | .166 |
| S-155 | #6 | .500 | .250 | .166 |
| S-165 | #6 | .750 | .250 | .166 |
| S-175 | #6 | 1.000 | .250 | .166 |
| S-185 | #6 | 1.500 | .250 | .166 |
| S-190 | #6 | 2.000 | .250 | .166 |
| S-192 | #8 | .250 | .250 | .180 |
| S-200 | #8 | .500 | .250 | .180 |
| S-210 | #8 | .750 | .250 | .180 |
| S-220 | #8 | 1.000 | .250 | .180 |
| S-230 | #8 | 1.500 | .250 | .180 |
| S-235 | #8 | 2.000 | .250 | .180 |
| S-237 | #8 | 2.500 | .250 | .180 |
| S-239 | #8 | 3.000 | .250 | .180 |
| S-242 | #10 | .250 | .313 | .218 |
| S-240 | #10 | .500 | .313 | .218 |
| S-245 | #10 | .750 | .313 | .218 |
| S-250 | #10 | 1.000 | .313 | .218 |
| S-260 | #10 | 1.500 | .313 | .218 |
| S-270 | #10 | 2.000 | .313 | .218 |
| S-280 | #10 | 2.500 | .313 | .218 |
| S-290 | #10 | 3.000 | .313 | .218 |
| S-300 | #10 | 3.500 | .313 | .218 |
| S-310 | #10 | 4.000 | .313 | .218 |
| S-330 | #10 | 5.000 | .313 | .218 |
| S-350 | #10 | 6.000 | .313 | .218 |

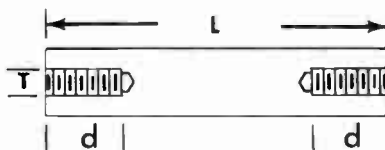
POSTS

DESCRIPTION:

- Class 2 Threads
- Fully Chamfered & Deburred
- Four Materials
- Four Finishes

APPLICATIONS:

- Component Board Supports
- Mechanical Assemblies
- Mechanisms
- Gear Trains



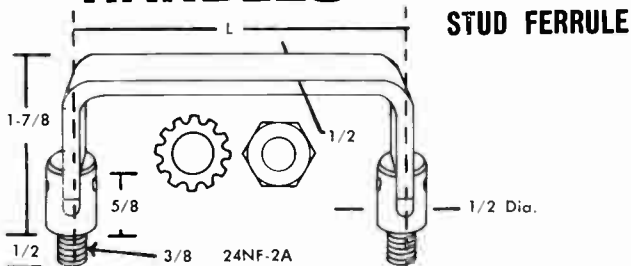
For material and Finish
Add Dash Letter to Part No.

| | MATERIAL | FINISH |
|---|---------------------------|---------------------------|
| A | BRASS | NICKEL PLATE |
| B | ALUMINUM | IRIDITE |
| C | CORROSION RESISTANT STEEL | PASSIVATE |
| D | COLD ROLLED STEEL | CADMIUM PLATE AND IRIDITE |

* Fully Stocked By Distributors

| Angler Type | T—Tapped Both Ends NC-2B | L ±.005 Length | OD ±.005 Outside Diameter | d—Minimum Full Depth |
|-------------|--------------------------|----------------|---------------------------|----------------------|
| P-134 | 4-40 | .500 | .250 | THRU |
| P-150 | 4-40 | 1.000 | .250 | .250 |
| P-160 | 4-40 | 1.500 | .250 | .250 |
| P-170 | 4-40 | 2.000 | .250 | .250 |
| P-175 | 4-40 | 2.500 | .250 | .250 |
| P-180 | 4-40 | 3.000 | .250 | .250 |
| P-184 | 6-32 | .500 | .250 | THRU |
| P-190 | 6-32 | .750 | .250 | THRU |
| P-200 | 6-32 | 1.000 | .250 | .375 |
| P-210 | 6-32 | 1.500 | .250 | .375 |
| P-220 | 6-32 | 2.000 | .250 | .375 |
| P-225 | 6-32 | 2.500 | .250 | .375 |
| P-230 | 6-32 | 3.000 | .250 | .375 |
| P-240 | 6-32 | 4.000 | .250 | .375 |
| P-241 | 8-32 | .500 | .313 | THRU |
| P-250 | 8-32 | .750 | .313 | THRU |
| P-260 | 8-32 | 1.000 | .313 | THRU |
| P-270 | 8-32 | 1.500 | .313 | .313 |
| P-280 | 8-32 | 2.000 | .313 | .313 |
| P-285 | 8-32 | 2.500 | .313 | .313 |
| P-290 | 8-32 | 3.000 | .313 | .313 |
| P-292 | 8-32 | 3.500 | .313 | .313 |
| P-294 | 8-32 | 4.000 | .313 | .313 |
| P-295 | 10-24 | .500 | .375 | THRU |
| P-300 | 10-24 | .750 | .375 | THRU |
| P-310 | 10-24 | 1.000 | .375 | THRU |
| P-320 | 10-24 | 1.500 | .375 | .375 |
| P-330 | 10-24 | 2.000 | .375 | .375 |
| P-340 | 10-24 | 2.500 | .375 | .375 |
| P-350 | 10-24 | 3.000 | .375 | .375 |
| P-355 | 10-24 | 3.500 | .375 | .375 |
| P-360 | 10-24 | 4.000 | .375 | .375 |

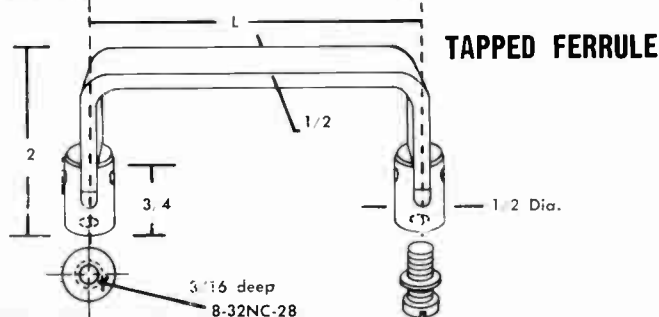
HANDLES



STUD FERRULE

| LENGTH L ± 1/64 | ANGLER PART NUMBER | | |
|--------------------|--------------------|----------------|-----------------------------------|
| | CLEAR ANODIZED | BLACK ANODIZED | BRIGHT POLISHED CLEAR ANODIZED |
| 4 | HAF-1 | HAF-2 | HAF-3 |
| 6 | HAF-4 | HAF-5 | HAF-6 |
| 8 | HAF-7 | HAF-8 | HAF-9 |
| 10 | HAF-10 | HAF-11 | HAF-12 |

Maximum Recommended Load: 50 pounds per handle.



TAPPED FERRULE

| LENGTH L ± 1/64 | ANGLER PART NUMBER | | |
|--------------------|--------------------|----------------|-----------------------------------|
| | CLEAR ANODIZED | BLACK ANODIZED | BRIGHT POLISHED CLEAR ANODIZED |
| 4 | HAF-13 | HAF-14 | HAF-15 |
| 6 | HAF-16 | HAF-17 | HAF-18 |
| 8 | HAF-19 | HAF-20 | HAF-21 |
| 10 | HAF-22 | HAF-23 | HAF-24 |

Maximum Recommended Load: 50 pounds per handle.

Birnbach

WIRE MEASURING MACHINE, BINDING POSTS, PHONO JACKS - HANDLES



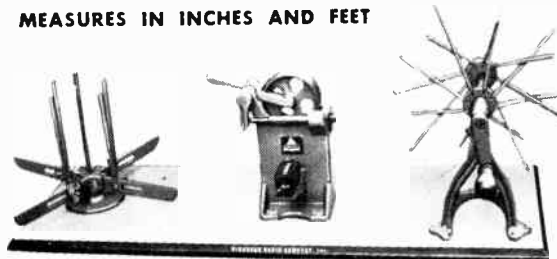
"NEW" COMPLETE WIRE MEASURING OUTFIT

ACCURATE • COMPACT • NOISELESS

CERTIFICATE OF APPROVAL
NO. 498-61
DEPARTMENT OF STATE OF AGRICULTURE CALIFORNIA
PRICES

MEASURING MACHINE
Sturdy and compact construction. Has a precision quality built counter with large numbers for easy reading and will register wire up to .9,999 feet for direct accurate reading. Can be easily reset to zero position. Wire passes through two rollers, the upper roller being self-adjusting and the tension of the upper roller can be set by a thumb screw to provide the proper grip for very fine as well as for heavy wire. Two hardened lead bushings with an opening of $\frac{5}{8}$ " diameter will guide the wire properly through the rollers. Bushings are removable to allow cables up to 1" dia. to pass through. Will measure accurately all electric wires, cables, coaxial cables, rope, tape, etc.

MEASURES IN INCHES AND FEET



Sold without baseboard.

| | MODEL | LIST | NET |
|--------------------------------|----------|----------|----------|
| COMPLETE WIRE MEASURING OUTFIT | 7389A | \$252.50 | \$126.25 |
| Separately: | | | |
| HOLDING REEL | 7398-1M | 35.00 | 17.50 |
| MEASURING MACHINE | 7398-2MA | 175.00 | 87.50 |
| WIRE WINDER | 7398-3M | 59.00 | 29.50 |

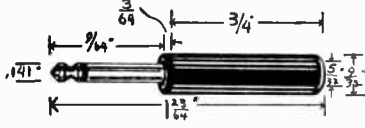
WIRE WINDER
Has adjustable arms to be set to the desired coil size and the arms will open to a flat position for easy removal of the coil. Simply open thumb screw which holds the front collar tight on the shaft. push the collar in any direction to

the desired position and tighten the thumb screw again.
HOLDING REEL
Compact, adjustable to size of coil and folding. Will hold spools or coils of wire.

MINIATURE PLUGS & JACKS

Insulated type. Solder terminals, two conductor mini. phone plug. Ideal for hearing aids, portable receivers, small instruments, etc. Rated 500 volts.

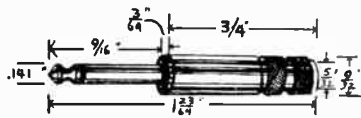
MINIATURE PHONE PLUG



Std. pkg. 50
No. 130 Red or Black 50

SHIELDED MINIATURE PHONE PLUG

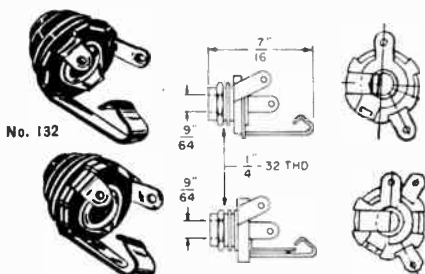
Same as No. 130 except with brass, bright nickel plated barrel with insulating tube inside.



Std. pkg. 50
No. 131

MINIATURE TELEPHONE TYPE JACK

Rugged construction, smaller than standard type Jacks. Mount in $\frac{1}{8}$ " dia. hole in panels up to $\frac{1}{8}$ " thick.



Std. pkg. 50
No. 132 Open circuit type

Std. pkg. 50
No. 133 Single closed circuit type

HANDLES

MATERIAL: BRASS
FINISH: NICKEL PLATED

Has 10-32 thread individually packaged for a perfect finish.

| Cat. No. | A | B | Std. Pkg. |
|----------|-------------------|-------------------|-----------|
| 1085-3 | 3" | 1 $\frac{1}{8}$ " | 10 |
| 1085-4 | 4 $\frac{1}{4}$ " | 1 $\frac{1}{2}$ " | 10 |
| 1085-6 | 6 $\frac{1}{4}$ " | 1 $\frac{3}{4}$ " | 10 |
| 1085-8 | 9" | 1 $\frac{3}{4}$ " | 10 |

CABINET HANDLE

MATERIAL: BRASS
FINISH: NICKEL PLATED
Mounts in $\frac{1}{8}$ " Hole.

Supplied with Hex Nut and Washer. Individually packaged for perfect finish.

| Cat. No. | Std. Pkg. |
|-------------|-----------|
| 1086 Handle | 10 |

INSULATED BINDING POST

Molded bakelite head with brass insert molded-in. Supplied complete with 8/32 x $\frac{1}{2}$ " screw, lock washer. Has brass insert molded-in. Supplied with washer. Available in black.

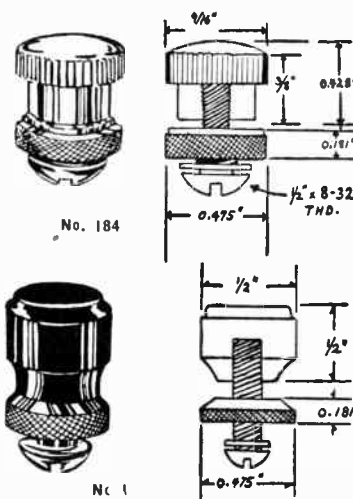
Cat. No. 184..Binding Post 50

Molded bakelite head with brass insert molded-in. Supplied complete with 8/32 x $\frac{1}{2}$ " screw and lock washer. Has brass nickel-plated retaining washer.

Colors: Red, Black.
Cat. No. 185..Binding Post 50

Brass, heavily nickel-plated overall. Complete with screw and lock washer. Designed for high amperage, low resistance connections.

Cat. No. 186..Metal Binding Post 50



BIRNBACH FLEXIBLE SHAFTS

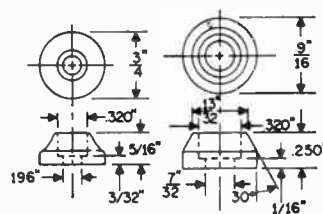
Modern construction calls for more compact arrangement of parts. At times there is difficulty getting the controls to the proper position on the panel. With couplings and these flexible shafts, locations can be made with ease on an offset and angles up to 90 degrees. The flexible shafts are made of phosphor bronze and fitted into $\frac{1}{4}$ " dia. hubs.

| Cat. No. | Std. Pkg. |
|----------------------------|-----------|
| 553—Flexible Shaft 3" long | 25 |
| 554—Flexible Shaft 6" long | 25 |

FERRULE

BRASS—NICKEL PLATED
Used for mounting handles.

| Cat. No. | Std. Pkg. |
|--------------|-----------|
| 1088 Ferrule | 100 |
| 1089 Ferrule | 100 |



Birnbach

SUB-MINIATURE TEFLON TERMINALS



NEW SUB-MINIATURE TEFLON* terminals provide instant mounting without any extra hardware of any kind because of the exceptional properties of Virgin Teflon*.

Low dielectric constant, low power factor (60 cps to 30,000 mc), low capacitance, high volume, high surface resistivity, high dielectric strength (1500-2000 v/mil. s.t.), continuous service—450°F to plus 500°F, unaffected by soldering, chemically inert, damage resistant, water repellent, voltage rating, sea level 750v r.m.s., flash-over, sea level 3000v r.m.s., flash-over, 50,000 ft. 1300 v r.m.s.

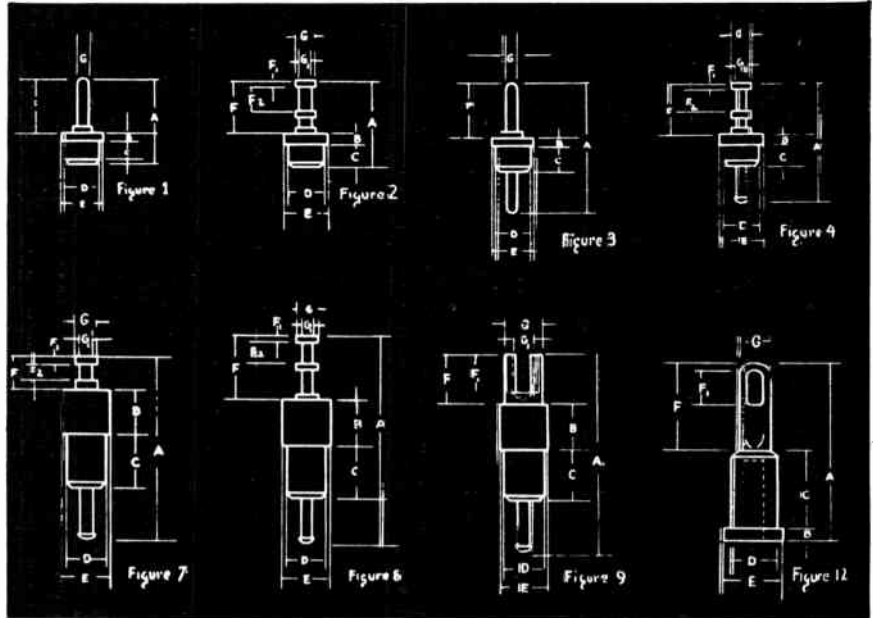
Installed permanently in seconds, in metallic or non-metallic chassis in one, simple, corking motion into punched or drilled holes. Mounting Hole Data: 1. Punch or drill the hole to a diameter that is .012" less than the diameter of the Teflon insulator which passes thru the chassis. 2. Where the thickness of the chassis permits, the entrance edge of the mounting hole should be countersunk 30° to the diameter of the insulator. Where chassis thickness will not permit (.040" or smaller), countersink 45° to the diameter of the insulator.

Speeds up assembly—cut production costs, no nuts, washers, staking or soldering necessary especially adapted in crowded assemblies.

As for HF, VHF, UHF, microwave, radar, telemetering, guided missile instrumentation and circuitry.

VARIATIONS OF SPECIFICATIONS LISTED BELOW ARE AVAILABLE. YOUR INQUIRIES INVITED.

* DuPont TM



SUB-MINIATURE STAND-OFFS

Std. Pkg. 100, 2000

| Cat No. | FIG. | CAPACITANCE mmf + | A | B | C | + .002 - .000 D DIA. | E DIA. | F | F ₁ | F ₂ | G DIA. | G ₁ DIA. |
|---------|------|----------------------|------|------|------|----------------------------|-----------|------|----------------|----------------|-----------|------------------------|
| 506 | 1 | 0.5 | .350 | .040 | .100 | .148 | .172 | .210 | | | .040 | |
| 507 | 1 | 0.5 | .406 | .040 | .156 | .148 | .172 | .210 | | | .040 | |
| 508 | 1 | 0.5 | .500 | .040 | .250 | .148 | .172 | .210 | | | .040 | |

| Cat No. | FIG. | CAPACITANCE mmf + | A | B | C | + .002 - .000 D DIA. | E DIA. | F | F ₁ | F ₂ | G DIA. | G ₁ DIA. |
|---------|------|----------------------|------|------|------|----------------------------|-----------|------|----------------|----------------|-----------|------------------------|
| 510 | 2 | 0.55 | .350 | .040 | .100 | .148 | .172 | .210 | .020 | .100 | .040 | .080 |
| 511 | 2 | 0.55 | .375 | .040 | .125 | .148 | .172 | .210 | .020 | .100 | .040 | .080 |
| 512 | 2 | 0.40 | .350 | .040 | .100 | .179 | .200 | .210 | .020 | .100 | .040 | .080 |

SUB-MINIATURE FEED-THRU

Std. Pkg. 100, 1000

| Cat. No. | FIG. | CAPACITANCE mmf + | A | B | C | + .002 - .000 D DIA. | E DIA. | F | F ₁ | F ₂ | G DIA. | G ₁ DIA. |
|----------|------|----------------------|------|------|------|----------------------------|-----------|------|----------------|----------------|-----------|------------------------|
| 514 | 3 | 0.60 | .515 | .040 | .100 | .148 | .172 | .210 | .172 | .100 | .040 | .040 |
| 515 | 3 | 0.55 | .443 | .040 | .100 | .148 | .172 | .210 | .172 | .100 | .040 | .040 |
| 516 | 3 | 0.75 | .725 | .040 | .100 | .148 | .172 | .210 | .172 | .100 | .040 | .040 |

| Cat No. | FIG. | CAPACITANCE mmf + | A | B | C | + .002 - .000 D DIA. | E DIA. | F | F ₁ | F ₂ | G DIA. | G ₁ DIA. |
|---------|------|----------------------|------|------|------|----------------------------|-----------|------|----------------|----------------|-----------|------------------------|
| 518 | 4 | 0.65 | .500 | .040 | .100 | .148 | .172 | .210 | .020 | .100 | .040 | .080 |
| 519 | 4 | 0.65 | .500 | .040 | .165 | .148 | .172 | .210 | .020 | .100 | .040 | .080 |

| CAT. NO. | FIG. | VOLTAGE, Nominal Rating | CAPACITANCE mmf + | RMS, 60 CPS | | A | B | C | D DIA. | E DIA. | F | F ₁ | F ₂ | G DIA. | G ₁ DIA. |
|----------|------|-------------------------|-------------------|---------------------|----------------------|------|------|------|--------|--------|------|----------------|----------------|--------|---------------------|
| | | | | Flashover Sea Level | Flashover 50,000 Ft. | | | | | | | | | | |
| 520 | 7 | 2000 | 1.00 | 6000 | 1400 | .540 | .063 | .171 | .171 | .187 | .133 | .020 | .093 | .046 | .093 |
| 521 | 8 | 2000 | 1.00 | 6000 | 2500 | .836 | .187 | .165 | .148 | .172 | .125 | .020 | .093 | .040 | .093 |

| CAT. NO. | FIG. | VOLTAGE, Nominal Rating | CAPACITANCE mmf + | RMS, 60 CPS | | A | B | C | D DIA. | E DIA. | F | F ₁ | F ₂ | G DIA. | G ₁ DIA. |
|----------|------|-------------------------|-------------------|---------------------|----------------------|------|------|------|--------|--------|------|----------------|----------------|--------|---------------------|
| | | | | Flashover Sea Level | Flashover 50,000 Ft. | | | | | | | | | | |
| 522 | 9 | 2000 | 1.10 | 6000 | 1400 | .821 | .187 | .212 | .171 | .187 | .203 | .156 | .143 | .078 | |

CONNECTORS & TEST JACKS

Std. Pkg. 100, 1000

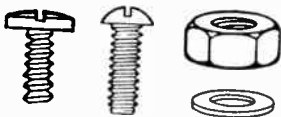
| CAT. NO. | FIG. | VOLTAGE, Nominal Rating | CAPACITANCE mmf + | RMS, 60 CPS | | A | B | C | D DIA. | E DIA. | F | F ₁ | F ₂ | G DIA. | G ₁ DIA. |
|----------|------|-------------------------|-------------------|---------------------|----------------------|------|------|------|--------|--------|------|----------------|----------------|--------|---------------------|
| | | | | Flashover Sea Level | Flashover 50,000 Ft. | | | | | | | | | | |
| 523 | 12 | 1250 | 0.40 | 4500 | 1500 | .687 | .046 | .287 | .185 | .218 | .354 | .140 | .070 | .115 | .060 |

Birnbach

SCREWS & NUTS · WASHERS · STANDOFFS ALL-NYLON FASTENINGS



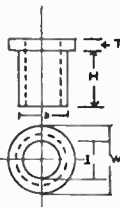
Non-Corrosive, Non-Conducting



Used in variety of applications, such as; appliances, computers and business machines, chemical and food processing equipment, electronic equipment and instruments, airborne equipment, etc.
*Reg. T.M. of DuPont

ALL-NYLON FASTENINGS

Zytel 101 per Mil P 20693 Spec, Mil S 7742 Spec
Birnbach All-Nylon Fastenings are made of Zytel 101*, a Polyamide plastic of the Nylon 6.6 Type. They offer outstanding insulating properties plus resistance to heat, shock, vibration and chemical solvents plus lightness elasticity and superior torque strength. In most cases, because of their high dielectric strength, they eliminate the need of bushings, washers or other insulation. They are corrosion resistant, non-magnetic and good torque strength thru a wide temperature range. Continuous service temperature to 300°F (150°C). Stock color: Natural. Additional colors available to order. Zytel 101 per MIL-P-17019B.



BIRNBACH NYLON BUSHINGS AND SPACERS

Designed with wide flanges to completely isolate screw from mounting surface, useful where hi tensile and torque requirements require high strength non-insulating screws. Natural color.

| Cat. No. | Used U with Screw Size | | Dimensions | | |
|----------|------------------------|-------|------------|------|-------|
| | I | W | T | H | D |
| 6549 | # 4 (.115") | .235" | 3/64" | 3/4" | .146" |
| 6549A | # 6 (.140") | .290" | 3/64" | 3/4" | .170" |
| 6549B | # 8 (.173") | .344" | 1/16" | 3/8" | .205" |
| 6549C | # 10 (.200") | .399" | 1/16" | 3/8" | .260" |
| 6549D | 1/4" (.260") | .513" | 1/16" | 3/8" | .312" |

ALL NYLON MACHINE SCREWS STANDARD PKG.: 100, 1000

| Cat. No. | Size | Type |
|----------|-------------|----------------|
| 6640 | 2-56 x 1/4" | Round Head |
| 6640A | 2-56 x 1/4" | Fillister Head |
| 6640B | 2-56 x 1/4" | Binding Head |
| 6641 | 2-56 x 3/8" | Round Head |
| 6641A | 2-56 x 3/8" | Fillister Head |
| 6641B | 2-56 x 3/8" | Binding Head |
| 6550 | 2-56 x 1/2" | Round Head |
| 6551 | 2-56 x 1/2" | Fillister Head |
| 6551A | 2-56 x 1/2" | Binding Head |
| 6643 | 4-40 x 1/4" | Round Head |
| 6643A | 4-40 x 1/4" | Fillister Head |
| 6643B | 4-40 x 1/4" | Binding Head |
| 6644 | 4-40 x 3/8" | Round Head |
| 6644A | 4-40 x 3/8" | Fillister Head |
| 6644B | 4-40 x 3/8" | Binding Head |

| Cat. No. | Size | Type |
|----------|-------------|----------------|
| 6552 | 4-40 x 1/2" | Round Head |
| 6552A | 4-40 x 1/2" | Fillister Head |
| 6552B | 4-40 x 1/2" | Binding Head |
| 6646 | 6-32 x 1/4" | Round Head |
| 6646A | 6-32 x 1/4" | Fillister Head |
| 6646B | 6-32 x 1/4" | Binding Head |
| 6553 | 6-32 x 3/8" | Round Head |
| 6554 | 6-32 x 3/8" | Binding Head |
| 6555 | 6-32 x 3/8" | Fillister Head |
| 6556 | 6-32 x 3/8" | Flat Head |
| 6557 | 6-32 x 1/2" | Round Head |
| 6558 | 6-32 x 1/2" | Binding Head |
| 6559 | 6-32 x 1/2" | Fillister Head |
| 6560 | 6-32 x 1/2" | Flat Head |
| 6648 | 6-32 x 3/4" | Round Head |
| 6648A | 6-32 x 3/4" | Fillister Head |
| 6648B | 6-32 x 3/4" | Binding Head |
| 6561 | 6-32 x 1" | Round Head |

All parts are manufactured to American Thread Standards to a class 2A or 2B ft. B 18.2 (hex nuts), B 18.6 (machine screws), B 1.1 (thread specs.)

BIRNBACH ALL NYLON HEX NUTS STANDARD PKG.: 100, 1000

| Cat. No. | Size | Cat. No. | Size |
|----------|------|----------|--------|
| 6585 | 2-56 | 6588 | 8-32 |
| 6586 | 4-40 | 6589 | 10-32 |
| 6587 | 6-32 | 6590 | 1/4-20 |

BIRNBACH ALL-NYLON WASHERS STANDARD PKG.: 100, 1000

| Cat. No. | Fits | Screw No. | O.D. | I.D. | Thickness |
|----------|------|-----------|-------|-------|-----------|
| 6592 | 2 | 1/4" | 3/32" | 1/16" | .018" |
| 6593 | 4 | 1/4" | 1/4" | 1/16" | .016" |
| 6594 | 6 | 5/16" | 5/32" | 1/16" | .031" |
| 6595 | 8 | 3/8" | 1/2" | 1/16" | .031" |
| 6596 | 10 | 3/8" | 1/2" | 1/16" | .031" |
| 6597 | 1/4" | 3/8" | 9/32" | 1/16" | .063" |

ROUND HEAD MACHINE SCREWS Standard Package 1000

| STEEL NICKEL PLATED | | BRASS NICKEL PLATED | |
|---------------------|-----------------|---------------------|-----------------|
| Cat. No. | Size | Cat. No. | Size |
| 6300 | 2-56 x 1/8" | 6402 | 4-36 x 1/2" |
| 6301 | 2-56 x 1/4" | 6403 | 4-36 x 3/4" |
| 6302 | 2-56 x 3/8" | 6404 | 4-36 x 1" |
| 6303 | 3-48 x 3/8" | 6312 | 4-40 x 1" |
| 6304 | 4-36 x 1/4" | 6313 | 4-40 x 3/4" |
| 6305 | 4-36 x 1/2" | 6314 | 4-40 x 1/2" |
| 6306 | 4-36 x 3/4" | 6315 | 4-40 x 3/8" |
| 6307 | 4-40 x 1/4" | 6405 | 6-32 x 1/2" |
| 6308 | 4-40 x 1/2" | 6406 | 6-32 x 3/4" |
| 6309 | 4-40 x 3/4" | 6407 | 6-32 x 1" |
| 6420 | 6-32 x 1/4" | 6408 | 6-32 x 3/8" |
| 6421 | 6-32 x 3/8" | 6409 | 6-32 x 1/2" |
| 6422 | 6-32 x 1/2" | 6410 | 6-32 x 1" |
| 6423 | 6-32 x 3/4" | 6410A | 6-32 x 1 1/4" |
| 6424 | 6-32 x 1" | 6411 | 6-32 x 1 1/2" |
| 6425 | 6-32 x 1 1/4" | 6412 | 6-32 x 1 3/4" |
| 6426 | 8-32 x 1/4" | 6413 | 8-32 x 1/2" |
| 6427 | 8-32 x 3/8" | 6414 | 8-32 x 3/4" |
| 6428 | 8-32 x 1/2" | 6415 | 8-32 x 1" |
| 6429 | 8-32 x 3/4" | 6416 | 8-32 x 1 1/4" |
| 6430 | 8-32 x 1" | 6417 | 8-32 x 1 1/2" |
| 6431 | 8-32 x 1 1/4" | 6418 | 8-32 x 1 3/4" |
| 6432 | 8-32 x 1 3/8" | 6316 | 10-32 x 1/4" |
| 6433 | 10-32 x 3/8" | 6317 | 10-32 x 1/2" |
| 6434 | 10-32 x 1/2" | 6318 | 10-32 x 3/4" |
| 6435 | 10-32 x 3/4" | 6318A | 10-32 x 1/2" |
| 6436 | 10-32 x 5/8" | 6319 | 10-32 x 3/8" |
| 6437 | 10-32 x 3/4" | 6319A | 12-24 x 1" |
| 6438 | 10-32 x 1" | 6320 | 10-32 x 1" |
| 6439 | 1/4-20 x 1 1/2" | 6320A | 1/4-20 x 1 3/8" |
| 6310 | 1/4-20 x 1 1/4" | 6320B | 1/4-20 x 1 1/2" |
| 6311 | 1/4-20 x 2 1/2" | 6320C | 1/4-20 x 1 3/4" |
| 6400 | 4-36 x 1/4" | | |
| 6401 | 4-36 x 3/8" | | |

| | | |
|-------|--------------|----------------|
| 6561C | 6-32 x 1" | Flat Head |
| 6650 | 8-32 x 1/4" | Round Head |
| 6650A | 8-32 x 1/4" | Fillister Head |
| 6650B | 8-32 x 1/4" | Binding Head |
| 6562 | 8-32 x 3/8" | Round Head |
| 6563 | 8-32 x 3/8" | Binding Head |
| 6564 | 8-32 x 3/8" | Flat Head |
| 6565 | 8-32 x 3/8" | Fillister Head |
| 6566 | 8-32 x 1/2" | Round Head |
| 6567 | 8-32 x 1/2" | Binding Head |
| 6568 | 8-32 x 1/2" | Flat Head |
| 6569 | 8-32 x 1/2" | Fillister Head |
| 6570 | 8-32 x 5/8" | Round Head |
| 6571 | 8-32 x 5/8" | Fillister Head |
| 6572 | 8-32 x 3/4" | Round Head |
| 6572A | 8-32 x 3/4" | Fillister Head |
| 6572B | 8-32 x 3/4" | Binding Head |
| 6573 | 8-32 x 1" | Flat Head |
| 6573A | 8-32 x 1" | Fillister Head |
| 6574 | 10-32 x 3/8" | Round Head |
| 6575 | 10-32 x 1/2" | Round Head |
| 6576 | 10-32 x 1/2" | Flat Head |
| 6577 | 10-32 x 5/8" | Round Head |
| 6578 | 10-32 x 1" | Round Head |
| 6579 | 10-32 x 1" | Flat Head |

THREADED NYLON ROD in 6-32, 8-32, 10-32 and 1/4-20 thread sizes available.

SHEET METAL SELF TAPPING SCREWS

Steel Cadmium Plated
TYPE A — SHARP POINT

| Cat. No. | Size | Std. Pkg. |
|----------|---------------|-----------|
| 6500 | # 1 x 1/2" | 144 |
| 6501 | # 6 x 1/4" | 144 |
| 6502 | # 6 x 3/8" | 144 |
| 6503 | # 6 x 1/2" | 144 |
| 6504 | # 6 x 3/4" | 144 |
| 6540 | # 8 x 3/8" | 144 |
| 6541 | # 8 x 1/2" | 144 |
| 6505 | # 8 x 1" | 144 |
| 6542 | # 10 x 1/2" | 144 |
| 6543 | # 10 x 3/4" | 144 |
| 6506 | # 10 x 1" | 144 |
| 6507 | # 10 x 1 1/4" | 144 |

HEX HEAD SELF TAPPING SCREWS

TYPE B — BLUNT POINT SLOTTED
Steel Cadmium Plated

| Cat. No. | Size | Std. Pkg. | Cat. No. | Size | Std. Pkg. |
|----------|--------------|-----------|----------|---------------|-----------|
| 6510 | # 6 x 3/4" | 144 | 6515 | # 8 x 1 1/2" | 144 |
| 6511 | # 6 x 1" | 144 | 6516 | # 8 x 1 3/4" | 144 |
| 6512 | # 6 x 1 1/4" | 144 | 6517 | # 8 x 1 3/8" | 144 |
| 6513 | # 8 x 1 1/4" | 144 | 6518 | # 10 x 1 1/2" | 144 |
| 6514 | # 8 x 1 3/4" | 144 | 6519 | # 10 x 1 3/4" | 144 |

VOLUME CONTROL AND TOGGLE NUTS

STEEL - BRASS - NICKEL PLATED

| No. | Type | Size | Std. Pkg. |
|-------|---------------------|---------------------|-----------|
| 6337 | Vol. Control Brass | 3/8-32 x 1/2 x 3/8 | 1000 |
| 6337A | Vol. Control Steel | 3/8-32 x 1/2 x 3/8 | 1000 |
| 6338 | Toggle Switch Brass | 15-32 x 1/4 x 3/4 | 1000 |
| 6339 | Toggle Ring Nut | 15-32 x 3/4 x 1 1/8 | 1000 |

BIRNBACH HEXAGON STEEL MACHINE SCREW NUTS

| Cat. No. | Thread | Size | Flats | Thickness | Std. Pkg. |
|----------|--------|-------|-------|-----------|-----------|
| 6330 | 2-56 | 3/16" | 1/16" | 1/16" | 1000 |
| 6331 | 3-48 | 1/4" | 1/16" | 1/16" | 1000 |
| 6332 | 4-36 | 1/4" | 3/32" | 3/32" | 1000 |
| 6333 | 4-40 | 1/4" | 3/32" | 3/32" | 1000 |
| 6448 | 6-32 | 1/4" | 3/32" | 3/32" | 1000 |
| 6449 | 6-32 | 5/16" | 7/64" | 7/64" | 1000 |
| 6334 | 8-32 | 1/4" | 3/32" | 3/32" | 1000 |
| 6450 | 8-32 | 5/16" | 7/64" | 7/64" | 1000 |
| 6335 | 10-32 | 3/8" | 1/8" | 1/8" | 1000 |
| 6336 | 1/4-20 | 7/16" | 3/16" | 3/16" | 1000 |

BIRNBACH HEXAGON MACHINE SCREW NUTS

| Cat. No. | Thread | Size | Flats | Thickness | Std. Pkg. |
|----------|--------|-------|-------|-----------|-----------|
| 6440 | 4-36 | 1/4" | 3/32" | 3/32" | 1000 |
| 6442 | 4-40 | 1/4" | 3/32" | 3/32" | 1000 |
| 6441 | 6-32 | 1/4" | 5/64" | 5/64" | 1000 |
| 6443 | 6-32 | 5/16" | 7/64" | 7/64" | 1000 |
| 6444 | 8-32 | 1/4" | 3/32" | 3/32" | 1000 |
| 6445 | 10-32 | 5/16" | 7/64" | 7/64" | 1000 |
| 6446 | 10-32 | 3/8" | 1/8" | 1/8" | 1000 |
| 6447 | 1/4-20 | 7/16" | 3/16" | 3/16" | 1000 |

BIRNBACH BRASS NICKEL PLATED FLAT WASHERS

| Cat. No. | Fits | Screw No. | Hole Size | O.D. | Thickness | Std. Pkg. |
|----------|--------|-----------|-----------|-------|-----------|-----------|
| 6479 | 4 | 1/8" | 9/32" | 0.25" | 0.025" | 1000 |
| 6480A | 6 | 1/4" | 5/16" | 0.25" | 0.025" | 1000 |
| 6480 | 6 | 1/4" | 3/8" | 0.25" | 0.025" | 1000 |
| 6481 | 8 | 1/2" | 3/8" | 0.32" | 0.025" | 1000 |
| 6482 | 10 | 203" | 7/16" | 0.36" | 0.025" | 1000 |
| 6483 | 1/4-20 | .265" | 9/16" | 0.40" | 0.025" | 1000 |

BIRNBACH STEEL KANKLINK LOCKWASHERS

| Cat. No. | Screw Size | O.D. | Thickness | Std. Pkg. |
|----------|------------|--------|-----------|-----------|
| 6484 | 4 | 3/16" | 1/32" | 1000 |
| 6485 | 6 | 15/64" | 1/32" | 1000 |
| 6486 | 8 | 15/64" | 0.25" | 1000 |
| 6487 | 10 | 5/16" | 0.050" | 1000 |
| 6488 | 1/4 | 7/16" | 5/64" | 1000 |

BIRNBACH SHAKEPROOF LOCKWASHERS

| Cat. No. | Screw Size | Std. Pkg. |
|----------|------------|-----------|
| 6358 | 4 | 1000 |
| 6359 | 6 | 1000 |
| 6360 | 8 | 1000 |
| 6361 | 10 | 1000 |
| 6362 | 1/4 | 1000 |
| 6363 | 3/8 | 1000 |

BIRNBACH SHAKEPROOF LOCKWASHERS

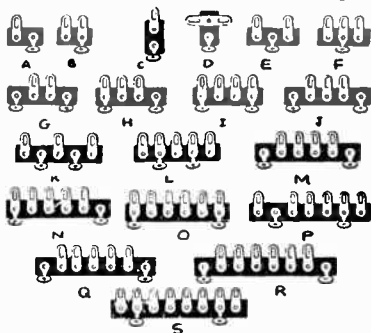
| Cat. No. | Screw Size | Std. Pkg. |
|----------|------------|-----------|
| 6355 | 2 | 1000 |
| 6356 | 3 | 1000 |
| 6357 | 4 | 1000 |
| 6490 | 6 | 1000 |
| 6491 | 8 | 1000 |
| 6492 | 10 | 1000 |
| 6493 | 1/4 | 1000 |
| 6494 | 3/8 | 1000 |
| 6494 | 1/2 | 1000 |
| 6494 | 3/4 | 1000 |
| 6494 | 1" | 1000 |
| 6494 | 1 1/4" | 1000 |
| 6494 | 1 1/2" | 1000 |
| 6494 | 1 3/4" | 1000 |
| 6494 | 2" | 1000 |
| 6494 | 2 1/4" | 1000 |
| 6494 | 2 1/2" | |

Birnbach

TERMINAL STRIPS • LUGS • BUSHINGS SHAFT COUPLINGS • PANEL BEARINGS SPACERS • TUBE CLAMPS



TIE DOWN LUG TERMINAL STRIPS



STANDARD TYPE

These lugs made of 1/16" (.062" thick) XP bakelite x 3/8" wide with cadmium plated brass lugs. Lugs are 3/8" centers with .140 diam. mounting holes. Strips illustrated are standard; special combinations on request.

| Cat. No. | Illustration | Std. Pkg. | Cat. No. | Illustration | Std. Pkg. |
|----------|--------------|-----------|-----------------|--------------|-----------|
| 1382 | A | 100 | 1385B | L | 100 |
| 1382A | B | 100 | 1386 | M | 100 |
| 1382B | C | 100 | 1386A | N | 100 |
| 1382C | D | 100 | 1386B | O | 100 |
| 1383 | E | 100 | 1387 | P | 100 |
| 1383A | F | 100 | 1388 | Q | 100 |
| 1384 | G | 100 | 5 Ter., 2 grds. | | |
| 1384A | H | 100 | 1389 | R | 100 |
| 1384B | I | 100 | 6 Ter., 2 grds. | | |
| 1385 | J | 100 | 1390 | S | 100 |
| 1385A | K | 100 | | | |

MINIATURE TYPE

These lugs made of 1/16" (.062" thick) XP bakelite x 5/16" wide. Brass, cadmium plated lugs are 1/4" centers; .096 diam. mounting hole. Clearance for 3/32" rivet or No. 3 screw. Strips illustrated are standard; special combinations on request.

| Cat. No. | Illustration | Std. Pkg. | Cat. No. | Illustration | Std. Pkg. |
|----------|--------------|-----------|----------|--------------|-----------|
| 1352 | A | 100 | 1355A | K | 100 |
| 1352A | B | 100 | 1355B | L | 100 |
| 1352B | C | 100 | 1356 | M | 100 |
| 1352C | D | 100 | 1356A | N | 100 |
| 1353 | E | 100 | 1356B | O | 100 |
| 1353A | F | 100 | 1357 | P | 100 |
| 1354 | G | 100 | 1358 | Q | 100 |
| 1354A | H | 100 | 1359 | R | 100 |
| 1354B | I | 100 | 1360 | S | 100 |
| 1355 | J | 100 | | | |

BIRNBACH BRASS BUSHINGS & SPACERS

An ideal brass bushing for raising sub panels, chassis, condensers, transformers, etc. Hole will accommodate a No. 6 or No. 8 screw.

| For No. 6 | | 1/4" O.D. | | For No. 8 | |
|-----------|-----------|-----------|----------|-----------|--------|
| Cat. No. | Std. Pkg. | Length | Cat. No. | Std. Pkg. | Length |
| 1125 | 100 | 1/8" | 1130 | 100 | 1/8" |
| 1126 | 100 | 1/4" | 1131 | 100 | 1/4" |
| 1127 | 100 | 3/8" | 1132 | 100 | 3/8" |
| 1128 | 100 | 1/2" | 1133 | 100 | 1/2" |
| 1129 | 100 | 3/4" | 1134 | 100 | 3/4" |
| 1135 | 100 | 1/8" | 1140 | 100 | 1/8" |
| 1136 | 100 | 1/4" | 1141 | 100 | 1/4" |
| 1137 | 100 | 3/8" | 1142 | 100 | 3/8" |
| 1138 | 100 | 1/2" | 1143 | 100 | 1/2" |
| 1139 | 100 | 3/4" | 1144 | 100 | 3/4" |

THREADED BRASS SPACERS

| For No. 6-32 | | 1/4" O.D. | | For No. 8-32 | |
|--------------|-----------|-----------|----------|--------------|--------|
| Cat. No. | Std. Pkg. | Length | Cat. No. | Std. Pkg. | Length |
| 1125T | 100 | 1/8" | 1130T | 100 | 1/8" |
| 1126T | 100 | 1/4" | 1131T | 100 | 1/4" |
| 1127T | 100 | 3/8" | 1132T | 100 | 3/8" |
| 1128T | 100 | 1/2" | 1133T | 100 | 1/2" |
| 1129T | 100 | 3/4" | 1134T | 100 | 3/4" |

BIRNBACH INSULATED BUSHINGS AND SPACERS

| For No. 6 | | 1/4" O.D. | | For No. 8 | |
|-----------|-----------|-----------|----------|-----------|--------|
| Cat. No. | Std. Pkg. | Length | Cat. No. | Std. Pkg. | Length |
| 1145 | 100 | 1/8" | 1149 | 100 | 1/8" |
| 1146 | 100 | 1/4" | 1150 | 100 | 1/4" |
| 1147 | 100 | 3/8" | 1151 | 100 | 3/8" |
| 1148 | 100 | 1/2" | 1152 | 100 | 1/2" |

BIRNBACH CABLE CLAMPS

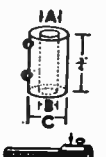
| To Fit | | Cable | | Mtg. Std. | |
|----------|--------|--------|------|-----------|------|
| Cat. No. | Up to | Lth. | Wth. | Hole | Pkg. |
| 1153 | 3/8" | 3/4" | 3/8" | 3/8" | 4 |
| 1154 | 1/2" | 1" | 3/8" | 3/8" | 6 |
| 1155 | 3/4" | 1 1/4" | 3/8" | 3/8" | 6 |
| 1156 | 1" | 1 3/4" | 3/8" | 3/8" | 8 |
| 1157 | 1 1/4" | 2" | 3/8" | 3/8" | 10 |

SHAFT COUPLING REDUCERS AND EXTENDERS

By the use of these units all 1/4" and 3/8" dia. shafts and knobs can be assembled together. The insulated units are for use where electrical isolation is desired. Furnished complete with set screws shown. Be sure to specify whether Brass or Insulated is desired.



| SHAFT COUPLINGS | | | | | |
|-----------------|--------|------------|-----------|------|-----------|
| Cat. No. | Insul. | Shaft Dia. | Hole Dia. | O.D. | Std. Pkg. |
| 534 | 634 | 1/4" | 1/4" | 1/2" | 50 |
| 535 | 635 | 1/4" | 3/8" | 1/2" | 50 |
| 536 | 636 | 3/8" | 3/8" | 1/2" | 50 |
| 537 | 637 | 3/8" | 1/2" | 1/2" | 50 |



| COUPLINGS | | | | | |
|-----------|--------|------------|-----------|------|-----------|
| Cat. No. | Insul. | Shaft Dia. | Hole Dia. | O.D. | Std. Pkg. |
| 531 | 631 | 1/4" | 1/4" | 1/2" | 50 |
| 532 | 632 | 1/4" | 3/8" | 1/2" | 50 |
| 533 | 633 | 3/8" | 3/8" | 1/2" | 50 |

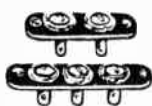
| EXTENDERS | | | | | |
|-----------|-------------|-------------|-----------|------------|-----------|
| Cat. No. | Over-Insul. | Shaft Lgth. | Hole I.D. | Shaft O.D. | Std. Pkg. |
| 538 | Brass | 1 1/4" | 1/4" | 1/4" | 50 |
| 539 | Insulated | 1 1/4" | 1/4" | 1/4" | 50 |



| BRASS SHAFTING | | | | | |
|----------------|------|----------|-----------|--|--|
| Cat. No. | Dia. | Length | Std. Pkg. | | |
| 540 | 1/4" | 6" Long | 12 | | |
| 541 | 3/8" | 12" Long | 12 | | |
| 542 | 1/2" | 8" Long | 12 | | |

| FIBRE SHAFTING | | | | | |
|----------------|------|----------|-----------|--|--|
| Cat. No. | Dia. | Length | Std. Pkg. | | |
| 543 | 1/4" | 6" Long | 12 | | |
| 544 | 3/8" | 12" Long | 12 | | |
| 545 | 1/2" | 8" Long | 12 | | |

BAKELITE TERMINAL STRIPS



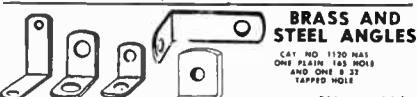
Terminals are made of brass and cadmium plated. Terminals are mounted on 1/16" bakelite. 7, 8, 9 and 10 terminals are mounted on 3/32" bakelite. All terminals are spaced 7/16" center to center.

| PLAIN | | | MARKED | | |
|----------|-----------|-------------|----------|-----------|-------------|
| Cat. No. | Terminals | Mtg. Center | Cat. No. | Terminals | Marked |
| 1372 | 2 | 1-1/8" | 1260 | 2 | A-G |
| 1373 | 3 | 1-1/8" | 1261 | 2 | Output |
| 1374 | 4 | 1-3/8" | 1262 | 2 | Input |
| 1375 | 5 | 1-3/8" | 1263 | 3 | 1-2-3 |
| 1376 | 6 | 1-3/8" | 1264 | 4 | 1-2-3-4 |
| 1377 | 7 | 1-3/8" | 1265 | 5 | 1-2-3-4-5 |
| 1378 | 8 | 1-3/8" | 1266 | 6 | 1-2-3-4-5-6 |
| 1379 | 9 | 1-3/8" | | | |
| 1380 | 10 | 1-3/8" | | | |



SPRING WIRE CLIPS
They will hold a wire up to No. 10 B&S Gauge in a secure contact. All clips are brass nickel plated.

| Cat. No. | Length | Width | Mtg. Hole | Std. Pkg. |
|----------|-------------|--------|-----------|-----------|
| 32A | Spring Clip | 3/8" | 3/8" | 6 |
| 32 | Spring Clip | 1/2" | 3/8" | 10 |
| 33 | Twin Clip | 1 1/4" | 3/8" | 10 |



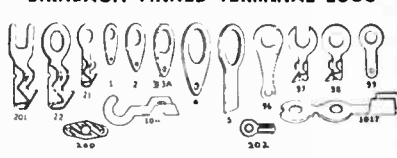
| Cat. No. | Material | Size | Mtg. Holes | Std. Pkg. |
|----------|---------------|-------------|------------|-----------|
| 1120 | Cadmium Pltd. | 1/2" x 1/2" | 165 | 100 |
| 1121 | Brass N.P. | 1/2" x 1/2" | 169 | 100 |
| 1122 | Brass N.P. | 3/4" x 3/4" | 169 | 100 |
| 1123 | Steel H.T. | 3/4" x 3/4" | 144 | 100 |
| 1124 | Steel H.T. | 1" x 1 1/8" | 169 | 100 |



BIRNBACH TUBE CLAMPS
These Tube Clamps are made of hard drawn aluminum and are found to be extremely desirable when mounting resonant lines, or elements of directive beam antennas. The 1/4" thru 3/8" clamps have a clearance for No. 10 Screw. The 3/4" to the 1 1/4" clamps have a clearance for 1/4" bolts.

| Cat. No. | To Fit Tube | Wth. | Lgth. | Thickness | Std. Pkg. |
|----------|-------------|--------|--------|-----------|-----------|
| 51A | 1/4" | 1/2" | 1 1/2" | .050" | 100 |
| 51 | 1/4" | 1/2" | 1 1/2" | .050" | 100 |
| 52 | 3/8" | 1/2" | 1 1/2" | .050" | 100 |
| 53 | 3/8" | 1/2" | 1 1/2" | .050" | 100 |
| 54 | 1/2" | 1/2" | 1 1/2" | .050" | 100 |
| 54A | 3/8" | 1/2" | 1 1/2" | .050" | 50 |
| 55 | 3/8" | 3/4" | 1 1/2" | .090" | 50 |
| 56 | 1/2" | 3/4" | 1 1/2" | .090" | 50 |
| 57 | 3/4" | 3/4" | 1 1/2" | .090" | 50 |
| 58A | 1 1/4" | 1 1/4" | 2" | .090" | 50 |
| 58B | 1 1/4" | 1 1/4" | 2" | .090" | 50 |

BIRNBACH TINNED TERMINAL LUGS

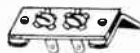


| Cat. No. | Hole for Screw | Material | Thickness | Length |
|----------|----------------|----------------|-----------|--------|
| 1 | 6 | Tinned Copper | .015" | 1 1/2" |
| 2 | 10 | Tinned Copper | .016" | 1 1/2" |
| 3 | .252 | Tinned Copper | .015" | 1 1/2" |
| 3A | 1/4 | Tinned Copper | .015" | 1 1/2" |
| 4 | 3/8 | Tinned Copper | .016" | 1 1/2" |
| 5 | 1/2 | Hot Tin. Cop. | .024" | 1 1/2" |
| 21 | 10 | Hot Tin. Cop. | .020" | 1 1/2" |
| 22 | 1/4 | Hot Tin. Cop. | .025" | 1 1/2" |
| 200 | 8 | Brass Hot Tin. | .015" | 1 1/2" |
| 201 | 10 | Brass Hot Tin. | .020" | 1 1/2" |
| 202 | 6 | Brass Hot Tin. | .020" | 1 1/2" |
| 96 | 4-6-8-10 | Brass Hot Tin. | .020" | 1 1/2" |
| 97 | 8 | Tinned Copper | .016" | 1 1/2" |
| 98 | 4-6-8-10 | Brass Hot Tin. | .020" | 1 1/2" |
| 99 | 4-6-8-10 | Brass Hot Tin. | .020" | 1 1/2" |
| 100 | 10 | Brass Hot Tin. | .020" | 1 1/2" |
| 1017 | 10 | N. Pl. Cop. | .023" | 1 1/2" |

BIRNBACH LOCKING TYPE TERMINAL LUGS



| Cat. No. | Hole for Screw | Thickness | Length | Std. Pkg. |
|----------|----------------|-----------|--------|-----------|
| 193 | 4 | .020" | 3/4" | 1000 |
| 194 | 6 | .020" | 3/4" | 1000 |
| 195 | 8 | .020" | 3/4" | 1000 |
| 197 | 10 | .020" | 3/4" | 1000 |
| 196 | 1/4 | .020" | 3/8" | 1000 |



TERMINAL STRIPS 2 POST

Excellent mounting for twin lead transmission lines. Brass hot tinned lugs spaced 7/16" center to center. 1/16" bakelite. 1 1/2" mounting center.

Cat. No. T16.....Std. Pkg. 50



BIRNBACH 3 POST

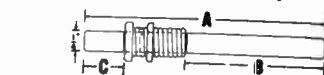
A synchronizing lock strip for RCA type television receivers.

Brass hot tinned lugs. Spaced 7/16" center to center. Mounting center 1 3/4", 1/16" bakelite.

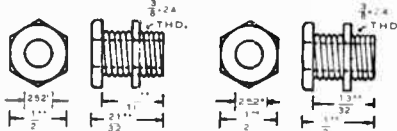
Ca. No. T16A.....Std. Pkg. 50

BIRNBACH FRONT PANEL BEARINGS

Cadmium plated brass for panels up to 3/8" in thickness and for 1/4" dia. shafts. The No. 551 and No. 552 are complete assemblies of the No. 550 and 1/4" dia. brass shaft cadmium plated.



| Cat. No. | A | B | C | Std. Pkg. |
|----------|----|--------|--------|-----------|
| 551 | 3" | 1 3/4" | 1 1/2" | 50 |
| 552 | 6" | 4 3/4" | 3 1/2" | 25 |



(Same as used on No. 551 and No. 552)

| Cat. No. | Std. Pkg. |
|----------|-----------|
| 550 | 50 |
| 550A | 50 |
| 550-B | 50 |
| 550-C | 50 |

CAMBRIDGE THERMIONIC CORPORATION

GAMBION



The guaranteed electronic components

TERMINALS

SOLDER TERMINALS Material: Brass. Finish: Silver plate unless otherwise noted. Other platings available on special order.

TURRET TYPE TERMINALS

| Cambion No. | Fig. | Shank x Turret x Shoulder (All in Oia., in.) | Hole Dia. Hollow Type | Height, Above Board x Below Board | Board Thickness | Net Pkg. of 100 - |
|-------------|------|--|-----------------------|-----------------------------------|-----------------|-------------------|
| 1011 | VIII | .090 x 3/32 x 1/4 | | 1 5/64" x — | Chart I | \$1.83 |
| 1013 | VIII | .090 x 3/64 x 3/32 | | 1 1/32" x — | Chart I | 2.20 |
| 1014 | VIII | .090 x 3/64 x 3/32 | | 1 5/32" x — | Chart I | 2.50 |
| 1030 | IX | .072 x 3/64 x 3/32 | | 1/4" x 1 1/8" | Chart I | 3.30 |
| 1031 | X | .072 x 3/64 x 3/32 | | 3/64" x 1/4" | Chart I | 2.44 |
| 1032 | X | .062 x 3/64 x 3/64 | | 3/64" x 3/64" | Chart I; a | 1.50 |
| 1081 | VII | .201 x .144 x 1/4 | | 1 1/32" x 3/64" | b | 4.20 |
| 1143 | V | .181 x 3/32 x 1/4 | | 1/4" x 3/32" | Chart II | 3.10 |
| 1245 | I | .112 x .145 x 3/16 | | 1 5/64" x — | Chart II; c | 1.56 |
| 1457 | I | .078 x .075 x 1/8 | | 3/16" x 1/4" | Chart II; d | 1.00 |
| 1463 | V | .116 x .070 x 3/32 | | 3/32" x 1/4" | Chart II; e | 1.45 |
| 1548 | II | .112 x .149 x 3/16 | 3/64" | 3/16" x — | Chart II | 1.34 |
| 1558 | II | .090 x 3/32 x 1/8 | | 3/16" x — | Chart II | .97 |
| 1579 | VI | .202 x 3/64 x 1/4 | | 1 1/32" x 7/64" | Chart II; f | 3.10 |
| 1604 | I | .062 x 1/16 x 3/32 | | 3/32" x — | Chart II; g | 1.25 |
| 1724 | II | .112 x .145 x 3/16 | .067" | 3/16" x — | Chart II; h | 1.60 |
| 1797 | II | .110 x 3/16 x 3/16 | .043" | 3/16" x — | i | 2.30 |
| 1798 | II | .135 x .110 x 3/16 | .060" | 3/16" x — | Chart II | 2.40 |
| 1979 | XI | .112 x .130 x 3/16 | | 3/32" x 7/64" | Chart II; h | 1.59 |
| 2000 | VI | .090 x 1/16 x 1/8 | | 3/32" x 3/64" | Chart II; h | 1.59 |
| 2004 | VII | .090 x 1/16 x 1/8 | | 3/32" x 3/64" | Chart II; h | 1.46 |
| 2027 | I | .071 x .096 x 1/8 | .043" | 3/16" x — | Chart II; h | 1.74 |
| 2034 | II | .090 x 3/64 x 3/32 | | 3/32" x — | Chart II | 1.79 |
| 2040 | VII | .072 x .050 x 3/32 | | 3/16" x 1/64" | Chart II | 1.04 |
| 2041 | I | .072 x .050 x 3/32 | | 3/64" x 3/64" | Chart II | 1.13 |
| 2042 | IV | .072 x .050 x 3/32 | | 3/16" x — | Chart II | 1.18 |
| 2043 | II | .072 x .050 x 3/32 | | 3/16" x 3/64" | Chart II | 1.22 |
| 2044 | VI | .072 x .050 x 3/32 | | 3/16" x 3/64" | Chart II | 1.48 |
| 2080 | III | .090 x 3/32 x 1/8 | | 1 5/64" x — | Chart II; f | 3.00 |
| 2084 | III | .112 x .145 x 3/16 | | 3/64" x — | Chart II; c | 3.00 |
| 2085 | I | .047 x .040 x 1/16 | | 3/32" x — | Chart II; g | 1.40 |
| 2100 | I | .062 x 1/16 x 3/32 | .023" | 3/32" x — | Chart II; j | 1.40 |
| 2114 | II | .145 x .149 x 3/16 | .062" | 3/16" x — | Chart II; k | 6.00 |
| 2115 | IV | .145 x .118 x 3/16 | max. | 1/4" x 1/4" | Chart II; l | 5.00 |
| 2132 | II | .145 x .149 x 3/16 | .054" | 3/64" x — | Chart II; i | 6.00 |
| 2186 | I | .112 x .118 x 3/32 | min. | 1 5/64" x — | Chart II; m | 4.00 |

Tooling: Special tooling is required for all Cambion terminals. This tooling, necessary for proper swaging of terminals, is available at \$8.00 per set, including a punch and anvil.



SPADE TYPE TERMINALS

| Cambion No. | Fig. | Shank Dia. x Spade W. x Slot W., in. | Hole Dia. Hollow Type | Height Above Board | Board Thickness | Net Pkg. of 100 |
|-------------|------|--------------------------------------|-----------------------|--------------------|-----------------|-----------------|
| 1010 | XIII | .112 x .146 x .040 | .078" | 3/16" | Chart I; n | \$5.00 |
| 1025 | XIV | .112 x .145 x 1/16 | | 2 5/64" | Chart I; c | 5.40 |
| 1089 | XIV | .047 x .072 x .025 | .026" | 3/32" | 0 | 1.53 |
| 1578 | XIV | .150 x .142 x 1/16 | .081" | 3/8" | Chart II; p | 2.90 |
| 1782 | XIV | .185 x 1/4 x .090 | .120" | 1 1/16" | Chart II; q | 6.80 |
| 1783 | XIV | .135 x 3/32 x 1/16 | .102" | 1 1/2" | Chart II; t | 4.30 |
| 1784 | XIV | .112 x 3/32 x 1/32 | .070" | 1 1/2" | Chart II; r | 2.60 |
| 1785 | XII | .062 x 3/32 x 1/32 | .043" | 3/32" | Chart II; s | 1.46 |
| 1969 | XII | .112 x 3/16 x .053 | .079" | 2 1/64" | Chart II; t | 1.94 |
| 2086 | XV | .122 x 1/8 x 1/32 | .047" | 3/32" | Chart II; u | 2.60 |

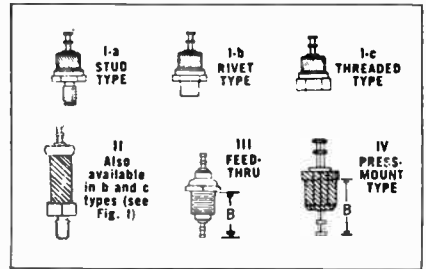
Notes: a. Except -5, -6. b. -AA, 1/64; -B, 3/32; -C, 3/64; -D, 1/4. c. Chamfer on upper edge of shoulder. d. Except -E, -F. Chamfer on upper edge of turret and shoulder. e. Except -F. g. Except -E, -F. Like V except no turret bases. f. Except -F. g. Except -E, -F. Plus -AA, 1/64. h. Except -E, -F. i. -A, 1/64; -B, 3/32; -C, 1/8; -D, 3/16. j. Except -D, -E, -F. plus -AA, 1/64. k. For use with .061/in taper pins. Takes pin from top of board. Finish copper plate and electro-tin. l. For use with .061/in taper pins. Takes pin from top or bottom of board, or both. Finish copper plate and electro-tin. m. For use with .061/in taper pins. Takes pin from top of board; taper not a through hole. Finish copper plate and electro-tin. n. Two slots at right angles. o. -1, 1/64; -2, 1/32; -3, 1/16; -4, 3/32; -5, 1/4; -6, 3/16; -7, 1/4. p. Except -A, -B. Straight knurl on shank. q. Except -A, -B. Straight knurl on shank. Chamfer on lower edge of spade and upper edge of shoulder. r. Except -A, -E, -F. Straight knurl on shank. Chamfer on lower edge of spade and upper edge of shoulder. s. Plus -AA, 1/64. t. Radial knurl on lower edge of shoulder. u. Except -F. Diameter turret below board 3/32.

| Dash No. | Board Thckns. |
|----------|---------------|
| -1 | 1/16" |
| -2 | 1/8" |
| -3 | 3/16" |
| -4 | 1/2" |
| -5 | 3/8" |
| -6 | 1/4" |

| Dash No. | Board Thckns. |
|----------|---------------|
| -A | 1/32" |
| -B | 1/16" |
| -C | 3/32" |
| -D | 1/8" |
| -E | 3/16" |
| -F | 1/4" |

INSULATED TERMINALS AND FEED-THRU

| Cambion Number and Material | Fig. | Height Above Board | Turret Oia. or Spade Width | No. of Turrets or Slot Width | Base Oia. In. | Rivet Oia. or Thread Size | Stud L., Rivet L., or Tap Depth | Voltage Breakdown at 60 cy. AC | Net Ea. 1-9 - |
|-----------------------------|------|--------------------|----------------------------|------------------------------|---------------|---------------------------|---------------------------------|--------------------------------|---------------|
| 1580-156† | I-b | 3/16" | 3/32" | 2 | 3/16" hex | .187 | Chart I | 4,000 rms | .21 |
| 1581-1* | I-a | 3/16" | 3/32" | 2 | 3/16" hex | 6-32 | " | 4,000 rms | .19 |
| 1581-3* | I-a | 3/16" | 3/32" | 2 | 3/16" hex | 6-32 | " | 4,000 rms | .19 |
| 1719-1* | I-a | 1 1/16" | 3/32" | 2 | 3/16" hex | 6-32 | " | 11,000 rms | .27 |
| 1719-3* | I-a | 1 1/16" | 3/32" | 2 | 3/16" hex | 6-32 | " | 11,000 rms | .27 |
| 1795-A* | III | 3/16" | .052" | 2 ea. end | 3/16" hex | 1/4-28 | a | 2,800 rms | .33 |
| 1795-B* | III | 3/16" | .052" | 2 ea. end | 3/16" hex | 1/4-28 | b | 2,800 rms | .33 |
| 1942-F4† | I-c | 1 1/2" | 3/32" | 2 | 3/16" hex | 4-40 | " | 4,000 rms | .21 |
| 1942-F6† | I-c | 1 1/2" | 3/32" | 2 | 3/16" hex | 6-32 | " | 4,000 rms | .21 |
| 1942-X† | I-a | 1 1/2" | 3/32" | 2 | 3/16" hex | 6-32 | " | 4,000 rms | .21 |
| 1942-X3† | I-a | 1 1/2" | 3/32" | 2 | 3/16" hex | 6-32 | " | 4,000 rms | .21 |
| 1942-Y156† | I-b | 1 1/2" | 3/32" | 2 | 3/16" hex | .187 | Chart I | 4,000 rms | .21 |
| 1945‡ | I-a | 3/16" | 3/32" | 2 | 3/16" hex | 6-32 | Chart IV; c | 4,000 rms | .30 |
| 1946‡ | I-b | 3/16" | 3/32" | 2 | 3/16" hex | .187 | Chart V; c | 4,000 rms | .30 |
| 1980-XA† | I-a | 3/16" | 3/32" | 1 | 3/16" hex | 3-48 | Chart II | 2,500 rms | .21 |
| 1980-XB† | I-a | 3/16" | 3/32" | 1 | 3/16" hex | 3-48 | Chart II | 4,000 rms | .21 |
| 1980-XC† | I-a | 3/16" | 3/32" | 1 | 3/16" hex | 3-48 | Chart II | 5,000 rms | .21 |
| 1980-YA156† | I-b | 3/16" | 3/32" | 1 | 3/16" hex | .141 | Chart I | 2,500 rms | .21 |
| 1980-YB156† | I-b | 3/16" | 3/32" | 1 | 3/16" hex | .141 | Chart I | 4,000 rms | .21 |
| 1980-YC156† | I-b | 3/16" | 3/32" | 1 | 3/16" hex | .141 | Chart I | 5,000 rms | .21 |
| 1990† | III | 3/16" | 1/16" | 2 ea. end | 3/16" hex | 1/4-28 | d | 2,500 rms | .45 |
| 1995-A† | I-a | 3 5/64" | .145" | 1 | 3/16" hex | 6-32 | e | 4,000 rms | .21 |
| 1995-B† | I-a | 3 5/64" | .145" | 1 | 3/16" hex | 6-32 | " | 4,000 rms | .21 |
| 1995-C† | I-a | 4 3/64" | .145" | 2 | 3/16" hex | 6-32 | " | 4,000 rms | .21 |
| 1995-D† | I-a | 4 3/64" | .145" | 2 | 3/16" hex | 6-32 | " | 4,000 rms | .21 |
| 2045-F4† | I-c | 3 5/64" | 3/32" | 2 | 1/4" hex | 4-40 | " | 2,500 rms | .21 |
| 2045-F6† | I-c | 3 5/64" | 3/32" | 2 | 1/4" hex | 6-32 | " | 2,500 rms | .21 |
| 2045-X† | I-a | 1 1/2" | 3/32" | 2 | 1/4" hex | 4-40 | " | 2,500 rms | .21 |
| 2045-X3† | I-a | 1 1/2" | 3/32" | 2 | 1/4" hex | 4-40 | " | 2,500 rms | .21 |
| 2045-Y156† | I-b | 1 1/2" | 3/32" | 2 | 1/4" hex | .141 | Chart I | 2,500 rms | .21 |
| 3482-1† | II-c | 2 5/64" | 3/32" | 1 | 3/16" hex | 3-48 | f | 3,300 rms | .21 |
| 3480-1† | II-a | 2 5/64" | 3/32" | 1 | 3/16" hex | 3-48 | f | 3,300 rms | .21 |
| 3481† | II-b | 2 5/64" | 3/32" | 1 | 2-11 | .141 | Chart V; g | 3,300 rms | .21 |
| 3485-1† | II-c | 1 1/2" | 3/32" | 2 | 3/16" hex | 4-40 | " | 11,000 rms | .27 |
| 3485-2† | II-c | 1 1/2" | 3/32" | 2 | 3/16" hex | 6-32 | " | 11,000 rms | .27 |
| 3483-1† | II-a | 3 1/32" | 3/32" | 2 | 3/16" hex | 6-32 | " | 11,000 rms | .27 |
| 3483-2† | II-a | 3 1/32" | 3/32" | 2 | 3/16" hex | 6-32 | " | 11,000 rms | .27 |
| 3484† | II-b | 3 1/32" | 3/32" | 2 | .355 | .187 | Chart V | 11,000 rms | .27 |
| 2255† | II-a | 1 1/2" | 3/32" | 1 | 3/16" hex | 2-56 | Chart III; g | 2,000 rms | .21 |
| 4115-1-0519 | IV | 1 5/64" | 3/32" | 2 | 1/4" | .205 | c | 2,000 rms | .17 |
| 4114-2-0519 | IV | 1 5/64" | .096" | 2 | 1/4" | .205 | h | 2,000 rms | .17 |
| 4113-1-0519 | IV | 1 5/64" | .096" | 1 | 1/4" | .205 | h | 2,000 rms | .17 |
| 4263-1-0519 | IV | 1 5/64" | 3/32" | 2 ea. end | 1/4" | .205 | i | 2,000 rms | .21 |
| 4025-1-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4026-1-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4025-2-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4026-2-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4025-3-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4026-3-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4025-4-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4026-4-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4027-2-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |
| 4028-2-0519 | IV | 1 5/64" | 3/64" | 2 | 1 1/64" | .136 | c | 2,000 rms | .12 |



Material: Mounting stud, brass with cadmium plate unless otherwise noted. Terminal, brass with silver plate unless otherwise noted. Insulator (see Number column): *Phenolic; †Ceramic; ‡Teflon.

Notes: a. Mounting hardware supplied. B height, 3/8". Stud nickel-plated. b. Mounting hardware supplied. B height, 3/8". Stud nickel-plated. c. Terminal tin-lead solder plate. d. Mounting hardware supplied. B height, 3/8". Stud nickel-plated. e. Stud nickel-plated. f. Terminal silver plate and gold flash; Stud nickel-plate. g. Terminal silver plate and gold flash. Stud nickel-plate. h. Terminal tin-lead solder plate; .043" through-hole. i. Terminal tin-lead solder plate; .070" turret dia. below. B height, 1 1/2".

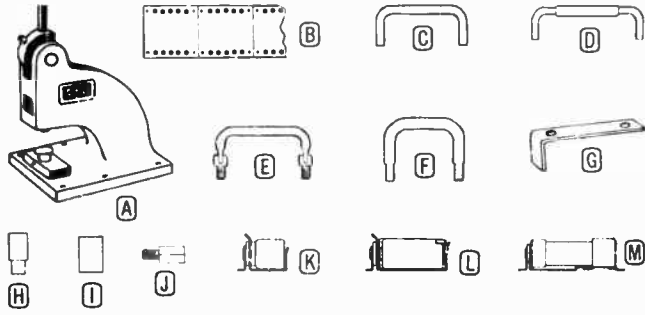
| Rivet Length and Part No. Suffix | CHART III | | CHART V | |
|----------------------------------|-----------|------------|----------|-------------|
| | Oash No. | Stud Lgth. | Dash No. | Rivet Lgth. |
| .062 | -1 | .125" | -1 | .062" |
| .094 | -2 | .188" | -2 | .094" |
| .105 | -3 | .250" | -3 | .105" |
| .125 | | | -4 | .125" |
| .156 | | | -5 | .156" |

| Stud Length and Part No. Suffix | CHART IV | | CHART VI | |
|---------------------------------|----------|------------|----------|------------|
| | Oash No. | Stud Lgth. | Oash No. | Thrd. Size |
| .094 | -1 | 1/4" | -1 | 4-40 |
| .125 | -2 | 3/8" | -2 | 6-32 |
| .156 | | | | |
| .250 | | | | |

★WRITE FOR DISCOUNTS ON LARGER QUANTITIES



HARDWARE



#3801 ARBOR SWAGERS (FIG. A)

Specially designed by Cambion for mounting Cambion terminals on terminal boards. These Arbor Swagers are sturdy, precision-built, hand operated, cam action rolling tools; designed for quick, solid uniform swaging of solder terminals. Adjustable to a wide range of terminal board thicknesses by setting the anvil at the proper height. Terminals may be swaged, in place, as far as 1 1/8" from the board edge. Pressure is adjustable and uniform, assuring good, even peening. When ordering, specify terminal to be staked, PSA (anvil) and PSP (punch) toolings are used with the Arbor Swager, Net Each \$40.00. PSA and PSP tooling, each \$4.00.

ALL-PURPOSE HANDLES
 BRASS TYPE

Available in polished nickel plate or black oxide finish.

| Cambion Number | Fig. | Mtd. Ht. | Mtg. Ctrs. | Tap or Stud Lgth. x Size | Dia. | Net Each, 1-9* Nickel Plate -1* Black Oxide -2* |
|----------------|------|----------|------------|--------------------------|-------|---|
| 1075 | C | 1 1/2" | 4 3/8" | 3/8" x 10-32 | 3/16" | \$1.16 \$0.97 |
| 1220 | C | 1" | 1 1/4" | 3/8" x 4-40 | 3/32" | 1.09 .96 |
| 1221 | C | 1" | 2" | 3/8" x 4-40 | 3/32" | 1.16 1.02 |
| 1222 | C | 1" | 3" | 3/8" x 4-40 | 3/32" | 1.21 1.07 |
| 1250 | C | 1 3/8" | 2" | 3/16" x 8-32 | 3/32" | .99 .85 |
| 1252 | C | 1 3/8" | 3" | 3/16" x 8-32 | 3/32" | 1.02 .91 |
| 1260 | F | 1 3/8" | 2" | 3/16" x 12-28 | 3/32" | 1.16 1.02 |
| 1261 | F | 1 3/8" | 3" | 3/16" x 12-28 | 3/32" | 1.24 1.10 |
| 1262 | F | 1 1/2" | 4" | 3/16" x 12-28 | 3/32" | 1.37 1.21 |
| 1263 | F | 1 3/8" | 6" | 3/16" x 12-28 | 3/32" | 1.51 1.38 |
| 1280 | C | 1 1/2" | 2" | 3/8" x 8-32 | 1/4" | 1.07 .93 |
| 1281 | C | 1 1/2" | 3" | 3/8" x 8-32 | 1/4" | 1.12 .99 |
| 1282 | C | 1 1/2" | 4" | 3/8" x 8-32 | 1/4" | 1.21 1.07 |
| 1283 | C | 1 1/2" | 6" | 3/8" x 8-32 | 1/4" | 1.31 1.16 |
| 1965 | C | 1 3/8" | 6 1/2" | 3/8" x 10-32 | 3/16" | 1.19 1.12 |
| 1900-1 | E | 1 1/2" | 4" | 5/8" x 3/8-24 | 3/16" | 2.80 2.60 |
| 2066 | D | 1 1/2" | 3" | 5/8" x 10-32 | 3/16" | 3.10 2.60 |
| 2062-1 | E | 1 1/2" | 4" | 5/8" x 3/8-24 | 3/16" | 2.70 2.50 |
| 2111-2 | C | 1 1/2" | 4 3/8" | 1/2" x 10-32 | # | 1.82 1.70 |
| 2111-3 | C | 1 3/4" | 6 1/8" | 1/2" x 10-32 | # | 2.10 1.92 |
| 2111-4 | C | 1 3/4" | 9" | 1/2" x 10-32 | # | 2.30 2.20 |
| 2111-1 | C | 1 3/4" | 3" | 5/8" x 10-32 | # | 1.62 1.50 |
| 2721-1 | E | 1 3/4" | 4" | 5/8" x 3/8-24 | # | 3.10 2.90 |
| 2722-1 | E | 1 3/4" | 4" | 5/8" x 3/8-24 | # | 3.70 3.00 |

*Add suffix to Cambion number when ordering (example, 1075-1). †90° folding; 3/8" dia. base. ‡180° folding; 5/8" dia. base. §Adjustable 4 1/2" to 6 1/2". #Oval: 3/32" x 3/8". □Add suffix -02 for nickel plate; -12 for black oxide.

ALUMINUM TYPE

Specify black or semi-frost finish when ordering.

| Cambion Number | Fig. | Mtd. Ht. | Mtg. Ctrs. | Tap or Stud Lgth. x Size | Dia. | Net Ea., 1-9* |
|----------------|------|----------|------------|--------------------------|-------|---------------|
| 1230 | C | 1" | 1 1/4" | 3/8" x 4-40 | 3/32" | \$0.69 |
| 1231 | C | 1" | 2" | 3/8" x 4-40 | 3/32" | .77 |
| 1232 | C | 1" | 3" | 3/8" x 4-40 | 3/32" | .82 |
| 1290 | C | 1 1/2" | 2" | 3/8" x 8-32 | 1/4" | .71 |
| 1291 | C | 1 1/2" | 3" | 3/8" x 8-32 | 1/4" | .77 |
| 1292 | C | 1 1/2" | 4" | 3/8" x 8-32 | 1/4" | .88 |
| 1293 | C | 1 1/2" | 6" | 3/8" x 8-32 | 1/4" | 1.01 |
| 1270-1 | C | 1 3/8" | 4" | 3/8" x 10-32 | 3/16" | 1.19 |
| 1271-1 | C | 1 3/8" | 4" | 3/8" x 12-24 | 3/16" | 1.19 |
| 2385-1 | C | 1 3/8" | 3" | 3/8" x 10-24 | # | 1.23 |
| 2385-2 | C | 1 1/2" | 4 1/8" | 3/8" x 10-24 | # | 1.31 |
| 2385-3 | C | 1 3/4" | 6 1/8" | 3/8" x 10-24 | # | 1.43 |
| 2385-4 | C | 1 3/4" | 9" | 3/8" x 10-24 | # | 1.56 |

±Oval, 3/32" x 5/8"

MERCURY BATTERY HOLDERS

Phosphor-bronze body with nylon insulator. Rivets (No. 2099) available for assembly of holders. Specify Finish: Add suffix to number to indicate finish desired (example 2233-1); -1, no longer available; -2, nickel plate; -3, gold flash over nickel plate.

| Cambion Number | Fig. | Max. Size, Inches H. x W. x L. | Battery Size, Inches Dia. x Lgth. | Net Each, 1-9* | |
|----------------|------|-----------------------------------|--------------------------------------|----------------|-----------|
| | | | | Suffix -2 | Suffix -3 |
| 2233 | K | 4 3/4 x 1/2 x 1 3/32 | 5/8 x 2 1/32 | \$0.35 | \$0.43 |
| 2234 | L | 4 3/4 x 3/4 x 1 3/4 | 7/32 x 1 1/8 | .44 | .52 |
| 2324 | M | 5 3/4 x 3/4 x 4 3/32 | 7/32 x 3 1/4 | .92 | 1.05 |
| 2475 | M | 5 3/4 x 3/4 x 2 1/32 | 7/32 x 2 | .74 | .85 |
| 2477 | M | 5 3/4 x 3/4 x 3 1/2 | 7/32 x 2 5/8 | .83 | .93 |
| 2570 | M | 1 1/2 x 1 x 3 1/4 | 1 1/4 x 2 3/8 | 1.01 | 1.26 |

*Mercury "D" cell, not illustrated.

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ALL-SET TERMINAL BOARDS (FIG. B)

Board is scored into 2 5/8" sections to facilitate wiring divisions; 5-section length, 13 1/8". Terminal spacing, 3/8". Standard boards, below, have 5 sections per board. For use with 1724 terminal unless otherwise noted.

PHENOLIC TYPE

| Board Width | Terminal Rows Spaced | Recommended Bracket | Cotton Fabric | | Nylon Fabric | |
|-------------|----------------------|---------------------|---------------|--------------|--------------|--------------|
| | | | Cambion No. | Net Ea. 1-9* | Cambion No. | Net Ea. 1-9* |
| 1/2" | 8 | ..... | 1401* | \$.89 | 1401* | \$1.02 |
| 2" | 1 1/2" | 1998-B | 1402* | 2.00 | 1402* | 2.50 |
| 2 1/4" | 2" | 1998-C | 1403* | 2.10 | 1403* | 2.70 |
| 3" | 2 1/2" | 1998-D | 1404* | 2.20 | 1404 | 2.90 |
| 1 3/8" | 3 1/2" | 1998-E | 1405† | 1.84 | 1405‡ | 2.00 |
| 1 1/2" | 1 3/8" | 1998-F | 1406* | 1.97 | 1406* | 2.30 |

*Specify Board thickness by dash no. In cotton -15 = 3/32"; -45 = 1/8"; in Nylon -35 = 3/32"; -65 = 1/8"; †In Cotton -15 = 1/4" bd., -45 = 3/32" bd. In Nylon -35 = 1/4" bd. -65 = 1/8" bd. Used with 1558 Terminal. ‡Single Row of Terminals.

GLASS EPOXY TYPE

| Board Width | Terminal Rows Spaced | Recommended Bracket | Thin Board* | | Heavy Board† | |
|-------------|----------------------|---------------------|-------------|--------------|--------------|--------------|
| | | | Cambion No. | Net Ea. 1-9* | Cambion No. | Net Ea. 1-9* |
| 1/2" | 8 | ..... | 1401 | \$1.51 | 1401 | \$1.72 |
| 2" | 1 1/2" | 1998-B | 1402 | 3.40 | 1402 | 4.20 |
| 2 1/4" | 2" | 1998-C | 1403 | 3.70 | 1403 | 4.40 |
| 3" | 2 1/2" | 1998-D | 1404 | 4.20 | 1404 | 5.20 |
| 1 3/8" | 3 1/2" | 1998-E | 1405 | 2.50 | 1405 | 3.00 |
| 1 1/2" | 1 3/8" | 1998-F | 1406 | 3.20 | 1406 | 3.80 |

‡Used with 1558 terminal. †Single row of terminals. *25 3/32" thick. †55 1/8" thick. 1405-25 = 1/8", 1405-55 = 3/32".

MOUNTING BRACKETS (FIG. G)

Cadmium plated cold rolled steel construction.

| Cambion Number | Width In. | Long Leg Size, In. | | | Short Leg, In. | Net Each 1-9* |
|----------------|-----------|--------------------|------------|-------------|----------------|---------------|
| | | Lgth. | Hole Dia.† | Hole Ctrs.‡ | | |
| 1301# | 3/4" | 2 1/4" | 3/32" | ..... | 1.44 | .12 |
| 1302† | 3/4" | 2 3/4" | 3/32" | ..... | 1.44 | .11 |
| 1303‡ | 3/4" | 2 3/4" | 1 1/8" | ..... | 1.44 | .11 |
| 1963# | 3/8" | 1 3/8" | 3/32" | ..... | 3/32" | .12 |
| 1981 | 3/8" | 2 1/2" | 3/32" | 1 3/4" | 3/32" | .11 |
| 1988-1 | 3/8" | 2 1/4" | 3/8" | 2" | 3/32" | .11 |
| 1988-2 | 3/8" | 2 3/8" | 3/8" | 2" | 3/32" | .11 |
| 1988-3 | 3/8" | 3" | 3/8" | 2 1/2" | 3/32" | .11 |
| 1988-4 | 3/8" | 1 7/8" | 3/32" | 3/4" | 3/32" | .11 |
| 1988-5 | 3/8" | 1 7/8" | 3/32" | 1 3/4" | 3/32" | .11 |

*Distance from surface to center of hole. †1/8" sq. tab on center of longer leg, 3/64" from end. ‡1/4" sq. tab on center of longer leg, 3/64" from end. §Slot. ±Curved end on short leg.

STANDOFFS

Cadmium plated brass construction.

| Cambion Number | Fig. | O.D., In. | I.D. | Shank Dia. or Stud | Above Panel Ht., In. | Use With Tool‡ | Net Each 1-9* |
|----------------|------|-----------|-------|--------------------|----------------------|------------------|---------------|
| 1246 | H | 1/4" | 6-32 | .117" | * | PSA-10 PSP-12 | .12 |
| 1300 | H | 1/4" | 4-40 | .138" | * | PSA-10 PSP-7 | .12 |
| 2188 | H | 3/8" | 2-56 | .125" | * | PSA-39 PSP-38 | .12 |
| 1801-1 | I | 3/16" | 4-40 | ..... | 1/4" | ..... | .13 |
| 1801-2 thru-6 | I | 1/4" | 6-32 | ..... | ..... | ..... | .13 |
| 1801-7 thru-10 | I | 3/8" | 8-32 | ..... | ..... | ..... | .13 |
| 1915 | I | 1/4" | .129" | ..... | ..... | ..... | .06 |
| 1916 | I | 3/16" | .154" | ..... | ..... | ..... | .08 |
| 1917 | I | 3/8" | .180" | ..... | ..... | ..... | .09 |
| 1299-1 | J | 1/4" | 6-32 | 6-32§ | 3/8" | ..... | .10 |
| 1299-2 | J | 1/4" | 6-32 | 6-32§ | 1/2" | ..... | .10 |

§1/4" stud length.

***CHART I**

Specify above-panel height desired and board thickness by adding suffix to number (example: 1246-1, 1300-11, etc.).

| Suffix for Panel Thickness of | | | | | | Above-Panel Height |
|-------------------------------|-------|-------|------|-------|------|--------------------|
| 1/32" | 1/16" | 3/32" | 1/8" | 3/16" | 1/4" | |
| -1 | -9 | -17 | -25 | -33 | -41 | 1/4" |
| -2 | -10 | -18 | -26 | -34 | -42 | 3/8" |
| -3 | -11 | -19 | -27 | -35 | -43 | 1/2" |
| -4 | -12 | -20 | -28 | -36 | -44 | 5/8" |
| -5 | -13 | -21 | -29 | -38 | -46 | 1" |
| -6 | -14 | -22 | -30 | -38 | -46 | 3/4" |
| -7 | -15 | -23 | -31 | -39 | -47 | 1 1/4" |
| -8 | -16 | -24 | -32 | -40 | -48 | 1" |

†CHART II

Specify above-panel height desired by adding suffix to number.

| Suffix for Standoff Nos. | | Above-Panel Height |
|--------------------------|-----------|--------------------|
| 1801 | 1915-1917 | |
| -1, -2 | -1 | 1/4" |
| -3, -7 | -2 | 3/8" |
| -4, -8 | -3 | 1/2" |
| -5, -9 | -4 | 5/8" |
| -6, -10 | -5 | 3/4" |

‡CHART III

Specify tooling by proper suffix into tool type listed for specific stand-off (examples: PSA-10-1 and PSP-101 for 1/2" or 3/8" h 1246 standoff).

| Suffix | Above-Panel Height |
|--------|--------------------|
| -1 | 1/4", 3/8" |
| -2 | 1/2", 5/8" |
| -3 | 1", 1 1/4" |
| -4 | 3/4", 1" |

***WRITE FOR DISCOUNTS ON LARGER QUANTITIES.**



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

SCREW TYPE TERMINAL STRIPS



| Code | Mounting Centers | List Price Each |
|------|------------------|-----------------|
| 17-1 | 7/8" | \$.065 |
| 17-2 | 1 1/16" | .113 |
| 17-3 | 1 3/4" | .16 |

Ideal for chassis or breadboard layouts. Solder coated brass terminals. .136 diameter mounting holes. Strips with 1 to 6 lugs are of 1/16" bakelite; 7 to 10 terminals mounted on 3/32" bakelite. Ends of screws are captivated to prevent removal. Terminals are spaced on 1/16" centers. Code indicates number of terminal lugs.

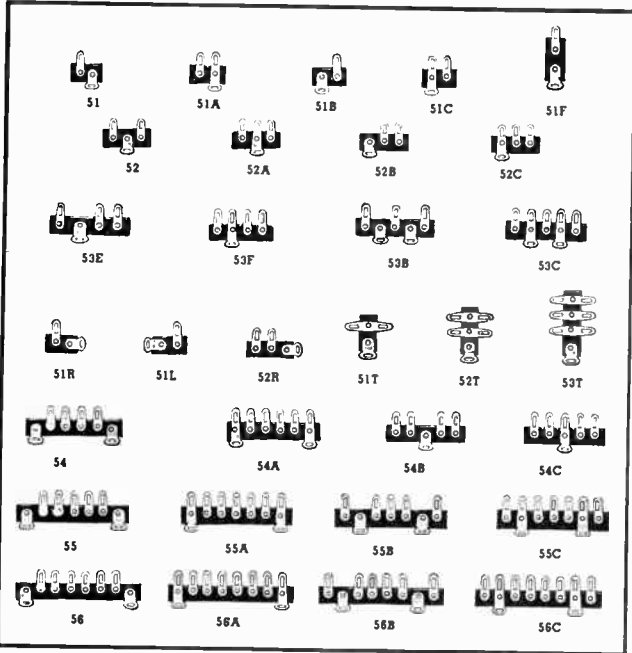
| Code | Mounting Centers | List Price Each |
|------|------------------|-----------------|
| 17-4 | 2 3/16" | .208 |
| 17-5 | 2 5/8" | .255 |
| 17-6 | 3 1/4" | .303 |
| 17-7 | 3 1/2" | .375 |

SCREEN TYPE PLUG BUTTON

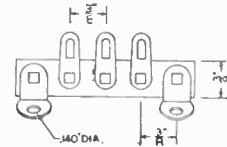
For portable radios, transmitters, amplifiers, etc. Provides ventilation wherever required in radio, television and electronic equipment. Bright zinc plated steel button snaps in 1" diam. hole. Half size illustration.



| No. | Description | List Price Ea. |
|-----|-------------|----------------|
| 41V | for 1" Hole | \$.20 |



LUG TYPE TERMINAL STRIPS



These bakelite strips are handy for neatly supporting resistors, condensers, etc., in circuit wiring. Solder coated steel lugs are spaced on 3/8" centers with .140 diameter mounting holes. Chocolate colored bakelite strips are 1/16" thick and 3/8" wide.

| No. | Mtg. Centers | List Price Each | No. | Mtg. Centers | List Price Each |
|-----|--------------|-----------------|-----|--------------|-----------------|
| 51 | | \$.153 | 53E | | \$.223 |
| 51A | | .158 | 53F | | .228 |
| 51B | | .153 | 53T | | .325 |
| 51C | | .158 | 54 | 1 7/8" | .315 |
| 51F | | .153 | 54A | 1 7/8" | .325 |
| 51L | | .153 | 54B | | .253 |
| 51R | | .153 | 54C | | .253 |
| 51T | | .175 | 55 | 2 1/4" | .340 |
| 52 | | .188 | 55A | 2 1/4" | .350 |
| 52A | | .193 | 55B | 1 1/2" | .340 |
| 52B | | .188 | 55C | 1 1/2" | .350 |
| 52C | | .193 | 56 | 2 5/8" | .365 |
| 52R | | .188 | 56A | 2 5/8" | .375 |
| 52T | | .250 | 56B | 1 7/8" | .365 |
| 53B | 3/4" | .285 | 56C | 1 7/8" | .375 |
| 53C | 3/4" | .295 | | | |

No. 170 TERMINAL STRIPS

Terminal .032" Brass, Tin Plated

No. 2-170

A heavy-duty solder terminal strip.

Insulation: Black molded Bakelite, 3/16" wide, 1/4" thick. Terminals mounted on 3/8" centers. Mounting holes are 3/8" from center of end Terminals.

| Code | List Price Each | Code | List Price Each |
|-----------|-----------------|------------|-----------------|
| No. 1-170 | \$.26 | No. 6-170 | \$.59 |
| No. 2-170 | .33 | No. 7-170 | .64 |
| No. 3-170 | .38 | No. 8-170 | .70 |
| No. 4-170 | .45 | No. 9-170 | .78 |
| No. 5-170 | .53 | No. 10-170 | .83 |

No. 2000 CABLE CLAMPS



Cadmium plated sturdy steel cable clamps designed for securing cables ranging from 1/16" diameter to 3/8" diameter. Illustrations are half size.

| No. | Dia. of arc | Hole Dia. | Over-all Width | Over-all Length | Hole cent. to arc | List Price Ea. |
|-----|-------------|-----------|----------------|-----------------|-------------------|----------------|
| 35A | 1/8" | .149 | 1 1/32" | 1 1/2" | 1/4" | \$.031 |
| 35B | 3/16" | .140 | 3/16" | 2 3/32" | 3/8" | .023 |
| 35C | 1/4" | .144 | 3/8" | 2 1/2" | 3/8" | .025 |
| 35D | 3/8" | .136 | 3/8" | 2 3/32" | 1/2" | .018 |
| 35E | 1/2" | .147 | 1 1/2" | 1 5/8" | 3/8" | .02 |
| 35F | 3/8" | .171 | 3/8" | 1" | 1/2" | .02 |

No. 2000 TERMINAL STRIPS

Terminal .019" Brass, Tin Plated



No. 2005 Mounting hole—1/4"

Compact and sturdy junction terminal strip. Useful in assembling radio chassis, wiring, etc.

Insulation: bakelite Brackets: steel, cadmium plated. Terminals spaced on 3/8" centers.

| Code | Mounting Hole Centers | List Price Each | Code | Mounting Hole Centers | List Price Each |
|----------|-----------------------|-----------------|----------|-----------------------|-----------------|
| No. 2002 | 1" | \$.11 | No. 2008 | 2 7/8" | \$.20 |
| No. 2003 | 1 5/8" | .12 | No. 2009 | 3 3/8" | .22 |
| No. 2004 | 1 5/8" | .14 | No. 2010 | 3 1/2" | .23 |
| No. 2005 | 1 5/8" | .15 | No. 2011 | 3 1/2" | .25 |
| No. 2006 | 2 1/4" | .17 | No. 2012 | 4 1/8" | .26 |
| No. 2007 | 2 1/8" | .18 | No. 2013 | 4 1/8" | .28 |

PLUG BUTTONS



Used to cover punched or drilled holes in metal, wood, fibre, tubes, plastic, cardboard, etc. Nickel plated steel plug buttons for eight popular size holes. Other sizes available, let us know your requirements. Spring tension prongs hold plug bottom firmly in position. Illustrations are 1/2 actual size. (See screen type above.)

| No. | Fig. | For hole Diameter | Cap Diameter | List Price Ea. |
|-----|------|-------------------|--------------|----------------|
| 41A | A | 1/4" | 1 1/4" | \$.04 |
| 41B | B | 3/8" | 1 1/2" | .04 |
| 41C | C | 1/2" | 1 3/4" | .04 |
| 41D | D | 5/8" | 1 7/8" | .04 |
| 41E | E | 3/4" | 2" | .04 |
| 41F | F | 7/8" | 2 1/8" | .05 |
| 41G | G | 1" | 2 1/4" | .06 |
| 41H | H | 1 1/4" | 2 3/4" | .10 |



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

BARRIER TERMINAL BLOCKS

The Jones Barrier Terminal Block is another product of Cinch designed to offer increased insurance against failure of electrical/electronic circuitry. By interposing barriers between each adjacent terminal position, not only are much higher voltage ratings obtained, but also addi-

tional protection from frayed wire faults is gained. The block is made of molded bakelite. The eyelets and binder screws are of brass, nickel-plated. The ¾W or Y terminals are of brass, hot tin finish. Widths indicated are measured on the barrier between terminals.

No. 140 TERMINAL BLOCKS

5-40 x ¾ Binder Head Screws — Metal-to-Metal Spacing over ¼" Bakelite. Width: 7/8".

| No. 2-140 No. 140 | | No. 2-140-¾ W No. 140-¾ W | | No. 2-140-Y No. 140-Y | |
|----------------------|-----------------|------------------------------|-----------------|--------------------------|-----------------|
| Code | List Price Each | Code | List Price Each | Code | List Price Each |
| 1-140 | \$.15 | 1-140-¾ W | \$.19 | 1-140-Y | \$.19 |
| 2-140 | .24 | 2-140-¾ W | .32 | 2-140-Y | .32 |
| 3-140 | .33 | 3-140-¾ W | .44 | 3-140-Y | .44 |
| 4-140 | .42 | 4-140-¾ W | .57 | 4-140-Y | .57 |
| 5-140 | .51 | 5-140-¾ W | .69 | 5-140-Y | .69 |
| 6-140 | .59 | 6-140-¾ W | .83 | 6-140-Y | .83 |
| 7-140 | .68 | 7-140-¾ W | .95 | 7-140-Y | .95 |
| 8-140 | .77 | 8-140-¾ W | 1.08 | 8-140-Y | 1.08 |
| 9-140 | .86 | 9-140-¾ W | 1.21 | 9-140-Y | 1.21 |
| 10-140 | .95 | 10-140-¾ W | 1.33 | 10-140-Y | 1.33 |
| 11-140 | 1.03 | 11-140-¾ W | 1.45 | 11-140-Y | 1.45 |
| 12-140 | 1.12 | 12-140-¾ W | 1.58 | 12-140-Y | 1.58 |
| 13-140 | 1.21 | 13-140-¾ W | 1.71 | 13-140-Y | 1.71 |
| 14-140 | 1.31 | 14-140-¾ W | 1.84 | 14-140-Y | 1.84 |
| 15-140 | 1.40 | 15-140-¾ W | 1.96 | 15-140-Y | 1.96 |
| 16-140 | 1.49 | 16-140-¾ W | 2.09 | 16-140-Y | 2.09 |
| 17-140 | 1.57 | 17-140-¾ W | 2.21 | 17-140-Y | 2.21 |
| 18-140 | 1.66 | 18-140-¾ W | 2.34 | 18-140-Y | 2.34 |
| 19-140 | 1.75 | 19-140-¾ W | 2.46 | 19-140-Y | 2.46 |
| 20-140 | 1.84 | 20-140-¾ W | 2.60 | 20-140-Y | 2.60 |
| 21-140 | 1.93 | 21-140-¾ W | 2.72 | 21-140-Y | 2.72 |

No. 164 TERMINAL BLOCKS

6-32 x ¼ Binder Head Screws — Metal-to-Metal Spacing over ¼" Bakelite. Width: 7/8".

| No. 2-164 No. 164 | | No. 2-164-¾ W No. 164-¾ W | | No. 2-164-Y No. 164-Y | |
|----------------------|-----------------|------------------------------|-----------------|--------------------------|-----------------|
| Code | List Price Each | Code | List Price Each | Code | List Price Each |
| 1-164 | \$.16 | 1-164-¾ W | \$.20 | 1-164-Y | \$.20 |
| 2-164 | .26 | 2-164-¾ W | .34 | 2-164-Y | .34 |
| 3-164 | .36 | 3-164-¾ W | .47 | 3-164-Y | .47 |
| 4-164 | .46 | 4-164-¾ W | .61 | 4-164-Y | .61 |
| 5-164 | .56 | 5-164-¾ W | .74 | 5-164-Y | .74 |
| 6-164 | .65 | 6-164-¾ W | .89 | 6-164-Y | .89 |
| 7-164 | .75 | 7-164-¾ W | 1.02 | 7-164-Y | 1.02 |
| 8-164 | .85 | 8-164-¾ W | 1.16 | 8-164-Y | 1.16 |
| 9-164 | .95 | 9-164-¾ W | 1.30 | 9-164-Y | 1.30 |
| 10-164 | 1.05 | 10-164-¾ W | 1.43 | 10-164-Y | 1.43 |
| 11-164 | 1.14 | 11-164-¾ W | 1.56 | 11-164-Y | 1.56 |
| 12-164 | 1.24 | 12-164-¾ W | 1.70 | 12-164-Y | 1.70 |
| 13-164 | 1.34 | 13-164-¾ W | 1.84 | 13-164-Y | 1.84 |
| 14-164 | 1.45 | 14-164-¾ W | 1.98 | 14-164-Y | 1.98 |
| 15-164 | 1.55 | 15-164-¾ W | 2.11 | 15-164-Y | 2.11 |
| 16-164 | 1.65 | 16-164-¾ W | 2.25 | 16-164-Y | 2.25 |
| 17-164 | 1.74 | 17-164-¾ W | 2.38 | 17-164-Y | 2.38 |
| 18-164 | 1.84 | 18-164-¾ W | 2.52 | 18-164-Y | 2.52 |
| 19-164 | 1.94 | 19-164-¾ W | 2.65 | 19-164-Y | 2.65 |
| 20-164 | 2.04 | 20-164-¾ W | 2.80 | 20-164-Y | 2.80 |
| 21-164 | 2.14 | 21-164-¾ W | 2.93 | 21-164-Y | 2.93 |

No. 141 TERMINAL BLOCKS

6-32 x ¼ Binder Head Screws — Metal-to-Metal Spacing over ¾" Bakelite. Width: 1 1/8".

| No. 2-141 No. 141 | | No. 2-141-¾ W No. 141-¾ W | | No. 2-141-Y No. 141-Y | |
|----------------------|-----------------|------------------------------|-----------------|--------------------------|-----------------|
| Code | List Price Each | Code | List Price Each | Code | List Price Each |
| 1-141 | \$.20 | 1-141-¾ W | \$.24 | 1-141-Y | \$.24 |
| 2-141 | .31 | 2-141-¾ W | .41 | 2-141-Y | .41 |
| 3-141 | .42 | 3-141-¾ W | .57 | 3-141-Y | .57 |
| 4-141 | .54 | 4-141-¾ W | .74 | 4-141-Y | .74 |
| 5-141 | .65 | 5-141-¾ W | .90 | 5-141-Y | .90 |
| 6-141 | .75 | 6-141-¾ W | 1.07 | 6-141-Y | 1.07 |
| 7-141 | .88 | 7-141-¾ W | 1.23 | 7-141-Y | 1.23 |
| 8-141 | .99 | 8-141-¾ W | 1.40 | 8-141-Y | 1.40 |
| 9-141 | 1.10 | 9-141-¾ W | 1.56 | 9-141-Y | 1.56 |
| 10-141 | 1.22 | 10-141-¾ W | 1.73 | 10-141-Y | 1.73 |
| 11-141 | 1.33 | 11-141-¾ W | 1.89 | 11-141-Y | 1.89 |
| 12-141 | 1.44 | 12-141-¾ W | 2.06 | 12-141-Y | 2.06 |
| 13-141 | 1.56 | 13-141-¾ W | 2.22 | 13-141-Y | 2.22 |
| 14-141 | 1.67 | 14-141-¾ W | 2.39 | 14-141-Y | 2.39 |
| 15-141 | 1.78 | 15-141-¾ W | 2.55 | 15-141-Y | 2.55 |
| 16-141 | 1.90 | 16-141-¾ W | 2.72 | 16-141-Y | 2.72 |
| 17-141 | 2.01 | 17-141-¾ W | 2.88 | 17-141-Y | 2.88 |
| 18-141 | 2.12 | 18-141-¾ W | 3.05 | 18-141-Y | 3.05 |
| 19-141 | 2.24 | 19-141-¾ W | 3.21 | 19-141-Y | 3.21 |
| 20-141 | 2.35 | 20-141-¾ W | 3.38 | 20-141-Y | 3.38 |

No. 142 TERMINAL BLOCKS

8-32 x 5/16" Binder Head Screws — Metal-to-Metal Spacing over 5/16" Bakelite. Width: 1 3/8".

| No. 2-142 No. 142 | | No. 2-142-¾ W No. 142-¾ W | | No. 2-142-Y No. 142-Y | |
|----------------------|-----------------|------------------------------|-----------------|--------------------------|-----------------|
| Code | List Price Each | Code | List Price Each | Code | List Price Each |
| 1-142 | .23 | 1-142-¾ W | \$.30 | 1-142-Y | \$.30 |
| 2-142 | .36 | 2-142-¾ W | .50 | 2-142-Y | .50 |
| 3-142 | .51 | 3-142-¾ W | .70 | 3-142-Y | .70 |
| 4-142 | .65 | 4-142-¾ W | .90 | 4-142-Y | .90 |
| 5-142 | .78 | 5-142-¾ W | 1.11 | 5-142-Y | 1.11 |
| 6-142 | .92 | 6-142-¾ W | 1.31 | 6-142-Y | 1.31 |
| 7-142 | 1.07 | 7-142-¾ W | 1.52 | 7-142-Y | 1.52 |
| 8-142 | 1.20 | 8-142-¾ W | 1.72 | 8-142-Y | 1.72 |
| 9-142 | 1.34 | 9-142-¾ W | 1.93 | 9-142-Y | 1.93 |
| 10-142 | 1.49 | 10-142-¾ W | 2.12 | 10-142-Y | 2.12 |
| 11-142 | 1.62 | 11-142-¾ W | 2.33 | 11-142-Y | 2.33 |
| 12-142 | 1.76 | 12-142-¾ W | 2.53 | 12-142-Y | 2.53 |
| 13-142 | 1.90 | 13-142-¾ W | 2.74 | 13-142-Y | 2.74 |
| 14-142 | 2.04 | 14-142-¾ W | 2.94 | 14-142-Y | 2.94 |
| 15-142 | 2.18 | 15-142-¾ W | 3.15 | 15-142-Y | 3.15 |
| 16-142 | 2.32 | 16-142-¾ W | 3.34 | 16-142-Y | 3.34 |
| 17-142 | 2.45 | 17-142-¾ W | 3.54 | 17-142-Y | 3.54 |



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

BARRIER TYPE TERMINAL BLOCKS

No. 171 TERMINAL BLOCKS



A Miniature Barrier Terminal Block with Single Screw Terminals. $\frac{1}{2}$ " wide by $\frac{3}{8}$ " overall height. Terminals are mounted on $\frac{1}{4}$ " centers. 2-56 x $\frac{1}{4}$ " Binder Head Screws. $\frac{1}{8}$ " Dia. Mounting Holes.

| Code | Contacts | List Price Each | Code | Contacts | List Price Each |
|-------|----------|-----------------|-------|----------|-----------------|
| 2-171 | 2 | \$.24 | 5-171 | 5 | \$.51 |
| 3-171 | 3 | .33 | 6-171 | 6 | .60 |
| 4-171 | 4 | .42 | 7-171 | 7 | .69 |
| | | | 8-171 | 8 | .78 |



No. 6-173

No. 173 and 174 TERMINAL BLOCKS

Single Screw Terminals, $\frac{3}{8}$ " wide by $\frac{1}{2}$ " overall height. Terminals mounted on $\frac{3}{8}$ " centers. 4-40 x $\frac{3}{16}$ " Sems Type Binder Head Screws. $\frac{3}{32}$ " Dia. Mounting Holes. No. 174 series is identical with No. 173 series except they are equipped with plain 4-40 x $\frac{3}{16}$ " binder head screws.

| Code | List Price Each | Code | List Price Each |
|--------|-----------------|--------|-----------------|
| 2-173 | \$.30 | 2-174 | \$.24 |
| 3-173 | .42 | 3-174 | .33 |
| 4-173 | .54 | 4-174 | .42 |
| 5-173 | .66 | 5-174 | .51 |
| 6-173 | .78 | 6-174 | .60 |
| 7-173 | .90 | 7-174 | .69 |
| 8-173 | 1.02 | 8-174 | .78 |
| 9-173 | 1.14 | 9-174 | .87 |
| 10-173 | 1.26 | 10-174 | .96 |

No. 172 TERMINAL BLOCKS

CONVENTIONAL TERMINALS



No. 6-172

$\frac{5}{8}$ " wide by $\frac{3}{8}$ " high. Double-screw terminals are mounted on $\frac{1}{4}$ " centers with 2-56 x $\frac{1}{4}$ " binder head screws. Mounting holes are $\frac{1}{8}$ " dia.

| Code | No. Contacts | List Price Each | Code | No. Contacts | List Price Each |
|-------|--------------|-----------------|--------|--------------|-----------------|
| 2-172 | 2 | \$.57 | 9-172 | 9 | \$1.68 |
| 3-172 | 3 | .73 | 10-172 | 10 | 1.84 |
| 4-172 | 4 | .89 | 11-172 | 11 | 2.01 |
| 5-172 | 5 | 1.05 | 12-172 | 12 | 2.17 |
| 6-172 | 6 | 1.20 | 13-172 | 13 | 2.32 |
| 7-172 | 7 | 1.36 | 14-172 | 14 | 2.48 |
| 8-172 | 8 | 1.52 | | | |



No. 3-172-3/4 W



No. 3-172-Y

"Y" "W" and "3/4 W" TERMINALS

See description of these terminals on preceding page.

| "Y" Code | "W" Code | "3/4 W" Code | List Pr., Ea. |
|----------|----------|--------------|---------------|
| 2-172-Y | 2-172-W | 2-172-3/4 W | \$.64 |
| 3-172-Y | 3-172-W | 3-172-3/4 W | .84 |
| 4-172-Y | 4-172-W | 4-172-3/4 W | 1.04 |
| 5-172-Y | 5-172-W | 5-172-3/4 W | 1.24 |
| 6-172-Y | 6-172-W | 6-172-3/4 W | 1.44 |
| 7-172-Y | 7-172-W | 7-172-3/4 W | 1.64 |
| 8-172-Y | 8-172-W | 8-172-3/4 W | 1.84 |
| 9-172-Y | 9-172-W | 9-172-3/4 W | 2.04 |
| 10-172-Y | 10-172-W | 10-172-3/4 W | 2.24 |
| 11-172-Y | 11-172-W | 11-172-3/4 W | 2.44 |
| 12-172-Y | 12-172-W | 12-172-3/4 W | 2.64 |
| 13-172-Y | 13-172-W | 13-172-3/4 W | 2.84 |
| 14-172-Y | 14-172-W | 14-172-3/4 W | 3.04 |

MORE BARRIER BLOCK LISTINGS ON TWO PRECEDING PAGES

CINCH BATTERY PLUGS



SAB1



6K4



SAB4



SAB5



SAB6



SAB7



SAB8



SA1



SA2-1



SA3



SA4



SA5



SB1A



SB2



SD1



SD2



SM



SF



SD



SMFA

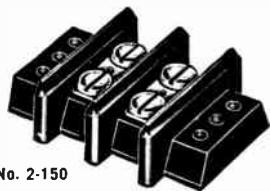
| Part Number | Voltage | For Burgess No. | For Eveready No. | For R.C.A. No. | For Philco No. | For Ray-D-Vac No. | Net Price |
|-------------|---------------------|--------------------------|----------------------|----------------------------|-----------------|----------------------------------|------------|
| SA1 | 1 1/2 "A" | 4F, 4FL, 6F, 8F, 8FL, TE | 741, 742, 743, 1052P | VS004, VS005, VS007, VS008 | P94, P96, P8F1 | P94A, P94L, PX, P96A, P98A, P98L | Ea. \$.097 |
| SA2-1 | 3 "A" | 20F2 | X125 | VS025 | P8024 | P9403 | Ea. .153 |
| SA3 | 4 1/2 "A" | G-3 | 746 | VS002 | P100 | P-83A | Ea. .137 |
| SA4 | 6 "A" | 2F4, 2F4L, F4PI, T5 | A509, 718, 744, 747 | VS009, VS010, VS011 | P4F4R | P694A, P696L, P698A, P698L | Ea. .094 |
| SA5 | 7 1/2 "A" | G-5 | 687 | VS003 | | P85A | Ea. .216 |
| SB1A | 45 "B" Small | M30, Z30, A30, B30 | 482, 738, 762 | VS012, VS013, VS014, VS015 | PR10, P305 | 430P, P7830, P5303 | Ea. .089 |
| SB2-1 | 45 "B" Large | M30, Z30, A30, B30 | 482, 738, 762 | VS012, VS013, VS014, VS015 | P210, P305 | 430P, P7830, P5303 | Ea. .183 |
| SM | 6 7/2 "B" | XX30, XX45 | 455, 467 | VS016, VS056 | | P4367 | Ea. .08 |
| SF | 6 7/2 "B" | XX30, XX45 | 455, 467 | VS016, VS056 | | P4367 | Ea. .08 |
| SMFA | 6 7/2 "B" | XX30, XX45 | 455, 467 | VS016, VS056 | | P4367 | Ea. .45 |
| SD | 45 "B" | U30 | 415 | VS086 | | | Ea. .75 |
| SD1 | 6 7/2 "B" | P45 | 477 | VS218 | P149 | 846 | Ea. .45 |
| SD2 | 90 "B" | N60 | 490 | VS090 | P132 | 4390 | Ea. .45 |
| SAB1-1 | 1 1/2 "A"-90 "B" | 17G060, 50A60, 6TA60 | 758 | VS022, VS043 | P60D11L | AB82, 10793 | Ea. .213 |
| 6K4 | 9 "A"-90 "B" | G6B60 | 752 | VS047 | | | Ea. .336 |
| SAB2 | 1 1/2 "A"-63-90 "B" | 6FA60, 4GA41, 4GA42 | | VS037 | P60A-4L, P41A4G | AB419 | Ea. .115 |
| SAB5 | 6 "A"-90 "B" | D4A60, 2FB60, F4A41 | | VS046 | P41AFL | 10896, AB648 | Ea. .341 |
| SAB6 | 7 1/2 "A"-90 "B" | G5A42, F5A60 | | VS038 | P87, P841 | AB794 | Ea. .166 |
| SAB7 | 9 "A"-90 "B" | F6A60, G6M60 | 753, 754 | VS018, VS019 | P841A | AB878, AG994 | Ea. .172 |
| SAB8 | 9 "A"-90 "B" | 4FA60 | | | | | Ea. .166 |



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

BARRIER TYPE TERMINAL BLOCKS

HEAVY DUTY TYPE



No. 2-150



No. 2-150-Y

No. 150 TERMINAL BLOCKS

Conventional Type. 1 3/8" wide by 3/8" high. Terminals are mounted on 1/8" centers. Screws are 10-32 x 3/8" brass, burnished nickel plate. Fits standard 50 Amp. solder lug for 6 Ga. stranded wire. Metal-to-metal spacing over 5/8" bakelite.

| Code | List Pr. Ea. | Code | List Pr. Ea. |
|-------|--------------|--------|--------------|
| 1-150 | \$.55 | 6-150 | \$2.48 |
| 2-150 | .94 | 7-150 | 2.86 |
| 3-150 | 1.32 | 8-150 | 3.25 |
| 4-150 | 1.71 | 9-150 | 3.63 |
| 5-150 | 2.09 | 10-150 | 4.02 |

Y-Terminal Type. Same as above except "Y" Terminals as illustrated.

| Code | List Pr. Ea. | Code | List Pr. Ea. |
|---------|--------------|----------|--------------|
| 1-150-Y | \$.65 | 6-150-Y | \$3.08 |
| 2-150-Y | 1.14 | 7-150-Y | 3.56 |
| 3-150-Y | 1.62 | 8-150-Y | 4.05 |
| 4-150-Y | 2.11 | 9-150-Y | 4.53 |
| 5-150-Y | 2.59 | 10-150-Y | 5.02 |

No. 151 TERMINAL BLOCKS

No. 2-151

2" wide by 1/8" high. Terminals are mounted on 7/8" centers. Screws: 12-32 x 3/8" brass, burnished nickel plate. Fits standard 70 Amp. solder lug for 4 Ga. stranded wire. Metal-to-metal spacing over 3/4" bakelite.

| Code | List Price Each | Code | List Price Each |
|-------|-----------------|-------|-----------------|
| 1-151 | \$.94 | 5-151 | \$4.02 |
| 2-151 | 1.71 | 6-151 | 4.79 |
| 3-151 | 2.48 | 7-151 | 5.56 |
| 4-151 | 3.25 | 8-151 | 6.33 |

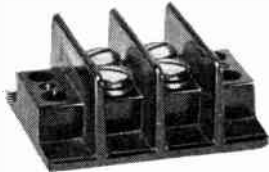
No. 152 TERMINAL BLOCKS

No. 2-152

2 1/2" wide by 1 1/8" high. Terminals are mounted on 1 1/8" centers. Screws: 1/4"-28 x 1/2" brass, burnished nickel plate. Fits standard 90 Amp. solder lug for 2 Ga. stranded wire. Metal-to-metal spacing over 1" bakelite.

| Code | List Price Each | Code | List Price Each |
|-------|-----------------|-------|-----------------|
| 1-152 | \$1.27 | 4-152 | \$4.73 |
| 2-152 | 2.42 | 5-152 | 5.89 |
| 3-152 | 3.58 | 6-152 | 7.04 |

NEW "500" SERIES BARRIER BLOCKS



No. 2-540

The new 500 series barrier blocks are designed for applications where electrical and mechanical performance requirements are especially critical. Bottoms are closed so that insulating strips are not required. Knockouts are molded into the base so that Y terminals can be accommodated if desired. The heavy construction adds strength to the strip minimizing warpage and shrinkage. A top-mounted marker strip can be furnished, as described elsewhere in this catalog.

No. 540 TERMINAL BLOCKS

1 1/8" wide by 3/8" high. Terminals are mounted on 3/8" centers with 5-40 x 3/8" binder head screws. Creepage distance is 1/2". Ratings: 2300 VRMS, 15 amps. Code indicates number of terminals.

| Code | List, Ea. | Code | List, Ea. |
|--------|-----------|--------|-----------|
| 1-540 | \$.17 | 17-540 | \$1.73 |
| 2-540 | .26 | 18-540 | 1.83 |
| 3-540 | .36 | 19-540 | 1.93 |
| 4-540 | .46 | 20-540 | 2.02 |
| 5-540 | .56 | 21-540 | 2.12 |
| 6-540 | .65 | 22-540 | 2.22 |
| 7-540 | .75 | 23-540 | 2.32 |
| 8-540 | .85 | 24-540 | 2.41 |
| 9-540 | .95 | 25-540 | 2.51 |
| 10-540 | 1.05 | 26-540 | 2.61 |
| 11-540 | 1.13 | 27-540 | 2.71 |
| 12-540 | 1.23 | 28-540 | 2.80 |
| 13-540 | 1.33 | 29-540 | 2.90 |
| 14-540 | 1.44 | 30-540 | 3.00 |
| 15-540 | 1.54 | 31-540 | 3.10 |
| 16-540 | 1.64 | | |

No. 541 TERMINAL BLOCKS

1 3/8" wide by 1/8" high. Terminals are mounted on 3/8" centers with 6-32 x 1/4" binder head screws. Creepage distance is 5/8". Ratings: 2800 VRMS, 20 amps. Code indicates no. of terminals.

| Code | List, Ea. | Code | List, Ea. |
|--------|-----------|--------|-----------|
| 1-541 | \$.22 | 16-541 | \$2.09 |
| 2-541 | .32 | 17-541 | 2.21 |
| 3-541 | .46 | 18-541 | 2.33 |
| 4-541 | .59 | 19-541 | 2.46 |
| 5-541 | .72 | 20-541 | 2.59 |
| 6-541 | .83 | 21-541 | 2.71 |
| 7-541 | .97 | 22-541 | 2.83 |
| 8-541 | 1.09 | 23-541 | 2.95 |
| 9-541 | 1.22 | 24-541 | 3.08 |
| 10-541 | 1.34 | 25-541 | 3.20 |
| 11-541 | 1.46 | 26-541 | 3.32 |
| 12-541 | 1.58 | 27-541 | 3.44 |
| 13-541 | 1.72 | 28-541 | 3.56 |
| 14-541 | 1.84 | 29-541 | 3.69 |
| 15-541 | 1.96 | 30-541 | 3.80 |

No. 542 TERMINAL BLOCKS

1 1/2" wide by 7/8" high. Terminals are mounted on 3/8" centers with 8-32 x 3/8" binder head screws. Creepage distance is 3/4". Ratings: 4000 VRMS, 30 amps. Code indicates no. of terminals.

| Code | List, Ea. | Code | List, Ea. |
|--------|-----------|--------|-----------|
| 1-542 | \$.25 | 16-542 | 2.55 |
| 2-542 | .40 | 17-542 | 2.70 |
| 3-542 | .56 | 18-542 | 2.86 |
| 4-542 | .72 | 19-542 | 3.01 |
| 5-542 | .86 | 20-542 | 3.16 |
| 6-542 | 1.01 | 21-542 | 3.32 |
| 7-542 | 1.18 | 22-542 | 3.47 |
| 8-542 | 1.32 | 23-542 | 3.62 |
| 9-542 | 1.47 | 24-542 | 3.78 |
| 10-542 | 1.64 | 25-542 | 3.93 |
| 11-542 | 1.78 | 26-542 | 4.08 |
| 12-542 | 1.94 | 27-542 | 4.24 |
| 13-542 | 2.09 | | |
| 14-542 | 2.24 | | |

OPTIONAL TERMINALS AND JUMPERS FOR ABOVE BARRIER BLOCKS

OPTIONAL TERMINALS



"3/4 W"



"W"



"Y"

Solder Terminals. "Y," "W" and "3/4W" are optional types for use with barrier blocks as indicated by code. For * substitute terminal type desired (e.g. Y-140, 3/4W-142 etc.) Also available are W-140-3/4W, W-141-3/4W, and W-142-3/4W at prices below, respectively.

| Code | List, Ea. | Code | List, Ea. |
|-------|-----------|-------|-----------|
| *-140 | \$.044 | *-150 | \$.10 |
| *-141 | .059 | *-151 | .18 |
| *-142 | .072 | *-152 | .26 |

Quick-Clamp* Terminals. Simplifies engaging of wires to barrier blocks. Wire is stripped, inserted into flared opening on Quick-Clamp and the screw tightened. Since wire is not bent around the screw, significant time savings result. Two built-in stops prevent conductors from extending beyond the rear of the terminal. Screws are brass, binder-head type.

| Code | Barrier Strip Series | Wire Gauge | Screw Size | List, Ea.† |
|------|----------------------|------------|-------------|------------|
| QC-1 | 141,541 | 14 thru 22 | 6-32 x 3/8" | \$.098 |
| QC-2 | 142,542 | 8 thru 16 | 8-32 x 3/8" | .106 |

*Patent pending
†Includes two mating clamps and screws.

JUMPERS



141J or 95B



142J-1



140J-1



142J-2



141J-1



540J, 541J, 542J

Jumpers pictured at left are used for making permanent connections between adjacent barrier block terminals, except for 142J-1 which connects two alternate terminals, bridging the intermediate terminal.

| Code | Barrier Strip Series | List, Ea. |
|---------|----------------------|-----------|
| 141-J | 140, 141 | \$.04 |
| 95B | 142 | .14 |
| 140J-1 | 140 | .03 |
| 141J-1 | 141 | .06 |
| 142J-1* | 142, 542 | .06 |
| 142J-2 | 142, 542 | .05 |
| 540J | 540 | .29 |
| 541J | 541 | .31 |
| 542J | 542 | .33 |

*See notation above.



CINCH-JONES DISTRIBUTOR SALES DIVISION • CINCH MANUFACTURING COMPANY

MARKER STRIPS FOR BARRIER TERMINAL BLOCKS



No. MS-4-140

For labelling terminal positions on barrier terminal blocks and insulating exposed portions of terminals from metallic mounting surface. Marker strip mounting holes correspond with those on appropriate barrier terminal block. Made of 1/2" black fibre and numbered sequentially from 1 with legible white numerals. Code indicates number of terminal positions accommodated.

Marker Strips for 140, 140W, 140-3/4 W, 164, 164 W, 164-3/4 W

| Code | List Ea. | Code | List Ea. |
|-----------|----------|-----------|----------|
| MS- 2-140 | \$.088 | MS-12-140 | \$.223 |
| MS- 3-140 | .097 | MS-13-140 | .242 |
| MS- 4-140 | .107 | MS-14-140 | .252 |
| MS- 5-140 | .116 | MS-15-140 | .261 |
| MS- 6-140 | .126 | MS-16-140 | .321 |
| MS- 7-140 | .135 | MS-17-140 | .330 |
| MS- 8-140 | .145 | MS-18-140 | .340 |
| MS-10-140 | .214 | MS-19-140 | .349 |
| MS-11-140 | .223 | MS-20-140 | .409 |
| | | MS-21-140 | .418 |

Marker Strips for 141, 141 W and 141-3/4 W

| Code | List Ea. | Code | List Ea. |
|-----------|----------|-----------|----------|
| MS- 2-141 | \$.094 | MS-12-141 | \$.271 |
| MS- 3-141 | .107 | MS-13-141 | .283 |
| MS- 4-141 | .120 | MS-14-141 | .296 |
| MS- 5-141 | .132 | MS-15-141 | .359 |
| MS- 6-141 | .145 | MS-16-141 | .371 |
| MS- 7-141 | .158 | MS-17-141 | .384 |
| MS- 8-141 | .170 | MS-18-141 | .397 |
| MS- 9-141 | .183 | MS-19-141 | .459 |
| MS-10-141 | .245 | MS-20-141 | .472 |
| MS-11-141 | .258 | | |

Marker Strips for 142, 142 W, and 142-3/4 W

| Code | List Ea. | Code | List Ea. |
|-----------|----------|-----------|----------|
| MS- 2-142 | \$.101 | MS-10-142 | \$.277 |
| MS- 3-142 | .116 | MS-11-142 | .293 |
| MS- 4-142 | .132 | MS-12-142 | .309 |
| MS- 5-142 | .148 | MS-13-142 | .325 |
| MS- 6-142 | .164 | MS-14-142 | .340 |
| MS- 7-142 | .180 | MS-15-142 | .406 |
| MS- 8-142 | .195 | MS-16-142 | .422 |
| MS- 9-142 | .211 | MS-17-142 | .438 |

NEW "500" SERIES MARKER BLOCKS



No. MSK-540 (Installed)

For labelling terminal positions on 500 series barrier terminal blocks. Made of 1/4" XP Bakelite, 1/4" wide. Numbered sequentially from 1 with 1/8" legible white numerals. Mounted on top of terminal block as illustrated, with mounting screws furnished. Code indicates number of terminal positions accommodated.

THE 540 SERIES

| Code | List Ea. | Code | List Ea. |
|------------|----------|------------|----------|
| MSX- 2-540 | \$.15 | MSX-17-540 | \$.33 |
| MSX- 3-540 | .16 | MSX-18-540 | .35 |
| MSX- 4-540 | .16 | MSX-19-540 | .35 |
| MSX- 5-540 | .16 | MSX-20-540 | .40 |
| MSX- 6-540 | .17 | MSX-21-540 | .40 |
| MSX- 7-540 | .17 | MSX-22-540 | .42 |
| MSX- 8-540 | .17 | MSX-23-540 | .42 |
| MSX- 9-540 | .17 | MSX-24-540 | .42 |
| MSX-10-540 | .22 | MSX-25-540 | .47 |
| MSX-11-540 | .23 | MSX-26-540 | .47 |
| MSX-12-540 | .23 | MSX-27-540 | .47 |
| MSX-13-540 | .23 | MSX-28-540 | .47 |
| MSX-14-540 | .25 | MSX-29-540 | .47 |
| MSX-15-540 | .30 | MSX-30-540 | .56 |
| MSX-16-540 | .30 | MSX-31-540 | .56 |

THE 541 SERIES

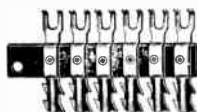
| Code | List Ea. | Code | List Ea. |
|------------|----------|------------|----------|
| MSX- 2-541 | \$.16 | MSX-16-541 | \$.35 |
| MSX- 3-541 | .16 | MSX-17-541 | .35 |
| MSX- 4-541 | .17 | MSX-18-541 | .35 |
| MSX- 5-541 | .17 | MSX-19-541 | .37 |
| MSX- 6-541 | .17 | MSX-20-541 | .42 |
| MSX- 7-541 | .17 | MSX-21-541 | .42 |
| MSX- 8-541 | .18 | MSX-22-541 | .42 |
| MSX- 9-541 | .18 | MSX-23-541 | .42 |
| MSX-10-541 | .23 | MSX-24-541 | .42 |
| MSX-11-541 | .23 | MSX-25-541 | .47 |
| MSX-12-541 | .25 | MSX-26-541 | .51 |
| MSX-13-541 | .25 | MSX-27-541 | .51 |
| MSX-14-541 | .25 | MSX-28-541 | .51 |
| MSX-15-541 | .35 | MSX-29-541 | .51 |
| | | MSX-30-541 | .56 |

THE 542 SERIES

| Code | List Ea. | Code | List Ea. |
|------------|----------|------------|----------|
| MSX- 2-542 | \$.16 | MSX-14-542 | \$.25 |
| MSX- 3-542 | .17 | MSX-15-542 | .37 |
| MSX- 4-542 | .17 | MSX-16-542 | .37 |
| MSX- 5-542 | .17 | MSX-17-542 | .37 |
| MSX- 6-542 | .17 | MSX-18-542 | .37 |
| MSX- 7-542 | .18 | MSX-19-542 | .37 |
| MSX- 8-542 | .18 | MSX-20-542 | .46 |
| MSX- 9-542 | .20 | MSX-21-542 | .46 |
| MSX-10-542 | .29 | MSX-22-542 | .46 |
| MSX-11-542 | .29 | MSX-23-542 | .46 |
| MSX-12-542 | .30 | MSX-24-542 | .46 |
| MSX-13-542 | .30 | MSX-25-542 | .51 |
| | | MSX-26-542 | .51 |

FANNING STRIPS TO FACILITATE CONNECTING TO BARRIER BLOCKS

Jones Fanning Strip Terminals are of .032" Brass, Cadmium Plated. The Bakelite strips are furnished with a hole in either the right or left end for fastening the cable with a cable clamp or lacing twine. Simplifies cable or harness wiring, assuring positive connectors. Makes replacement of units an easy matter and assures correct connections after servicing.



6-160-L

THE 160 SERIES

The following Fanning Strips fit the 140 Series Barrier Blocks. Terminals are mounted on 3/2" Bakelite, 1/2" wide and on 3/8" centers. The B type fits the 140 and 164 series. If desired add suffix B to Code Number.

| Code | List Price Each | Code | List Price Each |
|----------|-----------------|----------|-----------------|
| 2-160-L | \$.14 | 2-160-R | .22 |
| 3-160-L | .22 | 3-160-R | .28 |
| 4-160-L | .28 | 4-160-R | .35 |
| 5-160-L | .35 | 5-160-R | .43 |
| 6-160-L | .43 | 6-160-R | .50 |
| 7-160-L | .50 | 7-160-R | .56 |
| 8-160-L | .56 | 8-160-R | .63 |
| 9-160-L | .63 | 9-160-R | .70 |
| 10-160-L | .70 | 10-160-R | .77 |
| 11-160-L | .77 | 11-160-R | .84 |
| 12-160-L | .84 | 12-160-R | .91 |
| 13-160-L | .91 | 13-160-R | .98 |
| 14-160-L | .98 | 14-160-R | 1.06 |
| 15-160-L | 1.06 | 15-160-R | 1.11 |
| 16-160-L | 1.11 | 16-160-R | 1.19 |
| 17-160-L | 1.19 | 17-160-R | 1.28 |
| 18-160-L | 1.28 | 18-160-R | 1.33 |
| 19-160-L | 1.33 | 19-160-R | 1.41 |
| 20-160-L | 1.41 | 20-160-R | 1.46 |
| 21-160-L | 1.46 | 21-160-R | |



6-161-L (Cable Clamp on Left)

THE 161 SERIES

The following Fanning Strips fit the 141 Series Barrier Blocks. Terminals are mounted on 3/2" Bakelite, 5/8" wide and on 1/4" centers.

| Code | List Price Each | Code | List Price Each |
|----------|-----------------|----------|-----------------|
| 2-161-L | \$.15 | 2-161-R | .22 |
| 3-161-L | .22 | 3-161-R | .29 |
| 4-161-L | .29 | 4-161-R | .36 |
| 5-161-L | .36 | 5-161-R | .44 |
| 6-161-L | .44 | 6-161-R | .51 |
| 7-161-L | .51 | 7-161-R | .57 |
| 8-161-L | .57 | 8-161-R | .64 |
| 9-161-L | .64 | 9-161-R | .72 |
| 10-161-L | .72 | 10-161-R | .79 |
| 11-161-L | .79 | 11-161-R | .85 |
| 12-161-L | .85 | 12-161-R | .92 |
| 13-161-L | .92 | 13-161-R | 1.00 |
| 14-161-L | 1.00 | 14-161-R | 1.07 |
| 15-161-L | 1.07 | 15-161-R | 1.13 |
| 16-161-L | 1.13 | 16-161-R | 1.20 |
| 17-161-L | 1.20 | 17-161-R | 1.29 |
| 18-161-L | 1.29 | 18-161-R | 1.34 |
| 19-161-L | 1.34 | 19-161-R | 1.42 |
| 20-161-L | 1.42 | 20-161-R | |



6-162-R (Cable Clamp on Right)

THE 162 SERIES

The following Fanning Strips fit the 142 Series Barrier Blocks. Terminals are mounted on 3/2" Bakelite, 5/8" wide and on 1/4" centers.

| Code | List Price Each | Code | List Price Each |
|----------|-----------------|----------|-----------------|
| 2-162-L | \$.19 | 2-161-R | .25 |
| 3-162-L | .25 | 3-162-R | .32 |
| 4-162-L | .32 | 4-162-R | .39 |
| 5-162-L | .39 | 5-162-R | .47 |
| 6-162-L | .47 | 6-162-R | .53 |
| 7-162-L | .53 | 7-162-R | .61 |
| 8-162-L | .61 | 8-162-R | .67 |
| 9-162-L | .67 | 9-162-R | .75 |
| 10-162-L | .75 | 10-162-R | .81 |
| 11-162-L | .81 | 11-162-R | .88 |
| 12-162-L | .88 | 12-162-R | .95 |
| 13-162-L | .95 | 13-162-R | 1.03 |
| 14-162-L | 1.03 | 14-162-R | 1.09 |
| 15-162-L | 1.09 | 15-162-R | 1.17 |
| 16-162-L | 1.17 | 16-162-R | 1.22 |
| 17-162-L | 1.22 | 17-162-R | |



CABLE CLAMPS

Cable Clamps are available for the Fanning Strips listed at the left and are furnished in 6 different sizes as listed below. Cable Clamp is of Brass Nickel Plated, with 6-32 round head Nickel Plated Brass Screws. For convenience the Cable Clamps are furnished unassembled.

CABLE CLAMP SIZES AVAILABLE

| No. | I.D. | List Price Each |
|-----------|------|-----------------|
| CC-161- 4 | 1/8" | \$.20 |
| CC-161- 6 | 3/8" | .21 |
| CC-161- 8 | 1/2" | .22 |
| CC-161-10 | 5/8" | .23 |
| CC-161-12 | 3/4" | .24 |
| CC-161-14 | 7/8" | .25 |

Be sure to give code number when ordering.



RADIO AND TV HARDWARE



HINGED COVER
PLASTIC BOXES
— 50 LINE —
Dir. Net Price. 36c
Per Box



BOXES OF 100
Standard Carton
10 Boxes of 100



BULK
HARDWARE
Box of 1000



**(A) 6-C ROUND HEAD MACHINE SCREWS
STEEL — NICKEL PLATED**

| Description & Specs. | 50-Line | | Part No. | Dir. Net | Part No. | Dir. Net |
|-------------------------------------|----------|--------------|----------|----------|----------|----------|
| | Part No. | Quan. In Box |  |  |  |  | No. | Per M |
| Assorted Screws | H1000-F | 35 | | | | |
| Assorted Screws & Nuts | H1001-F | 40 | | | | |
| Assorted No. 2 & 4 Screws & Nuts | H1002-F | 35 | | | | |
| Assorted 4-36 Screws | H1010-F | 40 | | | | |
| Assorted 6-32 Screws | H1012-F | 40 | | | | |
| Assorted 8-32 Screws | H1016-F | 40 | | | | |
| Assorted 10-32 Screws | H1018-F | 25 | | | | |
| 2-56 x 1/4" | H1022-F | 40 | 7130-C | \$.45 | 7130-M | \$3.53 |
| 2-56 x 1/2" | H1024-F | 40 | 7131-C | .48 | 7131-M | 3.85 |
| 2-56 x 3/4" | H1026-F | 40 | 7132-C | .55 | 7132-M | 4.43 |
| 3-48 x 3/4" | H1028-F | 40 | 7124-C | .58 | 7124-M | 4.65 |
| 4-36 x 1/4" | H1032-F | 40 | 6005-IC | .48 | 6005-M | 3.87 |
| 4-36 x 3/8" | H1033-F | 35 | 7138-C | .50 | 7138-M | 3.97 |
| 4-36 x 1/2" | H1034-F | 35 | 6006-C | .52 | 6006-M | 4.18 |
| 4-36 x 5/8" | | | 5651-C | .57 | 5651-M | 4.53 |
| 4-36 x 3/4" | | | 6007-C | .60 | 6007-M | 4.87 |
| 4-40 x 1/4" | H1042-F | 40 | 6005-AC | .48 | 6005-AM | 3.87 |
| 4-40 x 1/2" | H1044-F | 35 | 6005-BC | .53 | 6005-BM | 4.22 |
| 4-40 x 3/4" | | | 5652-C | .57 | 5652-M | 4.53 |
| 4-40 x 5/8" | | | 6005-CC | .60 | 6005-CM | 4.87 |
| 6-32 x 1/4" | H1062-F | 40 | 6008-C | .53 | 6008-M | 4.25 |
| 6-32 x 1/2" | H1064-F | 30 | 6009-C | .62 | 6009-M | 4.93 |
| 6-32 x 3/8" | | | 5653-C | .68 | 5653-M | 5.40 |
| 6-32 x 3/4" | H1066-F | 30 | 6010-C | .73 | 6010-M | 5.80 |
| 6-32 x 1" | H1068-F | 30 | 6011-C | .83 | 6011-M | 6.67 |
| 6-32 x 1 1/4" | H1070-F | 30 | 7141-C | 1.00 | 7141-M | 8.00 |
| 6-32 x 2" | H1076-F | 20 | 7148-C | 1.50 | 7148-M | 12.07 |
| 8-32 x 1/4" | H1082-F | 30 | 6013-C | .70 | 6013-M | 5.55 |
| 8-32 x 3/8" | H1083-F | 25 | 6014-C | .75 | 6014-M | 5.98 |
| 8-32 x 1/2" | | | 6015-C | .82 | 6015-M | 6.48 |
| 8-32 x 3/4" | | | 5654-C | .87 | 5654-M | 6.95 |
| 8-32 x 1" | H1086-F | 25 | 6016-C | .93 | 6016-M | 7.42 |
| 8-32 x 1 1/4" | H1088-F | 20 | 6017-C | 1.07 | 6017-M | 8.50 |
| 8-32 x 1 1/2" | H1090-F | 20 | 7142-C | 1.23 | 7142-M | 9.87 |
| 10-32 x 1/2" | H1104-F | 20 | 6020-C | .95 | 6020-M | 7.63 |
| 10-32 x 3/8" | | | 5655-C | 1.03 | 5655-M | 8.32 |
| 10-32 x 3/4" | H1106-F | 20 | 6021-C | 1.12 | 6021-M | 8.93 |
| 10-32 x 1" | H1108-F | 17 | 6022-C | 1.25 | 6022-M | 10.05 |
| 10-32 x 1 1/2" | H1112-F | 15 | 7143-C | 1.65 | 7143-M | 13.22 |

**(B) 6-C ROUND HEAD MACHINE SCREWS
BRASS — NOT PLATED**

| Assorted | H1210-F | 30 | | | | |
|----------------|---------|----|--------|------|--------|---------|
| 2-56 x 1/4" | | | 5657-C | .67 | 5657-M | \$ 5.32 |
| 2-56 x 1/2" | | | 5658-C | .80 | 5658-M | 6.42 |
| 2-56 x 3/8" | | | 5659-C | .87 | 5659-M | 6.97 |
| 2-56 x 3/4" | | | 5660-C | .93 | 5660-M | 7.50 |
| 3-48 x 3/4" | | | 5661-C | 1.05 | 5661-M | 8.33 |
| 4-36 x 1/4" | | | 5662-C | .80 | 5662-M | 6.45 |
| 4-36 x 1/2" | | | 5663-C | 1.02 | 5663-M | 8.10 |
| 4-36 x 3/8" | | | 5664-C | 1.10 | 5664-M | 8.82 |
| 4-36 x 3/4" | | | 5665-C | 1.20 | 5665-M | 9.53 |
| 4-40 x 1/4" | | | 5666-C | .80 | 5666-M | 6.45 |
| 4-40 x 1/2" | | | 5667-C | 1.02 | 5667-M | 8.10 |
| 4-40 x 3/8" | | | 5668-C | 1.10 | 5668-M | 8.82 |
| 4-40 x 3/4" | | | 5669-C | 1.20 | 5669-M | 9.53 |
| 6-32 x 1/4" | | | 8501-C | 1.08 | 8501-M | 8.63 |
| 6-32 x 3/8" | | | 5670-C | 1.15 | 5670-M | 9.22 |
| 6-32 x 1/2" | | | 8502-C | 1.30 | 8502-M | 10.38 |
| 6-32 x 3/4" | | | 5671-C | 1.43 | 5671-M | 11.47 |
| 6-32 x 1" | | | 8503-C | 1.58 | 8503-M | 12.67 |
| 6-32 x 1 1/4" | | | 8504-C | 1.88 | 8504-M | 15.00 |
| 6-32 x 1 1/2" | | | 5672-C | 2.18 | 5672-M | 17.82 |
| 6-32 x 2" | | | 5673-C | 3.68 | 5673-M | 29.40 |
| 8-32 x 1/4" | | | 8505-C | 1.60 | 8505-M | 12.78 |
| 8-32 x 3/8" | | | 5674-C | 1.68 | 5674-M | 13.43 |
| 8-32 x 1/2" | | | 8506-C | 1.92 | 8506-M | 15.37 |
| 8-32 x 3/4" | | | 5675-C | 2.12 | 5675-M | 16.92 |
| 8-32 x 1" | | | 8507-C | 2.35 | 8507-M | 18.75 |
| 8-32 x 1 1/4" | | | 8508-C | 2.80 | 8508-M | 22.35 |
| 8-32 x 1 1/2" | | | 5676-C | 3.28 | 5676-M | 26.25 |
| 10-32 x 1/2" | | | 5677-C | 2.43 | 5677-M | 19.50 |
| 10-32 x 3/8" | | | 5678-C | 2.70 | 5678-M | 21.67 |
| 10-32 x 3/4" | | | 5679-C | 2.95 | 5679-M | 23.55 |
| 10-32 x 1" | | | 5680-C | 3.52 | 5680-M | 28.08 |
| 10-32 x 1 1/2" | | | 5681-C | 4.80 | 5681-M | 38.40 |

**(C) 6-C PHILLIPS TYPE ROUND HEAD MACHINE SCREWS
STEEL — NICKEL PLATED**

| Description & Specs. | 50-Line | | Part No. | Dir. Net | Part No. | Dir. Net |
|----------------------|----------|--------------|----------|----------|----------|----------|
| | Part No. | Quan. In Box |  |  |  |  | No. | Per M |
| Assorted | H1180-F | 25 | | | | |
| 6-32 x 1/4" | | | 8511-C | 1.18 | 8511-M | \$ 9.47 |
| 6-32 x 1/2" | | | 8512-C | 1.07 | 8512-M | 8.53 |
| 6-32 x 3/8" | | | 5689 C | 1.15 | 5689-M | 9.18 |
| 6-32 x 3/4" | | | 8513-C | 1.22 | 8513-M | 9.75 |
| 6-32 x 1" | | | 8514-C | 1.37 | 8514-M | 10.87 |
| 8-32 x 3/8" | | | 8515-C | 1.03 | 8515-M | 8.32 |
| 8-32 x 1/2" | | | 8516-C | 1.15 | 8516-M | 9.18 |
| 8-32 x 3/4" | | | 5690 C | 1.23 | 5690-M | 9.90 |
| 8-32 x 1" | | | 8517 C | 1.33 | 8517-M | 10.65 |
| 8-32 x 1 1/4" | | | 8518-C | 1.53 | 8518-M | 12.23 |

**(D) 6-C BINDING HEAD MACHINE SCREWS
STEEL — NICKEL PLATED**

| Assorted | H1168-F | 35 | H1170-F | 35 | 7154-C | .53 | 7154-M | \$4.20 |
|-------------|---------|----|---------|----|--------|------|--------|--------|
| | | | | | | | | |
| 6-32 x 3/8" | | | H1172-F | 35 | 7152-C | .53 | 7152-M | 4.23 |
| 6-32 x 1/2" | | | | | 7155-C | .57 | 7153-M | 4.50 |
| 7-32 x 3/8" | | | H1174-F | 30 | 7155-C | 1.57 | 7155-M | 12.48 |
| 8-32 x 3/4" | | | | | 7158-C | .72 | 7158-M | 5.73 |

**(E) 6-C OVAL HEAD RACK AND CABINET SCREWS
STEEL — NICKEL PLATED**

| Assorted Screws and Washers | H1005-F | 15 | 6540-C | .62 | 6540-M | \$4.93 |
|-----------------------------|---------|----|--------|------|--------|--------|
| | | | | | | |
| 6-32 x 3/8" | | | 5691-C | .68 | 5691-M | 5.40 |
| 6-32 x 3/4" | | | 6541-C | .73 | 6541-M | 5.80 |
| 8-32 x 3/8" | | | 5692-C | .87 | 5692-M | 6.95 |
| 8-32 x 3/4" | | | 6542-C | .93 | 6542-M | 7.42 |
| 10-32 x 1/2" | | | 8848-C | .95 | 8848-M | 7.60 |
| 10-32 x 5/8" | | | 5693-C | 1.03 | 5693-M | 8.32 |
| 10-32 x 3/4" | | | 6543-C | 1.12 | 6543-M | 8.93 |

**(F) 6-C ORNAMENTAL HEAD SCREWS
STEEL — BRONZE PLATED**

| Assorted | H1250-F | 20 | | | | | | |
|---------------|---------|----|---------|------|--------|---------|--------|-------|
| 6-32 x 3/4" | | | 1097-C | 1.28 | 1097-M | \$10.27 | | |
| 6-32 x 1" | | | H1252-F | 20 | 1098-C | 1.40 | 1098-M | 11.28 |
| 8-32 x 1 1/4" | | | H1255-F | 12 | 1099-C | 1.92 | 1099-M | 15.30 |

**(G) 6-C WOOD SCREWS
ROUND HEAD — STEEL — NICKEL PLATED**

| Assorted | H1502-F | 25 | 6114-C | .78 | 6114-M | \$ 6.23 |
|-----------------|---------|----|--------|------|--------|---------|
| | | | | | | |
| No. 4 x 5/8" | | | 5644-C | .85 | 5644-M | 6.75 |
| No. 4 x 3/4" | | | 6115-C | .90 | 6115-M | 7.20 |
| No. 6 x 3/4" | | | 6116-C | .97 | 6116-M | 7.73 |
| No. 6 x 1" | | | 6117-C | 1.20 | 6117-M | 9.57 |
| No. 8 x 3/4" | | | 6118-C | 1.15 | 6118-M | 9.15 |
| No. 8 x 1 1/4" | | | 8071-C | 1.58 | 8071-M | 12.68 |
| No. 10 x 1 1/2" | | | 8073-C | 2.12 | 8073-M | 16.95 |
| No. 12 x 1 1/2" | | | 8075-C | 2.70 | 8075-M | 21.60 |
| No. 14 x 1 3/4" | | | 8076-C | 3.80 | 8076-M | 30.45 |

**(H) 6-C SPADE BOLTS OR MOUNTING SCREWS
STEEL — NICKEL PLATED**

| Assorted | A | B | C | D | E | H1570-F | 15 | | | |
|----------|---|--------|--------|--------|--------|---------|------|--------|---------|--|
| | | | | | | | | | | |
| 6-32 | 6 | 3/2" | 1 1/4" | 3/8" | 1 1/8" | 6C81-C | 1.15 | 6081-M | \$ 9.15 | |
| 6-32 | 6 | 1 3/2" | 7/8" | 1 1/8" | 1 1/8" | 6C82-C | 1.55 | 6082-M | 12.45 | |
| 8-32 | 8 | 3/4" | 1 3/2" | 1 3/8" | 1 3/8" | 6C84-C | 2.93 | 6084-M | 23.40 | |



RADIO AND TV HARDWARE



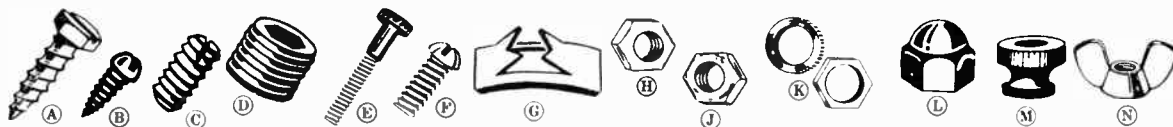
HINGED COVER
PLASTIC BOXES
— 50 LINE —
Dir. Net Price 36¢
Per Box



BOXES OF 100
Standard Carton
10 Boxes of 100



BULK
HARDWARE
Box of 1000



**(A) G-C SHEET METAL SCREWS
HEX HEAD — SLOTTED — SELF-TAPPING — NICKEL PLATED
POINTED TYPE "A"**

| Description & Specs. | 50-Line | | Part No. | Dir. Net | Part No. | Dir. Net |
|----------------------|----------|--------------|----------|----------|----------|----------|
| | Part No. | Quan. In Box | | | | |
| Asstd | H1300-F | 25 | | | | |
| Asstd. No. 4 & 6 | | | | | | |
| Asstd. No. 8 & 10 | | | | | | |
| No. 4 x 1/2" | H1350-F | 35 | 6090-C | \$.75 | 6090-M | \$ 6.00 |
| No. 6 x 1/4" | H1362-F | 30 | 6091-C | .85 | 6091-M | 6.83 |
| No. 6 x 3/8" | H1363-F | 25 | 6092-C | .87 | 6092-M | 6.97 |
| No. 6 x 1/2" | H1364-F | 25 | 6093-C | .92 | 6093-M | 7.32 |
| No. 6 x 5/8" | | | 5695-C | .95 | 5695-M | 7.57 |
| No. 6 x 3/4" | H1366-F | 20 | 6094-C | 1.00 | 6094-M | 7.95 |
| No. 8 x 1/4" | H1382-F | 20 | 8102-C | 1.00 | 8102-M | 8.03 |
| No. 8 x 3/8" | H1383-F | 20 | 6095-C | 1.05 | 6095-M | 8.33 |
| No. 8 x 1/2" | H1384-F | 20 | 6096-C | 1.08 | 6096-M | 8.63 |
| No. 8 x 5/8" | | | 5696-C | 1.10 | 5696-M | 8.78 |
| No. 8 x 1" | H1388-F | 15 | 6097-C | 1.38 | 6097-M | 11.03 |
| No. 10 x 3/8" | H1403-F | 15 | 6098-C | 1.18 | 6098-M | 9.52 |
| No. 10 x 1/2" | H1404-F | 15 | 6099-C | 1.27 | 6099-M | 10.13 |
| No. 10 x 3/4" | H1406-F | 12 | 6100-C | 1.40 | 6100-M | 11.17 |

**(B) G-C ESCUTCHEON PLATE SCREWS
ROUND HEAD — SLOTTED — BRONZE PLATED**

| | | | | | | |
|--------------|---------|----|--------|--------|--------|---------|
| Asstd. | H1500-F | 25 | | | | |
| No. 2 x 1/4" | | | 1091-C | \$.72 | 1091-M | \$ 5.70 |
| No. 2 x 3/8" | | | 1093-C | .72 | 1093-M | 5.70 |

**(C) G-C RADIO KNOB SET SCREWS
SLOTTED — HEADLESS — CUP POINT Standard**

| | | | | | | |
|-------------------------|---------|----|--------|--------|--------|---------|
| Asst. 6-32, 8-32, 10-32 | H1605-F | 15 | | | | |
| 6-32 x 3/16" | H1623-F | 15 | 6072-C | \$1.80 | 6072-M | \$14.40 |
| 8-32 x 3/16" | H1633-F | 15 | 6075-C | 1.80 | 6075-M | 14.40 |
| 8-32 x 1/4" | H1634-F | 15 | 6076-C | 1.80 | 6076-M | 14.40 |
| 10-32 x 1/4" | | | 6079-C | 1.80 | 6079-M | 14.40 |

**(D) G-C ALLEN HEX SET SCREWS
STEEL — HEADLESS**

| | | | | | | |
|----------------------|---------|---|--------|--------|--------|---------|
| Asstd. Lengths, 4-36 | H1674-F | 5 | | | | |
| Asstd. Lengths, 6-32 | H1676-F | 5 | | | | |
| Asstd. Lengths, 8-32 | H1678-F | 5 | | | | |
| 8-32 x 1/8" | | | 7201-C | \$4.93 | 7201-M | \$39.45 |
| 8-32 x 3/16" | | | 7202-C | 4.93 | 7202-M | 39.45 |

**(E) G-C PHONOGRAPH NEEDLE AND STYLUS SET SCREWS
STEEL — BRONZE PLATED**

| | | | | | | |
|--|---------|----|--|--|--|--|
| No. 1052 Ass't., in Box. Dir. Net \$.36 | | 15 | | | | |
| Assorted | H1550-F | 12 | | | | |
| No. 1053 Ass't., 100 in Box Dir. Net .36 | H1551-F | 12 | | | | |
| 2-56 x 3/16" | H1553-F | 12 | | | | |
| 1-72 x 3/32" | H1555-F | 5 | | | | |

**(F) PHONO CARTRIDGE MOUNTING SCREWS
STEEL — NICKEL PLATED**

| | | | | | | |
|-------------|---------|----|---------|-----|---------|--------|
| Assorted | H1560-F | 60 | | | | |
| 4-36 x 1/4" | H1562-F | 40 | 6005-1C | .48 | 6005-M | \$3.87 |
| 4-40 x 1/4" | H1564-F | 40 | 6005-AC | .48 | 6005-AM | 3.87 |

(G) G-C TINNEMAN SPEED NUTS

| | | | | | | |
|----------|---------|----|--------|--------|--------|---------|
| Assorted | H1960-F | 30 | | | | |
| No. 4 | | | 6051-C | \$.93 | 6051-M | \$ 5.70 |
| No. 6 | | | 6052-C | .78 | 6052-M | 6.23 |
| No. 8 | | | 6053-C | .78 | 6053-M | 6.23 |

**(H) G-C HEXAGON NUTS
STEEL — NICKEL PLATED**

| Description & Specs. | 50-Line | | Part No. | Dir. Net | Part No. | Dir. Net |
|----------------------|--------------|-------------------|----------|----------|----------|----------|
| | Part No. | Quan. In Box | | | | |
| Assorted | H1800-F | 30 | | | | |
| Thread | Width | Thick-ness | | | | |
| 2-56 | 3/16" | 1/16" | H1802-F | 30 | 7225-C | \$.68 |
| 3-48 | 3/16" | 1/16" | H1803-F | 30 | 7226-C | .68 |
| 4-36 | 1/4" | 3/32" | H1805-F | 30 | 6041-C | .67 |
| 4-40 | 1/4" | 3/32" | H1804-F | 30 | 6041-AC | .67 |
| 5-40 | 3/8" | 3/64" | | | 6045-BC | .73 |
| 6-32 | 1/4" | 3/32" | H1806-F | 30 | 6042-C | .68 |
| 6-32 | 3/8" | 3/64" | H1807-F | 30 | 7230-C | .73 |
| 8-32 | 1/4" | 3/32" | H1808-F | 30 | 6043-C | .73 |
| 8-32 | 1 1/2" | 3/8" | H1809-F | 30 | 7233-C | .73 |
| 10-32 | 3/8" | 3/8" | H1810-F | 30 | 6044-C | .97 |
| 10-32 | 3/8" | 1/8" | | | 6049-C | .87 |
| 1/4-20 | 7/16" | 3/8" | H1820-F | 25 | 7235-C | 1.33 |
| 1/2-32 | 7/16" | 1/2" | | | 7236-C | 1.95 |
| 3/8-32 | 3/8" | 3/8" | H1923-F | 15 | 6050-AC | 1.47 |
| 7/16-27 | 3/8" | 1/8" | H1924-F | 10 | 7238-C | 3.30 |
| 1/2-32 | 3/8" | 3/64" | | | 6050-BC | 1.80 |
| | | | | | 6050-BM | 14.40 |

**(J) G-C BRASS HEXAGON NUTS
NOT PLATED**

| Thread | Width | Thick-ness | | | | |
|--------|-------|------------|----------|----------|----------|----------|
| | | | Part No. | Dir. Net | Part No. | Dir. Net |
| 2-56 | 3/16" | 1/16" | | | 7241-C | \$.98 |
| 3-48 | 3/16" | 1/16" | | | 7242-C | .90 |
| 4-36 | 1/4" | 3/32" | H1842-F | 35 | 7243-C | 1.18 |
| 4-40 | 1/4" | 3/32" | H1844-F | 25 | 7244-C | 1.17 |
| 6-32 | 1/4" | 3/32" | H1846-F | 25 | 7245-C | 1.17 |
| 6-32 | 3/8" | 3/64" | | | 5697-C | 1.40 |
| 8-32 | 1/4" | 3/32" | | | 5698-C | 1.17 |
| 8-32 | 3/8" | 3/64" | H1848-F | 15 | 7248-C | 1.40 |
| 10-32 | 3/8" | 1/8" | H1850-F | 15 | 7249-C | 1.53 |
| 1/4-20 | 7/16" | 3/8" | | | 5699-C | 3.13 |
| | | | | | 7241-M | \$ 7.83 |
| | | | | | 7242-M | 7.13 |
| | | | | | 7243-M | 9.42 |
| | | | | | 7244-M | 9.33 |
| | | | | | 7245-M | 9.30 |
| | | | | | 5697-M | 11.18 |
| | | | | | 5698-M | 9.30 |
| | | | | | 7248-M | 11.18 |
| | | | | | 7249-M | 12.27 |
| | | | | | 5699-M | 25.02 |

**(K) G-C MOUNTING NUTS
STEEL — NICKEL PLATED**

| | | | | | | |
|-------------------------------------|--------------|-------------------|---------|----|---------|---------|
| Assorted | H1920-F | 12 | | | | |
| Thread | Width | Thick-ness | | | | |
| 1/2-32 | 7/16" | 1/16" | | | 7236-C | \$1.95 |
| (Rotary Switch Size) | | | | | 7236-M | \$15.60 |
| 3/8-32 | 3/8" | 3/32" | H1923-F | 15 | 6050-AC | 1.47 |
| (Volume Control Size) | | | | | 6050-AM | 11.70 |
| 3/16-27 | 3/16" | 1/8" | | | 7238-C | 3.30 |
| (Pilot Light Size) | | | | | 7238-M | 26.40 |
| 1/2-32 | 3/8" | 3/64" | H1924-F | 10 | 6050-BC | 1.80 |
| (Toggle Switch Size) | | | | | 6050-BM | 14.40 |
| 1/2-32 | 3/8" | 1/16" | H1926-F | 8 | 6050-CC | 3.47 |
| Round Ring Nut (Toggle Switch Size) | | | | | 6050-CM | 27.78 |

**(L) G-C ACORN NUTS
SOLID BRASS — NICKEL PLATED**

| | | | | | | |
|----------|---------|----|--------|--------|--------|---------|
| Assorted | H1950-F | 10 | | | | |
| 6-32 | | | 6031-C | \$2.82 | 6031-M | \$22.50 |
| 8-32 | | | 6032-C | 3.00 | 6032-M | 24.00 |
| 10-32 | | | 6033-C | 3.63 | 6033-M | 29.10 |

**(M) G-C KNURLED THUMB NUTS
BRASS — NICKEL PLATED**

| | | | | | | |
|----------|---------|----|--------|--------|--------|---------|
| Assorted | H1941-F | 10 | | | | |
| 6-32 | H1943-F | 8 | 6655-C | \$2.27 | 6655-M | \$18.15 |
| 8-32 | H1944-F | 8 | 6656-C | 2.27 | 6656-M | 18.15 |
| 10-32 | H1945-F | 5 | 6657-C | 4.98 | 6657-M | 39.90 |

**(N) G-C WING NUTS
NICKEL PLATED**

| | | | | | | |
|----------|---------|----|--------|--------|--------|---------|
| Assorted | H1931-F | 10 | | | | |
| 6-32 | H1933-F | 10 | 6658-C | \$3.32 | 6658-M | \$26.52 |
| 8-32 | H1934-F | 10 | 6659-C | 2.45 | 6659-M | 19.65 |
| 10-32 | H1935-F | 8 | 6660-C | 2.73 | 6660-M | 21.90 |



ELECTRONIC HARDWARE



| DESCRIPTION | 100 PACK | | 1000 PACK | |
|-------------|----------|---------|-----------|----------|
| | Part No. | Net/100 | Part No. | Net/1000 |

**(A) GC-PHILLIPS TYPE
ROUND HEAD MACHINE SCREWS
STEEL — NICKEL PLATED**

| | | | | |
|--|--------|--------|--------|---------|
| Machine Screws, Phillips 6-32x $\frac{3}{16}$ " | 8510-C | \$1.18 | 8510-M | \$ 9.47 |
|--|--------|--------|--------|---------|

**(B) GC-BINDING HEAD MACHINE SCREWS
STEEL — NICKEL PLATED**

| | | | | |
|--|--------|-------|--------|---------|
| Machine Screws, 2-56x $\frac{1}{4}$ " | 7160-C | \$.53 | 7160-M | \$ 4.20 |
| Machine Screws, 2-56x $\frac{1}{2}$ " | 7161-C | .53 | 7161-M | 4.20 |
| Machine Screws, 2-56x $\frac{3}{4}$ " | 7162-C | .53 | 7162-M | 4.20 |
| Machine Screws, 4-36x $\frac{1}{4}$ " | 7163-C | .53 | 7163-M | 4.20 |
| Machine Screws, 4-36x $\frac{1}{2}$ " | 7164-C | .53 | 7164-M | 4.20 |
| Machine Screws, 4-36x $\frac{3}{4}$ " | 7165-C | .53 | 7165-M | 4.20 |
| Machine Screws, 4-40x $\frac{1}{4}$ " | 7170-C | .52 | 7170-M | 4.18 |
| Machine Screws, 4-40x $\frac{1}{2}$ " | 7171-C | .54 | 7171-M | 4.22 |
| Machine Screws, 4-40x $\frac{3}{4}$ " | 7172-C | .64 | 7172-M | 5.35 |
| Machine Screws, 6-32x $\frac{3}{4}$ " | 7173-C | .72 | 7173-M | 5.62 |
| Machine Screws, 8-32x $\frac{1}{4}$ " | 7174-C | .72 | 7174-M | 5.62 |
| Machine Screws, 8-32x $\frac{3}{4}$ " | 7175-C | .95 | 7175-M | 7.57 |
| Machine Screws, 10-32x $\frac{1}{2}$ " | 7176-C | .99 | 7176-M | 7.70 |
| Machine Screws, 10-32x $\frac{3}{4}$ " | 7177-C | 1.15 | 7177-M | 9.20 |

**(C) GC-BINDING HEAD MACHINE SCREWS
BRASS — NICKEL PLATED**

| | | | | |
|--|----------|-------|----------|---------|
| Machine Screws, 2-56x $\frac{1}{4}$ " | 7160-1-C | \$.81 | 7160-1-M | \$ 6.98 |
| Machine Screws, 2-56x $\frac{1}{2}$ " | 7161-1-C | .96 | 7161-1-M | 8.28 |
| Machine Screws, 2-56x $\frac{3}{4}$ " | 7162-1-C | 1.11 | 7162-1-M | 9.55 |
| Machine Screws, 4-36x $\frac{1}{4}$ " | 7163-1-C | .97 | 7163-1-M | 8.32 |
| Machine Screws, 4-36x $\frac{1}{2}$ " | 7164-1-C | 1.19 | 7164-1-M | 10.18 |
| Machine Screws, 4-36x $\frac{3}{4}$ " | 7165-1-C | 1.40 | 7165-1-M | 12.05 |
| Machine Screws, 4-40x $\frac{1}{4}$ " | 7170-1-C | .97 | 7170-1-M | 8.32 |
| Machine Screws, 4-40x $\frac{1}{2}$ " | 7171-1-C | 1.19 | 7171-1-M | 10.18 |
| Machine Screws, 4-40x $\frac{3}{4}$ " | 7172-1-C | 1.40 | 7172-1-M | 12.05 |
| Machine Screws, 5-36x $\frac{1}{4}$ " | 7154-1-C | 1.07 | 7154-1-M | 9.17 |
| Machine Screws, 6-32x $\frac{3}{16}$ " | 7151-1-C | 1.34 | 7151-1-M | 11.47 |
| Machine Screws, 6-32x $\frac{1}{4}$ " | 7152-1-C | 1.27 | 7152-1-M | 10.90 |
| Machine Screws, 6-32x $\frac{3}{8}$ " | 7153-1-C | 1.35 | 7153-1-M | 11.54 |
| Machine Screws, 6-32x $\frac{1}{2}$ " | 7118-1-C | 1.51 | 7118-1-M | 12.90 |
| Machine Screws, 6-32x $\frac{3}{4}$ " | 7173-1-C | 1.83 | 7173-1-M | 15.65 |
| Machine Screws, 8-32x $\frac{1}{4}$ " | 7174-1-C | 1.85 | 7174-1-M | 15.70 |
| Machine Screws, 8-32x $\frac{3}{8}$ " | 7119-1-C | 1.94 | 7119-1-M | 16.65 |
| Machine Screws, 8-32x $\frac{1}{2}$ " | 7120-1-C | 2.20 | 7120-1-M | 18.80 |
| Machine Screws, 8-32x $\frac{3}{4}$ " | 7158-1-C | 1.88 | 7158-1-M | 16.20 |
| Machine Screws, 8-32x $\frac{3}{4}$ " | 7175-1-C | 2.70 | 7175-1-M | 23.15 |
| Machine Screws, 10-32x $\frac{1}{2}$ " | 7176-1-C | 2.54 | 7176-1-M | 21.80 |
| Machine Screws, 10-32x $\frac{3}{4}$ " | 7177-1-C | 3.43 | 7177-1-M | 29.50 |

| DESCRIPTION | 100 PACK | | 1000 PACK | |
|-------------|----------|---------|-----------|----------|
| | Part No. | Net/100 | Part No. | Net/1000 |

**(D) GC-SHEET METAL SCREWS
HEX HEAD—SLOTTED—SELF-TAPPING—NICKEL PLATED**

| | | | | |
|---|--------|-------|--------|---------|
| Sheet Metal Screws, No. 4x $\frac{3}{8}$ " | 6089-C | \$.77 | 6089-M | \$ 6.32 |
|---|--------|-------|--------|---------|

(E) GC-RADIO KNOB SET SCREWS

| | | | | |
|-------------------------------------|--------|--------|--------|---------|
| Set Screws, 6-32x $\frac{1}{8}$ " | 6071-C | \$1.80 | 6071-M | \$14.40 |
| Set Screws, 6-32x $\frac{1}{4}$ " | 6073-C | 1.80 | 6073-M | 14.40 |
| Set Screws, 8-32x $\frac{1}{8}$ " | 6074-C | 1.80 | 6074-M | 14.40 |
| Set Screws, 8-32x $\frac{1}{2}$ " | 6077-C | 1.80 | 6077-M | 14.40 |
| Set Screws, 10-32x $\frac{3}{16}$ " | 6078-C | 1.80 | 6078-M | 14.40 |

**(F) GC-ALLEN HEX SET SCREWS
STEEL — HARDENED — HEADLESS**

| | | | | |
|--|--------|--------|--------|---------|
| Hex Set Screws, 6-32x $\frac{1}{8}$ " | 7196-C | \$4.93 | 7196-M | \$39.45 |
| Hex Set Screws, 6-32x $\frac{3}{16}$ " | 7197-C | 4.93 | 7197-M | 39.45 |

**(G) GC-HEXAGON NUTS
STEEL — NICKEL PLATED**

| | | | | |
|--|--------|-------|--------|---------|
| Hex Nuts, Thread 8-32, Width $\frac{5}{16}$ ", Thickness $\frac{1}{8}$ " | 7232-C | \$.73 | 7232-M | \$ 5.85 |
|--|--------|-------|--------|---------|

**(H) GC-BRASS HEXAGON NUTS
NOT PLATED**

| | | | | |
|---|--------|--------|--------|---------|
| Hex Nuts, Thread 4-40, Width $\frac{5}{16}$ ", Thickness $\frac{7}{64}$ " | 7246-C | \$1.17 | 7246-M | \$ 9.33 |
|---|--------|--------|--------|---------|

(I) GC-FLAT FIBRE WASHERS

| | | | | |
|--|--------|-------|--------|---------|
| Screw Size No. 4: I.D. .020", O.D. $\frac{1}{4}$ ", Thickness $\frac{1}{32}$ " | 6512-C | \$.42 | 6512-M | \$ 2.27 |
| Screw Size No. $\frac{7}{16}$ ", I.D. .440", O.D. $\frac{3}{4}$ ", Thickness $\frac{1}{32}$ " | 6519-C | .77 | 6519-M | 6.12 |

(J) GC-EXTRUDED FIBRE WASHERS

| | | | | |
|---|--------|-------|--------|---------|
| Screw Size No. 4: A- $\frac{9}{32}$ ", B-203, C- $\frac{1}{8}$ ", D-.031 | 6524-C | \$.87 | 6524-M | \$ 6.90 |
|---|--------|-------|--------|---------|

**(K) GC-ROUND HEAD MACHINE SCREWS
BRASS — NOT PLATED**

| | | | | |
|---------------------------------------|--------|-------|--------|---------|
| Machine Screws, 4-36x $\frac{3}{8}$ " | 8509-C | \$.91 | 8509-M | \$ 7.34 |
|---------------------------------------|--------|-------|--------|---------|



RADIO AND TV HARDWARE



HINGED COVER
PLASTIC BOXES
— 50 LINE
Dir. Net 36c
Per Box



BOXES OF 100
Standard Carton
10 Boxes of 100



BULK
HARDWARE
Box of 1000



(A) G-C METAL WASHERS NICKEL PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-------------------|---------------------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. Screw Size | | H870-F | 80 | | | | |
| No. | Hole Size O.D. Thick-ness | | | | | | |
| 4 | 1/8" 3/32" 1/8" | H874-F | 80 | 6154-C | \$.30 | 6154-M | \$ 2.25 |
| 6 | 3/32" 3/8" 1/32" | H876-F | 80 | 6155-C | .28 | 6155-M | 2.25 |
| 8 | 3/16" 7/16" 1/32" | H878-F | 80 | 6156-C | .30 | 6156-M | 2.37 |
| 10 | 1/2" 7/8" 1/32" | H880-F | 70 | 7306-C | .32 | 7306-M | 2.55 |
| 10 | 13/64" 1 1/2" 1/32" | | | 7307-C | .30 | 7307-M | 2.37 |
| 10 | 13/64" 1 1/2" .049 | | | 6157-C | .40 | 6157-M | 3.18 |
| 12 | .228 7/16" .021 | | | 7308-C | .35 | 7308-M | 2.78 |
| 1/4" | 9/16" 5/8" 1/16" | H882-F | 50 | 6158-C | .47 | 6158-M | 3.68 |
| 1/4" | 17/64" 1/2" 1/16" | | | 7311-C | .63 | 7311-M | 5.07 |
| 3/16" | 3/16" 1 1/16" 1/16" | | | 7312-C | .58 | 7312-M | 4.68 |

(B) G-C LOCK WASHERS INTERNAL LOCK WASHERS CADMIUM PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-----------------------|-------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. All Types | | H918-F | 45 | | | | |
| Asstd. Internal Screw | | H920-F | 50 | | | | |
| Screw Size | O.D. | | | | | | |
| 2 | | H922-F | 35 | 7322-C | \$.72 | 7322-M | \$ 5.78 |
| 3 | | | | 7323-C | .63 | 7323-M | 5.03 |
| 4 | | H924-F | 50 | 7324-C | .45 | 7324-M | 3.63 |
| 6 | | H926-F | 50 | 7326-C | .45 | 7326-M | 3.63 |
| 8 | 3/32" | H928-F | 50 | 7328-C | .50 | 7328-M | 3.98 |
| 10 | 7/64" | H930-F | 45 | 7330-C | .50 | 7330-M | 3.98 |
| 1/4" | 3/16" | | | 7332-C | .65 | 7332-M | 5.25 |
| 3/16" | 1/32" | | | 7333-C | .82 | 7333-M | 6.53 |
| 3/8" | 1/16" | | | 7334-C | 1.10 | 7334-M | 8.78 |
| 3/8" | 3/16" | H938-F | 25 | 7335-C | 1.25 | 7335-M | 9.98 |
| 1/2" | 3/8" | | | 7338-C | 1.58 | 7338-M | 12.63 |

(C) EXTERNAL LOCK WASHERS CAD PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-----------------|---------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. | | H950-F | 60 | | | | |
| No. 4 | | | | 7354-C | \$.45 | 7354-M | \$ 3.63 |
| No. 6 | | | | 7356-C | .45 | 7356-M | 3.63 |
| No. 8 | | | | 7358-C | .50 | 7358-M | 3.98 |
| No. 10 | | | | 7360-C | .48 | 7360-M | 3.87 |
| No. 1/4" | 1/2" | | | 7361-C | .65 | 7361-M | 5.22 |
| No. 3/8" | 1 1/16" | | | 7363-C | .97 | 7363-M | 7.68 |

(D) SPLIT TYPE LOCK WASHERS CAD PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-------------------|-------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. Screw Size | | H960-F | 60 | | | | |
| No. 4 | 3/16" 1/32" | | | 6503-C | \$.57 | 6503-M | \$ 4.50 |
| No. 6 | 1/8" 1/32" | | | 6504-C | .48 | 6504-M | 3.90 |
| No. 8 | 1/16" .025 | | | 6505-C | .47 | 6505-M | 3.70 |
| No. 10 | 3/32" .050 | | | 6506-C | .53 | 6506-M | 4.32 |
| No. 1/4" | 3/16" 5/64" | | | 6507-C | .80 | 6507-M | 6.38 |

(E) G-C SPRING FRICTION WASHERS

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-----------------|------------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. | | H750-F | 12 | | | | |
| A | B C Thick. | | | | | | |
| 3/64" | 3/16" 1/32" .012 | | | 7385-C | \$1.95 | 7385-M | \$15.60 |
| 3/16" | 3/8" 1/32" .008 | | | 7386-C | 1.65 | 7386-M | 13.27 |
| 3/16" | 3/16" 1/16" .008 | | | 7387-C | 1.62 | 7387-M | 12.93 |
| 1/4" | 3/16" 3/16" .012 | | | 7389-C | 1.87 | 7389-M | 14.77 |

(F) G-C CUP FINISHING WASHERS NICKEL PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-------------------------|--|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. Screws & Washers | | H1005-F | 15 | | | | |
| Asstd. Washers | | H805-F | 40 | | | | |
| No. 6 | | H806-F | 45 | 6161-C | \$.40 | 6161-M | \$ 3.18 |
| No. 8 | | H808-F | 45 | 6162-C | .42 | 6162-M | 3.38 |
| No. 10 | | H810-F | 35 | 6163-C | .55 | 6163-M | 4.47 |

(G) G-C C-WASHERS AND RETAINING RINGS STEEL-CAD PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|---------------------|---------------------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. C-Washers | | H770-F | 25 | | | | |
| Shaft Diam. A B C D | | | | | | | |
| 3/16" | .171 .125 .062 .031 | H772-F | 15 | 6182-C | \$.95 | 6182-M | \$ 7.53 |
| 1/4" | .234 .156 .046 .031 | H774-F | 15 | 6183-C | 1.07 | 6183-M | 8.58 |
| 1/4" | .260 .187 .062 .031 | | | 6184-C | 1.10 | 6184-M | 8.73 |
| 1/4" | 3/32" O.D. Wire Ring .029 | H778-F | 50 | 6185-C | .42 | 6185-M | 3.30 |

(H) G-C HAIR PIN COTTERS

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-----------------|------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. | | H380-F | 50 | | | | |
| A | B C | | | | | | |
| 3/32" | 1/16" .026 | | | 7375-C | \$.48 | 7375-M | \$ 3.90 |
| 3/8" | 1/8" .026 | | | 7376-C | .42 | 7376-M | 3.30 |
| 1/2" | 3/16" .026 | | | 7377-C | .47 | 7377-M | 3.78 |
| 1/2" | 5/16" .026 | | | 7378-C | .42 | 7378-M | 3.30 |
| 7/32" | 3/16" .032 | | | 7379-C | .50 | 7379-M | 3.93 |

(J) G-C FLAT FIBRE WASHERS

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-------------------|-------------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. Screw Size | | H820-F | 35 | | | | |
| I.D. | O.D. Thick. | | | | | | |
| 6 | .140 1/4" 1/32" | H824-F | 30 | 6513-C | \$.42 | 6513-M | \$ 3.30 |
| 8 | 13/64" 3/8" 1/32" | H825-F | 30 | 6514-C | .42 | 6514-M | 3.30 |
| 10 | .196 3/8" 1/32" | H826-F | 30 | 6515-C | .42 | 6515-M | 3.30 |
| 1/4" | 1/4" 1/2" 3/32" | H827-F | 24 | 6516-C | .47 | 6516-M | 3.68 |
| 3/8" | .390 25/64" 3/32" | H828-F | 20 | 6517-C | .77 | 6517-M | 6.12 |
| 1/2" | 15/32" 1/4" 1/32" | | | 6518-C | .77 | 6518-M | 6.12 |

(K) G-C EXTRUDED FIBRE WASHERS

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|------------------------|----------------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. Extruded & Flat | | H854-F | 30 | | | | |
| Asstd. Extruded | | H855-F | 30 | | | | |
| Screw Size A B C D | | | | | | | |
| 6 | 3/16" .187 .140 .039 | | | 6525-C | \$.87 | 6525-M | \$ 6.90 |
| 8 | 3/8" .250 .169 .031 | | | 6526-C | .87 | 6526-M | 6.90 |
| 10 | 1/2" .255 .196 .032 | | | 6527-C | .95 | 6527-M | 7.53 |
| 1/4" | 1/2" .375 .250 .032 | | | 6528-C | .95 | 6528-M | 7.53 |
| 3/8" | 5/8" .437 .380 .031 | H864-F | 20 | 6529-C | .98 | 6529-M | 7.92 |

(L) G-C SNAP BUTTON HOLE PLUGS NICKEL PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--------------------------------|-------------------------------|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| Asstd. | | H300-F | 8 | | | | |
| No. 1710 Asst. 50 Plugs in Box | | | | | | | Dir. Net \$3.05 |
| 1/4" | 13/32" 1/4" 17/64" 3/32" | H306-F | 8 | 1711-AC | \$ 2.25 | 1711-AM | 18.00 |
| 3/16" | 7/16" 1/4" 21/64" 1/16" | | | 1711-BC | 2.40 | 1711-BM | 19.20 |
| 3/8" | 1 1/2" 3/8" 25/64" 3/16" | H308-F | 8 | 1711-C | 3.08 | 1711-M | 24.60 |
| 1/2" | 2 1/2" 17/64" 17/32" 3/8" | H310-F | 6 | 1712-C | 3.08 | 1712-M | 24.60 |
| 5/8" | 51/64" 1 1/4" 41/64" 3/4" | H312-F | 6 | 1713-C | 3.30 | 1713-M | 26.40 |
| 3/4" | 1 1/8" 1 1/2" 49/64" 3/2" | H314-F | 5 | 1714-C | 3.60 | 1714-M | 28.80 |
| 7/8" | Fits Switch Box Knockout Hole | | | 1714-AC | 4.62 | 1714-AM | 36.90 |
| 1" | 1 5/8" 1 3/4" 1 1/2" 5/8" | H316-F | 5 | 1715-AC | 4.95 | 1715-AM | 39.60 |
| 1 1/8" | 1 3/4" 1 3/2" 1 1/4" 5/8" | | | 1715-BC | 5.93 | 1715-BM | 59.40 |
| 1 1/4" | 1 3/16" 3/16" 1 1/4" 3/2" | | | 1715-C | 6.45 | 1715-M | 51.60 |
| 1 3/8" | 1 1/16" 1 3/32" 1 1/32" 3/2" | | | 5700-C | 7.13 | 5700-M | 57.00 |
| 1 1/2" | 1 3/8" 1 1/4" 1 1/32" 3/4" | | | 5701-C | 7.28 | 5701-M | 58.20 |
| 1 1/2" | 1 41/64" 1 1/32" 1 1/32" 3/2" | | | 5702-C | 9.38 | 5702-M | 75.00 |

(M) G-C SNAP-IN VENTILATING PLUGS NICKEL PLATED

| Desc. and Spec. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|------------------|--|------------------------|-----------------|-------------|---------------------|-------------|-------------------|
| 1" Punched Holes | | H334-F | 4 | 1709-C | \$ 8.10 | 1709-M | \$65.16 |
| 1" Screen Vent | | | | 1708-C | 21.38 | 1708-M | 170.99 |

GC RADIO AND TV HARDWARE

GC ELECTRONICS



HINGED COVER
PLASTIC BOXES
— 50 LINE —
Dir. Net 36¢
Per Box



BOXES OF 100
Standard Carton
10 Boxes of 100



BULK
HARDWARE
Box of 1000



G-C SNAP-IN TRIMOUNTS

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--|----------|------------------|--------------|----------|------------------|----------|----------------|
| No. 1720 Asst. 100 Trimounts Net Price \$.82 Assorted | | H370-F | 20 | | | | |
| To Fit Hole | | | | | | | |
| | A | B | | | | | |
| 1/8" | 3/32" | 3/16" | | 1721-C | \$1.13 | 1721-M | \$ 9.60 |
| 1/8" | 7/32" | 1/4" | | 1722-C | 1.20 | 1722-M | 9.90 |
| .136 | 1/2" | 5/8" | | H373-F | 25 | 1723-C | 1.38 |
| .136 | 3/4" | 7/8" | | H375-F | 20 | 1724-C | 1.45 |
| 3/32" | 7/16" | 1/2" | | H378-F | 17 | 1726-C | 1.77 |
| 3/32" | 1/2" | 5/8" | | H379-F | 15 | 1727-C | 1.77 |



G-C DIAL CORD CLIPS NICKEL PLATED

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-------------------------|--------|------------------|--------------|----------|------------------|----------|----------------|
| Used on Cord No. | | | | | | | |
| 75-75A | 1/8" A | 1/8" B | 1/8" C | H745-F | 30 | | |
| 74-74L | 1/4" A | 1/4" B | 1/4" C | H746-F | 40 | 6221-C | .68 |
| 73-73X | 3/8" A | 3/8" B | 3/8" C | | | 6222-C | .77 |
| | | | | | | 6223-C | .78 |
| | | | | | | 6221-M | \$ 5.43 |
| | | | | | | 6222-M | 6.08 |
| | | | | | | 6223-M | 6.30 |



G-C FUSE CLIPS

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--|--|------------------|--------------|----------|------------------|----------|----------------|
| For 1/4" Fuses, No. 6 Mounting Hole TV Fuse Clip, No. 8618 (\$.25 Net) | | H600-F | 12 | 6311-C | \$1.85 | 6311-M | \$14.82 |



G-C SOLDERING LUGS TINNED

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--|--|------------------|--------------|----------|------------------|----------|----------------|
| No. 1020, 100 Asst. Dir. Net \$.67 Assorted | | | | | | | |
| No. 6, 3/8" Length (A) | | H100-F | 30 | 8466-C | \$1.58 | 8466-M | \$12.63 |
| No. 6, 3/32" Length (B) | | | | 8467-C | 2.82 | 8467-M | 22.50 |
| No. 8, 3/32" Length (B) | | | | 8468-C | 2.65 | 8468-M | 21.15 |
| No. 6, 3/32" Length (C) | | H104-F | 25 | 1021-BC | 1.05 | 1021-BM | 8.40 |
| No. 8, 3/32" Length (C) | | H106-F | 25 | 7445-C | 1.20 | 7445-M | 9.57 |
| No. 10, 3/32" Length (C) | | | | 8473-C | 1.17 | 8473-M | 9.30 |
| No. 6, 1/2" Length (D) | | | | 5708-C | 1.68 | 5708-M | 13.50 |
| No. 8, 1/2" Length (D) | | | | 5704-C | 1.68 | 5704-M | 13.50 |
| No. 10, 1/2" Length (D) | | | | 5705-C | 1.68 | 5705-M | 13.50 |
| No. 6, 1/4" Length (D) | | H108-F | 30 | 1021-CC | .93 | 1021-CM | 8.08 |
| No. 6, 3/8" Length (E) | | H112-F | 30 | 1021-FC | .92 | 1021-FM | 7.38 |
| No. 8, 3/8" Length (E) | | H113-F | 30 | 7451-C | .87 | 7451-M | 6.98 |

| | | | | | | |
|----------------------------|--------|----|---------|--------|---------|---------|
| No. 6, 1" Length (F) | H114-F | 25 | 7454-C | \$.67 | 7454-M | \$ 5.33 |
| No. 8, 1" Length (F) | H117-F | 25 | 7455-C | 1.85 | 7455-M | 14.85 |
| No. 10, 1" Length (F) | H118-F | 25 | 7456-C | 1.85 | 7456-M | 14.85 |
| No. 4, 3/4" Length (G) | | | 7458-C | 1.85 | 7458-M | 14.85 |
| No. 8, 3/4" Length (G) | | | 7460-C | 1.87 | 7460-M | 14.88 |
| No. 10, 3/4" Length (G) | | | 7461-C | 1.87 | 7461-M | 14.88 |
| No. 6, 5/8" Length (H) | H122-F | 20 | 7462-C | 1.07 | 7462-M | 8.52 |
| No. 8, 5/8" Length (H) | | | 7463-C | 1.07 | 7463-M | 8.52 |
| No. 4, 7/8" Length (E) | | | 5706-C | 1.68 | 5706-M | 13.50 |
| No. 8, 7/8" Length (E) | | | 5707-C | 1.68 | 5707-M | 13.50 |
| No. 6, 7/8" Length (E) | | | 5708-C | 1.68 | 5708-M | 13.50 |
| No. 6, 1 1/8" Length (J) | H124-F | 25 | 7441-C | 1.18 | 7441-M | 9.45 |
| No. 8, 1 1/8" Length (J) | H134-F | 25 | 7442-C | 1.13 | 7442-M | 9.12 |
| No. 10, 1 1/8" Length (J) | H102-F | 25 | 1021-AC | 1.13 | 1021-AM | 9.12 |
| Solderless TV Line Lug (K) | H225-F | 10 | 8633-C | 1.65 | 8633-M | 13.13 |



G-C FAHNESTOCK CLIPS NICKEL PLATED

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|----------------------|--------------|------------------|--------------|----------|------------------|----------|----------------|
| Assorted | | H590-F | 12 | | | | |
| (A) 1/2" L | 3/32" W Hole | H592-F | 15 | 6381-C | 1.50 | 6301-M | \$13.05 |
| (B) 3/4" L | 3/16" W Hole | H594-F | 14 | 6302-C | 1.73 | 6302-M | 13.98 |
| (C) 1 1/4" L | 3/8" W Hole | | | 6303-C | 2.97 | 6303-M | 23.85 |
| (D) 1 1/2" L | 3/8" W Hole | | | 6304-C | 11.02 | 6304-M | 77.33 |
| (E) 3/4" L | 3/16" W Hole | | | 6306-C | 4.03 | 6306-M | 32.28 |



G-C CABLE HOLDER CLAMPS NICKEL PLATED

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|----------------------|----------------------|------------------|--------------|----------|------------------|----------|----------------|
| Assorted | | H500-F | 20 | | | | |
| To Fit Cable | | | | | | | |
| | Mounting Hole | | | | | | |
| 1/8" to 3/8" | No. 6 | H502-F | 25 | 6251-C | \$.98 | 6251-M | \$ 7.83 |
| 3/8" to 1/4" | No. 6 | H503-F | 20 | 6252-C | 1.12 | 6252-M | 8.88 |
| 1/4" to 3/8" | No. 6 | | | 7503-C | 1.73 | 7503-M | 13.80 |
| 3/8" to 1/2" | No. 6 | H506-F | 15 | 6253-C | 1.27 | 6253-M | 10.13 |
| Baseboard Clips Blk. | | H509-F | 20 | 8345-C | 2.07 | 8345-M | 16.17 |



G-C TERMINAL STRIP ASSORTMENT 1/16" INSULATION — 3/8" SPACING

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|----------------------|--|------------------|--------------|----------|------------------|----------|----------------|
| Assorted | | H250-F | 4 | | | | |
| 1 Lug | | | | 1781-C | \$ 2.70 | | |
| 2 Lugs | | | | 1782-C | 2.70 | | |
| 3 Lugs | | | | 1783-C | 2.82 | | |
| 4 Lugs | | | | 1784-C | 3.90 | | |
| 5 Lugs | | | | 1785-C | 4.50 | | |
| 6 Lugs | | | | 1786-C | 4.80 | | |
| 7 Lugs | | | | 1787-C | 8.70 | | |
| 8 Lugs | | | | 1788-C | 9.60 | | |



G-C COMPRESSION SPRINGS

| | | |
|-------------|--------|----|
| Asst. Small | H440-F | 20 |
| Asst. Large | H441-F | 15 |



G-C DIAL DRIVE TENSION PHONO SPRINGS STEEL CAD. PLATED

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M | | |
|---|----------|------------------|--------------------------|-----------------|--------------------|-----------------|-------------------------|-----------------|-----------------------|
| Asst. Reg. Dial Drive Asst. Small Dial Drive No. 1055 Kit of 25 Asst. Net \$1.23 | | H401-F | 8 | | | | | | |
| No. 1056 Kit of 100 Asst. Net \$3.57 | | H400-F | 10 | | | | | | |
| Asst. Lge. Tension Spgs. Asst. Sm. Tension Spgs. | | H421-F | 10 | | | | | | |
| | | H420-F | 10 | | | | | | |
| A | B | C | Wire Old Size No. | Part No. | Quan. In Bx | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
| 1/8" | 1/2" | 1/4" | .019 T1 | H403-F | 10 | 6450-C | \$ 5.03 | 6450-M | \$40.33 |
| 1/8" | 1" | 3/4" | .019 T2 | H406-F | 8 | 6451-C | 3.78 | 6451-M | 30.30 |
| 3/8" | 1" | 5/8" | .020 T3 | H408-F | 8 | 6452-C | 4.23 | 6452-M | 33.82 |
| 3/8" | 1 3/8" | 1" | .020 T4 | H410-F | 8 | 6453-C | 4.33 | 6453-M | 34.72 |
| 1/4" | 1 1/2" | 1" | .026 T5 | H412-F | 6 | 6454-C | 5.60 | 6454-M | 44.85 |
| 1/4" | 2" | 1 1/2" | .026 T6 | | | 6455-C | 6.92 | 6455-M | 55.35 |



G-C PHONO TURNTABLE MOUNTING SPRINGS

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--|--|------------------|--------------|----------|------------------|----------|----------------|
| O.D. Lgth. Wire No. of Size Coils 1"x1 1/8" 1 1/8" .079 4 | | | | | | | |
| | | | | 7497-C | \$ 3.17 | 7497-M | \$25.35 |



G-C DIAL PULLEYS BRASS

| Description & Specs. | | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|----------------------|----------|------------------|-----------------------|----------|------------------|----------|----------------|
| Assorted | | H1966-F | | | | | |
| A | B | C | (Groove D Wd.) | | | | |
| 3/8" | .120 | 1/8" | 3/32" | 6057-AC | 4.62 | 6057-AM | 36.97 |
| 3/8" | .067 | 1/4" | 1/8" | 6057-BC | 6.85 | 6057-BM | 54.88 |
| 1/2" | 1/8" | 3/8" | 3/32" | 6057-CC | 8.48 | 6057-CM | 67.93 |
| .620 | .128 | .165 | 1/4" | 6057-CC | 9.35 | 6057-CM | 74.76 |
| .860 | .128 | 3/32" | .050 | 6057-FC | 16.05 | 6057-FM | 128.34 |



RADIO AND TV HARDWARE



HINGED COVER
PLASTIC BOXES
— 50 LINE —
Dir. Net 36c
Per Box



BOXES OF 100
Standard Carton
10 Boxes of 100



BULK
HARDWARE
Box of 1000



G-C RADIO KNOB SPRINGS

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-----------------------------------|------------------|--------------|----------|------------------|----------|----------------|
| Asst. | H480-F | 18 | | | | |
| TV Spring Asst. | H460-F | 12 | | | | |
| No. 1050 Kit of 35 Springs | | | | | | |
| No. 1051 Kit of 100 Springs | | | | | | |
| Width | | | | | | |
| Length For Knob Shaft Dia. | | | | | | |
| (A) 3/32" Light 3/16" 1/4" | H482-F | 20 | 6460-C | 1.05 | 6460-M | \$ 8.38 |
| (B) 3/32" Heavy 3/16" 1/4" | H484-F | 20 | 6461-C | 1.10 | 6461-M | 8.78 |
| (C) 3/32" 3/16" 1/4" | H487-F | 20 | 6462-C | .88 | 6462-M | 7.10 |

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--------------------------------|------------------|--------------|----------|------------------|----------|----------------|
| (D) 3/8" 5/32" 1/4" | H489-F | 10 | 6463-C | \$1.18 | 6463-M | \$ 9.40 |
| (E) 3/32" 1/32" 1/4" | | | 6464-C | 1.85 | 6464-M | 14.78 |
| (F) 3/32" 3/8" 1/4" | H492-F | 8 | 6465-C | 2.35 | 6465-M | 18.83 |
| (G) 3/32" 1/4" 1/4" | | | 6466-C | 2.80 | 6466-M | 22.43 |
| (H) 3/32" 1/2" 1/4" | | | 6467-C | 1.27 | 6467-M | 10.10 |
| (J) 3/32" 3/8" 1/4" | H494-F | 10 | 6468-C | 1.50 | 6468-M | 11.93 |
| (K) 1/32" 1/4" 1/4" | | | 6469-C | 2.35 | 6469-M | 18.83 |
| (L) 3/8" 3/8" 1/4" | H497-F | 10 | 6470-C | 1.50 | 6470-M | 12.02 |
| (M) 3/8" 3/4" 1/4" | H498-F | 10 | 6471-C | 2.55 | 6471-M | 20.40 |
| (N) 3/8" 3/4" 3/8" | H499-F | 10 | 6472-C | 2.33 | 6472-M | 18.68 |
| TV Knob Spring .202" Shaft | H462-F | 10 | 8541-C | 1.27 | 8451-M | 10.10 |
| TV Knob Spring 3/8" Flat Shaft | H464-F | 10 | 8542-C | 1.52 | 8542-M | 12.08 |



(A) G-C BRASS EYELETS

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--------------------------|------------------|--------------|----------|------------------|----------|----------------|
| Asst. Rivets and Eyelets | H526-F | 55 | | | | |
| Asst. Eyelets and Clamps | H744-F | 60 | | | | |
| Eyelet Asst. | H510-F | 50 | | | | |
| Shank Dia. | | | | | | |
| Length Under Head | | | | | | |
| Head Dia. | | | | | | |
| .087 1/8" | | | 7251-C | \$.28 | 7251-M | \$ 2.27 |
| .087 3/32" | | | 7252-C | .35 | 7252-M | 2.85 |
| .087 7/32" | | | 7253-C | .47 | 7253-M | 3.20 |
| .087 1/2" | | | 7254-C | 1.08 | 7254-M | 8.70 |
| .123 3/32" | H515-F | 50 | 7257-C | .50 | 7257-M | 3.98 |
| .123 7/32" | | | 7259-C | .40 | 7259-M | 3.20 |
| .123 1/2" | | | 7260-C | .52 | 7260-M | 4.18 |
| .123 3/4" | | | 7261-C | .53 | 7261-M | 4.25 |
| .125 3/8" | | | 7264-C | .92 | 7264-M | 7.30 |
| .127 1/2" | | | 7265-C | 1.12 | 7265-M | 8.93 |
| .182 3/8" | | | 7269-C | .32 | 7269-M | 2.53 |

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|-------------------------------|------------------|--------------|----------|------------------|----------|----------------|
| 1/2" 3/16" 1/4" 3/16" 3/8" | | | 5710-C | \$3.80 | 5710-M | \$30.42 |
| 7/8" 1/4" 3/8" 1/8" 3/8" | | | 7566-C | 2.45 | 7566-M | 19.53 |
| 1 1/8" 9/16" 1 3/8" 1/2" 3/4" | | | 5711-C | 3.53 | 5711-M | 28.27 |
| 3/4" 3/8" 1/4" 1/8" 9/16" | | | 5712-C | 5.15 | 5712-M | 41.22 |
| 1 3/16" 1/2" 3/2" 3/8" 9/8" | H038-F | 8 | 1043-IC | 2.88 | 1043-IM | 26.40 |
| 1 1/8" 3/8" 3/8" 1/2" 1 3/16" | | | 7569-C | 5.75 | 7569-M | 45.93 |
| 3/4" 5/8" 1 1/2" 3/2" 1 5/8" | | | 5715-C | 6.80 | 5715-M | 54.36 |
| 1 1/8" 5/8" 3/4" 1/2" 7/8" | | | 5716-C | 5.73 | 5716-M | 45.90 |
| 1 3/8" 1 1/8" 3/8" 1/2" 1" | | | 5717-C | 11.55 | 5717-M | 92.33 |

(E) G-C PURE GUM GROMMETS SOFT RUBBER GROMMETS FOR SHOCK DAMPENING. FOR MOUNTING TUNING CONDENSERS, SOCKETS, PHONO MOTORS, ETC.

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|---------------------------------|------------------|--------------|----------|------------------|----------|----------------|
| Asst. | H040-F | 12 | | | | |
| No. 7581 Kit of 100 | | | | | | |
| Asst. Grommets, \$1.62 | | | | | | |
| A 3/16" 3/16" 7/32" 1/16" 3/16" | H042-F | 12 | 7582-C | 1.62 | 7582-M | 12.90 |
| B 3/16" 1/4" 1/4" 1/16" 3/8" | H043-F | 10 | 7584-C | 2.30 | 7584-M | 18.38 |

(F) G-C RADIO KNOB FELTS 3/4" O.D. x 1/4" Hole, Brown H760-F

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|------------------------------|------------------|--------------|----------|------------------|----------|----------------|
| 3/4" O.D. x 1/4" Hole, Brown | H760-F | 40 | 1065-C | .38 | 1065-M | 3.22 |

(G) G-C RUBBER FEET — Screw Type

| O.D. | High | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|------|-------|------------------|--------------|----------|------------------|----------|----------------|
| 3/8" | 3/16" | H050-F | 8 | | | | |
| 1/2" | 3/8" | H052-F | 8 | 1075-BC | .92 | 1075-BM | 7.30 |
| 3/8" | 1/4" | H054-F | 8 | 1075-CC | 1.47 | 1075-CM | 11.70 |
| 3/8" | 3/8" | H056-F | 8 | 1075-FC | 2.22 | 1075-FM | 17.75 |

(H) G-C RUBBER BUTTON BUMPERS

| A D.D. | B Height | C Hole | E Height | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|--------|----------|--------|----------|------------------|--------------|----------|------------------|----------|----------------|
| 3/8" | 3/8" | 3/16" | 3/16" | H058-F | 8 | 7596-C | 1.43 | 7596-M | 11.50 |
| 1/2" | 1/2" | 1/4" | 1/4" | | | 7597-C | 2.10 | 7597-M | 16.85 |
| 5/8" | 5/8" | 3/8" | 3/8" | | | 7598-C | 3.38 | 7598-M | 27.10 |

(J) G-C RUBBER TACK BUMPERS

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|----------------------|------------------|--------------|----------|------------------|----------|----------------|
| 3/8" O.D. | H071-F | 10 | 1075-C | 1.85 | 1075-M | 14.78 |

(K) G-C FELT PADS

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|----------------------------------|------------------|--------------|----------|------------------|----------|----------------|
| Asst. Felt Pads | H074-F | 40 | | | | |
| 1/2" O.D. x 1/4" Thick Felt Pads | | | 1071-C | .30 | 1071-M | 2.38 |

(L) G-C CORD STRAIN RELIEFS

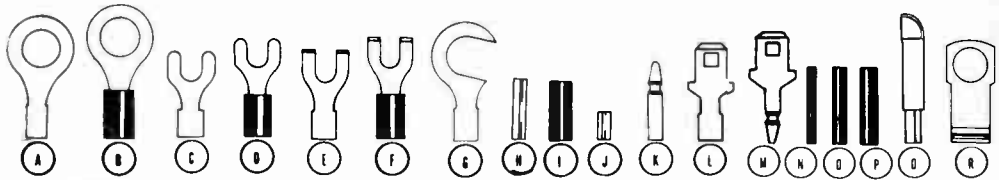
| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|------------------------|------------------|--------------|----------|------------------|----------|----------------|
| Will Fit P.O.S.J. Cord | H048-F | 5 | 6675-C | 5.27 | 6675-M | 42.11 |

(M) G-C ANGLES AND BRACKETS

| Description & Specs. | 50-Line Part No. | Quan. In Box | Part No. | Dir. Net Per 100 | Part No. | Dir. Net Per M |
|----------------------|------------------|--------------|----------|------------------|----------|----------------|
| Asst. | H570-F | 12 | | | | |
| A 1/4" 3/16" 9/32" | | | 6261-C | 1.12 | 6261-M | 8.97 |
| B 3/8" 1/4" 5/16" | | | 6262-C | 1.40 | 6262-M | 11.12 |
| C 1/2" 3/8" 5/8" | | | 6263-C | 1.58 | 6263-M | 12.68 |



SOLDERLESS TERMINALS and CONNECTORS



| WIRE SIZE | STUD SIZE | LENGTH | FIG. | PART. NO. | 100 PACK NET/100 | PART. NO. | 1000 PACK NET/100 |
|--|-----------|---------|------|-----------|------------------|-----------|-------------------|
| RING TONGUE — NON INSULATED | | | | | | | |
| 22-16 | 4-6 | 17/32 | A | 13-000-C | \$2.21 | 13-000-M | \$18.90 |
| 22-16 | 4-6 | 23/32 | A | 13-002-C | 2.21 | 13-002-M | 18.90 |
| 22-16 | 8 | 41/64 | A | 13-004-C | 2.21 | 13-004-M | 18.90 |
| 22-16 | 8 | 23/32 | A | 13-006-C | 2.48 | 13-006-M | 21.00 |
| 22-16 | 8-10 | 23/32 | A | 13-008-C | 2.21 | 13-008-M | 18.90 |
| 22-16 | 10 | 57/64 | A | 13-010-C | 1.94 | 13-010-M | 16.60 |
| 16-14 | 4-6 | 19/32 | A | 13-012-C | 2.23 | 13-012-M | 19.10 |
| 16-14 | 4-6 | 45/64 | A | 13-014-C | 2.23 | 13-014-M | 19.10 |
| 16-14 | 8 | 45/64 | A | 13-016-C | 2.23 | 13-016-M | 19.10 |
| 16-14 | 10 | 45/64 | A | 13-018-C | 2.23 | 13-018-M | 19.10 |
| 16-14 | 1/4 | 57/64 | A | 13-020-C | 3.11 | 13-020-M | 26.65 |
| 12-10 | 4-6 | 3/4 | A | 13-022-C | 3.11 | 13-022-M | 26.65 |
| 12-10 | 8-10 | 3/4 | A | 13-024-C | 3.11 | 13-024-M | 26.65 |
| 12-10 | 1/4 | 1-1/32 | A | 13-026-C | 3.87 | 13-026-M | 33.15 |
| 16-14 | 5-6 | 3/4 | A | 13-028-C | 6.55 | 13-028-M | 56.10 |
| 16-14 | 10 | 55/64 | A | 13-030-C | 6.55 | 13-030-M | 56.10 |
| RING TONGUE — INSULATED | | | | | | | |
| 22-16 | 4-6 | 45/64 | B | 13-050-C | \$5.04 | 13-050-M | \$43.20 |
| 22-16 | 4-6 | 29/32 | B | 13-052-C | 5.04 | 13-052-M | 43.20 |
| 22-16 | 8-10 | 29/32 | B | 13-054-C | 5.04 | 13-054-M | 43.20 |
| 16-14 | 4-6 | 25/32 | B | 13-056-C | 5.04 | 13-056-M | 43.20 |
| 16-14 | 4-6 | 57/64 | B | 13-058-C | 5.04 | 13-058-M | 43.20 |
| 16-14 | 10 | 57/64 | B | 13-060-C | 5.04 | 13-060-M | 43.20 |
| 16-14 | 1/4 | 1-5/64 | B | 13-062-C | 5.88 | 13-062-M | 50.40 |
| 12-10 | 8-10 | 1-3/64 | B | 13-064-C | 5.88 | 13-064-M | 50.40 |
| 12-10 | 1/4 | 1-21/64 | B | 13-066-C | 6.74 | 13-066-M | 57.60 |
| 22-16 | 4/6 | 45/64 | B | 13-068-C | 9.76 | 13-068-M | 83.50 |
| 22-16 | 8-10 | 29/32 | B | 13-070-C | 9.76 | 13-070-M | 83.50 |
| 16-14 | 5-6 | 25/32 | B | 13-072-C | 9.76 | 13-074-M | 83.50 |
| 16-14 | 5-6 | 57/64 | B | 13-074-C | 9.76 | 13-074-M | 83.50 |
| SPADE TERMINAL — NON INSULATED | | | | | | | |
| 22-16 | 4-6 | 3/4 | C | 13-100-C | \$2.21 | 13-100-M | \$18.90 |
| 22-16 | 8 | 3/4 | C | 13-102-C | 1.94 | 13-102-M | 16.60 |
| 16-14 | 4-6 | 3/4 | C | 13-104-C | 2.21 | 13-104-M | 18.90 |
| 16-14 | 10 | 3/4 | C | 13-106-C | 2.21 | 13-106-M | 18.90 |
| SPADE TERMINAL — INSULATED | | | | | | | |
| 22-16 | 4-6 | 1-3/16 | D | 13-108-C | \$5.04 | 13-108-M | \$43.20 |
| 16-14 | 4-6 | 1-3/16 | D | 13-110-C | 5.04 | 13-110-M | 43.20 |
| 16-14 | 10 | 1-3/16 | D | 13-112-C | 5.04 | 13-112-M | 43.20 |
| FLANGE SPADE TERMINAL — NON INSULATED | | | | | | | |
| 22-16 | 4-6 | 5/8 | E | 13-114-C | \$2.21 | 13-114-M | \$18.90 |
| 16-14 | 10 | 3/4 | E | 13-116-C | 3.05 | 13-116-M | 26.20 |
| 16-14 | 4-6 | 3/4 | E | 13-118-C | 4.54 | 13-118-M | 38.80 |
| 16-14 | 8 | 3/4 | E | 13-120-C | 4.54 | 13-120-M | 38.80 |
| 22-16 | 8-10 | 3/4 | E | 13-122-C | 4.54 | 13-122-M | 38.80 |
| FLANGE SPADE TERMINAL — INSULATED | | | | | | | |
| 22-16 | 4-6 | 13/16 | F | 13-124-C | \$7.42 | 13-124-M | \$61.70 |
| 22-16 | 8-10 | 13/16 | F | 13-126-C | 9.17 | 13-126-M | 76.20 |
| 16-14 | 4-6 | 13/16 | F | 13-128-C | 9.93 | 13-128-M | 67.80 |
| 16-14 | 8 | 13/16 | F | 13-130-C | 9.76 | 13-130-M | 83.50 |
| 16-14 | 10 | 13/16 | F | 13-132-C | 9.76 | 13-132-M | 83.50 |
| HOOK TERMINAL | | | | | | | |
| 22-16 | 4-6 | 23/32 | G | 13-200-C | \$1.94 | 13-200-M | \$16.60 |
| 22-16 | 8-10 | 23/32 | G | 13-202-C | 2.25 | 13-202-M | 19.30 |
| BUTT CONNECTOR — NON INSULATED | | | | | | | |
| 22-16 | — | 9/16 | H | 13-220-C | \$2.36 | 13-220-M | \$20.20 |
| 16-14 | — | 9/16 | H | 13-222-C | 1.94 | 13-222-M | 16.16 |
| 12-10 | — | 9/16 | H | 13-224-C | 2.25 | 13-224-M | 19.30 |
| BUTT CONNECTOR — INSULATED | | | | | | | |
| 22-16 | — | 1 | I | 13-226-C | \$5.88 | 13-226-M | \$50.40 |
| 16-14 | — | 1 | I | 13-228-C | 5.17 | 13-228-M | 44.30 |
| 12-10 | — | 1-1/16 | I | 13-230-C | 6.30 | 13-230-M | 54.00 |
| 22-16 | — | 1 | I | 13-232-C | 10.58 | 13-232-M | 90.80 |
| 16-14 | — | 1 | I | 13-234-C | 9.87 | 13-234-M | 84.40 |
| PARALLEL CONNECTOR — NON INSULATED | | | | | | | |
| 22-16 | — | 5/16 | J | 13-240-C | \$2.38 | 13-240-M | \$20.40 |
| 16-14 | — | 5/16 | J | 13-242-C | 3.84 | 13-242-M | 33.00 |
| SNAP TERMINAL | | | | | | | |
| 16-14 | — | 5/8 | K | 13-250-C | 1.96 | 13-250-M | \$16.78 |
| TAB TERMINALS — NON INSULATED | | | | | | | |
| 18-14 | — | — | L | 13-260-C | \$2.31 | 13-260-M | \$19.80 |
| 18-14 | — | — | L | 13-262-C | 2.31 | 13-262-M | 19.80 |
| 18-14 | — | — | L | 13-264-C | 2.52 | 13-264-M | 21.60 |
| 18-14 | — | — | L | 13-266-C | 2.36 | 13-266-M | 20.20 |
| ADAPTER | | | | | | | |
| — | — | 7/8 | M | 13-270-C | \$4.00 | 13-270-M | \$34.20 |
| — | — | 5/16 | M | 13-272-C | 4.04 | 13-272-M | 34.60 |
| — | — | 7/8 | M | 13-274-C | 4.00 | 13-274-M | 34.20 |
| — | — | 49/64 | M | 13-276-C | 4.00 | 13-276-M | 34.20 |
| INSULATING TUBING | | | | | | | |
| 22-16 | — | 5/8 | N | 13-280-C | \$2.46 | 13-280-M | \$21.10 |
| CONNECTOR INSULATOR | | | | | | | |
| 16-14 | — | 1-7/8 | O | 13-282-C | \$2.46 | 13-282-M | \$21.10 |
| TERMINAL INSULATOR | | | | | | | |
| 16-14 | — | 1-5/8 | P | 13-284-C | \$2.46 | 13-284-M | \$21.10 |
| KNIFE DISCONNECT | | | | | | | |
| 22-16 | — | — | Q | 13-290-C | \$7.35 | 13-290-M | \$63.00 |
| FLAG TERMINAL | | | | | | | |
| 22-16 | 8-10 | 11/16 | R | 13-294-C | \$2.36 | 13-294-M | \$20.20 |
| 16-14 | 8-10 | 5/8 | R | 13-296-C | 2.21 | 13-296-M | 18.90 |

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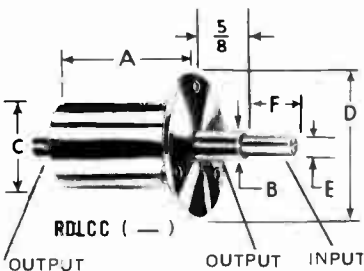
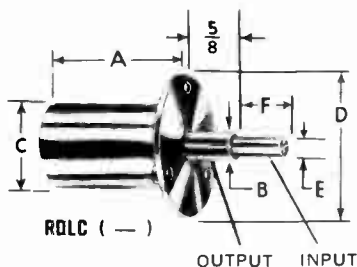
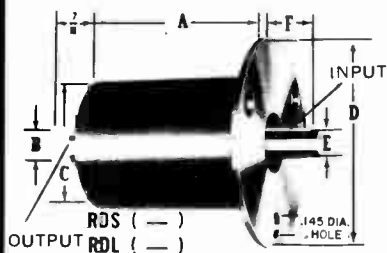
RATIO DRIVES

for FINE INSTRUMENT AND MACHINE CONTROLS

Ball Bearing Type Compact, durable, exceptionally smooth action

These unique ratio drives employ precision ball bearings. Used for rotary control of components in instruments, they provide unexcelled smooth motion. Ruggedly built, permanently sealed and lubricated, JAN Ratio Drives accommodate applications where miniaturization is essential.

Input and output shafts of these units operate in the SAME DIRECTION. Types "RDL" and "RDS" provide "in-line" input-output shafts. Type "RDLC" is supplied with concentric shafts whereby the output envelopes the input shaft. An added feature of type RDLC is the output shaft in the rear. The front concentric can be used as a coarse tuning (1:1 ratio to the output in the rear) and the small diameter shaft in the front can be used for fine tuning.



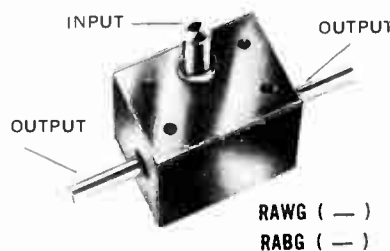
| CAT. No. | RATIO | B | | C | D | Input Shaft E | F | Bolt-Mtg. Dia. |
|----------|---------|---------|-----------|-------|-------|---------------|--------|----------------|
| | | A | O.D. I.D. | | | | | |
| RDS-1 | 2.70-1 | 3/4 | — | 5/8 | 1 1/8 | 1/8 | — | 3/32 |
| RDS-2 | 7.28-1 | 3 1/32 | — | 5/8 | 1 1/8 | 1/8 | — | 3/32 |
| RDS-3 | 19.65-1 | 1 1/32 | — | 5/8 | 1 1/8 | 1/8 | — | 3/32 |
| RDL-1 | 2.66-1 | 1 | 3/8 1/4 | 1 1/8 | 1 1/8 | 1/4 | 3/4 | 1 1/32 |
| RDL-2 | 7.08-1 | 1 13/32 | 3/8 1/4 | 1 1/8 | 1 1/8 | 1/4 | 3/4 | 1 1/32 |
| RDL-3 | 18.80-1 | 1 1/16 | 3/8 1/4 | 1 1/8 | 1 1/8 | 1/4 | 3/4 | 1 1/32 |
| RDLC-1 | 2.66-1 | 1 | 3/8 1/4 | 1 1/8 | 1 1/8 | 1/4 | 1 1/2 | 1 1/32 |
| RDLC-2 | 7.08-1 | 1 13/32 | 3/8 1/4 | 1 1/8 | 1 1/8 | 1/4 | 1 3/4 | 1 1/32 |
| RDLC-3 | 18.80-1 | 1 1/16 | 3/8 1/4 | 1 1/8 | 1 1/8 | 1/4 | 2 3/32 | 1 1/32 |
| RDLC-C-1 | 2.66-1 | 1 13/32 | 3/8 1/4 | 1 1/8 | 1 1/8 | 1/4 | 1 5/8 | 1 1/32 |
| RDLC-C-3 | 17.00-1 | 2 1/64 | 3/8 1/4 | 1 1/8 | 1 5/8 | 1/4 | 1 1/8 | 1 1/32 |

RIGHT ANGLE RATIO DRIVES

Versatile, miniaturized, right angle rotary controls.

Featuring dual output stainless steel shafts at right angles to input, these engineered drives provide an ideal type of instrument control. Available with matched bevel or worm gears covering a wide range of ratios.

JAN'S RIGHT ANGLE DRIVES are especially useful for handling spring or gravity-loaded components since the output shaft automatically locks in any desired position yet remains free for smooth adjustment by the input shaft. Assembled in dust-proof housings, the gears are permanently pinned in place on stainless-steel shafts mounted in oilite bearings and held under constant pressure.



RAWG (-)
RABG (-)

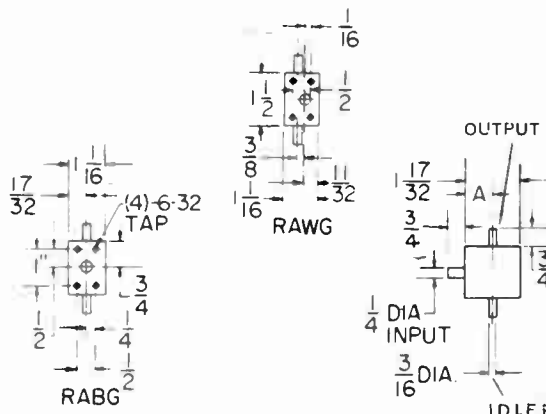
BEVEL GEAR RIGHT ANGLE DRIVES

| CAT. No. | RATIO | "A" |
|----------|-------|-----|
| RABG-1 | 1:1 | 7/8 |
| RABG-2 | 2:1 | 7/8 |
| RABG-3 | 3:1 | 7/8 |



WORM GEAR RIGHT ANGLE DRIVES

| CAT. No. | RATIO | "A" |
|----------|-------|-----|
| RAWG-1 | 5:1 | 3/4 |
| RAWG-2 | 10:1 | 3/4 |
| RAWG-22 | 12:1 | 3/4 |
| RAWG-3 | 20:1 | 3/4 |





JAN HARDWARE

MANUFACTURING COMPANY, INC.
LONG ISLAND CITY 1, NEW YORK



JACK COVERS (TRIMMER COVERS)

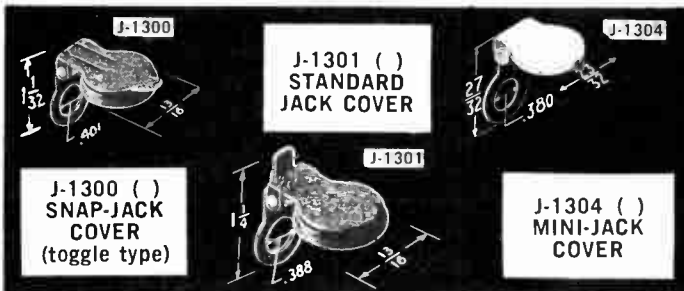
These sturdy Jack Covers fit jack or panel bushings and are used to keep out dust and moisture as well as to prevent inadvertent disturbance of control settings. Outer surfaces are finished in standard colors of baked enamel.

NOTE: No. J-1300 (SNAP-JACK) is made with toggle action. It snaps to open or shut position and will remain open until snapped shut. No. J-1304 is a miniaturized Jack Cover similar to a No. J-1301 but without thumb lift.

To Order Colors: Specify:

- (-1) Black Wrinkle; (-2) Smooth Gray; (-3) Smooth Olive; (-4) Smooth Black. Other colors on request.

Example: Jack cover, color black wrinkle, order as J-1300(-1).



SHAFT LOCKS

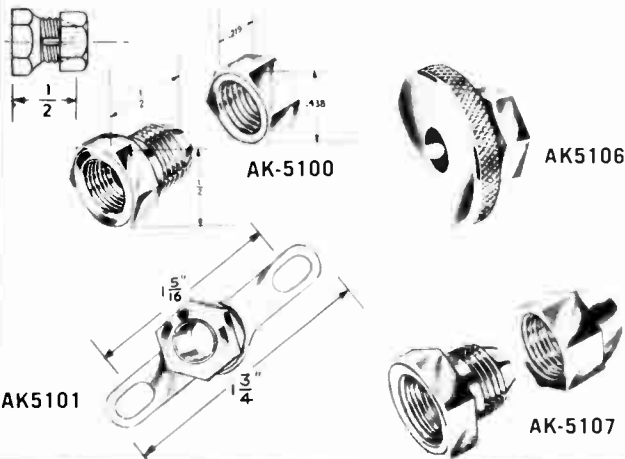
Cat. No. AK-5100 thru No. AK-5107
Split-bushing, collet type locks.

Used to securely hold the shaft of volume controls, capacitors, switches, etc. in position. Body and lock nut are brass—nickel plated. Supplied with nickel plated internal tooth lock washers, upon request.

SPLIT BUSHING TYPE For 1/4" shafts

- AK-5100 Standard Lock Nut
- AK-5101 Panel Mount Type

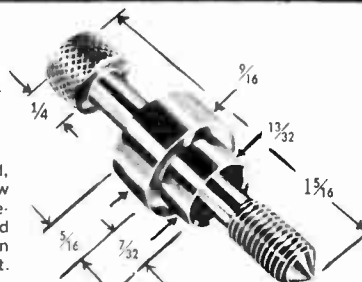
- AK-5106 Knurled Shaft Lock (1" O.D. Knurl)
- AK-5107 Lock Nut (Round Head)



CAPTIVE SCREW & NUT ASSEMBLY

Cat. No. Ap-711

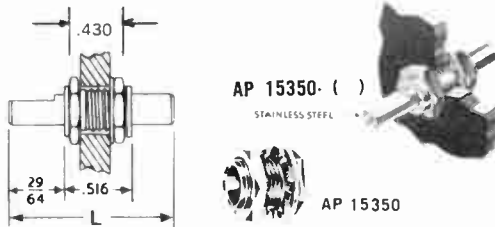
Consists of a slotted, knurled thumb screw made of corrosion resistant steel bar, and a nickel-plated (on brass) panel insert.



PANEL BEARING & SHAFT ASSEMBLIES

Cat. No. AP-15350 series

Used for rotary control of components. Passivated stainless steel shaft is 1/4" dia. with one end flattened for attaching to knob control by set screws. Supplied completely assembled with two retaining rings, jam nut with lock washer and nickel plated, brass panel bearing. Fits panels up to 3/16" thick; mounts in 1/2" dia. hole.



| Cat. No | Item | "L" Shaft Length |
|------------|-----------------|------------------|
| AP 15350 | Panel Bearing | |
| AP 15350-1 | Panel Bearing & | 1 1/8" |
| AP 15350-2 | Shaft Assembly | 3" |
| AP 15350-3 | | 6" |

"NO-MAR" CLAMPS

Set screw does not touch shaft. Ideal for knob and gear applications. Variety of sizes available.



NYLON SHAFT LOCK Cat. No. AK-1050

One-piece, black nylon; fits standard 3/8"-32 thread of shaft bushing. Friction grip holds 1/4" shaft to prevent accidental or vibrational disturbance of control settings. Adjustment for semi-permanent locking, provided.

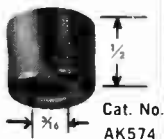


CHASSIS & CABINET BUMPER Cat. No. AK574 ()

Durable, low-friction polyethylene. Guards against scuffing. Supplied in either black or russet brown, with recessed hole for screw or bolt usage.

To Order Colors:

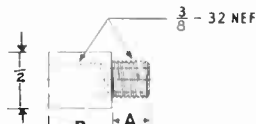
Black, specify (4); Brown, specify (7). Other colors on request.



BUSHING EXTENDERS Cat. No. AK-5075-1 thru No. AK-5075-11

Permit staggered mounting of components having 1/4" shafts, behind a panel. Useful in meeting problems of space economy. Supplied in nickel plated brass.

Note: Extender No. AK-5075-9 is a locking (collet) type and is supplied by JAN with lock nut.



| Cat. No. | "B" | "A" | Cat. No. | "B" | "A" |
|----------|--------|-------|-----------|--------|------|
| AK5075-1 | 5/8" | 3/8" | AK5075-6 | 1 5/8" | 3/4" |
| AK5075-2 | 5/8" | 1/4" | AK5075-7 | 1 7/8" | 3/8" |
| AK5075-3 | 5/8" | 3/16" | AK5075-8 | 1 3/4" | 3/4" |
| AK5075-4 | 3/4" | 1/4" | AK5075-9 | 1 3/4" | 1/2" |
| AK5075-5 | 2 1/4" | 1/4" | AK5075-10 | 1 7/8" | 3/8" |
| | | | AK5075-11 | 1 5/8" | 3/8" |



JAN HARDWARE

MANUFACTURING COMPANY, INC.
LONG ISLAND CITY 1, NEW YORK



U.S. PATENT NO. 2,681,378

HI-VOLTAGE INSULATED COUPLINGS

MEETS MIL SPECS:
TEMPERATURE - HUMIDITY
SHOCK - VIBRATION - FUNGUS

HI-VOLTAGE INSULATED COUPLINGS
15 KV Breakdown 10 inch pounds torque
Series No. AK-5079 & No. AK-5164

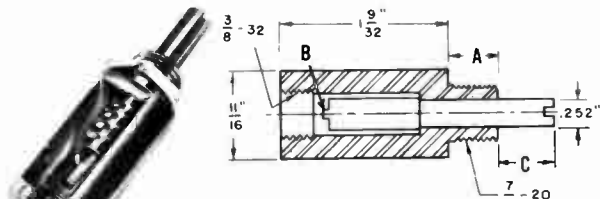
Engineered with stainless steel shaft and precision, screwdriver tip molded integrally with Mineral-Filled-Melamine in accordance with Military Specifications. Completely shock, vibration and fungus proof, they operate with ease over an ambient temperature range of -75 to +175° C. Supplied complete with nickel plated mounting hardware.

Stainless steel screw driver tip fits all standard slotted shafts (potentiometer, etc.) without need for further machining. Ideally suited to adjust high voltage controls thus protecting operating personnel against danger. They are also used to reduce ground capacitance on other types of sensitive instrument controls.

Cat. No. 5144 10 KV Breakdown
15 inch pounds torque

This coupling is the same dimensionally as AK-5079, AK-5164 except that the body and insulated portion of shaft is molded in reinforced fiberglass (CYMEL) per MIL Spec. MIL-M-14E to withstand a minimum of 15 inch pounds torque. Can be used for switches, where greater torque is needed.

COMMERCIAL INSULATED COUPLINGS
30 KV Breakdown Series No. AK-4160
10 inch pounds torque For TV and Industrial Applications
These handy couplings, capable of withstanding 30 KV, are made of high grade Bakelite throughout except for the stainless steel screwdriver tip molded within the drive shaft. Mounting hardware supplied.



| CAT No. | "A" | "B" | SHAFT | "C" |
|-------------|------|-------|---------|-------|
| AK-4160-X-1 | 3/8" | 3/16" | Slotted | 3/16" |
| AK-4160-B-1 | 3/8" | 1/16" | Slotted | 3/16" |
| AK-4160-X-2 | 3/8" | 3/16" | Slotted | 3/16" |
| AK-4160-B-2 | 3/8" | 1/16" | Slotted | 3/16" |

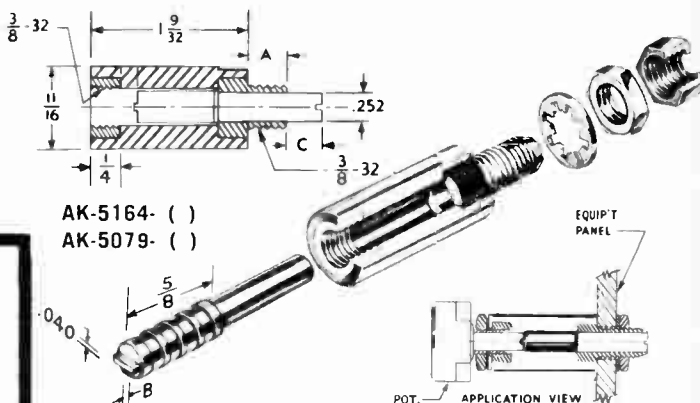
AUTOLINEAR (INSULATED) SHAFT COUPLINGS
2.5 - 5KV BREAKDOWN
Universal, miniature, self-aligning
Cat. No. AP-1530 & AP-1538

A unique series of shaft couplers that accommodate either similar or dissimilar 1/8", 3/16" or 1/4" shafts. Permits offset misalignment to 3/16" and 5° angle. Operates free of backlash. Plastic insulator between precision cast aluminum hubs. Each hub has 2 set screws for firm attachment. Alodine finish.

| PART NO. | DIA. HOLE | "A" | "B" | "C" |
|----------|-----------|-------|------|--------|
| AP-1530 | -2 | 1/8" | 1/2" | 1 1/4" |
| | -3 | 3/16" | 1/2" | 1 1/4" |
| | -4 | 1/4" | 1/2" | 1 1/4" |
| AP-1538 | -2 | 1/8" | 1/2" | 2 3/4" |
| | -3 | 3/16" | 1/2" | 2 3/4" |
| | -4 | 1/4" | 1/2" | 2 3/4" |

TYPICAL PART NUMBERS: AP-1530-34 AP-1538-22
VOLTAGE RATING: AP-1530 — 2500 VOLTS AP-1538 — 5000 VOLTS

| CAT No. | "A" | "B" | SHAFT | "C" |
|---------------------------|---------|-------|---------|-------------|
| AK-5144-X-1 | 3/8" | 3/16" | Slotted | 3/16" |
| AK-5144-B-1 | 3/8" | 1/16" | Slotted | 3/16" |
| AK-5144-X-2 | 3/8" | 3/16" | Slotted | 15/32" |
| AK-5144-B-2 | 3/8" | 1/16" | Slotted | 15/32" |
| AK-5164-X-1 | 3/8" | 3/16" | Slotted | 3/16" |
| AK-5164-B-1 | 3/8" | 1/16" | Slotted | 3/16" |
| AK-5164-X-2 | 3/8" | 3/16" | Slotted | 15/32" |
| AK-5164-B-2 | 3/8" | 1/16" | Slotted | 15/32" |
| AK-5164-X-3 | 3/8" | 3/16" | No Slot | 15/32" |
| AK-5164-B-3 | 3/8" | 1/16" | No Slot | 15/32" |
| AK-5164-X-4 | 3/8" | 3/16" | No Slot | 1 1/16" |
| AK-5164-B-4 | 3/8" | 1/16" | No Slot | 1 1/16" |
| AK-5169-X-5 | 3/8" | 3/16" | Slotted | Minus 1/16" |
| AK-5164-B-5 | 3/8" | 1/16" | Slotted | Minus 1/16" |
| WITH LOCKING TYPE BUSHING | | | | |
| AK-5079-X-1 | 9/16" | 3/16" | Slotted | 1/8" |
| AK-5079-B-1 | 1 1/16" | 1/16" | Slotted | 1/8" |
| AK-5079-X-2 | 9/16" | 3/16" | Slotted | 3/32" |
| AK-5079-B-2 | 9/16" | 1/16" | Slotted | 3/32" |

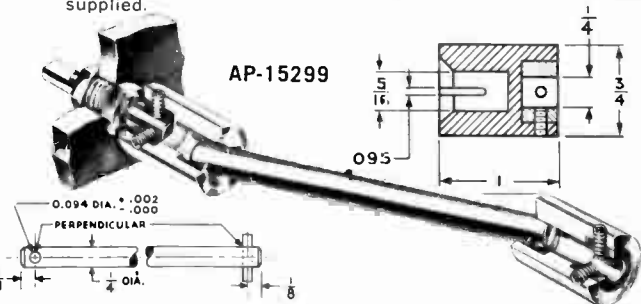


AK-5164- ()
AK-5079- ()

OFFSET-SHAFT (INSULATED) COUPLINGS
10 KV Breakdown—±30° Offset
Cat. No. AP-15299

Highly versatile, durable insulated couplings made with single-unit, molded Nylon-to-metal insert construction. Application requires two couplings—permits smooth control for two parallel shafts offset from each other up to 30 degrees at separations greater than 3 inches. Secured to component and control shafts by 2 set screws.

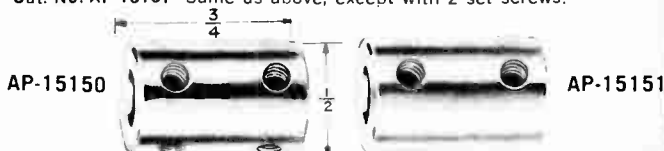
Note: Coupling is accomplished with a 1/4" shaft of any length (not furnished). Coupling shaft keyed to coupler by steel drive pins supplied.



SHAFT COUPLING Cat. No. AP-15150

A rugged, nickel plated brass coupling for joining two 1/4" shafts. Supplied with 4 set screws for firm attachment to shafts.

Cat. No. AP-15151 Same as above, except with 2 set screws.





JAN HARDWARE

MANUFACTURING COMPANY, INC.
LONG ISLAND CITY 1, NEW YORK



DELUXE INSTRUMENT KNOBS

MEETS PERFORMANCE OF MIL-STD-242D (SHIPS) AND PROPOSED MS 91528C

JAN's Standard Instrument Control Knobs for use with electronic equipment. Molded of JAN's KR23 plastic, these knobs will withstand the extreme environmental condi-

tions of MIL-E-16400. Either knob-cap or entire knob is available in a variety of colors, in MATTE (M) or GLOSSY (G) finish. Complete range of sizes . . . send for catalog.



TACTILE SHAPE CONTROL KNOBS

JAN's Tactile Shape Control Knobs are expressly made for both visual and tactile function identification. Each Tactile knob is

produced in the standard recognizable color identified with its configuration. Available in other colors on special order.

INTENSITY--(Blue)

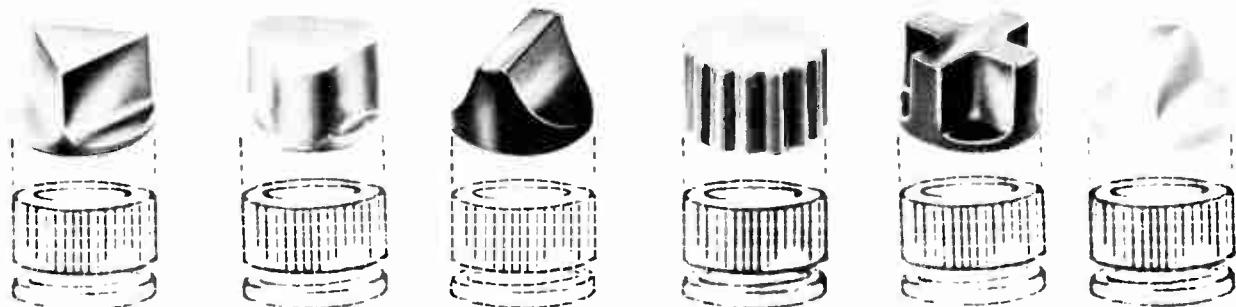
TUNE--(Orange)

DIMMER--(White)

GAIN--(Red)

FOCUS--(Violet)

RANGE--(Yellow)



SLIP-CLUTCH, SAFETY KNOBS

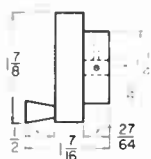
With Fixed or Retractable Spinners

Cat. Nos. K-1375 & K-1376 (For 1/4" shafts)

Designed for driving devices such as variable capacitors, inductors, potentiometers, etc., these knobs are based upon the principle of the "slip-clutch", automatically disengaging and slipping when a pre-determined torque has been exceeded. JAN'S SLIP-CLUTCH SAFETY KNOBS are fluted to aid in sensitive adjustments and are equipped with either a fixed or retractable spinner for fast turning. Insert-molded-to-Bakelite construction provide durable, backlash-free units to safeguard delicate and costly instruments against careless or inadvertent cranking beyond their normal stops.

Model No. K-1376 is identical with No. K-1375 but has the additional feature of a retractable spinner. Spring loading provides positive, toggle-type action to lock spinner in either open or closed position. Model No. K-1376 is designed for use where economy of space is essential.

Model No. K-1475 Slip-Clutch knobs are designed similar to No. K-1375 except for larger dimensions and utilize cast aluminum in place of Bakelite.



K1376



K1375



1475

SPINNER KNOBS

With Fixed or Retractable Spinners

Cat. Nos. K-1275 & K-1276 (For 1/4" shafts)

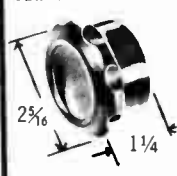
In appearance, these knobs are identical with No. K-1375 and No. K-1376 but without JAN'S Slip-Clutch mechanism. Made with single-unit, molded Bakelite-to-metal-insert construction, with two set screws for firm attachment to shafts.

MS — SIGNAL CORPS
DIE CAST ALUMINUM
& ZINC ALLOY KNOBS



Manufactured in accordance with applicable military specifications.

TUNING KNOB
Cat. No. K-243



Die cast aluminum. Made to Fed. Spec QQ-A-591 and MIL-F-14072. Mounted with no-mar clamp.

POINTER KNOB
Cat. No. K-706

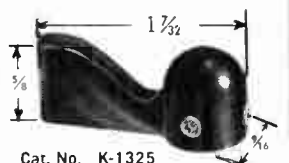


Molded thermosetting phenolic. Type CFG per MIL-P-14. Designed for square shaft, providing positive action.

BAR-KNOB

Cat. No. AK-1325

Precision cast aluminum for 1/4" shafts. Furnished with twin set screws for shaft attachment. Provides a 1.0" integrally cast lever arm for heavy-load switching. Finished to specifications.

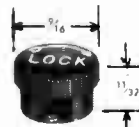


Cat. No. K-1325

KNOB LOCK

Cat. No. AK-1326

Black anodized aluminum with serrated edges for easy turning. Has twin set screws for firm attachment to 1/4" shafts. Height 3/16" x 3/16" diameter.



Cat. No. K-1326

SPECIAL! ENGRAVED KNOBS TO ORDER.



JAN HARDWARE

MANUFACTURING COMPANY, INC.
LONG ISLAND CITY 1, NEW YORK



JOLTA SHOCK TEST MACHINES

For reproducible impact-shock test pulses

Four models engineered to reproduce the entire spectrum of all significant impact shock waves.

Designed for laboratory and production testing of light to medium weight components as well as complete instrumentation. Produced to meet practically all requirements of common Mil. Spec. qualification tests. Each JOLTA is electronically calibrated to certify compliance with test specifications.

JOLTA — Bench Model No. 1001 — Produced to meet JAN-S-44 & Mil-Std. 202 (202A). Standard model range 30-120G. Accessory plate springs available for test pulses to 500 G.

JOLTA — Bench Model No. M-500 — Produced to meet Mil-T-12679A (Sig. C) and Mil. T-19500A. Standard model range —200 to 1000 G at 1.0 millisees. Alternate anvil and pad kits available to order.

JOLTA—Floor Model Nos. F-3003-C1, C2, C-3—Designed for high impact shock testing for small and moderate-sized components. Precision-machined magnesium casting utilized for higher shock amplitudes. Typical tests with these units 50 to 5000 G at .2 to 11.0 millisees. For high impact testing, accessory springs and twin anvil combinations yield impulses of 0.2 millisees to 5000 G.

Note: New design allows for quick changeovers of accessories.

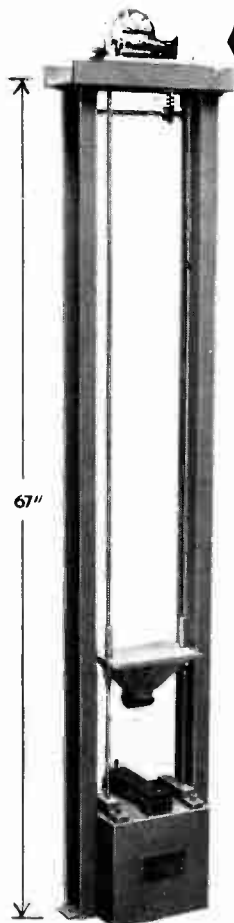
FEATURES

- Economical
- Simple to operate
- Rugged
- Uniformly accurate

JOLTA UNIVERSAL SHOCK TESTERS

No. S-200-V

A functionally engineered test machine for large components and complete instrumentation. Accepts specimens up to 200 lbs. and volume of 2 cubic feet. Standard model provides pulses of from 20 to 250 G at 3.0 to over 30.0 millisees.

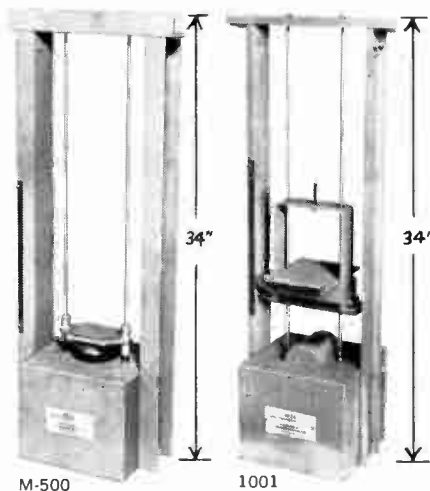


F-3003-C

For Production Testing, JAN's Jolta Shock Test Machines can be automated for continuous operation.

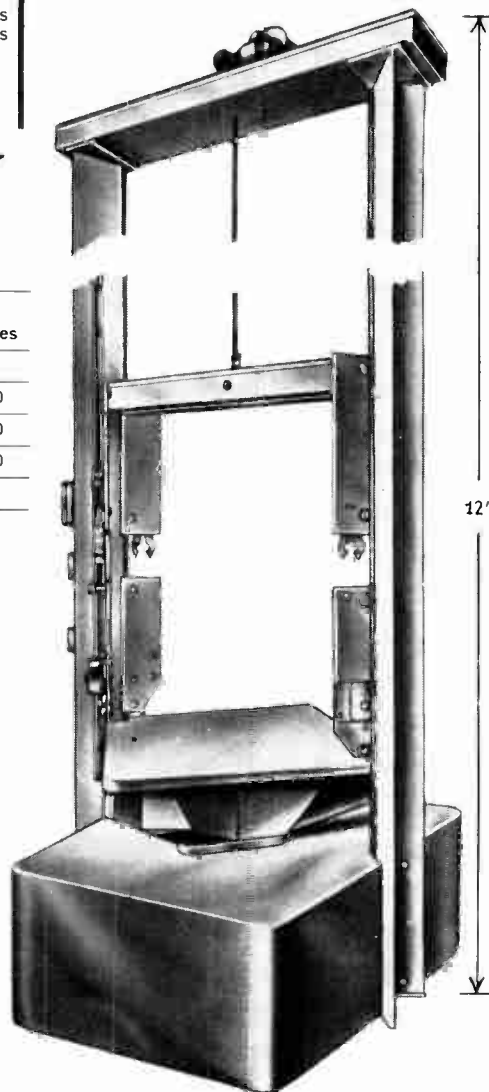
SPECIFICATIONS — JOLTA SHOCK TESTERS

| Model No. | Carriage Volume | Test Weight | "G" Ranges |
|------------|-----------------|-------------|------------|
| 1001 | 5" x 5" x 7" | 0-12 lbs. | 25-500 |
| M-500 | 3" cube | 0-2.0 lbs. | 100-1000 |
| F-3003-C-1 | 5" cube | 0-12 lbs. | 50-1500 |
| F-3003-C-2 | 5" cube | 0-4.0 lbs. | 350-5000 |
| S-200-V | 2 Foot cube | 0-200 lbs. | 20-250 |



M-500

1001



S-200-V

Free engineering services available to customers where adaptation or conversion of standard machines are needed to meet Mil. Spec. changes or other special needs.



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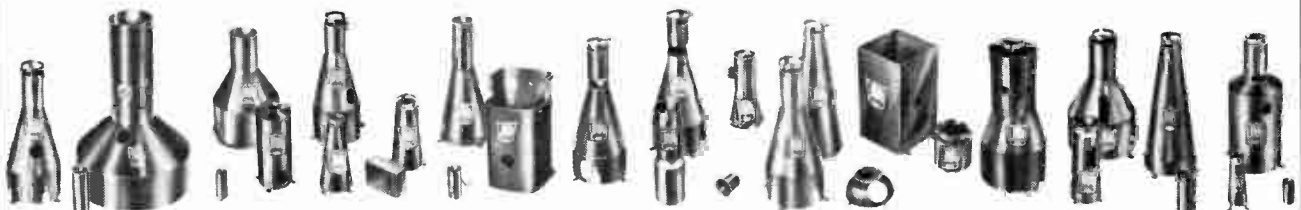


JAN'S MAGNETIC SHIELDS are made of Mu-Metal and are hydrogen annealed by a special process to assure optimum orientation of the molecular structure of the alloy for best magnetic shielding. JAN'S MAGNETIC SHIELDS prevent distortion and intensity modulation of the electron beam due to stray magnetic fields.

In addition, the use of these shields protect personnel against the dangers of accidental tube breakage. Mounting holes are tapped for No. 6-32 screws as shown. These shields are designed to fit JAN'S standard bezels as listed below. See following pages for specifications on JAN'S BEZEL ASSEMBLIES.

| SHIELD CAT. NO. | FOR USE WITH C.R.T. NO. | MATCHING JAN BEZEL | |
|---|----------------------------|--|---|
| S2001 S2001-1 | 902 2AP 2BP | CP1110P2 CP1120P2 | |
| S3001 adaptable for edge-lighting graticule using S3010 with Bezel CP1428* | 3RP 3RPA | CP1328-P-1 C1427-1 CP1429-1 CP1328-P2 CP1427-2 CP1429-2 CP3430-1 CP3430-2 | |
| S3002 | 3MP | Same as S3003 | Same type as S-3001, except A=7 7/16 B=1 1/4 |
| S3003 S3003-1 | 3KP 908A 3AP | CP1328-P1 C1427-1 CP1429-1 | Same type as S-3001, except A=10 7/8 B=2 |
| S3004 adaptable for edge-lighting graticule using S3012 with Bezel CP1428* | 3BP 3JP 3ACP | Same as S3003 Same as S3005 | Same type as S-3001, except A=8 5/8 B=2 3/4 |
| S3005 adaptable for edge-lighting graticule using S3008 with Bezel CP1428* | 3WP | CP1328-P2 C1427-2 CP1429-2 | Same type as S-3001, except A=10 3/8 B=1 1/8 |
| S5001 | 5UP | CP1465 CP13584-1 CP13549-1 CP13595-1 CP19495-1 CP446-11 CP446-22 | |
| S5002 adaptable for edge-lighting | 5BP 5CP 5ABP 5ADP | Same as S5001 Same as S5006 | |
| S5003 | 5UP | CP1465 CP13584-1 CP13549-1 CP13595-1 CP19495-1 | |
| S5005 adaptable for edge-lighting | 5AQP 5ABP 5ADP | CP1465-2 CP13549-2 CP13584-2 CP13595-2 CP19495-2 CP446-11 CP446-22 | |

When ordering, be sure to specify CRT type number. Anode openings provided, where required.





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LONG ISLAND CITY 1, NEW YORK



| SHIELD CAT. NO. | FOR USE WITH C.R.T. NO. | MATCHING JAN BEZEL | |
|--------------------------------------|-------------------------|--|---|
| S5006 adaptable for edge-lighting | 5RPA 5AWP | CP1465-2 CP13549-2 CP13584-2 CP13595-2 CP19495-2 | |
| S5008 adaptable for edge-lighting | 5AMP | CP1465-2 CP13549-2 CP13584-2 CP13595-2 CP19495-2 | |
| S5017 adaptable for edge-lighting | 5ABP 5ADP | CP1465-2 CP19636-2 | |
| S5019 | 5BGP | CP1465-2 CP13549-2 CP13584-2 CP13595-2 CP19495-2 | |
| S5021 | 5AQP 5ABP 5ADP | CP1465-2 CP13549-2 CP13584-2 CP13595-2 CP19495-2 | |
| S7001 | 7GP 7JP 7VP | CP7330 CP7375 CP7331 CP7550 CP7420 | |
| S7002 | 7CP 7BP | Same as S7001 | Same as S 7001, except anode opening provided |

All 5" Shields have mounting provisions for edge lighting, except # 5021

The service of JAN's design engineers is available to assist you with your Shield & Bezel requirements. We will design and manufacture special Shields & Bezels to customers' specifications. Complete facilities for prototype work.





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LONG ISLAND CITY 1, NEW YORK

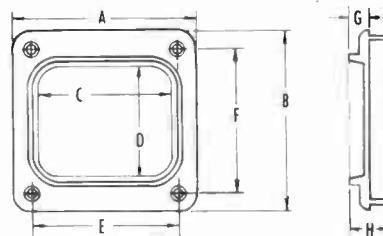


JAN's Bezels enhance the appearance of the instruments on which they are used. These units are functionally designed to provide OPTIMUM UTILIZATION OF THE CRT SCREEN, as well as safety against tube breakage and danger to operating personnel.

JAN Bezel Assemblies are supplied with a bezel, calibrated graticule, (where applicable) light filter and CRT cushion. Bezels are finished in a smooth dull black non-reflecting surface. These units fit JAN Mu-Metal Shields.

Edge-lit Bezels (E.L.B.A.)** These Bezels are designed to provide edge lighting of the engraved scale-calibrated graticule by means of pilot lights.

Camera Mount Bezel These units provide an integral cast mounting flange that fits all standard 3", 5" and 7" CRT cameras.



| Catalog No. | CRT Face | Material | Type | Panel Opening | A Overall Width | B Overall Height | C Visible Area (Bezel) Width | D Visible Area (Bezel) Height | E Mounting Holes Width | F Mounting Holes Height | G Thickness (Face Only) | H Thickness (Incl. Flange) | Visible Area (Cushion) Height \| Width | |
|-------------|----------|----------|------|---------------|-----------------|------------------|------------------------------|-------------------------------|------------------------|-------------------------|-------------------------|----------------------------|---------------------------------------|--|
|-------------|----------|----------|------|---------------|-----------------|------------------|------------------------------|-------------------------------|------------------------|-------------------------|-------------------------|----------------------------|---------------------------------------|--|

BEZELS FOR 2" C.R.T.

| | | | | | | | | | | | | | | |
|-------------|------|----------|----------|--------|--------|--------|--------|--------|----|----|------|------|--------|--------|
| CP-1110-P-2 | Flat | Plastic* | Standard | 2 3/8" | 2 5/8" | 2 5/8" | 1 3/4" | 1 3/4" | 2" | 2" | 3/8" | 3/8" | 1 3/4" | 1 3/4" |
|-------------|------|----------|----------|--------|--------|--------|--------|--------|----|----|------|------|--------|--------|

BEZELS FOR 3" C.R.T.

| | | | | | | | | | | | | | | |
|----------------------------|----------------|----------|-------------------------|--------|-------------|--------|-------------|--------|--------|--------|---------|---------|--------------|--------|
| CP-1220-P: | Curved or Flat | Plastic* | Camera Mount | — | 4 1/8" | 3 1/4" | 2 3/4" | 2 1/4" | 4" | 2 1/2" | 3/8" | 1 1/8" | — | |
| CP-1328-P-1 CP-1328-P-2 | Curved Flat | Plastic* | Standard | 3 3/8" | 3 3/4" | 3 3/4" | 2 5/8" | 2 5/8" | 3" | 3" | 3/8" | 4 5/8" | 2 1/2" | 2 5/8" |
| CP-1427-1 CP-1427-2 | Curved Flat | Aluminum | Camera Mount | 3 1/8" | 4" | 4" | 2 3/4" Dia. | | 3" | 3" | 3/8" | 3/8" | 2 5/32" Dia. | |
| CP-1428-1** CP-1428-2** | Curved Flat | Aluminum | Camera Mount E.L.B.A.** | 3 1/8" | 4" | 4" | 2 3/4" Dia. | | 3" | 3" | 3/8" | 3/8" | 2 5/32" Dia. | |
| CP-1429-1 CP-1429-2 | Curved Flat | Aluminum | Camera Mount | 3 1/8" | 4" | 4" | 2 3/4" Dia. | | 3" | 3" | 3/8" | 3/8" | 2 5/32" Dia. | |
| CP-3430-1 CP-3430-2 | Curved Flat | Steel | Standard | — | 4 5/8" Dia. | | 3 3/8" Dia. | | 3 3/4" | 3 3/4" | 1 4/16" | 1 4/16" | 2 5/32" Dia. | |

BEZELS FOR 4" C.R.T.

| | | | | | | | | | | | | | | |
|------------|--|----------|--------------|--------|--------|--------|----|----|----|--|---------|---------|------------|--|
| CP-1533-P: | | Plastic* | Camera Mount | 3 1/2" | 4 3/8" | 3 5/8" | 3" | 3" | 4" | | 1 3/32" | 1 3/32" | No Cushion | |
|------------|--|----------|--------------|--------|--------|--------|----|----|----|--|---------|---------|------------|--|

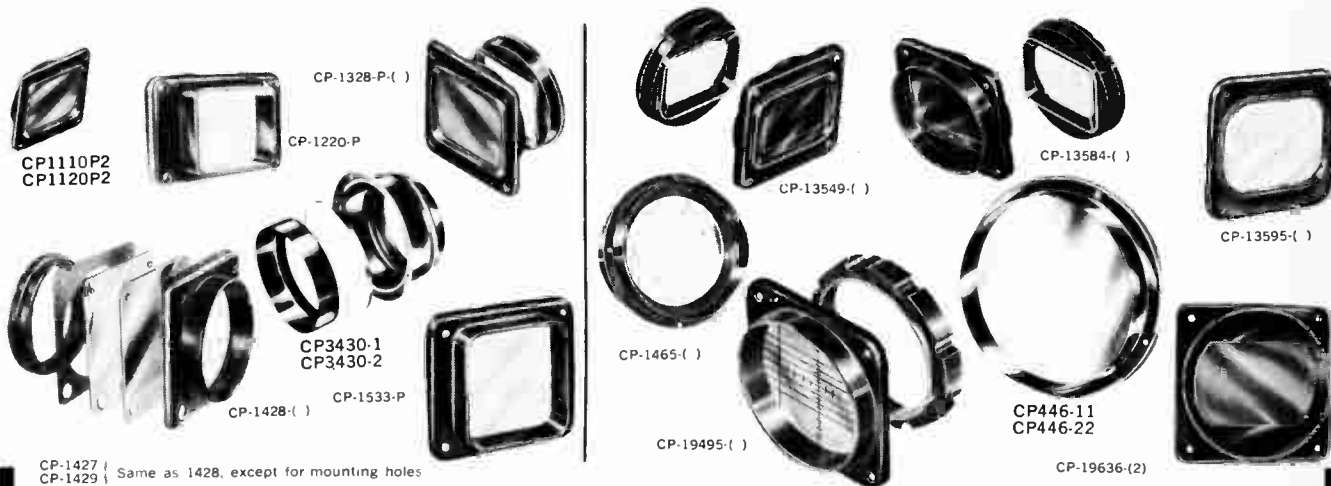
BEZELS FOR 5" C.R.T.

| | | | | | | | | | | | | | | |
|------------------------------|----------------|----------|-------------------------|------------------|-------------|--------|-------------|--------|-------------------|-------------------|---------|-------------------|---------------------------|--------|
| CP-13549-1 CP-13549-2 | Curved Flat | Aluminum | Standard | 6.0" | 6 1/4" | 6 1/4" | 4 7/8" | 3 3/4" | 4 1/8" | 4 1/8" | 1 3/32" | 1 3/32" | 4 1/4" | 3 3/8" |
| CP-13584-1 CP-13584-2 | Curved Flat | Aluminum | Camera Mount | 6.0" | 6 1/4" | 6 1/4" | 4 7/8" | 3 3/4" | 4 1/8" | 4 1/8" | 1 3/32" | 1 3/32" | 4 1/4" | 3 3/8" |
| CP-13595-1** CP-13595-2** | Curved Flat | Aluminum | Standard E.L.B.A.** | 5 5/8" | 6 1/4" | 6 1/4" | 4 7/8" | 3 3/4" | 4 1/8" | 4 1/8" | 1 3/32" | — | 4 3/4" Dia. | |
| CP-1465 CP-1465-2 | Curved or Flat | Steel | Camera Mount | 5 5/8" 5 1/2" | 6 3/8" Dia. | | 5 3/8" Dia. | | 6" | 6" | 3/8" | 3/8" | No Cushion 4 1/2" Dia. | |
| CP-19495-1** CP-19495-2** | Curved Flat | Aluminum | Camera Mount E.L.B.A.** | 5 5/8" | 6 1/4" | 6 1/4" | 5 1/4" Dia. | | 4 1/8" | 4 1/8" | 1 3/32" | — | 4 3/4" Dia. | |
| CP-19636-2** | Flat | Aluminum | Camera Mount E.L.B.A.** | 5 5/8" | 5 7/8" | 5 7/8" | 4 1/2" Dia. | 3" | 4 7/8" | 4 7/8" | 1 1/4" | — | 4 1/2" Dia. | |
| CP-446-11 CP-446-22 | Curved Flat | Steel | Camera Mount | — | 6 5/8" Dia. | | 5 1/4" Dia. | | 6 5/32" 6 3/8" | 6 5/32" 6 3/8" | 1" | 1 1/8" 1 3/16" | — | |

* All Plastic Bezels are furnished in shock resistant plastic, per MIL P-3414

** Edge Lit Bezel Assemblies

‡ Rectangular C.R.T.



CP-1427 / CP-1429 } Same as 1428, except for mounting holes



JAN HARDWARE

MANUFACTURING COMPANY, INC.
LONG ISLAND CITY 1, NEW YORK



| Catalog No. | CRT Face | Material | Type | Panel Opening | A | B | C Visible Area (Bezel) | | E Mounting Holes | | F | G-Thickness (Face Only) | H-Thickness (Incl. Flange) | Visible Area (Cushion) | |
|-------------|----------|----------|------|---------------|---------------|----------------|------------------------|--------|------------------|--------|-------|-------------------------|----------------------------|------------------------|--------|
| | | | | | Overall Width | Overall Height | Width | Height | Width | Height | Width | Height | Height | Width | Height |

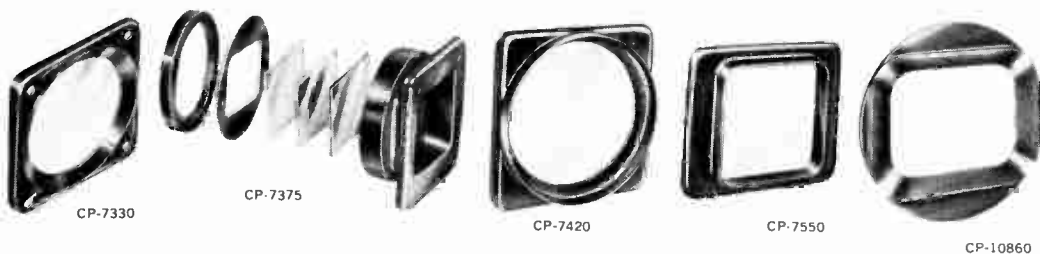
BEZELS FOR 7" C.R.T.

| | | | | | | | | | | | | | | |
|--------------------------|-------------------|----------|------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------------|---------------------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|--------------------------------------|---------------------------------|
| CP-7330-1 CP-7331-2** | Curved Flat | Aluminum | Standard E.L.B.A.** | 7 ¹³ / ₃₂ " | 7 ¹³ / ₁₆ " | 7 ¹³ / ₁₆ " | 6 ¹ / ₈ " Dia. | | 6 ³ / ₁₆ " | 6 ³ / ₁₆ " | 3 ₄ " | 3 ₄ " | 6 ³ / ₈ " Dia. | |
| CP-7375-1** -2** | Curved Flat | Aluminum | E.L.B.A.** | 7 ¹³ / ₃₂ " | 8" | 8" | 4 ¹ / ₂ " | 4 ¹ / ₂ " | 6 ³ / ₁₆ " | 6 ³ / ₁₆ " | 1 ¹⁷ / ₃₂ " | 2 ²⁹ / ₃₂ " | 4 ¹ / ₂ " | 4 ¹ / ₂ " |
| CP-7420-1** -2** | Curved Flat | Aluminum | Camera Mount | 7 ¹³ / ₃₂ " | 7 ¹³ / ₁₆ " | 7 ¹³ / ₁₆ " | 6 ¹ / ₈ " Dia. | | 6 ³ / ₁₆ " | 6 ³ / ₁₆ " | 3 ₄ " | 1 ³ / ₈ " | 6 ³ / ₈ " Dia. | |
| CP-7550 | Curved or Flat | Aluminum | Camera Mount | 4 ²⁵ / ₃₂ " | 7 ³ / ₈ " | 6 ¹ / ₄ " | 4 ³ / ₄ " | 4 ³ / ₄ " | 6 ¹ / ₄ " | 5 ¹ / ₈ " | 1 ³ / ₈ " | 1 ³ / ₈ " | No Cushion | |

BEZEL FOR 10" C.R.T.

| | | | | | | | | | | | | | | |
|----------|-------------------|----------|----------|------------------------------------|---------------------------------------|--|---------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------|------------|--|
| CP-10860 | Curved or Flat | Aluminum | Standard | 11 ¹⁵ / ₃₂ " | 10 ³ / ₄ " Dia. | | 8 ¹ / ₂ " | 6 ¹ / ₄ " | 11 ¹ / ₂ " | 11 ¹ / ₂ " | 1 ³ / ₈ " | 1 ³ / ₈ " | No Cushion | |
|----------|-------------------|----------|----------|------------------------------------|---------------------------------------|--|---------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------|------------|--|

** Edge Lit Bezel Assemblies

DISTINCTIVE
FEATURES

- Engineered for 2", 3", 4", 5", 7", 8" and 10" CRT
- Maximum display area
- Precision engraved, scale-calibrated graticules; standard or to customer's specifications
- Materials and finish to "Mil Spec"
- Heavy buna-S shock cushion
- Models for edge-lighting
- Phosphor-matched light filters
- Non-reflecting matte surfaces
- Rugged camera mounts
- Models for curved and flat-faced CRT

VIEWING HOOD

Cat. No. H-689-1
(5⁷/₈" O.D.)Cat. No. H-689-2
(4⁷/₈" O.D.)

Made of black neoprene rubber, contour-molded to fit shape of face. Keeps out ambient light when viewing scope.

PACKAGED SHIELD-BEZEL ASSEMBLIES

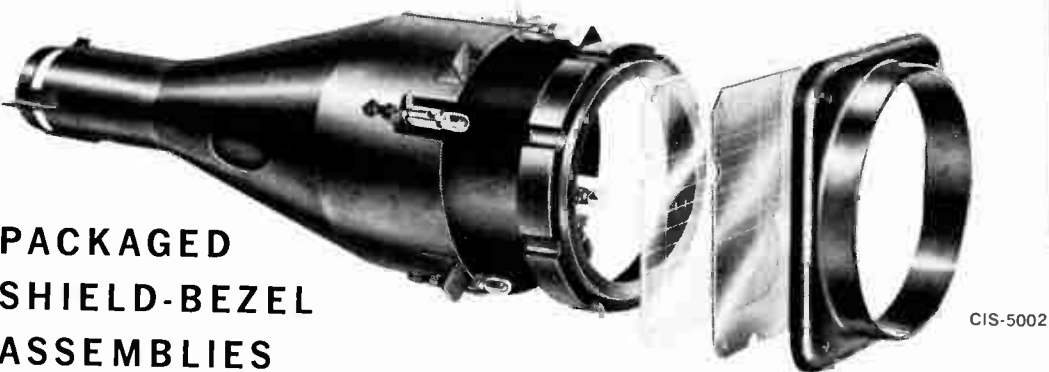
SAVES } TIME
} MONEYELIMINATES } MULTIPLE PURCHASING
} COMPLEX ENGINEERING

All necessary items for CRT Magnetic Shield and Bezel applications are packaged in one unit.

EACH } Shield, JAN Bezel, CRT Rubber Cushion,
ASSEMBLY } Graticule, Filter, Light Sockets, Pilot Lamps
CONTAINS } (for edge-lit bezel-shield assemblies) plus Hardware.

When ordering specify:

"JAN PACKAGED UNIT" giving JAN shield No., JAN bezel No. and CRT tube type with which it is to be used.



CIS-5002



CIS-3008

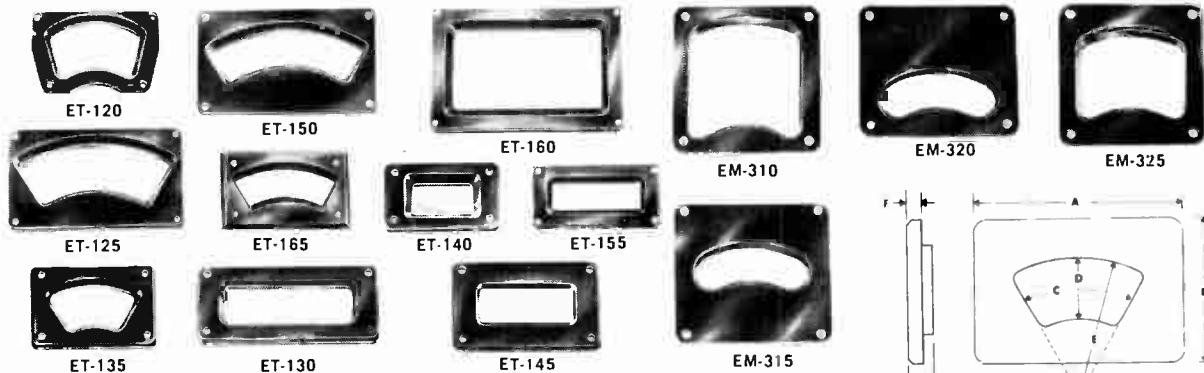


JAN HARDWARE

MANUFACTURING COMPANY, INC.
LONG ISLAND CITY 1, NEW YORK



ESCUTCHEON PLATES For Elegant Framing of Panel Openings



SPECIFICATIONS — JAN ESCUTCHEONS

| Escutcheon Cat. No. | A Overall Width | B Overall Height | C Window Width | D Window Height | E Effective Outer Dial Radius | F Thickness Face Only | G Incl. Flange | Panel Opening Width | Panel Opening Height | Mounting Holes Width | Mounting Holes Height | Type of Dial | Material |
|---------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|---------------------------------|--------------------------------|---|---------------------------------|--------------------------------|--|
| ET-120 | 2 ³⁷ / ₃₂ | 1 ⁷ / ₈ | 1 ³ / ₄ | 1" | 1 ³⁷ / ₃₂ | ³ / ₁₆ | ³ / ₁₆ | 2 ¹¹ / ₃₂ | 1 ¹ / ₈ | 2 ¹ / ₁₆ top 2 ¹ / ₁₆ bottom | 1 ¹ / ₁₆ | Circular | Injection Molded |
| ET-125 | 3 ¹ / ₄ | 2 ¹⁵ / ₁₆ | 2 ⁷ / ₈ | 1" | 3 ¹ / ₂ | ³ / ₁₆ | ³ / ₁₆ | 3 ¹ / ₂ | 1 ¹ / ₂ | 3 ¹ / ₂ | 1 ¹⁵ / ₁₆ | Circular | Tenite II, Black Matte Finish |
| ET-135 | 2 ¹ / ₂ | 1 ⁷ / ₈ | 1 ¹ / ₂ | ³ / ₈ | 1 ¹ / ₂ | ³ / ₁₆ | ¹ / ₄ | 1 ¹ / ₂ | 1 ³ / ₃₂ | 2 ¹ / ₄ | 1 ³ / ₈ | Circular | Tenite II, Black Matte Finish |
| ET-150 | 3 ³ / ₄ | 2 ¹ / ₁₆ | 2 ⁷ / ₈ | ³ / ₄ | 3 ¹ / ₂ | ³ / ₁₆ | ³ / ₁₆ | 3 ¹ / ₂ | 1 ³ / ₃₂ | 3 ¹ / ₂ | 1 ¹⁵ / ₁₆ | Circular | Tenite II, Black Matte Finish |
| ET-165 | 2 ⁵ / ₈ | 1 ³ / ₈ | 1 ¹ / ₄ | ³ / ₈ | 2 ¹ / ₃₂ | ³ / ₁₆ | ³ / ₁₆ | 3 ¹ / ₃₂ | 1 ¹ / ₃₂ | 2 ¹ / ₁₆ | 1 ¹ / ₁₆ | Circular | Tenite II, Black Matte Finish |
| ET-130 | 4 | 1 ¹⁵ / ₁₆ | 2 ¹ / ₄ | 1 ³ / ₄ | — | ³ / ₁₆ | ¹ / ₄ | 2 ¹ / ₃₂ | 1 ¹ / ₃₂ | 3 ¹ / ₂ | 1 ³ / ₈ | Flexible Tape, Digital Counter | Injection Molded Tenite II, Black Matte Finish |
| ET-140 | 2 ¹ / ₂ | 1 ¹ / ₂ | 1 ¹ / ₄ | ³ / ₈ | — | ³ / ₁₆ | ³ / ₁₆ | 1 ¹ / ₃₂ | 1 ¹ / ₃₂ | 2 | 1 ³ / ₈ | Cylinder or Drum | Injection Molded Tenite II, Black Matte Finish |
| ET-145 | 3 ¹ / ₂ | 2 ¹ / ₁₆ | 1 ¹⁵ / ₁₆ | ³ / ₈ | — | ³ / ₁₆ | ³ / ₁₆ | 2 ¹ / ₃₂ | 1 ¹ / ₃₂ | 2 ¹ / ₄ | 1 ³ / ₈ | Cylinder or Drum | Injection Molded Tenite II, Black Matte Finish |
| ET-155 | 2 ¹ / ₂ | 1 ³ / ₈ | 1 ¹ / ₄ | ³ / ₈ | — | ³ / ₁₆ | ³ / ₁₆ | 2 ¹ / ₃₂ | 2 ¹ / ₃₂ | 2 ¹ / ₄ | 1 ¹⁵ / ₁₆ | Cylinder or Drum | Injection Molded Tenite II, Black Matte Finish |
| ET-160 | 3 ³ / ₄ | 2 ¹ / ₂ | 2 ¹ / ₄ | 1 ³ / ₈ | — | ³ / ₁₆ | ¹ / ₈ | 2 ¹ / ₃₂ | 2 ¹ / ₃₂ | 3 ³ / ₈ | 2 ¹ / ₄ | Circular | Soft Aluminum with Black Matte Enamel Finish |
| EM-310 | 3 | 3 | 2 ¹ / ₁₆ | 1 ¹⁵ / ₁₆ | 2 ¹ / ₁₆ | ¹ / ₃₂ | ¹ / ₄ | 3 ¹ / ₃₂ | 2 ¹ / ₃ | 2 ¹ / ₃ | 2 ¹ / ₃ | Helical | Soft Aluminum with Black Matte Enamel Finish |
| EM-315 | 3 ¹ / ₄ | 3 | 2 ¹ / ₄ | ³ / ₈ | 2 ¹ / ₁₆ | ¹ / ₃₂ | ¹ / ₈ | 2 ¹ / ₃₂ | 1 ¹ / ₂ | 2 ¹ / ₄ | 2 ¹ / ₈ | Circular | Soft Aluminum with Black Matte Enamel Finish |
| EM-320 | 3 ¹ / ₄ | 2 ³ / ₄ | 2 ¹ / ₄ | ³ / ₈ | 2 ¹ / ₁₆ | ¹ / ₃₂ | ¹ / ₄ | 2 ¹ / ₃₂ | 1 ¹ / ₂ | 2 ¹ / ₄ | 2 ¹ / ₈ | Circular | Soft Aluminum with Black Matte Enamel Finish |
| EM-325 | 3 | 3 | 2 ¹ / ₁₆ | 1 ¹ / ₂ | 2 ¹ / ₁₆ | ¹ / ₃₂ | ¹ / ₄ | 2 ¹ / ₃₂ | 1 ¹ / ₂ | 2 ¹ / ₃ | 2 ¹ / ₃ | Helical | Soft Aluminum with Black Matte Enamel Finish |

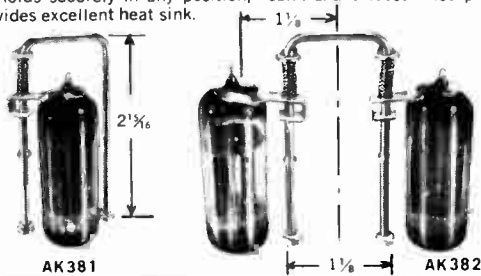
JAN'S molded, black, shock-resistant plastic escutcheons are available in an exceptionally wide variety of different types and sizes. They provide a pleasing window to frame dial plates mounted behind the panel. Plastic escutcheons are available in the following ways: frame only; frame with clear windows; frame with clear window scribed with a center line. For especially large working areas, stamped aluminum escutcheons, finished in dull black are available to meet the needs for space economy. Withstands temperature shock -65° to +85° C. **NON INFLAMMABLE**

* To Order specify: (1) frame only, (2) frame with clear window, (3) frame with clear window scribed with a center line

TUBE BAIL ASSEMBLIES

Positive protection against vibration and shock. Spring-loaded tube holders give positive protection that is free of strain on tube. Available as single and twin tube hold-downs.

Holds securely in any position,—can't shake loose. Also provides excellent heat sink.

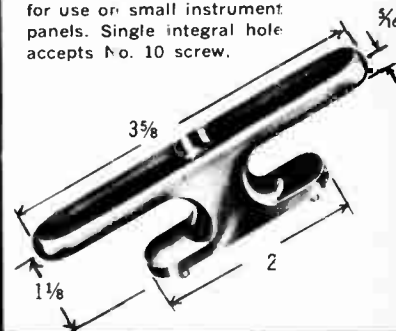


WHERE
INTEGRITY
COSTS
NO MORE

HANDLE

Cat. No. H-692

This durable, die-cast aluminum handle is designed for use on small instrument panels. Single integral hole accepts No. 10 screw.

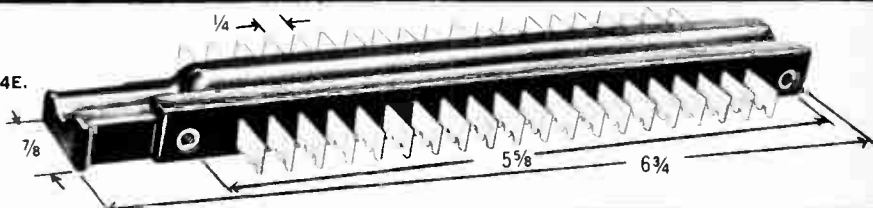


"FEED THROUGH" TERMINAL BOARDS

Cat. No. T-746

Molded of wood-filled melamine per MIL-M-14E.

Avoid expensive tooling. Design around this integrally-molded 20 feed-through terminal board. Equally-spaced terminals can be used for wrap around and/or solder connections. Voltage Breakdown 4000 Volts.



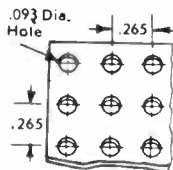
The service of JAN's design engineers is available to assist you with your Component requirements. JAN will design and manufacture special Components to customers' specifications. Complete facilities for prototype work.

PRE-PUNCHED TERMINAL BOARDS

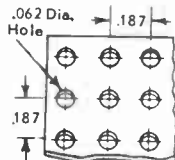


STANDARDIZED PERFORATED BAKELITE BOARDS

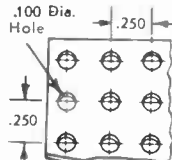
- Time Saving
- Economical
- Permits Flexibility of Circuit Design
- Six Popular Patterns for Most Applications



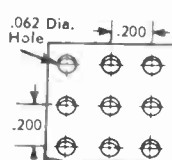
"A" PATTERN



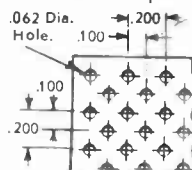
"B" PATTERN



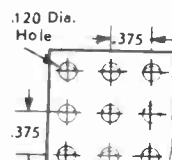
"E" PATTERN



"F" PATTERN



"G" PATTERN



"H" PATTERN

MATERIAL: Grade xxxp Natural Color Bakelite (MIL Spec 3115B) $\frac{1}{16}$ " and $\frac{1}{32}$ " Thick. Paper Base Epoxy available for some patterns.

"A" PATTERN

.093 Dia. holes spaced .265 x .265 C to C. Available from stock in xxxp Bakelite (MIL Spec 3115B) and Epoxy.

| Cat. No. | Width | Lgth | No. of Holes W & L | NET COST EACH | |
|---|----------------|----------------|--------------------|---------------|-------|
| | | | | 1-19 | 20-99 |
| $\frac{1}{16}$" Thick xxxp Bakelite | | | | | |
| 1731 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 3 x 32 | .30 | .27 |
| 1737 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 7 x 32 | .46 | .41 |
| 1738 | $2\frac{1}{8}$ | $8\frac{1}{2}$ | 9 x 32 | .48 | .46 |
| 1739 | $4\frac{7}{8}$ | 17 | 18 x 64 | 1.25 | 1.13 |
| 1732 | $8\frac{1}{2}$ | $8\frac{1}{2}$ | 32 x 32 | 1.30 | 1.17 |
| 1733 | $8\frac{1}{2}$ | 17 | 32 x 64 | 2.13 | 1.92 |
| $\frac{1}{32}$" Thick xxxp Bakelite | | | | | |
| 1749 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 4 x 32 | .48 | .43 |
| 1740 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 7 x 32 | .54 | .49 |
| 1741 | $2\frac{1}{8}$ | $8\frac{1}{2}$ | 9 x 32 | .61 | .55 |
| 1756 | $4\frac{1}{8}$ | $8\frac{1}{2}$ | 18 x 32 | .84 | .76 |
| 1742 | $4\frac{7}{8}$ | 17 | 18 x 64 | 1.60 | 1.44 |
| 1757 | $8\frac{1}{2}$ | 17 | 32 x 64 | 2.70 | 2.43 |
| $\frac{1}{32}$" Thick P. B. Epoxy | | | | | |
| 1758EP | $1\frac{1}{8}$ | $1\frac{1}{2}$ | 4 x 7 | .18 | .16 |
| 1760EP | $1\frac{1}{8}$ | 4 | 4 x 15 | .30 | .27 |
| 1759EP | $1\frac{1}{2}$ | $1\frac{1}{8}$ | 7 x 7 | .33 | .30 |
| 1740EP | $1\frac{1}{2}$ | $8\frac{1}{2}$ | 7 x 32 | .75 | .68 |
| 1756EP | $4\frac{7}{8}$ | $8\frac{1}{2}$ | 18 x 32 | 1.40 | 1.26 |
| 1742EP | $4\frac{7}{8}$ | 17 | 18 x 64 | 2.73 | 2.46 |
| 1757EP | $8\frac{1}{2}$ | 17 | 32 x 64 | 4.90 | 4.50 |

"B" PATTERN

.062 Dia. holes spaced .187 x .187. Available from stock in $\frac{1}{16}$ " thick xxxp Bakelite.

| Cat. No. | Width | Lgth | No. of Holes W & L | NET COST EACH | |
|----------|----------------|----------------|--------------------|---------------|-------|
| | | | | 1-19 | 20-99 |
| 1761 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 6 x 45 | .39 | .35 |
| 1734 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 8 x 45 | .46 | .41 |
| 1735 | $2\frac{1}{8}$ | $8\frac{1}{2}$ | 15 x 45 | .53 | .48 |
| 1762 | $5\frac{1}{8}$ | $8\frac{1}{2}$ | 30 x 45 | .84 | .76 |
| 1736 | $5\frac{1}{8}$ | 17 | 30 x 90 | 1.62 | 1.46 |
| 1763 | $8\frac{1}{2}$ | 17 | 45 x 90 | 2.13 | 1.92 |

"E" PATTERN

.100 Dia. holes spaced .250 x .250 C to C.

| Cat. No. | Width | Lgth | No. of Holes W & L | NET COST EACH | |
|---|----------------|----------------|--------------------|---------------|-------|
| | | | | 1-19 | 20-99 |
| $\frac{1}{16}$" Thick xxxp Bakelite | | | | | |
| 1750 | $2\frac{1}{8}$ | 4 | 8 x 16 | .25 | .22 |
| 1765 | $2\frac{1}{8}$ | $8\frac{1}{2}$ | 8 x 34 | .46 | .41 |
| 1766 | $3\frac{1}{8}$ | $8\frac{1}{2}$ | 14 x 34 | .62 | .56 |
| 1767 | $8\frac{1}{2}$ | $8\frac{1}{2}$ | 34 x 34 | 1.30 | 1.17 |
| 1768 | $8\frac{1}{2}$ | 17 | 34 x 69 | 2.13 | 1.92 |
| $\frac{1}{32}$" Thick xxxp | | | | | |
| 1770 | $2\frac{1}{8}$ | $8\frac{1}{2}$ | 8 x 34 | .57 | .51 |
| 1771 | $8\frac{1}{2}$ | $8\frac{1}{2}$ | 34 x 34 | 1.75 | 1.57 |
| 1772 | $8\frac{1}{2}$ | 17 | 34 x 69 | 2.70 | 2.43 |

"F" PATTERN

.062 Dia. holes spaced .200 x .200. Available from stock in $\frac{1}{16}$ " thick xxxp natural Bakelite, $\frac{1}{16}$ " thick paper base epoxy.

| Cat. No. | Width | Lgth | No. of Holes W & L | NET COST EACH | |
|---|----------------|----------------|--------------------|---------------|-------|
| | | | | 1-19 | 20-99 |
| $\frac{1}{16}$" Thick xxxp Bakelite | | | | | |
| 1730 | $1\frac{1}{4}$ | $8\frac{1}{2}$ | 8 x 16 | .33 | .30 |
| 1773 | $3\frac{1}{8}$ | $8\frac{1}{2}$ | 18 x 42 | .62 | .56 |
| 1775 | $3\frac{1}{8}$ | 17 | 18 x 85 | .72 | .65 |
| 1774 | $4\frac{7}{8}$ | $8\frac{1}{2}$ | 24 x 42 | 1.05 | .94 |
| 1776 | $4\frac{7}{8}$ | 17 | 24 x 85 | 1.25 | 1.13 |
| 1777 | $8\frac{1}{2}$ | $8\frac{1}{2}$ | 42 x 42 | 1.15 | 1.03 |
| 1778 | $8\frac{1}{2}$ | 17 | 42 x 85 | 2.18 | 1.96 |
| $\frac{1}{16}$" Thick PB Epoxy | | | | | |
| 1776EP | $4\frac{7}{8}$ | 17 | 24 x 85 | 2.06 | 1.85 |
| 1778EP | $8\frac{1}{2}$ | 17 | 42 x 85 | 3.54 | 3.20 |

"G" PATTERN

.062 Dia. holes staggered at alternate spacings of a standard .100 grid. Mounting of "top hat" type transistors to this board is possible because transistor leads are in alignment with these holes. Available from stock in $\frac{1}{16}$ " thick xxxp natural bakelite (MIL Spec 3115B) or $\frac{1}{16}$ " thick paper base epoxy.

| Cat. No. | Width | Lgth | No. of Holes W & L | NET COST EACH | |
|---|----------------|----------------|--------------------|---------------|-------|
| | | | | 1-19 | 20-99 |
| $\frac{1}{16}$" Thick xxxp Bakelite | | | | | |
| 1752 | $1\frac{3}{4}$ | 4 | 8 x 16 | .25 | .22 |
| 1753 | $3\frac{1}{8}$ | 4 | 8 x 16 | .46 | .41 |
| 1754 | $2\frac{1}{4}$ | $8\frac{1}{2}$ | 8 x 16 | .55 | .51 |
| 1779 | $4\frac{7}{8}$ | 17 | 23 x 85 | 1.25 | 1.13 |
| 1780 | $8\frac{1}{2}$ | $8\frac{1}{2}$ | 42 x 42 | 1.25 | 1.13 |
| 1781 | $8\frac{1}{2}$ | 17 | 42 x 85 | 2.13 | 1.92 |
| $\frac{1}{16}$" Thick PB Epoxy | | | | | |
| 1752EP | $1\frac{3}{4}$ | 4 | 8 x 16 | .46 | .41 |
| 1753EP | $3\frac{1}{8}$ | 4 | 8 x 16 | .65 | .58 |
| 1754EP | $2\frac{1}{4}$ | $8\frac{1}{2}$ | 8 x 16 | .72 | .65 |
| 1779EP | $4\frac{7}{8}$ | 17 | 23 x 85 | 2.06 | 1.85 |
| 1781EP | $8\frac{1}{2}$ | 17 | 42 x 85 | 3.54 | 3.20 |

"H" PATTERN

.120 Dia. holes spaced $\frac{3}{8}$ " x $\frac{3}{8}$ " C to C. Either $\frac{1}{16}$ " or $\frac{1}{32}$ " thick xxxp natural bakelite (MIL Spec 3115B).

| Cat. No. | Width | Lgth | No. of Holes W & L | NET COST EACH | |
|---|----------------|-----------------|--------------------|---------------|-------|
| | | | | 1-19 | 20-99 |
| $\frac{1}{16}$" Thick xxxp Bakelite | | | | | |
| 1743 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 5 x 22 | .43 | .39 |
| 1744 | $2\frac{1}{8}$ | $8\frac{1}{2}$ | 6 x 22 | .47 | .42 |
| 1782 | $4\frac{1}{8}$ | $8\frac{1}{2}$ | 11 x 22 | .68 | .62 |
| 1745 | $4\frac{1}{8}$ | $16\frac{1}{2}$ | 11 x 44 | 1.20 | 1.08 |
| $\frac{1}{32}$" Thick xxxp | | | | | |
| 1746 | $1\frac{1}{8}$ | $8\frac{1}{2}$ | 5 x 22 | .55 | .50 |
| 1747 | $2\frac{1}{8}$ | $8\frac{1}{2}$ | 6 x 22 | .59 | .53 |
| 1783 | $4\frac{1}{8}$ | $8\frac{1}{2}$ | 11 x 22 | .82 | .74 |
| 1748 | $4\frac{1}{8}$ | $16\frac{1}{2}$ | 11 x 44 | 1.50 | 1.35 |

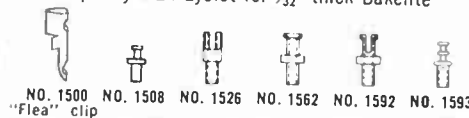
EYELETS AND TERMINALS

Suitable For These Boards
TERMINALS ILLUSTRATED FULL SIZE
For Boards With .062 Dia. Holes

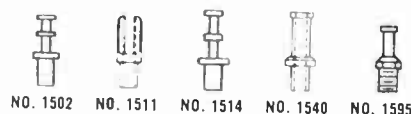
Terminals are made of Brass (MIL Spec QQ626) and Silver Plated. When ordering terminals SPECIFY whether for use with $\frac{1}{16}$ " or $\frac{1}{32}$ " thick Bakelite.

Eyelets are hot tin dip finish for easy soldering.

Specify =23 Eyelet for $\frac{1}{16}$ " thick Bakelite
Specify =24 Eyelet for $\frac{1}{32}$ " thick Bakelite

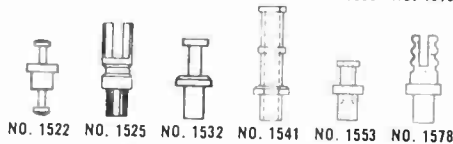
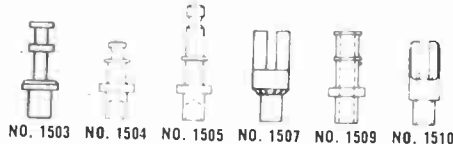


For Boards with .093 Dia. Holes



Specify =33 Eyelet for $\frac{1}{16}$ " thick Bakelite
Specify =34 Eyelet for $\frac{1}{32}$ " thick Bakelite

For Boards with .120 Dia. Holes



Specify =43 Eyelet for $\frac{1}{16}$ " thick Bakelite
Specify =44 Eyelet for $\frac{1}{32}$ " thick Bakelite

Bulletin on request

TERMINALS

| Cat. No. | 100 Pcs | | 1000 Pcs | | Cat. No. | 100 Pcs | | 1000 Pcs | | Cat. No. | 100 Pcs | | 1000 Pcs | |
|----------|---------|-------|----------|-------|----------|---------|-------|----------|-------|----------|---------|-------|----------|-------|
| | 1-19 | 20-99 | 1-19 | 20-99 | | 1-19 | 20-99 | 1-19 | 20-99 | | 1-19 | 20-99 | 1-19 | 20-99 |
| 1500 | 1.75 | 15.70 | 1511 | 2.20 | 19.80 | 1553 | 1.75 | 16.25 | | | | | | |
| 1502 | .90 | 8.25 | 1514 | 1.61 | 13.72 | 1562 | 1.23 | 10.00 | | | | | | |
| 1503 | 1.30 | 10.65 | 1522 | 1.28 | 11.43 | 1578 | 2.27 | 19.70 | | | | | | |
| 1504 | 1.30 | 11.70 | 1525 | 2.41 | 20.55 | 1592 | 1.34 | 12.06 | | | | | | |
| 1505 | 1.70 | 15.30 | 1526 | 1.34 | 11.43 | 1593 | 1.36 | 12.24 | | | | | | |
| 1507 | 1.80 | 14.00 | 1532 | 1.40 | 12.32 | 1595 | 1.80 | 16.20 | | | | | | |
| 1509 | 1.20 | 10.65 | 1540 | 2.00 | 18.00 | | | | | | | | | |
| 1510 | 1.80 | 15.20 | 1541 | 2.47 | 21.18 | | | | | | | | | |

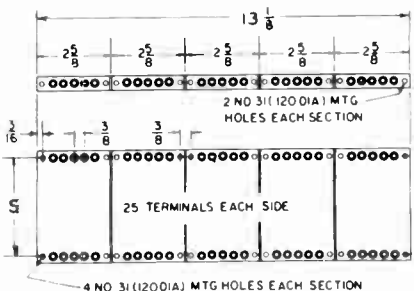
STANDARDIZED TERMINAL BOARDS



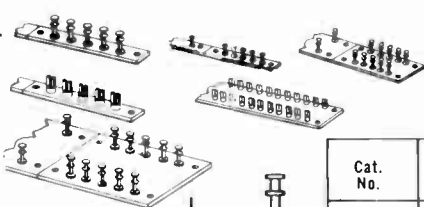
STANDARDIZED TURRET TERMINAL BOARDS

Cut your production cost by eliminating the tooling and setup charge usually applied to nonstandardized boards. Terminals are securely riveted and hot tinned for easy soldering. Material $\frac{3}{32}$ " thick natural bakelite to Gov't Spec. MIL-P-3115B—TYPE PBE. Five $2\frac{5}{8}$ " sections scored for easy separation.

CHOICE OF TERMINALS



These boards can be modified with terminals staked in all holes. Scoring marks can be eliminated. Marking can be added.



These boards are assembled with turret terminal No. 1503 (NAS 707T3) height above board $2\frac{3}{4}$ ".

| Cat. No. | W width | S ins. dim. | Total No. terminals | Net Cost Each | |
|----------|---------|-------------|---------------------|---------------|-------|
| | | | | 5-19 | 20-99 |
| 15031 | 1/2 | single | 25 | .80 | .75 |
| 15032 | 1 1/2 | 1 | 50 | 1.68 | 1.50 |
| 15033 | 2 | 1 1/2 | 50 | 1.85 | 1.70 |
| 15034 | 2 1/2 | 2 | 50 | 1.90 | 1.77 |
| 15035 | 3 | 2 1/2 | 50 | 2.00 | 1.83 |
| 15036 | 1 1/2 | 1 3/4 | 50 | 1.82 | 1.74 |



Assembled with Fork Type terminal No. 1507 with hole thru center. Height above board $1\frac{1}{2}$ ".

| Cat. No. | W width | S ins. dim. | Total No. terminals | Net Cost Each | |
|----------|---------|-------------|---------------------|---------------|-------|
| | | | | 5-19 | 20-99 |
| 15071 | 1/2 | single | 25 | 1.20 | 1.10 |
| 15072 | 1 1/2 | 1 | 50 | 2.20 | 2.10 |
| 15073 | 2 | 1 1/2 | 50 | 2.35 | 2.20 |
| 15074 | 2 1/2 | 2 | 50 | 2.40 | 2.25 |
| 15075 | 3 | 2 1/2 | 50 | 2.60 | 2.40 |
| 15076 | 1 1/2 | 1 3/4 | 50 | 2.35 | 2.15 |



Assembled with turret type terminal No. 1509. Hole thru center (NAS 708T3). Height above board $2\frac{3}{4}$ ".

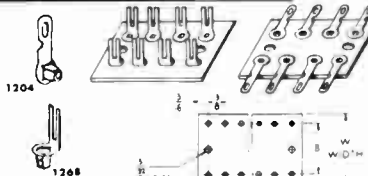
| Cat. No. | W width | S ins. dim. | Total No. terminals | Net Cost Each | |
|----------|---------|-------------|---------------------|---------------|-------|
| | | | | 5-19 | 20-99 |
| 15091 | 1/2 | single | 25 | 1.20 | 1.05 |
| 15092 | 1 1/2 | 1 | 50 | 2.25 | 2.00 |
| 15093 | 2 | 1 1/2 | 50 | 2.30 | 2.10 |
| 15094 | 2 1/2 | 2 | 50 | 2.40 | 2.25 |
| 15095 | 3 | 2 1/2 | 50 | 2.47 | 2.20 |
| 15096 | 1 1/2 | 1 3/4 | 50 | 2.25 | 2.00 |



READI-MADE TERMINAL BOARDS

READI-MADE TERMINAL BOARDS

An inexpensive line of terminal boards for general use. Terminals are hot tinned for easy soldering, and provide a rigid mounting for resistors, condensers, etc. Material $\frac{1}{16}$ " thick Bakelite. Mounting Holes Provided on all Boards.



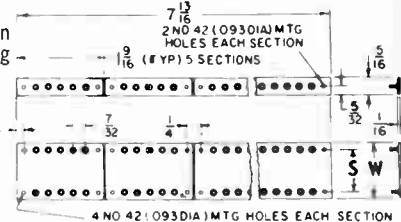
CHOICE OF TERMINALS

| Cat. No. | Cat. No. | W Width | L Length | A Mtg. Ctr. | B Dim. | Terminal Each Side | Net Cost Each | |
|----------|----------|---------|----------|-------------|--------|--------------------|---------------|-------|
| | | | | | | | 5-19 | 20-99 |
| 1204-10 | 1268-10 | 1 | 1 7/8 | 1 1/2 | 1 3/8 | 5 | .27 | .22 |
| 1204-12 | 1268-12 | 1 | 2 1/4 | 1 7/8 | 1 3/8 | 6 | .30 | .24 |
| 1204-28 | 1268-28 | 1 | 5 1/4 | 4 7/8 | 1 3/8 | 14 | .65 | .55 |
| 1204-20 | 1268-20 | 1 3/4 | 3 3/4 | 3 3/8 | 1 1/8 | 10 | .50 | .40 |
| 1204-22 | 1268-22 | 1 3/4 | 4 1/8 | 3 3/4 | 1 1/8 | 11 | .55 | .44 |
| 1204-38 | 1268-38 | 1 3/4 | 7 7/8 | 6 3/4 | 1 1/8 | 19 | .90 | .74 |

MINIATURE TURRET TERMINAL BOARDS

Material: $\frac{1}{16}$ " thick bakelite to Gov't Spec. MIL-3115B TYPE PBE. Five $1\frac{1}{8}$ " sections scored for easy separation. Assembled with 1502 turret terminal. Height above board $\frac{7}{32}$ " (NAS 705T2).

CHOICE OF TERMINALS



NOTE:

| Cat. No. | W width | S ins. dim. | Total No. terminals | Net Cost Each | |
|----------|---------|-------------|---------------------|---------------|-------|
| | | | | 5-19 | 20-99 |
| 15021 | 3/8 | Ctr. | 25 | 1.00 | .84 |
| 15028 | 3/4 | 1/2 | 50 | 1.85 | 1.68 |
| 15022 | 1 | 3/4 | 50 | 1.85 | 1.68 |



Same as above assembled with 1562 turret terminal (Hole thru center) Height above board $\frac{7}{32}$ ".

| Cat. No. | W width | S ins. dim. | Total No. terminals | Net Cost Each | |
|----------|---------|-------------|---------------------|---------------|-------|
| | | | | 5-19 | 20-99 |
| 15023 | 3/8 | Ctr. | 25 | 1.00 | .84 |
| 15029 | 3/4 | 1/2 | 50 | 1.85 | 1.68 |
| 15024 | 1 | 3/4 | 50 | 2.00 | 1.75 |



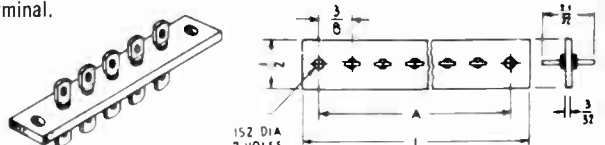
Same as above assembled with 1526 Fork Type terminal (Hole thru center) Height above board $\frac{7}{32}$ ".

| Cat. No. | W width | S ins. dim. | Total No. terminals | Net Cost Each | |
|----------|---------|-------------|---------------------|---------------|-------|
| | | | | 5-19 | 20-99 |
| 15025 | 3/8 | Ctr. | 25 | 1.00 | .84 |
| 15026 | 3/4 | 1/2 | 50 | 1.85 | 1.68 |
| 15030 | 1 | 3/4 | 50 | 1.85 | 1.68 |



FEED THRU TERMINAL BOARDS

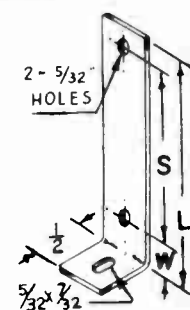
Terminals made of copper, hot tinned and force fitted into $\frac{3}{32}$ " thick Bakelite. Holes pierced in terminal at each end to provide a sturdy feed thru terminal.



| Cat. No. | No. Lugs | A Mtg. Ctr. | L Length | Net Each | |
|----------|----------|-------------|----------|----------|-------|
| | | | | 5-19 | 20-99 |
| 1220-1 | 1 | 3/4 | 1 1/8 | .09 | 7.50 |
| 1220-2 | 2 | 1 1/8 | 1 1/2 | .11 | .09 |
| 1220-3 | 3 | 1 1/2 | 1 7/8 | .13 | .11 |
| 1220-4 | 4 | 1 7/8 | 2 1/4 | .14 | .12 |
| 1220-5 | 5 | 2 1/4 | 2 5/8 | .15 | .14 |
| 1220-6 | 6 | 2 5/8 | 3 | .16 | .15 |
| 1220-7 | 7 | 3 | 3 3/8 | .18 | .16 |
| 1220-8 | 8 | 3 3/8 | 3 3/4 | .19 | .18 |
| 1220-9 | 9 | 3 3/4 | 4 1/8 | .22 | .20 |
| 1220-10 | 10 | 4 1/8 | 4 1/2 | .24 | .22 |

BRACKETS FOR STANDARDIZED BOARDS

| Cat. No. | W | L | S | For Boards |
|----------|------|-------|-------|---------------------|
| | | | | Cat. No. |
| 1556 | 3/8 | 1 3/8 | 1 | 15032, 15072, 15092 |
| 1567 | 3/8 | 2 1/8 | 1 1/2 | 15033, 15073, 15098 |
| 1568 | 3/8 | 2 5/8 | 2 | 15034, 15074, 15094 |
| 1569 | 3/8 | 3 1/8 | 2 1/2 | 15035, 15075, 15095 |
| 1570 | 3/32 | 1 3/8 | 3/4 | 15022, 15024, 15030 |
| 1571 | 3/32 | 1 3/8 | 1 3/8 | 15036, 15076, 15096 |



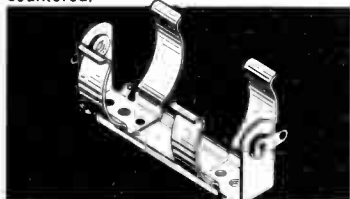
FOR ANY BRACKET LISTED HERE
YOUR NET COST
\$7.00 per 100
\$48.00 per 1000

KEYSTONE ALL STEEL BATTERY HOLDERS



STANDARDIZED ALL STEEL BATTERY HOLDERS

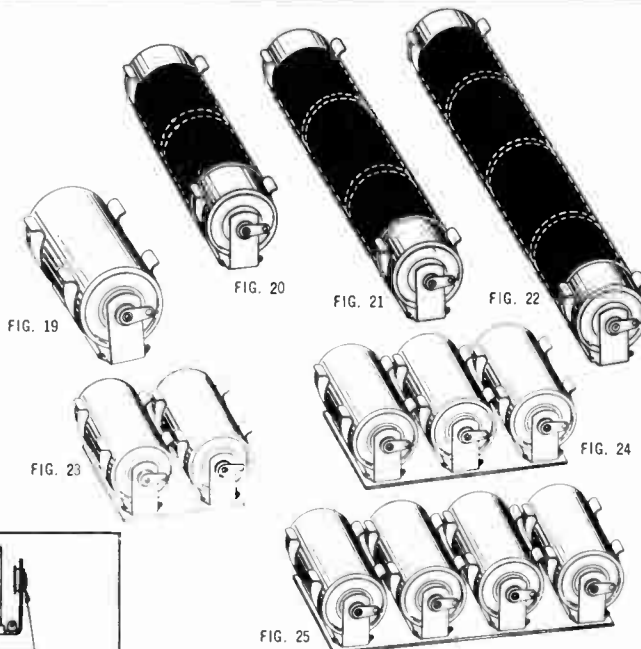
An important advance in design that has gained wide acceptance for military and commercial usage. Battery when installed is held under spring tension at a constant pressure assuring low resistance contact will hold up to 4 cells in series in sturdy insulating tube. Retainer clips available to lock battery securely. This prevents shifting or loosening of battery in holder. Recommended for use where shock or severe vibration is encountered.



- CORROSION RESISTANT NICKEL PLATED
- STAINLESS STEEL CONTACTS
- MOISTURE PROOF INSULATING WASHERS
- IDEAL FOR NI-CAD AND ALKALINE CELLS

SPECIFICATIONS

Made of SAE 1065 Carbon Steel to MIL Spec. 17919, heat treated to spring temper and nickel plated .0002 thick. Contact assembly consists of a stainless steel eyelet, moisture proof vulcooid washers and a coated copper solder lug. Ribbed carbon steel base for added support is nickel plated and has 2 mounting holes for ease in mounting.



1100 SERIES
DIMPLE CONTACT



2100 SERIES
INSULATED CONTACTS

| One Insulated Contact | Net Each | | All Contacts Insulated | Net Each | | Fig. No. | Holds No. of Cells | All Batteries in the Group are of Similar Size and Fit Holders Listed | | |
|------------------------|----------|-------|------------------------|----------|-------|----------|--------------------|---|-----------|--------|
| | 5-19 | 20-99 | | 5-19 | 20-99 | | | Burgess | Eveready | RCA |
| PENCELL HOLDERS | | | | | | | | | | |
| Cat. No. | | | Cat. No. | | | | | | | |
| 1139 | .23 | .21 | 2139 | .26 | .24 | 19 | 1 | Z, HG9 | E9, E12 | VS034A |
| | — | — | 2140* | .38 | .34 | 23 | 2 | CD6, 9R | E91, E133 | VS144 |
| | — | — | 2171* | .64 | .54 | 24 | 3 | HG12R | E502, N46 | VS149 |
| | — | — | 2182* | .70 | .65 | 25 | 4 | H133 | 515, 915 | VS313A |
| 1189 | .38 | .31 | 2189 | .41 | .36 | 20 | 2 | HG502R | 1015 | VS334 |
| 1191 | .41 | .36 | 2191 | .45 | .41 | 21 | 3 | 920 | | |
| 1194 | .48 | .44 | 2194 | .51 | .47 | 22 | 4 | 930 | | |

| "C" CELL HOLDERS | | | | | | | | | | |
|-------------------------|-----|-----|-------|-----|-----|----|---|--------|------|--------|
| 1173 | .30 | .26 | 2173 | .41 | .36 | 19 | 1 | 1 | | VS035A |
| | — | — | 2174* | .49 | .44 | 23 | 2 | P6 | E233 | VS300 |
| | — | — | 2187* | .70 | .65 | 24 | 3 | 120 | 635 | VS335 |
| | — | — | 2188* | .93 | .81 | 25 | 4 | 130 | 935 | VS400 |
| 1185 | .45 | .41 | 2185 | .48 | .44 | 20 | 2 | H233 | | |
| 1195 | .48 | .44 | 2195 | .51 | .47 | 21 | 3 | 302599 | | |
| 1198 | .51 | .47 | 2198 | .57 | .52 | 22 | 4 | | | |

| "D" CELL HOLDERS | | | | | | | | | | |
|-------------------------|-----|-----|-------|-----|-----|----|---|-----|------|--------|
| 1175 | .30 | .26 | 2175 | .33 | .29 | 19 | 1 | 2 | E42 | VS036 |
| | — | — | 2176* | .49 | .44 | 23 | 2 | 2R | N56 | VS036A |
| | — | — | 2190* | .70 | .65 | 24 | 3 | CD7 | E95 | VS336 |
| | — | — | 2192* | .95 | .85 | 25 | 4 | 210 | D99 | |
| 1186 | .48 | .44 | 2186 | .51 | .47 | 20 | 2 | 230 | A100 | |
| 1199 | .51 | .47 | 2199 | .57 | .53 | 21 | 3 | | 950 | |
| 1162 | .54 | .49 | 2162 | .57 | .53 | 22 | 4 | | 1050 | |
| 1179 | .30 | .26 | 2179 | .34 | .31 | 19 | 1 | | E94 | |

MODIFICATIONS AVAILABLE

Variety of stock parts permits fast delivery on special requirements. Use our engineering service for your special custom-built holders.



SPACE SAVER BATTERY CLIPS



Std. Pkg. 10 Pieces

These holders are available insulated contact or with a dimple contact. Provides positive contact in either case. They are compact and economical. The "AA", "C", "D", Mercury and Ni-Cad batteries are accommodated. Made of SAE 1065 steel heat treated to spring temper and nickel plated. Insulated type has steel nickel plated eyelet and resin impregnated vulcanized fibre insulation. Snap-on washer for polarization will be supplied upon request.

| Cat. No. | Battery Types | Min. to max. Diameter | Net Each | |
|----------|---------------|-----------------------|----------|-------|
| | | | 5-19 | 20-99 |
| 92* | AA | .531-.660 | .07 | .05 |
| 99* | AA | .531-.660 | .07 | .05 |
| 100* | AA | .531-.660 | .12 | .10 |
| 86* | C | .875-1.125 | .14 | .11 |
| 87* | C | .875-1.125 | .16 | .12 |
| 88* | D | 1.187-1.375 | .16 | .12 |
| 89* | D | 1.187-1.375 | .14 | .11 |

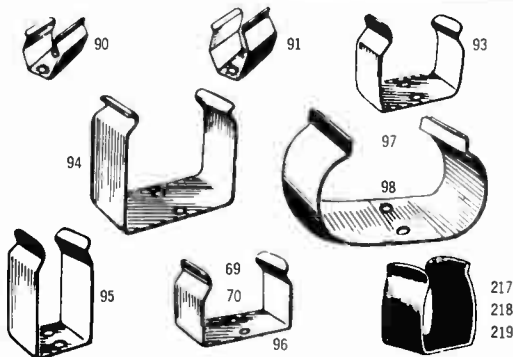
*Non-Insulated

†Insulated

BATTERY AND COMPONENT HOLDERS

| Cat. No. | Battery Types | Min. to Max. Diameters | | NET EACH | | Cat. No. | Battery Types | Min. to Max. Diameters | | NET EACH | |
|----------|---------------|----------------------------------|-------|----------|-------|---------------------|--------------------------------|------------------------|-------|----------|--|
| | | 5-19 | 20-99 | 5-19 | 20-99 | | | 5-19 | 20-99 | | |
| 69 | 2U6 or (2) AA | $\frac{3}{8}$ x $1\frac{1}{8}$ | .08 | .07 | 96 | (1) K 20 | $\frac{3}{8}$ x $1\frac{3}{4}$ | .08 | .07 | | |
| 70 | (2) RM 12 | $\frac{3}{8}$ x $1\frac{3}{8}$ | .08 | .07 | 97 | (2) "C" | (2) $1\frac{1}{4}$ Dia. | .12 | .10 | | |
| 90 | #7 | $\frac{3}{8}$ to $2\frac{3}{4}$ | .06 | .04 | 98 | (2) D | (2) $1\frac{1}{4}$ Dia. | .14 | .12 | | |
| 91 | (1) AA | $\frac{1}{2}$ to $2\frac{1}{2}$ | .07 | .05 | 217 | $1\frac{1}{2}$ Dia. | $1\frac{1}{2}$ Dia. | .18 | .14 | | |
| 93 | (1) C | $\frac{7}{8}$ to $1\frac{1}{8}$ | .08 | .07 | 218 | $1\frac{1}{2}$ Dia. | $1\frac{1}{2}$ Dia. | .20 | .15 | | |
| 94 | (1) D | $1\frac{1}{2}$ to $1\frac{3}{4}$ | .08 | .07 | 219 | 2" Dia. | 2" Dia. | .22 | .16 | | |
| 95 | (1) U-15 | $\frac{3}{8}$ x $1\frac{1}{2}$ | .08 | .07 | | | | | | | |

Clips are made of Aluminum except Nos. 69, 217, 218, 219 are made of Steel.



KEYSTONE BATTERY HOLDERS



| Cat. No. | MET EACH | | Holds No. of Cells | Fig. No. | ALL BATTERIES LISTED WITHIN BOXES ARE IN THE SAME SIZE GROUP | | |
|----------|----------|-------|--------------------|----------|--|--------------------------|---------------|
| | 5-19 | 20-99 | | | BATTERY Burgess | CROSS REFERENCE Eveready | REFERENCE RCA |

| MINIATURE CELL HOLDERS | | | | | | | |
|------------------------|-----|-----|---|---|---|--|-------|
| 137 | .23 | .21 | 1 | 1 | 7 | | VS074 |
| 138 | .38 | .34 | 2 | 2 | | | |
| 169 | .49 | .44 | 3 | 3 | | | |
| 170 | .64 | .57 | 4 | 4 | | | |

| PENCIL HOLDERS | | | | | | | |
|----------------|-----|-----|---|---|--------|-----------|--------|
| 139 | .23 | .21 | 1 | 1 | CD6 | E9, E12 | VS034A |
| 140 | .38 | .34 | 2 | 2 | 9R, Z | E91 | VS144 |
| 171 | .49 | .44 | 3 | 3 | HC9 | E133 | VS149 |
| 182 | .64 | .57 | 4 | 4 | HG12R | 333 | VS313A |
| 189 | .45 | .36 | 2 | 5 | H133 | E502 | VS334 |
| 191 | .49 | .44 | 3 | 6 | HG502R | 515 | |
| 192 | .64 | .54 | 4 | 7 | 920 | 915, 1015 | |
| 193 | .93 | .81 | 6 | 8 | 930 | N46 | |

| "C" CELL HOLDERS | | | | | | | |
|------------------|-----|-----|---|---|--------|------|--------|
| 173 | .30 | .26 | 1 | 1 | P6 | 226 | VS035A |
| 174 | .38 | .34 | 2 | 2 | 120 | E233 | VS300 |
| 187 | .45 | .36 | 3 | 3 | 130 | 635 | VS335 |
| 185 | .45 | .36 | 2 | 5 | H233 | 935 | VS400 |
| 195 | .49 | .44 | 3 | 6 | 302599 | | |
| 196 | .64 | .54 | 4 | 7 | | | |
| 197 | .93 | .81 | 6 | 8 | | | |

| "D" CELL HOLDERS | | | | | | | |
|------------------|-----|-----|---|----|-----|------|--------|
| 175 | .30 | .26 | 1 | 1 | 2 | E42 | VS036A |
| 176 | .38 | .34 | 2 | 2 | 2R | N56 | VS036 |
| 190 | .49 | .44 | 3 | 3 | CD7 | E95 | VS336 |
| 186 | .46 | .37 | 2 | 5 | 210 | D99 | |
| 199 | .50 | .45 | 3 | 6 | 230 | A100 | |
| 200 | .65 | .55 | 4 | 7 | | 950 | |
| 201 | .95 | .85 | 6 | 8 | | 1050 | |
| 205 | .95 | .85 | 6 | 12 | | | |

| 1 1/2 VOLT CELL HOLDERS | | | | | | | |
|-------------------------|-----|-----|---|---|-----|------|-------|
| 154 | .21 | .20 | 1 | 1 | N | E340 | VS073 |
| 155 | .35 | .32 | 2 | 2 | | E400 | |
| 156 | .49 | .44 | 3 | 3 | | E401 | |
| 160 | .49 | .44 | 1 | 1 | 21R | 964 | VS236 |
| 179 | .30 | .26 | 1 | 1 | | E94 | |

| 4 1/2 VOLT CELL HOLDERS | | | | | | | |
|-------------------------|-----|-----|---|---|--|-----|--------|
| 139 | .23 | .21 | 1 | 1 | | 333 | VS1149 |

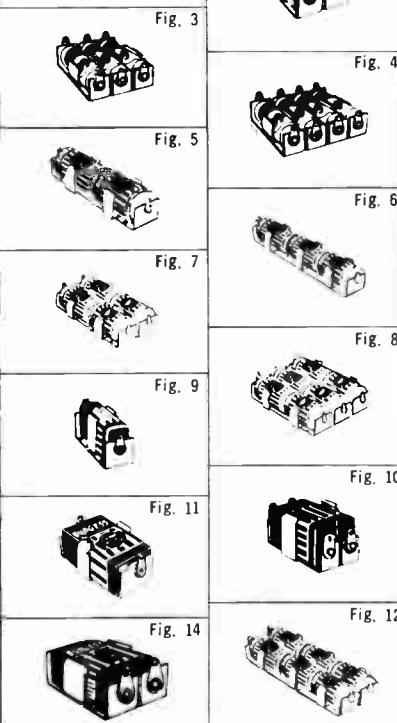
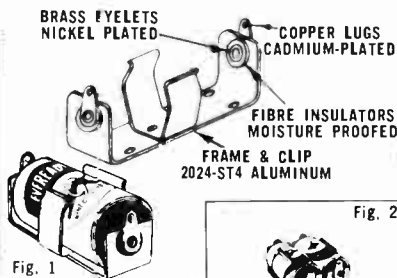
| 9 VOLT CELL HOLDERS | | | | | | | |
|---------------------|-----|-----|---|----|-----|-----|--------|
| 139A | .23 | .21 | 1 | 1 | | 206 | VS327 |
| 203P | .44 | .30 | 1 | 14 | 2U6 | 216 | VS323 |
| 173P | .30 | .26 | 1 | 1 | P6M | 226 | VS300A |

| 15 VOLT CELL HOLDERS | | | | | | | |
|----------------------|-----|-----|---|----|-----|-----|-------|
| 163 | .30 | .26 | 1 | 11 | K10 | 417 | |
| 166 | .30 | .26 | 1 | 9 | U10 | 411 | VS083 |
| 167 | .38 | .34 | 2 | 10 | | | |
| 225 | .21 | .20 | 1 | 1 | Y10 | 504 | |
| 226 | .35 | .32 | 2 | 2 | | | |

| 22 1/2 VOLT CELL HOLDERS | | | | | | | |
|--------------------------|-----|-----|---|----|-----|-----|-------|
| 164 | .30 | .26 | 1 | 11 | K15 | | |
| 168 | .30 | .26 | 1 | 11 | | 420 | |
| 177 | .30 | .26 | 1 | 9 | U15 | 412 | VS084 |
| 178 | .38 | .34 | 2 | 10 | | | |
| 139A | .23 | .21 | 1 | 1 | Y15 | 505 | |
| 140A | .38 | .34 | 2 | 2 | | | |
| 171A | .49 | .44 | 3 | 3 | | | |
| 182A | .64 | .57 | 4 | 4 | | | |

| 30 VOLT CELL HOLDERS | | | | | | | |
|----------------------|-----|-----|---|----|------|-----|-------|
| 157 | .30 | .26 | 1 | 14 | Y20 | 506 | |
| 165 | .30 | .26 | 1 | 11 | K20 | 430 | |
| 183 | .30 | .26 | 1 | 9 | U20 | 413 | VS085 |
| 184 | .38 | .34 | 2 | 10 | | | |
| 134 | .38 | .34 | 1 | 1 | Y20S | 507 | |

A standard line of battery holders available for immediate shipment from stock. Low cost, lightweight and sturdily constructed of quality materials. Good electrical contact, low leakage current and snap-fit clips are the outstanding features.



RETAINER CLIPS



These retainers prevent the battery from shifting or loosening in the holder. Made of high carbon steel, heat treated to spring temper and nickel plated.

Cat. No. 61—Retainer for "A" or Mercury cells with diameters of 1 1/2" to 3/4" when used with Keystone #91, 92, 99 or 100 clips also clip #95 for rectangular battery.

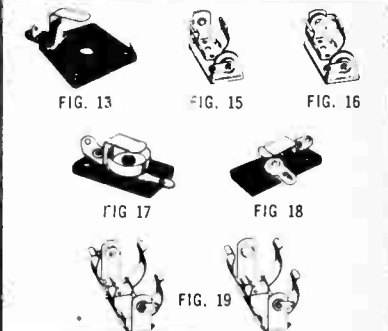
Cat. No. 62—Retainer for C cells or other batteries with maximum diameter of 1 1/2" when used with Keystone #93, 86 or 87 clips.

Cat. No. 63—Retainer for D cells or other batteries with maximum diameter of 1 1/2" when used with Keystone #94, 88 or 89 clips.

Cat. No. 66—Retainer for mercury cells with .650 dia. when used with our #91 clips.

Any above, Net Each (5-19) .05; (20-99) .04

MERCURY BATTERY HOLDERS



| Mallory Mercury Battery Listing | Aluminum and Phenolic Base Holders | | All Steel Holders One Insulated Contact | | All Steel Holders All Contacts Insulated | |
|---------------------------------|------------------------------------|----------|---|----------|--|----------|
| | Cat. No. | Fig. No. | Cat. No. | Fig. No. | Cat. No. | Fig. No. |
| RM1R | 101* | 13 | 1101 | 15 | 2101 | 16 |
| RM3R | 103* | 13 | 1103 | 15 | 2103 | 16 |
| RM4R | 104* | 13 | 1104 | 15 | 2104 | 16 |
| ZM9 | 139 | 1 | 1139 | 19 | 2139 | 19 |
| RM12R | 139 | 1 | 1139 | 19 | 2139 | 19 |
| RM42 | 775 | 1 | 1175 | 19 | 2175 | 19 |
| TR113 | | | 1113 | 15 | 2113 | 16 |
| TR114 | | | 1114 | 15 | 2114 | 16 |
| TR115 | 132 | 1 | 1132 | 15 | 2132 | 16 |
| TR132 | 132 | 1 | 1132 | 15 | 2132 | 16 |
| TR133 | 139 | 1 | 1139 | 19 | 2139 | 19 |
| TR134 | 134 | 1 | 1134 | 19 | 2134 | 19 |
| TR135 | 135 | 5 | 1135 | 19 | 2135 | 19 |
| TR136 | 189 | 5 | 1189 | 19 | 2189 | 19 |
| TR137 | 125 | 5 | 1125 | 19 | 2125 | 19 |
| TR145 | | | 1145 | 15 | 2145 | 16 |
| TR152 | 124** | 1 | | | | |
| TR153 | 106** | 1 | | | | |
| TR162 | | | 1113 | 15 | 2113 | 16 |
| TR163 | 132 | 1 | 1132 | 15 | 2132 | 16 |
| TR164 | 109 | 1 | 1109 | 19 | 2109 | 19 |
| TR165 | 110 | 1 | 1110 | 19 | 2110 | 19 |
| TR169 | 189 | 5 | 1189 | 19 | 2189 | 19 |
| TR175 | 124** | 1 | | | | |
| TR177 | | | 1142 | 19 | 2142 | 19 |
| TR233 | 173 | 1 | 1173 | 19 | 2173 | 19 |
| TR234 | 144 | 1 | 1144 | 19 | 2144 | 19 |
| RM400 | 111* | 18 | | | | |
| RM401 | 124** | 1 | | | | |
| RM411 | 166** | 9 | | | | |
| RM412 | 177** | 9 | | | | |
| RM413 | 183** | 9 | | | | |
| RM450 | 112* | 17 | | | | |
| RM502 | 139 | 1 | 1139 | 19 | 2139 | 19 |
| RM601 | | | 1116 | 15 | 2116 | 16 |
| RM625 | 117* | 17 | | | | |
| RM630 | 126* | 14 | | | | |
| RM640 | 118* | 13 | | | | |
| RM675 | 127* | 13 | | | | |
| 302351 | 119 | 1 | 1119 | 19 | 2119 | 19 |
| 302478 | 120 | 1 | 1120 | 19 | 2120 | 19 |
| 302642 | 121 | 1 | 1121 | 19 | 2121 | 19 |
| 302435 | 122** | 1 | | | | |
| 302437 | 139 | 1 | 1139 | 19 | 2139 | 19 |
| 302599 | 173 | 1 | 1173 | 19 | 2173 | 19 |

*Bakelite Base Holders
**Available Only in Aluminum

NET EACH PRICE LIST MERCURY BATTERY HOLDERS

| No. | 5-15 | 20-99 | No. | 5-15 | 20-99 | No. | 5-15 | 20-99 |
|-----|------|-------|------|------|-------|------|------|-------|
| 101 | .30 | .26 | 173 | .30 | .26 | 1175 | .30 | .26 |
| 103 | .30 | .26 | 175 | .30 | .26 | 1189 | .38 | .34 |
| 104 | .30 | .26 | 177 | .30 | .26 | 2101 | .34 | .31 |
| 106 | .30 | .26 | 183 | .30 | .26 | 2103 | .34 | .31 |
| 109 | .30 | .26 | 189 | .45 | .36 | 2104 | .34 | .31 |
| 110 | .38 | .34 | 1101 | .30 | .26 | 2109 | .34 | .31 |
| 111 | .30 | .26 | 1103 | .30 | .26 | 2110 | .34 | .31 |
| 112 | .30 | .26 | 1104 | .30 | .26 | 2113 | .34 | .31 |
| 117 | .30 | .26 | 1109 | .30 | .26 | 2114 | .34 | .31 |
| 118 | .30 | .26 | 1110 | .30 | .26 | 2116 | .34 | .31 |
| 119 | .38 | .34 | 1113 | .30 | .26 | 2119 | .34 | .31 |
| 120 | .38 | .34 | 1114 | .30 | .26 | 2120 | .41 | .36 |
| 121 | .38 | .34 | 1116 | .30 | .26 | 2121 | .41 | .36 |
| 122 | .38 | .34 | 1119 | .30 | .26 | 2125 | .34 | .31 |
| 124 | .23 | .21 | 1120 | .38 | .34 | 2132 | .34 | .31 |
| 125 | .30 | .26 | 1121 | .38 | .34 | 2134 | .34 | .31 |
| 126 | .30 | .26 | 1125 | .30 | .26 | 2135 | .38 | .34 |
| 127 | .30 | .26 | 1132 | .30 | .26 | 2139 | .26 | .24 |
| 132 | .30 | .26 | 1134 | .30 | .26 | 2142 | .26 | .24 |
| 134 | .36 | .34 | 1135 | .34 | .31 | 2144 | .23 | .21 |
| 135 | .38 | .34 | 1139 | .23 | .21 | 2145 | .34 | .31 |
| 139 | .23 | .21 | 1142 | .23 | .21 | 2173 | .33 | .29 |
| 144 | .26 | .24 | 1144 | .26 | .24 | 2175 | .33 | .29 |
| 166 | .30 | .26 | 1145 | .30 | .26 | 2189 | .41 | .36 |
| | | | 1173 | .30 | .26 | | | |

INSULATED POLARIZING WASHERS

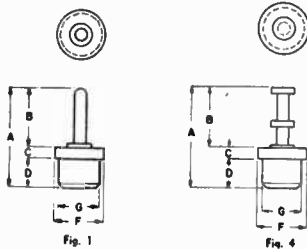
Insulated Polarizing Washers eliminate the danger of damage and short circuit to expensive transistor equipment. The washers hold securely when snapped over the eyelets used on our standardized battery holders. Material: Precision molded of plastic.



| Cat. No. | NET COST EACH | |
|----------|---------------|-------|
| | 5-19 | 20-99 |
| 59 | .04 | .03 |

Sealectro PRESS-FIT[®] TEFLON[†] TERMINALS

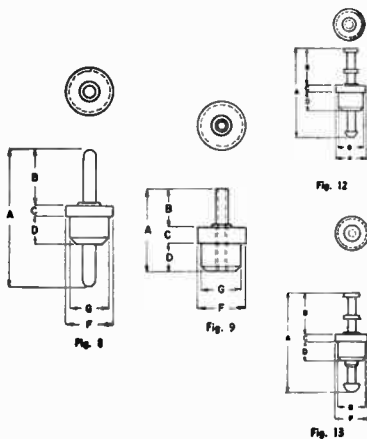
INSURED PERFORMANCE — OUTSTANDING LABORATORY SERVICE — PRECISION PARTS



SUBMINIATURE STAND-OFFS

The ultimate in space-saving terminals for subminiaturization programs. Teflon bushing diameters of the order of .148" to .218". Choice of lugs, including turrets.

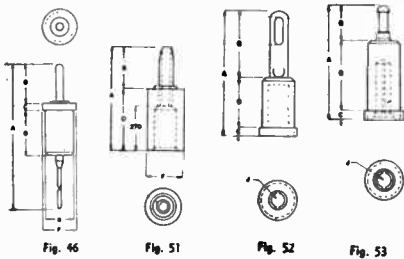
| PART NO. | FIG. | A | B | C | D | F | G |
|-----------------|------|------|------|------|------|------|------|
| ST-SM-1 | 1 | .350 | .210 | .040 | .100 | .172 | .148 |
| ST-SM-1L2 | 1 | .265 | .125 | .040 | .100 | .172 | .148 |
| ST-SM-1L4 | 1 | .250 | .110 | .040 | .100 | .172 | .148 |
| ST-SM-1L6 | 1 | .285 | .145 | .040 | .100 | .172 | .148 |
| ST-SM-1L10 | 1 | .594 | .450 | .040 | .100 | .172 | .148 |
| ST-SM-2C4 | 1 | .375 | .210 | .050 | .110 | .172 | .148 |
| ST-SM-19 | 1 | .365 | .193 | .040 | .132 | .172 | .148 |
| ST-SM-1 TUR | 4 | .350 | .210 | .040 | .100 | .172 | .148 |
| ST-SM-4 TUR | 4 | .350 | .210 | .040 | .100 | .200 | .179 |
| ST-SM-20 TUR | 4 | .350 | .210 | .040 | .100 | .218 | .185 |
| ST-SM-22 TUR | 4 | .428 | .210 | .093 | .125 | .172 | .148 |
| ST-SM-23 TUR | 4 | .350 | .210 | .040 | .100 | .250 | .204 |
| ST-SM-29 TUR-C2 | 4 | .540 | .250 | .040 | .250 | .172 | .148 |



SUBMINIATURE FEED-THRUS

For facilitating connections through chassis or casing, in subminiaturized components and assemblies. Choice of lug designs and finishes, including hollow-tube lugs. Generous safety factor at rated voltages.

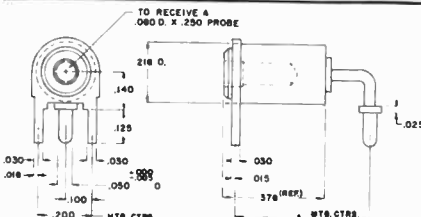
| PART NO. | FIG. | A | B | C | D | F | G |
|--------------|------|------|------|------|------|------|------|
| FT-SM-1 | 8 | .515 | .210 | .040 | .100 | .172 | .148 |
| FT-SM-2C4 | 8 | .535 | .210 | .050 | .110 | .172 | .148 |
| FT-SM-2C6 | 8 | .410 | .147 | .050 | .110 | .172 | .148 |
| FT-SM-9L2 | 8 | .407 | .125 | .040 | .132 | .172 | .148 |
| FT-SM-52 | 9 | .225 | .125 | .040 | .060 | .150 | .125 |
| FT-SM-55 | 9 | .296 | .136 | .060 | .100 | .172 | .148 |
| FT-SM-60 | 9 | .367 | .207 | .050 | .110 | .218 | .171 |
| FT-SM-1 TUR | 12 | .500 | .210 | .040 | .100 | .172 | .148 |
| FT-SM-16 TUR | 12 | .500 | .210 | .040 | .100 | .125 | .093 |
| FT-SM-21 TUR | 13 | .531 | .210 | .040 | .125 | .218 | .185 |



JACKS AND PLUGS

Breakaway connectors (male and female) miniature test point jacks (female) that will accept test instrument probes or companion plugs and patch cord jumpers

| PART NO. | FIG. | A | B | C | D | J |
|----------|------|------|------|------|------|------|
| SKT 1 | 52 | 1/16 | .354 | .046 | .287 | .050 |
| SKT-4 | 52 | 1/16 | .354 | .046 | .287 | .041 |
| SKT-8 | 52 | 1/16 | .330 | .046 | .287 | .080 |
| SKT-2BC | 53 | 7/16 | .120 | .046 | .281 | .090 |
| SKT-5BC | 53 | 7/16 | .120 | .046 | .281 | .080 |
| SKT-10 | 53 | .637 | .187 | .050 | .400 | .080 |
| SKT-12 | 53 | .375 | .060 | .046 | .269 | .090 |
| SKT-13 | 53 | .203 | .060 | — | .143 | .040 |
| SKT-14 | 53 | .345 | .120 | .046 | .179 | .040 |
| SKT-15 | 53 | .732 | .188 | .157 | .387 | .050 |



PRINTED WIRING JACKS

Miniature jacks. Mount flat on printed-wiring board. Double-prong steel strap in front, connection lug at rear, fit into three holes of grid coordinate layout. Part No. SKT-102 PC (.500" overall centers) Part No. SKT-103 PC (.400" overall centers)

Specifically designed as companion units (male) for connectors and test jacks. Used as test instrument probes, jumper plugs and multiple pin plugs.

| PART NO. | FIG. | A | B | C | D | F | G |
|----------|------|-------|------|------|------|------|------|
| FT-M-2 | 46 | 2.083 | 1/4 | .046 | .287 | .218 | .185 |
| FT-M-4 | 46 | .739 | 5/32 | .046 | .287 | .218 | .185 |
| PR-300 | 51 | .645 | .270 | .375 | — | .218 | — |



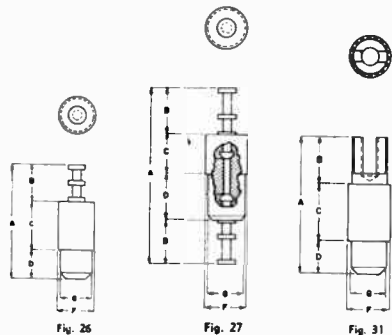
AVAILABLE IN COLORS — DESIGNED FOR COLOR CODING.

Sealectro PRESS-FIT[®] TEFLON[†] TERMINALS

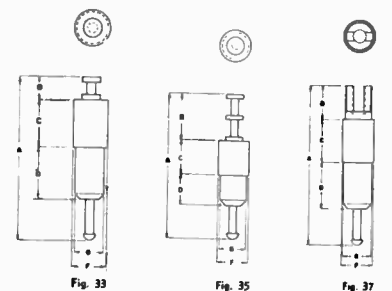
SIMPLE INSTALLATION — WIDEST STOCK SELECTION — ASSORTED LUGS AND PLATING

MINIATURE STAND-OFFS

Wide selection of types in voltage ratings to 4000. Choice of lugs and finishes, as well as bushings. For components and assemblies stressing higher operating voltages rather than space-saving.



| PART NO. | FIG. | A | B | C | D | F | G |
|------------|------|-------|-------|------|------|------|------|
| ST-210 | 26 | .346 | .156 | .103 | .087 | .125 | .104 |
| ST-250 | 26 | .431 | 3/32 | .125 | .150 | 3/16 | .165 |
| ST-1000 | 26 | .493 | 3/32 | .187 | .150 | 3/16 | .165 |
| ST-1500 | 26 | .556 | 3/32 | .250 | .150 | 3/16 | .165 |
| ST-2000 | 26 | .831 | 3/32 | .400 | .150 | 3/16 | .165 |
| ST-2500 | 26 | .968 | 3/32 | .500 | .187 | 1/4 | .215 |
| ST-4000 | 26 | 1.268 | 3/32 | .800 | .187 | 1/4 | .215 |
| DST-1000 | 27 | .819 | .210 | .187 | .212 | 3/16 | .171 |
| DST-1550 | 27 | 1.187 | 3/32 | .250 | .375 | 1/4 | .218 |
| DST-2550 | 27 | 1.687 | 3/32 | .500 | .625 | 1/4 | .218 |
| ST-250 SL | 31 | .478 | 1 3/4 | .125 | .150 | 3/16 | .171 |
| ST-1000 SL | 31 | .540 | 1 3/4 | .187 | .150 | 3/16 | .171 |
| ST-1500 SL | 31 | .603 | 1 3/4 | .250 | .150 | 3/16 | .171 |
| ST-2500 SL | 31 | .890 | 1 3/4 | .500 | .187 | 1/4 | .217 |
| ST-4000 SL | 31 | 1.190 | 1 3/4 | .800 | .187 | 1/4 | .217 |



MINIATURE FEED-THRUS

Handy Feed-thru terminals with choice of lugs. Handling voltage ratings up to 4000. Wide selection of bushing diameters and lengths. Ideal for making connections through chassis or casings, with generous safety factor at rated voltages.

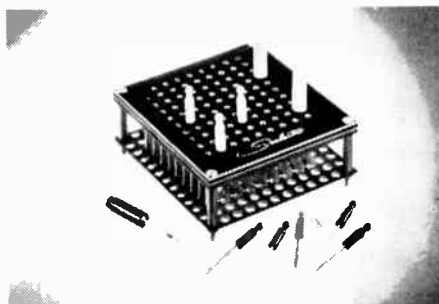
| PART NO. | FIG. | A | B | C | D | F | G |
|--------------|------|-------|-------|------|------|------|------|
| FT-310 | 33 | .540 | .133 | .063 | .171 | .187 | .171 |
| FT-1000 | 33 | .740 | 1/8 | .187 | .212 | 3/16 | .171 |
| FT-1500 | 33 | .865 | 1/8 | .250 | .275 | 3/16 | .171 |
| FT-2500 | 33 | 1.365 | 1/8 | .500 | .525 | 1/4 | .217 |
| FT-4000 | 33 | 1.965 | 1/8 | .800 | .825 | 1/4 | .217 |
| FT-1000 DTUR | 35 | .836 | 1/4 | .187 | .212 | 3/16 | .171 |
| FT-1000 SL | 37 | .821 | 1 3/4 | .187 | .212 | 3/16 | .171 |
| FT-1500 SL | 37 | .947 | 1 3/4 | .250 | .275 | 3/16 | .171 |
| FT-2000 SL | 37 | 1.197 | 1 3/4 | .375 | .400 | 3/16 | .171 |



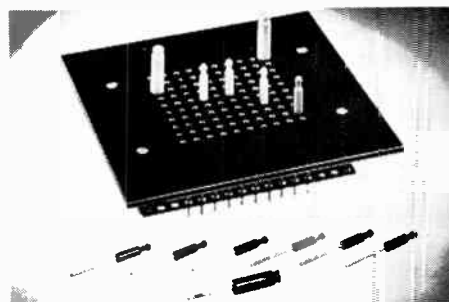
SEALLECTOBOARD cordless program boards

PROTO-KIT[®]

A complete programming system in a single package ready for use. The Sealectroboard Proto-Kit is available in two sizes, each complete with program board, shorting pins and component holders. Permits switching of multi-points at the push of a pin. Provides component interpositioning at any X-, Y- axis coordinate. The economical, reliable and simple answer to programming.



9 x 8 PROTO-KIT
9 x 8 Sealectroboard
8 shorting pins
3 diode holders



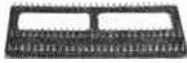
10 x 10 PROTO-KIT
10 x 10 Sealectroboard
10 shorting pins
3 diode holders

NATIONAL TEL-TRONICS CORPORATION

YONKERS, N. Y.

TERMINAL BOARDS

CUSTOM
to your specifications

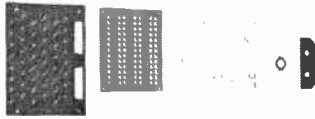


STANDARD



Custom terminal board assemblies to commercial or government specs.

FABRICATED PARTS



Intricate and precise parts of paper, cloth, nylon or glass laminates.

FABRICATED PRINTED CIRCUITS TO MILITARY SPECIFICATIONS



Etched type, on copper-clad laminates.

TERMINALS TURRET—SPLIT—SPECIAL



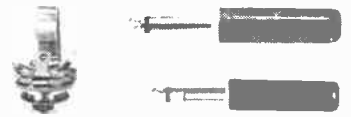
Standard terminals, silver-plated brass. Printed circuit terminals available.

MINIATURE TELEPHONE PLUGS and JACKS



For miniaturized applications.

TELEPHONE PLUGS and JACKS



Complete standard line available.

BINDING POST BOARDS HEAVY DUTY

STANDARD

≅2700 line for heavy electronic equipment.



CUSTOM

Custom designed boards using ≅2700 terminals.



≅2400 series binding post with 6-32 screw for television antenna hook-up.

BINDING POSTS



Complete line including wrap-around, 5-way grounding and fully insulated for electronic applications.

BANANA JACKS and PLUGS



Standard banana jack assembly ≅813 recommended use with ≅852 Plug. Custom plugs available.

TEST PROBES



HEAVY DUTY

Standard line includes 3/16" or 1/4" hole.

ALLIGATOR CLIPS



FULLY INSULATED

Complete line of insulated, screw type and fully insulated types.

TIP PLUGS and JACKS



A complete standard line of insulated and non-insulated plugs and jacks.

TERMINAL STRIPS

STANDARD



3/8-1/2" centers on 1/8" x 3/8" wide laminations fabricated to meet customer specs.

MINIATURE



Made to customer specs. Recommended where space is a factor.

PHONO PLUGS and JACKS



A complete line of phono plugs and jacks.

DIODE and FUSE MOUNTING BASES



Custom made of spring brass and any insulating material to customer specs.

WRITE  FOR DATA!

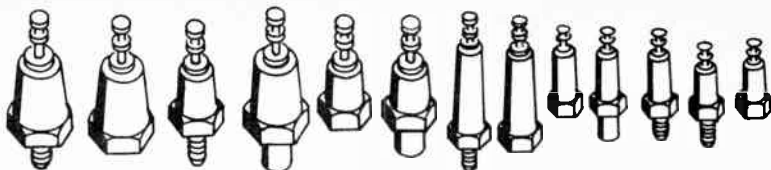
NATIONAL TEL-TRONICS CORPORATION

YONKERS, N. Y.

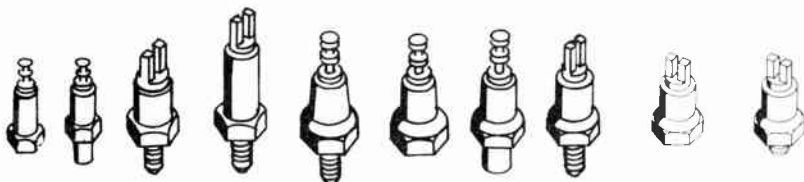


**STANDARDIZED
ELECTRONIC HARDWARE**

INSULATED TERMINALS



1400 1401 1409 1410 1411 1413 1421 1422 1423 1424 1425 1426 1427
1418 1417 1419



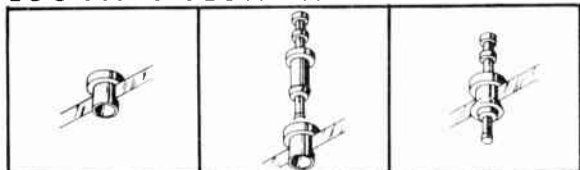
1428 1429 1600, 1612, 1450, 1451, 1452, 1455, 1456, 1457,
01,02, 13,14, 60,70, 61,71, 62,72, 65,75, 66,76, 67,77,
03,04,05 15,16,17 80,90 81,91 82,92 85,95 86,96 87,97

Feed-Thru



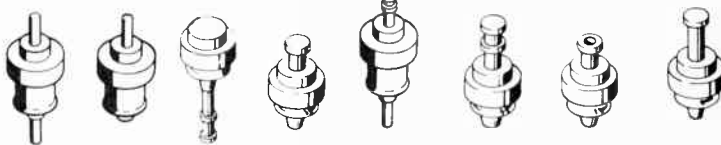
1430 1432 1433, 1483 1484
1431 36

LOC-FIT TEFLON INSULATED TERMINALS

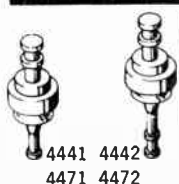


1. Push Teflon Grommet into hole.
2. Insert LOC-FIT terminal.
3. Snap LOC-FIT into place.

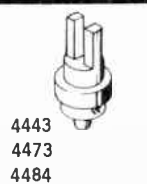
Insulated Terminals



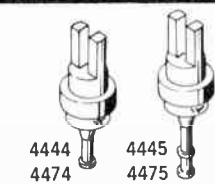
4401 4402 4430 4435 4437 4440 4446 4460
4485 4480



4441 4442 4471 4472
Insulated Feed-Thru



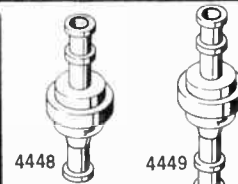
4443 4473 4484
Bifurcated Terminals



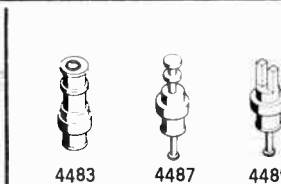
4444 4445 4474 4475
Insulated Bifurcated Feed-Thru



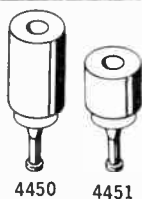
4447
Taper Pin Receptacle



4448 4449
Taper Pin Receptacle Feed-Thru

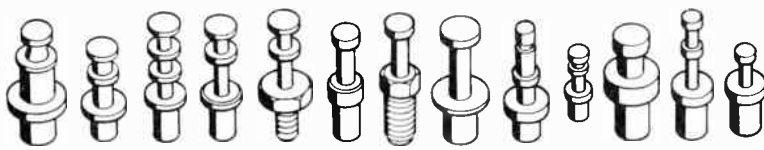


4483 4487 4489
SUB-MINIATURE INSULATED TERMINALS — FEED THRU — BIFURCATED FEED THRU



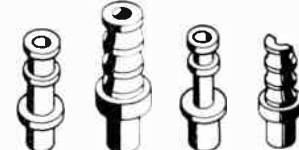
4450 4451
Insulated Test Point

STANDARD TERMINALS Turret

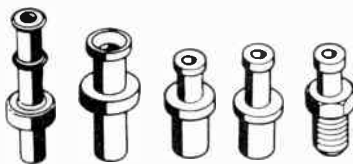


1210 1280 1299 1300 1300T 1340 1340T 1350 1370 2030 2060 2520 2540
2035 2031 2061

Hollow Lug

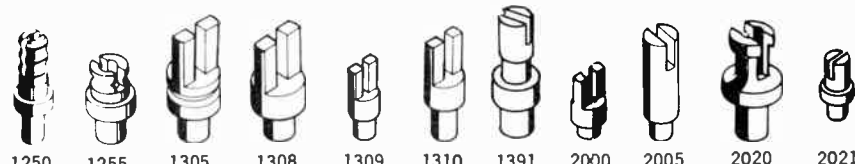


1200 1260 1330 1380



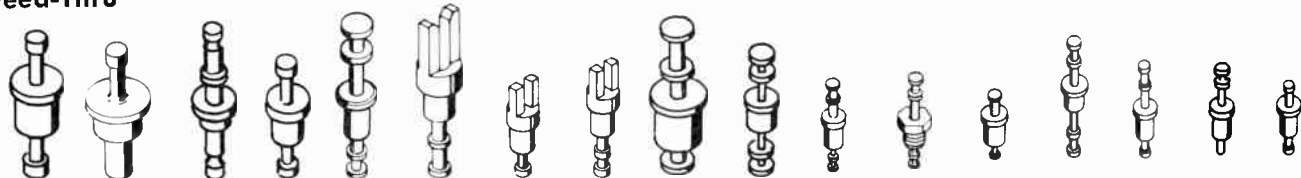
1390 1392 2010 2011 2010T

Bifurcated



1250 1255 1305 1308 1309 1310 1391 2090 2005 2020 2021
1240 1306 1307 2023 2031 2006 2022

Feed-Thru



1220 1221 1230 1290 1301 1311 1315 1316 1320 1360 2040 2040T 2050 2500 2510 2511 2530
2509

SECTION 2800



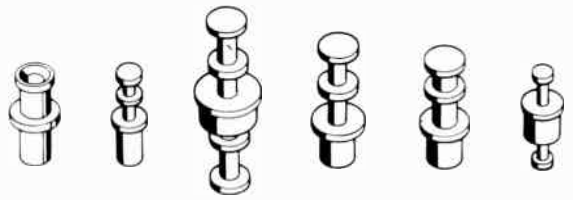
STANDARDIZED
ELECTRONIC HARDWARE

Combination
Terminal



1203

NAS Terminals



704

705

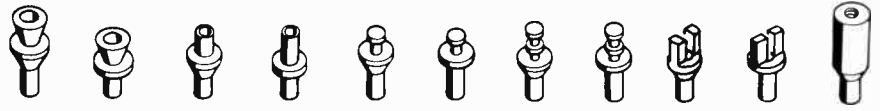
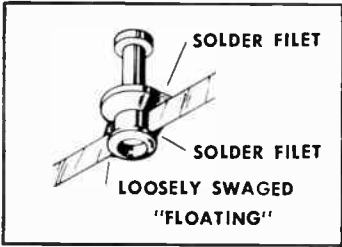
706

707

708

709

FLOATING PRINTED CIRCUIT TERMINALS



7000

7001

7010

7011

7020

7021

7030

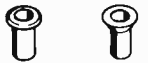
7031

7040

7041

7050

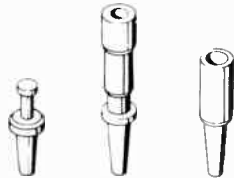
EYELETS



7600

7650

TAPER PINS

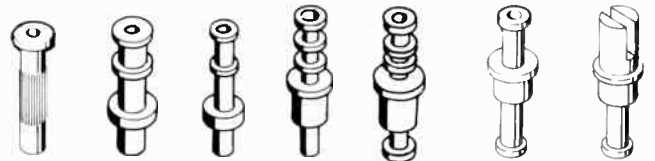


2770

2775

2776

TAPERED RECEPTACLE



2710

2720

2730

2740

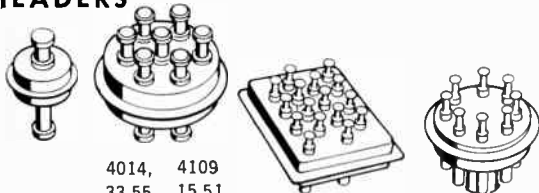
2760

2761

2762

2763

HEADERS

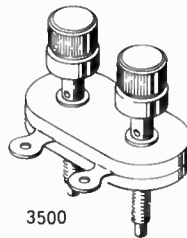


4008 4010 4011
4014, 4109
33,55, 15,51,
56,64, 52,62,
67,68, 63,64,
74,78 65,67

4107
4166

4098

BINDING POST



3500

SHAFT LOCKS



1510

1511

1512

1513

1520

1515

1514

(CAP ONLY)

STAND-OFFS



1530

1540

1531

1541

1550

1551

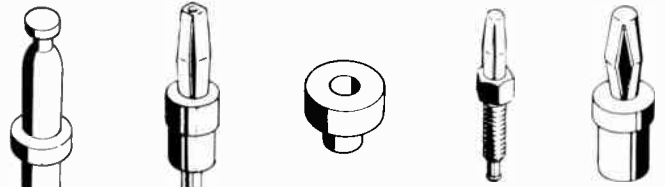
Chassis
Fastener



1590

1591

PLUGS & SOCKETS



1700

1785

1705

1782

1710

1786

1715

1716

1780

1781

ACCESSORY HARDWARE



1560 series
1561 series
Chassis
Bushing



1800
Dial
Lock



1815
Dial
Indicator



3100-6
8, 10
Thumb
Screw



3200-6
8,10,25
Captive
Panel Screw



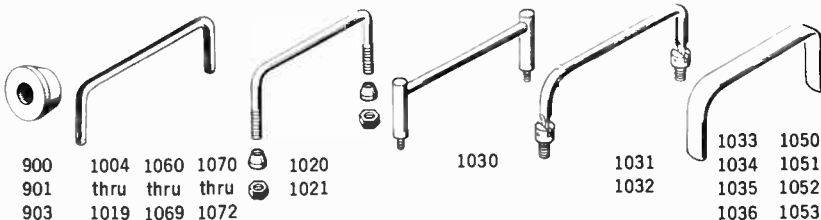
3316A, B
Shaft
Coupling



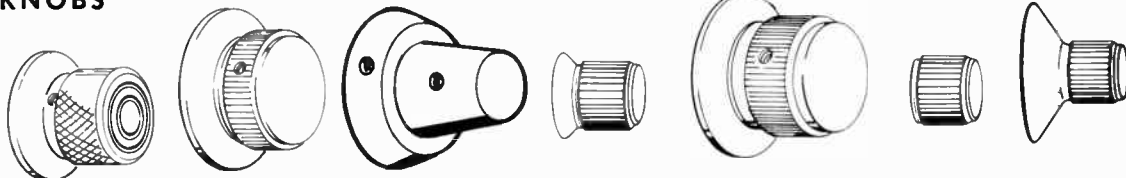
**STANDARDIZED
ELECTRONIC HARDWARE**

HANDLES & FERRULES

Brass and Aluminum



KNOBS

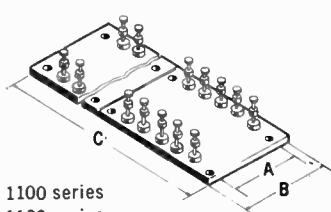


- 300 series
- 400 series
- 450 series
- 500 series
- 550 series
- 625 series
- 1000 series
- 305 series
- 410 series
-
- 501 series
- 555 series
- 626 series
- 1038 series
- 310 series
-
- 502 series
- 560 series
- 627 series
- 1040 series

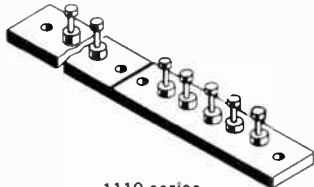
FOR ANODIZED COLORS
ORDER BY DASH NO.

- 20 PLAIN
- 21 BROWN
- 22 RED
- 23 ORANGE
- 24 YELLOW
- 25 GREEN
- 26 BLUE
- 27 VIOLET
- 28 GREY
- 30 BLACK

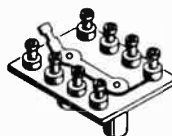
TERMINAL BOARDS & BRACKETS



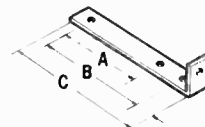
- 1100 series
- 1102 series
- 2200 series
- 2202 series
- 8001 series
- 8003 series



- 1110 series
- 1112 series
- 2210 series
- 2212 series
- 8002 series
- 8004 series



- 1180
- 1181
- 1182
- 1183
- 1184
- 1185



| NO. | A | B | C | D | USE ON |
|------|------|------|---------|-----|----------------|
| 11-2 | 1.50 | — | 2-1/8 | .35 | 1100B |
| 11-3 | 1.50 | 2.00 | 2-5/8 | .35 | 1100B 1100C |
| 11-4 | 2.00 | 2.50 | 3-5/16 | .56 | 1100C 1100D |
| 11-5 | 1.50 | 2.00 | 2-13/16 | .56 | 1100B 1100C |

ENGINEERING DESIGN KIT



- K-44
- K-14-1
- K-14-2
- K-14-3
- K-70
- K-12

- LOC FIT
- HI ALUMINA
- TEFLON
- PLASTIC
- PRINTED CIRCUIT
- SOLDER TERMINALS

SWAGING MACHINES AND TOOLS



Model A

How To Order

Order by basic part number of terminal for which tool is to be used. Disregard letter and/or number following basic number.

- Example:
1. For terminal #1300 A-1 order tool #1300
 2. For LOC-FIT #4430 B-9 order tool #4330

note: unless otherwise specified, tolerances are ±.010

PLATING SPECIFICATIONS

| Dash No. | Finish | Dash No. | Finish |
|----------|---|----------|-------------------------------|
| —1 | Silver 0.0003 | —2 | Gold/Silver 0.000030/0.0003 |
| —3 | Gold 0.000050 | —4 | Solder 0.0005 |
| —5 | Tin 0.0002 | —6 | Hot Tin 0.0002 |
| —7 | Gold 0.000015 | —8 | Gold/Nickel 0.000030/0.000050 |
| —9 | Gold/Silver 0.000010-0.00002C/0.0003-0.0005 | —10 | Gold 0.000030 |

Order by Basic Part Number Followed by Dash Number
For Finish Required. Example: 1300A-1

Standard Catalog Items are stocked by USECO Authorized Distributors throughout the country.

Special Items and information may be obtained by writing Litton Industries, U.S. Engineering Co. Div., 13536 Saticoy St., Van Nuys, Calif., or 456 Sylvan Ave., Englewood, N.J.





| SHANK LENGTH | | | | | | | |
|--------------|------|------|------|------|------|------|------|
| NAS | -1 | -2 | -3 | -4 | | | |
| | A | B | C | D | E | F | |
| | .075 | .105 | .135 | .165 | .195 | .230 | |
| | | | | | | | .293 |
| | | | | | | | G |

| SHANK LENGTH | | | | |
|--------------|------|------|------|------|
| AA | A | B | C | D |
| .037 | .053 | .084 | .115 | .147 |

| SHANK LENGTH | | | | | | |
|--------------|------|------|------|------|------|------|
| A | B | C | D | E | F | |
| .054 | .094 | .125 | .156 | .188 | .219 | |
| | | | | | | .281 |

| THREAD LENGTH | | | | |
|---------------|------|------|------|--|
| A | B | C | D | |
| .187 | .250 | .312 | .375 | |

| THREAD LENGTH | |
|---------------|------|
| A | B |
| .125 | .218 |

| SHANK LENGTH | | | | |
|--------------|------|------|------|------|
| NAS | -1 | -2 | -3 | -4 |
| | A | B | C | D |
| | .062 | .094 | .125 | .156 |

| SHANK LENGTH | | | | |
|--------------|------|------|------|------|
| NAS | -1 | -2 | -3 | -4 |
| | .078 | .109 | .141 | .172 |

Al = Aluminum
 Bd, Thick. = Board Thickness
 Br = Brass
 C = Consecutively
 CW = Clockwise
 CCW = Counter-clockwise
 D = Swage Diameter
 H = Height
 M = Material

Mtg. D = Mounting Diameter
 O.H. = Overall Height
 D.L. = Overall Length
 S.D. = Shaft Diameter
 Sk. D. Skirt Diameter
 T = Thread
 X = Shank or Thread Length,
 see box as indicated

TERMINALS & EYELETS

Order by Part Number and Letter. For example, 1300A, NAS 704-1, etc.. Standard Plating All Metal Terminals -1, Insulated Terminals, -9, P.C. Terminals and Eyelets -7.

| Part Number | X (see box no.) | Tor D | Bd Thick—Order by Letter | | | | | | H above/below bd. | |
|-------------|-----------------|-------|--------------------------|------|------|------|-----|------|-------------------|-----------|
| | | | 1/64 | 1/32 | 1/16 | 1/32 | 1/8 | 3/32 | | 1/4 |
| 1200 | #1 | .114 | | A | B | C | D | E | F | .328/— |
| 1203C | .141 | .221 | | | | | C | | | .250/.172 |
| 1203D | .172 | .251 | | | | | D | | | .312/.203 |
| 1203E | .234 | .258 | | | | | | D | E | .375/.203 |
| 1210 | #1 | .114 | | A | B | C | D | | | .266/— |
| 1220 | #1 | .183 | | | B | C | D | E | F | .250/.203 |
| 1221 | #1 | .183 | | | B | C | D | E | F | .250/.203 |
| 1230 | #1 | .183 | | | B | C | D | E | F | .469/.297 |
| 1240 | #1 | .183 | | | B | C | D | E | F | .481/— |
| 1250 | #1 | .114 | | A | B | C | D | | | .312/— |
| 1255 | #1 | .114 | | A | B | C | D | | | .188/— |
| 1260 | #1 | .114 | | A | B | C | D | | | .312/— |
| 1280 | #1 | .091 | | A | B | C | D | | | .239/— |
| 1290 | #1 | .114 | | A | B | C | D | | | .156/.125 |
| 1299 | #1 | .114 | | A | B | C | D | E | F | .421/— |
| 1300 | #1 | .114 | | A | B | C | D | E | F | .364/— |
| 1300T | .188 | 4.40 | | A | B | C | D | E | F | .364/— |
| 1301 | #1 | .114 | | | B | C | D | E | F | .364/.312 |
| 1305 | #1 | .114 | | | B | C | D | | | .344/— |
| 1306 | #1 | .135 | | | B | C | D | | | .500/— |
| 1307 | #1 | .186 | | | B | C | D | | | .688/— |
| 1308 | #2 | .114 | | A | B | C | D | E | F | .328/— |
| 1309 | #1 | .091 | | A | B | C | D | | | .239/— |
| 1310 | #1 | .114 | | A | B | C | D | | | .312/— |
| 1311 | #1 | .114 | | A | B | C | D | | | .310/.250 |
| 1315 | #3 | .094 | | B | C | D | | | | .188/.100 |
| 1316 | #3 | .094 | | B | C | D | | | | .188/.194 |
| 1320 | #1 | .204 | | B | C | D | E | F | | .344/.125 |
| 1330 | #1 | .135 | | B | C | D | | | | .312/— |
| 1340 | #1 | .079 | | A | B | C | D | | | .181/— |
| 1340T | .125 | 2.56 | | A | B | C | D | | | .181/— |
| 1350 | #1 | .114 | | B | C | D | E | F | G | .234/— |
| 1360 | #1 | .204 | | B | C | D | E | F | G | .364/.315 |
| 1370 | #1 | .114 | | B | C | D | E | F | G | .449/— |
| 1380 | #1 | .114 | | B | C | D | E | F | G | .312/— |
| 1390 | #1 | .079 | | A | B | C | D | E | F | .328/— |
| 1391 | #1 | .151 | | A | B | C | D | E | F | .375/— |
| 1392 | #1 | .111 | | A | B | C | D | | | .188/— |

Insulation Material

| Part Number | X (see box no.) | Tor D | Material | Notes | H above/below bd. | | |
|------------------|------------------|--------|----------|-------|-------------------|---|------------|
| 1400 thru 1410 | Phenolic | | | | | | |
| 1417 thru 1429 | Alkyd | | | | | | |
| 1600 thru 1617 | Alkyd | | | | | | |
| 1430, 33, 35 | Diallyl Pthalate | | | | | | |
| 1431, 32, 34, 36 | Teflon | | | | | | |
| 1450 thru 1457 | | | | | | | |
| 1470 thru 1477 | | | | | | | |
| 1490 thru 1497 | | | | | | | |
| 1460 thru 1467 | | | | | | | |
| 1480 thru 1487 | | | | | | | |
| 1400A,B,C,D | #4 | 6-32 | | | .59/— | | |
| 1400E,F,G,H | #4 | 4-40 | | | .59/— | | |
| 1401 | #4 | 6-32 | | | .59/— | | |
| 1401A | #4 | 4-40 | | | .59/— | | |
| 1409A,B,C,D | #4 | 6-32 | | | .59/— | | |
| 1409E,F,G,H | #4 | 4-40 | | | .59/— | | |
| 1410 | #3 | .188 | A | B | C | D | .59/— |
| 1411A | | 6-32 | | | | | .59/— |
| 1411B | | 4-40 | | | | | .59/— |
| 1413 | #3 | .115 | A | B | C | D | .59/— |
| 1417 | | 6-32 | | | | | .59/— |
| 1417A | | 4-40 | | | | | .59/— |
| 1418A,B,C,D | #4 | 4-40 | | | | | .59/— |
| 1418E,F,G,H | #4 | 4-40 | | | | | .59/— |
| 1419 | #3 | .188 | A | B | C | D | .59/— |
| 1421 | .250 | 6-32 | | | | | .59/— |
| 1422 | | 6-32 | | | | | 1.08/— |
| 1423 | | 6-32 | | | | | 1.08/— |
| 1424 | #1 | .115 | B | C | D | | .88/— |
| 1425 | .218 | 2.56 | | | | | .53/— |
| 1426A | .125 | 2.56 | | | | | .53/— |
| 1426B | .218 | 2.56 | | | | | .38/— |
| 1427 | | 2.56 | | | | | .38/— |
| 1428 | | 2.56 | | | | | .53/— |
| 1429 | #1 | .115 | B | C | D | | .38/— |
| 1430 | | 10-32 | | | | | .38/— |
| 1431 | | 10-32 | | | | | .26/.42* |
| 1432 | .358 | 5-40 | | | | | .26/.42* |
| 1433 | | 1/4-28 | | | | | .43/.348 |
| 1434 | | 1/4-28 | | | | | .355/.538* |
| 1435 | | 3/8-32 | | | | | .355/.538* |
| 1436 | | 3/8-32 | | | | | .542/.768* |
| 1450A,B,C,D | #4 | 6-32 | | | | | .542/.768* |
| 1450E,F,G,H | #4 | 4-40 | | | | | .60/— |
| 1451 | | 6-32 | | | | | .60/— |
| 1451A | | 4-40 | | | | | .63/— |
| 1452 | #4 | .188 | A | B | C | D | .60/— |
| 1455A,B,C,D | #4 | 6-32 | | | | | .60/— |
| 1455E,F,G,H | #4 | 4-40 | | | | | .60/— |
| 1456 | | 6-32 | | | | | .63/— |
| 1456A | | 4-40 | | | | | .63/— |
| 1457 | #3 | .188 | A | B | C | D | .63/— |
| 1460A,B,C,D | #4 | 6-32 | | | | | .60/— |
| 1460E,F,G,H | #4 | 4-40 | | | | | .60/— |
| 1461 | | 6-32 | | | | | .60/— |
| 1461A | | 4-40 | | | | | .63/— |
| 1462 | #3 | .188 | A | B | C | D | .60/— |
| 1465A,B,C,D | #4 | 6-32 | | | | | .60/— |
| 1465E,F,G,H | #4 | 4-40 | | | | | .60/— |
| 1466 | | 6-32 | | | | | .63/— |
| 1466A | | 4-40 | | | | | .63/— |
| 1467 | #3 | .188 | A | B | C | D | .60/— |
| 1470A,B,C,D | #4 | 6-32 | | | | | .60/— |
| 1470E,F,G,H | #4 | 4-40 | | | | | .51/— |
| 1471A | | 2.56 | | | | | .51/— |

*approx.

TERMINALS & EYELETS

| Part Number | X (see box no.) | Tor D | Bd Thick—Order by Letter | | | | | | H above/below bd. |
|-------------|-----------------|--------|--------------------------|------|------|------|-----|------|-------------------|
| | | | 1/64 | 1/32 | 1/16 | 1/32 | 1/8 | 3/32 |  | 1/4 |
| 1471B | | 4-40 | | | | | | | .55/— |
| 1472 | #1 | .115 | | | | | | | .51/— |
| 1475A,B,C,D | #4 | 6-32 | | | | | | | .51/— |
| 1475E,F,G,H | #4 | 4-40 | | | | | | | .51/— |
| 1476A | | 2.56 | | | | | | | .55/— |
| 1476B | | 4-40 | | | | | | | .55/— |
| 1477 | #1 | .115 | | | | | | | .51/— |
| 1480A,B | #5 | 2.56 | | | | | | | .36/— |
| 1480C,D | #5 | 4-40 | | | | | | | .36/— |
| 1481A | | 4-40 | | | | | | | .47/— |
| 1481B | | 2.56 | | | | | | | .47/— |
| 1482 | #3 | .115 | | | | | | | .36/— |
| 1483 | .250 | 1/4-28 | | | | | | | .359/.552 |
| 1484 | #1 | .188 | | | | | | | .39/.29 |
| 1485AB | #5 | 2.56 | | | | | | | .36/— |
| 1485CD | #5 | 4-40 | | | | | | | .36/— |
| 1486A | | 4-40 | | | | | | | .47/— |
| 1486B | | 2.56 | | | | | | | .47/— |
| 1487 | #3 | .115 | | | | | | | .36/— |
| 1490A,B | #5 | 2.56 | | | | | | | .36/— |
| 1490C,D | #5 | 4-40 | | | | | | | .36/— |
| 1491A | | 2.56 | | | | | | | .39/— |
| 1492 | #3 | .115 | | | | | | | .36/— |
| 1495A,B | #5 | 2.56 | | | | | | | .36/— |
| 1495C,D | #5 | 4-40 | | | | | | | .36/— |
| 1496A | | 2.56 | | | | | | | .39/— |
| 1497 | | 2.56 | | | | | | | .36/— |
| 1600A,B,C,D | #4 | 6-32 | | | | | | | .62/— |
| 1600E,F,G,H | #4 | 4-40 | | | | | | | .62/— |
| 1601A | | 6-32 | | | | | | | .62/— |
| 1601B | | 4-40 | | | | | | | .62/— |
| 1602 | #1 | .115 | | | | | | | .62/— |
| 1603A,B,C,D | #4 | 6-32 | | | | | | | .62/— |
| 1603E,F,G,H | #4 | 4-40 | | | | | | | .62/— |
| 1604A | | 6-32 | | | | | | | .56/— |
| 1604B | | 4-40 | | | | | | | .56/— |
| 1605 | #1 | .115 | | | | | | | .56/— |
| 1612A,B,C,D | #4 | 6-32 | | | | | | | .84/— |
| 1612E,F,G,H | #4 | 4-40 | | | | | | | .84/— |
| 1613A | | 6-32 | | | | | | | .84/— |
| 1613B | | 4-40 | | | | | | | .84/— |
| 1614 | #1 | .115 | | | | | | | .84/— |
| 1615A,B,C,D | #4 | 6-32 | | | | | | | .78/— |
| 1615E,F,G,H | #4 | 4-40 | | | | | | | .78/— |
| 1616A | | 6-32 | | | | | | | .78/— |
| 1616B | | 4-40 | | | | | | | .78/— |
| 1617 | #1 | .115 | | | | | | | .78/— |
| 1700 | #1 | .115 | | | | | | | .390/— |
| 1705 | #1 | .157 | | | | | | | .38/.109 |
| 1710 | #1 | .135 | | | | | | | .070/— |
| 1715 | .27 | 2.56 | | | | | | | .38/.39 |
| 1716 | .23 | 4-40 | | | | | | | .36/.36 |
| 1780 | | 1.90 | | | | | | | .48/— |
| 1781 | #1 | .135 | | | | | | | .38/— |
| 1782 | #3 | .094 | | | | | | | .48/.131 |
| 1785 | #1 | .190 | | | | | | | .596/— |
| 1786 | #1 | .205 | | | | | | | .094/— |
| 2000 | #2 | .063 | AA | A | B | C | D | E | .156/— |
| 2001 | #2 | .062 | AA | A | B | C | D | E | .121/— |
| 2002 | #2 | .042 | AA | A | B | C | D | E | .285/— |
| 2005 | #2 | .062 | AA | A | B | C | D | E | .312/— |
| 2006 | #2 | .042 | AA | A | | | | | |

SECTION 2800

LITTON INDUSTRIES/U.S. ENGINEERING CO. DIVISION

TERMINALS & EYELETS (Cont'd)

| Part Number | X (see box no.) | Ter O | Bd Thick—Order by Letter | | | | | | H above/below bd. |
|-------------|-----------------|-------|--------------------------|------|------|------|-----|-----------|-------------------|
| | | | 1/64 | 1/32 | 1/16 | 3/32 | 1/8 | 3/16 | |
| 4443 | .142 | | A | B | C | | | .312/.081 | |
| 4444 | .142 | | A | B | C | | | .312/.205 | |
| 4445 | .142 | | A | B | C | | | .312/.319 | |
| 4446 | .142 | | A | B | C | | | .230/.081 | |
| 4447 | .188 | | A | B | C | | | .400/.081 | |
| 4448 | .188 | | A | B | C | | | .400/.247 | |
| 4449 | .188 | | A | B | C | | | .400/.369 | |
| 4450 | .126 | | A | B | C | O | | .346/.280 | |
| 4451 | .189 | | A | B | C | O | | .135/.197 | |
| 4460 | .142 | | A | B | C | | | .312/.081 | |
| 4470 | .154 | | A | B | C | | | .312/.081 | |
| 4471 | .154 | | A | B | C | O | | .312/.205 | |
| 4472 | .154 | | A | B | C | | | .312/.319 | |
| 4473 | .154 | | A | B | C | O | | .312/.081 | |
| 4474 | .154 | | A | B | C | | | .312/.205 | |
| 4475 | .154 | | A | B | C | | | .312/.319 | |
| 4476 | .154 | | A | B | C | | | .230/.081 | |
| 4480 | .126 | | A | B | C | | | .260/.060 | |
| 4482 | .126 | | A | B | C | | | .289/.060 | |
| 4483 | .126 | | A | B | C | | | .253/.060 | |
| 4484 | .126 | | A | B | C | | | .289/.060 | |
| 4485 | .126 | | A | B | C | | | .260/.218 | |
| 4487 | .126 | | A | B | C | | | .289/.218 | |
| 4489 | .126 | | A | B | C | | | .289/.218 | |
| 7000 | #6 | .062 | A | B | C | O | | .136/— | |
| 7001 | #6 | .062 | A | B | C | D | | .104/— | |
| 7010 | #6 | .062 | A | B | C | O | | .188/— | |
| 7011 | #6 | .062 | A | B | C | O | | .156/— | |
| 7020 | #6 | .062 | A | B | C | O | | .136/— | |
| 7021 | #6 | .062 | A | B | C | D | | .104/— | |
| 7030 | #6 | .062 | A | B | C | D | | .188/— | |

TERMINALS & EYELETS

| Part Number | X (see box no.) | Ter O | Bd Thick—Order by Letter | | | | | | H above/below bd. |
|-------------|-----------------|-------|--------------------------|------|------|------|-----|-----------|-------------------|
| | | | 1/64 | 1/32 | 1/16 | 3/32 | 1/8 | 3/16 | |
| 7031 | #6 | .062 | A | B | C | O | | .156/— | |
| 7040 | #6 | .062 | A | B | C | O | | .188/— | |
| 7041 | #6 | .062 | A | B | C | D | | .156/— | |
| 7050 | #6 | .062 | A | B | C | D | | .312/— | |
| 7600 | #6 | .030 | A | B | C | | | | |
| 7601 | #6 | .047 | A | B | C | O | | | |
| 7602 | #6 | .058 | A | B | C | D | | | |
| 7603 | #6 | .075 | A | B | C | D | | | |
| 7604 | #6 | .090 | A | B | C | D | | | |
| 7650A | .051 | .030 | A | | | | | | |
| 7650B | .082 | .030 | A | B | | | | | |
| 7651A | .054 | .047 | A | | | | | | |
| 7651B | .085 | .047 | A | B | | | | | |
| 7651C | .117 | .047 | A | | C | | | | |
| 7651D | .148 | .047 | A | | | D | | | |
| 7652A | .068 | .058 | A | | | | | | |
| 7652B | .099 | .058 | A | B | | | | | |
| 7652C | .131 | .058 | A | | C | | | | |
| 7652D | .162 | .058 | A | | | D | | | |
| 7653A | .054 | .075 | A | | | | | | |
| 7653B | .095 | .075 | A | B | | | | | |
| 7653C | .127 | .075 | A | | C | | | | |
| 7653D | .158 | .075 | A | | | D | | | |
| 7654A | .068 | .090 | A | | | | | | |
| 7654B | .099 | .090 | A | B | | | | | |
| 7654C | .131 | .090 | A | | C | | | | |
| 7654D | .162 | .090 | A | | | D | | | |
| NAS 704 | #7 | .110 | -1 | -2 | -3 | -4 | | .188/— | |
| NAS 705 | #7 | .090 | -1 | -2 | -3 | -4 | | .237/— | |
| NAS 706 | #6 | .201 | -1 | -2 | -3 | -4 | | .342/.315 | |
| NAS 707 | #7 | .112 | -2 | -3 | -4 | | | .360/— | |
| NAS 708 | #7 | .112 | -2 | -3 | -4 | | | .313/— | |
| NAS 709 | #6 | .116 | -1 | -2 | -3 | -4 | | .156/.125 | |

TERMINAL BOARDS & BRACKETS

A, B, C Letters Indicated on Drawing

| Part Number | M | A | See Owg | |
|----------------------|-------|-------------------|-----------------------|-------|
| | | | B | C |
| 11-2, 3, 4, 5 | Steel | (See bracket box) | | |
| 1100A | XXXP | 1.00 | 1.50 | 13.12 |
| 1100B | XXXP | 1.00 | 2.00 | 13.12 |
| 1100C | XXXP | 2.00 | 2.50 | 13.12 |
| 1100D | XXXP | 2.50 | 3.00 | 13.12 |
| 1102A | GEE | 1.00 | 1.50 | 13.12 |
| 1102B | GEE | 1.50 | 2.00 | 13.12 |
| 1102C | GEE | 2.00 | 2.50 | 13.12 |
| 1102D | GEE | 2.50 | 3.00 | 13.12 |
| 1110 | XXXP | — | .50 | 13.12 |
| 1112 | GEE | — | .50 | 13.12 |
| 1180 | GMG | .50 | .72 | .88 |
| 1181 | GMG | .75 | 1.03 | 1.22 |
| 1182 | GMG | .88 | 1.16 | 1.50 |
| 1183 | GEE | .50 | .72 | .88 |
| 1184 | GEE | .75 | 1.03 | 1.22 |
| 1185 | GEE | .88 | 1.16 | 1.50 |
| 2200B | XXXP | .75 | 1.00 | 7.81 |
| 2200C | XXXP | .50 | .75 | 7.81 |
| 2202B | GEE | .75 | 1.00 | 7.81 |
| 2202C | GEE | .50 | .75 | 7.81 |
| 2210 | XXXP | — | .31 | 7.81 |
| 2212 | GEE | — | .31 | 7.81 |
| 8001 | | (materials) | (See 1100 series) | |
| 8002 | | and | (See 1110) | |
| 8003 | | configurations | (See 2200 series) | |
| 8004 | | (on request) | (See 2210) | |
| 1100 and 2200 series | | | scored for 5 sections | |

KNOBS

| Part Number | SD | H | SKO |
|-------------|------|------|------|
| 300 | .250 | .562 | .75 |
| 301 | .188 | .562 | .75 |
| 302 | .125 | .562 | .75 |
| 305 | .250 | .625 | 1.00 |
| 306 | .188 | .625 | 1.00 |
| 307 | .125 | .625 | 1.00 |
| 310 | .250 | .687 | 1.25 |
| 311 | .188 | .687 | 1.25 |
| 312 | .125 | .687 | 1.25 |
| 400 | .250 | .69 | 1.12 |
| 401 | .188 | .69 | 1.12 |
| 402 | .125 | .69 | 1.12 |
| 410 | .250 | .875 | 1.81 |
| 411 | .188 | .875 | 1.81 |
| 412 | .125 | .875 | 1.81 |

KNOBS (Cont'd)

| Part Number | SO | H | SKD |
|-------------|-----------|------|------|
| 450 | .250/.125 | .99 | 1.00 |
| 500 | .250 | .50 | .62 |
| 501 | .188 | .50 | .62 |
| 502 | .125 | .50 | .62 |
| 550 | .250 | .612 | .81 |
| 551 | .188 | .612 | .81 |
| 552 | .125 | .612 | .81 |
| 555 | .250 | .675 | 1.03 |
| 556 | .188 | .675 | 1.03 |
| 557 | .125 | .675 | 1.03 |
| 560 | .250 | .750 | 1.23 |
| 561 | .188 | .750 | 1.23 |
| 562 | .125 | .750 | 1.23 |
| 625 | .250 | .56 | .45 |
| 626 | .188 | .56 | .45 |
| 627 | .125 | .56 | .45 |
| 1000 | .250 | .75 | 1.00 |
| 1001 | .188 | .75 | 1.00 |
| 1002 | .125 | .75 | 1.00 |
| 1038 | .250 | .88 | 1.38 |
| 1039 | .188 | .88 | 1.38 |
| 1040 | .125 | .88 | 1.38 |

HANDLES & FERRULES

| Part Number | M | T | OL | H |
|------------------|----|-----------------------|-------|------|
| 900 | Br | (Fits 1004 thru 1019) | | |
| 901 | Al | (Fits 1060 thru 1069) | | |
| 903 | Br | (Fits 1070 thru 1072) | | |
| 1004 | Br | 10-32 | 6.44 | 1.50 |
| 1005 | Br | 10-32 | 6.44 | 1.75 |
| 1007 | Br | 10-32 | 6.00 | 1.50 |
| 1010 | Br | 10-32 | 4.25 | 1.50 |
| 1012 | Br | 10-32 | 4.00 | 1.50 |
| 1013 | Br | 10-32 | 4.56 | 1.50 |
| 1015 | Br | 10-32 | 3.00 | 1.50 |
| 1017 | Br | 10-32 | 2.00 | 1.50 |
| 1018 | Br | 10-32 | 8.00 | 1.50 |
| 1019 | Br | 10-32 | 10.00 | 1.50 |
| 1020 | Br | 5/16-18 | 4.25 | 2.12 |
| 1021 | Al | 5/16-18 | 4.25 | 2.12 |
| 1030 | Br | 5/16-18 | | 1.50 |
| 1031 (90° fold) | Br | 3/8-24 | 4.00 | 1.81 |
| 1032 (180° fold) | Br | 3/8-24 | 4.00 | 1.81 |
| 1033 | Br | 10-32 | 3.00 | 1.28 |
| 1034 | Br | 10-32 | 4.56 | 1.50 |
| 1035 | Br | 10-32 | 6.44 | 1.75 |
| 1036 | Br | 10-32 | 9.00 | 1.75 |
| 1050 | Al | 10-32 | 3.00 | 1.28 |

*Available lengths 3" to 6" in 1/2" increments.

HANDLES & FERRULES (Cont'd)

| Part Number | SO | H | SKD |
|-------------|----|-------|------------|
| 1051 | Al | 10-32 | 4.56 1.50 |
| 1052 | Al | 10-32 | 6.44 1.75 |
| 1053 | Al | 10-32 | 9.00 1.75 |
| 1060 | Al | 10-32 | 6.44 1.50 |
| 1061 | Al | 10-32 | 6.44 1.75 |
| 1062 | Al | 10-32 | 6.00 1.50 |
| 1063 | Al | 10-32 | 4.25 1.50 |
| 1064 | Al | 10-32 | 4.00 1.50 |
| 1065 | Al | 10-32 | 4.56 1.50 |
| 1066 | Al | 10-32 | 3.00 1.50 |
| 1067 | Al | 10-32 | 2.00 1.50 |
| 1068 | Al | 10-32 | 8.00 1.50 |
| 1069 | Al | 10-32 | 10.00 1.50 |
| 1070 | Br | 6-32 | 1.25 1.00 |
| 1071 | Br | 6-32 | 1.75 1.00 |
| 1072 | Br | 6-32 | 2.25 1.00 |

HEADERS

| Part No. | Mtg. D | O.H. | Pins Numbered |
|----------|---------------|--------|---------------|
| 4008 | 17/64 | 3/64 | 1 |
| 4010 | 29/64 | 29/32 | 1 |
| 4011 | 29/64 | 1 3/32 | 1 |
| 4014 | 1 3/32 | 29/32 | 1 thru 7 CCW |
| 4033 | 1 13/32 | 29/32 | 1 thru 16 CCW |
| 4055 | 3/4 | 17/32 | 1 thru 9 CW |
| 4056 | 29/32 | 29/32 | 1 thru 12 CW |
| 4064 | 41/64 | 3/16 | 1 thru 8 CW |
| 4067 | 3/4 | 3/16 | 1 thru 9 CW |
| 4068 | 29/32 | 3/16 | 1 thru 12 CW |
| 4074 | 37/64 | 3/16 | 1 thru 7 CW |
| 4078 | 1 3/32 | 31/32 | 1 thru 7 CW |
| 4098 | 61/64 | 3/8 | 1 thru 8 CW |
| 4107 | 1 3/8 x 23/32 | 3/16 | 1 thru 16 C |
| 4109 | 29/32 | 1/8 | 1 thru 12 CW |
| 4115 | 3/4 | 29/32 | 1 thru 9 CW |
| 4151 | 29/32 | 29/32 | 1 thru 7 CCW |
| 4152 | 29/32 | 29/32 | 1 thru 7 CCW |
| 4162 | 41/64 | 13/32 | 1 thru 8 CW |
| 4163 | 37/64 | 13/32 | 1 thru 7 CW |
| 4164 | 29/32 | 13/32 | 1 thru 12 CW |
| 4165 | 3/4 | 13/32 | 1 thru 9 CW |
| 4166 | 1 3/8 x 23/32 | 13/32 | 1 thru 16 C |
| 4167 | 29/32 | 29/32 | 1 thru 7 CW |

MISC. HARDWARE

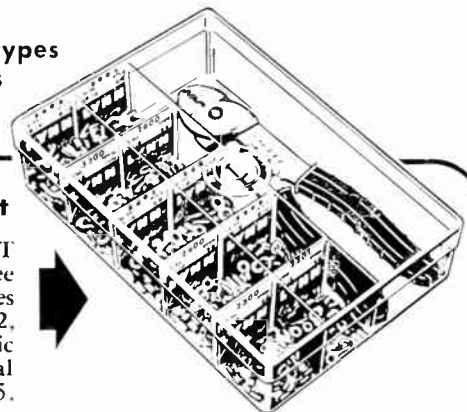
| Part No. | S.D. | T |
|----------|----------|--------|
| 1510 | .250 | 3/8-32 |
| 1511 | .250 | 3/8-32 |
| 1512 | .125 | 1/4-32 |
| 1513 | .125 | 1/4-32 |
| 1514 | Cap Only | |
| 1515 | .250 | 3/8-32 |
| 1520 | .250 | 3/8-32 |

| Part Number | X (see box no.) | T and D | Bd. Thick.—Order by Letter | | | | H above/below bd. |
|-------------|-----------------|------------|----------------------------|------|------|-----|-------------------|
| | | | 1/32 | 1/16 | 3/32 | 1/8 | |
| 1530 | #1 | 6-32, .188 | A | B | C | O | .250/— |
| 1531 | #1 | 6-32, .188 | A | B | C | O | .250/— |
| 1540 | #1 | 6-32, .188 | A | B | C | O | .375/— |
| 1541 | #1 | 6-32, .188 | A | B | C | O | .375/— |
| 1550A | | 4-40, .187 | | | | | .250/— |
| 1550B | | 4-40, .187 | | | | | .375/— |
| 1550C | | 6-32, .250 | | | | | .250/— |
| 1550D | | 6-32, .250 | | | | | .375/— |
| 1550E | | 6-32, .250 | | | | | .500/— |
| 1550F | | 6-32, .250 | | | | | .625/— |
| 1550G | | 6-32, .250 | | | | | .750/— |
| 1550H | | 8-32, .375 | | | | | .250/— |
| 1550I | | 8-32, .375 | | | | | .375/— |
| 1550J | | 8-32, .375 | | | | | .500/— |
| 1550K | | 8-32, .375 | | | | | .625/— |
| 1550M | | 8-32, .375 | | | | | .750/— |
| 1551A | | 4-40, .187 | | | | </ | |

VACO® Solderless Terminals

Now Available in 2 Lines— Insulated and Non-Insulated

71 different types
and sizes



No. 2195 Service Kit

A GENERAL PURPOSE ELECTRICAL, RADIO AND TV KIT containing everything needed for making clean, fast, trouble-free electrical connections. No soldering! No fuss or muss! Kit includes ... No. 1900 Crimping Tool and Terminals Nos. 2300, 2301, 2302, 2400, 2401, 2402, 2600, 2601, 2602, and 3300 ... all in a clear plastic box with tight-fitting lid. Individual bins marked with terminal stock number cards. \$8.95.

No. 1900 Crimping Tool



No solder ... no iron ... no heating ... a perfect connection every time with this tool and Solderless Terminals by Vaco! Crimping tool has wire cutters, indenting die, wire-stripping die, shock-proof, slip-proof plastic handle sleeves. For No. 22 to No. 10 gauge wire. \$3.95

Only 3 SIMPLE STEPS and Terminal Is On



1. Cut Wire. Use the wire cutter built into the crimping tool to cut wire proper length.



2. Strip Wire. Insert end of wire into proper wire stripping opening, close jaws, rotate tool one-half turn, then pull insulation off wire.



3. Crimp Terminal. Insert stripped portion of wire into terminal barrel, place barrel in proper crimping nest with seam directly opposite crimping tooth and close tool like pliers.

Extra long barrel on terminal provides easy crimp and perfect contact. Only ONE crimp necessary. Barrel always remains round.

Quick Reference Chart for Easy Terminal Identification

RING TONGUE TERMINALS

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| * No. 2300 Hole Dia. — 5/32" Stud Size — 4 - 6 Wire Size — 22 - 16 | * No. 2301 Hole Dia. — 5/32" Stud Size — 4 - 6 Wire Size — 22 - 16 | * No. 2302 Hole Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 22 - 16 | * No. 2303 Hole Dia. — 17/64" Stud Size — 12 - 1/4 Wire Size — 22 - 16 | * No. 2304 Hole Dia. — 13/32" Stud Size — 3/8 Wire Size — 22 - 16 | * No. 2400 Hole Dia. — 5/32" Stud Size — 4 - 6 Wire Size — 16 - 14 | * No. 2401 Hole Dia. — 5/32" Stud Size — 4 - 6 Wire Size — 16 - 14 |
| | | | | | | |
| * No. 2402 Hole Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 16 - 14 | * No. 2403 Hole Dia. — 17/64" Stud Size — 12 - 1/4 Wire Size — 16 - 14 | * No. 2404 Hole Dia. — 13/32" Stud Size — 3/8 Wire Size — 16 - 14 | * No. 2502 Hole Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 12 - 10 | * No. 2503 Hole Dia. — 17/64" Stud Size — 12 - 1/4 Wire Size — 12 - 10 | * No. 2504 Hole Dia. — 13/32" Stud Size — 3/8 Wire Size — 12 - 10 | |

SPADE TONGUE TERMINALS

| | | | |
|---|---|---|---|
| | | | |
| * No. 2600 Slot Dia. — 5/32" Stud Size — 4 - 6 Wire Size — 22 - 16 | * No. 2601 Slot Dia. — 5/32" Stud Size — 4 - 6 Wire Size — 16 - 14 | * No. 2602 Slot Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 16 - 14 | * No. 2702 Slot Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 12 - 10 |

FLAG TYPE TERMINALS

| | | |
|---|---|---|
| | | |
| No. 2802 Hole Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 22 - 16 | No. 2902 Hole Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 16 - 14 | No. 3002 Hole Dia. — 13/64" Stud Size — 8 - 10 Wire Size — 12 - 10 |

HOOK TYPE TERMINAL

| |
|---|
| |
| No. 3300 Slot Dia. — 5/32" Stud Size — 4 - 6 Wire Size — 22 - 16 |

BUTT CONNECTORS

| | | |
|-----------------------------------|-----------------------------------|-----------------------------------|
| | | |
| * No. 3101 Wire Size — 22 - 16 | * No. 3102 Wire Size — 16 - 14 | * No. 3103 Wire Size — 12 - 10 |

* These types available in insulated style ... use prefix 6 instead of 2. Thus 2300 becomes 6300.

CONVENIENT \$ PAK



All Lynn Lightning Terminals are available in convenient \$ Paks. When any of the "bins" of the service kit are empty, user merely purchases a refill just right for replacing stock. Refill Paks are well marked for trouble-free handling, and designed with "window" for easy identification. ... \$1.00

BULK PAK

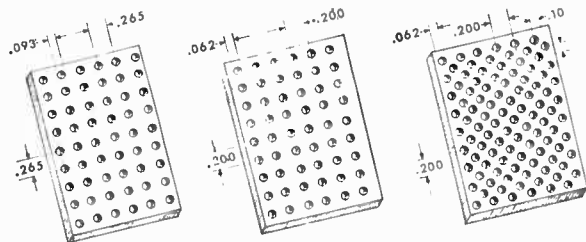
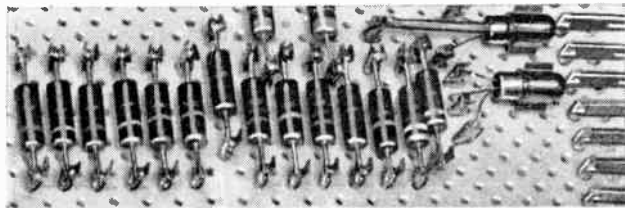


Also available in bulk—packed 100 pieces to a package or in new "Bulko" Paks of 1000 each.

Vector Electronic Company

INCORPORATED
GLENDALE, CALIFORNIA

VECTORBOARD



Pattern A Pattern F Pattern G
Pattern H - .10 x .10 Spacing

VECTORBOARD (Pre-Punched Terminal Board) has precision pre-punched .093" or .062" holes at various spacings on ton XXXP Phenolic (MIL-P-18177) ivory epoxy paper (MIL-P-22324), G-10 Epoxy Glass (MIL-P-1877) or Copper clad epoxy glass type FLGE-91 (MIL-P-13949-B). Ideal for prototypes and many production uses. Vector Push-in Terminals or standard turned terminals and eyelets fit pre-punched holes. User can make own etched circuits with listed copper clad boards. May be sawed, drilled, or punched.

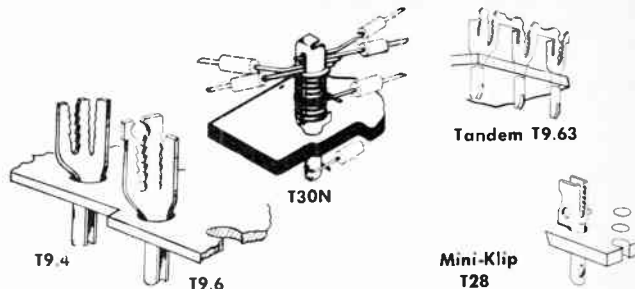
VECTORBOARD TABLE OF SIZES

| Cat. No. | Hole Size | Pattern | Dimensions | No. of Holes | Price 1-19 |
|----------------------------------|-----------|---------|---------------------|--------------|------------|
| XXXP Phenolic | | | | | |
| 18A18 | A | .093 | 4.80 x 4.80 x 1/16 | 18 x 18 | \$.43 |
| 32A9 | A | .093 | 8.51 x 2.41 x 1/16 | 32 x 9 | .45 |
| 32AA18 | A | .093 | 8.51 x 4.80 x 3/32 | 32 x 18 | .84 |
| 64A18 | A | .093 | 4.8 x 16.99 x 1/16 | 64 x 18 | 1.25 |
| 64AA18 | A | .093 | 4.8 x 16.99 x 3/32 | 64 x 18 | 1.60 |
| 64AA32 | A | .093 | 16.99 x 8.51 x 3/32 | 64 x 32 | 2.45 |
| Epoxy Paper | | | | | |
| 32AA18EP | A | .093 | 8.51 x 4.80 x 3/32 | 32 x 18 | 1.40 |
| 64AA18EP | A | .093 | 16.99 x 4.80 x 3/32 | 64 x 18 | 2.73 |
| 64AA32EP | A | .093 | 16.99 x 8.51 x 3/32 | 64 x 32 | 4.39 |
| 85F24EP | F | .062 | 16.99 x 4.80 x 1/16 | 85 x 23 | 2.06 |
| 85G24EP | G | .062 | 16.99 x 4.80 x 1/16 | 2(85 x 23) | 2.06 |
| Epoxy Glass | | | | | |
| 32A18WE | A | .093 | 8.51 x 4.80 x 1/16 | 32 x 18 | 1.89 |
| 42G24WE | G | .062 | 8.5 x 4.80 x 1/16 | 2(42 x 24) | 1.94 |
| 85G24WE | G | .062 | 16.99 x 4.80 x 1/16 | 2(85 x 23) | 3.81 |
| 170H48WE | H | .062 | 17.00 x 4.80 x 1/16 | 170 x 47 | 4.07 |
| Copper Clad XXXP Phenolic | | | | | |
| 849XXXP-1* | F | .062 | 3 x 4 1/2 | 22 x 15 | .45 |
| 849XXXP-2** | F | .062 | 3 x 4 1/2 | 22 x 15 | .55 |
| 850XXXP-1* | F | .062 | 4 1/2 x 6 1/2 | 32 x 22 | .84 |
| 850XXXP-2** | F | .062 | 4 1/2 x 6 1/2 | 32 x 22 | 1.04 |
| 42F22C1* | F | .062 | 4.5 x 8.5 | 42 x 22 | 1.07 |
| 42F22C2** | F | .062 | 4.5 x 8.5 | 42 x 22 | 1.34 |
| Copper Clad Epoxy Paper | | | | | |
| 850EP-1* | F | .062 | 4.5 x 6.5 x 1/16 | | 1.39 |
| 850EP-2** | F | .062 | 4.5 x 6.5 x 1/16 | | 1.67 |
| Copper Clad Epoxy Glass | | | | | |
| 42G22WEC1* | G | .062 | 8.5 x 4.5 x 1/16 | 2(42 x 22) | 2.55 |
| 42G22WEC2** | G | .062 | 8.5 x 4.5 x 1/16 | 2(42 x 22) | 2.60 |
| 85F42WEC1* | F | .062 | 16.99 x 8.51 x 1/16 | 85 x 42 | 9.33 |
| 85F42WEC2** | F | .062 | 16.99 x 8.51 x 1/16 | 85 x 42 | 10.25 |
| 849-1* | F | .062 | 3.0 x 4.5 x 1/16 | 22 x 15 | 1.01 |
| 849-2** | F | .062 | 3.0 x 4.5 x 1/16 | 22 x 15 | 1.10 |
| 850-1* | F | .062 | 4.5 x 6.5 x 1/16 | 32 x 22 | 2.03 |
| 850-2** | F | .062 | 4.5 x 6.5 x 1/16 | 32 x 22 | 2.21 |

*Indicates 2 oz. Copper Clad 1 Side

**Indicates 2 oz. Copper Clad 2 Sides

VECTOR PUSH-IN TERMINALS

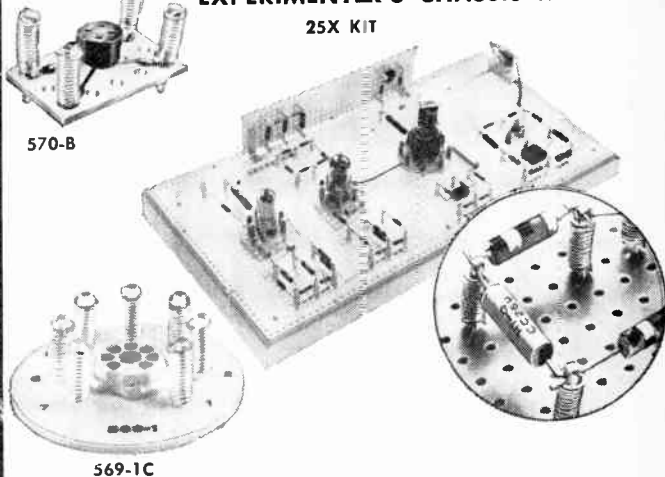


VECTOR PUSH-IN TERMINALS simplify "breadboarding" and production. Push them into .062" or .093" holes in 1/8" or 3/32" Vectorboard panels and they hold without stoking. (May be stoked by dipping off flush with board surface or flattening with a pair of pliers for maximum holding, if desired). All terminals except T9.4A have serrated slots to grip inserted wires. Large slot accommodates most resistor and capacitor wires. Small slot hold transistor leads. The T9.4A is supplied without "teeth" on the wire slots to permit easy removal of leads when soldered components must be changed. The T9.6 has a special "snop-in" slot to accommodate .075-080 diode leads. All types have thru hole construction enabling riser wire to be inserted down through center of terminal, and slot or hole in shank for additional connections.

SOLDERLESS SPRINGCLIP TERMINALS—Reliable truly solderless terminals for fast setup of experimental circuitry. May be used over and over—permits reusing expensive components by eliminating heat damage. Extremely low contact resistance—less than .002 ohms for T30. Order insertion tool P-92A for easy insertion in .093" holes. Suggested board thickness 3/32" for best support of terminal.

| Cat. No. | Fits Holes | Description | Quantity Per Bag | Net Price 1-19 Bags | Bulk Price 1M-4999 |
|----------|------------|---------------------------------------|------------------|---------------------|--------------------|
| T9.4 | .093" | Brass, Fused Tin Pltg. | 100 | \$1.25 | \$ 8.90 M |
| T9.4A | .093" | Brass, Fused Tin Pltg. | 100 | 1.25 | 8.90 M |
| T28 | .062" | Beryllium Copper, Fused Tin Pltg. | 100 | 1.55 | 11.00 M |
| P91 | | Inserting Tool for T28 | 1 | .50 | |
| T30 | .093" | Brass, Silver Pltg. | 10 | 1.20 | |
| T30 | .093" | Brass, Silver Pltg. | 100 | 8.95 | 63.93 M |
| T30N | .093" | Brass, Nickel Pltg. | 10 | 1.15 | |
| T30N | .093" | Brass, Nickel Pltg. | 100 | 8.45 | 58.90 M |
| P92A | | Inserting Tool for T30 & T30N | 1 | .50 | |
| P92B | | Spring Depressing Tool for T30 & T30N | 1 | .25 | |
| T9.62 | .093" | Two T9.6 in Tandem | 25 | 1.22 | |
| T9.63 | .093" | Three T9.6 in Tandem | 25 | 1.75 | |
| T9.64 | .093" | Four T9.6 in Tandem | 25 | 2.27 | |

EXPERIMENTER'S CHASSIS KITS



SOLDERLESS SOCKETS

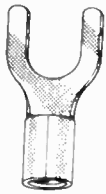
With a Vector Kit you can "breadboard" faster, easier, less expensively and more realistically. All Kits have 3/32" chassis decks with pre-punched over-all grid of .093 holes, T9.4 Push-in Terminals and T30N Solderless Springclips, grid layout paper, wood or aluminum supporting frame, pot and switch brackets, bus strips, setup hardware (screws, nuts, brackets). Tube sockets are furnished as follows: 20X, 21X, 25X; 3-7-p, 2 8-p, 3-9-p. Transistor sockets, 21X: 6 univ. type 22X: 3 power, 4 univ., 2 Tetrode. 25X: 2 power, 4 univ. Eight wafers to make Solderless Sockets (see illus.) furnished in 25X.

| Cat. No. | Description | Net Price 1-19 |
|----------|---|----------------|
| 20X | 4 3/4" x 8 1/2" Deck, acces. above plus 75 T9.4, 20 T30N Springclips | \$ 6.25 |
| 21X | 4 3/4" x 17" Deck, acces. above plus 100 T9.4, 50 T30N Springclips | 15.25 |
| 22X | Miscellaneous Terminals 4 3/4" x 8 1/2" Deck, acces. above plus 75 T9.4, 20 T30N Springclips | \$10.50 |
| 25X | Miscellaneous Terminals 4 3/4" x 17" Deck, acces. above plus 100 T9.4, 100 T30N Springclips | 19.50 |
| 567-1C | Miscellaneous Terminals Solderless Octal Socket | 1.50 |
| 568-1C | Solderless Noval (9-p.) Socket | 1.65 |
| 569-1C | Solderless Miniature (7-p.) Socket | 1.35 |
| 570-B | Solderless Transistor (Univ.) Socket | 1.20 |

WALDOM

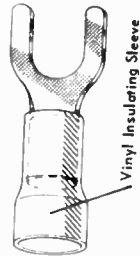
SOLDERLESS TERMINALS AND CONNECTORS

COMPLETE LINE . . . 21 TYPES, 5 CONSTRUCTION STYLES



KRIMPTITE®

Basic non-insulated electro-tin plated copper terminal. One-piece construction for maximum strength and conductivity.



INSULKRIMP®

All advanced features of KRIMPTITE, plus permanently attached rigid vinyl plastic insulating sleeve for increased vibration resistance.



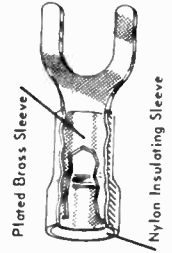
VERSAKRIMP®

Advantageous features of KRIMPTITE plus the higher tensile strength afforded by BRAZED BARREL construction.



VIBRAKRIMP®

Particularly suitable where high vibration is a factor. KRIMPTITE construction plus seamless annealed electro-tin plated brass sleeve.



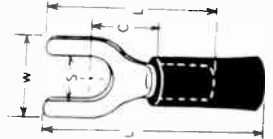
AVIKRIMP®

All VIBRAKRIMP features, tin-plated brass sleeve plus permanently attached overlapping nylon insulating sleeve.

Insulated terminals color coded: 22-18 Red, 16-14 Blue, 12-10 Yellow, 8 Red, 6 Blue

BASIC TERMINAL CONSTRUCTION DETAILS

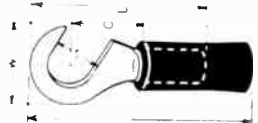
Material: Annealed electrolytic copper, electro-tin finish. Modern one-piece design for maximum strength and conductivity. With strength gusset, open end rapid inspection, beveled edge to facilitate wire insertion. Circumferential serrations for maximum contact area and grip. Full 1/4 inch barrel length, wide crimping area, easy location. Wire ranges 22-18, .032 stock. Wire Ranges 12-10, .040 stock. Terminals in 22-18 and 16-14 wire ranges. Are available with 5/32" barrel by adding "S" to front of part desired. Listed by Underwriter Labs., Inc.



SPADE TONGUE TERMINALS

| Wire Range | Basic Dimensions | | | KRIMPTITE | | INSULKRIMP | | | VERSAKRIMP | | VIBRAKRIMP | | | AVIKRIMP | | |
|------------|------------------|---------|-------------|-----------|----------|-------------------------------|-------------------------------|----------|------------|----------|-------------------------------|----------|----------|-------------------------------|----------|----------|
| | Stud Size S | Width W | Clearance C | Cot. No. | Length L | .125 Max. Insulation Diameter | .145 Max. Insulation Diameter | Length L | Cot. No. | Length L | .145 Max. Insulation Diameter | Cot. No. | Length L | .145 Max. Insulation Diameter | Cot. No. | Length L |
| 22-18 | 3-4 | 1/4 | 7/32 | S-1116 | 5/8 | T-2116 | T-2116X | 13/16 | B-3116 | 5/8 | D-4116 | | 25/32 | N-5116 | | 13/16 |
| | 3-4 | 19/64 | 7/32 | S-1117 | 5/8 | T-2117 | T-2117X | 13/16 | B-3117 | 5/8 | D-4117 | | 25/32 | N-5117 | | 13/16 |
| | 5-6 | 1/4 | 7/32 | S-1118 | 5/8 | T-2118 | T-2118X | 13/16 | B-3118 | 5/8 | D-4118 | | 25/32 | N-5118 | | 13/16 |
| | 5-6 | 19/64 | 7/32 | S-1014 | 5/8 | T-2014 | T-2014X | 13/16 | B-3014 | 5/8 | D-4014 | | 25/32 | N-5014 | | 13/16 |
| | 5-6 | 5/16 | 5/16 | S-1029 | 3/4 | T-2029 | T-2029X | 15/16 | B-3029 | 3/4 | D-4029 | | 29/32 | N-5029 | | 15/16 |
| | 8 | 1/4 | 7/32 | S-1119 | 5/8 | T-2119 | T-2119X | 13/16 | B-3119 | 5/8 | D-4119 | | 25/32 | N-5119 | | 13/16 |
| | 8 | 19/64 | 7/32 | S-1030 | 5/8 | T-2030 | T-2030X | 13/16 | B-3030 | 5/8 | D-4030 | | 25/32 | N-5030 | | 13/16 |
| | 8 | 5/16 | 5/16 | S-1031 | 3/4 | T-2031 | T-2031X | 15/16 | B-3031 | 3/4 | D-4031 | | 29/32 | N-5031 | | 15/16 |
| | 10 | 19/64 | 7/32 | S-1120 | 5/8 | T-2120 | T-2120X | 13/16 | B-3120 | 5/8 | D-4120 | | 25/32 | N-5120 | | 13/16 |
| | 10 | 5/16 | 5/16 | S-1032 | 3/4 | T-2032 | T-2032X | 15/16 | B-3032 | 3/4 | D-4032 | | 29/32 | N-5032 | | 15/16 |
| 16-14 | 3-4 | 1/4 | 7/32 | S-1121 | 5/8 | T-2121 | T-2121X | 13/16 | B-3121 | 5/8 | D-4121 | | 25/32 | N-5121 | | 13/16 |
| | 3-4 | 19/64 | 7/32 | S-1122 | 5/8 | T-2122 | T-2122X | 13/16 | B-3122 | 5/8 | D-4122 | | 25/32 | N-5122 | | 13/16 |
| | 5-6 | 1/4 | 7/32 | S-1123 | 5/8 | T-2123 | T-2123X | 13/16 | B-3123 | 5/8 | D-4123 | | 25/32 | N-5123 | | 13/16 |
| | 5-6 | 19/64 | 7/32 | S-1015 | 5/8 | T-2015 | T-2015X | 13/16 | B-3015 | 5/8 | D-4015 | | 25/32 | N-5015 | | 13/16 |
| | 5-6 | 23/64 | 9/32 | S-1051 | 3/4 | T-2051 | T-2051X | 15/16 | B-3051 | 3/4 | D-4051 | | 29/32 | N-5051 | | 15/16 |
| | 8 | 1/4 | 7/32 | S-1124 | 5/8 | T-2124 | T-2124X | 13/16 | B-3124 | 5/8 | D-4124 | | 25/32 | N-5124 | | 13/16 |
| | 8 | 19/64 | 7/32 | S-1033 | 5/8 | T-2033 | T-2033X | 13/16 | B-3033 | 5/8 | D-4033 | | 25/32 | N-5033 | | 13/16 |
| | 8 | 23/64 | 9/32 | S-1052 | 3/4 | T-2052 | T-2052X | 15/16 | B-3052 | 3/4 | D-4052 | | 29/32 | N-5052 | | 15/16 |
| | 10 | 19/64 | 7/32 | S-1104 | 5/8 | T-2104 | T-2104X | 13/16 | B-3104 | 5/8 | D-4104 | | 25/32 | N-5104 | | 13/16 |
| | 10 | 23/64 | 9/32 | S-1016 | 3/4 | T-2016 | T-2016X | 15/16 | B-3016 | 3/4 | D-4016 | | 29/32 | N-5016 | | 15/16 |
| 12-10 | 5-6 | 3/8 | 5/16 | S-1053 | 25/32 | T-2053 | T-2053X | 1-3/32 | B-3053 | 25/32 | D-4053 | D-4053X | 1-1/32 | N-5053 | N-5053X | 1-5/64 |
| | 8 | 3/8 | 5/16 | S-1054 | 25/32 | T-2054 | T-2054X | 1-3/32 | B-3054 | 25/32 | D-4054 | D-4054X | 1-1/32 | N-5054 | N-5054X | 1-5/64 |
| | 10 | 3/8 | 5/16 | S-1017 | 25/32 | T-2017 | T-2017X | 1-3/32 | B-3017 | 25/32 | D-4017 | D-4017X | 1-1/32 | N-5017 | N-5017X | 1-5/64 |

HOOK TONGUE TERMINALS

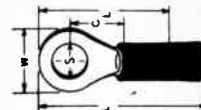
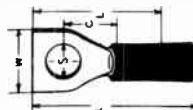


| Wire Range | Basic Dimensions | | | KRIMPTITE | | INSULKRIMP | | | VERSAKRIMP | | VIBRAKRIMP | | | AVIKRIMP | | |
|------------|------------------|---------|-------------|-----------|----------|-------------------------------|-------------------------------|----------|------------|----------|-------------------------------|----------|----------|-------------------------------|----------|----------|
| | Stud Size S | Width W | Clearance C | Cot. No. | Length L | .125 Max. Insulation Diameter | .145 Max. Insulation Diameter | Length L | Cot. No. | Length L | .145 Max. Insulation Diameter | Cot. No. | Length L | .145 Max. Insulation Diameter | Cot. No. | Length L |
| 22-18 | 5-6 | 5/16 | 5/16 | S-1018 | 23/32 | T-2018 | T-2018X | 29/32 | B-3018 | 23/32 | D-4018 | | 7/8 | N-5018 | | 29/32 |
| | 8 | 5/16 | 5/16 | S-1036 | 23/32 | T-2036 | T-2036X | 29/32 | B-3036 | 23/32 | D-4036 | | 7/8 | N-5036 | | 29/32 |
| | 10 | 5/16 | 5/16 | S-1037 | 23/32 | T-2037 | T-2037X | 29/32 | B-3037 | 23/32 | D-4037 | | 7/8 | N-5037 | | 29/32 |
| 16-14 | 5-6 | 11/32 | 9/32 | S-1038 | 23/32 | T-2038 | T-2038X | 29/32 | B-3038 | 23/32 | D-4038 | | 7/8 | N-5038 | | 29/32 |
| | 8 | 11/32 | 9/32 | S-1039 | 23/32 | T-2039 | T-2039X | 29/32 | B-3039 | 23/32 | D-4039 | | 7/8 | N-5039 | | 29/32 |
| | 10 | 11/32 | 9/32 | S-1040 | 23/32 | T-2040 | T-2040X | 29/32 | B-3040 | 23/32 | D-4040 | | 7/8 | N-5040 | | 29/32 |
| 12-10 | 5-6 | 3/8 | 5/16 | S-1057 | 3/4 | T-2057 | T-2057X | 1-1/16 | B-3057 | 3/4 | D-4057 | D-4057X | 1 | N-5057 | N-5057X | 1-3/64 |
| | 8 | 3/8 | 5/16 | S-1058 | 3/4 | T-2058 | T-2058X | 1-1/16 | B-3058 | 3/4 | D-4058 | D-4058X | 1 | N-5058 | N-5058X | 1-3/64 |
| | 10 | 3/8 | 5/16 | S-1045 | 3/4 | T-2045 | T-2045X | 1-1/16 | B-3045 | 3/4 | D-4045 | D-4045X | 1 | N-5045 | N-5045X | 1-3/64 |

WALDOM ELECTRONICS INC., CHICAGO 32, ILLINOIS.

WALDOM**SOLDERLESS TERMINALS AND CONNECTORS**

Rectangular Tongue



Ring Tongue

RECTANGULAR TONGUE TERMINALS - Not available with 5/32" barrel

| Wire Range | Basic Dimensions | | | KRIMPTITE | | INSULKRIMP | | | VERSAKRIMP | | VIBRAKRIMP | | AVIKRIMP | | | |
|------------|------------------|---------|-------------|-----------|----------|-------------------------------|-------------------------------|----------|------------|----------|-------------------------------|-----------|-----------|-------------------------------|----------|----------|
| | Stud Size S | Width W | Clearance C | Cat. No. | Length L | .125 Max. Insulation Diameter | .145 Max. Insulation Diameter | Length L | Cat. No. | Length L | .145 Max. Insulation Diameter | Cat. No. | Length L | .145 Max. Insulation Diameter | Cat. No. | Length L |
| 22-18 | 3-4 | 1/4 | 7/32 | S-1127 | 5/8 | T-2127 | T-2127X | 13/16 | B-3127 | 5/8 | D-4127 | | 25/32 | N-5127 | | 13/16 |
| | 3-4 | 19/64 | 7/32 | S-1128 | 5/8 | T-2128 | T-2128X | 13/16 | B-3128 | 5/8 | D-4128 | | 25/32 | N-5128 | | 13/16 |
| | 5-6 | 1/4 | 7/32 | S-1129 | 5/8 | T-2129 | T-2129X | 13/16 | B-3129 | 5/8 | D-4129 | | 25/32 | N-5129 | | 13/16 |
| | 5-6 | 19/64 | 7/32 | S-1071 | 5/8 | T-2071 | T-2071X | 13/16 | B-3071 | 5/8 | D-4071 | | 25/32 | N-5071 | | 13/16 |
| | 5-6 | 5/16 | 5/16 | S-1130 | 3/4 | T-2130 | T-2130X | 15/16 | B-3130 | 3/4 | D-4130 | | 29/32 | N-5130 | | 15/16 |
| | 8 | 1/4 | 7/32 | S-1131 | 5/8 | T-2131 | T-2131X | 13/16 | B-3131 | 5/8 | D-4131 | | 25/32 | N-5131 | | 13/16 |
| | 8 | 19/64 | 7/32 | S-1072 | 5/8 | T-2072 | T-2072X | 13/16 | B-3072 | 5/8 | D-4072 | | 25/32 | N-5072 | | 13/16 |
| | 8 | 5/16 | 5/16 | S-1132 | 3/4 | T-2132 | T-2132X | 15/16 | B-3132 | 3/4 | D-4132 | | 29/32 | N-5132 | | 15/16 |
| | 10 | 19/64 | 7/32 | S-1073 | 5/8 | T-2073 | T-2073X | 13/16 | B-3073 | 5/8 | D-4073 | | 25/32 | N-5073 | | 13/16 |
| | 10 | 5/16 | 5/16 | S-1133 | 3/4 | T-2133 | T-2133X | 15/16 | B-3133 | 3/4 | D-4133 | | 29/32 | N-5133 | | 15/16 |
| 16-14 | | | | | | .155 Max. | .175 Max. | | | | .175 Max. | | | .175 Max. | | |
| | 3-4 | 1/4 | 7/32 | S-1134 | 5/8 | T-2134 | T-2134X | 13/16 | B-3134 | 5/8 | D-4134 | | 25/32 | N-5134 | | 13/16 |
| | 3-4 | 19/64 | 7/32 | S-1135 | 5/8 | T-2135 | T-2135X | 13/16 | B-3135 | 5/8 | D-4135 | | 25/32 | N-5135 | | 13/16 |
| | 5-6 | 1/4 | 7/32 | S-1136 | 5/8 | T-2136 | T-2136X | 13/16 | B-3136 | 5/8 | D-4136 | | 25/32 | N-5136 | | 13/16 |
| | 5-6 | 19/64 | 7/32 | S-1074 | 5/8 | T-2074 | T-2074X | 13/16 | B-3074 | 5/8 | D-4074 | | 25/32 | N-5074 | | 13/16 |
| | 5-6 | 23/64 | 9/32 | S-1137 | 3/4 | T-2137 | T-2137X | 15/16 | B-3137 | 3/4 | D-4137 | | 29/32 | N-5137 | | 15/16 |
| | 8 | 1/4 | 7/32 | S-1138 | 5/8 | T-2138 | T-2138X | 13/16 | B-3138 | 5/8 | D-4138 | | 25/32 | N-5138 | | 13/16 |
| | 8 | 19/64 | 7/32 | S-1075 | 5/8 | T-2075 | T-2075X | 13/16 | B-3075 | 5/8 | D-4075 | | 25/32 | N-5075 | | 13/16 |
| | 8 | 23/64 | 9/32 | S-1139 | 3/4 | T-2139 | T-2139X | 15/16 | B-3139 | 3/4 | D-4139 | | 29/32 | N-5139 | | 15/16 |
| | 10 | 19/64 | 7/32 | S-1076 | 5/8 | T-2076 | T-2076X | 13/16 | B-3076 | 5/8 | D-4076 | | 25/32 | N-5076 | | 13/16 |
| 10 | 23/64 | 9/32 | S-1140 | 3/4 | T-2140 | T-2140X | 15/16 | B-3140 | 3/4 | D-4140 | | 29/32 | N-5140 | | 15/16 | |
| 12-10 | | | | | | .215 Max. | .255 Max. | | | | .235 Max. | .255 Max. | .235 Max. | .255 Max. | | |
| | 5-6 | 3/8 | 5/16 | S-1077 | 25/32 | T-2077 | T-2077X | 1-3/32 | B-3077 | 25/32 | D-4077 | D-4077X | 1-1/32 | N-5077 | N-5077X | 1-5/64 |
| | 8 | 3/8 | 5/16 | S-1078 | 25/32 | T-2078 | T-2078X | 1-3/32 | B-3078 | 25/32 | D-4078 | D-4078X | 1-1/32 | N-5078 | N-5078X | 1-5/64 |
| | 10 | 3/8 | 5/16 | S-1079 | 25/32 | T-2079 | T-2079X | 1-3/32 | B-3079 | 25/32 | D-4079 | D-4079X | 1-1/32 | N-5079 | N-5079X | 1-5/64 |

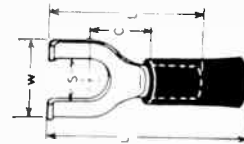
RING TONGUE TERMINALS

| Wire Range | Stud Size S | Width W | Clearance C | Cat. No. | Length L | .125 Max. | .145 Max. | Length L | Cat. No. | Length L | .145 Max. | Cat. No. | Length L | .145 Max. | Cat. No. | Length L |
|------------|-------------|---------|-------------|----------|----------|---------------------|---------------------|-----------|----------|----------|---------------------|-----------|-----------|---------------------|-----------|----------|
| | | | | | | Insulation Diameter | Insulation Diameter | | | | Insulation Diameter | | | Insulation Diameter | | |
| 22-18 | 2 | 7/32 | 5/32 | S-1099 | 33/64 | T-2099 | T-2099X | 45/64 | B-3099 | 33/64 | D-4099 | | 43/64 | N-5099 | | 45/64 |
| | 3-4 | 7/32 | 5/32 | S-1047 | 33/64 | T-2047 | T-2047X | 45/64 | B-3047 | 33/64 | D-4047 | | 43/64 | N-5047 | | 45/64 |
| | 3-4 | 9/32 | 1/4 | S-1096 | 41/64 | T-2096 | T-2096X | 53/64 | B-3096 | 41/64 | D-4096 | | 51/64 | N-5096 | | 53/64 |
| | 5-6 | 7/32 | 5/32 | S-1001 | 33/64 | T-2001 | T-2001X | 45/64 | B-3001 | 33/64 | D-4001 | | 43/64 | N-5001 | | 45/64 |
| | 5-6 | 9/32 | 1/4 | S-1002 | 41/64 | T-2002 | T-2002X | 53/64 | B-3002 | 41/64 | D-4002 | | 51/64 | N-5002 | | 53/64 |
| | 5-6 | 5/16 | 5/16 | S-1103 | 23/32 | T-2103 | T-2103X | 29/32 | B-3103 | 23/32 | D-4103 | | 7/8 | N-5103 | | 29/32 |
| | 8 | 9/32 | 1/4 | S-1097 | 41/64 | T-2097 | T-2097X | 53/64 | B-3097 | 41/64 | D-4097 | | 51/64 | N-5097 | | 53/64 |
| | 8 | 5/16 | 5/16 | S-1021 | 23/32 | T-2021 | T-2021X | 29/32 | B-3021 | 23/32 | D-4021 | | 7/8 | N-5021 | | 29/32 |
| | 10 | 9/32 | 1/4 | S-1098 | 41/64 | T-2098 | T-2098X | 53/64 | B-3098 | 41/64 | D-4098 | | 51/64 | N-5098 | | 53/64 |
| | 10 | 5/16 | 5/16 | S-1003 | 23/32 | T-2003 | T-2003X | 29/32 | B-3003 | 23/32 | D-4003 | | 7/8 | N-5003 | | 29/32 |
| | 10 | 15/32 | .400 | S-1111 | 57/64 | T-2111 | T-2111X | 1-5/64 | B-3111 | 57/64 | D-4111 | | 1-3/64 | N-5111 | | 1-5/64 |
| | 10 | 9/16 | 9/16 | S-1141 | 1-7/64 | T-2141 | T-2141X | 1-19/64 | B-3141 | 1-7/64 | D-4141 | | 1-17/64 | N-5141 | | 1-19/64 |
| | 1/4 | 15/32 | .400 | S-1004 | 57/64 | T-2004 | T-2004X | 1-5/64 | B-3004 | 57/64 | D-4004 | | 1-3/64 | N-5004 | | 1-5/64 |
| | 1/4 | 9/16 | 9/16 | S-1179 | 1-7/64 | T-2179 | T-2179X | 1-19/64 | B-3179 | 1-7/64 | D-4179 | | 1-17/64 | N-5179 | | 1-19/64 |
| | 5/16 | 15/32 | .400 | S-1005 | 57/64 | T-2005 | T-2005X | 1-5/64 | B-3005 | 57/64 | D-4005 | | 1-3/64 | N-5005 | | 1-5/64 |
| | 5/16 | 9/16 | 9/16 | S-1142 | 1-7/64 | T-2142 | T-2142X | 1-19/64 | B-3142 | 1-7/64 | D-4142 | | 1-17/64 | N-5142 | | 1-19/64 |
| | 3/8 | 9/16 | 9/16 | S-1143 | 1-7/64 | T-2143 | T-2143X | 1-19/64 | B-3143 | 1-7/64 | D-4143 | | 1-17/64 | N-5143 | | 1-19/64 |
| | 16-14 | | | | | | .155 Max. | .175 Max. | | | | .175 Max. | | | .175 Max. | |
| 2 | | 1/4 | 7/32 | S-1102 | 19/32 | T-2102 | T-2102X | 25/32 | B-3102 | 19/32 | D-4102 | | 3/4 | N-5102 | | 25/32 |
| 3-4 | | 1/4 | 7/32 | S-1048 | 19/32 | T-2048 | T-2048X | 25/32 | B-3048 | 19/32 | D-4048 | | 3/4 | N-5048 | | 25/32 |
| 3-4 | | 5/16 | 9/32 | S-1112 | 45/64 | T-2112 | T-2112X | 57/64 | B-3112 | 45/64 | D-4112 | | 55/64 | N-5112 | | 57/64 |
| 3-4 | | 11/32 | 5/16 | S-1095 | 47/64 | T-2095 | T-2095X | 59/64 | B-3095 | 47/64 | D-4095 | | 57/64 | N-5095 | | 59/64 |
| 5-6 | | 1/4 | 7/32 | S-1006 | 19/32 | T-2006 | T-2006X | 25/32 | B-3006 | 19/32 | D-4006 | | 3/4 | N-5006 | | 25/32 |
| 5-6 | | 5/16 | 9/32 | S-1007 | 45/64 | T-2007 | T-2007X | 57/64 | B-3007 | 45/64 | D-4007 | | 55/64 | N-5007 | | 57/64 |
| 5-6 | | 11/32 | 5/16 | S-1092 | 47/64 | T-2092 | T-2092X | 59/64 | B-3092 | 47/64 | D-4092 | | 57/64 | N-5092 | | 59/64 |
| 8 | | 1/4 | 7/32 | S-1113 | 19/32 | T-2113 | T-2113X | 25/32 | B-3113 | 19/32 | D-4113 | | 3/4 | N-5113 | | 25/32 |
| 8 | | 5/16 | 9/32 | S-1024 | 45/64 | T-2024 | T-2024X | 57/64 | B-3024 | 45/64 | D-4024 | | 55/64 | N-5024 | | 57/64 |
| 8 | | 11/32 | 5/16 | S-1093 | 47/64 | T-2093 | T-2093X | 59/64 | B-3093 | 47/64 | D-4093 | | 57/64 | N-5093 | | 59/64 |
| 10 | | 5/16 | 9/32 | S-1008 | 45/64 | T-2008 | T-2008X | 57/64 | B-3008 | 45/64 | D-4008 | | 55/64 | N-5008 | | 57/64 |
| 10 | | 11/32 | 5/16 | S-1094 | 47/64 | T-2094 | T-2094X | 59/64 | B-3094 | 47/64 | D-4094 | | 57/64 | N-5094 | | 59/64 |
| 10 | | 15/32 | .400 | S-1106 | 57/64 | T-2106 | T-2106X | 1-5/64 | B-3106 | 57/64 | D-4106 | | 1-3/64 | N-5106 | | 1-5/64 |
| 10 | | 9/16 | 9/16 | S-1144 | 1-7/64 | T-2144 | T-2144X | 1-19/64 | B-3144 | 1-7/64 | D-4144 | | 1-17/64 | N-5144 | | 1-19/64 |
| 1/4 | | 15/32 | .400 | S-1009 | 57/64 | T-2009 | T-2009X | 1-5/64 | B-3009 | 57/64 | D-4009 | | 1-3/64 | N-5009 | | 1-5/64 |
| 1/4 | | 9/16 | 9/16 | S-1145 | 1-7/64 | T-2145 | T-2145X | 1-19/64 | B-3145 | 1-7/64 | D-4145 | | 1-17/64 | N-5145 | | 1-19/64 |
| 5/16 | | 15/32 | .400 | S-1041 | 57/64 | T-2041 | T-2041X | 1-5/64 | B-3041 | 57/64 | D-4041 | | 1-3/64 | N-5041 | | 1-5/64 |
| 5/16 | 9/16 | 9/16 | S-1146 | 1-7/64 | T-2146 | T-2146X | 1-19/64 | B-3146 | 1-7/64 | D-4146 | | 1-17/64 | N-5146 | | 1-19/64 | |
| 3/8 | 9/16 | 9/16 | S-1147 | 1-7/64 | T-2147 | T-2147X | 1-19/64 | B-3147 | 1-7/64 | D-4147 | | 1-17/64 | N-5147 | | 1-19/64 | |
| 12-10 | | | | | | .215 Max. | .255 Max. | | | | .235 Max. | .255 Max. | .235 Max. | .255 Max. | | |
| | 3/4 | 9/32 | 5/16 | S-1148 | 45/64 | T-2148 | T-2148X | 1-1/64 | B-3148 | 45/64 | D-4148 | D-4148X | 61/64 | N-5148 | N-5148X | 1 |
| | 3/4 | 3/8 | 5/16 | S-1114 | 3/4 | T-2114 | T-2114X | 1-1/16 | B-3114 | 3/4 | D-4114 | D-4114X | 1 | N-5114 | N-5114X | 1-3/64 |
| | 5-6 | 9/32 | 5/16 | S-1149 | 45/64 | T-2149 | T-2149X | 1-1/64 | B-3149 | 45/64 | D-4149 | D-4149X | 61/64 | N-5149 | N-5149X | 1 |
| | 5-6 | 3/8 | 5/16 | S-1049 | 3/4 | T-2049 | T-2049X | 1-1/16 | B-3049 | 3/4 | D-4049 | D-4049X | 1 | N-5049 | N-5049X | 1-3/64 |
| | 8 | 9/32 | 5/16 | S-1150 | 45/64 | T-2150 | T-2150X | 1-1/64 | B-3150 | 45/64 | D-4150 | D-4150X | 61/64 | N-5150 | N-5150X | 1 |
| | 8 | 3/8 | 5/16 | S-1050 | 3/4 | T | | | | | | | | | | |



SOLDERLESS TERMINALS AND CONNECTORS

FLANGED SPADE TERMINALS



| Wire Range | Basic Dimensions | | | KRIMPTITE | | INSULKRIMP | | | VERSAKRIMP | | VIBRAKRIMP | | AVIKRIMP | | | |
|------------|------------------|---------|-------------|-----------|----------|-------------------------------|-------------------------------|----------|------------|----------|-------------------------------|----------|----------|-------------------------------|----------|----------|
| | Stud Size S | Width W | Clearance C | Cat. No. | Length L | .125 Max. Insulation Diameter | .145 Max. Insulation Diameter | Length L | Cat. No. | Length L | .145 Max. Insulation Diameter | Cat. No. | Length L | .145 Max. Insulation Diameter | Cat. No. | Length L |
| 22-18 | 3-4 | 19/64 | 7/32 | S-1125 | 5/8 | T-2125 | T-2125X | 13/16 | B-3125 | 5/8 | D-4125 | | 25/32 | N-5125 | | 13/16 |
| | 5-6 | 19/64 | 7/32 | S-1080 | 5/8 | T-2080 | T-2080X | 13/16 | B-3080 | 5/8 | D-4080 | | 25/32 | N-5080 | | 13/16 |
| | 8 | 19/64 | 7/32 | S-1081 | 5/8 | T-2081 | T-2081X | 13/16 | B-3081 | 5/8 | D-4081 | | 25/32 | N-5081 | | 13/16 |
| | 10 | 19/64 | 7/32 | S-1082 | 5/8 | T-2082 | T-2082X | 13/16 | B-3082 | 5/8 | D-4082 | | 25/32 | N-5082 | | 13/16 |
| 16-14 | 3-4 | 19/64 | 7/32 | S-1126 | 5/8 | T-2126 | T-2126X | 13/16 | B-3126 | 5/8 | D-4126 | | 25/32 | N-5126 | | 13/16 |
| | 5-6 | 19/64 | 7/32 | S-1083 | 5/8 | T-2083 | T-2083X | 13/16 | B-3083 | 5/8 | D-4083 | | 25/32 | N-5083 | | 13/16 |
| | 8 | 19/64 | 7/32 | S-1084 | 5/8 | T-2084 | T-2084X | 13/16 | B-3084 | 5/8 | D-4084 | | 25/32 | N-5084 | | 13/16 |
| | 10 | 19/64 | 7/32 | S-1085 | 5/8 | T-2085 | T-2085X | 13/16 | B-3085 | 5/8 | D-4085 | | 25/32 | N-5085 | | 13/16 |
| 12-10 | 5-6 | 3/8 | 5/16 | S-1086 | 3/4 | T-2086 | T-2086X | 1-1/16 | B-3086 | 3/4 | D-4086 | | 1 | N-5086 | N-5086X | 1-3/64 |
| | 8 | 3/8 | 5/16 | S-1087 | 3/4 | T-2087 | T-2087X | 1-1/16 | B-3087 | 3/4 | D-4087 | | 1 | N-5087 | N-5087X | 1-3/64 |
| | 10 | 3/8 | 5/16 | S-1088 | 3/4 | T-2088 | T-2088X | 1-1/16 | B-3088 | 3/4 | D-4088 | | 1 | N-5088 | N-5088X | 1-3/64 |
| | | | | | | | | | | | | | | | | |

FLAG TYPE TERMINALS-CLOSED AND OPEN



| Wire Range | Basic Dimensions | | | | KRIMPTITE | | KRIMPTITE | |
|------------|------------------|-----------------|-------------|-------|----------------|----------|----------------|----------|
| | Stud Size S | Maximum Width W | Clearance C | Stock | Catalog Number | Length L | Catalog Number | Length L |
| 22-18 | 5-6 | 3/8 | 5/16 | .032 | S-1059 | 5/8 | S-1156 | 5/8 |
| | 8 | 3/8 | 5/16 | .032 | S-1060 | 5/8 | S-1157 | 5/8 |
| | 10 | 3/8 | 5/16 | .032 | S-1043 | 5/8 | S-1158 | 5/8 |
| 16-14 | 5-6 | 3/8 | 5/16 | .032 | S-1061 | 21/32 | S-1159 | 21/32 |
| | 8 | 3/8 | 5/16 | .032 | S-1062 | 21/32 | S-1160 | 21/32 |
| | 10 | 3/8 | 5/16 | .032 | S-1044 | 21/32 | S-1161 | 21/32 |
| 12-10 | 5-6 | 3/8 | 5/16 | .040 | S-1108 | 23/32 | S-1162 | 23/32 |
| | 8 | 3/8 | 5/16 | .040 | S-1109 | 23/32 | S-1163 | 23/32 |
| | 10 | 3/8 | 5/16 | .040 | S-1110 | 23/32 | S-1164 | 23/32 |

Insulated Snap Plug Receptacle

An insulated connector for use with S-1055, T-2055, T-2055X, or D-4055 only. One snap plug is inserted in either end of the receptacle. Tubular Shell is high impact transparent Styrene.

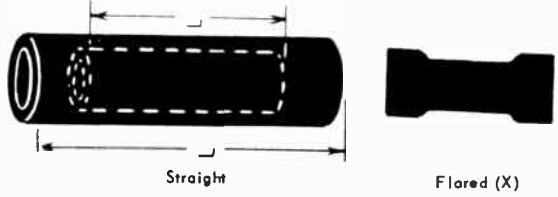


Cat. No. PR-1426

SNAP PLUGS

| Wire Range | Basic Dimensions | | | KRIMPTITE | | INSULKRIMP | | VIBRAKRIMP | | AVIKRIMP | |
|------------|------------------|---------------|------------|----------------|----------|-------------------------------|-------------------------------|------------|-------------------------------|----------|-------------------------------|
| | Length L | Bore Length B | Diameter D | Catalog Number | Length L | .155 Max. Insulation Diameter | .175 Max. Insulation Diameter | Length L | .175 Max. Insulation Diameter | Length L | .175 Max. Insulation Diameter |
| 16-14 | 35/64 | 3/16 | .176 | S-1056 | 35/64 | T-2056 | T-2056X | 51/64 | D-4056 | 49/64 | N-5056 |
| 16-14 | 19/32 | 3/16 | .157 | S-1055 | 19/32 | T-2055 | T-2055X | 27/32 | D-4055 | 13/16 | N-5055 |

BUTT CONNECTORS



PARALLEL CONNECTORS



Wire ranges represent cumulative totals of wires used.

| Wire Range | KRIMPTITE | | INSULKRIMP | | | VERSAKRIMP | | Wire Range | KRIMPTITE | | INSULKRIMP | | | VERSAKRIMP | |
|------------|-------------|------------------|--------------------|---------------------|------------------|-------------|------------------|------------|-------------|------------------|--------------------|---------------------|------------------|-------------|------------------|
| | Catalog No. | Overall Length L | Catalog No. | Catalog No. | Overall Length L | Catalog No. | Overall Length L | | Catalog No. | Overall Length L | Catalog No. | Catalog No. | Overall Length L | Catalog No. | Overall Length L |
| 22-18 | S-1019 | 9/16 | T-2019 (.125 I.D.) | T-2019X (.145 I.D.) | 15/16 | B-3019S | 21/32 | 22-18 | S-1105 | 5/16 | T-2105 (.125 I.D.) | T-2105X (.145 I.D.) | 11/16 | B-3105S | 5/16 |
| 16-14 | S-1020 | 9/16 | T-2020 (.155 I.D.) | T-2020X (.175 I.D.) | 15/16 | B-3020S | 21/32 | 16-14 | S-1063 | 5/16 | T-2063 (.155 I.D.) | T-2063X (.175 I.D.) | 11/16 | B-3063S | 5/16 |
| 12-10 | S-1046 | 9/16 | T-2046 (.215 I.D.) | T-2046X (.255 I.D.) | 1-1/16 | B-3046S | 21/32 | 12-10 | S-1064 | 5/16 | T-2064 (.215 I.D.) | T-2064X (.255 I.D.) | 25/32 | B-3064S | 5/16 |

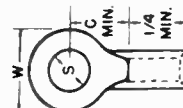
WALDOM ELECTRONICS INC., CHICAGO 32, ILLINOIS

WALDOM**SOLDERLESS TERMINALS AND CONNECTORS****HEAVY DUTY TERMINALS**

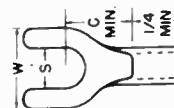
(USE 12-10 TOOLING)

RING TONGUE .050 STOCK

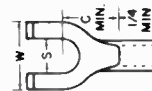
These terminals are formed from heavier stock (full .050") to resist heavy vibration that fractures standard terminals.



| Wire Range | Basic Dimensions | | | KRIMPTITE | | INSULKRIMP | | | VIBRAKRIMP | | | AVIKRIMP | | |
|------------|------------------|-----------------------|------------------------|-------------------------------|----------------------------|-------------------------------|----------------------------------|-------------------------------|-------------------------------|----------------------------------|------------------------------|-------------------------------|----------------------------------|-----------------------------|
| | Stud Size S | Width W | Clearance C | Catalog Number | Length L | .215 Max. Insulation Diameter | .255 Max. Insulation Diameter | Length L | .235 Max. Insulation Diameter | .255 Max. Insulation Diameter | Length L | .235 Max. Insulation Diameter | .255 Max. Insulation Diameter | Length L |
| 16-14 | 3-4 | 9/32 3/8 | 5/16 5/16 | S-1401H S-1402H | 45/64 3/4 | T-2401H T-2402H | T-2401HX T-2402HX | 1-1/64 1-1/16 | D-4401H D-4402H | D-4401HX D-4402HX | 61/64 1 | N-5401H N-5402H | N-5401HX N-5402HX | 1 1-3/64 |
| | 5-6 | 9/32 3/8 | 5/16 5/16 | S-1403H S-1404H | 45/64 3/4 | T-2403H T-2404H | T-2403HX T-2404HX | 1-1/64 1-1/16 | D-4403H D-4404H | D-4403HX D-4404HX | 61/64 1 | N-5403H N-5404H | N-5403HX N-5404HX | 1 1-3/64 |
| | 8 | 9/32 3/8 | 5/16 5/16 | S-1405H S-1406H | 45/64 3/4 | T-2405H T-2406H | T-2405HX T-2406HX | 1-1/64 1-1/16 | D-4405H D-4406H | D-4405HX D-4406HX | 61/64 1 | N-5405H N-5406H | N-5405HX N-5406HX | 1 1-3/64 |
| | 10 | 3/8 17/32 19/32 | 5/16 13/32 31/64 | S-1407H S-1408H S-1409H | 3/4 59/64 1-1/32 | T-2407H T-2408H T-2409H | T-2407HX T-2408HX T-2409HX | 1-1/16 1-15/64 1-11/32 | D-4407H D-4408H D-4409H | D-4407HX D-4408HX D-4409HX | 1 1-11/64 1-9/32 | N-5407H N-5408H N-5409H | N-5407HX N-5408HX N-5409HX | 1-3/64 1-7/32 1-21/64 |
| | 1/4 | 17/32 19/32 3/4 | 13/32 31/64 5/8 | S-1410H S-1411H S-1412H | 59/64 1-1/32 1-17/64 | T-2410H T-2411H T-2412H | T-2410HX T-2411HX T-2412HX | 1-15/64 1-11/32 1-37/64 | D-4410H D-4411H D-4412H | D-4410HX D-4411HX D-4412HX | 1-11/64 1-9/32 1-33/64 | N-5410H N-5411H N-5412H | N-5410HX N-5411HX N-5412HX | 1-7/32 1-21/64 1-9/16 |
| | 5/16 | 17/32 19/32 3/4 | 13/32 31/64 5/8 | S-1413H S-1414H S-1415H | 59/64 1-1/32 1-17/64 | T-2413H T-2414H T-2415H | T-2413HX T-2414HX T-2415HX | 1-15/64 1-11/32 1-37/64 | D-4413H D-4414H D-4415H | D-4413HX D-4414HX D-4415HX | 1-11/64 1-9/32 1-33/64 | N-5413H N-5414H N-5415H | N-5413HX N-5414HX N-5415HX | 1-7/32 1-21/64 1-9/16 |
| | 3/8 | 19/32 3/4 | 31/64 5/8 | S-1416H S-1417H | 1-1/32 1-17/64 | T-2416H T-2417H | T-2416HX T-2417HX | 1-11/32 1-37/64 | D-4416H D-4417H | D-4416HX D-4417HX | 1-9/32 1-33/64 | N-5416H N-5417H | N-5416HX N-5417HX | 1-21/64 1-9/16 |
| | 7/16 | 3/4 | 5/8 | S-1418H | 1-17/64 | T-2418H | T-2418HX | 1-37/64 | D-4418H | D-4418HX | 1-33/64 | N-5418H | N-5418HX | 1-9/16 |
| | 1/2 | 3/4 | 5/8 | S-1419H | 1-17/64 | T-2419H | T-2419HX | 1-37/64 | D-4419H | D-4419HX | 1-33/64 | N-5419H | N-5419HX | 1-9/16 |

SPADE TONGUE .050 STOCK

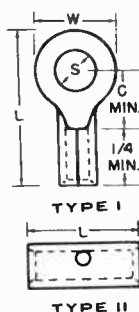
| | | | | | | | | | | | | | | |
|-------|------|-------|-------|---------|-------|---------|----------|---------|---------|----------|---------|---------|----------|--------|
| 16-14 | 5-6 | 3/8 | 5/16 | S-1420H | 25/32 | T-2420H | T-2420HX | 1-3/32 | D-4420H | D-4420HX | 1-1/32 | N-5420H | N-5420HX | 1-5/64 |
| | 8 | 3/8 | 5/16 | S-1421H | 25/32 | T-2421H | T-2421HX | 1-3/32 | D-4421H | D-4421HX | 1-1/32 | N-5421H | N-5421HX | 1-5/64 |
| | 10 | 3/8 | 5/16 | S-1422H | 25/32 | T-2422H | T-2422HX | 1-3/32 | D-4422H | D-4422HX | 1-1/32 | N-5422H | N-5422HX | 1-5/64 |
| | 10 | 17/32 | 13/32 | S-1426H | 59/64 | T-2426H | T-2426HX | 1-11/64 | D-4426H | D-4426HX | 1-11/64 | N-5426H | N-5426HX | 1-7/32 |
| | 1/4 | 17/32 | 13/32 | S-1427H | 59/64 | T-2427H | T-2427HX | 1-11/64 | D-4427H | D-4427HX | 1-11/64 | N-5427H | N-5427HX | 1-7/32 |
| | 5/16 | 17/32 | 13/32 | S-1428H | 59/64 | T-2428H | T-2428HX | 1-11/64 | D-4428H | D-4428HX | 1-11/64 | N-5428H | N-5428HX | 1-7/32 |

FLANGED SPADE .050 STOCK

| | | | | | | | | | | | | | | |
|-------|-----|-----|------|---------|-----|---------|----------|--------|---------|----------|---|---------|----------|--------|
| 16-14 | 5-6 | 3/8 | 5/16 | S-1423H | 3/4 | T-2423H | T-2423HX | 1-1/16 | D-4423H | D-4423HX | 1 | N-5423H | N-5423HX | 1-3/64 |
| | 8 | 3/8 | 5/16 | S-1424H | 3/4 | T-2424H | T-2424HX | 1-1/16 | D-4424H | D-4424HX | 1 | N-5424H | N-5424HX | 1-3/64 |
| | 10 | 3/8 | 5/16 | S-1425H | 3/4 | T-2425H | T-2425HX | 1-1/16 | D-4425H | D-4425HX | 1 | N-5425H | N-5425HX | 1-3/64 |

HIGH TEMPERATURE TERMINALS

Engineered specifically for high temperature applications, rugged TEMPTERMS are conservatively rated for continuous duty at 900°F. Terminals and connectors in this series are fabricated from a heat-resisting alloy are are specially nickel plated for corrosion-resistance at elevated temperatures.



| Wire Range | Catalog Number | Type | Stud Size S | Maximum Width W | Overall Length L | Stud Clearance C |
|------------|----------------|------|-------------|-----------------|------------------|------------------|
| 22-18 | S-1165 | I | 5-6 | 7/32 | 33/64 | 5/32 |
| | S-1166 | I | 5-6 | 9/32 | 41/64 | 1/4 |
| | S-1167 | I | 8 | 9/32 | 41/64 | 1/4 |
| | S-1168 | I | 10 | 9/32 | 41/64 | 1/4 |
| | S-1169 | II | — | — | 9/16 | — |
| 16-14 | S-1170 | I | 5-6 | 1/4 | 19/32 | 7/32 |
| | S-1171 | I | 5-6 | 5/16 | 45/64 | 9/32 |
| | S-1172 | I | 8 | 5/16 | 45/64 | 9/32 |
| | S-1173 | I | 10 | 5/16 | 45/64 | 9/32 |
| | S-1174 | II | — | — | 9/16 | — |
| 12-10 | S-1175 | I | 5-6 | 3/8 | 3/4 | 5/16 |
| | S-1176 | I | 8 | 3/8 | 3/4 | 5/16 |
| | S-1177 | I | 10 | 3/8 | 3/4 | 5/16 |
| | S-1178 | II | — | — | 9/16 | — |

WALDOM ELECTRONICS INC., CHICAGO 32, ILLINOIS

SOLDERLESS TERMINALS AND CONNECTORS

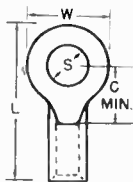
WALDOM

LARGE WIRE RANGES

RING TONGUE TERMINALS

NO. 8 WIRE RANGE .050 Stock

| BASIC DIMENSIONS | | | | VERSA-KRIMP CATALOG NUMBER | INSUL-KRIMP CATALOG NUMBER |
|-------------------|---|---|--|---|--|
| STUD SIZE S | WIDTH W | CLEAR- ANCE C | LENGTH L | | |
| 6 | 15/32 3/8 | 11/32 11/32 | 61/64 29/32 | B-3200 B-3224* | T-2200 T-2224 |
| 8 | 15/32 3/8 | 11/32 11/32 | 61/64 29/32 | B-3201 B-3225* | T-2001 T-2225 |
| 10 | 15/32 19/32 13/16 3/8 | 11/32 13/32 19/32 11/32 | 61/64 1-5/64 1-3/8 29/32 | B-3202 B-3205 B-3210 B-3226* | T-2202 T-2205 T-2210 T-2226 |
| 1/4 | 15/32 19/32 13/16 1-1/8 3/8 | 11/32 13/32 19/32 31/32 11/32 | 61/64 1-5/64 1-3/8 1-29/32 29/32 | B-3203 B-3206 B-3211 B-3217 B-3279* | T-2203 T-2206 T-2211 T-2217 T-2279 |
| 5/16 | 15/32 19/32 13/16 1-1/8 | 11/32 13/32 19/32 31/32 | 61/64 1-5/64 1-3/8 1-29/32 | B-3204 B-3207 B-3212 B-3218 | T-2204 T-2207 T-2212 T-2218 |
| 3/8 | 19/32 13/16 1-1/8 | 13/32 19/32 31/32 | 1-5/64 1-3/8 1-29/32 | B-3208 B-3213 B-3219 | T-2208 T-2213 T-2219 |
| 7/16 | 19/32 13/16 1-1/8 | 13/32 19/32 31/32 | 1-5/64 1-3/8 1-29/32 | B-3209 B-3214 B-3220 | T-2209 T-2214 T-2220 |
| 1/2 | 13/16 1-1/8 | 19/32 31/32 | 1-3/8 1-29/32 | B-3215 B-3221 | T-2215 T-2221 |
| 5/8 | 13/16 1-1/8 | 19/32 31/32 | 1-3/8 1-29/32 | B-3216 B-3222 | T-2216 T-2222 |
| 3/4 | 1-1/8 | 31/32 | 1-29/32 | B-3223 | T-2223 |



Regular

NO. 6 WIRE RANGE .057 Stock

| BASIC DIMENSIONS | | | | VERSA-KRIMP CATALOG NUMBER | INSUL-KRIMP CATALOG NUMBER |
|-------------------|--------------------------------|------------------------------|---------------------------------------|---------------------------------------|--------------------------------------|
| STUD SIZE S | WIDTH W | CLEAR- ANCE C | LENGTH L | | |
| 8 | 5/8 15/32 | 1/2 1/2 | 1-1/4 1-11/64 | B-3227 B-3247* | T-2227 T-2247 |
| 10 | 5/8 13/16 15/32 | 1/2 19/32 1/2 | 1-1/4 1-7/16 1-11/64 | B-3228 B-3233 B-3248 | T-2228 T-2233 T-3248 |
| 1/4 | 5/8 13/16 1-1/8 15/32 | 1/2 19/32 31/32 1/2 | 1-1/4 1-7/16 1-31/32 1-11/64 | B-3229 B-3234 B-3240 B-3249* | T-2229 T-2234 T-2240 T-2249 |
| 5/16 | 5/8 13/16 1-1/8 15/32 | 1/2 19/32 31/32 1/2 | 1-1/4 1-7/16 1-31/32 1-11/64 | B-3230 B-3235 B-3241 B-3250* | T-2230 T-2235 T-2241 T-2250 |
| 3/8 | 5/8 13/16 1-1/8 | 1/2 19/32 31/32 | 1-1/4 1-7/16 1-31/32 | B-3231 B-3236 B-3242 | T-2231 T-2236 T-2242 |
| 7/16 | 5/8 13/16 1-1/8 | 1/2 19/32 31/32 | 1-1/4 1-7/16 1-31/32 | B-3232 B-3237 B-3243 | T-2232 T-2237 T-2243 |
| 1/2 | 13/16 1-1/8 | 19/32 31/32 | 1-17/16 1-31/32 | B-3238 B-3244 | T-2238 T-2244 |
| 5/8 | 13/16 1-1/8 | 19/32 31/32 | 1-7/16 1-31/32 | B-3239 B-3245 | T-2239 T-2245 |
| 3/4 | 1-1/8 | 31/32 | 1-31/32 | B-3246 | T-2246 |

NO. 4 WIRE RANGE .075 Stock

| BASIC DIMENSIONS | | | | VERSA-KRIMP CATALOG NO. |
|-------------------|--------------------------------|------------------------------|---------------------------------------|---------------------------------------|
| STUD SIZE S | WIDTH W | CLEAR- ANCE C | LENGTH L | |
| 10 | 21/32 15/32 | 1/2 1/2 | 1-5/16 1-7/32 | B-3251 B-3257* |
| 1/4 | 21/32 15/32 7/8 1-1/4 | 1/2 1/2 31/32 31/32 | 1-5/16 1-7/32 1-29/32 2-3/32 | B-3252 B-3258* B-3266 B-3272 |
| 5/16 | 21/32 15/32 7/8 1-1/4 | 1/2 1/2 31/32 31/32 | 1-5/16 1-7/32 1-29/32 2-3/32 | B-3253 B-3259* B-3267 B-3273 |
| 3/8 | 21/32 7/8 1-1/4 | 1/2 31/32 31/32 | 1-5/16 1-29/32 2-3/32 | B-3254 B-3268 B-3274 |
| 7/16 | 21/32 7/8 1-1/4 | 1/2 31/32 31/32 | 1-5/16 1-29/32 2-3/32 | B-3255 B-3269 B-3275 |
| 1/2 | 21/32 7/8 1-1/4 | 1/2 31/32 31/32 | 1-5/16 1-29/32 2-3/32 | B-3256 B-3270 B-3276 |
| 5/8 | 7/8 1-1/4 | 31/32 31/32 | 1-29/32 2-3/32 | B-3271 B-3277 |
| 3/4 | 1-1/4 | 31/32 | 2-3/32 | B-3278 |



Elongated

NO. 2 WIRE RANGE .075 Stock

| BASIC DIMENSIONS | | | | VERSA-KRIMP CATALOG NO. |
|-------------------|----------------------------|----------------------------------|---|---------------------------------------|
| STUD SIZE S | WIDTH W | CLEAR- ANCE C | LENGTH L | |
| 10 | 5/8 | 43/64 | 1-17/32 | B-3280* |
| 1/4 | 7/8 5/8 7/8 1-1/4 | 43/64 43/64 31/32 31/32 | 1-21/32 1-17/32 1-31/32 2-5/32 | B-3284 B-3281* B-3290 B-3296 |
| 5/16 | 7/8 5/8 7/8 1-1/4 | 43/64 43/64 31/32 31/32 | 1-21/32 1-17/32 1-31/32 2-5/32 | B-3295 B-3282* B-3291 B-3297 |
| 3/8 | 7/8 5/8 7/8 1-1/4 | 43/64 43/64 31/32 31/32 | 1-21/32 1-17/32 1-31/32 2-5/32 | B-3286 B-3283* B-3292 B-3299 |
| 7/16 | 7/8 7/8 1-1/4 | 43/64 31/32 31/32 | 1-21/32 1-31/32 2-5/32 | B-3287 B-3293 B-3299 |
| 1/2 | 7/8 7/8 1-1/4 | 43/64 31/32 31/32 | 1-21/32 1-31/32 2-5/32 | B-3288 B-3294 B-3300 |
| 5/8 | 7/8 7/8 1-1/4 | 43/64 31/32 31/32 | 1-21/32 1-31/32 2-5/32 | B-3289 B-3295 B-3301 |
| 3/4 | 1-1/4 | 31/32 | 2-5/32 | B-3302 |

*Elongated Type

PARALLEL AND BUTT CONNECTORS

PARALLEL CONNECTORS

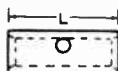
| WIRE RANGE | STOCK | VERSAKRIMP | | INSULKRIMP | |
|---------------|-------|----------------|-------------|----------------|-------------|
| | | CATALOG NO. | LENGTH L | CATALOG NO. | LENGTH L |
| #8 | .050 | B-3260 | 3/8 | T-2260 | 1 |
| #6 | .057 | B-3261 | 7/16 | T-2261 | 1-3/16 |
| #4 | .075 | B-3262 | 17/32 | | |
| #2 | .075 | B-3303 | 41/64 | | |

BUTT CONNECTORS

| WIRE RANGE | STOCK | VERSAKRIMP | | INSULKRIMP | |
|---------------|-------|----------------|-------------|----------------|-------------|
| | | CATALOG NO. | LENGTH L | CATALOG NO. | LENGTH L |
| #8 | .050 | B-3263 | 53/64 | T-2263 | 1-7/16 |
| #6 | .057 | B-3264 | 1-1/64 | T-2264 | 1-3/4 |
| #4 | .075 | B-3265 | 1-1/8 | | |
| #2 | .075 | B-3304 | 1-1/4 | | |



Parallel



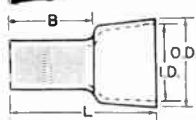
Butt

WALDOM ELECTRONICS INC., CHICAGO 32, ILLINOIS

SOLDERLESS TERMINALS AND CONNECTORS



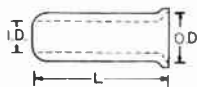
NYLON INSULATED CLOSED-END CONNECTORS



| Wire Range | Catalog Number | Outside Diameter O.D. | Overall Length L | Barrel Length B | Inside Diameter I.D. | Circular Mil Area |
|------------|----------------|-----------------------|------------------|-----------------|----------------------|-------------------|
| 22-14 | CE-2214 | 5/16 | 39/64 | 11/32 | 1/4 | 600- 5,180 |
| 16-10 | CE-1610 | 7/16 | 23/32 | 3/8 | 3/8 | 2,400-13,100 |

Connectors are annealed, tin-plated seamless brass. Insulation is natural-color translucent Du-Pont Nylon Moulded of the finest compound obtainable. A variety of colors is available on quantity orders. Temperature rating of 105°C maximum. 600 Volts maximum in building wire and 1,000 Volts inside a sign or fixture.

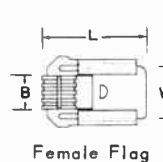
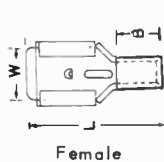
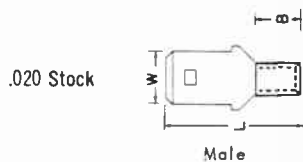
CONNECTOR INSERTS



| Wire Range | Catalog Number | Outside Diameter O.D. | Overall Length L | Inside Diameter I.D. | Circular Mil Area |
|------------|----------------|-----------------------|------------------|----------------------|-------------------|
| 22-14 | IC-2214 | 1/8 | 21/64 | 5/64 | 600- 5,180 |
| 16-10 | IC-1610 | 13/64 | 11/32 | 5/32 | 2,400-13,100 |

Inserts are the same annealed, tin-plated seamless brass pieces as used in the Nylon-insulated Closed-End Connectors described above. Inserts are used in applications where insulation is not essential.

QUICK-DISCONNECT PUSH-ON TYPE TERMINALS

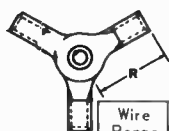


KRIMPTITE
 Length L 15/32
 Barrel Length B 5/32
 Width W 1/4
 Catalog No. S-1091
 Wire range 18-14

| Wire Range | Basic Dimensions | | | KRIMPTITE | | INSULKRIMP | | VIBRAKRIMP | | AVIKRIMP | | |
|------------|------------------|-----------------|-----------|----------------|----------|-------------------------------|-------------------------------|------------|-------------------------------|----------|-------------------------------|-------|
| | Length L | Barrel Length B | D Width W | Catalog Number | Length L | .155 Max. Insulation Diameter | .175 Max. Insulation Diameter | Length L | .175 Max. Insulation Diameter | Length L | .175 Max. Insulation Diameter | |
| MALE | 21/32 | 1/4 | 1/4 | S-1089 | 21/32 | T-2089 | T-2089X | 27/32 | D-4089 | 13/16 | N-5089 | 27/32 |
| FEMALE | 43/64 | 7/32 | 1/4 | S-1090 | 43/64 | T-2090 | T-2090X | 55/64 | D-4090 | 53/64 | N-5090 | 55/64 |

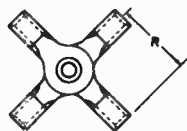
These terminals are designed to give high pressure spring-loaded connections. They incorporate a locking action caused by mating a depression on the male tongue with a raised pip in the female slot when the parts are engaged. Insulation is not available on the flag design.

3 WAY "Y" CONNECTORS



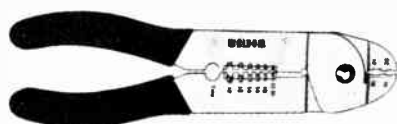
| Wire Range | Stock | KRIMPTITE | | INSULKRIMP | | | | VERSAKRIMP | | VIBRAKRIMP | | AVIKRIMP | | | | |
|------------|-------|----------------|---------------|----------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------------|---------------|
| | | Catalog Number | Ref. Length R | Catalog Number | Max. Ins. Dio. | Catalog Number | Max. Ins. Dio. | Ref. Length R | Catalog Number | Ref. Length R | Catalog Number | Max. Ins. Dio. | Ref. Length R | Catalog Number | Max. Ins. Dio. | Ref. Length R |
| 22-18 | .032 | S-1065 | 33/64 | T-2065 | .125 | T-2065X | .145 | 45/64 | B-3065 | 33/64 | D-4065 | .145 | 43/64 | N-5065 | .145 | 45/64 |
| 16-14 | .032 | S-1066 | 35/64 | T-2066 | .155 | T-2066X | .175 | 47/64 | B-3066 | 35/64 | D-4066 | .175 | 45/64 | N-5066 | .175 | 47/64 |
| 12-10 | .040 | S-1067 | 37/64 | T-2067 | .215 | T-2067X | .255 | 57/64 | B-3067 | 37/64 | D-4067 | .235 | 53/64 | N-5067 | .235 | 7/8 |

4 WAY "X" CONNECTORS



| Wire Range | Stock | KRIMPTITE | | INSULKRIMP | | | | VERSAKRIMP | | VIBRAKRIMP | | AVIKRIMP | | | | |
|------------|-------|----------------|---------------|----------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------------|---------------|
| | | Catalog Number | Ref. Length R | Catalog Number | Max. Ins. Dio. | Catalog Number | Max. Ins. Dio. | Ref. Length R | Catalog Number | Ref. Length R | Catalog Number | Max. Ins. Dio. | Ref. Length R | Catalog Number | Max. Ins. Dio. | Ref. Length R |
| 22-18 | .032 | S-1068 | 33/64 | T-2068 | .125 | T-2068X | .145 | 45/64 | B-3068 | 33/64 | D-4068 | .145 | 43/64 | N-5068 | .145 | 45/64 |
| 16-14 | .032 | S-1069 | 35/64 | T-2069 | .155 | T-2069X | .175 | 47/64 | B-3069 | 35/64 | D-4069 | .175 | 45/64 | N-5069 | .175 | 47/64 |
| 12-10 | .040 | S-1070 | 37/64 | T-2070 | .215 | T-2070X | .255 | 57/64 | B-3070 | 37/64 | D-4070 | .235 | 53/64 | N-5070 | .235 | 7/8 |

Both the "Y" and the "X" Connectors are made up of ring tongue terminals which have been joined to form a 3-way or 4-way splice. The wire ranges apply to each terminal. The material is tin-plated copper with a plated steel rivet. Other combinations of standard terminals can usually be supplied on special order.



UNIVERSAL CRIMPING TOOL

CT-4050. Crimps both insulated and non-insulated terminals. Wire ranges 22 through 12. Also cuts wire and strips wire.

\$3.95

WALDOM Electronic Hardware

ROUND HEAD STEEL WOOD SCREWS
Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------------------|-------------|-----------------|-----------------|
| F-514 4 x 1/2" | .78 | 6.40 | 4.45 |
| F-515 4 x 3/4" | .90 | 7.38 | 5.13 |
| F-516 6 x 3/4" | .97 | 7.95 | 5.53 |
| F-517 6 x 1" | 1.20 | 9.84 | 6.84 |
| F-518 8 x 3/4" | 1.15 | 9.43 | 6.56 |
| F-047 8 x 1" | 1.35 | 11.07 | 7.70 |
| F-519 8 x 1-1/4" | 1.58 | 12.96 | 9.01 |
| F-520 10 x 1-1/2" | 2.12 | 17.38 | 12.08 |
| F-521 12 x 1-1/2" | 2.70 | 22.14 | 15.39 |
| F-522 14 x 1-3/4" | 3.80 | 31.16 | 21.66 |



STEEL CUP WASHERS
Nickel Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|---|-------------|-----------------|-----------------|
| CW-6 For #6 Oval Head or Flat Head Screws | .39 | 3.20 | 2.22 |
| CW-8 For #8 Oval Head or Flat Head Screws | .41 | 3.36 | 2.34 |
| CW-10 For #10 Oval or Flat Head Screws | .53 | 4.35 | 3.02 |



FLAT STEEL WASHERS
Cadmium Plated

| Screw Size | I.O. | O.O. | Thick. | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|------------|-------|---------|--------|-------------|-----------------|-----------------|
| MW-400 #2 | .092" | 7/32" | .018" | .30 | 2.46 | 1.71 |
| MW-401 #4 | .125 | 9/32" | .025 | .30 | 2.46 | 1.71 |
| MW-402 #6 | .150 | 3/8" | .032 | .28 | 2.30 | 1.60 |
| MW-403 #8 | .170 | 3/8" | .032 | .30 | 2.46 | 1.71 |
| MW-404 #10 | .204 | 3/8" | .032 | .32 | 2.62 | 1.82 |
| MW-408 1/4 | .281 | 5/8" | .050 | .46 | 3.77 | 2.62 |
| MW-410 3/8 | .392 | 1 1/16" | .050 | .58 | 4.76 | 3.31 |

FLAT HEAD STEEL WOOD SCREWS
Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------------------|-------------|-----------------|-----------------|
| F-027 4 x 1/2" | .78 | 6.40 | 4.45 |
| F-028 4 x 3/4" | .90 | 7.38 | 5.13 |
| F-029 6 x 3/4" | .97 | 7.95 | 5.53 |
| F-030 6 x 1" | 1.20 | 9.84 | 6.84 |
| F-031 8 x 3/4" | 1.15 | 9.43 | 6.56 |
| F-048 8 x 1" | 1.35 | 11.07 | 7.70 |
| F-032 8 x 1-1/4" | 1.58 | 12.96 | 9.01 |
| F-044 10 x 1-1/2" | 2.12 | 17.38 | 12.08 |
| F-045 12 x 1-1/2" | 2.70 | 22.14 | 15.39 |
| F-046 14 x 1-3/4" | 3.80 | 31.16 | 21.66 |



FLAT BRASS WASHERS
Nickel Plated

| Screw Size | I.O. | O.O. | Thick. | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------------|-------|-------|--------|-------------|-----------------|-----------------|
| MW-400B #2 | .092" | 7/32" | .018" | .45 | 3.70 | 2.55 |
| MW-401B #4 | .125" | 9/32" | .025" | .47 | 3.85 | 2.70 |
| MW-402B #6 | .150" | 3/8" | .032" | .53 | 4.35 | 3.02 |
| MW-403B #8 | .170" | 3/8" | .032" | .51 | 4.15 | 2.90 |
| MW-404B #10 | .204" | 3/8" | .032" | .55 | 4.50 | 3.15 |

Insulating Fibre Washers - Precision made insulating washers, both flat and extruded, for insulation of components and controls from chassis or from each other.



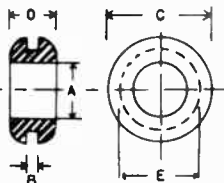
FLAT

| Screw Size | I.O. | O.O. | Thick. | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------------|-------|------|--------|-------------|-----------------|-----------------|
| FW-374 #4 | .020" | 1/4" | 1/32" | .41 | 3.36 | 2.34 |
| FW-375 #6 | .145" | 1/4" | 1/32" | .41 | 3.36 | 2.34 |
| FW-376 #8 | 3/16" | 3/8" | 1/32" | .41 | 3.36 | 2.34 |
| FW-377 #10 | .192" | 3/8" | 1/32" | .41 | 3.36 | 2.34 |
| FW-378 1/4 | .255" | 1/2" | 3/64" | .46 | 3.77 | 2.62 |
| FW-379 3/8 | 3/8" | 5/8" | 3/64" | .75 | 6.15 | 4.28 |
| FW-380 7/16 | .440" | 3/4" | 1/32" | .75 | 6.15 | 4.28 |

EXTRUDED

| Screw Size | A | B | C | O | E | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------------|-------|--------|--------|-------|-------|-------------|-----------------|-----------------|
| FW-384 #4 | 9/32" | 13/64" | 1/8" | 1/32" | 5/64" | .84 | 6.89 | 4.79 |
| FW-385 #6 | 5/16" | 7/32" | 9/64" | 1/32" | 5/64" | .84 | 6.89 | 4.79 |
| FW-386 #8 | 3/8" | 1/4" | 11/64" | 1/32" | 3/32" | .84 | 6.89 | 4.79 |
| FW-387 #10 | 7/16" | 9/32" | 13/64" | 1/32" | 3/32" | .92 | 7.54 | 5.24 |
| FW-388 1/4" | 1/2" | .375" | .256" | 1/32" | 3/32" | .92 | 7.54 | 5.24 |
| FW-389 3/8" | 5/8" | .437" | .375" | 1/32" | 3/32" | .95 | 7.79 | 5.42 |

VINYL GROMMETS



- Exceptional Aging Qualities
- High Dielectric Properties
- Oil Resistant
- Durometer Hardness 45 to 85
- Cost Less Than Rubber
- Will Not Stain Most Surfaces

*These grommets were tested by Underwriters Laboratories in a circulating air oven at 212 degree F. for seven days with no visible change.

| Cat. No. | A | B | C | O | E | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|----------|------|------|-------|------|------|-------------|-----------------|-----------------|
| G-401 | 1/8 | 1/16 | 11/32 | 3/16 | 1/4 | .88 | 7.22 | 5.02 |
| G-402 | 3/16 | 1/16 | 7/16 | 7/32 | 5/16 | .99 | 8.12 | 5.62 |
| G-403 | 1/4 | 1/16 | 9/16 | 1/4 | 3/8 | 1.16 | 9.51 | 6.61 |
| G-404 | 5/16 | 1/16 | 5/8 | 1/4 | 7/16 | 1.24 | 10.17 | 7.09 |
| G-405 | 3/8 | 1/16 | 5/8 | 1/4 | 1/2 | 1.24 | 10.17 | 7.09 |
| G-406 | 1/2 | 1/16 | 13/16 | 9/32 | 5/8 | 2.16 | 17.71 | 12.31 |
| G-407 | 5/8 | 1/16 | 1-1/8 | 9/32 | 7/8 | 3.71 | 30.42 | 21.15 |

WALDOM RUBBER GROMMETS - A complete selection of highest quality rubber grommets for use in protecting insulation from raw edges of chassis hole, shock and vibration dampening. For mounting tuning condensers, sockets, phono motors, chassis, etc.



| | A | B | C | O | E | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|--------|--------|-------|-------|--------|-------------|-----------------|-----------------|
| G-300 | 11/32" | 1/8" | 3/16" | 1/16" | 1/4" | 1.56 | 12.79 | 8.89 |
| G-301 | 9/16" | 5/16" | 3/16" | 1/16" | 15/32" | 1.76 | 14.43 | 10.03 |
| G-302 | 11/16" | 3/8" | 9/32" | 1/16" | 1/2" | 2.26 | 18.53 | 12.88 |
| G-305 | 7/16" | 3/16" | 7/32" | 1/16" | 5/16" | 1.78 | 14.60 | 10.15 |
| G-307 | 3/4" | 7/16" | 1/4" | 3/64" | 19/32" | 2.50 | 20.50 | 14.25 |
| G-309 | 5/8" | 11/32" | 5/16" | 1/16" | 15/32" | 1.74 | 14.26 | 9.92 |
| G-311 | 1-1/8" | 5/8" | 5/16" | 1/16" | 7/8" | 5.54 | 45.43 | 31.58 |

Nylon and Ethyl Cellulose Cable Clamps

These clamps combine lightweight and chemical resistance with excellent shock resisting properties in a temperature range of from 185° F. to -40° F. in the Ethyl Cellulose and 300° F. to -60° F. in the Nylon.

- Approved 7-21-44 Army-Navy Aeronautical AN742.
- OPENS EASILY FOR FAST ASSEMBLY. ONE NAIL INSTEAD OF TWO
 - FORM STABILITY AT HIGH TEMPERATURES
 - ECONOMY
 - ABRASION AND MOISTURE RESISTANCE
 - CHEMICAL RESISTANCE
 - LIGHTNESS IN WEIGHT
 - TOUGHNESS AND RESILIENCY
 - GOOD ELECTRICAL PROPERTIES
 - STRENGTH AND DURABILITY

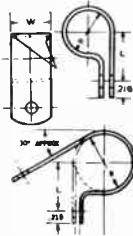
NYLON CABLE CLAMPS

| Cat. No. | For Use With Rod O.D. | Dia. | Width | Length | Mat. Thick. | PKG. OF 100 | 1000-4999 PER M |
|----------|-----------------------|-------|-------|--------|-------------|-------------|-----------------|
| CCN-31 | 1/8" | .125" | 3/8" | 0.328 | .050 | 2.85 | 24.30 |
| CCN-32 | 3/16" | .188" | 3/8" | 0.390 | .050 | 3.00 | 25.72 |
| CCN-33 | 1/4" | .250" | 3/8" | 0.421 | .050 | 3.30 | 28.12 |
| CCN-34 | 5/16" | .313" | 3/8" | 0.453 | .050 | 3.66 | 31.06 |
| CCN-35 | 3/8" | .375" | 3/8" | 0.483 | .050 | 3.89 | 32.65 |
| CCN-36 | 7/16" | .438" | 3/8" | 0.531 | .050 | 4.05 | 34.53 |
| CCN-37 | 1/2" | .500" | 3/8" | 0.562 | .050 | 4.30 | 36.75 |
| CCN-38 | 9/16" | .563" | 1/2" | 0.625 | .060 | 5.32 | 45.37 |
| CCN-39 | 5/8" | .625" | 1/2" | 0.610 | .060 | 6.24 | 53.16 |



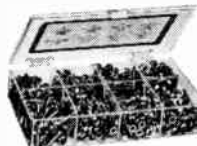
ETHYL CELLULOSE PLASTIC CLAMPS - Width 3/8"

| Cat. No. | For Use With Rod O.D. | Dia. | Length | Mat. Thick. | PKG. OF 100 | 1000-4999 PER M |
|----------|-----------------------|--------|--------|-------------|-------------|-----------------|
| CCE-1 | 1/8" | .125" | 0.328 | .063 | 1.87 | 16.03 |
| CCE-2 | 3/16" | .188" | 0.390 | .063 | 1.89 | 16.14 |
| CCE-3 | 1/4" | .250" | 0.421 | .063 | 1.87 | 17.79 |
| CCE-4 | 5/16" | .313" | 0.453 | .063 | 2.30 | 19.63 |
| CCE-5 | 3/8" | .375" | 0.483 | .063 | 2.41 | 21.69 |
| CCE-6 | 7/16" | .438" | 0.531 | .063 | 2.64 | 22.54 |
| CCE-7 | 1/2" | .500" | 0.562 | .063 | 2.81 | 24.00 |
| CCE-8 | 9/16" | .563" | 0.625 | .063 | 3.30 | 28.09 |
| CCE-9 | 5/8" | .625" | 0.610 | .063 | 3.73 | 31.81 |
| CCE-10 | 11/16" | .688" | 0.666 | .063 | 4.06 | 34.59 |
| CCE-11 | 3/4" | .750" | 0.765 | .063 | 4.25 | 36.25 |
| CCE-12 | 7/8" | .875" | 0.812 | .063 | 4.60 | 39.36 |
| CCE-13 | 1" | 1.000" | 0.906 | .063 | 4.90 | 41.79 |
| CCE-14 | 1-1/8" | 1.125" | 0.968 | .063 | 4.91 | 41.91 |
| CCE-15 | 1-1/4" | 1.250" | 1.156 | .063 | 5.52 | 47.14 |



WALDOM Skru-Box

VARIETY ASSORTMENTS
SCREWS & NUTS



- ROUND HEAD MACHINE SCREWS, NUTS, SHEET METAL SCREWS, R.H.S.M.S**
4-40 x 1/2, 6-32 x 1/4, 6-32 x 3/4, 8-32 x 1/2, Sheet Metal Screw #6 x 1/2, Nuts 4-40, 6-32, 8-32, 265 Total Pieces. Net 1.59
- BINDER-HEAD SCREWS** - Same assortment as above, but machine screws have binder-head! Net 1.59
- SHEET METAL SCREWS** - Slotted Hex Head Sheet Metal Screws Type A in 4 x 3/8", 6 x 1/4", 6 x 1/2", 6 x 3/4", 8 x 3/8", 8 x 1/2", 8 x 5/8". 165 Total Pieces. Net 1.59
- WASHER-HEAD SHEET METAL SCREWS** - Slotted Hex Head Type A w/flat washer attached, sizes 6 x 1/4, 6 x 3/8, 6 x 1/2, 6 x 3/4, 8 x 1/4, 8 x 3/8, 8 x 1/2, 8 x 5/8. 120 Total Pieces. Net 1.59
- WOOD SCREW ASSORTMENT** - Round Head Wood Screws 4 x 1/2, 6 x 3/4, 6 x 6 x 1, 8 x 3/4, 8 x 1 1/4. Flat Head 8 x 1, 8 x 1 1/4. 139 Total Pieces. Net 1.59
- GENERAL HARDWARE KIT** - 260 Fasteners - Round Head, Binder Head, and Phillips Head Machine Screws, Hex Steel Nuts, Hex Head (slotted) and Hex Washer Head (slotted) Sheet Metal Screws, Flat Head and Round Head Wood Screws. All popular diameters and lengths. Net 1.59

STEEL LOCK WASHERS - (INTERNAL AND EXTERNAL)
Cadmium Plated



| INTERNAL Screw Size | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|---------------------|-------------|-----------------|-----------------|
| MW-416 #4 | .44 | 3.61 | 2.51 |
| MW-417 #6 | .44 | 3.61 | 2.51 |
| MW-418 #8 | .48 | 3.94 | 2.74 |
| MW-419 #10 | .48 | 3.94 | 2.74 |
| MW-420 1/4 | .63 | 5.17 | 3.59 |
| MW-421 3/8 | 1.07 | 8.77 | 6.10 |

| EXTERNAL Screw Size | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|---------------------|-------------|-----------------|-----------------|
| MW-422 #4 | .44 | 3.61 | 2.51 |
| MW-423 #6 | .44 | 3.61 | 2.51 |
| MW-424 #8 | .48 | 3.94 | 2.74 |
| MW-425 #10 | .48 | 3.94 | 2.74 |
| MW-426 1/4 | .63 | 5.17 | 3.59 |
| MW-427 3/8 | .94 | 7.71 | 5.36 |

WALDOM Electronic Hardware

ROUND HEAD STEEL MACHINE SCREWS Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|-----------------|-----------------|-----------------|
| F-579 | 2-56 x 1/8" | .49 | 4.02 2.79 |
| F-461 | 2-56 x 1/4" | .44 | 3.61 2.51 |
| F-462 | 2-56 x 1/2" | .47 | 3.85 2.68 |
| F-463 | 2-56 x 3/4" | .53 | 4.35 3.02 |
| F-464 | 3-48 x 3/4" | .56 | 4.59 3.19 |
| F-465 | 4-36 x 1/4" | .47 | 3.85 2.68 |
| F-466 | 4-36 x 3/8" | .49 | 4.02 2.79 |
| F-467 | 4-36 x 1/2" | .51 | 4.18 2.91 |
| F-580 | 4-36 x 5/8" | .55 | 4.51 3.14 |
| F-468 | 4-36 x 3/4" | .58 | 4.76 3.31 |
| F-469 | 4-40 x 1/4" | .47 | 3.85 2.68 |
| F-581 | 4-40 x 3/8" | .50 | 4.10 2.85 |
| F-470 | 4-40 x 1/2" | .51 | 4.18 2.91 |
| F-582 | 4-40 x 5/8" | .55 | 4.51 3.14 |
| F-471 | 4-40 x 3/4" | .58 | 4.76 3.31 |
| F-472 | 6-32 x 1/4" | .53 | 4.35 3.02 |
| F-583 | 6-32 x 3/8" | .57 | 4.67 3.25 |
| F-473 | 6-32 x 1/2" | .60 | 4.92 3.42 |
| F-584 | 6-32 x 5/8" | .66 | 5.41 3.76 |
| F-474 | 6-32 x 3/4" | .71 | 5.82 4.05 |
| F-475 | 6-32 x 1" | .81 | 6.64 4.62 |
| F-476 | 6-32 x 1-1/4" | .97 | 7.95 5.33 |
| F-477 | 6-32 x 2" | 1.46 | 11.97 8.32 |
| F-478 | 8-32 x 1/4" | .68 | 5.58 3.88 |
| F-479 | 8-32 x 3/8" | .73 | 5.99 4.16 |
| F-480 | 8-32 x 1/2" | .80 | 6.56 4.56 |
| F-585 | 8-32 x 5/8" | .85 | 6.97 4.84 |
| F-481 | 8-32 x 3/4" | .90 | 7.38 5.13 |
| F-482 | 8-32 x 1" | 1.04 | 8.53 5.93 |
| F-483 | 8-32 x 1-1/4" | 1.19 | 9.76 6.78 |
| F-484 | 10-32 x 1/2" | .92 | 7.54 5.24 |
| F-586 | 10-32 x 5/8" | 1.00 | 8.20 5.70 |
| F-485 | 10-32 x 3/4" | 1.09 | 8.94 6.21 |
| F-486 | 10-32 x 1" | 1.21 | 9.92 6.99 |
| F-487 | 10-32 x 1-1/2" | 1.60 | 13.12 9.12 |
| F-587 | 12-24 x 3/4" | 1.49 | 12.22 8.49 |
| F-588 | 12-24 x 1" | 1.78 | 14.60 10.15 |
| F-589 | 12-24 x 1-1/2" | 2.30 | 18.86 13.11 |
| F-590 | 12-24 x 2" | 2.71 | 22.22 15.45 |
| F-488 | 1/4-20 x 1/2" | 1.81 | 14.84 10.32 |
| F-489 | 1/4-20 x 3/4" | 2.06 | 16.89 11.74 |
| F-490 | 1/4-20 x 1" | 2.35 | 19.27 13.40 |
| F-491 | 1/4-20 x 1-1/4" | 2.67 | 21.89 15.22 |
| F-492 | 1/4-20 x 1-3/4" | 3.24 | 26.57 18.47 |
| F-493 | 1/4-20 x 2-1/2" | 4.08 | 33.46 23.26 |

BRASS ROUND HEAD MACHINE SCREWS Nickel Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|--------|-------------|-----------------|-----------------|
| F-461B | 2-56 x 1/4" | .67 | 5.49 3.82 |
| F-462B | 2-56 x 1/2" | .80 | 6.56 4.56 |
| F-463B | 2-56 x 3/4" | .93 | 7.63 5.30 |
| F-464B | 3-48 x 3/4" | 1.05 | 8.61 5.99 |
| F-465B | 4-36 x 1/4" | .80 | 6.56 4.56 |
| F-466B | 4-36 x 3/8" | .91 | 7.46 5.19 |
| F-467B | 4-36 x 1/2" | 1.02 | 8.36 5.81 |
| F-580B | 4-36 x 5/8" | 1.10 | 9.02 6.27 |
| F-468B | 4-36 x 3/4" | 1.20 | 9.84 6.84 |
| F-469B | 4-40 x 1/4" | .80 | 6.56 4.56 |
| F-470B | 4-40 x 1/2" | 1.02 | 8.36 5.81 |
| F-582B | 4-40 x 5/8" | 1.10 | 9.02 6.27 |
| F-471B | 4-40 x 3/4" | 1.20 | 9.84 6.84 |
| F-472B | 6-32 x 1/4" | 1.08 | 8.86 6.16 |
| F-583B | 6-32 x 3/8" | 1.15 | 9.43 6.56 |
| F-473B | 6-32 x 1/2" | 1.30 | 10.66 7.41 |
| F-584B | 6-32 x 5/8" | 1.43 | 11.73 8.15 |
| F-474B | 6-32 x 3/4" | 1.58 | 12.76 9.01 |

BRASS ROUND HEAD MACHINE SCREWS (Continued)

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|--------|----------------|-----------------|-----------------|
| F-475B | 6-32 x 1" | 1.88 | 15.42 10.72 |
| F-476B | 6-32 x 1-1/4" | 2.18 | 17.88 12.43 |
| F-477B | 6-32 x 2" | 3.68 | 30.18 20.98 |
| F-478B | 8-32 x 1/4" | 1.60 | 13.12 9.12 |
| F-479B | 8-32 x 3/8" | 1.68 | 13.78 9.58 |
| F-480B | 8-32 x 1/2" | 1.92 | 15.74 10.94 |
| F-585B | 8-32 x 5/8" | 2.12 | 17.38 12.08 |
| F-481B | 8-32 x 3/4" | 2.35 | 19.27 13.40 |
| F-482B | 8-32 x 1" | 2.80 | 22.96 15.96 |
| F-483B | 8-32 x 1-1/4" | 3.28 | 26.90 18.70 |
| F-484B | 10-32 x 1/2" | 2.43 | 19.93 13.85 |
| F-586B | 10-32 x 5/8" | 2.70 | 22.14 15.39 |
| F-485B | 10-32 x 3/4" | 2.95 | 24.19 16.82 |
| F-486B | 10-32 x 1" | 3.52 | 28.86 20.06 |
| F-487B | 10-32 x 1-1/2" | 4.80 | 39.36 27.36 |

BINDER HEAD STEEL MACHINE SCREWS Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|--------------|-----------------|-----------------|
| F-591 | 2-56 x 1/8" | .49 | 4.02 2.79 |
| F-592 | 2-56 x 1/4" | .44 | 3.61 2.51 |
| F-593 | 2-56 x 1/2" | .47 | 3.85 2.70 |
| F-594 | 2-56 x 5/8" | .53 | 4.35 3.02 |
| F-020 | 4-40 x 1/4" | .47 | 3.85 2.68 |
| F-021 | 4-40 x 1/2" | .51 | 4.18 2.91 |
| F-022 | 4-40 x 3/4" | .58 | 4.76 3.31 |
| F-502 | 6-32 x 3/16" | .52 | 4.26 2.96 |
| F-503 | 6-32 x 1/4" | .53 | 4.35 3.02 |
| F-504 | 6-32 x 3/8" | .57 | 4.67 3.25 |
| F-014 | 6-32 x 1/2" | .60 | 4.92 3.42 |
| F-015 | 6-32 x 3/4" | .71 | 5.82 4.05 |
| F-621 | 6-32 x 5/8" | .66 | 5.41 3.76 |
| F-023 | 8-32 x 1/4" | .68 | 5.58 3.88 |
| F-505 | 8-32 x 5/16" | .70 | 5.74 3.99 |
| F-024 | 8-32 x 3/8" | .73 | 5.99 4.16 |
| F-025 | 8-32 x 1/2" | .80 | 6.56 4.56 |
| F-026 | 8-32 x 3/4" | .90 | 7.38 5.13 |
| F-577 | 10-32 x 1/2" | .92 | 7.54 5.24 |
| F-578 | 10-32 x 3/4" | 1.09 | 8.94 6.21 |

BINDER HEAD BRASS MACHINE SCREWS Nickel Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|--------|-------------|-----------------|-----------------|
| F-503B | 6-32 x 1/4" | 1.08 | 8.86 6.16 |
| F-504B | 6-32 x 3/8" | 1.15 | 9.43 6.56 |
| F-014B | 6-32 x 1/2" | 1.30 | 10.66 7.41 |
| F-015B | 6-32 x 3/4" | 1.58 | 12.96 9.01 |
| F-023B | 8-32 x 1/4" | 1.60 | 13.12 9.12 |
| F-024B | 8-32 x 3/8" | 1.68 | 13.78 9.58 |
| F-025B | 8-32 x 1/2" | 1.92 | 15.74 10.94 |
| F-026B | 8-32 x 3/4" | 2.35 | 19.27 13.40 |

FILLISTER HEAD STEEL MACHINE SCREWS Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|--------------|-----------------|-----------------|
| F-606 | 2-56 x 1/4" | .44 | 3.61 2.51 |
| F-607 | 2-56 x 1/2" | .47 | 3.85 2.70 |
| F-608 | 4-40 x 1/4" | .47 | 3.85 2.70 |
| F-609 | 4-40 x 1/2" | .51 | 4.18 2.91 |
| F-610 | 4-40 x 3/4" | .58 | 4.76 3.31 |
| F-611 | 6-32 x 1/4" | .53 | 4.35 3.02 |
| F-612 | 6-32 x 1/2" | .60 | 4.92 3.42 |
| F-613 | 6-32 x 3/4" | .71 | 5.82 4.05 |
| F-614 | 8-32 x 3/8" | .73 | 5.99 4.16 |
| F-615 | 8-32 x 1/2" | .80 | 6.56 4.56 |
| F-616 | 8-32 x 3/4" | .90 | 7.38 5.13 |
| F-617 | 10-32 x 1/2" | .92 | 7.54 5.24 |
| F-618 | 10-32 x 3/4" | 1.09 | 8.94 6.21 |

OVAL HEAD STEEL MACHINE SCREWS Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|--------------|-----------------|-----------------|
| F-506 | 6-32 x 1/2" | .60 | 4.92 3.42 |
| F-507 | 6-32 x 3/4" | .71 | 5.82 4.05 |
| F-508 | 8-32 x 3/4" | .90 | 7.38 5.13 |
| F-509 | 10-32 x 1/2" | .92 | 7.54 5.24 |
| F-510 | 10-32 x 3/4" | 1.09 | 8.94 6.21 |

PHILLIPS HEAD ROUND STEEL M.S. Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|--------------|-----------------|-----------------|
| F-494 | 6-32 x 1/4" | 1.14 | 9.35 6.50 |
| F-018 | 6-32 x 5/16" | 1.16 | 9.51 6.61 |
| F-495 | 6-32 x 1/2" | 1.05 | 8.61 5.99 |
| F-496 | 6-32 x 3/4" | 1.18 | 9.68 6.73 |
| F-497 | 6-32 x 1" | 1.33 | 10.91 7.58 |
| F-019 | 8-32 x 1/4" | 1.30 | 10.66 7.41 |
| F-498 | 8-32 x 5/16" | 1.00 | 8.20 5.70 |
| F-499 | 8-32 x 1/2" | 1.12 | 9.18 6.38 |
| F-500 | 8-32 x 3/4" | 1.29 | 10.58 7.35 |
| F-501 | 8-32 x 1" | 1.48 | 12.14 8.44 |

SLOTTED HEX HEAD SHEET METAL SCREWS (Type A) Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|-------------|-----------------|-----------------|
| F-016 | 4 x 3/8" | .70 | 5.74 3.99 |
| F-523 | 4 x 1/2" | .73 | 5.99 4.16 |
| F-524 | 6 x 1/4" | .82 | 6.72 4.69 |
| F-525 | 6 x 3/8" | .84 | 6.89 4.79 |
| F-526 | 6 x 1/2" | .89 | 7.30 5.07 |
| F-595 | 6 x 5/8" | .93 | 7.63 5.30 |
| F-527 | 6 x 3/4" | .97 | 7.95 5.53 |
| F-528 | 8 x 1/4" | .97 | 7.95 5.53 |
| F-529 | 8 x 3/8" | 1.02 | 8.36 5.81 |
| F-530 | 8 x 1/2" | 1.05 | 8.61 5.99 |
| F-017 | 8 x 5/8" | 1.07 | 8.77 6.10 |
| F-531 | 8 x 1" | 1.34 | 10.99 7.64 |
| F-532 | 10 x 3/8" | 1.14 | 9.35 6.50 |
| F-533 | 10 x 1/2" | 1.23 | 10.09 7.01 |
| F-534 | 10 x 3/4" | 1.36 | 11.15 7.76 |

HEX WASHER HEAD SHEET METAL SCREW (Type A) Steel—Indented Slotted Head Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|-------------|-----------------|-----------------|
| F-060 | 4 x 3/8" | .77 | 6.31 4.39 |
| F-061 | 4 x 1/2" | .80 | 6.56 4.56 |
| F-056 | 6 x 1/4" | .90 | 7.38 5.13 |
| F-057 | 6 x 3/8" | .92 | 7.54 5.24 |
| F-050 | 6 x 1/2" | .98 | 8.04 5.59 |
| F-058 | 6 x 5/8" | 1.02 | 8.36 5.81 |
| F-054 | 6 x 3/4" | 1.07 | 8.77 6.10 |
| F-051 | 8 x 1/4" | 1.07 | 8.77 6.10 |
| F-052 | 8 x 3/8" | 1.12 | 9.18 6.38 |
| F-053 | 8 x 1/2" | 1.16 | 9.51 6.61 |
| F-055 | 8 x 5/8" | 1.18 | 9.68 6.73 |
| F-059 | 8 x 3/4" | 1.32 | 10.82 7.52 |

PAN HEAD SHEET METAL SCREWS (Type A) Cadmium Plated

| | PKG. OF 100 | 1000-4999 PER M | 5000 OVER PER M |
|-------|-------------|-----------------|-----------------|
| F-596 | 4 x 1/2" | .73 | 5.99 4.16 |
| F-033 | 6 x 1/4" | .82 | 6.72 4.67 |
| F-597 | 6 x 3/8" | .84 | 6.89 4.79 |
| F-034 | 6 x 1/2" | .89 | 7.30 5.07 |
| F-035 | 6 x 3/4" | .97 | 7.95 5.53 |
| F-036 | 8 x 1/4" | .97 | 7.95 5.53 |
| F-598 | 8 x 3/8" | 1.02 | 8.36 5.81 |
| F-037 | 8 x 1/2" | 1.05 | 8.61 5.99 |
| F-038 | 8 x 1" | 1.34 | 10.99 7.64 |



ELECTRONIC HARDWARE

WALSCO BINDING HEAD MACHINE SCREWS

—
STEEL
NICKEL PLATED



| SIZE | BOX OF 100 | | BOX OF 1000 | |
|------------------------------|------------|---------|-------------|----------|
| | PART NO. | NET/100 | PART NO. | NET/1000 |
| Machine Screws, 2-56 x 1/4" | 8151-C | \$.53 | 8151-M | \$ 4.20 |
| Machine Screws, 2-56 x 1/2" | 8152-C | .53 | 8152-M | 4.20 |
| Machine Screws, 2-56 x 3/4" | 8154-C | .53 | 8154-M | 4.20 |
| Machine Screws, 4-36 x 1/4" | 8155-C | .53 | 8155-M | 4.20 |
| Machine Screws, 4-36 x 1/2" | 8156-C | .53 | 8156-M | 4.20 |
| Machine Screws, 4-36 x 3/4" | 8157-C | .53 | 8157-M | 4.20 |
| Machine Screws, 4-40 x 1/4" | 8158-C | .52 | 8158-M | 4.18 |
| Machine Screws, 4-40 x 1/2" | 8159-C | .54 | 8159-M | 4.22 |
| Machine Screws, 4-40 x 3/4" | 8160-C | .64 | 8160-M | 5.35 |
| Machine Screws, 5-36 x 1/4" | 8161-C | .53 | 8161-M | 4.20 |
| Machine Screws, 6-32 x 3/16" | 8162-C | .53 | 8162-M | 4.20 |
| Machine Screws, 6-32 x 1/4" | 8163-C | .53 | 8163-M | 4.20 |
| Machine Screws, 6-32 x 3/8" | 8164-C | .57 | 8164-M | 4.50 |
| Machine Screws, 6-32 x 1/2" | 8166-C | .65 | 8166-M | 5.12 |
| Machine Screws, 6-32 x 3/4" | 8167-C | .72 | 8167-M | 5.17 |
| Machine Screws, 7-32 x 3/8" | 8165-C | 1.57 | 8165-M | 12.48 |
| Machine Screws, 8-32 x 1/4" | 8168-C | .72 | 8168-M | 5.62 |
| Machine Screws, 8-32 x 3/8" | 8169-C | .75 | 8169-M | 5.85 |
| Machine Screws, 8-32 x 1/2" | 8170-C | .78 | 8170-M | 6.27 |
| Machine Screws, 8-32 x 5/16" | 8171-C | .72 | 8171-M | 5.73 |
| Machine Screws, 8-32 x 3/4" | 8172-C | .95 | 8172-M | 7.57 |
| Machine Screws, 10-32 x 1/2" | 8173-C | .79 | 8173-M | 7.70 |
| Machine Screws, 10-32 x 3/4" | 8174-C | 1.15 | 8174-M | 9.20 |

WALSCO BINDING HEAD MACHINE SCREWS

—
BRASS
NICKEL PLATED



| | | | | |
|------------------------------|----------|------|----------|-------|
| Machine Screws, 2-56 x 1/4" | 8151-1-C | .84 | 8151-1-M | 6.98 |
| Machine Screws, 2-56 x 1/2" | 8152-1-C | .96 | 8152-1-M | 8.28 |
| Machine Screws, 2-56 x 3/4" | 8154-1-C | 1.11 | 8154-1-M | 9.55 |
| Machine Screws, 4-36 x 1/4" | 8155-1-C | .97 | 8155-1-M | 8.32 |
| Machine Screws, 4-36 x 1/2" | 8156-1-C | 1.19 | 8156-1-M | 10.18 |
| Machine Screws, 4-36 x 3/4" | 8157-1-C | 1.40 | 8157-1-M | 12.05 |
| Machine Screws, 4-40 x 1/4" | 8158-1-C | .97 | 8158-1-M | 8.32 |
| Machine Screws, 4-40 x 1/2" | 8159-1-C | 1.19 | 8159-1-M | 10.18 |
| Machine Screws, 4-40 x 3/4" | 8160-1-C | 1.40 | 8160-1-M | 12.15 |
| Machine Screws, 5-36 x 1/4" | 8161-1-C | 1.07 | 8161-1-M | 9.17 |
| Machine Screws, 6-32 x 3/16" | 8162-1-C | 1.34 | 8162-1-M | 11.47 |
| Machine Screws, 6-32 x 1/4" | 8163-1-C | 1.27 | 8163-1-M | 10.90 |
| Machine Screws, 6-32 x 3/8" | 8164-1-C | 1.35 | 8164-1-M | 11.54 |
| Machine Screws, 6-32 x 1/2" | 8166-1-C | 1.51 | 8166-1-M | 12.90 |
| Machine Screws, 6-32 x 3/4" | 8167-1-C | 1.83 | 8167-1-M | 15.65 |
| Machine Screws, 8-32 x 1/4" | 8168-1-C | 1.85 | 8168-1-M | 15.70 |
| Machine Screws, 8-32 x 3/8" | 8169-1-C | 1.94 | 8169-1-M | 16.65 |
| Machine Screws, 8-32 x 1/2" | 8170-1-C | 2.20 | 8170-1-M | 18.80 |
| Machine Screws, 8-32 x 5/16" | 8171-1-C | 1.88 | 8171-1-M | 16.20 |
| Machine Screws, 8-32 x 3/4" | 8172-1-C | 2.70 | 8172-1-M | 23.15 |
| Machine Screws, 10-32 x 1/2" | 8173-1-C | 2.54 | 8173-1-M | 21.80 |
| Machine Screws, 10-32 x 3/4" | 8174-1-C | 3.43 | 8174-1-M | 29.50 |

HEX NUTS STEEL NICKEL PLATED



| Thread | Width | Thickness | | | | |
|--------|--------|-----------|--------|-----|--------|------|
| 2-56 | 3/16" | 1/16" | 8802-C | .68 | 8802-M | 5.52 |
| 4-36 | 1/4" | 3/32" | 8824-C | .67 | 8824-M | 5.28 |
| 4-40 | 5/16" | 7/64" | 8804-C | .67 | 8804-M | 5.28 |
| 6-32 | 1/4" | 3/32" | 8806-C | .68 | 8806-M | 5.52 |
| 6-32 | 5/16" | 7/64" | 8826-C | .73 | 8826-M | 5.82 |
| 8-32 | 1/4" | 3/32" | 8808-C | .73 | 8808-M | 5.85 |
| 8-32 | 11/32" | 1/8" | 8828-C | .73 | 8828-M | 5.85 |
| 10-32 | 3/8" | 5/64" | 8810-C | .97 | 8810-M | 7.68 |
| 10-32 | 3/8" | 1/8" | 8830-C | .87 | 8830-M | 6.98 |

HEX NUTS BRASS



| | | | | | | |
|-------|-------|-------|----------|------|----------|-------|
| 2-56 | 3/16" | 1/16" | 8802-1-C | .98 | 8802-1-M | 7.83 |
| 4-36 | 1/4" | 3/32" | 8845-C | 1.18 | 8845-M | 9.42 |
| 4-40 | 5/16" | 7/64" | 8844-C | 1.17 | 8844-M | 9.33 |
| 6-32 | 1/4" | 3/32" | 8846-C | 1.17 | 8846-M | 9.30 |
| 6-32 | 5/16" | 7/64" | 8826-1-C | 1.40 | 8826-1-M | 11.18 |
| 8-32 | 1/4" | 3/32" | 8848-C | 1.17 | 8848-M | 9.30 |
| 10-32 | 3/8" | 5/64" | 8810-1-C | 1.53 | 8810-1-M | 12.27 |
| 10-32 | 3/8" | 1/8" | 8850-C | 1.53 | 8850-M | 12.27 |

Walsco ELECTRONIC HARDWARE

ELECTRONICS



WALSCO CABLE CLAMPS

For all cable or wire groups from 1/8" to 3/8" in diameter.
Description

| Description | Mtg. Hole Size |
|------------------------------|----------------|
| 1/8" to 3/16" cable diameter | #6 |
| 3/16" to 1/4" cable diameter | #8 |
| 1/4" to 3/8" cable diameter | #8 |
| | Assorted |



| 50 LINE | | 100 Pack | | BULK PACK | | Dealer | |
|----------|----------|----------|-----------|------------|----------|-----------|--------------|
| Dir. Net | .36/Pkg. | Cat. No. | Qty. Pkg. | Dealer Net | Cat. No. | Std. Pack | Net Per 1000 |
| 7502-F | 25 | 7502-C | 100 | \$.98 | 7502-M | 1000 | \$ 7.83 |
| 7503-F | 20 | 7503-C | 100 | 1.12 | 7503-M | 1000 | 8.88 |
| 7505-F | 16 | 7505-C | 100 | 2.08 | 7505-M | 1000 | 16.65 |
| 7500-F | 20 | | | | | | |

VINYL GROMMETS

Protects insulated wires from sharp edges of chassis holes. Easily installed. Extremely useful for damping vibration in mounting parts.



DIMENSIONS

| A | B | C | D | E | Cat. No. | Qty. Pkg. | Cat. No. | Qty. Pkg. | Dealer Net | Cat. No. | Std. Pack | Dealer Net Per 1000 |
|-------|------|-------|-----|-----|----------|-----------|----------|-----------|------------|----------|-----------|---------------------|
| 1 1/2 | 1/8 | 3/16 | 1/4 | 1/4 | 7030-F | 14 | 7030-C | 100 | \$1.00 | 7030-M | 1000 | \$ 8.13 |
| 3/4 | 3/16 | 1/2 | 3/8 | 3/8 | 7032-F | 12 | 7032-C | 100 | 1.25 | 7032-M | 1000 | 10.00 |
| 1/2 | 1/4 | 3/4 | 1/2 | 1/2 | 7034-F | 12 | 7034-C | 100 | 1.37 | 7034-M | 1000 | 10.88 |
| 3/8 | 3/8 | 1 | 3/4 | 3/4 | 7036-F | 10 | 7036-C | 100 | 1.47 | 7036-M | 1000 | 11.73 |
| 1/4 | 1/2 | 1 1/2 | 1 | 3/8 | 7038-F | 8 | 7038-C | 100 | 2.27 | 7038-M | 1000 | 18.22 |
| | | | | | 7025-F | 12 | | | | | | |

CABINET FEET — SCREW TYPE

Made of synthetic rubber. Easily installed with wood screws, metal screws or tacks. Screw type is supplied with wood screws on "50" and "99" line packages.



| Diameter | Height |
|----------|----------|
| 3/8 | 3/8 |
| 1/2 | 1/4 |
| 5/8 | 3/8 |
| 3/4 | 3/8 |
| | Assorted |

TACK TYPE

Same as above, but with handy tacks molded in feet.



| Diameter |
|----------|
| 3/8 |
| 1/2 |
| Assorted |

| 50 LINE | | 100 Pack | | BULK PACK | | Dealer | |
|----------|----------|----------|-----------|------------|----------|-----------|--------------|
| Dir. Net | .36/Pkg. | Cat. No. | Qty. Pkg. | Dealer Net | Cat. No. | Std. Pack | Net Per 1000 |
| 7052-F | 8** | 7052-C | 100** | \$.92 | 7052-M* | 1000 | \$ 7.30 |
| 7054-F | 8** | 7054-C | 100** | 1.47 | 7054-M* | 1000 | 11.70 |
| 7056-F | 8** | 7056-C | 100** | 2.22 | 7056-M* | 1000 | 17.70 |
| | | 7058-C | 100** | 2.82 | 7058-M* | 1000 | 22.50 |
| 7050-F | 8** | | | | | | |
| | | | | | 7071-C | 100 | \$1.85 |
| | | | | | 7072-C | 100 | 1.95 |
| | | | | | 7071-M | 1000 | \$14.78 |
| | | | | | 7072-M | 1000 | 15.57 |
| 7070-F | 8 | | | | | | |

* No screws included

** Wood screws included

WALSCO INSULATING WASHERS

(Flat and Extruded)
Precision made from vulcanized phenolic fiber. Assures the proper and safe insulation between components and controls from each other or the chassis and other metal parts.



| Fits Screw Size | A | B | C | D | |
|-----------------|------|-------|------|------|---------------|
| #6 | 3/16 | 3/16 | .140 | .039 | Extruded Flat |
| | 3/16 | | .140 | | Fl. & Ex. |
| #8 | 3/8 | 1/4 | .169 | 1/32 | Extruded Flat |
| | 3/8 | | .166 | | Fl. & Ex. |
| #10 | 3/8 | .308 | .195 | 1/32 | Extruded Flat |
| | 3/8 | | .195 | | Fl. & Ex. |
| 1/4" | 1/2 | 1 1/2 | .250 | 1/32 | Extruded Flat |
| | 1/2 | | .250 | | Fl. & Ex. |
| 3/8" | 5/8 | 1/2 | .380 | 1/32 | Extruded Flat |
| | 5/8 | | .380 | | Fl. & Ex. |

| 50 LINE | | 100 Pack | | BULK PACK | | Dealer | |
|----------|----------|----------|-----------|------------|----------|-----------|--------------|
| Dir. Net | .36/Pkg. | Cat. No. | Qty. Pkg. | Dealer Net | Cat. No. | Std. Pack | Net Per 1000 |
| | | 7856-C | 100 | \$.87 | 7856-M | 1000 | \$6.90 |
| | | 7836-C | 100 | .42 | 7836-M | 1000 | 3.30 |
| 7824-F | 30 | 7858-C | 100 | .87 | 7858-M | 1000 | 6.90 |
| | | 7838-C | 100 | .42 | 7838-M | 1000 | 3.30 |
| 7825-F | 30 | 7860-C | 100 | .95 | 7860-M | 1000 | 7.53 |
| | | 7840-C | 100 | .42 | 7840-M | 1000 | 3.30 |
| 7826-F | 30 | 7862-C | 100 | .95 | 7862-M | 1000 | 7.53 |
| | | 7842-C | 100 | .47 | 7842-M | 1000 | 3.68 |
| 7827-F | 24 | 7864-C | 100 | .98 | 7864-M | 1000 | 7.92 |
| | | 7844-C | 100 | .77 | 7844-M | 1000 | 6.12 |
| 7828-F | 20 | | | | | | |

WALSCO SPADE BOLTS

Ideal for fastening condensers, coils, shields, etc. The type 8572 is straight and has 1/2" long thread. Thread on type 8573 is 3/16" long. Both types are 3/4" long overall, have 6-32 thread and hole for 6-32 screw or 1/8" rivet.



| Size | A | B | C | D | |
|---------------|------|-------|-------|---------|----------|
| 6-32 Straight | 3/4" | 3/16" | 3/32" | 1/4" | Assorted |
| 6-32 Offset | 3/4" | 3/16" | 3/16" | 1 3/64" | |

| 50 LINE | | 100 Pack | | BULK PACK | | Dealer | |
|----------|----------|----------|-----------|------------|----------|-----------|--------------|
| Dir. Net | .36/Pkg. | Cat. No. | Qty. Pkg. | Dealer Net | Cat. No. | Std. Pack | Net Per 1000 |
| 8570-F | 15 | 8572-C | 100 | \$1.22 | 8572-M | 1000 | \$12.23 |
| | | 8573-C | 100 | 2.55 | 8573-M | 1000 | 20.33 |

WALSCO SNAP-HOLE PLUGS

The quickest, simplest way ever devised to cover a hole in chassis or panel. Spring flanges hold polished nickel-plated flat-head button firmly in place. Use Walsco Snap-Hole Plugs to seal adjustments, cover unused holes, etc.



| Fits Hole Diameter |
|--------------------|
| 1/8" |
| 3/16" |
| 1/4" |
| 3/8" |
| 1/2" |
| 5/8" |
| 3/4" |
| 1" |
| 1 1/8" |
| 1 1/4" |
| Assorted |

| 50 LINE | | 100 Pack | | BULK PACK | | Dealer | |
|----------|----------|----------|-----------|------------|----------|-----------|--------------|
| Dir. Net | .36/Pkg. | Cat. No. | Qty. Pkg. | Dealer Net | Cat. No. | Std. Pack | Net Per 1000 |
| 7306-F | 8 | 7306-C | 100 | \$2.25 | 7302-M | 1000 | \$25.65 |
| 7308-F | 8 | 7308-C | 100 | 2.85 | 7304-M | 1000 | 24.38 |
| 7310-F | 6 | 7310-C | 100 | 3.08 | 7306-M | 1000 | 18.00 |
| 7312-F | 6 | 7312-C | 100 | 3.30 | 7308-M | 1000 | 22.87 |
| 7314-F | 5 | 7314-C | 100 | 3.60 | 7310-M | 1000 | 24.60 |
| | | 7315-C | 100 | 4.62 | 7312-M | 1000 | 26.40 |
| | | 7316-C | 100 | 4.95 | 7314-M | 1000 | 28.80 |
| | | 7318-C | 100 | 5.93 | 7315-M | 1000 | 36.90 |
| | | 7320-C | 100 | 6.45 | 7316-M | 1000 | 39.60 |
| | | | | | 7318-M | 1000 | 59.40 |
| | | | | | 7320-M | 1000 | 51.60 |
| 7300-F | 6 | | | | | | |

VENTILATING HOLE PLUGS

Assorted 7330-F 3
Snap these protective screen coverings into ventilating holes on chassis, portable equipment cases, amplifiers, amateur rigs, etc. Spring flange holds plug in place.



| Fig. No. | Type | Hole Size | Finish | Cat. No. | Dealer Net | Cat. No. | Dealer Net |
|----------|----------|-----------|------------------|----------|------------|----------|------------|
| 1 | Screened | 1" | Steel | 7331-C | \$21.38 | 7331-M | \$170.99 |
| 2 | Eyelet | 1 1/2" | Brass—Not Plated | 7332-C | 4.50 | 7332-M | 40.43 |
| 2 | Eyelet | 3/4" | Brass | 7333-C | 6.37 | 7333-M | 57.23 |

THE FIRST SIX MODELS IN THE NEW "ACCURATE" LINE — MORE TO COME!



Model 154 a Modern, Streamlined

20,000 OHMS-PER-VOLT V.O.M.

FEATURES GIANT 6½" METER only \$29⁹⁵ COMPLETE!

Not a kit . . . the 154 is a completely Wired and Calibrated Tester . . . **READY TO USE!**

The 20,000 Ohms-per-Volt-V.O.M. has been the one "must have" tester for all Radio and TV technicians since 1935 . . . and now . . . we proudly announce

the most recent, streamlined edition of this all-around useful standard with a 6½" meter and at an unbelievably low price.

MODEL 154 FEATURES AND SPECIFICATIONS

- Mirrored Scale permits fine accurate measurements where fractional readings are important.
- Selected resistors are used as multipliers to assure unchanging accurate readings on all ranges.
- 6 D.C. VOLTAGE RANGES (at 20,000 Ohms per Volt) 0 to 15/75/150/300/750/3000 Volts
- 6 A.C. VOLTAGE RANGES (at 5,000 Ohms per Volt) 0 to 15/75/150/300/750/3000 Volts.
- 5 RESISTANCE RANGES: 0 to 2000/20,000/200,000

- 5 O.C. CURRENT RANGES: 0 to 75/750 Microamperes; 0 to 7.5/75 Milliamperes; 0 to 7.5 Amperes;
- 3 DECIBEL RANGES: — 6 db to — 18 db; + 14 db to + 38 db; — 28 db to + 52 db.

Model 154 comes complete with operating instructions and test leads. Only **\$29⁹⁵**



New Model 155 Super-Tester

WITH NEW 6" FULL-VIEW METER
A Combination
VOLT-OHM MILLIAMMETER

plus

CAPACITY, REACTANCE, INDUCTANCE and DECIBEL MEASUREMENTS.

Also Tests

SELENIUM and SILICON RECTIFIERS, SILICON and GERMANIUM DIODES.

SPECIFICATIONS:

- \ D.C. Volts: 0 to 7.5/15/75/150/750/1,500.
- \ A.C. Volts: 0 to 15/30/150/300/1,500/3,000.
- \ D.C. Current: 0 to 1.5/15/ 150 Ma.; 0 to 1.5/15 Amperes.
- \ Resistance: 0 to 2,000/200,000 Ohms. 0 to 20 Megohms.
- \ Capacity: .001 to 1 Mfd. 1 to 20 Mfd.
- \ Reactance: 130 to 2,600 Ohms, 2,600 Ohms to 2.6 Meg-ohms.
- \ Inductance: .35 to 7 Henries, 7 to 7,000 Henries.
- \ Decibels: — 6 to + 18, + 14 to — 38, + 34 to + 58.

The following components are all tested for QUALITY at appropriate test potentials. Two separate BAD-GOOD scales on the meter are used for direct readings.

- \ All Electrolytic Condensers from 1 Mfd to 1000 Mfd.
- \ All Selenium Rectifiers
- \ All Silicon Rectifiers
- \ All Germanium Diodes \ All Silicon Diodes

Model 155 comes complete with operating instructions and test leads. Use it on the bench — use it on calls. Complete with all instructions and leads. Only **\$2840**



New Model 156 GENOMETER

SEVEN (7) SIGNAL GENERATORS IN ONE!

- R.F. Signal Generator for A.M.
- R.F. Signal Generator for F.M.
- Audio Freq. Generator
- Bar Generator
- Cross Hatch Generator
- Color Dot Pattern Generator
- Marker Generator

A versatile all-inclusive GENERATOR which provides all the outputs for servicing:
A.M. RADIO • F.M. RADIO • AMPLIFIERS • BLACK AND WHITE TV • COLOR TV

Specifications:

R.F. SIGNAL Generator: The Model 156 Genometer provides complete coverage for A.M. and F.M. alignment. Generates Radio Frequencies from 250 Kilocycles to 45 Megacycles on fundamentals and from 35 Megacycles to 120 Megacycles on powerful harmonics.

CROSS HATCH GENERATOR: The Model 156 Genometer will project a cross-hatch pattern on any TV picture tube. The pattern will consist of non-shifting, horizontal and vertical lines interlaced to provide a stable cross-hatch effect.

VARIABLE AUDIO FREQUENCY GENERATOR: In addition to a fixed 400 cycle sine-wave audio, the Model 156 Genometer provides a variable 300 cycle to 20,000 cycle peaked wave audio signal.

DOT PATTERN GENERATOR (FOR COLOR TV): Although you will be able to use most of your regular standard equipment for servicing Color TV, the one addition which is a "must" is a Dot Pattern Generator. The Dot Pattern projected on any color TV Receiver tube by the Model 156 will enable you to adjust for proper color convergence.

BAR GENERATOR: The Model 156 projects an actual Bar Pattern on any TV Receiver Screen. Pattern will consist of 4 to 16 horizontal bars or 7 to 20 vertical bars.

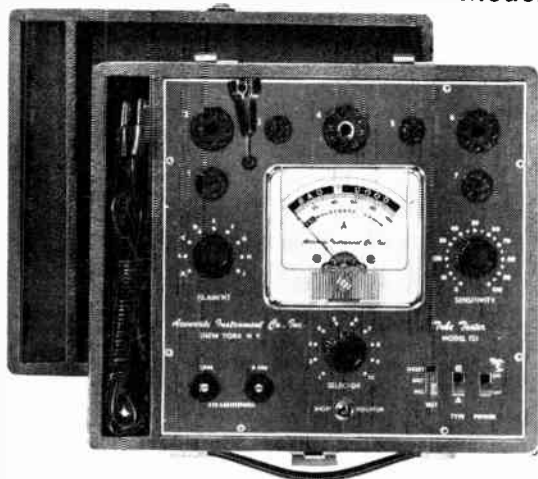
The Model 156 comes absolutely complete with shielded leads and operating instructions. Only **\$3850**

MARKER GENERATOR: The Model 156 includes all the most frequently needed marker points. The following markers are provided: 262 Kc., 456 Kc., 600 Kc., 1400 Kc., 1600 Kc., 2500 Kc., 3,579 Mc., 4.5 Mc., 10.7 Mc., (3,579 Mc. is the color burst frequency).

ACCURATE INSTRUMENT CO., INC., NEW YORK 59, N. Y.

THE FIRST SIX MODELS IN THE NEW "ACCURATE" LINE — MORE TO COME!

Model 151 a Modern, Streamlined **TUBE TESTER**



PICTURE TUBE ADAPTER DESIGNED ESPECIALLY FOR
MODEL 151 ONLY\$3.85

Only \$21.95 COMPLETE! Not a kit . . . the 151 is a completely Wired and Calibrated Tester . . . Ready to use!

Don't let the low price mislead you!

The Model 151 was designed and produced with the knowledge that the only way to meet "imported" tester competition is to turn out a better product at a lower price.

Compare the Model 151 features and specifications below with any tube tester, domestic or foreign, in the \$30.00 to \$50.00 price range.

MODEL 151 FEATURES AND SPECIFICATIONS

- ✓ Tests over 1,000 Tube Types
- ✓ Makes all necessary tests. Checks for shorts and leakages between all elements; tests for filament continuity; indicates the quality (emission) of all tubes.
- ✓ Checks all modern tubes including 7-pin miniatures; octals; lock-ins; 9-pin noval miniatures and new T-9 types.
- ✓ Five (5) Year Free Tube Data.
- ✓ Speedy Operation assured by use of a new improved circuit which enables us to use a single rotary switch in place of the one-at-a-time slide switches previously used.
- ✓ 7 and 9 pin tube straighteners permanently mounted on front panel.
- ✓ Employs a rugged, accurate, highly damped meter movement with sealed air-dampening chamber.
- ✓ Comes housed in a beautiful portable carrying case with slip-on cover.

Model 151 comes complete—absolutely **\$2195** no extras. Only

Model 152 a Modern, Streamlined **SENIOR V.T.V.M.**

FEATURES GIANT 6½" METER

Only \$29.95 COMPLETE! Not a kit . . . the 152 is a completely Wired and Calibrated Tester . . . Ready to use!

Don't let the low price mislead you!

The Model 152 was designed and produced with the knowledge that the only way to meet "imported" tester competition is to turn out a better product at a lower price.

Compare the Model 152 features and specifications below with any wired V.T.V.M., domestic or foreign, in the \$50.00 to \$70.00 price range.

MODEL 152 FEATURES AND SPECIFICATIONS:

- D.C. VOLTMETER: Ranges: 0 to 3, 30, 150, 300, 1500 volts; Accuracy: $\pm 3\%$ of full scale; Input resistance: 11 megohms.
- ZERO CENTER VOLTMETER (for discriminator alignment): Ranges: 0 to 1.5, 15, 75, 150, 750 volts; Accuracy: $\pm 3\%$ of full scale. Input resistance: 11 megohms.
- A.C. VOLTMETER: R.M.S. Ranges: 0 to 3, 30, 150, 300, 1500 volts; Peak to Peak Ranges: 0 to 8, 80, 400, 800 volts; Accuracy: $\pm 3\%$ of full scale.
- OHMMETER: Ranges: 0 to 1000 megohms (5 overlapping ranges); Center Scale Values: 10, 100, 1000, 100,000 ohms, 10 megohms.
- DECIBEL METER (for all audio measurements): Ranges: -10 to +5, +6 to +25, +26 to +45 decibels. All based on zero db. at 1.73 volts on 500 ohm line; Pilot light indicates when unit is "on".
- Housed in beautiful grey high-impact case, with color matched etched aluminum panel and portable handle.

Model 152 comes complete with D.C. V.T.V.M. Probe and cable, pair of standard test leads for all other services, detailed instructions. Only **\$2995**



Model 153 a COMBINATION **SIGNAL GENERATOR and SIGNAL TRACER**

Now, for the first time ever, a combination Signal Generator and Signal Tracer priced at only **\$2840** COMPLETE

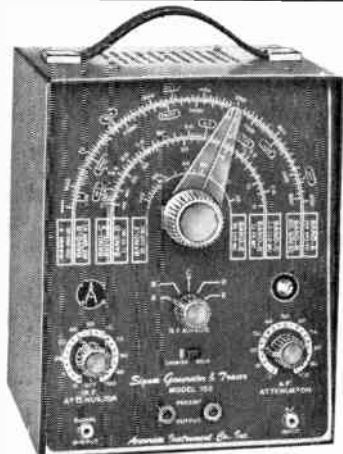
The true test of the claim "two instruments in one" is; can each of the two units be used separately as well as in conjunction with each other? In the case of this versatile combination instrument, the answer is emphatically yes, for, the Signal Generator will function as a full service instrument with a range of 250 kilocycles to 120 megacycles and the Signal Tracer will follow any signal whether generated by a broadcasting station or

injected by the Signal Generator section of Model 153. When used in combination with no dependence on outside signals, the compatibility of Model 153 provides ideal service, for unlike any standard signal tracer, the Model 153 first injects its own signal then traces that controllable signal to locate the source of trouble whether due to component or circuit by standard signal tracing technique.

SPECIFICATIONS:

SIGNAL TRACER: • Hi-gain cascode pre-amplifier • Pre-amplifier output available at front panel jacks for use with VTVM, oscilloscope or phones. • Low distortion triode output stage. • Audio Attenuator provided to prevent high signal overloading. • 4½ inch permanent magnet speaker. • Separate R.F. and Audio signal trac-

ing probes. **SIGNAL GENERATOR:** • Covers from 250 KC to 120 MC in 5 bands. • All popular and most used frequencies marked on panel in color. • High stability electron coupled R.F. oscillator. • Attenuator used on both R.F. and Audio circuits.



Model 153 comes complete with all necessary probes. Only **\$2840**

ACCURATE INSTRUMENT CO., INC., NEW YORK 59, N. Y.



NORTHROP VENTURA

AERO INSTRUMENT FACILITY

NORTH HOLLYWOOD, CALIFORNIA

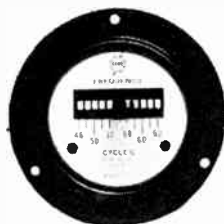
VIBRATING REED FREQUENCY & TIMING INSTRUMENTS

GENERAL DESCRIPTION

Vibrating Reed Instruments are direct reading frequency indicators for use where the efficient operation of A.C. equipment depends upon the maintenance of known or constant frequency. They are self contained, their accuracy is not affected by wide voltage variations or wave form distortions and require no auxiliary apparatus. They consist of a number of steel reeds, of high Q, each of which is tuned to a single frequency within the band covered by the instrument. Indication is by visual pattern formed by the vibration of the reed in resonance with the line frequency. Excitation is electromagnetic, and the reeds are the only moving elements. Running Time Meters are synchronous motor operated instruments to automatically measure service periods or service requirements.

APPLICATIONS

A large demand exists for VIBRATING REED FREQUENCY METERS for use with engine driven A.C. generator units as this is the most simple speed and frequency indicator yet devised for A.C. generator sets. These meters are also generally used in laboratory and portable test equipment, electronics, telephony, aircraft, industrial plants and numerous applications where electrical frequency indication is desired. Engineering services are available for those desiring assistance on their application problems. Running Time Meters are often used in conjunction with reed type frequency meters.



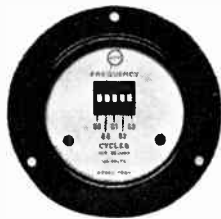
SERIES 7002

Range: 48-52 and 58-62 cycles for reading in either 50 or 60 cycles. Voltage: 125 volts \pm 20 volts. Accuracy: \pm 0.3% of designated frequency. Power Consumption: 1 watt. Resistance: Approximately 100 ohms per volt. Flush panel mounting.

- 2810-134 48-52 and 58-62 cy. in 3 1/2" flange MIL-M-6A molded bakelite case.....\$25.00
- 2810-133 48-52 and 58-62 cy. in 3 1/2" flange metal case..... 25.00
- 2810-153 48-52 and 58-62 cy. in 3 1/4" flange metal case..... 25.00
- 2810-123 48-52 and 58-62 cy. in 2 1/2" flange metal case..... 25.00

SERIES 7004

Range: 59-63 cycles. Used extensively on standby power supplies for measuring generator frequency and engine speeds. Electrical characteristics: Same as the Series 7002.



- 6915-134 59-63 cy. in 3 1/2" flange MIL-M-6A molded bakelite case.....\$21.50
- 6915-133 59-63 cy. in 3 1/2" flange metal case.....\$21.50
- 6915-153 59-63 cy. in 3 1/4" flange metal case.....\$21.50
- 6915-123 59-63 cy. in 2 1/2" flange metal case.....\$21.50

SERIES 4009

Range: 380-420 cycles. For use on 400 cycle commercial power supplies and aircraft inverters. Accuracy: \pm 0.2% at 70° F. Power consumption: Approximately 1.25 watts. Resistance: Approximately 70 ohms per volt. Flush panel mounting.



- 4059-134 380-420 cy. in 3 1/2" flange MIL-M-6A molded bakelite case.....\$31.00
- 4059-133 380-420 cy. in 3 1/2" flange metal case.....\$31.00
- 4059-153 380-420 cy. in 3 1/4" flange metal case.....\$31.00
- 4059-123 380-420 cy. in 2 1/2" flange metal case.....\$31.00

VOLTAGES—All frequency meters can be supplied for voltages from 10 to 440 volts.

DISCOUNTS—Quantity prices quoted upon request.

SPECIAL INSTRUMENTS—Prices on special ranges will be furnished upon request.

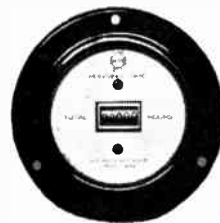
RUNNING TIME METERS—Special ranges, frequencies and voltages available.

Write for catalog describing complete line of Aero stock instruments.

SERIES 1001

Direct reading indicators to automatically and cumulatively register total operating or idle time of any equipment, machine, circuit or system to which they are connected. Range: 0 to 10,000 hours in hours and tenths of hours—automatically resets. Voltage: 125 \pm 20 volts. Power consumption: 2.5 watts. Frequency: 50, 60 and 400 cycles.

- 61134 60 cy. in 3 1/2" flange MIL-M-6A molded bakelite case.....\$19.00
- 41134 400 cy.....Price upon request



3 1/2" SEALED METER

Meets all applicable requirements of MIL-M-6A Specification. All 3 1/2" meters can be supplied in hermetically sealed cases. Electrical characteristics: Same as unsealed instruments.

Prices on all models available upon request.



1 1/2" SEALED METER

Range: 380-420 cycles. For use in air borne or ground equipment where size and weight are important factors. Voltage: 125 \pm 20 volts. Resistance: Approximately 70 ohms per volt. Accuracy: \pm 0.2% at 70° F. or 1.5% over range of -65° to +165° F. Breakdown voltage: 1500 volts. Power consumption: Approximately 1.25 watts.

- 4005-115 380-420 cy. in 1 1/2" hermetically sealed case.....\$23.85

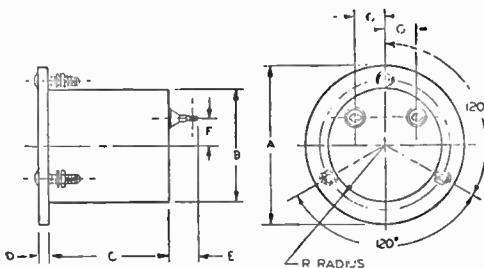
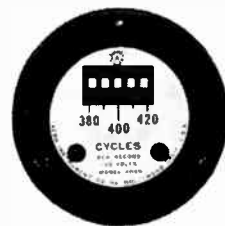


TABLE I

CASE SIZE CHART

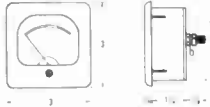
| CASE TYPE | A | | B | | C | | D | | E | | F | | G | | H | | I | | MOUNTING SCREWS |
|-----------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|
| | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | |
| A | 2 10 | 1 31 | 1 56 | 0 14 | 0 40 | 0 41 | 35 | 41 | 35 | 41 | 35 | 41 | 35 | 41 | 35 | 41 | 35 | 41 | 4-26HS 2A |

Series 4005
Range 380 to 420 C.P.S. Hermetically Sealed.

3" RECTANGULAR ALCO PANEL METERS

D'A-serval type; 2.5% ACCURACY. 90° scale arc. Fits 2 3/4" mounting hole. Black bakelite case. MODEL S-35 (specify range)

| Net | | Net | |
|----------------------|--------|------------------------|------|
| 0-50 μ A DC | \$8.95 | 0-10 MA DC | 5.95 |
| 0-100 μ A DC | 7.95 | 0-50 MA DC | 5.95 |
| 0-200 μ A DC | 7.75 | 0-100 MA DC | 5.95 |
| 0-500 μ A DC | 6.95 | 0-300 MA DC | 5.95 |
| 50-0-50 μ A DC | 7.95 | 0-30 VDC 1000 Ω | 5.95 |
| 100-0-100 μ A DC | 7.75 | 0-300 VDC per volt | 5.95 |
| 100-0-500 μ A DC | 6.95 | 0-150 VAC | 6.45 |
| 0-1 MA DC | 5.95 | 20 +3 VU | 6.95 |
| 0-5 MA DC | 5.95 | | |



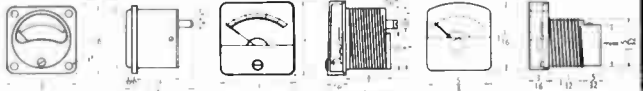
MINIATURE PANEL METERS

S-10



B-100

P-1000



20,000 OHMS PER VOLT TS-60H MULTITESTER

New design; wide scale arc. Compares with 4 1/2" meters; has 4" meter face. Measures 3 1/4" W x 4 1/2" H. Includes leather case and test leads.

C Volt Ranges—5-25-250-500-2500 @ 20,000 Ω per volt
 C Volt Ranges—10-50-100-500-1000 @ 10,000 Ω per volt
 Capacity—.001 mfd.-1 mfd (w/10 VAC supply)
 .00001 mfd.-0.01 mfd (w/100 VAC supply)
 C Current—50 μ a, 2.5 ma, 250 ma.
 Resistance—0-60,000 ohms, 0-6 megs.
 Scales—20db to +22db.

\$15.95
Net



VOLT-OHM-MILLIAMETER TS-55A MULTITESTER

• PORTABLE

A.C. VOLTAGE RANGES: 10, 50, 250, 500 & 1000
 A.C. VOLTAGE RANGES: 10, 50, 250, 500 & 1000
 A.C. CURRENT RANGES: 0-1 & 0-500ma
 RESISTANCE: 20 Ω to +36db (2 ranges)
 RESISTANCE: 0 -100K Ω

\$8.95 Net



BATTERY-OPERATED PORTABLE VTVM

A.C. voltage: 0-3, 6, 30, 120, 600V
 D.C. voltage: 0-3, 6, 30, 120, 600V
 (P-P): 0-9, 18, 90, 360, 1.8KV
 Resistance: Rx1, Rx100, Rx1K, Rx10K, Rx1 Meg.
 Input Imp: 11 Meg (DCV range)
 Sensitivity: 20 μ A
 Dimensions: 8 3/4 x 5 1/2 x 4 3/8"
 Weight: 4 1/4 lbs.

\$49.95 Net



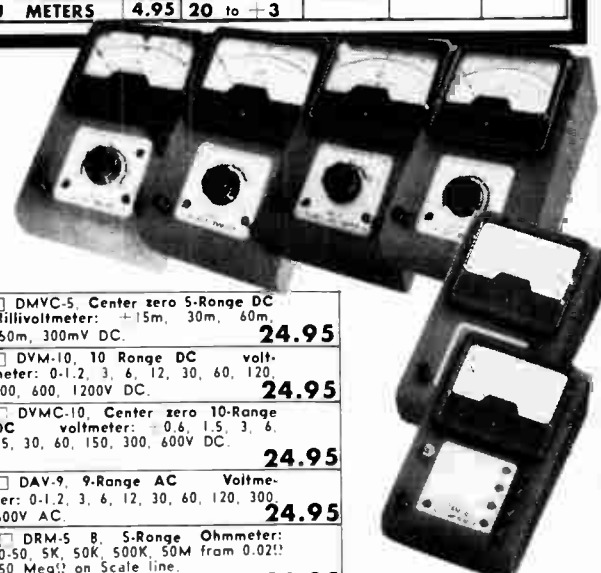
MULTI-RANGE SINGLE FUNCTION PRECISION LABORATORY INSTRUMENTS

ALCO introduces a brand new series of MULTI-RANGE meters of particular interest to schools and labs! The instruments in the ALCO line are standard meters but ingeniously built for rugged use and as a standard of reliability. The adaptation of ONE KNOB CONTROL, wide mirrored scales, and the 5 to 10 different multi-ranges provide further versatility, simplicity, and effectiveness in their applications.

- ZERO CENTER TYPES
- ALL MIRROR SCALES

| | |
|--|---|
| DM5-5, 5-Range DC Microammeter: 0-30 μ , 60 μ , 120 μ , 300 μ , 600 μ A DC. 26.95 | DMVC-5, Center zero 5-Range DC Millivoltmeter: 15m, 30m, 60m, 150m, 300mV DC. 24.95 |
| DMMC-5, Center zero 5-Range DC Microammeter: 15 μ , 30 μ , 60 μ , 150 μ , 300 μ A DC. 26.95 | DVM-10, 10 Range DC Voltmeter: 0-1.2, 3, 6, 12, 30, 60, 120, 300, 600, 1200V DC. 24.95 |
| DMA-11, 11-Range DC Ammeter: 0-600 μ , 1.2m, 3m, 6m, 12m, 30m, 60m, 120m, 300m, 600m, 3A DC. 24.95 | DVMC-10, Center zero 10-Range DC Voltmeter: 0.6, 1.5, 3, 6, 15, 30, 60, 150, 300, 600V DC. 24.95 |
| DMAC-11, Center zero 11-Range DC Ammeter: 300 μ , 0.6m, 1.5m, 3m, 6m, 15m, 30m, 60m, 150m, 300m, 1.5A DC. 24.95 | DAV-9, 9-Range AC Voltmeter: 0-1.2, 3, 6, 12, 30, 60, 120, 300, 600V AC. 24.95 |
| DAM-8 8-Range DC AC Ammeter: 0-1.2, 3, 6, 12A AC. 0-1.2, 3, 6, 12A DC. 26.95 | DRM-5 B 5-Range Ohmmeter: 0-50, 5K, 50K, 500K, 50M from 0.02 Ω ! 50 Meg Ω on Scale line. 28.95 |

Net Prices



ALCO

ELECTRONIC PRODUCTS INC.

LAWRENCE, MASS.

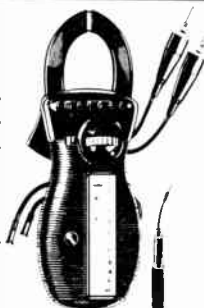


AMPROBE INSTRUMENT CORPORATION

AMPROBE INSTRUMENTS

ROTARY SCALE MODELS

Offer you these outstanding features. • Only the Ohms scale plus one voltage scale or current scale is visible at any one time, providing greater reading speed and accuracy; on models other than RS-3 only scale selected appears. • Magnified unbreakable window. • Pointer-lock "freezes" pointer at reading. • Accurate within $\pm 3\%$ full scale reading. • One hand operation.



| MODEL | RANGES | PRICE* |
|---------|--|---------|
| RS-1 | 0-5/15/40/100 Amps A.C. 0-150/600 Volts A.C. | \$39.85 |
| RS-2 | 0-5/15/40/100 Amps A.C. 0-150/300 Volts A.C. | 39.85 |
| RS-3 | 0-5/15/40/300 Amps A.C. | |
| | 0-150/300/600 Volts A.C. 25 Ω Mid-Scale | 52.50 |
| RS-300 | 0-5/15/40/300 Amps A.C. | |
| | 0-150/300/600 Volts A.C. | 47.50 |
| RS-1000 | 0-15/40/100/300/1000 Amps A.C. | |
| | 0-150/300/600 Volts A.C. 25 Ω Mid-Scale | 69.50 |

Factory Packed with Model "G" Top-Grain Cowhide Leather Carrying Case and Model VL-22 Voltage Test Leads. RS-1000 Packed with Model "E" Carrying Case.

AMPROBE JUNIOR

The only voltage testers in their price class that also measure amperage. They are precision instruments that measure instantly and accurately on a calibrated scale $\pm 3\%$ full scale (not just an indication).



| MODEL | RANGES | PRICE* |
|-------|--------------------------------------|---------|
| Y10 | 0-10 Amps A.C. 0-125/250 Volts A.C. | \$19.85 |
| Y25 | 0-25 Amps A.C. 0-125/250 Volts A.C. | 19.85 |
| Y50 | 0-50 Amps A.C. 0-125/250 Volts A.C. | 19.85 |
| Y100 | 0-100 Amps A.C. 0-125/250 Volts A.C. | 19.85 |
| Y525 | 0-25 Amps A.C. 0-150/600 Volts A.C. | 19.85 |
| Y550 | 0-50 Amps A.C. 0-150/600 Volts A.C. | 19.85 |
| Y500 | 0-100 Amps A.C. 0-150/600 Volts A.C. | 19.85 |

Price includes Model VL-55. Safety Type Voltage Leads. P-1 Leather Punch Optional at \$2.85. Order Separately.

AMPROBE CABLE TRACER

LOCATE UP TO 10 CABLES SIMULTANEOUSLY

Now you can trace conductors in cables and conduit 10 times faster than ever before — and leave your helper free to finish other jobs quickly and profitably. A tracing system in itself, revolutionary new CABLE TRACER lets you search — and unmistakably identify — up to 10 separate circuits simultaneously. What's more, with CABLE TRACER there's no needless handling of wires to locate a conductor. Every time the Indicator Button is pressed, you identify a circuit. And you do it without extra trips between conductor ends. **PRICE \$39.50***



AMPROBE JR. TEST MASTER KITS

The AMPROBE JR. TEST-MASTER KIT consists of specially designed leather case that contains one of the all new YO AMPROBE JR. voltage testers, and an AMPROBE A-45 ENERGIZER.

The new YO models are the only voltage testers in their price class that measure voltage, amperage and resistance. They are precision instruments that measure instantly and accurately on a calibrated scale (not just an indication).

The AMPROBE ENERGIZER increases the versatility of the instrument by increasing the instruments sensitivity for precise readings on fractional horse-power motors and appliances.



| MODEL | 2 AMMETER RANGES (full scale) | | | 2 VOLTAGE RANGES |
|-------------|-------------------------------|----------|-------------|------------------|
| | 5x | A-45 10x | BASIC INST. | |
| TM-YO "525" | 0-5 | 0-2.5 | 0-25 | 0-150/600 |
| TM-YO "550" | 0-10 | 0-5 | 0-50 | 0-150/600 |
| TM-YO "500" | — | 0-10 | 0-100 | 0-150/600 |
| TM-YO "25" | 0-5 | 0-2.5 | 0-25 | 0-125/250 |
| TM-YO "50" | 0-10 | 0-5 | 0-50 | 0-125/250 |
| TM-YO "100" | — | 0-10 | 0-100 | 0-125/250 |

OHMMETER RANGE (All models): 25 ohms Mid Scale. **PRICE: \$29.85***

AMPROBE TEST MASTER KITS

The TEST-MASTER KIT designed to hold any one of the famous AMPROBE RS models, the AMPROBE DECA-TRAN, the AMPROBE ENERGIZER. The TEST-MASTER has a separate covered section to hold your small hand tools easily, within reach.

MODEL TM-33 contains the world-famous AMPROBE RS-3 snap-around volt-ammeter-ohmmeter; 5 current ranges, 3 voltage ranges; AMPROBE DECA-TRAN: Extends amperage reading 10x, as high as 1200 amps; AMPROBE ENERGIZER: Multiplies sensitivity of any AMPROBE 5x or 10x for readings on small appliances and fractional h. p. motors. **PRICE: \$84.50***

MODEL TM-11 contains the AMPROBE RS-1, economy snap-around volt-ammeter; AMPROBE DECA-TRAN and AMPROBE ENERGIZER. **PRICE: \$71.75***

MODEL HK contains AMPROBE DECA-TRAN and AMPROBE ENERGIZER (to be used with instrument already in possession). **PRICE: \$39.75***



HIGH CURRENT AMPROBES

Designed to fill the need of the individual consistently working in current and voltage ranges higher than scale reading available on the rotary scale models.



| MODEL | RANGE | PRICE* |
|-------|---|---------|
| 600 | 0-15/30/60/150/300/600 Amps A.C. 0-150/300/600 Volts A.C. | \$59.50 |
| 1200 | 0-15/30/60/150/300/1200 Amps A.C. 0-150/300/600 Volts A.C. | 67.50 |

Factory Packed with Model "E" Top-Grain Cowhide Leather Carrying Case and Model VL-22 Voltage Test Leads.

*Prices slightly higher outside the United States.



AMPROBE INSTRUMENT CORPORATION, LYNBROOK, N. Y.

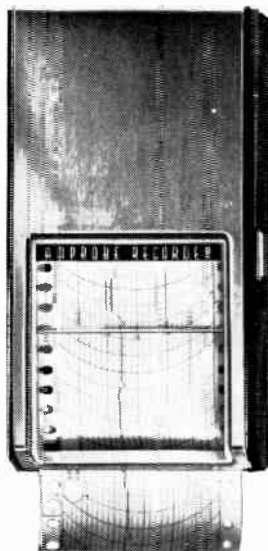
CANADIAN SALES DIVISION: ATLAS RADIO CORP., 50 WINGOLD AVE., TORONTO, ONTARIO
EXPORT CABLE ADDRESS: AMPROBE LYNBROOK



AMPROBE INSTRUMENT CORPORATION

AMPROBE RECORDERS

New miniature instrument makes permanent record of operating conditions



The new AMPROBE RECORDER is the smallest, lightest, least-expensive precision recording instrument available anywhere today. Whatever your requirements, the AMPROBE RECORDER provides a permanent, continuous record of voltage, amperage or temperature, depending upon model, to help you maintain and service electrical equipment and installations. Simple, precise and foolproof, the AMPROBE RECORDER is a time-and-labor-saving tool for which you'll find many uses.

FEATURES

- **INKLESS STYLUS** makes recording on pressure-sensitive paper.
- **MYLAR SHIELD** seals meter movement and drive mechanism from dust.
- **SIMPLE PAPER LOADING.** No rollers or drums to thread.
- **VERSATILE.** Use as a recording or indicated meter.
- **CONTEMPORARY STYLING.** Clean, modern design blends with your product.

SPECIFICATIONS

Weight: 20 ounces

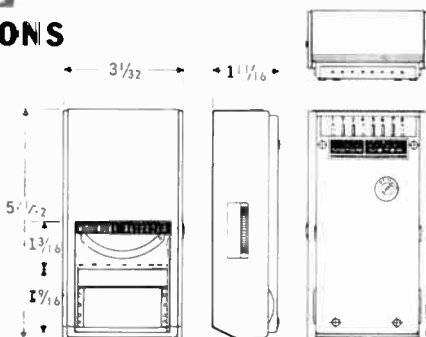
Paper Size:
2½" wide x 30' long.

Paper Speeds:
1", 6", 12" per hour.

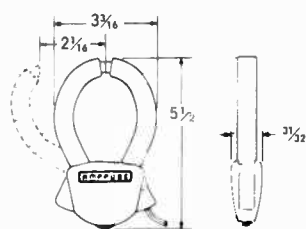
Power Requirements:
115 vAC, 60 cyc es.
Other voltages and frequencies available.

Accuracy:

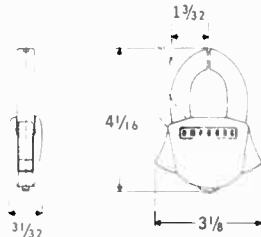
DC instruments: ±2% F. S.;
AC instruments: ±3% F. S.; AC expanded-scale instruments: 95-130 v: ±1 DIV. 190-260 v: ±1 DIV. with 60 cycle sine wave input.



TRANSDUCERS



AMPROBE CURRENT TRANSDUCER.
Model A-70. Heavy duty. Ranges (when used with Model AA1 RECORDER): 0/10/50/250/500 amps. Price: \$24.75 List.



AMPROBE CURRENT TRANSDUCER.
Model A-60. Current ranges (when used with Model AA2 RECORDER): 0/5/25/100/250 amps. Price: \$14.50 List.

THERMOMETER. Model RBT-1. Resistance bulb thermometer. Range (when used with Model T100 RECORDER): -50°/+100°F., +50°/+250°F. 12 foot card length. Price: \$6.50

MODELS (all models supplied with line cord and one roll of chart paper)

| Number | Description | Range | Price |
|--------|---|----------------------------|---------|
| DC100 | Microammeter | 0/100 ua DC | \$74.85 |
| DC500 | Microammeter | 0/500 ua DC | 69.85 |
| DB1 | Milliammeter | 0/1 ma DC | 69.85 |
| AA1 | Ammeter (with A-70) | 0/10/50/250/500 amps AC | 94.85 |
| AA2 | Ammeter (with A-60) | 0/5/25/100/250 amps AC | 89.85 |
| AV1X | Voltmeter (expanded-scale) | 95-130/190-260 vAC | 84.85 |
| T100 | Temperature Recorder* | -50°/+100°F., +50°/+250°F. | 98.85 |
| P600 | Pyrometer** | 0°/600°F. | 79.85 |
| P1000 | Pyrometer** | 0°/1000°F. | 79.85 |
| P2000 | Pyrometer** | 0°/2000°F. | 79.85 |
| ATM-2 | Consists of AV1X & AA2 in "M" carrying case | see AV1X & AA2 ranges | 181.20 |

*Supplied with resistance-bulb thermometer.
**Not supplied with thermocouples.

Carrying Cases

Model L—Holds one Recorder. Price: \$4.50
Model M—Holds two Recorders. Price: \$6.50

STRIP CHARTS

Perforated and Printed 2 Colors. Individually Boxed
*Minimum Order—Box of 6 Strip Charts. Price: \$9.00 per box

| | |
|---------|--|
| 501DC | 50 DIVISION CHART PAPER for DC Variables—2 Inches Spacing Between Time Lines. (Interchangeable with 501A) |
| 5012AA2 | Use with RECORDER Model AA1 and AA2 |
| RCV12HX | Use with Expanded-Scale Voltmeter Model AV1X |
| 2012T1 | Use with Model T100 on -50°/+100°F. Range |
| 2012T2 | Use with Model T100 on +50°/+250°F. Range |
| NP-1 | BLANK CHARTS, Perforated but without printing. For use with any AMPROBE RECORDER Where Time and Variable Coordinates are not required. |
| BL-12 | Time Line Only—2 Inches Spacing Between Lines |
| SPECIAL | CHARTS TO ORDER PRICES ON REQUEST |

Prices slightly higher outside the United States.



AMPROBE INSTRUMENT CORPORATION, LYNBROOK, N. Y.

CANADIAN SALES DIVISION: ATLAS RADIO CORP., 50 WINGOLD AVE., TORONTO, ONTARIO
EXPORT CABLE ADDRESS: AMPROBE LYNBROOK



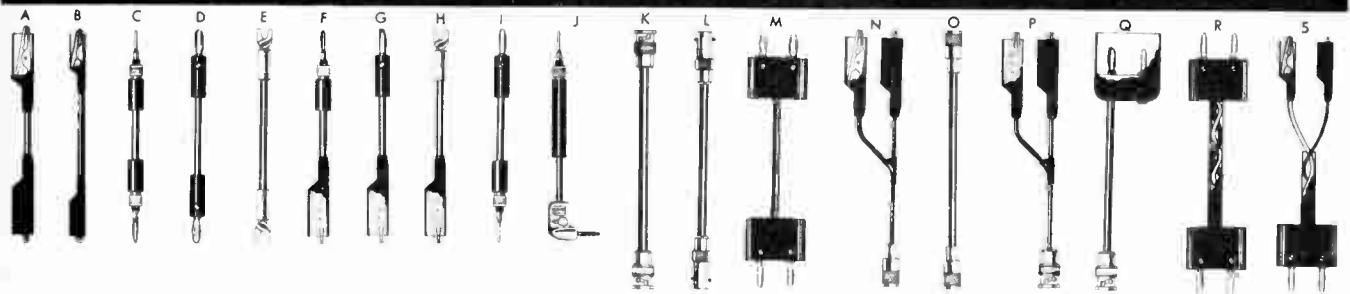
EVERY CABLE TESTED AT HIGHEST DESIGN FREQUENCY

COAXIAL CABLE ASSEMBLIES

| SERIES | IMPEDANCE | CABLE TYPE | MATING CONNECTOR TYPE | | PART NO. | SERIES | IMPEDANCE | CABLE TYPE | MATING CONNECTOR TYPES | | PART NO. |
|---|-----------|------------|-----------------------|------------|------------|---|-----------|------------|------------------------|------------|------------|
| | | | FROM | TO | | | | | FROM | TO | |
| BNC UG88C/U UG260B/U UG89B/U UG261B/U UG913/U | 50 OHMS | RG55A/U | MALE | MALE | C-100-()† | N UG21D/U UG94A/U UG23D/U UG95A/U | 50 OHMS | RG5B/U | MALE | MALE | C-630-()† |
| | 50 OHMS | RG55A/U | MALE | FEMALE | C-105-()† | | 50 OHMS | RG5B/U | MALE | FEMALE | C-635-()† |
| | 50 OHMS | RG55A/U | FEMALE | FEMALE | C-110-()† | | 50 OHMS | RG5B/U | FEMALE | FEMALE | C-640-()† |
| | 50 OHMS | RG55A/U | MALE | R. ANGLE | C-115-()† | | 50 OHMS | RG8A/U | MALE | MALE | C-600-()† |
| | 50 OHMS | RG58C/U | MALE | MALE | C-120-()† | | 50 OHMS | RG8A/U | MALE | FEMALE | C-605-()† |
| | 50 OHMS | RG58C/U | MALE | FEMALE | C-125-()† | | 50 OHMS | RG8A/U | FEMALE | FEMALE | C-610-()† |
| | 50 OHMS | RG58C/U | FEMALE | FEMALE | C-130-()† | | 50 OHMS | RG9B/U | MALE | MALE | C-615-()† |
| | 50 OHMS | RG58C/U | MALE | R. ANGLE | C-135-()† | | 50 OHMS | RG9B/U | MALE | FEMALE | C-620-()† |
| | 75 OHMS | RG59A/U | MALE | MALE | C-140-()† | | 50 OHMS | RG9B/U | FEMALE | FEMALE | C-625-()† |
| | 75 OHMS | RG59A/U | MALE | FEMALE | C-145-()† | | 50 OHMS | RG21A/U | MALE | MALE | C-660-()† |
| | 75 OHMS | RG59A/U | FEMALE | FEMALE | C-150-()† | | 50 OHMS | RG21A/U | MALE | FEMALE | C-665-()† |
| | 93 OHMS | RG62A/U | MALE | MALE | C-160-()† | | 75 OHMS | RG6A/U | MALE | MALE | C-645-()† |
| 93 OHMS | RG62A/U | MALE | FEMALE | C-165-()† | 75 OHMS | RG6A/U | MALE | FEMALE | C-650-()† | | |
| 93 OHMS | RG62A/U | FEMALE | FEMALE | C-170-()† | 75 OHMS | RG6A/U | FEMALE | FEMALE | C-655-()† | | |
| 93 OHMS | RG71A/U | MALE | MALE | C-180-()† | 75 OHMS | RG11A/U | MALE | MALE | C-675-()† | | |
| 93 OHMS | RG71A/U | MALE | FEMALE | C-185-()† | 75 OHMS | RG11A/U | MALE | FEMALE | C-680-()† | | |
| 93 OHMS | RG71A/U | FEMALE | FEMALE | C-190-()† | 75 OHMS | RG11A/U | FEMALE | FEMALE | C-685-()† | | |
| C UG583A/U UG709D/U UG572/U | 50 OHMS | RG8A/U | MALE | MALE | C-300-()† | HN UG59B/U UG495A/U UG60B/U UG333A/U | 50 OHMS | RG8A/U | MALE | MALE | C-345-()† |
| | 50 OHMS | RG8A/U | MALE | FEMALE | C-305-()† | | 50 OHMS | RG8A/U | MALE | FEMALE | C-350-()† |
| | 50 OHMS | RG8A/U | FEMALE | FEMALE | C-310-()† | | 50 OHMS | RG8A/U | FEMALE | FEMALE | C-355-()† |
| | 50 OHMS | RG9B/U | MALE | MALE | C-315-()† | | 50 OHMS | RG9B/U | MALE | MALE | C-360-()† |
| | 50 OHMS | RG9B/U | MALE | FEMALE | C-320-()† | | 50 OHMS | RG9B/U | MALE | FEMALE | C-365-()† |
| 50 OHMS | RG9B/U | FEMALE | FEMALE | C-325-()† | 50 OHMS | RG9B/U | FEMALE | FEMALE | C-370-()† | | |
| UHF PL-259 83-59 | 50 OHMS | RG8A/U | MALE | MALE | C-800-()† | 50 OHMS | RG17A/U | MALE | MALE | C-375-()† | |
| | 50 OHMS | RG8A/U | MALE | R.ANGLE | C-805-()† | 50 OHMS | RG17A/U | MALE | FEMALE | C-380-()† | |
| | 50 OHMS | RG8A/U | R.ANGLE | R.ANGLE | C-810-()† | 50 OHMS | RG17A/U | FEMALE | FEMALE | C-385-()† | |
| LC UG154/U | 50 OHMS | RG17A/U | MALE | MALE | C-500-()† | | | | | | |

NOTE:
† ADD DASH NO. FOR LENGTH IN FEET (1) 1 FT. (4) 4 FT. (12) 12 FT. (2) 2 FT. (6) 6 FT. (25) 25 FT.

TEST LEADS—TEST CABLES



| UNSHIELDED TEST LEADS | | | | | | | COAXIAL CABLES SHIELDED LEADS | | | | |
|-----------------------|------------------------|------------|-----------|------------|-----------|------------|-------------------------------|----------|----------|----------|-------------------------------------|
| FIGURE | 1 FT. RED | 1 FT. BLK. | 3 FT. RED | 3 FT. BLK. | 5 FT. RED | 5 FT. BLK. | FIGURE | 1 FT. | 3 FT. | 5 FT. | TYPE |
| A | 03103 | 01101 | 03303 | 01301 | 03503 | 01501 | K | 5011501 | 5013501 | 5015501 | RG-58A U BNC Male |
| B | 23123 | 21121 | 23323 | 21321 | 23523 | 21521 | L | 5021502 | 5023502 | 5025502 | RG-58A U BNC Female |
| C | 53153 | 51151 | 53353 | 51351 | 53553 | 51551 | M | 5081508 | 5083502 | 5085502 | RG-58A U Dbl. Plug |
| D | 33133 | 31131 | 33333 | 31331 | 33533 | 31531 | N | 5011509 | 5013509 | 5015509 | Low C. Cable BNC To Clips |
| E | 83183 | 81181 | 83383 | 81381 | 83583 | 81581 | O | 5031503 | 5033503 | 5035503 | RG 11A U UHF Male |
| F | 03153 | 01151 | 03353 | 01351 | 03553 | 01551 | P | 5031509 | 5033509 | 5035509 | RG 11A U UHF Clips |
| G | 03133 | 01131 | 03333 | 01331 | 03533 | 01531 | Q | 5011509 | 5013509 | 5015509 | Low C. Cable BNC To Shield Dbl. Pl. |
| H | 03183 | 01181 | 03383 | 01381 | 03583 | 01581 | TWISTED PAIR | | | | |
| I | 53133 | 51131 | 53333 | 51331 | 53533 | 51531 | R | 5081T508 | 5083T508 | 5085T508 | Twisted Pair Dbl. Plug |
| J | 805 (4 FEET LONG)—PAIR | | | | | | S | 5081T509 | 5083T509 | 5085T509 | Twisted Pair Dbl. Pl. To Clips |



Don Bosco Electronics Inc.

• HANOVER, NEW JERSEY •
A Subsidiary of Howell Electric Motors Company

New Precision, Miniaturized Electronic Instruments

New "Stethotracer" Signal Tracer Amplifies 1000 Times! Locates Defective Circuits Fast!

Now trace hum, oscillations, ground loops, breaks in printed circuits and other common trouble shooting ailments in seconds! The dependable vest-pocket STETHOTRACER detects and demodulates any low level microwatt audio or modulated radio frequency signal...the signal is then amplified 1000 times into a high quality earphone, or observed on a scope, using a plug-in scope adaptor (available optionally).

Ideal for test and trouble shooting all types of radio, amplifiers, phonographs, magnetic tape recorders, dictating machines, hearing aids, and phono pickup cartridges, or for use as a preamplifier.

Complete with earphone, cord, 3 interchangeable attenuator probes and RF detector-demodulator crystal diode probe, ground clip lead and battery.

SPECIFICATIONS:

AMPLIFICATION: 1000X approx. at 1kc (600 ohm load).

LOW FREQUENCY BANDWIDTH: Useable from 60cps to 100kc.

MODULATED HIGH FREQUENCY BANDWIDTH: 100kc — 200mc (with 1kc audio modulation) — microwave frequencies with special probes.

INPUT IMPEDANCE: 3,500 ohm at 0 attenuation
35,000 ohm at 20 db attenuation
350,000 ohm at 40 db attenuation

MAXIMUM AC SIGNAL INPUT VOLTAGE: One millivolt peak-to-peak for linear operation across 600 ohm scope adaptor load (0 attenuation).

Accessory probes (available optionally) include Vibration Pickup Probe, Miniature Microphone Probe, Magnetic Tape Head Probe, Microwave Demodulator Probe and Telephone Pickup, Input Adaptor, Scope or Output Adaptor.

MAXIMUM INPUT DC VOLTAGE: 250V DC max. from the input terminal to case ground.

OUTPUT VOLTAGE: 0.3 volts peak-to-peak across 600 ohm scope adaptor load (linear operation).

OUTPUT ACOUSTICAL LIMITING: The output sound is limited electrically to the earpiece at 2 milliwatt level so that audio output is limited to a comfortable and safe level.

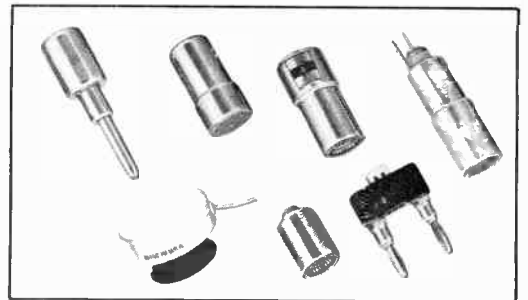
EQUIVALENT INPUT NOISE LEVEL: 3 microvolt peak-to-peak broad band with input shorted.

DISTORTION: 5% max. harmonic distortion within its dynamic range.

POWER SOURCE: 1.5 volt standard A.A. size battery (EVEREADY #912 or equivalent). Battery life: 250 hrs. normal use.

PROBES: 0db, 20db, 40db, attenuator probes, and RF crystal diode probe included.

OSCILLOSCOPE PREAMPLIFIER ADAPTOR: (Optional) equivalent of 600 ohms impedance with a DC level of +0.80 volt (use AC input on scope) output plug will fit all laboratory scopes with plug adaptor.



"Mosquito" Signal Generator For Every Troubleshooting Application!

Find defective circuits quickly and exactly with the new MOSQUITO — a pocket-size, cordless, pen-size instrument which generates and injects a rich signal covering the audio, IF and RF spectrum!

The unique MOSQUITO contains a transistor oscillator, powered by a single 1.5 volt pen light cell, which completely eliminates, in many cases, the need for a large, expensive signal generator. It can be coupled into magnetic pickups and circuits without leads...oscillates at approximately 1,000 cycles per second, with a wave form rich in harmonics.

Ideal for use in radio, television, tape recorders, movie projectors, telephone circuits, sound systems, hearing aids, amplifiers, transformers, reproducers, transducers.

SPECIFICATIONS:

FREQUENCY: 1kc approximately with harmonics to 30 MC
OUTPUT VOLTAGE: 50 volts peak-to-peak approximately open circuit

OUTPUT IMPEDANCE: 10k capacitive

INPUT DC VOLTAGE: 600 volts max. from output tip to case ground

SUPPLY VOLTAGE: Use only one 1.5v conventional battery (EVEREADY #912 or any A.A. size equivalent).

BATTERY LIFE: 2,000 hours normal use

SIZE: 5 1/2" long x 1/2" O.D. ONLY!

WEIGHT: ONE OUNCE!

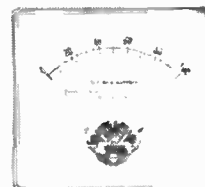
Also manufacturers of "VIBROTRACER" pocket sized vibration detector.

See your local distributor or write for details to

Don Bosco Electronics, Inc. HANOVER, N. J.

WORLD'S FOREMOST PRODUCER OF PRECISION-BUILT, POCKET-SIZE TEST EQUIPMENT

BEEDE METERS



MODEL 16

MODEL 15

MODELS 310 501

MODELS 23 - 14 - 2 - 5

| Model D.C. | Case Mat. & Mounting | Case Size | Barrel Diameter & Depth | Scale Length |
|------------|----------------------|---|---|-----------------------------------|
| 5 | Styrene - Flush | 1 ¹³ / ₃₂ " x 1 ¹³ / ₃₂ " | 1 ¹³ / ₃₂ " Dia. x 1" | 1 ⁵ / ₁₆ " |
| 411 | Metal - Flush | 2 ³ / ₃₂ " Dia. | 2 ¹ / ₁₆ " Dia. x 1 ⁵ / ₁₆ " | 1 ²⁵ / ₃₂ " |
| 412 | Metal - Flush | 2 ³⁷ / ₆₄ " Dia. | 2 ¹ / ₁₆ " Dia. x 1 ⁵ / ₁₆ " | 1 ²⁵ / ₃₂ " |
| 501 | Bakelite - Flush | 2 ³ / ₄ " Dia. | 2 ⁵ / ₃₂ " Dia. x 1 ⁵ / ₁₆ " | 1 ²⁵ / ₃₂ " |
| 733 | Metal - Surface | 3 ¹ / ₁₆ " Dia. | — | 2" |
| 2 | Styrene - Flush | 2 ³ / ₈ " x 2 ³ / ₈ " | 2 ³ / ₁₆ " Dia. x 1 ¹ / ₃₂ " | 2 ³ / ₁₆ " |
| 701 | Metal - Flush | 3 ³ / ₃₂ " Dia. | 2 ¹¹ / ₃₂ " Dia. x 1 ⁵ / ₁₆ " | 2 ¹¹ / ₆₄ " |
| 15 | Bakelite - Flush | 3" x 3" | 2 ³ / ₄ " Dia. x 1 ⁵ / ₁₆ " | 2 ³ / ₈ " |
| 310 | Bakelite - Flush | 3 ¹ / ₂ " Dia. | 2 ³ / ₄ " Dia. x 1 ¹¹ / ₃₂ " | 2 ³ / ₈ " |
| 140 | Styrene - Flush | 3 ³ / ₈ " x 2 ⁵ / ₈ " | 2 ³ / ₁₆ " Dia. x 1 ¹ / ₆₄ " | 2 ¹¹ / ₆₄ " |
| 811 | Metal - Flush | 3 ³ / ₄ " Dia. | 3" Dia. x 1 ¹¹ / ₃₂ " | 2 ³ / ₈ " |
| 815 | Metal - Surface | 3 ¹ / ₂ " Dia. | — | 2 ³ / ₈ " |
| 14 | Styrene - Flush | 3 ¹³ / ₃₂ " x 3" | 2 ³ / ₄ " Dia. x 1 ¹ / ₃₂ " | 3 ³ / ₄ " |
| 1 | Bakelite - Flush | 4 ⁵ / ₈ " x 4" | 2 ³ / ₄ " Dia. x 1 ¹ / ₁₆ " | 3 ¹³ / ₃₂ " |
| 16 | Bakelite - Flush | 4 ²¹ / ₃₂ " x 4 ³ / ₁₆ " | 2 ³ / ₄ " Dia. x 1" | 4 ¹ / ₄ " |
| 23 | Styrene - Flush | 4 ²¹ / ₃₂ " x 4 ³ / ₁₆ " | 2 ³ / ₄ " Dia. x 1 ¹ / ₃₂ " | 4 ¹ / ₄ " |
| 45 | Bakelite - Flush | 4 ⁵ / ₈ " x 4" | 2 ³ / ₄ " Dia. x 1 ¹ / ₁₆ " | 3 ¹³ / ₃₂ " |
| 425 | Metal - Surface | 4 ¹ / ₄ " Dia. | — | 3 ¹³ / ₃₂ " |
| 450 | Metal - Flush | 4 ³ / ₁₆ " Dia. | 3 ³ / ₄ " Dia. x 1 ¹¹ / ₃₂ " | 3 ¹³ / ₃₂ " |
| 458 | Bakelite - Flush | 4 ²¹ / ₃₂ " x 4 ³ / ₁₆ " | 2 ³ / ₄ " Dia. x 1" | 4 ¹ / ₄ " |
| 541 | Bakelite - Flush | 4 ¹ / ₂ " x 3 ³ / ₈ " | 2 ³ / ₄ " Dia. x 1 ¹ / ₁₆ " | 3 ¹³ / ₃₂ " |
| 230 | Styrene - Flush | 4 ⁵ / ₈ " x 3 ⁵ / ₈ " | 2 ³ / ₄ " Dia. x 1 ¹ / ₆₄ " | 3 ⁵⁹ / ₆₄ " |
| 6 | Metal - Flush | 6 ¹ / ₁₆ " Dia. | 3" Dia. x 1 ¹ / ₈ " | 4 ²³ / ₃₂ " |
| 70 | Styrene - Flush | 7" x 5 ¹ / ₄ " | 2 ³ / ₄ " Dia. x 1 ¹ / ₆₄ " | 6 ⁵ / ₃₂ " |
| 7 | Bakelite - Flush | 7 ¹ / ₄ " x 7 ¹ / ₄ " | 3" Dia. x 1 ¹ / ₈ " | 5 ²⁹ / ₃₂ " |

D. C. MICROAMMETERS

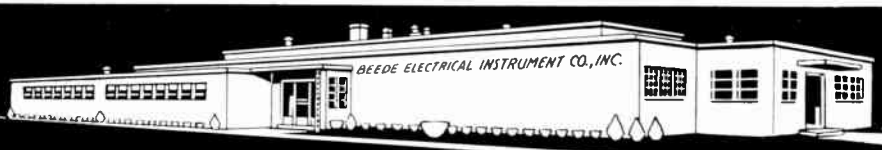
| Range | Approx. Res. | Models 411 - 412 - 501 2 - 701 - 733 | Models 310 - 15 - 14 140 - 811 - 815 | Models 1 - 45 - 16 458 - 23 - 230 | Model 70 |
|-------|--------------|---|---|--------------------------------------|----------|
| 0-20 | 3000 ohms | \$24.90 | \$25.55 | \$28.75 | \$34.87 |
| 0-50 | 2000 ohms | 14.23 | 14.60 | 16.43 | 19.94 |
| 0-100 | 1000 ohms | 13.50 | 14.15 | 14.75 | 18.38 |
| 0-200 | 500 ohms | 13.18 | 13.48 | 14.00 | 17.50 |
| 0-500 | 150 ohms | 10.73 | 10.98 | 12.55 | 16.05 |

D. C. MILLIAMMETERS

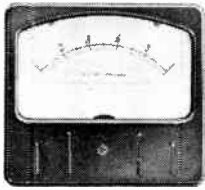
| Range | Models 411 - 412 - 501 2 - 701 - 733 | Models 310 - 15 - 14 140 - 811 - 815 | Models 1 - 45 - 16 458 - 23 - 230 | Model 70 |
|-------|---|---|--------------------------------------|----------|
| 0-1 | \$10.10 | \$10.38 | \$10.73 | \$15.63 |
| 0-5 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-10 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-15 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-25 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-50 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-100 | 9.38 | 9.63 | 10.10 | 13.60 |

| Range | Models 411 - 412 - 501 2 - 701 - 733 | Models 310 - 15 - 14 140 - 811 - 815 | Models 1 - 45 - 16 458 - 23 - 230 | Model 70 |
|--------|---|---|--------------------------------------|----------|
| 0-150 | \$9.38 | \$9.63 | \$10.10 | \$13.60 |
| 0-200 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-250 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-300 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-400 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-500 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-1000 | 9.38 | 9.63 | 10.10 | 13.60 |

**BEEDE ELECTRICAL
INSTRUMENT CO., INC.
PENACOOK, N. H.**



BEEDE METERS



MODEL 458



MODEL 411



MODELS 701 - 412 - 811



MODELS 70 - 140 - 230

| Range | Models 411-412-501 2-701-733 | Models 310-15-14 140-811-815 | Models 1-45-16 458-23-230 | Model 70 |
|-------|---------------------------------|---------------------------------|------------------------------|----------|
| 0-1 | \$9.38 | \$9.63 | \$10.10 | \$13.60 |
| 0-5 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-10 | 9.38 | 9.63 | 10.10 | 13.60 |

D. C.
AMMETERS

| Range | Models 411-412-501 2-701-733 | Models 310-15-14 140-811-815 | Models 1-45-16 458-23-230 | Model 70 |
|-------|---------------------------------|---------------------------------|------------------------------|----------|
| 0-15 | \$9.38 | \$9.63 | \$10.10 | \$13.60 |
| 0-25 | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-50 | 9.38 | 9.63 | 10.10 | 13.60 |

D. C. VOLTMETERS

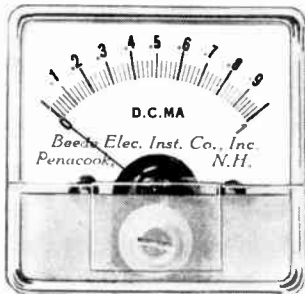
Intermediate sensitivities available in all models

Magcentric® self shielding movements available in all models

| Range | | Models 411-412-501 2-701-733 | Models 310-15-14 140-811-815 | Models 1-45-16 458-23-230 | Model 70 |
|-------|--------------------|---------------------------------|---------------------------------|------------------------------|----------|
| 0-1 | 200 ohms per volt | \$ 9.38 | \$ 9.63 | \$10.10 | \$13.60 |
| 0-5 | " | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-10 | " | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-15 | " | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-25 | " | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-50 | " | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-100 | " | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-150 | " | 9.38 | 9.63 | 10.10 | 13.60 |
| 0-200 | 1000 ohms per volt | 11.60 | 11.88 | 13.45 | 17.05 |
| 0-250 | " | 11.60 | 11.88 | 13.45 | 17.05 |
| 0-300 | " | 11.60 | 11.88 | 13.45 | 17.05 |
| 0-500 | " | 11.60 | 11.88 | 13.45 | 17.05 |

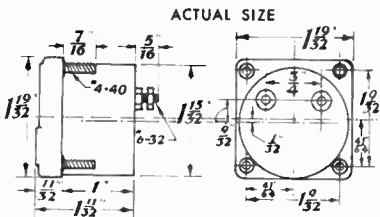
Repulsion Type AC available in all models

MODEL 5 1 1/2 inch Panel Instrument



Clear Plastic Flush Type

Accuracy within 3%
Painter Style Optional
Alnico Magnet



CONSTRUCTION D'Arsonval moving coil design, precision polished jewels and pivots, fatigue tested springs, and stress-released assembled units. Superior workmanship and individual operation inspected production provides accurate, on the spot instruments. The Magcentric mechanism provides an inherent magnetic shield with no loss in sensitivity.

D. C. MILLIAMPERES

| Range | |
|-------|---------|
| 0-1 | \$10.10 |
| 0-5 | 9.38 |

D. C. AMPERES

| Range | |
|-------|--------|
| 0-1 | \$9.38 |
| 0-5 | 9.38 |
| 0.50 | 9.38 |

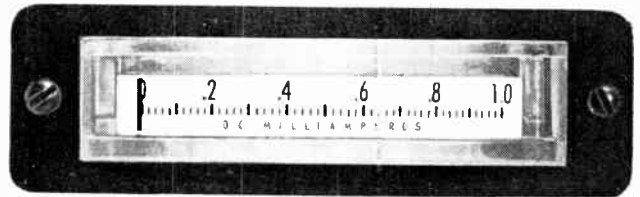
D. C. MICROAMPERES

| Range | |
|-------|---------|
| 0-50 | \$14.23 |
| 0-100 | 13.50 |
| 0-200 | 13.18 |
| 0-500 | 10.73 |

D. C. VOLTS

| | |
|--------------------|---------|
| 200 ohms per volt | \$ 9.38 |
| 1000 ohms per volt | 11.60 |

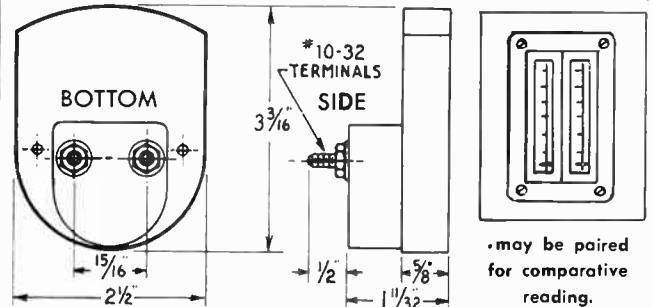
MODEL E-25 EDGEWISE



ACTUAL SIZE

Clear Plastic Horizontal or Vertical

CONSTRUCTION D'Arsonval moving coil design, precision polished jewels and pivots, fatigue tested springs, and stress-released assembled units. Superior workmanship and individual operation inspected production provides accurate, on the spot instruments. The Magcentric mechanism provides an inherent magnetic shield with no loss in sensitivity.



D. C. MICROAMPERES

| Range | |
|-------|---------|
| 0-50 | \$16.43 |
| 0-100 | 14.75 |
| 0-200 | 14.00 |
| 0-500 | 12.55 |

D. C. MILLIAMPERES

| Range | |
|-------|---------|
| 0-1 | \$11.95 |
| 0-5 | 10.10 |

Accuracy within 2%
Painter Style Optional
Alnico Magnet

CORNELL-DUBILIER ELECTRONICS

Decades & Instruments

CLASS
259.00
SERIES

CDE

DECADE CAPACITORS



Provide an accurate source of measured capacitances for electronic and electrical substitution purposes. Units of capacitance selected from direct reading switch scales. Models CDA, CDB, and CDC can be grouped in parallel to provide capacitances from

0 to 11,111 Mfd. in steps of .0001 Mfd.

RATED VOLTAGE — 600 D.C.-220 A.C.

| Model | Capacity | + or - Tol. | Dielectric | Net Price |
|-------|-------------------------------|-------------|------------|-----------|
| CDA-2 | .011 mfd. in .0001 mfd. steps | 2% | Mica | \$17.50 |
| CDA-5 | .011 mfd. in .0001 mfd. steps | 5% | Mica | 14.20 |
| CDB-5 | 1.1 mfd. in .01 mfd. steps | 5% | Oil-Paper | 14.20 |
| CDB-3 | 1.1 mfd. in .01 mfd. steps | 3% | Oil-Paper | 16.35 |
| CDC-5 | 10.0 mfd. in 1.0 mfd. steps | 5% | Oil-Paper | 24.65 |
| CDC-3 | 10.0 mfd. in 1.0 mfd. steps | 3% | Oil-Paper | 27.25 |

DECADE RESISTORS

Provide a reliable source of resistance for substitution purposes in a wide variety of electronic and electrical applications. Each instrument permits a possible selection of 110 resistance values, and the use of all three decades provides resistances from 1 Ohm to 1,111,110 Ohms in steps of 1 Ohm.



USER NET PRICES:

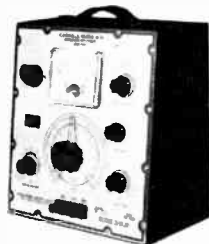
| | |
|---|---------|
| Model RDA — 1 to 110 Ohms..... | \$15.35 |
| Model RDB — 100 to 11,000 Ohms..... | \$15.65 |
| Model RDC — 10,000 to 1,100,000 Ohms..... | \$15.65 |

ELECTROLYTIC CAPACITOR
SUBSTITUTION BOX

Provides 15 combinations of capacitance, from 10 Mfd. to 150 Mfd. in steps of 10 Mfd. Units can be connected in parallel to provide unlimited capacitance range. Rated at 450 WVDC. User's Net \$14.20

C-D CAPACITOR-RESISTOR-ANALYZER
Model BF-71

Improved and extended version of popular Model BF-70. Measures Current, Voltage, Power Factor; Capacitance from 10 mmfd. to 2000 mfd; Resistance from 2.5 Ohms to 25 Megohms.



Versatile and economical. Variable control, over DC voltages from as low as 1 Volt, for testing leakage current.

User's Net \$129.75

RACK-PANEL MOUNTED

CAPACITOR AND RESISTOR DECADES

Three CAPACITOR or RESISTOR DECADES mounted on a standard 19-inch rack panel.

Model CDRM-3 consists of Capacitor Decades CDA-2, CDB-3 and CDC-3.

User's Net \$58.85

Model RDRM consists of Resistor Decades RDA, RDB and RDC. User's Net \$55.00

C-D "HANDICHECK" FOR CAPACITORS
Model BF-9D

Determines the condition of open, shorted or intermittent capacitors WITHOUT REMOVING THEM FROM THE CIRCUIT. A handy dependable time saver. User's Net \$41.75

C-D CAPACITOR-RESISTOR BRIDGE
Model BF-6D

Developed to measure rapidly and accurately, the important characteristics of substantially all types of Capacitors and Resistors. Range to 1000 Mfd. and 5 Megohms. User's Net \$51.85

C-D CAPACITOR BRIDGE
Model BN

This midget Capacitor (Wien) Bridge quickly and accurately measures the capacity of all capacitors from .00001 to 50 Mfd. A handy reliable economy priced unit. User's Net \$30.20

C-D FLYBACK TRANSFORMER &
YOKE CHECKER Model BF-8D

Sensitive to even a single shorted winding turn. Reveals opens and shorts and checks continuity. A rapid and dependable instrument for locating defects in TV flybacks and yokes. Detects opens in coils generally and in switches, tubes, etc. User's Net \$56.20

Tracks 'em Down Dead or Alive

ONLY THE VERSATILE



Circuitracer*

**GIVES YOU A 3-IN-1
ELECTRICAL TEST LABORATORY**

Satisfaction Unconditionally Guaranteed

DON'T SEND A MAN TO DO A BOY'S JOB!

Are the technicians in your laboratories and shops using expensive meters and instruments for simple continuity and voltage checks? Speed up production through the use of the tool specifically designed for this application. A meter should be used only when the value of voltage, resistance or current must be known. Under any other conditions a Circuitracer will provide the required information faster and easier than expensive, bulky meters.

CIRCUIT TESTING WITH A CIRCUITRACER IS FASTER because the signal light is in the tip at the point of contact. This makes it possible to determine the existence of a circuit or voltage without removing the eyes from the test point to read a meter.



LIST PRICE

\$4.95 Weighs only 2½ ozs.

SAVE METER REPAIR MONEY BY USING DESCO CIRCUITRACERS. An overvoltage across a meter usually results in extensive damage which takes the meter out of service until repaired or replaced. The worst that can happen to your Circuitracer is a burned out lamp that can be replaced by the operator in less than a minute. Total cost, ten or fifteen cents for the lamp!

The **CIRCUITRACER** is the only electrical tester (other than expensive meters) that can test dead circuits, low voltage live circuits **AND** high voltage live circuits. It is made of the finest materials available and is designed for long life.

WS-12
Socket to fit 12 ga. connector pin

WP-12
Pin to fit 12 ga. connector socket

WS-16
Socket to fit 16 ga. connector pin

WP-16
Pin to fit 16 ga. connector socket

WS-20
Socket to fit 20 ga. connector pin

WP-20
Pin to fit 20 ga. connector socket

WRITE FOR CATALOG WITH FULL INFORMATION
©T.M. Reg.

DESCO TEST PROBE ADAPTERS

INSURE CONNECTOR RELIABILITY

Manual probing of harness connectors while circuit testing can damage connectors and impair reliability. Desco Test Probe Adapters were developed to provide a test fitting identical to the pins and sockets in the connectors being tested. They make the same electrical and mechanical contact as the mating connector, and insure against scratching, bending and warping.

The adapters are made in three sizes to fit connectors using #12, #16 and #20 wire gauges. The sockets are gold plated copper with a brass sheath which retains a beryllium copper spring. The pins are stainless steel to insure long life. All are made to rigid MIL-SPECS. The adapters will fit Desco Jumper Wires and the Desco Circuitracer® Tester interchangeably.

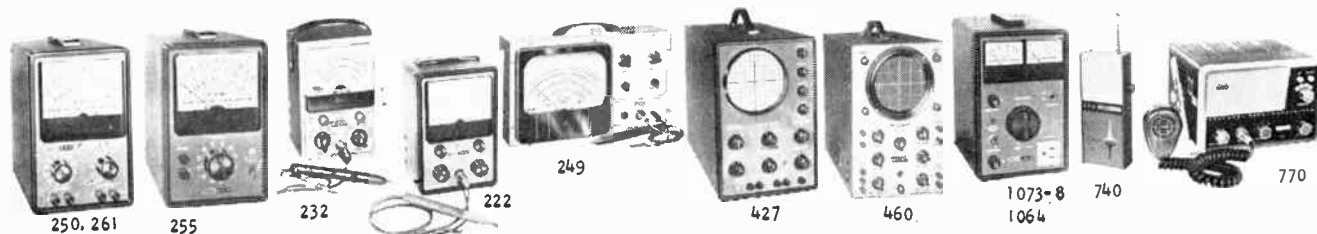


Several aircraft and missile manufacturers specify Desco Test Probe Adapters for most manual test connections. (names on request)

DESCO MFG. CO.

Glendale 1, Calif.

EICO® KITS and WIRED... TEST INSTRUMENTS • HI-FI • HAM GEAR



AC VTVM & AMPLIFIER #250

Kit \$49.95 Wired \$79.95

Highly sensitive, reliable AC VTVM & wideband amplifier. Measures 100 microvolts to 300V in 12 ranges; 10c-600kc ± 0 db response, 10 megohms input impedance, $\pm 3\%$ accuracy. Wideband amplifier switch-controlled for external use: 8c-800kc response, 5VRMS output, 5K ohms output impedance, gain control, noise -40 db. Frame-grid triode cathode follower input circuit, freq.-compensated input attenuator, cathode circuit attenuator. Regulated power supply. $8\frac{1}{2}'' \times 5\frac{3}{4}'' \times 7''$. Wt. 7 lbs.

AC VTVM #255

Kit \$44.95 Wired \$72.95

Identical to #250 above, but less the external use of the amplifier.

AC VOLT-WATT METER #261

Kit \$49.95 Wired \$79.95

AC voltmeter & load-compensated audio watt-meter of unique quality. Measures AC voltages from 1mv to 1000V in 11 ranges, power from .015mw to 150W. In 7 ranges, across standard loads from 4 to 600 ohms. Tapped power resistor load (4, 8, 16 and 600 ohms) handles up to 80W on 8 ohms and 40W on other taps. Switch to external load up to 150W. Meter automatically compensated for any load selected, internal or external, to provide single watt scale. $8\frac{1}{2}'' \times 5\frac{3}{4}'' \times 7''$. Wt. 6 lbs.

VACUUM TUBE VOLTMETER #222

Complete with exclusive dual-purpose Uni-Probe®

Kit \$27.95 Wired \$42.95

Entirely electronic, direct reading measurement of resistance, and AC & DC to 1500V in 5 ranges. May be calibrated without removal from cabinet. Complete electronic overload protection, plus fuse. 1% precision ceramic resistors. Exclusive AC/DC Uni-Probe® selects DC or AC-Ohms. DC voltmeter input impedance 11 megohms, accuracy $\pm 3\%$. AC voltmeter, input impedance 1 megohm, accuracy $\pm 5\%$. Ohmmeter 0.2 ohms to 1000 megohms in 5 ranges. $8\frac{1}{2}'' \times 5\frac{3}{4}'' \times 7''$. Wt. 5 lbs.

MODEL 232 PEAK-TO-PEAK VTVM with DUAL-PURPOSE AC/DC Uni-Probe®

Kit \$29.95 Wired \$49.95

Measure directly p-p voltage of complex and sine waves: 0-4, 14, 42, 140, 420, 1400, 4200. DC RMS sine volts: 0-1.5, 5, 15, 50, 150, 500, 1500 (up to 30,000 V. with HVP probe, and 250 mc with PRF probe). Ohms: 0.2 ohms to 1000 megs. 7 non-skip ranges on every function. Calibration without removing from cabinet. $4\frac{1}{2}''$ meter, can't-burn-out circuit. Zero center, 1% multipliers. Exceptional stability and accuracy. $8\frac{1}{2}'' \times 5'' \times 5''$. Wt. 5 lbs.

VACUUM TUBE VOLTMETER #221

Kit \$25.95 Wired \$39.95

The popular, reliable, performance-proven VTVM — over 100,000 in use! Large $4\frac{1}{2}''$ meter in can't-burn-out circuit. Zero center for TV/FM discrimination or alignment. AC/DC Volts: 0-5, 10, 100, 500, 1000 (up to 30,000 V. with HVP probe, up to 250 mc with PRF probe, and peak-to-peak with PTP probe). Ohms: 0.2 ohms to 1000 megs. DB: -20 to $+55$. Input R: 25 megs. 1% precision multipliers. Stable, accurate double-triode bridge circuit. Satin aluminum etched panel; steel case. $9\frac{1}{8}'' \times 6'' \times 5''$. Wt. 11 lbs.

VTVM PROBES

DUAL-PURPOSE AC/DC Uni-Probe®

Performs all functions — half-turn of probe-tip selects DC or AC-OHMS!

Kit \$4.95 Wired \$6.95

PEAK-TO-PEAK VTVM PROBES PTP 11 & 25

Kit \$4.95 Wired \$6.95

Read p-p voltages directly on DC scales of your VTVM. Use with any 11 or 25 megohm VTVM. †U. S. Pat.

RF VTVM PROBES PRF-11 & 25

Kit \$3.95 Wired \$4.95

For RF voltage measurements up to 250 mc. Accuracy $\pm 10\%$. Use with any 11 or 25 megohm VTVM.

HIGH VOLTAGE PROBES

HVP-1 Wired \$6.95 HVP-2 Wired \$4.95

For safe measurement up to 30,000 volts dc with any VTVM or 20,000 ohms/volt VOM. HVP-1 supplied with matching resistor for your instrument; HVP-2 supplied with choice of high quality multiplier resistors to match most popular instruments.

DELUXE PEAK-TO-PEAK VTVM #249 with $7\frac{1}{2}''$ METER and EXCLUSIVE Uni-Probe®

Kit \$39.95 Wired \$59.95

All the outstanding and exclusive features of Model 232 — PLUS the convenience and readability of its big $7\frac{1}{2}''$ meter. An ideal bench instrument. $8\frac{1}{2}'' \times 13'' \times 5''$. Wt. 9 lbs.

NEW ADVANCED GENERAL PURPOSE 5" OSCILLOSCOPE #427

Kit \$69.95 Wired \$109.95

Six-stage vertical amplifier direct-coupled for minimum phase distortion & push-pull throughout for maximum linearity. Frequency-compensated vertical input attenuator. Intensity, focus and astigmatism controls on front panel. Non-blooming trace instantaneous, drift-free positioning permits centering and part of a trace expanded. Easy, direct connection to vertical deflection plates. Mu metal shielded 5DEP1 CRT. V Amp: flat DC-500kc, -6 db @ 1MC; sensitivity 3.5mv rms cm. H Amp: flat 2cps-450kc; sensitivity 0.18V rms cm. Sweep: 10cps-100kc. $12\frac{1}{2}'' \times 8\frac{1}{2}'' \times 16\frac{1}{8}''$. Wt. 26 lbs.

DC WIDE BAND

5" OSCILLOSCOPE #460

Kit \$79.95 Wired \$129.50

Flat from DC to 4.5 mc, usable to 10 mc., featuring DC amplifiers. Vert. Sens.: 25 mv/in., push-pull thruout. Sweep freqs.: 10 cps to 100 kc, low sweep with ext. condenser. Automatic sync limiter and amplifier eliminates sync voltage adjustment. Dn front panel: int. mod., saw-tooth output, 60 cps, ext. sync, ext. capacitor jacks! 60 cps variable phase sine sweep. Pre-set TV V&H sweep positions. Edge-lit plexiglass filter screen with variable illumination. 4 freq. compensated attenuator positions up to 1000:1 on either direct or capacitive coupled input. $13'' \times 8\frac{1}{2}'' \times 16''$. Wt. 29 lbs.

ELECTRONIC SWITCH #488

Kit \$23.95 Wired \$39.95

Simultaneously observe 2 patterns on 1 scope: compare voltage and current amplitudes, waveforms, freqs. and phase relationships. Continuously variable switching rates from less than 10 cps to over 2000 cps. Very useful as square wave generator over same range. $6'' \times 8'' \times 6''$. Wt. 7 lbs.

OSCILLOSCOPE VOLTAGE CALIBRATOR #495

Kit \$12.95 Wired \$17.95

Enables p-p voltage measurement of complex TV sweep waveforms displayed on scope, calibration of vert. and hor. scope amplifiers, etc. Output variable from zero on every range with full-scale readings of 0.1, 1, 10, and 100 volts p-p. Accuracy $\pm 5\%$ of full scale on each range. VR tube regulated power supply. $5'' \times 7\frac{1}{8}'' \times 4''$. Wt. 4 lbs.

SCOPE PROBES

MODEL PSD DEMODULATOR PROBE

Kit \$3.95 Wired \$5.95

Demodulates amplitude-modulated carriers between 150 kc and 250 mc.

MODEL PD DIRECT PROBE

Kit \$2.95 Wired \$3.95

Eliminates stray pickup and signal re-radiation.

MODEL PLC LOW CAPACITY PROBE

Kit \$3.95 Wired \$5.95

For TV waveform tracing in high Z, high frequency or wide-band circuits.

METERED VARIABLE AUTO-

TRANSFORMER AC BENCH SUPPLIES

≈ 1073 : 3A rating Kit \$35.95 Wired \$47.95

≈ 1078 : 7 $\frac{1}{2}$ A rating Kit \$42.95 Wired \$54.95

For study of components under varying line conditions. Delivers any voltage up to 140VAC with linear variation of output throughout entire range. Smooth rotary brush-tap controlled by panel dial. Highly efficient variable toroidal core design. Auto-transformer. No waveform distortion or voltage drop from no-load to full load. Separate output ammeter & output voltmeter. $8\frac{1}{2}'' \times 5\frac{3}{4}'' \times 7''$. Wt. 13 lbs.

6 & 12 VOLT BATTERY

ELIMINATOR & CHARGER #1064

Kit \$43.95 Wired \$52.95

Heavy-duty 2-ranges for operating any mobile radio & transistor including transistor or "hybrid" types. Also usable as charger for either 6 or 12 volt batteries. Variable transformer provides continuous output adjustment. 2 meters simultaneously observe output voltage and current. Ratings: 0-8V; 10A continuous, 20A intermittent; 0-16V; 6A cont., 10A interm. AC ripple: 0-16V range: 0.3% @ 2A, 1% @ 6A. Heavy-duty selenium rectifiers, & automatic reset overload relay. $8\frac{1}{2}'' \times 5\frac{3}{4}'' \times 7\frac{1}{2}''$. Wt. 14 lbs.

CITIZENS BAND TRANSCEIVERS

DELUXE 770 SERIES

Model 770: 117 VAC only Kit \$79.95 Wired \$109.95

Model 771: 117 VAC, 6 VDC* Kit \$89.95 Wired \$119.95

Model 772: 117 VAC, 12 VDC* Kit \$89.95 Wired \$119.95

*Includes mounting bracket.

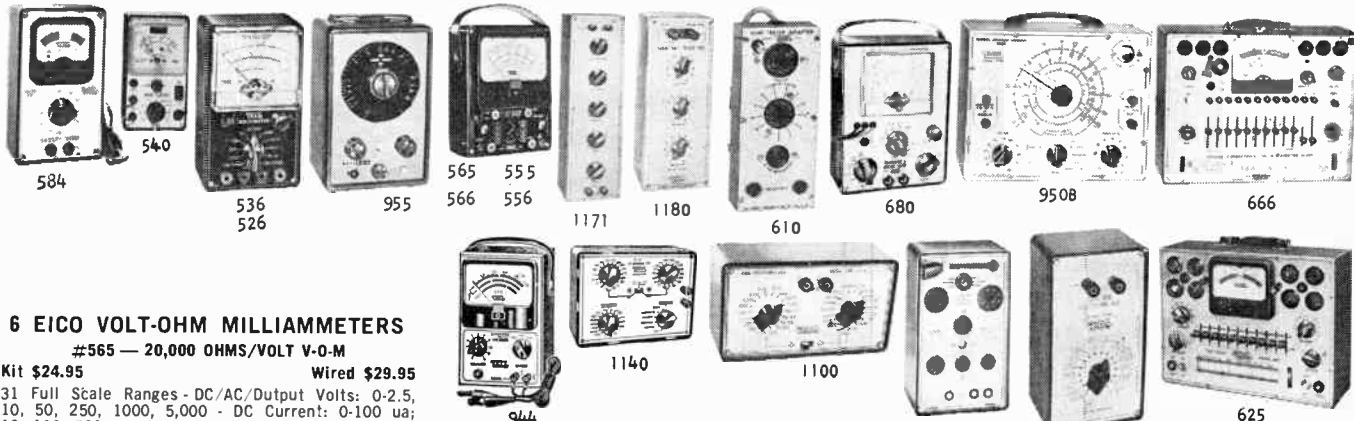
4-channel crystal-controlled transmitting chosen by channel-selector knob on front panel - Crystal-controlled receiving available on one transmit channel, continuous tuning over all 23 CB channels on the three other transmit channels - Press-to-talk button microphone: transmit-receive switching accomplished by high-quality relay with minimum capacity between contacts to prevent current leakages at RF frequencies. Superhet receiver with RF stage for high sensitivity and low s/n ratio: 1750 kc prealigned IF strip for unequalled image rejection and freedom from oscillator "pulling" on strong signals - Current metering jack in series in cathode circuit permits checking of input power to transmitter final, adjusting to FCC limit. 13-tube performance (4 dual function, 4 single function tubes, 1 germ. diode) - Adjustable squelch control, automatic noise limiter - Built-in AVC - Built-in 3" x 5" oval PM speaker and detachable ceramic-element cartridge - Posi-Lock mounting bracket permits 360° rotation, positive lock every 30° - 1 transmit xtal supplied; others available, with matched receiving xtals if desired. $6'' \times 8\frac{1}{2}'' \times 9''$. Wt. 12 lbs.

NEW CITIZENS BAND WALKIE-TALKIE ≈ 740

Kit \$54.95 Wired \$79.95

Including nickel-cadmium battery and charger, plus transmit and receive crystals for 1 channel. U.S.-made... an original product of EICO research. A lightweight (19 oz), pocket-size Citizens Band 2-way radio requiring no license to operate. Crystal controlled transmit and receive. Full superheterodyne receiver with crystal-controlled local oscillator; and high-level AM type transmitter incorporating advanced circuits, highest quality circuit boards, and 9 transistors. Rechargeable nickel-cadmium battery operates 10 hours on one charge, rechargeable 500 times. Range is 10 miles over water, up to 1 $\frac{1}{2}$ miles over good terrain; better if used with conventional 5-watt CB transceiver. Ideal for hunting, fishing, boating, construction, warehouses, drive-in theaters and restaurants, etc. $7\frac{1}{8}'' \times 2\frac{5}{8}'' \times 1\frac{1}{8}''$.

Ask your Distributor for full catalog data on EICO's complete line of Stereo & Mono Hi-Fi, (everything from Tape Decks to Speakers), Technician & Laboratory Test Instruments, Citizens Transceivers, Ham Gear, Transistor Radio & Electronics Teaching Aids.



6 EICO VOLT-OHM MILLIAMMETERS

#565 — 20,000 OHMS/VOLT V-O-M
 Kit \$24.95 Wired \$29.95

31 Full Scale Ranges - DC/AC/Output Volts: 0-2.5, 10, 50, 250, 1000, 5,000 - DC Current: 0-100 ua; 10, 100, 500 ma; 1 Amp. - Dhms: 0-2000, 200K, 20 meg. - 5 DB Ranges: -12 to +55. - Large 4 1/2" 50 ua Meter Movement. - High-Impact Bakelite case. 6 3/4" x 5 1/4" x 3". Wt. 3 lbs.

#555 — 20,000 OHMS/VOLTS V-O-M
 Kit \$29.95 Wired \$34.95

As above, with 1% precision resistors.

#566 — 1000 OHMS/VOLT V-O-M
 Kit \$14.90 Wired \$20.95

Ranges: Same as Model 536 (see below), plus 7 output voltage ranges. Large 4 1/2" 400 ua meter movement. 6 3/4" x 5 1/4" x 3". Wt. 3 lbs.

#556 — 1000 OHMS/VOLT V-O-M
 Kit \$16.90 Wired \$23.50

Same as Model 566, with 1% precision resistors.

#536 — 1000 OHMS/VOLT V-O-M
 Kit \$12.90 Wired \$16.90

31 1000 Full-Scale Ranges Dhms/Volt. - DC/AC Volts: Zero to 1, 5, 10, 50, 100, 500, 5000. - DC/AC Current: 0-1, 10 ma.; 0.1, 1 Amp. - Dhms: 0-5000, 100K, 1 meg. - 6 DB Ranges: -20 to +69 - Large 3" 400 ua Meter Movement - High-Impact Bakelite case. 6 1/4" x 3 3/4" x 2". Wt. 2 lbs.

#526 — 1000 OHMS/VOLT V-O-M
 Kit \$13.90 Wired \$18.90

As above, with 1% precision resistors.

BATTERY TESTER #584

Kit \$9.95 Wired \$12.95

For accurate, true DYNAMIC test of all A and B portable radio batteries, lantern batteries, and other types—in or out of equipment. Test Positions (Volts): 1.5, 4.5, 6.0, 7.5, 9.0, 22.5, 45, 67.5, 75, 90 plus Spare Position. Test leads provided. High-impact Bakelite case and satin aluminum panel. 6 1/4" x 3 3/4" x 2". Wt. 2 lbs.

READI-TESTER #540

Kit \$12.95 Wired \$15.95

For electrical and electronic servicing; for home and automotive repairs; an all-in-one multi-range ac/dc voltmeter, ammeter, ohmmeter, wattmeter and leakage checker. Instruction book contains an introduction to electricity, complete operating method, and procedures for common repair jobs. 3 3/4" x 6 1/2" x 3 1/2". Wt. 3 lbs.

DECADE RESISTANCE BOX #1171

Kit \$24.95 Wired \$29.95

Exceptionally accurate, wide-range, versatile instrument. 0-99,999 ohms in 1-ohm steps with 5 decades and 1/2% precision. 12" x 3 1/2" x 3". Wt. 3 lbs.

DECADE CONDENSER BOX #1180

Kit \$14.95 Wired \$19.95

Precision silver-mica capacitors (±1% accuracy, 500 VDC rated) arranged in 3 decades for extremely wide range of 100 mmf to 0.111 mf in steps of 100 mmf. Positive detent ceramic wafer switches, silverplated contacts. 9" x 3 1/2" x 3 1/2". Wt. 3 lbs.

RESISTANCE SUBST. BOX #1100

Kit \$6.95 Wired \$10.95

Enables rapid substitution of wide range of EIA resistance values from 15 ohms to 10 megohms in decade multiples of 15, 22, 33, 47, 68, 100 ohms. Uses standard 1 watt, ±10% EIA resistors. 3 3/4" x 6 1/2" x 3 1/2". Wt. 2 lbs.

CAPACITANCE SUBST. BOX #1120

Kit \$5.95 Wired \$9.95

Enables rapid substitution of a wide range of EIA capacitance values from 0.0001 to 0.22 mfd in an operating circuit. Minimum accuracy ±10%. Uses silver mica and molded plastic capacitors, most conservatively rated at 600 volts. Convenient 5-way jack-top binding posts. 3 3/4" x 6 1/2" x 3 1/2". Wt. 2 lbs.

SERIES/PARALLEL R-C COMBINATION BOX #1140

Kit \$13.95 Wired \$19.95

Only EICO has it!

A combination of Models 1100 and 1120 (above), with switching facilities permitting selection of any R alone, any C alone, or 1350 combinations of same in series or parallel. Open and short circuit positions provided. Standard EIA values, 10% accuracy. Convenient jack-top binding posts. 6 3/4" x 5 1/4" x 2 3/8". Wt. 3 lbs.

IN-CIRCUIT CAPACITOR TESTER #955

Kit \$19.95 Wired \$39.95

Tests capacitors in the circuit without unsoldering. Checks for shorts, (even in the presence of as little as 1 ohm shunt resistance). Checks open units (as little as 5mmf in the circuit). Measures capacitance with ±10% accuracy between 0.1mf and 50mf. Measures RC product, convertible into dissipation or power factor. Utilizes electron-ray tube EM84/6FG6 with sharp bar pattern. Line adjust control permits maximum sensitivity regardless of the line voltage variations. 8 1/2" x 5 3/4" x 6". Wt. 4 lbs.

R-C BRIDGE & R-C-L COMPARATOR #950B

Kit \$19.95 Wired \$29.95

A versatile and truly useful service instrument for direct measurement of capacity or resistance over a wide range of values. For leakage testing of electrolytics, a continuously variable polarizing test voltage from 0 to 500 VDC (±10%) is provided. Bridge balance and leakage are both indicated by a sensitive electron-ray tube indicator. The bridge provides 4 capacitance ranges from 10 mmf to 5000 mf and 4 resistance ranges from 0.5 ohms to 500 megohms. A comparator range permits comparison measurement of capacitance, resistance, or inductance against a standard. Transformer-operated power supply. 8" x 10" x 4 3/4". Wt. 8 lbs.

DYNAMIC CONDUCTANCE TUBE AND TRANSISTOR TESTER #666

Kit \$69.95 Wired \$109.95

Complete with rugged steel carrying case, matching steel cover, and carrying handle for easy portability. Checks transistor collector current and Beta using internal dc power supply. Tests all receiving tubes including subminiatures (and tv pic tubes with accessory adapter). Composite indication of mutual conductance, plate conductance, and peak emission. Simultaneous sel. of any 1 of 4 combinations of 3 plate, 3 screen, and 3 ranges of control grid voltage. Grid voltage variable over 3 ranges with 5% accuracy pot. New series-string voltages for 600, 450 and 300 ma types. 5 ranges meter sens. with 1% precision shunts and 5% accurate pot. 10 six-position lever switches for free-pin connection of every tube pin or cap. 10 push-buttons for rapid insert of any tube element in leakage circuit and speedy sel. of individual tube sections. Direct reading of inter-element leakage in ohms. New gear-driven rollchart. 200 ua meter. 12" x 15" x 4 1/2". Wt. 20 lbs.

TUBE TESTER #625

Kit \$34.95 Wired \$49.95

Tests new 600 ma filament series string tubes and ALL conventional and TV tubes. 10 individual lever-type element switches. 4 1/2" meter, 3-color scale. Illuminated anti-backlash "SPEEDROLL" roll-chart. Protective overload bulb. Line-adjust control. 2 grid caps. Blank socket for future tube types. Pilot light test socket. 9 1/2" x 12 1/2" x 4 1/4". Wt. 11 lbs.

Tube Tester Kit with Counter Display Case

Model 625-CK, Kit\$44.95

Model 625-C, factory wired\$59.95

Lid for your EICO Tube Tester\$3.98

CATHODE RAY TUBE CHECKER #630

Kit \$13.95 Factory Wired \$18.95

Tests all TV picture and oscilloscope type C-R tubes—in set or carton. Measures peak beam current (proportional to screen brightness). Balance control calibrated directly in terms of tube condition. Detects open and shorted elements. 9 1/2" x 6 1/2" x 3". Wt. 5 lbs.

TRANSISTOR & CIRCUIT TESTER #680

Kit \$25.95 Wired \$39.95

Measures ICEO, ICBO & DCB directly, ACB indirectly, without charts or special settings—plus all dc volts, current's & resistances needed to service transistor equipment. Battery powered. 50ua, 3 1/2" face meter movement provides sensitivity & scale length necessary for accuracy. Built-in 20,000:1 VOM facilities frees your other test equipment. 6 3/4" x 5 1/4" x 3". Wt. 3 lbs.

TUBE TESTER ADAPTER #610

Kit \$5.95 Wired \$11.95

Adapts EICO models 625 or 666 tube testers for testing the following new tube types: nuvistor 5-pin; nuvistor 7-pin; novar; 10-pin miniature; compactron, 12-pin. Included are roll chart supplements for both 625 and 666 models. 1 1/4" x 2 1/2" x 6". Wt. 1 lb.

PICTURE TUBE TEST ADAPTER CRA-110

For 110° deflection tubes. Wired \$3.95

FAST TUBE & CRT FILAMENT TESTER #612

Kit \$3.95 Wired \$5.95

Includes batteries

Fast filament check of series string & all other TV & radio tubes (9-pin, octal, local, 7-pin); 14-pin, 12-pin, 8-pin CRT's; bayonet & screw-type pilot lamps; cartridge fuses. Just plug tube into tester socket, observe indicator lamp—no fiddling with controls or switches. Self-powered for convenience & safety. 7-pin & 9-pin miniature tube pin straighteners provided. 6 1/4" x 3 3/4" x 2". Wt. 2 lbs.

FLYBACK XFMR & YOKE TESTER #944

Kit \$23.95 Wired \$34.95

Positive check of all flybacks and yokes, in or out of set, in just seconds! Uses sensitive grid-dip principle—shows up even 1 shorted turn! Excludes separate calibration for air and iron-core flybacks. Checks any inductance of not too low impedance; also usable for general continuity testing. Large 4 1/2" 50 ua meter, 3 separate colored scales. 7" x 5" x 4". Wt. 5 lbs.

EICO ELECTRONIC INSTRUMENT CO., Inc. • Long Island City, N. Y.

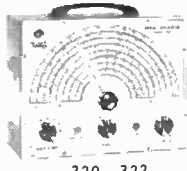
ALL PRICES 5% HIGHER IN THE WEST



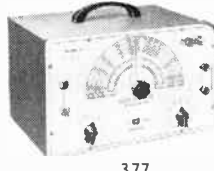
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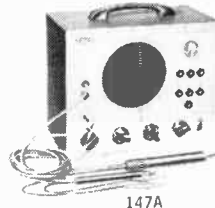
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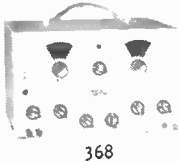
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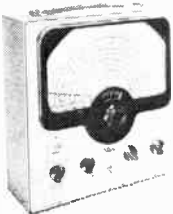
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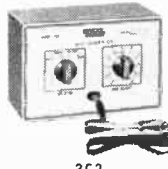
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315



352



1020



1050, 1060

RF SIGNAL GENERATOR #324

Kit \$26.95 Wired \$39.95

Extended frequency range: 150 kc to 145 mc on fundamentals in 6 bands; 111-435 mc on calibrated harmonics. $\pm 1.5\%$ frequency accuracy; 6:1 vernier tuning knob and excellent spread at most important alignment frequencies. Etched tuning dial, plexiglass windows, edge-lit hairlines. Colpitts RF oscillator, directly plate-modulated by cathode follower for improved modulation. Variable depth of internal modulation 0-50% by 400 cps Colpitts oscillator. Variable gain external modulation amplifier; only 3.0 volts needed for 30% modulation. Turret-mounted slug-tuned coils. Fine and Coarse (3-step) attenuators. 50-ohm output Z. RF and AF outputs respectively 100,000 uv and up to 10 V. Tubes: 12AU7, 12AV7, selenium rectifier, xfmr-operated. 5-way jack-top binding posts for AF in/out; coaxial connector and shielded cable for RF out. Satin aluminum panel and grey wrinkle steel case. 8" x 10" x 4 3/4". Wt. 8 lbs.

TV-FM SWEEP GENERATOR AND MARKER #368

Kit \$69.95 Wired \$119.95

Entirely electronic sweep circuit with accurately biased inductor: superb linearity on both sides of selected center freq. Newly-designed AGC circuit automatically adjusts osc. for max. output on each band with min. amplitude variations. Sweep gen. range 3-216 mc in 5 OVERLAPPING FUND. BANDS. Sweep width continuously variable from 0-3 mc lows, max. deviation to 0-30 mc highest max. deviation. Variable marker gen. range from 2-75 mc in 3 FUND. BANDS plus a calibrated harmonic band 60-225 mc. Variable marker calibrated with int. crystal marker gen. 4.5 mc crystals included. Ext. marker provision. Double pi line filter. Edge-lit hairlines eliminate parallax. 8 3/4" x 13 1/2" x 7 1/4". Wt. 16 lbs.

RF SIGNAL GENERATOR #320

Kit \$19.95 Wired \$29.95

Low-cost, high quality signal generator providing modulated or unmodulated RF. Separate 400 cps output with level control. For AM/FM alignment, and TV marker frequencies. Stable Hartley RF oscillator, vernier tuning capacitor, Colpitts audio oscillator. Five fundamental RF ranges from 150 cps to 34 mc. Two ranges of calibrated harmonics to 102 mc. 8" x 10" x 4 3/4". Wt. 8 lbs.

RF SIGNAL GENERATOR #322

Kit \$23.95 Wired \$34.95

Identical to Model 320 but provided with 5 trimmers, one for each fundamental band, for increased frequency accuracy.

DELUXE RF SIGNAL GENERATOR #315

Kit \$39.95 Wired \$59.95

Laboratory-precision generator EICO Service-Engineered with 1% accuracy. Frequency range: 75 kc-150 mc in 7 calibrated ranges. Extremely stable. Illuminated hairline VERNIER TUNING. VR stabilized line supply. 400-cycle pure sine wave with less than 5% distortion. Tube complement: 6X5, 6SL7, 6C4, VR-150. Satin aluminum etched panel; rugged steel case. 115 V. 60 cycles AC. 12" x 13" x 7". Wt. 18 lbs.

TV-FM SWEEP GENERATOR #360

Kit \$34.95 Wired \$49.95

Covers all TV-FM alignment frequencies. 500 kc 228 mc. Vernier-driven dial. Center of each of 13 TV channels marked on front panel. Sweep width variable 0-30 mc with mechanical inductive sweep — permits gain comparison of adjacent TV channels. Crystal marker oscillator, variable amplitude. Provides for injection of external marker. Phasing control. Complete with HF tubes. Less Crystal. 10" x 8" x 6 3/4". Wt. 11 lbs.

EICO 5 MC and 4.5 MC Crystals — \$3.95 ea.

SINE & SQUARE WAVE AUDIO OSCILLATOR #377

Kit \$34.95 Wired \$49.95

RC (Wein Bridge) oscillator incorporating 1% resistors and a 2-gang tuning capacitor providing sine wave frequencies from 20 cps to 200 kc in 4 bands. Sine wave distortion is less than 1%. Output amplitude is flat ± 1.5 db from 60 cps to 150 kc. Square wave output is obtained from an overdriven clipper and the waveform is free of excessive tilt or rounding between 200 cps and 20 kc. A high degree of frequency stability is obtained after a very short warm-up, and calibration accuracy is the greater of $\pm 3\%$ or 1 cps. The output stage is a split-load cathode follower providing 10 V rms into a 1000-ohm load. The power supply employs full-wave rectifiers and a pi-type LC filter. Hum is less than 0.4% of rated output. 8 3/4" x 13 1/2" x 7 1/4". Wt. 13 lbs.

BAR GENERATOR #352

Kit \$14.95 Wired \$19.95

Produces 16 to 23 V bars and 13 to 22 H bars, adjustable in number to accommodate all screen sizes. Incorporates VHF osc., RF osc., and LF multivibrator. Adjustable from Channel 2 to 6. Deluxe 3-way antenna terminal clip fits any type antenna terminal including plug-in type. Output voltage: 100,000 microvolts. Tubes: 1-12AU7, 1-6C4; selenium rectifier. 5" x 7 1/2" x 4 1/2". Wt. 4 lbs.

DELUXE MULTI-SIGNAL TRACER #147A

Kit \$24.95 Wired \$39.95

Entirely new 5-tube instrument provides high gain RF and low gain audio channels with both visual and aural monitors (electron-ray tube and 5" speaker). Permits RF, IF and audio signal tracing in TV, FM and AM sets. Highly useful noise localizer circuit that applies DC test voltage thru probe to suspected component and simultaneously picks up and amplifies effect. Wattmeter circuit detects abnormal power consumption in TV and radio receivers. May be connected as test speaker, amplifier or output transformer, and has output for VTVM or scope. Excellent for gain-per-stage estimation, null detector, scope preamplifier, utility amplifier, small P.A. system. New satin finish etched panel; grey wrinkle steel case. 105-125 VAC, 50/60 cps. 8" x 10" x 4 3/4". Wt. 10 lbs.

LOW-COST MULTI SIGNAL TRACER #145A

Kit \$19.95 Wired \$28.95

More than enough RF gain to trace up to receiver input; signal heard through built-in 5" PM speaker. Shielded RF crystal demodulator and direct probes supplied. Noise localizer circuit applies DC test voltage through probe to suspected component and simultaneously picks up and amplifies effect. 7 1/4" x 5 1/4" x 5 1/4". Wt. 7 lbs.

POWER & BIAS SUPPLY FOR TRANSISTORIZED EQUIPMENT #1020

Kit \$19.95 Wired \$27.95

Extremely low ripple DC power supply for hum-free operation of transistor radios, hearing aids, "walkie-talkie" transistor transceivers, transistor preamps and tuners, language lab transistor amplifiers, transistor test equipment, etc. May also be used in TV and radio service work as a bias supply to offset AVC and AGC voltages during alignment, and to cut off the color burst amplifier in color TV adjustments. May also be used as a variable bias supply in the development of transistor and tube circuits, including the supply of the DC bias for filaments or as a filament DC power supply within the current ratings. Output Voltage Range: 0-30 V DC, continuously variable. Max. Output Current Capacity (continuous): 150 ma from 0-12 V, 200 ma from 12-24 V, 300 ma from 24-30 V. Ripple: (120 cps): 0.005% at full load. Power Requirements: 117 V, 60 cps. 5" x 4" x 5 1/2". Wt. 5 lbs.

6V & 12V BATTERY ELIMINATOR AND CHARGER #1050

Kit \$29.95 Wired \$38.95

All the power you need for 6-volt and 12-volt battery charging and auto radio servicing. Two DC ranges: 0-8 V (10 amps continuous, 20 amps intermittent), 0-16 volts (6 amps continuous, 12 amps intermittent). Continuous voltage adjustment with variable-type transformer. Separate voltmeter and ammeter. Heavy duty selenium rectifiers. Fused primary; automatic reset circuit-breaker opens secondary circuit upon overload. Rugged, well-ventilated steel cabinet. 8 3/4" x 10 1/2" x 7 3/4". Wt. 13 lbs.

B.E. ACCESSORY FILTER #1055

Kit \$11.95 Wired \$15.95

L-C filter provides additional filtering of output of EICO ≈ 1050 or similar unit, for powering transistor and "hybrid" car radios. Functions on either 6V or 12V ranges. 10 amps max current; can remain in use for ALL functions of the Battery Eliminator. Wt. 7 lbs.

EXTRA-FILTERED 6V & 12V BATTERY ELIMINATOR AND CHARGER #1060

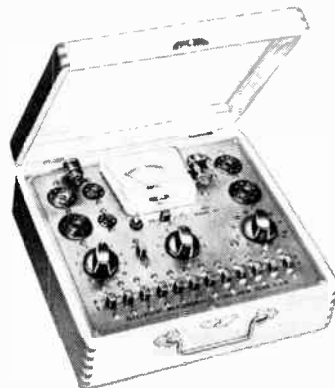
Kit \$38.95 Wired \$47.95

Combines Model 1050K Battery Eliminator and Model 1055 Filter in a single unit. Powers both transistor and conventional equipment. 8 3/4" x 10 1/2" x 7 3/4". Wt. 17 lbs.

EICO ELECTRONIC INSTRUMENT CO., Inc. • Long Island City, N. Y.

ALL PRICES 5% HIGHER IN THE WEST

EMC for BEST VALUES in INSTRUMENTS or KITS!



**MODEL 213
TUBE TESTER . . .**

Checks all the new 12 prong (Comparison), Nixistor, Novar and 10 prong tubes, in addition to octal, loctal, miniature and 9 prong tubes. Tests each tube for quality, shorts, leakages and intermittents. Each section of multi purpose tube is checked separately. Comes complete with instructions and tube charts in ring bound manual.

- Model 213 (in high impact bakelite case with strap) \$28.90
- Model 213 Kit 18.90
- Model 213P (in wood carrying case) 32.25
- Model 213P Kit 21.90
- Model CRT picture tube adaptor 4.50



MODEL 102 VOM . . .

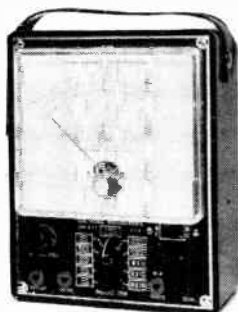
Resistance to 1 meg.
AC and DC Volts to 3000V.
3 AC and DC Current Ranges.

- Wired \$14.90
- Kit 12.50

MODEL 102F . . .

(With Fused Meter)

- Wired \$15.55
- Kit 13.10



MODEL 109 VOM . . .

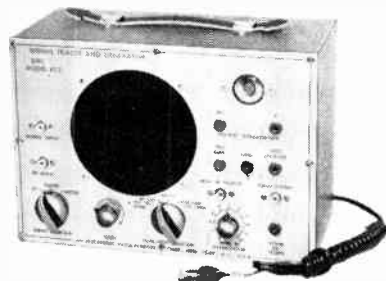
20,000 ohms per Volt DC.
10,000 ohms per Volt AC.
4 1/2" 40 Microampere Meter
5 AC and DC Volt Ranges
to 3000V. 3 Resistance
Ranges to 20 megs.
3 AC & DC Current Ranges.

- Wired \$26.95
- Kit 19.25

**MODEL 802
SIGNAL TRACER
AND
GENERATOR . . .**

Generates its own Audio and RF signals for tracing. Complete with RF and 2 Audio leads. Uses Magic Eye and Speaker. Checks noisy components.

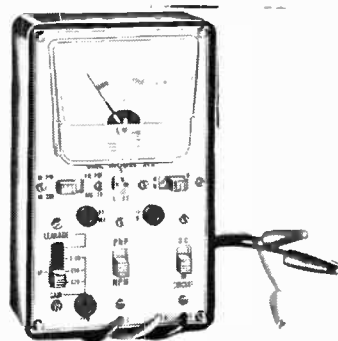
- Wired \$38.95
- Kit 24.95



**MODEL 212
TRANSISTOR
ANALYZER . . .**

Checks all transistors in or out of circuit. Checks for gain and leakage. Can be used to signal trace AF, IF or RF circuits. Measures battery voltage. Checks diodes. Measures DC current drain. Comes complete with test leads and instruction manual.

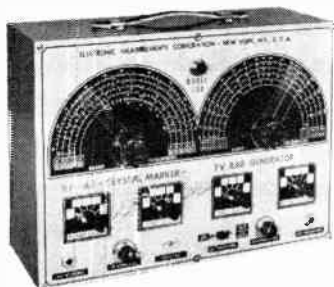
- Wired \$18.50
- Kit 13.50



**MODEL 700
AUDIO AND RF
GENERATOR . . .**

Complete coverage from 18 cycles to 108 MC on fundamentals. Bar Generator. Square Wave Generator.

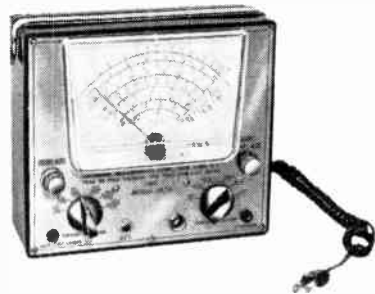
- Wired \$55.90



**MODEL 107A
PEAK-TO-PEAK
VACUUM TUBE
VOLT-OHM-
CAPACITY
TESTER . . .**

Uses 6" meter. Bakelite Case. 6 AC & DC volt ranges to 2800 V. 6 capacity ranges from 50 MMFD to 5000 MFD. 6 resistance ranges from .2 ohm to 1000 megs.

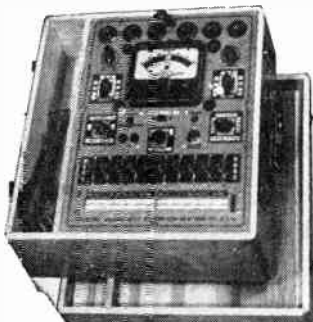
- Wired \$51.40
- Kit 36.50



**MODEL 206P
DYNAMIC MUTUAL
CONDUCTANCE
TUBE TESTER . . .**

Checks micromho value. Gas Content Flexible switching. Lowest Priced Mutual Conductance Tester on Market.

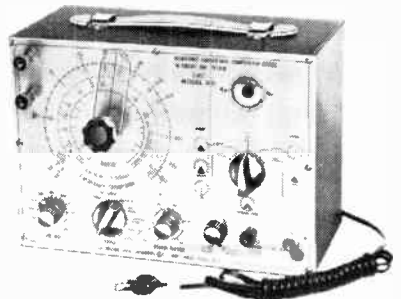
- Wired \$83.50 (Oak Portable Case)



**MODEL 801
RC BRIDGE AND
IN-CIRCUIT
CHECKER . . .**

Checks condensers completely in and out of circuit. Checks resistance. Checks condensers for value, leakage and power factor.

- Wired . . . \$38.95
- Kit 24.95



ELECTRONIC MEASUREMENTS CORPORATION
New York, New York

EMICO

PRECISION-PLUS

PRECISION

the Recognized Leader...

PRICE LIST

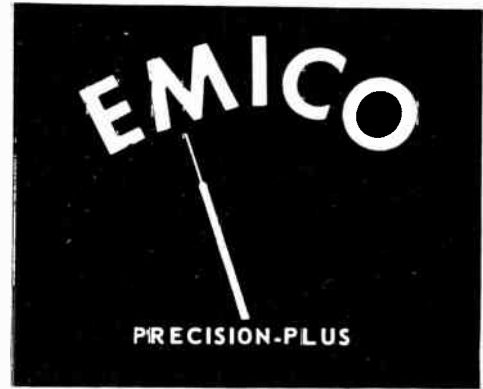
PRICES—Prices listed are net and include all hardware and individual boxing. Resistance approximate. If important request factory engineering confirmation.

ELECTRO-MECHANICAL INSTRUMENT CO. PERKASIE, PENNSYLVANIA

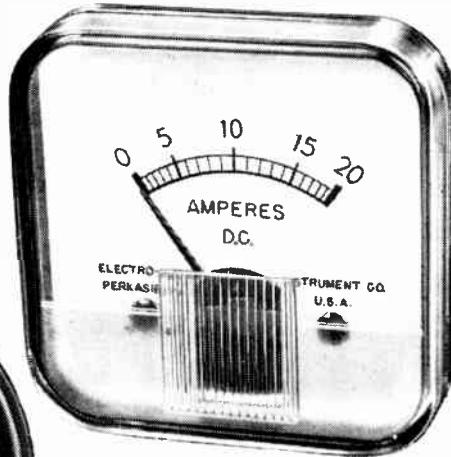
| Range | Approximate Resist. Ohms | MODEL Catalog Number | NF-2C Dealers' Net Price | MODEL Catalog Number | RF-2C Dealers' Net Price | MODEL Catalog Number | RF-2 1/4C Dealers' Net Price | Approximate Resist. Ohms | MODEL 13 Catalog Number | Dealers' Net Price |
|--|--------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|------------------------------|--------------------------|-------------------------|--------------------|
| 0-1 | .15 | 2101 | \$1.90 | 2201 | \$2.00 | 2301 | \$2.30 | | | |
| 0-3 | .032 | 2101-A | 1.90 | 2201-A | 2.00 | 2301-A | 2.30 | | | |
| 0-5 | .016 | 2102 | 1.90 | 2202 | 2.00 | 2302 | 2.30 | | | |
| 0-10 | .00115 | 2103 | 1.90 | 2203 | 2.00 | 2303 | 2.30 | .0025 | 2403 | \$2.30 |
| 0-15 | .00115 | 2103-A | 1.90 | 2203-A | 2.00 | 2303-A | 2.30 | .0025 | 2403-A | 2.30 |
| 0-20 | .00115 | 2104 | 1.90 | 2204 | 2.00 | 2304 | 2.30 | | | |
| 0-25 | .00115 | 2104-A | 1.90 | 2204-A | 2.00 | 2304-A | 2.30 | | | |
| 0-30 | .00115 | 2105 | 1.90 | 2205 | 2.00 | 2305 | 2.30 | .0006 | 2405 | 2.30 |
| 0-60 | .000116 | 2106-A | 2.60 | 2206-A | 2.70 | 2306-A | 3.00 | | | |
| 1-0-1 | .08 | 2109 | 1.90 | 2209 | 2.00 | 2309 | 2.30 | | | |
| 3-0-3 | .00115 | 2110 | 1.90 | 2210 | 2.00 | 2310 | 2.30 | | | |
| 6-0-6 | .00115 | 2111 | 1.90 | 2211 | 2.00 | 2311 | 2.30 | | | |
| 10-0-10 | .00115 | 2112 | 1.90 | 2212 | 2.00 | 2312 | 2.30 | | | |
| 15-0-15 | .00115 | 2113 | 1.90 | 2213 | 2.00 | 2313 | 2.30 | | | |
| 20-0-20 | .00115 | 2114 | 1.90 | 2214 | 2.00 | 2314 | 2.30 | .0006 | 2414 | 2.30 |
| 30-0-30 | .00115 | 2115 | 1.90 | 2215 | 2.00 | 2315 | 2.30 | .0006 | 2415 | 2.30 |
| 75-0-75 | .000116 | 2116-A | 2.95 | 2216-A | 3.05 | 2316-A | 3.35 | | | |
| DC MILLIAMMETERS | | | | | | | | | | |
| 0-1 | 850 | 2120 | \$3.70 | 2220 | \$3.75 | 2320 | \$4.05 | 950 | 2420 | \$4.05 |
| 0-3 | 425 | 2121 | 2.60 | 2221 | 2.65 | 2321 | 2.95 | 130 | 2425 | 2.70 |
| 0-5 | 925 | 2125 | 2.35 | 2225 | 2.40 | | | | | |
| 0-5 | 1300 | | | | | 2325 | 2.70 | 75 | 2426 | 2.55 |
| 0-10 | 300 | 2126 | 2.20 | 2226 | 2.25 | 2326 | 2.55 | 23 | 2427 | 2.30 |
| 0-10 | 350 | | | | | | | | | |
| 0-20 | 95 | 2127 | 1.90 | 2227 | 2.00 | | | | | |
| 0-20 | 105 | | | | | 2327 | 2.30 | | | |
| 0-25 | 65 | 2127-A | 1.90 | 2227-A | 2.00 | 2327-A | 2.30 | 12 | 2428 | 2.30 |
| 0-30 | 37 | 2128 | 1.90 | 2228 | 2.00 | | | | | |
| 0-30 | 45 | | | | | 2328 | 2.30 | 5.5 | 2429 | 2.30 |
| 0-50 | 14.5 | 2129 | 1.90 | 2229 | 2.00 | | | 1.8 | 2430 | 2.30 |
| 0-50 | 18 | | | | | 2329 | 2.30 | 1.0 | 2430-A | 2.30 |
| 0-100 | 7.0 | 2130 | 1.90 | 2230 | 2.00 | 2330 | 2.30 | .5 | 2430-B | 2.30 |
| 0-100 | 8.3 | | | | | | | .35 | 2431 | 2.30 |
| 0-150 | 1.8 | 2130-A | 1.90 | 2230-A | 2.00 | 2330-A | 2.30 | .12 | 2432 | 2.30 |
| 0-150 | 2.15 | | | | | | | | | |
| 0-200 | 1.5 | 2130-B | 1.90 | 2230-B | 2.00 | 2330-B | 2.30 | | | |
| 0-200 | 1.7 | | | | | | | | | |
| 0-300 | .61 | 2131 | 1.90 | 2231 | 2.00 | | | | | |
| 0-300 | .8 | | | | | 2331 | 2.30 | | | |
| 0-500 | .21 | 2132 | 1.90 | 2232 | 2.00 | | | | | |
| 0-500 | .27 | | | | | 2332 | 2.30 | | | |
| DC VOLTMETERS (HIGH RESISTANCE) | | | | | | | | | | |
| (100 ohms/volt except 150 and 300 volt ranges are 200 ohms per volt) | | | | | | | | | | |
| 0-10 | 1050 | 2140 | \$2.75 | 2240 | \$2.85 | 2340 | \$3.15 | | | |
| 0-30 | 2800 | 2141 | 2.75 | 2241 | 2.85 | 2341 | 3.15 | | | |
| 0-50 | 4000 | 2142 | 2.95 | 2242 | 3.05 | 2342 | 3.35 | | | |
| 0-150 | 28000 | 2143 | 3.10 | 2243 | 3.20 | 2343 | 3.60 | | | |
| 0-300 | 55000 | 2144 | 3.20 | 2244 | 3.30 | 2344 | 3.60 | | | |
| DC VOLTMETERS (LOW RESISTANCE) | | | | | | | | | | |
| Range | Approximate Resist. Ohms | MODEL Catalog Number | NF-2C Dealers' Net Price | MODEL Catalog Number | RF-2C Dealers' Net Price | MODEL Catalog Number | RF-2 1/4C Dealers' Net Price | | | |
| 0-1 | 33 | 2134 | \$1.90 | 2234 | \$2.00 | 2334 | \$2.30 | | | |
| 0-3 | 100 | 2135 | 1.90 | 2235 | 2.00 | 2335 | 2.30 | 150 | 2435 | \$2.30 |
| 3-0-3 | 30 | 2136 | 1.90 | 2236 | 2.00 | 2336 | 2.30 | | | |
| 0-5 | 140 | 2136-A | 1.90 | 2236-A | 2.00 | 2336-A | 2.30 | | | |
| 0-8 | 225 | 2136-B | 1.90 | 2236-B | 2.00 | 2336-B | 2.30 | | | |
| 0-10 | 280 | 2137 | 1.90 | 2237 | 2.00 | 2337 | 2.30 | 500 | 2437 | 2.30 |
| 0-15 | 450 | 2137-A | 1.90 | 2237-A | 2.00 | 2337-A | 2.30 | 750 | 2437-A | 2.30 |
| 0-20 | 600 | 2137-B | 1.90 | 2237-B | 2.00 | 2337-B | 2.30 | 1000 | 2437-B | 2.30 |
| 0-30 | 1000 | 2137-C | 1.90 | 2237-C | 2.00 | 2337-C | 2.30 | 1500 | 2437-C | 2.30 |
| 0-50 | 1400 | 2138 | 1.90 | 2238 | 2.00 | 2338 | 2.30 | 2500 | 2438 | 2.30 |
| AC AMMETERS | | | | | | | | | | |
| 0-1 | .365 | 6101 | \$3.05 | 6201 | \$3.15 | 6301 | \$3.45 | | | |
| 0-3 | .078 | 6102 | 3.05 | 6202 | 3.15 | 6302 | 3.45 | | | |
| 0-5 | .023 | 6103 | 3.05 | 6203 | 3.15 | 6303 | 3.45 | .023 | 6404 | \$3.45 |
| 0-10 | .013 | 6104 | 3.05 | 6204 | 3.15 | 6304 | 3.45 | | | |
| AC MILLIAMMETERS | | | | | | | | | | |
| 0-25 | 750 | 6125 | \$3.05 | 6225 | \$3.15 | 6325 | \$3.45 | | | |
| 0-50 | 175 | 6126 | 3.05 | 6226 | 3.15 | 6326 | 3.45 | | | |
| 0-100 | 58 | 6127 | 3.05 | 6227 | 3.15 | 6327 | 3.45 | | | |
| 0-250 | 12 | 6128 | 3.05 | 6228 | 3.15 | 6328 | 3.45 | | | |
| 0-500 | 1.75 | 6129 | 3.05 | 6229 | 3.15 | 6329 | 3.45 | 1.15 | 6429 | \$3.45 |
| AC VOLTMETERS | | | | | | | | | | |
| 0-5 | 50 | 6135 | \$3.05 | 6235 | \$3.15 | 6335 | \$3.45 | | | |
| 0-10 | 175 | 6136 | 3.05 | 6236 | 3.15 | 6336 | 3.45 | 300 | 6437 | \$3.45 |
| 0-15 | 300 | 6137 | 3.05 | 6237 | 3.15 | 6337 | 3.45 | | | |
| 0-25 | 920 | 6137-A | 3.05 | 6237-A | 3.15 | 6337-A | 3.45 | | | |
| 0-50 | 1800 | 6138 | 3.05 | 6238 | 3.15 | 6338 | 3.45 | | | |
| 0-150 | 9530 | 6139 | 3.60 | 6239 | 3.70 | 6339 | 4.00 | 15000 | 6439 | 4.00 |
| 0-300 | 32000 | 6140 | 4.20 | 6240 | 4.25 | 6340 | 4.55 | 32000 | 6440 | 4.55 |

METERS

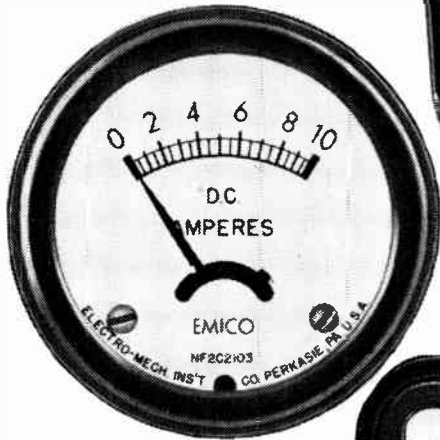
in Precision Products



MODEL 13
Edge Reading Type



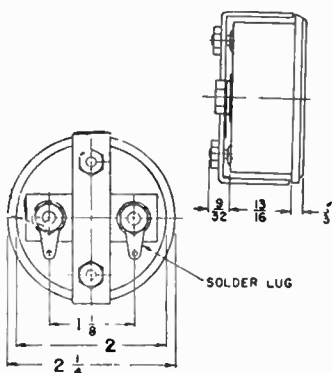
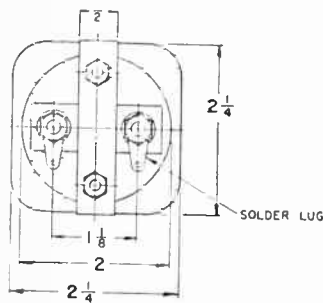
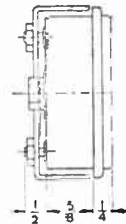
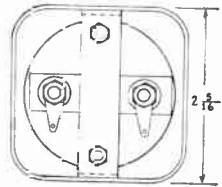
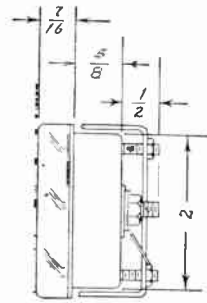
MODEL RF2 1/4 C



MODEL NF2C



MODEL RF2C



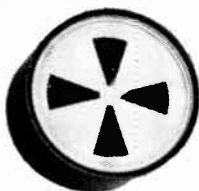
Precision instruments engineered for

- accuracy
- long life
- economy

EMICO Miniature Circuit Indicator MODEL 801

Gives snap-action response at .001 (milliwatt) to monitor all circuit malfunctions or on-off conditions. Dependable through millions of on-off cycles. Simplified panel installation.

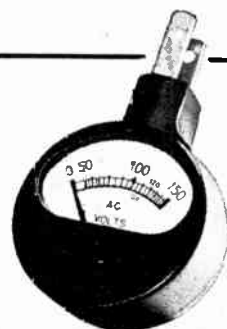
Dealer's Net \$5.00



EMICO A.C. Voltage Tester

Accurate, precision mechanism plug-in type with damped meter movement. Convenient 90° swivel prongs for ease of reading from any position.

Dealer's Net \$3.45



ELECTRO-MECHANICAL INSTRUMENT CO., PERKASIE, PENNSYLVANIA

Average Reading R. F. POWER METERS

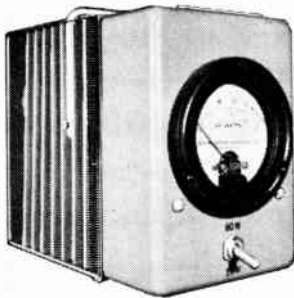
EMPHASIZING MAINTAINABILITY

1. Calibrate these Power Meters in your plant or laboratory against low frequency power standards at power line frequencies. No need to ship to manufacturer for repair and recalibration.
2. No correction curves necessary.
3. Simple operation.

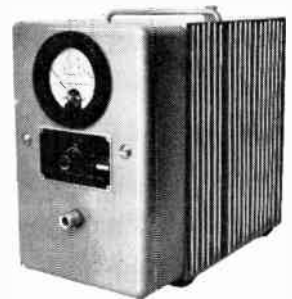
200 KC TO 500 MC — GREATLY IMPROVED

- Portable, Continuous Duty.
- Can be recalibrated anywhere with DC or Alternating Current Power against a low frequency standard.

These broad band R.F. Power Meters are of the absorption-type consisting of an oil filled, air cooled, coaxial load resistor and a voltmeter calibrated to read watts. The power meter is suitable for use as a field or laboratory test instrument, is completely shielded and non-radiating, permitting transmitter testing and adjustment without interference. The meter box is easily detached, permitting location of the load resistor at a remote point. In cases where power measurements are not required the load resistor may be used as a dummy load. No correction curve is necessary to cover the frequency range. The spurious response usually associated with directional couplers and capacitive voltage dividers is absent in this purely resistive voltage divider. Since this is a resistive voltage divider which has the same voltage division at DC, 60 cycle AC, and at high radio frequencies, this instrument can be calibrated and its calibration can be checked frequently on 60 cycle supply voltages.



Model PM-10



Models PM-7, 14

| Model | Power Ranges In Watts | Dielectric | Max. Power Dissipation | Price |
|-------|--------------------------|------------|------------------------|----------|
| PM-3 | 60, 150 | Oil | 150 watts | \$220.00 |
| PM-4 | .15, 6 | Air | 1 watt | 95.00 |
| PM-5 | .6, 1.5 | Air | 1.5 watts | 95.00 |
| PM-6 | 1.5, 6 | Air | 10 watts | 95.00 |
| PM-7 | 150, 600 | Oil | 600 watts | 285.00 |
| PM-8 | 1.5, 6, 15, 60 | Oil | 100 watts | 225.00 |
| PM-9 | 2.5, 10 | Air | 10 watts | 105.00 |
| PM-10 | 15, 60 | Oil | 90 watts | 145.00 |
| PM-14 | 25, 100, 500 | Oil | 500 watts | 325.00 |
| PM-16 | 150, 600, 1500 | Oil | 1500 watts | 375.00 |
| PM-18 | 1.5, 6, 15, 60, 150, 600 | Oil | 600 watts | 485.00 |
| PM-19 | 1.5, 6, 15, 60, 120 | Oil | 100 watts | 250.00 |



100 KC TO 200 MC

- Intermittent Duty.
- Portable.
- Can be recalibrated anywhere with DC or Alternating Current Power against a low frequency standard.

These broad band R.F. Power Meters are of the absorption-type consisting of an oil or air filled, air cooled, coaxial load resistor and a voltmeter calibrated to read watts. The power meter is suitable for use as a field or laboratory test instrument, is completely shielded and non-radiating, permitting transmitter testing and adjustment without interference. It is designed to operate in the frequency range of 100 KC to 200 MC with an accuracy of plus or minus 5%. In this Power Meter a resistive voltage divider is used. This voltage divider has the same voltage divisions at DC, 60 cycle AC and throughout the frequency range up to 200 MC. Because of this feature it is possible to calibrate this Power Meter and its calibration can be checked frequently with DC power or with 60 cycle power. Since this is a resistive voltage divider, the spurious response usually associated with directional couplers in capacitive voltage dividers is eliminated.

| Model | Power Ranges In Watts | Dielectric | Max. Power Dissipation (Intermittent Duty) | Price |
|-------|--------------------------|------------|--|---------|
| AM-3 | 60, 150 | Oil | 150 watts | \$95.00 |
| AM-6 | 1.5, 6 | Air | 10 watts | 60.00 |
| AM-7 | 150, 6 | Oil | 600 watts | 150.00 |
| AM-8 | 1.5, 6, 16, 60 | Oil | 100 watts | 95.00 |
| AM-9 | 2.5, 10 | Air | 10 watts | 60.00 |
| AM-10 | 15, 60 | Oil | 90 watts | 75.00 |
| AM-14 | 25, 100, 500 | Oil | 500 watts | 175.00 |
| AM-16 | 150, 600, 1500 | Oil | 1500 watts | 200.00 |
| AM-18 | 1.5, 6, 15, 60, 150, 600 | Oil | 600 watts | 250.00 |
| AM-19 | 1.5, 6, 15, 60, 120 | Oil | 100 watts | 125.00 |

MODEL PM-6K

POWER
MEASURING RANGE:

6000 watts Max.

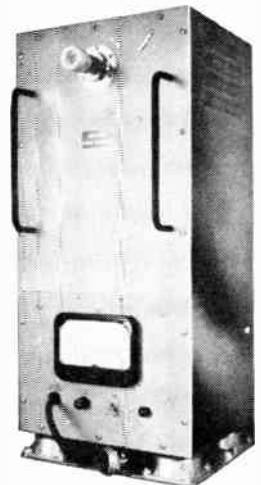
100 watts Min.

MAXIMUM
CONTINUOUS

POWER

DISSIPATION:

6000 watts



Frequency Range.....100 KC — 30 MC
Impedance50 ohms
V.S.W.R.....1.2 Maximum
Power Requirements.....115 V 60 cps, 1 amp.
Accuracy±5% of full scale
Electron Tube complement...1 ea 1N21 + 1 spare

Electro IMPULSE Laboratory

• RED BANK, N. J. •

FREED TRANSFORMER COMPANY, INC.

INCREMENTAL INDUCTANCE BRIDGES**TYPE 1110-C****MAXIMUM SUPERIMPOSED DC UP TO 2 AMPERES**

Direct in-line readings of inductance and conductance of iron core component at audio frequencies with or without superimposed direct current. The bridge uses the Owens circuit with provisions for measuring the series or parallel inductance and conductance of the unknown inductor; five precision resistance and capacitance decades are provided to indicate these values. "Q" or storage factor can be measured as the product of the inductive reactance and the conductance.

SPECIFICATIONS

Inductance Range: Five decade resistors are used for the inductance balance with a maximum resistance of 111,110 ohms in steps of 1 ohm.

Range: 5 decades 1111.1 H max. — 1 μ h min.
3 decades 11.1 H max. — 10 μ h min.
2 decades 1.1 H max. — 1 μ h min.

Frequency Range: 20 cycles to 10kc.

Accuracy: \pm .5% up to 5 kc, \pm 2% to 10 kc.

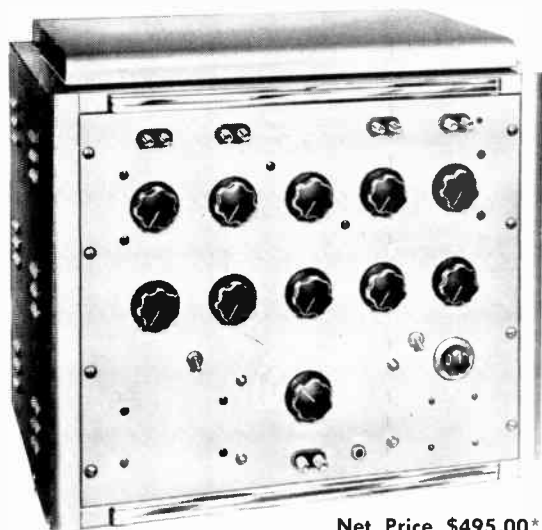
Conductance Balance: Five decade capacitors and one air variable, maximum capacitance 11.111 MF.

Conductance Range: 0.015 micromho to 100 mho.

"Q" Range: Series operation, 600 max. @ 100 cycles.
Parallel operation, 80 five dials. @ 100 cycles.

Superimposed DC: 2 amperes 1 Mh — 100 Mh.
1 ampere 0.1 H — 10 H.
0.32 ampere 10 H — 100 H.
0.1 ampere 100 H — 1000 H.

Dimensions: 21 $\frac{3}{4}$ x 17 $\frac{1}{2}$ x 15 $\frac{1}{4}$ inches. **Weight:** 50 lbs



Net Price \$495.00*

TYPE 1185**MAXIMUM DC TO 30 AMPERES**

Designed for 30 Ampere incremental inductance measurements, same operational controls as supplied on type 1110-C and 1115 bridges.

SPECIFICATIONS

Inductance Balance: Five decade resistors are used for inductance balance with a maximum resistance of 111,110 ohms in steps of 1 ohm.

Inductance Range:
5 decades 111.1 H max. - 100 μ h min.
3 decades 1.1 H max. - 1 μ h min.
2 decades 0.11 H max. - 0.1 μ h min.

Frequency Range: 20 cycles to 10 kc.

Accuracy: \pm 1% to 5 kc; \pm 3% to 10 kc.

Conductance Balance: Five decade capacitors and one air variable, maximum capacitance 11.111 MF.

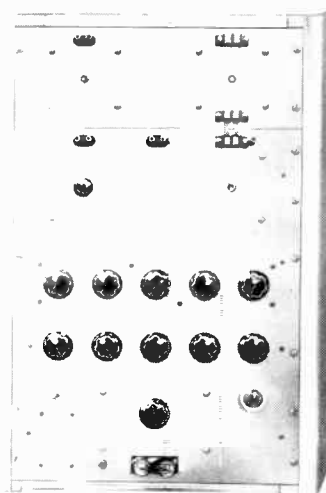
Conductance Range: 0.15 micromho-1000 Mho.

"Q" Range: Series operation, 600 max. @ 100 cycles.
Parallel operation, 80 five dials. @ 100 cycles.

Superimposed DC Range:
30 amperes 0.1 Mh - 100 Mh.
8 amperes 0.1 H - 1 H.
4 amperes 1 H - 10 H.
1 ampere 10 H - 100 H.

Dimensions: 21 $\frac{3}{4}$ x 33 $\frac{3}{4}$ x 15 $\frac{1}{4}$ inches.

Weight: 100 lbs.



Net Price \$1,250.00*

TYPE 1115**MAXIMUM DC TO 15 AMPERES**

Offers all features of the Type 1110-C Inductance Bridge with increased superimposed DC rating.

SPECIFICATIONS

Inductance Balance. Five decade resistors are used for inductance balance with a maximum resistance of 111,110 ohms in steps of 1 ohm.

Inductance Range:
5 decades 111.1 H max. - 100 μ h min.
3 decades 1.1 H max. - 1 μ h min.
2 decades 0.11 H max. - 0.1 μ h min.

Frequency Range: 20 cycles to 10 kc.

Accuracy: \pm 1% up to 5 kc. - \pm 3% to 10 kc.

Conductance Balance: Five decade capacitors and one air variable, maximum capacitance 11.111 MF.

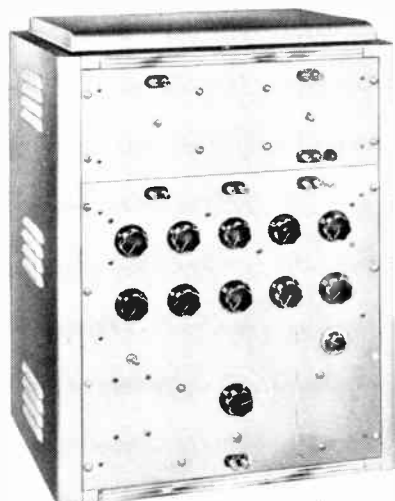
Conductance Range: 0.15 micromho-1000 Mho.

"Q" Range: Series operation, 600 max. @ 100 cycles.
Parallel operation, 80 five dials. @ 100 cycles.

Superimposed DC Range:
15 amperes 0.1 Mh. - 100 Mh.
4 amperes 0.1 H - 1 H.
1 ampere 1 H - 10 H.
0.4 ampere 10 H - 100 H.

Dimensions: 21 $\frac{3}{4}$ x 28 x 15 $\frac{1}{4}$ inches.

Weight: 80 lbs.



Net Price \$795.00*

* These items can be supplied for rack mounting. Write for prices.

FREED TRANSFORMER COMPANY, INC.

NULL DETECTOR AMPLIFIER TYPE 1140-A

USES

A sensitive null indicator for bridge measurements, providing visual null indications or aural when used in conjunction with headphones. The unit may also be used as a high gain amplifier for general laboratory work.

DESCRIPTION

Functionally the instrument consists of a high gain linear amplifier with a 30 db. input attenuator in addition to the variable gain control. A four-inch panel meter provides visual null indications, the response of the meter circuit is approximately logarithmic over a 40 db. voltage range. Resonant circuits tuned to 60, 400 and 1000 cycles limit the amplifier transmission characteristics to the three audio frequencies commonly used for bridge measurements or it may be used as a non-selective amplifier with filter "off." Other selective frequency can be obtained by use of a Type 1940 Filter Unit.

SPECIFICATIONS

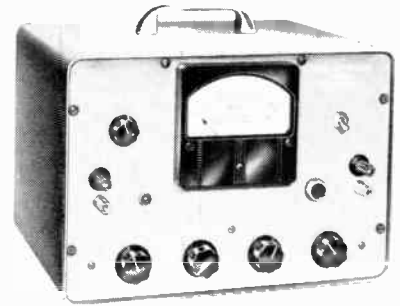
Input Impedance: 1 megohm in parallel with 25 mmf. **GAIN:** 100 db. with 1 megohm load (6 mmf. shunt capacity).

Null Detector Sensitivity: At 1 kc, 10 microvolts will give a 15% meter deflection.

Selective Amplifier: 26 db. second harmonic attenuation of 60, 400 and 1000 cycles.

Power Supply: 105-125 volts, 50-60 cycles, 35 watts consumption.

Dimensions: 12" x 8½" x 10". **Weight:** 24 lbs.



Net Price \$235.00*



NULL DETECTOR AND VACUUM TUBE VOLTMETER TYPE 1210-A

USES

The Type 1210-A Null Detector and Vacuum Tube Voltmeter is primarily designed for bridge measurements. The Null Detector indicates the balance of the bridge, and the Vacuum Tube Voltmeter indicates the voltage across the unknown two terminal or four terminal network.

SPECIFICATIONS

NULL DETECTOR

Input Impedance: 1 megohm in parallel with 25 mmf.

Frequency Response: 2 db from 20 to 20,000 cycles.

Null Detector Sensitivity: At 1000 cycles, 10 microvolts will give a 15% meter deflection.

Selective Amplifier: 26 db second harmonic attenuation at 60, 400 and 1000 cycles.

Selectivity of any other frequency between 20 cycles and 20 kc, may be obtained by connecting Freed Model 1940 to the external filter jack.

VACUUM TUBE VOLTMETER

Voltage Range: .01 volts to 150 volts in four ranges — (.15 — 1.5 — 15 — 150 volts at full scale.)

Accuracy: 2% of full scale on all four ranges.

Waveform Error: The instrument is a full wave average meter and is free of turnover effects. For small amounts of distortion the accuracy of the instrument is independent of the waveform.

Frequency Range: 20 cycles to 20,000 cycles (1 db.)

Input Impedance: Equivalent to 50 megohms resistance in parallel with a 25 mmf condenser.

Power Supply: 105-125 volts AC, 50-60 cycles. **Dimensions:** 21" x 15" x 13". **Weight:** 37 lbs.

Net Price \$350.00*

NULL DETECTOR-AMPLIFIER TYPE 2075

The Type 2075 Null Detector-Amplifier is a sensitive, transistorized, battery operated bridge detector. A continuously tunable filter, low noise level and isolation from the power line provides an ideal balance indicator for all A.C. bridge measurements.

SPECIFICATIONS

Sensitivity: 1 microvolt full scale.

Input Impedance: 50K ohms.

Frequency Range: 20 cycles to 100 KC. ± 3 db.

Continuously Variable Filter: 20 to 20,000 cycles.

Dimensions: 8" x 6" x 8".

Weight: 6 lbs.

Net Price \$345.00*



NULL DETECTOR TYPE 2050 (ALL TRANSISTOR)

The Freed Type 2050 Null Detector, when used in conjunction with other battery operated equipment, allows complete isolation from the power lines. This feature, plus battery operation, provide a lower noise level which makes it useful in all types of AC Bridge measurements. Readily portable and independent of power lines this instrument is particularly suited for bridge measurements in any location.

FEATURES

- Complete isolation from power lines.
- Portable — lightweight.
- Economical operation.
- High sensitivity throughout battery life.
- Maintenance — free service.
- Simplified operations — no warm-up, no zero setting.
- Built-in harmonic filters.

SPECIFICATIONS

Input Impedance: Approximately 1 Megohm (resistive) at 1000 cycles.

Frequency Range: 40 cycles to 50 kc ± 1 db.

In "Direct" position: 20 cycles to 50kc ± 5 db.

Filters: 400 cycles and 1000 cycles, greater than 22 db rejection of 2nd Harmonics.

Power Supply: 5.2 volts (4 mercury cells).

Battery Life: At least 1800 hours.

Size: 6 x 8 x 3½ inches. **Weight:** 3½ lbs. with batteries.

Sensitivity: (with 400 cycle or 1000 cycle filter)
 A — 200 μ V for full-scale
 80 μ V for 30% deflection } in "Linear" position
 B — 2000 μ V for full-scale
 100 μ V for 30% deflection } in "Null" position

Net Price \$185.00

* These items can be supplied for rack mounting. Write for prices.

FREED TRANSFORMER COMPANY, INC.

D.C. SUPPLY TYPE 1170-A**USES**

Intended as a dependable source of direct current for the Incremental Inductance Bridge Type No. 1110-C. Can also be used as a general laboratory supply.

DESCRIPTION

Consists of an electronically regulated high voltage supply. Four independent control circuits provide four current ranges, namely 5 milliamperes, 25 milliamperes, 100 milliamperes and 1 ampere. The output current is indicated by a multirange 4" meter.

SPECIFICATIONS

Current Ranges: Four current ranges: 5, 25, 100 milliamperes and 1 ampere.

Voltage Ranges: The maximum no load voltages corresponding to the four current ranges are the following: 1 ampere — 270 volts, 100 mA — 270 volts, 25 MA — 55 volts, 5 MA — 25 volts.

Voltage Regulation: The unit operates from a 115 volts, 50-60 cycle line. For a line variation of plus or minus 10%, the output voltage shall not vary more than $\pm 1\frac{1}{2}\%$.

Dimensions: 21" x 15" x 14". **Weight:** 89 lbs.



Net Price \$350.00*

FILTER TYPE 1940**USES**

This filter may be used with the Freed Type 1140-A Null Detector and Type 1210-A Null Detector V.T.V.M. or similar amplifiers. It can be set to any one of 7 fixed frequencies to reduce noise and harmonics when making bridge measurements.

DESCRIPTION

The filters are parallel resonant circuits, and are designed to be used in the plate circuit of the amplifier. D.C. current through the inductor is limited to 3 ma. Terminals are provided for connecting an external capacitor to tune to any frequency between 50 cps and 20 kc.

FEATURES

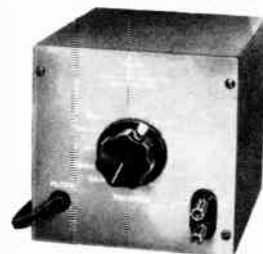
- Each of 7 tuned frequencies is quickly available.
- Any resonant frequency between 50 cps and 20 kc can be obtained with external capacitors.
- Sharp anti-resonant tuning.
- Can be used directly in plate circuit.

SPECIFICATIONS

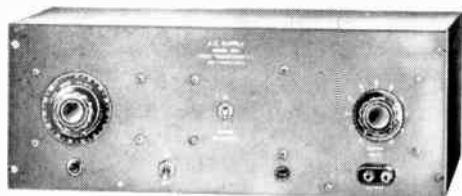
Frequencies: 100 cps, 200 cps, 500 cps, 800 cps, 1200 cps, 2000 cps and 10 kc, adjusted to any accuracy of $\pm 2\%$. Discrimination vs 2nd harmonic approximately 23 db.

Terminals: Shielded cord and plug for connection to null detector. Binding posts for connecting external capacitors.

Dimensions: 6" x 6" x 6". **Weight:** 7 lbs.



Net Price \$100.00



Net Price \$115.00*

A.C. SUPPLY TYPE 1180**USES**

The type 1180 A.C. Supply is designed for both laboratory and production applications where a power line isolated source of A.C. test voltage is required. It will have particular application to bridge measurements where a source of voltage in small increments is needed.

SPECIFICATIONS

Voltage Range: .01 — 130 volts AC — 50-60 cycles.

Dimensions: Width 19"; Depth 5"; Height 7".

Weight: 13½ lbs.

**INCREMENTAL INDUCTANCE
COMPARISON BRIDGE TYPE 1870****DESCRIPTION**

The unit is completely self-contained, consisting of a metered 500 ma D.C. supply, a metered 135 volt, 60 cycle supply and a direct reading % deviation indicator. An external oscillator jock is provided so that test frequencies from 60 cycles to 10 kc may be used.

SPECIFICATIONS

Inductance Range: 25 mh to 100 h.

Deviation Range: $\pm 20\%$ with an accuracy of 1%. $\pm 30\%$ with an accuracy of 5%.

Frequency: 60 cycles to 10,000 cycles.

Voltage Applied to Unknown: Variable from 0 to 135 volts.

D.C. Current Range: 0 to 500 ma in four overlapping ranges, 0-5 ma, 0-25 ma, 0-100 ma, 0-500 ma.

Vacuum Tube Voltmeter: .01, .1, 10, and 100 volts full scale.

Power Supply: Instrument is entirely self-contained, operates on 100-125 volts, 50-60 cycles.

Dimensions: 19½" high x 22" wide x 15" deep. **Weight:** 150 lbs.



Net Price \$550.00*

* These items can be supplied for rack mounting. Write for prices.

FREED TRANSFORMER COMPANY, INC.

UNIVERSAL BRIDGE TYPE 1150-A

The Freed Type 1150-A Universal Bridge offers the laboratory a combination of eight bridges in one instrument. This bridge will measure the reactive and resistive component of impedances, capacitance, resistance and phase angle. In the Hay and/or Owen bridge configuration the incremental permeability of an inductance can be measured.

- BRIDGE TYPES**
- Maxwell
 - Hay
 - Series* Owen
 - Parallel* Owen
 - Resonance
 - Series Resistor Condenser
 - Parallel Resistance Condenser
 - Resistance

SPECIFICATIONS

Accuracy: The basic bridge accuracy at 1000 cycles is $\pm 0.5\%$ for all bridge configurations.
Inductance Range: 1 μ h - 1110H.
Conductance Range: 0.015 μ mho - 100 mho (*Owen Bridge).
Superimposed D.C.: Up to 2 amperes.
"Q" Range: Up to 100 @ 1 kc.
Capacitance Range: 10 PF - 10 MF.
Resistance Range: 1 ohm - 1 megohm.
Frequency Range: 20-20,000 cycles.
Dimensions: 21 $\frac{3}{4}$ " x 24 $\frac{1}{2}$ " x 17".
Weight: 65 lbs.

*Owen Bridge measurements require external decade capacitor.



Net Price \$795.00*



Net Price \$1,250.00*

LOW FREQUENCY "Q" INDICATOR TYPE 1030-A

USES

Measures the "Q" factor of coils directly and the inductance of coils, distributed capacity, impedance and dielectric losses. The "Q" Indicator can be used to study the magnetic properties of iron, such as stability of iron cores in function of applied voltages, and, iron losses as a function of the frequency.

FEATURES

- Direct reading
- Unaffected by line voltage variations.
- Self contained — A.C. operated.

SPECIFICATIONS

Range of "Q" Measurements: The range of "Q" factors is from 0.1 to 1000 over the frequency range from 20 to 50,000 cycles with an accuracy of 5%; from 50,000 to 200,000 cycles the accuracy of "Q" measurements is limited by the residual capacity of the measuring circuit.
Oscillator Frequency Range: Continuously variable from 20 to 200,000 cycles in four ranges.
Power Supply: The instrument is entirely self-contained and operates on 105-125 volts, 50-60 cycles. Total power consumption 200 watts. **Dimensions:** 19 $\frac{1}{2}$ " x 14 $\frac{1}{2}$ " x 23". **Weight:** 120 lbs.

MEGOHMMETER TYPE 1020-C

USES

A rugged A.C. powered instrument for measuring resistance from 1 megohm to 2,000,000 megohms. Stabilized test voltages make this unit particularly useful for measuring leakage in capacitors.

FEATURES

Selection of 50, 100 or 500 volt test potential by front panel switch. Resistance values are indicated directly in megohms on a single scale meter which is protected against overload. Safe and rapid testing of capacitors is achieved by providing discharge and charge positions as the first two steps on the range switch. A lever switch with lock and spring return positions is provided for applying test voltage to non-capacitive components. Regulated test and supply voltages assure steady meter readings in the presence of line transients.

SPECIFICATIONS

Range: 1 megohm to 2,000,000 megohms with 500 volt test potential; 0.1 to 200,000 megohms with either 50 or 100 volt test potential.

Accuracy: $\pm 3\%$ at full scale for x 1, x 10, x 100, x 1000, 10,000 range; $\pm 5\%$ for x 100,000 range.

Test Voltages: 50, 100 and 500 volt D.C., all voltages are regulated and are within $\pm 5\%$ of nominal value. Other test voltages optional.

Power Supply: 105-125 volts, 50-60 cycles. An instrument to operate on other power line voltages and/or frequencies available on special order.

Dimensions: 9 $\frac{1}{2}$ " x 10 $\frac{1}{2}$ " x 8".

Weight: 18 lbs.



Net Price \$250.00

BATTERY OPERATED PORTABLE MEGOHMMETER TYPE 2030

USES

The Freed Type 2030 Megohmmeter is a battery operated instrument especially suited for measuring leakage of transformers, motors, cables, condensers and insulating materials wherever the power line is inaccessible or where battery operation is more desirable.

FEATURES

Resistance values are indicated on a 3" expanded scale meter protected against overload. Low resistance in series with component under test provides very short charging time for even the largest condensers. Calibration position provided to check accuracy of 500 volt test potential. The 500 volt D.C. test potential is obtained from a regulated transistor power supply.

SPECIFICATIONS

Range: 5 megohms to 5 million megohms indications to 10 million megohms in 5 overlapping ranges.

Accuracy: Plus or minus 3% on resistance values up to 100,000 megohms; plus or minus 5% from 100,000 megohms to 5,000,000 megohms.

Voltages on Unknown: The voltage applied to the Unknown terminals is 500 volts D.C. and is independent (less than 1%) of the value of the Unknown.

Terminals: Four terminals are provided, two for connecting the Unknown, one guard and one ground.

Dimensions: 6" x 8" x 4". **Weight:** 8 lbs.



Net Price \$195.00

*These items can be supplied for rack mounting. Write for prices.

VARIABLE TEST VOLTAGE MEGOHMMETER TYPE 1620

The Freed Type 1620 Megohmmeter is a versatile insulation resistance measurement instrument with a continuously variable DC test potential from 50 to 1000 volts. Components such as transformers, condensers, motors, printed circuits, cables and insulation material can be tested at their rated voltage and above, for safety factor.

- **Resistance** — 0.1 megohms to 4,000,000 megohms.
 - **Voltage** — variable, 50 - 1000 volts.
 - **Accurate** — plus or minus 5% on all ranges.
 - **Simple** — for use by unskilled operators.
 - **Rack Mounting available** — Type 1620R — 19" x 10½" x 9½".
- Power Supply:** 105-125 volts AC — 50-60 cycles.
Dimensions: 15" x 9" x 7½". **Weight:** 24 lbs.

Net Price \$335.00*

MEGOHMMETER TYPE 1620-C

All features same as type 1620 with additional circuitry for measuring capacitor leakage with test voltages from 50-1000 volts D.C.

Net Price \$360.00*

MEGOHMMETER TYPE 1620-D

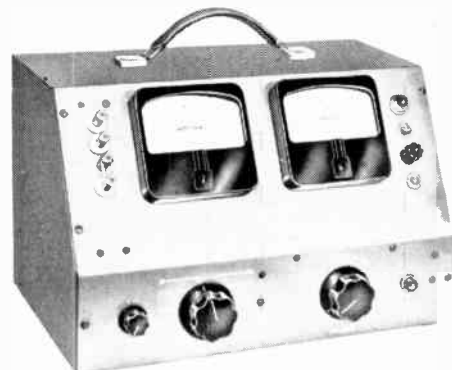
The Type 1620-D combines the features of the Types 1620 and 1620-C with an additional low test voltage range and an increase, by a factor of 10, of the upper resistance range.

Voltage Range: 5-100 volts, 100-1000 volts

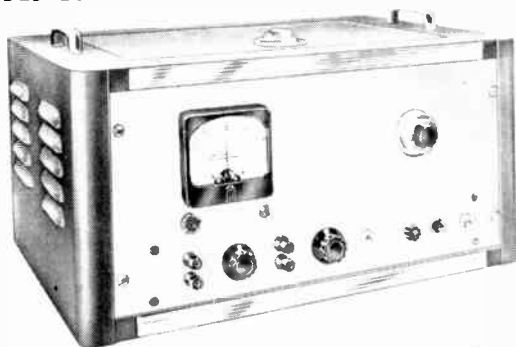
Resistance Range: 5-100 volts, 1 megohm to 4,000,000 megohms
100-1000 volts, 10 megohms to 40,000,000 megohms

Accuracy: ±5%, except highest range which is ±10%

Net Price \$385.00*



A. C. DIFFERENTIAL VOLTMETER TYPE 1560



USES

Measures differences in voltage levels as low as 0.01% regardless of their phase relation. It is extremely useful when checking response and attenuation of filters, transformers, amplifiers and other applications where a small difference in two voltages is to be measured. Because of its excellent stability and high sensitivity the differential voltmeter may also be used to observe drift in amplifiers, meters and filters.

DESCRIPTION

This instrument consists of a balanced dual-channel AC Amplifier with separate rectifiers; a DC comparison circuit which indicates percent difference on a calibrated multiturn potentiometer; a chopper modulated D.C. Amplifier operating at 60 cps; a synchronous detector which is polarity-sensitive; and a 4" center-zero null meter.

SPECIFICATIONS

Percent Difference: -10% to +5% in .01% increments on multiturn potentiometer dial.
Input Voltage (each channel): 3 volt to 100 volts rms in 5 ranges.
Input Impedance: 470 K ohms shunted by approximately 20 mmf capacitance on 1 volt range; 400 K ohms shunted by 40 mmf.

Frequency Range: 20 to 20,000 cps (MODEL 1560); 20 to 200,000 cps (MODEL 1560E). **Power Supply:** Electronically regulated; 115 volts, 60 cps input.
Calibration Linearity: ±.25% difference, 20 to 20kc; ±.5% difference, 20 to 200kc. **Dimensions:** 21" x 15" x 10½". **Weight:** 37 lbs.

TYPE 1560 **Net Price \$525.00***

TYPE 1560E **Net Price \$550.00***

WIDE BAND AND CARRIER FREQUENCY DISTORTION METER TYPE 1410

USES

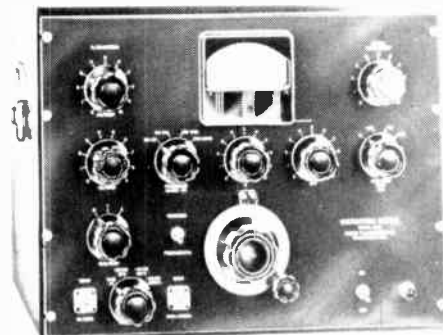
The Type 1410 Distortion Meter may be used in the laboratory or for production testing of Wide Band Amplifiers, Carrier Frequency, Telemetering and Ultra-Sonic equipment.

DESCRIPTION

The high sensitivity of the instrument permits measurements to be made on signals as low as 0.2 volts to an accuracy of 0.1%. Signals as high as 1000 volts may be applied to the input terminals directly. The frequency range of the instrument is 20 kc to 1 mc. in 10 overlapping ranges. Frequencies up to 3 mc. are passed without attenuation by the amplifier circuits, so that distortion measurements can be made on fundamental frequencies up to 1 mc. An isolation transformer and line filter provided with the instrument prevent any feedback through the power line.

SPECIFICATIONS

Frequency Range: 20 kc to 1 mc.
Input Impedance: 500,000 ohms shunted by 70 mmfd. (plus capacity of input cable) in all ranges but the 0.1 volt range. The shunt capacity on this range is 800 mmfd.
Accuracy: Harmonic Distortion can be measured accurately to 0.1%.
Sensitivity: Distortion levels of 0.1% can be read accurately for a signal input as low as 0.2 volts. Maximum input signal is 1000 volts rms.
Elimination Characteristics: Eliminates fundamental completely while attenuating second harmonic approximately 3%. **Power Supply:** 105-125 volts, 50-60 cycles. **Dimensions:** 19¾" x 16¾" x 15¾". **Net Weight:** 60 pounds.



Net Price \$875.00*

* These items can be supplied for rack mounting. Write for prices.

FREED TRANSFORMER COMPANY, INC.

FREQUENCY COUNTER TYPE 2025

A compact low cost instrument for frequency measurements, or counting of random events, in the range of 1 c.p.s. to 100 kc., to an accuracy of .1%

Utilization of glowtransfer tubes for combined counting and display functions, and the use of Digital type dividers in the line frequency derived timebase results in an instrument requiring the minimum of maintenance.

SPECIFICATIONS

Counting Rate: 1 cps to 100 kc.

Number of Decades: 4

Gate Time: .1 sec and 1 sec.
10 second gate optional

Accuracy: .1% nominal, ± 1 count, accuracy proportional to the accuracy of the power line frequency.

Input Voltage: .5v peak min. into 100k

Size: 12" W. x 8 1/2" H. x 10" D.

Type 2026 available — 1 cps to 500kc.



Net Price \$375.00

AC LINE REGULATOR TYPE RAC-1.5/3

- TUBELESS
- DISTORTION FREE
- HIGHLY EFFICIENT
- REGULATES 60 CYCLES
- REGULATES 400 CYCLES
- ELECTRO-MECHANICAL
- CIRCUIT BREAKER ON-OFF SWITCH
- FUSED VARIAC CIRCUIT
- FUSED CONTROL CIRCUIT

Utilizing . . . a fast response phase reversible magnetic amplifier preceded by a transistor comparison amplifier with a zener reference.

SPECIFICATIONS

Nominal Input Voltage and Frequency: 115V @ 60 cps or 400 cps.

Output Voltage: Adjustable 110-120 Volts.

KVA Rating and Regulation Range: 3KVA for a Regulation Range of $\pm 10\%$ of Adjusted Voltage.

1.5KVA for a Regulation Range of $\pm 20\%$ of Adjusted Voltage.

Regulation Accuracy: $\pm 0.25\%$ for a $\pm 10\%$ Regulation Range.
 $\pm 0.50\%$ for a $\pm 20\%$ Regulation Range.

Response Speed Volt/Second: 10 @ $\pm 10\%$. 20 @ $\pm 20\%$.

Size: 7" H. x 13" D. x 19" W.

Weight: 45 lbs.



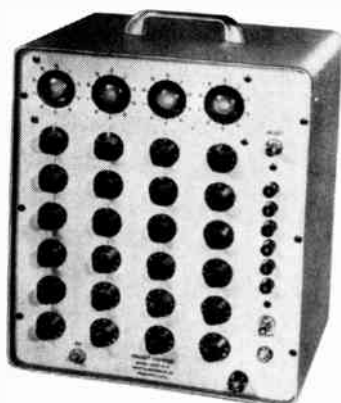
Net Price \$380.00

ELECTRONIC COUNTING AND CONTROL EQUIPMENT

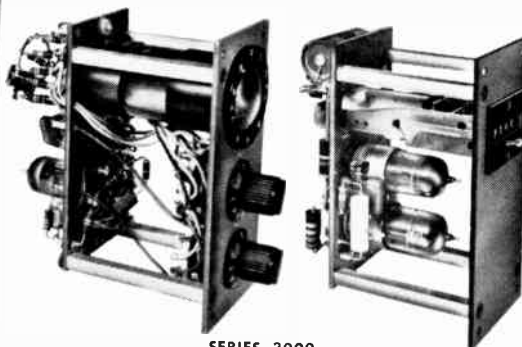
Freed offers a wide range of Industrial counters including TOTALIZING COUNTERS, PRESET COUNTERS, PRESET INTERVAL GENERATORS AND MODULAR COUNTERS. Special counters custom designed to your requirements are a Freed specialty — we invite your inquiries.



SERIES 2022



SERIES 2020



SERIES 3000



SERIES 2021

FREED TRANSFORMER COMPANY, INC.

DECADE CAPACITORS

The Freed series of Decade Capacitors covers a wide range of values and can be supplied as individual decades from 0.0001 mfd. per step to 1 mfd. per step or in various combinations of assembled decade boxes.

Single decade units can be assembled in different capacitor values for use in experimental and permanent equipment. The decade boxes are useful for laboratory work in bridge measurements and as components of filters and tuned circuits.

Polystyrene dielectric is used in the manufacture of the capacitor assemblies with the exception of the 1 mfd. per step unit which uses Mylar as a dielectric. All capacitors are non-inductively wound and heat treated for stability, low dielectric absorption and low losses.

Each decade is variable from 0 to 10 by use of 11 position selector switch. The losses in the switches and mountings are kept low by the use of special low loss, impregnated switch wafers. A positive detent mechanism allows the switch to be set accurately.

SPECIFICATIONS

Accuracy: Individual capacitors are adjusted to an accuracy of $\pm 1\%$ when measured at 1kc. The capacitance at the terminals, less the zero capacitance, is within $\pm 1\%$ of indicated dial setting. The zero capacitance of the decade boxes is supplied with each unit. Single decade units have a zero terminal capacity of approximately 8 mmfd. except Type 1419, which is compensated for true terminal capacity.

Dissipation Factor: The dissipation factor of the polystyrene units when measured at 1kc is less than 0.0002, the 1 mfd. per step decade (Mylar) is less than 0.005.

Maximum Voltage: The maximum voltage that may be applied to these decades is 500 DC or peak.

Note: Individual capacitors can be supplied to better than $\pm 1\%$ Tolerance. Write for complete information.

| Type | Step | Total Capacity | Size | Wgt. | Net Price |
|-------|-------------|----------------|-----------------------|---------|-----------|
| 1415 | 1. mfd. | 10. mfd. | 3" x 3" x 7" | 2 lbs. | \$ 35.00 |
| 1416 | 0.1 mfd. | 1. mfd. | 3" x 3" x 7" | 2 lbs. | 50.00 |
| 1417 | 0.01 mfd. | 0.1 mfd. | 3" x 3" x 7" | 2 lbs. | 35.00 |
| 1418 | 0.001 mfd. | 0.01 mfd. | 3" x 3" x 7" | 2 lbs. | 30.00 |
| 1419 | 0.0001 mfd. | 0.001 mfd. | 3" x 3" x 7" | 2 lbs. | 45.00 |
| 1250* | 0.001 mfd. | 1.110 mfd. | 13 3/4" x 6" x 4 1/2" | 8 lbs. | 170.00 |
| 1350† | 0.001 mfd. | 11.111 mfd. | 19" x 7 3/4" x 8" | 20 lbs. | 260.00* |
| 1351‡ | 0.0001 mfd. | 11.111 mfd. | 19" x 10 3/4" x 8" | 25 lbs. | 305.00* |
| 1352 | 0.0001 mfd. | 1.111 mfd. | 19" x 5 1/4" x 8" | 15 lbs. | 220.00* |

*3 decade unit

†4 decade unit plus 1000 pf air variable

‡5 decade unit plus 100 pf air variable

DECADE INDUCTORS

DESCRIPTION

Each unit is an assembly of four Toroids wound on a stabilized Molybdenum permalloy dust core protected against moisture. Four coils (nominal inductance values 1, 2, 3, 4) are connected in series, the inductance is varied from 0-10 by use of an 11 position law loss switch. A positive detent mechanism allows the switch to be set accurately.

USES

The Freed Toroidal Decade Inductors are available in single units from 1 Millihenry per step to 10 henries per step or in various combinations of assembled decade. They are especially useful in the design of filters and equalizers at audio and supersonic frequencies where the variable feature allows adjustments for optimum circuit performance.

SPECIAL FEATURES

- High stability of inductance value.
- Small variation of inductance with frequency (high self resonant frequency).
- Small variation of inductance with AC and DC currents.
- High Q in the operating frequency range.
- Low temperature coefficient.
- True astatic construction.

MAXIMUM Q VALUES ABOVE 200

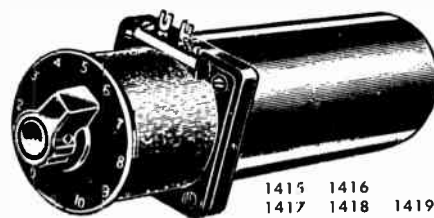
| Type | Frequency Range cps. | Maximum Q* | Inductance Per Step | Total Inductance | Size | Wgt. Lbs. | Net Price |
|-------|----------------------|------------|---------------------|------------------|---------------------------|-----------|-----------|
| 1164† | 30- 2,000 | 60 @ 300 | .1 Hy | 111. Hy | 15" x 7" x 5 1/2" | 28 | \$250.00 |
| 1220 | 500-20,000 | 230 @ 4kc | 0.001 Hy | 0.01 Hy | 3" x 3" x 9" | 4 1/2 | 80.00 |
| 1230 | 500-20,000 | 280 @ 3kc | 0.01 Hy | 0.1 Hy | 3" x 3" x 9" | 4 1/2 | 75.00 |
| 1240 | 500-20,000 | 260 @ 3kc | 0.1 Hy | 1. Hy | 3" x 3" x 9" | 4 1/2 | 80.00 |
| 1270 | 500-20,000 | 190 @ 2kc | 1. Hy | 10. Hy | 3" x 3" x 9" | 4 1/2 | 90.00 |
| 1280 | 500-20,000 | 280 @ 3kc | 0.001 Hy | 1.11 Hy | 13 3/4" x 6 1/8" x 5 1/2" | 16 | 260.00 |
| 1290 | 500-20,000 | 280 @ 3kc | 0.001 Hy | 11.11 Hy | 15" x 7" x 5 1/2" | 20 | 335.00 |
| 1310 | 500-20,000 | 280 @ 3kc | 0.01 Hy | 11.1 Hy | 13 3/4" x 6 1/8" x 5 1/2" | 16 | 260.00 |
| 1341 | 100- 2,000 | 100 @ 1kc | 10. Hy | 100. Hy | 3" x 3" x 9" | 4 1/2 | 90.00 |

ACCURACY OF TOROIDAL INDUCTANCE

| Inductance per Step: | 1 mh | 10 mh | 100 mh | 1 h |
|----------------------|-----------|-----------|-------------|--------------|
| Nominal Accuracy: | $\pm 2\%$ | $\pm 1\%$ | $\pm 0.5\%$ | $\pm 0.25\%$ |

*Maximum Q depending on inductance value and AC voltage across the coil.

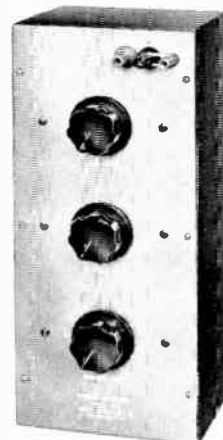
†Type 1164 Decade Inductance is wound on a special nickel alloy laminated core, nominal inductance $\pm 1\%$.



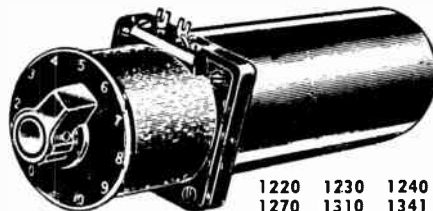
1415 1416
1417 1418 1419



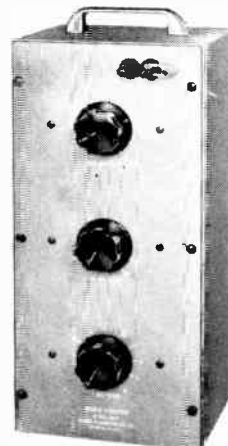
1350 Decade Capacitor



T250



1220 1230 1240
1270 1310 1341



1164 1280
1290 1310

*These items can be supplied for rack mounting. Write for prices.

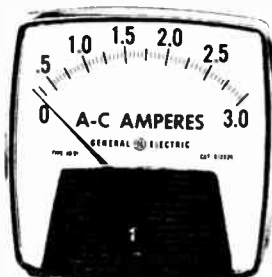


PANEL METERS

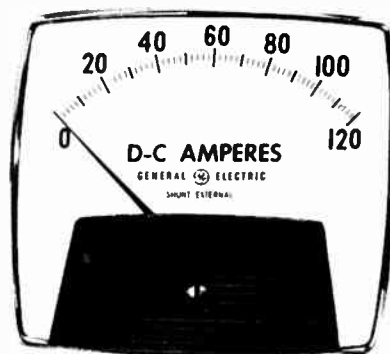
THE BIG LOOK IN SMALL PANEL METERS



2½-inch design
Type DW-91 Voltmeter



3½-inch design
Type AO-91 Ammeter



4½-inch design
Type DO-92 Ammeter

General Electric's BIG LOOK panel meters offer such added values as distinctive appearance, excellent readability, completely sealed cases and self-shielded d-c core-magnet mechanisms. And you get full-line selectivity with 2½-, 3½-, or 4½-inch models . . . a-c, d-c, or Rectifier types.

Distinctive Appearance

BIG LOOK panel meters are designed specifically to meet industry's increasing demands for panel components that contribute to end-product eye appeal. BIG LOOK panel meters—with their distinctive and modern, but not radical design—offer an important added value by complementing the appearance of the finest equipment.

Excellent Readability

Big, clear, easy-to-read numerals are positioned above the scale divisions so that they cannot be obscured by the pointer. The absence of arc-lines and use of a slim, tapered pointer facilitates quick accurate readings. Functional cover design eliminates confusing shadows by admitting natural light from all sides.

Completely Sealed Cases on 2½- and 3½-inch Designs

General Electric quality is built in to stay. Gasketed construction on 2½- and 3½-in. models protect internal parts from dirt, dust, and water and helps assure extra-long, reliable life.

Snap-on, Snap-off Covers on 4½-inch Designs

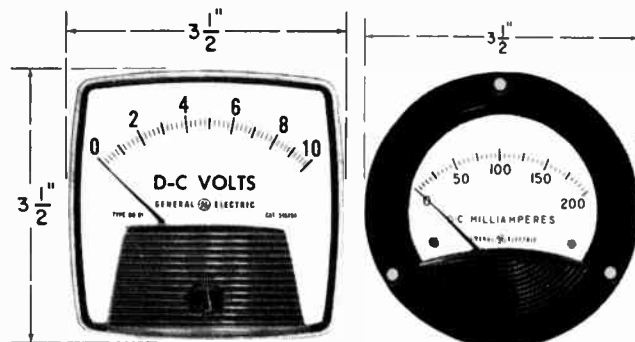
Snap-on, snap-off covers are supplied on all 4½-in. BIG LOOK panel meters. Covers can be easily removed and replaced while meter remains in normal mounted position.

Electroluminescent Scale Plate

For illuminated instrument applications, an electroluminescent scale plate is now available for all 4½-inch a-c and d-c Big Look panel meters. Excited by a-c voltage, they give a soft, even, green light over entire surface of scale plate.

Mirror-backed Scale

Also available on the 4½-inch meter exclusively are mirror-backed scales (with knife-edge pointers, if desired) for more precise, antiparallax reading.



As this size comparison shows, the new design appears to look much bigger, but will actually fit into the same usable panel space as older style meter.

GENERAL SPECIFICATIONS

| | D-C TYPES | | | A-C TYPES | | |
|--|-----------|-------|-------|-----------|-------|-------|
| | DW-91 | DO-91 | DO-92 | AW-91 | AO-91 | AO-92 |
| Accuracy (percent of full scale)* | 2% | 2% | 2% | 2% | 2% | 2% |
| Scale length | 2.1" | 2.9" | 3.93" | 2.0" | 2.9" | 3.93" |
| Damping (nominal overshoot) | | | | | | |
| (a) All ratings except those listed below: | 3% | 3% | 10% | 40% | 40% | 45% |
| (b) 20 microamps | 25% | 25% | — | — | — | — |
| (c) 30 microamps | 25% | 25% | — | — | — | — |
| (d) 50 microamps | 25% | 25% | 33% | — | — | — |
| Maximum weight — Net | 7 oz | 7 oz | 9 oz | 7 oz | 7 oz | 9 oz |
| Shipping | 12 oz | 12 oz | 13 oz | 12 oz | 12 oz | 13 oz |

Insulation level—All types meet requirements of ASA specifications C39.1 (2600 volts RMS live parts to panel.)

A-C Burden: AO-91, AW-91 and AO-92 rated 5A; 0.5 VA at 0.5 pf lag.

AO-91, AW-91 and AO-92 voltmeters have approximately unity power factor at 60 cycles.

Overload Capacity: All Big Look panel meters meet requirements of ASA specifications C39.1.

Voltmeters (a-c and d-c types) Momentary and sustained: 20% greater than rated capacity.

Ammeters (a-c and d-c types)

Momentary: 10 times rated current applied for 10 consecutive intervals of ½ second with a one-minute interval between successive applications. Sustained: 20% greater than rated capacity for 8 hours.

More specific information on a-c ammeters is as follows:

Rating (Types AO-91, AW-91, and AO-92 A-c Ammeters)

10A and under

15A—30A

50A

5 sec

10

6

5

Overload x Full scale for

15 sec

6

4

3

30 sec

4

3

2

*Rectifier type accuracy: ±3% of F.S. @ 25°C, 60 cycle sine wave.

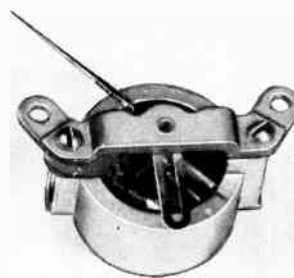
D-C PANEL METERS

Shelf-shielded D-C Mechanism

Core-magnet mechanisms with inherent self-shielding are used for all d-c ratings. This permits mounting on magnetic or non-magnetic panels without special calibration and cluster-mounting bezel-to-bezel without interaction.

Self-shielding also minimizes effects of stray magnetic fields. Weight is reduced,

too. Because of these important added values, the core-magnetic mechanism has gained industry-wide acceptance. (General Electric pioneered in the development of the core-magnet mechanism.) The superior operating characteristics of BIG LOOK meters—excellent damping, a high torque-to-weight ratio and minimum burden—are the result of continuous progress in development and use of high-quality, modern materials.



D-C Mechanism

| Scale and Rating | Approx. Terminal Resistance (Ohms) | DW-91 2 1/2-inch | | DO-91 3 1/2-inch | | DO-92 4 1/2-inch | | |
|--|---|---|------------|------------------|----------------|------------------|----------------|---------|
| | | Cat. No. | Net Price* | Cat. No. | Net Price* | Cat. No. | Net Price* | |
| D-C VOLTMETERS (Self-contained) | | | | | | | | |
| 0-1.5V | 1000 ohms per volt | 517X84 | \$12.00 | 516X84 | \$12.80 | 50-171011 LCLC | \$15.20 | |
| 0-3V | | 517X88 | 12.00 | 516X88 | 12.80 | 50-171011 LULJ | 15.20 | |
| 0-5V | | 517X90 | 12.00 | 516X90 | 12.80 | 50-171011 LLSL | 15.20 | |
| 0-8V | | 517X92 | 12.00 | 516X92 | 12.80 | 50-171011 MJMJ | 15.20 | |
| 0-10V | | 517X94 | 12.00 | 516X94 | 12.80 | 50-171011 MTMT | 15.20 | |
| 0-15V | | 517X96 | 12.00 | 516X96 | 12.80 | 50-171001 NDND | 15.20 | |
| 0-30V | | 519X4 | 12.00 | 518X4 | 12.80 | 50-171011 NLNL | 15.20 | |
| 0-50V | | 519X6 | 12.00 | 518X6 | 12.80 | 50-171011 NTVT | 15.20 | |
| 0-80V | | 519X8 | 12.00 | 518X8 | 12.80 | 50-171011 PDPD | 15.20 | |
| 0-100V | | 519X10 | 12.80 | 518X10 | 13.60 | 50-171011 PKPK | 16.00 | |
| 0-150V | | 519X12 | 12.80 | 518X12 | 13.60 | 50-171011 PZPZ | 16.00 | |
| 0-200V | | 519X14 | 12.80 | 518X14 | 13.60 | 50-171011 RLRL | 16.00 | |
| 0-250V | | 519X16 | 12.80 | 518X16 | 13.60 | 50-171011 RSRR | 16.00 | |
| 0-300V | | 519X18 | 13.60 | 518X18 | 14.40 | 50-171011 RXRX | 16.80 | |
| 0-500V | | ----- | ----- | ----- | 518X20 | 15.20 | 50-171011 SFSF | 17.60 |
| 0-600V | | ----- | ----- | ----- | 518X22 | 15.20 | 50-171011 SJSJ | 17.60 |
| D-C VOLTMETERS (For use with external resistors—prices do not include resistors) | | | | | | | | |
| 0-500V | | Rated 125 ohms | 519X20 | \$11.20 | ----- | ----- | ----- | ----- |
| 0-600V | | | 519X22 | 11.20 | ----- | ----- | ----- | ----- |
| 0-750V | 519X24 | | 11.20 | 518X24 | \$12.00 | 50-171111 FASM | \$16.00 | |
| D-C AMMETERS (Self-contained) | | | | | | | | |
| 0-1A | 0.0500 | 513X58 | \$11.20 | 512X58 | \$12.00 | 50-171111 LALA | \$14.40 | |
| 0-1.5A | | 513X60 | 11.20 | 512X60 | 12.00 | 50-171111 LCLC | 14.40 | |
| 0-2A | | 513X62 | 11.20 | 512X62 | 12.00 | 50-171111 LELE | 14.40 | |
| 0-3A | | 513X64 | 11.20 | 512X64 | 12.00 | 50-171111 LULJ | 14.40 | |
| 0-5A | | 513X66 | 11.20 | 512X66 | 12.00 | 50-171111 LLSL | 14.40 | |
| 0-10A | | 513X70 | 11.20 | 512X70 | 12.00 | 50-171111 MTMT | 14.40 | |
| 0-15A | | 513X72 | 11.20 | 512X72 | 12.00 | 50-171111 NDND | 14.40 | |
| 0-20A | | 513X74 | 11.20 | 512X74 | 12.00 | 50-171111 NGNG | 14.40 | |
| 0-30A | | 513X76 | 11.20 | 512X76 | 12.00 | 50-171111 NLNL | 14.40 | |
| 0-50A | | 0.0100 | ----- | ----- | 512X80 | 12.00 | 50-171111 NTVT | 14.40 |
| D-C AMMETERS (For use with 50 millivolt external shunts—prices do not include shunt or shunt leads) | | | | | | | | |
| 0-50A | | Rated 12.5 ohms (Calibrated for use with 2-way lead resistance of 0.063 ohms) | 515X6 | \$11.20 | 514X6 | \$12.00 | 50-171121 ECNT | \$14.40 |
| 0-75A | | | 515X10 | 11.20 | 514X10 | 12.00 | 50-171121 ECPB | 14.40 |
| 0-100A | | | 515X14 | 11.20 | 514X14 | 12.00 | 50-171121 ECPK | 14.40 |
| 0-150A | 515X16 | | 11.20 | 514X16 | 12.00 | 50-171121 ECPZ | 14.40 | |
| 0-200A | 515X18 | | 11.20 | 514X18 | 12.00 | 50-171121 ECRL | 14.40 | |
| 0-250A | 515X20 | | 11.20 | 514X20 | 12.00 | 50-171121 ECRS | 14.40 | |
| 0-300A | 515X22 | | 11.20 | 514X22 | 12.00 | 50-171121 ECRX | 14.40 | |
| 0-400A | 515X24 | | 11.20 | 514X24 | 12.00 | 50-171121 ECSE | 14.40 | |
| 0-500A | 515X26 | | 11.20 | 514X26 | 12.00 | 50-171121 ECST | 14.40 | |
| 0-600A | 515X28 | | 11.20 | 514X28 | 12.00 | 50-171121 ECSS | 14.40 | |
| 0-800A | 515X30 | | 11.20 | 514X30 | 12.00 | 50-171121 ECST | 14.40 | |
| 0-1KA | 515X32 | | 11.20 | 514X32 | 12.00 | 50-171121 ECST | 14.40 | |
| 0-1.2KA | 515X34 | | 11.20 | 514X34 | 12.00 | ----- | ----- | |
| 0-1.5KA | 515X36 | | 11.20 | 514X36 | 12.00 | ----- | ----- | |
| 0-2KA | 515X38 | 11.20 | 514X38 | 12.00 | ----- | ----- | | |
| D-C AMMETERS (For use with 100-mv external shunts—prices do not include shunt or shunt leads) | | | | | | | | |
| 0-20A | Rated 25 ohms for use with 2-way lead resistance of 0.063 ohms) | 515X68 | \$11.20 | 514X68 | \$12.00 | ----- | ----- | |
| 0-40A | | 515X72 | 11.20 | 514X72 | 12.00 | ----- | ----- | |
| 0-50A | | 515X74 | 11.20 | 514X74 | 12.00 | 50-171121 GBNT | \$14.40 | |
| 0-75A | | 515X78 | 11.20 | 514X78 | 12.00 | 50-171121 GBPP | 14.40 | |
| 0-100A | | 515X82 | 11.20 | 514X82 | 12.00 | 50-171121 GBPK | 14.40 | |
| 0-150A | | 515X84 | 11.20 | 514X84 | 12.00 | 50-171121 GBPZ | 14.40 | |
| 0-200A | | 515X86 | 11.20 | 514X86 | 12.00 | 50-171121 GBRL | 14.40 | |
| 0-250A | | 515X88 | 11.20 | 514X88 | 12.00 | 50-171121 GBRS | 14.40 | |
| 0-300A | | 515X90 | 11.20 | 514X90 | 12.00 | 50-171121 GBRS | 14.40 | |
| 0-400A | | 515X92 | 11.20 | 514X92 | 12.00 | 50-171121 GBRS | 14.40 | |
| 0-500A | | 515X94 | 11.20 | 514X94 | 12.00 | 50-171121 GBRS | 14.40 | |
| 0-600A | | 515X96 | 11.20 | 514X96 | 12.00 | 50-171121 GBRS | 14.40 | |
| 0-800A | | 515X98 | 11.20 | 514X98 | 12.00 | 50-171121 GBRS | 14.40 | |
| 0-1KA | | 517X2 | 11.20 | 516X2 | 12.00 | 50-171121 GBVA | 14.40 | |
| 0-2KA | 517X8 | 11.20 | 516X8 | 12.00 | 50-171121 GBVB | 14.40 | | |
| D-C MICROAMMETERS | | | | | | | | |
| 0-20UA | 3400 | 513X2 | \$22.40 | 512X2 | \$23.20 | ----- | ----- | |
| 0-50UA | 1600 | 513X6 | 17.60 | 512X6 | 18.40 | 50-171111 CYCY | \$20.80 | |
| 0-100UA | 1525 | 513X10 | 11.40 | 512X10 | 15.20 | 50-171111 DRDR | 17.60 | |
| 0-2000UA | 690 | 513X14 | 12.80 | 512X14 | 13.60 | 50-171111 EAEA | 16.00 | |
| 0-5000UA | 220 | 513X18 | 11.20 | 512X18 | 12.00 | 50-171111 EMEM | 14.40 | |
| D-C MILLIAMMETERS | | | | | | | | |
| 0-1MA | 64 | 513X22 | \$11.20 | 512X22 | \$12.00 | 50-171111 FAFA | \$14.40 | |
| 0-1.5MA | 64 | 513X24 | 11.20 | 512X24 | 12.00 | 50-171111 FDFD | 14.40 | |
| 0-3MA | 2.5 | 513X28 | 11.20 | 512X28 | 12.00 | 50-171111 FNFN | 14.40 | |
| 0-5MA | 2.5 | 513X30 | 11.20 | 512X30 | 12.00 | 50-171111 FXFX | 14.40 | |
| 0-10MA | 1.8 | 513X32 | 11.20 | 512X32 | 12.00 | 50-171111 GZGZ | 14.40 | |
| 0-20MA | 1.5 | 513X34 | 11.20 | 512X34 | 12.00 | 50-171111 HPHF | 14.40 | |
| 0-25MA | 2.0 | 513X36 | 11.20 | 512X36 | 12.00 | 50-171111 HJHJ | 14.40 | |
| 0-30MA | 1.67 | 513X38 | 11.20 | 512X38 | 12.00 | 50-171111 HHHH | 14.40 | |
| 0-50MA | 1.00 | 513X40 | 11.20 | 512X40 | 12.00 | 50-171111 HYHY | 14.40 | |
| 0-80MA | 0.62 | 513X42 | 11.20 | 512X42 | 12.00 | 50-171111 JJJJ | 14.40 | |
| 0-100MA | 0.50 | 513X44 | 11.20 | 512X44 | 12.00 | 50-171111 JJRJ | 14.40 | |
| 0-150MA | 0.33 | 513X46 | 11.20 | 512X46 | 12.00 | 50-171111 JXJX | 14.40 | |
| 0-200MA | 0.25 | 513X48 | 11.20 | 512X48 | 12.00 | 50-171111 KAKA | 14.40 | |
| 0-250MA | 0.20 | 513X50 | 11.20 | 512X50 | 12.00 | 50-171111 KDKD | 14.40 | |
| 0-300MA | 0.167 | 513X52 | 11.20 | 512X52 | 12.00 | 50-171111 KGGK | 14.40 | |
| 0-500MA | 0.100 | 513X54 | 11.20 | 512X54 | 12.00 | 50-171111 KMKM | 14.40 | |
| 0-800MA | 0.062 | 513X56 | 11.20 | 512X56 | 12.00 | 50-171111 KWKW | 14.40 | |

* Manufacturer's suggested resale prices.

Mirror-backed, rectifier-type, and zero-center panel meters are available also. Refer to your General Electric Supplier.

A-C PANEL METERS

| Scale and Rating | Approx. Terminal Resistance (Ohms) | AW-91, 2½-inch | | AO-91, 3½-inch | | AO-92, 4½-inch | |
|--|------------------------------------|----------------|------------|----------------|------------|-----------------|------------|
| | | Cat. No. | Net Price* | Cat. No. | Net Price* | Cat. No. | Net Price* |
| A-C VOLTMETERS (Self-contained) | | | | | | | |
| 0-3V | 11.1 | 613X68 | \$11.20 | 612X68 | \$12.00 | 50-171031 LJJLJ | \$14.40 |
| 0-5V | 29 | 613X69 | 11.20 | 612X69 | 12.00 | 50-171031 LSLS | 14.40 |
| 0-10V | 110 | 613X72 | 11.20 | 612X72 | 12.00 | 50-171031 MTMT | 14.40 |
| 0-15V | 251 | 613X73 | 11.20 | 612X73 | 12.00 | 50-171031 NDND | 14.40 |
| 0-30V | 779 | 613X76 | 11.20 | 612X76 | 12.00 | 50-171031 NLNL | 14.40 |
| 0-50V | 2500 | 613X77 | 12.00 | 612X77 | 12.80 | 50-171031 NTNT | 15.20 |
| 0-150V | 15000 | 613X81 | 12.80 | 612X81 | 13.60 | 50-171031 PZPZ | 16.00 |
| 0-300V | 54000 | 613X85 | 14.40 | 612X85 | 15.20 | 50-171031 RXXR | 17.60 |
| 0-500V | 118000 | ----- | ----- | 612X87 | 19.20 | 50-171031 SFSF | 21.60 |
| 0-600V | 141000 | ----- | ----- | 612X88 | 19.20 | 50-171031 SJSJ | 21.60 |

| A-C VOLTMETERS (Transformer rated—prices do not include transformers) | | | | | | | | |
|--|-------|-------|--------|---------|--------|---------|----------------|---------|
| 0-600V | Rated | 15000 | 613X90 | \$12.80 | 612X90 | \$13.60 | 50-171031 PZRX | \$16.00 |
| 0-750V | 0-150 | 15000 | 613X91 | 12.80 | 612X91 | 13.60 | 50-171031 PZSJ | 16.00 |
| 0-3KV | Volts | 15000 | 613X92 | 12.80 | 612X92 | 13.60 | 50-171031 PZSM | 16.00 |

| 400-CYCLE A-C VOLTMETERS (Self-contained—for use at 400 cycles) | | | | | | | | |
|--|--|-------|-------|---------|-------|---------|----------------|---------|
| 0-150V | | 15000 | 817X1 | \$12.80 | 816X1 | \$13.60 | 50-171061 PZPZ | \$16.00 |
| 0-300V | | 54000 | 817X2 | 14.40 | 816X2 | 15.20 | 50-171061 RXXR | 17.60 |

| A-C AMMETERS (Self-contained) | | | | | | | | |
|--------------------------------------|--|--------|----------|---------|----------|---------|------------------|---------|
| 0-1A | | 0.16 | 613X20 | \$12.00 | 612X20 | \$12.80 | 50-171141 LALA | \$15.20 |
| 0-3A | | 0.015 | 613X24 | 12.00 | 612X24 | 12.80 | 50-171141 LJJLJ | 15.20 |
| 0-5A | | 0.007 | 613X25 | 12.00 | 612X25 | 12.80 | 50-171141 LSLS | 15.20 |
| 0-8A | | 0.003 | 613X28 | 12.00 | 612X28 | 12.80 | 50-171141 MJMJ | 15.20 |
| 0-10A | | 0.0024 | 613X29 | 12.00 | 612X29 | 12.80 | 50-171141 MTMT | 15.20 |
| 0-15A | | 0.0016 | 613X31 | 12.00 | 612X31 | 12.80 | 50-171141 NDND | 15.20 |
| 0-20A | | 0.001 | 613X32** | 12.80 | 612X32** | 13.60 | 50-172141 LSPG** | 16.00 |
| 0-30A | | 0.0006 | 613X34** | 12.80 | 612X34** | 13.60 | 50-172141 NLNL** | 16.00 |
| 0-50A | | 0.0004 | ----- | ----- | 612X35** | 15.20 | 50-172141 NTNT** | 17.60 |

| A-C AMMETERS (Transformer rated—prices do not include transformers) | | | | | | | | |
|--|-------------------------|-------|--------|---------|----------------|---------|----------------|---------|
| 0-10A | Rated 0-5 Amperes | 0.007 | 613X36 | \$12.00 | 612X36 | \$12.80 | 50-171141 LSMT | \$15.20 |
| 0-15A | | | 613X37 | 12.00 | 612X37 | 12.80 | 50-171141 LSND | 15.20 |
| 0-20A | | | 613X38 | 12.00 | 612X38 | 12.80 | 50-171141 LSGN | 15.20 |
| 0-30A | | | 613X40 | 12.00 | 612X40 | 12.80 | 50-171141 LSNL | 15.20 |
| 0-40A | | | 613X41 | 12.00 | 612X41 | 12.80 | 50-171141 LSPN | 15.20 |
| 0-50A | | | 613X42 | 12.00 | 612X42 | 12.80 | 50-171141 LSNT | 15.20 |
| 0-75A | | | 613X44 | 12.00 | 612X44 | 12.80 | 50-171141 LSPB | 15.20 |
| 0-80A | | | 613X45 | 12.00 | 612X45 | 12.80 | 50-171141 LSPD | 15.20 |
| 0-100A | | | 613X46 | 12.00 | 612X46 | 12.80 | 50-171141 LSPG | 15.20 |
| 0-150A | | | 613X49 | 12.00 | 612X49 | 12.80 | 50-171141 LSPZ | 15.20 |
| 0-200A | | | 613X50 | 12.00 | 612X50 | 12.80 | 50-171141 LSRL | 15.20 |
| 0-300A | | | 613X52 | 12.00 | 612X52 | 12.80 | 50-171141 LSRX | 15.20 |
| 0-400A | | | 613X53 | 12.00 | 612X53 | 12.80 | 50-171141 LSSC | 15.20 |
| 0-500A | | | 613X54 | 12.00 | 612X54 | 12.80 | 50-171141 LSSF | 15.20 |
| 0-600A | | | 613X55 | 12.00 | 612X55 | 12.80 | 50-171141 LSSJ | 15.20 |
| 0-800A | | | 613X56 | 12.00 | 612X56 | 12.80 | 50-171141 LSSN | 15.20 |
| 0-1KA | | | 613X57 | 12.00 | 612X57 | 12.80 | 50-171141 LSWA | 15.20 |
| 0-1.2KA | | | 613X58 | 12.00 | 612X58 | 12.80 | 50-171141 LSVB | 15.20 |
| 0-1.5KA | | | 613X59 | 12.00 | 612X59 | 12.80 | 50-171141 LSVL | 15.20 |
| 0-2KA | | | 613X60 | 12.00 | 612X60 | 12.80 | 50-171141 LSVF | 15.20 |
| 0-3KA | 613X62 | 12.00 | 612X62 | 12.80 | 50-171141 LSVJ | 15.20 | | |

A-C LOAD INDICATORS—Rated 0-5A. Can be applied to any 60-cycle a-c motor when used with the variable-ratio Type JCH-0 current transformer

| Scale legend: | PERCENT MOTOR LOAD CURRENT | | | | | | |
|--|----------------------------|-----|--------|---------|---------------------|---------|--|
| Scale markings: 0-150; (red band 100-150) | ----- | --- | 612X98 | \$14.40 | 50-171141 LSPZ1-AAA | \$16.80 | |
| 0-150; (green band 0-100) (yellow band 100-125) (red band 125-150) | ----- | --- | 612X99 | 17.60 | 50-171141 LSPZ1-AAB | 20.00 | |

| A-C MILLIAMMETERS | | | | | | | |
|--------------------------|------|--------|---------|--------|---------|----------------|---------|
| 0-10MA | 2158 | 613X4 | \$12.00 | 612X4 | \$12.80 | 50-171141 GZGZ | \$15.20 |
| 0-25MA | 341 | 613X7 | 12.00 | 612X7 | 12.80 | 50-171141 HJHJ | 15.20 |
| 0-50MA | 84 | 613X9 | 12.00 | 612X9 | 12.80 | 50-171141 HYYH | 15.20 |
| 0-100MA | 21 | 613X12 | 12.00 | 612X12 | 12.80 | 50-171141 JRJR | 15.20 |
| 0-200MA | 4.1 | 613X14 | 12.00 | 612X14 | 12.80 | 50-171141 KAKA | 15.20 |
| 0-500MA | 0.7 | 613X17 | 12.00 | 612X17 | 12.80 | 50-171141 KMKM | 15.20 |

| RECTIFIER-TYPE A-C VOLTMETERS (Self-contained) | | | | | | | |
|---|-----------------------------|----------------|---------|----------------|---------|----------------|---------|
| 0-10 V | 1000 Ohms per Volt | 50-152051MTMT2 | \$16.80 | 50-162051MTMT2 | \$17.60 | 50-171051MTMT1 | \$20.00 |
| 0-15 V | | 50-152051NDND2 | 16.80 | 50-162051NDND2 | 17.60 | 50-171051NDND1 | 20.00 |
| 0-20 V | | 50-152051NGNG2 | 16.80 | 50-162051NGNG2 | 17.60 | 50-171051NGNG1 | 20.00 |
| 0-25 V | | 50-152051NJNJ2 | 16.80 | 50-162051NJNJ2 | 17.60 | 50-171051NJNJ1 | 20.00 |
| 0-30 V | | 50-152051NLNL2 | 16.80 | 50-162051NLNL2 | 17.60 | 50-171051NLNL1 | 20.00 |
| 0-50 V | | 50-152051NTNT2 | 16.80 | 50-162051NTNT2 | 17.60 | 50-171051NTNT1 | 20.00 |
| 0-80 V | | 50-152051PDPD2 | 16.80 | 50-162051PDPD2 | 17.60 | 50-171051PDPD1 | 20.00 |
| 0-100 V | | 50-152051PKPK2 | 17.60 | 50-162051PKPK2 | 18.40 | 50-171051PKPK1 | 20.80 |
| 0-150 V | | 50-152051PZPZ2 | 17.60 | 50-162051PZPZ2 | 18.40 | 50-171051PZPZ1 | 20.80 |
| 0-200 V | | ----- | ----- | ----- | ----- | 50-171051RLRL1 | 20.80 |
| 0-250 V | | ----- | ----- | ----- | ----- | 50-171051RSTR1 | 20.80 |
| 0-300 V | | ----- | ----- | ----- | ----- | 50-171051RXXR1 | 21.60 |

| RECTIFIER-TYPE A-C MICROAMMETERS | | | | | | | |
|---|-----|----------------|---------|----------------|---------|----------------|---------|
| 0-500 μA | 985 | 50-152151EMEM2 | \$16.00 | 50-162151EMEM2 | \$16.80 | 50-171151EMEM1 | \$19.20 |
| 0-800 μA | 655 | 50-152151EWEW2 | 16.00 | 50-162151EWEW2 | 16.80 | 50-171151EWEW1 | 19.20 |

| RECTIFIER-TYPE A-C MILLIAMMETERS | | | | | | | |
|---|-----|----------------|---------|----------------|---------|----------------|---------|
| 0-1 MA | 570 | 50-152151FAFA2 | \$16.00 | 50-162151FAFA2 | \$16.80 | 50-171151FAFA1 | \$19.20 |
| 0-1.5 MA | 375 | 50-152151FDFF2 | 16.00 | 50-162151FDFF2 | 16.80 | 50-171151FDFF1 | 19.20 |
| 0-2 MA | 325 | 50-152151FGFG2 | 16.00 | 50-162151FGFG2 | 16.80 | 50-171151FGFG1 | 19.20 |
| 0-3 MA | 197 | 50-152151FNFN2 | 16.00 | 50-162151FNFN2 | 16.80 | 50-171151FNFN1 | 19.20 |
| 0-5 MA | 139 | 50-152151FXFX2 | 16.00 | 50-162151FXFX2 | 16.80 | 50-171151FXFX1 | 19.20 |
| 0-10 MA | 90 | 50-152151GZGZ2 | 16.00 | 50-162151GZGZ2 | 16.80 | 50-171151GZGZ1 | 19.20 |
| 0-20 MA | 62 | 50-152151HFHF2 | 16.00 | 50-162151HFHF2 | 16.80 | 50-171151HFHF1 | 19.20 |

*Manufacturer's suggested resale prices.
**Furnished with external magnetic shield assembled to meter base.

TIME METERS



Time meters provide for proper servicing and preventive maintenance, or to indicate component life. General Electric time meters are the ideal indicators for these purposes:

Electronic Component Testing and Operation Life

- Radio Transmitters
- Power Supplies and Converters
- Radar, Sonar, Doppler and other Military Equipment
- Engine-Generator Test Stands
- Data Handling Systems
- Industrial and Nuclear Control Systems
- Test Equipment

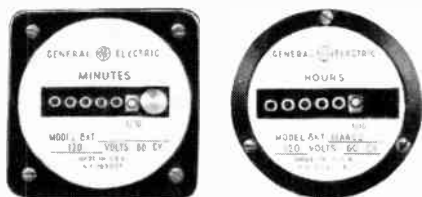
Electrical Machinery Operating Time

- Conveyors
- Molding and Extrusion Machines
- Drill and Punch Presses
- Machine Tools
- Welding Machines
- Industrial Ovens

Preventive Maintenance

- Operating Time
- Shut-down Time
- Total Operating Life
- Correct Intervals for Inspecting and Servicing Machines

TYPE KT TIME METERS



The Type KT time meter, with 6-digit counter as standard and the last digit in contrasting color to indicate tenths, can be supplied for minutes or hours in ratings of 120, 208, 240, and 480 volts; 60 or 50 cycles.

Complete line for every time-measuring application. Includes 2 1/2- and 3 1/2-inch sizes in either round or square case for panel mounting.

Reset device available for front-of-meter mounting on all but the sealed model.

Mechanism is completely enclosed in die-cast zinc bezel and plastic case, providing a dust-resistant enclosure.

Increased operating temperature range from 67°F to 150°F means more flexible application, longer meter life, and less maintenance.

A special model is available for military applications.

STANDARD RATINGS—60 Cycles

| Volts | Non-Reset Type | | | Net Price* | With Reset Knob | | |
|-------|----------------|-------|-----------|------------|-----------------|-------|-----------|
| | Register | | | | Register | | |
| | Minutes | Hours | Model No. | | Minutes | Hours | Model No. |

TYPE KT-11—2 1/2-INCH ROUND CASE

| | | | | | | |
|-----|-----------|-----------|---------|-----------|-----------|---------|
| 120 | 8KT11AAA1 | 8KT11AAA2 | \$17.60 | 8KT11AAB1 | 8KT11AAB2 | \$24.00 |
| 240 | 8KT11ABA1 | 8KT11ABA2 | 18.40 | 8KT11ABB1 | 8KT11ABB2 | 24.80 |
| 480 | 8KT11ALA1 | 8KT11ALA2 | 19.20 | 8KT11ALB1 | 8KT11ALB2 | 25.60 |

TYPE KT-11—2 1/2-INCH SQUARE CASE

| | | | | | | |
|-----|-----------|-----------|---------|-----------|-----------|---------|
| 120 | 8KT11BAA1 | 8KT11BAA2 | \$17.60 | 8KT11BAE1 | 8KT11BAB2 | \$24.00 |
| 240 | 8KT11BBA1 | 8KT11BBA2 | 18.40 | 8KT11BBE1 | 8KT11BBB2 | 24.80 |
| 480 | 8KT11BLA1 | 8KT11BLA2 | 19.20 | 8KT11BLE1 | 8KT11BLB2 | 25.60 |

TYPE KT-11—3 1/2-INCH ROUND CASE

| | | | | | | |
|-----|-----------|-----------|---------|-----------|-----------|---------|
| 120 | 8KT11CAA1 | 8KT11CAA2 | \$17.60 | 8KT11CAE1 | 8KT11CAB2 | \$24.00 |
| 240 | 8KT11CBA1 | 8KT11CBA2 | 18.40 | 8KT11CBE1 | 8KT11CBB2 | 24.80 |
| 480 | 8KT11CLA1 | 8KT11CLA2 | 19.20 | 8KT11CLE1 | 8KT11CLB2 | 25.60 |

TYPE KT-11—3 1/2-INCH SQUARE CASE

| | | | | | | |
|-----|-----------|-----------|---------|-----------|-----------|---------|
| 120 | 8KT11DAA1 | 8KT11DAA2 | \$17.60 | 8KT11DAE1 | 8KT11DAB2 | \$24.00 |
| 240 | 8KT11DBA1 | 8KT11DBA2 | 18.40 | 8KT11DBE1 | 8KT11DBB2 | 24.80 |
| 480 | 8KT11DLA1 | 8KT11DLA2 | 19.20 | 8KT11DLE1 | 8KT11DLB2 | 25.60 |

NEW TYPE 236 TIME METERS



New Type 236 elapsed-time indicators, latest addition to G-E's BIG LOOK line of panel components, meet industry's need for instruments that enhance end-product eye appeal through compatible design. They now offer the same distinctive appearance and excellent readability found in G-E's BIG LOOK ammeters and voltmeters, plus outstanding operating accuracy and reliability.

FEATURES

- Reset device available.
- Military sealed model available.
- Extra-large counter numbers.
- Water and dust-resistant case.
- ASA panel-mounting dimensions.

STANDARD RATINGS—60 Cycles

| Volts | Non-reset Type | | | Net Price* | Reset Type | | |
|-------|----------------|-------|----------|------------|------------|-------|----------|
| | Register | | | | Register | | |
| | Minutes | Hours | Cat. No. | | Minutes | Hours | Cat. No. |

2 1/2-INCH COMMERCIAL CASE

| | | | | | | |
|-----|----------------|----------------|---------|----------------|----------------|---------|
| 120 | 50-236401AAAA1 | 50-236402AAAA1 | \$17.60 | 50-236411AAAA1 | 50-236412AAAA1 | \$24.00 |
| 240 | 50-236401ABAA1 | 50-236402ABAA1 | 18.40 | 50-236411ABAA1 | 50-236412ABAA1 | 24.80 |
| 480 | 50-236401ACAA1 | 50-236402ACAA1 | 19.20 | 50-236411ACAA1 | 50-236412ACAA1 | 25.60 |

3 1/2-INCH COMMERCIAL CASE

| | | | | | | |
|-----|----------------|----------------|---------|----------------|----------------|---------|
| 120 | 50-236301AAAA1 | 50-236302AAAA1 | \$17.60 | 50-236311AAAA1 | 50-236312AAAA1 | \$24.00 |
| 240 | 50-236301ABAA1 | 50-236302ABAA1 | 18.40 | 50-236311ABAA1 | 50-236312ABAA1 | 24.80 |
| 480 | 50-236301ACAA1 | 50-236302ACAA1 | 19.20 | 50-236311ACAA1 | 50-236312ACAA1 | 25.60 |

2 1/2-INCH SEALED CASE

| | | | | | | |
|-----|----------------|----------------|---------|--|--|--|
| 120 | 50-236421AAAA1 | 50-236422AAAA1 | \$20.00 | | | |
| 240 | 50-236421ABAA1 | 50-236422ABAA1 | 20.80 | | | |
| 480 | 50-236421ACAA1 | 50-236422ACAA1 | 21.60 | | | |

3 1/2-INCH SEALED CASE

| | | | | | | |
|-----|----------------|----------------|---------|--|--|--|
| 120 | 50-236321AAAA1 | 50-236322AAAA1 | \$20.00 | | | |
| 240 | 50-236321ABAA1 | 50-236322ABAA1 | 20.80 | | | |
| 480 | 50-236321ACAA1 | 50-236322ACAA1 | 21.60 | | | |

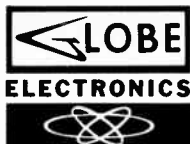
2 1/2-INCH CONDUIT CASE

| | | | | | | |
|-----|----------------|----------------|---------|----------------|----------------|---------|
| 120 | 50-236431AAAD1 | 50-236432AAAD1 | \$20.80 | 50-236441AAAD1 | 50-236442AAAD1 | \$27.20 |
| 240 | 50-236431ABAD1 | 50-236432ABAD1 | 21.60 | 50-236441ABAD1 | 50-236442ABAD1 | 28.00 |
| 480 | 50-236431ACAD1 | 50-236432ACAD1 | 22.40 | 50-236441ACAD1 | 50-236442ACAD1 | 28.80 |

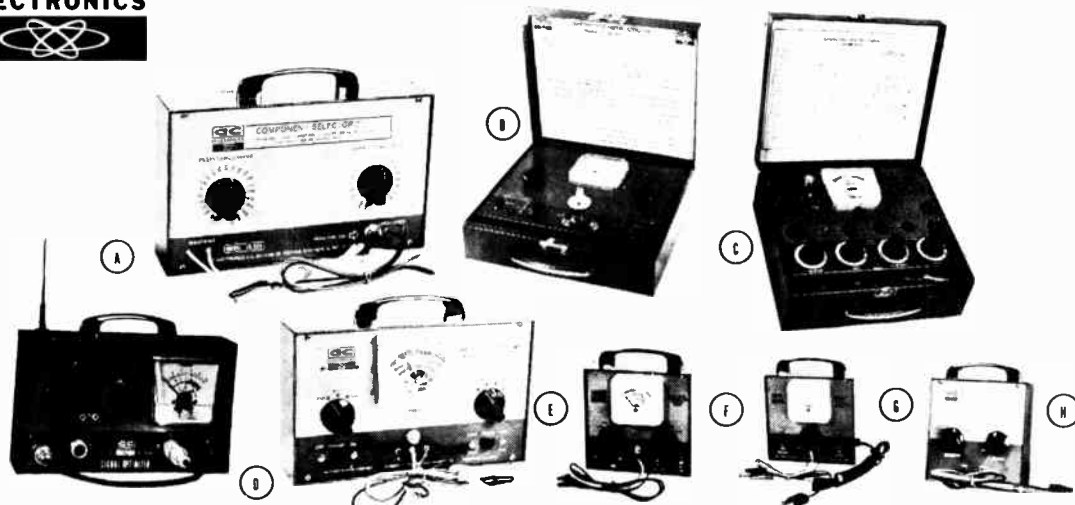
2 1/2-INCH PORTABLE CASE

| | | | | | | |
|-----|----------------|----------------|---------|----------------|----------------|---------|
| 120 | 50-236451AAAE1 | 50-236452AAAE1 | \$22.40 | 50-236461AAAE1 | 50-236462AAAE1 | \$28.80 |
| 240 | 50-236451ABAE1 | 50-236452ABAE1 | 23.20 | 50-236461ABAE1 | 50-236462ABAE1 | 29.60 |
| 480 | 50-236451ACAE1 | 50-236452ACAE1 | 24.00 | 50-236461ACAE1 | 50-236462ACAE1 | 30.40 |

*Manufacturer's suggested resale prices.



TEST EQUIPMENT



(A) COMPONENT SELECTOR—Instant component substitution of 45 different Resistors, Capacitors and Electrolytics. Eliminates wasted time hunting for parts, determines the value of illegible capacitors and ends soldering mess created by individual substitution. Portable, compact design, first quality, full discharge protection. Completely self-contained in Scotch Grain finish Metal case with High Visibility recessed panel in two tone.

Cat. No. 36-524 Net \$24.95

(B) TRANSISTOR RADIO TROUBLE SHOOTER—Indispensible and time saving... Tests PNP, NPN, Power Transistors, diodes and rectifiers (semi-conductors), all transistors; operates as a SIGNAL GENERATOR of 400 CPS (approx.) audio signal; also acts as a POWER SUPPLY — BATTERY ELIMINATOR. GC's Trouble Shooter gives an indirect battery test through substitution.

VOLT METER-MILLIAMMETER measures both external DC voltage 0-24 and milliammeters 0-100 without use of power supply. The wide angle meter (90% — 5 scales) and 8 position selector switch to give simple operation but accurate and dependable.

Cat. No. 36-568 Net \$49.50

(C) PORTABLE TUBE TESTER & CRT REACTIVATOR — TESTS OVER 1750 TUBES—Test all tubes including Compactrons, Nuvisors, Ten-Pin Sylvania, Novars, Foreign Tubes, Hybrid Auto Radio Tubes, some Industrial Tubes — and as an extra feature, will test and reactivate CRT Tubes. Over 1,750 tubes. Only four knobs to set, the Checker does the rest. Tests black and white and all color Receiving Tubes. Six sockets eliminate search problems. Allows for feature tubes (including Color). Selenium Rectifiers can be tested and provides "Grid to Cathode" and "Filament to Cathode". Short Tests, spots "Gassy" Tubes. Grid emission shown on meter inter-element leakage sensitivity can be adjusted to suit individual serviceman.

Cat. No. 36-540 Net \$67.50

(D) GC TEST "SIGNAL OPTIMIZER"

To Get the "MOST" Out of Your Own CB Equipment.

To Get the "MOST" Out of Your CB Servicing!
7 Testers in One.

... "Wattmeter" measures antenna power in Watts

... "Modulation Monitor"

... Field Strength Meter

... Measures Antenna output

... Checks and Tests the frequency and overtone of CB Crystals

... Measures standing wave ratio (SWR)

... It measures the "Efficiency" of your base (or Mobile) Antenna

Cat. No. 36-590 Net \$47.50

(E) IN AND OUT OF CIRCUIT TRANSISTOR TESTER

—Test all common NPN, PNP transistors and provide an indication of collector to emitter shorts, collector to base shorts, the condition of the collector junction and the DC current gain. Indicates the condition of diodes and rectifiers. Provides an "In-Circuit" test to determine the transistor's ability to oscillate as a blocking oscillator. This test is often most expedient in Isolating troubles — The in-circuit check is not a gain test but only indicate whether or not the transistor is operative.

Cat. No. 36-570 Net \$24.95

(F) TRANSISTOR TESTER—Tests PNP, NPN, power transistors, diodes and Rectifiers (Semi-conductors). The Tester's basic measurement capacities are Open Test, Short Test, Leakage — ICO, Gain — BETA, In-Circuit, Out-of-Circuit. GC's Tester operates on 2 penlite batteries. Wide angle meter with zero adjustment registers Shorts, Leakage and Gain. On/Off switch eliminates possible battery and/or Meter damage through accidental shorts.

Size: 5" x 5" x 1 7/8"

Cat. No. 36-560 Net \$19.95

(G) POWER SUPPLY AND BATTERY ELIMINATOR—

Operate units without batteries, through especially designed transformer. At higher or lower than normal output voltages, giving technicians better analysis of relative performance. Well filtered source of DC/0-24 volts checks current drain; large capacitor filter provides less than a fraction of one percent ripple; OPTIMUM FULL WAVE rectification through 2 heavy duty silicon rectifiers. 3 18" leads, common, B+ variable, plus extra 1 1/2" V tap; equipped with mini-gator clips and slip-on insulators. Ideal for recharging nickel cadmium batteries. Can be used to align individual stages in trans-radio.

Size: 5" x 5" x 1 7/8"

Cat. No. 36-562 Net \$19.95

(H) TRANSISTORIZED SIGNAL GENERATOR — For

service repairs on Transistor Radios, Auto Radios, conventional Radios and Hi-Fi Stereo sets. Makes trouble shooting quick and easy through the signal injection method, isolating defects to a specific stage. 18" leads; neg. side has insulated alligator clip, possible: thin probe, for hard-to-reach areas.

Size: 5" x 5" x 1 7/8"

Cat. No. 36-564 Net \$9.95

FLOOR MODEL



Dynamic Self-Service Tester — Test All 4 —
1. TV-Radio tubes, past, present, and future
2. Car Radio Vibrators, 3. Portable Radio Batteries, 4. Hi-Fi — Stereo Tubes.

Exclusive Master Switch and Just 6 Sockets — Provides accurate, dynamic testing for over 1200 current tubes, plus the majority of all future tubes.

Beats Obsolescence — Master Switch accommodates new tubes.

Fast and Easy to Use — No complicated mass of sockets. Attractive, uncluttered test panel looks... and is... easy to operate!

Battery Test — Tests battery models ranging from 1.5 to 90 volts.

Instruction Book Included — Tube settings for over 1200 tube types.

Five Drawers — Storage space for over 275 tubes in sliding drawers with egg-crate dividers.

Size: 15" W x 61" H x 14" D

Cat. No. 36-500 with drawer base Net \$199.50

Cat. No. 36-502 counter top model Net 159.50

SPECIALISTS in Sub-Miniature Panel Meters

FIRST in U.S. to manufacture 1" diameter meter
 FIRST to produce 1" and 1½" illuminated meters

FIRST to produce 1½" self-contained DB and VU meters
 FIRST to produce miniature side indicators



RUGGEDIZED METERS

1½" Square

Meets MIL-M-10304 (SIG.C.) Accurate within ±3% of full scale deflection. Basic d-c ranges 0-100 d-c ua, 0-1 d-c ma, and 0-10 d-c mv. VU meters and other ranges also available



Model 2547

Horizontal Scale

Vertical Scale

NEW! CONTACTLESS ELECTRONIC CONTROL METERS

Provide continuous output signal past selected control setting, with uninterrupted, accurate, full-scale indication at all times. No electrical contacts at control point, so no control-point problems. Models with single or double independent control-arm circuits, and with scales for horizontal or vertical mounting, with zero at center, left or right. Accuracy held to ±2% of full scale for dc, ±5% for ac.

Patent Nos. 2, 871, 450 and 2, 967, 278

Model 1120

Vertical Mounting



Model 1135*

Horizontal Mounting



Model 1145*

Horizontal Mounting
 *Patented



SIDE INDICATORS

- GREATER READABILITY
- REDUCES PANEL AREA TO ¼ OF CONVENTIONAL METER INSTALLATIONS OF SAME SCALE LENGTH
- HORIZONTAL OR VERTICAL MOUNTING

THREE SIZES AVAILABLE:

MODEL 1120—Scale length 1.2".

MODEL 1135—Scale length 2.1".
 Front external zero adjuster.

MODEL 1145—Scale length 2.75".
 Front external zero adjuster.

International Instruments' components lead the way for miniaturization through practical engineering design.



Model 150

1½" ROUND and SQUARE

1½" barrel diameter. Full 90° scale arc, scale length 1.322". Model 153 meets MIL-M-3823 requirements. Also available: self-contained VU and DB meters — illuminated meters with lamp housing attached.



Model 153

VOM-20 Multi-Tester



Sensitivity: 20,000 ohms per volt for dc, 15,500 ohms per volt for ac. Three big scales with ranges: (1) to 1500 acv, dcv (2) to 500 dcma (3) to 2 megohms. Moderately priced.

1" ROUND



Model 100

1" barrel diameter. Full 90° scale arc, scale length .770". VU, DB and illuminated meters also available with external accessory attached.

ENGINEERING DATA SHEETS COMPLETELY DESCRIBING THESE INSTRUMENTS ARE AVAILABLE. WRITE FOR YOUR COPIES TODAY.



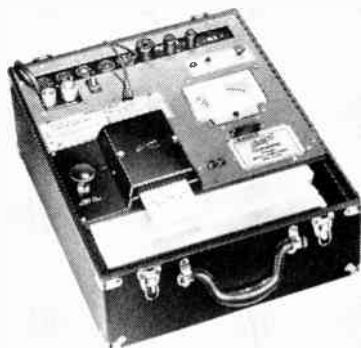
international instruments

INCORPORATED

ORANGE, CONNECTICUT, CABLE "INTERINST"



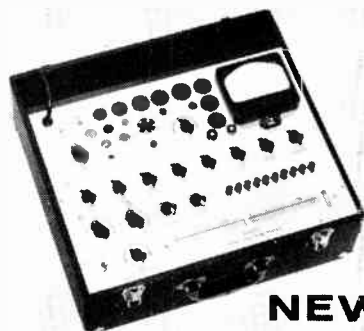
TEST EQUIPMENT



MODEL 123A
Cardmatic Automatic Tube Tester



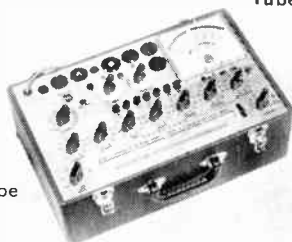
MODEL 539C
New Industrial and Laboratory Portable Tube Tester



MODEL 752A
New Industrial and Communications Portable Tube Tester

NEW!

NEW!



MODEL 800
Service Technician's Portable Tube and Transistor Tester



MODEL 6000A
Service Technician's Deluxe Portable Tube and Transistor Tester

NEW!

MODEL 123A
Cardmatic[®] Automatic Tube Tester

Ideal for industrial and laboratory applications. A genuinely complete tube tester—card-programs complete "fringe" tests, saturation and cut-off tests, in addition to basic Gm measurement, Gm Ranges: 500-26,000 umhos; Current Ranges: 100ua to 510MA. Will test Nuvistors using SA-3 Nuvisor Adapter. Complete with pin straighteners, socket savers and 500 selected cards. In black leatherette portable case, 19½" x 16½" x 9¼". 105-125v, 50-60 cycles, 55 watts. Shipping weight, 57 lbs.

Model 123A Cardmatic Automatic Tube Tester—Net Each . . . \$585.00

Model 121 Cardmatic[®] Automatic Tube Tester—Net Each . . . \$359.50

NEW MODEL 752A
New Industrial and Communications Portable Tube Tester

Designed for use in maintaining communications equipment and industrial electronic apparatus. New voltage regular test circuit tests VR tubes to handbook specifications, including firing point, regulating voltage and current range. Tests Nuvistors, Compactrons, Novars, 10-pin types. Push button test for dual-section tubes speeds selection of tubes for balanced or matched characteristics. Covers 1500 to 30,000 umhos in five ranges. Inter-element leakage read directly on the meter (Sensitivity to 10 megohms). Illuminated meter and roll chart. Complete with socket savers and pin-straighteners. In black leatherette portable case, 18¾" x 16¼" x 7½". 105-125v, 50-60 cycles, 40-70 watts. Shipping weight, 27 lbs.

Model 752A Industrial and Communications Portable Tube Tester—Net Each . . . \$345.00

MODEL 539C
New Industrial and Laboratory Portable Tube Tester

Tests VR tubes, low power thyratrons, "4 digit" types. VR test evaluates voltage regulator tubes under actual operating conditions. Tests Nuvistors, Novars, Compactrons, 10-pin types. Provision for separate monitoring of plate current. Panel terminals provide access to grid, plate, cathode and heater circuits, permitting direct measurement of voltages and current for "non-standard" or "tailored" tests. Covers 600 to 60,000 umhos in six ranges. Dual leakage readings: directly on meter or by neon short indicators (Sensitivity to 50 megohms). Complete with socket savers. In black leatherette portable case, 16¼" x 18¾" x 7½". 105-125v, 50-400 cycles, 40 watts. Shipping weight, 35 lbs.

Model 539C Industrial and Laboratory Portable Tube Tester—Net Each . . . \$485.00

NEW MODEL 6000A
Service Technician's Deluxe Portable Tube and Transistor Tester

Has replaceable socket plate for obsolescence protection. Sensitive, instantaneous inter-element leakage and shorts test (Sensitivity—in excess of 3 megohms) filament continuity test. Covers 3,000 to 15,000 umhos in 3 ranges. Tests Compactrons, Nuvistors, Novars and 10-pin types. Also tests transistors and diodes. In red leatherette portable case, 16¼" x 11¾" x 7½". 105-125v, 50-70 cycles, 40 watts. Shipping weight, 21 lbs.

Model 6000A Deluxe Portable Tube and Transistor Tester—Net Each . . . \$239.50

MODEL 800
Service Technician's Portable Tube and Transistor Tester

Lowest priced tester with the Hickok Gm Circuit. Provides direct meter reading of inter-element leakage and shorts. Tests Nuvistors, transistors and diodes. New filament continuity test speeds test of series-string tubes. Tests Compactrons, 10-pin headers, Novars with Model CA-4 adapter listed below. 105-125v, 400 cycles—40 watts. In red leatherette portable case, 16¼" x 11¾" x 7½". Shipping weight, 21 lbs.

Model 800 Service Technician's Portable Tube and Transistor Tester—Net Each . . . \$179.50

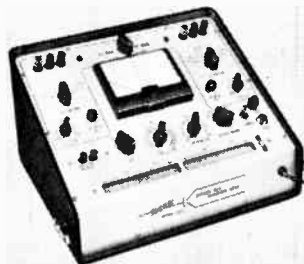
Model 800 Tube Tester with CRT Adapter, Replaceable Socket Savers and SA-2 Subminiature Socket Adapter—Net Each . . . \$220.95

CA-4 Universal Adapter for testing Compactrons, Novars, Nuvistors and 10-pin types. For use with all current Hickok manual tube testers—Net Each . . . \$ 49.50

HICKOK
Electrical Instrument Co.
Cleveland, Ohio



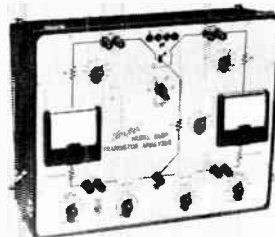
TEST EQUIPMENT



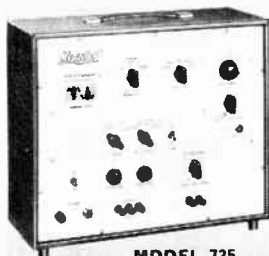
MODEL 870
Dynamic Beta Transistor Tester



MODEL 890
Dynamic Beta In-Circuit Transistor Tester



MODEL 850P
Engineer's Portable Transistor Analyzer



MODEL 725
Stereo Standard FM Multiplex Generator

NEW!



MODEL 209B
True Vacuum Tube Volt-Ohm-Milliampere
and Capacitance Meter

NEW!

MODEL 870
Dynamic Beta Transistor Tester

Measures AC and DC Beta. Collector test current variable up to 2 amperes, permitting Beta measurement on power transistors rated 5 amperes or more. Variable collector voltage and current permit tests according to manufacturers' specifications—Tests switching transistors, measures large signal DC Beta on power transistors—small signal AC Beta on low and medium power transistors. Icbo Ranges: 100ua, 1ma, 10ma; Beta Ranges: 0-100, 0-300. Complete with replaceable roll chart and test leads in black leatherette portable case 14 $\frac{1}{16}$ " x 11 $\frac{3}{4}$ " x 7 $\frac{7}{8}$ ". 115v-60 cycles, 40 watts. Shipping weight, 22 lbs.

Model 870 DYNAMIC BETA Transistor Tester—Net Each . . . \$355.00

MODEL 890
Dynamic Beta In-Circuit Transistor Tester

Utilizes unique new test circuit to measure AC Beta in OR OUT of circuit with 5% accuracy. Measures these in-circuit parameters: AC Beta, Ic, Rin (transistor input impedance), Z Ohms (base-emitter circuit impedance). Measures AC Beta, Ic, Rn and Icbo out of circuit. Portable, completely self-contained, fully-transistorized—battery operated. 10 $\frac{3}{4}$ " x 9" x 6 $\frac{1}{2}$ ". Shipping weight 8 lbs.

Model 890 Dynamic Beta In-Circuit Transistor Tester—Net Each . . . \$137.50

MODEL 850P
Engineer's Portable Transistor Analyzer

Ideal for use as a "breadboard" in transistor circuit design and de-

velopment. Checks basic transistor parameters in any of three configurations; common base, common emitter and common collector. Identical input and output meters cover 100ua to 1 ampere in 5 ranges. Battery operated. Furnished complete with leads in black leatherette portable case, 15 $\frac{1}{2}$ " x 8" x 13 $\frac{1}{2}$ ". Shipping weight 20 lbs.

Model 850P Engineer's Portable Transistor Analyzer—Net Each . . . \$169.50

MODEL 725
Stereo Standard FM Multiplex Generator

NEW—STEREO STANDARD FM Multiplex Generator. Provides composite stereo signal per FCC specifications, correct for service and alignment of FM Stereo tuners and adapters. Pilot phase check feature assures proper separation; separation is 35 db or better. Choice of 5% or 10% pilot carrier level. Fully compensated to accept external modulation source, such as tape or record player. Shipping weight, 13 lbs.

Model 725 Stereo Standard Generator—Net Each . . . \$495.00

MODEL 209B
True Vacuum Tube Volt-Ohm-Milliampere and Capacitance Meter

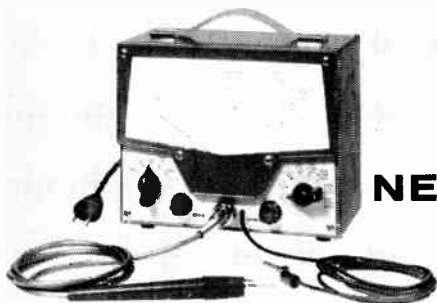
Has advanced Uni-Scale Design. 100 Millivolt Sensitivity. Special "10-ohms" range. Measures capacitance as low as 1 uuf and up to 1,000 uf; inductance, 50 mh to 100 henries (with conversion chart). 1% stability with $\pm 10\%$ variation in line voltage. Complete with AC and DC probe assemblies, test leads, low capacity-high frequency probe. Shipping weight, 26 lbs.

Model 209B True Vacuum Tube Volt-Ohm-Milliampere and Capacitance Meter—Net Each . . . \$249.00

Hickok Electrical Instrument Co.
Cleveland, Ohio

HICKOK

TEST EQUIPMENT

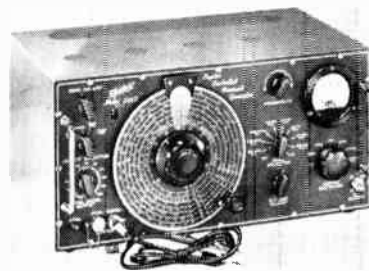


MODEL 470A
Electronic Volt-Ohmmeter

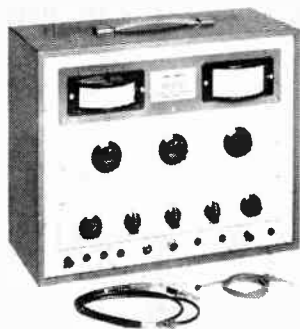
NEW!



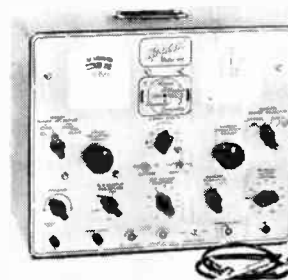
MODEL 455A
Burn-Out Proof Volt—Ohm—Milliammeter



MODEL 295X
Microvolt and Crystal Controlled Generator



NEW!
MODEL 288AX
Crystal Controlled AM-FM Sweep and
Marker Generator



MODEL 615
Sweep and Marker Alignment Generator

MODEL 470A
Electronic Volt-Ohmmeter

A major advance in VTVM design, the 470A provides increased ranges in all functions—using just two basic scales to cover eight ranges. AC and DC values are read from the same scales—AC errors due to crowding are eliminated. Ranges: DC, AC rms and AC peak-to-peak, 0.5-1500v. New AC-DC—Ohms single unit probe eliminates the need for multiple leads. Ohmmeter: Center Scale, 10 Ohms, Ohms X1, X10, X100, X1000, X10,000, X100,000, X1M, X10M. Readability 0.2 ohms to 100 megohms. Input impedance DC volts 15 megohms, AC volts 15 megohms. DC resistance paralleled with approximately 150 uufd. 105-125v, 50-400 cycles, 15 watts, 6½" x 7½" x 4½". Complete with single unit probe and test leads. Shipping weight, 8 lbs.

Model 470A Electronic Volt-Ohmmeter—Net Each \$ 79.50

MODEL 455A
Burn-Out Proof Volt—Ohm—Milliammeter

Has Hickok's exclusive overload cut-out and protection system providing complete safety against burn-outs for the meter and all multipliers, shunts and other components. 20,000 ohms/volt AC and DC. AC/DC Volts: 3, 15, 60, 150, 600, 1200v; Resistance, 0-100 megohms in 4 ranges: Center Scale Ranges: 5, 500, 5000, 500,000 ohms. Current Ranges: 50 ua, 1, 10, 100, 100 MA, 10 amperes. Attractive, streamlined case, large easy to read meter. Battery operated. 8½"L x 5⅞"W x 3"H tapering to 1¾"H. Complete with leads. Shipping weight (two per carton), 12 lbs.

Model 455A Burn-Out Proof Volt-Ohm-Milliammeter—Net Each \$79.50

MODEL 295X
Microvolt and Crystal Controlled Generator

Provides continuous frequency coverage in 8 bands from 125KC to

175 MC. Calibrated, metered output from 0.1 to 100,000 microvolts. 1% Dial calibration accuracy. Built-in 1MC crystal standard. Precision step attenuator, direct reading, vernier tuning. 105-125v, 50-400 cycles, 90 watts in steel case 19" x 12½" x 9". Complete with 1MC crystal, 48-inch output cable with 2 connectors. Shipping weight, 47 lbs.

**Model 295X Microvolt and Crystal Controlled Generator—
Net Each \$635.00**

MODEL 288AX
Crystal Controlled AM-FM Sweep and Marker Generator

A complete alignment instrument with built-in decibel meter and crystal frequency standard (100KC and 1000KC). Covers 35KC to 110MC in 8 bands frequency modulated and 35KC to 160MC in 8 bands amplitude modulated. Includes new ultrasonic range from 35KC to 125KC. Supplied with 100KC/1000KC crystal, cable assembly and meter leads. Case size, 16" x 7" x 13", Shipping weight, 33 lbs.

**Model 288AX Crystal Controlled AM-FM Sweep and Marker
Generator—Net Each \$315.00**

MODEL 615
Sweep and Marker Alignment Generator

For complete TV, IF and RF alignment, including color TV alignment. Also provides harmonic output on UHF. All electronic Sweep with no moving parts. Amplitude modulation less than 0.1db/MC. 110-120v, 60 cycles, 40 watts. Furnished in steel carrying case, 16¼" x 8" x 13½" complete with leads. Shipping weight 39 lbs.

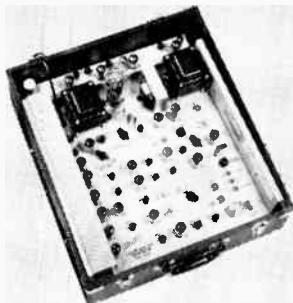
**Model 615 Sweep and Marker Alignment Generator—Net
Each \$359.50**

Hickok Electrical Instrument Co.

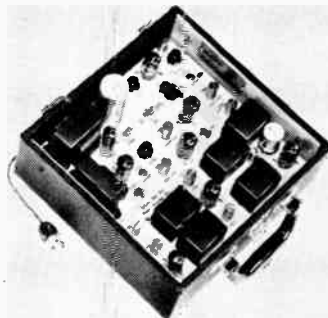
Cleveland, Ohio



TEST EQUIPMENT



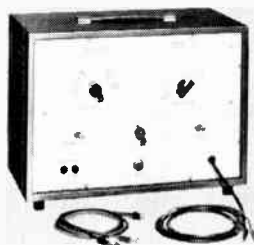
MODEL 656
Color Bar-White Dot Generator



MODEL 660
Crystal Controlled White Dot-Bar Color Display TV Generator

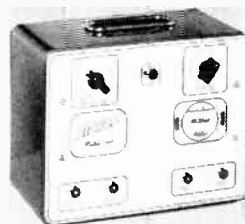


MODEL 675A
Wide Band, High Sensitivity Oscilloscope



MODEL 661
Chrom-Aligner Combined NTSC Color Bar-White Dot Generator

NEW!



MODEL 691
Heterodyne Marker-Adder

MODEL 656
Color Bar-White Dot Generator

Produces 100% fully-saturated NTSC standard patterns. Provides complete range of signals for chroma alignment, including R-Y, B-Y, —G-Y, G-Y at 90°, RF output on channels 3 or 4. Crystal-controlled chroma and sync. Video output 1.5v p-p across 75 ohms. 110v—60 cycles—20 watts—Complete with leads.

Model 656 Color Bar-White Dot TV Generator—Net Each \$549.50

MODEL 661
Chrom-Aligner NTSC Color Bar-White Dot Generator

Generates individual 100% saturated color bars to NTSC standards. Provides the following demodulator alignment signals: R-Y, B-Y, —G-Y, G-Y at 90°, RF output on channels 3 or 4. Crystal-controlled chroma and sync. Video output 1.5v p-p across 75 ohms. 110v—60 cycles—20 watts—Complete with leads.

Model 661 Chrom-Aligner Generator \$349.50

MODEL 660
Crystal Controlled White Dot-Bar Color Display TV Generator

All frequencies crystal controlled and locked together providing stable dots of correct size. Provides rainbow color display. Circuitry completely compatible with new design receivers. Lightweight portable for installation, convergence and in-the-home servicing. 105-125v, 50-60 cycles, 40 watts. Furnished in black leatherette portable carrying case, 10½" x

10½" x 5¼" complete with two crystals and output cable. Shipping weight, 21 lbs.

Model 660 Crystal Controlled White Dot-Bar Color Display TV Generator—Net Each \$245.00

MODEL 691
Heterodyne Marker-Adder

Provides a continuously visible marker. (including trap points) that will not alter or distort the receiver's response curve. Functions with any associated marker and sweep equipment that has an output capability of 0.5 volts, or more. 105-125v, 50-60 cycles, 25 watts. Furnished in steel case, 11¼" x 7" x 8¼", complete with leads. Shipping weight, 16 lbs.

Model 691 Heterodyne Marker Adder—Net Each \$109.00

MODEL 675A
Wide Band, High Sensitivity Oscilloscope

5" scope with an illuminated, calibrated screen. Vertical amplifier response within 3 db, DC through 4.5MC, flat through 3.58MC color burst frequency. Astigmatic control provides a new standard of undistorted trace detail. 105-125v, 50-400 cycles, 125 watts. In steel case, 10" x 16" x 13" complete with low capacity probe and ground lead. Shipping weight, 45 lbs.

Model 675A, Wide Band, High Sensitivity Oscilloscope—Net Each \$299.90

Model 770 Industrial and Laboratory 5" Oscilloscope: Response, DC to 5MC, within 3 db (Rise time 0.07 usec)—Net Each \$470.00

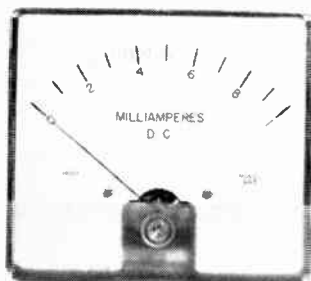
Hickok Electrical Instrument Co.

Cleveland, Ohio



HOYT ELECTRICAL INSTRUMENTS

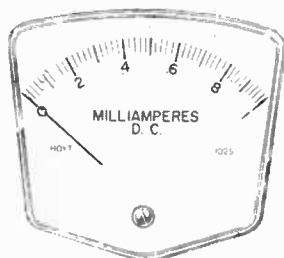
For Original Equipment and Replacement Applications



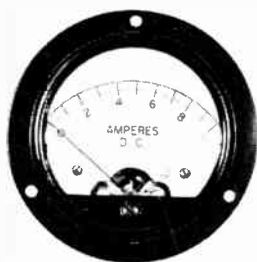
MODEL Nos.
641, 645, 653 and 649, D.C.
642, 646, 654 and 650, A.C.
Clear Plastic Styrene Cases



MODEL No. 668 DC
1 1/2" Clear Plastic Square
Styrene Case

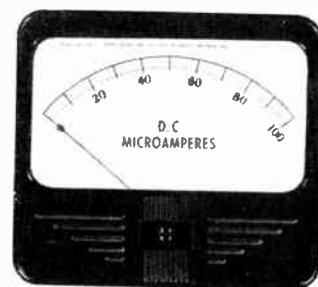


MODEL Nos.
1025, 1037, 1045, 1060 D.C.
1026, 1038, 1046, 1061 A.C.
Clear Plastic Styrene Case



MODEL Nos. 582 & 17/3, D.C.
MODEL Nos. 584 and 552, A.C.

HOYT moving-coil Meters are built on the D'Arsonval principle using carefully selected jewel bearings and polished steel pivots. Accuracy within 2%. Alnico Magnets with soft-iron pole-pieces of uniform flux density used in all movements. Permanently correct balance assured by HOYT "cross arm" spiral wire balance. High torque to weight ratio. Quick response and good damping under all conditions. Choice of "knife-edge" or "lance" type pointers. Full 100° movements standard on most models.



MODEL 647, D.C., and 648, A.C.

| METER SIZE | MODEL DC | MODEL AC | CASE TYPE PANEL MTG. | SCALE LENGTH DC | FLANGE | BODY DIAM. AC - DC | BODY DEPTH AC - DC |
|------------|----------|----------|----------------------|-----------------|-----------------|--------------------|--------------------|
| 1 1/2" | 668 | 669R | Styrene Sq. | 1.800" | 1.740" | 1.500" | 1.000" |
| 2 1/2" | 17/3 | 552 | Bakelite Rd. | 2.015" | 2.690" | 2.200" | 1.375" |
| 2 1/2" | 17/3 | 552 | Metal Rd. | 2.015" | 2.547" | 2.063" | 1.297" |
| 2 1/2" | 1025 | 1026 | Styrene | 2.500" | 2.87" x 2.59" | 2.16" | 1.12" |
| 2 1/2" | 635 | 636 | Bakelite Sq. | 2.015" | 2.375" | 2.200" | 1.400" |
| 2 1/2" | 649 | 650 | Styrene Sq. | 2.480" | 2.625" x 2.375" | 2.200" | 1.125" |
| 3 1/2" | 17/L | 560 | Metal Rd. | 2.480" | 3.219" | 2.500" | 1.500" |
| 3 1/2" | 17/L | 560 | Metal Surf. | 2.480" | 3.063" | 2.500" | — |
| 3 1/2" | 582 | 584 | Bakelite Rd. | 2.720" | 3.500" | 2.750" | 1.375" |
| 3 1/2" | 1037 | 1038 | Styrene | 3.812" | 3.500" | 2.750" | 1.125" |
| 3 1/2" | 597 | 598 | Bakelite Sq. | 2.720" | 3.000" | 2.750" | 1.375" |
| 3 1/2" | 653 | 654 | Styrene Sq. | 3.435" | 3.375" x 3.125" | 2.750" | 1.125" |
| 3 3/4" | 570 | 580 | Metal Rd. | 2.850" | 3.750" | 3.000" | 1.688" |
| 3 3/4" | 570 | 580 | Metal Surf. | 2.850" | 3.625" | 3.000" | — |
| 3 3/4" | 607 | 610 | Bakelite Sq. | 2.850" | 3.625" x 3.313" | 2.250" | 1.063" |
| 4 1/2" | 641 | 642 | Styrene | 4.250" | 4.500" x 3.844" | 2.750" | 1.125" |
| 4 1/2" | 574 | 617 | Metal Rd. | 3.875" | 4.500" | 3.750" | 1.594" |
| 4 1/2" | 574 | 617 | Metal Surf. | 3.875" | 4.500" | 3.750" | — |
| 4 1/2" | 600 | 601 | Bakelite Sq. | 4.034" | 4.500" x 4.000" | 2.750" | 1.063" |
| 4 1/2" | 645 | 646 | Styrene Sq. | 4.470" | 4.625" x 4.188" | 2.750" | 1.125" |
| 4 1/2" | 647 | 648 | Bakelite Sq. | 4.470" | 4.500" x 4.188" | 2.750" | 1.125" |
| 4 1/2" | 1045 | 1046 | Styrene | 4.500" | 4.81" | 2.750" | 1.125" |
| 6" | 1060 | 1061 | Styrene | 5.375" | 6.000" x 4.500" | 2.750" | 1.100" |

| Size: | 1 1/2" | 2 1/2" | 3 1/2" | 3 3/4" | 4 1/2" | 6" | 6 3/4"—8 1/2" | 3" x 4" | 5" x 4" |
|-------|--------|--------------------------------|-------------------------------|--------------|---|-------|---------------|-----------|--------------------|
| | | | | | ≈1045 ≈574 ≈641 ≈645 ≈600 ≈647 | | | | |
| | | #1025 ≈17/3 ≈635 ≈649 | ≈1037 ≈653 ≈582 ≈597 | ≈570 ≈607 | | | | | |
| Range | ≈668 | | | | | ≈1060 | | | |
| | | | | | | | # 583 ≈602 | ≈578 ≈575 | Prices on request. |

D.C. MILLIAMMETERS

| | | | | | | | |
|------|-----|---------|---------|---------|---------|---------|---------|
| 0/1 | 60 | \$10.85 | \$10.25 | \$10.85 | \$11.40 | \$12.00 | \$14.40 |
| 0/25 | 1.7 | 11.15 | 10.50 | 11.15 | 11.65 | 12.30 | 14.80 |

Above prices also apply to 0/3, 0/5, 0/10, 0/15 MA Standard ranges.
Above prices also apply to 0/25, 0/30, 0/50, 0/100, 0/150, 0/200, 0/300, 0/500 MA Standard ranges.

D.C. MICROAMMETERS

| | | | | | | | |
|-------|------|-------|---------|---------|---------|---------|-------|
| 0/20 | 3000 | | \$18.30 | \$18.95 | \$19.50 | \$20.10 | — |
| 0/50 | 2000 | | 15.50 | 16.00 | 16.55 | 17.15 | — |
| 0/100 | 2000 | 14.00 | 13.50 | 14.00 | 14.55 | 15.15 | 17.55 |
| 0/200 | 1000 | 12.15 | 11.50 | 12.15 | 12.65 | 13.30 | 15.65 |
| 0/500 | 200 | 11.50 | 10.95 | 11.50 | 12.00 | 12.65 | 15.00 |

Zero center microammeters available for most models in 25/0/25, 50/0/50, 100/0/100, 500 0/500 U.A. Prices on request.

D.C. MILLIVOLTMETERS

| | | | | | | | |
|------|---|-------|-------|-------|-------|-------|-------|
| 0/50 | 3 | 10.85 | 10.25 | 10.85 | 11.40 | 12.00 | 14.40 |
|------|---|-------|-------|-------|-------|-------|-------|

D.C. AMMETERS

| | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|-------|
| 0/1 | 0.005 | 10.85 | 10.25 | 10.85 | 11.40 | 12.00 | 14.40 |
| 0/5 | 0.004 | 11.20 | 10.65 | 11.20 | 11.75 | 12.40 | 15.10 |

Above prices for 0.5 amp. range also apply to standard ranges of 0/10, 0/15, 0/25, 0/30, 0/50* amps on all models. No. 668 uses external shunt over 5 amps. See Shunt Table below for High Current Ammeter Ranges.

D.C. VOLTMETERS

| | | | | | | | |
|-------|----------|-------|-------|-------|-------|-------|-------|
| 0/1 | 1000Ω/V. | 11.60 | 11.10 | 11.60 | 12.15 | 12.75 | 15.10 |
| 0/500 | 2000Ω/V. | 11.60 | 12.25 | 12.75 | 13.40 | 15.75 | |

Above prices also apply to standard ranges of 0/3, 0/5, 0/10, 0/15, 0/25, 0/30, 0/50, 0/100, 0/150, 0/300* volts on all models.
Above prices also apply to standard ranges at 0/600, 0/750 volts on all models except #668.

STANDARD SWITCHBOARD SHUNTS AND AMMETER RANGES

On High Current Ammeters, add 0.50 millivoltmeter price to external shunt price below. Shunts include 3 ft. leads. Standard Ammeter and Shunt Ranges on types 17/3, 582 and 547 only; others listed are special ranges at slight extra cost.

| | | | | | |
|--------------|--------------|---------------|---------------|---------------|----------------|
| 0/25—\$8.60 | 0/30—\$8.60 | 0/50—\$7.55 | 0/75—\$7.55 | 0/100—\$7.55 | 0/150—\$7.55 |
| 0/200—\$7.55 | 0/300—\$8.80 | 0/500—\$13.25 | 0/600—\$15.90 | 0/800—\$20.15 | 0/1000—\$29.25 |

NOTE:
If "in-between" ranges are required, add \$2.00 to price of next higher range listed. If "zero-center" ranges are required, add \$2.00 to price of that range. For in-between ranges on moving-coil type Voltmeter 150 volts and up, add \$3.00 to next higher range.

NOTE:
Please specify type of case on order from chart above. Unless specified, all meters are calibrated on non-magnetic panels. If steel panels are used, give thickness of steel and size of panel hole (No extra charge). All prices are net - subject to change or withdrawal without notice.

*These ranges carried IN STOCK
Models #582, 597, and 617 only (Calibrated for non-magnetic panels)



HOYT ELECTRICAL INSTRUMENTS

For Original Equipment and Replacement Applications

HOYT A.C. Meters for indicating 60 cycle Voltage and Current are of the repulsion type with pneumatic damping. Furnished in the same case styles and sizes as HOYT D.C. Meters, they match the D.C. meter where both types are used on the same panel. See DC-AC Specification Chart on opposite page. Accuracy is 2%. A choice of pointers is available, and special

shields can be supplied at additional cost.

VU METERS, with "A" scale, available in #649, #653, #645, and #647 case styles. Prices on request.

NOTE: A.C. Meters calibrated at any special frequency. Prices on request.

PRICE LIST:

| Size: | PANEL MOUNTING | | | | | PORTABLE | |
|-------|-----------------|--------|--------|--------|-------|-------------------|---------|
| | 2 1/2" | 3 1/2" | 3 3/4" | 4 1/2" | 6" | 3" x 4" | 5" x 4" |
| | | # 560 | | =617 | | #562 | #517 |
| | #1026 | #1038 | | =601 | | Prices on request | |
| | # 552 | # 654 | | =648 | | | |
| | # 636 | # 584 | =580 | =642 | | | |
| Range | Approx. Resist. | # 650 | # 598 | =610 | =1046 | | #1061 |

A.C. MILLIAMMETERS

| | | | | | | | |
|------|------|---------|---------|---------|---------|-------|---|
| 0/6 | 6000 | \$10.95 | \$11.75 | \$12.30 | \$13.05 | — | — |
| 0/10 | 2700 | 9.90 | 10.70 | 11.25 | 12.00 | 14.40 | — |

Prices for ranges: 0/30, 0/50, 0/100, 0/150, 0/200, 0/300, 0/500 MA. for all models—same as 0/10 MA. range above.

A.C. AMMETERS

| | | | | | | | |
|-----|-------|------|-------|-------|-------|-------|---|
| 0/1 | 0.271 | 9.90 | 10.70 | 11.25 | 12.00 | 14.40 | — |
|-----|-------|------|-------|-------|-------|-------|---|

Above prices also apply to all models of standard single ammeter ranges—0/3, 0/5*, 0/10, 0/15, 0/25, 0/30*, 0/50* amps. A.C. Ammeters are self-contained to 50 amps.

For High Current Ranges—See Transformer Section below.

A.C. VOLTMETERS (Repulsion Type)

| | | | | | | | |
|--------|--------|-------|-------|-------|-------|-------|---|
| 0/25 | 1476 | 10.25 | 10.70 | 11.40 | 12.00 | 14.40 | — |
| 0/150° | 25,000 | 11.20 | 11.80 | 12.35 | 13.05 | 15.35 | — |
| 0/300° | 50,000 | 11.20 | 11.80 | 12.35 | 13.05 | 16.50 | — |
| 0/500 | 83,300 | — | 17.00 | 17.50 | 18.10 | 20.50 | — |
| 0/600° | 99,960 | — | 17.00 | 17.50 | 18.10 | 20.50 | — |

*These ranges carried IN STOCK on Models #584, #598 and #648 only (calibrated for non-magnetic panels).

NOTE: If "in-between" ranges are required, add \$2.00 to next higher price as shown above (add \$3.00, if above 150 volts). Standard calibration is for non-magnetic panels. Steel panel calibration at no extra charge if order specifies thickness of steel and size of panel hole. Please specify type of meter case.

DIAL COSTS: Standard range dials only—\$1.00 each; special hand drawn single range dials only \$3.00 each; other custom dials on special order.

HIGH CURRENT DONUT TYPE TRANSFORMERS (In Stock)

For prices on HIGH CURRENT AC AMMETERS, add price of ammeter model above to transformer price below, plus an additional \$3.00 except on models #552, #584, and #648. Transformers have 2-ft. leads and 2 VA burden. Other ranges available on request.

| | | | | | | | |
|------|--------|-------|--------|-------|--------|-------|---------|
| 50/5 | \$9.15 | 100/5 | \$9.15 | 200/5 | \$9.15 | 500/5 | \$16.50 |
| 75/5 | 9.15 | 150/5 | 9.15 | 300/5 | 9.15 | 600/5 | 16.50 |

MOVING MAGNET INDICATORS

HOYT Moving Magnet Indicators have been used for many years by the leading manufacturers of electrical devices. Feature long scales and accuracy within 5%. Attractive appearance is combined with a sturdy movement.

Furnished in round or square cases at low cost. Standard finish on metal cases is black. Chrome Plate is available at slight additional cost. Many types of mounting arrangements available.

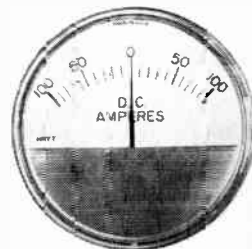
NOTE: A.C. Vane Meters are furnished in quantity only. Prices on request.

NOTE: If in-between ranges are required — add \$1.00 to next higher range price; for "zero-center" ranges, add \$1.00 to same range price.

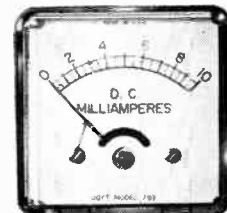
NOTE: DC Ammeters up to 100 amps. have internal shunts.



MODEL No. 640, D.C.
2 1/4" Metal Case



MODEL No. 740 D.C. Indicator.
2 1/4" Metal Case w/Plastic Cover



MODEL No. 793 D.C., 794 A.C.
2 1/2" Metal Case with Plastic Cover

| MODEL DC | AC | CASE TYPE PANEL MTG. | SCALE LENGTH DC | FLANGE | BODY DIA. DC | BODY DEPTH DC |
|----------|-------|----------------------|-----------------|--------|--------------|---------------|
| 640 | 531AC | Nar. Metal Rd. | 1.400" | 2.281" | 2.000" | 1.078" |
| 640 | 531AC | Metal Surface | 1.400" | 2.375" | 2.000" | — |
| 693 | 594 | Metal Sq. | 1.400" | 2.625" | 2.000" | 0.563" |
| 793 | 794 | Plastic Sq. | 1.715" | 2.375" | 2.000" | 0.500" |
| 740 | 741 | Plastic Rd. | 1.715" | 2.375" | 2.000" | 0.520" |

D.C. MILLIAMMETERS

| Range | Approx. Resist. | # 640 | # 693 | #740 # 793 |
|-------|-----------------|--------|--------|------------|
| 0/1 | 1000 | \$4.05 | \$4.10 | \$4.40 |
| 0/3 | 700 | 3.00 | 3.10 | 3.35 |
| 0/5 | 480 | 2.75 | 2.80 | 3.10 |
| 0/10 | 180 | 2.55 | 2.65 | 2.90 |
| 0/15 | 130 | 2.20 | 2.25 | 2.55 |

Prices for 0/25, 0/30, 0/50, 0/100, 0/150, 0/200, 0/300, 0/500 MA. ranges:

| | | | |
|--|------|------|------|
| | 2.15 | 2.20 | 2.50 |
|--|------|------|------|

D.C. AMMETERS

| Range | # 640 | # 693 | #740 # 793 |
|---|--------|--------|------------|
| 0/1 | \$2.15 | \$2.20 | \$2.50 |
| Above prices also apply to 1/0/1, 3/0/3, 0/5, 5/0/5, 0/10, 10/0/10, 0/15 amp. ranges. | | | |
| 20/0/20 | 2.70 | 2.75 | 3.00 |
| Above prices also apply to 0/25, 0/30, 30/0/30 amp. ranges. | | | |
| 0/50 | 2.90 | 2.95 | 3.25 |
| 50/0/50 | 2.90 | 2.95 | 3.25 |
| 0/75 | 3.35 | 3.45 | 3.80 |
| 0/100 | 3.90 | 4.00 | 4.30 |

D.C. VOLTMETERS

| Range | Approx. Resist. | # 640 | # 693 | #740 # 793 |
|--|-----------------|--------|--------|------------|
| 0/1 | | \$2.15 | \$2.20 | \$2.50 |
| Above prices also apply to 0/3, 0/5, 0/10, 0/15 volt ranges. | | | | |
| 0/25 | 1375 | 2.50 | 2.55 | 2.85 |
| 0/30 | 1650 | 2.50 | 2.55 | 2.85 |
| 0/50 | 2200 | 2.70 | 2.75 | 3.00 |
| 0/100 | 20,000 | 2.70 | 2.75 | 3.00 |
| 0/150 | 30,000 | 2.75 | 2.80 | 3.10 |
| 0/300 | 60,000 | 2.70 | 2.80 | 4.10 |



ELECTRICAL



RESISTANCE DECADES

• Available in a wide variety of standard models. Accuracy at 1.0 and 0.1 ohm steps is $\pm 0.25\%$. Accuracy of all other resistors is $\pm 0.1\%$ of indicated value. Self-cleaning, molded nylon and silver plated brass switch mounted below panel. Zero resistance is less than .003 ohms per dial. Hardwood case. Models DR-1D to DR-4D, 8" x 5½" x 4½". Weight 4 lbs. net, 6 lbs. shipping. Models DR-50D to DR-52D, 9" x 6" x 4½" h. Weight 5 lbs. net, 7 lbs. shipping. Models DR-70D and DR-71D, 17¾" x 5" x 4½" h. Weight 6 lbs. net, 8 lbs. shipping.

ELECTRICAL SPECIFICATIONS AND PRICES

| Model No. | Total Resistance Ohms | Decade Steps | Accuracy | Price |
|-----------|-----------------------|--|--------------------------|----------|
| DR-1D | 1,110,000 | 10x(1,000 + 10,000 + 100,000) | $\pm 0.1\%$ | \$ 78.00 |
| DR-2D | 111,000 | 10x(100 + 1,000 + 10,000) | $\pm 0.1\%$ | 67.00 |
| DR-3D | 11,100 | 10x(10 + 100 + 1,000) | $\pm 0.1\%$ | 65.00 |
| DR-4D | 1,110 | 10x(1 + 10 + 100) | ± 0.25 & $\pm 0.1\%$ | 65.00 |
| DR-50D | 11,111 | 10x(.1 + 1 + 10 + 100 + 1,000) | ± 0.25 & $\pm 0.1\%$ | 95.00 |
| DR-51D | 111,110 | 10x(1 + 10 + 100 + 1,000 + 10,000) | ± 0.25 & $\pm 0.1\%$ | 100.00 |
| DR-52D | 1,111,100 | 10x(10 + 100 + 1,000 + 10,000 + 100,000) | $\pm 0.1\%$ | 112.00 |
| DR-70D | 1,111,111 | 10x(.1 + 1 + 10 + 100 + 1,000 + 10,000 + 100,000) | ± 0.25 & $\pm 0.1\%$ | 165.50 |
| DR-71D | 11,111,110 | 10x(1 + 10 + 100 + 1,000 + 10,000 + 100,000 + 1,000,000) | ± 0.25 & $\pm 0.1\%$ | 215.25 |



CAPACITANCE DECADES

• These are 3-dial units with the sum of the dial settings indicating total capacity in microfarads. Mylar and silver-mica capacitors are used for high stability, low-loss characteristics. Polished hardwood case, engraved dial graduations.

ELECTRICAL SPECIFICATIONS AND PRICES

| Model | Decade Steps MF | Accuracy | Dielectric | P.F. | Peak Volts | Price |
|--------|-------------------------|--|--------------------------|-----------------------|--|----------|
| DK-2A | 10x(.001 + .01 + 0.1) | $\pm 1\%$ | Silver Mica | 0.2% | 700 (.001) (.01) 500 (.1) | \$175.00 |
| DK-4 | 10x(.001 + .01 + 0.1) | $\pm 1\%$ (.001) (.01) $\pm 3\%$ (0.1) | Silver Mica Mylar | 0.2% 1% | 700 400 | 80.00 |
| DK-5A | 10x(.01 + 0.1 + 1.0) | $\pm 1\%$ (.01) (0.1) $\pm 3\%$ (0.1) (1.0) | Silver Mica Mylar | 0.2% 1% | 700 400 | 95.00 |
| DK-11A | 10x(.01 + 0.1 + 1.0) | $\pm 0.5\%$ (.01) (0.1) $\pm 2\%$ (1.0) | Silver Mica Mylar | 0.2% 1% | 700 (.01) 500 (0.1) 400 (1.0) | 185.00 |
| DK-10 | 10x(.0001 + .001 + .01) | $\pm 0.5\%$ or 10 mmf | Silver Mica | 0.2% 2% (.0001) | 700 | 95.00 |

PHYSICAL SPECIFICATIONS

| | Overall Dimensions | Weight (Lbs.) | |
|--------------------|--------------------|---------------|----------|
| | | Net | Shipping |
| DK-2A, DK-4, DK-10 | 8 x 5½ x 7½ | 8 | 10 |
| DK-5A, DK-11A | 10¾ x 7¾ x 7½ | 10 | 12 |

TEST EQUIPMENT



TYPE L MEGOHMMETERS

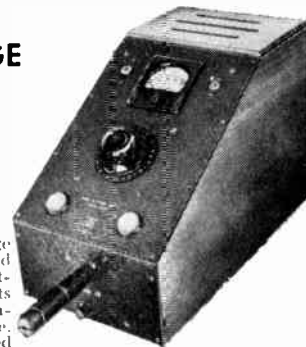
Type L Megohmmeters are used for both laboratory and high speed production testing of motor and transformer winding insulation, cable insulation, high value resistors, capacitor insulation, and for the measurement of surface and volume leakage of insulating materials. These instruments meet the requirements for testing insulation resistance in accordance with ASTM D-257, and Federal Specification LP-406B, Method 4041.

ELECTRICAL SPECIFICATIONS AND PRICES

| Model | TEST Voltage | RANGE | | POWER Consumption | WEIGHT | | Size | Price |
|-------|-------------------|-------------|--------------------|-------------------|--------|-------|------------------------|--------|
| | | Low in meg. | High in meg. | | Net | Ship. | | |
| L-2A | 200 fixed | 1 | 100,000 | 40 Watts | 12 | 15 | 15"x8"x10" | \$175. |
| L-4A | 200 and 500 fixed | 1 | 100,000 250,000 | 52 Watts | 14 | 17 | 15"x8"x10" | 215. |
| L-6B | 100 to 600* | 1 | 100,000 | 82 Watts | 15 | 18 | 15"x8"x10" | 310. |
| L-7 | 100 to 600* | 1 | 5x10 ¹³ | 75 Watts | 20 | 24 | 8"x10 1/2" x11 1/2" | 383. |

*Continuously variable. built-in voltmeter for accurate setting.

TYPE P—VOLTAGE BREAKDOWN TESTERS



The Type P Series Voltage Breakdown Testers are designed for safe, accurate and fast testing of materials, components and circuits both in the laboratory and on the production line. All types have self-contained metered high-voltage power supply with safety features including inter-lock switches and pilot warning lights. Load current is limited to values shown in table below. Output voltage continuously variable over range listed for each model.

ELECTRICAL SPECIFICATIONS AND PRICES

| Model | VOLTAGE RANGE | | CURRENT RANGE | | Price |
|-------|---------------|----------|---------------|--------------|----------|
| | AC volts RMS | DC volts | AC | DC | |
| P1 | - | 0-4000 | | 5 ma (max)* | \$218.00 |
| P2 | 0-3000 | 0-4000 | 7 ma (max) | 5 ma (max)* | 264.00 |
| P3B | 0-8000 | 0-10,000 | 60 ma (max) | 50 ma (max)* | 488.00 |

*Models P1, P2 and P3B incorporate a variable series resistance which limits short circuit current independently of voltage.

Other power supplies up to 100 KV can be supplied to your specifications. Send complete details for quotation.



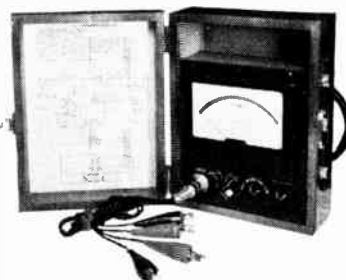
WHEATSTONE BRIDGES TYPE RN

Universally used for the measurement of all types of resistance devices and circuits where high accuracy is required. Models available for performing Murray-Varley Loop tests.

| Model | Total Resistance of Decade | Ratio Dial Settings | Circuits | Dimensions | Price |
|-------|-----------------------------|--|-----------------|------------------|----------|
| RN-1 | 9x(1 + 10 + 100 + 1000) | .001, .01, 1, 1.10, 100, 1000 | ..... | 9"x8"x6 1/2" | \$176.50 |
| RN-2 | 9x(1 + 10 + 100 + 1000) | .001, .01, 1, 1.10, 100, 1000, M10, M100, M1000 | Murray & Varley | 9"x8"x6 1/2" | 193.25 |
| RN-3 | 10x(1 + 10 + 100 + 9(1000)) | 1/1000, 1/100, 1/10, 1/100, 1/1000, 1/10000, 1/100000, 1/1000000 | Murray & Varley | 9 1/2"x8"x6 1/2" | 226.00 |

TYPE LRO-1 LOW RESISTANCE OHMMETER

The Type LRO-1 Low Resistance Ohmmeter is useful for the measurement of resistance of sensitive relay contacts, fuse, bus-bars and connections, rail joints, pipe or conduit, switch contacts, transformer windings, motor windings, bonding, grounding and similar applications. The current through the unknown resistance never exceeds 110 ma.



Price \$148.85

FEATURES: Extreme accuracy for the most critical measurements. • Entirely self-contained, including 1 1/2 volt flashlight battery • Ranges: .1 ohm, 1 ohm and 10 ohms, 100 meter scale divisions. • Accuracy of plus/minus 1 1/2% on LRO-1 based on full scale values. • Full Scale Readings. • Maximum current through piece under test = 0.11 amp.

• Other electrical test equipment manufactured by Industrial Instruments can be found in current editions of ELECTRONIC ENGINEERS MASTER. For complete technical details and specifications on test equipments listed here and many others request a copy of Catalog 25.



**Industrial
Instruments INC.**

CEDAR GROVE, N. J.



INSTRUMENTS & TESTERS

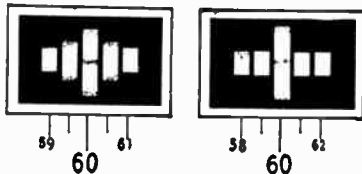
J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

VIBRATING REED FREQUENCY METERS (PATENTED)

• **USES** — J-B-T Vibrating Reed Frequency Meters are used extensively in radio, telephone, and television service, on engine generator sets, in laboratories, in many types of electronic equipment, on panel and control boards, in inspection set-ups—wherever constant or known frequency is important to efficient operation of equipment. More than 20 years of continuous experience covering many thousands of these instruments are your assurance of quality for both commercial and defense applications.

• **OPERATING PRINCIPLE** — The patented, simplified design used in the J-B-T meter operates on AC or interrupted DC. Each reed is adjusted to respond by resonance to but one frequency. As the current excites the driving coil, the reed "in tune" with the frequency in the coil will respond by vibrating rapidly because of permanent magnet polarization and induced magnetism from the coil. The instrument is adapted to specified operating voltage by a series resistor. To determine frequency, simply read the reed.

• **RESPONSE PATTERNS** — These patterns differ with the increments of frequency between reeds. For example, at 60 cycles, half-cycle steps give the broad response shown below at left, whereas full cycle steps bring the sharp response at right. In general, the lower the frequency the greater the amplitude, the higher the frequency the less the amplitude. Thus a 12 cycle reed normally will have substantially greater amplitude than a 1000 cycle reed.



• **ADVANTAGES** — Guaranteed accuracy at reference temperatures of 77°F is $\pm 0.3\%$ or better of the AC frequency being measured, unless otherwise stated. Accuracy on interrupted DC may be somewhat less. High fatigue safety factor for continuous operation. Temperature compensations are not required as temperature coefficient of reeds is only approximately 75 parts per million per degree F., negative.

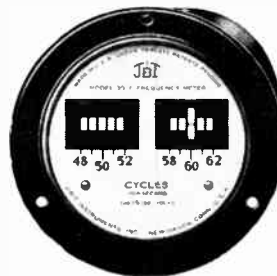
• **STABILITY** — All meters are permanently calibrated at the factory and do not require subsequent adjustment. J-B-T reeds have relatively high Q characteristics, an especially desirable factor in electronic circuits. Wave form or external fields do not ordinarily have an adverse effect. Built with no pivoted parts and with lock washers at every critical point, these rugged meters can take rougher treatment than many instruments.

• **TRUST THE METER** — If a meter plugged in on a 60-cycle AC power line does not indicate exactly 60 cycles, trust the meter! Power supply may momentarily be off-frequency due to changing load conditions. All J-B-T Frequency Meters are meticulously calibrated at the factory, entirely independent of frequency of power supply. Production and inspection equipment are checked regularly against National Bureau of Standards frequency signals.

5 OR 7 REEDS

Used on standby power equipment. Handy for accurately measuring frequency of power source. 5 reeds (as illustrated), 58-62 cycles, or 7 reeds, 57-63 cycles, 100-130 volts. Other characteristics same as Model 30-F. See Table of Dimensions, lines 4 and 5.

- 31-F, (illustrated) 58-62 cy., 5 reeds, 3-1/4" metal case \$26.65
 31-FX, 58-62 cy., 5 reeds, 3-1/2" Molded case, MIL-M-6B mtg \$23.65
 31-FX-7, 57-63 cy., 7 reeds, 3-1/2" Molded case, MIL-M-6B mtg \$25.85



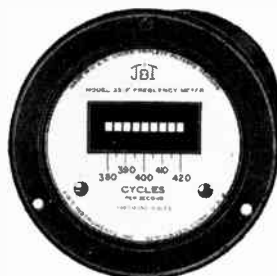
(Meter operating at 60 cycles)

10 REEDS

Range: 48-52 and 58-62 cycles. Double window for ease of reading either range. Often specified for export. 100-130 volts; 130 ohms per volt; 1 watt power consumption. Other voltages available on special order. Accuracy $\pm 0.3\%$ at reference temperature. Flush panel mounting. See Table of Dimensions, lines 4 and 5.

30-F, (illustrated), 48-52 and 58-62 cy., 3/4" Metal Case. \$30.50

30-FX, 48-52 and 58-62 cy., 3/2" Molded Case, MIL-M-6B mtg. \$27.50



9 REEDS — 400 CY.

Used for measuring frequency of high-cycle power sources, particularly aircraft. Accuracy $\pm 0.3\%$ at reference temperature. Nine reeds, 380-420 cycle range. 100-130 volts; 90 ohms per volt; 1.5 watts power consumption. Other voltages available on special order. Flush panel mounting. See Table of Dimensions, lines 4 and 5.

33-F, (illustrated), 380-420 cy., 3/4" Metal Case \$37.10

33-FX, 380-420 cy., 3/2" Molded Case, MIL-M-6B mtg. \$34.10



9 REEDS — 60 CY.

Covers a broad frequency band. Nine reeds, 56-64 cycles, or in half-cycle steps (accuracy $\pm 0.2\%$) 58-62 cycles. 100-130 volts; 110 ohms per volt; 1 watt power consumption. Flush panel mounting. See Table of Dimensions, lines 4 and 5.

34-F, 56-64 cy., 3/4" Metal Case 1-cycle steps. \$30.25

34-FX, (illustrated), 56-64 cy., 3/2" Molded Case, MIL-M-6B mtg. \$27.25

34-F-Z, 58-62 cy., 3/4" Metal Case, 1/2-cycle steps. \$31.90

34-FX-Z, 58-62 cy., 3/2" Molded Case, MIL-M-6B mtg. \$28.90



18 OR 21 REEDS

Advanced design offers 21 reeds as an interchangeable 3/2" panel meter with 2-cycle intervals for close reading over the band of 380 to 420 cycles per second. Accuracy $\pm 0.3\%$ at reference temperature. The reed flag size is necessarily smaller than in a 9-reed 400-cycle meter, such as the model 33-FX, but the 21 reeds are located in an enlarged window 2" wide with flags 3/32" high x 1/16" wide to give maximum readability. A patented internal construction for mounting the reeds in one clamp assures ruggedness. This instrument and its variations are particularly useful where unusually close indication of frequency throughout the band is desirable. See Table of Dimensions, line 5.

36-FX-21, (as illustrated), 380-420 cycles, 21 reeds, 28 volts operation, 3/2" Molded Case; 18 ohms per volt; 1.6 watts power consumption. \$43.75

36-FX-21-115*, 380-420 cycles, 21 reeds, 100-130 volts; 90 ohms per volt; 1.5 watts power consumption. \$45.00

30-FX-18, (not illustrated), 46-54 and 56-64 cycles, 18 reeds in one window with two groupings, 100-130 volts; 210 ohms per volt; 0.7 watts power consumption \$36.30

All have 3/2" Molded Case, MIL-M-6B mounting. Meters marked (*) are normally stocked.

Net Effective Aug. 31, 1962

..... INSTRUMENTS & TESTERS



J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

3 1/2" SEALED FREQUENCY METERS

FHXX TYPE Sealed meters, glass-to-metal construction, with solder terminals and detachable flange, supersede the former FHX sealed meters. While JAN-I-6, MIL-M-6B, and MIL-M-10304B (Type MR36) do not refer specifically to frequency indicators, the FHXX series uses the front mounting dimensions of these specifications, and meets or exceeds the sealing and electrical requirements including 3000 volt breakdown. Electrical characteristics and accuracy are the same as for corresponding F models without the HXX designation. Every meter is tested in water where the absolute pressure of the air above the water is reduced to 2.5 inches of mercury (approx. 57,000 ft. altitude) and is maintained for one minute. For dimensions, see Table, Line 8, and Print SK-51 Rev. D. Standard voltage is 100-130. Meters marked * are normally stocked; others are produced on order.



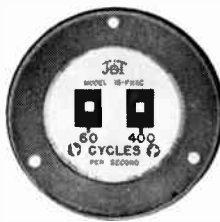
| | |
|---|---------|
| 30-FHXX, 10 reeds, 48-52 cy. and 58-62 cy. | \$34.30 |
| 31-FHXX, 5 reeds, 58-62 cy. | 30.45 |
| 33-FHXX*, 9 reeds, 380-420 cy. | 40.90 |
| 34-FHXX*, 9 reeds 56-64 cy. | 34.05 |
| 34-FHXX-11, 11 reeds, 55-65 cy. | 36.25 |
| 34-FHXX-2-11, illustrated, 11 reeds, 57.5-62.5 cy. | 37.90 |

2 1/2" SEALED METERS

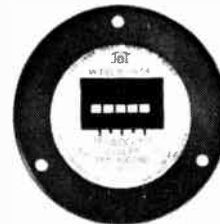
J-B-T manufactures 2 1/2" sealed frequency meters which are similar to the 3 1/2" sealed above, except with dimensions per Line 3 of Table. 21-FHXX, 5 reeds, 58-62 cy., 100-130 volts \$34.85
23-FHXX, 5 reeds, 380-420 cy., 100-130 volts (normally stocked) \$39.80

1 1/2" SEALED METERS

MODEL 15-FHAC. Widely used as the frequency standard on audio-oscillators, the model illustrated operates 2 reeds, 60 and 400 cycles, at approximately 8-10 volts on 0.4 watts for a cathode follower circuit. Accuracy ±0.5% at 77°F. Steel case has telephone black case, solder terminals. Barrel is 1 1/2" diameter; 2-3/32" detachable flange FL-4 covers glass-to-metal seal. See Table of Dimensions, line 1



| | |
|---|---------|
| 15-FHAC | \$20.30 |
| 15-FH-5 METERS (lower photo) also use the 1 1/2" black metal case with 2-3/32" detachable flange and glass-to-metal seal. The 15-FH-5 series features 5 reeds in a row for 107-130 volt operation. Specified where size and weight are important. Same 100% inspection for approx. 57,000 ft. altitude as FHXX types. Standard meters, but not regularly stocked. See Table of Dimensions, line 1 | |
| 15-FH-54, 5 reeds, 390-410 cycles, 1.25 watts power consumption | \$25.85 |
| 15-FH-56, 5 reeds, 58-62 cycles, 0.25 watts power consumption | \$21.45 |
| 15-FH-400, 5 reeds, 380-420 cy., 1.25 watts power consumption | \$25.85 |



RUGGEDIZED METERS

Model with "RUG"—Sealed vibrating reed frequency meters and sealed elapsed time meters are available, when so ordered, to the intent of MIL-M-10304B, which covers ruggedization of other kinds of meters. This feature usually is specified only for extra-severe shock and vibration.

400 CYCLES, IN 1 CYCLE STEPS; 800 CYCLES

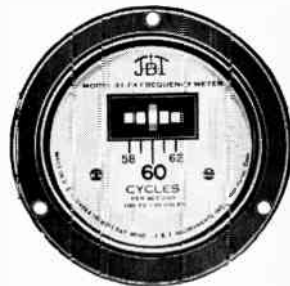
Among the non-cataloged variations which J-B-T produces on special order, are 21-reed, 390-410 cycles in 3 1/2" case; and 11-reed 780-820 cycles with 5-cycle increments. Quotations on request.

NOTE ON METER VOLTAGE

J-B-T Vibrating Reed Frequency Meters of all sizes normally are made with two studs and are designed to be connected across one phase of a multi-phase line. The single phase voltage where the meter will be used thus becomes the voltage to be specified for the meter. Special meters with extra studs are made only for the purpose of reading two or more voltages, not additional phases.

2 1/2" METERS — 5 REEDS

MODEL 21-FX, 23-FX. Matches other 2 1/2" panel instruments. Meets ASA, C39.1-1951 and MIL-M-6B (Type MR 24 or MR 25) in depth of case and mounting dimensions. Weighs only 4 1/2 ozs.; 5 reeds 58-62 cycles 500 ohms per volt 0.25 watt power consumption. At 400 cycles, 170 ohms per volt, 0.7 watts power consumption. Flush panel mounting; see print MD-20, Rev. B, also Table of Dimensions, Line 2.

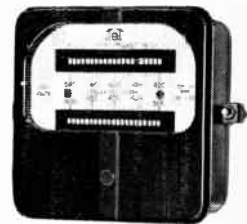


| | |
|--|---------|
| 21-FX, 58-62 cy., 2-11/16" Molded Case, 1 cy. steps | \$22.55 |
| 23-FX-54, 390-410 cy., 2-11/16" Molded Case, 5 cy. steps | \$27.50 |
| 23-FX, 380-420 cy., 2-11/16" Molded Case, 10 cy. steps | \$27.50 |

(Operating at 60 cycles)

400 CYCLE BROAD AND VERNIER INDICATORS

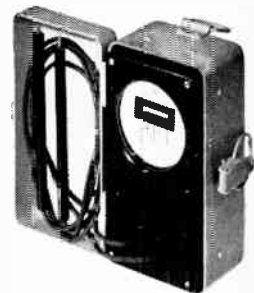
MODEL 41-FX-42 (supersedes Model 41-FX) Widely used in commercial and military testing, this model provides two windows: for 300-500 cycles, 21 reeds in 10-cycle steps, and, for a vernier effect, 380-420 cycles with 21 reeds in 2-cycle steps. Black molded case, flush front is 4-3/64" wide x 4-3/64" high x 2-29/32" deep behind panel over studs. 100-130 volts is standard; also made with 4 studs for 200-240, 115 and 30 volts, 4.5 watts at 115 volts, 7.7 watts at 200 volts, 2 watts at 30 volts. For mounting, see Print MD-38-11



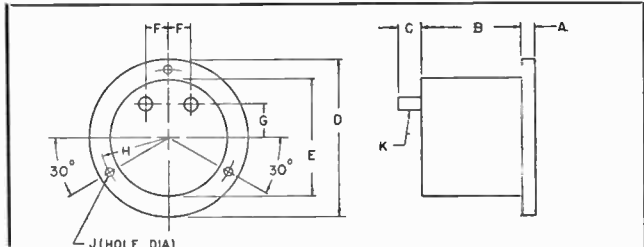
| | |
|---------------------------------------|----------|
| 41-FX-42, 100-130 volts | \$125.00 |
| 41-FX-42, 3 voltages, without switch. | \$140.00 |

PORTABLE FREQ. TESTERS

FP SERIES, METAL OR MOLDED CASE. Accuracy of ±0.3% meets the exacting test requirements of aviation, signal, and communication equipment. **M-Types** use anodized gray aluminum case, 6 3/8" long x 4" wide x 3-9/32" deep. Leads permanently attached. See Print SK-63-10. With pertinent name plate, **33-FP-9M** is known as **TS-328 A/U**. **L-Types**, sturdy molded case within top grain leather carrying case 6-3/32" x 4 1/4" x 2 3/4"; 4' leads with 5" test picks and banana plugs.



| | |
|--|---------|
| 33-FP-9M, 380-420 cy., 9 reeds, 100-130 volts, 70 ohms per volt, 1.5 watts power consumption; com. quality and packing | \$49.25 |
| 34-FP-9M, 56-64 cy., 9 reeds, 100-130 volts, 130 ohms per volt; 1 watt power consumption, com. quality and packing | \$42.35 |
| 33-FP-9L, (illustrated) 380-420 cy., 9 reeds, 100-130 volts | \$47.60 |
| 34-FP-9L, 56-64 cy., 9 reeds, 100-130 volts | \$40.70 |



FREQUENCY AND FREQUENCY — TIME METERS, TABLE OF DIMENSIONS, INCHES

| MODEL | MIL-M-6B* MOUNTING | A | B | C | D | E | F | G | H | J | K | TERMINAL DESCRIPTION |
|----------------------------------|--------------------|-------|---------|-------|---------|---------|------|------|-------|-------|---|-------------------------|
| Line 1 15-FH Series | — | 1/8 | 1-9/16 | 3/8 | 2-3/32 | 1-1/2 | 3/8 | 3/8 | 0.875 | 0.125 | | Solder, 1/16" dia. hole |
| Line 2 21-FX and 23-FX Series | MR 24, MR 25 | 13/64 | 1-3/8 | 23/32 | 2-11/16 | 2-5/32 | 7/16 | 9/16 | 1.220 | 0.116 | | 10-32 NF-2 studs |
| Line 3 21-FHXX, 23-FHXX | MR 26** | 3/32 | 1-27/32 | 11/16 | 2-11/16 | 2-1/8 | 1/2 | 1/2 | 1.220 | 0.125 | | Solder, 3/32 hole |
| Line 4 30-F to 34-F Series | — | 7/64 | 2-3/32 | 23/32 | 3-1/4 | 2-9/16 | 7/16 | 7/8 | 1.453 | 0.150 | | 10-32 NF-2 studs |
| Line 5 30-FX to 36-FX Series | MR 34, MR 35 | 19/64 | 2 | 23/32 | 3-1/2 | 2-11/16 | 7/16 | 7/8 | 1.580 | 0.150 | | 10-32 NF-2 studs |
| Line 6 31-FE Series | — | 7/64 | 3-7/8 | 23/32 | 3-1/4 | 2-9/16 | 7/16 | 7/8 | 1.453 | 0.150 | | 10-32 NF-2 studs |
| Line 7 31-FEX-1 Series | MR 34, MR 35 | 7/64 | 3-7/8 | 23/32 | 3-1/2 | 2-9/16 | 7/16 | 7/8 | 1.453 | 0.150 | | 10-32 NF-2 studs |
| Line 8 30-FHXX to 34-FHXX Series | MR36** | 3/32 | 2-1/4 | 5/8 | 3-1/2 | 2-11/16 | 1/2 | 3/4 | 1.580 | 0.150 | | Solder, 3/32 hole |

*Also JAN-I-6 and ASA C39.1-1951 Mounting

**Also MIL-M-10304B Mounting

Net Effective Aug. 31, 1962



INSTRUMENTS & TESTERS

J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

ELAPSED TIME METERS; FREQUENCY-TIME METERS; REED RELAYS AND OSCILLATOR CONTROLS

• USES AND ADVANTAGES OF ELAPSED (OR RUNNING) TIME METERS

To record operating time of AC electrical and electronic equipment, these self-starting synchronous instruments normally register in 1/10th hour steps to 9,999.9 or 99,999.9 hours, then automatically reset. They are widely used for tube life, TV equipment, punch presses, conveyors, oil burners, ground support equipment, maintenance schedules, etc. J-B-T engineers recommend the AC type of elapsed time meter for superior accuracy, especially where voltage or ambient temperature vary widely.

New WIDE-NUMERAL ELAPSED TIME METERS



MODEL 31-EXW. The latest J-B-T elapsed time meter is Model 31-EXW, illustrated. Easily-read, wide 6-digit numerals register to 99,999.9 hours then automatically reset. Distinctive contemporary dial shows tenths in black on white, and units in white on black. The 3 1/2" black molded case is interchangeable with Model 31-EX and FX types of frequency meters. Print SK-125 gives mounting information.

Model 31-EXW, 6-digits, 0-99,999.9 hours, 60 cy., 110-125 volts. \$16.95

MODEL 31-ES. A square black molded case, matching other 3" x 3" meters, differentiates this model from the round 31-EX. Ask for Print SK-110, Rev. F showing standard rear mounting 2 1/4" bet. centers of molded-in studs, new rugged case with overall depth 3-11/32" behind flange, and electrical studs on center line. Variations can be made for 99,999 hours (suffix U), 230 volts, minutes, matte finish, or 50 cycles.

31-ES, 60 cy., 110-125 volts, 0-9,999.9 hours. \$17.05



ELAPSED TIME METERS — Tenths of Minutes

MODEL 31-EXM, 60 cycles, 110-125 volts, reading 0-9,999.9 minutes; for short-run applications or readings at closer intervals than 31-EX. Tenths of minutes in red on white, minutes in white on black numerals, otherwise identical with 31-EX. **\$16.25**

3 1/2" SEALED ELAPSED TIME METERS — 60 Cycles



MODEL 31-EHXX. Where rugged requirements make a completely sealed elapsed time meter desirable, this glass-to-metal construction with flat glass front and 3 1/2" diameter separable flange, often is specified. Heavy-duty solder terminals are supplied. Every instrument is checked in a vacuum chamber. Overall dimensions and appearance match the FHXX series sealed frequency meters. Maximum voltage between terminals and case, 1,000 volts, R.M.S. The meter registers in 1/10 hour steps to 9,999.9 hours, then automatically resets. Tenths indicator is red on white, all others in white on black. Mount according to SK-85, Rev. C.

31-EHXX, 60 cy., 110-125 volts \$19.75

3 1/2" SEALED ELAPSED TIME METERS — 400 Cycles



MODEL 31-EHXX. This stable, self-starting 400-cycle elapsed time meter is extensively used for preventive maintenance and for reliability testing and checking in a wide variety of equipment. The instrument is entirely enclosed in a 3 1/2" flanged case, glass-to-metal sealed construction with separable flange; heavy-duty solder terminals; flat glass front. 1/10 hours are shown in red on white, all other numerals white on black. The external appearance matches FHXX frequency meter series. For dimensional details see SK-61, Rev. B.

31-EHXX, 400 cy., 0-9,999.9 hours, 1/10 hour steps, 110-125 volts \$58.00

2 1/2" SEALED ELAPSED TIME METERS

MODEL 21-EHXX. A full size counter reading 9,999.9 hours in 1/10 hour steps and a rugged self-starting synchronous motor are built into this 2 1/2" sealed meter. Its front mounting dimensions are the same as Type MR2E electrical indicating instruments in MIL-M-6B. Glass-to-metal seal makes the instrument completely tamper-proof. Ask for Print SK-68, Rev. G. A. 2 1/2" 400-cycle meter, **Model 23-EHXX** also is made on special order. **21-EHXX, 60 cy., 110-25 volts \$24.75**

MODEL 31-EX. First in popularity among all J-B-T elapsed time meters, this self-starting instrument registers to 9,999.9 hours in 1/10 hour steps before automatically resetting. Red numerals on white are used for tenths, all others are white on black. Black molded case matches FX series 3 1/2" frequency meters and completely encloses all parts. This case, with centered terminals, meets type MR34 or MR35 mounting dimensions of MIL-M-6B, also JAN-I-6. Referring to line 5 of the Table of Dimensions on the preceding page, barrel depth (B) is 2 1/2", stud height above center (G) is zero, and all other measurements are as shown. Types for 99,999 hours, or 50 cycles, or special voltages are available on special order.

31-EX, 60 cy., 110-125 volts

31-EX-200, 60 cy., 230 volts (not regularly stocked)

**\$15.95
\$17.05**



CLEAR-PLASTIC ELAPSED TIME METERS

EPL TYPE. The modern clear-plastic front gathers light from every side and is compatible with many other instruments. A sturdy metal case with solder terminals is used behind the panel. The 2 1/2" size is 2-19/32" wide x 2 3/8" high with 2 1/8" diam. meter barrel, per print SK-102, Rev. C. The 3 1/2" is per print SK-108, Rev. C.

21-EPL, 2 1/2" size (illus.), 60 cy., 110-125 v., 0-9,999.9 hrs. \$25.75

31-EPL, 3 1/2" size (not illus.), 60 cy., 110-125 v., 0-9,999.9 hrs. \$23.75



ELAPSED TIME — FREQUENCY METERS

31-FE SERIES. To conserve panel space and centralize information, this panel instrument combines elapsed time or running time meter with frequency reads. It is used on motor generator sets and on electrical equipment where maintenance routine calls for periodic servicing. The J-B-T design, proved by years of field experience, uses a separate exciting coil for the reeds to achieve close control of reed amplitude and frequency. Reads 0-9,999.9 hours, and 58-62 cycles with 5 reeds, for 100-130 volt operation; self starting. Tenths shown in red on white, all other numerals in white on black. Black metal case with front mounting per Table of Dimensions, line 6. Power consumption is 4.7 watts. For variations having 7, 9, or 11 reeds, not regularly stocked, such as Model 34-FE, see print SK-45, Rev. C.

31-FE, 3 1/4" metal case 4-19/32" deep. \$33.00

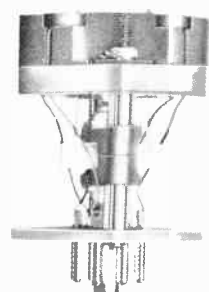
31-FEX-1, (per print SK-44 - not regularly stocked) like Model 31-FE, except with 3 1/2" metal flange permanently attached for MIL-M-6B front mounting per line 7, Table of Dimensions \$34.10



RESONANT — REED RELAYS AND OSCILLATOR CONTROLS



RELAY RR-A11A-124.0



OSCILLATOR CONTROL RO-B10B-188.0

J-B-T's many years of experience in the manufacture of resonant reed products is being utilized to produce, on a custom basis, frequency-sensitive electro-mechanical control devices of two types. The **contact type** makes use of a resonant reed in conjunction with a highly reliable control system. Typical are Series RR-A- and RR-B-plug-in relays (sometimes known as decoders) which respond to a signal of predetermined frequency in the range of 50 to 1000 cps. **Oscillator controls** (sometimes known as tone generators or encoders) are made in octal and 7-prong plug-in types, double or single reeds, in frequencies corresponding to the relays. Typical in Series RO-B, of which a 188.0 cycle cut-away model is illustrated. For further information, see Bulletin 162R. The **contactless type** is a new, patented device evolved from combining resonant reed and photoelectric principles. The reed acts as a shutter in the light beam from light source to a photo-sensor. For further details, please request reprint of technical paper on Photoreeds. For quotations, please describe application as fully as possible.

Net Effective Aug. 31, 1962

..... INSTRUMENTS & TESTERS



J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

APPLIANCE TEMPERATURE TESTERS AND ACCESSORIES
LABORATORY TEMPERATURE INDICATORS; ACCESSORIES

OVEN TESTERS

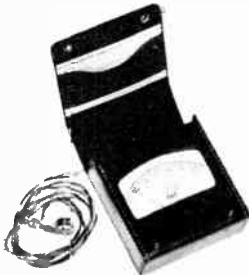


MODEL 23-JP-1. This popular portable indicating pyrometer; saves time and furnishes reliable information in testing and setting thermostats on electric or gas ranges and other appliances by showing oven temperatures as they change. Standard size dial, 0-650°F., with 2 $\frac{3}{8}$ " scale arc reading, is used but covered by clear-plastic instrument front. The indicator is mounted on a black metal panel affixed inside a pocket-sized, black top-grain leather case 4 $\frac{1}{2}$ " x 2 $\frac{3}{8}$ " x 4 $\frac{1}{4}$ " over hardware. Characteristic of more expensive pyrometers, the 23-JP-1 is automatically compensated for ambient temperature. Thus the tester eliminates calculations, avoids likelihood of serious error as temperature changes inside the instrument itself, and gives foolproof direct readings. Supplied with attached SA-116, 5 $\frac{1}{2}$ ' calibrated thermocouple, clip, and convection shield **\$26.00**

MODEL 32-JP-3. This time-tested model uses a rigid outer carrying case 6" x 3 $\frac{3}{8}$ " x 3 $\frac{3}{4}$ ", covered in black leatherette. The glass-covered indicator shows 0-650°F. range in 10° divisions readable to 2 $\frac{1}{2}$ " on a 2 $\frac{3}{8}$ " scale arc. Exceptionally fast, continuous response. Automatic compensation for ambient temperature is a valuable feature whether the tester is used for service work, sales demonstrations, or inspection. Attached SA-116, 5 $\frac{1}{2}$ ' thermocouple, clip for attaching to grill and convection shield included **\$28.00**

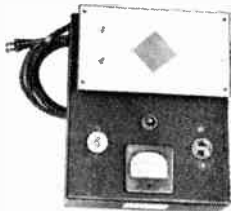


NEWEST MODEL 32-JP-7. Most versatile, and easiest to read of J-B-T oven temperature testers, Model 32-JP-7 offers a 650°F scale more than 4" long. Automatic compensation for ambient temperature change is included, so that temperatures are read directly and without calculations. The 32-JP-7 also provides color-coded external binding posts. These permit quick attachment or interchanging of various J-B-T thermocouples placed in one or more of the heat zones to be checked. An SA-116 5 $\frac{1}{2}$ ' thermocouple with attachment clip, convection shield is supplied and is left attached when the tester is carried. For maximum usefulness in checking irons, washers, toasters, clothes dryers, etc., appropriate accessory thermocouples are suggested. Tester price includes stitched Ever-ready case, 5" wide x 5 $\frac{1}{2}$ " high x 2 $\frac{3}{4}$ " deep, of sturdy, scuff resistant black vinyl. **\$29.50**



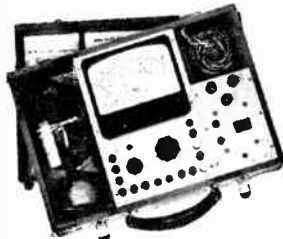
IRON TESTER

MODEL 32-JIT. Self-contained bench-type tester; checks all makes of irons; measures thermostat temperatures; shows open or short circuits. Automatically compensated for room temperature. Also indicates operating temperature of the sole plate (working surface) on non-electric or cordless irons. Black metal base; overall size 10" x 12 x 5 $\frac{1}{2}$ ", scale 0-650°F, 15 amp fuse, 6' cord, 110 volt, 50-60 cycles. **\$34.50**



ALL-PURPOSE TESTER

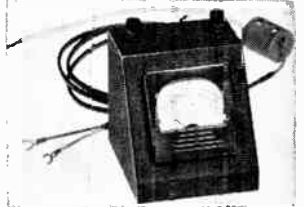
MODEL 61-JRT. A 9-in-1 tester to speed accurate temperature adjustment and electrical analysis of ranges, refrigerators, etc. Rapidly reads four cold zones 100°F, +80°F, up to 14' distant; two heat zones 0-600°F. up to 5 $\frac{1}{2}$ ' distant; one voltage range 0-300 AC and, with transformer, two current ranges, 0-30 and 0-60 amps, AC. Sturdy, polished walnut case, 15 $\frac{1}{2}$ " x 10 3/16" x 4 $\frac{3}{4}$ ". Two color etched metal panel. Separate switches protect bulb and ammeter circuits. Requires one standard flashlight cell, replaceable in the field. Temperature accuracy $\pm 2\%$ of full scale; rectified AC readings $\pm 5\%$. Accessories as listed may be added for testing appliances. Includes two SA-162 resistance bulbs, two SA-116 thermocouples, electrical leads, and AS-TR-2 built-in transformer **\$124.00**



Same unit, same scales except no reading in amperes; AS-TR-2 transformer omitted. **\$110.00**

HEAT INDICATORS

MODEL 32-J PYROMETER IN SN-7 STAND. Mounted in sloping front black metal stand, 4 $\frac{1}{4}$ " high x 4 $\frac{3}{8}$ " deep x 4 $\frac{1}{8}$ " wide. Compensated for ambient temperature. Medium resistance system, damped for quick reading on 2 $\frac{3}{8}$ " scale, assures ruggedness and pointer stability. For $\pm 2\%$ accuracy, use only the type and resistance of thermocouple and lead provided; if extra length, coil it to maintain calibration. A protection tube usually is not required. For convenience keep an extra thermocouple and lead on hand.



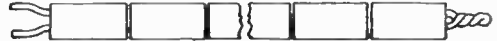
MODEL 32-J IN SN-7 STAND (Supersedes SN-3 Stand)

0°-650°F-350°C, includes SA-91 thermocouple, SA-84 lead, and CB-1 connector block **\$33.50**
0°-1200°F-650°C, includes SA-87, SA-82, and CB-1 **\$3.50**
0°-2000°F-1100°C, includes SA-87, SA-82, and CE-1 **\$3.50**

MODEL 32-J IN SN-8 STAND (not illustrated). With 3 binding posts to accommodate flexible extra lead and thermocouple for hard-to-reach locations. (Stand supersedes SN-5)
0°-650°F with SA-91 thermocouple, SA-84 lead, CB-1 connector block, and SA-86 flexible leads and thermocouple **\$37.50**

TEMPERATURE AND TESTER ACCESSORIES

Condensed listing; full line in Catalog 562

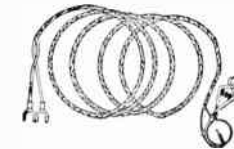


THERMOCOUPLES. For J-B-T pyrometers and leads, thermocouples are carefully selected, standardized, and tested.

SA-87. 12" #14 Ga. chromel-alumel, 2 hole ceramic beads, fits 5/16" hole; welded tip **\$3.40**

SA-91. 12" #14 Ga. iron-constantan, 1938 calibration 2-hole ceramic beads, fits 5/16" hole; welded tip **\$2.90**

SA-116 with SHIELD and CLIP. Flexible No. 22 gauge iron constantan, asbestos insulated, 5 $\frac{1}{2}$ ', with attachment clip and convection shield for use with 23-JP-1, 32-JP-1, 32-JP-2, 32-JP-3, 32-JP-4, 32-JP-7, 6C-JRT and 61-JRT Testers. (See SA-199 for extra quality glass insulated type). **\$2.00**



SA-175 (PLAIN TIP). For toasters, waffle irons, etc., 5 $\frac{1}{2}$ ' #22 Ga. with small ball tip; use where clip and shield are unsuitable **\$1.60**

SA-176 (for TOASTERS, etc). Same as SA-175 except tip has special disc to collect heat **\$3.00**

SA-188 (for AUTOMATIC WASHER TEMPERATURES, etc.). 3/16" dia. copper tube, 4" long, encloses couple; for use in pipe or sample of water **\$4.50**

SA-199 (with SHIELD and CLIP). Same as SA-116 except duplex non-fraying glass braid construction; dia. .115"; for frequent use above 400°F. **\$2.65**

SA-300 (for SURFACE READINGS). Spring-type I-C in Transit tip with handle and 5' #22 Ga. lead for rapid reading; not regularly stocked **\$8.00**

ACCESSORY IRON TESTER, MODEL IT-1. This attachment is identical with 32-JIT except there is no meter. **\$18.00**

LEAD WIRES SA-82. 6' compensating lead for chromel-alumel couples; duplex stranded, asbestos-insulated; outside moisture-proof and flame-proof (not interchangeable with SA-84) **\$1.70**

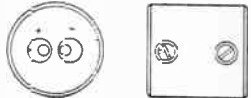
TRANSFORMERS. AS-TR-2. Attachment for 61-JRT to read 30 and 60 AC amp scales on tester; includes jumper lead and panel **\$18.00**

AS-TR-3 For 60-JRT tester. To read 30 and 60 AC amp by dividing volt scale by 10 or 5. Complete with attachments **\$20.00**

RESISTANCE BULBS (for cold testing). **SA-142.** Bulb with 14' polyethylene ribbon lead, for 60-JRT only. **\$ 6.50**

SA-162. Bulb, with 14' polyethylene ribbon lead, for 50-50 and 61-JRT testers **\$ 6.50**

CONNECTOR BLOCK MODEL CB-1. Lava connector block, withstands high temperatures, accommodates all thermocouples. Heavy brass connectors keep contact resistance low. Useable with or without connector head **\$1.85**



LEAD WIRES

SA-82, 6' for chromel-alumel couples **\$1.70**
SA-84, 6' for iron constantan couples **\$1.70**
SA-86, 7' Iron constantan thermocouple and lead combined; #20 Ga., twisted pair asbestos insulated. **\$2.05**

Net Effective Aug. 31, 1962

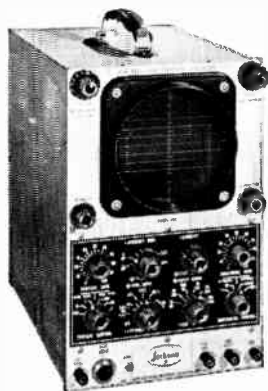
J-B-T INSTRUMENTS, INC.
NEW HAVEN 8, CONN.

Electrical Instruments, Testers
and Electronic Components

For other J-B-T Products,
see Sec. 5100



"SERVICE ENGINEERED" TEST EQUIPMENT
THE JACKSON ELECTRICAL INSTRUMENT COMPANY, DAYTON, OHIO



MODEL 600 LABORATORY OSCILLOSCOPE

A new, compact, laboratory oscilloscope, equally suited to service, industrial and scientific applications. Features choice of wide-band or high sensitivity operation, originated by Jackson. Power supply regulated for stable operation.

- Wide band vertical amplifier, flat within 1db from less than 20 cycles to 4.9 MC, usable to 10 MC.
- Two-range vertical sensitivity from 20 mv/inch.
- Horizontal amplifier response uniform within 2 db from 20 cycles to 200 KC.
- Linear Sawtooth Sweep, 10 cycles to 100 KC.
- Sync Sources: Internal Signal, Internal 60 or 120 cycle, External Source.
- Input Calibration Voltage, 10 V, P-P.
- Provision for direct connection to CRT deflection

- plates.
- Lighted graticule with variable illumination.
- Camera studs for any standard scope camera.
- Variable sweep expansion.
- Return Trace Blanking.
- Intensity modulation, external, or internal 60 cycles.
- Flat face CRT for improved linearity.
- Sweep frequency pulse on panel terminal for transformer ringing test.

Size: 15" H x 9 $\frac{1}{8}$ " W x 13" D, overall.

Power Requirements: 105-125 VAC, 50-60 cycle, 75 watts.

Accessory Probes: Uses same probes as Model CRO-2.

\$335.00 net SHIPPING WEIGHT 29 LBS.



MODEL 605 AUDIO SINE-SQUARE WAVE OSCILLATOR

A new, precision audio generator with a choice of either sine wave or true square wave output. Square wave is NOT a clipped sine wave but is generated by a special Schmitt Trigger circuit. Features push-button range selection and variable output.

Range: 20 cycles to 200,000 cycles, sine or square wave in 4 ranges.

Accuracy: 3% or 1 cycle, whichever is greater.

Output: High Impedance, continuously variable. Sine wave 0 to 5.0 RMS Volts, Square Wave 20 mv to 7.0 P-P.

Sine Waveform: Less than 1% distortion.

Output Level Characteristic: ± 1 db over full range.

Hum Level: Down more than 50 db at all output levels.

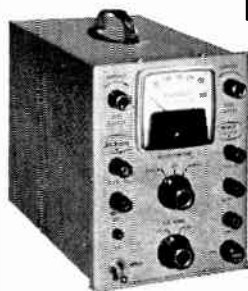
Square Wave Rise Time: Less than 0.2 μ sec.

Square Wave Tilt: 5% at 60 cycles. Less than 1% above 200 cycles.

Dimensions: 11" H x 7 $\frac{1}{8}$ " W x 13" D.

Power Requirements: 110-120 VAC, 50-60 cycles, 50 watts.

\$129.95 net SHIPPING WEIGHT 21 LBS.



MODEL 607 VARIABLE REGULATED POWER SUPPLY

A complete laboratory power supply which provides heater, bias and regulated variable B+ voltages in one compact package.

- AC Heater Output: 6.3 VAC at 3 A max.
- DC Bias Output: 30 to 275 VDC, no load. 15 to 150 VDC at 20 ma.

\$79.95 net

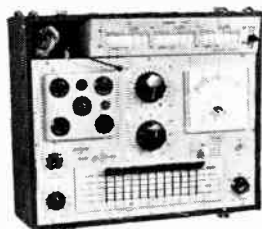
SHIPPING WEIGHT 12 LBS.

- DC Regulated Output: Low Position 150 to 225 VDC, 0 to 100 ma. max. High Position 225 to 300 VDC, 0 to 100 ma. Regulation: Within 1.5%. no load to 100 ma. at 300 volts.

- Ripple Content: Bias Supply: Less than 0.003% at 20 ma. Regulated Supply: Less than 0.005% at 100 ma.

- Metered Output: For Bias and Regulated B+ Supply.

- Dimensions: 8 $\frac{1}{4}$ " H x 5 $\frac{3}{8}$ " W x 10 $\frac{1}{4}$ " D.



MODEL 598 LOW-COST DYNAMIC[®] TUBE TESTER

An economical tube tester featuring the famous Jackson Dynamic principle, already proved by service men everywhere. Checks practically all receiving tubes under load conditions. Completely flexible for future tubes, without having to buy extra cards or sockets.

\$109.95 net

SHIPPING WEIGHT 21 LBS.

- 23 Separate Heater Voltages for any receiving tube.

- Variable Plate Voltage and Load.
- Grouped Tube Socket Sub-Assembly.
- Good/Bad, plus "percentage" meter indications.
- Zig-Zag Roll Chart in Quick-Change Housing.
- Variable Shorts Sensitivity Test.
- Line Voltage Indicating Control.
- Convenient Lever Switching.
- Portable case for shop or on-the-job use.

Dimensions: 16 $\frac{1}{2}$ " L x 14 $\frac{1}{2}$ " W x 6 $\frac{3}{4}$ " D.

POWER CHART AVAILABLE



"SERVICE ENGINEERED" Test Equipment

THE JACKSON ELECTRICAL INSTRUMENT CO., DAYTON, OHIO

MODEL GRO-2 5-INCH WIDE-BAND, HIGH SENSITIVITY OSCILLOSCOPE

Laboratory quality scope with highly stable circuitry and every feature for accurate TV work, color and black & white. Widely used, too, in many laboratory and industrial applications.

- Wide Band Amplifier, flat within 1 db 20 cycles to 4.5 mc.
- Two-range vertical deflection sensitivity from 0.018 rms volts-per-inch
- Highly stable amplifier circuits. No balancing required.
- Positive or negative internal horizontal sync.
- Linear sawtooth oscillator, 20 cycles through 50 kc.
- Input calibrating voltage, 10 volts peak-to-peak
- Vertical polarity reversal

- Variable sweep expansion
- Return trace blanking
- Z-axis modulation—internal, external or 60-cycle
- Direct connection to deflection plates when required

ACCESSORY PROBES

LC2-1P Low Capacity Probe. Cathode follower type. 2:1 attenuation. Not more than 8 μ uf effective impedance \$19.95 net.
 LC10-P High Voltage Low Capacity Probe. 10:1 attenuation ratio. For circuits where up to 1,000-volts is present \$7.95 net
 DEM-P Demodulation Probe. For RF or IF signal tracing \$9.95 net



\$225.00 net SHIPPING WEIGHT 32 LBS.

MODEL TVG-2 SWEEP MARKER GENERATOR AND CRYSTAL CALIBRATOR

The TVG-2 is a complete alignment generator for any TV set or FM broadcast receiver—in fact, any receiver within its tuning range. Has ample output for even the most badly de-tuned receiver. Valuable for working with FM broadcast receivers, low band police FM receivers and others in the VHF ranges covered.

- Wide range sweep oscillator covers three bands all on fundamentals: 2 to 38 mc, 38 to 108 mc, and 174 to 216 mc.

- Variable sweep width 0 to 18 mc in 8 steps
- Video Sweep (30 kc) for color circuit adjustments
- Accurate Marker Generator (1/4%) from 4 to 216 mc.
- Crystal oscillator for any crystal 3 mc to 20 mc with beat detector
- 400 cycle modulation for marker or crystal oscillators
- Provision for video signal modulation
- Variable output impedance on 10K range
- Provides oscilloscope timing axis with phase and blanking controls



\$289.95 net SHIPPING WEIGHT 35 LBS.

MODEL 655 WIDE RANGE AUDIO OSCILLATOR

- Push-button range selection
- Exceptionally stable RC tuned sine wave generator
- Frequency range 20 cycles to 200,000 cycles in 4 steps
- Up to 500 milliwatt output
- Output impedances of 10, 250, 500, or 5,000 ohms plus resistive output
- Frequency characteristic within 1 db 30 to 15,000 cycles on transformer output
- Accuracy, 3% or 1 cycle whichever is greater
- Sinusoidal Waveform
- Hum Level down 60 db at maximum output

- Logarithmic Calibration Curve
- Continuously variable output
- Factory-calibrated for guaranteed accuracy



\$150.00 NET
SHIPPING WEIGHT 32 LBS.

MODEL 590 ALL-NEW 7" VTVM

- Large 7" meter and hairline pointer for greatest accuracy
- Fast warm-up time—complete accuracy in less than 5 minutes
- Single Probe for all measurements
- Accurate a-c voltage readings from 20 cycles to 2 mc.
- All-new silicon diode circuitry
- Factory calibrated for guaranteed accuracy



\$69.95 NET. SHIPPING WEIGHT 8 LBS.

RANGES: DC volts, plus or minus, and AC volts: 1, 5, 10, 50, 100, 500, 1000 volts full scale. Separate 1 volt rms scale, separate peak-to-peak and Zero-center d-c scales. Ohms Rx1, 10, 100, 1k, 10k, 100k and 1 meg. Center of Rx1 scale, 10 ohms. Accuracy d-c and ohms, 3% of full scale; a-c volts 5% full scale.

MODEL 59 H.P. HIGH VOLTAGE PROBE FOR 590 \$9.95 NET

MODEL 606 SQUARE WAVE

Now you can get true square waves from your present sine wave generator. The Model 606 square wave characteristics are the same as Model 605 Generator. Provides true square waves over the frequency range provided by the driving source generator. Input and output continuously variable. Negligible rise time and tilt. Square wave shape is independent of the driving source wave shape. Ideal for producing a square wave output from the Model 655.



\$34.95 NET
SHIPPING WT.
5 LBS.

MODEL 691 WIDE-RANGE CAPACITANCE CHECKER

- Tests capacity from 10 μ uf to 1000 μ uf in 4 ranges
- Color-coded range push-buttons match scale colors for easy selection
- Graduated leakage tests for both polarized and unpolarized capacitors
- Low voltage bridge for testing electrolytic capacitors in transistorized circuits with complete safety
- Graduated power factor test for electrolytics, 0 to 60%
- Electron-ray indicator tube for all tests
- Complete with test leads
- Factory-wired and calibrated for guaranteed accuracy



\$69.95 NET
SHIPPING WEIGHT
11 LBS.

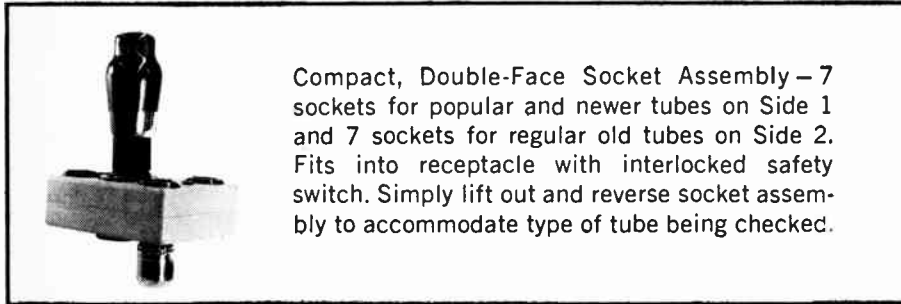


"SERVICE ENGINEERED" Dynamic® Tube Testers

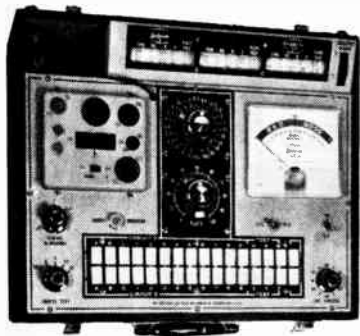
New Models Test ALL New Tube Types

- Nuvistors—5 and 7 pin versions • Compactrons • Novars • New 10 pin • Sub-miniature
- New, Small Diameter 12 pin • New, Large Diameter 12 pin • Low Power Special Purpose Tubes

Plus all TV and Radio Tubes • 12 volt Hybrid Tubes • Eye Tubes • Rectifier Tubes • VR Tubes



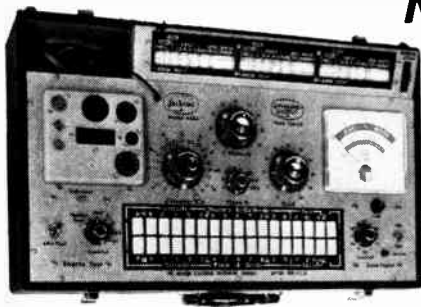
Compact, Double-Face Socket Assembly—7 sockets for popular and newer tubes on Side 1 and 7 sockets for regular old tubes on Side 2. Fits into receptacle with interlocked safety switch. Simply lift out and reverse socket assembly to accommodate type of tube being checked.



648S Dynamic® Tube Tester

- Best for servicemen... faster, more accurate and completely versatile for all new tubes.
- Double face Socket assembly with 14 sockets
- Push-button sequence switching makes set-up time less than tube warm-up time
- Angled view zig-zag roll chart
- Semi-conductor rectifier for instant warm-up
- 23 Separate Heater Voltages from .75 to line voltage
- Variable Sensitivity Shorts Test—up to 2 Megohms
- Automatic Line voltage indicator

\$154.95 net SHIPPING WEIGHT 22 LBS.



New 658A Dynamic® Output Tube Tester

Faster, more versatile, designed for industrial, laboratory, engineering and service applications, the new Jackson 658A makes all these tests on new and old tube types.

Heater Continuity—Heater Current Rectifier Tests—Dynamic "Eye" Tube Tests—Grid Leakage

Features:

- Double Face Socket Assembly with 14 Sockets

- Push-Button Sequence Switching
- Silicon Rectifier Balanced Double Bridge Circuit
- 231 Heater Voltage Combinations from 0.6 to 120 volts
- Panel Mounted Fused Line for Overload Protection
- Compact, Portable Case, 21" x 13¾" x 7"

\$214.95 net

SHIPPING WEIGHT 26 LBS.

FASTER, MORE ACCURATE, MORE VERSATILE, MORE PROFITABLE!

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IN CANADA: TRI-TEL ASSOCIATES, LTD., WILLOWDALE, ONTARIO

NEW DATA FOR JACKSON TUBE TESTERS APPEARS MONTHLY IN "PF REPORTER" and PHOTO-FACT FOLDER

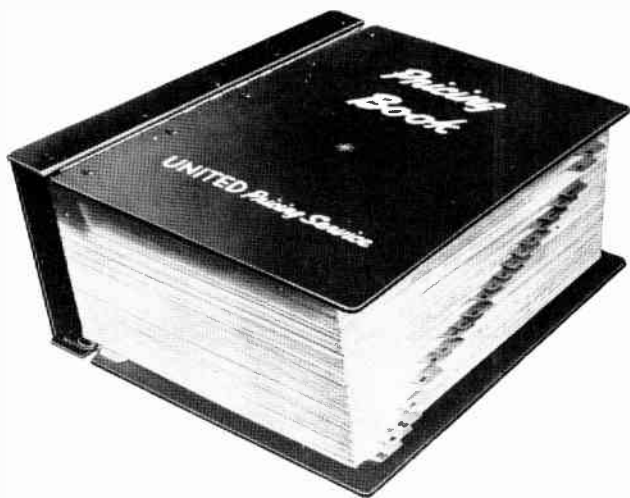
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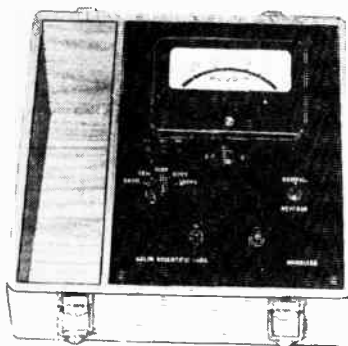
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Kalpa SCIENTIFIC LABORATORIES

Manufacturers of High Voltage Components



HIGH RANGE KILOVOLTMETER

RANGES

0 to 5,000/10,000/50,000
100,000
Volts DC. or 60 cycles AC.
Model 50-AC or DC \$400.00
Model 60-DC only \$300.00

Measures extra high voltages as easy as standard low voltage tests. Special highly insulated probes are used for both AC and DC readings. Panel mounted trim pots allow for instant recalibration, should this ever be required. Large 6 inch mirror scale meter for maximum accuracy.

RATED FOR
5,000 VOLTS DC

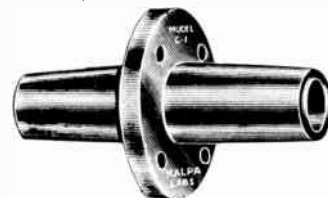


MODEL C-0

HIGH VOLTAGE CONNECTORS

Sturdily constructed of plastic high voltage barrier material. Has the convenience of mating with any standard banana jack for quick disconnect or 10 32 machine bolt for permanent service. Widely used for mounting on front panels. Sealed center conductor permits operation in oil filled tanks.

RATED FOR
25,000 VOLTS DC



MODEL C-1

Miniature Model C-0 Rated for 5,000 Volt DC service. Price \$ 5.00 each.
Standard Model C-1 Rated for 25,000 Volt DC service. Price \$10.00 each.



HIGH VOLTAGE RELAYS

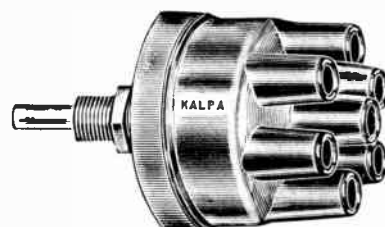
For polarity change-over and other H. V. circuit applications. Will carry up to 15,000 Volts DC or AC (PEAK). 150 Milliamperes, resistive load switching. 5 amperes steady state current rating, (when circuit is not being switched). Standard coil rated for 115 volts 60 cycles AC.

| MODEL | RATING | TYPE | PRICE |
|--------------|--------|----------|----------|
| 5 HV—SPDT—A | 5 KV | S.P.D.T. | \$ 40.00 |
| 5 HV—DPDT—B | 5 KV | D.P.D.T. | 60.00 |
| 10 HV—SPDT—A | 10 KV | S.P.D.T. | 60.00 |
| 10 HV—DPDT—B | 10 KV | D.P.D.T. | 80.00 |
| 10 HV—3PDT—C | 10 KV | 3.P.D.T. | 100.00 |
| 15 HV—SPDT—A | 15 KV | S.P.D.T. | 80.00 |

HIGH VOLTAGE SWITCH

For use in High Voltage low current circuits. DPDT types and Single Pole six position types available. Nominal rating 5,000 Volts DC or AC (PEAK). May be used in lower duty circuits at up to 10,000 Volts.

Model SW-1 DPDT \$20.00
SW-2 SP6T \$20.00



Contact Your Nearest Stocking Distributor for More Details.

KALPA SCIENTIFIC LABORATORIES • Flemington, New Jersey



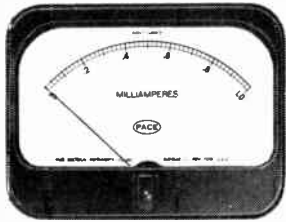
PANEL INSTRUMENTS FOR EQUIPMENT MANUFACTURERS

SPECIAL PACE FEATURES

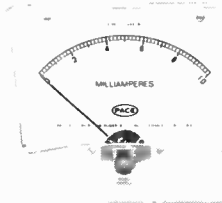
Apply to both standard external magnet and core-magnet meters.

- Full Double-Bridge D'Arsonval Movement
- Precision Die-Cast Movement Frame
- High Density Sintered Iron Pole Pieces
- Coined, Soft-Iron Pole Faces
- High-Flux Alnico Magnets
- Optimum Torque To Mass Ratio

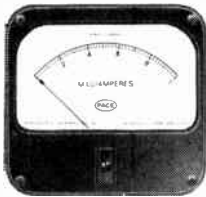
These features, coupled with strict quality control, result in superior shock and vibration characteristics, high accuracy and long, trouble-free life. PACE meters are supplied in production quantities to meet the custom requirements of Original Equipment Manufacturers. (Specify External or Core Magnet). PACE stock meters also available at electronic parts distributors.



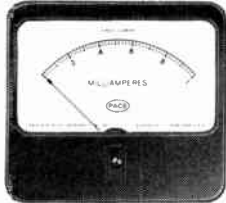
Model 55... 5 1/4" Rectangular Phenolic



Model 15-LP 1 1/2"
Model 25-LP 2 1/2"
Model 35-LP 3"
Model 45-LP 4 7/8"
Rectangular Acrylic
Standardly available clear or black finish



Model 42-W... 4 1/4" Rectangular Phenolic



Model 45-L... 4 5/8" Rectangular Phenolic



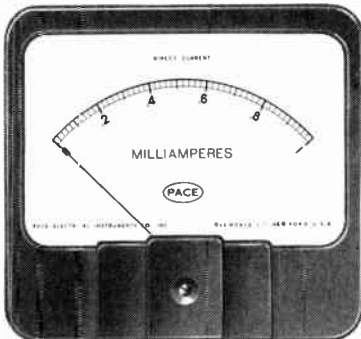
Model 25-R... 2 1/2"
Model 35-R... 3 1/2"
Round Phenolic



Model 25-L... 2 3/8"
Model 35-L... 3"
Rectangular Phenolic



VU Meters Available with Standard A or B Scales



Model 75... 7" Rectangular Phenolic

D.C. MICROAMMETERS

D.C. MILLIAMMETERS

D.C. AMMETERS

D.C. VOLTMETERS

A.C. MILLIAMMETERS (Rectifier Type)

A.C. VOLTMETERS (Rectifier Type)

V.U. METERS (A or B Scale)

| Ranges | Approx. Resistance (ohms) | Models 15-LP*, 25-L, 25-R, 25-LP* | Models 35-L, 35-R, 35-LP* | Models 42-W, 45-L, 45-LP* | Model 55 | Model 75 | |
|-----------|---------------------------|-----------------------------------|---------------------------|---------------------------|----------|----------|-------|
| 0-25 | 6000 | \$18.50 | \$19.50 | \$21.50 | \$24.00 | — | |
| 25-0-25 | 2000 | 15.85 | 16.40 | 17.60 | 19.35 | — | |
| 0-50 | 2000 | 15.85 | 16.40 | 17.60 | 19.35 | — | |
| 50-0-50 | 1000 | 13.75 | 14.30 | 15.50 | 17.00 | — | |
| 0-100 | 1000 | 13.75 | 14.30 | 15.50 | 17.00 | — | |
| 0-200 | 500 | 12.20 | 12.90 | 14.10 | 15.50 | \$22.55 | |
| 0-500 | 200 | 11.30 | 11.85 | 13.20 | 14.50 | 20.35 | |
| 0-1 | 100 | \$10.35 | \$11.00 | \$12.20 | \$13.40 | \$18.70 | |
| 1-0-1 | 50 | 10.35 | 11.00 | 12.20 | 13.40 | 18.70 | |
| 0-2.5 | 40 | 10.35 | 11.00 | 12.20 | 13.40 | 18.70 | |
| 0-3 | 33.3 | 10.35 | 11.00 | 12.20 | 13.40 | 18.70 | |
| 0-5 | 20 | 10.35 | 11.00 | 12.20 | 13.40 | 18.70 | |
| 0-10 | 10 | 10.35 | 11.00 | 12.20 | 13.40 | 18.70 | |
| 0-25 | 4 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-50 | 2 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-75 | 1.33 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-100 | 1.0 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-200 | .5 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-250 | .4 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-300 | .33 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-500 | .2 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-1 | .100 | \$10.80 | \$11.45 | \$12.65 | \$14.00 | \$19.55 | |
| 0-2.5 | .040 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-3 | .033 | 10.80 | 11.45 | 12.65 | 14.00 | 19.55 | |
| 0-5 | .010 | 11.35 | 12.00 | 13.20 | 14.50 | 20.10 | |
| 0-10 | .005 | 11.35 | 12.00 | 13.20 | 14.50 | 20.10 | |
| 0-50 | .001 | 11.35 | 12.00 | 13.20 | 14.50 | 20.10 | |
| 0-3 | 1000 ohms per volt | \$11.20 | \$11.80 | \$13.00 | \$14.30 | \$19.80 | |
| 0-10 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-15 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-40 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-50 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-75 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-100 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-150 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-200 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-250 | | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | |
| 0-300 | 11.20 | 11.80 | 13.00 | 14.30 | 19.80 | | |
| 0-500 | 11.80 | 12.45 | 13.65 | 14.95 | 20.65 | | |
| 0-1000 | 2000 ohms per volt | 14.15 | 14.95 | 16.40 | 17.95 | 24.80 | |
| 0-1 | 1500 | \$15.25 | \$16.75 | \$18.65 | \$20.50 | \$26.35 | |
| 0-5 | 375 | 15.25 | 16.75 | 18.65 | 20.50 | 26.35 | |
| 0-10 | 150 | 15.25 | 16.75 | 18.65 | 20.50 | 26.35 | |
| 0-25 | 60 | 15.25 | 16.75 | 18.65 | 20.50 | 26.35 | |
| 0-50 | 30 | 15.25 | 16.75 | 18.65 | 20.50 | 26.35 | |
| 0-100 | 15 | 15.25 | 16.75 | 18.65 | 20.50 | 26.35 | |
| 0-3 | 1000 ohms per volt | \$14.65 | \$16.25 | \$18.15 | \$20.00 | \$25.85 | |
| 0-10 | | 14.65 | 16.25 | 18.15 | 20.00 | 25.85 | |
| 0-15 | | 14.65 | 16.25 | 18.15 | 20.00 | 25.85 | |
| 0-50 | | 14.65 | 16.25 | 18.15 | 20.00 | 25.85 | |
| 0-150 | | 14.65 | 16.25 | 18.15 | 20.00 | 25.85 | |
| 0-250 | | 14.65 | 16.25 | 18.15 | 20.00 | 25.85 | |
| 0-300 | | 14.65 | 16.25 | 18.15 | 20.00 | 25.85 | |
| 0-500 | | 15.20 | 16.80 | 18.70 | 20.70 | 26.70 | |
| 0-1000 | | 2000 ohms per volt | 18.25 | 20.25 | 22.45 | 24.85 | 32.00 |
| -20 to +3 | | 3900 | \$19.00 | \$20.65 | \$22.55 | — | — |

All prices are subject to change without notice.

*Add 50 cents to prices indicated for "BLACK" acrylic cases Models 15-LPB, 25-LPB, 35-LPB and 45-LPB. PACE external magnet meters are calibrated for use on non-magnetic panels. For use on magnetic panels, state panel material and thickness and add \$1.50 to prices indicated. Core magnet meters are not affected by panel.

Write for complete descriptive catalog to:

PACE Electrical Instruments Co., Inc. Glendale 27, L. I., N. Y.
(A subsidiary of Pacotronics, Inc.)

Manufacturers of fine electronic instruments for over a quarter of a century.

RCA TEST EQUIPMENT

FOR SERVICE, INDUSTRY, SCHOOLS, LABORATORIES

WV-38A V-O-M (KIT or WIRED)

Ohms-divider network fuse-protected. Easier-to-read scales on extra-large 5¼ inch meter. Polarity reversal switch. Full-wave bridge rectifier. Less circuit loading. Standard dbm ranges.

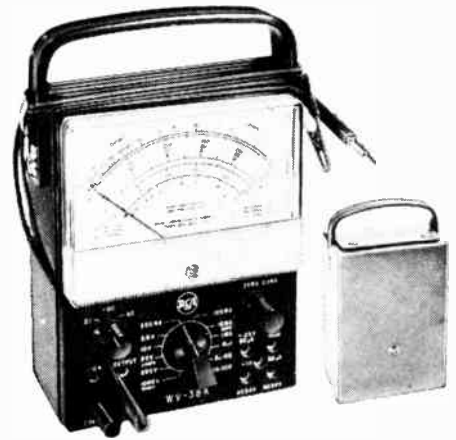
Extra 1-volt and 0.25-volt (250 mv) ranges.

Handle clips accommodate probes and test leads for extra carrying convenience.

The WV-38A VOM has an input resistance of 20,000 ohms-per-volt on dc and 5,000 ohms-per-volt on ac and an accuracy of $\pm 3\%$ of full scale on dc, $\pm 5\%$ of full scale on ac. Regular scales: 2.5, 10, 50, 250, 1000, 5000 volts, ac and dc; 50 μ amp, 1, 10, 100, 500 ma, 10 amps (dc); plus extra scales of 250 mv and 1-volt (dc)! Frequency response (ac), flat from 10 cps to 50 Kc with usable response at 500 Kc. Ohms—3 ranges—R x 1 (0-2,000 ohms), R x 100 (0-200,000 ohms), R x 10,000 (0-20,000,000 ohms). Dimensions: W 5¼" x H 6¾" x D 3⅞".

\$29.95* WV-38A(K) VOM Kit

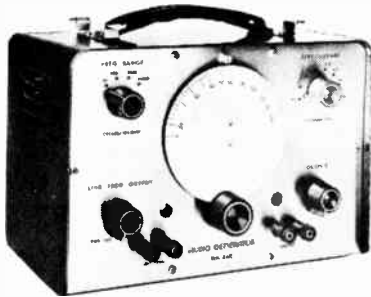
\$43.95* WV-38A VOM (factory wired and calibrated)



WG-270A Accessory Carrying Case for WV-38A VOM **\$4.95***

**User Price (Optional)*

WA-44C AUDIO SIGNAL GENERATOR SINE/SQUARE WAVE OUTPUT



\$98.50* Complete with 20 page instruction booklet.
**User Price (Optional)*

The Compact WA-44C is ac operated from a 50-to-60 cycle, 105-125 volt source, and covers in four bands a range from 20 cps to 200,000 cps. Can be used for a wide variety of applications, including the measurement of frequency response characteristics of audio amplifiers, and the testing of loudspeakers and enclosures or finding the impedance of I.C. combinations. Width 10¼", Height 7", Depth 6⅞".

The circuit of the sine-wave function consists of a "Bridged-T" oscillator with a cathode follower output stage. The square-wave output is developed by using the sine-wave oscillator output to drive a clipping and shaping circuit. Produces a stable signal with an amplitude variation of not more than ± 1.5 db. Total harmonic distortion is limited to 0.25% over the range of 30 cps to 15 kc.

- Switch selection for sinewave or squarewave output
- Simple one-scale dial
- Separate 60 cps output for intermodulation distortion measurements
- Wide frequency range, 20 cps to 200,000 cps.
- Less than ¼ of 1% distortion over the audio-frequency range

WR-64A COLOR-BAR/DOT/CROSSHATCH GENERATOR



\$189.50*

Complete with RF output cable, cable-carrying bracket attachment and instruction booklet.

**User Price (Optional)*

For checking over-all operation of Color-TV receivers. A "must" for adjusting and trouble-shooting color phasing and matrixing circuits. Generates signals for producing ten bars of different colors simultaneously. Also provides extremely stable fine-line crosshatch and dot patterns free from "jitter" and "crawl". Fixed number of bars and dots facilitate adjustment of over-scan (height and width) and linearity in both color and black-and-white sets.

The Color-Bar and Dot/Crosshatch generating functions require no external sync connections. All three patterns are RF outputs, factory set to channel 3 (can be set to channel 4). A sound carrier is provided to permit accurate adjustment of the fine-tuning control on the receiver.

The WR-64A features a chroma control helpful in checking color sync lock and color AFC alignment. The color sub-carrier frequency, the horizontal sync-pulse frequency, and the "bar" frequency are all crystal controlled. A shielded output cable is provided with the instrument. Width 13½", Height 10", Depth 7½". Weight only 13 pounds.

RCA TEST EQUIPMENT

FOR SERVICE, INDUSTRY, SCHOOLS, LABORATORIES

Application: provides direct reading of peak-to-peak voltages of complex waveforms found in video, sync and deflection circuits. Includes an improved circuit providing $\pm 3\%$ accuracy full scale on both ac and dc measurements with less than 1% tracking error. Separate color-coded, peak-to-peak and rms-voltage scales in two distinctive colors simplify readings. Features die-cast aluminum case; high input resistance; electronic protection against burnout; rugged 200-microampere meter movement; precision multiplier resistors with accuracy of $\pm 1\%$ and 0.5-volt full-scale dc range for checking transistor circuits.

- Large 6½" easy-to-read, full vision meter (26 sq. in.).
- Measures complex waveforms directly from 0.2 volt to 4200 volts peak-to-peak in 7 overlapping ranges.
- Measures rms values of sine waves from 0.1 volt to 1500 volts in 7 overlapping ranges.
- Measures from 0.02 volt to 1500 volts dc on two scales in 7 overlapping "3-to-1" ranges.
- INPUT RESISTANCE — 11 megohms on all dc ranges.
- Measures resistance from 0.2 ohm to 1000 megohms on single scale, with 7 overlapping ranges.
- FREQUENCY RESPONSE — 30 cps to 250 Mc with WG-301A Crystal-Diode Accessory Probe.
- Compact design: 7" wide, 3¾" deep, 6½" high.

Kit features pre-assembled DC/AC-OHMS Probe

WV-77E VoltOhmyst® (Kit or Wired)



\$29.95* WV-77E(K) VoltOhmyst Kit
\$43.95* WV-77E VoltOhmyst (Factory-Wired)

*User Price (Optional)

Application: measures dc voltages accurately in high-impedance circuits even with ac present; reads rms values of sine waves and the peak-to-peak value of complex waves or recurrent pulses even in presence of dc. Invaluable for television, radar and other types of pulse work. Has the accuracy and stability necessary for many laboratory applications including a mirror scale.

- $\pm 2\%$ accuracy on ac and dc volts.
- Measures resistance from 0.2 ohm to 1000 megohms, current from 10 microamperes to 15 amperes.
- Features $\pm 1\%$ multiplier and shunt resistors.
- Zero-center scale adjustment for discriminator alignment.
- Sensitivity on 1.5 v range — 7.3 megohm/volt.
- DC polarity reversing switch.
- Measures dc Voltage from 0-1500 volts; ac from 0-1500 volts rms; 4200 volts peak-to-peak.
- Frequency Response—30 cps to 250 Mc using auxiliary WG-301A Crystal-Diode Probe.

WV-98C Senior VoltOhmyst® (Kit or Wired)



\$57.95* WV-98C(k) Senior VoltOhmyst Kit.

\$79.50* WV-98C Senior VoltOhmyst (Factory Wired).

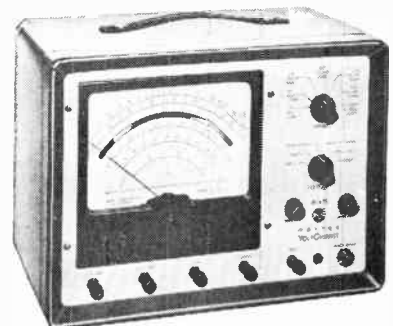
*User Price (Optional)

The WV-77E features flat frequency response $\pm 5\%$ from 40 cps to 5 Mc on the 1.5, 5, and 15-volt rms ranges and the 4, 14, and 40-volt peak-to-peak ranges. The WV-77E measures dc from 0.02 volt to 1500 volts, rms ac from 0.1 volt to 1500 volts, peak-to-peak ac from 0.2 volt to 4000 volts, and resistance from 0.2 ohm to 1000 megohms—all in seven overlapping ranges! Full-scale accuracy is $\pm 3\%$ on dc and $\pm 5\%$ on ac. Meter is electronically protected against burnout. Separate scales are provided for low ac measurements. Input resistance is standard 11 megohms. Width 5", Height 7", Depth 4", Weight 5 lbs.

- Sleeve on handle stores probes and cables
- Fuse in ohms circuit prevents accidental burnout
- Circuit minimizes effect of residual gas in bridge tube
- Color-coded scales for easier, faster readings
- Ultra-slim probes and extra-flexible cables

(Prices for WV-77E(K) and WV-77E include d probe and cable, ac/ohms probe and cable, ground lead and clip, and instruction booklet. Assembly instruction sheet is provided with the WV-77E(K) VoltOhmyst Kit.)

WV-87B Master VoltOhmyst®



\$137.50* complete with probes and cables; including WG-299D DC/AC-Ohms Probe and Cable, current cable, ground cable insulator, instruction booklet.

*User Price (Optional)

RCA TEST EQUIPMENT

FOR SERVICE, INDUSTRY, SCHOOLS, LABORATORIES

WO-33A OSCILLOSCOPE (Kit or Wired)

The WO-33A 3-inch Oscilloscope is the "all purpose" scope! All the bandwidth you need for servicing color-TV, video broadcast monitors and cameras; and for square-wave testing of audio and ultrasonic equipment! All the gain you need for low-level audio work — servicing pickups, microphones, preamps; plus signal-tracing radios, amplifiers—trouble shooting communications signaling systems, ham radio and hi-fi equipment, industrial electronics machinery and other applications.

With vertical amplifier in narrow-band position, sensitivity is 3 rms millivolts/inch; bandwidth within -3 db, 20 cps to 150 Kc. Wide band position: sensitivity 100 rms millivolts/inch; bandwidth within -3 db, 5.5 cps to 5.5 Mc. Sweep circuit: Sawtooth range from 15 cps to 75 Kc; sync — external, \pm internal; line sweep — 160° adjustable phase; sync range— to 4.5 Mc.

- for accuracy—voltage-calibrated frequency-compensated, 3-to-1 step attenuator
- for measurements—scaled graph screen and calibrating voltage source allows direct reading of peak-to-peak voltages
- for stability—"plus-minus" internal sync . . . holds sync to 4.5 Mc
- for completeness—shielded input cable with low-capacitance probe included
- for portability—compact size—W 6½" x H 8¾" x D 10¼"—weight only 14 lbs. Plus built-in brackets to hold power cord and cables



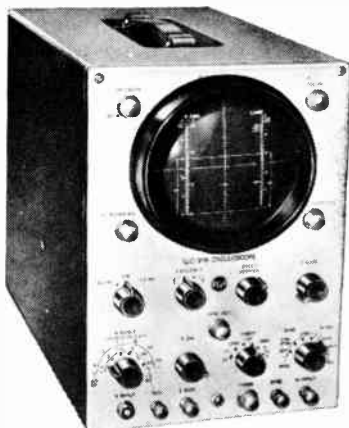
\$79.95*—WO-33A(K) Oscilloscope Kit

\$129.95*—WO-33A Oscilloscope

(Prices for the WO-33A(K) and WO-33A include Direct Low-Cap probe and cable, and instruction booklet.

*User Price (Optional)

WO-91A 5" OSCILLOSCOPE



\$249.50* complete with WG-300B two-way Direct/Low-Capacitance Probe and Cable, alligator clip and insulator, ground cable; green graph screen. Instruction booklet.

*User Price (Optional)

Application: for alignment and signal tracing of AM and FM radio receivers, alignment of low-frequency if amplifiers in TV receivers, and signal tracing and trouble-shooting in TV receivers. Continuously tunable from 85 Kc to 30 Mc. With the WR-49A you can inject rf signals into plate circuits and other points where dc is present without placing a dc load on circuit under test . . . with protection from burn-out in both equipment and signal generator.

- Cathode-follower output stage isolates oscillator from effects of load reactance and resistance, thereby maintaining good output waveform, voltage regulation and frequency stability of the oscillator.
- Functional-design dial facilitates accurate, easy readings.
- Full-length shielding of output cable minimizes radiation and hum pickup.
- Built-in dc blocking capacitors.
- Built-in 400 cycle oscillator for internal or external use.
- Range: 85 Kc to 30 Mc in 6 ranges.
- Maximum output at "hi" connector — .05 volts; at "lo" connector — .01 volts rms.

Application: for production and servicing both black-and-white and color TV receivers. Used to measure color burst signals and for trouble-shooting wide-band color circuits, signal tracing and aligning wide-band video amplifiers, and chrominance circuits. A multi-scale graph screen makes peak-to-peak voltage measurements as simple as with a VTVM. Response: Wide-band within ± 1 db from 10 cps to 4.5 Mc; High sensitivity within -1 db from 10 cps to 0.5 Mc; within -6 db to 1.5 Mc. Sensitivity: 0.05 volt peak-to-peak per inch (0.018 volts rms) in high-sensitivity position; 0.15 volt peak-to-peak per inch (0.053 rms volts in wide-band position).

- Voltage - calibrated, frequency - compensated, 3-to-1 step attenuator for "V" amplifier.
- Shielded vertical-input connector and shielded cable minimize hum, stray field pickup.
- Input Resistance—1 megohm shunted by 40 μ f. Low capacitance position—10 megohm shunted by 11 μ f.
- Z-Axis input 12 volts for blanking.
- Preset "V" and "H" sweep positions.
- "Plus" or "Minus" internal-sync selector.
- Positive-lock internal sync.
- Sweep Frequency: 10 cps to 100 Kc.
- Maximum ac input: 600 volts peak-to-peak.
- Weight: 30 lbs. Size 13½" x 16½" x 9".

WR-49B RF SIGNAL GENERATOR



\$79.50* complete with shielded cable for rf or af output, instruction booklet.

*User Price (Optional)

- Calibration accuracy of Dial — $\pm 1\%$.
- Attenuation range — 65 db.
- Percentage of modulation — adjustable to 70%.
- External modulation input available.
- Weight: 8 lbs. Size: 7½" x 10½" x 6".

RCA TEST EQUIPMENT

FOR SERVICE, INDUSTRY, SCHOOLS, LABORATORIES

Application: supplies a fundamental frequency rf carrier of crystal accuracy for use in aligning and trouble-shooting TV (color and black-and-white) and FM receivers, and other electronic equipment operating in the range of 19 to 260 Mc. Built-in crystal calibrator, heterodyne detector, amplifier and speaker provides calibrating beats at 1 Mc or 10 Mc intervals throughout entire tuning range which is covered by 8 bands. A built-in 4.5 Mc crystal provides necessary accuracy for alignment of intercarrier-if amplifiers and discriminators.

- At least 0.1 volt output, into 95 ohms terminated.
- Provides signals for adjusting vertical or horizontal linearity.
- Precision matched impedance/resistance pad attenuator, 0-60 db in 5 db steps.
- Special modulation input available for re-transmission.
- Provision for use as Heterodyne Frequency Meter.
- Provides dual markers for band-width checks and rf alignment.
- Triple markers for sound-if alignment and band-width checks.
- Adjustable dial pointer for accurate registration with crystal-calibration check points.

WR-70A RF/IF/VF MARKER ADDER



\$74.50* complete with four coaxial cables and instruction booklet.

**User Price (Optional)*

Application: for rf, if and video sweep alignment of both color and black-and-white TV receivers. Provides sharp, easy-to-read markers for alignment. A choice of four different marker shapes is available, permitting use of marker type best suited to the response curve. Designed for use with conventional marker and sweep generators, such as the RCA WR-39 and WR-39 series marker generators and the WR-59 and WR-69 series TV sweep generators. With the WR-70A, the marker signal is added to the sweep-response curve after the sweep signal is taken out of the receiver under test.

- Eliminates or reduces distortion of sweep curve by the marker.
- Permits trap alignment without marker "suckout."
- Hi-Q markers — high in amplitude, narrow in width.
- Four marker choices — positive peak, negative peak, positive and negative peaks (wide band), positive and negative peaks (narrow band).
- Voltage stabilized for rock-steady trace display.

WV-84C ULTRA-SENSITIVE DC MICROAMMETER

Application: a battery-operated vacuum tube microammeter designed for measuring minute direct currents, for making current and voltage measurements in electrolysis and corrosion investigations, and for checking currents in light meters, ultra-violet and infrared detectors, and spectrophotometric devices. Self-contained batteries permit use almost anywhere. Low-drain tubes extend battery life and protect the delicate meter against burnout due to accidental overloads. When used as a voltmeter, it is especially suited to measurements in circuits where loading is a critical factor. Can also be used as an ohmmeter to measure extremely high resistances, such as leakage and insulation resistance.

- Six direct-current ranges for measuring currents from 0.0002 to 1000 microamperes.
- Can be used as ohmmeter to measure resistance in the order of billions of ohms.
- Voltage drop for full-scale deflection only 0.5 volts.
- Input resistance of 100 megohms for measurement of voltages from 0.1 to 1 volt; 1000 megohms input resistance for voltages from 1 to 10 volts, 1005 megohms for voltages from 1 to 100 volts.

WR-99A CRYSTAL-CALIBRATED MARKER GENERATOR



\$242.50* complete with rf output cable, instruction booklet.

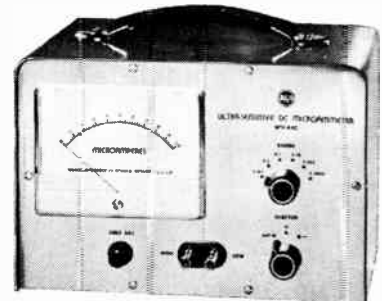
**User Price (Optional)*

SPECIFICATIONS

IF/VF sweep input — 50 Kc to 50 Mc. RF input — 50 Mc to 250 Mc.

MINIMUM INPUT VOLTAGES — IF/VF — 0.1 volts rms. RF Sweep sample input—0.005 volts rms. Marker input—0.1 volts rms. Maximum demodulator signal input—8 volts peak-to-peak.

MAXIMUM SIGNAL OUTPUT — Marker signal — 2.5 volts rms. Demodulator signal — 10 volts peak-to-peak. Input and output impedances all 100 ohms except demodulator signal input of 0.5 megohm. Weight: 8 lbs. Size: 7½" x 10½" x 6¼".



\$110.00* includes 50- and 950-megohm multiplier resistors, instruction booklet.

(less batteries)

**User Price (Optional)*

- Over-all microammeter accuracy on .01 range $\pm 5\%$ or better; accuracy on all other ranges $\pm 4\%$ or better.
- Size 7½" x 10½" x 6¼". Weight: 10 lbs. including batteries.

RCA TEST EQUIPMENT

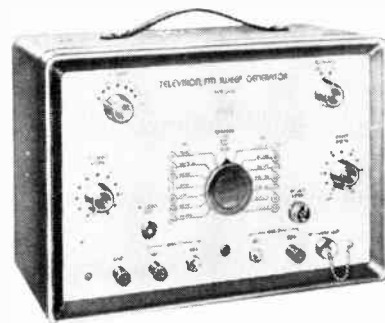
FOR SERVICE, INDUSTRY, SCHOOLS, LABORATORIES

WR-69A

TELEVISION/FM SWEEP GENERATOR

Tops for visual alignment of both TV and FM receivers, the WR-69A has preset switch positions for all VHF TV channels, the FM broadcast band, and TV video, chrominance, and if frequencies. VHF output is on fundamental frequencies only; no beat notes or harmonics are used. Exceptionally good linearity is provided by a precision vibrator capacitor. Continuously adjustable sweep width and flat output make for accurate sweep response portrayals. The WR-69A is especially suited to alignment of color receivers. Special sample-voltage terminal on panel permits use with marker-adder units in alignment. Dual-piston attenuator provides smooth even attenuation over 60 db range. Width 13", Height 10", Depth 7".

- IF/Video output frequency continuously tunable from 50 Kc to 50 Mc.
- Sweep-frequency bandwidth continuously adjustable from 50 Kc to 20 Mc on if/video and fm - 12 Mc max. on TV channels.
- Return trace blanking.
- Two adjustable bias voltages available on front panel.



\$295.00*

(complete with RF Output cable, IF/Video Output cable and instruction booklet.)

*User Price (Optional)



\$989.00* Electron-Tube MicroMhoMeter

(complete with 4 multiple-socket plug-in units, instruction booklet.)

- measures transconductance to an accuracy of better than $\pm 3\%$
- accurate measurement of "hybrid" auto receiver tube types under actual operating conditions
- built-in shorts test for any combination of tube elements

WT-100A Electron-Tube MicroMhoMeter

A precision laboratory measuring instrument which tests tubes under typical operating conditions as specified in the tube manufacturers' technical data manuals. It is particularly useful in production line testing, design and development work, pre-selecting for critical applications, quality control programs, and preventive maintenance. MEASUREMENTS PERFORMED: ac heater current from 0.02 ampere to 5 amperes • dc filament current up to 250 ma • voltage drop across rectifier tubes and semiconductor diodes • transconductance from 10 micromhos to 100,000 micromhos. Within the range of its facilities it will test: vacuum tubes—diodes, triodes, tetrodes, pentodes, heptodes, spetodes, octodes, and multi-unit types; gas tubes—thyratrons, voltage regulators, cold-cathode and hot cathode rectifiers; in these bases and envelopes—bases with 4, 5, and 6 pins, lock-in, miniature, sub-miniature, pencil and lighthouse; and semi-conductor diodes—small dry-disc rectifiers, germanium and silicon diode types. Size: W 23 $\frac{1}{2}$ " x H 8" x D 18 $\frac{1}{2}$ ". Weight: 50 lbs.

- measures transconductance up to 100,000 micromhos in six ranges
- measures both control-grid-to-plate and suppressor-grid-to-plate transconductance
- built-in calibrating circuit—no null meters or extra devices required
- meter completely burnout-proof
- regulated power supplies for dc plate and screen test voltages

WP-25A TV ISOTAP



Speeds up servicing, prevents damage to test equipment, minimizes shock hazard, cuts down costly returns. The WP-25A may be used as a high-medium-low voltage isolation transformer or as an auto-transformer for testing radio and TV receivers at various settings of line voltage. Supplies outputs of 130, 115, and 105 volts at maximum load and is tapped to match line voltages from 105 to 130 volts in six steps **\$22.00***

WG-304B RF MODULATOR



An accessory used to check the over-all frequency response of TV receivers from antenna to picture tube grid. The unit permits modulation of an rf marker signal from a marker generator (such as WR-89A or WR-99A) by a signal from a video sweep generator (such as WR-59C or WR-69A).

\$12.50*

*User Price (Optional)

RCA TEST EQUIPMENT ACCESSORIES

WG-295C VIDEO MULTIMARKER

Provides seven simultaneous absorption-type markers at accurately preset frequencies for marking video response curves in color receivers. Markers are at 0.5 Mc (For (Q, R-Y, B-Y, G-Y filters), 1.5 Mc (for J filter), 2.5 Mc (for bandpass filter), 3.58 Mc (color subcarrier frequency), 3 and 4.1 Mc (video and bandpass amplifiers), and 4.5 Mc (sound-trap frequency). Each marker is identified simply by touching a corresponding contact on the WG-295C case. This reduces the amplitude of the particular marker. The WG-295C connects between the IF/VF output on the sweep generator and the video output cable. Equipped with shorting switch. With instruction booklet **\$32.50***



WG-289, WG-297 HIGH-VOLTAGE PROBES

The WG-289 extends the dc-voltage range of the WV-77A, WV-77B, WV-77C, WV-87A, WV-87B, WV-97A, WV-98A and WV-98B VoltOhmysts to 50,000 volts. The WG-297 extends the range of the WV-77E VoltOhmyst® and WV-38A volt-ohms-milliammeter to 50,000 volts dc. The WG-289 is provided with a microphone-type connector, and the WG-297 is provided with banana-plugs for use with appropriate VoltOhmysts and other VTVM's, VOM's.

A choice of three multiplier resistors is available, enabling these probes to be used with many popular electronic and non-electronic volt-ohm-meters!

WG-206—1090-megohm multiplier resistor for VTVM's having 11-megohm input (multiplying factor 100).

WG-210—900-megohm resistor multiplies 5000-volt dc range of 20,000-ohms-per-volt VOM's by a factor of 10.

WG-211—495-megohm resistor multiplies 250-volt dc range of 20,000-ohms-per-volt VOM's by a factor of 100.

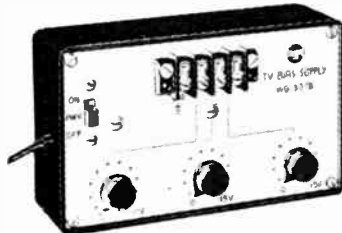
WG-289 or WG-297, Probe Only **\$7.15***

WG-206, WG-210, or WG-211, Multiplier Resistor Only (each) **\$2.80***

*User Price (Optional)

WG-307B(K) TV BIAS SUPPLY KIT

Three separate dc output voltages each adjustable from 0 to -15 V. Panel isolated from all circuits. Measures 6 3/4" x 3 3/4" x 2". Weight: 22 ounces.



\$11.95*

WG-301A CRYSTAL-DIODE PROBE



"Slip-on" type for use with the WG-299A, B or C DC/AC Ohms Probe and Cable extending the frequency range of VoltOhmysts® to 250 Mc. **\$7.75***

WG-299D DC/AC OHMS PROBE AND CABLE



The WG-299D is a single-unit probe for use with Volt Ohmysts® except WV-77E. Switch provides instant selection of dc or ac/ohms operation. The WG-299D replaces the WG-299A, WG-299B and WG-299C. **\$7.95***

WG-300B DIRECT/LOW CAPACITANCE PROBE AND CABLE



Designed for use with the RCA Scopes. Cable is 48" long, completely shielded from microphone connector to probe tip to minimize hum and stray field pick-up. Built-in switch provides instant selection of direct or low-capacitance operation. Input characteristics: 10 megohms resistance, less than 12.5 µmf capacitance in low capacitance position. Includes ground lead and clip. **\$9.95***

WV-120A POWER LINE MONITOR



For constant indication of power line voltage

Features: • expanded scale 100 to 140 volts indicates true rms values • accuracy ±2% at 120 volts, ±3% at 100 and 140 volts • readable from 10 feet or more • plugs in to power line outlet • wide frequency range, 25 to 400 cps. H 3 1/8", W 5", D 3 1/8". Weight: 1 1/2 lbs. **\$14.95***

WG-349A DIRECT/LOW-CAPACITANCE PROBE



A 48-inch, small diameter, extremely flexible shielded cable designed for use with the WO-33A Oscilloscope. The probe consists of three short leads with alligator clips for ground, direct, and low-capacitance connections. For convenient use, the WG-349A eliminates the need for switching. It connects to the oscilloscope by means of a miniature-type microphone connector. Input characteristics: 10 megohms, 12 uuf capacitance, when used with the WO-33A and WO-33A(K). **\$4.95***

WG-302A RF/IF/VF SIGNAL TRACING PROBE



"Slip-on" type high-frequency probe designed for use with the WG-300A and B probe and cable to permit visual signal tracing for rapid isolation of trouble in radio receivers and in television if and video stages. **\$8.50***

WG-350A DEMODULATOR PROBE



For use with the WO-33A Super-Portable Oscilloscope for demodulation and signal tracing of radio/TV rf and if signals. **\$4.95***

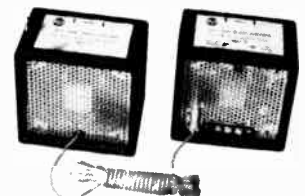
WG-351A CRYSTAL DIODE PROBE



For extending the rf measuring capability of the WV-77E VoltOhmyst, and WV-77E(K) VoltOhmyst Kit, to over 100 Mc. **\$4.95***

WG-360A PHASE CHECKER

Used for a dynamic check of phasing in any audio system from input to the output of the speakers.



Features:

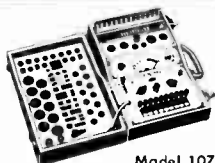
- sound powered; requires no external voltage source
- any VOM, VTVM, or oscilloscope may be used as the indicator

\$14.95*

*User Price (Optional)



TEST EQUIPMENT



Model 107A

DELUXE COMPLETE TUBE TESTER

Tests all newest types!

Three complete tests in one compact, portable instrument! Ideal tester for Radio-TV, Industrial and Foreign types—including sub-miniature. Dynamic Mutual Conductance Test on pre-wired chassis—Cathode Emission Test for all tubes by free point selector system—"Good-Bad" meter indicates merit.

Nationally accepted Grid Circuit Test, developed and patented by Seco. 12A7 Cascade Amplifier, 6AF6G Electron Eye Indicator, 3" meter. Size: 13½" long x 9" high x 6" wide. Shipping weight: 14½ lbs. In portable carrying case with handy flip-chart for fast, easy tube set-up data. For 105-125 V, 60 cycle AC.

MODEL 107A . . . Wired and Factory Tested . . . \$149.50 NET

GRID CIRCUIT AND TUBE MERIT TESTER

Tests all newest types!

Compact, portable, low-cost tester. Fast, easy to use! Offers complete TV tube type coverage—all modern heater type radio tubes including hybrid and battery types. Incorporates patented Seco Grid Circuit Test plus reliable Cathode Emission Test—also checks filament continuity and provides open element test. One easy-to-read meter indicates results for both Grid Circuit and Tube Merit Tests. Two-stage DC amplifier isolates and protects meter—achieves wide range of load currents and test conditions. Size: 9" wide x 10½" high x 5½" deep. Shipping weight: 6 lbs. For 110-125 V, 60 cycle AC. With portable carrying case and flip-chart for quick set-up data.

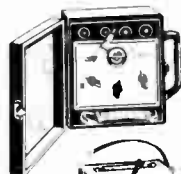


Model 88

MODEL 88 . . . Wired and Factory Tested . . . \$69.50 NET

GRID CIRCUIT TUBE TESTER

Only Grid Circuit tester with full TV tube coverage—including voltage amplifiers; power output and heater-type diodes; types with Grid, Plate or Cathode caps; and hundreds of Foreign and Industrial tube types. Tests for Grid Emission, leakage, shorts and gas in one operation! Two new exclusive tests—Cathode Continuity Check and Inter-element Short Test with short identified to pin number. Easy to operate—available in metal case with exposed panel (Model GCT-9S, Size: 6½" wide x 6½" high x 2½" deep. Shipping Weight: 4 lbs.) or mounted in carrying case (Model GCT-9W, Size: 6½" wide x 6½" high x 2½" deep. Shipping weight: 4½ lbs.) For 105-125 V, 60 cycle AC.



GCT-9W

GCT-9S

MODEL GCT-9-S . . . Wired and Factory Tested . . . \$32.95 NET (GCT-9-W \$34.95 NET)

TRANSISTOR AND TUNNEL DIODE ANALYZER

Gives you the most rapid, complete and accurate semi-conductor check in the medium priced field—plus many circuit analyzing features. Requires no set-up data—identifies NPN and PNP transistors immediately—provides dynamic GO-NO-GO test without removing transistors from circuit—provides accurate DC analysis of transistors out of circuit—indicates transistor leakage and gain—matches transistors of similar types by AC dynamic test or DC analysis—tests signal and power transistors, also tunnel and zener diodes—indicates tunnel diode negative resistance characteristics—indicates diode forward conductance and reverse leakage current—includes VOM meter with appropriate ranges. Reads BOTH Icco and Ileo leakage—cancelling feature on Ileo gives direct, true gain reading. Choice of metal or wood case.



Model 250

MODEL 250 B (Battery Powered) . . . \$74.50 NET
MODEL 250 A (AC Powered) . . . \$86.50 NET

DYNAMIC TRANSISTOR CHECKER

Safely, automatically tests PNP and NPN transistors "in or out" of circuit. No set-up necessary. Covers wide range of types: small signal including "drift" types; medium power and power types. Provides positive check for "opens", shorts and gain—indicates results by simple visual signal. Also provides GO-NO-GO test at practical collector currents, and permits matching of similar transistor types. Transistors under test may be easily plugged into unit or "clipped" into circuit with external leads. Size: 3¼" wide x 6¼" long x 2¼" deep. Shipping weight: 1½ lbs. Powered by one 1.5 V "C" cell.



Model 100

MODEL 100 . . . Wired and Factory Tested . . . \$19.95 NET

2-WAY RADIO TEST SET

Combination Crystal Checker, RF Signal and Field Strength Meter! Cuts service and installation time on all types of crystal controlled transmitters and receivers! Checks crystal activity on third overtone transmitter crystals—checks fundamental types and third overtone receiver crystals at fundamental frequency. Plug into jacks and use 0-50 ma. meter for final amplifier tuning. Use as output indicator. Insert crystal for quick check of "on channel" operation. Supplies low power, unmodulated RF signal for adjusting squelch, etc.—or tone modulated RF signal for peaking. Unit may be modulated by external signal generator or voice modulator. Lets you check modulation visually or with headphones. With 15 ft. remote cable. Size: 2¼" deep x 3¼" wide x 6¼" high. Shipping weight: 1½ lbs. Powered by two 1.5 V "C" cells.



Model 500

MODEL 500 . . . Wired and Factory Tested . . . \$29.95 NET

TRANSMITTER TESTER

For Citizens Band and low power transmitters up to 160 MC. Large 3" meter is calibrated for direct reading amplitude modulation percentage; 0-5 watts RF output; 0-400 ma. RF output. High impedance input provided for Handy Talkies. Percentage of modulation scale provides check of positive and negative modulation peaks. Model 510 is equipped for headphone modulation monitoring or the connection of a scope to the unit. Measures losses in transmission lines . . . ideal for testing coaxial insertion devices such as connectors, switches, relays, filters, tuning stubs and patch cords. An Attenuator cable is available for RF metering up to 15 feet. Optional "T" pad attenuator adapts the Model 510 for use with transmitters rated up to 50 watts. Size 6¾" wide x 2¼" deep x 5¼" high—shipping weight 2 lbs.



Model 510

MODEL 510 . . . \$46.95 NET

ATTENU-LOAD

Dual purpose 50 Ohm—50 Watts attenuator and load termination. Ten db "T" pad attenuator reduces power levels by ratio of 10 to 1. The fully shielded 50 ohm termination is designed for coaxial cable applications.

MODEL 511A . . . \$15.95 NET



Model 511A

ANTENNA TESTER

In-line antenna efficiency tester and in-line R. F. Power Meter. Dual cylinder air coupler rated at 1000 watts maximum—does not insert error into coaxial line up to 160 MC. Direct reading scales show clear numerical values. An English reading "Antenna System Efficiency" scale marked off in red and green, GOOD-POOR. Scale is graduated in percent. A direct reading of FORWARD POWER AND REFLECTED POWER. A standing Wave Ratio scale from 1:1 to 8:1 for those who prefer this accepted scale. Three "Watts" ranges are provided with switching, 0-10 watts, 0-100 watts and 0-1000 watts. Size 6¾" wide x 2¼" deep x 5¼" high . . . shipping weight 2½ pounds.

MODEL 520 . . . \$46.95 NET



Model 520

VARIABLE, REGULATED TRANSISTOR AND TUNNEL DIODE POWER SUPPLY

A metered variable DC supply for transistorized equipment, tunnel diode circuits, experiments, relays and similar electrical equipment, charging batteries, and biasing. Transistorized circuit maintains constant voltage over a wide load variation. Four output and meter ranges—0-1½ V, 0-30 V, 0-30 ma, and 0-150 ma. Max. ripple .01% at full load—output impedance, 1.4 ohms resistive, 3.8 ohms reactive. Special bias tap for simultaneous 1½ V and 3 V output. This is the first transistorized power supply in the low current range.



Model RPS-4

MODEL RPS-4 . . . \$26.95 NET

TRANSISTORIZED "S" METER

A SECO PLUS—this is the only transistorized "S" Meter on the market. Indicates signal strength accurately with no loading an AVC—illuminated "zero" to "30 db over 9" meter—controls for zero set and sensitivity—self powered, operates on 9 v transistor battery—builds into set or mounts on suction cup base.

S-METER
MODEL 540 . . . \$13.88 NET



Model 540

SIGNAL FILTER

Noise limiter and controllable squelch electronically cleans signal. Clips noise pulses—increases reception range—filters ignition noises without costly suppression installations—compact (only 1¾" x 2½" x 4¼")—rugged, encapsulated circuit assembly. For most CB tube-type transceivers—all AM superheterodyne receivers with 6 or 12 V AC or DC and 150 V "B" power supply—mobile or base station.

SIGNAL FILTER
MODEL 530 . . . \$15.88 NET



Model 530



SECO ELECTRONICS, INC.

MINNEAPOLIS • MINNESOTA

A subsidiary of Di-Acro Corporation • Lake City, Minnesota

SPRAGUE TEST EQUIPMENT

TCA-1 TRANSFARAD*

THE FIRST ANALYZER SPECIFICALLY DESIGNED TO SAFELY TEST TRANSISTOR CIRCUIT CAPACITORS. CHECK THESE FEATURES!



The Sprague TCA-1 is specifically designed to safely test capacitors such as tantalum capacitors, low-leakage aluminum electrolytic miniatures, low voltage ceramics and low voltage paper and film capacitors used in transistors and other low voltage circuits. No industrial laboratory or modern electronic service shop can afford to be without one! *Trademark

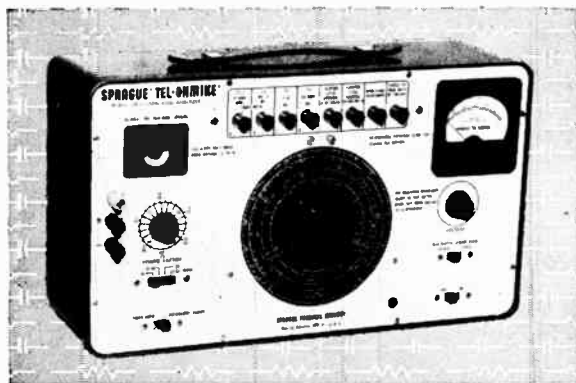
- CAPACITANCE BRIDGE measures $1\mu\mu\text{F}$ to $2000\mu\text{F}$ overlapping ranges. Only 0.5 volt applied to bridge during tests. No possibility of overheating or deforming any low voltage capacitor during measurements.
- INSULATION RESISTANCE directly read from 50 megohms to 20,000 megohms.
- LEAKAGE CURRENT measured directly from $0.6\mu\text{A}$ to $600\mu\text{A}$ in seven ranges.
- POWER FACTOR measured by Wien bridge from 0 to 50 per cent.
- MAGIC EYE null detector permits accurate measurement of small capacitors.
- SHORT-TIME STABILITY assured by dual regulation of power supply.
- BINDING POSTS are shielded assuring greater accuracy.
- FOR SAFETY the capacitor under test is automatically discharged after testing. Three wire card grounds case.
- OPERATING PROCEDURES clearly shown on a convenient pull-out slide.

MODEL TCA-1 TRANSFARAD 115 VAC/60 cy.....\$197.50 net
MODEL TCA-1RM for rack mounting.....\$207.50 net

TO-5 TEL-OHMIKE™ CAPACITOR ANALYZER

- LEAKAGE CURRENT of electrolytics measured directly on meter, with exact rated voltage up to 600v. applied from continuously adjustable power supply. Two ranges: 0-6-60 ma. No guessing on eye-width or counting lamp blinks!
- POWER FACTOR of electrolytics measured by Wien bridge up to 55% in three ranges.
- TURNS RATIO SCALE to measure power and audio transformers.
- MAGIC EYE TUBE simplifies bridge balancing for power factor and capacitance measurements.
- PUSH BUTTONS for instant range selection, also discharges capacitors for safety upon release.
- MODERN CASE finished in two-tone grey: $8\frac{7}{8}$ " high, $14\frac{5}{8}$ " wide, $6\frac{1}{8}$ " deep. Weight only 12 $\frac{1}{2}$ pounds.

MODEL TO-5.....115 VAC/50-60 cy.....\$92.50 net
MODEL TO-5X.....115-230 V/25-60 cy.....98.75 net
MODEL TO-5RM for rack mounting.....102.50 net



- CAPACITANCE BRIDGE measures up to 2000 μF in five overlapping ranges. The special 1 mmf to 100 mmf range is exclusive with the Tel-Ohmike.
- INSULATION RESISTANCE directly read on large meter up to 20,000 megohms for papers, ceramics, and micas. No guessing with neon lamps.

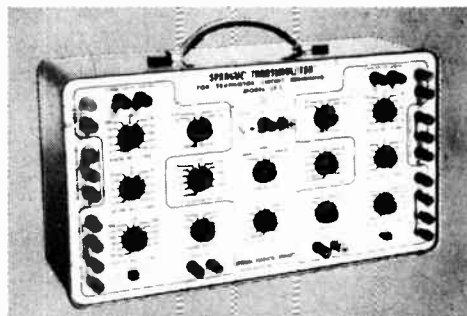
LF-1 TRANSIMULATOR®

SPEEDS TRANSISTOR CIRCUIT DESIGN—ELIMINATES BREADBOARDS

Bring transistor circuits to life in a matter of minutes with the Sprague LF-1 Transimulator. This instrument lets you simulate any amplifier stage, ac or direct coupled, short of high power audio output; also multivibrator, switching, phasing, push-pull, Class A and B, and many others using cross-coupled Transimulators . . . whether the circuit is common or grounded emitter, base, or collector . . . whether the transistors are PNP, NPN or Surface Barrier. You can simulate circuits stage-by-stage for cascade operation . . . or use a separate Transimulator for each stage to get simultaneous multi-stage operation. Everything you need is built right into the LF-1. An ideal laboratory instrument. Use the LF-1 to test transistors in the circuit . . . the only real proof of design parameters. A complete step-by-step instruction manual makes operation fast, simple and easy.

FEATURES OF THE LF-1 TRANSIMULATOR

- TRANSISTORS—PNP and NPN Junction, and Surface Barrier.
- CIRCUITS—Common or Grounded Emitter, Base, Collector.
- RANGE—Audio, up to 100 kc.
- TRANSISTOR POWER—Through medium power audio output.
- BATTERY SUPPLY—Separate bias and load. 1.5, 3, 4.5, 6 volts d-c. Polarity Reversing Switch.
- COUPLING—2 μF and 20 μF Direct, and Ext. C. posts on both Input and Output.
- BIAS RESISTANCE—Up to 555,000 ohms continuously variable.



- LOAD RESISTANCE—Up to 277,500 ohms continuously variable.
- EMITTER RESISTANCE—Up to 2,500 ohms variable.
- BASE COLLECTOR STABILITY—Up to 250,000 ohms variable. Series resistor and bypass capacitor can be added.
- VOLTAGE DIVIDER STABILITY—Up to 50,000 ohms variable.
- 5-WAY BINDING POSTS—For meters, transformer coupling, external supply voltage, degeneration, bypass, coupling, signal input and output, almost any connection required.

\$79.50
NET
LESS BATTERIES

Shurite PANEL METERS

● **SHURITE Meters** are attractive, rugged, dependable instruments with accuracy well within $\pm 5\%$, and have the ability to duplicate readings. DC meters are polarized-vane solenoid type, or moving-magnet construction when indicated; AC meters are double-vane repulsion type with jeweled bearing. The jewel construction costs more to build, but it pays off by providing continuing accuracy during a longer useful life. Models 550 and 950 fit 2 5/32" hole, and Model 850 also fits any small size down to 2 1/16". All are guaranteed.

FEATURES

GUARANTEE: Meters are guaranteed to users against defective workmanship and material, and will be repaired or replaced if sent to the factory postpaid with 40¢ handling charge within one year after purchase . . . **ALL METAL DIALS**—age and moisture resistant, lithographed in black on white for high visibility . . . **STURDY DESIGN**—with husky coil frames designed to prevent breakage, rigidly mounted in cases with anti-turning square head studs . . . **VISCOSITY DAMPING**—careful application of new silicone compound on bearing surfaces damps pointer overtravel . . . **WIDE SELECTION**—Shurite offers the broadest line of standard meters in the economy-priced field. Distributor stocks are backed by an extensive factory inventory.

WHAT'S NEW IN THIS CATALOG—In response to the growing demand for increasingly sensitive meters in the rugged, dependable Shurite construction, three 500 microampere models as listed below have been introduced. The internal magnetic design tends to minimize the effects of external magnetic forces. Volume production makes moderate prices possible. Nine additional ranges in Edgewise meters including a VU meter, and a new S meter in 850 series case, now also are stocked.

DC MICROAMMETERS

| RANGE | RESIST. Approx. Ohms | Model 550* Stock No. | Model 950* Stock No. | Model 850* Net Each | Model 550* Stock No. | Model 850* Net Each |
|---------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|
| 0-500** | 1000 | 5902 | 9902 | \$4.10 | 8902 | \$4.30 |

* For zero adjuster, add 35c to price and Z to stock number.
** Sensitive type, note internal resistance. DC bridge-type construction.

DC MILLIAMMETERS

| RANGE | RESIST. Approx. Ohms | MODEL 550* Stock No. | MODEL 950* Stock No. | MODEL 950* Net Each | MODEL 850* Stock No. | MODEL 850* Net Each |
|--------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|
| 0-1** | 1000 | 5300Z | 9300Z | \$3.75 | 8300Z | \$3.95 |
| 0-3L** | 500 | 5332Z | 9332Z | 3.45 | 8332Z | 3.65 |
| 0-3 | 4800 | 5301 | 9301 | 2.85 | 8301 | 3.05 |
| 0-5 | 3475 | 5302 | 9302 | 2.60 | 8302 | 2.80 |
| 0-10 | 870 | 5303 | 9303 | 2.35 | 8303 | 2.55 |
| 0-15 | 485 | 5304 | 9304 | 2.15 | 8304 | 2.35 |
| 0-25 | 172 | 5305 | 9305 | 2.15 | 8305 | 2.35 |
| 0-50 | 46 | 5306 | 9306 | 2.15 | 8306 | 2.35 |
| 0-100 | 10.4 | 5307 | 9307 | 2.15 | 8307 | 2.35 |
| 0-150 | 4.7 | 5308 | 9308 | 2.15 | 8308 | 2.35 |
| 0-200 | 2.8 | 5309 | 9309 | 2.15 | 8309 | 2.35 |
| 0-300 | 1.5 | 5310 | 9310 | 2.15 | 8310 | 2.35 |
| 0-400 | .46 | 5311 | 9311 | 2.15 | 8311 | 2.35 |
| 0-500 | .30 | 5312 | 9312 | 2.15 | 8312 | 2.35 |

* For zero adjuster, add 35c to price and Z to stock number.
** Sensitive type, note internal resistance. Moving-magnet construction, patent pending. Price includes zero adjuster built-in.

AC MILLIAMMETERS

| RANGE | RESIST. Approx. Ohms | MODEL 550 Stock No. | MODEL 950 Stock No. | MODEL 950 Net Each | MODEL 850* Stock No. | MODEL 850* Net Each |
|-------|----------------------|---------------------|---------------------|--------------------|----------------------|---------------------|
| 0-10 | 4800 | 5607 | 9607 | \$3.50 | 8607 | \$3.70 |
| 0-25 | 750 | 5601 | 9601 | 3.35 | 8601 | 3.55 |
| 0-50 | 150 | 5602 | 9602 | 3.35 | 8602 | 3.55 |
| 1-100 | 37 | 5603 | 9603 | 3.35 | 8603 | 3.55 |
| 0-250 | 5.4 | 5604 | 9604 | 3.35 | 8604 | 3.55 |
| 0-500 | 1.34 | 5605 | 9605 | 3.35 | 8605 | 3.55 |

NO ZERO ADJUSTER ON AC METERS, EXCEPT ON MODEL 850.
* For zero adjuster add 35c to price and Z to stock number.



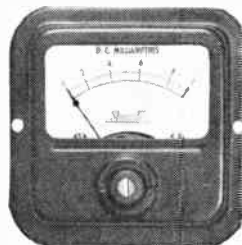
MODEL 850

(Actual Size)

ZERO ADJUSTER OPTIONAL

CLEAR PLASTIC INSTRUMENTS

Now number one in popularity, the 850 series dresses up panels and retains the characteristically sturdy construction of the Shurite metal-cased 550 and 950 series. The 850 snap-on front of crystal polystyrene 2 17/32" wide x 2 5/16" high, admits light from all sides and accentuates the appearance of the scale arc which is the longest in its field. The case back, with interior frosted finish, is molded of the same material to provide weight reduction and superior insulation.



MODEL 950 SERIES WITH ZERO ADJUSTER (metal-case)



MODEL 550 SERIES (Rimless Round) (metal-case)

TYPICAL USES

Amateur radio rigs . . . Citizens Band equipment . . . battery eliminators . . . battery chargers . . . volt-ohm-milliammeters and kits . . . model train equipment . . . tuning circuits for stereo and tape recorders . . . burglar, fire alarm, or emergency lighting systems . . . transistor testers . . . plating equipment . . . voltage regulators . . . school and demonstration panels . . . many other applications.

DC AMMETERS

| RANGE | RESIST. Approx. Ohms | MODEL 550* Stock No. | MODEL 950* Stock No. | MODEL 950* Net Each | MODEL 850* Stock No. | MODEL 850* Net Each |
|---------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|
| 0-1 | .105 | 5201 | 9201 | \$2.15 | 8201 | \$2.35 |
| 0-3 | .02 Max. | 5202 | 9202 | 2.15 | 8202 | 2.35 |
| 0-5 | .02 Max. | 5203 | 9203 | 2.15 | 8203 | 2.35 |
| 0-8 | .02 Max. | 5204 | 9204 | 2.15 | — | — |
| 0-10 | .02 Max. | 5205 | 9205 | 2.15 | 8205 | 2.35 |
| 0-15 | .02 Max. | 5206 | 9206 | 2.15 | 8206 | 2.35 |
| 0-25 | .02 Max. | 5207 | 9207 | 2.60 | 8207 | 2.80 |
| 0-50 | .02 Max. | 5208 | 9208 | 2.60 | 8208 | 2.80 |
| 3-0-3 | .02 Max. | 5210 | 9210 | 2.25 | — | — |
| 5-0-5 | .022 Max. | 5211 | 9211 | 2.25 | — | — |
| 6-0-6 | .02 Max. | 5212 | 9212 | 2.25 | — | — |
| 10-0-10 | .02 Max. | 5213 | 9213 | 2.60 | 8213 | 2.80 |
| 20-0-20 | .02 Max. | 5214 | 9214 | 2.60 | 8214 | 2.80 |
| 30-0-30 | .02 Max. | 5215 | 9215 | 2.60 | 8215 | 2.80 |
| 50-0-50 | .02 Max. | 5216 | 9216 | 2.75 | 8216 | 2.95 |

* For zero adjuster, add 35c to price and Z to stock number.

AC AMMETERS

| RANGE | RESIST. Approx. Ohms | MODEL 550 Stock No. | MODEL 950 Stock No. | MODEL 950 Net Each | MODEL 850* Stock No. | MODEL 850* Net Each |
|-------|----------------------|---------------------|---------------------|--------------------|----------------------|---------------------|
| 0-1 | .42 Max. | 5501 | 9501 | \$3.25 | 8501 | \$3.45 |
| 0-3 | .072 Max. | 5502 | 9502 | 3.25 | 8502 | 3.45 |
| 0-5 | .041 Max. | 5503 | 9503 | 3.25 | 8503 | 3.45 |
| 0-10 | .02 Max. | 5504 | 9504 | 3.25 | 8504 | 3.45 |
| 0-15 | .02 Max. | 5508 | 9508 | 3.25 | 8508 | 3.45 |
| 0-30 | .02 Max. | 5505 | 9505 | 3.35 | 8505 | 3.55 |
| 0-50 | .02 Max. | 5506 | 9506 | 3.75 | 8506 | 3.95 |

NO ZERO ADJUSTER ON AC METERS, EXCEPT ON MODEL 850.
* For zero adjuster add 35c to price and Z to stock number.

PRICES NET, F.O.B., New Haven, Conn. Individually Boxed, Domestic Packed, Effective September 1, 1962

DC VOLTMETERS

| RANGE | RESIST. Approx. Ohms | MODEL 550* Stock No. | MODEL 950* Stock No. | Net Each | MODEL 850* Stock No. | Net Each |
|-----------|----------------------|----------------------|----------------------|----------|----------------------|----------|
| 0-1 | 10 | 5101 | 9101 | \$2.15 | — | — |
| 0-3 | 93 | 5102 | 9102 | 2.15 | 8102 | \$2.35 |
| 3-0-3 | 250 | 5103 | 9103 | 2.15 | — | — |
| 0-5 | 300 | 5104 | 9104 | 2.15 | 8104 | 2.35 |
| 0-6 | 390 | 5105 | 9105 | 2.15 | — | — |
| 0-8 | 600 | 5106 | 9106 | 2.15 | 8106 | 2.35 |
| 0-10 | 880 | 5107 | 9107 | 2.15 | 8107 | 2.35 |
| 0-15 | 2370 | 5108 | 9108 | 2.15 | 8108 | 2.35 |
| 0-20 | 3500 | 5121 | 9121 | 2.15 | 8121 | 2.35 |
| 0-25 | 1240 | 5109 | 9109 | 2.45 | 8109 | 2.65 |
| 0-25H** | 5800 | 5110 | 9110 | 2.85 | 8110 | 3.05 |
| 0-50 | 2540 | 5122 | 9122 | 2.40 | 8122 | 2.60 |
| 0-50H** | 11800 | 5111 | 9111 | 3.10 | 8111 | 3.30 |
| 0-75 | 3740 | 5112 | 9112 | 2.45 | — | — |
| 0-100 | 5140 | 5113 | 9113 | 2.45 | — | — |
| 0-100H** | 23800 | 5114 | 9114 | 3.00 | — | — |
| 0-150 | 7540 | 5115 | 9115 | 2.60 | 8115 | 2.80 |
| 0-150H** | 34800 | 5116 | 9116 | 3.25 | 8116 | 3.45 |
| 0-300H*** | 74800 | 5117 | 9117 | 3.35 | 8117 | 3.55 |
| 0-500H*** | 124800 | 5118 | 9118 | 3.60 | 8118 | 3.80 |
| 0-750H*** | 184800 | 5119 | 9119 | 4.10 | — | — |

* For zero adjuster add 35c to price and Z to stock number.
 ** H denotes high resistance.
 † Supplied with external resistors.

AC VOLTMETERS

| RANGE | RESIST. Approx. Ohms | MODEL 550 Stock No. | MODEL 950 Stock No. | Net Each | MODEL 850* Stock No. | Net Each |
|---------|----------------------|---------------------|---------------------|----------|----------------------|----------|
| 0-4 | 11 | 5401 | 9401 | \$3.40 | — | — |
| 0-6 | 15.8 | 5402 | 9402 | 3.40 | — | — |
| 0-10 | 27 | 5403 | 9403 | 3.40 | 8403 | \$3.60 |
| 0-15 | 32.3 | 5404 | 9404 | 3.40 | 8404 | 3.60 |
| 0-25 | 53 | 5412 | 9412 | 3.40 | 8412 | 3.60 |
| 0-50 | 96 | 5405 | 9405 | 3.75 | 8405 | 3.95 |
| 0-150 | 100 | 5406 | 9406 | 3.85 | 8406 | 4.00 |
| 0-300** | 100 | 5407 | 9407 | 4.35 | 8407 | 4.55 |
| 0-600** | 100 | 5408 | 9408 | 4.90 | — | — |
| 0-750** | 100 | 5409 | 9409 | 5.50 | — | — |

NO ZERO ADJUSTER ON AC METERS, EXCEPT ON MODEL 850
 *For zero adjuster add 35c to price and Z to stock number.
 **Supplied with external resistors.

RESISTANCE METERS

| RANGE | MODEL 550* Stock No. | MODEL 950* Stock No. | Net Each | MODEL 850* Stock No. | Net Each | |
|--------|----------------------|----------------------|----------|----------------------|----------|--------|
| Ohms | — | — | — | — | — | |
| 10,000 | 4.5** | 5701 | 9701 | \$2.75 | 8701 | \$2.95 |

*For zero adjuster add 35c to price and Z to stock number.
 **Requires 3 flashlight cells for resistance readings but does not require resistor for voltage readings.

VU and S METERS

VU METERS—To measure volume levels in audio transmission circuits, range -20 to +3 VU, red and black scale; AC rectifier type; pointer normally at -20 VU; 1400 Ohms ±5% internal resistance; see Bulletin VUS-62 for application circuitry.

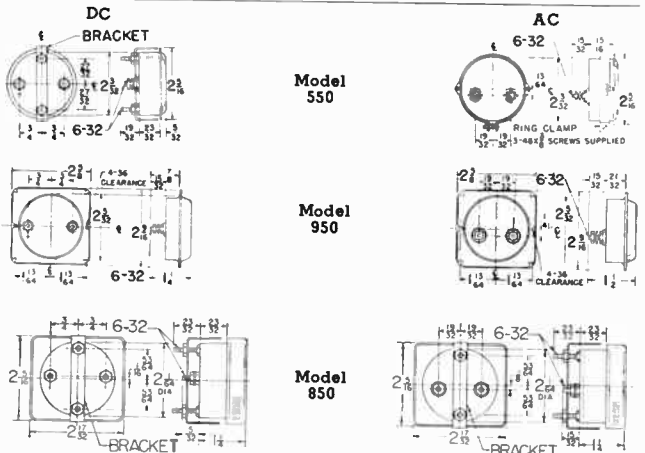
STOCK NO. 8801Z, 850 series case, zero adjuster included; as illustrated on preceding page \$5.85

STOCK NO. 3801, 350 series edgewise case; zero adjuster not available. \$5.50

S METERS—To measure relative signal strength; range 0-40 db; black and red scale; basic movement is 0.5 Ma. DC with 1000 ohms internal resistance ±5%; for application notes and typical circuits, see Bulletin VUS-62.

STOCK NO. 3333, 350 Series edgewise case, as illustrated, pointer normally at 40 \$3.45

STOCK NO. 8333*, 850 Series case, pointer normally at zero \$3.35
 * For zero adjuster, add 35c to price and Z to stock number.



Shurite®

EDGEWISE

MODEL 350

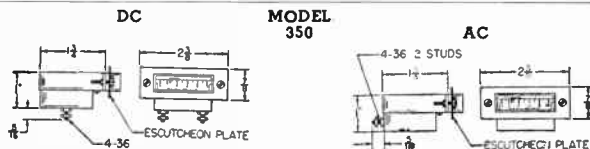
Including S and VU Meters

STOCK NO. 3333



The crystal polystyrene front of the Model 350 series adds beauty to panel designs and the 1.2" scale length offers easy reading. Requires less than half the panel space of other Shurite meters. Horizontal mounting; weight under 2 ozs.; accuracy well within ±5%; black escutcheon plate supplied.

| RANGE | Resistance Approx. Ohms | Stock No. | Net Each |
|-----------------------|-------------------------|-----------|----------|
| 0-1 DC Milliamperes | 500 | 3300 | \$3.70 |
| 0-5 DC Milliamperes | 3100 | 3302 | 3.45 |
| 0-10 DC Milliamperes | 800 | 3303 | 3.45 |
| 0-25 DC Milliamperes | 150 | 3305 | 3.35 |
| 0-50 DC Milliamperes | 25 | 3306 | 3.35 |
| 0-100 DC Milliamperes | 8 | 3307 | 3.35 |
| 0-200 DC Milliamperes | 3 | 3309 | 3.35 |
| 0-300 DC Milliamperes | 2 | 3310 | 3.35 |
| 0-500 DC Milliamperes | 1.5 | 3312 | 3.35 |
| 0-100 AC Milliamperes | 32 | 3603 | 3.45 |
| 0-3 DC Amperes | .02 Max. | 3202 | 3.35 |
| 0-5 DC Amperes | .02 Max. | 3203 | 3.35 |
| 0-10 DC Amperes | .02 Max. | 3205 | 3.45 |
| 10-0-10 DC Amperes | .02 Max. | 3213 | 3.55 |
| 0-5 AC Amperes | .02 | 3503 | 3.45 |
| 0-5 DC Volts | 725 | 3104 | 3.35 |
| 0-10 DC Volts | 850 | 3107 | 3.35 |
| 0-15 DC Volts | 1400 | 3108 | 3.35 |
| 0-15 AC Volts | 728 | 3404 | 3.45 |
| 0-150 AC Volts | 14000 | 3406 | 4.10 |
| VU Meter -20 to +3 VU | 1400 | 3801 | 5.50 |
| S Meter 0-40 db | 1000 | 3333 | 3.45 |



POCKET TYPE METERS

Please ask for Catalog 94-D which describes 11 types of battery testers (pocket meters). Their stock numbers begin with the digit 4. Typical is Stock No. 4151, 0-7 DC volts, approx. res. 670 ohms. \$2.50

3-HOLE MOUNTING ADAPTER

To adapt any Model 550 (round) meter for 3-hole flange mounting (former Model 650) attach this 2 3/4" flange from front of panel Model 5-A, standard black with hardware, each \$0.18

HANDY AC-DC LINE VOLTAGE TESTER

Stock 5406-LT — To use this highly popular line tester, push in the plug and read line voltage, then plug in the TV set, iron, toaster, washer, air-conditioner, or other appliance, and note the new reading. Find (and demonstrate) voltage drop or inadequate wiring. Cord is permanently attached to metal-cased meter which tests single outlets without accessories. Range 0-150 Volts. Standard package of 6 individually boxed meters includes attractive counter display at no extra charge. Per meter \$4.10



IMPORTANT — HOW TO ORDER

For all standard models, give (1) Model Number, (2) Range, (3) Stock Number.

ZERO ADJUSTERS (Z) For DC meters, available only on Models 550, 850, and 950. For AC meters, available on Model 850. When ordering, add Z to stock number, as 5101Z, and 35¢ to price.

PANEL CALIBRATION (S) Meters are calibrated for non-magnetic panels. If steel panel mounting, specify thickness and overall size of panel; add S to stock number, as 5101-S.

SEE YOUR DISTRIBUTOR Authorized Shurite distributors of electronic parts carry most models and can obtain your other needs promptly.

Shurite® METERS
 New Haven 8, Conn.

PRICES NET, F.O.B., New Haven, Conn. Individually Boxed, Domestic Packed, Effective September 1, 1962

Simpson

VOMs and ADAPTERS

WORLD FAMOUS 260[®] VOM

- Converts to 9 Different Testers (See Adapters Below)
- Over a Million Purchased . . . Recognized Reliability
- 20,000 opv, DC; 5,000 opv, AC
- Adjust-A-Vue Handle

- **Polarity Reversing Switch:** Makes DC measurements easier and faster . . . no lead reversal.
- **50 Microampere-250 Millivolt Range:** Gives more sensitive measurements.
- **Easier-to-Read Scales:** Black and red scales have been spread out for faster reading, less chance of error!
- **Less Circuit Loading:** Sensitivity of AC voltage ranges increased to 5000 OHMS-PER-VOLT!
- **Popular DBM Ranges:** -20 DBM to +50 DBM, one milliwatt in 600 ohms!
- **Improved Frequency Response in AC Measurements:** 5 to 500,000 cycles per second!
- **Full-Wave Bridge Rectifier System:** Provides more accurate AC voltage measurements!

VOLTAGE RANGES

DC: 0-250mv; 0-2.5v; 0-10v; 0-50v; 0-250v; 0-1000v; 0-5000v.
AC: 0-2.5v; 0-10v; 0-50v; 0-250v; 0-1000v; 0-5000v.

AF: 0-2.5v; 0-10v; 0-50v; 0-250v.

DB (1MW—600Ω): -20 to +10 db; -8 to +22 db; +6 to +36 db; +20 to +50 db.

CURRENT RANGES

DC: 0-50ua; 0-1ma; 0-10ma; 0-100ma; 0-500ma; 0-10 amps.

RESISTANCE RANGES

0-2000Ω (12Ω ctr.); 0-200KΩ (1200Ω ctr.); 0-20 meg. (120KΩ ctr.)

FREQUENCY RESPONSE

Essentially flat through 50,000 cps.

ACCURACIES

DC Volts ±3% of full scale. DC current ±3% of full scale.

AC Volts ±3% of full scale.

DC resistance ±3% of arc length.

Size: 5¼" x 7" x 3⅛" . . . Net Wt.: 3½ lbs.

Complete with test leads No. 7500 and operator's manual.

\$48.95

260 in roll top safety case, 260RT

\$54.95

260[®] VOM



*Trademark

ACCESSORIES

| Leads, Probes and Cases | Part No. | Price |
|-----------------------------------|----------|---------|
| Banana plugs and alligator clip.. | 7500 | \$ 2.10 |
| Banana plugs and test prods..... | 7538 | 2.50 |
| 10,000v High voltage probe..... | 0497 | 10.20 |
| 25,000v High voltage probe..... | 0247 | 11.50 |
| 50,000v High voltage probe..... | 0248 | 12.50 |
| Leather Carrying Case..... | 1818 | 8.50 |
| Ever-Redy Carrying Case..... | 4236 | 9.75 |
| Roll top safety case only, 260-3 | 0249 | 9.95 |

1½% VOM — MODEL 270. Converts to Different Testers with Adapters Below

Excellent Repeatability

Greater Accuracy Predictable Over a Wide Temperature Range

DC Accuracy, 1½% * Full Scale

AC Accuracy, 2% * Full Scale

Resistance Accuracy, ±1½° of Arc

*At an Ambient Temperature of 77°F

RANGES

DC Voltage (20,000 ohms-per-volt): 0-250 mv; 0-2.5 v; 0-10 v; 0-50 v; 0-250 v; 0-1000 v; 0-5000 v.

AC Voltage (5000 ohms-per-volt): 0-2.5 v; 0-10 v; 0-50 v; 0-250 v; 0-1000 v; 0-5000 v.

AF Output Voltage (With .1 microfarad internal series capacitor): 0-2.5 v; 0-10 v; 0-50 v; 0-250 v.

Volume Level in Decibels (Zero DB equal to 1 milliwatt across a 600 ohm line): -20 to +10 DB; -8 to +22 DB; +6 to +36 DB; +20 to +50 DB.

DC Resistance: 0-2000 ohms (12 ohms center); 0-200,000 ohms (1200 ohms center); 0-20 meg-ohms (120,000 ohms center).

Direct Current: 0-50 mu a; 0-1 ma; 0-10 ma; 0-100 ma; 0-500 ma; 0-10 amp.

MODEL 270, complete with test leads and Operator's Manual **\$59.95**

MODEL 270 RT, in Roll-Top Case **65.95**
See accessories under 260 VOM above.

270 VOM



ADJUST-A-VUE
HANDLE

PLUG-IN ADAPTERS FOR 260[®] AND 270 VOMs ABOVE

Transistor Testers, Model 650 **\$26.95**
DC VTVM, Model 651 **32.95**
Temperature Tester, Model 652 **38.95**
AC Ammeter, Model 653 **18.95**
Battery Tester, Model 656 **19.95**

Microvolt Attenuator, Model 655 **\$18.95**
Audio Wattmeter, Model 654 **18.95**
Milliohmmeter, Model 657 **39.95**
DC Ammeter, Model 661 **17.95**



See your distributor or write for Bulletin 2064 giving specifications

WRITE ON LETTERHEAD FOR GENERAL CATALOG 18 — DEPT. V

SIMPSON ELECTRIC CO. • CHICAGO, ILLINOIS

Simpson

VOMs and TESTERS

AC/DC VOLT-OHM-MILLIAMMETERS AND TESTERS*



MODEL 269 VOM
140,000 opv



MODEL 267 VOM
20,000 opv



MODEL 268 VOM
20,000 opv



MODEL 262 VOM
20,000 opv



MODEL 355
VOLT-OHMMETER

MODEL 269

VOLTAGE RANGES

DC: 1.6v; 8v; 40v; 160v; 400v; 1600v; 4000v.

AC: 3v; 8v; 40v; 160v; 800v.

AF: 3v; 8v; 40v; 160v.

DB: (1MW-600Ω): -12 to +45.5 db in four ranges.

CURRENT RANGES

DC: 0-16ua; 0-160ua; 0-1.6ma; 0-16ma;
0-160ma; 0-1.6 amps; 0-16 amps.

RESISTANCE RANGES

0-2KΩ (18Ω ctr.); 0-20KΩ (180Ω ctr.); 0-200KΩ
1800Ω ctr.); 0-2 megΩ (18KΩ ctr.); 0-20 megΩ
(180KΩ ctr.); 0-200 megΩ (1.8 megΩ ctr.).

FREQUENCY RESPONSE

Essentially flat through 50 kc.

ACCURACIES

DC Volts ±3% of full scale. AC Volts ±5%
of full scale. DC Resistance ±3% of arc
length.

Complete with test leads No. 8463, 4000 V
DC probe extension and operator's manual.

\$89.95

MODEL 267

DC Volts: 0-.25/2.5/10/50/250/500/1000.

AC Volts: 0-2.5/10/50/250/500/1000.

DC Microamperes: 0-50.

DC Milliamperes: 0-1/10/100/500.

DC Amperes: 0-10.

DB Scale: -20 +10, 1 mw, 600 ohms.

Output Ranges: AC volt ranges to 250 V with
.1/mfd condenser in series.

*See "ACCESSORIES" Section for carrying cases, etc.

RESISTANCE RANGES

0-2000Ω (12Ω ctr.); 0-200KΩ (1200Ω ctr.); 0-20
meg. (120KΩ ctr.)

FREQUENCY RESPONSE

2.5/10 VAC 20 cps — 500 KC ±5%
50 VAC 20 cps — 150 KC ±5%

ACCURACY

DC V, Milliamperes, Amperes ±3% F.S.; DC
Mics ±2% F.S.; AC Volts ±5% F.S.; Ohms
±3% of linear arc.

Complete with test leads No. 7500 and
operator's manual **\$54.95**

MODEL 262

VOLTAGE RANGES

DC: 1.6v; 8v; 40v; 160v; 400v; 1600v; 4000v.

AC: 3v; 8v; 40v; 160v; 800v.

AF: 3v; 8v; 40v; 160v.

DB: (1 MW-600Ω): -12 to +45.5 db in four
ranges.

CURRENT RANGES

DC: 80ua; 160ua; 1.6 ma; 16 ma; 1.6 amps;
16 amps.

RESISTANCE RANGES

DC: 0-500Ω (4.5Ω ctr.); 0-5KΩ (45Ω ctr.); 0-50KΩ
(450Ω ctr.); 0-500KΩ (4,500Ω ctr.); 5 megΩ
(45Ω ctr.); 0-50 megΩ (450KΩ ctr.).

FREQUENCY RESPONSE

Essentially flat through 50 kc.

ACCURACIES

DC Volts ±3% of full scale. AC Volts ±5%
of full scale. DC Resistance ±3% of arc length
Complete with test leads No. 8463, 4000 V
DC probe extension and operator's manual.

\$69.95

MODEL 268

AC Volts: 0-3/12/60/300/600/1200

DC Volts: 0-3/12/60/300/600/1200

DC Microamperes: 0-60.

DC Milliamperes: 0-1.2/12/120

DC Amperes: 0-12

DB Scale: -12 +11, 1 mw, 600 ohms

OUTPUT RANGES

AC Volt: Ranges to 300 V with .1/mfd con-
denser in series

RESISTANCE RANGES

0-2000Ω (12Ω ctr.); 0-200KΩ (1200Ω ctr.); 0-20
meg (120KΩ ctr.)

FREQUENCY RESPONSE

2.5/10 VAC 20 cps — 500 kc ±5%; 50 VAC
20 cps — 150 kc ±5%

ACCURACY

DC V, Milliamperes, Amperes ±3% F.S.; DC
Mics ±2% F.S.; AC Volts ±5% F.S.; Ohms
±3% of linear arc.

Complete with test leads No. 7500
and operator's manual

\$54.95

MODEL 355, MIDGETESTER®

10,000 Ohms per Volt AC-DC

Size: 2 3/4" x 4 1/2" x 1"

Complete with test leads and
operator's manual

\$34.95

(WRITE FOR BULLETIN 2064)

HAND-SIZE MICROTTESTERS — MEASURE ONLY 3" x 5 7/8" x 2 1/2"

AC-DC Volt-Ohm-Milliammeter,
Model 240 — 1000 ohms per
volt, AC and DC.

AC Volts: 15, 150, 750, 3000.

DC Volts: 15, 75, 300, 750, 3000.

DC Milliamperes: 15, 150, 750.

Ohms: (4-3000 (center scale 30);

0-300,000 (center scale 3000).
With Leads\$31.95



AC-DC Volt-Ohm-Milliammeter, Model 230 —

AC Volts: 10, 250, 1000 (400 ohms per volt)

— DC Volts: 10, 50, 250, 1000 (1000 ohms

per volt) — DC Milliamperes: 10, 50, 250 —

Ohms: 0-1000, 0-100,000 — With Leads.....30.95

DC Ammeter, Model 375 — 0-1, 2.5, 5, 10, 25

amps21.95

DC Milliammeter, Model 373 — 0-1, 5, 10, 25,

50, 100, 250, 1000 ma 21.95

DC Microammeter, Model 374 — 0-50, 100,

250, 500, 1000 ua24.95

AC Ammeter, Model 370 — 0-1, 0-2.5, 0-5,

0-10, 0-25 amps22.95

AC Milliammeter (Self-contained transformer),

Model 378 — 0-5, 25, 100, 250,

1000 ma24.95

DC Voltmeter (Res. 1000 ohms per volt), Model

377 — 0-1, 2.5, 5, 10, 25, 50, 100, 250, 500,

1000 DC volts22.95

Millivoltmeter, Model 387 — 10, 30, 100, 1000

mv; with leads and manual.....29.95

AC Voltmeter (Rec. Type — 1000 ohms per

volt), Model 376 — 0-5, 10, 25, 50, 100, 250,

500, 1000 AC volts21.95

AC Voltmeter, Model 371 — 0-150, 0-300,

0-600 volts22.95

Ohmmeter, Model 372 — 0-500 ohms (5 ohms

center); 0-5000 ohms (50 ohms center);

0-50,000 ohms (500 ohms center); 0-500,000

ohms (5,000 ohms center); 0-5 meg. (50,000

ohms center), 0-50 meg. (500,000 ohms center)

— with Leads29.95

Low Ohmmeter, Model 362 — 0-5, 0-25 ohms,

with Leads and Manual24.95

AC Volt-Amp-Wattmeter, Model 390 — Volts:

0-150, 300 — Amps: 0-0.3, 15 — Watts: 0-300,

600, 1500, 3000 — with break-in plug and

Leads48.95

AC-DC Volt-Wattmeter, Model 391 — AC or

DC — Volts: 0-130, 0-260 — Watts: 0-1500,

0-3000 — with Cord and Plug43.95

AC-DC Volt-Wattmeter, Model 392 — AC or

DC — Volts: 0-130, 0-260 — Watts: 0-1000,

0-5000 — with Cord and Plug43.95

Battery Tester, Model 379 — (Separate arcs for

Radio A Batteries, Hearing Aid A Batteries,

and for all B Batteries) — with Leads29.95

WRITE ON LETTERHEAD FOR GENERAL CATALOG 18 — DEPT. V

SIMPSON ELECTRIC CO. • CHICAGO, ILLINOIS



VTVMs and STANDARDS

VACUUM TUBE VOLT-OHM-MILLIAMMETERS*

MODEL 311 VOLTAGE RANGES

DC: 0-1.5v; 5v; 15v; 50v; 150v; 500v; 1500v.
(22 meg Ω input impedance)
AC: 0-1.5v; 5v; 15v; 50v; 150v; 500v; 1500v;
(RMS) (Min. 2.2 meg Ω input impedance)
PP: 0-4v; 14v; 40v; 140v; 400v; 1400v; 4000v.
(Min. 2.2 meg Ω input impedance)
AF: 0-1.5v; 5v; 15v; 50v; 150v; 500v; 1500v.
(30 cycles to 100Kc \pm 5%)
RF: 1.5v; 5v; 15v; 50v; 150v.
with probe (50 cycles to 100mc, 0-150 VRMS)

RESISTANCE RANGES

1K Ω (10 Ω center); 10K Ω (100 Ω center); 100K Ω (1K Ω center); 1 meg Ω (10K Ω center); 10 meg Ω (100K Ω center); 100 meg Ω (1 meg Ω center); 1000 meg Ω (10 meg Ω center).

FREQUENCY RESPONSE

\pm 5% to 100 kc (with RF probe, usable to 250 mc)

LINE VOLTAGE

105/125 v, 50/60 cycles.

ACCURACIES

DC Volts: \pm 3% of full scale.
AC Volts: \pm 5% of full scale.
DC Resistance: \pm 3% of arc length (resistance).
Model 311 with AC/DC ohms probe No. 0734,
ground lead No. 0733 and operator's manual.

\$69.95

MODEL 303 VOLTAGE RANGES

AC-DC: 1.2v; 12v; 60v; 300v; 1200v.
AF: 1.2v; 12v; 60v.

MODEL 311
AC-DC



MODEL 303
AC-DC



MODEL 715
AC ONLY



MODEL 715 RANGES

Volts: 0-.01/.03/.1/.3/1/3/10 30 100 300
rms.
Decibels: Total Range -52 to +52 DBM.
Zero DBM: 1 millivolt in 600 ohms.
Scale Markings: -12 to +2 DB.

ACCURACY

\pm 5% of full scale.

TESTER SENSITIVITY

10 millivolts full scale on lowest range.

INPUT IMPEDANCE

Minimum 1 meg @ 1 KC shunted by 25 uuf.

INTERNAL MULTIPLIERS

\pm 1% precision resistors.

FREQUENCY RESPONSE

10 cps to 400 KC \pm 1 DB.

INPUT POWER REQUIREMENTS

110 to 125 VRMS, 50/60 cps @ 10 watts.
Complete with operator's manual and
shielded input cable. **\$69.95**

*Also See "ACCESSORIES" Section.

RF: 20 volts maximum. (With RF Probe)
DB: -20 to +63 db in five ranges.

RESISTANCE RANGES

1K Ω (10 Ω center); 100K Ω (1000 Ω center);
1 meg Ω (10K Ω center); 10 meg Ω (100K Ω center);
1000 meg Ω (10 meg Ω center).

INPUT IMPEDANCE

10 megohms (all ranges) on DCV; 275K ohms
shunted by 210 uuf on ACV.

FREQUENCY RESPONSE

AF: Flat to 100 Kc on the three low AC ranges
RF: 20 Kc to 100 Mc (with RF probe)

LINE VOLTAGE

105/125 v, 50/60 cycles.

ACCURACIES

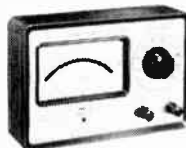
DC Volts: \pm 3% of full scale.
AC Volts: \pm 5% of full scale.
DC Resistance: \pm 3% of arc length (resistance).

Model 303 with DCV probe No. 0067, ACV-
ohm probe No. 0068, ground lead No. 0069
and operator's manual. **\$73.95**

Model 303RT (in roll top safety case) **\$82.95**

PORTABLE STANDARDS

NEW
SERIES 1700
MULTI-RANGE



MODELS
9 & 10



MODEL
880



Accuracy: Model 9, 1/2 of 1% of Full Scale @ 77°F. Models 10 and 880, 1% of Full Scale @ 77°F. 4 1/2" Hand drawn scale, mirror; knife-edge pointer.

| SPECIFICATIONS | DC Voltmeter MODEL 1700 | DC Ammeter MODEL 1701 | DC Milliammeter MODEL 1702 | DC Microammeter MODEL 1703 | DC Millivoltmeter MODEL 1704 |
|----------------------|---|-----------------------------------|--|-------------------------------|---------------------------------|
| RANGES | 0-1.5, 3, 7.5, 15, 30, 75, 150, 300, 750, 1500 | 0-0.75, 1.5, 3.0, 7.5, 15, 30, 75 | 0-1.5, 3, 7.5, 15, 30, 75, 150, 300, 750, 1500 | 0-75, 150, 750, 1500 | 0-30, 75, 150, 750, 1500 |
| ACCURACY | 1/2 of 1% of Full Scale in Horizontal Position @ 25°C | | | | |
| LOSS (Max.) | 1 milliampere | 45 mv (approx.) | 50 to 150 mv | .160-.578 Volts | 5 ma |
| EXT. TEMP. INFLUENCE | 1/4 of 1% | 1/4 of 1% | 1/4 of 1% | 1/4 of 1% | 1/4 of 1% |
| DIELECTRIC TEST | 3000 V. RMS | 3000 V. RMS | 3000 V. RMS | 3300 V. RMS | 3300 V. RMS |
| MIRROR SCALE LENGTH | 5.5" | 5.5" | 5.5" | 5.5" | 5.5" |
| DAMPING | Magnetic | Magnetic | Magnetic | Magnetic | Magnetic |
| METER MOVEMENT | Deep Core Magnet Meter Movement (1-5/16") | | | | |
| SENSITIVITY | 1000 Ω /V | — | — | — | 200 Ω /V |
| ZERO ADJUSTER | External | External | External | External | External |
| SIZE | 1 13/16" x 7 3/8" x 3 1/4" | 1 13/16" x 7 3/8" x 3 1/4" | 1 13/16" x 7 3/8" x 3 1/4" | 1 13/16" x 7 3/8" x 3 1/4" | 1 13/16" x 7 3/8" x 3 1/4" |
| PRICE | \$160.00 | \$155.00 | \$135.00 | \$140.00 | \$150.00 |

Made to Conform to ASA C 39.1-1959
MODELS 9 & 10 — D'ARSONVAL (DC) AND IRON VANE (AC)

| SINGLE RANGE | | MULTIPLE RANGE | |
|----------------------|-------------|-------------------|-------------|
| DC Model 9 | AC Model 10 | DC Model 9 | AC Model 10 |
| VOLTMETERS | | | |
| 50 \$ 49.50 | \$43.95 | 50 \$ 55.00 | — |
| 100 49.50 | 43.95 | 150-300 60.45 | \$55.00 |
| 150 49.50 | 43.95 | 300-750 66.00 | 60.45 |
| 300 55.00 | 49.50 | 15-150-300 63.75 | — |
| | | 150-300-600 66.00 | 60.45 |
| MILLIAMMETERS | | | |
| 1 57.15 | — | 10-100 55.00 | — |
| 50 49.50 | 43.95 | 25-250 55.00 | — |
| 100 49.50 | 43.95 | 100-500 55.00 | — |
| 500 49.50 | 43.95 | — | — |
| AMMETERS | | | |
| 5 49.50 | 43.95 | 2.5-5 55.00 | — |
| 15 49.50 | 43.95 | 5-10 55.00 | — |
| 30 49.50 | 43.95 | 2.5-10-25 60.45 | — |
| 50 49.50 | 43.95 | 10-25-50 60.45 | — |
| 100 52.50 | — | — | — |
| MICROAMMETERS | | | |
| 5 71.55 | — | — | — |
| 100 67.00 | — | — | — |
| 200 64.95 | — | — | — |

MODEL 880 — AC-DC DYNAMOMETER TYPE METER MOVEMENT
WATTMETERS, SINGLE PHASE — Maximum Volts 150-300

| Amperes | Watts Range | | Price |
|---|-------------|---------------|-------------|
| | Normal | Maximum | |
| 1 | 1.5 | 100 | 200 \$60.45 |
| 2 | 3.0 | 200 | 400 60.45 |
| 5 | 7.5 | 500 | 1000 60.45 |
| 10 | 15 | 1000 | 2000 60.45 |
| 20 | 30 | 2000 | 4000 66.00 |
| 50 | 75 | 5000 | 10000 66.00 |
| WATTMETERS, DOUBLE CURRENT RANGE — Maximum Volts 150-300 | | | |
| 2.5- 5 | 3.75- 7.5 | 250- 500-1000 | \$76.95 |
| 5-10 | 7.5- 15.0 | 500-1000-2000 | 76.95 |
| VOLTMETERS — Single and Multiple Ranges | | | |
| Maximum Volts | | Price | |
| 0-150 | | \$60.45 | |
| 0-150-300 | | 71.55 | |
| 0-75-150-300 | | 76.95 | |
| 0-150-300-600 | | 76.95 | |

WRITE ON LETTERHEAD FOR GENERAL CATALOG 18 — DEPT. V

SIMPSON ELECTRIC CO. • CHICAGO, ILLINOIS

Simpson

TEST EQUIPMENT

LABORATORY TYPE TEST EQUIPMENT

Model 1900



NEW DC DECADING VOLTMETER MODEL 1900

- **Voltage Range:** 1 through 1000 Volts D.C.
- **Voltage Accuracy:** p/m .1% of reading at 25°C; p/m .25% of reading from 15°C to 35°C
- **Accuracy of Calibration Source:** p/m .05%
- **Accuracy of Decades:** p/m .05%
- **Sensitivity:** 1000 ohms per volt
- **External Power Requirements:** none
- **Internal Power Requirements:** 1-45 volt battery Eveready No. 482 or equivalent (used for the calibration circuit only)
- **Battery Life:** based on two calibrations per day, approx. one year
- **Size:** 17" x 9" x 6 1/2" **Weight:** 16 1/2 lbs. (net)

Price \$345.00



Model 2600

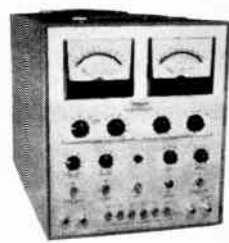
SELF-POWERED LAB STANDARD CALIBRATOR MODEL 2600

A Self-Powered Calibrator for Electrical Instrument Maintenance and High Accuracy Testing.

Two terminal connections cover all 49 ranges for unusually fast operation. DC accuracy is $\pm 0.5\%$ F.S.; AC, $\pm 0.75\%$ F.S. (at 77°F, 25°C). Separate meters (self shielded movements) for DC and AC readings. **Size:** 15" x 31" x 15". **Power Requirement:** Approx. 50 watts. **Net Wt:** 132 lbs. @ 117.5 volts, 60 cps.

Price \$1620

Model 2620



PULSE GENERATOR MODEL 2620

No Other Unit Offers Such Accuracy, Versatility, and Set-Up Speed Within This Price Range.

Twin meters read pulse repetition frequency and pulse duration simultaneously. Rise time is 0.02 microseconds; decay time, 0.03 microseconds. Pulse duration, continuously variable from 0.1 to 1000 microseconds. Jitter, less than 0.005 microseconds. Pulse repetition rate, continuously variable from 10 to 1000,000 pps in four ranges. **Size:** 15 1/2" x 13 1/4" x 21". **Net Wt:** 66 lbs. 110v., 50/60 cycles.

Price \$625

WRITE FOR ADDITIONAL SPECIFICATIONS

Model 466
General Purpose ScopeModel 458
Color ScopeModel 430
Color Bar GeneratorModel 434A
White Dot GeneratorModel 383A
Capacitor Leakage Tester

MODEL 466 GENERAL PURPOSE SCOPE

Frequency Response of Vertical Amplifier: From 15 cycles/sec to 100 Kc/sec, flat within ± 1 db; 6 db down at 250 Kc/sec; usable to 1 Mc/sec.

Maximum Vertical Deflection Sensitivity: 30 Millivolts RMS/inch.

Frequency Response of Horizontal Amplifier: From 15 cycles/sec to 20 Kc, flat within ± 1 db; 6 db down at 100 Kc/sec.

Maximum Horizontal Deflection Sensitivity: 0.7 volt RMS/inch.

Z-Axis Sensitivity (Voltage Required to Extinguish Beam): 20 volts RMS.

Calibrating Voltage (at 117.5 VAC power source): 1 volt P-P $\pm 10\%$.

Maximum Input Voltage: 400 volts peak.

Input Resistance: 0.1 Meg (at atten. x 1); 0.5 Meg (at atten. x 100).

Input Capacitance: 40 uuf (at atten. x 1); 35 uuf (at atten. x 100).

Sawtooth Sweep Range: 15 cycles/sec to 80 Kc/sec.

Size: 7 7/8" x 12 1/4" x 16 1/8". **Net Wt:** 19 lbs. For use on 110 volts, 60 cycles.

Complete with input cable No. 0100 and operator's manual.

\$149.95

MODEL 458 COLOR SCOPE

- 7" Cathode Ray Tube.
- Wide band operation, the frequency response is flat within ± 1.0 db to 4.5 Mc. Faithfully displays COLOR BURST frequency with a sensitivity greater than 40 Mv rms per inch of vertical deflection.

- Narrow band operation, the frequency response is flat within ± 2 db from 10 cycles to 300 Kc with a sensitivity greater than 15 Mv rms per inch.

- Good square wave response provides accurate representation of sync pulses and composite wave-form pattern for trouble-shooting video, sync, and sweep circuits.

- Horizontal sweep, to 250 Kc, for expansion of high frequency wave-form detail and color burst.

- Vernier and Compensated Decimal Step Attenuator for better signal controls.

- Provision for Intensity Modulation of CRT.
- 1 volt peak calibrating voltage.

Line Voltage: 105/125v, 50/60 cycle.
Size: 11" x 16 1/2" x 14 1/2". **Weight:** 29 lbs.

Complete with operator's manual.

\$249.95

MODEL 430 COLOR BAR GENERATOR

- 100% Saturated NTSC Signals • Outputs pictured on a single, master control... a color print of the signal output is featured at each position on the master control • Line Voltage 105/125 volts, 60 cycle only.

Outputs—Y; chroma; color bar (8 bars simultaneously); R-Y; B-Y; R-Y and B-Y simultaneously; I; Q; I and Q simultaneously; G-Y at 90°; sync and burst; horizontal sync; high level 3.58 megacycle output; high level modulated rf output; positive or negative video output. 4.5 Megacycle (crystal controlled) marker for proper tuning.

Chroma Level Switch—0 db for checking older style receivers and some current models; -6 db for video checks of newer receivers using vestigial color sideband alignment; -15 db for checking color sync lock under weak signal conditions. Variable chroma control position for other chroma levels.

Size: 19 1/4" x 17 1/2" x 14". **Shpg. Wt:** 26 lbs. Complete with operator's manual and test leads.

\$395.00

MODEL 434A WHITE DOT GENERATOR

- White dot pattern with variable dot size (from 1 to 8 scanning lines, with corresponding dot widths).
- Variable dot number (from 6 to 12 horizontal dots, and 6 to 14 vertical dots).

Horizontal and vertical sync pulses provided with adjustable vertical sync which can be operated at line frequency or off-line frequency. Also operates as a hum-check control. Modulated r-f output is available, operating on fundamentals from Channel 2 to Channel 6. Positive or negative video output is also available. **Line Voltage:** 105/125v, 60 cycles, 45 watts.

Complete with operator's manual.

\$149.95

MODEL 383A CAPACITOR LEAKAGE TESTER

- Measures the leakage resistance of defective paper, mica, or ceramic capacitors. Indicates directly the capacitance of good paper, mica, or ceramic capacitors over a range of 10.0 mmf to 10.0 mf.

Pulse technique detects many marginal capacitors. All measurements are made under load conditions. No adjusting of a bridge circuit and balancing controls. **Line Voltage:** 105/125v, 60 cycle only.

Complete with test leads and operator's manual.

\$89.95

WRITE ON LETTERHEAD FOR GENERAL CATALOG 18—DEPT. V

SIMPSON ELECTRIC CO. • CHICAGO, ILLINOIS

Simpson

TEST EQUIPMENT and ACCESSORIES

TEMPERATURE TESTERS



Model 385-3L



Models 388-3L
and 389-3L

MODEL 385-3L
Accuracy: $\pm 1^\circ\text{F}$ about center scale; $\pm 2^\circ\text{F}$ at either end. For measuring temperatures from $+70^\circ\text{F}$ to as low as -50°F . Available in 3 lead model only. Supplied with one No. 0010 15 ft. thermistor probe and operator's manual. **\$33.95***

MODEL 388-3L — Therm-O-Meter
Measures Temperatures -50°F to $+1000^\circ\text{F}$. Accuracy: $+1\frac{1}{2}$ scale divisions. Standard models have combination Fahrenheit and Centigrade scale. Sensing Element: Thermocouple (Iron-Constantan). Supplied with internal battery and one 8' general purpose probe No. 0190, and operator's manual. Order additional

probes as required.
Model 388-3L: For three probes. **\$67.95***

MODEL 389-3L
This dual range instrument provides a means for temperature measurements between -50°F and $+100^\circ\text{F}$ and between $+100^\circ\text{F}$ and $+250^\circ\text{F}$. Accuracy is $\pm 2^\circ\text{F}$. Supplied with internal battery and one 15' thermistor type probe (No. 0010). Order additional probes as required.
Model 389-3L (for 3 leads). **\$62.95***

*See accessories below for other types of probe leads.

ACCESSORIES FOR SIMPSON TEST EQUIPMENT

CARRYING CASES

| For Models | Cat. No. | Price |
|--|----------|--------|
| 260, 270 — Leather | 1818 | \$8.50 |
| 260, 270, 303 — Ever-Redy Leather | 4236 | 9.75 |
| 262, 267, 268, 269, 388-3L, 389-3L — Ever-Redy Vinyl | 5262 | 9.95 |
| 385-3L — Ever-Redy Leather | 8073 | 8.75 |
| 391, 392 — Leatherette-Covered | 3413 | 5.95 |
| 355 — Ever-Redy Leather | 6355 | 3.95 |
| All Microtesters — Ever-Redy Leather | 4299 | 7.50 |
| All Microtesters — Leatherette-Covered | 3011 | 5.95 |
| Roll Top Safety Case For 260-2, 9, 10, 880's | 6192 | 9.95 |
| Roll Top Safety Case for 260-3, 270 | 0249 | 9.95 |
| Roll Top Safety Case For 303 | 6379 | 9.95 |

LEADS

| For Models | Cat. No. | Price |
|---|----------|--------|
| 260 Series 3, Banana plugs and alligator clip | 7500 | \$2.10 |
| 260 Series 3, 267, 268 Banana plugs and test prods. | 7538 | 2.50 |
| 355 Test prods. | 8600 | 1.85 |
| 385-3L, 389-3L Free Air Temperature Probe | 0330 | 6.45 |
| 385-3L, 389-3L, 15 ft. Thermistor lead | 0010 | 4.75 |
| 385-3L, 389-3L, 30 ft. Thermistor lead | 0216 | 5.55 |
| 385-3L, 389-3L, 50 ft. Thermistor lead | 0415 | 6.50 |
| 385-3L, 389-3L, 100 ft. Thermistor lead | 0416 | 8.70 |
| 385-3L, 389-3L, 150 ft. Thermistor lead | 0417 | 10.95 |
| 388-3L Rugged Service Lead (8 ft.) | 0496 | 5.25 |
| 388-3L General purpose thermocouple | 0190 | 4.95 |
| 388-3L Surface temperature thermocouple (300°F. Max.) | 0187 | 8.90 |
| 389-3L Surface temperature probe | 0084 | 4.95 |
| 1704 — 0.26Ω leads for Millivolt Standard; spade lugs both ends | 0105 | 2.95 |
| 466, 715 Input cable | 0100 | 2.85 |
| Test prods and elbow terminals 230/240/260-2/372 | 8381 | 2.50 |
| Test prods and spade terminals — all microtesters. | 8379 | 2.50 |
| Alligator clips and elbow terminals — 230/240/260-2/372 | 8375 | 1.75 |
| Alligator clips and spade terminals — all microtesters | 8376 | 1.75 |
| Combination test prods with removable alligator clips and elbow terminals 262/269 | 8463 | 2.30 |

PROBES — High Voltage Types

| For Models | Cat. No. | Price |
|------------------------|----------|---------|
| 221 (30,000v) | 0009 | \$12.55 |
| 260 Series 2 (25,000v) | 0007 | 10.75 |

For Models

| For Models | Cat. No. | Price |
|--------------------------|----------|-------|
| 260 Series 2 (50,000v) | 0179 | 12.50 |
| 260 Series 3 (10,000v) | 0497 | 10.20 |
| 260 Series 3 (25,000v) | 0247 | 11.50 |
| 260 Series 3 (50,000v) | 0248 | 12.50 |
| 262 (16,000v) | 0172 | 11.95 |
| 262 (40,000v) | 0180 | 12.50 |
| 267 2500 V DC Multiplier | 8568 | 3.60 |
| 267 5000 V DC Multiplier | 8569 | 3.60 |
| 267 2500 V AC Multiplier | 8570 | 3.60 |
| 267 5000 V AC Multiplier | 8571 | 3.60 |
| 268 3000 V DC Multiplier | 8572 | 3.60 |
| 268 6000 V DC Multiplier | 8573 | 3.60 |
| 268 3000 V AC Multiplier | 8574 | 3.60 |
| 268 6000 V AC Multiplier | 0004 | 3.60 |
| 269 (16,000v) | 0173 | 11.95 |
| 269 (40,000v) | 0181 | 13.50 |
| 270 (25,000v) | 0247 | 11.50 |
| 270 (50,000v) | 0248 | 12.50 |
| 303 (30,000v) | 0074 | 11.95 |

PROBES — Miscellaneous Types

| For Models | Cat. No. | Price |
|---|----------|--------|
| 303 High frequency | 0073 | \$8.75 |
| 303 AC Probe | 0068 | 3.55 |
| 303 DC Probe | 0067 | 3.55 |
| 303 Ground lead | 0069 | 1.00 |
| 311 High Frequency | 0731 | 11.50 |
| 311 High voltage | 0732 | 11.75 |
| 311 DC-AC/OHMS | 0734 | 8.50 |
| 311 Ground lead | 0733 | 1.25 |
| 479, 480 High Frequency crystal probe and cable | 0185 | 7.65 |
| 479, 480 Output cable 45 mc. | 0046 | 4.25 |
| Voltage Doubler | 0740 | 14.65 |
| Low Capacitance | 0741 | 14.00 |
| 100:1 Voltage Divider | 0742 | 15.20 |
| Direct Resistive | | |
| Dual Purpose | 0743 | 11.55 |

OSCILLOSCOPE PROBE KIT — Model 739

For use with Model 458 Oscilloscope. Includes *low capacity probe, voltage doubler, detector, 100:1 voltage divider and dual direct — resistive. (isolation)
Complete with 4 probes, plastic roll, and operator's manual.....\$45.15
*For Model 458 only.



Model 55ET



Model 57ET

3 1/2" ELAPSED TIME METERS

These meters use self-starting synchronous clock motors.

They indicate up to 9999.9, then recycle and begin again at 0000.0. Molded bakelite case. Case depth— $2\frac{1}{8}$ ".

| Range | Model 55 ET | Model 57 ET |
|-------------|-------------|-------------|
| 120V-60 cps | \$18.85 | \$18.85 |
| 240V-60 cps | 19.15 | 19.15 |

WRITE ON LETTERHEAD FOR GENERAL CATALOG 18 — DEPT. V

SIMPSON ELECTRIC CO. • CHICAGO, ILLINOIS

Simpson

1½", 2½", 3½", 4½" WIDE-VUE PANEL METERS



WIDE-VUE SPECIFICATIONS

| Size | Model No. | Accuracy | Scale Length |
|------|-----------|---|--------------------------------|
| 1½" | 1212C | ±2% of full scale | 1.5" @ 90° Arc (38.1 mm) |
| | 1214C | ±3% F. S. @ 25°C. & 60 cy. Sine Wave | |
| 2½" | 1227C | ±2% of full scale | 2.5" (63.8 mm) |
| | 1257 | | |
| 3½" | 1327C | ±2% of full scale | 3.04" (77.2 mm) |
| | 1337C | | |
| | 1347C | ±3% F. S. @ 25°C. & 60 cy. Sine Wave | |
| 4½" | 1357 | ±2% of full scale | 3.93" (100 mm) |
| | 1329C | ±2% of full scale | |
| | 1339C | | |
| | 1349C | ±3% F. S. @ 25°C. & 60 cy. Sine Wave | |
| | 1359 | ±2% of full scale | |

Calibration and Dials—All DC Wide-Vue meters listed below have the Simpson self-shielded core-type movement (Calibration not affected by stray magnetic fields). All AC Wide-Vue meters have the Simpson Iron-vane type movement. AC Milliammeters and Ammeters to 5 amps are calibrated for use on 25 through 800 cps; AC Ammeters (10 amps and up) and all AC Voltmeters are calibrated for use on 25 through 125 cps. For other specified frequencies up to 800 cps add \$1.65 to the list price.

DC VOLTMETERS

Core Magnet Type Movement

| Range | Resistance | 1½" Model 1212C | 2½" Model 1227C | 3½" Model 1327C | 4½" Model 1329C |
|--------|------------|-----------------|-----------------|-----------------|-----------------|
| 0-5 | | \$12.75 | \$13.80 | \$14.25 | \$15.75 |
| 0-8 | | — | — | 14.25 | 15.75 |
| 0-10 | | 12.75 | 13.80 | 14.25 | 15.75 |
| 0-15 | | 12.75 | 13.80 | 14.25 | 15.75 |
| 0-25 | 1000 | 12.75 | 13.80 | 14.25 | 15.75 |
| 0-30 | ohms | 12.75 | 13.80 | 14.25 | 15.75 |
| 0-50 | Per | 12.75 | 13.80 | 14.25 | 15.75 |
| 0-100 | volt | 12.75 | 13.80 | 14.25 | 15.75 |
| 0-150 | | 12.75 | 13.80 | 14.25 | 15.75 |
| 0-200 | | — | 13.80 | 14.25 | 15.75 |
| 0-250 | | — | 13.80 | 14.25 | 15.75 |
| 0-300 | | — | 13.80 | 14.25 | 15.75 |
| 0-300 | 2000 | 12.75 | — | — | — |
| 0-500 | ohms | 16.05 | 14.25 | 15.00 | 16.20 |
| 0-750 | per | — | 17.55 | 15.00 | 16.20 |
| 0-1000 | volt | — | 17.85 | 18.60 | 19.80 |

External Multipliers, Model 183 on 1½" DC meters 500 volts or higher; on 2½" DC meters 750 volts or higher; and on 3½" and 4½" DC meters 1000 volts or higher. All others are self contained.

DC AMMETERS—Core Magnet Type Movement

| | | | | | |
|---------|-------|---------|---------|---------|---------|
| 0-1 | .050 | \$12.75 | \$13.05 | \$13.65 | \$15.00 |
| 0-1.5 | .033 | — | 13.05 | 13.65 | 15.00 |
| 0-2 | .025 | 12.75 | 13.05 | 13.65 | 15.00 |
| 0-3 | .0166 | 12.75 | 13.05 | 13.65 | 15.00 |
| 0-5 | .010 | 12.75 | 13.05 | 13.65 | 15.00 |
| 0-10 | .005 | 12.75 | 13.05 | 13.65 | 15.00 |
| 0-15 | .0033 | 12.75 | 13.05 | 13.65 | 15.00 |
| 0-25 | .0020 | 12.75 | 13.05 | 13.65 | 15.00 |
| 0-30 | .0017 | — | 13.05 | 13.65 | 15.00 |
| 0-50 | .001 | 12.75 | 13.05 | 13.65 | 15.00 |
| 0-100 | 10.0 | — | 13.05 | 13.65 | 15.00 |
| 0-150 | 10.0 | — | 13.05 | 13.65 | 15.00 |
| 0-200 | 10.0 | — | 13.05 | 13.65 | 15.00 |
| 0-300 | 10.0 | — | 13.05 | 13.65 | 15.00 |
| 0-500 | 10.0 | — | — | 13.65 | 15.00 |
| 15-0-15 | .0033 | — | — | 14.55 | — |
| 30-0-30 | .0017 | — | — | 14.55 | — |
| 50-0-50 | .001 | — | — | 14.55 | — |

1½" DC Ammeters are self contained through 10 amps. 15 Amps and higher are supplied as 50 MV meters to be used with external shunts. 2½", 3½" and 4½" DC ammeters are self contained through 50 amps. Higher range DC ammeters are 50 MV meters to be used with external shunts.

DC MILLIAMMETERS

Core Magnet Type Movement

| | | | | | |
|------|-----|---------|---------|---------|---------|
| 0-1 | 46 | \$12.30 | \$12.90 | \$13.50 | \$14.25 |
| 0-3 | 46 | — | 12.90 | 13.50 | 14.25 |
| 0-5 | 23 | 12.30 | 12.90 | 13.50 | 14.25 |
| 0-10 | 2.2 | 12.30 | 12.90 | 13.50 | 14.25 |
| 0-15 | 2.2 | 12.30 | 12.90 | 13.50 | 14.25 |
| 0-20 | 2.2 | — | 12.90 | 13.50 | 14.25 |
| 0-25 | 6.0 | 12.75 | 13.20 | 13.80 | 15.00 |

Ranges listed without prices (—) are available on special order only. 1½" DC Milliammeters all self contained. Voltage drop 150 MV or less. †Has external magnet type movement except Model 1212C & 1214C which have core type meter movements. Resistance of Model 1212C 0-50 MIC Meter is 5300 ohms. Range 0-15 in models 1327 and 1329 and the 0-25 MIC in model 1329 are high flux movements and cannot be recalibrated for use on steel panels. (—) Available on special order only.

| | | | | | |
|--------|-----|-------|-------|-------|-------|
| 0-50 | 3.0 | 12.75 | 13.20 | 13.80 | 15.00 |
| 0-100 | 1.5 | 12.75 | 13.20 | 13.80 | 15.00 |
| 0-150 | 1.0 | 12.75 | 13.20 | 13.80 | 15.00 |
| 0-200 | .75 | 12.75 | 13.20 | 13.80 | 15.00 |
| 0-250 | .60 | 12.75 | 13.20 | 13.80 | 15.00 |
| 0-300 | .50 | 12.75 | 13.20 | 13.80 | 15.00 |
| 0-500 | .30 | 12.90 | 13.20 | 13.80 | 15.00 |
| 0-750 | .20 | — | — | 13.80 | 15.00 |
| 0-1000 | .05 | — | 13.20 | 13.80 | 15.00 |

DC MICROAMMETERS

Core Magnet Type Movement

| Range | (ohms) Approx. Resistance | 1½" Model 1212C | 2½" Model 1227C | 3½" Model 1327C | 4½" Model 1329C |
|-----------|---------------------------|-----------------|-----------------|-----------------|-----------------|
| 0-15† | 4500 | — | — | \$22.50 | \$24.60 |
| 0-25† | 2200 | — | \$19.20 | 20.10 | 22.20 |
| 0-50† | 2000 | \$16.20 | 16.65 | 17.10 | 18.45 |
| 0-100 | 2000 | 14.40 | 15.00 | 15.60 | 17.40 |
| 0-200 | 1000 | 13.05 | 13.65 | 14.25 | 15.75 |
| 0-500 | 200 | 12.80 | 13.50 | 13.95 | 15.15 |
| 25-0-25† | 2000 | 16.35 | — | 17.25 | 18.60 |
| 50-0-50 | 2000 | 14.55 | 15.15 | 15.75 | 17.55 |
| 100-0-100 | 1000 | 13.20 | 13.80 | 14.40 | 15.90 |
| 500-0-500 | 46 | 12.45 | 13.05 | 13.65 | 14.40 |

DC MILLIVOLTMETERS

Core Magnet Type Movement

| | | | | | |
|------|---------|---------|--------------|--------------|--------------|
| 0-50 | 10 7005 | \$12.75 | 7010 \$13.05 | 7020 \$13.65 | 7030 \$15.00 |
|------|---------|---------|--------------|--------------|--------------|

Simpson VT meters meet all the Electrical and Ballistic specifications established by Bell Laboratories and American Standards Association as required by broadcasting, communication and sound engineers. They are available with either type A or B scales. Type A scale stresses the level in VT for monitoring wire lines. Type B scale stresses per cent use of transmitter output and is the standard for broadcast service.

VOLUME LEVEL INDICATORS

DECIBEL METERS

Zero Power Level—6 MW. 500 Ohm Line—
Core Magnet Type Movement

| Range | 1½" Model 1214C | 2½" Model 1247C | 3½" Model 1347C | 4½" Model 1349C |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| General-Purpose | | | | |
| 5000 ohms | — | \$18.35 | \$19.60 | \$20.25 |

VOLUME LEVEL INDICATORS—V. U. METERS

Reference Level—1 MW. 600 Ohms Line. External Magnet Type Movement except Model 1214C which is core magnet type movement.

| Range | 1½" Model 1214C | 2½" Model 1247 | 3½" Model 1347 | 4½" Model 1349 |
|----------|-----------------|----------------|----------------|----------------|
| †A—Scale | \$19.80 | \$21.90 | \$22.50 | \$23.70 |
| †B—Scale | — | — | 22.50 | 23.70 |

DC GALVANOMETERS

Core Magnet Type Movement

| Scale | Sensitivity Micro-Amperes | Resistance (ohms) | 1½" Model 1212C | 2½" Model 1227C | 3½" Model 1327C | 4½" Model 1329C |
|---------|---------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|
| 50-0-50 | 750-0-500 | 46 | \$12.45 | \$12.90 | \$13.65 | \$14.40 |
| 50-0-50 | 50-0-75 | 2000 | 13.20 | 13.95 | 15.15 | 16.65 |

RF AMMETERS—Core Magnet Type Movement

| Range Amperes | (ohms) Approx. Resistance | 1½" Model 1212C | 2½" Model 1237C | 3½" Model 1337C | 4½" Model 1339C |
|---------------|---------------------------|-----------------|-----------------|-----------------|-----------------|
| 0-1 | .343 | — | — | \$15.90 | \$18.15 |

| | | | | | |
|-------|------|---|---|-------|-------|
| 0-1.5 | .200 | — | — | 15.90 | 18.15 |
| 0-2 | .120 | — | — | 15.90 | 18.15 |
| 0-2.5 | .10 | — | — | 15.90 | 18.15 |
| 0-3 | .08 | — | — | 15.90 | 18.15 |
| 0-5 | .045 | — | — | 15.90 | 18.15 |
| 0-8 | .031 | — | — | 15.90 | 18.15 |
| 0-10 | .023 | — | — | 15.90 | 18.15 |

RF MILLIAMMETERS

| | | | | | |
|-------|-----|---|---|---------|---------|
| 0-500 | .63 | — | — | \$18.75 | \$21.15 |
|-------|-----|---|---|---------|---------|

AC VOLTMETERS—Iron-Vane Type Movement

| Range | (ohms) Approx. Resistance | 2½" Model 1257 | 3½" Model 1357 | 4½" Model 1359 |
|-------|---------------------------|----------------|----------------|----------------|
| 0-5 | 33 | — | \$12.60 | \$14.40 |
| 0-10 | 133 | \$12.30 | 12.60 | 14.40 |
| 0-15 | 300 | 12.30 | 12.60 | 14.40 |
| 0-25 | 833 | 12.45 | 13.05 | 14.40 |
| 0-50 | 3,333 | 12.45 | 13.05 | 14.40 |
| 0-100 | 16,666 | 12.75 | 13.65 | 14.40 |
| 0-150 | 25,000 | 13.05 | 13.95 | 15.00 |
| 0-250 | 41,166 | 13.05 | 13.95 | 15.00 |
| 0-300 | 50,000 | 13.05 | 13.95 | 15.00 |
| 0-500 | 83,333 | 16.65 | 17.85 | 19.05 |

External Multipliers, Model 183 (Featured on back page) are furnished on AC meters having a range of 500 volts or higher. All others are self contained.

AC AMMETERS—Iron Vane Type Movement

| | | | | |
|-------|-------|---------|---------|---------|
| 0-1 | .287 | \$11.70 | \$12.45 | \$14.55 |
| 0-1.5 | .185 | 11.70 | 12.45 | 14.55 |
| 0-2 | .115 | — | 12.45 | 14.55 |
| 0-3 | .027 | 11.70 | 12.45 | 14.55 |
| 0-5 | .012 | 11.70 | 12.45 | 14.55 |
| 0-10 | .0031 | 11.70 | 12.45 | 14.55 |
| 0-15 | .0022 | 11.70 | 12.45 | 14.55 |
| 0-25 | .0003 | 12.30 | 12.90 | 15.00 |
| 0-30 | .0003 | 12.30 | 12.90 | 15.00 |
| 0-50 | .0006 | 12.30 | 12.90 | 15.00 |
| 0-75 | .012 | — | 13.05 | 13.95 |
| 0-100 | .012 | 11.70 | 12.45 | 14.55 |
| 0-150 | .012 | 11.70 | 12.45 | 14.55 |
| 0-200 | .012 | 11.70 | 12.45 | 14.55 |
| 0-300 | .012 | 11.70 | 12.45 | 14.55 |

2½" AC ammeters are self contained through 50 amps. 3½" and 4½" AC ammeters self contained through 75 amps. Higher range AC ammeters are 5 amp meters to be used with external current transformer.

AC MILLIAMMETERS

Iron Vane Type Movement

| | | | | |
|-------|-------|---------|---------|---------|
| 0-10 | 2,000 | \$11.70 | \$12.45 | \$14.55 |
| 0-50 | 80 | 11.70 | 12.45 | 14.55 |
| 0-100 | 20 | 11.70 | 12.45 | 14.55 |
| 0-250 | 5 | 11.70 | 12.45 | 14.55 |
| 0-500 | .9 | 11.70 | 12.45 | 14.55 |

AC VOLTMETERS—RECTIFIER TYPE

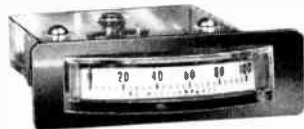
Core Magnet Type Movement

| Range Volts | Resistance | 1½" Model 1214C | 2½" Model 1247C | 3½" Model 1347C | 4½" Model 1349C |
|-------------|---------------|-----------------|-----------------|-----------------|-----------------|
| 0-5 | | \$17.70 | \$16.50 | \$18.30 | \$20.10 |
| 0-10 | 1000 | 17.70 | 16.50 | 18.30 | 20.10 |
| 0-15 | ohms | — | — | 18.30 | 20.10 |
| 0-50 | per | — | — | 18.30 | 20.10 |
| 0-150 | volt | 17.70 | 16.50 | 18.30 | 20.10 |
| 0-300 | 2000 | — | 16.50 | 18.30 | 20.10 |
| 0-150 | ohms per volt | — | — | 19.05 | 20.85 |
| | 2000 | — | — | — | — |
| 0-300 | ohms per volt | 18.30 | — | — | — |

Simpson

METERS and METER RELAYS

EDGEWISE METERS



Types: Direct Current and AC Rectifier. Accuracy: DC 2% of full scale; AC Rectifier, 5%. Standard Scale: Black numbers on white background; 1/8" long. Terminals: Solder or stud type. Case: Dust-proof, molded lucite.

| DC MILLIAMMETERS | | |
|-------------------|--------------------|-------------|
| Range Milliampers | Approx. Resistance | Model 1522C |
| 0-1 | 20 ohms | \$14.85 |
| 0-5 | 2.5 ohms | 14.85 |
| 0-10 | 13.5 ohms | 14.85 |
| 0-25 | 5.4 ohms | 15.45 |
| 0-50 | 2.7 ohms | 15.45 |
| 0-100 | 1.35 ohms | 15.45 |
| 0-150 | .9 ohms | 15.45 |
| 0-200 | .675 ohms | 15.45 |
| 0-250 | .54 ohms | 15.45 |
| 0-300 | .45 ohms | 15.45 |
| 0-500 | .27 ohms | 15.45 |

VOLUME LEVEL INDICATORS—VU Meters

| Range | Model 1542E |
|-----------|-------------|
| "A" SCALE | \$24.75 |
| "B" SCALE | 24.75 |

AC VOLTMETERS—Rectifier Type

| Range | Approx. Resistance | Model 1542C |
|-------|--------------------|-------------|
| 0-150 | 1000 ohms | \$19.20 |
| 0-300 | per volt | 19.20 |

| DC VOLTMETERS | | |
|---------------|--------------------|-------------|
| Range Volts | Approx. Resistance | Model 1522C |
| 0-10 | 1000 ohms per volt | \$15.00 |
| 0-15 | 1000 ohms per volt | 15.00 |
| 0-25 | 1000 ohms per volt | 15.00 |
| 0-50 | 1000 ohms per volt | 15.00 |
| 0-150 | 1000 ohms per volt | 15.00 |
| 0-300 | 1000 ohms per volt | 15.00 |
| 0-500 | 2000 ohms per volt | 15.15 |

DC AMMETER

| | | |
|------|------------|---------|
| 0-1 | .050 ohms | \$15.75 |
| 0-5 | .010 ohms | 15.75 |
| 0-10 | .005 ohms | 15.75 |
| 0-15 | .0033 ohms | 15.75 |
| 0-25 | .002 ohms | 15.75 |
| 0-50 | .001 ohms | 15.75 |

DC MICROAMMETERS

| | | |
|-------|-----------|---------|
| 0-25 | 3150 ohms | \$22.20 |
| 0-50 | 1800 ohms | 19.50 |
| 0-100 | 1100 ohms | 17.40 |
| 0-200 | 290 ohms | 15.75 |
| 0-500 | 90 ohms | 15.30 |

4 1/2" METER RELAY — FRONT ADJUSTABLE — MODEL 29XA



General: Model 29XA Relays are of the D'Arsonval Type. Externally adjusted limit setting contacts are non-locking and intended for circuits with external locking provisions or for light duty non-locking applications.

Calibration: Accuracies $\pm 2\%$ of full scale.

Contacts: Platinum Alloy. For use @ 15 volts DC @ 10 milliamperes maximum on resistive or diode protected inductive loads.

Contact Adjustment: Contacts are externally adjustable over 95° of 100° scale arc, and within 5° of each other. The pointer will indicate the contact make position within 2° of actual contact intercept.

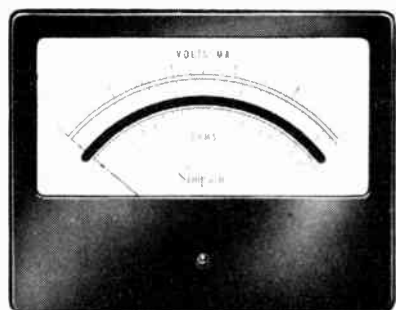
Contact Differential: Normally, contacts will close within 2% of full scale value and break within 10% of full scale value.

Insulation: Breakdown 300 volts AC from Relay contacts to meter circuit. 3 KV AC from Relay terminals to mounting panel. (All Tests at 60 cycles.)

| Range | Description | Approx. Resistance (ohms) | Price |
|-------|-------------------|---------------------------|---------|
| 0-50 | DC Microammeter | 5200 | \$44.10 |
| 0-100 | DC Microammeter | 1800 | 42.15 |
| 0-200 | DC Microammeter | 1000 | 39.60 |
| 0-500 | DC Microammeter | 280 | 39.00 |
| 0-1 | DC Milliammeter | 140 | 38.10 |
| 0-50 | DC Millivoltmeter | 10 | 38.25 |

1% AND 2% PANEL METERS — 6" SIZE

Red knife-edge pointers; 1/4-28 studs; front surface glass mirrors on 1% meters; molded black phenolic case; scale length, 4.6" (114.8 mm).



6 INCH RECTANGULAR PANEL METERS — 1% & 2% tolerance

| Range | Approx. Resist. | DC Volt-meters ¹ | | DC Millivolt-meters ¹ | | DC Am-meters ¹ | |
|-------|-----------------|-----------------------------|----------------|----------------------------------|----------------|---------------------------|-----------------|
| | | Model 1150E, 2% | Resist. (ohms) | Model 1150E, 1% | Resist. (ohms) | Model 1150E, 2% | Model 1150H, 1% |
| 0-1 | — | — | — | .050 | \$19.65 | — | — |
| 1-5 | — | — | — | .010 | 19.65 | — | — |
| 10 | — | — | — | .005 | 19.65 | — | — |
| 15 | — | — | — | .0033 | 19.65 | — | — |
| 25 | 1000 | — | — | .0020 | 19.65 | — | — |
| 30 | OHMS | — | — | .0016 | 19.65 | — | — |
| 50 | PER VOLT | 18.90 | 10 | \$19.65 | .001 | 19.65 | — |
| 100 | — | 18.90 | — | — | — | — | — |
| 150 | — | 18.90 | — | — | — | — | — |
| 200 | — | — | — | — | — | — | — |
| 300 | — | 18.90 | — | — | — | — | — |
| 500 | 2000 Ω/V | 19.50 | — | — | — | — | — |

¹All ranges 1-5/16" shallow core movement.

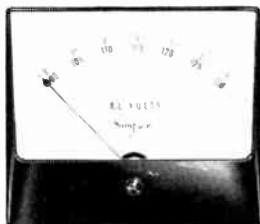
²Ranges 15 through 100 use high flux movements designated as Model 1150H and cannot be calibrated for use on steel panels. Ranges 200 through 500 use 1-5/16" shallow core movement designated as 1150E.

[†]Supplied as Model 1150E which has 1-5/16" shallow core meter movement. Ranges listed without prices (—) are available on special order only.

SEGMENTAL VOLTMETERS (Expanded Scale) 100 — 130 AC Volts



3 1/2" Model 1347C Wide-Vue



4 1/2" Model 1349C Wide-Vue



4 1/2" Model 49C Rectangular

Simpson Segmental AC Voltmeters improve meter accuracy and readability over most conventional type meters. Used primarily in monitoring line voltage, these segmental Voltmeters increase the efficiency, reliability and life of costly components.

| MODEL NO. | 1347C | 1349C | 49C |
|-----------------------------------|--|----------------|----------------|
| Scale Length | 3.14" (79.7 mm) | 3.93" (100 mm) | 3.5" (89.0 mm) |
| Operating Frequency Range | 20-2000 cps | | |
| Accuracy | $\pm .5\%$ of Center scale value at 25°C and 60 cps sine wave | | |
| Movement Type | Core Magnet Meter Movement | | |
| Frequency Influence | Less than 0.5% of Center scale value for temperature range of $\pm 20^\circ$ from 25°C. | | |
| Sensitivity | 160 to 100 ohms/volt end scale values. Sensitivity decreases as input voltage increases. | | |
| Intermittent Input Voltage (max.) | 150 volt RMS for 10 seconds | | |

| WIDE-VUE | | | RECTANGULAR | |
|----------|-------|---------|-------------|---------|
| Size | Model | Price | Model | Price |
| 3 1/2" | 1347C | \$40.80 | — | — |
| 4 1/2" | 1349C | 40.95 | 49C | \$40.50 |

WRITE ON LETTERHEAD FOR GENERAL CATALOG 18 — DEPT. V

SIMPSON ELECTRIC CO. • CHICAGO, ILLINOIS

Simpson

2 1/2, 3 1/2, 4 1/2 ROUND AND RECTANGULAR PANEL METERS

AC VOLTMETERS—RECTIFIER TYPE

| Range | Ohms | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|-------|----------|-----------------------|---------------------|-----------------|
| 0-1 | — | — | \$18.15 | \$19.95 |
| 0-3 | — | — | 18.15 | 19.95 |
| 0-5 | — | — | 18.15 | 19.95 |
| 0-10 | 1000 | — | 18.15 | 19.95 |
| 0-15 | ohms | — | 18.15 | 19.95 |
| 0-50 | per volt | — | 18.15 | 19.95 |
| 0-100 | — | — | 18.15 | 19.95 |
| 0-150 | — | — | 18.15 | 19.95 |
| 0-300 | — | — | 18.15 | 19.95 |

| Range | Ohms | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|-------|----------|-----------------------|---------------------|-----------------|
| 0-1 | — | — | 18.75 | 20.55 |
| 0-3 | — | — | 18.75 | 20.55 |
| 0-5 | — | — | 18.75 | 20.55 |
| 0-10 | 2000 | — | 18.75 | 20.55 |
| 0-15 | ohms | — | 18.75 | 20.55 |
| 0-50 | per volt | — | 18.75 | 20.55 |
| 0-100 | — | — | 18.75 | 20.55 |
| 0-150 | — | — | 18.75 | 20.55 |
| 0-300 | — | — | 18.75 | 20.55 |

AC MILLIAMMETERS—RECTIFIER TYPE

| Range | Ohms | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|-------|------|-----------------------|---------------------|-----------------|
| 0-1 | 600 | — | 18.00 | 19.50 |
| 0-2 | 400 | — | 18.00 | 19.50 |
| 0-5 | 200 | — | 18.00 | 19.50 |

AC MICRAMPETERS—RECTIFIER TYPE

| Range | Ohms | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|-------|------|-----------------------|---------------------|-----------------|
| 0-100 | 3400 | — | 20.55 | 22.05 |
| 0-200 | 2400 | — | 18.15 | 19.80 |
| 0-300 | 1800 | — | 18.00 | 19.50 |
| 0-500 | 1200 | — | 17.70 | 19.20 |

AC VOLTMETERS

| Range | Approx. Resistance | 2 1/2" Models 155/157 | 3 1/2" Models 55/57 | 4 1/2" Model 59 |
|--------|--------------------|-----------------------|---------------------|-----------------|
| 0-1.5 | 3 ohms | \$11.70 | \$12.45 | \$14.10 |
| 0-3 | 12 | 11.70 | 12.45 | 14.10 |
| 0-5 | 33 | 11.70 | 12.45 | 14.10 |
| 0-8 | ..... | — | — | — |
| 0-10 | 133 | 11.70 | 12.45 | 14.10 |
| 0-15 | 300 | 11.70 | 12.45 | 14.10 |
| 0-25 | 833 | 12.15 | 12.75 | 14.10 |
| 0-30 | ..... | — | — | — |
| 0-50 | 3,333 | 12.15 | 12.75 | 14.10 |
| 0-100 | 16,666 | 13.20 | 13.80 | 14.70 |
| 0-150 | 25,000 | 12.90 | 13.65 | 14.85 |
| 0-200 | ..... | — | — | — |
| 0-250 | 41,166 | 12.90 | 13.65 | 14.85 |
| 0-300 | 50,000 | 12.90 | 13.65 | 14.85 |
| 0-500 | 83,333 | 17.40 | 17.70 | 18.30 |
| 0-750 | 125,000 | 19.20 | 19.35 | 20.10 |
| 0-1000 | 166,666 | 20.70 | 20.85 | 21.75 |
| 0-1500 | ..... | — | — | — |

External Multipliers, Model 183 (Featured on back page) are furnished on A.C. meters having a range of 500 volts or higher; on 2 1/2" D.C. meters 750 volts or higher; and on 3 1/2" and 4 1/2" D.C. meters 1000 volts and higher. All others are self contained.

AC AMMETERS

| Range | Approx. Resistance | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|--------|--------------------|-----------------------|---------------------|-----------------|
| ±0-1 | .287 | \$11.55 | \$12.15 | \$14.40 |
| ±0-1.5 | .185 | 11.55 | 12.15 | 14.40 |
| ±0-2 | .115 | 11.55 | 12.15 | 14.40 |
| ±0-3 | .027 | 11.55 | 12.15 | 14.40 |
| ±0-5 | .012 | 11.55 | 12.15 | 14.40 |
| ±0-10 | .003 | 11.55 | 12.15 | 14.40 |
| ±0-15 | .0022 | 11.55 | 12.15 | 14.40 |
| ±0-25 | .0003 | 11.85 | 12.45 | 15.00 |
| ±0-30 | .0003 | 11.85 | 12.45 | 15.00 |
| ±0-50 | .0006 | 11.85 | 12.45 | 15.00 |
| 0-75 | .012 | 11.55 | 12.15 | 14.40 |
| ±0-75 | .012 | — | 13.20 | 14.55 |
| 0-100 | .012 | 11.55 | 12.15 | 14.40 |
| 0-150 | .012 | 11.55 | 12.15 | 14.40 |
| 0-200 | .012 | 11.55 | 12.15 | 14.40 |

ACCURACY: DC METERS OR AC IRON VANE TYPE METERS ±2% OF FULL SCALE; RECTIFIER TYPE ±3% OF FULL SCALE @ 25°C. AND 60 CYCLE SINE WAVE.



2 1/2" Models 125, 135, 145, 155, 175
3 1/2" Models 25, 35, 45, 55, 75



2 1/2" Models 127, 137, 147, 157, 177
3 1/2" Models 27, 37, 47, 57, 77



4 1/2" Models 29, 39, 49, 59, 79, 142

All meters listed below, except wattmeters, have the Simpson external magnet meter movement, calibrated for non-magnet panel. When ordering these meters for use on steel panels, state panel thickness and add 1.65 to price shown below for re-calibration. Wattmeters listed below have the Simpson dynamometer movement calibrated for either magnetic or non-magnetic panels and for a frequency range of 25—125 cycles.

AC AMMETERS

| Range | Approx. Resistance | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|-------|--------------------|-----------------------|---------------------|-----------------|
| 0-250 | .012 | 11.55 | 12.15 | 14.40 |
| 0-300 | .012 | 11.55 | 12.15 | 14.40 |
| 0-500 | .012 | 11.55 | 12.15 | 14.40 |

AC MILLIAMMETERS

| Range | Approx. Resistance | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|--------|--------------------|-----------------------|---------------------|-----------------|
| 0-1 | ..... | — | — | — |
| 0-1.5 | ..... | — | — | — |
| 0-3 | ..... | — | — | — |
| 0-5 | ..... | — | — | — |
| 0-10 | 2,000 ohms | \$11.55 | \$12.15 | \$14.40 |
| 0-15 | 875 | 11.55 | 12.15 | 14.40 |
| 0-20 | ..... | — | — | — |
| 0-25 | 390 | 11.55 | 12.15 | 14.40 |
| 0-50 | 80 | 11.55 | 12.15 | 14.40 |
| 0-75 | ..... | — | — | — |
| 0-100 | 20 | 11.55 | 12.15 | 14.40 |
| 0-150 | ..... | — | — | — |
| 0-200 | ..... | — | — | — |
| 0-250 | 5 | 11.55 | 12.15 | 14.40 |
| 0-300 | ..... | — | — | — |
| 0-500 | .9 | 11.55 | 12.15 | 14.40 |
| 0-750 | ..... | — | — | — |
| 0-1000 | ..... | — | — | — |

DC AMMETERS

| Range | (ohms) Approx. Resistance | 2 1/2" Models 125/127 | 3 1/2" Models 25/27 | 4 1/2" Model 29 |
|---------|---------------------------|-----------------------|---------------------|-----------------|
| 0-1 | .050 | \$12.90 | \$13.35 | \$14.70 |
| 0-1.5 | .033 | 12.90 | 13.35 | 14.70 |
| 0-2 | .025 | 12.90 | 13.35 | 14.70 |
| 0-3 | .0166 | 12.90 | 13.35 | 14.70 |
| 0-5 | .010 | 12.90 | 13.35 | 14.70 |
| 0-10 | .005 | 12.90 | 13.35 | 14.70 |
| 0-15 | .0033 | 12.90 | 13.35 | 14.70 |
| 0-25 | .0020 | 12.90 | 13.35 | 14.70 |
| 0-30 | .0017 | 12.90 | 13.35 | 14.70 |
| 0-50 | .001 | 12.90 | 13.35 | 14.70 |
| 0-75 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-100 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-150 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-200 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-250 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-300 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-500 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-750 | 10.0 | 12.45 | 12.90 | 14.40 |
| 0-1000 | 10.0 | 12.45 | 12.90 | 14.40 |
| 15-0-15 | .0033 | 13.20 | 13.65 | 15.15 |
| 30-0-30 | .0017 | 13.20 | 13.65 | 15.15 |
| 50-0-50 | .001 | 13.20 | 13.65 | 15.15 |

DC MICROAMMETERS

| Range | Approx. Resistance | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|-----------|--------------------|-----------------------|---------------------|-----------------|
| 0-15* | 4500 | — | \$22.95 | \$25.05 |
| 0-25† | 2200 | \$19.65 | 20.55 | 22.65 |
| 0-50 | 2000 | 17.10 | 17.55 | 18.90 |
| 0-100 | 2000 | 14.85 | 15.45 | 17.25 |
| 0-200 | 1000 | 13.20 | 13.95 | 15.45 |
| 0-500 | 200 | 12.75 | 13.35 | 14.85 |
| 25-0-25 | 2000 | 17.35 | 17.70 | 19.05 |
| 50-0-50 | 2000 | 15.00 | 15.60 | 17.40 |
| 100-0-100 | 1000 | 12.90 | 14.10 | 15.75 |
| 500-0-500 | 46 | 12.30 | 12.90 | 14.10 |

DC MILLIVOLTMETERS

| Range | Approx. Resistance | 2 1/2" Model 135/137 | 3 1/2" Model 35/37 | 4 1/2" Model 39 |
|-------|--------------------|----------------------|--------------------|-----------------|
| 0-50 | 10 | \$12.45 | \$12.90 | \$14.40 |
| 0-100 | 20 | 12.45 | 12.90 | 14.40 |

RF AMMETERS — Internal Thermocouple Type

| Range | Approx. Resistance | 2 1/2" Model 135/137 | 3 1/2" Model 35/37 | 4 1/2" Model 39 |
|-------|--------------------|----------------------|--------------------|-----------------|
| 0-1 | .343 ohms | \$14.10 | \$15.00 | \$17.25 |
| 0-1.5 | .200 | 14.10 | 15.00 | 17.25 |
| 0-2 | .120 | 14.10 | 15.00 | 17.25 |
| 0-2.5 | .10 | 14.10 | 15.00 | 17.25 |
| 0-3 | .08 | 14.10 | 15.00 | 17.25 |
| 0-5 | .045 | 14.10 | 15.00 | 17.25 |
| 0-8 | .031 | 14.10 | 15.00 | 17.25 |
| 0-10 | .023 | 14.10 | 15.00 | 17.25 |

RF MILLIAMMETERS ±0-100 linear scale

| Range | Approx. Resistance | 2 1/2" Model 135/137 | 3 1/2" Model 35/37 | 4 1/2" Model 39 |
|--------|--------------------|----------------------|--------------------|-----------------|
| ±0-115 | 4.0 ohms | — | 28.35 | 29.85 |
| 0-150 | 4.5 | — | 18.00 | 20.40 |
| 0-250 | 3.5 | — | 18.00 | 20.40 |
| 0-500 | .63 | — | 18.00 | 20.40 |

VOL. LEVEL INDICATORS — DECIBEL METERS

| Range | Approx. Resistance | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|--|--------------------|-----------------------|---------------------|-----------------|
| Zero Power Level — 6 MW 500 Ohm Line | | | | |
| General Purpose Type — 10 to +6 db 5000 ohms \$18.30 \$18.45 \$20.10 | | | | |
| High Speed Type — 10 to +6 db 5000 ohms — 20.40 21.75 | | | | |
| Low Speed Type — 10 to +6 db 5000 ohms — 20.25 21.15 | | | | |

| Range | Approx. Resistance | 2 1/2" Models 145/147 | 3 1/2" Models 45/47 | 4 1/2" Model 49 |
|--|--------------------|-----------------------|---------------------|-----------------|
| VOLUME LEVEL INDICATORS — VU METERS | | | | |
| Reference Level — 1 MW 600 Ohm Line | | | | |
| "A" Scale; Not Illuminated — \$22.35 \$24.15 | | | | |
| "B" Scale; Not Illuminated — 22.35 24.15 | | | | |
| "A" Scale; Illuminated — — 26.70 | | | | |
| "B" Scale; Illuminated — — 26.70 | | | | |

WATTMETERS — DYNAMOMETER TYPE

| Range | Max. Volts | Max. Amps. | 2 1/2" Model 175/177 | 3 1/2" Model 75/77 | 4 1/2" Model 79 |
|--------------|------------|------------|----------------------|--------------------|-----------------|
| Single Phase | | | | | |
| 0-75 | 150 | 1.0 | \$26.25 | \$27.60 | \$33.90 |
| 0-150 | 150 | 2.0 | 26.25 | 27.60 | 33.90 |
| 0-300 | 150 | 4.0 | 26.25 | 27.60 | 33.90 |
| 0-750 | 150 | 10.0 | 26.25 | 27.50 | 33.90 |
| 0-600 | 300 | 4.0 | 28.65 | 30.00 | 36.45 |
| 0-1500 | 300 | 10.0 | 28.65 | 30.00 | 36.45 |
| 0-3000 | 300 | 20.0 | 28.65 | 30.00 | 36.45 |

COMPENSATED WATTMETERS — Single Phase

| Range | Max. Volts | Max. Amps. | 2 1/2" Model 175/177 | 3 1/2" Model 75/77 | 4 1/2" Model 79 |
|-------|------------|------------|----------------------|--------------------|-----------------|
| 0-10 | 300 | .175 | — | 44.10 | 45.75 |
| 0-20 | 300 | .400 | — | 44.10 | 45.75 |
| 0-20 | 500 | .175 | — | 44.10 | 45.75 |
| 0-30 | 300 | .650 | — | 44.10 | 45.75 |
| 0-30 | 500 | .300 | — | 44.10 | 45.75 |
| 0-50 | 500 | 1.25 | — | 44.10 | 45.75 |

DC GALVANOMETERS

| Scale | Sensitivity Micro-Amperes | Res. Ohms | 2 1/2" Models 125/127 | 3 1/2" Models 25/27 | 4 1/2" Model 29 |
|---------|---------------------------|-----------|-----------------------|---------------------|-----------------|
| 50-0-50 | 500-0-500 | 46 | \$12.75 | \$13.20 | \$14.85 |
| 50-0-50 | 75-0-75 | 2000 | 13.65 | 15.00 | 15.45 |

†AC ammeters are self-contained. Higher range AC ammeters can be supplied with external current transformers and include 2 foot leads. External current transformers should be ordered separately. DC ammeters are self-contained for ranges up to and including 50 amperes. Higher range DC ammeters (50MV) listed above can be supplied with external shunts and include 5 foot leads. *These meters use the Hi Flux magnet and cannot be recalibrated for use on steel panels. ‡The Model 29 meters in this range use the Hi Flux magnet and cannot be recalibrated for use on steel panels. Ranges without prices are available on special order.

Insulation Testers

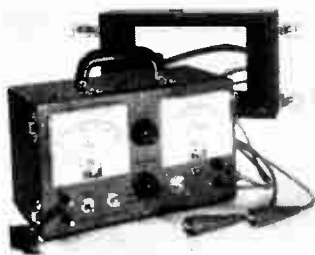
WRITE FOR DATA SHEETS ON THE INSTRUMENTS SHOWN . . . ALL ARE STANDARD PRODUCTION MODELS, AVAILABLE FOR IMMEDIATE DELIVERY FROM STOCK . . . LET US QUOTE ON YOUR REQUIREMENTS FOR MODIFIED UNITS OR SPECIAL TEST EQUIPMENT.

SLAUGHTER CO.

PIQUA 3, OHIO

High-voltage Leakage Tester

checks insulation for...leakage
...grounds
....arcing



MODEL

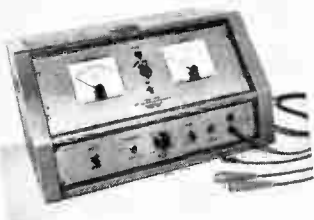
122

16 lb. Portable
for lab and
field work

VARIABLE VOLTAGE RATINGS TO 5 KV
AC & DC. DUAL RANGE LEAKAGE METER
0/100/1000 μ a. . . . CAPACITY COMPEN-
SATION. . . MEASURES INSULATION RES-
ISTANCE, CAPACITY, POWER FACTOR.

Automatic H-V Insulation Tester

for precision checking...breakdowns
...leakage
...grounds



MODEL

103-MP

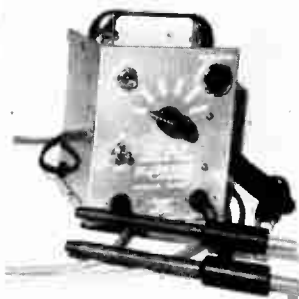
Automatic
Test Cycle

FULLY AUTOMATIC TEST CYCLE. . . CON-
TROLLED RATE-OF-RISE. . . ADJUSTABLE
TEST VOLTAGE, DWELL TIME, & LEAK-
AGE LIMIT. . . CAPACITY COMPENSATION
ON AC TEST. . . FOR PRECISION TEST
OF CRITICAL PARTS & ASSEMBLIES. . .

SLAUGHTER CO. • PIQUA 3, OHIO

High-voltage Insulation Tester

with buzzer signal on breakdowns
... grounds
.... shorts



MODEL

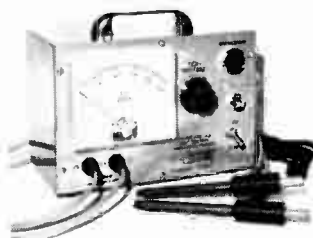
101

Watch what you
are doing . . .
not the tester

SIX TEST VOLTAGES . . . 500 to 2500 V.A.C.
PRICED SO YOU CAN AFFORD TO SPOT A
FEW ALONG YOUR ASSEMBLY LINES.
FOR SAFETY

Adjustable High-voltage Tester

with buzzer signal on breakdowns
... grounds
.... shorts



MODEL

106

Voltmeter
shows actual
Test Voltage

CONTINUOUSLY VARIABLE TEST VOLTAGE
RATINGS TO 10,000 VOLTS AC & DC . .
RECOMMENDED FOR BREAKDOWN TESTING
AT FINAL ASSEMBLY AND INSPECTION

High-voltage Leakage Tester

audibly signals excess leakage
... grounds
.... arcing



MODEL

103

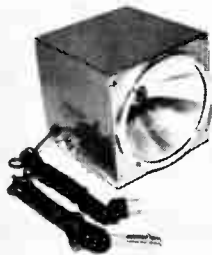
Measures Leakage
... not capacity
current

TEST VOLTAGE CONTINUOUSLY VARIABLE
ADJUSTABLE LEAKAGE LIMIT. . . CAPACITY
COMPENSATION ON AC TESTS. . . RATINGS
TO 10,000 VOLTS AC & DC. . . LIMITED
ENERGY. . . NON-DESTRUCTIVE. . . FOR LAB
AND PRODUCTION LINE SERVICE.

SLAUGHTER CO. • PIQUA 3, OHIO

Inspection Stroboscope

...with high intensity daylight lamp



MODEL
161

0/2,000
Flashes per
Minute

LIGHT WEIGHT INEXPENSIVE TRIGGERED FLASH UNIT... PUSH-TO-SEE SWITCH... INTENSE WHITE LIGHT FOR INSPECTION ON-THE-GO

Inspection Stroboscope

...with extra high intensity daylight lamp



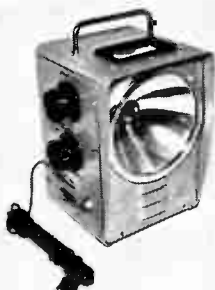
MODEL
167

0/600
Flashes per
Minute

SUPER INTENSITY TRIGGERED FLASH UNIT ... PUSH-TO-SEE SWITCH... FOR INSPECTION ON-THE-GO UNDER HIGH AMBIENT LIGHT CONDITIONS.

Metered Precision Stroboscope

...with high intensity daylight lamp



MODEL
165

50/16,000
Flashes per
Minute

PRECISION STROBOSCOPE TACHOMETER INSTANT STARTING... HIGH INTENSITY WHITE LIGHT... OPERATES FROM EXTERNAL CONTACTS OR INTERNAL OSCILLATOR... EASILY SYNCHRONIZED... OUTPUT JACKS TO COUPLE SCOPE, ETC....

SLAUGHTER CO. • PIQUA 3, OHIO

Stroboscopes

WRITE FOR DATA SHEETS ON THE INSTRUMENTS SHOWN... ALL ARE STANDARD PRODUCTION MODELS, AVAILABLE FOR IMMEDIATE DELIVERY FROM STOCK... LET US QUOTE ON YOUR REQUIREMENTS FOR MODIFIED UNITS OR SPECIAL TEST EQUIPMENT.

SLAUGHTER CO.

PIQUA 3, OHIO

MIDGET STROBOSCOPE FLASH HEAD



MODEL
166

0/10,000
Flashes per
Minute

FOR WORK ON MINIATURIZED EQUIPMENT... FOR PRINTING TRADES... FOR BIO-MEDICAL WORK... ADAPTS TO ANY SLAUGHTER STROBOSCOPE...

Universal Stroboscope

...with high intensity daylight lamp



MODEL
163

50/16,000
Flashes per
Minute

UNIVERSAL UNIT FOR MOTION STUDY & INSPECTION ON-THE-GO... INSTANT STARTING... HIGH INTENSITY WHITE LIGHT... TRIGGER EXTERNALLY OR OPERATE FROM INTERNAL OSCILLATOR

SLAUGHTER CO. • PIQUA 3, OHIO

STERLING PANEL METERS

PRICE LIST



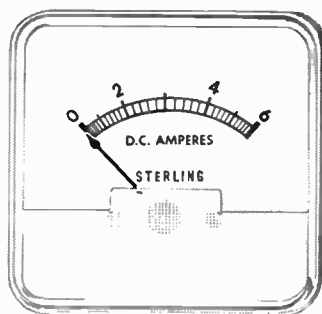
MODEL 80

2-5/32" dia. flange. Flush case. Fits mounting hole 2-1/32" dia. Black clamp mounting. Black enamel finish.



MODEL 75

2-1/4" square flange, fits mounting hole 2-1/32" dia. Back clamp mounting. Black enamel finish.



MODEL 55

2-1/4" clear plastic face. Fits mounting hole 2-1/32" dia. Back clamp mounting.

All Sterling meters have rugged, time-proven linear-power movement. Calibration accuracy is within 5%.

D.C. AMMETERS

| Range | Approximate Resist. Ohms | Model 80 Part No. | NET EACH | Model 75 Part No. | Model 55 Part No. | NET EACH |
|---------|--------------------------|-------------------|----------|-------------------|-------------------|----------|
| 0-1 | .02 Max. | 80-855 | \$1.80 | 75-855 | 55-855 | \$2.05 |
| 0-3 | .02 Max. | 80-856 | 1.80 | 75-856 | 55-856 | 2.05 |
| 0-6 | .02 Max. | 80-857 | 1.80 | 75-857 | 55-857 | 2.05 |
| 0-8 | .02 Max. | 80-928 | 1.80 | 75-928 | 55-928 | 2.05 |
| 0-10 | .02 Max. | 80-858 | 1.80 | 75-858 | 55-858 | 2.05 |
| 0-15 | .02 Max. | 80-864 | 1.80 | 75-864 | 55-864 | 2.05 |
| 0-25 | .02 Max. | 80-865 | 1.80 | 75-865 | 55-865 | 2.05 |
| 0-50 | .02 Max. | 80-866 | 2.10 | 75-866 | 55-866 | 2.65 |
| 30-0-30 | .02 Max. | 80-867 | 1.80 | 75-867 | 55-867 | 2.05 |

D.C. MILLIAMMETERS

| | | | | | | |
|-------|------|--------|--------|--------|--------|--------|
| 0-1 | 1000 | 80-834 | \$3.60 | 75-834 | 55-834 | \$3.85 |
| 0-2 | 4350 | 80-835 | 2.70 | 75-835 | 55-835 | 2.95 |
| 0-5 | 2175 | 80-836 | 2.25 | 75-836 | 55-836 | 2.55 |
| 0-10 | 750 | 80-837 | 2.10 | 75-837 | 55-837 | 2.40 |
| 0-15 | 319 | 80-838 | 1.80 | 75-838 | 55-838 | 2.05 |
| 0-25 | 130 | 80-839 | 1.80 | 75-839 | 55-839 | 2.05 |
| 0-50 | 33 | 80-840 | 1.80 | 75-840 | 55-840 | 2.05 |
| 0-100 | 8 | 80-841 | 1.80 | 75-841 | 55-841 | 2.05 |
| 0-150 | 3 | 80-842 | 1.80 | 75-842 | 55-842 | 2.05 |
| 0-200 | 2.4 | 80-843 | 1.80 | 75-843 | 55-843 | 2.05 |
| 0-300 | 1.3 | 80-844 | 1.80 | 75-844 | 55-844 | 2.05 |
| 0-500 | .23 | 80-848 | 1.80 | 75-848 | 55-848 | 2.05 |

D.C. VOLTMETERS

| | | | | | | |
|-------|--------|--------|--------|--------|--------|--------|
| 0-1 | 15 | 80-801 | \$1.80 | 75-801 | 55-801 | \$2.05 |
| 0-3 | 130 | 80-802 | 1.80 | 75-802 | 55-802 | 2.05 |
| 0-5 | 210 | 80-804 | 1.80 | 75-804 | 55-804 | 2.05 |
| 0-10 | 1000 | 80-807 | 1.80 | 75-807 | 55-807 | 2.05 |
| 0-15 | 1580 | 80-808 | 1.80 | 75-808 | 55-808 | 2.05 |
| 0-25 | 1700 | 80-809 | 1.80 | 75-809 | 55-809 | 2.05 |
| 0-50 | 3340 | 80-811 | 1.80 | 75-811 | 55-811 | 2.05 |
| 0-150 | 10000 | 80-815 | 2.25 | 75-815 | 55-815 | 2.55 |
| 0-300 | 100000 | 80-817 | 3.00 | 75-817 | 55-817 | 3.30 |

A.C. AMMETERS

| | | | | | | |
|------|-----|--------|--------|--------|--------|--------|
| 0-1 | .7 | 80-886 | \$2.85 | 75-886 | 55-886 | \$3.15 |
| 0-3 | .09 | 80-887 | 2.85 | 75-887 | 55-887 | 3.15 |
| 0-5 | .04 | 80-888 | 2.85 | 75-888 | 55-888 | 3.15 |
| 0-10 | .02 | 80-889 | 2.85 | 75-889 | 55-889 | 3.15 |
| 0-15 | .02 | 80-917 | 2.85 | 75-917 | 55-917 | 3.15 |
| 0-30 | .02 | 80-892 | 3.00 | 75-892 | 55-892 | 3.30 |

A.C. MILLIAMMETERS

| | | | | | | |
|-------|-----|--------|--------|--------|--------|--------|
| 0-100 | 104 | 80-882 | \$2.85 | 75-882 | 55-882 | \$3.15 |
| 0-250 | 16 | 80-883 | 2.85 | 75-883 | 55-883 | 3.15 |
| 0-500 | 3 | 80-884 | 2.85 | 75-884 | 55-884 | 3.15 |

A.C. VOLTMETERS

| | | | | | | |
|-------|-------|--------|--------|--------|--------|--------|
| 0-10 | 104 | 80-872 | \$2.85 | 75-872 | 55-872 | \$3.15 |
| 0-15 | 210 | 80-873 | 2.85 | 75-873 | 55-873 | 3.15 |
| 0-25 | 1750 | 80-910 | 2.85 | 75-910 | 55-910 | 3.15 |
| 0-50 | 2750 | 80-879 | 2.85 | 75-879 | 55-879 | 3.15 |
| 0-150 | 11500 | 80-874 | 3.60 | 75-874 | 55-874 | 3.90 |
| 0-300 | 19400 | 80-875 | 4.05 | 75-875 | 55-875 | 4.35 |

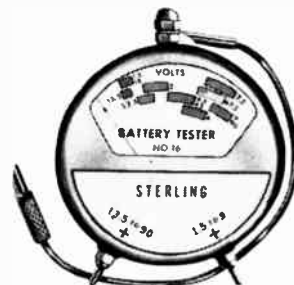
For meters with special scales, ranges or construction, contact the factory or local Sterling representative.

STERLING POCKET METERS

- No. 10 Dual A and B for Hearing Aids. Has 2-0-2 and 50-0-50 scales. Net Price \$3.30
- No. 13 Transistor Hearing Aid tester. Has 0-7 volt scale. Net Price \$3.00
- No. 24 Ammeter 0-35 amp. for No. 6 dry cells. Scale has 1 amp. divisions. Net Price \$2.25
- No. 34 Voltmeter for "hot-shot" batteries. 0-10 volt scale with 1.5 volt divisions. Net Price \$2.40

- No. 16 General voltmeter. Has green color zones for batteries from 1.5 to 90 volts. Net Price \$4.05

- No. 44 Voltammeter. 0-35 amp. scale, 1 amp. divisions, 0-10 volt scale, 1/5 volt divisions. Net Price \$2.76



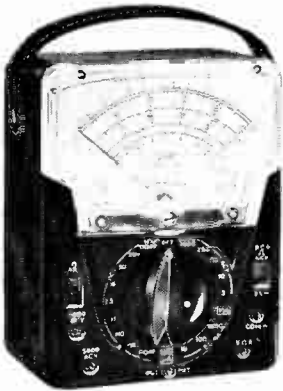
NO. 16 GENERAL TESTER

SEND FOR CATALOGS OF OUR COMPLETE LINE OF POCKET METERS AND PORTABLE BATTERY TESTERS.

The STERLING Manufacturing Company
Cleveland, Ohio

TEST EQUIPMENT

TRIPOLET



MODEL 630-PL VOLT-OHM-MILLIAMMETER

- Instant-vision, wider spread scales; streamlined case, handsome modern design.
- Outstanding linear ohm scale: low reading .1 ohm; high to 100 megs.
- One switch selects any range; minimizes chance of incorrect settings and burn-outs. 5 to 500,000 cycles per second frequency response in AC measurements.
- DC Polarity reversing switch.
- High Sensitivity: 5,000 ohms per volt AC; 20,000 ohms per volt D.C.

RANGES

DC Volts: 0-2.5-10-50-250-1,000-5,000—at 20,000 ohms/volt
AC Volts: 0-3-10-50-250-1,000-5,000—at 5,000 ohms/volt
Decibels: -20 to +11, +21, +35, +49, +61, +75;
 "0" DB at 1 MW on 600 ohm line.
DC Microamperes: 0-100—at 250 millivolts.
DC Milliamperes: 0-10-100-1,000—at 250 millivolts.
DC Amperes: 0-10—at 250 millivolts.

Ohms: 0-1,000-10,400—(4.4-44 at center scale).
Megohms: 0-1-100—(4,400-440,000 at center scale).
Output V (AC): 0-3-10-50-250-1,000—at 5,000 ohms/volt, jack with condenser in series with AC ranges.
Case: Molded, fully insulated, 3 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ".
MODEL 630-PL—U.S.A. Dealer Net \$49.50
 Complete with leads, alligator clips, rubber feet, batteries and instruction manual.

MODEL 630-APL VOLT-OHM-MILLIAMMETER

- Laboratory type V-O-M featuring $\frac{1}{2}$ % resistors and more accurate movement for greater accuracy.
- Long MIRRORED scales to eliminate parallax in reading.
- One switch selects any range; minimizes chance of incorrect settings and burnouts. 5 to 500,000 cycles per second frequency response in AC measurements.
- DC Polarity reversing switch.
- High Sensitivity: 5,000 ohms per volt AC; 20,000 ohms per volt DC.

RANGES

DC Volts: 0-2.5-10-50-250-1,000-5,000—at 20,000 ohms/volt
AC Volts: 0-3-10-50-250-1,000-5,000—at 5,000 ohms/volt
Decibels: -20 to +11, +21, +35, +49, +61, +75;
 "0" DB at 1 MW on 600 ohm line.
DC Microamperes: 0-100—at 250 millivolts.
DC Milliamperes: 0-10-100-1,000—at 250 millivolts.
DC Amperes: 0-10—at 250 millivolts.

Ohms: 0-1,000-10,000—(4.4-44 at center scale).
Megohms: 0-1-100 (4,400-440,000 at center scale).
Output V (AC): 0-3-10-50-250-1,000—at 5,000 ohms/volt, jack with condenser in series with AC ranges.
Case: Molded, fully insulated, 3 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ".

MODEL 630 APL—U.S.A. Dealer Net \$59.50
 Complete with leads, alligator clips, rubber feet, batteries and instruction manual.



MODEL 631 — COMBINATION VOLT-OHM-MILLIAMMETER AND VACUUM TUBE VOLTMETER

- Two fundamental units at the price of a single tester; the number one instrument for all electronic men.
- VTVM stability assured by battery operation.
- Sensitivity plus—sensitivity of the 1.2 volt (VTVM) range is equal to over nine million ohms per volt.
- Long battery life on VTVM action.
- A V-O-M for general use and a VTVM when needed; ranges entirely adequate for servicing needs.
- Large meter easy to read; unbreakable meter face.
- Single switch selects all ranges; minimizes chance of incorrect settings and burnouts.
- Accuracy 3% DC to 1200 V.

V-O-M RANGES

DC Volts: 0-3-12-60-300-1,200 (20,000 ohms per volt).
AC Volts: 0-3-12-60-300-1,200 (5,000 ohms per volt).
Ohms: 0-1,500-15,000.

Megohms: 0-1.5-150.

DC Microamperes: 0-60 at 250MV. **Output Volts:** 0-3-12-60-300-1,200; jack with condenser in series with AC ranges.

DC Milliamperes: 0-1.2-12-120-1,200 at 250 MV.

DC Amperes: 0-12 at 250 MV.

OB: -20, +11, +23, +37, +51, +63. (600 ohm line at 1 MW).

VTVM RANGES

DC Volts: 0-1.2-6-30-120.

CASE—Molded, fully insulated, 3 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ".

MODEL 631—U.S.A. Dealer Net

Complete with leads, alligator clips, rubber feet, batteries and instruction manual. **\$69.50**

- The super deluxe of VOMs.
- Seventy ranges; nearly double those of conventional testers.
- Frequency compensated from 35 cps to 2 $\frac{1}{2}$ kc.
- Temperature compensated.
- Accurate within 1 $\frac{1}{2}$ % of full scale reading on DC.
- Large open front meter easy to read.
- Mirrored scale.
- Meter protection against overloads.

RANGES

DC Volts: 0-240-6-3-12-60-300-1,200-6,000 at 10,000 ohms per volt.
AC: 0-120-3-1.5-6-30-150-600-3,000 at 20,000 ohms per volt.

MODEL 630-NA — VOLT-OHM-MILLIAMMETER

AC Volts: 0-3-12-60-300-1,200-6,000 at 5,000 ohms per volt.

0-1.5-6-30-150-600-3,000 at 10,000 ohms per volt.

Ohms: 0-1K-10K-100K.

Megohms: 0-1-10-100.

DC Microamperes: 0-120 at 240 millivolts. 0-60-600 at 120 millivolts.

DC Milliamperes: 0-1.2-12-120-1,200 at 240 millivolts. 0-6-60-600 at 120 millivolts.

DC Amperes: 0-12 at 240 millivolts. 0-6 at 120 millivolts.

OB: -20 to +77 (600 ohm line at 1 MW).

Output Volts: 0-3-12-60-300-1,200; jack with condenser in series with AC ranges.

CASE—Molded, fully insulated, 3 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ".

MODEL 630-NA—U.S.A. Dealer Net

Complete with leads, alligator clips, rubber feet, batteries and instruction manual. **\$79.50**



TRIPLET

TEST EQUIPMENT

MODEL 630 — VOLT-OHM-MILLIAMMETER

- Popular streamlined tester with long meter scales arranged for easy reading.
- Outstanding linear ohm scale; low reading .1 ohm, high 100 meg.
- One switch will select any range; minimizes chance of incorrect settings and burnouts.
- Accuracy 3% DC to 1200 V.

RANGES

DC Volts: 0-3-12-60-300-1,200-6,000 at 20,000 ohms per volt.

AC Volts: 0-3-12-60-300-1,200-6,000 at 5,000 ohms per volt.

Ohms: 0-1,000-10,000.

Megohms: 0-1-100.

DC Microamperes: 0-60 at 250 millivolts.

DC Milliampers: 0-1.2-12-120 at 250 millivolts.

DC Amperes: 0-12.

DB: -20 to +77 (600 ohm line at 1 MW).

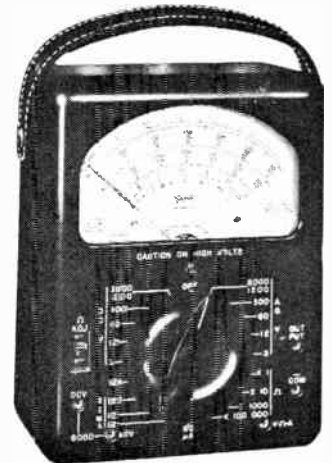
Output Volts: 0-3-12-60-300-1,200; jack with condenser in series with AC ranges.

CASE—Molded, fully insulated. 3½" x 5½" x 7½".

MODEL 630—U.S.A. Dealer Net

Complete with leads, alligator clips, rubber feet, batteries and instruction manual.

\$49.50



MODEL 630-A — VOLT-OHM-MILLIAMMETER

- A laboratory type VOM with ½% resistors for greater accuracy.
- Long mirrored scale to eliminate parallax.
- Banana jacks, low resistance connections.
- High flux magnet for increased ruggedness.
- One switch selects any range; minimizes chance of incorrect settings and burnouts.
- Accuracy 1½% on DC to 1200 V.

RANGES

DC Volts: 0-3-12-60-300-1,200-6,000 at 20,000 ohms per volt.

AC Volts: 0-3-12-60-300-1,200-6,000 at 5,000 ohms per volt.

Dhms: 0-1,000-10,000.

Megohms: 0-1-100.

DC Microamperes: 0-60 at 250 millivolts.

DC Milliampers: 0-1.2-12-120 at 250 millivolts.

DC Amperes: 0-12 at 250 millivolts.

DB: -20 to +77 (600 ohm line at 1 MW).

Output Volts: 0-3-12-60-300-1,200; jack with condenser in series with AC ranges.

CASE—Molded, fully insulated. 3½" x 5½" x 7½".

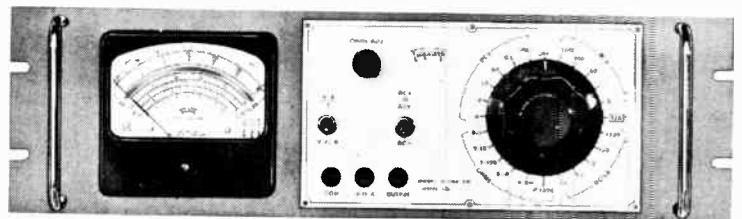
MODEL 630-A—U.S.A. Dealer Net

Complete with leads, alligator clips, rubber feet and instruction manual.

\$59.50

MODEL 630-NA-RM — RACK MOUNTED V-O-M

Rack mounted V-O-M with ranges same as Model 630-NA opposite page, except for 6000 AC and DC Volts. The heavy etched aluminum panel, 19" x 5¼" has two chrome plated handles for easy removal of the tester from the rack. The 4" meter has mirror scale and knife-edge pointer. Standard test leads come out the front. Also provision in the back for a three-lead connector. There is a DC reversing switch on the panel. Large, easy to turn single selector switch. Tester components and wiring enclosed in aluminum housing.



MODEL 630-NA-RM—U.S.A. Dealer Net

\$89.50



MODEL 800 — VOLT-OHM-MILLIAMMETER

- New design with open front for readability.
- Seventy ranges: nearly double those of conventional testers.
- Greater scale length (7"), knife edge pointer, mirror scale.
- Frequency compensated from 40 cps to 20 kc to 300 V.
- Temperature compensated.
- Accurate within 1½% of full scale reading on DC.

RANGES

DC Volts: 0-.240-0.6-3-12-60-300-1200-6000 at 10,000 Ohms per Volt.

0-.120-0.3-1.5-6-30-150-600-3000 at 20,000 Ohms per Volt.

AC Volts: 0-3-12-60-300-1200-6000 at 5,000 Ohms per Volt.

0-1.5-6-30-150-600-3000 at 10,000 Ohms per Volt.

OB: -30 to +70 in 12 ranges.

DC Microamperes: 0-60-600 at 120 MV. 0-120 at 240 MV.

DC Milliampers: 0-6-60-600 at 120 MV. 0-1.2-12-120-1200 at 240 MV.

DC Amperes: 0-6 at 120 MV. 0-12 at 240 MV.

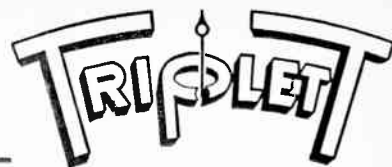
Ohms: 0-1K-10K-100K (4.4-44-440 at center scale).

Megohms: 0-1-10-100 (4400-44,000-440,000 Ohms center scale).

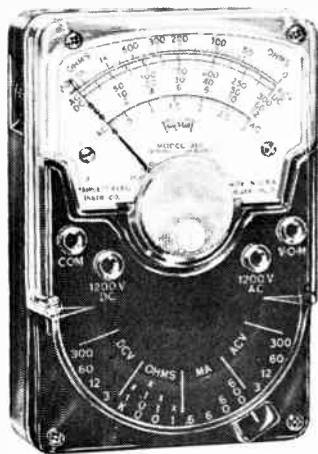
Output: Condenser in series with AC volt ranges.

MODEL 800—U.S.A. Dealer Net

\$89.50



TEST EQUIPMENT



MODEL 310 VOLT-OHM-MILLIAMMETER

- The only complete miniature V-O-M with 20,000 ohms per volt and selector range switch.
- Self-shielded for checking in strong magnetic field.
- Rugged, high torque, bar-ring instrument.
- Unbreakable plastic meter window. Fitting interchangeable test prod into top of tester makes it the common probe, freeing one hand.
- Standard sensitivity, 20,000 ohms per volt DC, and 5,000 ohms per volt AC.
- Accuracy 3% DC.

RANGES

DC Volts: 0-3-12-60-300-1,200 (at 20,000 ohms per volt).
 AC Volts: 0-3-12-60-300-1,200 (at 5,000 ohms per volt).
 Ohms: 0-20,000-200,000.
 Megohms: 0-2-20.

DC Microamperes: 0-600 at 250 millivolts.
 DC Milliampers: 0-6-60-600 at 250 millivolts.
 WEIGHT: Approx. 14 oz. complete with batteries.
 CASE Molded, fully insulated, 2 3/4" x 4 1/4" x 1 3/4".

MODEL 310—U.S.A. Dealer Net \$37.50
 Complete with leads, batteries and instruction manual.

TRIPLETT MODEL 10 CLAMP-ON ADAPTER

Just plug into any Triplet Model 310 Miniature V-O-M it becomes an AC clamp-on ammeter to measure AC amperes without cutting or opening current carrying wires. The split transformer yoke opens at the touch of a lever to fit around a single conductor or bus-bar for direct readings of AC amperes from 6 to 300 in 6 steps.

MODEL 10 \$15.50

In addition, to use with the Model 310, the Model 10 Adapter also can be used as a Clamp-On Ammeter with any Volt-Ohm-Milliammeter having a 3 AC Volt scale at 5,000 ohms per volt such as Triplet Models 630, 630-A, 630-NA, 630-PL, 631, etc., by employing Triplet No. 611 Leads \$2.10 net



RANGES
 AC Amperes: 0-6-12-30-60-120-300.

The Model 10 can be used at a distance from the Model 310 by using No. 311 lead attachment. This permits readings in difficult locations.
 No. 311 Leads \$2.10 net

TRIPLETT MODEL 101 LINE SEPARATOR

Serves to plug in at outlet to divide 2 conductor cords for clamp-on measuring. Makes accurate, rapid testing of radio and TV sets, appliances, motors, etc., possible without opening or splitting double conductors. Also serves to increase ammeter sensitivity 10X and 20X, if desirable, for easier reading.

MODEL 101 \$6.00 net



| RANGE | Max. Capacity Amps. |
|--------------|---------------------|
| Direct | 30 |
| Divide by 10 | 12 |
| Divide by 20 | 6 |



MODEL 100 V-O-M AND CLAMP-ON AMMETER SET

Consists of Model 310 VOM, Model 10 Clamp-On Adapter, Model 101 Line Separator, No. 311 leads — all conveniently packaged in one handy, durable, high-quality Model 379 leather carrying case which has provision for all parts.

MODEL 100 \$64.50 net
 MODEL 100C—Same as above, but with Model 310-C \$71.50 net

NEW TRIPLETT MODEL 310-C

Same small size—
 same convenient features as Model 310



PLUS:

1. Fully enclosed lever range switch
2. 15,000 Ohms per volt AC (20,000 O/V DC, same as 310)
3. Reversing Switch for DC Measurements

LEATHER CARRYING CASES

| | |
|--|-------------|
| Case 639 | Net \$9.90 |
| Case 639-N (Center open flap snaps back, use tester in case) | Net \$9.90 |
| Case 639-P (Sponge rubber lined) | Net \$14.90 |
| Case 669 | Net \$6.90 |
| Case 369 (For testers 310, 305, 308, 309) | Net \$3.20 |
| Case 369-T (Neckstrap carrying case for Model 310) | Net \$7.70 |
| Case 379 (For 310-10-101) | Net \$6.00 |
| Case 659 (For Tester 650) | Net \$11.90 |
| Case 659-P (For Tester 650) | Net \$17.60 |
| Case 629 (For 625-NA, 660, 661, 690-A) | Net \$7.20 |

TESTER STAND

Metal stand holds Model 630, 630-A, 630-PL, 630-APL, 630-NA, 630-T, 631 or 650 tester in approximately a 45° angle; will enable you to make easier readings.
 STAND ONLY—Pt. T-255-A-33—U.S.A. Dealer Net \$1.00

EXTERNAL SHUNTS

| | |
|-------------------------------------|---------|
| Pt. T-91-247—30 Amperes (Plug-In) | \$ 9.90 |
| Pt. T-91-248—60 Amperes (Portable) | \$13.20 |
| Pt. T-91-255—120 Amperes (Portable) | \$13.20 |

TRIPLET

TEST EQUIPMENT



MODEL 850 ELECTRONIC VOLT-OHMMETER

- Extremely versatile with superior voltage measuring capabilities.
- .5 volt full scale range on DC—useful in low voltage transistor circuits.
- Better stability—meter connected in cathode circuit of 12AU7.
- Full view scales—7" long at top arc for easy reading.
- Electrical protection of meter against burnout.

RANGES

Eight DC Volts Ranges: 0-.5-1.5-5-15-50-150-500-1500.
 Seven AC RMS Volts Ranges: 0-1.5-5-15-50-150-500-1500.
 Seven Peak-to-Peak Volts Ranges: 0-4-14-40-140-400-1400-4000.
 Seven Resistance Ranges: 0-1000-10,000-100,000—1 Meg-10 Meg-100 Megohms-1000 Megohms.
 Frequency Range: 15 CPS to 3 MC; (Up to 250 MC with accessory diode probe available extra.)
 Input Impedance: DC Volts 11 Megohms; AC Volts minimum of .83 Megohms.

CASE—Molded black case completely insulated. 7 $\frac{3}{8}$ " x 6 $\frac{1}{8}$ " x 3 $\frac{3}{4}$ ". Carrying handle also can be used to place the tester at 25° angle for ease in reading.

PANEL—Etched aluminum.

MODEL 850—U.S.A. Dealer Net \$79.50

MODEL 630-NS VOLT-OHM-MILLIAMMETER

- 200,000 Ohms per Volt D.C. for greater accuracy on high resistance circuits 20,000 Ohms per Volt A.C.
- 64 ranges.
- Frequency Response: Flat from 20 cps to 100,000 cps.
- Temperature compensated.
- Long 4.5 inch scale—mirrored for greater accuracy.
- Large open front meter—easy to read.
- Overload protection on accidental overloads.

RANGES

D.C. Volts: 0-0.300-0.6-3-12-60-300-1200 at 100,000 Ohms/Volt.
 0-0.150-0.3-1.5-6-30-150-600 at 200,000 Ohms/Volt.
 A.C. Volts: 0-3-12-60-300-1200 at 10,000 Ohms/Volt.
 0-1.5-6-30-150-600 at 20,000 Ohms/Volt.
 DB: -20 to +77 in 12 ranges.
 D.C. Microamperes: 0-60-600 at 150 M.V.—0-120 at 300 M.V.
 D.C. Milliamperes: 0-6-600 at 150 M.V.—0-1.2-12-120-1200 at 300 M.V.
 D.C. Amperes: 0-6 at 150 M.V.—0-12 at 300 M.V.
 Ohms: 0-1K-10K-100K (4.4-44-440 at center scale).
 Megohms: 0-1-10-100 (4400-44,000-440,000 Ohms center scale).
 Output: Condenser in series with AC Volt ranges.
 CASE—Molded, fully insulated, 3 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ".

MODEL 630 NS—U.S.A. Dealer Net \$99.50
 Complete with leads, alligator clips, rubber feet, batteries and instruction manual.



MODEL 666-HH POCKET VOLT-OHM-MILLIAMMETER

Compact, hand-size V-O-M.
 Three-inch meter integral with panel, adjusted to 400 microamperes at 250 millivolts.
 Only three jacks necessary for all ranges.
 Accuracy 3% DC to 1000 V.

RANGES

DC Volts: 0-10-50-250-1,000-5,000 at 1,000 ohms per volt.

AC Volts: 0-10-50-250-1,000-5,000 at 1,000 ohms per volt.

Ohms: 0-2,000-400,000.

DC Milliamperes: 0-10-100-500 at 250 millivolts.

Output Volts: 0-10-50-250-1,000; jack with condenser in series with AC ranges.

CASE—Black molded, insulated 3 $\frac{3}{8}$ " x 5 $\frac{7}{8}$ " x 2 $\frac{1}{8}$ ".

MODEL 666-HH—U.S.A. Dealer Net \$29.50
 Complete with leads, alligator clips, battery and instruction manual.



MODEL 666-R — POCKET VOLT-OHM-MILLIAMMETER

Hand-size—the ideal tester for electrical maintenance.
 Recessed range knob enables tester to fit in tool kit.
 AC rectifier pre-calibrated unit for easy replacement.
 Banana jacks at top of the panel lessen possibility of leads falling over the meter dial.
 Single switch selects all ranges; minimizes chance of incorrect settings and burnouts.
 Accuracy 3% DC to 1000 V.

RANGES

DC Volts: 0-10-50-250-1,000-5,000 at 1,000 ohms per volt.

AC Volts: 0-10-50-250-1,000-5,000 at 1,000 ohms per volt.

Ohms: 0-3,000-300,000.

Megohms: 0-3.

DC Milliamperes: 0-10-100 at 250 MV.

DC Amperes: 0-1 at 250 MV.

Output Volts: 0-10-250-1,000; jack with condenser in series with AC ranges.

CASE—Black molded, streamlined, completely insulated. Handy pocket size, 3 $\frac{3}{8}$ " x 5 $\frac{7}{8}$ " x 2 $\frac{1}{8}$ ".

MODEL 666R—U.S.A. Dealer Net \$32.50
 Complete with leads, alligator clips, batteries and instruction manual.

Special field case designed for the 666-R. Camera-type leather case, No. 669-RL \$6.60



MODEL 630-T — VOLT-OHM-MILLIAMMETER

Specially designed for telephone maintenance. Accuracy 2% on DC. Fused protected circuit protects resistors and meter in ohms ranges.

Special neck strap supplied to hold instrument, leaving both hands free.

Banana jack connectors to eliminate all shock hazard. Completely insulated case to protect instrument from ground.

RANGES

DC Volts: 0-.3-3-12-60-300-600 at 20,000 ohms per volt.

AC Volts: 0-3-12-60-300-600 at 3,000 ohms per volt.

Ohms: 0-1K-10K-100K.

Megohms: 0-1-10.

DC Microamperes: 0-60 at 150 millivolts.

DC Milliamperes: 0-1.2, 12-120 at 150 millivolts.

DB: -20 to +57.

CASE—Molded, completely insulated to protect instrument from ground, 3 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ".

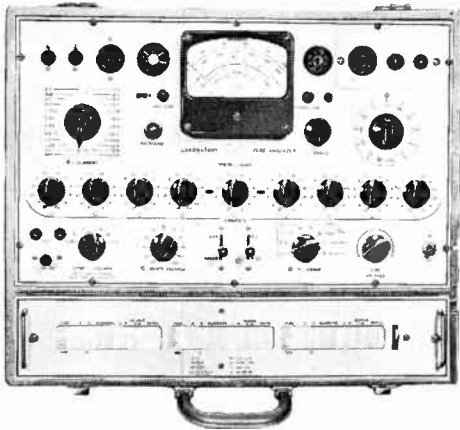
WEIGHT—4 lbs.

MODEL 630-T—U.S.A. Dealer Net \$59.50



TEST EQUIPMENT

TRIPOLET



MODEL 3444 — NEW PORTABLE TRUE DYNAMIC MUTUAL CONDUCTANCE TUBE ANALYZER

Rapid, positive, completely analyzes, solves the most perplexing tube analysis problems—Laboratory, Research, Industrial Production, Radio, TV, Theatre, PA Equipment, Communications, etc.

Measures true Gm—no extra compensating factors—using proper value DC electrode potentials, 5 KC-AC signal source and vacuum tube micro-ammeter at very low 33 ohm plate impedance.

Offers unique test advantages never before available in portable mode s: CHECKS PLATE current cut-off. PLOTS tube characteristic curves. CHECKS GAS under actual operating condition. CHECKS RECTIFIERS under load. CHECKS THYRATRON firing voltage, grid current. CHECKS DUAL section tubes with only 1 lever movement. CHECKS ACCURACY Gm circuits by self-checking Gm circuit. PROVIDES SHORTS, LEAKAGE measurements from 0-10 megohms using filtered DC supply 85V. New easy tube chart data. PROVIDES cut-off measurements voltage, amplifiers. RECESSED SOCKET SAVERS (under-panel mounted) easily removable for replacement.

CASE: Wood, gray leatherette covered, 15 $\frac{3}{8}$ " x 18 $\frac{3}{8}$ " x 7 $\frac{3}{4}$ ".

MODEL 3444—U.S.A. Dealer Net \$279.50

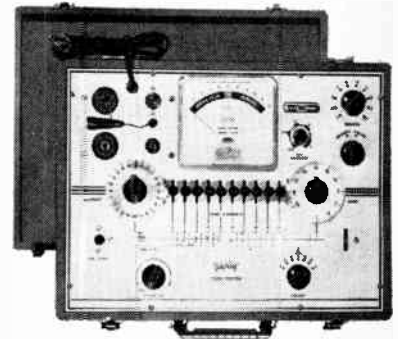
MODEL 3414 — TUBE TESTER — MORE FLEXIBLE

All switch settings made before tube warms up; ready for testing before filaments reach proper temperature. Rejects burned out tubes instantly without filament heatup. Complete flexibility for new tube setups; plus non-obsolence factor. Few simple switch settings give complete accurate story tube capabilities. Modified plate conductance circuit for closer correlation to tube characteristics. Neon indicator shorts test. Slightest interelement shorts show while cathodes are hot. New variable leakage test from 0.3 Meg. to over 3 Meg. Checks all today's and tomorrow's tubes (including new series filament tubes). With BV adapter (\$5.40) tests TV picture tubes in set. Wide angle neon indicator for greater visibility glow test. Checks appliances for shorts, open circuits.

CASE: Counter-portable, wood, dark gray leatherette covered, 15 $\frac{7}{8}$ " x 11 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ ".

PANEL: Etched, heavy gauge aluminum, black and red markings, 12 lbs.

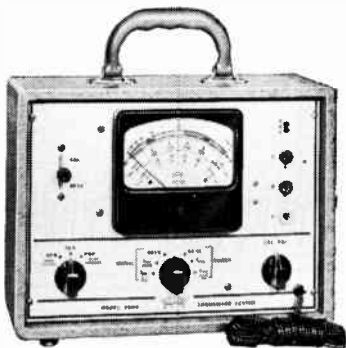
MODEL 3414—U.S.A. Dealer Net \$89.50



MODEL 2590 — NEW TRANSISTOR TESTER

Tests Power Type Transistors and Signal Type Transistors under SIMULATED OPERATING CONDITIONS. Tests for shorts and leakage. . . Provides for testing ICEO (at 9.5 volts); ICBO (at 9.5 volts), and BETA (at 3 volts) on both NPN and PNP transistors. . . Checks leakage and forward currents of Diodes. . . SIMPLE AND STRAIGHTFORWARD IN OPERATION. . . No roll chart or special technical data is required. The only information needed to make a test is the transistor type. . . FOR ANY BASING ARRANGEMENT. A transistor socket and a set of external leads permit use with any basing arrangement. . . Power—115 volts, 50-60 cycle AC. No batteries are required. . . CASE—Handsome: gray leatherette covered case, 11 $\frac{3}{4}$ " x 8 $\frac{3}{4}$ " x 5 $\frac{1}{4}$ ". Case has rubber feet. Luggage style handle for ease in carrying. . . RECESSED PANEL—Panel of etched heavy gauge aluminum has natural finish with black and red markings and trim. . . WEIGHT—Approximately 5 $\frac{1}{4}$ lbs.; Shipping weight, 9 lbs.

MODEL 2590—Suggested U.S.A. Dealer Net Price \$54.50



MODEL 690-A — TRANSISTOR TESTER

Leakage and gain tests for all low and medium power PNP and NPN type transistors. . . Measures DC Beta (current gain from base to collector with grounded emitter) from 5 to Infinity. The long, GOOD scale provides a better indication of the degree of quality. . . Affords an exact test for shorts and leakage. . . Checks forward and reverse leakage of diodes. Prevents drain on batteries in case of accidental shorting of leads. Battery operation eliminates need for external power supply. . . Error-proof controls. . . Easily portable. Transistor socket and external leads for any basing layout. CASE—Black molded 2 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 6" with removable black leather strap handle. Overall thickness of tester 3".

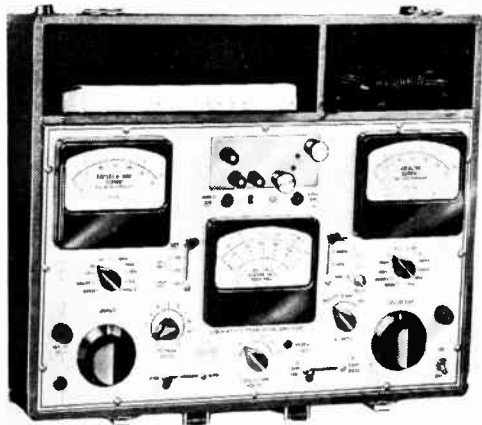
PANEL—Black and red markings etched on aluminum.

MODEL 690-A—U.S.A. Dealer Net \$32.50
Carrying case 629.



TRIPOLET

TEST EQUIPMENT



MODEL 3490 — TRANSISTOR ANALYZER

RANGES

| | |
|---------------------------------|---|
| Input Current (Emitter or Base) | 0-1 Amp, 0-300 Ma, 0-100 Ma, 0-100 Ma, 0-30 Ma, 0-10 Ma, 0-3 Ma, 0-1 Ma, 0-300 Ua. |
| Collector Current | 0-10 Amp, 0-3 Amp, 0-1 Amp, 0-300 Ma, 0-100 Ma, 0-30 Ma, 0-10 Ma, 0-3 Ma, 0-1 Ma, 0-300 Ua. |
| ICEO, ICO (ICBO) | 0-60 Ma, 0-6 Ma, 0-600 Ua, 0-60 Ua. |
| Collector Voltage | 0-120V, 0-60V, 0-30V, 0-12V, 0-3V |
| Emitter or Base Voltage | 0-12V, 0-1.2V |
| Tetrode | 0-10V Calibrated Control |

For the ultimate in Transistor Analysis, Model 3490 offers among other features:

THREE INDEPENDENT Power Supplies—COLLECTOR currents to 10 Amperes—INPUT currents to 1 Ampere—SEPARATE Input and Collector meters (4½") monitor emitter or base—CONTINUOUSLY VARIABLE Emitter or Base Voltage or Current—CONTINUOUSLY VARIABLE Tetrode Voltage—MEASUREMENT AT ANY POTENTIAL of ICO and ICEO—DC ALPHA or BETA measurement on Signal and Power Types—MEASUREMENT OF AC BETA on Signal Types at 1000 cycles—CONTINUOUS INSTRUMENT COVERAGE, no skips—ALSO HANDLES Punch Through; Saturation and Floating Potential Measurements—ANALYZES transistors in either the Common Base or Common Emitter configuration.

CASE Wood, gray leatherette covered, 18¼" x 15¼" x 8" with removable cover and sloping etched aluminum panel.

MODEL 3490—Suggested U.S.A. Dealer Net \$399.50

MODEL 2002 — APPLIANCE TESTER

For installations and servicing.

Shows power consumption of industrial equipment, radios, electric ranges, refrigerators, washers and other household appliances under actual operating conditions, on either DC or AC between 25 and 133 cycles.

A Wattmeter on the left and a Voltmeter on the right permit Watts and Volts to be read simultaneously or independently.

Shows if voltage remains within limits under operating loads.

Current coils assure ample capacity for momentary tests on motor starting overloads.

Heavy inner construction assures ample current capacity for momentary tests on motor starting overloads.

Shows faulty power lines.

RANGES

Watts: DC-AC: 0-1,500-3,000.

Volts: DC-AC: 0-130-260.

CASE—Heavy leather and snap button cover and leather handle, 6½" x 4½" x 3¼". Storage space for leads furnished which include one cord to plug into wall socket, another with a socket to receive connections from appliances under test.

MODEL 2002—U.S.A. Dealer Net \$49.50



MODEL 660, 661 — LOAD CHECK

A time-saver, designed for TV servicing. Helps prevent repair come-backs.

No time lost in connecting this unit. Just plug in the power cord of the radio and all meters are connected. Quick way to locate hidden shorts and overloaded circuits.

Double meter indication provides simultaneous check of line voltage and power.

Shows faulty power line wiring as well as proper functioning of the appliance under test.

Simple operation by means of only one toggle switch to change watts range.

Double range on Watts meter permits one unit to serve from a 5-tube radio to the largest TV set.

RANGES Watts: DC-AC: 0-500-1,000 Volts: DC-AC: 0-150

CASE Black molded, 2½" x 5½" x 6", insulated to protect instrument from ground. Removable black leather strap handle.

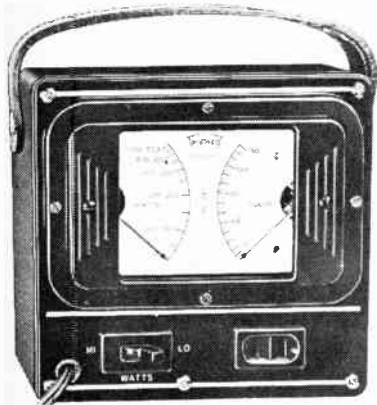
MODEL 660—U.S.A. Dealer Net \$39.50

MODEL 661

RANGES Watts: DC-AC: 0-150-300 Volts: DC-AC: 0-150

Designed for Radio and Low Wattage Appliances. Appearance and construction same as 660 with watt range 150-300.

MODEL 661—U.S.A. Dealer Net \$39.50



MODEL 3432-A — SIGNAL GENERATOR

The generator is provided with a 400 cycle audio frequency with variable control for 0-100 per cent modulation.

| | | | |
|--------|--------------|---------------|------------|
| Band A | 160-370 KC | Band E | 4.85-13 MC |
| B | 360-735 KC | F | 12.5-35 Mc |
| C | 715-1875 KC | G | 34-110 MC |
| D | 1825-4950 KC | G (Harmonics) | 68-220 MC |

CASE—Metal with black baked suede finish, 15½" x 11½" x 6¼". Black leather strap handle, rubber feet.

MODEL 3432-A—U.S.A. Dealer Net \$109.50

Designed for new servicemen coming into the service field. One generator to align radio, television (monochrome and color).

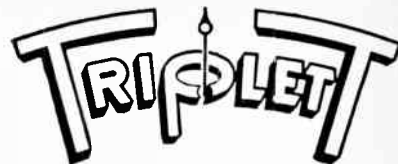
Complete frequency coverage 160 KC to 110 MC fundamental with seven bands (220 MC harmonics).

R.F. circuits are double shielded with copper steel shields.

Large easily read etched aluminum dial.

Cathode follower output provides good stability by acting as a buffer to the oscillator.



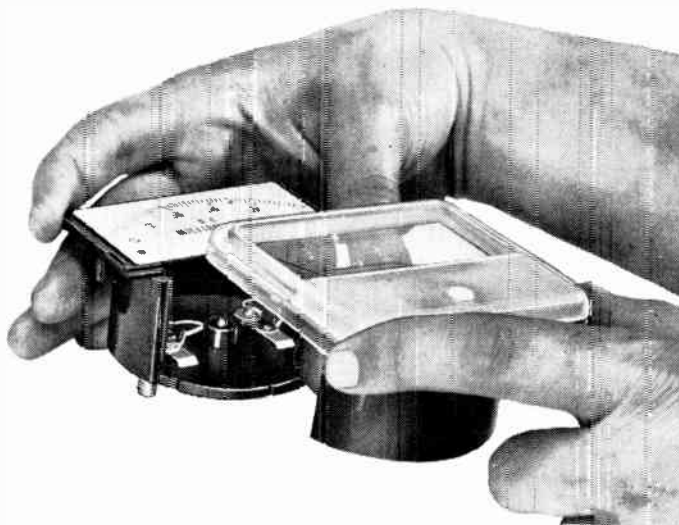


TEST EQUIPMENT

UNIMETERS

An innovation in self-service meters these Select-Your-Range Unimeters consist of two basic meter movements, which can be combined with any one of a number of separate dial-component units for a wide variety of meter ranges. The basic meter movements and the Dial-Component units lock together simply; no soldering, no wiring, no opening of the dust-proof movement is required.

In two sizes, 327-U 3½" rectangular and 420-U 4½" rectangular with mirror scale for greater accuracy in reading. Also in handy kits, both sizes, as below. The triple-purpose kit case with handle provides handy portability; easy protective storage and attractive display.



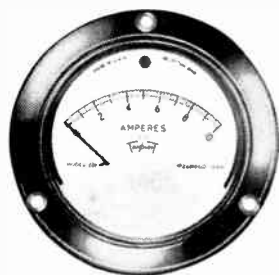
UNIMETER PRICE LIST — BASIC MOVEMENTS

| | | | |
|---|----------------------|---|----------------------|
| | U.S.A. Dealer Net | | U.S.A. Dealer Net |
| Model 327-U 0-1 DC Milliammeter (50 MV) | \$12.10 | Model 420-U 0-1 DC Milliammeter (50 MV) | \$13.20 |
| Model 327-U 0-50 DC Microammeter (250 MV) | 17.50 | Model 420-U 0-50 DC Microammeter (250 MV) | 18.70 |

DIAL-COMPONENT UNITS

U.S.A. Dealer Net Price Each Unit (Specify for use with 327-U or 420-U)\$2.75

| DC-MA | | DC-VM 1000 o/v Film Type | DC-AM | AC-VM Rectifier Type* | DC-UA | DC-MA | | DC-VM 1000 o/v Film Type | DC-AM | AC-VM Rectifier Type* | DC-UA |
|-------|-------|--------------------------------|-------|-----------------------------|-------|-------|-------|--------------------------------|-------|-----------------------------|-------|
| 0-1 | 0-100 | 0-10 | 0-1 | 0-10 | 0-50 | 0-15 | 0-250 | 0-150 | 0-15 | | 0-500 |
| 0-5 | 0-150 | 0-25 | 0-5 | 0-150 | 0-100 | 0-25 | 0-300 | 0-300 | 0-25 | | |
| 0-10 | 0-200 | 0-50 | 0-10 | 0-300 | 0-200 | 0-50 | 0-500 | 0-500 | 0-50 | *500 o/v | |



RUGGEDIZED INSTRUMENTS

A complete line of 2½" and 3½" ruggedized and sealed instruments designed to meet government specification MIL-M-10304A.

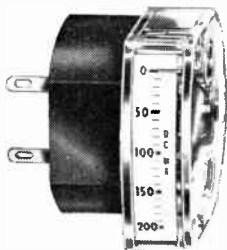
Triplet ruggedized instruments employ the unique and exclusive bar-ring construction so well adapted to ruggedization, that the addition of spring loaded jewels and an internal rubber mount (both designed for jewel protection) constitute the essential difference between the commercial and ruggedized movements.

The bar-ring construction is inherently self-shielding, so that the heavy steel case does not affect instrument calibration nor does mounting in a steel panel of any thickness.

The unusually strong housing consists of a drawn steel case with heavy die cast window bezel. The bezel seals the window to the case with a simple gasket and screws. A tough plastic window is used instead of glass.

Husky gasket-sealed studs are used for electrical connections to provide additional protection over delicate glass sealed types.

Most catalog ranges of DC: MV, Volts, Mic, Ma, Amp and AC rectifier type can be supplied. Regular dials in accordance with MIL-M-10304A are supplied although special dials of all descriptions can be made up for special applications.



MINIATURE EDGEWISE PANEL INSTRUMENTS

If space on your panel is at a premium here is a miniature meter that will fit into even the most restricted area—yet give you the readability, performance and reliability you expect from the conventional 2½" sizes.

Weighing only four ounces this meter also is of value to the user who has a weight limitation factor on his hands.

Accuracy—DC 2% of full scale; AC Rectifier type 5% of full scale.

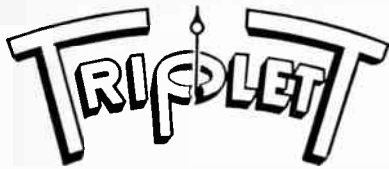
Self-Shielded Bar-Ring Magnet—Not affected by magnetic panels. High torque, exceedingly rugged and accurate.

Mounting—Horizontal, zero at left and barrel down is standard.

Vertical mounting or other special adaptations in quantity orders.

Panel Hole Required—Only ⅞" x 1⅛".

| | | | |
|--------------|-------------------|---------------------------|-------------------|
| DC-MA | Dealer Net | DC-UA | Dealer Net |
| 0-1 | \$10.90 | 0-50 | \$16.40 |
| 0-10 | 10.90 | 0-100 | 14.30 |
| 0-25 | 11.30 | 0-200 | 12.20 |
| 0-50 | 11.30 | | |
| 0-100 | 11.30 | DC-AM | |
| 0-150 | 11.30 | 0-10 | \$11.80 |
| 0-200 | 11.30 | | |
| 0-300 | 11.30 | AC-VM (Rect. Type) | |
| 0-500 | 11.30 | 0-150 | \$19.70 |
| | | 0-300 | 20.70 |
| DC-VM | | VU Meters | |
| 0-10 | \$11.80 | A or B Scales | \$21.90 |
| 0-50 | 11.80 | | |
| 0-150 | 11.80 | | |



INSTRUMENTS

DC MILLIVOLTMETERS

| Range | Approx. Res. | Scale Div. | 2 1/2" Models | | 2 1/2" Models | 3 1/2" Models | 3 1/2" Models | 4 1/2" Model | 4 1/2" Models | | |
|-------|--------------|------------|---------------|-------|---------------|---------------|---------------|--------------|---------------|---------|---------|
| | | | 221-T | 227-T | 220-M | 321-T | 327-T | 321-PL | 327-PL | 420 | 420-M | 420-PL |
| 0-50 | 6.3 | 50 | \$10.90 | | \$10.90 | \$11.60 | \$11.60 | \$12.80 | \$12.80 | \$12.80 | \$12.80 |
| 0-100 | 12.5 | 50 | 10.90 | | 10.90 | 11.60 | 11.60 | 12.80 | 12.80 | 12.80 | 12.80 |
| 0-150 | 20 | 75(30)** | 10.90 | | | 11.60 | | 12.80 | | | |



DC 221-T, 321-T

AC 231-S, 331-S

DC VOLTMETERS (1000 Ohms per Volt) — FILM TYPE RESISTORS

| Range | Scale Div. | 2 1/2" Models | | 2 1/2" Models | 3 1/2" Models | 3 1/2" Models | 4 1/2" Models | 4 1/2" Models |
|--------|------------|---------------|-------|-----------------------|---------------|-----------------------|---------------|---------------|
| | | 221-T | 227-T | 220-M, 221-PL, 227-PL | 321-T, 327-T | 320-M, 321-PL, 327-PL | 420-M, 420-PL | 420-M, 420-PL |
| 0-10 | 50 | \$11.80 | | \$11.80 | \$12.30 | \$12.30 | \$13.50 | \$13.50 |
| 0-15 | 75(30)** | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-25 | 50 | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-50 | 50 | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-100 | 50 | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-150 | 75(30)** | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-200 | 40 | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-250 | 50 | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-300 | 60(30) | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-500 | 50 | 14.10*** | | 14.10*** | 13.00 | 13.00 | 14.20 | 14.20 |
| 0-750 | 75(30)** | 17.20*** | | 17.20*** | 13.00 | 13.00 | 14.20 | 14.20 |
| 0-1000 | 50 | 14.90 | | 14.90 | 15.50 | 15.50 | 16.70 | 16.70 |
| 0-2000 | 40 | 15.50 | | 15.50 | 16.20 | 16.20 | 17.40 | 17.40 |
| 0-3000 | 60(30)** | 16.20 | | 16.20 | 16.80 | 16.80 | 18.00 | 18.00 |
| 0-4000 | 40 | 16.50 | | 16.50 | 17.20 | 17.20 | 18.40 | 18.40 |
| 0-5000 | 50 | 16.80 | | 16.80 | 17.50 | 17.50 | 18.70 | 18.70 |



DC 220-M, 320-M, 420-M

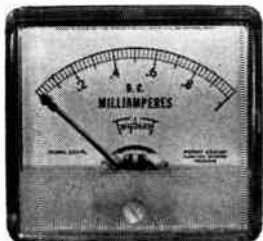
DC VOLTMETERS (1000 Ohms per Volt) — WIREWOUND RESISTORS

| Range | Scale Div. | 2 1/2" Models | | 2 1/2" Models | 3 1/2" Models | 3 1/2" Models | 4 1/2" Models | 4 1/2" Models |
|--|------------|---------------|-------|-----------------------|---------------|-----------------------|---------------|---------------|
| | | 221-T | 227-T | 220-M, 221-PL, 227-PL | 321-T, 327-T | 320-M, 321-PL, 327-PL | 420-M, 420-PL | 420-M, 420-PL |
| 0-1 | 50 | \$11.80 | | \$11.80 | \$12.30 | \$12.30 | \$13.50 | \$13.50 |
| 0-3 | 60(30)** | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-5 | 50 | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-10 | 50 | 11.80 | | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-25 | 50 | 14.40 | | 14.40 | 15.00 | 15.00 | 16.20 | 16.20 |
| 0-50 | 50 | 14.40 | | 14.40 | 15.00 | 15.00 | 16.20 | 16.20 |
| 0-100 | 50 | 15.00 | | 15.00 | 15.60 | 15.60 | 16.80 | 16.80 |
| 0-150 | 75(30)** | 15.00 | | 15.00 | 15.60 | 15.60 | 16.80 | 16.80 |
| 0-300 | 60(30)** | 18.30 | | 18.30 | 18.90 | 18.90 | 20.10 | 20.10 |
| 0-500 | 50 | 20.50*** | | 20.50*** | 21.00 | 21.00 | 22.20 | 22.20 |
| 0-750 | 75(30)** | 23.40*** | | 23.40*** | 24.10 | 24.10 | 25.30 | 25.30 |
| The following supplied with external resistor boxes at prices shown: | | | | | | | | |
| 0-1000 | 50 | 41.30 | | 41.30 | 42.00 | 42.00 | 43.10 | 43.10 |
| 0-2000 | 40 | 67.70 | | 67.70 | 68.20 | 68.20 | 69.40 | 69.40 |

***Supplied with external resistors.

DC MICROAMMETERS

| Range | Approx. Res. | Scale Div. | 2 1/2" Models | 2 1/2" Models | 3 1/2" Models | 3 1/2" Models | 4 1/2" Model | 4 1/2" Models |
|-----------|--------------|------------|---------------|---------------|-----------------------|---------------|-----------------------|---------------|
| | | | 221-T | 227-T | 220-M, 221-PL, 227-PL | 321-T, 327-T | 320-M, 321-PL, 327-PL | 420 | 420-M, 420-PL |
| 0-20 | 4750 | 40 | \$19.40 | | \$19.40 | \$20.00 | \$20.00 | \$21.20 |
| 0-50 | 2000 | 50 | 16.40 | | 16.40 | 16.90 | 16.90 | 18.20 |
| 0-100 | 825 | 50 | 14.30 | | 14.30 | 14.90 | 14.90 | 16.10 |
| 0-200 | 360 | 40 | 12.20 | | 12.20 | 12.90 | 12.90 | 14.10 |
| 0-500 | 156 | 50 | 11.70 | | 11.70 | 12.20 | 12.20 | 13.40 |
| 50-0-50 | 825 | 50 | 14.30 | | 14.30 | 14.90 | 14.90 | 16.10 |
| 100-0-100 | | 50 | 12.20 | | 12.20 | 12.90 | 12.90 | 13.40 |
| 500-0-500 | 55 | 50 | 10.90 | | 10.90 | 11.60 | 11.60 | 12.80 |

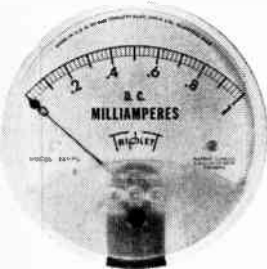


DC 227-PL, 327-PL

AC 237-PL, 337-PL

DC MILLIAMMETERS

| Range | Approx. Res. | Scale Div. | 2 1/2" Models | 2 1/2" Models | 3 1/2" Models | 3 1/2" Models | 4 1/2" Model | 4 1/2" Models |
|--------|--------------|------------|---------------|---------------|-----------------------|---------------|-----------------------|---------------|
| | | | 221-T | 227-T | 220-M, 221-PL, 227-PL | 321-T, 327-T | 320-M, 321-PL, 327-PL | 420 | 420-M, 420-PL |
| 0-1 | 55 | 50 | \$10.90 | | \$10.90 | \$11.60 | \$11.60 | \$12.80 |
| 0-1.5 | 30 | 75(30)** | 10.90 | | 10.90 | 11.60 | 11.60 | 12.80 |
| 0-3 | 14 | 60(30)** | 10.90 | | 10.90 | 11.60 | 11.60 | 12.80 |
| 0-5 | 8.5 | 50 | 10.90 | | 10.90 | 11.60 | 11.60 | 12.80 |
| 0-10 | 3.1 | 50 | 10.90 | | 10.90 | 11.60 | 11.60 | 12.80 |
| 0-15 | 6.6 | 75(30)** | 10.90 | | 10.90 | 11.60 | 11.60 | 12.80 |
| 0-25 | 4 | 50 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-50 | 2 | 50 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-75 | 1.3 | 75(30)** | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-100 | 1 | 50 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-150 | 0.6 | 75(30)** | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-200 | 0.5 | 40 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-250 | 0.4 | 50 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-300 | 0.33 | 60(30)** | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-400 | 0.25 | 40 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-500 | 0.2 | 50 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-750 | 0.13 | 75(30)** | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |
| 0-1000 | 0.1 | 50 | 11.30 | | 11.30 | 12.00 | 12.00 | 13.20 |

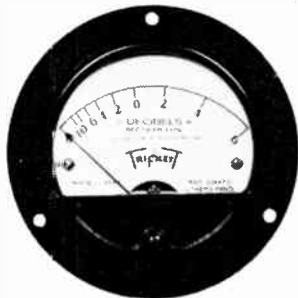


DC 221-PL, 321-PL

AC 231-PL, 331-PL

INSTRUMENTS

TRIPLET



DC AMMETERS

| Range | Scale Div. | 2 1/2" Models 221-T, 227-T | 2 1/2" Models 220-M, 221-PL, 227-PL | 3 1/2" Models 321-T, 327-T | 3 1/2" Models 320-M, 321-PL, 327-PL | 4 1/2" Model 420 | 4 1/2" Models 420-M, 420-PL |
|-------|------------|-------------------------------|---|-------------------------------|---|---------------------|--------------------------------|
| 0-1 | 50 | \$10.90 | \$10.90 | \$11.60 | \$11.60 | \$12.80 | \$12.80 |
| 0-3 | 60(30)** | 10.90 | 10.90 | 11.60 | 11.60 | 12.80 | 12.80 |
| 0-5 | 50 | 11.80 | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-10 | 50 | 11.80 | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-15 | 75(30)** | 11.80 | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-25 | 50 | 11.80 | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-30 | 60(30)** | 11.80 | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |
| 0-50 | 50 | 11.80 | 11.80 | 12.30 | 12.30 | 13.50 | 13.50 |

D.C. Ammeters are self-contained up to and including 50 Amperes. Shunts 75 Amperes (50 M.V.) and higher are switch-board type with 5 ft. leads.

AC VOLTMETERS

| Range | Approx. Ohms/Volt | Scale Div. | 2 1/2" Models 231-S, 237-S | 2 1/2" Models 231-PL, 237-PL | 3 1/2" Models 331-S, 337-S | 3 1/2" Models 331-PL, 337-PL | 4 1/2" Model 430 | 4 1/2" Model 430-PL |
|---------|----------------------|------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|---------------------|------------------------|
| 0-1.5 | 1.33 | 75(30)** | \$11.40 | \$11.40 | \$12.10 | \$12.10 | \$12.80 | \$12.80 |
| 0-3 | 3.33 | 60(30)** | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-5 | 4 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-10 | 10 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-15 | 16 | 75(30)** | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-25 | 20 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-50 | 50 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-100 | 91 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-150 | 125 | 75(30)** | 12.50 | 12.50 | 13.10 | 13.10 | 13.80 | 13.80 |
| 0-250 | 144 | 50 | 13.10 | 13.10 | 13.80 | 13.80 | 14.40 | 14.40 |
| 0-300 | 144 | 60(30)** | 13.80 | 13.80 | 14.30 | 14.30 | 15.00 | 15.00 |
| 0-500* | 125 | 50 | 17.80 | 17.80 | 18.50 | 18.50 | 19.10 | 19.10 |
| 0-750* | 125 | 75(30)** | 20.60 | 20.60 | 21.20 | 21.20 | 21.90 | 21.90 |
| 0-1000* | 125 | 50 | 22.20 | 22.20 | 22.90 | 22.90 | 23.50 | 23.50 |

These A.C. Voltmeters are for use on frequencies from 25 to 133 cycles. *Supplied with external resistor boxes at prices shown above. All other instruments are self-contained. Double-range Voltmeters are available on special order. Prices on request.

AC AMMETERS

| Range | Approx. Res. | Scale Div. | 2 1/2" Models 231-S, 237-S | 2 1/2" Models 231-PL, 237-PL | 3 1/2" Models 331-S, 337-S | 3 1/2" Models 331-PL, 337-PL | 4 1/2" Model 430 | 4 1/2" Model 430-PL |
|-------|-----------------|------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|---------------------|------------------------|
| 0-1 | .21 | 50 | \$11.40 | \$11.40 | \$12.10 | \$12.10 | \$12.80 | \$12.80 |
| 0-2 | .11 | 40 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-3 | .02 | 60(30)** | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-5 | .01 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-10 | .005 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-15 | .002 | 75(30)** | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-25 | .001 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-30 | .011 | 60(30)** | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-50 | .0005 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-75 | .0003 | 75 | | | 13.30 | | 14.50 | |

AC MILLIAMMETERS

| Range | Approx. Res. | Scale Div. | 2 1/2" Models 231-S, 237-S | 2 1/2" Models 231-PL, 237-PL | 3 1/2" Models 331-S, 337-S | 3 1/2" Models 331-PL, 337-PL | 4 1/2" Model 430 | 4 1/2" Model 430-PL |
|-------|-----------------|------------|-------------------------------|---------------------------------|-------------------------------|---------------------------------|---------------------|------------------------|
| 0-10 | 0-10 | 50 | \$11.40 | \$11.40 | \$12.10 | \$12.10 | \$12.80 | \$12.80 |
| 0-15 | 1150 | 75(30)** | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-25 | 344 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-50 | 82 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-100 | 21 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-200 | 6.7 | 40 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-250 | 3.4 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |
| 0-500 | 0.8 | 50 | 11.40 | 11.40 | 12.10 | 12.10 | 12.80 | 12.80 |

THERMO AMMETERS (R.F.)

| Range | Approx. Res. | Scale Div. | 2 1/2" Models 241-T, 247-T | 3 1/2" Models 341-T, 347-T | 3 1/2" Models 341-PL, 347-PL | 4 1/2" Model 440 | 4 1/2" Model 440-PL |
|------------|-----------------|------------|-------------------------------|-------------------------------|---------------------------------|---------------------|------------------------|
| 0-5 Amps | .93 | 50 | \$12.10 | \$12.80 | \$12.80 | \$14.00 | \$14.00 |
| 0-1 Amps | .35 | 50 | 12.10 | 12.80 | 12.80 | 14.00 | 14.00 |
| 0-1.5 Amps | .21 | 75(30) | 12.10 | 12.80 | 12.80 | 14.00 | 14.00 |
| 0-2.5 Amps | .13 | 50 | 12.10 | 12.80 | 12.80 | 14.00 | 14.00 |
| 0-5 Amps | .06 | 50 | 12.10 | 12.80 | 12.80 | 14.00 | 14.00 |
| 0-10 Amps | .03 | 50 | 12.10 | 12.80 | 12.80 | 14.00 | 14.00 |

Internal couples are normally furnished at prices shown. If external couples are required, please specify on order, adding \$6.10 net to price of instrument shown above. External couples only less meter, with leads, \$7.30 net each.

**Scale divisions for 2-inch Models in parentheses.

***Supplies with external resistors.

**It's so easy to order
from this catalog . . .**

When ordering products shown in this book
or writing for additional information, please
be sure to specify:

- 1. Manufacturer's Catalog Numbers
and Page Numbers.**
- 2. The Year and Edition of This
MASTER.**

This will avoid confusion and expedite delivery.

Thank you!

The
Radio - Electronic
MASTER

UNITED SYSTEMS CORPORATION

CERTIFIED ACCURACY - 0.2% FULL SCALE
.001 TO 1020 V-D.C.
RESOLUTION 0.05%
PORTABLE (7 lbs.)
FLOATING OR GROUNDED INPUT
COMPLETELY TRANSISTORIZED - RELIABLE

LOW COST Outstanding performance is provided in a low cost instrument providing digital readout. Small (5½" x 7" x 8") and weighing only 7 lbs., unit is conveniently designed for either lab or production use.

RESOLUTION and REPEATABILITY The warranted accuracy is 2 digits for all ranges. This covers all thermal effects and reference circuit errors. The instrument can be easily read and is sensitive to small voltage changes. For short term observation, under stabilized ambient conditions, unit will repeat to ½ digit or .05%. Thus, for many applications, the instrument can be used to a comparative accuracy of .05%.

READABILITY Presentation is readable upon application of slowly changing voltages. Thus, input voltage drift can be continuously observed.

READING SPEED Instrument comes to reading balance quickly and without annoying creep. Average reading time is 2 seconds. Numerals are illuminated.

CALIBRATION EASE High input impedance permits direct calibration from a standard cell. Under normal usage, recalibration is required only at 6 month intervals.

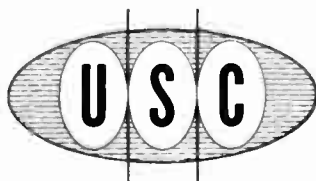
RELIABILITY High reliability is achieved by a completely transistorized amplifier and the absence of stepping switches and relays. Normal overloads or incorrect polarity will not damage instrument.

LOW POWER CONSUMPTION The efficient circuit requires only 28 watts maximum, thus minimizing heat rise and attending problems.

OTHER USES By use of compatible DC transducers, the Digitec 200 can be used to display readings of current, pressure, speed, position, flow, angle or any parameter.

READING RETENTION A jack is available on the rear of the case to permit holding of a displayed voltage by means of an external switch. Suitable switches complete with cord and plug are available as optional accessories.

CARRYING HANDLE A convenient carrying handle also serves as a means for setting the viewing angle for optimum readability.



UNITED SYSTEMS CORPORATION
DAYTON 3, OHIO

Offers...

a new
in DVM

**LOW
COST**

\$287⁵⁰



DIGITEC SPECIFICATIONS

| | |
|---------------------------------------|---|
| D.C. Voltage Ranges Manually Selected | 0.000 to 1.020 000.0 to 102.0 00.00 to 10:20 0000. to 1020. |
| Decimal Point | Illuminated—Automatically shifts with range switch |
| Accuracy | 2 digits (0.2% full scale) over ambient range of 60° to 100° F. |
| Resolution and Readability | ½ digit (0.05% full scale) |
| Balance Time | 4 seconds full scale |
| Input Impedance | 2 megohms |
| A.C. Rejection | 50 db. at 60 cps |
| Power Requirements | 105/125 V—60 cps—28 watts |
| Size | 5½" High, 8" Wide, 7" Deep |
| Weight | 7 lbs. |
| Price | \$287.50 |

This certificate of accuracy is furnished with each instrument



WESTON INSTRUMENTS

201/301 PANEL INSTRUMENT SERIES

MODELS 201/301 — D-C VOLTMETERS — 1000 OHMS PER VOLT

| Range | Scale Div. | | Price | |
|-------|------------|-----|---------|---------|
| | 201 | 301 | 201 | 301 |
| 1.5 | 30 | 75 | — | \$14.20 |
| 3 | 30 | 60 | \$13.25 | 14.20 |
| 5 | 25 | 50 | 13.25 | 14.20 |
| 10 | 20 | 50 | 13.25 | 14.20 |
| 15 | 30 | 75 | 13.25 | 14.20 |
| 30 | 30 | 60 | 13.25 | 14.20 |
| 50 | 25 | 50 | 13.25 | 14.20 |
| 100 | 20 | 50 | 13.25 | 14.20 |
| 150 | 30 | 75 | 13.25 | 14.20 |
| 200 | 40 | 40 | 13.70 | 14.65 |
| 250 | 25 | — | 13.70 | — |
| 300 | 30 | 60 | 13.70 | 14.65 |
| 500 | 25 | 50 | 14.20 | 15.10 |
| 800 | — | 40 | — | 17.00 |
| 1KV | — | 50 | — | 18.85 |

MODEL 201/301 — D-C MILLIAMMETERS

| Range | Scale Div. | | Approx. Resis. Ohms | | Price | |
|-----------|------------|-----|---------------------|------|---------|---------|
| | 201 | 301 | 201 | 301 | 201 | 301 |
| 1 | 20 | 50 | 100 | 88 | \$12.80 | \$13.70 |
| 1.5 | — | 75 | — | 88 | — | 13.70 |
| 2 | — | 40 | — | 45 | — | 13.70 |
| 3 | — | 60 | — | 45 | — | 13.70 |
| 5 | 25 | 50 | 6 | 8 | 12.80 | 13.70 |
| 10 | 20 | 50 | 2.5 | 2.5 | 12.80 | 13.70 |
| 15 | 30 | 75 | 2.5 | 2.5 | 12.80 | 13.70 |
| 20 | 40 | 40 | 2.5 | 2.5 | 12.80 | 13.70 |
| 30 | 30 | 60 | 2.5 | 2.5 | 12.80 | 13.70 |
| 50 | 25 | 50 | 2 | 2 | 12.80 | 13.70 |
| 100 | 20 | 50 | 1 | 1 | 12.80 | 13.70 |
| 150 | 30 | 75 | 0.66 | 0.66 | 12.80 | 13.70 |
| 200 | — | 40 | — | 0.5 | — | 13.70 |
| 300 | — | 60 | — | 0.33 | — | 13.70 |
| 500 | 25 | 50 | 0.2 | 0.2 | 12.80 | 13.70 |
| 800 | — | 40 | — | 0.12 | — | 13.70 |
| 1-0-1 | 40 | 40 | 40 | 45 | 12.80 | 13.70 |
| 10-0-10 | — | 50 | — | 2.5 | — | 13.70 |
| 50-0-50 | — | 50 | — | 2 | — | 13.70 |
| 100-0-100 | 40 | 40 | 1 | 1 | 12.80 | 13.70 |

MODELS 201/301 — D-C AMMETERS

| Range | Scale Div. | | Price | |
|---------|------------|-----|---------|---------|
| | 201 | 301 | 201 | 301 |
| 1 | 20 | 50 | \$12.80 | \$13.70 |
| 1.5 | 30 | 75 | 12.80 | 13.70 |
| 2 | — | 40 | — | 13.70 |
| 3 | 30 | 60 | 12.80 | 13.70 |
| 5 | 25 | 50 | 12.80 | 13.70 |
| 10 | 20 | 50 | 12.80 | 13.70 |
| 15 | 30 | 75 | 13.70 | 14.65 |
| 20 | 20 | 20 | 13.70 | 14.65 |
| 30 | 30 | 60 | 13.70 | 14.65 |
| 50 | — | 50 | — | 14.65 |
| 10-0-10 | — | 40 | — | 13.70 |
| 30-0-30 | — | 60 | — | 14.65 |
| 50-0-50 | — | 50 | — | 14.65 |

MODELS 201/301—206*/306* D-C MICROAMMETERS

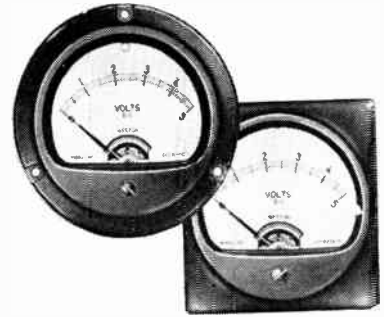
| Range | Scale Div. | | Approx. Resis. | | | | Price | |
|-----------|------------|---------|----------------|------|------|------|-----------------|-----------------|
| | 201/206 | 301/306 | 201 | 206 | 301 | 306 | 201 | 306 |
| 10 | 20 | 50 | — | 3800 | — | 3800 | — | — |
| 20 | 40 | 40 | — | 1480 | 5500 | 1480 | — | \$22.55 \$25.10 |
| 30 | 30 | 60 | — | 1480 | 5500 | 1480 | — | 21.40 |
| 50 | 25 | 50 | 4150 | 1175 | 4800 | 1175 | \$18.35 \$22.30 | 19.30 22.30 |
| 100 | 20 | 50 | 870 | 660 | 1230 | 660 | 15.60 | 16.50 |
| 200 | 40 | 40 | 600 | — | 600 | 55 | 13.25 | 14.20 20.45 |
| 500 | 25 | 50 | 160 | — | 230 | — | 13.25 | 14.20 |
| 10-0-10 | — | — | — | 5500 | — | — | — | 22.55 |
| 25-0-25 | — | — | 4150 | — | 4800 | — | 15.60 | 19.30 |
| 50-0-50 | 20 | 50 | 870 | — | 1230 | — | 15.10 | 16.50 |
| 100-0-100 | 40 | 40 | 600 | — | 600 | — | 13.25 | 14.20 |
| 500-0-500 | 20 | 50 | 100 | — | 88 | — | 12.80 | 13.70 |

*External magnet type, unshielded

MODELS 202/302 RECTIFIER TYPE A-C VOLTMETERS

| Range | Scale Div. | | Price | |
|-------|------------|-----|---------|-----|
| | 202 | 302 | 202 | 302 |
| 3 | 60 | — | \$19.75 | — |
| 5 | 50 | — | 19.75 | — |
| 10 | 50 | — | 19.75 | — |
| 15 | 75 | — | 19.75 | — |
| 30 | 60 | — | 19.75 | — |
| 50 | 50 | — | 19.75 | — |
| 100 | 50 | — | 19.75 | — |
| 150 | 75 | — | 19.75 | — |
| 300 | 60 | — | 20.25 | — |

- 2½" and 3½" Sizes
- 2% Accuracy Full Scale
- Spring Back Jewels
- Long Term Stability
- Self Shielded Mechanism
- Cases Sealed Against Dust
- Minimum Power Consumption
- Minimum Response Time
- Note: Specify Round or Square Case



MODELS 202/302 RECTIFIER TYPE A-C MILLIAMMETERS

| Range | Scale Div. | | Approx. Resis. | | Price | |
|-------|------------|-----|----------------|-----|-------|---------|
| | 202 | 302 | 202-302 | 202 | 302 | 302 |
| 1 | 20 | 50 | 470 | — | — | \$19.75 |
| 2 | 40 | 40 | 270 | — | — | 19.75 |
| 3 | 25 | 50 | 150 | — | — | 19.75 |

MODELS 202/302 RECTIFIER TYPE A-C MICROAMMETERS

| Range | Scale Div. | | Approx. Resis. | | Price | |
|-------|------------|-----|----------------|-----|-------|---------|
| | 202 | 302 | 202-302 | 202 | 302 | 302 |
| 100 | 20 | 50 | 3400 | — | — | \$23.25 |
| 500 | 25 | 50 | 1030 | — | — | 19.75 |

MODELS 204/304—A-C VOLTMETERS—25-125 CYCLES

| Range | Scale Div. | OHMS/V | | Price | |
|-------|------------|--------|--------|---------|---------|
| | | 204 | 304 | 204 | 304 |
| 1.5 | 30 | — | 3 | — | \$17.20 |
| 3 | 30 | — | 15 | — | 17.20 |
| 5 | 50 | 26 | 26 | \$16.30 | 17.20 |
| 8 | 40 | — | 81 | — | 17.20 |
| 10 | 50 | 100 | 100 | 16.30 | 17.20 |
| 15 | 30 | — | 250 | — | 17.20 |
| 30 | 30 | — | 790 | — | 17.20 |
| 50 | 50 | — | 2124 | — | 17.20 |
| 100 | 50 | — | 10065 | — | 17.20 |
| 130 | 26 | — | 13065 | — | 17.65 |
| 150 | 30 | 20295 | 20295 | 16.75 | 17.65 |
| 300 | 30 | 81550 | 81550 | 18.15 | 19.10 |
| 500 | 50 | — | 131550 | — | 20.45 |

MODELS 204/304—A-C AMMETER—25-500 CYCLES

| Range | Amps Scale | | Scale Div. | | Approx. Resis. | | Price | |
|----------|------------|-----|------------|-----|----------------|--------|---------|---------|
| | 204 | 304 | 204 | 304 | 204 | 304 | 204 | 304 |
| 1 | 1 | 1 | 50 | 50 | 0.130 | 0.130 | \$15.80 | \$16.75 |
| 1.5 | — | 1.5 | — | 30 | — | 0.555 | — | 16.75 |
| 2 | 2 | 2 | 40 | 40 | 0.026 | 0.026 | 15.80 | 16.75 |
| 3 | 3 | 3 | 30 | 30 | 0.013 | 0.013 | 15.80 | 16.75 |
| 5 | 5 | 5 | 50 | 50 | 0.005 | 0.005 | 15.80 | 16.75 |
| 5 Amps.* | — | 100 | — | 50 | — | — | — | 16.75 |
| 5 Amps.* | — | 200 | — | 40 | — | — | — | 16.75 |
| 5 Amps.* | — | 300 | — | 30 | — | — | — | 16.75 |
| 10 | 10 | 10 | 50 | 50 | 0.0014 | 0.0014 | 15.80 | 16.75 |
| 15 | 15 | 15 | 30 | 30 | 0.0015 | 0.0015 | 15.80 | 16.75 |
| 20 | 20 | 20 | 40 | 40 | 0.0005 | 0.0005 | 15.80 | 16.75 |
| 30 | 30 | 30 | 30 | 30 | 0.0004 | 0.0004 | 15.80 | 16.75 |
| 50 | 50 | 50 | 50 | 50 | 0.0002 | 0.0002 | 15.80 | 16.75 |

*For use with Current Transformer. Above prices do not include Transformer.

MODELS 204/304 — A-C MILLIAMMETERS

| Range | Scale Div. | | Approx. Resis. | | Price | |
|-------|------------|-----|----------------|------|---------|---------|
| | 204 | 304 | 204 | 304 | 204 | 304 |
| 50 | — | 50 | — | 34 | — | \$16.75 |
| 100 | — | 50 | — | 8.5 | — | 16.75 |
| 500 | 50 | 50 | 0.42 | 0.42 | \$15.80 | 16.75 |

MODELS 208/308 — THERMO-AMMETERS

| Range | Scale Div. | | Price | |
|-------|------------|-----|-------|---------|
| | 208 | 308 | 208 | 308 |
| 1 | — | 50 | — | \$27.90 |
| 1.5 | — | 60 | — | 27.90 |
| 2 | — | 40 | — | 27.90 |
| 3 | — | 60 | — | 27.90 |

MODELS 208/308 — THERMO-MILLIAMMETERS

| Range | Scale Div. | | Approx. Resis. | | Price | |
|-------|------------|-----|----------------|-----|-------|---------|
| | 208 | 308 | 208 | 308 | 208 | 308 |
| ± 10 | — | 50 | — | 85 | — | \$61.40 |
| ± 50 | — | 50 | — | 5 | — | 61.40 |
| 100 | 20 | 50 | 5.2 | 8 | — | 31.60 |
| *115 | 100 | 100 | 5.2 | 5.2 | — | 31.60 |
| 120 | 30 | 60 | 5.2 | 5.2 | — | 31.60 |
| 150 | — | 75 | — | 5.2 | — | 31.60 |
| 200 | — | 40 | — | 2.7 | — | 31.60 |
| 300 | 30 | 60 | 1.8 | 2.4 | — | 31.60 |
| 500 | 25 | 50 | 1.3 | 1.3 | — | 31.60 |

*Vacuum Thermocouple Type.

*Current Squared Galvanometer with uniform 100 division scale.

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

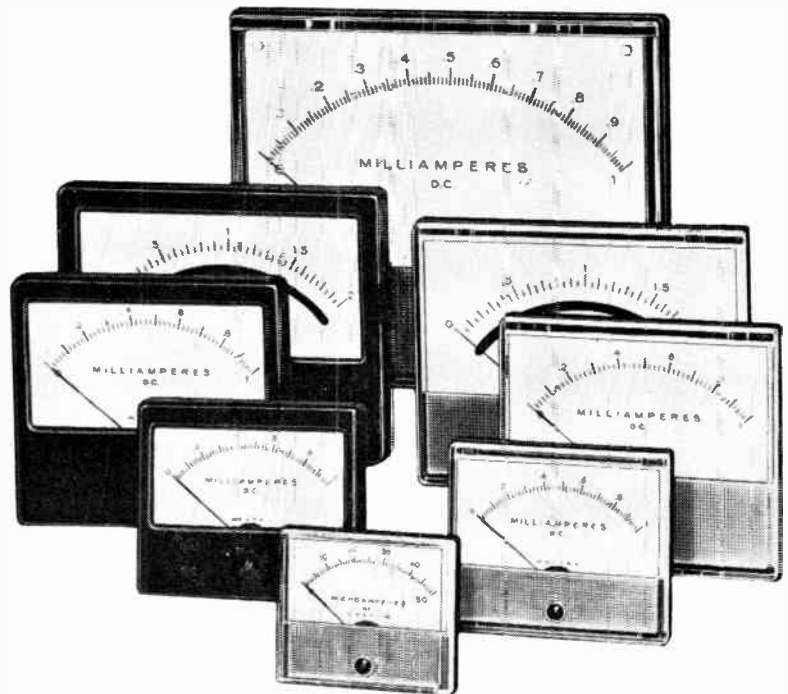
WESTON INSTRUMENTS

1900 PANEL INSTRUMENT SERIES

GENERAL

The 1900 Series is an integrated line of a-c and d-c panel instruments, providing a carefully selected choice of sizes, case styles, accuracies, pointers, scales and ranges. Particular attention has been paid to designing instruments that will present an overall appearance of harmony, even when random sizes are mounted side by side. Mounting bezels provide three types of mounting—recess, flush and conventional.

One of the many features of this new Weston series is the method of construction which provides quick interchangeability of fronts and easy access for adjustment or service, if ever required. From their spring-backed jewels to their unique fastening clips, the 1900 Series incorporate the fine workmanship and quality that has always been associated with Weston.



SPECIFICATIONS

| 2½" SIZE | Function & Mechanism | Accuracy (Full scale value) | Scale Length (100° arc) | Pointer | Type Scale | Case Front |
|------------|----------------------|-----------------------------|-------------------------|------------|------------|------------------|
| Model 1921 | D-C CORMAG® | 2% | 2.3" | Lance | Plain | Plastic |
| Model 1922 | Rect. CORMAG® | 3%** | 2.3" | Lance | Plain | Plastic |
| Model 1924 | Iron Vane | 2% | 2.3" | Lance | Plain | Plastic |
| 3½" SIZE | | | | | | |
| Model 1931 | D-C CORMAG® | 2% | 2.7" | Lance | Plain | Plastic/Bakelite |
| Model 1932 | Rect. CORMAG® | 3%** | 2.7" | Lance | Plain | Plastic/Bakelite |
| Model 1934 | Iron Vane | 2% | 2.7" | Lance | Plain | Plastic/Bakelite |
| Model 1936 | D-C Ext. Mag. | 2% | 2.7" | Lance | Plain | Plastic/Bakelite |
| Model 1938 | Thermo. Ext. Mag. | 2% | 2.7" | Lance | Plain | Plastic/Bakelite |
| 4½" SIZE | | | | | | |
| Model 1941 | D-C CORMAG® | 2%* | 3.9" | Lance | Plain | Plastic/Bakelite |
| Model 1942 | Rect. CORMAG® | 2%** | 3.9" | Lance | Plain | Plastic/Bakelite |
| Model 1944 | Iron Vane | 2% | 3.9" | Lance | Plain | Plastic/Bakelite |
| Model 1946 | D-C Ext. Mag. | 1% | 3.9" | Knife-edge | Mirrored | Plastic/Bakelite |
| Model 1948 | Thermo. Ext. Mag. | 2% | 3.9" | Lance | Plain | Plastic/Bakelite |
| 5½" SIZE | | | | | | |
| Model 1951 | D-C CORMAG® | 2%* | 4.7" | Lance | Plain | Plastic/Bakelite |
| Model 1952 | Rect. CORMAG® | 2%** | 4.7" | Lance | Plain | Plastic/Bakelite |
| Model 1954 | Iron Vane | 2% | 4.7" | Lance | Plain | Plastic/Bakelite |
| Model 1956 | D-C Ext. Mag. | 1% | 4.7" | Knife-edge | Mirrored | Plastic/Bakelite |
| Model 1958 | Thermo. Ext. Mag. | 2% | 4.7" | Lance | Plain | Plastic/Bakelite |
| 7½" SIZE | | | | | | |
| Model 1971 | D-C CORMAG® | 1%† | 7.2" | Lance | Plain | Plastic |
| Model 1972 | Rect. CORMAG® | 2%†† | 7.2" | Lance | Plain | Plastic |
| Model 1976 | D-C Ext. Mag. | 1%† | 7.2" | Lance | Plain | Plastic |
| Model 1977 | Rect. Ext. Mag. | 2%†† | 7.2" | Lance | Plain | Plastic |

*1% when knife-edge pointer and mirrored scale is specified.

**on sine wave 60 cycle source at normal room temperature of 25 C.

†½% with knife-edge pointer and mirrored scale on special order ONLY.

††on sine wave 60 cycle source at normal room temperature; 1½% can be supplied on special order.

NOTE: If Models 1924, 34, 36, 44, 46, 54, 56 and 76 are used on steel panels, order should specify panel thickness to assure proper adjustment.

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

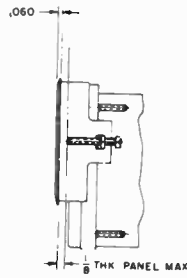
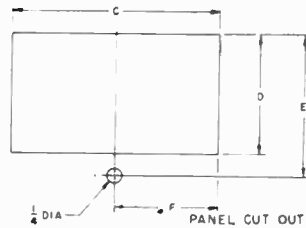
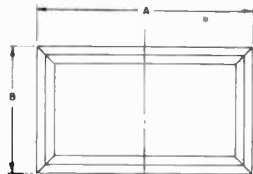
WESTON INSTRUMENTS

THREE TYPES OF MOUNTINGS

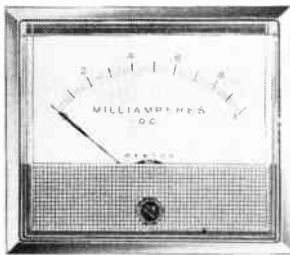


RECESS (Plastic front only)

Only the scale is visible since meter is mounted behind the panel... half bezel fits into window.

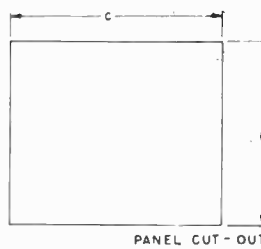
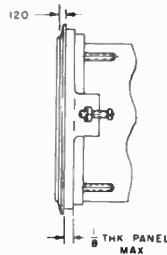
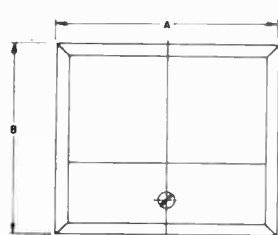


| MODEL | A | B | C | D | E | F |
|--------------------------------------|-------|-------|---------------------------------|---------------------------------|-------|---------------------------------|
| 1921 1922 1924 | 3.120 | 1.720 | 3.000 | 1 ¹⁹ / ₃₂ | 2.070 | 1 ¹ / ₂ |
| 1931 1932 1934 1936 1938 | 3.860 | 2.265 | 3 ²³ / ₃₂ | 2 ⁵ / ₃₂ | 2.550 | 1 ⁵⁵ / ₆₄ |
| 1941 1942 1944 1946 1948 | 4.960 | 2.900 | 4 ¹³ / ₁₆ | 2 ³ / ₄ | 3.290 | 2 ¹³ / ₃₂ |
| 1951 1952 1954 1956 1958 | 6.060 | 3.300 | 5 ⁷ / ₈ | 3 ⁵ / ₃₂ | 3.950 | 2 ¹⁵ / ₁₆ |

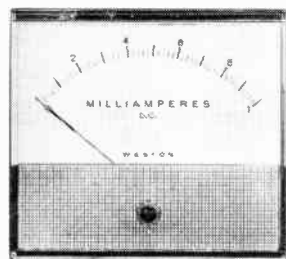


FLUSH (Plastic front only)

Full Bezel permits mounting flush with panel through rectangular cutout.

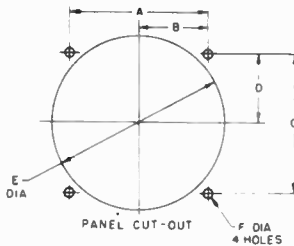


| MODEL | A | B | C | D |
|--------------------------------------|-------|-------|---------------------------------|---------------------------------|
| 1921 1922 1924 | 3.050 | 2.620 | 2 ³¹ / ₃₂ | 2 ¹⁷ / ₃₂ |
| 1931 1932 1934 1936 1938 | 3.830 | 3.320 | 3 ¹¹ / ₁₆ | 3 ³ / ₁₆ |
| 1941 1942 1944 1946 1948 | 5.000 | 4.550 | 4 ²⁵ / ₃₂ | 4 ¹¹ / ₃₂ |

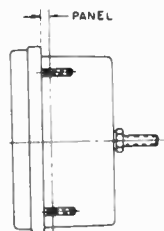
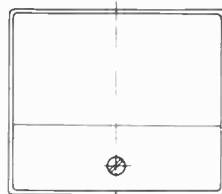
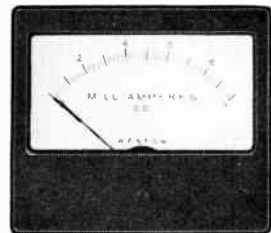


CONVENTIONAL

Use same dimensions, whether you choose a meter with taut band or pivot and jewel movement.



| MODEL | A | B | C | D | E | F |
|--------------------------------------|-------|-------|-------|-------|-----------|----------|
| 1921 1922 1924 | 1.880 | .940 | 1.880 | .940 | 2.220 DIA | .125 DIA |
| 1931 1932 1934 1936 1938 | 2.250 | 1.125 | 2.250 | 1.125 | 2.820 DIA | .125 DIA |
| 1941 1942 1944 1946 1948 | 4.000 | 2.000 | 3.560 | 2.020 | 2.820 DIA | .154 DIA |
| 1951 1952 1954 1956 1958 | 5.250 | 2.625 | 3.000 | 2.150 | 2.820 DIA | .154 DIA |
| 1971 1972 | 6.000 | 3.000 | 4.500 | 3.500 | 3.560 DIA | .156 DIA |



WESTON 1900 T SERIES WITH TAUT BAND MECHANISMS

Available in Bakelite or static-free clear plastic cases in sizes from 3 1/2" through 7 1/2".

Taut-Band instruments are slightly higher in price than the 1900 Series with conventional pivot and jewel movements, but are completely interchangeable.

Taut-Band mechanisms are free from friction and inertia. They offer outstanding sensitivity, reliability and uniformity from zero to full scale.

Your distributor can provide complete information on Weston 1900 T Series with Taut Band Mechanisms.

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

WESTON INSTRUMENTS

1900 PANEL INSTRUMENT SERIES

D-C (Cormag) — MODELS 1921/1931/1941/1951/1971

| | Ranges | | | | | Scale Divisions | | | | | Nominal Resist. Ohms | | | | | P R I C E S | | | | |
|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|---------------|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 2 1/2" M-1921 | 3 1/2" M-1931 | 4 1/2" M-1941 | 5 1/2" M-1951 | 7 1/2" M-1971 | 2 1/2" M-1921 | 3 1/2" M-1931 | 4 1/2" M-1941 | 5 1/2" M-1951 | 7 1/2" M-1971 | 2 1/2" M-1921 | 3 1/2" M-1931 | 4 1/2" M-1941 | 5 1/2" M-1951 | 7 1/2" M-1971 | 2 1/2" M-1921 | 3 1/2" M-1931 | 4 1/2" M-1941 | 5 1/2" M-1951 | 7 1/2" M-1971 |
| ua | | | | | | | | | | | | | | | | | | | | |
| 50 | | x | | | x | | | | | 50 | 100 | 4800 | 2500 | | 5160 | \$17.75 | \$18.20 | \$19.15 | — | — |
| 100 | | x | | | x | | | | | 50 | 100 | 1225 | 2500 | | 4640 | 16.55 | 17.05 | 17.95 | \$30.25 | \$43.00 |
| 200 | | x | | | x | | | | | 40 | 100 | 600 | 850 | | 1700 | 15.85 | 16.30 | 17.25 | 29.30 | 40.20 |
| 500 | | x | | | x | | | | | 50 | 100 | 240 | 240 | | 935 | 14.90 | 15.35 | 16.30 | 28.85 | — |
| ma* | | | | | | | | | | | | | | | | | | | | |
| 1 | | x | | | x | | | | | 50 | 100 | 88 | 115 | | 93 | \$13.95 | \$14.40 | \$15.35 | \$26.50 | \$38.35 |
| 1.5 | | | | | x | | | | | | 150 | | | | 93 | — | — | — | — | — |
| 2 | | x | | | x | | | | | 40 | 100 | 45 | 16 | | 69 | — | 14.40 | 15.35 | 26.50 | — |
| 3 | | | | | x | | | | | | 150 | | | | 33.5 | — | — | — | — | — |
| 5 | | x | | | x | | | | | 50 | 100 | 8.5 | 11 | | 12.6 | 13.95 | 14.40 | 15.35 | 26.50 | — |
| 10 | | x | | | x | | | | | 50 | 100 | 2.5 | 2.7 | | 3.36 | 13.95 | 14.40 | 15.35 | 26.50 | — |
| 20 | | x | | | x | | | | | 40 | 100 | 2.2 | 2.7 | | 1 | — | 14.40 | 15.35 | 26.50 | — |
| 30 | | | | | x | | | | | | 150 | | | | 1 | — | — | — | — | — |
| 50 | | x | | | x | | | | | 50 | 100 | 2.0 | 2 | | 1 | 13.95 | 14.40 | 15.35 | 26.50 | — |
| 100 | | x | | | x | | | | | 50 | 100 | 1.0 | 1 | | .5 | 13.95 | 14.40 | 15.35 | 26.50 | — |
| 200 | | x | | | x | | | | | 40 | 100 | 0.5 | 0.5 | | .25 | — | 14.40 | 15.35 | 26.50 | — |
| 500 | | x | | | x | | | | | 50 | 100 | 0.2 | 0.2 | | .1 | — | 14.40 | 15.35 | 26.50 | — |
| amps** | | | | | | | | | | | | | | | | | | | | |
| 1 | | x | | | x | | | | | 50 | 100 | | | | | \$13.95 | \$14.40 | \$15.35 | \$27.20 | — |
| 1.5 | | | | | x | | | | | | 150 | | | | | — | — | — | — | — |
| 2 | | x | | | x | | | | | 40 | 100 | | | | | 13.95 | 14.40 | 15.35 | 27.20 | — |
| 3 | | | | | x | | | | | | 150 | | | | | — | — | — | — | — |
| 5 | | x | | | x | | | | | 50 | 100 | | | | | 13.95 | 14.40 | 15.35 | 27.20 | — |
| 10 | | x | | | x | | | | | 50 | 100 | | | | | 13.95 | 14.40 | 15.35 | 27.20 | — |
| 20 | | x | | | † | | | | | 40 | | | | | | 13.95 | 14.40 | 15.35 | 27.20 | — |
| 30 | | x | | | † | | | | | 60 | | | | | | 13.95 | 14.40 | 15.35 | 27.20 | — |
| volts | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | x | | | | | | 100 | | | | | — | — | — | — | — |
| 1.5 | | | | | x | | | | | | 150 | | | | | — | — | — | — | — |
| 2 | | x | | | x | | | | | 40 | 100 | | | | | \$14.65 | \$15.10 | \$16.05 | \$27.20 | — |
| 3 | | | | | x | | | | | | 150 | | | | | — | — | — | — | — |
| 5 | | x | | | x | | | | | 50 | 100 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |
| 10 | | x | | | x | | | | | 50 | 100 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |
| 15 | | x | | | x | | | | | 75 | 150 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |
| 30 | | x | | | x | | | | | 60 | 150 | | | | | — | 15.10 | 16.05 | 27.20 | — |
| 50 | | x | | | x | | | | | 50 | 100 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |
| 80 | | | | | x | | | | | | 80 | | | | | — | — | — | — | — |
| 100 | | x | | | x | | | | | 50 | 100 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |
| 150 | | x | | | x | | | | | 75 | 150 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |
| 200 | | x | | | x | | | | | 40 | | | | | | — | 15.10 | 16.05 | 27.20 | — |
| 300 | | x | | | x | | | | | 60 | 150 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |
| 500 | | x | | | x | | | | | 50 | 100 | | | | | 14.65 | 15.10 | 16.05 | 27.20 | — |

Approx. MV Drop
50

Ohms Per Volt
1000

*NOTE: Range of 50 ma and up are shunted and have a drop of approximately 50 mv on Model 1971 and 100 mv on Models 1921, 1931, 1941 and 1951.
**For ranges above 30 amps use a 50 mv instrument, with required external shunt.
†For ranges above 10 amps use external shunts.

D-C (External Magnet) — MODELS 1936/1946/1956/1976

| | Ranges | | | | Scale Divisions | | | | Nominal Resist. Ohms | | | | P R I C E S | | | |
|-----------|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 3 1/2" M-1936 | 4 1/2" M-1946 | 5 1/2" M-1956 | 7 1/2" M-1976 | 3 1/2" M-1936 | 4 1/2" M-1946 | 5 1/2" M-1956 | 7 1/2" M-1976 | 3 1/2" M-1936 | 4 1/2" M-1946 | 5 1/2" M-1956 | 7 1/2" M-1976 | 3 1/2" M-1936 | 4 1/2" M-1946 | 5 1/2" M-1956 | 7 1/2" M-1976 |
| ua | | | | | | | | | | | | | | | | |
| 20 | | x | | | | | | | | | | | \$26.50 | \$29.05 | \$33.70 | — |
| 30 | | | x* | | | | | 150 | | | | | — | — | — | — |
| 50 | | x | | x | | | | 50 | 100 | | | 2180 | 26.50 | 29.05 | 33.70 | \$53.70 |
| 100 | | x | | x | | | | 50 | 100 | | | 870 | 25.60 | 28.35 | 33.00 | 46.25 |
| 200 | | x | | x | | | | 40 | 100 | | | 550 | 25.10 | 27.65 | 32.10 | 43.50 |
| 500 | | x | | x | | | | 50 | | | | 120 | 24.65 | 26.95 | 30.70 | — |

*2% accuracy only.

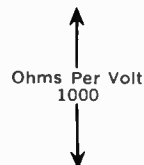
PRICE SUBJECT TO CHANGE WITHOUT NOTICE

WESTON INSTRUMENTS

1900 PANEL INSTRUMENT SERIES

RECTIFIER TYPE A-C (Cormag) — MODELS 1922/32/42/52/72

| | Ranges | | Scale Divisions | | Nominal Resist. Ohms | | P R I C E S | | | | | | | | | | |
|-------|---------------|---------------|-----------------|---------------|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|-------|
| | 2 1/2" M-1922 | 3 1/2" M-1932 | 4 1/2" M-1942 | 5 1/2" M-1952 | 7 1/2" M-1972 | 2 1/2" M-1922 | 3 1/2" M-1932 | 4 1/2" M-1942 | 5 1/2" M-1952 | 7 1/2" M-1972 | 2 1/2" M-1922 | 3 1/2" M-1932 | 4 1/2" M-1942 | 5 1/2" M-1952 | 7 1/2" M-1972 | | |
| ua | | | | | | | | | | | | | | | | | |
| 100 | x | | | | | 50 | | | | | \$21.40 | \$21.85 | \$22.80 | \$26.75 | — | | |
| 200 | x | | | | | 40 | | 100 | | | 21.40 | 21.85 | 22.80 | 26.75 | \$54.80 | | |
| 500 | x | | | | | 50 | | 100 | | | 21.40 | 21.85 | 22.80 | 26.75 | 53.70 | | |
| ma | | | | | | | | | | | | | | | | | |
| 1 | x | | | | | 50 | | 100 | | | 475 | 460 | 18.35 | 18.85 | 19.75 | 23.50 | 52.55 |
| 2 | x | | | | | 40 | | | | | 280 | | 18.35 | 18.85 | 19.75 | 23.50 | 52.55 |
| 5 | x | | | | | 50 | | 100 | | | 140 | 150 | 18.35 | 18.85 | 19.75 | 23.50 | — |
| volts | | | | | | | | | | | | | | | | | |
| 3 | x | | | | | 60 | | | | | | | 19.75 | 20.70 | 24.40 | — | — |
| 7.5 | x | | | | | 75 | | | | | | | 19.75 | 20.70 | 24.40 | — | — |
| 15 | x | | | | | 75 | 150 | | | | | | 19.75 | 20.70 | 24.40 | — | — |
| 30 | x | | | | | 60 | 150 | | | | | | 19.75 | 20.70 | 24.40 | — | — |
| 75 | x | | | | | 75 | 150 | | | | | | 19.75 | 20.70 | 24.40 | — | — |
| 150 | x | | | | | 75 | 150 | | | | | | 19.75 | 20.70 | 24.40 | — | — |
| 300 | x | | | | | 60 | 150 | | | | | | — | 20.70 | 24.40 | — | — |
| 500 | x | | | | | 50 | 100 | | | | | | — | 20.70 | 24.40 | — | — |



THERMO (Linear Scale ONLY) — MODELS 1938/1948/1958

| | Ranges | | | Scale Divisions | | | P R I C E S | | |
|------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|---------------|---------------|
| | 3 1/2" M-1938 | 4 1/2" M-1948 | 5 1/2" M-1958 | 3 1/2" M-1938 | 4 1/2" M-1948 | 5 1/2" M-1958 | 3 1/2" M-1938 | 4 1/2" M-1948 | 5 1/2" M-1958 |
| amps | | | | | | | | | |
| 1 | | x | | 50 | | | — | — | — |
| 1.5 | | x | | 75 | | | — | — | — |
| 2 | | x | | 40 | | | — | — | — |
| 3 | | x | | 60 | | | — | — | — |
| 5 | | x | | 50 | | | — | — | — |
| 7.5 | | x | | 75 | | | — | — | — |
| 10 | | x | | 50 | | | — | — | — |
| 15 | | x | | 75 | | | — | — | — |

A-C (Iron Vane) — MODELS 1924/1934/1944/1954

| | Ranges | | Scale Divisions | | | Approx. Resist. Ohms | | | P R I C E S | | | |
|---------|---------------|---------------|-----------------|---------------|---------------|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 2 1/2" M-1924 | 3 1/2" M-1934 | 4 1/2" M-1944 | 5 1/2" M-1954 | 2 1/2" M-1924 | 3 1/2" M-1934 | 4 1/2" M-1944 | 5 1/2" M-1954 | 2 1/2" M-1924 | 3 1/2" M-1934 | 4 1/2" M-1944 | 5 1/2" M-1954 |
| ma† | | | | | | | | | | | | |
| 10 | | x | | | 20 | | | | \$18.15 | \$18.60 | \$19.55 | \$25.35 |
| 20 | | x | | | 40 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 50 | | x | | | 25 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 100 | | x | | | 20 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 200 | | x | | | 40 | | | | — | 18.60 | 19.55 | 25.35 |
| 500 | | x | | | 25 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| amps* | | | | | | | | | | | | |
| 1 | | x | | | 20 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 2 | | x | | | 40 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 5 | | x | | | 25 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 10 | | x | | | 20 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 20 | | x | | | 40 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| 30 | | x | | | 30 | | | | 18.15 | 18.60 | 19.55 | 25.35 |
| volts** | | | | | | | | | | | | |
| 3 | | x | | | 30 | | | 60 | 19.05 | 19.55 | 20.45 | 26.30 |
| 7.5 | | x | | | 37.5 | | | 75 | 19.05 | 19.55 | 20.45 | 26.30 |
| 15 | | x | | | 30 | | | 75 | 19.05 | 19.55 | 20.45 | 26.30 |
| 30 | | x | | | 30 | | | 60 | 19.05 | 19.55 | 20.45 | 26.30 |
| 75 | | x | | | 37.5 | | | 75 | 19.05 | 19.55 | 20.45 | 26.30 |
| 150 | | x | | | 30 | | | 75 | 19.05 | 19.55 | 20.45 | 26.30 |
| 300 | | x | | | 30 | | | 60 | 19.05 | 19.55 | 20.45 | 26.30 |
| 500 | | x | | | 25 | | | 50 | 19.05 | 19.55 | 20.45 | 26.30 |

†Frequency: 25 to 500 cycles.

*Power consumption: 5 ampere range at 5 amperes, 0.45 watts; at 60 cycles, 0.45 volt-amperes. Frequency: 25 to 500 cycles.

**Power consumption: 150 volt range at 113 volts, 1.15 watts, at 60 cycles, 1.15 volt-amperes. Frequency: adjusted for use on frequencies of 25 to 125 cycles.

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

WESTON INSTRUMENTS

741-744 PANEL INSTRUMENT GROUP



741/744 PANEL INSTRUMENTS

These instruments are regularly supplied in flush, black bakelite cases which can be mounted on panels up to $\frac{1}{8}$ " thick. The adjustable mounting arrangement is invisible from the front of the panel. Illumination feature available if required.

Rated Accuracy: 1% of full scale value.

Overall Dimensions: 4" x 4.25" (101.6 x 107.9 mm)

Scale: 3.52" (90 mm)

Model 741: Permanent Magnet Moving Coil Type

Model 744: Movable Iron Type

MODEL 741 D-C VOLTMETERS (1000 ohms/volt)

| Range | Scale Div. | Price |
|-------|------------|---------|
| 10 | 50 | \$42.10 |
| 30 | 60 | 42.10 |
| 50 | 50 | 42.10 |
| 150 | 75 | 43.50 |
| 300 | 60 | 46.25 |

MODEL 741 D-C AMMETERS

| Range | Scale Div. | Price |
|-------|------------|---------|
| 1 | 50 | \$42.10 |
| 5 | 50 | 42.10 |
| 10 | 50 | 42.10 |
| 25 | 50 | 42.10 |
| 50 | 50 | 42.10 |

MODEL 741 D-C MILLIAMMETERS

| Range | Scale Div. | Approx. Resistance Ohms | Price |
|-------|------------|-------------------------|---------|
| 1 | 60 | 39 | \$42.10 |
| 10 | 50 | 2.8 | 42.10 |
| 25 | 50 | 1.06 | 42.10 |
| 50 | 50 | 2 | 42.10 |
| 100 | 50 | 1 | 42.10 |
| 200 | 40 | 0.5 | 42.10 |
| 300 | 60 | 0.33 | 42.10 |
| 500 | 50 | 0.2 | 42.10 |

MODEL 741 D-C MICROAMMETERS

| Range | Scale Div. | Approx. Resistance Ohms | Price |
|-------|------------|-------------------------|---------|
| 30 | 60 | 1800 | \$58.50 |
| 50 | 50 | 720 | 57.20 |
| 100 | 50 | 290 | 56.05 |

| | | | |
|-----|----|-----|-------|
| 200 | 40 | 475 | 44.65 |
| 500 | 50 | 98 | 44.65 |

MODEL 744 A-C VOLTMETERS (25-125 Cycles)

| Range | Scale Div. | Approx. Resistance Ohms | Price |
|-------|------------|-------------------------|---------|
| 10 | 50 | 33 | \$46.05 |
| 15 | 75 | 98 | 46.05 |
| 30 | 60 | 362 | 46.05 |
| 130 | 65 | 7880 | 47.45 |
| 150 | 75 | 9100 | 47.45 |
| *300 | 60 | 18200 | 55.10 |
| *500 | — | — | 66.05 |

*Furnished with Exterior Resistor Type 51

MODEL 744 A-C AMMETERS (25-500 Cycles)

| Range | Scale Div. | Approx. Resistance Ohms | Price |
|-------|------------|-------------------------|---------|
| 1 | 50 | 1.12 | \$46.05 |
| 3 | 60 | 0.112 | 46.05 |
| 5 | 50 | 0.0275 | 46.05 |
| 10 | 50 | 0.0135 | 46.05 |
| 15 | 75 | 0.0068 | 46.05 |
| 20 | 40 | 0.0026 | 46.05 |
| 30 | 60 | 0.0020 | 46.05 |
| 50 | 50 | 0.00070 | 46.05 |

MODEL 744 A-C MILLIAMMETERS (25-500 Cycles)

| Range | Scale Div. | Approx. Resistance Ohms | Price |
|-------|------------|-------------------------|---------|
| 250 | 50 | 10.2 | \$46.05 |

PORTABLE INSTRUMENTS

MATCHED A-C AND D-C PORTABLE INSTRUMENTS

MODEL 433—A-C INSTRUMENTS

Scale Length 4.04"—Accuracy within $\frac{3}{4}$ of 1%.—Movable Iron Type—Shielded Case. Size $5\frac{1}{2}$ " x $5\frac{1}{4}$ " x $3\frac{1}{4}$ "—Weight 2 $\frac{1}{2}$ lbs.—Hand Calibrated Mirror Scales—Bakelite Case with Carrying Strap.

Note: These instruments are calibrated for use in a horizontal position.

A-C VOLTMETERS

Made with single, double and triple ranges. For use on frequencies from 25 to 125 cycles.

| Range | Price |
|-------------------|----------|
| 10, 15, 150, 250 | \$ 94.25 |
| 10.5 20/10, 30/15 | 95.75 |
| 450/300/150 | 112.25 |
| 600/300/150 | 112.25 |
| 750/300/150 | 112.25 |

A-C MILLIAMMETERS

Made in single and double ranges only, for use on frequencies from 25 to 500 cycles.

| Range | Price |
|------------------|----------|
| 15, 30, 150, 500 | \$ 85.75 |
| 300/150 | 100.25 |

A-C AMMETERS

Made in single, double and triple ranges for use on frequencies from 25 to 500 cycles. All instruments have two binding posts; double and triple range instruments are provided with a range selector switch.

| Range | Price |
|-----------------------------|----------|
| 1, 3, 5, 10 | \$ 89.25 |
| 15, 30, 50 | 89.25 |
| 2/2, 5/2.5, 10/5 | 102.25 |
| 3/1.5/0.75, 5/2.5/1, 10/5/1 | 140.25 |
| 20/5/2, 30/7.5/3, 50/20/5 | 140.25 |



MODEL 432—D-C AND

SINGLE PHASE A-C WATTMETERS

Double voltage and single or double current ranges, self-contained up to 300 volts and 50 amperes, frequencies from 25 to 125 cycles.

Electrodynamometer Type

Accuracy $\frac{1}{2}$ of 1% Scale Length 4.04"

Case Size $5\frac{1}{2}$ " x $5\frac{1}{4}$ " x $3\frac{1}{4}$ " Wt. 3 $\frac{1}{4}$ lbs.

| Normal Volts | Normal Amps | Price |
|-----------------------|-------------|----------|
| 150/75 | 1 | \$192.25 |
| Double Current Ranges | | |
| 300/150 | 5/2.5 | \$192.25 |

MODEL 931—D-C INSTRUMENTS

Scale Length 4.04"—Accuracy within $\frac{1}{2}$ of 1% Core Magnet Moving Coil Type. Case Size $5\frac{1}{2}$ " x $5\frac{1}{4}$ " x $3\frac{1}{4}$ "—Weight 2 lbs.—Hand Calibrated Mirror Scales—Bakelite Case with Carrying Strap.

Note: These instruments are calibrated for use in a horizontal position.

D-C VOLTMETERS

| Range | Price |
|-------------|----------|
| 1,000 Ohms | \$ 87.25 |
| Per Volt | \$ 98.75 |
| 300/150/3 | 101.25 |
| 750/300/150 | 101.25 |
| 5,000 Ohms | 112.75 |
| Per Volt | 112.75 |

D-C AMMETERS

| Range | Price |
|--------------|----------|
| 3, 5, 15, 50 | \$ 89.00 |
| 30/15/3 | 101.50 |
| 50/20/5 | 101.50 |

Self-contained up to 50 amperes inclusive, but can be supplied with external 50 mv shunts and 5 ft. leads.

D-C MILLIAMMETERS

| Range | Price |
|-------------|----------|
| 15, 150 | \$ 85.50 |
| 1500/150/15 | 98.75 |
| 15/1.5/15 | 110.50 |

Single range, Milliammeters with ranges above can be supplied with external 50 mv shunts and 30 ma are shunted and have a drop of 50 mv $\pm 5\%$.

D-C MICROAMMETERS

| High Resistance | Low Resistance | Price |
|-----------------|----------------|-------|
| Approx. Res. | Approx. Res. | Price |
| Range Ohms | Range Ohms | Price |
| 30 2300 | \$110.50 | 490 |
| 100 2000 | 98.75 | 60 |
| 200 600 | 94.00 | 15 |
| | | 98.75 |

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

WESTON INSTRUMENTS

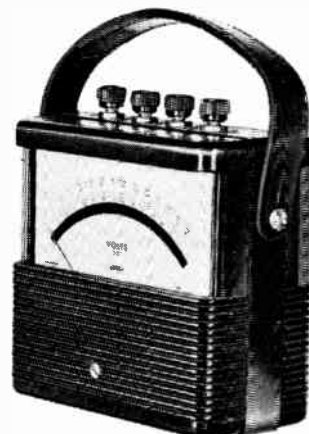
PORTABLE INSTRUMENTS

901-904 GROUP 1/4-1/2% ACCURACY

Size: 7 1/2" x 7 1/4" x 3 3/8" Scale Length: 5 1/2"
D-C 901, 1/4% Accuracy, Self Shielded Permanent Magnet Moving Coil Type

A-C 904, 1/2% Accuracy, Movable Iron Type

These modern style instruments are used for general testing and for checking other meters in daily use in industry where easy reading and high shielding are desired. Long 5 1/2" hand calibrated mirror scales combined with knife-edge pointers eliminate reading errors. Leather carrying cases are available, specify instrument model and range—Price \$24.50.



Model 901

D-C VOLTMETER (7 RANGE)—Model 901 (5000 ohms per volt)

| Range (Volts) | Price |
|------------------------|----------|
| 750/300/150/75/30/15/3 | \$182.25 |

D-C AMMETER—Model 901

| Range (Amperes) | Price |
|-----------------|----------|
| 50 mv/20/5/2 | \$162.25 |

D-C MILLIAMMETERS (7 RANGE)—Model 901

| Range (Ma) | Approx. Res. Ohms | Price |
|---------------------------|----------------------------------|----------|
| 1000/500/200/100/50/20/10 | .049/.099/.244/.475/.9/1.88/2.5 | \$172.25 |
| 100/50/20/10/5/2/1 | 1.49/2.96/7.28/14.1/26.4/52.5/60 | 172.25 |

A-C VOLTMETER—Model 904

| Range (Volts) | Approx. Res. Ohms | Price |
|------------------------------|---|----------|
| 750/300/150/75/30/15/7.5/3** | 117,500/18,400/5180/ 1145/182/46/11.1/1.76 | \$247.50 |

†Other frequency ranges available. Prices on request.
 *Frequency 25-125 cps.
 **Frequency 50-125 cps, accuracy 1/2%; 125-450 cps, accuracy 1%.

A-C MILLIAMMETERS—Model 904 (Frequency 25 to 500 cycles)

| Range (Ma) | Approx. Res. Ohms | Price |
|------------|-------------------|----------|
| 150/75 | 16.64 | \$176.50 |
| 300/150* | 4/16 | 176.50 |

*Also stocked for 25-1000 cycles at \$191.50.

A-C AMMETERS—Model 904

| Range (Amperes) | Price |
|-------------------------------|----------|
| 200/100/50/20/10/5/2** | \$222.50 |
| (Frequency 25 to 1000 cycles) | |
| 50/20/10*5/2/1 | 215.50 |

**Frequency is 50-450 cps.

D-C AND SINGLE PHASE A-C WATTMETERS—Model 905 (Frequency 25-60 cycles)

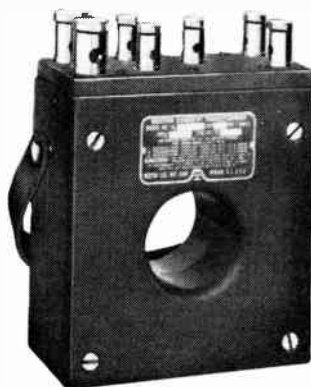
| Normal | Volts | | Amperes | | High Range | Watts | Low Range | Price |
|---------|---------|--------|---------|----------|------------|----------|-----------|-------|
| | Max. | Normal | Max. | Normal | | | | |
| 200/100 | 300/150 | 25 | 50 | 5 KW | 2.5 KW | \$197.50 | | |
| | | 5 | 10 | 1 KW | .5 KW | 197.50 | | |
| | | 10/5 | 20/10 | 2/1 KW | 1/5 KW | 212.50 | | |
| | | 5/2.5 | 10/5 | 1000/500 | 500/250 | 212.50 | | |

CURRENT TRANSFORMERS

Model 461

Size: 7.97" x 6.63" x 2.75" Weight: Type 1—8 lbs.; Type 2—8.4 lbs. Core Opening: 2.12"

Models 461 are used with A-C instruments as multipliers. Four self-contained primary ranges are brought out to binding posts. A secondary short circuiting switch is provided. Black bakelite case.



| Range (Amps) | Type* | Price | Range (Amps) | Type* | Price |
|---|-------|----------|--|-------|----------|
| 800/400/200/ 100/50/20/10 Pri. to 5 Sec. | 1 | \$117.25 | 1000/500/250/ 100/50/25/10 Pri. to 5 Sec. | 2 | \$147.25 |
| 800/400/200/ 100/50/20/10 Pri. to 5 Sec. | 2 | 147.25 | 500/250/100/ 50/25/10/5/ 2.5/1/0.5 Pri. to 5 Sec. | 5 | 157.25 |
| 1000/500/250/ 100/50/25/10 Pri. to 5 Sec. | 1 | 117.25 | | | |

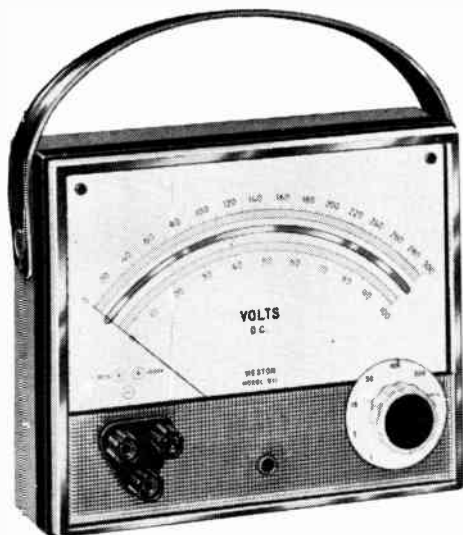
*Type 1—Primarily used for Ammeter applications.
 Type 2—Primarily used for Wattmeter applications
 Type 5—Similar to Type 2 except for additional ranges.

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

WESTON INSTRUMENTS

911/912 PORTABLE/PANEL INSTRUMENTS

Newly designed Weston Portable/Panel instruments now provide a combination of features never before offered in portable test equipment. Equally valuable in shop or field, these units feature high accuracy, long-scale length and modern styling. And, these instruments are designed for . . . Panel or switchboard mounting without special adaptors or attachments! Simply remove meter from case and mount on panel . . . all hardware is supplied. The compact steel case may be attached behind panel when mechanical protection is required.



Model 911/912

SPECIFICATIONS

- ACCURACY**— $\pm 1\%$ of full scale value on d-c voltmeters and milliammeters ($\pm 2\%$ of full scale value on 300 and 1000 volts d-c).
 $\pm 2\%$ of full scale value on rectifier type a-c voltmeters 10 through 300 volts.
 $\pm 3\%$ of full scale value on rectifier type a-c voltmeters for 1000 volt range and 3 volt range above mid-scale.
- COMPACT CASE**—Modern designed instrument front of clear durable plastic provides unlimited natural illumination which, coupled with knife-edge pointers and mirror scale, provide unexcelled readability. The instrument is cased in heavy duty, grey finished steel. Handle can be swung under instrument so that it may be tilted for easy reading. Size: $7\frac{1}{2}'' \times 6\frac{1}{2}'' \times 2\frac{3}{8}''$.
- COMPONENTS**—Weston VAMISTOR® precision metal film resistors and other long-life components are used.
 Adjustable resistors provide for easy calibration, if required.
- BINDING POSTS**—Screw type with captive heads can use all types of leads. Triangular base allows greater torque when securing leads. Wide $\frac{3}{4}''$ spacing permits use of plug type leads. Cross hole located so fine wire is not cut.
- SCALE**—Large 7.2" mirror back with knife-edge pointer.
- MECHANISM**—CORMAG® self-shielding, with spring-backed jewels.
- RANGE SWITCH**—Large, sure-grip knob.
- SIZE**— $7\frac{1}{2}'' \times 6\frac{1}{2}'' \times 2\frac{3}{8}''$.

RANGES AND PRICES

| | |
|--|---------------|
| Model 911 D-C VOLTMETER (20,000 ohms per volt) | |
| 1000/300 100/30/10/3/1 Volts | Price \$68.50 |
| Model 911 D-C AMMETER | |
| 10/3/1 amps., 300 100/30/10 ma | Price \$68.50 |
| Model 911 D-C MILLIAMMETER | |
| 100/30/10/3/1/3/.1 milliamperes | Price \$68.50 |
| Model 912 A-C VOLTMETER (5,000 ohms per volt) | |
| 1000/300/100/30/10/3 Volts | Price \$78.50 |

WESTON D-C MILLIVOLT/MICROAMMETER

D-C MILLIVOLT/MICROAMMETER—Model 1477

Size: $7\frac{1}{2}'' \times 6\frac{1}{2}'' \times 4\frac{3}{8}''$ Weight: $5\frac{1}{2}$ lbs. Scale Length: 7.2"



A portable test instrument designed to measure potentials and currents in the low-level millivolt and microampere ranges. No energy is drawn from the input circuit during steady-state operation. Only with an initial input application is there a small current taken during the transient period prior to steady state indication.

D-C Input Ranges

| | |
|--------------|-------------------------------------|
| Millivolts | 1/2/5/10/20/50/ 100/200/500/1000 |
| Microamperes | 10/20/50 100/200/500/1000 |

D-C Output

| | |
|------------------|---|
| (Rear Terminals) | 1 MA DC for full scale input (into a load up to 5000 ohms) |
|------------------|---|

Power Requirements

120 volts AC, 5 or 60 cycles,
19 watts

Accuracy

| | |
|----------------------------------|---|
| Panel Indicator (Both Scales) | $\pm 1\%$ of full scale value on ranges of 2-1000 MV and 20-1000 μ A $\pm 2\%$ of full scale value on ranges of 1 MV and 10- μ A |
| 1 MA Output | $\pm 0.25\%$ on ranges of 5-1000 MV and 50-1000 μ A $\pm 0.5\%$ on ranges of 1-2 MV and 10-20 μ A |

Operating Position Vertical

Price \$446.25

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

WESTON INSTRUMENTS

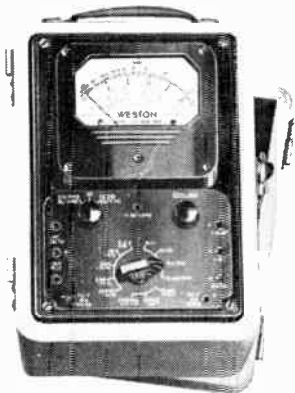
SUPER-SENSITIVE ANALYZER MODEL 779

ACCURACY: A-C within 3%; D-C within 2% to 250 volts; 3% on 1,000 volt range.

Size: 6 $\frac{3}{8}$ " x 9 $\frac{1}{8}$ " x 4 $\frac{7}{8}$ " (162 x 232 x 124 mm)

Approx. Wt.: 6 lbs. (2.72 kgs.)

A compact 26 range ultra-sensitive analyzer with five d-c voltage ranges at a sensitivity of either 1,000 or 20,000 ohms per volt. A-C temperature compensated; precision resistors throughout. Supplied in a rugged solid oak case with a removable cover and convenient carrying handle. Test leads are provided.



Model 779 Type 1B
Price \$194.25

RANGES

| Volts | | Current D-C Only | | Decibels | Ohms |
|-------|------|------------------|--|-----------------------|-----------|
| D-C | A-C | | | | |
| 2.5 | 2.5 | .1 Ma | | - 14 to + 2* | 0-3000 |
| 10 | 10 | 1 Ma | | - 2 to + 14* | 0-30,000 |
| 50 | 50 | 10 Ma | | + 12 to + 28* | 0-300,000 |
| 250 | 250 | 50 Ma | | + 26 to + 42* | 0-30 Meg |
| 1000 | 1000 | 250 Ma | | + 38 to + 54†† | |
| | | 1 Amp | | (6 milliwatts, | |
| | | 10 Amp | | 500 ohms, zero level) | |

*Substantially flat to 10,000 cycles.

†Substantially flat to 3,000 cycles. ††Substantially flat to 1,000 cycles.

MODEL 799 INSULATION TESTER

ACCURACY: Within $\frac{1}{8}$ " of scale length.

SCALE: 2.375" (60.3 mm)

Size: 3 $\frac{3}{16}$ " x 5 $\frac{1}{4}$ " x 5" (86 x 133 x 127 mm)

Approx. Wt.: 3.8 lbs. (1.7 kgs.)

For leakage measurements up to 10,000 megohms at low voltage at a maximum test potential 50 volts. Test leads, tubes, batteries and oak case are supplied.

RANGES: 0-10,000 megohms (Logarithmic scale)

Price.....\$108.75



Model 799

MARK II ANALYZER

The new thin-line Mark II is a highly sensitive and extremely rugged volt-ohm-milliammeter designed for a wide range of accurate test measurements in the electronic field.

Famous CORMAG® mechanism protects the instrument against false readings due to magnetic disturbances. Electrostatic shielding assures

accurate measurements at high d-c voltages. Fuses in the low ohmmeter circuits prevent burnout if voltages are mistakenly applied. Interchangeable parts eliminate all need for parts selection in the event replacements are ever necessary. The breakproof case will withstand dropping and thus eliminate the major source of repair and maintenance costs.

FEATURES

- Modern Thin-Line Design
- Spring Back Jewels for Maximum Shock Resistance
- Fused Resistance Ranges
- Trans't Switch Position to Dampen Movement During Transportation
- Fully Insulated Crack-proof Case
- Single Selector Knob for all Functions and Ranges
- Wide Angle Scale for Maximum Visibility
- Precision Components —No Parts Selection Required
- Single Board Etched Wiring Circuit for Easy Maintenance
- Static Shielded for Accurate High Voltage Measurement
- 4-Way Combination Tilt Stand and Protective Cover Available

SPECIFICATIONS

Accuracy: 2%, d-c; 3%, a-c

Scale Length: 4.63"

Ranges

D-C Volts: 1.6, 8, 40, 160, 400, 800, 4000 ... at 20,000 ohms/volt.
A-C Volts: 1.6, 8, 40, 160, 400, 1600 ... at 1,000 ohms/volt.
DB Range: -15 db to +54 db (in six ranges).
D-C Amperes: 8
D-C Milliamperes: 1.6, 8, 80, 800.
D-C Microamperes: 80.

| Ohms Range | Center Scale | Full Scale |
|------------|--------------|------------|
| R x 1 | 25 | 1,000 |
| R x 10 | 250 | 10,000 |
| R x 100 | 2,500 | 100,000 |
| R x 1,000 | 25,000 | 1 megohms |
| R x 10,000 | 250,000 | 10 megohms |

Case: Black impact resistant plastic, with carrying strap.

Panel: Black impact resistant plastic with engraved white markings.

Size: 6.25" x 7.50" x 2.25".

Approx. Weight: 2.5 lbs.

Ohms: Four decade ranges: 1K to 10 meg full scale; 25 ohms to 250K center scale

High Voltage Probes: High voltage probes are available for measuring high voltages up to 20 kv at 50 microamperes or less. Probes have multiplier resistors encased in insulated handles. Multipliers are rated with a flash voltage of 30 kv.



Model 980 Mark II

Price\$53.50

Combination protective front cover and tilt stand\$5.50

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

WESTON INSTRUMENTS

Model 749 Miniature Clamp Volt-Ammeter



Light weight and rugged pocket-size instrument for quick easy servicing. Has self-shielded core magnet mechanism with spring backed jewels, and shatter-proof Plexiglas window. Only one scale for all ranges and functions. Jaws take up to 1" round, or 1 3/4" x 3/8" rectangular conductors. Furnished with test leads in scuff proof case.

Plug-In Adapter available for making both current and voltage measurements... has female receptacles on both sides for plugging in load without disturbing circuit being tested... convenient for lead insertion for voltage checks... serves as 10 to 1 divider for low current measurements.

RATED ACCURACY: (Model 749) $\pm 3\%$ full scale deflection.
RANGES: Current 300/150/60/30/15/6 amperes a-c.
Voltage 600/300/150 volts a-c.
Model 749—\$51.50 complete Plug-In Adapter—\$5.25

Model 633 Clamp Volt-Ammeter and Clamp- Ammeter



Model 633 Type VA-1

| | Price |
|---|----------|
| Model 633 Type VA-1 (Incl. Potential Leads)—1000/250, 100/25/10 amperes a-c 700/350/175 volts a-c | \$141.50 |
| Model 633 Type A-3—2000/1000/500/250/100/50 amperes a-c | 133.50 |
| Model 9958, 50 foot Extension Cable, Plug & Receptacle for Model 633 Type A-3 | 79.25 |
| Leather Carrying Case (Model 633 Types VA-1, A-3) | 13.50 |
| Leather Carrying Case (Model 9958—Cable, Plug and Receptacle) | 22.50 |

NOTE—Model 633 instruments may be used for continuous duty up to 500 amperes.

Approximate Dimensions and Weights

| | | |
|---|---------------------------|------------|
| Model 633 Types VA-1, A-3 | 13 5/8" x 4 3/8" x 2 1/4" | 3 1/4 lbs. |
| Leather Carrying Case (Types VA-1, A-3) | 14 1/2" x 5 1/2" x 3 5/8" | 2 1/4 lbs. |
| Model 9958, 50 Foot Extension Cable, Plug & Receptacle | | 4 1/4 lbs. |
| Leather Carrying Case (Model 9958—Cable, Plug & Receptacle) | 14" x 8 1/2" x 3 3/4" | 4 1/4 lbs. |

Foot-Candle Meters—Model 614

Size: 7 3/8" x 3 3/8" x 2 1/4" Scale Length: 2.36"
Weight: 1 lb. 13 ozs.

This unit is ideal for general commercial lighting surveys where wide ranges of light values exist. Completely self-contained, no outside power or batteries being required. Available for checking two different light situations.

†VISCOR filtered, 0-60/120/600 foot-candles, for visual correction for color Price \$133.25

†VISCOR and Cosine correction filtered, 0-100/250/500 foot-candles for visual correction for color and direction correction. Price \$136.25



Model 614

Sightmeters—Model 703

Size: 4 5/8" x 2 5/8" x 1 3/8" Scale Length: 1.57"
Weight: 10 ounces

This pocket sized meter is ideal for checking illumination levels at work stations. It is available for checking three different light situations. Leather case available. Price \$3.00

Unfiltered, Type 3A, 0-75 foot-candles. Price \$48.50

†VISCOR filtered, Type 6A, 0-75 foot-candles for visual correction for color Price \$60.50

†VISCOR and Cosine correction filters Type 7, 0-100 foot-candles for visual correction for color and direction correction. Price \$63.75

Model 9924 Multiplier Disc fits Type 3A and Type 6A and multiplies scale readings by 10 Price \$1.75

†VISCOR—A registered trademark.



Model 703

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

Birnbach

GLAS-LINE CABLE

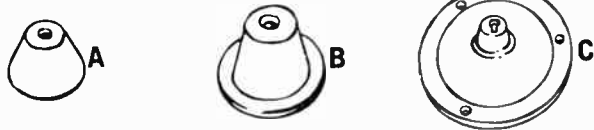
INSULATORS

ANTENNA • FEED-THRU
STAND-OFF



STEATITE FEEDTHRU INSULATOR

Useful in many constructions. Has high dielectric and mechanical strength. They are made of L-5 Glazed Steatite. No hardware is included.



| Cat. No. | Figure | Height | Base Diam. | Max. Screw Size | Std. Pkg. |
|----------|--------|--------|------------|-----------------|-----------|
| 4200 | A | 7/8" | 1 1/4" | 10-32 | 25 |
| 4201 | A | 1 1/8" | 1 3/4" | 1/4-20 | 25 |
| 4202 | B | 1 5/8" | 2 1/2" | 3/8-16 | 25 |
| 4203 | C | 1" | 3 1/8" | 8-32 | 12 |

STEATITE FEEDTHRU PANEL BUSHING INSULATORS



Made of L-5 Glazed Steatite. These Feedthrus have male and female (tops and bottoms) for feeding thru chassis, panels, shields, racks or panels. No hardware included. (100 to Std. Package)

| Cat. No. | Top Height | Max. Dia. | Panel Hole | Panel Thickness | Max. Screw Sz. |
|----------|------------|-----------|------------|-----------------|----------------|
| 4204 | 1/8" | 1/2" | 3/16" | To 1/8" | 6-32 |
| 4205 | 3/32" | 5/8" | 7/16" | To 1/8" | 8-32 |
| 4206 | 3/8" | 1/2" | 1/4" | To 3/16" | 6-32 |
| 4207 | 3/8" | 5/8" | 3/8" | To 3/8" | 8-32 |
| 4208 | 3/4" | 1 1/8" | 3/4" | To 3/8" | 10-32 |
| 4209 | 1 5/8" | 1 1/4" | 1/2" | To 2" | 10-32 |

NEW FROM BIRNBACH INSULATED GLAS-LINE CABLE



Provides complete isolation of any antenna system where support must be obtained from metallic objects such as towers, windmills, etc.

NON-INDUCTIVE • NON-CONDUCTING • NON-ABSORBING
• NO SAG • NO ROT • NO SHRINK • FLEXIBLE •
USE FOR DIRECTIONAL ARRAYS, BEAMS, RHOMBIC SYSTEMS, ETC.

This Birnbach non-metallic guy wire is not to be handled as regular wire. Do not twist around itself for solid joint; it must be knotted firmly in place (use bow line knot) — use coupling devices such as our Nos. 472, 473 or 474 insulators. Must not be abraded by constant friction — will wear and break line; avoid tight turns. An open thimble should be used to couple the Birnbach "Glas-Line" cable to an eye-bolt at mast or tree. Glass fibers conform to Mil 1140 Spec. and plastic jacket conforms to Mil-I-631C Spec.

*The breaking strength indicated is applicable when "Glas-Line" cable is properly used.

DESCRIPTION: Fiberglass insulation with PVC insulation overall. Color coded per indicated tensile strength.

| Cat. No. | Put-Up | *Tensile Strength | Color | Nom. O.D. |
|----------|----------------------------|-------------------|-------|-----------|
| GL 1 | 100', 500', 1000' 2500' | 500 lbs. | Green | .125" |
| GL 2 | 100', 500', 1000' 2500' | 1000 lbs. | Gray | .2187" |
| GL 3 | 100', 500', 1000' 2500' | 2500 lbs. | White | .3125" |

For greater strength — doubling or tripling the cable will double or triple the tensile strength.

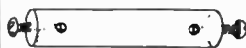
FISH SPINE BEADS



Made of L-5 Glazed Steatite. Useful for insulating Buss or Heavy Lines. Ball and Socket style interlocks permitting beads to follow bends and curves. Four Beads cover approx. 1" — Package of 100 covers 25" of wire. Dimensions: 5/16" O.D. 1/8" I.D. Beads are treated with special Dow Corning treatment to prevent accumulation of surface moisture.

| Cat. No. | Std. Pkg. |
|-----------------------|-----------|
| 4215 FISH SPINE BEADS | 100 |

LUCITE SPREADERS



They are made of Dupont Lucite rod which has a very low loss at radio frequencies. It is water clear and has very low water absorption. The holes are drilled to take a No. 12 wire. A screw at the end of the spreader locks the wire in position.

| Cat. No. | Wire Spacing | Std. Pkg. |
|----------|--------------|-----------|
| 436 | 2" | 25 |
| 437 | 4" | 25 |
| 438 | 6" | 25 |

BIRNBACH FEEDER SPREADERS

They have a cross section of 3/4" x 1/2". Made of highly vitrified, low absorption, high tensile strength porcelain with a smooth white glaze overall.



| Cat. No. | Std. Pkg. |
|-----------------------|-----------|
| 462—Spreader, 2" long | 25 |
| 464—Spreader, 4" long | 25 |
| 469—Spreader, 6" long | 25 |

BIRNBACH STEATITE AIRPLANE INSULATORS



A very small compression type Steatite Insulator with small wind resistance. Fully glazed. It is 1 1/2" in length; 17/32" in diameter; 3/4" line spacing.

| Cat. No. | Std. Pkg. |
|----------------------------------|-----------|
| 463—Steatite Airplane Insulators | 25 |

BIRNBACH AIRPLANE INSULATORS

They are used on mobile and aircraft and also with guy wire on TV installations. They are shaped for the least air resistance and have very high tensile strength, and low loss. Nos. 473 and 474 are made of white glazed low absorption porcelain. No. 472 is made of wet process glazed brown.



| Cat. No. | Std. Pkg. |
|--------------------|-----------|
| 472—2 1/4" (brown) | 25 |
| 473—2" (white) | 100 |
| 474—1 1/2" (white) | 100 |

BIRNBACH ANTENNA INSULATORS



These antenna insulators have exceptionally low moisture absorption. The leakage path is long and the cross section is small and is consistent with the strength required. Smooth white glaze overall prevents the accumulation of dirt or ice.

| Cat. No. | Std. Pkg. |
|----------------------------------|-----------|
| 468—4 1/2" long Center Insulator | 10 |
| 668—4 1/2" long | 25 |
| 470—7" long | 10 |
| 471—12" long | 5 |

BEEHIVE STANDOFF



Base measures 2-3/16" diam. with 3 holes on 1-15/16" circle for No. 6 screws. Height of base 1 1/2". Complete with 10-32 brass screw and nuts. No. 766J has a No. 403 Jack. Available in white glaze.

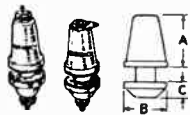
| Cat. No. | Std. Pkg. |
|--------------------------------------|-----------|
| 766—Standoff Insulator, 10-32 Screws | 10 |
| 766J—Jack Type with No. 403 Jack | 10 |



FEEDTHRU • STEATITE PILLARS • CORRUGATED CERAMIC • STANDOFF INSULATORS



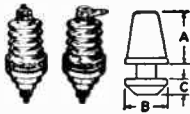
BIRNBACH FEEDTHRU INSULATORS



Made of highly vitrified, low absorption porcelain smoothly glazed to prevent accumulation of dust or dirt. Maximum strength is achieved by the proper proportions and flat mounting surfaces. Long insulating sleeves on the lower part of the insulator contribute much to their performance on high voltages. Brass nickel plated hardware.

| Cat. No. | Height | Std. Pkg. | Dimensions | | Mounting Hole | Hardware |
|----------|--------|-----------|------------|-------|---------------|--------------|
| | | | B | C | | |
| 458 | 1/2" | 50 | 1 1/16" | 3/4" | 5/16" | 6-32 |
| 478 | 1" | 25 | 1 3/16" | 5/16" | 7/16" | 10-32 |
| 478J | 1" | 25 | 1 3/16" | 5/16" | 7/16" | No. 403 Jack |
| 4125 | 1 1/4" | 25 | 7/8" | 3/8" | 7/16" | 10-32 |
| 4125J | 1 1/4" | 25 | 7/8" | 3/8" | 7/16" | No. 403 Jack |
| 4234 | 2 3/4" | 10 | 2 1/4" | 1" | 1 1/4" | 1/4-20 |
| 4175 | 2 3/4" | 10 | 1 1/4" | 3/4" | 7/8" | 1/4-20 |
| 4175J | 2 3/4" | 10 | 1 1/4" | 3/4" | 7/8" | No. 394 Jack |

CORRUGATED FEEDTHRU INSULATORS



The six new corrugated type feedthru insulators have more than twice the leakage path of the straight type because of increased surface of the corrugations and recommends itself where a straight side insulator of equal height is not satisfactory because of its shorter leakage path. Brass nickel plated hardware and cork mounting washers supplied.

| Cat. No. | Height | Std. Pkg. | Dimensions | | Mounting Hole | Hardware |
|----------|--------|-----------|------------|---------|---------------|--------------|
| | | | B | C | | |
| 479 | 1 1/4" | 25 | 1 1/4" | 1 1/16" | 9/16" | 10-32 |
| 479J | 1 1/4" | 25 | 1 1/4" | 1 1/16" | 9/16" | No. 403 Jack |
| 4276 | 2 3/4" | 10 | 1 1/4" | 1" | 3/4" | 1/4-20 |
| 4276J | 2 3/4" | 10 | 1 1/4" | 1" | 3/4" | No. 394 Jack |
| 4452 | 4 1/4" | 5 | 2 1/4" | 1 1/2" | 1" | 1/4-20 |
| 4452J | 4 1/4" | 5 | 2 1/4" | 1 1/2" | 1" | No. 394 Jack |

HIGH VOLTAGE FEEDTHRU INSULATOR



This insulator has been designed to meet the demand for an insulator having high dielectric and mechanical strength. The extra long leakage path is made possible by the corrugations on the top insulator. The bottom sleeve taper from a base dia. of 1-3/16" where the electric stress is greatest.

| Cat. No. | Height | Std. Pkg. | Base Dia. | Mounting Hole | Hardware |
|----------|--------|-----------|-----------|---------------|----------|
| 4233 | 1 1/2" | 10 | 2" | 1 1/4" | 1/4-20 |

STEATITE PILLARS

Have great tensile strength with extremely low losses at very high frequencies. Tapped on both ends; supplied with nickel plated mounting base and top hardware.



| Cat. No. | Height | Std. Pkg. | Dimen. | | Base Dia. | Hardware |
|----------|--------|-----------|---------|---------|-----------|--------------|
| | | | B | C | | |
| 450 | 1" | 10 | 1 1/4" | 1 1/4" | 7/8" | 6-32 |
| 450J | 1" | 10 | 1 1/4" | 1 1/4" | 7/8" | No. 403 Jack |
| 451 | 1 1/2" | 10 | 1 1/2" | 1 1/2" | 7/8" | 6-32 |
| 451J | 1 1/2" | 10 | 1 1/2" | 1 1/2" | 7/8" | No. 403 Jack |
| 452 | 2 1/4" | 10 | 1 1/2" | 1 1/2" | 7/8" | 6-32 |
| 452J | 2 1/4" | 10 | 1 1/2" | 1 1/2" | 7/8" | No. 403 Jack |
| 453 | 2 3/4" | 5 | 1 9/16" | 1-3/16" | 1-3/16" | 1/4-20 |
| 453J | 2 3/4" | 5 | 1 9/16" | 1-3/16" | 1-3/16" | No. 395 Jack |
| 454 | 4" | 5 | 2 3/4" | 1-3/16" | 1-3/16" | 1/4-20 |
| 454J | 4" | 5 | 2 3/4" | 1-3/16" | 1-3/16" | No. 395 Jack |

BIRNBACH METAL BASE INSULATORS

Corrugated surface provides long leakage path. Made of high tensile strength low absorption porcelain fully glazed. Supplied with nickel plated brass screws and nuts, cadmium plated drawn steel bases.

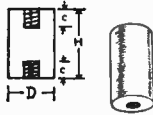


| Cat. No. | Height | Std. Pkg. | Base Dimension | | Mtg. Screw | Hardware |
|----------|--------|-----------|----------------|--------|------------|--------------|
| | | | B | C | | |
| 867 | 1 3/8" | 25 | 1 1/8" | 1 1/2" | 2 No. 8 | 10-32 |
| 867J | 1 3/8" | 25 | 1 1/8" | 1 1/2" | 2 No. 8 | No. 403 Jack |
| 4176 | 2 3/4" | 10 | 1 3/8" | 1 1/2" | 4 No. 10 | 1/4-20 |
| 4176J | 2 3/4" | 10 | 1 3/8" | 1 1/2" | 4 No. 10 | No. 395 Jack |
| 4451 | 4 1/4" | 5 | 2 3/4" | 1 1/2" | 4 No. 10 | 1/4-20 |
| 4451J | 4 1/4" | 5 | 2 3/4" | 1 1/2" | 4 No. 10 | No. 395 Jack |

BIRNBACH STANDOFF INSULATORS

Made of highly vitrified low absorption glazed porcelain. No washers necessary — mounting surface is ground flat for No. 401. No. 966 it is advisable to use cork washers which are available. All brass nickel plated hardware supplied.

| Cat. No. | Height | Std. Pkg. | Base Dimension | | | Mounting Holes | Hardware |
|----------|--------|-----------|----------------|--------|--------|----------------|--------------|
| | | | B | C | D | | |
| 405 | 5/8" | 100 | 1" | 3/8" | 3/8" | 5 | 6-32 |
| 965 | 1" | 50 | 1 1/4" | 3/8" | 3/8" | 5 | 8-32 |
| 966 | 1" | 50 | 1 1/4" | 3/8" | 3/8" | 5 | 8-32 |
| 966J | 1" | 50 | 1 1/4" | 3/8" | 3/8" | 5 | No. 403 Jack |
| 866 | 1 1/2" | 25 | 1 3/4" | 1 1/4" | 1 1/4" | 5 | 10-32 |
| 866J | 1 1/2" | 25 | 1 3/4" | 1 1/4" | 1 1/4" | 5 | No. 403 Jack |
| 866SJ | 1 1/2" | 10 | 1 3/4" | 1 1/4" | 1 1/4" | 5 | No. 395 Jack |
| 4275 | 2 3/4" | 10 | 2 3/4" | 2 1/2" | 2 1/2" | 5 | 1/4-20 |
| 4275J | 2 3/4" | 10 | 2 3/4" | 2 1/2" | 2 1/2" | 5 | No. 399 Jack |
| 4450 | 4 1/4" | 5 | 3 3/8" | 2 1/2" | 2 1/2" | 5 | 1/4-20 |
| 4450J | 4 1/4" | 5 | 3 3/8" | 2 1/2" | 2 1/2" | 5 | No. 399 Jack |

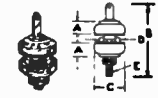


BIRNBACH STEATITE PILLARS JAN-1-8 and JAN-1-10 SPECS. (Less Hardware)

In many constructions, these unmounted threaded Steatite pillars will facilitate assembly because of the one hole mounting and parallel mounting surfaces. They are made of L5 glazed Steatite with threaded holes on both sides.

| Cat. No. | Height | Diam. | Threaded Hole | | Std. Pkg. |
|----------|----------|--------|------------------|--------|-----------|
| | | | Length of Thread | Thread | |
| 441 | 1/4" | 1/4" | All | 6-32 | 100 |
| 441B | 3/8" | 1/4" | 5/8" | 6-32 | 100 |
| 441A | 1/2" | 1/4" | 5/8" | 6-32 | 100 |
| 444A | 3/4" | 1/4" | 5/8" | 6-32 | 100 |
| 445A | 1" | 1/4" | 5/8" | 6-32 | 100 |
| 442 | 3/8" | 3/8" | 5/8" | 6-32 | 100 |
| 442A | 1/2" | 3/8" | 5/8" | 6-32 | 100 |
| 443A | NS5W0105 | 5/8" | 3/4" | 6-32 | 100 |
| 444B | NS5W0106 | 3/4" | 3/4" | 6-32 | 100 |
| 445B | NS5W0108 | 1" | 3/4" | 6-32 | 100 |
| 446B | NS5W0110 | 1 1/4" | 3/4" | 6-32 | 100 |
| 446A | NS5W0112 | 1 1/2" | 3/4" | 6-32 | 100 |
| 446C | NS5W0116 | 2" | 3/4" | 6-32 | 100 |
| 443 | 1/2" | 1/2" | 3/4" | 6-32 | 100 |
| 444 | 3/4" | 1/2" | 1/4" | 6-32 | 100 |
| 445 | 1" | 1/2" | 3/8" | 6-32 | 100 |
| 446 | 1 1/2" | 1/2" | 3/8" | 6-32 | 100 |
| 447 | 2 1/2" | 1/2" | 3/8" | 6-32 | 100 |
| 440 | NS5W0205 | 5/8" | 1/2" | 8-32 | 100 |
| 440A | NS5W0206 | 3/4" | 1/2" | 8-32 | 100 |
| 440B | NS5W0208 | 1" | 1/2" | 8-32 | 100 |
| 440C | NS5W0210 | 1 1/4" | 1/2" | 8-32 | 100 |
| 440D | NS5W0212 | 1 1/2" | 1/2" | 8-32 | 100 |
| 440E | NS5W0216 | 2" | 1/2" | 8-32 | 100 |
| 440F | NS5W0220 | 2 1/2" | 1/2" | 8-32 | 100 |
| 444C | NS5W0308 | 3/4" | 3/4" | 10-32 | 100 |
| 445C | NS5W0310 | 1" | 3/4" | 10-32 | 100 |
| 445D | NS5W0310 | 1 1/4" | 3/4" | 10-32 | 100 |
| 445E | NS5W0312 | 1 1/2" | 3/4" | 10-32 | 100 |
| 445F | NS5W0316 | 2" | 3/4" | 10-32 | 100 |
| 445G | NS5W0320 | 2 1/2" | 3/4" | 10-32 | 100 |
| 448 | 2 1/4" | 3/4" | 3/4" | 1/4-20 | 50 |
| 449 | 4" | 3/4" | 3/4" | 1/4-20 | 50 |
| 447B | NS5W0412 | 1 1/2" | 1" | 1/4-20 | 50 |
| 447D | NS5W0420 | 2 1/2" | 1" | 1/4-20 | 50 |
| 447E | NS5W0424 | 3" | 1" | 1/4-20 | 50 |

STEATITE BUTTONS



This specially designed Steatite button is intended for use to simplify wiring and to be used as a binding post or a binding post insulator. Attention is called to the uniqueness of the design which prevents either section of the insulator from turning in respect to the special screw. The specially designed screw locks both sections.

| Cat. No. | Button Dimensions | | | | | Std. Pkg. |
|----------|-------------------|--------|------|------|----|-----------|
| | A | B | C | D | E | |
| 457 | 5/16" | 1 3/8" | 3/4" | 1/2" | 1" | 25 |

"LUCITE" FEEDTHRU INSULATORS

These feedthru insulators are ideal for bringing high frequency leads thru a panel. They are made of genuine Dupont Lucite. Because of its low loss at high frequency, it is well adapted to insulated elements of high frequency circuits. The 1/2" dia. insulators have brass nickel plated 6-32 hardware and the 3/4" dia. insulators, 10-32 hardware.

| Cat. No. | Height Above Panel | Insulator Dia. | Mounting Hole | Bottom Height | Std. Pkg. |
|----------|--------------------|----------------|---------------|---------------|-----------|
| | | | | | |
| 378 | 1/2" | 1/2" | 5/16" | 1/4" | 25 |
| 379 | 1" | 1/2" | 5/16" | 1/4" | 25 |
| 475 | 1 1/2" | 3/4" | 7/16" | 1/2" | 25 |
| 476 | 2" | 3/4" | 7/16" | 1/2" | 25 |

BIRNBACH LEADIN INSULATORS

Each cone is 2 3/4" high and made of low absorption, highly vitrified glazed porcelain. The Nos. 4237 and 4238 Leadin Insulators have sufficient insulating bushings to insulate the rod that goes through the wall. In addition, 2 bushings are included, 1/4" and 1/2" long, allowing complete insulation of the threaded rod of any length in multiples of 1/4". They come complete with brass nickel plated hardware and lead and cork washers to permit a water-tight seal.

| Cat. No. | Description | Std. Pkg. |
|----------|-----------------------|-----------|
| 4235 | 10" Rod | 10 |
| 4236 | 15" Rod | 10 |
| 4237 | 10" Rod with bushings | 10 |
| 4238 | 15" Rod with bushings | 10 |

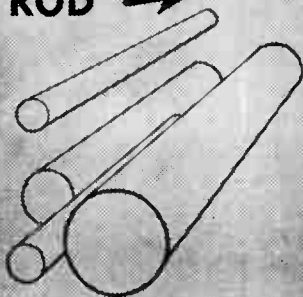
BIRNBACH CONE STANDOFF INSULATORS (Steatite)

Made of low absorption high tensile strength Steatite with a smooth glaze. All heights except the No. 430 are available with a Jack or a threaded hole top. Available in a white glaze and are complete with screws, metal and cork washers.

| Cat. No. | Height | Std. Pkg. | Base Dimensions | | Threaded Holes | | Mtg. Hole |
|----------|--------|-----------|-----------------|--------|----------------|--------------|-----------|
| | | | B | C | D | E | |
| 430 | 1" | 100 | 1 1/8" | 1 1/2" | 6-32 | 6-32 | 5/8" |
| 431 | 1 1/4" | 50 | 1 1/8" | 1 1/2" | 8-32 | 8-32 | 3/4" |
| 431J | 1 1/4" | 50 | 1 1/8" | 1 1/2" | 8-32 | No. 403 Jack | 3/4" |
| 432 | 1 1/2" | 50 | 1 3/8" | 1 3/4" | 10-32 | 10-32 | 3/4" |
| 432J | 1 1/2" | 50 | 1 3/8" | 1 3/4" | 10-32 | No. 403 Jack | 3/4" |
| 433 | 2 3/4" | 25 | 1 1/2" | 2 1/4" | 1/4-20 | 1/4-20 | 1 1/4" |
| 433J | 2 3/4" | 25 | 1 1/2" | 2 1/4" | 1/4-20 | No. 395 Jack | 1 1/4" |

PLASTICS for electronics

ROD →

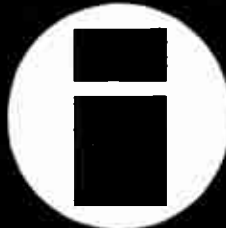


(R = Rods, B = Bars,
½R = Half Round)

EXAMPLE: Cat. No. R11A-½ is ½" diameter Acrylic Rod 1 foot long.

illuminetric

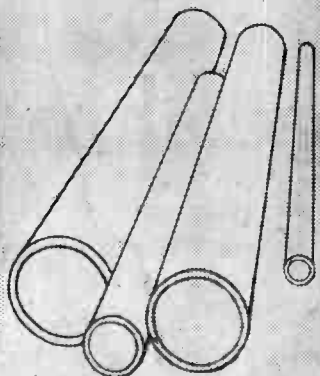
sunnyvale,



california

engineering

TUBING →



EXAMPLE: Cat. No. T15A-¼x¼ is ¼" O.D. with ¼" I.D. Nylon Tubing 1 foot long.

| MATERIAL → | POLY- STY- RENE | | ACRYLIC | | PHENOLIC Paper Base Canvas Base | | POLY- ETHY- LENE | NYLON | TEFLON | | | MACH- INABLE LAVA | MACH- INABLE CER- AMIC | |
|------------|-----------------------|------|---------|------|------------------------------------|-------|------------------------|-------|--------|-------|-------|-------------------------|---------------------------------|--|
| Length → | 1' | 1' | 1' | 1' | 1' | 1' | 1' | 1' | 1' | 6" | 3" | 1' | 8" | |
| CAT. NO. → | R10A | R11A | ½R11A | B11A | R12A | R13A | R14A | R15A | R16A | R16P | R16L | B17A | B18R | |
| Di. | | | | | | | | | | | | | | |
| ¼" | — | — | — | — | — | — | — | .06 | — | — | — | — | — | |
| ⅕" | .03 | .06 | — | — | .69 | 1.02 | — | .18 | — | — | — | — | — | |
| ⅜" | .06 | .09 | — | — | .71 | 1.04 | — | .27 | .98 | .63 | .37 | — | — | |
| ¼" | .09 | .15 | — | .27 | .72 | 1.05 | .10 | .45 | 1.18 | .77 | .47 | — | — | |
| ⅝" | .14 | .21 | — | — | .80 | 1.16 | — | .63 | 1.52 | .97 | .58 | — | — | |
| ¾" | .18 | .29 | — | .53 | .92 | 1.36 | .39 | .87 | 1.94 | 1.34 | .81 | — | — | |
| ½" | .36 | .48 | .35 | .84 | 1.38 | 2.03 | .53 | 1.49 | 3.10 | 2.25 | 1.34 | 1.95 | .90 | |
| ⅝" | .60 | .75 | .60 | 1.50 | 2.12 | 2.85 | .72 | 1.94 | 4.55 | 3.32 | 2.00 | — | — | |
| ¾" | .81 | 1.08 | .86 | — | 2.76 | 3.72 | 1.05 | 2.64 | 6.38 | 4.64 | 2.78 | 2.70 | 1.80 | |
| ⅞" | 1.20 | 1.43 | — | — | 3.44 | 4.67 | 1.43 | 3.48 | 8.47 | 6.30 | 3.78 | — | — | |
| 1" | 1.70 | 1.88 | — | — | 4.16 | 5.70 | 2.03 | 4.38 | 10.95 | 7.32 | 4.79 | 4.05 | 2.70 | |
| 1 1/8" | 2.11 | 2.33 | — | — | 4.56 | 6.91 | — | 5.43 | 13.76 | 9.58 | 6.14 | — | — | |
| 1 1/4" | 2.54 | 2.78 | — | — | 5.37 | 8.13 | 2.93 | 6.39 | 16.87 | 11.08 | 7.45 | — | — | |
| 1 3/8" | 3.38 | 3.83 | — | — | 6.43 | 9.74 | — | 7.28 | 20.12 | 13.60 | 8.96 | — | — | |
| 1 1/2" | 3.58 | 4.13 | — | — | 7.55 | 11.43 | 4.20 | 8.40 | 23.88 | 16.29 | 10.57 | 9.45 | — | |
| 1 5/8" | 4.23 | — | — | — | 8.64 | 13.08 | — | 10.25 | 27.95 | 19.60 | 12.56 | — | — | |
| 1 3/4" | 4.91 | 5.47 | — | — | 10.79 | 16.34 | — | 11.97 | 32.35 | 22.92 | 13.88 | — | — | |
| 1 7/8" | 5.54 | — | — | — | 12.75 | 19.32 | — | 13.29 | 40.70 | 26.18 | 16.03 | — | — | |
| 2" | 6.24 | 6.98 | — | — | 15.05 | 22.77 | 7.05 | 15.42 | 41.48 | 29.86 | 17.38 | 14.63 | — | |

R10, 11, 14, 15 and 16 also available in 4' and 6' lengths. R12 and 13 also available in 3' random lengths. Smaller sizes in the R15 are available in 100' and 500' continuous lengths.

The Illumitronic Jobber Line of PLASTICS is the most complete line available in small standard sizes and short lengths. All sizes are available from stock. For quantity requirements request quotation.

| MATERIAL → | POLY- STY- RENE | ACRY- LIC | PHENOLIC Paper Base Canvas Base | | POLY- ETHY- LENE | NYLON | TEFLON | | MACH- INABLE CER- AMIC |
|---------------|-----------------------|--------------|------------------------------------|------|------------------------|-------|--------|------|---------------------------------|
| Length → | 1' | 1' | 1' | 1' | 1' | 1' | 1' | 6" | 8" |
| CAT. NO. → | T10A | T11A | T12A | T13A | T14A | T15A | T16A | T16P | T18R |
| O.D. I.D. | | | | | | | | | |
| ¼x ⅜ | — | — | — | — | — | .06 | — | — | — |
| ¼x ½ | .09 | .15 | .60 | .83 | .09* | — | — | — | — |
| ¼x ¾ | — | — | — | — | — | .14 | 1.53 | 1.01 | — |
| ⅜x ¼ | .15 | .21 | .64 | .88 | .18* | — | 1.79 | 1.17 | — |
| ⅜x ⅜ | — | — | — | — | — | .27 | — | — | — |
| ½x ¼ | .21 | .37 | .74 | .97 | .24* | .72 | — | — | — |
| ½x ½ | — | — | — | — | — | — | 2.99 | 1.96 | — |
| ½x ¾ | .24 | .41 | .81 | 1.05 | .36 | — | — | — | — |
| ¾x ¼ | .30 | .51 | .88 | 1.20 | .42 | — | — | — | — |
| ¾x ½ | — | — | — | — | — | — | 5.08 | 3.30 | — |
| ¾x ¾ | .39 | .63 | .94 | 1.30 | — | — | — | — | — |
| ¾x ¾ | — | — | — | — | — | — | 5.98 | 3.88 | — |
| 1 x ⅜ | .42 | — | 1.04 | 1.47 | .54 | — | — | — | — |
| 1 x ¼ | .81 | 1.13 | 1.42 | 2.22 | — | — | 7.69 | 5.00 | — |
| 1 1/4 x 1 | 1.12 | 1.35 | 1.58 | 2.55 | .81 | — | — | — | — |
| 1 1/2 x 1 1/4 | 1.20 | 1.65 | 1.73 | 3.00 | 1.05 | — | — | — | 3.30 |
| 1 3/4 x 1 1/2 | 1.58 | 1.80 | 2.02 | 3.30 | 1.27 | — | — | — | — |
| 2 x 1 3/4 | 1.65 | 2.25 | — | — | — | — | — | — | 5.40 |
| 2 1/4 x 2 | — | 3.00 | — | — | — | — | — | — | — |
| 2 1/2 x 1 3/4 | — | — | — | — | — | — | — | — | 5.85 |
| 3 x 2 3/4 | — | 3.60 | — | — | — | — | — | — | — |
| 3 x 2 1/2 | — | — | — | — | — | — | — | — | 6.15 |

T10, T11 and T14 also available in 4' and 6' lengths. T12 and T13 also available in 3' random lengths. *T14 also available in 100' and 500' continuous lengths.

For specifications, contact us or consult your local distributor.

PLASTICS for electronics

SHEET

| MATERIAL → | POLYSTYRENE | | | ACRYLIC | | | PHENOLIC Paper Base | | | PHENOLIC Canvas Base | | |
|------------|-------------|--------|--------|---------|--------|--------|------------------------|--------|--------|-------------------------|--------|--------|
| SIZE → | 6"x12" | 12"sq. | 24"sq. | 6"x12" | 12"sq. | 24"sq. | 6"x12" | 12"sq. | 24"sq. | 6"x12" | 12"sq. | 24"sq. |
| CAT. NO. → | S10A | S10C | S10E | S11A | S11C | S11E | S12A | S12C | S12E | S13A | S13C | S13E |
| Thickness | | | | | | | | | | | | |
| 1/32 | 1.77 | 2.82 | 9.18 | — | — | — | .39 | .60 | 1.86 | .57 | .96 | 3.02 |
| 1/16 | 1.84 | 3.08 | 10.77 | 1.59 | 2.66 | 8.41 | .61 | 1.02 | 3.23 | 1.05 | 1.76 | 5.56 |
| 1/8 | 2.46 | 4.11 | 14.50 | 1.68 | 2.79 | 8.84 | 1.23 | 2.04 | 6.48 | 2.10 | 3.51 | 11.13 |
| 3/16 | 3.20 | 5.32 | 18.35 | 1.99 | 3.34 | 10.53 | 1.83 | 3.06 | 9.68 | 3.16 | 5.27 | 16.69 |
| 1/4 | 3.64 | 6.07 | 21.55 | 2.35 | 3.93 | 12.45 | 2.44 | 4.08 | 12.93 | 4.21 | 7.02 | 22.25 |
| 5/16 | 5.08 | 8.47 | 29.93 | 3.78 | 6.30 | 19.96 | 3.67 | 6.14 | 19.44 | 6.33 | 10.55 | 33.38 |
| 1/2 | 6.27 | 10.46 | 36.71 | 5.03 | 8.39 | 26.57 | 4.90 | 8.18 | 25.87 | 8.43 | 14.06 | 44.52 |
| 5/8 | 8.55 | 14.25 | 47.35 | 6.22 | 10.83 | 32.85 | 6.13 | 10.23 | 32.37 | 10.54 | 17.57 | 55.63 |
| 3/4 | 11.79 | 19.65 | 65.44 | 7.42 | 12.38 | 39.21 | 7.35 | 12.26 | 38.80 | 12.66 | 21.09 | 65.77 |
| 7/8 | 12.65 | 21.07 | 70.09 | 8.65 | 14.42 | 45.66 | 8.58 | 14.31 | 45.31 | 14.76 | 24.60 | 77.88 |
| 1" | 14.07 | 26.70 | 89.21 | 9.84 | 16.40 | 51.92 | 9.82 | 16.37 | 51.82 | 16.86 | 28.11 | 89.02 |

S11 also available in sizes 36"x60", 36"x36". S12 and S13 also available in sizes 36"x48", 36"x36".

MATERIAL DESIGNATION

- | | |
|---------------------------|---------------------------|
| 10 = Polystyrene | 15 = Nylon |
| 11 = Acrylic* | 16 = Teflon |
| 12 = Paper Base Phenolic | 17 = Machinable Lava** |
| 13 = Canvas Base Phenolic | 18 = Machinable Ceramic** |
| 14 = Polyethylene | |

*(Acrylic is also called Plexiglas or Lucite)

**May be drilled or machined.

SHEET

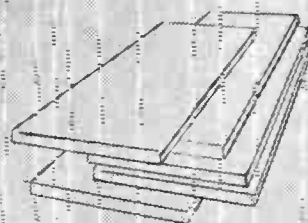
| MATERIAL → | POLYETHYLENE | | | NYLON | | | | TEFLON | | |
|------------|--------------|--------|--------|-------|--------|--------|--------|--------|--------|--------|
| SIZE → | 6"x12" | 12"sq. | 24"sq. | 3"x6" | 4"x12" | 6"x12" | 12"sq. | 3"x6" | 6"x12" | 12"sq. |
| CAT. NO. → | S14A | S14C | S14E | S15L | S15M | S15A | S15C | S16L | S16A | S16C |
| Thickness | | | | | | | | | | |
| .005 | .14 | .27 | .93 | — | — | — | — | .32 | .93 | 1.48 |
| .010 | .24 | .36 | 1.26 | — | .48 | — | — | .53 | 1.73 | 2.66 |
| .015 | .33 | .48 | 1.65 | — | .68 | — | — | .80 | 2.55 | 4.00 |
| .020 | .39 | .60 | 2.00 | — | .83 | — | — | 1.09 | 3.46 | 5.33 |
| .025 | — | — | — | — | 1.05 | — | — | 1.30 | 4.34 | 6.68 |
| .030 | .54 | .90 | 3.06 | — | 1.20 | — | — | 1.57 | 5.11 | 8.00 |
| .040 | .68 | 1.17 | 4.06 | — | 1.50 | — | — | 2.10 | 6.81 | 10.66 |
| .050 | .75 | 1.35 | 4.66 | — | 1.83 | — | — | 2.63 | 8.51 | 13.33 |
| .060 | .97 | 1.65 | 5.65 | — | 2.25 | — | — | 3.14 | 10.21 | 15.99 |
| 1/32 | .54 | .90 | 3.06 | — | 1.20 | — | — | 1.57 | 5.11 | 8.00 |
| 1/16 | .97 | 1.65 | 5.65 | — | 2.25 | 6.38 | 9.38 | 3.14 | 10.21 | 15.99 |
| 1/8 | 1.62 | 2.70 | 9.31 | — | 5.03 | 10.64 | 15.00 | 4.81 | 16.01 | 25.38 |
| 3/16 | 2.01 | 3.36 | 11.77 | 3.99 | — | 13.30 | 18.75 | 7.08 | 23.67 | 37.00 |
| 1/4 | 3.00 | 4.95 | 17.36 | 5.19 | — | 17.29 | 24.38 | 8.92 | 29.79 | 46.50 |
| 3/8 | 4.65 | 7.74 | 26.73 | 7.18 | — | 23.94 | 33.75 | 13.77 | 45.75 | 71.63 |
| 1/2 | 6.30 | 10.50 | 36.77 | 9.98 | — | 26.60 | 37.50 | 17.82 | 59.32 | 92.75 |
| 5/8 | 7.95 | 13.26 | 46.42 | 9.98 | — | 33.25 | 46.88 | 22.34 | ** | ** |
| 3/4 | 11.55 | 19.20 | ** | 11.97 | — | 39.90 | 56.25 | 26.40 | — | — |
| 7/8 | — | — | — | — | — | ** | ** | 30.46 | — | — |
| 1" | 15.60 | 25.95 | — | — | — | — | — | 35.38 | — | — |

S14 also available in sizes 60"x36" and 36"x36". S16 also available in size 24"x24".

*1/16 and smaller are skived sheets, larger are cast sheets.

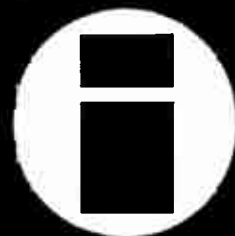
**Larger sizes available on request.

EXAMPLE: Cat. No. S14C-1/2 is 1/2" thick Polyethylene Sheet 12"x12".



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TOLERANCES:

| | |
|------------|----------------|
| 6" ± 1/16" | 3"x6" ± 1/16" |
| 1" ± 1/8" | 6"x12" ± 1/4" |
| 3" ± 1/4" | 12"x12" ± 1/4" |
| 4" ± 1/2" | 24"x24" ± 1/2" |
| 6" ± 1" | 36"x36" ± 1" |

For Vinyl Sealing,
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Spiral Wrap, Zippertubing,
Cable Clamps and other
plastic items see other
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For Physical Properties ask
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Jobbers nationally.

For specifications, contact us or consult your local distributor.

POLYSTYRENE ROD — TUBING — SHEET

For radio and electronic applications, because of its very low loss factor at ultra high frequencies, Polystyrene is the ideal material for insulators, coil forms, shields, etc. It has excellent arc resistance, is non-tracking and has splendid insulating properties. Because its water absorption is practically zero it has excellent dimensional stability.

POLYSTYRENE ROD — Transparent

Available in 12" or 48" lengths

| Catalog Number | Diameter | Net Price | |
|----------------|----------|-----------|-----------|
| | | 12" lgth. | 48" lgth. |
| JB-100 | 1/8" | \$.03 | \$.12 |
| JB-101 | 3/16" | .07 | .28 |
| JB-102 | 1/4" | .12 | .48 |
| JB-103 | 5/16" | .18 | .72 |
| JB-104 | 3/8" | .26 | 1.04 |
| JB-105 | 7/16" | .36 | 1.44 |
| JB-106 | 1/2" | .48 | 1.92 |
| JB-107 | 5/8" | .72 | 2.88 |
| JB-108 | 3/4" | 1.00 | 4.00 |
| JB-109 | 7/8" | 1.42 | 5.68 |
| JB-110 | 1" | 1.90 | 7.60 |
| JB-111 | 1 1/8" | 2.50 | 10.00 |
| JB-112 | 1 1/4" | 3.00 | 12.00 |
| JB-113 | 1 3/8" | 3.60 | 14.40 |
| JB-114 | 1 1/2" | 4.30 | 17.20 |
| JB-116 | 1 3/4" | 6.00 | 24.00 |
| JB-118 | 2" | 7.50 | 30.00 |

POLYSTYRENE TUBING — Satin Finish

Available in 12" or 48" lengths.

| Catalog Number | O.D. | I.D. | Net Price | |
|----------------|--------|--------|-----------|-----------|
| | | | 12" lgth. | 48" lgth. |
| JB-201 | 1/4" | 1/8" | \$.10 | \$.40 |
| JB-202 | 5/16" | 3/16" | .14 | .56 |
| JB-203 | 3/8" | 1/4" | .18 | .72 |
| JB-205 | 1/2" | 3/8" | .26 | 1.04 |
| JB-206 | 5/8" | 1/2" | .32 | 1.28 |
| JB-207 | 3/4" | 5/8" | .40 | 1.60 |
| JB-208 | 1" | 7/8" | .56 | 2.24 |
| JB-220 | 1 1/2" | 1 1/4" | 1.50 | 6.00 |
| JB-222 | 2" | 1 3/4" | 2.20 | 8.80 |

POLYSTYRENE SHEET

The following sheets are all crystal clear with smooth surfaces fully protected against abrasion by masking paper on both sides.

| Catalog Number | Thickness | Sheet Size | Net Price |
|----------------|-----------|------------|-----------|
| JB-125 | 1/16" | 12" x 12" | \$4.15 |
| JB-126 | 3/32" | 12" x 12" | 4.80 |
| JB-127 | 1/8" | 12" x 12" | 5.50 |
| JB-128 | 3/16" | 12" x 12" | 7.15 |
| JB-129 | 1/4" | 12" x 12" | 8.15 |
| JB-245 | 1/16" | 12" x 24" | 7.80 |
| JB-246 | 3/32" | 12" x 24" | 9.15 |
| JB-247 | 1/8" | 12" x 24" | 10.50 |
| JB-248 | 3/16" | 12" x 24" | 13.15 |
| JB-249 | 1/4" | 12" x 24" | 15.65 |
| JB-315 | 1/32" | 24" x 24" | 9.65 |
| JB-301 | 1/16" | 24" x 24" | 11.15 |
| JB-302 | 3/32" | 24" x 24" | 13.00 |
| JB-303 | 1/8" | 24" x 24" | 14.80 |
| JB-304 | 3/16" | 24" x 24" | 18.75 |
| JB-305 | 1/4" | 24" x 24" | 23.00 |
| JB-316 | 5/16" | 24" x 24" | 27.65 |
| JB-309 | 3/8" | 24" x 24" | 31.25 |
| JB-311 | 1/2" | 24" x 24" | 38.65 |
| JB-317 | 5/8" | 24" x 24" | 50.00 |
| JB-318 | 3/4" | 24" x 24" | 69.25 |
| JB-319 | 1" | 24" x 24" | 94.15 |

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PERMACEL 29 PLASTIC ELECTRICAL TAPE

TECHNICAL DATA

| | |
|--|--------------|
| Dielectric Strength | 10,000 volts |
| Thickness | 7 mils |
| Adhesion (oz./inch) | 32 |
| Tensile Strength (lbs./inch) | 25 |
| Elongation | 175% |



PERMACEL 29D DISPLAY
12 rolls— $\frac{3}{4}$ " x 66'



PERMACEL 29C DISPLAY
12 rolls— $\frac{3}{4}$ " x 20'

FREE CUTTER BAR WITH EVERY 66' ROLL!

Eliminates need for scissors, razor blades or penknives. Made of durable plastic—good for thousands of cuts. A non-conductor—safe for all electrical uses. Saves money—prevents tape waste.



PERMACEL®

Small Size, Low Cost Motors for Continuous Timing Applications Beyond the Capacity of Standard Clock Motors

Hurst Synchronous Motors were developed to fill the repeatedly expressed need for a timing unit of larger capacity than clock motors, at a practical low cost, light in weight and compact in size. In this middle area of size and price, Hurst motors provide outstanding quality and performance.



Rugged synchronous motors for continuous duty applications. In a wide choice of output speeds for alarm systems, extra-large clocks, displays, railroad signaling equipment, process controls, code signal devices, time switches, program instruments, aircraft training devices, etc. Engineered for tough jobs requiring accurate timing. Will not overheat during continuous duty or in a stalled position. Gear trains are constructed to withstand considerably more than the motor's rated capacity. Venting prevents moisture contamination and insures proper lubrication at all times. Mounting can be made in any plane with assurance of trouble-free service. Specifications common to all Hurst motors: Operating temperature, 40° to 105° C. Power required, 5 watts, 95-130 volts AC, 60 cycles. Shaft, stainless steel 3/16" dia. x 1" long flattened. Finest quality bronze bearings. Hardened steel pinions and wheel shafts. Brass gears lubricated for lifetime service. Completely enclosed cases, cadmium plated. Mounting, 3 No. 6 holes spaced 120°.

100 INCH-OUNCE REVERSIBLE. (CA Series) Instantly reversible (with SPDT switching). Completely accurate both clockwise and counter-clockwise. 1200 rpm rotor speed for quiet performance. Torque, 100 inch-ounce at 1 rpm. Case dimensions, 2 1/2" dia. x 2 1/8". Output shaft 3/16" dia. x 1" long flattened. Shipping Wt., 1 lb. 2 oz. Most versatile and economical motor in its field!

| Model | Output Speed | Net Each, Lots of | | |
|-------|--------------|----------------------------|---------------|---------------|
| | | 1-49 | 50-71 | 72-107 |
| CA | 1/2 RPM | \$9.25 | \$8.33 | \$7.40 |
| CA | 1 RPM | | | |
| CA | 1 1/2 RPM | | | |
| CA | 2 RPM | | | |
| CA | 2 1/2 RPM | | | |
| CA | 3 RPM | \$9.25 | \$8.33 | \$7.40 |
| CA | 4 RPM | | | |
| CA | 5 RPM | | | |
| CA | 6 RPM | | | |
| CA | 8 RPM | | | |
| CA | 10 RPM | \$9.25 | \$8.33 | \$7.40 |
| CA | 12 RPM | | | |
| CA | 15 RPM | | | |
| CA | 16 RPM | | | |
| CA | 20 RPM | | | |
| CA | 24 RPM | \$9.25 | \$8.33 | \$7.40 |
| CA | 25 RPM | | | |
| CA | 30 RPM | | | |
| CA | 32 RPM | | | |
| CA | 33 1/2 RPM | | | |
| CA | 40 RPM | \$9.25 | \$8.33 | \$7.40 |
| CA | 48 RPM | | | |
| CA | 50 RPM | | | |
| CA | 60 RPM | | | |
| CA | 64 RPM | | | |
| CA | 80 RPM | \$9.25 | \$8.33 | \$7.40 |
| CA | 100 RPM | | | |
| CA | 120 RPM | | | |
| CA | 150 RPM | | | |
| CA | 160 RPM | | | |
| CA | 200 RPM | \$9.25 | \$8.33 | \$7.40 |
| CA | 240 RPM | | | |
| CA | 400 RPM | | | |
| CA | 600 RPM | | | |
| CA | 800 RPM | | | |
| CA | 1000 RPM | (Price includes capacitor) | | |

POSITIVE CLUTCH SM SERIES. Basic SM motor with Positive Clutch and Instantaneous Brake. Starts in 10 milliseconds — stops 60 rpm shaft in 6"; 1 rpm, 1/10". Shipping Wt., 1 lb. 4 oz.

| Model | Output Speed | Net Each, Lots of | | |
|-------|--------------|----------------------------|----------------|----------------|
| | | 1-49 | 50-71 | 72-107 |
| PC-SM | 1/2 RPM | \$13.20 | \$11.88 | \$10.56 |
| PC-SM | 1 RPM | | | |
| PC-SM | 2 RPM | | | |
| PC-SM | 3 RPM | | | |
| PC-SM | 4 RPM | | | |
| PC-SM | 5 RPM | \$13.20 | \$11.88 | \$10.56 |
| PC-SM | 6 RPM | | | |
| PC-SM | 10 RPM | | | |
| PC-SM | 15 RPM | | | |
| PC-SM | 30 RPM | | | |
| PC-SM | 60 RPM | (Price includes capacitor) | | |

120 INCH-OUNCE REVERSIBLE. (DA Series) Instantly reversible (with SPDT switching). Completely accurate both clockwise and counter-clockwise. 100g shock resistance. Vibration resistance, accurate synchronization at 10-55 cps at .065" excursion. Perfect magnetic shielding. Torque, 120 inch-ounce at 1 rpm. Case dimensions, 2 1/2" dia. x 1 3/4". Output shaft 3/16" dia. x 1" long flattened. Shipping Wt., 1 lb. 1 oz.

| Model | Output Speed | Net Each, Lots of | | |
|-------|--------------|----------------------------|---------------|---------------|
| | | 1-49 | 50-71 | 72-107 |
| DA | 1 RPM | \$10.80 | \$9.72 | \$8.64 |
| DA | 2 RPM | | | |
| DA | 4 RPM | | | |
| DA | 6 RPM | | | |
| DA | 8 RPM | | | |
| DA | 10 RPM | \$10.80 | \$9.72 | \$8.64 |
| DA | 12 RPM | | | |
| DA | 20 RPM | | | |
| DA | 30 RPM | | | |
| DA | 60 RPM | | | |
| DA | 120 RPM | (Price includes capacitor) | | |

POSITIVE CLUTCH DA SERIES. Basic DA motor with Positive Clutch and Instantaneous Brake. Starts in 10 milliseconds — stops 60 rpm shaft in 6"; 1 rpm, 1/10". Shipping Wt. 1 lb. 5 oz.

| Model | Output Speed | Net Each, Lots of | | |
|-------|--------------|----------------------------|----------------|----------------|
| | | 1-49 | 50-71 | 72-107 |
| PC-DA | 1 RPM | \$14.92 | \$13.42 | \$11.94 |
| PC-DA | 2 RPM | | | |
| PC-DA | 4 RPM | | | |
| PC-DA | 6 RPM | | | |
| PC-DA | 8 RPM | | | |
| PC-DA | 10 RPM | \$14.92 | \$13.42 | \$11.94 |
| PC-DA | 12 RPM | | | |
| PC-DA | 20 RPM | | | |
| PC-DA | 30 RPM | | | |
| PC-DA | 60 RPM | | | |
| PC-DA | 120 RPM | (Price includes capacitor) | | |

40 INCH-OUNCE UNIDIRECTIONAL. (SM Series) Shaded pole. Clockwise rotation. Instant start of full torque of 40 inch-ounce at 1 rpm. 100g shock resistance. Vibration resistance, accurate synchronization at 10-55 cps at .065" excursion. Case dimensions, 2 1/2" dia. x 1 3/4". Output shaft 3/16" dia. x 1" long flattened. Shipping Wt., 1 lb.

| Model | Output Speed | Net Each, Lots of | | |
|-------|--------------|----------------------------|---------------|---------------|
| | | 1-49 | 50-71 | 72-107 |
| SM | 1/2 RPM | \$9.08 | \$8.17 | \$7.26 |
| SM | 1 RPM | | | |
| SM | 2 RPM | | | |
| SM | 3 RPM | | | |
| SM | 4 RPM | | | |
| SM | 5 RPM | \$9.08 | \$8.17 | \$7.26 |
| SM | 6 RPM | | | |
| SM | 10 RPM | | | |
| SM | 15 RPM | | | |
| SM | 30 RPM | | | |
| SM | 60 RPM | (Price includes capacitor) | | |

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SLO-SYN[®] Synchronous Motors

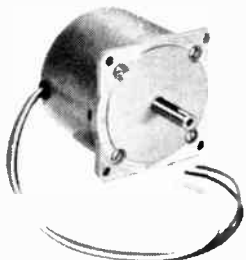
● INSTANT STARTING,
STOPPING, REVERSING

● 72 RPM SHAFT
SPEED WITHOUT GEARS

● CAN BE USED AS
O-C STEPPING MOTORS

A SLO-SYN Synchronous Motor is a permanent magnet type a-c motor having instant start, stop and reverse characteristics and a basic shaft speed of 72 RPM with 60 cycles applied. Adaptable for use as a d-c stepping motor or incremental positioning device that can be stepped 200 times per revolution of the motor shaft. Compact and economical, has almost negligible overshoot, no ratchets or detents. A single-pole,

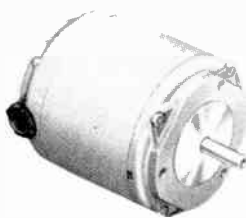
three-position switch can give complete forward, reverse and "off" control because the motor has three leads only. Starts or stops in less than 0.025 second or approximately 1.5 cycles. No need for mechanical or electrical braking; stops in less than 5° of motor shaft rotation. Starting and operating currents are nearly identical; no excessive inrush current when motor is turned on. All types have lubricated-for-life bearings.



50 OZ-IN

TYPES SS50 AND SS50M

Well-suited for limited space applications, actuating selector switches, tape handling, process timing. Militarized type SS50M meets or exceeds applicable military specifications. Planetary gear types available.



150 AND 250 OZ-IN

TYPES SS150, SS152, SS150M, SS250 AND SS252

Types SS150 and SS152 can be ordered with resistor and capacitor integrally mounted in an enclosure on the end of the motor (suffix RC when ordering). Militarized type SS150M meets or exceeds applicable military specifications. Planetary gear types available.

TYPE SS400

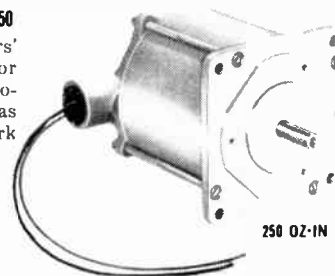
Ideally suited for heavy duty industrial applications, remotely controlled gate and butterfly valves, machine tool carriage feeds, telemetering, numerical control systems.



400 OZ-IN

TYPE X250

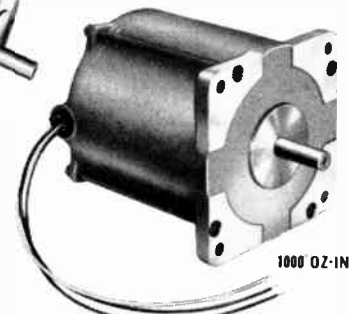
Explosion-proof. Underwriters' Laboratories Approved for Class 1, Group D service. Provides safe operation in areas where a small arc or spark could cause an explosion.



250 OZ-IN

TYPE X1000

Explosion-proof. Underwriters' Laboratories Approved for Class 1, Group D service. Ideally suited for "on-off" a-c servo duty and heavy duty applications.



1000 OZ-IN

| TORQUE (Oz-in) | VOLTS | MAXIMUM AMPERES | RESISTOR* | CAPACITOR* | TYPE | APPROXIMATE WEIGHT (POUNDS) | |
|---|-------|--------------------|---------------------|-----------------------|-----------------|--------------------------------|----------|
| | | | | | | NET | SHIPPING |
| 50/60 CYCLES, 1 PHASE, 72 RPM @ 60 CYCLES | | | | | | | |
| 50 | 120 | 0.3 | 250 ohms ± 5%, 25W | 2.6 mfd ± 6%, 330VAC | SS50 SS50M | 3 | 3½ |
| 150 | 120 | 0.4 | 250 ohms ± 5%, 25W | 3.75 mfd ± 6%, 330VAC | SS150 SS150M | 6½ | 8 |
| 150 | 240 | 0.2 | 1200 ohms ± 5%, 25W | 1.0 mfd ± 6%, 660VAC | SS152 | 6½ | 8 |
| 250 | 120 | 0.6 | 150 ohms ± 5%, 50W | 6.5 mfd ± 6%, 330VAC | SS250 X250 | 6½ 7¾ | 8 9 |
| 250 | 240 | 0.3 | 750 ohms ± 5%, 50W | 1.75 mfd ± 6%, 660VAC | SS252 | 6½ | 8 |
| 400 | 120 | 0.6 | 150 ohms ± 5%, 50W | 6.5 mfd ± 6%, 330VAC | SS400 | 12¼ | 13¾ |
| 1000 | 120 | 3.0 | 65 ohms ± 5%, 160W | 30.0 mfd ± 5%, 330VAC | X1000† | 22 | 25 |

*User must supply resistor and capacitor

†For 60 cycle operation only

PLANETARY GEAR TYPES

Standard types having specially-designed planetary gear assemblies are available. The speed reduction assembly is completely enclosed in a dust proof housing mounted on the shaft end of the motor. The load is evenly distributed over three nylon gears thereby reducing the possibility of tooth damage. The self-lubricated nylon gears provide quiet operation and long life. The planetary gear shaft is ball bearing mounted. When ordering, the basic type number must be suffixed with the desired planetary gear assembly number. For example, type SS50-P1.

| PLANETARY ASSEMBLY SUFFIX | GEAR RATIO | APPROX. SPEED* (RPM) | OUTPUT TORQUE | | | |
|---------------------------------|---------------|----------------------------|------------------------------|---|-------------------------------|--------------------|
| | | | BASIC TYPES SS50 SS50M | BASIC TYPES SS150 SS150M SS152 | BASIC TYPES SS250 SS252 | BASIC TYPE X250 |
| P1 | 4-1 3 | 16.6 | 120 oz-in | 400 oz-in | 650 oz-in | 650 oz-in |
| P2 | 21-2 3 | 3.32 | 600 oz-in | 2000 oz-in | | 2000 oz-in |
| P3 | 108-1 3 | 0.665 | 2000 oz-in | 2000 oz-in | | 2000 oz-in |
| P4 | 541-2 3 | 0.133 | 2000 oz-in | 2000 oz-in | | 2000 oz-in |
| P5 | 2708-1 3 | 0.027 | 2000 oz-in | 2000 oz-in | | 2000 oz-in |

*Exact speed may be calculated from basic motor speed (72 RPM) and given ratio.



THE SUPERIOR ELECTRIC COMPANY
Bristol, Connecticut, U.S.A.

SEE OTHER SUPERIOR ELECTRIC PRODUCT PAGES IN SECTIONS 2100 AND 4000

SLO-SYN® Translators

A SLO-SYN Translator is a pulse-to-step converter intended for use with appropriate bifilar type SLO-SYN Synchronous Motors. It converts low-level signal pulses or square waves into the correct switching sequence needed to drive the SLO-SYN motor at 200 discrete steps per revolution. Internal power supply allows alternate operation from an external shorting switch if desired. Power input is 120 volts a-c, 0.5 ampere for type ST-250 and 120 volts a-c, 1.0 ampere for type ST-1000. SLO-SYN Translators are used in programmed positioning, remote positioning, indexing and indicating operations.



TYPES ST-250 AND ST-1000

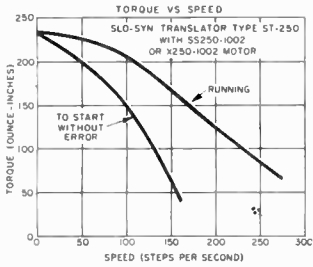


FIGURE 1

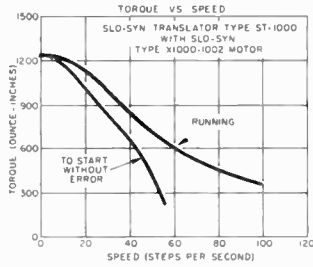


FIGURE 2

Torque vs. speed characteristics for a SLO-SYN Translator type ST-250 are as shown in Figure 1 when used with a type SS250-1002 or type X250-1002 motor. SLO-SYN Translator type ST-250 can also be used with a type SS150-1010 motor or, for higher stepping rates, with a type SS50-1009 motor and a 2 ohm, 25 watt dropping resistor. Figure 2 shows the torque vs. speed characteristics for a SLO-SYN Translator type ST-1000 when operated with a type X1000-1002 SLO-SYN motor. For higher stepping rates, SLO-SYN Translator type ST-1000 can be used with a type SS400-1002, type SS250-1027 or type X250-1003 motor and a 1 ohm, 50 watt dropping resistor.



SS150 AND SS250 TYPES

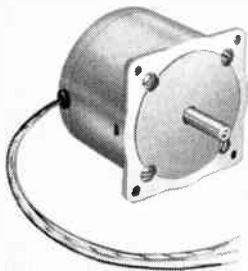
BIFILAR SLO-SYN Synchronous Motors are used for d-c stepping applications where the use of push-pull circuitry and a center-tapped power supply is not possible or where increased torque at high stepping speeds is required.

*Bifilar
and
Four-Lead*

SLO-SYN® Synchronous Motors

BIFILAR SLO-SYN SYNCHRONOUS MOTORS—RATINGS FOR STEPPING APPLICATIONS

| TYPE | D-C VOLTS | AMPERES PER WINDING | APPROXIMATE WEIGHT (POUNDS) | |
|------------|-----------|---------------------|-----------------------------|----------|
| | | | NET | SHIPPING |
| SS50-1010 | 2.0 | 3.3 | 3 | 3½ |
| SS50-1009 | 5.5 | 1.3 | | |
| SS50-1008 | 8.0 | 0.85 | | |
| SS50-1001 | 14.0 | 0.53 | | |
| SS50-1007 | 35.0 | 0.21 | | |
| SS150-1023 | 1.4 | 8.5 | 6½ | 8 |
| SS150-1009 | 2.5 | 4.0 | | |
| SS150-1010 | 10.0 | 1.25 | | |
| SS150-1017 | 25.0 | 0.5 | 6 | 8 |
| SS250-1006 | 7.5 | 5.0 | | |
| SS250-1027 | 4.6 | 3.1 | | |
| SS250-1002 | 9.0 | 1.55 | | |
| SS250-1004 | 22.5 | 0.61 | 7½ | 9 |
| X250-1003 | 4.6 | 3.1 | | |
| X250-1002 | 9.0 | 1.55 | | |
| SS400-1002 | 8.3 | 2.2 | 12¼ | 13¼ |
| SS400-1006 | 21.2 | 0.85 | | |
| X1000-1002 | 10.0 | 3.6 | 22 | 25 |



SS50 TYPES*

FOUR-LEAD SLO-SYN Synchronous Motors are designed to provide the flexibility needed for use with equipment requiring isolated windings with no common connection.

*Bifilar types have five leads.

FOUR-LEAD SLO-SYN SYNCHRONOUS MOTORS—RATINGS FOR STEPPING APPLICATIONS

| TYPE | D-C VOLTS | AMPERES PER WINDING | APPROXIMATE WEIGHT (POUNDS) | |
|------------|-----------|---------------------|-----------------------------|----------|
| | | | NET | SHIPPING |
| SS50-1017 | 2.5 | 3.1 | 3 | 3½ |
| SS50-1011 | 10.0 | 0.75 | | |
| SS50-1002 | 25.0 | 0.30 | | |
| SS50-1014 | 50.0 | 0.15 | 6½ | 8 |
| SS150-1007 | 2.0 | 6.3 | | |
| SS150-1018 | 7.0 | 1.75 | | |
| SS150-1015 | 17.5 | 0.70 | | |
| SS150-1025 | 35.0 | 0.35 | | |
| SS250-1010 | 3.0 | 5.3 | 6½ | 8 |
| SS250-1009 | 8.0 | 2.0 | | |
| SS250-1008 | 16.0 | 1.0 | | |
| SS250-1007 | 32.0 | 0.50 | | |
| SS400-1005 | 15.0 | 1.2 | 12¼ | 13¼ |
| SS400-1007 | 30.0 | 0.6 | | |
| X1000-1005 | 11.5 | 3.2 | 22 | 25 |

FOR MORE DETAILED INFORMATION about ratings, specifications and technical data about SLO-SYN synchronous motors and SLO-SYN translators, request the complete SLO-SYN literature file which includes information about the use of SLO-SYNs as d-c stepping motors.



AUTOTRON

Photoelectric Controls

AUTOTRON, INC Danville, Illinois

Self-Contained Photoelectric ON/OFF Controls and Light Sources

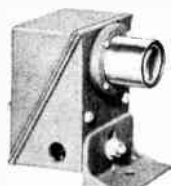


S1A, S4A1



L1A

3-3/4 X 4 X 5-1/4



S2A, S5A1



L2A

5-1/4 X 4 X 5-1/4

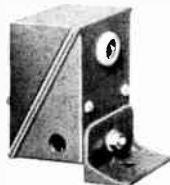


L2A

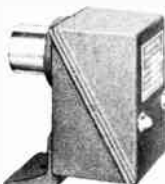


F1B, F2B

6 X 7-1/4 X 5-1/4



L2A

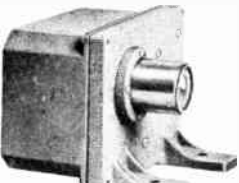


A579

5-1/4 X 4 X 5-1/4

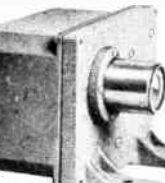


L1A



L3A

8 X 4 X 5-1/4



L4

6 X 7-1/4 X 5-1/4

FEATURES and NOTES

R—Built-in SAFETY Relay (contacts SPDT, rated 5 amps. at 115 VAC)

In Control: Energizes when power comes on; de-energizes when tube filament burns out or power goes off.

In Light Source: Energizes when light comes on; de-energizes when lamp fails or power goes off.

Y—Built-in Light Beam Intensity Adjustment.

*Available with built-in heating element at \$7.50 extra.

DARK Energized—Plate relay energizes when light beam is interrupted; de-energizes when the light beam is restored, when a tube filament fails or any tube loses emission.

LIGHT Energized—Plate relay energizes when continued in column 3

Each self-contained unit includes sensing element or lamp with lenses, transformers and other components for operation direct from electric power. The illustrations show Controls and Light

Sources in pairs or sets to illustrate their use. However any Control can be used with any Light Source if the Light Source provides, at the installed distance, the minimum light (candle-power) specified for the control.

S Series ON-OFF Controls

Rugged, industrial Photoelectric Controls, moderately sensitive, factory adjusted for use where object interrupts light beam 100% Minimum dark time, .06 second; minimum light time, .06 seconds. Plate Relay Contacts, SPDT, rated 8 amperes at 115 VAC non-inductive load. Splashproof cast aluminum case with adjustable bracket; tapped for 1/2" conduit. S1A and S4A1 have 3/4" lens mounted in flexible neoprene—require 20 foot-candles minimum light. S2A and S5A1 have 1 1/2" lens—require 10 foot-candles minimum light.

| Energized | | 50-60 cycles | Net |
|-----------|-------|----------------------|---------|
| Dark | Light | volts | Each |
| S1A | S4A1 | 115 / 230 | \$38.75 |
| S1AR | S4A1R | 115 or 230 (specify) | 50.75 |
| S2A | S5A1 | 115 / 230 | 45.00 |
| S2AR | S5A1R | 115 or 230 (specify) | 57.00 |

F Series ON/OFF Controls

"Fail Safe", sensitive, high speed. Widely used where "safe" relay action is required in case of tube failure, where light change is limited, and where photo-tube dark time or light time is short. Special, quick response DC circuit permits speeds to 1200 operations (cycles) per minute. Sensitivity adjustment inside case inhibits tampering. Shaftlock secures setting.

Minimum light, 5 foot-candles. Minimum phototube dark time, .025 second; minimum phototube light time, .025 second. Plate Relay: Contacts DPDT, rated 8 amps at 115 VAC, non-inductive load. Splashproof cast aluminum case tapped for 1/2" conduit. Rigid mounting feet. Lens dia. 1 1/2". 115/230 v., 50-60 cycles. Power 20 watts.

| Energized | | For 115/230 v., 50-60 Cycles | Net |
|-----------|-------|------------------------------|---------|
| Dark | Light | Description | Each |
| *F2B | *F1B | Photoelectric Control | \$67.50 |
| *F2BR | *F1BR | Above with R feature | 79.50 |

A579 Transistor ON-OFF Control

Fast Acting, rugged industrial construction. Photoelectric Control.

.025 second light time; .025 second dark time (minimums).

Rugged, 8-ampere DPDT plug-in relay with transparent plastic enclosure.

No tubes. Cad Cell and Transistors replace tubes. Transistors protected from transient voltage. Cad Cell exceptionally well shielded from extraneous light by long lens tube and carefully designed mounting arrangement. All components are securely mounted on modern printed circuit board.

All contacts of the 8-ampere DPDT Relay are wired to large, easily accessible screw type terminals, separated by high barriers.

Splashproof cast aluminum case with adjustable mounting bracket; tapped for 3/4" conduit. Power consumption; 5 watts. Maximum ambient operating temperature 115°F.

Relay de-energizing time delay easily added by user; instructions included with control.

Requires 5 foot-candles minimum light. Operates from 115 or 230 v (specify) 50-60 cycles. Power consumption, 5 watts.

A579 LIGHT-ENERGIZED Transistor ON/OFF Photoelectric Control.....NET each \$58.00

L1A Light Source

Has 3/4" lens mounted in flexible Neoprene. Splashproof cast aluminum case tapped for 1/2" conduit. Adjustable mounting bracket.

| Model | L1A | L1AY | L1AR | L1ARY |
|----------|---------|---------|---------|---------|
| Net each | \$18.50 | \$23.50 | \$30.50 | \$35.50 |

L2A Light Source

Has 1 1/2" lens mounted in a brass lens tube. Splashproof cast aluminum case tapped for 1/2" conduit. Adjustable mounting bracket.

| Model No. | L2A | L2AY | L2AR | L2ARY |
|-----------|---------|---------|---------|---------|
| Net each | \$21.80 | \$26.80 | \$33.80 | \$38.80 |

L4A Light Source

Has prefocused, two-filament lamp, extra low voltage connection and 1 1/2" OD straight fixed beam. The prefocused lamps permit replacement with minimum change in the light beam. The dual filaments provide protection against shutdowns—when one filament fails the other lights up and a signal light in the housing comes on indicating that the lamp should be replaced as soon as convenient. Splashproof cast aluminum case with rigid mounting feet, taped for 1/2" conduit.

| L4 Light Source | Net each | \$49.50 |
|-----------------|----------|---------|
|-----------------|----------|---------|

| Model No. | FOOT CANDLES | | | | Lens Diameter | NET each | Ship wt lbs. |
|-----------|--------------|----|----|----|---------------|----------|--------------|
| | 20 | 10 | 5 | 2 | | | |
| L1A | 8 | 12 | 15 | 18 | 3/4 | \$18.50 | 2.5 |
| L2A | 13 | 20 | 30 | 45 | 1 1/2 | 21.80 | 2.5 |
| L4 | N7 | 12 | — | — | 1 1/2 | 49.50 | 8 |
| | L2 | 4 | 6 | 12 | | | |

L3A Light Source

Has 1 1/2" lens with light beam adjustment from a minimum focal length of 4 3/4" and corresponding focal size of 5/16 x 1/4" to a straight light beam of 1 1/2" O.D. Light output at twice the focal distance exceeds 30 foot-candles.

Increasing the focal length increases the focal size. For example at 6" focal length the focal size is 1/2 x 3/8" and at 12" focal length the focal size is 1 1/2" (straight light beam).

| Model No. | L3A | L3AY | L3AR | L3ARY |
|-----------|---------|---------|---------|---------|
| Net each | \$29.30 | \$34.30 | \$41.30 | \$46.30 |

Control and Light Source Sets

(practically any light source can be used with any control)

| MODEL NUMBERS | | max. ft. between lenses | Min. Dark Time | Min. Light Time | Net per Set |
|---------------|-----------------|-------------------------|----------------|-----------------|-------------|
| DARK | energized LIGHT | | | | |
| S1A-L1A | S4A1-L1A | 8 | .06 | .06 | \$57.25 |
| S2A-L1A | S5A1-L1A | 12 | .06 | .06 | 63.50 |
| S2A-L2A | S5A1-L2A | 20 | .06 | .06 | 66.80 |
| S2A-L4 | S5A1-L4 | N 12 | .06 | .06 | 94.50 |
| | | L 4 | | | |
| F2B-L1A | F1B-L1A | 15 | .025 | .025 | 86.00 |
| F2B-L2A | F1B-L2A | 30 | .025 | .025 | 89.30 |
| F2B-L4 | F1B-L4 | N — | .025 | .025 | 117.00 |
| | | L 6 | | | |
| — | A579-L1A | 15 | .025 | .025 | 76.50 |
| | A579-L2A | 30 | .025 | .025 | 79.80 |
| — | A579-L4 | N — | .025 | .025 | 107.50 |
| | | L 6 | | | |

continued from column 1

light beam is restored; de-energizes when light beam is interrupted, when tube filament fails or any tube loses emission.

Specified minimum dark and light time are based on the specified minimum foot-candles.

AUTOTRON Photoelectric Controls

Self-Contained Photoelectric Timing Controls (for Light Sources see preceding page)

For applications requiring delayed plate relay response to light change, such as conveyor jam-up, spraying, processing, etc.



L2A
5-1/4 x 4 x 5-1/4



T1A
5-1/4 x 4 x 5-1/4



L2A



T2B, T3A, T5A
6 x 7-1/4 x 5-1/4



L1A
3-3/4 x 4 x 5-1/4



A579P
5-1/4 x 4 x 5-1/4

T1A Photoelectric Timing Control

Relay energizes DARK—unit times out DARK. Time delay with shaft lock adjustment from 1 to 10 seconds. Repeat accuracy 4%. Minimum light, 40 foot-candles. Plate relay: Contacts SPDT, rated 8 amps at 115 v. AC, non-inductive load. Splashproof aluminum case, tapped for 1/2" conduit. Lens diameter 1 1/2". Power consumption, 10 watts. 115/230 v., 50-60 cycles.

T1A Photoelectric Timing Control. Net each \$57.50

T2B, T3A and T5A Timing Controls

Plate Relay: Contacts DPDT, rated 8 amps at 115 v. AC, non-inductive load. Time delay adjustment has shaft lock. Splashproof cast aluminum case tapped for 1/2" conduit. Lens diameter 1 1/2". 115/230 v., 50-60 cycles. Power consumption 20 watts

T2B Photoelectric Timing Control

Relay energizes LIGHT—unit times out with DARK. Repeat accuracy 3%. Minimum light 20 foot-candles.

| Timing Ranges (specify) | Min. Light Time |
|-------------------------|-----------------|
| No. 1 1. to 3. sec. | .2 sec. |
| No. 2 2.5 to 8. sec. | .4 sec. |
| No. 3 4. to 15. sec. | .8 sec. |

T2B Photoelectric Timing Control. Net each \$72.50
T2BR—Above with Safety Relay. Net each \$84.50

T3A Photoelectric Timing Control

Relay energizes LIGHT—unit times out with LIGHT. Timing accuracy, 2%. Minimum light 10 foot candles.

| T3A and T5A Timing Ranges (specify) | | | |
|-------------------------------------|----------------------|--|--|
| No. 0.1 .03 to .3 sec. | No. 1. .6 to 15 sec. | | |
| No. 0.2 .06 to 3. sec. | No. 2. 1. to 25 sec. | | |
| No. 0.5 .1 to 6. sec. | No. 2.5 1.5 to 50 | | |
| No. 3. 30. to 300. | | | |

T3A Photoelectric Timing Control. Net each \$72.50
T3AR—Above with Safety Relay. Net each \$84.50

T5A Photoelectric Timing Control

Relay energizes DARK—unit times out with DARK. Timing accuracy 2%. Minimum light, 10 foot candles. Timing ranges—same as T3A (specify).

T5A Photoelectric Timing Control. Net each \$82.50
T5AR—Above with Safety Relay. Net each \$94.50

A579P Transistor Timing Control.

Photoelectric—Relay energizes LIGHT—unit times out with DARK. Cad Cell and Transistors replace tubes. Plug-in plate relay, with plastic dust cover; Contacts DPDT, rated 8 amps at 115 VAC, non-inductive load. Time delay adjustment has shaft lock. Splashproof cast aluminum case with adjustable mounting bracket, tapped for 3/4" conduit. Repeat accuracy 4%. Power consumption, 5 watts.

Adjustable timing ranges (specify) No. 4: .1 to 5 sec.
No. 2: 1. to 20 sec.

A579P Timing Control. Net each \$67.00

Control and Light Source Sets

(practically any Light Source can be used with any Control)

| Model Numbers | max. ft. between lenses | Min. dark time | Min. light time | Price per set. |
|---------------|-------------------------|----------------|-----------------|----------------|
| T1A-L1A | 5 ft | — | .5 | \$76.00 |
| T1A-L2A | 10 ft | — | .5 | 79.30 |
| T3A-L1A | 12 ft | .005 | — | 91.00 |
| T3A-L2A | 20 ft | .005 | — | 94.30 |
| T5A-L1A | 12 ft | — | .005 | 101.00 |
| T5A-L2A | 20 ft | — | .005 | 104.30 |
| T2B-L1A | 8 ft | — | — | 91.00 |
| T2B-L2A | 13 ft | — | — | 94.30 |
| A579P-L1A | 15 ft | — | .5 | 85.50 |
| A579P-L2A | 30 ft | — | .5 | 88.80 |

F Series Photoelectric ON/OFF Controls with Remote Sensing and Light Source Heads



EPAGA
\$20.00



E1APGA
\$15.00



E8BP9C
\$18.50



F1BEVA, F2BEVA



E8BAC
\$15.00



E8B8C
\$14.50



E1AD
\$15.00



EX3MD
\$20.00

Sensing Heads

Light Source Heads

F Series ON/OFF Controls have a special quick response DC circuit which permits speeds to 1200 operations per minute. Sensitivity adjustment inside case inhibits tampering. Shaft lock secures setting.

Plate Relay: Contacts DPDT, rated 8 amps at 115 VAC, non-inductive load. Splashproof cast aluminum case, tapped for 1/2" conduit. Power consumption, 20 watts.

DIMENSIONS

| | |
|----------------|-----------------------|
| F1BEVA, F2BEVA | 6 x 7-1/4 x 5-1/4 |
| EPAGA, E2A88D | 5-1/4 x 4 x 5-1/4 |
| EXPMGA, EX3MD | 3-3/4 x 1-1/2 x 4-3/4 |
| E8BP9C, E8BC | 2-3/4 x 7/8 x 1-1/8 |
| E8AP4C, E8AC | 2 x 7/8 x 1-1/8 |

Models F1BEVA and F2BEVA have connections for operating remote sensing and remote light source heads.

The Sensing and Light Source Heads are listed in "matched" pairs. However, either light source may be used with either sensing head

provided the light source has sufficient foot candle output at the installed distance.

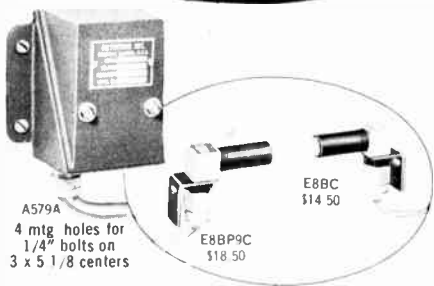
Each AUTOTRON Remote Sensing Head and Light Source Head is equipped with 6-foot connecting cable.

| Model Number | Control | Sensing Head | Light Source | Max. ft. between heads | Min. dark time | Min. light time | Price | With R Feature | | Ship. Wt. lbs. |
|---|---------|--------------|--------------|------------------------|----------------|-----------------|----------|----------------------|----------|----------------|
| | | | | | | | | Model Number | Price | |
| LIGHT ENERGIZED F Series Controls with Sensing and Light Source Heads (115/230 V, 50-60 C) | | | | | | | | | | |
| F1BEVA-EPAGA-E2A88D | | | | 30 | .025 | .025 | \$117.50 | F1BEVAR-EPAGA-E2A88D | \$129.50 | 12 |
| F1BEVA-E1APGA-E1AD | | | | 5 | .025 | .025 | 107.50 | F1BEVAR-E1APGA-E1AD | 119.50 | 9 |
| F1BEVA-EXPMGA-EX3MD | | | | focused | .025 | .025 | 117.50 | F1BEVAR-EXPMGA-EX3MD | 129.50 | 9 |
| F1B4EVE-E8AP4C-E8AC | | | | 1 1/4 | .05 | .025 | 112.50 | F1B4EVER-E8AP4C-E8AC | 124.50 | 9 |
| F1B4EVF-E8BP9C-E8BC | | | | 12 | .025 | .025 | 110.50 | F1B4EVFR-E8BP9C-E8BC | 122.50 | 9 |
| DARK ENERGIZED F Series Controls with Sensing and Light Source Heads (115/230 V, 50-60 C) | | | | | | | | | | |
| F2BEVA-EPAGA-E2A88D | | | | 30 | .025 | .025 | 117.50 | F2BEVAR-EPAGA-E2A88D | 129.50 | 12 |
| F2BEVA-E1APGA-E1AD | | | | 5 | .025 | .025 | 107.50 | F2BEVAR-E1APGA-E1AD | 119.50 | 9 |
| F2BEVA-EXPMGA-EX3MD | | | | focused | .025 | .025 | 117.50 | F2BEVAR-EXPMGA-EX3MD | 129.50 | 9 |
| F2B4EVE-E8AP4C-E8AC | | | | 1 1/4 | .05 | .025 | 112.50 | F2B4EVER-E8AP4C-E8AC | 124.50 | 9 |
| F2B4EVF-E8BP9C-E8BC | | | | 12 | .025 | .025 | 110.50 | F2B4EVFR-E8BP9C-E8BC | 122.50 | 9 |

AUTOTRON

Photoelectric Controls

A579A Transistor Photoelectric ON/OFF Control with Remote Heads

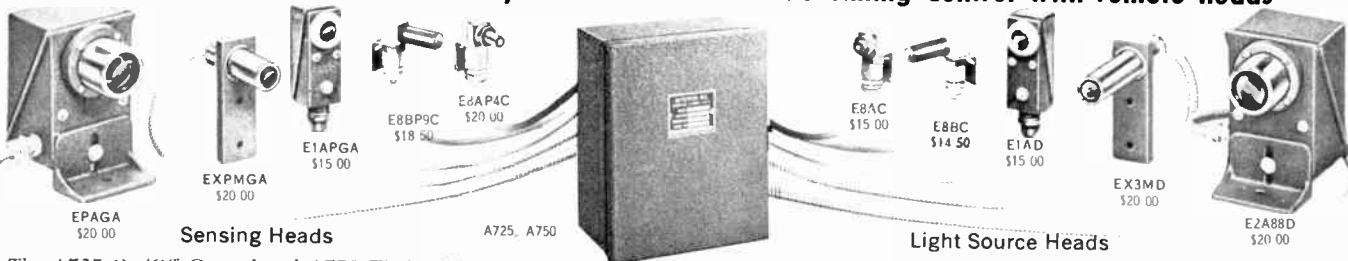


Furnished wired to E8BP9C Photo Cell Sensing Head and E8BC Light Source Head, with 6-foot cable to each head. Max. distance between heads, 12 feet. Minimum light time, .025 second; Minimum dark time, .025 second. LIGHT-energized. Rugged, 5-ampere plug-in DPDT Relay with transparent cover. Cad Cell and transistors instead of tubes. Transistors protected from transient voltage. Cad Cell exceptionally well shielded from extraneous light. All circuit components securely mounted on a modern printed circuit board.

All contacts of the DPDT Relay wired to large easily accessible screw type terminals with high barriers. Splash-proof, cast aluminum case, tapped for 3/4" conduit. Power consumption—5 watts. Time delay easily added by user.

AUTOTRON No. 650 Control Pack Net each \$87.80 (includes A579A ON/OFF Control with E8BP9C and E8BC Remote Heads and connecting cables.)
P-204 E8B Infrared Filter Assembly ... Net 3.45

A725 Transistor Photoelectric ON/OFF Control and A750 Timing Control with remote heads



The A725 On/Off Control and A750 Timing Control have the same case.

Both have rugged, 5-ampere DPDT Plug-in Relay with plastic dust cover.

Both have Cad Cell and Transistors instead of tubes. Both have Transistors protected from transient voltage and Cad Cell exceptionally well shielded from extraneous light.

Both have all circuit components securely mounted on a modern printed circuit board.

Both have all contacts of the DPDT Relay wired to large, easily accessible, screw type terminals.

Both may be changed from DARK to Light or Light to DARK energized by moving a single connection. Both operate at ambient temperatures to 115°F.

Both can be furnished in JIC enclosures at \$12.50 extra. Both are equipped to operate remote sensing and light source heads.

A725 ON/OFF Control
 Sensitive and fast acting. Approximately .025 second light time and .025 second dark time (minimum). Power consumption, 15 watts. Sensitivity adjustment has shaft lock.

A725 ON/OFF Control without heads ... net each \$69.50

A750 Timing Control

Almost instant re-cycle time (.015 second) and re-cycle time is independent of the light level on the sensing cell. The timing control is voltage regulated and variation in timing between 100 and 130 volts is negligible.

When connected to LIGHT terminals, relay energizes LIGHT—unit times out with DARK.

When connected to DARK terminals, relay energizes DARK—unit times out with LIGHT.

A750 Timing Control without heads ... net each \$88.00

| MODEL NUMBERS | max. ft. between heads | NET per Set |
|--------------------|------------------------|-------------|
| A725-EPAGC-E8AC | 2 | \$104.50 |
| A725-E8BP9C-E8BC | 30 | 102.50 |
| A725-EXPM9LC-EX3ME | 70 | 109.50 |
| A725-E1AP6LC-E1AE | 60 | 104.50 |
| A725-EPA9LC-E2A88E | 150 | 109.50 |
| A725-EPA9LC-E4BE | 24 | 127.50 |

A725 ON/OFF Control (.025 sec. light time and .025 sec. dark time, minimum)

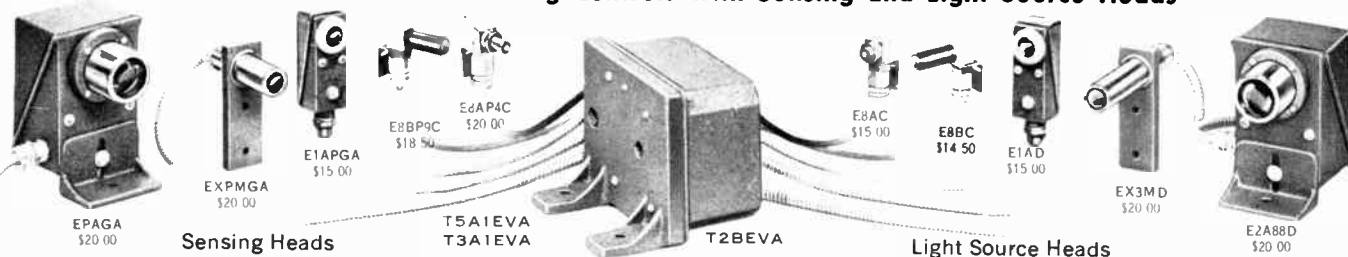
| | | |
|--------------------|-----|----------|
| A725-E8BP9C-E8AC | 2 | \$104.50 |
| A725-E8BP9C-E8BC | 30 | 102.50 |
| A725-EXPM9LC-EX3ME | 70 | 109.50 |
| A725-E1AP6LC-E1AE | 60 | 104.50 |
| A725-EPA9LC-E2A88E | 150 | 109.50 |
| A725-EPA9LC-E4BE | 24 | 127.50 |

A750 Timing Control (.015 sec. recycle time)

| | | |
|--------------------|----|--------|
| A750-E8BP9C-E8AC | 1 | 123.00 |
| A750-E8BP9C-E8BC | 15 | 121.00 |
| A750-EXPM9LC-EX3ME | 35 | 128.00 |
| A750-E1AP6LC-E1AE | 30 | 123.00 |
| A750-EPA9LC-E2A88E | 75 | 128.00 |
| A750-EPA9LC-E4BE | 12 | 146.00 |

Other Sensing and Light Source Head combinations are practical when needed.

T Series Photoelectric Timing Controls with Sensing and Light Source Heads



T Series Controls are built for heavy duty Industrial Service. Plate Relay Contacts: DPDT, Silver Cadmium Oxide, rated 8 amps at 115 VAC, non-inductive load.

Time Delay adjustment with shaftlock, inside case.

Timing Ranges same as self-contained models, page 2. H Feature available with all models—to order add Suffix "H" to Model Number and \$7.50 to price.

The Sensing and Light Source Heads are listed in matched pairs for convenience. Other combinations are practical when required.

DIMENSIONS

| | |
|--------------------------|------------------------|
| A579A | 6 1/4 x 3-1/2 x 5-1/2 |
| A725, A750 | 8-3/8 x 4-1/4 x 10-3/8 |
| T5A1EVA, T3A1EVA, T2BEVA | 6 x 7-1/4 x 5-1/4 |
| EPAGA, E2A88D | 5-1/4 x 4 x 5-1/4 |
| EXPMGA, EX3MD | 3-3/4 x 1-1/2 x 4-3/4 |
| E8BP9C, E8BC | 2-3/4 x 7/8 x 1-1/8 |
| E8AP4C, E8AC | 2 x 7/8 x 1-1/8 |

| Model Number | Max. Ft. Between Heads | Min. Dark Time | Min. Light Time | Price | With R Feature | | | Ship. Wt. Lbs. |
|---|------------------------|----------------|-----------------|----------|-----------------------|--------------|--------------|----------------|
| | | | | | Control | Sensing Head | Light Source | |
| DARK-ENERGIZED—ENERGIZE DELAY (115/230 V, 50-60 C) | | | | | | | | |
| T5A1EVA-EPAGA-E2A88D | 23 | delay | .005 | \$132.50 | T5A1ERVA-EPAGA-E2A88D | | \$144.50 | 11 |
| T5A1EVA-E1APGA-E1AD | 5 | delay | .005 | 122.50 | T5A1ERVA-E1APGA-E1AD | | 134.50 | 9 |
| T5A1EVA-EXPMGA-EX3MD | 5 | delay | .005 | 132.50 | T5A1ERVA-EXPMGA-EX3MD | | 144.50 | 9 |
| T5A4EVE-E8AP4C-E8AC | 1.2 | delay | .01 | 127.50 | T5A4ERVA-E8AP4C-E8AC | | 139.50 | 9 |
| T5A4EVF-E8BP9C-E8BC | 5 | delay | .005 | 125.50 | T5A4ERVF-E8BP9C-E8BC | | 137.50 | 9 |
| LIGHT-ENERGIZED—ENERGIZE DELAY (115 230 V, 50-60 C) | | | | | | | | |
| T3A1EVA-EPAGA-E2A88D | 23 | .005 | delay | \$132.50 | T3A1ERVA-EPAGA-E2A88D | | \$144.50 | 11 |
| T3A1EVA-E1APGA-E1AD | 5 | .005 | delay | 122.50 | T3A1ERVA-E1APGA-E1AD | | 134.50 | 9 |
| T3A1EVA-EXPMGA-EX3MD | 5 | .005 | delay | 132.50 | T3A1ERVA-EXPMGA-EX3MD | | 144.50 | 9 |
| T3A4EVE-E8AP4C-E8AC | 1.2 | .05 | delay | 127.50 | T3A4ERVA-E8AP4C-E8AC | | 139.50 | 9 |
| T3A4EVF-E8BP9C-E8BC | 5 | .025 | delay | 125.50 | T3A4ERVF-E8BP9C-E8BC | | 137.50 | 9 |
| LIGHT-ENERGIZED—DE-ENERGIZE DELAY (115/230 V, 50-60 C) | | | | | | | | |
| T2BEVA-EPAGA-E2A88D | 16 | delay | | \$122.50 | T2BERVA-EPAGA-E2A88D | | \$134.50 | 11 |
| T2BEVA-E1APGA-E1AD | 3 | delay | See | 112.50 | T2BERVA-E1APGA-E1AD | | 124.50 | 9 |
| T2BEVA-EXPMGA-EX3MD | 3 | delay | Chart | 122.50 | T2BERVA-EXPMGA-EX3MD | | 134.50 | 9 |

AUTOTRON Photoelectric Controls

C-Series Impulse Actuated Photoelectric Timing Controls



C Series Controls are triggered (ENERGIZED) by electric impulses. De-Energizing is controlled by adjustable time delay—the relay remains energized through the timing period for which the control is set. DARK-energized Controls time out with LIGHT; LIGHT-energized Controls time out with DARK.

When the "ENERGIZING" light change occurs *before the timing period expires* the relay remains energized through another complete timing period.

Quick "Light Change" is required. Objects should travel at near 60 feet per minute (unless specified). Timing repeat accuracy, 1%. Power consumption, 20 watts.

Plate Relay: SPDT contacts rated 15 ampere at 115 VAC, non-inductive load.

| Timing Range Numbers | 0.6 | 1 | 2 | 3 |
|-------------------------|-----------|------------|------------|-------------|
| Timing Range in Seconds | .05 to .5 | 0.1 to 1.0 | 0.5 to 5.0 | 1.0 to 10.0 |

| Model Number | Max. Ft. Between Heads | Mirr. Dark Time | Min. Light Time | Price | Shp. Wt. Lbs. |
|---|------------------------|-----------------|-----------------|----------|---------------|
| DARK-ENERGIZED — DE-ENERGIZE Delay (115/230 V, 50-60 C) | | | | | |
| C3V-ERAGB-E2A88D | 13 | .00001 | .001 | \$197.00 | 19 |
| C3V-E1APGB-E1AD | 10 | .00001 | .001 | 187.00 | 16 |
| C3V-EXPMGB-EX3MD | 10 | .00001 | .001 | 197.00 | 17 |
| C3403V-E8AP403C-E8AC | 1 1/2 | .00001 | .001 | 192.00 | 16 |
| C3403V-E8BP9C-E8BC | 4 | .00001 | .001 | 190.00 | 16 |
| LIGHT ENERGIZED — DE-ENERGIZE Delay (115/230 V, 50-60 C) | | | | | |
| C4V-EPAGB-E2A88D | 13 | .001 | .00001 | \$197.00 | 19 |
| C4V-E1APGB-E1AD | 10 | .001 | .00001 | 187.00 | 16 |
| C4V-EXPMGB-EX3MD | 10 | .001 | .00001 | 197.00 | 17 |
| C4403V-E8AP403C-E8AC | 1 1/2 | .001 | .00001 | 192.00 | 16 |
| C4403V-E8BP9C-E8BC | 4 | .001 | .00001 | 190.00 | 16 |

A2BX Solar ON/OFF Control



Automatically turns lights "ON" at preset light value—and turns lights "OFF" when light exceeds preset value.

DPDT Control Relay energizes when light exceeds intensity for which control is set; de-energizes when light falls below the preset level.

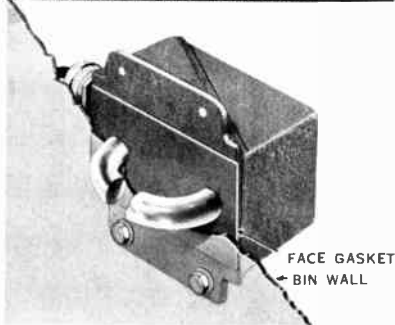
In case of tube failure the relay de-energizes; providing same control action as when light falls below preset level.

Dual Time Delays prevent operation by either momentary light flashes or shadows. Modern, simple circuitry uses one rugged, premium type power tube. Light intensity adjustment from outside of housing. Gasket-sealed cast aluminum housing, tapped for 1/2" conduit. For 115/230 v, 50-60 c. Available with three adjustment ranges:

- No. A2BX-2; 1 to 5 fc for street lighting, parking lots
- No. A2BX-5; 15 to 50 fc for signs, parking lots
- No. A2BX-1; 20 to 150 fc for obstruction or tower lights

A2BX Solar Control (all models) Net \$76.95

Tubeless Bin Level Control

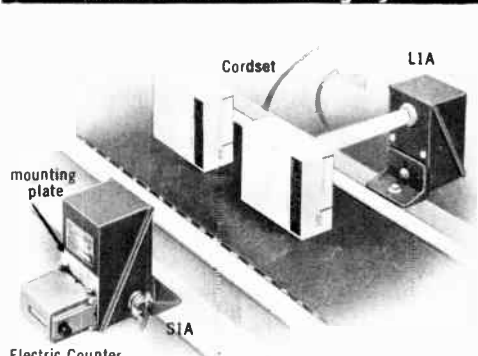


Tubeless Photoelectric actuation — unaffected by pressure of material in the bin. Only rigid, non-moving Lucite probes project into the bin. Cast aluminum, gasket-sealed housing mounts to bin wall as shown. Removal of cover makes all parts accessible. Dust-covered plug-in DPDT 8-ampere relay provides ON/OFF control for either high or low bin level. All wiring connections brought out of case in 3-foot oil proof cable. For 115/230V, 50-60 C.

A700 Bin Level Control . . . Net each \$68.00

(Includes 3-foot cable, face gasket and mounting template)

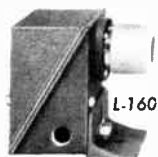
AUTOTRON Counting Eye



Counts anything—Automatically—without touching the object. Each object must interrupt the light beam .06 second or more. Space between objects must permit restoration of the light beam .06 second or more. Max. distance between lenses, 8 feet.

- Counting Eye Components
- S1A Photoelectric Control (see page 1) \$38.75
 - L1A Light Source (see page 1) 18.50
 - Cordset: two 6-foot rubber covered cords with plugs and attachment clamps 2.50
 - Plate and hardware for mounting counter (4 mounting holes on 3-15/16 x 1-23/64" centers) 1.50
 - CE-600AS602 Electric Counter (6-digit, knob reset) \$21.40
- A-138 Counting Eye 115 v., 50-60 c . . . Net each \$89.05**
(includes above items wired ready to plug in.)

Photoelectric Controls with Infrared Light Beams



For burglar alarms, safety applications, etc. Controls and Light Sources are designed for use in pairs as listed.

| CONTROL No. | NET PRICE Each | LIGHT SOURCE No. | NET PRICE Each | Max. ft. between lenses | CONTACTS combination Rating amps. | Shp. wt. lbs. |
|-------------|----------------|------------------|----------------|-------------------------|-----------------------------------|---------------|
| A392 | \$52.50 | L-160 | \$30.65 | 15 | SPDT 8 | 5 1/2 |
| A435 | 83.50 | L-148 | 46.50 | 50 | DPDT 10 | 14 |



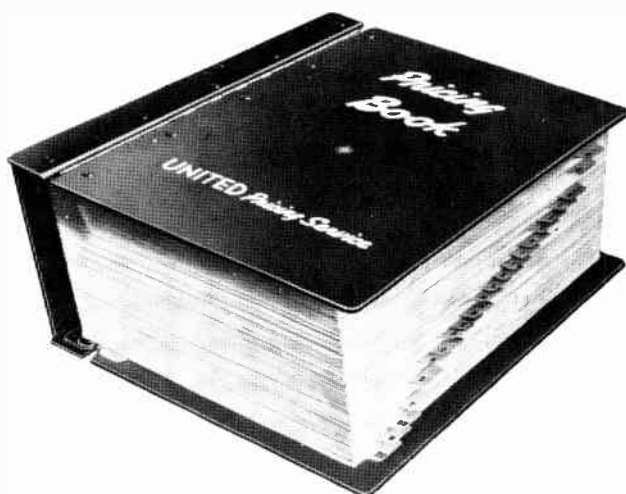
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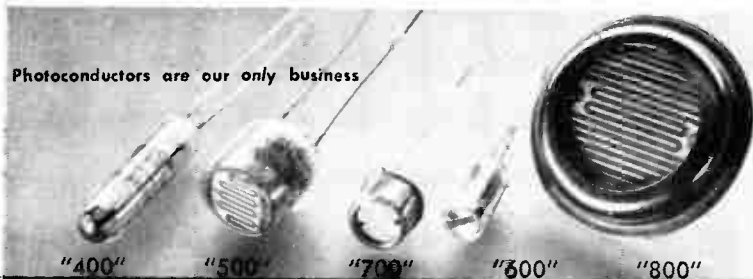
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DELIVERY

Delivery is often dependent on availability of raw materials. Check with your distributor for delivery information at the time you place your order.

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CLAIREX
PHOTOCONDUCTIVE
CELLS

5

Series in Glass or Metal
TO MEET MOST DESIGN NEEDS!

25 standard types in glass . . . Plus *

| CL Cell # | Sensitive Material | Enclosure (inches) | Pk. Spectral Response, Å | Light Resistance ¹ | Voltage Rating (Max.) | Power ² (MW) |
|-----------------------|--------------------|--------------------|--------------------------|-------------------------------|-----------------------|-------------------------|
| CL402 | CdS | .265x1 | 5150 | 1M | 300 | 75 |
| CL402S ³ | CdS | .265x1 | 5150 | 1M | 300 | 75 |
| CL403 | CdSe | .265x1 | 7350 | 133K | 300 | 75 |
| CL403S ³ | CdSe | .265x1 | 7350 | 133K | 300 | 75 |
| CL403A | CdSe | .265x1 | 7350 | 75K | 300 | 75 |
| CL403AS ³ | CdSe | .265x1 | 7350 | 75K | 300 | 75 |
| CL403ASL ³ | CdSe | .265x1 | 7350 | 3.5K | 60 | 75 |
| CL404 | CdSe | .265x1 | 6900 | 30K | 300 | 75 |
| CL404S ³ | CdSe | .265x1 | 6900 | 30K | 300 | 75 |
| CL404SL ³ | CdSe | .265x1 | 6900 | 1.5K | 60 | 75 |
| CL407 | CdS | .265x1 | 6150 | 133K | 300 | 75 |
| CL407S ³ | CdS | .265x1 | 6150 | 133K | 300 | 75 |
| CL504 | CdSe | .5x.5 | 6900 | 1.5K | 250 | 500-250 ² |
| CL504L | CdSe | .5x.5 | 6900 | 0.25K | 60 | 500-250 ² |
| CL505 | CdS | .5x.5 | 5500 | 9K | 250 | 500-250 ² |
| CL505L | CdS | .5x.5 | 5500 | 1.5K | 60 | 500-250 ² |
| CL602 ³ | CdS | .25x.5 | 5150 | 1M | 300 | 75 |
| CL603 ³ | CdSe | .25x.5 | 7350 | 133K | 300 | 75 |
| CL603A ³ | CdSe | .25x.5 | 7350 | 75K | 300 | 75 |
| CL603AL | CdSe | .25x.5 | 7350 | 3.5K | 60 | 75 |
| CL604 ³ | CdSe | .25x.5 | 6900 | 30K | 300 | 75 |
| CL604L | CdSe | .25x.5 | 6900 | 1.5K | 60 | 75 |
| CL605 | CdS | .25x.5 | 5500 | 166K | 300 | 75 |
| CL605L | CdS | .25x.5 | 5500 | 7.5K | 60 | 75 |
| CL607 ³ | CdS | .25x.5 | 6150 | 133K | 300 | 75 |

Operating temperature, all types, +50 to -75° C.

¹DC resistance measured at 2 foot-candles, 2870° K. and 25° C ambient. (± 33 1/3%)

²With and without heat sink.

³Designed to replace previous plastic types. ⁴At 25° C ambient. ⁵S denotes side view cell.

Salient Characteristics:

- Hermetically Sealed in Glass or Metal-Glass.
- A variety of Spectral Response and Resistance.
- Low Resistance "L" types for Transistor and other low voltage applications.
- The High Sensitivity and Fast Response of Cadmium Selenide.
- High Ratio of Light to Dark Current at low light levels.
- Stable and closely controlled Parameters.
- NEW! . . . Custom "70C" Series in short, TO-5 Case; includes useful Twin-Element types.
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Are you on the mailing list for Clairex Technical Information? If not, contact our representative or write direct

Clairex Photoconductive Cells . . . variable resistors controlled by light . . . unique design components for automation and control

*Two new Clairex custom, metal Series, "700" and "800", now available on special order; the three standard glass Series are still generally available through your local distributor from stock. If not, call or write our New York office for direct and immediate service, or contact our technical representative in your area.

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CLAIREX CAN OPEN
NEW HORIZONS . . .

THE light TOUCH IN AUTOMATION AND CONTROL

CLAIREX CORPORATION

New York, N. Y.

INDUSTRIAL FOTOLECTRIC CONTROLS

Write for Engineering Bulletins on these items or on any requirements not shown here.

EXCITER LAMP & PHOTO-CELL RECEIVER

The Exciter Lamp unit is designed to project the light beam and the Photo-Cell Receiver is designed to pick up the beam and convert its light into electrical energy through the Amplifier unit.

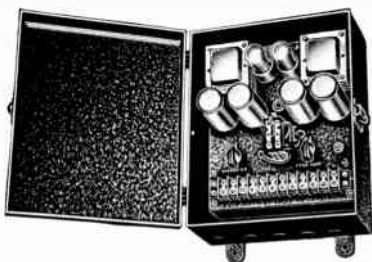


Model 33 Model 23

For Use With Amplifiers
Nos. 63, 63-A, 63-B, 63-C
and No. 64 Listed Below

Model 33 Exciter Lamp and Model 23 Photo-cell Receiver units operate as a Set most generally installed for industrial applications. The light beam from the Model 33 series Exciter Lamps covers a distance of from a few inches up to 25 ft. from unit to unit. (See Price List for distances of various models). The Set is heavy cast iron with 1/2 in. conduit fittings. Gray finish. For use in damp areas, the Set can be made moisture-proof at slight additional cost.

| Model No. | Description | Size, Inches | Price, Each |
|-----------|---------------------|-----------------------|-------------|
| 33 | Exciter Lamp Unit | 4 1/4 x 2 3/4 x 2 3/4 | \$19.50 |
| 23 | Photo-Cell Receiver | 4 1/4 x 2 3/4 x 2 3/4 | 22.50 |



MODEL 63 SERIES AMPLIFIERS

(Electronically Operated Relays)

Size: 9 1/4" x 11 1/2" x 5"

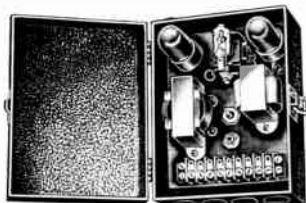
Insure Positive and Accurate Performance

Especially designed for use with the above combination of standardized Worner Photo-Cell and Exciter Lamp units shown. The relay under normal conditions will operate up to 650 times a minute. Will operate also from light sources such as daylight, artificial lights, radiant energy, etc. MODEL 63 Series Amplifiers are specially engineered, highest quality units. They enjoy wide preference as they efficiently meet exacting requirements and replace the need of costly individually engineered equipment. For technical details, please address the factory.

| Model | Description | Price, Each |
|------------|--|-------------|
| Model 63 | Described Above | \$117.00 |
| Model 63-A | combines Model 63 and Time Delay Circuit giving delay from zero to 45 seconds | 134.10 |
| Model 63-B | same as Model 63 with additional amplification to operate on less active change of light | 141.30 |
| Model 63-C | same as Model 63 but operates with "on" light | 117.00 |

MODEL 64 AMPLIFIER

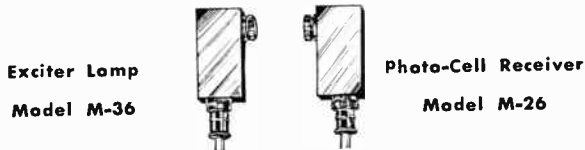
An efficient unit for practically any industrial applications that do not require fine detection and where the Relay is not required to operate in excess of 450 times a minute. (For fine detection at greater speeds, we recommend a choice of Model 63 series.)



Model 64 Amplifier ea. \$67.35

Prices slightly higher West of Rockies

"MINIATURE" FOTOLECTRIC HEADS



Exciter Lamp
Model M-36

Photo-Cell Receiver
Model M-26

For horizontal installation, order Models M-37 and M-27

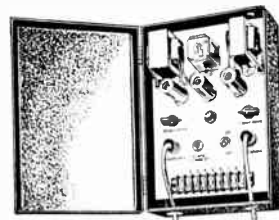
Size 1 1/4" x 3/4" x 2 1/2" for space limitations. One-piece solid aluminum, machined for components. Pin-point detection on cross-over beam at distances from 3" to 12". Directional beam supervises objects 1" or larger at a distance up to 8 ft. Operates up to 10,000 counts per minute with Model 66-A below. Units equipped with 6 ft. of cable with prong-type positive connectors. For guaranteed efficiency, Miniature Heads should be used only with Amplifiers described below.

| | |
|---|---------|
| Model M-36 Vertical Exciter Lamp | \$24.96 |
| Model M-26 Vertical Photo-cell Receiver | 28.31 |
| Model M-37 Horizontal Exciter Lamp | 24.96 |
| Model M-27 Horizontal Photo-cell Receiver | 28.31 |

MODEL 66 SERIES AMPLIFIERS

Use With Miniature Heads

Speeds shown below are based upon "on" and "off" periods being equal. Model 66, double-pole, double-throw relay with contact rating of 110 v. 60 cy. a.c., 10 amps. non-inductive, 5 amps. inductive. Light beam intensity control.



| | |
|---|---------------|
| Model 66-A Amplifier, for use with ultra high speed electronic decade counters. Accurate counts of light beam interruption or variation of intensity up to 10,000 counts per minute | Each \$138.60 |
| Model 66 Amplifier, same as Model 66-A except that it operates up to 900 counts per minute | Each \$131.10 |
| Model 67 Amplifier, for applications where fine detection at high speeds is not a factor or Relay is not required to operate in excess of 450 times per minute | Each \$69.90 |

TWO-UNIT SET for INDOOR USE
Model 62 R & L



Model 62-L
Exciter Lamp

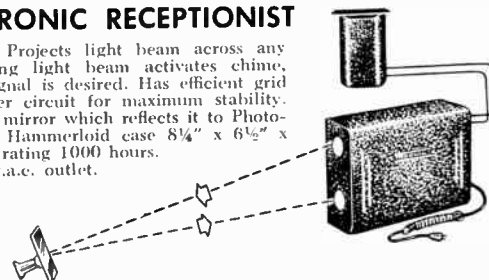


Model 62-R
Amplifier

This Amplifier unit includes Photo-Cell, Relay and Components. Efficient for distances from a few inches to 75 ft., where Relay is not required to operate in excess of 400 times a minute, such as: Counting, sorting large objects; limit switches; start, stop operations; opening doors, etc.
Model 62 R & L "Two-Unit Set" Per Set \$82.50

THE ELECTRONIC RECEPTIONIST

Three-piece set. Projects light beam across any entrance. Breaking light beam activates chime, located where signal is desired. Has efficient grid controlled rectifier circuit for maximum stability. Projects beam to mirror which reflects it to Photo-cell in the unit. Hammerloid case 8 1/4" x 6 1/2" x 3 3/4". Lamp-life rating 1000 hours. Plugs into 110 v.a.c. outlet.



Model 61 Fotoelectric Announcer, Per Set \$40.50

WORNER BURGLAR ALARM SYSTEMS

Write for Engineering Bulletins on these items or on any requirements not shown here.

MODEL 9000 SERIES This is the Worner Master Control System. It consists of the Model 9000-S Master Control Panel which supervises 1, 2, 3 or 4 Fotoelectric Sets of Model No. 9000 series shown. Each Fotoelectric Set consists of Exciter Lamp and Photo-cell Receiver chosen in pairs for distance to be covered. Fotoelectric Sets are located for detection. Control Panel remotely installed, contains Relays which energize alarm circuits.

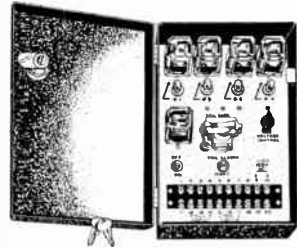


Illustration shows four Relay units plugged in to show plug-in location for 1, 2, 3 or 4 Relays as needed. Model 9000-S Master Control Panel is priced "less Relays". One Relay unit is automatically supplied with each Model No. 9000 series Fotoelectric Set ordered.

SIZE: 7" wide, 10 1/4" hi., 4 3/8" dp.

MODEL 9000-S MASTER CONTROL PANEL supervises up to four Fotoelectric Sets. On a separate circuit, it will also supervise foil tape, door traps and window switch systems. Both circuits operate independently and simultaneously. Sounds continuous alarm (until reset) when either of these detection circuits is opened or wiring of Fotoelectric system is tampered with. Model 9000-S Master Control Panel prevents false alarms should power fail or drop momentarily and resets automatically when power is restored. Also operates with any type electrical devices employed by professional burglar alarm companies. For 110-120 v. 50/60 cy. ac.

Model 9000-S Master Control Paneleach, \$61.05

FOTOLECTRIC SETS Models for 100 and 150 ft. ranges are not weatherproof, for indoor use only. Models for 75, 250 and 500 ft. ranges are weatherproof, for both indoor and outdoor use. Exciter Lamps for all ranges project infra-red (invisible) light beams. Sets for 75, 150, 250 and 500 ft. ranges have unwanted light rejector which improves day-light range.

| Model No. | Range | Fotoelectric Set | Per Set |
|-----------|---------|--------------------|----------|
| 9100 | 100 ft. | Master Tresp. Trap | \$ 96.00 |
| 9150 | 150 ft. | Master Tresp. Trap | 112.50 |
| 9075 | 75 ft. | Master Tresp. Trap | 118.50 |
| 9250 | 250 ft. | Master Tresp. Trap | 130.80 |
| 9500 | 500 ft. | Master Tresp. Trap | 146.25 |

MODEL 7000 SERIES operates with burglar alarm company's central office control, police signal or local alarm. The Relay may be connected either in series or parallel to meet circuit requirements. One or more Fotoelectric Sets of No. 7000 series can be used and can be operated by an existing control panel. Can be used with foil systems, etc., if Control Panel is so equipped. For 110-120V or 24V.

| Model No. | Range | Fotoelectric Set | Per Set |
|-----------|---------|---------------------------|----------|
| 7100 | 100 ft. | Central Cont. Tresp. Trap | \$ 96.00 |
| 7150 | 150 ft. | Central Cont. Tresp. Trap | 112.50 |
| 7075 | 75 ft. | Central Cont. Tresp. Trap | 118.50 |
| 7250 | 250 ft. | Central Cont. Tresp. Trap | 130.80 |
| 7500 | 500 ft. | Central Cont. Tresp. Trap | 146.25 |

MODEL 5000 SERIES is a TWO-PIECE set comprising No. 5000 series Fotoelectric sets. For 100 ft. and 150 ft. ranges for interior use only where a single beam is ample protection. Not intended for use with foil systems, etc. Equipped with lock and key. 110V.

| Model No. | Range | Fotoelectric Set | Per Set |
|-----------|---------|-------------------------|----------|
| 5100 | 100 ft. | Single Beam Tresp. Trap | \$ 96.00 |
| 5150 | 150 ft. | Single Beam Tresp. Trap | 112.50 |

FOTOLECTRIC SETS

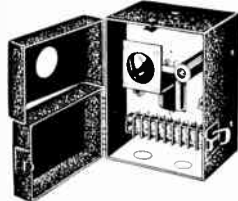
Same cases house different components. Order by Model Number of Series desired.



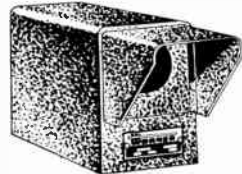
For 100 Ft. Ranges Exciter Lamps and Photo-cell Receivers have matching cases.



For 150-Ft. Range Exciter Lamp



For 150-Ft. Range Photo-cell Receiver

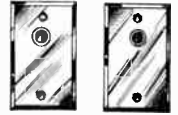


For 75, 250 and 500-Ft. Ranges, all units are Weatherproof. Exciter Lamps and Photo-cell Receivers are externally the same.

Prices slightly higher West of Rockies

"MINIATURE" FOTOLECTRIC BURGLAR ALARM

"In-Wall" Concealment



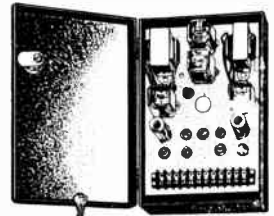
Light Source and Photo-cell Receiver units concealed in light-switch type face plates. Projects invisible light beam ranging up to 35 feet (indoors). Standard size wall plates concealing Fotoelectric detection units are high finish stainless steel. Light bulb rated 2000 hours. For guaranteed efficiency Fotoelectric sets must be used only with specially engineered amplifiers listed below.

Model 81 "In-Wall" Light Source, each\$21.18
Model 82 "In-Wall" Photo Cell Receiver, each 22.92

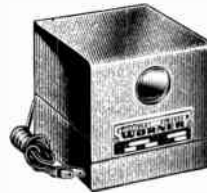
MODEL 80 SERIES AMPLIFIERS Use With Above Fotoelectric Units

Two specially engineered units. Circuits with no-voltage control relay prevent false alarms due to line voltage irregularities and will sound alarm if tampered with. Standard alarm continuous, regulated warning signal "special" upon order. For 110, 120 volts, 60 cycle, a.c.

Model 86-1 is a single channel Amplifier Panel that will amplify current flow of one Fotoelectric Set. each \$115.50



Model 86-2 is a dual channel Amplifier Panel that will amplify current flow of two Fotoelectric Sets, each installed to guard a separate area. Will also supervise one Fotoelectric Set where amplification is provided for future addition of a second Fotoelectric Set. each \$178.50



THE TWO-UNIT WORNER WATCHMAN

Exciter Lamp is equipped with removable infra-red filter. Provides invisible light beam ranging up to 50 ft. The Electronically Operated Relay combines Photo-cell and electrical components. Equipped with toggle switch for either continuous alarm or to sound only while light beam is broken. Extraneous light rejector maintains daylight range. Two-piece case construction enables removal of cover without unmounting. Identical cases 5" x 5" x 5 1/2" welded steel, mahogany hammerloid finish. For indoor use; 110-120V. 60 cycle A.C.

Model 4000 Two Unit Watchmanper set \$63.00

MORE THAN FIFTY STOCK UNITS

comprise the Worner line. For more information on Industrial Control, Burglary, Automatic Lighting, Fire Protection, etc., please write or phone your wholesaler. Catalogs and Engineering Bulletins available from the factory on request.

FOTOLECTRIC FIRE PROTECTION

SMOKE DETECTION For institutions, schools, hospitals, hotels, etc., where fire originating in or drawn into ventilating or air conditioning ducts are fan driven to a succession of uncontrollable outbreaks throughout building. The Worner Fan Motor Stop installed on air duct minimizes this hazard by early detection, automatic stopping of fan and signaling of alarm. Meets requirements of National Board of Fire Underwriters and listed by Underwriters Laboratories. Write for Bulletin 650.

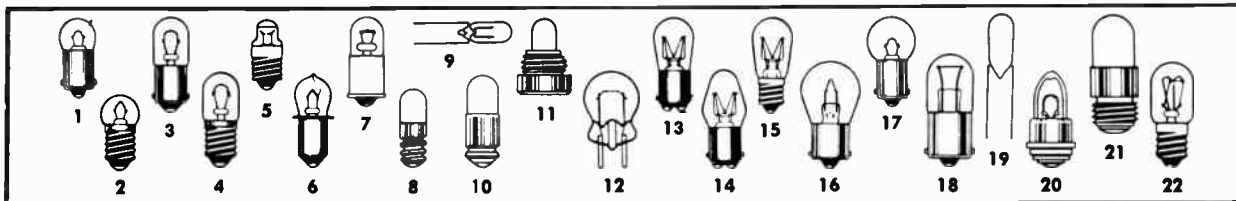
Also request data on "Fotoelectric Fire Protection in Space Areas".

CHICAGO MINIATURE LAMPS

—backed by over 50 years experience in standard and special lamp design.

The list below merely represents a few of our most popular lamps. Specifications and engineering data covering all standard and special lamps available on request. For proved dependability always ask us for Chicago Miniature Lamps.

CHICAGO MINIATURE LAMP WORKS, CHICAGO 40, ILL.



PANEL, INDICATOR, RADIO and COIN MACHINE LAMPS

| Lamp No. | Bulb | Base | Fig. | Volt | Amps or Candle-Power | Hrs. Life | Net Each | Lot of Ten |
|----------|---------|-----------|------|------|----------------------|-----------|----------|------------|
| 43 | T-3/4 | Min. Bay | 3 | 2.5 | .50 | 3000 | \$.15 | \$.92 |
| 44 | T-3/4 | Min. Bay | 3 | 6.3 | .25 | 3000 | .15 | .92 |
| 46 | T-3/4 | Min. Scr. | 4 | 6.3 | .25 | 3000 | .15 | .92 |
| 47 | T-3/4 | Min. Bay | 3 | 6.3 | .15 | 3000 | .15 | .92 |
| 48 | T-3/4 | Min. Scr. | 4 | 2.0 | .06 | 1000 | .15 | .92 |
| 49 | T-3/4 | Min. Bay | 3 | 2.0 | .06 | 1000 | .15 | .92 |
| 50 | G-3/2 | Min. Scr. | 2 | 7.5 | .25 | 500 | .15 | .92 |
| 51 | G-3/2 | Min. Bay | 1 | 7.5 | .22 | 1000 | .15 | .92 |
| 52 | G-3/2 | Min. Scr. | 2 | 7.5 | .22 | 1000 | .25 | 1.53 |
| 53 | G-3/2 | Min. Bay | 1 | 14.4 | .12 | 1000 | .15 | .92 |
| 55 | G-4 1/2 | Min. Bay | 1 | 7.0 | .41 | 500 | .15 | .92 |
| 57 | G-4 1/2 | Min. Bay | 1 | 14.0 | .24 | 1000 | .15 | .92 |
| 57X | G-4 1/2 | Min. Bay | 1 | 14.0 | .24 | 1000 | .20 | 1.22 |
| 63 | G-6 | S.C. Bay | 17 | 7.0 | .63 | 1000 | .20 | 1.22 |
| 63L | G-6 | S.C. Bay | 17 | 7.0 | .79 | L | .50 | 3.06 |
| 81 | G-6 | S.C. Bay | 17 | 6.5 | 1.02 | 500 | .25 | 1.53 |
| 1458 | G-5 | Min. Bay | 17 | 20.0 | .25 | 250 | .20 | 1.22 |
| 1489 | T-5 | S.C. Bay | 18 | 6.5 | 2.75 | 125 | 2.45 | 15.00 |
| 1490 | T-3/4 | Min. Bay | 3 | 3.2 | .16 | 3000 | .17 | 1.04 |
| 1618 | S-8 | D.C. Bay | 16 | 6.4 | 21 C.P. | 200 | .70 | 4.28 |
| 1648 | S-8 | D.C. Bay | 16 | 8.0 | 21 C.P. | 200 | .70 | 4.28 |
| 1815 | T-3/4 | Min. Bay | 3 | 14.0 | .20 | 3000 | .20 | 1.22 |
| 1822 | T-3/4 | Min. Bay | 3 | 36.0 | .10 | 1000 | .60 | 3.67 |
| 1847 | T-3/4 | Min. Bay | 3 | 6.3 | .15 | L | .20 | 1.22 |
| 1866 | T-3/4 | Min. Bay | 3 | 6.3 | .24 | L | .20 | 1.22 |
| 1891 | T-3/4 | Min. Bay | 3 | 14.0 | .24 | 500 | .17 | 1.04 |
| 1892 | T-3/4 | Min. Bay | 3 | 14.0 | .12 | L | .25 | 1.53 |

AIRCRAFT AND SPECIAL LAMPS (cont.)

| Lamp No. | Bulb | Base | Fig. | Volts | Amps or Candle-Power | Hrs. Life | Net Each | Lot of Ten |
|----------|---------|------------|------|-------|----------------------|-----------|----------|------------|
| 311 | S-11 | S.C. Bay | 16 | 28 | 50 C.P. | 300 | \$.90 | \$ 5.50 |
| 312 | S-11 | D.C. Bay | 16 | 28 | 50 C.P. | 300 | 1.15 | 7.03 |
| 313 | T-3/4 | Min. Bay | 3 | 28 | .17 | 500 | .35 | 2.14 |
| 313R | T-3/4 | Min. Bay | 3 | 28 | .17 | 500 | .55 | 3.36 |
| 323 | T-1 1/4 | Special | 11 | 3 | .19 | 350 | 1.00 | 6.11 |
| 323R | T-1 1/4 | Special | 11 | 3 | .19 | 350 | 1.05 | 6.42 |
| 325 | T-1 1/4 | Special | 21 | 3 | .19 | 350 | 1.25 | 7.64 |
| 327 | T-1 1/4 | Mid. Flgd. | 7 | 28 | .04 | 1000 | .90 | 5.50 |
| 328 | T-1 1/4 | Mid. Flgd. | 7 | 6 | .20 | 500 | .70 | 4.28 |
| 328L | T-1 1/4 | Mid. Flgd. | 7 | 6 | .20 | 3000 | 2.10 | 12.80 |
| 328NR | T-1 1/4 | Mid. Flgd. | 7 | 6 | .20 | 500 | 3.85 | 23.50 |
| 329 | T-1 1/4 | Special | 21 | 2.5 | .40 | 30 | 1.80 | 11.00 |
| 330 | T-1 1/4 | Mid. Flgd. | 7 | 14 | .08 | 750 | 1.00 | 6.11 |
| 331 | T-1 1/4 | Mid. Flgd. | 7 | 1.35 | .06 | 500 | .80 | 4.89 |
| 332 | T-1 1/4 | Mid. Flgd. | 7 | 6 | .20 | 500 | 1.45 | 8.86 |
| 334 | T-1 1/4 | Mid. Grvd. | 10 | 28 | .04 | 1000 | .90 | 5.50 |
| 335 | T-1 1/4 | Mid. Scr. | 8 | 28 | .04 | 1000 | 1.20 | 7.33 |
| 336 | T-1 1/4 | Mid. Grvd. | 10 | 14 | .08 | 750 | 1.50 | 9.17 |
| 337 | T-1 1/4 | Mid. Grvd. | 10 | 6 | .20 | 500 | 1.45 | 8.86 |
| 337L | T-1 1/4 | Mid. Grvd. | 10 | 6 | .20 | 3000 | 2.10 | 12.80 |
| 338 | T-1 1/4 | Mid. Flgd. | 7 | 2.7 | .06 | 500 | .80 | 4.89 |
| 342 | T-1 1/4 | Mid. Scr. | 8 | 6 | .04 | 1000 | 1.40 | 8.55 |
| 344 | T-1 1/4 | Mid. Flgd. | 7 | 10 | .015 | L | 1.50 | 9.17 |
| 345 | T-1 1/4 | Mid. Flgd. | 7 | 6 | .04 | 1000 | 1.40 | 8.55 |
| 1251 | G-6 | S.C. Bay | 17 | 28 | 3 C.P. | 1000 | .40 | 2.44 |
| 1767 | T-1 1/4 | Mid. Scr. | 8 | 2.5 | .20 | 500 | .60 | 3.67 |
| 1768 | T-1 1/4 | Mid. Scr. | 8 | 6.0 | .20 | 500 | .90 | 5.50 |
| 1768L | T-1 1/4 | Mid. Scr. | 8 | 6.0 | .20 | 3000 | 2.25 | 13.70 |
| 1769 | T-1 1/4 | Mid. Scr. | 8 | 2.5 | .20 | 500 | .80 | 4.89 |
| 1775 | T-1 1/4 | Mid. Scr. | 8 | 6.3 | .075 | 500 | .80 | 4.89 |
| 1816 | T-3/4 | Min. Bay | 3 | 13 | .33 | 1000 | .30 | 1.83 |
| 1819 | T-3/4 | Min. Bay | 3 | 28 | .035 | 1000 | .45 | 2.75 |
| 1820 | T-3/4 | Min. Bay | 3 | 28 | .10 | 1000 | .40 | 2.44 |
| 1829 | T-3/4 | Min. Bay | 3 | 28 | .07 | 1000 | .35 | 2.14 |

SPECIAL ULTRAMINIATURE LAMPS

With T1 bulb and rated at 5 volts. All conforming to MS24367 (*) or MS 24515 (†).

| Lamp No. | Base | Fig. | Candle Power | Hrs. Life | Net Each | Lot of Ten |
|---------------|---------|------|--------------|-----------|----------|------------|
| CM8-680* | Unbased | 19 | .060 | L | \$3.20 | \$19.60 |
| CM8-715* | Unbased | 19 | .115 | L | 3.20 | 19.60 |
| CM8-682† | Special | 20 | .060 | L | 4.00 | 24.40 |
| CM8-718† | Special | 20 | .115 | L | 4.00 | 24.40 |
| CM8-685† | Special | 20 | .060 | L | 4.00 | 24.40 |
| CM8-714† | Special | 20 | .075 | L | 4.00 | 24.40 |
| CM8-683* | Unbased | 19 | .060 | L | 3.20 | 19.60 |
| CM8-713* | Unbased | 19 | .075 | L | 3.20 | 19.60 |
| CM8-682 AS15† | Special | 20 | .029 ± 15% | L | 4.10 | 25.40 |
| CM8-685 AS15† | Special | 20 | .048 ± 15% | L | 4.10 | 25.40 |
| CM8-714 AS15† | Special | 20 | .080 ± 15% | L | 4.10 | 25.40 |
| CM8-718 AS15† | Special | 20 | .132 ± 15% | L | 4.10 | 25.40 |
| CM8-680 AS15* | Unbased | 19 | .132 ± 15% | L | 3.30 | 20.60 |
| CM8-683 AS15* | Unbased | 19 | .053 ± 15% | L | 3.30 | 20.60 |
| CM8-713 AS15* | Unbased | 19 | .088 ± 15% | L | 3.30 | 20.60 |
| CM8-715 AS15* | Unbased | 19 | .147 ± 15% | L | 3.30 | 20.60 |

POPULAR NEON GLOW LAMPS

| Lamp No. | Watts or MA | Bulb No. | Base | Fig. | Series Resistor Ohms | Life | Net Each | Lot of Ten |
|----------|-------------|----------|------------|------|----------------------|-------|----------|------------|
| NE-2 | 1/25 | T-2 | Unbsd. | 9 | 200K | 25000 | \$.10 | \$.60 |
| NE-2A | 1/25 | T-2 | Unbsd. | 9 | 200K | 25000 | .10 | .60 |
| NE-2D | 1/10 | T-2 | Mid. Flgd. | 7 | 62K | 5000 | .82 | 5.10 |
| NE-2E | 1/10 | T-2 | Unbsd. | 9 | 62K | 5000 | .10 | .60 |
| NE-2H | 1/4 | T-2 | Unbsd. | 9 | 25K | 5000 | .12 | .70 |
| NE-2J | 1/4 | T-2 | Mid. Flgd. | 7 | 25K | 5000 | .82 | 5.10 |
| NE-2X | 1/10 | T-2 | Unbsd. | 9 | 62K | 5000 | .09 | .63 |
| NE-45 | 1/4 | T-4 1/2 | Canda. | 4 | 30K | 7500 | .85 | 5.30 |
| NE-48 | 1/4 | T-4 1/2 | D.C. Bay | 3 | 30K | 7500 | .70 | 4.30 |
| NE-51 | 1/25 | T-3/4 | Min. Bay | 3 | 200K | 15000 | .21 | 1.30 |
| NE-51H | 1/4 | T-3/4 | Min. Bay | 3 | 25K | 5000 | .23 | 1.50 |
| NE-57 | 1/4 | T-4 1/2 | Canda. | 4 | 30K | 5000 | .99 | 6.10 |

Prices shown include Federal Excise Tax.

FLASHLIGHT AND LANTERN LAMPS

| Lamp No. | Bulb | Base | Fig. | Volt | Amps or Candle-Power | Hrs. Life | Net Each | Lot of Ten |
|----------|---------|------------|------|------|----------------------|-----------|----------|------------|
| PR-2 | B-3 1/2 | Min. Flgd. | 6 | 2.4 | .50 | 15 | .20 | 1.22 |
| PR-3 | B-3 1/2 | Min. Flgd. | 6 | 3.6 | .50 | 15 | .20 | 1.22 |
| PR-4 | B-3 1/2 | Min. Flgd. | 6 | 2.3 | .27 | 10 | .20 | 1.22 |
| PR-6 | B-3 1/2 | Min. Flgd. | 6 | 2.5 | .30 | 30 | .20 | 1.22 |
| PR-7 | B-3 1/2 | Min. Flgd. | 6 | 3.8 | .30 | 30 | .20 | 1.22 |
| PR-12 | B-3 1/2 | Min. Flgd. | 6 | 6.0 | .50 | 15 | .20 | 1.22 |
| PR-13 | B-3 1/2 | Min. Flgd. | 6 | 4.75 | .50 | 15 | .20 | 1.22 |
| 13 | G-3 1/2 | Min. Scr. | 2 | 3.8 | .30 | 15 | .17 | 1.04 |
| 14 | G-3 1/2 | Min. Scr. | 2 | 2.5 | .30 | 15 | .17 | 1.04 |
| 27 | G-4 1/2 | Min. Scr. | 2 | 5.0 | .30 | 30 | .17 | 1.04 |
| 31 | G-4 1/2 | Min. Scr. | 2 | 6.15 | .30 | 15 | .20 | 1.22 |
| 112 | TL-3 | Min. Scr. | 5 | 1.1 | .22 | 5 | .17 | 1.04 |
| 123 | G-3 1/2 | Min. Scr. | 2 | 1.2 | .30 | 10 | .17 | 1.04 |
| 222 | TL-3 | Min. Scr. | 5 | 2.2 | .25 | 5 | .17 | 1.04 |
| 425 | G-4 1/2 | Min. Scr. | 2 | 5.0 | .50 | 15 | .17 | 1.04 |
| 502 | G-4 1/2 | Min. Scr. | 2 | 5.1 | .15 | 100 | .17 | 1.04 |

SMALL STANDARD VOLTAGE LAMPS

| Lamp No. | Watts | Bulb | Fig. | Base | Voltage | Net Each | Lot of Ten |
|-----------|-------|---------|------|----------|---------|----------|------------|
| 3S-6/5 | 3 | S6 | — | Canda. | 110-125 | \$.39 | \$2.70 |
| 6T4 1/2/1 | 6 | T-4 1/2 | 4 | Canda. | 110-125 | .70 | 4.90 |
| 6S6 | 6 | S-6 | 15 | Canda. | 110-125 | .22 | 1.50 |
| 6S6/D.C. | 6 | S-6 | 13 | D.C. Bay | 110-125 | .33 | 2.30 |
| 7C7 | 7 | C-7 | 22 | Canda. | 110-125 | .22 | 1.50 |
| 10C7 | 10 | C-7 | 22 | Canda. | 110-125 | .27 | 1.90 |
| 10C7/D.C. | 10 | C-7 | 14 | D.C. Bay | 110-125 | .29 | 2.10 |
| 10S6/10 | 10 | S-6 | 15 | Canda. | 230-250 | .52 | 3.60 |
| 10S6/D.C. | 10 | S-6 | 13 | D.C. Bay | 230-250 | .67 | 4.70 |

AIRCRAFT AND SPECIAL LAMPS

| Lamp No. | Bulb | Base | Fig. | Volts | Amps or Candle-Power | Hrs. Life | Net Each | Lot of Ten |
|----------|------|----------|------|-------|----------------------|-----------|----------|------------|
| 301 | G-5 | S.C. Bay | 17 | 28 | 3 C.P. | 500 | \$.40 | \$2.44 |
| 302 | G-5 | D.C. Bay | 17 | 28 | 3 C.P. | 500 | .40 | 2.44 |
| 303 | G-6 | S.C. Bay | 17 | 28 | 6 C.P. | 500 | .40 | 2.44 |
| 304 | G-6 | D.C. Bay | 17 | 28 | 6 C.P. | 500 | .40 | 2.44 |
| 305 | S-8 | S.C. Bay | 16 | 28 | 15 C.P. | 300 | .60 | 3.67 |
| 306 | S-8 | D.C. Bay | 16 | 28 | 15 C.P. | 300 | .85 | 5.19 |
| 307 | S-8 | S.C. Bay | 16 | 28 | 21 C.P. | 300 | .60 | 3.67 |
| 307F | S-8 | S.C. Bay | 16 | 28 | 21 C.P. | 300 | .70 | 4.28 |
| 308 | S-8 | D.C. Bay | 16 | 28 | 21 C.P. | 300 | .70 | 4.28 |
| 309 | S-11 | S.C. Bay | 16 | 28 | 32 C.P. | 300 | .70 | 4.28 |
| 310 | S-11 | D.C. Bay | 16 | 28 | 32 C.P. | 300 | .90 | 5.50 |

NOTE: "L" in "Hrs. Life" column indicates extremely long life far in excess of 60,000 hrs. at rated voltage.



THE COMPLETE LINE OF

PILOT LIGHTS

Foremost Manufacturer of Pilot Lights
DIALIGHT CORPORATION • BROOKLYN 37, N. Y.

DATALITES®

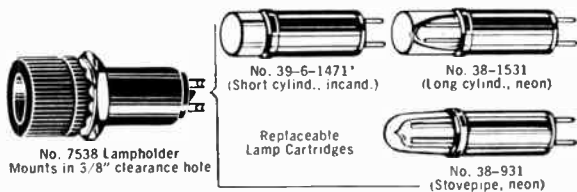
For the Computer-Automation Industries

DATALITES by DIALCO are ultra-miniature Indicator Lights specially designed to meet the critical requirements of the computer-automation fields. Made in 2 basic styles: *Lamp Holders with DIALCO'S own replaceable Lamp Cartridges*, or integrated DATALITES with *Built-in Neon Lamps* which are *not replaceable* (see below). Ultra-compact, single units mount in $\frac{3}{8}$ " clearance hole.

DATALITES have fully insulated terminals and conform to all applicable military specifications. Integrated units are available with or without *built-in resistors* (see below).

Also available—twin-lamp assemblies which mount in $\frac{3}{4}$ " clearance hole.

DATALITES with DIALCO'S Replaceable Lamp Cartridges



NEON or INCANDESCENT LAMP CARTRIDGES

Lamps used: T-1 $\frac{3}{4}$ wire-lead incandescent Lamps... or Neon Lamps NE-2E (regular), or NE-2H (High Brightness) which is specified by adding H to the Cat. No.... Example: 38H-931.

Neon Cartridge Cat. Nos.

| LENS COLOR (Transparent) | STOVEPIPE | LONG CYL. |
|--------------------------|-----------|-----------|
| Red | 38-931 | 38-1531 |
| Yellow (Amber) | 38-933 | 38-1533 |
| White | 38-935 | 38-1535 |
| Light Yellow | 38-936 | 38-1536 |
| Clear (Colorless) | 38-937 | 38-1537 |

Incandescent Cartridge Cat. Nos.

| LENS COLOR (Translucent) | SHORT CYL. (Translucent) |
|--------------------------|--------------------------|
| Red | 39-6-1471 |
| Green | 39-6-1472 |
| Yellow (Amber) | 39-6-1473 |
| Blue | 39-6-1474 |
| White | 39-6-1475 |
| Light Yellow | 39-6-1476 |

Green or blue lenses are not listed. They are not recommended for use with Neon lamps.

*NOTE: The -6- in the Cat. Nos. indicate a 6V lamp. For 14V or 28V, change the -6- to -14- or -28-. Example: 39-14-1471.

DATALITES with Built-in NE-2E or NE-2H Neon Lamps (Lamps are not replaceable.)



(NOTE: To specify a unit for the High Brightness Neon Lamp, add H to the Cat. No.... Example: 249-7841H-931.)

HOT-STAMPED LEGENDS (Digits, Letters or Symbols) on Dialco Lamp Cartridge Lenses

SHORT and LONG CYLINDRICAL lenses can be hot-stamped with one to three digits of standard size, as follows: 1 DIGIT, 11/64" high (14 pt. type) . . . 2 DIGITS, 9/64" high (10 pt. type) . . . 3 DIGITS, 5/64" high (8 pt. type) . . . These standard sizes of Legends will be provided in a uniform manner per order—i.e., the size of type will be determined by the largest legend indicated in each individual order.

Standard—BLACK letters; but white, red, green, or blue letters can be supplied to order.

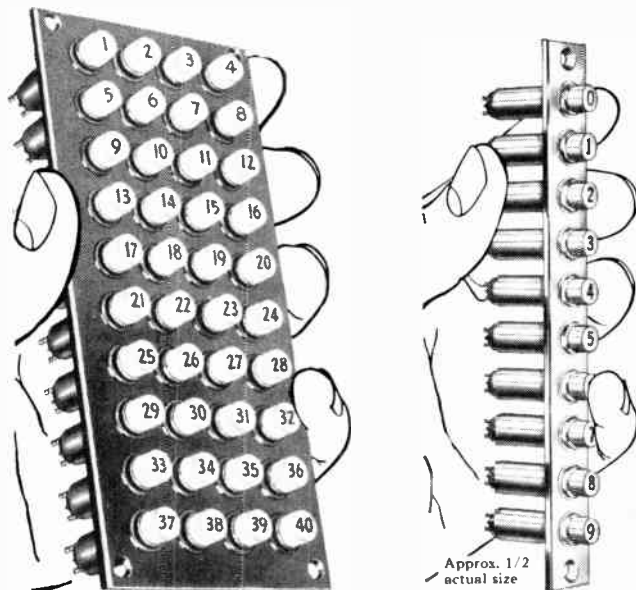
Colored Legends on black or gray lenses: Legends can also be furnished in "negative", or "reverse" style. That is, the legend is illuminated in white or other color while the background remains opaque black or gray. To order, insert -XP20B- for black lens and -XP20G- for gray lens.
Ex.: 39-6-XP20B-1471; 39-6-XP20G-1471.

MULTIPLE INDICATORS

in a compact "package"—

Ready to install in a minimum of space

For Data-Processing Equipment, Computers,
and Automation Applications



"DATA MATRIX" No. DM-7538-40; panel size, 5 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ "; accommodates 40 Lamp Holders with Incandescent Lamp Cartridges capped with short cylindrical lenses.

"DATA STRIP" No. DSV-7538-10. Vertical, complete with 10 No. 39-28-1475 Dialco Lamp Cartridges . . . No. DSH-7538-10, same as above, but for horizontal reading.

A Complete "Data Matrix" and "Data Strip" Manufacturing Service

To expedite installation of multiple-indicators, let DIALCO perform the following manufacturing services for you:

- Fabricate a "Data Matrix" or "Data Strip" panel to your specifications . . . Punch the necessary holes therein for DIACO Lamp Holders and your fuses, switches, screws, etc.
- Mount the required number of Lamp Holders on the panel for vertical or horizontal reading . . . Lamp Holders can be spaced on any center-to-center measuring from $\frac{7}{16}$ " up. ($\frac{1}{2}$ " center-to-center spacing is standard, as shown on typical configurations illustrated above) . . . There is no basic (or stock) item; we can supply from 2 to 40 Lamp Holders on a panel or strip.
- Insert required Lamp Cartridge into Lamp Holders.
- Hot Stamp or engrave legends on lenses (see column at left).

Lamp Holders accommodate DIALCO'S Neon or Incandescent Lamp Cartridges (see column at left) . . . Each Lamp Holder has 2 Solder Cup terminals and is completely insulated (without the use of insulating shoulder washers); Turret, or AMP "S3" Terminals can also be furnished.

MATERIALS AND FINISHES: Lamp Holder housing, panel or strip, and cartridge sleeve are aluminum with clear anodize finish.

Option: black anodize finish or to specifications.

For complete data, see brochure FORM L-160C.



THE COMPLETE LINE OF

PILOT LIGHTS

Foremost Manufacturer of Pilot Lights
DIALIGHT CORPORATION • BROOKLYN 37, N. Y.

(Illustrations are approx. actual size)

Sub-Miniature Indicator Lights for NEON Lamps

NE-2D (regular)
NE-2J (high brightness)
(See below)

TWO TERMINALS — FULLY INSULATED — Conform to all applicable military specifications

For FRONT of Panel Insertion in 15/32" Clearance Hole

With Built-in Resistor

(A patented DIALCO feature—
U.S. Pat No. 2,421,321)

Conform to MS25257

Accommodates a T-2 Neon Glow Lamp: NE-2D (MS25252) for 105-125 Volts A.C. or D.C.; for Catalog Numbers see below. NE-2J (High Brightness) for 110-125 Volts A.C. only; for Catalog Numbers, see Brochure L-159C.



| DIALCO Cat. No. WITHOUT LAMP | MS No. WITHOUT LAMP* | MS No. WITH LAMP* MS25252-NE-2D | LENS COLOR |
|------------------------------|----------------------|---------------------------------|--------------------|
| 137-8836-933 | MS25257-2 | MS25257-1 | Aviation Yellow |
| 137-8836-931 | MS25257-4 | MS25257-3 | Identification Red |
| 137-8836-937 | MS25257-6 | MS25257-5 | Clear (Colorless) |

* With patented built-in resistor: 62K ± 10%. *MARKING: The Part No. marked on the assembly is the Part No. for the complete assembly less lamp.

Also: Similar Series not covered by MS25257: For NE-2D lamp, with standard 62K built-in resistor. For NE-2J (high brightness) lamp, with standard 18K built-in resistor. See Brochure L-159C.

The LIGHT SOURCE: Tiny Neon Glow Lamps NE-2D or NE-2J

These lamps have formed bulbs and midjet flanged bases; designated as NE-2D for the regular lamp, and as NE-2J for the high brightness type which has higher voltage characteristic requiring 110 volts A.C. or 140 volts D.C. for reliable performance. A resistor (or other ballast) must be used. Since the current is never more than 3 m.a., the resistor may be the 1/3 watt type. Recommended values are as follows:

| For NE-2D at 105-125 volts A.C. or D.C. | | |
|---|----------------------------------|---------------------------|
| Bright light 62,000 ohms | Medium intensity 100,000 ohms | Long life 220,000 ohms |
| For NE-2J (High Brightness) at 110-125 V. (A.C. only) | | |
| Bright light 18,000 ohms | Medium intensity 33,000 ohms | Long life 100,000 ohms |



For FRONT of Panel Insertion in 15/32" Clearance Hole

Without Built-in Resistor

This Series is similar in size, general appearance, and construction to the Series shown at the left, except for the following: Has no built-in resistor or anti-rotation tab. Catalogue Numbers, with soldering terminals, are as follows:

| | |
|-------------------|--------------|
| Red | 137-8536-931 |
| Yellow (Amber) | 137-8536-933 |
| White | 137-8536-935 |
| Light Yellow | 137-8536-936 |
| Clear (Colorless) | 137-8536-937 |

Sub-Miniature Indicator Lights for T-1 3/4 Bulbs

MIDGET FLANGE BASE
INCANDESCENT

TWO TERMINALS — FULLY INSULATED — Conform to all applicable military specifications



Back of Panel Insertion:
Requires a single 15/32" Clearance Hole

CATALOGUE NUMBERS

Transparent colors

| Color | (Back insertion) | (Front insertion) |
|-----------------|------------------|-------------------|
| Red | 101-3830-931 | 101-5030-931 |
| Green | 101-3830-932 | 101-5030-932 |
| Yellow (Amber) | 101-3830-933 | 101-5030-933 |
| Blue | 101-3830-934 | 101-5030-934 |
| White (Opal) | 101-3830-935 | 101-5030-935 |
| Light Yellow | 101-3830-936 | 101-5030-936 |
| Clear (Color's) | 101-3830-937 | 101-5030-937 |

Translucent colors

| | | |
|----------------|--------------|--------------|
| Red | 101-3830-971 | 101-5030-971 |
| Green | 101-3830-972 | 101-5030-972 |
| Yellow (Amber) | 101-3830-973 | 101-5030-973 |
| Blue | 101-3830-974 | 101-5030-974 |
| White (Opal) | 101-3830-975 | 101-5030-975 |
| Light Yellow | 101-3830-976 | 101-5030-976 |



Front of Panel Insertion:
Requires a single 17/32" Clearance Hole

These pilot lights are also available with Taper-Tab Terminals. Specify by changing the middle part of the catalog number "3830-" to "6330-", & "5030-" to "6530-".



Front of Panel Insertion:
Requires a single 15/32" Clearance Hole
Anti-rotation Tab on face of flange prevents rotation of unit while nut is being tightened.

| DIALCO Catalog No. | MS No. WITHOUT LAMP* | MS No. WITH LAMP* MS25237-327 | CAP COLOR |
|--------------------|----------------------|-------------------------------|--------------------|
| 162-8430-933 | MS25256-2 | MS25256-1 | Aviation Yellow |
| 162-8430-932 | MS25256-4 | MS25256-3 | Aviation Green |
| 162-8430-931 | MS25256-6 | MS25256-5 | Identification Red |
| 162-8430-937 | MS25256-8 | MS25256-7 | Aviation White |
| 162-8430-975 | MS25256-10 | MS25256-9 | Translucent White |
| 162-8430-934 | MS25256-12 | MS25256-11 | Aviation Blue |

*MARKING: The Part No. marked on the assembly is the Part No. for the complete assembly less lamp.

RUGGED CONSTRUCTION. PHENOLIC INSULATION —

Lamp, socket, and all connections are completely insulated from the bushing and panel to which it is attached. The use of phenolic material for military specification grade assures permanent isolation from ground.

These assemblies are solidly made to withstand usual vibration and corrosion resistance tests.

Order Complete with Lamp.
Specify Lamp Number.

New WATER-TIGHT Series

Series No. 177-8430-971 is designed to be water-tight, oil-tight, and dust-tight on face of panel. Mounts from front of panel in 15/32" clearance hole. Two 1/16" thick neoprene retained "O" rings assure absolute seal. Stovepipe lens; choice of 7 colors.



DIMMERS — MECHANICAL or POLAROID

Illustrated: Units for Front of Panel Insertion; require a 17/32" clearance hole. Units for Back of Panel Insertion require a 15/32" clearance hole.

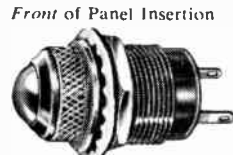
CATALOGUE NUMBERS

(Back insert.) (Front insert.)

| | unfrosted Lens. | unfrosted Lens. |
|---------------|-----------------|-----------------|
| DIMMING | 109-3830-131 | 109-5030-131 |
| Semi-blackout | 108-3830-131 | 108-5030-131 |
| Blackout | 112-3830-131 | 112-5030-131 |
| Polaroid | 111-3830-131 | 111-5030-131 |
| NON-DIMMING | 111-3830-131 | 111-5030-131 |

For "Lens, backfrosted," change series numbers ending in —131 to —111. For "Lens, frosted all over," change series numbers ending in —131 to —121.

LENS COLOR: The final figure in Catalogue Number indicates that the lens has RED color. When color other than red is desired, change this digit to a figure from the listing below. Note that white lenses are translucent and are always furnished unfrosted. (For example: 111-3830-135)
Red — 1 . . . Green — 2 . . . Yellow (Amber) — 3 . . . Blue — 4 . . .
White Trans. — 5 . . . Light Yellow — 6 . . . Clear (Colorless) — 7



THE COMPLETE LINE OF

PILOT LIGHTS



Foremost Manufacturer of Pilot Lights
DIALIGHT CORPORATION • BROOKLYN 37, N. Y.

(Illustrations are approx. actual size)

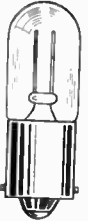
ASSEMBLIES with BUILT-IN RESISTORS (U. S. Patent No. 2,421,321)

For the T-3¼ NEON GLOW LAMP FOR VOLTAGES UP TO 250

NOTE: To designate a unit for use with the High Brightness NE-51H lamp, add H to the Catalog Number.
Example: 52408H-991

For operation on 105-125V. or 210-250V. . . . The required resistor is an integral part of the unit — BUILT IN. Also, simple external resistors for all higher voltages.

Assemblies Conform to All Applicable Military Specifications.



NE-51 or NE-51H (High Brightness)



75W., 125V.

PROPER CHOICE OF LAMP AND BUILT-IN RESISTOR VALUES: The NE-51 glow lamp types are shown with resistor tables. Lamps are the standard NE-51 and the new NE-51H. The high brightness lamp may be operated at about three times the level of current that may be applied to the standard lamp and it will produce more than eight times as much light.

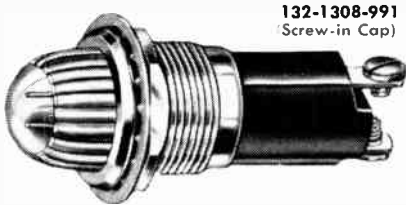
* The NE-51H Neon Glow Lamp is not recommended for use on DC circuits under 160 V.

BUILT-IN RESISTOR VALUES for the NE-51 TYPE GLOW LAMPS (Values in ohms)

| VOLTS | NE-51 | | New NE-51H (high brightness) | |
|----------------------------|------------------------------|--------------------|------------------------------|---------------------------------------|
| | Applied to terminals 105-125 | 210-250 | VOLTS* | Applied to terminals 105-125 210-250 |
| BRIGHT LIGHT | 56,000 (1/3 watt) | 180,000 (1/3 watt) | BRIGHT LIGHT | 18,000 (1/3 watt) 56,000 (1/3 watt) |
| MEDIUM LAMP LIFE | 100,000 (1/3 watt) | 270,000 (1/3 watt) | MEDIUM LAMP LIFE | 33,000 (1/3 watt) 100,000 (1/3 watt) |
| VERY LONG LAMP LIFE | 220,000 (1/3 watt) | 680,000 (1/3 watt) | VERY LONG LAMP LIFE | 100,000 (1/3 watt) 220,000 (1/3 watt) |

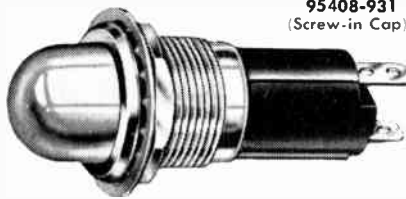
External resistors will be furnished which will permit use of these pilot lights on voltages higher than 250 volts.

For Mounting in 11/16" Clearance Hole (For Front of Panel Insertion)



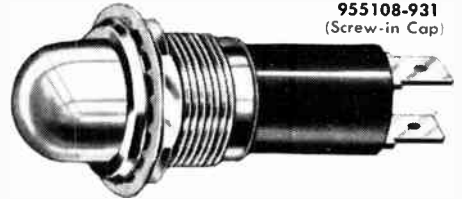
132-1308-991 (Screw-in Cap)

With SCREW TERMINALS



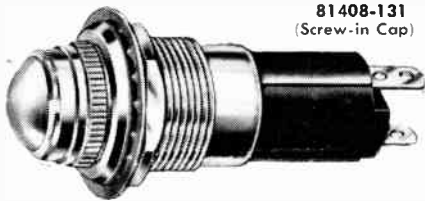
95408-931 (Screw-in Cap)

With SOLDERING TERMINALS

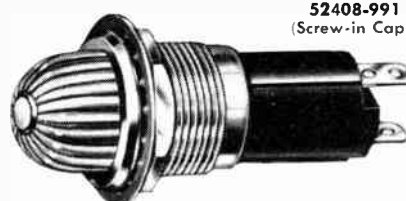


955108-931 (Screw-in Cap)

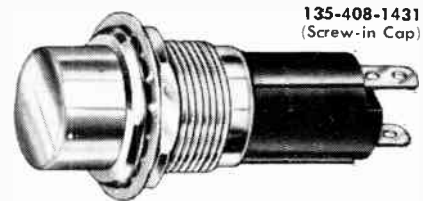
With QUICK-CONNECT TERMINALS



81408-131 (Screw-in Cap)



52408-991 (Screw-in Cap)



135-408-1431 (Screw-in Cap)



169-408-991 (Screw-on Cap)

LENS COLOR: The final figure in the Catalog Number indicates that the lens has RED color. When color other than red is desired, change this digit to a figure from the listing below. Note: White lenses are translucent and are always furnished unfrosted. (For example: 37408-335).

Red—1; Yellow (Amber)—3;
White Translucent—5;
Light Yellow—6; Clear (Colorless)—7.



851308-831 (Screw-on Cap)

9/16" Assemblies mount from BACK of panel only



37408-XP15-331 (Screw-on Cap)

With optional hardware

Assemblies which mount in a 9/16" clearance hole are useful where close center-to-center spacing is required.

Standard Hardware consists of 3 knurled rings . . . Optional Hardware consists of 1 ring, 1 lockwasher, and 1 mounting nut . . . Specify hardware desired.



With standard hardware

171308-931 (Screw-on Cap)

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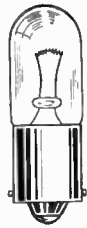
(Illustrations are approx. actual size)

ASSEMBLIES for T-3¼ INCANDESCENT LAMP

2 to 55V.
(No Higher)

With Miniature Bayonet Base

Conform to All Applicable Military Specifications

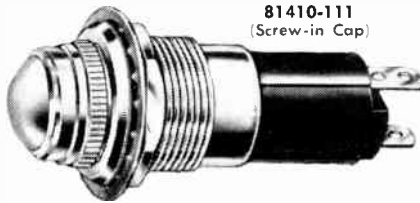


For Mounting in 11/16" Clearance Hole

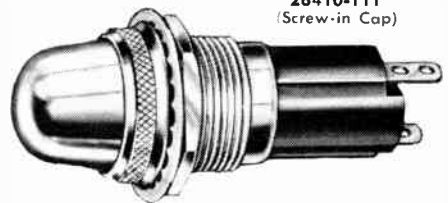
For Front of Panel Insertion



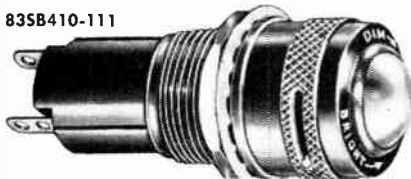
169-410-1191
(Screw-on Cap)



81410-111
(Screw-in Cap)



26410-111
(Screw-in Cap)



835B410-111

with MECHANICAL dimmer

Mechanical and Polaroid Dimmers

Mount in 11/16" clearance hole

Any of the Dialco mechanical dimmers can be supplied either for "Complete Blackout" or for "Semi-Blackout". Typical Catalogue Numbers are as follows:

83B410-111 ("Complete Blackout")
835B410-111 ("Semi-Blackout")



93410-111

with POLAROID dimmer



211310

PUSH-IN CAP with opening 1/2" x 1/2"
Typical Assembly. Other Catalog Nos. are assigned to cover other optional features.

Assemblies with Light Shield Caps

Mount in 11/16" clearance hole

Complete Series available with the following Push-in Caps: With ONE opening 3/32" x 1/2", 3/16" x 1/2", 3/16" x 9/16", 1/2" x 1/2" . . . With TWO openings 1/2" x 1/2" . . . Also Screw-in Cap with opening 3/16" x 1/2", and Friction-Fit Cap with opening 1/8" x 1/2".



156-410

PUSH-PULL CAP

Variable Opening—from 0" to 1/4" x 3/8"



(Screw-on Cap)

with standard hardware: 171310-931
with optional hardware: 171310-XP15-931

For Mounting in 9/16" Clearance Hole

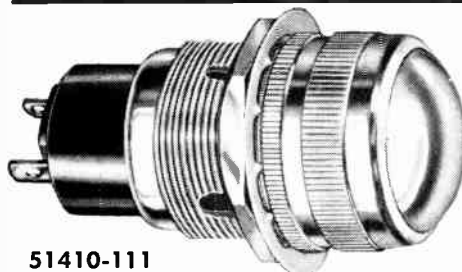
(from BACK of panel)

Standard Hardware consists of 3 knurled rings . . . Optional Hardware consists of 1 ring, 1 lockwasher, and 1 mounting nut . . . Specify hardware desired.



(Screw-on Cap)

with standard hardware: 70410-1191
with optional hardware: 70410-XP10-1191



51410-111
(With Convex Lens)

For Mounting in 1" Clearance Hole

Complete Series available with Screw-on Caps (as illustrated), Friction-Fit Caps, or Bayonet Caps. Choice of 9 Lens Types: Flat, Dome, Stovepipe, Faceted, Torpedo Faceted, Torpedo, Large Torpedo, Small Convex, Large Convex. 7 Lens Colors (see below).

GLASS LENSES: Plastic lenses are not recommended for use with lamps rated over 2 watts.



80410-1211
(With Dome Lens)

LENS COLOR: The final figure in the above numbers indicates that the lens has RED color. When color other than red is desired, change this digit to a figure from the listing below. Note that white lenses are translucent and are always furnished unfrosted. (For example: 80410-1235.)

Red—1; Green—2; Yellow (Amber)—3; Blue—4; White Translucent—5; Light Yellow—6; Clear (Colorless)—7.

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(Illustrations are approx. actual size)

ASSEMBLIES for INCANDESCENT LAMPS

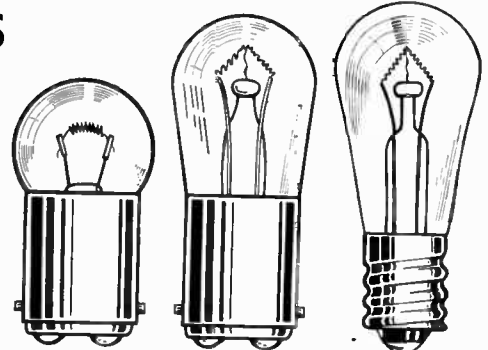
(with double contact bayonet base or candelabra screw base)

For Mounting in 1" Clearance Hole



75W., 125V.

FEATURES: DIALCO makes the most extensive line of 1" enclosed assemblies for large incandescent lamps. 3 such styles of lamps are shown here together with 6 typical units. These units are available with Screw Terminals, Soldering Terminals, or Quick Connect Terminals (will mate with standard solderless female connectors) . . . 8 glass lens types are available, in 7 colors (see below). Plastic lenses are not recommended because of the high degree of heat that incandescent lamps generate.

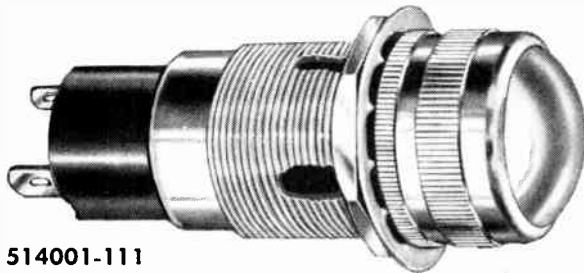


G-6
D.C. Bay.
(32V. max.)

S-6
D.C. Bay.

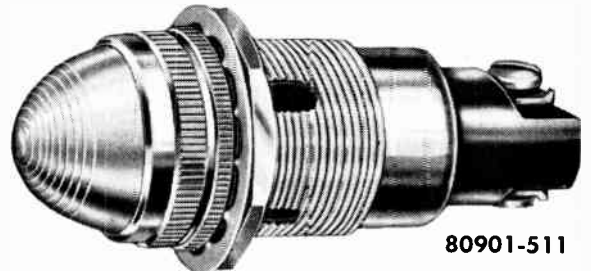
S-6
Cand. Screw

VOLTAGES (at 6 watts): 6, 12, 24, 32, 48, 70-80, 125, 130, 135, 145.



514001-111

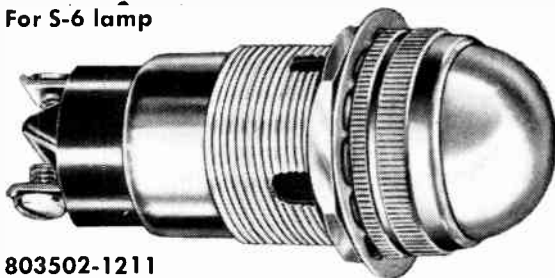
Assembly with Screw-on Cap, Convex Lens, and Soldering Terminals. Similar units available with Quick Connect Terminals.



80901-511

Assembly with Screw-on Cap Torpedo Lens, and Screw Terminals in side position. Similar units available with screw terminals in protruding position.

For S-6 lamp



803502-1211

Assembly with Screw-on Cap, Dome Lens, and Screw Terminals. Terminals may be specified as fixed type or movable type.

For G-6 lamp



31204-111

Assembly with Friction Cap, Convex Lens, and Soldering Terminals. 2 other types of soldering terminals are fixed or movable.

DIMMERS and LIGHT SHIELDS

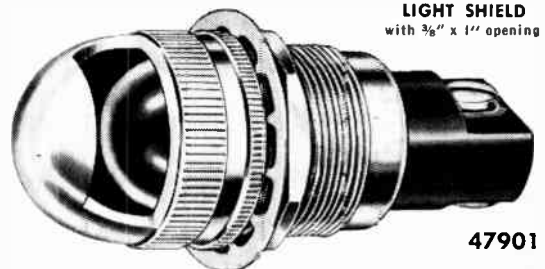


71B4001-111 Mechanical Dimmer

Typical assemblies for use with S-6 bulb with candelabra screw base

Shown are typical assemblies in a most extensive Series available only from DIALCO.

784001-111 Polaroid Dimmer



LIGHT SHIELD with 3/8" x 1" opening

47901

LENS COLOR: The final figure in the above numbers indicates that the lens has RED color. When color other than red is desired, change this digit to a figure from the listing below. Note that white lenses are translucent and are always furnished unfrosted. (For example: 80901-535).

Red—1; Green—2; Yellow (Amber)—3; Blue—4; White Translucent—5; Light Yellow—6; Clear (Colorless)—7.

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(Illustrations are approx. actual size)

A SELECTION OF OPEN TYPES



For T-3/4 Low Voltage Incandescent Lamps

Typical assemblies for bayonet base lamp.
Available also for screw base type. See listing below.



Min. Screw Base (2-48V.)

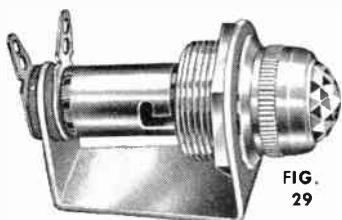


FIG. 29



Min. Bayonet Base (2-55V.)

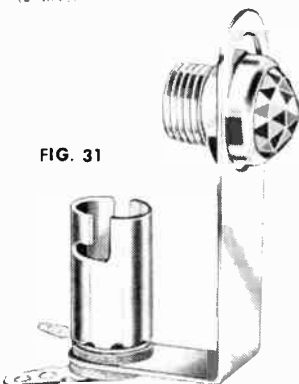


FIG. 31

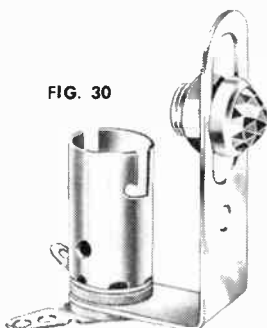


FIG. 30

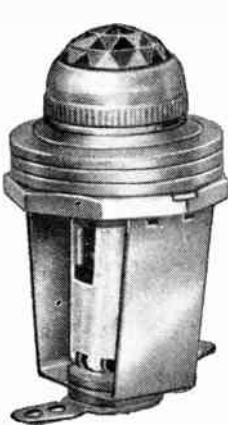


FIG. 32



FIG. 33

Octagon lock nut and bracket on these two units welded into one-piece construction

CATALOGUE NUMBERS

Assemblies for T-3/4 miniature bayonet base lamps

- No. 819B-431 Faceted 1/2" lens. For 11/16" mounting hole. Fig. 29
- No. 710V-431 Faceted 1/2" lens. For 7/16" mounting hole. Fig. 31
- No. 7551-431 Faceted 1/2" lens. For 9/32" mounting hole. Fig. 30
- No. 857B-431 Faceted 1/2" lens. For 11/16" mounting hole. Fig. 32
- No. 67B-111 Convex 3/4" lens. For 13/16" mounting hole. Fig. 33

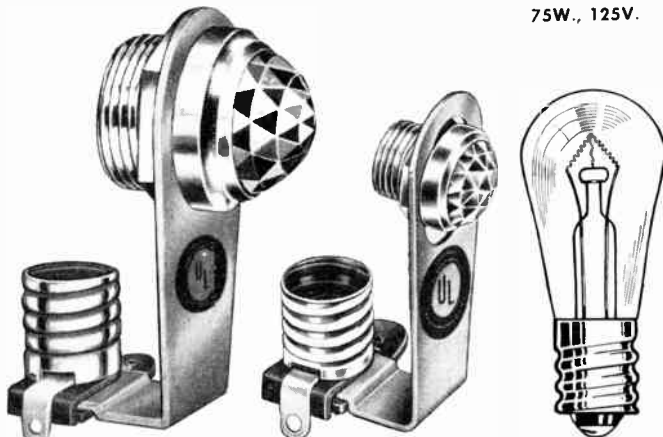
Assemblies for T-3/4 miniature screw base lamps

- No. 810M-431 Faceted 1/2" lens. For 11/16" mounting hole. Fig. 29
- No. 510-431 Faceted 1/2" lens. For 7/16" mounting hole. Fig. 31
- No. 555-431 Faceted 1/2" lens. For 9/32" mounting hole. Fig. 30
- No. 855-431 Faceted 1/2" lens. For 11/16" mounting hole. Fig. 32
- No. 66M-111 Convex 3/4" lens. For 13/16" mounting hole. Fig. 33

LENS COLOR: The final figure in the catalogue number indicates that lens has RED color. When color other than red is desired, change this digit to a figure from the listing below. Note that white lenses are translucent and are always furnished frosted.

- Red-1 Green-2 Yellow (Amber)-3 Blue-4
- White Translucent-5 Light Yellow-6 Clear (Colorless)-7

For Candelabra Screw Base Lamps



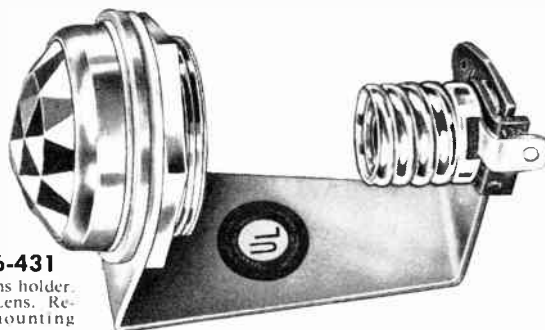
25-18-15-431

Tamper-proof lens holder. 5/8" Faceted Lens. Requires 11/16" mounting clearance hole.

10-18-14-431

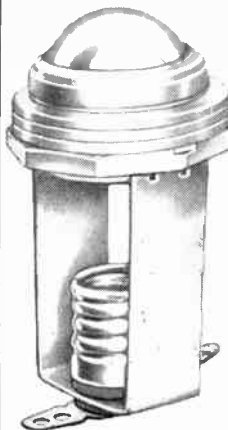
With elongated slot. 1/2" Faceted Lens. Requires 7/16" mounting clearance hole.

S-6 (6 to 145 V.)



31-18-16-431

Friction-fit lens holder. 1" Faceted Lens. Requires 1" mounting clearance hole.



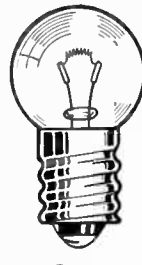
67BN-831

For NE-45 Neon Glow Lamps (105-125 V.)

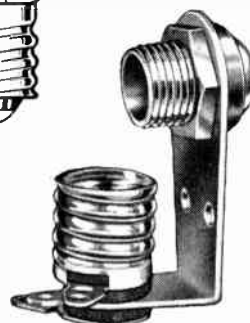
Friction-fit lens holder. 3/4" Plastic Dome Lens. Requires 13/16" mounting clearance hole . . . Octagon lock nut and bracket on this unit welded into one-piece construction.



NE-45



G-6



610-121

For G-6 Low Voltage Lamps (up to 32 V., no higher)

Tamper-proof lens holder. 1 2" Convex Lens. Requires 7/16" mounting clearance hole.

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Lens Holders with Lenses for Panel Mounting

FRICITION FIT PUSH IN TYPES



4004-431
9/32" hole
1/4" shank



6004-631
9/32" hole
1/4" shank

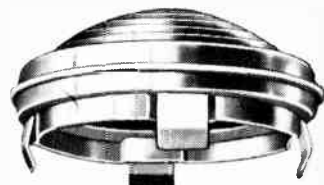


38003-631
3/8" mtg. hole
3/16" shank
Options: 1/8", 3/32"



34-431 GLASS LENS

These Holders snap into a 13/8" hole



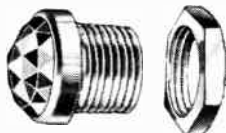
34-841 PLASTIC LENS



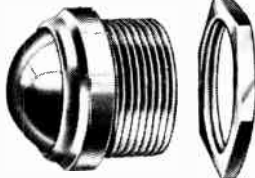
5006-431
9/32"-32 thread
3/8" shank
(option 1/4")



7005-631
3/8"-24 thread
5/16" shank



10006-431
7/16"-27 thread
3/8" shank
(options: 1/4", 5/8")



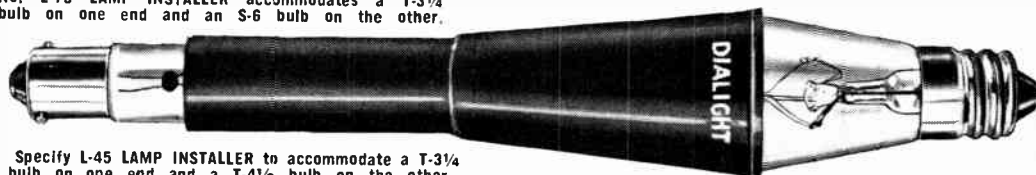
25006-111
11/16"-27 thread
3/8" shank
(option 1/4")

| | | | | |
|-------------------------------|-----------------------------|----------------------------------|------------------------------|-------------------------|
| FLAT (frosted back) | FACED (unfrosted) | TORPEDO (frosted back) | CONVEX (frosted back) | 76006-111 |
| | | | | |
| 76006-211 | 76006-431 | 76006-511 | 1"-27 thread | 3/8" shank—tamper proof |

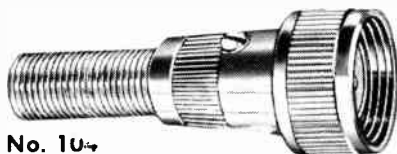
Mount in 1" clearance hole

| | | | | |
|-----------------------------|----------------------------------|---------------------------------|----------------|--------------|
| FACED (unfrosted) | TORPEDO (frosted back) | CONVEX (frosted back) | BUSHING | 31246 |
| | | | | |
| 31-431 | 31-511 | 31-111 | 1"-27 thread | 3/8" shank |

No. L-73 LAMP INSTALLER accommodates a T-3/4 bulb on one end and an S-6 bulb on the other.



Specify L-45 LAMP INSTALLER to accommodate a T-3/4 bulb on one end and a T-4 1/2 bulb on the other.



No. 10



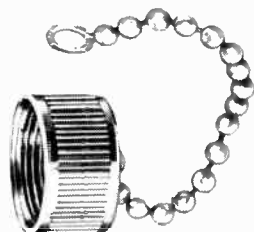
No. 101



No. 50



No. 51



No. 103

CONNECTORS FOR SINGLE CONDUCTOR CABLE

For Microphones, Speakers, Pick-ups, Jacks (using cable shield for second conductor) Female Cable Connector, Catalog No. 104. This unit has a spring protector to prevent sharp bending of cable. It solders to cable sheath, and is secured by a set screw. Catalog No. 101 has the same general characteristics, but is a male connector.

Male Chassis Connectors . . . No. 50. Shell grounds to panel, or may be insulated by washers. Fits a 3/8"-24 threaded hole, or may be secured by nut. No. 50P is similar to No. 50, but is designed to force fit in hole in panel. Does not require a nut to fit in place. No. 51 Connector has a sprung center contact which grounds before cable connection is broken, preventing open circuit howls.

Cap and Chain, Catalog No. 103. To protect unused male connectors. Chain secured by screw prevents loss when removed to make connection.



BRACKET MOUNTED

SOCKETS

FOR SMALL LAMPS

LEECRAFT MANUFACTURING CO., Inc. • LONG ISLAND CITY 1, N.Y.

(Illustrations are approx. actual size)

Bracket Mounted SOCKETS For Incandescent or Neon Lamps



75W., 125V.

Accommodates Lamps With Double Contact Candelabra Bayonet Base

12-200 Series



Cat. No. 12-258

12-200 Series Sockets are furnished with bakelite discs, including separately sprung contacts, and have 6" wire leads. Also available with ceramic discs (called 1200 Series) for heat-resistant applications.

5700 Series Sockets use tab terminals. These assemblies are ruggedly constructed with moulded bakelite housings and specially designed contacts.

5700 Series



Cat. No. 57-07

400 Series



Cat. No. 4-45

Accommodates Lamps With Candelabra Screw Base

400 Series Sockets are housed in heavy moulded bakelite. They are equipped with built-in wire leads, 6" long.

1800 Series Sockets are intended for use with lamps on commercial voltages. Terminals are locked in place and thoroughly insulated from the bracket and each other.

1800 Series

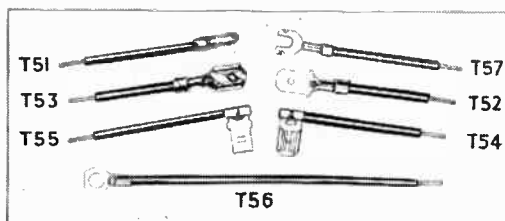


Cat. No. 18-79

WIRE

TERMINATIONS

All wire assemblies are furnished with 6" long standard leads, ends stripped 1/2". Standard insulation is vinyl plastic with copper conductors. Special insulations such as Asbestos, 105°C Plastic,

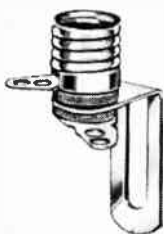


Rubber, SRIR, etc., may be furnished.

A large variety of solderless terminals can be furnished with most wire lead assemblies. Some standard popular types are shown here. To assure your receiving the correct terminal, please specify our assembly part number as well as the terminal required.

600 Series

Accommodates Lamps With Candelabra Screw Base



Cat. No. 6-06

600 Series Sockets have soldering terminals, and can be furnished with the same basic brackets as shown in grouped illustration below.

Accommodates Lamps With Miniature Bayonet Base

300 Series Sockets have moulded bakelite housing. U.L. and CSA listed for 75W., 125 V.

700 Series Sockets have soldering terminals. Some popular basic types are shown in illustration below.

200 Series Sockets are supplied with insulating sleeves, eliminating any accidental grounding.

300 Series



Cat. No. 3-05

700 Series



Cat. No. 7-02

200 Series



Cat. No. 2-15

Accommodates Lamps With Miniature Screw Base

500 Series



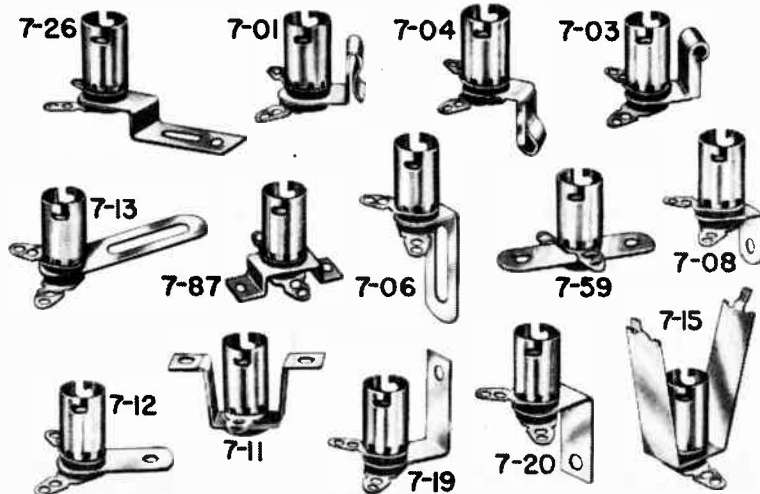
Cat. No. 5-03

500 Series Sockets are supplied with soldering terminals. This group, as well as those sockets in the 600 and 700 Series, are also furnished for Grounded use with only one terminal.

ORDER COMPLETE with LAMP so that you will be assured of receiving the proper socket and correct lamp at one time, ready for immediate use.

CHOICE OF BRACKETS

The series of brackets shown at the right can be used with any of our 200, 500, 600, and 700 Series Sockets. All the sockets have 2 terminals.



INDICATOR LIGHTS

for every panel design by

CONTROLS COMPANY OF AMERICA
CONTROL SWITCH DIVISION
Folcroft, Pa.

Shown below are only a few of the more than 50 basic standard types of indicator lights available from Control Switch Division. Actually, there are dozens of variations in color, mounting, appearance and circuitry possible for almost every basic style. For example, indicator lights are available for 6, 14, or 28 volt, D.C. and 110 V. A.C. circuits. So whatever your needs, there are ready-made, in-stock indicator lights to fit your panel.

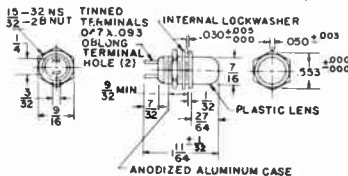
(LIST PRICES BELOW ARE FOR UNITS WITHOUT LAMPS)

SERIES L14005B



Conforms to MS-25256. Long plastic lens for 180° visibility. Front panel mounting (L14000) shown; also available for back mounting (L14200). Uses MS-25237 lamps.

LIST \$0.98

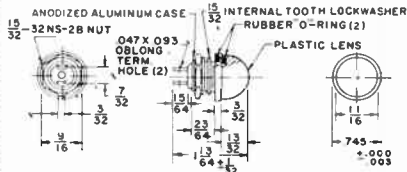


SERIES L5105



Watertight, front-of-panel mounting. Wide-angle visibility. 2-terminal circuit. Mounts in 1/2-inch hole. Uses MS-25237 lamps. Press-to-Test Model L16200 available.

LIST \$1.62



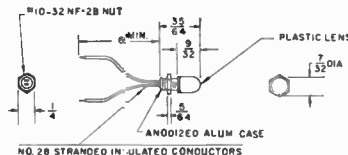
SERIES L10000



Supplied with 5V. Lamp

Sub-miniature, moisture-proof. Rated life of 60,000 continuous hours at 5 volts. Models available to mount flush with panel surface.

LIST \$5.45

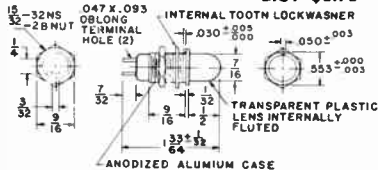


SERIES L15015B



Neon indicator with built-in 62,000 ohm resistor for 115V circuits. Conforms to MS-25257. Available for front or back panel mounting.

LIST \$1.71

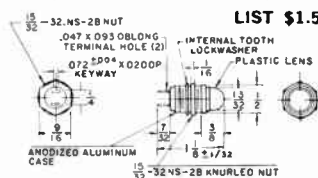


SERIES L14215



Special model for back-of-panel mounting on very compact panels. Mounting nut is tightened from front. Lens has knurled nut for easy removal of lens-lamp module. Uses MS-25237 lamps.

LIST \$1.59

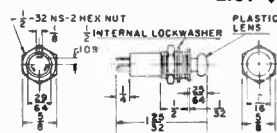


SERIES L3060

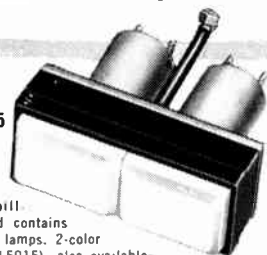


Moisture-proof push-to-test indicator light. Test lamp circuit by pushing plastic lens. Supplied with or without silicon rubber boot to seal panel. Lens has "O"-ring seal. Flange-type mounting in 1/2-inch hole. Uses MS-25237 lamps.

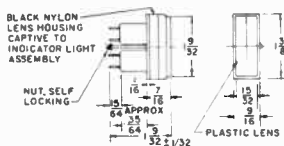
LIST \$4.45



SERIES L5915

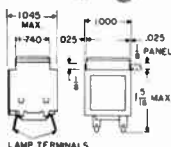


Miniature "bill board" placard contains two MS 25237 lamps. 2-color model shown (L5915), also available: 1-color (L5900) and Press-to-Test (L5200). All legends engraved (not hot stamped). Self-indexing unit. Captive lens. L5915: **LIST \$5.90**



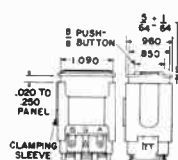
SERIES C6

TWINLITE modular indicator light assembly with identical panel appearance and mounting configuration to Series C6 lighted push-buttons. Mounts with barriers in rows, in matrix, or individually. Contains two lamps on individual or common circuits. Split or solid color buttons available. With 6 V. or 28 V. lamps. **LIST \$5.25**



NEW M-SERIES

Indicator version of new M-Series switch-lites has four lamps with silicon rubber color filters, four lamp circuits. Re-lamps from front without tools. Mounts without hardware in single cut-out from front of any panel .020 to .250 thick. One piece legend mounted assemblies, splash-proof model. Snap-on switch modules in DPDT and 4PDT, alternate or momentary action, or solenoid-hold. **LIST \$7.50**

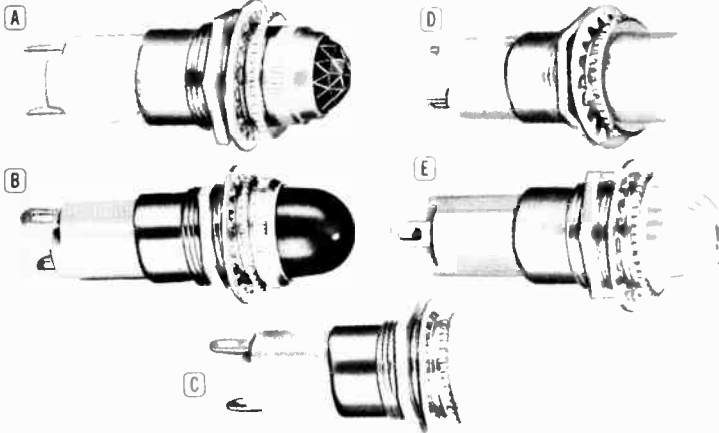




DRAKE

CHICAGO 31, ILLINOIS

INDICATOR LIGHTS



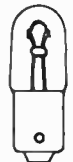
“DELUXE MOLDED” Series MINIATURE BAYONET BASE INDICATOR LIGHTS



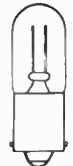
Polished chrome finish (MIL units are black nickel plated), molded Glaskyd housing give fine appearance, assure dependability. All “DELUXE MOLDED” units have Drake’s E-Z-Tite flange for quick assembly with Drake No. 32 wrench. Install lamps and mount units from front of panel up to $1\frac{13}{32}$ ” thick, in $1\frac{11}{16}$ ” dia. mounting hole on $3\frac{1}{32}$ ” centers. Units with built-in $\frac{1}{3}$ watt series resistors take neon lamps.

(ALL ILLUSTRATIONS APPROX. $\frac{3}{4}$ ACTUAL SIZE)

| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lugs | Built-In Resistor (Ohms) | List Price |
|----------|--------------|------------------|-----------------|--------------------------|--------------------------|--------|--------------------------|------------|
| A | 5200-222-110 | | $\frac{1}{2}$ ” | $1\frac{17}{32}$ ” | $1\frac{1}{8}$ ” | Solder | | \$2.00 |
| B | 5200-222-301 | | $\frac{3}{8}$ ” | $1\frac{11}{16}$ ” | $1\frac{1}{8}$ ” | Solder | | 2.40 |
| C | 5200-222-304 | | $\frac{1}{2}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | | 1.72 |
| D | 5200-222-604 | | $\frac{3}{8}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | | 1.72 |
| B* | 5200-228-101 | LH75-LC14 | $\frac{1}{2}$ ” | $1\frac{17}{32}$ ” | $1\frac{1}{8}$ ” | Solder | | 2.07 |
| | 5200-228-301 | LH75-LC15 | $\frac{3}{8}$ ” | $1\frac{11}{16}$ ” | $1\frac{1}{8}$ ” | Solder | | 2.43 |
| C* | 5200-229-101 | LH62-BR2 | $\frac{1}{2}$ ” | $1\frac{17}{32}$ ” | $1\frac{1}{8}$ ” | Solder | | 1.94 |
| | 5200-229-303 | LH62-PR5 | $\frac{3}{8}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | | 1.68 |
| E | 5200-232-103 | | $\frac{1}{2}$ ” | $1\frac{17}{32}$ ” | $1\frac{1}{8}$ ” | Solder | 22K | 2.22 |
| | 5200-232-323 | | $\frac{3}{8}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | 22K | 2.06 |
| | 5200-232-623 | | $\frac{3}{8}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | 22K | 2.06 |
| E | 5200-242-103 | | $\frac{1}{2}$ ” | $1\frac{17}{32}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 2.22 |
| | 5200-242-323 | | $\frac{3}{8}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 2.06 |
| | 5200-242-623 | | $\frac{3}{8}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 2.06 |
| C* | 5200-248-100 | LH76-LC14 | $\frac{1}{2}$ ” | $1\frac{17}{32}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 2.43 |
| | 5200-249-103 | LH64-PR2 | $\frac{1}{2}$ ” | $1\frac{17}{32}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 2.20 |
| | 5200-249-303 | LH64-PR5 | $\frac{3}{8}$ ” | $\frac{1}{2}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 2.05 |



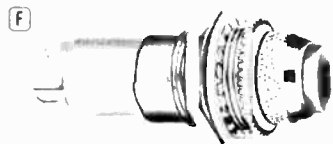
T-3/4 BULB
6.3 to 28V



LAMP NO.
NE51H — 125V
and 250V

LEN DESCRIPTION CODE (last three Drake Number digits): See next page for explanation.

*Black Finish.



“DELUXE MOLDED” MINIATURE BAYONET BASE INDICATOR LIGHTS

with Friction Fit Lens Shank, for Easy Legend Alignment
Other features are same as those of units listed above.

| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lugs | Built-In Resistor (Ohms) | List Price |
|----------|--------------|------------------|-----------------|--------------------------|--------------------------|--------|--------------------------|------------|
| F | 5203-222-550 | | $\frac{1}{2}$ ” | $1\frac{15}{32}$ ” | $1\frac{1}{8}$ ” | Solder | | \$2.28 |
| F | 5203-232-544 | | $\frac{1}{2}$ ” | $1\frac{15}{32}$ ” | $1\frac{1}{8}$ ” | Solder | 22K | 2.46 |



LENS DESCRIPTION CODE (last three Drake Number digits): See next page for explanation.

•
LAMPS
SAME
AS
ABOVE
•



“DELUXE MOLDED” MINIATURE BAYONET BASE INDICATOR LIGHTS

with Mechanical Dimmer Lens Assembly: Type 5207 for Complete Blackout, Type 5208 for Partial Blackout
Other features are same as those of units listed above.

| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lugs | Built-In Resistor (Ohms) | List Price |
|----------|--------------|------------------|-----------------|--------------------------|--------------------------|--------|--------------------------|------------|
| G | 5207-228-101 | LH75-LC17 | $\frac{1}{2}$ ” | $2\frac{7}{32}$ ” | $1\frac{1}{8}$ ” | Solder | | \$3.45 |
| G | 5207-248-100 | LH76-LC17 | $\frac{1}{2}$ ” | $2\frac{7}{32}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 3.79 |
| G | 5208-228-101 | LH75-LC18 | $\frac{1}{2}$ ” | $2\frac{7}{32}$ ” | $1\frac{1}{8}$ ” | Solder | | 3.45 |
| G | 5208-248-100 | LH76-LC18 | $\frac{1}{2}$ ” | $2\frac{7}{32}$ ” | $1\frac{1}{8}$ ” | Solder | 100K | 3.79 |

LENS DESCRIPTION CODE (last three Drake Number digits): See next page for explanation.

•
LAMPS
SAME
AS
ABOVE
•

ALL PRICES LIST ★ ABOVE UNITS CAN BE ORDERED WITH LAMP INSTALLED ★ ALWAYS SPECIFY LENS COLOR

INDICATOR LIGHTS

DRAKE



CHICAGO 31, ILLINOIS

DRAKE LENS CODE NUMBER DATA

On all units illustrated and described, the last three digits of the DRAKE NUMBER identify the lens shape and other variants. These types are described below.

- | | | |
|-------------------------------------|----------------------------------|---|
| 100 : Convex glass clear | 305 : Macrodome Lexan diffusing | 544 : Flat plastic translucent, imprinted |
| 101 : Convex glass diffusing | 320 : Macrodome glass fluted | 550 : Flat glass clear, printed disc |
| 103 : Convex plastic clear | 323 : Macrodome plastic fluted | 603 : Cylindrical plastic clear |
| 110 : Convex glass faceted | 410 : Beehive glass faceted | 604 : Cylindrical plastic translucent |
| 113 : Convex plastic faceted | 430 : Beehive glass signal lined | 623 : Cylindrical plastic fluted transparent |
| 203 : Dome plastic clear | 431 : Beehive glass diffusing | 624 : Cylindrical plastic fluted semi-transparent |
| 204 : Dome plastic translucent | 500 : Flat glass clear | 644 : Cylindrical plastic imprinted |
| 301 : Macrodome glass diffusing | 503 : Flat plastic clear | 703 : Long Macrodome plastic clear |
| 303 : Macrodome plastic clear | 504 : Flat plastic translucent | |
| 304 : Macrodome plastic translucent | 523 : Flat plastic fluted | |

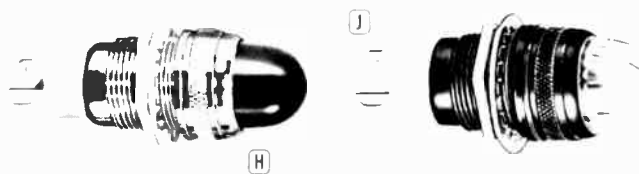
LENS COLORS: incandescent and neon—Red, Yellow (amber), White or Colorless;—incandescent only—Green or Blue

“DELUXE MOLDED” Series INDICATOR LIGHTS

MINIATURE BAYONET BASE

with 5/8" GLASS MACRODOME LENS (JEWEL)

Lens holder with female thread permits neon lamp to project all the way up into macrodome lens for maximum visibility. Other “DELUXE MOLDED” features as previous.



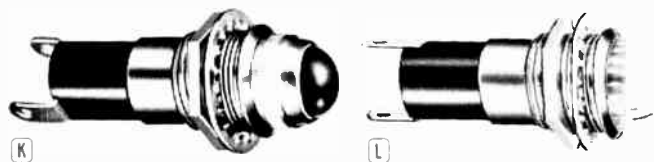
| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lugs | Built-In Resistor (Ohms) | List Price |
|----------|--------------|------------------|-----------|--------------------------|--------------------------|--------|--------------------------|------------|
| H | 5204-222-301 | | 5/8" | 27/32" | 1 1/2" | Solder | | \$2.47 |
| J* | 5204-232-320 | | 5/8" | 27/32" | 1 1/2" | Solder | 22K | 2.76 |
| J | 5204-238-320 | LH78-LC20 | 5/8" | 27/32" | 1 1/2" | Solder | 27K | 2.90 |
| J* | 5204-242-320 | | 5/8" | 27/32" | 1 1/2" | Solder | 100K | 2.76 |
| J | 5204-248-320 | LH77-LC20 | 5/8" | 27/32" | 1 1/2" | Solder | 100K | 2.84 |



LAMPS SAME AS FOR OTHER “DELUXE MOLDED” TYPES

LENS DESCRIPTION CODE (last three Drake Number digits): See above explanation.

*Polished Chrome Finish.



“STANDARD” INDICATOR LIGHTS

MINIATURE BAYONET BASE

Serviceable series, with nickel plated lens holder and flange. Lamp installed and units mounted from front of panels up to 13/32" thick, in 11/16" dia. mounting hole on 31/32" centers. Built-in 1/2 watt series resistors for neon lamps.

| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lugs | Built-In Resistor (Ohms) | List Price |
|----------|--------------|------------------|-----------|--------------------------|--------------------------|--------|--------------------------|------------|
| K | 5100-182-101 | | 1/2" | 1 1/32" | 1 21/32" | Solder | | \$.93 |
| | 5100-182-304 | | 5/8" | 1 1/2" | 1 21/32" | Solder | | .93 |
| K | 5100-192-103 | | 1/2" | 1 1/32" | 1 23/32" | Solder | 25K | 1.17 |
| L | 5100-192-323 | | 5/8" | 1 1/2" | 1 23/32" | Solder | 25K | 1.10 |
| K | 5100-202-103 | | 1/2" | 1 1/32" | 1 23/32" | Solder | 100K | 1.17 |
| L | 5100-202-323 | | 5/8" | 1 1/2" | 1 23/32" | Solder | 100K | 1.10 |



LAMP NOS. NE51—125V NE51H—125 and 250V

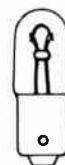
LENS DESCRIPTION CODE (last three Drake Number digits): See above explanation.

MINIATURE BAYONET BASE INSTRUMENT LIGHT

Uses T-3 1/4 bulbs, inserted from front of panel up to 13/32" thick, in 11/16" dia. hole on 31/32" centers.



| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lugs | Built-In Resistor (Ohms) | List Price |
|----------|--------------|------------------|-----------|--------------------------|--------------------------|--------|--------------------------|------------|
| M | 168E | | | 1 1/8" | 1 3/8" | Solder | | \$2.36 |



T-3 1/4 BULB 6.3 to 28V

(ALL ILLUSTRATIONS APPROX. 3/4 ACTUAL SIZE)

ALL PRICES LIST ★ ABOVE UNITS CAN BE ORDERED WITH LAMP INSTALLED ★ ALWAYS SPECIFY LENS COLOR

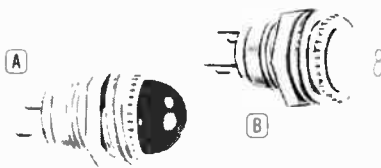


CHICAGO 31, ILLINOIS

INDICATOR LIGHTS

"TINYLITE" MIDGET SCREW BASE INDICATOR LIGHTS SMALLEST INDICATOR LIGHTS WITH REPLACEABLE LAMP

Fully enclosed. Supplied with midget lamp installed. Lamps replaced and units mounted from front of panels up to $\frac{9}{32}$ " thick, in $\frac{7}{16}$ " dia. mounting hole on $\frac{19}{32}$ " centers. Friction device prevents lamps from loosening in use.

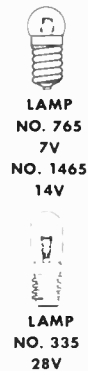


| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Lamp Voltage | Replacement Lamp No. | List Price |
|----------|--------------|------------------|------------------|---|--------------------------|--------------|----------------------|------------|
| A | 121- 7-204 | | $\frac{7}{16}$ " | | $\frac{13}{16}$ " | 7 | 765 | \$1.22 |
| B* | 121- 7-604 | | $\frac{3}{8}$ " | | $\frac{13}{16}$ " | 7 | 765 | 1.22 |
| B | 121- 7-644 | | $\frac{3}{8}$ " | $\frac{21}{64}$ " on all numbers | $\frac{13}{16}$ " | 7 | 765 | 1.36 |
| A | 121-14-204 | | $\frac{7}{16}$ " | | $\frac{13}{16}$ " | 14 | 1465 | 1.24 |
| B* | 121-14-604 | | $\frac{3}{8}$ " | | $\frac{13}{16}$ " | 14 | 1465 | 1.24 |
| B | 121-14-644 | | $\frac{3}{8}$ " | | $\frac{13}{16}$ " | 14 | 1465 | 1.38 |
| A | 121-28-204 | | $\frac{7}{16}$ " | | $\frac{29}{32}$ " | 28 | 335 | 2.00 |
| B* | 121-28-604 | | $\frac{3}{8}$ " | | $\frac{29}{32}$ " | 28 | 335 | 2.00 |
| B | 121-28-644 | | $\frac{3}{8}$ " | | $\frac{29}{32}$ " | 28 | 335 | 2.14 |

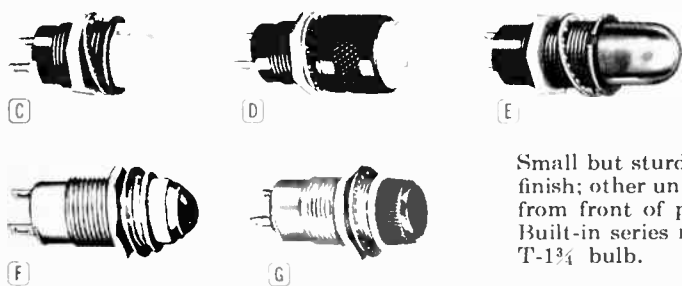
LENS DESCRIPTION CODE (last three Drake Number digits): See preceding page for explanation.

*Unprinted

REPLACEMENT LAMPS
NO. 335 (28V)...\$0.83 NO. 765 (7V)...\$0.34 NO. 1465 (14V)...\$0.36



(ALL ILLUSTRATIONS APPROX. $\frac{3}{4}$ ACTUAL SIZE)



"MF" INDICATOR LIGHTS

FOR USE WITH MIDGET FLANGE BASE LAMPS IN MIL STANDARD OR COMMERCIAL APPLICATIONS

Small but sturdy—only $\frac{9}{16}$ " max. dia. MIL units, black anodized finish; other units, clear finish. Lamps replaced and units mounted from front of panel, in $\frac{15}{32}$ " dia. mounting hole on $\frac{3}{4}$ " centers. Built-in series resistor takes NE2D neon lamp; other units take T-1 $\frac{3}{4}$ bulb.



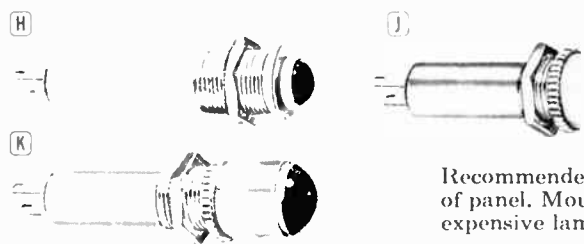
BULB NO. T-1 $\frac{3}{4}$
1.2 to 28V

| Fig. No. | Drake Number | MIL Style Number | MS Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Built-In Resistor (Ohms) | Max. Panel Thickness | List Price |
|----------|--------------|------------------|-----------|-------------------|--------------------------|--------------------------|--------------------------|----------------------|------------|
| C | 5131-038-303 | LH73-LC12 | MS25256 | $\frac{7}{16}$ " | $\frac{29}{64}$ " | $\frac{49}{64}$ " | 62K | $\frac{9}{32}$ " | \$1.81 |
| C | 5131-038-304 | LH73-LC12 | | $\frac{7}{16}$ " | $\frac{29}{64}$ " | $\frac{49}{64}$ " | | $\frac{9}{32}$ " | 1.81 |
| D | 5132-038-544 | LH73-LC11 | | $\frac{15}{32}$ " | $\frac{3}{8}$ " | $\frac{49}{64}$ " | | $\frac{9}{32}$ " | 2.42 |
| E | 5133-048-703 | LH74-LC13 | MS25257 | $\frac{7}{16}$ " | $\frac{3}{8}$ " | 1 $\frac{1}{64}$ " | 62K | $\frac{15}{32}$ " | 3.15 |
| F | 5130-032-101 | | | $\frac{3}{16}$ " | $\frac{11}{32}$ " | 1 $\frac{1}{64}$ " | | $\frac{15}{32}$ " | 1.86 |
| G | 5133-032-504 | | | $\frac{7}{16}$ " | $\frac{3}{16}$ " | 1 $\frac{1}{64}$ " | | $\frac{15}{32}$ " | 1.69 |

LENS DESCRIPTION CODE (last three Drake Number digits): See preceding page for explanation.



LAMP NO. NE2D
115V



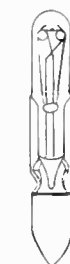
"TELESLIDE" INDICATOR LIGHTS

FOR USE WITH TELEPHONE SLIDE BASE LAMPS

Recommended for voltages from 24 to 55. Lamps replaced from front of panel. Mount in $\frac{15}{32}$ " dia. hole on $\frac{23}{32}$ " centers. No. 135 replaces more expensive lampjack assembly.

| Fig. No. | Drake Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Max. Panel Thickness | Mounting | Lens Fitting | Finish | List Price |
|----------|--------------|------------------|--------------------------|--------------------------|----------------------|---------------|--------------|--------------|------------|
| H | 135-101 | $\frac{3}{16}$ " | $\frac{1}{4}$ " | 2 $\frac{7}{32}$ " | $\frac{17}{32}$ " | Front | Friction | Plain Brass | \$1.77 |
| J | 136-624 | $\frac{3}{8}$ " | $\frac{13}{16}$ " | 1 $\frac{3}{8}$ " | $\frac{7}{32}$ " | Front or Rear | Threaded | Nickel Plate | 1.52 |
| K | 137-101 | $\frac{1}{2}$ " | $\frac{25}{32}$ " | 1 $\frac{23}{32}$ " | $\frac{3}{16}$ " | Front or Rear | Threaded | Nickel Plate | 1.83 |

LENS DESCRIPTION CODE (last three Drake Number digits): See preceding page for explanation.



BULB NO. T-2
6 to 55V

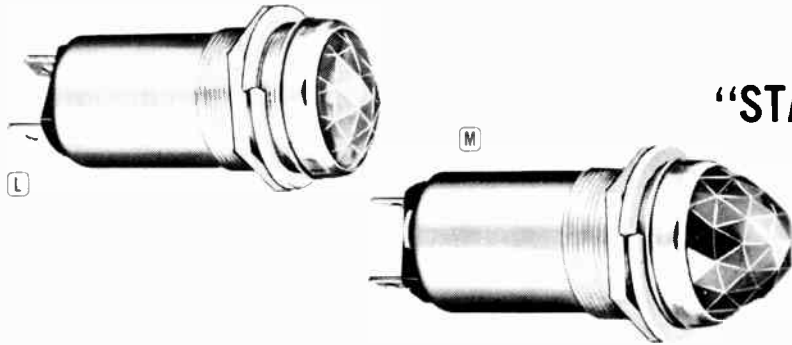
ALL PRICES LIST ★ ABOVE UNITS CAN BE ORDERED WITH LAMP INSTALLED ★ ALWAYS SPECIFY LENS COLOR

INDICATOR LIGHTS

DRAKE

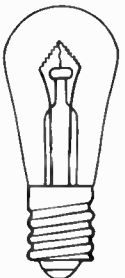


CHICAGO 31, ILLINOIS



"STANDARD" INDICATOR LIGHTS

Practical, good-looking—polished chrome plated lens holder. Special feature: easy front replacement of pop-forward lamps. Snap-in lens assembly. Mount from front of panels up to 1/2" thick, in 1" dia. hole on 1 3/8" centers.

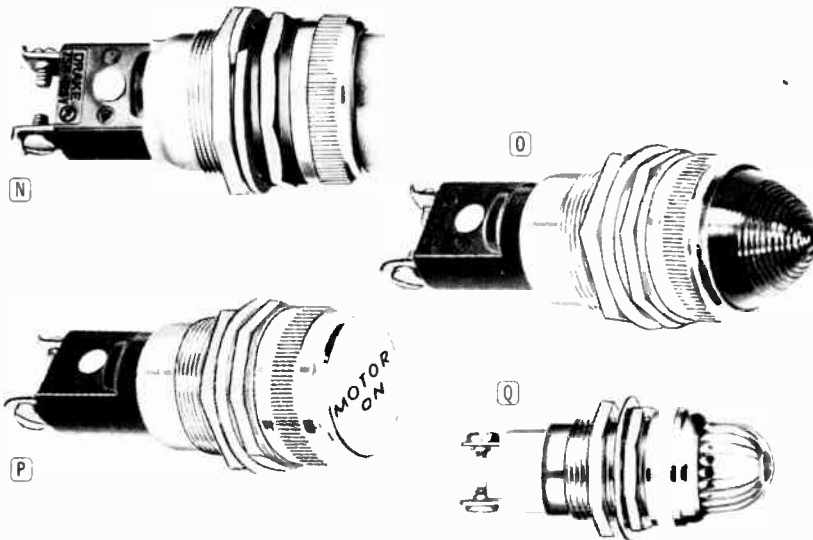


LAMP NO. 656
120V

| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Face | Lamps | List Price |
|----------|----------------|------------------|-----------|-------------|--------------------------|--------------------------|-------------|------------|
| L | B1476L-ISE-110 | | 1" | Cand. Screw | 7/16" | 2 1/16" | 656 or 10C7 | \$1.95 |
| M | B1476L-ISE-410 | | 1" | Cand. Screw | 3/4" | 2 3/16" | 656 or 10C7 | 1.96 |



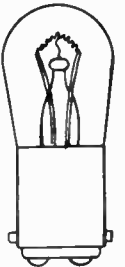
LENS DESCRIPTION CODE (last three Drake Number digits): See preceding page for explanation.



"TITELITE"

OIL-WATER-DUST PROOF INDICATOR LIGHTS

Neoprene gaskets seal out oil, water, dust, dirt. Ruggedly made for severe duty. Polished chrome plated screw-on lens holder (MIL types, black nickel plated); octagon nut for easier mounting. Pop-forward lamp on screw base units, easily replaced from front of panel. Mount from front or rear of panels up to 7/16" thick, in 1" dia. hole on 1 3/8" centers. No. 5205-233 has built-in 1/3 watt series resistor for NE51H lamp. Mounts from front or rear of panels up to 3/8" thick, in 1 1/16" dia. hole on 3 1/32" centers.



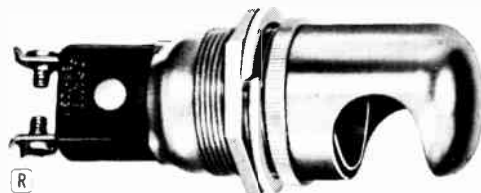
LAMP NO. 656DC
120V



LAMP NO. NE45
120V

| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Face | Built-In Resistor (Ohms) | Lamps | List Price |
|----------|----------------|------------------|-----------------|-----------------|--------------------------|--------------------------|--------------------------|-------------|------------|
| N | B979S-IBE-305 | LH80-LC22 | 1" | D.C. Cand. Bay. | 1 3/32" | 1 3/8" | | 656DC | \$3.27 |
| | B979S-IBE-410 | | D.C. Cand. Bay. | 1 3/16" | 2 1/8" | | 656DC | 3.23 | |
| | B979S-IBE-430 | | D.C. Cand. Bay. | 1 3/16" | 2 1/8" | | 656DC | 3.29 | |
| | B979S-IBE-550 | | D.C. Cand. Bay. | 2 7/32" | 2 1/8" | | 656DC | 3.48 | |
| O | B1479S-IBE-305 | | 1" | Cand. Screw | 1 9/32" | 1 9/16" | | 656 or NE45 | 3.51 |
| | B1479L-IBE-410 | | Cand. Screw | 1 3/16" | 1 7/32" | | 656 or 10C7 | 3.51 | |
| | B1479L-IBE-430 | | Cand. Screw | 1 3/16" | 1 7/32" | | 656 or 10C7 | 3.51 | |
| | B1479L-IBE-550 | | Cand. Screw | 2 7/32" | 2 1/32" | | 656 or 10C7 | 3.70 | |
| Q | 5205-223-301 | | 5/8" | Min. Bayonet | 2 7/32" | 1 7/32" | 25K | 44 | 2.99 |
| | 5205-233-320 | | 3/4" | Min. Bayonet | 2 7/32" | 1 7/32" | | NE51H | 3.36 |

LENS DESCRIPTION CODE (last three Drake Number digits): See preceding page for explanation.



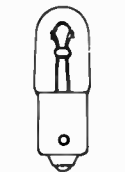
CANDELABRA SCREW BASE INSTRUMENT LIGHT

For 120V, 6S6 lamp. Nickel plated friction hood. Mounts from front or rear of panels up to 1/2" thick, in 1" dia. hole on 1 3/8" centers.

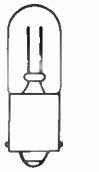
| Fig. No. | Drake Number | MIL Style Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Face | Lamps | List Price |
|----------|--------------|------------------|-----------|-------------|--------------------------|--------------------------|-------|------------|
| R | 900-006 | | | Cand. Screw | 1 1/2" | 1 29/32" | 6S6 | \$2.17 |

(ALL ILLUSTRATIONS APPROX. 3/4 ACTUAL SIZE)

ALL PRICES LIST ★ ABOVE UNITS CAN BE ORDERED WITH LAMP INSTALLED ★ ALWAYS SPECIFY LENS COLOR



LAMP NO. T-3/4
6.3 to 28V



LAMP NO. NE51H
125 to 250V

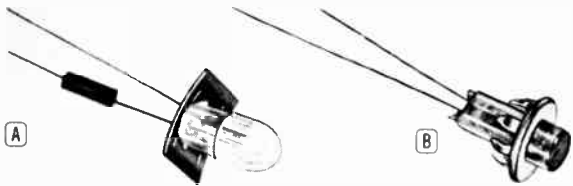
LAMP SAME AS 656 ABOVE



DRAKE

CHICAGO 31, ILLINOIS

INDICATOR LIGHTS



"ECONOGLO" NEON GLOW INDICATOR LIGHTS

Excellent for LOW COST 115V applications or as D.C. circuit components. Available with or without series resistors. Mount from front of panel. Equipped with 2" wire leads. Plain macrodome also available; substitute lens code 303 for 323 when ordering.

| Fig. No. | Drake Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Built-In Resistor (Ohms) | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|--------------------|----------------------|------------------|------------|
| A* | 116-323 or 303 | 1 1/2" on oil numbers | 3/8" | 1 3/32" | 100K | 3/8" | 1/4" | 1 7/32" | \$.37 |
| A | 116-603 | | 3/8" | 1 1/4" | | 3/8" | 3/4" | 1 7/32" | |
| | R116-323 or 303 | | 3/8" | 1 3/32" | | 3/8" | 1/4" | 1 7/32" | |
| | R116-603 | | 3/8" | 1 1/4" | | 3/8" | 3/4" | 1 7/32" | |
| B | 117-323 or 303 | 7/16" | 13/32" | 5/8" | 100K | 1/2" | 1/4" | 1 1/4" | .48 |
| B** | 117-603 | 7/16" | 13/32" | 5/8" | | 1/2" | 1/4" | 1 1/4" | |
| | R117-323 or 303 | 7/16" | 13/32" | 5/8" | | 1/2" | 1/4" | 1 1/4" | |
| | R117-603 | 7/16" | 13/32" | 5/8" | | 1/2" | 1/4" | 1 1/4" | |

ALL ILLUSTRATIONS ARE APPROX. 3/4 ACTUAL SIZE

LENS DESCRIPTION CODE (last three Drake Number digits): See preceding page for explanation.

For HI-BRIGHTNESS Lamps, prefix Drake Number with letter "H". * No Resistor ** With Resistor



"MINEON" NEON GLOW INDICATOR LIGHTS

Similar to "ECONOGLO" types, except mounted in black anodized aluminum body with solder lugs or turret terminals. Drake E-Z-Tite facing nut, and No. 20 wrench, make assembly fast.

| Fig. No. | Drake Number | | | | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Built-In Resistor (Ohms) | Mounting Hole Dio. | Max. Panel Thickness | Mounting Centers |
|----------|--------------|------------|-------------|------------|-----------|--------------------------|--------------------------|--------------------------|--------------------|----------------------|------------------|
| | Pin Lugs | List Price | Turret Lugs | List Price | | | | | | | |
| C | 118-323 | \$1.14 | 119-323 | \$1.63 | 1 1/2" | 1 3/32" | 1 3/4" | 100K | 3/8" | 3/8" | 5/8" |
| D | 118-604 | 1.14 | 119-604 | 1.63 | 1 1/2" | 9/32" | 1 3/4" | | 3/8" | 3/8" | 5/8" |
| C | R118-323 | 1.46 | R119-323 | 2.07 | 1 1/2" | 1 3/32" | 1 3/4" | | 3/8" | 3/8" | 5/8" |
| D | R118-604 | 1.46 | R119-604 | 2.07 | 1 1/2" | 9/32" | 1 3/4" | | 3/8" | 3/8" | 5/8" |



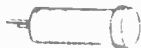
DRAKE NO. 119 TURRET LUGS

LENS DESCRIPTION CODE (last three Drake Number digits): See preceding page for explanation.

For HI-BRIGHTNESS Lamps, prefix Drake Number with letter "H".

FOR FULL DETAILS ABOUT DRAKE'S COMPUTER INDICATOR LIGHTS, INCLUDING BI-PIN CARTRIDGE LIGHTS

SEE SECTION 2000



"POSTLITE" INDICATOR LIGHTS

Unique all polystyrene neon indicator light with built-in series resistor. Extremely decorative.

| Fig. No. | Drake Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Face | Built-In Resistor (Ohms) | Lamp | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------------|------------|--------------------------|--------------------------|--------------------------|----------|----------------------|------------------|------------|
| F | 10S | 5/8" (Sq.) | 3/4" | 1 1/4" | 100K | Std. | 5/16" | 7/8" | \$1.13 |
| F | 10S-025 (Hi-Brite) | 5/8" (Sq.) | 3/4" | 1 1/4" | 25K | Hi-Brite | 5/16" | 7/8" | 1.13 |



"FLUSHLITE" INDICATOR LIGHTS

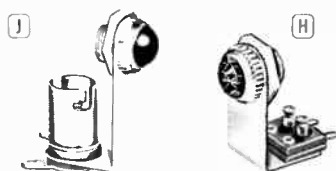
"One-of-a-kind" neon unit—all nylon with built-in series resistor. Exceptional appearance.

| Fig. No. | Drake Number | Lens Size | Length in Front of Panel | Length Behind Panel Face | Built-In Resistor (Ohms) | Lamp | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------------|------------------|--------------------------|--------------------------|--------------------------|------|----------------------|------------------|------------|
| G | 110 | 1 3/32" x 1 1/4" | 1 1/2" or 9/16" | 1 7/32" or 3/4" | 100K | NE2E | 1 1/32" (Rear Mt.) | 5/8" or 1 3/8" | \$.83 |
| G | 110-022 (Hi-Brite) | 1 3/32" x 1 1/4" | 1 1/2" or 9/16" | 1 7/32" or 3/4" | 22K | NE2H | 1 1/32" (Rear Mt.) | 5/8" or 1 3/8" | \$.83 |



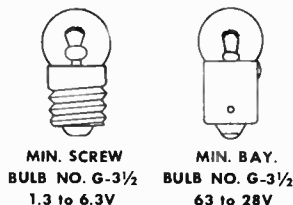
ALL PRICES LIST ★ ALL ABOVE UNITS HAVE NON-REPLACEABLE LAMPS ★ ALWAYS SPECIFY LENS COLOR

INDICATOR LIGHTS



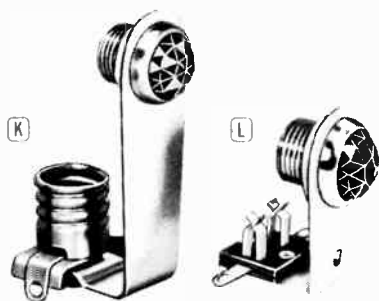
“MINISPACE” 5/16" Lens MONEY SAVER INDICATOR LIGHTS

For practical economy. Lamp replacement from behind panel. Cadmium plated lens holder has Drake E-Z-Tite knurl, for fast assembly with Drake No. 14 wrench.



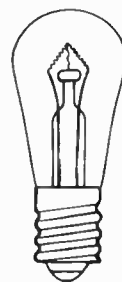
| Fig. No. | Drake Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Back | Built-In Resistor (Ohms) | Bulb Size | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------|-----------|------------|--------------------------|--------------------------|--------------------------|-----------|--------------------|----------------------|------------------|------------|
| J | 5-113 | 5/16" | Min. Screw | 7/32" | 29/32" | | G-3 1/2 | 3/16" | 1/8" | 3/8" | \$.39 |
| H | 5B-103 | 3/16" | Min. Bay. | 7/32" | 29/32" | | G-3 1/2 | 3/16" | 1/8" | 3/8" | .42 |
| | 2005-IL-113 | 3/16" | Min. 2-Pin | 7/32" | 13/16" | | G-3 1/2 | 3/16" | 1/8" | 3/8" | .39 |
| | 5005-272-113 | 3/16" | Min. Wedge | 7/32" | 21/32" | | T-3 1/4 | 3/16" | 1/8" | 3/8" | .39 |

LENS DESCRIPTION CODE (last three Drake Number digits): See earlier page for explanation.

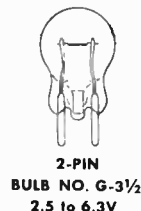


MONEY SAVER INDICATOR LIGHTS—1/2" Lens

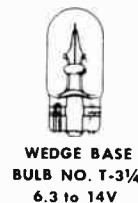
Popular low cost units. Lamps replaced from behind panel. Nickel plated lens holder.



LAMP NO. 656
120V



2-PIN
BULB NO. G-3 1/2
2.5 to 6.3V



WEDGE BASE
BULB NO. T-3 1/4
6.3 to 14V

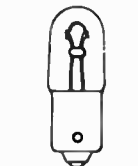
| Fig. No. | Drake Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Back | Built-In Resistor (Ohms) | Bulb Size | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------|-----------|-------------|--------------------------|--------------------------|--------------------------|-----------|--------------------|----------------------|------------------|------------|
| K | 10-113 | 1/2" | Min. Screw | 9/32" | 31/32" | | T-3 1/4 | 7/16" | 1/4" | 23/32" | \$.35 |
| | 10C-113 | 1/2" | Cand. Screw | 9/32" | 1" | | S6 | 7/16" | 1/4" | 23/32" | .52 |
| | 10G-113 | 1/2" | Min. Bay. | 9/32" | 31/32" | | G-3 1/2 | 7/16" | 1/4" | 23/32" | .35 |
| L | 10T-113 | 1/2" | Min. Bay. | 9/32" | 1 1/32" | | T-3 1/4 | 7/16" | 1/4" | 23/32" | .35 |
| | 5010-272-113 | 1/2" | Min. Wedge | 9/32" | 21/32" | | T-3 1/4 | 7/16" | 1/4" | 23/32" | .43 |

LENS DESCRIPTION CODE (last three Drake Number digits): See earlier page for explanation.

Drake No. 10C-113 is UL and CSA Listed.

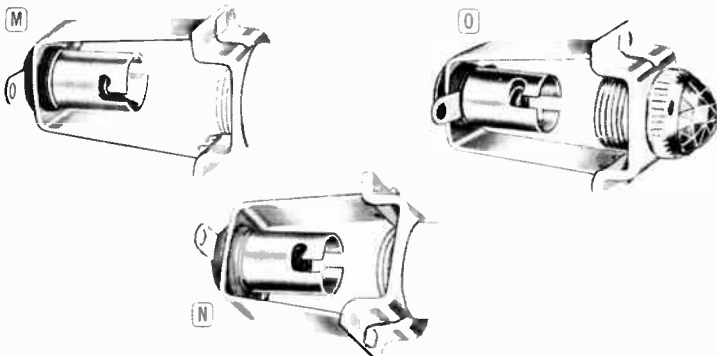


MIN. SCREW
BULB NO. T-3 1/4
2.5 to 6.3V



MIN. BAY.
BULB NO. T-3 1/4
6.3 to 28V

(ALL ILLUSTRATIONS APPROX. 3/4 ACTUAL SIZE)

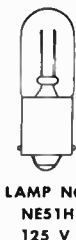


MONEY SAVER MINIATURE BAYONET BASE INDICATOR LIGHTS

with Snap-in Brackets

Available with attached 1/3 watt series resistor for NE51H Hi-Brightness neon lamp. Specify 100 K resistor for NE51 lamp. Lamps replaced from behind panel. No. 54 has nickel plated lens holder with Drake E-Z-Tite knurl for Drake No. 24 wrench.

| Fig. No. | Drake Number | Lens Dia. | Length in Front of Panel | Length Behind Panel Back | Built-In Resistor (Ohms) | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------|-----------|--------------------------|--------------------------|--------------------------|--------------------|----------------------|------------------|------------|
| M | 52-504 | 1 1/16" | 1/16" | 1 1/2" | | 9/16" | 3/32" | 23/32" | \$.34 |
| | N252-IL-503 | 1 1/16" | 1/16" | 1 1/2" | 22K | 9/16" | 3/32" | 23/32" | .71 |
| N | 53-304 | 5/8" | 7/16" | 1 7/32" | | 9/16" | 3/32" | 23/32" | .34 |
| | N253-IL-323 | 5/8" | 7/16" | 1 7/32" | 22K | 9/16" | 3/32" | 23/32" | .71 |
| O | 54-113 | 1/2" | 1 1/32" | 1 13/32" | | 9/16" | 5/16" | 23/32" | .54 |
| | N254-IL-103 | 1/2" | 1 1/32" | 1 13/32" | 22K | 9/16" | 5/16" | 23/32" | .85 |



LAMP NO.
NE51H
125 V



MIN. BAY.
BULB NO. T-3 1/4
6.3 to 28V

LENS DESCRIPTION CODE (last three Drake Number digits): See earlier page for explanation.

N252, N253, N254 are UL and CSA Listed.

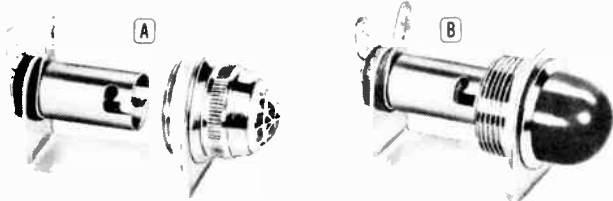
ALL PRICES LIST ★ ABOVE UNITS CAN BE ORDERED WITH LAMPS ★ ALWAYS SPECIFY LENS COLOR



DRAKE

CHICAGO 31, ILLINOIS

INDICATOR LIGHTS



MONEY SAVER INDICATOR LIGHTS HORIZONTAL MOUNTING

Plastic lens. Lamps replaced from front of panel. Nickel plated lens holder. Rated at 2 watts.

| Fig. No. | Drake Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Back | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------|-----------|------------|--------------------------|--------------------------|--------------------|----------------------|------------------|------------|
| A | 20-113 | 1/2" | Min. Bay. | 1 7/32" | 1 11/32" | 1 1/16" | 7/64" | 1" | \$.53 |
| | 205-113 | 1/2" | Min. Screw | 1 7/32" | 1 3/32" | 1 1/16" | 15/64" | 1" | .54 |
| B | 21C-304 | 3/8" | Min. Bay. | 1/2" | 1 1/32" | 1 1/16" | 15/64" | 1" | .44 |

LENS DESCRIPTION CODE (last three Drake Number digits): See earlier page for explanation.

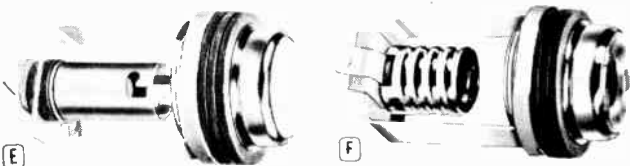


MONEY SAVER INDICATOR LIGHTS FOR EASY PANEL THICKNESS ADJUSTMENT

Supplied with three fiber spacing washers. Sturdily built. Plastic lens. Nickel plated lens holder. Lamps replaced from front of panel. Rated at 2 watts.

| Fig. No. | Drake Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Face | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------|-----------|-----------|--------------------------|--------------------------|--------------------|----------------------|------------------|------------|
| C | 50-113 | 1/2" | Min. Bay. | 1 7/32" | 1 7/32" | 1 1/16" | 1/4" | 1" | \$.74 |
| D | 51-304 | 3/8" | Min. Bay. | 1/2" | 1 7/32" | 1 1/16" | 1/4" | 1" | .63 |

LENS DESCRIPTION CODE (last three Drake Number digits): See earlier page for explanation.



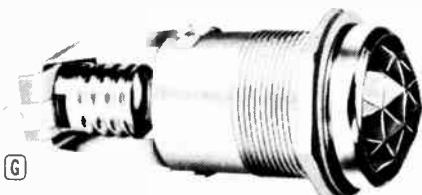
"STANDARD" INDICATOR LIGHTS FRONT LAMP REPLACEMENT

Smallest diameter units with front lamp replacement for 120 V incandescent lamps. Polished chrome friction lamp holder.

| Fig. No. | Drake Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Face | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------|-----------|-------------|--------------------------|--------------------------|--------------------|----------------------|------------------|------------|
| E | 60-101 | 3/4" | Min. Bay. | 3/8" | 1 1/2" | 13/16" | 1/4" | 1 1/8" | \$1.40 |
| | A460N-IL-100 | 3/4" | Cand. Screw | 3/8" | 1 13/16" | 13/16" | 1/4" | 1 1/8" | 1.45 |
| F | A461N-IL-203 | 3/4" | Cand. Screw | 1 7/32" | 1 1/4" | 13/16" | 1/4" | 1 1/8" | 1.42 |

LENS DESCRIPTION CODE (last three Drake Number digits): See earlier page for explanation.

N460N-IL-100 and A461N-IL-203 are UL and CSA Listed.



MONEY SAVER INDICATOR LIGHT SLIP-FIT BEZEL FOR EASY INSTALLATION

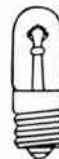
Lamps may be replaced from front or rear of panel. Polished chrome friction lens holder.

| Fig. No. | Drake Number | Lens Dia. | Base | Length in Front of Panel | Length Behind Panel Face | Mounting Hole Dia. | Max. Panel Thickness | Mounting Centers | List Price |
|----------|--------------|-----------|-------------|--------------------------|--------------------------|--------------------|----------------------|------------------|------------|
| G | 75-110 | 1" | Cand. Screw | 7/16" | 2 1/4" | 1" | 1/2" | 1 3/8" | \$1.46 |

LENS DESCRIPTION CODE (last three Drake Number digits): see earlier page for explanation.



MIN. BAY.
BULB NO. T-3 1/4
6.3-28V

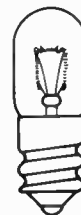


MIN. SCREW
BULB NO. T-3 1/4
2.5-6.3V

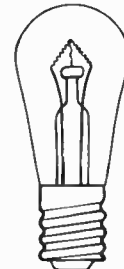
•
MIN. BAY.
AS ABOVE
•



LAMP NO. NE45
125V



LAMP NO.
6T4/3
120V



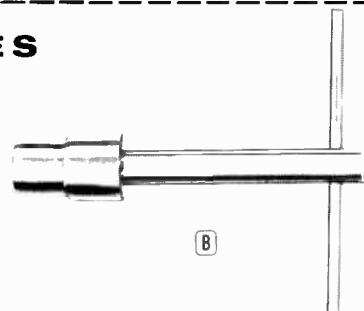
LAMP NO. 656
120V



DRAKE E-Z-TITE WRENCHES

Special Socket Wrenches to fit specially knurled mounting bushing flanges or nuts. Speeds up mounting of units. Number of required wrench given in unit descriptions.

| Fig. No. | Drake Number | Size |
|----------|--------------|--------------|
| A | 651-14 | 7/16" dia. |
| A | 651-20 | 1/2" dia. |
| A | 651-24 | 3/8" dia. |
| B | 652-32 | 1 3/16" dia. |



LENSES & LAMPHOLDERS

DRAKE



CHICAGO 31, ILLINOIS



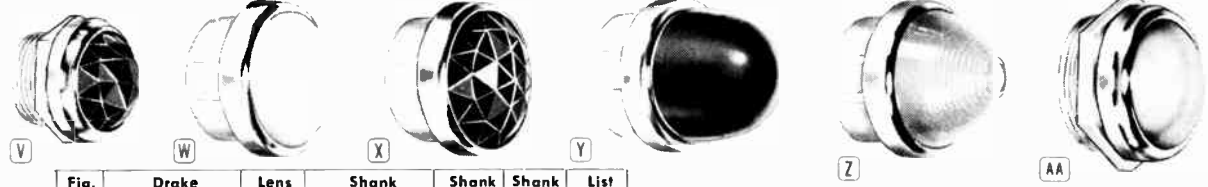
| Fig. No. | Drake Number | Lens Dia. | Shank O.D. | Shank I.D. | Shank Length | List Price |
|----------|--------------|-----------|---------------|------------|--------------|------------|
| A | 6155-113 | 5/32" | .218 | Solid | 1/4" | \$.09 |
| B | 615L(1-113) | 5/32" | .218 | Solid | 1/2" | .12 |
| C | 24-113 | 3/16" | .278 .282 | 1 5/16" | 1/4" | .11 |
| D | 36-101 | 3/16" | .324 .330 | 1 5/16" | 3/16" | .41 |
| E | 14L-15-113 | 3/16" | 3/16"—32 Thd. | 1 5/16" | 3/8" | .25 |
| F | 14L-15-103 | 3/16" | 3/16"—32 Thd. | 1 5/16" | 3/8" | .28 |

| Fig. No. | Drake Number | Lens Dia. | Shank O.D. | Shank I.D. | Shank Length | List Price |
|----------|--------------|-----------|---------------|------------|--------------|------------|
| G | 31-113 | 1/2" | .373 .377 | 1 1/2" | 3/4" | .18 |
| H | 23-113 | 1/2" | .373 .377 | 1 1/2" | 3/4" | .17 |
| J | 16-17-113 | 1/2" | 7/16"—27 Thd. | 1 1/2" | 3/8" | .22 |
| K | 16-17-103 | 1/2" | 7/16"—27 Thd. | 1 1/2" | 3/8" | .26 |
| L | 38-52B-110 | 1/2" | 7/16"—27 Thd. | 7/16" | 3/8" | .39 |
| M | 103A-500 | 1/2" | .483 .485 | 1 1/2" | 3/4" | .51 |



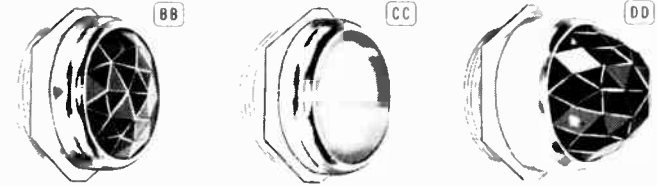
| Fig. No. | Drake Number | Lens Dia. | Shank O.D. | Shank I.D. | Shank Length | List Price |
|----------|--------------|-----------|---------------|------------|--------------|------------|
| N | 25-52B-110 | 1/2" | 5/16"—27 Thd. | 7/16" | 3/16" | .35 |
| O | 25P-52B-304 | 5/8" | 5/16"—27 Thd. | 7/16" | 3/16" | .32 |
| P | 25P-52B-323 | 5/8" | 5/16"—27 Thd. | 7/16" | 3/16" | .32 |
| Q | 25P-52B-604 | 5/8" | 5/16"—27 Thd. | 7/16" | 3/16" | .32 |

| Fig. No. | Drake Number | Lens Dia. | Shank O.D. | Shank I.D. | Shank Length | List Price |
|----------|--------------|-----------|---------------|------------|--------------|------------|
| R | 25G4-52B-320 | 3/4" | 9/16"—27 Thd. | 7/16" | 3/16" | .76 |
| S | 52A-B-504 | 1 1/16" | 9/16"—27 Thd. | 7/16" | 3/16" | .22 |
| T | 60A-101 | 3/4" | .685 .687 | 3/8" | 1/4" | .60 |
| U | 60A-110 | 3/4" | .685 .687 | 3/8" | 1/4" | .57 |



| Fig. No. | Drake Number | Lens Dia. | Shank O.D. | Shank I.D. | Shank Length | List Price |
|----------|--------------|-----------|-----------------|------------|--------------|------------|
| V | 60A3-27-110 | 3/4" | 1 1/16"—27 Thd. | 3 3/4" | 3/8" | .44 |
| W | 75A-101 | 1" | .887/.889 | 5 3/4" | 3/8" | .65 |

| Fig. No. | Drake Number | Lens Dia. | Shank O.D. | Shank I.D. | Shank Length | List Price |
|----------|--------------|-----------|------------|------------|--------------|------------|
| X | 75A-110 | 1" | .887/.889 | 5 3/4" | 3/8" | .61 |
| Y | 75A-305 | 1" | .887/.889 | 5 3/4" | 3/8" | .73 |
| Z | 75A-431 | 1" | .887/.889 | 5 3/4" | 3/8" | .69 |
| AA | 75A3-C-101 | 1" | 1"—27 Thd. | 5 3/4" | 3/8" | 1.05 |
| BB | 75A3-C-110 | 1" | 1"—27 Thd. | 5 3/4" | 3/8" | 1.01 |
| CC | 75A3-C-500 | 1" | 1"—27 Thd. | 5 3/4" | 3/8" | 1.04 |
| DD | 75A4-C-410 | 1" | 1"—27 Thd. | 7/8" | 3/8" | 1.18 |



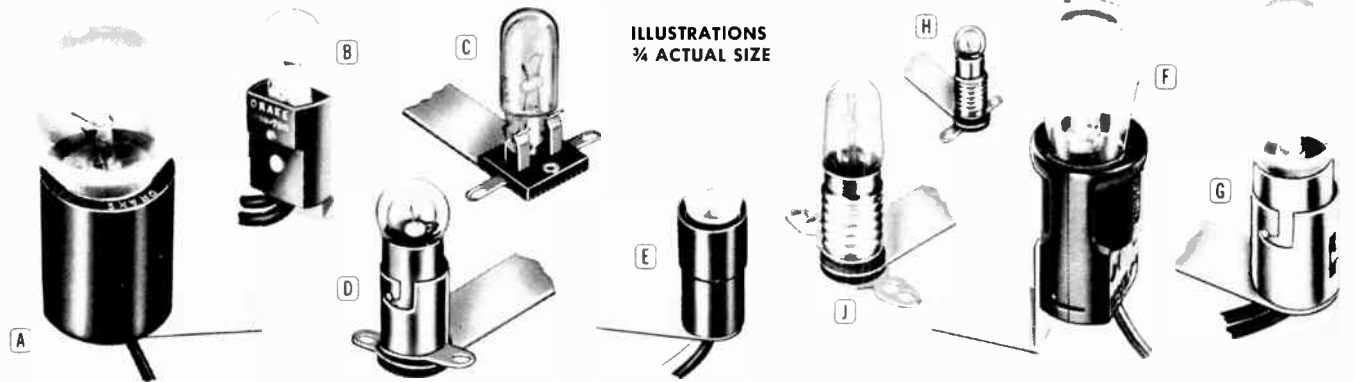
(ALL ILLUSTRATIONS APPROX. 3/4 ACTUAL SIZE)

★ ALWAYS SPECIFY LENS COLOR ★

A FEW DRAKE LAMPHOLDERS

Ask for additional information about these and other styles

- | | |
|--|--|
| A: No. A1700 Intermediate Screw Base with Phenolic Housing | E: No. N500 Miniature Bayonet Base with Nylon Housing |
| B: No. 1900 Miniature 2-Pin Base with Phenolic Housing | F: No. B1400 Candelabra Screw Base with Phenolic Housing |
| C: No. 4272 "WEDGE-GRIP" Miniature Wedge Base | G: No. A1100 Double Contact Bayonet Base |
| D: No. 4080 Miniature Bayonet Base | H: No. 2100 Midget Screw Base |
| | J: No. 100 Miniature Screw Base |



ILLUSTRATIONS 3/4 ACTUAL SIZE

INDUSTRIAL DEVICES, Inc.

EDGEWATER, NEW JERSEY

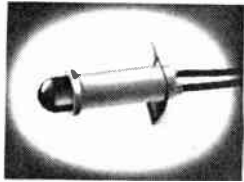


OMNI-GLOW PILOT LIGHT

For use on instrument panels, appliances, switchboards, all electrical and electronic apparatus, OMNI-GLOW will last in excess of 10,000 to 25,000 hours of operating life.

With built-in glow lamp and current limiting resistor, all mechanical spring contacts are eliminated, providing a cost-saving, rugged unit relatively free from failure due to vibration or shock.

Easy mounting — only a 1/2" hole required for any panel thickness. Instant fastening



speed nut assures permanent shock and vibration-proof attachment.

Drawing less than 1.10 watt at 115 volts, long life, high reliability operation is provided over the 75-150 volt range; can also be used at higher voltage with decreased life.

Nylon body and acrylic lens assembly is 1 1/4" long overall. Lens extends 1/32" in front of panel. Black plastic (105°C) leads are 4 1/2" long, stripped and tinned 1/2".

Four standard models have red (Model =1010A1), clear (Model =1010A2), amber (Model =1010A3), or white translucent (Model =1010A4) lenses.

Furnished complete with lamp and speed nut. OMNI-GLOW is UL approved—CSA Approval No. 13346.

| Catalog Number | Description | List Price |
|----------------|------------------------------------|------------|
| 1010A1 | OMNI-GLOW Pilot Light (red lens) | \$.90 |
| 1010A2 | OMNI-GLOW Pilot Light (clear lens) | \$.90 |
| 1010A3 | OMNI-GLOW Pilot Light (amber lens) | \$.90 |
| 1010A4 | OMNI-GLOW Pilot Light (white lens) | \$.90 |

TINY-GLOW PILOT LIGHT

Midget Size. For use on instrument panels, switchboards, electrical and electronic apparatus. Neon lamp draws less than 1 milliamperere at 110 volts. Over 25,000 hours of actual service. Operates over a wide range, 75 to 250 volts. A.C. or D.C. TINY-GLOW outlasts the equipment that it serves.

Shock and vibration proof, no spring contacts, soldered connections. Requires less back-of-panel space than any other pilot light. Polished chrome plated housing, 3/4" brass mounting studs. Mounts simply and easily with speed nuts on two 1/64" holes, 1 1/8" apart. Furnished complete with lamp and speed nuts. Dimensions: 1 1/4" x 1/2" x 3/8".



| Catalog Number | Description | List Price |
|----------------|-----------------------|------------|
| 300 | TINY GLOW Pilot Light | \$1.25 |

MINI-VOLT VOLTMETER

(U.S. Pat. 2,644,134)

MINI-VOLT is an "abuse-proof" voltmeter, sufficiently accurate to indicate a 2 or 3 volt drop on 110 volt line. Virtually burn-out proof, this rugged unit is used by electricians, radio and TV repairmen, refrigerator and air conditioning servicemen, experimentors, lab technicians, handymen.

MINI-VOLT has wide application for all equipment whose proper operation requires correct voltage.

In addition to measuring the exact voltage over the range from 65 to 660 volts, Model =400B is used to identify AC or DC lines, check rectifiers, filter capacitors, chokes; test for blown fuses, grounded components, DC polarity, measure voltage drops with load, and 1001 other uses.

For use on AC (any frequency) or DC, MINI-VOLT, with an impedance of approximately 1/2 megohm, draws negligible current and can therefore provide dependable voltage readings even on circuits used in electronic apparatus.

Will provide a lifetime of service — glow lamp is guaranteed for 25,000 hours of actual operation. Furnished complete with extra-heavy insulated 12-inch flexible test leads and test prods.

Lightweight impact resistant case and dial panel, thoroughly insulated. So rugged that instrument can be thrown into tool box or dropped to floor without damage. C.S.A. approval =8910.



| Catalog Number | Description | List Price |
|----------------|-----------------------|------------|
| 400B | Range 65 to 660 volts | \$3.75 |

SAFE-T-KLIP

(U. S. Patent 2,754,490)

New convenience and safety are realized through the use of 100% insulation on these test clips. Tough nylon insulation covers the entire clip, including the nose, without the bulkiness of rubber boots or insulating tape. Danger of short circuit due to clips touching each other or other components is eliminated, and test leads may be changed from one connection to another without cutting the power in the equipment.



Available in pairs (one red, one black) SAFE-T-KLIP incorporates a cadmium plated steel alligator clip and provides shock-proof, short-circuit proof operation in excess of 600 volts. Width of the clips is 3/8"; maximum height is 5/8".

Four models are available. The =1410A is for use with a wire lead and provides either a soldered or screw terminal connection. The nylon sleeve is threaded to the clip for easy connection. Overall assembled length is 2 1/4". The =1410B, with overall length of 2 1/32", provides positive clip connection to all standard (.081 dia) phone-tip test prods. The =1410C has a jack for standard banana plugs and an overall length of 2 1/16".

The 1410D is similar to 1410B except that the entrance hole is modified for Signal Corps. application

| Catalog Number | Description | List Price |
|----------------|--|------------|
| 1410A | SAFE-T-KLIP for use with lead wire provides screw terminal or solder Color — black (Model No. 1410-A1) .90 ea. Color — red (Model No. 1410-A2) .90 ea. | \$1.80 pr. |
| 1410B | SAFE-T-CLIP for use with standard .080" test prod Color — black (Model No. 1410-B1) .75 ea. Color — red (Model No. 1410-B2) .75 ea. | 1.50 pr. |
| 1410C | SAFE-T-KLIP for use with banana plug Color — black (Model No. 1410-C1) .60 ea. Color — red (Model No. 1410-C2) .60 ea. | 1.20 pr. |
| 1410D | SAFE-T-KLIP for Signal Corps use Color — black (Model No. 1410-D1) .70 ea. Color — red (Model No. 1410-D2) .70 ea. | 1.40 pr. |

LINE-VOLT TEST LIGHT

LINE-VOLT Model No. 1310 is a rugged, compact test light covering the wide range of 55-550 VAC or 90-600 VDC.

LINE-VOLT tells immediately whether there is power in the line, checks fuses, can identify AC or DC lines, grounded components, continuity of line circuits.

Leads are 12" long overall and are heavy-duty flexible wire terminating in 3 1/2" insulated prods with really sharp points—able to pierce insulation, paint, or oxidation. Bright lamp provides immediate positive indication. 14" long overall, diameter 3/8".



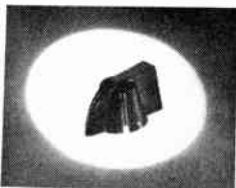
| Catalog Number | Description | List Price |
|----------------|------------------------------------|------------|
| 1310 | LINE-VOLT Test Lite (55-550 volts) | \$1.50 |

NYLON CONTROL KNOBS

Loose knob problems are gone forever with molded nylon pointer knobs! Nylon toughness eliminates metal bushings; nylon resilience provides a positive, vibration-proof, high-torque lock against the shaft.

Nylon knobs are practically unbreakable, can't fade or chip, have high insulation resistance, are virtually immune to acid and solvents.

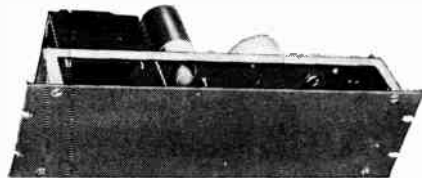
Furnished complete with set-screw, these knobs fit a 1/4" shaft and are available in red or black.



| Catalog Number | Description | List Price |
|----------------|--|------------|
| 1431-1 | Nylon pointer knob, 1 1/4" x 1/32" x 3/4", black | \$.25 |
| 1431-2 | Same in red | .25 |

Acme Electric
ENGINEERED FOR QUALITY

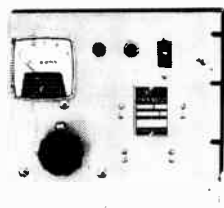
DC REGULATED POWER SUPPLIES



Continuous duty magnetic power supplies. No tubes. Output voltage adequately maintained. Rapid recovery from input line variations and/or sudden load changes. Current limited. Units feature constant voltage transformer, resonant capacitor, electrolytic filter, silicon rectifiers, adequate bleeder. Bulletin 174.

100-130 volt, 60 cycles; Less than 1% ripple voltage RMS.

| Catalog No. | Watts | Amps | D.C. Volts | Approx. Efficiency |
|-------------|-------|------|------------|--------------------|
| PS-41423 | 150 | 6.25 | 24 | 76 |
| PS-41424 | 200 | 4.15 | 48 | 81 |
| PS-41425 | 250 | 2.0 | 125 | 86 |
| PS-41426 | 300 | 2.0 | 150 | 86 |
| PS-41427 | 200 | 1.0 | 200 | 80 |
| PS-41428 | 250 | 1.0 | 250 | 85 |



UNFILTERED, NON REGULATED POWER SUPPLIES

Sturdily built, economically priced, manual regulation, silicon rectifiers provide full-wave d-c output. Bulletin 174.

Input 100-120 volts, 60 cycles.

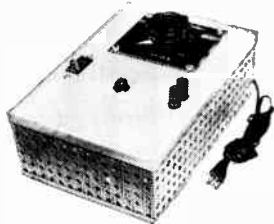
| Catalog No. | Watts | D.C. Volts | Amps |
|-------------|-------|------------|------|
| PS-39887 | 300 | 0-100 | 3 |
| PS-39888 | 500 | 0-100 | 5 |
| PS-39889 | 1000 | 0-100 | 10 |
| PS-39890 | 2000 | 0-100 | 20 |

ADJUSTABLE DC POWER SUPPLIES

Portable or Rack Models

95-130 volts, 60 cycle. Direct current output stabilized and adjustable from 0-45 volts, current outputs 0.25 amp, and 0-5 amps. Voltage regulation approximately 5% between full load and no load.

Available in portable, plug-in model or standard rack type. Bulletin 17.



SCOPE-O-TROL

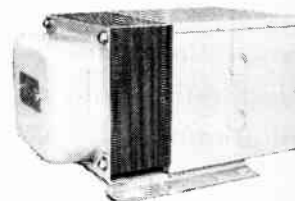
Operates from 115 volt, 60 cycle circuit. Regulated output range from 0 to 300 volts d-c, stabilized at any desired setting. Coarse adjustment, 75 volt steps, fine adjustment .25/degree. Less than 1 millivolt ripple RMS. Current limiting and short circuit protection. Bulletin 17.



POWER SUPPLIES CONSTANT VOLTAGE STABILIZERS MAGNETIC AMPLIFIERS VOLTAGE ADJUSTORS

CONSTANT VOLTAGE STABILIZERS

| VA Output Capacity | Catalog Number | Input Voltage | Output Voltage $\pm 1\%$ |
|--------------------|----------------|---------------|--------------------------|
| 15 | T-19700 | 95-130 | 6.3 |
| 15 | T-19701 | 95-130 | 120 |
| 25 | T-19703 | 95-130 | 6.3 |
| 25 | T-19704 | 95-130 | 120 |
| 50 | T-19706 | 95-130 | 6.3 |
| 50 | T-19707 | 95-130 | 120 |
| 100 | T-31901 | 95-130 | 120 |
| 200 | T-31902 | 95-130 | 120 |
| 300 | T-31903 | 95-130 | 120 |
| 500 | T-31905 | 95-130 | 120 |
| 1000 | T-31908 | 95-130 | 120 |
| 2000 | T-31909 | 95-130 | 120 |
| 100 | T-31921 | 190-260 | 120 |
| 200 | T-31922 | 190-260 | 120 |
| 300 | T-31923 | 190-260 | 120 |
| 500 | T-31925 | 190-260 | 120 |
| 1000 | T-31928 | 190-260 | 120 |
| 2000 | T-31929 | 190-260 | 120 |
| 100 | T-31911 | 190-260 | 240 |
| 200 | T-31912 | 190-260 | 240 |
| 300 | T-31913 | 190-260 | 240 |
| 500 | T-31915 | 190-260 | 240 |
| 1000 | T-31918 | 190-260 | 240 |
| 2000 | T-31919 | 190-260 | 240 |



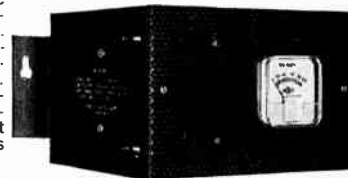
Standard units stabilize output voltage $\pm 1\%$ while input voltage may vary $\pm 15\%$ of nominal rating. Voltage correction response within 2 cycles. Automatic overload and short circuit protection. Write for Bulletin 09.

SPECIAL FOR TV RECEIVERS AND SIMILAR USE

200 va capacity, fully automatic, noiseless operation. Corrects 95-130 volts fluctuation to normal $\pm 2\%$ within 1/30th second. Automatic secondary disconnect when not loaded. Supplied with primary cord and receptacle for output connection. Bulletin 091.

MAGNETIC AMPLIFIERS

Combine solid state electronic components with magnetic reactors and advanced circuitry. Bias control winding is converted from input line to provide self saturation of core. Independent gain control operates from 0-5 ma signal. Independent potentiometers permit individual adjustment of bias or gain control.



| Catalog No. | Watts | Dc Output Volts | Amps | AC Input |
|-------------|-------|-----------------|------|----------|
| MA-42900 | 5 | 24 | 0.21 | 120 |
| MA-42901 | 40 | 80 | 0.5 | 120 |
| MA-42902 | 80 | 80 | 1.0 | 120 |
| MA-42903 | 125 | 80 | 1.6 | 120 |
| MA-42904 | 250 | 80 | 3.2 | 120 |
| MA-42905 | 500 | 80 | 6.4 | 120 |
| MA-42906 | 500 | 160 | 3.2 | 240 |
| MA-42907 | 1000 | 80 | 12.8 | 120 |
| MA-42908 | 1000 | 160 | 6.4 | 240 |

MANUAL VOLTAGE ADJUSTORS

An inexpensive voltage adjustor that increases a low voltage or reduces a high voltage condition to 115 volts. Seven steps of adjustment from 95 to 125 volts input to approximately 115 volts output. Units supplied with integrally mounted tap-switch, cord and plug and plug-in receptacle for outlet connection. Write for Bulletin 091.



ACME ELECTRIC CORPORATION

11 Water Street

Cuba, New York

In Canada: Acme Electric Corp. Ltd., 50 Northline Rd.,

SAA-3581-2034

Toronto, Ont.

Acme Electric



INSIST on ATR VIBRATORS—Get the Best!!






ATR Replacement Vibrator Specifications

FOR COMPLETE INFORMATION ON AUTO RADIO VIBRATORS FOR AUTOMOBILES MANUFACTURED PRIOR TO AND IN 1954 SEE ATR VIBRATOR MANUAL NO. 554. THIS MANUAL ALSO CONTAINS INFORMATION ON HOUSEHOLD, 2-WAY COMMUNICATION SETS AND:

- VIBRATOR LISTINGS BY RECEIVER NAME AND MODEL NUMBER.
- BUFFER REFERENCE CIRCUITS.
- SUBSTITUTION CHART ON DISCONTINUED VIBRATORS.
- VIBRATOR SPECIFICATIONS.
- VIBRATOR EQUIVALENT CHARTS.
- CROSS REFERENCE LISTINGS.
- AUTO BATTERY GROUND CHARTS.
- INSTALLATION NOTES.
- SERVICING PROCEDURE FOR AUTO RADIO VIBRATORS.

FOR ALL AUTO RADIO SETS SINCE 1954 USE ONE OF THE ATR VIBRATORS LISTED BELOW

| | | |
|---|---|--|
| <p>No. 340 (Boxed) No. 1400 (Bulk)</p>  <p>4-Prong 6-Volt</p> <p>For all 6-Volt Sets Since 1954</p> | <p>No. 1343 (Boxed) No. 1843 (Bulk)</p>  <p>3-Prong 12-Volt</p> <p>FOR ALL 12-VOLT GENERAL MOTORS SINCE 1954</p> <p>Plus automobiles shown in box below.</p> | <p>No. 1340 (Boxed) No. 1840 (Bulk)</p>  <p>4-Prong 12-Volt</p> <p>For 12 Volt Cars other Than GM Since 1954</p> <p>Except automobiles shown in box below.</p> |
| <p>ATR Type 1343 and 1843 also used in following automobiles: 1956 Ford (Philco), Lincoln (Bendix), and Mercury (Bendix); 1956 Chrysler (Philco); 1955-57 Packard; 1956-57 Plymouth (Philco); 1956 Studebaker (Philco) and 1957 Mercury (Philco).</p> | | |

**EVERYBODY
AGREES
ATR
AUTO-RADIO
VIBRATORS
are
TOPS**

Here's why—

ATR Vibrators, the heart of vibrator-operated power supplies, are proven units of the highest quality engineered to perfection. They are backed by more than thirty-one years of vibrator design and research, development and manufacturing — ATR pioneered in the vibrator field.

All ATR Products incorporate only the best materials and workmanship and are carefully manufactured under rigid engineering inspections and tests making them the finest that can be built.

...ATR Vibrators Feature

- ✓ **Ceramic Stack Spacers** with Two-Bolt Stack Construction — for adjustment permanency under any operating condition.
- ✓ **Instant Starting** — as a result of highly efficient magnetic circuit with formed base for more uniform operation on both high and low voltages.
- ✓ **Large Oversize Tungsten Contacts** having Full Wiping Action — far greater reliability and longer life.
- ✓ **Perforated Reed** of Highest Quality Swedish Spring Steel — for uniform flexibility and prevention of reed breakage.
- ✓ **Highest Precision Construction and Workmanship** — Practically all parts used are held to within a tolerance of 0.0005 of inch.
- ✓ **Value Plus** — as readily evidenced by the Larger Contacts, Ceramic Spacers and Precision Construction and Workmanship.

JOBBER'S ATTENTION: See Page 1030 in this ATR Section and Page 646 in Section 1900 for your Catalog Needs!

Communication Vibrators for SUPER SERVICE

As introduced in the 1954 May-June issues of many leading radio magazines, ATR COMMUNICATION VIBRATORS are truly THE WORLD'S FINEST. See reprint of ad on this page for feature specifications.

ATR COMMUNICATION VIBRATORS eliminate the problem of short-life call-backs on those tough two-way communication rigs. Yes, Sir! these ATR COMMUNICATION VIBRATORS deliver SUPER SERVICE.

ATR VIBRATORS FEATURE:

CERAMIC STACK SPACERS with Two-Bolt Stack Construction — for adjustment permanency under any operating condition.

INSTANT STARTING — as a result of highly efficient magnetic circuit with formed base for more uniform operation on both high and low voltages.

LARGE OVERSIZED TUNGSTEN CONTACTS having Full Wiping Action—for greater reliability and longer life.

PERFORATED REED of Highest Quality Swedish Spring Steel—for uniform flexibility and prevention of reed breakage.

HIGHEST PRECISION CONSTRUCTION AND WORKMANSHIP—Practically all parts used are held to within a tolerance of 0.0005 of an inch.

VALUE PLUS — as readily evidenced by the Larger Contacts, Ceramic Spacers and Precision Construction and Workmanship.

ATR

ATR VIBRATOR
343
35404
use only on approved
6 volt D. C. Circuits.
PATENTS PENDING
ATR MFG. CO., INC.
PAUL, MINNESOTA
MADE IN U.S.A.

The World's Finest
**Communication
VIBRATORS**

featuring:

- CERAMIC STACK SPACERS
- 1/4" DIAMETER POWER CONTACTS
- DRIVER-TYPE COIL CONSTRUCTION
- SPECIAL REED HINGE and WIRING
- POWER CAPABILITY UP TO 15 AMPERES

A COMPLETE LINE OF REPLACEMENT

ATR VIBRATORS

FOR AUTOMOTIVE, HOUSEHOLD and TWO-WAY COMMUNICATION SETS

ATR VIBRATORS are proven units of the highest quality, engineered to perfection. They are backed by more than 31 years of vibrator design and research, development and manufacturing.
ATR pioneered in the vibrator field.



JOBBERS ATTENTION: See Page 1030 in this ATR Section and Page 646 in Section 1900 for your Catalog Needs!

ATR

"A" BATTERY ELIMINATORS

... FOR DEMONSTRATING AND TESTING AUTO RADIOS

6 VOLT OR 12 VOLT!
TRANSISTOR or VIBRATOR OPERATED!
LOW RIPPLE!!

Specially Designed for Testing and Operating Auto Radios and D.C. Electrical Apparatus on Regular A.C. Lines, 105-125 Volts, 50-60 Cycles.

SUGGESTED USES:

As a power supply for radio sets, aircraft instruments, relays, motors and other electrical and electronic equipments. In the laboratory, for supplying various low D.C. voltages.

Battery Eliminators may be treated as batteries in the sense that they can be connected in series for higher voltages at the same current output per unit or in parallel for the same output voltage per unit at higher currents.

- ✓ Eliminates Storage Batteries and Battery Chargers.
- ✓ Operates the Equipment at Maximum Efficiency at All Times.
- ✓ Delivers Filtered Direct Current at the Correct Voltage for Proper Operation.
- ✓ Minimum Ripple
- ✓ Fully Automatic and Fool-Proof
- ✓ Adjustable Voltage Control



Featured cut illustrates Heavy Duty "A" Battery Eliminator, Model 620C-ELIT; equipped with Voltmeter, Ammeter and Voltage Control.



Illustrates Standard "A" Battery Eliminator, Model 610C-ELIF; equipped with Voltmeter, Ammeter and Voltage Control.

Equipped with Full-Wave Dry Disc Selenium Rectifier, Assuring Noiseless, Interference-Free Operation and Extreme Long Life and Reliability.

TYPE 610C-ELIF—Rated output 6 volts at 10 amperes continuous or 12 volts at 6 amperes continuous. Size $6\frac{1}{2}$ " x $9\frac{1}{8}$ " x $8\frac{1}{2}$ ". Shipping weight, 22 lbs. Code word "SELIT." USER NET PRICE \$49.95

TYPE 620C-ELIT—Rated output 6 volts at 20 amperes continuous or 12 volts at 10 amperes continuous. Uses dual rectifiers. Sizes $6\frac{1}{2}$ " x $12\frac{7}{8}$ " x $8\frac{1}{2}$ ". Shipping weight, 33 lbs. Code word "HELIT." USER NET PRICE \$66.95

Either 6 or 12 volt output obtainable by means of simple output toggle switching arrangement having locking device to prevent accidental switching.

All ATR Eliminators have as standard equipment: On-Off Switch, 8-Position Voltage Control, Meter(s), Fuse Protection, Rubber Mounting Feet, 6-ft. All-Rubber Cord Set and Cabinet of heavy gauge metal having attractive grey-hammerloid finish.

JOBBERS ATTENTION: See Page 1030 in this ATR Section and Page 646 in Section 1900 for your Catalog Needs!

ATR

UNIVERSAL INVERTERS

Specially Designed for
Operating Standard A.C.

Tape Recorder, Television Set,

Dictating Machine, Radio Set, Ham Gear, Public Address System, Amplifier, Record Player, Electric Razor, Food Mixer, Vacuum Cleaner, Sewing Machine, Business Machine, Electric Drill, Fluorescent and Incandescent Lamp, and Electronic Test Equipment from D.C. Voltages in Automobiles, Buses, Trucks, Boats, Trains, Planes, and D.C. Districts. Ideal for Emergency Lighting Applications for Civil Defense, Red Cross, Rescue Work, etc., Simply Using Extension Cords.

ATR Universal Inverters are actually a combination of 4 Inverter designs in one unit! These Inverters are especially recommended for applications as mentioned above and feature complete RF frequency interference suppression, instant starting, frequency stability, and built-in power factor corrector utilizing a simple toggle switch. With ATR Inverters, the need for special equipment is eliminated. They are designed for quiet, long-life operation at high efficiency and maximum reliability. All models indicated are equipped with ATR heavy duty plug-in Inverter Vibrators. These Inverters also come equipped with four-point voltage regulator which make possible the correct output voltage for minimum to maximum loads and also help compensate for input voltages which are lower or higher than normal. The operating efficiency is in excess of 75%. To figure approximate current consumption from storage battery, divide the rated input wattage of the recorder (or load) being operated by the storage battery voltage and further divide this answer by .75 which will give the actual current consumption based on the actual load and efficiency. The battery current consumption required for a tape recorder is normally less than that drawn by ordinary automobile headlight(s). These Universal Inverters are recommended only for use with loads having power factors in excess of 70%.



Featured cut above illustrates
Model 12U-RHG.

ATR Inverters should be used only for the applications as outlined.

"—P" models equipped with cigarette lighter cord set to plug into dash receptacle.

All ATR Universal Inverters are housed in attractively finished grey-hammerloid metal cabinets.

Dimensions of Standard (RSF) Model Universal Inverters, 8½" x 9½" x 5¼"; shipping weight 22 lbs.

Dimensions of Heavy Duty (RHG) Model Universal Inverters, 6½" x 11¼" x 8½"; shipping weight 27 lbs.

Dimensions of Super Heavy Duty (HSJ) Model Universal Inverters 6½" x 12¾" x 8½"; shipping weight 37 lbs.

For correct replacement Vibrator, consult Inverter Vibrator Guide.

| Type | Input D.C. Volts | A.C. Output 60 Cycles | Output Watt. | | Shipping Weight | Dealer Price |
|-----------|------------------------|-----------------------------|--------------|-------|--------------------|-----------------|
| | | | Int. | Cont. | | |
| 6U-RSF | 6 | 110 Volts | 100 | 80 | 22 lbs. | \$ 50.00 |
| 6U-RSF-P | 6 | 110 | 100 | 80 | 22 | 50.00 |
| 6U-RHG | 6 | 110 | 150 | 125 | 27 | 66.34 |
| 6U-HSJ | 6 | 110 | 175 | 150 | 37 | 83.34 |
| 12U-RSF | 12 | 110 | 125 | 100 | 22 | 50.00 |
| 12U-RSF-P | 12 | 110 | 125 | 100 | 22 | 50.00 |
| 12U-RHG | 12 | 110 | 175 | 150 | 27 | 66.34 |
| 12U-HSJ | 12 | 110 | 250 | 200 | 37 | 83.34 |
| *28U-RSF | 28 | 110 | 125 | 100 | 22 | 59.97 |
| *28U-RHG | 28 | 110 | 175 | 150 | 27 | 79.67 |
| *28U-HSJ | 28 | 110 | 250 | 200 | 37 | 96.67 |
| 32U-RSF | 32 | 110 | 150 | 100 | 22 | 59.97 |
| 32U-RHG | 32 | 110 | 200 | 180 | 30 | 70.50 |
| 32U-HSJ | 32 | 110 | 325 | 225 | 37 | 96.67 |
| 50U-RSF | 50 | 110 | 150 | 100 | 22 | 59.97 |
| 50U-RHG | 50 | 110 | 225 | 200 | 27 | 79.67 |
| 110U-RSF | 110 | 110 | 250 | 150 | 22 | 50.00 |
| 110AU-RHG | 110 | 110 | 325 | 250 | 27 | 59.97 |
| 110BU-RHG | 110 | 110 | 450 | 350 | 30 | 70.50 |
| 110U-HSJ | 110 | 110 | 600 | 400 | 37 | 96.67 |
| 220U-RSF | 220 | 110 | 250 | 150 | 22 | 53.00 |
| 220U-RHG | 220 | 110 | 325 | 250 | 27 | 66.34 |
| 220U-HSJ | 220 | 110 | 500 | 300 | 37 | 103.34 |

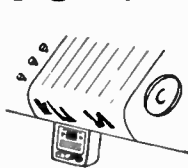
* Recommended for 24 volt battery systems.

ACCESSORIES

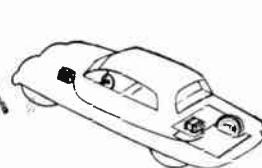
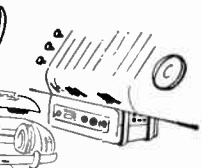
for 6, 12, and 28 Volt D.C. Input Inverters.



REMOTE CONTROL UNIT — for under-dash mounting permitting installation of Inverter in auto-trunk compartment. Dealer Price \$5.97



MOUNTING BRACKETS — to securely mount Inverter in trunk compartment of car or under-dash, as illustrated. Dealer Price \$3.30 pr.



EXTENSION CABLES — to provide additional cable lengths for installation of Inverter in trunk compartment. Dealer Price \$6.43 pr.

JOBBER'S ATTENTION: See Page 1030 in this ATR Section and Page 646 in Section 1900 for your Catalog Needs!

ATR

PORTABLE – Plug-in Type INVERTERS

Specially Designed for Operating Standard A.C. Dictating Machines, Record Players, Incandescent Lamps, Electric Razors, Electronic Test Equipment, and Other Small Electrical and Electronic Devices from D.C. Voltages in Automobiles, Buses, Trucks, Boats, Planes, Trains, and D.C. Districts.

ATR Portable Inverters are light-weight plug-in units for applications as recommended above. These Inverters feature instant starting, frequency stability, and high efficiency and reliability. Inverters have partial RF filtering which is only suitable for small insensitive type radios. For sensitive radio sets, ATR Universal Inverters, catalog sheet 657U, must be used. The 6 and 12-volt units are equipped with cigarette lighter cord set to plug into dash receptacle; whereas, the other higher input voltage units are equipped with standard two-blade plug-in cord sets. With ATR Inverters the need for special equipment is eliminated. They are designed for quiet, long-life operation. All ATR Models indicated are equipped with ATR plug-in Inverter Vibrators. Models RME and RMF come equipped with a four-point voltage regulator which makes possible the correct output voltage for minimum to maximum loads. The battery current consumption required is normally less than that drawn by one ordinary automobile headlight. The operating efficiency is approximately 75%. To figure battery current consumption see catalog sheet 657U. These Inverters are recommended only for use with loads having power factors in excess of 80% and should be used only for the applications as outlined above and on the reverse side of this sheet. These Portable Inverters are not recommended for tape recorder operation, except as specified in (2) below.



Illustrates ATR Mighty Midget (DME) Model Inverter having Cigarette Lighter Plug Attachment.



Illustrates ATR Medium (RME and RMF) Model Inverter having Four-Point Voltage Regulator and Cigarette Lighter Plug Attachment.

EASY TO INSTALL

EASY TO OPERATE



Illustrates Under-Dash Mounting for ATR Models RME and RMF. See Page 942 for available accessories.

Ideal for Emergency Lighting Applications for Civil Defense, Red Cross, Rescue Work, etc., Simply Using Extension Cords.

| TYPE | INPUT D.C. VOLTS | A.C. OUTPUT 60 CYCLES | OUTPUT WATTAGE | | SHIPPING WEIGHT | DEALER PRICE |
|-----------------|------------------|-----------------------|----------------|-------|-----------------|--------------|
| | | | Int. | Cont. | | |
| 6-DME (1) | 6 | 110 Volts | 40 | 30 | 5 lbs. | \$16.63 |
| 6C-DME (1) | 6/12 | 110 | 40 | 30 | 5 | 19.30 |
| 6-RMF (2) | 6 | 110 | 80 | 60 | 12 | 33.00 |
| 6C-RMF (2) | 6/12 | 110 | 80 | 60 | 12 | 36.64 |
| 12-DME (1) | 12 | 110 | 50 | 40 | 5 | 16.63 |
| 12T-RME (2) (3) | 12 | 110 | 125 | 90 | 12 | 33.00 |
| *28-RME (2) | 28 | 110 | 100 | 80 | 12 | 46.34 |
| 32-RME (2) | 32 | 110 | 100 | 80 | 12 | 46.34 |
| 110-RME (2) | 110 | 110 | 150 | 100 | 12 | 39.67 |

* Recommended for 24-Volt Battery Systems.

For Inverters having larger or smaller output capacities, or for operation on other D.C. input voltages, please consult available ATR Inverter catalog sheets.

All models designated above are housed in attractively finished grey-hammerloid metal cabinets. Dimensions of Medium (RME and RMF) Model Inverters, 3 $\frac{3}{8}$ " x 8" x 3 $\frac{3}{4}$ "; shipping weight, 12 lbs. Dimensions of Mighty Midget (DME) Model Inverters, 5 $\frac{1}{4}$ " x 4 $\frac{3}{4}$ " x 2 $\frac{3}{4}$ "; shipping weight, 5 lbs. For correct replacement vibrator, consult Inverter Vibrator Guide.

- (1) These Inverters primarily recommended for Edison VP dictating machines. May also be used with Model 200 Soundscriber (with engine of car not running).
- (2) Primarily recommended for Dictaphone's Time Master, Gray Audograph and DeJux Stenorette dictating machines, or other similar types. Also, highly recommended for Norelco Tape Recorder Model EL-3516 and Gelsolo Model G255-S.
- (3) THIS INVERTER SPECIALLY DESIGNED AND RECOMMENDED ALSO FOR USE WITH RCA 8 $\frac{1}{2}$ " PORTABLE TV SET OR G.E. 9" PORTABLE TV SET IN AN AUTOMOBILE.

JOBBER'S ATTENTION: See Page 1030 in this ATR Section and Page 646 in Section 1900 for your Catalog Needs!



EMERGENCY LIGHTING AND POWER UNITS

Completely Automatic Standby-Power Units Specially Designed to Permit the Instantaneous Continued Operation of Critical Lighting Equipment, PA Systems, Amplifiers, Intercom Systems, Burglar Alarms, Fire Alarms, Synchronous Electric Clocks, Electric Time and Recording Clocks, Incubators, Gas Valves, Telephone and Test Equipment, and Similar Critical Devices in the Event of 115 Volt AC Commercial Power Line Failure. For Use: In Hospitals, Banks, Hotels, Theatres, Factories, Office Buildings, Schools, Homes, and Many Other Areas of Operation.

ATR Emergency Lighting and Power Units are actually a combination of an ATR Inverter, automatic Battery Charger, and transfer panel. These Emergency Standby-Power Units are especially recommended for applications as mentioned above and feature RF frequency interference suppression, instant starting, frequency stability, and built-in power factor corrector. ATR Emergency Lighting and Power Units provide instantaneous operation of the equipment being protected, within approximately 1/20th of a second. They are designed for quiet long life operation at high efficiency and maximum reliability. All models indicated are equipped with ATR heavy duty plug-in type Inverter Vibrators. These Inverters also come equipped with four-point voltage regulators which make possible the correct output voltage for the power load being protected. These Inverters are recommended for use only with loads having power factors in excess of 70%. Additional external power factor correction is required in order to operate lower power factor loads as low as 50%.

The ATR Charger portion is completely automatic and will maintain the storage battery at full charge, with minimum gassing, from regular 115-volt AC 60 cycle power line. In the event of power line failure, the storage battery, which has been kept fully charged for this purpose from the regular power line, is connected automatically to the lamps, or to the Inverter, or both. The Inverter then supplies power automatically to the load being protected. When the commercial power is restored, the transfer unit automatically switches the "protected load" to commercial power and turns the Inverter and lights off. At this point, depending on the state of charge of the battery, the battery charger will deliver approximately 6-3 amperes to a 6-volt battery (or less to a 12-volt battery) for fast recharging. As soon as battery reaches full charge, the charger will automatically switch to a trickle charge of 100-150 milliamperes (adjustable) to maintain this full charge.

SERIES ETA



Illustrates ATR Emergency Lighting and Power Unit, Model ETS complete with lamps.

| TYPE | *STORAGE BATTERY INPUT | A.C. OUTPUT 60 CYCLES | OUTPUT WATTAGE INT. | WATTAGE CONT. | DEALER NET PRICE COMPLETE WITH LAMPS |
|----------|------------------------|-----------------------|---------------------|---------------|--------------------------------------|
| 661-ETM | 6-volts | 110-volts | 80 | 60 | \$102.67 |
| 662-ETS | 6 | 110 | 100 | 80 | 119.67 |
| 663-ETH | 6 | 110 | 150 | 125 | 136.00 |
| 1232-ETS | 12 | 110 | 125 | 100 | 119.67 |
| 1233-ETH | 12 | 110 | 175 | 150 | 136.00 |
| 1234-ETJ | 12 | 110 | 250 | 200 | 153.00 |

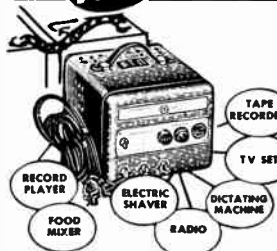
Above models come equipped with lamps, as illustrated. These lamps operate directly from storage battery. Each ATR model above permits maximum flexibility in its utilization; that is, lamps and power unit may be operated all at the same time or individually as the user may select. Models as above are available without lamps and, if so desired, please specify "less lamps."

All models designated above are housed in attractively finished grey-hammerloid metal cabinets. Dimensions of ETM Model complete with lamps, 11 $\frac{3}{8}$ " x 16" x 15"; shipping weight, 29 $\frac{1}{2}$ lbs. Dimensions of ETS Model complete with lamps, 11 $\frac{3}{8}$ " x 16" x 16 $\frac{1}{4}$ "; shipping weight, 36 $\frac{1}{2}$ lbs. Dimensions of ETH Model complete with lamps, 11 $\frac{3}{8}$ " x 16" x 18"; shipping weight, 42 $\frac{1}{2}$ lbs. Dimensions of ETJ Model complete with lamps, 12 $\frac{7}{8}$ " x 16" x 19 $\frac{3}{4}$ "; shipping weight, 50 $\frac{1}{2}$ lbs. All of the above models "less lamps" have similar dimensions except the 16" dimension is changed to 11" and the shipping weight is 4 $\frac{1}{2}$ lbs. less.

* Recommend 100 ampere-hour lead-acid type automobile storage battery for general use; however, for minimum maintenance, we recommend 50-100 ampere-hour nickel-cadmium type battery. Both types are available direct from storage battery supplier.

JOBBER'S ATTENTION: See Page 1030 in this ATR Section and Page 646 in Section 1900 for your Catalog Needs!

ATR Inverters, Vibrators, "A" Eliminators, etc.



ATR DC TO AC UNIVERSAL INVERTERS

New, universal inverters for operating 110-v., 60 cycle A.C. equipment from DC voltages in autos, buses, trucks, boats, trains, planes and D.C. districts. Designed especially for standard 110-volt A.C. tape recorders, TV sets, radios, PA systems, electric razors, test equipment, etc. Units are carefully engineered and ruggedly constructed to provide long life operation. All feature complete R.F. interference suppression and exceptional frequency stability. Have operating efficiency in excess of 75%. Four-point voltage regulator corrects output voltage for minimum and maximum loads, and also helps compensate for input voltages lower or higher than normal. Inverters are recommended for use with loads having power factors in excess of 70%. Built-in toggle switch selects most efficient operation for use with TV sets or tape recorders. Inverters are not recommended for use with large motor driven appliances such as refrigerators, washing machines, etc. All have ON-Off switches. Housed in attractive gray hammered-look metal cabinet with convenient leather carrying strap. Sizes: Standard Model RSF, 8 1/2 x 9 1/2 x 5 1/2"; Heavy-Duty Model RHG, 11 1/2 x 11 1/2 x 8 1/2"; Extra-Heavy-Duty Model RHJ, 11 1/2 x 12 1/2 x 8 1/2". With battery clips for instant connection to power source. Models with "P" suffix equipped with adapter cord for use in auto cigarette lighter receptacles. *Recommended for 24 volt battery operation. Before ordering, check wattage of equipment with which inverter will be used.

| Stock No. | Mfr's Type | Input D.C. Volts | A.C. Output 60 Cycles | Output Watt. Int. | Cont. | Shipping Weight | List Price | Net Price |
|-----------|------------|------------------|-----------------------|-------------------|-------|-----------------|------------|-----------|
| | 6U-RSF | 6 | 110 Volts | 100 | 80 | 22 lbs. | \$75.00 | \$50.00 |
| | 6U-RSF-P | 6 | 110 | 100 | 80 | 22 | 75.00 | 50.00 |
| | 6U-RHG | 6 | 110 | 125 | 100 | 27 | 99.50 | 66.34 |
| | 6U-RSJ | 6 | 110 | 175 | 150 | 37 | 125.00 | 83.34 |
| | 12U-RSF | 12 | 110 | 125 | 100 | 22 | 75.00 | 50.00 |
| | 12U-RSF-P | 12 | 110 | 125 | 100 | 22 | 75.00 | 50.00 |
| | 12U-RHG | 12 | 110 | 175 | 150 | 27 | 99.50 | 66.34 |
| | 12U-RSJ | 12 | 110 | 250 | 200 | 37 | 125.00 | 83.34 |
| | 28U-RSF | 28 | 110 | 125 | 100 | 27 | 99.50 | 59.97 |
| | 28U-RHG | 28 | 110 | 175 | 150 | 27 | 119.50 | 79.67 |
| | 28U-RSJ | 28 | 110 | 250 | 200 | 37 | 145.00 | 96.67 |
| | 32U-RSF | 32 | 110 | 150 | 100 | 22 | 89.95 | 59.97 |
| | 32U-RHG | 32 | 110 | 200 | 180 | 30 | 105.75 | 70.50 |
| | 32U-RSJ | 32 | 110 | 325 | 225 | 37 | 145.00 | 96.67 |
| | 50U-RSF | 50 | 110 | 150 | 100 | 22 | 89.95 | 59.97 |
| | 50U-RHG | 50 | 110 | 225 | 200 | 27 | 119.50 | 79.67 |
| | 110U-RSF | 110 | 110 | 250 | 150 | 22 | 75.00 | 50.00 |
| | 110AU-RHG | 110 | 110 | 325 | 250 | 27 | 89.95 | 59.97 |
| | 110BU-RHG | 110 | 110 | 450 | 350 | 30 | 105.75 | 70.50 |
| | 110U-RSJ | 110 | 110 | 600 | 400 | 37 | 145.00 | 96.67 |
| | 220U-RSF | 220 | 110 | 250 | 150 | 22 | 79.50 | 53.00 |
| | 220U-RHG | 220 | 110 | 325 | 250 | 27 | 99.50 | 66.34 |
| | 220U-RSJ | 220 | 110 | 500 | 300 | 37 | 155.00 | 103.34 |



PORTABLE PLUG-IN TYPE INVERTERS

Specially designed for operating standard A. C. dictating machines, record players, incandescent lamps, electric razors, electronic test equipment and other small electrical and electronic devices from D. C. voltages in automobiles, buses, trucks, boats, planes, trains, and D. C. districts.

Lightweight inverters for operating 110 v. A.C. equipment from DC voltage sources. Feature excellent frequency stability and high efficiency. 6 and 12-volt units plug into cigarette lighter receptacle of any vehicle; others are equipped with standard 2-prong plugs. All are designed especially for use with dictating machines; record players, electric razors, test equipment, etc. Not recommended for tape recorders and large motor driven appliances such as refrigerators, washing machines, etc. Gray Hammered look case with leather carrying strap. Sizes: DME, 5 1/4 x 4 3/4 x 2 3/4"; RME and RMF, 8 1/2 x 8 3/4 x 3 1/4". *Recommended for 24-volt operation. Check wattage rating of equipment before ordering. RME/RMF Model Inverters equipped with voltage regulator.

| Stock No. | Mfr's Type | Input D.C. Volts | A.C. Output 60 Cycles | Output Watt. Int. | Cont. | Shipping Weight | List Price | Net Price |
|-----------|-----------------|------------------|-----------------------|-------------------|-------|-----------------|------------|-----------|
| | 6-DME (1) | 6 | 110 Volts | 40 | 30 | 5 lbs. | \$24.95 | \$16.63 |
| | 6C-DME (1) | 6/12 | 110 | 40 | 30 | 5 | 28.95 | 19.30 |
| | 6-RMF (2) | 6 | 110 | 80 | 60 | 12 | 49.50 | 33.00 |
| | 6C-RMF (2) | 6/12 | 110 | 80 | 60 | 12 | 54.95 | 36.64 |
| | 12-DME (1) | 12 | 110 | 50 | 40 | 5 | 24.95 | 16.63 |
| | 12T-RME (2) (3) | 12 | 110 | 125 | 90 | 12 | 49.50 | 33.00 |
| | 28-RME (2) | 28 | 110 | 100 | 80 | 12 | 69.50 | 46.34 |
| | 32-RME (2) | 32 | 110 | 100 | 80 | 12 | 69.50 | 46.34 |
| | 110-RME (2) | 110 | 110 | 150 | 100 | 12 | 59.50 | 39.67 |

(1) These Inverters primarily recommended for Edison VP dictating machines. May also be used with Model 200 Sound-scriber (with engine of car not running).
 (2) Primarily recommended for Dictating Time Master, DeJury Stenorette, and Gray Audograph dictating machines or other similar types. Also recommended for use with Norelco tape recorder Model EL-3516 and Geloso Model G 255-S tape Recorder.
 (3) This Inverter specially designed and recommended also for use with RCA 8 1/2" portable TV set or G.E. 9" portable TV set in an automobile.



ATR VIBRATORS

FOR ALL AUTO RADIO SETS SINCE 1954 USE ONE OF THE ATR VIBRATORS LISTED BELOW ... ATR VIBRATORS FEATURE

Ceramic Stack Spacers with Two-Block Stack construction.

Instant Starting—as a result of highly efficient magnetic circuit with formed base for more uniform operation on both high and low voltages.

Large Oversize Tungsten Contacts having Full Wiping Action—for greater reliability and longer life.

Perforated Reed of Highest Quality Swedish Spring Steel.

Highest Precision Construction and Workmanship—Practically all parts used are held to within a tolerance of 0.0005 of inch.

Value Plus—as readily evidenced by the Larger Contacts, Ceramic Spacers and Precision Construction and Workmanship. Available in TEN-PAK.

ATR No. 1400 (Bulk), 4-Prong, 6-Volt For All 6-Volt Sets Since 1954. Net \$1.19

ATR No. 1843 (Bulk), 3-Prong, 12-Volt For All 12-Volt General Motors Since 1954. Net \$1.25

ATR No. 1843 also used in following automobiles: 1956 Ford (Philco), Lincoln (Bendix), and Mercury (Bendix); 1956 Chrysler (Philco); 1955-57 Packard; 1956-57 Plymouth (Philco); 1956 Studebaker (Philco) and 1957 Mercury (Philco).

ATR No. 1840 (Bulk), 4-Prong, 12-Volt For 12 Volt Cars other Than GM Since 1954. Net \$1.25



ATR ELECTRONIC TUBE PROTECTOR

A "MUST" FOR EVERY TV HOME! WILL DOUBLE OR TRIPLE THE LIFE OF ALL TYPES OF ELECTRONIC TUBES, INCLUDING TV PICTURE TUBE. Automatic in operation, for use with any electronic equipment having input wattage of 100 to 300 watts. Fuse protected; rugged construction; and enclosed in interior decorator's golden brown hammered-look metal case. Available in two models. Our Floor Model 300 is 4" x 2 1/2" x 2 3/4" and weighs 2 lbs. Has 6 ft. cord set to plug into wall socket. Wall Model 250 is 1-15/16" OD x 3 3/8" in length and plugs directly into wall socket. Shipping weight is 1 lb.

(115 volt A.C.) —Wall Model 250 Net \$2.63

(115 volts A.C.) —Floor Model 300 Net \$3.30



ATR SHAV-PAKS

Every man should have this lightweight ATR inverter in his car for that "Keep Clean-Shaved Look." Will operate standard A.C. Electric Shavers from your CAR or Boat*. Complete with 3 ft. cord set. Plugs into cigarette lighter receptacle. Fuse protected; rugged construction, and attractively housed in gray hammered-look finish steel case. Size 4" x 2 1/2" x 2 3/4". Shipping weight 2 1/2 lbs.

Model 6-SPB (6 volt) Net \$7.97
 Model 12-SPB (12 volt) Net \$7.97

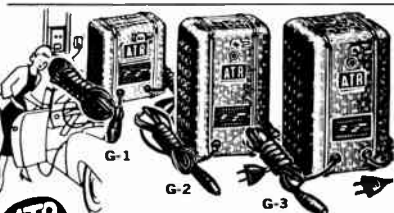


ATR "A" BATTERY ELIMINATOR

FOR DEMONSTRATING AND TESTING TRANSISTOR OR VIBRATOR-TYPE AUTO RADIOS. Designed for testing D.C. Electrical Apparatus on regular 110 volt A. C. lines... equipped with full-wave dry disc-type rectifier, assuring noiseless, interference-free operation. Fully Automatic and Fool-Proof! has voltmeter, ammeter, and 8-position voltage control. Fuse protected, and housed in heavy gauge gray hammered-look metal case. 6 ft. cord set included. Size: Model 610C-EL11, 6 1/2" x 9 1/2" x 8 1/2"—shipping weight 22 lbs.; Model 620C-EL11, 6 1/2" x 12 1/2" x 8 1/2"—shipping weight 33 lbs.

IDEAL AS A POWER SUPPLY FOR MODEL RAILROAD TRAINS, RADIO SETS, ELECTRO PLATING OUTFITS, AND OTHER 6 OR 12 VOLT, D.C. EQUIPMENT. MAY ALSO BE USED AS A BATTERY CHARGER.

—Model 610C-EL11 (6 volt at 10 amps. or 12 volt at 6 amps.) Net \$49.95
 —Model 620C-EL11 (6 volt at 20 amps. or 12 volt at 10 amps.) Net \$66.95



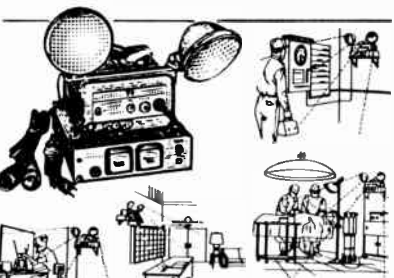
ATR AUTO PLUG-IN, HOME-TYPE PORTABLE BATTERY CHARGERS

No installation... just plug into cigarette lighter receptacle! Makes motor starting easy! Keeps your car battery fully charged in your own garage. Operates directly from standard 110 volt A.C. Household Current. Available in three portable sizes for both 6 or 12 volt cars. Light in weight, rugged in construction, economical, and built to last. Each battery charger is housed in gray hammered-look metal case. Complete with cord sets. Size of G1 is 5 1/2" x 4 1/2" x 2 3/4"—shipping weight is 6 lbs.; G2 is 8 1/2" x 5 1/2" x 3 1/2"—shipping weight is 8 lbs.; and G3 is 8 1/2" x 5 1/2" x 5 1/2"—shipping weight is 10 lbs.

(G-1) 6 or 12 volt —Model 612CA4 (4 amp.) Net \$19.46

(G-2) 6 or 12 volt —Model 612CA6 (6 amp.) Net \$22.46

(G-3) 6 or 12 volt —Model 612CA10 (10 amp.) Net \$27.71



Illustrates ATR Emergency Lighting and Power Unit, Model ETS complete with lamps.

ATR EMERGENCY LIGHTING and POWER UNIT

Completely Automatic Standby-Power Units Specially Designed to Permit the Instantaneous Continued Operation of Critical Lighting Equipment, PA Systems, Amplifiers, Intercorn Systems, Burglar Alarms, Fire Alarms, Synchronous Electric Clocks, Electric Time and Recording Clocks, Incubators, Gas Valves, Telephone and Test Equipment, and Similar Critical Devices in the Event of 115 Volt A.C. Commercial Power Line Failure. For Use in Hospitals, Banks, Hotels, Theatres, Factories, Office Buildings, Schools, Homes, and Many Other Areas of Operation.

| Type | *Storage Battery Input | A.C. Output 60 Cycles | Output Wattage Int. Cont. | Net Weight Lamps | |
|----------|------------------------|-----------------------|---------------------------|------------------|--------|
| 661-ETM | 6-volts | 110-volts | 80 | \$102.67 | |
| 662-ETS | 6 | 110 | 100 | 80 | 119.67 |
| 663-ETH | 6 | 110 | 150 | 126.00 | |
| 1232-ETH | 12 | 110 | 125 | 100 | 119.67 |
| 1233-ETH | 12 | 110 | 175 | 150 | 136.00 |
| 1234-ETJ | 12 | 110 | 250 | 200 | 153.00 |

For Units Without Lamps Deduct \$13.33 Net

Associated Specialties Co.

OREFIELD, PENNSYLVANIA



ELECTRONICALLY REGULATED D.C. CONSTANT VOLTAGE POWER SUPPLIES

RELAY RACK MOUNTING TYPES \$52.50
 MODEL 1-BK (BLACK RIPPLE FRONT PANEL)
 MODEL 1-GR (GRAY RIPPLE FRONT PANEL)

Input: 105-125 volts AC. 50-60 cycles.
DC Output Voltage: Continuously variable from 200 to 325 volts DC for load currents 0 to 100 ma.
Regulation of DC Voltage: Better than 1% for loads of 0 to 100 ma. and line voltage variations from 105 to 125 volts.
Ripple Output: Less than 10 millivolts rms.
Isolated Output: Both positive and negative sides of the output are isolated from ground. Either side may be grounded or the output may be left floating.
AC Output for Filaments: An isolated AC voltage of 6.3 volts AC at 3 amperes is available at the output terminal connections.
Overload Protection: A fuse mounted on the front panel protects supply against external overloads or internal failure.

Input and Output Connections: All input and output connections are made to a single terminal strip conveniently located on the rear of the chassis.

Dimensions: Standard 19" relay rack mounting. Panel Width: 19 inches; Panel Height: 5 1/4 inches; Depth Behind Panel: 7 1/4 inches.

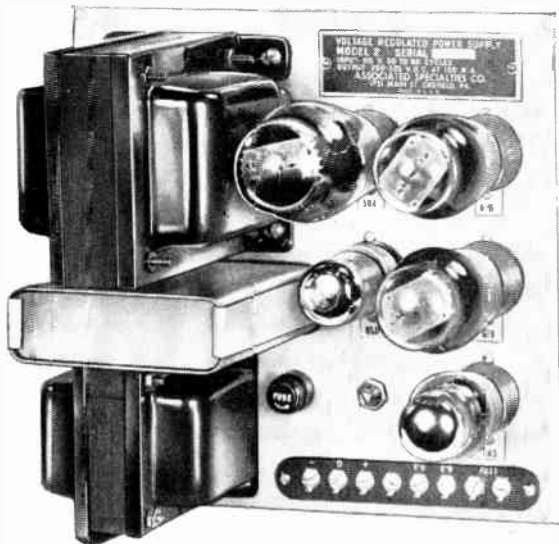
Cabinet Finish: Standard Black ripple enamel.

Controls: Rear Chassis—DC output voltage control. Front Panel—Pilot light, input power switch, and fuse.

Weight: Net weight is approximately 20 pounds.

High Quality Components: Only components of the highest quality are used in this equipment insuring you years of trouble-free dependable operation.

Accessibility: By removing two small screws, the front panel may be removed while the supply stays mounted on a relay rack or cabinet. This allows quick and easy inspection.



MODEL 2 SUB-CHASSIS MOUNTING \$49.50

Sub-chassis mounting type regulated power supplies are designed to save space and money. They can be mounted on a chassis along with other components and thereby save space which would be used by a relay rack mounting supply. Savings are made in the size and cost of the cabinet required for a job along with the lower cost of the sub-chassis mounting supplies.

SAME AS MODEL 1 EXCEPT

Dimensions: 9" wide, 8 3/4" long, 4 3/4" high above chassis, 1 3/4" clearance required below chassis. Size of cut-out required, 8 1/2" wide x 8" high. Location of four mounting holes: 8 5/8" wide x 3 1/2" high.

Chassis Finish: Aluminum.

Controls: DC output voltage control adjustable from the top side of the chassis.

Weight: Net weight is approximately 14 1/2 lbs.



MODEL 3 CABINET MOUNTING \$69.50

An ideal unit for bench work or assembly into equipment.

SAME AS MODEL 1 EXCEPT

Input Connections: A line cord at rear of cabinet.

Output Connections: 5 way binding posts.

Dimensions: 5" wide, 7" high, 16" deep.

Panel Finish: Aluminum.

Cabinet Finish: Gray enamel.

Controls: D.C. output voltage on front panel.

Meters: Output voltage.

Weight: Net weight is approximately 20 pounds.

MODEL P2 PANEL \$9.00

Mounts two Model 2 power supplies side by side in a 19 inch relay rack space 8 3/4" high.

| OUTPUT | MOUNTING | SIZE | COLOR | MODEL | PRICE |
|---|----------------------|--------------|------------------|-------|---------|
| 200-325 V.D.C., 0-100 M.A. REGULATION LINE BETTER THAN 1% LOAD BETTER THAN 1% RIPPLE LESS THAN 10 MILLIVOLTS R.M.S. | RACK MOUNTED | SEE ABOVE | GRAY COVER | 1-GR | \$52.50 |
| | RACK MOUNTED | SEE ABOVE | BLACK COVER | 1-BK | \$52.50 |
| | SUB-CHASSIS MOUNTING | SEE ABOVE | ALUMINUM CHASSIS | 2 | \$49.50 |
| 75-200 V.D.C., 0-100 M.A. REGULATION LINE BETTER THAN 1% LOAD BETTER THAN 1% RIPPLE LESS THAN 5 MILLIVOLTS R.M.S. | CABINET | SEE ABOVE | GRAY | 3 | \$69.50 |
| | RACK MOUNTED | SAME AS 1-GR | GRAY COVER | 11GR | \$69.50 |
| | RACK MOUNTED | SAME AS 1-BK | BLACK COVER | 11-BK | \$69.50 |
| | SUB-CHASSIS MOUNTING | | ALUMINUM CHASSIS | 12 | \$66.50 |
| | CABINET | | GRAY | 13 | \$79.50 |

BURGESS BATTERIES



P6



2U6



Hg-9



2R



C5



XX45

| BURGESS Number | NEDA Numbers | Other | Volts | Terminal Type | Overall Dimensions | | | Unit Package Quantities | Weight of Unit Package in Pounds | List Price Each |
|---|--------------|-------|---------|---------------|--------------------|---------|---------|-------------------------|----------------------------------|-----------------|
| | | | | | L | W | H | | | |
| BURGESS ACTIVATORS FOR TRANSISTOR CIRCUITS | | | | | | | | | | |
| NE | | | 1½ | Flashlight | 7/16 (diam.) | 1 11/64 | | 6 | 1/8 | \$.125 |
| XX9 | 1900 | 239 | 9, 13½ | Socket | 1 19/32 | 2 29/32 | 2 17/32 | 1 | 1/8 | 1.50 |
| D6 | 1603 | 276 | 9 | Snap Type | 2 7/16 | 2 | 3 3/32 | 1 | 1 | 1.80 |
| 2N6 | 1602 | 246 | 9 | Snap Type | 1 3/8 | 1 3/8 | 2 3/4 | 1 | 3/10 | 1.85 |
| 4D4 | 1400 | 274 | 6 | Snap Type | 2 17/32 | 2 | 7 5/16 | 1 | 2 1/2 | 4.75 |
| 2U6 | 1604 | 216 | 9 | Snap Type | 1 | 3 39/64 | 1 7/8 | 12 | 7/8 | .69 |
| A4 | | | 6 | Flat Contacts | 1 19/32 | 1 19/32 | 2 11/32 | 1 | 1/4 | 1.00 |
| D6PI | 1601 | 2506 | 3, 6, 9 | Socket | 2 19/32 | 1 1/16 | 7 7/32 | 1 | 1 3/8 | 2.50 |
| C6X | 1612 | 2356 | 9 | Snap Type | 2 7/16 | 1 1/2 | 6 1/16 | 1 | 5/8 | 1.60 |
| P6 | 1600 | 226 | 9 | Snap Type | 1 (diam.) | 1 15/16 | | 12 | 1 3/8 | .89 |
| D5 | 26 | 707 | 7½ | Snap Type | 2 9/16 | 2 | 2 23/32 | 1 | 7/8 | 1.50 |
| 130 | 14 | 635 | 1½ | Flashlight | 6 3/64 (diam.) | 1 15/16 | | 12 | 1 3/8 | .25 |
| 230 | 13 | A100 | 1½ | Flashlight | 1 21/64 (diam.) | 2 25/64 | | 24 | 5 1/4 | .25 |
| 930 | 15 | 1015 | 1½ | Flashlight | 3 5/64 (diam.) | 1 3/32 | | 12 | 1/2 | .25 |
| M6 | 1605 | 266 | 9 | Snap Type | 1 13/16 | 1 13/16 | 2 1/16 | 1 | 3/8 | 1.50 |
| D6S | 1608 | 2761 | 9 | Socket | 2 1/4 | 1 1/4 | 7 29/32 | 1 | 1 1/8 | 1.95 |
| 2Z3 | 1610 | 243 | 4½ | Snap Type | 1 3/8 | 1 3/8 | 2 3/4 | 1 | 3 1/10 | 1.59 |
| Y6 (YL6) | 1606 | E177 | 9 | Snap Type | 3 5/8 | 3 5/8 | 1 9/10 | 12 | 1/2 | 1.20 |
| L6 | 1611 | 206 | 9 | Flat Contacts | 4 7/64 (diam.) | 1 3/32 | | 12 | 1 | .75 |
| 2MN6 | | 216 | 9 | Snap Type | 1 | 3 39/64 | | 12 | 7/8 | .98 |
| PM6 | | 226 | 9 | Snap Type | 1 (diam.) | 1 15/16 | | 6 | 5/8 | 1.19 |

BURGESS MERCURY ACTIVATORS
Information on additional Mercury Batteries not listed below is available.

| | | | | | | | | | | |
|---------|------|--|------|--------|-----------------|---------|--------|----|------|-------|
| Hg-1 | | | 1.4 | Flat | 5/8 (diam.) | 2 1/32 | | 4 | .13 | .59 |
| Hg-1R | E1 | | 1.35 | Flat | 5/8 (diam.) | 2 1/32 | | 4 | .13 | .65 |
| Hg-3R | E3 | | 1.35 | Flat | 1 (diam.) | 2 1/32 | | 4 | .30 | .80 |
| Hg-4R | E4 | | 1.35 | Flat | 1 13/64 (diam.) | 2 1/32 | | 4 | .45 | 1.05 |
| Hg-9 | E9 | | 1.4 | Flat | 1 17/32 (diam.) | 1 31/32 | | 12 | .90 | .75 |
| Hg-12 | | | 1.4 | Flat | 5/8 (diam.) | 2 | | 2 | .25 | 1.10 |
| Hg-12R | E12 | | 1.35 | Flat | 5/8 (diam.) | 2 | | 2 | .25 | 1.25 |
| Hg-42R | E42 | | 1.35 | Flat | 1 13/64 (diam.) | 2 5/8 | | 1 | .50 | 2.75 |
| H115R | E115 | | 6.75 | Flat | 4 3/64 (diam.) | 1 21/64 | | 2 | .15 | 2.50 |
| H126 | E126 | | 8.4 | Flat | 4 1/64 (diam.) | 1 65/64 | | 12 | 1.00 | 1.25 |
| H132R | E132 | | 2.7 | Flat | 4 3/64 (diam.) | 1 5/16 | | 2 | .15 | 1.35 |
| H133 | E133 | | 4.2 | Flat | 2 1/32 (diam.) | 2 | | 12 | 1.20 | 1.50 |
| H133R | | | 4.05 | Flat | 2 1/32 (diam.) | 2 | | 2 | .20 | 1.75 |
| H134R | E134 | | 5.4 | Flat | 4 3/64 (diam.) | 2 5/8 | | 2 | .25 | 2.15 |
| H135R | E135 | | 6.75 | Flat | 4 3/64 (diam.) | 3 3/32 | | 2 | .30 | 2.80 |
| H136R | E136 | | 8.1 | Flat | 4 3/64 (diam.) | 3 15/16 | | 2 | .35 | 3.20 |
| H146 | E146 | | 8.4 | Snap | 1 | 1 19/32 | 1 7/8 | 6 | .50 | 1.50 |
| H153R | E153 | | 4.05 | Flat | 3 1/32 (diam.) | 1 45/64 | | 2 | .075 | 1.50 |
| H163 | E163 | | 4.2 | Flat | 2 1/32 (diam.) | 1 5/16 | | 2 | .15 | 1.50 |
| H164 | E164 | | 5.6 | Flat | 2 1/32 (diam.) | 1 3/4 | | 12 | .80 | 1.75 |
| H165 | E165 | | 7.0 | Flat | 2 1/32 (diam.) | 2 15/64 | | 2 | .20 | 2.25 |
| H177 | E177 | | 9.8 | Snap | 3 5/64 (diam.) | 1 29/32 | | 12 | .20 | 1.75 |
| H233 | E233 | | 4.2 | Flat | 1 1/64 (diam.) | 1 31/32 | | 1 | .20 | 2.65 |
| Hg-312 | E312 | | 1.4 | Flat | 5/16 (diam.) | 9/64 | | 6 | .024 | .35 |
| Hg-400R | E400 | | 1.35 | Flat | 2 9/64 (diam.) | 9/64 | | 6 | .024 | .35 |
| Hg-401 | E401 | | 1.4 | Flat | 2 9/64 (diam.) | 1 7/8 | | 3 | .09 | .50 |
| Hg-450R | E450 | | 1.35 | Flat | 2 9/64 (diam.) | 9/16 | | 4 | .01 | .50 |
| Hg-502R | E502 | | 1.35 | Flat | 1 17/32 (diam.) | 1 31/32 | | 2 | .16 | .96 |
| Hg-520 | E520 | | 1.40 | Flat | 1 1/2 (diam.) | 9/32 | | 6 | .22 | .25 |
| Hg-601R | E601 | | 1.35 | Flat | 5/8 (diam.) | 1 5/64 | | 2 | .16 | 1.00 |
| Hg-625 | | | 1.4 | Flat | 5/8 (diam.) | 1/4 | | 4 | .05 | .45 |
| Hg-625R | E625 | | 1.35 | Flat | 5/8 (diam.) | 1/4 | | 4 | .05 | .50 |
| Hg-630 | E630 | | 1.4 | Flat | 5/8 (diam.) | 1/4 | | 4 | .05 | .45 |
| Hg-630R | | | 1.35 | Flat | 5/8 (diam.) | 1/4 | | 4 | .05 | .50 |
| Hg-640 | E640 | | 1.4 | Flat | 5/8 (diam.) | 7/16 | | 4 | .15 | .45 |
| Hg-675 | E675 | | 1.4 | Flat | 2 9/64 (diam.) | 1 3/64 | | 6 | .02 | .40 |
| 302157 | | | 1.35 | Socket | 2 7/16 | 1 3/16 | 4 3/16 | 1 | .844 | 15.75 |
| 303145 | | | 8.4 | Snaps | 2 1/8 | 1 3/16 | 4 3/8 | 1 | .551 | 9.10 |

BURGESS PORTABLE RADIO "A"

| | | | | | | | | | | |
|------|----|------|----|---------------|-----------------|---------|---------|----|-------|------|
| Z4 | 2 | 724 | 6 | Flat Contacts | 1 3/16 | 1 3/16 | 2 1/32 | 1 | 1/5 | 1.00 |
| F3 | 3 | 736 | 4½ | Socket | 4 | 1 1/16 | 4 1/8 | 1 | 1 | 1.35 |
| 4F | 4 | 742 | 1½ | Socket | 2 5/8 | 2 5/8 | 4 3/32 | 6 | 8 1/2 | 1.65 |
| F4P1 | 6 | 744 | 6 | Socket | 2 21/32 | 2 21/32 | 4 7/8 | 6 | 9 | 1.65 |
| G3 | 7 | 746 | 4½ | Socket | 4 1/16 | 1 7/8 | 4 11/16 | 1 | 1 1/5 | 1.50 |
| B5 | 8 | 713 | 7½ | Socket | 3 29/32 | 7/8 | 2 21/32 | 1 | 1/2 | 2.25 |
| C5 | 9 | 717 | 7½ | Socket | 2 7/32 | 1 15/16 | 3 3/32 | 6 | 4 3/4 | 1.50 |
| T5 | 10 | W360 | 7½ | Socket | 2 17/32 | 2 17/32 | 3 29/32 | 3 | 4 | 1.90 |
| 2R | 13 | 950 | 1½ | Flashlight | 1 21/64 (diam.) | 2 25/64 | | 48 | 11 | .20 |
| 2D | 18 | 720 | 1½ | Socket | 2 9/16 | 1 3/32 | 2 31/32 | 1 | 2 5/8 | 1.20 |
| D3 | 19 | 726 | 4½ | Socket | 3 7/8 | 1 3/16 | 2 15/16 | 6 | 4 1/2 | 1.35 |
| 21R | 20 | 964 | 1½ | Flashlight | 1 21/64 (diam.) | 4 1/8 | | 1 | 2 5/8 | .45 |

BURGESS BATTERIES

| BURGESS Number | NEDA Numbers | Other | Volts | Terminal Type | Overall Dimensions | | | Unit Package Quantities | Weight of Unit Package in Pounds | List Price Each |
|---|--------------|-------|-------|---------------|---------------------------------|---------------------------------|---------------------------------|-------------------------|----------------------------------|-----------------|
| | | | | | L | W | H | | | |
| BURGESS PORTABLE RADIO "B" BATTERIES | | | | | | | | | | |
| P45 | 211P | 477 | 67½ | Snap Type | 1 ²⁹ / ₃₂ | 1 | 5 ⁹ / ₃₂ | 6 | 3¾ | \$3.10 |
| XX45 | 200 | 467 | 67½ | Snap Type | 2¾ | 1 ¹¹ / ₃₂ | 3 ⁴³ / ₆₄ | 6 | 4½ | 3.50 |
| XX30 | ----- | 455 | 45 | Snap Type | 2 ¹⁷ / ₃₂ | 3 ³ / ₃₂ | 3 ¹¹ / ₃₂ | 6 | 3 ³ / ₁₀ | 2.75 |
| M30 | ----- | 482 | 45 | Socket | 3 ⁹ / ₁₆ | 1¾ | 5½ | 1 | 2 | 3.85 |
| K45 | 203 | 457 | 67½ | Snap Type | 2 ¹¹ / ₁₆ | 1 ⁵ / ₁₆ | 2¼ | 6 | 2½ | 3.45 |
| N60 | 204 | 490 | 90 | Snap Type | 3 ¹¹ / ₁₆ | 1 ⁹ / ₃₂ | 3 ¹⁹ / ₃₂ | 6 | 6 | 4.50 |
| XX50 | ----- | 437 | 75 | Snap Type | 1 ²⁷ / ₃₂ | 1 ⁵ / ₁₆ | 6 ³ / ₁₆ | 6 | 5¼ | 4.50 |
| U30 | 213 | 415 | 45 | Snap Type | 1 ³ / ₃₂ | 1 ⁹ / ₃₂ | 3 ¹⁷ / ₃₂ | 1 | ½ | 2.50 |
| P60 | 214 | 479 | 90 | Snap Type | 1 ²⁹ / ₃₂ | 1 | 7 ¹³ / ₃₂ | 6 | 5 | 3.95 |
| U10 | 208 | 411 | 15 | Flat Contact | 1 | ³⁹ / ₆₄ | 1 ¹ / ₁₆ | 1 | 1 oz. | 1.15 |
| U15 | 215 | 412 | 22½ | Flat Contact | 1 | ³⁹ / ₆₄ | 1 ³¹ / ₃₂ | 1 | 1 oz. | 1.50 |
| U20 | 210 | 413 | 30 | Flat Contact | 1 | ³⁹ / ₆₄ | 2 ¹⁷ / ₃₂ | 1 | 2 ozs. | 1.75 |
| UX45 | ----- | 416 | 67½ | Snap Type | 1 ⁷ / ₃₂ | 3 ³ / ₃₂ | 3 ³¹ / ₃₂ | 1 | ¼ | 2.95 |
| N60X | 216 | 495 | 90 | Snap Type | 1 ⁷ / ₈ | 1 ¹¹ / ₃₂ | 7 ¹ / ₈ | 1 | 1 | 4.95 |
| D30 | ----- | 487 | 45 | Socket | 5 ¹ / ₁₆ | 2 ³ / ₃₂ | 7 ⁵ / ₁₆ | 1 | 4½ | 4.95 |
| V45 | 200 | 468 | 67½ | Snap Type | 2 ³ / ₄ | 1 ¹¹ / ₃₂ | 3 ⁴³ / ₆₄ | 6 | 4½ | 3.50 |
| V60 | ----- | 90 | 90 | Snap Type | 3 ²³ / ₃₂ | 1 ⁹ / ₃₂ | 3 ¹ / ₁₆ | 6 | 8 | 4.50 |



F6A60



CD3



CD7



CD25



F2BP



F4BP



5308

BURGESS PORTABLE RADIO "A & B" BATTERIES

| | | | | | | | | | | |
|--------|-----|-----|-------------|---------------|----------------------------------|---------------------------------|---------------------------------|---|--------------------------------|------|
| G6B60 | 400 | 752 | 9A, 90B | Recessed Plug | 13 ²⁹ / ₃₂ | 2 ¹³ / ₁₆ | 4 ²¹ / ₃₂ | 1 | 6 ³ / ₁₀ | 8.25 |
| F6A60 | 401 | 753 | 7½, 9A, 90B | Socket | 9 ¹⁵ / ₁₆ | 2 ²¹ / ₃₂ | 4 ³ / ₁₆ | 1 | 5 ⁵ / ₈ | 7.75 |
| T5Z50 | 403 | 755 | 6, 7½A, 75B | Socket | 8½ | 3 ¹¹ / ₃₂ | 2 ⁹ / ₁₆ | 1 | 3½ | 7.25 |
| T5Z50P | 431 | 785 | 7½A, 75B | Recessed Plug | 8½ | 3 ¹¹ / ₃₂ | 2 ⁹ / ₁₆ | 1 | 3½ | 6.90 |
| F6A60P | 406 | 757 | 9A, 90B | Recessed Plug | 9 ⁷ / ₁₆ | 2¾ | 4 ¹¹ / ₃₂ | 1 | 5 ³ / ₁₀ | 7.95 |
| T6Z60 | 405 | 756 | 7½, 9A, 90B | Socket | 8 ¹⁵ / ₁₆ | 2 ³ / ₁₆ | 3 ¹³ / ₁₆ | 1 | 4 ³ / ₁₀ | 6.95 |
| T6Z60P | 428 | 727 | 9A, 90B | Recessed Plug | 8 ¹⁵ / ₁₆ | 2 ³ / ₁₆ | 3 ¹³ / ₁₆ | 1 | 4 ³ / ₁₀ | 7.45 |
| 4T260 | 425 | 729 | 1½A, 90B | Socket | 7 ⁵ / ₈ | 2½ | 3¾ | 1 | 3 ³ / ₅ | 6.25 |

BURGESS SEALED RECHARGEABLE NICKEL CADMIUM CELLS AND BATTERIES

* (L after cell number indicates types with solder lugs on terminals).

Information on additional Nickel Cadmium Batteries not listed below is available.

| | | | | | | | | |
|----------------|--|------|--|---------------------------------|---------------------------------|---------------------------------|---|-------|
| CD1 | | 1.25 | | .460 (diam.) | .225 | 1 | | 1.66 |
| CD2 | | 1.25 | | .610 (diam.) | .236 | 1 | | 1.16 |
| CD8 | | 1.25 | | .984 (diam.) | .232 | 1 | | 1.29 |
| CD8L | | 1.25 | | .984 (diam.) | .257 | 1 | | 1.41 |
| CD3 | | 1.25 | | .984 (diam.) | .275 | 1 | | 1.31 |
| *CD3L | | 1.25 | | .984 (diam.) | .300 | 1 | | 1.44 |
| CD4 | | 1.25 | | .984 (diam.) | .350 | 1 | | 1.36 |
| *CD4L | | 1.25 | | .984 (diam.) | .375 | 1 | | 1.73 |
| CD5 | | 1.25 | | 1.700 (diam.) | .300 | 1 | | 2.10 |
| *CD5L | | 1.25 | | 1.700 (diam.) | .325 | 1 | | 2.29 |
| CD6(AA) | | 1.25 | | .560 (diam.) | 1.950 | 1 | | 2.75 |
| CD6L(AA) | | 1.25 | | .560 (diam.) | 2.275 | 1 | | 3.14 |
| CD9 | | 1.25 | | .550 (diam.) | 3.680 | 1 | | 4.30 |
| CD7(D) | | 1.25 | | 1.300 (diam.) | 2.425 | 1 | | 5.00 |
| CD7L(D) | | 1.25 | | 1.300 (diam.) | 2.775 | 1 | | 5.35 |
| CD10(D) | | 1.25 | | 1.300 (diam.) | 2.425 | 1 | | 8.75 |
| CD10L(D) | | 1.25 | | 1.300 (diam.) | 2.775 | 1 | | 9.15 |
| CD11(D) | | 1.25 | | 1.300 (diam.) | 2.425 | 1 | | 6.50 |
| CD11L(D) | | 1.25 | | 1.300 (diam.) | 2.775 | 1 | | 6.85 |
| CD12 (short C) | | 1.25 | | .876 (diam.) | 1.672 | 1 | | 3.85 |
| CD13 (half D) | | 1.25 | | 1.273 (diam.) | 1.440 | 1 | | 5.70 |
| CD21 | | 6 | | 1.065 (diam.) | 1.525 | 1 | | 8.20 |
| CD22 | | 6 | | 1.065 (diam.) | 1.975 | 1 | | 8.43 |
| CD23 | | 6 | | 1.800 (diam.) | 1.725 | 1 | | 14.50 |
| CD24 | | 9.6 | | 1.065 (diam.) | 2.650 | 1 | | 13.41 |
| CD25 | | 9.6 | | 1.065 (diam.) | 3.200 | 1 | | 13.68 |
| CD25L | | 9.6 | | 1.065 (diam.) | 3.200 | 1 | | 13.54 |
| CD26 | | 9.6 | | 1.800 (diam.) | 2.575 | 1 | | 22.50 |
| CD27 | | 12 | | 1.065 (diam.) | 2.925 | 1 | | 16.50 |
| CD28 | | 12 | | 1.065 (diam.) | 3.600 | 1 | | 17.08 |
| CD29 | | 12 | | 1.800 (diam.) | 3.100 | 1 | | 27.95 |
| CD30 | | 6 | | 1½ | 1½ | 3 ¹³ / ₁₆ | 1 | 28.53 |
| CD31 | | 6 | | 3 ¹³ / ₁₆ | 1 ¹⁷ / ₃₂ | 3 ⁵ / ₈ | 1 | 34.00 |
| CD100 | | 1.25 | | 1.36 | .75 | 3.36 | 1 | 9.15 |
| CD101 | | 1.25 | | 1.36 | 1.36 | 2.40 | 1 | 9.12 |
| CD102 | | 1.25 | | 1.36 | 1.36 | 3.36 | 1 | 10.35 |
| CD103S | | 1.25 | | 1.57 | .92 | 4.01 | 1 | 17.71 |
| CD104 | | 1.25 | | 1.67 | 1.93 | 3.13 | 1 | 14.12 |
| CD105 | | 1.25 | | 1.67 | 1.93 | 3.65 | 1 | 15.67 |
| CD106S | | 1.25 | | 1.57 | 1.48 | 4.01 | 1 | 20.18 |
| CD107 | | 1.25 | | 1.67 | 1.93 | 4.25 | 1 | 14.91 |
| CD108 | | 1.25 | | 1.05 | 3.56 | 4.90 | 1 | 19.04 |
| CD109 | | 1.25 | | 1.34 | 3.56 | 4.90 | 1 | 23.50 |
| CD110 | | 1.25 | | 1.66 | 3.56 | 4.90 | 1 | 27.17 |
| CD111 | | 1.25 | | 1.97 | 3.56 | 4.90 | 1 | 36.10 |

(Continued on next page)

BURGESS BATTERIES



Y15



U10



XX30PI



5540



2



TW1



4FH

| BURGESS Number | NEDA Numbers | Other | Volts | Terminal Type | Overall Dimensions | | | Unit Package Quantities | Weight of Unit Package in Pounds | List Price Each |
|---|--------------|-------|--------------|---------------|---|---------------------------------|----------------------------------|-------------------------|----------------------------------|-----------------|
| | | | | | L | W | H | | | |
| BURGESS INDUSTRIAL - ELECTRONIC - TRANSISTOR BATTERIES ("A" TYPES) | | | | | | | | | | |
| 5R | ... | ... | 1½ | Flashlight | 4 ⁹ / ₆₄ (diam.) | 2 ¹⁵ / ₆₄ | 12 | 3/4 | | .36 |
| 8R | 23 | 960P | 1½ | Socket | 1 ³ / ₃₂ (diam.) | 3 ¹⁵ / ₆₄ | 1 | 1/4 | | .85 |
| 9R | ... | 1015E | 1½ | Flashlight | 3 ⁵ / ₆₄ (diam.) | 1 ⁶³ / ₆₄ | 12 | 1/2 | | .17 |
| 37 | ... | ... | 1½ | Flashlight | 1 ¹ / ₆ (diam.) | 6 ¹ / ₈ | 1 | 3/16 | | .98 |
| 2F | 11 | W353 | 1½ | Socket | 2 ¹⁹ / ₃₂ | 1 ³ / ₈ | 4 1/4 | 1 | 3/4 | 1.10 |
| 2Z | ... | 1016E | 1½ | Flashlight | 1 ¹ / ₈ | 1 ¹ / ₃₂ | 1 ⁶³ / ₆₄ | 10 | 3/4 | .45 |
| 2FBP | 700 | W354 | 1½ | Binding Post | 2 ²¹ / ₃₂ | 1 ³ / ₈ | 4 ¹ / ₃₂ | 5 | 4 1/5 | 1.15 |
| F2BP | 701 | W352 | 3 | Binding Post | 2 ²¹ / ₃₂ | 1 ³ / ₈ | 4 ¹ / ₃₂ | 5 | 4 | 1.15 |
| F4BP | 915 | 510S | 6 | Binding Post | 2 ³ / ₈ | 2 ³ / ₈ | 4 | 1 | 1 1/5 | 1.19 |
| 2F2H | 703 | W356 | 3 | Binding Post | 2 ³ / ₈ | 2 ³ / ₈ | 4 ¹ / ₁₆ | 5 | 7 | 1.55 |
| 422 | 704 | 750 | 3 | Brass Straps | 1 ¹¹ / ₃₂ | 2 ³ / ₃₂ | 2 ³ / ₁₆ | 10 | 1 1/5 | .85 |
| 432 | 705 | 751 | 4½ | Brass Straps | 1 ³¹ / ₃₂ | 2 ¹ / ₃₂ | 2 ¹ / ₄ | 10 | 2 | 1.00 |
| 532 | 706 | 703 | 4½ | Brass Straps | 2 ¹³ / ₃₂ | 1 ¹ / ₆ | 2 ²³ / ₃₂ | 1 | 3/10 | 1.02 |
| 44 | ... | ... | 1½ | Binding Post | 1 ²⁹ / ₃₂ (diam.) | 4 ³ / ₃₂ | 1 | 7/8 | | 2.61 |
| 2BBP | ... | ... | 1½ | Binding Post | 1 ¹⁹ / ₃₂ | 2 ¹ / ₃₂ | 2 ¹ / ₁₆ | 1 | 1/4 | 1.65 |
| B2BP | ... | ... | 3 | Binding Post | 1 ³ / ₈ | 1 ³ / ₁₆ | 2 ¹ / ₁₆ | 1 | 1/4 | 1.40 |
| 2F2BP | ... | ... | 3 | Binding Post | 5 ³ / ₁₆ | 1 ⁵ / ₁₆ | 4 ³ / ₃₂ | 1 | 1 1/5 | 3.20 |
| F4X | ... | ... | 6 | Binding Post | 5 ⁵ / ₁₆ | 1 ¹ / ₃₂ | 4 ¹ / ₈ | 1 | 1 1/4 | 3.79 |
| 2F4 | 1 | 718 | 6 | Socket | 4 | 2 ¹³ / ₁₆ | 5 ⁷ / ₁₆ | 1 | 2 1/5 | 3.90 |
| 6F | 5 | 743 | 1 1/2 | Socket | 4 ³ / ₃₂ | 2 ³ / ₄ | 4 ¹ / ₁₆ | 1 | 2 1/6 | 2.75 |
| 8F | 17 | 741 | 1 1/2 | Socket | 3 ²⁹ / ₃₂ | 2 ²³ / ₃₂ | 5 1/2 | 1 | 3 | 3.45 |
| BURGESS INDUSTRIAL - ELECTRONIC - TRANSISTOR BATTERIES ("B" TYPES) | | | | | | | | | | |
| U10 | 208 | 411 | 15 | Flat Contact | 1 | 3 ⁹ / ₆₄ | 1 ¹ / ₆ | 1 | 1 oz. | 1.15 |
| U15 | 215 | 412 | 22½ | Flat Contact | 1 | 3 ⁹ / ₆₄ | 1 ¹ / ₃₂ | 1 | 1 oz. | 1.50 |
| U20 | 210 | 413 | 30 | Flat Contact | 1 | 3 ⁹ / ₆₄ | 2 ¹ / ₃₂ | 1 | 2 ozs. | 1.75 |
| W30 | ----- | ----- | 45 | Binding Post | 3 | 1 1/4 | 3 ²⁵ / ₃₂ | 1 | 3/5 | 3.15 |
| XX15 | ----- | 425P | 22½ | Socket | 1 ¹¹ / ₃₂ | 1 ⁵ / ₁₆ | 3 ³ / ₈ | 1 | 1/4 | 1.95 |
| XX22 | ----- | 433P | 33 | Socket | 2 ¹ / ₃₂ | 3 ¹ / ₃₂ | 3 ¹ / ₈ | 1 | 1/3 | 2.45 |
| XX30PI | ----- | 455P | 45 | Socket | 2 ¹ / ₃₂ | 3 ¹ / ₃₂ | 4 ¹ / ₃₂ | 1 | 1/2 | 3.00 |
| Y10 | 220 | 504 | 15 | Flat Contact | 1 ⁹ / ₃₂ | 1 ⁹ / ₃₂ | 1 ²³ / ₆₄ | 1 | 1 oz. | 1.15 |
| Y15 | 221 | 505 | 22½ | Flat Contact | 1 ⁹ / ₃₂ | 1 ⁹ / ₃₂ | 1 ³ / ₃₂ | 1 | 1 oz. | 1.50 |
| Y20 | 223 | 506 | 30 | Flat Contact | 1 ³ / ₁₆ | 1 ⁹ / ₃₂ | 1 ¹³ / ₃₂ | 1 | 1 oz. | 1.85 |
| Y20S | 222 | 507 | 30 | Flat Contact | 1 ⁹ / ₃₂ | 1 ⁹ / ₃₂ | 2 ¹ / ₁₆ | 1 | 1 oz. | 1.85 |
| Z30NX | 711 | W350 | 45 | Binding Post | 3 ¹ / ₃₂ | 1 ⁷ / ₈ | 4 ¹ / ₃₂ | 5 | 7 3/5 | 3.85 |
| U200 | 722 | 493 | 300 | Pin Jacks | 2 ³ / ₄ | 2 ³ / ₃₂ | 3 ³ / ₈ | 1 | 1 | 11.95 |
| Z30T | ----- | ----- | 45 | Socket | 3 | 2 ⁵ / ₁₆ | 4 ¹ / ₈ | 1 | 1 3/10 | 3.75 |
| W30BPX | ----- | W358 | 45 | Binding Post | 3 | 1 1/4 | 3 ²⁵ / ₃₂ | 1 | 3/5 | 3.55 |
| Z30BP | ----- | W351 | 45 | Binding Post | 3 ¹ / ₁₆ | 2 ¹ / ₃₂ | 3 ³ / ₁₆ | 1 | 1 3/5 | 7.55 |
| Z96P (9968) | ----- | ----- | 144 | Binding Post | 2 ³ / ₈ | 2 ³ / ₈ | 13 ¹ / ₁₆ | 1 | 3 3/4 | 26.00 |
| 5156PI | 721 | 768 | 22½ | Socket | 4 ⁵ / ₆₄ | 2 ³ / ₈ | 2 ²⁵ / ₆₄ | 1 | 1 3/5 | 4.45 |
| A60 | ----- | ----- | 90 | Socket | 4 ⁷ / ₁₆ | 3 ³ / ₈ | 4 1/2 | 1 | 3 1/3 | 7.95 |
| W20PI | ----- | ----- | 30 | Socket | 1 ⁵ / ₁₆ | 1 ¹³ / ₁₆ | 3 ³ / ₃₂ | 1 | 1/2 | 2.47 |
| XX69 | 227 | W361 | 103½ | Flashlight | 1 ¹¹ / ₃₂ | 1 ¹¹ / ₃₂ | 11 ²³ / ₃₂ | 1 | 1 | 6.57 |
| Z30 | 205 | 738 | 45 | Socket | 3 | 2 ⁵ / ₁₆ | 4 ¹ / ₁₆ | 2 | 2 3/4 | 3.95 |
| A30 | 206 | W359 | 45 | Socket | 3 ³ / ₁₆ | 2 ¹ / ₄ | 4 ³ / ₁₆ | 2 | 3 1/2 | 3.55 |
| B30 | 207 | 484 | 45 | Socket | 4 ¹ / ₁₆ | 2 ¹ / ₃₂ | 5 ⁵ / ₁₆ | 2 | 4 1/2 | 4.70 |
| 4156 | 710 | 763 | 22½ | Binding Post | 3 ¹ / ₃₂ | 2 ¹ / ₈ | 2 ²⁹ / ₃₂ | 1 | 1 | 2.35 |
| 5156SC | 708 | 778 | 22½ | Spring Clip | 4 ¹ / ₈ | 2 ¹ / ₂ | 2 ³ / ₄ | 5 | 8 | 4.45 |
| 5308 | 709 | W376 | 45 | Binding Post | 4 ¹ / ₁₆ | 2 ³ / ₁₆ | 5 ¹ / ₈ | 1 | 2 1/2 | 4.35 |
| K10 | 224 | 417 | 15 | Flat Contact | 1 1/4 | 7/8 | 1 ¹⁷ / ₃₂ | 1 | 2 ozs. | 1.65 |
| K15 | 225 | 420 | 22½ | Flat Contact | 1 1/4 | 7/8 | 2 ³ / ₃₂ | 1 | 2 ozs. | 1.75 |
| K20 | 226 | 430 | 30 | Flat Contact | 1 1/4 | 1 ⁵ / ₁₆ | 2 ²³ / ₃₂ | 1 | 3 ozs. | 2.15 |
| BURGESS INDUSTRIAL AND ELECTRONIC "C" BATTERIES | | | | | | | | | | |
| 2370PI | 718 | 771 | 4½ | Binding Post | 4 ¹ / ₆₄ | 1 ²⁷ / ₆₄ | 2 ⁵ / ₆₄ | 5 | 3 3/5 | 2.25 |
| 2370 | 712 | 761T | 4½ | Binding Post | 3 ¹⁵ / ₁₆ | 1 ⁷ / ₈ | 2 ⁷ / ₈ | 5 | 3 ⁷ / ₁₀ | 1.99 |
| 5540 | 713 | 773 | 7 1/2 | Bndg Post Neg | 4 | 2 ³ / ₈ | 2 ³ / ₄ | 5 | 1 ⁹ / ₁₀ | 2.35 |
| 5360 | 714 | 781 | 4½ | Binding Post | 2 ¹³ / ₃₂ | 2 ⁷ / ₃₂ | 2 ²¹ / ₃₂ | 10 | 2 ³ / ₅ | 1.55 |
| W5BP | ----- | W362 | 7 1/2 | Binding Post | 2 ²¹ / ₃₂ | 2 ²³ / ₃₂ | 1 1/4 | 6 | 4 1/5 | 2.10 |
| A3BPX | ----- | ----- | 4½ | Binding Post | 1 ³ / ₃₂ | 2 ³ / ₃₂ | 2 ¹ / ₄ | 1 | 1/4 | 2.50 |
| A8BP | ----- | ----- | 12 | Binding Post | 2 ²⁵ / ₃₂ | 1 ²⁵ / ₆₄ | 2 ¹⁵ / ₃₂ | 1 | 1/2 | 6.22 |
| 2156 | 702 | 766 | 22½ | Spring Clips | 6 ² / ₃₂ | 4 ¹ / ₁₆ | 2 ³ / ₃₂ | 6 | 17 1/2 | 6.25 |
| BURGESS FARM RADIO "A", "B", AND "A" & "B" BATTERIES | | | | | | | | | | |
| 20F2 | 720 | X-125 | 3 | Socket | 11 1/2 | 4 | 6 1/8 | 1 | 13 ⁹ / ₁₀ | 9.30 |
| 20F | 719 | 740 | 1 1/2 | Socket | 7 ³ / ₈ | 2 ⁵ / ₁₆ | 6 ¹⁵ / ₁₆ | 1 | 6 ⁴ / ₅ | 9.85 |
| 21308PI | 727 | W364P | 45 | Socket | 8 ¹ / ₈ | 4 ¹⁵ / ₃₂ | 7 ³ / ₃₂ | 1 | 12 ⁴ / ₅ | 7.65 |
| 21308SC | 715 | W364F | 45 | Spring Clip | 8 ¹ / ₈ | 4 ¹⁵ / ₃₂ | 7 ³ / ₃₂ | 1 | 12 ⁴ / ₅ | 7.65 |
| 10308PI | 726 | W363P | 45 | Socket | 8 ¹ / ₃₂ | 4 ¹ / ₃₂ | 7 ³ / ₁₆ | 1 | 11 1/2 | 6.90 |
| 10308SC | 716 | W363F | 45 | Spring Clip | 8 ¹ / ₃₂ | 4 ¹ / ₃₂ | 7 ³ / ₁₆ | 1 | 12 1/2 | 6.90 |
| 2308PI | 717 | W365P | 45 | Socket | 8 ³ / ₃₂ | 2 ¹ / ₃₂ | 7 ¹ / ₄ | 1 | 7 ⁴ / ₅ | 5.50 |
| 2308SC | 723 | W365F | 45 | Spring Clip | 8 ³ / ₃₂ | 2 ¹ / ₃₂ | 7 ¹ / ₄ | 1 | 7 1/2 | 5.50 |
| 17GD60 | 413 | 759 | 1 1/2 A, 90B | Socket | 15 ¹ / ₁₆ | 4 ³ / ₈ | 7 ¹ / ₁₆ | 1 | 20 1/2 | 10.65 |

BURGESS BATTERIES

| BURGESS Number | NEDA Numbers | Other | Volts | Terminal Type | Overall Dimensions | | | Unit Package Quantities | Weight of Unit Package in Pounds | List Price Each |
|---|--------------|-------|-------|---------------|---|---------------------------------|-------------------------------|--------------------------------|----------------------------------|-----------------|
| | | | | | L | W | H | | | |
| BURGESS FLASHLIGHT AND LANTERN BATTERIES | | | | | | | | | | |
| 2 (24V) | 13 | 950 | 1½ | Flashlight | 1 ²¹ / ₆₄ (diam.) | 2 ³ / ₈ | 48 | 10 ¹ / ₂ | \$.20 | |
| 2 (50 Bulk) | 13 | 950 | 1½ | Flashlight | 1 ²¹ / ₆₄ (diam.) | 2 ³ / ₈ | 50 | 11 | .20 | |
| 210 (24V) | ----- | 1050 | 1½ | Flashlight | 1 ²¹ / ₆₄ (diam.) | 2 ³ / ₈ | 48 | 11 | .25 | |
| 210 (Bulk) | ----- | 1050 | 1½ | Flashlight | 1 ²¹ / ₆₄ (diam.) | 2 ³ / ₈ | 50 | 10 ³ / ₄ | .25 | |
| 1 | 14 | 935 | 1½ | Flashlight | 6 ³ / ₆₄ (diam.) | 1 ¹¹ / ₁₆ | 24 | 2 ⁵ / ₈ | .20 | |
| Z | 15 | 915 | 1½ | Flashlight | 3 ⁵ / ₆₄ (diam.) | 1 ³¹ / ₃₂ | 12 | ½ | .15 | |
| 7 | 24 | 912 | 1½ | Flashlight | 1 ¹³ / ₃₂ (diam.) | 1 ³ / ₄ | 12 | ¼ | .15 | |
| N (Bare) | 910 | 904 | 1½ | Flashlight | ¼ (diam.) | 1 ¹ / ₆₄ | 12 | ⅓ | .125 | |
| F4H | 908 | 509 | 6 | Spring | 2 ⁵ / ₈ | 2 ⁵ / ₈ | 4 ³ / ₈ | 12 | 18 | 1.19 |
| TW1 | 918 | 731 | 6 | Binding Post | 5 ³ / ₈ | 2 ⁷ / ₈ | 4 ¹ / ₆ | 1 | 3 ¹ / ₅ | 2.75 |
| TW2 | 926 | ----- | 12 | Binding Post | 5 ³ / ₈ | 2 ⁷ / ₈ | 4 ¹ / ₆ | 1 | 3 ¹ / ₅ | 2.75 |



No. 6 Ignition

| BURGESS IGNITION - TELEPHONE AND PROTECTIVE SYSTEM BATTERIES | | | | | | | | | | |
|---|-----|--------|----|----------------|--|--------------------------------|--------------------------------|----|---------------------------------|------|
| * Battery also available with spring clip terminals | | | | | ** Battery also available with screw terminals | | | | | |
| 4FH | 900 | 735 | 1½ | Screw Terminal | 2 ⁵ / ₈ | 2 ⁵ / ₈ | 4 | 12 | 16 | 1.25 |
| 4F2H | 901 | W357 | 3 | Spring Clip | 3 ²⁹ / ₃₂ | 2 ¹ / ₁₆ | 5 ¹ / ₃₂ | 1 | 2 ³ / ₅ | 2.05 |
| 4F4H | 902 | 706 | 6 | Binding Post | 8 ⁵ / ₁₆ | 2 ¹ / ₁₆ | 5 ¹ / ₁₆ | 1 | 6 ¹ / ₅ | 4.98 |
| 4F5H | 903 | 715 | 7½ | Binding Post | 7 ³ / ₁₆ | 3 ¹ / ₃₂ | 5 ¹ / ₁₆ | 1 | 7 ² / ₅ | 7.25 |
| 4F6H | 904 | 716 | 9 | Binding Post | 8½ | 3 ¹ / ₃₂ | 5 ¹ / ₁₆ | 1 | 9 | 8.25 |
| *6 Ign. | 905 | 6 Ign. | 1½ | Screw Terminal | 2½ (diam.) | 6 ⁵ / ₈ | 6 ⁵ / ₈ | 12 | 21 ³ / ₁₀ | 1.25 |
| **6 Tel. | 906 | 6 GL | 1½ | Spring Clip | 2½ (diam.) | 6 ⁵ / ₈ | 6 ⁵ / ₈ | 12 | 24 ³ / ₅ | 1.25 |
| 6 Ind. | 911 | 6 Ind. | 1½ | Screw Terminal | 2½ (diam.) | 6 ⁵ / ₈ | 6 ⁵ / ₈ | 12 | 25 | 1.35 |
| S461 | 907 | 1461 | 6 | Binding Post | 10½ | 2¾ | 7 ¹ / ₃₂ | 6 | 53½ | 4.98 |



270

| BURGESS PHOTO-FLASH BATTERIES | | | | | | | | | | |
|--------------------------------------|-----|-----|-----|----------------|---|---------------------------------|---------------------------------|----|-------------------------------|-------|
| 120 | ... | 835 | 1½ | Flashlight | 1 (diam.) | 1 ⁵ / ₁₆ | 48 | 4½ | | .25 |
| 220 | ... | 850 | 1½ | Flashlight | 1 ¹¹ / ₃₂ (diam.) | 2 ²⁵ / ₆₄ | 48 | 11 | | .25 |
| 920 | ... | 815 | 1½ | Flashlight | 3 ⁵ / ₆₄ (diam.) | 1 ³¹ / ₃₂ | 24 | 1 | | .20 |
| U15 | 215 | 412 | 22½ | Flat Contact | 3 ¹ / ₃₂ | 9 ¹ / ₁₆ | 1 ³¹ / ₃₂ | 1 | 1 oz. | 1.50 |
| Y10 | 220 | 504 | 15 | Flat Contact | 1 ¹⁹ / ₃₂ | 1 ¹⁹ / ₃₂ | 1 ²³ / ₆₄ | 1 | 1 oz. | 1.15 |
| Y15 | 221 | 505 | 22½ | Flat Contact | 1 ¹⁹ / ₃₂ | 1 ¹⁹ / ₃₂ | 1 ³¹ / ₆₄ | 1 | 1 oz. | 1.50 |
| U10 | 208 | 411 | 15 | Flat Contact | 1 | 3 ³ / ₆₄ | 1 ¹ / ₁₆ | 1 | 1 oz. | 1.15 |
| U20 | 210 | 413 | 30 | Flat Contact | 1 | 3 ³ / ₆₄ | 2 ¹ / ₃₂ | 1 | 2 ozs. | 1.75 |
| XX150 | ... | 489 | 225 | Pin Jacks | 4¼ | 2 ⁵ / ₈ | 4¼ | 1 | 2½ | 9.95 |
| U160 | ... | 491 | 240 | Flat Contact | 2 ⁹ / ₁₆ | 1 ⁵ / ₁₆ | 4 ¹ / ₃₂ | 1 | 4 ⁴ / ₅ | 7.95 |
| N150 | ... | 492 | 225 | Pin Jacks | 3 ¹ / ₁₆ | 2¾ | 4¾ | 1 | 2½ | 8.75 |
| U320 | ... | 497 | 510 | Flat Contact | 2 ¹ / ₁₆ | 1 ¹ / ₃₂ | 5 ¹ / ₁₆ | 1 | 1½ | 15.95 |
| K30P-K | ... | 45 | | Battery & Bulb | | | | 6 | 2½ | 2.50 |



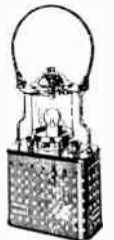
U15

| BURGESS ALKALINE BATTERIES | | | | | | | | | | |
|-----------------------------------|-------|-------|----|--------------|---|---------------------------------|----|-------|--|-----|
| AL-9 | 815 | E91 | 1½ | Flat Contact | 1 ⁷ / ₃₂ (diam.) | 1 ³¹ / ₃₂ | 12 | 1 | | .50 |
| AL-1 | 814 | E93 | 1½ | Flat Contact | 6 ³ / ₆₄ (diam.) | 1 ¹ / ₁₆ | 6 | 1 | | .75 |
| AL-133 | 1306 | 333 | 4½ | Flat Contact | 2 ¹ / ₃₂ (diam.) | 2 | 12 | 1 | | .95 |
| AL-N | 910 | 904 | 1½ | Flat Contact | 2 ⁵ / ₆₄ (diam.) | 1 ¹ / ₈ | 3 | 1 oz. | | .35 |
| AL-7 | ----- | ----- | 1½ | Flat Contact | 1 ¹³ / ₃₂ (diam.) | 1 ³ / ₄ | 12 | ¼ | | .45 |



TW3

| BURGESS RADAR LIGHTS NOTICE: All Radar Lights are packed in individual cartons complete with battery. | | | | | | | | | | |
|--|---|-----------------|--------------------------------|-----------------|---------|----------|--|--|--|--|
| BURGESS Number | Description | Unit Pkg. Quan. | Wt. of Un. Pkg. in Lbs. | LIST PRICE EACH | | | | | | |
| | | | | Head Only | Battery | Complete | | | | |
| TW3 | Radar-Lite Spot-Flasher (Lamp 4546, 407) | 1 | 5 ¹ / ₁₀ | \$10.20 | \$2.75 | \$12.95 | | | | |
| TW4 | Radar-Lite Spot-Without Flasher (Lamp 4546) | 1 | 4¾ | 7.75 | 2.75 | 10.50 | | | | |
| TW7 | Radar-Lamp Chrome-Finish (Lamp 1651) | 1 | 4½ | 6.50 | 2.75 | 9.25 | | | | |
| TW8 | Radar-Lamp Copper-Finish (Lamp 1651) | 1 | 4½ | 6.50 | 2.75 | 9.25 | | | | |
| TW9 | Radar Bearcat Focusing Lantern (Lamp 425 or 502) | 1 | 4¾ | 4.50 | 2.75 | 7.25 | | | | |
| TW11 | Radar-Lite (Bulb Reflector Model) (Lamp 425) | 1 | 4¾ | 6.20 | 2.75 | 8.95 | | | | |
| TW12 | 12 Volt Radar-Lite (Uses TW2 Battery) (Lamp 965) | 1 | 5 | 8.20 | 2.75 | 10.95 | | | | |
| TW4E | Power Failure Operated Lantern (Spot Beam) (Lamp 4546) | 1 | 6 | 17.50 | 2.75 | 20.25 | | | | |
| TW6E | Power Failure Operated Lantern (Flood Beam) (Lamp 4512) | 1 | 6 | 17.50 | 2.75 | 20.25 | | | | |
| TW34 | Radar-Flash (Lamp 407) | 1 | 4½ | 3.95 | 2.75 | 6.70 | | | | |



TW7

| BURGESS RADAR-MATE FLASHLIGHTS (less batteries) | | | | | | | | | | |
|--|--|-----------------|-------------------------------|-----------------|-----|---|---|----|--------|--|
| BURGESS Number | Description (Batteries not included) | Unit Pkg. Quan. | Wt. of Un. Pkg. in Lbs. | List Price Each | | | | | | |
| | | | | | JR1 | 4½ Volt Lantern. Uses 3 No. 2 (Size D) batteries (Lamp PR3) | 6 | 7½ | \$4.98 | |
| 161 | Magnet Flashlight—2 Cell Prefocused (Lamp PR2 or PR4) | 6 | 3 | 1.99 | | | | | | |
| 259 | Aurora Flashlight—2 Cell Prefocused (Lamp PR2 or PR4) | 6 | 2¾ | 1.69 | | | | | | |
| 257 | Satellite Torch—2 Cell Junior Prefocused (Lamp PR2 or PR4) | 3 | 1 | 1.75 | | | | | | |
| 357 | Satellite Torch—2 Cell Prefocused (Lamp PR2 or PR4) | 6 | 2¾ | 1.95 | | | | | | |
| 152 | Penlight—Tu-Tone Colors (Lamp 224) | 12 | 7 ¹ / ₈ | .88 | | | | | | |
| 350 | 2 Cell Tough Industrial Flashlight (Lamp PR2) | 6 | 3 | 1.90 | | | | | | |
| 453 | 2 Cell Industrial—Safety Light (Lamp PR2) | 1 | ½ | 5.00 | | | | | | |
| P92 | Penlight (Heavy Duty) Assorted Colors (Lamp 222) | 6 | ½ | .88 | | | | | | |



357

CARTER • CARTER • CARTER • CARTER • CARTER

Carter Motor

GENEMOTORS, DC-AC CONVERTERS FREQUENCY CHANGERS



CARTER CUSTOM DYNAMOTORS

For railroad and marine radio-telephone, industrial communications systems, locomotives, telephone emergency standby power, etc. Heavy duty construction. Low rpm speed, small temperature rise assure extra long life. Filter not normally required. Size: 12 1/2" x 6 1/2" x 7 1/2". Weight, 47 lbs.

| Carter Number | Input Range | Output Volts | Output Recv. | Amps Trans. | List Price |
|---------------|-------------|--------------|--------------|-------------|------------|
| DS1220P | 118-132 | 12.8 | 5 | 18 | \$253.00 |
| HS1220P | 67-74 | 12.8 | 5 | 18 | 253.00 |
| CS1220P | 33-37 | 12.8 | 5 | 18 | 253.00 |
| WS1220P | 45-50 | 12.8 | 5 | 18 | 253.00 |
| DS640P | 118-132 | 6.3 | 15 | 40 | 253.00 |
| HS640P | 67-74 | 6.3 | 15 | 40 | 253.00 |
| CS640P | 33-37 | 6.3 | 15 | 40 | 253.00 |



CUSTOM CONVERTERS

Dependable rotary power for operating office business machines, professional tape recorders, railroad, mobile and marine radio and radar equipment. Finest construction. Sealed ball bearings require no lubrication. Long life, continuous duty, high efficiency on all models. Only popular models listed here. For 50-cycle output, add \$5.50 to list prices. All models 100% power factor. Size: 200 watts, 12 1/2" w. x 6 3/4" d., 7 1/2" h.; 210 and 300 watts, 11 3/4" w., 500 watts, 12 3/4" w.; 750 watts, 13 1/4" w.

| Carter Number | DC Inp. V. | A. | List Price | Carter Number | DC Inp. V. | A. | List Price |
|---------------|------------|------|------------|---------------|------------|------|------------|
| DS1020C5P | 115† | 2.8† | \$231.00 | D1030CP | 115† | 4.8† | \$209.00 |
| HS1020C5P | 64† | 5† | 234.85 | E1050CP | 24† | 33† | 240.35 |
| CS1020C5P | 32† | 9† | 234.85 | C1050CP | 32† | 25† | 240.35 |
| BR1021CP* | 12† | 29† | 286.00 | D1050CP | 115† | 7† | 236.50 |
| B1030CP | 12† | 45† | 209.00 | C1075CP | 32† | 32† | 270.60 |
| E1030CP | 24† | 22† | 209.00 | D1075CP | 115† | 8.8† | 270.60 |
| C1030CP | 32† | 19† | 209.00 | | | | |

Watts At 115 v. AC, 60 cps: †200 †210 †300 †500 †750
*Equipped with manual frequency control. For frequency control on all other models, add \$82.50 to list prices. Filter available; add \$44.00 to list prices.

MONARCH CONVERTERS

The Monarch series is ideal for heavy-duty industrial service, marine, mine, crane and railroad communications. Slow speed (1800 rpm.), long life, 4-pole design; ball bearing equipped. No filter is necessary for most applications. Size: 19" x 11" x 12" high. Three-phase output available at no extra charge. 24 and 28 v. Input available.



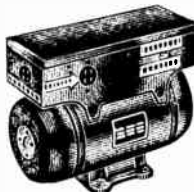
| Carter Number | DC Input Volts | Amps | Watts* | List Price |
|---------------|----------------|------|--------|------------|
| C10150M | 32 | 69 | 1500 | \$704.00 |
| W10200M† | 48 | 60 | 2000 | 759.00 |
| H10200M† | 64 | 45 | 2000 | 759.00 |
| D10200M† | 115 | 25 | 2000 | 759.00 |
| K10200M† | 230 | 12.5 | 2000 | 759.00 |

†Reduced voltage starters necessary; add \$159.50 to list price.
‡Reduced voltage starters necessary; add \$103.40 to list price.
*At 115 v. AC, 60 cps.

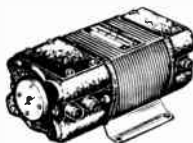
MARINE REFRIGERATOR-APPLIANCE CONVERTERS

Operates standard refrigerators, compressors (up to 1/8 hp only), vacuum cleaners and other appliances from DC; for use aboard commercial and pleasure boats. Converter operates only when power is called for. Input, from 24 to 230 v. DC. Size: 14" x 6 3/4" x 11" high. Net Weight, 65 lbs.

| Carter Number | DC Input | List Price |
|---------------|----------|------------|
| RF24 | 24 v. | \$493.90 |
| RF28 | 28 v. | 493.90 |
| RF32 | 32 v. | 493.90 |
| RF48 | 48 v. | 493.90 |
| RF64 | 64 v. | 493.90 |
| RF115 | 115 v. | 493.90 |
| RF230 | 230 v. | 493.90 |



DUOVOLT 6/12 VOLT GENEMOTORS



Will operate 30- to 100-watt mobile transmitters. Incorporates two separate six-volt windings, each having its own field. Six or twelve volt operation is obtained simply by connecting the four input leads in parallel or in series. May be transferred from one car to another regardless of battery voltage, without replacing generator and without wiring modification of hookup. Size: 3 1/2" high, 4 3/4" wide, 8" long. Weight, 1 1/2 lbs.

| Carter No. | Input 6 | | Input 12 | | Output | | Duty | List Price |
|------------|---------|------|----------|------|--------|------|------|------------|
| | Volts | Amps | Volts | Amps | Volts | Amps | | |
| 450ABNS | 6 | 29 | 12 | 14.5 | 400 | 250 | Int. | \$108.35 |
| 4030VBNS | 5.2 | 40 | 10.4 | 20 | 400 | 300 | Int. | 108.90 |
| 4228VBNS | 5.8 | 33 | 11.6 | 16.5 | 420 | 280 | Int. | 108.90 |
| 4432VBNS | 5.8 | 42 | 11.6 | 21 | 430 | 325 | Int. | 109.45 |
| 520ABNS | 6 | 28 | 12 | 14 | 500 | 300 | Int. | 111.10 |
| 624VBNS | 5.7 | 46 | 11.4 | 23 | 600 | 240 | Int. | 111.10 |
| 6427VBNS | 5.7 | 51 | 11.4 | 25.5 | 640 | 270 | Int. | 113.30 |
| 7212ABNS | 6.1 | 28 | 12.2 | 14 | 720 | 125 | Int. | 113.30 |

CHANGE-A-VOLT DYNAMOTORS

Operate 6 volt 2-way radio equipment from 12 volt systems without rewiring. Supplied complete with starting relay and switch, 12 volt fuse block and wiring to directly convert a 12 volt battery to a 6 volt radio supply. H615V delivers 15 amps continuously and 45 amps intermittent, 65% efficiency. Can also serve as battery equalizer when operating low voltage equipment. Size: 11 1/2" x 4 1/2" x 7 1/4" high. Weight, 25 lbs.



| Carter No. | Input* Volts | Amps | List Price | Carter No. | Input† Volts | Amps | List Price |
|------------|--------------|------|------------|------------|--------------|------|------------|
| H615V | 12 | 11.5 | \$129.80 | E128V | 24 | 6.0 | \$129.80 |
| E615V | 24 | 5.7 | 129.80 | J128V | 28 | 5.3 | 129.80 |
| J615V | 28 | 5.0 | 129.80 | C128V | 32 | 4.6 | 129.80 |
| C615V | 32 | 4.3 | 129.80 | HS128V | 70 | 2.2 | 129.80 |
| HS615V | 70 | 2.1 | 129.80 | D128V | 115 | 1.3 | 129.80 |
| D615V | 115 | 1.2 | 129.80 | | | | |

*Output 6 volts, 15 amps. †Output 12 volts, 8 amps.



MARK II SUPER CONVERTERS

New, long life design increases brush life and assures dependable service. Smooth, quiet, ball bearing operation. Standard 100% P.F. models change DC to AC for operating amplifiers, office equipment, test instruments, radios and other high-power-factor equipment. Also available in 70% P.F. models to operate popular tape recorders from DC input. Many other catalog models available promptly from factory stock. A converter can be furnished to operate any tape recorder. Continuous duty. Size: 8 1/4" x 4 1/2" x 5" high. Weight, 13 lbs.

| Carter No. | DC Input | | Watts, AC at 60 cps, 115 v. | List Price |
|------------|----------|------|-----------------------------|------------|
| | Volts | Amps | | |
| D1040CB | 115 | 4 | 40 | \$126.50 |
| D1010CB | 115 | 1.7 | 100 | 129.80 |
| D1015CB | 115 | 2.0 | 150 | 130.80 |
| B1040CB | 12 | 8 | 40 | 116.60 |
| B1010CB | 12 | 15 | 100 | 119.90 |
| B1015CB | 12 | 23 | 150 | 121.00 |

Mark II Heavy Duty Super Converter. Continuous duty, less filter, 10 1/2" long, 4 1/2" wide, 5" high. Weight, 19 lbs.

| | | | | |
|---------|-----|-----|-----|----------|
| D1020CB | 115 | 2.6 | 200 | \$145.20 |
| D1025CB | 115 | 3.2 | 250 | 145.20 |
| B1020CB | 12 | 30 | 200 | 135.30 |
| B1025CB | 12 | 34 | 250 | 135.30 |

AC TO AC FREQ. CHANGERS

Produces 115 v., 50 or 60 cycle AC output from 25 to 400 cycle input. For operating standard equipment on non-standard frequencies. Standard units are for single phase input and output. Three-phase output available on order. 70% P.F. models to run tape recorders, optional at no extra cost. For frequency control (meter), add \$44.00 to list price.



| Carter No. | Output Watts | List Price | Carter No. | Output Watts | List Price |
|------------|--------------|------------|------------|--------------|------------|
| FC1020L | 20 | \$271.70 | FC1025CP | 250 | \$633.50 |
| FC1040L | 40 | 272.80 | FC1050CP | 500 | 636.50 |
| FC1060L | 60 | 273.90 | FC1075CP | 750 | 639.50 |
| FC1080C | 80 | 348.70 | FC10100M | 1000 | 1094.50 |
| FC1010C | 100 | 349.80 | FC10150M | 1500 | 1144.00 |
| FC1015C | 150 | 350.90 | FC10200M | 2000 | 1204.50 |
| FC1020C | 200 | 365.20 | | | |

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CARTER • CARTER • CARTER • CARTER • CARTER

CLASS
250.01
250.20

CORNELL-DUBILIER ELECTRONICS
Standard and Special Purpose
Communications Vibrators



Designed for reliable service and long shelf life. "Seal-Vent" protected until placed in service. "Seal-Vent" protected on the shelf and "Breathes" in service.

Beveled counterweights provide quicker starting and smoother operating.

Ceramic block insulators are precision ground, permitting perfect contact alignment.

STANDARD AND SPECIAL PURPOSE

INTERRUPTER

| 6 Volt | | | 6 Volt | | | 12 Volt | | |
|----------|------------|-----------|----------|------------|-----------|----------------|------------|-----------|
| Type No. | List Price | Net Price | Type No. | List Price | Net Price | Type No. | List Price | Net Price |
| 5300 | \$4.95 | \$2.97 | 5342 | \$3.80 | \$2.28 | 6301 | \$5.15 | \$3.09 |
| 5301 | 4.95 | 2.97 | 5366 | 6.70 | 4.02 | 6326 | 4.80 | 2.88 |
| 5303 | 5.15 | 3.09 | 5370 | 5.15 | 3.09 | 6330 | 5.15 | 3.09 |
| 5304 | 6.70 | 4.02 | 5371 | 4.95 | 2.97 | 6370 | 4.95 | 2.97 |
| 5307 | 5.15 | 3.09 | 5372 | 4.95 | 2.97 | 6371 | 5.15 | 3.09 |
| 5314 | 5.15 | 3.09 | 5506 | 7.55 | 4.53 | 6372 | 5.15 | 3.09 |
| 5320 | 5.15 | 3.09 | 5510 | 7.55 | 4.53 | 6511 | 8.10 | 4.86 |
| 5321 | 5.15 | 3.09 | 5513 | 8.10 | 4.86 | 6513 | 8.10 | 4.86 |
| 5323 | 4.40 | 2.64 | 5516 | 7.25 | 4.35 | 6514 | 10.45 | 6.27 |
| 5326 | 4.40 | 2.64 | 5560 | 9.05 | 5.43 | 6517 | 8.10 | 4.86 |
| 5331 | 5.15 | 3.09 | | | | Other Voltages | | |
| 5333 | 5.15 | 3.09 | | | | 5300-32 | \$7.55 | \$4.53 |
| 5335 | 5.15 | 3.09 | | | | 5314-4 | 5.15 | 3.09 |
| | | | | | | 5513-4 | 8.10 | 4.86 |
| | | | | | | 5514-4 | 8.10 | 4.86 |

SYNCHRONOUS

| 6 Volt | | | 6 Volt | | | 12 Volt | | |
|----------|------------|-----------|----------|------------|-----------|----------------|------------|-----------|
| Type No. | List Price | Net Price | Type No. | List Price | Net Price | Type No. | List Price | Net Price |
| 5400 | \$8.10 | \$4.86 | 5607 | \$9.05 | \$5.43 | 6607 | \$10.45 | \$6.27 |
| 5404 | 8.10 | 4.86 | 5610 | 8.10 | 4.86 | 6609 | 10.45 | 6.27 |
| 5406 | 8.10 | 4.86 | 5616 | 9.05 | 5.43 | 6610 | 9.05 | 5.43 |
| 5407 | 8.10 | 4.86 | 5620 | 8.10 | 4.86 | 6614 | 9.05 | 5.43 |
| 5408 | 8.10 | 4.86 | | | | 6615 | 9.05 | 5.43 |
| 5409 | 8.10 | 4.86 | | | | 6616 | 10.45 | 6.27 |
| 5410 | 8.10 | 4.86 | | | | Other Voltages | | |
| 5411 | 8.10 | 4.86 | | | | 5468-2 | \$11.30 | \$6.78 |
| 5425 | 9.65 | 5.79 | | | | 5469-2 | 10.30 | 6.18 |
| 5426 | 8.10 | 4.86 | | | | 5615-24 | 9.05 | 5.43 |
| 5429 | 9.65 | 5.79 | | | | | | |
| 5437 | 8.10 | 4.86 | | | | | | |
| 5438 | 8.10 | 4.86 | | | | | | |

COMMUNICATIONS TYPES

INTERRUPTER

| 6 Volt | | | 6 or 12 Volts | | | 12 Volt Only | | |
|----------|------------|-----------|---------------|------------|-----------|--------------|------------|-----------|
| Type No. | List Price | Net Price | Type No. | List Price | Net Price | Type No. | List Price | Net Price |
| 5715 | \$7.25 | \$4.35 | 6715 | \$7.25 | \$4.35 | 6715S | \$7.25 | \$4.35 |
| 5718 | 7.25 | 4.35 | 6718 | 7.25 | 4.35 | | | |
| 5721 | 7.25 | 4.35 | 6721 | 7.25 | 4.35 | | | |
| 5722 | 9.05 | 5.43 | 6722 | 9.05 | 5.43 | | | |
| 5725 | 7.25 | 4.35 | 6725 | 7.25 | 4.35 | | | |

SYNCHRONOUS

| 6 Volt | | | 6 or 12 Volts | | | 12 Volt Only | | |
|----------|------------|-----------|---------------|------------|-----------|--------------|------------|-----------|
| Type No. | List Price | Net Price | Type No. | List Price | Net Price | Type No. | List Price | Net Price |
| 5805 | \$8.10 | \$4.86 | 6805 | \$8.10 | \$4.86 | 6820S | \$8.10 | \$4.86 |
| 5820 | 8.10 | 4.86 | 6820 | 8.10 | 4.86 | | | |
| 5822 | 9.05 | 5.43 | 6821 | 7.25 | 4.35 | | | |
| 5824 | 10.45 | 6.27 | 6822 | 9.05 | 5.43 | | | |
| | | | 6824 | 10.45 | 6.27 | | | |



SPECIFICATIONS

POPULAR TYPES IN STANDARDIZED SERIES

| Vibrator | Voltage | Frequency | *D.C. Amps. | Base | Type | Size | List Price | Net Price |
|----------|---------|-----------|-------------|------|---------------|--------------------------|------------|---------------|
| 6VB6H | 6 | 60 ± 2 | 15 | HB | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | \$14.20 | \$8.52 |
| 6VD6H | 6 | 60 ± 2 | 30 | HE | Horiz. Tandem | 2 3/16 x 5 15/16 x 3 3/8 | 24.70 | 14.82 |
| 6VL6H | 6 | 60 ± 1/2 | 12 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 14.20 | 8.52 |
| 6VL10 | 6 | 100 ± 3 | 10 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 12.90 | 7.74 |
| 12VB6H | 12 | 60 ± 2 | 10 | HB | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 14.20 | 8.52 |
| 12VD6H | 12 | 60 ± 1/2 | 20 | HE | Horiz. Tandem | 2 3/16 x 5 15/16 x 3 3/8 | 24.70 | 14.82 |
| 12VL6H | 12 | 60 ± 1/2 | 9 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 14.20 | 8.52 |
| 12VL10 | 12 | 100 ± 3 | 8 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 12.90 | 7.74 |
| 28VB6H | 28 | 60 ± 2 | 8 | HB | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 14.20 | 8.52 |
| 28VD6H | 28 | 60 ± 1/2 | 15 | HE | Horiz. Tandem | 2 3/16 x 5 15/16 x 3 3/8 | 24.70 | 14.82 |
| 28VL6 | 28 | 60 ± 2 | 7 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 12.90 | 7.74 |
| 28VL10 | 28 | 100 ± 3 | 6 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 12.90 | 7.74 |
| 32VB6H | 32 | 60 ± 1/2 | 6 | HB | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 14.20 | 8.52 |
| 32VD6H | 32 | 60 ± 1/2 | 12 | HE | Horiz. Tandem | 2 3/16 x 5 15/16 x 3 3/8 | 24.70 | 14.82 |
| 32VL6H | 32 | 60 ± 1/2 | 6 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 14.20 | 8.52 |
| 32VL10 | 32 | 100 ± 3 | 5 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 12.90 | 7.74 |
| 110VB6H | 110 | 60 ± 1/2 | 3 | HB | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 14.20 | 8.52 |
| 110VC6H | 110 | 60 ± 1/2 | 6 | HE | Horiz. Tandem | 2 3/16 x 5 15/16 x 3 3/8 | 24.70 | 14.82 |
| 110VL6H | 110 | 60 ± 1 | 3 | HA | Vert. Single | 1 31/32 Dia. x 4 9/16 | 14.20 | 8.52 |

POPULAR OLD TYPES (Not directly replaceable by Standardized Series)

| Vibrator | Voltage | Frequency | *D.C. Amps. | Base | Type | Size | List Price | Net Price |
|----------|---------|-----------|-------------|------|---------------|--------------------------|------------|---------------|
| 427 | 6 | 60 ± 2 | 12 | HF | Vert. Single | 2 3/16 Dia. x 4 11/16 | \$12.90 | \$7.74 |
| 490 | 6 | 60 ± 3.0 | 25 | HL | Horiz. Tandem | 2 3/16 x 5 15/16 x 3 3/8 | 24.70 | 14.82 |
| 491 | 6 | 60 ± 2 | 20 | HL | Horiz. Tandem | 2 3/16 x 5 9/16 x 2 9/16 | 24.70 | 14.82 |
| 1315 | 110 | 60 ± 2 | 3 | HH | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 14.20 | 8.52 |
| 1315H | 110 | 60 ± 1/2 | 3 | HH | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 15.25 | 9.15 |
| 3077 | 110 | 60 Adj. | 2 | HH | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 15.25 | 9.15 |
| 11028 | 110 | 60 ± 2 | 3 | HF | Horiz. Single | 2 3/16 x 5 9/16 x 2 9/16 | 15.25 | 9.15 |

SMALL VIBRATORS USED IN VIPOWERS

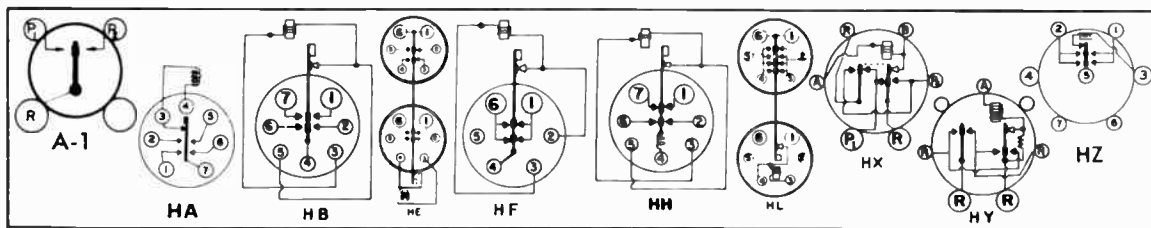
| Vibrator | Voltage | Frequency | *D.C. Amps. | Base | Type | Size | List Price | Net Price |
|----------|---------|-----------|-------------|------|-----------|--------------------|------------|---------------|
| 2522 | 110 | 60 ± 3 | 5 | HX | Vert. ARV | 1 1/2 Dia. x 2 7/8 | \$9.10 | \$5.46 |
| 2529 | 6 | 60 ± 5 | 5 | None | Wire-in | 1 x 1 x 2 3/8 | 4.40 | 2.64 |
| 2530 | 12 | 60 ± 5 | 3 | None | Wire-in | 1 x 1 x 2 3/8 | 4.40 | 2.64 |
| 2531 | 6 | 60 ± 3 | 10 | A-1 | Vert. ARV | 1 1/2 Dia. x 2 7/8 | 8.10 | 4.86 |
| 2532 | 12 | 60 ± 3 | 5 | A-1 | Vert. ARV | 1 1/2 Dia. x 2 7/8 | 8.10 | 4.86 |
| 2533 | 110 | 60 ± 5 | 6 | None | Wire-in | 1 x 1 x 3/8 | 4.40 | 2.64 |
| 2563 | 6 | 60 ± 3 | 15 | HZ | Vert. ARV | 1 1/2 Dia. x 2 7/8 | 10.90 | 6.54 |
| 2564 | 28 | 60 ± 3 | 5 | HZ | Vert. ARV | 1 1/2 Dia. x 2 7/8 | 10.90 | 6.54 |
| 2565 | 110 | 60 ± 3 | 8 | HY | Vert. ARV | 1 1/2 Dia. x 2 7/8 | 10.90 | 6.54 |

POPULAR OLD TYPES (Directly replaceable by Standardized Series)

| Old | New | Old | New | Old | New |
|------|--------|------|---------|------|-------|
| 2989 | 32VB6H | 3079 | 110VC6H | 3103 | 6VB6H |
| 3047 | 12VD6H | 3087 | 12VB6H | 4123 | 6VD6H |

*D.C. Ampere rating is based upon measurement made with a D.C. ammeter in primary lead. Circuit must be properly designed for load being handled. Technical advice is available through CDR Vibrator Department, Fuquay Springs, N. C.

BASE DIAGRAMS



OBsolete TYPES

It is entirely impractical to continue to stock the hundreds of different heavy-duty vibrators that have been supplied in past years for a large variety of uses. Every attempt is made to maintain equipment in service, even though it originally used vibrators which have generally become obsolete. Some obsolete vibrator types are still carried in limited stock at the factory. In a great many cases, simple instructions are available so that a radio technician can change wiring, sockets, or other

minor features in an old design to adapt it for use with new standard vibrators.

For information regarding a possible replacement for obsolete vibrators, send details including model number of equipment, original vibrator type number, voltage and frequency to the CDR Vibrator Department, Fuquay Springs, N. C.

CLASS
251.00
SERIES

CORNELL-DUBILIER ELECTRONICS

"VIPOWER®" Power Supplies



**INVERTERS
DC-AC**



**BATTERY ELIMINATORS
AC-DC**



**MOBLPAKS
DC-DC**



**SPORTSMAN, SR.
PORTABLE**

- **COMPLETE COVERAGE** — Each inverter applicable to widest variety of uses. Good inventory turnover.
- **SIMPLIFIED SERVICING** — All components individually and readily accessible. No potted assemblies.
- **SINE-WAVE-REGULATED** — Models hold output steady as input or load varies and provide commercial wave form for best operation of sensitive equipment.
- **POWER FACTOR CORRECTION** — Auxiliary PF Correctors available to permit standard inverters to handle low PF loads. Special Inverters are not required.
- **SPORTSMAN, SR.** — Combines a vibrator inverter, battery charger and a compartment for standard 12 volt auto battery, so that 110 volt AC power is available for operation of TV, radio, record players, etc.
- **MOBLPAK VIPOWERS** — Supply up to 500 V. DC — 225 MA from 6 to 12 volt sources for mobile radio service.
- **BATTERY ELIMINATORS** — Compact, well filtered, conveniently styled power package for test bench.

| REGULAR STANDARD VIPOWERS (DC to 110 V.AC) | | | | | SINE-WAVE-REGULATED VIPOWERS (DC to AC) | | | | | VIPOWER ACCESSORIES | | | | | | | |
|---|-------------|----------------------------|---------------------|---|--|--------------------|--------------------------------|--|---|---|---|-------------|----------------------|-----------------|-----------|-------------------|--------|
| Model | Input Volts | Output Watts | Class | *List Price | Model | Input Volts | Output Watts | Class | *List Price | Model No. | Explanation | *List Price | | | | | |
| 12SP2 | 12 | 20 | SP | \$13.40 | 12SW10 | 12 | 100 | H | \$122.35 | LEAD KITS | | | | | | | |
| 12L8 | 12 | 80 | L | 39.50 | 12SW25 | 12 | 250 | SH | 135.50 | LK-605 | Dual #6 — 5 feet | \$8.95 | | | | | |
| 12S10 | 12 | 100 | S | 63.60 | 110SW15 | 110 | 150 | H | 122.35 | LK-612 | Dual #6 — 12 feet | 16.50 | | | | | |
| 12H15 | 12 | 150 | H | 87.30 | <p align="center">"SPORTSMAN, SR." (110 V.AC from self-contained battery)</p> <p align="center">- Model 12SS14 Input Volts 12</p> <p align="center">Output Watts 140 Class SS User Net \$65.00</p> <p align="center">Note: Unit includes 140 Watt Inverter, built-in Battery Charger and compartment for standard 12 V. auto battery (not provided)</p> | | | | | LK-616 | Dual #6 — 16 feet | 20.50 | | | | | |
| 12SH22 | 12 | 225 | SH | 113.65 | | | | | | LK-805 | Dual #8 — 5 feet | 6.25 | | | | | |
| 28H15 | 28 | 150 | H | 99.00 | | | | | | LK-812 | Dual #8 — 12 feet | 10.75 | | | | | |
| 32H18 | 32 | 180 | H | 103.50 | | | | | | LK-816 | Dual #8 — 16 feet | 13.00 | | | | | |
| 110S15 | 110 | 150 | S | 63.15 | | | | | | LK-1005 | Dual #10 — 5 feet | 5.25 | | | | | |
| 110H25 | 110 | 250 | H | 78.60 | | | | | | LK-1012 | Dual #10 — 12 feet | 8.50 | | | | | |
| 110SH40 | 110 | 400 | SH | 149.15 | | | | | | LK-1016 | Dual #10 — 16 feet | 10.25 | | | | | |
| BATTERY ELIMINATORS | | | | | | | | | | MOBLPAK VIPOWERS (Low DC to High DC) | | | MOUNTING KITS | | | | |
| Model | Input Volts | Output Watts | Class | *List Price | | | | | | 6/12D6 | 6/12 | 60 | L | \$43.90 | MK-3544-1 | For L and S cases | \$5.50 |
| 110B6 | 110 | 6A-12 V.DC 10A- 6 V.DC | H | \$87.30 | | | | | | VIPOWER ACCESSORIES | | | MK-3544-2 | For H case only | 6.00 | | |
| 110B12 | 110 | 10A-12 V.DC 20A- 6 V.DC | H | 111.90 | REMOTE CONTROL KITS | | | MK-3544-3 | For SH case only | 7.50 | | | | | | | |
| TRANSIPOWER TRANSISTORIZED MOBILE SUPPLIES | | | | | SPORTSMAN, SR. | | | MASTER FUSE KITS (2" cartridge) | | | | | | | | | |
| Model | Input Volts | Output Watts | Price | <p align="center">VIPOWER ACCESSORIES</p> <p align="center">RK-105 5' extension cable \$9.00</p> <p align="center">RK-112 12' extension cable 11.00</p> <p align="center">RK-116 16' extension cable 12.00</p> | | | | | <p align="center">FK-220 20 ampere \$3.50</p> <p align="center">FK-230 30 ampere 3.50</p> <p align="center">FK-240 40 ampere 4.50</p> <p align="center">FK-250 50 ampere 4.50</p> <p align="center">FK-260 60 ampere 4.50</p> | | | | | | | | |
| 12TP3 | 12 | 300 V.DC* 100 MA | \$45.00 User Net | MOBLPAK VIPOWERS (Low DC to High DC) | | | POWER FACTOR CORRECTORS | | | | | | | | | | |
| 12TP12 | 12 | 500 V.DC* 240 MA | 60.00 User Net | 6/12C6 | 6/12 | 300 V.DC 200 MA | S | \$65.70 | PF-1 | 60% PF loads 10-100 watts; 30% PF loads 10- 25 watts | \$17.10 | | | | | | |
| * Have taps at one-half rated voltage. | | | | | 6/12DC12 | 6/12 | 500 V.DC 225 MA | S | 105.00 | PF-2 | 60% PF loads 150-300 watts; 30% PF loads 50- 75 watts | 34.20 | | | | | |
| | | | | | | | | | | PF-3 | 60% PF loads 350-500 watts; 30% PF loads 100-150 watts | 42.70 | | | | | |

* List prices are subject to Dealer Discount.

- Standard models deliver 110 volts, 60 cycle, AC power. Output watt ratings are based on continuous operation at high power factor loads. They should be reduced by the percent of power factor where inductive loads are involved.
- All models are housed in cases of similar design and appearance. The class designations signify approximate size and weight as follows:

- SP — Shaver Pack—2 3/8 x 2 1/2 x 3 3/2..... 2 lbs.
- LM — Light Midget—3 x 3 1/2 x 4 13/16..... 4 lbs.
- M — Midget—3 13/16 x 4 3/8 x 5 13/16..... 6 lbs.
- L — Lightweight—5 1/2 x 6 1/4 x 8.....12 lbs.
- S — Standard—5 1/2 x 6 1/4 x 9.....14 lbs.
- H — Heavy—6 1/2 x 7 1/2 x 11.....20 lbs.
- SH — Super Heavy—8 x 9 1/2 x 13.....35 lbs.
- SS — Sportsman, Sr.—9 1/2 x 9 1/2 x 14.....20 lbs. (less bat.)

PLASTICON POWER SUPPLIES



HI VOLT POWER SUPPLIES

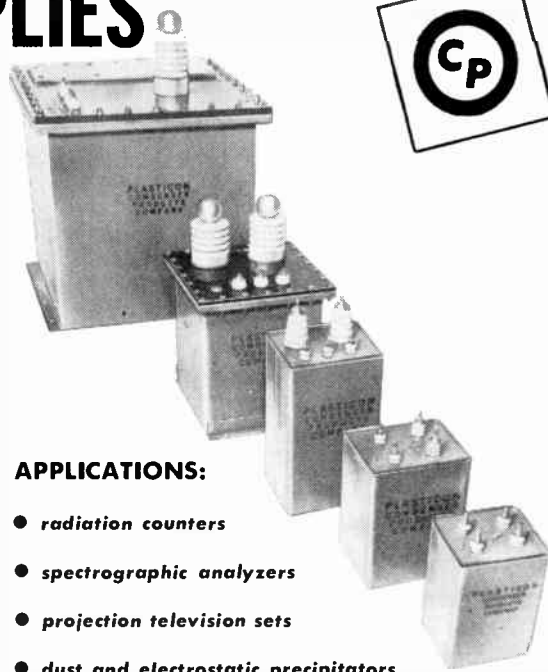
These hermetically-sealed, self-contained power supplies are designed for Hi Voltage low current DC for many applications. Our exclusive engineering techniques and oil-filled construction assure smaller, lighter, more reliable units.

HI VOLT POWER SUPPLIES FEATURE —

- Hermetically sealed oil filled construction to assure small size and light weight.
- Variable output voltage when the input voltage is supplied through an auto transformer to assure flexibility.
- High quality components safely rated and carefully assembled to assure reliability.
- Neutral case which may also be made either positive or negative to assure safety.

APPLICATIONS:

- radiation counters
- spectrographic analyzers
- projection television sets
- dust and electrostatic precipitators
- oscilloscopes
- display tubes



STANDARD POWER SUPPLIES

| Model No. | Output Voltage KVDC | Rated Output Current Ma. | Max. Output Current Ma. | % Ripple At Rated Current | Circuit | Case Size | Weight Pounds |
|-------------|---------------------|--------------------------|-------------------------|---------------------------|-------------------|----------------------------|---------------|
| PS2-2M60 | 2 | 2.0 | 5.0 | 1.5 | Half Wave | 3 3/4 x 3 3/8 x 5 1/2" Hi. | 4.5 |
| PS5-3M60 | 5 | 3.0 | 3.0 | .6 | Half Wave | 3 3/4 x 4 3/8 x 6" | 9.0 |
| PS5-5M60 | 5 | 5.0 | 5.0 | .8 | Half Wave | 3 3/4 x 4 3/8 x 6" | 9.0 |
| PS10-1M60V | 0-12 | 1.0 | 1.75 | 2.0 | Full Wave Doubler | 3 3/4 x 4 3/8 x 8" | 11.5 |
| PS10-5M60V | 0-10 | 5.0 | 5.0 | 3.0 | Full Wave Doubler | 3 3/4 x 4 3/8 x 8" | 11.5 |
| PS15-1M60V | 0-15 | 1.0 | 1.75 | 3.0 | Full Wave Doubler | 3 3/4 x 4 3/8 x 8" | 12.0 |
| PS15-5M60V | 0-15 | 5.0 | 5.0 | 1.5 | Full Wave Doubler | 3 3/4 x 4 3/8 x 8" | 12.0 |
| PS30-1M60V | 0-30 | 1.0 | 1.5 | 3.0 | Full Wave Doubler | 7 x 7 x 9 1/4" | 25.0 |
| PS50-2M60VT | 0-50 | 2.0 | 4.0 | 1.5 | Full Wave Tripler | 12 1/2 x 12 1/2 x 12 1/2" | 80.0 |

NOTES:

1. The case can be made either positive or negative.
2. The PS50 Supply has a separate accessible compartment for the rectifier tubes.
3. Hi Volt Supplies are rated at 118 V AC input, 60 cycles.
4. Hi Volt Supplies for 400 cycle operation are also available for aircraft use — built to military specifications.
5. Hi Volt Supplies are engineered for various applications. Send us your requirements.

NEW! SUB-MINIATURE SOLID-STATE POWER SUPPLIES

| Model No. | Output Voltage KVDC | Rated Output Current MA. | Max. Output Current MA. | % Ripple At Rated Current | Circuit | Case Dimensions | Approx. Weight Pounds |
|------------|---------------------|--------------------------|-------------------------|---------------------------|-------------------|---------------------------|-----------------------|
| PST2-2M60 | 0-2. | 2. | 3.00 | 0.5 | Half Wave | 3 3/4 x 2 1/4 x 3 1/2" Hi | 2.5 |
| PST5-2M60 | 0-5. | 2. | 3.00 | 0.5 | Full Wave Doubler | 3 3/4 x 2 1/4 x 3 1/2" Hi | 2.5 |
| PST10-1M60 | 0-10. | 1. | 1.75 | 1.0 | Full Wave Doubler | 3 3/4 x 3 3/8 x 4" Hi | 4.5 |
| PST15-1M60 | 0-15. | 1. | 1.75 | 1.0 | Full Wave Doubler | 4 3/8 x 3 3/8 x 5 1/2" Hi | 8.5 |

NOTES:

1. The case is neutral — Output has reversible polarity.
2. Input rated @ 115 V AC $\pm 5\%$ from 60 to 400 cycle operation.
3. Case is standard CP70 Type Container.
4. Finish on all units consists of Zinc Chromate Primer & Secondary Coat of Grey Lacquer.
5. Terminals are Ceramic Solder Seal Type with No. 8-32 Threaded Studs except Model PST15-1M60 which has No. 10-32 Threaded Studs on output terminals.
6. Units can be mounted in any position.

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- 380 to 1,000 CPS Applications
- High voltage output from 1 to 50 KV with current ratings up to 50 ma.
- and many other varied applications
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- HiVolt Power Supplies
- Pulse Forming Networks



Filtered, variable output DC POWER SUPPLIES



...for all types of low DC voltage applications
GUARANTEED PERFORMANCE, LONG LIFE AT LOW COST

| Model | Voltage Output | Amperage Output | Regulation (V. A) | Maximum Ripple (%) | Meters | DC Impedance (ohms) | Size | Weight (lbs. net) | Prices (net) |
|-------------|---|--------------------|--|---------------------|--------------------------|----------------------------|----------------|-------------------|--------------|
| GFA | 0-125 | 0-10 | 1.6 to 10A (12% of no-load voltage @ max. output) | 1 | 0-150V, 0-20A | 1.6 | 14¼ x 22 x 15¼ | 150 | \$575.00 |
| PS-5 | 0-55 | 0-10 | 0.8 (0-10A) | 0.5 | 0-75V, 0-10A | 0.8 | 9¾ x 14¼ x 14¼ | 60 | 250.00 |
| PS-5R | 0-55 | 0-10 | 0.8 (0-10A) | 0.5 | 0-75V, 0-10A | 0.8 | 10½ x 19 x 14¼ | 71 | 275.00 |
| NFB | 0-32 | 0-15 | 0.3 (0-15A) | 0.75 | 0-50V, 0-25A | 0.3 | 9¾ x 14¼ x 14¼ | 71 | 250.00 |
| NFB-R | 0-32 | 0-15 | 0.3 (0-15A) | 0.75 | 0-50V, 0-25A | 0.3 | 10½ x 19 x 14¼ | 82 | 275.00 |
| NB | 0-32 | 0-15 | 0.3 (0-15A) | 5 | 0-50V, 0-25A | 0.3 | 9¾ x 14¼ x 14¼ | 61 | 225.00 |
| EFB | 0-32 0-16 | 0-4 0-8 | 1.25 (0-4A) 1 (0-8A) | 0.1 | 0-40/20V, 0-10A | 1.25 1.0 | 7 x 12 x 8½ | 31 | 140.00 |
| EFBR | 0-32 0-16 | 0-4 0-8 | 1.25 (0-4A) 1 (0-8A) | 0.1 | 0-40/20V, 0-10A | 1.25 1.0 | 8¾ x 19 x 8½ | 34 | 160.00 |
| EB | 0-32 0-16 | 0-4 0-8 | 1.25 (0-4A) 1 (0-8A) | 5 | 0-40/20V, 0-10A | 1.25 1.0 | 7 x 12 x 8½ | 23 | 115.00 |
| EF | 0-28 0-14 | 0-5 0-5 | 0.9 (1-5A) 0.6 (1-5A) | 1 | 0-50V, 0-6A | 0.9 (1-5A) 0.6 (1-5A) | 7 x 12 x 8½ | 21 | 98.00 |
| PS-3 | 0-15 15-25 | D-200MA D-100MA | 100MV | 1MV | 0-25V/10HMA, 200MA | 0.5 | 6¼ x 5 x 6 | 3½ | 79.50 |
| PS-2 | 0-20 0-16 | 0-75MA 0-5A | 1.6 | 0.15 0.5 | 0-20V, 0-1DA & 0-75MA | 1.6 | 6 x 8½ x 8 | 12 | 56.00 |
| KPS-2 (Kit) | 0-20 0-16 | 0-75MA 0-5A | 1.6 | 0.15 0.5 | 0-20V, 0-1DA & 0-75MA | 1.6 | 6 x 8½ x 8 | 12 | 44.95 |
| D-612T | 0-16 0-8 | 0-10 0-10 | .44 (3-10A) .3 (3-10A) | 0.5 @ 5A 2 @ 10A | 0-20V, 0-10A | .44 (3-10A) .3 (3-10A) | 7 x 12 x 8½ | 20 | 59.95 |
| EC-2 | 0-16 | 0-5 | 1.8 | 0.5 | 0-20V/1GA | 1.8 | 10¾ x 4¾ x 6½ | 9 | 39.95 |
| PS-30 | 12 (adjustable) | 0-30 | 2.7 (6-30A) | 1 | 0-20, 0-50A | 0.27 | 9¼ x 16¾ x 13 | 56 | 195.00 |
| H | 12 (adjustable) 6 (adjustable) | 0-10 0-20 | .23 (3-10A) .15 (3-20A) | 5 | 0-20V, 0-30A | .23 (3-10A) .15 (3-20A) | 7 x 12 x 8½ | 29 | 86.00 |
| EC-1 | 12 (adjustable) | 0-5 | 1.4 | 0.5 | | 1.4 | 10¾ x 4¾ x 6½ | 10 | 29.95 |

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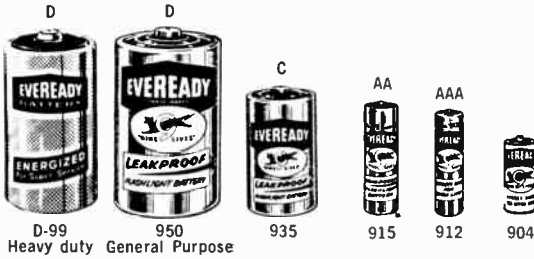
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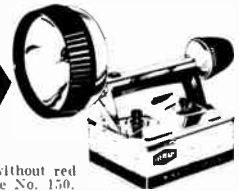


No. 105 "Big Jim" Camp and Emergency Lantern: Combination floodlight, searchlight, red-flashing warning light. Uses "Eveready" No. 731 weather-proof battery... "Eveready" No. PR13 Headlamp... "Eveready" No. 407 Signal Lamp. List price \$13.50 complete.



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|------------------------------|-------------|------------------------------|---------------------------|---|-----------------------------------|----------------|------|-----------------|-----------------|--|---------------------|
| | | L | W | H | | lbs. | ozs. | | | | |
| E1 | 1100 | 0.625 | Diam. x 0.650 | | Flat Contact, +1.40 | | 0.43 | 4 | \$ 0.60 | Meters, Instruments, Signal Lights, Miniature Radios | |
| E1N | | 0.625 | Diam. x 0.650 | | Flat Contact, +1.35 | | 0.43 | 4 | 0.65 | | |
| E3 | | 0.985 | Diam. x 0.660 | | Flat Contact, +1.35 | | 0.98 | 4 | 0.80 | | |
| E4 | | 1.195 | Diam. x 0.660 | | Flat Contact, +1.35 | | 1.6 | 4 | 1.03 | | |
| EPX-4 | | 0.662 | Diam. x 1.965 | | Flat Contact, +5.40 | | 1.16 | 1 | 1.95 | | |
| No. 6 | | | | | | | | | | Camera | |
| "Ignitor" Gen. Purpose No. 6 | 905 | 2% | Diam. x 6% | | **Screw, +1/2 | | 2 | 2 | 12 | 1.25 | Ignition, Lighting |
| "Gray Label" Telephone No. 6 | 906 | 2% | Diam. x 6% | | ***Fahnestock, +1/2 | | 2 | 2 | 12 | 1.25 | Telephone |
| Railroad & Industrial No. 6 | 911 | 2% | Diam. x 6% | | **Screw, +1/2 | | 2 | 2 | 12 | 1.35 | Ignition, Telephone |
| EPX-6 | | 0.662 | Diam. x 4.090 | | Flat Contact, +5.40, +12.15 | | 1.6 | 1 | 3.07 | Camera | |
| E9 | 1103 | 0.550 | Diam. x 1.968 | | Flat Contact, +1.40 | | 1.05 | 4 | 0.75 | Transistor Applications | |
| E9N | | 0.550 | Diam. x 1.968 | | Flat Contact, +1.40 | | 1.05 | 2 | 0.80 | Transistor Radio | |
| E12 | 1101 | 0.640 | Diam. x 1.968 | | Flat Contact, +1.40 | | 1.4 | 2 | 1.10 | Instruments, Miscellaneous | |
| E12N | | 0.640 | Diam. x 1.968 | | Flat Contact, +1.35 | | 1.4 | 2 | 1.25 | Meters, Instruments | |
| N22 | | 0.449 | Diam. x 0.201 | | Flat Contact, +1.25 | | 0.04 | 1 | 1.50 | | |
| N24 | | 0.61 | Diam. x 0.235 | | Flat Contact, +1.25 | | 0.12 | 1 | 1.00 | | |
| N26 | | 0.988 | Diam. x 0.230 | | Flat Contact, +1.25 | | 1.16 | 1 | 2.20 | | |
| N26T | | 0.988 | Diam. x 0.230 (plus tabs) | | Solder Tabs, +1.25 | | 0.32 | 1 | 1.20 | | |
| N28 | | 0.988 | Diam. x 0.252 | | Flat Contact, +1.25 | | 0.4 | 1 | 1.15 | | |
| N28T | | 0.988 | Diam. x 0.252 (plus tabs) | | Solder Tabs, +1.25 | | 0.4 | 1 | 1.25 | Instruments, Hobby, Transistor Applications, Miscellaneous | |
| N32 | | 0.988 | Diam. x 0.343 | | Flat Contact, +1.25 | | 0.44 | 1 | 1.20 | | |
| N32T | | 0.988 | Diam. x 0.343 (plus tabs) | | Solder Tabs, +1.25 | | 0.44 | 1 | 1.30 | | |
| N36 | | 1.697 | Diam. x 0.286 | | Flat Contact, +1.25 | | 1.16 | 1 | 2.10 | | |
| N36T | | 1.697 | Diam. x 0.286 (plus tabs) | | Solder Tabs, +1.25 | | 1.16 | 1 | 2.20 | | |
| N38 | | 1.355 | Diam. x 0.380 | | Flat Contact, +1.25 | | 1.0 | 1 | 2.50 | Instruments | |
| N38T | | 1.355 | Diam. x 0.380 (plus tabs) | | Solder Tabs, +1.25 | | 1.0 | 1 | 2.60 | Instruments | |
| N40 | | 1.984 | Diam. x 0.394 | | Flat Contact, +1.25 | | 2.0 | 1 | 4.00 | Instruments, Miscellaneous | |
| S40 | | 0.450 | Diam. x 0.155 | | Flat Contact, +1.50 | | 0.06 | 6 | 0.30 | Instruments, Meters | |
| N41 | | 1.984 | Diam. x 0.719 | | Flat Contact, +1.25 | | 3.4 | 1 | 6.70 | Instruments, Miscellaneous | |
| E42 | | -9/32 | Diam. x 2.390 | | Flat Contact, +1.40 | | 5.85 | 1 | 2.30 | Instruments | |
| E42N | | -9/32 | Diam. x 2.39 | | Flat Contact, +1.35 | | 5.85 | 1 | 2.75 | Instruments | |
| N43 | | 1.984 | Diam. x 0.988 | | Flat Contact, +1.25 | | 4.8 | 1 | 8.15 | Instruments | |
| N45 | | 17/32 | Diam. x 1-1/32 | | Solder Tabs, +1.25 | | 0.8 | 1 | 3.00 | | |
| N46 | | 17/32 | Diam. x 1-1/32 | | Flat Contact, +1.25 | | 0.8 | 1 | 2.75 | | |
| N52 | | 17/32 | Diam. x 3-35/64 | | Solder Tabs, +1.25 | | 1.4 | 1 | 4.55 | | |
| N56 | | 1-11/32 | Diam. x 2-13/32 | | Flat Contact, +1.25 | | 4.5 | 1 | 5.00 | Instruments, Hobby, Transistor Applications, Miscellaneous | |
| N67 | | 1-15/32 | x 1-15/32 x 3-25/32 | | Wire Leads, +6 | | 8.3 | 1 | 26.40 | | |
| N70 | | 3-53/64 | x 1-35/64 x 3% | | Wire Leads, +6 | | 1 | 12 | 42.30 | | |
| N73 | | 1-23/64 | x 1-23/64 x 2-13/32 | | Nut & Stud; Tab, +1.25 | | 5.9 | 1 | 8.65 | | |
| N74 | | 1-23/64 | x 1-23/64 x 3-25/64 | | Nut & Stud; Tab, +1.25 | | 9.2 | 1 | 10.15 | | |
| N75 | | 1-23/32 | x 2 x 3-5/32 | | Nut & Stud, +1.25 | | 12.3 | 1 | 13.35 | Instruments, Hobby, Transistor Applications, Miscellaneous | |
| N76 | | 1-23/32 | x 2 x 3-45/64 | | Nut & Stud, +1.25 | | 15.2 | 1 | 14.60 | | |
| N77 | | 1-23/32 | x 2 x 4-1/4 | | Nut & Stud, +1.25 | | 1 | 1 | 15.95 | | |
| N81 | | 1-1/16 | x 3-37/64 x 4-15/16 | | Nut & Stud, +1.25 | | 1 | 1.6 | 19.70 | | |
| N81 | | 1-25/64 | x 3-37/64 x 4-15/16 | | Nut & Stud, +1.25 | | 2 | 2.9 | 23.95 | | |
| N83 | | 1-45/64 | x 3-37/64 x 4-15/16 | | Nut & Stud, +1.25 | | 2 | 9.6 | 28.45 | | |
| N85 | | 2-1/64 | x 3-37/64 x 4-15/16 | | Nut & Stud, +1.25 | | 3 | 1.6 | 32.75 | | |
| E90 | | 0.470 | Diam. x 1.130 | | Flat Contacts, +1.5 | | 0.35 | 3 | 0.35 | Radio, Electronic | |
| E91 | | 9/16 | Diam. x 1-31/32 | | Flat Contacts, +1.5 | | 0.75 | 24 | 0.50 | Portable Radio | |
| E93 | | 1-1/32 | Diam. x 1-15/16 | | Flat Contact, +1.5 | | 2.0 | 12 | 0.60 | Radio, Electronic | |
| E94 | 927 | 1-1/32 | Diam. x 1-7/32 | | Flat Contact, +1.5 | | 1.8 | 12 | 0.50 | Electronic Photoflash | |
| E95 | | 1-1/32 | Diam. x 2-13/32 | | Flat Contact, +1.5 | | 4.3 | 12 | 0.75 | Communication Equipment | |
| E97S | | 1-1/32 | Diam. x 5-7/32 | | Ins. Screw, +1/2 | | 1 | 12 | 1.10 | Hobby | |
| †099 | | 1-1/32 | Diam. x 2-13/32 | | Flat Contact, +1.5 | | 3.3 | 48 | 0.25 | Flashlight, Toys | |
| A100 | 13 | 1-1/32 | Diam. x 2-13/32 | | Flat Contact, +1.5 | | 3.3 | 48 | 0.25 | Portable Radio "A", Transistor | |
| E113 | | 0.660 | Diam. x 0.845 | | Flat Contact, +4.05 | | 0.45 | 1 | 1.95 | Instruments | |
| F14 | | 0.660 | Diam. x 1.080 | | Flat Contact, +5.40 | | 0.59 | 1 | 2.30 | Instruments | |
| E115 | | 0.660 | Diam. x 1-3/32 | | Flat Contact, +6.75 | | 0.73 | 1 | 2.50 | Instruments | |
| E136 | | 0.724 | Diam. x 2.17 | | Flat Contact, +8.4 | | 1.7 | 1 | 1.25 | Transistor Radio | |
| E132 | | 0.662 | Diam. x 1.315 | | Flat Contact, +2.70 | | 0.9 | 2 | 1.30 | Transistor Applications | |
| E33 | 1304 | 0.662 | Diam. x 1.965 | | Flat Contact, +4.2 | | 1.4 | 2 | 2.15 | Transistor Applications | |
| E134 | | 0.662 | Diam. x 2.620 | | Flat Contact, +5.40 | | 1.9 | 2 | 2.80 | Instruments | |
| E135 | | 0.662 | Diam. x 3.275 | | Flat Contact, +6.75 | | 2.4 | 1 | 3.20 | Instruments | |
| E136 | | 0.662 | Diam. x 3.930 | | Flat Contact, +8.10 | | 2.9 | 1 | 3.85 | Instruments | |
| E137 | | 0.662 | Diam. x 4.585 | | Flat Contact, +9.45 | | 3.3 | 1 | 2.30 | Electronic | |
| E145 | | 2-1/32 | Diam. x 1-3/16 | | Flat Contact, +1.5 | | 0.6 | 1 | 1.50 | Transistor Radio | |
| E146 | 1604 | 1-1/32 | x 3/8 x 2 | | Min. Snap, -8.40 | | 0.42 | 1 | 1.15 | Instruments | |
| E132 | | 0.485 | Diam. x 1.140 | | Flat Contact, +2.70 | | 0.60 | 1 | 1.50 | Instruments | |
| E153 | | 0.485 | Diam. x 1.708 | | Flat Contact, +4.05 | | 0.60 | 1 | 1.50 | Instruments | |
| E162 | | 0.662 | Diam. x 0.887 | | Flat Contact, +2.70 | | 0.58 | 1 | 1.30 | Instruments | |
| E163 | 1305 | 0.662 | Diam. x 1.327 | | Flat Contact, +4.20 | | 0.87 | 2 | 1.50 | Transistor Applications | |
| E164 | 1404 | 0.662 | Diam. x 1.767 | | Flat Contact, +5.60 | | 1.16 | 2 | 1.75 | Transistor Applications | |
| E165 | 1500 | 0.662 | Diam. x 2.217 | | Flat Contact, +7.00 | | 1.45 | 2 | 2.25 | Transistor Applications | |
| E169 | | 0.662 | Diam. x 3-63/64 | | Flat Contact, +12.6 | | 4.2 | 1 | 4.79 | Instruments | |
| E175 | | 1/2 | Diam. x 1-3/32 | | Flat Contact, +7.0 | | 1.0 | 10 | 1.50 | Transistor Radio | |
| E177 | 1606 | 35/64 | Diam. x 1-29/32 | | Min. Snap, +9.6 | | 0.67 | 1 | 1.75 | Transistor Radio | |
| 206 | 1611 | 3/4 | Diam. x 2 | | Flat Contacts, Neg. Recessed, +.9 | | 1.2 | 1 | 0.75 | Transistor Radio | |
| 216 | 1604 | 1-1/32 | x 11/16 x 1-29/32 | | Min. Snap, +9 | | 1.3 | 12 | 0.69 | Transistor Radio | |
| 226 | 1600 | 1 | Diam. x 1-15/16 | | Snap Type, +9 | | 2.0 | 6 | 0.89 | Transistor Radio | |
| E233 | 1300 | 1 | Diam. x 2-7/16 | | Snap Type, +12 | | 2.3 | 1 | 1.50 | Transistor Radio | |
| E234 | | 1-1/64 | Diam. x 1-31/32 | | Flat Contact, +4.20 | | 3 | 1 | 2.65 | Transistor Radio | |
| 239 | 1900 | 1-21/64 | x 1-1/32 x 2-11/16 | | Flat Contact, +5.60 | | 3.88 | 3 | 3.75 | Instruments | |
| 243 | 1610 | 1-13/32 | x 1-11/32 x 2 3/4 | | Socket, -.9, +13-1/2 | | 3 | 1 | 1.50 | Transistor Radio | |
| 246 | 1602 | 1-13/32 | x 1-11/32 x 2 3/4 | | Min. Snap, +4 1/2 | | 4.5 | 1 | 1.70 | Transistor Radio | |
| 266 | 1605 | 1-13/16 | x 1-13/16 x 2-7/16 | | Min. Snap, +9 | | 4.5 | 1 | 1.85 | Transistor Radio | |
| 274 | 1400 | 2-9/16 | x 2-1/32 x 7-29/32 | | Snap Type, +9 | | 7 | 1 | 1.50 | Transistor Radio | |
| 276 | 1603 | 2-9/16 | x 2-1/32 x 3-5/32 | | Snap Type, +6 | | 2 | 7 | 4.75 | Transistor Radio | |
| E312 | | 0.310 | Diam. x 0.140 | | Snap Type, +9 | | 15 | 1 | 1.80 | Transistor Radio | |
| 3-2 | 1306 | 0.662 | Diam. x 1.965 | | Flat Contact, +1.40 | | 0.02 | 6 | 0.35 | Instruments | |
| W-350 | 711 | 3-1/32 | x 1 1/8 x 4-31/32 | | Flat Contacts, +1.45 | | 0.9 | 1 | 0.75 | Transistor Radio | |
| W-351 | | 3 3/8 | x 2 1/4 x 3-11/16 | | Ins. Screw, +22 1/2, +45 | | 14.5 | 1 | 3.85 | Radio, Transceivers, Instruments | |
| W-352 | 701 | 2-21/32 | x 1-11/32 x 4-9/16 | | Screw, +22 1/2, +45 | | 5.5 | 1 | 7.55 | Radio, Transceivers, Instruments | |
| W-353 | 11 | 2-19/32 | x 1 3/8 x 4 1/4 | | Ins. Screw, +3 | | 12.5 | 1 | 1.25 | Electronic Devices, Instruments | |
| W-354 | 700 | 2-21/32 | x 1-11/32 x 4 3/8 | | Socket, +1/2 | | 12.5 | 1 | 1.10 | Portable Radio | |
| W-356 | | 2 1/8 | x 2 1/8 x 4-9/16 | | Screw, +1 1/2 | | 12.2 | 1 | 1.25 | Instruments | |
| W-357 | 901 | 3 3/8 | x 2-11/16 x 5-13/16 | | Ins. Screw, +3 | | 6 | 1 | 1.55 | Radio and Electric Devices | |
| W-358 | | 2-15/16 | x 1-3/16 x 4 1/4 | | Fahnestock, +1.3 | | 2 | 12 | 2.05 | Model Ignition, Telephone | |
| W-359 | 206 | 3-9/16 | x 2 1/4 x 4 1/2 | | Ins. Screw, +45 | | 11.8 | 1 | 3.55 | Industrial | |
| W-360 | 10 | 2-9/16 | x 2-9/16 x 4-1/32 | | Socket, +7/2 | | 1 | 3 | 1.90 | Portable "B" | |
| W-361 | 227 | 1-11/32 | x 1-11/32 x 11-23/32 | | Flat Contacts, +103 1/2 | | 1 | 4 | 6.57 | Portable "A" | |
| W-362 | | 2-15/16 | x 11/16 x 1 3/4 | | Screw, +4 1/2, -7 1/2 | | 1 | 1 | 2.10 | Portable "B" | |
| ▲ W-363F | | 8-1/32 | x 4-1/16 x 7 5/8 | | Fahnestock, +22 1/2, +45 | | 10 | 5 | 6.90 | Heavy Duty Radio "B" | |
| ▲ W-364F | | 8 1/2 | x 4-7/16 x 7-11/16 | | Fahnestock, +22 1/2, +45 | | 11 | 14 | 7.65 | Heavy Duty Radio "B" | |

*NEDA number same as an "Eveready" battery number on a different battery. Omitted to prevent errors in shipping. †Flashlight types.
 **Equipped with screw terminals unless Fahnestock spring terminals are specified. ††Shipped from factory only.
 ***Equipped with Fahnestock spring terminals unless screw terminals are specified.
 ▲ Furnished with Fahnestock spring terminals. If socket terminals required, specify W-363P, W-364P, W-365P.



COMPLETE LINE SPECIFICATIONS



| "Eveready" Battery Number | NEDA Number | Overall Dimensions in inches L W H | Terminals & Voltages | Battery Weight lbs. ozs. | Unit Pkg. Juan. | List Price Each | Major Use |
|---------------------------|-------------|---------------------------------------|--|--------------------------|-----------------|------------------------------|------------------------------------|
| ▲ W-365F | 723 | 8-1/16 x 2-15/16 x 7/8 | Fahnestock, +22 1/2, +45 | 7 | 7.5 | 1 | 5.50 Industrial "B" |
| W-366 | 407 | 9-1/32 x 2-1/32 x 4-23/32 | Socket—"A", +1 1/2 "A", —"B", +63 "B" | 4 | 4 | 1 | 8.80 Portable Radio "A-B" |
| W-367 | 408 | 9/8 x 2 3/4 x 4-7/16 | Socket—"A", +7 1/2 "A", —"B", +63 "B" | 4 | 5 | 1 | 9.20 Portable Radio "A-B" |
| W-368 | * | 9-1/32 x 2-23/32 x 3-9/16 | Recessed Plug—"A", +6 "A", —"B", +175 "B" | 4 | 4 | 1 | 9.50 Portable Radio "A-B" |
| W-369 | 410 | 9-15/16 x 2-1/4 x 4-23/32 | Socket—"A", +1 1/2 "A", —"B", +90 "B" | 4 | 5 | 1 | 7.85 Portable Radio "A-B" |
| W-370 | * | 2-13/32 x 1-11/32 x 7-5/32 | Socket—"A", +1 1/2 "A", —"B", +60 "B" | 1 | 1.5 | 1 | 5.85 Portable Radio "A-B" |
| W-371 | | 1-5/32 x 1-5/32 x 2-9/16 | Socket (including plug), +3 | 1 | 2.2 | 1 | 0.95 Model Ignition |
| E400 | 1106 | 0.455 Diam. x 0.135 | Flat Contact, +1.35 | 0.04 | 6 | 3 | 0.35 Transistor Applications |
| E401 | 1102 | 0.470 Diam. x 1.130 | Flat Contact, +1.40 | 0.4 | 3 | 0.50 Transistor Applications | |
| 409 | 916 | 2-5/8 x 2-5/8 x 4-13/32 | Coil Spring, +6 | 1 | 6.5 | 1 | 1.15 Industrial |
| 411 | 208 | 1-1/32 x 5/8 x 1-29/64 | Flat Contact, +15 | 1 | 0.8 | 1 | 1.50 Pocket Radio "B", Instruments |
| 412 | 215 | 1-1/32 x 5/8 x 2 | Flat Contact, +22 1/2 | 1 | 1.2 | 1 | 1.75 Pocket Radio "B", Instruments |
| 413 | 210 | 1-1/32 x 5/8 x 2-9/16 | Flat Contact, +30 | 1 | 1.4 | 1 | 2.50 Pocket Radio "B", Instruments |
| 415 | 217 | 1-3/64 x 3/8 x 3-11/16 | Min. Snap, +45 | 1 | 2.5 | 1 | 2.95 Portable Radio "B" |
| 416 | 217 | 1-21/64 x 3/8 x 3-11/16 | Min. Snap, +67 1/2 | 1 | 1.8 | 1 | 1.65 Pocket Radio "B", Instruments |
| 417 | 224 | 1-5/16 x 31/32 x 2-3/16 | Flat Contact, +22 1/2 | 1 | 2.5 | 1 | 1.75 Pocket Radio "B", Instruments |
| 420 | 225 | 1-5/16 x 31/32 x 2-3/16 | Flat Contact, +22 1/2 | 1 | 4.1 | 1 | 1.95 Instruments |
| 425P | * | 1-23/64 x 1-1/32 x 3-15/16 | Socket, +22 1/2 | 1 | 3.2 | 1 | 2.15 Instruments "B", Instruments |
| 430 | * | 1-5/16 x 1 x 2-13/16 | Flat Contacts, +30 | 1 | 6 | 1 | 2.45 Instruments |
| 430P | | 1-23/64 x 1-1/32 x 3-11/32 | Socket, +30 | 1 | 3.2 | 1 | 4.50 Portable Radio "B" |
| 433P | | 2-21/32 x 1-1/64 x 3-1/16 | Socket, +33 | 1 | 0.18 | 4 | 0.52 Instruments |
| 437 | 212 | 1-15/16 x 1-15/32 x 6-15/32 | Snap Type, +45 | 14.8 | 7.8 | 1 | 2.95 Portable Radio "B" |
| E450 | | 0.455 Diam. x 0.570 | Snap Type, +1.35 | 0.04 | 6 | 3 | 0.35 Transistor Applications |
| 455 | | 2-21/32 x 1 x 3-11/16 | Snap Type, +45 | 1 | 8.6 | 1 | 3.00 Instruments |
| 455P | | 2-21/32 x 1-1/64 x 3-29/32 | Socket, +45 | 1 | 7.4 | 1 | 3.45 Portable Radio "B" |
| 457 | 203 | 2-13/16 x 1 3/8 x 2 1/2 | Snap Type, +67 1/2 | 1 | 5.3 | 6 | 2.50 Photoflash |
| 460K | | 1-29/64 x 1-3/8 x 2.344 | Flat Contact, +45 | 1 | 12 | 1 | 3.95 Radio Electronic |
| 467 | 200 | 2-13/16 x 1 3/8 x 3-45/64 | Snap Type, +67 1/2 | 1 | 8.6 | 1 | 3.25 Portable Radio "B" |
| 468 | | 2-13/16 x 1-3/8 x 3-45/64 | Snap Type, +67-1/2 | 1 | 12 | 1 | 3.95 Portable Radio "B" |
| 477 | 211 | 1-29/64 x 3/8 x 5-7/16 | Snap Type, +67 1/2 | 1 | 15 | 1 | 3.85 Portable Radio "B" |
| 479 | 214 | 1-31/32 x 1-1/32 x 7-15/32 | Snap Type, +90 | 1 | 12 | 1 | 4.70 Fluorescent Lantern |
| 482 | 202 | 3-19/32 x 1-27/32 x 5 1/2 | Socket, +45 | 1 | 4 | 2 | 4.95 Farm Radio "B" |
| 484 | 207 | 3-31/32 x 2-17/32 x 5-5/16 | Socket, +45 | 1 | 2 | 1 | 9.95 Electronic Photoflash |
| 487 | | 5/8 x 2-1/16 x 7 1/4 | Socket, +22 1/2, +45 | 4 | 2 | 1 | 4.50 Portable Radio "B" |
| 489 | | 4-11/32 x 2-11/16 x 4-3/16 | Socket, +225 | 2 | 12 | 1 | 7.95 Electronic Photoflash |
| 490 | 204 | 3-23/32 x 1 3/8 x 3-45/64 | Snap Type, +90 | 15 | 15 | 1 | 8.75 Electronic Photoflash |
| 491 | | 1-9/32 x 5/8 x 1-15/16 x 4 1/2 | Flat Recessed & Socket, +240 | 1 | 8 | 1 | 11.95 Geiger Counter |
| 492 | | 3-9/16 x 2-29/32 x 4-29/32 | Socket, +180, +225 | 2 | 14.5 | 1 | 4.95 Portable Radio "B" |
| 493 | 722 | 2-11/16 x 2-7/32 x 3-29/32 | Pinjacks, +90 | 1 | 10 | 1 | 15.95 Electronic Photoflash |
| 495 | * | 1-15/16 x 1-15/32 x 7 1/8 | Snap Type, +90 | 1 | 1.05 | 2 | 0.95 Transistor Applications |
| 497 | | 3 x 1-19/32 x 5 5/8 | Flat Recessed, +180, +510 | 1 | 0.6 | 1 | 1.15 Pocket Radio "B", Instruments |
| E502 | | 0.550 Diam. x 1.968 | Flat Contact, +1.35 | 1 | 0.8 | 1 | 1.50 Pocket Radio "B", Instruments |
| 504 | 220 | 5/8 x 19/32 x 1 3/8 | Flat Contact, +15 | 1 | 0.9 | 1 | 1.85 Pocket Radio "B", Instruments |
| 505 | | 5/8 x 19/32 x 1-63/64 | Flat Recessed, +22 1/2 | 1 | 0.9 | 1 | 1.19 Lanterns |
| 506 | 223 | 1-13/64 x 3/8 x 1-27/64 | Flat Recessed, +22 1/2 | 1 | 5 | 1 | 1.19 Miscellaneous |
| 507 | 222 | 5/8 x 19/32 x 2.605 | Flat Contact, +30 | 1 | 0.5 | 24 | 0.15 Flashlights, Toys |
| 509 | 908 | 2 5/8 x 2 5/8 x 4-13/32 | Flat Contact, +30 | 1 | 1 | 1 | 4.50 Lanterns, Electronics |
| 510F | 917 | 2 5/8 x 2 5/8 x 4-13/32 | Coil Springs, +6 | 1 | 1.1 | 6 | 1.00 Transistor Radio |
| 510S | * | 2 5/8 x 2 5/8 x 4 3/8 | Fahnestock, +6 | 1 | 10 | 1 | 5.25 Portable Television |
| 515 | | 35/64 Diam. x 1-31/32 | Screw, +6 | 1 | 4 | 1 | 1.95 Instruments |
| 520 | 930 | 5-17/32 x 4-21/32 x 2-21/32 | Flat Contact, +1.5 | 0.5 | 10 | 12 | 3.90 Fishing Buoy |
| 523 | | 0.665 Diam. x 1.965 | Ins. Screw, +6 | 2 | 8 | 1 | 4.50 Transistor Applications |
| 528 | | 1-1/32 x 11/16 x 1-29/32 | Flat Contact, +4.5 | 1 | 1.1 | 1 | 0.25 Transistor Radio |
| 560 | | 2-21/32 x 1-17/32 x 7-5/32 | Min. Snap, +9.0 | 1 | 1.3 | 6 | 1.00 Transistor Radio |
| 561 | | 8-5/16 x 2-13/16 x 5-7/8 | Socket, +7 1/2 | 1 | 10 | 1 | 1.95 Portable Television |
| E601 | | 0.627 Diam. x 1.40 | Socket, +15 | 6 | 1.22 | 1 | 1.00 Instruments |
| E625 | | 2-9/16 Diam. x 1.3 | Flat Contact, +1.35 | 4 | 10 | 12 | 3.90 Fishing Buoy |
| E630 | | 0.615 Diam. x 0.238 | Flat Contact, +1.95 | 1 | 0.14 | 4 | 0.50 Transistor Applications |
| 635 | 14 | 1-1/32 Diam. x 1-15/16 | Flat Contact, +1.40 | 1 | 0.17 | 4 | 0.25 Transistor Radio "A" |
| E640 | | 0.625 Diam. x 0.440 | Flat Contact, +1.40 | 1 | 0.38 | 4 | 0.45 Transistor Applications |
| E675 | | 0.455 Diam. x 0.210 | Flat Contact, +1.40 | 1 | 0.07 | 6 | 0.40 Instruments |
| 702 | * | 2-17/32 x 7/8 x 3 1/8 | Socket, +4 1/2 | 1 | 5 | 1 | 1.85 Shot Firing |
| 703 | | 2-7/16 x 27/32 x 3-1/16 | Spring, +4 1/2 | 1 | 5 | 1 | 1.10 Instruments |
| 704 | | 2-11/16 x 1-11/32 x 4 3/8 | Socket, +3 | 1 | 11.8 | 1 | 2.10 Shot Firing |
| 706 | 902 | 8-5/16 x 2-13/16 x 6-7/16 | Ins. Screw, +6 | 5 | 14 | 1 | 5.98 Ignition, Emergency Lighting |
| 707 | 26 | 2-9/16 x 2-1/32 x 2-13/16 | Snap Type, +22 1/2 | 1 | 11 | 1 | 4.75 Portable Radio "A" |
| 708 | | 2 5/8 x 2 3/4 x 4-13/16 | Socket, +22 1/2 | 1 | 11 | 1 | 4.75 Shot Firing |
| 713 | 8 | 3-29/32 x 53/64 x 2-27/32 | Socket, +7 1/2 | 1 | 6.3 | 1 | 2.75 Portable Radio "A" |
| 714 | | 3-31/32 x 1-11/32 x 3 1/2 | Screw, +4 1/2 | 7 | 14.5 | 1 | 1.75 Telephone Test Sets |
| 715 | 903 | 7/8 x 4-1/16 x 6-7/16 | Ins. Screw, +7 1/2 | 7 | 10 | 1 | 7.25 Ignition, Emergency Lighting |
| 716 | | 4-37/64 x 4-1/16 x 6-7/16 | Ins. Screw, +9 | 8 | 8 | 1 | 8.25 Ignition, Emergency Lighting |
| 717 | 9 | 2-5/32 x 1-15/16 x 3-1/32 | Socket, +7 1/2 | 2 | 4 | 6 | 1.60 Portable Radio "A" |
| †718 | 1 | 3-29/32 x 23/4 x 5-7/16 | Socket, +1 1/2 | 2 | 4 | 1 | 3.90 Portable Radio "A" |
| 720 | 18 | 2-25/32 x 1-13/32 x 3-1/32 | Socket, +1 1/2 | 6.5 | 6.5 | 1 | 1.20 Portable Radio "A" |
| 724 | 2 | 1-7/32 x 1-7/32 x 2-11/32 | Flat Contact, +6 | 2.5 | 1 | 1 | 1.00 Portable Radio "A" |
| 726 | 19 | 4-3/32 x 1-7/16 x 2-15/16 | Socket, +4 1/2 | 10.5 | 1 | 1 | 1.35 Portable Radio "A" |
| 727 | 428 | 8 7/8 x 2 1/8 x 3-25/32 | Recessed Plug—"A", +9 "A", —"B", +90 "B" | 2 | 14 | 1 | 7.45 Portable Radio "A-B" |
| †729 | * | 3-27/32 x 2-7/32 x 7-13/16 | Socket—"A", +1 1/2 "A", —"B", +90 "B" | 2 | 7 | 1 | 6.25 Portable Radio "A-B" |
| 731 | 918 | 5-11/32 x 2-27/32 x 4-15/16 | Ins. Screw, +6 | 3 | 4 | 1 | 2.75 Lantern |
| 735 | 900 | 2 5/8 x 2 5/8 x 4 3/8 | Screw, +1 1/2 | 1 | 7 | 1 | 1.25 Model Ignition "Glo-Plug" |
| 736 | 3 | 3-15/16 x 1-5/16 x 4-3/32 | Socket, +4 1/2 | 1 | 5 | 1 | 1.35 Portable Radio "A" |
| 739 | 205 | 3 x 2-5/16 x 4 1/8 | Socket, +22 1/2, +45 | 1 | 3 | 1 | 3.95 Portable Radio "B" |
| †740 | 719 | 4-19/32 x 3 3/8 x 7 3/8 | Socket, +1 1/2 | 6 | 10 | 1 | 9.95 Farm Radio "A" |
| †741 | 17 | 3 3/8 x 2 1/8 x 5 3/8 | Socket, +1 1/2 | 2 | 10 | 1 | 3.45 Portable Radio "A" |
| 742 | 4 | 2 5/8 x 2 5/8 x 3-27/32 | Socket, +1 1/2 | 1 | 16 | 1 | 1.65 Portable Radio "A" |
| †743 | 5 | 3-13/16 x 2 5/8 x 4-1/32 | Socket, +1 1/2 | 1 | 10 | 1 | 2.75 Portable Radio "A" |
| 744 | * | 2 5/8 x 2 5/8 x 3-27/32 | Socket, +6 | 1 | 6 | 1 | 1.65 Portable Radio "A" |
| 746 | 7 | 3-15/16 x 1-5/16 x 4-21/32 | Socket, +4 1/2 | 1 | 3 | 1 | 1.50 Portable Radio "A" |
| 750 | | 1-11/32 x 11/16 x 2-21/32 | Spring, +3 | 2 | 1 | 1 | 0.95 Instruments |
| 751 | 705 | 2 x 11/16 x 2-21/32 | Spring, +4 1/2 | 3 | 1 | 1 | 1.00 Instruments |
| 752 | 400 | 14-1/16 x 2-11/16 x 4-1/16 | Recessed Plug—"A", +9 "A", —"B", +90 "B" | 6 | 2 | 1 | 8.25 Portable Radio "A-B" |
| 752W | | 14-1/16 x 2-11/16 x 4-1/16 | Recessed Plug—"A", +9 "A", —"B", +90 "B" | 6 | 2 | 1 | 8.25 Portable Radio "A-B" |
| 753 | 401 | 9-7/32 x 2-23/32 x 4-5/16 | Socket—"A", +7 1/2 "A", +9 "A", —"B", +90 "B" | 6 | 8 | 1 | 9.25 Portable Radio "A-B" |
| 754 | 402 | 10-15/32 x 3 1/4 x 4 | Socket—"A", +7 1/2 "A", +9 "A", —"B", +90 "B" | 4 | 12 | 1 | 7.75 Portable Radio "A-B" |
| 755 | 403 | 8-9/16 x 3 3/4 x 2-7/16 | Socket—"A", +7 1/2 "A", +9 "A", —"B", +90 "B" | 6 | 1 | 1 | 9.45 Portable Radio "A-B" |
| 756 | * | 8 7/8 x 2 1/8 x 3-25/32 | Socket—"A", +6 "A", +7 1/2 "A", —"B", +75 "B" | 3 | 9 | 1 | 7.25 Portable Radio "A-B" |
| | | | Socket—"A", +7 1/2 "A", +9 "A", —"B", +90 "B" | 2 | 14 | 1 | 6.95 Portable Radio "A-B" |

*NEDA number same as an "Eveready" battery number on a different battery. Omitted to prevent errors in shipping.

†Flashlight types.

**Equipped with screw terminals unless Fahnestock spring terminals are specified.

††Shipped from factory only.

†††Equipped with Fahnestock spring terminals unless screw terminals are specified.

▲Furnished with Fahnestock spring terminals. If socket terminals required, specify W-363P, W-364P, W-365P.



COMPLETE LINE SPECIFICATIONS



| "Eveready" Battery Number | NEDA Number | Overall Dimensions in Inches L W H | Terminals & Voltages | Battery Weight lbs. ozs. | Unit Pkg. Quan. | List Price Each | Major Use |
|---------------------------|-------------|---------------------------------------|---|--------------------------|-----------------|-----------------|--------------------------------|
| 757 | 406 | 9-7/32 x 2-28/32 x 4-7/32 | Recessed Plug—"A", +9 "A", —"B", +90 "B" | 4 12 | 1 | 7.85 | Portable Radio "A-B" |
| 759 | * | 15-11/18 x 4-1/32 x 6-15/16 | Socket—"A", +1/2 "A", —"B", +90 "B" | 18 4 | 1 | 10.65 | Farm Radio "A-B" |
| 761T | 712 | 4-1/16 x 1-15/32 x 3/16 | Screw—"A", +1/2, +3, +4 1/2 | 2 12 | 1 | 4.35 | Telephone Test Sets |
| 762S | 709 | 4-3/32 x 2-9/16 x 5-7/18 | Ins. Screw—"A", +2 1/2, +4 1/2 | 2 12 | 1 | 2.25 | Instruments |
| 765 | 710 | 3 1/2 x 2-3/32 x 2-15/16 | Screw—"A", +2 1/2 | 2 12 | 1 | 2.95 | Instruments |
| 788T | * | 6 1/4 x 4 1/4 x 3-15/16 | Fahnestock—"A", +16 1/2, +18, +19 1/2, +21, +22 1/2 | 4 10 | 1 | 8.25 | Switchboard Testing |
| 771 | * | 3-29/32 x 1 1/8 x 3-1/16 | Socket—"A", +3, -4 1/2 | 18 13 | 1 | 2.35 | Radio "C" |
| 773 | * | 3-29/32 x 7/8 x 3 3/8 | 5 Screw: 1 wire+, -1 1/2, -3, -4 1/2, -6, -7 1/2 | 9 9 | 1 | 2.35 | Radio "C" |
| 778 | * | 7-27/32 x 4 1/8 x 9 7/8 | Socket & Recessed Plug—"A", +7 1/2 "A", +9 "A", —"B", +90 "B" | 14 12 | 1 | 14.95 | Home Receiver "A-B" |
| 778 | * | 4 1/8 x 2-17/32 x 3-7/16 | Fahnestock—"A", -3, -4 1/2, -6, -9, -10 1/2, -16 1/2, -22 1/2 | 1 8 | 1 | 4.45 | Instruments |
| 781 | * | 2-15/32 x 55/64 x 3/4 | Screw—"A", -4 1/2 | 1 5 | 1 | 1.25 | Instruments |
| 785 | 481 | 8 3/8 x 3 3/8 x 2 1/4 | Socket—"A", +7 1/2 "A", —"B", +75 "B" | 2 12 | 1 | 6.90 | Portable Radio "A-B" |
| 789 | * | 5-9/32 x 1-7/16 x 3/4 | Fahnestock—"A", +22 1/2, +45, +49 1/2 | 1 1.5 | 1 | 2.75 | Finger Print Camera |
| 799 | * | 8-5/32 x 4 1/4 x 8-19/32 | Fiat Contact—"A", -1-1-2 | 13 5 | 1 | 11.95 | Camera Cranking |
| 815 | * | 9/16 Diam. x 1-31/32 | Fiat Contact—"A", -1-1-2 | 13 5 | 1 | 0.25 | Photoflash |
| 835 | * | 1-1/32 Diam. x 1-15/16 | Fiat Contact—"A", -1-1-2 | 13 5 | 1 | 0.25 | Photoflash |
| 850 | * | 1-11/32 Diam. x 2-13/32 | Fiat Contact—"A", -1-1-2 | 13 5 | 1 | 0.25 | Photoflash |
| 1304 | 910 | 0.445 Diam. x 1.180 | Fiat Contact—"A", -1 1/2 | 13 5 | 1 | 0.125 | Flashlight, Novelties |
| 1912 | 24 | 13/32 Diam. x 1-1/2 | Fiat Contact—"A", -1 1/2 | 13 5 | 1 | 0.15 | Flashlight, Toys |
| 1915 | * | 9/16 Diam. x 1-31/32 | Fiat Contact—"A", -1 1/2 | 13 5 | 1 | 0.20 | Flashlight, Toys |
| 1935 | 814 | 1-1/32 Diam. x 1-15/16 | Fiat Contact—"A", -1 1/2 | 13 5 | 1 | 0.20 | Flashlight, Toys |
| 1950 | 813 | 1-11/32 Diam. x 2-13/32 | Fiat Contact—"A", -1 1/2 | 13 5 | 1 | 0.20 | Flashlight, Toys |
| 960P | 25 | 1-11/32 Diam. x 4-1/16 | Socket—"A", +1 1/2 | 5 1 | 1 | 0.85 | Portable Radio "A" |
| 964 | 20 | 1-11/32 Diam. x 4-8/16 | Fiat Contact—"A", -1 1/2 | 5.9 12 | 1 | 0.45 | Portable Radio "A" |
| 1015 | 15 | 9/16 Diam. x 1-31/32 | Fiat Contact—"A", -1 1/2 | 5.6 24 | 1 | 0.25 | Transistor Portable |
| 1016 | * | 1-9/64 x 19/32 x 2-1/64 | Fiat Contact—"A", -1 1/2 | 1.1 1 | 1 | 0.45 | Pocket Radio "A" |
| 1050 | * | 1-11/32 Diam. x 2-13/32 | Fiat Contact—"A", -1-1/2 | 3.3 48 | 1 | 0.80 | Instrument |
| 1052P | * | 1-1/8 Diam. x 3-29/32 | Socket—"A", +1.5 | 3.6 4 | 1 | 4.98 | Ignition, Fence Controllers |
| 1461 | 907 | 10-13/32 x 2-25/32 x 7-9/32 | Ins. Screw—"A", +6 | 9 7 | 4 | 5.98 | Ignition, Fence Controllers |
| 1462 | * | 5 3/8 x 5 3/8 x 7 1/4 | Ins. Screw—"A", +6 | 9 7 | 4 | 5.75 | Toy Cars |
| 1463 | 922 | 10-13/32 x 2-25/32 x 7-9/32 | Ins. Screw—"A", +12 | 7 8 | 1 | 7.25 | Ignition, Searchlights |
| 1562 | * | 7-15/16 x 5 x 7 1/2 | Ins. Screw—"A", +12 | 11 10 | 4 | 8.25 | Ignition, Searchlights |
| 1662 | 913 | 7-27/32 x 5-9/32 x 7-9/32 | Ins. Screw—"A", +12 | 14 8 | 1 | 2.25 | Transistor Portable |
| 2400 | 2400 | 1-21/64 x 1-1/32 x 2 3/8 | Socket—"A", -12, -21 | 1 1 | 1 | 1.60 | Transistor Radio |
| 2356 | 1612 | 2-3/16 x 1-5/32 x 6 1/4 | Snap Type—"A", -9 | 1 1 | 1 | 2.50 | Transistor Portable |
| 2506 | 1601 | 8 x 2-13/16 x 1-9/16 | Socket—"A", +3, +6, +9 | 1 8 | 1 | 1.50 | Transistor Portable |
| 2709 | 1613 | 1-13/32 x 47/64 x 4-11/16 | Snap Type—"A", +9 | 1 4 | 1 | 1.00 | Transistor Portable |
| 2713 | 1408 | 1-13/32 x 47/64 x 4-11/16 | Min. Snap—"A", +6 | 1 4 | 1 | 1.00 | Transistor Portable |
| 2731 | 1308 | 2-13/16 x 1 3/4 x 8-11/32 | Socket—"A", +4 1/2 | 2 11 | 1 | 2.75 | Transistor Radio |
| 2744 | 920 | 2-21/32 x 2-21/32 x 3 3/8 | Socket—"A", +6 | 1 14 | 1 | 1.60 | Barrier Flasher, Miscellaneous |
| 2745 | 924 | 2-21/32 x 2-21/32 x 4-7/16 | Coil Springs—"A", +8 | 1 14 | 1 | 1.60 | Barrier Flasher, Lantern |
| 2746 | 925 | 2-21/32 x 2-21/32 x 4 3/8 | Screw—"A", +6 | 1 14 | 1 | 1.60 | Lighting, Miscellaneous |
| 2761 | 1608 | 2-9/32 x 1 1/4 x 7-31/32 | Socket—"A", +9 | 1 9 | 1 | 2.25 | Transistor Portable |
| 2762 | 1609 | 2-13/16 x 1 3/4 x 8-11/32 | Socket—"A", +9 | 2 11 | 1 | 2.75 | Transistor Radio |
| 2780 | 923 | 5-11/32 x 2-27/32 x 4-5/32 | Socket—"A", +12 | 3 8 | 1 | 3.40 | Barrier Flasher, Miscellaneous |
| E302125 | * | 1-11/32 Diam. x 3-1/32 | Wire Leads—"A", +7.00 | 3.9 1 | 1 | 6.55 | Fire Alarm |
| E302157 | * | 2 1/2 x 1 3/8 x 4 1/4 | Socket—"A", +1.35 | 13.5 1 | 1 | 15.50 | Radiation Equipment |
| E302158 | * | 3 1/4 x 1 3/8 x 4 1/4 | Socket—"A", +47.25 | 1 8 | 1 | 37.00 | Radiation Equipment |
| E302227 | * | 1 1/16 Diam. x 15/16 | Tab—"A", +4.05 | 0.5 1 | 1 | 2.55 | Meter |
| E302229 | * | 1 1/16 Diam. x 1-7/32 | Tab—"A", +5.40 | 0.62 1 | 1 | 2.70 | Meter |
| E302240 | * | 2-1/4 x 1-3/8 x 5-9/32 | Wire Leads—"A", +24.3 | 1 3.0 | 1 | 34.60 | Instruments |
| E302249 | * | 23/32 Diam. x 1-15/32 | Tab—"A", +6.75 | 0.75 1 | 1 | 3.50 | Radiation Equipment |
| E302250 | * | 1 1/16 Diam. x 1-29/32 | Tab—"A", +9.45 | 1.0 1 | 1 | 3.75 | Radiation Equipment |
| E302257 | * | 1-5/16 Diam. x 2-7/16 | Spec. Leads—"A", +1.35 | 6.0 1 | 1 | 11.40 | Test Equipment |
| E302271 | * | 45/64 Diam. x 4-5/8 | Wire Leads—"A", +1.35, +13.5 | 3.0 1 | 1 | 7.85 | Instruments |
| E302351 | * | 1-1/16 Diam. x 2 3/8 | Fiat Contact—"A", +5.40 | 4.5 1 | 1 | 4.10 | Fire Alarm |
| E302354 | * | 3/4 Diam. x 1-1/4 | Wire Leads—"A", +5.40 | 0.50 1 | 1 | 2.75 | Meter |
| E302358 | * | 3/4 Diam. x 2-5/32 | Wire Leads—"A", +10.8 | 0.87 1 | 1 | 4.35 | Meter |
| E302360 | * | 3/4 Diam. x 2-11/16 | Wire Leads—"A", +13.5 | 1.0 1 | 1 | 5.30 | Radiation Equipment |
| E3022362 | * | 23/32 Diam. x 3-5/32 | Wire Leads—"A", +16.2 | 1.13 1 | 1 | 5.95 | Radiation Equipment |
| E302424 | * | 1 1/16 Diam. x 3-15/32 | Tab—"A", +6.75 | 2.5 1 | 1 | 3.95 | Instruments |
| E302425 | * | 2-13/16 x 1 x 2-25/32 | Snap—"A", +48.6 | 8.0 1 | 1 | 25.40 | "B" Battery |
| E302435 | * | 1 1/16 Diam. x 1-1/2 | Fiat Contact—"A", +6.75 | 0.75 1 | 1 | 3.50 | Radiation Equipment |
| E302437 | * | 1 1/16 Diam. x 1-31/32 | Fiat Contact—"A", +9.45 | 1.0 1 | 1 | 3.55 | Radiation Equipment |
| E302462 | * | 2-13/16 x 1-17/32 x 6-3/8 | Wire Leads—"A", +97.2 | 2 8.0 | 1 | 49.75 | Transmitter "B" |
| E302463 | * | 2-1/8 Diam. x 2-5/16 | Wire Leads—"A", +1.35 | 8.0 1 | 1 | 9.35 | Geophysical |
| E302464 | * | 2-1/8 Diam. x 2-5/16 | Wire Leads—"A", +6.75 | 8.0 1 | 1 | 11.30 | Geophysical |
| E302465 | * | 2-3/16 Diam. x 3-3/4 | Wire Leads—"A", +47.25 | 1 8.0 | 1 | 22.50 | Geophysical |
| E302467 | * | 1 1/16 Diam. x 2-7/8 | Tab—"A", +5.40 | 2.0 1 | 1 | 2.85 | Test Equipment |
| E302478 | * | 1-9/32 Diam. x 3 3/8 | Fiat Contact—"A", +9.80 | 9.0 1 | 1 | 6.60 | Wire Recorder |
| E302497 | * | 1-1/16 Diam. x 4-1/8 | Screw—"A", +6.75 | 6.0 1 | 1 | 2.85 | Test Equipment |
| E307499 | * | 2-3/4 x 1-3/8 x 3-21/32 | Wire Leads—"A", +64.8 | 1 10.5 | 1 | 42.50 | Missile |
| E302502 | * | 2-3/32 Diam. x 2-31/32 | Wire Leads—"A", +94.5 | 10.5 1 | 1 | 38.50 | Geophysical |
| E302506 | * | 1-3/8 x 3/4 x 2-1/8 | Wire Leads—"A", -16.2, +4.05 | 3.0 1 | 1 | 14.10 | Telemetry |
| E302510 | * | 2-7/32 x 2-25/32 x 2-5/32 | Screw—"A", +1.35 | 1 5.0 | 1 | 23.75 | Computer |
| E302519 | * | 2-3/4 x 1-7/16 x 2-11/32 | Wire Leads—"A", +5.40 | 15.0 1 | 1 | 17.65 | Test Equipment |
| E302527 | * | 2-5/32 x 1-15/32 x 3-3/8 | Wire Leads—"A", +97.2 | 10.0 1 | 1 | 38.50 | "B" Battery |
| E302530 | * | 2-23/32 x 2-23/32 x 5-11/16 | Spec. Posts—"A", +10.8 | 4 4.0 | 1 | 59.20 | Missile |
| E302539 | * | 1-3/8 x 3/4 x 3-1/32 | Socket—"A", +21.6 | 6.0 1 | 1 | 49.75 | Transmitter "B" |
| E302540 | * | 1-13/64 Diam. x 2-25/64 | Tab—"A", +1.36 | 2.35 1 | 1 | 4.40 | Test Equipment |
| E302554 | * | 2-5/32 x 1-15/32 x 3-5/8 | Snap—"A", +97.2 | 10.0 1 | 1 | 38.50 | "B" Battery |
| E302558 | * | 2-3/4 x 1-3/8 x 3-21/32 | Wire Leads—"A", +35.1, +64.8 | 15.0 1 | 1 | 37.50 | Missile |
| E302579 | * | 1-13/32 x 3/4 x 3-3/16 | Wire Leads—"A", +29.7 | 5.0 1 | 1 | 16.70 | Test Equipment |
| E302580 | * | 2-23/32 x 2-23/32 x 3-29/32 | Socket—"A", +27.0 | 2 6.0 | 1 | 32.19 | Test Equipment |
| E302589 | * | 1-7/16 x 1-7/16 x 1-15/16 | Socket—"A", +21.6 | 2.35 1 | 1 | 18.00 | Instruments |
| E302604 | * | 0.645 Diam. x 1.069 | Fiat Contact—"A", +5.40 | 2.10 1 | 1 | 2.10 | Instruments |
| E302609 | * | 43/64 Diam. x 2-5/8 | Fiat Contact—"A", +12.15 | 1.5 1 | 1 | 4.15 | Instruments |
| E302642 | * | 1-9/32 Diam. x 2 3/8 | Fiat Contact—"A", -7.00 | 5.0 1 | 1 | 5.25 | Fire Alarm |
| E302651 | * | 1-5/16 Diam. x 2-7/16 | Spec. Leads—"A", +1.35 | 6.14 1 | 1 | 5.64 | Instruments |
| E302667 | * | 6-15/32 x 1-15/32 x 2-23/32 | Wire Leads—"A", +6.75 | 1 14.7 | 1 | 34.42 | Instruments |
| E302702 | * | 1-1/8 Diam. x 1-5/8 | Wire Leads—"A", +2.70 | 2.0 1 | 1 | 4.10 | Geophysical |
| E302705 | * | 1-7/16 x 1-7/16 x 4-29/32 | Socket—"A", +1.8 | 11.8 1 | 1 | 23.65 | Instruments |
| E302800 | * | 2-3/4 x 1-7/16 x 5/8 | Snap—"A", +75.6 | 1 24 | 1 | 45.50 | Instruments |
| E302830 | * | 3-15/32 x 7/8 x 6-1/2 | Socket—"A", +6.75, +12.15 | 2 11.8 | 1 | 29.50 | Instruments |
| E302896 | * | 2-9/16 x 1-13/16 x 2-1/4 | 3 Neg. Snap—"A", +9.45, +1.35 | 11.8 1 | 1 | 24.30 | Recorder |
| E302904 | * | 1-11/32 Diam. x 2-31/32 | Wire Leads—"A", +5.40 | 6.0 1 | 1 | 6.65 | Meter |
| E302905 | * | 1-11/32 Diam. x 3-19/32 | Wire Leads—"A", +6.75 | 9.0 1 | 1 | 8.70 | Test Equipment |
| E302907 | * | 1-5/16 Diam. x 4-7/8 | Wire Leads—"A", +9.45 | 11.6 1 | 1 | 10.50 | Instruments |
| E302908 | * | 1-1/32 Diam. x 5-9/16 | Wire Leads—"A", +10.8 | 12.0 1 | 1 | 11.40 | Radiation Equipment |
| E303035 | * | 1-9/32 Diam. x 4-1/32 | Fiat Contact—"A", +8.10 | 10.0 1 | 1 | 7.78 | Instruments |
| E303145 | 1614 | 2-3/16 x 7/8 x 4-7/16 | Snap—"A", +8.40 | 8.82 1 | 1 | 9.10 | Depth Finder |

*NEDA number same as an "Eveready" battery number on a different battery. Omitted to prevent errors in shipping. †Flashlight types.
 **Equipped with screw terminals unless Fahnestock spring terminals are specified. ††Shipped from factory only.
 ***Equipped with Fahnestock spring terminals unless screw terminals are specified.
 ▲Furnished with Fahnestock spring terminals. If socket terminals required, specify W-363P, W-364P, W-365P.

DC POWER SUPPLIES SILICON & SELENIUM RECTIFIERS

SILICON POWER RECTIFIER



For transistor circuits & electronic equipment
MODEL G92F

INPUT: 115 volts AC 60 cycles, 1 phase
OUTPUT: 0-30 Volts DC, 0-10 Amperes D.C. continuous duty
REGULATION: No load to full load 15%
RIPPLE: Less than 0.5% RMS
METERS: 2% Accuracy

PRICE: \$145.00 NET

*Also available in 5 Amperes
PRICE: \$95.00 NET

INDUSTRIAL POWER UNITS



MODEL A10

INPUT: 115 or 230 AC Volts, 60 cycles—Single Phase.

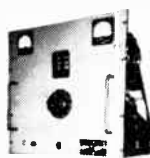
DC OUTPUT: 115 Volts DC 125 Watts

APPLICATION: Power sources for operating DC Motors, Relays, Solenoids, Magnetic Chucks.

DIMENSIONS: 11" H x 9" W x 6½" D

PRICE \$63.00 NET

SILICON INDUSTRIAL POWER UNIT



MODEL #G30-40F

INPUT: 115 or 230 Volts AC, 60 cycles, single phase

OUTPUT: 0-32 Volts DC, 0-40 Amperes DC, continuous duty

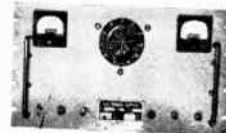
RIPPLE: 1% RMS

DIMENSIONS: 12¼"Hx19"Wx13"D

REGULATION: D.C.V. at full load: 32 minimum D.C.V. at ¼ load: 35 maximum

PRICE: \$385.00

SILICON POWER RECTIFIER



MODEL G30.10FR

INPUT: 115 Volts AC, 60 Cycles, Single Phase

OUTPUT: 0-30 Volts DC, 0-10 Amperes, continuous duty

CONTROL: Continuously variable over entire range

REGULATION: 6% No Load to Full Load

RIPPLE: 0.2% RMS

METERS: 2% Accuracy

PRICE: \$185.00 NET

SILICON RACK MOUNT SUPPLY



MODEL #GX30-10

INPUT: 115 Volts AC 60 Cycles, Single Phase

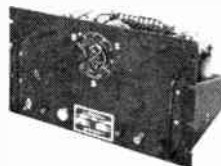
OUTPUT: 30 Volts DC 0-10 Amperes Continuous Duty

REGULATION: 10% No Load to Full Load

RIPPLE: Below 0.5% RMS

DIMENSIONS: 8¾" H x 19" W x 10" D

PRICE: \$137.50 NET



MODEL G48-6FM

SELENIUM POWER SUPPLY

INPUT: 115 Volts AC 60 Cycles—Single Phase

OUTPUT: 0-48 Volts DC, 0-6 Amperes

CONTROL: Continuously variable over entire range

RIPPLE: 1% RMS

DIMENSIONS: 19" W x 13" D x 10½" H, Fits RETMA, Western Electric racks

PRICE: \$190.00 NET

AIRCRAFT BATTERY ELIMINATOR



MODEL #G101F

INPUT: 115 Volts AC 60 cycles, single phase

OUTPUT: 0-30 Volts DC, 0-20 Amperes, continuous duty

RIPPLE: 0.5% RMS

Unique overload device prevents needle slam and shows overload condition

REGULATION: D.C.V. at full load: 30

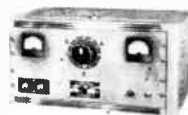
D.C.V. at 1/10 load: 35

METERS: 2% Accuracy

PRICE: \$200.00 NET

PRICE: \$185.00 LESS DUST COVER

May be used for Rack or Bench



MODEL #GS 14-15F

SILICON POWER SUPPLY

INPUT: 115 Volts AC, 1 Phase, 60 cycles

OUTPUT: 0-14 Volts DC, 0-15 Amperes, continuous duty

RIPPLE: Less than 1% RMS

METER ACCURACY: 2%

DIMENSIONS: 9" H x 17½" W x 9" D

PRICE: \$125.00 NET

SELENIUM POWER SUPPLY



MODEL GX 30-5

INPUT: 115 Volts AC 60 cycles, single phase

OUTPUT: 30 Volts DC, 0-5 Amperes, DC Continuous Duty

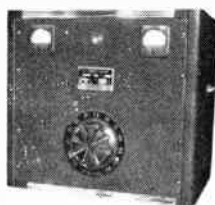
REGULATION: 12% No Load to Full Load

RIPPLE: Below 1% RMS

DIMENSIONS: 5" W x 13½" L x Overall Height 10"

PRICE: \$75.00 NET

SILICON GENERAL PURPOSE RECTIFIER



MODEL G-115

INPUT: 115 or 220 Volts AC 60 cycles, 1 Phase

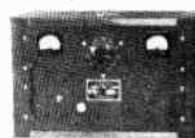
OUTPUT: 0-32 Volts DC, 0-50 Amperes DC, Continuous duty variable over entire range

RIPPLE: 1% RMS

DIMENSIONS: 22"H x 19"W x 15"D

PRICE: \$475.00 NET

DC POWER SUPPLY



MODEL G94F

INPUT: 115 Volts AC 60 cycles, 1 Phase DC

OUTPUT: 0-300 Volts DC Continuous Variable 0-1 Amperes.

RIPPLE: 100 MV RMS

DIMENSIONS: Rack 8¾" H x 19" L x 9½" D

CABINET: 10½"Hx22"Lx12"D

PRICE: \$240.00

SILICON POWER SUPPLY



MODEL GX30-20

INPUT: 115 Volts, 1 Phase, 60 cycles

OUTPUT: 0-34, Volts, DC 0-20 Amperes, continuous duty

REGULATION: No load to full load: 18%

RIPPLE: Below 1%

Silicon Rectifiers, High Efficiency

DIMENSIONS: 10" x 17" x 3"

PRICE: \$185.00 NET

GATES ELECTRONIC CO.

BRONX, N. Y.

See Our Ad on Power Supplies Page 1292 in the 5th Edition of the Electronic Engineering Master

DC POWER SUPPLIES SILICON & SELENIUM RECTIFIERS

SILICON POWER RECTIFIER

Model G50-50R

INPUT: 220 Volts AC, 60 cycles, 3 phase

OUTPUT: 0-50 volts DC, 0-50 amperes continuous duty

RIPPLE: 0.5% RMS

REGULATION: No Load to Full Load 8%

METERS: 2% Accuracy



SILICON INDUSTRIAL POWER UNIT

Model G30-100

INPUT: 220 Volts AC, 60 cycles, 3 phase

OUTPUT: 0-30 Volts DC, 0-100 amperes continuous duty

RIPPLE: 4% RMS

REGULATION: 5-8% 1/10th load to full load with constant input and at maximum output voltage setting

METERS: 2% Accuracy

SILICON AIRCRAFT BATTERY ELIMINATOR

Model G30-200



INPUT: 220 Volts AC, 60 cycles, 3 phase

OUTPUT: 0-30 Volts DC, 0-200 amperes continuous duty

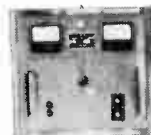
RIPPLE: 4% RMS

REGULATION: 5-8% 1/10th load to full load with constant input and maximum output voltage setting

METERS: 2% Accuracy

SILICON REGULATED POWER SUPPLY

Model G530-40M



INPUT: 115 Volts AC, 60 cycles, 1 phase

OUTPUT: 5-30 Volts DC, 0-40 amperes

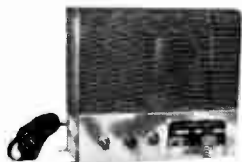
RIPPLE: 1% RMS

REGULATION: $\pm 1\%$ from no load to full load

METERS: 2% Accuracy

SILICON POWER SUPPLY

Model GX24-1



INPUT: 115 Volts AC, 60 cycles, 1 phase

OUTPUT: 24 Volts DC, 0-1 ampere DC, continuous duty

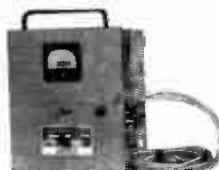
RIPPLE: 0.4% RMS

REGULATION: 10% no load to full load

PRICE: \$50.00

PORTABLE SILICON BATTERY CHARGER

Model G612-20



INPUT: 115 volts AC, 60 cycles, 1 phase

OUTPUT: 6/12 Volts DC, 20 amperes continuous duty

METER: Amp. meter 2% Accuracy

DIMENSIONS: 11"H x 9"W x 6 1/2"D

PRICE: \$45.00

BENCH PLATING RECTIFIER

Model G10-8

INPUT: 115 Volts, 50-60 cycles, 1 phase

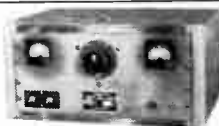
OUTPUT: 10 amperes, 0-8 Volts DC

RECTIFIER: Full wave selenium rectifier

VOLTAGE CONTROL: Powerstat

METERS: 2% Accuracy volt meter, amp meter

PRICE: \$75.00



BENCH PLATING RECTIFIER

Model G30-8

INPUT: 115 Volts, 50-60 cycles, 1 phase

OUTPUT: 30 amperes, 0-8 Volts DC

RECTIFIER: Full wave selenium rectifier

VOLTAGE CONTROL: Powerstat

METERS: 2% Accuracy, volt meter, amp. meter

PRICE: \$115.00

BENCH PLATING RECTIFIER

Model G50-8



INPUT: 115 volts, 50-60 cycles, 1 phase

OUTPUT: 50 amperes, 0-8 Volts DC

RECTIFIER: Full wave selenium rectifier

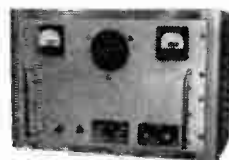
VOLTAGE CONTROL: Powerstat

METER: 2% Accuracy, volt meter amp. meter

PRICE: \$175.00

BENCH PLATING RECTIFIER

Model G100-8



INPUT: 115 Volts, 50-60 cycles, 1 phase

OUTPUT: 100 amperes, 0-8 Volts DC

RECTIFIER: Full wave selenium rectifier

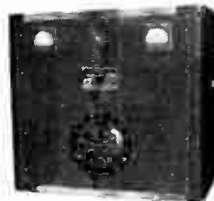
VOLTAGE CONTROL: Powerstat

METERS: 2% Accuracy, volt meter, amp. meter

PRICE: \$275.00

BENCH PLATING RECTIFIER

Model G200-6



INPUT: 115 Volts, 50-60 cycles, 1 phase

OUTPUT: 200 amperes, 0-6 Volts DC

RECTIFIER: Full wave selenium rectifier

COOLING: Fan

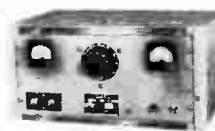
VOLTAGE CONTROL: Powerstat

METERS: 2% Accuracy, volt meter, amp. meter

PRICE: \$395.00

BENCH PLATING RECTIFIER

Model G50-15



INPUT: 115 Volts, 50-60 cycles, 1 phase

OUTPUT: 50 amperes, 0-15 Volts DC

RECTIFIER: Full wave selenium rectifier

VOLTAGE CONTROL: Powerstat

METERS: 2% Accuracy, volt meter, amp. meter

PRICE: \$210.00

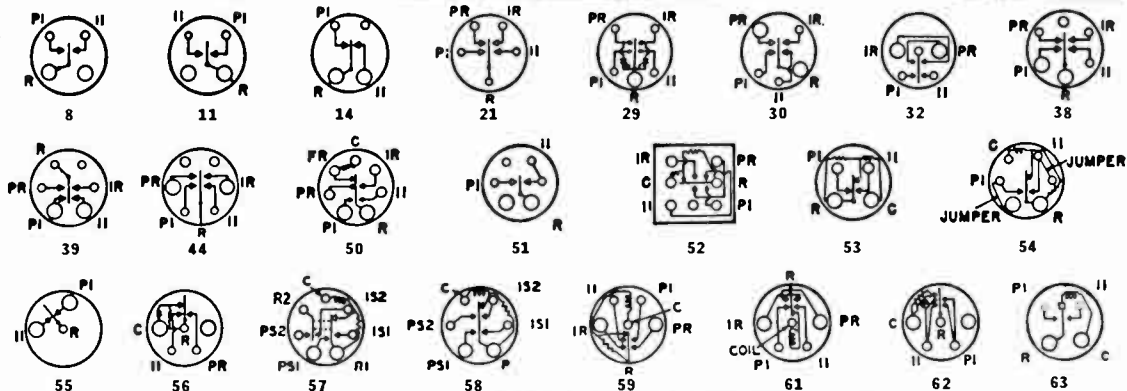
GATES ELECTRONIC CO.

BRONX, N. Y.

See Our Ad on Rectifiers in Section 4800 & Transformers in Section 5600

P. R. MALLORY & CO. Inc.
MALLORY

Vibrators



BASE DIAGRAMS: C = Coil; FR = Frame; II = Inertia Interrupter; IR = Inertia Rectifier; IS = Inertia Spring; PI = Pull Interrupter; PR = Pull Rectifier; PS = Pull Spring; R = Reed.

COMMON AUTO REPLACEMENT TYPES

Famous "Gold Label" models indicated by *

| Mallory No. | Volts | Type | Base Diag. | Can Type | Size, In. A x B x C | Net Each |
|-------------|-------|------|------------|----------|---------------------|----------|
| G1601* | 12 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | \$2.82 |
| G1602* | 12 | Int. | 55 | 9 | 1 1/2 x 2 3/8 | 2.82 |
| W1601 | 4 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.94 |
| 509P | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.49 |
| 716 | 6 | Syn. | 30 | 7 | 1 1/2 x 3 3/8 | 4.62 |
| 903M | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.16 |
| 1501 | 6 | Int. | 53 | 1 | 1 1/2 x 2 3/8 | 3.81 |
| 1601* | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.82 |

COMPLETE VIBRATOR SPECIFICATIONS

| Mallory No. | † | Volts | Type | Base Diag. | Can Type | Size, Inches A x B x C | Net Each |
|-------------|------|--------------------|------|------------|----------|------------------------|----------|
| F294 | 1 | 32 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | \$4.29 |
| F826S | 1, 2 | 32 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| G294 | ... | 12 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 5.13 |
| G1501 | 1 | 12 | Int. | 53 | 1 | 1 1/2 x 2 3/8 | 4.14 |
| G1502 | ... | 12 | Int. | 54 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| G1601 | ... | 12 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.82 |
| G1602 | ... | 12 | Int. | 55 | 9 | 1 1/2 x 2 3/8 | 2.82 |
| G1603S | 1, 2 | 12 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| G1604 | ... | 12 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| G1801 | ... | 12 | Syn. | 32 | 1 | 1 1/2 x 2 3/8 | 5.13 |
| G1801S | 1, 2 | 12 | Syn. | 32 | 1 | 1 1/2 x 2 3/8 | 5.97 |
| G1802S | 1, 2 | 12 | Syn. | 21 | 1 | 1 1/2 x 2 3/8 | 5.97 |
| G1803S | ... | 12 | Int. | 38 | 1 | 1 1/2 x 3 | 5.97 |
| G1807 | ... | 12 | Syn. | 44 | 1 | 1 1/2 x 2 3/8 | 5.13 |
| G1808 | ... | 12 | Syn. | 38 | 1 | 1 1/2 x 2 3/8 | 5.13 |
| M1501 | ... | 24 | Int. | 53 | 1 | 1 1/2 x 2 3/8 | 4.14 |
| W1601 | 3 | 4 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.94 |
| W1802 | 3 | 4 | Syn. | 21 | 1 | 1 1/2 x 2 3/8 | 4.95 |
| 273C | ... | 6 | Syn. | 29 | 1 | 2 x 4 1/4 | 5.49 |
| 294 | ... | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.94 |
| 298 | ... | 6 | Int. | 51 | 1 | 1 1/2 x 2 3/8 | 3.81 |
| 509P | ... | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.49 |
| 716 | ... | 6 | Syn. | 30 | 7 | 1 1/2 x 3 3/8 | 4.62 |
| 743 | ... | 6 | Syn. | 38 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| 825S | 1, 2 | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 4.14 |
| 854 | ... | 6 | Int. | 11 | 1 | 1 1/2 x 2 3/8 | 2.94 |
| 870 | ... | 6 | Int. | 14 | 1 | 1 1/2 x 2 3/8 | 2.94 |
| 903M | ... | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.16 |
| 954 | ... | 6 | Syn. | 39 | 1 | 1 1/2 x 3 3/8 | 4.62 |
| 1501† | 1 | 6 | Int. | 53 | 1 | 1 1/2 x 2 3/8 | 3.81 |
| 1512† | ... | 6 | Int. | 54 | 1 | 1 1/2 x 2 3/8 | 4.14 |
| 1513† | ... | 6/12 | Int. | 56 | 1 | 1 1/2 x 2 3/8 | 4.14 |
| 1514† | ... | 6 | Int. | 53 | 1 | 1 1/2 x 2 3/8 | 4.14 |
| 1601 | 1 | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.82 |
| 1603S | 1, 2 | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 3.81 |
| 1604 | ... | 6 | Int. | 8 | 1 | 1 1/2 x 2 3/8 | 2.94 |
| 1610 | ... | 6 | Int. | 63 | 1 | 1 1/2 x 2 3/8 | 3.30 |
| 1701† | ... | 6/12 | Int. | 57 | 1 | 1 1/2 x 3 | 5.76 |
| 1751† | ... | 6 | Int. | 58 | 1 | 1 1/2 x 3 | 5.88 |
| 1752† | ... | 6/12 | Int. | 62 | 1 | 1 1/2 x 3 | 5.82 |
| 1801S | 1, 2 | 6 | Syn. | 32 | 1 | 1 1/2 x 2 3/8 | 5.13 |
| 1802 | 1 | 6 | Syn. | 21 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| 1806 | ... | 6 | Syn. | 61 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| 1807† | ... | 6 | Syn. | 44 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| 1808† | ... | 6 | Syn. | 38 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| 1813† | ... | 6 | Syn. | 32 | 1 | 1 1/2 x 2 3/8 | 4.62 |
| 1852† | ... | 6 | Syn. | 59 | 1 | 1 1/2 x 2 3/8 | 5.82 |
| GC7 | 4 | Ground Cup Adapter | | ... | ... | ... | .27 |
| AR-1 | 5 | Vibrator Puller | | ... | ... | ... | .90 |
| VP-1 | ... | ... | | ... | ... | ... | 1.65 |

†—1: For new equipment design only, other types for replacement purposes only. 2: Hermetically sealed. 3: Designed for photoflash applications. 4: A grounding cup for 1 1/2" dia. vibrators which makes low RF ground between vibrator can and power supply. 5: Five special sockets for Practical Vibrator tester. Supplied as complete kit only. Int.—Interrupter. Syn.—Synchronous. ‡For Mobile communications and heavy duty uses.

Mallory Vibrators are assembled from carefully matched materials built to extremely close tolerances, assuring perfect balance and precise operation. Crude rubber insulation and heavy cans effectively deaden sound and vibration. Every Mallory vibrator is tested for output, starting voltage and wave form. If Mallory type number is not known refer to diagram above or write for VIBRATOR GUIDE, 15c FREE when request is included with order for Mallory Vibrators.

COMMUNICATION TYPE

Designed for mobile communications and other heavy duty uses. Engineered to the finest standards and will give long, trouble-free service when used as recommended.

| Mallory No. | Volts | Type | Base Diag. | Size, Inches | Net Each |
|-------------|-------|------|------------|---------------|----------|
| G1501 | 12 | Int. | 53 | 1 1/2 x 2 3/8 | \$4.14 |
| G1502 | 12 | Int. | 54 | 1 1/2 x 2 3/8 | 2.94 |
| G1801 | 12 | Syn. | 32 | 1 1/2 x 2 3/8 | 5.13 |
| G1807 | 12 | Syn. | 44 | 1 1/2 x 2 3/8 | 5.13 |
| 1501 | 6 | Int. | 53 | 1 1/2 x 2 3/8 | 3.81 |
| 1512 | 6 | Int. | 54 | 1 1/2 x 2 3/8 | 4.14 |
| 1513 | 6/12 | Int. | 56 | 1 1/2 x 2 3/8 | 4.14 |
| 1514 | 6 | Int. | 53 | 1 1/2 x 2 3/8 | 4.14 |
| 1701 | 6 | Int. | 57 | 1 1/2 x 3 | 5.76 |
| 1751 | 6 | Int. | 58 | 1 1/2 x 3 | 5.88 |
| 1752 | 6/12 | Int. | 62 | 1 1/2 x 3 | 5.82 |
| 1807 | 6 | Syn. | 44 | 1 1/2 x 2 3/8 | 4.62 |
| 1808 | 6 | Syn. | 38 | 1 1/2 x 2 3/8 | 4.62 |
| 1813 | 6 | Syn. | 32 | 1 1/2 x 2 3/8 | 4.62 |
| 1852 | 6 | Syn. | 59 | 1 1/2 x 2 3/8 | 5.82 |

BUFFER CAPACITORS

Tubular paper capacitors have case molded from high grade, mineral-filled bakelite; sealed against moisture and mechanical shock by epoxy resin. Double tinned copperweld wire leads. Tolerance, ±10%. Working voltage, 1600 v. DC; test 3200 v. DC.

| Mallory No. | Capacity μf | Size, Inches Dia. x Length | Net Each |
|-------------|-------------|----------------------------|----------|
| GEM-1621 | .001 | 3/8 x 1 1/4 | 39c |
| GEM-16215 | .0015 | 3/8 x 1 1/4 | 39c |
| GEM-1622 | .002 | 3/8 x 1 1/4 | 39c |
| GEM-16225 | .0025 | 7/16 x 1 1/4 | 45c |
| GEM-1623 | .003 | 7/16 x 1 1/4 | 39c |
| GEM-16233 | .0033 | 7/16 x 1 1/4 | 39c |
| GEM-1624 | .004 | 7/16 x 1 1/4 | 39c |
| GEM-16247 | .0047 | 7/16 x 1 1/4 | 39c |
| GEM-1625 | .005 | 7/16 x 1 1/4 | 39c |
| GEM-16256 | .0056 | 7/16 x 1 1/4 | 39c |
| GEM-1626 | .006 | 7/16 x 1 1/4 | 39c |
| GEM-16268 | .0068 | 7/16 x 1 1/4 | 39c |
| GEM-1627 | .007 | 7/16 x 1 1/4 | 39c |
| GEM-16275 | .0075 | 7/16 x 1 1/4 | 39c |
| GEM-1628 | .008 | 7/16 x 1 1/4 | 39c |
| GEM-16282 | .0082 | 7/16 x 1 1/4 | 39c |
| GEM-1611 | .01 | 7/16 x 1 1/4 | 42c |
| GEM-161125 | .0125 | 7/16 x 1 1/4 | 42c |
| GEM-1612 | .02 | 7/16 x 1 1/4 | 36c |
| GEM-16122 | .022 | 7/16 x 1 1/4 | 45c |
| GEM-1613 | .03 | 7/16 x 1 1/4 | 42c |
| GEM-1614 | .04 | 7/16 x 2 1/4 | 42c |
| GEM-1615 | .05 | 7/16 x 2 1/4 | 42c |

MALLORY Batteries

MANGANESE ALKALINE BATTERIES

| Mallory | Volts | Use | Oz. | Net |
|---------|-------|-------------------|-------|-----|
| Mn1300 | 1.5 | All Purpose "D" | 5 1/4 | 65c |
| Mn1306 | 4.5 | Transistor radio | 1 1/2 | 70c |
| Mn1400 | 1.5 | All Purpose "C" | 2 1/2 | 51c |
| Mn1500 | 1.5 | All Purpose "AA" | .82 | 33c |
| Mn1604 | 9 | Transistor radio | 1 1/2 | 70c |
| Mn2400 | 1.5 | All Purpose "AAA" | .4 | 31c |
| Mn9100 | 1.5 | All Purpose "AA" | .34 | 24c |



MERCURY BATTERIES

| Mallory Number | Volts | Cap., MAH | Use | Size, Inches L. x W. x H. | Wt., Oz. | Net Each |
|----------------|-------|-----------|-------------|---------------------------|----------|----------|
| RM-1 | 1.4 | 1000 | Electronic | 3/8 dia. x 1 1/2 | 0.75 | \$0.38 |
| RM-1R | 1.35 | 1000 | Electronic | 3/8 dia. x 1 1/2 | 0.75 | .44 |
| RM-1RT† | 1.35 | 1000 | Electronic | 3/8 dia. x 1 1/2 | 0.75 | .49 |
| RM-1RT‡ | 1.35 | 1000 | Electronic | 3/8 dia. x 1 1/2 | 0.75 | .53 |
| RM-3R | 1.35 | 2200 | Electronic | 1 dia. x 2 1/2 | 0.93 | .54 |
| RM-4R | 1.35 | 3400 | Electronic | 1.2 dia. x 2 1/2 | 1.6 | .69 |
| RM-4RT† | 1.35 | 3400 | Electronic | 1.2 dia. x 2 1/2 | 1.6 | .74 |
| RM-4Z | 1.4 | 2400 | Electronic | 1.2 dia. x 1 1/2 | 1.2 | .58 |
| RM-12 | 1.4 | 3600 | Electronic | 1 1/4 dia. x 2 | 2.0 | .75 |
| RM-12R | 1.35 | 3600 | Electronic | 3/8 dia. x 2 | 2.0 | .82 |
| RM-12RT† | 1.35 | 3600 | Electronic | 3/8 dia. x 2 | 2.0 | .87 |
| RM-12RT‡ | 1.35 | 3600 | Electronic | 3/8 dia. x 2 | 2.0 | .92 |
| RM-42 | 1.4 | 14000 | Electronic | 1.2 dia. x 2 3/8 | 5.9 | 1.70 |
| RM-42R | 1.35 | 14000 | Electronic | 1.2 dia. x 2 3/8 | 5.9 | 1.85 |
| RM-42RT† | 1.35 | 14000 | Electronic | 1.2 dia. x 2 3/8 | 5.9 | 1.90 |
| RM-42RT‡ | 1.35 | 14000 | Electronic | 1.2 dia. x 2 3/8 | 5.9 | 1.95 |
| RM-312 | 1.4 | 36 | Electronic | 3/8 dia. x 1 1/4 | 0.01 | .24 |
| RM-400R | 1.35 | 75 | Electronic | 3/8 dia. x 1 1/4 | 0.04 | .24 |
| RM-401 | 1.35 | 800 | Electronic | 3/8 dia. x 1 1/4 | 0.4 | .34 |
| RM-411 | 1.4 | 120 | Electronic | 1 x 1 1/2 x 1 1/2 | 1 | 2.00 |
| RM-412 | 22.4 | 120 | Electronic | 1 x 1 1/2 x 1 1/2 | 1.5 | 2.55 |
| RM-413 | 28 | 120 | Electronic | 1 x 1 1/2 x 3 1/2 | 1.5 | 3.25 |
| RM-415‡ | 42 | 120 | Electronic | 1 x 1 1/2 x 3 1/2 | 2.18 | 5.40 |
| RM-450R | 1.35 | 350 | Electronic | 1 1/4 dia. x 1 1/2 | 0.18 | .44 |
| RM-502R | 1.35 | 2400 | Electronic | 1 1/4 dia. x 1 1/2 | 1.05 | .62 |
| RM-520 | 1.4 | 130 | Electronic | 1 1/4 dia. x 1 1/2 | 0.07 | .16 |
| RM-601R | 1.35 | 1800 | Electronic | 3/8 dia. x 1 1/2 | 1.2 | .65 |
| RM-625R | 1.35 | 350 | Electronic | 3/8 dia. x 1 1/2 | 0.15 | .34 |
| RM-625RT† | 1.35 | 350 | Electronic | 3/8 dia. x 1 1/2 | 0.15 | .39 |
| RM-625RT‡ | 1.35 | 350 | Electronic | 3/8 dia. x 1 1/2 | 0.15 | .44 |
| RM-630 | 1.4 | 350 | Electronic | 3/8 dia. x 1 1/2 | 0.17 | .30 |
| RM-640* | 1.4 | 500 | Electronic | 3/8 dia. x 1 1/2 | 0.38 | .30 |
| RM-640RT‡ | 1.35 | 500 | Electronic | 3/8 dia. x 1 1/2 | 0.38 | .40 |
| RM-675 | 1.4 | 175 | Electronic | 3/8 dia. x 1 1/2 | 0.07 | .26 |
| TR-113R | 4.05 | 250 | Electronic | 2 1/2 dia. x 1 1/2 | 0.45 | 1.29 |
| TR-114R | 5.4 | 250 | Electronic | 2 1/2 dia. x 1 1/2 | 0.59 | 1.50 |
| TR-114RT‡ | 5.4 | 250 | Electronic | 2 1/2 dia. x 1 1/2 | 0.59 | 1.60 |
| TR-115R | 6.75 | 250 | Electronic | 2 1/2 dia. x 1 1/2 | 0.73 | 1.70 |
| TR-126 | 8.4 | | Radio | 3/4 dia. x 1 1/2 | 1.6 | .85 |
| TR-132R | 2.7 | 1000 | Electronic | 3/8 dia. x 1 1/2 | 1 | .92 |
| TR-133* | 4.2 | 1000 | Radio, Pag. | 3/8 dia. x 2 | 1.4 | 1.00 |
| TR-133R | 4.05 | 1000 | Radio, Pag. | 3/8 dia. x 2 | 1.4 | 1.18 |
| TR-134R | 5.4 | 1000 | Electronic | 3/8 dia. x 2 | 1.9 | 1.45 |
| TR-135R | 6.75 | 1000 | Electronic | 3/8 dia. x 2 1/2 | 2.4 | 1.85 |
| TR-136R | 8.1 | 1000 | Electronic | 3/8 dia. x 3 1/4 | 2.9 | 2.18 |
| TR-145 | 7 | 250 | Electronic | 3/8 dia. x 1 1/2 | 0.58 | 1.55 |
| TR-146* | 8.4 | 350 | Radio | 1 x 1 1/2 x 1 1/2 | 1.6 | 1.02 |
| TR-152R | 2.7 | 350 | Electronic | 3/8 dia. x 1 1/2 | 0.42 | .78 |
| TR-153R | 4.05 | 350 | Electronic | 3/8 dia. x 1 1/2 | 0.6 | 1.02 |
| TR-162R | 2.7 | 500 | Electronic | 3/8 dia. x 1 1/2 | 0.58 | .87 |
| TR-163 | 4.2 | 500 | TV tuner | 3/8 dia. x 1 1/2 | 0.87 | 1.02 |
| TR-164* | 5.6 | 500 | Radio | 3/8 dia. x 1 1/2 | 1.16 | 1.15 |
| TR-165 | 7 | 500 | TV tuner | 3/8 dia. x 2 1/2 | 1.45 | 1.50 |
| TR-169 | 12.6 | | Electronic | 3/8 dia. x 2 1/2 | 2.88 | 3.20 |
| TR-175 | 7 | 350 | Radio | 3/8 dia. x 1 1/2 | 1 | 1.02 |
| TR-177* | 9.8 | 250 | Radio | 3/8 dia. x 1 1/2 | 1 | 1.15 |
| TR-233 | 4.2 | 2200 | Radio | 1 1/4 dia. x 1 1/2 | 3 | 1.80 |
| TR-234 | 5.6 | 2200 | Electronic | 1 dia. x 2 1/2 | 3.88 | 2.50 |
| DM-9N | 1.4 | 2400 | Radio | 1 1/4 dia. x 1 1/2 | 1 | .54 |
| ZM-9* | 1.4 | 2400 | Radio | 1 1/4 dia. x 1 1/2 | 1 | .51 |

* Available in plastic jewel box, add suffix P, e.g., TR-146P. † 1 tab, 1 flat terminal. ‡ 2 tab terminals. § Snap terminals.

MERCURY POWER-PAK BATTERIES

| Mallory Number | Volts | Cap., MAH | Use | Terminals | Net Each |
|----------------|------------------------|-----------|------------------|-----------|----------|
| 302125-M | 7.0 | 2400 | Fire alarm | Flat | \$ 4.25 |
| 302157 | 1.35 | 28000 | Radiation eqpt. | Sekt | 10.35 |
| 302158 | 22.95, 2.7, 47.25, 5.4 | 500 | Radiation eqpt. | Sekt | 24.38 |
| 302227 | 4.05 | 250 | P. H. meter | Tabs | 1.65 |
| 302229 | 5.4 | 250 | P. H. meter | Tabs | 1.75 |
| 302240 | 24.3 | 2400 | Instruments | Leads | 22.50 |
| 302249 | 6.75 | 250 | Radiation eqpt. | Tabs | 2.28 |
| 302250 | 9.45 | 250 | Radiation eqpt. | Leads | 2.45 |
| 302257 | 1.35 | 1440 | Test equipment | Leads | 7.40 |
| 302271-M | 1.35-13.5 | 3600/250 | Electronic | Leads | 5.18 |
| 302351-M | 5.4 | 2200 | Fire alarm | Flat | 2.67 |
| 302354 | 5.4 | 250 | Radiation eqpt. | Leads | 1.80 |
| 302358 | 10.8 | 250 | Radiation eqpt. | Leads | 2.83 |
| 302360 | 8.1 | 250 | Radiation eqpt. | Leads | 3.60 |
| 302362 | 16.2 | 250 | Radiation eqpt. | Leads | 3.87 |
| 302424 | 6.75 | 1000 | Instruments | Leads | 2.57 |
| 302425 | 48.6 | 250 | "B" | Snap | 16.51 |
| 302435 | 6.75 | 250 | Radiation eqpt. | Flat | 2.28 |
| 302437 | 9.45 | 250 | Radiation eqpt. | Flat | 2.30 |
| 302462 | 97.2 | 1000 | "Transmitter "B" | Leads | 32.34 |
| 302464 | 6.75 | 3600 | Geophysical | Leads | 7.35 |
| 302465 | 47.25 | 1000 | Geophysical | Leads | 15.40 |
| 302467 | 5.4 | 1000 | Test equipment | Leads | 1.85 |
| 302478-M | 9.8 | 2400 | Recorder | Flat | 4.29 |
| 302479 | 6.75 | 2200 | Test equipment | Posts | 4.16 |
| 302499 | 64.8 | 500 | Missile | Leads | 28.50 |
| 302502 | 94.5 | 250 | Geophysical | Leads | 26.50 |
| 302506 | 16.2, 4.05 | 250 | Telemetry | Leads | 9.47 |
| 302510 | 1.35 | 43200 | Computer | Posts | 15.44 |

MERCURY POWER-PAKS (CONTINUED)

| Mallory Number | Volts | Cap., MAH | Use | Terminals | Net Each |
|----------------|------------|-----------|-----------------|-----------|----------|
| 302515 | 5.4 | 7200 | Test equipment | Leads | \$11.47 |
| 302527 | 97.2 | 250 | "B" | Leads | 26.50 |
| 302530 | 10.8 | 14000 | Missile | Posts | 38.48 |
| 302539 | 21.5 | 250 | Electronic | Sekt | 9.78 |
| 302540 | 1.35 | 14000 | Test equipment | Leads | 2.86 |
| 302554 | 97.2 | 250 | "B" | Leads | 26.50 |
| 302558 | 64.8, 34.1 | 500 | Missile | Leads | 25.50 |
| 302579 | 29.7 | 250 | Test equipment | Leads | 10.85 |
| 302580 | 27 | 3400 | Electronic | Sekt | 21.40 |
| 302589 | 21.5 | 250 | Electronic | Sekt | 12.20 |
| 302604 | 5.4 | 250 | Electronic | Flat | 1.37 |
| 302609 | 12.15 | 250 | Electronic | Flat | 3.40 |
| 302642 | 7.0 | 2400 | Fire alarm | Flat | 3.62 |
| 302651 | 1.35 | 14000 | Electronic | Leads | 22.37 |
| 302667 | 6.7 | 3200 | Geophysical | Leads | 2.67 |
| 302792 | 2.7 | 14000 | Electronic | Leads | 2.37 |
| 302795 | 10.75 | 3600 | Electronic | Snap | 15.37 |
| 302800 | 75.6 | 1000 | Electronic | Snap | 27.50 |
| 302830 | 12.06-6.7 | 1000/7200 | Electronic | Sekts | 19.25 |
| 302896 | 9.4, 1.35 | 3600 | Recorder | Snap | 15.80 |
| 302904 | 5.4 | 3400 | Meter | Leads | 4.32 |
| 302905 | 6.75 | 3400 | Test equipment | Leads | 5.65 |
| 302907 | 9.45 | 3400 | Electronic | Leads | 6.70 |
| 302908 | 10.8 | 3400 | Radiation eqpt. | Leads | 7.48 |
| 303145 | 8.4 | 3600 | Depth finder | Snap | 6.33 |
| 303203 | 4.05 | 2200 | Electronic | Flat | 1.80 |
| 303219 | 9.8 | 175 | Electronic | Flat | 1.80 |

† Special leads. ‡ Three negative leads.

MERCURY VOLTAGE REFERENCE BATTERY

Mallory No. 303113—Eight outputs, 0-10.80 v. in 1.35 v. steps. Size: 6 1/2" x 2 3/8" x 1". In lined leatherette case with complete technical information. Net Each \$39.50

ZINC-CARBON BATTERIES

| Mallory No. | Nom. Volts | Use | Size, Inches L. x W. x H. | Wt., Oz. | Net Each |
|-------------|------------|-----------------|---------------------------|----------|----------|
| M-4 | 1.5 | Radio "A" | a 2 1/2 x 1 1/2 x 1 1/2 | 20 | \$1.16 |
| M-6 | 6 | Radio "A" | a 2 1/2 x 2 1/2 x 3 1/2 | 9 | 1.16 |
| M-9 | 7.5 | Radio "A" | a 2 1/2 x 1 1/2 x 3 1/2 | 31 | 1.15 |
| M-13F | 1.5 | Flashlight "D" | b 1 1/2 dia. x 2 1/2 | 3.3 | .13 |
| M-13R | 1.5 | Radio "D" | b 1 1/2 dia. x 2 1/2 | 3.3 | .155 |
| M-13X | 1.5 | Industrial "D" | b 1 1/2 dia. x 2 1/2 | 3.3 | .13 |
| M-14F | 1.5 | Flashlight "C" | b 1 1/2 dia. x 1 1/2 | 1.5 | .155 |
| M-14R | 1.5 | Radio "C" | b 1 1/2 dia. x 1 1/2 | 1.5 | .13 |
| M-15F | 1.5 | "AA" penlight | b 3/4 dia. x 1 1/2 | 0.5 | .155 |
| M-15R | 1.5 | Radio penlight | b 3/4 dia. x 1 1/2 | 0.5 | .13 |
| M-20 | 1.5 | Radio "A" | b 1 1/2 dia. x 4 1/2 | 6 | .32 |
| M-24F | 1.5 | Junior penlight | b 1 1/2 dia. x 1 1/2 | 0.3 | .095 |
| M-200 | 67.5 | Radio "B" | c 2 1/4 x 1 1/2 x 3 1/4 | 12 | 2.45 |
| M-208 | 15 | Electronic "B" | b 1 1/2 x 1 1/2 x 1 1/2 | 0.8 | .81 |
| M-210 | 30 | Electronic "B" | b 1 1/2 x 1 1/2 x 2 1/2 | 1.4 | 1.23 |
| M-211P | 67.5 | Radio "B" | c 1 1/2 x 1 1/2 x 3 1/4 | 8.5 | 2.27 |
| M-213 | 45 | Radio "B" | c 1 1/2 x 1 1/2 x 3 1/4 | 3 | 1.75 |
| M-214 | 90 | Radio "B" | c 1 1/2 x 1 1/2 x 3 1/4 | 12 | 2.77 |
| M-215 | 22.5 | Radio "B" | b 1 1/2 x 1 1/2 x 2 | 1.5 | 1.05 |
| M-413 | 1 1/2 | Farm Radio | a 15 1/2 x 4 1/2 x 6 1/2 | 260.0 | 7.95 |
| M-504 | 15 | Electronic "B" | b 3 1/2 x 1 1/2 x 1 1/2 | 0.6 | .81 |
| M-505 | 22.5 | Electronic "B" | b 3 1/2 x 1 1/2 x 1 1/2 | 0.6 | 1.05 |
| M-506 | 30 | Electronic "B" | b 1 1/2 x 3 1/2 x 1 1/2 | 0.9 | 1.30 |
| M-507 | 30 | Electronic "B" | b 3 1/2 x 1 1/2 x 1 1/2 | 0.9 | 1.30 |
| M-900 | 1.5 | Ignition | c 2 3/8 x 2 3/8 x 4 3/8 | 20 | .84 |
| M-902 | 6 | Lighting | e 8 1/2 x 2 1/2 x 6 1/2 | 94.0 | 4.01 |
| M-903 | 7.5 | Lighting | e 7 1/2 x 4 1/2 x 6 1/2 | 122.0 | 4.86 |
| M-904 | 9 | Lighting | e 8 1/2 x 4 1/2 x 6 1/2 | 136.0 | 5.53 |
| M-905 | 1.5 | Ignition | e 2 3/8 dia. x 6 3/8 | 34 | .84 |
| M-906 | 1.5 | Telephone | f 2 3/8 dia. x 6 3/8 | 34</ | |

PRECISE MEASUREMENTS COMPANY BUILDS HIGH VOLTAGE POWER SUPPLIES

These well designed and constructed power packs are proven by many years of service in industry, laboratories, universities and by the United States Government. Only the best available selected material goes into these units. Listed below are some of our standard design models. Other voltages and currents available as we stock large quantities of specialized transformers and components to give you faster more efficient service. Since 50 per cent of our orders are for special supplies, we will cheerfully give you quotations on your specific requirements.

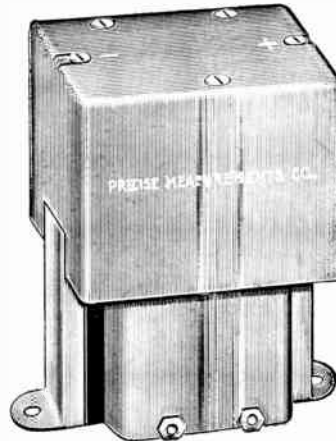
AC INSULATION AND BREAKDOWN TESTERS



Used in testing insulation where AC voltages are desired. Dual instruments are also available which provide choice of AC or DC output with simple toggle switch selection. Units include kilovoltmeter, current meter and automatic over-load cutout circuits.

| Model | Voltage | VA | AC | Price AC and DC |
|---------|-------------|-------|----------|-----------------|
| 3000 | 0 to 3,000 | 75 | \$150.00 | \$ 250.00 |
| 3010 | 0 to 3,000 | 300 | 250.00 | 400.00 |
| 3050 | 0 to 3,000 | 1,500 | 500.00 | 650.00 |
| 3100 | 0 to 6,000 | 3,000 | 700.00 | 1,100.00 |
| 5000 | 0 to 5,000 | 75 | 175.00 | 300.00 |
| 1000 | 0 to 10,000 | 75 | 200.00 | 350.00 |
| 1500 | 0 to 15,000 | 75 | 250.00 | AC only |
| 2500-AC | 0 to 25,000 | 75 | 400.00 | AC only |
| 2500-DC | 0 to 25,000 | 75 | DC only | 400.00 |

ROCK TOP PACKAGED POWER SUPPLIES



Snap-Together, Packaged Power Supplies with new patent applied for features. Consists of a molded basic transformer which has undergone rigid tests for insulation and power handling capacity; plus a ROCK TOP head containing the rectifier and filter section. This simple fool-proof construction results in longest possible life with minimum space requirements. Should repair ever be required, simply discard either the top or bottom section and replace with new element. In a matter of minutes, full operation is restored. The Filtered D.C. Output Voltage may be varied from zero to

full rated voltage by adjustment of input AC level with a rheostat or Variac. Output is completely isolated and either side may be grounded. Ideal for all high voltage applications and photomultiplier circuits. All units rated for 5 milliamperes current.

| Model | Output Voltage | Price | Model | Output Voltage | Price |
|-----------|----------------|---------|------------|----------------|--------|
| 05-KV-5MA | 500 Volts DC | \$50.00 | 7.5-KV-5MA | 7.5-KV-DC | 110.00 |
| 1-KV-5MA | 1-KV-DC | 60.00 | 10-KV-5MA | 10-KV-DC | 125.00 |
| 2-KV-5MA | 2-KV-DC | 70.00 | 15-KV-5MA | 15-KV-DC | 140.00 |
| 3-KV-5MA | 3-KV-DC | 80.00 | 20-KV-5MA | 20-KV-DC | 235.00 |
| 5-KV-5MA | 5-KV-DC | 95.00 | 30-KV-5MA | 30-KV-DC | 300.00 |

HANDY PORTABLE MODELS



New Mirror Scale Instrument Illustrated

One of the most popular power supplies on the market. Completely redesigned for greater ruggedness and convenience of operation. Widely used for powering electronic equipment and for routine breakdown and insulation testing. Output voltage is well filtered D.C. which is adjustable with convenient front panel control. Input is 115 Volt, 60 cycle A.C. Larger 6" precision 1/4 mirror scale movement available on order. Regulated models offer closely stabilized output voltage regardless of line or load changes.

| Model | Max. Voltage | Regulated | | Unregulated | |
|--------|--------------|---------------|----------|-------------|-------|
| | | 100 Microamps | 1 MA. | 1 MA. | 5 MA. |
| 6000-1 | 1,000 | | \$150.00 | \$200.00 | |
| 6000 | 2,500 | 120.00 | 175.00 | 225.00 | |
| 6005 | 5,000 | 135.00 | 200.00 | 250.00 | |
| 6010 | 10,000 | 145.00 | 225.00 | 275.00 | |
| 6015 | 15,000 | 155.00 | 250.00 | 300.00 | |
| 6025 | 25,000 | 205.00 | 275.00 | 350.00 | |

Note. Regulated power supplies are of the radio frequency type and adjust from approximately 20% to full rated voltage. The 1 and 5 milliamperes types are transformer operated and have a range of zero to full voltage output. These are recommended for industrial service applications.

Mirror Scale Higher Accuracy Meter. Recommended for more exact calibration or test purposes. Add \$50.00 to any meter equipped power supply.

For additional built-in current meter (both meters are 3 inch size), including automatic meter protector circuit, add \$50.00 to any power supply.

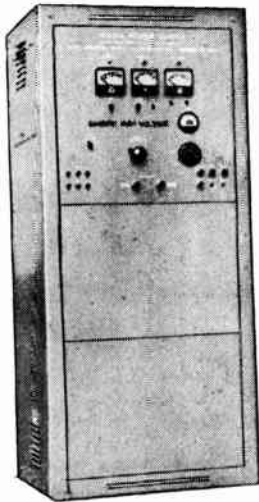
PRECISE MEASUREMENTS COMPANY

FLEMINGTON, NEW JERSEY

PRECISE MEASUREMENTS COMPANY BUILDS HIGH VOLTAGE POWER SUPPLIES

FOR INDUSTRIAL APPLICATIONS

HEAVY DUTY POWER SUPPLIES



For use in applications where high voltages at extra high currents are required. Either fixed or fully variable types are available. Automatic circuits protect against over-current conditions, turning off main power in a split second. Used for Plasma research, Electron beam furnaces, plate power and condenser charging.

| Model | Voltage | Current Amps | Price |
|-------|-------------|--------------|-------------|
| A 1-A | 0 to 100 | 100 | \$ 2,000.00 |
| A 1-B | 0 to 100 | 1000 | 12,500.00 |
| A 10A | 0 to 1,000 | 5 | 2,500.00 |
| A 10B | 0 to 1,000 | 10 | 3,700.00 |
| A 30A | 0 to 3,000 | 5 | 4,500.00 |
| A 31 | 0 to 3,000 | 10 | 6,750.00 |
| A 32 | 0 to 3,000 | 20 | 7,850.00 |
| A 50 | 0 to 5,000 | 5 | 5,900.00 |
| A 51 | 0 to 5,000 | 10 | 8,350.00 |
| A 72 | 0 to 7,500 | 10 | 9,250.00 |
| A 100 | 0 to 10,000 | 5 | 10,250.00 |
| A 110 | 0 to 10,000 | 10 | 14,575.00 |
| A 200 | 0 to 20,000 | 5 | 16,450.00 |
| A 300 | 0 to 30,000 | 5 | 19,200.00 |
| A 500 | 0 to 50,000 | 5 | 27,500.00 |

METERING TRANSFORMERS



| Model | Voltage | Price |
|-----------|---------|---------|
| 5 KV-EXP | 5,000 | \$40.00 |
| 10 KV-EXP | 10,000 | 65.00 |
| 15 KV-EXP | 15,000 | 75.00 |

MOLDED ROCK design. Used for insulation and breakdown testing, meter calibration and for elimination of static charges on plastics and paper. Primary windings for 0 to 115 Volts 60 cycles AC. Secondary provides high AC voltage in true RMS. One side of secondary brought out to a LOW POST. High side of secondary is sheathed in plastic deep well for maximum safety. A third winding with 1/100 ratio permits standard low voltage precision voltmeter to be used to indicate exact value of high voltage.

FILAMENT TRANSFORMERS

Primary designed for 115 Volts, 60 cycles AC. Secondary has special insulation for minimum leakage and smallest practical size.

| Model | Filament Voltage | Current | Insulation | Price |
|----------------|------------------|-----------|------------|---------|
| F-1 | 1.2 Volts | 500 Ma. | 20 KV test | \$ 5.00 |
| F-2 | Dual 1.2 Volts | 500 Ma. | 20 KV test | 7.50 |
| F-3 | 2.5 Volts | 2 amps | 15 KV test | 8.00 |
| F-5 | 5 Volts | 500 Ma. | 15 KV test | 8.00 |
| F-50 | 5 Volts | 10 amps | 45 KV test | 40.00 |
| F-51 | 5 Volts | 35 amps | 10 KV test | 35.00 |
| F-15-EXP. | 15 Volts | 35 amps | 45 KV test | 100.00 |
| F-5-5-5-5-EXP. | Four 5 V. wdgs. | 15A & 30A | 45 KV test | 250.00 |

HIGH VOLTAGE CONVERTERS

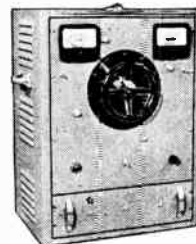
MODEL 10 MVT. Miniature chopper type voltage converter with built in transformer. Small and compact. Weighs only three ounces. Simply connect input to 1 to 3 volts DC or AC (60 cycles) and any voltage from 0 to 6,000 Volts AC or DC (when rectified) will be produced depending upon loading. Circuits supplied with each unit.

Model 10 MVT Converter Price \$10.00 each.

MODEL 18 VT. Chopper type voltage converter. Produces up to 18,000 Volts peak pulse from standard 115 volts 60 cycles AC. Special current limiting design for maximum safety. May be connected to half wave rectifier for up to 18,000 Volts DC (at very light loading) output or voltage doubler circuit for up to 30,000 Volts output. Full circuit details with each unit.

Model 18 VT Converter Price \$35.00 each

INDUSTRIAL POWER SUPPLIES



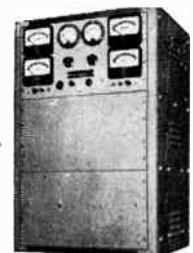
Standard hum level 5% or less. .01% to 1% ripple available. All power supplies have automatic overload cut-out control circuits. Regulated models available.

These industrial type power supplies are built for service and efficiency. All are of the transformer type and employ husky components that have been selected for their power handling capacity. Controls are arranged so that operation is greatly simplified and a number of safety features are built in for maximum protection of personnel and equipment. Output is continuously variable from zero to full rated value. Polarity reversing models (as illustrated) can be had at additional cost.

| Model | Voltage | Current | Price |
|-------------|-----------|---------|----------|
| F-100V | 0-100 | 10 Amp | \$650.00 |
| F-500V | 0-500 | 3 Amp | 800.00 |
| F-6001 | 0-1000 | 2 Amp | 975.00 |
| F-6002 | 0-2000 | 1 Amp | 985.00 |
| F-6003-AI | 0-3000 | 100 MA | 375.00 |
| F-6003-AV | 0-3000 | 500 MA | 550.00 |
| F-6003-AK | 0-3000 | 1 Amp | 1100.00 |
| F-6005-AI-H | 0-5000 | 100 MA | 550.00 |
| F-6005-AV | 0-5000 | 500 MA | 750.00 |
| F-6005-AIK | 0-5000 | 1 Amp | 1200.00 |
| F-6010-AI | 0-10,000 | 100 MA | 800.00 |
| F-6010-AV | 0-10,000 | 500 MA | 3000.00 |
| F-6020-A05 | 0-20,000 | 50 MA | 975.00 |
| F-6030-A3 | 0-30,000 | 300 MA | 5000.00 |
| F-6050-T | 0-50,000 | 1/2 MA | 600.00 |
| F-6100-T | 0-100,000 | 1/2 MA | 1100.00 |

CONSTANT CURRENT POWER SUPPLIES

Designed for application where output current must remain constant regardless of loading resistance changes. Used for magnet fields plating applications, gasous lamps. Dependable magnetic current stabilizer has no moving parts, no tubes, no transistors to replace. Simply set current to desired level, no balancing or other adjustments needed. Ideal for lamp operation since operating state ionizing voltage in no way affects lamp current. Standard hum level 5%. Lower hum levels available on order.



| Model | Max. Voltage | Current | Price |
|---------------|----------------|---------------|-----------|
| C-25-100 | 25 V. | 100 Amp. | \$ 980.00 |
| C-70-70 | 70 V. | 70 Amp. | 1,700.00 |
| C-500-10 | 500 V. | 10 Amp. | 1,700.00 |
| C-Dual 500-10 | 500 or 1000 V. | 10 or 20 Amp. | 2,750.00 |
| C-1000-5 | 1000 V. | 5 Amp. | 3,000.00 |
| C-3000-1 | 3000 V. | 1 Amp. | 2,500.00 |
| C-5000-1 | 5000 V. | 1 Amp. | 3,450.00 |
| C-10K-5H | 10 KV. | 500 Ma. | 3,850.00 |

Dual 500 V - 500 V, 10 Ampere Power Supply. Isolated outputs may be series or paralleled.

TRANSFORMERS, HIGH VOLTAGE

For experimental, industrial, or production use. These units are small and compact and rated for constant service. Primary designed for 115 Volts, 60 Cycle. Secondary is isolated. Only standard models are listed. We can wind specials for any frequency or voltage.

Two types of construction is available. Open frame type windings with leads or MOLDED ROCK design with screw connections. All have 5 Milliampere current rating.



| Model | Voltage | Open Frame Price | MOLDED ROCK Price |
|---------|--------------|------------------|-------------------|
| 1-KVT | 1000 Volts | \$10.00 | \$15.00 |
| 2-KVT | 2000 Volts | 12.50 | 17.00 |
| 3-KVT | 3000 Volts | 15.00 | 19.00 |
| 5-KVT | 5000 Volts | 20.00 | 25.00 |
| 7.5-KVT | 7500 Volts | 30.00 | 42.50 |
| 10-KVT | 10,000 Volts | 50.00 | 65.00 |
| 50-KVT | 50,000 Volts | 600.00 | |

PRECISE MEASUREMENTS COMPANY

FLEMINGTON, NEW JERSEY

RCA BATTERIES

RADIO • FLASHLIGHT
FARM • TRANSISTOR
INDUSTRIAL • PHOTO FLASH

| RCA TYPE NO. | DEALER PRICE EA.* | LIST PRICE EA.* | VOLTAGE | INTERCHANGEABILITY GUIDE | | | STANDARD PKG. | | MAX. DIMENSIONS (in.) | | |
|-----------------------------|-------------------|-----------------|-------------------------|--------------------------|------|---------|---------------|---------------------------------|----------------------------------|---------------------------------------|----------------------------------|
| | | | | EVEREADY | NEDA | BURGESS | QTY. | WT. (lbs.) | L. | W. or DIAM. | HT. |
| PORTABLE "A" TYPES | | | | | | | | | | | |
| VS002 | | | (Substitute Type VS067) | | | | | | | | |
| VS004 | 1.15 | 1.65 | 1½ | 742 | 4 | 4F | 12 | 16 | 2½ ⁸ / ₈ | 2½ ⁸ / ₈ | 4½ ⁶ / ₆ |
| VS009 | 1.16 | 1.65 | 6 | 744 | 6 | 4FP1 | 12 | 17 | 2½ ³² / ₃₂ | 2½ ³² / ₃₂ | 4½ ⁶ / ₆ |
| VS065 | 1.15 | 1.65 | 7½ | 717 | 9 | C5 | 12 | 6½ | 2½ ³² / ₃₂ | 1½ ⁶ / ₆ | 3½ ³² / ₃₂ |
| VS067 | .95 | 1.35 | 4½ | 736 | 3 | F3 | 12 | 13 | 4 | 1½ ⁶ / ₆ | 4½ ⁶ / ₆ |
| VS068 | .70 | 1.00 | 6 | 724 | 2 | Z4 | 12 | 2 | 1¼ | 1¼ | 2½ ⁶ / ₆ |
| VS069 | .84 | 1.20 | 1½ | 720 | 18 | 2D | 12 | 5½ | 2½ ⁸ / ₈ | 1½ ⁶ / ₆ | 2½ ⁶ / ₆ |
| VS070 | .60 | .85 | 1½ | 960P | 23 | 8R | 12 | 4½ | — | 1½ ³² / ₃₂ | 4½ ⁶ / ₆ |
| VS072 | .95 | 1.35 | 4½ | 726 | 19 | D3 | 12 | 9 | 3½ ³² / ₃₂ | 1½ ⁶ / ₆ | 3 |
| VS129 | 1.58 | 2.25 | 7½ | 713 | 8 | B5 | 6 | 2½ | 4½ ⁶ / ₆ | 1½ ⁶ / ₆ | 3 |
| VS141 | .77 | 1.10 | 1½ | W353 | 11 | 2F | 6 | 5 | 2½ ³² / ₃₂ | 1½ ⁶ / ₆ | 4¼ |
| VS236 | .32 | .45 | 1½ | 964 | 20 | 21R | 48 | 19 | — | 1½ ⁶ / ₆ (dia.) | 4½ ⁶ / ₆ |
| VS315 | 1.05 | 1.50 | 7½ | 707 | 26 | D5 | 6 | 6 | 2½ ⁶ / ₆ | 2½ ³² / ₃₂ | 2½ ⁶ / ₆ |
| PORTABLE "B" TYPES | | | | | | | | | | | |
| VS012 | 3.29 | 4.70 | 45 | 484 | 207 | B30 | 6 | 19¾ | 3½ ³² / ₃₂ | 2½ ³² / ₃₂ | 5½ ⁶ / ₆ |
| VS013 | 2.70 | 3.85 | 45 | 482 | 202 | M30 | 6 | 12¾ | 3½ ³² / ₃₂ | 2½ ³² / ₃₂ | 5½ ⁶ / ₆ |
| VS014 | 2.49 | 3.55 | 45 | W359 | 206 | A30 | 5 | 10½ ⁸ / ₈ | 3½ ⁶ / ₆ | 2¼ | 4½ ⁶ / ₆ |
| VS015 | 2.76 | 3.95 | 22½-45 | 738 | 205 | Z30 | 5 | 7 | 3 | 2½ ⁶ / ₆ | 4½ ⁸ / ₈ |
| VS016 | 2.45 | 3.50 | 67½ | 467 | 200 | XX45 | 12 | 10 | 2½ ⁶ / ₆ | 1½ ⁸ / ₈ | 3½ ⁶ / ₆ |
| VS055 | 2.08 | 2.95 | 45 | 455 | 201 | XX30 | 12 | 6¾ | 2½ ³² / ₃₂ | 1 | 3½ ⁶ / ₆ |
| VS082 | 2.42 | 3.45 | 67½ | 457 | 203 | K45 | 12 | 6½ | 2½ ⁶ / ₆ | 1½ ⁸ / ₈ | 2½ ⁶ / ₆ |
| VS084 | 1.05 | 1.50 | 22½ | 412 | 215 | U15 | 12 | 1 | 1½ ³² / ₃₂ | ½ ⁸ / ₈ | 2 |
| VS086 | 1.75 | 2.50 | 45 | 415 | 213 | U30 | 12 | 2 | 1¾ | ½ ⁸ / ₈ | 3½ ⁶ / ₆ |
| VS090 | 3.15 | 4.50 | 90 | 490 | 204 | N60 | 12 | 13 | 3½ ³² / ₃₂ | 1½ ⁸ / ₈ | 3½ ⁶ / ₆ |
| VS217 | 3.15 | 4.15 | 75 | 437 | 212 | XX50 | 12 | 12½ | 1½ ⁶ / ₆ | 1½ ³² / ₃₂ | 6½ ⁶ / ₆ |
| VS218 | 2.27 | 3.25 | 67½ | 477 | 211P | P45 | 12 | 6¾ | 1½ ³² / ₃₂ | ½ ⁶ / ₆ | 5½ ⁶ / ₆ |
| VS219 | 2.77 | 3.95 | 90 | 479 | 214 | P60 | 12 | 9 | 1½ ³² / ₃₂ | 1½ ⁶ / ₆ | 7½ ³² / ₃₂ |
| VS316 | 3.47 | 4.95 | 90 | 495 | 216 | N60X | 6 | 7 | 1½ ⁶ / ₆ | 1½ ³² / ₃₂ | 7½ ⁸ / ₈ |
| VS318 | 2.07 | 2.95 | 67½ | 416 | 217 | UX45 | 6 | 1¾ | 1½ ⁶ / ₆ | ½ ⁶ / ₆ | 3½ ⁶ / ₆ |
| PORTABLE "A-B" TYPES | | | | | | | | | | | |
| VS019 | 5.43 | 7.75 | 7½-9-90 | 753 | 401 | F6A60 | 6 | 32 | 9¼ | 2½ ⁶ / ₆ | 4½ ⁶ / ₆ |
| VS047 | 5.78 | 8.25 | 9-90 | 752 | 400 | G6B60 | 6 | 41¾ | 13½ ⁶ / ₆ | 2½ ⁶ / ₆ | 4½ ⁶ / ₆ |
| VS050 | 5.08 | 7.25 | 6-7½-75 | 755 | 403 | T5250 | 6 | 23 | 8½ ⁸ / ₈ | 2½ ⁶ / ₆ | 3½ ⁶ / ₆ |
| VS057W | 4.87 | 6.95 | 7½-9-90 | 756 | 405 | T6260 | 6 | 19 | 8½ ⁸ / ₈ | 2¼ | 3½ ⁸ / ₈ |
| VS058 | 5.57 | 7.95 | 9-90 | 757 | 406 | F6A60P | 6 | 31 | 9½ ⁶ / ₆ | 2¼ | 4½ ⁶ / ₆ |
| VS059 | 5.22 | 7.45 | 9-90 | 727 | 428 | T6260P | 6 | 20 | 9½ ⁶ / ₆ | 2¼ | 3½ ⁶ / ₆ |
| VS060 | 4.83 | 6.90 | 7½-75 | 785 | 431 | T5250P | 6 | 18 | 8½ ⁶ / ₆ | 2½ ⁶ / ₆ | 3½ ⁶ / ₆ |
| VS064 | 4.38 | 6.25 | 1½-90 | 729 | 425 | 4T260 | 6 | 16½ | 7½ ⁶ / ₆ | 2¼ | 3½ ⁶ / ₆ |
| TRANSISTOR BATTERIES | | | | | | | | | | | |
| VS150** | .30 | .45 | 1.4 | E640 | — | RM640 | 20 | ½ | — | 0.625 | 0.440 |
| VS163** | 1.10 | 1.60 | 4.2 | E163 | — | TR163 | 10 | ¾ | — | 0.662 | 1.327 |
| VS164** | 1.15 | 1.75 | 5.6 | E164 | — | TR164 | 10 | 1 | — | 0.662 | 1.767 |
| VS165** | 1.64 | 2.45 | 7 | — | — | TR165 | 10 | 1 | — | 0.662 | 2.217 |
| VS300A° | .62 | .89 | 9 | 226 | 1600 | P6M | 36 | 4½ | — | 3½ ³² / ₃₂ | 1½ ³² / ₃₂ |
| VS301 | 1.76 | 2.50 | 3, 6, 9 | 2506 | 1601 | D6P1 | 12 | 18 | 8 | 1½ ⁶ / ₆ | 2½ ⁶ / ₆ |
| VS304 | 1.05 | 1.50 | 13½ | 239 | 1900 | XX9 | 12 | 2½ ⁸ / ₈ | 1½ ⁶ / ₆ | 1½ ⁶ / ₆ | 2½ ⁶ / ₆ |
| VS305 | 1.30 | 1.85 | 9 | 246 | 1602 | D6 | 12 | 3½ | 1½ ³² / ₃₂ | 1½ ³² / ₃₂ | 3½ ⁶ / ₆ |
| VS306 | 1.26 | 1.80 | 9 | 276 | 1603 | D6 | 6 | 5¾ | 2½ ⁶ / ₆ | 2½ ⁶ / ₆ | 3½ ³² / ₃₂ |
| VS309A** | 1.37 | 1.95 | 9.8 | E177 | 1606 | TR177 | 12 | ½ | — | ½ ⁶ / ₆ | 1½ ³² / ₃₂ |
| VS312** | 1.02 | 1.50 | 8.4 | E146 | 1604 | TR146 | 12 | 1¼ | 1 | ½ ³² / ₃₂ | 1½ ⁶ / ₆ |
| VS313** | .51 | .75 | 1.4 | E9 | 15 | ZM9 | 96 | 7 | — | ¾ ⁶ / ₆ | 1½ ³² / ₃₂ |
| VS321 | 1.93 | 2.75 | 4½ | 2731 | — | — | 12 | 36¾ | 2½ ⁶ / ₆ | 1¾ | 8½ ³² / ₃₂ |
| VS322 | 1.05 | 1.50 | 9 | 266 | 1605 | M6 | 12 | 5¾ | 1½ ⁶ / ₆ | 1½ ⁶ / ₆ | 2½ ⁶ / ₆ |
| VS323° | .48 | .69 | 9 | 216 | 1604 | 2U6 | 36 | 2.7 | 1½ ³² / ₃₂ | 1½ ⁶ / ₆ | 1½ ³² / ₃₂ |
| VS324 | 1.19 | 1.70 | 4.50 | 243 | 1610 | Z23 | 12 | 3½ | 1½ ³² / ₃₂ | 1½ ³² / ₃₂ | 2½ ⁶ / ₆ |
| VS325 | .71 | 1.00 | 6 | 2713 | 1403 | — | 6 | 1.8 | 1½ ³² / ₃₂ | ¾ ⁶ / ₆ | 4½ ⁶ / ₆ |
| VS326 | 1.05 | 1.50 | 9 | 2709 | 1613 | — | 6 | 2 | 1½ ³² / ₃₂ | ¾ | 4½ ⁶ / ₆ |
| VS327 | .53 | .75 | 9 | 206 | 1611 | — | 12 | 1 | — | ¾ | 2 |
| VS328** | .85 | 1.25 | 8.4 | E126 | 1611 | H126 | 24 | 2.0 | — | .645 | 1.975 |
| VS329 | 1.05 | 1.50 | 12 | 228 | — | — | 12 | 1.7 | — | 1 | 2½ ⁶ / ₆ |
| VS334° | .155 | .25 | 1.5 | 1015 | 15 | 930 | 144 | 5¼ | — | ¾ ⁶ / ₆ | 2 |
| VS335 | .155 | .25 | 1.5 | 635 | 14 | 130 | 72 | 8¼ | — | 1 | 1½ ⁶ / ₆ |
| VS336 | .155 | .25 | 1½ | A-100 | 13 | 230 | 192 | 40½ | — | 1½ ³² / ₃₂ | 2½ ³² / ₃₂ |
| VS400** | 1.80 | 2.65 | 4 | E233 | 1300 | TR233R | 10 | 2½ | — | 1½ ³² / ₃₂ | 1½ ³² / ₃₂ |
| VS401** | .34 | .50 | 1.4 | E401 | 910 | — | 24 | 1.0 | — | .455 | 1.130 |
| VS1073† | .35 | .24 | 1.5 | — | 910 | Mn9100 | 72 | 2 | — | 0.470 | 1.130 |
| VS1149† | .65 | .95 | 4.5 | — | 1306 | Mn1306 | 24 | 2 | — | 0.662 | 1.965 |
| VS1334† | .33 | .50 | 1.5 | E91 | 15 | Mn1500 | 48 | 3 | — | 0.550 | 1.968 |
| VS1335† | .51 | .75 | 1.5 | E93 | 14 | Mn1400 | 24 | 4 | — | 1½ ⁶ / ₆ | 2 |
| VS1336† | .64 | .95 | 1½ | E95 | — | — | 72 | 25 | — | 1½ ⁶ / ₆ | 2½ ⁶ / ₆ |

*Optional

**Mercury Types

†New Alkaline Multi-Purpose Type

‡New Alkaline Radio Type

°Also available in blister pack at 1c higher dealer prices

RCA BATTERIES

RADIO • FLASHLIGHT
FARM • TRANSISTOR
INDUSTRIAL • PHOTO FLASH

LIGHTING TYPES



| RCA TYPE NO. | DEALER PRICE EA.* | LIST PRICE EA.* | VOLTAGE | INTERCHANGEABILITY GUIDE | | | STANDARD PKG. | | MAX. DIMENSIONS (in.) | | |
|--------------|-------------------|-----------------|---------|--------------------------|------|---------|---------------|------------|----------------------------------|----------------------------------|----------------------------------|
| | | | | EVEREADY | NEDA | BURGESS | QTY. | WT. (lbs.) | L. | W. or DIAM. | HT. |
| VS034A | .125 | .20 | 1½ | 915 | 15 | Z | 144 | 6 | — | 9/16 | 2 |
| VS035A | .125 | .20 | 1½ | 935 | 14 | 1 | 240 | 26 | — | 1 | 1½ ¹¹ / ₁₆ |
| VS036 | .125 | .20 | 1½ | 950 | 13 | 2R | 192 | 38 | — | 1½ ¹¹ / ₁₆ | 2 ³ / ₈ |
| VS040C | .79 | 1.19 | 6 | 509 | 908 | F4H | 12 | 16½ | 2¾ | 2¾ | 4¾ |
| VS040S | .79 | 1.19 | 6 | 510S | 915 | F4BP | 12 | 16¼ | 2¾ | 2¾ | 4¼ |
| VS073 | .08 | .125 | 1½ | 904 | 910 | N | 96 | 1½ | — | 7/16 | 1¾ |
| VS074 | .095 | .15 | 1½ | 912 | 24 | 7 | 120 | 2½ | — | 7/16 | 1¾ |
| VS138 | 1.45 | 2.05 | 3 | W357 | 901 | 4F2H | 5 | 14½ | 3½ ¹¹ / ₁₆ | 2¾ | 6¼ |
| VS317 | 1.83 | 2.75 | 6 | 731 | 918 | TW1 | 4 | 13 | 5½ ¹¹ / ₁₆ | 2¾ | 4¾ |

FARM TYPES



INDUSTRIAL and SPECIAL-PURPOSE TYPES



| | | | | | | | | | | | |
|-------|-------|-------|---------|-----|-----|--------|---|----|-----------------------------------|----|----------------------------------|
| VS022 | 7.95 | 10.65 | 1½-90 | 759 | 413 | 17GD60 | 3 | 52 | 16½ ¹¹ / ₁₆ | 4¼ | 6½ ¹¹ / ₁₆ |
| VS119 | 10.47 | 14.95 | 7½-9-90 | 776 | 415 | S6D60 | 3 | 47 | 8¼ | 4¼ | 13¾ |

| | | | | | | | | | | | |
|---------|------|-------|--------------|-------|------|---------|----|-----|----------------------------------|-------|---------------------------------|
| VS006C | .84 | 1.25 | 1½ | 6GL | 914 | — | 12 | 27 | — | 2½ | 6½ |
| VS006S | .84 | 1.25 | 1½ | 61GN | 905 | 61GN | 12 | 27 | — | 2½ | 6½ |
| VS028 | .88 | 1.25 | 4½ | 781 | 714 | 5360 | 5 | 1¾ | 2½ ³² / ₃₂ | 1½ | 3¼ |
| VS029 | 1.65 | 2.35 | 1½-3-4½-6-7½ | 773 | 713 | 5540 | 10 | 5 | 4½ | 1½ | 3 |
| VS039 | 3.34 | 4.98 | 6 | 1461 | 907 | S461 | 4 | 38 | 10¾ | 27 | 7¾ |
| VS070 | .60 | .85 | 1½ | 960P | 23 | 8R | 12 | 4½ | — | 1½ | 3½ |
| VS083 | .81 | 1.15 | 15 | 411 | 208 | U10 | 12 | ¾ | 1½ ³² / ₃₂ | 5/8 | 12 ⁵ / ₆₄ |
| VS085 | 1.23 | 1.75 | 30 | 413 | 210 | U20 | 12 | 1¼ | 1½ ³² / ₃₂ | 5/8 | 2½ |
| VS093 | 8.37 | 11.95 | 300 | 493 | 722 | U200 | 3 | 3½ | 2½ ¹¹ / ₁₆ | 2¾ | 3¾ |
| VS100 | .87 | 1.25 | 3 | W352 | 701 | F2BP | 5 | 4¼ | 2½ | 1½ | 4¾ |
| VS101 | .87 | 1.25 | 1½ | W354 | 700 | 2F8P | 5 | 4¼ | 2½ | 1½ | 4¾ |
| VS102 | 1.61 | 2.35 | -22½ | 763 | 710 | 4156 | 5 | 5 | 3¼ | 2½ | 2½ |
| VS103 | 4.01 | 5.98 | 6 | 706 | 902 | 4F4H | 4 | 23½ | 8¾ | 2½ | 6¾ |
| VS106 | .84 | 1.25 | 1½ | 735 | 900 | 4FH | 12 | 15½ | 2½ | 2½ | 4¾ |
| VS112 | 3.05 | 4.35 | 22½-45 | W376 | 709 | 5308 | 5 | 15¼ | 4¾ | 2½ | 6 |
| VS114 | 2.69 | 3.85 | 22½-45 | W350 | 711 | Z30NX | 5 | 6½ | 3 | 1½ | 4½ |
| VS127W* | 4.84 | 6.90 | 22½-45 | W363F | 724 | 10308SC | 4 | 44½ | 8¾ | 4¾ | 8 |
| VS130 | 1.33 | 1.90 | -1½-3-4½ | 761T | 712 | 2370ST | 5 | 5 | 4 | 1½ | 3½ |
| VS131 | 3.12 | 4.45 | -22½ | 778 | 708 | 5156SC | 4 | 6½ | 4 | 2½ | 3¾ |
| VS133 | .68 | 1.02 | 4½ | 703 | 706 | 532 | 10 | 3 | 2¾ | 1½ | 3¾ |
| VS134 | .57 | .85 | 3 | 750 | 704 | 422 | 10 | 1¼ | 1½ | ¾ | 2½ |
| VS136 | 1.08 | 1.55 | 3 | W356 | 703 | 2F2H | 5 | 8 | 2½ | 2½ | 4¼ |
| VS139 | 4.86 | 7.25 | 7½ | 715 | 903 | 4F5H | 4 | 31½ | 7¼ | 4 | 6¾ |
| VS140 | 5.53 | 8.25 | 9 | 716 | 904 | 4F6H | 4 | 38 | 8½ | 4¾ | 6¾ |
| VS141 | .77 | 1.10 | 1½ | W353 | 11 | 2F | 6 | 5 | 2½ ³² / ₃₂ | 1½ | 4¼ |
| VS142 | .66 | 1.00 | 4½ | 751 | 705 | 432 | 10 | 2 | 2 | ¾ | 2¾ |
| VS143** | .38 | .59 | 1.34 | E1 | — | RM1R | 40 | 2 | — | 0.625 | 0.650 |
| VS144** | .82 | 1.25 | 1.35 | E12 | — | RM12R | 10 | 1¼ | — | 0.640 | 1.968 |
| VS145** | .25 | .36 | 1.35 | E400 | — | RM400R | 60 | ½ | — | 0.455 | 0.135 |
| VS147** | .30 | .45 | 1.4 | E630 | — | RM630R | 40 | ½ | — | 0.615 | 0.238 |
| VS148** | .84 | 1.25 | 2.7 | E132 | — | TR132R | 10 | ¾ | — | 0.662 | 1.315 |
| VS149** | 1.00 | 1.50 | 4.2 | E133 | 1306 | TR133R | 10 | 1 | — | 0.662 | 1.955 |
| VS157W* | 5.53 | 7.90 | 22½-45 | W364F | 715 | 21308SC | 4 | 51 | 8½ | 4½ | 7½ |
| VS317 | 1.83 | 2.75 | 6 | 731 | 918 | TW1 | 4 | 13 | 5½ | 2¾ | 4¾ |

PHOTO FLASH



| | | | | | | | | | | | |
|--------|------|------|-----|-----|-----|---------|-----|------|---|------|----|
| VS013 | 2.70 | 3.85 | 45 | 482 | 202 | M30 | 6 | 12.6 | | | |
| VS016 | 2.45 | 3.50 | 67½ | 467 | 200 | XX45 | 12 | 10.0 | | | |
| VS072 | .95 | 1.35 | 4½ | 726 | 19 | D3 | 3 | 2.1 | | | |
| VS083 | .81 | 1.15 | 15 | 411 | 208 | U10 | 6 | .5 | | | |
| VS084 | 1.05 | 1.50 | 22½ | 412 | 215 | U15 | 12 | 11 | | | |
| VS085 | 1.23 | 1.75 | 30 | 413 | 210 | U20 | 12 | 1.4 | | | |
| VS090 | 3.15 | 4.50 | 90 | 490 | 204 | N60 | 12 | 13.0 | | | |
| VS335 | .115 | .25 | 1.5 | 635 | 14 | 130 | 72 | 7.0 | | | |
| VS704 | .81 | 1.15 | 15 | 504 | 220 | Y10 | 12 | .37 | | | |
| VS705 | 1.05 | 1.50 | 22½ | 505 | 221 | Y15 | 12 | .5 | | | |
| VS734 | .16 | .25 | 1½ | 815 | — | 920 | 144 | 6.0 | — | 9/16 | 1¾ |
| VS735 | .16 | .25 | 1½ | 835 | — | 120 | 72 | 7.0 | — | 1½ | 1¾ |
| VS736 | .16 | .25 | 1½ | 850 | — | 220 | 72 | 13.0 | — | 1½ | 2¾ |
| VS1073 | .24 | .35 | 1.5 | E90 | 910 | MN9100+ | 72 | 2.0 | | | |
| VS1334 | .33 | .50 | 1.5 | E91 | 15 | MN1500+ | 48 | 2.75 | | | |
| VS1335 | .51 | .75 | 1.5 | E93 | 14 | MN1400+ | 24 | 4.0 | | | |
| VS1336 | .65 | .95 | | | | | | | | | |

* Wax coated. ♦ Other voltage taps: 3, 4½, 6, 9, 10½, 16½. * Optional ■ Sealed-in-Steel.

OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes

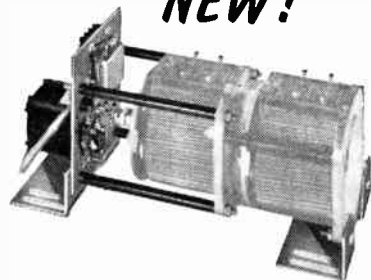


"V.T." VARIABLE TRANSFORMERS

Toroidal core type autotransformers providing distortion-free continuously adjustable voltage from fixed AC input. Highly advanced Ohmite design. Sizeable bonus in current available in all units where output greater than line volts ("over-voltage") is not required ("N" suffix); "LN" suffix indicates low input (36V max.) and very high current output; positive current transfer achieved with direct brush to slip spring shaft. Mounting: VT2 panel mounting by 3/8-32 bushing; VT2

tandem units by 1/4-20 bolts; all VT4 and VT8 types panel or table mounting by 1/4-20 bolts; VT20, VT20B, panel or table mounting by four 3/8" dia. bolts or three 3/4-24 bolts. Shafts of VT4, VT8, VT20 units slide to brush or base side. Units not cased except where indicated. Over-all dimensions include shaft. Suffixes "2" and "3" indicate number of units in tandem assembly (shipped with connection instructions).

NEW!



MOTOR MODULE PACKAGE
For VT4 or VT8, single or ganged, uncased models. Attaches in 15 minutes with everyday tools. Five speeds in stock. Call your distributor or the factory.

| SINGLE-PHASE | | | | | | | | |
|---------------------------------------|-----------------|---------------------|----------------------|-----------------------|-------------------------|----------|--------------|------------|
| Input Volts | Freq. cps. from | Maximum Output Amps | Maximum Output Volts | Feature or Connection | Size, Inches | Stk. No. | Weight Lbs.† | Net \$ 1-5 |
| SINGLE TRANSFORMERS — UNCASSED | | | | | | | | |
| 36 | 50 | 5 | 0-36 | Hi-amps, low volts | 2-13/16 dia. x 2-15/16 | VT2LN | 2.4 | 9.75 |
| 36 | 50 | 12.0 | 0-36 | Hi-amps, low volts | 3-9/16 x 4-7/32 x 4 3/4 | VT4LN | 5.25 | 14.50 |
| 36 | 50 | 22.0 | 0-36 | Hi-amps, low volts | 4 3/8 x 5-11/16 x 5 1/2 | VT8LN | 10.25 | 20.50 |
| 120 | 60 8 | 1.5 | 0-120/132 | Basic 1.5A Model | 2-13/16 dia. x 2-15/16 | VT2 | 2.4 | 8.50 |
| 120 | 60 | 1.8 | 0-120 | No overvoltage | 2-13/16 dia. x 2-15/16 | VT2N | 2.4 | 9.00 |
| 120 | 50 | 3.5 | 0-120/140 | Basic 3.5A Model | 3-9/16 x 4-7/32 x 4 3/4 | VT4N | 5.25 | 12.50 |
| 120 | 50 | 4.75 | 0-120 | No overvoltage | 3-9/16 x 4-7/32 x 4 3/4 | VT4 | 5.25 | 13.00 |
| 120 | 50 | 7.5 | 0-120/140 | Basic 7.5A Model | 4 3/8 x 5-11/16 x 5 1/2 | VT8N | 10.25 | 18.00 |
| 120 | 50 | 10.0 | 0-120 | No overvoltage | 4 3/8 x 5-11/16 x 5 1/2 | VT8 | 10.25 | 18.50 |
| 120 | 50 | 20.0 | 0-120/140 | Basic 20A Model | 7 1/2 x 8-1/16 x 5-9/16 | VT20N | 22.0 | 45.00 |
| 120 | 50 | 25.0 | 0-120 | No overvoltage | 7 1/2 x 8-1/16 x 5-9/16 | VT20 | 22.0 | 45.50 |
| 240 2 | 50 | 3.0 | 0-240/280 | 240V Input 2 | 4 3/8 x 5-11/16 x 5 1/2 | VT8H | 10.25 | 20.00 |
| 240 2 | 50 | 4.0 | 0-240 | 240V in. No overv. | 4 3/8 x 5-11/16 x 5 1/2 | VT8HN | 10.25 | 21.00 |

| SINGLE TRANSFORMERS — CASSED | | | | | | | | |
|------------------------------|------|------|-------------|-----------------|---------------------------|-------|------|-------|
| 120 | 60 8 | 1.2 | 0-132 4 | Fixed Mtg. | 3 3/4 x 2 1/2 x 4 1/4 | VT2E | 2.8 | 12.50 |
| 120 | 60 8 | 1.5 | 0-132 3 | Portable | 3 3/4 x 2 1/2 x 4 1/4 | VT2F | 3.2 | 14.50 |
| 120 | 60 | 1.45 | 0-120 | Fixed Mtg. | 3 3/4 x 2 1/2 x 4 1/4 | VT2NE | 2.8 | 13.00 |
| 120 | 60 | 1.8 | 0-120 | Portable | 3 3/4 x 2 1/2 x 4 1/4 | VT2NF | 3.2 | 15.00 |
| 120 | 50 | 2.8 | 0-140 4 | Fixed Mtg. | 4 1/2 x 4 1/2 x 6 | VT4E | 7.4 | 17.50 |
| 120 | 50 | 3.5 | 0-140 3 | Portable | 4 1/2 x 4 1/2 x 6 | VT4F | 7.8 | 18.50 |
| 120 | 50 | 3.8 | 0-120 | Fixed Mtg. | 4 1/2 x 4 1/2 x 6 | VT4NE | 7.4 | 18.00 |
| 120 | 50 | 4.75 | 0-120 | Portable | 4 1/2 x 4 1/2 x 6 | VT4NF | 7.8 | 19.00 |
| 120 | 50 | 6.0 | 0-140 4 4 | Fixed Mtg. | 5-5/32 x 5-5/16† x 7-3/16 | VT8E | 13.5 | 23.00 |
| 120 | 50 | 7.5 | 0-140 3 4 | Portable | 5-5/32 x 5-5/16† x 7-3/16 | VT8F | 13.8 | 24.00 |
| 120 | 50 | 6.0 | 0-120/140 3 | Deluxe Portable | 5-5/32 x 5-5/16† x 7-3/16 | VT8G | 14.2 | 28.50 |
| 120 | 50 | 8.0 | 0-120 | Fixed Mtg. | 5-5/32 x 5-5/16† x 7-3/16 | VT8NE | 13.5 | 23.50 |
| 120 | 50 | 10.0 | 0-120 | Portable | 5-5/32 x 5-5/16† x 7-3/16 | VT8NF | 13.8 | 24.50 |
| 120 | 50 | 20.0 | 0-120/140 | Basic Case | 7 1/2 x 8-1/16 x 5-11/16 | VT20B | 22.5 | 50.00 |
| 120 | 50 | 25.0 | 0-120 | Basic Case | 7 1/2 x 8-1/16 x 5-11/16 | VT20B | 22.5 | 50.50 |

| TWO-IN-TANDEM ASSEMBLIES 5 10 | | | | | | | | |
|-------------------------------|------|------|-----------|--------------------|--------------------------|----------|------|--------|
| 240 | 60 8 | 1.5 | 0-240/264 | Series Conn. 6 | 3-13/16 dia. x 6-3/16 | VT2-2 | 5.25 | 25.00 |
| 240 | 60 | 1.8 | 0-240 | Series Conn. 6 | 3-13/16 dia. x 6-3/16 | VT2N-2 | 5.25 | 26.00 |
| 240 | 50 | 3.5 | 0-240/280 | Series Conn. 6 | 4-5/32 x 4-13/16 x 8 7/8 | VT4-2 | 11.3 | 37.00 |
| 240 | 50 | 4.75 | 0-240 | Series Conn. 6 | 4-5/32 x 4-13/16 x 8 7/8 | VT4N-2 | 11.3 | 38.00 |
| 240 | 50 | 7.5 | 0-240/280 | Series Conn. 6 | 4 3/8 x 5-11/16 x 10 5/8 | VT8-2 | 20.6 | 44.50 |
| 240 | 50 | 10.0 | 0-240 | Series Conn. 6 | 4 3/8 x 5-11/16 x 10 5/8 | VT8N-2 | 20.6 | 45.50 |
| 240 | 50 | 20.0 | 0-240/280 | Series Conn. 6 | 7 1/2 x 8-1/16 x 11 1/2 | VT20-2 | 45.0 | 107.00 |
| 240 | 50 | 25.0 | 0-240/280 | Above unit, B case | 7 1/2 x 8-1/16 x 11 1/2 | VT20N-2 | 45.0 | 108.00 |
| 240 | 50 | 25.0 | 0-240 | Series Conn. 6 | 7 1/2 x 8-1/16 x 11 1/2 | VT20N-2B | 46.0 | 118.00 |
| 480 | 50 | 3.0 | 0-480/560 | Above unit, B case | 4 3/8 x 5-11/16 x 10 5/8 | VT8H-2 | 20.6 | 49.00 |
| 480 | 50 | 4.0 | 0-480 | Series Conn. 6 | 4 3/8 x 5-11/16 x 10 5/8 | VT8HN-2 | 20.6 | 51.00 |

| THREE-PHASE TWO-IN-TANDEM ASSEMBLIES 5 10 | | | | | | | | |
|---|----|------|-----------|--------------------|--------------------------|----------|------|--------|
| 120 | 60 | 1.5 | 0-120/132 | Open Delta Conn. | 3-13/16 dia. x 6-3/16 | VT2-2 | 5.25 | 25.00 |
| 120 | 60 | 1.8 | 0-120 | Open Delta Conn. | 3-13/16 dia. x 6-3/16 | VT2N-2 | 5.25 | 26.00 |
| 120 | 50 | 3.5 | 0-120/140 | Open Delta Conn. | 4-5/32 x 4-13/16 x 8 7/8 | VT4-2 | 11.3 | 37.00 |
| 120 | 50 | 4.75 | 0-120 | Open Delta Conn. | 4-5/32 x 4-13/16 x 8 7/8 | VT4N-2 | 11.3 | 38.00 |
| 120 | 50 | 7.5 | 0-120/140 | Open Delta Conn. | 4 3/8 x 5-11/16 x 10 5/8 | VT8-2 | 20.6 | 44.50 |
| 120 | 50 | 10.0 | 0-120 | Open Delta Conn. | 4 3/8 x 5-11/16 x 10 5/8 | VT8N-2 | 20.6 | 45.50 |
| 120 | 50 | 20.0 | 0-120/140 | Open Delta Conn. | 7 1/2 x 8-1/16 x 11 1/2 | VT20-2 | 45.0 | 107.00 |
| 120 | 50 | 20.0 | 0-120/140 | Above unit, B case | 7 1/2 x 8-1/16 x 11 1/2 | VT20N-2 | 45.0 | 108.00 |
| 120 | 60 | 25.0 | 0-120 | Open Delta Conn. | 7 1/2 x 8-1/16 x 11 1/2 | VT20N-2B | 46.0 | 118.00 |
| 120 | 60 | 25.0 | 0-120 | Above unit, B case | 7 1/2 x 8-1/16 x 11 1/2 | VT20N-2B | 46.0 | 118.00 |
| 240 | 50 | 3.0 | 0-240/280 | Open Delta Conn. | 4 3/8 x 5-11/16 x 10 5/8 | VT8H-2 | 20.6 | 49.00 |
| 240 | 50 | 4.0 | 0-240 | Open Delta Conn. | 4 3/8 x 5-11/16 x 10 5/8 | VT8HN-2 | 20.6 | 51.00 |

| THREE-IN-TANDEM ASSEMBLIES 5 10 | | | | | | | | |
|---------------------------------|------|------|-----------|--------------------|-----------------------------|----------|------|--------|
| 240 | 60 | 1.5 | 0-240 9 | "Y" Conn. | 3-13/16 dia. x 8-15/16 | VT2-3 | 8.0 | 40.00 |
| 240 | 60 8 | 3.5 | 0-240/280 | "Y" Conn. | 4-5/32 x 4-13/16 x 12-15/16 | VT4-3 | 17.0 | 59.50 |
| 240 | 60 8 | 7.5 | 0-240/280 | "Y" Conn. | 4 3/8 x 5-11/16 x 15 1/2 | VT8-3 | 31.0 | 61.50 |
| 240 | 60 8 | 6.0 | 0-240/280 | Above unit, E case | 5-3/16 x 7-3/16 x 15 3/4† | VT8-3E | 40.0 | 77.00 |
| 240 | 60 8 | 20.0 | 0-240/280 | "Y" Conn. | 7 1/2 x 8-1/16 x 16-3/16 | VT20-3 | 69.5 | 155.00 |
| 240 | 60 8 | 20.0 | 0-240/280 | Above unit, B case | 7 1/2 x 8-1/16 x 16 3/4 | VT20N-3 | 68.0 | 156.50 |
| 240 | 60 | 25.0 | 0-240 | "Y" Conn. | 7 1/2 x 8-1/16 x 16-3/16 | VT20N-3B | 69.5 | 171.50 |
| 240 | 60 | 25.0 | 0-240 | Above unit, B case | 7 1/2 x 8-1/16 x 16 3/4 | VT20N-3B | 69.5 | 171.50 |
| 480 | 60 8 | 3.0 | 0-480/560 | "Y" Conn. | 4 3/8 x 5-11/16 x 15 1/4 | VT8H-3 | 31.0 | 69.50 |

- Frequency shown is a minimum—units may be used to well over 400 cps.
- VT8H and VT8HN also have taps for 120V input with 280V output for VT8H and 240V output for VT8HN. With use of 120V input the max. current rating applies up to 120V output but reduces to approx. 50% at max. output voltage. (Cat. 500)
- Connected at factory for overvoltage output—easily reconnected by user for no-overvoltage output. On VT8G, switch selects overvoltage or no-overvoltage.
- Add 3/8" for knob thickness.
- Add 1" for knob thickness.

- User wires for desired output. Dial normally calibrated for overvoltage.
- Tandem assemblies normally furnished without interconnection between units.
- When transformers are series connected, load cannot be grounded.
- Includes knob and dial.
- May be used at 50 cps if connected for no-overvoltage output.
- Overvoltage connection must not be used.
- Specify 240 volt dial if desired.

ACCESSORIES, PARTS

Adapter Plate for 4-hole mtg. of VT4—matches other popular 4-hole mtgs.; dimensions same as shown for front plate of VT4 tandems. (Cat. 500).

Stk. No. 6512 Net 1-5 \$0.67

Brush-Contact Assemblies for . . .

| | | |
|-------------------------------|----------|---------|
| VT2 Types except VT2LN | Stk. No. | Net 1-5 |
| VT2LN | 6514 | \$1.00 |
| VT4 Types except VT4LN | 6515 | 1.00 |
| VT4LN | 6518 | 2.00 |
| VT8 Types except VT8H, HN, LN | 6516 | 1.25 |
| VT8H, HN only | 6516H | 1.25 |
| VT8LN only | 6519 | 2.50 |
| VT20 Types except VT20N | 6580 | 1.75 |
| VT20N | 6584 | 1.75 |

Adjustable stop for limiting rotational arc of trans. transformers.

| | | |
|--------------------|----------|---------|
| | Stk. No. | Net 1-5 |
| Stop for VT4 types | 6536 | \$.50 |
| Stop for VT8 types | 6537 | \$.50 |

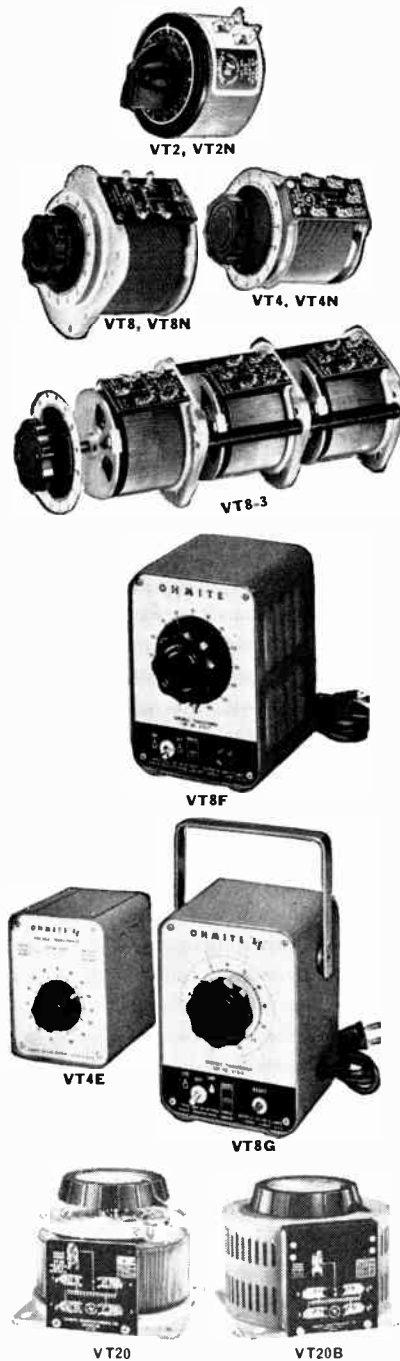
Extra Dials or Dials with C.C.W. Calibration

| "V.T." | Dial Calibration | Stk. No. | Net 1-5 |
|-------------|---------------------|----------|---------|
| VT2 | 0-120, 0-132 C.W. | 5005 | \$.25 |
| | 0-100, 100-0* C.W. | 5011 | \$.25 |
| VT4 and VT8 | 0-120, 0-140 C.W. | 5006 | \$.50 |
| | 0-240, 0-280 C.W. | 5009 | \$.50 |
| VT20 | 0-120, 0-140 C.C.W. | 5010 | \$.50 |
| | 0-100, 100-0* C.W. | 5012 | \$.50 |
| VT20 | 0-120, 0-140 C.W. | 5013 | 1.20 |
| | 0-120, 0-140 C.C.W. | 5014 | 1.20 |
| VT20 | 0-240, 0-280 C.W. | 5015 | 1.20 |
| | 0-240, 0-280 C.C.W. | 5015 | 1.20 |

*Percent-of-output dial furnished with "LN" series units.

Extra Knobs for Uncased Units

| | Stk. No. | Net 1-5 |
|--------------------|----------|---------|
| For VT2 types | 5158 | \$.35 |
| For VT4, VT8 types | 5155 | 1.00 |
| For VT20 types | 5157 | 1.75 |



Rely on **RAY-O-VAC**® Batteries

SUPPORTED BY A COMPLETE MERCHANDISING PROGRAM

TRANSISTOR BATTERIES



2LP

| STOCK NO. | VOLT-AGE | MAX. DIMENSIONS | | | TERMINALS | COMPARATIVE GUIDE | | | LIST PRICE |
|-----------|----------|------------------|------------------|-------------------|------------------|-------------------|---------|--------|------------|
| | | L | W | † O.A.H. | | EVEREADY | BURGESS | RCA | |
| 13 | 1½ | 1½ ₃₂ | — | 2½ ₃₂ | Flashlight | A100 | 230 | VS036 | .25 |
| 14 | 1½ | 1½ ₃₂ | — | 1¾ ₃₂ | Flashlight | 635 | 130 | VS035 | .25 |
| 15 | 1½ | ¾ ₃₂ | — | 1¾ ₃₂ | Flashlight | 1015 | 930 | VS034 | .25 |
| 1600 | 9 | 2½ ₃₂ | — | 1¾ ₃₂ | 2 Snap Fasteners | 226 | P6 | VS300 | .89 |
| 1601 | 9, 6, 3 | ¾ ₃₂ | — | 1¾ ₃₂ | 4-hole Socket | 2506 | D6PI | VS301 | 2.50 |
| 1602 | 9 | 1¾ | 1¾ | ¾ | 2 Snap Fasteners | 246 | 2N6 | VS305 | 1.85 |
| 1603 | 9 | 2¾ | 2½ ₃₂ | 3¾ ₃₂ | 2 Snap Fasteners | 276 | D6 | VS306 | 1.80 |
| 1604 | 9 | 1 | 1½ ₃₂ | 1¾ ₃₂ | 2 Snap Fasteners | 216 | 2U6 | VS312 | .69 |
| 1605 | 9 | 1¾ ₁₆ | 1¼ | 2¾ | 2 Snap Fasteners | M6 | 266 | — | 1.50 |
| 1606 | 9 | ¾ ₆₄ | — | 1-¾ ₃₂ | 2 Snap Fasteners | E177 | — | VS309A | 1.61 |
| 1608 | 9 | 2¾ ₃₂ | 1¼ | 7¾ ₃₂ | Cinch 2676 | 2761 | D6S | — | 2.25 |
| 1900 | 9, 13½ | 1¼ | ¾ | 2¾ | 3 Hole Socket | 239 | XX9 | VS304 | 1.50 |



6 Ign. SC.

Note: 2LP or 5LP size D, 1LP size C and 7R or 7LP size AA 1½ Volt batteries are also used in transistor applications. These batteries are listed under the lighting and ignition battery section.

MERCURY TRANSISTOR BATTERIES



1604M

| STOCK NO. | VOLT-AGE | MAX. DIMENSIONS | | | COMPARATIVE GUIDE | | | LIST PRICE |
|-----------|----------|------------------|------------------|-------------------|-------------------|-----|--------|------------|
| | | L | W | O.A.H. | E | B | RCA | |
| 15M | 1½ | ¾ | — | 1-¾ ₃₂ | E9 | H69 | VS313 | .75 |
| 1600M | 9 | ¾ ₃₂ | — | 1-¾ ₃₂ | 226 | P6M | VS300A | 1.50 |
| 1604M | 9 | 1 | 1½ ₃₂ | 1-¾ ₃₂ | E146 | 2U6 | VS323 | 1.50 |
| 1611M | 9 | 1¾ ₁₆ | — | 2 | 206 | — | VS321 | .98 |
| 1810M | 12 | ¾ ₃₂ | — | 2-¾ ₆₄ | — | — | — | 2.49 |



941

LIGHTING AND IGNITION BATTERIES



7R

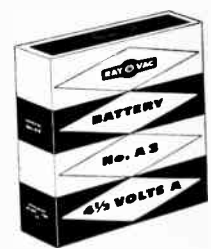
| STOCK NO. | VOLT-AGE | MAX. DIMENSIONS | | | TERMINALS | COMPARATIVE GUIDE | | | LIST PRICE |
|------------------------|----------|------------------------|------------------|------------------|---------------|-------------------|------------|--------|------------|
| | | L | W | † O.A.H. | | EVEREADY | BURGESS | RCA | |
| 1LP (NEDA 14) | 1½ | 1½ ₃₂ Diam. | — | 1¾ ₃₂ | Flashlight | 935 | 1 | VS035 | .20 |
| 2LP | 1½ | 1½ ₃₂ Diam. | — | 2½ ₃₂ | Flashlight | 950 | 2R | VS036 | .20 |
| 3LP | 1½ | 1½ ₃₂ Diam. | — | 2½ ₃₂ | Flashlight | 1050 | 210 | — | .25 |
| 5LP (NEDA 13) | 1½ | 1½ ₃₂ Diam. | — | 2½ ₃₂ | Flashlight | D99 | — | — | .25 |
| 7LP | 1½ | ¾ Diam. | — | 1¾ ₃₂ | Flashlight | 915 | 2 | VS034 | .20 |
| 7R (NEDA 15) | 1½ | ¾ Diam. | — | 1¾ ₃₂ | Flashlight | 915 | 2 | VS034 | .15 |
| 400 (NEDA 24) | 1½ | ¾ Diam. | — | 1¾ ₆₄ | Flashlight | 912 | 7 | VS074 | .15 |
| 716 (NEDA 910) | 1½ | ¾ ₆₄ Diam. | — | 1¾ ₆₄ | Flashlight | W468 | N | VS073 | .125 |
| 941 SP (NEDA 908) | 6 | 2¾ ₁₆ | 2¾ ₁₆ | 4¾ | 2 Coil Spring | 509 | F4H | VS040C | 1.19 |
| 941 SCREW (NEDA 915) | 6 | 2¾ ₁₆ | 2¾ ₁₆ | 4¾ | Screw | 510S | F4BP | — | 1.19 |
| 941 CLIP (NEDA 917) | 6 | 2¾ ₁₆ | 2¾ ₁₆ | 4¾ | Clip | 510F | F4SC | — | 1.19 |
| 941 RR (NEDA 916) | 6 | 2¾ ₁₆ | 2¾ ₁₆ | 4¾ | Spring | 409 | — | — | 1.19 |
| 918 | 6 | 5¾ | 2¾ ₁₆ | 4¾ | 2 Screw | 731 | TW1 | — | 2.75 |
| 900 | 1½ | 2¾ ₁₆ | 2¾ ₁₆ | 4¾ | 2 Screw | 735 | 4FH | VS106 | 1.25 |
| 6 Ign. SC. (NEDA 905) | 1½ | 2¾ Diam. | — | 6¾ | 2 Screw | 6 Ign. | 6 Ign. | VS006S | 1.25 |
| 6 Ign. Clip (NEDA 914) | 1½ | 2¾ Diam. | — | 6¾ | 2 Spring Clip | 6 Ign. Clip | 6 Ign. Cl. | VS006C | 1.25 |
| 6 Tel CLIP (NEDA 906) | 1½ | 2¾ Diam. | — | 6¾ | 2 Spring Clip | 6 GL | 6 Tel. | VS042C | 1.25 |
| 641 (NEDA 907) | 6 | 10¾ | 2¾ ₁₆ | 7¾ | 2 Screw | 1461 | S461 | VS039 | 4.98 |
| 903 | 7½ | 7¼ | 4 | 6¾ | 2 Screw | 715 | 4F5H | VS139 | 7.25 |
| 904 | 9 | 8¾ | 4 | 6¾ ₃₂ | 2 Screw | 716 | 4F6H | VS140 | 8.25 |



1600

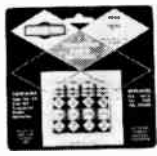


918



A3*

BUBBLE PAK TRANSISTOR BATTERIES



15 Bubble 4 Pak

| RAY-O-VAC NUMBER | VOLTAGE | UNIT PKG. | COMPARATIVE NUMBERS | | | RETAIL EACH |
|----------------------|---------|-----------|---------------------|---------|-------|-------------|
| | | | EVEREADY | BURGESS | RCA | |
| 14 Bubble Two Pak | 1½ | 12 | 635 | 130 | VS035 | .25 |
| 15 Bubble Four Pak | 1½ | 48 | 1015 | 930 | VS034 | .25 |
| 1304M Bubble One Pak | 4 | 1 | E133 | H133 | VS149 | 1.50 |
| 1600 Bubble One Pak | 9 | 12 | 226 | P6 | VS300 | .89 |
| 1604 Bubble One Pak | 9 | 12 | 216 | 2U6 | VS312 | .69 |
| 1611M Bubble One Pak | 9 | 1 | 206 | L6 | VS327 | .98 |



1604 Bubble one Pak

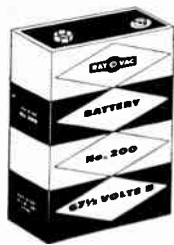
† Over-all height. * Prefix A added to NEDA number to eliminate duplication of existing Ray-O-Vac number.

RAY-O-VAC FIRST WITH NEDA NUMBERING

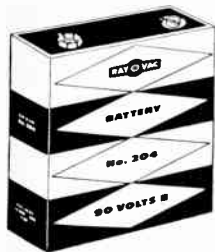


BATTERIES FOR ALL RADIO, ELECTRONIC, LIGHTING & HOBBY NEEDS
A COMPLETE LINE OF POWERFUL BATTERIES

B BATTERIES



200



204



A400*



401



709



713

| STOCK NO. | VOLT-AGE | MAX. DIMENSIONS | | | TERMINALS | COMPARATIVE GUIDE | | | LIST PRICE |
|-----------|------------|-----------------|---------|----------|------------------|-------------------|---------|-----------|------------|
| | | L | W | † O.A.H. | | EVEREADY | BURGESS | RCA | |
| 200 | 67½ | 2 11/16 | 1 3/8 | 3 3/4 | RMA 119 | 467 | XX45 | VS016 | 3.50 |
| 201 | 45 | 2 21/32 | 1 | 3 11/16 | RMA 119 | 455 | XX30 | VS055 | 2.95 |
| 202 | 45 | 3 3/16 | 1 13/16 | 5 1/2 | RMA 110 | 482 | M30 | VS013 | 3.85 |
| 203 | 67 1/2 | 2 3/4 | 1 3/8 | 2 1/2 | RMA 119 | 457 | K45 | VS082 | 3.45 |
| 204 | 90 | 3 11/16 | 1 3/8 | 3 3/4 | RMA 119 | 490 | N60 | VS090 | 4.50 |
| 205 | 22 1/2, 45 | 3 3/16 | 2 5/16 | 4 1/16 | RMA 111 | 738 | Z30 | VS015 | 3.95 |
| 207 | 45 | 4 1/8 | 2 5/8 | 5 5/16 | RMA 111 | 484 | 830 | VS012 | 4.70 |
| 208 | 15 | 1 1/32 | 3/64 | 1 7/16 | RMA 120 | 411 | U10 | VS083 | 1.15 |
| A210* | 30 | 1 1/4 | 3/64 | 2 1/2 | RMA 120 | 413 | U20 | VS085 | 1.75 |
| 211M | 67 1/2 | 1 3/32 | 63/64 | 5 3/64 | 2 Snap Fasteners | — | P45M | VS216/215 | 3.95 |
| 211P | 67 1/2 | 1 7/8 | 1 | 5 15/32 | 2 Snap Fasteners | 477 | P45 | VS218 | 3.25 |
| 212 | 75 | 1 13/16 | 1 3/8 | 6 1/4 | 2 Snap Fasteners | 437 | XX50 | VS217 | 4.50 |
| 213 | 45 | 1 3/16 | 35/64 | 3 1/16 | 2 Snap Fasteners | 415 | U30 | VS086 | 2.50 |
| 214 | 90 | 1 7/8 | 1 | 7 15/32 | 2 Snap Fasteners | 479 | P60 | VS219 | 3.95 |
| 215 | 22 1/2 | 1 3/64 | 5/64 | 2 | RMA 120 | 412 | U15 | VS084 | 1.50 |
| 217 | 67 1/2 | 1 3/64 | 63/64 | 3 1/2 | Snap Fasteners | 416 | UX45 | VS318 | 2.95 |



211M



213



403

A B BATTERIES

| STOCK NO. | VOLTAGE | DIMENSIONS | | | TERMINALS | COMPARATIVE GUIDE | | | LIST PRICE |
|-----------|--------------|------------|--------|----------|-----------------------|-------------------|---------|--------|------------|
| | | L | W | † O.A.H. | | EVEREADY | BURGESS | RCA | |
| A400* | 9, 90 | 1 3/8 | 2 3/4 | 4 3/8 | 4 Prong Recessed Plug | 752 | G6860 | VS047 | 8.25 |
| 405 | 7 1/2, 9, 90 | 8 11/16 | 2 3/16 | 3 3/4 | RMA 116 | 756 | T6260 | VS057W | 6.75 |
| 413 | 1 1/2, 90 | 1 5/8 | 4 1/4 | 6 13/16 | RMA 115 | 759 | 17GD60 | VS022 | 10.55 |

A BATTERIES

| STOCK NO. | VOLT-AGE | MAX. DIMENSIONS | | | TERMINALS | COMPARATIVE GUIDE | | | LIST PRICE |
|-----------|----------|-----------------|--------|----------|------------------|-------------------|---------|-------|------------|
| | | L | W | † O.A.H. | | EVEREADY | BURGESS | RCA | |
| A2* | 6 | 1 3/32 | 1 5/32 | 2 11/32 | Flashlight | 724 | Z4 | VS068 | 1.00 |
| A4* | 1 1/2 | 2 5/8 | 2 5/8 | 4 | RMA 101 | 742 | 4F | VS004 | 1.65 |
| A6* | 6 | 2 5/8 | 2 5/8 | 4 | RMA 104 | 744 | F4PI | VS009 | 1.65 |
| 8 | 7 1/2 | 4 1/16 | 1 5/8 | 3 | RMA 105 | 713 | 85 | VS129 | 2.75 |
| 9 | 7 1/2 | 2 5/8 | 2 | 3 1/16 | RMA 105 | 717 | C5 | VS065 | 1.50 |
| 11 | 1 1/2 | 2 5/8 | 1 5/16 | 4 1/4 | RMA 101 | W353 | 2F | VS141 | 1.10 |
| 20 | 1 1/2 | 1 3/8 Diam. | — | 4 1/64 | Flashlight | 964 | 21R | VS236 | .45 |
| 26 | 7 1/2 | 2 15/32 | 2 3/16 | 2 7/8 | 2 Snap Fasteners | 707 | D5 | VS315 | 1.50 |
| 27 | 6 | 3 3/8 | 2 3/4 | 5 1/2 | RMA 105 | — | 2F45 | — | 2.90 |



413



711

INDUSTRIAL AND SPECIAL-PURPOSE BATTERIES

| STOCK NO. | VOLTAGE | DIMENSIONS | | | TERMINALS | COMPARATIVE GUIDE | | | LIST PRICE |
|-----------|--|------------|---------|----------|------------------|-------------------|---------|-------|------------|
| | | L | W | † O.A.H. | | EVEREADY | BURGESS | RCA | |
| 700 | 1 1/2 | 2 5/8 | 1 3/8 | 4 3/8 | 2 Screw | W354 | 2F8P | VS101 | 1.25 |
| 701 | 3 | 2 5/8 | 1 3/8 | 4 3/8 | 2 Screw | W352 | F28P | VS100 | 1.25 |
| 704 | 3 | 1 3/8 | 3/4 | 2 5/8 | 2 Flat Spring | 750 | 422 | VS134 | .95 |
| 705 | 4 1/2 | 2 | 3/4 | 2 5/8 | 2 Flat Spring | 751 | 432 | VS142 | 1.10 |
| 706 | 4 1/2 | 2 15/32 | 3 1/16 | 3 3/8 | 2 Flat Spring | 703 | 532 | VS133 | 1.10 |
| 708 | 3, 4 1/2, 6, 9, 10 1/2, 16 1/2, 22 1/2 | 4 1/8 | 2 1/2 | 3 3/8 | 8 Spring Clip | 778 | 5156SC | VS131 | 4.45 |
| 709 | 22 1/2, 45 | 4 1/8 | 2 5/8 | 5 1/8 | 3 Screw | W376 | 5308 | VS112 | 4.35 |
| A710 | 22 1/2 | 3 1/16 | 2 3/8 | 2 3/4 | Screw | 4156 | 763 | VS102 | 2.35 |
| 711 | 22 1/2-45 | 2 21/32 | 1 21/32 | 5 | 3 Screw | W350 | Z30NX | VS114 | 3.85 |
| 712 | 1 1/2, 3, 4 1/2 | 3 13/16 | 1 3/8 | 3 | 4 Screw | 761T | 2370ST | VS130 | 2.25 |
| 713 | 1 1/2, 3, 4 1/2, 6, 7 1/2 | 3 13/16 | 7/8 | 3 | 5 Screw | 773 | 5540 | VS029 | 2.35 |
| 714 | 4 1/2 | 2 13/16 | 1 3/16 | 2 7/8 | 1 Pigtail | 781 | 5360 | VS028 | 1.25 |
| 715 | 22 1/2, 45 | 8 1/8 | 4 5/8 | 7 11/16 | 3 Spring Clip | W364F | 21308SC | VS157 | 7.65 |
| A716 | 22 1/2, 45 | 8 | 4 | 7 3/8 | 3 Spring Clip | W363F | 10308SC | VS127 | 6.90 |
| 717 | 22 1/2, 45 | 8 1/16 | 3 3/8 | 7 3/8 | RMA 107 | W365P | 2308P1 | VS026 | 5.00 |
| 721 | 3, 4 1/2, 16 1/2, 22 1/2 | 4 | 2 1/2 | 3 | RMA 113 | 768 | 5156P1 | VS031 | 4.45 |
| 722 | 300 | 2 5/8 | 2 5/32 | 3 13/16 | 2 Flush Pin Jack | 493 | U200 | VS093 | 11.95 |



20

†Over-all height. *Prefix A added to NEDA number to eliminate duplication of existing Ray-O-Vac number.

SECTION 4000

**WORLD-FAMOUS FLASHLIGHTS
LANTERNS . . . HEADLIGHTS**



S22F



303



ML22



S367F



N22T



AN22



BM32



L298 and L19



h22

| STOCK No. | DESCRIPTION | LIST PRICE |
|--------------|-------------|---------------|
|--------------|-------------|---------------|

SPORTSMAN® LINE

| | | |
|-------|--|---------|
| S21F | 2-cell chrome knurled baby spotlight, ring hanger | \$ 1.95 |
| S22F | 2-cell chrome knurled regular spotlight, ring hanger | 1.95 |
| S32F | 3-cell chrome knurled spotlight, ring hanger | 2.35 |
| S33F | 3-cell chrome searchlight with ring hanger | 3.95 |
| S367F | 7 cell searchlight — converts to 3, 4, 6 cell. | 8.95 |
| S53F | 5-cell chrome searchlight with ring hanger | 4.95 |
| S62F | 6-cell chrome spotlight — converts to 3-cell | 5.95 |
| 301 | Sealed beam SPORTSMAN® lantern, knurled barrel grip — price includes battery | 10.50 |
| 303 | Sealed beam SPORTSMAN® lantern has shock absorber and red signal flasher — price includes battery | 12.95 |
| 304 | SPORTSMAN® lantern with swivel head — allows diffused glow or piercing beam — price includes battery | 9.95 |
| 305 | Lantern with swivel head and red signal flasher | 11.95 |

RAY-O-VAC MAGNET LIGHTS

| | | |
|------|--|------|
| ML12 | 2-cell baby, magnet independent of switch | 1.89 |
| ML22 | 2-cell regular, magnet independent of switch | 1.99 |

RAY-O-VAC PENLIGHTS

| | | |
|------|------------------|-----|
| P20 | 2-cell pen size | .98 |
| Z21P | 2-cell size "AA" | .98 |

HEAVY-DUTY FLASHLIGHTS Rubber End Caps

| | | |
|------|---|------|
| BR22 | 2-cell prefocused spotlight with 3-position switch | 1.85 |
| G22 | 2-cell prefocused spotlight with replaceable switch | 2.60 |
| G32 | 3-cell prefocused spotlight with replaceable switch | 2.67 |

HEAVY-DUTY WORKMAN® FLASHLIGHTS

| | | |
|------|---|------|
| N22 | 2-cell prefocused spotlight, replaceable lock switch | 3.25 |
| N22T | 2-cell prefocused spotlight, continuity tester built into removable end cap | 6.75 |

UNDERWRITER-APPROVED SAFETY LIGHTS

| | | |
|------|--|------|
| AN22 | 2-cell prefocused spotlight with safety head | 3.98 |
| BM22 | 2-cell prefocused spotlight with safety head | 3.45 |
| BM32 | 3-cell prefocused spotlight with safety head | 4.20 |

HUNTER® LANTERN

| | | |
|-----|---|------|
| 398 | Versatile HUNTER® lantern with 3" reflector for piercing beam. Signal button on switch. | 4.95 |
|-----|---|------|

HEAVY DUTY UTILITY LIGHT

| | | |
|-----|---|------|
| H22 | 2 cell pefocused heavy duty utility light | 1.19 |
|-----|---|------|

NITE HAWK® LINE

| | | |
|------|-----------------------------|------|
| L298 | Headlight | 3.29 |
| L19 | Battery pouch for headlight | .69 |

RAY-O-VAC COMPANY, MADISON, WISCONSIN

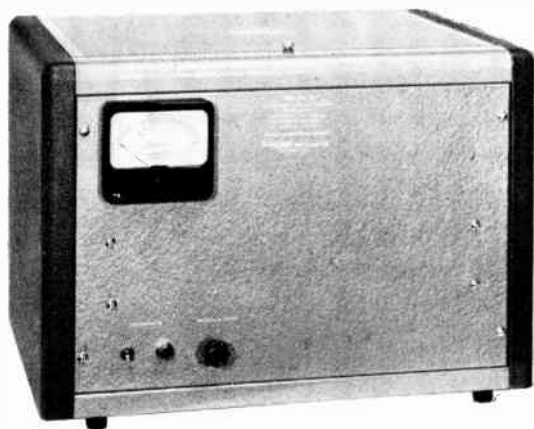
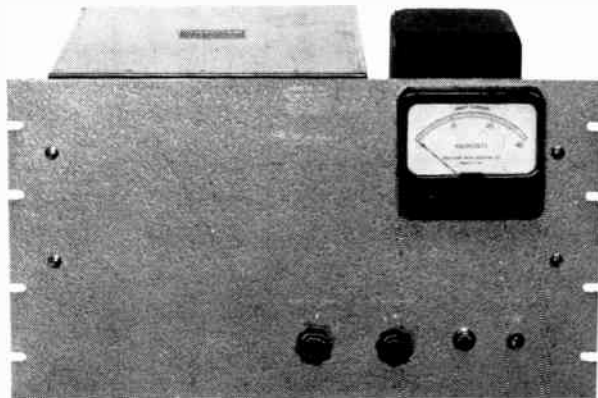
A DIVISION OF THE ELECTRIC STORAGE BATTERY COMPANY


HIGH VOLTAGE
RF TYPE - DC
POWER SUPPLIES
MODEL RG-30
**CONTINUOUSLY VARIABLE 15-30 KV
 REGULATED DC POWER SUPPLY WITH
 REGULATED FOCUS VOLTAGE TAP**

A continuous duty DC supply with highly filtered outputs and regulations better than 0.5% at 1 ma. — no load to full load. A variable focus tap 4-6 KV for use with 5WP11, 5TP4 and flying spot tubes. Dimensions: 19" wide x 10½" high x 13" deep.

With HV meter \$375 Net
Less meter \$325 Net

MODEL RG-40 is a 20-40 KV unit with focus tap designed for use with 5AZP4 projection tube. In wide use in projection television systems. Same specifications as RG-30 except .7 ma. at 40 KV.

With meter \$375 Net
Less meter \$325 Net

MODEL LAB-30PN
**DC POWER SUPPLY REVERSIBLE POLARITY
 CONTINUOUSLY VARIABLE 1 TO 30 KV**

Regulated DC Power Supply with regulations of 0.5% at 2 milliamperes. Polarity reversible from front panel.

Standard Rack Model — 19" wide x 12" high x 13" deep.

Standard Bench Model — 21" wide x 14" high x 15" deep.

With HV meter \$645 Net
Less Meter \$595 Net

MODEL LAB-30 is a positive polarity output regulated High Voltage DC Power Supply with same electrical characteristics and dimensions as the LAB-30PN. Available in either positive or negative polarity.

With meter \$545 Net
Less meter \$495 Net
SPECIAL MODELS up to 5 ma. output AVAILABLE
**MODEL
 4575**

5 KV — 1 ma. DC POWER SUPPLY

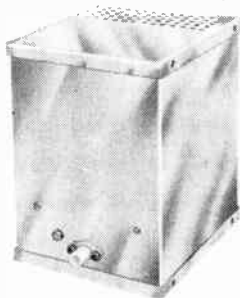
For an output voltage of 5 KV DC at 1 milliamperes, the low voltage input requirement is 250 V at 50 milliamperes. By varying the DC input the output voltage can be varied from approx. 1 KV to 7½ KV. Dimensions: 5¾" high x 5" deep x 4¼" wide. In completely enclosed metal housing.

\$32.50 net

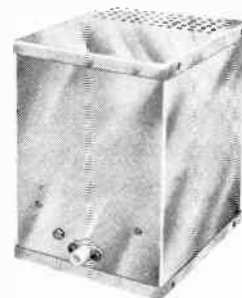
MODEL 4575-2 — same as above with 2 ma. output at 5 KV **\$42.50 net**

MODEL 4575PN — Reversible polarity. High voltage secondary floating or can be grounded. 1 ma. at 5 KV **\$42.50 net**

MODEL 4575-2PN — Reversible polarity. 2 ma. at 5 KV **\$52.50 net**

MODEL 7512


12KV — 1 ma. DC Power Supply — Voltage output of approx. 7.5 to 12 KV. 1 ma. of current may be drawn throughout the voltage range. To obtain an output voltage of 7.5 KV at 1 ma., low voltage input requirement is 300 V DC at 50 ma. By varying the DC input, the output voltage can be increased. Maximum input voltage of 425 V at 100 ma. will give an output of 12 KV at 1 ma. 5¾" W., 8¼" H., 6¼" D. **\$42.50 net**

MODEL 7516

20 KV — .5 ma. DC POWER SUPPLY

Voltage output of approx. 10 to 20 KV. To obtain output voltage of 10 KV at 1 ma., low voltage input requirement is 300 V DC at 50 ma. Maximum input voltage of 425 V at 100 ma. will give an output of 20 KV at .5 ma. 5¾" W., x 8¼" H., x 6¼" D.

MODEL 7516.....\$48.50 net


HIGH VOLTAGE CO., INC.
BRONX 69, N. Y.

SPELLMAN**HIGH VOLTAGE**
RF TYPE - DC**POWER SUPPLIES****MODEL PN-30****REVERSIBLE POLARITY**
Continuously Variable 1-30 KV
Unregulated DC Power Supply

A light, compact unit in wide use for insulation testing, condenser charging, precipitators and laboratory research. Polarity reversible from front panel. Current output — 2 milliamperes at 20 KV; 1 ma. at 30 KV. Input — 117V AC 60 cycles. Dimensions: 19" x 10 1/2" x 13".
 With meter \$275 net
 Less meter \$225 Net

MODEL PN-30C — Same as above except automatic overload and reset button provided. Adjustable sensitivity 0.5 ma. to 2.5 ma.

With meter \$325 net
 Less meter \$275 net

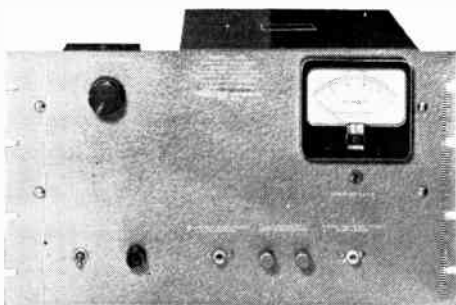
MODEL 2040**40 KV DC POWER SUPPLY**

A ruggedly built RF type power supply which is in constant use in laboratories and industrial plants throughout the world for condenser charging, electrostatic paint spraying and insulation testing, electrostatic flocking, etc. In wide use for spot knocking by TV tube manufacturers. Designed for constant use and will stand severe abuse. Available with either positive or negative 40 KV output. Voltage range is approx. 12 to 40 KV continuously variable. The 12 to 40 KV variance in voltage is controlled through a knob on the front panel. Voltage supplied through a 6 ft. HV Safety Cable. Specify desired polarity when ordering. Specifications: Continuously variable 12 to 40 KV. 1 ma. at 30 KV Input: 117V — 60 cycles, 19" wide x 12 1/4" high x 13" deep.

With meter on front panel \$215 net
 Less meter \$165 net

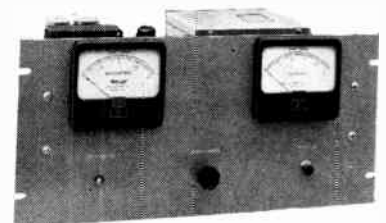
MODEL 2040C — Same as above except automatic overload cutout and reset button provided. Adjustable sensitivity 0.5 ma. to 2 ma.

With meter \$265 net
 Less meter \$215 net

**MODEL PN-15****FLOATING REVERSIBLE**
POLARITY
CONTINUOUSLY VARIABLE
1 TO 15 KV
UNREGULATED
DC POWER SUPPLY

The high voltage output available through Aiden HV connectors on front panel. Reversible and floating secondary — either positive or negative can be grounded or left floating. Current output 2 ma. at 15 KV. Voltage continuously variable through knob on front panel. Dimensions 8 3/4" high x 19" wide x 11" deep.

Complete with meter.....\$250 net

MODEL LAB-10**CONTINUOUSLY VARIABLE** **0-10 KV**
REGULATED DC SUPPLY

Output current 2 ma. Regulations better than 1%. Complete with HV and current meters 19" W x 8 3/4" H x 13" D\$275 net

SPELLMAN**HIGH VOLTAGE CO., INC.****BRONX 69, N. Y.**

SPELLMAN**HIGH VOLTAGE
RF TYPE - DC****POWER SUPPLIES**

MODEL LAB-90 0-90 KV REGULATED DC POWER SUPPLY

Continuously variable 0 to 90 KV DC Power Supply. Ideal for kinematic electron diffraction equipment and high voltage condenser charging. Output current .7 ma. at 90 KV. 1 ma. at 80 KV. 2 ma. from 40 KV down. Voltage regulations better than 1% throughout entire range. Dimensions in cabinet: 28" high x 21 $\frac{3}{4}$ " wide x 18" deep.

LAB-90 Complete with HV meter **\$900 Net**
Specify polarity output — positive or negative.

MODEL LAB-90C—Same as above except automatic overload cutout and reset button provided. Adjustable sensitivity. .5 ma. to 2.5 ma. **\$950 Net**

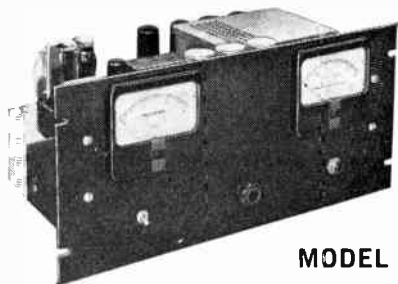
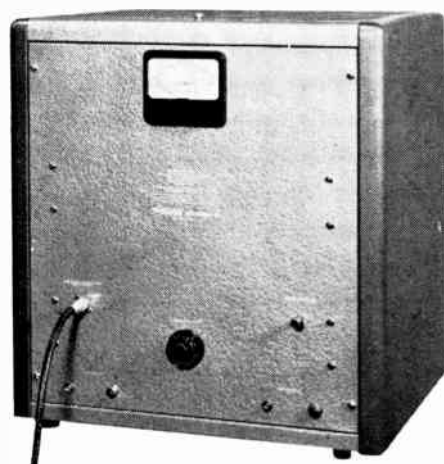
MODEL LAB-60PN

REVERSIBLE POLARITY CONTINUOUSLY VARIABLE 0-60 KV DC REGULATED POWER SUPPLY

Current output 1 ma. at 60 KV 2 ma. may be drawn from 50 KV down. Regulations — no load to full load 1% at 1 ma. 21 $\frac{3}{4}$ " wide x 22 $\frac{3}{4}$ " high x 18" deep. Dimensions in cabinet: 22 $\frac{3}{4}$ " high x 21" wide x 18" deep.

LAB-60PN — Reversible polarity — either positive or negative output controlled through switch on front panel. **\$820 Net**

LAB-60 — Same as above not reversible. Specify polarity when ordering. **\$765 Net**



MODEL RG-10, 10 KV REGULATED DC POWER SUPPLY

Output current 2 ma. Regulated against line and load 1%. Variable 8 to 12 KV.

Complete with Current and Volt Meters **\$260 Net**

MODEL RG-5, 5 KV REGULATED DC POWER SUPPLY

Output current 2 ma. Regulated against line and load 1%. Variable 4 to 6 KV.

Complete with Current and Volt Meters **\$250 Net**

MODEL RG-15, 15 KV REGULATED DC POWER SUPPLY

Output current 2 ma. Regulated against line and load 1%. Variable 13 to 17 KV.

Complete with Current and Volt Meters **\$275 Net**

DIMENSIONS: Panel Height 8 $\frac{3}{4}$ ", Width 19", Depth 11".

SPELLMAN**HIGH VOLTAGE CO., INC.****BRONX 69, N. Y.**



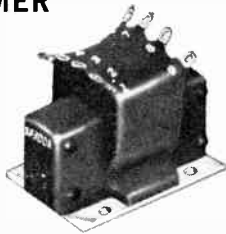
HIGH VOLTAGE

TRANSFORMERS

HIGH VOLTAGE TRANSFORMER FOR TRANSISTORIZED 7KV DC POWER SUPPLY

For a transistorized full wave DC to DC Converter. For 25 Volt DC input. Output voltage 7KV DC at .5 ma. may be obtained. Supplied with operating circuit diagram. Completely encapsulated. 2" H x 2 3/4" W x 1 3/4" D.

MODEL T-7A \$24.00 Net



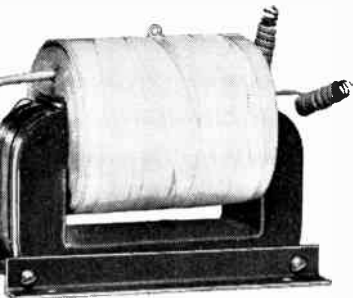
TRANSISTORIZED HIGH VOLTAGE TRANSFORMER

Designed for input voltage from 11 to 15 Volts DC. Input current from 2 to 10 amps. Output voltage from single rectifier stage 10 KV at 2 ma. Supplied with operating circuit diagram showing transistors and rectifier for an operational power supply. Completely encapsulated. 4"H x 3 1/4" W x 4" D.

MODEL T-10 \$28.00 Net

HYPERSIL CORE OIL INSULATED HIGH VOLTAGE TRANSFORMER

Voltage input 110 Volts AC. Output 20 KV Rms. Suitable for use in 50 KV DC 10 ma. Power Supply.



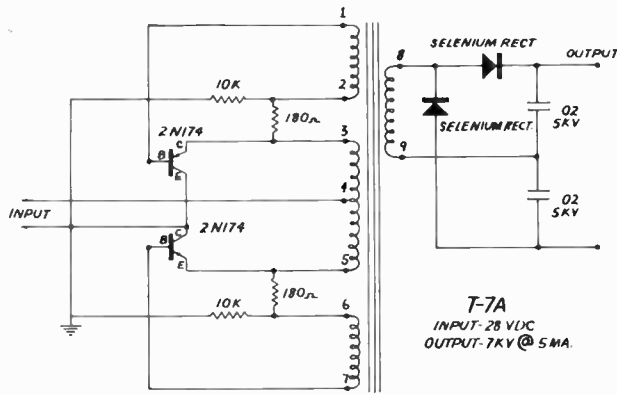
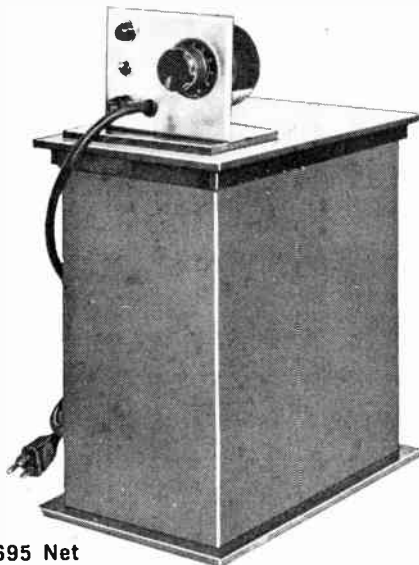
MODEL HV-20 \$51.00 Net

0-100 KV HIGH VOLTAGE DC POWER SUPPLY

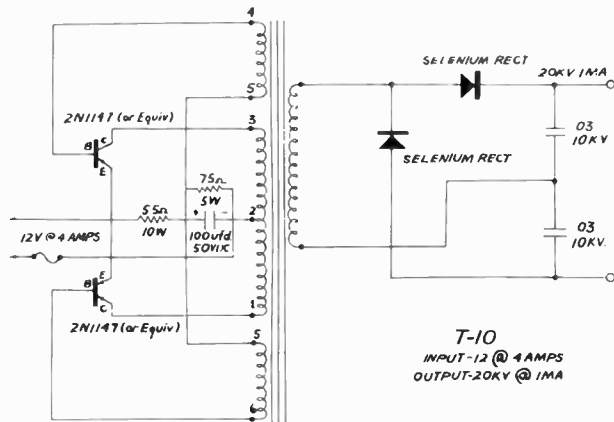
0-100 KV @ 25 micro-amperes. This solid state encapsulated DC power supply is available in either positive or negative output. Designed for insulation testing, electrostatic paint spray systems, powder separation, de-tearing, etc.

Shown less case. Dimensions: 12 1/2" high x 11 1/2" deep x 6 1/2" wide.

MODEL P-110 \$695 Net

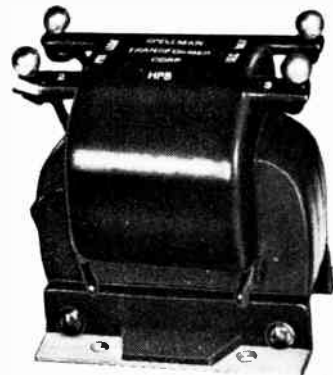


T-7A
INPUT-25 VDC
OUTPUT-7KV @ 5 mA.



T-10
INPUT-12 @ 4 AMPS
OUTPUT-20KV @ 1 mA

HIGH VOLTAGE TRANSFORMER



Voltage input 110 volts 60 cycles.

Output 8 KV Rms. 10 ma.

Dimensions: 5" wide x 5" high x 4 1/4" deep.

Suitable for use in 20 KV doubler circuit.

MODEL HP-8 \$30.00 Net

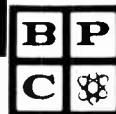
SEND FOR COMPLETE INFORMATION



HIGH VOLTAGE CO., INC.

BRONX 69, N. Y.

SOLA

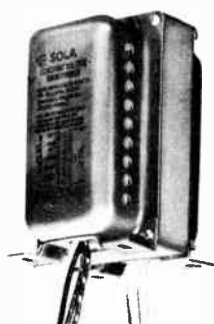
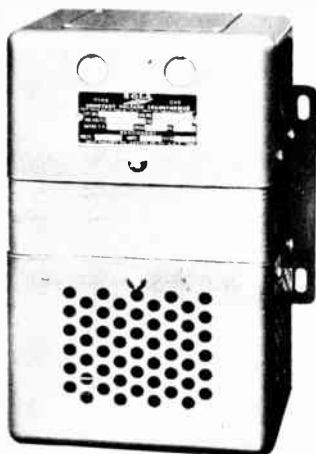


A Division of
Basic Products Corporation

PRICES AND
SPECIFICATIONS SUBJECT
TO CHANGE WITHOUT
NOTICE

CONSTANT VOLTAGE TRANSFORMERS

— automatic, instantaneous voltage regulators



Sola Constant Voltage Transformers are static-magnetic voltage regulators. They are designed to provide a stabilized output voltage even though the input voltage varies over a considerable range. They have nine distinct advantages over electronic-type regulators or regulators which depend solely upon saturation of core materials for their regulating action:

1. Completely automatic, continuous regulation.
2. Virtually instantaneous response time of $1\frac{1}{2}$ cycles or 25 milliseconds at 60 cycles.
3. Mechanically rugged — as resistant to mechanical shock as a conventional power transformer.
4. No moving or renewable parts — no manual adjustment or maintenance is necessary.
5. Type CVS units have the ability to improve a poor voltage wave-form applied to input terminals.
6. Self-protecting against short circuits on output or load circuit.
7. Inherently incapable of producing an output over-voltage.
8. Current-limiting characteristic protects load equipment from excessive fault currents. Inrush current is held within manufacturers' tolerance, eliminating the need for starting relays.
9. Available in step-up or step-down ratios, permitting substitution in place of conventional, non-regulating transformers.
10. Capable of serving a wide range of electrical devices. CVS Standard catalog items available in 51 different primary-secondary voltage combinations from 30 to 7500 volt-amperes. CVN units available in many combinations.
11. High degree of isolation between input and output circuit usually eliminates the need for electrostatic shielding. Input and output are isolated both physically and electrically.
12. Relatively compact compared to other equipment for a-c voltage regulation.

Sola static-magnetic transformers are supplied for a number of voltage-regulating requirements. They supply constant voltage in nominal line values, in filament and combination plate-and-filament values, and in variable voltage outputs.

The following pages list the widest range of stock ratings and types offered by any manufacturer of static-magnetic voltage regulators.

Standard Sinusoidal Type (CVS)

± 1% regulation of AC line input for electrical and electronic equipment

Sola Standard Sinusoidal Constant Voltage Transformers regulate voltage within ±1% regardless of input voltage variations as great as ± 15%. Displaying fast regulating action, their response time is usually 1.5 cycles or less. With less than 3% total rms harmonic content in their output voltage wave, they are particu-

larly suitable for use with rectifiers or other equipment which is sensitive to, or is affected by, harmonics in the supply voltage. Nineteen stock ratings are listed. Special designs are available in production quantities. Fifty cycle versions of popular items also available from stock.

Electrical specifications 60 cycle single phase

Mechanical specifications

| Voltage Rating | | VA | Catalog Number | Price Ind'l & Govt. Users | Nominal Dimensions | | Approximate Shipping Weight lbs. | * Structure Code |
|--|--------------------------|------|----------------|---------------------------|------------------------------|--------------------------------------|----------------------------------|------------------|
| Regulated Output | Input Range | | | | Outline | Mounting | | |
| 118 | 95-130 | 30 | 23-13-030(a) | 25.00 | 6 1/8 x 4 x 5 3/16 | 3 x 3 1/2 | 9 | W |
| | 190-260X 380-520 | 30 | 23-23-030(a) | 27.00 | 6 1/8 x 4 x 5 3/16 | 3 x 3 1/2 | 9 | W |
| | 95-130 | 60 | 23-13-060(a) | \$30.00 | 6 1/8 x 4 x 5 3/16 | 3 x 3 1/2 | 10 | W |
| | 190-260X 380-520 | 60 | 23-23-060(a) | 32.00 | 6 1/8 x 4 x 5 3/16 | 3 x 3 1/2 | 10 | W |
| | 95-130X 190-260 | 120 | 23-22-112(a) | 38.00 | 8 x 4 x 5 3/16 | 3 x 3 1/2 | 14 | W |
| | 190-260X 380-520 | 120 | 23-23-112(a) | 41.00 | 8 x 4 x 5 3/16 | 3 x 3 1/2 | 14 | W |
| | 95-130X 190-260 | 250 | 23-22-125(b) | 52.00 | 9 3/8 x 5 3/8 x 7 1/8 | 4 1/8 x 4 3/4 | 28 | W |
| | 190-260X 380-520 | 250 | 23-23-125(b) | 56.00 | 10 x 5 3/8 x 7 1/8 | 4 1/8 x 4 3/4 | 28 | W |
| | 95-130X 190-260 | 500 | 23-22-150(c) | 81.00 | 12 1/8 x 9 x 6 1/8 | 5 3/8 x 8 1/8 | 47 | W |
| | 190-260X 380-520 | 500 | 23-23-150(c) | 86.00 | 12 1/8 x 9 x 6 1/8 | 5 3/8 x 8 1/8 | 47 | W |
| 118 x 236 | 95-130X 175-235X 190-260 | 1000 | 23-25-210(c) | 135.00 | 17 1/8 x 9 x 6 7/16 | 5 3/8 x 8 1/8 | 80 | W |
| | 190-260X 380-520 | 1000 | 23-26-210(c) | 135.00 | 17 1/8 x 9 x 6 7/16 | 5 3/8 x 8 1/8 | 80 | W |
| | 95-130X 175-235X 190-260 | 2000 | 23-25-220 | 245.00 | 19 1/8 x 12 3/4 x 10 11/16 | 4 1/2 x 11 3/4 | 145 | W |
| | 190-260X 380-520 | 2000 | 23-26-220 | 245.00 | 19 1/8 x 12 3/4 x 10 11/16 | 4 1/2 x 11 3/4 | 145 | W |
| | 95-130X 175-235X 190-260 | 3000 | 23-25-230-3 | 330.00 | 21 7/8 x 12 3/4 x 10 11/16 | 6 7/16 x 11 3/4 | 192 | W |
| | 190-260X 380-520 | 3000 | 23-26-230 | 330.00 | 21 7/8 x 12 3/4 x 10 11/16 | 6 7/16 x 11 3/4 | 192 | W |
| | 95-130X 175-235X 190-260 | 5000 | 23-25-250 | 515.00 | 20 3/8 x 25 13/16 x 10 11/16 | 5 7/16 x 24 13/16 | 475 | Y |
| | 190-260X 380-520 | 5000 | 23-26-250 | 515.00 | 20 3/8 x 25 13/16 x 10 11/16 | 5 7/16 x 24 13/16 | 475 | Y |
| | 95-130X 175-235X 190-260 | 7500 | 23-28-275 | 900.00 | 20 3/8 x 38 1/4 x 11 1/8 | 5 7/16 x 37 1/4 | 710 | Z |
| | 190-260X 380-520 | 7500 | 23-28-275 | 900.00 | 20 3/8 x 38 1/4 x 11 1/8 | 5 7/16 x 37 1/4 | 710 | Z |
| #1 115 (fixed) #20-130 (adjustable) | 100-130 | 500 | *23-90-150 | 275.00 | 9 x 19 x 12 1/2 | relay rack mounting or bench top use | 83 | P |

Normal-Harmonic Type (CVN) — for built-in component use

*portable, fully adjustable unit.

These units provide the same ±1% regulation as the standard sinusoidal models on Page 2. They have an average of 20% total rms harmonic content in their output voltage. Along with the sinusoidal type, they offer simplicity, reliability and freedom from maintenance. They are reliable sources of voltage for most

electrical loads such as filaments, relays, solenoids, other transformers serving ac loads — in fact, all loads not affected by harmonics in the supply voltage. This series includes those mechanical designs specially engineered for use as built-in components. Special designs are available in production quantities.

Electrical specifications 60 cycle single phase

Mechanical specifications

| Voltage Rating | | Output Capacity in VA | Catalog Number | Approx. Net Price Each to Industrial, Commercial or Govt. Users | Nominal Dimensions (Inches) | | Approx. Shp. Wt. in Lbs. | * Structure Code | |
|------------------|--------------------------|-----------------------|-------------------------|---|-----------------------------|---------------------------|--------------------------|------------------|----|
| Regulated Output | Input Range | | | | Outline | Mounting | | | |
| 118 | 95-130 | 15 | 20-10-015 | \$15.00 | 5 1/8 x 2 3/8 x 3 1/2 | 5 1/8 x 1 1/8 | 4 | D | |
| | | | 20-11-015 | 20.00 | 5 1/4 x 3 1/2 x 2 1/4 | 3 x 1 1/2 | 4 | S | |
| | | | 20-14-015 | 14.00 | 4 3/8 x 2 3/8 x 2 3/8 | 1 3/4 x 1 7/8 | 3 | E | |
| | | 30 | 20-14-030 | 16.00 | 4 3/8 x 2 3/8 x 3 3/8 | 1 7/8 x 2 3/8 | 5 | E | |
| | | | 20-13-030(a) | 20.00 | 6 x 4 x 5 3/8 | 3 x 3 1/2 | 7 | W | |
| | | | 20-13-060(a) | 25.00 | 6 1/8 x 4 x 5 3/8 | 3 x 3 1/2 | 10 | W | |
| 60 | 20-14-060 | 21.00 | 4 13/16 x 3 3/8 x 3 7/8 | 2 1/2 x 3 3/8 | 8 | E | | | |
| | 118 | 95-130 | 120 | 20-14-112 | 29.00 | 4 13/16 x 3 3/8 x 4 13/16 | 2 1/2 x 3 3/8 | 11 | E |
| | 20-13-112(a) | | | 33.00 | 7 3/8 x 4 x 5 3/8 | 3 x 3 1/2 | 13 | W | |
| 236 | 190-260 | 120 | 20-21-112(a) | 33.00 | 7 3/8 x 4 x 5 3/8 | 3 x 3 1/2 | 13 | W | |
| 118 | | | 95-130 | 150 | 20-13-115(b) | 40.00 | 8 7/8 x 5 3/8 x 7 7/8 | 4 1/8 x 4 3/4 | 22 | W |
| | 20-13-125(c) | 49.00 | | | 11 1/8 x 6 13/16 x 6 3/8 | 4 3/8 x 6 1/8 | 25 | W | |
| | 190-260x 380-520 | 250 | 20-23-125(c) | 49.00 | 11 1/8 x 6 13/16 x 6 3/8 | 4 3/8 x 6 1/8 | 25 | W | |
| | 95-130 | | 20-13-150(c) | 77.00 | | | | | |
| 236 | 190-260x 380-520 | 500 | 20-23-150(c) | 77.00 | 12 5/16 x 6 13/16 x 6 3/8 | 4 3/8 x 6 1/8 | 36 | W | |
| 20-24-150(c) | | | 77.00 | 12 1/2 x 6 13/16 x 6 7/16 | | | | | |
| 118 | 95-130 | 1000 | 20-13-210 | 128.00 | 15 1/8 x 6 13/16 x 6 3/8 | 4 3/8 x 6 1/8 | 54 | W | |
| | 190-260 | | 20-20-210 | 128.00 | | | | | |
| 118x 236 | 95-130x 175-235x 190-260 | 2000 | 20-25-220 | 232.00 | 20 x 10 1/2 x 10 11/16 | 4 9/16 x 9 1/2 | 166 | W | |
| | | 3000 | 20-25-230 | 315.00 | 22 x 10 1/2 x 10 11/16 | 6 7/16 x 9 1/2 | 230 | W | |
| | 5000 | 20-27-250 | 490.00 | 21 x 14 1/2 x 14 3/8 | 7 x 13 | 279 | W | | |
| | 190-260x 380-520 | 10000 | 20-26-310 | 925.00 | 21 x 29 7/8 x 14 3/8 | 7 x 27 13/16 | 590 | Y | |
| | | | | | | | | | |

Electronic Power Type

±1% regulation for filament voltage; ±3% regulation of plate-filament supply

Sola Electronic Power Type Constant Voltage Transformers are designed as components for simple assembly into electronic manufacturers' own product. The filament type provides 6.0 or 6.3 volts output, regulated within ±1% over line voltage variations as great as ±15%. The combination plate-and-filament type pro-

vides voltage regulated within ±3% for line voltages varying up to ±15%. Both types provide filaments with stabilized voltage supply, and thus contribute to reliable operation, long life, and reduced service expense for load equipment. Thirteen stock units are listed. Special designs available in production quantities.

For Filament Service (Type CVF)

Electrical specifications
60 cycle single phase

Mechanical specifications

| Voltage Rating | | Output Capacity in Amps. | Catalog Number | Approx. Net Price Each to Industrial Users | Nominal Dimensions (Inches) | | Approx. Ship Wt. In Lbs. | * Structure Code |
|----------------------|--------------------|--------------------------|----------------|--|-----------------------------|-----------------------------|--------------------------|------------------|
| Regulated ±1% Output | Input Range | | | | Outline | Mounting | | |
| 6.0 | 95-130 | 2.50 | 20-01-015 | \$ 15.00 | 5½" x 2¾" x 3½" | 5¼" x 1½" | 6 | D |
| | | | 20-06-015 | 14.00 | 4¾" x 2¾" x 2¾" | 1¾" x 1½" | 4 | E |
| 6.3 | 95-130 | 2.38 | 20-02-015 | 15.00 | 5½" x 2¾" x 3½" | 5¼" x 1½" | 6 | D |
| | | | 20-03-015 | 20.00 | 4½" x 2¾" x 2¾" | 1¾" x 1½" | 4 | S |
| | | | 20-04-015 | 14.00 | 4½" x 2¾" x 2¾" | 1¾" x 1½" | 4 | E |
| | | | 20-04-030 | 16.00 | 4½" x 3½" x 3½" | 2½" x 2¼" | 6 | E |
| | 95-130X 190-260 | 5.0 | 20-04-065 | 20.00 | 4½" x 3½" x 3½" | 2½" x 2¼" | 7 | E |
| | | 10.0 | 20-04-095 | 24.00 | 4½" x 3½" x 4½" | 2½" x 3¾" | 11 | E |
| | | 20.0 | 20-04-113 | 31.00 | 7" x 4½" x 5½" | 3¾" x 3¾" | 20 | E |
| 25.0 | 20-04-116 | 35.00 | 7" x 4½" x 5½" | 3¾" x 4½" | 23 | E | | |
| 6.3 | 95-130 | 5 | 20-05-030 | 25.00 | 6½" x 4½" x 4¾" | portable, for bench-top use | 8 | F |

For Plate-Filament Service (Type CVE)

Electrical specifications
60 cycle single phase

Input range, 100-130 volts

Mechanical specifications

| Typical Rectifier Tube | Average D.C. Input Volts to Filter* | Filament Windings | | Catalog Number | Approx. Net Price Each to Industrial Users | Nominal Dimensions (Inches) | | Approx. Ship Wt. In Lbs. | * Structure Code |
|------------------------|-------------------------------------|--|-----------|----------------|--|-----------------------------|-----------|--------------------------|------------------|
| | | 6.3 Volts | 5.0 Volts | | | Outline | Mounting | | |
| 5Y3 | 275v D.C. @ 50 M.A. | 2.5 amps C.T. | 2.0 amps | 7 104 | \$12.00 | 4½" x 3½" x 3¾" | 2½" x 2½" | 6 | E |
| 5Y3 | 385v D.C. @ 110 M.A. | 3.0 amps C.T. | 2.0 amps | 7 106 | 15.00 | 4½" x 3½" x 3½" | 2½" x 2¾" | 8 | E |
| 5U4 | 380v D.C. @ 250 M.A. | No. 1: 4.0 amps No. 2: 8.0 amps unregulated | 3.0 amps | 7 107 | 27.00 | 7" x 4½" x 4¾" | 3¾" x 3¾" | 19 | E |

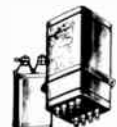
*Voltage values are taken at output of 5Y3GT rectifier for No. 7104 and No. 7106 transformers and at output of 5U4GA-GB for No. 7107. Guaranteed

regulation of ±3% on plate voltage output is contingent on the use of Sola-regulated 5.0v filament supply winding for the rectifier tube.

"Structure code" letter refers to one of these general types of mechanical assemblies:



D—Drawn case; integral capacitor unit; flex leads.



S—Hermetically-sealed case; separate capacitor; solder lugs.



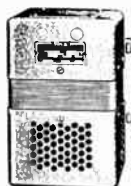
P—Portable adjustable a-c supply



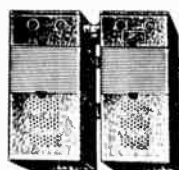
F—Portable filament transformer.



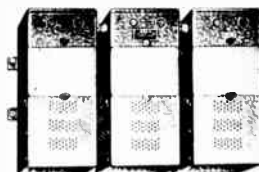
E—Exposed core; end bells; separate capacitor; flex leads.



W—Exposed core; end housings; screw-type terminals in outlet box.



Y—Same as W, but duplex assembly.

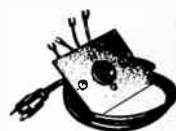


Z—Same as W, but triplex assembly.

Cord/receptacle adapter kits

Adapter kits may be used when the convenience of input plug and output receptacle is preferred to the standard arrangement of terminals in the transformer housing. See footnote 1 and accompanying chart.

| Code | Adapter Kit Catalog No. | Input Cord | Output Connections | Net price each to industrial users |
|------|-------------------------|------------|--------------------|------------------------------------|
| (a) | 999-004 | 2-wire | 2-wire receptacle | \$1.75 |
| | 999-018 | 3-wire | 3-wire receptacle | 2.50 |
| (b) | 999-005 | 2-wire | 2-wire receptacle | 1.75 |
| | 999-019 | 3-wire | 3-wire receptacle | 2.50 |
| (c) | 999-009 | 2-wire | 2-wire receptacle | 2.00 |
| | 999-020 | 3-wire | 3-wire receptacle | 2.50 |



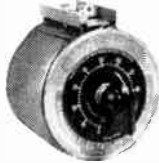
The transformers described in this folder are manufactured under one or more of the following United States Patents: Nos. 2,694,177; 2,753,513; 2,806,199, and patents pending.

STACO® *Adjust-A-Volt*® Variable Auto-Transformers

Bench and Panel Mounted Units for Control of AC lines, Power, Heat, Speed and Light. Adjust-A-Volts feature smooth, continuous control, zero waveform distortion, excellent regulation and high efficiency.



100BU



250BU



T51U



300BU



500BU



1500B



2500BU



2500B



T501U



300BU-3

Uncased Units or Cased with Bare Conduit or Terminal Box

| Type | Input Voltage | Output Voltage | Cycles | Rated Amps | Kva Max | Shipping Wgt. Lbs. | Net Price |
|--------|---------------|----------------|--------|------------|---------|--------------------|-----------|
| 100BU | 120 | 0-132 | 60 | 1.25 | .165 | 2.2 | \$ 8.50 |
| 250BU | 120 | 0-132 | 60 | 2.5 | .33 | 2.5 | \$ 9.50 |
| T21U | 120 | 0-140 | 50/60 | 2.4 | .33 | 4 | \$ 15.00 |
| 300BU | 120 | 0-140 | 60 | 3.0 | .42 | 5 | \$ 12.50 |
| T51U | 120 | 0-140 | 50/60 | 6.0 | .84 | 8 | \$ 18.00 |
| 500BU | 120 | 0-140 | 50/60 | 7.5 | 1.05 | 10 | \$ 18.00 |
| 1500B | 120 | 0-140 | 50/60 | 15 | 2.1 | 20 | \$ 46.00 |
| 2500B | 120 | 0-140 | 50/60 | *30 | *4.2 | 22 | \$ 49.00 |
| 2500BU | 120 | 0-140 | 50/60 | *30 | *4.2 | 23 | \$ 55.00 |
| T501U | 120 | 0-140 | 50/60 | 50 | 7 | 60 | \$120.00 |

All of the above units may be easily connected by user to attain 0-120 volt line voltage output for either 50 or 60 cycle current.

*These ratings are permitted only if the brush position is changed frequently, if ample cooling is provided and the atmosphere is relatively dust free. Otherwise the unit should be derated to approx. 25 amps.

Cased Units with Line Cord, Receptacle, Fuse, Switch and Pilot Light

| | | | | | | | |
|-------|-----|----------------|-------|------|------|----|----------|
| PA-1 | 120 | 0-132 | 60 | 1.25 | .165 | 3 | \$ 16.00 |
| PA-1L | | 0-120 | 50/60 | | | 3 | |
| PA-3 | 120 | 0-140 | 60 | 3.0 | .42 | 7 | \$ 26.00 |
| PA-3L | | 0-120 | 50/60 | | | 7 | |
| 500B | 120 | 0-140 0-120 | 50/60 | 7.5 | 1.05 | 11 | \$ 23.00 |

*Note: 0-120 line voltage is attained by connections made by user.

Ganged assemblies and motorized units available. Write for General Catalog 61.



M2511



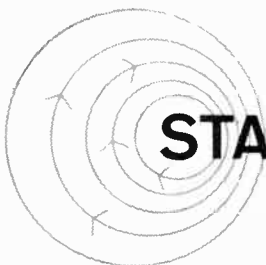
PA-1



PA-3



500B



STANDARD electrical products company, Dayton, Ohio

A Subsidiary of General Electronic Control, Inc., Minneapolis, Minnesota

STACO® *Adjust-A-Volt* ISOLATED TRANSFORMERS

These units provide a means for smooth control of an electrically isolated AC voltage output. Uncased models give the design engineer a wide variety of circuit arrangements for both original equipment and custom-built lab applications. Cased units have line cord, input switch, pilot light, output receptacle, output voltmeter and thermal circuit breaker.

Uncased IV Series for Panel Mounting

| Type | Input Voltage | Output Voltage | Cycles | Rated Amps | KVA Max | Connection | Shipping Wgt. lbs. |
|---------|---------------|----------------|--------|------------|---------|------------------------|----------------------|
| IV-1-2U | 120 | 0-140 | 50/60 | 2 | .28 | Isolated | 8 |
| | 120 | 0-120N | 50/60 | 5 | .60 | Non-Isolated | Net Price \$30.25 |
| | 120 | 120-260N | 50/60 | 4.5-2 | .52VD | Voltage Doubler Series | |
| | 240 | 110-240N | 50/60 | 4.5 | 1.08 | | |
| IV-1-9U | 120 | 0-140 | 50/60 | 9 | 1.26 | Isolated |  | 28 |
| | 120 | 0-120N | 50/60 | 25 | 3 | Non-Isolated | Net Price \$57.50 |
| | 120 | 120-260N | 50/60 | 20-9 | 2.34VD | Voltage Doubler Series | |
| | 240 | 110-240N | 50/60 | 20 | 4.8 | | |

Cased IV Series for Bench Use

| Type | Input Voltage | Output Voltage | Cycles | Rated Amps | KVA Max | Shipping Wgt. lbs. | Net Price |
|---------|---------------|----------------|--------|------------|---------|--------------------|-----------|
| IV-1-2M | 120 | 0-140 | 50/60 | 2 | .28 | 13 | \$69.50 |
| IV-1-4M | 120 | 0-140 | 50/60 | 4 | .56 | 20 | 79.50 |
| IV-1-9M | 120 | 0-140 | 50/60 | 9 | 1.26 | 32 | 97.50 |

Deluxe Cased Units with Panel Switches & Dual Range Voltmeter

| | | | | | | | |
|---------|-----|----------|-------|-----|--------|------------------------------|-----------------------------|
| IV-1-2D | 120 | 0-140 | 50/60 | 2 | .28 | NON ISOLATED VOLTAGE DOUBLER | 14 Net Price \$84.50 |
| | 120 | 0-120N | 50/60 | 4 | .48 | | |
| | 120 | 120-160N | 50/60 | 4-2 | .52VD | | |
| IV-1-4D | 120 | 0-140 | 50/60 | 4 | .56 | NON ISOLATED VOLTAGE DOUBLER | 21 Net Price \$109.50 |
| | 120 | 0-120N | 50/60 | 8 | .96 | | |
| | 120 | 120-260N | 50/60 | 8-4 | 1.04VD | | |

N on Voltage means Non-Isolated

ADJUST-A-VOLT AC AUTOMATIC VOLTAGE REGULATORS

| | IVR Series Instantaneous | VR Series Electro-Mechanical |
|------------------------|--------------------------|------------------------------|
| Reg. Accuracy | ± 0.10% | ± 0.5% |
| Time Constant | 100 Milliseconds | |
| Speed of Correction | | .05 sec/volt |
| Output Voltage | 110-120 | 110-120 |
| Input Voltage | 95-130 1 Ph. | 95-135 1 Ph. |
| Frequency | 60 cycle | 60 cycle |
| Load Range | 0 — Full Load | 0 — Full Load |
| EFF @ Full Load | 90% @ Unity P.F. | 97% 97.5% |
| | | VR-1-50 VR-1-75 |
| Power Factor Range | 1.0 to 0.7% | Any |
| Wave Form Distortion | 3% Max. | None |
| Amb. Temp. Oper. Range | -0°C — +40°C | -20°C — +40°C |

0—150 Volts AC Output Meter on all Models

| Type | KVA | Rated Amps. | Shipping Wgt. lbs. | | Net Price | |
|----------|-----|-------------|--------------------|---------|-----------|---------|
| | | | Rack | Cabinet | Rack | Cabinet |
| IVR-1-10 | 1 | 8.7 | 95 | 115 | \$405 | \$435 |
| IVR-1-25 | 2.5 | 22.0 | 195 | 220 | \$610 | \$665 |
| VR-1-50 | 5 | 44 | 90 | 110 | \$495 | \$525 |
| VR-1-75 | 7.5 | 66 | 100 | 122 | \$545 | \$575 |

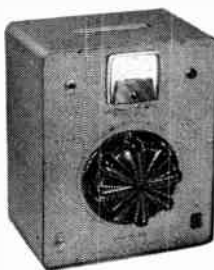
R = Rack Type C = Cabinet Type—add letter to Type No. when ordering i.e. IVR-10R



IV-1-2U



IV-1-9U



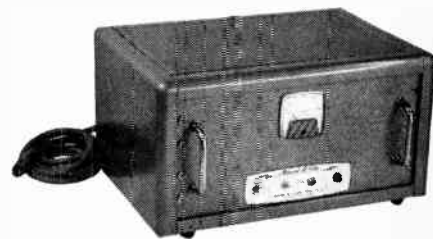
IV-1-9M



IV-1-2M



IV-1-2D



IVR-1-10C



VR-1-75R

All Adjust-A-Volt Variable Transformers and Voltage Regulator Models and Full Specifications with Eng. data are Covered in New Gen. Cat. No. 61



STANDARD electrical products company
Dayton, Ohio

POWERSTAT® Variable Transformers

● ZERO WAVEFORM DISTORTION

● RUGGED CONSTRUCTION

● GOLD-ALLOY PLATED COMMUTATORS

Deliver continuously-adjustable voltage from a-c power lines. All manually-operated types listed in charts except 10B, EN116-EN216 and EN117-EN217 Series are also available with motor-drives if desired. Motor-driven speeds are 5, 15, 30 or 60 seconds for full range travel except types suffixed 4P, 4PS, 4D, 5P, 6P, 6PS, 6D and 6Y which do not offer the 5 second speed. 117-217, 126-226 and 136-236 types are also available with 2- or 3-wire cord-plug sets. 1156D-1256D Series types are available in ratings up to 244 KVA.



TYPE 10B



TYPE 21



TYPE 2PF10



TYPE 116



TYPE EN216-2



TYPE Q116U

| RATINGS AND SPECIFICATIONS | | | | | | | | | | 116-216 and 117-217 SERIES† (contd.) | | | | | | | |
|------------------------------------|--------|--------|-------------------|------------------|-------------------|------|---------------|--------------------|--------|--------------------------------------|-------------------|------------------|-----------------|--------------------|------------------|-----------------|--------------------|
| 10B SERIES | | | | | | | | | | INPUT | | OUTPUT | | | | TYPE | Shp. Wt. Lbs. |
| INPUT | | OUTPUT | | | | TYPE | Shp. Wt. Lbs. | Volts | Cycles | Volts | Const. Max. Amps. | Current Max. KVA | Load Max. Amps. | Impedance Max. KVA | | | |
| Volts | Cycles | Volts | Const. Max. Amps. | Current Max. KVA | Const. Max. Amps. | | | Impedance Max. KVA | TYPE | Shp. Wt. Lbs. | Volts | Cycles | Volts | Const. Max. Amps. | Current Max. KVA | Load Max. Amps. | Impedance Max. KVA | TYPE | Shp. Wt. Lbs. |
| 10B SERIES | | | | | | | | | | | | | | | | | |
| Single Phase | | | | | | | | | | | | | | | | | |
| 120 | 60 | 0.132 | 1.0 | 0.132 | 1.0 | 132 | 2PF10 | 3.3 | 120 | 50/60 | 0.120 | 7.5 | 1.6 | 10.4 | 2.1 | 116T.2 | 24 |
| 120 | 50/60 | 0.120 | 1.75* | 0.21 | 2.5 | 30 | 10B | 2.4 | 120 | 50/60 | 0.140 | 7.5 | 1.6 | 7.1 | 1.8 | 117T.2 | 24 |
| 120 | 60 | 0.132 | 1.75* | 0.23 | 1.75* | 23 | | | 240 | 50/60 | 0.240 | 3.0 | 1.2 | 4.1 | 1.9 |  |  | 216T.2 | 24 |
| 240 | 50/60 | 0.240 | 1.75 | 0.42 | 2.5 | 60 | 10B-2 | 5.6 | 240 | 50/60 | 0.280 | 3.0 | 1.5 | 3.0 | 1.5 | 217T.2 | 24 |
| 240 | 60 | 0.264 | 1.75 | 0.46 | 1.75 | 46 | | | 240 | 60 | 0.240 | 4.0 | 1.7 | 6.2 | 2.6 |  |  | 116T.3 | 36 |
| 240 | 60 | 0.240 | 1.75 | 0.46 | 1.75 | 46 | 10B-3 | 8.3 | 240 | 60 | 0.240 | 10.0 | 4.2 | 13.1 | 5.4 | 117T.3 | 36 |
| 120 | 50/60 | 0.120 | 1.75 | 0.36 | 2.5 | 52 | | | 10B-2 | 5.6 | 480 | 50/60 | 0.480 | 3.0 | 2.5 |  |  | 4.1 | 3.7 | 216T.3 | 36 |
| 120 | 60 | 0.132 | 1.75 | 0.40 | 1.75 | 40 | 480 | 60 | | | 0.560 | 3.0 | 2.9 | 3.0 | 2.9 | 217T.3 | 36 |
| 240 | 60 | 0.240 | 1.75 | 0.73 | 2.5 | 1.0 | | | | | | | | | | | |
| 21 SERIES | | | | | | | | | | | | | | | | | |
| Single Phase | | | | | | | | | | | | | | | | | |
| 120 | 50/60 | 0.120 | 3.75 | 0.45 | 5.5 | 0.66 | 21 | 6 | 120 | 50/60 | 0.120 | 6.5 | 7.8 | 10.0 | 1.2 | EN116 | 15 |
| 120 | 60 | 0.140 | 3.75 | 0.53 | 3.75 | 0.53 | | | 120 | 50/60 | 0.140 | 6.5 | 9.1 | 6.5 | 9.1 |  |  | EN117 | 15 |
| 240 | 50/60 | 0.240 | 3.75 | 0.90 | 5.5 | 1.3 | 21.2 | 12 | 240 | 50/60 | 0.240 | 2.6 | 4.2 | 4.0 | 9.6 | EN216 | 15 |
| 240 | 60 | 0.280 | 3.75 | 1.0 | 3.75 | 1.0 | | | 240 | 50/60 | 0.280 | 2.6 | 7.3 | 2.6 | 7.3 |  |  | EN217 | 15 |
| 240 | 60 | 0.240 | 3.75 | 0.78 | 5.5 | 1.1 | 21.2 | 12 | 240 | 60 | 0.240 | 3.5 | 3.4 | 5.2 | 1.2 | EN116-2 | 28 |
| 120 | 50/60 | 0.140 | 3.75 | 0.91 | 3.75 | 0.91 | | | 240 | 50/60 | 0.240 | 6.5 | 1.6 | 10.0 | 2.4 | | |
| 120 | 60 | 0.140 | 3.75 | 0.91 | 3.75 | 0.91 | 21.3 | 17 | 240 | 50/60 | 0.280 | 6.5 | 1.8 | 6.5 | 1.8 | EN117.2 | 28 |
| 240 | 50/60 | 0.240 | 3.75 | 1.6 | 5.5 | 2.3 | | | 240 | 60 | 0.240 | 8.5 | 2.0 | 12.5 | 3.0 |  |  | EN117.2 | 28 |
| 240 | 60 | 0.280 | 3.75 | 1.8 | 3.75 | 1.8 | | | | | | | | | | | |
| 116-216 and 117-217 SERIES† | | | | | | | | | | | | | | | | | |
| Single Phase | | | | | | | | | | | | | | | | | |
| 120 | 50/60 | 0.120 | 7.5 | 0.90 | 10.0 | 1.2 | 116 | 12 | 120 | 50/60 | 0.120 | 6.5 | 1.4 | 10.0 | 2.1 | EN116-2 | 28 |
| 120 | 60 | 0.120 | 10.0 | 1.2 | 13.0 | 1.6 | | | 120 | 50/60 | 0.140 | 6.5 | 1.6 | 6.5 | 1.6 |  |  | EN117.2 | 28 |
| 240 | 50/60 | 0.240 | 3.0 | 0.72 | 4.5 | 1.1 | 216 | 12 | 240 | 50/60 | 0.240 | 2.6 | 1.1 | 4.0 | 1.7 | EN216-2 | 28 |
| 240 | 60 | 0.280 | 3.0 | 0.84 | 3.0 | 0.84 | | | 240 | 50/60 | 0.280 | 2.6 | 1.3 | 2.6 | 1.3 |  |  | EN217.2 | 28 |
| 240 | 60 | 0.240 | 4.0 | 1.0 | 6.3 | 1.5 | 217T | 12 | 240 | 60 | 0.240 | 3.5 | 1.5 | 5.2 | 2.2 | EN116.3 | 39 |
| 240 | 50/60 | 0.240 | 7.5 | 1.8 | 10.0 | 2.4 | | | 240 | 50/60 | 0.240 | 6.5 | 2.7 | 10.0 | 4.2 |  |  | EN117.3 | 39 |
| 240 | 60 | 0.280 | 7.5 | 2.1 | 7.5 | 2.1 | 116T.2 | 24 | 240 | 60 | 0.280 | 6.5 | 3.2 | 6.5 | 3.2 | EN117.3 | 39 |
| 240 | 60 | 0.240 | 10.0 | 2.4 | 13.0 | 3.1 | | | 117T.2 | 24 | 240 | 60 | 0.240 | 8.1 | 3.5 |  |  | 12.5 | 5.2 | EN216.3 | 39 |
| 480 | 50/60 | 0.480 | 3.0 | 1.4 | 4.5 | 2.2 | 216T.2 | 24 | | | 480 | 50/60 | 0.480 | 2.6 | 2.2 | 4.0 | 3.3 | EN217.3 | 39 |
| 480 | 60 | 0.560 | 3.0 | 1.7 | 3.0 | 1.7 | | | 480 | 60 | 0.560 | 2.6 | 2.5 | 2.6 | 2.5 | EN217.3 | 39 |
| 480 | 60 | 0.480 | 4.0 | 1.9 | 6.3 | 3.0 | 217T-2 | 24 | 480 | 60 | 0.480 | 3.5 | 2.9 | 5.2 | 4.3 | | |

FOOTNOTES: *Rating is 2.0 amperes when mounted on a metal panel.
 †Also available with open construction for back of panel mounting (Suffix U when ordering). Prefix Q if square frame is desired instead of round frame on open construction (U) types.



THE SUPERIOR ELECTRIC COMPANY
 Bristol, Connecticut, U.S.A.

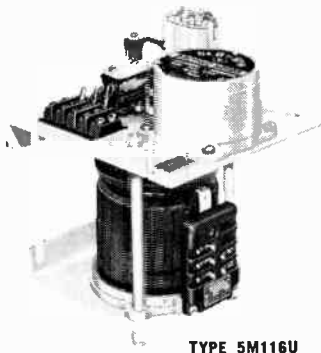
SEE OTHER SUPERIOR ELECTRIC PRODUCT PAGES IN SECTIONS 2100 AND 3500

POWERSTAT® Variable Transformers

● EXCELLENT REGULATION

● HIGH EFFICIENCY

● CONSERVATIVE RATINGS



TYPE 5M116U



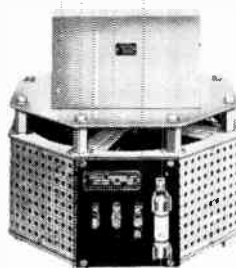
TYPE 1156D



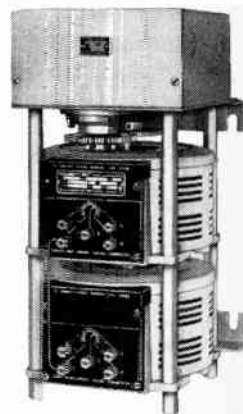
TYPE 3PN126



TYPE 136



TYPE 5M1156D



TYPE 15MC136-2

| 126-226 SERIES** | | | | | | | | LW136 SERIES†† | | | | | | | | |
|-------------------------|--------|--------|-------------------|-----------------------|----------------------------------|----------|--------|----------------|-----------------------------|-----------------------------|---------|------------|----------|-----------|----------------|-----|
| INPUT | | OUTPUT | | | | | TYPE | Ship. Wt. Lbs. | INPUT | | OUTPUT | | | TYPE | Ship. Wt. Lbs. | |
| Volts | Cycles | Volts | Const. Max. Amps. | Current Load Max. KVA | Const. Impedance Load Max. Amps. | Max. KVA | | | Volts | Cycles | Volts | Max. Amps. | Max. KVA | | | |
| Single Phase | | | | | | | | | | Single Phase | | | | | | |
| 120 | 50/60 | 0-120 | 12.5 | 1.5 | 18.0 | 2.2 | 126 | 17 | 120/240 | 50/60 | 15-0-15 | 35.0 | 5.2 | LW136 | 25 | |
| 120 | 50/60 | 0-140 | 12.5 | 1.8 | 12.5 | 1.8 | | | 120/240/480 | 50/60 | 30-0-30 | 35.0 | 1.0 | 1.0 | LW136-2 | 52 |
| 240 | 50/60 | 0-240 | 6.0 | 1.4 | 9.0 | 2.2 | 226 | 17 | 120/240 | 50/60 | 45-0-45 | 35.0 | 1.6 | LW136-3 | 76 | |
| 240 | 50/60 | 0-280 | 6.0 | 1.7 | 6.0 | 1.7 | | | 120/240 | 50/60 | 0-30 | 25.0 | 2.5 | 2.5 | LW136 | 25 |
| 240 | 50/60 | 0-240 | 12.5 | 3.0 | 18.0 | 4.3 | 126-2 | 32 | 120/240/480 | 50/60 | 0-60 | 25.0 | 1.5 | LW136-2 | 52 | |
| 240 | 50/60 | 0-280 | 12.5 | 3.5 | 12.5 | 3.5 | | | 120/240 | 50/60 | 0-90 | 25.0 | 2.2 | 2.2 | LW136-3 | 76 |
| 480 | 50/60 | 0-480 | 6.0 | 2.9 | 9.0 | 4.3 | 226-2 | 32 | Three Phase | | | | | | | |
| 480 | 50/60 | 0-560 | 6.0 | 3.4 | 6.0 | 3.4 | | | 120/240 | 50/60 | 0-30 | 25.0 | 1.4 | 1.4 | LW136-2 | 52 |
| Three Phase | | | | | | | | | | Three Phase | | | | | | |
| 120 | 50/60 | 0-120 | 12.5 | 2.6 | 18.0 | 3.7 | 126-2 | 32 | 120/240 | 50/60 | 0-30 | 43.3 | 2.1 | LW136-3 | 76 | |
| 120 | 50/60 | 0-140 | 12.5 | 3.0 | 12.5 | 3.6 | | | 120/240 | 50/60 | 0-52 | 25.0 | 2.1 | 2.1 | LW136-3 | 76 |
| 240 | 50/60 | 0-240 | 6.0 | 2.5 | 9.0 | 3.7 | 226-2 | 32 | 240/480 | 60 | 0-35 | 43.3 | 2.1 | LW136-3 | 76 | |
| 240 | 50/60 | 0-280 | 6.0 | 2.9 | 6.0 | 2.9 | | | 240/480 | 60 | 0-60 | 25.0 | 2.4 | 2.4 | LW136-3 | 76 |
| 240 | 50/60 | 0-240 | 12.5 | 5.2 | 18.0 | 7.5 | 126-3 | 49 | 1156D-1256D SERIES§§ | | | | | | | |
| 240 | 50/60 | 0-280 | 12.5 | 6.1 | 12.5 | 6.1 | | | Single Phase | | | | | | | |
| 480 | 50/60 | 0-480 | 6.0 | 5.0 | 9.0 | 7.5 | 226-3 | 49 | 120 | 50/60 | 0-140 | 45.0 | 6.3 | 1156D | 79 | |
| 480 | 50/60 | 0-560 | 6.0 | 5.8 | 6.0 | 5.8 | | | 120 | 50/60 | 0-140 | 90.0 | 12.6 | 12.6 | 1156D-2P | 158 |
| 136-236 SERIES** | | | | | | | | | | 1156D-1256D SERIES§§ | | | | | | |
| Single Phase | | | | | | | | | | Single Phase | | | | | | |
| 120 | 50/60 | 0-120 | 20.0 | 2.4 | 25.0 | 3.0 | 136 | 25 | 120 | 50/60 | 0-140 | 135.0 | 18.0 | 18.0 | 1156D-3P | 274 |
| 120 | 50/60 | 0-140 | 20.0 | 2.8 | 20.0 | 2.8 | | | 120 | 50/60 | 0-140 | 180.0 | 25.0 | 25.0 | 1156D-4P | 395 |
| 120 | 50/60 | 0-120 | 40.0 | 4.8 | 50.0 | 6.0 | 136-2S | 52 | 120 | 50/60 | 0-140 | 225.0 | 31.0 | 31.0 | 1156D-5P | 490 |
| 120 | 50/60 | 0-140 | 40.0 | 5.6 | 40.0 | 5.6 | | | 120 | 50/60 | 0-140 | 270.0 | 37.0 | 37.0 | 1156D-6P | 584 |
| 240 | 50/60 | 0-240 | 9.0 | 2.2 | 12.0 | 3.0 | 236 | 25 | 240 | 50/60 | 0-280 | 28.0 | 7.0 | 1256D | 79 | |
| 240 | 50/60 | 0-280 | 9.0 | 2.5 | 9.0 | 2.5 | | | 240 | 50/60 | 0-280 | 45.0 | 12.0 | 12.0 | 1156D-2S | 152 |
| 240 | 50/60 | 0-240 | 20.0 | 4.8 | 25.0 | 6.0 | 136-2 | 52 | 240 | 50/60 | 0-280 | 56.0 | 15.7 | 1256D-2P | 158 | |
| 240 | 50/60 | 0-280 | 20.0 | 5.6 | 20.0 | 5.6 | | | 240 | 50/60 | 0-280 | 84.0 | 23.5 | 23.5 | 1256D-3P | 274 |
| 480 | 50/60 | 0-480 | 9.0 | 4.3 | 12.0 | 6.0 | 236-2 | 52 | 240 | 50/60 | 0-280 | 90.0 | 25.2 | 1156D-4PS | 386 | |
| 480 | 50/60 | 0-560 | 9.0 | 5.0 | 9.0 | 5.0 | | | 240 | 50/60 | 0-280 | 112.0 | 31.4 | 31.4 | 1256D-4P | 391 |
| Three Phase | | | | | | | | | | Three Phase | | | | | | |
| 120 | 50/60 | 0-120 | 20.0 | 4.2 | 25.0 | 5.2 | 136-2 | 52 | 240 | 50/60 | 0-280 | 140.0 | 39.2 | 39.2 | 1256D-5P | 490 |
| 120 | 50/60 | 0-140 | 20.0 | 4.8 | 20.0 | 4.8 | | | 240 | 50/60 | 0-280 | 135.0 | 37.8 | 37.8 | 1156D-6PS | 583 |
| 240 | 50/60 | 0-240 | 9.0 | 3.7 | 12.0 | 5.2 | 236-2 | 52 | 240 | 50/60 | 0-280 | 168.0 | 47.0 | 47.0 | 1256D-6P | 588 |
| 240 | 50/60 | 0-280 | 9.0 | 4.4 | 9.0 | 4.4 | | | 480 | 50/60 | 0-560 | 28.0 | 15.7 | 15.7 | 1256D-2S | 152 |
| 240 | 50/60 | 0-240 | 20.0 | 8.3 | 25.0 | 10.4 | 136-3 | 76 | 480 | 50/60 | 0-560 | 56.0 | 31.4 | 31.4 | 1256D-4PS | 386 |
| 240 | 50/60 | 0-280 | 20.0 | 9.7 | 20.0 | 9.7 | | | 480 | 50/60 | 0-560 | 84.0 | 42.0 | 42.0 | 1256D-6PS | 583 |
| 480 | 50/60 | 0-480 | 9.0 | 7.5 | 12.0 | 10.4 | 236-3 | 76 | Three Phase | | | | | | | |
| 480 | 50/60 | 0-560 | 9.0 | 8.7 | 9.0 | 8.7 | | | 120 | 50/60 | 0-140 | 45.0 | 10.9 | 10.9 | 1156D-2D | 152 |

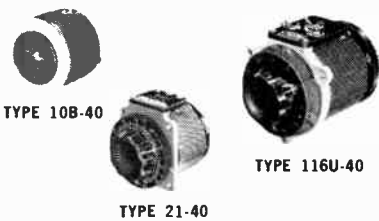
FOOTNOTES
 § Requires also one paralleling choke type 15900
 ** 126-226 and 136-236 Series also available with open-construction for back-of-panel mounting (suffix U when ordering)
 †† LW136 Series ratings are for use as low-voltage isolated output transformer. Also permits connection for use as a line reactor transformer or as a line corrector. Full connections and ratings as requested.
 §§ 1156D-1256D Series types also have terminal for limiting output voltage to line voltage.

COMPLETE LITERATURE
 containing full product information,
 engineering data, outline drawings, connections,
 ratings, charts and illustrations on all standard
 and special use POWERSTATS
 is available on request.
 Specify whether 50/60 cycle,
 400/800 cycle or complete file is desired.

POWERSTAT® Variable Transformers

40-VOLT SERIES

Meet high current, low voltage requirements of low voltage power supplies and a wide range of transistor circuit applications. Single, 2- and 3-gang single phase types available.



TYPE 10B-40

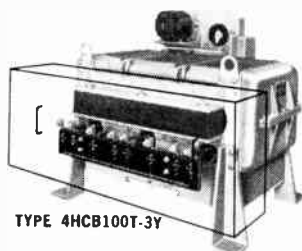
TYPE 21-40

TYPE 116U-40

| 40-VOLT SERIES | | | | | | |
|----------------|--------|--------|------------|----------|---------|----------------|
| INPUT | | OUTPUT | | | TYPE | SHIP. WT. LBS. |
| VOLTS | CYCLES | VOLTS | MAX. AMPS. | MAX. KVA | | |
| Single Phase | | | | | | |
| 40 | 60 | 0-40 | 6.0 | 0.24 | 10B-40 | 3.3 |
| | | | 15.0 | 0.6 | 21-40 | 6 |
| | | | 25.0 | 1.0 | 116U-40 | 11 |

H-C SERIES

High current, high efficiency types featuring a new variable transformer design concept with helical coils and patented re-entry rings. Extremely fine voltage division. 3 phase only.



TYPE 4HCB100T-3Y

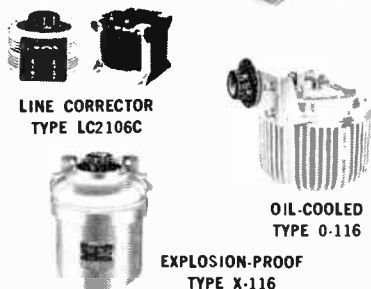
| H-C SERIES | | | | | | |
|------------|--------|--------|------------|---------------|---------------|----------------|
| INPUT | | OUTPUT | | | TYPE | SHIP. WT. LBS. |
| VOLTS | CYCLES | VOLTS | MAX. AMPS. | MAX. KVA | | |
| 240 | 60 | 0-270 | 200 | 93.5 | 2HC200T 3Y* | 1800 |
| | | | 200 | 83 | 2HC200LT 3Y* | |
| | 50-60 | 0-270 | 350 | 168 | 2HC200T 3Y* | |
| | | | 350 | 129 | 2HCB200LT 3Y* | |
| | 50-60 | 0-540 | 100 | 93.5 | 4HC100LT 3Y* | |
| | | | 100 | 83 | 4HC100LT 3Y* | |
| 50-60 | 0-540 | 200 | 187 | 4HCB100T 3Y* | | |
| | | 200 | 166 | 4HCB100LT 3Y* | | |

*Convection cooled

*Forced air cooled

LINE CORRECTORS, OIL-COOLED, EXPLOSION-PROOF

Special use types to meet the requirements of a wide range of applications.



LINE CORRECTOR TYPE LC2106C

OIL-COOLED TYPE O-116

EXPLOSION-PROOF TYPE X-116

| LINE CORRECTOR SERIES | | | | | | |
|--|--------|--------|------------|----------|-----------|----------------|
| INPUT | | OUTPUT | | | TYPE | SHIP. WT. LBS. |
| VOLTS | CYCLES | VOLTS | MAX. AMPS. | MAX. KVA | | |
| Used as Line Correctors — SINGLE PHASE | | | | | | |
| 95-135 | 50/60 | 115 | 17.5 | 2.0 | LC2102C | 55 |
| 95-135 | 50/60 | 115 | 52.0 | 6.0 | LC2106C | 80 |
| 95-135 | 50/60 | 115 | 130.0 | 15.0 | LC2115C | 200 |
| 195-255 | 50/60 | 230 | 32.5 | 7.5 | LC2207C | 85 |
| 205-250 | 50/60 | 230 | 120.0 | 27.5 | LC2228C | 205 |
| 400-520 | 50/60 | 460 | 15.0 | 6.6 | LC2407C | 85 |
| 400-520 | 50/60 | 460 | 40.0 | 17.6 | LC2418C | 205 |
| Used as Line Correctors — THREE PHASE | | | | | | |
| 195-255 | 50/60 | 230 | 25.0 | 10.0 | LC3210YC | 211 |
| 195-255 | 50/60 | 230 | 38.0 | 15.0 | LC3215YC | 226 |
| 195-255 | 50/60 | 230 | 50.0 | 20.0 | LC3220YC | 241 |
| 195-255 | 50/60 | 230 | 113.0 | 45.0 | LC3245YD | 615 |
| 195-255 | 50/60 | 230 | 175.0 | 70.0 | LC3270DD | 795 |
| 400-520 | 50/60 | 460 | 16.0 | 12.5 | LC3412YC | 200 |
| 400-520 | 50/60 | 460 | 22.0 | 17.5 | LC3417YC | 215 |
| 400-520 | 50/60 | 460 | 33.0 | 25.0 | LC3425YC | 230 |
| 400-520 | 50/60 | 460 | 66.0 | 50.0 | LC3450YD | 580 |
| 400-520 | 50/60 | 460 | 100.0 | 75.0 | LC3475YD | 630 |
| 420-500 | 50/60 | 460 | 131.0 | 100.0 | LC34100YD | 630 |

When units of the LC series are used as limited range adjustable transformers, the input voltage is the output voltage shown in the above chart and the output voltage is the input voltage shown in the above chart.

| OIL-COOLED | | | | | | |
|------------|--------|--------|------------|----------|--------|----------------|
| INPUT | | OUTPUT | | | TYPE | SHIP. WT. LBS. |
| VOLTS | CYCLES | VOLTS | MAX. AMPS. | MAX. KVA | | |
| 120 | 50-60 | 0-120 | 15.0 | 1.8 | O 116 | 32 |
| 120 | 50-60 | 0-140 | 15.0 | 2.1 | | |
| 120 | 50-60 | 0-140 | 30.0 | 4.2 | O 1126 | 100 |
| 240 | 50-60 | 0-240 | 6.0 | 1.4 | O 216 | 32 |
| 240 | 50-60 | 0-280 | 6.0 | 1.7 | | |
| 240 | 50-60 | 0-280 | 18.0 | 5.0 | O 1226 | 105 |

OTHER TYPES AVAILABLE ON SPECIAL ORDER

| EXPLOSION-PROOF | | | | | | |
|-----------------|--------|--------|------------|----------|--------|----------------|
| INPUT | | OUTPUT | | | TYPE | SHIP. WT. LBS. |
| VOLTS | CYCLES | VOLTS | MAX. AMPS. | MAX. KVA | | |
| 120 | 50-60 | 0-120 | 7.5 | 0.90 | X 116 | 47 |
| 120 | 50-60 | 0-140 | 7.5 | 1.0 | | |
| 120 | 50-60 | 0-140 | 12.0 | 1.7 | X-1126 | 142 |
| 240 | 50-60 | 0-240 | 3.0 | 0.72 | X 216 | 47 |
| 240 | 50-60 | 0-280 | 3.0 | 0.84 | | |
| 240 | 50-60 | 0-280 | 6.0 | 1.7 | X 1226 | 142 |

other variable voltage controls

SOLIDSTAT Variable Voltage Controls

Solid-state, semiconductor type variable a-c voltage controls for inductive or lagging power factor loads. Can be controlled by small indicating potentiometer, current feedback sensing or voltage sensing circuits.

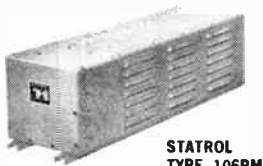


SOLIDSTAT TYPE CSR106

| SOLIDSTAT VARIABLE VOLTAGE CONTROLS | | | | | | |
|-------------------------------------|------------------|--------|--------------------------|----------|--------|----------------|
| INPUT | | OUTPUT | | | TYPE | SHIP. WT. LBS. |
| VOLTS | FREQUENCY CYCLES | VOLTS | MAX. AMPS. AT MAX. VOLTS | MAX. KVA | | |
| 120 | 60 | 0-115 | 50 | 6.0 | CSR106 | 21 |
| 240 | 60 | 0-230 | 50 | 12.0 | CSR212 | 21 |
| 120 | 60 | 0-115 | 100 | 12.0 | CSR112 | 42 |
| 240 | 60 | 0-230 | 100 | 24.0 | CSR224 | 42 |

STATROL Magnetic Amplifiers

Two-stage magnetic amplifiers controlled by small indicating potentiometer. Contains no moving parts, relays or tubes.



STATROL TYPE 106PM

| STATROL MAGNETIC AMPLIFIERS | | | | | | |
|-----------------------------|--------|--------|------------|----------|-------|----------------|
| INPUT | | OUTPUT | | | TYPE | SHIP. WT. LBS. |
| VOLTS | CYCLES | VOLTS | MAX. AMPS. | MAX. KVA | | |
| Single Phase | | | | | | |
| 120 | 60 | 0-120 | 25 | 3.0 | 103PM | 92 |
| | | | 50 | 6.0 | 106PM | 142 |
| | | | 83 | 10.0 | 110PM | 202 |
| | | | 125 | 15.0 | 115PM | 260 |

*Nominal zero (12 volts maximum)



THE SUPERIOR ELECTRIC COMPANY

Bristol, Connecticut, U.S.A.

SEE OTHER SUPERIOR ELECTRIC PRODUCT PAGES IN SECTIONS 2100 AND 3500

FLEXIFORMER[®] Packaged Transformer Primary

"THE
Do-it-yourself"

TRANSFORMER

- A SOURCE OF A-C VOLTAGE
- A CURRENT TRANSFORMER
- 150 VA AND 1000 VA TYPES



TYPE TP150

A FLEXIFORMER Packaged Transformer Primary is a self-contained toroidal primary coil encased in durable high impact plastic. Colored SUPERIOR 5-WAY Binding Posts for connections are integrally mounted. When used as a source of a-c voltage, the center opening permits hand-threading the correct number of secondary winding turns to obtain the desired output voltage. When used as a current transformer, the FLEXIFORMER winding is shunted by an ammeter which indicates the current flow in a conductor hand-threaded through the center opening. Can be portable or fastened permanently

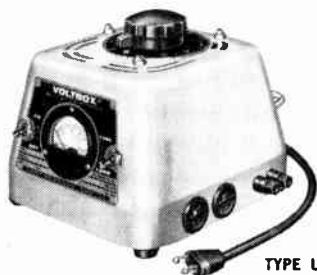
| AS A SOURCE OF A-C VOLTAGE | | | | | AS A CURRENT TRANSFORMER | | | | TYPE | SHIP. WT. LBS. |
|----------------------------|--------|---------|--------------------------|---------------------|--------------------------|---------------------|-----------------------|-----------------------|--------|----------------|
| NOMINAL PRIMARY VOLTS* | CYCLES | MAX. VA | VOLTS PER SECONDARY TURN | REG. AT MAX. OUTPUT | INPUT/OUTPUT RATIO | MAX. PRIMARY AMPS.† | MAX. SECONDARY AMPS.† | ACCURACY AT 60 CYCLES | | |
| 120 | 50/60 | 150 | 0.3 | 25% | 400/1 | 400 | 1.0 | 1% | TP150 | 6 |
| 120 | 50/60 | 1000 | 0.75 | 10% | 160/1 | 800 | 5.0 | 1% | TP1000 | 24 |

*Maximum 175 volts at 60 cycles, 145 volts at 50 cycles.

†Ratings for continuous duty. Double for intermittent duty but with reduced accuracy.

VOLTBOX[®]

A-C Power Supply



TYPE UC1M

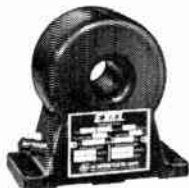
| INPUT VOLTS | OUTPUT | | | TYPE |
|-------------|--------|------------|----------|------|
| | VOLTS | MAX. AMPS. | MAX. KVA | |
| 120 | 0-140 | 7.5 | 1.0 | UC1M |
| 240 | 0-280 | 3.0 | 0.84 | UC2M |

OTHER TYPES AVAILABLE ON SPECIAL ORDER

Compact versatile instrument containing all the necessary components for tests involving a-c voltage: POWERSTAT Variable Transformer, direct reading voltmeter, three output receptacles, two SUPERIOR 5-WAY Binding Posts, "on-off" switch, line-load meter switch, fuse and 6-foot cord-plug. For 50/60 cycle service.

EXEL

Loading Reactor



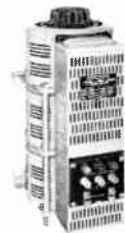
Type LR2

120 volts, 60 cycles
2.0 amperes at 120 volts
Inductive reactance 60 ohms
D-C resistance 4.0 ohms
Inductance 0.16 henrys

Designed to provide a convenient inductive load which can be made adjustable when used in conjunction with a POWERSTAT variable transformer. Used primarily for testing apparatus at various lagging power factors, i.e., to simulate an inductive load. Essentially consists of a gapped, strip-wound silicon steel toroid core, wire-wound and imbedded in epoxy compound. Entire assembly enclosed in a self-contained, durable, high grade phenolic case having two SUPERIOR 5-WAY binding posts for connections. At 60 cycles, the EXEL has essentially a linear current curve from 0 to nominal 2.0 amperes for continuous duty and up to 3.0 amperes for intermittent duty.

VARICELL[®]

adjustable
A-C/D-C Power Supply



Type V4050-3

A-C INPUT: { 240 v., 50/60 cycles, 3-phase (Primary delta connected)
480 v., 50/60 cycles, 3-phase (Primary wye connected)

A-C OUTPUT: { 0-25 v., 40 amps., 3-phase (Secondary delta connected)
0-50 v., 25 amps., 3-phase (Secondary wye connected)

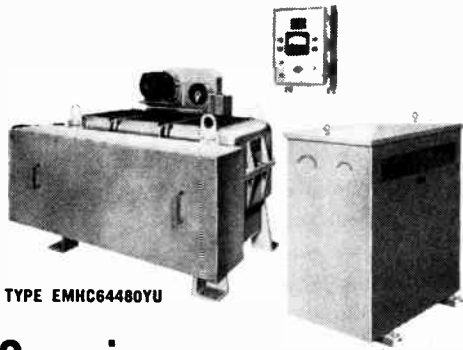
D-C OUTPUT: { 0-35 v., 50 amps. (Secondary delta connected)
0-60 v., 30 amps. (Secondary wye connected)

Provides a source of adjustable low a-c or d-c voltage from a-c power lines. Essentially consists of a 3-phase, low voltage POWERSTAT variable transformer combined with a static d-c power supply. Power supply uses highly efficient silicon rectifier cells connected for full-wave 3-phase operation. The a-c and d-c outputs cannot be simultaneously loaded or externally interconnected. The a-c output can be used either single or three-phase.

REQUEST BULLETINS AND DATA SHEETS giving complete information on
SOLIDSTAT Variable Voltage Controls,
STATROL Magnetic Amplifiers,
FLEXIFORMER Packaged Transformer Primaries,
VOLTBOX A-C Power Supplies,
VARICELL Adjustable A-C/D-C Power Supplies,
and EXEL Loading Reactors.



STABILINE® automatic VOLTAGE REGULATORS



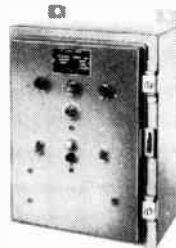
TYPE EMHC64480YU

EMHC series

For heavy-duty applications to 480 KVA. Feature zero waveform distortion, efficiency as high as 99%. Patented re-entry rings and helical coils on variable transformer component permit extremely fine voltage adjustment with very low voltage drop.

DC Regulator Control

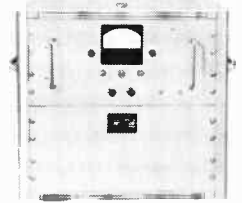
Provides automatically regulated d-c voltage adjustable from 25 to 100% of maximum with an input variation of $\pm 10\%$ in a-c line voltage at 50/60 cycles. Accuracy is $\pm 1\%$ of 100% voltage setting. Designed for use with a motor-driven POWERSTAT Variable Transformer and associated d-c components supplied by the user. Supply can be from either a single-phase full-wave or a 3-phase full-wave unfiltered source. Error detection requires either 1 milliampere, 300 kilohms or 10 milliamperes, 15 kilohms supplied from the d-c output.



TYPE CB5001

EMT series

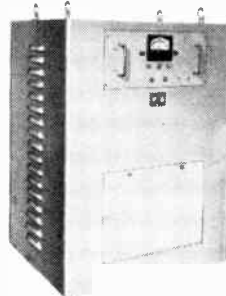
Electro Mechanical Transistorized types in ratings from 2 to 100 KVA. Control circuit is completely transistorized. Speed of response sufficiently fast for most applications.



TYPE EMT4115

EMS series

Electro Mechanical Transistorized types for single or three phase duty with ratings from 25 to 275 KVA. Several types available with individual line control for greater application flexibility.



TYPE EMS42100

EMK series

Electro Mechanical high speed, high accuracy assemblies in ratings of 2.5/5.0 KVA. Accuracy $\pm 1.0\%$ of nominal output voltage.



TYPE EMK4105R

RATINGS AND SPECIFICATIONS

EMT SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAXIMUM OUTPUT AMPERES | RATED OUTPUT KVA | CORRECTION RATE (sec./volt) | TYPE |
|---|---------------------|-----------------------------|------------------------|------------------|-----------------------------|------------------------|
| For 50/60 Cycle, Single Phase Operation | | | | | | |
| 115 | 95-135 | 110-120 | 17.5 | 2.0 | .075 | EMT4102† |
| | | 110-120 | 52.0 | 6.0 | .075 | EMT4106B _s |
| | | 110-120 | 104.0 | 12.0 | .15 | EMT4112B* _s |
| | | 110-120 | 130.0 | 15.0 | .125 | EMT4115 |
| 120 | 108-137 | 110-120 | 35.0 | 4.2 | 0.1 | EMT4104†† |
| | | | | | | EMT4104U†† |
| 230† | 195-255 | 220-240 | 32.5 | 7.5 | .083 | EMT4207 |
| | | | | | | 205-250 | 120.0 | 27.5 | .111 | EMT4228B |
| 240† | 228-256 | 220-240 | 35.0 | 8.4 | 0.1 | EMT4104†† |
| | | | | | | EMT4104U†† |
| | | | | | | EMT4104UT†† |
| 460 | 400-520 | 440-480 | 15.0 | 6.6 | .041 | EMT4407 |
| | | | | | | 440-480 | 40.0 | 17.6 | .041 | EMT4418 |
| For 50/60 Cycle, Three-Phase Operation | | | | | | |
| 230† | 195-255 | 220-240 | 25.0 | 10.0 | .083 | EMT6210Y |
| | | | 38.0 | 15.0 | .083 | EMT6215Y |
| | | | 50.0 | 20.0 | .083 | EMT6220Y |
| | | | 113.0 | 45.0 | .25 | EMT6245Y |
| | | | 175.0 | 70.0 | .25 | EMT6270D |
| 460 | 400-520 | 440-480 | 16.0 | 12.5 | .041 | EMT6412Y |
| | | | 22.0 | 17.5 | .041 | EMT6417Y |
| | | | 33.0 | 25.0 | .041 | EMT6425Y |
| | | | 66.0 | 50.0 | .125 | EMT6450Y |
| | | | 100.0 | 75.0 | .125 | EMT6475Y |
| 460 | 428-500 | 440-480 | 131.0 | 100.0 | .188 | EMT64100Y |

See Footnotes on Facing Page

EMS SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAXIMUM OUTPUT AMPERES | RATED OUTPUT KVA | CORRECTION RATE (sec./volt) | TYPE |
|--|---------------------|-----------------------------|------------------------|------------------|-----------------------------|--------------|
| For 60 Cycle, Single Phase, 2 Wire, Single Control Operation | | | | | | |
| 115 | 103.5-126.5 | 110-120 | 833 | 100 | .65 | EMS41100 |
| 230** | 218.5-241.5 | 220-240 | 435 | 100 | .22 | EMS42100** |
| For 50/60 Cycle, Single Phase, 3 Wire, Individual Line Control Operation | | | | | | |
| 240/120 | 204-276/102-138 | 230-250/115-125 | 104 | 25 | .06/.03 | EMS4225 |
| | | 230-250/115-125 | 250 | 60 | .06/.03 | EMS4260 |
| | | 228-252/114-126 | 220-240/110-120 | 417 | 100 | .21/.10 | EMS42100† |
| For 50/60 Cycle, Three Phase, Single Control Operation | | | | | | |
| 230** | 203-257 | 220-240 | 339 | 135 | .28 | EMS62135Y** |
| 460 | 445-495 | 440-480 | 230 | 180 | .30 | EMS64180Y |
| | | | 347 | 275 | .30 | EMS64275Y |
| For 50/60 Cycle, Three Phase, Individual Line Control Operation | | | | | | |
| 208/120 | 177-239/102-138 | 191-217/115-125 | 250 | 90 | .08/.14 | EMS16290Y |
| | | 191-217/115-125 | 525 | 190 | .22/.37 | EMS162190Y†† |

EMK SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAXIMUM OUTPUT AMPERES | RATED OUTPUT KVA | CORRECTION RATE (sec./volt) | TYPE |
|---|---------------------|-----------------------------|------------------------|------------------|-----------------------------|----------|
| For 50/60 Cycle, Single Phase Operation | | | | | | |
| 115 | 95-135 | 110-120 | 21.5 | 2.5 | .02 | EMK4105† |
| | | 110-120 | 43.0 | 5.0 | .04 | |

EMHC SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAXIMUM OUTPUT AMPERES | RATED OUTPUT KVA | CORRECTION RATE (sec./volt) | TYPE |
|--|---------------------|-----------------------------|------------------------|------------------|-----------------------------|-------------|
| For 50/60 Cycle, Three Phase Operation | | | | | | |
| 460 | 380-520 | 440-480 | 300 | 240 | .28 | EMHC64240YU |
| | | | 600 | 480 | .28 | EMHC64480YU |



THE SUPERIOR ELECTRIC COMPANY

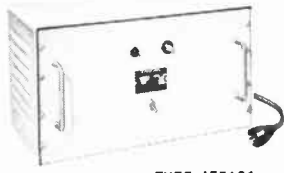
Bristol, Connecticut, U.S.A.

SEE OTHER SUPERIOR ELECTRIC PRODUCT PAGES IN SECTIONS 2100 AND 3500

STABILINE[®] automatic VOLTAGE REGULATORS

IE series

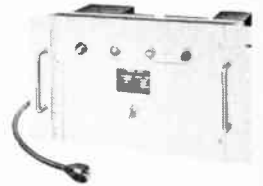
Instantaneous Electronic types have no moving parts. Hold output voltage to within $\pm 0.1\%$ for wide line variations, within $\pm 0.15\%$ for any load current change or power factor change from .5 lagging to unity.



TYPE IE5101

TM series

Tubeless Magnetic types have no tubes, transistors or moving parts. Response time for ordinary line and/or load changes is within $\frac{1}{2}$ second; accuracy is within a 1.0 volt bandwidth. Waveform distortion is 4% or less.



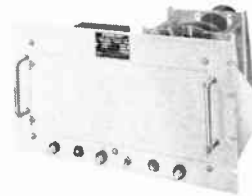
TYPE TM7101R

IET series

Instantaneous Electronic Transistorized types in ratings from .25 to 1.0 KVA. Output voltage remains within a 0.5 volt bandwidth for any and all variations in line voltage, load current and load power factor.



TYPE IET51002



TYPE EM4108MCR

MILITARIZED

Standard Instantaneous Electronic, Electro Mechanical and Electro Mechanical Transistorized types that meet requirements of applicable military specifications. Type EMTH41007MH is $3\frac{1}{2} \times 6 \times 4\frac{1}{2}$ "; others fit standard 19" relay rack.

MR series

Provide the constant RMS voltage required to maintain proper tube filament temperature. Response time will not exceed 0.6 second under most adverse line or load changes.



TYPE MR6F015

400 CYCLE

Instantaneous Electronic types in ratings of 1.0 and 5.0 KVA. Maximum waveform distortion is 3.5% under all input line and most load conditions. Other 400 cycle types listed under MR Series and Militarized types.



TYPE IEH5101R

RATINGS AND SPECIFICATIONS

IE SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAX. OUTPUT AMPS. | RATED OUTPUT KVA | TYPE | | | |
|------------------------------|---------------------|-----------------------------|------------------------------|------------------|----------|-----|-----|----------|
| For 60 - 10% Cycle Operation | | | | | | | | |
| 115 | 95-135 | 110-120 | 2.2 | 0.25 | IE51002* | | | |
| | | | 4.5 | 0.5 | IE51005* | | | |
| | | | 8.5 | 1.0 | IE5101* | | | |
| | | | 22.0 | 2.5 | IE5102* | | | |
| | | | 43.5 | 5.0 | IE5105* | | | |
| 230 | 195-255 | 220-240 | 87.0 | 10.0 | IE5110 | | | |
| | | | 1.1 | 0.25 | IE52002* | | | |
| | | | 2.2 | 0.5 | IE52005* | | | |
| | | | 4.5 | 1.0 | IE5201* | | | |
| | | | 11.0 | 2.5 | IE5202* | | | |
| 230 | 195-255 | 220-240 | 22.0 | 5.0 | IE5205* | | | |
| | | | 43.5 | 10.0 | IE5210 | | | |
| | | | For 50 - 10% Cycle Operation | | | | | |
| | | | 115 | 95-135 | 110-120 | 4.5 | 0.5 | IE51005* |
| | | | | | | 8.5 | 1.0 | IE5101* |
| 43.5 | 5.0 | IE5105* | | | | | | |
| 2.2 | 0.5 | IE52005* | | | | | | |
| 4.5 | 1.0 | IE5201* | | | | | | |
| 230 | 195-255 | 220-240 | 11.0 | 2.5 | IE5202* | | | |
| | | | 22.0 | 5.0 | IE5205* | | | |
| | | | 4.5 | 0.5 | IE51005* | | | |
| | | | 8.5 | 1.0 | IE5101* | | | |
| | | | 43.5 | 5.0 | IE5105* | | | |

IET SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAX. OUTPUT AMPS. | RATED OUTPUT KVA | TYPE |
|-----------------------------|---------------------|-----------------------------|-------------------|------------------|----------|
| For 60 - 5% Cycle Operation | | | | | |
| 115 | 95-135 | 110-120 | 2.2 | 0.25 | IE51002* |
| | | | 4.5 | 0.5 | IE51005* |
| | | | 8.5 | 1.0 | IE5101* |

TM SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAX. OUTPUT AMPS. | RATED OUTPUT KVA | TYPE |
|-----------------------------|---------------------|-----------------------------|-------------------|------------------|----------|
| For 60 - 5% Cycle Operation | | | | | |
| 115 | 95-135 | 110-120 | 8.5 | 1.0 | TM7101* |
| | | | 43.5 | 5.0 | TM7105B* |

MR SERIES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | FREQUENCY (cycles) | LOAD RANGE IN AMPERES | RATED OUTPUT | TYPE |
|------------------------|---------------------|-----------------------------|--------------------|-----------------------|--------------|----------|
| 6.3 | 120V RMS | 10 | 60 $\pm 10\%$ | 8.0-25.0 | 150 VA | MR6F015 |
| 6.3 | 120V RMS | 10 | 400 $\pm 5\%$ | 2.5-8.2 | 50 VA | MRH6F005 |

IEH 400 CYCLE TYPES

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAX. OUTPUT AMPS. | RATED OUTPUT KVA | TYPE |
|------------------------------|---------------------|-----------------------------|-------------------|------------------|----------|
| For 400 - 5% Cycle Operation | | | | | |
| 115 | 95-130 | 110-120 | 8.5 | 1.0 | IEH5101R |
| | | | 43.5 | 5.0 | IEH5105* |

MILITARIZED TYPES IE5101MR AND IEH5101MR

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAX. OUTPUT AMPS. | RATED OUTPUT KVA | TYPE |
|--|---------------------|-----------------------------|-------------------|------------------|-----------|
| For 60 - 5% Cycle, Single Phase Operation | | | | | |
| 120 | 105-135 | 115-125 | 8.3 | 1.0 | IE5101MR |
| For 400 - 5% Cycle, Single Phase Operation | | | | | |
| 120 | 105-135 | 115-125 | 8.3 | 1.0 | IEH5101MR |

MILITARIZED TYPES EM4108MCR AND EMTH41007MH

| NOMINAL OUTPUT VOLTAGE | INPUT VOLTAGE RANGE | OUTPUT VOLTAGE (adjustable) | MAXIMUM OUTPUT AMPERES | RATED OUTPUT KVA | CORRECTION RATE (sec./volt) | TYPE |
|---|---------------------|-----------------------------|------------------------|------------------|-----------------------------|-------------|
| For 45 60 Cycle, Single Phase Operation | | | | | | |
| 120 | 105-135** | 115-125* | 66.6 | 8.0 | 0.1 | EM4108MCR |
| For 300 420 Cycle, Single Phase Operation | | | | | | |
| 115 | 103.5-126.5 | - | 6.0 | 0.63 | 0.23 | EMTH41007MH |

FOOTNOTES (all charts) *Also available as rack models (suffix R when ordering) **For 60 cycle operation only. *Can also be operated on an input range of 95 to 135 volts with a rating of 52.0 amperes, 6.0 KVA and a correction rate of .075 seconds per volt. **Can also be operated at nominal 208 volts output with proportional changes in input and output voltage ranges. †Units can be converted for 208 volt operation by simple tap changes. Input and output voltage ranges change in proportion. ††At 120 volt output. Shifts proportionally with output voltage setting. ‡Also available as rack (suffix R when ordering) or wall mounted (suffix W when ordering) models.

FOR MORE DETAILED INFORMATION about ratings, specifications and technical data on STABILINE automatic voltage regulators, request either the complete STABILINE literature file or individual bulletins describing the series that meet your particular requirements.



TECHNICAL APPARATUS BUILDERS

"TABTRON" "SILTAB" RECTIFIERS
Engineered for Industry
Since 1945!

FOR ALL YOUR DC POWER REQUIREMENTS

"TECHNICAL APPARATUS BUILDERS" mfr. Power Rectifiers to your specs. From one amp up to and above 1000 amps, convection or fan cooled, single or 3 phase. "NEMA" & Jan. Specs.

SILTAB

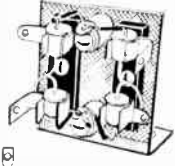
"SILTAB" SILICON JUNCTION FINNED STACKS -65°C TO +150°C CONVECTION COOLED

Single Phase Full Wave Bridge

| DC AMP | 36VAC 32VDC | 70VAC 62VDC | 140VAC 125VDC | 280VAC 250VDC |
|--------|-------------|-------------|---------------|---------------|
| 1,2 | JA36 2.75 | JA70 3.15 | JA140 3.90 | JA280 5.75 |
| 2 | JE36 4.75 | JE70 5.00 | JE140 7.60 | JE280 9.90 |
| 3 | JF36 5.45 | JF70 6.30 | JF140 7.90 | JF280 19.15 |
| 6 | JJ36 8.60 | JJ70 11.90 | JJ140 16.15 | JJ280 32.00 |
| 12 | JL36 12.45 | JL70 18.15 | JL140 23.00 | JL280 40.75 |
| 24 | JN36 16.45 | JN70 22.3 | JN140 33.45 | JN280 46.30 |
| 35 | JR36 24.90 | JR70 32.75 | JR140 79.60 | JR280 99.45 |
| 50 | JS36 31.00 | JS70 38.00 | JS140 68.00 | JS280 108.00 |
| 70 | JU36 36.00 | JU70 45.45 | JU140 72.00 | JU280 126.00 |
| 160 | JO36 45.00 | JO70 60.00 | JO140 81.00 | JO280 144.90 |
| 240 | JY36 75.00 | JY70 99.00 | JY140 153.90 | JY280 243.75 |

Center Tap Full Wave

| 36VCT 16VDC | 72VCT 32VDC |
|-------------|-------------|
| SA36 2.60 | SA72 3.00 |
| SE36 3.60 | SE72 4.30 |
| SF36 4.75 | SF72 6.00 |
| SJ36 6.00 | SJ72 10.75 |



SELENIUM-SILICON
GERMANIUM, COP-OW
ALL GOV'T TYPES
EXACT
REPLACEMENTS
"FEDERAL"
"CHATHAM, KOTRON,
VICKERS, MALLORY
SCA, IT&T, 8&L
SELECTRON, G.E. S.T,
WSTGHSE, R&R, IRC,
SYNTRON, FANSTEEL
LOW PRICES!
QUICK DELIVERY
JAN & NEMA SPECS

"Surgtab" Transient Peak V-Surge Protectors!

| RMS VOLTS | PEAK VOLTS | SINGLE UNIT | DUAL UNIT |
|-----------|------------|-------------|-----------|
| ST18 | 25 | .90 | 1.75 |
| ST26 | 36 | .90 | 1.80 |
| ST40 | 56 | .90 | 1.90 |
| ST50 | 70 | 1.15 | 2.15 |
| ST60 | 84 | 1.15 | 2.15 |
| ST125 | 175 | 1.15 | 2.15 |
| ST150 | 210 | 1.30 | 2.60 |
| ST170 | 238 | 1.45 | 2.75 |
| ST225 | 315 | 1.60 | 2.90 |
| ST250 | 350 | 1.75 | 3.30 |

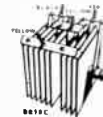
OTHER SIZES & TYPES TO YOUR SPECS.

Selenium "Teksel" Rectifier Stacks—All Types! Sizes & Current Convection Cooled Ratings! Full Wave Bridge

| DC AMP | 18VAC 14VDC | 36VAC 28VDC | 54VAC 42VDC | 72VAC 58VDC | 130VAC 100VDC | 144VAC 118VDC | 266VAC 217VDC | F.W.C.T. 26 V.C.T. 12 V.D.C. |
|--------|-------------|-------------|-------------|-------------|---------------|---------------|---------------|------------------------------|
| 0.5 | BV18 1.00 | BV36 1.45 | BV54 2.30 | BV72 3.85 | BV130 4.90 | BV144 5.45 | BV266 9.75 | CV26 1.30 |
| 1 | BA18 1.40 | BA36 2.15 | BA54 3.00 | BA72 4.90 | BA130 7.15 | BA144 8.00 | BA266 15.75 | CA26 1.75 |
| 2 | BE18 2.00 | BE36 2.90 | BE54 4.45 | BE72 6.25 | BE130 9.30 | BE144 12.45 | BE266 19.45 | CE26 2.15 |
| 3 | BF18 2.60 | BF36 3.90 | BF54 5.75 | BF72 8.60 | BF130 13.00 | BF144 17.25 | BF266 27.30 | CF26 3.00 |
| 4 | BG18 3.50 | BG36 6.15 | BG54 9.60 | BG72 10.90 | BG130 16.75 | BG144 21.90 | BG266 47.60 | CG26 Query |
| 6 | BJ18 4.40 | BJ36 8.30 | BJ54 11.45 | BJ72 14.00 | BJ130 21.90 | BJ144 25.15 | BJ266 63.45 | CJ26 3.75 |
| 10 | BK18 6.35 | BK36 10.75 | BK54 17.60 | BK72 18.15 | BK130 29.00 | BK144 33.60 | BK266 75.15 | CK26 4.30 |
| 12 | BL18 8.00 | BL36 11.45 | BL54 21.95 | BL72 25.60 | BL130 41.75 | BL144 47.75 | BL266 86.75 | CL26 6.00 |
| 15 | BW18 10.30 | BW36 12.90 | BW54 22.75 | BW72 32.75 | BW130 52.60 | BW144 48.90 | BW266 106.90 | CW26 7.00 |
| 20 | BM18 12.45 | BM36 20.45 | BM54 24.30 | BM72 40.90 | BM130 75.90 | BM144 69.60 | BM266 152.00 | CM26 8.00 |
| 20 | BN18 14.75 | BN36 29.15 | BN54 35.00 | BN72 48.30 | BN130 80.90 | BN144 90.00 | BN266 162.30 | CN26 10.30 |
| 30 | BQ18 19.00 | BQ36 36.30 | BQ54 53.60 | BQ72 66.45 | BQ130 117.30 | BQ144 125.75 | BQ266 249.60 | CQ26 14.90 |
| 36 | BR18 23.75 | BR36 47.15 | BR54 69.30 | BR72 81.00 | BR130 132.00 | BR144 153.90 | BR266 299.45 | CR26 16.45 |
| 50 | BS18 33.45 | BS36 63.75 | BS54 121.50 | BS72 108.75 | BS130 172.45 | BS144 207.60 | BS266 398.90 | CS26 Query |

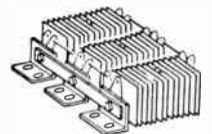
Three Phase Full Wave Bridge

| DC AMP | 36VAC 42VDC | 130VAC 160VDC | 234VAC 282VDC | 420VAC 460VDC |
|--------|-------------|---------------|---------------|---------------|
| 1 | PA36 4.90 | PA130 17.90 | PA234 33.75 | PA420 63.20 |
| 2 | PE36 7.45 | PE130 21.75 | PE234 39.90 | PE420 66.90 |
| 4 | PG36 9.90 | PG130 33.15 | PG234 62.15 | PG420 99.75 |
| 6 | PJ36 12.90 | PJ130 46.90 | PJ234 81.75 | PJ420 108.60 |
| 10 | PK36 16.60 | PK130 62.45 | PK234 116.00 | PK420 197.45 |
| 12 | PL36 18.45 | PL130 66.60 | PL234 132.15 | PL420 212.60 |



24-HOUR SERVICE ON REPLACEMENTS!

WE CAN SUPPLY EXACT EQUALS ON ALL MAKES AND TYPES OF RECTIFIERS — SIZE, TYPE CURRENT TO YOUR SPECIFICATIONS

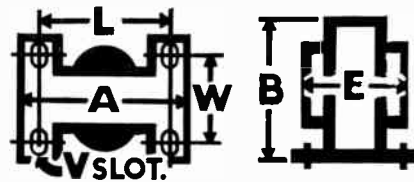


RECTIFIER "TABTRON" TRANSFORMERS

F.W.B., C.T. & H.W.—ISOLATED PRI. & SECD!

Sec'd Volts (Dual +0-9-15-18 & 0-9-15-18)†
Series sec'ds = 0-3-6-9-12-15-18-21-24-27-30-33-36 volts
Pri = 115VAC 50 to 800 cys./to; (*115 & 230VAC)

| | |
|--|---------|
| TR400R 2x16V @ 1 Amp each Sec'd Wndg(2) | \$ 3.45 |
| †TR4001 @ 1 Amp per each Sec'd Wndg(2) | 4.60 |
| †TR4002 @ 2 Amp per each Sec'd Wndg(2) | 6.30 |
| †TR4003 @ 5 Amp per each Sec'd Wndg(2) | 9.00 |
| †TR4005 @ 12 Amp per each Sec'd Wndg(2) | 16.15 |
| †TR4006 @ 24 Amp per each Sec'd Wndg(2) | 32.00 |
| *†TR4008 @ 100 Amp per each Sec'd Wndg(2) | 125.00 |
| *TR4009 Sec'd 165, 160, 150, 125 @ 5Amps | 54.00 |
| *TR4010 Sec'd 165V, 160, 150, 125 @ 10Amps | 89.75 |
| *TR4011 Sec'd 330V, 320, 300, 250 @ 5Amps | 79.00 |
| *TR4012 Sec'd 330V, 320, 300, 250 @ 10Amps | 128.00 |
| 56V. Dual Sec'd(2) 0-14-28; Parallel 28V ct @ 2X Cur | |
| TR4013 @ 2 Amps per each Sec'd Wndg(2) | 8.80 |
| TR4014 @ 4 Amps per each Sec'd Wndg(2) | 12.50 |
| TR4015 @ 6 Amps per each Sec'd Wndg(2) | 20.00 |
| TR4016 @ 12 Amps per each Sec'd Wndg(2) | 29.00 |



"TABTRON" UNIVERSAL RECTIFIER CHOKES

| | |
|--|-------|
| CR6001 1 Amp 0.1Henrys / 1.4ohm I.R. | 2.90 |
| CR6002 2 Amp 0.1Henrys 0.67ohm I.R. | 5.15 |
| CR6003 5 Amp 0.07Henrys 0.6ohm I.R. | 9.00 |
| CR6008 10 Amp 0.01Henrys 0.1ohm I.R. | 5.45 |
| CR6004 12 Amp 0.015Henrys 0.1ohm I.R. | 11.45 |
| CR6005 24 Amp 0.005Henrys 0.025ohm I.R. | 14.90 |
| CR6006 50 Amp 0.001Henrys 0.001ohms I.R. | 43.00 |
| CR6009 100 Amp 0.0005Henrys 0.005ohms I.R. | 53.90 |

"TABPOST" Heavy Duty *Five Way Binding Posts

| Type | Amps | 1 to 9 | 10/49 | 50/999 |
|-------|------|--------|-------|--------|
| BP8* | 8 | .16@ | .14@ | .12@ |
| BP10* | 10 | .20@ | .18@ | .15@ |
| BP30* | 30 | .33@ | .27@ | .24@ |
| BP60* | 60 | 1.50@ | 1.24@ | 1.00@ |
| BP100 | 100 | 2.10@ | 1.80@ | 1.50@ |

"TABCAP" Electrolytic Hi-Amp Filter Capacitors

| Type | MFD | D.C. VOLTAGE | Price |
|---------|------|--------------|--------|
| CE152M* | 2000 | 15 | \$1.00 |
| CE156*A | 6000 | 15 | 2.00 |
| CE505C* | 500 | 50 | 1.00 |
| CE502M | 2000 | 50 | 3.30 |
| CE2005C | 500 | 200 | 3.00 |
| CE4004C | 400 | 300 | 3.00 |

BRACKETS FOR CAPACITORS 25c EACH

We reserve the right to change specifications and prices without notice.

TABTRON

TECHNICAL APPARATUS BUILDERS

Write for all DC Power Requirements
Eng. Dept. Specialists in Design, Mfgs. of D.C.
Power Supplies. "TABTRON"®, "TABPAK"®,
"REG-O-TAB"®, "REG-O-VAC"®, "TABSTAT"®

PACKAGED DC POWER ENGINEERED FOR INDUSTRY

"TABTRON" VARIABLE DC POWER SUPPLIES, COMPLETELY BUILT, DESIGNED FOR CONTINUOUS SERVICE, READY TO USE. "VARIAC"® TYPE VARIABLE TRANSFORMER, ISOLATION RECTIFIER TRANSFORMER, FULL WAVE BRIDGE RECTIFIER, METERS, VOLT AND AMP., PILOT LIGHT, SWITCH, TERMINALS AND FUSE. CABINET OR RACK MTD (RP). STD 115V/60CY INPT. OTHER INPTS TO ORDER.

| Type | Description | D.C. Volts & Amps | Ripple/Regulation | Code Word | Ship. Wgt. | Price | Fig. |
|------------|---|-------------------|-------------------|-----------|------------|-------|------|
| T12V15ARM | 0 to 12VDC @ 15Amp/1% Ripple, ±5% Regulation | | | CAMCA | 50 LBS | \$133 | 2 |
| T12V25AC | 0 to 12VDC @ 25Amp @ 1% Ripple @ 10 Amps | | | AGAIN | 50 LBS | 144 | 2 |
| T12V100ASJ | 0 to 12VDC @ 100Amp/up to 150Amp Int. | | | AMEER | 196 LBS | 299 | 3 |
| T14V20ACC | 0 to 14VDC @ 20Amp @ 1% Ripple 140Mv Max. | | | ABYSU | 60 LBS | 124 | 2 |
| T14V30ARM | 0 to 14VDC @ 30Amp/1% Ripple, ±5% Regulated | | | CRYPT | 100 LBS | 288 | 2 |
| T14V40ACT | 0 to 14VDC @ 40Amp/0.1% Ripple 14Mv Max. | | | AGINN | 80 LBS | \$243 | 2 |
| T16V5ACE | 0 to 16VDC @ 5Amp/0.5% Ripple 80Mv Max. | | | AMBAS | 20 LBS | 39 | 1 |
| T16V10E | 0 to 16VDC @ 10Amp/Int up to 18 Amp | | | AMBER | 30 LBS | 43 | 1 |
| T16V10ACC | 0 to 16VDC @ 10Amp/0.5% Ripple 80Mv at 5 Amps | | | AGTEA | 38 LBS | 57 | 1 |
| T16V25E | 0 to 16VDC @ 25Amps | | | AMBIT | 48 LBS | 93 | 1 |
| T28V5A2CC | 0 to 28VDC @ 5Amp/.01% Ripple 3Mv Max. | | | ABAME | 30 LBS | \$125 | 1 |
| T28V12A2CC | 0 to 28VDC @ 12Amp/.01% Ripple 3Mv Max. | | | AMBLE | 90 LBS | 198 | 2A |
| T28V24A2CC | 0 to 28VDC @ 24Amp/1% Ripple 30Mv Max. | | | ABUTE | 152 LBS | 287 | 2A |
| LT32V5A | 0 to 32V(AC&DC) @ 5Amp/0.5% Ripple 160Mv Max. | | | VARIT | 30 LBS | 89 | 1 |
| T32V5A | 0 to 32VDC @ 5Amp | | | AB8RE | 28 LBS | 59 | 1 |
| T32V5ACC | 0 to 32VDC @ 5Amp/0.5% Ripple 160Mv Max. | | | ABDIC | 39 LBS | \$ 79 | 1 |
| T32V12A | 0 to 32VDC @ 12Amp | | | ABETS | 50 LBS | 120 | 1 |
| T32V12ACC | 0 to 32VDC @ 12Amp/0.5% Ripple 160Mv Max. | | | ABIDE | 81 LBS | 169 | 2A |
| T32V15ARM | 0 to 32VDC @ 15Amp/1% Ripple, ±5% Regulation | | | CLOCK | 50 LBS | 207 | 2A |
| T32V24A | 0 to 32VDC @ 24Amp | | | ABLED | 95 LBS | 174 | 2 |
| T32V24ACC | 0 to 32VDC @ 24Amp/0.5% Ripple 160Mv Max. | | | ABUND | 100 LBS | \$234 | 2A |
| T32V30ARM | 0 to 32VDC @ 30Amp/1% Ripple, ±5% Regulated | | | COLOR | 95 LBS | 369 | 2A |
| T32V50A | 0 to 32VDC @ 50Amp | | | ABYSM | 120 LBS | 300 | 3 |
| T32V50ACC | 0 to 32VDC @ 50Amp/1% Ripple 320 Mv Max. | | | ACADE | 196 LBS | 372 | 3 |
| T32V60ARM | 0 to 32VDC @ 60Amp/1% Ripple, ±5% Regulated | | | CUNEO | 220 LBS | 576 | 3 |
| T48V5ACC | 0 to 48V @ 5Amp/1% Ripple 480Mv. Max. | | | AMEND | 110 LBS | \$149 | 2A |
| T48V10ACC | 0 to 48V @ 10Amp/0.5% Ripple 240Mv Max. | | | ATELE | 145 LBS | 175 | 2A |
| T130V2A | 0 to 130V @ 2Amp | | | AMIAB | 45 LBS | 135 | 2 |
| T130V2ACC | 0 to 130V @ 2Amp 1% Ripple 1.3V Max. | | | AMYEL | 60 LBS | 159 | 2 |
| T130V5A | 0 to 130V @ 5Amp | | | ACRES | 75 LBS | 234 | 2 |
| T120V5ACC | 0 to 120V @ 5Amp/1% Ripple 1.2V Max. | | | ACEDA | 150 LBS | \$289 | 2A |
| T130V10A | 0 to 130V @ 10Amp | | | ACMES | 180 LBS | 299 | 2A |
| T130V10ACC | 0 to 130V @ 10Amp/1% Ripple 1.3V Max. | | | ACORN | 230 LBS | 390 | 3 |
| T220V10A | 0 to 220V @ 10Amp | | | ACROM | 231 LBS | 395 | 3 |
| T220V10ACC | 0 to 220V @ 10Amp/1% Ripple 2.2V Max. | | | ACREP | 298 LBS | 486 | 3 |



Fig. 1
(73/4H x 6 1/2W x 12D)



Fig. 2 9H x 15W x 7D
Fig. 2A Rack Mtd. & Cob.
10 1/2H x 21 1/2 W x 15D



Fig. 8

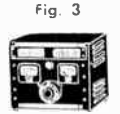


Fig. 3

19 1/4H x 21 1/2W
x 15D



Fig. 7



Fig. 5

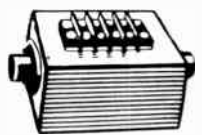


Fig. 10

LO-PRICED BASIC DC SUPPLIES FOR BENCH, OR INBUILT USE

| | | | | | |
|-----------|--|-------|---------|-------|---|
| B12V15ACM | 12VDC @ 15Amp/.5%/60Mv Ripple, ±5% Regulated | CRISP | 52 LBS | \$130 | 5 |
| B12V15ARM | 12VDC @ 15Amp/3% Ripple, ±5% Regulated | CANAL | 48 LBS | 99 | 5 |
| B12V24A | 12VDC @ 24Amp | ADJON | 65 LBS | 97 | 5 |
| B12V24ACC | 12VDC @ 24Amp/1% Ripple 120Mv Max | ADJUR | 78 LBS | 145 | 5 |
| B28V1AC | 28VDC @ 1Amp/1% Ripple 280Mv Max | ACOOT | 7 LBS | 16 | 5 |
| B28V5A | 28VDC @ 5Amp | ACOUS | 20 LBS | 43 | 5 |
| B28V12A | 28VDC @ 12Amp | ACCEN | 49 LBS | \$ 90 | 5 |
| B28V15ARM | 28VDC @ 15Amp/3% Ripple 280Mv, ±5% Regulated | CAJOL | 48 LBS | 162 | 5 |
| B28V24A | 28VDC @ 24Amp | ADDLE | 90 LBS | 139 | 5 |
| B28V24ACC | 28VDC @ 24Amp/1% Ripple 280Mv Max | ADAGE | 125 LBS | 187 | 5 |
| B28V30ARM | 28VDC @ 30Amp/3% Ripple 280Mv, ±5% Regulated | COPYS | 98 LBS | 333 | 5 |

LO-PRICED RELAY-PAKS CASED FILTERED 24-28VDC

| | | | | | |
|--------|--|-------|----------|-------|---|
| B12VER | 12-16VDC @ 2Amp/Filtered & Cased | AMENA | 2.5 LBS | \$ 10 | 8 |
| B12VGR | 12-16VDC @ 4Amp/Filtered & Cased | ALLEY | 4 LBS | 19 | 8 |
| B12VKM | 12VDC @ 8Amp/5% Ripple, ±5% Regulated | CAJON | 46 LBS | 50 | 5 |
| B24VAR | 24VDC @ 1Amp/Filtered & Cased | AMEND | 2.3 LBS | 10 | 8 |
| B24VER | 24-28VDC @ 2Amp/Filtered & Cased | ALEAD | 4 LBS | \$ 15 | 8 |
| B24VET | 24-28VDC @ 2Amp/.05% Ripple 10Mv Cased | ALBET | 4 LBS | 30 | 8 |
| B24VJR | 24-28VDC @ 6Amp/Filtered & Cased | ALIMB | 10.5 LBS | 29 | 7 |
| B24VLM | 24VDC @ 12Amp/5% Ripple, 5% Regulated | CANDY | 48 LBS | 89 | 5 |

BATTERY CHARGERS TRUCK-AUTO-INDUSTRIAL-AERO-MARINE! WRITE FOR SEMI & FULL AUTOMATIC UNITS!

| | | | | | |
|-------------|---|-------|--------|-------|---|
| BC612VT5A | 6 & 12V @ up to 5Amp Full Charge & Trickle | AERYS | 11 LBS | \$ 27 | 7 |
| BC612VT35A | 6 & 12V @ up to 40Amp/Full Charge & Trickle | AERIA | 48 LBS | 54 | 5 |
| BC12/28VT5A | 12 & 28V @ up to 5Amp/Full Charge & Trickle | AEPOR | 11 LBS | 39 | 7 |

"TABSTAT"® TRANSISTORIZED INVERTERS & CONVERTERS! WRITE FOR OTHER TYPES VOLTS, AMPS FREQ.!

| | | | | | |
|---------|--|-------|-------|-------|----|
| TR1250B | 12Volts Inpt 500 & 250VDC @ 200Ma | RANGE | 5 LBS | \$ 38 | 10 |
| TR1260B | 12 Volts Inpt 600 & 300VDC @ 200Ma | RINGS | 5 LBS | 48 | 10 |
| TPC200W | 12Volts Inpt 115V at 200 Watts at 60Cys (SQ/W) | RATER | 9 LBS | 32 | 10 |

"MAGREGPAK"® REGULATED ±1% AT 2S to 28 VOLTS

| | | | | | |
|-------------|------------------------------|-------|---------|-------|----|
| MRT32V25ACC | 0 to 32VDC @ 25Amp/1% Ripple | AFRAY | 125 LBS | \$396 | 2A |
| MRT32V50ACC | 0 to 32VDC @ 50Amp/1% Ripple | AFFET | 225 LBS | 777 | 3 |

"TRANSISTORIZED" REGULATED/*VARIABLE, †SHORTPRUF!

| | | | | | |
|--------------|--|-------|---------|-------|---|
| *VT14V1AQ | 0 to 14VDC @ 1Amp (Non-Regulated) | THRIT | 6 LBS | \$ 18 | 8 |
| *VT2.5V.25AQ | 0.2 to 2.5VDC @ 250Ma (Tunnel Diode P/S) L&LR | TUNEL | 6 LBS | 27 | 8 |
| †VT15V3AQ | 0 to 15VDC @ 3A Reg 5% Rip 0.2% L&LR | TIME | 15 LBS | 69 | 1 |
| †*VT816VQ | 0 to 8V @ 8A or 0 to 16V @ 5A Int 20Amp/.01% Rip 1.6Mv | TELCO | 16 LBS | 58 | 1 |
| †*VT612HSQ | 6 or 12VDC @ 40Amp @ 1% Reg & 1% Ripple | TRANE | 189 LBS | 639 | 3 |
| †*VT20V5AQ | 0 to 20V @ 5Amp Reg & Rip/40Mv/0.2% L&LR | TAME | 90 LBS | \$399 | Q |
| †*VT28V4AQ | 0.5 to 30VDC @ 4Amp/1% Reg/100Mv L&LR | TRADE | 35 LBS | 162 | 2 |
| †*VT28V2AQ | 0.5 to 28VDC @ 2Amp/0.5% Reg/Rip 100Mv L&LR | TREAT | 34 LBS | 99 | 1 |
| †P25V.5AQ | 25VDC @ 500Ma/Rip & Reg 100Mv/0.4% L&LR | TAMES | 12 LBS | 49 | 7 |
| †P28V3AQ | 28VDC @ 3Amp/Rip & Reg 280Mv L&LR | TALLY | 32 LBS | 66 | 7 |

TRANSIENT INDICATOR "TIQ"! CIRCUIT BREAKER "CBQ"

| | | | | | |
|-----|--|-------|-------|-------|---|
| TIQ | "Transtab"® Transient Peak V Indicator up to 2000V | PULSE | 8 LBS | \$150 | 1 |
| CBQ | "Voltab"® Circuit Breaker 12 to 500Ma, 4 to 80V | BREAK | 3 LBS | 50 | Q |

We build all power supplies to your specs & quantity. We reserve the right to change specifications and prices without notice.



DC-AC

Inverters, Chargers, Relays

INVERTERS

CHANGES BATTERY CURRENT TO 110 VOLT AC, 60 CYCLE

Frequency stable within 1 cycle with change in load & input voltage

DUAL CONTINENTAL (Transistorized, 600 watts)

Converts 12 V. D.C. to 110 V., 60 cycle 550 to 600 watts. Complete with battery cables and remote control with variable A.C. output. Filtered for tape recorders. Frequency stable within 1/2 cycle with changing input voltage and load. Size 10 3/4" w. x 13" d. x 4" h. Shpg. Wt., 60 lbs.
Terado No. 50-202—Net Each\$232.68

CONTINENTAL (Transistorized, 300 watts)
Same features as DUAL above, but has capacity of 275 to 300 watts. Size 10 3/4" x 6" x 6". Shpg. Wt., 30 lbs.
Terado No. 50-191—Net Each\$116.34

ATLAS (Transistorized, 200 watts)
Same features as CONTINENTAL above, but has capacity of 175 to 200 watts. Size 10 3/4" x 6" x 6". Shpg. Wt., 21 lbs.
Terado No. 50-200—Net Each\$87.07

TITAN (Transistorized, 175 watts)
Same features as ATLAS above less remote control, but with on-off switch and A.C. receptacle in case. Capacity 150 to 175 watts. Size 10 3/4" x 6" x 6". Shpg. Wt., 20 lbs.
Terado No. 50-201—Net Each\$73.34

SUPREME
Converts 12 v. DC to AC; power output, 175-200 watts. Complete with wire for installation and remote control. Remote control has variable AC output switch and signal light indicating proper AC output voltage. Filtered for use with tape recorders. Steel case. Size: 10 3/4" w. x 6" d. x 6" h. Shpg. Wt., 25 lbs.
Terado No. 50153—Net Each\$73.34

RECORDER
Same case as "Supreme" less remote control. Input, 12 v. DC; output, 150-175 w. Plugs into cigarette lighter. III-low voltage selector switch to maintain proper output voltage. Filtered for use with tape recorders and portable TV. Size: 10 3/4" w. x 6" d. x 6" h. Shpg. Wt., 21 lbs.
Terado No. 50175—Net Each\$66.37

CHIEF
Operates tape recorders, power tools, dictation machines, mixers, blenders, etc. Two models available. Direct connection to battery. Front AC receptacle. Toggle switch output control. Ventilated steel case. Easy to mount. Size: 3 1/2" w. x 6 1/2" d. x 4" h. Shipping Weight, 8 lbs.
Terado No. 50137—Voltage Input, 6 v.
AC Power Output, 75-100 watts. Net\$46.66
Terado No. 50138—Voltage Input, 12 v.
AC Power Output, 100-125 watts. Net\$46.66

AUTOMATIC
Operates automatically from 6 or 12 v. DC without vibrator change or switching (6 v., 55-75 watts; 12 v., 85-110 watts). Easy installation into cigarette lighter. For dictation machines, radios, tape recorders, phonographs, heating pads, etc. Steel case. Seal brown baked enamel. Size: 3 1/2" w. x 6 1/2" d. x 4" h. Shpg. Wt., 8 lbs.
Terado No. 50134—Net Each\$38.65

SUPER
Operates dictation machine, radios, phonograph, tape recorders, massaging equipment, etc. Two compact, lightweight models available. Simple installation into cigarette lighter. Steel case. Seal brown baked enamel. Size: 3 1/2" w. x 6 1/2" d. x 4" h. Shipping Weight, 8 lbs.
Terado No. 50126—Voltage Input, 6 v.
AC Power Output, 60-75 watts. Net\$33.32
Terado No. 50127—Voltage Input, 12 v.
AC Power Output, 75-100 watts. Net\$33.32

MASTER
Operates some dictation machines and tape recorders, radios and phonographs, emergency lighting, etc. Easy to install into cigarette lighter. Steel case. Seal brown baked enamel. Size: 3 1/2" w. x 6 1/2" d. x 4" h. Shipping Weight, 6 lbs.
Terado No. 50122—Voltage input, 12 v.
AC Power Output, 60-75 watts. Net\$27.68

ELECTRAL
Glove compartment size converters, available in 6 v. or 12 v. input. Easy installation into cigarette lighter. Operates De Jur Stenorette, Gelson, G.B.C., Stenocord, Norelec dictation machines, radios, etc. Vinyl coated steel case with leatherette appearance. Size: 3" w. x 2 1/4" d. x 5 1/2" h. Shipping Weight, 3 lbs.
Terado No. 50167—Voltage input, 12 v.
AC Power Output, 42-52 watts. Net\$17.98

SENIOR
Operates radios, lights, phonographs and small tape recorders. Available in 6 v. or 12 v. input. Simple to install into cigarette lighter. Aluminum case. Seal brown baked enamel. Size: 2 1/2" w. x 4 1/2" d. x 2 1/4" h. Shipping Weight, 3 lbs.
Terado No. 50115—Voltage input, 6 v.
AC Power Output, 35-40 watts. Net\$15.98
Terado No. 50116—Voltage input, 12 v.
AC Power Output, 40-50 watts. Net\$15.98

DYNAMO
Converts any small table radio to a car radio. Changes your car DC current to 110 volts AC, 60 cycles. Pocket-sized. Operates from any 12 volt car. No installation—just plug into cigar lighter. Needs no outside aerial (radio built-in only). Also operates all electric shavers. (Complete with generator condenser and ignition noise suppressor. Size: 2" w. x 2" x 3 3/4" h. Shpg. Wt., 1 1/2 lbs.
Terado No. 50196—Net Each\$8.62

AUTO SHAVER

Operates all electric shavers by plugging into AC receptacle provided. Available in 6 v. or 12 v. input. Easy installation into cigarette lighter. Polyethylene non-breakable case. Size: 3 3/4" w. x 2 1/4" d. x 4 1/4" h. Shipping Weight, 2 lbs.
Terado No. 50102—Voltage input, 6 v.
AC Power Output, 10-15 watts, Net Ea.\$9.31
Terado No. 50103—Voltage input, 12 v.
AC Power Output, 15-20 watts, Net Each.\$9.31

QUICK SHAVE

Speeds up electric shaver; cuts shaving time in half. Changes AC to DC.
Terado No. 50184—Net Each\$3.93

BATTERY CHARGERS

Electronically engineered full wave silicon rectifier chargers. Miniaturization with full power charge rate.

DYN-A-MITE

Baked seal brown paint over aluminum case. Charge rate 1 amp, both 6 and 12 volts. Size: 1 3/4" x 1 3/4" x 3 1/4". Wt., 1 lb.
Terado No. 50186—Net Each\$5.90

TINY GIANT

Copper clad steel case. Charge rate 1 1/2 amps, both 6 and 12 volts. Warning buzzer for improper connection. Size: 2-1/16" x 3" x 5 1/2". Weight, 1 1/2 lbs.
Terado No. 50185—Net Each\$7.66

LEADER

Copper clad steel case. Charge rate 3 amps, 12 volts only. Warning buzzer for improper connection. Size: 2 1/4" x 3" x 5 1/2". Weight, 2 lbs.
Terado No. 50187—Net Each\$10.47

HI-WAY CHARGER

Charge your boat battery while travelling! For any American 12 volt car. Charges 6 or 12 volt batteries without removing battery from boat. Charges up to 10 amps. No installation—just plug into cigar lighter. Large dial indicator shows state of charge. 30 ft. extension cord with battery clamps.
Terado No. 50193—Net Each\$12.57

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Copper clad steel case. Charge rate 4 amps, both 6 and 12 volts. Automatic circuit breaker protection. Size: 2 1/4" x 3" x 5 1/2". Weight, 2 lbs.
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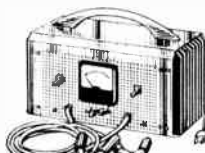
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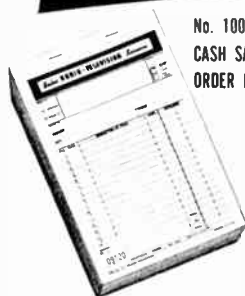
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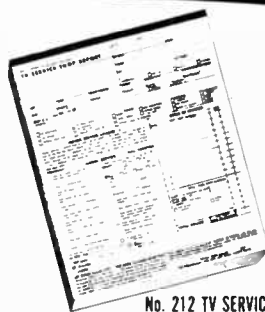
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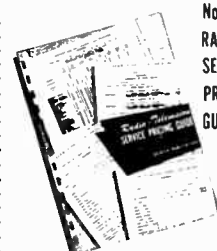
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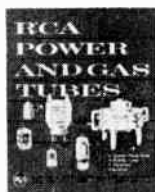
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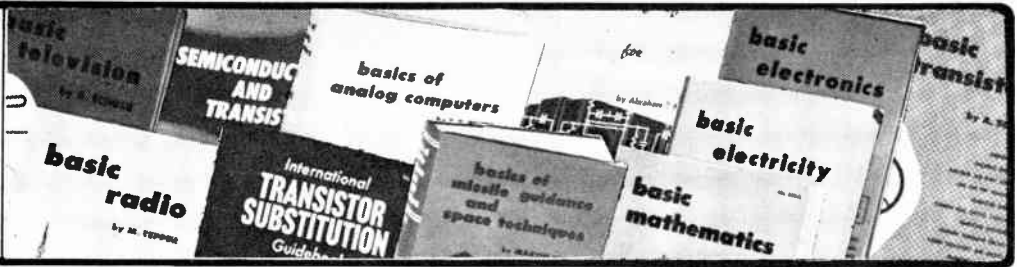
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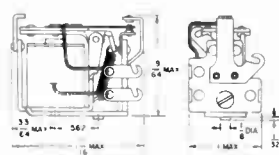
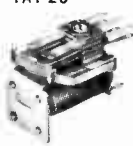
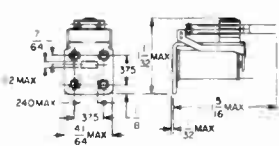
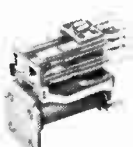
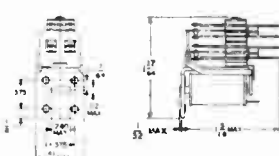

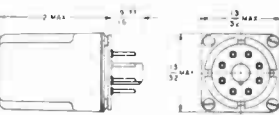

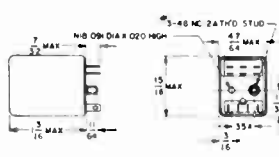

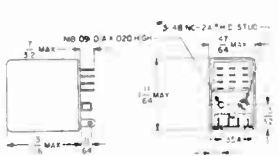

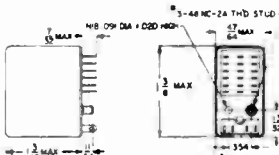
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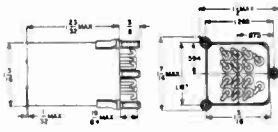

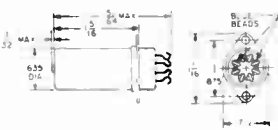

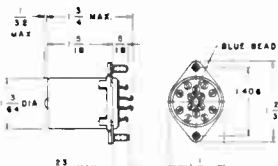

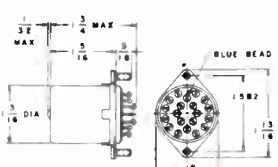

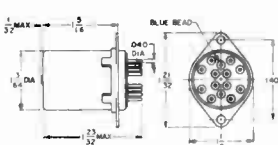

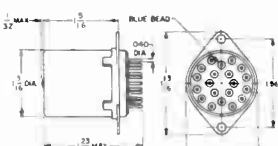

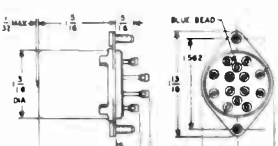
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|  | AS-3A 115v a-c | SPDT | 5 | 3.5 va | 850 | \$3.75 |  | Compact design, single hole mounting, terminal board on the front and contacts on top for easy inspection. Terminals: .078 x .107 hook Weight: 2.0 ounces max. Mounting: (1) 6-32 NC-2B tapped hole 7-32 deep |
| | AS-3D 26.5v d-c | SPDT | 5 | 1.3 w | 528 | 3.40 | | |
|  | TAT-2C 6v d-c | DPDT | 2 | 700 mw | 52 | \$2.85 |  | Subminiature with the performance of a miniature plus extra long life Terminals: Elongated holes .080 x .040 Weight: 0.70 ounces max. Mounting: (4) 4-48 NF-2B tapped holes |
| | TAT-2C 12v d-c | DPDT | 2 | 700 mw | 185 | 2.85 | | |
| | TAT-2C 24v d-c | DPDT | 2 | 700 mw | 700 | 2.85 | | |
| | TAT-2C 48v d-c | DPDT | 2 | 700 mw | 2500 | 2.85 | | |
| | TAT-2C 115v d-c | DPDT | 2 | 700 mw | 15000 | 4.20 | | |
|  | TAT-4C 6v d-c | 4PDT | 2 | 700 mw | 52 | \$3.21 |  | Subminiature with the performance of a miniature plus extra long life Terminals: Elongated holes .080 x .040 Weight: 0.75 ounces max. Mounting: (4) 4-48 NF-2B tapped holes |
| | TAT-4C 12v d-c | 4PDT | 2 | 700 mw | 185 | 3.21 | | |
| | TAT-4C 24v d-c | 4PDT | 2 | 700 mw | 700 | 3.21 | | |
| | TAT-4C 48v d-c | 4PDT | 2 | 700 mw | 2500 | 3.21 | | |
| | TAT-4C 115v d-c | 4PDT | 2 | 700 mw | 15000 | 4.56 | | |
|  | TFMD0-2C 6v d-c | DPDT | 5 | 700 mw | 52 | \$5.58 |  | Enclosed in a transparent polycarbonate cover and rigidly secured to base. Enclosure: Dust cover Weight: 2.5 ounces Socket: Any std. RETMA or EIA octal |
| | TFMD0-2C 12v d-c | DPDT | 5 | 700 mw | 185 | 5.58 | | |
| | TFMD0-2C 24v d-c | DPDT | 5 | 700 mw | 700 | 5.58 | | |
| | TFMD0-2C 115v d-c | DPDT | 5 | 700 mw | 15000 | 6.93 | | |
|  | TF154-2C 6v d-c | DPDT | 5 | 700 mw | 52 | \$3.27 |  | Features no internal wiring, contact arms extended to form combination solder and plug-in terminals Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 0.80 ounces max. Socket: Allied type 30055-1 |
| | TF154-2C 12v d-c | DPDT | 5 | 700 mw | 185 | 3.27 | | |
| | TF154-2C 24v d-c | DPDT | 5 | 700 mw | 700 | 3.27 | | |
| | TF154-2C 48v d-c | DPDT | 5 | 700 mw | 2500 | 3.27 | | |
| | TF154-2C 115v d-c | DPDT | 5 | 700 mw | 15000 | 4.62 | | |
|  | TF154-4C 6v d-c | 4PDT | 5 | 700 mw | 52 | \$3.75 |  | Features no internal wiring, contact arms extended to form combination solder and plug-in terminals Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 0.95 ounces max. Socket: Allied type 30055-2 |
| | TF154-4C 12v d-c | 4PDT | 5 | 700 mw | 185 | 3.75 | | |
| | TF154-4C 24v d-c | 4PDT | 5 | 700 mw | 700 | 3.75 | | |
| | TF154-4C 48v d-c | 4PDT | 5 | 700 mw | 2500 | 3.75 | | |
| | TF154-4C 115v d-c | 4PDT | 5 | 700 mw | 15000 | 5.10 | | |
|  | TF154-6C 6v d-c | 6PDT | 5 | 1.5 w | 25 | \$4.79 |  | Features no internal wiring, contact arms extended to form combination solder and plug-in terminals Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 1.0 ounces max. Socket: Allied type 30055-20 |
| | TF154-6C 12v d-c | 6PDT | 5 | 1.5 w | 90 | 4.79 | | |
| | TF154-6C 24v d-c | 6PDT | 5 | 1.5 w | 430 | 4.79 | | |
| | TF154-6C 48v d-c | 6PDT | 5 | 1.5 w | 1550 | 4.79 | | |
| | TF154-6C 115v d-c | 6PDT | 5 | 1.5 w | 9000 | 5.64 | | |

ALLIED CONTROL

ALLIED CONTROL COMPANY INC., NEW YORK, NEW YORK

MINIATURE TYPE RELAYS


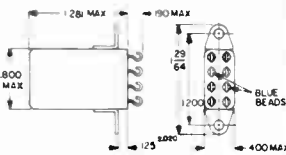
| RELAY TYPE | COIL VOLTAGE OR CURRENT | CONTACTS FORMS | AMPS | COIL POWER AT 25°C | COIL RESIST. OHMS | NET PRICE | OUTLINE DRAWING | DESCRIPTION |
|---|---------------------------------------|----------------|------|--------------------|-------------------|------------------|--|---|
| CH  | CH-12D 26.5v d-c | 4PDT | 10 | 4.0 w | 180 | \$30.00 |  | Vibration: 20g to 2000 cps Shock: 50g operational Operate: 15 milliseconds Release: 10 milliseconds Temp: -65°C to +125°C Weight: 5.0 ounces max. Mounting: (3) 6-32 NC-2A thd. studs |
| MH-6  | MH-6D 26.5v d-c MHB-6D 26.5v d-c | DPDT | 5 | 1.75 w 1.25 w | 400 325 | \$14.25 14.25 |  | Vibration: 15g to 1000 cps Shock: 50g operational Operate: 8 milliseconds Release: 5 milliseconds Temp. MH: -55°C to +85°C MHB: -65°C to +125°C Weight: 2.0 ounces max. Mounting: (2) 0.125 dia. holes |
| MH-12  | MH-12D 26.5v d-c MHB-12D 26.5v d-c | 4PDT | 5 | 2.5 w 3.0 w | 300 250 | \$20.90 20.90 |  | Vibration: 15g to 1000 cps Shock: 50g operational Operate: 10 milliseconds Release: 5 milliseconds Temp. MH: -55°C to +85°C MHB: -65°C to +125°C Weight: 3.0 ounces max. Mounting: (2) 6-32 NC-2A thd. studs |
| MH-18  | MH-18D 26.5v d-c MHB-18D 26.5v d-c | 6PDT | 5 | 3.0 w 3.5 w | 240 200 | \$23.75 23.75 |  | Vibration: 15g to 1000 cps Shock: 50g operational Operate: 10 milliseconds Release: 5 milliseconds Temp. MH: -55°C to +85°C MHB: -65°C to +125°C Weight: 4.2 ounces max. Mounting: (2) 6-32 NC-2A thd. studs |
| MHUO-12  | MHUO-12D 26.5v d-c | 4PDT | 5 | 2.5 w | 300 | \$20.90 |  | Vibration: 15g to 1000 cps Shock: 50g operational Operate: 10 milliseconds Release: 5 milliseconds Temp: -55°C to +85°C Weight: 3.0 ounces max. Mounting: (2) 0.156 dia. holes Socket: Allied type 16188-1 |
| MHUO-18  | MHUO-18D 26.5v d-c | 6PDT | 5 | 3.0 w | 240 | \$23.75 |  | Vibration: 15g to 1000 cps Shock: 50g operational Operate: 10 milliseconds Release: 5 milliseconds Temp: -55°C to +85°C Weight: 4.2 ounces max. Mounting: (2) 0.152 dia. holes Socket: Allied type 16189-1 |
| MHY  | MHY-12D 26.5v d-c | 4PDT | 10 | 3.5 w | 200 | \$25.41 |  | Vibration: 20g to 500 cps Shock: 50g operational Operate: 10 milliseconds Release: 5 milliseconds Temp: -65°C to +125°C Weight: 4.2 ounces max. Mounting: (2) #6-32 NC-2A thd. studs |


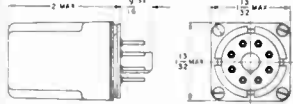



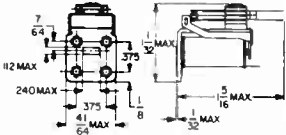
ALLIED CONTROL


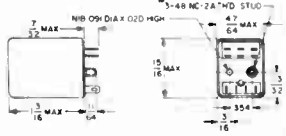
ALLIED CONTROL COMPANY INC., NEW YORK, NEW YORK


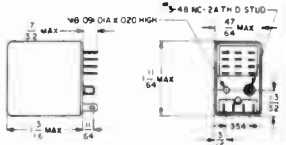
SENSITIVE and PLATE CIRCUIT RELAYS

| RELAY TYPE | COIL VOLTAGE OR CURRENT | CONTACTS FORMS | CONTACTS AMPS | COIL POWER AT 25°C | COIL RESIST. OHMS | NET PRICE | OUTLINE DRAWING | DESCRIPTION |
|---|-------------------------|----------------|---------------|--------------------|-------------------|-----------|--|--|
|  | JSH-3D 3.2 ma d-c | SPDT | 2 | 25 mw | 2500 | \$13.52 |  | Vibration: 15g to 2000 cps Shock: 50g operational Operate: 15 milliseconds Release: 10 milliseconds Temp: -65°C to +125°C Weight: 1.1 ounces max. Mounting: (2) 0.125 dia. holes |
| | JSH-3D 2.2 ma d-c | SPDT | 2 | 25 mw | 5000 | 13.52 | | |
| | JSH-3D 1.6 ma d-c | SPDT | 2 | 25 mw | 10000 | 15.46 | | |
| | JSH-6D 4.0 ma d-c | DPDT | 2 | 40 mw | 2500 | 14.49 | | |
| | JSH-6D 2.8 ma d-c | DPDT | 2 | 40 mw | 5000 | 14.49 | | |
| | JSH-6D 2.0 ma d-c | DPDT | 2 | 40 mw | 10000 | 16.43 | | |


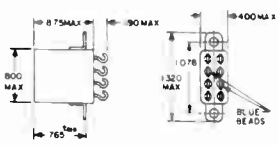
| | | | | | | | | |
|---|---------------------|------|---|--------|-------|--------|--|---|
|  | TFMDO-2C 9.5 ma d-c | DPDT | 5 | 220 mw | 2500 | \$5.87 |  | Included in a transparent polycarbonate cover and rigidly secured to base. Enclosure: Dust cover Weight: 2.5 ounces max. Socket: Any std. RETMA or EIA octal |
| | TFMDO-2C 7.0 ma d-c | DPDT | 5 | 250 mw | 5000 | 6.33 | | |
| | TFMDO-2C 5.5 ma d-c | DPDT | 5 | 300 mw | 10000 | 7.22 | | |


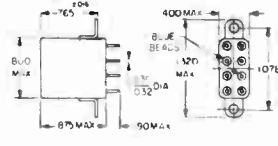
| | | | | | | | | |
|--|-------------------|------|---|--------|-------|--------|---|--|
|  | TFT-2C 9.5 ma d-c | DPDT | 5 | 220 mw | 2500 | \$3.26 |  | Subminiature with small size moving parts resulting in quick release and exceptional contact rating. Terminals: Elongated holes .080 x .040 Weight: 0.70 ounces max. Mounting: (4) 4-48NF 2B tapped holes |
| | TFT-2C 7.0 ma d-c | DPDT | 5 | 250 mw | 5000 | 3.72 | | |
| | TFT-2C 5.5 ma d-c | DPDT | 5 | 300 mw | 10000 | 4.61 | | |

| | | | | | | | | |
|---|---------------------|------|---|-------|-------|--------|--|--|
|  | TS154-2C 5.8 ma d-c | DPDT | 1 | 85 mw | 2500 | \$3.44 |  | Features no internal wiring. Contact arms extend to form combination solder and plug in terminals. Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 0.80 ounces max. Socket: Allied type 30055-1 |
| | TS154-2C 4.1 ma d-c | DPDT | 1 | 85 mw | 5000 | 3.90 | | |
| | TS154-2C 3.1 ma d-c | DPDT | 1 | 85 mw | 10000 | 4.79 | | |

| | | | | | | | | |
|---|---------------------|------|---|--------|-------|--------|--|--|
|  | TS154-4C 8.4 ma d-c | 4PDT | 1 | 175 mw | 2500 | \$3.83 |  | Features no internal wiring. Contact arms extend to form combination solder and plug in terminals. Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 0.95 ounces max. Socket: Allied type 30055-2 |
| | TS154-4C 6.2 ma d-c | 4PDT | 1 | 175 mw | 5000 | 4.29 | | |
| | TS154-4C 4.5 ma d-c | 4PDT | 1 | 175 mw | 10000 | 5.18 | | |

SUBMINIATURE TYPE RELAYS

| | | | | | | | | |
|---|------------------|------|---|-------|-------|---------|--|---|
|  | KHJ-6D 6v d-c | DPDT | 2 | 1.5 w | 39 | \$12.64 |  | Vibration: 20g to 2000 cps Shock: 100g operational Operate: 5 milliseconds Release: 3 milliseconds Temp: -65°C to +125°C Weight: 0.5 ounces max. Mounting: (2) 0.120 dia. holes |
| | KHJ-6D 12v d-c | DPDT | 2 | 1.5 w | 147 | 12.64 | | |
| | KHJ-6D 26.5v d-c | DPDT | 2 | 1.5 w | 612 | 12.64 | | |
| | KHJ-6D 48v d-c | DPDT | 2 | 1.5 w | 2370 | 14.44 | | |
| | KHJ-6D 115v d-c | DPDT | 2 | 1.5 w | 10000 | 18.14 | | |


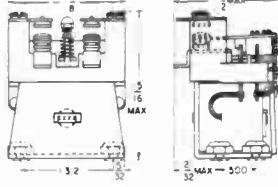

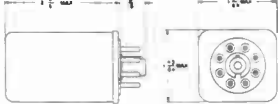

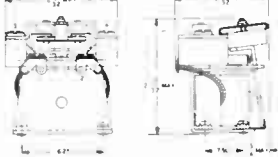

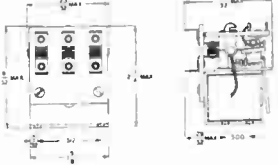

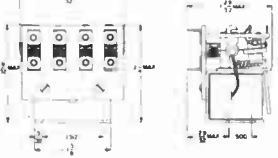
| | | | | | | | | |
|---|-------------------|------|---|-------|-----|---------|--|---|
|  | KHJO-6D 26.5v d-c | DPDT | 2 | 1.5 w | 612 | \$12.64 |  | Vibration: 20g to 2000 cps Shock: 100g operational Operate: 5 milliseconds Release: 3 milliseconds Temp: -65°C to +125°C Weight: 0.5 ounces max. Mounting: (2) 0.120 dia. holes Socket: Arnel type HRC-1 or equiv. |
|---|-------------------|------|---|-------|-----|---------|--|---|




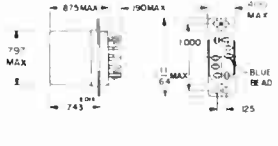

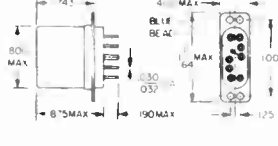
ALLIED CONTROL

ALLIED CONTROL COMPANY INC., NEW YORK, NEW YORK

POWER RELAYS

| | RELAY TYPE | COIL VOLTAGE OR CURRENT | CONTACTS FORMS | AMPS | COIL POWER AT 25°C | COIL RESIST. OHMS | NET PRICE | OUTLINE DRAWING | DESCRIPTION |
|---|------------|-------------------------|----------------|------|--------------------|-------------------|-----------|--|--|
|  | BO-6A | 6v a-c | DPDT | 15 | 5.0 va | 1.07 | \$4.93 |  | Compact, rugged design with contacts and terminals, readily accessible on top of relay Terminals: .096 diameter holes, tin dipped Weight: 5.5 ounces max. Mounting: (4) 6-32 elastic stop nuts |
| | BO-6A | 24v a-c | DPDT | 15 | 5.0 va | 17 | 4.93 | | |
| | BO-6A | 115v a-c | DPDT | 15 | 5.0 va | 445 | 5.08 | | |
| | BO-6A | 220v a-c | DPDT | 15 | 5.0 va | 1700 | 5.19 | | |
| | BO-6D | 6.3v d-c | DPDT | 15 | 2.5 w | 14.2 | 4.60 | | |
| | BO-6D | 13.2v d-c | DPDT | 15 | 2.5 w | 70 | 4.60 | | |
| | BO-6D | 26.5v d-c | DPDT | 15 | 2.5 w | 230 | 4.66 | | |
| | BO-6D | 115v d-c | DPDT | 15 | 2.5 w | 5000 | 5.17 | | |
|  | BOHRO-6A | 115v a-c | DPDT | 15 | 5.0 va | 445 | \$10.46 |  | Vibration: 10-55 cps at .062" double amplitude Shock: 30g operational Temp: -55°C to +71.5°C Weight: 9.5 ounces max. Socket: Any std. RETMA or EIA octal |
| | BOHRO-6D | 26.5v d-c | DPDT | 15 | 2.5 w | 230 | 10.04 | | |
|  | CNA-13A | 115v a-c | SPST NO DB | 25 | 10.5 va | 145 | \$7.00 |  | Heavy duty, compact relay with double break contact construction eliminating pigtails Terminals: Coil (1 & 2) 3-32 dia. holes Contacts (3 & 4) 10-32 screw type Weight: 9.5 ounces max. Mounting: (4) 6-32 elastic stop nuts |
| | CNAS-13A | 115v a-c | SPST NO DB | 50 | 10.5 va | 145 | 8.15 | | |
|  | PO-9A | 24v a-c | 3PDT | 15 | 10.5 va | 8.0 | \$5.54 |  | Low cost, compact, multi pole Terminals: .079 x .164 hook, tin dipped Weight: 7.5 ounces max. Mounting: (4) 6-32 tapped holes |
| | PO-9A | 115v a-c | 3PDT | 15 | 10.5 va | 145.0 | 5.54 | | |
| | PO-9D | 13.2v d-c | 3PDT | 15 | 2.5 w | 70 | 5.18 | | |
| | PO-9D | 24.0v d-c | 3PDT | 15 | 2.5 w | 230 | 5.18 | | |
| | PO-9D | 115.0v d-c | 3PDT | 15 | 2.5 w | 5000 | 5.80 | | |
|  | PO-12A | 115v a-c | 4PDT | 15 | 10.5 va | 145 | \$6.16 |  | Low cost, compact, multi pole Terminals: .079 x .164 hook, tin dipped Weight: 8.0 ounces max. Mounting: (4) 6-32 tapped holes |
| | PO-12D | 13.2v d-c | 4PDT | 15 | 2.5 w | 70 | 5.80 | | |
| | PO-12D | 24.0v d-c | 4PDT | 15 | 2.5 w | 230 | 5.80 | | |

SUBMINIATURE TYPE RELAYS


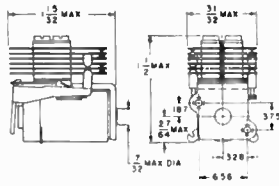

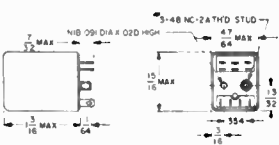

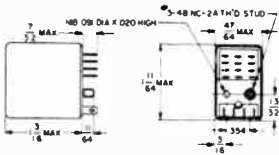

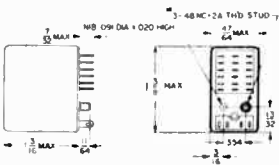
| | | | | | | | | | |
|---|---------|-----------|------|---|-------|------|---------|--|--|
|  | KHY-6D | 6v d-c | DPDT | 2 | 1.5 w | 34 | \$12.64 |  | Vibration: 20g to 2000 cps Shock: 50g operational Operate: 5 milliseconds Release: 3 milliseconds Temp: -65°C to +125°C Weight: 0.5 ounces max. Mounting: (4) 0.096 dia. holes |
| | KHY-6D | 12v d-c | DPDT | 2 | 1.5 w | 155 | 12.64 | | |
| | KHY-6D | 26.5v d-c | DPDT | 2 | 1.5 w | 615 | 12.64 | | |
| | KHY-6D | 48v d-c | DPDT | 2 | 1.5 w | 1920 | 14.44 | | |
| | KHY-6D | 115v d-c | DPDT | 2 | 1.5 w | 8120 | 17.24 | | |
|  | KHYO-6D | 26.5v d-c | DPDT | 2 | 1.5 w | 615 | \$12.64 |  | Vibration: 20g to 2000 cps Shock: 50g operational Operate: 5 milliseconds Release: 3 milliseconds Temp: -65°C to +125°C Weight: 0.5 ounces max. Mounting: (4) 0.096 dia. holes Socket: Arnel type HRK-1 or equiv. |




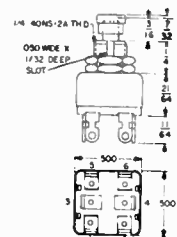

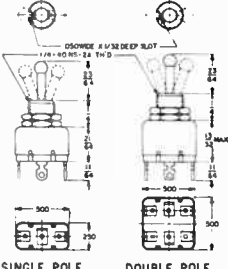
ALLIED CONTROL

ALLIED CONTROL COMPANY INC., NEW YORK, NEW YORK

TELEPHONE TYPE RELAYS

| RELAY TYPE | COIL VOLTAGE OR CURRENT | CONTACTS FORMS | AMPS | COIL POWER AT 25°C | COIL RESIST. OHMS | NET PRICE | OUTLINE DRAWING | DESCRIPTION |
|---|---|----------------|------|--------------------|-----------------------------------|--|--|---|
| SK | | | | | | | | |
|  | SK-4C 24v d-c | 4PDT | 2 | 1.5 w | 425 | \$3.94 |  | Miniature size for front of panel wiring with an efficient metal to metal hinge. Terminals: elongated holes .062 x .125 Weight: 2.5 ounces max. Mounting: (2) 4-40 NC-2B thd. |
| T154-2C | | | | | | | | |
|  | T154-2C 6v d-c T154-2C 12v d-c T154-2C 24v d-c T154-2C 48v d-c T154-2C 115v d-c | DPDT | 2 | 700 mw | 52 185 700 2500 15000 | \$3.15 3.15 3.15 3.15 4.50 |  | Features no internal wiring, contact arms extended to form combination solder and plug-in terminals Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 0.80 ounces max. Socket: Allied type 30055-1 |
| T154-4C | | | | | | | | |
|  | T154-4C 6v d-c T154-4C 12v d-c T154-4C 24v d-c T154-4C 48v d-c T154-4C 115v d-c | 4PDT | 2 | 700 mw | 52 185 700 2500 15000 | \$3.51 3.51 3.51 3.51 4.86 |  | Features no internal wiring, contact arms extended to form combination solder and plug-in terminals Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 0.95 ounces max. Socket: Allied type 30055-2 |
| T154-6C | | | | | | | | |
|  | T154-6C 6v d-c T154-6C 12v d-c T154-6C 24v d-c T154-6C 48v d-c T154-6C 115v d-c | 6PDT | 2 | 1.5 w | 25 90 430 1550 9000 | \$4.43 4.43 4.43 4.43 5.28 |  | Features no internal wiring, contact arms extended to form combination solder and plug-in terminals Terminals: Elongated holes .080 x .040 Enclosure: Dust cover Weight: 1.0 ounces max. Socket: Allied type 30055-20 |

SWITCHES

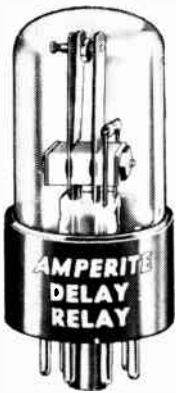
| SWITCH TYPE | POSITIONS | CONTACTS FORMS | AMPS | NET PRICE | OUTLINE DRAWING | DESCRIPTION |
|---|---|--------------------------------------|------|--|--|---|
|  | PM-7 — | 3PST Normally Open | 2 | \$4.28 |  | Elec. Life: 10,000 make and break cycles (min) Vibration: 5-28 cps at 0.5" double amplitude Shock: 50g operational Weight: 4.5 grams max. |
|  | TC-3 ON-OFF-ON TE-3 MOM-OFF-ON TG-3 MOM-OFF-MOM TS-3 ON-ON TS-6 ON-ON | SPDT SPDT SPDT SPDT DPDT | 5 | \$3.20 3.20 3.20 3.00 3.90 | |  Elec. Life: 20,000 make and break cycles (min) App. Mil. Specs: Mil S-3950 as applicable to SCL-6305 Vibration: 5-28 cps at 0.5" double amplitude Shock: 50g operational Weight: From 3.0 to 5.5 grams max. |

THERMOSTATIC

AMPERITE

DELAY RELAYS

GLASS ENCLOSED • HERMETICALLY SEALED • A.C., D.C., OR PULSATING CURRENT



STANDARD

AMPERITE THERMOSTATIC DELAY RELAYS

Amperite Thermostatic Delay Relays are actuated by a heater . . . can therefore be used on A.C., D.C., or pulsating current. Being hermetically sealed, Amperite Relays are not affected by altitude, moisture, or other atmospheric conditions. **REPLACED AS EASILY AS A RADIO TUBE.**

CIRCUITS SPST: Available only — normally open or normally closed.

HEATER VOLTAGES AVAILABLE: 2.5, 5.0, 6.3, 12.6, 26, 60, 115V.
For 220V use a 6500 ohm-5 watt resistor in series with 115V heater.

HEATER WATTAGE: Standard and Miniature Relays—all voltages—2w prox. All heaters may be operated continuously. Heaters will not be damaged by a 50% voltage overload for duration of 1 hour or less.

VARIATION OF DELAY WITH HEATER VOLTAGE

FIGURE 1 — Effect of change in heater voltage on delay in seconds. Only low voltage heaters (2.5 to 26 V.) incorporate heater voltage regulations as shown in this diagram.

For 22 to 30 V. supply: We recommend Amperite Delay Relays with 26 V. heaters for airplanes and similar power supplies. These heaters are regulated for battery variation of 22 to 30 V. as shown in this diagram.

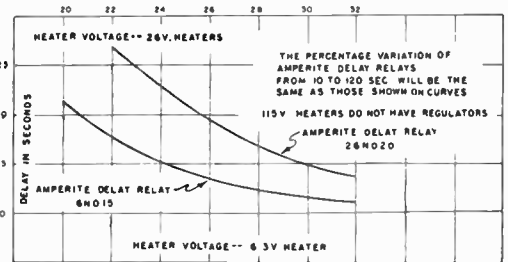
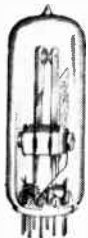


Figure 1



MINIATURE

CONTACT RATING

| | Delay | Contact Rating Non-Inductive | DC Voltage Breakdown | |
|---------------------|----------------|---------------------------------|----------------------|-------------------|
| | | | Contact-to-Contact | Heater-to-Contact |
| STANDARD RELAYS | 2 to 10 Sec. | 115V — 3a AC | 250V | 500V |
| | 15 to 180 Sec. | 115V — 3a AC | 800V | 800V |
| | | 220V — 1a AC | 800V | 800V |
| MINIATURE RELAYS | 2 to 10 Sec. | 115V — 2a AC | 250V | 500V |
| | 15 to 180 Sec. | 115V — 2a AC | 800V | 800V |
| | | 220V — 1a AC | 800V | 800V |
| FLASHERS | | — 1/2a AC | 250V | 500V |

CONTACT DROP: —0.1V — Prox. at 1A.

AMBIENT TEMPERATURES: Relays are compensated for temperatures of -55° to $+80^{\circ}$ C. (Relays can be operated from -80° C to $+125^{\circ}$ C without damage). Tolerances given are for 20° C. Ambient temperature tolerances depend on type. Low voltage heater 26V or less have better ambient compensation than high voltage heaters.

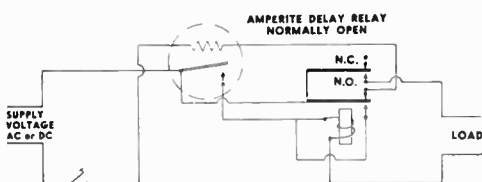
DELAYS AVAILABLE: From 2 to 180 seconds. Relays can be used in series to obtain longer delays. The delay of any individual relay can be increased up to 50% by using a resistor in series with the heater. Relays with short delays such as 2 to 5 seconds can be increased 100%.

LIFE of any individual relay will depend on the service the contacts are subjected to. With a 115 V. — 2A A.C. non inductive load the contacts will withstand at least 250,000 operations. **SHELF LIFE** of Amperite Delay Relays is over 10 years.

INDUCTIVE A.C. LOADS: When breaking an inductive A.C. load, use a condenser of .01 to .1 mfd. across contacts.

INSTANTANEOUS RECYCLE: This can be obtained by using a normally open Amperite Delay Relay in conjunction with a DPDT Magnetic Relay as shown at left. If normally closed is required — use a normally open Amperite Delay Relay — and use the NC contacts on the magnetic relay. Choose the Amperite Delay Relay for the voltage required and the delay required (e.g. — 115N030 — would be used on 115 volt supply — for a 30 second delay).

LONG RECYCLE RELAYS: are also available. For example, Amperite Delay Relay 115N07T has a delay in closing of 3 to 8 seconds. After heater is disconnected, contacts will remain closed for 30 seconds minimum. Write us about your requirements.



THERMOSTATIC

AMPERITE

DELAY RELAYS

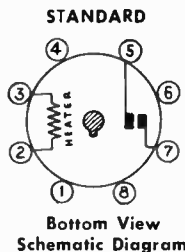
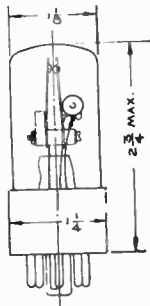
GLASS ENCLOSED • HERMETICALLY SEALED • A.C., D.C., OR PULSATING CURRENT



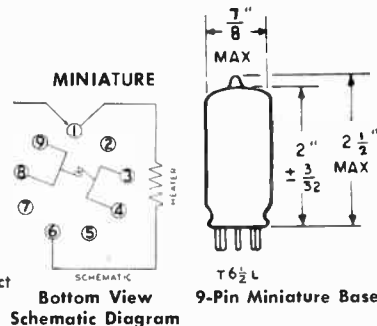
BREAKING D.C. CURRENT: When Relay contacts open D.C. Current above 50 volts, a condenser with a resistor in series with the condenser must be connected across the contacts. The following condenser values are approximate.

| | 50 V. D.C. | 115 V. D.C. | 230 V. D.C. |
|---------------------|------------|-------------|-------------|
| 0 to .5 Amps..... | None | .1 MF | .25 MF |
| .5 to 1.5 Amps..... | " | .25 " | .25 " |
| 1.5 to 3 Amps..... | .25 MF | 1 " | .5 " |

SPECIFICATIONS:



Base Wiring:
Standard Radio Octal:
Prongs 2-3-heater;
Prongs 5-7-contacts.



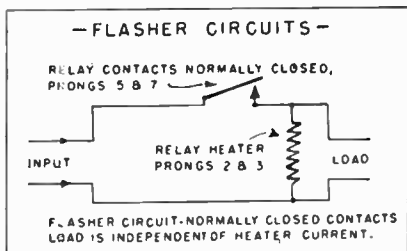
Base Wiring:
9-Pin Miniature:
Prongs 1-6 heater;
Prongs 3-4, 1 contact;
Prongs 8-9, 2nd contact

Standard Octal Base

STANDARD AND MINIATURE TYPES OF AMPERITE DELAY RELAYS AND FLASHERS... Net \$2.40 each

MINIATURE TYPES: Designated by letter T. (e.g. 6N05T). Types shown in Bold Type are the more popular types, and are more readily available. Miniature type relays available in 2-120 Seconds Delay. All Standard Octal Base Types are available in 2-180 Seconds Delay.

| Delay-Seconds | Tolerance Seconds at 20°C | NORMALLY OPEN CONTACTS | | | | | | | NORMALLY CLOSED CONTACTS | | | | | | |
|---------------|---------------------------|------------------------|--------------|---------------|---------------|----------------|---------|----------|--------------------------|--------|--------------|---------|---------------|--------|---------|
| | | HEATER VOLTAGES | | | | | | | HEATER VOLTAGES | | | | | | |
| | | 2.5 V. | 5.0 V. | 6.3 V. | 12.6 V. | 26 V. (22-30) | 50 V. | 115 V. | 2.5 V. | 5.0 V. | 6.3 V. | 12.6 V. | 26 V. (22-30) | 50 V. | 115 V. |
| 2 | 1 1/2 | 2N02 | 5N02 | 6N02 | 12N02 | 26N02 | 50N02 | 115N02 | 2C2 | 5C2 | 6C2 | 12C2 | 26C2 | 50C2 | 115C2 |
| 3 | 1 1/2 | 2N03 | 5N03 | 6N03 | 12N03 | 26N03 | 50N03 | 115N03 | 2C3 | 5C3 | 6C3 | 12C3 | 26C3 | 50C3 | 115C3 |
| 5 | 2 1/2 | 2N05 | 5N05 | 6N05 | 12N05 | 26N05 | 50N05 | 115N05 | 2C5 | 5C5 | 6C5 | 12C5 | 26C5 | 50C5 | 115C5 |
| 8 | 3 | 2N08 | 5N08 | 6N08 | 12N08 | 26N08 | 50N08 | 115N08 | 2C8 | 5C8 | 6C8 | 12C8 | 26C8 | 50C8 | 115C8 |
| 10 | 4 | 2N010 | 5N010 | 6N010 | 12N010 | 26N010 | 50N010 | 115N010 | 2C10 | 5C10 | 6C10 | 12C10 | 26C10 | 50C10 | 115C10 |
| 15 | 4 | 2N015 | 5N015 | 6N015 | 12N015 | 26N015 | 50N015 | 115N015 | 2C15 | 5C15 | 6C15 | 12C15 | 26C15 | 50C15 | 115C15 |
| 20 | 5 | 2N020 | 5N020 | 6N020 | 12N020 | 26N020 | 50N020 | 115N020 | 2C20 | 5C20 | 6C20 | 12C20 | 26C20 | 50C20 | 115C20 |
| 30 | 10 | 2N030 | 5N030 | 6N030 | 12N030 | 26N030 | 50N030 | 115N030 | 2C30 | 5C30 | 6C30 | 12C30 | 26C30 | 50C30 | 115C30 |
| 45 | 10 | 2N045 | 5N045 | 6N045 | 12N045 | 26N045 | 50N045 | 115N045 | 2C45 | 5C45 | 6C45 | 12C45 | 26C45 | 50C45 | 115C45 |
| 60 | 15 | 2N060 | 5N060 | 6N060 | 12N060 | 26N060 | 50N060 | 115N060 | 2C60 | 5C60 | 6C60 | 12C60 | 26C60 | 50C60 | 115C60 |
| 75 | 15 | 2N075 | 5N075 | 6N075 | 12N075 | 26N075 | 50N075 | 115N075 | 2C75 | 5C75 | 6C75 | 12C75 | 26C75 | 50C75 | 115C75 |
| 90 | 20 | 2N090 | 5N090 | 6N090 | 12N090 | 26N090 | 50N090 | 115N090 | 2C90 | 5C90 | 6C90 | 12C90 | 26C90 | 50C90 | 115C90 |
| 120 | 35 | 2N0120 | 5N0120 | 6N0120 | 12N0120 | 26N0120 | 50N0120 | 115N0120 | 2C120 | 5C120 | 6C120 | 12C120 | 26C120 | 50C120 | 115C120 |
| 150 | 35 | 2N0150 | 5N0150 | 6N0150 | 12N0150 | 26N0150 | 50N0150 | 115N0150 | 2C150 | 5C150 | 6C150 | 12C150 | 26C150 | 50C150 | 115C150 |
| 180 | 45 | 2N0180 | 5N0180 | 6N0180 | 12N0180 | 26N0180 | 50N0180 | 115N0180 | 2C180 | 5C180 | 6C180 | 12C180 | 26C180 | 50C180 | 115C180 |



Normally closed flashers are standard, and are indicated by the letter "F." The number following letter "F" denotes flashes per minute. For example a 6F30 flasher, has 6.3V heater, normally closed 30 FPM with a ± 15 flashes per minute tolerance. A 6F30T, would be the same type but in 9-pin miniature. Flashers are available from 30 to 90 Flashes per minute with tolerances as shown in the chart below:

FLASHERS have contact rating of 1/2a AC, non-inductive.

| Tol. FPM - 20°C | Standard Flashers Available | | |
|-----------------|-----------------------------|-------|--------|
| 10 ± 5 | 6F10 | 26F10 | 115F10 |
| 30 ± 15 | 6F30 | 26F30 | 115F30 |
| 45 ± 15 | 6F45 | 26F45 | 115F45 |
| 60 ± 20 | 6F60 | 26F60 | 115F60 |
| 75 ± 20 | 6F75 | 26F75 | |
| 90 ± 25 | 6F90 | 26F90 | |

Flashers operate approximately 1/3 on, 2/3 off. The percentage time on can be increased by reducing the voltage of the heater.

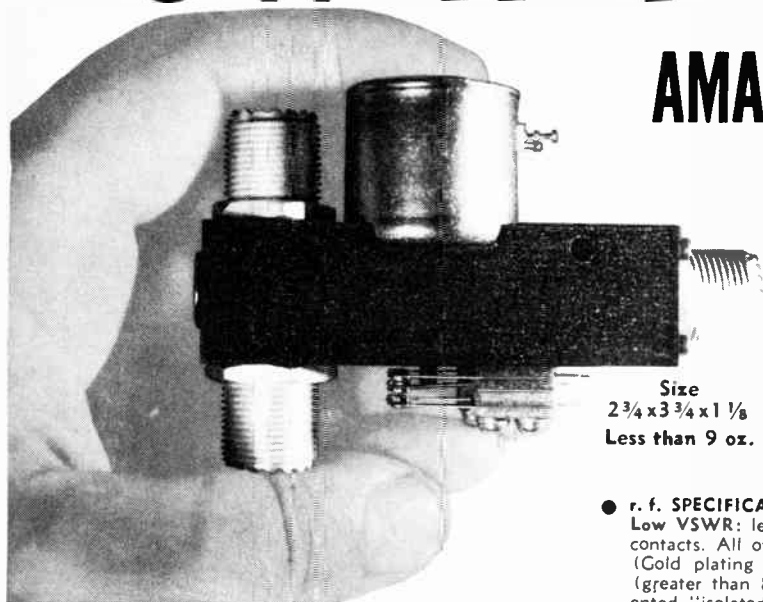
DOW-KEY RELAYS

AMATEURS! INDUSTRIALS!

DK60 SERIES COAXIAL RELAYS

Size
2 3/4 x 3 3/4 x 1 1/8
Less than 9 oz.

4 VERSATILE MODELS, A.C. or D.C.
(And Types C, TNC, BNC, N, UHF Connectors)



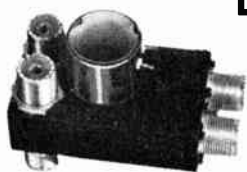
UNCONDITIONAL GUARANTEE
(We will repair if faulty within 1 year)

**STANDARD RELAYS, WITH
TYPE UHF CONNECTORS, INCLUDE:**

- **DK60** — SPDT r.f. switch each \$12.45
- **DK60-G** — SPDT r.f. switch with special "isolated" connector in de energized position each \$13.70
- **DK60-2C** — SPDT r.f. switch with DPDT auxiliary contacts each \$14.35
- **DK60-G2C** — SPDT r.f. switch with DPDT auxiliary contacts and special "isolated" connector in de-energized position each \$15.65

Weather proof model
available for exterior installation.

- **r. f. SPECIFICATIONS:**
Low VSWR: less than 1.15:1 from 0 to 500 mc — **Low Losses:** Pure silver contacts. All other parts used in crucial positions are plated with fine silver. (Gold plating available at extra cost, special order.) — **Low Cross-Talk:** (greater than 80 db) in DK60-G and DK60-G2C through the use of a patented "isolated connector" arrangement which opens the disconnected conductor and simultaneously provides an electrostatic shield between it and the rest of the circuit — **High Power Rating:** (a) one kilowatt through straight connectors (b) to 10 watts through "isolated connector" — excellent for video switching — **Single Pole Double Throw r.f. contacts:** r.f. leakage — extremely low, below leakage of typical r.f. connectors. A wide variety of connectors available. Example: UHF, N, C, and others in both straight and "isolated" models.
- **MECHANICAL SPECIFICATIONS:**
High Contact Pressures: Long-Life Expectancy greater than one million operations — **Continuous Duty:** Teflon feed-through terminals used on coil to provide connection ease — **Small, Compact:** only 2 3/4" x 3 3/4" x 1 1/8" — **Light-weight:** less than 9 ounces — Dow designed UHF (standard) or type N (slight additional cost) r.f. connectors available. Specify if type N connector required.
- **ELECTRICAL SPECIFICATIONS:**
Wide variety of coil voltages: 6, 12, 24, 28, 32, 48, 110, 220 D.C. volts at 2.0 watts; 6, 12, 24, 110, 220 A.C. volts at 6 volt-amperes 50-60 cps. (Special voltage or resistances available on request.) — **Less than 50°C temperature rise above ambient:** maximum operating temperature is 100°C except on special order — Auxiliary contacts available for power control — DPDT at 5a, 110 v a.c. on DK60-2C and DK60-G2C.



DOW-KEY DK2-60 DPDT r.f. SWITCH

... for switching two coaxial lines simultaneously. Specifications similar to DK60 series.

DK2-60 . . . Each \$19.00



Signals 'pop out' with DOW-KEYS DKC-RFB PREAMPLIFIER

Amateurs will hear
signals they didn't
hear before!

Compact
1 3/8" x 1 3/8" x 2 1/4"
Wt. 10 oz.

DKC-RFB
only \$10⁷⁵

HELP YOUR RECEIVER! The DKC-RFB Booster is a 50 to 70 ohm impedance matching "broadband preamplifier" guaranteed to increase the over-all gain by 1 to 6 "S" units on all bands (1.5 to 30mc). Worth dollars and dollars more to the amateur with low cost equipment desiring to improve sensitivity, work with DX, and bring up weak unintelligible signals. Designed for receivers up to the \$300 class.



COAXIAL ELECTRONIC TR SWITCH with Built-in Power Supply

Designed to operate in 1.8 to 30 mc. range. NO EXTERNAL D.C. POWER SUPPLY NEEDED! Just plug into any regular 120 v. A.C. outlet! About 15 watts of power required.

A vacuum tube T-R switch utilizes grid-blocking scheme when in transmit mode. In receive mode, circuit provides a small amount of gain between the antenna and receiver. Employs circuitry with large signal handling capabilities to reduce locally-generated cross-modulation types of interference.

DKC-TRP \$27⁷⁵
each

FACTORY WARRANTY

DKC-TRP features include: Rated maximum legal power. Low VSWR. Cast aluminum construction makes DKC-TRP TVI proof. Switch allows break-in operation with a single antenna system. Has standard UHF coaxial connectors; type "N" connectors available at small, additional cost.

DKC-TRM-1 Electronic antenna change-over switch,
UHF connectors 6-volt filament, 125 to
150 V B+, 1 KW.

Each \$12.50

DOW-KEY
products available
at your local
distributor
or write:



UHF CONNECTORS

PANEL MOUNT
Durable, silver
plated, precision
made. Only 5/8"
hole is needed,
no screws.
DK60-P . . . 70

DOUBLE MALE
Favorite every-
where. Precision
made, rugged
locking type.
Silver, plated.
DKF-2 . . . 1,25



Manufactured by DOW-KEY COMPANY, Thief River Falls, Minnesota

RELAY PROBLEMS?

INDUSTRIAL MILITARY APPLICATION

Investigate . . . this Tested, Proven

DOW-KEY DKC-61 COAXIAL RELAY

A compact superb new DOW-KEY relay specifically designed, thoroughly tested and proven, for the rugged requirements of industrial and military application.

R. F. SPECIFICATIONS:

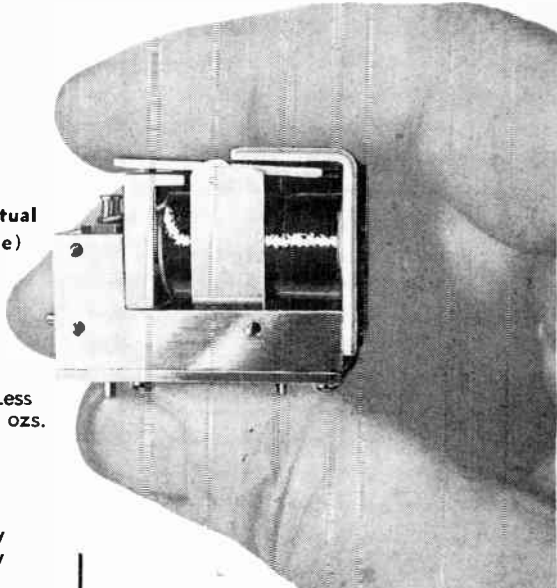
Low VSWR: Less than 1.10:1 from 0 to 400 mc., Less than 1.20:1 from 0 to 1000 mc. — **Low Losses:** Contact material available for low and high power levels. — **Cross-Talk:** Greater than 40 db @ 400 mc. — **Power Rating:** 100 watts. — **Connectors Available:** Connectors shown are std., available in BNC, TNC, and other miniature connectors.

ELECTRICAL SPECIFICATIONS:

Coil Voltages: 6, 12, 24, 28, 48, 110 or 220 V DC at less than 3.0 watts. — **Operating Time:** Less than 15 ms. Auxiliary SPDT or DPDT contacts available for power control rated at 5 a at 150 V DC.

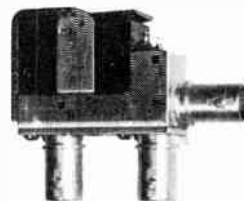
ENVIRONMENTAL AND MECHANICAL SPECIFICATIONS:

Operating Temperature Range: -55° C. to +125° C. — **Duty Cycle:** Continuous. — **Life Expectancy:** Greater than 500,000. — **Vibration:** Withstands vibration tests in accordance with MIL-STD-202B, Test Condition B. — **Finish:** Silver plated per Mil Spec QQ-S-365 type 3 and cadmium plated per QQ-P-416 type 2 to withstand salt spray and humidity tests. — **Weight:** Less than 3 ounces.

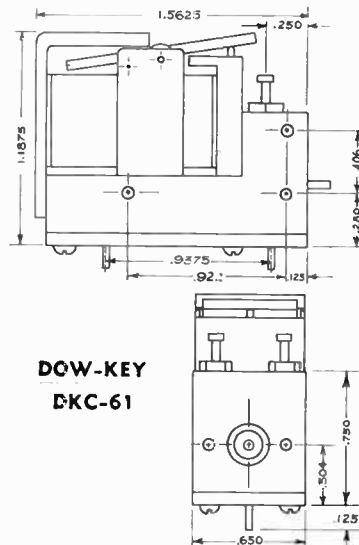


(Actual Size)

Wt. Less than 3 ozs.



TYPE BNC CONNECTORS



DOW-KEY
DKC-61

SERVICE AND DELIVERY

Our engineering staff, completely equipped plant, and technicians invite the opportunity to serve you in developing, designing or building your specific relay requirements. Try Us!

DKC-71 Single Pole, Six-Throw



WEATHER-PROOF ELECTRO-MAGNETIC COAXIAL RELAY

FOR REMOTE SELECTION
OF R.F. SOURCES

R. F. SPECIFICATIONS:

Low VSWR: Less than 1.2:1 at 500 mc. — **Cross-Talk:** Greater than 50 db at 100 mc. — **High Power Rating:** 1 kw. — **Coaxial connectors:** Available in types UHF, N, BNC, TNC and C.

MECHANICAL SPECIFICATIONS:

Size: 5 3/4" diameter by 2 3/4" deep. — **Finish:** Connectors silver plated per Mil Spec QQ-S-365, relay body iridite per MIL-C-5541. — **Coil Voltage:** All standard A.C. and D.C. voltages. — **Life Expectancy:** 1,000,000 operations. — **Duty:** Continuous.

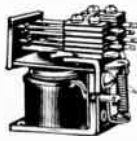
DKC-71 with UHF connectors Each \$49⁵⁰

DOW-KEY products available at your local distributor or write:

Manufactured by DOW-KEY COMPANY, Thief River Falls, Minnesota



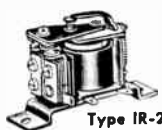
GUARDIAN [®] Highest Quality Industrial Controls...



Type IR-500-505



Type IR-120



Type IR-220



Type IR-625



Type IR-1200-1205



Type IR-805-S

IR-500-505 Compact, lightweight relay capable of unusually heavy power control for its size. Long life, high quality, available in a variety of AC and DC voltages with a selection of contact combinations. Contact rated 10 amps., 60 cy., 115 V. non-inductive. Size, 1 1/8" x 1 1/2" x 1". Shpg. wt. 4 oz. **IR-120** An economical unit for requirements not exceeding S.P.D.T. combinations. Armature carries the contact blade and both are common to the field piece. Contacts rated 8 amps., 60 cy., 115 V. non-inductive load. Size, 3" x 1 1/4" x 1 1/2". Shpg. wt. 4.5 oz. **IR-220** Rugged unit breaks up to 20 amperes. Armature is equipped with bakelite contact mounting block carrying 3/4" dual contacts. Bakelite is tested at 1500 volts breakdown to ground. Contacts are silver alloy. Available in S.P.S.T.N.O. contact combination only. Contact rated 20 amp., 60 cy., 230 V. non-inductive load. Size, 3" x 1 1/4" x 1 1/4". Shpg. wt. 5.5 oz.

1200 Rated at 8 amps. 60 cycles, 115 V. non-inductive load. Heavy solder lug type terminals molded in phenolic block, with barriers for over-surface insulation, built to meet U/L specifications. Applicable to automation, communications, remote control, selectors, switching devices and experimental uses. Size, 1 1/2" x 1" x 1 1/4". Shpg. wt. 2.5 oz.

IR-625 plate circuit control with extra long coil for greater sensitivity. Adaptable to voltage operating as well as sensitive plate circuit control installations. Coil impregnated for reliability and longer life. Average power requirement, 0.2 watts. Contacts, 8 amps. Size, 2 1/4" x 2" x 1 1/4". Shpg. wt. 5.5 oz. **IR-805-S** Group selector relay can simultaneously make common up to 32 circuits. All circuits insulated from ground. Contact blades molded in thermosetting phenolic. All contact members completely enclosed. Phenolic plunger housing, 32 poles made common upon energization. Size, 2 7/8" x 1 1/2" x 2 1/4". Shpg. wt. 6 oz.

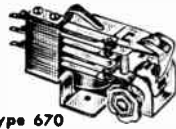
| Mfg. No. | Volts | Cont. Comb. | Quantities | | | | |
|--------------|--------|-------------|------------|--------|--------|---------|--------|
| | | | 1-24 | 25-49 | 50-99 | 100-149 | 250-Up |
| IR-500-A6 | 6-AC | SPST* | \$2.50 | \$2.25 | \$2.13 | \$2.00 | \$1.75 |
| IR-500-C6 | 6-AC | SPDT | 2.80 | 2.52 | 2.38 | 2.24 | 1.96 |
| IR-500-G6 | 6-AC | DPDT | 3.10 | 2.79 | 2.64 | 2.48 | 2.17 |
| IR-500-GG6 | 6-AC | 4PDT | 4.30 | 3.87 | 3.66 | 3.44 | 3.01 |
| IR-500-A24 | 24-AC | SPST* | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| IR-500-C24 | 24-AC | SPDT | 2.80 | 2.52 | 2.38 | 2.24 | 1.96 |
| IR-500-G24 | 24-AC | DPDT | 3.10 | 2.79 | 2.64 | 2.48 | 2.17 |
| IR-500-GG24 | 24-AC | 4PDT | 4.30 | 3.87 | 3.66 | 3.44 | 3.01 |
| IR-500-A115 | 115-AC | SPST* | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| IR-500-C115 | 115-AC | SPDT | 2.80 | 2.52 | 2.38 | 2.24 | 1.96 |
| IR-500-G115 | 115-AC | DPDT | 3.10 | 2.79 | 2.64 | 2.48 | 2.17 |
| IR-500-GG115 | 115-AC | 4PDT | 4.30 | 3.87 | 3.66 | 3.44 | 3.01 |
| IR-500-G230 | 230-AC | DPDT | 3.70 | 3.33 | 3.15 | 2.96 | 2.59 |
| IR-505-A6 | 6-DC | SPST* | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| IR-505-C6 | 6-DC | SPDT | 2.80 | 2.52 | 2.38 | 2.24 | 1.96 |
| IR-505-G6 | 6-DC | DPDT | 3.10 | 2.79 | 2.64 | 2.48 | 2.17 |
| IR-505-GG6 | 6-DC | 4PDT | 4.30 | 3.87 | 3.66 | 3.44 | 3.01 |
| IR-505-A12 | 12-DC | SPST* | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| IR-505-C12 | 12-DC | SPDT | 2.80 | 2.52 | 2.38 | 2.24 | 1.96 |
| IR-505-G12 | 12-DC | DPDT | 3.10 | 2.79 | 2.64 | 2.48 | 2.17 |
| IR-505-GG12 | 12-DC | 4PDT | 4.30 | 3.87 | 3.66 | 3.44 | 3.01 |
| IR-505-A24 | 24-DC | SPST* | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| IR-505-C24 | 24-DC | SPDT | 2.80 | 2.52 | 2.38 | 2.24 | 1.96 |
| IR-505-G24 | 24-DC | DPDT | 3.10 | 2.79 | 2.64 | 2.48 | 2.17 |
| IR-505-GG24 | 24-DC | 4PDT | 4.30 | 3.87 | 3.66 | 3.44 | 3.01 |
| IR-505-A110 | 110-DC | SPST* | 3.05 | 2.75 | 2.59 | 2.44 | 2.14 |
| IR-505-C110 | 110-DC | SPDT | 3.15 | 2.84 | 2.68 | 2.52 | 2.21 |
| IR-505-G110 | 110-DC | DPDT | 3.50 | 3.15 | 2.98 | 2.80 | 2.45 |
| IR-505-GG110 | 110-DC | 4PDT | 4.70 | 4.23 | 4.00 | 3.76 | 3.29 |
| IR-120-C24 | 24-AC | SPDT | 3.05 | 2.75 | 2.59 | 2.44 | 2.14 |
| IR-120-C115 | 115-AC | SPDT | 3.50 | 3.15 | 2.98 | 2.80 | 2.45 |
| IR-120-C230 | 230-AC | SPDT | 5.30 | 4.77 | 4.51 | 4.24 | 3.71 |
| IR-220-A24 | 24-AC | SPST* | 3.95 | 3.56 | 3.36 | 3.16 | 2.77 |
| IR-220-A115 | 115-AC | SPST* | 4.45 | 4.01 | 3.78 | 3.56 | 3.12 |
| IR-220-A230 | 230-AC | SPST* | 4.95 | 4.46 | 4.21 | 3.96 | 3.47 |

*Normally Open

RATCHET RELAYS - AC



Type IR-M-120-115



Type 670

IR-M-120-115 Small but rugged 4 PDT stepper with 3-position switch operation, center position "off." Large cam assures precision "step" action. 24 pt. ratchet. Fine silver contacts rated for 10 amps., 115 volts, 60 cps. Unit rated at intermittent duty. Size, 3" x 2 1/4" x 2 1/4". Shpg. wt. 10 oz. **670** For on/off control of lighting, motors, appliances and speaker applications, among others. Highly reliable operation over 1,000,000 steps. Each impulse (up to 10 steps per second) reverses contacts. Contact arrangements to DPDT and ratings to 1 1/2 amperes resistive load at 115 v., 60 c. Intermittent duty coil with voltages to 230 VAC or 115 VAC. Size, 3" x 1 1/4" x 2 1/4". Shpg. wt. 7.5 ounces.

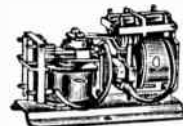
| Mfg. No. | Volts | Cont. Comb. | Quantities | | | | |
|--------------|--------|-------------|------------|---------|--------|---------|--------|
| | | | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up |
| IR-M-120-115 | 115 AC | 4PDT | \$11.75 | \$10.58 | \$9.99 | \$9.40 | \$8.23 |
| 670-C115 | 115 AC | SPDT | 5.75 | 5.18 | 4.89 | 4.60 | 4.03 |
| 670-G-115 | 115 AC | DPDT | 5.85 | 5.27 | 4.97 | 4.68 | 4.10 |

| Mfg. No. | Volts AC | Coil Res. | Cont. Comb. | Quantities | | | | |
|------------|----------|-----------|-------------|------------|--------|--------|---------|--------|
| | | | | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up |
| 1200-G6 | 6 | 2 | DPDT | \$3.60 | \$3.24 | \$3.06 | \$2.88 | \$2.52 |
| 1200-GC6 | 6 | 2 | 3PDT | 4.00 | 3.60 | 3.40 | 3.20 | 2.80 |
| 1200-G24 | 24 | 33 | DPDT | 3.60 | 3.24 | 3.06 | 2.88 | 2.52 |
| 1200-GC24 | 24 | 33 | 3PDT | 4.00 | 3.60 | 3.40 | 3.20 | 2.80 |
| 1200-C115 | 115 | 800 | SPDT | 3.50 | 3.15 | 2.98 | 2.80 | 2.45 |
| 1200-G115 | 115 | 800 | DPDT | 3.60 | 3.24 | 3.06 | 2.88 | 2.52 |
| 1200-GC115 | 115 | 800 | 3PDT | 4.00 | 3.60 | 3.40 | 3.20 | 2.80 |
| 1200-G230 | 230 | 3,500 | DPDT | 3.85 | 3.47 | 3.27 | 3.08 | 2.70 |
| 1200-GC230 | 230 | 3,500 | 3PDT | 4.25 | 3.83 | 3.61 | 3.40 | 2.98 |
| | DC | | | | | | | |
| 1205-G6 | 6 | 12 | DPDT | \$3.30 | \$2.97 | \$2.81 | \$2.64 | \$2.31 |
| 1205-GC6 | 6 | 12 | 3PDT | 3.70 | 3.33 | 3.15 | 2.96 | 2.59 |
| 1205-G12 | 12 | 48 | DPDT | 3.30 | 2.97 | 2.81 | 2.64 | 2.31 |
| 1205-GC12 | 12 | 48 | 3PDT | 3.70 | 3.33 | 3.15 | 2.96 | 2.59 |
| 1205-C24 | 24 | 192 | SPDT | 3.20 | 2.88 | 2.72 | 2.56 | 2.24 |
| 1205-G24 | 24 | 192 | DPDT | 3.30 | 2.97 | 2.81 | 2.64 | 2.31 |
| 1205-GC24 | 24 | 192 | 3PDT | 3.70 | 3.33 | 3.15 | 2.96 | 2.59 |
| 1205-G110 | 110 | 4,075 | DPDT | 3.55 | 3.20 | 3.02 | 2.84 | 2.49 |
| 1205-GC110 | 110 | 4,075 | 3PDT | 3.95 | 3.56 | 3.36 | 3.16 | 2.77 |
| IR-625-2.5 | 9M.A.* | 2,500 | DPDT | \$3.85 | \$3.47 | \$3.27 | \$3.08 | \$2.70 |
| IR-625-5 | 6.3M.A.* | 5,000 | DPDT | 4.25 | 3.83 | 3.61 | 3.40 | 2.98 |
| IR-625-10 | 4.5M.A.* | 10,000 | DPDT | 5.25 | 4.73 | 4.46 | 4.20 | 3.68 |
| IR-805-S | 24-DC | 72 Ohms | | \$4.30 | \$3.87 | \$3.66 | \$3.44 | \$3.01 |

*Oper. Mils.



Type IR-1200/1200



Type X-300-ER

IR-610L Single coil and 5 ampere contact rating for S.P.S.T., or S.P.D.T., contact combinations. Recommended for positive ON/OFF control of positioning devices, remote controls, lighting circuits, etc. Impulse as short as M.S. energizes coil to reverse position of snap-action switches. Holds last position of switch with coil de-energized. Size: 2 1/4" L. x 1 1/4" W. x 1 1/4" H. Shpg. wt. 4 oz. **IR-1200/1200** Two interlocking AC relays in sturdy metal frame bracket. Used to maintain circuits continuously without coil power consumption. Unit is electrically pulse operated with mechanical hold and electrical release. Contacts rated at 8 amps., 60 cps, non-inductive. Size, 1 1/8" x 1 1/4" x 2 1/4". Shpg. wt. 5.5 oz. **X-300-ER** Applicable for use in industrial panel installation, provides precise protection from current surges and continuous overloads. Remote panel installation of control potentiometer simplifies adjustment of relay to operate on any current value from 250 to 750 milliamperes. Auxiliary for pilot light indication of "overload" or "clear" position. Reset relay can be operated from any point convenient to operator. Insulation between coil and ground rated 3,000 v. Shpg. wt. 1.3 oz. Size, 4 3/4" x 2 x 1 1/8"

| Mfg. No. | Volts AC | Cont. Comb. | Quantities | | | | |
|--------------------|----------|-------------|------------|--------|--------|---------|--------|
| | | | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up |
| IR-610L-A115 | 115 | SPST | \$3.80 | \$3.42 | \$3.23 | \$3.04 | \$2.66 |
| IR-610L-C115 | 115 | SPDT | 3.95 | 3.56 | 3.36 | 3.16 | 2.77 |
| IR-1200/1200-GG115 | | 4PDT | 10.25 | 9.23 | 8.71 | 8.20 | 7.18 |
| X-300-ER | 115 | | 8.85 | 7.97 | 7.52 | 7.08 | 6.20 |

GUARDIAN [®] ELECTRIC
MANUFACTURING COMPANY

... Available NOW from your STOCKING DISTRIBUTOR



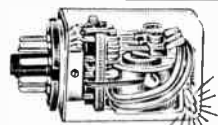
**ENCLOSED PLUG-IN
AC-DC RELAY
1210-1215**

A powerful and economical relay enclosed in a transparent, lightweight Lucite case which has high impact strength, unaffected by weather, and is resistant to temperatures of 200° F. Relay available with 8 pin octal plug for DPDT and 11 pin for 3PDT. Contacts rated for 8 amperes at 60 cycles, 115 V. AC non-inductive load. Shipping Weight, 3.5 oz.

| Size, 2 3/8" x 1 3/8" x 1 3/8" | | | Quantities | | | | | |
|--------------------------------|----------|-----------|-------------|--------|--------|--------|---------|--------|
| Mfg. No. | Volts AC | Coil Res. | Cont. Comb. | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up |
| 1210-G6 | 6 | 2 | DPDT | \$5.70 | \$5.13 | \$4.85 | \$4.56 | \$3.99 |
| 1210-GC6 | 6 | 2 | 3PDT | 7.10 | 6.39 | 6.04 | 5.68 | 4.97 |
| 1210-G24 | 24 | 33 | DPDT | 5.70 | 5.13 | 4.85 | 4.56 | 3.99 |
| 1210-GC24 | 24 | 33 | 3PDT | 7.10 | 6.39 | 6.04 | 5.68 | 4.97 |
| 1210-G115 | 115 | 1,000 | DPDT | 5.70 | 5.13 | 4.85 | 4.56 | 3.99 |
| 1210-GC115 | 115 | 1,000 | 3PDT | 7.10 | 6.39 | 6.04 | 5.68 | 4.97 |
| 1210-G230 | 230 | 5,230 | DPDT | 5.95 | 5.36 | 5.06 | 4.76 | 4.17 |
| 1210-GC230 | 230 | 5,230 | 3PDT | 7.35 | 6.62 | 6.25 | 5.88 | 5.15 |
| DC | | | | | | | | |
| 1215-G6 | 6 | 12 | DPDT | \$5.80 | \$5.22 | \$4.93 | \$4.64 | \$4.06 |
| 1215-GC6 | 6 | 12 | 3PDT | 7.25 | 6.53 | 6.16 | 5.80 | 5.08 |
| 1215-G12 | 12 | 60 | DPDT | 5.80 | 5.22 | 4.93 | 4.64 | 4.06 |
| 1215-GC12 | 12 | 60 | 3PDT | 7.25 | 6.53 | 6.16 | 5.80 | 5.08 |
| 1215-G24 | 24 | 192 | DPDT | 5.80 | 5.22 | 4.93 | 4.64 | 4.06 |
| 1215-GC24 | 24 | 192 | 3PDT | 7.25 | 6.53 | 6.16 | 5.80 | 5.08 |
| 1215-G110 | 110 | 5,042 | DPDT | 6.05 | 5.45 | 5.14 | 4.84 | 4.24 |
| 1215-GC110 | 110 | 5,042 | 3PDT | 7.50 | 6.75 | 6.38 | 6.00 | 5.25 |

ENCLOSED PLATE CIRCUIT PLUG-IN RELAY-DC

| Mfg. No. | Oper. Mils MA | Coil Res. | Cont. Comb. | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up |
|------------|---------------|-----------|-------------|--------|--------|--------|---------|--------|
| 1215-G2.5 | 10 | 2,500 | DPDT | \$6.00 | \$5.40 | \$5.10 | \$4.80 | \$4.20 |
| 1215-GC2.5 | 12 | 2,500 | 3PDT | 7.00 | 6.30 | 5.95 | 5.60 | 4.90 |
| 1215-G5 | 7.2 | 5,000 | DPDT | 6.10 | 5.49 | 5.19 | 4.88 | 4.27 |
| 1215-GC5 | 8.5 | 5,000 | 3PDT | 7.20 | 6.48 | 6.12 | 5.76 | 5.04 |
| 1215-G10 | 5 | 10,000 | DPDT | 6.40 | 5.76 | 5.44 | 5.12 | 4.48 |
| 1215-GC10 | 6 | 10,000 | 3PDT | 7.50 | 6.75 | 6.38 | 6.00 | 5.25 |

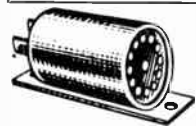


**ENCLOSED PLUG-IN AC RELAY
1210-N**

With Built-In Neon Lamp to Indicate Circuit Faults

This plug-in relay utilizes a miniature neon lamp connected across coil terminals. The lamp lights each time the coil is energized, or indicates a circuit fault when lamp is "dark." Ideal for detecting circuit faults in relay banks, mass relay arrangements, or where relays are visibly located at intermediate switching points of the circuitry. Precludes the use of circuit testers. Available with 8 pin octal plug for DPDT and 11 pin for 3PDT. Contacts rated 8 amperes at 115 V. AC, 60 cycles, non-inductive load. Shipping Weight, 3.5 ounces.

| Size, 2 3/8" x 1 3/8" x 1 3/8" | | | Quantities | | | | | |
|--------------------------------|-----------|-------------|------------|--------|--------|---------|--------|--|
| Mfg. No. | Coil Res. | Cont. Comb. | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up | |
| 1210N-G115 | 1,000 | DPDT | \$6.30 | \$5.67 | \$5.36 | \$5.04 | \$4.41 | |
| 1210N-GC115 | 1,000 | 3PDT | 7.70 | 6.93 | 6.55 | 6.16 | 5.39 | |



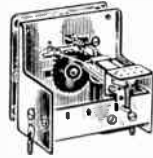
**ROTOMITE STEPPER-DC
IR-705-12P**

Unit enables engineers to apply the stepping relay principle over a wide range of applications. Applications include business machines, computer circuits, automated devices, counting, lighting, sorting, model trains, among others. Stepping mechanism, coils and contacts completely enclosed. Continuous rotation on 12 positions up to 20 steps per second. High contact rating 3 amperes resistive, 1 ampere inductive (50% P.F.). DC coils are continuous duty for 6, 12, or 24 V. DC. Tests well over 1,000,000 operations. Shipping Weight, 5 ounces.

| Size, 2" L. x 1 1/8" Dia. | | | Quantities | | | | | |
|---------------------------|----------|----------|------------|--------|--------|---------|--------|--|
| Mfg. No. | No. Pts. | Volts DC | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up | |
| IR-705-12P-6D | 12 | 6 | \$5.40 | \$4.86 | \$4.59 | \$4.32 | \$3.78 | |
| IR-705-12P-12D | 12 | 12 | 5.40 | 4.86 | 4.59 | 4.32 | 3.78 | |
| IR-705-12P-24D | 12 | 24 | 5.40 | 4.86 | 4.59 | 4.32 | 3.78 | |

STEPPING CONTROLS

For accurate sequence selecting, pulse multiplying, pulse dividing, circuit selecting, automatic homing, remote homing, counting and latching. Guardian steppers are specified for automatic control of electrically operated business machines, accumulators (coin and other), animated displays, electric scoreboards, automatic overhead garage doors, assembly line controls, automatic packaging (loading) controls, sump pump controls, commercial slide projectors, electric scoreboards, among others. All Guardian steppers are *intermittent duty* direct-drive units with switching operations completed upon energization.



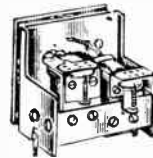
CONTINUOUS ROTATION

Type IR-P.C. Constructed with micro-finished shaft and Oilite shaft bearing. Beryllium copper pawl control shutter. Selection contacts are terminated on a phenolic board, solder beaded for easy soldering. Mechanical life expectancy estimated 4,000,000 steps. Will operate satisfactorily at 15% below or 10% above rated voltage.

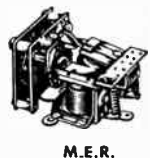


Type IR-M.C. is a smaller continuous rotation operation stepper similar to the P.C. with life expectancy of 2,000,000 steps.

ELECTRICAL RESET

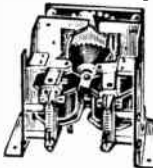


Type IR-P.E.R. Constructed with micro-finished shaft and Oilite shaft bearing. Positive mechanical stops limit total number of "steps" in any single unit. Returns automatically to home or start position when reset coil is energized.



Type M.E.R. A direct drive (steps on energization) with positive mechanical reset interlock actuated by the reset magnet and unlocked on the first energization of the step magnet. Assures positive reset on as short a pulse as one-hundredth of a second or even from its own selection contacts. Unit is capable of counting in groups up to 21, then resetting automatically. By interconnecting two or more Steppers, count can be increased to any desired total counting by tens, or any convenient multiple. Will control a sequence of operation and then automatically reset to starting position.

ADD AND SUBTRACT



Type IR-R.A.S. Non-ferrous shutters control motion of the pawl to extend life of unit and prevent skipping of the ratchet. Steps one step at a time in either direction, depending upon which one of two coils may be energized.



Type IR-M.A.S. Midget Add and Subtract Stepper is similar to the R.A.S. in general operation. A zero position switch is opened at home position.

Auxiliary switches connected in series with the commutator of the selecting finger may be added to the step and/or reset magnet to increase the normal contact rating. The Guardian Series 200-M3 Contact Switch Kit may be used to add switches (except RAS stepper). Contact fingers are insulated from the shaft. Guardian Steppers are *intermittent duty units* rated at 10% duty cycle (out of each hour), maximum energization single period, 5 minutes. See chart for details.

All stepper contact points are rated 1 1/2 amps resistive, at 115 V., 60 cps. Coil* Voltages are 115 V. AC, 60 cps.

| Mfg. No. | Volt Amperes | Watts | Number of Points | No. of Active Contacts *** | Max. Steps Per Second | Shpg. Wt. Oz. |
|------------|--------------|---------|------------------|----------------------------|-----------------------|---------------|
| IR-PC-115 | 70 | 45 | 40 | 40 | 20 | 17 |
| IR-MC-115 | 30 | 18 | 24 | 24 | 20 | 9 1/2 |
| IR-PER-115 | 70-25** | 45-15** | 40 | 36 | 20 | 22 |
| MER-115 | 30-9** | 18-7** | 24 | 22 | 20 | 11 1/2 |
| IR-RAS-115 | 100 | 45 | 40 | 38 | 10 | 29 1/2 |
| IR-MAS-115 | 15 | 10 | 30 | *** | 10 | 11 |

*Steppers will operate satisfactorily at 15% below or 10% above rated voltage.
**Listings are for stepping coil and reset coil, respectively.
***Includes Zero (0) position.
****Zero (0) position switch only.

| Mfg. No. | SIZE | | | Quantities | | | | |
|------------|--------|-------|--------|------------|---------|---------|---------|---------|
| | Length | Width | Height | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up |
| IR-PC-115 | 3 3/8 | 3 | 3 3/8 | \$18.15 | \$16.34 | \$15.43 | \$14.52 | \$12.71 |
| IR-MC-115 | 2 3/8 | 3 | 3 1/4 | 13.00 | 11.70 | 11.05 | 10.40 | 9.10 |
| IR-PER-115 | 3 | 3 3/8 | 3 3/8 | 24.20 | 21.78 | 20.57 | 19.36 | 16.94 |
| MER-115 | 3 3/4 | 2 3/8 | 3 1/4 | 14.00 | 12.60 | 11.90 | 11.20 | 9.80 |
| IR-RAS-115 | 3 3/8 | 4 1/8 | 3 3/8 | 25.30 | 22.77 | 21.51 | 20.24 | 17.71 |
| IR-MAS-115 | 1 1/8 | 3 1/8 | 3 | 15.95 | 14.36 | 13.56 | 12.76 | 11.17 |

GUARDIAN ELECTRIC
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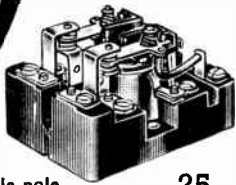


GUARDIAN POWER RELAYS

with Interchangeable Coil Assemblies

Series 2200
D.P.D.T.

Contacts: double pole,
double throw. Wt. 11 oz.
Size: 3 3/8" x 2 1/2" x 2 3/8".



25
Amperes

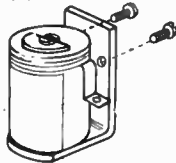


Series 2210.
D.P.S.T.N.O. Contacts:
double pole, single throw,
normally open. Wt. 10 oz.
Size: 2 1/8" x 2 1/2" x 2 3/8".

Interchangeable Coil Assemblies . . .

(No Solder Connections)

By removing two easily accessible screws, coil assembly can be replaced by coil of another value. Complete instructions for this operation are included with each unit. Solder connections are not required when changing coils.



Replacement Coils for Either Relay

| Mfg. No. | Volts AC | Quantities | | | | |
|-----------|----------|------------|--------|--------|---------|--------|
| | | 1-24 | 25-49 | 50-99 | 100-249 | 250-UP |
| 2200-6A | 6 | \$2.25 | \$2.03 | \$1.91 | \$1.80 | \$1.57 |
| 2200-24A | 24 | 2.25 | 2.03 | 1.91 | 1.80 | 1.57 |
| 2200-115A | 115 | 2.25 | 2.03 | 1.91 | 1.80 | 1.57 |
| 2200-230A | 230 | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |

POWER RELAY REPLACEMENT CONTACT SWITCH PARTS

Available for Series 2200, only—Replacement Contact Switch Parts for easy right or left S.P.D.T. assembly. No solder needed. Package contains one normally open and one normally closed contact bracket, complete moving blade and one terminal. Left or Right Switch Assemblies determined by viewing relay from armature hinge end with contacts up.

| Mfg. No. | Quantities | | | | |
|---------------|------------|--------|--------|---------|--------|
| | 1-24 | 25-49 | 50-99 | 100-249 | 250-UP |
| CS-2200—LEFT | \$1.85 | \$1.67 | \$1.57 | \$1.48 | \$1.29 |
| CS-2200—RIGHT | 1.85 | 1.67 | 1.57 | 1.48 | 1.29 |

The Guardian Series 2200, D.P.D.T., and the Series 2210, D.P.S.T.N.O., power relays have 25-ampere contacts and interchangeable coil assemblies for either relay. Replaceable contact switch parts available for Series 2200, only. These power relays provide a much wider latitude of control for a variety of heavy duty industrial applications including motor starting and heater loads. Series 2200 and 2210 power relays are rated at 25 amperes, continuous duty at 230 volts A.C., with 75% power factor. Operating power requirement for A.C. is 9.5 volt amperes, 60 cycles. Coil drain approximately .080 amperes at 115 volts, 60 cycles. Approximate weight of replacement coil assemblies is 6 ounces.

MOUNTING: 2 holes .196" dia. on 1 7/8" centers.

2200 and 2210 Power Relays

| Mfg. No. | Volts AC | Quantities | | | | |
|--------------------|----------|------------|--------|--------|---------|--------|
| | | 1-24 | 25-49 | 50-99 | 100-249 | 250-UP |
| 2200-DPDT-6 | 6 | \$6.10 | \$5.49 | \$5.19 | \$4.88 | \$4.27 |
| 2200-DPDT-24 | 24 | 6.10 | 5.49 | 5.19 | 4.88 | 4.27 |
| 2200-DPDT-115 | 115 | 6.10 | 5.49 | 5.19 | 4.88 | 4.27 |
| 2200-DPDT-230 | 230 | 6.50 | 5.85 | 5.53 | 5.20 | 4.55 |
| 2210-DPST-N.O.-6 | 6 | 5.25 | 4.73 | 4.46 | 4.20 | 3.68 |
| 2210-DPST-N.O.-24 | 24 | 5.25 | 4.73 | 4.46 | 4.20 | 3.68 |
| 2210-DPST-N.O.-115 | 115 | 5.25 | 4.73 | 4.46 | 4.20 | 3.68 |
| 2210-DPST-N.O.-230 | 230 | 5.60 | 5.04 | 4.76 | 4.48 | 3.92 |

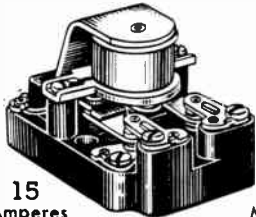
ENGINEER'S CONTACT SWITCH KIT



Guardian Contact Switch Kit is indispensable to experimental engineers and those who design, plan, build, repair or test electrically operated controls. All materials are standard high-quality Guardian production items.

Net Ea. \$10.95

GUARDIAN Series 2400 AC - 2405 DC POWER RELAY



15
Amperes

In power applications that require up to 15 ampere contacts the Guardian Series 2400 A.C., or Series 2405 D.C. Power Relays are specified. Both have standard D.P.D.T. contacts rated for 15 amperes non-inductive, or 1 H.P. at 115/230 volts, 60 cycles. Series 2400 standard coil voltages are 6, 12, 24 and 110 V.D.C. In verted coil construction protects armature and contacts. Armature extension permits manual circuit testing. Screw type terminals easily accessible for top or bottom connections. Easy to mount recessed auxiliary switch, up to S.P.D.T. for 10 ampere operation, available for both A.C. and D.C. versions.

Size: 3 3/8" x 2 1/2" x 2 3/8"
Shpg. Wt.: 8 ounces.

Mounting: Two .196" Dia. holes on 1 7/8" centers.

| Mfg. No. | Volts | Rating | Quantities | | | | |
|--------------------------------|--------|----------|------------|--------|--------|---------|--------|
| | | | 1-24 | 25-49 | 50-99 | 100-249 | 250-UP |
| 2400-DPDT-6 | 6 AC | 15 Amps. | \$5.40 | \$4.86 | \$4.59 | \$4.32 | \$3.78 |
| 2400-DPDT-24 | 24 AC | 15 Amps. | 5.40 | 4.86 | 4.59 | 4.32 | 3.78 |
| 2400-DPDT-115 | 115 AC | 15 Amps. | 5.40 | 4.86 | 4.59 | 4.32 | 3.78 |
| 2400-DPDT-230 | 230 AC | 15 Amps. | 5.70 | 5.13 | 4.85 | 4.56 | 3.99 |
| 2405-DPDT-6 | 6 DC | 15 Amps. | \$5.60 | \$5.04 | \$4.76 | \$4.48 | \$3.92 |
| 2405-DPDT-12 | 12 DC | 15 Amps. | 5.60 | 5.04 | 4.76 | 4.48 | 3.92 |
| 2405-DPDT-24 | 24 DC | 15 Amps. | 5.60 | 5.04 | 4.76 | 4.48 | 3.92 |
| 2405-DPDT-110 | 110 DC | 15 Amps. | 5.90 | 5.31 | 5.02 | 4.72 | 4.13 |
| 2400-SPDT-AUX Auxiliary Switch | | 10 Amps. | \$1.35 | \$1.21 | \$1.15 | \$1.08 | \$.94 |

GUARDIAN SERIES 200 RELAY with completely interchangeable COIL and CONTACT ASSEMBLIES



MIDGET CONTACT ASSEMBLY. Dotted line shows size of standard unit.

Two basic parts—a coil assembly and a contact switch assembly—comprise this simple, yet versatile Guardian relay. The coil assembly consists of the coil and field piece; the contact assembly consists of switch blades, armature, return spring and mounting bracket. The Guardian Midget Contact Assembly is interchangeable with the standard Series 200 coil assembly. Available with SPDT, DPDT or 4 PDT contact switch assemblies, each interchangeable with all A.C. or D.C. coils.

CONTACT SWITCH PARTS Use contact switch parts 200-3 for adding poles to contact switch assemblies 200-1 and 200-2. Use midget contact switch parts 200-M3 to add poles to midget contact switch assemblies 200-M1 and 200-M2.

| Mfg. No. | Quantities | | | | |
|----------|------------|--------|--------|---------|--------|
| | 1-24 | 25-49 | 50-99 | 100-249 | 250-UP |
| 200-3 | \$1.50 | \$1.35 | \$1.28 | \$1.20 | \$1.05 |
| 200-M3 | \$1.50 | \$1.35 | \$1.28 | \$1.20 | \$1.05 |

| SERIES 200 | | | Quantities | | | | |
|-------------|------------|-------|------------|-------|-------|---------|--------|
| Mfg. No. | Coils | Volts | 1-24 | 25-49 | 50-99 | 100-249 | 250-UP |
| | | | 200-6A | A.C. | 6 | \$1.75 | \$1.58 | $1.49 | $1.40 | $1.22 |
| 200-12A | A.C. | 12 | 1.75 | 1.58 | 1.49 | 1.40 | 1.22 |
| 200-24A | A.C. | 24 | 1.75 | 1.58 | 1.49 | 1.40 | 1.22 |
| 200-115A | A.C. | 115 | 2.05 | 1.85 | 1.74 | 1.64 | 1.43 |
| 200-230A | A.C. | 230 | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 200-6D | D.C. | 6 | 1.90 | 1.71 | 1.62 | 1.52 | 1.33 |
| 200-12D | D.C. | 12 | 1.90 | 1.71 | 1.62 | 1.52 | 1.33 |
| 200-24D | D.C. | 24 | 1.90 | 1.71 | 1.62 | 1.52 | 1.33 |
| 200-32D | D.C. | 32 | 1.90 | 1.71 | 1.62 | 1.52 | 1.33 |
| 200-110D | D.C. | 110 | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| 200-5,000D | PLATE COIL | | 2.20 | 1.98 | 1.87 | 1.76 | 1.54 |
| 200-10,000D | PLATE COIL | | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |

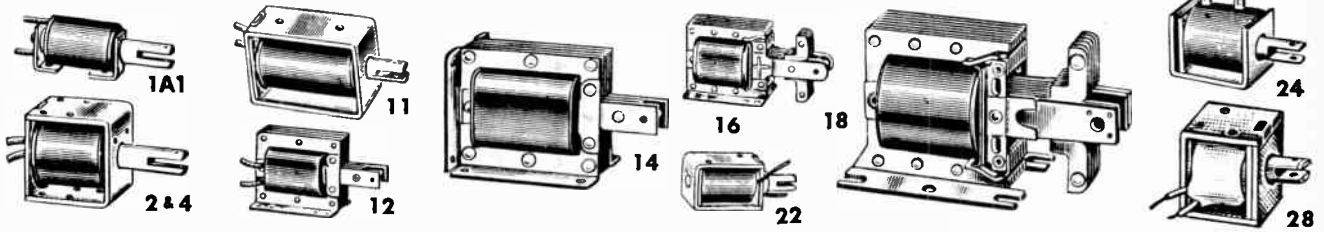
| CONTACT SWITCH ASSEMBLIES | | | | Quantities | | | | |
|---------------------------|----------|---------------|-------------|------------|----------|-------|---------|--------|
| Mfg. No. | Type | Contact Amps. | Cont. Comb. | 1-24 | 25-49 | 50-99 | 100-249 | 250-UP |
| | | | | 200-1 | STANDARD | 8 | SPDT | \$1.50 | $1.35 | $1.28 | $1.20 | $1.05 |
| 200-2 | STANDARD | 8 | DPDT | 2.00 | 1.80 | 1.70 | 1.60 | 1.40 |
| 200-4 | STANDARD | 12.5 | DPDT | 2.25 | 2.03 | 1.91 | 1.80 | 1.57 |
| 200-5 | STANDARD | 8 | 4PDT | 3.50 | 3.15 | 2.98 | 2.80 | 2.45 |
| 200-M1 | MIDGET | 10 | SPDT | 1.40 | 1.26 | 1.19 | 1.12 | .98 |
| 200-M2 | MIDGET | 10 | DPDT | 1.75 | 1.58 | 1.49 | 1.40 | 1.22 |
| 200-M5 | MIDGET | 8 | 4PDT | 2.85 | 2.57 | 2.42 | 2.28 | 1.99 |

GUARDIAN[®]

A.C. INDUSTRIAL SOLENOIDS D.C. INTERMITTENT AND CONTINUOUS



A Complete Line for Every Industrial Application



Intermittent duty solenoids may be specified when the cycle of operations does not require energization of the solenoid coil for more than five consecutive minutes with a sufficient time lapse between operations to permit cooling of the coil to approximately the 24° C. (72° F.) ambient temperature. If energized more frequently and for shorter periods, the cycle should be such that the temperature rise of the coil is not greater

than 85° C. (185° F.) at 24° C. ambient temperature. Continuous duty solenoids are constructed that they will not exceed a maximum temperature rise of 85° C. above 24° C. ambient temperature under continuous operation, at rated load. Ambient temperature for temperature rise tests on these solenoids has been fixed at 24° C. (72° F.).

| Mfg. No. | Duty | Volts | Ohms | Amps | Power Req. | Max. Lift (Oz.) | Adj. Stroke Inches | Size Shipping Weight | Quantities | | | | |
|---------------|------|--------------|------|------|------------|-----------------|---|---|------------|--------|--------|---------|--------|
| | | | | | | | | | 1-24 | 25-49 | 50-99 | 100-249 | 250-Up |
| 1A1-Int-115A | AC | Inter. 115AC | 300 | .17 | 20VA. | 8.0 | 1/8" - 1/2" | 1 1/4" H. x 1 3/4" L. x 1 3/16" W. | \$2.80 | \$2.52 | \$2.38 | \$2.24 | \$1.96 |
| 1A1-Cont-115A | | Cont. 115AC | 675 | .076 | 9VA | 3.0 | 1/8" - 3/8" | Shipping Wt. 4.5 ounces | 2.80 | 2.52 | 2.38 | 2.24 | 1.96 |
| 1A1-Int-24D | DC | Inter. 24DC | 42.6 | .56 | 14.70W | 5.0 | 1/8" - 3/8" | 1 1/4" H. x 1 3/4" L. x 1 3/16" W. Shipping Wt. 4.5 ounces | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| 1A1-Cont-24D | | Cont. 24DC | 74.4 | .32 | 7.01W | 2.0 | 1/8" - 1/4" | | 2.50 | 2.25 | 2.13 | 2.00 | 1.75 |
| 1A1-Int-115D | | Inter. 115DC | 803 | .14 | 14.70W | 5.0 | 1/8" - 3/8" | | 3.00 | 2.70 | 2.55 | 2.40 | 2.10 |
| 1A1-Cont-115D | | Cont. 115DC | 2070 | .05 | 7.01W | 2.0 | 1/8" - 1/4" | | 3.00 | 2.70 | 2.55 | 2.40 | 2.10 |
| 2-Int-115A | AC | Inter. 115AC | 60 | .50 | 61VA | 27.0 | 1/8" - 3/8" | 1 3/8" H. x 1 1/4" L. x 1 1/16" W. | 3.20 | 2.88 | 2.72 | 2.56 | 2.24 |
| 2-Cont-115A | | Cont. 115AC | 166 | .155 | 18VA | 10.5 | 1/8" - 7/8" | Shipping Wt. 10 ounces | 3.20 | 2.88 | 2.72 | 2.56 | 2.24 |
| 4-Int-115A | AC | Inter. 115AC | 37 | .64 | 75VA | 24.0 | 1/8" - 1" | 1 3/8" H. x 2" L. x 1 1/16" W. | 3.80 | 3.42 | 3.23 | 3.04 | 2.66 |
| 4-Cont-115A | | Cont. 115AC | 133 | .14 | 16VA | 6.0 | 1/8" - 1/2" | Shipping Wt. 14.5 ounces | 3.80 | 3.42 | 3.23 | 3.04 | 2.66 |
| 4-Int-24D | DC | Inter. 24DC | 15 | 1.6 | 37.4W | 57.0 | 1/8" - 1" | 1 3/8" H. x 2" L. x 1 1/16" W. Shipping Wt. 14.5 ounces | 3.80 | 3.42 | 3.23 | 3.04 | 2.66 |
| 4-Cont-24D | | Cont. 24DC | 50 | .48 | 10.8W | 20.0 | 1/8" - 3/8" | | 3.80 | 3.42 | 3.23 | 3.04 | 2.66 |
| 4-Int-115D | | Inter. 115DC | 346 | .33 | 37.4W | 57.0 | 1/8" - 1" | | 4.00 | 3.60 | 3.40 | 3.20 | 2.80 |
| 4-Cont-115D | | Cont. 115DC | 1210 | .09 | 10.8W | 20.0 | 1/8" - 7/8" | | 4.00 | 3.60 | 3.40 | 3.20 | 2.80 |
| 11-Int-24A | AC | Inter. 24AC | 5.1 | 1.10 | 26.4VA | 20.0 | 1/8" - 1" | 1 3/8" H. x 1 1/4" L. x 1 7/32" W. Shipping Wt. 7.5 ounces | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 11-Cont-24A | | Cont. 24AC | 12 | .33 | 7.9VA | 8.0 | 1/8" - 1" | | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 11-Int-115A | | Inter. 115AC | 125 | .225 | 26.0VA | 20.0 | 1/8" - 1" | | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 11-Cont-115A | | Cont. 115AC | 300 | .072 | 8.0VA | 8.0 | 1/8" - 1" | | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 11-Int-6D | DC | Inter. 6DC | 2 | 3.00 | 18.0W | 39.0 | 1/8" - 7/8" | 1 3/8" H. x 1 1/4" L. x 1 7/32" W. Shipping Wt. 7.5 ounces | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 11-Cont-6D | | Cont. 6DC | 5 | 1.2 | 7.2W | 21.0 | 1/8" - 3/8" | | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 11-Int-24D | | Inter. 24DC | 32 | .750 | 18.0W | 39.0 | 1/8" - 7/8" | | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 11-Cont-24D | | Cont. 24DC | 72 | .333 | 8.0W | 21.0 | 1/8" - 3/8" | | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 |
| 12-Int-115A | AC | Inter. 115AC | 100 | .27 | 32VA | 32.0 | 1/8" - 1" | 1 1/8" H. x 1 1/8" L. x 1 3/16" W. | 4.15 | 3.74 | 3.53 | 3.32 | 2.90 |
| 12-Cont-115A | | Cont. 115AC | 150 | .155 | 18VA | 22.0 | 1/8" - 3/8" | Shipping Wt. 6 ounces | 4.15 | 3.74 | 3.53 | 3.32 | 2.90 |
| 14-Int-115A | AC | Inter. 115AC | 11 | 1.4 | 164VA | 110.0 | 1/8" - 1 1/2" | 2 1/4" H. x 2 1/4" L. x 1 1/16" W. | 5.50 | 4.95 | 4.68 | 4.40 | 3.85 |
| 14-Cont-115A | | Cont. 115AC | 18 | .52 | 61VA | 65.0 | 1/8" - 1 1/2" | Shipping Wt. 19 ounces | 5.50 | 4.95 | 4.68 | 4.40 | 3.85 |
| 16-Int-115A | AC | Inter. 115AC | 41 | .54 | 62VA | 96.0 | 1/8" - 3/4" | 1 1/4" H. x 1 1/8" L. x 1 1/8" W. Shipping Wt. 7.5 ounces | 3.20 | 2.88 | 2.72 | 2.56 | 2.24 |
| 16-Cont-115A | | Cont. 115AC | 85 | .19 | 23VA | 55.0 | 1/8" - 3/8" | | 3.20 | 2.88 | 2.72 | 2.56 | 2.24 |
| 16-Int-230A | | Inter. 230AC | 224 | .230 | 49VA | 96.0 | 1/8" - 3/4" | | 3.40 | 3.06 | 2.89 | 2.72 | 2.38 |
| 16-Cont-230A | | Cont. 230AC | 350 | .110 | 25VA | 55.0 | 1/8" - 3/8" | | 3.40 | 3.06 | 2.89 | 2.72 | 2.38 |
| 18-Int-115A | AC | Inter. 115AC | 8.8 | 1.45 | 170VA | 304.0 | 1/8" - 1" | 2 1/8" H. x 2 1/2" L. x 1 13/32" W. Shipping Wt. 16.5 ounces | 4.50 | 4.05 | 3.83 | 3.60 | 3.15 |
| 18-Cont-115A | | Cont. 115AC | 19.7 | .39 | 45VA | 145.0 | 1/8" - 1" | | 4.50 | 4.05 | 3.83 | 3.60 | 3.15 |
| 18-Int-230A | | Inter. 230AC | 45 | .59 | 136VA | 304.0 | 1/8" - 1" | | 4.70 | 4.23 | 4.00 | 3.76 | 3.29 |
| 18-Cont-230A | | Cont. 230AC | 78 | .20 | 46VA | 145.0 | 1/8" - 1" | | 4.70 | 4.23 | 4.00 | 3.76 | 3.29 |
| 22-Int-6D | DC | Inter. 6DC | 4.7 | 1.27 | 24.0 | 1/16" - 3/8" | 3/4" H. x 1 1/8" L. x 3/4" W. Shipping Wt. 2.5 ounces | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 22-Cont-6D | | Cont. 6DC | 9 | .667 | 13.0 | 1/16" - 1/4" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 22-Int-24D | | Inter. 24DC | 60 | .4 | 24.0 | 1/16" - 3/8" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 22-Cont-24D | | Cont. 24DC | 144 | .167 | 13.0 | 1/16" - 1/4" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 24-Int-115A | AC | Inter. 115AC | 310 | .13 | 19.0 | 1/16" - 3/8" | 5/8" H. x 1 1/4" L. x 2 7/32" W. | 2.95 | 2.66 | 2.51 | 2.36 | 2.06 | |
| 24-Cont-115A | | Cont. 115AC | 500 | .07 | 12.0 | 1/16" - 3/8" | Shipping Wt. 3 ounces | 2.95 | 2.66 | 2.51 | 2.36 | 2.06 | |
| 28-Int-24A | AC | Inter. 24AC | 7.5 | .900 | 35.0 | 1/16" - 1/2" | 1 3/8" H. 1 1/8" L. x 1 3/16" W. Shipping Wt. 3.5 ounces | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 | |
| 28-Cont-24A | | Cont. 24AC | 17.4 | .340 | 20.0 | 1/16" - 1/2" | | 2.70 | 2.43 | 2.30 | 2.16 | 1.89 | |
| 28-Int-115A | | Inter. 115AC | 220 | .160 | 35.0 | 1/16" - 1/2" | | 2.90 | 2.61 | 2.46 | 2.32 | 2.03 | |
| 28-Cont-115A | | Cont. 115AC | 400 | .077 | 20.0 | 1/16" - 1/2" | | 2.90 | 2.61 | 2.46 | 2.32 | 2.03 | |
| 28-Int-6D | DC | Inter. 6DC | 3.3 | 1.80 | 41.0 | 1/16" - 1/2" | 1 3/8" H. 1 1/8" L. x 1 3/16" W. Shipping Wt. 3.5 ounces | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 28-Cont-6D | | Cont. 6DC | 7.7 | .78 | 35.0 | 1/16" - 3/8" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 28-Int-12D | | Inter. 12DC | 13 | .92 | 41.0 | 1/16" - 1/2" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 28-Cont-12D | | Cont. 12DC | 27 | .45 | 35.0 | 1/16" - 3/8" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 28-Int-24D | | Inter. 24DC | 50 | .48 | 41.0 | 1/16" - 1/2" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |
| 28-Cont-24D | | Cont. 24DC | 104 | .23 | 35.0 | 1/16" - 3/8" | | 2.60 | 2.34 | 2.21 | 2.08 | 1.82 | |

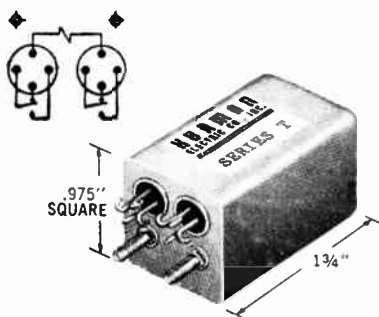
* Pull Data Obtained During "Cold" Operation, when plunger is down.



KURMAN RELAYS

At KURMAN SALES AGENCIES, yesterday's SPECIALS are today's STANDARDS . . . stocked in your own backyard at Factory Prices!

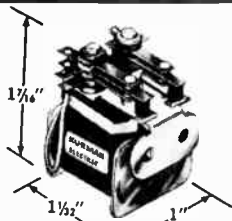
SENSITIVE RELAYS



SERIES T002
SUB-MINIATURE — DC

Highest quality sensitive relay meeting both military and commercial DC requirements. Sensitivity—40 milliwatts—DPDT. Wide range of coil resistances up to 20,000 ohms. Special versions as low as 10 milliwatts. Mounting: 2 #4-40 screws on 1/2" centers.

| Relay No. | (Ohms) Coil Resistance | Operating Current | Cont. Arr. | Contact Rating (Amps) | Net Ea. 1-10 |
|-----------|------------------------|-------------------|------------|-----------------------|--------------|
| T002-2000 | 2000 | 4.5 MA | DPDT | 2 | \$15.10 |
| T002-5000 | 5000 | 2.8 MA | DPDT | 2 | 16.25 |
| T002-8000 | 8000 | 2.2 MA | DPDT | 2 | 16.75 |

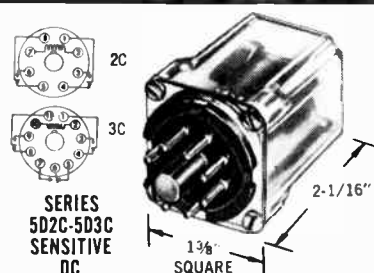


SERIES 52C-54C
SENSITIVE DC

The 52C, DPDT and 54C, 4PDT are the smallest, lightest plate circuit relays offering self-wiping contacts. Either of two adjustments can be specified—50 milliwatts per pole (5 amp contacts) and "OFF THE SHELF" 100 milliwatts per pole (5 amp contacts). Coil resistances are available up to 20,000 ohms. Variations can be supplied up to 4PDT including hermetic sealing. Mounting: two No. 6/32 tapped holes on 0.437" centers.

100 MILLIWATTS PER POLE

| Relay No. | (Ohms) Coil Resistance | Cont. Arr. | Contact Rating (Amps) | 1-10 Net Ea. |
|-----------|------------------------|------------|-----------------------|--------------|
| 52C-500 | 500 | DPDT | 5 | \$5.60 |
| 52C-2500 | 2500 | DPDT | 5 | 5.60 |
| 52C-5000 | 5000 | DPDT | 5 | 5.90 |
| 52C-8000 | 8000 | DPDT | 5 | 6.10 |
| 52C-10000 | 10000 | DPDT | 5 | 6.20 |
| 54C-500 | 500 | 4PDT | 5 | 6.95 |
| 54C-2500 | 2500 | 4PDT | 5 | 6.95 |
| 54C-5000 | 5000 | 4PDT | 5 | 7.15 |
| 54C-8000 | 8000 | 4PDT | 5 | 7.45 |
| 54C-10000 | 10000 | 4PDT | 5 | 7.65 |



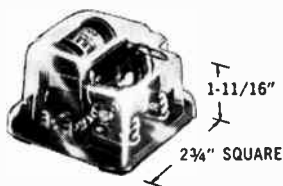
SERIES 5D2C-5D3C
SENSITIVE DC

All standard operating characteristics of Series 52C are available in this new polystyrene high heat cover. Two adjustment ranges are provided—50 milliwatts per pole and "OFF THE SHELF" 100 milliwatts per pole. Variations can be supplied with contact arrangements up to 3PDT only. Mounting 8 pin octal plug for 5D2C; 11 pin for 5D3C.

100 MILLIWATTS PER POLE

| Relay No. | (Ohms) Coil Resistance | Cont. Arr. | Contact Rating (Amps) | 1-10 Net Ea. |
|------------|------------------------|------------|-----------------------|--------------|
| 5D2C-500 | 500 | DPDT | 5 | \$6.60 |
| 5D2C-2500 | 2500 | DPDT | 5 | 6.60 |
| 5D2C-5000 | 5000 | DPDT | 5 | 6.80 |
| 5D2C-8000 | 8000 | DPDT | 5 | 7.10 |
| 5D2C-10000 | 10000 | DPDT | 5 | 7.20 |
| 5D3C-500 | 500 | 3PDT | 5 | 7.70 |
| 5D3C-2500 | 2500 | 3PDT | 5 | 7.70 |
| 5D3C-5000 | 5000 | 3PDT | 5 | 8.00 |
| 5D3C-8000 | 8000 | 3PDT | 5 | 8.30 |
| 5D3C-10000 | 10000 | 3PDT | 5 | 8.40 |

SEE COMPLETE ENGINEERING SPECS FOLLOWING CATALOG LISTINGS



SERIES 310
MICROAMP DC
SERIES 321
MICROAMP AC

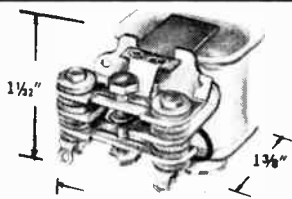
High sensitivity relay—2 milliwatts. Ideal for all low power in-pur circuits where available current is at a premium. Typical applications include high speed keying, remote control, or battery operated devices. May be field adjusted to handle currents up to 3 amps at reduced sensitivity. Transparent plastic dust cover. Mounting: Two .196" clearance holes on 2 1/8" x 2 1/8" centers.

DC RELAYS

| Relay No. | (Ohms) Coil Resistance | Operating Current | Cont. Arr. | Contact Rating (Amps) | 1-10 Net Ea. |
|-----------|------------------------|-------------------|------------|-----------------------|--------------|
| 310DC35 | 470 | 2.1 MA | SPDT | 1 | \$8.85 |
| 310DC37 | 1200 | 1.3 MA | SPDT | 1 | 8.85 |
| 310DC40 | 4680 | 0.7 MA | SPDT | 1 | 8.85 |
| 310DC42 | 11700 | 0.4 MA | SPDT | 1 | 10.75 |
| 310DC44 | 29250 | 0.25 MA | SPDT | 1 | 12.40 |

AC RELAYS

| Relay No. | Operating Voltage | Contact Arrangement | Contact Rating (Amps) | 1-10 Net Ea. |
|-----------|-------------------|---------------------|-----------------------|--------------|
| 321DC78 | 6 V | SPDT | 2 | \$9.25 |
| 321DC81 | 12 V | SPDT | 2 | 9.25 |
| 321DC84 | 24 V | SPDT | 2 | 9.25 |
| 321DC91 | 110 V | SPDT | 2 | 9.50 |



SERIES 51C — MIDGET — AC or DC

Smallest, lightest plate circuit relay offering self-wiping contacts. Standard adjustment—10 milliwatts* DC operation; 0.3 VA AC operation. Adjustable 2 amp. SPDT screw contacts. New rigid front pile-up. Variations—including 5 amp contacts, H. S. military relays, coils to 20,000 ohms available. Mounting: 2 #6-32 tapped holes on 0.437" centers.

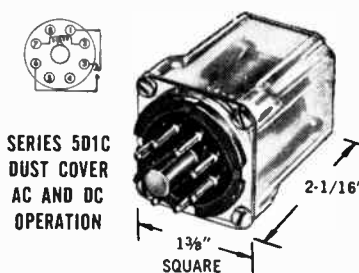
*51CB44D factory adjusted for 5 milliwatt operation — others can be field adjusted — 1 amp contact rating.

DC RELAYS

| Relay No. | (Ohms) Coil Resistance | Operating Current | Cont. Arr. | Contact Rating (Amps) | 1-10 Net Ea. |
|-----------|------------------------|-------------------|------------|-----------------------|--------------|
| 51CA37D | 500 | 4.5 MA | SPDT | 2 | \$5.20 |
| 51CA40D | 2000 | 2.3 MA | SPDT | 2 | 5.20 |
| 51CA42D | 5000 | 1.4 MA | SPDT | 2 | 5.70 |
| 51CA43D | 8000 | 1.2 MA | SPDT | 2 | 5.70 |
| 51CB44D | 13000 | 0.6 MA | SPDT | 1 | 6.20 |

AC RELAYS

| Relay No. | Operating Voltage | Contact Arrangement | Contact Rating (Amps) | 1-10 Net Ea. |
|-----------|-------------------|---------------------|-----------------------|--------------|
| 51CB3A | 6 V | SPDT | 2 | \$5.60 |
| 51CB6A | 12 V | SPDT | 2 | 5.60 |
| 51CB9A | 24 V | SPDT | 2 | 5.60 |



SERIES 5D1C
DUST COVER
AC AND DC
OPERATION

All standard operating characteristics of series 51C available in this new polystyrene enclosed plug in unit. Easily removable case permits field adjustment without special equipment. Mounting: 8 pin octal plug in.

DC RELAYS

| Relay No. | (Ohms) Coil Resistance | Operating Current | Cont. Arr. | Contact Rating (Amps) | 1-10 Net Ea. |
|-----------|------------------------|-------------------|------------|-----------------------|--------------|
| 5D1CA37D | 500 | 4.5 MA | SPDT | 2 | \$6.20 |
| 5D1CA40D | 2000 | 2.3 MA | SPDT | 2 | 6.20 |
| 5D1CA42D | 5000 | 1.4 MA | SPDT | 2 | 6.70 |
| 5D1CA43D | 8000 | 1.2 MA | SPDT | 2 | 6.70 |
| 5D1CB44D | 13000 | 0.6 MA | SPDT | 1 | 7.20 |

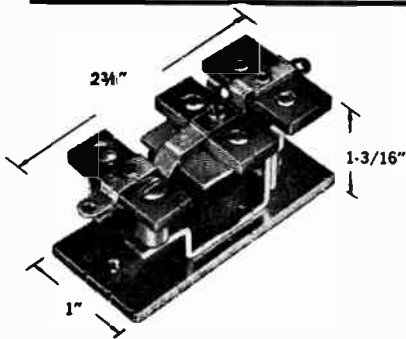
AC RELAYS

| Relay No. | Operating Voltage | Contact Arrangement | Contact Rating (Amps) | 1-10 Net Ea. |
|-----------|-------------------|---------------------|-----------------------|--------------|
| 5D1CB3A | 6 V | SPDT | 2 | \$6.60 |
| 5D1CB6A | 12 V | SPDT | 2 | 6.60 |
| 5D1CB9A | 24 V | SPDT | 2 | 6.60 |

IMMEDIATE DELIVERY

of stock relays at factory prices will save you engineering and purchasing time

POWER AND ANTENNA RELAYS



SERIES 261C—ECONOMY POWER

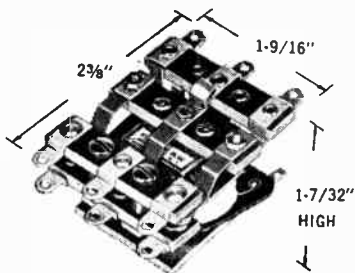
Both space and cost economy have been carefully balanced in the design of this heavy duty power relay. SPDT contacts rated at carrying continuous loads of 20 amps are standard. AC or DC operation. Mounting: 2 #6-32 tapped holes on 1-3/16" centers.

DC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24 V Net | 110 V Net |
|------|--------------|-----------------------|----------------|-----------|
| 261C | SPDT | 20 | \$5.45 | \$6.00 |

AC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24, 115 V Net | 230 V Net |
|------|--------------|-----------------------|---------------------|-----------|
| 261C | SPDT | 20 | \$5.45 | \$6.00 |



SERIES 262C-263C—MEDIUM POWER

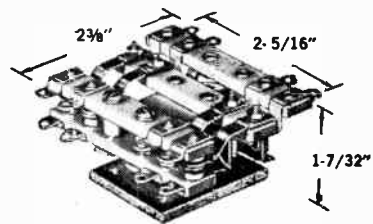
The DPDT and 3PDT relays feature self-wiping contacts, which will continuously handle 20 amp loads. AC or DC coils. This high speed relay will handle the majority of all power applications. Standard operating power; 1 watt—DPDT; 1/2 watts—3PDT. Mounting: 4 #6-32 tapped holes on 13/16" x 1-3/16" centers.

DC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24 V Net | 110 V Net |
|------|--------------|-----------------------|----------------|-----------|
| 262C | DPDT | 20 | \$6.45 | \$7.00 |
| 263C | 3PDT | 20 | 6.95 | 7.50 |

AC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24, 115 V Net | 230 V Net |
|------|--------------|-----------------------|---------------------|-----------|
| 262C | DPDT | 20 | \$6.45 | \$7.00 |
| 263C | 3PDT | 20 | 6.95 | 7.50 |

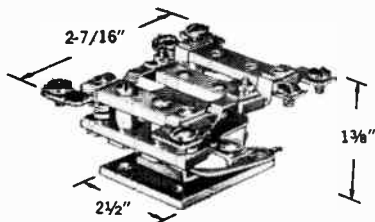


SERIES 264C—MEDIUM POWER—DC

Special version of Series 26 for DC application only. Available as 4PDT. With a minimum of operating power, it is now possible to handle up to 4 power control circuits at one time. Mounting: 4 #6-32 tapped holes on 13/16" x 1-3/16" centers.

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24 V Net | 110 V Net |
|------|--------------|-----------------------|----------------|-----------|
| 264C | 4PDT | 10 | \$8.35 | \$9.15 |

SEE COMPLETE ENGINEERING SPECS FOLLOWING CATALOG LISTINGS



SERIES 26L—SCREW TERMINALS

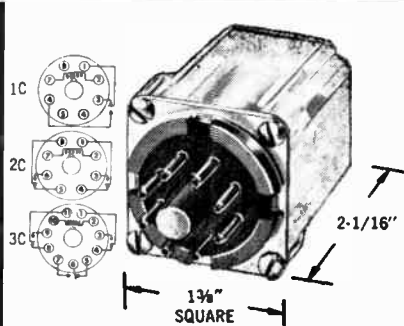
Heavy duty industrial control relay for all applications requiring high speed operation, long life and reliable high current contacts. All contacts rated at 30 amp. Heavy duty screw terminals. Mounting: two 3/16" diameter holes on 1 7/8" centers.

DC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24 V Net | 110 V Net |
|-------|--------------|-----------------------|----------------|-----------|
| 26L2C | DPDT | 30 | \$7.20 | \$7.75 |

AC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24, 115 V Net | 230 V Net |
|-------|--------------|-----------------------|---------------------|-----------|
| 26L2C | DPDT | 30 | \$7.20 | \$7.75 |



SERIES 26D—DUST COVER

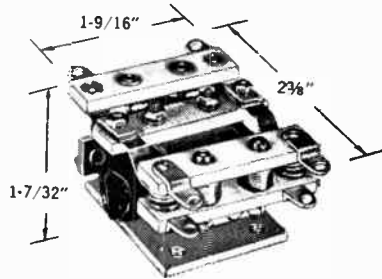
Midget version of standard Series 26 in clear polystyrene enclosure. Available up to 3PDT with standard contacts rated at 10 amps. Mounting: 8 pin octal plug in for standard DPDT; 11 pin octal type plug in for 3PDT.

DC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24 V Net | 110 V Net |
|-------|--------------|-----------------------|----------------|-----------|
| 26D1C | SPDT | 10 | \$5.45 | \$5.95 |
| 26D2C | DPDT | 10 | 6.45 | 7.00 |
| 26D3C | 3PDT | 10 | 7.95 | 8.50 |

AC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24, 115 V Net | 230 V Net |
|-------|--------------|-----------------------|---------------------|-----------|
| 26D1C | SPDT | 10 | \$5.45 | \$6.15 |
| 26D2C | DPDT | 10 | 6.45 | 8.00 |
| 26D3C | 3PDT | 10 | 7.95 | 8.50 |



SERIES 252C-253C—ANTENNA

Powerful antenna change-over relay, capable of transferring up to 1500 watts RF load. High speed DPDT self-wiping contacts. AC or DC operation. Low loss handling of RF energy is insured by the use of G-7 insulating bridges. Present use includes the 450 megacycle range. Standard operating power—1 watt. Mounting: 4 #6-32 tapped holes on 13/16" x 1-3/16" centers.

DC RELAYS

| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24 V Net | 110 V Net |
|------|--------------|---------------------------------|----------------|-----------|
| 252C | DPDT | 1.5 KW RF | \$7.50 | \$8.10 |
| 253C | 3PDT | { 1.5 KW RF (2C) 20 amp (1C) | 8.50 | 8.60 |

AC RELAYS

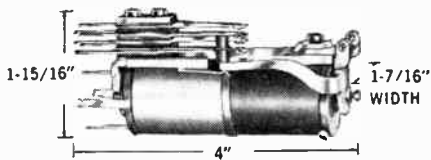
| Type | Contact Arr. | Contact Rating (Amps) | 6, 12 24 V Net | 115 V Net |
|------|--------------|---------------------------------|----------------|-----------|
| 252C | DPDT | 1.5 KW RF | \$7.50 | |
| 253C | 3PDT | { 1.5 KW RF (2C) 20 amp (1C) | 8.00 | 8.00 |

All prices are for orders from 1-10 relays. Write for quantity discounts.



KURMAN RELAYS

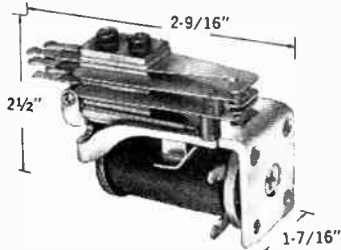
MICRO-MINIATURE AND TELEPHONE TYPE RELAYS



SERIES A — LONG FORM — DC

Designed for applications requiring rapid opening and closing of up to 15 individual circuits (forms A-E). Single or double wound coils with resistances up to 75,000 ohms. The heavy duty armature hinge with a non-loosening knurled armature pin provides an extra long operational life. Tinned solder terminals for rear of panel wiring. For sensitivity, ruggedness, reliability, multiple switching and economy, the Series A has no equal. Mounting: 2 #8-32 tapped holes on 3/4" centers.

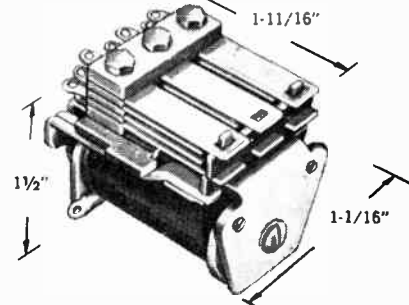
| Relay No. | Contact Arr. | Coil Volt | Coil (Ohms) | Contact Rating (Amps) | Net 1-10 |
|-----------|--------------|-----------|-------------|-----------------------|----------|
| A004-6 | 4PDT | 6 | 40 | 3 | \$8.65 |
| A004-12 | 4PDT | 12 | 140 | 3 | 9.10 |
| A004-24 | 4PDT | 24 | 600 | 3 | 9.20 |
| A004-110 | 4PDT | 110 | 10,000 | 3 | 10.30 |



SERIES E — SHORT FORM — DC

Featuring all the benefits of the long form relay, and incorporating a shortened coil and heel piece, this relay is desired where space economy is a factor. Extremely fast contact switching — ideal for computer applications. High reliability—designed for hundreds of millions of operations. Sensitive versions as low as 100 milliwatt per pole. Mounting: 4 #8-32 tapped mounting holes on 5/8" x 3/4" centers.

| Relay No. | Contact Arr. | Coil Volt | Coil (Ohms) | Contact Rating (Amps) | Net 1-10 |
|-----------|--------------|-----------|-------------|-----------------------|----------|
| E004-6 | 4PDT | 6 | 40 | 3 | \$7.65 |
| E004-12 | 4PDT | 12 | 145 | 3 | 8.10 |
| E004-24 | 4PDT | 24 | 590 | 3 | 8.20 |
| E004-110 | 4PDT | 110 | 10,000 | 3 | 9.30 |

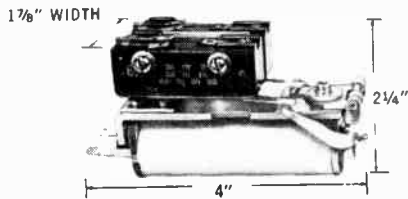


SERIES M — MINIATURE — DC

Ideal for all applications where space, weight and economy are factors. Short springs and light-weight armature provide fast action, reliability and long life. Up to 18 contact arms, forms (A-D). Good shock and vibration characteristics. DC operation only. Mounting: 2 #4-40 tapped holes on 3/4" centers.

| Relay No. | Contact Arr. | Coil Volt | Coil (Ohms) | Contact Rating (Amps) | Net 1-10 |
|-----------|--------------|-----------|-------------|-----------------------|----------|
| M004-6 | 4PDT | 6 | 30 | 3 | \$6.30 |
| M004-12 | 4PDT | 12 | 120 | 3 | 6.30 |
| M004-24 | 4PDT | 24 | 480 | 3 | 6.30 |
| M004-110 | 4PDT | 110 | 12,000 | 3 | 7.25 |

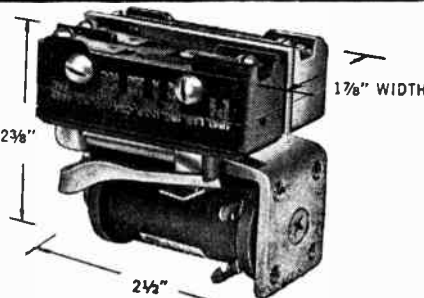
SEE COMPLETE ENGINEERING SPECS FOLLOWING CATALOG LISTINGS



SERIES AS — SNAP ACTION — DC

Special version of Series A shown above, offered with either one or two snap action switches. For sensitive switching of power control circuits, carrying currents of up to 15 amps per pole. Mounting: 2 #8-32 tapped holes on 3/4" centers.

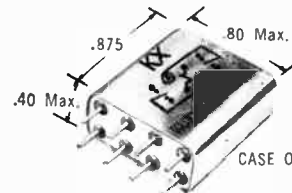
| Relay No. | Contact Arr. | Coil Volt | Coil (Ohms) | Contact Rating (Amps) | Net 1-10 |
|-----------|--------------|-----------|-------------|-----------------------|----------|
| AS2-6 | DPDT | 6 | 40 | 15 | \$12.00 |
| AS2-12 | DPDT | 12 | 140 | 15 | 12.45 |
| AS2-24 | DPDT | 24 | 600 | 15 | 12.55 |
| AS2-110 | DPDT | 110 | 10,000 | 15 | 13.70 |



SERIES ES — SNAP ACTION — DC

Either one or two snap action switches mounted on standard Series E frame, offering sensitive operation, handling high currents in 3/4" of the volume of the Series AS. Mounting: 4 #8-32 tapped holes on 5/8" x 3/4" centers.

| Relay No. | Contact Arr. | Coil Volt | Coil (Ohms) | Contact Rating (Amps) | Net 1-10 |
|-----------|--------------|-----------|-------------|-----------------------|----------|
| ES2-6 | DPDT | 6 | 23 | 15 | \$11.50 |
| ES2-12 | DPDT | 12 | 92 | 15 | 11.95 |
| ES2-24 | DPDT | 24 | 370 | 15 | 12.05 |
| ES2-110 | DPDT | 110 | 8,250 | 15 | 13.20 |



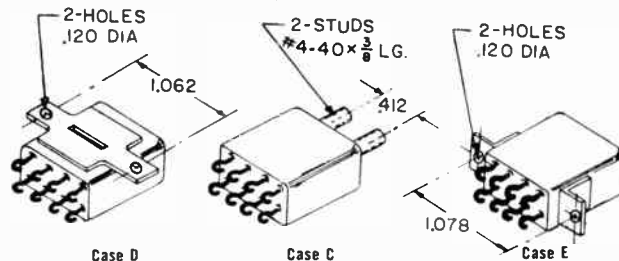
SERIES KX1 — MICRO-MINIATURE — DC

Equipped with special DPDT 2 amp contacts rated to carry any load from dry circuit to full rating. Features at 1/10" grid spaced header. Nominal operating power—250 milliwatts.

New torsional rotation banded armature offers 20G, 2,000 cycle vibration and 50G shock immunity. Proven reliability under all environmental conditions. A frictionless bearing assures repeatability and long life.

MICRO-MINIATURE RELAYS—DC

| Relay No. | Case Style | Header | Cont. Arr. | Contact Rating (Amps) | 6, 12, 24 VDC Net 1-10 |
|-----------|------------|---------|------------|-----------------------|------------------------|
| KX1P20 | 0 | Plug-in | DPDT | 2 amp | \$15.95 |
| KX1H2D | D | Solder | DPDT | 2 amp | 16.20 |
| KX1H2C | C | Solder | DPDT | 2 amp | 16.20 |
| KX1H2E | E | Solder | DPDT | 2 amp | 16.20 |



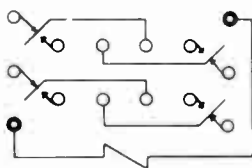
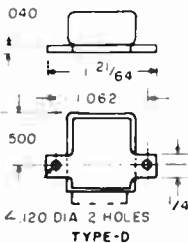
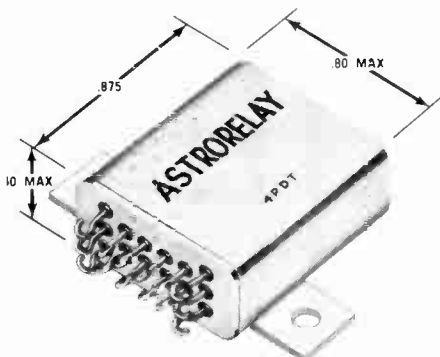
QUANTITY DISCOUNTS

| | | | | | | | |
|---------|---------|---------|----------|-----------|----------|--------------|--------------|
| 1 - 10 | Net | 26 - 50 | Less 10% | 76 - 100 | Less 30% | 251 - 500 | Less 45% |
| 11 - 25 | Less 5% | 51 - 75 | Less 15% | 101 - 250 | Less 40% | 501 - 1000 | Less 47 1/2% |
| | | | | | | 1001 or more | Less 50% |

IMMEDIATE DELIVERY

of stock relays at factory prices will save you engineering and purchasing time

HERMETICALLY SEALED AND ASTRORELAY



SERIES KX4-4PDT MICRO-MINIATURE

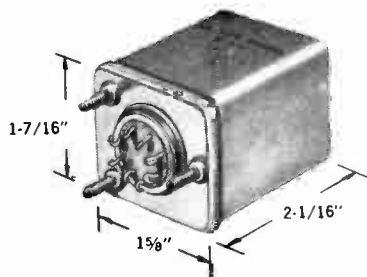
The "Astrorelay" will function under a 100G shock and vibration to 40G at 2000 cycles. Temperatures vary from -65°C to 125°C.

Pull-in power is approximately 250mw. Closing time is about 8 millise. Dropout speed is less than 4 milli-sec. Contact load from dry circuit up to two amps at 28v d-c resistive. Contact resistance is less than 30 milliohms.

The relay will withstand a high potential breakdown test of 750v a-c between any mutually insulated terminals or terminals to case. Insulation resistance is in excess of 1000 megohms. It weighs only 1/2 oz.

| Relay No. | Contact Arrangement | Coil Volt | Coil Ohms | Contact Rating (Amps) | Net 1-10 |
|-----------|---------------------|-----------|-----------|-----------------------|----------|
| KX4H4D-6 | 4PDT | 6 | 35 | 2 | \$26.00 |
| KX4H4D-12 | 4PDT | 12 | 150 | 2 | 26.00 |
| KX4H4D-24 | 4PDT | 24 | 600 | 2 | 26.00 |

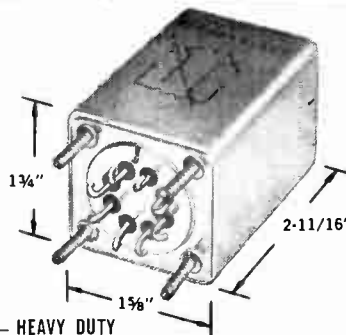
Meets Mil R-5757D



SM004E — MINIATURE TELEPHONE

Hermetically sealed version of Series M. This relay equipped with 4PDT contacts rated at 3 amp. Operating from a 26.5 V DC nominal input source. Solder lug terminals. Hermetic enclosure makes the relay impervious to all detrimental atmospheric conditions, including contaminating gases, dust salt, etc. Mounting: 3 ±6-32 studs on 15/16" x 1-3/16" centers.

| Relay Type | Contact Arrangement | Contact Rating (Amps) | Coil Voltage | 1-10 |
|------------|---------------------|-----------------------|--------------|-------------|
| SM004E | 4PDT | 3 | 26.5 V DC | \$12.10 Net |

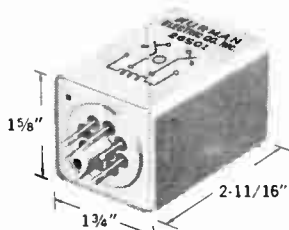


#26S20 — HEAVY DUTY

Hermetically sealed version of Series 26, equipped with heavy duty construction, offering contacts rated at 25 amps. Relay operates at 115 V AC nominal, and offers a standard DPDT construction. Can be externally wired for double-make or break arrangements. Excellent for all industrial and other remote power controls. Mounting: 4 ±6-32 studs on 1 1/4" x 1 1/8" centers

| Relay Type | Contact Arrangement | Contact Rating (Amps) | Coil Voltage | 1-10 |
|------------|---------------------|-----------------------|--------------|-------------|
| 26S20 | DPDT | 25 | 115 V AC | \$14.80 Net |

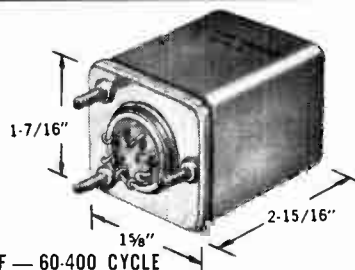
SEE COMPLETE ENGINEERING SPECS FOLLOWING CATALOG LISTINGS



#26S01 — MEDIUM POWER

Hermetically sealed Series 26 relay. DPDT contacts—rated at 10 amps. 115 V AC nominal coil operation. Equipped with octal plug-in. Small enclosures. Mounting: 8 pin octal plug-in.

| Relay Type | Contact Arrangement | Contact Rating (Amps) | Coil Voltage | 1-10 |
|------------|---------------------|-----------------------|--------------|-------------|
| 26S01 | DPDT | 10 | 115 V AC | \$12.85 Net |



SM004F — 60-400 CYCLE

Special version of Series M relay equipped with internal rectifiers. Nominal operation—110 V AC, 400 cycle (this relay can be used on frequencies as low as 60 cps). 4PDT contacts rated at 3 amp. Excellent vibration and shock characteristics. Solder lug terminals. Mounting: 3 ±6-32 studs on 15/16" x 1-3/16" centers.

| Relay Type | Contact Arrangement | Contact Rating (Amps) | Coil Voltage | 1-10 |
|------------|---------------------|-----------------------|---------------------|-------------|
| SM004F | 4PDT | 3 | 115 V AC-60-400 CPS | \$13.85 Net |

All prices and specifications are subject to change without notice. Prices shown are for quantities of 1-10. Consult a Kurman Sales Agency for discounts on larger quantities.

KURMAN

relays-engineering specifications

Complete electrical operating characteristics of all standard stock relays available off-the-shelf at factory prices.

SENSITIVE DC RELAYS

(See Illustrations and Dimensions on Preceding Pages)

| Relay No. | Resistance (ohms) $\pm 10\%$ | Contact Arrangements | OPERATE CHARACTERISTICS | | | | | | Oper. time† (milli-secs) | | Contact rating+ (amp) | | Coil Impreg. |
|------------|------------------------------|----------------------|-------------------------|------|----------|--------------------------|-----------|---------------|--------------------------|-----------|-----------------------|---------|--------------|
| | | | Current (ma) | | | Approx. Voltage* (volts) | | | at †† Nom. I | at Max. I | 28 VDC | 115 VAC | |
| | | | Pull In | Max. | Drop out | At Pull In I | at Max. I | at Drop Out I | | | | | |
| T002-2000 | 2000 | DPDT | 4.5 | 35 | 1.5 | 9 | 70 | 3.0 | 20-40 | 5 | 2 | 2 | no |
| T002-5000 | 5000 | DPDT | 2.8 | 22 | 1.0 | 14 | 100 | 5 | 20-40 | 5 | 2 | 2 | no |
| T002-8000 | 8000 | DPDT | 2.3 | 18 | 0.8 | 18 | 128 | 6.4 | 20-40 | 5 | 2 | 2 | no |
| 310DC35 | 470 | SPDT | 2.1 | 65 | 0.2 | 1.0 | 31 | 0.09 | 10-20 | 2-3 | 0.5 | 1 | no |
| 310DC37 | 1200 | SPDT | 1.3 | 41 | 0.13 | 1.56 | 49 | 0.15 | 10-20 | 2-3 | 0.5 | 1 | no |
| 310DC40 | 4680 | SPDT | 0.65 | 20 | 0.06 | 3.0 | 98 | 0.3 | 10-20 | 2-3 | 0.5 | 1 | yes |
| 310DC42 | 11700 | SPDT | 0.41 | 13 | 0.04 | 4.8 | 152 | 0.48 | 10-20 | 2-3 | 0.5 | 1 | yes |
| 310DC44 | 29250 | SPDT | 0.26 | 8 | 0.02 | 7.6 | 243 | 0.7 | 10-20 | 2-3 | 0.5 | 1 | yes |
| 51CA37D | 500 | SPDT | 4.5 | 63 | 0.45 | 2.2 | 31.5 | 0.22 | 10-20 | 2-3 | 2 | 2 | no |
| 51CA40D | 2000 | SPDT | 2.3 | 32 | 0.22 | 4.5 | 63 | 0.45 | 10-20 | 2-3 | 2 | 2 | yes |
| 51CA42D | 5000 | SPDT | 1.4 | 20 | 0.14 | 7.0 | 100 | 0.7 | 10-20 | 2-3 | 2 | 2 | yes |
| 51CA43D | 8000 | SPDT | 1.2 | 16 | 0.11 | 9 | 126 | 0.9 | 10-20 | 2-3 | 2 | 2 | yes |
| 51CB44D | 13000 | SPDT | 0.6 | 12 | 0.06 | 8.2 | 161 | 0.8 | 10-20 | 2-3 | 1 | 1 | yes |
| 52C-500 | 500 | DPDT | 20 | 63 | 1.2 | 10 | 32 | 0.6 | 8-16 | 3-8 | 5 | 5 | no |
| 52C-2500 | 2500 | DPDT | 8.8 | 28 | 0.5 | 22 | 70 | 1.3 | 8-16 | 3-8 | 5 | 5 | yes |
| 52C-5000 | 5000 | DPDT | 6.3 | 20 | 0.3 | 32 | 100 | 1.9 | 8-16 | 3-8 | 5 | 5 | yes |
| 52C-8000 | 8000 | DPDT | 5.0 | 16 | 0.30 | 40 | 128 | 2.4 | 8-16 | 3-8 | 5 | 5 | yes |
| 52C-10000 | 10000 | DPDT | 4.4 | 14 | 0.2 | 44 | 140 | 2.6 | 8-16 | 3-8 | 5 | 5 | yes |
| 54C-500 | 500 | 4PDT | 28.2 | 63 | 2.8 | 14.2 | 32 | 1.4 | 8-16 | 3-8 | 5 | 5 | no |
| 54C-2500 | 2500 | 4PDT | 12.6 | 28 | 1.3 | 32 | 70 | 3.2 | 8-16 | 3-8 | 5 | 5 | yes |
| 54C-5000 | 5000 | 4PDT | 8.9 | 20 | 0.9 | 45 | 100 | 4.5 | 8-16 | 3-8 | 5 | 5 | yes |
| 54C-8000 | 8000 | 4PDT | 7.0 | 16 | 0.7 | 56 | 128 | 5.6 | 8-16 | 3-8 | 5 | 5 | yes |
| 54C-10000 | 10000 | 4PDT | 6.3 | 14 | 0.6 | 63 | 140 | 6.3 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D1CA37D | 500 | SPDT | 4.5 | 63 | 0.45 | 2.2 | 31.5 | 0.22 | 10-20 | 2-3 | 2 | 2 | no |
| 5D1CA40D | 2000 | SPDT | 2.3 | 32 | 0.22 | 4.5 | 63 | 0.45 | 10-20 | 2-3 | 2 | 2 | yes |
| 5D1CA42D | 5000 | SPDT | 1.4 | 20 | 0.14 | 7.0 | 100 | 0.7 | 10-20 | 2-3 | 2 | 2 | yes |
| 5D1CA43D | 8000 | SPDT | 1.2 | 16 | 0.11 | 9 | 126 | 0.9 | 10-20 | 2-3 | 2 | 2 | yes |
| 5D1CB44D | 13000 | SPDT | 0.6 | 12 | 0.06 | 8.2 | 161 | 0.8 | 10-20 | 2-3 | 1 | 1 | yes |
| 5D2C-500 | 500 | DPDT | 20 | 63 | 1.2 | 10 | 32 | 0.6 | 8-16 | 3-8 | 5 | 5 | no |
| 5D2C-2500 | 2500 | DPDT | 8.8 | 28 | 0.5 | 22 | 70 | 1.3 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D2C-5000 | 5000 | DPDT | 6.3 | 20 | 0.3 | 32 | 100 | 1.9 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D2C-8000 | 8000 | DPDT | 5.0 | 16 | 0.30 | 40 | 128 | 2.4 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D2C-10000 | 10000 | DPDT | 4.4 | 14 | 0.2 | 44 | 140 | 2.6 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D3C-500 | 500 | 3PDT | 24.4 | 63 | 2.5 | 12.2 | 32 | 1.2 | 8-16 | 3-8 | 5 | 5 | no |
| 5D3C-2500 | 2500 | 3PDT | 10.9 | 28 | 1.1 | 27.2 | 70 | 2.8 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D3C-5000 | 5000 | 3PDT | 7.7 | 20 | 0.7 | 39 | 100 | 3.9 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D3C-8000 | 8000 | 3PDT | 6.0 | 16 | 0.6 | 48 | 128 | 4.8 | 8-16 | 3-8 | 5 | 5 | yes |
| 5D3C-10000 | 10000 | 3PDT | 5.4 | 14 | 0.5 | 54 | 140 | 5.4 | 8-16 | 3-8 | 5 | 5 | yes |

NOTES:

- * Voltage rating of current operated relays is specified at nominal resistance and may vary directly with actual resistance
- ** Current rating of voltage operated relays is specified at nominal resistance and may vary inversely with actual resistance
- † When energized from a high impedance power source.
- †† For timing purposes, nominal current is considered 5% above pull-in current
- + All ratings are for 100,000 operations minimum, with resistive load.
- ++ Not specified uses two internal rectifiers. Varies with source frequency ranging 47-440 CPS

All figures are based on 20°C. ambient temperature operation.

ALL SHADED AREAS ARE APPROXIMATE VALUES



relays-engineering specifications (continued)

Complete electrical operating characteristics of all standard stock relays available off-the-shelf at factory prices.

DC RELAYS

(See Illustrations and Dimensions on Preceding Pages)

| Relay No. | Resistance (ohms) ±10% | Contact Arrangements | OPERATE CHARACTERISTICS | | | | | | | | Oper. time† (milli-secs) | | Contact Rating‡ (amps) | | Coil Impreg. |
|--|------------------------|----------------------|--------------------------|-----------|---------------|---------------------------|------|------|----------|-------|--------------------------|--------------|------------------------|---------|--------------|
| | | | Approx DC Current** (ma) | | | Approx DC Voltage (volts) | | | | | Nom. V | Max. V | 28 VDC | 115 VAC | |
| | | | at Pull In V | at Nom. V | at Drop Out V | Pull In | Nom. | Max. | Drop Out | | | | | | |
| DC MEDIUM POWER AND ANTENNA RELAYS | | | | | | | | | | | | | | | |
| 26D1C6DC | 27 | SPDT | 185 | 222 | 18.5 | 5 | 6 | 9 | 0.5 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D1C12DC | 108 | SPDT | 84 | 112 | 8.8 | 9 | 12 | 18 | 1.0 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D1C24DC | 428 | SPDT | 42 | 56 | 4.2 | 18 | 24 | 36 | 2.0 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D1C110DC | 6800 | SPDT | 11 | 16 | 1.1 | 75 | 110 | 140 | 10 | 10-15 | 5-10 | 10 | 10 | yes | |
| 26D2C6DC | 27 | DPDT | 185 | 222 | 18.5 | 5 | 6 | 9 | 0.5 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D2C12DC | 108 | DPDT | 88 | 112 | 8.8 | 9.5 | 12 | 18 | 1.0 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D2C24DC | 428 | DPDT | 47 | 56 | 4.7 | 20 | 24 | 36 | 2.0 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D2C110DC | 6800 | DPDT | 12 | 16 | 1.2 | 80 | 110 | 140 | 10 | 10-15 | 5-10 | 10 | 10 | yes | |
| 26D3C6DC | 17 | 3PDT | 294 | 350 | 29 | 5 | 6 | 7 | 0.5 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D3C12DC | 68 | 3PDT | 147 | 176 | 15 | 10 | 12 | 14 | 1.0 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D3C24DC | 270 | 3PDT | 74 | 89 | 7.4 | 20 | 24 | 28 | 2.0 | 10-15 | 5-10 | 10 | 10 | no | |
| 26D3C110DC | 6800 | 3PDT | 13 | 16 | 1.3 | 90 | 110 | 140 | 10 | 10-15 | 5-10 | 10 | 10 | yes | |
| 261C6DC | 43 | SPDT | 108 | 140 | 10.8 | 5 | 6 | 13 | 0.5 | 10-15 | 5-10 | 20 | 20 | no | |
| 261C12DC | 170 | SPDT | 56 | 71 | 5.6 | 9.5 | 12 | 26 | 1.0 | 10-15 | 5-10 | 20 | 20 | no | |
| 261C24DC | 680 | SPDT | 26 | 35 | 2.6 | 18 | 24 | 52 | 2.0 | 10-15 | 5-10 | 20 | 20 | no | |
| 261C110DC | 6800 | SPDT | 10.4 | 16 | 1.0 | 70 | 110 | 165 | 10 | 10-15 | 5-10 | 20 | 20 | yes | |
| 262C6DC | 27 | DPDT | 185 | 222 | 18.5 | 5 | 6 | 10 | 0.5 | 10-15 | 5-10 | 20 | 20 | no | |
| 262C12DC | 108 | DPDT | 88 | 112 | 8.8 | 9.5 | 12 | 21 | 1.0 | 10-15 | 5-10 | 20 | 20 | no | |
| 262C24DC | 428 | DPDT | 42 | 56 | 4.2 | 18 | 24 | 41 | 2.0 | 10-15 | 5-10 | 20 | 20 | no | |
| 262C110DC | 6800 | DPDT | 12 | 16 | 1.1 | 80 | 110 | 165 | 10 | 10-15 | 5-10 | 20 | 20 | yes | |
| 263C6DC | 17 | 3PDT | 265 | 350 | 29 | 4.5 | 6 | 8 | 0.5 | 10-15 | 5-10 | 20 | 20 | no | |
| 263C12DC | 68 | 3PDT | 147 | 176 | 14.7 | 9.5 | 12 | 16 | 1.0 | 10-15 | 5-10 | 20 | 20 | no | |
| 263C24DC | 270 | 3PDT | 78 | 89 | 7.8 | 20 | 24 | 33 | 2.0 | 10-15 | 5-10 | 20 | 20 | no | |
| 263C110DC | 6800 | 3PDT | 12.5 | 16 | 1.25 | 85 | 110 | 165 | 10 | 10-15 | 5-10 | 20 | 20 | yes | |
| 26L2C6DC | 27 | DPDT | 185 | 222 | 18.5 | 5 | 6 | 10 | 0.5 | 10-15 | 5-10 | 20 | 30 | no | |
| 26L2C12DC | 108 | DPDT | 88 | 112 | 8.8 | 9.5 | 12 | 21 | 1.0 | 10-15 | 5-10 | 20 | 30 | no | |
| 26L2C24DC | 428 | DPDT | 48 | 56 | 4.8 | 20 | 24 | 41 | 2.0 | 10-15 | 5-10 | 20 | 30 | no | |
| 26L2C110DC | 6800 | DPDT | 12 | 16 | 1.2 | 80 | 110 | 165 | 10 | 10-15 | 5-10 | 20 | 30 | yes | |
| 252C6DC | 27 | DPDT | 185 | 222 | 18.5 | 5 | 6 | 10 | 0.5 | 10-15 | 5-10 | | | no | |
| 252C12DC | 108 | DPDT | 88 | 112 | 8.8 | 9.5 | 12 | 21 | 1.0 | 10-15 | 5-10 | | | no | |
| 252C24DC | 428 | DPDT | 42 | 56 | 4.2 | 18 | 24 | 41 | 2.0 | 10-15 | 5-10 | 1.5 KW RF | | no | |
| 252C110DC | 6800 | DPDT | 12 | 16 | 1.1 | 80 | 110 | 165 | 10 | 10-15 | 5-10 | | | yes | |
| 253C6DC | 17 | 3PDT | 265 | 350 | 29 | 4.5 | 6 | 8 | 0.5 | 10-15 | 5-10 | | | no | |
| 253C12DC | 68 | 3PDT | 140 | 176 | 14.7 | 9.5 | 12 | 16 | 1.0 | 10-15 | 5-10 | | | no | |
| 253C24DC | 270 | 3PDT | 74 | 89 | 7.4 | 20 | 24 | 33 | 2.0 | 10-15 | 5-10 | 1C-20 amp | | no | |
| 253C110DC | 6800 | 3PDT | 12.7 | 16 | 1.2 | 85 | 110 | 165 | 10 | 10-15 | 5-10 | 2C-1.5 KW RF | | yes | |
| DC TELEPHONE RELAYS | | | | | | | | | | | | | | | |
| A004-6 | 40 | 4PDT | 125 | 150 | 25 | 5 | 6 | 20 | 1.0 | 15-20 | 5-10 | 3 | 3 | no | |
| A004-12 | 140 | 4PDT | 68 | 86 | 14 | 9.5 | 12 | 37 | 1.9 | 15-20 | 5-10 | 3 | 3 | no | |
| A004-24 | 600 | 4PDT | 33 | 40 | 6.5 | 20 | 24 | 77 | 4 | 15-20 | 5-10 | 3 | 3 | no | |
| A004-110 | 10K | 4PDT | 9.5 | 11 | 1.9 | 95 | 110 | 300 | 19 | 15-20 | 5-10 | 3 | 3 | no | |
| E004-6 | 40 | 4PDT | 125 | 150 | 25 | 5 | 6 | 15 | 1.0 | 15-20 | 5-10 | 3 | 3 | no | |
| E004-12 | 145 | 4PDT | 65 | 83 | 13 | 9.5 | 12 | 30 | 1.9 | 15-20 | 5-10 | 3 | 3 | no | |
| E004-24 | 590 | 4PDT | 34 | 41 | 6.8 | 20 | 24 | 60 | 4 | 15-20 | 5-10 | 3 | 3 | no | |
| E004-110 | 10K | 4PDT | 9.5 | 11 | 1.9 | 95 | 110 | 240 | 19 | 15-20 | 5-10 | 3 | 3 | no | |
| M004-6 | 30 | 4PDT | 166 | 200 | 35 | 5 | 6 | 11 | 1.0 | 15-20 | 5-10 | 3 | 3 | no | |
| M004-12 | 120 | 4PDT | 79 | 100 | 16 | 9.5 | 12 | 22 | 1.9 | 15-20 | 5-10 | 3 | 3 | no | |
| M004-24 | 480 | 4PDT | 42 | 50 | 8.4 | 20 | 24 | 44 | 4 | 15-20 | 5-10 | 3 | 3 | no | |
| M004-110 | 12K | 4PDT | 8 | 9.2 | 1.6 | 95 | 110 | 220 | 19 | 15-20 | 5-10 | 3 | 3 | yes | |
| AS2-6 | 40 | DPDT | 125 | 150 | 12.5 | 5 | 6 | 20 | 0.5 | 15-20 | 5-10 | 6 | 15 | no | |
| AS2-12 | 140 | DPDT | 68 | 203 | 6.8 | 9.5 | 12 | 37 | 0.9 | 15-20 | 5-10 | 6 | 15 | no | |
| AS2-24 | 600 | DPDT | 33 | 40 | 3.3 | 20 | 24 | 77 | 2.0 | 15-20 | 5-10 | 6 | 15 | no | |
| AS2-110 | 10K | DPDT | 9.5 | 11 | 0.95 | 95 | 110 | 300 | 9.5 | 15-20 | 5-10 | 6 | 15 | no | |
| ES2-6 | 23 | DPDT | 218 | 260 | 22 | 5 | 6 | 12 | 0.5 | 15-20 | 5-10 | 6 | 15 | no | |
| ES2-12 | 92 | DPDT | 98 | 130 | 13 | 9.5 | 12 | 24 | 0.9 | 15-20 | 5-10 | 6 | 15 | no | |
| ES2-24 | 370 | DPDT | 54 | 65 | 5.4 | 20 | 24 | 47 | 2.0 | 15-20 | 5-10 | 6 | 15 | no | |
| ES2-110 | 8250 | DPDT | 10.5 | 13.4 | 1.1 | 95 | 110 | 220 | 9.5 | 15-20 | 5-10 | 6 | 15 | no | |
| DC MICRO-MINIATURE AND HERMETICALLY SEALED RELAYS | | | | | | | | | | | | | | | |
| KX1P20 | 35 | DPDT | 92 | 9.2 | 3.4 | 6 | 7.2 | 0.3 | 5 | 3-5 | 2 | 2 | no | | |
| KX1H2C | | DPDT | | | | | | | | | | | | | |
| KX1H2D | | DPDT | | | | | | | | | | | | | |
| KX1H2E | | DPDT | | | | | | | | | | | | | |
| KX1P20 | 150 | DPDT | 45 | 4.5 | 6.7 | 12 | 14.5 | 0.7 | 5 | 3-5 | 2 | 2 | no | | |
| KX1H2C | | DPDT | | | | | | | | | | | | | |
| KX1H2D | | DPDT | | | | | | | | | | | | | |
| KX1H2E | | DPDT | | | | | | | | | | | | | |
| KX1P20 | 600 | DPDT | 21 | 2.1 | 13 | 24 | 30 | 1.3 | 5 | 3-5 | 2 | 2 | no | | |
| KX1H2C | | DPDT | | | | | | | | | | | | | |
| KX1H2D | | DPDT | | | | | | | | | | | | | |
| KX1H2E | | DPDT | | | | | | | | | | | | | |
| KX4H4D-6 | 35 | 4PDT | 92 | 9.2 | 3.4 | 6 | 7.2 | 0.3 | 6.8 | 6 | 2 | 2 | no | | |
| KX4H4D-12 | 150 | 4PDT | 45 | 4.5 | 6.7 | 12 | 14.5 | 0.7 | 6.8 | 6 | 2 | 2 | no | | |
| KX4H4D-24 | 600 | 4PDT | 21 | 2.1 | 13 | 24 | 30 | 1.3 | 6.8 | 6 | 2 | 2 | no | | |
| SM004E | 300 | 4PDT | 60 | 89 | 10 | 18 | 26.5 | 35 | 3 | 15-20 | 10-15 | 3 | 3 | no | |

See Preceding Page for Symbol Descriptions

KURMAN

relays-engineering specifications (continued)

Complete electrical operating characteristics of all standard stock relays available off-the-shelf at factory prices.

AC RELAYS

(For Illustrations and Dimensions of Sensitive Relays see Preceding Pages)

| Relay No. | Resistance (ohms) ±10% | Contact Arrangements | OPERATE CHARACTERISTICS | | | Oper. Time† (milli-secs) | | Contact rating‡ (amps) | | Coil Impregnation | |
|-------------------------------|------------------------|----------------------|---|-----------------------|-----|--------------------------|--------|------------------------|-----------|-------------------|---------|
| | | | Approx. AC Current (ma) at nom. voltage | AC Voltage (in volts) | | | Min. V | Max. V | 28 VDC | | 115 VAC |
| AC SENSITIVE RELAYS | | | | | | | | | | | |
| 321DC78 | 19 | SPDT | 59 | 5.2 | 6 | 17 | 16 | 2 | 2 | no | |
| 321DC81 | 73 | SPDT | 29 | 10 | 12 | 33 | 16 | 2 | 2 | no | |
| 321DC84 | 292 | SPDT | 15 | 20 | 24 | 66 | 16 | 2 | 2 | no | |
| 321DC91 | 7300 | SPDT | 3.2 | 95 | 115 | 300 | 16 | 2 | 2 | yes | |
| 51C83A | 32 | SPDT | 64 | 4.7 | 6 | 9.1 | 16 | 2 | 2 | no | |
| 51C86A | 125 | SPDT | 32 | 9.3 | 12 | 18 | 16 | 2 | 2 | no | |
| 51C89A | 500 | SPDT | 16 | 18.5 | 24 | 36 | 16 | 2 | 2 | no | |
| 5D1C83A | 32 | SPDT | 64 | 4.7 | 6 | 9.1 | 16 | 2 | 2 | no | |
| 5D1C86A | 125 | SPDT | 32 | 9.3 | 12 | 18 | 16 | 2 | 2 | no | |
| 5D1C89A | 500 | SPDT | 16 | 18.5 | 24 | 36 | 16 | 2 | 2 | no | |
| AC MEDIUM POWER RELAYS | | | | | | | | | | | |
| 26D1C6AC | 3 | SPDT | 675 | 5.5 | 6 | 6.8 | 16 | 16 | 10 | 10 | no |
| 26D1C12AC | 12 | SPDT | 335 | 9.5 | 12 | 13.5 | 16 | 16 | 10 | 10 | no |
| 26D1C24AC | 49 | SPDT | 170 | 21 | 24 | 27 | 16 | 16 | 10 | 10 | no |
| 26D1C115AC | 1200 | SPDT | 35 | 90 | 115 | 130 | 16 | 16 | 10 | 10 | no |
| 26D1C230AC | 4900 | SPDT | 17 | 190 | 230 | 260 | 16 | 16 | 10 | 10 | no |
| 26D2C6AC | 3 | DPDT | 675 | 5.5 | 6 | 6.8 | 16 | 16 | 10 | 10 | yes |
| 26D2C12AC | 12 | DPDT | 335 | 9.5 | 12 | 13.5 | 16 | 16 | 10 | 10 | no |
| 26D2C24AC | 49 | DPDT | 170 | 21 | 24 | 27 | 16 | 16 | 10 | 10 | no |
| 26D2C115AC | 1200 | DPDT | 35 | 95 | 115 | 130 | 16 | 16 | 10 | 10 | no |
| 26D2C230AC | 4900 | DPDT | 17 | 190 | 230 | 260 | 16 | 16 | 10 | 10 | yes |
| 26D3C6AC | 3 | 3PDT | 675 | 5.5 | 6 | 6.8 | 16 | 16 | 10 | 10 | no |
| 26D3C12AC | 12 | 3DPT | 335 | 10.5 | 12 | 13.5 | 16 | 16 | 10 | 10 | no |
| 26D3C24AC | 49 | 3PDT | 170 | 22 | 24 | 27 | 16 | 16 | 10 | 10 | no |
| 26D3C115AC | 1200 | 3PDT | 35 | 95 | 115 | 130 | 16 | 16 | 10 | 10 | no |
| 26D3C230AC | 4900 | 3PDT | 17 | 195 | 230 | 260 | 16 | 16 | 10 | 10 | yes |
| 261C6AC | 2.7 | SPDT | 835 | 5.2 | 6 | 7 | 16 | 16 | 20 | 20 | no |
| 261C12AC | 11 | SPDT | 417 | 9.5 | 12 | 14 | 16 | 16 | 20 | 20 | no |
| 261C24AC | 43 | SPDT | 208 | 20 | 24 | 28 | 16 | 16 | 20 | 20 | no |
| 261C115AC | 1080 | SPDT | 44 | 95 | 115 | 130 | 16 | 16 | 20 | 20 | no |
| 261C230AC | 4280 | SPDT | 22 | 190 | 230 | 260 | 16 | 16 | 20 | 20 | yes |
| 262C6AC | 2.5 | DPDT | 675 | 5.5 | 6 | 6.9 | 16 | 16 | 20 | 20 | no |
| 262C12AC | 10 | DPDT | 335 | 10 | 12 | 14 | 16 | 16 | 20 | 20 | no |
| 262C24AC | 39 | DPDT | 170 | 21 | 24 | 27 | 16 | 16 | 20 | 20 | no |
| 262C115AC | 980 | DPDT | 35 | 95 | 115 | 130 | 16 | 16 | 20 | 20 | no |
| 262C230AC | 3900 | DPDT | 17 | 195 | 230 | 270 | 16 | 16 | 20 | 20 | yes |
| 263C6AC | 2.5 | 3PDT | 675 | 5.5 | 6 | 6.9 | 16 | 16 | 20 | 20 | no |
| 263C12AC | 10 | 3PDT | 335 | 10.5 | 12 | 14 | 16 | 16 | 20 | 20 | no |
| 263C24AC | 39 | 3PDT | 170 | 21 | 24 | 27 | 16 | 16 | 20 | 20 | no |
| 263C115AC | 980 | 3PDT | 35 | 95 | 115 | 130 | 16 | 16 | 20 | 20 | no |
| 263C230AC | 3900 | 3PDT | 17 | 190 | 230 | 270 | 16 | 16 | 20 | 20 | yes |
| 26L2C6AC | 2.5 | DPDT | 675 | 5.5 | 6 | 6.9 | 16 | 16 | 30 | 30 | no |
| 26L2C12AC | 10 | DPDT | 335 | 10 | 12 | 14 | 16 | 16 | 30 | 30 | no |
| 26L2C24AC | 39 | DPDT | 170 | 21 | 24 | 27 | 16 | 16 | 30 | 30 | no |
| 26L2C115AC | 980 | DPDT | 35 | 95 | 115 | 130 | 16 | 16 | 30 | 30 | no |
| 26L2C230AC | 3900 | DPDT | 17 | 190 | 230 | 270 | 16 | 16 | 30 | 30 | yes |
| 252C6AC | 2.5 | DPDT | 675 | 5.5 | 6 | 6.9 | 16 | 16 | 1.5 KW RF | | no |
| 252C12AC | 10 | DPDT | 335 | 10 | 12 | 14 | 16 | 16 | | | no |
| 252C24AC | 39 | DPDT | 170 | 21 | 24 | 27 | 16 | 16 | | | no |
| 252C115AC | 980 | DPDT | 35 | 95 | 115 | 130 | 16 | 16 | | | no |
| 253C6AC | 2.5 | 3PDT | 675 | 5.5 | 6 | 6.9 | 16 | 16 | | | no |
| 253C12AC | 10 | 3PDT | 335 | 10.5 | 12 | 14 | 16 | 16 | | | no |
| 253C24AC | 39 | 3PDT | 170 | 21 | 24 | 27 | 16 | 16 | | | no |
| 253C115AC | 980 | 3PDT | 35 | 95 | 115 | 130 | 16 | 16 | | | no |
| AC HERMETICALLY SEALED RELAYS | | | | | | | | | | | |
| 26S01 | 980 | DPDT | 35 | 95 | 115 | 130 | 16 | 16 | 10 | 10 | no |
| 26S20 | 980 | DPDT | 35 | 95 | 115 | 130 | 16 | 16 | 25 | 25 | no |
| SM004F | ++ | 4PDT | ++ | | 115 | 130 | 20 | 20 | 3 | 3 | no |

ORDERING INFORMATION: Relays PREVIOUSLY ORDERED are readily identified by the Kurman type number, which is placed on the relay. Please include this number when re-ordering.
Relays shown on these pages are STANDARD relays in stock for immediate shipment. From these pages a relay can be chosen meeting the needs of most electrical or electronic applications.
VARIATIONS of these relays, are available, as shown in our GS catalog, with slightly extended delivery schedules.

Please SPECIFY the Kurman relay type and coil voltage or resistance, AC or DC.

CONTACT LEGEND:

S—Single; D—Double; P—Pole; T—Throw; N—Normally; O—Open; C—Closed.

All prices and specifications are subject to change without notice.

See Preceding Page for Symbol Descriptions

GLOBE RELAYS

TYPE "W" MIDGET GENERAL PURPOSE

This relay offers high reliability at a minimum cost. The silver cadmium-oxide contacts are mounted on beryllium copper blades.** There is good contact wiping action. This unit operates well in ambient temperatures up to 125° C.

** Fine silver contacts for 5 amp applications.

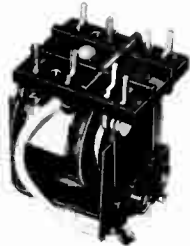
CONTACTS: 5 amps @ 24 VDC or 115 VAC, 10 amps @ 24 VDC or 115 VAC Arrangement 1, 2 or 3 PDT.
COIL: D-C applications up thru 120 VDC, A-C applications up thru 230 VDC.
MOUNTING: One 6-32 screw and keying boss to prevent turning.



TYPE "WP" MIDGET PRINTED CIRCUIT

Relay is identical to the "W" type using the same integrally moulded parts. The terminals are designed for direct mounting into printed circuit boards. They will fit into .050 inch diameter holes and project 1/32 inch beyond an 1/8 inch thick circuit board. Base plate area on the board is only 1.070 x .890 inches. Dimensional artwork for hole configuration is available.

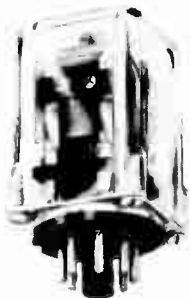
CONTACTS: 5 amps @ 24 VDC or 115 VAC, 10 amps @ 24 VDC or 115 VAC Arrangement 1, 2 or 3 PDT.
COIL: D-C applications up thru 120 VDC, A-C applications up thru 120 VDC.
MOUNTING: Soldered into printed circuit boards.



TYPE "WC" MIDGET GENERAL PURPOSE WITH DUSTITE ENCLOSURE

Relay is identical to type "W". However, the unit provides a clear dustproof polystyrene case on Octal type plug-in base. Operating temperatures up to 85° C ambient. Variation of base or a hermetically sealed can, can be provided on request. This unit comes in standard Globe wiring. For special wiring to meet existing installations specify "WZ" wiring.

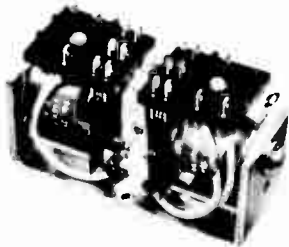
CONTACTS: 5 amps @ 24 VDC or 115 VAC, 10 amps @ 24 VDC or 115 VAC. Arrangement 1, 2 or 3 PDT.
COIL: D-C applications up thru 120 VDC, A-C applications up thru 230 VDC.
MOUNTING: Octal plug-in.



TYPE "WL" MIDGET LATCHING

This latching relay may be had with either coil to operate at any specified voltage. It is designed that either coil may be used to operate the contacts into a latched position. The other coil will latch or unlatch the contacts into the opposite position.

CONTACTS: 5 amps @ 24 VDC or 115 VAC, 10 amps @ 24 VDC or 115 VAC.
COIL: D-C applications up thru 120 VDC, A-C applications up thru 230 VDC on either coil.
MOUNTING: 2 holes for #6 screws in center of frame.



TYPE "P" MINIATURE TELEPHONE

A compact design incorporating a floating hinged armature mount for maximum resistance to shock and vibration. It offers proved dependability and long life through millions of cycles of trouble free operation. Available for both D-C, and A-C applications with the use of rectifiers. Ambient temperatures up to 125° C. Choice of single or bifurcated pattern blades with a variety of precious or semi-precious contact materials.

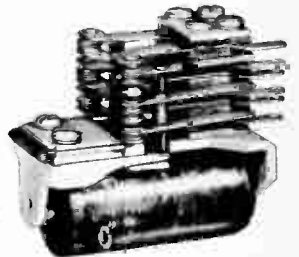
CONTACTS: Bifurcated Pattern—3 amps resistive @ 28 VDC or 115 VAC, 1P 5T thru 4P DT. Single Pattern—10 amps @ 28 VDC or 115 VAC resistive or inductive, 1P 5T thru 4P DT.
COIL: Up thru 120 VDC, up thru 230 VAC 60 or 400 cycles (w/rectifier).
CONFIGURATION: Hermetically sealed, Dustite enclosures or Open construction.



TYPE "PO" SENSITIVE MINIATURE TELEPHONE

Designed with 30 to 50 per cent more coil ampere turns, which provides greater sensitivity than conventional types. Even with this greater built-in power, the unique construction allows these units to fall in a miniature class. Available for both D.C. and A.C. applications with the use of rectifiers. Ambient temperatures up to 125° C. Choice of single or bifurcated pattern blades with a variety of precious or semi-precious contact materials.

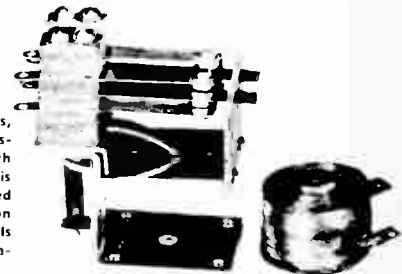
CONTACTS: Bifurcated Pattern—3 amps resistive @ 28 VDC or 115 VAC, 1P 5T thru 6P DT. Single Pattern—10 amps @ 28 VDC or 115 VAC resistive or inductive, 1P 5T thru 6P DT.
COIL: Up thru 120 VDC, up thru 230 VAC 60 or 400 cycles (w/rectifier).
CONFIGURATION: Hermetically sealed, Dustite enclosures or open construction.



TYPE "X" DO IT YOURSELF ALL PURPOSE

An ideal relay for bread-boards, experiments and prototypes. Easily interchangeable coils with one screw installation. Relay is factory adjusted and has rugged construction. A limited selection of contact assemblies and coils provide a multitude of variations.

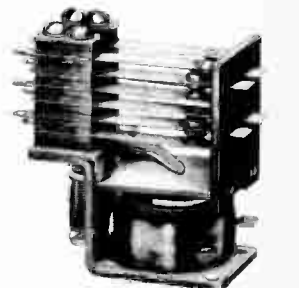
CONTACTS: 5 amps, 10 amps and 15 amps, 28 VDC or 115 VDC. Arrangements SPDT, DPDT, 4 PDT.
COIL: 6 VDC thru 120 VDC, 6 VAC thru 230 VAC.
MOUNTING: Single screw in coil center.



TYPE "A" INDUSTRIAL

Employing the time-tested "clapper" design; its simple manufacturing process permits use where low cost is a determining factor. It is recommended for application on stationary industrial equipment and qualifies for U.L. approval. When speed and positive action of snap-action switches are required, this relay may be supplied in either 2P DT 10 amp or a 1P DT 15 amp. Also available in mechanical latching relays up to a 4P DT arrangement.

CONTACTS: 5, 10 & 15 amp @ 28 VDC or 115 VAC resistive or inductive, 1P 5T thru 6P NO. Snap-action switches—15 amp 1P DT or 10 amp 2P DT.
COIL: Up thru 120 VDC, up thru 230 VAC.
CONFIGURATION: Open construction.



globe electrical mfg. co.



gardena,
california

Write for technical information and complete catalog of Globe Relays.



A complete line of industrial relays . . .

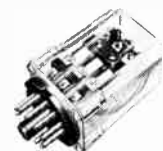
serving the nation's foremost equipment producers with a wide and varied selection of quality electrical components to meet specific space and time requirements.

GENERAL PURPOSE RELAYS



SERIES MK

Open type relay in standard contact arrangements up to 3PDT. 5 or 10 amp contact rating. Voltages up to 230 volts, A.C. or D.C. Factory adjusted to pull in at 75% max. of nominal voltage D.C. and 80% max. of nominal voltage A.C. Designed to pass 1,000 volt A.C. Hipot test between all elements.



SERIES MKP

Plug-in type relay, same factory tested, quality features as above. Will operate continuously in ambient temperature ranges of 45° to 75°C. for D.C. coils and -45° to 55°C. for A.C. coils. Metal or polystyrene dust cover.



SERIES MKT

Printed circuit type relay incorporating coil, frame and load contacts of standard Series MK. Connector lugs fit standard amp terminal #41355.



SERIES LR

Open type, heavy-duty type relay designed for many applications. Standard fine silver contacts rated at 10 amperes, optional Silver Cadmium load contacts rated at 15 amps. Ambient temperature operating range, continuous duty: A.C., -45° to 55°C.; D.C., -45° to 75°C.



SERIES MW

A small, versatile relay available in a variety of contact configurations consisting of forms A, B, C or D (make before break), up to a maximum of 12 springs. Coils can be supplied for operation on D.C. or A.C. 60 cps. Operation on 400 cps. source is available with self-contained rectifiers on relays with covers.



SERIES LG

Open type relay, specifically designed for extremely heavy-duty applications. Standard Fine Silver load contacts are rated at 15 amps. with optional Silver Cadmium Oxide contacts where larger inrush loads are encountered. Loads are rated at 115/60 non-inductive. All load contacts are factory gold-flashed to prevent contact oxidation prior to use.



SERIES LGP

Plug-in type relay, with same quality features as above. Also available in either metal or clear plastic enclosure. Ambient temperature operating range, continuous duty; A.C., -45° to 55°C.; D.C., -45° to 75°C.

| | 5 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|----------------------|--------------------------|---------------|
| AC | MK1A SPDT | \$3.10 | \$3.55 |
| | MK2A DPDT | 3.75 | 4.15 |
| | | 6, 12, 24V | 110V |
| DC | MK1D SPDT | \$3.05 | \$3.45 |
| | MK2D DPDT | 3.40 | 3.85 |

All models available 3PDT, and in 10 amp contact rating.

| | 5 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|----------------------|--------------------------|---------------|
| AC | MKP1A SPDT | \$5.45 | \$5.90 |
| | MKP2A DPDT | 6.05 | 6.45 |
| | | 6, 12, 24V | 110V |
| DC | MKP1D SPDT | \$5.40 | \$5.85 |
| | MKP2D DPDT | 6.00 | 6.40 |

All models available 3PDT, and in 10 amp contact rating.

| | 5 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|----------------------|--------------------------|---------------|
| AC | MKT1A SPDT | \$3.25 | \$3.65 |
| | MKT2A DPDT | 3.95 | 4.35 |
| | | 6, 12, 24V | 110V |
| DC | MKT1D SPDT | 3.20 | \$3.60 |
| | MKT2D DPDT | 3.60 | 4.05 |

All models available 3PDT, and in 10 amp contact rating.

| | 10 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|-----------------------|--------------------------|---------------|
| AC | LR1A SPDT | \$4.65 | \$5.10 |
| | LR2A DPDT | 5.05 | 5.45 |
| | | 6, 12, 24V | 110V |
| DC | LR1D SPDT | \$4.65 | \$5.10 |
| | LR2D DPDT | 5.05 | 5.45 |

All above available SPDT-DB (15 amp). Plug-In Type (Series LRP) also available.

| | 10 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|-----------------------|--------------------------|---------------|
| AC | MW1A SPDT | \$2.70 | \$3.10 |
| | MW2A DPDT | 3.30 | 3.75 |
| | | 6, 12, 24V | 110V |
| DC | MW1D SPDT | \$2.60 | \$3.10 |
| | MW2D DPDT | 3.25 | 3.65 |

All models available 3PDT and 4PDT.

HEAVY DUTY RELAYS

| | 15 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|-----------------------|--------------------------|---------------|
| AC | LG1A SPDT | \$4.85 | \$5.30 |
| | LG2A DPDT | 5.70 | 6.05 |
| | | 6, 12, 24V | 110V |
| DC | LG1D SPDT | \$4.70 | \$5.40 |
| | LG2D DPDT | 5.40 | 6.10 |

All models available 3PDT.

| | 15 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|-----------------------|--------------------------|---------------|
| AC | LGP1A SPDT | \$7.75 | \$8.25 |
| | LGP2A DPDT | 9.15 | 9.60 |
| | | 6, 12, 24V | 110V |
| DC | LGP1D SPDT | \$7.65 | \$8.35 |
| | LGP2D DPDT | 8.90 | 9.60 |

All models available 3PDT.

Prices are Suggested LIST



REED RELAYS... in a variety of standard packages or customed-designed to specifications!

For Complete Information, Bulletin # 450



Gold-tipped dry reed contacts sealed in glass with inert gas. Super-small—designed for computer, data handling, guidance system applications. Generate less heat than switching diodes. Operate in millisecond range and have infinite resistance in open contact position. Up to 12 reeds (Form A, B or C) as standard.

Other prices depending on specifications.

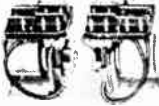
Series FRP, Plug-In Type
Series FRT, Printed Circuit
Series FR, Open Coil

STANDARD PACKAGES

| | 6, 12, 24VDC | 6, 12, 24VDC |
|-----------|--------------|--------------|
| SPST (NO) | \$6.00 | SPDT—\$9.00 |
| SPST (NO) | \$5.25 | SPDT—\$8.25 |
| SPST (NO) | \$2.75 | SPDT—\$5.50 |

MECHANICAL LATCH RELAYS

SERIES RL



Open type for use where a sustained relay closure is required, and current drain of a relay coil is to be eliminated. Incorporates two coils, one to close load contacts, the other to reset them. Requires only momentary electrical contact to operate or release. Provides positive mechanical latch, eliminating chatter during sustained relay closure.

| | 5 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|----------------------|--------------------------|---------------|
| AC | RL1A SPDT | \$7.15 | \$8.00 |
| | RL2A DPDT | 8.25 | 9.00 |
| | | 6, 12, 24V | 110V |
| DC | RL1D SPDT | \$6.50 | \$7.75 |
| | RL2D DPDT | 7.50 | 8.75 |

All models available 3PDT, 4PDT, 5PDT, 6PDT, and in 10 amp contact rating.

SERIES RLP



Plug-in type, same factory-tested quality features as above. Available in transparent closure up to 5PDT.

| | 5 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|----------------------|--------------------------|---------------|
| AC | RLP1A SPDT | \$ 9.40 | \$10.25 |
| | RLP2A DPDT | 10.50 | 11.30 |
| | | 6, 12, 24V | 110V |
| DC | RLP1D SPDT | \$8.75 | \$10.05 |
| | RLP2D DPDT | 9.85 | 11.15 |

All models available 3PDT, 4PDT, 5PDT, and in 10 amp contact rating.

POWER RELAYS

SERIES ST



A 25 amp. power relay ideally suited for starting motors up to 1 hp, elevator controls, and many other applications which require high current or high voltage switching with maximum dependability. One piece molded base, sturdy two-hole mounting.

| | 6, 12, 24, 115VAC | 220VAC |
|-----------|-------------------|----------------|
| ST2A DPDT | \$6.55 | \$6.85 |
| | | 6, 12, 24, VDC |
| ST2D DPDT | \$6.55 | \$6.85 |

SERIES STM



Same quality features as above, SPDT.

| | 6, 12, 24, 115VAC | 220VAC |
|-----------|-------------------|-------------------|
| ST1A SPDT | \$4.25 | \$4.65 |
| | | 6, 12, 24, 110VDC |
| ST1D SPDT | 4.25 | |

MINIATURE TELEPHONE RELAYS

SERIES GT

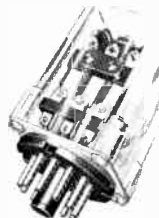


Fast acting miniature telephone type relay. Highly versatile, supplied in contact arrangements up to 6PDT, and in a variety of styles including open, dust cover, and hermetically sealed. Factory will supply enclosure details.

| | 6, 12, 24, 115V | (contact factory for prices) | (contact factory for prices) |
|----|-----------------|------------------------------|------------------------------|
| AC | GT1A SPDT | | |
| | GT2A DPDT | | |
| | | 6, 12, 24V | 110V |
| DC | GT1D SPDT | \$3.55 | \$4.00 |
| | GT2D DPDT | 4.80 | 5.40 |

All models available in 3PDT, 4PDT, 5PDT, and 6PDT.

SPOTLIGHT RELAYS



High quality, general purpose plug-in relay with built-in circuit indicator lamp. Available in colored cases for circuit identification and in metal can. Saves panel space, reduces costly labor.

| | 5 amp contact rating | 6, 12, 24, 115V—60 cycle | 220V—60 cycle |
|----|----------------------|--------------------------|---------------|
| AC | A-1A SPDT | \$6.40 | \$6.85 |
| | A-2A DPDT | 7.00 | 7.40 |
| | | 6, 12, 24V | 110V |
| DC | A-1D SPDT | \$6.35 | \$6.75 |
| | A-2D DPDT | 6.95 | 7.35 |

All models available 3PDT.

LINE ELECTRIC CO. Orange, New Jersey

Division of Industrial Timer Corporation

IN CANADA: Sperry Gyroscope Ottawa Ltd. • Ottawa, Ontario

Prices are Suggested LIST

MAGNECRAFT RELAYS

Immediate Delivery from STOCKING DISTRIBUTORS



All prices and specifications effective July 1, 1962 and subject to change without notice.

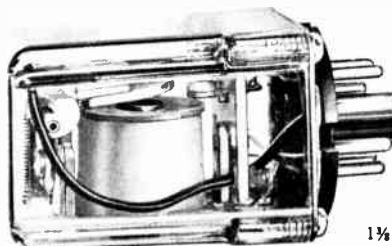
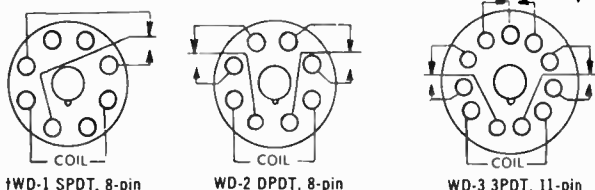
All contact ratings are based on 115 volts, 60 cycles, non-inductive load. ORDER BY CATALOG NUMBER. All Stock Relay Carton Labels carry Catalog Number; Contact Combination and Rating; Coil Voltage or Current.

All enclosed relays are identified by catalog number and wiring diagram.

NOTE: Order MAGNECRAFT STOCK RELAYS from STOCKING DISTRIBUTORS. Their supplies are supplemented by complete stocks maintained at the MAGNECRAFT plant in Chicago.

All Purpose MAGNECRAFT RELAYS

†Wiring Diagrams for small AC-DC Plug-in Relays with Enc. 40-279 "see-thru" plastic cover.

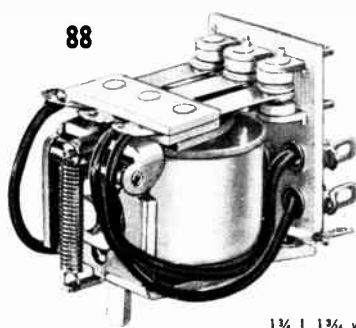


Small AC-DC Plug-in Relay with "see-thru" plastic cover

88CP

1 1/8 x 1 1/8 x 2 1/4 h*

Enc. 40-279 polystyrene dust cover housing Class 88 all purpose relay with 8- or 11-pin standard octal plug. Silver alloy contacts, 10 ampere rating. Weight, 3 ounces.



88

Small AC-DC General Purpose Relay

Open Type Relay. Has 10 ampere silver alloy contacts. Tinned solder terminals, spaced for easy wiring. One #6-32 tapped mounting hole with locating boss. Weight, 2 ounces.

1 1/4 l, 1 1/4 w, 1 1/4 h.

Class 88 is basically a clapper type relay that is similar to and interchangeable with many relays made by others. The BIG DIFFERENCE is the Class 88 has been developed to maintain the high standards of reliability users have learned to expect from MAGNECRAFT Telephone Type Relays. The result is reliability, stability of adjustment and long life at reduced cost for a great range of application.

For the first time in a relay of this type, the MAGNECRAFT Class 88 has a rugged, pin type armature hinge with centerless ground stainless steel pin and heavy duty yoke with precision reamed bearing surfaces; this is the hinge design used on the finest telephone type relays to stabilize adjustment through long wear life, reduce friction and improve contact effectiveness. Other features include fiber glass melamine insulation to provide high di-electric strength and greater resistance to humidity and temperature change; independently riveted; ruggedized coil terminals; riveted contacts with built-in contact wipe.

The many refinements plus MAGNECRAFT quality control and inspection standards produce relays so outstanding you can see the difference.

†WD is abbreviation for Wiring Diagram

| contact arrangement | COIL | | 10 ampere silver alloy contacts | | | | |
|---|------------------|-----------|---------------------------------|---------------------|--------------------------------|-----------|------|
| | volt. or current | res. ohms | nominal power | OPEN RELAY Cat. No. | WITH ENCLOSURE 40-279 Cat. No. | Plug NET | |
| alternating current voltage actuated | | | | | | | |
| SPDT †WD-1 | 6VAC | — | 3 VA | W88AX1 | 3.35 | W88ACPX1 | 5.50 |
| | 12VAC | | | W88AX2 | 3.35 | W88ACPX2 | 5.50 |
| | 24VAC | | | W88AX3 | 3.40 | W88ACPX3 | 5.55 |
| | 115VAC | | | W88AX4 | 3.55 | W88ACPX4 | 5.70 |
| DPDT WD-2 | 6VAC | — | 3 VA | W88AX5 | 3.95 | W88ACPX5 | 6.24 |
| | 12VAC | | | W88AX6 | 3.95 | W88ACPX6 | 6.24 |
| | 24VAC | | | W88AX7 | 4.00 | W88ACPX7 | 6.29 |
| | 115VAC | | | W88AX8 | 4.15 | W88ACPX8 | 6.44 |
| | 230VAC | W88AX32 | 4.60 | W88ACPX32 | 6.99 | | |
| 3PDT WD-3 | 6VAC | — | 3 VA | W88AX9 | 4.35 | W88ACPX9 | 7.66 |
| | 12VAC | | | W88AX10 | 4.35 | W88ACPX10 | 7.66 |
| | 24VAC | | | W88AX11 | 4.40 | W88ACPX11 | 7.81 |
| | 115VAC | | | W88AX12 | 4.55 | W88ACPX12 | 7.96 |
| direct current voltage actuated | | | | | | | |
| SPDT †WD-1 | 6VDC | 25 | 1.5W | W88X2 | 3.20 | W88CPX1 | 5.35 |
| | 12VDC | 100 | | W88X3 | 3.20 | W88CPX2 | 5.35 |
| | 24VDC | 400 | | W88X4 | 3.25 | W88CPX3 | 5.40 |
| | 110VDC | 8000 | | W88X5 | 3.80 | W88CPX4 | 5.95 |
| DPDT WD-2 | 6VDC | 25 | 1.5W | W88X6 | 3.55 | W88CPX5 | 5.84 |
| | 12VDC | 100 | | W88X7 | 3.55 | W88CPX6 | 5.84 |
| | 24VDC | 400 | | W88X8 | 3.60 | W88CPX7 | 5.89 |
| | 110VDC | 8000 | | W88X9 | 4.15 | W88CPX8 | 6.44 |
| 3PDT WD-3 | 6VDC | 25 | 1.5W | W88X10 | 3.95 | W88CPX9 | 7.21 |
| | 12VDC | 100 | | W88X11 | 3.95 | W88CPX10 | 7.21 |
| | 24VDC | 400 | | W88X12 | 4.00 | W88CPX11 | 7.26 |
| | 110VDC | 8000 | | W88X13 | 4.55 | W88CPX12 | 7.81 |
| DC current actuated for plate circuit operation | | | | | | | |
| SPDT †WD-1 | 7.2 MA | 2500 | 125MW | W88X14 | 3.75 | W88CPX13 | 5.90 |
| | 5.0 MA | 5000 | | W88X15 | 3.85 | W88CPX14 | 6.00 |
| | 3.6 MA | 10000 | | W88X16 | 4.25 | W88CPX15 | 6.40 |
| DPDT WD-2 | 10 MA | 2500 | 250MW | W88X17 | 4.01 | W88CPX16 | 6.30 |
| | 7.2 MA | 5000 | | W88X18 | 4.11 | W88CPX17 | 6.40 |
| | 5 MA | 10000 | | W88X19 | 4.51 | W88CPX18 | 6.80 |
| 3PDT WD-3 | 12.3 MA | 2500 | 375MW | W88X20 | 4.44 | W88CPX19 | 7.70 |
| | 8.7 MA | 5000 | | W88X21 | 4.54 | W88CPX20 | 7.80 |
| | 6.1 MA | 10000 | | W88X22 | 4.94 | W88CPX21 | 8.20 |

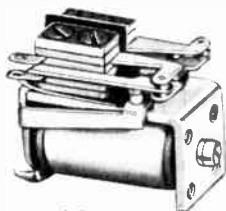
h* is overall dimension above socket

MAGNECRAFT ELECTRIC CO., Chicago 30, Illinois

MAGNECRAFT Telephone Type Relays page 2

Sub-miniature—DC—3 amps.

33



1 1/2 l, 1/4 w, 1 3/4 h, max.

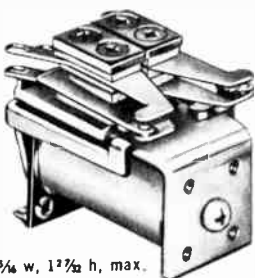
Class 33 midget sub-miniature; the smallest telephone type MAGNECRAFT Relay and one of the smallest telephone type relays on the market. Class 33 is also the fastest operating and inherently more shock resistant and vibration resistant. Long life, reliability and accuracy fit Class 33 relays for a wide range of small space requirements. They are extensively used for aircraft, computer and mobile applications where small size, light weight and resistance to shock and vibration are essential.

Palladium contacts; 3 ampere rating. Four 4-40 tapped mounting holes on 3/8 x 3/8 centers. Weight, 1 ounce.

| contacts | voltage | res. | nominal | Cat. | NET |
|----------|---------|------|---------|---------|------|
| 3 amps | DC | ohms | power | No. | |
| DPDT | 6VDC | 17 | | W33X237 | 4.87 |
| | 12VDC | 75 | | W33X238 | 4.87 |
| | 24VDC | 280 | 2.0W | W33X239 | 4.92 |
| | 110VDC | 6500 | | W33X240 | 5.50 |
| 4PDT | 6VDC | 17 | | W33X241 | 6.58 |
| | 12VDC | 75 | | W33X242 | 6.58 |
| | 24VDC | 280 | 2.0W | W33X243 | 6.63 |
| | 110VDC | 5500 | | W33X244 | 7.23 |

Miniature—DC—5 amps.

11



1 1/2 l, 1 3/4 w, 1 7/8 h, max.

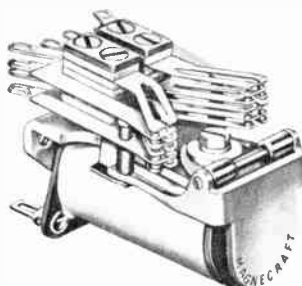
Class 11 miniature telephone type MAGNECRAFT Relay is a small, fast acting space saving relay that has BIG relay reliability, accuracy and long life. The Class 11 is extensively used to replace larger relays with completely satisfactory results where space is limited or weight saving is needed.

Silver alloy contacts; 5 ampere rating. Tinned solder terminals with easy-to-wire spacing. Four 4-40 tapped mounting holes on 3/8 x 7/16 centers. Weight, 3 ounces.

| contacts | volt. or | res. | nominal | Cat. | NET |
|---|----------|-------|---------|---------|-------|
| 5 amps. | current | ohms | power | No. | |
| 4PDT | 6VDC | 25 | | W11X505 | 6.78 |
| | 12VDC | 100 | | W11X506 | 6.83 |
| | 24VDC | 400 | 1.5W | W11X507 | 6.83 |
| | 110VDC | 9000 | | W11X508 | 8.07 |
| 6PDT | 6VDC | 13 | | W11X509 | 9.49 |
| | 12VDC | 56 | 2.5W | W11X510 | 9.49 |
| | 24VDC | 280 | | W11X511 | 9.54 |
| | 110VDC | 5000 | | W11X512 | 10.12 |
| DC current actuated for plate circuit operation | | | | | |
| DPDT | 5 MA | 10000 | 250MW | W11X513 | 6.16 |

Small—AC-DC—Twin Contacts

22T



2 1/4 l, 1 1/2 w, 1 3/4 h, max.

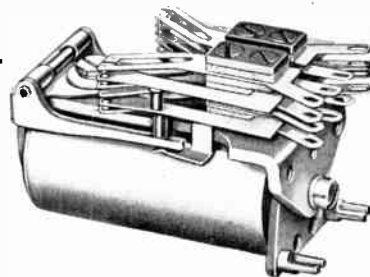
Class 22T—miniature long form relay with accuracy reliability and long life equal and sometimes superior to larger relays. A unique, pin type armature hinge of heavy duty design and precision construction assures stabilized adjustment through millions of operations. Twin Palladium contacts with long, flexible bifurcated contact springs assure the ultimate in switching reliability.

Twin Palladium contacts, 4 ampere rating. All mounting and wiring at heel end. Tinned solder terminals with easy-to-wire spacing. Two #6-32 tapped mounting holes on 3/4 centers. Weight, 5 ounces.

| contacts | volt. or | res. | nominal | Cat. | NET |
|---|----------|-------|---------|----------|-------|
| 4 amps. | current | ohms | power | No. | |
| alternating current voltage actuated | | | | | |
| DPDT | 115VAC | 500 | 5VA | W22ATX12 | 5.94 |
| direct current voltage actuated | | | | | |
| 4PDT | 6VDC | 20 | 2.0W | W22TX267 | 8.44 |
| | 12VDC | 80 | 2.0W | W22TX268 | 8.44 |
| | 24VDC | 375 | 1.5W | W22TX269 | 8.49 |
| | 110VDC | 8000 | 1.5W | W22TX270 | 9.97 |
| 6PDT | 6VDC | 12 | | W22TX271 | 11.87 |
| | 12VDC | 50 | 3.0W | W22TX272 | 11.87 |
| | 24VDC | 225 | | W22TX273 | 11.92 |
| | 110VDC | 5000 | | W22TX274 | 12.91 |
| DC current actuated for plate circuit operation | | | | | |
| SPDT | 4.5 MA | 5000 | | W22TX276 | 5.91 |
| | 6.0 MA | 2700 | 100MW | W22TX277 | 5.24 |
| | 3.2 MA | 10000 | | W22TX278 | 6.18 |
| DPDT | 4.5 MA | 10000 | 200MW | W22TX275 | 6.93 |

Medium—AC-DC—Twin Contacts

66T



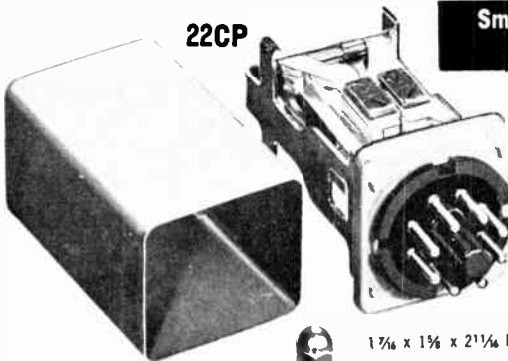
2 3/4 l, 1 3/4 w, 2 high, max.

Class 66T—similar to 22T except has larger coil for greater sensitivity and/or effective switching of more circuits. A unique, pin type armature hinge of heavy duty design and precision construction assures stabilized adjustment through millions of operations. Twin Palladium contacts with long flexible bifurcated contact springs assure the ultimate in switching reliability.

Twin Palladium contacts, 4 ampere rating. All mounting and wiring at heel end. Tinned solder terminals with easy-to-wire spacing. Two #6-32 tapped mounting holes on 3/4 centers. Weight, 5 ounces.

| contacts | volt. or | res. | nominal | Cat. | NET |
|---|----------|-------|---------|---------|-------|
| 4 amps. | current | ohms | power | No. | |
| alternating current voltage actuated | | | | | |
| 4PDT | 115VAC | 300 | 6VA | W66ATX2 | 7.72 |
| direct current voltage actuated | | | | | |
| 4PDT | 6VDC | 30 | | W66TX23 | 7.59 |
| | 12VDC | 135 | 1.0W | W66TX24 | 7.59 |
| | 24VDC | 540 | | W66TX25 | 7.64 |
| 8PDT | 6VDC | 20 | | W66TX29 | 13.21 |
| | 12VDC | 85 | | W66TX30 | 13.21 |
| | 24VDC | 250 | 2.0W | W66TX31 | 13.26 |
| | 110VDC | 5750 | | W66TX32 | 13.84 |
| DC current actuated for plate circuit operation | | | | | |
| 4PDT | 5.3 MA | 11000 | 300MW | W66TX26 | 8.96 |
| 6PDT | 6.75 MA | 11000 | 500MW | W66TX27 | 12.64 |
| 8PDT | 8.5 MA | 11000 | 800MW | W66TX28 | 14.25 |

22CP



1 7/8 x 1 1/4 x 2 1/4 h*

Small—AC-DC—Plug-in with removable dust cover

40-284 enclosure with removable dust cover housing Class 22 relay with 8- or 11-pin standard octal plug. Internal bracket supports cover and protects relay. One screw holds cover in place. Silver alloy contacts, 5 ampere rating. Weight, 6 ounces.

| contacts | voltage | res. | nominal | Cat. | NET |
|--------------------------------------|---------|------|---------|----------|-------|
| 5 amps. | | ohms | power | No. | |
| alternating current voltage actuated | | | | | |
| DPDT | 115VAC | 500 | 5VA | W22CPX60 | 10.23 |
| WD-5 | | | | | |
| direct current voltage actuated | | | | | |
| SPDT | 6VDC | 20 | 2.0W | W22CPX44 | 8.73 |
| | 12VDC | 80 | 2.0W | W22CPX45 | 8.73 |
| | 24VDC | 375 | 1.5W | W22CPX46 | 8.78 |
| | 110VDC | 8000 | 1.5W | W22CPX47 | 10.02 |
| DPDT | 6VDC | 20 | 2.0W | W22CPX48 | 9.85 |
| | 12VDC | 80 | 2.0W | W22CPX49 | 9.85 |
| | 24VDC | 375 | 1.5W | W22CPX50 | 9.90 |
| | 110VDC | 8000 | 1.5W | W22CPX51 | 11.14 |

| contacts | volt. or | res. | nominal | Cat. | NET |
|---|----------|-------|---------|----------|-------|
| 5 amps. | current | ohms | power | No. | |
| direct current voltage actuated | | | | | |
| 3PDT | 6VDC | 20 | 2.0W | W22CPX52 | 11.87 |
| | 12VDC | 80 | 2.0W | W22CPX53 | 11.87 |
| | 24VDC | 375 | 1.5W | W22CPX54 | 11.92 |
| | 110VDC | 8000 | 1.5W | W22CPX55 | 13.16 |
| DC current actuated for plate circuit operation | | | | | |
| SPDT | 4.5 MA | 5000 | | W22CPX57 | 9.36 |
| | 6.0 MA | 2700 | 100MW | W22CPX58 | 9.02 |
| WD-4 | 3.2 MA | 10000 | | W22CPX59 | 10.02 |
| DPDT | 4.5 MA | 10000 | 200MW | W22CPX56 | 11.14 |
| WD-5 | | | | | |

MAGNECRAFT

Sealed and Dustcover Enclosed Telephone Type Relays

**Hermetically Sealed
Sub-miniature
DC 5 amps.
33HS**



3/4 x 1 1/2 x 1 1/4 h"

40-157 enclosure, hermetically sealed, housing Class 33 miniature relay with 8- or 14-pin high compression, glass insulated, solder terminal header. Silver alloy contacts, 5-ampere rating. Three 4-40 tapped mounting holes on 1/2 x 1 centers. Weight, 3 ounces.

| contacts 5 amps. | voltage DC | res. ohms | nominal power | Cat. No. | NET |
|---------------------|---------------|--------------|------------------|-------------|-------|
| DPDT †WD-8 | 6VDC | 17 | | W33HSX177 | 13.21 |
| | 12VDC | 75 | | W33HSX178 | 13.21 |
| | 24VDC | 280 | 2.0W | W33HSX179 | 13.26 |
| | 110VDC | 6500 | | W33HSX180 | 13.87 |
| 4PDT WD-9 | 6VDC | 17 | | W33HSX181 | 16.65 |
| | 12VDC | 75 | | W33HSX182 | 16.65 |
| | 24VDC | 280 | 2.0W | W33HSX183 | 16.70 |
| | 110VDC | 6500 | | W33HSX184 | 17.36 |

**Hermetically Sealed
Miniature
DC 4 amps.
11HP**



1 1/2 diameter x 2 1/2 h"

40-101 enclosure, hermetically sealed, housing Class 11 miniature relay with standard 8-pin octal plug. Silver alloy contacts, 4 ampere rating. Weight, 5 ounces.

| contacts 4 amps. | volt. or current | res. ohms | nominal power | Cat. No. | NET |
|---|---------------------|--------------|------------------|-------------|-------|
| DPDT WD-5 | 6VDC | 25 | | W11HPX81 | 9.86 |
| | 12VDC | 100 | | W11HPX82 | 9.91 |
| | 24VDC | 400 | 1.5W | W11HPX83 | 9.91 |
| | 110VDC | 9000 | | W11HPX84 | 11.15 |
| DC current actuated for plate circuit operation | | | | | |
| DPDT WD-5 | 5 MA | 10000 | 250MW | W11HPX85 | 11.15 |

**Hermetically Sealed
Miniature
DC 5 amps.
11HS**

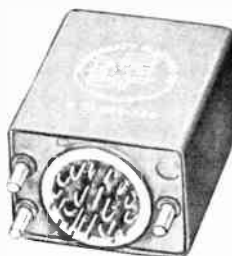


1 1/8 x 1 3/4 x 2 1/8 h"

40-102 enclosure, hermetically sealed, housing Class 11 miniature relay with 14-pin, high compression, glass insulated solder terminal header. Silver alloy contacts, 5 ampere rating. Three #6-32 NC-2 threaded mounting studs on 1 1/8 x 1 3/8 centers. Weight, 6 ounces.

| contacts 5 amps. | volt. or current | res. ohms | nominal power | Cat. No. | NET |
|---|---------------------|--------------|------------------|-------------|-------|
| 4PDT WD-9 | 6VDC | 25 | | W11HSX321 | 15.92 |
| | 12VDC | 100 | | W11HSX322 | 15.97 |
| | 24VDC | 400 | 1.5W | W11HSX323 | 15.97 |
| | 110VDC | 9000 | | W11HSX324 | 17.06 |
| DC current actuated for plate circuit operation | | | | | |
| DPDT WD-8 | 5 MA | 10000 | 250MW | W11HSX325 | 13.70 |

**Hermetically
Sealed
Miniature
DC
5 amps.
11HS**

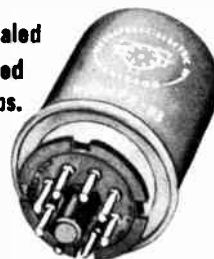


1 1/4 x 1 1/4 x 2 3/8 h"

40-188 enclosure, hermetically sealed, housing Class 11 miniature relay with 20-pin high compression glass insulated solder terminal header. Silver alloy contacts, 5 ampere rating. Three #6-32 NC-2 threaded mounting studs on 1/2 x 1 1/2 centers. Weight, 6 ounces.

| contacts 5 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|---------------------|---------|--------------|------------------|-------------|-------|
| 6PDT WD-10 | 6VDC | 13 | | W11HSX326 | 19.91 |
| | 12VDC | 56. | | W11HSX327 | 19.91 |
| | 24VDC | 280 | 2.5W | W11HSX328 | 19.96 |
| | 110VDC | 5000 | | W11HSX329 | 20.18 |

**Hermetically Sealed
Plug-In Mounted
Small—4 amps.
AC and DC
88HP**

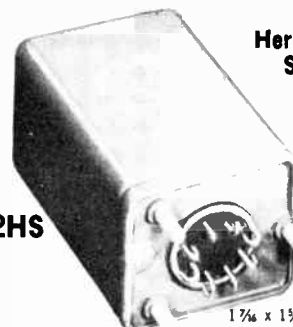


1-21/32 diameter x 2-11/32 h"

40-101 enclosure, hermetically sealed, housing Class 88 high reliability relay (see page 1) with standard 8-pin octal plug. Silver alloy contacts, 4 ampere rating. Weight, 5 ounces.

| contacts 4 amps. | voltage | res. ohms | nominal power | catalog number | NET |
|-------------------------------|--------------------------------------|--------------|------------------|-------------------|------|
| DPDT WD-2 See page 1 | alternating current voltage actuated | | | | |
| | 6VAC | — | — | W88AHPX-4 | 8.59 |
| | 12VAC | — | — | W88AHPX-5 | 8.59 |
| | 24VAC | — | 3VA | W88AHPX-6 | 8.64 |
| | 115VAC | — | — | W88AHPX-7 | 8.79 |
| DPDT WD-2 See page 1 | direct current voltage actuated | | | | |
| | 6VDC | 25 | | W88HPX-3 | 8.19 |
| | 12VDC | 100 | | W88HPX-4 | 8.19 |
| | 24VDC | 400 | 1.5W | W88HPX-5 | 8.24 |
| | 110VDC | 8000 | | W88HPX-6 | 9.29 |

All Prices are net
for 1 to 9 relays.
Quantity Prices
on Request.



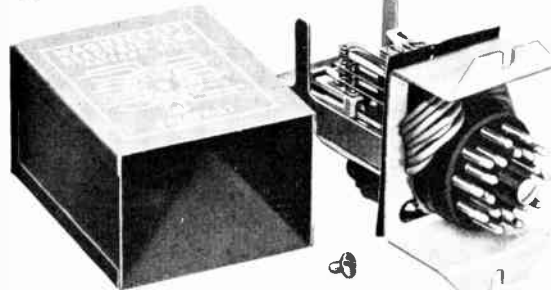
**Hermetically
Sealed
small
AC-DC
5 amps.**

1 1/8 x 1 3/8 x 2 1/8 h"

22HS

40-158 enclosure, hermetically sealed, housing Class 22 relay with 14-pin glass insulated solder terminal header. Silver alloy contacts, 5 ampere rating. Three #6-32 threaded mounting studs on 1 1/8 x 1 3/8 centers. Weight, 7 ounces.

| contacts 5 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|---------------------|--------------------------------------|--------------|------------------|-------------|-------|
| 4PDT WD-9 | alternating current voltage actuated | | | | |
| | 115VAC | 500 | 5VA | W22AHSX32 | 17.30 |
| | direct current voltage actuated | | | | |
| 4PDT WD-9 | 6VDC | 20 | 2.0W | W22HSX144 | 17.00 |
| | 12VDC | 80 | 2.0W | W22HSX145 | 17.00 |
| | 24VDC | 375 | 1.5W | W22HSX146 | 17.05 |
| | 110VDC | 8000 | 1.5W | W22HSX147 | 18.03 |



22CP

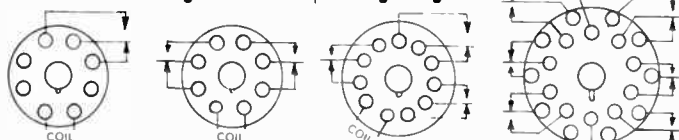
**Small—DC—Plug-in
with
removable dust cover**

45-176 removable dust cover with Class 22 relay and 20-pin octal plug. Hold-down bracket permits mounting in any position. Internal bracket supports cover. One screw holds cover. Rubber gasket seals out dust. Silver alloy contacts, 5 ampere rating. Hold down bracket has two mounting holes for 6-32 screws on 2 1/2 centers. Weight, 8 ounces.

1 1/8 x 2 1/8 x 3 1/2 h"

| contacts 5 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|---------------------|---------|--------------|------------------|-------------|-------|
| 6PDT WD-7 | 6VDC | 12 | | W22CPX61 | 16.72 |
| | 12VDC | 50 | 3.0W | W22CPX62 | 16.72 |
| | 24VDC | 225 | | W22CPX63 | 16.77 |
| | 110VDC | 5000 | | W22CPX64 | 17.35 |

Plug-in Header †Wiring Diagrams



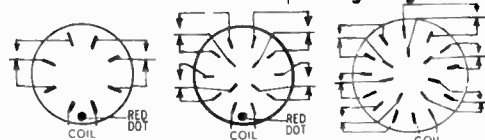
†WD-4 SPDT, 8-pin

WD-5 DPDT, 8-pin

WD-6 3PDT, 11-pin

WD-7 6PDT, 20-pin

Solder Terminal Header †Wiring Diagrams



†WD-8 DPDT, 8-hook

WD-9 4PDT, 14-hook

WD-10 6PDT, 20-hook

MAGNECRAFT

Power, Latch-in and Special Purpose Relays

Miniature Power DC 50 amps SPST-NO-DB

Class 11D miniature telephone type relay with heavy brass contact arms and large 50-ampere silver alloy, single pole, single throw, normally open, double break contacts. The Class 11 is a small size relay with big relay reliability, accuracy and long life.

Solder terminals, spaced for easy wiring. Four 4-40 tapped mounting holes on $\frac{3}{8}$ x $\frac{1}{16}$ centers. Weight, 3 ounces.



11D
1 1/2 l. 1 3/8 w. 1 3/8 h.

| contacts 50 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|----------------------|---------|--------------|------------------|-------------|------|
| SPST | 6VDC | 25 | | W11DX38 | 5.39 |
| NO | 12VDC | 100 | 1.5W | W11DX39 | 5.45 |
| double | 24VDC | 400 | | W11DX40 | 5.45 |
| break | 110VDC | 9000 | | W11DX41 | 6.08 |

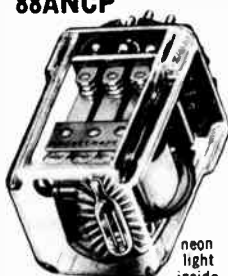
Small AC 10 amp. plug-in relay with neon "ON" light

Enc. 40-279 polystyrene dust cover with 8- or 11-pin standard octal plug housing Class 88 high reliability relay (see page 1) with built-in neon circuit indicator light. Indicator light comes on when coil is energized.

- Eliminates need for expensive pilot lamp assemblies
- Saves panel space
- Circuit condition can be seen at a glance

Silver alloy contacts, 10 ampere rating. Weight, 3 ounces.

88ANCP



1 3/4 x 1 3/8 x 2 3/8 h*

44



Enc. 40-227 plug-in header no bracket
Enc. 40-222 solder terminals no bracket
Enc. 40-224 solder terminals side bracket
Enc. 40-234 solder terminals flange bracket

Case - .875 x .797 x .359

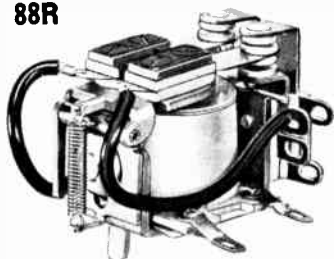


Standard wiring diagram for Class 44 Relays

| DC voltage | res. ohms | nominal power | catalog number | NET | catalog number | NET |
|--------------------|-----------|---------------|----------------|-------|----------------|-------|
| Enc. 40-227 | | | | | | |
| 6.5 | 34 | | W44HPX-34 | 17.60 | W44HSX-103 | 17.60 |
| 11 | 92 | | W44HPX-35 | 17.60 | W44HSX-104 | 17.60 |
| 26.5 | 552 | 1.2W | W44HPX-36 | 17.60 | W44HSX-105 | 17.60 |
| 38.5 | 1278 | | W44HPX-37 | 18.00 | W44HSX-106 | 18.00 |
| 76 | 5000 | | W44HPX-38 | 19.90 | W44HSX-107 | 19.90 |
| Enc. 40-224 | | | | | | |
| 6.5 | 34 | | W44HSX-108 | 17.95 | W44HSX-113 | 17.95 |
| 11 | 92 | | W44HSX-109 | 17.95 | W44HSX-114 | 17.95 |
| 26.5 | 552 | 1.2W | W44HSX-110 | 17.95 | W44HSX-115 | 17.95 |
| 38.5 | 1278 | | W44HSX-111 | 18.35 | W44HSX-116 | 18.35 |
| 76 | 5000 | | W44HSX-112 | 20.25 | W44HSX-117 | 20.25 |
| Enc. 40-234 | | | | | | |

Small—Power—AC—DC—15 amps.

88R



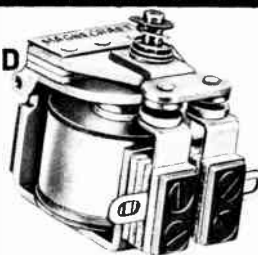
1 1/2 l. 1 1/2 w. 1 1/2 high

Class 88R extra quality, high reliability clapper type relay with 15 ampere heavy duty silver alloy contacts for industrial control applications. Has the exclusive quality features of Class 88 relays described on page one. Tinned solder terminals. One #6-32 tapped mounting hole and locating boss. Weight 3 ounces.

| contacts 15 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|----------------------|---------|--------------|------------------|-------------|------|
| DPDT | 6VAC | — | | W88ARX1 | 5.97 |
| | 12VAC | — | 3VA | W88ARX2 | 5.97 |
| | 24VAC | — | | W88ARX3 | 6.02 |
| | 115VAC | — | | W88ARX4 | 6.17 |
| DPDT | 6VDC | 25 | | W88RX1 | 5.90 |
| | 12VDC | 100 | 1.5W | W88RX2 | 5.90 |
| | 24VDC | 400 | | W88RX3 | 5.95 |
| | 110VDC | 8000 | | W88RX4 | 6.40 |

Power - AC and DC - 50 amps.

88D



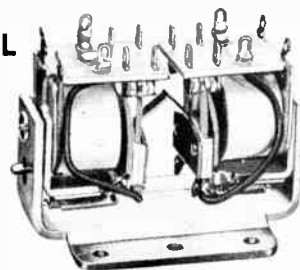
1-13/16 x 1-1/4 (less soldering tabs) x 1-7/16 high

The popular high reliability Class 88 Relay (see page 1) specially designed with 50-ampere SPST, Double Break, Normally Open contacts. Developed especially for switching heavy current in minimum space reliably and economically. Unique contact structure provides positive wiping action. One 6-32 tapped mounting hole and locating boss. Weight, 3 ounces.

| contacts 50 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|-----------------------------|---------|--------------|------------------|-------------|------|
| 50 amperes SPST | 24VAC | — | | W88ADX-1 | 5.15 |
| | 115VAC | — | 3VA | W88ADX-2 | 5.25 |
| | 230VAC | — | | W88ADX-3 | 5.70 |
| Double Break, Normally Open | 6VDC | 25 | | W88DX-1 | 4.65 |
| | 12VDC | 100 | 1.5W | W88DX-2 | 4.65 |
| | 24VDC | 400 | | W88DX-3 | 4.70 |
| | 110VDC | 8000 | | W88DX-4 | 5.94 |

Latch-In - AC and DC - Small

88L



2-11/16 max. x 1 3/4 x 1-15/16 high max.

Two class 88 relays (see page 1) with interlocking latch-in levers mounted on a common base. Each armature latches when pulled in. Energizing one armature releases (resets) the other. Each relay is complete with independent operating coil. Contacts are silver alloy, 10 ampere rating. Relay coils are designed for continuous duty operation. Weight 6 1/2 ounces.

| contacts 10 amps. | voltage | res. ohms | nominal power | catalog number | NET |
|----------------------|---------|--------------|------------------|----------------|-------|
| 4PDT | 6VAC | — | | W88ALX-2 | 10.60 |
| | 24VAC | — | 6VA | W88ALX-3 | 10.60 |
| | 115VAC | — | prox | W88ALX-4 | 10.60 |
| 6PDT | 6VAC | — | | W88ALX-5 | 12.80 |
| | 24VAC | — | 6VA | W88ALX-6 | 12.80 |
| | 115VAC | — | prox. | W88ALX-7 | 12.80 |
| 4PDT | 6VDC | 12 | | W88LX-1 | 9.65 |
| | 12VDC | 50 | | W88LX-2 | 9.65 |
| | 24VDC | 200 | 3W | W88LX-3 | 9.65 |
| | 110VDC | 400 | | W88LX-4 | 10.85 |
| 6PDT | 6VDC | 12 | | W88LX-5 | 11.75 |
| | 12VDC | 50 | | W88LX-6 | 11.75 |
| | 24VDC | 200 | 3W | W88LX-7 | 11.75 |
| | 110VDC | 4000 | | W88LX-8 | 12.95 |

MAGNECRAFT

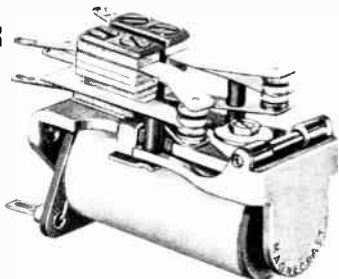
Power, Latch-in and Special Purpose Relays

Small—Power—AC—DC—10 amps.

RF Switching—Sub-miniature

Latch-in—Miniature—DC

22R



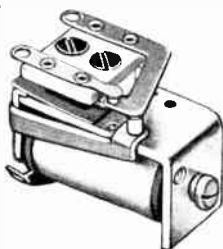
2 1/8 l, 1 1/2 w, 1 1/4 high, max.

Class 22R small size, high reliability, long life relay with heavy duty 10 ampere silver alloy contacts and same pin type armature hinge as Class 66AR.

All mounting and wiring at heel end. Tinned solder terminals with easy-to-wire spacing. Two #6-32 tapped mounting holes on 3/4 centers. Weight, 5 ounces.

| contacts | 10 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|----------|----------|---------|-----------|---------------|----------|------|
| DPDT | 6VAC | 2.0 | | | W22ARX38 | 6.25 |
| | 24VAC | 20 | 5VA | | W22ARX39 | 6.25 |
| | 115VAC | 500 | | | W22ARX40 | 6.30 |
| DPDT | 6VDC | 20 | | | W22RX67 | 6.00 |
| | 12VDC | 88 | 2.5W | | W22RX68 | 6.00 |
| | 24VDC | 225 | | | W22RX69 | 6.05 |
| | 110VDC | 5000 | | | W22RX70 | 6.63 |
| 4PDT | 6VDC | 20 | | | W22RX71 | 8.79 |
| | 12VDC | 80 | 2.5W | | W22RX72 | 8.79 |
| | 24VDC | 225 | | | W22RX73 | 8.84 |
| | 110VDC | 5000 | | | W22RX74 | 9.42 |

33F



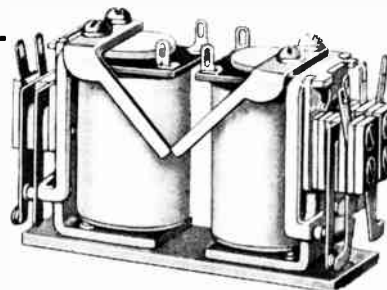
1 1/2 l, 1 1/8 w, 1 1/8 h.

Class 33F—Class 33 sub-miniature telephone type relay designed especially to afford lowest possible capacitance between springs and to minimize losses at high frequencies. Suitable for antenna change-over switching. Contact springs have ceramic insulation. Contacts are Palladium, 2 ampere rating.

Tinned solder terminals. Four #4-40 tapped mounting holes on 3/8 x 3/8 centers. Weight, 1 ounce.

| contacts | 2 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|----------|---------|---------|-----------|---------------|----------|------|
| SPDT | 6VDC | 28 | | | W33FX20 | 4.06 |
| | 12VDC | 100 | 1.5W | | W33FX21 | 4.11 |
| | 24VDC | 500 | | | W33FX22 | 4.16 |
| | 110VDC | 6500 | | | W33FX23 | 4.69 |

11L



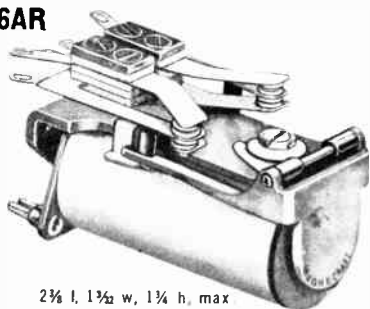
2 1/8 l, 1 1/8 w, 1 1/8 h.

Two Class 11 Miniature Telephone Type Relays mounted on a common base with armatures mechanically interlocked. Each armature latches when pulled in. Energizing one armature resets (releases) the other. Each relay is complete with DPDT 5-ampere silver alloy contacts. The latching levers are alloy steel, heat treated and hard chrome plated for reliability and long wear. Tinned solder terminals. Two #6-32 tapped mounting holes. Weight, 6 ounces.

| contacts | 5 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|----------|---------|---------|-----------|---------------|----------|-------|
| two DPDT | 6VDC | 13 | 2.7 | | W11LX100 | 14.74 |
| | 12VDC | 56 | 2.7 | | W11LX101 | 14.74 |
| | 24VDC | 280 | 2.0 | | W11LX102 | 14.87 |
| | 110VDC | 5000 | 2.0 | | W11LX103 | 15.96 |

Medium—Power—AC—10 amps.

66AR



2 3/8 l, 1 1/2 w, 1 1/4 h, max

Class 66AR high reliability, long life relay with heavy duty 10 ampere silver alloy contacts for industrial control applications. Resembles the Class 22R except has larger coil. A unique pin type armature hinge of heavy duty design and precision construction assures stabilized adjustment through long life and the positive contact pressure needed for switching heavy loads.

All mounting and wiring at heel end. Tinned solder terminals with easy-to-wire spacing. Two #6-32 tapped mounting holes on 3/4 centers. Weight, 5 ounces.

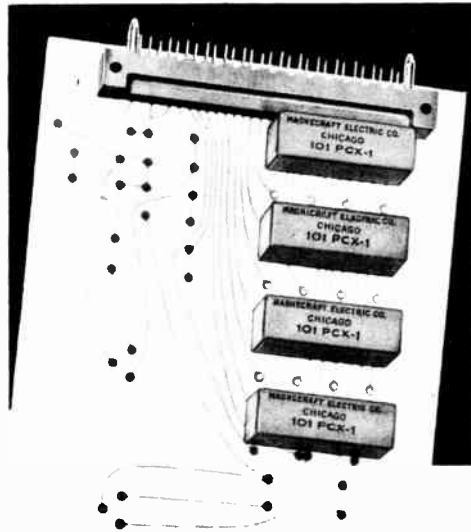
| contacts | 10 amps. | voltage | res. ohms | nominal power | Cat. No. | NET |
|----------|----------|---------|-----------|---------------|----------|------|
| 4PDT | 24VAC | 15 | 6VA | | W66ARX10 | 8.79 |
| | 115VAC | 300 | | | W66ARX11 | 9.04 |

Encapsulated MAGNEEED Relay Installation (see page 6)

Illustration shows four of seven encapsulated MAGNEEED Relays "plugged" into place. Spaces for the other three relays with sockets for their terminal pins can be seen between the four relays.

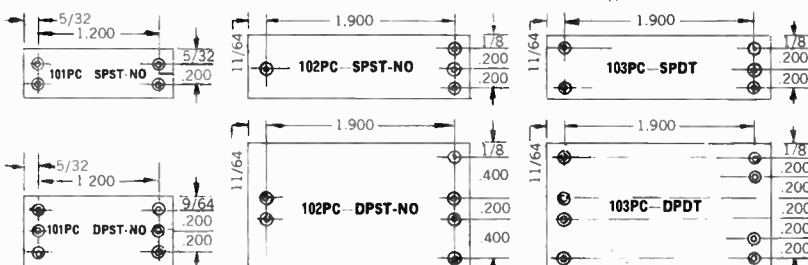
Please note the compact arrangement of the relays, the wide spaces between terminals and the extreme simplicity of the assembly.

Encapsulated MAGNEEED Relays are shown on page 6



Terminal Pin Spacings of Encapsulated MAGNEEED Relays.

All Terminal Pins are .040 Dia. and 1/8" long.



MAGNECRAFT

Ultra High Reliability MAGNEREED Relays

In this new approach to enduring relay reliability pre-adjusted gold contacts are hermetically sealed inside a glass capsule in an atmosphere of inert gas. The contacts are actuated magnetically by a coil around the hermetically sealed capsule.

Magnereed Relays are easily adaptable to mounting configurations as well as grouping to meet multi-pole switching requirements.

Magnereed Relays have many valuable features:

- Contacts are permanently sealed from dust, contamination and tampering.
- Contact resistance is stabilized over long life.
- Operation is sensitive
- Construction is simple.
- Switching is fast.

MAGNEREED Relays may be mounted in any position.

SPST-NO Miniature Magnereed



Overall length, 1½; glass length, ¾; outside diameter, ¼; weight, 1 oz.

Contact Combination: Single pole, single throw, normally open
 Contacts: Gold—rated 12VA at .250 amp. max. or 100 VAC max.
 Operate time: less than 1 millisecond.
 Release time: less than ½ millisecond.
 Nominal power, 200MW

Life Expectancy:
 At max. rating, 5 million cycles
 ½ max. rating, 20 million cycles

| direct current current | volts | res. ohms | catalog number | NET each |
|------------------------|-------|-----------|----------------|----------|
| 46MA | 6V | 100 | W101X-1 | 5.47 |
| 30MA | 12V | 250 | W101X-2 | 5.47 |
| 20MA | 24V | 500 | W101X-3 | 6.42 |
| 9MA | — | 2500 | W101X-4 | 7.09 |

SPST-NO Standard Magnereed



Overall length, 3¼; glass length, 1½; outside diameter, ¾; weight, 2 oz.

Contact Combination: Single pole, single throw, normally open.
 Contacts: Gold—rated 15VA at 1 amp. max. or 250 VAC max.
 Operate time: less than 1 millisecond.
 Release Time: less than ½ millisecond.
 Nominal Power, 100MW

Life Expectancy:
 At max. rating, 20 million cycles
 ½ max. rating, 100 million cycles
 Low load (1/10 amp. at 12V.) 200 million cycles.

| direct current current | volts | res. ohms | catalog number | NET each |
|------------------------|-------|-----------|----------------|----------|
| 32MA | — | 100 | W102X-1 | 3.57 |
| 23MA | 6V | 200 | W102X-2 | 3.57 |
| 14.5MA | 12V | 500 | W102X-3 | 3.57 |
| 7.5MA | 24V | 2000 | W102X-4 | 3.75 |
| 4.6MA | — | 5000 | W102X-5 | 4.51 |

SPDT (Form C) Magnereed



Overall length, 3½; glass length, 2¼; outside diameter, ½; weight, 2 oz.

Contact Combination: Single pole, double throw
 Contacts: Gold—Rated 10 watts resistive load, 1 ampere or 250 VAC maximum
 Operate time: Less than 1 millisecond
 Release time: Less than 1 millisecond
 Contact Bounce: 2 milliseconds maximum on release (N/C contact)

Nominal Power, 100MW
 Life Expectancy:
 At max. rating, 25 million cycles
 ½ max. rating, 50 million cycles
 Low load rating, 100 million cycles

| direct current current | volts | res. ohms | catalog number | NET |
|------------------------|-------|-----------|----------------|------|
| 32MA | — | 100 | W103X-8 | 6.32 |
| 23MA | 6V | 200 | W103X-9 | 6.60 |
| 14.5MA | 12V | 500 | W103X-10 | 7.13 |
| 7.5MA | 24V | 2000 | W103X-11 | 7.87 |
| 4.6MA | — | 5000 | W103X-12 | 8.04 |

Encapsulated MAGNEREED Relay Assemblies have many Added Advantages

1. Switch capsule, coil and terminal leads are encased in Epoxy resin which forms a terminal board of great dielectric strength.
2. Rigid, tinned terminal pins, spaced on 0.1 inch grid centers, reduce printed circuit installation to a simple "plug-in" operation.
3. Wide spacing between terminals provides wide safety margins in insulation and dielectric strength and permits similar safety margins in printed board design.
4. Compact design and shape simplify mounting and facilitate compact printed board application.

101PC SPST-NO

1½ x ½
 x ¾ h
 weight, 2 oz.



| direct current current | volts | res. ohms | catalog number | 1 to 9 |
|------------------------|-------|-----------|----------------|--------|
| — | 6V | 65 | W101PCX-5 | 7.58 |
| — | 12V | 250 | W101PCX-6 | 7.65 |
| — | 24V | 1000 | W101PCX-7 | 7.79 |
| 8MA | — | 5000 | W101PCX-8 | 8.41 |

102PC SPST-NO

2¼ x 2½
 x ¾ h
 weight 3 oz.



| direct current current | volts | res. ohms | catalog number | 1 to 9 |
|------------------------|-------|-----------|----------------|--------|
| — | 6V | 100 | W102PCX-1 | 7.07 |
| — | 12V | 400 | W102PCX-2 | 7.15 |
| — | 24V | 1500 | W102PCX-3 | 7.22 |
| 6.5MA | — | 5000 | W102PCX-4 | 7.89 |

103PC SPDT

2¼ x 2½
 x ¾ h
 weight 3 oz.



| direct current current | volts | res. ohms | catalog number | 1 to 9 |
|------------------------|-------|-----------|----------------|--------|
| — | 6V | 100 | W103PCX-1 | 10.70 |
| — | 12V | 400 | W103PCX-2 | 10.77 |
| — | 24V | 1500 | W103PCX-3 | 10.84 |
| 6.5MA | — | 5000 | W103PCX-4 | 11.50 |

101PC DPST-NO

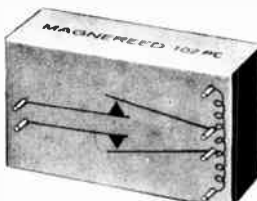
1½ x 1½
 x ¾ h
 weight, 3 oz.



| — | 6V | 40 | W101PCX-9 | 10.60 |
|-----|-----|------|------------|-------|
| — | 12V | 150 | W101PCX-10 | 10.64 |
| — | 24V | 650 | W101PCX-11 | 10.72 |
| 8MA | — | 5000 | W101PCX-12 | 11.40 |

102PC DPST-NO

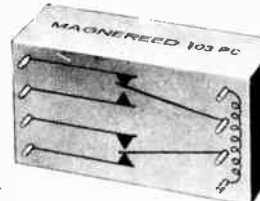
2¼ x 1½
 x ¾ h
 weight 4 oz.



| — | 6V | 50 | W102PCX-5 | 9.22 |
|-----|-----|------|-----------|-------|
| — | 12V | 200 | W102PCX-6 | 9.31 |
| — | 24V | 800 | W102PCX-7 | 9.38 |
| 9MA | — | 5000 | W102PCX-8 | 10.04 |

103PC DPDT

2¼ x 1½
 x ¾ h
 weight 4 oz.



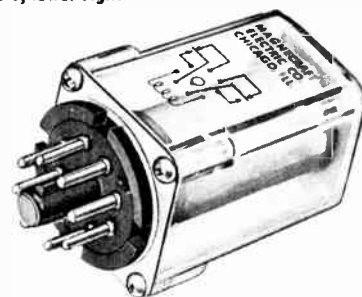
| — | 6V | 50 | W103PCX-5 | 15.95 |
|-----|-----|------|-----------|-------|
| — | 12V | 200 | W103PCX-6 | 15.99 |
| — | 24V | 800 | W103PCX-7 | 16.07 |
| 9MA | — | 5000 | W103PCX-8 | 16.76 |

For Terminal Pin Spacings of Encapsulated MAGNEREED Relays see Page 5, lower right

Plug-in MAGNEREED Relay Assemblies with Plastic Dust Cover

These assemblies combine the many great qualities of MAGNEREED Relays with convenient plug-in mounting. Each assembly includes two or three MAGNEREED Class 103 SPDT Relays (see operating characteristics above) with a common operating coil, 8- or 11-pin standard octal plug and Magnecraft No. 40-279 polystyrene "see-thru" dust cover housing. Dimensions: 1¾ x 1¾ x 2½ h. Weight, 5 oz.

| contacts | direct current current | volts | res. ohms | catalog number | 1 to 9 |
|----------|------------------------|-------|-----------|----------------|--------|
| DPDT | — | 6V | 75 | W103CPX-7 | 15.95 |
| DPDT | — | 12V | 300 | W103CPX-8 | 15.99 |
| DPDT | — | 24V | 1000 | W103CPX-9 | 16.07 |
| DPDT | 8MA | — | 5000 | W103CPX-10 | 16.76 |
| 3PDT | — | 6V | 40 | W103CPX-11 | 20.70 |
| 3PDT | — | 12V | 150 | W103CPX-12 | 20.78 |
| 3PDT | — | 24V | 650 | W103CPX-13 | 20.92 |
| 3PDT | 10MA | — | 5000 | W103CPX-14 | 21.60 |



OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



MODEL "GPR" GENERAL PURPOSE RELAYS

Simple, rugged, low cost relays handling substantial power for small size. Uncomplicated design provides unusual flexibility for making and changing connections and mounting. Stock includes relays in versatile enclosures, some with indicator light, also plate and latching versions. Wide commercial and industrial use where economy and versatility are important.

Basic (Unenclosed) Relay: All connections terminate on barrier-type terminal panel on combination solder-quick-connect (push-on) lugs which accept AMP 110 female connectors. Fixed contacts are integral link on the terminal itself. Terminal panel design permits use of relay in printed circuit assemblies.

Contact Ratings: Two ratings—fine silver contacts, 5 amps at 115VAC or 32VDC; silver cadmium fixed contacts, silver cadmium oxide movable contacts, 10 amps.

Contact Combinations: As shown in stock tables. (Also see GPR "Latching Relay" following for larger combinations.) Others made to order.

Insulation: Tested at 1000 VAC.

Coil Wattage: 1.4 watts DC operation; 1.60 watts (2.0 volt-amperes) AC (except see "Latching Relays")

Coil Operating Voltage: Up to 230 VAC 60 cycles or 115 VDC.

Weights—shown below stock tables, are based on 3PDT relays. Relays with fewer poles weigh slightly less.

Enclosed Relays (GPRTA, GPRTT, GPRTP) Three types of clear plastic enclosures as follows:

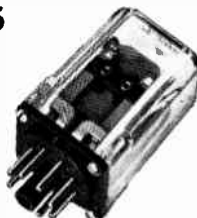
Chassis Mounting Types: "GPRTA"—("Terminals-Above-Chassis" type) has terminal panel opposite to mounting flange; "GPRTT"—("Terminals-Through-Chassis" type) has terminal panel on same end as mounting flange, requires chassis cutout.

Plug Mounting Type: "GPRTP"—employs octal plug for 1 and 2 pole relays; 11-pin plug for 3-pole. The octal plug base is integral with relay for rigidity—is designed with recessed pins which meet UL spacing requirements (150V).

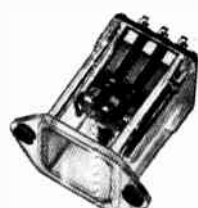
Indicator Relay: Incorporates light bulb to indicate energized condition of coil. Stocked only in GPRTP enclosures described above. Neon bulb furnished with coil ratings 115 volts and above; incandescent bulbs for coil ratings below 115 volts.



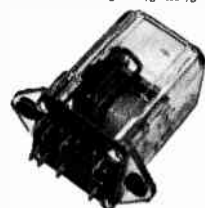
3PDT
1 1/2" x 1 3/8" x 1 1/8"



OCTAL PLUG BASE
(GPRTP) 2 1/8" x 1 3/8" x 1 1/8"



ABOVE CHASSIS MTG.*
(GPRTA) 2 3/8" x 2 1/4" x 1 1/8"



THRU-CHASSIS MTG.*
(GPRTT) 2 1/8" x 1 3/8"
* Extends 1 1/8" above chassis

* MULTI-USE TERMINALS: Can be soldered, inserted into a PC board, or will take AMP Style 110 push-on terminals.

STOCK GPR RELAYS—5 AMP AND 10 AMP

| Con- tacts | COIL DATA | | | 5 AMP CONTACTS | | | | | | | | | | | | 10 AMP CONTACTS | | | | |
|----------------|-----------|-------|--------|------------------------|---------------------------------------|---------------------------------------|-----------------------------------|------------------------------------|------------------------|------------|--------|---------------------------|---------|-------------|--------|-----------------|---------|--|--|--|
| | Volts | Amps | Ohms | Unen- closed GPR | Enclosed Above Chassis GPRTA | Enclosed Thru- Chassis GPRTT | Enclosed Plug Base GPRTP | Indicator Plug Base GPRTP | Unen- closed GPR | | | Enclosed Base GPRTP | | | Net \$ | | | | | |
| | | | | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | | | | |
| SPDT | 6VAC | .334 | 4.2 | GPRTX-3T | 3.19 | GPRTAX-3T | 5.19 | GPRTTX-3T | 5.19 | GPRTPX-3T | 5.43 | GPRX-203T | 3.23 | GPRTPX-203T | 5.52 | | | | | |
| DPDT | 6VAC | .334 | 4.2 | GPRTX-6T | 3.84 | GPRTAX-6T | 5.84 | GPRTTX-6T | 5.84 | GPRTPX-6T | 6.03 | GPRX-206T | 3.93 | GPRTPX-206T | 6.22 | GPRTPX-291T | | | | |
| 3PDT | 6VAC | .334 | 4.2 | GPRTX-9T | 4.24 | GPRTAX-9T | 6.24 | GPRTTX-9T | 6.24 | GPRTPX-9T | 7.48 | GPRX-209T | 4.38 | GPRTPX-209T | 7.77 | | | | | |
| SPDT | 12VAC | .167 | 17 | GPRTX-12T | 3.19 | GPRTAX-12T | 5.19 | GPRTTX-12T | 5.19 | GPRTPX-12T | 5.43 | GPRX-212T | 3.23 | GPRTPX-212T | 5.52 | | | | | |
| DPDT | 12VAC | .167 | 17 | GPRTX-15T | 3.84 | GPRTAX-15T | 5.84 | GPRTTX-15T | 5.84 | GPRTPX-15T | 6.03 | GPRX-215T | 3.93 | GPRTPX-215T | 6.22 | GPRTPX-292T | | | | |
| 3PDT | 12VAC | .167 | 17 | GPRTX-18T | 4.24 | GPRTAX-18T | 6.24 | GPRTTX-18T | 6.24 | GPRTPX-18T | 7.48 | GPRX-218T | 4.38 | GPRTPX-218T | 7.77 | | | | | |
| SPDT | 24VAC | .084 | 65 | GPRTX-21T | 3.19 | GPRTAX-21T | 5.19 | GPRTTX-21T | 5.19 | GPRTPX-21T | 5.43 | GPRX-221T | 3.23 | GPRTPX-221T | 5.52 | | | | | |
| DPDT | 24VAC | .084 | 65 | GPRTX-24T | 3.84 | GPRTAX-24T | 5.84 | GPRTTX-24T | 5.84 | GPRTPX-24T | 6.03 | GPRX-224T | 3.93 | GPRTPX-224T | 6.22 | GPRTPX-293T | | | | |
| 3PDT | 24VAC | .084 | 65 | GPRTX-27T | 4.24 | GPRTAX-27T | 6.24 | GPRTTX-27T | 6.24 | GPRTPX-27T | 7.48 | GPRX-227T | 4.38 | GPRTPX-227T | 7.77 | | | | | |
| SPDT | 115VAC | .0174 | 1600 | GPRTX-30T | 3.19 | GPRTAX-30T | 5.19 | GPRTTX-30T | 5.19 | GPRTPX-30T | 5.43 | GPRX-230T | 3.23 | GPRTPX-230T | 5.52 | | | | | |
| DPDT | 115VAC | .0174 | 1600 | GPRTX-33T | 3.84 | GPRTAX-33T | 5.84 | GPRTTX-33T | 5.84 | GPRTPX-33T | 6.03 | GPRX-233T | 3.93 | GPRTPX-233T | 6.22 | GPRTPX-294T | | | | |
| 3PDT | 115VAC | .0174 | 1600 | GPRTX-36T | 4.24 | GPRTAX-36T | 6.24 | GPRTTX-36T | 6.24 | GPRTPX-36T | 7.48 | GPRX-236T | 4.38 | GPRTPX-236T | 7.77 | | | | | |
| SPDT | 230VAC | .0087 | 7000 | GPRTX-39T | 3.58 | GPRTAX-39T | 5.58 | GPRTTX-39T | 5.58 | GPRTPX-39T | 5.82 | GPRX-239T | 3.62 | GPRTPX-239T | 5.91 | | | | | |
| DPDT | 230VAC | .0087 | 7000 | GPRTX-42T | 4.23 | GPRTAX-42T | 6.23 | GPRTTX-42T | 6.23 | GPRTPX-42T | 6.42 | GPRX-242T | 4.32 | GPRTPX-242T | 6.61 | GPRTPX-295T | | | | |
| 3PDT | 230VAC | .0087 | 7000 | GPRTX-45T | 4.63 | GPRTAX-45T | 7.13 | GPRTTX-45T | 7.13 | GPRTPX-45T | 7.87 | GPRX-245T | 4.77 | GPRTPX-245T | 8.16 | | | | | |
| SPDT | 6VDC | .23 | 26 | GPRTX-48T | 3.04 | GPRTAX-48T | 5.04 | GPRTTX-48T | 5.04 | GPRTPX-48T | 5.38 | | | GPRTPX-248T | 5.47 | | | | | |
| DPDT | 6VDC | .23 | 26 | GPRTX-51T | 3.39 | GPRTAX-51T | 5.39 | GPRTTX-51T | 5.39 | GPRTPX-51T | 5.98 | | | GPRTPX-251T | 6.17 | GPRTPX-296T | | | | |
| 3PDT | 6VDC | .23 | 26 | GPRTX-54T | 3.84 | GPRTAX-54T | 6.34 | GPRTTX-54T | 6.34 | GPRTPX-54T | 7.43 | | | GPRTPX-254T | 7.72 | | | | | |
| SPDT | 12VDC | .114 | 105 | GPRTX-57T | 3.04 | GPRTAX-57T | 5.04 | GPRTTX-57T | 5.04 | GPRTPX-57T | 5.38 | | | GPRTPX-257T | 5.47 | | | | | |
| DPDT | 12VDC | .114 | 105 | GPRTX-60T | 3.39 | GPRTAX-60T | 5.39 | GPRTTX-60T | 5.39 | GPRTPX-60T | 5.98 | | | GPRTPX-260T | 6.17 | GPRTPX-297T | | | | |
| 3PDT | 12VDC | .114 | 105 | GPRTX-63T | 3.84 | GPRTAX-63T | 6.34 | GPRTTX-63T | 6.34 | GPRTPX-63T | 7.43 | | | GPRTPX-263T | 7.72 | | | | | |
| SPDT | 24VDC | .060 | 400 | GPRTX-66T | 3.04 | GPRTAX-66T | 5.04 | GPRTTX-66T | 5.04 | GPRTPX-66T | 5.38 | | | GPRTPX-266T | 5.47 | | | | | |
| DPDT | 24VDC | .060 | 400 | GPRTX-69T | 3.39 | GPRTAX-69T | 5.39 | GPRTTX-69T | 5.39 | GPRTPX-69T | 5.98 | | | GPRTPX-269T | 6.17 | GPRTPX-298T | | | | |
| 3PDT | 24VDC | .060 | 400 | GPRTX-72T | 3.84 | GPRTAX-72T | 6.34 | GPRTTX-72T | 6.34 | GPRTPX-72T | 7.43 | | | GPRTPX-272T | 7.72 | | | | | |
| SPDT | 110VDC | .0110 | 10,000 | GPRTX-75T | 3.63 | GPRTAX-75T | 5.63 | GPRTTX-75T | 5.63 | GPRTPX-75T | 5.97 | | | GPRTPX-275T | 6.06 | | | | | |
| DPDT | 110VDC | .0110 | 10,000 | GPRTX-78T | 3.98 | GPRTAX-78T | 5.98 | GPRTTX-78T | 5.98 | GPRTPX-78T | 6.57 | | | GPRTPX-278T | 6.76 | GPRTPX-299T | | | | |
| 3PDT | 110VDC | .0110 | 10,000 | GPRTX-81T | 4.43 | GPRTAX-81T | 6.93 | GPRTTX-81T | 6.93 | GPRTPX-81T | 8.02 | | | GPRTPX-281T | 8.31 | | | | | |
| Approx. weight | | | | 2.5 oz. | 3.0 oz. | | | | 3.0 oz. | | | | 3.5 oz. | | | | 3.5 oz. | | | |

STOCK "GPR" PLATE CIRCUIT RELAYS—5 AMP CONTACTS

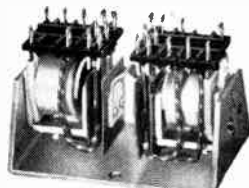
| Con- tacts | COIL DATA | | | 5 AMP CONTACTS | | | | | | | | | | | | |
|----------------|-----------|------------------------|------------------------|--|---------------------------------------|------------------------------------|------------|--------|------------|--------|--------|--------|---------|--------|--------|--|
| | Ohms | Pull-in max. ma. | Unen- closed GPR | Enclosed Above- Chassis GPRTA | Enclosed Thru- Chassis GPRTT | Enclosed Plug- Base GPRTP | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | |
| SPDT | 2500 | 7.2 | GPRTX-82T | 3.62 | GPRTAX-82T | 5.52 | GPRTTX-82T | 5.52 | GPRTPX-82T | 5.86 | | | | | | |
| DPDT | 2500 | 10 | GPRTX-83T | 4.15 | GPRTAX-83T | 5.67 | GPRTTX-83T | 5.67 | GPRTPX-83T | 6.26 | | | | | | |
| 3PDT | 2500 | 12.3 | GPRTX-84T | 4.75 | GPRTAX-84T | 6.62 | GPRTTX-84T | 6.62 | GPRTPX-84T | 7.71 | | | | | | |
| SPDT | 5000 | 5 | GPRTX-85T | 3.72 | GPRTAX-85T | 5.62 | GPRTTX-85T | 5.62 | GPRTPX-85T | 5.96 | | | | | | |
| DPDT | 5000 | 7.2 | GPRTX-86T | 4.25 | GPRTAX-86T | 5.77 | GPRTTX-86T | 5.77 | GPRTPX-86T | 6.36 | | | | | | |
| 3PDT | 5000 | 8.7 | GPRTX-87T | 4.85 | GPRTAX-87T | 6.72 | GPRTTX-87T | 6.72 | GPRTPX-87T | 7.81 | | | | | | |
| SPDT | 10,000 | 3.6 | GPRTX-88T | 4.12 | GPRTAX-88T | 6.02 | GPRTTX-88T | 6.02 | GPRTPX-88T | 6.36 | | | | | | |
| DPDT | 10,000 | 5 | GPRTX-89T | 4.65 | GPRTAX-89T | 6.17 | GPRTTX-89T | 6.17 | GPRTPX-89T | 6.76 | | | | | | |
| 3PDT | 10,000 | 6.1 | GPRTX-90T | 5.25 | GPRTAX-90T | 7.12 | GPRTTX-90T | 7.12 | GPRTPX-90T | 8.21 | | | | | | |
| Approx. weight | | | | 2.5 oz. | 3.0 oz. | | | | 3.0 oz. | | | | 3.5 oz. | | | |

STOCK "GPR" LATCHING RELAYS—5 AMP CONTACTS

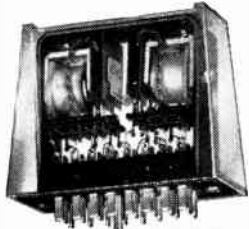
| Total Con- tacts | COIL DATA—(Each Coil) | | | 5 AMP CONTACTS | | | | | | | | | | | | |
|------------------------|-----------------------|-------|--------|--------------------------|----------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| | Volts | Amps. | Ohms | Unen- closed GPRLE | Enclosed Plug Base GPRLETP | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | Net \$ | |
| 4PDT | 6VAC | .650 | 2.5 | GPRTX-1T | 10.47 | GPRTPX-1T | 16.47 | | | | | | | | | |
| 6PDT | 6VAC | .650 | 2.5 | GPRTX-2T | 12.57 | GPRTPX-2T | 19.57 | | | | | | | | | |
| 4PDT | 12VAC | .309 | 10.0 | GPRTX-3T | 10.47 | GPRTPX-3T | 16.47 | | | | | | | | | |
| 6PDT | 12VAC | .309 | 10.0 | GPRTX-4T | 12.57 | GPRTPX-4T | 19.57 | | | | | | | | | |
| 4PDT | 24VAC | .155 | 40.0 | GPRTX-5T | 10.47 | GPRTPX-5T | 16.47 | | | | | | | | | |
| 6PDT | 24VAC | .155 | 40.0 | GPRTX-6T | 12.57 | GPRTPX-6T | 19.57 | | | | | | | | | |
| 4PDT | 115VAC | .0325 | 1000 | GPRTX-7T | 10.47 | GPRTPX-7T | 16.47 | | | | | | | | | |
| 6PDT | 115VAC | .0325 | 1000 | GPRTX-8T | 12.57 | GPRTPX-8T | 19.57 | | | | | | | | | |
| 4PDT | 230VAC | .0147 | 4000 | GPRTX-9T | 11.25 | GPRTPX-9T | 17.25 | | | | | | | | | |
| 6PDT | 230VAC | .0147 | 4000 | GPRTX-10T | 13.35 | GPRTPX-10T | 20.35 | | | | | | | | | |
| 4PDT | 6VDC | .23 | 26 | GPRTX-11T | 9.42 | GPRTPX-11T | 15.42 | | | | | | | | | |
| 6PDT | 6VDC | .23 | 26 | GPRTX-12T | 11.42 | GPRTPX-12T | 18.42 | | | | | | | | | |
| 4PDT | 12VDC | .114 | 105 | GPRTX-13T | 9.42 | GPRTPX-13T | 15.42 | | | | | | | | | |
| 6PDT | 12VDC | .114 | 105 | GPRTX-14T | 11.42 | GPRTPX-14T | 18.42 | | | | | | | | | |
| 4PDT | 24VDC | .060 | 400 | GPRTX-15T | 9.42 | GPRTPX-15T | 15.42 | | | | | | | | | |
| 6PDT | 24VDC | .060 | 400 | GPRTX-16T | 11.42 | GPRTPX-16T | 18.42 | | | | | | | | | |
| 4PDT | 110VDC | .0110 | 10,000 | GPRTX-17T | 10.60 | GPRTPX-17T | 16.60 | | | | | | | | | |
| 6PDT | 110VDC | .0110 | 10,000 | GPRTX-18T | 12.60 | GPRTPX-18T | 19.60 | | | | | | | | | |
| Approx. weight | | | | 7.0 oz. | 11.3 oz. | | | | | | | | | | | |

Plate Relays—Feature same physical construction as standard general purpose relays but are adjusted for greater sensitivity and can be used as electronic circuit controls, i.e., in the plate circuits of vacuum tubes.

Latching Relay—Consists of two GPR relays with armatures linked so that the n.o. contacts of one are mechanically latched in closed position when, and after, this relay is energized. When 2nd relay is energized, 1st relay restores and latches 2nd. Permits switching of twice the number of circuits and holding without coil current. Coil rating is higher than non-latching types, 3.70 volt-amperes. Unenclosed type "GPRLE". Enclosed type "GPRLETP" in clear plastic case with Jones plug P-324-SR. Plug fits Jones S-324-AR socket.



LATCHING
(GPRLE)
2 1/8" x 1 3/8" x 1 1/8"



OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



ALL-PURPOSE RELAYS (Also see Model GPR Relays)



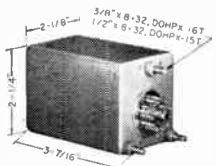
MODEL DO RELAY AC or DC OPERATION

Ideal for mobile equipment applications where severe shock and vibration are encountered. Coil drain: 3-watts DC, 6 watts 60 cycle AC. Contact ratings: 10 amps. at 115 v. AC; 32 volt DC non-inductive load. Insulation tested at 1500 v. AC. Size, (4 pole) 2 1/8 x 1 1/8"; (3 pole) 2 1/4 x 1 1/8".

| Stock No. | Type | Coil Data | | Net 1-24 | Stock No. | Type | Coil Data | | Net 1-24 |
|-----------|---------|-----------|-------|----------|-----------|------|-----------|-------|----------|
| | | V.A.C. | Amps. | | | | V.D.C. | Amps. | |
| DOX-50T | 3PDT | 6 | 2.10 | 8.65 | DOX-145T | 3PDT | 6 | .487 | 7.47 |
| DOX-183T | 4PDT | 6 | 2.10 | 9.85 | DOX-186T | 4PDT | 6 | .487 | 8.65 |
| DOX-49T | 3PDT | 12 | 1.13 | 8.65 | DOX-51T | 3PDT | 12 | .231 | 7.47 |
| DOX-184T | 4PDT | 12 | 1.13 | 9.85 | DOX-102T | 4PDT | 12 | .231 | 8.65 |
| DOX-181T | 3PDT | 24 | .57 | 8.65 | DOX-141T | 3PDT | 24 | .105 | 7.47 |
| DOX-185T | 4PDT | 24 | .57 | 9.85 | DOX-137T | 4PDT | 24 | .105 | 8.65 |
| DOX-226T | 1P1PST* | 115 | .110 | 8.60 | DOX-93T | 3PDT | 110 | .022 | 8.07 |
| DOX-227T | 3P1PST | 115 | .110 | 7.84 | DOX-187T | 4PDT | 110 | .022 | 9.25 |
| DOX-46T | 3PDT | 115 | .110 | 8.65 | DOX-182T | 3PDT | 220 | .014 | 8.75 |
| DOX-228T | 4P1PST | 115 | .110 | 8.80 | DOX-188T | 4PDT | 220 | .014 | 9.93 |
| DOX-53T | 4PDT | 115 | .110 | 9.85 | | | | | |
| DOX-61T | 3PDT | 230 | .060 | 9.00 | | | | | |
| DOX-130T | 4PDT | 230 | .060 | 10.25 | | | | | |

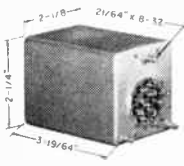
* Normally open
† AC Voltage is 60 cycle
• Double Break Contacts — 20 Amp.

DO RELAYS IN HERMETIC ENCLOSURES



DOHPX-16T, 3PDT, 11 Prongs
DOHPX-15T, 4PDT, 20 Prongs

Stock DO relays with 115 volt coil in hermetically sealed metal enclosures, filled with dry nitrogen. Both 3 and 4-pole DO relays are supplied in these enclosures with plug (DOHPX-) or solder terminal (DOHX-) connectors as illustrated. Weights: 3-pole hermetic relay approx. 14 oz.; 4-pole approx. 15 oz.

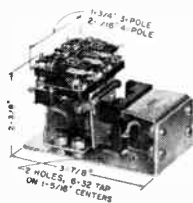


DOHX-22T, 3PDT, 14 Terminals
DOHX-23T, 4PDT, 14 Terminals

10 AMP. CONTACTS

| Stock No. | Type | Coil Data | | Net 1-24 |
|-----------|------|-----------|-------|----------|
| | | Volts | Amps. | |
| DOHPX-16T | 3PDT | 115VAC | .110 | 21.95 |
| DOHPX-15T | 4PDT | 115VAC | .110 | 27.95 |
| DOHX-22T | 3PDT | 115VAC | .110 | 21.31 |
| DOHX-23T | 4PDT | 115VAC | .110 | 22.90 |

MODEL DO LATCHING RELAY (DOLEX-)



DOLEX-3T, 3PDT
DOLEX-5T, 4PDT

Consists of Model DO relay and a "reset magnet" with both armatures mechanically latched so that the normally open contacts of the relay remain closed when the relay energizing voltage is removed. The relay releases to normal position when the reset coil is pulsed. Permits "holding" of circuits without continuous coil current. Coils of stock units (both relays and reset coils) are 115VAC. Available with 3 or 4-pole relays. Weights: 3-pole—16.5 oz.; 4-pole—17 oz.

10 AMP. CONTACTS

| Stock No. | Type | Coil Data† | | Net 1-24 |
|-----------|------|------------|-------|----------|
| | | Volts | Amps. | |
| DOLEX-3T | 3PDT | 115VAC | .110 | 15.47 |
| DOLEX-5T | 4PDT | 115VAC | .110 | 16.37 |

† Coil data applies to relay part of latching assembly. Reset magnet operates on 115VAC, 60 cycle also.



MODEL DOSY RELAY FOR PLATE CIRCUIT OPERATION

The high operating sensitivity makes the DOSY relay adaptable to a wide range of electronic control circuits, such as plate circuit controls, etc.

The insulation is of high grade, molded phenolic material. At 115 v. AC or 32 v. DC, non-inductive load, Model DOSY relay has a contact rating of 15 amperes.

There are two DPDT types, one having 10,000 ohms coil resistance (maximum pull-in current of 8 ma. DC); the other having 5,000 ohms coil resistance. Dimensions are same as for Model DOS next column.

| Stock No. | Type | Coil Data | | Net Each 1-24 |
|-----------|------|-----------|----------------------|---------------|
| | | D.C. Ohms | Max. Pull-in Current | |
| DOSYX-67T | DPDT | 10,000 | 8 MA | 6.09 |
| DOSYX-68T | DPDT | 5,000 | 11 MA | 6.09 |
| DOSYX-69T | SPDT | 10,000 | 5 MA | 5.62 |
| DOSYX-70T | SPDT | 5,000 | 7 MA | 5.62 |



MODEL DOS RELAY AC or DC OPERATION

Quality, general-purpose relays originally designed to meet rigorous aircraft specs. Extremely compact yet rugged. Coil drain: 2.5 watts DC, 3 watts at 60 cycles AC. Contact ratings: DP, 15 amps. at 115 v. AC or 32 v. DC non-inductive load; SP, 25 amps. Molded phenolic insulation; tested at 1500 v. AC. 1 1/8 x 1 1/8 x 1 1/8".

| Stock No. | Type | Coil Data | | Net 1-24 | Stock No. | Type | Coil Data | | Net 1-24 |
|-----------|---------|-----------|-------|----------|-----------|---------|-----------|-------|----------|
| | | V.A.C. | Amps. | | | | V.D.C. | Amps. | |
| DOSX-229T | 1P1PST* | 6 | .650 | 4.84 | DOSX-158T | DPDT | 6 | .550 | 4.96 |
| DOSX-230T | 1P1PST | 6 | .650 | 4.94 | DOSX-66T | DPDT | 12 | .210 | 4.96 |
| DOSX-30T | DPDT | 6 | .650 | 5.46 | DOSX-9T | DPDT | 24 | .105 | 4.96 |
| DOSX-16T | DPDT | 12 | .380 | 5.46 | DOSX-237T | 1P1PST* | 110 | .022 | 4.99 |
| DOSX-231T | 1P1PST* | 24 | .168 | 4.84 | DOSX-238T | 1P1PST | 110 | .022 | 5.09 |
| DOSX-232T | 1P1PST | 24 | .168 | 4.94 | DOSX-59T | DPDT | 110 | .022 | 5.56 |
| DOSX-162T | DPDT | 24 | .168 | 5.46 | DOSX-177T | DPDT | 230 | .013 | 6.14 |
| DOSX-232T | 1P1PST* | 115 | .043 | 4.84 | | | | | |
| DOSX-234T | 1P1PST | 115 | .043 | 4.94 | | | | | |
| DOSX-7T | DPDT | 115 | .043 | 5.46 | | | | | |
| DOSX-235T | 1P1PST* | 230 | .030 | 5.24 | | | | | |
| DOSX-236T | 1P1PST | 230 | .030 | 5.34 | | | | | |
| DOSX-12T | DPDT | 230 | .030 | 5.86 | | | | | |

† Normally open
† AC Voltage is 60 cycle
* Double Break Contacts — 25 Amp.

MODEL DOS PLUG-IN & ENCL. TYPES



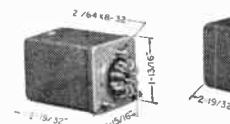
DOSPX-1T

DDSEPX-5T

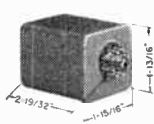
Model DOS, DPDT relay with standard octal plug base, unenclosed or enclosed types. Enclosed dust-proof type has drawn aluminum cover. Overall dimensions, exclusive of plug: DOSPX-1T—1 1/8 x 2 x 1 1/8"; DDSEPX-5T—2 1/8 x 2 1/8 x 2 1/8". Contacts—15 amps. Similar to DOSX-7T shown under "DOS Relays" above.

| Stock No. | Type | Coil | | Net 1-24 |
|---------------------|------|--------|-------|----------|
| | | V.A.C. | Amps. | |
| DOSPX-1T Unenclosed | DPDT | 115 | .043 | 7.26 |
| DDSEPX-5T Enclosed | DPDT | 115 | .043 | 8.30 |

DOS RELAYS IN HERMETIC ENCLOSURES



Hermetic Enclosures with 8 Terminals
DOSHX-39T, 115VDC



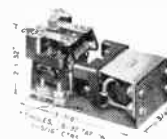
Hermetic Enclosures with Octal Plugs
DOSHPX-46T, 115VDC
DOSHX-40T, 115VAC

Hermetically Sealed non-removable enclosures, filled with dry nitrogen, are also available to provide protection under adverse ambient conditions. DOS relays with 115 volt AC or DC coils are provided in these enclosures with either octal plug (DOSHPX-) or solder-terminal (DOSHX-) connectors as illustrated. Weights: 8 oz. each approx.

15 AMP. CONTACTS

| Stock No. | Type | Coil Data | | Net 1-24 |
|------------|------|-----------|-------|----------|
| | | Volts | Amps. | |
| DOSHX-40T | DPDT | 115VAC | .043 | 13.58 |
| DOSHPX-47T | DPDT | 115VAC | .043 | 13.66 |
| DOSHX-39T | DPDT | 110VDC | .022 | 13.68 |
| DOSHPX-46T | DPDT | 110VDC | .022 | 13.76 |

MODEL DOS LATCHING RELAY (DOSLEX-)



DOSLEX-1T

Consists of Model DOS relay and a "reset magnet" with both armatures mechanically latched so that the normally open contacts of the relay remain closed when the relay energizing voltage is removed. The relay releases to normal position when the reset coil is pulsed. Permits "holding" of circuits without continuous coil current. Coils of stock units (both relay and reset magnet) are 115VAC. Weight: 14.2 oz.

15 AMP. CONTACTS

| Stock No. | Type | Coil Data† | | Net 1-24 |
|-----------|------|------------|-------|----------|
| | | Volts | Amps. | |
| DOSLEX-1T | DPDT | 115VAC | .043 | 11.98 |

† Coil data applies to relay part of latching assembly. Reset magnet operates on 115VAC, 60 cycle also.

MODEL CRU RELAY

AC or DC OPERATION



Precision-engineered, general-application relays. Used in recorders, vending machines, etc. Features small size and extremely rugged construction. Designed for long life performance. Has nickel-silver springs and pure silver contacts. Coil drain: 2.75 watts DC, 5.6 watts 60 cycle AC. Contact ratings: 5 amps. at 115 v. AC; 32 v. DC non-inductive load. Insulation tested at 750 v. AC between all insulated metal parts and between insulated metal parts and ground. Size 2 1/8 x 2 x 1 1/8".

| Stock No. | Type | Coil Data | | Net 1-24 | Stock No. | Type | Coil Data | | Net 1-24 |
|-----------|------|-----------|-------|----------|-----------|------|-----------|-------|----------|
| | | V.A.C. | Amps. | | | | V.D.C. | Amps. | |
| CRUX-192T | SPDT | 6 | 1.20 | 3.15 | CRUX-198T | SPDT | 6 | .40 | 2.94 |
| CRUX-193T | DPDT | 6 | 1.20 | 3.70 | CRUX-199T | DPDT | 6 | .40 | 3.47 |
| CRUX-171T | 4PDT | 6 | 1.20 | 4.81 | CRUX-133T | 4PDT | 6 | .40 | 4.52 |
| CRUX-194T | SPDT | 24 | .38 | 3.15 | CRUX-200T | SPDT | 24 | .10 | 2.94 |
| CRUX-195T | DPDT | 24 | .38 | 3.70 | CRUX-201T | DPDT | 24 | .10 | 3.47 |
| CRUX-196T | 4PDT | 24 | .38 | 4.81 | CRUX-165T | 4PDT | 24 | .10 | 4.52 |
| CRUX-197T | SPDT | 115 | .075 | 3.15 | CRUX-202T | SPDT | 110 | .022 | 3.81 |
| CRUX-175T | DPDT | 115 | .075 | 3.70 | CRUX-145T | DPDT | 110 | .022 | 4.34 |
| CRUX-163T | 4PDT | 115 | .075 | 4.81 | CRUX-137T | 4PDT | 110 | .022 | 5.39 |

† AC Voltage is 60 cycle.

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IN STOCK AT LEADING ELECTRONIC PARTS DISTRIBUTORS

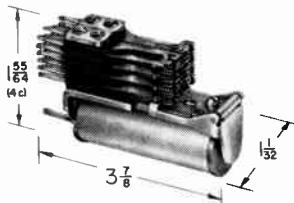
| INDEX BY TYPE | | | | | | ALPHABETICAL INDEX | | | | | | | | | | | | | | | | | |
|---------------|------------------------|-----|-------|-----|--------------|--------------------|---------------|-------------|---------------|-----------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-----------|---|
| TELEPHONE | PLATE CIR. & SENSITIVE | | POWER | | GEN. PURPOSE | | SPEC. PURPOSE | | SPEC. PURPOSE | | Relay | Page | Relay | Page | Relay | Page | Relay | Page | Relay | Page | Relay | Page | |
| BS | 1 | GB | 2 | AB | 4 | GA | 5 | AP | 6 | FC, FL | 8 | AB | 4 | GB | 2 | KL | 5 | MB | 2 | PC | 7 | SL, SLG | 8 |
| LS | 1 | KCP | 3 | ABC | 4 | GP | 5 | BU | 6 | SC, SCG | 8 | ABC | 4 | GF | 4 | KM | 7 | MC | 2 | PM | 4 | SM | 3 |
| LT | 1 | LB | 3 | GF | 4 | GP Kit | 5 | JM (Insert) | 5 | SL, SLG | 8 | AP | 6 | GP | 5 | KRP | 6 | MG | 2 | PR | 4 | SS | 3 |
| MB | 2 | LM | 3 | MR | 4 | KA | 5 | KB | 6 | BS Cover | 1 | BS | 1 | GP Kit | 5 | KRP-N | 6 | MH | 2 | PR | | | |
| MC | 2 | PW | 3 | PM | 4 | KHP | 5 | KM | 7 | MS/MR | | BS | | JM (Insert) | 7 | KT | 7 | ML | 2 | Cover | 4 | 'P' Case | 6 |
| MG | 2 | RS | 3 | PR | 4 | KL | 5 | KT | 7 | Cover | 7 | Cover | 1 | KA | 5 | LB | 3 | MR | 4 | PW | 3 | Hold Down | |
| MH | 2 | SM | 3 | | | KRP | 6 | PC | 7 | 'P' Case | 6 | BU | 6 | KB | 6 | LM | 3 | MS | 7 | RS | 3 | Spring | 6 |
| ML | 2 | SS | 3 | | | KRP-N | 6 | MS | 7 | Hid. Dwn. | 6 | GA | 5 | KCP | 3 | LS | 1 | MS/MR | | SA | 7 | | |
| | | | | | | | | SA | 7 | PR Cover | 4 | | | KHP | 5 | LT | 1 | Cover | 7 | | | | |

KEY TO SUFFIXES

| SUFFIX | STANDS FOR | EXAMPLE | SUFFIX | STANDS FOR | EXAMPLE |
|--------|------------------------------|---------|--------|----------------------------------|--------------|
| A | — Alternating Current | BS17A | N | — Neon Light | KRP11AN |
| D | — Direct Current | BS17D | P | — Enclosed in Plastic Dust Cover | MG11DP |
| DD | — DC in a sealed "D" can | MH23DD | R | — With Built-in Rectifier | MH17AMR |
| G | — Silver Cad.-Oxide Contacts | KRP5AG | S | — Sealed in can | PW5DS, SM5DS |
| L | — Plate Circuit | SM5L | T | — Sealed in "T" can | MG11DT |
| M | — Sealed in "M" can | MH17DM | Y | — U/L Listed | AB11AY |

See ordering information on P&B page 7.

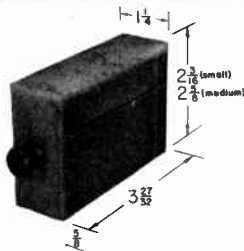
BS SERIES Long coil telephone type. Suited for computer and automatic test equipment applications requiring large numbers of poles. Tinned, pierced solder type terminals for rear panel wiring. Mounting: Two No. 8-32 NC 2B tapped holes on 1/16" centers. Contacts arms: Bifurcated with 1/16" dia. twin palladium contacts. Weight: Approximately 9 ozs.



TELEPHONE TYPE RELAYS

| TYPE | COILS | | | CONTACTS | | NET |
|-------|--------------------|--------------------|---------------|-------------|--------------|--------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| BS17A | 115V | 71 | 17.9VA | 4PDT | 4 | 5 9.00 |
| BS17D | 24V | 1,000 | 576mW | 4PDT | 4 | 7.40 |
| BS17D | 48V | 1,600 | 1.4W | 4PDT | 4 | 7.75 |
| BS17D | 110V | 6,500 | 1.8W | 4PDT | 4 | 8.00 |
| BS17L | 5.5MA | 10,000 | 300mW | 4PDT | 4 | 8.00 |
| BS23A | 115V | 71 | 17.9VA | 6PDT | 4 | 10.50 |
| BS23D | 24V | 1,000 | 576mW | 6PDT | 4 | 8.95 |
| BS23D | 48V | 1,600 | 1.4W | 6PDT | 4 | 9.30 |
| BS23D | 110V | 6,500 | 1.8W | 6PDT | 4 | 9.50 |
| BS23L | 7.6MA | 10,000 | 600mW | 6PDT | 4 | 9.50 |

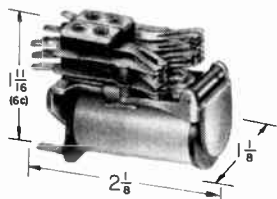
BS DUST COVER Built of sheet steel for protection against dust, dirt, mechanical damage. Also provides magnetic and electrostatic shielding. Cover can be removed for relay inspection. For BS series only. Two sizes: Small, will accept up to 6 form C (6PDT, BS23); medium, will accept up to 10 form C relay. Both sizes come complete with cover, knob attached, relay bracket, two screws and lockwashers. Weight: Small 6.5 ozs., medium 7 ozs.



SPECIFY COIL VOLTAGE OR RESISTANCE WHEN ORDERING

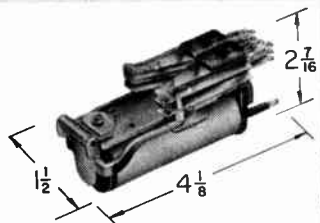
35D188, Small NET \$1.80
35D189, Medium NET \$1.80

LS SERIES Short springs and light weight armature provide fast action without sacrificing reliability and long life. Stainless steel hinge bearing designed to give 100 million operations. Tinned, pierced solder type terminals. Mounting: Two No. 6-32 tapped holes on 1/16" centers. Bifurcated contact arms with 1/16" dia. twin palladium contacts. Weight: Approximately 4 ozs.



| | | | | | | |
|-------|------|-------|------|------|---|------|
| LS17D | 24V | 300 | 1.8W | 4PDT | 4 | 5.60 |
| LS17D | 48V | 1,300 | 1.8W | 4PDT | 4 | 5.75 |
| LS17D | 110V | 8,000 | 1.8W | 4PDT | 4 | 6.00 |
| LS23D | 24V | 300 | 1.8W | 6PDT | 4 | 6.80 |
| LS23D | 48V | 1,300 | 1.8W | 6PDT | 4 | 6.95 |
| LS23D | 110V | 8,000 | 1.8W | 6PDT | 4 | 7.20 |

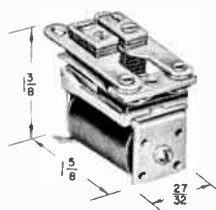
LT SERIES A fast acting, inherently reliable telephone type relay with a long coil. Armature has a full width hinge bearing capable of 50 million mechanical operations. Has single contact arms with 3/64" dia. palladium contacts rated at 3 amps. DC coils only. Mounting: Two 8-32 tapped holes on 1/16" centers. Weight: 12 ozs., max.



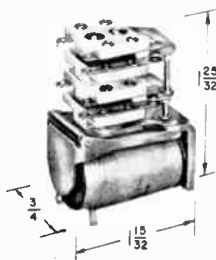
| | | | | | | |
|-------|------|--------|------|------|---|------|
| LT17D | 24V | 300 | 1.92 | 4PDT | 3 | 5.50 |
| LT17D | 48V | 1,300 | 1.77 | 4PDT | 3 | 5.85 |
| LT17D | 110V | 11,300 | 1.07 | 4PDT | 3 | 6.10 |
| LT23D | 24V | 300 | 1.92 | 6PDT | 3 | 6.40 |
| LT23D | 48V | 1,300 | 1.77 | 6PDT | 3 | 6.75 |
| LT23D | 110V | 6,500 | 1.86 | 6PDT | 3 | 7.00 |

Potter & Brumfield Relays

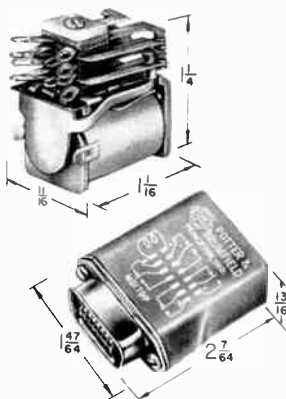
MB SERIES Miniature DC contactor. Designed for very high current applications. Extra rugged construction insures long life. Handles 150 ampere surges for 0.3 sec. Contact arms: Stationary, heavy brass, 1/4" dia. silver contacts pierced solder terminals. Movable, 1/4" x 1 1/16" silver bar contact. Mounting: Four No. 3-48 tapped holes on 3/8" x 3/8" centers. Weight: 2 ozs.



MC SERIES Built with ceramic contact spaces for RF switching to minimize losses at high frequencies. Intercontact capacitance 1.5 mmfd. max. Tinned, pierced solder type terminals. Mounting: Four No. 3-48 tapped holes on 3/8" x 3/8" centers. Contacts: 3/32" dia. palladium. Weight: 2 ozs.

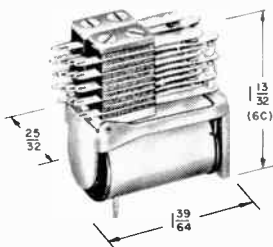


MG SERIES Sub-miniature telephone type relay for aircraft, computer and other applications requiring good shock and vibration characteristics. Furnished open, sealed or in nylon dust cover. Mounting: Open model has four No. 3-48 tapped holes on 3/8" x 3/8" centers. Sealed model has three No. 4-40 threaded studs on 1" x 1/2" centers. Dust cover model has plug-in header that fits Amphenol receptacle No. 57-20140 or similar. Contacts: 3/32" dia. silver. Weight: Open 1.2 ozs.; Dust cover 2.0 ozs.; Sealed 2.75 ozs.

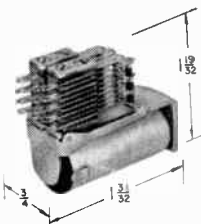


MH SERIES MINIATURE TYPE

Ideal for miniature program applications where space and weight are factors. Sealed AC MH17AMR operates with a built-in rectifier. Mounting: Open model, MH11L, one No. 6-32 threaded stud 1 1/2" long plus locating boss. All other open models have four No. 3-48 holes on 3/8" x 3/8" centers. Sealed models, M enclosures, three 6-32 NC 2 threaded studs on 1 1/4" x 1/2" centers. D enclosures, three 6-32 threaded studs on 1 1/4" x 1 1/16" centers. All sealed models have hook end solder terminals. All models have 1/4" dia. gold-flashed silver contacts. Weight: Open models 2 1/2 oz. max. Sealed models 5 ozs. max.



ML SERIES A small telephone type relay having excellent sensitivity with outstanding switching capabilities. Ideal for transistorized computer networks, telephone systems and battery powered communications equipment. Single contact arms have 1/8" dia. gold-flashed silver contacts rated at 3 amps for 100,000 operations. Pierced solder terminals. Mounting: Four 3-48 holes on 3/8" centers. Weight: 2.5 ozs.

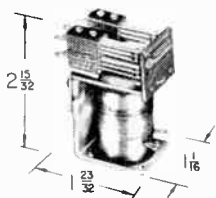


TELEPHONE TYPE RELAYS

| TYPE | COILS | | | CONTACTS | | NET |
|---------|--------------------|--------------------|---------------|-------------|--------------|---------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| MB3D | 6V | 13.3 | 2.7W | SPST-NO-DB | 60 | \$ 5.40 |
| MB3D | 12V | 62.3 | 2.7W | SPST-NO-DB | 60 | 5.50 |
| MB3D | 24V | 245 | 2.7W | SPST-NO-DB | 60 | 5.50 |
| MB3D | 110V | 5,000 | 2.7W | SPST-NO-DB | 60 | 5.90 |
| MC5A | 6V | 2.5 | 4.6VA | SPDT | 1 | 5.00 |
| MC5A | 115V | 800 | 4.6VA | SPDT | 1 | 5.00 |
| MC5D | 6V | 23 | 1.6W | SPDT | 1 | 4.40 |
| MC5D | 12V | 96 | 1.6W | SPDT | 1 | 4.40 |
| MC5D | 24V | 365 | 1.6W | SPDT | 1 | 4.40 |
| MC11A | 6V | 2.5 | 4.6VA | DPDT | 1 | 6.90 |
| MC11A | 115V | 800 | 4.6VA | DPDT | 1 | 6.90 |
| MC11D | 6V | 23 | 1.6W | DPDT | 1 | 6.35 |
| MC11D | 12V | 96 | 1.6W | DPDT | 1 | 6.35 |
| MC11D | 24V | 365 | 1.6W | DPDT | 1 | 6.35 |
| MC11D | 110V | 6,200 | 1.6W | DPDT | 1 | 6.85 |
| MG11D | 6V | 23 | 1.6W | DPDT | 2 | 5.20 |
| MG11D | 12V | 90 | 1.6W | DPDT | 2 | 5.20 |
| MG11D | 24V | 365 | 1.6W | DPDT | 2 | 5.20 |
| MG11D | 110V | 7,560 | 1.6W | DPDT | 2 | 5.65 |
| MG11DP | 24V | 365 | 1.6W | DPDT | 2 | 9.45 |
| MG11DP | 110V | 7,560 | 1.6W | DPDT | 2 | 10.05 |
| MG11DT | 24V | 365 | 1.6W | DPDT | 2 | 10.50 |
| MG17D | 6V | 23 | 1.6W | 4PDT | 2 | 6.95 |
| MG17D | 12V | 90 | 1.6W | 4PDT | 2 | 6.95 |
| MG17D | 24V | 365 | 1.6W | 4PDT | 2 | 6.95 |
| MG17D | 110V | 7,560 | 1.6W | 4PDT | 2 | 7.40 |
| MG17DP | 6V | 23 | 1.6W | 4PDT | 2 | 11.55 |
| MG17DP | 12V | 90 | 1.6W | 4PDT | 2 | 11.55 |
| MG17DP | 24V | 365 | 1.6W | 4PDT | 2 | 11.55 |
| MG17DP | 110V | 7,560 | 1.6W | 4PDT | 2 | 12.15 |
| MG17DT | 24V | 365 | 1.6W | 4PDT | 2 | 12.60 |
| MG17DT | 110V | 7,560 | 1.6W | 4PDT | 2 | 13.20 |
| MH11L | 4.5MA | 10,000 | 200MW | DPDT | 3 | 5.45 |
| MH11LM | 4.5MA | 10,000 | 200MW | DPDT | 3 | 9.20 |
| MH17AMR | 24V | 365 | 2VA | 4PDT | 5 | 23.60 |
| MH17AMR | 115V | 6,200 | 2VA | 4PDT | 5 | 17.95 |
| MH17D | 6V | 23 | 1.6W | 4PDT | 5 | 5.45 |
| MH17D | 12V | 96 | 1.6W | 4PDT | 5 | 5.45 |
| MH17D | 24V | 365 | 1.6W | 4PDT | 5 | 5.45 |
| MH17DM | 6V | 23 | 1.6W | 4PDT | 5 | 11.00 |
| MH17DM | 12V | 96 | 1.6W | 4PDT | 5 | 11.00 |
| MH17DM | 24V | 365 | 1.6W | 4PDT | 5 | 11.00 |
| MH23D | 6V | 13.3 | 2.5W | 6PDT | 5 | 6.85 |
| MH23D | 12V | 62.3 | 2.5W | 6PDT | 5 | 6.85 |
| MH23D | 24V | 245 | 2.5W | 6PDT | 5 | 6.85 |
| MH23D | 110V | 5,000 | 2.5W | 6PDT | 5 | 7.30 |
| MH23DD | 6V | 13.3 | 2.5W | 6PDT | 5 | 14.60 |
| MH23DD | 12V | 62.3 | 2.5W | 6PDT | 5 | 14.60 |
| MH23DD | 24V | 245 | 2.5W | 6PDT | 5 | 14.60 |
| MH23DD | 110V | 5,000 | 2.5W | 6PDT | 5 | 15.15 |
| ML11D | 4.0MA | 2,500 | 40MW | DPDT | 3 | 6.05 |
| ML11D | 2.83MA | 5,000 | 40MW | DPDT | 3 | 6.20 |
| ML11D | 2.0MA | 10,000 | 40MW | DPDT | 3 | 6.50 |
| ML17D | 5.65MA | 2,500 | 80MW | 4PDT | 3 | 7.20 |
| ML17D | 4.0MA | 5,000 | 80MW | 4PDT | 3 | 7.35 |
| ML17D | 2.83MA | 10,000 | 80MW | 4PDT | 3 | 7.65 |
| ML23D | 6.93MA | 2,500 | 120MW | 6PDT | 3 | 8.15 |
| ML23D | 4.9MA | 5,000 | 120MW | 6PDT | 3 | 8.30 |
| ML23D | 3.46MA | 10,000 | 120MW | 6PDT | 3 | 8.60 |
| GB5D | 6.8MA | 2,500 | 115MW | SPDT | 5 | 3.45 |
| GB5D | 4.9MA | 5,000 | 115MW | SPDT | 5 | 3.60 |
| GB5D | 3.0MA | 10,000 | 115MW | SPDT | 5 | 4.10 |
| GB11D | 7MA | 2,500 | 125MW | DPDT | 5 | 4.85 |
| GB11D | 5MA | 5,000 | 125MW | DPDT | 5 | 4.95 |
| GB11D | 3.53MA | 10,000 | 125MW | DPDT | 5 | 5.50 |
| GB17D | 10.5MA | 2,500 | 275MW | 4PDT | 5 | 5.80 |
| GB17D | 7.4MA | 5,000 | 275MW | 4PDT | 5 | 5.95 |
| GB17D | 5.25MA | 10,000 | 275MW | 4PDT | 5 | 6.40 |

PLATE CIRCUIT and SENSITIVE RELAYS

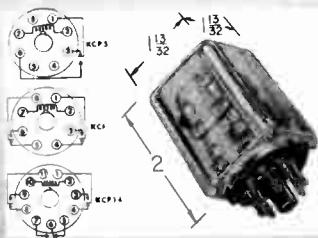
GB SERIES (See GA series for similar voltage actuated relays.) Sensitivity 115 milliwatts for single pole and 275 milliwatts for 4 pole. Medium cost, high quality relay. Pull-in is not adjustable. Mounting: No. 8-32 tapped core and locating boss. Contacts: 3/16" dia. silver. Weight: Approximately 5 ozs.



Potter & Brumfield Relays

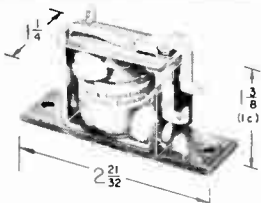
PLATE CIRCUIT and SENSITIVE RELAYS

KCP SERIES Low cost plate circuit relay enclosed in clear cellulose acetate cover. Sensitivity 125 mw single pole; 250 mw double pole; 375 mw three pole. Mounting: Standard octal plug-in type. Eight pin for KCP5 and KCP11. Eleven pin for KCP14. Contacts: 1/8" dia. gold-flashed silver. Weight: Approximately 3 ozs. See KCP-KRP hold down spring when vibration, inverted or horizontal mounting are factors.



| TYPE | COILS | | | CONTACTS | | NET |
|--------|--------------------|--------------------|---------------|-------------|--------------|---------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| KCP5S | 7.2MA | 2,500 | 125MW | SPDT | 2 | \$ 5.90 |
| KCP5S | 5MA | 5,000 | 125MW | SPDT | 2 | 6.00 |
| KCP5S | 3.6MA | 10,000 | 125MW | SPDT | 2 | 6.40 |
| KCP11S | 10MA | 2,500 | 250MW | DPDT | 2 | 6.30 |
| KCP11S | 7.2MA | 5,000 | 250MW | DPDT | 2 | 6.40 |
| KCP11S | 5MA | 10,000 | 250MW | DPDT | 2 | 6.80 |
| KCP14S | 12.3MA | 2,500 | 375MW | 3PDT | 2 | 7.75 |
| KCP14S | 8.7MA | 5,000 | 375MW | 3PDT | 2 | 7.85 |
| KCP14S | 6.1MA | 10,000 | 375MW | 3PDT | 2 | 8.25 |

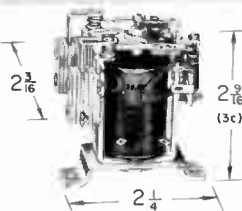
LB SERIES Designed for top performance, long life at an unusually low cost. Each coil is wound with a given coil resistance and factory adjusted to operate on minimum current requirements. Mounting: Two 3/16" dia. holes on 2 7/32" centers. Contacts: 1/8" dia. silver. Weight: Approximately 2 ozs.



| | | | | | | |
|-----|-------|--------|-------|------|---|------|
| LB5 | 9MA | 2,500 | 200MW | SPDT | 5 | 2.45 |
| LB5 | 6.3MA | 5,000 | 200MW | SPDT | 5 | 2.65 |
| LB5 | 4.5MA | 10,000 | 200MW | SPDT | 5 | 2.85 |

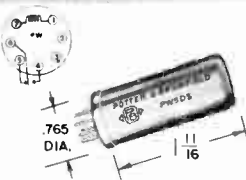
SPECIFY COIL VOLTAGE OR RESISTANCE WHEN ORDERING

LM SERIES (See KL for similar voltage actuated relays.) Sensitivity 100 milliwatts for single pole and 200 milliwatts for double pole. Medium cost, high quality relay with 3/32" dia. silver contacts. Pull-in adjustable by tail spring adjusting screw. Mounting: Two No. 6-32 tapped holes on 1 13/16" centers. Weight: Approximately 5 ozs. DC Coils only.



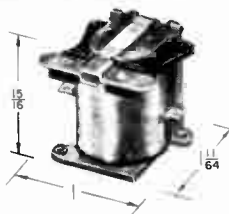
| | | | | | | |
|------|-------|--------|-------|------|---|------|
| LMS | 6.3MA | 2,500 | 100MW | SPDT | 5 | 3.90 |
| LMS | 4.5MA | 5,000 | 100MW | SPDT | 5 | 4.10 |
| LMS | 3.2MA | 10,000 | 100MW | SPDT | 5 | 4.40 |
| LM11 | 9MA | 2,500 | 200MW | DPDT | 5 | 5.55 |
| LM11 | 6.3MA | 5,000 | 200MW | DPDT | 5 | 5.75 |
| LM11 | 4.5MA | 10,000 | 200MW | DPDT | 5 | 6.30 |

PW SERIES (In both voltage and current actuated models.) Sensitivity 40 mw for current actuated models. 180 mw for voltage actuated models. Precision, light weight, hermetically sealed relay for aircraft and missile applications. Will withstand 10G vibration to 500 cps. Mounting: Standard 7-pin miniature tube base. Weight: Approx. 1 oz.



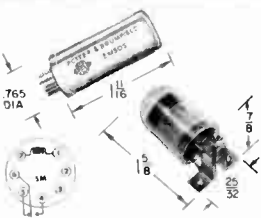
| | | | | | | |
|--------|-------|--------|-------|------|---|-------|
| PW5DS | 6V | 202 | 180MW | SPDT | 2 | 10.25 |
| PW5DS† | 12V | 816 | 180MW | SPDT | 2 | 10.25 |
| PW5DS† | 24V | 3,240 | 180MW | SPDT | 2 | 10.25 |
| PW5LS† | 2.8MA | 5,000 | 40MW | SPDT | 2 | 10.60 |
| PW5LS† | 2.0MA | 10,000 | 40MW | SPDT | 2 | 11.00 |

RS SERIES (In both voltage and current actuated models.) 60 mw. sensitivity. Low-cost, small, light weight, sensitive relay for radio-sonde, light dimmer and model applications. Mounting: Two No. 4-40 tapped holes on diagonal 3/8" x 5/8" centers. Contacts: Bar palladium. Weight: 1 1/2 ozs.



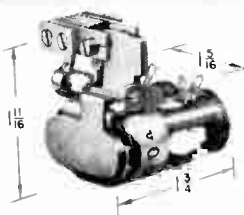
| | | | | | | |
|------|-------|--------|-------|------|---|------|
| RSSD | 6V | 335 | 110MW | SPDT | 2 | 2.60 |
| RSSD | 12V | 1,350 | 110MW | SPDT | 2 | 2.75 |
| RSSD | 5MA | 2,500 | 60MW | SPDT | 2 | 2.85 |
| RSSD | 3.5MA | 5,000 | 60MW | SPDT | 2 | 3.15 |
| RSSD | 2.5MA | 10,000 | 60MW | SPDT | 2 | 3.60 |

SM SERIES (In both voltage and current actuated models.) Sensitivity 75 mw for current actuated models. Medium cost, light weight, dust covered (right) or hermetically sealed (left) relay for light contact loads found in computers, model airplanes and similar applications. Extremely long mechanical life because of reed armature. Mounting: Sealed, standard 7-pin miniature tube socket; dust cover, two 3/32" dia. holes on 1 7/32" centers. Contacts: Stationary silver; movable rhodium. Weight: 1 oz. max.



| | | | | | | |
|--------|-------|--------|-------|------|-----|------|
| SM5DS | 6V | 80 | 500MW | SPDT | .25 | 5.10 |
| SM5DS | 12V | 360 | 500MW | SPDT | .25 | 5.10 |
| SM5DS | 24V | 900 | 500MW | SPDT | .25 | 5.10 |
| SM5DS† | 6V | 80 | 500MW | SPDT | .25 | 6.25 |
| SM5DS† | 12V | 360 | 500MW | SPDT | .25 | 6.25 |
| SM5DS† | 24V | 900 | 500MW | SPDT | .25 | 6.25 |
| SM5LS | 3.9MA | 5,000 | 75MW | SPDT | .25 | 6.25 |
| SM5LS† | 2.7MA | 10,000 | 75MW | SPDT | .25 | 5.95 |
| SM5LS† | 3.9MA | 5,000 | 75MW | SPDT | .25 | 6.55 |
| SM5LS† | 2.7MA | 10,000 | 75MW | SPDT | .25 | 7.00 |

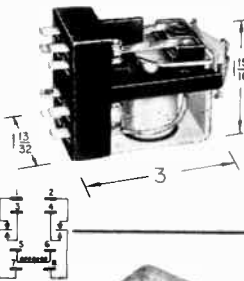
SS SERIES Ultra sensitive precision relay. 10 mw sensitivity. Dual series-connected coils with balanced armature on needle-point bearings for all low energy circuits such as instruments and bridge balancing. May also be used as a differential relay by connecting the two coils in separate circuits. Mounting: Two No. 6-32 tapped holes on 2 3/32" centers. Contacts: 1/8" dia. silver. Weight: Approx. 3 1/2 ozs.



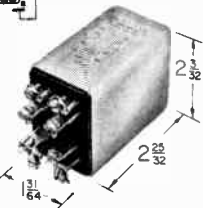
| | | | | | | |
|------|-----|--------|------|------|---|-------|
| SS5D | 1MA | 10,000 | 10MW | SPDT | 2 | 12.60 |
|------|-----|--------|------|------|---|-------|

Potter & Brumfield Relays

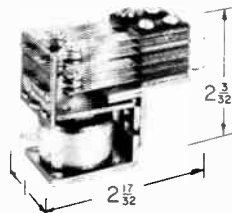
AB SERIES For appliance and general purpose applications where rugged construction, long life and quiet operation are required. All equipped with terminals to fit snap-on connectors and may also be applied to printed circuits using dip soldering. Snap-on screw adaptors packed with each relay. All AC models carry U/L and CSA® labels. Mounting: Two No. 8-32 tapped holes, on 1 1/4" centers. Weight: Approx. 5 ozs. Silver contacts.



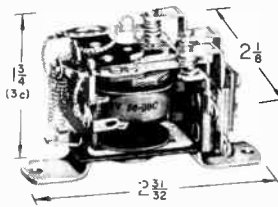
ABC SERIES Medium duty power relay with dust cover. For small motors, industrial control and similar applications. All equipped with terminals to fit snap-on connectors and may also be applied to printed circuits using dip soldering. Snap-on screw adaptors packed with each relay. All AC models carry U/L and CSA® labels. Mounting: One No. 8-32 threaded stud 3/8" long and locating tab on 3/16" centers. Contacts: 1/4" dia. silver. Weight: Approx. 7 ozs.



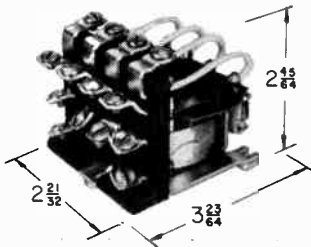
GF SERIES Medium duty power relay for industrial control applications. Long contact arms have 1/4" dia. silver contacts rated at 15 amps at 115V AC or 28V DC resistive. Contacts have excellent wipe or self-cleaning action. Tinned, pierced solder terminals. Mounting: 8-32 tapped core with locating boss. Weight: 4.75 ozs. (See GA series for similar voltage actuated relays.)



MR SERIES A medium duty power relay that can handle small motors, transmitters, and general purpose applications. Mounting: Two 3/32" dia. holes on 2 1/4" centers for MR3 and 11, 2 5/8" centers for MR2, 5 and 14. Contacts: 1/4" dia. silver. Weight: 4 ozs. Enclosure: See MS/MR dust cover.



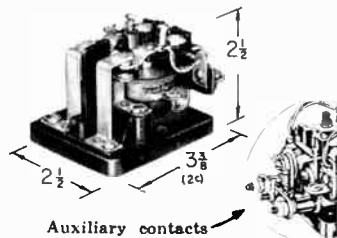
PM SERIES A compact heavy duty 4PDT power relay for polyphase and heavy duty switching applications. Screw terminals. Has 1/4" silver-cadmium-oxide contacts rated at 25 amps at 115V, 25 amps at 230V, 50/60 cycle resistive AC, 1 HP per movable arm at 120V or 240V. AC single phase, U/L listed. Mounts by one front key-hole and two rear channel slots for 8-32 screws on 2" x 2 1/2" triangular centers. Weight: 14 ozs.



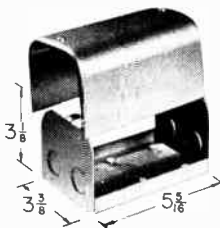
9PM1 Adapter plates for mounting PM on PR mounting holes. Box of 10 Net \$1.50

9PM2 Heavy-duty molded dust covers for PM. Box of 4 Net \$1.60

PR SERIES Heavy duty relay for industrial control applications requiring long life and fast action. Heavy duty screw type terminals. All AC and DC models except PR11AL5 carry U/L labels. Only AC models except PR11AL5 carry CSA® labels also. Mounting: Two 3/16" dia. holes on 1 7/8" centers. Weight: 11 ozs. max. Contacts: 3/16" dia. silver. Enclosure: See "PR" cover. The PR11AL5 relay is equipped with 3/16" dia. silver SPDT auxiliary contacts rated at 5 amps.



PR DUST COVER This dust cover has a sheet steel base with knockouts for 3/8" dia. conduit and an aluminum cover fitted with two screws. The cover fits tightly in place to provide maximum protection against dust, dirt and other foreign matter. Cover can be easily removed for relay maintenance. Fits all PR relays. Finished in gray baked enamel. Mounting: Three No. 10 holes on 1 7/8" x 4 3/8" centers. Weight: 1 lb. 35D013 NET \$3.00



POWER TYPE RELAYS

| TYPE | COILS | | | CONTACTS | | NET |
|---------|--------------------|--------------------|---------------|-------------|--------------|--------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| AB11AY | 6V | 1.3 | 6.4VA | DPDT | 10 | \$5.30 |
| AB11AY | 24V | 23 | 6.4VA | DPDT | 10 | 5.30 |
| AB11AY | 115V | 510 | 6.4VA | DPDT | 10 | 5.30 |
| AB11AY | 230V | 2,050 | 6.4VA | DPDT | 5 | 5.70 |
| AB11D | 12V | 72 | 2.0W | DPDT | 10 | 5.20 |
| AB11D | 24V | 288 | 2.0W | DPDT | 10 | 5.20 |
| AB11D | 110V | 6,050 | 2.0W | DPDT | 10 | 5.70 |
| ABC11AY | 6V | 1.3 | 6.4VA | DPDT | 10 | 6.40 |
| ABC11AY | 24V | 23 | 6.4VA | DPDT | 10 | 6.40 |
| ABC11AY | 115V | 510 | 6.4VA | DPDT | 10 | 6.40 |
| ABC11AY | 230V | 2,050 | 6.4VA | DPDT | 5 | 6.80 |
| ABC11DS | 6V | 1.7 | 2.0W | DPDT | 10 | 6.30 |
| ABC11DS | 12V | 72 | 2.0W | DPDT | 10 | 6.30 |
| ABC11DS | 24V | 288 | 2.0W | DPDT | 10 | 6.30 |
| ABC11DS | 110V | 6,050 | 2.0W | DPDT | 10 | 6.80 |
| GF5A | 6V | 1.7 | 6VA | SPDT | 15 | 3.40 |
| GF5A | 12V | 6.8 | 6VA | SPDT | 15 | 3.40 |
| GF5A | 24V | 24 | 6VA | SPDT | 15 | 3.40 |
| GF5A | 115V | 725 | 6VA | SPDT | 15 | 3.40 |
| GF5D | 6V | 1.7 | 2.0W | SPDT | 15 | 3.40 |
| GF5D | 12V | 72 | 2.0W | SPDT | 15 | 3.40 |
| GF5D | 24V | 288 | 2.0W | SPDT | 15 | 3.40 |
| GF5D | 110V | 6,050 | 2.0W | SPDT | 15 | 3.85 |
| GF11A | 6V | 1.7 | 6VA | DPDT | 15 | 4.25 |
| GF11A | 12V | 6.8 | 6VA | DPDT | 15 | 4.25 |
| GF11A | 24V | 24 | 6VA | DPDT | 15 | 4.25 |
| GF11A | 115V | 725 | 6VA | DPDT | 15 | 4.25 |
| GF11D | 6V | 1.7 | 2.0W | DPDT | 15 | 4.25 |
| GF11D | 12V | 72 | 2.0W | DPDT | 15 | 4.25 |
| GF11D | 24V | 288 | 2.0W | DPDT | 15 | 4.25 |
| GF11D | 110V | 6,050 | 2.0W | DPDT | 15 | 4.70 |
| GF17A | 6V | 1.7 | 6VA | 4PDT | 15 | 6.65 |
| GF17A | 12V | 6.8 | 6VA | 4PDT | 15 | 6.65 |
| GF17A | 24V | 24 | 6VA | 4PDT | 15 | 6.65 |
| GF17A | 115V | 725 | 6VA | 4PDT | 15 | 6.65 |
| GF17A | 230V | 2,950 | 6VA | 4PDT | 15 | 7.05 |
| GF17D | 6V | 1.7 | 2.0W | 4PDT | 15 | 6.65 |
| GF17D | 12V | 72 | 2.0W | 4PDT | 15 | 6.65 |
| GF17D | 24V | 288 | 2.0W | 4PDT | 15 | 6.65 |
| GF17D | 110V | 6,050 | 2.0W | 4PDT | 15 | 7.10 |
| MR2A | 24V | 50 | 3.25VA | SPST-NC | 8 | 3.30 |
| MR3A | 6V | 2.75 | 3.25VA | SPST-NO-DB | 10 | 3.85 |
| MR3A | 24V | 50 | 3.25VA | SPST-NO-DB | 10 | 3.85 |
| MR3A | 115V | 1,250 | 3.25VA | SPST-NO-DB | 10 | 3.85 |
| MR3D | 6V | 24 | 1.6W | SPST-NO-DB | 10 | 3.50 |
| MR3D | 12V | 96 | 1.6W | SPST-NO-DB | 10 | 3.50 |
| MR3D | 24V | 360 | 1.6W | SPST-NO-DB | 10 | 3.50 |
| MR5A | 6V | 2.75 | 3.25VA | SPDT | 8 | 3.45 |
| MR5A | 12V | 13.25 | 3.25VA | SPDT | 8 | 3.45 |
| MR5A | 24V | 50 | 3.25VA | SPDT | 8 | 3.45 |
| MR5A | 115V | 1,250 | 3.25VA | SPDT | 8 | 3.45 |
| MR5A | 230V | 4,600 | 3.25VA | SPDT | 8 | 3.85 |
| MR5D | 6V | 24 | 1.6W | SPDT | 8 | 3.20 |
| MR5D | 12V | 96 | 1.6W | SPDT | 8 | 3.20 |
| MR5D | 24V | 360 | 1.6W | SPDT | 8 | 3.20 |
| MR5D | 110V | 8,000 | 1.6W | SPDT | 8 | 3.20 |
| MR11A | 6V | 2.75 | 3.25VA | DPDT | 8 | 4.85 |
| MR11A | 12V | 13.25 | 3.25VA | DPDT | 8 | 4.85 |
| MR11A | 24V | 50 | 3.25VA | DPDT | 8 | 4.85 |
| MR11A | 115V | 1,250 | 3.25VA | DPDT | 8 | 4.85 |
| MR11A | 230V | 4,600 | 3.25VA | DPDT | 8 | 5.25 |
| MR11D | 6V | 24 | 1.6W | DPDT | 8 | 4.60 |
| MR11D | 12V | 96 | 1.6W | DPDT | 8 | 4.60 |
| MR11D | 24V | 360 | 1.6W | DPDT | 8 | 4.60 |
| MR11D | 110V | 8,000 | 1.6W | DPDT | 8 | 5.10 |
| MR14A | 6V | 2.75 | 3.25VA | 3PDT | 8 | 5.80 |
| MR14A | 12V | 13.25 | 3.25VA | 3PDT | 8 | 5.80 |
| MR14A | 24V | 50 | 3.25VA | 3PDT | 8 | 5.80 |
| MR14A | 115V | 1,250 | 3.25VA | 3PDT | 8 | 5.80 |
| MR14A | 230V | 4,600 | 3.25VA | 3PDT | 8 | 6.20 |
| MR14D | 6V | 24 | 1.6W | 3PDT | 8 | 5.45 |
| MR14D | 12V | 96 | 1.6W | 3PDT | 8 | 5.45 |
| MR14D | 24V | 360 | 1.6W | 3PDT | 8 | 5.45 |
| MR14D | 110V | 8,000 | 1.6W | 3PDT | 8 | 5.95 |
| PM17AY | 6V | 423 | 14VA | 4PDT | 25 | 12.35 |
| PM17AY | 12V | 1.6 | 14VA | 4PDT | 25 | 12.35 |
| PM17AY | 24V | 6.3 | 14VA | 4PDT | 25 | 12.35 |
| PM17AY | 115V | 120 | 14VA | 4PDT | 25 | 12.35 |
| PM17AY | 230V | 587 | 14VA | 4PDT | 25 | 12.75 |
| PR1A | 24V | 12 | 9.8VA | SPST-NO | 25 | 4.05 |
| PR3AY | 6V | 0.86 | 9.8VA | SPST-NO-DB | 25 | 4.15 |
| PR3AY | 12V | 3.2 | 9.8VA | SPST-NO-DB | 25 | 4.15 |
| PR3AY | 24V | 12 | 9.8VA | SPST-NO-DB | 25 | 4.15 |
| PR3AY | 115V | 290 | 9.8VA | SPST-NO-DB | 25 | 4.15 |
| PR3AY | 230V | 1,200 | 9.8VA | SPST-NO-DB | 25 | 4.50 |
| PR3DY | 6V | 1.8 | 2.0W | SPST-NO-DB | 25 | 4.15 |
| PR3DY | 12V | 7.1 | 2.0W | SPST-NO-DB | 25 | 4.15 |
| PR3DY | 24V | 288 | 2.0W | SPST-NO-DB | 25 | 4.15 |
| PR3DY | 110V | 6,050 | 2.0W | SPST-NO-DB | 25 | 4.75 |
| PR5AY | 6V | 0.86 | 9.8VA | SPDT | 25 | 4.35 |
| PR5AY | 12V | 3.2 | 9.8VA | SPDT | 25 | 4.35 |
| PR5AY | 24V | 12 | 9.8VA | SPDT | 25 | 4.35 |
| PR5AY | 115V | 290 | 9.8VA | SPDT | 25 | 4.35 |
| PR5AY | 230V | 1,200 | 9.8VA | SPDT | 25 | 4.75 |
| PR5DY | 6V | 1.8 | 2.0W | SPDT | 25 | 4.35 |
| PR5DY | 12V | 7.1 | 2.0W | SPDT | 25 | 4.35 |
| PR5DY | 24V | 288 | 2.0W | SPDT | 25 | 4.35 |
| PR5DY | 110V | 6,050 | 2.0W | SPDT | 25 | 4.95 |
| PR7AY | 6V | 0.86 | 9.8VA | DPST | 25 | 4.90 |
| PR7AY | 12V | 3.2 | 9.8VA | DPST | 25 | 4.90 |
| PR7AY | 24V | 12 | 9.8VA | DPST | 25 | 4.90 |
| PR7AY | 115V | 290 | 9.8VA | DPST | 25 | 4.90 |
| PR7AY | 230V | 1,200 | 9.8VA | DPST | 25 | 5.35 |
| PR7DY | 6V | 1.8 | 2.0W | DPST | 25 | 4.90 |
| PR7DY | 12V | 7.1 | 2.0W | DPST | 25 | 4.90 |
| PR7DY | 24V | 288 | 2.0W | DPST | 25 | 4.90 |
| PR7DY | 110V | 6,050 | 2.0W | DPST | 25 | 5.50 |
| PR11AY | 6V | 0.86 | 9.8VA | DPDT | 25 | 6.45 |
| PR11AY | 12V | 3.2 | 9.8VA | DPDT | 25 | 6.45 |
| PR11AY | 24V | 12 | 9.8VA | DPDT | 25 | 6.45 |
| PR11AY | 115V | 290 | 9.8VA | DPDT | 25 | 6.45 |
| PR11AY | 230V | 1,200 | 9.8VA | DPDT | 25 | 6.85 |
| PR11AL5 | 6V | 0.86 | 9.8VA | DPDT | 20 | 8.15 |
| PR11AL5 | 12V | 3.2 | 9.8VA | DPDT | 20 | 8.15 |
| PR11AL5 | 24V | 12 | 9.8VA | DPDT | 20 | 8.15 |
| PR11AL5 | 115V | 290 | 9.8VA | DPDT | 20 | 8.15 |
| PR11AL5 | 230V | 1,200 | 9.8VA | DPDT | 20 | 8.55 |
| PR11DY | 6V | 1.8 | 2.0W | DPDT | 25 | 6.45 |
| PR11DY | 12V | 7.1 | 2.0W | DPDT | 25 | 6.45 |
| PR11DY | 24V | 288 | 2.0W | DPDT | 25 | 6.45 |
| PR11DY | 110V | 6,050 | 2.0W | DPDT | 25 | 7.05 |

*Canadian Standards Association

New FROM

PB & B



Mercury-Wetted Contact Relays

DEPENDABILITY

Rare long life, high speed, and versatile application with unvarying dependability—all are the result of an unusual combination of advantages found only in mercury-wetted contact relays. The basic component of these relays is a glass capsule containing the contact arrangement. In if two sets of fixed contacts, a single movable reed armature (SPDT—Form D), and a small reservoir of mercury are hermetically sealed under high pressure hydrogen atmosphere. This arrangement does away with contact bounce, chatter, pits and welds. Make or break is positive—every time.

LONG LIFE

The use of mercury assures renewal of a film of mercury on all contact surfaces for every operation—the major reason why you can think in terms of billions of operations when you consider JM relays. Proper application, of course, is a requisite.

HIGH SPEED

Operate time for single capsule relays is just less than 3 milliseconds using 2 watts of power. Release time is about 3.2 milliseconds. Thus relays can be driven 100 times per second.

NOW AVAILABLE FROM STOCK FOR FAST DELIVERY

| Capsule | SERIES | | COIL CHARACTERISTICS | | | NET PRICE |
|-------------------------|--------|--------------------|-------------------------------|--------------------------|-------------------------|-----------|
| | Coil | Terminal Fig. No.* | RESISTANCE (Ohms $\pm 10\%$) | MUST OPERATE (Milliamps) | MAX. VOLTAGE (at 35°C.) | |
| SPDT Single Coil | | | | | | |
| JM1 | 109 | 12 | 130 | 38.8 | 16.1 | \$15.10 |
| JM1 | 112 | 11 | 500 | 20.1 | 31.6 | 15.10 |
| JM1 | 114 | 11 | 700 | 20.0 | 37.4 | 15.10 |
| JM1 | 114 | 12 | 700 | 20.0 | 37.4 | 15.10 |
| JM1 | 118 | 11 | 2500 | 10.1 | 70.7 | 15.40 |
| JM1 | 119 | 11 | 4000 | 8.1 | 89.5 | 15.10 |
| JM1 | 120 | 11 | 7000 | 6.0 | 117.0 | 15.85 |
| JM1 | 121 | 11 | 11000 | 5.0 | 148.0 | 15.85 |
| JM1 | 123 | 11 | 25000 | 3.6 | 224.0 | 15.85 |
| SPDT Dual Coil | | | | | | |
| JM1 | 405 | 51 | (1) 700 | (1) 32.0 | (1) 37.4 | 17.60 |
| | | | (2) 3300 | (2) 12.3 | (2) 81.0 | |
| DPDT Single Coil | | | | | | |
| JM2 | 111 | 22 | 700 | 30.5 | 45.8 | 24.60 |
| JM2 | 115 | 22 | 5000 | 11.3 | 122.0 | 24.65 |
| 4PDT Single Coil | | | | | | |
| JM4 | 114 | 41 | 1400 | 23.0 | 70.0 | 41.05 |
| JM4 | 114 | 42 | 1400 | 23.0 | 70.0 | 41.65 |
| JM4 | 118 | 41 | 6500 | 10.5 | 151.0 | 41.60 |
| JM4 | 119 | 42 | 10000 | 8.6 | 187.0 | 42.30 |

Use these 3 columns when ordering. Example: JM10912

* Octal style plugs, except fig. 42 (Hook Solder), fig. 41 (14-Pin).

PLEASE SEE OTHER SIDE FOR ENGINEERING DATA

ENGINEERING DATA

CONTACT RATING:

500 volts, and 5 amps, not to exceed 250 voltamperes with contact protection*. Available in Form D in SPDT single capsule, DPDT in two capsule, and 4PDT in four capsule construction.

TIMING:

100 operations per sec. for single capsule relays. 60 operations per sec. for 2 and 4 capsule relays. Operating time is as short as 3 milliseconds for JM1, 4 milliseconds for JM2, and 5 milliseconds for JM4. Repetitive accuracy within 1% of its "must operate" current.

DIELECTRIC:

1000 volts rms 60 cycles for single-wound coils, 500 volts rms 60 cycles for double-wound coils, and 200 volts rms 60 cycles for bifilar coils.

* Simple circuit for resistor and capacitor in series is required unless low level current is applied. Details of contact protection are packed with each relay.

RESISTANCE:

Contact resistance is 25 to 50 milliohms, constant within 1 or 2 milliohms for relay life. Coil: 2 to 25000 ohms.

SHOCK RESISTANCE:

Non-operating: 30 G's for 11 milliseconds. Vibrations up to 10 G's, 10-500 cps.

TEMPERATURES:

-39°C. (mercury freezes), 107°C. internal (potting compound softens).

TERMINATIONS:

Octal style plugs, except figure 42 (Hook Solder), figure 41 (14-Pin).

ENCLOSURES:

Three steel case sizes, one for single capsule, one for 2 and one for 4 capsules. Required mounting position: Vertical.

TERMINATIONS

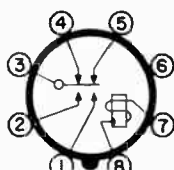


FIG.11

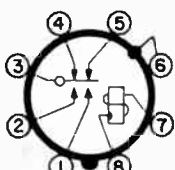


FIG.12

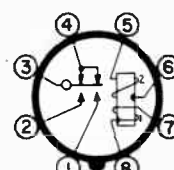


FIG.51

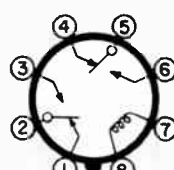


FIG.22

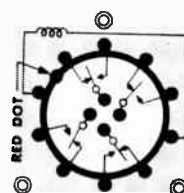


FIG.41

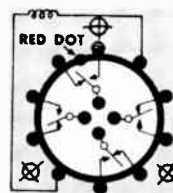
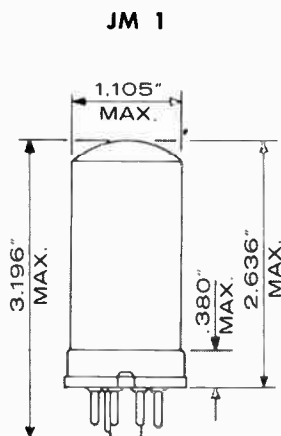
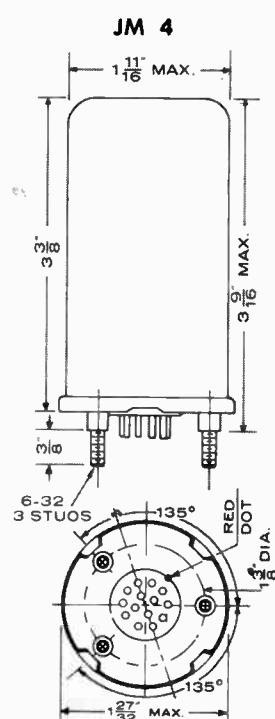
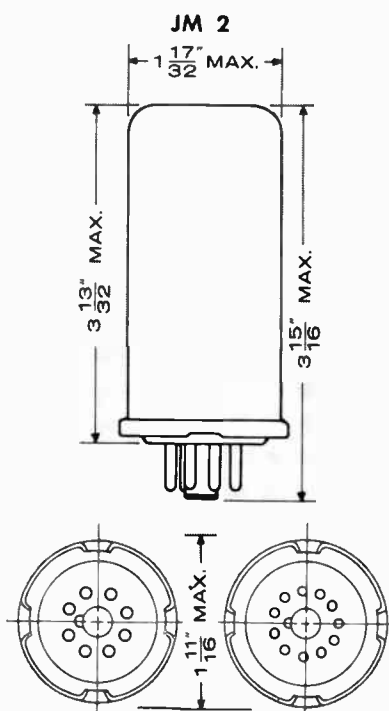


FIG.42

OUTLINE DIMENSIONS



WEIGHT: 4 Ounces Net

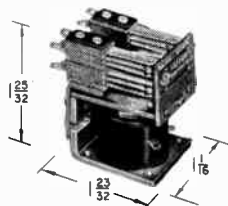


Potter & Brumfield Relays

GENERAL PURPOSE RELAYS

GA SERIES Low cost, all purpose, multiple contact, voltage switching relay. Used for many industrial control applications. Tinned, pierced solder type terminals. Contacts: $\frac{3}{16}$ " dia. silver, designed for maximum self-cleaning action. Mounting: No. 8-32 tapped core with locating boss. Weight: $\frac{1}{2}$ ozs.

See GF series for similar relays having 15 amp ratings.



SPECIFY COIL VOLTAGE OR RESISTANCE WHEN ORDERING

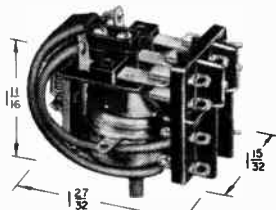
GP SERIES Separate AC and DC coils to match with 2PDT or 4PDT switches. AC coils (GPA) available in 6, 12, 24, 115 and 230 volts. DC coils (GPD) available in 6, 12, 24 and 110 volts; current coils: 2,500, 5,000 and 10,000 ohms. Contacts: $\frac{3}{16}$ " dia. silver.



GP-100 A complete kit of GP Series coils and switches consisting of the following: AC coils: Two 6 V., two 12 V., four 24 V., six 115 V., two 230 V. DC coils: Two 6 V., two 12 V., two 24 V., four 110 V. Also two 2,500 and four 10,000 ohm coils; eighteen DPDT switch assemblies. Fourteen 4PDT switch assemblies. The complete kit is ideal for experimenters, school and industrial laboratories.

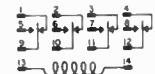
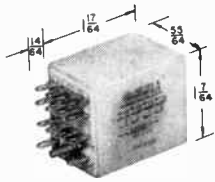
NET \$133.65

KA SERIES A small, low cost, highly efficient general purpose relay for handling light power loads such as small motors, solenoids and other relays, and general automation work. All AC models carry U/L labels; DC coil-operated models as listed. Only AC models are CSA* listed. Mounting: One No. 6-32 threaded stud and locating tab. Contacts: Movable, $\frac{1}{4}$ " dia. gold-flashed silver; stationary, $\frac{3}{32}$ " dia. wide silver overlay. Weight 2 ozs.



"G" suffix indicates silver-cadmium-oxide contacts on movables rated 10 amps.

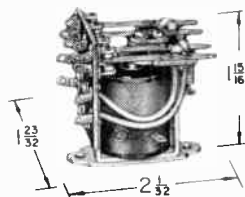
KHP SERIES Small, rugged, 4PDT relay designed to meet the exacting requirements of data processing, computer and process control applications. All have a nylon dust cover. $\frac{3}{32}$ " dia. silver contacts are rated at 3 amps at 30V DC or 115V AC resistive for 100,000 operations. Mounting: Solder terminals with a 3-48 stud $\frac{2}{64}$ " long. Can be adapted to sockets below for plug-in or printed circuit applications. Weight: 2 $\frac{1}{4}$ ozs.



9KH1 Solder terminal sockets and retainers. Box of 10
9KH2 Printed circuit terminal sockets. Box of 10
Weight per box: 4 ozs.
Net per box (either type) \$6.00



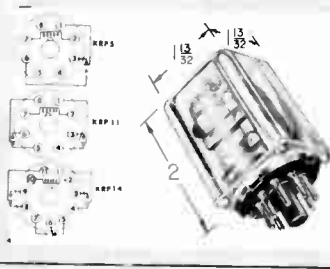
KL SERIES Multiple contact relay. Varied contact combinations and high dielectric phenolic insulation affords extreme versatility and utility. Widely used in such applications as industrial controls, elevator controls, communications equipment and electronic measuring devices. Mounting: All models—Two No. 6-32 tapped holes on $1\frac{1}{16}$ " centers. Contacts: $\frac{1}{8}$ " dia. gold-flashed silver. Weight: 5 ozs.



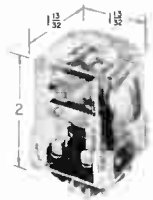
| TYPE | COILS | | | CONTACTS | | NET |
|----------|--------------------|--------------------|---------------|-------------|--------------|--------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| GA11A | 6V | 1.7 | 6VA | DPDT | 5 | \$3.35 |
| GA11A | 12V | 6.8 | 6VA | DPDT | 5 | 3.35 |
| GA11A | 24V | 24 | 6VA | DPDT | 5 | 3.35 |
| GA11A | 115V | 725 | 6VA | DPDT | 5 | 3.35 |
| GA11D | 6V | 1.8 | 2.0W | DPDT | 5 | 3.35 |
| GA11D | 12V | 7.2 | 2.0W | DPDT | 5 | 3.35 |
| GA11D | 24V | 28.8 | 2.0W | DPDT | 5 | 3.35 |
| GA11D | 110V | 6,050 | 2.0W | DPDT | 5 | 3.80 |
| GA14A | 6V | 1.7 | 6VA | 3PDT | 5 | 4.05 |
| GA14A | 12V | 6.8 | 6VA | 3PDT | 5 | 4.05 |
| GA14A | 24V | 24 | 6VA | 3PDT | 5 | 4.05 |
| GA14A | 115V | 725 | 6VA | 3PDT | 5 | 4.05 |
| GA14D | 12V | 7.2 | 2.0W | 3PDT | 5 | 4.05 |
| GA14D | 24V | 28.8 | 2.0W | 3PDT | 5 | 4.05 |
| GA17A | 6V | 1.7 | 6VA | 4PDT | 5 | 4.85 |
| GA17A | 12V | 6.8 | 6VA | 4PDT | 5 | 4.85 |
| GA17A | 24V | 24 | 6VA | 4PDT | 5 | 4.85 |
| GA17A | 115V | 725 | 6VA | 4PDT | 5 | 4.85 |
| GA17A | 230V | 2,950 | 6VA | 4PDT | 5 | 5.25 |
| GA17D | 6V | 1.8 | 2.0W | 4PDT | 5 | 4.85 |
| GA17D | 12V | 7.2 | 2.0W | 4PDT | 5 | 4.85 |
| GA17D | 24V | 28.8 | 2.0W | 4PDT | 5 | 4.85 |
| GA17D | 110V | 6,050 | 2.0W | 4PDT | 5 | 5.30 |
| GPA | 6V | 1.7 | 6VA | None | - | 1.65 |
| GPA | 12V | 6.8 | 6VA | None | - | 1.65 |
| GPA | 24V | 24 | 6VA | None | - | 1.65 |
| GPA | 115V | 725 | 6VA | None | - | 1.65 |
| GPA | 230V | 2,950 | 6VA | None | - | 2.10 |
| GPD | - | 2,500 | - | None | - | 1.50 |
| GPD | - | 5,000 | - | None | - | 1.75 |
| GPD | - | 10,000 | - | None | - | 2.10 |
| GPD | 6V | 1.8 | 2.0W | None | - | 2.10 |
| GPD | 12V | 7.2 | 2.0W | None | - | 2.10 |
| GPD | 24V | 28.8 | 2.0W | None | - | 2.10 |
| GPD | 110V | 6,050 | 2.0W | None | - | 3.15 |
| GP11 | Switch Assembly | | | DPDT | 5 | 1.70 |
| GP17 | Switch Assembly | | | 4PDT | 5 | 2.95 |
| KASAY | 6V | 5.1 | 2VA | SPDT | 5 | 3.20 |
| KASAY | 12V | 21 | 2VA | SPDT | 5 | 3.20 |
| KASAY | 24V | 75 | 2VA | SPDT | 5 | 3.20 |
| KASAY | 115V | 2,250 | 2VA | SPDT | 5 | 3.20 |
| KASAY | 230V | 9,110 | 2VA | SPDT | 5 | 3.60 |
| KASAG | 6V | 5.1 | 2VA | SPDT | 10 | 3.25 |
| KASAG | 12V | 21 | 2VA | SPDT | 10 | 3.25 |
| KASAG | 24V | 75 | 2VA | SPDT | 10 | 3.25 |
| KASAG | 115V | 2,250 | 2VA | SPDT | 10 | 3.25 |
| KASAG | 230V | 9,110 | 2VA | SPDT | 10 | 3.65 |
| KASDY | 6V | 32.1 | 1.2W | SPDT | 5 | 3.05 |
| KASDY | 12V | 120 | 1.2W | SPDT | 5 | 3.05 |
| KASDY | 24V | 472 | 1.2W | SPDT | 5 | 3.05 |
| KASDY | 110V | 10,000 | 1.2W | SPDT | 5 | 3.65 |
| KASDG | 6V | 32.1 | 1.2W | SPDT | 10 | 3.10 |
| KASDG | 12V | 120 | 1.2W | SPDT | 10 | 3.10 |
| KASDG | 24V | 472 | 1.2W | SPDT | 10 | 3.10 |
| KASDG | 110V | 10,000 | 1.2W | SPDT | 10 | 3.70 |
| KA11AY | 6V | 5.1 | 2VA | DPDT | 5 | 3.85 |
| KA11AY | 12V | 21 | 2VA | DPDT | 5 | 3.85 |
| KA11AY | 24V | 75 | 2VA | DPDT | 5 | 3.85 |
| KA11AY | 115V | 2,250 | 2VA | DPDT | 5 | 3.85 |
| KA11AY | 230V | 9,110 | 2VA | DPDT | 5 | 4.25 |
| KA11AG | 6V | 5.1 | 2VA | DPDT | 10 | 3.95 |
| KA11AG | 12V | 21 | 2VA | DPDT | 10 | 3.95 |
| KA11AG | 24V | 75 | 2VA | DPDT | 10 | 3.95 |
| KA11AG | 115V | 2,250 | 2VA | DPDT | 10 | 3.95 |
| KA11AG | 230V | 9,110 | 2VA | DPDT | 10 | 4.35 |
| KA11DY | 6V | 32.1 | 1.2W | DPDT | 5 | 3.40 |
| KA11DY | 12V | 120 | 1.2W | DPDT | 5 | 3.40 |
| KA11DY | 24V | 472 | 1.2W | DPDT | 5 | 3.40 |
| KA11DY | 110V | 10,000 | 1.2W | DPDT | 5 | 4.00 |
| KA11DG | 6V | 32.1 | 1.2W | DPDT | 10 | 3.50 |
| KA11DG | 12V | 120 | 1.2W | DPDT | 10 | 3.50 |
| KA11DG | 24V | 472 | 1.2W | DPDT | 10 | 3.50 |
| KA11DG | 110V | 10,000 | 1.2W | DPDT | 10 | 4.10 |
| KA14AY | 6V | 5.1 | 2VA | 3PDT | 5 | 4.25 |
| KA14AY | 12V | 21 | 2VA | 3PDT | 5 | 4.25 |
| KA14AY | 24V | 75 | 2VA | 3PDT | 5 | 4.25 |
| KA14AY | 115V | 2,250 | 2VA | 3PDT | 5 | 4.25 |
| KA14AY | 230V | 9,110 | 2VA | 3PDT | 5 | 4.65 |
| KA14AG | 6V | 5.1 | 2VA | 3PDT | 10 | 4.40 |
| KA14AG | 12V | 21 | 2VA | 3PDT | 10 | 4.40 |
| KA14AG | 24V | 75 | 2VA | 3PDT | 10 | 4.40 |
| KA14AG | 115V | 2,250 | 2VA | 3PDT | 10 | 4.40 |
| KA14AG | 230V | 9,110 | 2VA | 3PDT | 10 | 4.80 |
| KA14DY | 6V | 32.1 | 1.2W | 3PDT | 5 | 3.85 |
| KA14DY | 12V | 120 | 1.2W | 3PDT | 5 | 3.85 |
| KA14DY | 24V | 472 | 1.2W | 3PDT | 5 | 3.85 |
| KA14DY | 110V | 10,000 | 1.2W | 3PDT | 5 | 4.45 |
| KA14DG | 6V | 32.1 | 1.2W | 3PDT | 10 | 4.00 |
| KA14DG | 12V | 120 | 1.2W | 3PDT | 10 | 4.00 |
| KA14DG | 24V | 472 | 1.2W | 3PDT | 10 | 4.00 |
| KA14DG | 110V | 10,000 | 1.2W | 3PDT | 10 | 4.60 |
| KHP17D11 | 6V | 40 | 900MW | 4PDT | 3 | 4.80 |
| KHP17D11 | 12V | 160 | 900MW | 4PDT | 3 | 4.80 |
| KHP17D11 | 24V | 650 | 900MW | 4PDT | 3 | 4.80 |
| KHP17D11 | 48V | 2,600 | 900MW | 4PDT | 3 | 5.00 |
| KHP17D11 | 90V | 9,000 | 900MW | 4PDT | 3 | 5.60 |
| KHP17D11 | 110V | 11,000 | 900MW | 4PDT | 3 | 5.60 |
| KL5A | 6V | 2.25 | 2.9VA | SPDT | 5 | 3.85 |
| KL5A | 115V | 760 | 2.9VA | SPDT | 5 | 3.85 |
| KL5D | 6V | 36 | 1.1W | SPDT | 5 | 3.60 |
| KL5D | 12V | 140 | 1.1W | SPDT | 5 | 3.60 |
| KL5D | 24V | 600 | 1.1W | SPDT | 5 | 3.60 |
| KL11A | 6V | 2.25 | 2.9VA | DPDT | 5 | 4.80 |
| KL11A | 12V | 7.8 | 2.9VA | DPDT | 5 | 4.80 |
| KL11A | 24V | 33 | 2.9VA | DPDT | 5 | 4.80 |
| KL11A | 115V | 760 | 2.9VA | DPDT | 5 | 4.80 |
| KL11D | 6V | 36 | 1.1W | DPDT | 5 | 4.60 |
| KL11D | 12V | 140 | 1.1W | DPDT | 5 | 4.60 |
| KL11D | 24V | 600 | 1.1W | DPDT | 5 | 4.60 |
| KL14A | 6V | 2.25 | 2.9VA | 3PDT | 5 | 5.35 |
| KL14A | 115V | 760 | 2.9VA | 3PDT | 5 | 5.35 |
| KL14D | 6V | 36 | 1.1W | 3PDT | 5 | 5.15 |
| KL14D | 12V | 140 | 1.1W | 3PDT | 5 | 5.15 |
| KL14D | 110V | 10,000 | 1.1W | 3PDT | 5 | 5.75 |
| KL17A | 6V | 2.25 | 2.9VA | 4PDT | 5 | 6.30 |
| KL17A | 115V | 760 | 2.9VA | 4PDT | 5 | 6.30 |
| KL17D | 6V | 36 | 1.1W | 4PDT | 5 | 6.00 |
| KL17D | 12V | 140 | 1.1W | 4PDT | 5 | 6.00 |
| KL17D | 24V | 600 | 1.1W | 4PDT | 5 | 6.00 |
| KL17D | 110V | 10,000 | 1.1W | 4PDT | 5 | 6.60 |

Potter & Brumfield Relays

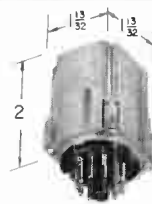
KRP SERIES Versatile, multi-contact arrangement. Enclosed in a clear cellulose acetate dust cover. Standard 8-pin octal-type plug for KRP5 and KRP11, 11-pin for KRP14. Weight: Approx. 3 ozs. Contacts: 5 amp, $\frac{3}{16}$ " dia. gold-flashed silver. 10 amp $\frac{3}{16}$ " dia. silver cadmium-oxide. See KCP-KRP hold down spring for special mounting applications. See KRP indicator lamp relay for current monitoring applications.



KRP-N INDICATOR LAMP RELAY A general purpose relay incorporating a lamp to indicate current or voltage availability in power circuit. Enclosure: $\frac{3}{16}$ " dia. silver cadmium-oxide. Enclosure: Clear cellulose acetate dust cover. Mounting: Standard octal plug. Weight: Approx. 3 ozs. See KCP-KRP Hold Down Spring for special mountings.



"P" CASE A clear cellulose acetate case for mounting rectifiers, capacitors, resistors or a combination of these. Available with octal-type plug with 8 or 11-pins. Comes complete with four screws. Weight: .5 ozs. each. See KCP-KRP Hold Down Spring for special mounting applications.



35DO70 Case (8-pin plug) NET \$5.55
35DO72 Case (11-pin plug) NET \$7.00

KCP-KRP HOLD DOWN SPRING

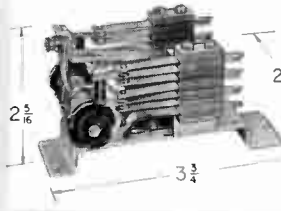
Designed to insure secure mounting of relay in any position. Fits all KCP or KRP plug-in relays. Durable stainless steel spring can be moved aside for relay removal or installation. Mounting: Two $\frac{3}{32}$ " dia. holes on $\frac{1}{16}$ " centers; will accommodate machine screws or rivets. Available in quantities of 50 per box. Weight: 3 ozs. per box.



9-KR-15 NET \$5.00

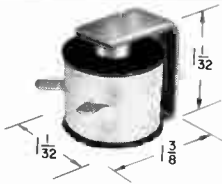
AP SERIES RATCHET, IMPULSE

A reliable compact unit for applications requiring on-off or reversing action on alternate operations. Positive ratchet operation at all speeds on impulses as short as 60 ms. Intermittent operation only. Mounting: Three $\frac{3}{32}$ " dia. holes on $3\frac{3}{8}$ " x $\frac{5}{8}$ " triangular centers. Contacts: $\frac{3}{16}$ " dia. silver. Weight: 7 ozs.



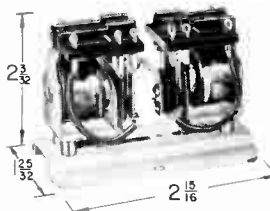
BU BUZZER

AC operated coil with a spring steel armature which buzzes when coil is energized. Used extensively in test equipment, laboratories and a host of other applications where a small light weight, dependable buzzer is required. Weight: 1 1/2 ozs. Mounting: No. 6-32 tapped core



KB SERIES LATCHING RELAY

Both release and trip coils must be for the same voltage. One coil operates relay to set latch and other coil releases it. Ideal for memory work and overload applications. Operates on momentary impulse to either coil. Mounting: Two $\frac{3}{32}$ " dia. holes on $1\frac{3}{8}$ " centers. Weight: 6 ozs. Contacts: $\frac{1}{8}$ " dia. silver rated 5 amps; "G" suffix indicates silver cadmium-oxide contacts on movables rated 10 amps. AC relays with 5 amp. contacts carry U/L and CSA® labels.



GENERAL PURPOSE RELAYS

| TYPE | COILS | | | CONTACTS | | NET |
|-----------|--------------------|--------------------|---------------|-------------|--------------|------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| KRP5A\$ | 6V | 5.1 | 2VA | SPDT | 5 | 5.45 |
| KRP5A\$ | 24V | 75 | 2VA | SPDT | 5 | 5.45 |
| KRP5A\$ | 115V | 2,250 | 2VA | SPDT | 5 | 5.45 |
| KRP5AG\$ | 6V | 5.1 | 2VA | SPDT | 10 | 5.55 |
| KRP5AG\$ | 24V | 75 | 2VA | SPDT | 10 | 5.55 |
| KRP5AG\$ | 115V | 2,250 | 2VA | SPDT | 10 | 5.55 |
| KRP5DS | 6V | 32.1 | 1.2W | SPDT | 5 | 5.40 |
| KRP5DS | 12V | 120 | 1.2W | SPDT | 5 | 5.40 |
| KRP5DS | 24V | 472 | 1.2W | SPDT | 5 | 5.40 |
| KRP5DS | 110V | 10,000 | 1.2W | SPDT | 5 | 6.00 |
| KRP5DG\$ | 6V | 32.1 | 1.2W | SPDT | 10 | 5.50 |
| KRP5DG\$ | 12V | 120 | 1.2W | SPDT | 10 | 5.50 |
| KRP5DG\$ | 24V | 472 | 1.2W | SPDT | 10 | 5.50 |
| KRP5DG\$ | 110V | 10,000 | 1.2W | SPDT | 10 | 6.10 |
| KRP11A\$ | 6V | 5.1 | 2VA | DPDT | 5 | 6.05 |
| KRP11A\$ | 12V | 21 | 2VA | DPDT | 5 | 6.05 |
| KRP11A\$ | 24V | 75 | 2VA | DPDT | 5 | 6.05 |
| KRP11A\$ | 115V | 2,250 | 2VA | DPDT | 5 | 6.05 |
| KRP11AG\$ | 230V | 9,110 | 2VA | DPDT | 5 | 6.45 |
| KRP11AG\$ | 6V | 5.1 | 2VA | DPDT | 10 | 6.25 |
| KRP11AG\$ | 12V | 21 | 2VA | DPDT | 10 | 6.25 |
| KRP11AG\$ | 24V | 75 | 2VA | DPDT | 10 | 6.25 |
| KRP11AG\$ | 115V | 2,250 | 2VA | DPDT | 10 | 6.25 |
| KRP11AG\$ | 230V | 9,100 | 2VA | DPDT | 10 | 6.65 |
| KRP11DS | 6V | 32.1 | 1.2W | DPDT | 5 | 6.00 |
| KRP11DS | 12V | 120 | 1.2W | DPDT | 5 | 6.00 |
| KRP11DS | 24V | 472 | 1.2W | DPDT | 5 | 6.00 |
| KRP11DS | 110V | 10,000 | 1.2W | DPDT | 5 | 6.60 |
| KRP11DG\$ | 6V | 32.1 | 1.2W | DPDT | 10 | 6.20 |
| KRP11DG\$ | 12V | 120 | 1.2W | DPDT | 10 | 6.20 |
| KRP11DG\$ | 24V | 472 | 1.2W | DPDT | 10 | 6.20 |
| KRP11DG\$ | 110V | 10,000 | 1.2W | DPDT | 10 | 6.80 |
| KRP14A\$ | 6V | 5.1 | 2VA | 3PDT | 5 | 7.50 |
| KRP14A\$ | 12V | 21 | 2VA | 3PDT | 5 | 7.50 |
| KRP14A\$ | 24V | 75 | 2VA | 3PDT | 5 | 7.50 |
| KRP14A\$ | 115V | 2,250 | 2VA | 3PDT | 5 | 7.50 |
| KRP14A\$ | 230V | 9,110 | 2VA | 3PDT | 5 | 7.90 |
| KRP14AG\$ | 6V | 5.1 | 2VA | 3PDT | 10 | 7.80 |
| KRP14AG\$ | 12V | 21 | 2VA | 3PDT | 10 | 7.80 |
| KRP14AG\$ | 24V | 75 | 2VA | 3PDT | 10 | 7.80 |
| KRP14AG\$ | 115V | 2,250 | 2VA | 3PDT | 10 | 7.80 |
| KRP14AG\$ | 230V | 9,100 | 2VA | 3PDT | 10 | 8.20 |
| KRP14DS | 6V | 32.1 | 1.2W | 3PDT | 5 | 7.45 |
| KRP14DS | 12V | 120 | 1.2W | 3PDT | 5 | 7.45 |
| KRP14DS | 24V | 472 | 1.2W | 3PDT | 5 | 7.45 |
| KRP14DS | 110V | 10,000 | 1.2W | 3PDT | 5 | 8.05 |
| KRP14DG\$ | 6V | 32.1 | 1.2W | 3PDT | 10 | 7.75 |
| KRP14DG\$ | 12V | 120 | 1.2W | 3PDT | 10 | 7.75 |
| KRP14DG\$ | 24V | 472 | 1.2W | 3PDT | 10 | 7.75 |
| KRP14DG\$ | 110V | 10,000 | 1.2W | 3PDT | 10 | 8.35 |
| KRP11AN\$ | 6V | 5.1 | 2VA | DPDT | 10 | 7.15 |
| KRP11AN\$ | 12V | 21 | 2VA | DPDT | 10 | 7.15 |
| KRP11AN\$ | 24V | 75 | 2VA | DPDT | 10 | 7.15 |
| KRP11AN\$ | 115V | 2,250 | 2VA | DPDT | 10 | 7.15 |
| KRP11AN\$ | 230V | 9,110 | 2VA | DPDT | 10 | 7.55 |
| KRP11DN\$ | 6V | 120 | 1.2W | DPDT | 10 | 7.10 |
| KRP11DN\$ | 12V | 420 | 1.2W | DPDT | 10 | 7.10 |
| KRP11DN\$ | 24V | 420 | 1.2W | DPDT | 10 | 7.10 |
| KRP11DN\$ | 110V | 10,000 | 1.2W | DPDT | 10 | 7.10 |
| KRP14AN\$ | 6V | 5.1 | 2VA | 3PDT | 10 | 8.70 |
| KRP14AN\$ | 12V | 21 | 2VA | 3PDT | 10 | 8.70 |
| KRP14AN\$ | 24V | 75 | 2VA | 3PDT | 10 | 8.70 |
| KRP14AN\$ | 115V | 2,250 | 2VA | 3PDT | 10 | 8.70 |
| KRP14AN\$ | 230V | 9,110 | 2VA | 3PDT | 10 | 9.10 |

SPECIAL PURPOSE RELAYS

| | | | | | | |
|--------|------|-------|--------|------|----|-------|
| AP11A | 6V | 0.6 | 18.5VA | DPDT | 5 | 8.70 |
| AP11A | 12V | 2.28 | 18.5VA | DPDT | 5 | 8.70 |
| AP11A | 24V | 8.8 | 18.5VA | DPDT | 5 | 8.70 |
| AP11A | 115V | 240 | 18.5VA | DPDT | 5 | 8.70 |
| AP11A | 230V | 900 | 18.5VA | DPDT | 5 | 9.15 |
| AP11D | 6V | 4.0 | 9.0W | DPDT | 5 | 8.70 |
| AP11D | 24V | 65 | 9.0W | DPDT | 5 | 8.70 |
| AP11D | 110V | 1,350 | 9.0W | DPDT | 5 | 9.35 |
| AP17A | 6V | 0.6 | 18.5VA | 4PDT | 5 | 10.50 |
| AP17A | 24V | 8.8 | 18.5VA | 4PDT | 5 | 10.50 |
| AP17A | 115V | 240 | 18.5VA | 4PDT | 5 | 10.50 |
| AP17A | 230V | 900 | 18.5VA | 4PDT | 5 | 10.95 |
| AP17D | 6V | 4.0 | 9.0W | 4PDT | 5 | 10.50 |
| AP17D | 12V | 15.5 | 9.0W | 4PDT | 5 | 10.50 |
| AP17D | 24V | 65 | 9.0W | 4PDT | 5 | 10.50 |
| AP17D | 110V | 1,350 | 9.0W | 4PDT | 5 | 11.15 |
| BU | 6V | 2.75 | 4.6VA | . | . | 1.70 |
| BU | 12V | 13.25 | 4.6VA | . | . | 1.70 |
| BU | 24V | 50 | 4.6VA | . | . | 1.70 |
| BU | 115V | 1,250 | 4.6VA | . | . | 1.70 |
| KB17AY | 6V | 2.3 | 5VA | 4PDT | 5 | 10.50 |
| KB17AY | 12V | 10 | 5VA | 4PDT | 5 | 10.50 |
| KB17AY | 24V | 42 | 5VA | 4PDT | 5 | 10.50 |
| KB17AY | 115V | 1,030 | 5VA | 4PDT | 5 | 10.50 |
| KB17AY | 230V | 4,100 | 5VA | 4PDT | 5 | 11.30 |
| KB17AG | 6V | 2.3 | 5VA | 4PDT | 10 | 10.60 |
| KB17AG | 12V | 10 | 5VA | 4PDT | 10 | 10.60 |
| KB17AG | 24V | 42 | 5VA | 4PDT | 10 | 10.60 |
| KB17AG | 115V | 1,030 | 5VA | 4PDT | 10 | 10.60 |
| KB17AG | 230V | 4,100 | 5VA | 4PDT | 10 | 11.40 |
| KB17D | 6V | 13.1 | 2.7W | 4PDT | 5 | 9.45 |
| KB17D | 12V | 52.0 | 2.7W | 4PDT | 5 | 9.45 |
| KB17D | 24V | 230 | 2.7W | 4PDT | 5 | 9.45 |
| KB17D | 110V | 4,560 | 2.7W | 4PDT | 5 | 10.65 |
| KB17DG | 6V | 13.1 | 2.7W | 4PDT | 10 | 9.65 |
| KB17DG | 12V | 52.0 | 2.7W | 4PDT | 10 | 9.65 |
| KB17DG | 24V | 230 | 2.7W | 4PDT | 10 | 9.65 |
| KB17DG | 110V | 4,560 | 2.7W | 4PDT | 10 | 10.85 |
| KB23AY | 6V | 1.8 | 7.8VA | 6PDT | 5 | 12.60 |
| KB23AY | 24V | 27 | 7.8VA | 6PDT | 5 | 12.60 |
| KB23AY | 115V | 700 | 7.8VA | 6PDT | 5 | 12.60 |
| KB23AY | 230V | 2,750 | 7.8VA | 6PDT | 5 | 13.40 |
| KB23AG | 6V | 1.8 | 7.8VA | 6PDT | 10 | 12.80 |
| KB23AG | 12V | 7.2 | 7.8VA | 6PDT | 10 | 12.80 |
| KB23AG | 24V | 27 | 7.8VA | 6PDT | 10 | 12.80 |
| KB23AG | 115V | 700 | 7.8VA | 6PDT | 10 | 12.80 |
| KB23AG | 230V | 2,750 | 7.8VA | 6PDT | 10 | 13.60 |
| KB23D | 6V | 13.1 | 2.7W | 6PDT | 5 | 11.45 |
| KB23D | 12V | 52.0 | 2.7W | 6PDT | 5 | 11.45 |
| KB23D | 24V | 230 | 2.7W | 6PDT | 5 | 11.45 |
| KB23D | 110V | 4,560 | 2.7W | 6PDT | 5 | 12.65 |
| KB23DG | 6V | 13.1 | 2.7W | 6PDT | 10 | 11.75 |
| KB23DG | 12V | 52.0 | 2.7W | 6PDT | 10 | 11.75 |
| KB23DG | 24V | 230 | 2.7W | 6PDT | 10 | 11.75 |
| KB23DG | 110V | 4,560 | 2.7W | 6PDT | 10 | 12.95 |

*Canadian Standards Association

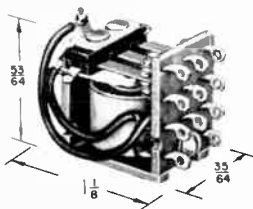
§Enclosed Relay

See ordering information on P. & B. page 7.

Potter & Brumfield Relays

SPECIAL PURPOSE RELAYS

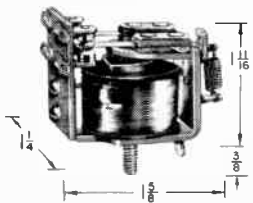
KM SERIES Subminiature relay for applications requiring unusually small relays with up to 3-poles. $\frac{3}{32}$ " dia. silver contacts. Withstands 30g mechanical shock and .06" excursion 10 to 55 cps mechanical vibration. Used extensively in small business machines, alarm systems, automatic toys and communications systems. Mounting: One 2-56 tapped core and locating half-punch. Solder terminals. Weight: .58 ozs.



| TYPE | COILS | | | CONTACTS | | NET |
|-------|--------------------|--------------------|---------------|-------------|--------------|---------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| KMSD | 6V | 36 | 1.1W | SPDT | 2 | \$ 3.35 |
| KMSD | 12V | 144 | 1.1W | SPDT | 2 | 3.35 |
| KMSD | 24V | 500 | 1.1W | SPDT | 2 | 3.35 |
| KM11D | 6V | 36 | 1.1W | DPDT | 2 | 3.70 |
| KM11D | 12V | 144 | 1.1W | DPDT | 2 | 3.70 |
| KM11D | 24V | 500 | 1.1W | DPDT | 2 | 3.70 |
| KM14D | 6V | 36 | 1.1W | 3PDT | 2 | 4.25 |
| KM14D | 12V | 144 | 1.1W | 3PDT | 2 | 4.25 |
| KM14D | 24V | 500 | 1.1W | 3PDT | 2 | 4.25 |

KT SERIES ANTENNA SWITCHING RELAY

Glass base insulation for minimum RF loss to switch 300 ohm line. Mounting: One No. 6-32 threaded stud. Contacts: $\frac{1}{8}$ " dia. gold-flashed silver. Weight: $1\frac{1}{2}$ " ozs.

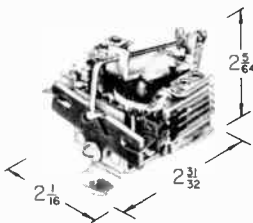


| | | | | | | |
|-------|------|-------|------|------|---|------|
| KT11A | 6V | 5.1 | 2VA | DPDT | 5 | 3.70 |
| KT11A | 115V | 2,250 | 2VA | DPDT | 5 | 3.70 |
| KT11D | 6V | 32.1 | 1.2W | DPDT | 5 | 3.70 |
| KT11D | 12V | 120 | 1.2W | DPDT | 5 | 3.70 |

SPECIFY COIL VOLTAGE OR RESISTANCE WHEN ORDERING

PC SERIES

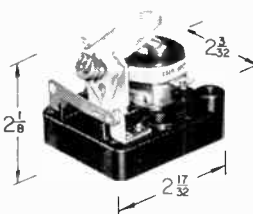
Single coil impulse latching relay for on-off and current reversal switching on alternate pulses. Operates on 30 millisecond pulses to the coil. Mounting: Two $\frac{5}{32}$ " dia. holes on $2\frac{3}{8}$ " centers. Weight: 5 ozs. Contacts: $\frac{1}{8}$ " dia. gold-flashed silver cadmium-oxide.



| | | | | | | |
|-------|------|-------|--------|------|-----|------|
| PC11A | 6V | 0.6 | 18.5VA | DPDT | 7.5 | 5.50 |
| PC11A | 12V | 2.28 | 18.5VA | DPDT | 7.5 | 5.50 |
| PC11A | 24V | 8.8 | 18.5VA | DPDT | 7.5 | 5.50 |
| PC11A | 115V | 240 | 18.5VA | DPDT | 7.5 | 5.50 |
| PC11A | 230V | 900 | 18.5VA | DPDT | 7.5 | 5.90 |
| PC11D | 6V | 4.0 | 9.0W | DPDT | 7.5 | 5.35 |
| PC11D | 12V | 15.5 | 9.0W | DPDT | 7.5 | 5.35 |
| PC11D | 24V | 65.0 | 9.0W | DPDT | 7.5 | 5.35 |
| PC11D | 110V | 1,350 | 9.0W | DPDT | 7.5 | 5.85 |
| PC17A | 12V | 2.28 | 18.5VA | 4PDT | 7.5 | 7.60 |
| PC17A | 24V | 8.8 | 18.5VA | 4PDT | 7.5 | 7.60 |
| PC17A | 115V | 240 | 18.5VA | 4PDT | 7.5 | 7.60 |
| PC17A | 230V | 900 | 18.5VA | 4PDT | 7.5 | 8.00 |
| PC17D | 24V | 65 | 9.0W | 4PDT | 7.5 | 7.45 |

MS SERIES MOTOR STARTING RELAYS

For starting capacitor start, induction-run motors. Operates on back EMF of start winding. Armature gap can be altered to change pull-in. Meets all U/L spacing requirements. Mounting: Two $\frac{5}{32}$ " dia. holes on $1\frac{1}{4}$ " centers. Contacts: $\frac{3}{4}$ HP, $\frac{1}{32}$ " dia. fine silver. 3 HP, $\frac{1}{32}$ " dia. silver cadmium. Weight: 5 ozs. max. Enclosure: See "MS/MR" cover.

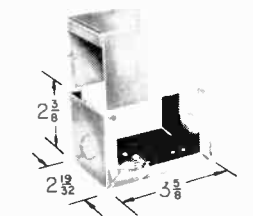


| | | | | | | |
|-------|------|-------|-------|------------|------------------|------|
| MS2AY | 115V | 530 | 5.9VA | SPST-NC | $\frac{3}{4}$ HP | 3.55 |
| MS2AY | 230V | 2,100 | 5.9VA | SPST-NC | $\frac{3}{4}$ HP | 3.95 |
| MS4AY | 115V | 530 | 5.9VA | SPST-NC-DB | 3HP | 4.15 |
| MS4AY | 230V | 2,100 | 5.9VA | SPST-NC-DB | 3HP | 4.55 |

"MS/MR" COVER

Provides neater installation, easier maintenance; minimizes broken leads, protects against dust, dirt, solder shorts and accidental jars. Sealed knock-out holes for standard conduit fittings. Relay mounts on pre-drilled base. Fits MS and MR relays. Weight: 7.5 ozs. 351D130

NET \$1.90



POTTER & BRUMFIELD

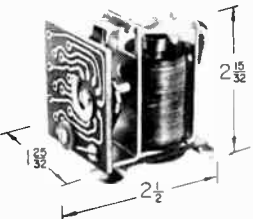
IS A MEMBER OF THE

NATIONAL ASSOCIATION OF RELAY MANUFACTURERS



SA SERIES STEPPING SWITCH

A twelve position stepping relay with printed circuit strips to switch currents up to 250 milliamps. Armature-driven pawl operates a ratchet wheel to drive the movable contact in steps of 30 degrees over 12 positions. Used widely for audio-level switching in TV remote control units, scoreboards and process controls. Mounting: Two 6-32 holes on $1\frac{3}{16}$ " centers. Weight: 4 ozs.



| | | | | | | |
|-----------|------|-----|------|----------|-----|------|
| SA-1N-12A | 115V | 140 | 20VA | 12-steps | .25 | 6.60 |
|-----------|------|-----|------|----------|-----|------|

ORDERING INSTRUCTIONS — File-O-Matic Sec. 23

All relay contacts are rated at 115 volt-60 cycle, non inductive load.

When ordering specify relay type and coil voltage or resistance.

Example: PR5AY, 115 Volts AC, 60 cycles or LB5, 2500 ohms resistance.

To operate 110V DC relays on 220V DC use a 5 watt wire-wound

resistor of a value approximately the relay coil resistance in series with the relay coil.

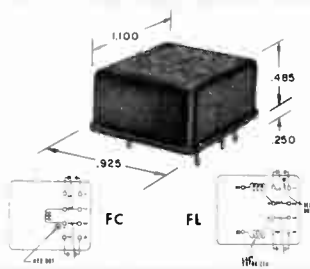
CONTACT LEGEND: S-Single; D-Double; P-Pole; T-Throw; N-Normally; O-Open; C-Closed; B-Break; M-Make.

Prices and Specifications subject to change without notice. For latest prices refer to United Pricing Service.

Potter & Brumfield Relays

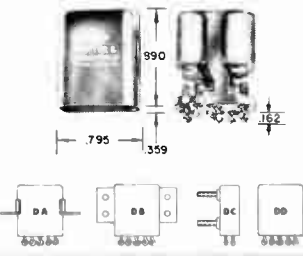
FC SERIES Conventional micro-miniature relay lies flat on printed circuit board. Withstands 100g shock, 400g linear acceleration, 30g vibration to 2000 cps. Ambient temperature range: -65° to +125°C. Hermetically sealed. Bifurcated contacts. Plus in on .2" grid. Meets applicable sect. MIL-R-5757D, and ABMA #PD-R-187. Weight: .75 ozs.

FL SERIES Dual-coil latching relay has same specs as above, except operates by pulsing each coil alternately (observing coil polarity); or connecting the coils in series from a reversing (polarized) source. Remains latched without coil power.



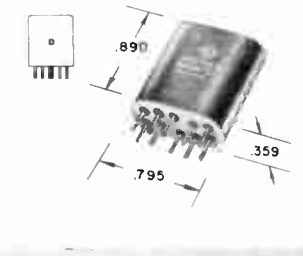
SC SERIES Micro-miniature permanent magnet relay for low power, high shock/vibration applications. 100g shock, 30g vibration to 2000cps with no contact openings. Ambient temperature range: -65°C. to +125°C. Features single coil action and conforms to standard micro-miniature coil operation except polarized connections because of magnetic circuit. Positive terminal marked with red dot. Mounting: SC11D°, SCG11D -DA, -DB, DC and DD correspond to similarly designed SL mountings. Weight: 3/4 oz.

°Cinch No. 54A20730 and Arnel No. HRK-1, 8-pin receptacles available from distributors for plug-in applications.



SL SERIES Dual coil micro-miniature magnetic latching relay with same shock/vibration, resistance and ambient temperature range as SC. Coils may be connected in series for polar operation. Mounting: SL11D° for plug-in applications; -DA has shoulder flangers with two .104" x .136" holes on a 1.062" center; -DB has a welded bracket with four .125" dia. holes on 1.062" x .281" centers; -DC has two No. 4-40 NC 2A threaded studs on .488" x .220" diagonal centers; -DD has plain case with hook end solder terminals. SCG-SLG11D have plug-in terminals on .2" grid.

°Viking No. P/N VB10/3DV 1 10-pin receptacles available from distributors for plug-in applications.



SPECIAL PURPOSE RELAYS

| TYPE | COILS | | | CONTACTS | | NET |
|---------|--------------------|--------------------|---------------|-------------|--------------|----------|
| | Voltage or Current | Resistance in Ohms | Nominal Power | Arrangement | Rate in Amps | |
| FC11D† | 6V | 60 | .5W | DPDT | 3* | \$ 16.00 |
| FC11D† | 12V | 210 | .5W | DPDT | 3 | 16.00 |
| FC11D† | 24V | 900 | .5W | DPDT | 3 | 16.00 |
| FL11D† | 6V | 67.5 | .5W | DPDT | 3* | 18.00 |
| FL11D† | 12V | 230 | .5W | DPDT | 3 | 18.00 |
| FL11D† | 24V | 1,000 | .5W | DPDT | 3 | 18.00 |
| SC11D† | 6V | 35 | 1W | DPDT | 2* | 15.75 |
| SC11D† | 12V | 135 | 1W | DPDT | 2 | 15.75 |
| SC11D† | 24V | 550 | 1W | DPDT | 2 | 15.75 |
| SC11DA† | 6V | 35 | 1W | DPDT | 2 | 15.75 |
| SC11DA† | 12V | 135 | 1W | DPDT | 2 | 15.75 |
| SC11DA† | 24V | 550 | 1W | DPDT | 2 | 15.75 |
| SC11DB† | 6V | 35 | 1W | DPDT | 2 | 15.75 |
| SC11DB† | 12V | 135 | 1W | DPDT | 2 | 15.75 |
| SC11DB† | 24V | 550 | 1W | DPDT | 2 | 15.75 |
| SC11DC† | 24V | 550 | 1W | DPDT | 2 | 15.75 |
| SC11DD† | 24V | 550 | 1W | DPDT | 2 | 15.75 |
| SCG11D† | 24V | 550 | 1W | DPDT | 2 | 15.75 |
| SL11D | 6V | 40 | 1W | DPDT | 2* | 17.25 |
| SL11D† | 12V | 160 | 1W | DPDT | 2 | 17.25 |
| SL11D† | 24V | 630 | 1W | DPDT | 2 | 17.25 |
| SL11DA† | 6V | 40 | 1W | DPDT | 2 | 17.25 |
| SL11DA† | 12V | 160 | 1W | DPDT | 2 | 17.25 |
| SL11DA† | 24V | 630 | 1W | DPDT | 2 | 17.25 |
| SL11DB† | 6V | 40 | 1W | DPDT | 2 | 17.25 |
| SL11DB† | 12V | 160 | 1W | DPDT | 2 | 17.25 |
| SL11DB† | 24V | 630 | 1W | DPDT | 2 | 17.25 |
| SL11DC† | 24V | 630 | 1W | DPDT | 2 | 17.25 |
| SL11DD† | 24V | 630 | 1W | DPDT | 2 | 17.25 |
| SLG11D† | 24V | 630 | 1W | DPDT | 2 | 17.25 |

† Sealed Relay

* @ 28VDC

BOURNS TRIMPOT® POTENTIOMETERS

THE INDUSTRY'S LARGEST
SELECTION OF ADJUSTMENT
AND PRECISION
POTENTIOMETERS

32 Standard Models
4 Terminal Types
3 Mounting Styles



MILITARY ■ INDUSTRIAL ■ COMMERCIAL ■ WIREWOUND ■ RESISTON® CARBON ■ RECTANGULAR ■ SQUARE ■ PRECISION
ROTARY ■ HUMIDITY-PROOF ■ HIGH-TEMPERATURE ■ SPECIAL-PURPOSE

Only Bourns Trimpot Potentiometers Give You All Of These Outstanding Features

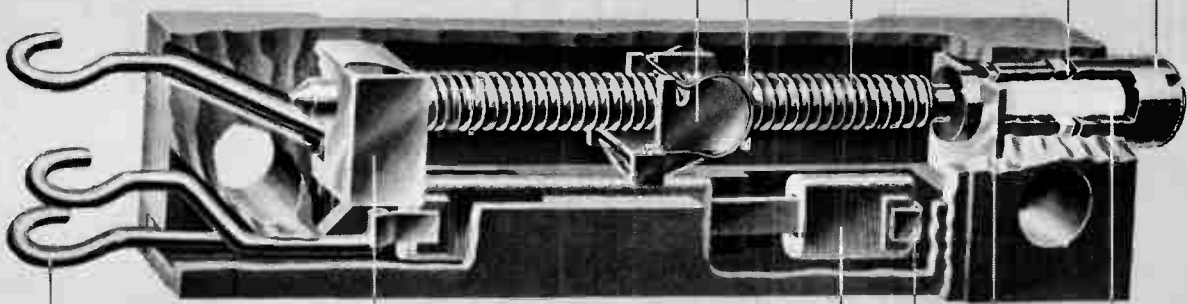
SPRING—Carriage spring provides positive no-slip performance during rotation plus a reliable idling feature at mechanical limits of travel.

LEADSCREW—Stainless steel leadscrew is corrosion-resistant, withstands salt spray.

O-RING—Silicone rubber O-ring seals potentiometer against humidity, withstands high temperature.

SHAFT HEAD—Stainless steel with machined slot for screwdriver adjustment. Meets military salt spray requirements.

WIPER CARRIAGE—Gold-plated carriage is welded to precious metal wiper for low noise.



SOLDER TERMINALS—Tinned terminals are compact, yet large enough for easy soldering. Teflon-insulated leads and printed circuit pins are also available.

SILVERWELD® TERMINATION—This exclusive Bourns feature is unequalled in ruggedness. There is a metal-to-metal bond from the terminal to the resistance wire.

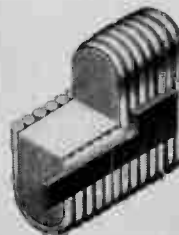
PICK-OFF—Gold-plated beryllium copper pick-off maintains constant pressure on leadscrew.

ELEMENT—Special ceramic element card for maximum reliability is precision wound with low-temperature-coefficient resistance wire.

SHAFT RETAINER—Shaft is locked in place for top performance under extreme shock, vibration and acceleration.

SHAFT INSULATOR—High-dielectric-strength, ceramic insulator isolates shaft head from internal circuits.

This cutaway of Model 224 shows the typical high quality to be found in all Bourns Trimpot potentiometers, although some features may vary from model to model.






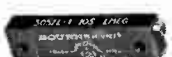









Indestructible Termination

The exclusive Bourns Silverweld® termination, alloyed with multiple turns of the resistance element, is indestructible under thermal or mechanical stress. It eliminates termination breakage, a major cause of potentiometer failure.

Turn Page for Complete Listing →

BOURNS TRIMPOT® POTENTIOMETERS—

| DESCRIPTION | Name | Model | Resistances (Ohms) ③ | Terminals ④ | End Settings (%) ⑤ | Tolerance (%) ⑥ | Power Rating (Watts) | Max Oper Temp (°C) | Adjustment Turns | Humidity Proof (Mil Specs) ⑦ | Size (Inches) | | | Standard Resist (Ohms) | Price ⑧ | | |
|---|---|---------------|----------------------|-------------|--------------------|-----------------|----------------------|--------------------|------------------|------------------------------|---------------|------|-------|------------------------|---------|--------|--------|
| | | | | | | | | | | | H | W | L | | 1-9 | 10-24 | 25-49 |
| TRIMPOT MULTI-TURN POTENTIOMETERS, UNSEALED | | | | | | | | | | | | | | | | | |
| General-Purpose Wirewound |  | Trimpot ⑨ 200 | 10Ω to 50K | L,S,P | 0-0.7 ⑤ | ±10 | 0.25 | 105 | 25 | No | 5/16 | 1/4 | 1-1/4 | 10 to 10K | \$4.86 | \$4.50 | \$4.05 |
| | | | 100K | L | 0-5 | | | | | | | | | 20K - 25K | 6.48 | 6.00 | 5.40 |
| General-Purpose Resistor ⑩ Carbon |  | Trimpot 215 | 20K to 1 Meg | L,S,P | 0-1.0 | ±20 | 0.25 | 125 | 22 | No | 5/16 | 1/4 | 1-1/4 | 20K to 1 Meg | 4.86 | 4.50 | 4.05 |
| High-Temperature Wirewound |  | Trimpot 260 | 10Ω to 50K | L,S,P | 0-0.2 ⑤ | ±10 | 1.0 | 175 | 25 | No | 5/16 | 1/4 | 1-1/4 | 10 to 10K | 5.94 | 5.50 | 4.95 |
| | | | 100K | L | 0-5 | | | | | | | | | 20K - 25K | 7.56 | 7.00 | 6.30 |
| TRIMPOT HUMIDITY-PROOF POTENTIOMETERS | | | | | | | | | | | | | | | | | |
| Sub-Miniature High-Temperature Humidity-Proof Wirewound |  | Trimpot 220 | 100Ω to 30K | L,W | 0-0.1 ⑤ | ±10 | 1.0 | 175 | 15 | Yes | 5/16 | 3/16 | 1 | 100 to 10K | 8.64 | 8.00 | 7.20 |
| Micro-Miniature High-Temperature Humidity-Proof Wirewound |  | Trimpot 3000 | 50Ω to 20K | P | 0-0.1 ⑤ | ±10 | 0.5 | 175 | 15 | Yes | 5/16 | 5/32 | 3/4 | 50 - 10K | 9.72 | 9.00 | 8.10 |
| High-Temperature Humidity-Proof Resistor Carbon |  | Trimpot 3051 | 20K to 1 Meg | L,S,P | 0-1.0 | ±20 | 0.25 | 150 | 22 | Yes | 5/16 | 3/16 | 1-1/4 | 20K to 1 Meg | 7.02 | 6.50 | 5.85 |
| Sub-Miniature High-Temperature Humidity-Proof Wirewound |  | Trimpot 3250 | 100Ω to 50K | L | 0-0.1 ⑤ | ±5 | 1.0 | 175 | 25 | Yes | 3/16 | 1/2 | 1/2 | 100 to 10K | 6.71 | 6.22 | 5.60 |
| | | | | P,W | | | | | | | 7/32 | 1/2 | 1/2 | 20K - 25K | 7.56 | 7.00 | 6.30 |
| Resistor—Carbon High-Temperature |  | Trimpot 3001 | 20K to 1 Meg | P | 0-1.0 | ±20 | 0.20 | 150 | 15 | Yes | 5/16 | 5/32 | 3/4 | 20K to 1 Meg | 9.18 | 8.50 | 7.65 |
| High-Temperature Humidity-Proof Wirewound |  | Trimpot 3010 | 10Ω to 50K | L,P | 0-0.2 ⑤ | ±5 | 1.0 | 175 | 25 | Yes | 5/16 | 9/32 | 1-1/4 | 10 to 10K | 7.02 | 6.50 | 5.85 |
| | | | 100K | L,P | 0-5 | | | | | | | | | 20K - 25K | 8.64 | 8.00 | 7.20 |
| Square Resistor Carbon High-Temperature |  | Trimpot 3251 | 20K to 1 Meg | L | 1.0 | ±20 | 0.50 | 150 | 25 | Yes | 3/16 | 1/2 | 1/2 | 20K to 1 Meg | 7.83 | 7.25 | 6.53 |
| | | | | P,W | | | | | | | 7/32 | 1/2 | 1/2 | | | | |
| High-Temperature Humidity-Proof Wirewound |  | Trimpot 224 | 10Ω to 50K | L,S,P | 0-0.1 ⑤ | ±5 | 1.0 | 175 | 22 | Yes | 5/16 | 3/16 | 1-1/4 | 10Ω to 10K | 7.02 | 6.50 | 5.85 |
| | | | 100K | L,S,P | 0-5 | | | | | | | | | 20K - 25K | 8.64 | 8.00 | 7.20 |
| High-Temperature Humidity-Proof Resistor Carbon |  | Trimpot 3011 | 20K to 1 Meg | L,P | 0-1.0 | ±20 | 0.25 | 150 | 22 | Yes | 5/16 | 9/32 | 1-1/4 | 20K to 1 Meg | 7.02 | 6.50 | 5.85 |
| Micro Miniature Humidity-Proof Wirewound |  | Trimpot 3280 | 100Ω to 50K | L,P,W | 0-0.1 ⑤ | ±5 | 1.0 | 175 | 25 | Yes | 3/8 | 3/8 | 13/64 | 100Ω - 10K | 7.56 | 7.00 | 6.30 |
| | | | | | | | | | | | | | | 20K - 25K | 9.18 | 8.50 | 7.65 |
| | | | | | | | | | | | | | | 50K | 9.12 | 9.00 | 8.10 |

① Key to terminal types:

L = Insulated stranded leads

S = Solder lugs (includes 3367S & 3300S, panel mounting bushing only)

P = Printed circuit pins

W = Uninsulated wires (side mounting 3250, 3251, 3280)

② Franchised local distributors quote factory prices through 500 pieces. Contact factory for prices in higher quantities.

③ The following resistances are standard if they fall within the limits listed: 10, 20, 50, 100, 200, 500, 1K, 2K, 5K, 10K, 20K, 25K (wirewound only), 50K, 100K, 200K, 500K, 750K, 1 Meg. Other resistances available on special order.

④ Or 0 to 0.5 ohms, whichever is greater.











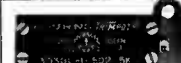


⑤ Or 0 to 1.0 ohms, whichever is greater.

⑥ Closer tolerances available on request, except commercial models.


Panel Mounting: All models (except 3000, 3067, 3068 and 3250) are available with the added convenience of panel mounting. Unique design permits quick factory conversion of "off-the-shelf" units.



LARGEST SELECTION, LONGEST RECORD OF RELIABILITY

| DESCRIPTION | Name | Model | Resistances (Ohms) ③ | Terminals ① | End Settings (%) ② | Tolerance (%) ④ | Power Rating (Watts) | Max. Oper. Temp. (°C) | Adjustment Turns | Humidity Proof (Mil Specs) ⑦ | Size (Inches) | | | Standard Resist. (Ohms) | Price ⑧ | | |
|--|------------|-------------------|----------------------|-------------|--------------------|-----------------|----------------------|-----------------------|------------------|------------------------------|--------------------------------------|---|------------------------------------|-------------------------|-------------------------|-------------------------|-------|
| | | | | | | | | | | | H | W | L | | 1-9 | 10-24 | 25-49 |
| TRIMPOT SINGLE-TURN POTENTIOMETERS | | | | | | | | | | | | | | | | | |
| Humidity-Proof Wirewound High-Temperature Microminiature  | Trimpot | 3300 | 50Ω to 20K | S P | 0-1.0 | ±5 | 0.5 | 175 | 1 | Yes | 5/16 dia. x 7/32 5/16 dia. x 3/16 | | 50-10K 20K | 5.94 7.56 | 5.50 7.00 | 4.95 6.30 | |
| Sub-Miniature Single-Turn Wirewound  | Trimpot | 3367 | 100Ω to 20K | P S | 0-1.0 | ±5 | 0.5 | 105 | 1 | Steady State Only | 1/2 dia. x 15/64 1/2 dia. x 17/64 | | 100-20K | 4.86 5.67 | 4.50 5.25 | 4.05 4.73 | |
| Sub-Miniature Single-Turn Resistor-Carbon  | Trimpot | 3368 | 20K to 1 Meg | P S | 0-1.0 | ±20 | 0.25 | 105 | 1 | Steady State Only | 1/2 dia. x 15/64 1/2 dia. x 17/64 | | 20K - 1 Meg (P) 20K - 1 Meg (S) | 5.94 6.75 | 5.50 6.25 | 4.95 5.63 | |
| COMMERCIAL POTENTIOMETERS | | | | | | | | | | | | | | | | | |
| Commercial Wirewound  | Trimit ⑩ | 271 273 275 | 100Ω to 10K | L S P | 0-2.0 | ±10 | 0.25 | 85 | 25 | No | 5/16 1/4 1-1/4 | | 100 to 10K | 3.18 | 2.95 | 2.65 | |
| Commercial Resistor Carbon  | Trimit | 272 274 276 | 20K to 1 Meg | L S P | 0-7.5 | ±20 | 0.2 | 85 | 25 | No | 5/16 1/4 1-1/4 | | 20K to 1 Meg | 3.78 | 3.50 | 3.15 | |
| Commercial Wirewound  | E-Z-Trim ⑪ | 3067 | 100Ω to 20K | S,P | 0-1.0 | ±10 | 0.5 | 85 | 15 | Steady State Only | 23/64 9/32 1 | | 100-20K | 1.65 | 1.53 | 1.37 | |
| Commercial Resistor Carbon  | E-Z-Trim | 3068 | 20K to 1 Meg | S,P | 0-5.0 | ±20 | 0.2 | 85 | 15 | Steady State Only | 23/64 9/32 1 | | 20K to 1 Meg | 1.65 | 1.53 | 1.37 | |
| SPECIAL-PURPOSE POTENTIOMETERS | | | | | | | | | | | | | | | | | |
| High-Power High-Temperature (2-Watt) Wirewound  | Trimpot | 207 | 100Ω to 100K | L | 0-0.2 ⑫ | ±10 | 2.0 | 175 | 25 | No ⑬ | 13/16 9/32 1-1/4 | | 100 to 50K 100K | 10.26 11.88 | 5.50 11.00 | 8.55 9.90 | |
| High-Power Humidity-Proof Wirewound  | Trimpot | 3020 | | L | 0-0.1 ⑫ | ±5 | 3.75 | 200 | 25 | Yes | 21/64 1/4 1-1/4 | | — | ⑭ | ⑮ | ⑯ | |
| Dual-Element Wirewound  | Twinpot ⑰ | 209 | 10Ω to 50K | L | 0-0.2 ⑫ | ±10 | 0.25 (each element) | 105 | 25 | No ⑬ | 5/16 1/2 1-1/4 | | 10 to 10K 20K - 25K 50K | 12.96 14.58 16.20 | 12.00 13.50 15.00 | 10.80 12.15 13.50 | |
| High-Power High-Temperature (15-Watt) Wirewound  | Trimpot | 3030 | 10Ω to 10K | L | 0-5.0 | ±10 | 15 | 265 | 25 | No | 1 3/4 3 3/4 1 1/4 | | 10-10K | 12.96 | 12.00 | 10.80 | |
| TRIMPOT PRECISION POTENTIOMETERS | | | | | | | | | | | | | | | | | |
| Bushing Mount Wirewound  | — | 3500 | 500Ω to 125K | S | 1.0-5.0 ohms | ±3 | 2 | 125 | 10 | Yes ⑱ | 7/8 dia. | 1 | 500Ω to 125K | 11.99 | 11.39 | 10.79 | |
| Read Out, Wirewound  | Knobpot ⑲ | 3600 | 1KΩ to 100KΩ | S | 0 to 0.1 | ±5 | 1.5 | 85 | 10 | Steady State | 3/4 dia. | 1 | — | ⑳ | ㉑ | ㉒ | |

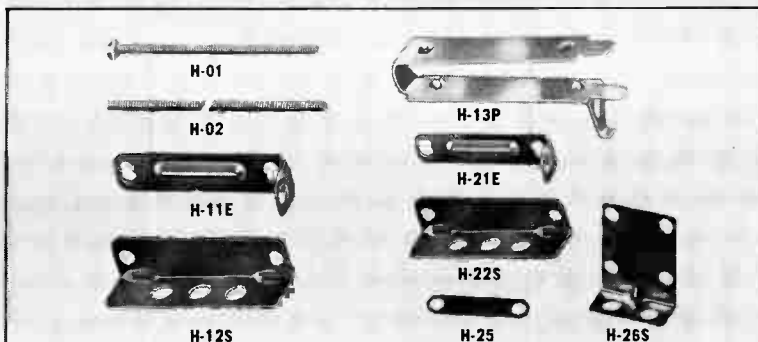
① All models are sealed against sand and dust.
 ② Humidity-proof version available on special order. Contact factory for part number, price and delivery.
 ③ TRIMPOT, TWINPOT, TRIMIT, and E-Z-TRIM are registered trademarks of Bourns, Inc. Other products made by Bourns, Inc., are identified by trademarks which include BOURNS, TRIMISTOR®, TRIMM®, KNOBPOT®, SILVER-WELD®, RESISTON®, PALIRIUM®, and RESISTALLOY®.
 ④ (A) To order units that meet steady-state humidity, specify standard part number 3500S-1-(RC) (RC—Resistance Code).
 (B) To order units that meet cycling humidity, specify the special part number 3500S-20-(RC).
 ⑤ Contact factory or nearest representative for prices.



BOURNS
 BOURNS, INC., TRIMPOT DIVISION
 RIVERSIDE, CALIF.

TRIMPOT®—THE ORIGINAL LEADSCREW-ACTUATED POTENTIOMETER

The Bourns Trimpot® is the original adjustment potentiometer. It was developed in 1952 to meet the need of the aircraft/missile industry for a rugged, high-performance miniature potentiometer. The Trimpot® pioneered such potentiometer qualities as small size, accurate adjustment, stable settings, and reliability.



TRIMPOT® POTENTIOMETER MOUNTING HARDWARE

Mounting screws, mounting brackets, and clip brackets are available from factory or local distributor stock to adapt Bourns potentiometers to virtually any mounting situation. H-01 Screw • H-02 Rod Stock • H-11E End Bracket, 1" Centers • H-12S Side Bracket, 1" Centers • H-13P Clip in Bracket • H-21E End Bracket, 3/4" Centers • H-22S Side Bracket, 3/4" Centers • H-25 Stacking Straps/Sq. Units, .520 Centers • H-26S Side Bracket/Sq. Units, .520 Centers.

Panel Mounts. All models except 3250 are available with the added convenience of panel mounting.

TRIMPOT® RELAYS

RELIABLE BOURNS RELAY — MODEL 3100



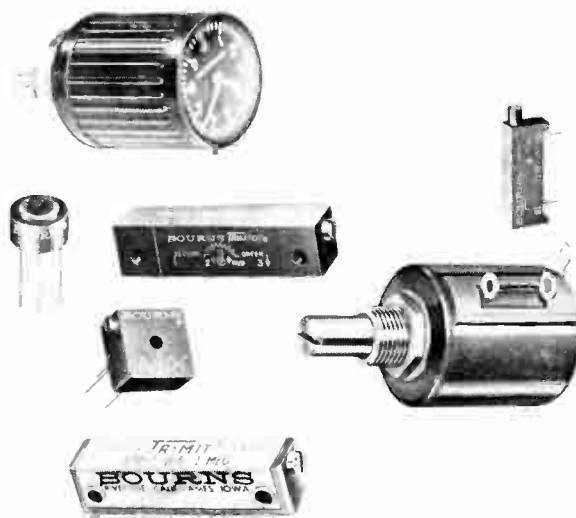
| Size | Contacts | Contact Rating | Pick-up Sensitivity | Coil Resistances | Nominal Voltages DC | Environmental Specifications | Terminal Styles |
|---------------|----------|-------------------------------|---------------------|------------------|---------------------|------------------------------|--|
| .2 x .4 x .6" | SPDT | 0.25 amp. resistive, 26.5 VDC | 100mw | 50 to 2000 | 4.2-26.5 | MIL-R-5757D | plug-in pins, solder hook, 1 1/2" straight leads |

Now Bourns offers you Trimpot reliability in relays that are so small that they fit into a transistor case. Efficient single coil design and packaging mean improved sensitivity. Other features include rotary balanced armature, hermetically sealed case, and self-cleaning long-life contacts. To ensure consistent quality, Bourns subjects every unit to a 5000-operation run-in plus 100% final inspection—including mass spectrometer leak testing—for all important relay characteristics.

CHOOSE BOURNS TRIMPOT® POTENTIOMETERS

THE INDUSTRY'S LARGEST
SELECTION OF ADJUSTMENT
AND PRECISION
POTENTIOMETERS

32 Standard Models
4 Terminal Types
3 Mounting Styles



MILITARY ■ INDUSTRIAL ■ COMMERCIAL ■ WIREWOUND ■ RESISTON® CARBON ■ RECTANGULAR ■ SQUARE ■ PRECISION
ROTARY ■ HUMIDITY-PROOF ■ HIGH-TEMPERATURE ■ SPECIAL-PURPOSE



BOURNS

BOURNS INC., TRIMPOT DIVISION
RIVERSIDE, CALIF.

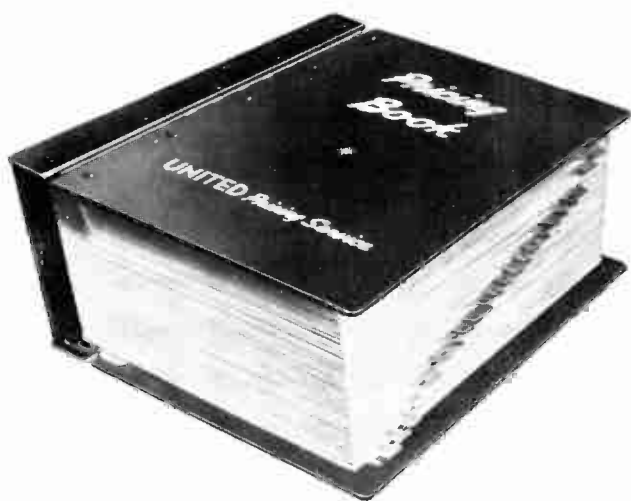
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DELIVERY

Delivery is often dependent on availability of raw materials. Check with your distributor for delivery information at the time you place your order.

AEROVOX*Resistors***±1% PRECISION ® CARBOFILM AND ® CARBOMOLD RESISTORS****CARBOFILM PRECISION RESISTORS**

Precision deposited carbon resistors designed for circuits calling for the accuracy and stability of wire-wound resistors with the marked economy of carbon resistors. The exclusive Aeroglaze conformal coating offers mechanical protection superior to any other coating eliminating the need for special tubes, sleeves and jackets. Aeroglaze coating will meet all moisture requirements of MIL-R-10509B. Carbofilm resistors offer outstanding stability, low voltage coefficient, low capacitance and inductance in high frequency applications.

CARBOFILM CHARACTERISTICS

TESTING: All Tests conducted in accordance with MIL-R-10509B requirements.

TEMPERATURE COEFFICIENT: Approximately 200 ppm per degree C in the lower resistance ranges and not exceeding 500 ppm per degree C in the highest values specified by MIL-R-10509B.

MOISTURE RESISTANCE: Will meet or surpass the requirements of MIL-R-10509B.

LOAD LIFE: When tested for more than 1,000 hours at full load operation in 40°C ambient temperature, maximum changes are less than 1% with an average change of less than 0.5%.

TEMPERATURE CYCLING: After 5 complete temperature cycles there is an average change of 0.21% with a maximum change of less than 0.5%.

SHORT TIME OVERLOAD: When subjected to 2.5 times the rated working voltage, but not exceeding 2 times the maximum rated voltage for 5 seconds, changes are less than 0.25% with an average change of 0.13%.

LOW TEMPERATURE OPERATION: Maximum changes are less than 1%.

ACCURACY: Guaranteed tolerance of plus/minus 1% at 25°C. (77°F.)

AGING: Due to manufacturing process and control, changes attributed to aging are negligible. The average change in resistance for self-aging is approximately 0.2% per year.

VOLTAGE COEFFICIENT: Does not exceed .002% per volt.

CARBOMOLD PRECISION RESISTORS

A superior molded carbon-deposited resistor manufactured under the most exacting quality control standards and specifications assuring excellent performance under the most adverse operating conditions. Resistors are encapsulated in a strong reinforced moisture and heat resistant plastic for added stability, precision and reliability. Rated for full load operation at 70°C and linearly derated to zero load at 150°C. Will meet or exceed insulation resistance requirements of MIL-R-10509D.

CARBOMOLD CHARACTERISTICS

TESTING: All tests conducted in accordance with MIL-R-10509C requirements.

TEMPERATURE COEFFICIENT: Extends from approximately 200 ppm per degree C in the lower resistance ranges to and not exceeding 500 ppm per degree C at the highest values specified by MIL-R-10509D.

MOISTURE RESISTANCE: Will meet or surpass the requirements of MIL-R-10509D.

LOAD LIFE: When tested for more than 1000 hours at full load operation in 70°C ambient temperature, maximum changes less than 1% with an average change of less than 0.5%.

TEMPERATURE CYCLING: After 5 complete temperature cycles there is an average change of 0.21% with a maximum change of less than 0.5%.

SHORT TIME OVERLOAD: When subjected to 2.5 times the rated working voltage, but not exceeding 2 times the maximum rated voltage for 5 seconds, changes are less than 0.25% with an average change of 0.13%.

LOW TEMPERATURE OPERATION: Maximum changes are less than 1%.

ACCURACY: Guaranteed tolerance of plus/minus 1% at 25°C.

AGING: Average change in resistance for self-aging, approximately 0.2% in a year.

VOLTAGE COEFFICIENT: Does not exceed .002% per volt.

CARBOFILM

| TYPE | SIZES | STD. MIN. OHMS | STD. MAX. MEGOHMS | Availability | | MIL-R-10509B Max DC Voltage | Equiv. to MIL-R-10509B | | | MARKING |
|--------------------|-----------------------|----------------|-------------------|--------------|----------------|-----------------------------|------------------------|-------|------|--|
| | | | | Comm. Value | MIL-BELL Value | | Type | Char. | Tol. | |
| CPX $\frac{1}{2}$ | .203 x $\frac{1}{2}$ | 10 | 2.2 | ✓ | ✓ | 350 | RN20 | X | 1% | RN20 Number |
| CPX $\frac{1}{4}$ | .260 x $\frac{3}{32}$ | 2,210,000 | 5.0 | ✓ | ✓ | 350 | --- | -- | --- | Type, Value, Tolerance |
| CPLX $\frac{1}{2}$ | .260 x 1 | 5,100,000 | 7.5 | ✓ | ✓ | 500 | --- | -- | --- | Type, Value, Tolerance |
| * CPX 1 | .328 x $\frac{1}{8}$ | 10 | 15 | ✓ | ✓ | 500 | RN25 | X | 1% | Type, Value, Tolerance and RN25 Number |
| ** CPX 2 | .328 x $2\frac{1}{4}$ | 50 | 100† | ✓ | ✓ | 750 | RN30 | X | 1% | Type, Value, Tolerance and RN30 Number |

† Only stock value above 50 megohms is 100 megohms furnished in ±2% tolerance.

* Values from 10.1 meg to 15 meg will be furnished at ±2% only.

** Values from 30.1 meg to 100 meg will be furnished at ±2% only, availability.

CARBOMOLD**Carbomold Stocked In Mil-Bell Values Only**

| TYPE | SIZES | STD. MIN. OHMS | STD. MAX. MEGOHMS | MIL-R-10509D Max. DC Volt. | Equiv. to MIL-R-10509D | | | MARKING |
|--------------------|-----------------------|----------------|-------------------|----------------------------|------------------------|-------|------|-------------------------------------|
| | | | | | Type | Char. | Tol. | |
| CPM- $\frac{1}{8}$ | .140 x .395 | 10 | 1.0 | 250 | RN60 | B | F | RN60 Number |
| CPM- $\frac{1}{4}$ | .220 x .590 | 10 | 2.0 | 300 | RN65 | B | F | RN65 Number |
| CPM- $\frac{1}{2}$ | .250 x .745 | 10 | 2.49 | 350 | RN70 | B | F | Type, Value, Tolerance, RN70 Number |
| CPM-1 | .375 x $1\frac{1}{4}$ | 10 | 5.11 | 500 | RN75 | B | F | Type, Value, Tolerance, RN75 Number |
| CPM-2 | .375 x $2\frac{1}{2}$ | 30 | 10.0 | 750 | RN80 | B | F | Type, Value, Tolerance, RN80 Number |

AEROVOX*Resistors***±1% PRECISION® CARBOFILM AND® CARBOMOLD RESISTORS****AEROGLAZE® CARBOFILM ± 1%
RESISTORS
MIL-BELL VALUES******COMMERCIAL STOCK VALUES ±1% TOLERANCE**

| OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | MEG- OHMS | MEG- OHMS | MEG- OHMS | |
|------|------|------|------|------|------|--------|--------|---------|---------|---------|-------|------|--------------|--------------|--------------|--|
| 10.0 | 36 | 82 | 300 | 820 | 2950 | 7000 | 20,000 | 62,000 | 220,000 | 650,000 | 2.0 | 6.2 | 27.0 | | | |
| 11.0 | 39 | 85 | 330 | 850 | 3000 | 7450 | 22,000 | 65,000 | 225,000 | 680,000 | 2.2 | 5.5 | 30.0 | | | |
| 12.0 | 40 | 89.5 | 350 | 900 | 3300 | 7500 | 22,500 | 68,000 | 240,000 | 700,000 | 2.225 | 6.8 | 33.0 | | | |
| 12.5 | 43 | 90 | 360 | 910 | 3500 | 8000 | 24,000 | 70,000 | 250,000 | 750,000 | 2.4 | 7.0 | 36.0 | | | |
| 13.0 | 44.5 | 91 | 390 | 1000 | 3600 | 8200 | 25,000 | 75,000 | 270,000 | 800,000 | 2.5 | 7.5 | 39.0 | | | |
| 14.5 | 45 | 99.5 | 400 | 1100 | 3900 | 8500 | 27,000 | 80,000 | 300,000 | 820,000 | 2.7 | 8.0 | 43.0 | | | |
| 15.0 | 47 | 100 | 430 | 1200 | 4000 | 8950 | 30,000 | 82,000 | 330,000 | 850,000 | 3.0 | 8.2 | 47.0 | | | |
| 16.0 | 50 | 110 | 450 | 1250 | 4300 | 9000 | 33,000 | 85,000 | 350,000 | 900,000 | 3.3 | 8.5 | 50.0 | | | |
| 17.5 | 51 | 120 | 470 | 1300 | 4450 | 9100 | 35,000 | 90,000 | 360,000 | 910,000 | 3.5 | 9.0 | 100.0* | | | |
| 18.0 | 55 | 130 | 500 | 1450 | 4500 | 9950 | 36,000 | 91,000 | 390,000 | | 3.6 | 9.1 | | | | |
| 20.0 | 56 | 150 | 510 | 1500 | 4700 | 10,000 | 39,000 | 100,000 | 400,000 | MEGOHMS | 3.9 | 10.0 | | | | |
| 22.0 | 59.5 | 160 | 550 | 1600 | 5000 | 11,000 | 40,000 | 110,000 | 430,000 | | 4.0 | 12.0 | | | | |
| 22.5 | 60 | 175 | 560 | 1750 | 5100 | 12,000 | 43,000 | 120,000 | 450,000 | 1.0 | 4.3 | 12.5 | | | | |
| 24.0 | 62 | 180 | 600 | 1800 | 5500 | 12,500 | 45,000 | 125,000 | 470,000 | 1.1 | 4.5 | 13.0 | | | | |
| 25.0 | 65 | 200 | 620 | 2000 | 5600 | 13,000 | 47,000 | 130,000 | 500,000 | 1.2 | 4.7 | 15.0 | | | | |
| 27.0 | 68 | 220 | 650 | 2200 | 5950 | 13,500 | 50,000 | 150,000 | 510,000 | 1.25 | 5.0 | 16.0 | | | | |
| 29.5 | 70 | 225 | 680 | 2250 | 6000 | 15,000 | 51,000 | 160,000 | 550,000 | 1.3 | 5.1 | 18.0 | | | | |
| 30.0 | 74.5 | 240 | 700 | 2400 | 6200 | 16,000 | 55,000 | 175,000 | 560,000 | 1.5 | 5.5 | 20.0 | | | | |
| 33.0 | 75 | 250 | 750 | 2500 | 6500 | 17,500 | 56,000 | 180,000 | 600,000 | 1.6 | 5.6 | 22.0 | | | | |
| 35 | 80 | 270 | 800 | 2700 | 6800 | 18,000 | 60,000 | 200,000 | 620,000 | 1.8 | 6.0 | 25.0 | | | | |

| | Net Price |
|-----------------------|--------------|
| CPSX½ (RN20X) | |
| 10 ohms to 49.9 ohms | .64 |
| 50 ohms to 2.2 meg | .54 |
| CPX½ | |
| 2.21 meg to 5.0 meg | .83 |
| CPLX½ | |
| 5.1 meg to 7.5 meg | .90 |
| CPX-1 (RN25X) | |
| 10 ohms to 99.9 ohms | .94 |
| 100 ohms to 5.0 meg | .81 |
| 5.01 meg to 10.0 meg | .89 |
| 10.1 meg to 15.0 meg* | 1.03 |
| CPX-2 (RN30X) | |
| 50 ohms to 199 ohms | 1.20 |
| 200 ohms to 10.0 meg | .97 |
| 10.1 meg to 30.0 meg | 1.13 |
| 30.1 meg to 50.0 meg* | 1.25 |
| 100 meg* | 1.62 |

*Only stock value above 50 megohms is 100 megohms furnished in ±2% tolerance.
For values from 3 to 10 ohms in CPX½ check factory for price and availability.

*All new production will be furnished at ± 2% only for values in these ranges.

MIL-BELL STOCK VALUES ±1% TOLERANCE

| OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | OHMS | MEG- OHMS | MEG- OHMS | MEG- OHMS |
|------|------|------|------|------|------|------|------|-------|-------|--------|--------|--------|---------|------|--------------|--------------|--------------|
| 10.0 | 23.2 | 53.6 | 124 | 287 | 665 | 1540 | 3570 | 8250 | 19100 | 44200 | 102000 | 237000 | 549000 | 1.13 | 2.61 | 6.04 | |
| 10.2 | 23.7 | 54.9 | 127 | 294 | 681 | 1580 | 3650 | 8450 | 19600 | 45300 | 105000 | 243000 | 562000 | 1.15 | 2.67 | 6.19 | |
| 10.5 | 24.3 | 56.2 | 130 | 301 | 698 | 1620 | 3740 | 8660 | 20000 | 46400 | 107000 | 249000 | 576000 | 1.18 | 2.74 | 6.34 | |
| 10.7 | 24.9 | 57.6 | 133 | 309 | 715 | 1650 | 3830 | 8870 | 20500 | 47500 | 110000 | 255000 | 590000 | 1.21 | 2.80 | 6.49 | |
| 11.0 | 25.5 | 59.0 | 137 | 316 | 732 | 1690 | 3920 | 9090 | 21000 | 48700 | 113000 | 261000 | 604000 | 1.24 | 2.87 | 6.65 | |
| 11.3 | 26.1 | 60.4 | 140 | 324 | 750 | 1740 | 4020 | 9310 | 21500 | 49900 | 115000 | 267000 | 619000 | 1.27 | 2.94 | 6.81 | |
| 11.5 | 26.7 | 61.9 | 143 | 332 | 768 | 1780 | 4120 | 9530 | 22100 | 51100 | 118000 | 274000 | 634000 | 1.30 | 3.01 | 6.98 | |
| 11.8 | 27.4 | 63.4 | 147 | 340 | 787 | 1820 | 4220 | 9760 | 22600 | 52300 | 121000 | 280000 | 649000 | 1.33 | 3.09 | 7.15 | |
| 12.1 | 28.0 | 64.9 | 150 | 348 | 806 | 1870 | 4320 | 10000 | 23200 | 53600 | 124000 | 287000 | 665000 | 1.37 | 3.16 | 7.32 | |
| 12.4 | 28.7 | 66.5 | 154 | 357 | 825 | 1910 | 4420 | 10200 | 23700 | 54900 | 127000 | 294000 | 681000 | 1.40 | 3.24 | 7.50 | |
| 12.7 | 29.4 | 68.1 | 158 | 365 | 845 | 1960 | 4530 | 10500 | 24300 | 56200 | 130000 | 301000 | 698000 | 1.43 | 3.32 | 7.68 | |
| 13.0 | 30.1 | 69.8 | 162 | 374 | 866 | 2000 | 4640 | 10700 | 24900 | 57600 | 133000 | 309000 | 715000 | 1.47 | 3.40 | 7.87 | |
| 13.3 | 30.9 | 71.5 | 165 | 383 | 887 | 2050 | 4750 | 11000 | 25500 | 59000 | 137000 | 316000 | 732000 | 1.50 | 3.48 | 8.06 | |
| 13.7 | 31.6 | 73.2 | 169 | 392 | 909 | 2100 | 4870 | 11300 | 26100 | 60400 | 140000 | 324000 | 750000 | 1.54 | 3.57 | 8.25 | |
| 14.0 | 32.4 | 75.0 | 174 | 402 | 931 | 2150 | 4990 | 11500 | 26700 | 61900 | 143000 | 332000 | 768000 | 1.58 | 3.65 | 8.45 | |
| 14.3 | 33.2 | 76.8 | 178 | 412 | 953 | 2210 | 5110 | 11800 | 27400 | 63400 | 147000 | 340000 | 787000 | 1.62 | 3.74 | 8.66 | |
| 14.7 | 34.0 | 78.7 | 182 | 422 | 976 | 2260 | 5230 | 12100 | 28000 | 64900 | 150000 | 348000 | 806000 | 1.65 | 3.83 | 8.87 | |
| 15.0 | 34.8 | 80.6 | 187 | 432 | 1000 | 2320 | 5360 | 12400 | 28700 | 66500 | 154000 | 357000 | 825000 | 1.69 | 3.92 | 9.09 | |
| 15.4 | 35.7 | 82.5 | 191 | 442 | 1020 | 2370 | 5490 | 12700 | 29400 | 68100 | 158000 | 365000 | 845000 | 1.74 | 4.02 | 9.31 | |
| 15.8 | 36.5 | 84.5 | 196 | 453 | 1050 | 2430 | 5620 | 13000 | 30100 | 69800 | 162000 | 374000 | 866000 | 1.78 | 4.12 | 9.53 | |
| 16.2 | 37.4 | 86.6 | 200 | 464 | 1070 | 2490 | 5760 | 13300 | 30900 | 71500 | 165000 | 383000 | 887000 | 1.82 | 4.22 | 9.76 | |
| 16.5 | 38.3 | 88.7 | 205 | 475 | 1100 | 2550 | 5900 | 13700 | 31600 | 73200 | 169000 | 392000 | 909000 | 1.87 | 4.32 | 10.0 | |
| 16.9 | 39.2 | 90.9 | 210 | 487 | 1130 | 2610 | 6040 | 14000 | 32400 | 75000 | 174000 | 402000 | 931000 | 1.91 | 4.42 | | |
| 17.4 | 40.2 | 93.1 | 215 | 499 | 1150 | 2670 | 6190 | 14300 | 33200 | 76800 | 178000 | 412000 | 953000 | 1.96 | 4.53 | | |
| 17.8 | 41.2 | 95.3 | 221 | 511 | 1180 | 2740 | 6340 | 14700 | 34000 | 78700 | 182000 | 422000 | 976000 | 2.00 | 4.64 | | |
| 18.2 | 42.2 | 97.6 | 226 | 523 | 1210 | 2800 | 6490 | 15000 | 34800 | 80600 | 187000 | 432000 | | 2.05 | 4.75 | | |
| 18.7 | 43.2 | 100 | 232 | 536 | 1240 | 2870 | 6650 | 15400 | 35700 | 82500 | 191000 | 442000 | | 2.10 | 4.87 | | |
| 19.1 | 44.2 | 102 | 237 | 549 | 1270 | 2940 | 6810 | 15800 | 36500 | 84500 | 196000 | 453000 | MEGOHMS | 2.15 | 4.99 | | |
| 19.6 | 45.3 | 105 | 243 | 562 | 1300 | 3010 | 6980 | 16200 | 37400 | 86600 | 200000 | 464000 | | 2.21 | 5.11 | | |
| 20.0 | 46.4 | 107 | 249 | 576 | 1330 | 3090 | 7150 | 16500 | 38300 | 88700 | 205000 | 475000 | | 2.26 | 5.23 | | |
| 20.5 | 47.5 | 110 | 255 | 590 | 1370 | 3160 | 7320 | 16900 | 39200 | 90900 | 210000 | 487000 | | 1.00 | 2.32 | 5.36 | |
| 21.0 | 48.7 | 113 | 261 | 604 | 1400 | 3240 | 7500 | 17400 | 40200 | 93100 | 215000 | 499000 | | 1.02 | 2.37 | 5.49 | |
| 21.5 | 49.9 | 115 | 267 | 619 | 1430 | 3320 | 7680 | 17800 | 41200 | 95300 | 221000 | 511000 | | 1.05 | 2.43 | 5.62 | |
| 22.1 | 51.1 | 118 | 274 | 634 | 1470 | 3400 | 7870 | 18200 | 42200 | 97600 | 226000 | 523000 | | 1.07 | 2.49 | 5.76 | |
| 22.6 | 52.3 | 121 | 280 | 649 | 1500 | 3480 | 8060 | 18700 | 43200 | 100000 | 232000 | 536000 | | 1.10 | 2.55 | 5.90 | |

**CARBOMOLD ± 1% RESISTORS
MIL-BELL VALUES****

| | Net Price |
|------------------------|--------------|
| CPM ⅛ (RN60B) | |
| 10 ohms to 24.9 ohms | 1.78 |
| 25 ohms to 49.9 ohms | 1.18 |
| 50 ohms to 500 ohms | 1.02 |
| 501 ohms to 500 K ohms | .96 |
| 501 K ohms to 1 meg | 1.02 |
| CPM ¼ (RN65B) | |
| 10 ohms to 49.9 ohms | .99 |
| 50 ohms to 500 K ohms | .94 |
| 501 K ohms to 1.0 meg | .99 |
| 1.01 meg to 2.0 meg | 1.08 |
| CPM ½ (RN70B) | |
| 10 ohms to 49.9 ohms | .91 |
| 50 ohms to 2.2 meg | .85 |
| 2.21 meg to 2.2 meg | 1.03 |
| CPM 1 (RN75B) | |
| 10 ohms to 99.9 ohms | 1.36 |
| 100 ohms to 5.0 meg | 1.28 |
| 5.01 meg to 5.11 meg | 1.42 |
| CPM 2 (RN80B) | |
| 30 ohms to 199 ohms | 1.99 |
| 200 ohms to 10 meg | 1.65 |

**Prices listed are for MIL-BELL values only. For commercial standard values listed in catalog IDC 561 add 10% to the above prices in the appropriate columns. For prices on any values other than MIL-BELL or catalog commercial standard values contact your authorized Aerovox Industrial Distributor.

PACKAGING:

Commercial Stock Values—Small quantities packaged individually in sealed plastic tubes. Also available in larger quantities, protected by paper sleeves and packed in bulk.

Mil Bell Stock Values—Small quantities packaged individually in sealed plastic tubes. Also available in larger quantities packed in bulk.

★Request OEM Price in quantities of 25-49, 50 to 99, 100 to 249, 250-499 and 500 and up.

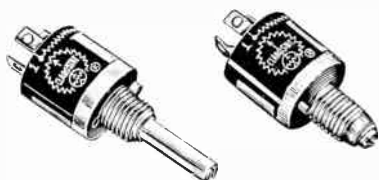
PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

SERIES 57M & 57EJ

½" Single Turn Potentiometers

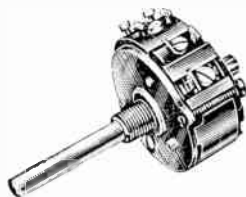


High performance potentiometer packaged in a ½" diameter housing. Quality construction throughout. Available in two models; Series 57M rated at 1.5 watts at 40°C and Series 57EJ rated at 2 watts at 70°C. The high-temperature Series 57EJ features glass-sealed terminals. Both units are corrosion resistant.

| SERIES 57M & 57M9 Stock Values | SERIES 57EJA & 57EJB Stock Values | Resistance Ohms | Resolution 100/Total Turns |
|--------------------------------------|---|--------------------|----------------------------------|
| 50 Ω | 50 Ω | 50,000 | 0.16% |
| 100 Ω | 100 Ω | 20,000 | 0.19% |
| 200 Ω | 200 Ω | 10,000 | 0.26% |
| 500 Ω | 500 Ω | 5,000 | 0.30% |
| 1000 Ω | 1000 Ω | 1,000 | 0.35% |
| 5000 Ω | 5000 Ω | 500 | 0.45% |
| 10,000 Ω | 10,000 Ω | 200 | 0.58% |
| 20,000 Ω | 20,000 Ω | 100 | 0.70% |
| 50,000 Ω | 50,000 Ω | 50 | 0.91% |

SERIES 42-900

High Versatility Single-Turn Potentiometer



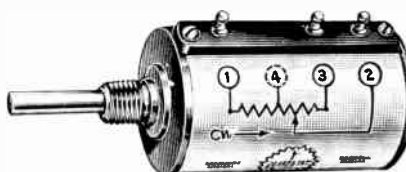
Used and approved by the millions in all types of applications ranging from ultra-critical military systems to ultra-dependable hard-working industrial equipment. Extra tap affords greater electrical versatility. Shaft extension through rear of unit permits addition of switching or other functions actuated by single shaft.

| Stock Values | ***Terminal Linearity | Resolution 100/Total Turns | Temp. Coefficient of Wire |
|--------------|--------------------------|----------------------------------|---------------------------------|
| 100,000 | ± 0.25% | .053% | ± .00002 Ω/Ω/°C |
| 50,000 | ± 0.25% | .056% | ± .00002 Ω/Ω/°C |
| 20,000 | ± 0.25% | .105% | ± .00002 Ω/Ω/°C |
| 10,000 | ± 0.25% | .125% | ± .00002 Ω/Ω/°C |
| 5,000 | ± 0.25% | .167% | ± .00002 Ω/Ω/°C |
| 2,500 | ± 0.25% | .148% | ± .00002 Ω/Ω/°C |
| 1,000 | ± 0.25% | .191% | ± .00002 Ω/Ω/°C |
| 500 | ± 0.50% | .174% | .00017 Ω/Ω/°C |
| 100 | ± 0.50% | .351% | .00017 Ω/Ω/°C |
| 50 | ± 0.50% | .435% | .00017 Ω/Ω/°C |

***Terminal Linearity: The maximum deviation of the actual output characteristic from a straight reference line extending between zero and the total applied voltage over the actual effective rotation.

SERIES 59-14JA

10-Turn Precision Potentiometers

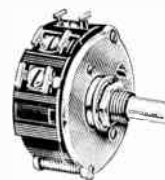


An advanced multi-turn potentiometer offering greater winding length and resolution for its diameter. Fits all standard multi-turn read-out indicators. Extra-long bushing to meet all mounting needs. Extra precise mechanical design and construction combined with tight electrical tolerances provides high degree of accuracy in quantitative functions.

| SERIES 59-14JA Stock Values | Resistance Ohms | Resolutions 100/Total Turns |
|-----------------------------------|--------------------|-----------------------------------|
| 500 Ω | 100,000 | .009% |
| 1000 Ω | 50,000 | .010% |
| 2000 Ω | 30,000 | .014% |
| 5000 Ω | 20,000 | .015% |
| 10,000 Ω | 10,000 | .018% |
| 20,000 Ω | 5,000 | .025% |
| 30,000 Ω | 2,000 | .023% |
| 50,000 Ω | 1,000 | .029% |
| 100,000 Ω | 500 | .024% |

SERIES 42JA

Single Turn Potentiometer



All the same fine qualities and performance tolerances of the Series 42-900, with the exception of the additional tap, and shaft extension. The ideal unit for extra-dependable potentiometer requirements.

| Stock Values | ***Absolute Linearity | Resolution 100/Total Turns | Temp. Coefficient of Wire |
|--------------|--------------------------|----------------------------------|---------------------------------|
| 100,000 | ± 0.5% | .051% | ± .00002 Ω/Ω/°C |
| 50,000 | ± 0.5% | .074% | ± .00002 Ω/Ω/°C |
| 20,000 | ± 0.5% | .10% | ± .00002 Ω/Ω/°C |
| 10,000 | ± 0.5% | .12% | ± .00002 Ω/Ω/°C |
| 5,000 | ± 0.5% | .17% | ± .00002 Ω/Ω/°C |
| 2,500 | ± 0.5% | .14% | ± .00002 Ω/Ω/°C |
| 1,000 | ± 0.5% | .19% | ± .00002 Ω/Ω/°C |
| 500 | ± 0.5% | .18% | .00017 Ω/Ω/°C |
| 100 | ± 1.0% | .28% | .00017 Ω/Ω/°C |
| 50 | ± 1.0% | .35% | .00017 Ω/Ω/°C |

***Absolute Linearity: The maximum deviation of the actual output characteristic from a straight reference line extending between zero and the total applied voltage over the theoretical effective rotation.

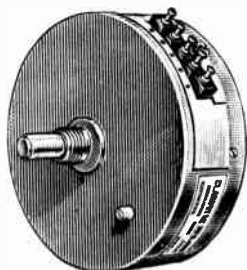
PRODUCTS OF
THE HOUSE OF RESISTORS®



**RESISTORS • CONTROLS
RESISTANCE DEVICES**

SERIES 54-48JA

3" Dia. Vari/Phase Single Turn Potentiometer



Permits external phasing of electrical rotation to mechanical rotation. Ultra precise unit for professional use. Exclusive Clarostat design eliminates bulky, hard-to-adjust clamping rings. Anodized aluminum housings for minimum weight. Widely used in aircraft instrumentation.

| Stock Values | Resolution 100/Total Turns |
|--------------|-------------------------------|
| 250,000 | .023% |
| 100,000 | .031% |
| 50,000 | .040% |
| 10,000 | .061% |
| 1,000 | .083% |

CLARODIALS

Ten-Turn Concentric Scale Dials

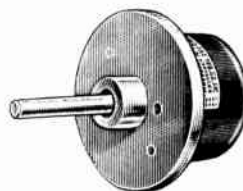


Calibrated dials designed for multi-turn potentiometers up to 10 turns or other rotary devices. CLARODIALS require only one inch of panel space. The knob attaches directly to the shaft, and the body of the dial is mounted rigidly to the panel. As a result, accurate readings with a ratio 1000:1 for ten turns are provided with zero backlash and no reading error. CLARODIALS are made of anodized aluminum for years of attractive use. Mounting requirements are 1/4" shaft and 3/8"-32 NEF-2A bushing. Adapters for 1/8" dia. shafts are available.

| Cat. No. | Description |
|----------|---|
| 411 | Commercial 10 turn, black anodize 1/4" shaft, no lock |
| 412 | Commercial 10 turn, black anodize 1/4" shaft, with lock |
| 461 | Commercial 10 turn, clear anodize 1/4" shaft, no lock |
| 462 | Commercial 10 turn, clear anodize 1/4" shaft, with lock |

SERIES SC42-970 SINE-COSINE

Single-Turn Potentiometer



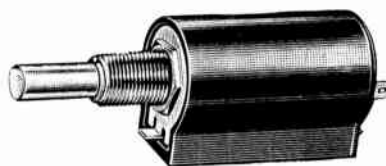
Used in radar, computer and servomechanisms, or any application requiring two output voltages accurately proportioned to the sine and cosine rotation angle. Due to functional use, units are designed and built for exceptionally long rotational life.

SPECIFICATIONS

FUNCTION: Sine-Cosine.
TOTAL RESISTANCE: 16,000 $\Omega \pm 10\%$.
POWER RATING: 2.46 watts @ 40°C.
(198 volts R.M.S.)
ROTATION: (Eff., Elec., Mech) 360° (Cont.)
MAXIMUM SPEED
RECOMMENDED: 30 RPM (20 gm. contact pressure)
EXPECTED LIFE: 500,000 Cycles.
RESOLUTION: 0.14% maximum of peak to peak voltage.
CONFORMITY: Standard, $\pm 1\%$ peak to peak voltage.
(Available, $\pm 1/2\%$ peak to peak voltage.
Not stocked — must be ordered special price and information on request.)
SHAFT TORQUE: 1 oz. in.
WEIGHT: 6 oz.

SERIES 62JA

Commercial Multi-turn Potentiometer



A 10-turn potentiometer offering electrical operating characteristics comparable to units costing far more. Designed specifically for the industrial instrumentation market, the Series 62JA has the inherent advantages of far greater resolution in trimming, better instrument control and settings for all types of electronic equipment. Brief specifications include: 7/8" diameter, 1 1/4" deep behind panel, bushing and shaft or split-locking bushing with screwdriver slot, 2 watts @ 25°C, derated to zero @ 85°C, 1000 to 100K ohms standard — others available, absolute linearity of $\pm 0.25\%$ standard, closer on order.

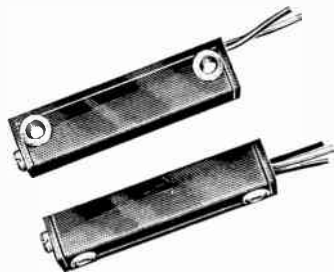
| Stock Values | Resolution % | Stock Values | Resolution % |
|--------------|--------------|--------------|--------------|
| 100,000 | .012 | 10,000 | .024 |
| 50,000 | .013 | 5,000 | .026 |
| 30,000 | .016 | 2,000 | .029 |
| 20,000 | .019 | 1,000 | .030 |

PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

SERIES 56 "PADOHM" TRIMMING POTENTIOMETER



A precision potentiometer for pad or trim resistance functions. The "Padohm" is especially intended for extreme ambient conditions of temperature, moisture, shock and vibration. The body material provides for high insulation as well as high temperature operation. The Series also features precision-metal contacts and welded single-turn end connections. A positive clutching and de-clutching mechanism insures release of wiper at end of rotation.

SPECIFICATIONS

Power Rating 0.8 watts @70°C. Derated linearly to zero power @150°C.
Working Voltage 200 volts, maximum.
Resistance Range 100 to 20,000 Ω, higher or low values available. Specify.
Resistance Tolerance ±10% or closer, specify.
Temperature Coefficient of Wire ±0.0002 Ω/°C.
Independent Linearity ±2% of the total resistance.
Minimum Resistance 1% of the total resistance or 1 Ω whichever is greater.

Effective Travel 95% minimum of the mechanical travel.
Mechanical Travel 25 turns ±2 turns with slip-drive mechanism at extreme ends of mechanical rotation.
Shaft Backlash ¼ turn maximum.
Torque 0.2 to 8.0 oz. in.
Lead or Terminal Strength 1 lb. pull in all three planes.
Lead Wires Teflon leads, MIL-W-16878, Type E.
Weight .010 lb.

TERMINAL CODE

| Wire Leads-1 | Solder Lug-2 | Printed Circuit-3 | |
|--------------|--------------|-------------------|----------------|
| 56JA-1 | 56JA-2 | 56JA-3 | Low Temp 105°C |
| 56JB-1 | 56JB-2 | 56JB-3 | Hi Temp 150°C |
| | | | Not Sealed |

EXAMPLE

Catalog No. 56JA-2-100: Indicates Series 56 with Solder Lug Terminals 100 Ω.

STOCK VALUES 56JA-56JB

| | | |
|-----|-----|-----|
| 10 | 200 | 5K |
| 20 | 500 | 10K |
| 50 | 1K | 20K |
| 100 | 2K | 25K |
| | | 50K |

MINIATURIZED POTENTIOMETERS

Consistent with miniaturization in Military and Commercial equipment, such as; Guided Missiles, Aircraft Electronics, Mobile Radio and Radar, Computers, Range Finders, Pocket Radios and Hearing Aids; Clarostat offers miniaturized composition element Series 48M and wire-wound

Series 49M Potentiometers, and a Rotary Selector Switch designated as Series BHM to meet the switching requirements of the above mentioned and other applications.

SERIES 48M — 0.2 WATT COMPOSITION ELEMENT



Available in single or dual, standard or shaft locking bushing. Standard bushing potentiometers have ¼" x 32 NEF-2A x ¼" long bushing and ⅛" dia. x ½" long shaft beyond bushing.

Shaft locking bushing potentiometers have ¼" x 32 NEF-2A x ¾" long bushing and ⅛" dia. x ¼" long screwdriver slotted shaft.

All potentiometers furnished with mounting nut ⅛" thick x ⅝" across flats, and one internal tooth lockwasher. Potentiometers with split locking bushings furnished with jam nut also.

Insulation: Breakdown test between terminals and ground for 1 minute 1000v.a.c.; 350v.a.c. @ 3.4" Hg.

Resistance Range (Ohms): Linear 200 to 5 Meg.
Tapered 1500 to 2.5 Meg.

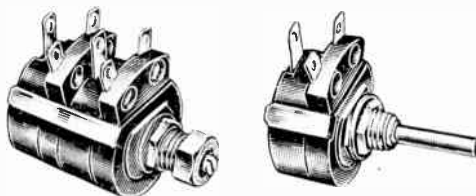
Resistance Tolerance: Linear ±10%.
Above 100,000 ohms ±20%.
Tapered ±20% all values.

Tapers: Linear
Left hand — 10% resistance at 50% rotation. "Z"

Mechanical and Electrical Rotation: 300° ±3°
Effective Rotation: 300° ±3°

Torque (oz.-in.): 0.5 to 6
Dual Construction: Available

SERIES 49M — 1.5 WATT WIRE-WOUND



Available in single or dual, standard or shaft locking bushing. Standard bushing potentiometers have ¼" x 32 NEF-2A x ¼" long bushing and ⅛" dia. x ½" long shaft beyond bushing.

Shaft locking bushing potentiometers have ¼" x 32 NEF-2A x ¾" long bushing and ⅛" dia. x ¼" long screwdriver slotted shaft. All potentiometers furnished with mounting nut ⅛" thick x ⅝" across flats, and one internal tooth lock-washer. Potentiometers with shaft locking bushings furnished with jam nut also.

Fabricated in accordance with MIL-R-19

Insulation: Breakdown test between terminals and ground for 1 minute. 1000v.a.c.; 500v.a.c. @ 3.4" Hg.

Resistance Range (Ohms): Linear 1 to 20,000

Resistance Tolerance: Linear ±5%
Tapered Linear only

Mechanical and Electrical Rotation: 300° ±3°

Effective Rotation: 300° ±3°

Torque (oz.-in.): 0.3 to 6

Dual Construction: Available

SERIES BHM ROTARY SWITCHES



Series BHM switches are rated at 50 ma. at 300 V. a.c. or d.c., and 500 ma. at 30 V. a.c. or d.c. All moving parts and contact mechanism are totally enclosed, and the switch assembly is sealed for protection from dust and atmospheric conditions. They are particularly adapted to portable radios, receivers and transmitters, X-ray and medical instruments, calculating machines and computers.

Current: 50 Milliamps. at 300 volts a.c. or d.c.
Rating: 500 Milliamps. at 30 volts a.c. or d.c.
Protection: All moving parts and contact mechanisms are totally enclosed and switch is sealed, which protects it from dust and atmospheric conditions.

Shaft: ¼" diameter round 1" beyond bushing.

Finish: Nickel Plating.

Bushing: ⅜" x 32 NEF-2 Thread. ⅜" Long.

Torque: 30 to 50 oz. in.

BHM-SP12P-S Single Pole 12 Positions — Shorting

BHM-SP12P-NS Single Pole 12 Positions — Non Shorting

BHM-2P6P-S 2 Pole 6 Positions — Shorting

BHM-2P6P-NS 2 Pole 6 Positions — Non-Shorting

BHM-3P4P-S 3 Pole 4 Positions — Shorting

BHM-3P4P-NS 3 Pole 4 Positions — Non-Shorting

BHM-4P3P-S 4 Pole 3 Positions — Shorting

BHM-4P3P-NS 4 Pole 3 Positions — Non-Shorting

Meets or exceeds test paragraph 4.5.3 thru 4.5.13 of MIL-S-3786.



MILITARY POTENTIOMETERS

ITEMS IN STOCK FOR IMMEDIATE DELIVERY

RA10 per MIL-R-19 1 WATT WIRE-WOUND POTENTIOMETERS — Commercial Equivalent — Series 49M

| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| RA10NASD150A | RA10NASD152A | RA10NASL501A | RA10LASD201A | RA10LASM750A |
| RA10NASD250A | RA10NASD202A | RA10NASL751A | RA10LASD251A | RA10LASM101A |
| RA10NASD500A | RA10NASD252A | RA10NASL102A | RA10LASD351A | RA10LASM151A |
| RA10NASD750A | RA10NASL150A | RA10NASL152A | RA10LASD501A | RA10LASM201A |
| RA10NASD101A | RA10NASL250A | RA10NASL202A | RA10LASD751A | RA10LASM251A |
| RA10NASD151A | RA10NASL500A | RA10NASL252A | RA10LASD102A | RA10LASM351A |
| RA10NASD201A | RA10NASL750A | RA10LASD150A | RA10LASD152A | RA10LASM501A |
| RA10NASD251A | RA10NASL101A | RA10LASD250A | RA10LASD202A | RA10LASM751A |
| RA10NASD351A | RA10NASL151A | RA10LASD500A | RA10LASD252A | RA10LASM102A |
| RA10NASD501A | RA10NASL201A | RA10LASD750A | RA10LASM150A | RA10LASM152A |
| RA10NASD751A | RA10NASL251A | RA10LASD101A | RA10LASM250A | RA10LASM202A |
| RA10NASD102A | RA10NASL351A | RA10LASD151A | RA10LASM500A | RA10LASM252A |

RA20 per MIL-R-19 2 WATT WIRE-WOUND POTENTIOMETERS — Commercial Equivalent — Series 43M

| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| RA20NASA3R0A | RA20NASA352A | RA20NASD751A | RA20LASB151A | RA20LASD250A |
| RA20NASA6R0A | RA20NASA502A | RA20NASD102A | RA20LASB201A | RA20LASD350A |
| RA20NASA8R0A | RA20NASA752A | RA20NASD152A | RA20LASB251A | RA20LASD500A |
| RA20NASA100A | RA20NASA103A | RA20NASD202A | RA20LASB351A | RA20LASD750A |
| RA20NASA150A | RA20NASA153A | RA20NASD252A | RA20LASB501A | RA20LASD101A |
| RA20NASA200A | RA20NASD3R0A | RA20NASD352A | RA20LASB751A | RA20LASD151A |
| RA20NASA250A | RA20NASD6R0A | RA20NASD502A | RA20LASB102A | RA20LASD201A |
| RA20NASA350A | RA20NASD8R0A | RA20NASD752A | RA20LASB152A | RA20LASD251A |
| RA20NASA500A | RA20NASD100A | RA20NASD103A | RA20LASB202A | RA20LASD351A |
| RA20NASA750A | RA20NASD150A | RA20NASD153A | RA20LASB252A | RA20LASD501A |
| RA20NASA101A | RA20NASD200A | RA20LASB3R0A | RA20LASB352A | RA20LASD751A |
| RA20NASA151A | RA20NASD250A | RA20LASB6R0A | RA20LASB502A | RA20LASD102A |
| RA20NASA201A | RA20NASD350A | RA20LASB8R0A | RA20LASB752A | RA20LASD152A |
| RA20NASA251A | RA20NASD500A | RA20LASB100A | RA20LASB103A | RA20LASD202A |
| RA20NASA351A | RA20NASD750A | RA20LASB150A | RA20LASB153A | RA20LASD352A |
| RA20NASA501A | RA20NASD101A | RA20LASB200A | RA20LASD3R0A | RA20LASD502A |
| RA20NASA751A | RA20NASD151A | RA20LASB250A | RA20LASD6R0A | RA20LASD752A |
| RA20NASA102A | RA20NASD201A | RA20LASB350A | RA20LASD8R0A | RA20LASD103A |
| RA20NASA152A | RA20NASD251A | RA20LASB500A | RA20LASD100A | RA20LASD153A |
| RA20NASA202A | RA20NASD351A | RA20LASB750A | RA20LASD150A | |
| RA20NASA252A | RA20NASD501A | RA20LASB101A | RA20LASD200A | |

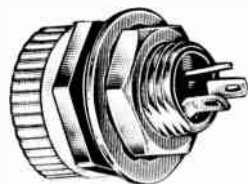
RA30 per MIL-R-19 4 WATT WIRE-WOUND POTENTIOMETERS — Commercial Equivalent — Series 58M

| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| RA30NASA3R0A | RA30NASA102A | RA30NASD250A | RA30NASD752A | RA30LASB201A |
| RA30NASA6R0A | RA30NASA152A | RA30NASD350A | RA30NASD103A | RA30LASB251A |
| RA30NASA8R0A | RA30NASA202A | RA30NASD500A | RA30NASD153A | RA30LASB351A |
| RA30NASA100A | RA30NASA252A | RA30NASD750A | RA30NASD203A | PA30LASB501A |
| RA30NASA150A | RA30NASA352A | RA30NASD101A | RA30NASD253A | RA30LASB751A |
| RA30NASA200A | RA30NASA502A | RA30NASD151A | RA30LASB3R0A | RA30LASB102A |
| RA30NASA250A | RA30NASA752A | RA30NASD201A | RA30LASB6R0A | RA30LASB152A |
| RA30NASA350A | RA30NASA103A | RA30NASD251A | RA30LASB8R0A | RA30LASB202A |
| RA30NASA500A | RA30NASA153A | RA30NASD351A | RA30LASB100A | RA30LASB252A |
| RA30NASA750A | RA30NASA203A | RA30NASD501A | RA30LASB150A | RA30LASB352A |
| RA30NASA101A | RA30NASA253A | RA30NASD751A | RA30LASB200A | RA30LASB502A |
| RA30NASA151A | RA30NASD3R0A | RA30NASD102A | RA30LASB250A | RA30LASB752A |
| RA30NASA201A | RA30NASD6R0A | RA30NASD152A | RA30LASB350A | RA30LASB103A |
| RA30NASA251A | RA30NASD8R0A | RA30NASD202A | RA30LASB500A | RA30LASB153A |
| RA30NASA351A | RA30NASD100A | RA30NASD252A | RA30LASB750A | RA30LASB203A |
| RA30NASA501A | RA30NASD150A | RA30NASD352A | RA30LASB101A | RA30LASB253A |
| RA30NASA751A | RA30NASD200A | RA30NASD502A | RA30LASB151A | |

RV4 per MIL-R-94 2 WATT CARBON POTENTIOMETERS — Commercial Equivalent — Series 53M

| | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|
| RV4NAYS101A | RV4NAYS255B | RV4NAYS504A | RV4NAYS104A | RV4LAYS253A | RV4LAYS502A |
| RV4NAYS251A | RV4NAYS505B | RV4NAYS105A | RV4NAYS254A | RV4LAYS503A | RV4LAYS103A |
| RV4NAYS501A | RV4NAYS101A | RV4NAYS255B | RV4NAYS504A | RV4LAYS104A | RV4LAYS253A |
| RV4NAYS102A | RV4NAYS251A | RV4NAYS505B | RV4NAYS105A | RV4LAYS254A | RV4LAYS503A |
| RV4NAYS252A | RV4NAYS501A | RV4NAYS101A | RV4NAYS255B | RV4LAYS504A | RV4LAYS104A |
| RV4NAYS502A | RV4NAYS102A | RV4NAYS251A | RV4NAYS505B | RV4LAYS105A | RV4LAYS254A |
| RV4NAYS103A | RV4NAYS252A | RV4NAYS501A | RV4LAYS101A | RV4LAYS255B | RV4LAYS504A |
| RV4NAYS253A | RV4NAYS502A | RV4NAYS102A | RV4LAYS251A | RV4LAYS505B | RV4LAYS105A |
| RV4NAYS503A | RV4NAYS103A | RV4NAYS252A | RV4LAYS501A | RV4LAYS101A | RV4LAYS255A |
| RV4NAYS104A | RV4NAYS253A | RV4NAYS502A | RV4LAYS102A | RV4LAYS251A | RV4LAYS505B |
| RV4NAYS254A | RV4NAYS503A | RV4NAYS103A | RV4LAYS252A | RV4LAYS501A | |
| RV4NAYS504A | RV4NAYS104A | RV4NAYS253A | RV4LAYS502A | RV4LAYS102A | |
| RV4NAYS105A | RV4NAYS254A | RV4NAYS503A | RV4LAYS103A | RV4LAYS252A | |

SERIES 60 MJA AND 60 MJB



A unique potentiometer design. The CapPot is a sealed unit that mounts on the operating side of the mounting surface. It is ideal for use in applications requiring a waterproof, explosion-proof, quality component. It may be used in pressurized equipment without the need of expensive bellows or other pressure-sealing devices.

SPECIFICATIONS

Power Rating 0.8 watts @ 40°C, derated linearly to zero power @ 105°C.
 Resistance Range Linear functions, 5 Ω min. to 10,000 Ω max. employing temperature coefficient wire of ± .002%/°C.
 Resistance Tolerance ± 10% or closer, specify.
 Absolute Minimum Resistance 1% of total or 5 Ω, whichever is greater, (Resistance measured between contact arm terminal and end terminal with the contact arm positioned so as to give a minimum value.)
 Effective Rotation 300° ± 5°.
 Mechanical & Electrical Rotation 310° ± 5°.
 Dielectric Strength 900V RMS at sea level for 1 minute. 450V RMS at 3.4 in-Hg. (50,000 ft.) for 1 minute.
 Torque 0.2 to 8.0 oz-in.
 Stop Strength 32 oz-in.
 Typical Weight 0.20 oz.
 Bushing Flatted bushing is standard unless otherwise specified. Flat relationship to contact in extreme CCW position shall be shown.
 Hardware Internal tooth lockwasher, and hex nut supplied.
 Knob Color Options Black is standard. (Other colors available.)

STOCK VALUES (ohms)

| | | |
|-------------------------|-----|------|
| Type 60MJA — Solder lug | | |
| Type 60MJB — Wire lug | | |
| 10 | 250 | 2.5K |
| 25 | 500 | 5K |
| 50 | 1K | 10K |
| 100 | | |



PRODUCTS OF
THE HOUSE OF RESISTORS®

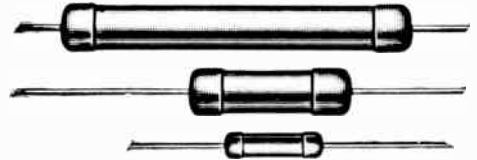


RESISTORS • CONTROLS
RESISTANCE DEVICES

"FIXTOHM"**

PRECISION RESISTORS

± 1% TOLERANCE



| | |
|--|--|
| <p>SERIES CVF MIL Style RN20X 1/2 WATT</p> | <p>50 ohms to 2 megohms. Values other than military decade values on page at right add 10% to List Price. *Values outside the above range price and delivery information on request.</p> |
| <p>SERIES CVC MIL Style RN25X 1 WATT</p> | <p>100 ohms to 4.99 megohms. Values other than military decade values on page at right add 10% to List Price. *Values outside the above range price and delivery information on request.</p> |
| <p>SERIES CVD MIL Style RN30X 2 WATT</p> | <p>200 ohms to 10 megohms. Values other than military decade values on page at right add 10% to List Price. *Values outside the above range price and delivery information on request.</p> |
| <p>SERIES CML MIL Style RN60B 1/8 WATT (MOLDED BODY)</p> | <p>50 ohms to 5 megohms. Values other than military decade values on page at right add 10% to List Price. *Values outside the above range price and delivery information on request.</p> |
| <p>SERIES CMH MIL Style RN65B 1/4 WATT (MOLDED BODY)</p> | <p>50 ohms to 5 megohms. Values other than military decade values on page at right add 10% to List Price. *Values outside the above range price and delivery information on request.</p> |
| <p>SERIES CMF MIL Style RN70B 1/2 WATT (MOLDED BODY)</p> | <p>50 ohms to 2.2 megohms. Values other than military decade values on page at right add 10% to List Price. *Values outside the above range price and delivery information on request.</p> |
| <p>SERIES CMD MIL Style RN80B 2 WATT (MOLDED BODY)</p> | <p>200 ohms to 10 megohms. Values other than military decade values on page at right add 10% to List Price. *Values outside the above range price and delivery information on request.</p> |

Resistance tolerances available from 1/2 to 10%.
Hermetically sealed resistors available on special order.
Also available—Series CEL 1/8 watt and Series CEH 1/4 watt.
Prices and information on request.

MILITARY DECADE VALUES

| | | | | | | | |
|------|------|------|------|------|------|------|------|
| 10.0 | 13.3 | 17.8 | 23.7 | 31.6 | 42.2 | 56.2 | 75.0 |
| 10.2 | 13.7 | 18.2 | 24.3 | 32.4 | 43.2 | 57.6 | 76.8 |
| 10.5 | 14.0 | 18.7 | 24.9 | 33.2 | 44.2 | 59.0 | 78.7 |
| 10.7 | 14.3 | 19.1 | 25.5 | 34.0 | 45.3 | 60.4 | 80.6 |
| 11.0 | 14.7 | 19.6 | 26.1 | 34.8 | 46.4 | 61.9 | 82.5 |
| 11.3 | 15.0 | 20.0 | 26.7 | 35.7 | 47.5 | 63.4 | 84.5 |
| 11.5 | 15.4 | 20.5 | 27.4 | 36.5 | 48.7 | 64.9 | 86.6 |
| 11.8 | 15.8 | 21.0 | 28.0 | 37.4 | 49.9 | 66.5 | 88.7 |
| 12.1 | 16.2 | 21.5 | 28.7 | 38.3 | 51.1 | 68.1 | 90.9 |
| 12.4 | 16.5 | 22.1 | 29.4 | 39.2 | 52.3 | 69.8 | 93.1 |
| 12.7 | 16.9 | 22.5 | 30.1 | 40.2 | 53.6 | 71.5 | 95.3 |
| 13.0 | 17.4 | 23.2 | 30.9 | 41.2 | 54.9 | 73.2 | 97.6 |

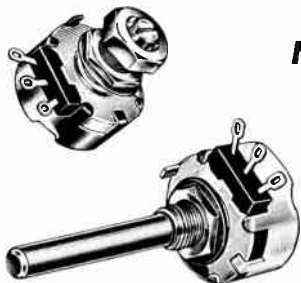
Other values may be found by using proper decade multiplier.

PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

MOLDED COMPOSITION-ELEMENT POTENTIOMETERS



A 2-watt Molded Composition Element Potentiometer totally enclosed and sealed against moisture and other environmental. Meets the need for a high quality resistance device incorporating high-stability under extreme climatic and operational conditions. For use in critical applications, such as, test equipment, military requirements, computers, servo systems and industrial metering devices.

1-1/16" diameter and 9/16" deep, wiper assembly of one piece construction. Carbon to carbon contact insures exceptionally low noise level. Stainless steel shaft. Gold plated terminals.

Electrical tolerances are plus/minus 10% for all values up to 1 meg. 1 meg. and above plus/minus 20%.

| Cat. No. | Res. Ohms | Taper | Cat. No. | Res. Ohms | Taper | "Z" TAPER |
|-------------|-----------|-------|----------------|-----------|-------|---------------------------|
| 53C1 | 50 | Z | 53C1 | 500K | S | 53C1-100K-Z 100K |
| 53C1-50-S | 50 | Z | 53C1-75K-S | 75K | S | 53C1-250K-Z 250K |
| 53C1-100-S | 100 | Z | 53C1-100K-S | 100K | S | 53C1-500K-Z 500K |
| 53C1-250-S | 250 | Z | 53C1-150K-S | 150K | S | 53C1-1 Meg-Z 1 Meg-Z |
| 53C1-500-S | 500 | Z | 53C1-200K-S | 200K | S | 53C1-2.5 Meg-Z 2.5 Meg-Z |
| 53C1-750-S | 750 | Z | 53C1-250K-S | 250K | S | NET PRICE \$2.25 |
| 53C1-1000-S | 1000 | Z | 53C1-500K-S | 500K | S | REVERSED "Z" TAPER |
| 53C1-1500-S | 1500 | S | 53C1-750K-S | 750K | S | 53C1-10K-RZ 10K |
| 53C1-2000-S | 2000 | S | 53C1-1 Meg-S | 1 Meg | S | 53C1-25K-RZ 25K |
| 53C2-2500-S | 2500 | S | 53C1-1.5 Meg-S | 1.5 Meg | S | 53C1-50K-RZ 50K |
| 53C1-5000-S | 5000 | S | 53C1-2 Meg-S | 2 Meg | S | NET PRICE \$2.25 |
| 53C1-7500-S | 7500 | S | 53C1-2.5 Meg-S | 2.5 Meg | S | DUAL POTENTIOMETERS |
| 53C1-10K-S | 10K | S | 53C1-3 Meg-S | 3 Meg | S | D53C1 10K-S D53C1 250K-S |
| 53C1-15K-S | 15K | S | 53C1-4 Meg-S | 4 Meg | S | D53C1 25K-S D53C1 500K-S |
| 53C1-20K-S | 20K | S | 53C1-5 Meg-S | 5 Meg | S | D53C1 50K-S D53C1 1 Meg-S |
| 53C1-25K-S | 25K | S | 53C1-10 Meg-S | 10 Meg | S | D53C1 100K-S |
| 53C1-50K-S | 50K | S | | | | NET PRICE \$5.85 |

Standard Packing — Individual Carton.
Standard Packing — Ind. Carton

SERIES "43C1" and "43C2" 2-WATT CONTROLS

Electrical tolerance is plus minus 5% for all ohmages. Independent linearity is to plus minus 2%. All controls rated 2 watts.

| 43C1 Cat. No. | 43C2 Cat. No. | Res. Ohms | 43C1 Cat. No. | 43C2 Cat. No. | Res. Ohms | 43C1 Cat. No. | 43C2 Cat. No. | Res. Ohms | 43C1 Cat. No. | 43C2 Cat. No. | Res. Ohms |
|---------------|---------------|-----------|---------------|---------------|-----------|---------------|---------------|-----------|---------------|---------------|-----------|
| 43C1-5 | 43C2-5 | 5 | 43C1-100 | 43C2-100 | 100 | 43C1-1500 | 43C2-1500 | 1500 | 43C1-15K | 43C2-15K | 15K |
| 43C1-10 | 43C2-10 | 10 | 43C1-150 | 43C2-150 | 150 | 43C1-2000 | 43C2-2000 | 2000 | 43C1-20K | 43C2-20K | 20K |
| 43C1-20 | 43C2-20 | 20 | 43C1-200 | 43C2-200 | 200 | 43C1-2500 | 43C2-2500 | 2500 | 43C1-25K | 43C2-25K | 25K |
| 43C1-25 | 43C2-25 | 25 | 43C1-300 | 43C2-300 | 300 | 43C1-3000 | 43C2-3000 | 3000 | 43C1-30K | 43C2-30K | 30K |
| 43C1-30 | 43C2-30 | 30 | 43C1-400 | 43C2-400 | 400 | 43C1-4000 | 43C2-4000 | 4000 | 43C1-40K | 43C2-40K | 40K |
| 43C1-40 | 43C2-40 | 40 | 43C1-500 | 43C2-500 | 500 | 43C1-5000 | 43C2-5000 | 5000 | 43C1-50K | 43C2-50K | 50K |
| 43C1-50 | 43C2-50 | 50 | 43C1-750 | 43C2-750 | 750 | 43C1-7500 | 43C2-7500 | 7500 | | | |
| 43C1-75 | 43C2-75 | 75 | 43C1-1000 | 43C2-1000 | 1000 | 43C1-10K | 43C2-10K | 10K | | | |

NET PRICES

| | | | | | |
|----------------------|--------|----------------------|--------|----------------------|--------|
| 43C1-5 to 43C1-10K | \$1.35 | 43C1-30K to 43C1-50K | \$2.01 | 43C2-15K to 43C2-25K | \$2.55 |
| 43C1-15K to 43C1-25K | 1.80 | 43C2-5 to 43C2-10K | 2.25 | 43C2-30K to 43C2-50K | 3.00 |

SERIES 58C1 AND 58C2 3-WATT CONTROLS



Electrical tolerance is plus minus 5% for all ohmages. Independent linearity is to plus/minus 1%. All controls rated 3 watts.

| 58C1 Cat. No. | 58C2 Cat. No. | Res. Ohms | 58C1 Cat. No. | 58C2 Cat. No. | Res. Ohms |
|---------------|---------------|-----------|---------------|---------------|-----------|
| 58C1-1 | 58C2-1 | 1 | 58C1-500 | 58C2-500 | 500 |
| 58C1-2 | 58C2-2 | 2 | 58C1-750 | 58C2-750 | 750 |
| 58C1-4 | 58C2-4 | 4 | 58C1-1000 | 58C2-1000 | 1000 |
| 58C1-6 | 58C2-6 | 6 | 58C1-1500 | 58C2-1500 | 1500 |
| 58C1-10 | 58C2-10 | 10 | 58C1-2000 | 58C2-2000 | 2000 |
| 58C1-15 | 58C2-15 | 15 | 58C1-2500 | 58C2-2500 | 2500 |
| 58C1-20 | 58C2-20 | 20 | 58C1-3000 | 58C2-3000 | 3000 |
| 58C1-25 | 58C2-25 | 25 | 58C1-5000 | 58C2-5000 | 5000 |
| 58C1-30 | 58C2-30 | 30 | 58C1-7500 | 58C2-7500 | 7500 |
| 58C1-40 | 58C2-40 | 40 | 58C1-10K | 58C2-10K | 10K |
| 58C1-50 | 58C2-50 | 50 | 58C1-15K | 58C2-15K | 15K |
| 58C1-60 | 58C2-60 | 60 | 58C1-20K | 58C2-20K | 20K |
| 58C1-75 | 58C2-75 | 75 | 58C1-25K | 58C2-25K | 25K |
| 58C1-100 | 58C2-100 | 100 | 58C1-30K | 58C2-30K | 30K |
| 58C1-200 | 58C2-200 | 200 | 58C1-40K | 58C2-40K | 40K |
| 58C1-300 | 58C2-300 | 300 | 58C1-50K | 58C2-50K | 50K |
| 58C1-400 | 58C2-400 | 400 | | | |

NET PRICES

| | | | |
|----------------------|--------|----------------------|--------|
| 58C1-1 to 58C1-10K | \$1.35 | 58C2-1 to 58C2-10K | \$2.25 |
| 58C1-15K to 58C1-25K | 1.80 | 58C2-15K to 58C2-25K | 2.55 |
| 58C1-30K to 58C1-50K | 2.01 | 58C2-30K to 58C2-50K | 3.00 |

SERIES "10C1" and "10C2" 4-WATT CONTROLS

Electrical tolerance is plus minus 5% for all ohmages. Independent linearity to plus minus 1%. All controls rated 4 watts. 1 to 50K ohms available on special order. Prices and information on request.

| 10C1 Cat. No. | 10C2 Cat. No. | Res. Ohms |
|---------------|---------------|-----------|
| 10C1-75K | 10C2-75K | 75K |
| 10C1-100K | 10C2-100K | 100K |

Net Prices

| | | | |
|------|------|------|------|
| 10C1 | 2.75 | 10C2 | 3.60 |
|------|------|------|------|

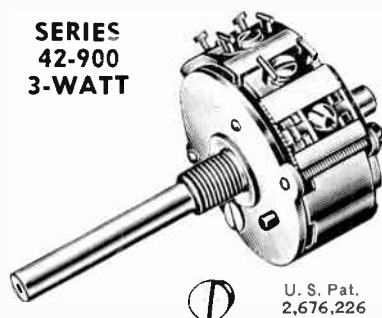
WIRE-WOUND PRECISION POTENTIOMETERS

Series 42-900 is a superlative-grade precision potentiometer with such features as selection of either limited or continuous rotation by simple manipulation; gold-plated bushings, terminals, screws; front and rear plates of green anodized aluminum; rear shaft extension for coupling to other potentiometers, switch, servos, etc. Wiring diagram on rear plate indicates terminal connections. Especially intended to meet the needs of your prototypes, laboratory testing, instrument-grade assemblies, etc.

Exceeds MIL-R-19 specifications where applicable.

- 42-900—100K ohms
- 42-900—50K ohms
- 42-900—20K ohms
- 42-900—10K ohms
- 42-900—5000 ohms
- 42-900—2500 ohms
- 42-900—1000 ohms
- 42-900—500 ohms
- 42-900—100 ohms
- 42-900—50 ohms

SERIES 42-900 3-WATT



U. S. Pat.
2,676,226

PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

"GREENOHM V"™ VITREOUS-ENAMEL RESISTORS

Based on years of research and engineering development, these vitreous-enamel wire-wound power resistors offer superlative performance and life as proved by countless tests. "Greenohm V" resistors provide all the outstanding quality which made Clarostat "Greenohm" cement-coated units famous, plus a glass-smooth vitreous-enamel coating in a handsome bluish-green for maximum eye appeal. Made to MIL-R-26C specifications.

- Fixed and adjustable
- 5-watt to 200 watt sizes
- = 5% tolerance, 50 ohms and over. ± 10% tolerance, 49.9 ohms and under. ± 10% for adjustable.

"GREENOHM V"™ FIXED RESISTORS (VITREOUS ENAMEL)

S-WATT SERIES VPR-5-F

Core: 1" x 5/16"
Terminals, wire lead and lug

| Resistance Ohms | | | | |
|-----------------|-----|------|------|-------|
| 1 | 30 | 350 | 1250 | 7000 |
| 1.5 | 35 | 400 | 1500 | 7500 |
| 2 | 40 | 450 | 1750 | 8000 |
| 3 | 50 | 500 | 2000 | 9000 |
| 4 | 75 | 600 | 2500 | 10K |
| 5 | 100 | 700 | 2500 | 12.5K |
| 7.5 | 125 | 750 | 3000 | 15K |
| 10 | 150 | 800 | 3500 | 17.5K |
| 12 | 200 | 900 | 4000 | 20K |
| 15 | 225 | 1000 | 4500 | 22.5K |
| 20 | 250 | 1100 | 5000 | 25K |
| 25 | 300 | 1200 | 6000 | |

NET PRICES:

| | |
|--------------|---------------|
| 1 to 1K | \$0.51 |
| 1100 to 5K | .54 |
| 6K to 10K | .57 |
| 12.5K to 15K | .60 |
| 17.5K to 20K | .63 |
| 22.5K to 25K | .66 |

10-WATT SERIES VPR-10-F

Core: 1 3/4" x 5/16"
Terminals, wire lead and lug

| Resistance Ohms | | | | |
|-----------------|-----|------|-------|-------|
| 0.4 | 30 | 500 | 3000 | 13.5K |
| 1 | 35 | 600 | 3500 | 14.3K |
| 1.2 | 40 | 700 | 4000 | 15K |
| 1.3 | 50 | 750 | 4500 | 16K |
| 1.5 | 75 | 800 | 5000 | 17.5K |
| 2 | 100 | 900 | 6000 | 18K |
| 3 | 125 | 1000 | 7000 | 20K |
| 4 | 150 | 1100 | 7500 | 22.5K |
| 5 | 200 | 1200 | 8000 | 25K |
| 7.5 | 225 | 1250 | 8500 | 30K |
| 10 | 250 | 1500 | 9000 | 35K |
| 12 | 300 | 1750 | 10K | 40K |
| 15 | 350 | 2000 | 11K | 45K |
| 20 | 400 | 2250 | 12K | 50K |
| 25 | 450 | 2500 | 12.5K | |

Standard Packaging — 10 per Carton

NET PRICES:

| | |
|--------------|---------------|
| 0.4 to 1K | \$0.57 |
| 1100 to 5K | .60 |
| 6K to 10K | .69 |
| 11K to 20K | .78 |
| 22.5K to 25K | .81 |
| 30K to 50K | .90 |

100-WATT SERIES VK-100-N

Core: 6 1/2" x 3/4"
Lug terminals — Mtg. bracket furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|------|------|
| 1 | 50 | 750 | 7500 | 50K |
| 2 | 75 | 1000 | 10K | 60K |
| 3 | 100 | 1500 | 15K | 75K |
| 4 | 125 | 2000 | 20K | 100K |
| 5 | 150 | 2500 | 25K | |
| 10 | 250 | 3000 | 30K | |
| 25 | 500 | 5000 | 40K | |

NET PRICES:

| | |
|-------------|---------------|
| 1 to 3 | \$2.22 |
| 4 to 1K | 1.59 |
| 1500 to 5K | 1.68 |
| 7500 to 10K | 1.80 |
| 15K to 20K | 1.98 |
| 25K to 40K | 2.13 |
| 50K to 60K | 2.22 |
| 75K | 2.43 |
| 100K | 2.73 |



20-WATT SERIES VPR-20-H

Core: 2" x 7/16"
Terminals, wire lead and lug

| Resistance Ohms | | | | |
|-----------------|------|------|-------|------|
| 0.4 | 350 | 1850 | 7500 | 55K |
| 0.6 | 400 | 2000 | 8000 | 60K |
| 0.8 | 500 | 2250 | 9000 | 65K |
| 5 | 650 | 2400 | 10K | 70K |
| 10 | 700 | 2500 | 12.5K | 75K |
| 25 | 750 | 2750 | 15K | 80K |
| 50 | 800 | 3000 | 20K | 85K |
| 75 | 850 | 3500 | 25K | 90K |
| 100 | 1000 | 4000 | 30K | 95K |
| 150 | 1200 | 4500 | 35K | 100K |
| 200 | 1250 | 5000 | 40K | |
| 250 | 1500 | 6000 | 45K | |
| 300 | 1750 | 7000 | 50K | |

Standard Packaging — 5 per Carton

NET PRICES:

| | |
|--------------|---------------|
| 0.4 to 1K | \$0.66 |
| 1200 to 5K | .69 |
| 6K to 10K | .81 |
| 12.5K to 20K | .84 |
| 25K to 40K | .99 |
| 45K to 60K | 1.14 |
| 65K to 80K | 1.35 |
| 85K to 100K | 1.56 |

160-WATT SERIES VK-160-W

Core: 8 1/2" x 1 1/8"
Lug terminals — Mtg. bracket furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|------|------|
| 1 | 50 | 750 | 7500 | 50K |
| 2 | 75 | 1000 | 10K | 60K |
| 3 | 100 | 1500 | 15K | 75K |
| 4 | 125 | 2000 | 20K | 100K |
| 5 | 150 | 2500 | 25K | |
| 10 | 250 | 3000 | 30K | |
| 25 | 500 | 5000 | 40K | |

NET PRICES:

| | |
|-------------|---------------|
| 1 to 5 | \$3.18 |
| 10 to 1K | 2.28 |
| 1500 to 5K | 2.31 |
| 7500 to 10K | 2.52 |
| 15K to 20K | 2.70 |
| 25K to 40K | 2.79 |
| 50K to 60K | 2.88 |
| 75K | 3.06 |
| 100K | 3.24 |

25-WATT SERIES VP-25-K

Core: 2" x 9/16"
Lug terminals — Mtg. bracket furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|------|------|
| 1 | 50 | 800 | 3000 | 30K |
| 2 | 75 | 1000 | 4000 | 35K |
| 3 | 100 | 1500 | 5000 | 40K |
| 4 | 150 | 2000 | 10K | 50K |
| 5 | 200 | 2500 | 12K | 60K |
| 10 | 250 | 3000 | 15K | 70K |
| 15 | 500 | 3500 | 20K | 80K |
| 25 | 750 | 4000 | 25K | 100K |

Standard Packing — Individually Boxed

NET PRICES:

| | |
|-------------|---------------|
| 1 to 1K | \$0.72 |
| 1500 to 10K | .75 |
| 6K to 10K | .84 |
| 12K to 20K | .90 |
| 25K to 40K | 1.02 |
| 50K to 60K | 1.20 |
| 70K to 80K | 1.41 |
| 100K | 1.62 |

50-WATT SERIES VP-50-K

Core: 4" x 9/16"
Lug terminals — Mtg. bracket furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|------|------|
| 1 | 75 | 1000 | 8000 | 75K |
| 2 | 100 | 1500 | 10K | 100K |
| 3 | 150 | 2000 | 12K | 125K |
| 4 | 200 | 2500 | 15K | 150K |
| 5 | 250 | 3000 | 20K | 175K |
| 10 | 500 | 4000 | 25K | 200K |
| 25 | 750 | 5000 | 35K | 225K |
| 50 | 800 | 7500 | 50K | 250K |

Standard Packaging — Individually Boxed

NET PRICES:

| | |
|-------------|---------------|
| 1 | \$1.53 |
| 2 to 1K | 1.11 |
| 1500 to 5K | 1.14 |
| 7500 to 10K | 1.26 |
| 12K to 20K | 1.38 |
| 25K to 35K | 1.53 |
| 50K | 1.71 |
| 75K | 1.95 |
| 100K | 2.13 |
| 125K | 2.55 |
| 150K | 2.70 |
| 175K | 2.79 |
| 200K | 2.88 |
| 225K | 3.24 |
| 250K | 3.24 |

200-WATT SERIES VK-200-W

Core: 10 1/2" x 1 1/8"
Lug terminals — Mtg. bracket furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|-----|------|
| 1 | 50 | 1000 | 10K | 60K |
| 2 | 75 | 1500 | 15K | 75K |
| 3 | 100 | 2000 | 20K | 100K |
| 4 | 150 | 2500 | 25K | |
| 5 | 250 | 3000 | 30K | |
| 10 | 500 | 5000 | 40K | |
| 25 | 750 | 7500 | 50K | |

NET PRICES:

| | |
|-------------|---------------|
| 1 to 5 | \$3.42 |
| 10 to 1K | 2.46 |
| 1500 to 5K | 2.52 |
| 7500 to 10K | 2.70 |
| 15K to 20K | 2.88 |
| 25K to 40K | 2.97 |
| 50K to 60K | 3.06 |
| 75K | 3.24 |
| 100K | 3.45 |

PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

"GREENOHM V"™ ADJUSTABLE RESISTORS (VITREOUS ENAMEL)

10-WATT SERIES VP-10-FA

Core: 1 3/4" x 5/16"

Lug terminals — Mtg. brackets furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|------|------|
| 1 | 25 | 350 | 1500 | 5000 |
| 2 | 50 | 400 | 2000 | 6000 |
| 3 | 75 | 500 | 2250 | 7000 |
| 5 | 100 | 600 | 2500 | 7500 |
| 7.5 | 150 | 750 | 3000 | 8000 |
| 10 | 200 | 800 | 3500 | 8500 |
| 15 | 250 | 1000 | 4000 | 9000 |
| 20 | 300 | 1250 | 4500 | 10K |

NET PRICES:

| | |
|-------------|--------|
| 1 to 1K | \$1.14 |
| 1250 to 5K | 1.17 |
| 6000 to 10K | 1.26 |

Standard Packing — 10 per Carton

25-WATT SERIES VP-25-KA

Core: 2" x 9/16"

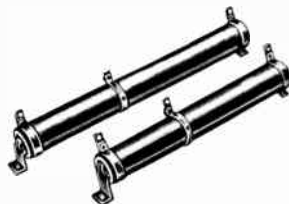
Lug terminals — Mtg. brackets furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|------|------|
| 1 | 50 | 750 | 3500 | 9000 |
| 2 | 75 | 800 | 4000 | 10K |
| 3 | 100 | 1000 | 4500 | 12K |
| 5 | 150 | 1250 | 5000 | 15K |
| 7.5 | 200 | 1500 | 6000 | 20K |
| 10 | 250 | 2000 | 7000 | 25K |
| 15 | 300 | 2250 | 7200 | 25K |
| 20 | 400 | 2500 | 7500 | 25K |
| 25 | 500 | 3000 | 8000 | 25K |

NET PRICES:

| | |
|------------|--------|
| 1 to 1K | \$1.29 |
| 1250 to 5K | 1.32 |
| 6K to 10K | 1.41 |
| 12K to 20K | 1.47 |
| 25K | 1.59 |

Standard Packing — Individually Boxed



50-WATT SERIES VP-50-KA

Core: 4" x 9/16"

Lug terminals — Mtg. brackets furnished

| Resistance Ohms | | | | |
|-----------------|------|------|------|------|
| 1 | 150 | 1500 | 7000 | 30K |
| 2 | 200 | 2000 | 7200 | 40K |
| 3 | 250 | 2250 | 7500 | 50K |
| 4 | 300 | 2500 | 8000 | 60K |
| 5 | 400 | 3000 | 9000 | 80K |
| 10 | 500 | 3500 | 10K | 100K |
| 25 | 750 | 4000 | 12K | |
| 50 | 800 | 4500 | 15K | |
| 75 | 1000 | 5000 | 20K | |
| 100 | 1250 | 6000 | 25K | |

NET PRICES:

| | |
|------------|--------|
| 1 ohm | \$2.10 |
| 2 to 1K | 1.68 |
| 1250 to 5K | 1.71 |
| 6K to 10K | 1.80 |
| 12K to 20K | 1.92 |
| 25K to 40K | 2.10 |
| 50K to 60K | 2.28 |
| 80K | 2.52 |
| 100K | 2.70 |

Standard Packing — Individually Boxed

75-WATT SERIES VP-75-KA

Core: 6" x 9/16"

Lug terminals — Mtg. brackets furnished

| Resistance Ohms | | | | |
|-----------------|------|------|------|------|
| 1 | 200 | 2000 | 7200 | 35K |
| 2 | 250 | 2250 | 7500 | 40K |
| 3 | 300 | 2500 | 8000 | 45K |
| 4 | 400 | 3000 | 9000 | 50K |
| 5 | 500 | 3500 | 10K | 60K |
| 10 | 750 | 4000 | 12K | 80K |
| 15 | 800 | 4500 | 15K | 100K |
| 25 | 1000 | 5000 | 20K | |
| 50 | 1250 | 6000 | 25K | |
| 100 | 1500 | 7000 | 30K | |

NET PRICES

| | |
|-------------|--------|
| 1 to 2 | \$2.37 |
| 3 to 1K | 1.86 |
| 1250 to 5K | 1.92 |
| 6000 to 10K | 2.01 |
| 12K to 20K | 2.13 |
| 25K to 40K | 2.31 |
| 45K to 60K | 2.52 |
| 80K | 2.76 |
| 100K | 2.91 |

Standard Packaging — Individually Boxed

100-WATT SERIES VK-100-NA

Core: 6 1/2" x 3/4"

Lug terminals — Mtg. brackets furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|-----|------|
| 1 | 10 | 500 | 10K | 40K |
| 2 | 25 | 1000 | 15K | 50K |
| 3 | 50 | 1500 | 20K | 75K |
| 4 | 100 | 2500 | 25K | 100K |
| 5 | 250 | 5000 | 30K | |

NET PRICES:

| | |
|------------|--------|
| 1 to 3 | \$3.00 |
| 4 to 1K | 2.37 |
| 1500 to 5K | 2.43 |
| 10K | 2.55 |
| 15K to 20K | 2.70 |
| 25K to 40K | 2.88 |
| 50K | 3.00 |
| 75K | 3.12 |
| 100K | 3.27 |

Standard Packing — Individually Boxed

160-WATT SERIES VK-160-WA

Core: 8 1/2" x 1 1/8"

Lug terminals — Mtg. brackets furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|-----|------|
| 1 | 10 | 500 | 10K | 40K |
| 2 | 25 | 1000 | 15K | 50K |
| 3 | 50 | 1500 | 20K | 75K |
| 4 | 100 | 2500 | 25K | 100K |
| 5 | 250 | 5000 | 30K | |

NET PRICES:

| | |
|------------|--------|
| 1 to 5 | \$4.05 |
| 10 to 1K | 3.15 |
| 1500 to 5K | 3.18 |
| 10K | 3.39 |
| 15K to 20K | 3.57 |
| 25K to 40K | 3.66 |
| 60K | 3.75 |
| 75K | 3.93 |
| 100K | 4.14 |

Standard Packing — Individually Boxed

200-WATT SERIES VK-200-WA

Core: 10 1/2" x 1 1/8"

Lug terminals — Mtg. brackets furnished

| Resistance Ohms | | | | |
|-----------------|-----|------|-----|------|
| 1 | 10 | 500 | 10K | 40K |
| 2 | 25 | 1000 | 15K | 50K |
| 3 | 50 | 1500 | 20K | 75K |
| 4 | 100 | 2500 | 25K | 100K |
| 5 | 250 | 5000 | 30K | |

NET PRICES:

| | |
|------------|--------|
| 1 to 5 | \$4.32 |
| 10 to 1K | 3.33 |
| 1500 to 5K | 3.42 |
| 10K | 3.57 |
| 15K to 20K | 3.75 |
| 25K to 40K | 3.84 |
| 50K | 3.96 |
| 75K | 4.14 |
| 100K | 4.32 |

Standard Packing — Individually Boxed

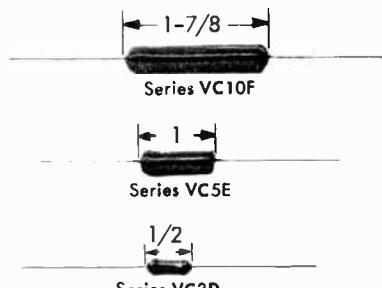
PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

AXIAL LEAD VITREOUS RESISTORS

Available in three sizes 3, 5 and 10 watts, Series VC3D, VC5E and VC10F. Axial lead resistors are particularly adapted to printed circuit, terminal board, and point-to-point wiring applications. These resistors save considerable space because of the elimination of mounting brackets and terminal lugs. Standard resistance tolerance is $\pm 5\%$ for 1 ohm and higher and tolerance below 1 ohm is $\pm 10\%$. Attractively packaged in a newly designed carton particularly adapted to this new axial lead resistor, beautifully finished with Clarostat's new vitreous shade of teal green.



Lead Length: 1 1/2" Lead Diameter: .032

| SERIES VC3D | | | | | |
|-----------------|-----|-----|-------|-------|-----|
| RESISTANCE OHMS | | | | | |
| 1 | 20 | 200 | 750 | 2.25K | 8K |
| 1.5 | 25 | 225 | 800 | 2.5K | 9K |
| 2 | 30 | 250 | 900 | 3K | 10K |
| 3 | 35 | 300 | 1K | 3.5K | K |
| 4 | 40 | 350 | 1.1K | 4K | K |
| 5 | 50 | 400 | 1.2K | 4.5K | K |
| 7.5 | 75 | 450 | 1.25K | 5K | K |
| 10 | 100 | 500 | 1.5K | 6K | K |
| 12 | 125 | 600 | 1.75K | 7K | K |
| 15 | 150 | 700 | 2K | 7.5K | K |

Net Prices

| | | | |
|------|--------|-------|-------|
| 1 | to 1K | ..... | \$.51 |
| 1.1K | to 5K | ..... | .54 |
| 6K | to 10K | ..... | .95 |

Standard Packing—10 per Carton.

| SERIES VC5E | | | | | |
|-----------------|-----|-----|-------|-------|-------|
| RESISTANCE OHMS | | | | | |
| 1 | 20 | 200 | 750 | 2.25K | 8K |
| 1.5 | 25 | 225 | 800 | 2.5K | 9K |
| 2 | 30 | 250 | 900 | 3K | 10K |
| 3 | 35 | 300 | 1K | 3.5K | 12.5K |
| 4 | 40 | 350 | 1.1K | 4K | 15K |
| 5 | 50 | 400 | 1.2K | 4.5K | 17.5K |
| 7.5 | 75 | 450 | 1.25K | 5K | 18K |
| 10 | 100 | 500 | 1.5K | 6K | 20K |
| 12 | 125 | 600 | 1.75K | 7K | 22.5K |
| 15 | 150 | 700 | 2K | 7.5K | 25K |

Net Prices

| | | | |
|-------|--------|-------|-------|
| 1 | to 1K | ..... | \$.54 |
| 1.1K | to 5K | ..... | .57 |
| 6K | to 10K | ..... | .60 |
| 12.5K | to 20K | ..... | .72 |
| 22.5K | to 25K | ..... | .75 |

Standard Packing—10 per Carton.

| SERIES VC10F | | | | | | |
|-----------------|-----|-----|-------|-------|-------|-------|
| RESISTANCE OHMS | | | | | | |
| 1 | 20 | 200 | 750 | 2.25K | 8K | 17.5K |
| 1.5 | 25 | 225 | 800 | 2.5K | 8.5K | 18K |
| 2 | 30 | 250 | 900 | 3K | 9K | 20K |
| 3 | 35 | 300 | 1K | 3.5K | 10K | 22.5K |
| 4 | 40 | 350 | 1.1K | 4K | 11K | 25K |
| 5 | 50 | 400 | 1.2K | 4.5K | 12K | 30K |
| 7.5 | 75 | 450 | 1.25K | 5K | 12.5K | 35K |
| 10 | 100 | 500 | 1.3K | 6K | 13.5K | 40K |
| 12 | 125 | 600 | 1.75K | 7K | 15K | 45K |
| 15 | 150 | 700 | 2K | 7.5K | 16K | 50K |

Net Prices

| | | | |
|-------|--------|-------|-------|
| 1 | to 1K | ..... | \$.60 |
| 1.1K | to 5K | ..... | .63 |
| 6K | to 10K | ..... | .72 |
| 11K | to 20K | ..... | .81 |
| 22.5K | to 40K | ..... | .84 |
| 45K | to 50K | ..... | .96 |

Standard Packing—10 per Carton

POWER RESISTOR DECADE BOX



The Resistance Decade Box, Model 240-C for bench use. Model 250 for rack mounting, provides any resistance from 1 to 999,999 ohms for working circuits at the flip of a switch. Six front panel dial-actuable selection in 1 ohm increments, the total value being read directly from the dial. Each decade has a power rating of 225 watts maximum, 1,000 VDC or 660 VAC maximum.

Resistance changing switches are of the type that prevent a resistance breakdown between steps, thus protecting delicate meters and measuring instruments in the circuit. Knobs indicate the resistance

value being used at a glance.

Clarostat GREENOHM Power Resistors are used throughout. These components are wire-wound power resistors on ceramic tubes and coated with an exclusive Clarostat inorganic cold-setting cement, providing the most rugged, long-lasting, trouble-free power resistor available. The resistors are mounted in rigid metal supports.

Overall length: 240C: 13" long x 8 1/2" deep x 5 3/4" high, weight 11 1/2 lbs., 250: 19" long x 13 3/4" deep x 7" high (fits in standard 19" relay rack), weight 18 1/2 lbs.

SUGGESTED USES: Resistance determination, Load Resistance, Meter Multiplier, Calibrating Meters, Providing any desired ohmage as a universal power resistor.

| Decade No. | 1 | 2 | 3 | 4 | 5 | 6 |
|----------------------------|----|-----|----|-----|-----|------|
| Max. Current Rating (amps) | 5 | 1.5 | .5 | .15 | 0.5 | .005 |
| Resistance Tolerance | 5% | 2% | 2% | 2% | 2% | 2% |

NET PRICE: Model 240C \$110.00, Model 250 \$150.00

SERIES 39 "HUMDINGER" WIRE-WOUND CONTROLS



Compact. Inexpensive. 2-watt rating. Screwdriver adjusted by slot in drive plate. Mounting ears. For hum balance, centering, hold and locking, linearity, AGC sensitivity, etc.

NET PRICE \$0.42

Standard Packing: 10 per Carton.

| Cat. No. | Total Res. Ohms | Min. Res. Ohms | Cat. No. | Total Res. Ohms | Min. Res. Ohms | Cat. No. | Total Res. Ohms | Min. Res. Ohms |
|----------|-----------------|----------------|------------|-----------------|----------------|--------------|-----------------|----------------|
| 39-5 | 5 | — | 39-500 | 500 | — | 39-1000-100 | 1,000 | 100 |
| 39-8 | 8 | — | 39-500-100 | 500 | 100 | 39-1500 | 1,500 | — |
| 39-50 | 50 | — | 39-600 | 600 | — | 39-2000 | 2,000 | — |
| 39-75 | 75 | — | 39-650 | 650 | — | 39-2000-100 | 2,000 | 100 |
| 39-100 | 100 | — | 39-700 | 700 | — | 39-3000 | 3,000 | — |
| 39-125 | 125 | — | 39-700-200 | 700 | 200 | 39-3000-700 | 3,000 | 700 |
| 39-150 | 150 | — | 39-800 | 800 | — | 39-4000 | 4,000 | — |
| 39-200 | 200 | — | 39-800-50 | 800 | 50 | 39-4000-350 | 4,000 | 350 |
| 39-300 | 300 | — | 39-1000 | 1,000 | — | 39-4000-1000 | 4,000 | 1,000 |
| | | | | | | 39-5000 | 5,000 | — |

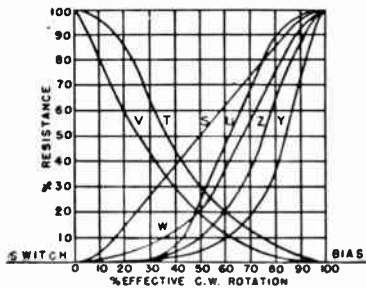
*Reg. U. S. Pat. Off.

PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

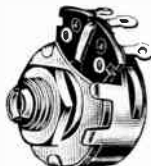
COMPOSITION-ELEMENT CONTROLS



Graph Explanation:
Taper S—Straight or uniform resistance change with rotation.
Taper T—Right-hand 30% resistance at 50% of C.W. rotation.
Taper U—Left-hand 1% resistance at 33 1/3% of C.W. rotation.
Taper V—Right-hand 20% resistance at 50% of C.W. rotation.
Taper W—Left-hand 20% resistance at 50% of C.W. rotation.
Taper Z—Left-hand (Log. audio) 10% resistance at 50% of C.W. rotation.
Taper Y—Left-hand 5% resistance at 50% of C.W. rotation.

SERIES "A47" 1/2-WATT CONTROLS

Composition-element controls in the popular 1 1/16" dia. size. Series "A47" controls are field-assembled with the selected "Pick-A-Shaft" and "Ad-A-Switch". These controls are also available with factory-assembled shafts at no extra charge, by omitting prefix "A" from catalog number and designating the type shaft desired when ordering. Example: 47-100K-S with FKS-1/4 shaft.



SERIES A47 (INDUSTRIAL) SERIES 47

| CAT No. | OHMS | TAPER | CAT No. | OHMS | TAPER |
|------------|------|-------|---------------|----------|-------|
| A47-500-S | 500 | S | A47-75K-V | 75K | V |
| A47-750-S | 750 | S | A47-100K-S | 100K | S |
| A47-1000-S | 1000 | S | A47-100K-Z | 100K | Z |
| A47-1500-S | 1500 | S | A47-150K-S | 150K | S |
| A47-2000-S | 2000 | S | A47-200K-S | 200K | S |
| A47-2500-S | 2500 | S | A47-250K-S | 250K | S |
| A47-3000-S | 3000 | S | A47-250K-Z | 250K | Z |
| A47-4000-S | 4000 | S | A47-300K-S | 300K | S |
| A47-5000-S | 5000 | S | A47-500K-S | 500K | S |
| A47-7500-S | 7500 | S | A47-500K-Z | 500K | Z |
| A47-10K-S | 10K | S | A47-750K-S | 750K | S |
| A47-10K-V | 10K | V | A47-750K-Z | 750K | Z |
| A47-10K-W | 10K | W | A47-1 Meg-S | 1 Meg. | S |
| A47-10K-Z | 10K | Z | A47-1 Meg-Z | 1 Meg. | Z |
| A47-15K-S | 15K | S | A47-1.5 Meg-S | 1.5 Meg. | S |
| A47-15K-V | 15K | V | A47-2 Meg-Z | 2 Meg. | Z |
| A47-15K-W | 15K | W | A47-2 Meg-S | 2 Meg. | S |
| A47-20K-S | 20K | S | A47-2.5 Meg-S | 2.5 Meg. | S |
| A47-25K-S | 25K | S | A47-3 Meg-S | 3 Meg. | S |
| A47-25K-W | 25K | W | A47-3 Meg-Z | 3 Meg. | Z |
| A47-25K-V | 25K | V | A47-4 Meg-S | 4 Meg. | S |
| A47-30K-S | 30K | S | A47-4 Meg-Z | 4 Meg. | Z |
| A47-40K-S | 40K | S | A47-5 Meg-S | 5 Meg. | S |
| A47-50K-S | 50K | S | A47-5 Meg-Z | 5 Meg. | Z |
| A47-50K-W | 50K | W | A47-7.5 Meg-S | 7.5 Meg. | S |
| A47-50K-Z | 50K | Z | A47-10 Meg-S | 10 Meg. | S |
| A47-75K-S | 75K | S | | | |

NET PRICE \$.93

Standard Packing—10 per Carton

SERIES "AD47" 1/2-WATT DUAL CONTROLS

These are the same as "A47" except that they are dual controls.

| Cat. No. | Panel | Taper | Rear | Taper |
|---------------|--------|-------|--------|-------|
| AD47-50-S | 50K | S | 50K | S |
| AD47-100K-S | 100K | S | 100K | S |
| AD47-250K-S | 250K | S | 250K | S |
| AD47-250K-Z | 250K | Z | 250K | Z |
| AD47-500K-Z | 500K | Z | 500K | Z |
| AD47-1 Meg.-S | 1 Meg. | S | 1 Meg. | S |
| AD47-1 Meg.-Z | 1 Meg. | Z | 1 Meg. | Z |
| AD47-2 Meg.-S | 2 Meg. | S | 2 Meg. | S |
| AD47-2 Meg.-Z | 2 Meg. | Z | 2 Meg. | Z |
| AD47-5 Meg.-S | 5 Meg. | S | 5 Meg. | S |
| AD47-5 Meg.-Z | 5 Meg. | Z | 5 Meg. | Z |

NET PRICE \$2.25

Standard Packing—Individual Carton

SERIES "C47S" 1/2-WATT CONTROLS WITH PUSH-PULL SWITCH

| Cat. No. | Cat. No. |
|-------------|---------------|
| C47S-250K-S | C47S-750K-Z |
| C47S-250K-Z | C47S-1 Meg.-S |
| C47S-500K-S | C47S-1 Meg.-Z |
| C47S-500K-Z | C47S-2 Meg.-S |
| C47S-750K-S | C47S-2 Meg.-Z |

Net Price \$1.53

Standard Packing—10 per Carton.

SERIES "C47SF" (TAPPED)

| Cat. No. | Tap |
|---------------|----------|
| C47SF-500K | Tap 250K |
| C47SF1-500K | Tap 150K |
| C47SF-1 Meg. | Tap 500K |
| C47SF1-1 Meg. | Tap 250K |

Net Price \$1.95

Standard Packing—10 per Carton.

SERIES "A47F"



SERIES A47F (INDUSTRIAL) SERIES 47F

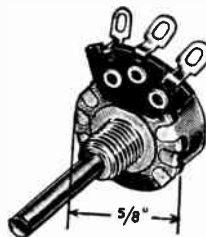
Series "A47F" controls are field-assembled with the selected "Pick-A-Shaft" and "Ad-A-Switch". "A47F" controls have taps 1, 2, 3 located at 40%, 50% and 60% of rotation, double taps at 35 and 65% of electrical position. These controls are also available with factory-assembled shafts at no extra charge, by omitting prefix "A" from catalog number and designating the type of shaft desired when ordering. Example: 47F-200K with FS-3 shaft.

| Cat. No. | Res. Ohms. | Tap No. 1 30% | Tap No. 2 50% | Tap No. 3 70% |
|---------------|------------|---------------|---------------|---------------|
| A47F-15K | 15K | | | |
| A47F-50K | 50K | | | |
| A47F-200K | 200K | | | |
| A47F-250K | 250K | | | |
| A47F1-250K | 250K | | 125K | |
| A47F2-250K | 250K | | | 125K |
| A47F-350K | 350K | 60K | | |
| A47F1-350K | 350K | | 75K | |
| A47F-500K | 500K | | | |
| A47F1-500K | 500K | 25K | | 100K |
| A47F2-500K | 500K | | | 200K |
| A47F3-500K | 500K | | | 100K |
| A47F4-500K | 500K | | | 50K |
| A47F5-500K | 500K | | | 250K |
| A47F6-500K | 500K | | | 300K |
| A47F-1 Meg. | 1 Meg. | 100K | | |
| A47F1-1 Meg. | 1 Meg. | 250K | | |
| A47F2-1 Meg. | 1 Meg. | | | 200K |
| A47F3-1 Meg. | 1 Meg. | | | 50K |
| A47F4-1 Meg. | 1 Meg. | | | 100K |
| A47F5-1 Meg. | 1 Meg. | | | 225K |
| A47F-1.5 Meg. | 1.5 Meg. | | | 500K |
| A47F-2 Meg. | 2 Meg. | 250K | | |
| A47F1-2 Meg. | 2 Meg. | 20K | | |
| A47F2-2 Meg. | 2 Meg. | 5000 | | |
| A47F3-2 Meg. | 2 Meg. | | | 15K |
| A47F4-2 Meg. | 2 Meg. | | | 1 Meg. |
| A47F5-2 Meg. | 2 Meg. | | | 200K |
| A47F6-2 Meg. | 2 Meg. | | | 400K |
| A47F7-2 Meg. | 2 Meg. | | | 500K |
| A47F-2.5 Meg. | 2.5 Meg. | 250K | | |
| A47F-3 Meg. | 3 Meg. | 250K | | |
| A47F-3 Meg. | 3 Meg. | | | 250K |

NET PRICE \$1.35. Standard Packing—10 per Carton. *Reg. U.S. Pat. Off.

SERIES 44 — 0.02 WATT CONTROLS

Composition Element Controls rated at 0.2 watt. designed specifically for miniaturized applications such as transistorized circuits, pocket radios, hearing aids, etc. Stocked controls have Clarostat "W" taper (20% log audio). Other tapers available on special order. Series 44 is without switch, while Series 44S has factory-attached 0.5 am. 25 v.d.c. DPST switch. Other ohmages available on special order. 200 ohms to 5 meg. linear; 1500 to 2.5 meg. tapered. Also available on special order, controls with 0.5 a. 25 v.d.c. SPST switch. Items not listed are special. Prices and information on request.



| Without Switch Cat. No. | 44S-5K-W | 44-100K-W |
|-------------------------|-----------|------------|
| 44-5K-W | 44-100K-W | 44S-100K-W |
| 44-10K-W | 44-250K-W | 44S-10K-W |
| 44-25K-W | 44-500K-W | 44S-25K-W |
| 44-50K-W | | 44S-50K-W |

NET PRICE \$.93

NET PRICE \$1.35

Standard Packing—10 Per Carton

SERIES B47 1/2-WATT TAB-MOUNT

Composition element controls designed for radio and TV applications, where bushing-less controls are required. Phenolic shaft insures insulation if control is used on a "hot" chassis. Items not listed are special, for which information and prices will be supplied on request.

| Cat. No. | Cat. No. | Cat. No. |
|------------|------------|---------------|
| B47-500-S | B47-10K-S | B47-250K-S |
| B47-750-S | B47-25K-S | B47-330K-Z |
| B47-1500-S | B47-50K-S | B47-2 Meg-S |
| B47-2500-S | B47-100K-S | B47-500K-S |
| B47-3000-S | B47-150K-S | B47-2.5 Meg-S |
| B47-5000-S | B47-200K-S | B47-500K-Z |
| | | B47-3 Meg-S |
| | | B47-1 Meg-S |
| | | B47-5 Meg-S |
| | | B47-7.5 Meg-S |

NET PRICE \$.60

Standard Packing—10 per Carton.

SERIES B47S 1/2-WATT TAB MOUNT WITH SWITCH

| Cat. No. | Cat. No. |
|-------------|--------------|
| B47S-250K-S | B47S-1 Meg-S |
| B47S-250K-Z | B47S-1 Meg-Z |
| B47S-500K-S | B47S-2 Meg-S |
| B47S-500K-Z | B47S-2 Meg-Z |

Net Price \$1.20

Standard Packing—10 per Carton.



PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

WIRE-WOUND CONTROLS

These are "Pick-A-Shaft" controls which take any one of 12 shafts listed on page R-24 including High Voltage Coupler and insulated shaft. Your choice of any one of the 12 shafts listed (this does not include insulated shaft) with each control. Tolerances of these controls are in accordance with EIA standards. Overall resistance

tolerance of plus/minus 10% for all values. All controls are linear. Available with factory-assembled shafts at no extra charge, by omitting the prefix "A" from the catalog number and designating the type of shaft desired when ordering. Example: 43-500 with FKS-1 shaft, or 43S-10K with FS-3 shaft and SPST switch.

SERIES "A43" and "A43S" 2-WATT CONTROLS



**SERIES A43
(INDUSTRIAL)
SERIES 43**



**SERIES A43S
(INDUSTRIAL)
SERIES 43S**

"A43" is without switch, while "A43S" has factory-attached SPST switch. When ordering "A43S" controls, specify type of switch. Controls with other than SPST switch are special. Prices and information on request.

| Without Switch Cat. No. | With SPST Switch Cat. No. | Res. Ohms | Without Switch Cat. No. | With SPST Switch Cat. No. | Res. Ohms |
|----------------------------|---------------------------------|--------------|----------------------------|---------------------------------|--------------|
| A43-5 | A43S-5 | 5 | A43-1,000 | A43S-1,000 | 1,000 |
| A43-10 | A43S-10 | 10 | A43-1,500 | A43S-1,500 | 1,500 |
| A43-20 | A43S-20 | 20 | A43-2,000 | A43S-2,000 | 2,000 |
| A43-25 | A43S-25 | 25 | A43-2,500 | A43S-2,500 | 2,500 |
| A43-30 | A43S-30 | 30 | A43-3,000 | A43S-3,000 | 3,000 |
| A43-40 | A43S-40 | 40 | A43-4,000 | A43S-4,000 | 4,000 |
| A43-50 | A43S-50 | 50 | A43-5,000 | A43S-5,000 | 5,000 |
| A43-75 | A43S-75 | 75 | A43-7,500 | A43S-7,500 | 7,500 |
| A43-100 | A43S-100 | 100 | A43-10K | A43S-10K | 10K |
| A43-150 | A43S-150 | 150 | A43-15K | | |
| A43-200 | A43S-200 | 200 | A43-20K | | |
| A43-300 | A43S-300 | 300 | A43-25K | | |
| A43-400 | A43S-400 | 400 | A43-30K | | |
| A43-500 | A43S-500 | 500 | A43-40K | | |
| A43-750 | A43S-750 | 750 | A43-50K | | |

Standard Packing: 10 per Carton.

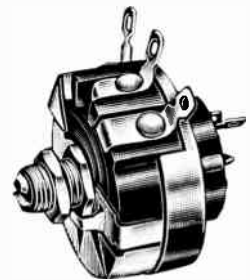
NET PRICES: (Without Switch)
 5 to 10KΩ \$.93
 15K to 25KΩ 1.20
 30K to 50KΩ 1.62
(With Switch)
 5 to 10KΩ! \$1.47

SERIES "A58" and "A58S" 3-WATT CONTROLS

"A58" is without switch, while "A58S" has factory-attached SPST switch. Available with factory-assembled shafts, at no extra charge, by omitting prefix "A" from catalog number, and designating type of shaft desired when ordering. Example: 58-50K with KSS-3 shaft, or 58S-25K with RS-3 shaft and SPST switch. Controls with other than SPST switch are special. Prices and information on request.



**SERIES A58
(INDUSTRIAL)
SERIES 58**



**SERIES A58S
(INDUSTRIAL)
SERIES 58S**

| Without Switch Cat. No. | Res. Ohms |
|----------------------------|--------------|
| A58-1 | 1 |
| A58-2 | 2 |
| A58-4 | 4 |
| A58-6 | 6 |
| A58-10 | 10 |
| A58-15 | 15 |
| A58-20 | 20 |
| A58-25 | 25 |
| A58-30 | 30 |
| A58-40 | 40 |
| A58-50 | 50 |
| A58-60 | 60 |
| A58-75 | 75 |
| A58-100 | 100 |
| A58-200 | 200 |
| A58-300 | 300 |
| A58-400 | 400 |
| A58-500 | 500 |
| A58-750 | 750 |
| A58-1,000 | 1,000 |
| A58-1,500 | 1,500 |
| A58-2,000 | 2,000 |
| A58-2,500 | 2,500 |
| A58-3,000 | 3,000 |
| A58-4,000 | 4,000 |
| A58-5,000 | 5,000 |

| Without Switch Cat. No. | Res. Ohms |
|----------------------------|--------------|
| A58-7,500 | 7,500 |
| A58-10K | 10K |
| A58-15K | 15K |
| A58-20K | 20K |
| A58-25K | 25K |
| A58-30K | 30K |
| A58-40K | 40K |
| A58-50K | 50K |

NET PRICES:
 1 to 10KΩ \$.93
 15K to 25KΩ 1.20
 30K to 50KΩ 1.62

| With SPST Switch Cat. No. | Res. Ohms |
|------------------------------|--------------|
| A58S-1 | 1 |
| A58S-2 | 2 |
| A58S-4 | 4 |
| A58S-6 | 6 |
| A58S-10 | 10 |
| A58S-15 | 15 |
| A58S-20 | 20 |
| A58S-25 | 25 |
| A58S-30 | 30 |
| A58S-40 | 40 |

| With SPST Switch Cat. No. | Res. Ohms |
|------------------------------|--------------|
| A58S-50 | 50 |
| A58S-60 | 60 |
| A58S-75 | 75 |
| A58S-100 | 100 |
| A58S-200 | 200 |
| A58S-300 | 300 |
| A58S-400 | 400 |
| A58S-500 | 500 |
| A58S-750 | 750 |
| A58S-1,000 | 1,000 |
| A58S-1,500 | 1,500 |
| A58S-30K | 30K |
| A58S-40K | 40K |
| A58S-50K | 50K |

| | |
|------------|-------|
| A58S-2,000 | 2,000 |
| A58S-2,500 | 2,500 |
| A58S-3,000 | 3,000 |
| A58S-4,000 | 4,000 |
| A58S-5,000 | 5,000 |
| A58S-7,500 | 7,500 |
| A58S-10K | 10K |
| A58S-15K | 15K |
| A58S-20K | 20K |
| A58S-25K | 25K |

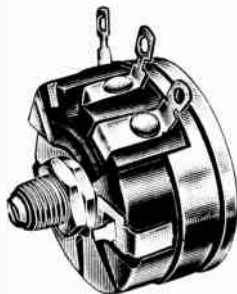
NET PRICES:
 1 to 10KΩ \$1.47
 15K to 25KΩ! 1.71
 30K to 50KΩ! 2.16

Standard Packing: 10 per Carton.

Standard Packing: 10 per Carton.

SERIES "A10" and "A10S" 4-WATT CONTROLS

"A10" is without switch, while "A10S" has factory-attached SPST switch. Also available with factory-assembled shaft at no extra charge, by omitting prefix "A" from catalog number. See above for examples. Controls with other than SPST switch are special. Price and information on request.



**SERIES A10
(INDUSTRIAL)
SERIES 10**

| Without Switch Cat. No. | With SPST Switch Cat. No. | Res. Ohms |
|----------------------------|---------------------------------|--------------|
| A10-1 | A10S-1 | 1 |
| A10-2 | A10S-2 | 2 |
| A10-4 | A10S-4 | 4 |
| A10-6 | A10S-6 | 6 |
| A10-10 | A10S-10 | 10 |
| A10-15 | A10S-15 | 15 |
| A10-20 | A10S-20 | 20 |
| A10-25 | A10S-25 | 25 |
| A10-30 | A10S-30 | 30 |
| A10-40 | A10S-40 | 40 |
| A10-50 | A10S-50 | 50 |
| A10-60 | A10S-60 | 60 |
| A10-75 | A10S-75 | 75 |
| A10-100 | A10S-100 | 100 |
| A10-200 | A10S-200 | 200 |
| A10-300 | A10S-300 | 300 |
| A10-400 | A10S-400 | 400 |
| A10-500 | A10S-500 | 500 |

| Without Switch Cat. No. | With SPST Switch Cat. No. | Res. Ohms |
|----------------------------|---------------------------------|--------------|
| A10-750 | A10S-750 | 750 |
| A10-1,000 | A10S-1,000 | 1,000 |
| A10-1,500 | A10S-1,500 | 1,500 |
| A10-2,000 | A10S-2,000 | 2,000 |
| A10-2,250 | | 2,250 |
| A10-2,500 | A10S-2,500 | 2,500 |
| A10-3,000 | A10S-3,000 | 3,000 |
| A10-4,000 | A10S-4,000 | 4,000 |
| A10-5,000 | A10S-5,000 | 5,000 |
| A10-7,500 | A10S-7,500 | 7,000 |
| A10-10K | A10S-10K | 10K |
| A10-15K | A10S-15K | 15K |
| A10-20K | A10S-20K | 20K |
| A10-25K | A10S-25K | 25K |
| A10-30K | A10S-30K | 30K |
| A10-40K | A10S-40K | 40K |
| A10-50K | A10S-50K | 50K |
| A10-75K | A10S-75K | 75K |
| A10-100K | A10S-100K | 100K |

NET PRICES
 (Without Switch)
 1 to 10KΩ \$1.35
 15K to 25KΩ 1.59
 30K to 50KΩ! 2.01
 75K to 100KΩ! 2.46

(With SPST Switch)
 1 to 10KΩ \$1.89
 15K to 25KΩ 2.10
 30K to 50KΩ 2.55
 75K to 100KΩ! 2.97

*Reg. U. S. Pat. Off.

Standard Packing: 10 per Carton.

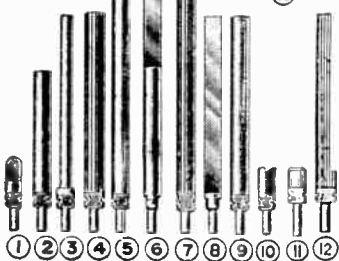
PRODUCTS OF
THE HOUSE OF RESISTORS®



**RESISTORS • CONTROLS
RESISTANCE DEVICES**

SHAFTS FOR "PICK-A-SHAFT"® CONTROLS

For use with all Clarostat "Pick-A-Shaft"® controls, either carbon or wire-wound. Your choice of shaft furnish with each control.

- 
- (1) SS- $\frac{3}{8}$ " length—(Male) to take female fitting.
 - (2) RS-2 — Round shaft, $\frac{3}{16}$ " long.
 - (3) RS- $\frac{3}{16}$ — Round shaft $\frac{3}{16}$ " dia., $\frac{3}{16}$ " long.
 - (4) KSS-3—Knurled, split shaft, $\frac{3}{16}$ " long.
 - (5) RS-5—Round shaft, $\frac{5}{16}$ " long.
 - (6) FS-5—Flatted, $\frac{5}{16}$ " long.
 - (7) KSS-5—Knurled, split shaft, $\frac{5}{16}$ " long.
 - (8) FS-3 — Flatted shaft, $\frac{3}{16}$ " long.
 - (9) RS-3 — Round shaft, $\frac{3}{16}$ " long.
 - (10) DFS- $\frac{1}{2}$ —Double flatted Philco Type, $\frac{1}{2}$ " long.
 - (11) FKS- $\frac{1}{4}$ —Fine knurled slotted shaft, $\frac{1}{4}$ " long.
 - (12) KFS- $\frac{3}{8}$ —Knurled flatted shaft, $\frac{3}{8}$ " long.
 - (13) FKS- $\frac{1}{2}$ —Fine knurled slotted shaft, $\frac{1}{2}$ " long.
- Net Price, Each Shaft \$0.33



U.S. PAT. 2,642,506

**SERIES "SWE"
SWITCHES FOR "AD-A-SWITCH"® CONTROLS**

For use with "A47" and "A47F" controls. Underwriters' Laboratories Inc. approved.

| Cat. No. | Wiring | Net Price |
|----------|---|-----------|
| SWE-12 | S.P.S.T. — Single Pole Single Throw, 5A.-125V. A.C. | \$0.45 |
| SWE-13 | S.P.S.T. — Single Pole Single Throw, 15A.-10V. D.C. | .66 |
| SWE-20 | D.P.S.T. — Double Pole Single Throw, 3A.-125V. A.C. | .51 |
| SWE-21 | Mod. D.P.S.T. one pole on, one off or with Jumper S.P.D.T., 3A.-125V. A.C.-D.C. | .51 |
| SWE-23 | D.P.S.T., 15A.-10V. D.C. | .66 |

(Mod. DPST has one pole "on", one pole "off" or w/lt Jumper it is SPDT.)

Standard Packing: 10 per Carton.

POWER RHEOSTATS



Clarostat Power Rheostats maintain their full power rating at settings as low as one-third rotation without excessive temperature rise. Standard overall resistance tolerance plus/minus 10%. Closer tolerances are available upon special order.

AN Types (aircraft type) are basically the same units mechanically and electrically except that they are encased in a metal housing (versus ceramic). Terminals are screw type lugs to prevent corrosion. Approved under MIL-R-6749.

Units mount through a single hole, a locking pin is provided for rear panel mounting.

SERIES 25 — 25-WATT

| Cat. No. | Total Res. Ohms | Net Price |
|----------|-----------------|-----------|
| 25-1 | 1 | \$3.87 |
| 25-2 | 2 | 3.42 |
| 25-3 | 3 | 3.42 |
| 25-6 | 6 | 3.42 |
| 25-8 | 8 | 3.42 |
| 25-10 | 10 | 3.42 |
| 25-15 | 15 | 3.42 |
| 25-25 | 25 | 3.42 |
| 25-35 | 35 | 3.42 |
| 25-50 | 50 | 3.42 |
| 25-75 | 75 | 3.42 |
| 25-100 | 100 | 3.42 |
| 25-125 | 125 | 3.42 |
| 25-175 | 175 | 3.42 |
| 25-250 | 250 | 3.42 |
| 25-350 | 350 | 3.42 |
| 25-500 | 500 | 3.42 |
| 25-750 | 750 | 3.42 |
| 25-1,000 | 1,000 | 3.87 |
| 25-1,500 | 1,500 | 3.87 |
| 25-2,500 | 2,500 | 3.87 |
| 25-3,500 | 3,500 | 4.08 |
| 25-5,000 | 5,000 | 4.29 |

SERIES 50 — 50-WATT

| Cat. No. | Total Res. Ohms | Net Price |
|----------|-----------------|-----------|
| 50-0.5 | 0.5 | \$4.25 |
| 50-1 | 1 | 4.25 |
| 50-2 | 2 | 4.25 |
| 50-4 | 4 | 3.87 |
| 50-6 | 6 | 3.87 |
| 50-8 | 8 | 3.87 |
| 50-12 | 12 | 3.87 |
| 50-16 | 16 | 3.87 |
| 50-22 | 22 | 3.87 |
| 50-35 | 35 | 3.87 |
| 50-50 | 50 | 3.87 |
| 50-80 | 80 | 3.87 |
| 50-125 | 125 | 3.87 |
| 50-150 | 150 | 3.87 |
| 50-225 | 225 | 3.87 |
| 50-300 | 300 | 3.87 |
| 50-500 | 500 | 3.87 |
| 50-800 | 800 | 4.08 |
| 50-1,000 | 1,000 | 4.08 |
| 50-1,600 | 1,600 | 4.08 |
| 50-2,500 | 2,500 | 4.08 |
| 50-3,500 | 3,500 | 4.29 |
| 50-5,000 | 5,000 | 4.29 |
| 50-8,000 | 8,000 | 5.16 |
| 50-10K | 10K | 5.16 |

AN-3155-25 —
25 WATTS**

| Cat. No. | Total Res. Ohms | Net Price |
|----------------|-----------------|-----------|
| AN-3155-25-10 | 10 | \$4.80 |
| AN-3155-25-11 | 11 | 4.80 |
| AN-3155-25-15 | 15 | 4.80 |
| AN-3155-25-25 | 25 | 4.80 |
| AN-3155-25-50 | 50 | 4.80 |
| AN-3155-25-75 | 75 | 4.80 |
| AN-3155-25-100 | 100 | 4.80 |
| AN-3155-25-200 | 200 | 5.61 |

AN-3155-50 —
50 WATTS**

| Cat. No. | Total Res. Ohms | Net Price |
|----------------|-----------------|-----------|
| AN-3155-50-5 | 5 | 5.61 |
| AN-3155-50-8 | 8 | 5.61 |
| AN-3155-50-10 | 10 | 5.61 |
| AN-3155-50-25 | 25 | 5.46 |
| AN-3155-50-30 | 30 | 5.46 |
| AN-3155-50-50 | 50 | 5.46 |
| AN-3155-50-75 | 75 | 5.46 |
| AN-3155-50-100 | 100 | 5.46 |
| AN-3155-50-150 | 150 | 6.12 |
| AN-3155-50-200 | 200 | 6.12 |

Prices include AN-3220 — 2 knob

Standard Packing: Individual Carton.

**25 and 50 watt Power Rheostats when encased in metal housing are derated 50%

PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

SOUND-SYSTEM CONTROLS

For proper control of volume and tone alike, Clarostat offers a choice of several controls, such as L- and T-pads, output attenuators, and individual-speaker volume controls as used for drive-in theatre instal-

lations. These are not ordinary radio controls but rather sound-system controls designed and built for critical requirements.

CONSTANT-IMPEDANCE CONTROLS

Self-compensating volume controls known as L-pads and T-pads for use in sound systems. Rated at 2 1/4 watts DC, but will handle up to 10 watts audio. Continuous range from 0.5 to 30 decibels attenuation in 90% rotation. Last 10% affords infinite attenuation. With Clarostat constant-impedance L-pads and T-pads the input and output impedances of associated circuits can be kept within the limits of a constant required value. Knob and dial plate furnished with each control.



U. S. Pat. 2,434,248

| CIT Cat. No. | CIL Cat. No. | Res. Ohms | CIT Cat. No. | CIL Cat. No. | Res. Ohms |
|-----------------|-----------------|-----------|-----------------|-----------------|-----------|
| CIT-4 | CIL-4 | 4 | CIT-200 | CIL-200 | 200 |
| CIT-6 | CIL-6 | 6 | CIT-250 | CIL-250 | 250 |
| CIT-8 | CIL-8 | 8 | CIT-500 | CIL-500 | 500 |
| CIT-15 | CIL-15 | 15 | CIT-600 | CIL-600 | 600 |
| CIT-50 | CIL-50 | 50 | CIT-1,000 | CIL-1,000 | 1,000 |
| CIT-100 | CIL-100 | 100 | CIT-2,000 | CIL-2,000 | 2,000 |

CIT—NET PRICE \$3.13

CIL—NET PRICE \$2.79

Standard Packing: Individual Carton.

CONSTANT IMPEDANCE OUTPUT ATTENUATORS

Series "CIB" rated at 10 watts, but will handle up to 30 watts in audio circuit. Linear attenuation provided in 3 decibel steps up to 24db, then 30db followed by infinity. Equipped with dial plate and bar knob. One-hole mounting, 3/8" bushing diameter, 1" shaft. This control has been developed to meet the need for a constant-impedance attenuator capable of handling considerable power without measurable insertion loss. Recommended as an output level control for power amplifiers, or as an input attenuator for individual or for a group of speakers in a public address system.



| Cat. No. | Res. Ohms | Cat. No. | Res. Ohms |
|----------|-----------|----------|-----------|
| CIB-6 | 6 | CIB-200 | 200 |
| CIB-8 | 8 | CIB-250 | 250 |
| CIB-15 | 15 | CIB-500 | 500 |
| CIB-50 | 50 | CIB-600 | 600 |

NET PRICE \$7.70

Standard Packing: Individual Carton.

SPECIAL DRIVE-IN THEATRE L-PAD

To meet the needs of theater sound systems, more especially those of drive-in theaters, a special 8 ohm L-Pad is now available, containing two separate windings of 5 ohms and 40 ohms. Also 50 ohm linear rheostat and 35 ohm tapered rheostat, as listed. Units have 3/8-32 bushing 3/4" long, and 1 1/2" round shaft.



| | | |
|-------------------|-------------------------|------------------|
| Cat. No. CM8727-1 | 8 ohm L-Pad | Net Price \$1.80 |
| Cat. No. CM17083 | 50 ohm linear rheostat | Price \$1.32 |
| Cat. No. CM17084 | 35 ohm tapered rheostat | Net Price \$1.32 |

SPACE-SAVER CONSTANT-IMPEDANCE ATTENUATORS

Characterized by reduced depth and diameter, these attenuators are ideal for use in remote control of speakers since they are small enough to be installed in standard electrical boxes in the home, office, stockroom, etc.

These controls are rated 2 watts D.C., but will handle up to 4 watts of audio, depending upon the type signal being handled. (As the frequency becomes constant, wattage reduces to 2 watts or the same as the D.C. rating).

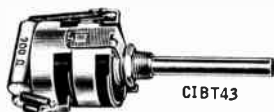
- Attenuation range of 0 to 30 db over 90% of rotation, 60 db in remaining 10% of rotation. Attenuation will increase approximately linearly to 30 db with counter-clockwise rotation.
- Insertion loss less than 0.5 db.
- Input impedance within plus/ minus 20%.
- The CIT43 and CIBT43 (Bridged T Pad) have constant input and output impedances, while the CIL43 has constant impedance in the input only.
- Shafts and bushings are insulated from the circuit elements.
- Pads have 3/8-32 x 3/8" long bushing.
- 1/4" dia. round shafts 1 1/2" long beyond bushing.
- All pads supplied with bar knob and dial plates, as shown above.
- Dia. 1 1/8". Depth of body from mounting surface: CIL43 — 1 1/8"; CIT43 — 1 3/8"; CIBT43 — 1 1/2".



CIL43



CIT43



CIBT43

| Cat. No. CIL43 (L-Pad) | Cat. No. CIT43 (T-Pad) | Cat. No. CIBT43 (Bridged T-Pad) | Impedance |
|------------------------------|------------------------------|---------------------------------------|-----------|
| CIL43-4 | CIT43-4 | CIBT43-4 | 4 ohms |
| CIL43-6 | CIT43-6 | CIBT43-6 | 6 ohms |
| CIL43-8 | CIT43-8 | CIBT43-8 | 8 ohms |
| CIL43-15 | CIT43-15 | CIBT43-15 | 15 ohms |
| CIL43-50 | CIT43-50 | CIBT43-50 | 50 ohms |
| CIL43-100 | CIT43-100 | CIBT43-100 | 100 ohms |
| CIL43-200 | CIT43-200 | CIBT43-200 | 200 ohms |
| CIL43-250 | CIT43-250 | CIBT43-250 | 250 ohms |
| CIL43-500 | CIT43-500 | CIBT43-500 | 500 ohms |

NET PRICE CIL43 \$2.79 NET PRICE CIT43 \$3.13

NET PRICE CIBT43 \$3.63

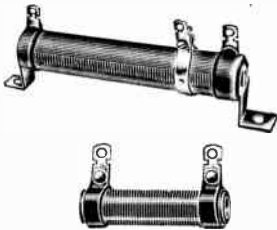
Standard Packing — Individual Carton

PRODUCTS OF
THE HOUSE OF RESISTORS®



RESISTORS • CONTROLS
RESISTANCE DEVICES

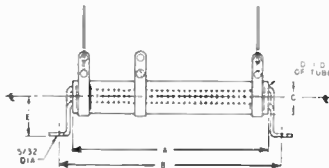
"GREENOHM"* WIRE-WOUND RESISTORS



FIXED TYPES Wire-wound resistors for most rugged applications. Will withstand tremendous overloads and temperature changes without altering resistance values or appearance. Wire windings on high grade ceramic tubing and coated with special inorganic cement. In accordance with EIA standards, overall tolerances are $\pm 5\%$ for resistors of 50 ohms and higher. For resistors of 49.9 ohms and lower, overall tolerances are $\pm 10\%$.

ADJUSTABLE TYPES Same electrically and mechanically as Fixed types, but incorporating sliding band or bands for tapping any desired resistance values. Slider band tightened by means of screw. In accordance with EIA standards, overall tolerances are $\pm 10\%$.

DIMENSIONS BY TYPES



| SERIES | WATTS | A | B | C | D | E |
|----------|-------|-------|--------|------|------|------|
| PR-5-F | 5 | 1 | 1-7/16 | 5/16 | 3/16 | 7/16 |
| PR-10-F | 10 | 1-3/4 | 2-3/16 | 5/16 | 3/16 | 7/16 |
| PR-10-FB | 10 | 1-3/4 | 2-3/16 | 5/16 | 3/16 | 7/16 |
| PR-20-K | 20 | 2 | 2-1/2 | 9/16 | 3/8 | 9/16 |
| P-25-K | 25 | 2-1/2 | 3 | 9/16 | 3/8 | 9/16 |
| P-25-KA | 25 | 2-1/2 | 3 | 9/16 | 3/8 | 9/16 |

FIXED RESISTORS

5-WATT SERIES PR-5-F

These resistors conform to EIA specification for type RRW-125 and 128.

| Ohms | Ohms | Ohms | Ohms |
|------|------|-------|-------|
| 1 | 75 | 800 | 5,000 |
| 2 | 100 | 900 | 6,000 |
| 3 | 125 | 1,000 | 7,000 |
| 4 | 150 | 1,100 | 7,500 |
| 5 | 200 | 1,200 | 8,000 |
| 7.5 | 225 | 1,250 | 8,500 |
| 10 | 250 | 1,500 | 9,000 |
| 12 | 300 | 1,750 | 10K |
| 15 | 350 | 2,000 | |
| 20 | 400 | 2,250 | |
| 25 | 450 | 2,500 | |
| 30 | 500 | 3,000 | |
| 35 | 600 | 3,500 | |
| 40 | 700 | 4,000 | |
| 50 | 750 | 4,500 | |

NET PRICE \$0.33

Standard Packing — 10 per Carton.
Mounting brackets supplied at extra cost.

25-WATT SERIES P-25-K

| Ohms | Ohms | Ohms | Ohms |
|------|-------|------|------|
| 1 | 750 | 10K | |
| 2 | 800 | 12K | |
| 3 | 1,000 | 15K | |
| 5 | 1,250 | 20K | |
| 7.5 | 1,500 | 25K | |
| 10 | 2,000 | 30K | |
| 15 | 2,250 | 35K | |
| 20 | 2,500 | 40K | |
| 25 | 3,000 | 45K | |
| 50 | 3,500 | 50K | |
| 75 | 4,000 | 60K | |
| 100 | 4,500 | 70K | |
| 150 | 5,000 | 75K | |
| 200 | 6,000 | 80K | |
| 250 | 7,000 | 85K | |
| 300 | 7,500 | 90K | |
| 400 | 8,000 | 100K | |
| 500 | 9,000 | | |

NET PRICES:

| | |
|-------------------|-------|
| 1 ohm to 5,000 | \$.51 |
| 6,000 to 15K ohms | .57 |
| 20K to 50K ohms | .66 |
| 60K ohms | .75 |
| 70K ohms | .84 |
| 75K ohms | .87 |
| 80K ohms | .90 |
| 85K ohms | .99 |
| 90K ohms | 1.05 |
| 100K ohms | 1.17 |

Mounting brackets at no extra cost.
Standard Packing — Individually Boxed.

10-WATT SERIES PR-10-F

These resistors conform to military specifications for type RW29, and EIA type RRW-126 and 129.

| Ohms | Ohms | Ohms | Ohms |
|------|-------|-------|-------|
| 1 | 200 | 2,000 | 14.5K |
| 2 | 225 | 2,250 | 15K |
| 3 | 250 | 2,500 | 16K |
| 4 | 300 | 3,000 | 17.5K |
| 5 | 350 | 3,500 | 18K |
| 7.5 | 400 | 4,000 | 20K |
| 10 | 450 | 4,500 | 22.5K |
| 12 | 500 | 5,000 | 25K |
| 15 | 600 | 6,000 | 30K |
| 20 | 700 | 7,000 | 35K |
| 25 | 750 | 7,500 | 40K |
| 30 | 800 | 8,000 | 50K |
| 35 | 900 | 8,500 | |
| 40 | 1,000 | 9,000 | |
| 50 | 1,100 | 10K | |
| 75 | 1,200 | 11K | |
| 100 | 1,250 | 12K | |
| 125 | 1,500 | 12.5K | |
| 150 | 1,750 | 13.5K | |

NET PRICE \$0.36

Mounting brackets supplied at extra cost.
Standard Packing — 10 per Carton.

20-WATT SERIES PR-20-K

These resistors conform to EIA specifications for type RRW-127.

| Ohms | Ohms | Ohms | Ohms |
|------|-------|-------|------|
| 5 | 850 | 7,000 | 70K |
| 10 | 1,000 | 7,500 | 75K |
| 25 | 1,200 | 8,000 | 80K |
| 50 | 1,250 | 9,000 | 85K |
| 75 | 1,500 | 10K | 90K |
| 100 | 1,750 | 12.5K | 95K |
| 150 | 1,850 | 15K | 100K |
| 200 | 2,000 | 20K | |
| 250 | 2,250 | 25K | |
| 300 | 2,500 | 30K | |
| 350 | 2,750 | 35K | |
| 400 | 3,000 | 40K | |
| 500 | 3,500 | 45K | |
| 650 | 4,000 | 50K | |
| 700 | 4,500 | 55K | |
| 750 | 5,000 | 60K | |
| 800 | 6,000 | 65K | |

NET PRICES:

| | |
|--------------------|-------|
| 5 ohms to 15K ohms | \$.42 |
| 20K to 50K ohms | .57 |
| 55K to 100K ohms | .72 |

Mounting brackets supplied at extra cost.
Standard Packing — 5 per Carton.

ADJUSTABLE RESISTORS

These resistors conform to military specification for type RW-29 and EIA specification for type RRW-226.

10-WATT SERIES PR-10-FA

| Res. | Res. | Res. | Res. |
|------|------|-------|-------|
| 1 | 75 | 750 | 4,000 |
| 2 | 100 | 800 | 4,500 |
| 3 | 150 | 1,000 | 5,000 |
| 5 | 200 | 1,250 | 6,000 |
| 7.5 | 250 | 1,500 | 7,000 |
| 10 | 300 | 2,000 | 7,500 |
| 15 | 350 | 2,250 | 8,000 |
| 20 | 400 | 2,500 | 8,500 |
| 25 | 500 | 3,000 | 9,000 |
| 50 | 600 | 3,500 | 10K |

NET PRICE \$0.57

Above adjustable resistors supplied with mounting brackets at no extra cost. Extra slider bands — 30¢ each. Standard Packing — individually boxed

25-WATT SERIES P-25-KA

| Res. | Res. | Res. | Res. |
|------|------|-------|-------|
| 1 | 75 | 1,000 | 5,000 |
| 2 | 100 | 1,250 | 6,000 |
| 3 | 150 | 1,500 | 7,000 |
| 5 | 200 | 2,000 | 7,500 |
| 7.5 | 250 | 2,250 | 8,000 |
| 10 | 300 | 2,500 | 9,000 |
| 15 | 400 | 3,000 | 10K |
| 20 | 500 | 3,500 | 12K |
| 25 | 750 | 4,000 | 15K |
| 50 | 800 | 4,500 | 20K |
| | | | 25K |
| | | | 50K |

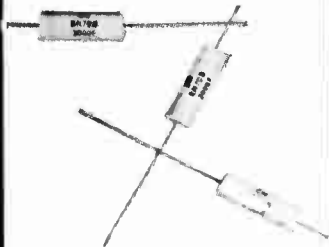
NET PRICES:

| | |
|---------------------|-------|
| 1 ohm to 5,000 ohms | \$.63 |
| 6,000 to 15K ohms | .72 |
| 20K to 25K ohms | .84 |
| 50K ohms | .99 |



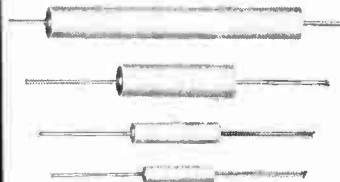
Precision Film Resistors, Potentiometers, Wire Wound Resistors, Spark Suppressors, Carbon Resistors and Specialties.

There's long life and superior performance behind every C-W component
—meeting highest quality and reliability standards at a moderate cost.



Molded Deposited Carbon Precision Film Resistors

C-W molded carbon film resistors are designed and manufactured to meet or exceed performance requirements of MIL-R-10509D. Available: $\frac{1}{8}$ W. thru 1 W.; 10 ohms thru 50 megohms. Request Bulletin 2023-61.

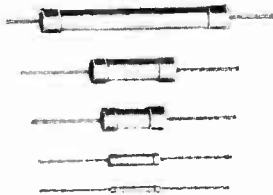


Ceramic Encased Deposited Carbon Precision Film Re- sistors.

For the ultimate in environmental protection, C-W deposited carbon film resistors are encased in a non-hydroscopic ceramic tube, and sealed with high temperature solder. Available: $\frac{1}{4}$ W. thru 2 W.; 10 ohms thru 50 megohms. Request Bulletin 307-A-60.

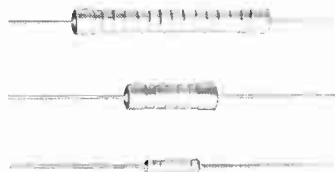
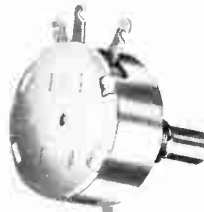
Coated Deposited Carbon Precision Film Resistors

C-W coated deposited carbon film resistors — while being designed and manufactured to meet or exceed characteristic "X" requirements of MIL-R-10509, are more modestly priced than molded resistors. Available: $\frac{1}{4}$ W. thru 2 W.; 10 ohms thru 50 megohms. Request Bulletin 307-A-60.



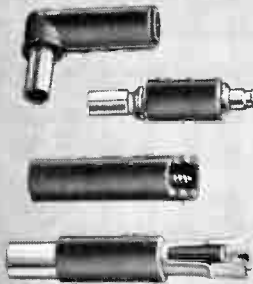
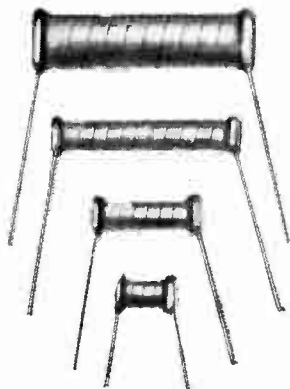
Wire-Wound Potentiometers

Available in wattage ratings from 2 thru 5, with conventional single element or dual element for "L" pad and similar applications. Shafts, bushings, mounting hardware, and other features available to meet your specific requirements. Request Bulletin 2009 and Drawing F-889.



Nobeloy and Nobelette Metal Film Precision Resistors

For applications where fine precision and good stability must be complemented with low extremes in resistance range, or, low noise characteristics, at a moderate cost. Metallic resistance element deposited on low loss ceramic core, is protected by rugged vitreous enamel coating. Available: $\frac{1}{2}$ W. thru 5 W.; less than 1 ohm thru 15 megohms. Request Bulletin 302-60.



Automotive and Oil Burner Spark Suppressors

For suppression of radio and television noise interference due to ignition spark discharge at plugs and high tension distributor; and due to ignition discharge action of oil burner igniting coil. Complete line of resistive type suppressors. Request Bulletin 125-61.

Trimmer Controls

Two Watt with screwdriver slot for convenient adjustment in trimming and balancing circuits. Insulated or ground rotor; printed circuit board snap-to-chassis or rivet-to-chassis mounting. Moderately priced. Resistance range to 10,000 ohms. Request Bulletin 2009, and Drawings E-850, E-860, E-870, and E-818.



Your C-W distributor can supply prices, and bulletins mentioned above — also details on the convenient RESIST-O-FILE stocking plan for composition resistors.



CONTINENTAL WIRT-ELECTRONICS CORP.
Philadelphia, Pa.

Centralab.

Controls and Accessories

UNIVERSAL SHAFT AND ADASHAFT® CONTROLS



"B" Control



"AB" and Shaft



"TT"



"KR"

MODELS "B" AND "AB" CONTROLS

Model B and AB controls are rated at 1/4 watt. Size: 1 1/4" diameter, 1 1/4" deep. Breakdown: 900 v. AC rms to ground. Mounting: 3/8" long 3/8"-32 thread bushing; equipped with mounting nut. Any model converts easily to switch type by merely snapping on "KR" switch. **Model B Shaft:** 1/4" diam. x 3 3/8" long from mtg. surface. Universal fluted knurled type; fits split knurl, shallow flat, deep flat, slotted, or round applications. **Model AB Shaft:** Patented stub, screwdriver slot shaft 1/4" long from mtg. surface. Use as is, or extended, using AK shafts. **\$1.02**
CRL Type "B" Plain Control—Any model. Net Each.....
CRL Type "AB" Plain Control—Any model. Net Each..... **84c**

PLAIN "B" AND "AB" CONTROLS

| Ohms | Taper | Specify No. B- or AB- | Ohms | Taper | Specify No. B- or AB- |
|--------|-------|-----------------------|----------|-------|-----------------------|
| 100 | C-1 | 1 | 100,000 | C-1 | 40 |
| 200 | C-1 | 2 | 100,000 | C-2 | 41 |
| 500 | C-1 | 4 | 150,000 | C-1 | 43 |
| 750 | C-5 | 415 | 150,000 | C-2 | 44 |
| 1,000 | C-1 | 5 | 200,000 | C-1 | 46 |
| 1,000 | C-5 | 505 | 250,000 | C-1 | 50 |
| 1,500 | C-5 | 515 | 250,000 | C-2 | 51 |
| 2,000 | C-1 | 6 | 250,000 | C-5 | 52 |
| 2,500 | C-1 | 7 | 500,000 | C-1 | 59 |
| 2,500 | C-2 | 702 | 500,000 | C-2 | 60 |
| 2,500 | C-5 | 705 | 500,000 | C-3 | 613 |
| 3,000 | C-1 | 8 | 500,000 | C-4 | 58 |
| 4,000 | C-1 | 9 | 500,000 | C-5 | 61 |
| 5,000 | C-1 | 10 | 500,000 | C-6 | 616 |
| 5,000 | C-2 | 11 | 500,000 | C-7 | 617 |
| 5,000 | C-5 | 12 | 750,000 | C-1 | 66 |
| 7,500 | C-1 | 13 | 1 meg. | C-1 | 69 |
| 10,000 | C-1 | 14 | 1 meg. | C-2 | 70 |
| 10,000 | C-2 | 15 | 1 meg. | C-4 | 744 |
| 10,000 | C-4 | 18 | 1 meg. | C-5 | 68 |
| 10,000 | C-5 | 17 | 1 meg. | C-7 | 697 |
| 10,000 | C-6 | 16 | 1.5 meg. | C-1 | 742 |
| 15,000 | C-5 | 19 | 2 meg. | C-1 | 75 |
| 15,000 | C-6 | 20 | 2 meg. | C-2 | 76 |
| 20,000 | C-1 | 22 | 2 meg. | C-5 | 77 |
| 20,000 | C-5 | 23 | 2.5 meg. | C-1 | 83 |
| 20,000 | C-6 | 24 | 3 meg. | C-1 | 84 |
| 25,000 | C-1 | 26 | 3 meg. | C-2 | 85 |
| 25,000 | C-2 | 25 | 3 meg. | C-5 | 855 |
| 25,000 | C-4 | 29 | 4 meg. | C-1 | 86 |
| 25,000 | C-5 | 27 | 4 meg. | C-2 | 862 |
| 25,000 | C-6 | 28 | 5 meg. | C-2 | 87 |
| 50,000 | C-1 | 31 | 5 meg. | C-2 | 88 |
| 50,000 | C-2 | 32 | 7 meg. | C-7 | 89 |
| 50,000 | C-5 | 34 | 7.5 meg. | C-1 | 90 |
| 75,000 | C-1 | 35 | 10 meg. | C-1 | 98 |
| 75,000 | C-5 | 36 | | | |

MODEL "B" SWITCH-TYPE CONTROLS

Universal DPST switch type units.

| CRL No. | Max. Ohms | Taper | Use For | Net Ea. |
|---------|-----------|-------|----------------------|---------|
| B-50-S | 1/2 Meg. | C-2 | SPST, DPST or 3-wire | \$1.44 |
| B-70-S | 1 Meg. | C-2 | SPST, DPST or 3-wire | 1.44 |

SINGLE TAPPED "B" CONTROLS

| Ohms | Taper | Tap | CRL No. | Net Each |
|----------|-------|---------|---------|----------|
| 50,000 | C-11 | 25K | BT-33 | \$1.28 |
| 100,000 | C-11 | 50K | BT-39 | 1.28 |
| 200,000 | C-11 | 100K | BT-47 | 1.28 |
| 250,000 | C-11 | 125K | BT-53 | 1.28 |
| 250,000 | C-12 | 50K | BT-54 | 1.28 |
| 250,000 | C-13 | 75K | BT-55 | 1.28 |
| 250,000 | C-16 | 125K* | BT-56 | 1.28 |
| 350,000 | C-12 | 70K | BT-57 | 1.28 |
| 1/2 meg. | C-11 | 250K | BT-65 | 1.28 |
| 1/2 meg. | C-12 | 100K | BT-66 | 1.28 |
| 1/2 meg. | C-13 | 150K | BT-67 | 1.28 |
| 1/2 meg. | C-15 | 50K† | BT-63 | 1.28 |
| 1/2 meg. | C-16 | 250K* | BT-64 | 1.28 |
| 1/2 meg. | C-17 | 50K† | BT-62 | 1.28 |
| 1 meg. | C-11 | 500K | BT-71 | 1.28 |
| 1 meg. | C-12 | 200K | BT-72 | 1.28 |
| 1 meg. | C-13 | 300K | BT-73 | 1.28 |
| 1 meg. | C-16 | 500K* | BT-74 | 1.28 |
| 1 meg. | C-17 | 100K | BT-7417 | 1.28 |
| 2 meg. | C-11 | 1 meg. | BT-78 | 1.28 |
| 2 meg. | C-12 | 400K | BT-79 | 1.28 |
| 2 meg. | C-13 | 600K | BT-80 | 1.28 |
| 2 meg. | C-15 | 200K | BT-81 | 1.28 |
| 2 meg. | C-16 | 1 meg.* | BT-82 | 1.28 |
| 3 meg. | C-15 | 300K† | BT-8515 | 1.28 |
| 3 meg. | C-17 | 300K† | BT-8517 | 1.28 |

*62 1/2% rotation. †50% rotation. ‡37 1/2% rotation.

SINGLE TAPPED "AB" CONTROLS

| Ohms | Taper | Tap | CRL No | Net Each |
|----------|-------|---------|----------|----------|
| 50,000 | C-11 | 25K | ABT-33 | \$1.28 |
| 100,000 | C-11 | 50K | ABT-39 | 1.28 |
| 200,000 | C-11 | 100K | ABT-47 | 1.28 |
| 250,000 | C-11 | 125K | ABT-53 | 1.28 |
| 250,000 | C-12 | 50K | ABT-54 | 1.28 |
| 250,000 | C-13 | 75K | ABT-55 | 1.28 |
| 250,000 | C-16 | 125K* | ABT-56 | 1.28 |
| 350,000 | C-12 | 70K | ABT-57 | 1.28 |
| 1/2 meg. | C-11 | 250K | ABT-65 | 1.28 |
| 1/2 meg. | C-12 | 100K | ABT-66 | 1.28 |
| 1/2 meg. | C-13 | 150K | ABT-67 | 1.28 |
| 1/2 meg. | C-15 | 50K† | ABT-63 | 1.28 |
| 1/2 meg. | C-16 | 250K* | ABT-64 | 1.28 |
| 1/2 meg. | C-17 | 50K† | ABT-62 | 1.28 |
| 1 meg. | C-11 | 500K | ABT-71 | 1.28 |
| 1 meg. | C-12 | 200K | ABT-72 | 1.28 |
| 1 meg. | C-13 | 300K | ABT-73 | 1.28 |
| 1 meg. | C-16 | 500K* | ABT-74 | 1.28 |
| 2 meg. | C-17 | 100K | ABT-7417 | 1.28 |
| 2 meg. | C-11 | 1 meg. | ABT-78 | 1.28 |
| 2 meg. | C-12 | 400K | ABT-79 | 1.28 |
| 2 meg. | C-13 | 600K | ABT-80 | 1.28 |
| 2 meg. | C-15 | 200K | ABT-81 | 1.28 |
| 2 meg. | C-16 | 1 meg.* | ABT-82 | 1.28 |
| 3 meg. | C-15 | 300K† | ABT-8515 | 1.28 |
| 3 meg. | C-17 | 300K† | ABT-8517 | 1.28 |

*62 1/2% rotation. †50% rotation. ‡37 1/2% rotation.

DUAL TAPPED "B" AND "AB" CONTROLS

| Ohms | Taps | Type B | | Type AB | |
|----------|----------------------|---------|---------|---------|---------|
| | | CRL No. | Net Ea. | CRL No. | Net Ea. |
| 15,000 | Taps 5K and 10K | BT-154 | \$1.35 | ABT-154 | \$1.28 |
| 250,000 | Taps 50K and 125K | BT-155 | 1.35 | ABT-155 | 1.28 |
| 250,000 | Taps 41K and 82K | BT-156 | 1.35 | ABT-156 | 1.28 |
| 1/2 Meg. | Taps 82K and 165K | BT-159 | 1.35 | ABT-159 | 1.28 |
| 1/2 Meg. | Taps 100K and 250K | BT-160 | 1.35 | ABT-160 | 1.28 |
| 1 Meg. | Taps 165K and 330K | BT-164 | 1.35 | ABT-164 | 1.28 |
| 1 Meg. | Taps 200K and 500K | BT-165 | 1.35 | ABT-165 | 1.28 |
| 1.5 Meg. | Taps 250K and 500K | BT-167 | 1.35 | ABT-167 | 1.28 |
| 2 Meg. | Taps 250K and 500K | BT-174 | 1.35 | ABT-174 | 1.28 |
| 2 Meg. | Taps 400K and 1 Meg. | BT-175 | 1.35 | ABT-175 | 1.28 |
| 2.5 Meg. | Taps 300K and 625K | BT-176 | 1.35 | ABT-176 | 1.28 |
| 3.3 Meg. | Taps 330K and 1650K | BT-180 | 1.35 | ABT-180 | 1.28 |

MODEL "TT" TWIST TAB * CONTROLS

Ideal for rear service adjust TV controls and other shock hazard uses. Features U/L Approved phenolic shaft, 3/8" long from mtg. surface, knurled full length; screwdriver slotted end. Composition element rated 1/4 watt; 1 1/4" dia. x 3/8" d. Breakdown, 900 v. AC rms to ground. Includes 2" polyethylene shaft extension. Shipping Weight, 2 oz. *Trademark

| CRL No. | Ohms | Taper | Net Each | CRL No. | Ohms | Taper | Net Each |
|---------|------|-------|----------|---------|----------|-------|----------|
| TT-2 | 200 | C-1 | 60c | TT-59 | 500K | C-1 | 60c |
| TT-4 | 500 | C-1 | 60c | TT-60 | 500K | C-2 | 60c |
| TT-411 | 750 | C-1 | 60c | TT-66 | 750K | C-1 | 60c |
| TT-511 | 1500 | C-1 | 60c | TT-69 | 1 meg. | C-1 | 60c |
| TT-8 | 3000 | C-1 | 60c | TT-70 | 1 meg. | C-2 | 60c |
| TT-10 | 5000 | C-1 | 60c | TT-72 | 1.5 meg. | C-1 | 60c |
| TT-14 | 10K | C-1 | 60c | TT-75 | 2 meg. | C-1 | 60c |
| TT-26 | 25K | C-1 | 60c | TT-83 | 2.5 meg. | C-1 | 60c |
| TT-31 | 50K | C-1 | 60c | TT-84 | 3 meg. | C-1 | 60c |
| TT-35 | 75K | C-1 | 60c | TT-86 | 4 meg. | C-1 | 60c |
| TT-40 | 100K | C-1 | 60c | TT-87 | 5 meg. | C-1 | 60c |
| TT-46 | 200K | C-1 | 60c | TT-90 | 7.5 meg. | C-1 | 60c |
| TT-50 | 250K | C-1 | 60c | | | | |

TYPE "KR" FASTATCH® SWITCHES

For use with Models A, AB and SR controls.

| 125 v. AC Switches | | | | 10 v. DC Switches | | | |
|--------------------|------|------|---------|-------------------|------|------|---------|
| CRL No. | Use | Amps | Net Ea. | CRL No. | Use | Amps | Net Ea. |
| KR-1 | SPST | 3 | 42c | KR-4 | SPST | 15 | 66c |
| KR-2 | DPST | 3 | 51c | KR-5 | SPST | 15 | 66c |
| KR-3 | DP* | 3 | 51c | KR-6 | DPST | 15 | 66c |

*One pole "off", one "on"; jumper for SPDT. †With dummy lug.

REPLACEMENT AC LINE SWITCHES

Used primarily as replacement switches for factory assembled switch type controls, not of Centralab manufacture. Rated 3 amps, 125 v. AC.

| CRL No. | Switching | Net Each | CRL No. | Switching | Net Each |
|---------|-----------|----------|---------|-----------|----------|
| SP-2 | DPST | 90c | SP-3 | SPST | 60c |

SWITCH SHIELDS

For use with switch type units only where AC shielding is needed or specified by Underwriter's Lab.

CRL No. KR-5—Net Package of 5..... **72c**

Centralab.

Controls and Accessories

FASTATCH® II PLAIN TYPE CONTROLS

Complete exact replacement control coverage for dual concentric single or tandem twins. Snap together assembly, with snap in, permanent locking shafts. Controls are carbon, 1/2 watt, 15/16" dia. Rear control 3/8" deep. Front control 1/4" deep, bushing mtg. 1/4" l. x .32 thd. Supplied with mtg. nut and universal terminals replacing printed circuit, wire-wrap and hole type terminals. Shafts and switches not included. Anti-backlash construction on duals and twins.

CRL Fastatch® II Dual Controls—Front or rear unit plain. Net Each **90c**

Number preceding dash (-) indicates taper (see next page for description of tapers). Number after dash (-) indicates number of ohms in resistance.

| CRL No. | | CRL No. | | CRL No. | |
|------------|-----------|------------|-----------|------------|-----------|
| Front Unit | Rear Unit | Front Unit | Rear Unit | Front Unit | Rear Unit |
| F1-100 | R1-100 | F5-100 | R5-100K | F1-1MEG | R1-1MEG |
| F1-200 | | F1-15K | | F2-1MEG | R2-1MEG |
| F1-300 | | F1-25K | R1-25K | F3-1MEG | R3-1MEG |
| F1-500 | R1-500 | F2-25K | R2-25K | F7-1MEG | R7-1MEG |
| F4-500 | | F1-50K | F1-1.5MEG | F1-1.5MEG | R1-1.5MEG |
| F5-500 | | F2-50K | R2-50K | F1-2MEG | R1-2MEG |
| F1-750 | | F3-50K | R3-50K | F2-2MEG | R2-2MEG |
| F5-750 | R5-750 | F1-75K | R1-75K | F3-2MEG | R3-2MEG |
| F1-1000 | R1-1000 | F1-100K | R1-100K | F7-2MEG | R7-2MEG |
| F5-1000 | R5-1000 | F2-100K | R2-100K | F1-2.5MEG | R1-2.5MEG |
| F5-1500 | R5-1500 | F1-150K | R1-150K | F2-3MEG | R2-3MEG |
| F1-2500 | R1-2500 | F1-200K | R1-200K | F3-3MEG | R3-3MEG |
| F2-2500 | | F1-250K | R1-250K | F1-4MEG | |
| F5-2500 | R5-2500 | F2-250K | R2-250K | F1-5MEG | R1-5MEG |
| F1-5000 | R1-5000 | F3-250K | R3-250K | F2-5MEG | R2-5MEG |
| F2-5000 | R2-5000 | F1-500K | F3-5MEG | F3-5MEG | R3-5MEG |
| F5-5000 | | F2-500K | R2-500K | F7-5MEG | R7-5MEG |
| F1-7500 | R1-7500 | F3-500K | R3-500K | F1-7.5MEG | R1-7.5MEG |
| F1-10K | R1-10K | F7-500K | R7-500K | F1-10MEG | R1-10MEG |
| F2-10K | R2-10K | F1-750K | R1-750K | | |

CRL Fastatch® II Single Tap Controls—Net Each **\$1.26**

| CRL No. | | CRL No. | | CRL No. | |
|------------|-----------|------------|-----------|------------|-----------|
| Front Unit | Rear Unit | Front Unit | Rear Unit | Front Unit | Rear Unit |
| F51-750 | | 500 | F11-1MEG | R11-1MEG | 500K |
| F51-2000 | | 1500 | F12-1MEG | R12-1MEG | 200K |
| F52-2500 | | 625 | F14-1MEG | R14-1MEG | 300K |
| F51-30K | | 20K | F16-1MEG | R16-1MEG | 500K |
| F53-30K | | 10K | F17-1MEG | R17-1MEG | 100K |
| F11-250K | R11-250K | 125K | F11-2MEG | R11-2MEG | 1 meg. |
| F14-250K | R14-250K | 125K | F12-2MEG | R12-2MEG | 400K |
| F16-250K | R16-250K | 125K | F14-2MEG | R14-2MEG | 600K |
| F11-500K | R11-500K | 250K | F16-2MEG | R16-2MEG | 1 meg. |
| F12-500K | R12-500K | 100K | F17-2MEG | R17-2MEG | 200K |
| F14-500K | R14-500K | 150K | F16-3MEG | R16-3MEG | 1.5 meg. |
| F16-500K | R16-500K | 250K | F54-3MEG | R54-3MEG | 900K |
| F17-500K | R17-500K | 50K | | | |

CRL Fastatch® II Dual Tap Controls—Net Each **\$1.26**

| Front Unit | Rear Unit | Taps, Ohms |
|------------|------------|-----------------|
| F55-15K | | 5K and 10K |
| F56-500K | R56-500K | 100K and 250K |
| F55-1MEG | R55-1MEG | 350K and 620K |
| F56-1MEG | R56-1MEG | 200K and 500K |
| F57-1.5MEG | R57-1.5MEG | 250K and 500K |
| F58-2MEG | R58-2MEG | 400K and 1 meg. |
| F58-2MEG | R58-2MEG | 250K and 500K |
| F59-3.3MEG | R59-3.3MEG | 330K and 1650K |



MODELS "SR" AND "STR" ADD-ON CONTROLS

Snap-on rear units added to "B" or "AB" controls provide geared twin controls for stereo applications. Convert to switch type by using snap-on "KR" Fastatch switches.

MODEL STR TAPPED CONTROLS

| CRL No. | Ohms | Taper | Tap | CRL No. | Ohms | Taper | Tap | Net Each |
|---------|--------|-------|------|---------|----------|-------|---------------|----------|
| STR-53 | 250K | C-11 | 125K | STR-82 | 2 meg. | C-16 | 1 meg. | \$1.14 |
| STR-56 | 250K | C-16 | 125K | STR-159 | 500K | | 82K & 165K | 1.14 |
| STR-65 | 500K | C-11 | 250K | STR-160 | 500K | | 100K & 250K | 1.14 |
| STR-66 | 500K | C-12 | 100K | STR-167 | 1.5 meg. | | 250K & 500K | 1.14 |
| STR-64 | 500K | C-16 | 250K | STR-174 | 2 meg. | | 250K & 500K | 1.14 |
| STR-71 | 1 meg. | C-11 | 500K | STR-175 | 2 meg. | | 400K & 1 meg. | 1.14 |
| STR-74 | 1 meg. | C-16 | 500K | STR-180 | 3.3 meg. | | 330K & 1650K | 1.14 |

MODEL SR PLAIN CONTROLS

| CRL No. | Ohms | Taper | Net Each | CRL No. | Ohms | Taper | Net Each |
|---------|------|-------|----------|---------|--------|-------|----------|
| SR-4 | 500 | C-1 | \$1.14 | SR-59 | 500K | C-1 | \$1.14 |
| SR-6 | 2000 | C-1 | 1.14 | SR-60 | 500K | C-2 | 1.14 |
| SR-13 | 7500 | C-1 | 1.14 | SR-61 | 500K | C-3 | 1.14 |
| SR-26 | 25K | C-1 | 1.14 | SR-58 | 500K | C-4 | 1.14 |
| SR-25 | 25K | C-2 | 1.14 | SR-617 | 500K | C-7 | 1.14 |
| SR-31 | 50K | C-1 | 1.14 | SR-69 | 1 meg. | C-1 | 1.14 |
| SR-32 | 50K | C-2 | 1.14 | SR-70 | 1 meg. | C-2 | 1.14 |
| SR-323 | 50K | C-3 | 1.14 | SR-68 | 1 meg. | C-5 | 1.14 |
| SR-40 | 100K | C-1 | 1.14 | SR-75 | 2 meg. | C-1 | 1.14 |
| SR-42 | 100K | C-2 | 1.14 | SR-76 | 2 meg. | C-2 | 1.14 |
| SR-40 | 100K | C-3 | 1.14 | SR-84 | 3 meg. | C-1 | 1.14 |
| SR-50 | 250K | C-1 | 1.14 | SR-85 | 3 meg. | C-2 | 1.14 |
| SR-51 | 250K | C-2 | 1.14 | SR-87 | 5 meg. | C-1 | 1.14 |
| SR-513 | 250K | C-3 | 1.14 | SR-88 | 5 meg. | C-2 | 1.14 |

FASTATCH® II SLOTS

Front (sleeve): FFS—Flatted and slotted; FS—Double slot; FK—Knurled; FU—Universal, flatted and slotted.

Any Model—Net Each **27c**

| CRL No. | Lgth. In. | CRL No. | Lgth. In. | CRL No. | Lgth. In. | CRL No. | Lgth. In. | CRL No. | Lgth. In. |
|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| FFS008 | .5 | FFS106 | 1.375 | FFS204 | 2.250 | FFS304 | 3.250 | FFS109 | 1.562 |
| FFS009 | .562 | FFS107 | 1.437 | FFS205 | 2.312 | FFS306 | 3.375 | FFS113 | 1.812 |
| FFS010 | .625 | FFS108 | 1.5 | FFS206 | 2.375 | FFS308 | 3.500 | FFS200 | 2.000 |
| FFS011 | .687 | FFS109 | 1.562 | FFS207 | 2.437 | FFS310 | 3.625 | FFS204 | 2.250 |
| FFS012 | .750 | FFS110 | 1.625 | FFS208 | 2.500 | FFS312 | 3.750 | FFS212 | 2.750 |
| FFS013 | .812 | FFS111 | 1.687 | FFS209 | 2.562 | FFS314 | 3.875 | FK008 | .500 |
| FFS014 | .875 | FFS112 | 1.750 | FFS210 | 2.625 | FFS400 | 4.000 | FK010 | .625 |
| FFS015 | .937 | FFS113 | 1.812 | FFS211 | 2.687 | FFS402 | 4.125 | FK013 | .812 |
| FFS100 | 1.000 | FFS114 | 1.875 | FFS212 | 2.750 | FFS404 | 4.250 | FK101 | 1.062 |
| FFS101 | 1.062 | FFS115 | 1.937 | FFS213 | 2.812 | FS006 | .375 | FK105 | 1.312 |
| FFS102 | 1.125 | FFS200 | 2.000 | FFS214 | 2.875 | FS010 | .625 | FK112 | 1.750 |
| FFS103 | 1.187 | FFS201 | 2.062 | FFS215 | 2.937 | FS015 | .937 | FU404 | 4.250 |
| FFS104 | 1.250 | FFS202 | 2.125 | FFS300 | 3.000 | FS101 | 1.062 | | |
| FFS105 | 1.312 | FFS203 | 2.187 | FFS302 | 3.125 | FS107 | 1.437 | | |

Rear (inner shaft): RFS—Flatted and slotted; RK—Knurled; RU—Universal, Single Controls (solid shaft); SS—Slotted, .25" dia., steel; SN—Same as SS, nylon; SK—Slotted and knurled, .125" dia., steel; SFS—Flatted and slotted, .187" dia., steel; STS—Universal, steel; TFS—Flatted and slotted.

Any Model—Net Each **27c**

| No. | Lgth. In. | No. | Lgth. In. | No. | Lgth. In. | CRL No. | Lgth. In. | CRL No. | Lgth. In. |
|-----|-----------|-----|-----------|-----|-----------|---------|-----------|---------|-----------|
| D14 | .875 | 112 | 1.750 | 210 | 2.625 | RFS311 | 3.687 | RK203 | 2.187 |
| O15 | 1.000 | 114 | 1.875 | 212 | 2.687 | RFS314 | 3.875 | RK205 | 2.312 |
| 100 | 1.000 | 114 | 1.875 | 212 | 2.687 | RFS404 | 4.250 | RK207 | 2.437 |
| 101 | 1.062 | 115 | 1.937 | 213 | 2.812 | RFS407 | 4.437 | RU413 | 4.812 |
| 102 | 1.125 | 200 | 2.000 | 214 | 2.875 | RFS413 | 4.812 | SFS212 | 2.75 |
| 103 | 1.187 | 201 | 2.062 | 215 | 2.937 | RK012 | 1.750 | SK010 | .625 |
| 104 | 1.250 | 202 | 2.125 | 300 | 3.000 | RK014 | .875 | SN010 | .625 |
| 105 | 1.312 | 203 | 2.187 | 301 | 3.062 | RK100 | 1.000 | SS006 | .375 |
| 106 | 1.375 | 204 | 2.250 | 302 | 3.125 | RK104 | 1.250 | SS008 | .500 |
| 107 | 1.437 | 205 | 2.312 | 303 | 3.187 | RK106 | 1.375 | SU204 | 2.250 |
| 108 | 1.500 | 206 | 2.375 | 304 | 3.250 | RK109 | 1.562 | SU500 | 5.000 |
| 109 | 1.562 | 207 | 2.437 | 306 | 3.375 | RK110 | 1.625 | TU304 | 3.250 |
| 110 | 1.625 | 208 | 2.500 | 307 | 3.437 | RK114 | 1.875 | TFS212 | 2.750 |
| 111 | 1.687 | 209 | 2.562 | 309 | 3.562 | | | | |

PUSH-PULL, PUSH-PUSH SWITCH CONTROLS



Switch type controls for radio, TV and hi-fi applications. Rated 1/2 watt; breakdown 900 v. AC rms to ground. Switch rated 3 amps, 125 v. AC; SPST type. Size: 1/4" dia. x 1 1/2" deep, push-push type; 1/4" deep, push-pull type. Mount using 3/8" lg. x 3/32 threaded bushing with mounting nut, except Fastatch types RPL and RPS.

ADASHAFAT® TYPE UNIVERSAL SHAFT

Any Model—Net Each **\$1.44** Any Model—Net Each **\$1.53**

| Resis. Ohms | Taper | Push-Pull | Push-Push | Resis. Ohms | Taper | Push-Pull | Push-Push |
|-------------|-------|-----------|-----------|-------------|-------|-----------|-----------|
| 2500 | C2 | APL-702 | | 2500 | C2 | BPL-702 | |
| 250K | C2 | | APS-51 | 250K | C2 | | BPS-51 |
| 500K | C1 | APL-59 | | 500K | C1 | BPL-59 | |
| 500K | C2 | APL-60 | | 500K | C2 | BPL-60 | |
| 500K | * | APL-91 | | 500K | * | BPL-91 | |
| 500K | † | APL-64 | | 500K | † | BPL-64 | |
| 500K | ‡ | APL-159 | | 500K | ‡ | BPL-159 | |
| 1 meg. | C2 | APL-70 | | 1 meg. | C2 | BPL-70 | |
| 1 meg. | C7 | APL-697 | APS-697 | 1 meg. | C7 | BPL-697 | BPS-697 |
| 1 meg. | * | APL-72 | | 1 meg. | * | BPL-72 | |
| 1 meg. | ‡ | APL-74 | | 1 meg. | ‡ | BPL-74 | |
| 2 meg. | C2 | APL-76 | APS-76 | 2 meg. | C2 | BPL-76 | BPS-76 |
| 2 meg. | ‡ | APL-82 | | 2 meg. | ‡ | BPL-82 | |

*37% tap, 200K. †62% tap, 250K. ‡37% tap, 82K; 62% tap, 165K. ‡62% tap, 500K. ‡62% tap, 1 meg.

FASTATCH® TYPE TWIN TYPE

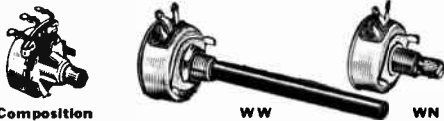
Any Model—Net Each **\$1.74** Any Model—Net Each **\$2.67**

| Resis. Ohms | Taper | Push-Pull | Push-Push | Resis. Ohms | Taper | Taps | CRL No. Push-Pull |
|-------------|-------|-----------|-----------|-------------|-------|-----------|-------------------|
| 500K | C2 | RPL-41 | | 250K | | 88K, 155K | TPL-101 |
| 500K | † | RPL-44 | | 500K | C1 | | TPL-102 |
| 500K | ‡ | RPL-46 | | 500K | C1 | 82K, 165K | TPL-103 |
| 1 meg. | C2 | RPL-52 | RPS-52 | 500K | C1 | | TPL-104 |
| 1 meg. | ‡ | RPL-57 | RPS-57 | 1 meg. | C2 | | TPL-105 |
| 2 meg. | C1 | RPL-67 | RPS-67 | 1 meg. | C2 | | TPL-106 |
| 2 meg. | C2 | RPL-68 | RPS-68 | 5 meg. | C2 | | TPL-107 |
| 2 meg. | ‡ | RPL-75 | RPS-75 | | | | |
| 3 meg. | ‡ | RPL-80 | | | | | |

*Front, C2; rear, C3. †37% tap, 100K. ‡62% tap, 250K. ‡37% tap, 200K. ‡62% tap, 1 meg. ‡62% tap, 1.

Centralab.

Controls and Accessories



SNAP-TITE* COMPOSITION CONTROLS
For hidden or rear TV controls, rated 1/2 watt. Installs simply: Push into mounting hole, turn until locating lugs fit in holes provided; may be used where no locating lugs are needed. Size: 1/4" diam. x 1/4" deep. 1/4" diam. molded plastic shaft 1/2" long, knurled and slotted. *Trade Mark.

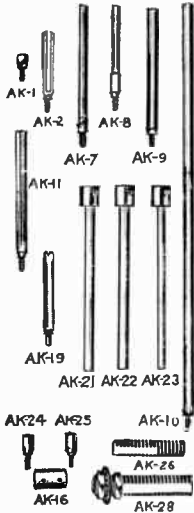
| CRL No. | Max. Ohms | Taper | Net Each | CRL No. | Max. Ohms | Taper | Net Each |
|---------|-----------|-------|----------|---------|-----------|-------|----------|
| BX-10 | 5,000 | C1 | 51c | BX-69 | 1 meg. | C1 | 51c |
| BX-31 | 50K | C1 | 51c | BX-742 | 1.5 meg. | C1 | 51c |
| BX-40 | 100K | C1 | 51c | BX-75 | 2 meg. | C1 | 51c |
| BX-46 | 200K | C1 | 51c | BX-83 | 2.5 meg. | C1 | 51c |
| BX-59 | 500K | C1 | 51c | BX-84 | 3 meg. | C1 | 51c |

5-WATT WIRE-WOUND CONTROLS
New design packs 5-watt capacity into a 2-watt size unit: 1 1/8" dia. x 1/4" deep. Model WW has full round aluminum shaft 1/2" dia. x 3" long. Model WN has fingertip knurled, slotted shaft 1/2" dia. x 1/2" long. Specify by using WN or WW as prefix.
CRL Type WW or WN—1 through 15K ohms. Net Each **\$1.14**
CRL Type WW or WN—20K through 30K ohms. Net Each **1.50**
CRL Type WW or WN—40K or 50K ohms. Net Each **1.80**
CRL Type WW or WN—75K or 100K ohms. Net Each **2.48**

| Ohms | CRL No. | | CRL No. | | CRL No. | | CRL No. | |
|------|---------|-----|---------|------|---------|------|---------|----|
| | WW | WN | WW | WN | WW | WN | WW | WN |
| 1 | 010 | 25 | 500 | 400 | 501 | 7500 | 752 | |
| 2 | 020 | 30 | 300 | 500 | 501 | 10K | 103 | |
| 3 | 030 | 40 | 400 | 750 | 501 | 15K | 153 | |
| 4 | 040 | 50 | 500 | 1000 | 102 | 20K | 203 | |
| 5 | 050 | 60 | 600 | 1500 | 152 | 25K | 253 | |
| 6 | 060 | 75 | 750 | 2000 | 202 | 30K | 303 | |
| 8 | 080 | 100 | 101 | 2500 | 252 | 40K | 403 | |
| 10 | 100 | 200 | 201 | 3000 | 302 | 50K | 503 | |
| 15 | 150 | 250 | 251 | 4000 | 402 | 75K | 753 | |
| 20 | 200 | 300 | 301 | 5000 | 502 | 100K | 104 | |

ADASHAFT® SHAFTS, COUPLERS, EXTENSIONS

| CRL No. | Description | Net Pkg. 5 |
|---------|---|------------|
| AK-1 | 1/4" L. screw slot | \$0.90 |
| AK-2 | 1 1/4" L. slot .078" W. | .90 |
| AK-7 | 3" L. flat side .168" | .90 |
| AK-8 | 2 1/4" L. x 1/4" round | .90 |
| AK-9 | 3 1/4" L. x 1/4" round | .90 |
| AK-10 | 10 3/4" L. flat mill .218" x 4 1/4" long | .90 |
| AK-11 | Universal, 4" long; slot, knurl and flat side | .90 |
| AK-16 | 1/2" to 3/4" or 1" shaft coupler | .90 |
| AK-19 | Insul. nylon 2 1/4" L. | .90 |
| AK-21 | 4" x 1/4" Dia. Exten., flat .218" wide | .90 |
| AK-22 | 4" x 1/4" Dia. Exten., flat .154" wide | .90 |
| AK-23 | 4" x 1/4" Dia. Exten., flat .172" wide | .90 |
| AK-24 | 3/4" L. x 1/4" full round | .90 |
| AK-25 | 3/4" L. x 1/4" flat .218" | .45* |
| AK-26 | Auto adapt bush, 3/8" - 1/2" | .45* |
| AK-28 | Auto bush, 1/4" - 1/2" | .45* |
| AK-29 | 2 1/4" L. x .235" full rd. | .90 |
| AK-30 | Ground Lug | .45† |
| AK-31 | 3/8"-32 bush. adj. to 1" | .45* |
| AK-33 | .187" dia. alum. dou-bie-grooved shaft. | .90 |
| AK-37 | 3/8"-32 phenolic bush-ing adjusts to 1" | .45* |

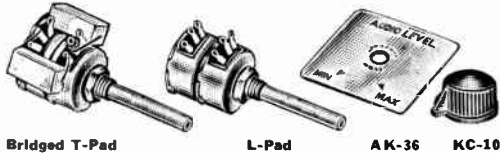


*Net Each. †Net per dozen.

DESCRIPTION OF TAPERS

C-1—Linear; uniform resistance change from either end. C-2—Semi-log. (audio) 10% center. C-3—Right hand semi-log. Reversed C-2. C-4—Modified log. 20% center. C-5—Right hand mod. log. 20% center. C-6—Mod. log. 40% center. C-7—Symet. straight line; slow change. C-11—Tapped 50% rotation, 50% resis. C-12—Tapped 37 1/2% rotation, 20% resis. C-13—Tapped 50% rotation, 30% resistance. C-14—Tapped 62% rotation, 30% resistance. C-15—Tapped 50% rotation, 10% resistance. C-16—Tapped 62% rotation, 50% resistance. C-17—Tapped 37 1/2% rotation, 10% resis. C-18—Left hand linear, tapped at 62%. CW, 68 1/2% resis. C-52—Rt. hand semi-linear, tapped at 37%. CCW, 25% resis. C-53—Rt. hand linear, tapped at 37%. CW, 33 1/2% resis. C-54—Left hand semi-linear, tapped at 37%. CW, 30% resis. C-55—Left-hand linear, tapped at 37% and 62%. CW, 35% and 62% resis. C-56—Left hand semi-log, tapped at 37% and 62%. CW, 20% and 50% resis. C-57—Left-hand semi-log, tapped at 37% and 62%. CW, 18 1/2% and 33% resis. C-58—Left-hand semi-log, tapped at 37% and 62%. CW, 12 1/2% and 25% resis. C-59—Left-hand semi-log, tapped at 37% and 62%. CW, 10% and 50% resis.

L-PAD, T-PAD, AND STEREO ATTENUATORS



Constant Impedance L-pads and bridged T-pads provide optimum sound reproduction quality without altering frequency response. Rated 20 watts, audio; 5 watts DC and sine-wave. Breakdown, 900 volts AC rms to ground. Anti-backlash construction features force-fit shaft interlock; prevents relative motion between contact springs of front and rear units; assures smooth attenuation in either direction without deterioration. Full round brass shaft, 1/2" dia. x 1 1/2" long from mounting surface. Bushing 3/8" long x 3/8"-32 thread with nut and lockwasher; can be extended up to 1" by adding AK-31 or AK-37 adapter bushing. Control size only 1 1/4" case dia. x 1 1/4" deep. Comes complete with AK-36 brushed gold-anodized dial plate and KC-10 black pointer knob with set screw.

L-PAD ATTENUATORS

Controls audio level of speakers in PA, intercom and hi-fi sound system. Net Each, Any Model **\$2.97**
Number after dash (-) indicates resistance in ohms.

| CRL No. | CRL No. | CRL No. | CRL No. | CRL No. |
|---------|---------|---------|---------|---------|
| WL-4 | WL-16 | WL-600 | WL-1250 | WL-2500 |
| WL-8 | WL-500 | WL-1000 | WL-2000 | |

BRIDGED T-PAD ATTENUATORS

Speaker audio level control and sound mixer control for mikes and other circuits where constant impedance between input and output circuits must be maintained. Net Each, Any Model **\$3.57**
Number after dash (-) indicates resistance in ohms.

| CRL No. | CRL No. | CRL No. | CRL No. | CRL No. |
|---------|---------|---------|---------|---------|
| WOT-4 | WOT-8 | WOT-16 | WOT-500 | WOT-600 |

STEREO ATTENUATORS

Designed for installation in standard junction or switch boxes where a conventional four-section L-Pad will not fit. Rated at 10 watts audio, 5 watts DC. Same basic construction and appearance as L-Pads. Shipping Wt., 5 oz.
CRL No. WST-200 (for 4-ohm speakers), WST-400 (for 8-ohm speakers), WST-800 (for 16-ohm speakers). Net Each **\$2.97**
Note: Above three models can be used as conventional twin-wire-wound controls, linear taper, 10% tolerance, 20, 40, and 80-ohms respectively.

ACCESSORIES

| CRL No. | Description | Net Each |
|---------|---|----------|
| KC-10 | Black set screw pointer knobs | \$0.90* |
| AK-34 | 4 1/2" x 2 1/2" brushed gold wall-plate | .90 |
| AK-35 | 4 1/2" x 2 1/2" brushed aluminum wall-plate | .90 |
| AK-36 | 2" x 2" brushed gold dial plate | 1.44* |

*Pkg. 5

1/10 WATT CONTROLS

Model B16 can be reduced to 3/8" diam. by removing knob; with knob is 1/2" diam. Plain type is stud mounted, using two 1-72NF-2 thd. x .140" on .427" centers. Switch type is bracket mounted. Model SM measures 1 1/4" with knob, reduces to .502" without knob. Mount in standard 0-80NF-2A thd. x .134" long brass studs on .235" centers. Switch type only. **\$1.50**
CRL Model B16 Plain—Net Each
CRL Model B16 Switch—Net Each **\$2.40**



TYPE B16 SERIES

| CRL No. | | Max. Ohms | Taper | CRL No. | | Max. Ohms | Taper |
|---------|---------|-----------|-------|---------|---------|-----------|-------|
| Plain | Switch | | | Plain | Switch | | |
| B16-107 | | 500 | C1 | B16-119 | | 50K | C1 |
| B16-109 | | 1000 | C1 | B16-121 | | 100K | C1 |
| B16-111 | | 2500 | C1 | B16-123 | | 250K | C1 |
| B16-112 | B16-212 | 2500 | C2 | B16-118 | B16-218 | 1/2 Meg. | C2 |
| B16-113 | | 5000 | C1 | B16-120 | B16-220 | 1 Meg. | C2 |
| B16-114 | B16-214 | 5000 | C2 | B16-122 | B16-222 | 2 Meg. | C2 |
| B16-115 | | 10000 | C1 | B16-124 | B16-224 | 3 Meg. | C2 |
| B16-116 | B16-216 | 10000 | C2 | B16-127 | | 5 Meg. | C2 |
| B16-117 | B16-217 | 25000 | C2 | B16-128 | B16-228 | 5 Meg. | C2 |
| B16-125 | | 25000 | C1 | | | | |

TYPE SM SERIES

| CRL No. | Max. Ohms | Taper | CRL No. | Max. Ohms | Taper | Net Each |
|-----------|-----------|-------|-----------|-----------|-------|----------|
| SM2-252-S | 2500 | C2 | SM2-103-S | 10000 | C2 | \$3.75 |
| SM2-502-S | 5000 | C2 | SM2-253-S | 25000 | C2 | 3.75 |

WALL PLATES

Satin chrome; for mounting speaker controls. Complete with mounting screws. Size, 2 1/4" x 4 1/4".
CRL No. P-223 (1/4" center hole) or P-224 (Blank plate)— **63c**
Net Each

Centralab.

Controls, Switches, Kits

CENTRALAB COMPENTROLS®



C1-70-5



C2-100

JUNIOR COMPENTROLS

Volume control and special Packaged Electronic Circuit network improves apparent bass and treble of amplifiers, radios, etc., when volume is at a low level. Does not introduce noticeable signal loss. Switched units have SPST switch with insulated shield to prevent hum. Universal shaft 3" long. Control, 1/4" dia. Shipping Weight, 5 oz.
CRL No. C1-60 (1/4 Meg.) or **C1-70** (1 Meg.)—Platin. Net \$240
CRL No. C1-60-5 (1/4 Meg.) or **C1-70-5** (1 Meg.)—Switched. Net Each \$2.85

SENIOR COMPENTROLS

Dual concentric; incorporates level set to adjust amount of compensation. Universal replacement for any value. Dual knobs supplied. Shipping Weight, 6 oz.
CRL No. C2-100—Net Each \$3.30
CRL No. C2-200—Same but Fastatch design with separate front and rear units. Includes special boost plates. Net Each... \$3.30

STEREO-TWIN COMPENTROLS

Twin compensated volume control provides synchronized compensation for dual-channel stereo systems. Shipping Wt., 6 oz.
CRL No. C2-60 (1/2-meg) or **C2-70** (1 meg)—Without switch. Net Each \$3.30

COMPENSATED TONE CONTROL

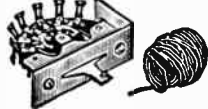
A compensated tone control as used in Baxandall circuit—not to be confused with two other Senior Compentrols above, which are compensated volume controls. Shipping Weight, 5 oz. \$3.30
CRL No. C3-300—Net Each



PK-300



PK-400



PK-500



WK-300

DUAL SPEAKER SWITCH KIT

Primarily designed for rear seat auto radio speaker applications. It is adaptable, however, to many commercial applications. Contains: 1484 switch, P-216 bracket-dial plate, P-401 knob, two self-tapping wood screws. \$1.05
CRL No. PK-300—Net Each

ANTENNA SWITCH KIT

Ceramic section rotary switch for UHF-VHF antenna switching. Rated at 2.75 amps. for 15 v. DC; 230 millamps. at 115 v. AC. Contains: PA-2050 switch, P-218 bracket-dial plate, P-401 knob, two self-tapping wood screws. \$1.88
CRL No. PK-400—Net Each

INTERCOM SWITCH KIT

Intercom cord-operated switch kit designed for use in public address and intercom systems where low cost dependable service is desired. \$1.80
CRL No. PK-500—Net Each

DUAL SPEAKER CONTROL KIT

Primarily designed for rear seat radio speaker uses. Provides for gradual reduction of volume of one speaker while increasing volume of the other; or, balances both speakers. Includes 5-watt control, combination mounting bracket and dial plate, black and chrome knob, mounting screws and installation instructions. Shipping Weight, 5 oz. \$1.80
CRL No. WK-300 Kit—Net Each

MODEL SK-2 SHAFT-KUT TOOL

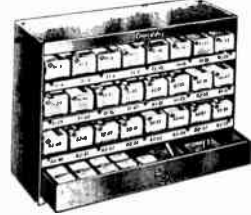


Precision instrument makes cutting shafts to exact size a simple job. Cuts any standard solid or hollow shaft accurately to 1/4". Constructed of case hardened steel; designed to last a lifetime. Complete with mounting screws and operating instructions. \$4.95
CRL No. SK-2—Net Each

SERVICE TECHNICIAN CONTROL KITS

WWK-100 5-WATT WIRE-WOUND KIT

Contains 24 controls in 14 best selling 5-watt wire-wound line. Sturdy, steel shelf type cabinet, labeled and set up, ready for use. Extra drawer space for expansion. \$27.88
Contents: One each WW-100, WW-500, WW-201, WW-501, WW-751, WW-202, WW-302, WW-153; two each WW-152, WW-252; three each WW-101, WW-102, WW-502, WW-103.
CRL No. WWK-100 Net Each



BK-100 UNIVERSAL SHAFT CONTROL KIT

Contains 24 type "B" controls in the 12 fastest moving values. Controls plus 10 "KR" Fastatch switches for all service needs. Sturdy steel cabinet, labeled, ready for use. \$29.54
CRL No. BK-100 Kit—Net Each

CONTENTS: CONTROLS

| Quan. Each | CRL No. | Ohms | Taper | Quan. Each | CRL No. | Ohms | Taper |
|------------|---------|--------|-------|------------|---------|--------|-------|
| 1 | B-5 | 1,000 | C1 | 6 | B-60 | 500K | C2 |
| 1 | B-10 | 5,000 | C1 | 2 | B-69 | 1 Meg. | C1 |
| 1 | B-14 | 10,000 | C1 | 4 | B-70 | 1 Meg. | C2 |
| 2 | B-31 | 50,000 | C1 | 1 | B-75 | 2 Meg. | C1 |
| 2 | B-40 | 100K | C1 | 1 | B-76 | 2 Meg. | C2 |
| 2 | B-59 | 500K | C1 | 1 | B-87 | 5 Meg. | C1 |

TYPE KR FASTATCH® SWITCHES

| Quan. Each | CRL No. | Amps at 125 v. AC | Type | Quan. Each | CRL No. | Amps at 125 v. AC | Type |
|------------|---------|-------------------|------|------------|---------|----------------------|------|
| 6 | KR-1 | 5 | SPST | 1 | KR-3 | 3 | DP |
| 3 | KR-2 | 3 | DPST | | | 1 pole "on", 1 "off" | |

ABK-100 ADASHAFT® CONTROL KIT

Contains 24 type "AB" Adashaft controls in 10 popular values. Combined with Fastatch switches and assorted shafts, kit provides flexible stock of replacement controls. Sturdy, steel shelf cabinet, labeled and ready for use. \$28.07
CRL No. ABK-100 Kit—Contents as listed, plus 21 assorted shafts and couplers. Net Each

CONTENTS: CONTROLS

| Quan. Each | CRL No. | Ohms | Taper | Quan. Each | CRL No. | Ohms | Taper |
|------------|---------|------|-------|------------|---------|--------|-------|
| 1 | AB-5 | 1000 | C1 | 6 | AB-60 | 500K | C2 |
| 2 | AB-10 | 5000 | C1 | 2 | AB-69 | 1 Meg. | C1 |
| 2 | AB-31 | 50K | C1 | 4 | AB-70 | 1 Meg. | C2 |
| 2 | AB-40 | 100K | C1 | 1 | AB-75 | 2 Meg. | C1 |
| 2 | AB-59 | 500K | C1 | 2 | AB-87 | 5 Meg. | C1 |

TYPE KR FASTATCH® SWITCHES

| Quan. Each | CRL No. | Amps at 125 v. AC | Type | Quan. Each | CRL No. | Amps at 125 v. AC | Type |
|------------|---------|-------------------|------|------------|---------|----------------------|------|
| 5 | KR-1 | 5 | SPST | 1 | KR-3 | 3 | DP |
| 2 | KR-2 | 3 | DPST | | | 1 pole "on", 1 "off" | |

ACK-100 AUTO RADIO CONTROL KIT

Handy kit contains the 24 most popular auto radio control replacements. Covers 90% of your replacement requirements for standard U.S. automobiles and some foreign cars. Packed in heavy steel cabinet and clearly labeled for easy selection. \$49.95
CRL No. ACK-100 Kit—Net Each

QUANTITY: 1 EACH

| | | | |
|-----------|-----------|---------|-------|
| A/U-1 | CD-59-B | FB-56 | FM-56 |
| A/U-2 | CD-59/O-A | FB-57 | M/U-4 |
| CD-51-A | FB-51 | FB-58 | M/U-8 |
| CD-53/4-A | FB-52/3 | FB-59 | PP-57 |
| CD-55/6-B | FB-54 | FM-52/3 | PP-58 |
| CD-57-B | FB-55 | FM-54 | PP-59 |

TTK-100 CONTROL KIT

Contains 24 type TT controls in 13 fastest moving values. Sturdy steel shelf cabinet, labeled and set up ready for use. Extra drawer space for expansion. \$14.90
CRL No. TTK-100—Net Each

| Qty. | No. | Ohms | Qty. | No. | Ohms | Qty. | No. | Ohms |
|------|--------|------|------|--------|---------|------|-------|---------|
| 1 | TT-411 | 750 | 1 | TT-59 | 500K | 3 | TT-83 | 2.5 meg |
| 2 | TT-10 | 5K | 2 | TT-69 | 1 meg | 2 | TT-84 | 3 meg |
| 1 | TT-31 | 50K | 1 | TT-742 | 1.5 meg | 4 | TT-87 | 5 meg |
| 2 | TT-40 | 100K | 2 | TT-75 | 2 meg | 2 | TT-90 | 7.5 meg |
| 1 | TT-46 | 200K | | | | | | |

AUTO RADIO ON/OFF SWITCH REPLACEMENTS

CRL No. SP-1 Switch—Replacement for 1951-1954 Plymouth, Dodge, DeSoto and Chrysler. Net Each 60c
CRL No. SP-4 Switch—Replacement for 1946-1956 Ford, Lincoln, Mercury, Plymouth, Dodge, DeSoto and Chrysler auto radios. Net Each 60c
CRL No. SP-6 Switch—Replacement for 1955-56 Lincoln & Mercury, 1956-57 Ford Thunderbird, 1957-58 Ford and 1958 Mercury auto radios. Net Each 60c
CRL No. SP-8 Switch—Replacement for 1956-57 Mercury and 1957 Lincoln auto radios. Net Each 60c

Centralab.

Auto Radio Controls

CONTROL REPLACEMENTS FOR BUICK AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|--|-------------------|----------|
| M/U-3 | 46-53 | Motorola | BK2A, BK3A6 | 18B512084 | \$2.13 |
| BD-50/3 | 50-53 | Delco | 980868, 980899, 980847, 980979, 980980, 981111, 981320, 981321, 981322, 981323 | 7263119 | 2.52 |
| BD-54/5 | 54 | Delco | 981550, 981551 | 7264309 | 2.52 |
| BD-54/5 | 55 | Delco | 981651, 981652 | 7265472 | 2.52 |
| BD-56 | 56 | Delco | 981707, 981708 | 7266996 | 2.52 |
| BD-57 | 57 | Delco | 981813, 981814 | 7268944 | 2.52 |
| BD-58 | 58 | Delco | 981902, 981903 | 7271329 | 2.52 |
| BD-59 | 59 | Delco | 981968 | 7273993 | 2.52 |
| BD-60 | 60 | Delco | 980051, 980052 | 7275219 | 2.52 |
| BD-61-A | 61 | Delco | 980132 | 7278561 | 1.95 |
| BD-61-B | 61 | Delco | 980134, 980135 | 7277155 | 1.95 |

FOR CHEVROLET AUTO AND TRUCK RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|------------------------------------|-------------------|----------|
| CD-49/0-A | 49-50 | Delco | 988389, 986241 | 1218641 | \$2.52 |
| CD-51-A | 51-52 | Delco | 986516 | 1219708 | 2.52 |
| M/U-3 | 51-52 | Motorola | CT2A, CT2M, CT2A6, CT52M6 | 18B512084 | 2.13 |
| CD-53/4-A | 53-54 | Delco | 986669, 986771* | 7264211 | 2.52 |
| CD-55 | 55 | Delco | 987087 | 7265265 | 2.52 |
| CD-55/6-B | 55-56 | Delco | 987088, 987366 | 7265220 | 2.52 |
| CD-55/6-A | 55-56 | Delco | 987086, 987364, 3725156 (Corvette) | 7265302 | 2.52 |
| CD-56 | 56 | Delco | 987368 | 7266842 | 2.52 |
| CD-57-A | 57 | Delco | 987577 | 7269211 | 2.52 |
| CD-57-C | 57 | Delco | 987575, 987693 | 7269199 | 2.52 |
| CD-57-B | 57 | Delco | 987573 | 7269186 | 2.52 |
| M/U-6 | 57 | Motorola | CTA7X, CTM7X | 18K541128 | 2.13 |
| CD-58-B | 58 | Delco | 987724 | 7270450 | 2.52 |
| CD-58-A | 58 | Delco | 987727 | 7270479 | 2.52 |
| M/U-7 | 58 | Motorola | CTA8X, CTM8X | 18B542657 | 2.13 |
| CD-59-B | 59 | Delco | 987891 | 7273367 | 2.52 |
| M/U-9 | 59 | Motorola | CTA9X, CTM9X | 18C543337 | 2.13 |
| CD-59/0-A | 59-60 | Delco | 987888, 988275 | 7273302 | 2.52 |
| CD-60-A | 60 | Delco | 988276 | 7275710 | 2.52 |
| CD-60-B | 60 | Delco | 988062 (Corvalr) | 7274920 | 2.52 |
| CD-61-A | 61 | Delco | 988413 | 7277329 | 1.95 |
| CD-61-B | 61 | Delco | 988414 | 7276939 | 1.95 |
| CD-61-C | 61 | Delco | 988460 | 7278058 | 1.95 |
| CD-61-D | 61 | Delco | 988468 | 7278296 | 1.95 |
| M/U-7 | 60 | Motorola | CR40X, CRM60X (Corvalr) | 18K544235 | 2.13 |
| M/U-3 | 48-53 | Motorola | GMT2A*, -2M*, -3A6* | 18B512084 | 2.13 |
| CD-60-T | 60 | Delco | 988080 | 7275629 | 2.52 |
| CD-61-T | 61 | Delco | 2233944*, 985036 | 7278528 | 1.95 |

FOR DESOTO AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|----------------------------|-------------------|----------|
| DEM-57/8 | 57-58 | Motorola | MOPAR 846, 919, 919HR, 923 | 18B539819 | \$2.13 |
| DEM-59 | 59 | Motorola | MOPAR 857 | 18K561733 | 2.13 |

FOR OODGE AUTO AND TRUCK RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-----------------|-------------------|----------|
| DOM-57 | 57 | Motorola | MOPAR 845, 918 | 18K539820 | \$2.13 |
| DOM-58 | 58 | Motorola | MOPAR 852 | 18K560417 | 2.13 |
| DOM-59 | 59 | Motorola | MOPAR 856 | 18B561732 | 2.13 |
| DOM-60 | 60 | Motorola | MOPAR 102 | 18C563115 | 2.13 |
| M/U-1 | 53 | Motorola | 610T* | 18K512740 | 2.13 |

FOR EDELSEL AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-----------------|-------------------|----------|
| FB-59 | 59 | Bendix | 94BE | 2090035-3 | \$2.13 |

FOR FORD AUTO AND TRUCK RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|--------------------------------|-------------------|----------|
| FB-49/0 | 49-50 | Bendix | M1, M1A, M1A1 | 1222808 | \$2.13 |
| FM-50 | 50 | Motorola | OMF | 18B591266 | 2.13 |
| FB-51 | 51 | Bendix | M2 | 1219586-2 | 2.13 |
| FM-51 | 51 | Motorola | 1MF | 18B501153 | 2.13 |
| FB-52/3 | 52-53 | Bendix | M4, M4A | 1219586-3 | 2.13 |
| FM-52/3 | 52-53 | Motorola | 2MF, 3MF | 18B511635 | 2.13 |
| FB-54 | 54 | Bendix | M4B, M4BA, M4BP | 1219586-7 | 2.13 |
| FM-54 | 54 | Motorola | 4MF | 18B530018 | 2.13 |
| FB-55 | 55 | Bendix | 5BF | 1219656-1 | 1.41 |
| FM-55 | 55 | Motorola | 5MF, 5MF8 | 18B531299 | 1.41 |
| FB-56 | 56 | Bendix | 6BF | 1219681-1 | 1.41 |
| FM-56 | 56 | Motorola | 6MF, 6MFP, 69MF | 18B534483 | 2.13 |
| A/U-3 | 57 | Automat | FT-227, FT-37 | 80A618C | 2.52 |
| FB-57 | 57 | Bendix | 75BF | 2090035-1 | 2.13 |
| FM-57 | 57 | Motorola | 75MF | 18K539059 | 2.13 |
| FB-58 | 57-58 | Bendix | 74BF, 84BF | 2090035-2 | 2.13 |
| FM-57/8 | 57-58 | Motorola | 74MF, 84MF, 84MFM | 18B541819 | 2.13 |
| A/U-3 | 58 | Automat | F-128, -C, FP-238, -C80A618C | 2.52 | |
| FB-59 | 59 | Bendix | 94BF | 2090035-3 | 2.13 |
| FM-59 | 59 | Motorola | 94MF, 94MFM | 18B561597 | 2.13 |
| A/U-3 | 59 | Automat | F-139, FP-249 | 80A618C | 2.52 |
| FB-60/1 | 60-61 | Bendix | 04BF, 14BF, 14BM | 2090405-1 | 1.95 |
| FM-60/1 | 60-61 | Motorola | 04MF, 04MFM, 14MD, 14MF, 14MFM | 2090405-8 | 1.95 |
| A/U-3 | 59 | Automat | F-139*, FP-249* | 80A618C | 2.52 |
| FB-57/8-T | 57-58 | Bendix | 74BT*, 84BT* | 2090253-1 | 1.41 |
| FB-59-T | 59 | Bendix | 94BT* | 2090253-2 | 1.41 |
| FB-60-T | 60 | Bendix | 04BT* | 2090253-3 | 1.41 |
| FB-61-T | 61 | Motorola | 12BT, 12BU* | 2091466-1 | 1.41 |

FOR GMC TRUCK RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|------------------|-------------------|----------|
| M/U-3 | 48-53 | Motorola | GMT2A, -2M, -3A6 | 18B512084 | \$2.13 |
| CD-53/4-A | 54-59 | Delco | 2233396, 2233398 | 7264211 | 2.52 |
| CD-58-B | 58 | Delco | 2233745 | 7270450 | 2.52 |
| CD-60-T | 60 | Delco | 2233850 | 7275629 | 2.52 |

*Truck Radio.

FOR HENRY J AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-------------------|-------------------|----------|
| M/U-1 | 51-53 | Motorola | HJ2A, HJ2M, HJ3A6 | 18K512740 | \$2.13 |
| CD-53/4-A | 56 | Delco | 894866 | 7264211 | 2.52 |

FOR HUDSON AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-----------------|-------------------|----------|
| M/U-3 | 51-53 | Motorola | H3A6 | 18B512084 | \$2.13 |

FOR KAISER AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-------------------|-------------------|----------|
| M/U-3 | 51-53 | Motorola | KR2A, KR2M, KR3A6 | 18B512084 | \$2.13 |

FOR OLDSMOBILE AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|------------------------|-------------------|----------|
| OD-51-A | 51 | Delco | 982700 | 7260294 | \$2.52 |
| M/U-3 | 51-52 | Motorola | OE2A, OE2M, OE2A6 | 18B512084 | 2.13 |
| OD-53-A | 53 | Delco | 983004 | 7263510 | 2.52 |
| OD-54/6 | 54-56 | Delco | 983091, 983205, 983436 | 7264128 | 2.52 |
| OD-57-B | 57 | Delco | 989002 | 7268847 | 2.52 |
| OD-57-A | 57 | Delco | 989001 | 7269055 | 2.52 |
| OD-58 | 58 | Delco | 989127, 989129 | 7270679 | 2.52 |
| OD-59 | 59 | Delco | 989170, 989171 | 7272855 | 2.52 |
| OD-60 | 60 | Delco | 989276, 989277 | 7275269 | 2.52 |
| OD-61-A | 61 | Delco | 989387 | 7276521 | 1.95 |
| OD-61-B | 61 | Delco | 989392, 989393 | 7276997 | 1.95 |

FOR PACKARD AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|------------------|-------------------|----------|
| M/U-3 | 51-53 | Motorola | PJ2A, PJ2M, -3A6 | 18B512084 | \$2.13 |

FOR PLYMOUTH AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-------------------|-------------------|----------|
| PM-56 | 56 | Motorola | MOPAR 916, 916HR | 18B536704 | \$2.13 |
| PM-57 | 57 | Motorola | MOPAR 819 | 18B540376 | 1.41 |
| PP-57 | 57 | Phileo | P-5701, MOPAR 848 | 33-5580-12 | 1.41 |
| PM-58 | 58 | Motorola | MOPAR 854 | 18B560415 | 1.41 |
| PP-58 | 58 | Phileo | P-5801, MOPAR 848 | 33-5580-21 | 1.41 |
| PP-59 | 59 | Phileo | P-5901, MOPAR 855 | 33-5580-27 | 1.41 |

FOR PONTIAC AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-------------------|-------------------|----------|
| M/U-1 | 46-52 | Motorola | PC2A, PC2A6, PC2M | 18K512740 | \$2.13 |
| POD-56 | 56 | Delco | 988823 | 7268308 | 2.52 |
| A/U-1 | 57 | Automat | CTR-6A | 80-69 | 2.52 |
| POD-57 | 57 | Delco | 988871 | 7270189 | 2.52 |
| POD-58-A | 58 | Delco | 988823 | 7270939 | 2.52 |
| POD-58-B | 58 | Delco | 988822 | 7271446 | 2.52 |
| POD-59 | 59 | Delco | 988976, 988977 | 7273623 | 2.52 |
| POD-60 | 60 | Delco | 989614, 989615 | 7275708 | 2.52 |
| POD-61-A | 61 | Delco | 988692, 988693 | 7277542 | 1.95 |
| POD-61-B | 61 | Delco | 989792 | 7277112 | 1.95 |
| POD-61-C | 61 | Delco | 989831 | 7278930 | 1.95 |

FOR RAMBLER AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-------------------------------|-------------------|----------|
| A/U-1 | 58-59 | Automat | RAP-89, RP-519 | 80-69 | \$2.52 |
| RM-58/59 | 58-59 | Motorola | RAM (8990543), 93MR (8990582) | 18B560804 | 2.13 |
| RM-59 | 59 | Motorola | 94MA (8990576) | 18B561728 | 2.13 |
| RM-60-A | 60 | Motorola | 990811 | 18B564229 | 2.13 |
| RM-60/1-B | 60-61 | Motorola | 14MR, 04MA, 8990833, 8990706 | 18K563154 | 1.95 |

FOR RIVERSIDE AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-------------------------------|-------------------|----------|
| A/U-3 | 58-59 | Automat | FJB-6679A, FJB-6684, FJB-6687 | 80A618C | \$2.52 |

FOR STUDEBAKER AUTO RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-------------------|-------------------|----------|
| M/U-1 | 50-52 | Motorola | SR2A, SR2A6, SR2M | 18K512740 | \$2.13 |
| M/U-3 | 53 | Motorola | SR3A6 | 18B512084 | 2.13 |
| M/U-7 | 59 | Motorola | AC2971 (SM9T) | 17B542657 | 2.13 |

FOR WILLYS JEEP RADIOS

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------|-----------------|-------------------|----------|
| CD-53/4-A | 56-58 | Delco | 694866, 815395 | 7264211 | \$2.52 |

FOR MOTOROLA UNIVERSAL RADIOS

Used in many autos and trucks.

| Centralab Number | Year Auto | Radio Mfr. | Radio Model No. | Original Part No. | Net Each |
|------------------|-----------|------------------------------|-----------------|-------------------|----------|
| M/U-2 | 55-57 | 395, -12; 396, -12; 397, 404 | | 18B531560 | \$1.41 |
| M/U-4 | 55-58 | 5M, -12, 6M, 6M-12, 7M, 8M | | 18K533457 | 2.13 |
| M/U-5 | 57 | 7MX | | | |



RESISTORS

WIRE WOUND—METAL FILM—
DEPOSITED CARBON

Dale resistors—available in a wide selection of types, sizes and terminations—have established a solid reputation for inherent stability.

Dale's inherent stability has been established and maintained through advanced design and stringently controlled methods of manufacture—methods which constantly are reaching new levels of achievement as part of Dale's super-high reliability development program.

Wire Wound Resistors

Ultra-High Reliability Type ARS

Manufactured to have a failure rate of less than .001% per thousand hours of operation at 50% of rated power at 25° C. Environmental tests conducted on each production lot, and test data furnished with each order for more than 300 pieces. Resistance range from 0.1 ohm to 16K ohms, depending on type. Tolerance 1%. Three wattages—2, 5, 10; three sizes.



Type ARS

Ask for Bulletin R-66

TYPES RS and RLS; HS (High Temperature); NS and NLS (Non-Inductive)

(Available with weldable leads)

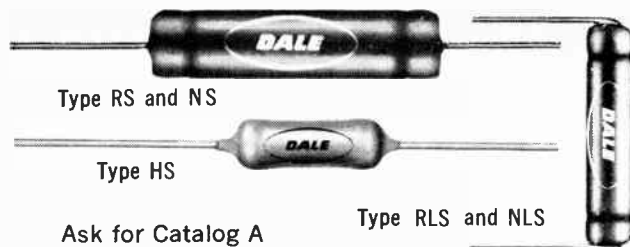
TYPES RS, RLS, HS resistance range from 0.05 ohm to 175K ohms, depending on type; TYPES NS, NLS from 1 ohm to 37K ohms. Tolerance range from 0.05% to 3%. TYPES RS, NS, NLS meet functional requirements of MIL-R-26C. TYPE RLS meets applicable paragraphs of MIL-R-26C, characteristic G. TYPE HS meets applicable paragraphs of MIL-R-26C, characteristic V.

TYPE RS with axial leads in eight wattages—0.5, 1, 2, 2.5, 3, 5, 7, 10; ten sizes.

TYPE RLS with radial leads in seven wattages—1, 2, 2.5, 3, 5, 7, 10; nine sizes.

TYPE HS with axial leads in eight wattages—1.25, 3, 3.25, 3.75, 4.25, 6.75, 9, 13; nine sizes.

TYPE NS (axial leads) and NLS (radial leads) in six wattages—2, 2.5, 3, 5, 7, 10; seven sizes.



Type RS and NS

Type HS

Ask for Catalog A

Type RLS and NLS

Clip Mounted Type RSE

(Available with weldable leads)

Complete insulation and protection afforded by suspending precision resistance unit in special shock absorbing material and then inserting in metal tube which can be clip mounted. Resistance range from 0.5 ohm to 175K ohms, depending on type; tolerance range 0.05% to 3%. Meets functional requirements of MIL-R-26C. Five wattages—2, 3, 5, 7, 10; seven sizes.

Type RSE



Ask for Catalog A

TYPES RH, NH (Non-Inductive) RHM, PH

Resistance unit in TYPES RH, NH, PH silicone sealed and inserted in radiator finned housing; in TYPE RHM molded with high temperature material into radiator finned housing. Mount on or through chassis for maximum heat dissipation. TYPES RH and RHM meet all requirements of MIL-R-18546C; TYPE PH meets functional requirements of MIL-R-18546C.

TYPE RH resistance range from 0.1 ohm to 175K ohms, depending on type; tolerance range 0.05% to 3%; six wattages and sizes—5, 10, 25, 50, 100, 250.

TYPE RHM resistance range from 0.1 ohm to 60K ohms, depending on type; tolerance range from 0.5% to 3%; two wattages and sizes—10, 25.

TYPE NH resistance range from 1 ohm to 37K ohms, depending on type; tolerance range 0.05% to 3%; five wattages and sizes—10, 25, 50, 100, 250.

TYPE PH resistance range from 0.1 ohm to 60K ohms, depending on type; tolerance range 0.05% to 3%; three wattages and sizes—10, 25, 100.



Type RH

Type RHM

Type NH

Type PH

Ask for Catalog A

Bobbin TYPE WW (Available with weldable leads)

Non-inductive; encapsulated in material with very high dielectric strength. Unique Dale design and manufacture involving new winding and termination methods assure long-lasting stability. Meets requirements of MIL-R-93C, characteristic C. Resistance range from 10 ohms to 1.5 megohms, depending on type; standard tolerance 1%. Rated at 0.1 watt to 0.4 watt; eight sizes.

Ask for Catalog A



Type WW

DALE ELECTRONICS, INC.



Columbus, Nebraska

A subsidiary of The Lionel Corp.

DALE

Deposited Carbon Resistors

(Available with weldable leads)

Designed for inherent stability, long load life and excellent protection against environmental factors in a wide range of applications. Made of pure crystalline carbon film bonded to selected ceramic cores. Excellent high frequency characteristics.

Type DC

Miniature size, protection against moisture at low cost. Resistance range from 1 ohm to 200 megohms; tolerance 1%. Seven wattages— $\frac{1}{10}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2, 5; ten sizes.



Type DC

Ask for Catalog A

Types MC - DCF - DCH

(Insulated—Meet functional requirements of MIL-R-10509D)

TYPE MC is completely insulated and protected from environmental and mechanical damage by molded housing; resistance range from 1 ohm to 50 megohms. Available in five wattages— $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2; five sizes in standard tolerance of 1%.

TYPE DCF has a new coating material which provides a completely insulated resistor, yet maintains miniature size. Resistance range from 1 ohm to 50 megohms; six wattages— $\frac{1}{10}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2; nine sizes in standard tolerance of 1%.

TYPE DCH hermetically sealed in non-hygroscopic ceramic envelope. Resistance range from 1 ohm to 50 megohms; seven wattages— $\frac{1}{10}$, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2, 5; ten sizes in standard tolerance of 1%.

Type MC



Type DCF



Type DCH



Ask for Catalog A

DALE

Metal Film Resistors

(Available with weldable leads)

Type MF

Inherently good R.F. characteristics and low noise levels. Completely insulated and protected against moisture and other severe environmental factors. Resistance range from 100 ohms to 4 megohms, depending on size; tolerance 1%. Five wattages— $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2; five sizes. Temperature coefficient ± 50 and ± 100 P.P.M.



Type MF

Ask for Catalog A

DALE

Trimmer Potentiometers

WIRE WOUND

Series 1200 - 900 - 600 - 1500 - 5000

Produced under stringently controlled "white room" conditions to assure highest quality and reliability. Welded construction throughout; sealed to protect against moisture and potting compounds.

SERIES 1200—Humidity proof; three terminal configurations for standard or printed circuit mounting; 10 to 50K ohms; 5% tolerance; 1 watt.

SERIES 900—Humidity proof, three terminal configurations for standard or printed circuit mounting; 10 to 30K ohms; 5% tolerance; 1 watt.

SERIES 600—Humidity proof; eight terminal configurations for standard, panel or printed circuit mounting; 10 to 30K ohms; 5% tolerance; 1 watt.

SERIES 1500—Humidity proof; nine terminal configurations for standard, panel or printed circuit mounting; 10 to 50K ohms; 5% tolerance, 1 watt.

SERIES 5000—Humidity proof; space saving, square configuration; 100 to 50K ohms; 5% tolerance; 1 watt.



Ask for Catalog B

Series 100 - 200 - 300 - 1100

Designed to give excellent performance for normal circuit problems where economy is of prime importance, yet dependable performance is a necessity.

SERIES 100—Five terminal configurations; 10 to 50K ohms; 5% tolerance; 0.8 watt.

SERIES 200—Five terminal configurations; 10 to 50K ohms; 10% tolerance; 0.5 watt.

SERIES 300—Two terminal configurations; 100 to 20K ohms; 15% tolerance; 0.25 watt.

SERIES 1100—High temperature; three terminal configurations for standard or printed circuit mounting; 10 to 50K ohms; 10% tolerance; 1 watt.

Ask for Catalog B



Special Problems?

When your requirements are for special resistance components and networks, please send us an outline of your problems.

Our standard line can be modified and special resistors can be produced to meet the toughest requirements.

Other products made by Dale are lightning arrestors; surge arrestors, RF and IF transformers; custom coils, chokes, toroidal inductors, ferrite antennas; precision potentiometers and tube shields.

DALE ELECTRONICS, INC.

Columbus, Nebraska

DALE






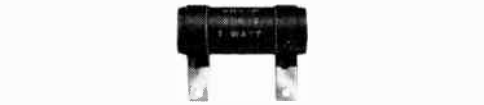



A subsidiary of The Lionel Corp.

CORNING ELECTRONIC COMPONENTS

GLASS/METAL OXIDE RESISTORS

Fuse a tin oxide coating into glass, cut a helix in the coating, attach leads and you have a simple, rugged, exceptionally reliable Corning resistor. Its temperature coefficient runs from $\pm 0.015\%$ to $\pm 0.05\%$ /°C.; overload change is less than 1%; noise level less than 0.1 uv/v. It is non-inductive above 280 ohms. Standard

values from 1.00 to 9.76, except for C resistors whose values run from 10 to 91 on standard decade tables, are the same as standard decade values in applicable military specifications. Our distributors across the nation can give you fast delivery at factory prices on top reliability Corning resistors.

| TYPE AND MIL SPEC | MODEL/ MIL MODEL | RESISTANCE (ohms) | WATTAGE | TOLERANCE |
|--|------------------------|----------------------|--------------------------------------|--|
| NF Glass encapsulation is fusion sealed. MIL-R-10509D, Char. B and G.  | NF60/RN60B | 100 to 100K | 1/8 @ 70°C | 1% |
| | NF65/RN65B | 100 to 348K | 1/4 @ 70°C | 1% |
| N-20 SERIES Derating to 140°C. Uninsulated. MIL-R-10509B, Char. X.  | N12 | 100 to 133K | 1/4 @ 40°C | 1, 2, and 5% |
| | N20/RN20 | 10 to 500K | 1/2 @ 40°C | 1, 2, and 5% |
| | N25/RN25 | 10 to 1.5 meg. | 1 @ 40°C | 1, 2, and 5% |
| | N30/RN30 | 30 to 4.12 meg. | 2 @ 40°C | 1, 2, and 5% |
| N Insulation coating. Total load-life resistance change less than 3%. MIL-R-10509D, Char. B.  | N60/RN60B | 10 to 133K | 1/8 @ 70°C | 1% |
| | N65/RN65B | 10 to 499K | 1/4 @ 70°C | 1% |
| | N70/RN70B | 10 to 1 meg. | 1/2 @ 70°C | 1% |
| C General purpose, low-cost film type. Prices and sizes comparable to carbon composition type, but with film resistor performance characteristics. MIL-R-22684 (Navy)  | C07/RL07 | 51 to 150K | 1/4 @ 70°C | 2%, 5% |
| | C20/RL20 | 51 to 150K | 1/2 @ 70°C | 2%, 5% |
| | C32/RL32 | 51 to 470K | 1 @ 70°C | 2%, 5% |
| | C42S/RL42 | 10 to 1.3 meg. | 2 @ 70°C | 2%, 5% |
| LPI Designed for radio, television, and allied industries. Silicone insulation. Give excellent frequency characteristics at low cost.  | LP1-3 | 10 to 40K | 3 @ 40°C | 10% |
| | LP1-4 | 16 to 90K | 4 @ 40°C | 10% |
| | LP1-5 | 20 to 110K | 5 @ 40°C | 10% |
| | LP1-7 | 24 to 90K | 7 @ 25°C | 10% |
| | LP1-10 | 180 to 70K | 10 @ 25°C | 10% |
| R Power type, essentially noninductive in high-frequency operations. MIL-R-11804C  | R31/RD31P | 10 to 70K | 7 @ 25°C | 2, 5, 10% |
| | R33/RD33P | 19.6 to 150K | 13 @ 25°C | 2, 5, 10% |
| | R35/RD35P | 19.6 to 301K | 25 @ 25°C | 2, 5, 10% |
| | R37/RD37P | 19.6 to 500K | 55 @ 25°C | 2, 5, 10% |
| | R39/RD39P | 30.1 to 1 meg. | 115 @ 25°C | 2, 5, 10% |
| S Fixed-film type for high-temperature operation. Silicone baked lacquer. MIL-R-11804C, Char. P.  | S20/RD60P | 10 to 500K | 130°C 1/2 25°C 1 | 1, 2, 5, 10% |
| | S25/RD65P | 10 to 1.54 meg. | 1 2 | 1, 2, 5, 10% |
| | S30/RD70P | 30.1 to 4.22 meg. | 2 4 | 1, 2, 5, 10% |
| H For dummy antennas, circuit loading, damping, and terminating. Also ideal for circuits subject to steep surges and sawtooth patterns.  | H31 | 10 to 70K | DC 5 AC 7 @ 40°C | 2% (striped or spiraled) 10% (continuous conductor) |
| | H33 | 20 to 150K | 10 15 | 2% (striped or spiraled) 10% (continuous conductor) |
| | H35 | 20 to 300K | 20 30 | 2% (striped or spiraled) 10% (continuous conductor) |
| | H37 | 20 to 500K | 50 70 | 2% (striped or spiraled) 10% (continuous conductor) |
| | H39 | 30 to 1 meg. | 100 140 | 2% (striped or spiraled) 10% (continuous conductor) |
| HL For high power applications as dummy antennas, circuit loading and terminating. Rated for natural air cooling at 25°C., its power ratings can be tripled by adequate forced air cooling.  | HL250 | 20 to 40K | 250 @ 25°C | 5, 10% |
| | HL500 | 20 to 600K | 500 @ 25°C | 5, 10% |
| | HL1000 | 20 to 1 M | 1000 @ 25°C | 5, 10% |
| | HL3000 | 30 to 2 M | 3000 @ 25°C | 5, 10% |
| | HL6000 | 30 to 2.4 M | 6000 @ 25°C | 5, 10% |

See our capacitors ad in Section 1500 for fixed glass capacitors and a rundown on our other top-reliability components.

For more information on our resistors, write:

CORNING

Electronic Components

CORNING GLASS WORKS, RALEIGH, N. C.

DAVEN/GENERAL MILLS
 Precision Wire Wound Resistors • Precision Rotary Switches • Precision Attenuators • Precision Laboratory Equipment • Precision Metal Film Resistors

DAVEN ATTENUATORS and Attenuator Networks



Over 25 years ago, Daven introduced the first attenuators as gain controls in audio program circuits. Since then, Daven has pioneered every important development in attenuators. Daven has produced more attenuators than all other manufacturers combined. Many of the first Daven attenuators are, in fact, still working perfectly **without one minute of service down-time!**

Today, Daven attenuators are accepted as standard in a wide range of other applications because of their extremely low switch noise level (below circuit noises), velvet-smooth control and wide range of attenuation. In broadcasting, recording and sound motion picture control installations there is still only one name synonymous with the finest: Daven!

Unbalanced Ladder Networks

20 or 30 steps, 1.5 and 2 db per step.

Unbalanced Ladder Networks and Potentiometers

20 steps, 2 db per step.

Balanced Ladder Networks

20 and 30 steps, 1.5 and 2 db per step.

Slide Attenuators

20 and 30 steps, 1.5 and 2 db per step.

"T" Attenuators

20, 30 and 45 steps, .1, .5, .75, 1, 1.5 and 2 db per step.

Precision "T" Networks $\pm 1\%$

20 and 30 steps, .1, .5, 1, 1.5 and 2 db per step.

Balanced "H" Networks

20 and 30 steps, .5, 1, 1.5 and 2 db per step.

Precision Balanced "H" Networks

$\pm 1\%$
20 steps, .1, .5, 1, 1.5 and 2 db per step.

Potentiometers

Carbon Resistor/Single Units: 20 and 30 steps, 1.5, 2, 3 and 5 db per step.

Carbon Resistor/Dual Units Single Deck: 20 and 30 steps, 1.5 and 2 db per step.

Carbon Resistor/Dual Units in Tandem: 20 and 30 steps, 1.5, 2 and 3 db per step.

Wire Wound/Single Units: 20 and 30 steps, 1.5, 2 and 3 db per step.

Wire Wound/Dual Units Single Deck: 30 steps, 1.5, 2 and 3 db per step.

Wire Wound/Dual Units: 20 steps, 1.5, 2 and 3 db per step.

VU Meter Multiplier Networks

Decade Attenuators

"T" Networks or Balanced "H" Networks. 0-50 KC, Resistor accuracy $\pm 1\%$.

Impedance Matching Networks

Two types: (1) db loss is constant and (2) db loss is the next highest multiple of 5 db above the minimum possible loss.

Video Variable Attenuators

10, 20 and 45 steps, .1, .2, .5, 1 and 2 db per step.

Decade Attenuator Units — Video

10 steps, .1, 1 and 10 db per step. "T" and balanced "H" circuits available.

Fixed Attenuators

Pads stocked in multiples of 5 db up to 50 db, vis. 5 db, 10 db, 15 db, etc.

Tapped Fixed Networks

0 to 40 db in 1 db steps as follows: 1, 2, 3, 4, 10 and 20 db fixed loss networks.

Multiple Input & Output Networks

Available with single input and multiple output, or a multiple input and single output.

Write today for a new 52-page specification catalog on Daven attenuators and networks!

DAVEN
Division of General Mills, Inc.



**LIVINGSTON,
NEW JERSEY**

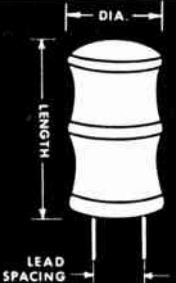
FROM DAVEN

The most complete line of Military and Commercial Wire Wound Resistors

Plug-In "Lollypop" Resistors

Daven has kept pace with the increased use of printed circuit subassemblies by providing a variety of precision wire wound resistor types for use in this type of construction. The most popular sizes of Daven

printed circuit "plug-in" resistors are listed below. Special designs to satisfy individual customer specifications can be furnished on special order.



| Daven Type | Mil Type | Dia. ($\pm 1/64$) | Length ($\pm 1/32$) | Max. Res. | AWG | Wattage | Standard Lead Spacing ($\pm .015$) |
|------------|----------|---------------------|-----------------------|-----------|------|---------|--------------------------------------|
| 1350* | RB-71 | 1/4 | 5/16 | 68 K | # 22 | .250 | .200 |
| 1351 | | 1/4 | 3/8 | 93 K | # 22 | .250 | .200 |
| 1352 | | 1/4 | 7/16 | 1.1 Meg. | # 20 | .250 | .200 |
| 1355 | RB-70 | 3/8 | 1/2 | 2.88 Meg. | # 20 | .333 | .200 |
| 1358 | | 7/16 | 1/2 | 3.6 Meg. | # 20 | .400 | .300 |
| 1359 | | 1/2 | 1/2 | 3.6 Meg. | # 20 | .500 | .300 |


*formerly 1273

Miniature Axial Lead — Typical Types

| Type | Mil R-93C | Diameter Inches | Length Inches | Maximum Watts* | Maximum Volts | Max. Res. | Non Inductive | Lead Length 2" $\pm 1/8$ " |
|------|-----------|-----------------|---------------|----------------|---------------|-----------|---------------|----------------------------|
| 1274 | | 3/16 | 3/8 | .125 | 200 | 418 K | No*** | # 22AWG |
| 1283 | RB-56 | 1/4 | 5/16 | 0.25 | 200 | 71 K | No*** | # 20AWG |
| 1250 | RB-55 | 1/4 | 1/2 | 0.33 | 400 | 1.4 Meg. | Yes | # 20AWG |

Axial Lead — Typical Types


Lead Length: 2" $\pm 1/8$ " #20AWG, Non-Inductive Winding



| Type | Mil R-93C | Diameter Inches | Length Inches | Maximum Watts | Maximum Volts | Max. Res. |
|------|-----------|-----------------|---------------|---------------|---------------|-----------|
| 1195 | RB-54 | 1/4 | 3/4 | 0.50 | 400 | 2.2 Meg. |
| 1252 | RB-52 | 3/8 | 1 | 1.00 | 800 | 6.4 Meg. |
| 1172 | RB-57 | 1/2 | 1 | 1.25 | 800 | 10 Meg. |

Lug Terminal — Typical Types

Non-Inductive Winding



| Type | Mil R-93C | Diameter Inches | Length Inches | Maximum Watts | Maximum Volts | Max. Res. |
|------|-----------|-----------------|---------------|---------------|---------------|-----------|
| 1173 | RB-08 | 1/2 | 1/2 | 0.50 | 400 | 4 Meg. |
| 1174 | | 1/2 | 5/8 | 0.60 | 400 | 6 Meg. |
| 1269 | RB-16 | 5/8 | 5/8 | 0.75 | 400 | 6.6 Meg. |
| 1270 | RB-17 | 5/8 | 1 | 1.25 | 800 | 13.2 Meg. |

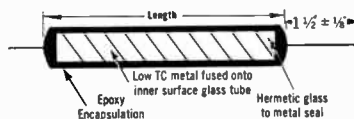
DAVEN

Division of General Mills, Inc.



LIVINGSTON,
NEW JERSEY

Only DAVEN offers the 6 most important features in Metal Film Resistors!



SPECIFICATIONS AT A GLANCE

1 True hermetic glass-to-metal seal plus Epoxy Encapsulation—a double seal that is standard on all units at no extra cost!

| TYPE | TEMP. CHAR. | WATTAGE AT 125°C | MAX. VOLTS | MIL-R-10509D DESIGNATION | LEAD DIAM. ± .002 | OHMIC VALUE | | LENGTH | DIAM. |
|------|----------------------------------|------------------|------------|--------------------------|-------------------|-------------|------|-------------|-------------|
| | | | | | | MIN. | MAX. | | |
| DA-2 | T ₂₁ , T ₉ | 1/2 | 350. | RN70C | .032 | 24.9Ω | 1.5M | .850 ± .020 | .265 ± .020 |
| DA-4 | T ₂₁ , T ₉ | 1/4 | 300 | RN65C | .025 | 49.9Ω | 1M | .640 ± .020 | .200 ± .020 |
| DA-8 | T ₂₁ , T ₉ | 1/8 | 250 | RN60C | .025 | 49.9Ω | 499K | .460 ± .015 | .130 ± .010 |
| DA-0 | T ₂₁ , T ₉ | 1/10 | 200 | RN55C | .025 | 49.9Ω | 100K | .345 ± .015 | .130 ± .010 |

2 Far exceeds all electrical and mechanical requirements of MIL-R-10509D, Characteristic C.

TYPICAL DAVEN DA SERIES PERFORMANCE

| TEST | LOW | AVERAGE | HIGH | ALLOWABLE UNDER MIL-R-10509D |
|---------------------------------|-----|---------|------|------------------------------|
| Temp. Cycling MIL-STD-202 | 0 | .01% | .04% | .25% |
| Low Temp. Oper. | 0 | 0 | .01 | .25 |
| Short Time Overload | 0 | 0 | .01 | .25 |
| Terminal Strength | 0 | 0 | .01 | .20 |
| Dielectric Withstanding Voltage | 0 | .01 | .02 | .25 |
| Effect of Soldering | 0 | 0 | .01 | .10 |
| Moisture | 0 | .03 | .20 | .50 |
| Lead Life | 0 | .10 | .40 | .50 |

4 The only metal film resistor with "current noise" factor as low as wire wounds.

Comparative "Current Noise" (Bureau of Standards Method) microvolts per volt per frequency octave (0 Db ref. = 1 MV/V/ frequency octave)

| RESISTOR MATERIAL | "NOISE" FACTOR |
|------------------------------------|---|
| Composition Carbon | -10 Db to -20 Db |
| Deposited Carbon | -20 Db |
| Tin Oxide | -25 Db |
| Evaporated Metal Film | -30 Db to -34 Db |
| DAVEN DA Series & DAVEN Wire Wound | Below -35 Db to -40 Db approaches signal level of test. |

3 Unique temperature characteristics.

- Over a temperature range of -65° C to +175° C, all Daven Metal Film Resistors show 50% less resistance change than allowed in the MIL-R-10509D Specifications for Characteristic C (50ppm).
- Over a temperature range of -65° C to +175° C, selected Daven Metal Film Resistors show the same resistance change as allowed in the MIL-R-10509D Specifications for Characteristic E (25ppm).

| | ALLOWABLE UNDER MIL-R-10509D | PERFORMANCE OF DAVEN TYPE DA RESISTORS |
|---------|------------------------------|--|
| | | -65°C to +175°C |
| ±50 ppm | 1.15% | 0.75% (All Daven MF resistors) |
| ±25 ppm | 0.58% | 0.58% (Selected Daven MF resistors) |
| | | 0°C to +80°C |
| ±30 ppm | --- | 0.21% (All Daven resistors) |
| ±20 ppm | --- | 0.13% (Selected Daven resistors) |

5 Weldable leads, which are readily solderable, are standard on all units at no surcharge.

6 Off-the-shelf delivery from your Daven distributor.

Write for full details on Types DA 2, DA 4, DA 8 and DA 10

DAVEN
Division of General Mills, Inc.



LIVINGSTON,
NEW JERSEY

NOW... ONE SOURCE ...

precision carbon and metal film

2 WATT MIL SIZE TO

CARBON FILM
"R" COAT

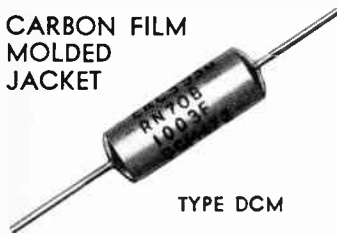


TYPE DC

| Electra Part No. | MIL Style | Wattage Temperature | Mil Resistance Range | Commercial Resistance Range | Maximum Rated Voltage | LENGTH—A | | DIAMETER—B | | Lead Size AWG # |
|------------------|-----------|---------------------|----------------------|-----------------------------|-----------------------|----------|--------------------|------------|--------------------|-----------------|
| | | | | | | Min | Production Average | Min | Production Average | |
| DC 1/10X | | 1/10 / 70°C | | 1 Ohm To 301K | 200 | .155 | .165 | .073 | .078 | 26 |
| DC 1/10 | | 1/10 / 125°C | | 1 Ohm To 301K | 250 | .240 | .250 | .083 | .093 | 22 |
| DC 1/8 | | 1/8 / 70°C | | 1.5 Ohms To 270K | 250 | .281 | .312 | .060 | .075 | 26 |
| DC 1/8X | | 1/8 / 70°C | | 301K Ohms To 1 Meg | 250 | .343 | .312 | .062 | .093 | 22 |
| DC 1/4A | RN 10X | 1/4 / 70°C | | 2.5 Ohms To 820K | 300 | .437 | .468 | .062 | .093 | 22 |
| DC 1/4X | | 1/4 / 70°C | | 820K Ohms To 2 Meg | 300 | .406 | .437 | .094 | .125 | 22 |
| DC 1/2C | RN 15X | 1/2 / 70°C | | 1.5 Ohms To 1.7 Meg | 350 | .469 | .500 | .140 | .171 | 20 |
| DC 1/2A | RN 20X | 1/2 / 70°C | | 2 Ohms To 2.6 Meg | 350 | .594 | .625 | .140 | .171 | 20 |
| DC 1/2B | | 1/2 / 70°C | | 1.5 Ohms To 2.8 Meg | 500 | .687 | .718 | .187 | .218 | 20 |
| DC 1/2 | | 1/2 / 70°C | | 3 Ohms To 3.7 Meg | 500 | .781 | .812 | .141 | .171 | 20 |
| DC 1 | RN 25X | 1 / 70°C | | 1.5 Ohms To 6.5 Meg | 500 | .875 | .937 | .266 | .297 | 20 |
| DC 2 | RN 30X | 2 / 70°C | | 5 Ohms To 17 Meg | 1000 | 2.025 | 2.095 | .266 | .297 | 20 |

* MIL Styles Obsolete by Military Aug. 1, 1961

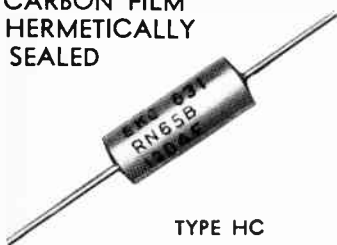
CARBON FILM
MOLDED
JACKET



TYPE DCM

| | | | | | | | | | | |
|----------|------------|--------------|---------------------|---------------------|-----|-------|-------|------|------|----|
| DCM 1/10 | RN 55D | 1/10 / 125°C | 10 Ohms To 301K | 1 Ohm To 301K | 250 | .250 | .260 | .115 | .125 | 22 |
| DCM 1/8 | RN 60B / D | 1/8 / 70°C | 10 Ohms To 1 Meg | 2 Ohms To 1 Meg | 250 | .385 | .400 | .125 | .135 | 22 |
| DCM 1/4 | RN 65B / D | 1/4 / 70°C | 10 Ohms To 2 Meg | 2 Ohms To 2.1 Meg | 300 | .580 | .595 | .205 | .215 | 22 |
| DCM 1/2 | RN 70B / D | 1/2 / 70°C | 10 Ohms To 2.49 Meg | 2 Ohms To 2.6 Meg | 350 | .740 | .755 | .250 | .260 | 20 |
| DCM 1 | RN 75B | 1 / 70°C | 10 Ohms To 5.11 Meg | 1.5 Ohms To 6.5 Meg | 500 | 1.095 | 1.110 | .380 | .390 | 20 |
| DCM 2 | RN 80B | 2 / 70°C | 30.1 Ohms To 10 Meg | 5 Ohms To 17 Meg | 750 | 2.225 | 2.240 | .390 | .400 | 20 |

CARBON FILM
HERMETICALLY
SEALED



TYPE HC

| | | | | | | | | | | |
|-------|------------|------------|---------------------|---------------------|------|-------|-------|------|------|----|
| HC 30 | | 1/8 / 70°C | | 1 Ohm To 301K | 250 | .195 | .210 | .099 | .107 | 26 |
| HC 40 | | 1/8 / 70°C | | 1.5 Ohms To 301K | 250 | .250 | .281 | .150 | .160 | 22 |
| HC 10 | RN 60B / G | 1/8 / 70°C | 10 Ohms To 1 Meg | 2.5 Ohms To 1 Meg | 250 | .428 | .433 | .148 | .158 | 22 |
| HC 8 | RN 65B / G | 1/4 / 70°C | 10 Ohms To 2 Meg | 2 Ohms To 2.6 Meg | 300 | .625 | .640 | .233 | .243 | 22 |
| HC 12 | RN 70B / G | 1/2 / 70°C | 10 Ohms To 2.49 Meg | 3 Ohms To 3.7 Meg | 500 | .823 | .833 | .240 | .250 | 20 |
| HC 6 | RN 75B / G | 1 / 70°C | 10 Ohms To 5.11 Meg | 1.5 Ohms To 6.5 Meg | 500 | 1.105 | 1.115 | .390 | .400 | 20 |
| HC 7 | RN 80B / G | 2 / 70°C | 30.1 Ohms To 10 Meg | 5 Ohms To 17 Meg | 1000 | 2.230 | 2.240 | .390 | .400 | 20 |

CARBON FILM
"R-5" COAT
(HIGH TEMPERATURE)



TYPE CF

| | | | | | | | | | | |
|---------|------------|--------------|---------------------|---------------------|-----|------|------|------|------|----|
| CF 1/10 | RN 55D | 1/10 / 125°C | 10 Ohms To 301K | 1 Ohm To 301K | 250 | .219 | .250 | .083 | .093 | 22 |
| CF 1/8 | RN 60B / D | 1/8 / 125°C | 10 Ohms To 1 Meg | 2 Ohms To 1 Meg | 250 | .313 | .375 | .085 | .125 | 22 |
| CF 1/8A | RN 60B / D | 1/8 / 125°C | 10 Ohms To 1 Meg | 2 Ohms To 1.1 Meg | 250 | .344 | .375 | .115 | .125 | 22 |
| CF 1/4 | RN 65B / D | 1/4 / 125°C | 10 Ohms To 2 Meg | 2 Ohms To 2 Meg | 300 | .532 | .625 | .156 | .187 | 22 |
| CF 1/2 | RN 70B / D | 1/2 / 125°C | 10 Ohms To 2.49 Meg | 1.5 Ohms To 3.8 Meg | 350 | .688 | .750 | .219 | .250 | 20 |
| CF 1/2C | | 1/2 / 70°C | | 1.5 Ohms To 1.7 Meg | 350 | .500 | .531 | .140 | .171 | 20 |

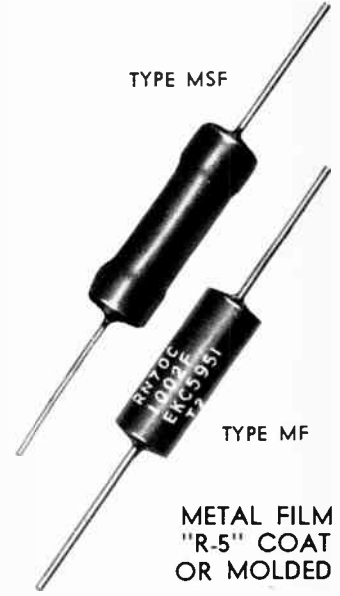
ELECTRA MANUFACTURING COMPANY

resistors from ELECTRA

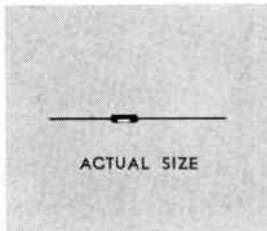
1/20 WATT MICRO-MINIATURE



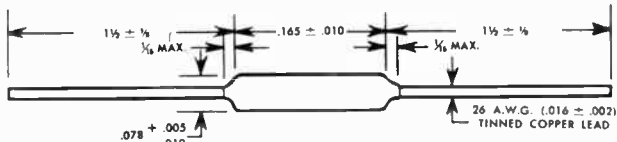
| Electra Part No. | MIL Style | Wattage Temperature | Mil Resistance Range | Commercial Resistance Range | Maximum Rated Voltage | LENGTH—A | | DIAMETER—B | | Lead Size AWG ± |
|------------------|-----------|---------------------|----------------------|-----------------------------|-----------------------|----------------|--------------------|--------------|--------------------|-----------------|
| | | | | | | Min | Production Average | Min | Production Average | |
| MFS 1/20 | | 1/20 / 125°C | | 30 Ohms To 100K | 200 | .115 .145 | .130 | .038 .058 | .048 | 26 |
| MFS 1/10 | | 1/10 / 125°C | | 30 Ohms To 300K | 250 | .250 .280 | .265 | .075 .095 | .085 | 22 |
| MFS 1/8 | | 1/8 / 125°C | | 30.1 Ohms To 499K | 250 | .320 .380 | .350 | .080 .110 | .095 | 22 |
| MFS 1/4 | | 1/4 / 125°C | | 49.9 Ohms To 1 Meg | 300 | .460 .540 | .500 | .110 .140 | .125 | 22 |
| MFS 1/2 | | 1/2 / 125°C | | 49.9 Ohms To 1.5 Meg | 350 | .600 .670 | .635 | .126 .156 | .141 | 20 |
| MFS 1 | | 1 / 125°C | | 49.9 Ohms To 4 Meg | 500 | .853 1.053 | .953 | .255 .285 | .270 | 20 |
| MFS 2 | | 2 / 125°C | | 100 Ohms To 10 Meg | 750 | 1.990 2.150 | 2.070 | .245 .295 | .270 | 20 |
| MF 1/10 | RN 55C/E | 1/10 / 125°C | 49.9 Ohms To 100K | 30 Ohms To 300K | 200 | .250 .270 | .260 | .115 .135 | .125 | 22 |
| MF 1/8 | RN 60C/E | 1/8 / 125°C | 49.9 Ohms To 499K | 30 Ohms To 500K | 250 | .391 .421 | .406 | .125 .145 | .135 | 22 |
| MF 1/4 | RN 65C/E | 1/4 / 125°C | 49.9 Ohms To 1 Meg | 49.9 Ohms To 1 Meg | 300 | .582 .612 | .597 | .195 .225 | .210 | 22 |
| MF 1/2 | RN 70C/E | 1/2 / 125°C | 24.9 Ohms To 1 Meg | 49.9 Ohms To 1.5 Meg | 350 | .730 .770 | .750 | .250 .280 | .265 | 20 |
| MF 1 | RN 75C/E | 1 / 125°C | 49.9 Ohms To 2 Meg | 49.9 Ohms To 4 Meg | 500 | 1.085 1.125 | 1.105 | .375 .415 | .395 | 20 |
| MF 2 | | 2 / 100°C | | 100 Ohms To 9.31 Meg | 750 | 2.219 2.259 | 2.239 | .375 .415 | .395 | 20 |



DC 1/10X-CARBON FILM RESISTOR

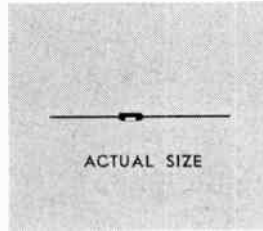


ACTUAL SIZE

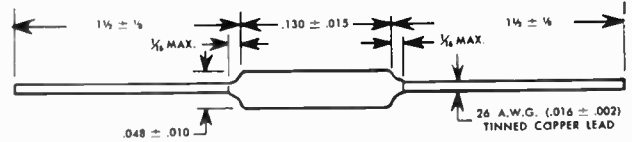


Resistance Range: 10 ohms to 301 K
 Tolerance: ±1%
 Dissipation at 70° C: 1/10 Watt
 Temp. Coefficient: Max. .05%/°C
 Encapsulation: Electra's R-5 Coating
 Marking: Tag or Color Band

MFS 1/20 METAL FILM RESISTOR



ACTUAL SIZE



Resistance Range: 30 ohms to 100 K
 Tolerance: ±1%
 Dissipation at 125° C: 1/20 Watt
 Temperature Coefficient: T-0: ± 150 PPM/°C
 T-2: ± 50 PPM/°C
 Encapsulation: Electra's R-5 Coating
 Marking: Tag

All precision carbon and metal film resistors are designed by Electra to meet or exceed MIL-R-10509D. Specification sheets are available detailing each type. For complete engineering data on our full line, write or call Electra Manufacturing Company requesting technical literature.

INDEPENDENCE, KANSAS



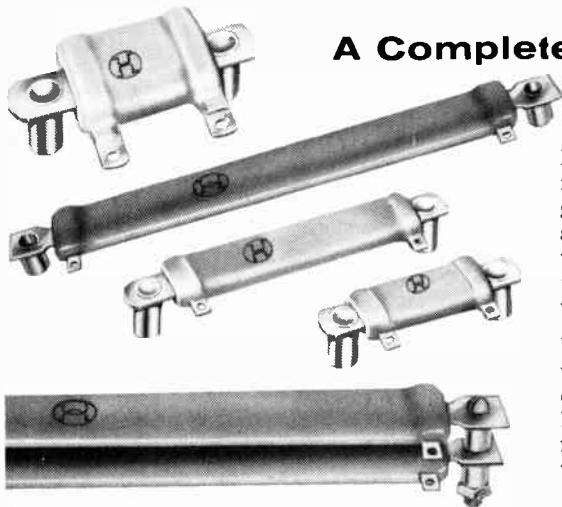
"Gray Line"



HARDWICK, HINDLE · INC

BLUE RIBBON RESISTORS

A Complete Line of Flat and Stack Mounting Power Resistors



Blue Ribbon wire-wound power resistors are made of quality materials with matched coefficients of expansion and are covered by H-H gray vitreous enamel for complete protection against environment and overload. The aluminum through bracket improves heat dissipation, minimizes hot spots, and allows a higher wattage rating per unit of space. Bracket construction facilitates stacking and adds additional space saving.

When BR resistors are stack mounted they must be derated to keep within rated operating temperatures. Watt ratings shown are based on the use of a steel panel 10 inches square x .040 thick supported horizontally. For non-metallic panels reduce rating 15%. When mounted as described in an ambient temperature not exceeding 40°C the maximum temperature rise of the resistor will not exceed 300°C.

| 10 WATT Type ¾ BRS-53B Mounting Centers 1" | | | | 15 WATT Type 1 BRS-53B Mounting Centers 1¼" | | | | 20 WATT Type 2 BRS-53B Mounting Centers 2¼" | | | | 20 WATT Type BRM-37 Mounting Center 1¾" | | | | 30 WATT Type 1½ BRM-37 Mounting Centers 1¾" | | | |
|--|-------|------------|-----------|---|-------|------------|-----------|---|-------|------------|-----------|---|------|------------|-----------|---|-------|------------|-----------|
| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
| B350 | 5 | 1.41 | \$.92 | B401 | 5 | 1.73 | \$.97 | B450 | 5 | 2.00 | \$.99 | B501 | 5 | 2.00 | \$.96 | B550 | 5 | 2.46 | \$.98 |
| B351 | 10 | 1.00 | .92 | B402 | 10 | 1.22 | .97 | B451 | 10 | 1.41 | .99 | B502 | 10 | 1.41 | .96 | B551 | 10 | 1.73 | .98 |
| B352 | 15 | .82 | .92 | B403 | 15 | 1.00 | .97 | B452 | 15 | 1.16 | .99 | B503 | 15 | 1.16 | .96 | B552 | 15 | 1.42 | .98 |
| B353 | 25 | .63 | .92 | B404 | 25 | .78 | .97 | B453 | 25 | .89 | .99 | B504 | 25 | .89 | .96 | B553 | 25 | 1.10 | .98 |
| B354 | 50 | .45 | .92 | B405 | 50 | .55 | .97 | B454 | 50 | .63 | .99 | B505 | 50 | .63 | .96 | B554 | 50 | .77 | .98 |
| B355 | 100 | .32 | .92 | B406 | 100 | .39 | .97 | B455 | 100 | .45 | .99 | B506 | 100 | .45 | .96 | B555 | 100 | .55 | .98 |
| B356 | 150 | .26 | .92 | B407 | 150 | .32 | .97 | B456 | 150 | .36 | .99 | B507 | 150 | .36 | .96 | B556 | 150 | .45 | .98 |
| B357 | 250 | .20 | .92 | B408 | 250 | .25 | .97 | B457 | 250 | .28 | .99 | B508 | 250 | .28 | .96 | B557 | 250 | .35 | .98 |
| B358 | 500 | .14 | .92 | B409 | 500 | .17 | .97 | B458 | 500 | .20 | .99 | B509 | 500 | .20 | .96 | B558 | 500 | .25 | .98 |
| B359 | 1000 | .10 | .92 | B410 | 1000 | .12 | .97 | B459 | 1000 | .14 | .99 | B510 | 1000 | .14 | .96 | B559 | 1000 | .17 | .98 |
| B360 | 1500 | .081 | .92 | B411 | 1500 | .10 | .97 | B460 | 1500 | .12 | .99 | B511 | 1500 | .12 | .96 | B560 | 1500 | .14 | .98 |
| B361 | 2500 | .063 | .92 | B412 | 2500 | .078 | .97 | B461 | 2500 | .089 | .99 | B512 | 2500 | .089 | .96 | B561 | 2500 | .11 | .98 |
| B362 | 5000 | .045 | .98 | B413 | 5000 | .055 | 1.00 | B462 | 5000 | .063 | 1.04 | B513 | 5000 | .063 | .98 | B562 | 5000 | .076 | 1.04 |
| B363 | 10000 | .032 | 1.03 | B414 | 10000 | .039 | 1.04 | B463 | 10000 | .045 | 1.16 | B514 | 8000 | .050 | 1.04 | B563 | 10000 | .049 | 1.15 |
| B364 | 15000 | .026 | 1.05 | B415 | 15000 | .032 | 1.11 | B464 | 15000 | .036 | 1.20 | | | | | B564 | 15000 | .045 | 1.19 |
| | | | | B416 | 20000 | .027 | 1.15 | B465 | 20000 | .032 | 1.26 | | | | | | | | |
| | | | | B417 | 25000 | .025 | 1.20 | B466 | 25000 | .028 | 1.33 | | | | | | | | |
| | | | | | | | | B467 | 50000 | .020 | 1.44 | | | | | | | | |

When Resistors are mounted on a non-metallic base the nominal watt rating should be reduced by approximately 15%.

| 30 WATT Type 1¼" BR-37 Mounting Centers 2" | | | | 40 WATT Type 2" BR-37 Mounting Centers 2¾" | | | | 55 WATT Type 3½" BR-37 Mounting Centers 4¼" | | | | 75 WATT Type 6" BR-37 Mounting Centers 6¾" | | | |
|--|-------|------------|-----------|--|-------|------------|-----------|---|-------|------------|-----------|--|-------|------------|-----------|
| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
| B101 | 5 | 2.46 | \$1.28 | B201 | 5 | 2.83 | \$1.32 | B301 | 5 | 3.32 | \$1.53 | B601 | 5 | 3.87 | \$1.93 |
| B102 | 10 | 1.73 | 1.28 | B202 | 10 | 2.00 | 1.32 | B302 | 10 | 2.34 | 1.53 | B602 | 10 | 2.74 | 1.93 |
| B103 | 15 | 1.42 | 1.28 | B203 | 15 | 1.63 | 1.32 | B303 | 15 | 1.92 | 1.53 | B603 | 15 | 2.24 | 1.93 |
| B104 | 25 | 1.10 | 1.28 | B204 | 25 | 1.26 | 1.32 | B304 | 25 | 1.48 | 1.53 | B604 | 25 | 1.73 | 1.93 |
| B105 | 50 | .77 | 1.28 | B205 | 50 | .89 | 1.32 | B305 | 50 | 1.05 | 1.53 | B605 | 50 | 1.22 | 1.93 |
| B106 | 100 | .55 | 1.28 | B206 | 100 | .63 | 1.32 | B306 | 100 | .74 | 1.53 | B606 | 100 | .86 | 1.93 |
| B107 | 150 | .45 | 1.28 | B207 | 150 | .52 | 1.32 | B307 | 150 | .61 | 1.53 | B607 | 150 | .71 | 1.93 |
| B108 | 250 | .35 | 1.28 | B208 | 250 | .40 | 1.32 | B308 | 250 | .47 | 1.53 | B608 | 250 | .55 | 1.93 |
| B109 | 500 | .25 | 1.28 | B209 | 500 | .28 | 1.32 | B309 | 500 | .33 | 1.53 | B609 | 500 | .39 | 1.93 |
| B110 | 1000 | .17 | 1.28 | B210 | 1000 | .20 | 1.32 | B310 | 1000 | .23 | 1.53 | B610 | 1000 | .27 | 1.93 |
| B111 | 1500 | .14 | 1.28 | B211 | 1500 | .16 | 1.32 | B311 | 1500 | .19 | 1.53 | B611 | 1500 | .22 | 1.93 |
| B112 | 2500 | .11 | 1.28 | B212 | 2500 | .13 | 1.32 | B312 | 2500 | .15 | 1.53 | B612 | 2500 | .17 | 1.93 |
| B113 | 5000 | .076 | 1.37 | B213 | 5000 | .089 | 1.43 | B313 | 5000 | .10 | 1.63 | B613 | 5000 | .12 | 2.00 |
| B114 | 10000 | .049 | 1.48 | B214 | 10000 | .063 | 1.60 | B314 | 10000 | .074 | 1.79 | B614 | 10000 | .086 | 2.16 |
| | | | | B215 | 15000 | .045 | 1.67 | B315 | 15000 | .061 | 1.87 | B615 | 15000 | .070 | 2.24 |
| | | | | | | | | B316 | 25000 | .047 | 2.05 | B616 | 25000 | .054 | 2.43 |
| | | | | | | | | | | | | B617 | 50000 | .033 | 2.60 |

Adjustable resistors with a bare edge can be furnished for obtaining intermediate resistance values. Standard tolerance $\pm 5\%$ on all stock units. Tapped units and closer tolerances to 1% available.

Specify short stud on BRS for unit mounting if height is at a premium.

Packaged one unit per box. Made in accordance with MIL-R-26C.

HARDWICK, HINDLE • INC AXIAL-LEAD RESISTORS



The "free air" wattage ratings of these axial lead resistors are based on a hot spot temperature rise of 300°C. (540°F.) in an ambient temperature not exceeding 40°C. (104°F.). These are the finest quality vitreous enameled wire-wound resistors made with application-tested parts and employing precision assembly. Since parts have matched heat expansion, crazing and cracks are eliminated. All welded construction.

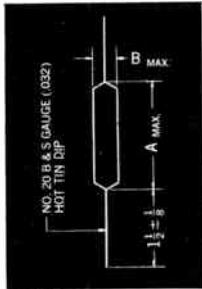
Standard Sizes:

| Resistor Type | Tube Dimensions | | Watt Rating Nominal | Recommended Resist. Range | |
|---------------|-----------------|-------|---------------------|---------------------------|-----------|
| | A | B | | Min. ohms | Max. ohms |
| 1/8 GA | 1/16" | 1/4" | 3 Watts | 1 | 10,000 |
| 1 WA | 1" | 1/32" | 5 Watts | 1 | 25,000 |
| 1 1/2 ZA | 1 3/4" | 1/32" | 10 Watts | 1 | 50,000 |

Standard tolerance is ±5% for all stock units.

3 WATT SIZE — Type 1/8 EA — 1/8" long x 1/4" o.d.

| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
|-----------|------|------------|-----------|-----------|------|------------|-----------|-----------|-------|------------|-----------|
| 701 | 1.0 | 1.73 | \$.59 | 719 | 125 | .155 | \$.59 | 737 | 1250 | .049 | \$.62 |
| 702 | 1.5 | 1.41 | .59 | 720 | 150 | .141 | .59 | 738 | 1500 | .045 | .62 |
| 703 | 2.0 | 1.22 | .59 | 721 | 200 | .122 | .59 | 739 | 1750 | .041 | .62 |
| 704 | 3.0 | 1.00 | .59 | 722 | 225 | .115 | .59 | 740 | 2000 | .039 | .62 |
| 705 | 4.0 | .86 | .59 | 723 | 250 | .109 | .59 | 741 | 2250 | .036 | .62 |
| 706 | 5.0 | .78 | .59 | 724 | 300 | .1 | .59 | 742 | 2500 | .035 | .62 |
| 707 | 7.5 | .63 | .59 | 725 | 350 | .093 | .59 | 743 | 3000 | .032 | .62 |
| 708 | 10 | .55 | .59 | 726 | 400 | .087 | .59 | 744 | 3500 | .029 | .62 |
| 709 | 12 | .50 | .59 | 727 | 450 | .082 | .59 | 745 | 4000 | .027 | .62 |
| 710 | 15 | .45 | .59 | 728 | 500 | .078 | .59 | 746 | 4500 | .026 | .62 |
| 711 | 20 | .39 | .59 | 729 | 600 | .071 | .59 | 747 | 5000 | .025 | .62 |
| 712 | 25 | .35 | .59 | 730 | 700 | .065 | .59 | 748 | 6000 | .022 | .66 |
| 713 | 30 | .32 | .59 | 731 | 750 | .063 | .59 | 749 | 7000 | .020 | .66 |
| 714 | 35 | .285 | .59 | 732 | 800 | .061 | .59 | 750 | 7500 | .020 | .66 |
| 715 | 40 | .274 | .59 | 733 | 900 | .058 | .59 | 751 | 8000 | .019 | .66 |
| 716 | 50 | .245 | .59 | 734 | 1000 | .055 | .59 | 752 | 9000 | .018 | .66 |
| 717 | 75 | .200 | .59 | 735 | 1100 | .052 | .52 | 753 | 10000 | .017 | .66 |
| 718 | 100 | .173 | .59 | 736 | 1200 | .050 | .52 | | | | |



Made in accordance with MIL-R-26. Packaged 10 units per box.

5 WATT SIZE — Type 1 WA — 1" long x 1/32" o.d.

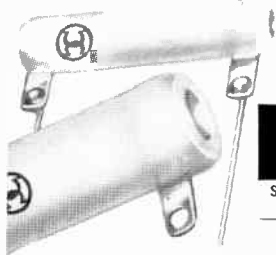
| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
|-----------|------|------------|-----------|-----------|------|------------|-----------|-----------|------|------------|-----------|-----------|-------|------------|-----------|
| 801 | 1.0 | 2.23 | \$.62 | 816 | 50 | .316 | \$.62 | 831 | 750 | .081 | \$.62 | 846 | 4500 | .033 | \$.66 |
| 802 | 1.5 | 1.82 | .62 | 817 | 75 | .258 | .62 | 832 | 800 | .079 | .62 | 847 | 5000 | .032 | .66 |
| 803 | 2.0 | 1.58 | .62 | 818 | 100 | .224 | .62 | 833 | 900 | .074 | .62 | 848 | 6000 | .029 | .70 |
| 804 | 3.0 | 1.29 | .62 | 819 | 125 | .200 | .62 | 834 | 1000 | .070 | .62 | 849 | 7000 | .027 | .70 |
| 805 | 4.0 | 1.12 | .62 | 820 | 150 | .182 | .62 | 835 | 1100 | .067 | .66 | 850 | 7500 | .026 | .70 |
| 806 | 5.0 | 1.0 | .62 | 821 | 200 | .158 | .62 | 836 | 1200 | .064 | .66 | 851 | 8000 | .025 | .70 |
| 807 | 7.5 | .818 | .62 | 822 | 225 | .149 | .62 | 837 | 1250 | .063 | .66 | 852 | 9000 | .024 | .70 |
| 808 | 10 | .7 | .62 | 823 | 250 | .141 | .62 | 838 | 1500 | .057 | .66 | 853 | 10000 | .022 | .70 |
| 809 | 12 | .645 | .62 | 824 | 300 | .129 | .62 | 839 | 1750 | .053 | .66 | 854 | 12500 | .020 | .78 |
| 810 | 15 | .575 | .62 | 825 | 350 | .120 | .62 | 840 | 2000 | .050 | .66 | 855 | 15000 | .018 | .78 |
| 811 | 20 | .500 | .62 | 826 | 400 | .112 | .62 | 841 | 2250 | .047 | .66 | 856 | 17500 | .017 | .78 |
| 812 | 25 | .447 | .62 | 827 | 450 | .105 | .62 | 842 | 2500 | .045 | .66 | 857 | 18000 | .017 | .78 |
| 813 | 30 | .408 | .62 | 828 | 500 | .100 | .62 | 843 | 3000 | .041 | .66 | 858 | 20000 | .016 | .78 |
| 814 | 35 | .378 | .62 | 829 | 600 | .091 | .62 | 844 | 3500 | .037 | .66 | 859 | 22500 | .015 | .82 |
| 815 | 40 | .353 | .62 | 830 | 700 | .084 | .62 | 845 | 4000 | .035 | .66 | 860 | 25000 | .014 | .82 |

10 WATT SIZE — Type 1 1/2 ZA — 1 1/2" long x 1/32" o.d.

| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
|-----------|------|------------|-----------|-----------|------|------------|-----------|-----------|------|------------|-----------|-----------|-------|------------|-----------|
| 901 | 1.0 | 3.16 | \$.95 | 915 | 40 | .5 | \$.68 | 929 | 600 | .129 | \$.68 | 943 | 3000 | .057 | \$.73 |
| 902 | 1.5 | 2.58 | .95 | 916 | 50 | .447 | .68 | 930 | 700 | .119 | .68 | 944 | 3500 | .053 | .73 |
| 903 | 2.0 | 2.235 | .95 | 917 | 75 | .365 | .68 | 931 | 750 | .115 | .68 | 945 | 4000 | .050 | .73 |
| 904 | 3.0 | 1.825 | .68 | 918 | 100 | .316 | .68 | 932 | 800 | .111 | .68 | 946 | 4500 | .047 | .73 |
| 905 | 4.0 | 1.58 | .68 | 919 | 125 | .283 | .68 | 933 | 900 | .105 | .68 | 947 | 5000 | .045 | .73 |
| 906 | 5.0 | 1.414 | .68 | 920 | 150 | .258 | .68 | 934 | 1000 | .100 | .68 | 948 | 6000 | .041 | .84 |
| 907 | 7.5 | 1.155 | .68 | 921 | 200 | .223 | .68 | 935 | 1100 | .095 | .73 | 949 | 7000 | .038 | .84 |
| 908 | 10 | 1 | .68 | 922 | 225 | .217 | .68 | 936 | 1200 | .091 | .73 | 950 | 7500 | .036 | .84 |
| 909 | 12 | .910 | .68 | 923 | 250 | .200 | .68 | 937 | 1250 | .089 | .73 | 951 | 8000 | .035 | .84 |
| 910 | 15 | .816 | .68 | 924 | 300 | .182 | .68 | 938 | 1500 | .081 | .73 | 952 | 8500 | .034 | .84 |
| 911 | 20 | .707 | .68 | 925 | 350 | .169 | .68 | 939 | 1750 | .075 | .73 | 953 | 9000 | .033 | .84 |
| 912 | 25 | .632 | .68 | 926 | 400 | .158 | .68 | 940 | 2000 | .071 | .73 | 954 | 10000 | .032 | .84 |
| 913 | 30 | .575 | .68 | 927 | 450 | .149 | .68 | 941 | 2250 | .066 | .73 | 955 | 11000 | .030 | .95 |
| 914 | 35 | .535 | .68 | 928 | 500 | .141 | .68 | 942 | 2500 | .063 | .73 | 956 | 12000 | .029 | .95 |



HARDWICK, HINDLE · INC FIXED RESISTORS



Vitreous Enameled Construction

Eight stock sizes of Hardwick, Hindle fixed resistors provide an exceptionally wide choice of resistance values to meet varied applications. Ratings are in accordance with NEMA standards, being based on a temperature rise of 300°C in free air. Data on types, sizes and values not included here, and on fixed resistors with intermediate taps, special mountings, modified terminals, etc. will be furnished on request. All stock sizes are supplied complete with mounting brackets.

| 5 WATT Type 1Z-34 1" long x 5/16" o.d. | | | | 10 WATT Type 1½Z-34 1½" long x 5/16" o.d. | | | | 20 WATT Type 2H-34 2" long x 5/16" o.d. | | | | 25 WATT Type 2JX-35 2" long x 5/16" o.d. | | | |
|--|-------|------------|-----------|---|-------|------------|-----------|---|-------|------------|-----------|--|-------|------------|-----------|
| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
| A1 | 1 | 2.23 | \$.57 | A101 | 1 | 3.16 | \$.57 | A201 | 5 | 2.00 | \$.68 | 1001 | 5 | 2.24 | \$.72 |
| A2 | 3 | 1.29 | .57 | A102 | 3 | 1.83 | .57 | A202 | 10 | 1.41 | .68 | 1002 | 10 | 1.58 | .72 |
| A3 | 5 | 1.00 | .57 | A103 | 5 | 1.41 | .57 | A203 | 25 | .89 | .68 | 1003 | 25 | 1.00 | .72 |
| A4 | 7.5 | .81 | .57 | A104 | 7.5 | 1.16 | .57 | A204 | 50 | .63 | .68 | 1004 | 50 | .71 | .72 |
| A5 | 10 | .71 | .57 | A105 | 10 | 1.00 | .57 | A205 | 75 | .52 | .68 | 1005 | 75 | .58 | .72 |
| A6 | 15 | .58 | .57 | A106 | 15 | .82 | .57 | A206 | 100 | .45 | .68 | 1006 | 100 | .50 | .72 |
| A7 | 25 | .45 | .57 | A107 | 25 | .63 | .57 | A207 | 150 | .36 | .68 | 1007 | 150 | .41 | .72 |
| A8 | 50 | .32 | .57 | A108 | 50 | .45 | .57 | A208 | 200 | .32 | .68 | 1008 | 200 | .35 | .72 |
| A9 | 75 | .26 | .57 | A109 | 75 | .37 | .57 | A209 | 250 | .28 | .68 | 1009 | 250 | .32 | .72 |
| A10 | 100 | .22 | .57 | A110 | 100 | .32 | .57 | A210 | 400 | .22 | .68 | 1010 | 500 | .22 | .72 |
| A11 | 150 | .18 | .57 | A111 | 150 | .26 | .57 | A211 | 500 | .20 | .68 | 1011 | 750 | .18 | .72 |
| A12 | 200 | .16 | .57 | A112 | 200 | .22 | .57 | A212 | 750 | .16 | .68 | 1012 | 1000 | .16 | .72 |
| A13 | 250 | .14 | .57 | A113 | 250 | .20 | .57 | A213 | 1000 | .14 | .68 | 1013 | 1500 | .13 | .75 |
| A14 | 400 | .11 | .57 | A114 | 400 | .16 | .57 | A214 | 1250 | .13 | .70 | 1014 | 2000 | .12 | .75 |
| A15 | 500 | .10 | .57 | A115 | 500 | .14 | .57 | A215 | 1500 | .12 | .70 | 1015 | 2500 | .10 | .75 |
| A16 | 750 | .082 | .57 | A116 | 750 | .12 | .57 | A216 | 2000 | .10 | .70 | 1016 | 3000 | .091 | .75 |
| A17 | 1000 | .070 | .57 | A117 | 1000 | .10 | .57 | A217 | 2500 | .089 | .70 | 1017 | 3500 | .084 | .75 |
| A18 | 1250 | .063 | .61 | A118 | 1250 | .089 | .61 | A218 | 3000 | .081 | .70 | 1018 | 4000 | .079 | .75 |
| A19 | 1500 | .057 | .61 | A119 | 1500 | .081 | .61 | A219 | 4000 | .070 | .70 | 1019 | 5000 | .070 | .75 |
| A20 | 2000 | .050 | .61 | A120 | 2000 | .071 | .61 | A220 | 5000 | .063 | .70 | 1020 | 6000 | .064 | .85 |
| A21 | 2500 | .045 | .61 | A121 | 2500 | .063 | .61 | A221 | 6000 | .057 | .83 | 1021 | 7500 | .057 | .85 |
| A22 | 3000 | .041 | .61 | A122 | 3000 | .057 | .61 | A222 | 7500 | .051 | .83 | 1022 | 10000 | .050 | .85 |
| A23 | 4000 | .035 | .61 | A123 | 4000 | .050 | .61 | A223 | 10000 | .043 | .83 | 1023 | 12000 | .042 | .90 |
| A24 | 5000 | .032 | .61 | A124 | 5000 | .045 | .61 | A224 | 12500 | .035 | .85 | 1024 | 15000 | .036 | .90 |
| A25 | 7500 | .026 | .58 | A125 | 7500 | .036 | .70 | A225 | 15000 | .032 | .85 | 1025 | 20000 | .031 | .90 |
| A26 | 10000 | .022 | .58 | A126 | 10000 | .032 | .70 | A226 | 25000 | .024 | .99 | 1026 | 25000 | .028 | 1.04 |
| A27 | 12500 | .020 | .65 | A127 | 12500 | .028 | .79 | A227 | 35000 | .021 | .99 | | | | |
| A28 | 15000 | .018 | .65 | A128 | 15000 | .026 | .79 | A228 | 40000 | .019 | .99 | | | | |
| A29 | 20000 | .016 | .65 | A129 | 20000 | .022 | .79 | A229 | 50000 | .017 | 1.15 | | | | |
| A30 | 25000 | .013 | .68 | A130 | 25000 | .020 | .83 | | | | | | | | |

Standard tolerance is ±5% for all stock units.
5, 10 and 20 watts sizes packaged 10 units per box;
25 through 200 watt sizes packaged one unit per box.

| 50 WATT Type 4JX-35 4" long x 5/16" o.d. Mounting Centers 7 1/4" | | | | 100 WATT Type 6½L-35 6 1/2" long x 5/16" o.d. Mounting Centers 7 1/4" | | | | 160 WATT Type 8½FX-57 8 1/2" long x 1 1/4" o.d. Mounting Centers 9 1/4" | | | | 200 WATT Type 10½FX-57 10 1/2" long x 1 1/4" o.d. Mounting Centers 11 1/4" | | | |
|---|-------|------------|-----------|--|-------|------------|-----------|--|--------|------------|-----------|---|--------|------------|-----------|
| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
| 2000 | 1 | 7.07 | \$1.55 | 3000 | 1 | 10.00 | \$2.16 | 4001 | 5 | 5.66 | \$3.19 | 5001 | 5 | 6.32 | \$3.44 |
| 2001 | 5 | 3.16 | 1.11 | 3001 | 3 | 5.77 | 2.16 | 4002 | 10 | 4.00 | 2.28 | 5002 | 10 | 4.47 | 2.46 |
| 2002 | 10 | 2.23 | 1.11 | 3002 | 5 | 4.47 | 1.54 | 4003 | 25 | 2.53 | 2.28 | 5003 | 25 | 2.83 | 2.46 |
| 2003 | 25 | 1.41 | 1.11 | 3003 | 10 | 3.16 | 1.54 | 4004 | 50 | 1.79 | 2.28 | 5004 | 50 | 2.00 | 2.46 |
| 2004 | 50 | 1.00 | 1.11 | 3004 | 25 | 2.00 | 1.54 | 4005 | 75 | 1.46 | 2.28 | 5005 | 75 | 1.64 | 2.46 |
| 2005 | 75 | .82 | 1.11 | 3005 | 50 | 1.41 | 1.54 | 4006 | 100 | 1.26 | 2.28 | 5006 | 100 | 1.41 | 2.46 |
| 2006 | 100 | .71 | 1.11 | 3006 | 75 | 1.15 | 1.54 | 4007 | 150 | 1.03 | 2.28 | 5007 | 150 | 1.15 | 2.46 |
| 2007 | 150 | .58 | 1.11 | 3007 | 100 | 1.00 | 1.54 | 4008 | 250 | .80 | 2.28 | 5008 | 250 | .89 | 2.46 |
| 2008 | 200 | .50 | 1.11 | 3008 | 250 | .63 | 1.54 | 4009 | 500 | .57 | 2.28 | 5009 | 500 | .63 | 2.46 |
| 2009 | 250 | .45 | 1.11 | 3009 | 500 | .45 | 1.54 | 4010 | 750 | .46 | 2.28 | 5010 | 750 | .52 | 2.46 |
| 2010 | 500 | .32 | 1.11 | 3010 | 1000 | .32 | 1.54 | 4011 | 1000 | .40 | 2.28 | 5011 | 1000 | .45 | 2.46 |
| 2011 | 750 | .26 | 1.11 | 3011 | 1500 | .26 | 1.60 | 4012 | 1500 | .33 | 2.32 | 5012 | 1500 | .37 | 2.53 |
| 2012 | 1000 | .22 | 1.11 | 3012 | 2000 | .22 | 1.60 | 4013 | 2000 | .28 | 2.32 | 5013 | 2000 | .32 | 2.53 |
| 2013 | 1500 | .18 | 1.14 | 3013 | 2500 | .20 | 1.60 | 4014 | 2500 | .25 | 2.32 | 5014 | 2500 | .28 | 2.53 |
| 2014 | 2000 | .16 | 1.14 | 3014 | 3000 | .18 | 1.60 | 4015 | 3000 | .23 | 2.32 | 5015 | 3000 | .26 | 2.53 |
| 2015 | 2500 | .14 | 1.14 | 3015 | 4000 | .16 | 1.60 | 4016 | 5000 | .18 | 2.32 | 5016 | 5000 | .20 | 2.53 |
| 2016 | 3000 | .13 | 1.14 | 3016 | 5000 | .14 | 1.60 | 4017 | 7500 | .15 | 2.53 | 5017 | 7500 | .16 | 2.71 |
| 2017 | 4000 | .11 | 1.14 | 3017 | 7500 | .12 | 1.73 | 4018 | 10000 | .13 | 2.53 | 5018 | 10000 | .14 | 2.71 |
| 2018 | 5000 | .10 | 1.14 | 3018 | 10000 | .10 | 1.73 | 4019 | 15000 | .10 | 2.71 | 5019 | 15000 | .12 | 2.89 |
| 2019 | 7500 | .081 | 1.23 | 3019 | 15000 | .081 | 1.87 | 4020 | 20000 | .089 | 2.71 | 5020 | 20000 | .10 | 2.89 |
| 2020 | 10000 | .071 | 1.23 | 3020 | 20000 | .071 | 1.87 | 4021 | 25000 | .080 | 2.80 | 5021 | 25000 | .089 | 2.98 |
| 2021 | 12000 | .064 | 1.35 | 3021 | 25000 | .063 | 2.13 | 4022 | 30000 | .073 | 2.80 | 5022 | 30000 | .082 | 2.98 |
| 2022 | 15000 | .057 | 1.35 | 3022 | 30000 | .058 | 2.13 | 4023 | 40000 | .063 | 2.80 | 5023 | 40000 | .071 | 2.98 |
| 2023 | 20000 | .050 | 1.35 | 3023 | 35000 | .054 | 2.13 | 4024 | 50000 | .057 | 2.89 | 5024 | 50000 | .063 | 3.08 |
| 2024 | 25000 | .045 | 1.54 | 3024 | 40000 | .050 | 2.13 | 4025 | 75000 | .046 | 3.08 | 5025 | 75000 | .052 | 3.26 |
| 2025 | 35000 | .032 | 1.54 | 3025 | 50000 | .045 | 2.21 | 4026 | 100000 | .040 | 3.26 | 5026 | 100000 | .045 | 3.46 |
| 2026 | 50000 | .026 | 1.72 | 3026 | 60000 | .041 | 2.21 | | | | | | | | |
| | | | | 3027 | 75000 | .032 | 2.45 | | | | | | | | |



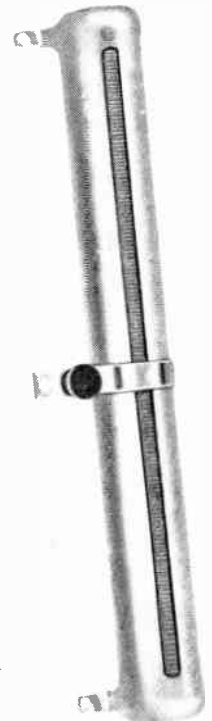
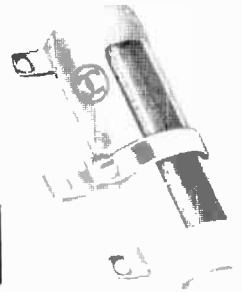
HARDWICK, HINDLE · INC ADJUSTABLE RESISTORS



The Quality
INDUSTRIAL LINE
since 1924

This resistor, embodying features originated by Hardwick, Hindle possesses the many advantages of Vitreous Enamel Construction, plus an adjustable feature. The winding is closely and evenly spaced,

assuring ample insulation between turns. Where winding is exposed in the track, its underside is tightly embedded in the enamel, the upper surface only being exposed for contact with adjustable band.



| 10 WATT—Type K-10 1 3/4" long x 3/16" o.d. Mounting Centers 2 3/16" Terminal 37 | | | | 25 WATT—Type K-25 2" long x 1/16" o.d. Mounting Center 2 3/4" Terminal 35 | | | | 50 WATT—Type K-50 4" long x 1/16" o.d. Mounting Center 4 3/4" Terminal 35 | | | | 75 WATT—Type K-75 6" long x 1/16" o.d. Mounting Centers 6 3/4" Terminal 35 | | | |
|--|-------|------------|-----------|--|-------|------------|-----------|--|-------|------------|-----------|---|--------|------------|-----------|
| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
| C10 | 1 | 3.16 | \$1.14 | 6001 | 1 | 5.00 | \$1.29 | 7001 | 5 | 3.16 | \$1.68 | 8001 | 5 | 3.87 | \$1.87 |
| C11 | 3 | 1.83 | 1.14 | 6002 | 2 | 3.54 | 1.29 | 7002 | 10 | 2.23 | 1.68 | 8002 | 10 | 2.74 | 1.87 |
| C12 | 5 | 1.41 | 1.14 | 6003 | 3 | 2.88 | 1.29 | 7003 | 25 | 1.41 | 1.68 | 8003 | 15 | 2.24 | 1.87 |
| C13 | 7.5 | 1.16 | 1.14 | 6004 | 5 | 2.24 | 1.29 | 7004 | 50 | 1.00 | 1.68 | 8004 | 25 | 1.73 | 1.87 |
| C14 | 10 | 1.00 | 1.14 | 6005 | 10 | 1.58 | 1.29 | 7005 | 75 | .82 | 1.68 | 8005 | 50 | 1.22 | 1.87 |
| C15 | 25 | .82 | 1.14 | 6006 | 20 | 1.12 | 1.29 | 7006 | 100 | .71 | 1.68 | 8006 | 100 | .86 | 1.87 |
| C16 | 50 | .63 | 1.14 | 6007 | 25 | 1.00 | 1.29 | 7007 | 200 | .50 | 1.68 | 8007 | 200 | .61 | 1.87 |
| C17 | 75 | .45 | 1.14 | 6008 | 50 | .71 | 1.29 | 7008 | 250 | .45 | 1.68 | 8008 | 300 | .50 | 1.87 |
| C18 | 100 | .32 | 1.14 | 6009 | 75 | .58 | 1.29 | 7009 | 300 | .41 | 1.68 | 8009 | 400 | .43 | 1.87 |
| C19 | 150 | .26 | 1.14 | 6010 | 100 | .50 | 1.29 | 7010 | 400 | .35 | 1.68 | 8010 | 500 | .39 | 1.87 |
| C20 | 200 | .22 | 1.14 | 6011 | 200 | .35 | 1.29 | 7011 | 500 | .32 | 1.68 | 8011 | 750 | .32 | 1.87 |
| C21 | 250 | .20 | 1.14 | 6012 | 300 | .29 | 1.29 | 7012 | 750 | .26 | 1.68 | 8012 | 1000 | .27 | 1.87 |
| C22 | 400 | .16 | 1.14 | 6013 | 400 | .25 | 1.29 | 7013 | 800 | .25 | 1.68 | 8013 | 1500 | .22 | 1.92 |
| C23 | 500 | .14 | 1.14 | 6014 | 500 | .22 | 1.29 | 7014 | 1000 | .22 | 1.68 | 8014 | 2000 | .19 | 1.92 |
| C24 | 750 | .12 | 1.14 | 6015 | 750 | .18 | 1.29 | 7015 | 1500 | .18 | 1.71 | 8015 | 2500 | .17 | 1.92 |
| C25 | 1000 | .10 | 1.14 | 6016 | 800 | .17 | 1.29 | 7016 | 2000 | .16 | 1.71 | 8016 | 3000 | .16 | 1.92 |
| C26 | 1250 | .089 | 1.18 | 6017 | 1000 | .16 | 1.29 | 7017 | 2500 | .14 | 1.71 | 8017 | 4000 | .14 | 1.92 |
| C27 | 1500 | .081 | 1.18 | 6018 | 1250 | .14 | 1.32 | 7018 | 3000 | .13 | 1.71 | 8018 | 5000 | .12 | 1.92 |
| C28 | 2000 | .071 | 1.18 | 6019 | 1500 | .13 | 1.32 | 7019 | 4000 | .11 | 1.71 | 8019 | 6000 | .11 | 2.01 |
| C29 | 2500 | .063 | 1.18 | 6020 | 2000 | .12 | 1.32 | 7020 | 5000 | .10 | 1.71 | 8020 | 7000 | .10 | 2.01 |
| C30 | 3000 | .057 | 1.18 | 6021 | 2500 | .10 | 1.32 | 7021 | 6000 | .091 | 1.80 | 8021 | 7500 | .10 | 2.01 |
| C31 | 4000 | .050 | 1.18 | 6022 | 3000 | .091 | 1.32 | 7022 | 7000 | .084 | 1.80 | 8022 | 10000 | .086 | 2.01 |
| C32 | 5000 | .045 | 1.18 | 6023 | 3500 | .084 | 1.32 | 7023 | 7500 | .081 | 1.80 | 8023 | 15000 | .070 | 2.13 |
| C33 | 7500 | .036 | 1.27 | 6024 | 4000 | .079 | 1.32 | 7024 | 8000 | .079 | 1.80 | 8024 | 20000 | .061 | 2.13 |
| C34 | 10000 | .032 | 1.27 | 6025 | 5000 | .070 | 1.32 | 7025 | 9000 | .074 | 1.80 | 8025 | 25000 | .054 | 2.32 |
| | | | | 6026 | 6000 | .064 | 1.42 | 7026 | 10000 | .071 | 1.80 | 8026 | 30000 | .050 | 2.32 |
| | | | | 6027 | 7000 | .060 | 1.42 | 7027 | 12000 | .064 | 1.92 | 8027 | 40000 | .043 | 2.32 |
| | | | | 6028 | 8000 | .055 | 1.42 | 7028 | 15000 | .057 | 1.92 | 8028 | 50000 | .033 | 2.52 |
| | | | | 6029 | 10000 | .050 | 1.42 | 7029 | 20000 | .050 | 1.92 | 8029 | 60000 | .030 | 2.52 |
| | | | | 6030 | 15000 | .036 | 1.47 | 7030 | 25000 | .045 | 2.11 | 8030 | 80000 | .026 | 2.78 |
| | | | | 6031 | 20000 | .031 | 1.47 | 7031 | 30000 | .036 | 2.11 | 8031 | 100000 | .023 | 2.93 |
| | | | | 6032 | 25000 | .028 | 1.61 | 7032 | 40000 | .029 | 2.11 | | | | |
| | | | | | | | | 7033 | 50000 | .026 | 2.29 | | | | |

| 100 WATT—Type K-100 5 1/2" long x 3/16" o.d. Mounting Centers 7 3/4" Terminal 35 | | | | 160 WATT—Type K-160 8 1/2" long x 1/4" o.d. Mounting Centers 9 3/4" Terminal 57 | | | | 200 WATT—Type K-200 10 1/2" long x 1/4" o.d. Mounting Centers 11 3/4" Terminal 57 | | | |
|---|-------|------------|-----------|--|--------|------------|-----------|--|--------|------------|-----------|
| STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE | STOCK NO. | OHMS | MAX. AMPS. | NET PRICE |
| 9001 | 5 | 4.47 | \$2.11 | 9030 | 5 | 5.66 | \$4.07 | 9060 | 5 | 6.32 | \$4.32 |
| 9002 | 10 | 3.16 | 2.11 | 9031 | 10 | 4.00 | 3.16 | 9061 | 10 | 4.47 | 3.34 |
| 9003 | 25 | 2.00 | 2.11 | 9032 | 25 | 2.53 | 3.16 | 9062 | 25 | 2.83 | 3.34 |
| 9004 | 50 | 1.41 | 2.11 | 9033 | 50 | 1.79 | 3.16 | 9063 | 50 | 2.00 | 3.34 |
| 9005 | 100 | 1.00 | 2.11 | 9034 | 100 | 1.26 | 3.16 | 9064 | 100 | 1.41 | 3.34 |
| 9006 | 250 | .63 | 2.11 | 9035 | 250 | .80 | 3.16 | 9065 | 250 | .89 | 3.34 |
| 9007 | 500 | .45 | 2.11 | 9036 | 500 | .57 | 3.16 | 9066 | 500 | .63 | 3.34 |
| 9008 | 1000 | .32 | 2.11 | 9037 | 1000 | .40 | 3.16 | 9067 | 1000 | .45 | 3.34 |
| 9009 | 1500 | .26 | 2.17 | 9038 | 1500 | .33 | 3.20 | 9068 | 2500 | .28 | 3.41 |
| 9010 | 2500 | .20 | 2.17 | 9039 | 2500 | .25 | 3.20 | 9069 | 5000 | .20 | 3.41 |
| 9011 | 5000 | .14 | 2.17 | 9040 | 5000 | .18 | 3.20 | 9070 | 10000 | .14 | 3.59 |
| 9012 | 10000 | .10 | 2.30 | 9041 | 10000 | .13 | 3.41 | 9071 | 15000 | .12 | 3.77 |
| 9013 | 15000 | .081 | 2.44 | 9042 | 15000 | .10 | 3.59 | 9072 | 20000 | .10 | 3.77 |
| 9014 | 20000 | .071 | 2.44 | 9043 | 20000 | .089 | 3.59 | 9073 | 25000 | .089 | 3.77 |
| 9015 | 25000 | .063 | 2.70 | 9044 | 25000 | .080 | 3.68 | 9074 | 30000 | .082 | 3.77 |
| 9016 | 30000 | .058 | 2.70 | 9045 | 30000 | .073 | 3.68 | 9075 | 40000 | .071 | 3.77 |
| 9017 | 40000 | .050 | 2.70 | 9046 | 40000 | .063 | 3.68 | 9076 | 50000 | .063 | 3.96 |
| 9018 | 50000 | .045 | 2.78 | 9047 | 50000 | .057 | 3.77 | 9077 | 75000 | .052 | 4.14 |
| 9019 | 75000 | .032 | 3.02 | 9048 | 75000 | .046 | 3.96 | 9078 | 100000 | .045 | 4.34 |
| 9020 | 00000 | .028 | 3.32 | 9049 | 100000 | .040 | 4.14 | | | | |

All sizes of Adjustable Resistors listed are furnished complete with mounting brackets and one adjustable contact band.

Tolerance of $\pm 10\%$, measured without the adjustable band.

Adjustable Contact Bands

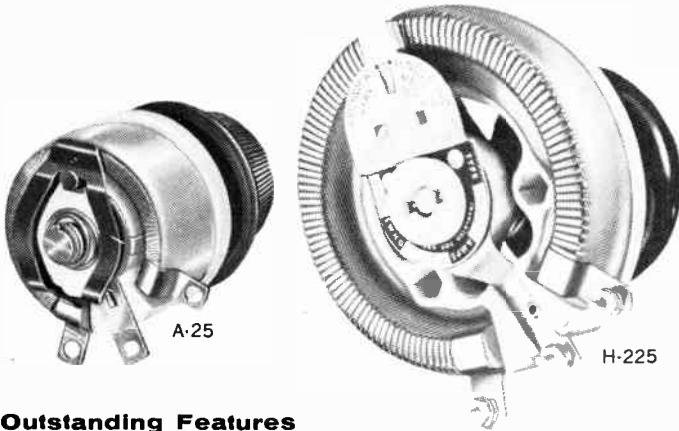
| RESISTOR O.D. | TERMINAL TYPE | STOCK NO. | |
|---------------|---------------|--------------|----------------|
| | | SCREW DRIVER | BAKELITE-KNOB* |
| 5/16" | K | 1791-2 | 1791-2-X |
| 9/16" | K | 1791-8 | 1791-8-X |
| 3/4" | 341 | 1793-2 | 1793-2-X |
| 1-1/8" | 341 | 1793-4 | 1793-4-X |

*Available on request at extra cost.

"Gray Line"



HARDWICK, HINDLE · INC RHEOSTATS —



Outstanding Features

- Highly perfected "bus bar" brush construction—affording minimum resistance to collector ring.
- Contact arm tension automatically adjusting for continuous pressure over winding surface.
- Greater safety factor due to high temperature enamel.
- Higher terminal strength with strong corrosion resistant alloy.
- Minimum number of parts in new trouble free design.
- Designed to comply with current standards of:

- (a) Military Specifications MIL-R-22
- (b) E.I.A.
- (c) N.E.M.A.
- (d) Listed by Underwriters Laboratories, Inc. (Types H-50 through and including H-150)

Hardwick, Hindle rheostats are exceptionally rugged without being over-designed or dependent on untried principles of construction. They exhibit "market quality" characteristics to meet the most exacting specifications, and special design features assure long life and protection under extremes of humidity and abnormal atmospheric conditions. The "bus bar" contact arm automatically adjusts for complete, continuous contact, and smooth, flexible control. Our blue-gray, high temperature enamel—thermo shock proof—gives increased service life with an extreme factor of safety.

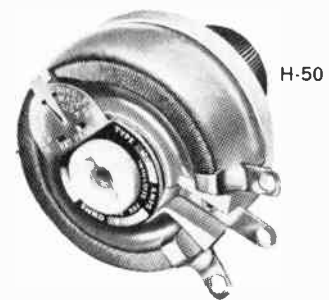
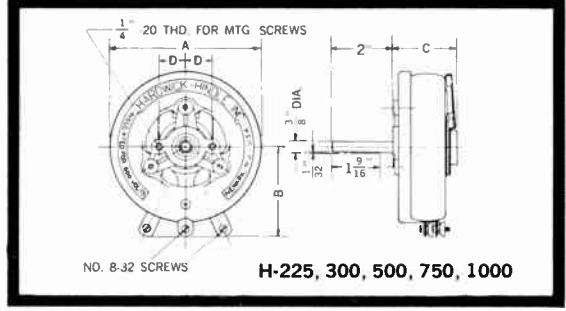
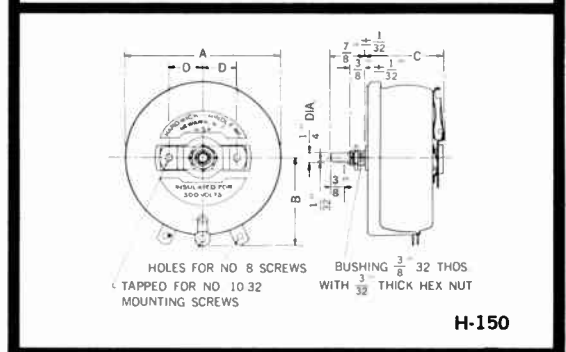
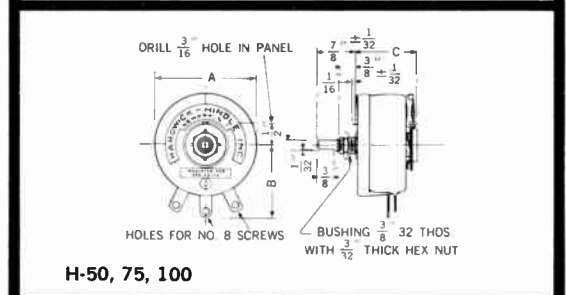
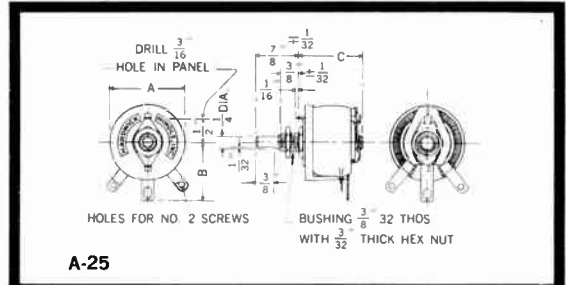
In addition to the complete standard line of rheostats listed at the right, Hardwick, Hindle, Inc. welcomes the opportunity to work with you in the development of rheostats or potentiometers to your specifications. Tapered windings, tandem assemblies, special resistances, and many other electrical or mechanical modifications can be supplied.

Hardwick, Hindle rheostats are packaged one unit per box.

Sizes and Ratings

| TYPE & WATTAGE | OHM RANGE | | MAX AMPS. | | DIMENSIONS (INCHES) | | | | ROTATION |
|----------------|-----------|-------|-----------|-----------|---------------------|---------|---------|--------|----------|
| | MIN. | MAX. | MIN. OHMS | MAX. OHMS | A | B | C | D | |
| A-25 | 0.50 | 5000 | 7.06 | .07 | 1 1/16 | 1 | 1 1/32 | — | 285° |
| H-50 | 0.50 | 10000 | 10.00 | .07 | 2 3/8 | 1 1/16 | 1 7/16 | — | 300° |
| H-75 | 0.50 | 10000 | 12.30 | .09 | 2 3/4 | 1 3/4 | 1 21/32 | — | 300° |
| H-100 | 0.50 | 10000 | 14.20 | 0.10 | 3 1/8 | 1 29/32 | 1 23/32 | — | 300° |
| H-150 | 0.50 | 10000 | 17.30 | 0.12 | 4 | 2 1/16 | 1 31/32 | 7/8 | 300° |
| H-225 | 1.0 | 2500 | 15.00 | 0.30 | 5 | 2 15/16 | 2 3/32 | 7/8 | 310 ± 5° |
| H-300 | 1.0 | 2500 | 17.25 | 0.35 | 6 | 3 13/32 | 2 1/4 | 1 1/16 | 315 ± 5° |
| H-500 | 1.0 | 2500 | 22.30 | 0.45 | 8 | 4 1/2 | 2 3/32 | 1 1/2 | 325 ± 3° |
| H-750 | 1.0 | 2500 | 27.40 | 0.55 | 10 | 5 1/2 | 2 23/32 | 1 7/8 | 330 ± 3° |
| H-1000 | 1.0 | 2500 | 31.60 | 0.63 | 12 | 6 1/4 | 2 3/4 | 3 | 335 ± 3° |

*Free air ratings thru all or any part of winding; reduce by 50% for enclosed units



25 WATTS TO 1000 WATTS



The Quality
INDUSTRIAL LINE
since 1924

| TYPE A-25 25 Watt Rheostat | | | | | TYPE H-50 50 Watt Rheostat | | | | | TYPE H-100 100 Watt Rheostat | | | | | TYPE H-150 150 Watt Rheostat | | | | |
|-------------------------------|------|----------|------------------|-----------|-------------------------------|-------|----------|------------------|-----------|---------------------------------|-------|----------|------------------|-----------|---------------------------------|-------|----------|------------------|-----------|
| STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE |
| 02#1 | 0.50 | 7.06 | 17 | \$4.63 | 0301 | 0.50 | 10.0 | 25 | \$5.15 | 0401 | 0.50 | 14.2 | 30 | \$7.72 | 0501 | 0.50 | 17.30 | 26 | \$9.78 |
| 02#2 | 0.75 | 5.77 | 17 | 4.63 | 0302 | 0.75 | 8.16 | 25 | 5.15 | 0402 | 0.75 | 11.6 | 30 | 7.72 | 0502 | 0.75 | 14.10 | 30 | 9.78 |
| 02#3 | 1.0 | 5.00 | 17 | 4.63 | 0303 | 1.0 | 7.06 | 52 | 5.15 | 0403 | 1.0 | 10.0 | 30 | 7.72 | 0503 | 1.00 | 12.25 | 40 | 9.78 |
| 02#4 | 1.5 | 4.08 | 34 | 4.63 | 0304 | 1.5 | 5.77 | 52 | 5.15 | 0404 | 1.5 | 8.16 | 30 | 7.72 | 0504 | 1.5 | 10.00 | 37 | 9.78 |
| 02#5 | 2.5 | 3.16 | 34 | 4.11 | 0305 | 2.5 | 4.48 | 52 | 5.15 | 0405 | 2.5 | 6.34 | 54 | 7.72 | 0505 | 2.5 | 7.75 | 39 | 9.78 |
| 02#6 | 5.0 | 2.22 | 34 | 4.11 | 0306 | 5.0 | 3.16 | 52 | 5.15 | 0406 | 5.0 | 4.48 | 54 | 7.72 | 0506 | 5.0 | 5.48 | 79 | 9.78 |
| 02#7 | 7.5 | 1.82 | 34 | 4.11 | 0307 | 7.5 | 2.58 | 52 | 5.15 | 0407 | 7.5 | 3.66 | 54 | 7.72 | 0507 | 7.5 | 4.47 | 75 | 9.78 |
| 02#8 | 10 | 1.58 | 90 | 4.11 | 0308 | 10 | 2.22 | 98 | 4.63 | 0408 | 10 | 3.16 | 54 | 7.72 | 0508 | 10 | 3.88 | 77 | 9.78 |
| 02#9 | 15 | 1.29 | 90 | 4.11 | 0309 | 15 | 1.82 | 98 | 4.63 | 0409 | 15 | 2.58 | 112 | 7.72 | 0509 | 15 | 3.16 | 151 | 9.78 |
| 02#10 | 25 | 1.00 | 100 | 4.11 | 0310 | 25 | 1.41 | 98 | 4.63 | 0410 | 25 | 2.00 | 108 | 7.21 | 0510 | 25 | 2.45 | 151 | 9.78 |
| 02#11 | 50 | .706 | 100 | 4.11 | 0311 | 50 | 1.00 | 129 | 4.63 | 0411 | 50 | 1.42 | 127 | 7.21 | 0511 | 50 | 1.73 | 192 | 9.78 |
| 02#12 | 75 | .577 | 135 | 4.11 | 0312 | 75 | .816 | 153 | 4.63 | 0412 | 75 | 1.16 | 151 | 7.21 | 0512 | 75 | 1.41 | 224 | 9.78 |
| 02#13 | 100 | .500 | 112 | 4.11 | 0313 | 100 | .706 | 157 | 4.63 | 0413 | 100 | 1.00 | 160 | 7.21 | 0513 | 100 | 1.22 | 204 | 9.78 |
| 02#14 | 150 | .408 | 146 | 4.11 | 0314 | 150 | .577 | 187 | 4.63 | 0414 | 150 | .816 | 190 | 7.21 | 0514 | 150 | 1.00 | 280 | 9.78 |
| 02#15 | 250 | .316 | 146 | 4.11 | 0315 | 250 | .448 | 258 | 4.63 | 0415 | 250 | .634 | 250 | 7.21 | 0515 | 250 | .775 | 252 | 9.78 |
| 02#16 | 500 | .222 | 180 | 4.11 | 0316 | 500 | .316 | 308 | 4.63 | 0416 | 500 | .448 | 302 | 7.21 | 0516 | 500 | .548 | 362 | 9.78 |
| 02#17 | 750 | .182 | 214 | 4.11 | 0317 | 750 | .258 | 294 | 4.90 | 0417 | 750 | .366 | 303 | 7.21 | 0517 | 750 | .447 | 378 | 9.78 |
| 02#18 | 1000 | .158 | 248 | 4.63 | 0318 | 1000 | .222 | 390 | 4.90 | 0418 | 1000 | .316 | 317 | 7.72 | 0518 | 1000 | .388 | 398 | 9.78 |
| 02#19 | 1500 | .129 | 292 | 4.63 | 0319 | 1500 | .182 | 364 | 4.90 | 0419 | 1500 | .258 | 375 | 7.72 | 0519 | 1500 | .316 | 483 | 10.30 |
| 02#20 | 2500 | .100 | 303 | 4.99 | 0320 | 2500 | .141 | 485 | 4.90 | 0420 | 2500 | .200 | 494 | 7.72 | 0520 | 2500 | .245 | 635 | 10.30 |
| 02#21 | 3500 | .084 | 336 | 4.99 | 0321 | 5000 | .100 | 590 | 5.15 | 0421 | 5000 | .141 | 640 | 8.24 | 0521 | 5000 | .173 | 790 | 10.81 |
| 02#22 | 5000 | .070 | 387 | 4.99 | 0322 | 7500 | .082 | 714 | 5.15 | 0422 | 7500 | .115 | 760 | 8.76 | 0522 | 7500 | .141 | 940 | 11.33 |
| | | | | | 0323 | 10000 | .070 | 750 | 5.15 | 0423 | 10000 | .100 | 740 | 9.26 | 0523 | 10000 | .122 | 1020 | 12.35 |

Note: Knobs supplied on stock units upon request at extra charge. Tolerance $\pm 10\%$ on all stock units.

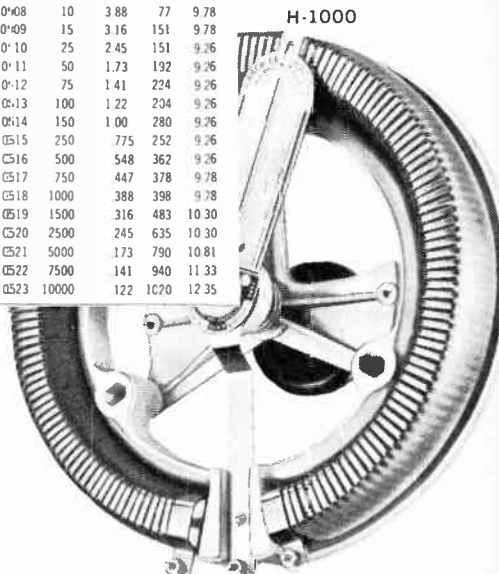
H-H RESISTORS, RHEOSTATS and POTENTIOMETERS



-the Reliable Line!

HARDWICK, HINDLE • INC

NEWARK 5, NEW JERSEY

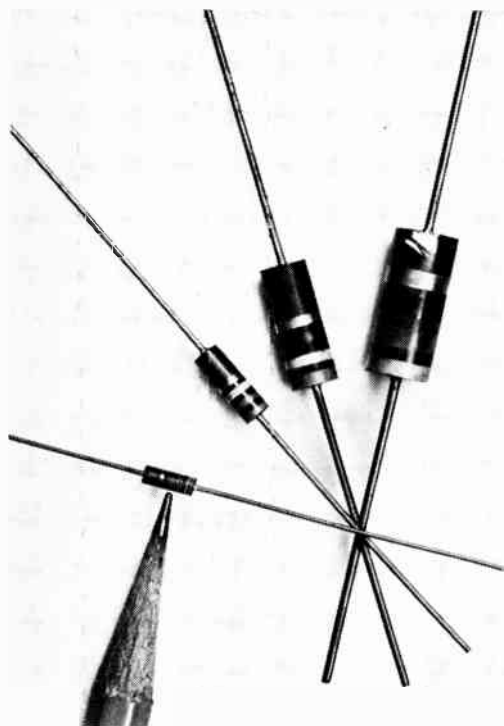


| TYPE H-225 225 Watt Rheostat | | | | | TYPE H-300 300 Watt Rheostat | | | | | TYPE H-500 500 Watt Rheostat | | | | | TYPE H-750 750 Watt Rheostat | | | | | TYPE H-1000 1000 Watt Rheostat | | | | | | |
|---------------------------------|------|----------|------------------|-----------|---------------------------------|------|----------|------------------|-----------|---------------------------------|------|----------|------------------|-----------|---------------------------------|------|----------|------------------|-----------|-----------------------------------|------|----------|------------------|-----------|--|--|
| STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | STOCK NO. | OHMS | MAX AMPS | APPROX NO. STEPS | NET PRICE | | |
| 0530 | 1 | 15.00 | 55 | \$14.11 | 0601 | 1 | 17.25 | 49 | \$15.29 | 0701 | 1 | 22.3 | 70 | \$22.09 | 0801 | 1 | 27.4 | 85 | \$31.20 | 0901 | 1 | 31.60 | 81 | \$36.45 | | |
| 0531 | 1.5 | 12.30 | 55 | 14.11 | 0602 | 1.5 | 14.15 | 47 | 15.29 | 0702 | 1.5 | 18.2 | 64 | 22.09 | 0802 | 1.5 | 22.3 | 85 | 31.20 | 0902 | 1.5 | 25.80 | 84 | 36.45 | | |
| 0532 | 2 | 10.60 | 55 | 14.11 | 0603 | 2 | 12.24 | 49 | 15.29 | 0703 | 2 | 15.8 | 68 | 22.09 | 0803 | 2 | 19.4 | 81 | 31.20 | 0903 | 2 | 22.40 | 109 | 36.45 | | |
| 0533 | 2.5 | 9.50 | 55 | 14.11 | 0604 | 2.5 | 10.95 | 70 | 15.29 | 0704 | 2.5 | 14.1 | 67 | 22.09 | 0804 | 2.5 | 17.3 | 87 | 31.20 | 0904 | 2.5 | 20.00 | 105 | 36.45 | | |
| 0534 | 3 | 8.66 | 55 | 14.11 | 0605 | 3 | 10.00 | 73 | 15.29 | 0705 | 3 | 12.9 | 65 | 22.09 | 0805 | 3 | 15.8 | 83 | 31.20 | 0905 | 3 | 18.30 | 113 | 36.45 | | |
| 0535 | 4 | 7.50 | 55 | 14.11 | 0606 | 4 | 8.66 | 70 | 15.29 | 0706 | 4 | 11.2 | 96 | 22.09 | 0806 | 4 | 13.6 | 87 | 31.20 | 0906 | 4 | 15.80 | 106 | 36.45 | | |
| 0536 | 5 | 6.71 | 55 | 14.11 | 0607 | 5 | 7.75 | 66 | 15.29 | 0707 | 5 | 10.0 | 96 | 22.09 | 0807 | 5 | 12.2 | 122 | 31.20 | 0907 | 5 | 14.10 | 105 | 36.45 | | |
| 0537 | 7.5 | 5.49 | 115 | 14.11 | 0608 | 7.5 | 6.32 | 71 | 15.29 | 0708 | 7.5 | 8.17 | 98 | 22.09 | 0808 | 7.5 | 10.0 | 129 | 31.20 | 0908 | 7.5 | 11.50 | 158 | 36.45 | | |
| 0538 | 10 | 4.74 | 115 | 14.11 | 0609 | 10 | 5.48 | 136 | 15.29 | 0709 | 8 | 7.90 | 97 | 22.09 | 0809 | 8 | 9.65 | 122 | 31.20 | 0909 | 8 | 11.20 | 168 | 36.45 | | |
| 0539 | 15 | 3.87 | 115 | 14.11 | 0610 | 15 | 4.47 | 144 | 15.29 | 0710 | 10 | 7.07 | 105 | 22.09 | 0810 | 10 | 8.65 | 121 | 31.20 | 0910 | 10 | 10.00 | 166 | 36.45 | | |
| 0540 | 25 | 3.00 | 115 | 14.11 | 0611 | 25 | 3.46 | 145 | 15.29 | 0711 | 12.5 | 6.30 | 103 | 22.09 | 0811 | 12.5 | 7.75 | 120 | 31.20 | 0911 | 12.5 | 8.95 | 165 | 36.45 | | |
| 0541 | 50 | 2.12 | 256 | 14.11 | 0612 | 50 | 2.45 | 245 | 15.29 | 0712 | 15 | 5.77 | 202 | 22.09 | 0812 | 15 | 7.07 | 127 | 31.20 | 0912 | 15 | 8.16 | 156 | 36.45 | | |
| 0542 | 75 | 1.73 | 306 | 14.11 | 0613 | 75 | 2.00 | 260 | 15.29 | 0713 | 16 | 5.60 | 192 | 22.09 | 0813 | 16 | 6.82 | 120 | 31.20 | 0913 | 16 | 7.90 | 166 | 36.45 | | |
| 0543 | 100 | 1.50 | 315 | 14.11 | 0614 | 100 | 1.73 | 327 | 15.29 | 0714 | 25 | 4.47 | 195 | 22.09 | 0814 | 25 | 5.47 | 240 | 31.20 | 0914 | 25 | 6.33 | 160 | 36.45 | | |
| 0544 | 150 | 1.22 | 385 | 14.11 | 0615 | 150 | 1.41 | 394 | 15.29 | 0715 | 40 | 3.54 | 205 | 22.09 | 0815 | 50 | 3.87 | 238 | 31.20 | 0915 | 50 | 4.47 | 331 | 36.45 | | |
| 0545 | 200 | 1.06 | 357 | 14.11 | 0616 | 200 | 1.22 | 420 | 15.29 | 0716 | 50 | 3.16 | 200 | 22.09 | 0816 | 75 | 3.19 | 250 | 31.20 | 0916 | 75 | 3.65 | 303 | 36.45 | | |
| 0546 | 250 | .950 | 350 | 14.11 | 0617 | 250 | 1.09 | 525 | 15.29 | 0717 | 75 | 2.58 | 395 | 22.09 | 0817 | 80 | 3.06 | 266 | 31.20 | 0917 | 100 | 3.16 | 320 | 36.45 | | |
| 0547 | 300 | .866 | 335 | 14.11 | 0618 | 300 | 1.00 | 420 | 15.29 | 0718 | 80 | 2.52 | 382 | 22.09 | 0818 | 100 | 2.74 | 265 | 31.20 | 0918 | 150 | 2.58 | 306 | 36.45 | | |
| 0548 | 400 | .750 | 448 | 14.11 | 0619 | 400 | .866 | 440 | 15.29 | 0719 | 100 | 2.23 | 450 | 22.09 | 0819 | 150 | 2.23 | 500 | 31.20 | 0919 | 175 | 2.39 | 645 | 36.45 | | |
| 0549 | 500 | .671 | 450 | 14.11 | 0620 | 500 | .775 | 440 | 15.29 | 0720 | 125 | 2.00 | 505 | 22.09 | 0820 | 160 | 2.17 | 485 | 31.20 | 0920 | 225 | 2.11 | 585 | 36.45 | | |
| 0550 | 700 | .567 | 495 | 14.11 | 0621 | 700 | .655 | 502 | 15.29 | 0721 | 150 | 1.82 | 544 | 22.39 | 0821 | 200 | 1.94 | 472 | 31.20 | 0921 | 250 | 2.00 | 640 | 36.45 | | |
| 0551 | 750 | .549 | 533 | 14.11 | 0622 | 750 | .633 | 540 | 15.29 | 0722 | 175 | 1.69 | 500 | 22.09 | 0822 | 250 | 1.73 | 470 | 31.20 | 0922 | 300 | 1.83 | 605 | 36.45 | | |
| 0552 | 900 | .500 | 500 | 14.11 | 0623 | 900 | .578 | 521 | 15.29 | 0723 | 250 | 1.41 | 570 | 22.09 | 0823 | 300 | 1.58 | 500 | 31.20 | 0923 | 400 | 1.58 | 640 | 36.45 | | |
| 0553 | 1000 | .474 | 555 | 14.11 | 0624 | 1000 | .548 | 580 | 15.29 | 0724 | 325 | 1.24 | 515 | 22.39 | 0824 | 400 | 1.37 | 472 | 31.20 | 0924 | 500 | 1.41 | 635 | 36.45 | | |
| 0554 | 1200 | .433 | 526 | 14.11 | 0625 | 1200 | .500 | 690 | 15.29 | 0725 | 500 | 1.00 | 620 | 22.09 | 0825 | 500 | 1.22 | 565 | 31.20 | 0925 | 750 | 1.15 | 820 | 36.45 | | |
| 0555 | 1500 | .387 | 630 | 14.11 | 0626 | 1500 | .449 | 680 | 15.29 | 0726 | 750 | .817 | 740 | 22.09 | 0826 | 600 | 1.12 | 677 | 31.20 | 0926 | 1000 | 1.00 | 862 | 36.45 | | |
| 0556 | 1750 | .358 | 620 | 14.11 | 0627 | 1750 | .414 | 790 | 15.29 | 0727 | 1000 | .707 | 780 | 22.09 | 0827 | 750 | 1.00 | 670 | 31.20 | 0927 | 1500 | .816 | 1030 | 36.45 | | |
| 0557 | 2500 | .300 | 670 | 14.11 | 0628 | 2500 | .346 | 862 | 15.29 | 0728 | 1500 | .577 | 940 | 22.09 | 0828 | 1000 | .865 | 715 | 31.20 | 0928 | 2500 | .633 | 1300 | 36.45 | | |
| | | | | | | | | | | 0729 | 2000 | .500 | 986 | 22.09 | 0829 | 1200 | .791 | 860 | 31.20 | | | | | | | |
| | | | | | | | | | | 0730 | 2500 | .447 | 940 | 22.09 | 0830 | 1500 | .707 | 840 | 31.20 | | | | | | | |
| | | | | | | | | | | | | | | 0831 | 1800 | .646 | 1020 | 31.20 | | | | | | | | |
| | | | | | | | | | | | | | | 0832 | 2500 | .547 | 1085 | 31.20 | | | | | | | | |

Note: Knobs supplied on stock units upon request at extra charge.



FIXED COMPOSITION RESISTORS



5% and 10% tolerance

1/4, 1/2, 1 and 2 watt ratings

1/4, 1/2, 1 and 2 watt ratings

| | | | | | | |
|----|-----|------|--------|---------|----------|----------|
| 10 | 82 | 680 | 5600 | 47,000 | 390,000 | 3.3 meg. |
| 11 | 91 | 750 | 6200 | 51,000 | 430,000 | 3.6 " |
| 12 | 100 | 820 | 6800 | 56,000 | 470,000 | 3.9 " |
| 13 | 110 | 910 | 7500 | 62,000 | 510,000 | 4.3 " |
| 15 | 120 | 1000 | 8200 | 68,000 | 560,000 | 4.7 " |
| 16 | 130 | 1100 | 9100 | 75,000 | 620,000 | 5.1 " |
| 18 | 150 | 1200 | 10,000 | 82,000 | 680,000 | 5.6 " |
| 20 | 160 | 1300 | 11,000 | 91,000 | 750,000 | 6.2 " |
| 22 | 180 | 1500 | 12,000 | 100,000 | 820,000 | 6.8 " |
| 24 | 200 | 1600 | 13,000 | 110,000 | 910,000 | 7.5 " |
| 27 | 220 | 1800 | 15,000 | 120,000 | 1.0 meg. | 8.2 " |
| 30 | 240 | 2000 | 16,000 | 130,000 | 1.1 " | 9.1 " |
| 33 | 270 | 2200 | 18,000 | 150,000 | 1.2 " | 10.0 " |
| 36 | 300 | 2400 | 20,000 | 160,000 | 1.3 " | 11.0 " |
| 39 | 330 | 2700 | 22,000 | 180,000 | 1.5 " | 12.0 " |
| 43 | 360 | 3000 | 24,000 | 200,000 | 1.6 " | 13.0 " |
| 47 | 390 | 3300 | 27,000 | 220,000 | 1.8 " | 15.0 " |
| 51 | 430 | 3600 | 30,000 | 240,000 | 2.0 " | 16.0 " |
| 56 | 470 | 3900 | 33,000 | 270,000 | 2.2 " | 18.0 " |
| 62 | 510 | 4300 | 36,000 | 300,000 | 2.4 " | 20.0 " |
| 68 | 560 | 4700 | 39,000 | 330,000 | 2.7 " | 22.0 " |
| 75 | 620 | 5100 | 43,000 | 360,000 | 3.0 " | |

Standard packages, 50 resistors.

5%
Tolerance

FOLLOWING
VALUES
AVAILABLE
ONLY IN 1/4,
1/2 and 1
WATT
RATINGS

2.7 ohms
3.0 ohms
3.3 ohms
3.6 ohms
3.9 ohms
4.3 ohms
4.7 ohms
5.1 ohms
5.6 ohms
6.2 ohms
6.8 ohms
7.5 ohms
8.2 ohms
9.1 ohms

... for immediate delivery... fixed composition resistors in all standard RETMA values, 5% and 10% tolerances.

And now... 1/4 watt resistors... in addition to 1/2, 1 and 2 watt sizes.

These fine G-H resistors offer the jobber a product of highest quality... conservative in ratings... permanent in electrical characteristics... uniform in physical size and shape. Resistor bodies are molded brown bakelite, have great mechanical strength, are coded in brilliant lasting colors. Differentially tempered leads allow normal lead shaping for best circuit arrangement yet avoid too-sharp bends near resistor body.

G-H resistor packaging is modern... colorful... functional. Four convenient container sizes hold standard quantities of 1/4, 1/2, 1 and 2 watt resistors... have pull-out inner sections for easy access to contents without removing container from shelf. Gold and silver ends on these pull-out sections give immediate identification of 5% and 10% tolerance units. Quantity, wattage and resistance values are clearly printed on container ends. These stackable containers combine to make up an attractive, space-saving stock shelf display.



CONVENIENT
ATTRACTIVE
PACKAGING

All Standard RETMA Values

1/4, 1/2, 1 and 2 watt ratings

| | | | | | |
|-----|------|--------|---------|----------|----------|
| 10 | 120 | 1500 | 18,000 | 220,000 | 2.7 meg. |
| 12 | 150 | 1800 | 22,000 | 270,000 | 3.3 " |
| 15 | 180 | 2200 | 27,000 | 330,000 | 3.9 " |
| 18 | 220 | 2700 | 33,000 | 390,000 | 4.7 " |
| 22 | 270 | 3300 | 39,000 | 470,000 | 5.6 " |
| 27 | 330 | 3900 | 47,000 | 560,000 | 6.8 " |
| 33 | 390 | 4700 | 56,000 | 680,000 | 8.2 " |
| 39 | 470 | 5600 | 68,000 | 820,000 | 10.0 " |
| 47 | 560 | 6800 | 82,000 | 1.0 meg. | 12.0 " |
| 56 | 680 | 8200 | 100,000 | 1.2 " | 15.0 " |
| 68 | 820 | 10,000 | 120,000 | 1.5 " | 18.0 " |
| 82 | 1000 | 12,000 | 150,000 | 1.8 " | 22.0 " |
| 100 | 1200 | 15,000 | 180,000 | 2.2 " | |

Standard packages, 50 resistors

10%
Tolerance

FOLLOWING
VALUES
AVAILABLE
ONLY IN 1/4,
1/2 and 1
WATT
RATINGS

2.7 ohms
3.3 ohms
3.9 ohms
4.7 ohms
5.6 ohms
6.8 ohms
8.2 ohms

GIRARD - HOPKINS



MOLDED WIRE WOUND RESISTORS

TYPE BWH MOLDED WIRE WOUND RESISTOR



IRC's new BWH molded wire wound resistor can be used in most applications normally filled by the lower values of composition resistors. The BWH exhibits inherent stability, reliability, and long-term life characteristics of a wire wound unit. It also provides low resistances unattainable in composition resistors.

Exceptionally stable, small and completely insulated the BWH meets or exceeds all MIL-R-11C performance requirements. Because it is the RC-32 size it will fit any 1 watt composition resistor processing equipment.

BWH resistors are packaged by BODY TAPE or the exclusive IRC GRIP STRIP, GRIP REEL or ORIENTED BULK.

The rating of this resistor is:

- ½ watt at 137°C. ambient
- 1 watt at 115°C. ambient
- 2 watts at 70 C. ambient

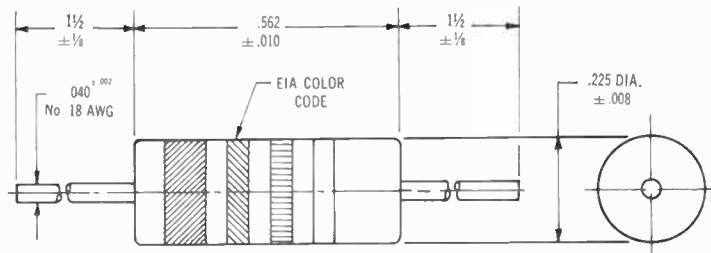
INSULATION. A plastic housing molded with IRC manufactured thermosetting materials at high pressure and temperature results in a high insulation resistance. This protects the element from effects of extreme climatic conditions. Type BWH resistors are brown in color.

NOISE. Negligible.

SHELF DRIFT. Negligible.

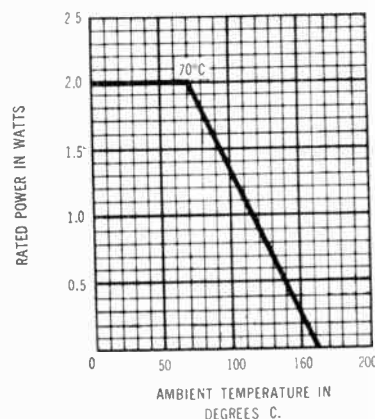
TOLERANCES & RESISTANCE VALUES. Available in $\pm 5\%$ and $\pm 10\%$ tolerances in accordance with standard EIA resistance ranges. Minimum resistance: 0.24 ohm, maximum: 1000 ohms.

COLOR CODING. Resistance values are indicated by standard EIA Color Code bands, and are distinguished from composition resistors by a wide band for the first significant figure.



| STANDARD STOCK VALUES ($\pm 5\%$ and $\pm 10\%$ tolerance) | | | | |
|--|------|------|------|-------|
| ($\pm 10\%$ tolerance in bold type. All values available in $\pm 5\%$) | | | | |
| OHMS | OHMS | OHMS | OHMS | OHMS |
| — | 1.0 | 10 | 100 | 1,000 |
| — | 1.1 | 11 | 110 | — |
| — | 1.2 | 12 | 120 | — |
| — | 1.3 | 13 | 130 | — |
| — | 1.5 | 15 | 150 | — |
| — | 1.6 | 16 | 160 | — |
| — | 1.8 | 18 | 180 | — |
| — | 2.0 | 20 | 200 | — |
| — | 2.2 | 22 | 220 | — |
| 0.24 | 2.4 | 24 | 240 | — |
| 0.27 | 2.7 | 27 | 270 | — |
| 0.30 | 3.0 | 30 | 300 | — |
| 0.33 | 3.3 | 33 | 330 | — |
| 0.36 | 3.6 | 36 | 360 | — |
| 0.39 | 3.9 | 39 | 390 | — |
| 0.43 | 4.3 | 43 | 430 | — |
| 0.47 | 4.7 | 47 | 470 | — |
| 0.51 | 5.1 | 51 | 510 | — |
| 0.56 | 5.6 | 56 | 560 | — |
| 0.62 | 6.2 | 62 | 620 | — |
| 0.68 | 6.8 | 68 | 680 | — |
| 0.75 | 7.5 | 75 | 750 | — |
| 0.82 | 8.2 | 82 | 820 | — |
| 0.91 | 9.1 | 91 | 910 | — |

DERATING CURVE





INSULATED RESISTORS

TYPE GBT-SR FIXED COMPOSITION CARBON RESISTORS

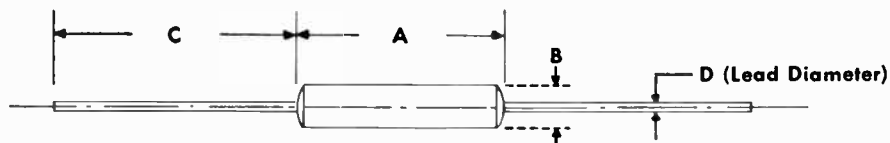


More IRC Type GBT-SR Resistors are used in the electronic industry than any other brand of fixed composition resistors. For original equipment, IRC GBT-SR's are by far the leading choice of Electronic Engineers—particularly since the new GBT-1/2 1/2 watt and GBT-1 1 watt give new appearance, new sizes . . . IRC's unsurpassed solderability has been maintained and no wax coating to gum up end equipment. For replacement, Service Technicians favor IRC GBT-SR's over all other brands combined.

IRC's exclusive filament-type resistance element is combined with superior construction features to provide a stable resistor of extremely low operating temperature and excellent power dissipation in a compact, light weight, fully insulated unit.

| IRC TYPE NUMBER | GBT-1/2 | GBT-1 | Sn-2 |
|---|--|---|--|
| Element Style | Carbon Filament | Carbon Filament | Carbon Filament |
| Equivalent MIL TYPE | RC20 | RC32 | RC42 |
| MIL CHARACTERISTICS | GF | GF | GF |
| Rating in Watts 70° Ambient — GBT-SR 40° Ambient — BW | 1/2 | 1 | 2 |
| Minimum Resistance | 10 Ohms | 10 Ohms | 10 Ohms |
| Maximum Resistance | 22 Meg. | 22 Meg. | 22 Meg. |
| Rated Voltage | 350V | 500V | 500V |
| Dimensions (Fig. 1) A—Body Length B—Body Diameter C—Lead Length D—Lead Diameter | 25/64" 9/64" 1 1/2 ± 1/8" 1/32" | 9/16" 7/32" 1 1/2 ± 1/8" 1/32" | 11/16" 5/16" 1 1/2 ± 1/8" 3/64" |

Figure 1
Dimensions



STANDARD STOCK VALUES—±5% and ±10% tolerance (±10% tolerance in bold type. All values available in ±5%).

| OHMS | OHMS | OHMS | OHMS | OHMS | MEGS | MEGS |
|------|------|-------|------|------|------|------|
| 10 | 100 | 1,000 | 10K | 100K | 1.0 | 10 |
| 11 | 110 | 1,100 | 11K | 110K | 1.1 | 11 |
| 12 | 120 | 1,200 | 12K | 120K | 1.2 | 12 |
| 13 | 130 | 1,300 | 13K | 130K | 1.3 | 13 |
| 15 | 150 | 1,500 | 15K | 150K | 1.5 | 15 |
| 16 | 160 | 1,600 | 16K | 160K | 1.6 | 16 |
| 18 | 180 | 1,800 | 18K | 180K | 1.8 | 18 |
| 20 | 200 | 2,000 | 20K | 200K | 2.0 | 20 |
| 22 | 220 | 2,200 | 22K | 220K | 2.2 | 22 |
| 24 | 240 | 2,400 | 24K | 240K | 2.4 | — |
| 27 | 270 | 2,700 | 27K | 270K | 2.7 | — |
| 30 | 300 | 3,000 | 30K | 300K | 3.0 | — |
| 33 | 330 | 3,300 | 33K | 330K | 3.3 | — |
| 36 | 360 | 3,600 | 36K | 360K | 3.6 | — |
| 39 | 390 | 3,900 | 39K | 390K | 3.9 | — |
| 43 | 430 | 4,300 | 43K | 430K | 4.3 | — |
| 47 | 470 | 4,700 | 47K | 470K | 4.7 | — |
| 51 | 510 | 5,100 | 51K | 510K | 5.1 | — |
| 56 | 560 | 5,600 | 56K | 560K | 5.6 | — |
| 62 | 620 | 6,200 | 62K | 620K | 6.2 | — |
| 68 | 680 | 6,800 | 68K | 680K | 6.8 | — |
| 75 | 750 | 7,500 | 75K | 750K | 7.5 | — |
| 82 | 820 | 8,200 | 82K | 820K | 8.2 | — |
| 91 | 910 | 9,100 | 91K | 910K | 9.1 | — |



RESIST-O-CABINETS

RESIST-O-CABINETS



IRC RESIST-O-CABINETS are practical assortments of most frequently used IRC Resistors contained in sturdy all-metal cabinets. 4 non-spill drawers—28 compartments. Measure 5 $\frac{3}{4}$ " x 5 $\frac{15}{16}$ " x 10 $\frac{3}{4}$ ".

RESIST-O-CABINETS

2 WATT ASSORTMENT #3A

Contains 120 IRC 2 Watt Resistors as follows:

7 ea. 8200, 10K, 22K, 47K; 5 ea. 1K, 6800, 15K, 0.1 meg.; 4 ea. 100, 330, 470, 1500, 2200, 3300, 4700, 27K, 1.0 meg.; 3 ea. 47, 82, 150, 220, 270, 3900, .22 meg., .47 meg.; 2 ea. 4.7, 10, 22, 68; 1 ea. 15, 27, 33, 39.

RESIST-O-PEDIA

For technicians, here's a unique convenience for stocking carbon composition resistors. Attractive blue and yellow hardback binder measures 9 x 8 $\frac{1}{4}$ x 2 $\frac{7}{8}$ ". 3-ring "fingered" inserts hold resistor Handy-Paks. Indexed stock saves searching . . . speeds servicing. Complete resistor identification always visible. Choose from these popular assortments (Resist-O-Pedia included in cost of assortments.)

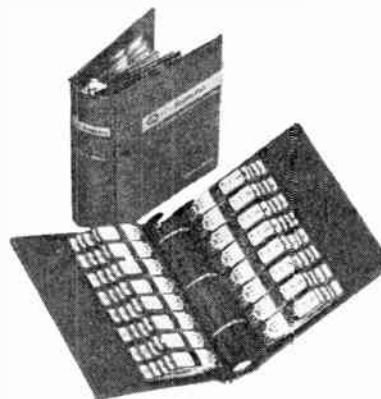
Assortment #44

6 each, Type GBT 1/2 1/2-watt (10% tolerance) 462 1/2-watt resistors, 77 values

| | | | | | | | | | | |
|-------|----|-----|-----|------|------|-----|------|---------|---------|--------|
| ohms: | 10 | 47 | 220 | 1000 | 4700 | 22K | 100K | 470K | 2.2 meg | 10 meg |
| | 12 | 56 | 270 | 1200 | 5600 | 27K | 120K | 560K | 2.7 meg | 12 meg |
| | 15 | 68 | 330 | 1500 | 6800 | 33K | 150K | 680K | 3.3 meg | 15 meg |
| | 18 | 82 | 390 | 1800 | 8200 | 39K | 180K | 820K | 3.9 meg | 18 meg |
| | 22 | 100 | 470 | 2200 | 10K | 47K | 220K | 1.0 meg | 4.7 meg | 22 meg |
| | 27 | 120 | 560 | 2700 | 12K | 56K | 270K | 1.2 meg | 5.6 meg | |
| | 33 | 150 | 680 | 3300 | 15K | 68K | 330K | 1.5 meg | 6.8 meg | |
| | 39 | 180 | 820 | 3900 | 18K | | 390K | 1.8 meg | 8.2 meg | |

Assortment #48

4 each, Type GBT1 1-watt (10% tolerance) 308 1-watt resistors, 77 values



RESIST-O-PANEL

Swing panel is all-metal 7" wide x 12 $\frac{1}{4}$ " high, slotted to accommodate Handy-Paks. Wall brackets are supplied. Can be used singly or in sets to provide a visible resistor stock that saves bench space. IRC Resist-O-Panel included with any of 4 popular assortments (at regular price of Assortments)

Assortment #64

6 each, Type GBT 1/2 1/2-watt (10% tolerance) 60 1/2-watt resistors, 10 values

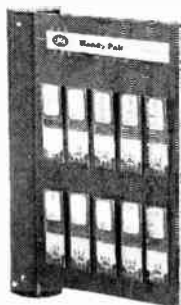
| | | | | | | | | | |
|------|------|-----|-----|-----|------|------|------|-------|---------|
| 1000 | 1500 | 10K | 22K | 47K | 100K | 220K | 470K | 1 meg | 2.2 meg |
|------|------|-----|-----|-----|------|------|------|-------|---------|

Assortment #68

4 each, Type GBT1 1-watt (10% tolerance) 40 1-watt resistors, 10 values

Assortment #80

3 each, Type SR2 2-watt (10% tolerance) 30 2-watt resistors, 10 values



1/2 WATT ASSORTMENT #4A

Contains 150 IRC 1/2 Watt Resistors as follows: 8 ea. 1K, 47K, 0.1 meg., 27 meg., 470K, 1.0 meg.; 7 ea. 3700, 10K, .22 meg., 2.2 meg.; 5 ea. 3300, 22K, 27K, 33K, .33 meg., 4.7 meg.; 4 ea. 100, 470, 1500, 2200, 2700, 56K, 68K, 3.3 meg.; 3 ea. 47, 220, 270, 10 meg.

1 WATT ASSORTMENT #5A

Contains 125 IRC 1 Watt Resistors as follows: 7 ea. 1K, 10K, 27K, 47K, 0.1 meg., 0.27 meg., 0.47 meg., 1.0 meg.; 5 ea. 2200, 4700, 22K; 4 ea. 33K, 39K, 68K; 3 ea. 47, 100, 150, 220, 270, 470, 1500, 2700, 3300, 15K, .15 meg., .22 meg., 2.2 meg., 4.7 meg.

COMBINATION ASSORTMENT #6A

Contains 139 IRC Insulated Resistors and Type DCF as follows:

1/2 Watt. 4 ea. 1000, 47K, 100K, 270K, 470K, 1.0 meg.; 3 ea. 4700, 10K, 220K, 2.2 meg.; 2 ea. 47, 100, 150, 220, 270, 470, 1500, 2200, 2700, 3300, 15K, 22K, 27K, 33K, 39K, 68K, 150K, 4.7 meg.

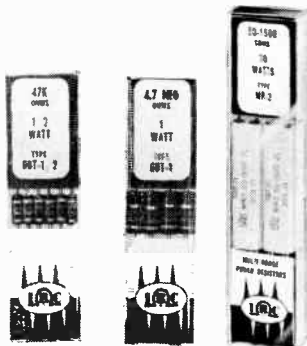
1 Watt. 4 ea. 1000, 10K, 27K, 100K, 1.0 meg.; 3 ea. 47K, 470K, 2.2 meg.; 2 ea. 3300, 15K, 22K, 68K, 150K, 270K; 1 ea. 47, 100, 150, 220, 270, 470, 1500, 2200, 2700, 4700, 33K, 39K, 220K, 4.7 meg.

2 Watt. 1 ea. 47, 100, 470, 4700, 10K, 22K, 47K.

DCF. 1 ea. 1000, 10K, 100K, 1.0 meg., 5 meg.



HANDY-PAKS and extra value premium kits



Each IRC Handy-Pak* contains several carbon composition resistors of one type and resistance value . . . to save you unnecessary shopping.

Three types include: 6 1/2-watt resistors; 4 1-watt resistors; and 3 2-watt resistors.
*Patent Pending

EASIER TO IDENTIFY!

In clear, large letters the type, resistance value and power rating are printed on every Handy-Pak. Correct identification is fast and certain with Handy-Paks.

QUICKER TO FIND!

In any stocking arrangement, Handy-Paks can be quickly indexed by power rating and resistance. Your resistor stock remains orderly from the time you buy it until you use it.

HANDIER TO USE!

IRC Handy-Paks open at both ends. The package slides out of the slimline plastic sleeve. Simply withdraw one or more resistors and slide the package back into the protective shield. Leads are kept straight, and resistors are always factory-clean.

EASIER TO CHECK INVENTORY!

The actual resistors are clearly visible. You always know what you have. Identification tab tears off conveniently for reordering reminder.

RESIST-O-CADDY



Ideal for in-home servicing. Pliable plastic pouch folds to 6 3/4 x 3 3/4 x 1 1/2" . . . fits easily in tube caddy or tool chest. Individual pockets hold resistor Handy-Paks secure and orderly. Accurate inventory always visible. RESIST-O-CADDY included with these "best-seller" assortments (at regular price of assortments)

| | | | | | | | |
|-----------------------|---|------|------|-----|------|---------|---------|
| Assortment #45 | 6 each, Type GBT 1/2-watt (10% tolerance) 120 1/2-watt resistors, 20 values | | | | | | |
| Assortment #41 | 4 each, Type GBT1 1 watt (10% tolerance) 80 1-watt resistors, 20 values | | | | | | |
| ohms: | 47 | 470 | 2200 | 22K | 100K | 470K | 4.7 meg |
| | 100 | 1000 | 4700 | 27K | 220K | 1.0 meg | 10 meg |
| | 150 | 1500 | 10K | 47K | 270K | 2.2 meg | |

4 PREMIUM KITS TO KEEP THE HANDY-PAKS AT YOUR FINGERTIPS

RESIST-O-CHEST

End "cigar box confusion." Select from 10 popular carbon composition resistor stocks, all in sturdy metal chests. Hinged lid and metal separators keep resistor Handy-Paks in order . . . right at your fingertips. Compact 5 5/8 x 3 3/8 x 6 1/4" size takes little bench space. Identification data clearly visible. Included at regular price of these 10 fast-moving assortments —

Assortment No. 42
6 each, Type GBT 1/2-watt (10% tolerance)
204 1/2-watt resistors, 34 values

Assortment No. 46
4 each, Type GBT1 1-watt (10% tolerance)
136 1-watt resistors, 34 values

Assortment No. 49A
3 each, Type SR-2 2-watt (10% tolerance)
102 2-watt resistors, 34 values

| | | | | | | | |
|-------|-----|------|------|-----|------|---------|---------|
| ohms: | 47 | 1000 | 4700 | 22K | 56K | 270K | 2.2 meg |
| | 100 | 1500 | 6800 | 27K | 68K | 330K | 3.3 meg |
| | 150 | 2200 | 8200 | 33K | 100K | 470K | 4.7 meg |
| | 220 | 2700 | 10K | 39K | 150K | 1.0 meg | 10 meg |
| | 470 | 3300 | 15K | 47K | 220K | 1.5 meg | |

Assortment No. 43
6 each, Type GBT 1/2 1/2-watt (10% tolerance) 462 1/2-watt resistors, 77 values

Assortment No. 47
4 each, Type GBT1 1-watt (10% tolerance) 308 1-watt resistors, 77 values

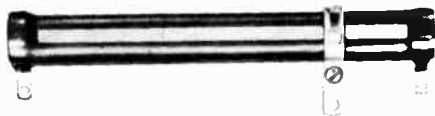
| | | | | | | | | | | |
|-------|----|-----|-----|------|------|-----|------|---------|---------|--------|
| ohms: | 10 | 47 | 220 | 1000 | 4700 | 22K | 100K | 470K | 2.2 meg | 10 meg |
| | 12 | 56 | 270 | 1200 | 5600 | 27K | 120K | 560K | 2.7 meg | 12 meg |
| | 15 | 68 | 330 | 1500 | 6800 | 33K | 150K | 680K | 3.3 meg | 15 meg |
| | 18 | 82 | 390 | 1800 | 8200 | 39K | 180K | 820K | 3.9 meg | 18 meg |
| | 22 | 100 | 470 | 2200 | 10K | 47K | 220K | 1.0 meg | 4.7 meg | 22 meg |
| | 27 | 120 | 560 | 2700 | 12K | 56K | 270K | 1.2 meg | 5.6 meg | |
| | 33 | 150 | 680 | 3300 | 15K | 68K | 330K | 1.5 meg | 6.8 meg | |
| | 39 | 180 | 820 | 3900 | 18K | 82K | 390K | 1.8 meg | 8.2 meg | |



Assortment No. 50A
3 each, Type SR-2 2-watt (10% tolerance)
231 2-watt resistors, 77 values



RESISTEG COATED ADJUSTABLE POWER WIRE WOUND RESISTORS



The adjustable feature of these IRC resistors provides an ideal solution to odd resistance values and to handling a variety of line voltages. For voltage dividing applications, one or more adjustable bands may be used.

IRC adjustable power resistors are standard Resisteg coated tubular units with a track of exposed wire to allow for adjustment. Adjustable resistor wattage ratings apply only when all the resistance is in the circuit. Resistor should not be adjusted with voltage applied.

TYPE 1¼AA 10-12 watts. Core size: 1¼" long by 5 16" dia. Terminals: 12A. One adjustable band: type A. Resistance tolerance: ±10%. Standard package: 1. Mounting hardware included: Z-0 brackets.

| Ohms | Maximum | | Ohms | Maximum | |
|------|---------|-------|------|---------|-------|
| | Mils | Volts | | Mils | Volts |
| 1 | 3470 | 3.47 | 750 | 126 | 99.8 |
| 2 | 2450 | 4.90 | 800 | 122 | 97.9 |
| 3 | 2000 | 6.00 | 1000 | 109 | 109 |
| 5 | 1550 | 7.75 | 1250 | 98 | 122 |
| 7.5 | 1266 | 9.49 | 1500 | 89 | 134 |
| 10 | 1095 | 10.9 | 2000 | 77 | 155 |
| 15 | 895 | 13.4 | 2250 | 73 | 164 |
| 20 | 775 | 15.5 | 2500 | 69 | 173 |
| 25 | 693 | 17.3 | 3000 | 63 | 189 |
| 50 | 490 | 24.5 | 3500 | 58 | 204 |
| 75 | 400 | 30.0 | 4000 | 54 | 219 |
| 100 | 346 | 34.6 | 4500 | 51 | 232 |
| 150 | 283 | 42.4 | 5000 | 49 | 245 |
| 200 | 245 | 49.0 | 6000 | 44 | 268 |
| 250 | 219 | 54.7 | 7000 | 41 | 290 |
| 300 | 200 | 60.0 | 7500 | 40 | 300 |
| 350 | 185 | 64.8 | 8000 | 38 | 310 |
| 400 | 173 | 69.2 | 8500 | 37 | 319 |
| 500 | 155 | 77.5 | 9000 | 36 | 328 |
| 600 | 141 | 84.8 | 10K | 34 | 346 |

TYPE 2DA 25 watts. Core size: 2" long x 9/16" dia. Terminals: 12A. One adjustable band: type X-2. Resistance tolerance: ±10%. Mounting hardware included: Z-1 brackets. Standard package: 1.

| Ohms | Maximum | | Ohms | Maximum | |
|------|---------|-------|------|---------|-------|
| | Mils | Volts | | Mils | Volts |
| 1 | 5000 | 5.00 | 1250 | 141 | 176 |
| 2 | 3450 | 7.07 | 1500 | 129 | 193 |
| 3 | 2880 | 8.66 | 2000 | 111 | 223 |
| 5 | 2236 | 11.1 | 2250 | 105 | 237 |
| 7.5 | 1825 | 13.7 | 2500 | 100 | 250 |
| 10 | 1580 | 15.8 | 3000 | 91 | 274 |
| 15 | 1290 | 19.4 | 3500 | 84 | 296 |
| 20 | 1118 | 22.3 | 4000 | 79 | 316 |
| 25 | 1000 | 25.0 | 4500 | 74 | 335 |
| 50 | 707 | 35.4 | 5000 | 70 | 353 |
| 75 | 577 | 43.3 | 6000 | 64 | 387 |
| 100 | 500 | 50.0 | 7000 | 59 | 418 |
| 150 | 408 | 61.2 | 7500 | 57 | 434 |
| 200 | 353 | 70.0 | 8000 | 55 | 447 |
| 250 | 316 | 79.0 | 9000 | 52 | 474 |
| 300 | 288 | 86.0 | 10K | 50 | 500 |
| 400 | 250 | 100 | 12K | 45 | 548 |
| 500 | 223 | 111 | 15K | 40 | 612 |
| 750 | 185 | 137 | 20K | 35 | 707 |
| 800 | 176 | 141 | 25K | 31 | 790 |
| 1000 | 158 | 158 | | | |

TYPE 4DA 50 watts. Core size: 4" long x 9/16" dia. Terminals: 12A. One adjustable band. Resistance tolerance: ±10%. Mounting hardware included: Z-2 brackets. Standard package: 1.

| Ohms | Maximum | | Ohms | Maximum | |
|------|---------|-------|------|---------|-------|
| | Mils | Volts | | Mils | Volts |
| 1 | 7070 | 7.07 | 2500 | 141 | 353 |
| 2 | 5000 | 10.00 | 3000 | 129 | 387 |
| 3 | 4080 | 12.20 | 3500 | 119 | 417 |
| 4 | 3540 | 14.10 | 4000 | 112 | 447 |
| 5 | 3160 | 15.80 | 4500 | 105 | 474 |
| 10 | 2236 | 22.3 | 5000 | 100 | 500 |
| 25 | 1415 | 35.3 | 6000 | 91 | 547 |
| 50 | 1000 | 50.0 | 7000 | 84 | 591 |
| 75 | 816 | 61.2 | 7500 | 79 | 612 |
| 100 | 707 | 70.7 | 8000 | 77 | 632 |
| 150 | 578 | 86.6 | 9000 | 74 | 670 |
| 200 | 500 | 100 | 10K | 70 | 707 |
| 250 | 448 | 111 | 12K | 64 | 775 |
| 300 | 408 | 122 | 15K | 57 | 866 |
| 400 | 353 | 141 | 20K | 50 | 1000 |
| 500 | 316 | 158 | 25K | 44 | 1118 |
| 750 | 258 | 193 | 30K | 40 | 1224 |
| 800 | 250 | 200 | 40K | 35 | 1414 |
| 1000 | 224 | 223 | 50K | 31 | 1580 |
| 1250 | 200 | 249 | 60K | 28 | 1732 |
| 1500 | 182 | 273 | 80K | 25 | 2000 |
| 2000 | 158 | 316 | 100K | 22 | 2230 |
| 2250 | 149 | 334 | | | |

TYPE 5EA 75 watts. Core size: 5" long x ¾" dia. Terminals: 12A. One adjustable band. Resistance tolerance: ±10%. Mounting hardware included: Z-2 brackets. Standard package: 1.

| Ohms | Maximum | | Ohms | Maximum | |
|------|---------|-------|------|---------|-------|
| | Mils | Volts | | Mils | Volts |
| 1 | 8660 | 8.6 | 1500 | 223 | 335 |
| 2 | 6120 | 12.2 | 2500 | 173 | 432 |
| 3 | 5000 | 15.0 | 5000 | 122 | 611 |
| 4 | 4330 | 17.3 | 10K | 86 | 866 |
| 5 | 3870 | 19.3 | 15K | 70 | 1060 |
| 10 | 2740 | 27.4 | 20K | 61 | 1224 |
| 25 | 1730 | 43.2 | 25K | 54 | 1370 |
| 50 | 1225 | 61.1 | 30K | 50 | 1500 |
| 100 | 866 | 86.6 | 40K | 43 | 1732 |
| 250 | 548 | 137 | 50K | 38 | 1936 |
| 500 | 387 | 193 | 75K | 31 | 2370 |
| 1000 | 274 | 274 | 100K | 27 | 2740 |

TYPE 6½EA 100 watts. Core size: 6½" long x ¾" dia. Terminals: 12A. One adjustable band. Resistance tolerance: ±10%. Mounting hardware included: Z-2 brackets. Standard package: 1.

| Ohms | Maximum | | Ohms | Maximum | |
|------|---------|-------|------|---------|-------|
| | Mils | Volts | | Mils | Volts |
| 1 | 10000 | 10.0 | 1500 | 258 | 387 |
| 2 | 7070 | 14.1 | 2500 | 200 | 500 |
| 3 | 5770 | 17.3 | 5000 | 141 | 707 |
| 4 | 5000 | 20.0 | 10K | 100 | 1000 |
| 5 | 4470 | 22.4 | 15K | 81 | 1224 |
| 10 | 3160 | 31.6 | 20K | 70 | 1414 |
| 25 | 2000 | 50.0 | 25K | 63 | 1581 |
| 50 | 1414 | 70.7 | 30K | 57 | 1732 |
| 100 | 1000 | 100 | 40K | 50 | 2000 |
| 250 | 632 | 158 | 50K | 44 | 2236 |
| 500 | 447 | 224 | 75K | 36 | 2738 |
| 1000 | 316 | 316 | 100K | 31 | 3160 |

TYPE 8½HA 160-175 watts. Core size: 8½" long x 1½" dia. Terminals: 4A. One adjustable band. Resistance tolerance: ±10%. Mounting hardware included: Z-3 brackets. Standard package: 1.

| Ohms | Maximum | | Ohms | Maximum | |
|------|---------|-------|------|---------|-------|
| | Mils | Volts | | Mils | Volts |
| 1 | 13228 | 13.2 | 1500 | 341 | 512 |
| 2 | 9350 | 18.7 | 2500 | 264 | 661 |
| 3 | 7640 | 22.9 | 5000 | 187 | 935 |
| 4 | 6620 | 26.4 | 10K | 132 | 1322 |
| 5 | 5920 | 29.7 | 15K | 108 | 1620 |
| 10 | 4180 | 41.8 | 20K | 93 | 1870 |
| 25 | 2640 | 66.1 | 25K | 83 | 2090 |
| 50 | 1870 | 93.5 | 30K | 76 | 2291 |
| 100 | 1322 | 132 | 40K | 66 | 2645 |
| 250 | 837 | 209 | 50K | 59 | 2960 |
| 500 | 592 | 296 | 75K | 48 | 3620 |
| 1000 | 418 | 418 | 100K | 41 | 4180 |

TYPE 10½HA 200-225 watts. Core size: 10½" long x 1½" dia. Terminals: 4A. One adjustable band. Resistance tolerance: ±10%. Mounting hardware included: Z-3 brackets. Standard package: 1.

| Ohms | Maximum | | Ohms | Maximum | |
|------|---------|-------|------|---------|-------|
| | Mils | Volts | | Mils | Volts |
| 1 | 15000 | 15.0 | 1500 | 387 | 580 |
| 2 | 10600 | 21.2 | 2500 | 300 | 750 |
| 3 | 8660 | 25.9 | 5000 | 212 | 1060 |
| 4 | 7500 | 30.0 | 10K | 150 | 1500 |
| 5 | 6708 | 33.5 | 15K | 122 | 1830 |
| 10 | 4750 | 47.4 | 20K | 106 | 2120 |
| 25 | 3000 | 75.0 | 25K | 95 | 2370 |
| 50 | 2120 | 106 | 30K | 86 | 2600 |
| 100 | 1500 | 150 | 40K | 75 | 3000 |
| 250 | 950 | 237 | 50K | 67 | 3350 |
| 500 | 670 | 335 | 75K | 54 | 4100 |
| 1000 | 475 | 474 | 100K | 47 | 4750 |



RESISTEG COATED FIXED POWER WIRE WOUND RESISTORS

TYPE 1A—5-8 watts. Resisteg coating. Core size: 1" long x 5/16" dia. Terminals: 13A. Resistance tolerance: ±5%. Mounting hardware included: none. Standard package—5.

| Maximum | | | Maximum | | | Maximum | | |
|---------|------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 2830 | 2.83 | 200 | 200 | 40.0 | 2250 | 59 | 134 |
| 1.5 | 2310 | 3.47 | 225 | 188 | 42.4 | 2500 | 56 | 141 |
| 2 | 2000 | 4.00 | 250 | 179 | 44.7 | 3000 | 51 | 155 |
| 3 | 1632 | 4.90 | 300 | 163 | 49.0 | 3500 | 47 | 167 |
| 4 | 1414 | 5.66 | 350 | 151 | 52.9 | 4000 | 44 | 179 |
| 5 | 1265 | 6.32 | 400 | 141 | 56.6 | 4500 | 42 | 189 |
| 7.5 | 1032 | 7.75 | 450 | 133 | 60.0 | 5000 | 40 | 200 |
| 10 | 894 | 8.94 | 500 | 126 | 62.2 | 6000 | 36 | 219 |
| 12 | 817 | 9.80 | 600 | 115 | 69.3 | 7000 | 33 | 236 |
| 15 | 731 | 10.9 | 700 | 107 | 75.0 | 7500 | 32 | 245 |
| 20 | 633 | 12.6 | 750 | 103 | 77.5 | 8000 | 31 | 253 |
| 25 | 566 | 14.1 | 800 | 100 | 80.0 | 9000 | 29 | 268 |
| 30 | 517 | 15.5 | 900 | 94 | 85.0 | 10K | 28 | 283 |
| 35 | 478 | 16.7 | 1000 | 89 | 89.5 | 12.5K | 25 | 316 |
| 40 | 447 | 17.9 | 1100 | 85 | 94.0 | 15K | 23 | 346 |
| 50 | 400 | 20.0 | 1200 | 81 | 98.0 | 17.5K* | 21 | 374 |
| 75 | 327 | 24.5 | 1250 | 80 | 100 | 20K* | 20 | 400 |
| 100 | 283 | 28.3 | 1500 | 73 | 109 | 22.5K* | 18 | 424 |
| 125 | 253 | 31.6 | 1750 | 67 | 118 | 25K* | 17 | 447 |
| 150 | 231 | 34.6 | 2000 | 63 | 126 | | | |

*No. 1 Terminal

TYPE 2C 20 watts. Resisteg coating. Core size: 2" long x 7/16" dia. Terminals: 13A. Resistance tolerance: ±5%. Mounting hardware included: none. Standard package—5.

| Maximum | | | Maximum | | | Maximum | | |
|---------|------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 4470 | 4.47 | 900 | 149 | 134 | 12.5K | 40 | 500 |
| 2 | 3160 | 6.32 | 1000 | 141 | 141 | 15K | 36 | 547 |
| 3 | 2580 | 7.74 | 1200 | 129 | 155 | 20K | 31 | 632 |
| 4 | 2236 | 8.94 | 1250 | 126 | 158 | 25K | 28 | 707 |
| 5 | 2000 | 10.0 | 1500 | 115 | 173 | 30K | 25 | 775 |
| 10 | 1415 | 14.1 | 1750 | 107 | 187 | 35K | 23 | 836 |
| 25 | 894 | 22.3 | 2000 | 100 | 200 | 40K | 22 | 894 |
| 50 | 633 | 31.6 | 2250 | 94 | 211 | 45K | 21 | 948 |
| 75 | 517 | 38.7 | 2500 | 89 | 222 | 50K | 20 | 1000 |
| 100 | 447 | 44.7 | 2750 | 85 | 234 | 55K | 19 | 1048 |
| 150 | 365 | 54.8 | 3000 | 81 | 245 | 60K | 18 | 1095 |
| 200 | 316 | 63.2 | 3500 | 75 | 264 | 65K | 17 | 1140 |
| 250 | 282 | 70.7 | 4000 | 70 | 283 | 70K | 16 | 1180 |
| 300 | 258 | 77.4 | 4500 | 66 | 300 | 75K | 16 | 1224 |
| 350 | 238 | 83.7 | 5000 | 63 | 316 | 80K | 15 | 1264 |
| 400 | 223 | 89.5 | 6000 | 57 | 346 | 85K* | 15 | 1303 |
| 500 | 200 | 100 | 7000 | 53 | 374 | 90K* | 14 | 1340 |
| 650 | 175 | 114 | 7500 | 51 | 387 | 95K* | 14 | 1378 |
| 700 | 169 | 118 | 8000 | 50 | 400 | 100K* | 14 | 1414 |
| 750 | 163 | 122 | 9000 | 47 | 424 | | | |
| 800 | 158 | 126 | 10K | 44 | 447 | | | |

*No. 1 Terminal

TYPE 4D 50 watts. Resisteg coating. Core size, 4" long x 9/16" dia. Terminals: 12A. Resistance tolerance: ±5%. Mounting hardware included: Z-1 brackets. Standard package—1.

| Maximum | | | Maximum | | | Maximum | | |
|---------|------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 7070 | 7.07 | 750 | 258 | 193 | 20K | 50 | 1000 |
| 2 | 5000 | 10.00 | 800 | 250 | 200 | 25K | 44 | 1118 |
| 3 | 4080 | 12.20 | 1000 | 224 | 223 | 35K | 38 | 1322 |
| 4 | 3540 | 14.10 | 1500 | 182 | 273 | 50K | 31 | 1580 |
| 5 | 3160 | 15.80 | 2000 | 158 | 316 | 75K | 25 | 1936 |
| 10 | 2236 | 22.3 | 2500 | 141 | 353 | 100K | 22 | 2230 |
| 25 | 1415 | 35.3 | 3000 | 129 | 387 | 125K | 20 | 2500 |
| 50 | 1000 | 50.0 | 4000 | 112 | 447 | 150K | 18 | 2738 |
| 75 | 816 | 61.2 | 5000 | 100 | 500 | 175K | 16 | 2958 |
| 100 | 707 | 70.7 | 7500 | 81 | 612 | 200K | 15 | 3160 |
| 150 | 578 | 86.6 | 8000 | 79 | 632 | 250K | 14 | 3530 |
| 200 | 500 | 100 | 10K | 70 | 707 | | | |
| 250 | 448 | 111 | 12K | 64 | 775 | | | |
| 500 | 316 | 158 | 15K | 57 | 866 | | | |

TYPE 8½H 160-175 watts. Resisteg coating. Core size: 8½" long x 1½" dia. Terminals: 4A. Resistance tolerance: ±5%. Mounting hardware included: Z-3 brackets. Standard package—1.

| Maximum | | | Maximum | | | Maximum | | |
|---------|-------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 13228 | 13.2 | 150 | 1080 | 162 | 10K | 132 | 1322 |
| 2 | 9350 | 18.7 | 250 | 837 | 209 | 15K | 108 | 1620 |
| 3 | 7640 | 22.9 | 500 | 592 | 296 | 20K | 93 | 1870 |
| 4 | 6620 | 26.4 | 750 | 483 | 362 | 25K | 83 | 2090 |
| 5 | 5920 | 29.7 | 1000 | 418 | 418 | 30K | 76 | 2291 |
| 10 | 4180 | 41.8 | 1500 | 341 | 512 | 40K | 66 | 2645 |
| 25 | 2640 | 66.1 | 2000 | 296 | 591 | 50K | 59 | 2960 |
| 50 | 1870 | 93.5 | 2500 | 264 | 661 | 60K | 54 | 3240 |
| 75 | 1525 | 114 | 3000 | 241 | 724 | 75K | 48 | 3620 |
| 100 | 1322 | 132 | 5000 | 187 | 935 | 100K | 41 | 4180 |
| 125 | 1180 | 148 | 7500 | 152 | 1145 | | | |

TYPE 1¾A 10-12 watts. Resisteg coating. Core size: 1¾" long x 5/16" dia. Terminals: 13A. Resistance tolerance: ±5%. Mounting hardware included: none. Standard package—5.

| Maximum | | | Maximum | | | Maximum | | |
|---------|------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 3470 | 3.47 | 350 | 185 | 64.7 | 7000 | 41 | 287 |
| 1.5 | 2830 | 4.24 | 400 | 173 | 69.2 | 7500 | 40 | 300 |
| 2 | 2450 | 4.90 | 450 | 163 | 73.3 | 8000 | 38 | 304 |
| 3 | 2000 | 6.00 | 500 | 155 | 77.5 | 8500 | 37 | 319 |
| 4 | 1732 | 6.93 | 600 | 141 | 84.6 | 9000 | 36 | 328 |
| 5 | 1550 | 7.75 | 700 | 131 | 91.7 | 10K | 34 | 340 |
| 7.5 | 1266 | 9.49 | 750 | 126 | 94.5 | 11K | 33 | 363 |
| 10 | 1095 | 10.9 | 800 | 122 | 97.6 | 12K | 31 | 372 |
| 12 | 1000 | 12.0 | 900 | 115 | 103 | 12.5K | 31 | 387 |
| 15 | 895 | 13.4 | 1000 | 109 | 109 | 13.5K | 29 | 391 |
| 20 | 775 | 15.5 | 1100 | 104 | 114 | 15K | 28 | 420 |
| 25 | 693 | 17.3 | 1200 | 100 | 120 | 16K | 27 | 432 |
| 30 | 633 | 19.0 | 1250 | 98 | 122 | 17.5K | 26 | 458 |
| 35 | 586 | 20.5 | 1500 | 89 | 133 | 18K | 25 | 464 |
| 40 | 548 | 21.9 | 1750 | 83 | 145 | 20K | 24 | 480 |
| 50 | 490 | 24.5 | 2000 | 77 | 154 | 22.5K | 23 | 517 |
| 75 | 400 | 30.0 | 2250 | 73 | 164 | 25K | 21 | 525 |
| 100 | 346 | 34.6 | 2500 | 69 | 172 | 30K | 20 | 600 |
| 125 | 310 | 38.7 | 3000 | 63 | 189 | 35K | 18 | 630 |
| 150 | 283 | 42.4 | 3500 | 58 | 199 | 40K | 17 | 680 |
| 200 | 245 | 49.0 | 4000 | 54 | 216 | 45K | 16 | 720 |
| 225 | 231 | 51.9 | 4500 | 51 | 229 | 50K | 15 | 750 |
| 250 | 219 | 54.7 | 5000 | 49 | 245 | | | |
| 300 | 200 | 60.0 | 6000 | 44 | 264 | | | |

TYPE 2D 25 watts. Resisteg coating. Core size: 2" long x 9/16" dia. Terminals: 12A. Resistance tolerance: ±5%. Mounting hardware included: Z-1 brackets. Standard package—1.

| Maximum | | | Maximum | | | Maximum | | |
|---------|------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 5000 | 5.00 | 500 | 223 | 111 | 12K | 45 | 548 |
| 2 | 3540 | 7.07 | 750 | 185 | 137 | 15K | 40 | 612 |
| 3 | 2880 | 8.66 | 800 | 176 | 141 | 20K | 35 | 707 |
| 4 | 2500 | 10.0 | 1000 | 158 | 158 | 25K | 31 | 790 |
| 5 | 2236 | 11.1 | 1500 | 129 | 193 | 30K | 28 | 866 |
| 10 | 1580 | 15.8 | 2000 | 111 | 223 | 35K | 26 | 935 |
| 15 | 1290 | 19.4 | 2500 | 100 | 250 | 40K | 25 | 1000 |
| 25 | 1000 | 25.0 | 3000 | 91 | 274 | 50K | 22 | 1118 |
| 50 | 707 | 35.4 | 3500 | 84 | 296 | 60K | 20 | 1224 |
| 75 | 577 | 43.3 | 4000 | 79 | 316 | 70K | 18 | 1320 |
| 100 | 500 | 50.0 | 5000 | 70 | 353 | 80K | 17 | 1414 |
| 150 | 408 | 61.2 | 6000 | 64 | 387 | 100K | 15 | 1580 |
| 200 | 353 | 70.7 | 7500 | 57 | 434 | | | |
| 250 | 316 | 79.0 | 10K | 50 | 500 | | | |

TYPE 6½E 100 watts. Resisteg coating. Core size: 6½" long x ¾" dia. Terminals: 12A. Resistance tolerance: ±5%. Mounting hardware included: Z-2 brackets. Standard package—1.

| Maximum | | | Maximum | | | Maximum | | |
|---------|-------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 10000 | 10.0 | 150 | 818 | 122 | 10K | 100 | 1000 |
| 2 | 7070 | 14.1 | 250 | 632 | 158 | 15K | 81 | 1224 |
| 3 | 5770 | 17.3 | 500 | 447 | 224 | 20K | 70 | 1414 |
| 4 | 5000 | 20.0 | 750 | 365 | 274 | 25K | 63 | 1581 |
| 5 | 4470 | 22.4 | 1000 | 316 | 316 | 30K | 57 | 1732 |
| 10 | 3160 | 31.6 | 1500 | 258 | 387 | 40K | 50 | 2000 |
| 25 | 2000 | 50.0 | 2000 | 223 | 447 | 50K | 44 | 2236 |
| 50 | 1414 | 70.7 | 2500 | 200 | 500 | 60K | 40 | 2449 |
| 75 | 1155 | 86.6 | 3000 | 182 | 547 | 75K | 36 | 2738 |
| 100 | 1000 | 100 | 5000 | 141 | 707 | 100K | 31 | 3160 |
| 125 | 895 | 111 | 7500 | 115 | 865 | | | |

TYPE 10½H 200-225 watts. Resisteg coating. Core size: 10½" long x 1½" dia. Terminals: 4A. Resistance tolerance: ±5%. Mounting hardware included: Z-3 brackets. Standard package—1.

| Maximum | | | Maximum | | | Maximum | | |
|---------|-------|-------|---------|------|-------|---------|------|-------|
| Ohms | Mils | Volts | Ohms | Mils | Volts | Ohms | Mils | Volts |
| 1 | 15000 | 15.0 | 250 | 950 | 237 | 15K | 122 | 1830 |
| 2 | 10600 | 21.2 | 500 | 670 | 335 | 20K | 106 | 2120 |
| 3 | 8660 | 25.9 | 750 | 548 | 410 | 25K | 95 | 2370 |
| 4 | 7500 | 30.0 | 1000 | 475 | 474 | 30K | 86 | 2600 |
| 5 | 6708 | 33.5 | 1500 | 387 | 580 | 40K | 75 | 3000 |
| 10 | 4750 | 47.4 | 2000 | 335 | 670 | 50K | 67 | 3350 |
| 25 | 3000 | 75.0 | 2500 | 300 | 750 | 60K | 61 | 3675 |
| 50 | 2120 | 106 | 3000 | 274 | 820 | 75K | 54 | 4100 |
| 75 | 1730 | 129 | 5000 | 212 | 1060 | 100K | 47 | 4750 |
| 100 | 1500 | 150 | 7500 | 173 | 1300 | | | |
| 150 | 1225 | 183 | 10K | 150 | 1500 | | | |



RESISTEG COATED FIXED POWER WIRE WOUND RESISTORS



MILITARY STYLE POWER RESISTORS

IRC's exclusive Resisteg Coating accounts directly for the superior stability of IRC power resistors. This coating is cured at temperatures below 205°F.—1000° less than required for other type coats. With low temperature curing, winding turns do not shift together. The wire is not "work-hardened" since excessive tension is not needed to prevent shifting. There are no failures from arc-over. And, RESISTEG COATED POWER RESISTORS NEED NO DERATING—even at high resistance values they operate at FULL RATED POWER! Low-temperature cured. Resisteg is an exclusive IRC feature.

RW29V 11 watts, military stamping, no hardware. Standard package: 1.

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|
| 1.0 | 4.5 | 20 | 90 | 400 | 1800 |
| 1.1 | 5.0 | 22 | 100 | 450 | 2000 |
| 1.2 | 5.6 | 25 | 110 | 500 | 2200 |
| 1.4 | 6.3 | 28 | 120 | 560 | 2500 |
| 1.6 | 7.1 | 31 | 140 | 630 | 2800 |
| 1.8 | 8.0 | 35 | 160 | 710 | 3100 |
| 2.0 | 9.0 | 40 | 180 | 800 | 3500 |
| 2.2 | 10 | 45 | 200 | 900 | 4000 |
| 2.5 | 11 | 50 | 220 | 1000 | 4500 |
| 2.8 | 12 | 56 | 250 | 1100 | 5000 |
| 3.1 | 14 | 63 | 280 | 1200 | 5600 |
| 3.5 | 16 | 71 | 310 | 1400 | |
| 4.0 | 18 | 80 | 350 | 1600 | |

RW30V 11 watts, military stamping, no hardware. Standard package: 1.

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|
| 1.0 | 4.0 | 16 | 63 | 250 | 1000 |
| 1.1 | 4.5 | 18 | 71 | 280 | 1100 |
| 1.2 | 5.0 | 20 | 80 | 310 | 1200 |
| 1.4 | 5.6 | 22 | 90 | 350 | 1400 |
| 1.6 | 6.3 | 25 | 100 | 400 | 1600 |
| 1.8 | 7.1 | 28 | 110 | 450 | 1800 |
| 2.0 | 8.0 | 31 | 120 | 500 | 2000 |
| 2.2 | 9.0 | 35 | 140 | 560 | 2200 |
| 2.5 | 10 | 40 | 160 | 630 | 2500 |
| 2.8 | 11 | 45 | 180 | 710 | |
| 3.1 | 12 | 50 | 200 | 800 | |
| 3.5 | 14 | 56 | 220 | 900 | |

RW31V 14 watts, military stamping, no hardware. Standard package: 1.

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|
| 1.0 | 4.5 | 20 | 90 | 400 | 1800 |
| 1.1 | 5.0 | 22 | 100 | 450 | 2000 |
| 1.2 | 5.6 | 25 | 110 | 500 | 2200 |
| 1.4 | 6.3 | 28 | 120 | 560 | 2500 |
| 1.6 | 7.1 | 31 | 140 | 630 | 2800 |
| 1.8 | 8.0 | 35 | 160 | 710 | 3100 |
| 2.0 | 9.0 | 40 | 180 | 800 | 3500 |
| 2.2 | 10 | 45 | 200 | 900 | 4000 |
| 2.5 | 11 | 50 | 220 | 1000 | 4500 |
| 2.8 | 12 | 56 | 250 | 1100 | 5000 |
| 3.1 | 14 | 63 | 280 | 1200 | 5600 |
| 3.5 | 16 | 71 | 310 | 1400 | 6300 |
| 4.0 | 18 | 80 | 350 | 1600 | |

RW32V 17 watts, military stamping, no hardware. Standard package: 1.

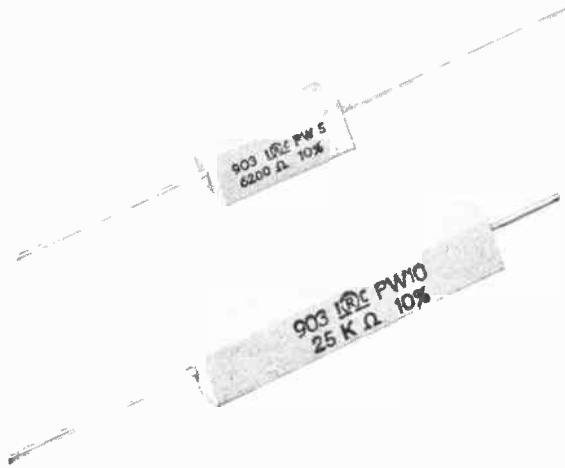
| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|
| 1.0 | 5.0 | 25 | 120 | 630 | 3100 |
| 1.1 | 5.6 | 28 | 140 | 710 | 3500 |
| 1.2 | 6.3 | 31 | 160 | 800 | 4000 |
| 1.4 | 7.1 | 35 | 180 | 900 | 4500 |
| 1.6 | 8.0 | 40 | 200 | 1000 | 5000 |
| 1.8 | 9.0 | 45 | 220 | 1100 | 5600 |
| 2.0 | 10 | 50 | 250 | 1200 | 6300 |
| 2.2 | 11 | 56 | 280 | 1400 | 7100 |
| 2.5 | 12 | 63 | 310 | 1600 | 8000 |
| 2.8 | 14 | 71 | 350 | 1800 | 9000 |
| 3.1 | 16 | 80 | 400 | 2000 | 10K |
| 3.5 | 18 | 90 | 450 | 2200 | |
| 4.0 | 20 | 100 | 500 | 2500 | |
| 4.5 | 22 | 110 | 560 | 2800 | |

RW33V 26 watts, military stamping, no hardware. Standard package: 1.

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|
| 1.0 | 5.6 | 31 | 180 | 1000 | 5600 |
| 1.1 | 6.3 | 35 | 200 | 1100 | 6300 |
| 1.2 | 7.1 | 40 | 220 | 1200 | 7100 |
| 1.4 | 8.0 | 45 | 250 | 1400 | 8000 |
| 1.6 | 9.0 | 50 | 280 | 1600 | 9000 |
| 1.8 | 10 | 56 | 310 | 1800 | 10K |
| 2.0 | 11 | 63 | 350 | 2000 | 11K |
| 2.2 | 12 | 71 | 400 | 2200 | 12K |
| 2.5 | 14 | 80 | 450 | 2500 | 14K |
| 2.8 | 16 | 90 | 500 | 2800 | 16K |
| 3.1 | 18 | 100 | 560 | 3100 | 18K |
| 3.5 | 20 | 110 | 630 | 3500 | |
| 4.0 | 22 | 120 | 710 | 4000 | |
| 4.5 | 25 | 140 | 800 | 4500 | |
| 5.0 | 28 | 160 | 900 | 5000 | |



AXIAL LEAD POWER WIRE WOUND RESISTORS



These popular axial lead power resistors are the industry favorites for 5 and 10 watt applications. The compact shape fits among other components more easily. The axial lead design speeds installation. And, the superior solderability of the terminals assures sound connections every time.

A precisely wound element is sealed in a ceramic case—fully protected and insulated. Conservative rating permits continuous operation at full power. Resistance, wattage and tolerance are permanently marked on resistor body. Standard tolerance is 10%.

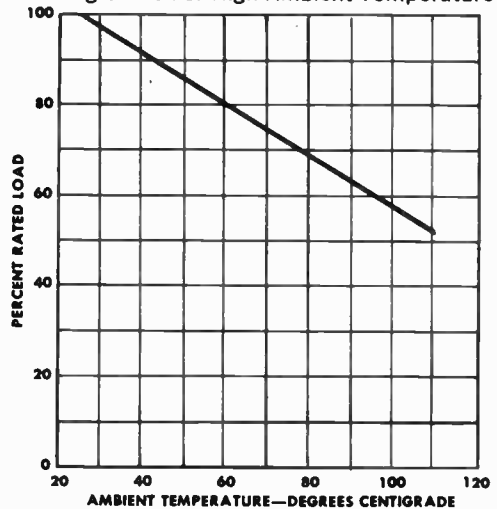
Popular Assortment of 20 PW10 resistors is available for handy bench stock. The values are selected on the basis of 10 watt usage. Resistors are mounted on plastic covered card with hole for hanging. Assortment 20A.

STANDARD STOCK VALUES

| PW5 | | | |
|-------|-----|-----|------|
| Ohms: | 1 | 50 | 600 |
| | 2 | 75 | 700 |
| | 3 | 100 | 750 |
| | 4 | 120 | 800 |
| | 5 | 125 | 820 |
| | 7.5 | 150 | 900 |
| | 10 | 200 | 1000 |
| | 15 | 250 | 1200 |
| | 20 | 300 | 1250 |
| | 25 | 350 | 1500 |
| | 30 | 400 | 1750 |
| | 40 | 500 | 2000 |

| PW10 | | | |
|-------|-----|-----|------|
| Ohms: | 1 | 120 | 1000 |
| | 2 | 125 | 1200 |
| | 3 | 150 | 1250 |
| | 4 | 200 | 1500 |
| | 5 | 250 | 1750 |
| | 7.5 | 300 | 2000 |
| | 10 | 350 | 2250 |
| | 15 | 400 | 2500 |
| | 20 | 500 | 3000 |
| | 25 | 600 | 3300 |
| | 30 | 700 | 3500 |
| | 40 | 750 | 3900 |
| | 50 | 800 | 4000 |
| | 75 | 820 | 4500 |
| | 100 | 900 | 5000 |

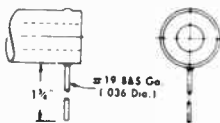
IRC PW5 and PW10
Derating Curve For High Ambient Temperature



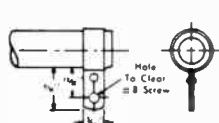
POWER WIRE WOUND RESISTOR HARDWARE

TERMINALS

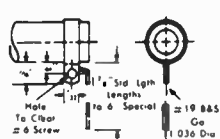
Type 1
Available for some value in Type 1A and 2C



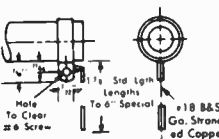
Type 4A
For 8 1/2 HA, 8 1/2 HA, 10 1/2 H and 10 1/2 HA



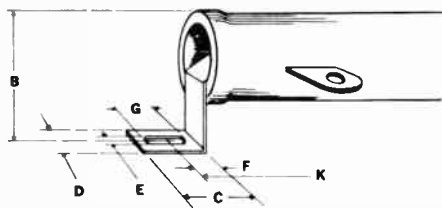
Type 12A
For 1 3/4 AA, 2D, 2DA, 4D, 4DA, 5EA, 6 1/2 E and 6 1/2 EA



Type 13A
For 1A, 1 3/4 A and 2C



BRACKETS



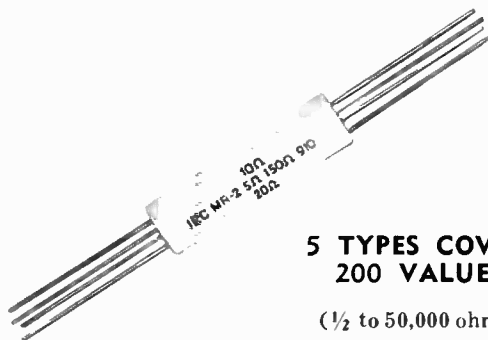
| BRACKET TYPE | USE WITH O.D. | RESISTOR TYPE | B | C | D | E | F | G | K |
|--------------|---------------|---------------|---------|---------|-------|-------|-------|------|---------------------|
| Z-0 | 3/16" | A | 1/32" | 1/2" | 3/16" | 1/4" | 1/4" | 1/4" | Core Length + 1/32" |
| Z-1 | 3/16" | D | 1/4" | 3/16" | 3/16" | 1/4" | 3/16" | 1/4" | Core Length + 3/8" |
| Z-2 | 3/4" | E | 1 1/16" | 5/8" | 3/8" | 1/4" | 1/2" | 3/8" | Core Length + 1/16" |
| Z-3 | 1 1/8" | H | 2 1/16" | 1 1/16" | 1/2" | 3/16" | 1/2" | 1/4" | Core Length + 1/16" |
| Z-4 | 3/16" | C | 3/8" | 2/64" | 1/4" | 3/4" | 1/4" | 3/4" | Core Length + 1/2" |

ADJUSTABLE BANDS

| Resistor | Band | Resistor | Band |
|----------|------|---------------------|------|
| 1 3/4 AA | A | 5EA, 6 1/2 EA | E |
| 2DA, 4DA | D | 8 1/2 HA, 10 1/2 HA | H |



MULTI-RANGE POWER RESISTORS



**5 TYPES COVER
200 VALUES**

($\frac{1}{2}$ to 50,000 ohms)

IRC TYPE MR1 MULTI-RANGE RESISTOR

Provides exceptionally broad coverage of ten-watt resistors between 0.5 ohm and 15 ohms. The MR1 Multi-Range Resistor has elements of 1, 2, 4, and 8 ohms.

| ohms: | 0.5 | 0.9 | 2.2 | 3.0 | 4.8 | 9.1 |
|-------|------|-----|------|-----|-----|-----|
| | 0.56 | 1.0 | 2.4 | 3.3 | 5.0 | 10 |
| | 0.62 | 1.1 | 2.5 | 3.6 | 5.6 | 11 |
| | 0.68 | 1.2 | 2.6 | 3.9 | 6.0 | 12 |
| | 0.75 | 1.3 | 2.7 | 4.0 | 7.0 | 13 |
| | 0.8 | 1.5 | 2.75 | 4.5 | 8.0 | 14 |
| | 0.82 | 1.6 | 2.8 | 4.6 | 8.2 | 15 |
| | 0.9 | 2.0 | 2.9 | 4.7 | 9.0 | |

IRC TYPE MR3 MULTI-RANGE RESISTOR

Provides exceptionally broad coverage of ten-watt resistors between 50 ohms and 1500 ohms. The MR3 Multi-Range Resistor has elements of 100, 200, 400, and 800 ohms.

| ohms: | 50 | 91 | 220 | 300 | 480 | 910 |
|-------|----|-----|-----|-----|-----|------|
| | 56 | 100 | 240 | 330 | 500 | 1000 |
| | 62 | 110 | 250 | 360 | 560 | 1100 |
| | 68 | 120 | 260 | 390 | 600 | 1200 |
| | 75 | 130 | 270 | 400 | 700 | 1300 |
| | 80 | 150 | 275 | 450 | 800 | 1400 |
| | 82 | 160 | 280 | 460 | 820 | 1500 |
| | 90 | 200 | 290 | 470 | 900 | |

IRC TYPE MR5 MULTI-RANGE RESISTOR

Provides exceptionally broad coverage of ten-watt resistors between 3K and 50K. The MR5 Multi-Range Resistor has elements of 10K, 15K, and 25K ohms.

| ohms: | 3K | 7.5K | 15K | 30K |
|-------|----|-------|-----|-----|
| | 5K | 10K | 20K | 40K |
| | 6K | 12.5K | 25K | 50K |



**ANOTHER MULTI-RANGE FEATURE
... EXCLUSIVE IRC HANDY-PAKS!**

For greater convenience and ease of stocking and handling, Multi-Range Resistors are supplied in Handy-Paks only ... 2 of a type to a Pak. Slim-line plastic sleeve protects modern, reusable package which opens at both ends.

COMPLETE 10-WATT COVERAGE

This sensational resistor means that never again will technicians or servicemen need to be delayed to order an odd resistance value. 5 Multi-Range Resistors cover all 10-watt needs . . . 200 values, 0.5 to 50,000 ohms! This unit consists of four ten-watt resistance elements sealed in a special steatite housing. Various interconnections of the elements provide replacement for 47 different values, except for the MR5 Multi-Range Resistor. Axial leads speed serving . . . Conservatively rated—10 watts or more.

IRC TYPE MR2 MULTI-RANGE RESISTOR

Provides exceptionally broad coverage of ten-watt resistors between 5 ohms and 150 ohms. The MR2 Multi-Range Resistor has elements of 10, 20, 40 and 80 ohms.

| ohms: | 5.0 | 9.1 | 22 | 30 | 48 | 91 |
|-------|-----|-----|------|----|----|-----|
| | 5.6 | 10 | 24 | 33 | 50 | 100 |
| | 6.2 | 11 | 25 | 36 | 56 | 110 |
| | 6.8 | 12 | 26 | 39 | 60 | 120 |
| | 7.5 | 13 | 27 | 40 | 70 | 130 |
| | 8.0 | 15 | 27.5 | 45 | 80 | 140 |
| | 8.2 | 16 | 28 | 46 | 82 | 150 |
| | 9.0 | 20 | 29 | 47 | 90 | |

IRC TYPE MR4 MULTI-RANGE RESISTOR

Provides exceptionally broad coverage of ten-watt resistors between 500 ohms and 15K ohms. The MR4 Multi-Range Resistor has elements of 1K, 2K, 4K, and 8K ohms.

| ohms: | 500 | 910 | 2.2K | 3K | 4.8K | 9.1K |
|-------|-----|------|-------|------|------|------|
| | 560 | 1K | 2.4K | 3.3K | 5K | 10K |
| | 620 | 1.1K | 2.5K | 3.6K | 5.6K | 11K |
| | 680 | 1.2K | 2.6K | 3.9K | 6K | 12K |
| | 750 | 1.3K | 2.7K | 4K | 7K | 13K |
| | 800 | 1.5K | 2.75K | 4.5K | 8K | 14K |
| | 820 | 1.6K | 2.8K | 4.6K | 8.2K | 15K |
| | 900 | 2K | 2.9K | 4.7K | 9K | |

MULTI-RANGE KIT #55 ASSORTMENT

Complete 10-watt power resistor coverage at your fingertips.

Your stock is always visible. Identification of type, value, etc. shows through the plastic case. You always know what you have, and have what is needed with an IRC Multi-Range Resistor Kit.

Kit gives complete 10-watt coverage of 200 values. Contains 5 Handy-Paks—2 of each Type MR resistor . . . 10 Multi-Range units. Rigid, clear-plastic box with hinged lid. Measures only $5\frac{1}{4}$ " x $3\frac{1}{2}$ " x $1\frac{1}{4}$ ".



NEW

FUSE RESISTOR IRC TYPE FR

New IRC Fuse-Resistor. Modern design in rectangular ceramic shell. Equipped with plug-in terminals. Available in three popular

resistance values. Attractively packaged.

FR5 —Fuse-Resistor 5.0 ohms

FR5.6—Fuse-Resistor 5.6 ohms

FR7.5—Fuse-Resistor 7.5 ohms



IRC DUAL DIODES

New IRC Universal Selenium Dual Diodes for horizontal phase detectors and remote control in TV Receivers. Also used in radio control devices for model planes, and other circuits. Two basic types: (1) common cathode; (2) series diodes. Sealed in plastic housing. Attractively packaged.

D4 (replaces former D1 and D2). Common cathode dual diode to replace the following Mfrs.' Parts: G.E. K115J510-1. -2; Hallicrafter 027-300-226. 27C226; Hoffman 10031, 744002; Motorola 48K741255; Philco 34-8037. -1. -2. -3; Muntz (2) SR-0004. SR-0006.

D5 (replaces former D3). Series connected dual diode to replace the following Mfrs.' Parts: Admiral 93A5-2. 93B5-3. -4. -5; Citizenship Radio 34-8037; Emerson 817062; Magnavox 530945-1, -2; Motorola 48K741752. 48B742698; Silvertone B48-110; Webcor 65P124; Zenith 63-3977.

D6 Common anode dual diode, universal replacement for Mfrs. parts: G.E. 66X1—118J966—2; Motorola 48K751724. Packard Bell 72036; R.C.A. 107628. D7 Common anode six cell dual diode, replacement for Motorola Part No. 48C65831A02.



PRECISION WIRE WOUND RESISTORS



IRC Precision Wire Wound Resistors are designed and manufactured to exacting standards necessary to insure consistent accuracy in critical applications.

The ceramic winding forms have high insulating qualities, high mechanical strength and low coefficient of expansion. Insulation provides greater humidity protection and also contributes to longer trouble-free service.

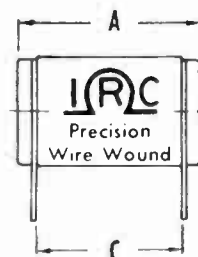
Maximum temperature coefficient of .0027% per degree C is standard on all IRC Precision Wire Wound Resistors at no added cost.

IRC Precision Wire Wound Resistors have either radial lug or radial lead terminal, designed to eliminate any strain on the winding. These terminals offer excellent solderability.



RADIAL LUG TYPE

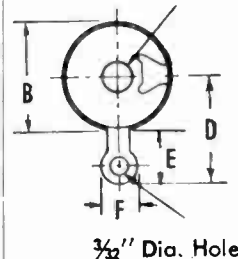
| IRC Type No. | WW2J | WW3J | WW4J | WW5J |
|---------------------|---------|-------|-------|-------|
| Rating in Watts | | | | |
| 65° C. Ambient | 2 | .50 | 1 | 1 |
| Former MIL Rating | 1 | .35 | .50 | .50 |
| Maximum Volts | 2000 | 400 | 700 | 1000 |
| Dimensions (inches) | | | | |
| A Dimension | 2 1/8 | 9/16 | 1 | 1 1/4 |
| B Dimension | 29/32 | 19/32 | 19/32 | 25/32 |
| C Dimension | 1 25/32 | 3/8 | 25/32 | 3 1/2 |
| D Dimension | 25/32 | 5/8 | 5/8 | 23/32 |
| E Dimension | 5/16 | 5/16 | 5/16 | 5/16 |
| F Dimension | 3/16 | 3/16 | 3/16 | 3/16 |



STANDARD STOCK VALUES: 1% Tolerance (Lugs Only)

| Type WW2J | | Type WW3J | | Type WW4J | | Type WW5J | |
|-----------|-------|-----------|------|-----------|-------|-----------|----------|
| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
| 600K | 0.1 | 1,500 | 30K | 0.1 | 2,000 | 40K | 600K |
| 750K | 0.2 | 2,000 | 35K | 0.2 | 2,500 | 50K | 750K |
| 900K | 0.5 | 2,500 | 40K | 0.5 | 3,000 | 60K | 900K |
| 1.0 Meg. | 1.0 | 3,000 | 50K | 1.0 | 3,500 | 75K | 1.0 Meg. |
| 1.5 Meg. | 5 | 3,500 | 60K | 5 | 4,000 | 100K | |
| 2.0 Meg. | 10 | 4,000 | 75K | 10 | 5,000 | 125K | |
| 2.5 Meg. | 25 | 5,000 | 100K | 25 | 7,500 | 150K | |
| | 50 | 7,500 | 125K | 50 | 10K | 175K | |
| | 100 | 10K | 150K | 100 | 12.5K | 200K | |
| | 200 | 12.5K | 175K | 200 | 15K | 225K | |
| | 250 | 15K | 200K | 250 | 20K | 250K | |
| | 300 | 20K | 225K | 300 | 22.5K | 300K | |
| | 500 | 22.5K | | 500 | 25K | 400K | |
| | 1,000 | 25K | | 1,000 | 30K | 500K | |
| | | | | 1,500 | 35K | | |

Clearance Hole for #6-32 Screw



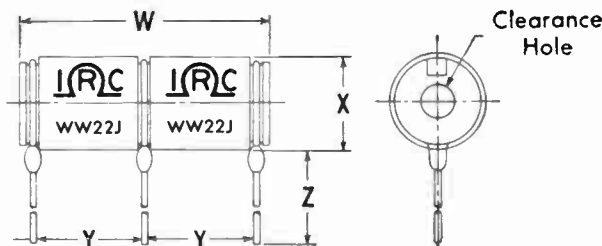
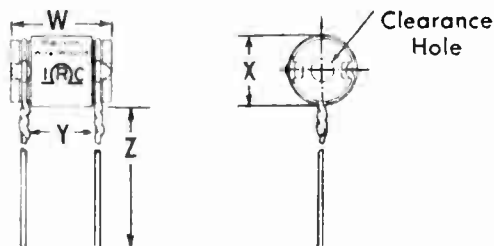
RADIAL LEAD TYPE

| IRC TYPE No. | WW10J |
|-----------------------|----------|
| Rating in Watts | |
| 65° C. Ambient | .25 |
| Former MIL Rating | 15 |
| Maximum Volts | 150 |
| Dimensions | |
| Lead Diameter (AWG) | ±22 |
| W Dimension | 13/32" |
| X Dimension | 9/32" |
| Y Dimension | 9/32" |
| Z Dimension | 2" |
| Clearance hole to fit | ±2 Screw |

*Lengths shown are standard. 2", 3" and 4" also available upon request.

STANDARD STOCK VALUES: 1% Tolerance (Leads Only)

| Type WW10J | | |
|------------|-------|------|
| Ohms | Ohms | Ohms |
| 10 | 2,000 | 20K |
| 25 | 2,500 | 25K |
| 50 | 3,000 | 30K |
| 100 | 3,500 | 40K |
| 200 | 4,000 | 50K |
| 250 | 5,000 | 60K |
| 300 | 7,500 | 75K |
| 500 | 10K | 100K |
| 1,000 | 12.5K | |
| 1,500 | 15K | |



Special non-stock types, tolerances and values available on request.



CLOSE TOLERANCE PRESTISTORS

UNMOLDED DEPOSITED CARBON TYPE DC 1% ACCURACY. 1/2, & 2 WATTS STYLE RN20X, RN25X, RN30X (MIL-R-10509B)

IRC Deposited Carbon Precision Resistors offer a unique combination of close tolerance, stability and economy. Pure crystalline carbon is bonded to selected ceramic cores to produce a resistor ideally suited to the requirements of instrumentation, advanced electronics and critical television circuits.

Deposited Carbon Prestistors provide a combination of characteristics not found in any other resistor type. The wide range of values, accuracy, high stability, low voltage coefficient, excellent frequency characteristics, predictable temperature characteristics, high voltage rating, low noise level and small size of PRESTISTORS make them superior to many popular applications.

IRC Type DC Deposited Carbon Prestistors are available in three sizes: 1/2 watt (body size 3/16" x 3/32"), M-Coat 1 watt (body size 1/16" x 3/32"), and 2 watts (body size 2 1/16" x 3/32"). Accuracy ±1% (25°C).

MOLDED DEPOSITED CARBON TYPE MDC 1% ACCURACY. 1/2 WATT STYLE RN70B (MIL-R-10509C)

IRC's Molded Deposited Carbon Prestistor is a precision film type resistor that incorporates the added advantages of a fully insulated unit. The molded insulation provides improved load life characteristics, better insulation resistance and greater resistance to moisture effects. The Molded Deposited Carbon Prestistor provides all the advantages of the ceramic solder sealed types without the hazards of seal leakage, breakage and low dielectric strength.

Type MDC Molded Deposited Carbon Prestistors are particularly suited for applications where an unmolded deposited carbon unit cannot be used due to the risk of mechanical damage to its coating, insulation breakdown and excessive moisture conditions.

Wattage Rating: 1/2 watt at 70°C. ambient (per MIL-R-10509B) derated to 0 at 165°C. Dimensions: 2 3/32" x 1/4" (body size).

MILITARY VALUES

TYPE DCC—all values from 10 ohms to 2.0 meg.
TYPE DCF—all values from 27.4 ohms to 4.99 meg.

TYPE DCH—all values from 46.4 ohms to 4.99 meg.
Type MDC—all values from 10 ohms to 2.49 meg.

STANDARD STOCK VALUES

TYPE DCC — DEPOSITED CARBON PRESTISTORS — 1/2 WATT — M COAT — 1% TOLERANCE

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|----------|-----------|------|
| 51.1 | 100 | 196 | 383 | 750 | 1470 | 2870 | 5620 | 11K | 21.5K | 42.2K | 82.5K | 162K | 316K | 619K | 1.21 meg. | |
| 56.2 | 110 | 215 | 422 | 825 | 1620 | 3160 | 6190 | 12.1K | 23.7K | 46.4K | 90.9K | 178K | 348K | 681K | 1.33 meg. | |
| 61.9 | 121 | 237 | 464 | 909 | 1780 | 3480 | 6810 | 13.3K | 26.1K | 51.1K | 100K | 196K | 383K | 750K | 1.47 meg. | |
| 68.1 | 133 | 261 | 511 | 1000 | 1960 | 3830 | 7500 | 14.7K | 28.7K | 56.2K | 110K | 215K | 422K | 825K | 1.62 meg. | |
| 75.0 | 147 | 287 | 562 | 1100 | 2150 | 4220 | 8250 | 16.2K | 31.6K | 61.9K | 121K | 237K | 464K | 909K | 1.78 meg. | |
| 90.9 | 162 | 316 | 619 | 1210 | 2370 | 4640 | 9090 | 17.8K | 34.8K | 68.1K | 133K | 261K | 511K | 1.0 meg. | 1.96 meg. | |
| | 178 | 348 | 681 | 1330 | 2610 | 5110 | 10K | 19.6K | 38.3K | 75.0K | 147K | 287K | 562K | 1.1 meg. | | |

TYPE DCF — DEPOSITED CARBON PRESTISTORS — 1 WATT — 1% TOLERANCE

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|-------|-------|-------|------|------|------|-----------|-----------|-----------|------|-----------|
| 100 | 215 | 464 | 1000 | 2150 | 4640 | 10K | 21.5K | 46.4K | 100K | 215K | 464K | 1.0 meg. | 2.15 meg. | 4.64 meg. | | |
| 110 | 237 | 511 | 1100 | 2370 | 5110 | 11K | 23.7K | 51.1K | 110K | 237K | 511K | 1.1 meg. | 2.37 meg. | 5.11 meg. | | |
| 121 | 261 | 562 | 1210 | 2610 | 5620 | 12.1K | 26.1K | 56.2K | 121K | 261K | 562K | 1.21 meg. | 2.61 meg. | 5.62 meg. | | |
| 133 | 287 | 619 | 1330 | 2870 | 6190 | 13.3K | 28.7K | 61.9K | 133K | 287K | 619K | 1.33 meg. | 2.87 meg. | 6.19 meg. | | |
| 147 | 316 | 681 | 1470 | 3160 | 6810 | 14.7K | 31.6K | 68.1K | 147K | 316K | 681K | 1.47 meg. | 3.16 meg. | 6.81 meg. | | |
| 162 | 348 | 750 | 1620 | 3480 | 7500 | 16.2K | 34.8K | 75.0K | 162K | 348K | 750K | 1.62 meg. | 3.48 meg. | 7.50 meg. | | |
| 178 | 383 | 825 | 1780 | 3830 | 8250 | 17.8K | 38.3K | 82.5K | 178K | 383K | 825K | 1.78 meg. | 3.83 meg. | 8.25 meg. | | |
| 196 | 422 | 909 | 1960 | 4220 | 9090 | 19.6K | 42.2K | 90.9K | 196K | 422K | 909K | 1.96 meg. | 4.22 meg. | 9.09 meg. | | 10.0 meg. |

TYPE DCH — DEPOSITED CARBON PRESTISTORS — 2 WATTS — 1% TOLERANCE

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|-------|-------|-------|------|-----------|-----------|-----------|------|------|------|------|------|------|------|
| 196 | 619 | 1960 | 6190 | 19.6K | 61.9K | 196K | 619K | 1.96 meg. | 6.19 meg. | | | | | | | |
| 215 | 681 | 2150 | 6810 | 21.5K | 68.1K | 215K | 681K | 2.15 meg. | 6.81 meg. | | | | | | | |
| 237 | 750 | 2370 | 7500 | 23.7K | 75.0K | 237K | 750K | 2.37 meg. | 7.50 meg. | | | | | | | |
| 261 | 825 | 2610 | 8250 | 26.1K | 82.5K | 261K | 825K | 2.61 meg. | 8.25 meg. | | | | | | | |
| 287 | 909 | 2870 | 9090 | 28.7K | 90.9K | 287K | 909K | 2.87 meg. | 9.09 meg. | | | | | | | |
| 316 | 1000 | 3160 | 10K | 31.6K | 100K | 316K | 1.0 meg. | 3.16 meg. | 10.0 meg. | | | | | | | |
| 348 | 1100 | 3480 | 11K | 34.8K | 110K | 348K | 1.1 meg. | 3.48 meg. | | | | | | | | |
| 383 | 1210 | 3830 | 12.1K | 38.3K | 121K | 383K | 1.21 meg. | 3.83 meg. | | | | | | | | |
| 422 | 1330 | 4220 | 13.3K | 42.2K | 133K | 422K | 1.33 meg. | 4.22 meg. | | | | | | | | |
| 464 | 1470 | 4640 | 14.7K | 46.4K | 147K | 464K | 1.47 meg. | 4.64 meg. | | | | | | | | |
| 511 | 1620 | 5110 | 16.2K | 51.1K | 162K | 511K | 1.62 meg. | 5.11 meg. | | | | | | | | |
| 562 | 1780 | 5620 | 17.8K | 56.2K | 178K | 562K | 1.78 meg. | 5.62 meg. | | | | | | | | |

TYPE MDC — MOLDED DEPOSITED CARBON PRESTISTORS — 1/2 WATT — 1% TOLERANCE

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|------|-----------|-----------|------|
| 100 | 191 | 365 | 698 | 1330 | 2550 | 4870 | 9090 | 17.4K | 33.2K | 63.4K | 121K | 232K | 442K | 845K | 1.62 meg. | |
| 102 | 196 | 374 | 715 | 1370 | 2610 | 4990 | 9310 | 17.8K | 34.0K | 64.9K | 124K | 237K | 453K | 866K | 1.65 meg. | |
| 105 | 200 | 383 | 732 | 1400 | 2670 | 5110 | 9530 | 18.2K | 34.8K | 66.5K | 127K | 243K | 464K | 887K | 1.69 meg. | |
| 107 | 205 | 392 | 750 | 1430 | 2740 | 5230 | 9760 | 18.7K | 35.7K | 68.1K | 130K | 249K | 475K | 909K | 1.74 meg. | |
| 110 | 210 | 402 | 768 | 1470 | 2800 | 5360 | 10.0K | 19.1K | 36.5K | 69.8K | 133K | 255K | 487K | 931K | 1.78 meg. | |
| 113 | 215 | 412 | 787 | 1500 | 2870 | 5490 | 10.2K | 19.6K | 37.4K | 71.5K | 137K | 261K | 499K | 953K | 1.82 meg. | |
| 115 | 221 | 422 | 806 | 1540 | 2940 | 5620 | 10.5K | 20.0K | 38.3K | 73.2K | 140K | 267K | 511K | 976K | 1.87 meg. | |
| 118 | 226 | 432 | 825 | 1580 | 3010 | 5760 | 10.7K | 20.5K | 39.2K | 75.0K | 143K | 274K | 523K | 1.00 meg. | 1.91 meg. | |
| 121 | 232 | 442 | 845 | 1620 | 3090 | 5900 | 11.0K | 21.0K | 40.2K | 76.8K | 147K | 280K | 536K | 1.02 meg. | 1.96 meg. | |
| 124 | 237 | 453 | 866 | 1650 | 3160 | 6040 | 11.3K | 21.5K | 41.2K | 78.7K | 150K | 287K | 549K | 1.05 meg. | 2.00 meg. | |
| 127 | 243 | 464 | 887 | 1690 | 3240 | 6190 | 11.5K | 22.1K | 42.2K | 80.6K | 154K | 294K | 562K | 1.07 meg. | 2.05 meg. | |
| 130 | 249 | 475 | 909 | 1740 | 3320 | 6340 | 11.8K | 22.6K | 43.2K | 82.5K | 158K | 301K | 576K | 1.10 meg. | 2.10 meg. | |
| 133 | 255 | 487 | 931 | 1780 | 3400 | 6490 | 12.1K | 23.2K | 44.2K | 84.5K | 162K | 309K | 590K | 1.13 meg. | 2.15 meg. | |
| 137 | 261 | 499 | 953 | 1820 | 3480 | 6650 | 12.4K | 23.7K | 45.3K | 86.6K | 165K | 316K | 604K | 1.15 meg. | 2.21 meg. | |
| 140 | 267 | 511 | 976 | 1870 | 3570 | 6810 | 12.7K | 24.3K | 46.4K | 88.7K | 169K | 324K | 619K | 1.18 meg. | 2.26 meg. | |
| 143 | 274 | 523 | 1000 | 1910 | 3650 | 6980 | 13.0K | 24.9K | 47.5K | 90.9K | 174K | 332K | 634K | 1.21 meg. | 2.32 meg. | |
| 147 | 280 | 536 | 1020 | 1960 | 3740 | 7150 | 13.3K | 25.5K | 48.7K | 93.1K | 178K | 340K | 649K | 1.24 meg. | 2.37 meg. | |
| 150 | 287 | 549 | 1050 | 2000 | 3830 | 7320 | 13.7K | 26.1K | 49.9K | 95.3K | 182K | 348K | 665K | 1.27 meg. | 2.43 meg. | |
| 154 | 294 | 562 | 1070 | 2050 | 3920 | 7500 | 14.0K | 26.7K | 51.1K | 97.6K | 187K | 357K | 681K | 1.30 meg. | 2.49 meg. | |
| 158 | 301 | 576 | 1100 | 2100 | 4020 | 7680 | 14.3K | 27.4K | 52.3K | 100K | 191K | 365K | 698K | 1.33 meg. | | |
| 162 | 309 | 590 | 1130 | 2150 | 4120 | 7870 | 14.7K | 28.0K | 53.6K | 102K | 196K | 374K | 715K | 1.37 meg. | | |
| 165 | 316 | 604 | 1150 | 2210 | 4220 | 8060 | 15.0K | 28.7K | 54.9K | 105K | 200K | 383K | 732K | 1.40 meg. | | |
| 169 | 324 | 619 | 1180 | 2260 | 4320 | 8250 | 15.4K | 29.4K | 56.2K | 107K | 205K | 392K | 750K | 1.43 meg. | | |
| 174 | 332 | 634 | 1210 | 2320 | 4420 | 8450 | 15.8K | 30.1K | 57.6K | 110K | 210K | 402K | 768K | 1.47 meg. | | |
| 178 | 340 | 649 | 1240 | 2370 | 4530 | 8650 | 16.2K | 30.9K | 59.0K | 113K | 215K | 412K | 787K | 1.50 meg. | | |
| 182 | 348 | 665 | 1270 | 2430 | 4640 | 8860 | 16.5K | 31.6K | 60.4K | 115K | 221K | 422K | 806K | 1.54 meg. | | |
| 187 | 357 | 681 | 1300 | 2490 | 4750 | 9070 | 16.9K | 32.4K | 61.9K | 118K | 226K | 432K | 825K | 1.58 meg. | | |



INDUSTRIAL CONTROLS

IRC Distributor Controls for Industry offer commercial users a wide selection of resistance values and two industrial shaft types. Shafts are fixed. This combination of wide selection of values and speedy Distributor delivery holds many advantages for industrial purchasers. These Industrial Controls are adaptations of the new, compact $\frac{1}{8}$ " Q Control. Power rating is $\frac{1}{2}$ watt, 500 volts maximum. Electrical rotation is the same with or without switch. $\frac{3}{8}$ " bushing is brass and held to close tolerance for snug shaft fit.

Terminals are heavily tinned for easy soldering, and may be bent without becoming noisy. Two locating lugs are provided, either or both of which may be bent down if not needed. Molded base. Both Types PQ and RQ are supplied in standard tapers.

SINGLE CONTROLS



TYPE PQ

TYPE PQ. Full round $\frac{1}{4}$ " shaft, approximately 3" from mounting face, with $\frac{3}{8}$ " long bushing. Available in 33 stock values as shown. Regular IRC stock numbers are used with prefix PQ.

TYPE RQ. Very short screw-driver slot shaft, $\frac{1}{4}$ " diameter and approximately $\frac{1}{2}$ " long from mounting face with $\frac{3}{8}$ " long bushing. Available in 33 values as shown. Regular IRC stock numbers are used with prefix RQ.



TYPE RQ



TYPE RQL

TYPE RQL. IRC's new line of 10% tolerance Locking Type Bushing Controls. Screw-driver slot shaft $\frac{1}{4}$ " diameter and approximately $\frac{1}{2}$ " long from mounting face, with a $\frac{3}{8}$ " split type bushing, and locking nut.

2 WATT INDUSTRIAL COMPOSITION MILITARY GRADE VARIABLE RESISTOR



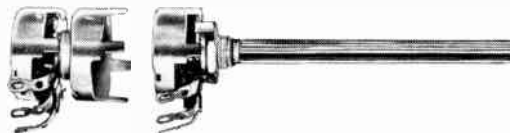
| Resistance | Resistance |
|------------------|-------------------|
| 100 \pm 10% | 50,000 \pm 10% |
| 250 \pm 10% | 100,000 \pm 10% |
| 500 \pm 10% | 250,000 \pm 10% |
| 1,000 \pm 10% | 500,000 \pm 10% |
| 2,500 \pm 10% | 1.0 Meg \pm 20% |
| 5,000 \pm 10% | 2.5 Meg \pm 20% |
| 10,000 \pm 10% | 5.0 Meg \pm 20% |
| 25,000 \pm 10% | |



MULTISECTIONS

IRC MULTISECTIONS are complete control sections that can be added like a switch to any Q, PQ, RQ or RQL Control. With these units, the Radio Technician or Engineer is provided with an endless variety of dual, triple or even quadruple controls.

Duals assembled from IRC MULTISECTIONS will accommodate Type 76 switches. Available in a selection of 25 values, as shown in following table. Each MULTISECTION adds $\frac{1}{8}$ " to basic control.



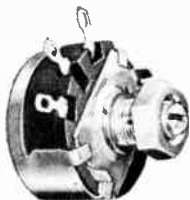
DUALS AND TRIPLES

IRC Type PQ, RQ and RQL Industrial Controls are supplied as single controls. Dual Control and Triple Control combinations are available by adding IRC MULTISECTIONS.



TYPE WP

Constructed with $\frac{3}{8}$ -32 x $\frac{3}{8}$ " bushing and $\frac{1}{4}$ " diameter, full round shaft 3" long from mounting face.



TYPE WPRL

A new line of IRC distributor industrial controls with short screw-driver slot shaft $\frac{1}{4}$ " diameter and approximately $\frac{1}{2}$ " long from mounting face, with $\frac{3}{8}$ " locking type bushing and locking nut, 10% resistance tolerance. Linear taper.

STOCK VALUES OF TYPES PQ, RQ, RQL CONTROLS AND MULTISECTIONS

| OHMS | TAPER | TYPE PQ | TYPE RQ | TYPE RQL | MULTISECTIONS |
|-----------|-------|----------|----------|-----------|---------------|
| 500 | A | PQ11-103 | RQ11-103 | RQL11-103 | M11-103 |
| 1,000 | A | PQ11-108 | RQ11-108 | RQL11-108 | M11-108 |
| 2,000 | A | PQ11-110 | RQ11-110 | RQL11-110 | M11-110 |
| 3,000 | A | PQ11-112 | RQ11-112 | RQL11-112 | M11-112 |
| 5,000 | A | PQ11-114 | RQ11-114 | RQL11-114 | M11-114 |
| 7,500 | A | PQ11-115 | RQ11-115 | — | — |
| 10K | A | PQ11-116 | RQ11-116 | RQL11-116 | M11-116 |
| 10K | C | PQ13-116 | RQ13-116 | — | — |
| 10K | D | PQ14-116 | RQ14-116 | — | — |
| 10K | Q | — | — | — | M17-116 |
| 20K | A | PQ11-119 | RQ11-119 | RQL11-119 | — |
| 25K | A | PQ11-120 | RQ11-120 | RQL11-120 | M11-120 |
| 25K | D | PQ14-120 | RQ14-120 | — | — |
| 30K | A | PQ11-121 | RQ11-121 | RQL11-121 | M11-121 |
| 50K | A | PQ11-123 | RQ11-123 | RQL11-123 | M11-123 |
| 50K | C | PQ13-123 | RQ13-123 | RQL13-123 | — |
| 50K | D | PQ14-123 | RQ14-123 | — | — |
| 100K | A | PQ11-128 | RQ11-128 | RQL11-128 | M11-128 |
| 100K | C | PQ13-128 | RQ13-128 | — | M13-128 |
| 200K | A | PQ11-129 | RQ11-129 | RQL11-129 | — |
| 250K | A | PQ11-130 | RQ11-130 | RQL11-130 | M11-130 |
| 250K | C | PQ13-130 | RQ13-130 | RQL13-130 | M13-130 |
| 500K | A | PQ11-133 | RQ11-133 | RQL11-133 | M11-133 |
| 500K | C | PQ13-133 | RQ13-133 | RQL13-133 | M13-133 |
| 1.0 Meg. | A | PQ11-137 | RQ11-137 | RQL11-137 | M11-137 |
| 1.0 Meg. | C | PQ13-137 | RQ13-137 | RQL13-137 | M13-137 |
| 1.5 Meg. | A | PQ11-138 | RQ11-138 | RQL11-138 | — |
| 1.5 Meg. | C | — | — | — | M13-138 |
| 2.0 Meg. | A | PQ11-139 | RQ11-139 | RQL11-139 | M11-139 |
| 2.0 Meg. | C | PQ13-139 | RQ13-139 | RQL13-139 | M13-139 |
| 2.5 Meg. | A | PQ11-239 | RQ11-239 | RQL11-239 | — |
| 3.0 Meg. | A | PQ11-140 | RQ11-140 | RQL11-140 | — |
| 3.0 Meg. | C | PQ13-140 | RQ13-140 | — | M13-140 |
| 3.0 Meg. | Q | — | — | — | M17-140 |
| 5.0 Meg. | A | PQ11-141 | RQ11-141 | RQL11-141 | M11-141 |
| 10.0 Meg. | A | PQ11-143 | RQ11-143 | RQL11-143 | M11-143 |

STOCK VALUES OF TYPE WP AND WPRL CONTROLS AND MULTISECTIONS

| Ohms | Taper | *MAX. Current in Amps | Type WP | Type WPRL | Multisections |
|--------|----------|-----------------------|---------|-----------|---------------|
| 2 | U (Lin.) | 1.414 | WP2 | WPRL2 | — |
| 3 | U | 1.152 | WP3 | WPRL3 | — |
| 5 | U | .895 | WP5 | WPRL5 | — |
| 6 | U | .817 | WP6 | WPRL6 | — |
| 8 | U | .707 | WP8 | WPRL8 | — |
| 10 | U | .632 | WP10 | WPRL10 | — |
| 15 | U | .517 | WP15 | WPRL15 | — |
| 20 | U | .447 | WP20 | WPRL20 | — |
| 25 | U | .400 | WP25 | WPRL25 | — |
| 30 | U | .365 | WP30 | WPRL30 | — |
| 40 | U | .316 | WP40 | WPRL40 | — |
| 50 | U | .282 | WP50 | WPRL50 | WM50 |
| 60 | U | .258 | WP60 | — | — |
| 75 | U | .231 | WP75 | WPRL75 | — |
| 100 | U | .200 | WP100 | WPRL100 | WM100 |
| 200 | U | .141 | WP200 | WPRL200 | WM200 |
| 250 | U | .126 | WP250 | WPRL250 | WM250 |
| 300 | U | .115 | WP300 | WPRL300 | — |
| 400 | U | .100 | WP400 | WPRL400 | — |
| 500 | U | .090 | WP500 | WPRL500 | WM500 |
| 750 | U | .075 | WP750 | WPRL750 | — |
| 1,000 | U | .063 | WP1000 | WPRL1000 | WM1000 |
| 1,500 | U | .052 | WP1500 | WPRL1500 | WM1500 |
| 2,000 | U | .045 | WP2000 | WPRL2000 | WM2000 |
| 2,500 | U | .040 | WP2500 | WPRL2500 | WM2500 |
| 3,000 | U | .036 | WP3000 | WPRL3000 | WM3000 |
| 4,000 | U | .031 | WP4000 | WPRL4000 | — |
| 5,000 | U | .028 | WP5000 | WPRL5000 | WM5000 |
| 7,500 | U | .023 | WP7500 | WPRL7500 | — |
| 7,500 | L | .016 | — | — | WM7500L |
| 10,000 | U | .020 | WP10000 | WPRL10000 | WM10000 |
| 15,000 | U | .0163 | WP15000 | WPRL15000 | — |
| 20,000 | U | .014 | WP20000 | WPRL20000 | — |
| 25,000 | U | .0126 | WP25000 | WPRL25000 | — |
| 30,000 | U | .0115 | WP30000 | WPRL30000 | — |
| 40,000 | U | .010 | WP40000 | WPRL40000 | — |
| 50,000 | U | .0089 | WP50000 | WPRL50000 | — |

* Maximum current is given for a single control operating at an ambient temperature of 10°C and mounted on a metal chassis. Multiple controls must be so derated that hot spot temperature (ambient plus temperature rise) will not exceed 110°C on any winding.



PRINTED CIRCUIT REPLACEMENT CONTROL KIT

For the First Time... **A LOW COST**

PRINTED CIRCUIT CONTROL KIT

PLUS SNAPTRON SELECTION SYSTEM

CONVENIENCE



Only IRC offers printed circuit control coverage in fast-selling kit form. Handsome 6-drawer stock cabinet of high impact plastic is included free to servicemen.

Ebony-black cabinet has an area for Distributor identification to build repeat sales.

Assortment No. 82 illustrated provides coverage of 175 manufacturers' model numbers, and 52 parts numbers. All major trade names are included.

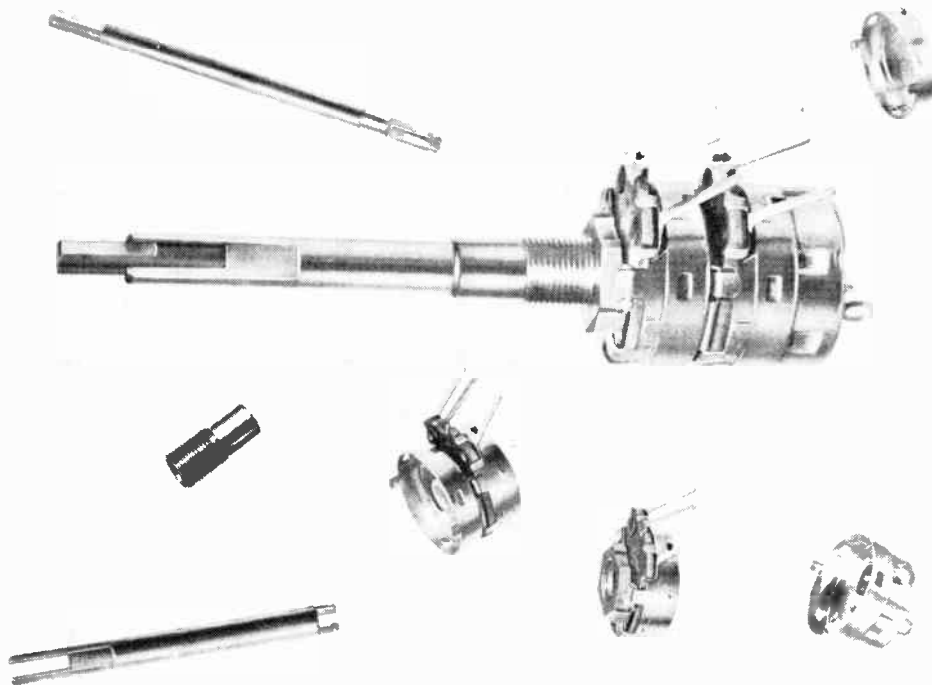
IRC-CTS SNAPTRON SECTION SYSTEM PRINTED CIRCUIT CONTROL KIT CONTENTS

- 8 Type BU-12 printed circuit brackets, with nuts
- 3 Type CF-25 Snaptron front sections, 500K
- 3 Type CF-26 Snaptron front sections, 1.0 meg.
- 2 Type CF-27 Snaptron front sections, 2.0 meg.
- 6 Type GC rotary power switches, S.P.S.T.
- 8 Type SSI Knobmaster shafts
- 6 Type DC 1 dust covers
- 1 Instruction sheet



SNAPTROL REPLACEMENT CONTROL SYSTEM

SNAPTROL PROVIDES VERSATILITY AND EASE OF ASSEMBLY



EASY TO USE. Parts assemble into exact duplicate control in 15 to 30 seconds. Sections completely factory assembled. No shaft cutting or modification needed.

GREATER VERSATILITY. SNAPTROL provides new and unique designs which provide for better utility and adaptability of component parts:

1—Interchangeable Control Mountings. $\frac{3}{8}$ " , $\frac{7}{16}$ " and $\frac{1}{2}$ " diameter bushings or varying lengths and bores, quickly thread into front control sections. Accommodates thick panel requirements without extra bushing or adjuster. Specially designed tab mounting plates or printed circuit brackets easily attached in place of bushings. This exclusive new design feature reduces the number of front sections needed and extends their use in a greater variety of replacement needs.

2—Printed Circuit Terminals. All control sections are equipped with terminals that will handle both conventional and printed circuit wiring. This exclusive CTS-IRC terminal design doubles the adaptability of control sections.

3—Rotary or Pull-Push Power Switches. Either type of power switch snaps onto rear section in field. Another exclusive CTS-IRC design feature which very considerably increases the utility of control components. Three different rotary power switches snap onto front sections for single control needs!

4—Uniform Diameter Rear Section Shafts. New design of rear section (inner) shafts provide uniform diameter—permits use of heavy-walled front section (outer) shaft contributing better concentric shaft operation and superior knob retention. Simple compression type adapter fits rear section shaft to knobs normally requiring larger diameter. No drilling or modification of knobs needed. Shafts are flatted or slotted as required—no shaft insert or fine needed! This new design reduces the number of exact length shafts required for broad replacement coverage.

5—Front Sections Serve for Single Controls. Without modification or adapters, all SNAPTROL front sections may be used for single control replacements. Provides practical use of single front section for special bushings, tab mountings, printed circuits, special shaft needs and a variety of power switches. No other section-type control system provides such broad versatility.

FEWER COMPONENTS PARTS. Because of the realistic design features provided, SNAPTROL requires far fewer items of components than any other section-type exact duplicate control system which offers so broad a replacement coverage. (Nearly 1000 exact duplicate concentric dual controls and many thousands of single controls.)

BEST SELLING CONTROLS. SNAPTROL is a special replacement design of the world's most frequently specified and most widely sold CTS Series 45 control. Over 300,000,000 in current use—a strong testimony to the quality and performance of these outstanding controls.



RADIO-TV TECHNICIANS' TYPE Q VOLUME CONTROLS



IIRC's Type Q Control is the basic control for servicing all sets. It is carefully engineered to meet most replacement requirements with a minimum stock. The quality appearance and "cushioned turn" of the Q Control assure customer satisfaction, easier installation and dependable performance provide more profitable servicing.

KNOB MASTER STANDARD FIXED SHAFT

Standard shaft is knurled, flatted and slotted and fits most knobs without alteration. For knurled or spring type push-on knobs, cut to length. For over-size, worn or web type knobs, split shaft slot lengthwise and spread ends. For positioned knobs, bend down control locating pins and rotate control base for correct knob position.

1/4" LONG BUSHING

Shorter bushing and compact 15/16" design suit Q Controls to all small sets, yet handle large set needs as well.

| Ohms | Taps | Type Q Control | Type Q Base-Element | Taper | Ohms | Taps | Type Q Control | Base-Element | Taper |
|------|------------|-------------------|------------------------|-------|-----------|---------------|-------------------|--------------|-------|
| 250 | — | Q11-201 | B11-201 | A | 250K | 60K & 12K | Q18-130XX | B18-130XX | S |
| 500 | — | Q11-103 | B11-103 | A | 300K | — | Q11-131 | B11-131 | A |
| 750 | — | Q11-105 | B11-105 | A | 350K | — | Q11-132 | B11-132 | A |
| 750 | — | Q17-105 | B17-105 | P | 350K | — | Q13-132 | B13-132 | C |
| 750 | 250 | Q17-105X | B17-105X | S | 350K | 35K | Q17-132X | B17-132X | S |
| 1000 | — | Q11-108 | B11-108 | A | 350K | 75K | Q18-132X | B18-132X | H |
| 1000 | — | Q17-108 | B17-108 | P | 500K | — | Q11-133 | B11-133 | A |
| 1500 | — | Q11-109 | B11-109 | A | 500K | — | Q13-133 | B13-133 | C |
| 1500 | — | Q17-109 | B17-109 | Q | 500K | — | Q14-133 | B14-133 | D |
| 2000 | — | Q11-110 | B11-110 | A | 500K | — | Q17-133 | B17-133 | Q |
| 2000 | — | Q17-110 | B17-110 | Q | 500K | 25K | Q17-133X | B17-133X | S |
| 2000 | 250 & 500 | Q17-110XX | B17-110XX | S | 500K | 50K | Q18-133X | B18-133X | S |
| 2500 | — | Q13-111 | B13-111 | C | 500K | 125K | Q13-133X | B13-133X | H |
| 2500 | — | Q17-111 | B17-111 | Q | 500K | 250K | Q19-133X | B19-133X | S |
| 3000 | — | Q11-112 | B11-112 | A | 500K | 100K & 200K | Q18-133XX | B18-133XX | S |
| 3000 | — | Q17-112 | B17-112 | Q | 600K | — | Q11-134 | B11-134 | A |
| 5000 | — | Q11-114 | B11-114 | A | 750K | — | Q11-136 | B11-136 | A |
| 5000 | — | Q13-114 | B13-114 | C | 1.0 Meg. | — | Q11-137 | B11-137 | A |
| 5000 | — | Q17-114 | B17-114 | Q | 1.0 Meg. | — | Q13-137 | B13-137 | C |
| 7500 | — | Q11-115 | B11-115 | A | 1.0 Meg. | — | Q14-137 | B14-137 | D |
| 10K | — | Q11-116 | B11-116 | A | 1.0 Meg. | — | Q17-137 | B17-137 | Q |
| 10K | — | Q13-116 | B13-116 | C | 1.0 Meg. | 35K | Q17-137X | B17-137X | S |
| 10K | — | Q14-116 | B14-116 | D | 1.0 Meg. | 100K | Q18-137X | B18-137X | S |
| 10K | — | Q17-116 | B17-116 | Q | 1.0 Meg. | 250K | Q13-137X | B13-137X | H |
| 15K | 10K | Q13-118X | B13-118X | S | 1.0 Meg. | 500K | Q19-137X | B19-137X | S |
| 15K | 5000 & 10K | Q13-118XX | B13-118XX | S | 1.0 Meg. | 500K & 100K | QVC-539X | BVC-539X | S |
| 15K | 5000 | Q17-118X | B17-118X | S | 1.0 Meg. | 50K & 100K | Q17-137XX | B17-137XX | S |
| 15K | 5000 & 10K | Q17-118XX | B17-118XX | S | 1.0 Meg. | 250K & 500K | Q18-137XX | B18-137XX | S |
| 20K | — | Q11-119 | B11-119 | A | 1.5 Meg. | — | Q11-138 | B11-138 | A |
| 20K | — | Q16-119 | B16-119 | S | 1.5 Meg. | 250K | Q13-138X | B13-138X | S |
| 25K | — | Q11-120 | B11-120 | A | 2.0 Meg. | — | Q11-139 | B11-139 | A |
| 25K | — | Q13-120 | B13-120 | C | 2.0 Meg. | — | Q13-139 | B13-139 | C |
| 25K | — | Q14-120 | B14-120 | D | 2.0 Meg. | — | Q17-139 | B17-139 | Q |
| 30K | — | Q11-121 | B11-121 | A | 2.0 Meg. | 50K | Q19-139X | B19-139X | S |
| 35K | — | Q11-122 | B11-122 | A | 2.0 Meg. | 150K | Q17-139X | B17-139X | S |
| 50K | — | Q11-123 | B11-123 | A | 2.0 Meg. | 500K | Q13-139X | B13-139X | H |
| 50K | — | Q13-123 | B13-123 | C | 2.0 Meg. | 1.0 Meg. | Q18-139X | B18-139X | S |
| 50K | — | Q14-123 | B14-123 | D | 2.0 Meg. | 250K & 500K | Q18-139XX | B18-139XX | S |
| 75K | — | Q11-125 | B11-125 | A | 2.0 Meg. | 500K & 1 Meg. | Q13-139XX | B13-139XX | S |
| 100K | — | Q11-128 | B11-128 | A | 2.5 Meg. | — | Q11-239 | B11-239 | A |
| 100K | — | Q13-128 | B13-128 | C | 3.0 Meg. | — | Q11-140 | B11-140 | A |
| 125K | — | Q11-228 | B11-228 | A | 3.0 Meg. | — | Q13-140 | B13-140 | C |
| 150K | — | Q11-328 | B11-328 | A | 3.0 Meg. | — | Q17-140 | B17-140 | Q |
| 150K | — | Q13-328 | B13-328 | C | 3.0 Meg. | 900K | Q13-140X | B13-140X | S |
| 150K | 19K & 38K | Q17-328XX | B17-328XX | S | 3.0 Meg. | 1.5 Meg. | Q18-140X | B18-140X | S |
| 200K | — | Q11-129 | B11-129 | A | 5.0 Meg. | — | Q11-141 | B11-141 | A |
| 250K | — | Q11-130 | B11-130 | A | 5.0 Meg. | — | Q12-141 | B12-141 | S |
| 250K | — | Q13-130 | B13-130 | C | 5.0 Meg. | — | Q13-141 | B13-141 | C |
| 250K | 60K | Q18-130X | B18-130X | H | 5.0 Meg. | — | Q17-141 | B17-141 | Q |
| 250K | 125K | Q13-130X | B13-130X | S | 7.5 Meg. | — | Q11-142 | B11-142 | A |
| | | | | | 10.0 Meg. | — | Q11-143 | B11-143 | A |



Q CONTROL ACCESSORIES

ASSEMBLE YOUR OWN STANDARD OR SPECIAL IRC Q CONTROLS

For those who would like to use their IRC Base-Element stock for assembly of standard controls, the component parts are available. Plain Q Control assemblies with 1-Base-Element, 1-Interchangeable Fixed Shaft, 1-QCB Bushing and 1-QCC Cover. Switch type Q control assemblies with 1-Base-Element, 1-Interchangeable Fixed Shaft, 1-QCB Bushing and 1 of either 76-1 or 76-2 Switch.



IRC VOLUME CONTROL GROUNDING LUG—Same as supplied with IRC Type Q Controls. Fits $\frac{3}{8}$ " bushing. Lug length from hole center— $1\frac{3}{16}$ ". Type QCL Grounding Lug. Pkg. of 5.



QCC-COVER—For plain or tapped controls. Pkg. of 5.



STANDARD Q CONTROL LOCKNUT—Hex nut for $\frac{3}{8}$ -32 thread, $9\frac{1}{16}$ " across flats. Type QCN. Pkg. of 10.



New SK1 (QPK) Kit assembles above standard Q control parts with IRC base elements. Contents: AQ Knob Master Shaft, QCB Ground Plate Bushing, QCC Universal Cover, R-1 Resilient Retainer Ring, QCN Mounting Nut.

QCB-BUSHING — $\frac{3}{8}$ -32 thread, $\frac{1}{4}$ " long. Pkg. of 5.

Q CONTROL PARTS KIT

Package of parts for assembly of specific Q Control types. Includes shaft, bushing and cover. Add desired Base-Element.

SK1 Formerly QPK, Includes AQ shaft for Q Control assembly.

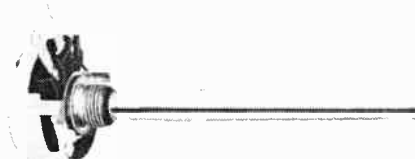
SK2 Includes RQ shaft for RQ Control assembly.

SK3 Includes SQ shaft for SQ Control assembly.

SK7—Knob Master Shaft Kit for Pull-Push Switch Assembly

SK8—Same as SK7 except shaft is similar to NQ shaft with $3\frac{1}{2}$ " A dimension

SINGLE Q CONTROL



IRC TAB-MOUNT KITS

Since assembly of Tab-Mount Controls is so simple, IRC supplies four 3-Part Tab-Mount Kits which will assemble with any standard plain or tapped IRC Base-Element to provide satisfactory Tab-Mount Controls. Each TM Kit includes a Tab-type Ground Plate, a control cover and a finger-knurled and screw-driver slotted shaft of appropriate length for universal replacement. Packaged with instruction sheet but without necessary Base-Element.

TM-3—IRC Tab-Mount Kit—Shaft 1" long.

TM-4—IRC Tab-Mount Kit—Shaft $1\frac{1}{2}$ " long.

TM-1—IRC Tab-Mount Kit—Shaft $\frac{1}{4}$ " long.

TM-2—IRC Tab-Mount Kit—Shaft $\frac{3}{4}$ " long.

$\frac{1}{4}$ " diameter Knob-Master Shaft $\frac{3}{8}$ " diameter shaft flatted and slotted

| Ohms | Stock No. | Ohms | Stock No. |
|----------|---------------|----------|---------------|
| 500 | PPQ 11-103-7 | 1.0 Meg. | PPQ 11-137-8 |
| 200K | PPQ 11-129-7 | 1.0 Meg. | PPQ 13-137-8 |
| 1.0 Meg. | PPQ 11-137-7 | 2.0 Meg. | PPQ 13-139-8 |
| 250K | PPQ 13-130-7 | 500K | PPQ 19-133X-8 |
| 500K | PPQ 13-133-7 | 1.0 Meg. | PPQ 13-137X-8 |
| 1.0 Meg. | PPQ 13-137-7 | 1.0 Meg. | PPQ 18-137X-8 |
| 1.0 Meg. | PPQ 13-137X-7 | 1.0 Meg. | PPQ 19-137X-8 |
| 2.0 Meg. | PPQ 18-139X-7 | 2.0 Meg. | PPQ 18-139X-8 |
| 3.0 Meg. | | 3.0 Meg. | PPQ 18-140X-8 |

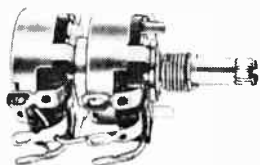
Can be also made up from Base Element and SK7 Parts Kit.

Can be also made up from Base Element and SK8 Parts Kit.

SWITCHES FOR TYPE Q CONTROLS

Easy attached power switches for Type Q Controls. Attractively finished to match control.
 76-1—Single pole, single throw.
 76-2—Double pole, single throw
 76-4—Single pole, double throw or Make one - Break one Spot Killer Switch

SPECIAL PURPOSE CONTROLS



**Type QJ-3
TV ATTENUATOR**

- Reduces overloading effects on TV sets in strong signal areas.
- Diminishes interstation interference caused by nearby or powerful stations.
- Minimizes buzz due to high signal level in intercarrier systems.
- Permits easy adjustment of signal RIGHT AT SET.
- Frequently prevents mismatch of antenna load to set.

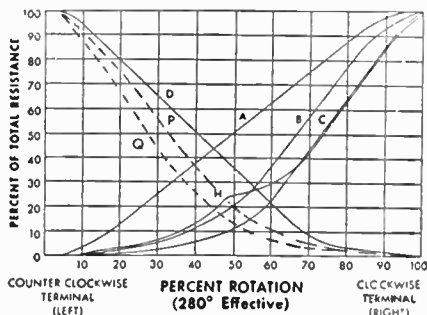
IRC's QJ-3 TV Attenuator permits ready adjustment of signal input to TV sets. In most cases, it corrects or substantially reduces such conditions as:—Adjacent channel interference, background picture on weaker stations, poor definition, picture and sound breakover. Also useful in service work—duplicating fringe area signals when show is near strong local station



**Type LC-2
LOUDNESS CONTROL**

A continuously compensated control that boosts lows and highs as volume is decreased—maintains depth and brilliance even at whisper level. Type LC-2 replaces makeshift compensating units—tapped volume controls, stepped-type loudness controls, bass and treble boost circuits. Automatically maintains proper balance of all frequencies in the audio spectrum at any listening level. Simplicity itself—as easy to wire into an audio circuit as any standard three-terminal volume control. Complete instructions included, showing applications. Type 76-1, 76-2 or 76-4 switch can be added to this control.

STANDARD TAPERS FOR Q CONTROLS



A—For potentiometer or rheostat where uniform resistance change is required.

B—Semi-logarithmic curve for tone control or audio circuit control.

C—Logarithmic curve for audio circuit control or antenna shunt control.

D—Tapered at both ends to provide control of grid bias and antenna circuit. Used where control of grid bias is important in controlling volume.

H—Tapped logarithmic curve for audio level control for automatic bass compensation.

P—Semi-logarithmic curve—reverse taper for use in contrast and picture control circuits in television.

Q—Semi-logarithmic curve—reverse taper for use in contrast and picture control circuits in television.

S—Special taper—based on specific specifications.

TV HEIGHT CONTROLS

Type HLC. Provided for reliable operation in TV—and other B+ applications such as AGC, noise gate, focus, fringe lock and sync. Type HLC is a premium quality television height control with a 1 watt rating and small $\frac{15}{16}$ " diameter size. Slotted and knurled shaft is nylon, and can be easily shortened, if required. Control has tab mount design with rear adjustment. Supplied in six high range types with $\pm 30\%$ tolerance.

| | | | | | |
|-------|-------------|-------|-------------|-------|-------------|
| HLC-1 | 2.0 megohms | HLC-3 | 3.0 megohms | HLC-5 | 5.0 megohms |
| HLC-2 | 2.5 megohms | HLC-4 | 4.0 megohms | HLC-6 | 7.5 megohms |



TELEVISION AND AUTO SET CONTROL ACCESSORIES

IRC offers parts for Volume Controls in a variety of standard assortments to cover a wide range of controls.

#21 Assortment Coverage of 226 QJ Exact Duplicate Controls and 243 different single carbon controls—in 2 Master Stockers.

#21S Assortment A Conversion Unit — changes #21 Parts Stock to #22 (below.) Covers 741 additional manufacturers' part numbers, 194 additional Exact Duplicate Controls, 13 additional values of Q Controls and 195 more variations of single carbon control values; plus 11 Wire-Wound Control values in 39 different items. In 2 Master Stockers.

#22 Assortment Basic Stock Parts for assembling any of 325 Type QJ Exact Duplicate Controls, 445 standard single carbon controls, and 30 standard Wire-Wound Controls. 4 Master Stockers hold parts for complete coverage of 809 different controls.

#22S Assortment Pull-Push Parts Stock. Converts #22 to include pull-push control parts. Includes 17 inner shafts, 10 base elements, 4 K-16 Concentrikits,

2 K-17 Concentrikits, 2 K-18 Concentrikits and 1 TM-4 Tab-Mount Control Kit.

#2A Assortment Contains the 19 best selling Q control elements and in addition gives coverage for 94% of the single carbon push-pull controls.

For those who prefer factory-assembled special controls, IRC provides an exceptionally broad line of over 1250 Exact Duplicate Controls.

The IRC Exact Duplicate Line now includes over 240 concentric dual controls for auto radios. Modern in design, these new controls bring many unique and desirable features to provide convenience, economy and long life. The new IRC Printed-Silver Tone Switch eliminates contact fatigue—assures positive, no bump contact. Simple detent assures positive positioning independent of switch action. Control position feature of $\frac{7}{16}$ " and $\frac{1}{2}$ " bushings permits exact duplication of original. Short control depth fits most crowded locations. Power switches amply rated for both TV and Auto Radios. Consult Howard A. Sams Replacement Manual (RGC-2 or later) or S020F Numerical Listing for needed controls.

IRC CONCENTRIKIT ASSEMBLES EXACT DUPLICATE CONTROLS features quick assembly—no modification of parts.

17 Basic CONCENTRIKITS

IRC Concentrikits are the common parts to various types of Exact Duplicate Controls. When assembled with parts shown in Howard A. Sams Replacement Manual (RGC-2 or later), they will produce any IRC Exact Duplicate TV or Auto Radio Controls. No cutting or filing of shafts or bushings—one minute assembly.

| Concentrikit | Depth | Control | Panel Section | Rear Section | Bushing | Use |
|--------------|-------|---------|---------------|--------------|-----------------------------------|-----------------------|
| K-2 | * | C | C | C | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV & Auto |
| K-3 | * | W | C | C | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV |
| K-4 | * | C | C | C | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV (Motorola) |
| K-5 | * | C | C | C | $\frac{3}{8}$ " x $\frac{1}{4}$ " | TV (Hallicrafters) |
| K-6 | ** | C | C | C | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV & Auto |
| K-7 | ** | C | C | C | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV |
| K-8 | ** | C | C | C | none | Auto |
| K-9 | ** | TS | C | C | none | Auto |
| K-10 | ** | W | W | W | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV |
| K-11 | ** | W | C | C | $\frac{3}{8}$ " x $\frac{1}{4}$ " | TV |
| K-12 | ** | C | W | W | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV |
| K-13 | ** | W | W | W | $\frac{3}{8}$ " x $\frac{1}{4}$ " | TV |
| K-14 | ** | W | W | W | $\frac{3}{8}$ " x $\frac{3}{8}$ " | TV |
| K-15 | ** | C | C | C | $\frac{3}{8}$ " x $\frac{1}{4}$ " | TV |
| K-16 | ** | C | C | C | $\frac{3}{8}$ " x $\frac{3}{8}$ " | Pull-Push |
| K-17 | ** | C | C | C | $\frac{3}{8}$ " x $\frac{3}{8}$ " | Pull-Push |
| K-18 | ** | C | C | C | $\frac{3}{8}$ " x $\frac{1}{4}$ " | Pull-Push |

*—Standard **—Short C—Carbon W—Wire TS—Tone Switch

IRC Printed-Silver Tone Switch Elements

Sensational new development in concentric tone switch permits assembly of special Exact Duplicate Auto Radio Controls in field. Assemblies like standard IRC Base Elements no loose parts. Packed with detent-type panel cover.

| Stock No. | Description |
|-----------|--|
| BS1 | 4 Position Tone Switch Element for Ford |
| BS2 | 4 Position Tone Switch Element for Delco |
| BS3 | 3 Position Tone Switch Element for Philco |
| BS4 | 4 Position Tone Switch Element for Delco |
| BS5 | 4 Position Tone Switch Element for Lincoln and Mercury |

IRC EXACT DUPLICATE BUSHINGS featuring Adjustable Positioning

A wide assortment of Exact Duplicate Bushings provide easy, quick assembly of Auto Radio Controls without cutting, filing or modification. New adjustable ground plate permits positioning of flats or notched mounting face to duplicate original control positioning. Individually packaged.

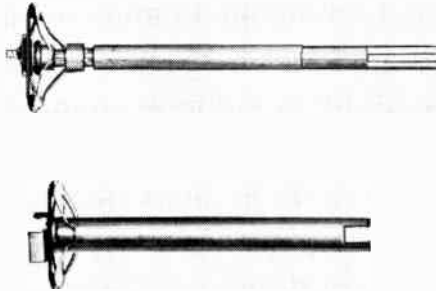
IRC EXACT DUPLICATE BUSHINGS

| Stock No. | Dimensions | Type |
|-----------|---|-------------|
| S6 | $\frac{7}{16}$ " x $\frac{15}{16}$ " | Double-flat |
| S7 | $\frac{7}{16}$ " x $\frac{11}{32}$ " | Double-flat |
| S8 | $\frac{7}{16}$ " x $\frac{15}{16}$ " | Double-flat |
| S9 | $\frac{7}{16}$ " x $\frac{11}{32}$ " | Double-flat |
| S10 | $\frac{1}{2}$ " x 0.2 " | Single-flat |
| S11 | $\frac{1}{2}$ " x $\frac{9}{16}$ " | Single-flat |
| S12 | $\frac{1}{2}$ " x $\frac{13}{16}$ " | Single-flat |
| S13 | $\frac{1}{2}$ " x 1 " | Single-flat |
| S14 | $\frac{1}{2}$ " x $\frac{11}{4}$ " | Single-flat |
| S15 | $\frac{1}{2}$ " x $\frac{11}{2}$ " | Single-flat |
| S16 | $\frac{1}{2}$ " x $\frac{15}{16}$ " | Single-flat |
| S17 | $\frac{1}{2}$ " x $\frac{11}{16}$ " | Single-flat |
| S18 | $\frac{1}{2}$ " x 2 " | Single-flat |
| S19 | $\frac{1}{2}$ " x $2\frac{1}{4}$ " | Single-flat |
| S20 | $\frac{1}{2}$ " x $2\frac{1}{4}$ " | Single-flat |
| S21 | $\frac{1}{2}$ " x $1\frac{1}{4}$ " | Notched |
| S22 | $\frac{1}{2}$ " x $\frac{11}{16}$ " | Notched |
| S23 | $\frac{1}{2}$ " x $\frac{11}{32}$ " | Notched |
| S24 | $\frac{1}{2}$ " x $1\frac{3}{4}$ " | Notched |
| S25 | $\frac{1}{2}$ " x $1\frac{1}{16}$ " | Notched |
| S26 | $\frac{1}{2}$ " x $\frac{117}{32}$ " | Notched |
| S27 | $\frac{1}{2}$ " x $\frac{121}{32}$ " | Notched |
| S28 | $\frac{1}{2}$ " x $1\frac{3}{4}$ " | Notched |
| S29 | $\frac{1}{2}$ " x $\frac{115}{16}$ " | Notched |
| S30 | $\frac{1}{2}$ " x $1\frac{7}{8}$ " | Notched |
| S31 | $\frac{1}{2}$ " x 2 " | Notched |
| S32 | $\frac{1}{2}$ " x $2\frac{1}{4}$ " | Notched |
| S33 | $\frac{3}{4}$ " x $\frac{1}{4}$ " | — |
| S34 | $\frac{3}{4}$ " x $\frac{3}{8}$ " | — |
| S35 | $\frac{1}{2}$ " x $\frac{11}{32}$ " | Single-flat |
| S36 | $\frac{1}{2}$ " x $\frac{5}{8}$ " | Single-flat |
| S37 | $\frac{1}{2}$ " x $\frac{11}{32}$ " | Single-flat |
| S38 | $\frac{1}{2}$ " x $\frac{21}{32}$ " | Single-flat |
| S39 | $\frac{1}{2}$ " x $\frac{31}{32}$ " | Single-flat |
| S40 | $\frac{1}{2}$ " x $\frac{11}{16}$ " | Single-flat |
| S41 | $\frac{1}{2}$ " x $\frac{13}{16}$ " | Notched |
| S42 | $\frac{1}{2}$ " x $\frac{11}{16}$ " | Single-flat |
| S43 | $\frac{1}{2}$ " x $\frac{11}{16}$ " | Single-flat |
| S44 | $\frac{3}{4}$ " x $.590$ " | — |
| S45 | $\frac{3}{4}$ " x $\frac{13}{16}$ " | — |
| S46 | $\frac{7}{16}$ " x $\frac{5}{8}$ " | Double-flat |
| S47 | $\frac{7}{16}$ " x $\frac{13}{32}$ " | Double-flat |
| S48 | $\frac{1}{2}$ " x $\frac{5}{16}$ " | Single-flat |
| S49 | $\frac{1}{2}$ " x 1 " | Notched |
| S50 | $\frac{1}{2}$ " x $\frac{11}{16}$ " | Single-flat |
| S51 | $\frac{7}{16}$ " x $1\frac{1}{4}$ " | Double-flat |
| S52 | $\frac{3}{8}$ " x $\frac{7}{8}$ " | — |
| N1 | Mounting Nut for $\frac{7}{16}$ " Bushings—Pkg. of 10 | |
| N2 | Mounting Nut for $\frac{1}{2}$ " Bushings—Pkg. of 10 | |
| N3 | Mounting Nut for $\frac{1}{2}$ " ($\frac{9}{16}$ " across flats) Bushings—Pkg. of 10 | |



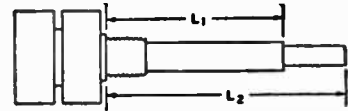
CONCENTRIKIT EXACT DUPLICATE SHAFTS

DEPENDABLE MECHANICAL FIT FOR YOUR TV REPLACEMENTS



TRIKIT—factory-tailored for dependable mechanical fit. No filing, slotting, soldering or cutting required! Many shafts are flatted as well as slotted to provide wider replacement coverage. Each shaft is a complete assembly, including contactor. Factory-lubricated, packaged in cellophane and in individual carton.

Exact Duplicate Shaft Stock Numbers indicate shaft length measured from mounting face when installed in control (L_1 is Outer Shaft length; L_2 is Inner Shaft length). First digit is number of whole inches in shaft length; remaining two digits indicate number of additional 32nds of an inch. Thus, P1-210 has shaft lengths of 2-10/32" or 2-5/16". Exception is Inner Shafts when used with K-3 CONCENTRIKIT where 3/32" should be subtracted to determine shaft length.



Save time—be assured of accurate fit! IRC now provides a complete line of Exact Duplicate Shafts for CONCENTRIKIT

EXACT DUPLICATE OUTER SHAFTS

| Shaft Type | Slot Width-Depth | Flat Length | Round Knurled Band | Type Base Element | ConcentriKIT |
|------------|------------------|-------------|--------------------|-------------------|-------------------------|
| P1 | 1/8" x 3/8" | 17/32" | — | Q | K-2, -4, -5 |
| P2 | 1/16" x 1/2" | 17/32" | — | Q | K-2, -4, -5 |
| P3 | 1/8" x 3/8" | 17/32" | — | W | K-3, -10, -11, -13, -14 |
| P4 | 1/8" x 3/8" | 3/4" | — | W | K-3, -10, -11, -13, -14 |
| P5 | 1/16" x 3/8" | 17/32" | — | W | K-3, -10, -11, -13, -14 |
| P6 | 1/8" x 3/8" | 11/16" | — | Q | K-2, -4, -5 |
| P7 | .120" x 3/8" | 17/32" | — | Q | K-2, -4, -5 |
| P8 | — | — | 1/8" wide | W | K-3, -10, -11, -13, -14 |
| P9 | — | — | 1/8" wide | Q | K-2, -4, -5 |
| P10 | 1/8" x 7/16" | 17/32" | — | Q | K-2, -4, -5 |
| P11 | 3/64" x 1/16" | — | — | Q | K-2, -4, -5 |
| P12 | 1/8" x 3/16" | — | — | Q | K-2, -4, -5 |
| P13 | 1/8" x 1/4" | — | — | Q | K-6, -7, -8, -12, -15 |
| P14 | 1/8" x 3/16" | — | — | Q | K-6, -7, -8, -12, -15 |
| P15 | 1/8" x 1/4" | — | — | Tone SW. | K-9 |
| P16 | .132" x 3/16" | — | — | Q | K-6, -7, -8, -12, -15 |
| P17 | 1/8" x 3/8" | 5/8" | — | Q | K-6, -7, -8, -12, -15 |
| P18 | 3/64" x 1/16" | — | — | W | K-3, -10, -11, -13, -14 |
| P19 | 3/64" x 1/16" | — | — | Q | K-6, -7, -8, -12, -15 |
| P20 | — | — | 1/8" wide | Q | K-6, -7, -8, -12, -15 |
| P21 | 1/8" x 7/16" | 5/8" | — | Q | K-6, -7, -8, -12, -15 |

EXACT DUPLICATE INNER SHAFTS

| Shaft Type | Diam. | Slot Width - Depth | Flat Length | Round Knurled Band | Type Base Element | ConcentriKIT |
|------------|-------|--------------------------------------|-------------|--------------------|-------------------|--|
| R1 | .187" | 1/16" x 1/2" | 1/2" | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R2 | .202" | 1/16" x 1/2" | 1/2" | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R3 | .190" | 20 Tooth Split Knurl (Zenith) | | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R4 | .180" | Round and Slotted (Motorola) | | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R5 | .187" | Rear Extension Type (RCA) | | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R6 | .202" | Rear Extension Type (Dumont) | | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R7 | .189" | 18 Tooth Split Knurl (Zenith) | | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R8 | .187" | 1/16" x 1/2" | 1/2" | — | W | K-10, -12, -13, -14 only |
| R9 | .187" | 1/16" x 1/2" | 5/8" | — | W | All but K-10, -12, -13, -14, -16, -17, -18 |
| R10 | .187" | — | — | 1/8" wide | W | K-10, -12, -13, -14 only |
| R11 | .187" | — | — | 1/8" wide | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R12 | .202" | — | — | 7/32" | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R13 | .180" | Round with 5/8" deep slot (Motorola) | | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R14 | .202" | 1/16" x 1/2" | 5/8" | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R15 | .202" | 3/64" x 1/16" | — | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R16 | .187" | 1/16" x 1/2" | 25/32" | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R17 | .202" | 1/16" x 1/2" | 11/16" | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R18 | .202" | 1/16" x 1/2" | 1/2" | — | W | K-10, -12, -13, -14 only |
| R19 | .202" | 3/64" x 1/16" | — | — | W | K-10, -12, -13, -14 only |
| R20 | .187" | 3/64" x 1/16" | — | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R21 | .180" | 1/16" x 5/8" (Motorola) | | — | Q | All but K-10, -12, -13, -14, -16, -17, -18 |
| R22 | .202" | Rear Extension Type (G.E., Hotpoint) | | — | Q | K13 |
| R23 | .187" | .156" x 1/2" (Pull-Push Type) | | — | Q | K-16, -17, -18 |
| R24 | .187" | 1/16" x 1/2" (Pull-Push Type) | | — | Q | K-16 |



AUTO RADIO CONTROLS



113 CONTROLS FOR 248 DIFFERENT MAKES AND MODELS OF AUTOMOBILES

The finest line of exact replacement auto radio controls . . . 113 controls for 248 different makes and models of automobiles . . . A greater, up-to-date selection for a greater number of applications. All of these factors are yours with the IRC line of Auto Radio Controls.

| CTS-IRC Part No. | Car Mfg. | Year | Radio Mfg. | Radio Model No. | Original Part No. |
|------------------|-------------------|---------|------------|--------------------------|-------------------|
| 5308 | Ford | 1948-50 | Bendix | M1, M1A, M1A1 | L222808 |
| 5309 | Ford | 1950 | Motorola | OMF | 18B591266 |
| 5310 | Ford | 1951 | Bendix | M2 | L219586-2 |
| 5311 | Ford | 1951 | Motorola | 1MF | 18B501153 |
| 5312 | Ford | 1952-53 | Bendix | M4, M4A | L219586-3 |
| 5313 | Ford | 1952-53 | Motorola | 2MF, 3MF | 18K511635 |
| 5314 | Ford | 1954 | Bendix | M4B, M4BA, M4BP | L219586-7 |
| 5315 | Ford | 1954 | Motorola | 4MF | 18B530018 |
| 5316 | Ford | 1955 | Bendix | 5BF, R5BF | L219656-1 |
| 5317 | Ford | 1955 | Motorola | 5MF, 5MF8 | 18B531299 |
| 5318 | Ford | 1956 | Bendix | R6BF | L219681-1 |
| 5319 | Ford | 1956 | Motorola | 66MF, 66MFP, 69MF | 18B534483 |
| 5320 | Ford | 1957 | Bendix | R75BF | 2090035-1 |
| 5321 | Ford | 1957 | Motorola | 75MF | 18K539059 |
| 5322 | Ford | 1957 | Motorola | 78MF | 18B539379 |
| 5323 | Ford | 1957-58 | Bendix | R74BF, R84BF | 2090035-2 |
| 5324 | Ford | 1957-58 | Motorola | 74MF, 84MF | 18B541819 |
| 5325 | Ford | 1957-58 | Motorola | 76MF(SR), 86MF | 18B542373 |
| 5342 | Chevrolet | 1949-50 | Delco | 986240, 986388 | 7258084 |
| 5343 | Chevrolet | 1950 | Delco | 986389 | 1218641 |
| 5344 | Chevrolet | 1951-52 | Delco | 986516 | 1219708 |
| 5345 | Chevrolet | 1951-52 | Delco | 986515 | 7261385 |
| 5346 | Oldsmobile | 1951-52 | Motorola | OE2A, OE2M | 18B512084 |
| | Buick | 1946-53 | | BK2A, BK3A6 | |
| | Chevrolet | 1951-52 | | CT2A, CT2M | |
| | GMC & Chevy Truck | 1948-53 | | GMT2A, GMT2M | |
| | Kaiser | 1951-53 | | KR2A, KR2M | |
| | Packard | 1951-53 | | PD2A, PD2M | |
| 5347 | Chevrolet | 1953-54 | Delco | 986669 | 7262941 |
| 5348 | Chevrolet | 1953-54 | Delco | 986669, 986771 | 7264211 |
| | GMC Truck | 1954-58 | | 2233396, 2233398 | |
| | Willys | 1956 | | 694866 | |
| 5349 | Chevrolet | 1953-54 | Delco | 986668 | 7264210 |
| 5350 | Universal | 1954-56 | Motorola | 5M, 5M-12 | 18K33457 |
| | Chevrolet | 1953-56 | | 6M | |
| | Pontiac | 1955-56 | | 6M-12 | |
| | Olds & Buick | 1954-56 | | 6M-12 | |
| | Volkswagen | 1953-56 | | 6M | |
| | Studebaker | 1953-56 | | 6M, 6M-12 | |
| 5351 | Chevrolet | 1955 | Delco | 987087 | 7265265 |
| 5352 | Chevrolet | 1955-56 | Delco | 987088, 987366 | 7265320 |
| 5353 | Chevrolet | 1955-57 | Delco | 987088, 987364, 3725156 | 7265302 |
| 5354 | Chevrolet | 1955-58 | Delco | 987187 | 7266193 |
| | GMC Truck | 1955-56 | | 2233478, 2233480 | |
| 5355 | Chevrolet | 1956 | Delco | 987368 | 7266842 |
| 5356 | Chevrolet | 1957 | Delco | 987577 | 7269211 |
| 5357 | Chevrolet | 1957 | Delco | 987575, 987693 | 7269199 |
| 5358 | Chevrolet | 1957 | Delco | 987573 | 7269186 |
| 5359 | Chevrolet | 1957 | Motorola | 7MX | 18B540768 |
| | Pontiac | 1957 | | 7MX | |
| | Buick | 1957 | | 7MX | |
| | Studebaker | 1957 | | 7MX | |
| 5360 | Chevrolet | 1957 | Motorola | CTA7X, CTM7X | 18K541128 |
| 5361 | GMC Truck | 1947-52 | Delco | 2233029, 2233297 | 7256188 |
| | Chevy Truck | 1950-52 | | 986067, 986443 | |
| 5362 | Chevrolet | 1957 | Delco | | 7270202 |
| 5373 | Plymouth | 1952 | Motorola | Mopar 606 | 18A501616 |
| 5374 | Plymouth | 1953 | Motorola | Mopar 608 | 18B521635 |
| 5375 | Plymouth | 1953 | Philco | P-5206 Mopar 819 | 33-5557-11 |
| 5376 | Plymouth | 1954-55 | Motorola | Mopar 836 | 18A533014 |
| 5377 | Plymouth | 1955 | Motorola | Mopar 613 | 18K532909 |
| 5378 | Plymouth | 1955 | Philco | P-5506 Mopar 832 | 33-5557-15 |
| | Chrysler | 1955 | | C-5509 Mopar 835, C-5609 | |
| 5379 | Plymouth | 1956 | Motorola | Mopar 841 | 18K536152 |
| 5380 | Plymouth | 1956 | Motorola | Mopar 916 | 18B536704 |
| 5381 | Plymouth | 1956 | Philco | P-5606 Mopar 840 | 33-5580-4 |
| 5382 | Plymouth | 1957 | Motorola | Mopar 849 | 18B540376 |
| 5383 | Plymouth | 1957 | Philco | P-5701 Mopar 848 | 33-5580-12 |
| | | | | P-5702 Mopar 848 | |
| 5384 | Plymouth | 1958 | Motorola | Mopar 854 | 18B560415 |
| 5385 | Plymouth | 1958 | Philco | P-5801 Mopar 848 | 33-5580-21 |
| 5386 | Plymouth | 1955 | Philco | P-5506 | 33-5557-14 |
| 5398 | Mercury | 1955-56 | Bendix | R6BM | L219660-2 |
| | Lincoln | 1955-56 | | R6BM | |
| | Continental | 1956 | | 6BC | |
| 5399 | Mercury | 1957 | Philco | M-5841, M-5741 | 33-5570-2 |
| 5400 | Mercury | 1958 | Bendix | R84BM, R85BM-5 | N219689-4 |



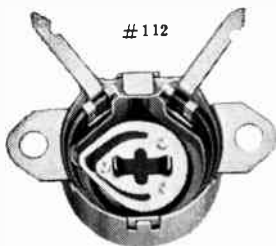
AUTO RADIO CONTROLS

| CTS-IRC Part No. | Car Mfg. | Year | Radio Mfg. | Radio Model No. | Original Part No. |
|------------------|-----------------|---------|------------|--|-------------------|
| 5411 | Buick | 1950-53 | Delco | 980868, 980899, 980979, 980980, 981111, 981320, 981321, 981322, 981323 | 7263119 |
| 5412 | Buick | 1954 | Delco | 981550, 981551 | 7264309 |
| 5413 | Buick | 1955 | Delco | 981651, 981652 | 7265742 |
| 5414 | Buick | 1956 | Delco | 981707, 981708 | 7266996 |
| 5415 | Buick | 1957 | Delco | 981813, 981814 | 7268944 |
| 5423 | Cadillac | 1950-52 | Delco | 7258865, 7260405, 7259825, 7260905, 7260705 | 7259240 |
| 5424 | Cadillac | 1953 | Delco | 7262645, 7262695, 7263525, 7263545, 7263835 | 7263321 |
| 5425 | Cadillac | 1954-55 | Delco | 7264165, 7264185, 7264195, 7265825, 7265845, 7265855 | 7264638 |
| 5426 | Cadillac | 1956 | Delco | 7266505, 7266535, 7266565 | 7266982 |
| 5427 | Cadillac | 1957 | Delco | 7268005, 7268035, 7268065 | 7269443 |
| 5435 | Chrysler | 1953 | Philco | C-5109 Mopar 812, C-5209 Mopar 817 C-5110 Mopar 813, C-5211 C-5111 Mopar 815, C-5212 C-5112 Mopar 816 C-5409 Mopar 824 | 83-5557-10 |
| 5436 | Chrysler | 1953-54 | Philco | C-5410 Mopar 830, C-5411 C-5595 Mopar 902, C-5596 Mopar 903, C-5696 Mopar 912 C-5705 Mopar 847 C-5707 | 33-5557-13 |
| 5437 | Chrysler | 1955 | Philco | Mopar 829 | 33-5580-16 |
| 5438 | Chrysler | 1956 | Philco | Mopar 901, 911 | 33-5580-13 |
| 5439 | Chrysler | 1957 | Philco | Mopar 846, 919, 919 HR | 18A530623 |
| 5449 | DeSoto | 1954 | Motorola | Mopar 923 | 18B532633 |
| 5450 | DeSoto | 1955-56 | Motorola | Mopar 609 | 18B539819 |
| 5451 | DeSoto | 1957 | Motorola | Mopar 833 | |
| 5459 | Dodge | 1953 | Motorola | Mopar 614, 621 | |
| 5460 | Dodge | 1954-55 | Motorola | Mopar 900, 901, 910 | |
| 5461 | Dodge | 1955 | Motorola | Mopar 845, 918 | |
| 5462 | Dodge | 1955-56 | Motorola | Mopar 502 | |
| 5463 | Dodge | 1957 | Motorola | 982420 | |
| 5464 | Dodge | 1958 | Motorola | 982700 | |
| 5473 | Oldsmobile | 1949 | Delco | 983004 | |
| 5474 | Oldsmobile | 1951 | Delco | 983090, 983204 | |
| 5475 | Oldsmobile | 1953 | Delco | 983091, 983205, 983336 | |
| 5476 | Oldsmobile | 1954-55 | Delco | 983334 | |
| 5477 | Oldsmobile | 1951-56 | Delco | 989002 | |
| 5478 | Oldsmobile | 1956 | Delco | 989001 | |
| 5479 | Oldsmobile | 1957 | Delco | 480487, 6480487 | |
| 5480 | Oldsmobile | 1957 | Delco | 984296, 984570 | |
| 5494 | Packard | 1956 | Delco | 984592, 984688 | |
| 5501 | Pontiac | 1949-50 | Delco | 984817 | |
| 5502 | Pontiac | 1951-52 | Delco | 984961, 988568 | |
| 5503 | Pontiac | 1953-54 | Delco | 988623 | |
| 5504 | Pontiac | 1955-56 | Delco | 988672 | |
| 5505 | Pontiac | 1956 | Delco | S-5327-AC-2300, S-5523 | |
| 5506 | Pontiac | 1957 | Delco | S-5323-AC-2301, S-5527 | |
| 5507 | Pontiac | 1957 | Delco | S-5524, S-5528, S-5529 | |
| 5517 | Studebaker | 1953 | Philco | 397,404 | |
| 5522 | Universal | 1954 | Motorola | 395,395-12 | 18B531560 |
| 5522 | Universal | 1955 | Motorola | 396,396-12 | |
| 5522 | Universal | 1956 | Motorola | 987724 | |
| 5550 | Chevrolet | 1958 | Delco | 987727 | 7270450 |
| 5551 | Chevrolet | 1958 | Delco | 989127, 989129 | 7270479 |
| 5552 | Oldsmobile | 1958 | Delco | 981902 | 7270679 |
| 5553 | Buick | 1958 | Delco | 988822 | 7271329 |
| 5554 | Pontiac | 1958 | Delco | 987888 | 7271446 |
| 5555 | Chevrolet | 1959 | Delco | 987891 | 7273302 |
| 5556 | Chevrolet | 1959 | Delco | 988976 | 7273367 |
| 5557 | Pontiac | 1959 | Delco | 981968 | 7273623 |
| 5558 | Buick | 1959 | Delco | Mopar 860 | 7273993 |
| 5559 | Plymouth | 1959 | Motorola | Mopar 861 | |
| 5560 | Chrysler | 1959 | Motorola | 94MF, 94MFM | 18B561364 |
| 5561 | Ford | 1959 | Motorola | 95MF | 18B561597 |
| 5562 | Ford | 1959 | Motorola | 94BF | 18B561599 |
| 5562 | Ford | 1959 | Bendix | 94BE | |
| 5563 | Edsel | 1959 | Bendix | 94MA | 2090035-3 |
| 5564 | American Motors | 1959 | Motorola | 94MA | 18B561728 |
| 5564 | Dodge | 1959 | Motorola | Mopar 856 | 18B561732 |

CTS-IRC BUZZ & BIAS SENSITIVITY CONTROLS



110



112

Two new miniature controls for hum balance, centering, hold, locking, etc. Designed for screw driver adjustment. Type 110 available in 5 values; Type 112 available in 21 values.

| Type 110 | | Type 112 (cont'd) | |
|-----------|-----------|-------------------|----------------------|
| Stock No. | Value | Stock No. | Value |
| 110-60 | 60 ohms | 112-800 | 800 ohms |
| 110-100 | 100 ohms | 112-800-50 | 800 ohms |
| 110-600 | 600 ohms | | fixed min. 50 ohms |
| 110-1000 | 1000 ohms | 112-1000 | 1000 ohms |
| 110-3000 | 3000 ohms | 112-1000-100 | 1000 ohms |
| | | | fixed min. 100 ohms |
| | | | 1500 ohms |
| | | | 2000 ohms |
| | | | 2000 ohms |
| | | | fixed min. 100 ohms |
| | | | 3000 ohms |
| | | | 4000 ohms |
| | | | 4000 ohms |
| | | | fixed min. 300 ohms |
| | | | 4000 ohms |
| | | | fixed min. 1000 ohms |
| | | | 600 ohms |
| | | | fixed min. 1000 ohms |
| | | | 650 ohms |
| | | | 5000 ohms |



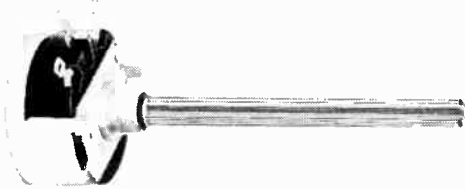
UNIVERSAL WIRE WOUND CONTROLS

4 WATT WIRE WOUNDS

International Resistance Company's new Universal Wire Wound Control, engineered to handle all 2-watt and 4-watt requirements, may be used as a replacement for former types W, WK, 4WK, and 4WS.

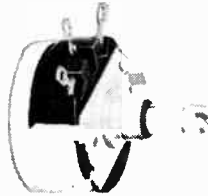
Dimensions: 1 1/4" in diameter, 45/64" deep behind mounting face without switch; 1-7/32" with switch.

Available in the following types:



TYPE WPK

3/8-32 x 1/4" long bushing with popular Q Type Knob Master Shaft 3" long from mounting face.



TYPE WPS

3/8-32 x 1/4" long bushing with combination finger knurl and screw-driver slot shaft 3/4" long from mounting face.

Switches are available for use with types WPK and WP. Windings are not compensated and the resistance in approximate 15% rotation will be lost.

Switch type 76-11 SPST

Switch type 76-12 DPST

PARTS KIT FOR WPK-WPS

Package of parts which, with addition of desired WP Base-Element, will assemble WPK or WPS Controls. Includes shaft, bushing, cover and coupling plate.

SK4—Parts kit for WPK Control
SK5—Parts kit for WPS Control

STOCK VALUES OF TYPE WPK AND WPS CONTROLS

| Ohms | Tap | Taper | Type WPK Control | Type WPS Control | Base Elements | Ohms | Tap | Taper | Type WPK Control | Type WPS Control | Base Elements |
|------|------|-------|------------------|------------------|---------------|-------|-----|-------|------------------|------------------|---------------|
| 10 | — | U | WPK10 | — | W11-010 | 750 | 250 | S | — | — | W17-105X |
| 10 | 5. | U | — | WPS10X5 | W11-010X | 1000 | — | U | WPK1000 | WPS1000 | W11-108 |
| 15 | 7.5 | U | — | WPS15X7.5 | W11-015X | 1350 | — | U | WPK1350 | — | W11-308 |
| 20 | — | U | WPK20 | — | W11-020 | 1350 | — | R | WPK1350R | — | W17-308 |
| 20 | 10 | U | — | WPS20X10 | W11-020X | 1500 | — | U | WPK1500 | WPS1500 | W11-109 |
| 25 | — | U | — | WPS25 | W11-025 | 1500 | — | L | WPK1500L | — | W13-109 |
| 25 | 12.5 | U | — | WPS25X12.5 | W11-025X | 1500 | 500 | S | — | — | W17-109X |
| 30 | — | U | WPK30 | — | W11-030 | 2000 | — | U | WPK2000 | WPS2000 | W11-110 |
| 30 | 15 | U | — | WPS30X15 | W11-030X | 2000 | — | L | WPK2000L | — | W13-110 |
| 40 | — | U | — | WPS40 | W11-040 | 2250 | — | U | — | WPS2250 | W11-210 |
| 40 | 20 | U | — | WPS40X20 | W11-040X | 2250 | — | L | WPK2250L | WPS2250L | W13-210 |
| 50 | — | U | WPK50 | — | W11-050 | 2500 | — | U | WPK2500 | WPS2500 | W11-111 |
| 50 | 25 | U | — | WPS50X25 | W11-050X | 3000 | — | R | WPK2500R | — | W17-111 |
| 60 | — | U | — | WPS60 | W11-060 | 3000 | — | U | WPK3000 | WPS3000 | W11-112 |
| 80 | 40 | U | — | WPS80X40 | W11-080X | 3000 | — | R | — | — | W17-112 |
| 100 | — | U | WPK100 | — | W11-084 | 4000 | — | L | — | WPS4000 | W13-212 |
| 100 | 50 | U | — | WPS100X50 | W11-084X | 4000 | — | U | — | WPS4000L | W11-113 |
| 140 | 70 | U | — | WPS140X70 | W11-092X | 5000 | — | L | WPK4000L | WPS4000L | W13-113 |
| 150 | 75 | U | — | WPS150X75 | W11-094X | 5000 | — | U | WPK5000 | WPS5000 | W11-114 |
| 200 | — | U | WPK200 | — | W11-100 | 5000 | — | L | WPK5000L | — | W13-114 |
| 200 | 100 | U | — | WPS200X100 | W11-100X | 5000 | — | R | — | — | W17-114 |
| 250 | — | U | WPK250 | — | W11-201 | 6000 | — | U | WPK6000 | — | W11-214 |
| 300 | — | U | WPK300 | — | W11-201 | 7500 | — | L | WPK6000L | — | W13-214 |
| 400 | — | U | WPK400 | — | W11-102 | 7500 | — | U | WPK7500 | — | W13-115 |
| 500 | — | U | WPK500 | — | W11-202 | 7500 | — | L | WPK7500L | — | W11-115 |
| 500 | — | U | — | WPS500 | W11-103 | 10000 | — | U | WPK10000 | WPS10000L | W11-116 |
| 500 | — | L | — | WPS500L | W13-103 | 12500 | — | U | WPK12500 | — | W11-217 |
| 600 | — | U | WPK600 | — | W11-104 | 15000 | — | U | WPK15000 | — | W11-118 |
| 650 | — | U | WPK650 | — | W11-204 | 20000 | — | U | WPK20000 | — | W11-119 |
| 750 | — | U | WPK750 | — | W11-105 | 25000 | — | U | WPK25000 | — | W11-120 |
| 750 | — | L | WPK750L | — | W13-105 | 30000 | — | U | WPK30000 | — | W11-121 |
| 750 | — | R | WPK750R | — | W17-105 | 40000 | — | U | WPK40000 | — | W11-222 |
| 750 | — | — | — | — | — | 50000 | — | U | WPK50000 | — | W11-123 |

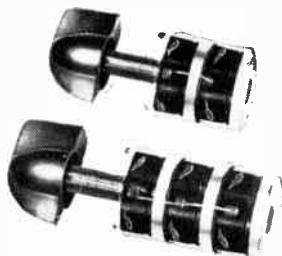
STANDARD TAPERS

R Taper—Right Hand Taper with approximately 50% rotation when measured from Right Terminal to Center Terminal facing shaft end of control with terminals down.

U Taper—Standard Linear Taper.

L Taper—Left Hand Taper with approximately 15% of total resistance at 50% rotation when measured from Left Terminal to Center Terminal facing shaft end of control with terminals down.

L AND T PAD CONSTANT IMPEDANCE CONTROLS



For use in sound systems and for speaker control. Handle up to 10 watts of audio power (3 watts D.C.) L Pad provides constant input impedance; T Pad provides constant input and output impedances.

IRC L and T Pads provide unusual convenience features small size; Diameter—1 1/4"; depth behind panel—1 3/16" (L Pad) and 1 1/2" (T Pad). 3/8" bushing mounts Pad on panels up to 3/8" thick. Interchangeable bushing available for metal panels. Shaft length is correct for knob supplied—no shaft cutting necessary.

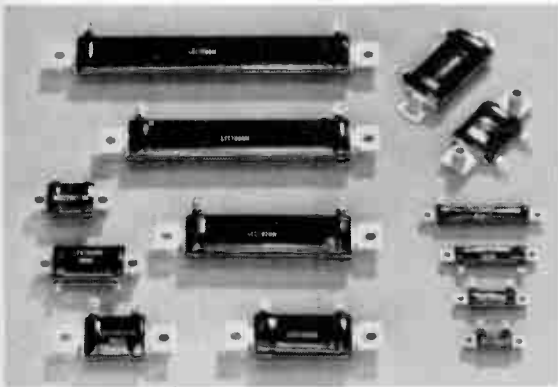
Each IRC Pad is individually boxed and includes knob and dial plate.

| L PADS | | T PADS | |
|-----------|-----------|-----------|-----------|
| Stock No. | Impedance | Stock No. | Impedance |
| LP4 | 4 ohms | TP4 | 4 ohms |
| LP8 | 8 ohms | TP8 | 8 ohms |
| LP15 | 15 ohms | TP15 | 15 ohms |
| LP500 | 500 ohms | TP500 | 500 ohms |

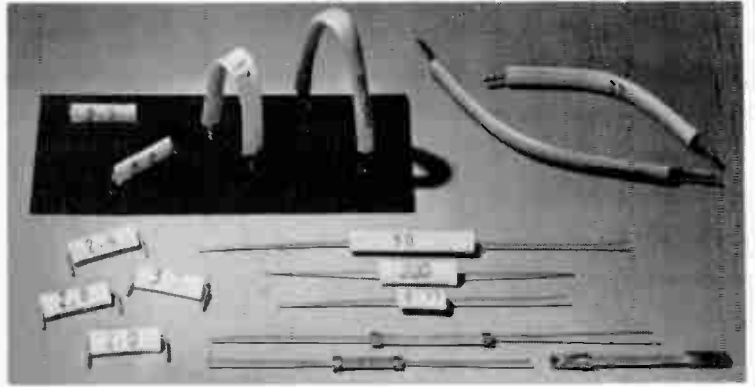
LECTROHM

INCORPORATED

CHICAGO, ILLINOIS



OVALS



FLEXIBLES

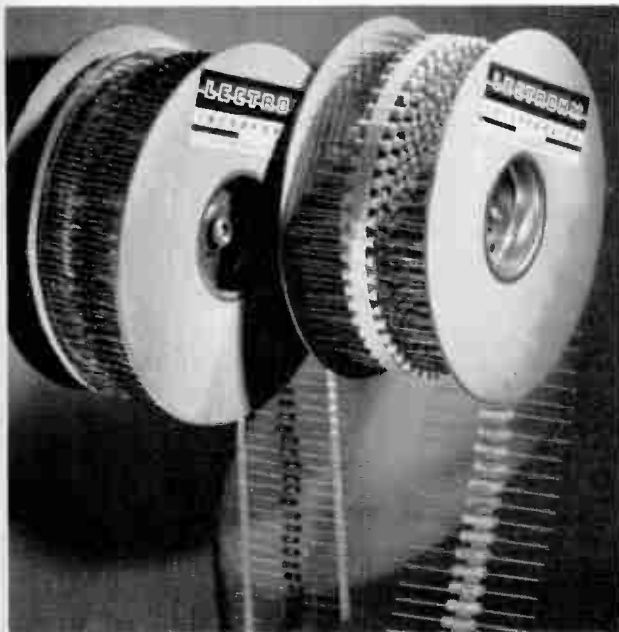


AXIALS

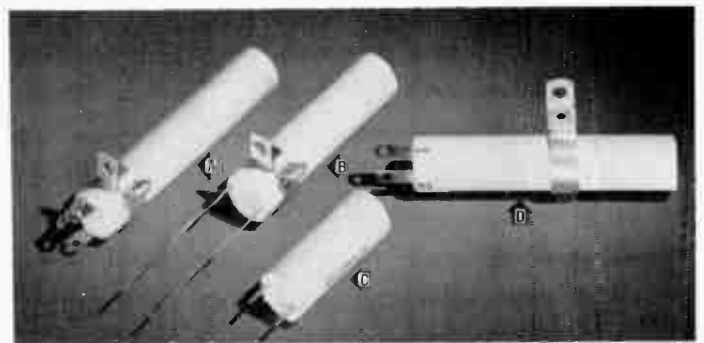


Some of the many "Special" LECTROHM Resistors

LECTROHM, while manufacturing the standard vitreous line, is also producing whole new groups of types, each designed to solve a special problem. Miniaturization and printed circuit restrictions in space and ventilation no longer are complicated by conventional power resistor size standards. New coating materials and winding methods developed by LECTROHM permit an infinite variety of configurations yet retain operating and life characteristics expected of the finest grade vitreous enameled types. LECTROHM engineers will fit the resistor size and shape to your design.



TAPED RESISTORS FOR AUTOMATION



UPRIGHTS A SOLDER LUG TYPE. B PIGTAIL TYPE. C PRINTED CIRCUIT. D HORIZONTAL MOUNTING BRACKET.

LECTROHM

INCORPORATED • CHICAGO, ILLINOIS

VITREOUS ENAMELED RESISTORS

Fixed Wire-Wound Types

C5 SERIES — 5 WATT

| DIMENSIONS | | | TERMINALS | | |
|--------------------------|-----------|-----------|---------------------------------|-----------|-----------|
| 3/16" x 3/16" x 1" | | | Pigtail type leads 1 1/2" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 10,000 ohms | | | 10,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 1 | 2240 | \$.45 | 600 | 91 | \$.45 |
| 2 | 1580 | .45 | 700 | 84 | .45 |
| 3 | 1290 | .45 | 750 | 81 | .45 |
| 4 | 1110 | .45 | 800 | 79 | .45 |
| 5 | 1000 | .45 | 900 | 74 | .45 |
| 10 | 707 | .45 | 1000 | 70 | .48 |
| 15 | 575 | .45 | 1100 | 67 | .48 |
| 20 | 500 | .45 | 1200 | 64 | .48 |
| 25 | 447 | .45 | 1250 | 63 | .48 |
| 30 | 408 | .45 | 1500 | 57 | .48 |
| 35 | 374 | .45 | 1750 | 53 | .48 |
| 40 | 346 | .45 | 2000 | 50 | .48 |
| 50 | 316 | .45 | 2250 | 47 | .48 |
| 75 | 258 | .45 | 2500 | 44 | .48 |
| 100 | 222 | .45 | 3000 | 41 | .48 |
| 125 | 200 | .45 | 4000 | 35 | .48 |
| 150 | 182 | .45 | 4500 | 33 | .48 |
| 200 | 158 | .45 | 5000 | 31 | .48 |
| 225 | 149 | .45 | 6000 | 29 | .51 |
| 250 | 141 | .45 | 7000 | 27 | .51 |
| 300 | 129 | .45 | 7500 | 26 | .51 |
| 350 | 119 | .45 | 8000 | 25 | .51 |
| 400 | 111 | .45 | 9000 | 23 | .51 |
| 500 | 100 | .45 | 10000 | 22 | .51 |

C10 SERIES — 10 WATT

| DIMENSIONS | | | TERMINALS | | |
|------------------------------|-----------|-----------|---------------------------------|-----------|-----------|
| 3/16" x 3/16" x 1 3/4" | | | Pigtail type leads 1 1/2" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 50,000 ohms | | | 50,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 1 | 3150 | \$.48 | 1500 | 79 | \$.54 |
| 2 | 2230 | .48 | 1750 | 74 | .54 |
| 3 | 1825 | .48 | 2000 | 69 | .54 |
| 5 | 1415 | .48 | 2250 | 64 | .54 |
| 7.5 | 1155 | .48 | 2500 | 61 | .54 |
| 10 | 1000 | .48 | 3000 | 58 | .54 |
| 15 | 815 | .48 | 3500 | 53 | .54 |
| 20 | 707 | .48 | 4000 | 50 | .54 |
| 25 | 630 | .48 | 4500 | 47 | .54 |
| 50 | 447 | .48 | 5000 | 44 | .54 |
| 75 | 365 | .48 | 6000 | 41 | .60 |
| 100 | 315 | .48 | 7000 | 38 | .60 |
| 150 | 258 | .48 | 7500 | 36 | .60 |
| 200 | 223 | .48 | 8000 | 35 | .60 |
| 225 | 212 | .48 | 8500 | 34 | .60 |
| 250 | 200 | .48 | 9000 | 33 | .60 |
| 300 | 182 | .48 | 10000 | 32 | .60 |
| 350 | 169 | .48 | 12000 | 29 | .66 |
| 400 | 158 | .48 | 12500 | 28 | .66 |
| 450 | 150 | .48 | 13500 | 27 | .66 |
| 500 | 141 | .48 | 15000 | 25 | .66 |
| 600 | 129 | .48 | 16000 | 25 | .66 |
| 700 | 119 | .48 | 17500 | 24 | .66 |
| 750 | 115 | .48 | 18000 | 23 | .66 |
| 800 | 111 | .48 | 20000 | 22 | .66 |
| 900 | 105 | .48 | 22500 | 21 | .72 |
| 1000 | 100 | .48 | 25000 | 20 | .72 |
| 1100 | 95 | .54 | 30000 | 18 | .81 |
| 1200 | 91 | .54 | 40000 | 15 | .81 |
| 1250 | 89 | .54 | 45000 | 15 | .81 |
| | | | 50000 | 14 | .81 |

C20 or E20 SERIES — 20 WATT

| DIMENSIONS | | | TERMINALS | | |
|--------------------------|-----------|-----------|---------------------------------|-----------|-----------|
| 3/16" x 3/16" x 2" | | | Pigtail type leads 1 1/2" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 100,000 ohms | | | 100,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 5 | 2000 | \$.63 | 2500 | 89 | \$.66 |
| 10 | 1414 | .63 | 3000 | 81 | .66 |
| 15 | 1153 | .63 | 4000 | 70 | .66 |
| 20 | 1000 | .63 | 5000 | 63 | .66 |
| 25 | 894 | .63 | 6000 | 57 | .72 |
| 40 | 707 | .63 | 7000 | 53 | .72 |
| 50 | 633 | .63 | 7500 | 51 | .72 |
| 60 | 574 | .63 | 8000 | 50 | .72 |
| 75 | 517 | .63 | 10000 | 45 | .72 |
| 100 | 448 | .63 | 12500 | 40 | .78 |
| 125 | 400 | .63 | 15000 | 36 | .78 |
| 150 | 365 | .63 | 20000 | 32 | .78 |
| 200 | 316 | .63 | 25000 | 28 | .90 |
| 250 | 283 | .63 | 30000 | 26 | .90 |
| 300 | 258 | .63 | 35000 | 24 | .90 |
| 350 | 238 | .63 | 40000 | 22 | .90 |
| 400 | 223 | .63 | 45000 | 21 | 1.05 |
| 500 | 200 | .63 | 50000 | 20 | 1.05 |
| 600 | 182 | .63 | 55000 | 18 | 1.05 |
| 700 | 169 | .63 | 60000 | 16 | 1.05 |
| 750 | 163 | .63 | 65000 | 15 | 1.20 |
| 800 | 158 | .63 | 70000 | 14 | 1.20 |
| 1000 | 141 | .63 | 75000 | 13 | 1.20 |
| 1100 | 134 | .66 | 80000 | 12 | 1.20 |
| 1250 | 126 | .66 | 90000 | 11 | 1.38 |
| 1500 | 115 | .66 | 95000 | 10.5 | 1.38 |
| 2000 | 100 | .66 | 100000 | 10 | 1.38 |

E25 SERIES — 25 WATT

| DIMENSIONS | | | TERMINALS | | |
|----------------------------|-----------|-----------|----------------------------|-----------|-----------|
| 3/16" x 3/16" x 2" | | | Solder lug type | | |
| MOUNTING BRACKET | | | MOUNTING BRACKET | | |
| B-33; Centers 2 3/4" | | | B-33; Centers 2 3/4" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 100,000 ohms | | | 100,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 1 | 5000 | \$.66 | 2500 | 100 | \$.75 |
| 3 | 2890 | .66 | 3000 | 91 | .75 |
| 5 | 2240 | .66 | 3500 | 84 | .75 |
| 10 | 1580 | .66 | 4000 | 79 | .75 |
| 15 | 1290 | .66 | 5000 | 71 | .75 |
| 25 | 1000 | .66 | 6000 | 64 | .75 |
| 50 | 707 | .66 | 7500 | 57 | .75 |
| 75 | 575 | .66 | 10000 | 50 | .75 |
| 100 | 500 | .66 | 12000 | 46 | .75 |
| 150 | 400 | .66 | 15000 | 41 | .78 |
| 200 | 353 | .66 | 20000 | 35 | .78 |
| 250 | 316 | .66 | 25000 | 32 | .90 |
| 300 | 288 | .66 | 30000 | 29 | .90 |
| 400 | 250 | .66 | 35000 | 27 | 1.02 |
| 500 | 224 | .66 | 40000 | 25 | 1.02 |
| 750 | 182 | .66 | 50000 | 20 | 1.20 |
| 1000 | 158 | .66 | 60000 | 16 | 1.20 |
| 1250 | 141 | .69 | 70000 | 14 | 1.38 |
| 1500 | 129 | .69 | 80000 | 12 | 1.38 |
| 2000 | 112 | .69 | 100000 | 10 | 1.38 |

E50 SERIES — 50 WATT

| DIMENSIONS | | | TERMINALS | | |
|----------------------------|-----------|-----------|----------------------------|-----------|-----------|
| 3/16" x 3/16" x 4" | | | Solder lug type | | |
| MOUNTING BRACKET | | | MOUNTING BRACKET | | |
| B-33; Centers 4 3/4" | | | B-33; Centers 4 3/4" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 250,000 ohms | | | 250,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 5 | 3165 | \$1.08 | 8000 | 79 | \$1.26 |
| 10 | 2230 | 1.08 | 10000 | 71 | 1.26 |
| 25 | 1414 | 1.08 | 12000 | 65 | 1.38 |
| 50 | 1000 | 1.08 | 12500 | 63 | 1.38 |
| 100 | 707 | 1.08 | 15000 | 57 | 1.38 |
| 200 | 500 | 1.08 | 20000 | 50 | 1.38 |
| 250 | 440 | 1.08 | 25000 | 45 | 1.53 |
| 500 | 300 | 1.08 | 30000 | 41 | 1.53 |
| 750 | 250 | 1.08 | 40000 | 35 | 1.53 |
| 1000 | 215 | 1.08 | 50000 | 32 | 1.71 |
| 1500 | 180 | 1.14 | 60000 | 29 | 1.71 |
| 2000 | 155 | 1.14 | 75000 | 26 | 1.92 |
| 2500 | 140 | 1.14 | 100000 | 19 | 2.10 |
| 3000 | 125 | 1.14 | 125000 | 15 | 2.22 |
| 4000 | 110 | 1.14 | 150000 | 13 | 2.31 |
| 5000 | 100 | 1.14 | 175000 | 11 | 2.40 |
| 6000 | 90 | 1.26 | 200000 | 9 | 2.49 |
| 7000 | 85 | 1.26 | 225000 | 8 | 2.75 |
| 7500 | 80 | 1.26 | 250000 | 7 | 2.75 |

E75 SERIES — 75 WATT

| DIMENSIONS | | | TERMINALS | | |
|----------------------------|-----------|-----------|----------------------------|-----------|-----------|
| 3/16" x 3/16" x 6" | | | Solder lug type | | |
| MOUNTING BRACKET | | | MOUNTING BRACKET | | |
| B-33; Centers 6 3/4" | | | B-33; Centers 6 3/4" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 100,000 ohms | | | 100,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 1 | 8650 | \$1.32 | 2500 | 171 | \$1.38 |
| 2 | 6120 | 1.32 | 3000 | 160 | 1.38 |
| 3 | 5010 | 1.32 | 4000 | 135 | 1.38 |
| 4 | 4340 | 1.32 | 5000 | 121 | 1.38 |
| 5 | 3870 | 1.32 | 6000 | 111 | 1.50 |
| 10 | 2740 | 1.32 | 7500 | 100 | 1.50 |
| 25 | 1730 | 1.32 | 8000 | 96 | 1.50 |
| 50 | 1220 | 1.32 | 10000 | 86 | 1.50 |
| 100 | 865 | 1.32 | 12000 | 80 | 1.62 |
| 150 | 705 | 1.32 | 12500 | 78 | 1.62 |
| 200 | 610 | 1.32 | 15000 | 70 | 1.62 |
| 250 | 550 | 1.32 | 20000 | 61 | 1.62 |
| 300 | 500 | 1.32 | 25000 | 55 | 1.83 |
| 400 | 430 | 1.32 | 30000 | 50 | 1.83 |
| 500 | 385 | 1.32 | 35000 | 46 | 1.83 |
| 750 | 318 | 1.32 | 40000 | 43 | 1.83 |
| 800 | 305 | 1.32 | 45000 | 41 | 1.95 |
| 1000 | 270 | 1.32 | 50000 | 39 | 1.95 |
| 1500 | 225 | 1.38 | 75000 | 31 | 2.13 |
| 2000 | 192 | 1.38 | 100000 | 27 | 2.37 |

E100 SERIES — 100 WATT

| DIMENSIONS | | | TERMINALS | | |
|----------------------------|-----------|-----------|----------------------------|-----------|-----------|
| 3/4" x 1/2" x 6 1/2" | | | Solder lug type | | |
| MOUNTING BRACKET | | | MOUNTING BRACKET | | |
| B-34; Centers 7 3/4" | | | B-34; Centers 7 3/4" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 100,000 ohms | | | 100,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 1 | 10000 | \$1.59 | 2000 | 222 | \$1.68 |
| 2 | 7070 | 1.59 | 2500 | 200 | 1.68 |
| 3 | 5770 | 1.59 | 3000 | 181 | 1.68 |
| 4 | 5000 | 1.59 | 5000 | 141 | 1.68 |
| 5 | 4470 | 1.59 | 7500 | 114 | 1.80 |
| 10 | 3160 | 1.59 | 10000 | 100 | 1.80 |
| 25 | 2000 | 1.59 | 15000 | 81 | 1.98 |
| 50 | 1414 | 1.59 | 20000 | 70 | 1.98 |
| 75 | 1153 | 1.59 | 25000 | 63 | 2.10 |
| 100 | 1000 | 1.59 | 30000 | 58 | 2.10 |
| 150 | 816 | 1.59 | 40000 | 50 | 2.10 |
| 250 | 632 | 1.59 | 50000 | 45 | 2.22 |
| 500 | 447 | 1.59 | 60000 | 41 | 2.22 |
| 750 | 365 | 1.59 | 75000 | 36 | 2.37 |
| 1000 | 316 | 1.59 | 100000 | 32 | 2.52 |
| 1500 | 257 | 1.68 | | | |

E160 SERIES — 160 WATT

| DIMENSIONS | | | TERMINALS | | |
|------------------------------|-----------|-----------|----------------------------|-----------|-----------|
| 1 1/8" x 3/4" x 8 1/2" | | | Solder lug type | | |
| MOUNTING BRACKET | | | MOUNTING BRACKET | | |
| B-35; Centers 9 3/4" | | | B-35; Centers 9 3/4" | | |
| MAXIMUM RESISTANCE | | | MAXIMUM RESISTANCE | | |
| 100,000 ohms | | | 100,000 ohms | | |
| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
| 1 | 12650 | \$2.75 | 3500 | 215 | \$2.01 |
| 2 | 8940 | 2.75 | 4000 | 200 | 2.01 |
| 3 | 7300 | 2.75 | 4500 | 185 | 2.01 |
| 4 | 6320 | 2.75 | 5000 | 180 | 2.01 |
| 5 | 5660 | 2.75 | 7500 | 145 | 2.16 |
| 10 | 4000 | 1.98 | 10000 | 125 | 2.16 |
| 25 | 2530 | 1.98 | 15000 | 105 | 2.34 |
| 50 | 1788 | 1.98 | 20000 | 90 | 2.34 |
| 75 | 1460 | 1.98 | 25000 | 80 | 2.40 |
| 100 | 1260 | 1.98 | 30000 | 73 | 2.40 |
| 200 | 900 | 1.98 | 35000 | 68 | 2.40 |
| 500 | 570 | 1.98 | 40000 | 64 | 2.40 |
| 1000 | 400 | 1.98 | 50000 | 57 | 2.49 |
| 1500 | 330 | 2.01 | 6000 | | |

LECTROHM

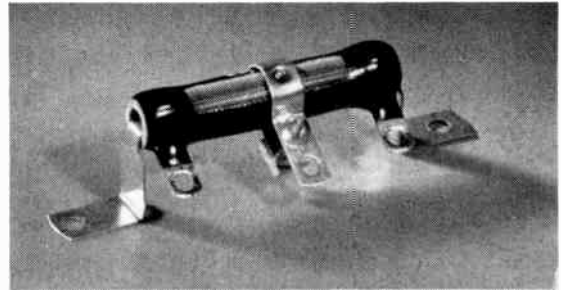
INCORPORATED CHICAGO, ILLINOIS

VITREOUS ENAMELED RESISTORS

FIXED AND ADJUSTABLE WIRE-WOUND TYPES

Years ahead in manufacturing techniques, LECTROHM Resistors offer absolutely top quality at consistently lower prices. New winding methods and improved enameling processes are the result of continuing research.

Your wire-wound resistor requirements, whether in small or large quantities, are given immediate attention. Large factory stocks of standard types are maintained for your convenience. Special types to fit particular applications are provided quickly and at low cost.



Adjustable Wire-Wound Types

D10 SERIES — 10 WATT

DIMENSIONS $\frac{3}{8}$ x $\frac{3}{8}$ x $1\frac{3}{4}$ "
MOUNTING BRACKET B-32; Centers $2\frac{1}{4}$ "
TERMINALS Solder lug type
MAXIMUM RESISTANCE 10,000 ohms

| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 3150 | \$.96 | 750 | 115 | \$.96 |
| 2 | 2230 | .96 | 800 | 111 | .96 |
| 3 | 1825 | .96 | 1000 | 100 | .96 |
| 5 | 1415 | .96 | 1250 | 89 | 1.02 |
| 7.5 | 1155 | .96 | 1500 | 79 | 1.02 |
| 10 | 1000 | .96 | 2000 | 69 | 1.02 |
| 15 | 815 | .96 | 2250 | 64 | 1.02 |
| 20 | 707 | .96 | 2500 | 61 | 1.02 |
| 25 | 630 | .96 | 3000 | 58 | 1.02 |
| 50 | 447 | .96 | 3500 | 53 | 1.02 |
| 75 | 365 | .96 | 4000 | 50 | 1.02 |
| 100 | 315 | .96 | 4500 | 47 | 1.02 |
| 150 | 258 | .96 | 5000 | 45 | 1.02 |
| 200 | 223 | .96 | 6000 | 41 | 1.08 |
| 250 | 200 | .96 | 7000 | 38 | 1.08 |
| 300 | 182 | .96 | 7500 | 36 | 1.08 |
| 350 | 169 | .96 | 8000 | 35 | 1.08 |
| 400 | 158 | .96 | 8500 | 34 | 1.08 |
| 500 | 141 | .96 | 9000 | 33 | 1.08 |
| 500 | 129 | .96 | 10000 | 31 | 1.08 |

D25 SERIES — 25 WATT

DIMENSIONS $\frac{1}{2}$ x $\frac{3}{8}$ x 2"
MOUNTING BRACKET B-33; Centers $2\frac{3}{4}$ "
TERMINALS Solder lug type
MAXIMUM RESISTANCE 25,000 ohms

| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 5000 | \$1.23 | 1250 | 141 | \$1.26 |
| 2 | 3535 | 1.23 | 1500 | 129 | 1.26 |
| 3 | 2890 | 1.23 | 2000 | 112 | 1.26 |
| 5 | 2240 | 1.23 | 2500 | 100 | 1.26 |
| 7.5 | 1825 | 1.23 | 3000 | 91 | 1.26 |
| 10 | 1580 | 1.23 | 3500 | 84 | 1.26 |
| 15 | 1290 | 1.23 | 4000 | 79 | 1.26 |
| 20 | 1117 | 1.23 | 4500 | 74 | 1.26 |
| 25 | 1000 | 1.23 | 5000 | 71 | 1.26 |
| 50 | 707 | 1.23 | 6000 | 64 | 1.32 |
| 75 | 575 | 1.23 | 7000 | 60 | 1.32 |
| 100 | 500 | 1.23 | 7500 | 57 | 1.32 |
| 150 | 400 | 1.23 | 8000 | 55 | 1.32 |
| 200 | 353 | 1.23 | 8500 | 54 | 1.32 |
| 250 | 316 | 1.23 | 9000 | 52 | 1.32 |
| 300 | 288 | 1.23 | 10000 | 50 | 1.32 |
| 400 | 250 | 1.23 | 12000 | 46 | 1.38 |
| 500 | 224 | 1.23 | 15000 | 41 | 1.38 |
| 750 | 182 | 1.23 | 20000 | 35 | 1.38 |
| 1000 | 177 | 1.23 | 25000 | 32 | 1.50 |
| 1000 | 158 | 1.23 | | | |

D50 SERIES — 50 WATT

DIMENSIONS $\frac{3}{8}$ x $\frac{3}{8}$ x 4"
MOUNTING BRACKET B-33; Centers $4\frac{3}{4}$ "
TERMINALS Solder lug type
MAXIMUM RESISTANCE 100,000 ohms

| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 5 | 3160 | \$1.56 | 3000 | 129 | \$1.62 |
| 10 | 2230 | 1.56 | 4000 | 112 | 1.62 |
| 25 | 1410 | 1.56 | 5000 | 100 | 1.62 |
| 50 | 1000 | 1.56 | 7500 | 81 | 1.74 |
| 75 | 816 | 1.56 | 10000 | 70 | 1.74 |
| 100 | 707 | 1.56 | 12000 | 64 | 1.86 |
| 150 | 577 | 1.56 | 15000 | 57 | 1.86 |
| 200 | 500 | 1.56 | 20000 | 50 | 1.86 |
| 250 | 447 | 1.56 | 25000 | 44 | 2.04 |
| 300 | 408 | 1.56 | 30000 | 41 | 2.04 |
| 400 | 354 | 1.56 | 40000 | 35 | 2.04 |
| 500 | 316 | 1.56 | 50000 | 32 | 2.16 |
| 750 | 258 | 1.56 | 60000 | 29 | 2.16 |
| 1000 | 224 | 1.56 | 75000 | 26 | 2.43 |
| 1500 | 182 | 1.62 | 80000 | 24 | 2.43 |
| 2000 | 158 | 1.62 | 100000 | 19 | 2.58 |
| 2500 | 141 | 1.62 | | | |

D75 SERIES — 75 WATT

DIMENSIONS $\frac{3}{8}$ x $\frac{3}{8}$ x 6"
MOUNTING BRACKET B-33; Centers $6\frac{3}{4}$ "
TERMINALS Solder lug type
MAXIMUM RESISTANCE 100,000 ohms

| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 5 | 3870 | \$1.80 | 3500 | 146 | \$1.86 |
| 10 | 2740 | 1.80 | 5000 | 121 | 1.86 |
| 15 | 2236 | 1.80 | 7500 | 100 | 1.98 |
| 25 | 1730 | 1.80 | 10000 | 86 | 1.98 |
| 50 | 1220 | 1.80 | 15000 | 70 | 2.10 |
| 100 | 865 | 1.80 | 20000 | 61 | 2.34 |
| 250 | 550 | 1.80 | 25000 | 55 | 2.34 |
| 300 | 500 | 1.80 | 30000 | 50 | 2.34 |
| 400 | 430 | 1.80 | 40000 | 43 | 2.34 |
| 500 | 385 | 1.80 | 50000 | 39 | 2.40 |
| 750 | 318 | 1.80 | 60000 | 35 | 2.40 |
| 1000 | 270 | 1.80 | 75000 | 31 | 2.64 |
| 1500 | 225 | 1.86 | 80000 | 30 | 2.64 |
| 2000 | 192 | 1.86 | 100000 | 27 | 2.85 |
| 2500 | 171 | 1.86 | | | |

D100 SERIES — 100 WATT

DIMENSIONS $\frac{3}{4}$ x $\frac{1}{2}$ x $6\frac{1}{2}$ "
MOUNTING BRACKET B-34; Centers $7\frac{3}{8}$ "
TERMINALS Solder lug type
MAXIMUM RESISTANCE 100,000 ohms

| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 5 | 4470 | \$2.37 | 2500 | 200 | \$2.43 |
| 10 | 3162 | 2.37 | 3000 | 180 | 2.43 |
| 25 | 2000 | 2.37 | 5000 | 140 | 2.43 |
| 50 | 1414 | 2.37 | 7500 | 115 | 2.55 |
| 75 | 1155 | 2.37 | 10000 | 100 | 2.55 |
| 100 | 1000 | 2.37 | 15000 | 80 | 2.70 |
| 150 | 815 | 2.37 | 20000 | 70 | 2.70 |
| 250 | 632 | 2.37 | 25000 | 63 | 2.88 |
| 500 | 447 | 2.37 | 30000 | 58 | 2.88 |
| 750 | 365 | 2.37 | 40000 | 50 | 2.88 |
| 1000 | 315 | 2.37 | 50000 | 45 | 3.00 |
| 1250 | 280 | 2.43 | 60000 | 41 | 3.00 |
| 1500 | 250 | 2.43 | 75000 | 36 | 3.12 |
| 2000 | 220 | 2.43 | 100000 | 32 | 3.27 |

D160 SERIES — 160 WATT

DIMENSIONS $1\frac{1}{8}$ x $\frac{3}{4}$ x $8\frac{1}{2}$ "
MOUNTING BRACKET B-35; Centers $9\frac{3}{8}$ "
TERMINALS Solder lug type
MAXIMUM RESISTANCE 100,000 ohms

| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 5 | 5660 | \$3.51 | 4500 | 185 | \$2.76 |
| 10 | 4000 | 2.73 | 5000 | 180 | 2.76 |
| 25 | 2530 | 2.73 | 7500 | 145 | 2.94 |
| 50 | 1788 | 2.73 | 10000 | 125 | 2.94 |
| 75 | 1460 | 2.73 | 15000 | 105 | 3.09 |
| 100 | 1260 | 2.73 | 20000 | 90 | 3.09 |
| 200 | 900 | 2.73 | 25000 | 80 | 3.18 |
| 500 | 570 | 2.73 | 30000 | 73 | 3.18 |
| 1000 | 400 | 2.73 | 35000 | 68 | 3.18 |
| 1500 | 330 | 2.76 | 40000 | 64 | 3.18 |
| 2000 | 280 | 2.76 | 50000 | 57 | 3.24 |
| 2500 | 250 | 2.76 | 60000 | 52 | 3.24 |
| 3000 | 230 | 2.76 | 70000 | 48 | 3.42 |
| 3500 | 215 | 2.76 | 80000 | 45 | 3.60 |
| 4000 | 200 | 2.76 | 100000 | 40 | 3.60 |

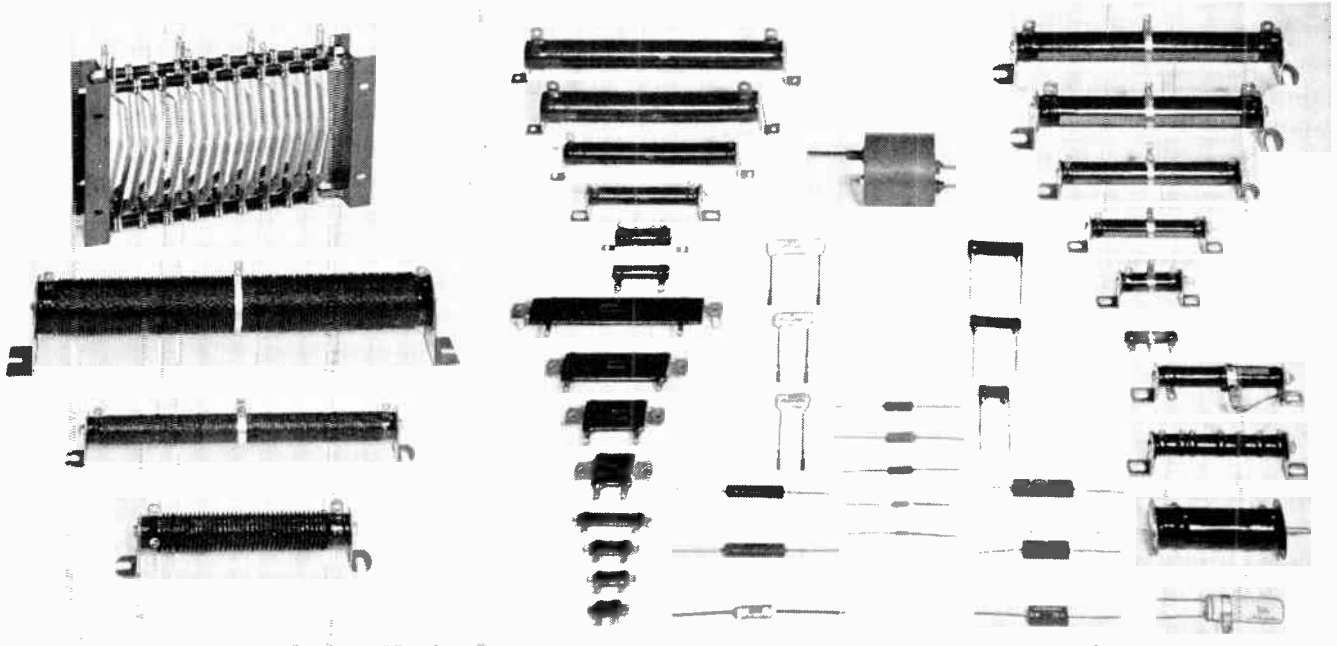
D200 SERIES — 200 WATT

DIMENSIONS $1\frac{1}{8}$ x $\frac{3}{4}$ x $10\frac{1}{2}$ "
MOUNTING BRACKET B-35; Centers $11\frac{3}{8}$ "
TERMINALS Solder lug type
MAXIMUM RESISTANCE 100,000 ohms

| Res. Ohms | Max. M.A. | Net Price | Res. Ohms | Max. M.A. | Net Price |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 5 | 6310 | \$3.75 | 4500 | 210 | \$2.94 |
| 10 | 4470 | 2.88 | 5000 | 200 | 2.94 |
| 25 | 2830 | 2.88 | 7500 | 165 | 3.12 |
| 50 | 2000 | 2.88 | 10000 | 140 | 3.12 |
| 75 | 1635 | 2.88 | 15000 | 115 | 3.24 |
| 100 | 1400 | 2.88 | 20000 | 100 | 3.24 |
| 250 | 900 | 2.88 | 25000 | 90 | 3.30 |
| 500 | 630 | 2.88 | 30000 | 82 | 3.30 |
| 1000 | 450 | 2.88 | 35000 | 76 | 3.30 |
| 1500 | 365 | 2.94 | 40000 | 71 | 3.30 |
| 2000 | 315 | 2.94 | 50000 | 63 | 3.42 |
| 2500 | 280 | 2.94 | 60000 | 58 | 3.57 |
| 3000 | 260 | 2.94 | 75000 | 52 | 3.57 |
| 3500 | 240 | 2.94 | 100000 | 45 | 3.75 |
| 4000 | 225 | 2.94 | | | |

Order by series number and resistance required.

MILWAUKEE "Fire-tested" RESISTORS



| TYPES | Fixed and Adjustable | Vitreous Enamel Coating | Taps Available | Non-inductive Winding Available | Standard Wattages |
|--------------------|----------------------|-------------------------|----------------|---------------------------------|-------------------|
| Tubular—Round Wire | Yes | Yes | Yes | Yes | 5-1500 |
| Tubular—Ribwound | Yes | Yes | Yes | Yes | 35-2000 |
| Oval | Yes | Yes | Yes | Yes | 10-250 |
| Axial Lead | fixed only | Yes | No | Yes | 1-30 |
| "W" Series | fixed only | No | Yes | Yes | 5-30 |
| "Bathtub" | fixed only | No | No | No | 4-20 |
| Strip | fixed only | No | Yes | No | 2-30 |
| "Topside" | fixed only | No | Yes | No | 10-25 |
| Encapsulated | fixed only | No | No | No | 5-100 |
| Power-Fin | fixed only | No | Yes | Yes | 1000-2500 |
| Rheostat | adj. only | No | Yes | No | 50-1000 |

TERMINALS:

Tab Type, Wire Lead, Quick-connect, Wire Wrap, Plug-in and Ferrule.

COATINGS:

Top quality, high temperature vitreous enamel; B-13 Silicone; Economy Cement and Sand.

MILITARY TYPES:

MIL-R-26C and MIL-R-15109A (Naval Shipboard Use).

MOUNTING BRACKETS:

Spring Clip Type; Single and Multiple "L" Type Thrubolt.

GRID RESISTORS:

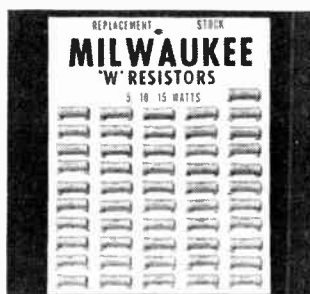
Series-Parallel Stacked Units up to 300 Ampere Capacity per Stacked Unit.

FUSE RESISTORS:

Manufactured with our patented no-flame construction—4.6 to 150 ohms.



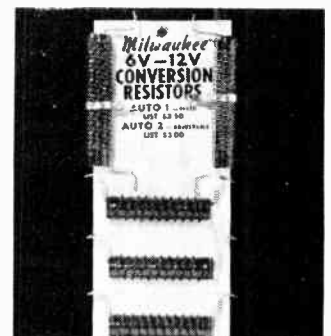
FUSE RESISTORS



"W" CARDS



HEATER-IN-SERIES



AUTO-CONVERSION

MILWAUKEE RESISTOR COMPANY

Milwaukee, Wisconsin

MALLORY
P. R. MALLORY & CO. Inc.

Wire-Wound Resistors



FIXED TYPE

TYPE HJ (FIXED) AND AV (ADJUSTABLE)

Vitreous enamel coated. Adjustable units come with two mtg. feet and ellp. To Order: Use type No. from top of column followed by resistance value.



ADJUSTABLE TYPE

| Ohms | Fixed Vitreous Types | | | | | | Adjustable Vitreous Types | | | | | Ohms | |
|---------|--------------------------|---------------------------|---------------------------|-----------------------------|---------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------|---------------------------|-----------------------------|--------|-----------------------------|
| | 5 Watt HHJ Net Ea. | 10 Watt 1HJ Net Ea. | 20 Watt 2HJ Net Ea. | 25 Watt 2.5HJ Net Ea. | 50 Watt 5HJ Net Ea. | 100 Watt 10HJ Net Ea. | 200 Watt 20HJ Net Ea. | 10 Watt 1AV Net Ea. | 25 Watt 2AV Net Ea. | 50 Watt 5AV Net Ea. | 100 Watt 10AV Net Ea. | | 200 Watt 20AV Net Ea. |
| 1 | \$0.44 | \$0.50 | | \$0.68 | | | | \$0.97 | \$1.21 | | | | 1 |
| 1.5 | .44* | | | .68 | | | | .97 | | | | | 1.5 |
| 2 | .44* | .50* | | .68 | | | | .97 | 1.21 | | | | 2 |
| 3 | .44* | .50* | | .68 | | | | .97 | | | | | 3 |
| 4 | .44* | .50* | | .68 | | | | .97 | | | | | 4 |
| 5 | .44* | .50* | | .68 | | | | .97 | 1.21 | \$1.57 | | | 5 |
| 7.5 | .44* | .50* | \$0.63 | .68 | | | | .97 | | | | | 7.5 |
| 10 | .44* | .50* | .63 | .68 | \$1.16 | | | .97 | 1.21 | 1.57 | | | 10 |
| 12 | .44 | | | .68 | | | | .97 | 1.21 | | | | 12 |
| 15 | .44 | | .63 | .68 | | | | .97 | 1.21 | | | | 15 |
| 20 | .44 | | | .68 | | | | .97 | | | | | 20 |
| 25 | .44 | | .63 | .68 | 1.16 | \$1.64 | \$2.17 | .97 | 1.21 | 1.57 | | | 25 |
| 30 | .44 | | | .68 | | | | .97 | | | | | 30 |
| 35 | .44 | | | .68 | | | | .97 | | | | | 35 |
| 40 | .44 | | | .68 | | | | .97 | | | | | 40 |
| 50 | .44 | | .63 | .68 | 1.16 | 1.64 | 2.17 | .97 | 1.21 | 1.57 | \$2.35 | \$2.89 | 50 |
| 75 | .44 | | .63 | .68 | | | | .97 | 1.21 | 1.57 | | | 75 |
| 100 | .44 | | .63 | .68 | 1.16 | 1.64 | 2.17 | .97 | 1.21 | 1.57 | 2.35 | 2.89 | 100 |
| 125 | .44 | | | .68 | | | | .97 | | | | | 125 |
| 150 | .44 | | .63 | .68 | | | | .97 | 1.21 | 1.57 | | | 150 |
| 200 | .44 | | .63 | .68 | | 1.64 | | .97 | 1.21 | 1.57 | | | 200 |
| 225 | .44 | | | .68 | | | | .97 | | | | | 225 |
| 250 | .44 | | .63 | .68 | 1.16 | 1.64 | 2.17 | .97 | 1.21 | 1.57 | | | 250 |
| 300 | .44 | | .63 | .68 | | | | .97 | 1.21 | | | | 300 |
| 350 | .44 | | | .68 | | | | .97 | | | | | 350 |
| 400 | .44 | | .63 | .68 | | | | .97 | 1.21 | 1.57 | | | 400 |
| 450 | .44 | | | .68 | | | | .97 | | | | | 450 |
| 500 | .44 | | .63 | .68 | 1.16 | 1.64 | 2.17 | .97 | 1.21 | 1.57 | 2.35 | 2.89 | 500 |
| 600 | .44 | | | .68 | | | | .97 | | | | | 600 |
| 700 | .44 | | | .68 | | | | .97 | | | | | 700 |
| 750 | .44 | | .63 | .68 | 1.16 | 1.64 | 2.17 | .97 | 1.21 | 1.57 | | | 750 |
| 800 | .44 | | | .68 | | | | .97 | | | | | 800 |
| 900 | .44 | | | .68 | | | | .97 | | | | | 900 |
| 1,000 | .44 | | .63 | .68 | 1.16 | 1.64 | 2.17 | .97 | 1.21 | 1.57 | 2.35 | 2.89 | 1,000 |
| 1,100 | .50 | | | | | | | | | | | | 1,100 |
| 1,200 | .50 | | | | | | | | | | | | 1,200 |
| 1,250 | .50 | | .64 | .71 | 1.16 | 1.67 | 2.20 | 1.01 | 1.24 | | | | 1,250 |
| 1,500 | .50 | | .64 | .71 | | | | 1.01 | 1.24 | 1.63 | | 2.94 | 1,500 |
| 1,750 | .50 | | .64 | .71 | 1.16 | 1.67 | 2.20 | 1.01 | 1.24 | 1.63 | 2.42 | 2.94 | 1,750 |
| 2,000 | .50 | | .64 | .71 | | | | 1.01 | 1.24 | 1.63 | 2.42 | 2.94 | 2,000 |
| 2,250 | .50 | | .64 | .71 | 1.16 | 1.67 | 2.20 | 1.01 | 1.24 | 1.63 | 2.42 | 2.94 | 2,250 |
| 2,500 | .50 | | .64 | .71 | | | | 1.01 | 1.24 | 1.63 | 2.42 | 2.94 | 2,500 |
| 2,750 | .50 | | .64 | .71 | | | 2.20 | 1.01 | 1.24 | 1.63 | 2.42 | | 2,750 |
| 3,000 | .50 | | .64 | .71 | | | | 1.01 | 1.24 | 1.63 | 2.42 | | 3,000 |
| 3,500 | .50 | | .64 | .71 | | | | 1.01 | 1.24 | 1.63 | 2.42 | | 3,500 |
| 4,000 | .50 | | .64 | .71 | | | | 1.01 | 1.24 | 1.63 | 2.42 | | 4,000 |
| 4,500 | .50 | | .64 | .71 | | | | 1.01 | 1.24 | 1.63 | 2.42 | | 4,500 |
| 5,000 | .50 | | .64 | .71 | 1.16 | 1.67 | 2.20 | 1.01 | 1.24 | 1.63 | 2.42 | 2.94 | 5,000 |
| 5,600 | .55 | | | | | | | 1.07 | 1.34 | | | | 5,600 |
| 6,000 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 6,000 |
| 7,000 | .55 | .61 | .71 | .81 | 1.27 | 1.78 | 2.33 | 1.07 | 1.34 | 1.73 | 2.56 | | 7,000 |
| 7,500 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 7,500 |
| 8,000 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 8,000 |
| 8,200 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 8,200 |
| 8,500 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 8,500 |
| 9,000 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 9,000 |
| 10,000 | .55 | .61 | .71 | .81 | 1.27 | 1.78 | 2.33 | 1.07 | 1.34 | 1.73 | 2.56 | 3.10 | 10,000 |
| 11,000 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 11,000 |
| 12,000 | .55 | .61 | .71 | .81 | | | | 1.07 | 1.34 | | | | 12,000 |
| 12,500 | .62 | | .79 | .86 | 1.40 | | | | 1.37 | | | | 12,500 |
| 13,500 | .62 | | .79 | .86 | | | | | | | | | 13,500 |
| 14,300 | .62 | | .79 | .86 | 1.40 | 1.96 | | | 1.37 | 1.87 | 2.72 | | 14,300 |
| 15,000 | .62 | | .79 | .86 | | | | | 1.37 | 1.87 | 2.72 | | 15,000 |
| 16,000 | .62 | | .79 | .86 | | | | | 1.37 | 1.87 | 2.72 | | 16,000 |
| 17,500 | .62 | | .79 | .86 | 1.40 | 1.96 | 2.48 | | 1.37 | 1.87 | 2.72 | 3.25 | 17,500 |
| 18,000 | .62 | | .79 | .86 | | | | | 1.37 | 1.87 | 2.72 | | 18,000 |
| 20,000 | .62 | | .79 | .86 | 1.40 | 1.96 | 2.48 | | 1.37 | 1.87 | 2.72 | 3.25 | 20,000 |
| 22,500 | .66 | | .72 | .91 | | | | | 1.51 | 2.03 | 2.89 | 3.32 | 22,500 |
| 25,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | | 1.51 | 2.03 | 2.89 | 3.32 | 25,000 |
| 30,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | 2.57 | | 2.03 | 2.89 | 3.32 | 30,000 |
| 35,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | 2.57 | | 2.03 | 2.89 | 3.32 | 35,000 |
| 40,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | 2.57 | | 2.03 | 2.89 | 3.32 | 40,000 |
| 45,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | 2.57 | | 2.03 | 2.89 | 3.32 | 45,000 |
| 50,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | 2.57 | | 2.03 | 2.89 | 3.32 | 50,000 |
| 75,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | 2.57 | | 2.03 | 2.89 | 3.32 | 75,000 |
| 100,000 | .66 | | .72 | .91 | .99 | 1.54 | 2.15 | 2.57 | | 2.03 | 2.89 | 3.32 | 100,000 |

*Tot., ±10%; all others ±5%. †Stocked only in low temperature enamel coating; operating voltage normally encountered rarely exceed values listed.

TUBE SIZES FOR ABOVE RESISTORS

Fixed Types: HHJ — 3/16" x 1/2" x 1/8" x 1/8" x 1/8" x 1/8"
 2HJ — 1/8" x 2" x 2" x 2" x 2" x 2"
 5HJ — 3/16" x 4" x 4" x 4" x 4" x 4"
 10HJ — 3/8" x 6 1/2" x 6 1/2" x 6 1/2" x 6 1/2" x 6 1/2"
 20HJ — 1/2" x 10 1/2" x 10 1/2" x 10 1/2" x 10 1/2" x 10 1/2"
 Adjustable Types: 1AV — 3/16" x 1 3/4" x 2" x 2" x 2" x 2"
 2AV — 3/16" x 2" x 2" x 2" x 2" x 2"
 5AV — 3/8" x 4" x 4" x 4" x 4" x 4"
 10AV — 3/4" x 6 1/2" x 6 1/2" x 6 1/2" x 6 1/2" x 6 1/2"
 20AV — 1 1/8" x 10 1/2" x 10 1/2" x 10 1/2" x 10 1/2" x 10 1/2"

EXTRA MOUNTING FEET

| Number | For Resistor Type | Ea. |
|--------|-------------------|-----|
| 30V | HHJ, 1HJ, and 1AV | 6c |
| 31V | 2AV, 5AV and 5HJ | 7c |
| 32V | 20HJ and 20AV | 7c |
| 33V | 10HJ and 10AV | 7c |

EXTRA ADJUSTABLE CLIPS

| Number | For Resistor Type | Ea. |
|--------|------------------------------|-----|
| 1V | 10-watt Variolohms* | 25c |
| 3V | 25 and 50-watt Variolohms* | 25c |
| 4V | 10AV 100-watt Variolohms* | 25c |
| 6V | 200-watt, 1 1/2" Variolohms* | 31c |

*Registered Trade Mark.

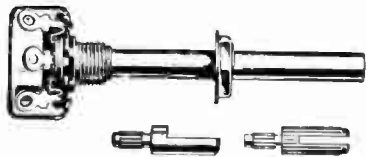
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MALLORY

Controls

METAL SHAFT MIDGETROLS®

A high quality round shaft carbon control $1\frac{1}{2}$ " in dia., designed to fit all applications. Special resistance element has ample safety factor for current-carrying ability. New type contact makes control smooth and quiet. New round shaft is easily cut to any required length. Shaft is machined to exact dimensions to meet replacement requirements. Two steel shaft and knob adapters for knurled or push-on knobs and one hex nut are included. Shipping Weight, **93¢** 3 oz. Net Each.



| Mall. No. | Resis. Ohms | Tap | Mall. No. | Resis. Ohms | Tap |
|-----------|-------------|-----|-----------|-------------|-----|
| U-1 | 100 | 4 | U-35 | 50K | 4 |
| U-2 | 500 | 4 | U-36 | 75K | 4 |
| U-52R | 500 | 2 | U-39 | 100K | 1 |
| U-751R | 750 | 2 | U-40 | 100K | 2 |
| U-3 | 1K | 2 | U-41 | 100K | 4 |
| U-4 | 1K | 4 | U-415 | 125K | 4 |
| U-5 | 1500 | 2 | U-42 | 150K | 1 |
| U-5L | 1500 | 4 | U-43 | 200K | 4 |
| U-6 | 2K | 4 | U-44 | 250K | 1 |
| U-7 | 2500 | 2 | U-45 | 250K | 2 |
| U-8 | 3K | 4 | U-46 | 250K | 4 |
| U-9 | 3K | 2 | U-48 | 500K | 1 |
| U-12 | 5K | 1 | U-50 | 500K | 4 |
| U-14 | 5K | 1 | U-51 | 750K | 1 |
| U-18 | 10K | 1 | U-52 | 1 meg. | 2 |
| U-19 | 10K | 2 | U-53 | 1 meg. | 4 |
| U-20 | 10K | 4 | U-54 | 1 meg. | 4 |
| U-21 | 15K | 1 | U-155 | 1.5 meg. | 4 |
| U-22 | 15K | 2 | U-55 | 2 meg. | 4 |
| U-24 | 20K | 1 | U-56 | 2 meg. | 4 |
| U-26 | 20K | 4 | U-255 | 2.5 meg. | 4 |
| U-28 | 25K | 2 | U-57 | 3 meg. | 1 |
| U-28A | 25K | 1 | U-59 | 3 meg. | 4 |
| U-29 | 25K | 4 | U-63 | 5 meg. | 2 |
| U-30 | 30K | 4 | U-65 | 5 meg. | 1 |
| U-33 | 50K | 1 | U-67 | 5 meg. | 4 |
| U-34 | 50K | 2 | U-82 | 10 meg. | 4 |

TAPPED MIDGETROLS®

Same as above, but tapped to provide tone compensation where required. Net Each. **\$1.35**

TYPE UT SINGLE TAPPED

| No. UT | Resis. Ohms | Tap At | No. UT | Resis. Ohms | Tap At |
|--------|-------------|--------|--------|-------------|--------|
| 153 | 15K | 10K | 440 | 1 meg. | 200K |
| 415 | 30K | 25K | 443 | 2 meg. | 450K |
| 420 | 250K | 50K | 450 | 2 meg. | 125K |
| 421 | 250K | 150K | 448 | 2 meg. | 250K |
| 425 | 350K | 70K | 449 | 2 meg. | 600K |
| 427 | 500K | 100K | 454 | 2 meg. | 400K |
| 429 | 500K | 50K | 451 | 2 meg. | 900K |
| 430 | 500K | 150K | 457 | 3 meg. | 900K |
| 431 | 500K | 225K | 461 | 3 1/4 meg. | 300K |
| 438 | 1 meg. | 300K | | | |

TYPE UDT DOUBLE TAPPED

| Mallory No. | Overall Resistance | Tap 1 | Tap 2 | Net Each |
|-------------|--------------------|-------|----------|----------|
| UDT-283 | 500K | 100K | 200K | 42c |
| UDT-289 | 1 meg. | 250K | 500K | 54c |
| UDT-291 | 1.5 meg. | 225K | 500K | |
| UDT-295 | 2.25 meg. | 250K | 500K | |
| UDT-296 | 2.25 meg. | 500K | 1 meg. | |
| UDT-303 | 3.3 meg. | 300K | 1.5 meg. | |

MIDGETROL® SWITCHES

Use with U, UT, UDT or TA controls.

| Mallory No. | Description | Net Each |
|-------------|------------------------------|----------|
| US-26 | SPST Switch | 42c |
| US-26T | SPST Switch with Dummy Term. | 54c |
| US-27 | DPST Switch | 42c |
| US-28 | SPDT Switch | 54c |

EXPLANATION OF TAPERS

Taper No. 1—A modified logarithmic left hand taper. For use in audio or antenna shunt circuits or where only the center and left hand terminals are used.

Taper No. 2—A right hand logarithmic taper. Used in series circuits as in cathode voltage controls or where only the center and right hand terminals are used.

Taper No. 4—A linear taper.

TV AND SPECIAL MIDGETROLS®

For use as exact replacements. Except for the shaft, these Midgetrols are of the same basic construction as the standard. A fixed, knurled, and slotted bakelite shaft protrudes $\frac{1}{4}$ " beyond the bushing. Net Each. **93¢**

| Mallory No. | Ohms | Tap | Mallory No. | Ohms | Tap |
|-------------|------|-----|-------------|----------|-----|
| SU-6 | 1500 | 4 | SU-50 | 500K | 4 |
| SU-8 | 3K | 4 | SU-54 | 1 meg. | 4 |
| SU-14 | 5K | 4 | SU-56 | 2 meg. | 4 |
| SU-20 | 10K | 4 | SU-565 | 2.5 meg. | 4 |
| SU-29 | 25K | 4 | SU-59 | 3 meg. | 4 |
| SU-35 | 50K | 4 | SU-67 | 5 meg. | 4 |
| SU-41 | 100K | 4 | SU-69 | 7.5 meg. | 4 |
| SU-46 | 250K | 4 | | | |

PHENOLIC SHAFT CONTROLS

For use as hidden or rear panel controls on monochrome and color TV sets where a bushingless control is needed. Ideal for "hot" chassis where shaft must be insulated. Tab mounting; tabs insert in slots provided in chassis; lock in place with twisting action. Phenolic hex shaft 1" long with screwdriver slot control $1\frac{1}{2}$ " dia. Phenolic Shaft Tab Control—Any model. Net Each. **60¢**

| Mallory No. PTA | Resis. Ohms | Tap | Mallory No. PTA | Resis. Ohms | Tap |
|-----------------|-------------|-----|-----------------|-------------|-----|
| 52L | 500 | 4 | 1254L | 1.25 meg. | 4 |
| 751L | 750 | 4 | 26L | 2 meg. | 4 |
| 152L | 1500 | 4 | 355L | 3.5 meg. | 4 |
| 252L | 2500 | 4 | 46A | 4 meg. | 1 |
| 53L | 5000 | 4 | 56R | 5 meg. | 2 |
| 352L | 3500 | 4 | 755L | 7.5 meg. | 4 |
| 54L | 50K | 4 | 855L | 8.5 meg. | 4 |
| 15L | 100K | 4 | 754L | 750K | 4 |
| 35L | 300K | 4 | 55L | 500K | 4 |
| 55R | 500K | 2 | 56L | 5 meg. | 4 |

METAL SHAFT CONTROLS

Same as phenolic shaft types except round tubular brass shaft ($2 \times \frac{1}{8}$ " dia.) that can be cut to size. For use as front panel, rear panel or hidden controls. Tab mounting. Three shaft ends supplied: one knurled, one flatted, and one finger knurled. Metal Shaft Tab Control—Any model. Net Each. **75¢**

| Mallory No. TA | Resis. Ohms | Tap | Mallory No. TA | Resis. Ohms | Tap |
|----------------|-------------|-----|----------------|-------------|-----|
| 52L | 500 | 4 | 334A | 330K | 1 |
| 751L | 750 | 4 | 55R | 500K | 2 |
| 13L | 1000 | 4 | 55A | 500K | 1 |
| 152L | 1500 | 4 | 55L | 500K | 4 |
| 352L | 3500 | 4 | 16A | 1 meg. | 1 |
| 53L | 5000 | 4 | 16L | 1 meg. | 4 |
| 14L | 10K | 4 | 155L | 1.5 meg. | 4 |
| 153L | 15K | 4 | 26A | 2 meg. | 1 |
| 253L | 25K | 4 | 26L | 2 meg. | 4 |
| 54A | 50K | 1 | 26T16 | 2 meg. | 4 |
| 54L | 50K | 4 | 255L | 2.5 meg. | 4 |
| 15L | 100K | 4 | 36L | 3 meg. | 4 |
| 184L | 180K | 4 | 56R | 5 meg. | 2 |
| 254L | 250K | 4 | 56L | 5 meg. | 4 |

*Tap at 1 meg.

TYPE FL SENSITIVITY CONTROLS

Replace sensitivity controls in radios and TV for hum, balance, linearity, AGC, hold, etc. Screwdriver slot for adjustment—no shaft. Rated 2 watts, control is insulated to withstand more than 500 v. AC from terminal to case. Mounting holes in ears take $\frac{1}{4}$ " bolts or rivets. Single axial terminal can be bent to radial position if required.

FLANGE MOUNT RHEOSTATS

| Mallory No. FL | Resis. Ohms | Net Ea. | Mallory No. FL | Resis. Ohms | Net Ea. |
|----------------|-------------|---------|----------------|-------------|---------|
| 6 | 6 | 42c | 6005* | 600 | 42c |
| 15 | 15 | 36c | 750 | 750 | 42c |
| 75 | 75 | 42c | 1K | 1K | 42c |
| 100 | 100 | 42c | 2K | 2K | 42c |
| 150 | 150 | 42c | 2K* | 2K | 42c |
| 200 | 200 | 42c | 3K | 3K | 42c |
| 250 | 250 | 42c | 4K | 4K | 42c |
| 500 | 500 | 42c | 5K | 5K | 42c |
| 600 | 600 | 42c | | | |

*Stops at 100 ohms.

FLANGE MOUNT POTENTIOMETERS

| Mallory No. | Resis. Ohms | Net Ea. | Mallory No. | Resis. Ohms | Net Ea. |
|-------------|-------------|---------|-------------|-------------|---------|
| 40P | 40 | 42c | 200P | 200 | 42c |
| 100P | 100 | 42c | 250P | 250 | 42c |

PRINTED CIRCUIT RHEOSTATS

New tab mount version of FL rheostats.

| Mallory No. PFL | Resis. Ohms | Net Ea. | Mallory No. PFL | Resis. Ohms | Net Ea. |
|-----------------|-------------|---------|-----------------|-------------|---------|
| 1.5 | 1.5 | 60c | 3K | 3K | 60c |
| 15 | 15 | 60c | 4K | 4K | 60c |
| 100 | 100 | 60c | 5K | 5K | 60c |
| 600 | 600 | 60c | 60A* | 60 | 60c |
| 1K | 1K | 60c | 100A* | 100 | 60c |
| 1.5K | 1.5K | 60c | | | |

*Has polyethylene knob.

TYPE PP PUSH-PULL CONTROLS

Carbon element controls with a push-pull type SPST switch permanently attached.

| Mallory Number | Resis. Ohms | Tap, Ohms | Tap | Net Each |
|----------------|--------------------|-----------|-----|----------|
| PP13R | 1K | | 2 | \$1.35 |
| PP15A | 100K | | 1 | 1.35 |
| PP16A | 1 meg. | | 1 | 1.35 |
| PP16L | 1 meg. | | 4 | 1.35 |
| PP16T15 | 1 meg. 100K | | 1 | 1.35 |
| PP16T25 | 1 meg. 200K | | 1 | 1.77 |
| PP16T55 | 1 meg. 500K | | 2 | 1.77 |
| PP16DT55 | 1 meg. 250K-500K | | 4 | 1.77 |
| PP25L | 200K | | 4 | 1.35 |
| PP254A | 250K | | 1 | 1.35 |
| PP254DT154 | 250K 100K-150K | | 4 | 1.77 |
| PP26A | 2 meg. | | 1 | 1.35 |
| PP26T16 | 2 meg. 1 meg. | | 4 | 1.77 |
| PP26DT16 | 2 meg. 500K-1 meg. | | 1 | 1.77 |
| PP36DT26 | 3 meg. 1 meg. | | 4 | 1.77 |
| PP55T25 | 500K 200K | | 4 | 1.77 |
| PP46T26 | 4 meg. 2 meg. | | 4 | 1.77 |
| PP55A | 500K | | 1 | 1.35 |
| PP55DT1683 | 500K 48K-168K | | 4 | 1.77 |
| PP55L | 500K | | 4 | 1.35 |
| PP55T254 | 500K 250K | | 1 | 1.77 |
| PP56L | 5 meg. | | 4 | 1.35 |
| PP155L | 1.5 meg. | | 4 | 1.35 |

P2 PRINTED CIRCUIT CARBON CONTROLS

Recommended as original or replacement control in printed circuit applications. $1\frac{1}{2}$ " dia. with special mounting tabs and with a $1\frac{1}{2} \times 3\frac{1}{2}$ " universal shaft. Without Switch—Net Each. **99¢** With Switch—Net Each. **\$1.41**

| Mallory No. | Ohms | Tap #1 | Tap #2 | Tap | Sw. |
|-------------|------------------|--------|--------|-----|------|
| P2-14A-D | 10K | | | 1 | DPST |
| P2-16A | 1 meg. | | | 1 | |
| P2-16T35 | 1 meg. 300K | | | 1 | |
| P2-16A-D | 1 meg. | | | 1 | DPST |
| P2-16A-S | 1 meg. | | | 1 | SPST |
| P2-16L-D | 1 meg. | | | 4 | DPST |
| P2-26A | 1 meg. | | | 1 | |
| P2-26A-S | 2 meg. | | | 1 | SPST |
| P2-26DT652 | 2 meg. 300K 600K | | | 1 | |
| P2-36L | 3 meg. | | | 4 | |
| P2-53L-S | 5K | | | 4 | SPST |
| P2-55A | 500K | | | 1 | |
| P2-55A-S | 500K | | | 1 | SPST |
| P2-55L-S | 500K | | | 4 | SPST |
| P2-55T254 | 500K 250K | | | 1 | |
| P2-153A-D | 15K | | | 1 | DPST |
| P2-252A-S | 2.5K | | | 1 | SPST |

THEATER SPEAKER CONTROLS

For use with Motograph, Simplex, International and other outdoor theater motion picture equipment. Pigtail rotor connections. Corrosion-resistant finish for long, noise-free life. Metal case $1\frac{1}{2}$ " dia. Mechanical rotation 280° ($\pm 3^\circ$); 255° ($\pm 5^\circ$), electrical. With mounting nut.

| Mallory Number | Description | Net Each |
|----------------|----------------------|----------|
| TSA-10 | 4-ohm L-pad | \$1.35 |
| TSA-35 | 35-ohm potentiometer | 1.35 |
| TSA-6 | 6-ohm potentiometer | 1.14 |

TV FOCUS CONTROLS

Replacements for TV focus controls, units are 4-watt wire-wound with special taper. Voltage breakdown, 1000 v. DC; mechanical rotation 294°, $\pm 2^\circ$; electrical rotation 275°, $\pm 5^\circ$. Have 2" round shaft with screwdriver slot. $1\frac{1}{2}$ " dia. Mallory No. TVF140—Max. 1500 ohms resistance. Net Each. **\$1.35** Mallory No. TVF143—Max. 2500 ohms Resistance. Net Each. **\$1.35**

SHAFT EXTENSIONS

Mallory No. DS-36—Extension shaft, $1\frac{1}{2}$ " x 3", for U, UT, UDT, TA, R and M controls. Also couples front to rear section for single shaft, dual control. With 1 knurled and slotted and 1 flatted shaft end knob adapters. Net Each. **33¢** Mallory No. DS-37— $\frac{1}{4}$ " dia. shaft for use with U, UT, UDT, TA, R and M controls. Net Each. **33¢**

MALLORY

Controls, Hardware

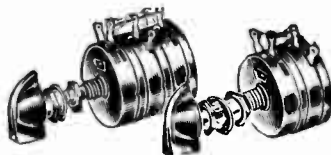
SUB-MINIATURE WIRE-WOUND CONTROLS



Rated at full 5 watts at 35° C. Only 3/4" in diameter. Linear Taper; mechanical rotation 305° ± 5°; electrical rotation 275° ± 5°. Resistance tolerance, ± 10%; voltage breakdown, 900 v. AC rns at sea level. Standard 3/32" x 3/8" bushing with locating lug. Shaft, 1/4" dia. x 2" F.M.S. Furnished with mounting nut and washer.

| Mallory Number | Resistance, Ohms | Net Each |
|----------------|------------------|----------|
| VW1 | 1 | \$1.33 |
| VW2 | 2 | 1.33 |
| VW3 | 3 | 1.33 |
| VW5 | 5 | 1.33 |
| VW6 | 6 | 1.33 |
| VW8 | 8 | 1.33 |
| VW10 | 10 | 1.33 |
| VW15 | 15 | 1.33 |
| VW20 | 20 | 1.33 |
| VW25 | 25 | 1.33 |
| VW30 | 30 | 1.33 |
| VW40 | 40 | 1.33 |
| VW50 | 50 | 1.33 |
| VW60 | 60 | 1.33 |
| VW75 | 75 | 1.33 |
| VW100 | 100 | 1.33 |
| VW200 | 200 | 1.33 |
| VW250 | 250 | 1.33 |
| VW300 | 300 | 1.33 |
| VW400 | 400 | 1.33 |
| VW500 | 500 | 1.33 |
| VW600 | 600 | 1.33 |
| VW750 | 750 | 1.33 |
| VW1K | 1000 | 1.33 |
| VW1P5K | 1500 | 1.44 |
| VW2K | 2000 | 1.44 |
| VW2P5K | 2500 | 1.44 |
| VW3K | 3000 | 1.44 |
| VW4K | 4000 | 1.44 |
| VW5K | 5000 | 1.44 |
| VW7P5K | 7500 | 1.55 |
| VW10K | 10000 | 1.55 |
| VW15K | 15000 | 1.55 |
| VW20K | 20000 | 1.55 |
| VW25K | 25000 | 1.55 |

T AND L PAD ATTENUATORS



"T" PAD "L" PAD

For controlling level of low impedance audio circuits and for volume controls. May be used with audio amplifiers having peak audio rating of 15 watts. Have continuous DC dissipation rating of 4 watts. Bushing, 3/8" dia. x 3/4" long. Shaft, 2", grooved at popular lengths for easy cutting. With bar knob, dial plate with matched rotation, nut and washer.

"T" Pad Attenuators—**\$3.09**
Net Each.....

| Mallory No. | Ohms Imped. | Mallory No. | Ohms Imped. |
|-------------|-------------|-------------|-------------|
| T2 | 2 | T200 | 200 |
| T4 | 4 | T250 | 250 |
| T6 | 6 | T500 | 500 |
| T8 | 8 | T600 | 600 |
| T15 | 15 | T1000 | 1000 |
| T50 | 50 | T2000 | 2000 |
| T100 | 100 | T3000 | 3000 |

"L" Pad Attenuators—**\$2.73**
Net Each.....

| Mallory No. | Ohms Imped. | Mallory No. | Ohms Imped. |
|-------------|-------------|-------------|-------------|
| L2 | 2 | L250 | 250 |
| L4 | 4 | L500 | 500 |
| L6 | 6 | L600 | 600 |
| L8 | 8 | L1000 | 1000 |
| L15 | 15 | L2000 | 2000 |
| L50 | 50 | L3000 | 3000 |
| L100 | 100 | L4000 | 4000 |
| L200 | 200 | | |

Tandem LL Pads or LA pads for Hi-Fi.

| Mall. No. | Type | Resis. Ohms | Case Size | Net Each |
|-----------|------|-------------|-----------------|----------|
| LL8 | LL | 8 | 1 1/2" x 2 1/2" | \$5.97 |
| LL16 | LL | 16 | 1 1/2" x 2 1/2" | 5.97 |
| LL50 | LL | 50 | 1 1/2" x 1 1/2" | 5.97 |
| LA8 | LA | 8 | 1 1/2" x 1 1/2" | 2.85 |
| L16A | LA | 16 | 1 1/2" x 1 1/2" | 2.85 |

TYPE R WIRE-WOUND POTS

For replacement of TV controls requiring 2 watt unit. Also for V-divider and bias applications. High quality, dust-proof, 1 1/2" overall dia. 900 v. insulation. No. 4 taper. Thumb knurled, serew-driver slotted stub shaft. Bushing, 3/4". One Pal-nut with each control.



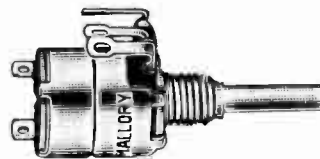
| Mallory No. | Ohms | Net Each | Mallory No. | Ohms | Net Each |
|-------------|------|----------|-------------|-------|----------|
| R2L | 2 | \$0.93 | R500CT† | 50 | \$1.32 |
| R3L | 3 | .93 | R100L | 100 | .93 |
| R5L | 5 | .93 | R250L | 250 | .93 |
| R6L | 6 | .93 | R500L | 500 | .93 |
| R8L | 8 | .93 | R750L | 750 | .93 |
| R10L | 10 | .93 | R1000L | 1000 | .93 |
| R10CT† | 10 | 1.32 | R1500L | 1500 | .93 |
| R15L | 15 | .93 | R2500L | 2500 | .93 |
| R20L | 20 | .93 | R3000L | 3000 | .93 |
| R20CT† | 20 | 1.32 | R5000L | 5000 | .93 |
| R25L | 25 | .93 | R7500L | 7500 | 1.08 |
| R30L | 30 | .93 | R10ML | 10000 | 1.08 |
| R30CT† | 30 | 1.32 | R15ML | 15000 | 1.08 |
| R50L | 50 | .93 | R20ML | 20000 | 1.08 |

†Center-tapped Controls

SWITCHES FOR TYPE R POTS

| Mall. No. | Description | Net |
|-----------|---------------------------|-----|
| US30 | Single Pole, Single Throw | 42c |
| US32 | Double Pole, Single Throw | 54c |

MLC CARBON CONTROLS



Actual Size

Only 1/2" diameter, these controls are ideal for most popular transistor radios. Universal 3/4" dia. steel shaft. MLCN types have nylon shaft.

MLC Carbon Controls—Without **\$1.35** switch. Net Each.....
With Switch—Net Each.....**\$2.25**

| Mallory No. | Ohms | Taper | Switch |
|-------------|--------|-------|--------|
| MLC13L | 1000 | 4 | |
| MLC222L-S | 2200 | 4 | SPST |
| MLC252A | 2500 | 1 | |
| MLC252A-S | 2500 | 1 | SPST |
| MLC53A | 5000 | 1 | |
| MLC53A-S | 5000 | 1 | SPST |
| MLC53L | 5000 | 4 | |
| MLC53L-S | 5000 | 4 | SPST |
| MLC14A-S | 10K | 4 | SPST |
| MLC14L | 10K | 4 | |
| MLC54L | 50K | 4 | |
| MLC15A | 100K | 1 | |
| MLC15L | 100K | 4 | |
| MLC25L | 200K | 4 | |
| MLC254L | 250K | 4 | |
| MLC55A-S | 500K | 1 | SPST |
| MLC55L-S | 500K | 4 | SPST |
| MLCN55L | 500K | 4 | |
| MLC16A-S | 1 meg. | 1 | SPST |
| MLC16L-S | 1 meg. | 4 | SPST |
| MLCN16A | 1 meg. | 1 | |
| MLCN16L | 1 meg. | 4 | |

DIAL PLATES FOR RHEOSTATS AND POTENTIOMETERS (NOT ILLUS.)

(No. 391—1 1/2" diameter; 370—5 1/2" diam. etc.—all others—2 1/4" diameter).

| Mall. No. | Marking | Control Type For | Net Each |
|-----------|-----------------|---|----------|
| 369 | 0 to 100 | All rheostats and potentiometers | 21c |
| 370 | 0 to 100 | "K" type rheostats and potentiometers | 85c |
| 391 | Increase Volume | All rheostats and potentiometers | 21c |
| 393 | 0 to 10 | "C" type | 21c |
| 395 | 0 to 10 | "M" type; Wire-wounds with plain covers | 21c |
| 396 | 0 to 10 | Wire-wounds with switch covers | 21c |
| 397 | 0 to 10 | Carbon with plain covers | 21c |
| 398 | 0 to 10 | Carbon with switch covers | 21c |
| 399 | 0 to 10 | "E" type pot's. | 21c |

CONTROL HARDWARE



VOLUME CONTROL NUT WRENCH

| Mall. No. | Fig. | Description | Net Ea. |
|-----------|------|----------------------------|---------|
| 178 | H | For 1/2" and 3/8" hex nuts | 51c |

COUPLERS, BUSHINGS

| Mall. No. | Fig. | Description | Net Ea. |
|-----------|------|----------------------------|---------|
| EC240 | C | Univ. coupling and reducer | 60c |
| EB247 | F | Univ. extension bushing | 42c |
| UB241 | G | Univ. bushing and nut | 9c |
| EB158 | | 3/8" dbl. flat. bushg. | 9c |
| EB214 | | 3/8" flatted bushing | 4c |

ADJUSTABLE MOUNTING BRACKETS

| Mall. No. | Fig. | Description | Net Ea. |
|-----------|------|-------------------------|---------|
| RB248 | A | 1 3/4" mounting centers | 21c |
| RB249 | B | 2 1/4" mounting centers | 24c |
| RB254 | | Universal | 15c |

UNIVERSAL EXTENSION SHAFTS

| Mall. No. | Fig. | Description | Net Ea. |
|-----------|------|-------------------------------|---------|
| RS242 | J | 3" long, 1/4" dia., 1/8" flat | 57c |
| RS243 | K | 1" long, 1/4" dia., 3/8" flat | 57c |
| RS244 | L | 4" long, 3/8" dia., 1/2" flat | 57c |
| RS245 | I | 2" long, 1/4" dia., 3/8" slot | 81c |

HEX SHOULDER NUTS (NOT ILLUS.)

| Mallory No. | Description | Net |
|-------------|-----------------|-----|
| 255 | For 1/2" panels | 12c |
| A11260-12 | For 1/2" panels | 15c |
| A11260-2 | For 3/4" panels | 18c |

TYPE "K" RHEOSTAT ACCESSORIES (Not Illustrated)

| Mall. No. | Description | Dia. | Net Ea. |
|-----------|------------------|--------|---------|
| 365-1 | Bar knob | 2 1/4" | \$0.21 |
| 366-1 | Bar knob | 1 1/2" | .18 |
| 367-1 | Knurled rd. knob | 1 1/2" | .21 |
| 368-1 | Knurled rd. knob | 1 3/8" | .15 |
| 364 | 368 w pointer | | .09 |
| 363-1† | Handwheel* | 3 1/2" | 2.49 |
| 363-2† | Handwheel** | 3 1/2" | 1.93 |
| 362-1 | Handwheel* | 3 1/2" | 2.03 |
| 362-2 | Handwheel** | 3 1/2" | 2.03 |
| 361 | Finger Grip* | 1 1/2" | .70 |
| 361-1 | Finger Grip** | 1 1/2" | .55 |
| 360 | Finger Grip* | 1 1/2" | .99 |
| 360-1 | Finger Grip** | 1 1/2" | .89 |
| 359† | Finger Grip* | 2 3/8" | .64 |
| 359-1† | Finger Grip** | 2 3/8" | .50 |

*With Pointer. **Without Pointer.
†3/8" hole dia., others, 1/4".

CONTROL AND SWITCH WASHERS (Not Illustrated)

| Mall. No. | Description | Net Pkg. |
|-----------|--------------------------------------|----------|
| 203 | Extruded fiber; 3/4" O.D., 3/8" I.D. | 18c |
| 212 | Flat phenolic; 3/4" O.D., 3/8" I.D. | 12c |
| 225 | Nickel finish metal, 3/8" I.D.* | 12c |
| 226 | Nickel finish metal, 3/8" I.D.* | 12c |
| 227 | Cadmium plated lock washer† | 12c |

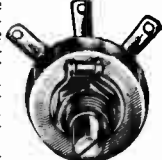
*3/8" O.D. †1 1/4" O.D. ‡3/8" I.D.

MALLORY

Industrial Controls

TWO-WATT WIRE-WOUND POTENTIOMETERS

1 1/8" diameter variable resistor that will dissipate 2 watts over the entire element for continuous operation. For use in test and special instruments, bias control and bridge circuits. Linear taper only. Contact arm is grounded. Total rotation 280°; effective electrical rotation 255°. Provided with short shaft, milled screwdriver slot. Will take standard knobs. Furnished with hex. nut. Shipping Weight, 4 ozs.



POTENTIOMETERS

| Mallory No. | Ohms Resis. | Carrying Capacity In Amps | Net Each |
|-------------|-------------|---------------------------|----------|
| C6P | 6 | .53 | \$1.08 |
| C10P | 10 | .45 | 1.08 |
| C15P | 15 | .37 | 1.08 |
| C20P | 20 | .32 | 1.08 |
| C30P | 30 | .26 | 1.08 |
| C40P | 40 | .22 | 1.08 |
| C50P | 50 | .2 | 1.08 |
| C100P | 100 | .14 | 1.08 |
| C200P | 200 | .1 | 1.08 |
| C400P | 400 | .07 | 1.08 |
| C1MP | 1K | .045 | 1.20 |
| C3MP | 3K | .025 | 1.20 |
| C5MP | 5K | .02 | 1.47 |
| C6MP | 6K | .018 | 1.47 |
| C10MP | 10K | .014 | 1.47 |
| C15MP | 15K | .011 | 1.47 |

RHEOSTATS*

| Mallory No. | Ohms Resis. | Carrying Capacity In Amps | Net Each |
|-------------|-------------|---------------------------|----------|
| C6R | 6 | .58 | 93c |
| C10R | 10 | .47 | 93c |
| C15R | 15 | .37 | 93c |
| C20R | 20 | .32 | 93c |
| C30R | 30 | .26 | 93c |
| C40R | 40 | .22 | 93c |
| C50R | 50 | .2 | 93c |
| C100R | 100 | .14 | 93c |

*"Open" or "off" position counter-clockwise.

FOUR-WATT WIRE-WOUND POTENTIOMETERS, RHEOSTATS

Used on bias control and voltage dividers; also for replacement of positioning, hold, focus and other controls of TV sets. Rugged. Rheostats feature "off" position (no connection) type of construction. Insulated contact arm. Pots have three, rheostats have two terminals. Total rotation 294°; effective electrical rotation 275° ± 5%. No. 4 linear taper. Voltage breakdown 1000 v. DC. One control (with hex nut) to carton.



POTENTIOMETERS

| Mallory Number | Ohms Resis. | Capacity In Amps | Net Each |
|----------------|-------------|------------------|----------|
| M1PK | 1 | 2.00 | \$1.35 |
| M3PK | 3 | 1.15 | 1.35 |
| M6PK | 6 | .82 | 1.35 |
| M10PK | 10 | .63 | 1.35 |
| M15PK | 15 | .52 | 1.35 |
| M20PK | 20 | .45 | 1.35 |
| M25PK | 25 | .40 | 1.35 |
| M30PK | 30 | .37 | 1.35 |
| M40PK | 40 | .32 | 1.35 |
| M50PK | 50 | .28 | 1.35 |
| M60PK | 60 | .26 | 1.35 |
| M75PK | 75 | .23 | 1.35 |
| M100PK | 100 | .20 | 1.35 |
| M200PK | 200 | .14 | 1.35 |
| M300PK | 300 | .116 | 1.35 |
| M400PK | 400 | .10 | 1.35 |
| M500PK | 500 | .09 | 1.35 |
| M600PK | 600 | .082 | 1.35 |
| M1MPK | 1K | .063 | 1.35 |
| M1.5MPK | 1.5K | .052 | 1.35 |
| M2MPK | 2K | .045 | 1.35 |
| M2.5MPK | 2.5K | .04 | 1.35 |
| M3MPK | 3K | .037 | 1.35 |
| M4MPK | 4K | .032 | 1.35 |
| M5MPK | 5K | .028 | 1.35 |
| M10MPK | 10K | .02 | 1.35 |
| M15MPK | 15K | .016 | 1.47 |
| M20MPK | 20K | .014 | 1.47 |
| M25MPK | 25K | .013 | 1.47 |

FOUR-WATT POTENTIOMETERS (CONTINUED)

| Mallory Number | Ohms Resis. | Capacity In Amps | Net Each |
|----------------|-------------|------------------|----------|
| M50MPK | 50K | .009 | \$1.74 |
| M70MPK | 70K | .0075 | 1.74 |
| M75MPK | 75K | .0073 | 2.46 |
| M100MPK | 100K | .0063 | 2.46 |

CENTER-TAPPED POTENTIOMETERS

| Mallory No. | Ohms Resis. | Capacity In Amps | Net Each |
|-------------|-------------|------------------|----------|
| MT10PK | 10 | .63 | \$1.32 |
| MT20PK | 20 | .45 | 1.32 |
| MT30PK | 30 | .37 | 1.32 |

RHEOSTATS*

| Mallory No. | Ohms Resis. | Capacity In Amps | Net Each |
|-------------|-------------|------------------|----------|
| M05RK | 0.5 | 2.80 | 93c |
| M1RK | 1 | 2.00 | 93c |
| M2RK | 2 | 1.40 | 93c |
| M3RK | 3 | 1.15 | 93c |
| M4RK | 4 | 1.00 | 93c |
| M6RK | 6 | .82 | 93c |
| M10RK | 10 | .63 | 93c |
| M15RK | 15 | .52 | 93c |
| M20RK | 20 | .45 | 93c |
| M25RK | 25 | .40 | 93c |
| M30RK | 30 | .37 | 93c |
| M40RK | 40 | .32 | 93c |
| M50RK | 50 | .28 | 93c |
| M60RK | 60 | .26 | 93c |
| M75RK | 75 | .23 | 93c |
| M100RK | 100 | .20 | 93c |

**"Open" or "Off" position counter-clockwise

SEVEN-WATT WIRE-WOUND POTENTIOMETERS



Suitable for precision instruments such as resistance bridges and where a control of medium currents or voltages is required. Supplied with grounded contact arm, 307° total rotation; 295° effective electrical rotation. Will dissipate 7 watts. Provided with short shaft, milled screw-driver slot for easy adjustment. Will take standard knobs. Hex. nut furnished. No. 4 taper.

| Mallory No. | Ohms Resistance | Carrying Capacity In Amps | Net Each |
|-------------|-----------------|---------------------------|----------|
| E5MP | 5K | .042 | \$2.76 |
| E10MP | 10K | .03 | 2.94 |
| E20MP | 20K | .021 | 3.00 |
| E25MP | 25K | .019 | 3.09 |
| E50MP | 50K | .0135 | 3.15 |
| E75MP | 75K | .011 | 3.24 |
| E100MP | 100K | .0095 | 3.30 |
| E125MP | 125K | .0085 | 3.30 |
| E150MP | 150K | .0078 | 3.36 |

TYPE "K" VITREOUS WIRE-WOUND POWER RHEOSTATS

Outstanding features are: Hinged-spring contact arm; low contact resistance; low wear; easy cleaning and brush replacement and anti-backlash characteristic. Each rheostat is of porcelain vitreous enamel construction, designed to give adequate ventilation. Precise uniform winding is permanently sealed into position around a high quality ceramic core. All current-carrying parts electrically insulated by dimensionally stable ceramic parts. Values shown below are for continuous operation in free air. 75, 225 and 500-watt "K" Rheostats available in many values. A knob and dial plate are supplied with each Type K rheostat.

TYPE 25K 25 WATTS

1 1/8" O.D. 295° angle of rotation.

| Mallory No. | Ohms | Max. Amps | Steps | Net Each |
|-------------|------|-----------|-------|----------|
| 25K1P | 1 | 3.000 | 28 | \$4.62 |
| 25K2P | 2 | 3.540 | 28 | 4.08 |
| 25K3P | 3 | 2.880 | 53 | 4.08 |
| 25K6P | 6 | 2.040 | 51 | 4.08 |
| 25K10P | 10 | 1.770 | 56 | 4.08 |
| 25K15P | 15 | 1.580 | 88 | 4.08 |
| 25K25P | 25 | 1.000 | 117 | 4.08 |
| 25K35P | 35 | .845 | 129 | 4.08 |
| 25K50P | 50 | .707 | 149 | 4.08 |
| 25K75P | 75 | .575 | 174 | 4.08 |
| 25K100P | 100 | .500 | 184 | 4.08 |
| 25K125P | 125 | .447 | 187 | 4.08 |
| 25K175P | 175 | .378 | 178 | 4.08 |
| 25K250P | 250 | .316 | 200 | 4.08 |
| 25K350P | 350 | .267 | 227 | 4.08 |
| 25K500P | 500 | .222 | 256 | 4.08 |
| 25K750P | 750 | .182 | 303 | 4.08 |
| 25K1000P | 1000 | .155 | 318 | 4.62 |
| 25K1500P | 1500 | .129 | 310 | 4.62 |
| 25K2500P | 2500 | .100 | 405 | 4.62 |
| 25K3500P | 3500 | .084 | 432 | 4.89 |
| 25K5000P | 5000 | .070 | 471 | 4.89 |

TYPE 50K 50 WATTS

2 1/8" O.D. 300° angle of rotation.

| Mallory No. | Ohms | Max. Amps | Steps | Net Each |
|-------------|------|-----------|-------|----------|
| 50K5P | 5 | 10.00 | 25 | \$5.16 |
| 50K1P | 1 | 7.07 | 37 | 5.16 |
| 50K2P | 2 | 5.00 | 42 | 4.62 |
| 50K4P | 4 | 3.54 | 66 | 4.62 |
| 50K6P | 6 | 2.89 | 79 | 4.62 |
| 50K8P | 8 | 2.50 | 84 | 4.62 |
| 50K12P | 12 | 2.04 | 100 | 4.62 |
| 50K16P | 16 | 1.76 | 106 | 4.62 |
| 50K22P | 22 | 1.50 | 145 | 4.62 |
| 50K35P | 35 | 1.19 | 145 | 4.62 |
| 50K50P | 50 | 1.00 | 163 | 4.62 |
| 50K80P | 80 | .79 | 210 | 4.62 |
| 50K125P | 125 | .63 | 204 | 4.62 |
| 50K150P | 150 | .58 | 244 | 4.62 |
| 50K225P | 225 | .47 | 298 | 4.62 |
| 50K300P | 300 | .41 | 268 | 4.62 |
| 50K500P | 500 | .32 | 205 | 4.62 |
| 50K800P | 800 | .25 | 363 | 4.89 |
| 50K1000P | 1000 | .22 | 354 | 4.89 |
| 50K1500P | 1500 | .176 | 449 | 4.89 |
| 50K2500P | 2500 | .14 | 455 | 4.89 |
| 50K3500P | 3500 | .12 | 500 | 5.16 |
| 50K5000P | 5000 | .10 | 550 | 5.16 |
| 50K8000P | 8000 | .08 | 690 | 5.16 |

TYPE 100K 100 WATTS

3 1/8" O.D. 300° angle of rotation.

| Mallory No. | Ohms | Max. Amps | Steps | Net Each |
|-------------|-------|-----------|-------|----------|
| 100K5P | 5 | 14.20 | 30 | \$7.71 |
| 100K1P | 1 | 10.00 | 40 | 7.71 |
| 100K2P | 2 | 7.07 | 42 | 7.71 |
| 100K3P | 3 | 5.77 | 56 | 7.71 |
| 100K5P | 5 | 4.47 | 59 | 7.71 |
| 100K7.5P | 7.5 | 3.65 | 96 | 7.23 |
| 100K10P | 10 | 3.16 | 101 | 7.23 |
| 100K16P | 16 | 2.50 | 128 | 7.23 |
| 100K25P | 25 | 2.00 | 160 | 7.23 |
| 100K50P | 50 | 1.41 | 200 | 7.23 |
| 100K75P | 75 | 1.15 | 240 | 7.23 |
| 100K100P | 100 | 1.00 | 250 | 7.23 |
| 100K200P | 200 | .71 | 315 | 7.23 |
| 100K300P | 300 | .58 | 302 | 7.23 |
| 100K400P | 400 | .50 | 316 | 7.23 |
| 100K500P | 500 | .45 | 342 | 7.23 |
| 100K750P | 750 | .37 | 406 | 7.23 |
| 100K1000P | 1000 | .32 | 435 | 7.71 |
| 100K1500P | 1500 | .26 | 520 | 7.71 |
| 100K2000P | 2000 | .22 | 544 | 7.71 |
| 100K2500P | 2500 | .20 | 535 | 7.71 |
| 100K5000P | 5000 | .14 | 692 | 8.22 |
| 100K7500P | 7500 | .12 | 820 | 8.76 |
| 100K10000P | 10000 | .10 | 840 | 9.24 |

TYPE 150K 150 WATTS

4 1/8" O.D. 305° angle of rotation.

| Mallory No. | Ohms | Max. Amps | Steps | Net Each |
|-------------|-------|-----------|-------|----------|
| 150K5P | 5 | 17.30 | 31 | \$9.81 |
| 150K1P | 1 | 12.30 | 38 | 9.81 |
| 150K2P | 2 | 8.66 | 51 | 9.81 |
| 150K3P | 3 | 7.07 | 73 | 9.81 |
| 150K5P | 5 | 5.48 | 77 | 9.81 |
| 150K7.5P | 7.5 | 4.47 | 70 | 9.81 |
| 150K10P | 10 | 3.87 | 145 | 9.24 |
| 150K15P | 15 | 3.16 | 138 | 9.24 |
| 150K25P | 25 | 2.45 | 142 | 9.24 |
| 150K35P | 35 | 2.07 | 198 | 9.24 |
| 150K50P | 50 | 1.73 | 182 | 9.24 |
| 150K75P | 75 | 1.41 | 218 | 9.24 |
| 150K100P | 100 | 1.22 | 229 | 9.24 |
| 150K150P | 150 | 1.00 | 276 | 9.24 |
| 150K200P | 200 | .87 | 289 | 9.24 |
| 150K250P | 250 | .77 | 360 | 9.24 |
| 150K350P | 350 | .66 | 350 | 9.24 |
| 150K500P | 500 | .55 | 400 | 9.24 |
| 150K750P | 750 | .45 | 460 | 9.81 |
| 150K1250P | 1250 | .35 | 490 | 9.81 |
| 150K1800P | 1800 | .290 | 555 | 10.30 |
| 150K2250P | 2250 | .26 | 547 | 10.30 |
| 150K3000P | 3000 | .22 | 729 | 10.30 |
| 150K4500P | 4500 | .18 | 689 | 10.80 |
| 150K7500P | 7500 | .14 | 930 | 11.31 |
| 150K10000P | 10000 | .12 | 980 | 12.33 |

TYPE 300K 300 WATTS

6 1/8" O.D. 315° angle of rotation.

| Mallory No. | Ohms | Max. Amps | Steps | Net Each |
|-------------|------|-----------|-------|----------|
| 300K1P | 1 | 17.30 | 48 | \$13.89 |
| 300K2P | 2 | 12.25 | 60 | 13.89 |
| 300K3P | 3 | 10.00 | 64 | 13.89 |
| 300K4P | 4 | 8.66 | 80 | 13.89 |
| 300K5P | 5 | 7.75 | 80 | 13.89 |
| 300K7.5P | 7.5 | 6.32 | 100 | 13.89 |
| 300K10P | 10 | 5.48 | 139 | 13.89 |
| 300K15P | 15 | 4.47 | 128 | 13.89 |
| 300K25P | 25 | 3.46 | 182 | 13.89 |
| 300K50P | 50 | 2.45 | 228 | 13.89 |
| 300K75P | 75 | 2.00 | 271 | 13.89 |
| 300K100P | 100 | 1.73 | 287 | 13.89 |
| 300K150P | 150 | 1.41 | 338 | 13.89 |
| 300K200P | 200 | 1.22 | 361 | 13.89 |
| 300K300P | 300 | 1.00 | 427 | 13.89 |
| 300K400P | 400 | .87 | 460 | 13.89 |
| 300K700P | 700 | .66 | 555 | 13.89 |
| 300K900P | 900 | .58 | 564 | 13.89 |
| 300K1200P | 1200 | .50 | 605 | 13.89 |
| 300K1500P | 1500 | .45 | 755 | 13.89 |
| 300K1750P | 1750 | .41 | 691 | 13.89 |
| 300K2500P | 2500 | .35 | 785 | 13.89 |

OHMITEresistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes**VITREOUS ENAMELED RHEOSTATS**

Eleven sizes in wirewound, vitreous enameled rheostats are stocked by Ohmite distributors all over the country and at the Ohmite factory. This selection, the most extensive available to industry, covers a range from 12½ to 1000 watts, in ratings that meet the major portion of design, production and emergency needs. Ratings of 12½, 25, 50, 75, 100, 150, 225, 300, 500, 750 and 1000 watts are standard.

FEATURES OF CONSTRUCTION: Ohmite rheostats are designed to produce permanently smooth, close control. The construction is all ceramic and metal; there is nothing to smoke, char, shrink, or shift. All models have insulated shafts with provision to keep the rheostat from turning on the panel. The resistance wire is wound over a solid ceramic core. Each turn is a separate resistance step and is locked against shifting by vitreous enamel. The core and base are also bonded by vitreous enamel.

MODEL "E" — 12.5 WATT*

Unenclosed and Enclosed

Diameter 7/8"—Depth behind panel 1 1/8"—Shaft 1/8" Diameter. Rotation 300°—Mounting for panels up to 1/4" by means of 1/4"-32 Bushing and Hex. Nut—Non-turn lug requires 1/8" hole 1/4" below center of shaft—Stock No. 5151 Knob Recommended. Enclosure including terminals 1 1/2" long by 1 1/8" diameter.

| Total Ohms | Max. Amps. | Unenclosed | | Enclosed | |
|------------|------------|------------|---------|-----------|---------|
| | | Stock No. | Net 1-4 | Stock No. | Net 1-4 |
| 1 | 3.53 | 0101 | \$4.63 | W0101 | \$6.31 |
| 2 | 2.50 | 0102 | 4.63 | W0102 | 6.31 |
| 3 | 2.04 | 0103 | 4.63 | W0103 | 6.31 |
| 6 | 1.44 | 0104 | 4.63 | W0104 | 6.31 |
| 8 | 1.25 | 0105 | 4.63 | W0105 | 6.31 |
| 10 | 1.12 | 0106 | 4.63 | W0106 | 6.31 |
| 15 | .91 | 0107 | 4.11 | W0107 | 5.79 |
| 25 | .71 | 0108 | 4.11 | W0108 | 5.79 |
| 35 | .60 | 0109 | 4.11 | W0109 | 5.79 |
| 50 | .50 | 0110 | 4.11 | W0110 | 5.79 |
| 75 | .41 | 0111 | 4.11 | W0111 | 5.79 |
| 100 | .35 | 0112 | 4.11 | W0112 | 5.79 |
| 125 | .32 | 0113 | 4.11 | W0113 | 5.79 |
| 175 | .27 | 0114 | 4.11 | W0114 | 5.79 |
| 250 | .22 | 0115 | 4.11 | W0115 | 5.79 |
| 350 | .19 | 0116 | 4.11 | W0116 | 5.79 |
| 500 | .16 | 0117 | 4.11 | W0117 | 5.79 |
| 750 | .13 | 0118 | 4.11 | W0118 | 5.79 |
| 1,000 | .11 | 0119 | 4.63 | W0119 | 6.31 |
| 1,500 | .091 | 0120 | 4.63 | W0120 | 6.31 |
| 2,500 | .071 | 0121 | 4.63 | W0121 | 6.31 |
| 3,500 | .060 | 0122 | 4.90 | W0122 | 6.58 |
| 5,000 | .050 | 0123 | 4.90 | W0123 | 6.58 |
| 7,500 | .041 | 4190† | 5.06 | W4190† | 6.74 |
| 10,000 | .035 | 4191† | 5.06 | W4191† | 6.74 |
| 12,500 | .028 | 4192† | 5.50 | W4192† | 7.18 |
| 15,000 | .023 | 4193† | 5.50 | W4193† | 7.18 |

†Silicone-ceramic coating. *Rating on metal panel.

MODEL "H", Series A — 25 WATT

Diameter 1 1/8"—Depth behind panel 1 3/8"—Shaft 1/4" diameter. Rotation 300°—Mounting for panels up to 1/4" by means of 3/8"-32 Bushing and Hex. Nut—Non-turn lug requires 1/8" hole 1/2" below center of shaft—Stock No. 5150 Knob Recommended.

| Stock No. | Total Ohms | Max. Amps. | Net 1-4 | Stock No. | Total Ohms | Max. Amps. | Net 1-4 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 0140 | 1 | 5.000 | \$4.63 | 0154 | 250 | .316 | \$4.11 |
| 0141 | 2 | 3.540 | 4.63 | 0155 | 350 | .267 | 4.11 |
| 0142 | 3 | 2.880 | 4.63 | 0156 | 500 | .222 | 4.11 |
| 0143 | 6 | 2.040 | 4.63 | 0157 | 750 | .182 | 4.11 |
| 0144 | 8 | 1.770 | 4.63 | 0158 | 1,000 | .155 | 4.63 |
| 0145 | 10 | 1.580 | 4.63 | 0159 | 1,500 | .129 | 4.63 |
| 0146 | 15 | 1.290 | 4.11 | 0160 | 2,500 | .100 | 4.63 |
| 0147 | 25 | 1.000 | 4.11 | 0161 | 3,500 | .084 | 4.90 |
| 0148 | 35 | .845 | 4.11 | 0162 | 5,000 | .070 | 4.90 |
| 0149 | 50 | .707 | 4.11 | 4200† | 7,500 | .050 | 5.06 |
| 0150 | 75 | .575 | 4.11 | 4201† | 10,000 | .041 | 5.06 |
| 0151 | 100 | .500 | 4.11 | 4202† | 15,000 | .031 | 5.50 |
| 0152 | 125 | .445 | 4.11 | 4203† | 20,000 | .025 | 6.16 |
| 0153 | 175 | .375 | 4.11 | 4204† | 25,000 | .020 | 6.82 |

†Silicone-ceramic coating. Not listed UL Ser. A.

The pivoted universal-action-mounted contact brush is of copper-graphite or silver-graphite on the heavier current rheostats. It rides upon a large flat surface and assures perfect contact without wear on the wire. Pressure at the contact and at the center lead are independent. Ohmite Rheostat Models H, J, G, K, L, P, and N, all marked Series A, are listed under the Underwriters' Laboratories Reexamination Service.

RATING: The current carrying capacities shown in the tables are for use in *free air*; when units are enclosed, these currents should be reduced possibly as much as 30% to 50%, depending upon the degree of ventilation. The rated current will cause the rheostat to dissipate its rated wattage when the full resistance is in the circuit.



Model "E"



Enclosed Model "E"

MODEL "J", Series A — 50 WATT

Diameter 2 1/8"—Depth behind panel 1 3/8"—Shaft 1/4" Diameter. Rotation 300°—Mounting for panels up to 1/4" by means of 3/8"-32 Bushing and Hex Nut—Non-turn lug requires 1/8" hole 1/2" below center of shaft—Stock No. 5150 Knob Recommended.

| Stock No. | Total Ohms | Max. Amps. | Net 1-4 | Stock No. | Total Ohms | Max. Amps. | Net 1-4 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 0308 | 0.5 | 10.000 | \$5.15 | 0324 | 500 | .316 | \$4.63 |
| 0309 | 1 | 7.070 | 5.15 | 0325 | 800 | .250 | 4.90 |
| 0310 | 2 | 5.000 | 5.15 | 0326 | 1,000 | .224 | 4.90 |
| 0311 | 4 | 3.530 | 5.15 | 0327 | 1,600 | .176 | 4.90 |
| 0312 | 6 | 2.880 | 5.15 | 0328 | 2,500 | .141 | 4.90 |
| 0313 | 8 | 2.500 | 4.63 | 0329 | 3,500 | .119 | 5.15 |
| 0314 | 12 | 2.040 | 4.63 | 0330 | 5,000 | .100 | 5.15 |
| 0315 | 16 | 1.760 | 4.63 | 0331 | 8,000 | .079 | 5.15 |
| 0316 | 22 | 1.500 | 4.63 | 0332 | 10,000 | .070 | 5.15 |
| 0317 | 35 | 1.190 | 4.63 | 4210† | 15,000 | .046 | 5.83 |
| 0318 | 50 | 1.000 | 4.63 | 4211† | 20,000 | .034 | 6.60 |
| 0319 | 80 | .790 | 4.63 | 4212† | 25,000 | .028 | 7.26 |
| 0320 | 125 | .630 | 4.63 | 4213† | 30,000 | .023 | 8.03 |
| 0321 | 150 | .575 | 4.63 | 4214† | 40,000 | .018 | 9.35 |
| 0322 | 225 | .470 | 4.63 | 4215† | 50,000 | .015 | 10.23 |
| 0323 | 300 | .408 | 4.63 | | | | |

†Silicone-ceramic coating. Not listed UL Ser. A.

MODEL "G" — 75 WATT

Diameter 2 3/4"—Depth behind panel 1 3/4"—Shaft 1/4" Diameter. Rotation 300°—Mounting for panels up to 1/4" by means of 3/8"-32 Bushing and Hex. Nut—Non-turn lug requires 1/8" hole 1/2" below center of shaft—Stock No. 5150 Knob Recommended.

| Stock No. | Total Ohms | Max. Amps. | Net 1-4 | Stock No. | Total Ohms | Max. Amps. | Net 1-4 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 1100 | 0.5 | 12.300 | \$6.97 | 1112 | 200 | .612 | \$6.41 |
| 1101 | 1 | 8.660 | 6.97 | 1113 | 300 | .500 | 6.41 |
| 1102 | 2 | 6.120 | 6.97 | 1114 | 400 | .433 | 6.41 |
| 1103 | 3 | 5.000 | 6.97 | 1115 | 500 | .388 | 6.41 |
| 1104 | 5 | 3.880 | 6.97 | 1116 | 750 | .316 | 6.97 |
| 1105 | 7.5 | 3.160 | 6.97 | 1117 | 1,000 | .274 | 6.97 |
| 1106 | 10 | 2.740 | 6.97 | 1118 | 1,500 | .224 | 6.97 |
| 1107 | 16 | 2.170 | 6.41 | 1119 | 2,000 | .194 | 6.97 |
| 1108 | 25 | 1.730 | 6.41 | 1120 | 2,500 | .173 | 6.97 |
| 1109 | 50 | 1.230 | 6.41 | 1121 | 5,000 | .123 | 7.45 |
| 1110 | 75 | 1.000 | 6.41 | 1122 | 7,500 | .100 | 8.00 |
| 1111 | 100 | .866 | 6.41 | 1123 | 10,000 | .087 | 8.00 |

OHMITEresistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes**VITREOUS ENAMELED RHEOSTATS****MODEL "K", Series A — 100 WATT**

Diameter 3 1/2" — Depth behind panel 1 3/4" — Shaft 1/4" Diameter. Rotation 300° — Mounting for panels up to 1/4" by means of 3/8"-32 Bushing and Hex. Nut — Non-turn lug requires 7/8" hole 1/2" below center of shaft — Stock No. 5150 Knob Recommended.

| Stock No. | Total Ohms | Max. Amps. | Net 1-4 | Stock No. | Total Ohms | Max. Amps. | Net 1-4 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 0440 | 0.5 | 14.100 | \$7.72 | 0452 | 200 | .707 | \$7.21 |
| 0441 | 1 | 10.000 | 7.72 | 0453 | 300 | .575 | 7.21 |
| 0442 | 2 | 7.070 | 7.72 | 0454 | 400 | .500 | 7.21 |
| 0443 | 3 | 5.750 | 7.72 | 0455 | 500 | .447 | 7.21 |
| 0444 | 5 | 4.470 | 7.72 | 0456 | 750 | .365 | 7.21 |
| 0445 | 7.5 | 3.650 | 7.72 | 0457 | 1,000 | .316 | 7.72 |
| 0446 | 10 | 3.160 | 7.72 | 0458 | 1,500 | .258 | 7.72 |
| 0447 | 16 | 2.500 | 7.21 | 0459 | 2,000 | .224 | 7.72 |
| 0448 | 25 | 2.000 | 7.21 | 0460 | 2,500 | .200 | 7.72 |
| 0449 | 50 | 1.410 | 7.21 | 0461 | 5,000 | .141 | 8.24 |
| 0450 | 75 | 1.150 | 7.21 | 0462 | 7,500 | .115 | 8.76 |
| 0451 | 100 | 1.000 | 7.21 | 0463 | 10,000 | .100 | 9.26 |

MODEL "L", Series A — 150 WATT

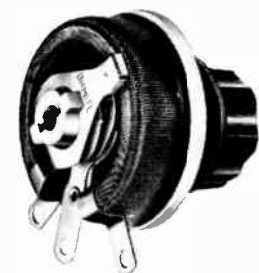
Diameter 4" — Depth behind panel 2" — Shaft 1/4" Diameter. Rotation 300° — Mounting for panels up to 1/4", 3/8"-32 Bushing and Hex. Nut or two 10-32 x 3/4" flat head screws, mounting centers 7/8" each side of center of shaft on line perpendicular to center terminal. — Stock No. 5150 Knob Recommended.

| Stock No. | Total Ohms | Max. Amps. | Net 1-4 | Stock No. | Total Ohms | Max. Amps. | Net 1-4 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 0524 | 0.5 | 17.300 | \$9.78 | 0537 | 150 | 1.000 | \$ 9.26 |
| 0525 | 1 | 12.300 | 9.78 | 0538 | 200 | .865 | 9.26 |
| 0526 | 2 | 8.650 | 9.78 | 0539 | 250 | .775 | 9.26 |
| 0527 | 3 | 7.070 | 9.78 | 0540 | 350 | .655 | 9.26 |
| 0528 | 5 | 5.480 | 9.78 | 0541 | 500 | .548 | 9.26 |
| 0529 | 7.5 | 4.470 | 9.78 | 0542 | 750 | .447 | 9.78 |
| 0530 | 10 | 3.880 | 9.78 | 0543 | 1,250 | .346 | 9.78 |
| 0531 | 15 | 3.613 | 9.78 | 0544 | 1,800 | .288 | 10.30 |
| 0532 | 25 | 2.450 | 9.26 | 0545 | 2,250 | .259 | 10.30 |
| 0533 | 35 | 2.070 | 9.26 | 0546 | 3,000 | .224 | 10.30 |
| 0534 | 50 | 1.735 | 9.26 | 0547 | 4,500 | .182 | 10.81 |
| 0535 | 75 | 1.415 | 9.26 | 0548 | 7,500 | .141 | 11.33 |
| 0536 | 100 | 1.225 | 9.26 | 0549 | 10,000 | .122 | 12.35 |

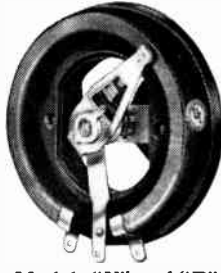
MODEL "P" — 225 WATT

Diameter 5" — Depth behind panel 2 1/2" — Shaft 3/8" Diameter. Rotation 310° — Mounting for panels up to 1 1/4", two 1/4"-20 x 1 1/2" flat head screws, mounting centers 7/8" each side of center of shaft on center line of cross-bar. — Stock No. 5105 Knob Recommended. Three 8-32 Terminal Screws, Nuts and Washers are supplied.

| Stock No. | Total Ohms | Max. Amps. | Net 1-2 | Stock No. | Total Ohms | Max. Amps. | Net 1-2 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 1250 | 1 | 15.000 | \$14.11 | 1261 | 100 | 1.500 | \$14.11 |
| 1251 | 2 | 10.600 | 14.11 | 1262 | 150 | 1.220 | 14.11 |
| 1252 | 3 | 8.660 | 14.11 | 1263 | 200 | 1.060 | 14.11 |
| 1253 | 4 | 7.500 | 14.11 | 1264 | 300 | .866 | 14.11 |
| 1254 | 5 | 6.710 | 14.11 | 1265 | 400 | .750 | 14.11 |
| 1255 | 7.5 | 5.490 | 14.11 | 1266 | 700 | .567 | 14.11 |
| 1256 | 10 | 4.740 | 14.11 | 1267 | 900 | .500 | 14.11 |
| 1257 | 15 | 3.870 | 14.11 | 1268 | 1,200 | .433 | 14.11 |
| 1258 | 25 | 3.000 | 14.11 | 1269 | 1,500 | .387 | 14.11 |
| 1259 | 50 | 2.120 | 14.11 | 1270 | 1,750 | .358 | 14.11 |
| 1260 | 75 | 1.730 | 14.11 | 1271 | 2,500 | .300 | 14.11 |



Models "J", "G" and "K"

Models "N" and "R"
("P", "T" and "U" Similar)**MODEL "N", Series A — 300 WATT**

Diameter 6" — Depth behind panel 2 3/8" — Shaft 3/8" Diameter. Rotation 320° — Mounting for panels up to 1 1/4", two 1/4"-20 x 1 1/2" flat head screws, mounting centers 1 1/8" each side of center of shaft on center line of cross-bar. — Stock No. 5105 Knob Recommended. Three 8-32 Terminal Screws, Nuts and Washers are supplied.

| Stock No. | Total Ohms | Max. Amps. | Net 1-2 | Stock No. | Total Ohms | Max. Amps. | Net 1-2 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 0650 | 1 | 17.320 | \$15.29 | 0661 | 100 | 1.730 | \$15.29 |
| 0651 | 2 | 12.240 | 15.29 | 0662 | 150 | 1.410 | 15.29 |
| 0652 | 3 | 10.000 | 15.29 | 0663 | 200 | 1.220 | 15.29 |
| 0653 | 4 | 8.660 | 15.29 | 0664 | 300 | 1.000 | 15.29 |
| 0654 | 5 | 7.750 | 15.29 | 0665 | 400 | .866 | 15.29 |
| 0655 | 7.5 | 6.320 | 15.29 | 0666 | 700 | .655 | 15.29 |
| 0656 | 10 | 5.480 | 15.29 | 0667 | 900 | .578 | 15.29 |
| 0657 | 15 | 4.470 | 15.29 | 0668 | 1,200 | .500 | 15.29 |
| 0658 | 25 | 3.460 | 15.29 | 0669 | 1,500 | .447 | 15.29 |
| 0659 | 50 | 2.450 | 15.29 | 0670 | 1,750 | .414 | 15.29 |
| 0660 | 75 | 2.000 | 15.29 | 0671 | 2,500 | .346 | 15.29 |

MODEL "R" — 500 WATT

Diameter 8" — Depth behind panel 2 1/8" — Shaft 3/8" Diameter. Rotation 325° — Mounting for panels up to 1 1/4", two 1/4"-20 x 1 1/2" flat head screws, mounting centers 1 1/2" each side of center of shaft on center line of cross-bar. — Stock No. 5105 Knob Recommended. Three 8-32 Terminal Screws, Nuts and Washers are supplied.

| Stock No. | Total Ohms | Max. Amps. | Net 1-2 | Stock No. | Total Ohms | Max. Amps. | Net 1-2 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 0849 | 1.0 | 22.300 | \$22.09 | 0872 | 50 | 3.160 | \$22.09 |
| 0850 | 1.5 | 18.200 | 22.09 | 0861 | 80 | 2.620 | 22.09 |
| 0851 | 2 | 15.800 | 22.09 | 0862 | 125 | 2.000 | 22.09 |
| 0852 | 2.5 | 14.100 | 22.09 | 0863 | 175 | 1.690 | 22.09 |
| 0853 | 3 | 12.900 | 22.09 | 0864 | 250 | 1.410 | 22.09 |
| 0854 | 4 | 11.200 | 22.09 | 0865 | 325 | 1.240 | 22.09 |
| 0855 | 5 | 10.000 | 22.09 | 0866 | 500 | 1.000 | 22.09 |
| 0856 | 8 | 7.900 | 22.09 | 0867 | 750 | .817 | 22.09 |
| 0857 | 12.5 | 6.300 | 22.09 | 0868 | 1,000 | .707 | 22.09 |
| 0858 | 16 | 5.600 | 22.09 | 0869 | 1,500 | .577 | 22.09 |
| 0859 | 25 | 4.470 | 22.09 | 0870 | 2,000 | .500 | 22.09 |
| 0860 | 40 | 3.540 | 22.09 | 0871 | 2,500 | .447 | 22.09 |

MODEL "T" — 750 WATT

Diameter 10" — Depth behind panel 3" — Shaft 3/8" Diameter. Rotation 330° — Mounting for panels up to 1 1/4", two 1/4"-20 x 1 1/2" flat head screws, mounting centers 1 7/8" each side of center of shaft on center line of cross-bar. — Stock No. 5105 Knob Recommended. Three 8-32 Terminal Screws, Nuts and Washers are supplied.

| Stock No. | Total Ohms | Max. Amps. | Net 1-2 | Stock No. | Total Ohms | Max. Amps. | Net 1-2 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 1300 | 1 | 27.400 | \$31.20 | 1312 | 50 | 3.870 | \$31.20 |
| 1301 | 1.5 | 22.300 | 31.20 | 1313 | 80 | 3.060 | 31.20 |
| 1302 | 2 | 19.400 | 31.20 | 1314 | 100 | 2.740 | 31.20 |
| 1303 | 2.5 | 17.300 | 31.20 | 1315 | 160 | 2.170 | 31.20 |
| 1304 | 3 | 15.800 | 31.20 | 1316 | 200 | 1.940 | 31.20 |
| 1305 | 4 | 13.600 | 31.20 | 1317 | 300 | 1.580 | 31.20 |
| 1306 | 5 | 12.200 | 31.20 | 1318 | 400 | 1.370 | 31.20 |
| 1307 | 8 | 9.650 | 31.20 | 1319 | 600 | 1.117 | 31.20 |
| 1308 | 10 | 8.650 | 31.20 | 1320 | 750 | 1.000 | 31.20 |
| 1309 | 12.5 | 7.750 | 31.20 | 1321 | 1,200 | .791 | 31.20 |
| 1310 | 16 | 6.820 | 31.20 | 1322 | 1,800 | .646 | 31.20 |
| 1311 | 25 | 5.470 | 31.20 | 1323 | 2,500 | .547 | 31.20 |

MODEL "U" — 1000 WATT

Diameter 12" — Depth behind panel 3" — Shaft 3/8" Diameter. Rotation 335° — Mounting for panels up to 1 1/4", two 1/4"-20 x 1 1/2" flat head screws, mounting centers 3" each side of center of shaft on center line of cross-bar. — Stock No. 5105 Knob Recommended. Three 8-32 Terminal Screws, Nuts and Washers are supplied.

| Stock No. | Total Ohms | Max. Amps. | Net 1-2 | Stock No. | Total Ohms | Max. Amps. | Net 1-2 |
|-----------|------------|------------|---------|-----------|------------|------------|---------|
| 1450 | 1 | 31.600 | \$36.45 | 1462 | 50 | 4.470 | \$36.45 |
| 1451 | 1.5 | 25.800 | 36.45 | 1463 | 75 | 3.650 | 36.45 |
| 1452 | 2 | 22.100 | 36.45 | 1464 | 100 | 3.160 | 36.45 |
| 1453 | 2.5 | 20.000 | 36.45 | 1465 | 175 | 2.390 | 36.45 |
| 1454 | 3 | 18.300 | 36.45 | 1466 | 225 | 2.110 | 36.45 |
| 1455 | 4 | 15.800 | 36.45 | 1467 | 300 | 1.830 | 36.45 |
| 1456 | 5 | 14.100 | 36.45 | 1468 | 400 | 1.580 | 36.45 |
| 1457 | 8 | 11.200 | 36.45 | 1469 | 500 | 1.410 | 36.45 |
| 1458 | 10 | 10.000 | 36.45 | 1470 | 750 | 1.150 | 36.45 |
| 1459 | 12.5 | 8.950 | 36.45 | 1471 | 1,000 | 1.000 | 36.45 |
| 1460 | 16 | 7.900 | 36.45 | 1472 | 1,500 | .816 | 36.45 |
| 1461 | 25 | 6.330 | 36.45 | 1473 | 2,500 | .633 | 36.45 |

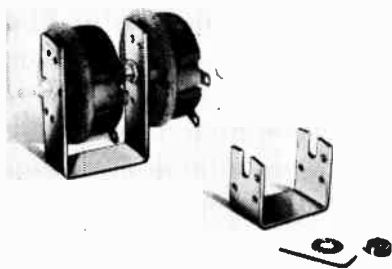
CATALOG 50 LISTS ALL RHEOSTATS TO MEET MILITARY SPECIFICATION MIL-R-22B

OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



RHEOSTAT TANDEM COUPLING KITS



Inexpensive kits assemble standard Ohmite Model G, H, J, K, L or E (miniature) rheostats. Each kit consists of a steel "U" frame, a coupling with set screw, mica washer, Allen wrench and assembly instructions. Rheostat shafts are joined by the coupling which is fastened to the shaft of the rear unit. Projections on the coupling fit a recess in the rear hub of the front unit. Stock No. 6533 kit, mounts Model G, K or L units but accommodates Models H or J in the rear position. Stock No. 6532 unit mounts Models H or J but accommodates Models G, K or L in the rear position. Stock No. 6591 kit assembles only Model E (miniature) rheostats.

Stock No. 6532 — Max Panel 1/8"..... Net Each (1-4) \$2.01
Stock No. 6533 — Max Panel 5/32"..... Net Each (1-4) 2.51
Stock No. 6591 — Max Panel 1/16"..... Net Each (1-4) 2.01

BLACK BAKELITE KNOBS

| Stock No. | Description | Knob Dia. | Hole Dia. | Net Ea. 1-2 |
|-----------|-------------------------------|-----------|-----------|-------------|
| 5102 | Bar Knob, 2 1/4" long | | 1 1/4" | \$.50 |
| 5103 | Bar Knob, 1 1/4" long | | 1 1/4" | .21 |
| 5104 | Handwheel with Pointer | 3 1/4" | 3 3/8" | 1.38 |
| 5105 | Handwheel without Pointer | 3 1/4" | 3 3/8" | 1.16 |
| 5106 | Handwheel with Pointer | 3 1/4" | 1 1/2" | 1.38 |
| 5107 | Handwheel without Pointer | 3 1/4" | 1 1/2" | 1.16 |
| 5109 | Finger-Grip with Pointer | 1 3/8" | 1 1/2" | .89 |
| 5110 | Finger-Grip without Pointer | 1 3/8" | 1 1/2" | .82 |
| 5111 | Finger-Grip with Pointer | 2 3/8" | 1 1/2" | 1.32 |
| 5112 | Finger-Grip without Pointer | 2 3/8" | 1 1/2" | 1.21 |
| *5115 | Bar Knob, 4 3/4" long | | 3 3/8" | 3.00 |
| 5116 | Bar Knob, 1 1/2" long | | 1 1/2" | .50 |
| 5150 | Skirted Finger-Grip | 1 1/2" | 1 1/2" | .29 |
| 5151 | Finger-Grip | 1 1/2" | 1 1/2" | .29 |
| 5152A | Like 5104 but shorter pointer | 3 1/4" | 1 1/4" | 1.60 |

*Requires pin and tapped hole in shaft.



MOLDED COMPOSITION POTENTIOMETERS, 1/2 and 2 WATTS

Used in commercial and military electronic applications where high quality and dependable performance are important. Type AB, 1 5/16" dia., is rated 2 watts at 70°C ambient and is available with 7/8" slotted shaft (CMU), 2" unslotted shaft (CU, CA, CB, CCU dual unit) and locking type slotted shaft (CLU). Type AS,

a miniature unit 1/2" dia. rated 1/2 watt, is available only with locking type shaft.

Because of their molded composition elements, these units outlast and outperform film type units. Noise level is exceedingly low. Single control Type AB units extend 5/8" behind panel; dual con-

trol 1 17/64". Type AS miniature unit extends 1 1/16" behind panel. An SPST switch for single Type AB units is available. Units are dust and splash proof, fungus and corrosion resistant and meet the latest requirements of MIL-R-94. Styles CMU, CLU and Type AS conform respectively to MIL-R-94 Styles RV4N, RV4L, RV6L.

STOCK "POTS" — MIL Units are Stamped with MIL and Commercial Designations

| Resistance Ohms Except As Noted Tol. ±10% except ±20% | TYPE AB (1 5/16" Dia.) | | | | | | | | TYPE AS (1/2" Dia.) | |
|---|--------------------------------|-----------------|----------------------|-----------------|------------------|------------------|-----------------|-----------------------------------|---------------------|-----------------|
| | Single Unit 7/8" Slotted Shaft | | Single Unit 2" Shaft | | | Locking | | Dual | Miniature Locking | |
| | Style CMU Linear | MIL Designation | Style CU Linear | Style CA CW log | Style CB CCW log | Style CLU Linear | MIL Designation | Style CCU Linear | Linear | MIL Designation |
| 50 | CMU5001 | RV4NAYS5000A | CU5001 | | | CLU5001 | RV4LAYS5000A | Resistance Shown is for Each Unit | AS3601 | RV6LAYS101A |
| 100 | CMU1011 | RV4NAYS101A | CU1011 | | | CLU1011 | RV4LAYS101A | | AS3602 | RV6LAYS251A |
| 150 | CMU1511 | RV4NAYS151A | CU1511 | | | CLU1511 | RV4LAYS151A | | | |
| 250 | CMU2511 | RV4NAYS251A | CU2511 | | | CU2511 | RV4LAYS251A | | | |
| 350 | CMU3511 | RV4NAYS351A | CU3511 | | | CLU3511 | RV4LAYS351A | | | |
| 500 | CMU5011 | RV4NAYS501A | CU5011 | | | CLU5011 | RV4LAYS501A | | AS3603 | RV6LAYS501A |
| 750 | CMU7511 | RV4NAYS751A | CU7511 | | | CLU7511 | RV4LAYS751A | | AS3604 | RV6LAYS102A |
| 1,000 | CMU1021 | RV4NAYS102A | CU1021 | | | CLU1021 | RV4LAYS102A | | | |
| 1,500 | CMU1521 | RV4NAYS152A | CU1521 | | | CLU1521 | RV4LAYS152A | | AS3605 | RV6LAYS252A |
| 2,500 | CMU2521 | RV4NAYS252A | CU2521 | | | CLU2521 | RV4LAYS252A | | | |
| 3,500 | CMU3521 | RV4NAYS352A | CU3521 | | | CLU3521 | RV4LAYS352A | | | |
| 5,000 | CMU5021 | RV4NAYS502A | CU5021 | | | CLU5021 | RV4LAYS502A | AS3606 | RV6LAYS502A | |
| 7,500 | CMU7521 | RV4NAYS752A | CU7521 | | | CLU7521 | RV4LAYS752A | | | |
| 10,000 | CMU1031 | RV4NAYS103A | CU1031 | | CB1031 | CLU1031 | RV4LAYS103A | CCU1031 | AS3607 | RV6LAYS103A |
| 15,000 | CMU1531 | RV4NAYS153A | CU1531 | | | CLU1531 | RV4LAYS153A | | | |
| 25,000 | CMU2531 | RV4NAYS253A | CU2531 | | CB2531 | CLU2531 | RV4LAYS253A | CCU2531 | AS3608 | RV6LAYS253A |
| 35,000 | CMU3531 | RV4NAYS353A | CU3531 | | | CLU3531 | RV4LAYS353A | | | |
| 50,000 | CMU5031 | RV4NAYS503A | CU5031 | | CB5031 | CU5031 | RV4LAYS503A | CCU5031 | AS3609 | RV6LAYS503A |
| 75,000 | CMU7531 | RV4NAYS753A | CU7531 | | | CU7531 | RV4LAYS753A | | | |
| .1 meg. | CMU1041 | RV4NAYS104A | CU1041 | CA1041 | | CLU1041 | RV4LAYS104A | CCU1041 | AS3610 | RV6LAYS104A |
| .15 meg. | CMU1541 | RV4NAYS154A | CU1541 | | | CLU1541 | RV4LAYS154A | | | |
| .25 meg. | CMU2541 | RV4NAYS254A | CU2541 | CA2541 | | CLU2541 | RV4LAYS254A | CCU2541 | AS3611 | RV6LAYS254A |
| .35 meg. | CMU3541 | RV4NAYS354A | CU3541 | | | CLU3541 | RV4LAYS354A | | | |
| .5 meg. | CMU5041 | RV4NAYS504A | CU5041 | CA5041 | | CLU5041 | RV4LAYS504A | CCU5041 | AS3612 | RV6LAYS504A |
| .75 meg.* | CMU7542 | RV4NAYS754B | CU7542 | | | CLU7542 | RV4LAYS754B | | | |
| 1.0 meg.* | CMU1052 | RV4NAYS105B | CU1052 | CA1052 | | CLU1052 | RV4LAYS105B | CCU1052 | AS3613 | RV6LAYS105B |
| 1.5 meg.* | CMU1552 | RV4NAYS155B | CU1552 | | | CLU1552 | RV4LAYS155B | | | |
| 2.0 meg.* | CMU2052 | RV4NAYS205B | CU2052 | | | CU2052 | RV4LAYS205B | AS3684 | RV6LAYS205B | |
| 2.5 meg.* | CMU2552 | RV4NAYS255B | CU2552 | CA2552 | | CLU2552 | RV4LAYS255B | AS3614 | RV6LAYS255B | |
| 3.5 meg.* | CMU3552 | RV4NAYS355B | CU3552 | | | CU3552 | RV4LAYS355B | | | |
| 5.0 meg.* | CMU5052 | RV4NAYS505B | CU5052 | | | CLU5052 | RV4LAYS505B | AS3615 | RV6LAYS505B | |
| Weight | .064 lb. | | .084 lb. | | | .070 lb. | | .123 lb. | .017 lb. | |
| Net Price | \$1.95 | | \$1.95 | \$2.25 | \$2.25 | \$2.55 | | \$5.85 | \$5.10 | |

Switch CS-1 (Unmounted) for CMU, CU, CA, CB, CLU..... Net \$66



Style CCU

OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



OHMITE VITREOUS ENAMELED FIXED AND DIVIDOHM® RESISTORS



25 WATT FIXED RESISTOR
Core: 2" x 1/8" — Mounting Centers 2 3/4"

| Res. Ohms | Max. Amps. | Fixed Resist. | | Adj. Resist. | |
|-----------|------------|---------------|---------|--------------|---------|
| | | Stock No. | Net 1-9 | Stock No. | Net 1-9 |
| 1 | 5.00 | 0200J | \$0.72 | 0360 | \$1.29 |
| 2 | 3.54 | 0200K | .72 | 0360B | 1.29 |
| 3 | 2.88 | 0200L | .72 | 0361 | 1.29 |
| 5 | 2.24 | 0200A | .72 | 0362 | 1.29 |
| 7.5 | 1.82 | | | 0362B | 1.29 |
| 10 | 1.58 | 0200B | .72 | 0363 | 1.29 |
| 15 | 1.29 | 0200R | .72 | 0364 | 1.29 |
| 20 | 1.12 | | | 0364B | 1.29 |
| 25 | 1.00 | 0200C | .72 | 0365 | 1.29 |
| 50 | .71 | 0200D | .72 | 0366 | 1.29 |
| 75 | .58 | 0200E | .72 | 0367 | 1.29 |
| 100 | .50 | 0200F | .72 | 0368 | 1.29 |
| 150 | .41 | 0200G | .72 | 0369 | 1.29 |
| 200 | .35 | 0200H | .72 | 0370 | 1.29 |
| 250 | .32 | 0201 | .72 | 0371 | 1.29 |
| 300 | .29 | | | 0371B | 1.29 |
| 400 | .25 | | | 0371C | 1.29 |
| 500 | .22 | 0202 | .72 | 0372 | 1.29 |
| 750 | .18 | 0203 | .72 | 0373 | 1.29 |
| 800 | .17 | 0204 | .72 | 0374 | 1.29 |
| 1,000 | .16 | 0205 | .72 | 0375 | 1.29 |
| 1,250 | .14 | | | 0375B | 1.32 |
| 1,500 | .13 | 0206 | .75 | 0376 | 1.32 |
| 2,000 | .12 | 0207 | .75 | 0377 | 1.32 |
| 2,250 | .11 | | | 0377B | 1.32 |
| 2,500 | .10 | 0208 | .75 | 0378 | 1.32 |
| 3,000 | .091 | 0209 | .75 | 0379 | 1.32 |
| 3,500 | .084 | 0210 | .75 | 0380 | 1.32 |
| 4,000 | .079 | 0211 | .75 | 0381 | 1.32 |
| 4,500 | .074 | | | 0381B | 1.32 |
| 5,000 | .070 | 0212 | .75 | 0382 | 1.32 |
| 6,000 | .064 | 0213 | .85 | 0383 | 1.42 |
| 7,000 | .060 | | | 0383B | 1.42 |
| 7,500 | .057 | 0214 | .85 | 0384 | 1.42 |
| 8,000 | .055 | | | 0384B | 1.42 |
| 9,000 | .052 | | | 0384C | 1.42 |
| 10,000 | .050 | 0215 | .85 | 0385 | 1.42 |
| 12,000 | .042 | 0216 | .90 | 0386 | 1.47 |
| 15,000 | .036 | 0217 | .90 | 0387 | 1.47 |
| 20,000 | .031 | 0218 | .90 | 0388 | 1.47 |
| 25,000 | .028 | 0219 | 1.04 | 0389 | 1.61 |
| 40,000 | .022 | 0222 | 1.04 | | |
| 50,000 | .020 | 0224 | 1.21 | | |
| 100,000 | .010 | 0229 | 1.64 | | |

100 WATT FIXED RESISTOR
Core: 6 1/2" x 3/4" — Mounting Centers 7 3/4"

| Res. Ohms | Max. Amps. | Fixed Resist. | | Adj. Resist. | |
|-----------|------------|---------------|---------|--------------|---------|
| | | Stock No. | Net 1-9 | Stock No. | Net 1-9 |
| 5 | 4.47 | 0600A | \$1.54 | 0956 | \$2.11 |
| 10 | 3.16 | 0600B | 1.54 | 0957 | 2.11 |
| 25 | 2.00 | 0601 | 1.54 | 0958 | 2.11 |
| 50 | 1.41 | 0602 | 1.54 | 0959 | 2.11 |
| 75 | 1.15 | 0603 | 1.54 | | |
| 100 | 1.00 | 0604 | 1.54 | 0960 | 2.11 |
| 150 | .816 | 0605 | 1.54 | | |
| 250 | .63 | 0606 | 1.54 | 0960B | 2.11 |
| 500 | .45 | 0607 | 1.54 | 0961 | 2.11 |
| 750 | .365 | 0608 | 1.54 | | |
| 1,000 | .32 | 0609 | 1.54 | 0962 | 2.11 |
| 1,500 | .26 | 0610 | 1.60 | 0962B | 2.17 |
| 2,000 | .223 | 0611 | 1.60 | | |
| 2,500 | .20 | 0612 | 1.60 | 0963 | 2.17 |
| 3,000 | .18 | 0613 | 1.60 | | |
| 5,000 | .14 | 0614 | 1.60 | 0964 | 2.17 |
| 7,500 | .115 | 0615 | 1.73 | | |
| 10,000 | .10 | 0616 | 1.73 | 0965 | 2.30 |
| 15,000 | .081 | 0617 | 1.87 | 0966 | 2.44 |
| 20,000 | .071 | 0618 | 1.87 | 0967 | 2.44 |
| 25,000 | .063 | 0619 | 2.13 | 0968 | 2.70 |
| 30,000 | .058 | 0620 | 2.13 | 0969 | 2.70 |
| 40,000 | .050 | 0621 | 2.13 | 0970 | 2.70 |
| 50,000 | .045 | 0622 | 2.24 | 0971 | 2.78 |
| 60,000 | .041 | 0623 | 2.21 | | |
| 75,000 | .032 | 0624 | 2.45 | 0972 | 3.02 |
| 100,000 | .028 | 0625 | 2.75 | 0973 | 3.32 |

50 WATT FIXED RESISTOR
Core: 4" x 1/8" — Mounting Centers 4 3/4"

| Res. Ohms | Max. Amps. | Fixed Resist. | | Adj. Resist. | |
|-----------|------------|---------------|---------|--------------|---------|
| | | Stock No. | Net 1-9 | Stock No. | Net 1-9 |
| 5 | 3.16 | 0400A | \$1.11 | 0560 | \$1.68 |
| 10 | 2.23 | 0400B | 1.11 | 0561 | 1.68 |
| 25 | 1.41 | 0400C | 1.11 | 0562 | 1.68 |
| 50 | 1.00 | 0400D | 1.11 | 0563 | 1.68 |
| 75 | .82 | 0400E | 1.11 | 0564 | 1.68 |
| 100 | .71 | 0400F | 1.11 | 0565 | 1.68 |
| 150 | .58 | 0400G | 1.11 | 0566 | 1.68 |
| 200 | .50 | 0400H | 1.11 | 0567 | 1.68 |
| 250 | .45 | 0401 | 1.11 | 0568 | 1.68 |
| 300 | .41 | | | 0568B | 1.68 |
| 400 | .35 | | | 0568C | 1.68 |
| 500 | .32 | 0402 | 1.11 | 0569 | 1.68 |
| 750 | .26 | 0403 | 1.11 | 0570 | 1.68 |
| 1,000 | .22 | 0405 | 1.11 | 0572 | 1.68 |
| 1,250 | .20 | | | 0572B | 1.71 |
| 1,500 | .18 | 0406 | 1.14 | 0573 | 1.71 |
| 2,000 | .16 | 0407 | 1.14 | 0574 | 1.71 |
| 2,500 | .14 | 0408 | 1.14 | 0575 | 1.71 |
| 3,000 | .13 | 0409 | 1.14 | 0576 | 1.71 |
| 3,500 | .12 | | | 0576B | 1.71 |
| 4,000 | .11 | 0410 | 1.14 | 0577 | 1.71 |
| 4,500 | .10 | | | 0577B | 1.71 |
| 5,000 | .10 | 0411 | 1.14 | 0578 | 1.71 |
| 6,000 | .091 | | | 0578B | 1.80 |
| 7,000 | .084 | | | 0578C | 1.80 |
| 7,500 | .081 | 0412 | 1.23 | 0579 | 1.80 |
| 8,000 | .079 | 0413 | 1.23 | 0580 | 1.80 |
| 9,000 | .074 | | | 0580B | 1.80 |
| 10,000 | .071 | 0414 | 1.23 | 0581 | 1.80 |
| 12,000 | .064 | 0415 | 1.35 | 0582 | 1.92 |
| 15,000 | .057 | 0416 | 1.35 | 0583 | 1.92 |
| 20,000 | .050 | 0417 | 1.35 | 0584 | 1.92 |
| 25,000 | .045 | 0418 | 1.54 | 0585 | 2.11 |
| 30,000 | .036 | | | 0586 | 2.11 |
| 35,000 | .032 | 0419 | 1.54 | | |
| 40,000 | .029 | | | 0587 | 2.11 |
| 50,000 | .026 | 0420 | 1.72 | 0588 | 2.29 |
| 60,000 | .024 | | | 0589 | 2.29 |
| 75,000 | .021 | 0421 | 1.97 | | |
| 80,000 | .021 | | | 0590 | 2.54 |
| 100,000 | .018 | 0422 | 2.13 | 0591 | 2.70 |

160 WATT FIXED RESISTOR
Core: 8 1/2" x 1 1/8" — Mounting Centers 9 3/4"

| Res. Ohms | Max. Amps. | Fixed Resist. | | Adj. Resist. | |
|-----------|------------|---------------|---------|--------------|---------|
| | | Stock No. | Net 1-9 | Stock No. | Net 1-9 |
| 5 | 5.66 | 0700A | \$3.19 | 1156 | \$4.07 |
| 10 | 4.00 | 0700B | 2.28 | 1157 | 3.16 |
| 25 | 2.53 | 0701 | 2.28 | 1158 | 3.16 |
| 50 | 1.79 | 0702 | 2.28 | 1159 | 3.16 |
| 75 | 1.46 | 0703 | 2.28 | | |
| 100 | 1.26 | 0704 | 2.28 | 1160 | 3.16 |
| 150 | 1.03 | 0705 | 2.28 | | |
| 250 | .80 | 0706 | 2.28 | 1160B | 3.16 |
| 500 | .57 | 0707 | 2.28 | 1161 | 3.16 |
| 750 | .46 | 0708 | 2.28 | | |
| 1,000 | .40 | 0709 | 2.28 | 1162 | 3.16 |
| 1,500 | .33 | 0710 | 2.32 | 1162B | 3.20 |
| 2,000 | .28 | 0711 | 2.32 | | |
| 2,500 | .25 | 0712 | 2.32 | 1163 | 3.20 |
| 3,000 | .23 | 0713 | 2.32 | | |
| 5,000 | .18 | 0714 | 2.32 | 1164 | 3.20 |
| 7,500 | .15 | 0715 | 2.53 | | |
| 10,000 | .13 | 0716 | 2.53 | 1165 | 3.41 |
| 15,000 | .10 | 0717 | 2.71 | 1166 | 3.59 |
| 20,000 | .089 | 0718 | 2.71 | 1167 | 3.59 |
| 25,000 | .080 | 0719 | 2.80 | 1168 | 3.68 |
| 30,000 | .073 | 0720 | 2.80 | 1169 | 3.68 |
| 40,000 | .063 | 0721 | 2.80 | 1170 | 3.68 |
| 50,000 | .057 | 0722 | 2.89 | 1171 | 3.77 |
| 60,000 | .051 | 0723 | 2.89 | | |
| 75,000 | .046 | 0724 | 3.08 | 1172 | 3.96 |
| 100,000 | .040 | 0725 | 3.26 | 1173 | 4.14 |

These all-welded construction resistors have welded high-strength alloy terminals. For perfect electrical connection, the resistance wire is welded to the terminal. Units are wire-wound on ceramic cores and protected by Ohmite Vitreous Enamel. Furnished with mounting brackets and on DIVIDOHM with one adjustable lug.

75 WATT SIZE — Dividohm
Core: 6" x 1/8" — Mounting Centers 6 3/4"

| Adjustable Res. | | | Adjustable Res. | | |
|-----------------|------------|-----------|-----------------|------------|-----------|
| Res. Ohms | Max. Amps. | Stock No. | Res. Ohms | Max. Amps. | Stock No. |
| 5 | 3.87 | 0769 | 5,000 | .12 | 0783 |
| 10 | 2.74 | 0770 | 6,000 | .11 | 0783B |
| 15 | 2.24 | 0771 | 7,000 | .10 | 0783C |
| 25 | 1.73 | 0772 | 7,500 | .10 | 0784 |
| 50 | 1.22 | 0773 | 8,000 | .096 | 0784B |
| 100 | .86 | 0774 | 9,000 | .091 | 0784C |
| 200 | .61 | 0774B | 10,000 | .086 | 0785 |
| 250 | .55 | 0775 | 12,000 | .079 | 0785B |
| 300 | .50 | 0775B | 15,000 | .070 | 0786 |
| 400 | .43 | 0775C | 20,000 | .061 | 0787 |
| 500 | .39 | 0776 | 25,000 | .054 | 0788 |
| 750 | .32 | 0777 | 30,000 | .050 | 0789 |
| 1,000 | .27 | 0778 | 35,000 | .046 | 0790 |
| 1,250 | .24 | 0778B | 40,000 | .043 | 0791 |
| 1,500 | .22 | 0779 | 45,000 | .035 | 0792 |
| 2,000 | .19 | 0780 | 50,000 | .033 | 0793 |
| 2,500 | .17 | 0781 | 60,000 | .030 | 0794 |
| 3,000 | .16 | 0781B | 80,000 | .026 | 0795 |
| 3,500 | .15 | 0782 | 100,000 | .023 | 0796 |
| 4,000 | .14 | 0782B | | | |

Net (1-9), 5 thru 1,000 ohms.....\$1.87
 Net (1-9), 1,250 thru 5,000 ohms.....1.92
 Net (1-9), 6,000 thru 10,000 ohms.....2.01
 Net (1-9), 12,000 thru 20,000 ohms.....2.13
 Net (1-9), 25,000 thru 40,000 ohms.....2.32
 Net (1-9), 45,000 thru 60,000 ohms.....2.52
 Net (1-9), 80,000 ohms.....2.78
 Net (1-9), 100,000 ohms.....2.93

200 WATT FIXED RESISTOR
Core: 10 1/2" x 1 1/8" — Mounting Centers 11 3/4"

| Res. Ohms | Max. Amps. | Fixed Resist. | | Adj. Resist. | |
|-----------|------------|---------------|---------|--------------|---------|
| | | Stock No. | Net 1-9 | Stock No. | Net 1-9 |
| 5 | 6.32 | 0900A | \$3.44 | 1356 | \$4.32 |
| 10 | 4.47 | 0900B | 2.46 | 1357 | 3.34 |
| 25 | 2.83 | 0901 | 2.46 | 1358 | 3.34 |
| 50 | 2.00 | 0902 | 2.46 | 1359 | 3.34 |
| 75 | 1.64 | 0903 | 2.46 | | |
| 100 | 1.41 | 0904 | 2.46 | 1360 | 3.34 |
| 150 | 1.15 | 0905 | 2.46 | | |
| 250 | .89 | 0906 | 2.46 | 1360B | 3.34 |
| 500 | .63 | 0907 | 2.46 | 1361 | 3.34 |
| 750 | .52 | 0908 | 2.46 | | |
| 1,000 | .45 | 0909 | 2.46 | 1362 | 3.34 |
| 1,500 | .37 | 0910 | 2.53 | 1362B | 3.41 |
| 2,000 | .32 | 0911 | 2.53 | | |
| 2,500 | .28 | 0912 | 2.53 | 1363 | 3.41 |
| 3,000 | .258 | 0913 | 2.53 | | |
| 5,000 | .20 | 0914 | 2.53 | 1364 | 3.41 |
| 7,500 | .16 | 0915 | 2.71 | | |
| 10,000 | .14 | 0916 | 2.71 | 1365 | 3.59 |
| 15,000 | .12 | 0917 | 2.89 | 1366 | 3.77 |
| 20,000 | .10 | 0918 | 2.89 | 1367 | 3.77 |
| 25,000 | .089 | 0919 | 2.98 | 1368 | 3.86 |
| 30,000 | .082 | 0920 | 2.98 | 1369 | 3.86 |
| 40,000 | .071 | 0921 | 2.98 | 1370 | 3.86 |
| 50,000 | .063 | 0922 | 3.08 | 1371 | 3.96 |
| 60,000 | .058 | 0923 | 3.08 | | |
| 75,000 | .052 | 0924 | 3.26 | 1372 | 4.14 |
| 100,000 | .045 | 0925 | 3.46 | 1373 | 4.34</ |

OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



OHMITE® STOCK AXIAL-LEAD RESISTORS



Ohmite axial-lead, vitreous-enamelled resistors are compact, wire-wound units available in four stock sizes: 1-Watt ($1\frac{1}{8}'' \times \frac{1}{8}''$), 3-Watt ($1\frac{1}{8}'' \times \frac{1}{4}''$), 5-Watt ($1\frac{1}{8}'' \times \frac{3}{8}''$), and 10-Watt ($1\frac{1}{8}'' \times \frac{1}{2}''$) . . . The resistance wire and terminal lead are both welded to the end cap, utilizing the patented Ohmite welding technique. All have $1\frac{1}{2}''$ tinned wire leads, are simple to mount, and occupy small space.

Axial-lead resistors are especially suited for printed circuits, terminal board, and point-to-point wiring applications.

The standard resistance tolerance is $\pm 5\%$. Resistance range for each size shown in price tables below.

| Ohms | Ohms | Ohms | Ohms |
|------|------|-------|--------|
| 1.0 | 56 | 700 | 6,800 |
| 1.5 | 68 | 750 | 7,000 |
| 2.0 | 75 | 800 | 7,500 |
| 3.0 | 82 | 820 | 8,000 |
| 4.0 | 100 | 900 | 8,200 |
| 5.0 | 120 | 1,000 | 9,000 |
| 7.5 | 150 | 1,200 | 10,000 |
| 10 | 180 | 1,500 | 12,000 |
| 12 | 200 | 1,800 | 15,000 |
| 15 | 220 | 2,000 | 18,000 |
| 18 | 250 | 2,200 | 20,000 |
| 20 | 270 | 2,500 | 22,000 |
| 22 | 300 | 2,700 | 25,000 |
| 25 | 330 | 3,000 | 27,000 |
| 27 | 390 | 3,300 | 30,000 |
| 30 | 400 | 3,900 | 33,000 |
| 33 | 470 | 4,000 | 39,000 |
| 39 | 500 | 4,700 | 40,000 |
| 40 | 560 | 5,000 | 47,000 |
| 47 | 600 | 5,600 | 50,000 |
| 50 | 680 | 6,000 | |

1 WATT SIZE

| | |
|--|--------|
| Net (1-9), 1 thru 1,000 ohms | \$.62 |
| Net (1-9), 1,200 thru 5,000 ohms | .66 |
| Net (1-9), 5,600 and 6,000 ohms | .70 |

3 WATT SIZE

| | |
|---|--------|
| Net (1-9), 1 thru 1,000 ohms | \$.59 |
| Net (1-9), 1,200 thru 5,000 ohms | .62 |
| Net (1-9), 5,600 thru 10,000 ohms | .66 |

5 WATT SIZE

| | |
|--|--------|
| Net (1-9), 1 thru 1,000 ohms | \$.62 |
| Net (1-9), 1,200 thru 5,000 ohms | .66 |
| Net (1-9), 5,600 thru 10,000 ohms | .70 |
| Net (1-9), 12,000 thru 20,000 ohms | .78 |
| Net (1-9), 22,000 and 25,000 ohms | .82 |

10 WATT SIZE

| | |
|--|--------|
| Net (1-9), 1 thru 1,000 ohms | \$.68 |
| Net (1-9), 1,200 thru 5,000 ohms | .73 |
| Net (1-9), 5,600 thru 10,000 ohms | .84 |
| Net (1-9), 12,000 thru 20,000 ohms | .95 |
| Net (1-9), 22,000 thru 40,000 ohms | 1.00 |
| Net (1-9), 47,000 and 50,000 ohms | 1.12 |

Popular OHMITE "BROWN DEVIL"® RESISTORS



5 Watt—1" x 5/16" Core Size

| Ohms | Amps | Ohms | Amps | Ohms | Amps |
|------|------|-------|------|--------|------|
| 1 | 2.23 | 200 | .160 | 2,250 | .047 |
| 1.5 | 1.82 | 225 | .150 | 2,500 | .045 |
| 2 | 1.58 | 250 | .140 | 3,000 | .041 |
| 3 | 1.29 | 300 | .130 | 3,500 | .037 |
| 4 | 1.12 | 350 | .120 | 4,000 | .035 |
| 5 | 1.00 | 400 | .110 | 4,500 | .033 |
| 7.5 | .810 | 450 | .100 | 5,000 | .032 |
| 10 | .710 | 500 | .100 | 6,000 | .029 |
| 12 | .640 | 600 | .091 | 7,000 | .027 |
| 15 | .580 | 700 | .084 | 7,500 | .026 |
| 20 | .500 | 750 | .082 | 8,000 | .025 |
| 25 | .450 | 800 | .079 | 9,000 | .024 |
| 30 | .410 | 900 | .074 | 10,000 | .022 |
| 35 | .380 | 1,000 | .070 | 12,500 | .020 |
| 40 | .350 | 1,100 | .067 | 15,000 | .018 |
| 50 | .320 | 1,200 | .064 | 17,500 | .017 |
| 75 | .260 | 1,250 | .063 | 20,000 | .016 |
| 100 | .220 | 1,500 | .057 | 22,500 | .014 |
| 125 | .200 | 1,750 | .053 | 25,000 | .013 |
| 150 | .180 | 2,000 | .050 | | |

| | |
|--|--------|
| Net (1-9), 1 thru 1,000 ohms | \$0.52 |
| Net (1-9), 1,100 thru 5,000 ohms | .55 |
| Net (1-9), 6,000 thru 10,000 ohms | .58 |
| Net (1-9), 12,500 thru 20,000 ohms | .65 |
| Net (1-9), 22,500 and 25,000 ohms | .68 |

10 Watt—1 1/4" x 5/16" Core Size

| Ohms | Amps | Ohms | Amps | Ohms | Amps |
|------|------|-------|------|--------|------|
| 0.5 | 4.47 | 300 | .18 | 5,000 | .045 |
| 1 | 3.16 | 350 | .17 | 6,000 | .041 |
| 2 | 2.24 | 400 | .16 | 7,000 | .038 |
| 3 | 1.83 | 450 | .15 | 7,500 | .036 |
| 4 | 1.58 | 500 | .14 | 8,000 | .035 |
| 5 | 1.41 | 600 | .13 | 8,500 | .034 |
| 7.5 | 1.16 | 700 | .12 | 10,000 | .032 |
| 10 | 1.00 | 750 | .12 | 11,000 | .030 |
| 12 | .91 | 800 | .11 | 12,000 | .029 |
| 15 | .82 | 900 | .11 | 12,500 | .028 |
| 20 | .71 | 1,000 | .10 | 13,500 | .027 |
| 25 | .63 | 1,100 | .095 | 15,000 | .026 |
| 30 | .58 | 1,200 | .091 | 16,000 | .025 |
| 35 | .53 | 1,250 | .089 | 17,500 | .024 |
| 40 | .50 | 1,500 | .081 | 18,000 | .023 |
| 50 | .45 | 1,750 | .075 | 20,000 | .022 |
| 75 | .37 | 2,000 | .071 | 22,500 | .021 |
| 100 | .32 | 2,250 | .066 | 25,000 | .020 |
| 125 | .28 | 2,500 | .063 | 30,000 | .018 |
| 150 | .26 | 3,000 | .057 | 35,000 | .017 |
| 200 | .22 | 3,500 | .053 | 40,000 | .016 |
| 225 | .21 | 4,000 | .050 | 45,000 | .015 |
| 250 | .20 | 4,500 | .047 | 50,000 | .014 |

| | |
|--|--------|
| Net (1-9), 0.5 thru 1,000 ohms | \$0.57 |
| Net (1-9), 1,100 thru 5,000 ohms | .61 |
| Net (1-9), 6,000 thru 10,000 ohms | .70 |
| Net (1-9), 11,000 thru 20,000 ohms | .79 |
| Net (1-9), 22,500 thru 40,000 ohms | .83 |
| Net (1-9), 45,000 and 50,000 ohms | .93 |

10 WATT DIVIDOHM® ADJUSTABLE RESISTORS

Core: $1\frac{1}{4}'' \times \frac{1}{8}''$ — Mounting Centers $2\frac{1}{4}''$

| Adjustable Res. | | | Adjustable Res. | | |
|-----------------|-----------|-----------|-----------------|-----------|-----------|
| Res. Ohms | Max. Amps | Stock No. | Res. Ohms | Max. Amps | Stock No. |
| 1 | 3.16 | 1001 | 75 | .37 | 1011 |
| 2 | 2.24 | 1002 | 100 | .32 | 1012 |
| 3 | 1.83 | 1003 | 150 | .26 | 1013 |
| 5 | 1.41 | 1004 | 200 | .22 | 1014 |
| 7.5 | 1.16 | 1005 | 250 | .20 | 1015 |
| 10 | 1.00 | 1006 | 300 | .18 | 1016 |
| 15 | .82 | 1007 | 350 | .17 | 1017 |
| 20 | .71 | 1008 | 400 | .16 | 1018 |
| 25 | .63 | 1009 | 500 | .14 | 1019 |
| 50 | .45 | 1010 | 600 | .13 | 1020 |

WITH WELDED TERMINALS

High quality, small size, wire-wound resistors ideal for voltage dropping, bias units, bleeders, etc. They're extra-sturdy, all-ceramic, vitreous enamelled. These all-welded construction units have welded high-strength alloy terminals. For perfect electrical connection, the resistance wire is welded to the terminal. They give time-proved protection against shock, vibration, heat and humidity. Their long record of continuous trouble-free service—their wide use in all climates of the world—prove their complete reliability and economy. All units can be conveniently mounted by means of their $1\frac{1}{2}''$ tinned wire leads. Standard resistance tolerance is $\pm 5\%$.

20 Watt—2" x 7/16" Core Size

| Ohms | Amps | Ohms | Amps | Ohms | Amps |
|------|------|-------|------|---------|------|
| 0.5 | 6.32 | 800 | .15 | 10,000 | .043 |
| 1.0 | 4.47 | 850 | .15 | 12,500 | .035 |
| 2.0 | 3.16 | 1,000 | .14 | 15,000 | .032 |
| 3.0 | 2.58 | 1,200 | .13 | 20,000 | .027 |
| 4.0 | 2.24 | 1,250 | .12 | 25,000 | .024 |
| 5 | 2.00 | 1,500 | .12 | 30,000 | .022 |
| 10 | 1.41 | 1,750 | .11 | 35,000 | .021 |
| 25 | .89 | 2,000 | .10 | 40,000 | .019 |
| 50 | .63 | 2,250 | .094 | 45,000 | .018 |
| 75 | .52 | 2,500 | .089 | 50,000 | .017 |
| 100 | .45 | 2,750 | .085 | 55,000 | .016 |
| 150 | .36 | 3,000 | .081 | 60,000 | .016 |
| 200 | .32 | 3,500 | .075 | 65,000 | .015 |
| 250 | .28 | 4,000 | .070 | 70,000 | .014 |
| 300 | .26 | 4,500 | .066 | 75,000 | .013 |
| 350 | .24 | 5,000 | .063 | 80,000 | .012 |
| 400 | .22 | 6,000 | .057 | 85,000 | .012 |
| 500 | .20 | 7,000 | .053 | 90,000 | .011 |
| 650 | .18 | 7,500 | .051 | 95,000 | .010 |
| 700 | .17 | 8,000 | .050 | 100,000 | .010 |
| 750 | .16 | 9,000 | .047 | | |

| | |
|---|--------|
| Net (1-9), 0.5 ohms | \$0.95 |
| Net (1-9), 1.0 thru 1,000 ohms | .68 |
| Net (1-9), 1,200 thru 5,000 ohms | .70 |
| Net (1-9), 6,000 thru 10,000 ohms | .83 |
| Net (1-9), 12,500 thru 20,000 ohms | .85 |
| Net (1-9), 25,000 thru 40,000 ohms | .99 |
| Net (1-9), 45,000 thru 60,000 ohms | 1.15 |
| Net (1-9), 65,000 thru 80,000 ohms | 1.37 |
| Net (1-9), 85,000 thru 100,000 ohms | 1.57 |

CATALOG 50 LISTS ALL RESISTORS TO MEET MILITARY SPECIFICATION MIL-R-26C

OHMITE

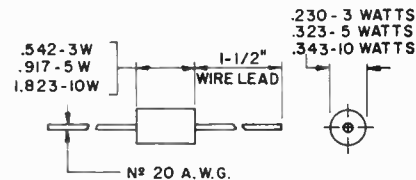
resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



RITEOHM® TYPE 884 MOLDED WIREWOUND RESISTORS ± 1% TOLERANCE



These precision power resistors are furnished from stock in power ratings of 3, 5 and 10 watts depending upon resistance. Single layer wound on ceramic core, Type 884 units feature a pressure-molded jacket of tough, resilient, silicone-ceramic material. Negligible inductance at audio frequencies. Temperature coefficient of resistance is $0 \pm 20 \text{ppm}/^\circ\text{C}$. Values shown are selected from MIL Standard MS90169, MIL-R-10509 and Bell Tel. Labs.



TYPE 884 MOLDED WIREWOUND

| 3 WATT | | 3 WATT (Cont.) | | 3 WATT (Cont.) | | 3 WATT (Cont.) | | 3 WATT (Cont.) | | 3 WATT (Cont.) | | 5 WATT (Cont.) | |
|--------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|
| Ohms | Max. Volts | Ohms | Max. Volts | Ohms | Max. Volts | Ohms | Max. Volts | Ohms | Max. Volts | Ohms | Max. Volts | Ohms | Max. Volts |
| 1.00 | 1.73 | 5.36 | 4.01 | 28.7 | 9.28 | 154 | 21.5 | 825 | 49.7 | 4420 | 115 | 15,800* | 170 |
| 1.02 | 1.75 | 5.49 | 4.06 | 29.4 | 9.39 | 158 | 21.8 | 845 | 50.4 | 4530 | 117 | 16,200* | 170 |
| 1.05 | 1.77 | 5.62 | 4.10 | 30.1 | 9.50 | 162 | 22.0 | 866 | 51.0 | 4640 | 118 | 16,500* | 170 |
| 1.07 | 1.79 | 5.76 | 4.16 | 30.9 | 9.62 | 165 | 22.2 | 887 | 51.6 | 4750 | 119 | 16,900* | 170 |
| 1.10 | 1.82 | 5.90 | 4.20 | 31.6 | 9.74 | 169 | 22.5 | 909 | 52.2 | 4870 | 121 | 17,400* | 170 |
| 1.13 | 1.84 | 6.04 | 4.25 | 32.4 | 9.86 | 174 | 22.8 | 931 | 52.8 | 4990 | 122 | 17,800* | 170 |
| 1.15 | 1.86 | 6.19 | 4.31 | 33.2 | 9.98 | 178 | 23.1 | 953 | 53.4 | 5110 | 124 | 18,200* | 170 |
| 1.18 | 1.88 | 6.34 | 4.36 | 34.0 | 10.1 | 182 | 23.4 | 976 | 54.1 | 5230 | 125 | 18,700* | 170 |
| 1.21 | 1.91 | 6.49 | 4.41 | 34.8 | 10.2 | 187 | 23.7 | 1000 | 54.7 | 5360 | 127 | 19,100* | 170 |
| 1.24 | 1.93 | 6.65 | 4.46 | 35.7 | 10.3 | 191 | 23.9 | 1020 | 55.3 | 5490 | 128 | 19,600* | 170 |
| 1.27 | 1.95 | 6.81 | 4.52 | 36.5 | 10.5 | 196 | 24.2 | 1050 | 56.1 | 5620 | 130 | 20,000* | 170 |
| 1.30 | 1.97 | 6.98 | 4.57 | 37.4 | 10.6 | 200 | 24.5 | 1070 | 56.6 | 5760 | 131 | 20,500 | 320 |
| 1.33 | 2.00 | 7.15 | 4.63 | 38.3 | 10.7 | 205 | 24.8 | 1100 | 57.4 | 5900 | 133 | 21,000 | 324 |
| 1.37 | 2.03 | 7.32 | 4.68 | 39.2 | 10.8 | 210 | 25.1 | 1130 | 58.2 | 6040 | 134 | 21,500 | 328 |
| 1.40 | 2.05 | 7.50 | 4.74 | 40.2 | 11.0 | 215 | 25.4 | 1150 | 58.7 | 6190 | 136 | 22,000 | 337 |
| 1.43 | 2.07 | 7.68 | 4.80 | 41.2 | 11.1 | 221 | 25.7 | 1180 | 59.5 | 6340 | 138 | 22,500 | 341 |
| 1.47 | 2.10 | 7.87 | 4.86 | 42.2 | 11.2 | 226 | 26.0 | 1210 | 60.2 | 6490 | 140 | 23,000 | 344 |
| 1.50 | 2.12 | 8.06 | 4.92 | 43.2 | 11.4 | 232 | 26.4 | 1240 | 61.0 | 6650 | 141 | 23,500 | 347 |
| 1.54 | 2.15 | 8.25 | 4.97 | 44.2 | 11.5 | 237 | 26.7 | 1270 | 61.7 | 6810 | 143 | 24,000 | 353 |
| 1.58 | 2.18 | 8.45 | 5.04 | 45.3 | 11.7 | 243 | 27.0 | 1300 | 62.4 | 6980 | 145 | 24,500 | 357 |
| 1.62 | 2.20 | 8.66 | 5.10 | 46.4 | 11.8 | 249 | 27.3 | 1330 | 63.2 | 7150 | 146 | 25,000 | 361 |
| 1.65 | 2.22 | 8.87 | 5.16 | 47.5 | 11.9 | 255 | 27.7 | 1370 | 64.1 | 7320 | 148 | 25,500 | 365 |
| 1.69 | 2.25 | 9.09 | 5.22 | 48.7 | 12.1 | 261 | 28.0 | 1400 | 64.8 | 7500 | 150 | 26,000 | 369 |
| 1.74 | 2.28 | 9.31 | 5.28 | 49.9 | 12.2 | 267 | 28.3 | 1430 | 65.5 | 7680 | 152 | 26,500 | 373 |
| 1.78 | 2.31 | 9.53 | 5.34 | 51.1 | 12.4 | 274 | 28.7 | 1470 | 66.4 | 7870 | 154 | 27,000 | 377 |
| 1.82 | 2.34 | 9.76 | 5.41 | 52.3 | 12.5 | 280 | 29.0 | 1500 | 67.0 | 8060 | 155 | 27,400 | 381 |
| 1.87 | 2.37 | 10.0 | 5.47 | 53.6 | 12.7 | 287 | 29.3 | 1540 | 68.0 | 8250 | 157 | 27,900 | 385 |
| 1.91 | 2.39 | 10.2 | 5.53 | 54.9 | 12.8 | 294 | 29.7 | 1580 | 68.8 | 8450 | 159 | 28,400 | 389 |
| 1.96 | 2.42 | 10.5 | 5.61 | 56.2 | 13.0 | 301 | 30.0 | 1620 | 69.7 | 8650 | 161 | 28,900 | 393 |
| 2.00 | 2.45 | 10.7 | 5.66 | 57.6 | 13.1 | 309 | 30.4 | 1650 | 70.3 | 8870 | 163 | 29,400 | 397 |
| 2.05 | 2.48 | 11.0 | 5.74 | 59.0 | 13.3 | 316 | 30.8 | 1690 | 71.2 | 9090 | 165 | 30,000 | 401 |
| 2.10 | 2.51 | 11.3 | 5.82 | 60.4 | 13.4 | 324 | 31.2 | 1740 | 72.2 | 9310 | 167 | 31,000 | 405 |
| 2.15 | 2.54 | 11.5 | 5.87 | 61.9 | 13.6 | 332 | 31.6 | 1780 | 73.0 | 9530 | 169 | 32,000 | 409 |
| 2.21 | 2.57 | 11.8 | 5.95 | 63.4 | 13.8 | 340 | 31.9 | 1820 | 73.9 | 9760 | 170 | 33,000 | 413 |
| 2.26 | 2.60 | 12.1 | 6.02 | 64.9 | 13.9 | 348 | 32.3 | 1870 | 74.9 | 10,000* | 170 | 34,000 | 417 |
| 2.32 | 2.64 | 12.4 | 6.10 | 66.5 | 14.1 | 357 | 32.7 | 1910 | 75.7 | 10,200* | 170 | 35,000 | 421 |
| 2.37 | 2.67 | 12.7 | 6.17 | 68.1 | 14.3 | 365 | 33.1 | 1960 | 76.6 | 10,500* | 170 | 35,700 | 425 |
| 2.43 | 2.70 | 13.0 | 6.24 | 69.8 | 14.5 | 374 | 33.5 | 2000 | 77.4 | 10,700* | 170 | 36,500 | 429 |
| 2.49 | 2.73 | 13.3 | 6.32 | 71.5 | 14.6 | 383 | 33.9 | 2050 | 78.4 | 11,000* | 170 | 37,400 | 433 |
| 2.55 | 2.77 | 13.7 | 6.41 | 73.2 | 14.8 | 392 | 34.3 | 2100 | 79.4 | 11,300* | 170 | 38,300 | 437 |
| 2.61 | 2.80 | 14.0 | 6.48 | 75.0 | 15.0 | 402 | 34.7 | 2150 | 80.3 | 11,500* | 170 | 39,200 | 441 |
| 2.67 | 2.83 | 14.3 | 6.55 | 76.8 | 15.2 | 412 | 35.1 | 2210 | 81.4 | 11,800* | 170 | 40,200 | 445 |
| 2.74 | 2.87 | 14.7 | 6.64 | 78.7 | 15.4 | 422 | 35.6 | 2260 | 82.3 | 12,100* | 170 | 41,200 | 449 |
| 2.80 | 2.90 | 15.0 | 6.70 | 80.6 | 15.5 | 432 | 36.1 | 2320 | 83.4 | 12,400* | 170 | 42,200 | 453 |
| 2.87 | 2.93 | 15.4 | 6.80 | 82.5 | 15.7 | 442 | 36.4 | 2370 | 84.3 | 12,700* | 170 | 43,200 | 457 |
| 2.94 | 2.97 | 15.8 | 6.88 | 84.5 | 15.9 | 453 | 36.9 | 2430 | 85.4 | 13,000* | 170 | 44,200 | 461 |
| 3.01 | 3.00 | 16.2 | 6.97 | 86.6 | 16.1 | 464 | 37.3 | 2490 | 86.4 | 13,300* | 170 | 45,300 | 465 |
| 3.09 | 3.04 | 16.5 | 7.03 | 88.7 | 16.3 | 475 | 37.7 | 2550 | 87.4 | 13,700* | 170 | 46,400 | 469 |
| 3.16 | 3.08 | 16.9 | 7.12 | 90.9 | 16.5 | 487 | 38.2 | 2610 | 88.4 | 14,000* | 170 | 47,500 | 473 |
| 3.24 | 3.12 | 17.4 | 7.22 | 93.1 | 16.7 | 499 | 38.7 | 2670 | 89.5 | 14,300* | 170 | 48,700 | 477 |
| 3.32 | 3.16 | 17.8 | 7.30 | 95.3 | 16.9 | 511 | 39.1 | 2740 | 90.6 | 14,700* | 170 | 49,900* | 481 |
| 3.40 | 3.19 | 18.2 | 7.39 | 97.6 | 17.1 | 523 | 39.6 | 2800 | 91.6 | 15,000* | 170 | 51,100* | 485 |
| 3.48 | 3.23 | 18.7 | 7.49 | 100 | 17.3 | 536 | 40.1 | 2870 | 92.8 | 15,400* | 170 | 52,300* | 489 |
| 3.57 | 3.27 | 19.1 | 7.57 | 102 | 17.5 | 549 | 40.6 | 2940 | 93.9 | | | | |
| 3.65 | 3.31 | 19.6 | 7.66 | 105 | 17.7 | 562 | 41.0 | 3010 | 95.0 | | | | |
| 3.74 | 3.35 | 20.0 | 7.74 | 107 | 17.9 | 576 | 41.6 | 3090 | 96.2 | | | | |
| 3.83 | 3.39 | 20.5 | 7.84 | 110 | 18.2 | 590 | 42.0 | 3160 | 97.4 | | | | |
| 3.92 | 3.43 | 21.0 | 7.94 | 113 | 18.4 | 604 | 42.5 | 3240 | 98.6 | | | | |
| 4.02 | 3.47 | 21.5 | 8.03 | 115 | 18.6 | 619 | 43.1 | 3320 | 99.8 | | | | |
| 4.12 | 3.51 | 22.1 | 8.14 | 118 | 18.8 | 634 | 43.6 | 3400 | 101 | | | | |
| 4.22 | 3.56 | 22.6 | 8.23 | 121 | 19.1 | 649 | 44.1 | 3480 | 102 | | | | |
| 4.32 | 3.60 | 23.2 | 8.34 | 124 | 19.3 | 665 | 44.6 | 3570 | 103 | | | | |
| 4.42 | 3.64 | 23.7 | 8.43 | 127 | 19.5 | 681 | 45.2 | 3650 | 105 | | | | |
| 4.53 | 3.69 | 24.3 | 8.54 | 130 | 19.7 | 698 | 45.7 | 3740 | 106 | | | | |
| 4.64 | 3.73 | 24.9 | 8.64 | 133 | 20.0 | 715 | 46.3 | 3830 | 107 | | | | |
| 4.75 | 3.77 | 25.5 | 8.74 | 137 | 20.3 | 732 | 46.8 | 3920 | 108 | | | | |
| 4.87 | 3.82 | 26.1 | 8.84 | 140 | 20.5 | 750 | 47.4 | 4020 | 110 | | | | |
| 4.99 | 3.87 | 26.7 | 8.95 | 143 | 20.7 | 768 | 48.0 | 4120 | 111 | | | | |
| 5.11 | 3.91 | 27.4 | 9.06 | 147 | 21.0 | 787 | 48.6 | 4220 | 112 | | | | |
| 5.23 | 3.96 | 28.0 | 9.16 | 150 | 21.2 | 806 | 49.2 | 4320 | 114 | | | | |

TYPE 884 NET PRICES

| | | |
|------------------------|----------|--------|
| 1.0 thru 3.0 ohms | Net 1-24 | \$.94 |
| 3.1 thru 1K ohms | Net 1-24 | .68 |
| 1,001 thru 5K ohms | Net 1-24 | .75 |
| 5,001 thru 10K ohms | Net 1-24 | .78 |
| 10,001 thru 15K ohms | Net 1-24 | .80 |
| 15,001 thru 20K ohms | Net 1-24 | .84 |
| 20,001 thru 40K ohms | Net 1-24 | .89 |
| 40,001 thru 55K ohms | Net 1-24 | .96 |
| 55,001 thru 75K ohms | Net 1-24 | 1.05 |
| 75,001 thru 100K ohms | Net 1-24 | 1.16 |
| 100,001 thru 125K ohms | Net 1-24 | 1.27 |
| 125,001 thru 150K ohms | Net 1-24 | 1.39 |
| 150,001 thru 175K ohms | Net 1-24 | 1.52 |
| 175,001 thru 178K ohms | Net 1-24 | 1.66 |

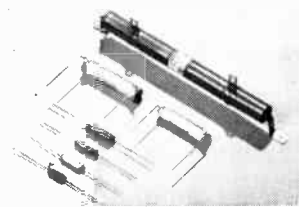
Resistance values marked * are derated in wattage because of maximum voltage gradient considerations. Even with these voltage limitations, however, the wattage ratings are still adequate for most precision applications. However, where wattage requirements dictate, the same value shown in a derated area for either the 3 or 5 watt sizes can be supplied in the next higher wattage as the case may be.

OHMITE R.F. PLATE CHOKES

This series of seven Ohmite single layer wound solenoid radio frequency plate chokes covers the entire frequency range of 3 to 520 megacycles. The four highest frequency chokes are wound on low power factor plastic cores while the other three units are wound on stearite tubes. The single layer winding is designed to avoid adverse harmonic effects within the recommended operating range and also prevents breakdown from high r.f. potentials.

| Stock Number | Operating Range Megacycles | Micro-henries | Core Dimensions | Net Each 1-9 |
|--------------|----------------------------|---------------|-----------------|--------------|
| Z-7 | 3 to 20 Mc. | 84.0 | 6" x 3/16" | \$1.37 |
| Z-14 | 7 to 35 Mc. | 44.0 | 2" x 7/16" | .68 |
| Z-28 | 20 to 60 Mc. | 21.0 | 1 3/8" x 3/16" | .57 |
| Z-50 | 35 to 110 Mc. | 7.0 | 7/8" x 3/32" | .46 |
| Z-144 | 80 to 200 Mc. | 1.8 | 3/4" x 3/16" | .43 |
| Z-235 | 160 to 350 Mc. | 0.84 | 3/4" x 3/16" | .43 |
| Z-460 | 320 to 520 Mc. | 0.20 | 1/2" x 3/32" | .43 |

Non-magnetic Brackets Furnished with Z-7. The Z-14 and Z-28 are rated at 600 ma. All others 1000 ma.



OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



LITTLE DEVIL® RESISTOR ASSORTMENTS FOR SERVICE USE



Servicemen's assortments of 150 Ohmite "Little Devil," 1/4-watt or 1/2-watt, or 125, 1-watt or 2-watt insulated composition resistors, in the 40 values (10 ohms to 10 megohms) most frequently used by servicemen. CAB-4 has 37 resistance values. The assortment is offered at the price of the resistors alone—the cabinet is furnished without extra cost! Cabinet is only 9" long, 4 3/4" high, and 5 1/4" deep.

sortment is offered at the price of the resistors alone—the cabinet is furnished without extra cost! Cabinet is only 9" long, 4 3/4" high, and 5 1/4" deep.

| Assortment | Stock No. | Quantity of Resistors | Wattages | Net Price |
|------------------------|---------------|-----------------------|----------|-----------|
| SERVICE | CAB-4 | 150 | 1/4 watt | \$19.50 |
| ±10% tolerance | CAB-10 | 150 | 1/2 watt | 18.00 |
| (40 resistance values) | CAB-2 | 125 | 1 watt | 22.50 |
| | CAB-3 | 125 | 2 watt | 30.00 |

NEW OHM'S LAW CALCULATOR

Redesigned! This new, improved version of the famous Ohmite Ohm's Law Calculator — popular the world over with servicemen, engineers and students — now has scales for solving parallel resistance problems, AND a standard slide rule. More useful than ever! With one setting of the slide the calculator gives the answer to any Ohm's Law problem—reading directly in ohms, volts, amperes, and watts. Three of the new scales on the back provide a quick, one-setting means of solving parallel resistance problems. The slide rule scales will multiply, divide, find squares, and square roots.



Ohm's Law Calculator (Cardboard) **Net Price \$0.25**
Ohm's Law Calculator (Plastic) **Net Price 1.50**

LITTLE DEVIL COLOR CODER



Here is a handy little device that makes it easy to determine the resistance and tolerance values of EIA color coded composition resistors. Just turn the color wheels until the color corresponds to the color band on the resistor and read the resistance value directly in ohms in the windows.

Little Devil Color Coder **Net Price \$.10**

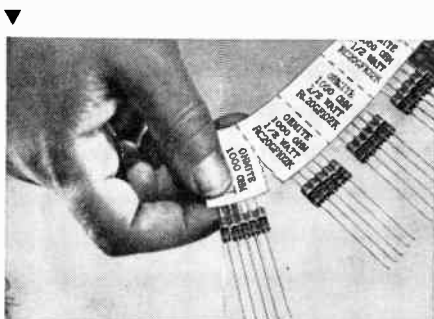


FR-7.5
Net Price \$0.45
Each

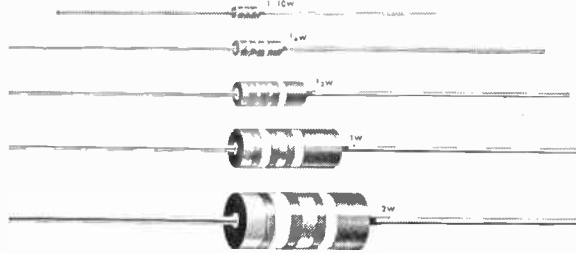
OHMITE FUSE RESISTOR

Designed for replacement in all television receivers, the FR-7.5 Fuse Resistor is provided with 1 1/2" tinned lead wires for easy installation directly in the TV circuit. May also be soldered to the plug-in terminal strip which is provided. 7.5 ohms.

"Tally Tape", Ohmite's wonderfully convenient packaging presently provided for 1/4, 1/2, 1 and 2-watt resistors. Each perforated segment holds 5 resistors—prevents spilling or tangling—simplifies counting—is printed for quick identification—guarantees original, factory-fresh stock.



OHMITE LITTLE DEVIL RESISTORS MOLDED COMPOSITION TYPE



on
Tally
Tape

(see below)

Now Includes MIL-R-11 Types

Ohmite's famous molded composition resistors. The 1/4, 1/2, 1 and 2-watt sizes, conform respectively to Styles RC07, RC20, RC32 and RC42 of MIL-R-11C and meet all the requirements of this military specification.

Little Devils have molded insulation except for the 1/10 watt size which is coated with insulating material. Features: Great stability, low noise level, low voltage coefficient, high insulation breakdown voltage and rapid heat dissipation. They may be used at full rated wattage at 70°C (158°F) ambient temperature.

Available from stock in the standard EIA resistance values in the tolerances and resistance ranges shown in the price table below. Ratings for maximum continuous RMS voltage drop are high: 150 volts for 1/10 watt units, 250 volts for 1/4 watt, 350 volts for 1/2 watt, 500 volts for 1 watt and 750 volts for 2 watt units.

STANDARD EIA VALUES

Figures in large, bold type are ±10% EIA values. All values listed are ±5% values. Price table lists the various "Little Devil" sizes and indicates the tolerances and resistance ranges in which they are supplied.

| Ohms | Ohms | Ohms | Ohms | Ohms | Megs. | Megs. | Megs. |
|------------|------------|-------------|--------------|--------------|-------------|-------------|-------------|
| 2.7 | 22 | 180 | 1500 | 12000 | 0.1 | 0.82 | 6.8 |
| 3.0 | 24 | 200 | 1600 | 13000 | 0.11 | 0.91 | 7.5 |
| 3.3 | 27 | 220 | 1800 | 15000 | 0.12 | 1.0 | 8.2 |
| 3.6 | 30 | 240 | 2000 | 16000 | 0.13 | 1.1 | 9.1 |
| 3.9 | 33 | 270 | 2200 | 18000 | 0.15 | 1.2 | 10.0 |
| 4.3 | 36 | 300 | 2400 | 20000 | 0.16 | 1.3 | 11.0 |
| 4.7 | 39 | 330 | 2700 | 22000 | 0.18 | 1.5 | 12.0 |
| 5.1 | 43 | 360 | 3000 | 24000 | 0.20 | 1.6 | 13.0 |
| 5.6 | 47 | 390 | 3300 | 27000 | 0.22 | 1.8 | 15.0 |
| 6.2 | 51 | 430 | 3600 | 30000 | 0.24 | 2.0 | 16.0 |
| 6.8 | 56 | 470 | 3900 | 33000 | 0.27 | 2.2 | 18.0 |
| 7.5 | 62 | 510 | 4300 | 36000 | 0.30 | 2.4 | 20.0 |
| 8.2 | 68 | 560 | 4700 | 39000 | 0.33 | 2.7 | 22.0 |
| 9.1 | 75 | 620 | 5100 | 43000 | 0.36 | 3.0 | ... |
| 10 | 82 | 680 | 5600 | 47000 | 0.39 | 3.3 | ... |
| 11 | 91 | 750 | 6200 | 51000 | 0.43 | 3.6 | ... |
| 12 | 100 | 820 | 6800 | 56000 | 0.47 | 3.9 | ... |
| 13 | 110 | 910 | 7500 | 62000 | 0.51 | 4.3 | ... |
| 15 | 120 | 1000 | 8200 | 68000 | 0.56 | 4.7 | ... |
| 16 | 130 | 1100 | 9100 | 75000 | 0.62 | 5.1 | ... |
| 18 | 150 | 1200 | 10000 | 82000 | 0.68 | 5.6 | ... |
| 20 | 160 | 1300 | 11000 | 91000 | 0.75 | 6.2 | ... |

PRICES, RESISTANCE RANGES, DIMENSIONS

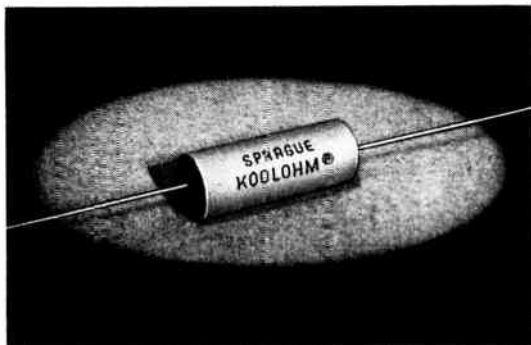
| Size Watts | Size | | Resistance Range | | MIL Type | ±5% | | ±10% | |
|------------|---------|-------|------------------|---------|----------|---------------------|---------------------|---------------------|---------------------|
| | Lgth. | Dia. | From | Thru | | Net 1-4 | Net 5-49 | Net 1-4 | Net 5-49 |
| 1/10 | .140" | .067" | 10 ohms | 1.0 meg | — | — | — | 24c LIDVS | 20c LIDVS |
| 1/4 | 1/4" | .090" | 2.7 ohms | 24 ohms | RC 07* | 40c LIDED | 34c LIDED | 20c LIDSM | 17c LIDSM |
| | | | 27 ohms | 22 megs | RC 07 | 26c LIDED | 22c LIDED | 13c LIDSM | 11c LIDSM |
| 1/2 | 3/8" | 9/64" | 2.7 ohms | 22 megs | RC 20* | 24c LIDFA | 20c LIDFA | 12c LIDLO | 10c LIDLO |
| 1 | 9/16" | 7/32" | 2.7 ohms | 22 megs | RC 32 | 36c LIDBU | 30c LIDBU | 18c LIDME | 15c LIDME |
| 2 | 1 1/16" | 5/16" | 10 ohms | 22 megs | RC 42 | 48c LIDOC | 40c LIDOC | 24c LIDHI | 20c LIDHI |

*Minimum resistance under MIL-R-11C is 10 ohms.

For more complete information on OHMITE PRODUCTS, ask for Ohmite Stock Catalog.

SPRAGUE RESISTORS

KOOLOHM[®] AXIAL-LEAD WIREWOUND RESISTORS



- Insulated-Shell Design for Easy Mounting
- Feature Improved Internal Construction in Which Windings and Leads are Welded to End-Cap for Superior Mechanical Strength
- Ceramic-Insulated Wire is Space Wound and Cemented, to Prevent Turn-to-Turn Shorting. Permits Higher Resistance Values in a Given Size Than in Conventional Resistors
- Non-Porous Tubular Ceramic Shells Sealed With High Temperature Silicone Cement
- Unexcelled Insulation and Mechanical Protection. Can Be Mounted in Direct Contact With Chassis
- For Prices on Quantities From 25 to 249, See Your Sprague Industrial Distributor
- For Complete Technical Details, Refer to Latest Issue of Sprague Engineering Bulletin 7300

- Types 450E, 452E, 454E, 456E and 458E are Standard Resistors. Types 451E, 453E, 455E, 457E and 459E are Non-Inductive Resistors

| Ohms | Type 450E 3 WATTS 1/4" x 1/8" | | Type 452E 5 WATTS 1/4" x 1" | | Type 454E 7 WATTS 1 1/2" x 1 3/8" | | Type 456E 10 WATTS 1 3/2" x 1 7/8" | | Type 458E 14 WATTS 1 3/2" x 1 7/8" | |
|------|-------------------------------------|------------|-----------------------------------|------------|---|------------|--|------------|--|------------|
| | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) |
| 1 | 450E1R05 | \$.354 | 452E1R05 | \$.366 | 454E1R05 | \$.420 | 456E1R05 | \$.440 | 458E1R05 | \$.484 |
| 1.5 | 450E1R55 | .354 | 452E1R55 | .366 | 454E1R55 | .420 | 456E1R55 | .440 | 458E1R55 | .484 |
| 2 | 450E2R05 | .354 | 452E2R05 | .366 | 454E2R05 | .420 | 456E2R05 | .440 | 458E2R05 | .484 |
| 3 | 450E3R05 | .354 | 452E3R05 | .366 | 454E3R05 | .420 | 456E3R05 | .440 | 458E3R05 | .484 |
| 4 | 450E4R05 | .354 | 452E4R05 | .366 | 454E4R05 | .420 | 456E4R05 | .440 | 458E4R05 | .484 |
| 5 | 450E5R05 | .354 | 452E5R05 | .366 | 454E5R05 | .420 | 456E5R05 | .440 | 458E5R05 | .484 |
| 7.5 | 450E7R55 | .354 | 452E7R55 | .366 | 454E7R55 | .420 | 456E7R55 | .440 | 458E7R55 | .484 |
| 10 | 450E1005 | .354 | 452E1005 | .366 | 454E1005 | .420 | 456E1005 | .440 | 458E1005 | .484 |
| 12 | 450E1205 | .354 | 452E1205 | .366 | 454E1205 | .420 | 456E1205 | .440 | 458E1205 | .484 |
| 15 | 450E1505 | .354 | 452E1505 | .366 | 454E1505 | .420 | 456E1505 | .440 | 458E1505 | .484 |
| 18 | 450E1805 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 20 | 450E2005 | .354 | 452E2005 | .366 | 454E2005 | .420 | 456E2005 | .440 | 458E2005 | .484 |
| 22 | 450E2205 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 25 | 450E2505 | .354 | 452E2505 | .366 | 454E2505 | .420 | 456E2505 | .440 | 458E2505 | .484 |
| 27 | 450E2705 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 30 | 450E3005 | .354 | 452E3005 | .366 | 454E3005 | .420 | 456E3005 | .440 | 458E3005 | .484 |
| 33 | 450E3305 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 35 | ---- | .354 | 452E3505 | .366 | 454E3505 | .420 | 456E3505 | .440 | 458E3505 | .484 |
| 39 | 450E3905 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 40 | 450E4005 | .354 | 452E4005 | .366 | 454E4005 | .420 | 456E4005 | .440 | 458E4005 | .484 |
| 47 | 450E4705 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 50 | 450E5005 | .354 | 452E5005 | .366 | 454E5005 | .420 | 456E5005 | .440 | 458E5005 | .484 |
| 56 | 450E5605 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 68 | 450E6805 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 75 | 450E7505 | .354 | 452E7505 | .366 | 454E7505 | .420 | 456E7505 | .440 | 458E7505 | .484 |
| 82 | 450E8205 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |
| 100 | 450E1015 | .354 | 452E1015 | .366 | 454E1015 | .420 | 456E1015 | .440 | 458E1015 | .484 |
| 120 | 450E1215 | .354 | 452E1215 | .366 | 454E1215 | .420 | 456E1215 | .440 | 458E1215 | .484 |
| 150 | 450E1515 | .354 | 452E1515 | .366 | 454E1515 | .420 | 456E1515 | .440 | 458E1515 | .484 |
| 180 | 450E1815 | .354 | ---- | .366 | ---- | .420 | ---- | .440 | ---- | .484 |

SPRAGUE RESISTORS

KOOLOHM AXIAL-LEAD WIREWOUND RESISTORS, continued

| Ohms | Type 450E 3 WATTS 1/4" x 3/16" | | Type 452E 5 WATTS 1/4" x 1" | | Type 454E 7 WATTS 1 1/2" x 1 3/16" | | Type 456E 10 WATTS 1 1/2" x 1 3/16" | | Type 458E 14 WATTS 1 1/2" x 1 3/16" | |
|-------|--------------------------------------|------------|-----------------------------------|------------|--|------------|---|------------|---|------------|
| | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) |
| 200 | 450E2015 | .354 | 452E2015 | .366 | 454E2015 | .420 | 456E2015 | .440 | 458E2015 | .484 |
| 220 | 450E2215 | .354 | 452E2215 | .366 | 454E2215 | .420 | 456E2215 | .440 | 458E2215 | .484 |
| 250 | 450E2515 | .354 | 452E2515 | .366 | 454E2515 | .420 | 456E2515 | .440 | 458E2515 | .484 |
| 270 | 450E2715 | .354 | --- | .366 | --- | .420 | --- | .440 | --- | .484 |
| 300 | 450E3015 | .354 | 452E3015 | .366 | 454E3015 | .420 | 456E3015 | .440 | 458E3015 | .484 |
| 330 | 450E3315 | .354 | --- | .366 | --- | .420 | --- | .440 | --- | .444 |
| 350 | --- | .354 | 452E3515 | .366 | 454E3515 | .420 | 456E3515 | .440 | 458E3515 | .484 |
| 390 | 450E3915 | .354 | --- | .366 | --- | .420 | --- | .440 | --- | .484 |
| 400 | 450E4015 | .354 | 452E4015 | .366 | 454E4015 | .420 | 456E4015 | .440 | 458E4015 | .484 |
| 450 | --- | .354 | 452E4515 | .366 | --- | .420 | --- | .440 | --- | .484 |
| 470 | 450E4715 | .354 | --- | .366 | --- | .420 | --- | .440 | --- | .484 |
| 500 | 450E5015 | .354 | 452E5015 | .366 | 454E5015 | .420 | 456E5015 | .440 | 458E5015 | .484 |
| 560 | 450E5615 | .354 | --- | .366 | --- | .420 | --- | .440 | --- | .484 |
| 600 | 450E6015 | .354 | 452E6015 | .366 | 454E6015 | .420 | 456E6015 | .440 | 458E6015 | .484 |
| 680 | 450E6815 | .354 | --- | .366 | --- | .420 | --- | .440 | --- | .484 |
| 700 | 450E7015 | .354 | 452E7015 | .366 | 454E7015 | .420 | 456E7515 | .440 | 458E7015 | .484 |
| 750 | --- | .354 | 452E7515 | .366 | 454E7515 | .420 | --- | .440 | 458E7515 | .484 |
| 800 | 450E8015 | .354 | 452E8015 | .366 | 454E8015 | .420 | 456E8015 | .440 | 458E8015 | .484 |
| 820 | 450E8215 | .354 | --- | .366 | --- | .420 | --- | .440 | --- | .484 |
| 900 | 450E9015 | .354 | 452E9015 | .366 | 454E9015 | .420 | 456E9015 | .440 | 458E9015 | .484 |
| 1000 | 450E1025 | .354 | 452E1025 | .366 | 454E1025 | .420 | 456E1025 | .440 | 458E1025 | .484 |
| 1100 | --- | .354 | 452E1125 | .378 | 454E1125 | .432 | 456E1125 | .458 | 458E1125 | .504 |
| 1200 | 450E1225 | .380 | 452E1225 | .378 | 454E1225 | .432 | 456E1225 | .458 | 458E1225 | .504 |
| 1400 | 450E1425 | .380 | 452E1425 | .378 | 454E1425 | .432 | 456E1425 | .458 | 458E1425 | .504 |
| 1500 | 450E1525 | .380 | 452E1525 | .378 | 454E1525 | .432 | 456E1525 | .458 | 458E1525 | .504 |
| 1800 | 450E1825 | .380 | 452E1825 | .378 | 454E1825 | .432 | 456E1825 | .458 | 458E1825 | .504 |
| 2000 | 450E2025 | .380 | 452E2025 | .378 | 454E2025 | .432 | 456E2025 | .458 | 458E2025 | .504 |
| 2200 | 450E2225 | .394 | 452E2225 | .388 | 454E2225 | .432 | 456E2225 | .470 | 458E2225 | .518 |
| 2500 | 450E2525 | .394 | 452E2525 | .388 | 454E2525 | .432 | 456E2525 | .470 | 458E2525 | .518 |
| 2700 | 450E2725 | .394 | --- | .388 | --- | .432 | --- | .470 | --- | .518 |
| 3000 | 450E3025 | .394 | 452E3025 | .388 | 454E3025 | .432 | 456E3025 | .470 | 458E3025 | .518 |
| 3300 | 450E3325 | .410 | --- | .388 | 454E3325 | .462 | 456E3325 | .484 | 458E3325 | .532 |
| 3500 | --- | .410 | 452E3525 | .396 | 454E3525 | .462 | 456E3525 | .484 | 458E3525 | .532 |
| 3900 | 450E3925 | .410 | --- | .396 | 454E3925 | .462 | 456E3925 | .484 | 458E3925 | .532 |
| 4000 | 450E4025 | .410 | 452E4025 | .396 | 454E4025 | .462 | 456E4025 | .484 | 458E4025 | .532 |
| 4500 | --- | .410 | 452E4525 | .408 | 454E4525 | .478 | 456E4525 | .498 | 458E4525 | .548 |
| 4700 | 450E4725 | .426 | --- | .408 | --- | .478 | --- | .498 | --- | .548 |
| 5000 | 450E5025 | .426 | 452E5025 | .408 | 454E5025 | .478 | 456E5025 | .498 | 458E5025 | .548 |
| 5600 | 450E5625 | .438 | --- | .408 | --- | .478 | --- | .498 | --- | .548 |
| 6000 | 450E6025 | .438 | 452E6025 | .418 | 454E6025 | .488 | 456E6025 | .510 | 458E6025 | .562 |
| 6800 | 450E6825 | .454 | --- | .418 | --- | .488 | --- | .510 | --- | .562 |
| 7000 | --- | .454 | 452E7025 | .432 | 454E7025 | .504 | 456E7025 | .510 | 458E7025 | .576 |
| 7500 | 450E7525 | .466 | 452E7525 | .442 | 454E7525 | .518 | 456E7525 | .534 | 458E7525 | .588 |
| 8000 | 450E8025 | .466 | 452E8025 | .442 | 454E8025 | .518 | 456E8025 | .534 | 458E8025 | .588 |
| 8200 | 450E8225 | .482 | --- | .442 | --- | .518 | --- | .534 | --- | .588 |
| 9000 | 450E9025 | .482 | 452E9025 | .458 | 454E9025 | .532 | 456E9025 | .552 | 458E9025 | .608 |
| 10000 | 450E1035 | .489 | 452E1035 | .476 | 454E1025 | .548 | 456E1035 | .562 | 458E1035 | .618 |
| 11000 | --- | .489 | --- | .476 | 454E1135 | .548 | 456E1135 | .582 | 458E1135 | .640 |
| 12000 | --- | .489 | 452E1235 | .506 | 454E1235 | .574 | 456E1235 | .594 | 458E1125 | .654 |
| 14000 | --- | .489 | 452E1435 | .534 | 454E1435 | .600 | 456E1435 | .618 | 458E1435 | .680 |
| 15000 | --- | .489 | 452E1535 | .552 | 454E1535 | .620 | 456E1535 | .632 | 458E1535 | .696 |
| 16000 | --- | .489 | --- | .552 | 454E1635 | .630 | 456E1635 | .650 | 458E1635 | .716 |
| 18000 | --- | .489 | 452E1835 | .614 | 454E1835 | .654 | 456E1835 | .676 | 458E1835 | .744 |
| 20000 | --- | .489 | 452E2035 | .668 | 454E2035 | .678 | 456E2035 | .702 | 458E2035 | .772 |
| 22000 | --- | .489 | --- | .668 | 454E2235 | .706 | 456E2235 | .726 | --- | .772 |
| 25000 | --- | .489 | --- | .668 | 454E2535 | .754 | 456E2535 | .727 | --- | .772 |
| 30000 | --- | .489 | --- | .668 | 454E3035 | .826 | 456E3035 | .838 | --- | .772 |
| 35000 | --- | .489 | --- | .668 | 454E3535 | .896 | 456E3535 | .904 | --- | .772 |
| 40000 | --- | .489 | --- | .668 | 454E4035 | .966 | 456E4035 | .974 | --- | .772 |
| 45000 | --- | .489 | --- | .668 | --- | .966 | 456E4535 | 1.042 | --- | .772 |
| 50000 | --- | .489 | --- | .668 | --- | .966 | --- | 1.114 | --- | .772 |
| 60000 | --- | .489 | --- | .668 | --- | .966 | 456E6035 | 1.252 | --- | .772 |
| 70000 | --- | .489 | --- | .668 | --- | .966 | 456E7035 | 1.402 | --- | .772 |

SPRAGUE RESISTORS

KOOLOHM NON-INDUCTIVE AXIAL-LEAD WIREWOUND RESISTORS

| Ohms | Type 451E 3 WATTS ¼" x ¼" | | Type 453E 5 WATTS ¼" x 1" | | Type 455E 7 WATTS ½" x 1½" | | Type 457E 10 WATTS ½" x 1¾" | | Type 459E 14 WATTS ½" x 1¾" | |
|-------|---------------------------------|------------|---------------------------------|------------|----------------------------------|------------|-----------------------------------|------------|-----------------------------------|------------|
| | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) | Cat. No. | Net (1-24) |
| 1 | 451E1R05 | \$.468 | 453E1R05 | \$.542 | 455E1R05 | \$.574 | 457E1R05 | \$.630 | 459E1R05 | \$.694 |
| 1.5 | 451E1R55 | .468 | 453E1R55 | .542 | 455E1R55 | .574 | 457E1R55 | .630 | 459E1R55 | .694 |
| 2 | 451E2R05 | .468 | 453E2R05 | .542 | 455E2R05 | .574 | 457E2R05 | .630 | 459E2R05 | .694 |
| 3 | 451E3R05 | .468 | 453E3R05 | .542 | 455E3R05 | .574 | 457E3R05 | .630 | 459E3R05 | .694 |
| 4 | 451E4R05 | .468 | 453E4R05 | .542 | 455E4R05 | .574 | 457E4R05 | .630 | 459E4R05 | .694 |
| 5 | 451E5R05 | .468 | 453E5R05 | .542 | 455E5R05 | .574 | 457E5R05 | .630 | 459E5R05 | .694 |
| 7.5 | 451E7R55 | .468 | 453E7R55 | .542 | 455E7R55 | .574 | 457E7R55 | .630 | 459E7R55 | .694 |
| 10 | 451E1005 | .468 | 453E1005 | .542 | 455E1005 | .574 | 457E1005 | .630 | 459E1005 | .694 |
| 12 | 451E1205 | .468 | 453E1205 | .542 | 455E1205 | .574 | 457E1205 | .630 | 459E1205 | .694 |
| 15 | 451E1505 | .468 | 453E1505 | .542 | 455E1505 | .574 | 457E1505 | .630 | 459E1505 | .694 |
| 18 | 451E1805 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 451E2005 | .468 | 453E2005 | .542 | 455E2005 | .574 | 457E2005 | .630 | 459E2005 | .694 |
| 22 | 451E2205 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 451E2505 | .468 | 453E2505 | .542 | 455E2505 | .574 | 457E2505 | .630 | 459E2505 | .694 |
| 27 | 451E2705 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 451E3005 | .468 | 453E3005 | .542 | 455E3005 | .574 | 457E3005 | .630 | 459E3005 | .694 |
| 33 | 451E3305 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 35 | 451E3505 | .468 | 453E3505 | .542 | 455E3505 | .574 | 457E3505 | .630 | 459E3505 | .694 |
| 39 | 451E3905 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 40 | 451E4005 | .468 | 453E4005 | .542 | 455E4005 | .574 | 457E4005 | .630 | 459E4005 | .694 |
| 47 | 451E4705 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 50 | 451E5005 | .468 | 453E5005 | .542 | 455E5005 | .574 | 457E5005 | .630 | 459E5005 | .694 |
| 56 | 451E5605 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 68 | 451E6805 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 75 | 451E7505 | .468 | 453E7505 | .542 | 455E7505 | .574 | 457E7505 | .630 | 459E7505 | .694 |
| 82 | 451E8205 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 100 | 451E1015 | .468 | 453E1015 | .542 | 455E1015 | .574 | 457E1015 | .630 | 459E1015 | .694 |
| 120 | 451E1215 | .468 | 453E1215 | .542 | 455E1215 | .574 | 457E1215 | .630 | 459E1215 | .694 |
| 150 | 451E1515 | .468 | 453E1515 | .542 | 455E1515 | .574 | 457E1515 | .630 | 459E1515 | .694 |
| 180 | 451E1815 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 200 | 451E2015 | .468 | 453E2015 | .542 | 455E2015 | .574 | 457E2015 | .630 | 459E2015 | .694 |
| 220 | 451E2215 | .468 | 453E2215 | .542 | 455E2215 | .574 | 457E2215 | .630 | 459E2215 | .694 |
| 250 | 451E2515 | .468 | 453E2515 | .542 | 455E2515 | .574 | 457E2515 | .630 | 459E2515 | .694 |
| 270 | 451E2715 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 300 | 451E3015 | .468 | 453E3015 | .542 | 455E3015 | .574 | 457E3015 | .630 | 459E3015 | .694 |
| 330 | 451E3315 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 350 | 451E3515 | .468 | 453E3515 | .542 | 455E3515 | .574 | 457E3515 | .630 | 459E3515 | .694 |
| 390 | 451E3915 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 400 | 451E4015 | .468 | 453E4015 | .542 | 455E4015 | .574 | 457E4015 | .630 | 459E4015 | .696 |
| 450 | 451E4515 | .468 | 453E4515 | .542 | --- | --- | --- | --- | --- | --- |
| 470 | 451E4715 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 500 | 451E5015 | .468 | 453E5015 | .542 | 455E5015 | .574 | 457E5015 | .630 | 459E5015 | .694 |
| 560 | 451E5615 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 600 | 451E6015 | .468 | 453E6015 | .542 | 455E6015 | .574 | 457E6015 | .630 | 459E6015 | .694 |
| 680 | 451E6815 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 700 | 451E7015 | .468 | 453E7015 | .542 | 455E7015 | .574 | 457E7015 | .630 | 459E7015 | .694 |
| 750 | 451E7515 | .468 | 453E7515 | .542 | 455E7515 | .574 | 457E7515 | .630 | 459E7515 | .694 |
| 800 | 451E8015 | .468 | 453E8015 | .542 | 455E8015 | .574 | 457E8015 | .630 | 459E8015 | .694 |
| 820 | 451E8215 | .468 | --- | --- | --- | --- | --- | --- | --- | --- |
| 900 | 451E9015 | .468 | 453E9015 | .542 | 455E9015 | .574 | 457E9015 | .630 | 459E9015 | .694 |
| 1000 | 451E1025 | .468 | 453E1025 | .542 | 455E1025 | .574 | 457E1025 | .630 | 459E1025 | .694 |
| 1100 | --- | --- | 453E1125 | .576 | 455E1125 | .600 | 457E1125 | .666 | 459E1125 | .732 |
| 1200 | 451E1225 | .532 | 453E1225 | .576 | 455E1225 | .600 | 457E1225 | .666 | 459E1225 | .732 |
| 1400 | 451E1425 | .532 | 453E1425 | .576 | 455E1425 | .600 | 457E1425 | .666 | 459E1425 | .732 |
| 1500 | 451E1525 | .532 | 453E1525 | .576 | 455E1525 | .600 | 457E1525 | .666 | 459E1525 | .732 |
| 1800 | 451E1825 | .532 | 453E1825 | .576 | 455E1825 | .600 | 457E1825 | .666 | 459E1825 | .732 |
| 2000 | 451E2025 | .532 | 453E2025 | .576 | 455E2025 | .600 | 457E2025 | .666 | 459E2025 | .732 |
| 2200 | --- | --- | 453E2225 | .612 | 455E2225 | .620 | 457E2225 | .700 | 459E2225 | .770 |
| 2500 | --- | --- | 453E2525 | .612 | 455E2525 | .620 | 457E2525 | .700 | 459E2525 | .770 |
| 3000 | --- | --- | 453E3025 | .612 | 455E3025 | .620 | 457E3025 | .700 | 459E3025 | .770 |
| 3300 | --- | --- | --- | --- | 455E3325 | .658 | 457E3325 | .728 | 459E3325 | .800 |
| 3500 | --- | --- | 453E3525 | .684 | 455E3525 | .658 | 457E3525 | .728 | 459E3525 | .800 |
| 3900 | --- | --- | --- | --- | 455E3925 | .658 | 457E3925 | .728 | 459E3925 | .800 |
| 4000 | --- | --- | 453E4025 | .684 | 455E4025 | .658 | 457E4025 | .728 | 459E4025 | .800 |
| 4500 | --- | --- | --- | --- | 455E4525 | .658 | 457E4525 | .774 | 459E4525 | .852 |
| 5000 | --- | --- | --- | --- | 455E5025 | .774 | 457E5025 | .774 | 459E5025 | .852 |
| 6000 | --- | --- | --- | --- | --- | --- | 457E6025 | .798 | 459E6025 | .878 |
| 7000 | --- | --- | --- | --- | --- | --- | 457E7025 | .846 | 459E7025 | .930 |
| 7500 | --- | --- | --- | --- | --- | --- | 457E7525 | .896 | 459E7525 | .986 |
| 8000 | --- | --- | --- | --- | --- | --- | 457E8025 | .896 | 459E8025 | .986 |
| 9000 | --- | --- | --- | --- | --- | --- | 457E9025 | .968 | 459E9025 | 1.064 |
| 10000 | --- | --- | --- | --- | --- | --- | 457E1035 | 1.074 | 459E1035 | 1.182 |

SPRAGUE RESISTORS

TYPE RW55, RW56 KOOLOHM® RESISTORS

● Axial-Lead Koolohm Resistors to Military Specification MIL-R-26C, Characteristic V

● For Prices on Quantities From 10 to 249, See Your Sprague Industrial Distributor

| Ohms | Type RW55 7 WATTS 1 1/2" x 1 1/8" | | Type RW56 14 WATTS 1 1/2" x 2" | | Ohms | Type RW55 7 WATTS 1 1/2" x 1 1/8" | | Type RW56 14 WATTS 1 1/2" x 2" | | Ohms | Type RW55 7 WATTS 1 1/2" x 1 1/8" | | Type RW56 14 WATTS 1 1/2" x 2" | |
|------|---|----------|--------------------------------------|----------|------|---|----------|--------------------------------------|----------|-------|---|----------|--------------------------------------|----------|
| | Cat. No. | Net(1-9) | Cat. No. | Net(1-9) | | Cat. No. | Net(1-9) | Cat. No. | Net(1-9) | | Cat. No. | Net(1-9) | Cat. No. | Net(1-9) |
| 1.0 | RW55V1R0 | \$1.48 | RW56V1R0 | \$1.59 | 31 | RW55V310 | \$1.06 | RW56V310 | \$1.13 | 710 | RW55V711 | \$1.06 | RW56V711 | \$1.13 |
| 1.1 | RW55V1R1 | 1.48 | RW56V1R1 | 1.59 | 35 | RW55V350 | 1.06 | RW56V350 | 1.13 | 800 | RW55V801 | 1.06 | RW56V801 | 1.13 |
| 1.2 | RW55V1R2 | 1.48 | RW56V1R2 | 1.59 | 40 | RW55V400 | 1.06 | RW56V400 | 1.13 | 900 | RW55V901 | 1.06 | RW56V901 | 1.13 |
| 1.4 | RW55V1R4 | 1.48 | RW56V1R4 | 1.59 | 45 | RW55V450 | 1.06 | RW56V450 | 1.13 | 1000 | RW55V102 | 1.06 | RW56V102 | 1.13 |
| 1.6 | RW55V1R6 | 1.48 | RW56V1R6 | 1.59 | 50 | RW55V500 | 1.06 | RW56V500 | 1.13 | 1100 | RW55V112 | 1.13 | RW56V112 | 1.21 |
| 1.8 | RW55V1R8 | 1.48 | RW56V1R8 | 1.59 | 56 | RW55V560 | 1.06 | RW56V560 | 1.13 | 1200 | RW55V122 | 1.13 | RW56V122 | 1.21 |
| 2.0 | RW55V2R0 | 1.48 | RW56V2R0 | 1.59 | 63 | RW55V630 | 1.06 | RW56V630 | 1.13 | 1400 | RW55V142 | 1.13 | RW56V142 | 1.21 |
| 2.2 | RW55V2R2 | 1.43 | RW56V2R2 | 1.59 | 71 | RW55V710 | 1.06 | RW56V710 | 1.13 | 1600 | RW55V162 | 1.13 | RW56V162 | 1.21 |
| 2.5 | RW55V2R5 | 1.43 | RW56V2R5 | 1.59 | 80 | RW55V800 | 1.06 | RW56V800 | 1.13 | 1800 | RW55V182 | 1.13 | RW56V182 | 1.21 |
| 2.8 | RW55V2R8 | 1.43 | RW56V2R8 | 1.59 | 90 | RW55V900 | 1.06 | RW56V900 | 1.13 | 2000 | RW55V202 | 1.13 | RW56V202 | 1.21 |
| 3.1 | RW55V3R1 | 1.06 | RW56V3R1 | 1.13 | 100 | RW55V101 | 1.06 | RW56V101 | 1.13 | 2200 | RW55V222 | 1.13 | RW56V222 | 1.21 |
| 3.5 | RW55V3R5 | 1.06 | RW56V3R5 | 1.13 | 110 | RW55V111 | 1.06 | RW56V111 | 1.13 | 2500 | RW55V252 | 1.13 | RW56V252 | 1.21 |
| 4.0 | RW55V4R0 | 1.06 | RW56V4R0 | 1.13 | 120 | RW55V121 | 1.06 | RW56V121 | 1.13 | 2800 | RW55V282 | 1.13 | RW56V282 | 1.21 |
| 4.5 | RW55V4R5 | 1.06 | RW56V4R5 | 1.13 | 140 | RW55V141 | 1.06 | RW56V141 | 1.13 | 3100 | RW55V312 | 1.13 | RW56V312 | 1.21 |
| 5.0 | RW55V5R0 | 1.06 | RW56V5R0 | 1.13 | 160 | RW55V161 | 1.06 | RW56V161 | 1.13 | 3500 | RW55V352 | 1.13 | RW56V352 | 1.21 |
| 5.6 | RW55V5R6 | 1.06 | RW56V5R6 | 1.13 | 180 | RW55V181 | 1.06 | RW56V181 | 1.13 | 4000 | RW55V402 | 1.13 | RW56V402 | 1.21 |
| 6.3 | RW55V6R3 | 1.06 | RW56V6R3 | 1.13 | 200 | RW55V201 | 1.06 | RW56V201 | 1.13 | 4500 | RW55V452 | 1.13 | RW56V452 | 1.21 |
| 7.1 | RW55V7R1 | 1.06 | RW56V7R1 | 1.13 | 220 | RW55V221 | 1.06 | RW56V221 | 1.13 | 5000 | RW55V502 | 1.13 | RW56V502 | 1.21 |
| 8.0 | RW55V8R0 | 1.06 | RW56V8R0 | 1.13 | 250 | RW55V251 | 1.06 | RW56V251 | 1.13 | 5600 | RW55V562 | 1.38 | RW56V562 | 1.30 |
| 9.0 | RW55V9R0 | 1.06 | RW56V9R0 | 1.13 | 280 | RW55V281 | 1.06 | RW56V281 | 1.13 | 6300 | RW55V632 | 1.38 | RW56V632 | 1.30 |
| 10 | RW55V100 | 1.06 | RW56V100 | 1.13 | 310 | RW55V311 | 1.06 | RW56V311 | 1.13 | 7100 | RW55V712 | 1.38 | RW56V712 | 1.30 |
| 11 | RW55V110 | 1.06 | RW56V110 | 1.13 | 350 | RW55V351 | 1.06 | RW56V351 | 1.13 | 8000 | RW55V802 | 1.38 | RW56V802 | 1.30 |
| 12 | RW55V120 | 1.06 | RW56V120 | 1.13 | 400 | RW55V401 | 1.06 | RW56V401 | 1.13 | 9000 | RW55V902 | 1.38 | RW56V902 | 1.30 |
| 14 | RW55V140 | 1.06 | RW56V140 | 1.13 | 450 | RW55V451 | 1.06 | RW56V451 | 1.13 | 10000 | --- | --- | RW56V103 | 1.30 |
| 16 | RW55V160 | 1.06 | RW56V160 | 1.13 | 500 | RW55V501 | 1.06 | RW56V501 | 1.13 | 11000 | --- | --- | RW56V113 | 1.63 |
| 18 | RW55V180 | 1.06 | RW56V180 | 1.13 | 560 | RW55V561 | 1.06 | RW56V561 | 1.13 | 12000 | --- | --- | RW56V123 | 1.63 |
| 20 | RW55V200 | 1.06 | RW56V200 | 1.13 | 630 | RW55V631 | 1.06 | RW56V631 | 1.13 | 14000 | --- | --- | RW56V143 | 1.63 |
| 22 | RW55V220 | 1.06 | RW56V220 | 1.13 | | | | | | 16000 | --- | --- | RW56V163 | 1.63 |
| 25 | RW55V250 | 1.06 | RW56V250 | 1.13 | | | | | | | | | | |
| 28 | RW55V280 | 1.06 | RW56V280 | 1.13 | | | | | | | | | | |

Commercial Tab-Terminal KOOLOHM® Wirewound Resistors



● These Resistors Are Also Available in 5 and 10 Watt Ratings, Axial-Lead Style. See Latest Issue of Sprague Catalog C-614

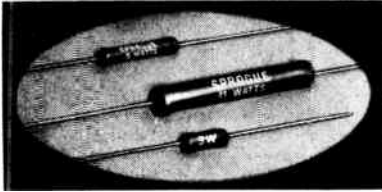
| Ohms | Type 25KT 25 Watts | | Type 50KT 50 Watts | | Type 120KT 120 Watts | |
|-----------------------------------|-----------------------|-------|-----------------------|--------|-------------------------|--------|
| | Cat. No. | Net | Cat. No. | Net | Cat. No. | Net |
| TYPE KT STANDARD RESISTORS | | | | | | |
| 5 | 25KT5R05 | \$.87 | 50KT5R05 | \$1.17 | 120KT5R05 | \$4.65 |
| 10 | 25KT1005 | .78 | 50KT1005 | 1.17 | 120KT1005 | 4.65 |
| 25 | 25KT2505 | .78 | 50KT2505 | 1.17 | 120KT2505 | 4.65 |
| 50 | 25KT5005 | .78 | 50KT5005 | 1.17 | 120KT5005 | 4.65 |
| 75 | 25KT7505 | .78 | 50KT7505 | 1.17 | 120KT7505 | 4.65 |
| 100 | 25KT1015 | .78 | 50KT1015 | 1.17 | 120KT1015 | 4.65 |
| 150 | 25KT1515 | .78 | 50KT1515 | 1.17 | 120KT1515 | 4.65 |
| 200 | 25KT2015 | .78 | 50KT2015 | 1.17 | 120KT2015 | 4.65 |
| 250 | 25KT2515 | .78 | 50KT2515 | 1.17 | 120KT2515 | 4.65 |
| 390 | | | | | 120KT3915 | 4.65 |
| 500 | 25KT5015 | .78 | 50KT5015 | 1.17 | 120KT5015 | 4.65 |
| 600 | 25KT6015 | .81 | 50KT6015 | 1.17 | 120KT6015 | 4.65 |
| 750 | 25KT7515 | .81 | 50KT7515 | 1.17 | 120KT7515 | 4.65 |
| 1000 | 25KT1025 | .81 | 50KT1025 | 1.17 | 120KT1025 | 4.65 |
| 1500 | 25KT1525 | .81 | 50KT1525 | 1.26 | 120KT1525 | 4.65 |
| 2000 | 25KT2025 | .81 | 50KT2025 | 1.26 | 120KT2025 | 4.65 |
| 2500 | 25KT2525 | .81 | 50KT2525 | 1.26 | 120KT2525 | 4.65 |
| 3000 | 25KT3025 | .87 | 50KT3025 | 1.38 | 120KT3025 | 4.65 |
| 4000 | 25KT4025 | .87 | 50KT4025 | 1.38 | | |
| 5000 | 25KT5025 | .87 | 50KT5025 | 1.38 | | |
| 7500 | 25KT7525 | .87 | 50KT7525 | 1.44 | 120KT5025 | 4.65 |
| 10000 | 25KT1035 | .90 | 50KT1035 | 1.71 | 120KT7525 | 4.80 |
| 12000 | 25KT1235 | .93 | 50KT1235 | 1.71 | 120KT1035 | 4.80 |
| 15000 | 25KT1535 | .93 | 50KT1535 | 1.71 | 120KT1235 | 4.80 |
| 20000 | 25KT2035 | .99 | 50KT2035 | 1.74 | 120KT1535 | 4.80 |
| | | | | | 120KT2035 | 4.80 |

| Ohms | Type 25NIT 25NIT Watts | | Type 50NIT 50NIT Watts | | Type 120NIT 120NIT Watts | |
|--|---------------------------|------|---------------------------|------|-----------------------------|------|
| | Cat. No. | Net | Cat. No. | Net | Cat. No. | Net |
| TYPE KT STANDARD RESISTORS, continued | | | | | | |
| 25000 | 25KT2535 | 1.08 | 50KT2535 | 1.74 | 120KT2535 | 4.80 |
| 40000 | 25KT4035 | 1.20 | | | | |
| 50000 | 25KT5035 | 1.32 | 50KT5035 | 1.80 | 120KT5035 | 4.80 |
| 75000 | 25KT7535 | 1.71 | 50KT7535 | 1.86 | 120KT7535 | 4.80 |
| 100000 | 25KT1045 | 2.13 | 50KT1045 | 2.10 | 120KT1045 | 4.80 |

| TYPE NIT NON-INDUCTIVE RESISTORS | | | | | | |
|---|-----------|--------|-----------|--------|------------|--------|
| 5 | 25NIT5R05 | \$1.11 | 50NIT5R05 | \$1.26 | 120NIT5R05 | \$5.64 |
| 10 | 25NIT1005 | 1.11 | 50NIT1005 | 1.86 | 120NIT1005 | 5.64 |
| 25 | 25NIT2505 | 1.11 | 50NIT2505 | 1.86 | 120NIT2505 | 5.64 |
| 50 | 25NIT5005 | 1.11 | 50NIT5005 | 1.86 | 120NIT5005 | 5.64 |
| 75 | 25NIT7505 | 1.11 | 50NIT7505 | 1.86 | 120NIT7505 | 5.64 |
| 100 | 25NIT1015 | 1.11 | 50NIT1015 | 1.86 | 120NIT1015 | 5.64 |
| 150 | 25NIT1515 | 1.11 | 50NIT1515 | 1.86 | 120NIT1515 | 5.64 |
| 200 | 25NIT2015 | 1.11 | 50NIT2015 | 1.86 | 120NIT2015 | 5.64 |
| 250 | 25NIT2515 | 1.11 | 50NIT2515 | 1.86 | 120NIT2515 | 5.64 |
| 390 | | | | | 120NIT3915 | 5.64 |
| 500 | 25NIT5015 | 1.11 | 50NIT5015 | 1.86 | 120NIT5015 | 5.64 |
| 600 | 25NIT6015 | 1.11 | 50NIT6015 | 1.86 | 120NIT6015 | 5.64 |
| 750 | 25NIT7515 | 1.11 | 50NIT7515 | 1.86 | 120NIT7515 | 5.64 |
| 1000 | 25NIT1025 | 1.11 | 50NIT1025 | 1.86 | 120NIT1025 | 5.64 |
| 1500 | 25NIT1525 | 1.20 | 50NIT1525 | 1.86 | 120NIT1525 | 5.64 |
| 2000 | 25NIT2025 | 1.20 | 50NIT2025 | 1.86 | 120NIT2025 | 5.64 |
| 2500 | 25NIT2525 | 1.20 | 50NIT2525 | 1.86 | 120NIT2525 | 5.64 |
| 3000 | 25NIT3025 | 1.44 | 50NIT3025 | 1.86 | 120NIT3025 | 5.64 |
| 4000 | 25NIT4025 | 1.44 | 50NIT4025 | 1.86 | | |
| 5000 | 25NIT5025 | 1.44 | 50NIT5025 | 1.86 | 120NIT5025 | 5.64 |
| 7500 | 25NIT7525 | 1.44 | 50NIT7525 | 1.86 | 120NIT7525 | 6.00 |
| 10000 | 25NIT1035 | 1.65 | 50NIT1035 | 1.86 | 120NIT1035 | 6.00 |
| 12000 | 25NIT1235 | 1.65 | 50NIT1235 | 1.86 | | |
| 15000 | 25NIT1535 | 1.65 | 50NIT1535 | 1.86 | 120NIT1535 | 6.00 |
| 20000 | 25NIT2035 | 1.65 | 50NIT2035 | 1.98 | 120NIT2035 | 6.00 |
| 25000 | 25NIT2535 | 1.86 | 50NIT2535 | 1.98 | 120NIT2535 | 6.00 |
| 50000 | | | 50NIT5035 | 3.45 | 120NIT5045 | 6.00 |

SPRAGUE RESISTORS

BLUE JACKET® INDUSTRIAL WIREWOUND RESISTORS



- Improved Miniified Resistors Designed for Thorough Reliability and Stability Under Extreme Operating Conditions
- Matched Coefficient of Expansion Allows Uniform Expansion of Vitreous Enamel Coating, Ceramic Base, and End Caps, Eliminating Cracking, Creaks, and Protects From Fumes and Humidity

- Windings and Leads Welded to End-Caps for Superior Mechanical Strength
- For 2BJ, 3BJ, 5BJ and 10BJ Commercial or Service Equivalents to These Resistors, Refer to the Latest Issue of Sprague Catalog C-614
- For Prices on Quantities of 10 to 999 See Your Sprague Industrial Distributor

| Ohms | Type 239E, 1 WATT 1/8" x 3/8" | | Type 240E, 2 WATTS 3/16" x 3/8" | | Type 242E, 3 WATTS 1/4" x 17/32" | | Type 243E, 5 WATTS 3/16" x 1/2" | | Type 244E, 7 WATTS 5/16" x 1/2" | | Type 247E, 10 WATTS 5/16" x 13/16" | |
|------|----------------------------------|------------------|------------------------------------|------------------|-------------------------------------|------------------|------------------------------------|------------------|------------------------------------|------------------|---------------------------------------|------------------|
| | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) |
| 1 | 239E1R05 | \$.520 | 240E1R05 | \$.591 | 242E1R05 | \$.591 | 243E1R05 | \$.622 | 244E1R05 | \$.641 | 247E1R05 | \$.681 |
| 1.2 | 239E1R25 | .520 | | | | | | | | | | |
| 1.5 | 239E1R55 | .520 | 240E1R55 | .591 | 242E1R55 | .591 | 243E1R55 | .622 | 244E1R55 | .641 | 247E1R55 | .681 |
| 1.8 | 239E1R85 | .520 | | | | | | | | | | |
| 2 | 239E2R05 | .520 | 240E2R05 | .591 | 242E2R05 | .591 | 243E2R05 | .622 | 244E2R05 | .641 | 247E2R05 | .681 |
| 2.2 | 239E2R25 | .520 | | | | | | | | | | |
| 2.7 | 239E2R75 | .520 | | | | | | | | | | |
| 3 | 239E3R05 | .520 | 240E3R05 | .591 | 242E3R05 | .591 | 243E3R05 | .622 | 244E3R05 | .641 | 247E3R05 | .681 |
| 3.3 | 239E3R35 | .520 | | | | | | | | | | |
| 3.9 | 239E3R95 | .520 | | | | | | | | | | |
| 4 | 239E4R05 | .520 | 240E4R05 | .591 | 242E4R05 | .591 | 243E4R05 | .622 | 244E4R05 | .641 | 247E4R05 | .681 |
| 4.7 | 239E4R75 | .520 | | | | | | | | | | |
| 5 | 239E5R05 | .520 | 240E5R05 | .591 | 242E5R05 | .591 | 243E5R05 | .622 | 244E5R05 | .641 | 247E5R05 | .681 |
| 5.6 | 239E5R65 | .520 | | | | | | | | | | |
| 6.8 | 239E6R85 | .520 | | | | | | | | | | |
| 7.5 | 239E7R55 | .520 | 240E7R55 | .591 | 242E7R55 | .591 | 243E7R55 | .622 | 244E7R55 | .641 | 247E7R55 | .681 |
| 8.2 | 239E8R25 | .520 | | | | | | | | | | |
| 10 | 239E1005 | .520 | 240E1005 | .591 | 242E1005 | .591 | 243E1005 | .622 | 244E1005 | .641 | 247E1005 | .681 |
| 12 | 239E1205 | .520 | 240E1205 | .591 | 242E1205 | .591 | 243E1205 | .622 | 244E1205 | .641 | 247E1205 | .681 |
| 15 | 239E1505 | .520 | 240E1505 | .591 | 242E1505 | .591 | 243E1505 | .622 | 244E1505 | .641 | 247E1505 | .681 |
| 18 | 239E1805 | .520 | 240E1805 | .591 | 242E1805 | .591 | | | | | | |
| 20 | 239E2005 | .520 | 240E2005 | .591 | 242E2005 | .591 | 243E2005 | .622 | 244E2005 | .641 | 247E2005 | .681 |
| 22 | 239E2205 | .520 | 240E2205 | .591 | 242E2205 | .591 | | | | | | |
| 25 | 239E2505 | .520 | 240E2505 | .591 | 242E2505 | .591 | 243E2505 | .622 | 244E2505 | .641 | 247E2505 | .681 |
| 27 | 239E2705 | .520 | 240E2705 | .591 | 242E2705 | .591 | | | | | | |
| 30 | 239E3005 | .520 | 240E3005 | .591 | 242E3005 | .591 | 243E3005 | .622 | 244E3005 | .641 | 247E3005 | .681 |
| 33 | 239E3305 | .520 | 240E3305 | .591 | 242E3305 | .591 | | | | | | |
| 35 | | | | | | | 243E3505 | .622 | 244E3505 | .641 | 247E3505 | .681 |
| 39 | 239E3905 | .520 | 240E3905 | .591 | 242E3905 | .591 | | | | | | |
| 40 | 239E4005 | .520 | 240E4005 | .591 | 242E4005 | .591 | 243E4005 | .622 | 244E4005 | .641 | 247E4005 | .681 |
| 47 | 239E4705 | .520 | 240E4705 | .591 | 242E4705 | .591 | | | | | | |
| 50 | 239E5005 | .520 | 240E5005 | .591 | 242E5005 | .591 | 243E5005 | .622 | 244E5005 | .641 | 247E5005 | .681 |
| 56 | 239E5605 | .520 | 240E5605 | .591 | 242E5605 | .591 | | | | | | |
| 68 | 239E6805 | .520 | 240E6805 | .591 | 242E6805 | .591 | | | | | | |
| 75 | 239E7505 | .520 | 240E7505 | .591 | 242E7505 | .591 | 243E7505 | .622 | 244E7505 | .641 | 247E7505 | .681 |
| 82 | 239E8205 | .520 | 240E8205 | .591 | 242E8205 | .591 | | | | | | |
| 100 | 239E1015 | .520 | 240E1015 | .591 | 242E1015 | .591 | 243E1015 | .622 | 244E1015 | .641 | 247E1015 | .681 |
| 120 | 239E1215 | .520 | 240E1215 | .591 | 242E1215 | .591 | 243E1215 | .622 | 244E1215 | .641 | 247E1215 | .681 |
| 150 | 239E1515 | .520 | 240E1515 | .591 | 242E1515 | .591 | 243E1515 | .622 | 244E1515 | .641 | 247E1515 | .681 |
| 180 | 239E1815 | .520 | 240E1815 | .591 | 242E1815 | .591 | | | | | | |
| 200 | 239E2015 | .520 | 240E2015 | .591 | 242E2015 | .591 | 243E2015 | .622 | 244E2015 | .641 | 247E2015 | .681 |
| 220 | 239E2215 | .520 | 240E2215 | .591 | 242E2215 | .591 | 243E2215 | .622 | 244E2215 | .641 | 247E2215 | .681 |
| 250 | 239E2515 | .520 | 240E2515 | .591 | 242E2515 | .591 | 243E2515 | .622 | 244E2515 | .641 | 247E2515 | .681 |
| 270 | 239E2715 | .520 | 240E2715 | .591 | 242E2715 | .591 | | | | | | |
| 300 | 239E3015 | .520 | 240E3015 | .591 | 242E3015 | .591 | 243E3015 | .622 | 244E3015 | .641 | 247E3015 | .681 |
| 330 | 239E3315 | .520 | 240E3315 | .591 | 242E3315 | .591 | | | | | | |
| 350 | | | | | | | 243E3515 | .622 | 244E3515 | .641 | 247E3515 | .681 |
| 390 | 239E3915 | .520 | 240E3915 | .591 | 242E3915 | .591 | | | | | | |
| 400 | 239E4015 | .520 | 240E4015 | .591 | 242E4015 | .591 | 243E4015 | .622 | 244E4015 | .641 | 247E4015 | .681 |
| 450 | | | | | | | 243E4515 | .622 | | | | |
| 470 | 239E4715 | .520 | 240E4715 | .591 | 242E4715 | .591 | | | | | | |
| 500 | 239E5015 | .520 | 240E5015 | .591 | 242E5015 | .591 | 243E5015 | .622 | 244E5015 | .641 | 247E5015 | .681 |
| 560 | 239E5615 | .520 | 240E5615 | .591 | 242E5615 | .591 | | | | | | |
| 600 | 239E6015 | .520 | 240E6015 | .591 | 242E6015 | .591 | 243E6015 | .622 | 244E6015 | .641 | 247E6015 | .681 |
| 680 | 239E6815 | .520 | 240E6815 | .591 | 242E6815 | .591 | | | | | | |
| 700 | 239E7015 | .520 | 240E7015 | .591 | 242E7015 | .591 | 243E7015 | .622 | 244E7015 | .641 | 247E7015 | .681 |
| 750 | | | | | | | 243E7515 | .622 | 244E7515 | .641 | 247E7515 | .681 |
| 800 | 239E8015 | .520 | 240E8015 | .591 | 242E8015 | .591 | 243E8015 | .622 | 244E8015 | .641 | 247E8015 | .681 |
| 820 | 239E8215 | .520 | 240E8215 | .591 | 242E8215 | .591 | | | | | | |
| 900 | 239E9015 | .520 | 240E9015 | .591 | 242E9015 | .591 | 243E9015 | .622 | 244E9015 | .641 | 247E9015 | .681 |
| 1000 | 239E1025 | .520 | 240E1025 | .591 | 242E1025 | .591 | 243E1025 | .622 | 244E1025 | .641 | 247E1025 | .681 |
| 100 | | | | | | | 243E1125 | .659 | 244E1125 | .702 | 247E1125 | .732 |
| 1200 | 239E1225 | .550 | 240E1225 | .622 | 242E1225 | .622 | 243E1225 | .659 | 244E1225 | .702 | 247E1225 | .732 |
| 1400 | 239E1425 | .550 | 240E1425 | .622 | 242E1425 | .622 | 243E1425 | .659 | 244E1425 | .702 | 247E1425 | .732 |
| 1500 | 239E1525 | .550 | 240E1525 | .622 | 242E1525 | .622 | 243E1525 | .659 | 244E1525 | .702 | 247E1525 | .732 |
| 1800 | 239E1825 | .550 | 240E1825 | .622 | 242E1825 | .622 | 243E1825 | .659 | 244E1825 | .702 | 247E1825 | .732 |
| 2000 | 239E2025 | .550 | 240E2025 | .622 | 242E2025 | .622 | 243E2025 | .659 | 244E2025 | .702 | 247E2025 | .732 |
| 2200 | 239E2225 | .550 | 240E2225 | .622 | 242E2225 | .622 | 243E2225 | .659 | 244E2225 | .702 | 247E2225 | .732 |
| 2500 | 239E2525 | .550 | 240E2525 | .622 | 242E2525 | .622 | 243E2525 | .659 | 244E2525 | .702 | 247E2525 | .732 |
| 2700 | | | 240E2725 | .622 | 242E2725 | .622 | | | | | | |
| 3000 | | | 240E3025 | .622 | 242E3025 | .622 | 243E3025 | .659 | 244E3025 | .702 | 247E3025 | .732 |
| 3300 | | | 240E3325 | .622 | 242E3325 | .622 | | | | | | |
| 3500 | | | 240E3525 | .622 | | | 243E3525 | .659 | 244E3525 | .702 | 247E3525 | .732 |
| 3900 | | | | | 242E3925 | .622 | | | 244E3925 | .702 | 247E3925 | .732 |
| 4000 | | | | | 242E4025 | .622 | 243E4025 | .659 | 244E4025 | .702 | 247E4025 | .732 |
| 4500 | | | | | | | 243E4525 | .659 | 244E4525 | .702 | 247E4525 | .732 |
| 4700 | | | | | 242E4725 | .622 | | | | | | |
| 5000 | | | | | 242E5025 | .622 | 243E5025 | .659 | 244E5025 | .782 | 247E5025 | .732 |
| 5600 | | | | | 242E5625 | .659 | | | | | | |
| 6200 | | | | | 242E6025 | .659 | 243E6025 | .701 | 244E6025 | .782 | 247E6025 | .839 |
| 6800 | | | | | 242E6825 | .659 | | | | | | |
| 7000 | | | | | | | 243E7025 | .701 | 244E7025 | .782 | 247E7025 | .839 |
| 7500 | | | | | 242E7525 | .659 | 243E7525 | .701 | 244E7525 | .782 | 247E7525 | .839 |
| 8000 | | | | | 242E8025 | .659 | 243E8025 | .701 | 244E8025 | .782 | 247E8025 | .839 |
| 8200 | | | | | 242E8225 | .659 | | | | | | |

SPRAGUE RESISTORS

BLUE JACKET INDUSTRIAL WIREWOUND RESISTORS, continued

| Ohms | Type 239E, 1 WATT 1/8" x 3/8" | | Type 240E, 2 WATTS 3/16" x 3/8" | | Type 242E, 3 WATTS 1/4" x 17/32" | | Type 243E, 5 WATTS 1/4" x 1 1/8" | | Type 244E, 7 WATTS 5/16" x 1 1/8" | | Type 247E, 10 WATTS 5/16" x 1 3/4" | |
|-------|----------------------------------|---------------|------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|--------------------------------------|---------------|---------------------------------------|---------------|
| | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) |
| 9000 | | | | | 242E9025 | \$.659 | 243E9025 | \$.701 | 244E9025 | \$.782 | 247E9025 | \$.839 |
| 10000 | | | | | 242E1035 | .659 | 243E1035 | .701 | 244E1035 | .782 | 247E1035 | .839 |
| 11000 | | | | | | | | | 244E1135 | .782 | 247E1135 | .949 |
| 12000 | | | | | | | 243E1235 | .782 | 244E1235 | .782 | 247E1235 | .949 |
| 14000 | | | | | | | 243E1435 | .782 | 244E1435 | .782 | 247E1435 | .949 |
| 15000 | | | | | | | 243E1535 | .782 | 244E1535 | .782 | 247E1535 | .949 |
| 16000 | | | | | | | | | 244E1635 | .782 | 247E1635 | .949 |
| 17000 | | | | | | | | | 244E1735 | .782 | | |
| 18000 | | | | | | | 243E1835 | .782 | 244E1835 | .782 | 247E1835 | .949 |
| 20000 | | | | | | | 243E2035 | .782 | 244E2035 | .782 | 247E2035 | .949 |
| 22000 | | | | | | | 243E2235 | .821 | 244E2235 | .913 | 247E2235 | 1.001 |
| 25000 | | | | | | | 243E2535 | .821 | 244E2535 | .913 | 247E2535 | 1.001 |
| 30000 | | | | | | | 243E3035 | .821 | 244E3035 | .913 | 247E3035 | 1.001 |
| 35000 | | | | | | | | | | | 247E3535 | 1.001 |
| 40000 | | | | | | | | | | | 247E4035 | 1.001 |
| 45000 | | | | | | | | | | | 247E4535 | 1.122 |
| 50000 | | | | | | | | | | | 247E5035 | 1.122 |

TYPE RW57, RW58, RW59 BLUE JACKET® WIREWOUND RESISTORS

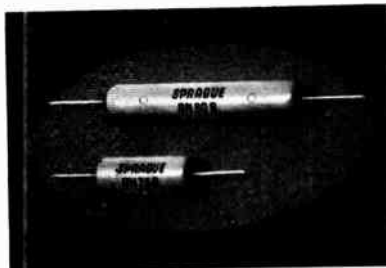
• This Series of Blue Jacket Wirewound Resistors Meet All Performance Characteristics of Military Specification MIL R-26C, Characteristic V

• For Prices on Quantities of 10 to 249 Contact Your Sprague Industrial Distributor

| Ohms | Type RW59 3 WATTS 1/4" x 1/2" | | Type RW57 6.5 WATTS 3/8" x 1" | | Type RW58 11 WATTS 7/8" x 1 1/8" | | Ohms | Type RW59 3 WATTS 1/4" x 1/2" | | Type RW57 6.5 WATTS 3/8" x 1" | | Type RW58 11 WATTS 7/8" x 1 1/8" | |
|------|-------------------------------------|---------------|-------------------------------------|---------------|--|---------------|-------|-------------------------------------|---------------|-------------------------------------|---------------|--|---------------|
| | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) | Cat. No. | Net Ea. (1-9) |
| 1.0 | RW59V1R0 | \$1.281 | RW57V1R0 | \$1.302 | RW58V1R0 | \$1.462 | 160 | RW59V161 | \$.891 | RW57V161 | \$.919 | RW58V161 | \$1.028 |
| 1.1 | RW59V1R1 | 1.281 | RW57V1R1 | 1.302 | RW58V1R1 | 1.462 | 180 | RW59V181 | .891 | RW57V181 | .919 | RW58V181 | 1.028 |
| 1.2 | RW59V1R2 | 1.281 | RW57V1R2 | 1.302 | RW58V1R2 | 1.462 | 200 | RW59V201 | .891 | RW57V201 | .919 | RW58V201 | 1.028 |
| 1.4 | RW59V1R4 | 1.281 | RW57V1R4 | 1.302 | RW58V1R4 | 1.462 | 220 | RW59V221 | .891 | RW57V221 | .919 | RW58V221 | 1.028 |
| 1.6 | RW59V1R6 | 1.281 | RW57V1R6 | 1.302 | RW58V1R6 | 1.462 | 250 | RW59V251 | .891 | RW57V251 | .919 | RW58V251 | 1.028 |
| 1.8 | RW59V1R8 | 1.281 | RW57V1R8 | 1.302 | RW58V1R8 | 1.462 | 280 | RW59V281 | .891 | RW57V281 | .919 | RW58V281 | 1.028 |
| 2.0 | RW59V2R0 | 1.281 | RW57V2R0 | 1.302 | RW58V2R0 | 1.462 | 310 | RW59V311 | .891 | RW57V311 | .919 | RW58V311 | 1.028 |
| 2.2 | RW59V2R2 | 1.281 | RW57V2R2 | 1.302 | RW58V2R2 | 1.462 | 350 | RW59V351 | .891 | RW57V351 | .919 | RW58V351 | 1.028 |
| 2.5 | RW59V2R5 | 1.281 | RW57V2R5 | 1.302 | RW58V2R5 | 1.462 | 400 | RW59V401 | .891 | RW57V401 | .919 | RW58V401 | 1.028 |
| 2.8 | RW59V2R8 | 1.281 | RW57V2R8 | 1.302 | RW58V2R8 | 1.462 | 450 | RW59V451 | .891 | RW57V451 | .919 | RW58V451 | 1.028 |
| 3.1 | RW59V3R1 | .891 | RW57V3R1 | .919 | RW58V3R1 | 1.028 | 500 | RW59V501 | .891 | RW57V501 | .919 | RW58V501 | 1.028 |
| 3.5 | RW59V3R5 | .891 | RW57V3R5 | .919 | RW58V3R5 | 1.028 | 560 | RW59V561 | .891 | RW57V561 | .919 | RW58V561 | 1.028 |
| 4.0 | RW59V4R0 | .891 | RW57V4R0 | .919 | RW58V4R0 | 1.028 | 630 | RW59V631 | .891 | RW57V631 | .919 | RW58V631 | 1.028 |
| 4.5 | RW59V4R5 | .891 | RW57V4R5 | .919 | RW58V4R5 | 1.028 | 710 | RW59V711 | .891 | RW57V711 | .919 | RW58V711 | 1.028 |
| 5.0 | RW59V5R0 | .891 | RW57V5R0 | .919 | RW58V5R0 | 1.028 | 800 | RW59V801 | .891 | RW57V801 | .919 | RW58V801 | 1.028 |
| 5.6 | RW59V5R6 | .891 | RW57V5R6 | .919 | RW58V5R6 | 1.028 | 900 | RW59V901 | .891 | RW57V901 | .919 | RW58V901 | 1.028 |
| 6.3 | RW59V6R3 | .891 | RW57V6R3 | .919 | RW58V6R3 | 1.028 | 1000 | RW59V102 | .891 | RW57V102 | .919 | RW58V102 | 1.028 |
| 7.1 | RW59V7R1 | .891 | RW57V7R1 | .919 | RW58V7R1 | 1.028 | 1100 | RW59V112 | 1.101 | RW57V112 | 1.011 | RW58V112 | 1.111 |
| 8.0 | RW59V8R0 | .891 | RW57V8R0 | .919 | RW58V8R0 | 1.028 | 1200 | RW59V122 | 1.101 | RW57V122 | 1.011 | RW58V122 | 1.111 |
| 9.0 | RW59V9R0 | .891 | RW57V9R0 | .919 | RW58V9R0 | 1.028 | 1400 | RW59V142 | 1.101 | RW57V142 | 1.011 | RW58V142 | 1.111 |
| 10 | RW59V100 | .891 | RW57V100 | .919 | RW58V100 | 1.028 | 1600 | RW59V162 | 1.101 | RW57V162 | 1.011 | RW58V162 | 1.111 |
| 11 | RW59V110 | .891 | RW57V110 | .919 | RW58V110 | 1.028 | 1800 | RW59V182 | 1.101 | RW57V182 | 1.011 | RW58V182 | 1.111 |
| 12 | RW59V120 | .891 | RW57V120 | .919 | RW58V120 | 1.028 | 2000 | RW59V202 | 1.101 | RW57V202 | 1.011 | RW58V202 | 1.111 |
| 14 | RW59V140 | .891 | RW57V140 | .919 | RW58V140 | 1.028 | 2200 | | | RW57V222 | 1.011 | RW58V222 | 1.111 |
| 16 | RW59V160 | .891 | RW57V160 | .919 | RW58V160 | 1.028 | 2500 | | | RW57V252 | 1.011 | RW58V252 | 1.111 |
| 18 | RW59V180 | .891 | RW57V180 | .919 | RW58V180 | 1.028 | 2800 | | | RW57V282 | 1.011 | RW58V282 | 1.111 |
| 20 | RW59V200 | .891 | RW57V200 | .919 | RW58V200 | 1.028 | 3100 | | | RW57V312 | 1.011 | RW58V312 | 1.111 |
| 22 | RW59V220 | .891 | RW57V220 | .919 | RW58V220 | 1.028 | | | | | | | |
| 25 | RW59V250 | .891 | RW57V250 | .919 | RW58V250 | 1.028 | | | | | | | |
| 28 | RW59V280 | .891 | RW57V280 | .919 | RW58V280 | 1.028 | | | | | | | |
| 31 | RW59V310 | .891 | RW57V310 | .919 | RW58V310 | 1.028 | 3500 | | | RW57V352 | 1.011 | RW58V352 | 1.111 |
| 35 | RW59V350 | .891 | RW57V350 | .919 | RW58V350 | 1.028 | 4000 | | | | | RW58V402 | 1.111 |
| 40 | RW59V400 | .891 | RW57V400 | .919 | RW58V400 | 1.028 | 4500 | | | | | RW58V452 | 1.111 |
| 45 | RW59V450 | .891 | RW57V450 | .919 | RW58V450 | 1.028 | 5000 | | | | | RW58V502 | 1.111 |
| 50 | RW59V500 | .891 | RW57V500 | .919 | RW58V500 | 1.028 | 5600 | | | | | RW58V562 | 1.259 |
| 56 | RW59V560 | .891 | RW57V560 | .919 | RW58V560 | 1.028 | 6300 | | | | | RW58V632 | 1.259 |
| 63 | RW59V630 | .891 | RW57V630 | .919 | RW58V630 | 1.028 | 7100 | | | | | RW58V712 | 1.259 |
| 71 | RW59V710 | .891 | RW57V710 | .919 | RW58V710 | 1.028 | 8000 | | | | | RW58V802 | 1.259 |
| 80 | RW59V800 | .891 | RW57V800 | .919 | RW58V800 | 1.028 | 9000 | | | | | RW58V902 | 1.259 |
| 90 | RW59V900 | .891 | RW57V900 | .919 | RW58V900 | 1.028 | | | | | | | |
| 100 | RW59V101 | .891 | RW57V101 | .919 | RW58V101 | 1.028 | 10000 | | | | | RW58V103 | 1.259 |
| 110 | RW59V111 | .891 | RW57V111 | .919 | RW58V111 | 1.028 | 11000 | | | | | RW58V113 | 1.749 |
| 120 | RW59V121 | .891 | RW57V121 | .919 | RW58V121 | 1.028 | 12000 | | | | | RW58V123 | 1.749 |
| 140 | RW59V141 | .891 | RW57V141 | .919 | RW58V141 | 1.028 | 14000 | | | | | RW58V143 | 1.749 |
| | | | | | | | 16000 | | | | | RW58V163 | 1.749 |
| | | | | | | | 18000 | | | | | RW58V183 | 1.749 |
| | | | | | | | 20000 | | | | | RW58V203 | 1.749 |

SPRAGUE RESISTORS

FILMISTOR® 'B' MOLDED-CASE DEPOSITED-CARBON RESISTORS



- Ideal for Circuits Requiring High Accuracy, Reliability, and Stability with Low Temperature Coefficient
- Low Self-inductance, Low Distributed Capacitance
- Designed to Meet the Stringent Performance Requirements of Spec. MIL-R-10509C, Characteristic B.
- Tough Molded Shell Provides Protection Against Mechanical Damage as Well as Catastrophic Failures from Electrolysis Caused by Moisture Penetration.
- Standard Resistance Tolerance, $\pm 1\%$
- For Complete Technical Data, Refer to Latest Issue of Engineering Bulletin 7000
- For Prices on Quantities from 25 to 999 Pieces See Your Sprague Industrial Distributor

STANDARD RESISTANCE VALUES (Ohms)

| | | | | | | | | | | | | | |
|------|------|------|-----|--------|--------|--------|---------|--------|--------|-------|-----------|-----------|-----------|
| 10.0 | 26.7 | 71.5 | 191 | 511 | 1.37 K | 3.65 K | 9.76 K | 26.1 K | 69.8 K | 187 K | 499 K | 1.37 meg. | 3.74 meg. |
| 10.2 | 27.4 | 73.2 | 196 | 523 | 1.40 K | 3.74 K | 10.00 K | 26.7 K | 71.5 K | 191 K | 511 K | 1.40 meg. | 3.83 meg. |
| 10.5 | 28.0 | 75.0 | 200 | 536 | 1.43 K | 3.83 K | 10.2 K | 27.4 K | 73.2 K | 196 K | 523 K | 1.43 meg. | 3.92 meg. |
| 10.7 | 28.7 | 76.8 | 205 | 549 | 1.47 K | 3.92 K | 10.5 K | 28.0 K | 75.0 K | 200 K | 536 K | 1.47 meg. | 4.02 meg. |
| 11.0 | 29.4 | 78.7 | 210 | 562 | 1.50 K | 4.02 K | 10.7 K | 28.7 K | 76.8 K | 205 K | 549 K | 1.50 meg. | 4.12 meg. |
| 11.3 | 30.1 | 80.6 | 215 | 576 | 1.54 K | 4.12 K | 11.0 K | 29.4 K | 78.7 K | 210 K | 562 K | 1.54 meg. | 4.22 meg. |
| 11.5 | 30.9 | 82.5 | 221 | 590 | 1.58 K | 4.22 K | 11.3 K | 30.1 K | 80.6 K | 215 K | 576 K | 1.58 meg. | 4.32 meg. |
| 11.8 | 31.6 | 84.5 | 226 | 604 | 1.62 K | 4.32 K | 11.5 K | 30.9 K | 82.5 K | 221 K | 590 K | 1.62 meg. | 4.42 meg. |
| 12.1 | 32.4 | 86.6 | 232 | 619 | 1.65 K | 4.42 K | 11.8 K | 31.6 K | 84.5 K | 226 K | 604 K | 1.65 meg. | 4.53 meg. |
| 12.4 | 33.2 | 88.7 | 237 | 634 | 1.69 K | 4.53 K | 12.1 K | 32.4 K | 86.6 K | 232 K | 619 K | 1.69 meg. | 4.64 meg. |
| 12.7 | 34.0 | 90.9 | 243 | 649 | 1.74 K | 4.64 K | 12.4 K | 33.2 K | 88.7 K | 237 K | 634 K | 1.74 meg. | 4.75 meg. |
| 13.0 | 34.8 | 93.1 | 249 | 665 | 1.78 K | 4.75 K | 12.7 K | 34.0 K | 90.9 K | 243 K | 649 K | 1.78 meg. | 4.87 meg. |
| 13.3 | 35.7 | 95.3 | 255 | 681 | 1.82 K | 4.87 K | 13.0 K | 34.8 K | 93.1 K | 249 K | 665 K | 1.82 meg. | 4.99 meg. |
| 13.7 | 36.5 | 97.6 | 261 | 698 | 1.87 K | 4.99 K | 13.3 K | 35.7 K | 95.3 K | 255 K | 681 K | 1.87 meg. | 5.11 meg. |
| 14.0 | 37.4 | 100 | 267 | 715 | 1.91 K | 5.11 K | 13.7 K | 36.5 K | 97.6 K | 261 K | 698 K | 1.91 meg. | 5.23 meg. |
| 14.3 | 38.3 | 102 | 274 | 732 | 1.96 K | 5.23 K | 14.0 K | 37.4 K | 100 | 267 K | 715 K | 1.96 meg. | 5.36 meg. |
| 14.7 | 39.2 | 105 | 280 | 750 | 2.00 K | 5.36 K | 14.3 K | 38.3 K | 102 K | 274 K | 732 K | 2.00 meg. | 5.49 meg. |
| 15.0 | 40.2 | 107 | 287 | 768 | 2.05 K | 5.49 K | 14.7 K | 39.2 K | 105 K | 280 K | 750 K | 2.05 meg. | 5.62 meg. |
| 15.4 | 41.2 | 110 | 294 | 787 | 2.10 K | 5.62 K | 15.0 K | 40.2 K | 107 K | 287 K | 768 K | 2.10 meg. | 5.76 meg. |
| 15.8 | 42.2 | 113 | 30* | 806 | 2.15 K | 5.76 K | 15.4 K | 41.2 K | 110 K | 294 K | 787 K | 2.15 meg. | 5.90 meg. |
| 15.2 | 43.2 | 115 | 309 | 825 | 2.21 K | 5.90 K | 15.8 K | 42.2 K | 113 K | 301 K | 806 K | 2.21 meg. | 6.04 meg. |
| 16.5 | 44.2 | 118 | 316 | 845 | 2.26 K | 6.04 K | 16.2 K | 43.2 K | 115 K | 309 K | 825 K | 2.26 meg. | 6.19 meg. |
| 15.9 | 45.3 | 121 | 324 | 866 | 2.32 K | 6.19 K | 16.5 K | 44.2 K | 118 K | 316 K | 845 K | 2.32 meg. | 6.34 meg. |
| 17.4 | 46.4 | 124 | 332 | 887 | 2.37 K | 6.34 K | 16.9 K | 45.3 K | 121 K | 324 K | 866 K | 2.37 meg. | 6.49 meg. |
| 17.8 | 47.5 | 127 | 340 | 909 | 2.43 K | 6.49 K | 17.4 K | 46.4 K | 124 K | 332 K | 887 K | 2.43 meg. | 6.65 meg. |
| 18.2 | 48.7 | 130 | 348 | 931 | 2.49 K | 6.65 K | 17.8 K | 47.5 K | 127 K | 340 K | 909 K | 2.49 meg. | 6.81 meg. |
| 18.7 | 49.9 | 133 | 357 | 953 | 2.55 K | 6.81 K | 18.2 K | 48.7 K | 130 K | 348 K | 931 K | 2.55 meg. | 6.98 meg. |
| 19.1 | 51.1 | 137 | 365 | 976 | 2.61 K | 6.98 K | 18.7 K | 49.9 K | 133 K | 357 K | 953 K | 2.61 meg. | 7.15 meg. |
| 19.6 | 52.3 | 140 | 374 | 1.0 K | 2.67 K | 7.15 K | 19.1 K | 51.1 K | 137 K | 365 K | 976 K | 2.67 meg. | 7.32 meg. |
| 20.0 | 53.6 | 143 | 383 | 1.02 K | 2.74 K | 7.32 K | 19.6 K | 52.3 K | 140 K | 374 K | 1.00 meg. | 2.74 meg. | 7.50 meg. |
| 20.5 | 54.9 | 147 | 392 | 1.05 K | 2.80 K | 7.50 K | 20.0 K | 53.6 K | 143 K | 383 K | 1.02 meg. | 2.80 meg. | 7.68 meg. |
| 21.0 | 56.2 | 150 | 402 | 1.07 K | 2.87 K | 7.68 K | 20.5 K | 54.9 K | 147 K | 392 K | 1.05 meg. | 2.87 meg. | 7.87 meg. |
| 21.5 | 57.6 | 154 | 412 | 1.10 K | 2.94 K | 7.87 K | 21.0 K | 56.2 K | 150 K | 402 K | 1.07 meg. | 2.94 meg. | 8.06 meg. |
| 22.1 | 59.0 | 158 | 422 | 1.13 K | 3.01 K | 8.06 K | 21.5 K | 57.6 K | 154 K | 412 K | 1.10 meg. | 3.01 meg. | 8.25 meg. |
| 22.6 | 60.4 | 162 | 432 | 1.15 K | 3.09 K | 8.25 K | 22.1 K | 59.0 K | 158 K | 422 K | 1.13 meg. | 3.09 meg. | 8.45 meg. |
| 23.2 | 61.9 | 165 | 442 | 1.18 K | 3.16 K | 8.45 K | 22.6 K | 60.4 K | 162 K | 432 K | 1.15 meg. | 3.16 meg. | 8.66 meg. |
| 23.7 | 63.4 | 169 | 453 | 1.21 K | 3.24 K | 8.66 K | 23.2 K | 61.9 K | 165 K | 442 K | 1.18 meg. | 3.24 meg. | 8.87 meg. |
| 24.3 | 64.9 | 174 | 464 | 1.24 K | 3.32 K | 8.87 K | 23.7 K | 63.4 K | 169 K | 453 K | 1.21 meg. | 3.32 meg. | 9.09 meg. |
| 24.9 | 66.5 | 178 | 475 | 1.27 K | 3.40 K | 9.09 K | 24.3 K | 64.9 K | 174 K | 464 K | 1.24 meg. | 3.40 meg. | 9.31 meg. |
| 25.5 | 68.1 | 182 | 487 | 1.30 K | 3.48 K | 9.31 K | 24.9 K | 66.5 K | 178 K | 475 K | 1.27 meg. | 3.48 meg. | 9.53 meg. |
| 26.1 | 69.8 | 187 | 499 | 1.33 K | 3.57 K | 9.53 K | 25.5 K | 68.1 K | 182 K | 487 K | 1.30 meg. | 3.57 meg. | 9.76 meg. |
| | | | | | | | | | | | 1.33 meg. | 3.65 meg. | 10 meg. |

| 1/8 WATT TYPE 405E/RN60B .135" Dia. x .400" Long | |
|--|------------------|
| Ohms | Net, each (1-24) |
| 10 thru 24.9 | \$1.79 |
| 25.5 thru 49.9 | 1.19 |
| 51.1 thru 499 | 1.03 |
| 511 thru 499 K | .97 |
| 511 K thru 1.00 meg. | 1.03 |

| 1/4 WATT TYPE 406E/RN65B .200" Dia. x .600" Long | |
|--|------------------|
| Ohms | Net, each (1-24) |
| 10 thru 49.9 | \$1.00 |
| 51.1 thru 499 K | .94 |
| 511 K thru 1.00 meg. | 1.00 |
| 1.02 meg. thru 2.00 meg. | 1.08 |

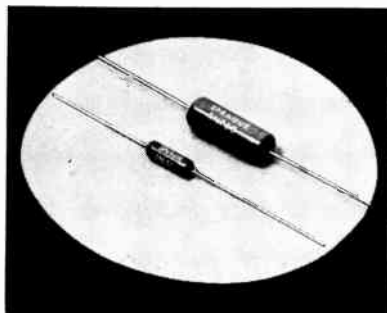
| 1/2 WATT TYPE 407E/RN70B .250" Dia. x .750" Long | |
|--|------------------|
| Ohms | Net, each (1-24) |
| 10 thru 49.9 | \$.91 |
| 51.1 thru 2.15 meg. | .86 |
| 2.21 thru 3.16 meg. | 1.03 |

| 1 WATT TYPE 408E/RN75B .375" Dia. x 1.062" Long | |
|---|------------------|
| Ohms | Net, each (1-24) |
| 10 thru 97.6 | \$1.37 |
| 100 thru 4.99 meg. | 1.28 |
| 5.11 meg. | 1.43 |

| 2 WATT TYPE 409E/RN80B .375" Dia. x 2.220" Long | |
|---|------------------|
| Ohms | Net, each (1-24) |
| 30.1 thru 196 | \$2.00 |
| 200 thru 10 meg. | 1.57 |

SPRAGUE RESISTORS

FILMISTOR® 'C' MOLDED-CASE METAL-FILM RESISTORS



- Key Performance Characteristics Include High Accuracy, Reliability, Stability, Combined with Low Temperature Coefficients
- Equal or Surpass the Characteristics of Precision Wirewound Resistors, Yet Are Smaller in Size
- Low Inherent Noise Level, Negligible Voltage Coefficient of Resistance
- Excellent Stability Under Rated Load and Under Severe Conditions of Humidity
- Designed to Meet Stringent Performance Characteristics of Spec. MIL-R-10509C, Characteristic C
- Tough Molded Shell Provides Protection Against Mechanical Damage as Well as Catastrophic Failures From Electrolysis Caused by Moisture Penetration
- Metallic Resistive Film is Firmly Bonded to Special Ceramic Core, Automatically Spiralled to Desired Resistance Values
- Standard Resistance Tolerance, $\pm 1\%$
- For Complete Technical Data, Refer to Latest Issue of Engineering Bulletin 7025
- For Prices on Quantities from 25 to 999 Pieces, See Your Sprague Industrial Distributor

STANDARD RESISTANCE VALUES (Ohms)

| | | | | | | | | | | | | | |
|-----|-----|-----|--------|--------|--------|---------|--------|--------|--------|-------|-------|-----------|-----------|
| 100 | 210 | 442 | 931 | 1.96 K | 4.12 K | 8.87 K | 19.1 K | 41.2 K | 88.7 K | 191 K | 412 K | 887 K | 1.91 meg. |
| 102 | 215 | 453 | 953 | 2.00 K | 4.22 K | 9.09 K | 19.6 K | 42.2 K | 90.9 K | 196 K | 422 K | 909 K | 1.96 meg. |
| 105 | 221 | 464 | 976 | 2.05 K | 4.32 K | 9.31 K | 20.0 K | 43.2 K | 93.1 K | 200 K | 432 K | 931 K | 2.00 meg. |
| 107 | 226 | 475 | 1.0 K | 2.10 K | 4.42 K | 9.53 K | 20.5 K | 44.2 K | 95.3 K | 205 K | 442 K | 953 K | 2.05 meg. |
| 110 | 232 | 487 | 1.02 K | 2.15 K | 4.53 K | 9.76 K | 21.0 K | 45.3 K | 97.6 K | 210 K | 453 K | 976 K | 2.10 meg. |
| 113 | 237 | 499 | 1.05 K | 2.21 K | 4.64 K | 10.00 K | 21.5 K | 46.4 K | 100 K | 215 K | 464 K | 1.00 meg. | 2.15 meg. |
| 115 | 243 | 511 | 1.07 K | 2.26 K | 4.75 K | 10.2 K | 22.1 K | 47.5 K | 102 K | 221 K | 475 K | 1.02 meg. | 2.21 meg. |
| 118 | 249 | 523 | 1.10 K | 2.32 K | 4.87 K | 10.5 K | 22.6 K | 48.7 K | 105 K | 226 K | 487 K | 1.05 meg. | 2.26 meg. |
| 121 | 255 | 536 | 1.13 K | 2.37 K | 4.99 K | 10.7 K | 23.2 K | 49.9 K | 107 K | 232 K | 499 K | 1.07 meg. | 2.32 meg. |
| 124 | 261 | 549 | 1.15 K | 2.43 K | 5.11 K | 11.0 K | 23.7 K | 51.1 K | 110 K | 237 K | 511 K | 1.10 meg. | 2.37 meg. |
| 127 | 267 | 562 | 1.18 K | 2.49 K | 5.23 K | 11.3 K | 24.3 K | 52.3 K | 113 K | 243 K | 523 K | 1.13 meg. | 2.43 meg. |
| 130 | 274 | 576 | 1.21 K | 2.55 K | 5.36 K | 11.5 K | 24.9 K | 53.6 K | 115 K | 249 K | 536 K | 1.15 meg. | 2.49 meg. |
| 133 | 280 | 590 | 1.24 K | 2.61 K | 5.49 K | 11.8 K | 25.5 K | 54.9 K | 118 K | 255 K | 549 K | 1.18 meg. | 2.55 meg. |
| 137 | 287 | 604 | 1.27 K | 2.67 K | 5.62 K | 12.1 K | 26.1 K | 56.2 K | 121 K | 261 K | 562 K | 1.21 meg. | 2.61 meg. |
| 140 | 294 | 619 | 1.30 K | 2.74 K | 5.76 K | 12.4 K | 26.7 K | 57.6 K | 124 K | 267 K | 576 K | 1.24 meg. | 2.67 meg. |
| 143 | 301 | 634 | 1.33 K | 2.80 K | 5.90 K | 12.7 K | 27.4 K | 59.0 K | 127 K | 274 K | 590 K | 1.27 meg. | 2.74 meg. |
| 147 | 309 | 649 | 1.37 K | 2.87 K | 6.04 K | 13.0 K | 28.0 K | 60.4 K | 130 K | 280 K | 604 K | 1.30 meg. | 2.80 meg. |
| 150 | 316 | 665 | 1.40 K | 2.94 K | 6.19 K | 13.3 K | 28.7 K | 61.9 K | 133 K | 287 K | 619 K | 1.33 meg. | 2.87 meg. |
| 154 | 324 | 681 | 1.43 K | 3.01 K | 6.34 K | 13.7 K | 29.4 K | 63.4 K | 137 K | 294 K | 634 K | 1.37 meg. | 2.94 meg. |
| 158 | 332 | 698 | 1.47 K | 3.09 K | 6.49 K | 14.0 K | 30.1 K | 64.9 K | 140 K | 301 K | 649 K | 1.40 meg. | 3.01 meg. |
| 162 | 340 | 715 | 1.50 K | 3.16 K | 6.65 K | 14.3 K | 30.9 K | 66.5 K | 143 K | 309 K | 665 K | 1.43 meg. | 3.09 meg. |
| 165 | 348 | 732 | 1.54 K | 3.24 K | 6.81 K | 14.7 K | 31.6 K | 68.1 K | 147 K | 316 K | 681 K | 1.47 meg. | 3.16 meg. |
| 169 | 357 | 750 | 1.58 K | 3.32 K | 6.98 K | 15.0 K | 32.4 K | 69.8 K | 150 K | 324 K | 698 K | 1.50 meg. | 3.24 meg. |
| 174 | 365 | 768 | 1.62 K | 3.40 K | 7.15 K | 15.4 K | 33.2 K | 71.5 K | 154 K | 332 K | 715 K | 1.54 meg. | 3.32 meg. |
| 178 | 374 | 787 | 1.65 K | 3.48 K | 7.32 K | 15.8 K | 34.0 K | 73.2 K | 158 K | 340 K | 732 K | 1.58 meg. | 3.40 meg. |
| 182 | 383 | 806 | 1.69 K | 3.57 K | 7.50 K | 16.2 K | 34.8 K | 75.0 K | 162 K | 348 K | 750 K | 1.62 meg. | 3.48 meg. |
| 187 | 392 | 825 | 1.74 K | 3.65 K | 7.68 K | 16.5 K | 35.7 K | 76.8 K | 165 K | 357 K | 768 K | 1.65 meg. | 3.57 meg. |
| 191 | 402 | 845 | 1.78 K | 3.74 K | 7.87 K | 16.9 K | 36.5 K | 78.7 K | 169 K | 365 K | 787 K | 1.69 meg. | 3.65 meg. |
| 196 | 412 | 866 | 1.82 K | 3.83 K | 8.06 K | 17.4 K | 37.4 K | 80.6 K | 174 K | 374 K | 806 K | 1.74 meg. | 3.74 meg. |
| 200 | 422 | 887 | 1.87 K | 3.92 K | 8.25 K | 17.8 K | 38.3 K | 82.5 K | 178 K | 383 K | 825 K | 1.78 meg. | 3.83 meg. |
| 205 | 432 | 909 | 1.91 K | 4.02 K | 8.45 K | 18.2 K | 39.2 K | 84.5 K | 182 K | 392 K | 845 K | 1.82 meg. | 3.92 meg. |
| | | | | | 8.66 K | 18.7 K | 40.2 K | 86.6 K | 187 K | 402 K | 866 K | 1.87 meg. | 4.00 meg. |

1/8 WATT TYPE 418E/RN60C

.135" Dia. x .400" Long

| Ohms | Net, each (1-24) |
|------------------|------------------|
| 100 thru 200 K | \$2.06 |
| 201 K thru 500 K | 2.24 |

1/4 WATT TYPE 419E/RN65C

.200" Dia. x .600" Long

| Ohms | Net, each (1-24) |
|-------------------|------------------|
| 100 thru 200 K | \$1.97 |
| 201 K thru 1 meg. | 2.14 |

1/2 WATT TYPE 420E/RN70C

.250" Dia. x .750" Long

| Ohms | Net, each (1-24) |
|-------------------|------------------|
| 100 thru 500 K | \$1.79 |
| 501 K thru 2 meg. | 1.97 |

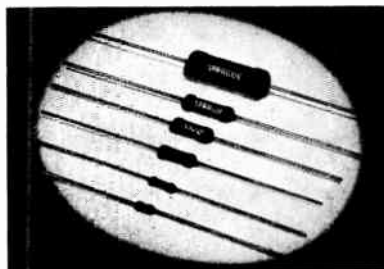
1 WATT TYPE 421E/RN75C

.375" Dia. x 1.062" Long

| Ohms | Net, each (1-24) |
|-------------------|------------------|
| 100 thru 500 K | \$2.01 |
| 501 K thru 4 meg. | 2.24 |

SPRAGUE RESISTORS

FILMISTOR® 'X-70' ENCAPSULATED Deposited-Carbon Resistors



- Ideal for Use in Industrial Electronic Equipment, Commercial Computer Circuitry, Packaged Circuit Modules, etc., Wherever Small Size, Close Tolerance Resistors are Required
- Standard Resistance Tolerance, $\pm 1\%$
- Will Operate at Full Rated Wattage at Temperatures to 70C — No Derating Required
- Have Special End Terminations and End Caps for Low Contact Resistance and Low Inherent Noise Level
- Special Encapsulating Material Will Withstand 10 Cycles of Standard Military Humidity Cycling Test
- For Complete Technical Data, Refer to Latest Issue of Engineering Bulletin 7005
- For Prices on Quantities from 25 to 999 Pieces, See Your Sprague Industrial Distributor

STANDARD RESISTANCE VALUES (Ohms)

| | | | | | | | | | | | | | |
|------|------|------|-----|-----|--------|--------|---------|--------|--------|--------|-------|-----------|-----------|
| 10.0 | 24.3 | 59.0 | 143 | 357 | 887 | 2.21 K | 5.49 K | 13.7 K | 34.0 K | 84.5 K | 210 K | 523 K | 1.30 meg. |
| 10.2 | 24.9 | 60.4 | 147 | 365 | 909 | 2.26 K | 5.62 K | 14.0 K | 34.8 K | 86.6 K | 215 K | 536 K | 1.33 meg. |
| 10.5 | 25.5 | 61.9 | 150 | 374 | 931 | 2.32 K | 5.76 K | 14.3 K | 35.7 K | 88.7 K | 221 K | 549 K | 1.37 meg. |
| 10.7 | 26.1 | 63.4 | 154 | 383 | 953 | 2.37 K | 5.90 K | 14.7 K | 36.5 K | 90.9 K | 226 K | 562 K | 1.40 meg. |
| 11.0 | 26.7 | 64.9 | 158 | 392 | 976 | 2.43 K | 6.04 K | 15.0 K | 37.4 K | 93.1 K | 232 K | 576 K | 1.43 meg. |
| 11.3 | 27.4 | 66.5 | 162 | 402 | 1.0 K | 2.49 K | 6.19 K | 15.4 K | 38.3 K | 95.3 K | 237 K | 590 K | 1.47 meg. |
| 11.5 | 28.0 | 68.1 | 165 | 412 | 1.02 K | 2.55 K | 6.34 K | 15.8 K | 39.2 K | 97.6 K | 243 K | 604 K | 1.50 meg. |
| 11.8 | 28.7 | 69.8 | 169 | 422 | 1.05 K | 2.61 K | 6.49 K | 16.2 K | 40.2 K | 100 K | 249 K | 619 K | 1.54 meg. |
| 12.1 | 29.4 | 71.5 | 174 | 432 | 1.07 K | 2.67 K | 6.65 K | 16.5 K | 41.2 K | 102 K | 255 K | 634 K | 1.58 meg. |
| 12.4 | 30.1 | 73.2 | 178 | 442 | 1.10 K | 2.74 K | 6.81 K | 16.9 K | 42.2 K | 105 K | 261 K | 649 K | 1.62 meg. |
| 12.7 | 30.9 | 75.0 | 182 | 453 | 1.13 K | 2.80 K | 6.98 K | 17.4 K | 43.2 K | 107 K | 267 K | 665 K | 1.65 meg. |
| 13.0 | 31.6 | 76.8 | 187 | 464 | 1.15 K | 2.87 K | 7.15 K | 17.8 K | 44.2 K | 110 K | 274 K | 681 K | 1.69 meg. |
| 13.3 | 32.4 | 78.7 | 191 | 475 | 1.18 K | 2.94 K | 7.32 K | 18.2 K | 45.3 K | 113 K | 280 K | 698 K | 1.74 meg. |
| 13.7 | 33.2 | 80.6 | 196 | 487 | 1.21 K | 3.01 K | 7.50 K | 18.7 K | 46.4 K | 115 K | 287 K | 715 K | 1.78 meg. |
| 14.0 | 34.0 | 82.5 | 200 | 499 | 1.24 K | 3.09 K | 7.68 K | 19.1 K | 47.5 K | 118 K | 294 K | 732 K | 1.82 meg. |
| 14.3 | 34.8 | 84.5 | 205 | 511 | 1.27 K | 3.16 K | 7.87 K | 19.6 K | 48.7 K | 121 K | 301 K | 750 K | 1.87 meg. |
| 14.7 | 35.7 | 86.6 | 210 | 523 | 1.30 K | 3.24 K | 8.06 K | 20.0 K | 49.9 K | 124 K | 309 K | 768 K | 1.91 meg. |
| 15.0 | 36.5 | 88.7 | 215 | 536 | 1.33 K | 3.32 K | 8.25 K | 20.5 K | 51.1 K | 127 K | 316 K | 787 K | 1.96 meg. |
| 15.4 | 37.4 | 90.9 | 221 | 549 | 1.37 K | 3.40 K | 8.45 K | 21.0 K | 52.3 K | 130 K | 324 K | 806 K | 2.00 meg. |
| 15.8 | 38.3 | 93.1 | 226 | 562 | 1.40 K | 3.48 K | 8.66 K | 21.5 K | 53.6 K | 133 K | 332 K | 825 K | 2.05 meg. |
| 16.2 | 39.2 | 95.3 | 232 | 576 | 1.43 K | 3.57 K | 8.87 K | 22.1 K | 54.9 K | 137 K | 340 K | 845 K | 2.10 meg. |
| 16.5 | 40.2 | 97.6 | 237 | 590 | 1.47 K | 3.65 K | 9.09 K | 22.6 K | 56.2 K | 140 K | 348 K | 866 K | 2.15 meg. |
| 16.9 | 41.2 | 100 | 243 | 604 | 1.50 K | 3.74 K | 9.31 K | 23.2 K | 57.6 K | 143 K | 357 K | 887 K | 2.21 meg. |
| 17.4 | 42.2 | 102 | 249 | 619 | 1.54 K | 3.83 K | 9.53 K | 23.7 K | 59.0 K | 147 K | 365 K | 909 K | 2.26 meg. |
| 17.8 | 43.2 | 105 | 255 | 634 | 1.58 K | 3.92 K | 9.76 K | 24.3 K | 60.4 K | 150 K | 374 K | 931 K | 2.32 meg. |
| 18.2 | 44.2 | 107 | 261 | 649 | 1.62 K | 4.02 K | 10.00 K | 24.9 K | 61.9 K | 154 K | 383 K | 953 K | 2.37 meg. |
| 18.7 | 45.3 | 110 | 267 | 665 | 1.65 K | 4.12 K | 10.2 K | 25.5 K | 63.4 K | 158 K | 392 K | 976 K | 2.43 meg. |
| 19.1 | 46.4 | 113 | 274 | 681 | 1.69 K | 4.22 K | 10.5 K | 26.1 K | 64.9 K | 162 K | 402 K | 1.00 meg. | 2.49 meg. |
| 19.6 | 47.5 | 115 | 280 | 698 | 1.74 K | 4.32 K | 10.7 K | 26.7 K | 66.5 K | 165 K | 412 K | 1.02 meg. | 2.55 meg. |
| 20.0 | 48.7 | 118 | 287 | 715 | 1.78 K | 4.42 K | 11.0 K | 27.4 K | 68.1 K | 169 K | 422 K | 1.05 meg. | 2.61 meg. |
| 20.5 | 49.9 | 121 | 294 | 732 | 1.82 K | 4.53 K | 11.3 K | 28.0 K | 69.8 K | 174 K | 432 K | 1.07 meg. | 2.67 meg. |
| 21.0 | 51.1 | 124 | 301 | 750 | 1.87 K | 4.64 K | 11.5 K | 28.7 K | 71.5 K | 178 K | 442 K | 1.10 meg. | 2.74 meg. |
| 21.5 | 52.3 | 127 | 309 | 768 | 1.91 K | 4.75 K | 11.8 K | 29.4 K | 73.2 K | 182 K | 453 K | 1.13 meg. | 2.80 meg. |
| 22.1 | 53.6 | 130 | 316 | 787 | 1.96 K | 4.87 K | 12.1 K | 30.1 K | 75.0 K | 187 K | 464 K | 1.15 meg. | 2.87 meg. |
| 22.6 | 54.9 | 133 | 324 | 806 | 2.00 K | 4.99 K | 12.4 K | 30.9 K | 76.8 K | 191 K | 475 K | 1.18 meg. | 2.94 meg. |
| 23.2 | 56.2 | 137 | 332 | 825 | 2.05 K | 5.11 K | 12.7 K | 31.6 K | 78.7 K | 196 K | 487 K | 1.21 meg. | 3.01 meg. |
| 23.7 | 57.6 | 140 | 340 | 845 | 2.10 K | 5.23 K | 13.0 K | 32.4 K | 80.6 K | 200 K | 499 K | 1.24 meg. | 3.09 meg. |
| | | | 348 | 866 | 2.15 K | 5.36 K | 13.3 K | 33.2 K | 82.5 K | 205 K | 511 K | 1.27 meg. | 3.16 meg. |

| 1/8 WATT TYPE 425E 3/32" Dia. x 5/16" Long | | 1/4 WATT TYPE 426E 1/8" Dia. x 7/16" Long | | 1/4 WATT TYPE 427E 3/32" Dia. x 15/32" Long | |
|--|------------------|---|------------------|---|------------------|
| Ohms | Net, each (1-24) | Ohms | Net, each (1-24) | Ohms | Net, each (1-24) |
| 10 thru 49.9 | \$1.25 | 10 thru 49.9 | \$0.80 | 10 thru 49.9 | \$0.80 |
| 51.1 thru 1 meg. | .94 | 51.1 thru 2 meg. | .61 | 51.1 thru 2 meg. | .61 |

| 1/2 WATT TYPE 428E 1 1/4" Dia. x 1/2" Long | | 1/2 WATT TYPE 429E 1 1/4" Dia. x 3/8" Long | |
|--|------------------|--|------------------|
| Ohms | Net, each (1-24) | Ohms | Net, each (1-24) |
| 10 thru 49.9 | \$.65 | 10 thru 49.9 | \$.65 |
| 51.1 thru 2 meg. | .54 | 51.1 thru 2 meg. | .54 |
| | | 2.05 meg. thru 3.16 meg. | .75 |



TRIMMING POTENTIOMETERS

Stocked at your local distributors for immediate off-the-shelf delivery

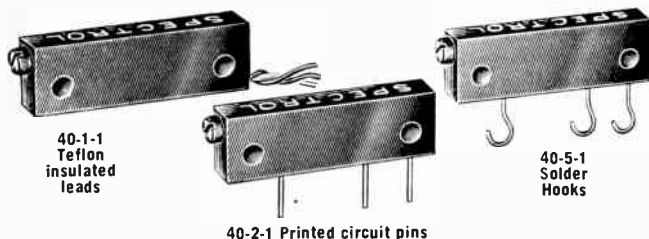
MODEL 40 Rectangular

Electrical Specifications

Standard Resistance Range 50Ω to 50K
Resistance Tolerance ±5.0%
Power Rating 1.0 watt at 70°C

Mechanical Specifications

Number of Turns 15
Operating Temperature Range -55°C to +175°C
Case Dimensions .180 x .315 x 1.000
Weight 1.5 grams
Base price in 1-9 quantities \$8.55



40-1-1
Teflon
insulated
leads

40-2-1 Printed circuit pins

40-5-1
Solder
Hooks

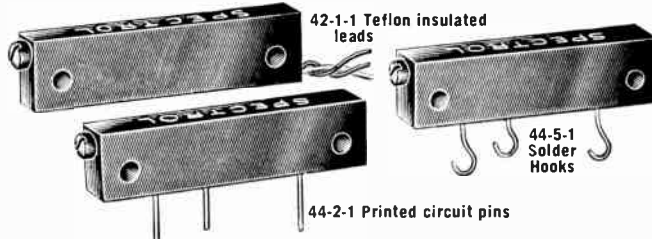
MODELS 42 and 44 Rectangulars

Electrical Specifications

Standard Resistance Range 50Ω to 100K
Resistance Tolerance ±5.0%
Power Rating 1.0 watt at 70°C

Mechanical Specifications

Number of Turns 25
Operating Temperature Range -55°C to +175°C
Case Dimensions .280 x .315 x 1.250
(.180 x .315 x 1.250 for Model 42)
Weight 2.5 grams
Base price in 1-9 quantities \$6.95



42-1-1 Teflon insulated
leads

44-2-1 Printed circuit pins

44-5-1
Solder
Hooks

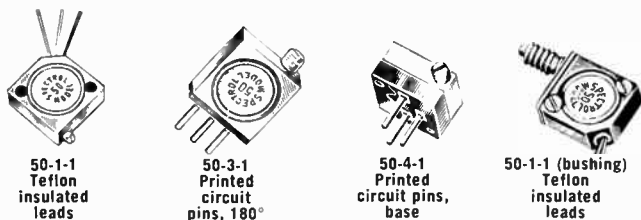
MODEL 50 Square

Electrical Specifications

Standard Resistance Range 50Ω to 50K
Resistance Tolerance ±5.0% (+1.0% available)
Power Rating 1.0 watt at 50°C

Mechanical Specifications

Number of Turns 25 (nominal)
Rotation Continuous
Operating Temperature Range -55°C to +150°C
Case Dimensions $\frac{3}{8}$ " x $\frac{3}{8}$ " x $\frac{3}{16}$ "
Weight 1 gram
Base price in 1-9 quantities \$7.50



50-1-1
Teflon
insulated
leads

50-3-1
Printed
circuit
pins, 180°

50-4-1
Printed
circuit
pins,
base

50-1-1 (bushing)
Teflon
insulated
leads

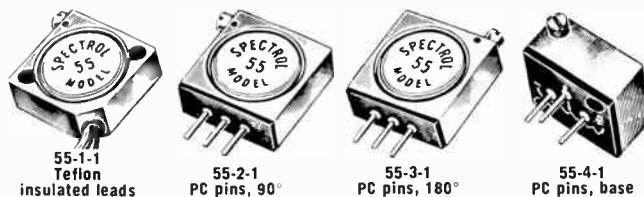
MODEL 55 Square

Electrical Specifications

Standard Resistance Range 50Ω to 50K
Resistance Tolerance ±5.0% (±1.0% available)
Power Rating 1.0 watt at 50°C

Mechanical Specifications

Number of Turns 42 (nominal)
Rotation Stops, clutch standard (continuous rotation available)
Operating Temperature Range -55°C to +175°C
Case Dimensions $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{3}{16}$ "
Weight 2 grams
Base price in 1-9 quantities \$6.00



55-1-1
Teflon
insulated
leads

55-2-1
PC pins, 90°

55-3-1
PC pins, 180°

55-4-1
PC pins, base

MODEL 60 Square

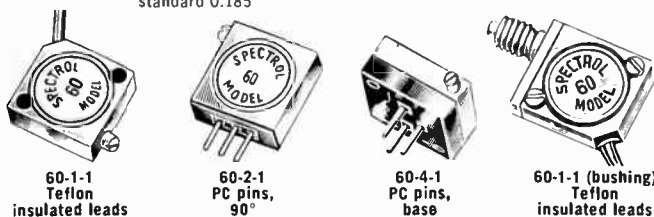
Electrical Specifications

Standard Resistance Range 50Ω to 100K
Resistance Tolerance ±5.0% (±1.0% available)
Power Rating 2.0 watts at 50°C

Mechanical Specifications

Number of Turns 25 (nominal)
Rotation Continuous
Operating Temperature Range -55°C to +150°C
Case Dimensions $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{3}{16}$ "
Weight 2 grams
Base price in 1-9 quantities \$6.50

*The case depth for 100K resistance is 0.218" instead of the standard 0.185"



60-1-1
Teflon
insulated
leads

60-2-1
PC pins,
90°

60-4-1
PC pins,
base

60-1-1 (bushing)
Teflon
insulated
leads

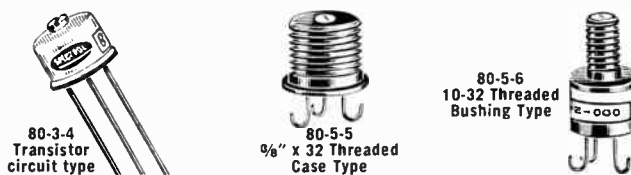
MODELS 80 and 82 Round

Electrical Specifications

Standard Resistance Range 50Ω to 50K
Resistance Tolerance ±5.0% (±1.0% available)
Power Rating (Model 80) 1.0 watt at 50°C
Power Rating (Model 82) 0.5 watt at 50°C

Mechanical Specifications

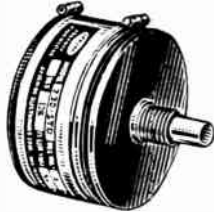
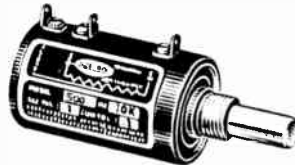
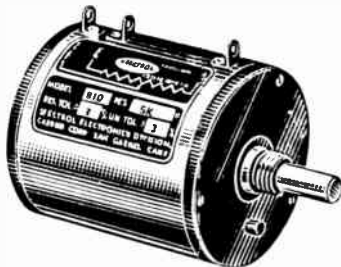
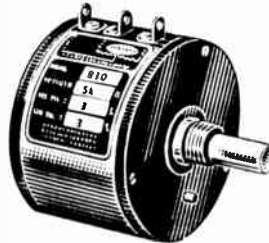
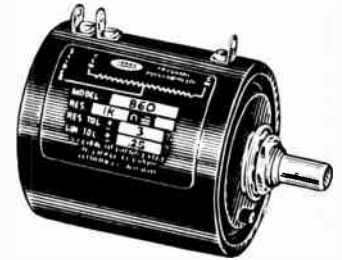
Number of Turns 1
Rotation End stops, standard (continuous rotation available)
Operating Temp. Range (Model 80) -55°C to +150°C
Operating Temp. Range (Model 82) -55°C to +105°C
Case Dimen.—Vary with mounting type ($\frac{3}{8}$ " Dia. x $\frac{1}{32}$ " body ht.)
Model 80 base price in 1-9 quantities—\$6.00
Model 82 base price in 1-9 quantities—\$3.85



80-3-4
Transistor
circuit type

80-5-5
 $\frac{3}{8}$ " x 32 Threaded
Case Type

80-5-6
10-32 Threaded
Bushing Type

SPECTROL**PRECISION
POTENTIOMETERS***Call Your Nearest Spectrol Distributor for Off-The-Shelf Delivery***MODEL 130**
1 $\frac{1}{16}$ " Diam.**MODEL 140**
 $\frac{1}{2}$ " Diam.**MODEL 150**
 $\frac{1}{2}$ " Diam.**MODEL 230**
1 $\frac{3}{4}$ " Diam.**MODEL 500**
 $\frac{7}{8}$ " Diam.**MODEL 510**
 $\frac{7}{8}$ " Diam.**MODEL 810**
1 $\frac{13}{16}$ " Diam.**MODEL 830**
1 $\frac{13}{16}$ " Diam.**MODEL 860**
1 $\frac{13}{16}$ " Diam.

| Model | Diameter (inches) | Turns | Standard Resistance Range (ohms) | Standard Linearity Tolerance (%) | Standard Electrical Rotation (degrees) | Power Rating (watts) | Max. Starting Torque (in./oz.) | Max. Weight (oz.) | Max. Sections (ganged) | Standard Operating Temperature (degrees C) | Approx. Base Price (each) |
|-------|-------------------|-------|----------------------------------|----------------------------------|--|----------------------|--------------------------------|-------------------|------------------------|--|---------------------------|
| 130 | 1.312 | 1 | 10-30K | 0.5 | 352 | 2.75 | 1.0 | 1.5 | 1 | -55 to +105 | \$ 8.50 |
| 140 | 0.500 | 1 | 50-10K | 1.0 | 325 | 2.0 | 2.0 | 0.15 | 1 | -55 to +105 | \$18.00 |
| 150 | 0.500 | 1 | 20-70K | 1.0 | 325 | 2.0 | 1.0 | 0.25 | 1 | -55 to +105 | \$10.00 |
| 230 | 1.750 | 1 | 5-65K | 0.3 | 354 | 2.5 | 0.7 | 3.0 | 1 | -55 to +105 | \$15.00 |
| 500 | 0.875 | 10 | 25-120K | 0.25 | 3600 | 3.0 | 0.4 | 1.0 | 2 | -55 to +105 | \$15.00 |
| 510 | 0.875 | 10 | 25-120K | 0.25 | 3600 | 3.0 | 0.5 | 1.5 | 1 | -55 to +105 | \$10.00 |
| 810 | 1.812 | 10 | 50-400K | 0.25 | 3600 | 8.0 | 1.75 | 4.5 | 1 | -55 to +105 | \$12.00 |
| 830 | 1.812 | 3 | 20-120K | 0.25 | 1080 | 4.75 | 1.75 | 3.0 | 1 | -55 to +105 | \$10.00 |
| 860 | 1.812 | 10 | 50-400K | 0.25 | 3600 | 3.0 | 1.75 | 4.5 | 1 | -55 to +105 | \$10.00 |

SPECTROL**ELECTRONICS CORPORATION**

SAN GABRIEL, CALIFORNIA

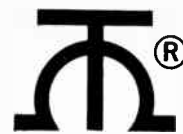
PLAINVIEW, L.I., NEW YORK

BRAMPTON (TORONTO), ONTARIO, CANADA



**VITREOUS
ENAMELED**

POWER RESISTORS



- **FIXED**
- **ADJUSTABLE**
- **TRU-RIB**
- **AXIAL LEAD**

Our new, modern plant occupies 80,000 square feet devoted to producing the finest power rheostats and wire wound resistors available. If you need a rheostat or resistor, whether it be right from stock or to your specifications, we assure you of courteous service, prompt delivery and quality merchandise.

AVAILABLE WITH OR
WITHOUT LEADS



5 Watt – FRL-5 – FIXED **Vitreous Enameled** RESISTORS

1 ohm thru 10,000 ohms available in 53 stock values for immediate shipment. Special resistance values made on order. All Welded Construction.

Core: $\frac{5}{16}$ " x $\frac{3}{16}$ " x 1"

AVAILABLE WITH OR
WITHOUT LEADS

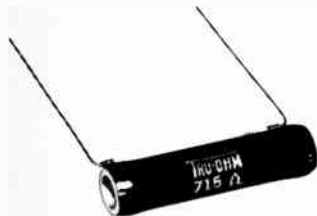


10 Watt – FRL-10 – FIXED **Vitreous Enameled** RESISTORS

1 ohm thru 50,000 ohms available in 71 stock values for immediate shipment. Special resistance values made on order. All Welded Construction.

Core: $\frac{5}{16}$ " x $\frac{3}{16}$ " x 1 $\frac{3}{4}$ "

AVAILABLE WITH OR
WITHOUT LEADS



20 Watt – FRL-20 – FIXED **Vitreous Enameled** RESISTORS

1 ohm thru 100,000 ohms available in 60 stock values for immediate shipment. Special resistance values made on order. All Welded Construction.

Core: $\frac{3}{16}$ " x $\frac{1}{4}$ " x 2"



25 Watt – FR-25 – FIXED **Vitreous Enameled** RESISTORS

1 ohm thru 100,000 ohms in 45 stock values available for immediate shipment. Special resistance values made to order.

Core: $\frac{9}{16}$ " x $\frac{5}{16}$ " x 2" Mounting Centers 2 $\frac{3}{4}$ " With Bracket #P-3747 Standard Lug #12



50 Watt – FR-50 – FIXED **Vitreous Enameled** RESISTORS

1 ohm thru 250,000 ohms in 46 stock values available for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{9}{16}$ " x $\frac{5}{16}$ " x 4" Mounting Centers 4 $\frac{3}{4}$ " With Bracket #P-3747 Standard Lug #12



75 Watt – FR-75 – FIXED **Vitreous Enameled** RESISTORS

1 ohm thru 100,000 ohms in 40 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{9}{16}$ " x $\frac{5}{16}$ " x 6" Mounting Centers 6 $\frac{3}{4}$ " With Bracket #P-3747 Standard Lug #12

You are guaranteed to receive 24 hour delivery as we maintain jobber stock items!

TRU-OHM RESISTORS are made to meet and exceed MIL-R-26C Specifications!

Mfd. by TRU-OHM PRODUCTS DIVISION OF MODEL ENG. & MFG. INC.

General Sales Office: Chicago, Ill.



VITREOUS ENAMELED RESISTORS



100 Watt — FR-100 — FIXED Vitreous Enameled RESISTORS

1 ohm thru 100,000 ohms in 38 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{3}{4}$ " x $\frac{1}{2}$ " x $6\frac{1}{2}$ " Mounting Centers $7\frac{3}{8}$ " With Bracket #P-3689 Standard Lug #12



160 Watt — FR-160 — FIXED Vitreous Enameled RESISTORS

1 ohm thru 10,000 ohms in 38 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $1\frac{1}{8}$ " x $\frac{3}{4}$ " x $8\frac{1}{2}$ " Mounting Centers $9\frac{3}{8}$ " With Bracket #P-4898 Standard Lug #14



200 Watt — FR-200 — FIXED Vitreous Enameled RESISTORS

1 ohm thru 150,000 ohms in 37 stock values available for immediate delivery. Special resistance values and tolerances made to order.

Core: $1\frac{1}{8}$ " x $\frac{3}{4}$ " x $10\frac{1}{2}$ " Mounting Centers $11\frac{3}{8}$ " With Bracket #P-4898 Standard Lug #14

ADJUSTABLE RESISTORS



10 Watt — AR-10 Adjustable Vitreous Enameled Resistors

1 ohm thru 10,000 ohms in 40 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{5}{16}$ " x $\frac{3}{16}$ " x $1\frac{3}{4}$ "
Mounting Centers $2\frac{3}{16}$ "

With Bracket #P-4989
Standard Lug #10



25 Watt — AR-25 Adjustable Vitreous Enameled Resistors

1 ohm thru 25,000 ohms in 43 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{9}{16}$ " x $\frac{5}{16}$ " x 2"
Mounting Centers $2\frac{3}{4}$ "

With Bracket #P-3747
Standard Lug #12



50 Watt — AR-50 Adjustable Vitreous Enameled Resistors

1 ohm thru 100,000 ohms in 47 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{9}{16}$ " x $\frac{5}{16}$ " x 4"
Mounting Centers $4\frac{3}{4}$ "

With Bracket #P-3747
Standard Lug #12



75 Watt — AR-75 Adjustable Vitreous Enameled Resistors

1 ohm thru 100,000 ohms in 48 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{9}{16}$ " x $\frac{5}{16}$ " x 6"
Mounting Centers $6\frac{3}{4}$ "

With Brackets #P-3747
Standard Lug #12



100 Watt — AR-100 Adjustable Vitreous Enameled Resistors

1 ohm thru 100,000 ohms in 33 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $\frac{3}{4}$ " x $\frac{1}{2}$ " x $6\frac{1}{2}$ "
Mounting Centers $7\frac{3}{8}$ "

With Brackets #P-3689
Standard Lug #12



160 Watt — AR-160 Adjustable Vitreous Enameled Resistors

1 ohm thru 100,000 ohms in 34 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $1\frac{1}{8}$ " x $\frac{3}{4}$ " x $8\frac{1}{2}$ "
Mounting Centers $9\frac{3}{8}$ "

With Brackets #P-4898
Standard Lug #14



200 Watt — AR-200 Adjustable Vitreous Enameled Resistors

1 ohm thru 100,000 ohms in 31 stock values available from stock for immediate shipment. Special resistance values and tolerances made to order.

Core: $1\frac{1}{8}$ " x $\frac{3}{4}$ " x $10\frac{1}{2}$ "
Mounting Centers $11\frac{3}{8}$ "

With Brackets #P-4898
Standard Lug #14



Mfd. by TRU-OHM PRODUCTS
DIVISION OF MODEL ENG. & MFG. INC.
General Sales Office: Chicago, Ill.



POWER RHEOSTATS

VITREOUS ENAMELED

Manufactured to meet and exceed MIL-R-22 Specifications



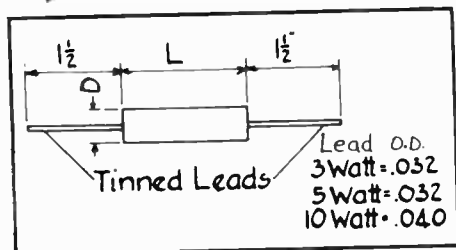
| | | | AVAILABLE FROM STOCK | | | | | | |
|---|---|--|---|---|--|---|--|---|--|
| | CAT. NO. | RESIST-ANCE | MAX. AMPS. | CAT. NO. | RESIST-ANCE | MAX. AMPS. | CAT. NO. | RESIST-ANCE | MAX. AMPS. |
| R-12 1/2 12 1/2 Watts — Dia. — 7/8" Back of panel dim. 1 1/8" Approx. 300° Rotat'n Panel mtg. to 1/8" by 1/4" — 32 bushing | 600 601 602 603 604 605 606 607 | 1 2 3 6 8 10 15 25 | 3.53 2.50 2.04 1.44 1.25 1.12 .91 .71 | 608 609 610 611 612 613 614 615 | 35 50 75 100 125 175 250 350 | .60 .50 .41 .35 .32 .27 .22 .19 | 616 617 618 619 620 621 622 | 500 750 1,000 1,500 2,500 3,500 5,000 | .16 .13 .11 .091 .071 .060 .050 |
| R-25 25 Watts — Dia. — 1 1/16" Back of panel dim. 1 3/16" Shaft Dia. 1/4" Approx. 295° Rotat'n Panel mtg. to 1/4" by 3/8" — 32 bushing | 100 101 102 103 104 105 106 107 | 1 2 3 6 8 10 15 25 | 5.000 3.540 2.880 2.040 1.770 1.580 1.290 1.000 | 108 109 110 111 112 113 114 115 | 35 50 75 100 125 175 250 350 | .845 .707 .575 .500 .445 .375 .316 .267 | 116 117 118 119 120 121 122 | 500 750 1,000 1,500 2,500 3,500 5,000 | .222 .182 .155 .129 .100 .084 .070 |
| R-50 50 Watts Dia. — 2 5/16" Back of panel dim. 1 5/16" Shaft—Dia. 1/4" Approx. rotat'n 300° Panel mtg. to 1/4" by 3/8" — 32 bushing | 200 201 202 203 204 205 206 207 208 | 0.5 1 2 4 6 8 12 16 22 | 10.000 7.070 5.000 3.540 2.880 2.500 2.040 1.760 1.500 | 209 210 211 212 213 214 215 216 217 | 35 50 80 125 150 225 300 500 800 | 1.190 1.000 .790 .630 .574 .470 .408 .316 .250 | 218 219 220 221 222 223 224 | 1,000 1,600 2,500 3,500 5,000 8,000 10,000 | .223 .176 .141 .119 .100 .079 .070 |
| R-75 75 Watts Dia.—2 3/4" Back of panel dim. 1 3/4" Shaft—Dia. 1/4" Approx. rotat'n 300° Panel mtg. to 1/4" by 3/8" — 32 bushing | 300 301 302 303 304 305 306 307 | 0.5 1 2 3 5 7.5 10 16 | 12.300 8.660 6.120 5.000 3.880 3.160 2.740 2.170 | 308 309 310 311 312 313 314 315 | 25 50 75 100 200 300 400 500 | 1.730 1.230 1.000 .866 .612 .500 .433 .388 | 316 317 318 319 320 321 322 323 | 750 1,000 1,500 2,000 2,500 5,000 7,500 10,000 | .316 .274 .224 .194 .173 .123 .100 .087 |
| R-100 100 Watts Dia. 3 1/8" Back of panel dim. 1 3/4" Shaft—Dia. 1/4" Approx. rotat'n 300° Panel mtg. to 1/4" by 3/8" — 32 bushing | 400 401 402 403 404 405 406 407 | 0.5 1 2 3 5 7.5 10 16 | 14.100 10.000 7.070 5.750 4.470 3.650 3.160 2.500 | 408 409 410 411 412 413 414 415 | 25 50 75 100 200 300 400 500 | 2.000 1.410 1.150 1.000 .707 .575 .500 .447 | 416 417 418 419 420 421 422 423 | 750 1,000 1,500 2,000 2,500 5,000 7,500 10,000 | .365 .316 .258 .224 .200 .141 .115 .100 |
| R-150 150 Watts Dia.—4" Back of panel Dim. 2" Shaft Dia. 1/4" Approx. rotat'n 300° Panel mtg. to 1/4" by 3/8" — 32 bushing or two 10-32 Flat Head Screws — mtg. centers 7/8" each side from shaft center. | 500 501 502 503 504 505 506 507 508 | 0.5 1 2 3 5 7.5 10 15 25 | 17.300 12.300 8.650 7.070 5.480 4.470 3.880 3.163 2.450 | 509 510 511 512 513 514 515 516 517 | 35 50 75 100 150 200 250 350 500 | 2.070 1.735 1.415 1.225 1.000 .865 .775 .655 .548 | 518 519 520 521 522 523 524 525 | 750 1,250 1,800 2,250 3,000 4,500 7,500 10,000 | .447 .346 .288 .259 .224 .182 .141 .122 |
| R-300 300 Watts Dia. 6" Back of panel dim. 2 1/4" Shaft Dia. 3/8" Approx. rotat'n 315° Panel mtg. to 1/4" by two 1/4" — 20 by 1 1/2 Flat Head mtg. Screws | 700 701 702 703 704 705 706 707 | 1 2 3 4 5 7.5 10 15 | 17.32 12.24 10.00 8.66 7.75 6.32 5.48 4.47 | 708 710 709 711 712 713 714 715 | 25 75 50 100 150 200 300 400 | 3.46 2.00 2.45 1.73 1.41 1.22 1.00 .87 | 716 717 718 719 720 721 | 700 900 1,200 1,500 1,750 2,500 | .66 .58 .50 .45 .41 .35 |



AXIAL LEAD Vitreous Enamel RESISTOR • TYPE VAL



TRU-OHM Vitreous enameled wire wound resistors with axial leads are available in a wide range of resistance values and wattage ratings.



| WATTAGE | RESISTANCE RANGES | CORE DIA. | CORE LENGTH | LEAD DIA. | LEAD LENGTH |
|---------|-------------------|-----------|-------------|-----------|-------------|
| 3 | 1-10000 | 1/4 | 9/16" | .032 | 1 1/2" |
| 5 | 1-25000 | 11/32 | 1 1/16" | .032 | 1 1/2" |
| 10 | 1-50000 | 27/64 | 1 5/16" | .040 | 1 1/2" |
| 20 | 1-100000 | 1/2 | 2 1/8" | .040 | 1 1/2" |

STANDARD RESISTANCE TOLERANCE $\pm 5\%$

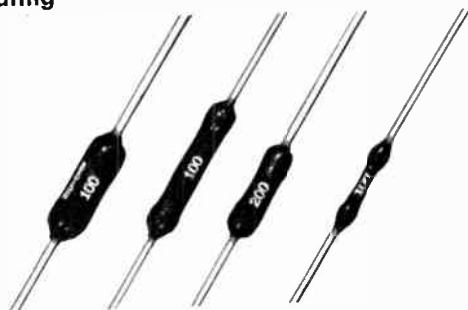
All welded construction, resistant to thermal shock and humidity are assured by thermally matching the expansion rates of core, enamel and end cad. Continuous operating temperature 340°C. Max. 40°C. ambient. These commercial units are engineered to meet and exceed the rigid requirements of the MIL-R-26-C specifications.

AXIAL LEAD PRECISION WIRE WOUND RESISTORS

With Exclusive Silicone Coating

TYPE S•AL Series

Miniature size — all welded construction — precision tolerances $\pm 5\%$ is standard for all types. $\pm 2\%$, $\pm 1\%$ and $\pm 1/2\%$ tolerances are available at additional cost. Maximum power in minimum space.



STANDARD TYPES

| TYPE | WATTAGE | LEAD SIZE | | DIMENSIONS | | CORE SIZE | | RESISTANCE | |
|---------|---------|-----------|------|------------|---------|-----------|-------|------------|-----------------|
| | | Lgth. | Dia. | Lgth. | Dia. | Lgth. | Dia. | Min. | Max. |
| S•AL-1 | 1 | 1 1/2 | .032 | 5/32 | 3/8 | 1/8 | 5/16 | 1 Ω | 3000 Ω |
| S•AL-3 | 3 | 1 1/2 | .032 | 7/32 | 1/2 | 5/32 | 7/16 | 1 Ω | 10,000 Ω |
| S•AL-5 | 5 | 1 1/2 | .032 | 9/16 | 29/32 | 1/4 | 7/8 | 1 Ω | 25000 Ω |
| S•AL-7 | 7 | 1 1/2 | .032 | 3/8 | 11/32 | 5/16 | 1 | 1 Ω | 35000 Ω |
| S•AL-10 | 10 | 1 1/2 | .032 | 3/8 | 1 25/32 | 5/16 | 1 3/4 | 1 Ω | 50000 Ω |
| S•AL-15 | 15 | 1 1/2 | .040 | 1/2 | 1 11/16 | 3/16 | 1 1/2 | 1 Ω | 75000 Ω |
| S•AL-20 | 20 | 1 1/2 | .040 | 1/2 | 2 3/16 | 7/16 | 2 | 1 Ω | 125000 Ω |

NOTE 1:

All S•AL Resistors are made to order. Materials for Standard Types are Stock items. Materials for Special Types must be purchased to order.

SPECIAL TYPES

| | | | | | | | | | |
|---------|---|-------|------|------|--------|------|--------|------------|----------------|
| S•AL-1A | 1 | 1 1/2 | .025 | 3/32 | 13/32 | 1/16 | 3/8 | 1 Ω | 1800 Ω |
| S•AL-1B | 1 | 1 1/2 | .025 | 3/32 | 13/32 | 1/16 | 1/2 | 1 Ω | 3500 Ω |
| S•AL-2 | 2 | 1 1/2 | .032 | 3/16 | 13/16 | 1/8 | 3/4 | 1 Ω | 12000 Ω |
| S•AL-3A | 3 | 1 1/2 | .032 | 3/16 | 9/16 | 1/8 | 9/16 | 1 Ω | 7500 Ω |
| S•AL-3B | 3 | 1 1/2 | .032 | 1/4 | 5/8 | 3/16 | 5/8 | 1 Ω | 11000 Ω |
| S•AL-7A | 7 | 1 1/2 | .032 | 5/16 | 1 3/32 | 1/4 | 1 3/16 | 1 Ω | 40000 Ω |

NOTE 2:

Overall Dimension Tolerances are $\pm 1/32$ on Diameter and $\pm 1/16$ on Length. (Tolerance on Length of 1 Watt Size is $\pm 1/32$.)

Mfd. by TRU-OHM PRODUCTS DIVISION OF MODEL ENG. & MFG. INC.
General Sales Office: Chicago, Ill.



TRU-OHM

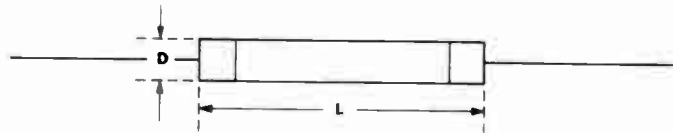
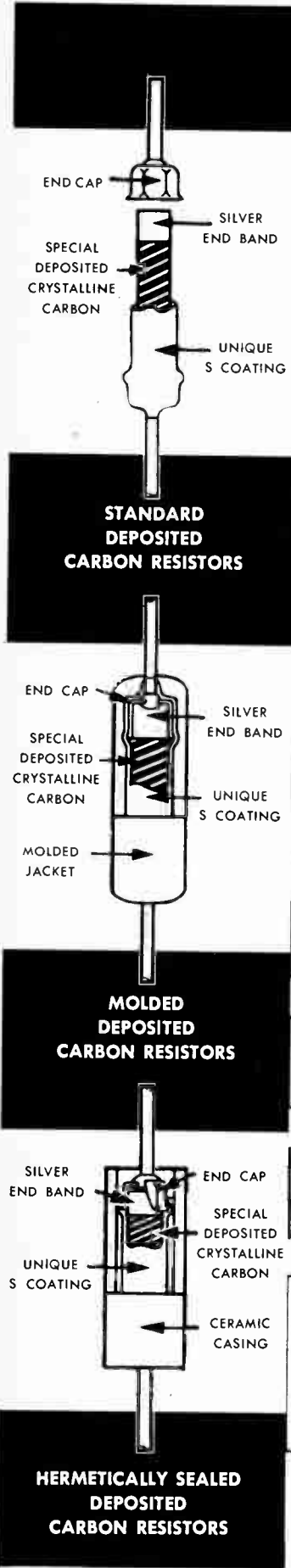
GOLD SEAL CARBON FILM RESISTORS

are manufactured to exacting standards in a clinically-clean atmosphere in humidity controlled, air conditioned rooms. Reliability tested individually, each and every resistor must withstand up to twenty-five times the rated wattage for 1 sec. duration to pass exacting TRU-OHM final inspection standards.

The continuous process method employed by TRU-OHM provides a completely uniform carbon coating applied to special ceramic core material. For example, in applications where these resistors are subject to extremely high frequencies, the uniformity of the film element is of utmost importance.

Years of accumulated experience in manufacturing resistors have been coordinated to bring about the development of nearly diamond-hard films bonded so perfectly to the ceramic core that it is impervious to the most severe scratch tests.

Despite their sub-miniature size — ruggedness is built into TRU-OHM Gold Seal Resistors — try the twist test on leads — they will withstand three times the military spec required.



STANDARD DEPOSITED CARBON RESISTORS (40°C. AMBIENT TEMP. AT FULL LOAD)

| TYPE | MIL-R 10509-B | RATING WATT | CONT. VDC MAX. | RESISTANCE RANGE | | | | | | L | D | LEADS (1.5") AWG. | *CAPACITY IN μ F | | |
|-------|---------------|-------------|----------------|------------------|----------|-------------|----------|-------------|---------|-------------|----------|-------------------|----------------------|-------|--|
| | | | | 1/2% | | 1% | | 2% | | | | | | 5% | |
| | | | | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | | | | |
| S-2 | RN-30 | 2 | 750 | 15 Ω | 10 Meg. | 15 Ω | 50 Meg. | 15 Ω | 60 Meg. | 15 Ω | 100 Meg. | 2.049" | .288" | 20 | |
| S-1 | RN-25 | 1 | 500 | 10 Ω | 5 Meg. | 10 Ω | 20 Meg. | 10 Ω | 30 Meg. | 10 Ω | 60 Meg. | .923" | .288" | 20 | |
| SX-12 | | 1/2 | 350 | 10 Ω | 3.9 Meg. | 10 Ω | 10 Meg. | 10 Ω | 15 Meg. | 10 Ω | 20 Meg. | .736" | .156" | 20 | |
| S-12 | RN-20 | 1/2 | 350 | 5 Ω | 2 Meg. | 2 Ω | 5 Meg. | 2 Ω | 10 Meg. | 2 Ω | 10 Meg. | .575" | .156" | 20 | |
| SX-14 | | 1/4 | 300 | 5 Ω | 1 Meg. | 2 Ω | 2.5 Meg. | 2 Ω | 5 Meg. | 2 Ω | 10 Meg. | .535" | .130" | 22 | |
| S-14 | RN-10 | 1/4 | 300 | 5 Ω | 1 Meg. | 5 Ω | 2.5 Meg. | 5 Ω | 5 Meg. | 5 Ω | 10 Meg. | .503" | .105" | 22/26 | |
| S-14A | | 1/4 | 300 | 5 Ω | 1 Meg. | 5 Ω | 2.5 Meg. | 5 Ω | 5 Meg. | 5 Ω | 10 Meg. | .421" | .105" | 22/26 | |
| SX-18 | | 1/8 | 250 | 2 Ω | 500K | 2 Ω | 1 Meg. | 2 Ω | 2 Meg. | 2 Ω | 3 Meg. | .350" | .105" | 22/26 | |
| S-18 | | 1/8 | 250 | 2 Ω | 500K | 2 Ω | 1 Meg. | 2 Ω | 2 Meg. | 2 Ω | 3 Meg. | .295" | .105" | 22/26 | |
| S-110 | | 1/10 | 150 | 20 Ω | 250K | 20 Ω | 250K | 20 Ω | 500K | 20 Ω | 500K | .285" | .069" | 26 | |

MOLDED DEPOSITED CARBON RESISTORS (70°C. AMBIENT TEMP. AT FULL LOAD)

| TYPE | MIL-R | RATING WATT | CONT. VDC MAX. | RESISTANCE RANGE | | | | | | L | D | LEADS | *CAPACITY | | |
|-------|-------|-------------|----------------|------------------|---------|-------------|----------|-------------|---------|-------------|----------|--------|-----------|----|--|
| | | | | 1/2% | | 1% | | 2% | | 5% | | | | | |
| | | | | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | | | | |
| SM-2 | RN-80 | 2 | 750 | 15 Ω | 10 Meg. | 15 Ω | 50 Meg. | 15 Ω | 60 Meg. | 15 Ω | 100 Meg. | 2.250" | .400" | 20 | |
| SM-1 | RN-75 | 1 | 500 | 10 Ω | 5 Meg. | 10 Ω | 20 Meg. | 10 Ω | 30 Meg. | 10 Ω | 60 Meg. | 1.115" | .400" | 20 | |
| SM-12 | RN-70 | 1/2 | 350 | 10 Ω | 2 Meg. | 10 Ω | 5 Meg. | 10 Ω | 10 Meg. | 10 Ω | 10 Meg. | .750" | .270" | 20 | |
| SM-14 | RN-65 | 1/4 | 300 | 10 Ω | 1 Meg. | 10 Ω | 2.5 Meg. | 10 Ω | 5 Meg. | 10 Ω | 10 Meg. | .640" | .220" | 22 | |
| SM-18 | RN-60 | 1/8 | 250 | 10 Ω | 500K | 10 Ω | 1 Meg. | 10 Ω | 2 Meg. | 10 Ω | 2 Meg. | .406" | .150" | 22 | |

HERMETICALLY SEALED DEPOSITED CARBON RESISTORS (70°C. AMBIENT TEMP. AT FULL LOAD)

| TYPE | MIL-R | RATING WATT | CONT. VDC MAX. | RESISTANCE RANGE | | | | | | L | D | LEADS | *CAPACITY | | |
|-------|-------|-------------|----------------|------------------|-----|-------------|----------|-------------|----------|-------------|----------|--------|-----------|----|--|
| | | | | 1/2% | | 1% | | 2% | | 5% | | | | | |
| | | | | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | | | | |
| SH-2 | RN-80 | 2 | 750 | | | 50 Ω | 20 Meg. | 50 Ω | 20 Meg. | 50 Ω | 20 Meg. | 2.250" | .395" | 20 | |
| SH-1 | RN-75 | 1 | 500 | | | 10 Ω | 10 Meg. | 10 Ω | 10 Meg. | 10 Ω | 10 Meg. | 1.093" | .395" | 20 | |
| SH-12 | RN-70 | 1/2 | 350 | | | 10 Ω | 5 Meg. | 10 Ω | 5 Meg. | 10 Ω | 5 Meg. | .830" | .250" | 20 | |
| SH-14 | RN-65 | 1/4 | 300 | | | 10 Ω | 2.5 Meg. | 10 Ω | 2.5 Meg. | 10 Ω | 2.5 Meg. | .640" | .244" | 22 | |
| SH-18 | RN-60 | 1/8 | 250 | | | 10 Ω | 1 Meg. | 10 Ω | 1 Meg. | 10 Ω | 1 Meg. | .437" | .160" | 22 | |

NON-INDUCTIVE DEPOSITED CARBON RESISTORS (40°C. AMBIENT TEMP. AT FULL LOAD)

| TYPE | RATING WATT | CONT. VDC MAX. | RESISTANCE RANGE | | | | | | L | D | LEADS | *CAPACITY | | |
|--------|-------------|----------------|------------------|-----|-------------|------|-------------|-----|-------------|-----|--------|-----------|-------|------|
| | | | 1/2% | | 1% | | 2% | | 5% | | | | | |
| | | | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | | | | |
| NS-2 | 2 | 750 | 15 Ω | 10K | 15 Ω | 20K | 15 Ω | 30K | 15 Ω | 50K | 2.049" | .288" | 20 | .034 |
| NS-1 | 1 | 500 | 10 Ω | 5K | 10 Ω | 7.5K | 10 Ω | 15K | 10 Ω | 20K | .923" | .288" | 20 | .119 |
| NSX-12 | 1/2 | 350 | 10 Ω | 3K | 10 Ω | 10K | 10 Ω | 15K | 10 Ω | 20K | .736" | .156" | 20 | |
| NS-12 | 1/2 | 350 | 5 Ω | 2K | 5 Ω | 5K | 5 Ω | 10K | 5 Ω | 15K | .575" | .156" | 20 | .088 |
| NSX-14 | 1/4 | 300 | 5 Ω | 2K | 5 Ω | 4K | 5 Ω | 6K | 5 Ω | 10K | .535" | .130" | 22 | .066 |
| NS-14 | 1/4 | 300 | 5 Ω | 2K | 5 Ω | 4K | 5 Ω | 6K | 5 Ω | 10K | .503" | .105" | 22/26 | .055 |
| NS-14A | 1/4 | 300 | 5 Ω | 2K | 5 Ω | 4K | 5 Ω | 6K | 5 Ω | 10K | .421" | .105" | 22/26 | .065 |
| NSX-18 | 1/8 | 250 | 2 Ω | 2K | 2 Ω | 4K | 2 Ω | 6K | 2 Ω | 10K | .350" | .105" | 22/26 | .082 |
| NS-18 | 1/8 | 250 | 2 Ω | 2K | 2 Ω | 4K | 2 Ω | 6K | 2 Ω | 10K | .295" | .105" | 22/26 | .095 |
| NS-110 | 1/10 | 150 | 20 Ω | 1K | 20 Ω | 2K | 20 Ω | 2K | 20 Ω | 3K | .285" | .069" | 26 | .059 |

For this true non-inductive type the inductance is negligible; i.e., the same as for a straight rod with the same dimensions of the resistor. The capacity * listed was measured in identical configuration 1/2" over ground plane, terminals 2" apart.

TRU-OHM PRODUCTS division of MODEL ENGINEERING and MANUFACTURING INC.



DESIGNERS' and EXPERIMENTORS' KITS

will help you in circuit design and experimental work

Creative personnel, designers and experimentors find these kits invaluable in the solution of circuitry problems and the preparation of prototype models, as well as in experimentation with a wide variety of thermistor and varistor applications.

VECO DESIGNERS' KITS

Each kit includes units covering a wide resistance range and physical size. VECO Designers' Kits are furnished with technical characteristics, curves and schematics to assist in the solution of circuitry designs and problems concerning the use and application of VECO thermistors and varistors.

| VECO Number | Description | Net Price (Postpaid) |
|-------------|--|----------------------|
| KD 25 | Designers' Disc Kit Contains one each: 11E2, 12E2, 15D1, 18E2, 21E21, 22E6, 23D34, 25D4, 31E2, 32D12, 33D10, 35D6, 41D2 | \$10.50 |
| KP 50 | Designers' Probe Kit Contains one each: 21A3, 31A11, 41A11, 51A11, 61A11, 71A11 | 14.50 |
| KR 75 | Designers' Rod Kit Contains one each: 33S1, 36S1, 41R1, 41S2, 43R1, 45R1, 51R1, 51R2 | 8.75 |

| VECO Number | Description | Net Price (Postpaid) |
|-------------|--|----------------------|
| KTB1 | Designers' Bead Kit Contains one each: 21A2, 31A2, 32A48, 41A2, 43A2, 51A2, 51A30, 61A2. Complete with tweezers | 19.50 |
| KW 125 | Designers' Washer Kit Contains 2 each: 11X1, 12X15, 14X4, 21W1, 22W6, 24W6. A828 (1 only) | 13.50 |
| KV 100 | Designers' Varistor Kit Contains one each: 023L4, 023W1, 063L4, 114L1, 124W1, 143W1, 155L2, 165W2, A818 | 14.50 |
| KV 1001 | Designers' Varistor Kit Contains one each: 023L9, 063L9, 114L2, 124L1, 124L2, 134L1, 155L3, 175L1, 195L1 | 7.50 |

VECO EXPERIMENTORS' KITS

Each kit includes forms showing typical circuitry and specific characteristics of units in kit.

M-168 Experimentors' Kit, 7 assorted units for \$ 5.00 net, ppd.
M-168A Experimentors' Kit, 10 assorted units for \$10.00 net, ppd.

VECO THERMISTORS & VARISTORS

| VECO Number | Resistance @ 25°C (ohms) | List Price | VECO Number | Resistance @ 25°C (ohms) | List Price | VECO Number | Resistance @ 25°C (ohms) | List Price | VECO Number | Resistance @ 25°C (ohms) | List Price |
|--|--------------------------|------------|---|--------------------------|------------|--|--------------------------|------------|-----------------------------|---|------------|
| SMALL BEAD THERMISTORS .014" Dia. | | | GLASS THERMISTOR PROBES 2" Long | | | WASHER THERMISTORS .2" to .770" Dia. | | | VARISTORS | | |
| 32A5 | 2,000 ±25% | \$3.00 | 32A1 | 2,000 ±20% | \$2.40 | 27D1 | 725 ± 5% | \$2.90 | 51R1 | 100,000 ±10% | \$1.10 |
| 32A48 | 2,000 ±25% | 2.60 | 34A3 | 3,500 ±30% | 2.40 | 28D1 | 760 ± 5% | 2.90 | 51R2 | 100,000 ±10% | 1.35 |
| 34A2 | 3,500 ±15% | 4.30 | 41A1 | 10,000 ±20% | 3.20 | 31D4 | 1,000 ±10% | .85 | VARISTORS | | |
| 38C2 | 8,000 ±25% | 3.30 | 45A1 | 50,000 ±20% | 3.20 | 31D7 | 1,200 ±10% | 1.05 | 023L4 | 1.5V min. @ 1 ma. | \$.80 |
| 43A1 | 30,000 ±25% | 3.60 | 51A1 | 100,000 ±15% | 2.60 | 31E2 | 1,000 ±10% | .85 | 023L9 | 6V @ 5 ma. DC | 1.00 |
| 43A2 | 30,000 ±25% | 3.40 | 61A1 | 1 meg ±20% | 3.70 | 32D12 | 2,000 ±10% | .85 | 023W1 | 9.09V to 12.3V @ 25 ma. | 1.80 |
| 51A30 | 100,000 ±25% | 3.40 | GLASS THERMISTOR RODS & BULBS | | | 33D10 | 3,000 ±10% | .85 | 063L4 | 4.6V min @ 1 ma. | .55 |
| MEDIUM & LARGE BEADS .043" to .088" Dia. | | | 32A3 | 2,000 ±25% | \$4.60 | 35D2 | 5,000 ±10% | .85 | 063L9 | 10V @ 5 ma. DC | 1.00 |
| 21A2 | 100 ±20% | \$3.30 | 37A1 | 7,000 ±20% | 3.60 | 35D6 | 5,000 ±10% | .85 | 114L1 | 16V to 24V @ 15 ma. | 1.40 |
| 25A2 | 500 ±20% | 3.40 | 44A1 | 35,000 ±25% | 1.90 | 41D2 | 10,000 ±10% | .85 | 114L2 | 15V @ 5 ma. DC | 1.00 |
| 31A2 | 1,000 ±20% | 2.50 | 45B2 | 50,000 ±40% | 2.60 | WASHER THERMISTORS .2" to .770" Dia. | | | 124L1 | 25V @ 5 ma. DC | 1.00 |
| 32A12 | 2,000 ±20% | 2.60 | 46A2 | 60,500 ±29% | 2.60 | 11X1 | 10 ±10% | \$1.15 | 124L2 | 35V @ 5 ma. DC | 1.00 |
| 32A13 | 2,000 ±20% | 2.30 | 49A1 | 85,000 ±25% | 1.90 | 12X15 | 20 ±10% | 1.15 | 124W1 | 26.8V to 32.2 V @ 15 ma. | 3.00 |
| 35A1 | 5,000 ±20% | 2.50 | 65A1 | 5.4 meg ±32% | 6.00 | 14X2 | 38 ±10% | 1.30 | 134L1 | 50V @ 5 ma. DC | 1.00 |
| 41A2 | 10,000 ±20% | 2.50 | 71A2 | 12 meg ±20% | 5.00 | 14X4 | 40 ±10% | 1.15 | 143W1 | 13.2V to 20.3V @ 50 µa | 2.00 |
| 43A4 | 30,000 ±20% | 2.50 | MATCHED PAIR OF THERMISTOR BEADS ON HERMETIC SEALS | | | 21W1 | 100 ±10% | 1.15 | 155L2 | 40.8V to 55.2V @ 1 ma. | 4.20 |
| 45A2 | 50,000 ±20% | 2.50 | A33 | 2,000 ±25% | \$15.00 | 21W4 | 130 ±10% | 1.30 | 155L3 | 75V @ 5 ma. DC | 1.00 |
| 51A2 | 100,000 ±15% | 2.30 | DISC THERMISTORS .1" to 1.0" Dia. | | | 22X1 | 150 ±10% | 1.15 | 165W2 | 95V to 120V @ 10 ma. | 5.00 |
| 55A2 | 500,000 ±20% | 2.80 | 11E2 | 10 ±10% | \$.85 | 22W2 | 180 ±10% | 1.15 | 175L1 | 100V @ 5 ma. DC | 1.00 |
| 61A2 | 1 meg ±20% | 2.90 | 12E2 | 20 ±10% | .85 | 22W6 | 200 ±10% | 1.30 | 195L1 | 120V @ 5 ma. DC | 1.00 |
| GLASS THERMISTOR PROBES 1/2" Long | | | 15D1 | 50 ±10% | 1.30 | 23W1 | 315 ±10% | 1.30 | MOUNTING ACCESSORIES | | |
| 21A3 | 100 ±20% | \$3.30 | 18E2 | 75 ±10% | .85 | 24W6 | 400 ±10% | 1.15 | A815 | Mounting Kit for 1 washer | \$1.00 |
| 31A11 | 1,000 ±20% | 2.30 | 21D2 | 100 ±10% | .85 | 24W1 | 415 ±10% | 1.30 | A816 | Mounting Kit for 3 washers | 1.25 |
| 32A11 | 2,000 ±20% | 2.10 | 21E2 | 100 ±10% | .85 | ROD THERMISTORS .5" to 1.6" Long | | | A818 | Mounting Kit w/Bracket for 1 washer | 1.50 |
| 35A11 | 5,000 ±20% | 2.30 | 21E21 | 100 ±10% | .85 | 33S1 | 3,150 ±10% | \$1.10 | A828 | Mounting Kit w/Bracket for 3 washers | 1.75 |
| 41A11 | 10,000 ±20% | 2.30 | 22E6 | 200 ±10% | .85 | 36S1 | 6,300 ±10% | 1.10 | A819 | Packing Gland—Probe | 4.00 |
| 43A11 | 30,000 ±20% | 2.30 | 23D7 | 295 ±10% | .85 | 38S1 | 8,000 ±10% | 1.10 | | | |
| 51A11 | 100,000 ±15% | 2.30 | 23D34 | 300 ±10% | .85 | 41R1 | 10,000 ±10% | 1.10 | | | |
| 55A11 | 500,000 ±20% | 2.80 | 23E3 | 310 ±10% | 1.05 | 41S1 | 10,000 ±10% | 1.10 | | | |
| 61A11 | 1 meg ±20% | 2.80 | 25D4 | 500 ±10% | 1.85 | 41S2 | 10,000 ±10% | 1.35 | | | |
| 71A11 | 10 meg ±20% | 3.40 | 25E2 | 500 ±10% | .85 | 43R1 | 31,500 ±10% | 1.10 | | | |
| | | | | | | 45R1 | 50,000 ±10% | 1.10 | | | |

TECHNICAL LITERATURE

VECO THERMISTOR AND VARISTOR DATA BOOK
containing historical background, technical data, typical circuitry, curves and other valuable information. \$1.00

Literature covering technical data pertaining to VECO products available FREE. The new Technical Catalog of VECO products appears in section 4700 of Electronic Engineers Master or may be obtained through your local jobber.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



Victory

ENGINEERING CORPORATION

SPRINGFIELD, NEW JERSEY

Manufacturers of Thermistors - Varistors - Combustion Analyzers - Thermistor Catheters and Needles - Matched Thermistors - Thermal Conductivity Cells - Thermistor Kits - Varistor Kits - Hygrometers - LOX Thermistors - Constant Temperature Baths - Temperature Monitors and Controllers - Solid-State Voltage Regulators

Vitrohm® RING RHEOSTATS



WARD LEONARD

25-Watt — 50-Watt

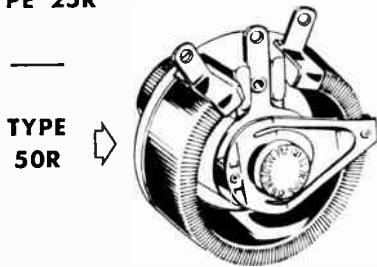
The Ward Leonard 25-watt (Type 25R) and 50-watt (Type 50R) Ring Rheostats are especially suited for use in electronic and electrical circuits where gradual and positive resistance change is essential. Balanced contact arms, self-lubricating metal graphite contact shoes, and no backlash in the drive shaft combine to assure uniform contact pressure and smooth operation.

Standard shaft length for back-of-board mounting on 1/4" panel.

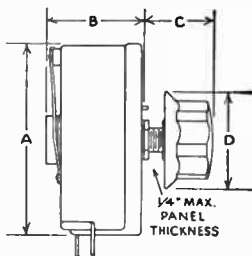
Standard Resistance Tolerance ±10%.



TYPE 25R



TYPE 50R



DIMENSION SKETCH

SEE DIMENSIONS HEADING EACH TABLE

| 25 WATTS TYPE 25R | | | | 50 WATTS TYPE 50R | | | |
|-------------------|----------------------|--------------------------|----------|-------------------|----------------------|--------------------------|----------|
| Dimensions: | | A-1 3/8" | B-1 1/8" | Dimensions: | | A-2 3/8" | B-1 1/8" |
| | | C-1" | D-1 1/2" | | | C-1" | D-1 1/2" |
| Current M.A. | Approx. No. of Steps | Price Net 1-4 Less Knob† | Ohms | Current M.A. | Approx. No. of Steps | Price Net 1-4 Less Knob† | Ohms |
| 5000 | 32 | \$4.63 | 1 | 7070 | 45 | \$5.15 | |
| 3540 | 32 | 4.63 | 2 | 5000 | 56 | 5.15 | |
| 2880 | 51 | 4.63 | 3 | * | * | * | |
| * | * | * | 4 | 3540 | 56 | 5.15 | |
| 2040 | 85 | 4.63 | 6 | 2880 | 94 | 5.15 | |
| 1770 | 95 | 4.63 | 8 | 2500 | 94 | 4.63 | |
| 1580 | 95 | 4.63 | 10 | 2230 | 94 | 4.63 | |
| 1280 | 102 | 4.11 | 15 | 1810 | 113 | 4.63 | |
| 1000 | 102 | 4.11 | 25 | 1415 | 144 | 4.63 | |
| 840 | 102 | 4.11 | 35 | 1190 | 144 | 4.63 | |
| 707 | 97 | 4.11 | 50 | 1000 | 180 | 4.63 | |
| 574 | 129 | 4.11 | 75 | 812 | 144 | 4.63 | |
| 500 | 162 | 4.11 | 100 | 707 | 216 | 4.63 | |
| 407 | 190 | 4.11 | 150 | 574 | 252 | 4.63 | |
| 316 | 200 | 4.11 | 250 | 447 | 245 | 4.63 | |
| 267 | 220 | 4.11 | 350 | 374 | 288 | 4.63 | |
| 223 | 245 | 4.11 | 500 | 316 | 324 | 4.90 | |
| 181 | 292 | 4.11 | 750 | 256 | 373 | 4.90 | |
| 158 | 315 | 4.63 | 1000 | 223 | 390 | 4.90 | |
| 128 | 369 | 4.63 | 1500 | 181 | 396 | 4.90 | |
| 100 | 388 | 4.63 | 2500 | 141 | 547 | 4.90 | |
| 84 | 388 | 4.90 | 3500 | 119 | 547 | 5.15 | |
| 70 | 595 | 4.90 | 5000 | 100 | 786 | 5.15 | |
| * | * | * | 7500 | 81 | 905 | 5.15 | |
| * | * | * | 10000 | 70 | 947 | 5.15 | |

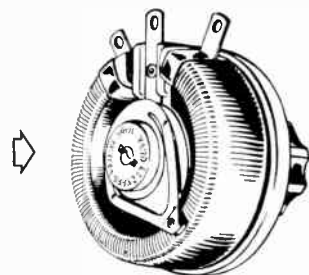
†Price with Knob add \$.29.

100-Watt — 150-Watt — 300-Watt

Ward Leonard 100, 150 and 300 watt Ring Type Rheostats are for higher current electronic, industrial and allied applications where smooth, gradual resistance change is needed. Employing Vitrohm construction, all types provide "twin-shoe" contacts and minimum size for full watt rating. Standard values listed are carried in stock at the factory or by our Distributors. Data on special types available on request.

Standard resistance tolerance ±10%

TYPE 100R



| 100 WATTS TYPE 100R | | | | 150 WATTS TYPE 150R | | | | 300 WATTS TYPE 300R | | | |
|---------------------|----------------------|--------------------------|----------|---------------------|----------------------|--------------------------|----------|---------------------|----------------------|--------------------------|----------|
| Dimensions: | | A-3 1/2" | B-1 1/2" | Dimensions: | | A-4" | B-1 3/4" | Dimensions: | | A-6" | B-2 3/8" |
| | | C-1" | D-1 1/2" | | | C-1" | D-1 1/2" | | | Shaft 3/8" x 2" | |
| Current M.A. | Approx. No. of Steps | Price Net 1-4 Less Knob† | Ohms | Current M.A. | Approx. No. of Steps | Price Net 1-4 Less Knob† | Ohms | Current m.a. | Approx. No. of Steps | Price Net 1-2 Less Knob* | Ohms |
| 10000 | 30 | \$7.72 | 1 | 12240 | 39 | \$9.78 | 1 | 17.320 | 40 | \$15.20 | 1 |
| 7070 | 56 | 7.72 | 2 | 8660 | 39 | 9.78 | 1.5 | 14.142 | 58 | 15.29 | 1.5 |
| 5740 | 66 | 7.72 | 3 | 7070 | 70 | 9.78 | 2 | 12.247 | 78 | 15.29 | 2 |
| 4470 | 56 | 7.72 | 5 | 5470 | 73 | 9.78 | 2.5 | 10.954 | 78 | 15.29 | 2.5 |
| 3640 | 66 | 7.72 | 7.5 | 4470 | 70 | 9.78 | 3 | 10.000 | 73 | 15.29 | 3 |
| 3160 | 104 | 7.72 | 10 | 3870 | 70 | 9.78 | 4 | 8.660 | 78 | 15.29 | 4 |
| 2560 | 113 | 7.72 | 15 | 3160 | 120 | 9.78 | 5 | 7.745 | 78 | 15.29 | 5 |
| 2000 | 144 | 7.21 | 25 | 2440 | 152 | 9.26 | 7.5 | 6.324 | 148 | 15.29 | 7.5 |
| 1415 | 180 | 7.21 | 50 | 1730 | 190 | 9.26 | 10 | 5.477 | 154 | 15.29 | 10 |
| 1150 | 180 | 7.21 | 75 | 1415 | 228 | 9.26 | 15 | 4.472 | 147 | 15.29 | 15 |
| 1000 | 216 | 7.21 | 100 | 1224 | 228 | 9.26 | 25 | 3.464 | 155 | 15.29 | 25 |
| 707 | 252 | 7.21 | 200 | 866 | 265 | 9.26 | 35 | 2.927 | 231 | 15.29 | 35 |
| 574 | 252 | 7.21 | 300 | 707 | 303 | 9.26 | 50 | 2.449 | 267 | 15.29 | 50 |
| 500 | 252 | 7.21 | 400 | 612 | 342 | 9.26 | 75 | 2.000 | 308 | 15.29 | 75 |
| 447 | 324 | 7.21 | 500 | 547 | 342 | 9.26 | 100 | 1.732 | 326 | 15.29 | 100 |
| 364 | 396 | 7.21 | 750 | 447 | 418 | 9.78 | 150 | 1.414 | 270 | 15.29 | 150 |
| 316 | 410 | 7.72 | 1000 | 387 | 432 | 9.78 | 200 | 1.224 | 308 | 15.29 | 200 |
| 223 | 410 | 7.72 | 2000 | 273 | 575 | 10.30 | 300 | 1.000 | 340 | 15.29 | 300 |
| 200 | 410 | 7.72 | 2500 | 244 | 456 | 10.30 | 500 | .774 | 455 | 15.29 | 500 |
| 141 | 685 | 8.24 | 5000 | 173 | 865 | 11.33 | 750 | .632 | 514 | 15.29 | 750 |
| 115 | 820 | 8.76 | 7500 | 141 | 1000 | 11.33 | 1000 | .547 | 578 | 15.29 | 1000 |
| 100 | 820 | 9.26 | 10000 | 122 | 1000 | 12.35 | 1500 | .447 | 675 | 15.29 | 1500 |
| | | | | | | | 2500 | .346 | 720 | 15.29 | 2500 |

†Price with Knob add \$.29.

*Price with Knob add \$1.16.

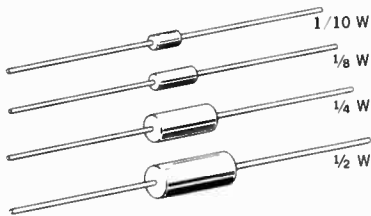


WARD LEONARD

METOHM METAL FILM PRECISION RESISTORS

STOCK METOHM FEATURES

- 4 sizes — 1/10 W, 1/8 W, 1/4 W and 1/2 W
- Types RN55, RN60, RN65 and RN70
- Designed to exceed MIL-R-10509D spec. Characteristic C
- 1% Resistance tolerance (accuracy)
- TC code T2 ±50 PPM/°C



In critical space-age electronic circuitry, METOHM metal film precision resistors guarantee high reliability, high stability, close accuracy, low TC and miniature size. Characteristic C, TC code T2 (±50 PPM) METOHMS are stocked in MIL standard values listed. Other tolerances, TC's and characteristics available in production order quantities.

METOHM SIZES AND RATINGS

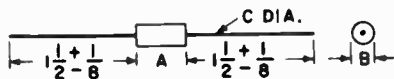
TOLERANCE ±1%

| METOHM Type | MIL Equivalent | Rated Watts* | Ohmic Values† | | Max. Volt-ages Rating (Continuous) | DIMENSIONS (in inches) | | |
|-------------|----------------|--------------|---------------|----------|------------------------------------|------------------------|---------------------|------------|
| | | | Min. | Max. | | A | B dia | C dia |
| WL55 | RN-55 | 1/10 | 100 | 100K | 200V | .260 ±.010 | .120 +.005 -.015 | .025 ±.002 |
| WL60 | RN-60 | 1/8 | 30 | 500K | 250V | .406 ±.015 | .130 ±.015 | .025 ±.002 |
| WL65 | RN-65 | 1/4 | 50 | 1 Meg. | 300V | .594 ±.015 | .203 ±.015 | .025 ±.002 |
| WL70 | RN-70 | 1/2 | 50 | 1.5 Meg. | 350V | .719 ±.020 | .261 ±.020 | .032 ±.002 |

*Based on 125°C Ambient. Max. operating temperature 175°C.

†Standard ±1%; lower tolerances to order.

| T. C. Code | T. C./°C | Temp. Range |
|------------|----------|----------------|
| T-0 | ±150 PPM | -55° to +175°C |
| T-1 | ±100 PPM | -55° to +175°C |
| T-2 | ± 50 PPM | -55° to +175°C |
| T-9 | ± 25 PPM | -55° to +175°C |



MIL STANDARD RESISTANCE VALUES FOR METOHM RESISTORS

| | | | | | | | | | | | | |
|-----|-----|-----|------|------|------|-------|-------|-------|-------|------|------|------|
| 100 | 205 | 422 | 866 | 1780 | 3650 | 7500 | 15.4K | 31.6K | 64.9K | 133K | 274K | 511K |
| 102 | 210 | 432 | 887 | 1820 | 3740 | 7680 | 15.8K | 32.4K | 66.5K | 137K | 280K | 523K |
| 105 | 215 | 442 | 909 | 1870 | 3830 | 7870 | 16.2K | 33.2K | 68.1K | 140K | 287K | 536K |
| 107 | 221 | 453 | 931 | 1910 | 3920 | 8060 | 16.5K | 34.0K | 69.8K | 143K | 294K | 549K |
| 110 | 226 | 464 | 953 | 1960 | 4020 | 8250 | 16.9K | 34.8K | 71.5K | 147K | 301K | 562K |
| 113 | 232 | 475 | 976 | 2000 | 4120 | 8450 | 17.4K | 35.7K | 73.2K | 150K | 309K | 576K |
| 115 | 237 | 487 | 1000 | 2050 | 4220 | 8660 | 17.8K | 36.5K | 75.0K | 154K | 316K | 590K |
| 118 | 243 | 499 | 1020 | 2100 | 4320 | 8870 | 18.2K | 37.4K | 76.8K | 158K | 324K | 604K |
| 121 | 249 | 511 | 1050 | 2150 | 4420 | 9090 | 18.7K | 38.3K | 78.7K | 162K | 332K | 619K |
| 124 | 255 | 523 | 1070 | 2210 | 4530 | 9310 | 19.1K | 39.2K | 80.6K | 165K | 340K | 634K |
| 127 | 261 | 536 | 1100 | 2260 | 4640 | 9530 | 19.6K | 40.2K | 82.5K | 169K | 348K | 649K |
| 130 | 267 | 549 | 1130 | 2320 | 4750 | 9760 | 20.0K | 41.2K | 84.5K | 174K | 357K | 665K |
| 133 | 274 | 562 | 1150 | 2370 | 4870 | 10.0K | 20.5K | 42.2K | 86.6K | 178K | 365K | 681K |
| 137 | 280 | 576 | 1180 | 2430 | 4990 | 10.2K | 21.0K | 43.2K | 88.7K | 182K | 374K | 698K |
| 140 | 287 | 590 | 1210 | 2490 | 5110 | 10.5K | 21.5K | 44.2K | 90.9K | 187K | 383K | 715K |
| 143 | 294 | 604 | 1240 | 2550 | 5230 | 10.7K | 22.1K | 45.3K | 93.1K | 191K | 392K | 732K |
| 147 | 301 | 619 | 1270 | 2610 | 5360 | 11.0K | 22.6K | 46.4K | 95.3K | 196K | 402K | 750K |
| 150 | 309 | 634 | 1300 | 2670 | 5490 | 11.3K | 23.2K | 47.5K | 97.6K | 200K | 412K | 768K |
| 154 | 316 | 649 | 1330 | 2740 | 5620 | 11.5K | 23.7K | 48.7K | 100K | 205K | 422K | 787K |
| 158 | 324 | 665 | 1370 | 2800 | 5760 | 11.8K | 24.3K | 49.9K | 102K | 210K | 432K | 806K |
| 162 | 332 | 681 | 1400 | 2870 | 5900 | 12.1K | 24.9K | 51.1K | 105K | 215K | 442K | 825K |
| 165 | 340 | 698 | 1430 | 2940 | 6040 | 12.4K | 25.5K | 52.3K | 107K | 221K | 453K | 845K |
| 169 | 348 | 715 | 1470 | 3010 | 6190 | 12.7K | 26.1K | 53.6K | 110K | 226K | 464K | 866K |
| 174 | 357 | 732 | 1500 | 3090 | 6340 | 13.0K | 26.7K | 54.9K | 113K | 232K | 475K | 887K |
| 178 | 365 | 750 | 1540 | 3160 | 6490 | 13.3K | 27.4K | 56.2K | 115K | 237K | 487K | 909K |
| 182 | 374 | 768 | 1580 | 3240 | 6650 | 13.7K | 28.0K | 57.6K | 118K | 243K | 499K | 931K |
| 187 | 383 | 787 | 1620 | 3320 | 6810 | 14.0K | 28.7K | 59.0K | 121K | 249K | 511K | 953K |
| 191 | 392 | 806 | 1650 | 3400 | 6980 | 14.3K | 29.4K | 60.4K | 124K | 255K | 523K | 976K |
| 196 | 402 | 825 | 1690 | 3480 | 7150 | 14.7K | 30.1K | 61.9K | 127K | 261K | 536K | 1M |
| 200 | 412 | 845 | 1740 | 3570 | 7320 | 15.0K | 30.9K | 63.4K | 130K | 267K | 550K | 1.1M |

(RN 60 C MIL Values end here)

AXIOHMS

Vitreous enameled wire-wound resistors, 1 1/2" leads, featuring space-saving design, high stability and overload capacity.

Order by Type Number and Resistance Value.

2 WATTS

Size—3/8" x 3/16"

TYPE 2X

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|--------------|------|--------|
| 1 | 1414 | \$0.57 | 51 | 198 | .57 | 510 | 63 | \$0.57 |
| 1.5 | 1155 | .57 | 56 | 189 | \$0.57 | 560 | 60 | .57 |
| 2 | 1000 | .57 | 62 | 179 | .57 | 620 | 57 | .57 |
| 3 | 816 | .57 | 68 | 172 | .57 | 680 | 54 | .57 |
| 4 | 707 | .57 | 75 | 163 | .57 | 750 | 52 | .57 |
| 5 | 632 | .57 | 82 | 156 | .57 | 820 | 49 | .57 |
| 7.5 | 517 | .57 | 91 | 148 | .57 | 910 | 47 | .57 |
| 10 | 447 | .57 | 100 | 141 | .57 | 1000 | 45 | .57 |
| 11 | 426 | .57 | 110 | 135 | .57 | 1100 | 43 | .60 |
| 12 | 408 | .57 | 120 | 129 | .57 | 1200 | 41 | .60 |
| 13 | 392 | .57 | 130 | 124 | .57 | 1300 | 39 | .60 |
| 15 | 365 | .57 | 150 | 116 | .57 | 1500 | 37 | .60 |
| 16 | 354 | .57 | 160 | 112 | .57 | 1600 | 35 | .60 |
| 18 | 333 | .57 | 180 | 105 | .57 | 1800 | 33 | .60 |
| 20 | 316 | .57 | 200 | 100 | .57 | 2000 | 32 | .60 |
| 22 | 302 | .57 | 220 | 95 | .57 | 2200 | 30 | .60 |
| 24 | 289 | .57 | 240 | 91 | .57 | 2400 | 29 | .60 |
| 27 | 272 | .57 | 250 | 89 | .57 | 2500 | 28 | .60 |
| 30 | 258 | .57 | 270 | 86 | .57 | 2700 | 27 | .60 |
| 33 | 246 | .57 | 300 | 82 | .57 | 3000 | 26 | .60 |
| 36 | 235 | .57 | 330 | 78 | .57 | 3300 | 25 | .60 |
| 39 | 228 | .57 | 360 | 75 | .57 | 3900 | 23 | .60 |
| 43 | 216 | .57 | 390 | 72 | .57 | 4300 | 22 | .60 |
| 47 | 206 | .57 | 430 | 68 | .57 | 4700 | 21 | .60 |
| | | | 470 | 65 | .57 | 5100 | 20 | .60 |

3 WATTS

Size—1/2" x 3/16"

TYPE 3X

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|-------|--------------|------|-------|
| 1 | 1732 | \$0.59 | 125 | 155 | .59 | 1250 | 49 | .62 |
| 1.5 | 1414 | .59 | 150 | 141 | .59 | 1500 | 45 | .62 |
| 2 | 1225 | .59 | 180 | 129 | .59 | 1750 | 41 | .62 |
| 3 | 1000 | .59 | 200 | 122 | .59 | 1800 | 40 | .62 |
| 4 | 866 | .59 | 220 | 117 | .59 | 2000 | 39 | .62 |
| 5 | 775 | .59 | 225 | 115 | .59 | 2200 | 37 | .62 |
| 7.5 | 632 | .59 | 250 | 110 | .59 | 2250 | 37 | .62 |
| 10 | 548 | .59 | 270 | 105 | .59 | 2500 | 35 | .62 |
| 12 | 500 | .59 | 300 | 100 | .59 | 2700 | 33 | .62 |
| 15 | 447 | .59 | 330 | 95 | .59 | 3000 | 32 | .62 |
| 18 | 408 | .59 | 350 | 93 | .59 | 3300 | 30 | .62 |
| 20 | 387 | .59 | 400 | 87 | .59 | 3500 | 29 | .62 |
| 22 | 369 | .59 | 450 | 82 | .59 | 4000 | 27 | .62 |
| 25 | 346 | .59 | 470 | 80 | .59 | 4500 | 26 | .62 |
| 27 | 333 | .59 | 500 | 77 | .59 | 4700 | 25 | .62 |
| 30 | 316 | .59 | 560 | 73 | .59 | 5000 | 25 | .62 |
| 33 | 301 | .59 | 600 | 71 | .59 | 5600 | 23 | .66 |
| 35 | 293 | .59 | 680 | 66 | .59 | 6000 | 22 | .66 |
| 40 | 274 | .59 | 700 | 66 | .59 | 6500 | 21 | .66 |
| 47 | 252 | .59 | 750 | 63 | .59 | 6800 | 21 | .66 |
| 50 | 245 | .59 | 800 | 61 | .59 | 7000 | 21 | .66 |
| 56 | 231 | .59 | 820 | 60 | .59 | 7500 | 20 | .66 |
| 68 | 210 | .59 | 900 | 58 | .59 | 8000 | 20 | .66 |
| 75 | 200 | .59 | 1000 | 55 | .59 | 8200 | 19 | .66 |
| 82 | 191 | .59 | 1100 | 52 | .62 | 9000 | 18 | .66 |
| 100 | 173 | .59 | 1200 | 50 | .62 | 10000 | 17 | .66 |

5 WATTS

Size—1 1/8" x 3/16"

TYPE 5XM

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|-------|--------------|------|-------|
| 1 | 2230 | \$0.61 | 225 | 148 | .61 | 3000 | 40 | .67 |
| 1.5 | 1820 | .61 | 250 | 141 | .61 | 3500 | 37 | .67 |
| 2 | 1580 | .61 | 300 | 129 | .61 | 4000 | 35 | .67 |
| 3 | 1290 | .61 | 350 | 119 | .61 | 4500 | 33 | .67 |
| 4 | 1117 | .61 | 400 | 112 | .61 | 5000 | 31 | .67 |
| 5 | 1000 | .61 | 450 | 105 | .61 | 6000 | 28 | .70 |
| 7.5 | 811 | .61 | 500 | 100 | .61 | 7000 | 26 | .70 |
| 10 | 707 | .61 | 600 | 91 | .61 | 7500 | 25 | .70 |
| 12 | 644 | .61 | 700 | 84 | .61 | 8000 | 25 | .70 |
| 15 | 577 | .61 | 750 | 81 | .61 | 9000 | 23 | .70 |
| 20 | 500 | .61 | 800 | 79 | .61 | 10000 | 22 | .70 |
| 25 | 450 | .61 | 900 | 74 | .61 | 11000 | 21 | .79 |
| 30 | 408 | .61 | 1000 | 70 | .61 | 12000 | 20 | .79 |
| 35 | 378 | .61 | 1100 | 67 | .67 | 12500 | 20 | .79 |
| 40 | 353 | .61 | 1200 | 64 | .67 | 13500 | 19 | .79 |
| 50 | 316 | .61 | 1250 | 63 | .67 | 15000 | 18 | .79 |
| 75 | 257 | .61 | 1500 | 57 | .67 | 16000 | 18 | .79 |
| 100 | 223 | .61 | 1750 | 53 | .67 | 17500 | 17 | .79 |
| 125 | 200 | .61 | 2000 | 50 | .67 | 18000 | 17 | .79 |
| 150 | 182 | .61 | 2250 | 47 | .67 | 20000 | 16 | .79 |
| 200 | 158 | .61 | 2500 | 45 | .67 | | | |

10 WATTS

Size—1 3/4" x 3/16"

TYPE 10XM

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|--------------|------|--------|
| 1 | 3160 | \$0.68 | 300 | 182 | \$0.68 | 6000 | 41 | \$0.84 |
| 1.5 | 2580 | .68 | 350 | 169 | .68 | 7000 | 38 | .84 |
| 2 | 2235 | .68 | 400 | 158 | .68 | 7500 | 36 | .84 |
| 3 | 1825 | .68 | 450 | 149 | .68 | 8000 | 35 | .84 |
| 4 | 1580 | .68 | 500 | 142 | .68 | 8500 | 34 | .84 |
| 5 | 1415 | .68 | 600 | 129 | .68 | 9000 | 33 | .84 |
| 7.5 | | | | | | | | |

Vitrohm[®] RESISTORS

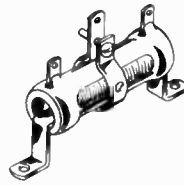
Wire-wound, power type, vitreous enamel resistors designed for high reliability. Coated with famous crazeless VITROHM enamel.



Types 5F, 10F, and 20F. Furnished with wire terminal leads. Brackets supplied an request.



WARD LEONARD



Types 10A, 25A, 50A, 80A, 100A, 160A, 200A. Furnished with mounting brackets and an adjustable band.

| 5 WATTS | | | Size—1" x 3/16" | | | TYPE 5F | | |
|---------|------|--------|-----------------|------|--------|---------|------|--------|
| Ohms | m.a. | Price | Ohms | m.a. | Price | Ohms | m.a. | Price |
| 1 | 2230 | \$0.52 | 100 | 223 | \$0.52 | 1200 | 64 | \$0.56 |
| 1.5 | 1820 | .52 | 125 | 200 | .52 | 1250 | 63 | .56 |
| 2 | 1580 | .52 | 150 | 182 | .52 | 1500 | 57 | .56 |
| 3 | 1290 | .52 | 200 | 158 | .52 | 1750 | 53 | .56 |
| 4 | 1117 | .52 | 225 | 148 | .52 | 2000 | 50 | .56 |
| 5 | 1000 | .52 | 250 | 141 | .52 | 2250 | 47 | .56 |
| 7.5 | 811 | .52 | 300 | 129 | .52 | 2500 | 45 | .56 |
| 10 | 707 | .52 | 350 | 119 | .52 | 3000 | 40 | .56 |
| 12 | 644 | .52 | 400 | 112 | .52 | 3500 | 37 | .56 |
| 15 | 577 | .52 | 450 | 105 | .52 | 4000 | 35 | .56 |
| 20 | 500 | .52 | 500 | 100 | .52 | 4500 | 33 | .56 |
| 25 | 450 | .52 | 600 | 91 | .52 | 5000 | 31 | .56 |
| 30 | 408 | .52 | 700 | 84 | .52 | 6000 | 28 | .58 |
| 35 | 378 | .52 | 750 | 81 | .52 | 7000 | 26 | .58 |
| 40 | 353 | .52 | 800 | 79 | .52 | 7500 | 25 | .58 |
| 50 | 316 | .52 | 900 | 74 | .52 | 8000 | 25 | .58 |
| 75 | 257 | .52 | 1000 | 70 | .52 | 9000 | 23 | .58 |
| | | | 1100 | 67 | .56 | 10000 | 22 | .58 |

| 10 WATTS | | | Type 10F—Fixed | | | Type 10A—Adj. | | |
|---|------|--------|----------------|-------|------|---------------|--------|-------|
| Size—1 3/4" x 3/16" Mtg. Centers—2 1/8" | | | | | | | | |
| Ohms | m.a. | Fixed | Adj. | Ohms | m.a. | Fixed | Adj. | Price |
| 1 | 3160 | \$0.57 | \$1.14 | 1200 | 91 | \$0.61 | * | |
| 1.5 | 2580 | .57 | * | 1250 | 89 | .61 | \$1.18 | |
| 2 | 2235 | .57 | 1.14 | 1500 | 81 | .61 | 1.18 | |
| 3 | 1825 | .57 | 1.14 | 1750 | 75 | .61 | * | |
| 4 | 1580 | .57 | * | 2000 | 70 | .61 | 1.18 | |
| 5 | 1415 | .57 | 1.14 | 2250 | 66 | .61 | * | |
| 7.5 | 1155 | .57 | 1.14 | 2500 | 63 | .61 | 1.18 | |
| 10 | 1000 | .57 | 1.14 | 3000 | 58 | .61 | 1.18 | |
| 12 | 913 | .57 | * | 3500 | 53 | .61 | 1.18 | |
| 15 | 815 | .57 | 1.14 | 4000 | 50 | .61 | 1.18 | |
| 20 | 707 | .57 | 1.14 | 4500 | 47 | .61 | 1.18 | |
| 25 | 630 | .57 | 1.14 | 5000 | 45 | .61 | 1.18 | |
| 30 | 577 | .57 | * | 6000 | 41 | .70 | 1.27 | |
| 35 | 534 | .57 | * | 7000 | 38 | .70 | 1.27 | |
| 40 | 500 | .57 | * | 7500 | 36 | .70 | 1.27 | |
| 50 | 450 | .57 | 1.14 | 8000 | 35 | .70 | 1.27 | |
| 75 | 365 | .57 | 1.14 | 8500 | 34 | .70 | 1.27 | |
| 100 | 316 | .57 | 1.14 | 9000 | 33 | .70 | 1.27 | |
| 125 | 283 | .57 | * | 10000 | 32 | .70 | 1.27 | |
| 150 | 258 | .57 | 1.14 | 11000 | 30 | .77 | | |
| 200 | 224 | .57 | 1.14 | 12000 | 29 | .77 | | |
| 225 | 211 | .57 | * | 12500 | 28 | .77 | | |
| 250 | 200 | .57 | 1.14 | 13500 | 27 | .77 | | |
| 300 | 182 | .57 | 1.14 | 15000 | 25.5 | .77 | | |
| 350 | 169 | .57 | 1.14 | 16000 | 25 | .77 | | |
| 400 | 158 | .57 | 1.14 | 17500 | 24 | .77 | | |
| 450 | 149 | .57 | * | 18000 | 23 | .77 | | |
| 500 | 142 | .57 | 1.14 | 20000 | 22 | .77 | | |
| 600 | 129 | .57 | 1.14 | 22500 | 21 | .83 | | |
| 700 | 120 | .57 | * | 25000 | 20 | .83 | | |
| 750 | 115 | .57 | 1.14 | 30000 | 18 | .83 | | |
| 800 | 112 | .57 | 1.14 | 35000 | 17 | .83 | | |
| 900 | 105 | .57 | * | 40000 | 16 | .83 | | |
| 1000 | 100 | .57 | 1.14 | 45000 | 15 | .92 | | |
| 1100 | 95 | .61 | * | 50000 | 14 | .92 | | |

| 20 WATTS | | | TYPE 20F | | |
|-------------------------------------|------|--------|--------------|------|--------|
| Size—2" x 3/16" Mtg. Centers—2 5/8" | | | | | |
| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
| 1 | 4480 | \$0.68 | 850 | 153 | \$0.68 |
| 3 | 2580 | .68 | 1000 | 141 | .68 |
| 5 | 2000 | .68 | 1200 | 130 | .70 |
| 10 | 1410 | .68 | 1250 | 125 | .70 |
| 15 | 1150 | .68 | 1500 | 115 | .70 |
| 25 | 900 | .68 | 1750 | 107 | .70 |
| 50 | 630 | .68 | 1850 | 104 | .70 |
| 75 | 517 | .68 | 2000 | 100 | .70 |
| 100 | 450 | .68 | 2250 | 94 | .70 |
| 150 | 365 | .68 | 2400 | 91 | .70 |
| 175 | 340 | .68 | 2500 | 90 | .70 |
| 200 | 320 | .68 | 2750 | 85 | .70 |
| 250 | 285 | .68 | 3000 | 81 | .70 |
| 300 | 258 | .68 | 3500 | 76 | .70 |
| 350 | 240 | .68 | 4000 | 70 | .70 |
| 400 | 224 | .68 | 4500 | 67 | .70 |
| 500 | 200 | .68 | 5000 | 63 | .70 |
| 650 | 175 | .68 | 6000 | 57 | .83 |
| 700 | 169 | .68 | 7000 | 53 | .83 |
| 750 | 163 | .68 | 7500 | 51 | .83 |
| 800 | 155 | .68 | 8000 | 50 | .83 |
| | | | 10000 | 45 | \$0.83 |
| | | | 12500 | 40 | .85 |
| | | | 15000 | 36 | .85 |
| | | | 20000 | 32 | .85 |
| | | | 25000 | 28 | .99 |
| | | | 30000 | 26 | .99 |
| | | | 35000 | 24 | .99 |
| | | | 40000 | 22 | .99 |
| | | | 50000 | 20 | 1.15 |
| | | | 55000 | 18 | 1.15 |
| | | | 60000 | 16 | 1.15 |
| | | | 65000 | 15 | 1.37 |
| | | | 70000 | 14 | 1.37 |
| | | | 75000 | 13 | 1.37 |
| | | | 80000 | 12 | 1.37 |
| | | | 85000 | 11.5 | 1.57 |
| | | | 90000 | 11 | 1.57 |
| | | | 95000 | 10.5 | 1.57 |
| | | | 100000 | 10 | 1.57 |

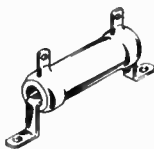
| 25 WATTS | | | Type 25F—Fixed | | | Type 25A—Adj. | | |
|-------------------------------------|------|--------|----------------|--------|------|---------------|--------|-------|
| Size—2" x 3/16" Mtg. Centers—2 5/8" | | | | | | | | |
| Ohms | m.a. | Fixed | Adj. | Ohms | m.a. | Fixed | Adj. | Price |
| 1 | 5000 | \$0.72 | \$1.29 | 2500 | 100 | \$0.75 | \$1.32 | |
| 2 | 3535 | .72 | 1.29 | 3000 | 90 | .75 | 1.32 | |
| 3 | 2890 | .72 | 1.29 | 3500 | 85 | .75 | 1.32 | |
| 4 | 2500 | .72 | * | 4000 | 80 | .75 | 1.32 | |
| 5 | 2230 | .72 | 1.29 | 4500 | 74 | * | 1.32 | |
| 7.5 | 1825 | *. | 1.29 | 5000 | 70 | .75 | 1.32 | |
| 10 | 1580 | .72 | 1.29 | 6000 | 65 | .85 | 1.42 | |
| 15 | 1290 | .72 | 1.29 | 7000 | 60 | * | 1.42 | |
| 20 | 1115 | *. | 1.29 | 7500 | 58 | .85 | 1.42 | |
| 25 | 1000 | .72 | 1.29 | 8000 | 56 | * | 1.42 | |
| 50 | 710 | .72 | 1.29 | 8500 | 54 | .85 | 1.42 | |
| 75 | 580 | .72 | 1.29 | 9000 | 52 | * | 1.42 | |
| 100 | 500 | .72 | 1.29 | 10000 | 50 | .85 | 1.42 | |
| 150 | 410 | .72 | 1.29 | 12000 | 46 | .90 | 1.47 | |
| 200 | 354 | .72 | 1.29 | 15000 | 41 | .90 | 1.47 | |
| 250 | 315 | .72 | 1.29 | 20000 | 34 | .90 | 1.47 | |
| 300 | 289 | .72 | 1.29 | 25000 | 32 | 1.04 | 1.61 | |
| 400 | 250 | .72 | 1.29 | 30000 | 29 | 1.04 | * | |
| 500 | 224 | .72 | 1.29 | 35000 | 27 | 1.04 | * | |
| 750 | 182 | .72 | 1.29 | 40000 | 25 | 1.04 | * | |
| 800 | 177 | .72 | 1.29 | 50000 | 20 | 1.21 | * | |
| 850 | 170 | .72 | 1.29 | 60000 | 17 | 1.21 | * | |
| 1000 | 158 | .72 | 1.29 | 70000 | 14 | 1.42 | * | |
| 1250 | 140 | .75 | 1.32 | 75000 | 13 | 1.42 | * | |
| 1500 | 129 | .75 | 1.32 | 80000 | 12 | 1.42 | * | |
| 2000 | 112 | .75 | 1.32 | 100000 | 10 | 1.64 | * | |
| 2250 | 105 | * | 1.32 | | | | | |

| 50 WATTS | | | Type 50F—Fixed | | | Type 50A—Adj. | | |
|---|------|--------|----------------|--------|------|---------------|--------|-------|
| Size—4 1/2" x 3/16" Mtg. Centers—5 1/4" | | | | | | | | |
| Ohms | m.a. | Fixed | Adj. | Ohms | m.a. | Fixed | Adj. | Price |
| 1 | 7070 | \$1.11 | \$1.68 | 5000 | 100 | \$1.14 | \$1.71 | |
| 2 | 5000 | 1.11 | 1.68 | 6000 | 91 | 1.23 | 1.80 | |
| 3 | 4080 | 1.11 | 1.68 | 7000 | 85 | * | 1.80 | |
| 4 | 3535 | 1.11 | 1.68 | 7500 | 82 | 1.23 | 1.80 | |
| 5 | 3160 | 1.11 | 1.68 | 8000 | 79 | 1.23 | 1.80 | |
| 10 | 2235 | 1.11 | 1.68 | 9000 | 75 | * | 1.80 | |
| 25 | 1415 | 1.11 | 1.68 | 10000 | 71 | 1.23 | 1.80 | |
| 50 | 1000 | 1.11 | 1.68 | 12000 | 65 | 1.34 | 1.92 | |
| 75 | 815 | 1.11 | 1.68 | 12500 | 63 | 1.34 | * | |
| 100 | 707 | 1.11 | 1.68 | 15000 | 58 | 1.34 | 1.92 | |
| 150 | 575 | 1.11 | 1.68 | 20000 | 50 | 1.34 | 1.92 | |
| 200 | 500 | 1.11 | 1.68 | 25000 | 45 | 1.54 | 2.11 | |
| 250 | 445 | 1.11 | 1.68 | 30000 | 41 | 1.54 | 2.11 | |
| 300 | 408 | 1.11 | 1.68 | 35000 | 38 | 1.54 | * | |
| 400 | 353 | 1.11 | 1.68 | 40000 | 35 | 1.54 | 2.11 | |
| 500 | 316 | 1.11 | 1.68 | 45000 | 33 | 1.72 | * | |
| 750 | 258 | 1.11 | 1.68 | 50000 | 32 | 1.72 | 2.29 | |
| 800 | 250 | 1.11 | 1.68 | 60000 | 29 | * | 2.29 | |
| 1000 | 224 | 1.11 | 1.68 | 75000 | 23 | 1.97 | 2.54 | |
| 1250 | 200 | * | 1.71 | 80000 | 21 | * | 2.54 | |
| 1500 | 180 | 1.14 | 1.71 | 100000 | 17 | 2.13 | 2.70 | |
| 2000 | 160 | 1.14 | 1.71 | 125000 | 14 | 2.57 | * | |
| 2250 | 150 | * | 1.71 | 150000 | 12 | 2.70 | * | |
| 2500 | 141 | 1.14 | 1.71 | 175000 | 10 | 2.79 | * | |
| 3000 | 130 | 1.14 | 1.71 | 200000 | 9 | 2.89 | * | |
| 3500 | 120 | * | 1.71 | 225000 | 8 | 3.24 | * | |
| 4000 | 110 | 1.14 | 1.71 | 250000 | 7 | 3.24 | * | |
| 4500 | 105 | * | 1.71 | | | | | |

| 80 WATTS | | | TYPE 80A | | |
|---|------|--------|--------------|------|-------|
| Size—6 1/2" x 3/16" Mtg. Centers—7 1/4" | | | | | |
| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
| 1 | 8940 | \$1.87 | 750 | 325 | 1.87 |
| 2 | 6320 | 1.87 | 800 | 316 | 1.87 |
| 3 | 5160 | 1.87 | 1000 | 282 | 1.87 |
| 4 | 4470 | 1.87 | 1250 | 253 | 1.91 |
| 5 | 4000 | 1.87 | 1500 | 231 | 1.91 |
| 10 | 2830 | 1.87 | 2000 | 200 | 1.91 |
| 15 | 2310 | 1.87 | 2250 | 188 | 1.91 |
| 25 | 1790 | 1.87 | 2500 | 178 | 1.91 |
| 50 | 1260 | 1.87 | 3000 | 161 | 1.91 |
| 75 | 1030 | 1.87 | 3500 | 151 | 1.91 |
| 100 | 894 | 1.87 | 4000 | 141 | 1.91 |
| 200 | 632 | 1.87 | 4500 | 133 | 1.91 |
| 250 | 565 | 1.87 | 5000 | 126 | 1.91 |
| 300 | 515 | 1.87 | 6000 | 115 | 2.01 |
| 400 | 447 | 1.87 | 7000 | 107 | 2.01 |
| 500 | 400 | 1.87 | | | |
| | | | 7500 | 103 | 2.01 |
| | | | 8000 | 100 | 2.01 |
| | | | 9000 | 94 | 2.01 |
| | | | 10000 | 89 | 2.01 |
| | | | 15000 | 73 | |

Vitrohm RESISTORS

Order by Type Number and Resistance Value. Asterisks (*) in Table indicate that Resistors are not Stock items.



HEAVY DUTY RESISTORS

Types 25F, 50F, 100F, 160F, 200F Furnished with lug terminals and mounting brackets.

160 WATTS Type 160F—Fixed Type 160A—Adj.

Size—8½" x 1½" Mtg. Centers—9¼"

| Ohms | m.a. | Fixed | Adj. | Ohms | m.a. | Fixed | Adj. |
|------|-------|--------|--------|--------|------|--------|--------|
| 1 | 12650 | \$2.28 | \$3.16 | 2500 | 252 | \$2.32 | \$3.20 |
| 2 | 8940 | 2.28 | 3.16 | 3000 | 230 | 2.32 | 3.20 |
| 3 | 7300 | 2.28 | 3.16 | 3500 | 215 | 2.32 | 3.20 |
| 4 | 6320 | 2.28 | 3.16 | 4000 | 200 | 2.32 | 3.20 |
| 5 | 5650 | 2.28 | 3.16 | 4500 | 185 | 2.32 | 3.20 |
| 10 | 4000 | 2.28 | 3.16 | 5000 | 178 | 2.32 | 3.20 |
| 15 | 3265 | 2.28 | 3.16 | 7500 | 146 | 2.53 | 3.41 |
| 25 | 2525 | 2.28 | 3.16 | 10000 | 126 | 2.53 | 3.41 |
| 50 | 1785 | 2.28 | 3.16 | 15000 | 105 | 2.71 | 3.59 |
| 75 | 1460 | 2.28 | * | 20000 | 90 | 2.71 | 3.59 |
| 100 | 1265 | 2.28 | 3.16 | 25000 | 80 | 2.80 | 3.68 |
| 150 | 1035 | 2.28 | * | 30000 | 73 | 2.80 | 3.68 |
| 200 | 894 | 2.28 | 3.16 | 35000 | 68 | 2.80 | * |
| 250 | 800 | 2.28 | 3.16 | 40000 | 64 | 2.80 | 3.68 |
| 500 | 565 | 2.28 | 3.16 | 50000 | 57 | 2.89 | 3.77 |
| 750 | 460 | 2.28 | * | 60000 | 52 | 2.89 | 3.77 |
| 1000 | 400 | 2.28 | 3.16 | 75000 | 46 | 3.08 | 3.96 |
| 1500 | 326 | 2.32 | 3.20 | 80000 | 45 | 3.08 | 3.96 |
| 2000 | 280 | 2.32 | 3.20 | 100000 | 40 | 3.26 | 4.14 |

200 WATTS Type 200F—Fixed Type 200A—Adj.

Size—10½" x 1½" Mtg. Centers—11¼"

| Ohms | m.a. | Fixed | Adj. | Ohms | m.a. | Fixed | Adj. |
|------|-------|--------|--------|--------|------|--------|--------|
| 1 | 14140 | \$2.46 | \$3.34 | 3500 | 240 | \$2.53 | \$3.41 |
| 2 | 10000 | 2.46 | 3.34 | 4000 | 225 | 2.53 | 3.41 |
| 3 | 8162 | 2.46 | 3.34 | 4500 | 210 | 2.53 | 3.41 |
| 4 | 7070 | 2.46 | 3.34 | 5000 | 200 | 2.53 | 3.41 |
| 5 | 6320 | 2.46 | 3.34 | 7500 | 163 | 2.71 | 3.59 |
| 10 | 4470 | 2.46 | 3.34 | 10000 | 141 | 2.71 | 3.59 |
| 25 | 2825 | 2.46 | 3.34 | 15000 | 115 | 2.89 | 3.77 |
| 50 | 2000 | 2.46 | 3.34 | 20000 | 100 | 2.89 | 3.77 |
| 75 | 1630 | 2.46 | * | 25000 | 90 | 2.98 | 3.86 |
| 100 | 1414 | 2.46 | 3.34 | 30000 | 82 | 2.98 | 3.86 |
| 150 | 1150 | 2.46 | * | 35000 | 76 | 2.98 | * |
| 250 | 900 | 2.46 | 3.34 | 40000 | 71 | 2.98 | 3.86 |
| 500 | 632 | 2.46 | 3.34 | 50000 | 63 | 3.08 | 3.96 |
| 750 | 515 | 2.46 | * | 60000 | 58 | 3.08 | 3.96 |
| 1000 | 447 | 2.46 | 3.34 | 75000 | 52 | 3.26 | 4.14 |
| 1500 | 365 | 2.53 | 3.41 | 100000 | 45 | 3.46 | 4.34 |
| 2000 | 315 | 2.53 | 3.41 | 125000 | 40 | * | 4.57 |
| 2500 | 282 | 2.53 | 3.41 | 150000 | 35 | * | 4.83 |
| 3000 | 260 | 2.53 | 3.41 | | | | |

ADJUSTABLE BANDS

Screw Driver Type

| Size of Resistor | Cat. No. | Price |
|------------------|----------|--------|
| 10 Watts | 609Z | \$0.26 |
| 25 Watts | 612A | .26 |
| 50 Watts | 612B | .26 |
| 80 Watts | 612B | .26 |
| 100 Watts | 615D | .26 |
| 160 Watts | 615D | .26 |
| 200 Watts | 615D | .26 |

Bakelite Knob Type

| | | |
|-----------|------|--------|
| 25 Watts | 610A | \$0.40 |
| 50 Watts | 610B | .40 |
| 80 Watts | 610B | .40 |
| 100 Watts | 619D | .40 |
| 160 Watts | 619D | .40 |
| 200 Watts | 619D | .40 |



WARD LEONARD

STRIPOHMS

Order by Type Number and Resistance Value

20 WATTS • TYPE 20S

2" Long—Mtg. Centers 2¾"
Width ¾"

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|
| 1 | 4480 | \$0.99 | 1500 | 115 | \$0.99 |
| 3 | 2580 | .99 | 2000 | 100 | .99 |
| 5 | 2000 | .99 | 2500 | 90 | .99 |
| 10 | 1410 | .99 | 3000 | 81 | 1.04 |
| 15 | 1150 | .99 | 3500 | 76 | 1.04 |
| 25 | 900 | .99 | 4000 | 70 | 1.04 |
| 50 | 630 | .99 | 5000 | 63 | 1.04 |
| 100 | 450 | .99 | 7500 | 51 | 1.10 |
| 150 | 365 | .99 | 10000 | 45 | 1.16 |
| 200 | 320 | .99 | 15000 | 36 | 1.20 |
| 250 | 285 | .99 | 20000 | 32 | 1.26 |
| 400 | 224 | .99 | 25000 | 28 | 1.33 |
| 500 | 200 | .99 | 30000 | 26 | 1.38 |
| 750 | 163 | .99 | 35000 | 24 | 1.38 |
| 1000 | 141 | .99 | 40000 | 22 | 1.44 |
| 1250 | 125 | .99 | 50000 | 20 | 1.44 |

30 WATTS • TYPE 30S

1¼" Long—Mtg. Centers 2"

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|
| 1 | 5480 | \$1.42 | 500 | 244 | \$1.42 |
| 3 | 3160 | 1.42 | 750 | 200 | 1.42 |
| 5 | 2450 | 1.42 | 1000 | 173 | 1.42 |
| 10 | 1730 | 1.42 | 1250 | 154 | 1.42 |
| 15 | 1420 | 1.42 | 1500 | 142 | 1.42 |
| 25 | 1095 | 1.42 | 2000 | 122 | 1.42 |
| 50 | 774 | 1.42 | 2500 | 109 | 1.42 |
| 100 | 547 | 1.42 | 3000 | 100 | 1.52 |
| 150 | 447 | 1.42 | 3500 | 92 | 1.52 |
| 200 | 387 | 1.42 | 4000 | 86 | 1.52 |
| 250 | 346 | 1.42 | 5000 | 77 | 1.52 |
| 400 | 273 | 1.42 | | | |

40 WATTS • TYPE 40S

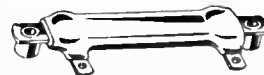
2" Long—Mtg. Centers 2¾"

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|
| 1 | 6320 | \$1.47 | 750 | 230 | \$1.47 |
| 3 | 3650 | 1.47 | 1000 | 200 | 1.47 |
| 5 | 2830 | 1.47 | 1250 | 180 | 1.47 |
| 10 | 2000 | 1.47 | 1500 | 163 | 1.47 |
| 15 | 1630 | 1.47 | 2000 | 141 | 1.47 |
| 25 | 1270 | 1.47 | 2500 | 126 | 1.47 |
| 50 | 894 | 1.47 | 3000 | 114 | 1.59 |
| 100 | 632 | 1.47 | 3500 | 106 | 1.59 |
| 150 | 510 | 1.47 | 4000 | 100 | 1.59 |
| 200 | 447 | 1.47 | 5000 | 88 | 1.59 |
| 250 | 400 | 1.47 | 7500 | 73 | 1.65 |
| 400 | 315 | 1.47 | 10000 | 63 | 1.77 |
| 500 | 283 | 1.47 | 15000 | 51 | 1.86 |

55 WATTS • TYPE 55S

3½" Long—Mtg. Centers 4¼"

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|
| 1 | 7420 | \$1.70 | 1250 | 209 | \$1.70 |
| 3 | 4280 | 1.70 | 1500 | 191 | 1.70 |
| 5 | 3320 | 1.70 | 2000 | 165 | 1.70 |
| 10 | 2350 | 1.70 | 2500 | 148 | 1.70 |
| 15 | 1910 | 1.70 | 3000 | 135 | 1.81 |
| 25 | 1480 | 1.70 | 3500 | 129 | 1.81 |
| 50 | 1050 | 1.70 | 4000 | 117 | 1.81 |
| 100 | 741 | 1.70 | 5000 | 104 | 1.81 |
| 150 | 604 | 1.70 | 7500 | 84 | 1.87 |
| 200 | 522 | 1.70 | 10000 | 74 | 1.99 |
| 250 | 469 | 1.70 | 15000 | 60 | 2.08 |
| 400 | 370 | 1.70 | 20000 | 52 | 2.15 |
| 500 | 331 | 1.70 | 25000 | 47 | 2.28 |
| 750 | 270 | 1.70 | 30000 | 42 | 2.39 |
| 1000 | 234 | 1.70 | | | |



Vitreous enameled wire-wound resistors built on a strong refractory core, and provided with low mounting brackets. Particularly suited for applications where space is limited. Specially adapted to stacking for networks.

The 20 watt Ministrip resistor is smaller in size than the standard Stripohms. They may be stacked by using 1/32" washers.

65 WATTS • TYPE 65S

4¾" Long—Mtg. Centers 5½"

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|
| 1 | 8060 | \$1.95 | 1500 | 208 | \$1.95 |
| 3 | 4650 | 1.95 | 2000 | 180 | 1.95 |
| 5 | 3610 | 1.95 | 2500 | 161 | 1.95 |
| 10 | 2550 | 1.95 | 3000 | 146 | 2.04 |
| 15 | 2080 | 1.95 | 3500 | 136 | 2.04 |
| 25 | 1610 | 1.95 | 4000 | 127 | 2.04 |
| 50 | 1140 | 1.95 | 5000 | 114 | 2.04 |
| 100 | 806 | 1.95 | 7500 | 92 | 2.12 |
| 150 | 658 | 1.95 | 10000 | 80 | 2.23 |
| 200 | 570 | 1.95 | 15000 | 65 | 2.31 |
| 250 | 509 | 1.95 | 20000 | 57 | 2.40 |
| 400 | 403 | 1.95 | 25000 | 51 | 2.53 |
| 500 | 360 | 1.95 | 30000 | 46 | 2.62 |
| 750 | 294 | 1.95 | 35000 | 43 | 2.62 |
| 1000 | 254 | 1.95 | 40000 | 40 | 2.73 |
| 1250 | 228 | 1.95 | 50000 | 36 | 2.73 |

75 WATTS TYPE 75S

6" Long—Mtg. Centers 6¾"

| Current Ohms | m.a. | Price | Current Ohms | m.a. | Price |
|--------------|------|--------|--------------|------|--------|
| 1 | 8660 | \$2.12 | 2500 | 173 | \$2.12 |
| 3 | 5000 | 2.12 | 3000 | 158 | 2.22 |
| 5 | 3870 | 2.12 | 3500 | 146 | 2.22 |
| 10 | 2740 | 2.12 | 4000 | 137 | 2.22 |
| 15 | 2235 | 2.12 | 5000 | 122 | 2.22 |
| 25 | 1730 | 2.12 | 7500 | 100 | 2.28 |
| 50 | 1220 | 2.12 | 10000 | 87 | 2.40 |
| 100 | 866 | 2.12 | 15000 | 71 | 2.48 |
| 150 | 707 | 2.12 | 20000 | 61 | 2.57 |
| 200 | 612 | 2.12 | 25000 | 55 | 2.70 |
| 250 | 550 | 2.12 | 30000 | 50 | 2.80 |
| 400 | 433 | 2.12 | 35000 | 46 | 2.80 |
| 500 | 387 | 2.12 | 40000 | 43 | 2.89 |
| 750 | 315 | 2.12 | 50000 | 37 | 2.89 |
| 1000 | 274 | 2.12 | 60000 | 35 | 3.03 |
| 1250 | 245 | 2.12 | 75000 | 33 | 3.03 |
| 1500 | 224 | 2.12 | | | |
| 2000 | 193 | 2.12 | | | |

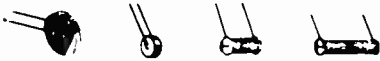
REPLACEMENT COMPONENTS

WORKMAN
SARASOTA, FLORIDA

Electronic
PRODUCTS, INC.

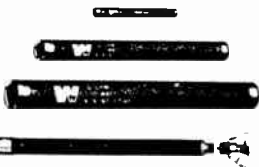


GLOBAR RESISTORS



| MODEL | DESCRIPTION | List | Dealer |
|-------|-----------------------------|------|--------|
| FR-49 | 49Ω at 3 amps. | 1.60 | .96 |
| FR2 | Replaces filament resistors | 3.00 | 1.80 |
| FR5-8 | 5-8Ω at 450ma | 1.65 | .99 |
| FR6 | 6Ω Hat - 600ma | 1.65 | .99 |
| FR9 | 9Ω Hat - 600ma | 1.65 | .99 |
| FR11 | 11Ω Hat - 600ma | 2.50 | 1.50 |
| FR11P | 11Ω-450ma 9.2Ω-600ma | 1.65 | .99 |
| FR19 | 19Ω Hat - 600ma | 1.50 | .90 |
| FR19A | 19Ω Hat - 600ma | 2.20 | 1.32 |
| FR31 | 31Ω Hat - 300ma | 1.90 | 1.14 |
| FR35 | 35Ω Hat - 600ma | 1.90 | 1.14 |
| FR43 | 43Ω Hat - 600ma | 2.50 | 1.50 |
| FR50 | 50Ω Hat - 150ma | 1.60 | .96 |
| FR041 | 75Ω Hat - 300ma | 2.20 | 1.32 |
| FR051 | 20Ω Hat - 600ma | 1.50 | .90 |
| FR052 | 10.5KΩ at 125 volts | 3.20 | 1.92 |
| FR054 | 35Ω Hat - 600ma | 3.20 | 1.92 |
| FR088 | 14KΩ at 140 volts | 3.20 | 1.92 |
| FR100 | 50Ω Hat - 150ma | 1.60 | .96 |
| FR191 | 120Ω cold | 1.20 | .72 |
| FR291 | 79Ω cold - .47Ω Hat | 1.60 | .96 |
| FR5K | 500KΩ at 25° C | 1.50 | .90 |
| FR71 | 100Ω Hat to 20Ω Hat | 1.85 | 1.11 |
| FRM | 1/5 Watt ± 20% 40 values | .65 | .39 |

NON INDUCTIVE DUMMY LOADS



| MODEL | DESCRIPTION | Users' Net |
|---------|-------------|------------|
| DL10W | 10 Watt | 3.50 |
| DL25W | 25 Watt | 4.35 |
| DL75W | 75 Watt | 8.85 |
| DL100W | 100 Watt | 12.45 |
| DL500W | 500 Watt | 42.00 |
| DLSP-50 | 150 Watt | 23.75 |

FUSED RESISTORS



| MODEL | DESCRIPTION | List | Dealer |
|----------|------------------------|------|--------|
| FR4.7 | 4.7Ω - 5 Watts | .65 | .39 |
| FR5 | 5Ω - 5 Watts | .65 | .39 |
| FR5.6 | 5.6Ω - 5 Watts | .65 | .39 |
| FR6 | 6Ω - 5 Watts | .65 | .39 |
| FR7 | 7.5Ω - 3 amperes | .72 | .43 |
| FR80 | 7.5Ω - 3 amperes | .65 | .39 |
| FR9 | 9Ω - 5 Watts | .65 | .39 |
| FR10 | 10Ω - 5 Watts | .65 | .39 |
| FR18 | 18Ω - 5 Watts | .65 | .39 |
| FR22 | 22Ω - 5 Watts | .65 | .39 |
| FR47 | 47Ω - 5 Watts | .65 | .39 |
| FR100 | 100Ω - 5 Watts | .65 | .39 |
| FR150 | 150Ω - 5 Watts | .65 | .39 |
| FR12A | 150Ω - 0.12 amperes | .65 | .39 |
| FRK | Kit of 10 resistors | 5.76 | 3.46 |
| FRZ4.7 | 4.7Ω - 3 amperes | .36 | .22 |
| FRZ5.6 | 5.6Ω - 3 amperes | .36 | .22 |
| FRZ7.5 | 7.5Ω - 3 amperes | .36 | .22 |
| FRZ9 | 9Ω - 3 amperes | .36 | .22 |
| FRZ | Pack of 10 resistors | 3.60 | 1.80 |
| FRB1 | Universal replacement | 2.00 | 1.20 |
| FR28 | Na. AWG 28 Wire 5 pcs. | .25 | .15 |
| FR15.7.5 | 7.5Ω - 15 Watts | .96 | .58 |
| FR7.5 | 5Ω - 7 Watts | .72 | .43 |
| FR2A | Reset thermal switch | 1.20 | .72 |

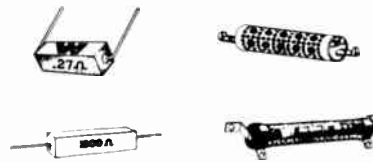
CHEMICAL FUSES

BY BEL FUSE, INC.



| MODEL | DESCRIPTION | List | Dealer |
|--------|--------------------------------|------|--------|
| 200-10 | RCA 945309-1 | .82 | .49 |
| KF-200 | RCA 105041 | 1.00 | .60 |
| LC-200 | For "C" type (Limited current) | 1.00 | .60 |
| 500-1 | RCA, Emerson, Olympic | .75 | .45 |
| 400-1 | RCA 945392-2 | .80 | .48 |
| 3-1 | RCA 045392-3 | .58 | .35 |
| BL-5 | Pack of 5 Chemical Fuses | 3.95 | 2.37 |

AUTO RADIO RESISTORS



| MODEL | DESCRIPTION | List | Dealer |
|-------|---------------------------|------|--------|
| WT22 | 0.22Ω - 5 Watt | .48 | .29 |
| WT27 | 0.27Ω - 5 Watt | .48 | .29 |
| WT33 | 0.33Ω - 5 Watt | .48 | .29 |
| WT47 | 0.47Ω - 5 Watt | .48 | .29 |
| WT56 | 5.6Ω - 5 Watt | .48 | .29 |
| WT68 | 0.68Ω - 5 Watt | .48 | .29 |
| WT82 | 0.82Ω - 5 Watt | .48 | .29 |
| 7W | 1800Ω - 7 Watt | .38 | .23 |
| FT2.8 | 2.8Ω cold | .65 | .39 |
| FT3.3 | 3.3Ω cold | .65 | .39 |
| FT4.5 | 4.5Ω cold | .65 | .39 |
| FT7.5 | 7.5Ω cold | .65 | .39 |
| FT10 | 10Ω cold | .65 | .39 |
| FT28 | 28Ω cold | .65 | .39 |
| FT35 | 35Ω cold | .65 | .39 |
| FT150 | 150Ω cold | 1.30 | .78 |
| GD1 | For 6 V. in 12 V. systems | 5.50 | 3.30 |
| GD2 | 2, 4, or 6 amp. loads | 3.30 | 1.98 |
| GD3 | 5 to 6 amp. loads | 2.50 | 1.50 |
| GD4 | 7 to 8 amp. loads | 2.50 | 1.50 |

SQUARE OHMS



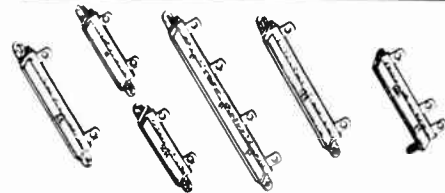
| MODEL | DESCRIPTION | List | Dealer |
|--------|-----------------------|------|--------|
| 5W-SQ | 5W 69 Values 1-6KΩ | .36 | .22 |
| 7W-SQ | 7W 77 Values 1-10KΩ | .38 | .23 |
| 10W-SQ | 10W 85 Values 1-25KΩ | .40 | .24 |
| 15W-SQ | 15W 87 Values 1-35KΩ | .50 | .30 |
| 20W-SQ | 20W 87 Values 1-35KΩ | .65 | .39 |
| 25W-SQ | 25W 121 Values 1-50KΩ | .75 | .45 |

WIREWOUND RESISTORS



| MODEL | DESCRIPTION | List | Dealer |
|--------|------------------------------|-------|--------|
| 10W | 10W 48 Values | .65 | .39 |
| 148 | 41Ω - 25 Watt | .85 | .51 |
| 151 | 51Ω - 30 Watt | .95 | .57 |
| M01 | 59Ω - 25 Watt | .85 | .51 |
| E10 | 10W - 8 Values | 1.40 | .84 |
| 30W | 30W - 18 Values | 1.60 | .96 |
| 25W | 31Ω or 2250Ω - 25 Watt | .85 | .51 |
| 25W-DR | 25W - 31 Values | 1.10 | .66 |
| VR1 | 10W 48 Values - .5 to 15Ω | 1.10 | .66 |
| VR2 | 10W 48 Values - 5 to 150Ω | 1.10 | .66 |
| VR3 | 10W 48 Values - 50 to 1500Ω | 1.10 | .66 |
| VR4 | 10W 48 Values - 500 to 15000 | 1.10 | .66 |
| VR5 | 10W 12 Values - 3000-50000Ω | 1.10 | .66 |
| WR-50 | 5-15W 50 Values - Each | .55 | .33 |
| WR-50 | Card of 50 Values | 27.50 | 16.50 |

CANDOHM WIREWOUND RESISTORS



| MODEL | DESCRIPTION | List | Dealer |
|-------|----------------------------|------|--------|
| C1 | 28Ω Top 24Ω | 1.60 | .96 |
| C2 | 17Ω Top 13Ω | 1.20 | .72 |
| C3 | 2760Ω Top 1380Ω | 2.00 | 1.20 |
| C4 | 5375Ω Top 2650Ω | 2.00 | 1.20 |
| C5 | 54Ω | 2.00 | 1.20 |
| C6 | 50Ω | 2.00 | 1.20 |
| C7 | 44Ω | 2.00 | 1.20 |
| C8 | 3000Ω | 2.00 | 1.20 |
| C9 | 2250Ω Top 750Ω | 1.60 | .96 |
| C10 | 2200Ω Top 1100Ω | 2.00 | 1.20 |
| C11 | 4000Ω | 1.60 | .96 |
| C12 | 2300Ω | 1.60 | .96 |
| C13 | 6Ω | 1.60 | .96 |
| C14 | 1300Ω | 1.60 | .96 |
| C15 | 2600Ω Top 1300Ω | 2.00 | 1.20 |
| C16 | 1300Ω Top 650Ω | 4.00 | 2.40 |
| C17 | 2650Ω | 2.00 | 1.20 |
| C18 | 9325Ω Top 8200Ω | 4.80 | 2.88 |
| C19 | 130Ω | 1.40 | .84 |
| C20 | 2175Ω Top 75Ω | 1.60 | .96 |
| C21 | 1975Ω Top 75Ω | 1.60 | .96 |
| C22 | 2000Ω | 1.40 | .84 |
| C23 | 135Ω | 1.20 | .72 |
| C24 | 47Ω Top 14Ω Top 32Ω | 2.40 | 1.45 |
| C25 | 1550Ω | 2.00 | 1.20 |
| C26 | 33Ω | 1.60 | .96 |
| C27 | 1800Ω | 1.60 | .96 |
| C28 | 2000Ω | 1.60 | .96 |
| C29 | 180Ω | 1.22 | .73 |
| C30 | 1180Ω Top 180Ω | 1.59 | .96 |
| C31 | 2820Ω Top 2000Ω | 2.40 | 1.45 |
| C32 | 2000Ω | 1.40 | .84 |
| C33 | 2000Ω Top 1000Ω | 1.59 | .96 |
| C34 | 61Ω | 2.00 | 1.20 |
| C35 | 4520Ω Top 120, 1120, 2320Ω | 3.00 | 1.80 |
| C36 | 56Ω | 1.60 | .96 |
| C37 | 2070Ω Top 720Ω | 1.60 | .96 |
| C38 | 1900Ω Top 950Ω | 1.59 | .96 |
| C39 | 459Ω Top 200Ω | 2.80 | 1.68 |
| C40 | 9562Ω Top 2500Ω | 3.40 | 2.04 |
| C41 | 1280Ω | 3.90 | 2.34 |

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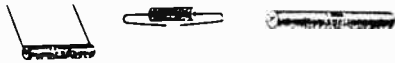
FOR A COMPLETE LISTING OF EXACT REPLACEMENT COILS ASK YOUR JOBBER FOR OUR COIL CROSS REFERENCE.



WORKMAN *Electronic*
SARASOTA, FLORIDA PRODUCTS, INC.

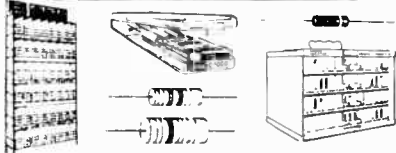
REPLACEMENT COMPONENTS

CARBON BAR RESISTORS



| MODEL | DESCRIPTION | List | Dealer |
|-------|----------------------------|------|--------|
| 1M | 1 meg - 4 watts | .95 | .57 |
| 1.5M | 1.5 meg - 4 watts | .95 | .57 |
| 2M | 2 meg - 4 watts | .95 | .57 |
| 2.5M | 2.5 meg - 4 watts | .95 | .57 |
| 1L | 1 meg - 4 watts | 1.25 | .75 |
| 1.5L | 1.5 meg - 4 watts | 1.25 | .75 |
| 2L | 2 meg - 4 watts | 1.25 | .75 |
| 2.5L | 2.5 meg - 4 watts | 1.25 | .75 |
| 1W | 2.2Ω, 3.3Ω, 4.4Ω, 5.5Ω kit | 1.10 | .66 |
| 1W2 | 2.2Ω 4 resistors 1 watt | 1.10 | .66 |
| 1W3 | 3.3Ω 4 resistors 1 watt | 1.10 | .66 |
| 1W4 | 4.4Ω 4 resistors 1 watt | 1.10 | .66 |
| 1W5 | 5.5Ω 4 resistors 1 watt | 1.10 | .66 |
| 4W5 | 4 Watts - 5600Ω | .95 | .57 |
| 4W6 | 4 Watts - 6800Ω | .95 | .57 |

CARBON RESISTORS



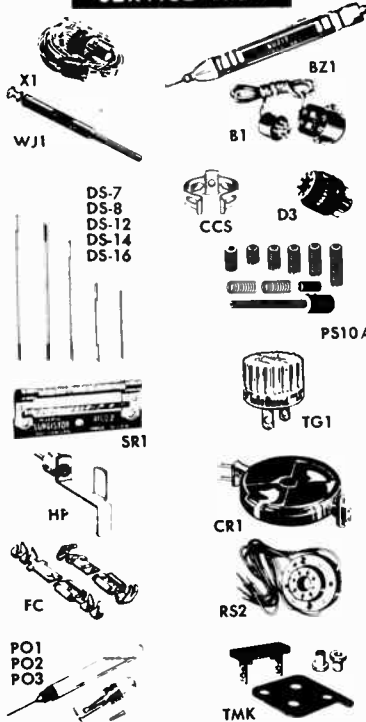
| MODEL | DESCRIPTION | List | Dealer |
|-------|-----------------------------|--------|--------|
| CA | 1/2 W ± 10% 77 values Bulk | .20 | .12 |
| CB | 1 W ± 10% 77 values Bulk | .30 | .18 |
| CC | 2 W ± 10% 77 values Bulk | .40 | .24 |
| CE | 1/2 W ± 5% 153 values Bulk | .40 | .24 |
| CA-6 | 1/2 W ± 10% 77 values 6 Pk. | 1.20 | .72 |
| CB-4 | 1 W ± 10% 77 values 4 Pk. | 1.20 | .72 |
| CC-3 | 2 W ± 10% 77 values 3 Pk. | 1.20 | .72 |
| CD | Rack of 624 Resistors | 172.80 | 95.00 |
| CD1 | Cabinet of 438 Resistors | 129.60 | 77.76 |

GLASS RESISTORS



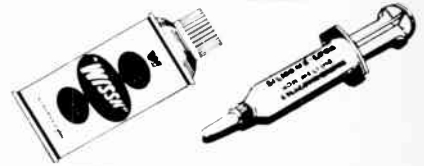
| MODEL | DESCRIPTION | List | Dealer |
|--------|----------------|------|--------|
| 3G470 | 3 Watt 470Ω | .65 | .37 |
| 3G560 | 3 Watt 560Ω | .65 | .37 |
| 3G1000 | 3 Watt 1000Ω | .65 | .37 |
| 3G2700 | 3 Watt 2700Ω | .65 | .37 |
| 3G3300 | 3 Watt 3300Ω | .65 | .37 |
| 3G4700 | 3 Watt 4700Ω | .65 | .37 |
| 3G5000 | 3 Watt 5000Ω | .65 | .37 |
| 3G5600 | 3 Watt 5600Ω | .65 | .37 |
| 3G6800 | 3 Watt 6800Ω | .65 | .37 |
| 3G8200 | 3 Watt 8200Ω | .65 | .37 |
| 3G10K | 3 Watt 10,000Ω | .65 | .37 |
| 3G12K | 3 Watt 12,000Ω | .65 | .37 |
| 3G15K | 3 Watt 15,000Ω | .65 | .37 |
| 3G22K | 3 Watt 22,000Ω | .65 | .37 |
| 4G3600 | 4 Watt 3600Ω | .70 | .42 |
| 4G4100 | 4 Watt 4100Ω | .70 | .42 |
| 4G4700 | 4 Watt 4700Ω | .70 | .42 |
| 4G5600 | 4 Watt 5600Ω | .70 | .42 |
| 4G7500 | 4 Watt 7500Ω | .70 | .42 |
| 4G12K | 4 Watt 12,000Ω | .70 | .42 |
| 4G27K | 4 Watt 27,000Ω | .70 | .42 |
| 5G1000 | 5 Watt 1000Ω | .75 | .45 |
| 5G5600 | 5 Watt 5600Ω | .75 | .45 |
| 5G6800 | 5 Watt 6800Ω | .75 | .45 |
| 5G7500 | 5 Watt 7500Ω | .75 | .45 |
| 5G8200 | 5 Watt 8200Ω | .75 | .45 |
| 5G33K | 5 Watt 33,000Ω | .80 | .48 |
| 7G3300 | 7 Watt 3300Ω | .80 | .48 |
| 7G4700 | 7 Watt 4700Ω | .80 | .48 |
| 7G5100 | 7 Watt 5100Ω | .80 | .48 |
| 7G5600 | 7 Watt 5600Ω | .80 | .48 |
| 7G7000 | 7 Watt 7000Ω | .80 | .48 |
| 7G16K | 7 Watt 16,000Ω | .80 | .48 |

SERVICE AIDS



| MODEL | DESCRIPTION | List | Dealer |
|-------|---------------------------|-------|--------|
| X1 | Extends Button Base | 2.15 | 1.29 |
| X2 | Extends Shell Base | 2.15 | 1.29 |
| X3 | Extends Std. Duo-Decal | 2.15 | 1.29 |
| X9 | Xtend-Shaft | .30 | .18 |
| D1 | Conv. Stand to Button | 2.63 | 1.58 |
| D2 | Conv. Stand to Shell | 2.63 | 1.58 |
| D3 | Conv. Shell to Button | 2.63 | 1.58 |
| D4 | Conv. Button to Shell | 2.63 | 1.58 |
| D5 | Conv. 23EP4 to Sylv. 8YP4 | 2.63 | 1.58 |
| DS-7 | Align. Tool 7"x1/8" | 1.25 | .75 |
| DS-8 | Align. Tool 8"x3/16" | 1.25 | .75 |
| DS-12 | Align. Tool 12"x1/8" | 1.40 | .85 |
| DS-14 | Align. Tool 14"x3/16" | 1.65 | 1.00 |
| DS-16 | Align. Tool 16"x1/8" | 1.65 | 1.00 |
| TG1 | Tube Guard | 2.00 | 1.20 |
| SR1 | Surgistor, 300 Watt | 1.95 | 1.17 |
| SR2 | Surgistor, 250-400W-50Ω | 2.95 | 1.77 |
| 10V | Boost-A-Volt | 9.00 | 5.40 |
| WJ1 | Wishh Jet | 6.25 | 3.75 |
| NT | Hypodermic Needle | .70 | .42 |
| B1 | Basip | 4.90 | 2.95 |
| FC | Faston Connectors | .75 | .45 |
| TMK | Power Trans. Mfg. Kit | .95 | .57 |
| TMS | Dio. Base Trans. Socket | .48 | .28 |
| GE12 | G.E. No. 12 Lamp | .25 | .15 |
| PS10A | Powdered Iron Cares Kit | 1.60 | .96 |
| RS1 | 110° Button Socket | 1.00 | .60 |
| RS2 | 110° Shell Socket | 1.00 | .60 |
| RS3 | Standard Socket | 1.00 | .60 |
| BZ1 | Buzit | 13.50 | 8.10 |
| HP | Handi Plug | .25 | .15 |
| CCS | Mounting Clips | .45 | .27 |
| CCL | Mounting Clips | .45 | .27 |
| SMA | Speed-Ma Applicator | 4.25 | 2.55 |
| PO1 | Precision Oiler | 1.10 | .66 |
| PO2 | Precision Graphiter | 1.10 | .66 |
| PO3 | Precision Greaser | 1.10 | .66 |
| PF | Perma Fla Filter | 1.60 | .96 |
| TH4 | Touch 'n' Hold | 3.25 | 1.95 |
| 484 | Tuner Shaft | 1.00 | .60 |
| CR1 | Reel-It Cheater Card | 1.95 | 1.17 |
| CR2 | Reel-It Cheater Card Ext. | 1.95 | 1.17 |
| CR3 | Reel-It A.C. Ext. Card | 1.95 | 1.17 |
| SO1 | Printed Circuit Solder | .56 | .34 |
| SO2 | Silver Solder | .56 | .34 |
| SO3 | Ribbon Silver | .42 | .25 |

CHEMICALS



| MODEL | DESCRIPTION | List | Dealer |
|-------|------------------------|------|--------|
| H6 | "Wishh" 6 oz. Cleaner | 1.65 | .99 |
| H6A | "Wishh" Aerosol | 2.05 | 1.23 |
| H14 | "Wishh" 16 oz. Cleaner | 3.25 | 1.95 |
| H32 | "Wishh" Cleaner Kit | 5.42 | 3.25 |
| S6 | Super "Wishh" | 3.50 | 2.10 |
| ET1 | Ease-It | 1.65 | .99 |
| SG6 | Silicane-Lube | 1.25 | .75 |
| HC | Speaker Conditioner | .95 | .57 |

SUPER BRIGHTENERS



| MODEL | DESCRIPTION | List | Dealer |
|-------|----------------------------|------|--------|
| W2 | Standard Parallel | 2.65 | 1.59 |
| W3 | Standard Series | 2.09 | 1.74 |
| W4 | Standard Isolation | 3.70 | 2.22 |
| W5 | 110° Button Parallel | 3.90 | 2.34 |
| W6 | 110° Button Series | 3.90 | 2.34 |
| W7 | 110° Shell Parallel | 3.90 | 2.34 |
| W8 | 110° Shell Series | 3.90 | 2.34 |
| W9 | Universal Standard | 4.15 | 2.49 |
| W10 | 110° Button Series 3 1/2 V | 3.50 | 2.10 |
| W11 | 110° Shell Series | 3.50 | 2.10 |
| W12 | 110° Button Universal | 4.50 | 2.70 |
| P5 | Standard Parallel | 1.25 | .75 |
| P7 | Standard Universal | 2.40 | 1.44 |

POWER TRANSISTORS



| MODEL | DESCRIPTION | List | Dealer |
|-----------|-------------|-------|--------|
| 99 Power | PNP Output | 1.65 | .99 |
| 199 Power | PNP Output | 2.32 | 1.99 |
| 299 Power | PNP Output | 4.98 | 2.99 |
| Power 12 | PNP Output | 5.30 | 3.18 |
| Power 25 | PNP Output | 6.40 | 3.84 |
| Power 40 | PNP Output | 8.75 | 5.22 |
| Power 60 | PNP Output | 7.50 | 4.50 |
| Power 80 | PNP Output | 10.00 | 6.00 |
| 2N278 | PNP Output | 8.20 | 4.92 |
| 2N277 | PNP Output | 5.85 | 3.50 |
| 2N277 | PNP Output | 5.85 | 3.50 |
| 2N176 | PNP Output | 4.00 | 2.40 |
| 2N235 | PNP Output | 4.50 | 2.70 |
| 2N155 | PNP Output | 2.50 | 1.50 |

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from the Amperex plant in Slatersville, Rhode Island.**

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9. High dissipation ratings
10. Completely specified

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At the new, modern Amperex semiconductor plant in Slatersville, Rhode Island, the Post Alloy Diffusion process is used to make a line of transistors having unusu-

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Amperex germanium and silicon diodes, including a complete subminiature line, meet the requirements for fast switching

as well as high inductance applications. Voltage reference and power rectifier types are available for those who demand optimum stability.

THE PLANT

The Amperex plant in Slatersville, Rhode Island, is one of the world's most modern plants devoted exclusively to the manufacture of semiconductors for industrial, communications and entertainment appli-

cations. The exclusive "self-jigging" techniques employed by Amperex, as well as specially developed tooling methods and fully automatic high-volume equipment, are the user's lasting guarantee of complete satisfaction.

APPLICATIONS ASSISTANCE FOR CUSTOM AND STANDARD TYPES

The modern Amperex applications laboratory, located in Hicksville, L. I., is available

to Amperex customers for consultation on design of circuitry and applications problems.

AERIAL VIEW OF THE AMPEREX SEMICONDUCTOR PLANT





ask Amperex

for your copies of the condensed semiconductor and tube catalogs... for price and delivery information... and for detailed technical data

AMPEREX ELECTRONIC CORPORATION
Hicksville, Long Island, N. Y.

In Canada: Philips Electron Devices, Ltd.,
116 Vanderhoof Avenue, Toronto 16, Ontario

semiconductors by **Amperex**[®]

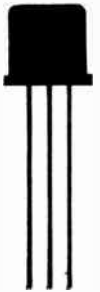
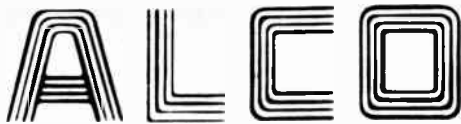
...mass-produced for specific applications at the Amperex plant in Slatersville, Rhode Island

transistors *representative of the Amperex line*

| MAXIMUM RATINGS | | | | TYPICAL CHARACTERISTICS (25°C) | | | | | | |
|--------------------------------------|--------------------------|-------------|--------------------------------------|--------------------------------|--|---------------------|---|---------|-------------|--------------|
| V_{ce} Volts | I_c MA | P_c MW | V_{ce} Volts | f_r MC | h_{fe} (1 KC) | I_{co} μ A | Gain db | at | Freq. MC | Case |
| COMMUNICATION AND INSTRUMENTS | | | | | | | | | | |
| 2N987 | 40 | 10 | 85 | 1.0 | 100 | 100 | 1.2 | 14 | 100 | TO-18 |
| 2N1225 | 40 | 10 | 120 | 0.5 | 100 | 60 | 50 | 18 | 50 | TO-33 |
| 2N1226 | 40 | 10 | 120 | 0.5 | 30 | 60 | 50 | 22 | 12.5 | TO-33 |
| 2N1395 | 60 | 10 | 120 | 0.5 | 30 | 90 | 50 | 45 | 1.5 | TO-33 |
| 2N1396 | 40 | 10 | 120 | 0.5 | 100 | 90 | 50 | 20 | 30 | TO-33 |
| 2N1397 | 40 | 10 | 120 | 0.5 | 120 | 90 | 50 | 21 | 50 | TO-33 |
| 2N2084 | 40 | 10 | 125 | 1.0 | 100 | 100 | 1.2 | 14 | 100 | TO-33 |
| AM RECEIVERS | | | | | | | | | | |
| 2N993 | 20 | 10 | 85 | 1.5 | 70 | 140 | 1.5 | 42 | 0.455 | TO-18 |
| 2N2093 | 25 | 10 | 100 | 1.5 | 70 | 150 | 1.5 | 30 | 1.4 | TO-7 |
| FM RECEIVERS | | | | | | | | | | |
| 2N990 | 20 | 10 | 85 | 1.5 | 70 | 140 | 1.5 | 14 | 100 | TO-18 |
| 2N2089 | 20 | 10 | 100 | 1.5 | 70 | 140 | 1.5 | 14 | 100 | TO-7 |
| VHF RECEIVERS | | | | | | | | | | |
| PADT-28 | 25 | 10 | 83 | 0.5 | 180 | 120 | 5 | 14 | 200 | TO-7 |
| MED. POWER RF & VIDEO | | | | | | | | | | |
| 2N2207 | 50 | 30 | 200 | 0.5 | 175 ($I_c = 10$ MA) | 200 | 5 (max.) | | | TO-7 |
| RF POWER AMPLIFIERS | | | | | | | | | | |
| PADT-50 | 75 | 750 | 16 W ($T_c = 25^\circ\text{C}$) | 1.5 | 60 | | $I_{co} = 10$ | | | TO-3 |
| GENERAL PURPOSE RF | | | | | | | | | | |
| 2N1515 (osc.) | 20 | 10 | 83 | 0.5 | 70 | 100 | 1.5 | 61 | 0.455 | TO-7 |
| 2N1516 (conv.) | 20 | 10 | 83 | 0.5 | 70 | 100 | 1.5 | 18 (Gc) | 30 | TO-7 |
| 2N1517 (RF) | 20 | 10 | 83 | 0.5 | 70 | 100 | 1.5 | 10 | 100 | TO-7 |
| FAST SWITCHING | | | | | | | | | | |
| PADT-40 | 20 | 30 | 94 | 2.5 | 600 | 30 | $V_{ce}(\text{sat.}) = 0.3$ V @ 50 MA, $t_r = 130$ ns | | | TO-18 |
| 2N705 | 15 | | 300 | 3.5 | 300 | 40 | 3.0 | | | TO-18 |
| 2N710 | 15 | | 300 | 2.0 | 300 | 40 | 3.0 | | | TO-18 |
| 2N711 | 12 | | 150 | 1.0 | | | | | | TO-18 |
| PADT-51 (Avalanche) | $V_{co} < 2$ V | 75 | 83 | | $V_{ce}(\text{sat.}) < 5$ V @ $I_c = 10$ MA, $I_B = 5$ MA V_{ce} at I_{co} $t_r = 1$ ns. = 1 MA, 25 V ($t_c = 12$ MA) | | | | | TO-7 TO-3 |
| MEDIUM SPEED SWITCHING | | | | | | | | | | |
| ASY-26 | 25 | 100 | 125 | 20 | 4 | 50 | 3 | | | TO-5 |
| ASY-27 | 20 | 100 | 125 | 20 | 6 | 75 | 3 | | | TO-5 |
| ASY-28 (NPN) | 25 | 100 | 125 | 20 | 4 | 50 | 3 | | | TO-5 |
| ASY-29 (NPN) | 20 | 100 | 125 | 20 | 6 | 75 | 3 | | | TO-5 |
| 2N404 | 25 | 100 | 150 | 12 | 4 | 50 | 3 | | | TO-5 |
| 2N1302 | 25 | 300 | 150 | 25 | 3.0 | 50 | 6.0 | | | TO-3 |
| 2N1303 | 25 | 300 | 150 | 25 | 3.0 | 50 | 6.0 | | | TO-5 |
| AUDIO AMPLIFIERS | | | | | | | | | | |
| AC-125 | 32 | 30 | | 10 | 1.5 | 125 | 10 | | | TO-1 |
| AC-126 | 32 | 30 | | 10 | 1.5 | | 10 | | | TO-1 |
| AC-128 | 32 | 150 | | 150 | 1.7 | 100 | 10 | | | TO-1 |
| BCZ-12 (Si) | 32 | | 315 | 12 | 2.0 | 40 | 0.1 | | | TO-1 |
| BCZ-12 (Si) | 60 | | 250 | 30 | 1.0 | 15 | 0.1 | | | TO-1 |
| SILICON MESA | | | | | | | | | | |
| 2N332 | 45 | 25 | 150 | 1.0 | 4.0 | 15 | 2.0 | 31 | | TO-5 |
| 2N334 | 45 | 25 | 150 | 1.0 | 8.0 | 54 | 10 | 35 | | TO-5 |
| 2N335 | 45 | 25 | 150 | 1.0 | 6.0 | 63 | 2.0 | 37 | | TO-5 |
| 2N337 | 45 | 20 | 125 | 1.0 | 20 | 22 | | | | TO-5 |
| 2N338 | 45 | 20 | 125 | | 30 | | | | | TO-5 |
| SILICON ALLOY | | | | | | | | | | |
| 2N329 A | 50 | 50 | 250 | 20 | 0.40 | 50 | 0.1 | | | TO-5 |
| 2N1024 | 15 | 100 | 250 | 15 | 1.0 | 15 | .02 | | | TO-5 |
| 2N1469 | 35 | 100 | 250 | 40 | 2.0 | 60 | .025 | | | TO-5 |
| 2N1477 | 100 | 100 | 250 | 100 | 1.0 | 45 | 0.2 | | | TO-5 |
| FOUR-LAYER SWITCH | | | | | | | | | | |
| PADT-60 | 35 ($V_{ce} = 12$ V) | 25 | 50 | $V_{ce}(\text{sat.}) = 0.6$ V | | | 10 | | | TO-1 |

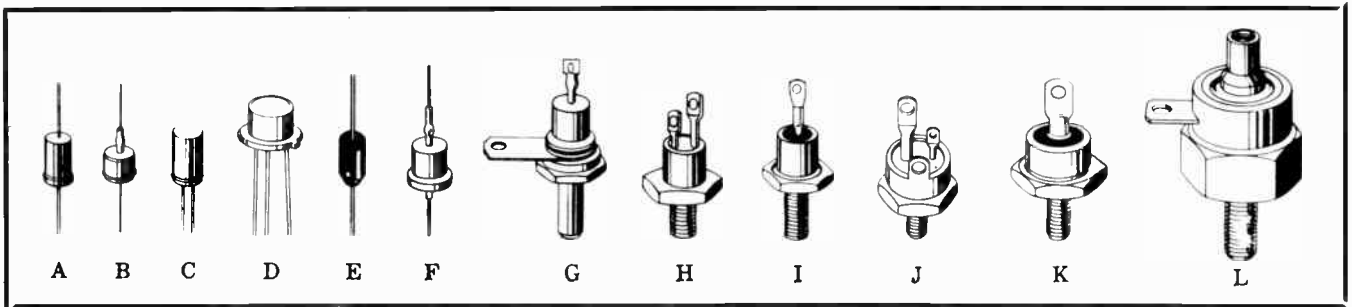
diodes *representative of the Amperex line*

| MAX. RATINGS (25°C) | | | TYPICAL CHARACTERISTICS | | | | | | |
|---|--|------|---|------|----------------|------------------|----|----------------|--------------|
| V_a Volts | I_r MA | | I_r MA | at | V_r Volts | I_a μ A | at | V_a Volts | Case |
| COMPUTER TYPES | | | | | | | | | |
| 1N191 | 90 | 35 | 5 | 1.0 | 25 | 10 | | | submin. |
| 1N192 | 70 | 35 | 5 | 1.0 | 20 | 10 | | | submin. |
| 1N270 | 80 | | 200 | 1.0 | 100 | 50 | | | submin. |
| 1N277 | 100 | | 100 | 1.0 | 250 | 50 (75°C) | | | submin. |
| 1N690 | 36 | 400 | 400 | 1.0 | 25 | 30 | | | submin. |
| 1N3121 | 50 | | 150 | 0.74 | 30 | 50 | | | submin. |
| 1N3122 | 20 | | 10 | 0.34 | 3 | 10 | | | submin. |
| 1N3483 (low Q) | 8 | | 10 | 0.5 | 10 | 3.0 | | | submin. |
| 1N3484 (low Z) | 8 | | 250 | 0.7 | 10 | 80 | | | submin. |
| DETECTORS | | | | | | | | | |
| A112 (Video) | 60 | 30 | 5 | 1.0 | 10 | 10 | | | submin. |
| 1N60 (Video) | 30 | 50 | | | 67 | 10 | | | solder-in |
| 1N87 (Video) | 25 | 45 | 0.1 | 0.25 | 30 | 1.5 | | | solder-in |
| 1N87A (Video) | 25 | 45 | 0.1 | 0.25 | 30 | 1.5 | | | submin. |
| 1N295 | 40 | | | | 200 | 10 | | | submin. |
| 1N541 (AM) | 30 | | 1.5 | 1.0 | 18 | 10 | | | solder-in |
| 1N542 (FM) | Matched pair of 1N541 | | | | | | | | submin. |
| VOLTAGE VARIABLE CAPACITANCE DIODE | | | | | | | | | |
| 1N3182 | 20 | | $C_0 = 33$ Pp at -4 V, $f = 500$ KC, $Q = 55$ | | | | | | submin. |
| SILICON VOLTAGE REFERENCE DIODES | | | | | | | | | |
| OAZ-200 to OAZ-207 | 40 MA 300 MW diodes; 4.7 to 0.1 V at 10 MA | | | | | | | | (single end) |
| OAZ-208 to OAZ-213 | 50 MA 300 MW diodes; 4.3 to 12.1 V at 1 MA | | | | | | | | (single end) |
| BZZ-10 to BZZ-13 | 25 MA 300 MW diodes; 6.0 to 8.0 V at 15 MA | | | | | | | | DO-7 |
| BZZ-14 to BZZ-19 | 500 MA 1.8 W diodes; 5.6 to 9.1 V at 20 MA | | | | | | | | DO-4 |
| SILICON GENERAL PURPOSE DIODES | | | | | | | | | |
| 1N456 | 25 | 90 | 40 | 1.0 | .025 | 25 | | | submin. |
| 1N457 | 60 | 75 | 20 | 1.0 | .025 | 60 | | | submin. |
| 1N458 | 125 | 55 | 7 | 1.0 | .025 | 125 | | | submin. |
| 1N459 | 175 | 40 | 3 | 1.0 | .025 | 175 | | | submin. |
| 1N461 | 25 | 60 | 15 | 1.0 | 0.5 | 25 | | | submin. |
| 1N462 | 60 | 50 | 5 | 1.0 | 0.5 | 60 | | | submin. |
| 1N463 | 175 | 30 | 1.0 | 1.0 | 0.5 | 175 | | | submin. |
| 1N464 | 125 | 40 | 3 | 1.0 | 0.5 | 125 | | | submin. |
| HIGH VOLTAGE SILICON RECTIFIERS | | | | | | | | | |
| BY-100 | 800 | 550 | 5 A | 1.5 | .01 | 1250 | | | |
| HIGH CURRENT SILICON RECTIFIERS | | | | | | | | | |
| BYZ-22 | 200 | 10 A | 50 A | 1.7 | 2 MA | 200 | | | DO-8 |
| BYZ-14 | 200 | 20 A | 100 A | 1.85 | 2 | 200 | | | |
| BYZ-15 | (Same as BYZ-14, except for reversed polarity) | | | | | | | | |
| GERMANIUM GENERAL PURPOSE DIODES | | | | | | | | | |
| 1N34 | 60 | 40 | 5 | 1.0 | 30 | 10 | | | solder-in |
| 1N38 | 100 | 50 | 4 | 1.0 | 5 | 3 | | | solder-in |
| 1N58 | 100 | 50 | 4 | 1.0 | 50 | 10 | | | solder-in |
| 1N67A | 80 | 30 | 4 | 1.0 | 50 | 50 | | | submin. |
| 1N90 | 60 | 30 | 5 | 1.0 | 500 | 50 | | | submin. |
| 1N126 | 60 | 30 | 5 | 1.0 | 50 | 10 | | | submin. |
| 1N128 | 40 | 30 | 3 | 1.0 | 10 | 10 | | | submin. |
| 1N198 | 80 | 30 | 5 | 1.0 | 75 | 10 | | | submin. |
| 1N478 | 90 | 50 | 5 | 1.0 | 30 | 3 | | | solder-in |
| 1N618 | 90 | 50 | 5 | 1.0 | 7 | 10 | | | submin. |



SEMICONDUCTORS

- AMERICAN MADE AT ECONOMY PRICES
- OEM QUANTITY DISCOUNTS
- AVAILABLE FROM LOCAL DISTRIBUTORS
- NEWEST TYPES STOCKED



ZENER DIODES

A ZENER VOLTAGE REGULATORS ¾ watt

| | | 20% | 10% |
|------------|---------------|------------|--------|
| DK-750-4.3 | (4.3V) | Net \$1.15 | \$1.45 |
| DK-750-6.2 | (6.2V) | Net 1.15 | 1.45 |
| DK-750-8.5 | (8.5V) | Net 1.15 | 1.45 |
| DK-750-15 | (15. V) | Net 1.15 | 1.45 |
| DK-750-22 | (22. V) | Net 1.15 | 1.45 |

B ZENER VOLTAGE REGULATORS 1 watt

| | | 20% | 10% |
|-------------|---------------|------------|--------|
| DK-1000-4.3 | (4.3V) | Net \$1.35 | \$1.70 |
| DK-1000-6.2 | (6.2V) | Net 1.35 | 1.70 |
| DK-1000-8.5 | (8.5V) | Net 1.35 | 1.70 |
| DK-1000-15 | (15. V) | Net 1.35 | 1.70 |
| DK-1000-22 | (22. V) | Net 1.35 | 1.70 |

C DOUBLE ANODE ZENERS Temperature Compensated

| | | |
|-------|------------------|------------|
| DZ-26 | 6.3V, ±20% | Net \$0.50 |
|-------|------------------|------------|

TRANSISTORS

D PNP TRANSISTOR RADIO KITS

Direct replacement for transistor radios.

| | | |
|--------|-------------------------------|------------|
| DT-304 | For 4-transistor radios | Net \$2.10 |
| DT-305 | For 5-transistor radios | Net 2.45 |
| DT-306 | For 6-transistor radios | Net 2.75 |

RECTIFIERS

E 500MA EPOXY RECTIFIERS

| | | |
|--------|----------------------------------|------------|
| DE-200 | Similar to 1N2069 (200PIV) | Net \$0.30 |
| DE-400 | Similar to 1N2070 (400PIV) | Net .40 |
| DE-600 | Similar to 1N2071 (600PIV) | Net .70 |

RECTIFIERS

F 750MA TOP HAT RECTIFIERS

| | | |
|--------|--------------------------------|------------|
| DL-150 | Replaces 1N599 (50PIV) | Net \$0.11 |
| DL-201 | Replaces 1N600 (100PIV) | Net .20 |
| DL-202 | Replaces 1N602 (200PIV) | Net .33 |
| DL-203 | Replaces 1N603 (300PIV) | Net .39 |
| DL-204 | Replaces 1N604 (400PIV) | Net .48 |
| DL-205 | Replaces 1N605 (500PIV) | Net .60 |
| DL-206 | Replaces 1N606 (600PIV) | Net .75 |
| DL-207 | (700PIV) | Net .95 |
| DL-208 | (800PIV) | Net 1.25 |
| DL-209 | (900PIV) | Net 1.50 |
| DL-210 | (1000PIV) | Net 1.95 |
| DL-211 | (1500PIV) | Net 3.25 |
| DL-212 | (2000PIV) | Net 4.15 |

G 2A CONTROLLED RECTIFIER

| | | |
|--------|-------------------------|------------|
| DCR-20 | Similar to 2N1600 | Net \$3.50 |
|--------|-------------------------|------------|

H 2A SILICON RECTIFIERS*

| | | |
|--------|---------------------------------|------------|
| DM-205 | Replaces 1N2026 (50PIV) | Net \$0.17 |
| DM-210 | Replaces 1N347 (100PIV) | Net .30 |
| DM-220 | Replaces 1N2027 (200PIV) | Net .45 |
| DM-240 | Replaces 1N2029 (400PIV) | Net .90 |
| DM-260 | Replaces 1N2031 (600PIV) | Net 1.35 |
| DM-280 | Replaces 1N1236 (800PIV) | Net 1.75 |
| DM-291 | Replaces 1N3366 (1000PIV) | Net 2.90 |
| DM-292 | Replaces 1N3371 (1500PIV) | Net 4.70 |
| DM-293 | (2000PIV) | Net 6.50 |

* Available in reverse polarity. 7/16" hex.
(G) Available in ceramic base at 10% higher price.

RECTIFIERS

I 12A RECTIFIERS*

Ideal for battery charges, medium power supplies, etc.

| | | |
|---------|---------------------------------|------------|
| DI-1199 | Replaces 1N1199 (50PIV) | Net \$0.75 |
| DI-1200 | Replaces 1N1200 (100PIV) | Net 1.20 |
| DI-1202 | Replaces 1N1202 (200PIV) | Net 1.75 |
| DI-1204 | Replaces 1N1204 (400PIV) | Net 2.60 |
| DI-1206 | Replaces 1N1206 (600PIV) | Net 3.75 |
| DI-1208 | (800PIV) | Net 6.90 |
| DI-1210 | (1000PIV) | Net 9.50 |

* Available in reverse polarity.
(G) Available in ceramic base at 10% higher price.

J 20A CONTROLLED RECTIFIER

Voltage to 400V. 11/16" hex.

| | | |
|---------|-------|-------------|
| DCR-200 | | Net \$14.00 |
|---------|-------|-------------|

K 25A SILICON RECTIFIERS*

Ideal for high power rectification. 11/16" hex.

| | | |
|---------|---------------------------------|------------|
| DH-305A | Replaces 1N248A (50PIV) | Net \$1.50 |
| DH-310A | Replaces 1N249A (100PIV) | Net 2.50 |
| DH-320A | Replaces 1N250A (200PIV) | Net 3.70 |
| DH-340A | Replaces 1N2136A (400PIV) | Net 4.75 |
| DH-360A | Replaces 1N2138A (600PIV) | Net 7.75 |
| DH-380A | (800PIV) | Net 10.00 |

* Available in reverse polarity.
(G) Available in ceramic base at 10% higher price.

L 50A SILICON RECTIFIERS

Excellent for high power use. 1-1/16" hex.

| | | |
|--------|----------------------------------|-------------|
| DH-502 | (25PIV) | Net \$ 2.70 |
| DH-505 | Similar to 1N411B (50PIV) | Net 3.98 |
| DH-510 | Similar to 1N412B (100PIV) | Net 5.98 |
| DH-520 | Similar to 1N413B (200PIV) | Net 6.50 |
| DH-540 | (400PIV) | Net 9.75 |
| DH-560 | (600PIV) | Net 16.00 |

NEW TYPES STOCKED BY YOUR DISTRIBUTOR AS SOON AS ANNOUNCED



SPECIALISTS IN MINIATURIZATION

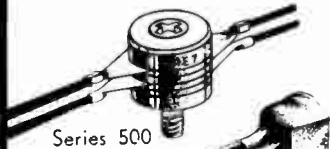
ELECTRONIC PRODUCTS, INC.

Lawrence, Mass.

CONANT *Miniature Metallic Rectifiers*

**STANDARD
SINCE 1933**

Illustrations
approx. actual size



Series 500



Series 160



Series
160-U



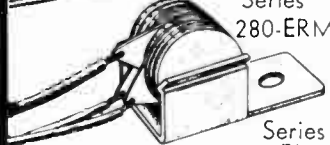
Series
160-C



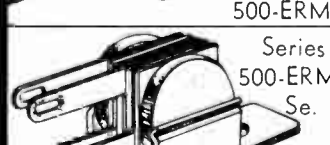
Series
80



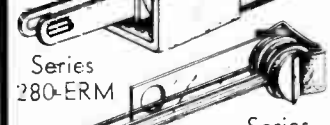
Series
160-ERM



Series
280-ERM



Series
500-ERM



Series
280-ERM
Se.



Series
160-ERM



Series 160



Series
160-C



CONANT MINIATURE METALLIC RECTIFIERS

All Conant rectifiers are manufactured to the highest quality standards from individually tested and graded cells. Copper oxide cells are produced by the exclusive Conant Process and have 24K gold contacts applied in high vacuum.

The Conant Complete Color Code permits identification of rectifier type by color and physical form.

Only basic standard rectifier types are listed below. Many other standard catalog items are available and we are prepared to produce special items to meet customers' special requirements.

COPPER OXIDE TYPES WITH INSULATED LEAD WIRES

| TYPE | CIRCUIT | CELL SIZE | ACTIVE AREA | INPUT | OUTPUT | MOUNTING | FINISH | PRICE |
|----------|----------|-----------|---------------|-------|---------|-----------|--------------|--------|
| M | 1 | .500" | .125 sq. in. | 5V | 100 ma. | 6-32 stud | Lacquer | \$2.10 |
| TH | Series 2 | " | " | " | 75 ma. | " | " | 1.86 |
| HS | 500 3 | " | " | " | 50 ma. | " | " | 1.53 |
| T | 4 | " | " | " | 100 ma. | " | " | 1.53 |
| H | 5 | " | " | " | 50 ma. | " | " | 1.20 |
| B | 1 | .166" | .012 sq. in. | " | 10 ma. | #2 screw | Solid fill | 2.10 |
| BTH | Series 2 | " | " | " | 7 ma. | " | " | 1.86 |
| BHS | 160 3 | " | " | " | 5 ma. | " | " | 1.53 |
| BT | 4 | " | " | " | 10 ma. | " | " | 1.53 |
| BH | 5 | " | " | " | 5 ma. | " | " | 1.20 |
| B-U | 1 | " | " | " | 10 ma. | #2 screw | " | 1.98 |
| BTH-U | 2 | " | " | " | 7 | " | " | 1.74 |
| BHS-U | Series 3 | " | " | " | 5 | " | " | 1.41 |
| BT-U | 160-U 4 | " | " | " | 10 | " | " | 1.41 |
| BH-U | 5 | " | " | " | 5 | " | " | 1.08 |
| B-C | 1 | " | " | " | 10 ma. | Fuse clip | " | 2.10 |
| BTH-C | Series 2 | " | " | " | 7 ma. | " | " | 1.86 |
| BHS-C | 160-C 3 | " | " | " | 5 ma. | " | " | 1.53 |
| BT-C | 4 | " | " | " | 10 ma. | " | " | 1.53 |
| BH-C | 5 | " | " | " | 5 ma. | " | " | 1.20 |
| A | 1 | .080" | .0012 sq. in. | 5V | 1 ma. | #2 screw | Bonded vinyl | 2.10 |
| ATH | Series 2 | .080" | .0012 sq. in. | " | 1 ma. | #2 screw | Bonded vinyl | 1.86 |
| AHS | 80 3 | .080" | .0012 sq. in. | " | 500 ua. | #2 screw | Bonded vinyl | 1.53 |
| AT | 4 | .080" | .0012 sq. in. | " | 500 ua. | #2 screw | Bonded vinyl | 1.53 |
| AH | 5 | .080" | .0012 sq. in. | " | 500 ua. | #2 screw | Bonded vinyl | 1.20 |
| B-ERM* | 1 | " | " | " | 10 ma. | Leads | Lacquer | 1.59 |
| BTH-ERM* | Series 2 | " | " | " | 7 ma. | " | " | 1.35 |
| BHS-ERM* | 160- 3 | " | " | " | 5 ma. | " | " | 1.05 |
| BT-ERM* | ERM 4 | " | " | " | 10 ma. | " | " | 1.05 |
| BH-ERM* | 5 | " | " | " | 5 ma. | " | " | .75 |
| I-ERM* | 1 | .280" | .035 sq. in. | " | 30 ma. | " | " | 1.59 |
| ITH-ERM* | Series 2 | " | " | " | 20 ma. | " | " | 1.35 |
| IHS-ERM* | 280 3 | " | " | " | 15 ma. | " | " | 1.05 |
| IT-ERM* | ERM 4 | " | " | " | 30 ma. | " | " | 1.05 |
| IH-ERM* | 5 | " | " | " | 15 ma. | " | " | .75 |
| M-ERM* | 1 | .500" | .123 sq. in. | " | 100 ma. | #6 screw | " | 1.59 |
| TH-ERM* | Series 2 | " | " | " | 75 ma. | " | " | 1.35 |
| HS-ERM* | 500 3 | " | " | " | 50 ma. | " | " | 1.05 |
| T-ERM* | ERM 4 | " | " | " | 100 ma. | " | " | 1.05 |
| H-ERM* | 5 | " | " | " | 50 ma. | " | " | .75 |

SELENIUM TYPES, wire leads or lugs as shown

| TYPE | CIRCUIT | CELL SIZE | ACTIVE AREA | INPUT | OUTPUT | MOUNTING | FINISH | PRICE |
|------------|----------|-----------|-------------|-------|--------|-----------------|------------|--------|
| SeM-ERM* | Series 1 | .500" | .15 sq. in. | 25V | 60 ma. | #6 screw | Lacquer | \$1.23 |
| SeTH-ERM* | 500 2 | " | " | " | 40 ma. | " | " | 1.08 |
| SeHS-ERM* | ERM 3 | " | " | " | 30 ma. | " | " | .87 |
| SeT-ERM* | Se. 4 | " | " | " | 60 ma. | " | " | .87 |
| SeH-ERM* | 5 | " | " | " | 30 ma. | " | " | .66 |
| SeI* | 1 | .280" | .06 sq. in. | " | 20 ma. | Bracketterminal | " | .66 |
| SeITH* | Series 2 | " | " | " | 15 ma. | " | " | .60 |
| SeIHS* | 280 3 | " | " | " | 10 ma. | " | " | .51 |
| SeIT* | ERM 4 | " | " | " | 20 ma. | " | " | .51 |
| SeIH* | 5 | " | " | " | 10 ma. | " | " | .42 |
| SeB-ERM* | 1 | .166" | .02 sq. in. | " | 10 ma. | Leads | " | .87 |
| SeBTH-ERM* | Series 2 | " | " | " | 7 ma. | " | " | .81 |
| SeBHS-ERM* | 160 3 | " | " | " | 5 ma. | " | " | .69 |
| SeBT-ERM* | ERM 4 | " | " | " | 10 ma. | " | " | .69 |
| SeBH-ERM* | 5 | " | " | " | 5 ma. | " | " | .57 |
| SeB | 1 | " | " | " | 10 ma. | #2 screw | Solid fill | 1.38 |
| SeBTH | Series 2 | " | " | " | 7 ma. | " | " | 1.32 |
| SeBHS | 160 3 | " | " | " | 5 ma. | " | " | 1.17 |
| SeBT | 4 | " | " | " | 10 ma. | " | " | 1.17 |
| SeBH | 5 | " | " | " | 5 ma. | " | " | 1.02 |
| SeB-C | 1 | " | " | " | 10 ma. | Fuse clip | " | 1.38 |
| SeBTH-C | Series 2 | " | " | " | 7 ma. | " | " | 1.32 |
| Se-BHS-C | 160-C 3 | " | " | " | 5 ma. | " | " | 1.17 |
| SeBT-C | 4 | " | " | " | 10 ma. | " | " | 1.17 |
| SeBH-C | 5 | " | " | " | 5 ma. | " | " | 1.02 |

*Resilient structure (U. S. Pat. No. 2,656,493) maintains optimum stack pressure independent of temperature changes, as well as providing the lowest price and smallest size.

CONANT LABORATORIES

Lincoln, Nebraska

GATES

**RECTIFIERS
CAPACITORS
TRANSFORMERS
CHOKES**

SELENIUM RECTIFIERS

SILICON RECTIFIERS

| MAX. AMPS | 0-26 VAC 0-20 VDC | 0-52 VAC 20-40 VDC | 0-78 VAC 40-60 VDC | 0-130 VAC 60-100 VDC | 0-156 VAC 100-120 VDC | STOCK No. | A.C. INPUT UP TO | D.C. OUTPUT UP TO | MAX. AMPS SELF COOLED | MAX. AMPS FAN COOLED | NET PRICE |
|-----------|----------------------|-----------------------|-----------------------|-------------------------|--------------------------|-----------|------------------|-------------------|-----------------------|----------------------|-----------|
| 0.6 | 1.50 | 2.50 | 3.25 | 4.50 | 6.25 | G6S6 | 420 | 390 | 1.5 | — | \$ 4.66 |
| 1.5 | 2.30 | 3.25 | 4.75 | 8.25 | 10.00 | G1-32-3 | 36 | 32 | 10 | — | 19.00 |
| 2.2 | 3.20 | 5.00 | 5.75 | 11.25 | 13.25 | G2-125-3 | 140 | 125 | 10 | — | 28.00 |
| 3.4 | 4.15 | 6.00 | 8.25 | 14.00 | 16.50 | G3-250-3 | 280 | 250 | 10 | — | 40.00 |
| 4 | 7.00 | 11.00 | 15.00 | 24.00 | 27.00 | G1-32-5 | 36 | 32 | 40 | 80 | 30.00 |
| 6.6 | 8.00 | 12.00 | 18.00 | 32.00 | 35.00 | G2-64-5 | 72 | 64 | 40 | 80 | 45.00 |
| 10 | 12.00 | 19.00 | 25.00 | 41.00 | 48.00 | G3-95-5 | 105 | 95 | 40 | 80 | 85.00 |
| 12 | 15.00 | 21.00 | 29.00 | 44.00 | 51.00 | G4-125-5 | 140 | 125 | 40 | 80 | 100.00 |
| 15 | 18.00 | 28.00 | 38.00 | 53.00 | 63.00 | G1-32-5 | 36 | 32 | 50 | 100 | 32.00 |
| 20 | 22.00 | 35.00 | 46.00 | 75.00 | 88.00 | G2-250-5 | 280 | 250 | 50 | 100 | 85.00 |
| 24 | 30.00 | 42.00 | 53.00 | 83.00 | 93.00 | G1-32-6 | 36 | 32 | 75 | 100 | 58.00 |
| 30 | 34.00 | 53.00 | 70.00 | 115.00 | 133.00 | G2-64-7 | 72 | 64 | 150 | 150 | 133.00 |
| 36 | 45.00 | 65.00 | 84.00 | 140.00 | 185.00 | G3-95-6 | 105 | 95 | 75 | 150 | 155.00 |

DURALYTIC CAPACITORS

| MFD. | WVDC | PRICE | MFD. | WVDC | PRICE |
|--------|------|---------|-------|------|---------|
| 2,000 | 50 | \$ 3.75 | 1,000 | 200 | \$14.25 |
| 4,000 | 50 | 4.68 | 2,000 | 200 | 18.75 |
| 10,000 | 50 | 12.44 | 250 | 300 | \$12.25 |
| 1,000 | 75 | \$ 9.80 | 500 | 300 | 14.75 |
| 2,000 | 75 | 10.50 | 750 | 300 | 16.75 |
| 7,000 | 75 | 16.25 | 1,000 | 300 | 17.75 |
| 2,000 | 100 | \$12.90 | 250 | 350 | \$13.25 |
| 4,000 | 100 | 15.50 | 500 | 350 | 14.75 |
| | | | 1,000 | 350 | 19.00 |

TRANSFORMERS

36, 38 and 40 VOLTS*

36 V. CENTER TAPPED**

56 V. CENTER TAPPED***

| MODEL NO. | AMPS | PRICE | MODEL NO. | AMPS | PRICE | MODEL NO. | AMPS | PRICE |
|-----------|------|-------|-----------|------|-------|-----------|------|-------|
| GT 36-2 | 2 | 6.00 | XF 36-1 | 1 | 4.75 | AH 56-2 | 2 | 7.50 |
| GT 36-5 | 5 | 7.60 | XF 36-2 | 2 | 6.45 | AH 56-4 | 4 | 11.50 |
| GT 36-8 | 8 | 13.00 | XF 36-4 | 4 | 7.75 | AH 56-6 | 6 | 21.50 |
| GT 36-10 | 10 | 14.75 | XF 36-8 | 8 | 14.10 | AH 56-12 | 12 | 29.00 |
| GT 36-12 | 12 | 15.00 | XF 36-12 | 12 | 15.50 | | | |
| GT 36-15 | 15 | 21.50 | XF 36-24 | 24 | 34.05 | | | |
| GT 36-20 | 20 | 28.50 | XF 36-30 | 30 | 42.50 | | | |
| GT 36-30 | 30 | 41.00 | XF 36-50 | 50 | 56.75 | | | |
| GT 36-50 | 50 | 55.00 | | | | | | |

* Primary 115 vac 60C, tapped to deliver 36, 38 and 40 vac. ** Provide two 18V secondary windings. Secondaries connected in series gives 36 V as rated; in parallel gives 18 V at twice rated current (taps 9, 18, 27, 36 V.) Primary is tapped for 100, 105, 110, and 115 V on 12, 24, 30, and 50 amp models. ***Center tapped secondary.

CHOKES

| MODEL NO. | AMPS | HY | OHMS | PRICE | MODEL NO. | AMPS | HY | OHMS | PRICE |
|-----------|------|------|------|-------|-----------|------|-------|------|-------|
| GH-1 | 1 | .1 | 1.5 | 4.75 | GH-15 | 15 | .006 | .01 | 14.75 |
| GH-2 | 2 | .04 | .9 | 5.50 | GH-20 | 20 | .004 | .05 | 15.00 |
| GH-4 | 4 | .07 | .6 | 6.45 | GH-24 | 24 | .004 | .025 | 25.00 |
| GH-5 | 5 | .03 | .02 | 6.60 | GH-30 | 30 | .003 | .01 | 35.00 |
| GH-8 | 8 | .03 | .3 | 11.00 | GH-50 | 50 | .001 | .001 | 43.00 |
| GH-10 | 10 | .015 | .05 | 12.50 | GH-100 | 100 | .0005 | .005 | 53.00 |
| GH-12 | 12 | .01 | .1 | 14.20 | | | | | |

POWER SUPPLIES

SEE OUR PAGES ON POWER SUPPLIES
IN SECTION 4000

GATES

ELECTRONIC COMPANY, BRONX, N. Y.

SERVICE-DESIGNED

ENTERTAINMENT SEMICONDUCTORS



TRANSISTORS • RECTIFIERS • DIODES

UNIVERSAL REPLACEMENTS

ELECTRONICS



TRANSISTORS

| Catalog No. | Use | Application | Sugg. Resale |
|-------------|-----|--|--------------|
| GE-1 | PNP | Mixer/Oscillator Converter • RF and IF Amplifier.... | \$1.30 |
| GE-2 | PNP | AF Amplifier | 1.20 |
| GE-3 | PNP | AF Power Amplifier | 2.25 |
| GE-4 | PNP | AF High Power Amplifier | 4.90 |
| GE-5 | NPN | Mixer/Oscillator Converter • RF and AF Amplifier.. | 1.75 |
| GE-6 | NPN | Mixer/Oscillator Converter • RF Amplifier | 1.75 |
| GE-7 | NPN | IF Amplifier | 1.58 |
| GE-8 | NPN | AF Amplifier | 1.26 |

SILICON RECTIFIER

| Catalog No. | Div. | Max. IDC | Max. Current Surge Rating | Sugg. Resale |
|-------------|------|----------|---------------------------|--------------|
| GE-504 | 400 | 750 | *45 AMPS | \$1.00 |

*Because of the 45 AMP. Surge Rating, the G.E.-504 is recommended as a replacement for all Selenium and Silicon Rectifiers used in TV Receivers. No current limiting resistor is necessary when replacing other rectifiers with the G.E. 504.

REGISTERED ENTERTAINMENT JEDEC TYPES

TRANSISTORS

| JEDEC No. | Type | Use | Sugg. Resale | JEDEC No. | Type | Use | Sugg. Resale |
|-----------|------|--------|--------------|-----------|------|--------|--------------|
| GE-M-100 | NPN | .... | \$1.50 | 2N320 | PNP | AF | \$.59 |
| 2N107 | PNP | AF | .55 | 2N321 | PNP | AF | .68 |
| 2N135 | PNP | IF | 2.15 | 2N322 | PNP | AF | .48 |
| 2N136 | PNP | IF | 2.55 | 2N323 | PNP | AF | .60 |
| 2N137 | PNP | IF | 6.20 | 2N324 | PNP | AF | .75 |
| 2N169 | NPN | IF | 1.57 | 2N404 | PNP | SW | .63 |
| 2N169A | NPN | AF | 2.40 | 2N448 | NPN | IF | .83 |
| 2N170 | NPN | IF | .75 | 2N449 | NPN | IF | 1.57 |
| 2N186A | PNP | AF OUT | 1.95 | 2N450 | PNP | SW | 2.10 |
| 2N187A | PNP | AF OUT | 1.50 | 2N508 | PNP | AF OUT | .83 |
| 2N188A | PNP | AF OUT | 1.64 | 2N1086 | NPN | OSC | .83 |
| 2N189 | PNP | AF | .70 | 2N1086A | NPN | OSC | 1.57 |
| 2N190 | PNP | AF | .75 | 2N1087 | NPN | OSC | 1.82 |
| 2N191 | PNP | AF | .83 | 2N1097 | PNP | AF OUT | .47 |
| 2N192 | PNP | AF | 1.57 | 2N1098 | PNP | AF OUT | .42 |
| 2N241A | PNP | AF OUT | .92 | 2N1121 | NPN | IF | 1.57 |
| 2N265 | PNP | AF | 1.87 | 2N1144 | PNP | AF OUT | .68 |
| 2N292 | NPN | IF | .75 | 2N1145 | PNP | AF OUT | .68 |
| 2N293 | NPN | IF | .83 | 2N1415 | PNP | AF-SW | .99 |
| 2N319 | PNP | AF | .44 | 2N1694 | NPN | SW | .99 |
| | | | | 2N2160 | PNP | SW | 1.49 |

RECTIFIERS

| Type | PIV | Max. I _{DC} | Sugg. Resale |
|--------|-----|----------------------|--------------|
| 1N91 | 100 | 150 | \$.85 |
| 1N576A | 380 | 400 | 1.50 |
| 1N584 | 380 | 400 | 1.97 |
| 1N1008 | 380 | 400 | 1.50 |
| 1N1016 | 380 | 400 | 3.00 |
| 1N1024 | 380 | 400 | 1.50 |
| 1N1692 | 100 | 600 | .59 |
| 1N1693 | 200 | 600 | .63 |
| 1N1694 | 300 | 600 | .78 |
| 1N1695 | 400 | 600 | .96 |
| 1N1696 | 500 | 600 | .96 |
| 1N1697 | 600 | 600 | 1.41 |

CRYSTAL DIODES

| Type | Description | AVG Forward Current (MA) | Sugg. Resale |
|--------|-------------------|--------------------------|--------------|
| 1N34AS | General Purposes | 50 | \$.32 |
| 1N60 | Video Detector | 50 | .48 |
| 1N82A | Silicon UHF Mixer | — | .91 |
| 1N295 | 50 MC Detector | 30 | .35 |

Vac-u-Sel

SELENIUM DUAL-DIODE RECTIFIERS

| Catalog No. | Type | Sugg. Resale |
|-------------|------------------|--------------|
| 6GC1 | COMMON CATHODE | \$.54 |
| 6GD1 | SERIES CONNECTED | .54 |
| 6GX1 | COMMON ANODE | .54 |

6th EDITION TRANSISTOR MANUAL INCLUDING TUNNEL DIODES

22 fact filled chapters containing

- Transistor Theory
- Characteristics
- Specifications
- Applications

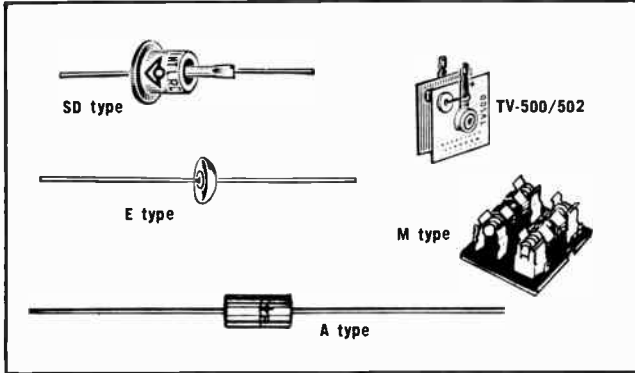


PRICE \$2.00

INTERNATIONAL RECTIFIER

EXECUTIVE OFFICES, EL SEGUNDO, CALIFORNIA

SEMICONDUCTORS



SILICON REPLACEMENT RECTIFIERS FOR TV, RADIO AUDIO AND SIMILAR APPLICATIONS

The most complete line of industrial and replacement silicon rectifiers. Type E are small, economy diodes. Type A is the new, all insulated miniature Mark VII, very high rated for its size. Type SD 500 is the most popular, hermetically sealed "Top-Hat," TV 500 and TV 502 are top-hats, mounted on heat-sinks as direct replacement for selenium stacks. Type M are "plug-ins."

RATINGS (Into Capacitive Load)

| Type | Peak Rev. Volt | RMS Input | DC Output (Ma) | Max. Surge, Amp. |
|--------|----------------|-----------|----------------|------------------|
| 5A4 | 400 | 140 | 750 | 50 |
| 2E4 | 400 | 140 | 250 | 2 |
| 5E4 | 400 | 140 | 450 | 5 |
| 1M4 | 400 | 140 | 250 | 2 |
| 5M4 | 400 | 140 | 750 | 50 |
| SD 500 | 400 | 140 | 650 | 5 |
| TV 500 | 400 | 140 | 750 | 5 |
| TV 502 | 800 | 280 | 750 | 5 |

PACKAGING ON ABOVE RECTIFIERS

| Int'l No. | Packaging | Net |
|-------------|---|--------|
| 5A4 | Indiv. Packaged | \$1.35 |
| 5A4-BU | Bulk — 10 to pkg. | 1.07* |
| 5A4-95** | Plastic box of 5 | 5.60 |
| 2E4 | Indiv. Boxes | .70 |
| 2E4-BU | Bulk — 10 to a pkg. | .68* |
| 5E4 | Indiv. Boxes | .90 |
| 5E4-BU | Bulk — 10 to a pkg. | .72* |
| 5E4-95* | Plastic Box of 5 | 3.95 |
| 1M4 | Indiv. Boxed | .95 |
| 1M4-BU | Bulk — 10 to a pkg. | .85* |
| 1M4-K | Kit, includ. rectif. holder, hwde and resistor | 1.00 |
| 5M4 | Indiv. Boxed | 1.40 |
| 5M4-95** | Plastic box of 5 | 6.75 |
| 5M4-BU | Bulk — 10 to a pkg. | 1.30* |
| 5M4-K | Kit of 2 rect. with holder | 2.80 |
| 43-1803 | SNAP-IN Holder only (single) | .12 |
| 43-1804 | SNAP-IN Holder only (dual) | .25 |
| 43-1805 | SNAP-IN Holder only (quadruple) | .90 |
| SD 500 | Indiv. boxes, no hardware | 1.05 |
| SD 500-BU | Bulk, no hardware, 10 to pkg. | .92 |
| SD 500-92** | Popular Kit of 2 rectifiers incl. conversion hardware and compl. instructions | 2.30 |
| SD 500-95** | Same as above but kit of 5 | 5.50 |
| TV 500 | Universal, 750 mil rectifier | 1.85 |
| TV 502 | Dual rectifier for voltage doubler circuits and color TV | 3.30 |

*in lots of 10 **order per kit

SELENIUM BATTERY CHARGER REPLACEMENTS

Type JD-4346B: Universal unit for commercial "fast" chargers; fits many brands without circuit or mechanical modifications. Single-Plate Rectifiers: Replace low current types in "trickle" type battery chargers. Can be assembled for any function (center tap, bridge, etc.).

| Int'l No. | Output DC Volts | DC Amps | Max. AC Volts | Circuit Diag. | H. D. | W. D. | Stud | Net Each | |
|-----------|-----------------|---------|---------------|---------------|-------|-------|-------|----------|---------|
| JD-4346B | 6-12 | 30-100* | 16.5-0-16.5 | 1A | 6 | 5 | 4 1/2 | 3/8-16 | \$16.75 |
| JD-4346D | 6-12 | 30-100* | 16.5-0-16.5 | 1 | 6 | 5 | 4 1/2 | 3/8-16 | 16.75 |
| JD-116K | 6-12 | 2† | 16.5-0-16.5 | | 3 | 3 | 1/2 | | 1.20 |
| JD-117K | 6-12 | 3† | 16.5-0-16.5 | | 4 | 4 | 1/2 | | 1.80 |
| JD-241K | 6-12 | 6† | 16.5-0-16.5 | | 6 | 5 | 1/2 | | 2.46 |
| JD-240K | 6-12 | 9† | 16.5-0-16.5 | | 7 1/2 | 6 1/2 | 1/2 | | 3.40 |

*30 amps without fan; 100, with fan rated 800 LFM. †Ratings shown are for half wave; two plates in center-tap circuit have twice this rating.

ITEMS ON THIS PAGE CARRIED BY INDUSTRIAL AND COMMERCIAL PRODUCTS DISTRIBUTORS

SELENIUM RECTIFIERS RADIO-TV REPLACEMENT TYPES

Compact, high density types for economy with reliability; for radio, TV and audio replacement. Feature negligible leakage and aging; stable characteristics. Supplied with mounting bracket and hardware. Type QM50 is encapsulated.

| Int'l No. | Output DC MA | Max. RMS Volts | Plate Size, lin. | Mtg. Size Max., In. | Net Each |
|-----------|--------------|----------------|------------------|---------------------|----------|
| T065/075 | To 75 | 130 | .067 sq. | 3/16 | \$0.48 |
| T075/150 | 75-150 | 130 | 1 sq. | 3/4 | .69 |
| T200/300 | 150-300 | 130 | 1 1/4 sq. | 3/4 | 1.08 |
| T350/400 | 300-400 | 130 | 1 1/2 sq. | 1 1/8 | 1.25 |
| T450/500 | 400-500 | 130 | 1 1/2 sq. | 1 1/8 | 1.32 |
| T550/650 | 500-650 | 130 | 2 sq. | 2 | 1.74 |
| QM50 | To 50 | 130 | 7/8 sq. | 1/2 | .64 |

FULL WAVE BRIDGE RECTIFIERS

| Int'l No. | Max. DC Ma | Max. RMS Volts | Dimensions Inches | | | Net Each |
|-----------|------------|----------------|-------------------|-----|-------|----------|
| | | | H. | W. | D. | |
| Q1B | 100 | 25 | .67 | .67 | 3/8 | \$0.84 |
| Q4B | 100 | 130 | .67 | .67 | 1 1/8 | 1.56 |
| A1B | 180 | 25 | 1.0 | 1.0 | 3/4 | 1.22 |
| B1B | 300 | 25 | 1.2 | 1.2 | 3/4 | 1.28 |
| C1B | 600 | 25 | 1.5 | 1.5 | 3/4 | 1.46 |
| M1B | 1200 | 25 | 2.0 | 2.0 | 3/4 | 1.72 |

SINGLE PLATE HALF WAVE RECTIFIERS

| Int'l No. | Max. DC Ma | Max. RMS Volts | Min. Series Rstr. Ohms | Dimensions, Inches | | | Net Each |
|-----------|------------|----------------|------------------------|--------------------|-----|-----|----------|
| | | | | H. | W. | D. | |
| Q1H | 65 | 25 | 47 | .67 | .67 | 3/8 | \$0.36 |
| A1H | 100 | 25 | 22 | 1.0 | 1.0 | 3/4 | .38 |
| B1H | 150 | 25 | 15 | 1.2 | 1.2 | 3/4 | .40 |
| C1H | 250 | 25 | 5 | 1.5 | 1.5 | 3/4 | .42 |
| M1H | 500 | 25 | 5 | 2.0 | 2.0 | 3/4 | .56 |

MINIATURE BRIDGE RECTIFIERS

| | | | | | | | |
|----------|-----|-----|-------|-------|-------|-------|--------|
| D3575F | 100 | 130 | ..... | 2 1/2 | 2 1/2 | 1 1/4 | \$1.56 |
| 60-9150* | 100 | 260 | ..... | 2 1/2 | 2 1/2 | 1 1/4 | 1.56 |
| 61-4037 | 100 | 260 | ..... | 2 1/2 | 2 1/2 | 1 1/4 | 3.10 |

*Doubler stack; ratings for two stacks connected as full wave bridge; half-wave and doubler ratings are half of those shown.

INDUSTRIAL SELENIUM RECTIFIERS NEW HIGH DENSITY TYPES

Ideal for limited space and weight applications; delivers approximately twice the rectified DC output of standard units. Save 50% in volume for a given rating. Low fwd v. drop; high inverse voltage. Circuit diagram 1, all units rated 0-14 v. DC; circuit diagram 2, all others (see below).

| Int'l No. | DC Output Volts | Input Amps | Input AC Volts | Size, Inches H. x W. x D. | Stud | Net Each |
|-----------|-----------------|------------|----------------|---------------------------|---------|----------|
| J14C04 | 0-14 | 0.4 | 36 | 1 x 1 x 1 1/8 | 8-32 | \$ 0.95 |
| J14C1 | 0-14 | 1.5 | 36 | 1 1/2 x 1 1/2 x 1 1/8 | 8-32 | 1.39 |
| J14C5 | 0-14 | 4.8 | 36 | 3 x 3 x 1 1/8 | 3/8-16 | 3.48 |
| J14C8 | 0-14 | 8.4 | 36 | 4 x 4 x 1 1/8 | 3/8-16 | 4.89 |
| J14C17 | 0-14 | 17.4 | 36 | 6 x 5 x 2 1/8 | 3/8-16 | 7.55 |
| J29B04 | 0-29 | 0.4 | 36 | 1 x 1 x 1 1/2 | 8-32 | 1.57 |
| J29B1 | 0-29 | 1.5 | 36 | 1 1/2 x 1 1/2 x 1 1/2 | 8-32 | 2.28 |
| J29B5 | 0-29 | 4.8 | 36 | 3 x 3 x 2 1/8 | 3/8-16 | 6.43 |
| J29B8 | 0-29 | 8.4 | 36 | 4 x 4 x 2 1/8 | 3/8-16 | 8.93 |
| J29B17 | 0-29 | 17.0 | 36 | 6 x 5 x 3 1/4 | 3/8-16 | 13.27 |
| J58B04 | 0-58 | 0.4 | 72 | 1 x 1 x 2 1/4 | 8-32 | 3.11 |
| J58B1 | 0-58 | 1.5 | 72 | 1 1/2 x 1 1/2 x 2 1/4 | 8-32 | 4.49 |
| J58B5 | 0-58 | 4.8 | 72 | 3 x 3 x 4 3/8 | 3/8-16 | 12.08 |
| J58B8 | 0-58 | 8.4 | 72 | 4 x 4 x 4 3/8 | 3/8-16 | 16.75 |
| J58B17 | 0-58 | 17.0 | 72 | 6 x 5 x 5 5/8 | 3/8-16 | 26.52 |
| J116B04 | 0-116 | 0.4 | 144 | 1 x 1 x 3 1/4 | 8-32 | 5.56 |
| J116B1 | 0-116 | 1.5 | 144 | 1 1/2 x 1 1/2 x 3 1/4 | 8-32 | 8.15 |
| J116B5 | 0-116 | 4.8 | 144 | 3 x 3 x 7 3/8 | 3/8-16 | 22.91 |
| J115B8 | 0-116 | 8.4 | 144 | 4 x 4 x 7 3/8 | 3/8-16 | 32.09 |
| J116B17 | 0-116 | 17.0 | 144 | 6 x 5 x 10 1/4 | 3/8-16 | 50.45 |
| J135B04 | 0-135 | 0.4 | 180 | 1 x 1 x 4 3/8 | 8-32 | 6.77 |
| J135B1 | 0-135 | 1.5 | 180 | 1 1/2 x 1 1/2 x 4 3/8 | 8-32 | 9.93 |
| J135B5 | 0-135 | 4.8 | 180 | 3 x 3 x 8 1/8 | 3/8-16 | 28.29 |
| J135B8 | 0-135 | 8.4 | 180 | 4 x 4 x 8 1/8 | 3/8-16 | 39.71 |
| J135B17 | 0-135 | 17.0 | 180 | 6 x 5 x 12 3/8 | 3/10-16 | 62.43 |

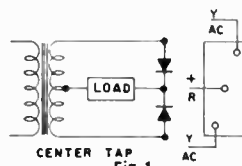


Fig. 1

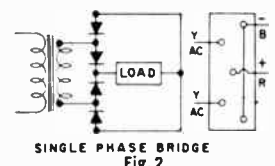


Fig. 2

CIRCUIT DIAGRAMS

FIG 1A Same as Fig. 1 Except Center Terminal (Red) Is Negative

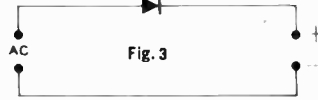
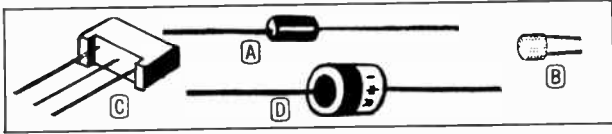


Fig. 3

INTERNATIONAL RECTIFIER

EXECUTIVE OFFICES, EL SEGUNDO, CALIFORNIA



GERMANIUM DIODES (FIG. A)

| Int'l No. | Min. Fwd. Cur., Ma* | Max. Inv. Current | | Max. DC Inv. V. | Net Each |
|-----------|---------------------|----------------------|-------------|-----------------|----------|
| | | Ma | At V. | | |
| 1N34A | 5.0 | 0.500 | —50 | 60 | \$0.40 |
| 1N48 | 4.0 | 0.833 | —50 | 70 | .34 |
| 1N60 | 6.0 | 0.800 | —30 | 40 | .29 |
| 1N64 | 5.0 | 0.200 | —10 | 25 | .38 |
| 1N82A | | 0.030 @ —1.5V | — | 25 | .91 |
| 1N67A | 5.0 | 0.005 @ —5V | 0.050 @ —50 | 80 | .40 |
| 1N87A | 4.0 | 0.100 | —25 | 30 | .35 |
| 1N294 | 5.0 | 0.800 | —50 | 70 | .52 |
| 1N295 | | 0.200 | —10 | 50 | .35 |
| 1N541 | | Matched pair 1N541's | — | 45 | .40 |
| 1N542 | | 0.350 | —45 | — | .90 |
| 1N636 | 2.5 | 0.010 | —10 | 60 | .38 |

*At inverse voltage.

SELENIUM DIODES (FIG. B)

| Int'l No. | JEDEC No. | Input Volts, RMS | | Out.,* DC Ma | PRV Volts | Net Each |
|-----------|-----------|------------------|--------|--------------|-----------|----------|
| | | Resis. | Capac. | | | |
| 1T1 | 1N1625A | 33 | 20 | 0.5 | 48 | \$0.37 |
| 2T1 | 1N1626A | 66 | 40 | 0.5 | 96 | .41 |
| 1U1 | 1N1627 | 33 | 20 | 3.75 | 48 | .37 |
| 2U1 | 1N1628 | 66 | 40 | 3.75 | 96 | .41 |
| 3U1 | 1N1629 | 99 | 60 | 3.75 | 144 | .45 |
| 4U1 | 1N1630 | 132 | 80 | 3.75 | 192 | .48 |
| 6U1 | 1N1632 | 198 | 120 | 3.75 | 288 | .56 |
| 1V1 | 1N1635 | 33 | 20 | 12.5 | 48 | .37 |
| 2V1 | 1N1636 | 66 | 40 | 12.5 | 96 | .41 |
| 5V1 | 1N1639 | 165 | 100 | 12.5 | 240 | .52 |
| 3Y1 | 1N1642 | 99 | 60 | 28 | 144 | .45 |

SELENIUM DUAL DIODES (FIG. C)

Quality replacements for TV phase detector circuits. Superior quality design. Come complete with connecting diagram and interchangeability table.

| Int'l No. | Description | Equivalent to | | | Net Each |
|-----------|------------------|---------------|-----|-------|----------|
| | | G.E. | IRC | ITT | |
| DD04 | Common cathode | 6GC1 | D4 | K1615 | \$0.54 |
| DD05 | Series connected | 6GD1 | D5 | K1616 | .34 |
| DD06 | Common anode | 6GX1 | D6 | K1617 | .54 |
| DD07 | Common anode | — | D7 | — | 1.25 |

SELENIUM CONTACT PROTECTORS (FIG. D)

Make circuits safe against arcing, flashover and erosion across relay, switch or other contacts. Low cost, high efficiency. Miniature design with pigtail leads for fast installation. When ordering, make sure that maximum voltage rating of the protector exceeds the maximum value of the supply voltage. Size: Indicated by center letter of number (S1V1P, S1Y1P, etc.) V—380" dia. Y—500" dia. All units .620" long except S6V6P and S6Y6P which are .990" long.

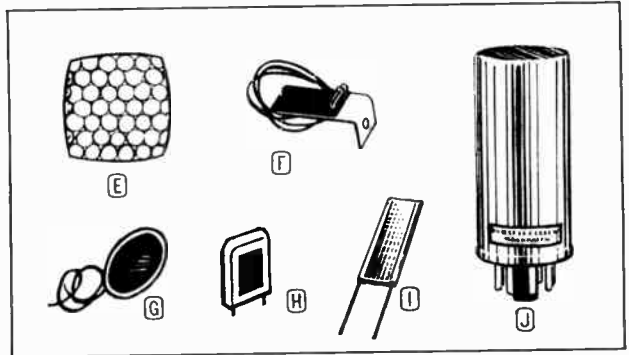
| DC TYPES | | | | AC TYPES | | | | |
|-----------|------|------|----------|-----------|-----------|-----------|----------|-------|
| Int'l No. | Min. | Max. | Net Amps | Int'l No. | Max. WVAC | Max. Amps | Net Each | |
| S1V1P | 15 | 22 | .25 | \$0.89 | S1V1P | 26 | .20 | \$.89 |
| S2V1P | 23 | 44 | .25 | .90 | S2V2P | 52 | .20 | 1.07 |
| S3V2P | 45 | 66 | .25 | 1.07 | S3V3P | 78 | .20 | 1.08 |
| S4V2P | 67 | 88 | .25 | 1.08 | S4V4P | 104 | .20 | 1.26 |
| S5V2P | 89 | 110 | .25 | 1.24 | S5V5P | 130 | .20 | 1.40 |
| S6V2P | 111 | 132 | .25 | 1.25 | S6V6P | 156 | .20 | 1.42 |
| S7V2P | 133 | 154 | .25 | 1.26 | S1Y1P | 26 | .40 | .94 |
| S1Y1P | 15 | 22 | .60 | .94 | S2Y2P | 52 | .40 | 1.13 |
| S2Y1P | 23 | 44 | .60 | .94 | S3Y3P | 78 | .40 | 1.14 |
| S3Y2P | 45 | 66 | .60 | 1.14 | S4Y4P | 104 | .40 | 1.38 |
| S4Y2P | 67 | 88 | .60 | 1.14 | S5Y5P | 130 | .40 | 1.56 |
| S5Y2P | 89 | 110 | .60 | 1.36 | S6Y6P | 156 | .40 | 1.58 |
| S6Y2P | 111 | 132 | .60 | 1.37 | | | | |
| S7Y2P | 133 | 154 | .60 | 1.38 | | | | |

SILICON HIGH VOLTAGE TUBE REPLACEMENT RECTIFIERS (FIG. J)

Designed to replace vacuum tube and mercury vapor tube rectifiers; long life, high temp. operation, no warm up time. Equipped with tube bases to allow direct replacement.

| Int'l No. | JEDEC No. | PRV Volts | Max. Inp. Volts | Max. MaDC 75° C | Replaces Tube Type | Net Each |
|-----------|-----------|-----------|-----------------|-----------------|---|----------|
| ST-1 | 1N2630 | 1500 | 1050 | 85 | 6X4, 12X4 | \$13.00 |
| ST-1A | 1N570 | 1500 | 1050 | 75 | MIL 6X4 and 12X4 | 30.00 |
| ST-2 | 1N2631 | 1600 | 1130 | 600 | 5AW4, 5AX4, 5A24, 5AU4, 5W4, 5Y3, 5U4, 5T4, 5Z4, 6004 | 13.00 |
| ST-2A | 1N2632 | 2800 | 1950 | 250 | 5R4, 5R4W | 20.45 |
| ST-3 | 1N2633 | 1600 | 1130 | 600 | 6AX5, 6W5, 6X5, 6ZY5, 0Z4, 5839, 5852, 5X4 | 13.00 |
| ST-4 | 1N2634 | 1600 | 1130 | 600 | 5Z3, 80, 82, 83, 83V | 13.00 |
| ST-5 | 1N2635 | 1500 | 1050 | 85 | Hi. alt. 6X4, 12X4 | 14.40 |
| ST-6 | 1N2636 | 1500 | 1050 | 85 | 84/6Z4 | 14.40 |
| ST-7A | | 10500 | 7500 | 250 | 866A | 28.25 |
| ST-8 | | 1250 | 880 | 80 | 0Z4, 6X5 | 9.00 |
| ST-9 | | 10000 | 7000 | 1250 | 8008 | 137.50 |
| ST-10 | | 10000 | 7000 | 1250 | 872A | 137.50 |
| ST-13 | | 1275 | 900 | 130 | 6BW4, 12BW4 | 13.00 |

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PHOTOCELLS, SUN BATTERIES AND PHOTO-CONDUCTIVE CELLS EXPERIMENTER'S TYPES

Specially selected, low priced, efficient units for the experimenter and hobbyist. Many applications in transistorized radios, light meters, powering small motors, etc. Rugged selenium types have spectral response similar to the human eye; often used in light meters. Silicon cells have higher light conversion efficiency. Types "S" are the same as used for battery charging in space vehicles. All units supplied with pigtail leads. Outputs, shown, is in full sunlight, using conventional volt and ma meter.

| Int'l No. | Fig. | Description | Output | | Case Size, In. | Net Each |
|-----------|------|-------------|--------|-------------|-----------------|----------|
| | | | Volts | Ma | | |
| B2M | F | Selenium* | 0.3-4 | 2 | 1 1/2 x 3/4† | \$1.50 |
| B3M | E | Selenium | 0.3-4 | 1 1/2-2 1/2 | 1 1/2 sq. x 3/8 | 1.75 |
| S1M | E | Silicon | 0.3-5 | 10-16 | 1 1/2 sq. x 3/8 | 2.25 |
| S3M | E | Silicon | 0.6-9 | 10-16 | 1 1/2 sq. x 3/8 | 3.95 |
| S5M | E | Silicon | 0.6-9 | 18-25 | 1 1/2 sq. x 3/8 | 4.95 |

*With mounting bracket; all others have plastic case.

INDUSTRIAL SELENIUM TYPES

Widely used in photography and other optical applications. Spectral response similar to human eye. Output: Rated at 100 foot-candles into 100-ohm load. Suffix PL: (Example, A5PL) Indicates 6" flexible leads. Suffix M: Stud terminal types. Type DP3: Plug-in pin type. Type DP5: Solder terminal type.

| Int'l No. | Fig. | Description | Output μa | Net Each |
|-----------|------|--|-----------|----------|
| A5PL | G | Unmounted, 1 1/2" round | 250 | \$ 2.50 |
| A10PL | G | Unmounted, 1 1/2" round | 600 | 5.00 |
| A15PL | G | Unmounted, 2" round | 770 | 6.50 |
| A5M | | Molded case, 1 1/2" dia. x 0.3" thick | 220 | 7.00 |
| A15M | | Molded case, 2 1/2" dia. x 0.3" thick | 700 | 11.00 |
| B2PL | | Unmounted, .72" x .44" | 77 | 1.50 |
| B10PL | | Unmounted, 1.68" x 0.88" | 380 | 3.00 |
| B10M | | Molded case, 2.4" x 1.1" x 0.4" | 320 | 7.00 |
| B15PL | | Unmounted, 1.68" square | 640 | 6.50 |
| DP3 | H | Herm. sealed case, 3/4" x .35" x .36" | 66 | 10.00 |
| DP5 | H | Herm. sealed case, 2" sq. x 3/8" thick | 600 | 14.00 |

INDUSTRIAL SILICON SOLAR CELLS (FIG. I)

Higher efficiency than selenium cells; principally used to convert solar energy directly into electricity. Operate portable radios, charge batteries, etc. Output: Rated in full sunlight using conventional meters. Type S: Supplied with flexible pigtail leads. Type SM: Five S1020E6 cells in series. Turret terminals on back.

| Int'l No. | Description | Output | | Size, In. | Net Each |
|------------|-------------|--------|----|-------------|----------|
| | | Volts | Ma | | |
| S1020E4-PL | Unmounted | 0.40 | 18 | 0.4 x 0.8 | \$ 1.95 |
| S1020E6-PL | Unmounted | 0.40 | 27 | 0.4 x 0.8 | 2.50 |
| S1020E8-PL | Unmounted | 0.40 | 36 | 0.4 x 0.8 | 3.85 |
| 5SM1020E6 | Mounted | 1.85 | 29 | 2 1/2 x 3/8 | 13.20 |

IR LIGHT SENSITIVE PHOTO CELL (CADMIUM SULPHIDE CELL) Fig. E

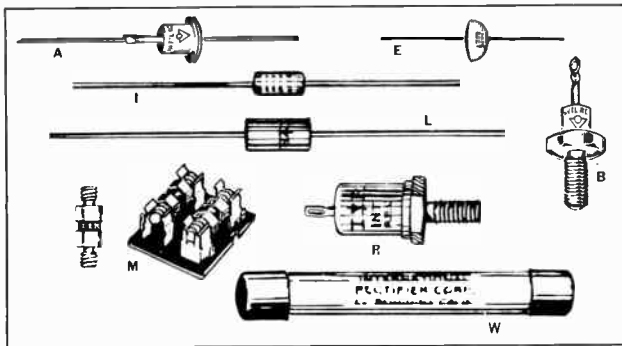
Extremely sensitive device. Activates relays for use in door-openers, burglar alarms, traffic and industrial control counters, turning lights on in evening for store windows, signs, parking lots, etc. These cells are "light sensitive resistors" with resistance varying from a few hundred Ohms or less to bright light, to Megohms in darkness. A 24 page Experimenter's Handbook supplied free with each cell. Max. voltage 120 AC or DC, 0.2 Watt Max. Power dissipation.

| Int'l No. | Max. Volts | Max. Pw. Dissip. | Approx. Resis., Ohms | | | Net Each |
|-----------|------------|------------------|----------------------|------|-------|----------|
| | | | Dark | 10FC | 100FC | |
| CS-120-M6 | 120 | .2 watt | 1.5 meg | 10K | 2000 | 2.35 |

INTERNATIONAL RECTIFIER

EXECUTIVE OFFICES, EL SEGUNDO, CALIFORNIA

SEMICONDUCTORS



SUBMINIATURE SILICON GLASS DIODES (FIG. I)

Silicon diffused-junction glass diodes assure high conductance with exceptional forward and reverse characteristics.

GENERAL PURPOSE TYPES

| JEDEC Part No.* | PRV, Volts | Max. Rect. Current Ma | | Net 1-99 | JEDEC Part No.* | PRV, Volts | Max. Rect. Current Ma | | Net 1-99 |
|-----------------|------------|-----------------------|---------|----------|-----------------|------------|-----------------------|---------|----------|
| | | @ 25°C | @ 150°C | | | | @ 25°C | @ 150°C | |
| 1N456 | 25 | 90 | 25 | .62 | 1N461 | 25 | 60 | 25 | .62 |
| 1N457 | 60 | 75 | 25 | .74 | 1N462 | 60 | 50 | 25 | .74 |
| 1N458 | 125 | 55 | 25 | .86 | 1N463 | 175 | 30 | 15 | .86 |
| 1N459 | 175 | 40 | 25 | 1.12 | 1N464 | 125 | 40 | 20 | 1.12 |

*Add suffix "A" to JEDEC part No. for 5% tolerance units.

MINIATURE SILICON POWER RECTIFIERS (FIG. A)

Highly reliable silicon power diodes provide optimum power dissipation with miniaturized hermetically sealed packaging. This diode is smaller than conventional top-hat diodes. Case size is .025" diam. x 0.275" length. Ratings for 60 cps resistive or inductive loads.

| JEDEC Part No. | PRV, Volts | Max. Rect. Current Ma | | Net 1-99 | JEDEC Part No. | PRV, Volts | Max. Rect. Current Ma | | Net 1-99 |
|----------------|------------|-----------------------|---------|----------|----------------|------------|-----------------------|---------|----------|
| | | @ 50°C | @ 100°C | | | | @ 50°C | @ 100°C | |
| 1N1701 | 50 | 300 | 150 | .75 | 1N1704 | 300 | 300 | 150 | .75 |
| 1N1702 | 100 | 300 | 150 | .87 | 1N1705 | 400 | 300 | 150 | .87 |
| 1N1703 | 200 | 300 | 150 | 1.01 | 1N1706 | 500 | 300 | 150 | 1.01 |

High Temperature Diodes (Fig. A)

Optimum reliability, high efficiency and reduced space requirements. Provide maximum forward conductance under elevated temperature without additional heat sink; saving space and assembly time and cost. Max. voltage drop: 0.5 v; max. leakage current: 0.4 ma (1N536 and 1N537), 0.3 ma all other types; all at 150°C. Ratings are absolute maximum, 60 cps resistive or inductive loads.

| JEDEC Part No. | PRV, Volts | Max Rectified DC Output, Ma | | Max Input RMS Volts* | Net 1-99 |
|----------------|------------|-----------------------------|---------|----------------------|----------|
| | | @ 50°C | @ 150°C | | |
| 1N536 | 50 | 750 | 250 | 35 | .66 |
| 1N537 | 100 | 750 | 250 | 70 | .74 |
| 1N538 | 200 | 750 | 250 | 140 | .76 |
| 1N539 | 300 | 750 | 250 | 210 | .91 |
| 1N540 | 400 | 750 | 250 | 280 | 1.07 |
| 1N547 | 600 | 750 | 250 | 420 | 1.65 |
| 1N1095 | 500 | 750 | 250 | 350 | 1.07 |
| 1N1096 | 600 | 750 | 250 | 420 | 1.65 |

SILICON GENERAL PURPOSE RECTIFIERS (FIG. A)

Hermetically sealed to assure long, trouble-free life. Manufactured to the same rigid requirements specified for critical military and industrial applications.

| Int'l Part No. | Peak Inv. Volts | Max Rect Current Ma | | Max RMS Input Volts | Net 1-99 |
|----------------|-----------------|---------------------|---------|---------------------|----------|
| | | @ 50°C | @ 100°C | | |
| SD-91 | 100 | 550 | 300 | 70 | .59 |
| SD-92 | 200 | 550 | 300 | 140 | .68 |
| SD-93 | 300 | 550 | 300 | 210 | .86 |
| SD-94 | 400 | 550 | 300 | 280 | .96 |
| SD-95 | 500 | 550 | 300 | 350 | 1.06 |
| SD-91A | 100 | 750 | 500 | 70 | .62 |
| SD-92A | 200 | 750 | 500 | 140 | .72 |
| SD-93A | 300 | 750 | 500 | 210 | .90 |
| SD-94A | 400 | 750 | 500 | 280 | 1.01 |
| SD-95A | 500 | 750 | 500 | 350 | 1.12 |

1.8 AMP SILICON RECTIFIER CELLS (FIG. A)

Silicon diffused-junction rectifier cells provide forward currents up to 1.8 amps (when mounted on 1 1/2 x 1 1/2" heat sink), 1.3 amps in free air; well suited for all applications where a very small, high power rectifier is desired, including magnetic amplifiers and other devices where low leakage is also important. Ratings at 40°C into resistive or inductive load.

| Int'l Part No. | PRV Volts | Max Rect Current Amps | Max RMS Input Volts | Net 1-99 |
|----------------|-----------|-----------------------|---------------------|----------|
| | | | | |
| 10B2 | 200 | 1.8 | 140 | 1.24 |
| 10B3 | 300 | 1.8 | 210 | 1.75 |
| 10B4 | 400 | 1.8 | 280 | 2.46 |
| 10B5 | 500 | 1.8 | 350 | 3.46 |
| 10B6 | 600 | 1.8 | 420 | 4.89 |

COMMERCIAL TYPE SILICON DIODES (FIG. E)

Specifically designed for low cost, miniaturized use such as radio, TV, audio, and other commercial applications.

| Int'l Part No. | PRV | | Max Rect Current @ 70°C | | Net 1-99 |
|----------------|-----------------|-----------------|-------------------------|--------------|----------|
| | Cap. Load Volts | Res. Load Volts | Cap. Load Ma | Res. Load Ma | |
| 2E4 | 400 | 400 | 200 | 300 | .70 |
| 5E4 | 400 | 400 | 350 | 500 | .90 |
| 5E5 | 500 | 500 | 350 | 500 | 1.15 |
| 5E6 | 600 | 600 | 350 | 500 | 1.20 |

MINIATURE 1-AMP SILICON RECTIFIER CELLS STANDARD TYPES (FIG. L)

Miniature diffused-junction fully insulated silicon rectifier cells in encapsulated package provide high current handling capacities with low forward voltage drop over entire -65°C to +130°C.

| Int'l Part No. | PRV | | Max Rect Current | | | Net 1-99 |
|----------------|-----------------|-----------------|----------------------|-----------------------|----------------------|----------|
| | Cap. Load Volts | Res. Load Volts | Cap. Load @ 25°C Amp | Cap. Load @ 100°C Amp | Res. Load @ 25°C Amp | |
| 3A2 | 200 | 200 | .75 | .5 | 1 | .625 |
| 5A4 | 400 | 400 | .75 | .5 | 1 | .625 |
| 5A5 | 500 | 500 | .75 | .5 | 1 | .625 |
| 5A6 | 600 | 600 | .75 | .5 | 1 | .625 |

MINIATURE 1-AMP SILICON RECTIFIERS (FIG. L)

Oper. Temp. Range: -20 to +130°C. Max. DC output (@ 25°C) and reverse current rating (@ 100°C) are full cycle average values. Case dimensions are 0.375" x 0.200" dia. approx.

| JEDEC Type No. | PRV Volts | Max. DC Output (Amps) | Max. Rev. Current ma | Net Each | |
|----------------|-----------|-----------------------|----------------------|----------|---------|
| | | | | 1-99 | 100-999 |
| 1N2069A | 200 | .750 | 0.2 | \$0.68 | \$0.51 |
| 1N2070A | 400 | .750 | 0.2 | 0.83 | 0.62 |
| 1N2071A | 600 | .750 | 0.2 | 1.07 | 0.80 |

SILICON PLUG-IN RECTIFIER CELLS (FIG. M)

Silicon diffused-junction plug-in rectifier cells can be snapped into clip-type holders. For TV, audio, industrial power supply, etc.

| Int'l Part No. | PRV | | Max Rect Current | | | Net 1-99 |
|----------------|-----------------|-----------------|---------------------|----------------------|---------------------|----------|
| | Cap. Load Volts | Res. Load Volts | Cap. Load @ 50°C Ma | Cap. Load @ 100°C Ma | Res. Load @ 50°C Ma | |
| SMA2 | 200 | 200 | 750 | 500 | 850 | .85 |
| SMA4 | 400 | 400 | 750 | 500 | 850 | 1.40 |
| SMA5 | 500 | 500 | 750 | 500 | 850 | 1.25 |
| SMA6 | 600 | 600 | 750 | 500 | 850 | 1.70 |

HOLDERS FOR SNAP-IN RECTIFIERS

| Int'l No. | Description | Net Each |
|-----------|---------------------------------|----------|
| 43-1803 | SNAP-IN holder only (single) | .12 |
| 43-1804 | SNAP-IN holder only (dual) | .25 |
| 43-1805 | SNAP-IN holder only (quadruple) | .90 |

SILICON POWER RECTIFIERS CELLS (FIG. B)

Stud-mounted silicon power diodes are designed specifically for high temperature, high reliability applications; provide 800 ma @ 100°C over 50 to 600 PRV range. Max operating temperature: 150°C; derate output current 2%/°C above 100°C.

| JEDEC Type No. | PRV Volts | Max Contin. DC Current* Ma | Max Rect. Current* Ma | Max RMS Input Volts | Net 1-99 |
|----------------|-----------|----------------------------|-----------------------|---------------------|----------|
| | | | | | |
| 1N608 | 100 | 1,000 | 800 | 70 | 1.38 |
| 1N609 | 150 | 1,000 | 800 | 105 | 1.43 |
| 1N610 | 200 | 1,000 | 800 | 140 | 1.53 |
| 1N611 | 300 | 1,000 | 800 | 210 | 1.95 |
| 1N612 | 400 | 1,000 | 800 | 280 | 2.67 |
| 1N613 | 500 | 1,000 | 800 | 350 | 3.17 |
| 1N614 | 600 | 1,000 | 800 | 420 | 4.55 |

*On 2" x 2" x 0.025 heat sink operating into resistive or inductive load at 100°C.

SELENIUM HIGH VOLTAGE CARTRIDGE RECTIFIERS (FIG. W)

These cartridge rectifiers deliver high efficiency rectification over -65°C to 100°C temperature range.

| Int'l | PRV* Volts | Max AC Input RMS | | Norm. DC Output Volts | | O.D. In. | Lth. In. | Net 1-9 |
|--------|------------|------------------|------|-----------------------|------|----------|----------|---------|
| | | Volts Res. | Cap. | Res. | Cap. | | | |
| V50HF | 2400 | 1650 | 1000 | 650 | 1000 | 3/8 | 2 3/8 | \$3.43 |
| V75HF | 3600 | 2475 | 1500 | 975 | 1500 | 3/8 | 3 | 4.60 |
| V100HF | 4800 | 3300 | 2000 | 1300 | 2000 | 3/8 | 4 | 5.50 |
| V125HF | 6000 | 4125 | 2500 | 1675 | 2500 | 3/8 | 4 3/8 | 6.85 |
| V150HF | 7200 | 4950 | 3000 | 1950 | 3000 | 3/8 | 5 1/2 | 7.75 |
| V175HF | 8400 | 5775 | 3500 | 2275 | 3500 | 3/8 | 6 | 9.10 |

*Also available in other values to 14,400 PRV.

HIGH VOLTAGE SILICON RECTIFIERS (FIG. R)

Designed especially for high voltage/high temperature applications where stability under environmental extremes is necessary.

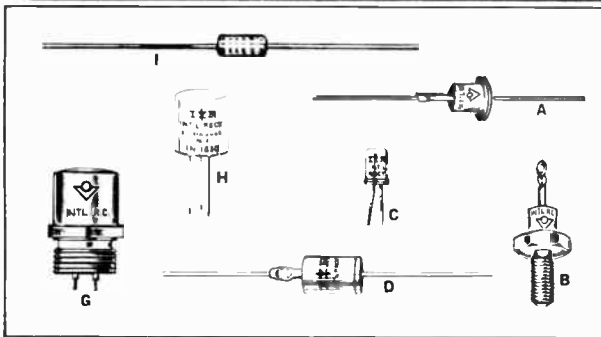
| JEDEC Part No. | PRV Volts | Max Rect Current* | | Stud Polarity | Net 1-99 |
|----------------|-----------|-------------------|------------|---------------|----------|
| | | @ 25°C Ma | @ 100°C Ma | | |
| 1N1130 | 1500 | 300 | 230 | Cathode | \$11.20 |
| 1N1131 | 1500 | 300 | 230 | Anode | 11.20 |

*Rectifier mtd. on 2 x 2 x 1/8" heat sink.

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750MW SILICON ZENER DIODES (FIG. A)

Size: .185" diam. x .220" body length with 1 1/4" leads. Ratings and characteristics at 25°C.

| JEDEC Part No.* | VzT Volts | IzT MA | Zzt Ohms | Net 1-99 |
|-----------------|-----------|--------|----------|----------|
| 1N1507 | 3.9 | 35 | 14 | \$4.35 |
| 1N1508 | 4.7 | 30 | 12 | 4.35 |
| 1N1509 | 5.6 | 26 | 5.2 | 3.30 |
| 1N1510 | 6.8 | 22 | 1.5 | 3.30 |
| 1N1511 | 8.2 | 18 | 1.5 | 3.30 |
| 1N1512 | 10 | 15 | 1.8 | 3.30 |
| 1N1513 | 12 | 12 | 2.8 | 3.30 |
| 1N1514 | 15 | 10 | 5 | 3.30 |
| 1N1515 | 18 | 8 | 9 | 3.30 |
| 1N1516 | 22 | 6 | 19 | 3.30 |
| 1N1517 | 27 | 5 | 50 | 3.30 |

*Add suffix "A" to JEDEC part no. for 5% tolerance.

1-WATT SILICON ZENER DIODES (FIG. A)

Size: 0.375" O.D. with 1 1/4" leads. Ratings and characteristics at 25°C.

| JEDEC Part No.* | VzT Volts | IzT MA | Zzt Ohms | Net 1-99 |
|-----------------|-----------|--------|----------|----------|
| 1N1518 | 3.9 | 50 | 9 | \$6.20 |
| 1N1519 | 4.7 | 40 | 8.5 | 6.20 |
| 1N1520 | 5.6 | 35 | 5.5 | 3.50 |
| 1N1521 | 6.8 | 30 | 1.6 | 3.50 |
| 1N1522 | 8.2 | 25 | 1.1 | 3.50 |
| 1N1523 | 10 | 20 | 1.5 | 3.50 |
| 1N1524 | 12 | 15 | 2.4 | 3.50 |
| 1N1525 | 15 | 13 | 5.4 | 3.50 |
| 1N1526 | 18 | 10 | 11 | 3.50 |
| 1N1527 | 22 | 9 | 18 | 3.50 |
| 1N1528 | 27 | 7 | 28 | 3.50 |

*Add suffix "A" to JEDEC part no. for 5% tolerance.

SILICON ZENER VOLTAGE REFERENCE ELEMENTS (FIGS. C, G, H, I)

| Type | Voltage Range (V) | Bias Current (MA @ 25°C) | Temp. Coeff. (%/°C) | Temp. Range | Max. Dynam. Imped. | Net 1-99 | Fig. |
|-----------|-------------------|--------------------------|---------------------|---------------|--------------------|----------|------|
| 1N429 | 5.9-6.5 | 7.5 | ±.01 | -55 to +150°C | 20 | \$5.00 | C |
| USN-1N430 | 8.0-8.8 | 10 | ±.002 | -55 to -100°C | 15 | 27.00 | G |
| 1N430 | 8.0-8.8 | 10 | ±.002 | -55 to -100°C | 15 | 18.00 | G |
| 1N430A | 8.0-8.8 | 10 | ±.001 | -55 to +100°C | 15 | 27.00 | G |
| 1N430B | 8.0-8.8 | 10 | ±.001 | -55 to +150°C | 15 | 36.00 | G |
| 1N1530 | 8.0-8.8 | 10 | ±.002 | -55 to +100°C | 15 | 18.00 | H |
| 1N1530A | 8.0-8.8 | 10 | ±.001 | -55 to +100°C | 15 | 27.00 | H |
| 1N821 | 5.9-6.5 | 7.5 | ±.01 | -55 to +100°C | 15 | 5.05 | I |
| 1N821A | 5.9-6.5 | 7.5 | ±.01 | -55 to +100°C | 15 | 5.60 | I |
| 1N823 | 5.9-6.5 | 7.5 | ±.005 | -55 to +100°C | 15 | 7.90 | I |
| 1N823A | 5.9-6.5 | 7.5 | ±.005 | -55 to +100°C | 15 | 8.70 | I |
| 1N825 | 5.9-6.5 | 7.5 | ±.002 | -55 to +100°C | 15 | 10.85 | I |
| 1N825A | 5.9-6.5 | 7.5 | ±.002 | -55 to +100°C | 15 | 11.90 | I |
| 1N827 | 5.9-6.5 | 7.5 | ±.001 | -55 to +100°C | 15 | 26.30 | I |
| 1N827A | 5.9-6.5 | 7.5 | ±.001 | -55 to +100°C | 15 | 28.95 | I |
| 1N3154 | 8.0-8.8 | 10 | ±.01 | -55 to +100°C | 15 | 7.20 | I |
| 1N3154A | 8.0-8.8 | 10 | ±.01 | -55 to +150°C | 15 | 8.10 | I |
| 1N3155 | 8.0-8.8 | 10 | ±.005 | -55 to +100°C | 15 | 11.30 | I |
| 1N3155A | 8.0-8.8 | 10 | ±.005 | -55 to +150°C | 15 | 12.25 | I |
| 1N3156 | 8.0-8.8 | 10 | ±.002 | -55 to +100°C | 15 | 16.80 | I |
| 1N3156A | 8.0-8.8 | 10 | ±.002 | -55 to +150°C | 15 | 18.10 | I |
| 1N3157 | 8.0-8.8 | 10 | ±.001 | -55 to +100°C | 15 | 25.30 | I |

250 MW SILICON GLASS ZENER DIODES (FIG. I)

Body size: 0.265 x 0.110" diameter.

| JEDEC Part No.* | VzT Volts | Zzt Ohms | IzT MA | Net 1-99 |
|-----------------|-----------|----------|--------|----------|
| 1N702 | 2.6 | 60 | | \$2.50 |
| 1N703 | 3.4 | 55 | 10 | 2.50 |
| 1N704 | 4.1 | 45 | 10 | 2.50 |
| 1N705 | 4.8 | 35 | 10 | 2.50 |
| 1N706 | 5.8 | 20 | 10 | 2.50 |
| 1N707 | 7.1 | 10 | 10 | 2.50 |
| 1N708 | 5.6 | 3.6 | 25 | 2.50 |
| 1N709 | 6.2 | 4.1 | 25 | 2.50 |
| 1N710 | 6.8 | 4.7 | 25 | 2.50 |
| 1N711 | 7.5 | 5.3 | 25 | 2.50 |
| 1N712 | 8.2 | 6.0 | 25 | 2.50 |
| 1N713 | 9.1 | 7.0 | 12 | 2.50 |
| 1N714 | 10.0 | 8.0 | 12 | 2.50 |
| 1N715 | 11.0 | 9.0 | 12 | 2.50 |
| 1N716 | 12.0 | 10.0 | 12 | 2.50 |

*Add suffix "A" to JEDEC part no. for 5% tolerance.

400 MW SILICON GLASS ZENER DIODES (FIG. I)

Body size: 0.265 x 0.110" diameter.

| JEDEC Part No.* | VzT Volts | Zzt Ohms | IzT MA | Net 1-99 |
|-----------------|-----------|----------|--------|----------|
| 1N746 | 3.3 | 28 | 20 | \$2.60 |
| 1N747 | 3.6 | 24 | 20 | 2.60 |
| 1N748 | 3.9 | 23 | 20 | 2.60 |
| 1N749 | 4.3 | 22 | 20 | 2.60 |
| 1N750 | 4.7 | 19 | 20 | 2.60 |
| 1N751 | 5.1 | 17 | 20 | 2.60 |
| 1N752 | 5.6 | 11 | 20 | 2.60 |
| 1N753 | 6.2 | 7 | 20 | 2.60 |
| 1N754 | 6.8 | 5 | 20 | 2.60 |
| 1N755 | 7.5 | 6 | 20 | 2.60 |
| 1N756 | 8.2 | 8 | 20 | 2.60 |
| 1N757 | 9.1 | 10 | 20 | 2.60 |
| 1N758 | 10.0 | 17 | 20 | 2.60 |
| 1N759 | 12.0 | 30 | 20 | 2.60 |

*Add suffix "A" to JEDEC part no. for 5% tolerance.

| Type | VzT Volts | Zzt Ohms | IzT MA | Net 1-99 |
|--------|-----------|----------|--------|----------|
| 1N761 | 4.8 | 10 | 55 | \$2.10 |
| 1N762 | 5.8 | 10 | 20 | 2.10 |
| 1N763 | 7.1 | 10 | 10 | 2.10 |
| 1N764 | 8.7 | 10 | 15 | 2.10 |
| 1N765 | 10.5 | 5 | 50 | 2.10 |
| 1N766 | 12.7 | 5 | 70 | 2.10 |
| 1N1929 | 5.6 | 5 | 8 | 1.93 |
| 1N1930 | 6.8 | 5 | 7 | 1.93 |
| 1N1931 | 8.3 | 5 | 15 | 1.93 |
| 1N1932 | 10.0 | 5 | 22 | 1.93 |
| 1N1933 | 12.0 | 1 | 30 | 4.25 |
| 1N1934 | 14.5 | 1 | 50 | 4.25 |
| 1N1935 | 18.0 | 1 | 70 | 4.25 |
| 1N1936 | 22.0 | 1 | 100 | 4.25 |
| 1N1937 | 27.0 | 1 | 200 | 4.25 |

Types listed are ±10% voltage tolerance. To order ±5% tolerance types, add "A" to end of JEDEC part number — e.g. — 1N1927A.

| Type | VzT Volts | Zzt Ohms | IzT MA | Net 1-99 |
|-------|-----------|----------|--------|----------|
| 1N957 | 6.8 | 20 | 5 | 2.20 |
| 1N958 | 7.5 | 20 | 6 | 2.20 |
| 1N959 | 8.2 | 20 | 8 | 2.20 |
| 1N960 | 9.1 | 20 | 10 | 2.20 |
| 1N961 | 10 | 20 | 17 | 2.20 |
| 1N962 | 11 | 11.5 | 9.5 | 2.20 |
| 1N963 | 12 | 10.5 | 11.5 | 2.20 |
| 1N964 | 13 | 9.5 | 13 | 2.20 |
| 1N965 | 15 | 8.5 | 16 | 2.20 |
| 1N966 | 16 | 7.8 | 17 | 2.20 |
| 1N967 | 18 | 7.0 | 21 | 2.20 |
| 1N968 | 20 | 6.2 | 25 | 2.20 |
| 1N969 | 22 | 5.6 | 29 | 2.20 |
| 1N970 | 24 | 5.2 | 33 | 2.20 |
| 1N971 | 27 | 4.6 | 41 | 2.20 |
| 1N972 | 30 | 4.2 | 49 | 2.20 |
| 1N973 | 33 | 3.8 | 58 | 2.20 |

Types listed are ±20% voltage tolerance. To order ±10% tolerance add "A" to end of JEDEC Part No. — e.g. — 1N957A. For ±5% tolerance add "B" to end of JEDEC number.

1 WATT FLANGELESS SILICON ZENER DIODES (FIG. D)

| Type | VzT Volts | IzT MA | Zzt Ohms | Net 1-99 |
|--------|-----------|--------|----------|----------|
| 1N1768 | 7.5 | 100 | 2.1 | \$4.60 |
| 1N1769 | 8.2 | 100 | 2.4 | 4.60 |
| 1N1770 | 9.1 | 90 | 3.0 | 4.60 |
| 1N1771 | 10 | 50 | 3.5 | 4.60 |
| 1N1772 | 11 | 50 | 4.2 | 4.60 |
| 1N1773 | 12 | 50 | 5.0 | 4.60 |
| 1N1774 | 13 | 50 | 5.8 | 4.60 |
| 1N1775 | 15 | 50 | 7.6 | 4.60 |
| 1N1776 | 16 | 50 | 8.6 | 4.60 |
| 1N1777 | 18 | 50 | 11 | 4.60 |
| 1N1778 | 20 | 15 | 13 | 4.60 |
| 1N1779 | 22 | 15 | 16 | 4.60 |
| 1N1780 | 24 | 15 | 18 | 4.60 |
| 1N1781 | 27 | 15 | 23 | 4.60 |
| 1N1782 | 30 | 15 | 28 | 4.60 |
| 1N1783 | 33 | 15 | 33 | 5.25 |
| 1N1784 | 36 | 15 | 39 | 5.25 |
| 1N1785 | 39 | 15 | 45 | 5.25 |
| 1N1786 | 43 | 15 | 54 | 5.25 |
| 1N1787 | 47 | 15 | 64 | 5.25 |
| 1N1788 | 51 | 15 | 74 | 5.25 |
| 1N1789 | 56 | 15 | 88 | 5.25 |
| 1N1790 | 62 | 5 | 105 | 5.25 |
| 1N1791 | 68 | 5 | 125 | 5.25 |
| 1N1792 | 75 | 5 | 150 | 5.25 |
| 1N1793 | 82 | 5 | 175 | 5.25 |
| 1N1794 | 91 | 5 | 220 | 5.25 |
| 1N1795 | 100 | 5 | 260 | 5.25 |
| 1N1796 | 110 | 5 | 320 | 5.25 |
| 1N1797 | 120 | 5 | 390 | 5.25 |
| 1N1798 | 130 | 5 | 450 | 5.25 |
| 1N1799 | 150 | 5 | 600 | 5.25 |
| 1N1800 | 100 | 5 | 700 | 5.25 |
| 1N1801 | 100 | 5 | 900 | 5.25 |
| 1N1802 | 200 | 5 | 1100 | 5.25 |

NOTE: JEDEC types listed above are 10% voltage tolerance types. To specify 5% tolerance types, add "A" to JEDEC part no. (e.g. 1N1770A).

3.5 WATT SILICON ZENER DIODES (FIG. B)

Size: 1.222" overall L. x 7/16" across the flats, 10-32 stud mounting with washer and nut.

| JEDEC Type* | VzT Volts | IzT MA | Zzt Ohms | Net 1-99 |
|-------------|-----------|--------|----------|----------|
| 1N1588 | 3.9 | 150 | 2.6 | \$7.50 |
| 1N1589 | 4.7 | 125 | 2.3 | 7.50 |
| 1N1590 | 5.6 | 110 | 1.4 | 6.00 |
| 1N1591 | 6.8 | 100 | .58 | 6.00 |
| 1N1592 | 8.2 | 80 | .5 | 6.00 |
| 1N1593 | 10 | 70 | .7 | 6.00 |
| 1N1594 | 12 | 50 | 1.4 | 6.00 |
| 1N1595 | 15 | 40 | 3.4 | 6.00 |
| 1N1596 | 18 | 35 | 6 | 6.00 |
| 1N1597 | 22 | 30 | 9 | 6.00 |
| 1N1598 | 27 | 25 | 13 | 6.00 |

*Add suffix "A" to JEDEC part no. for 5% tolerance.

10-WATT SILICON ZENER DIODES (FIG. B)

Size: 1.323" overall L. x 7/16" across hex flats, 10-32 stud mounting with washer and nut.

| JEDEC Type* | VzT Volts | IzT MA | Zzt Ohms | Net 1-99 |
|-------------|-----------|--------|----------|----------|
| 1N1599 | 3.9 | 500 | .84 | \$8.50 |
| 1N1600 | 4.7 | 400 | .68 | 8.50 |
| 1N1601 | 5.6 | 350 | .3 | 6.75 |
| 1N1602 | 6.8 | 300 | .2 | 6.75 |
| 1N1603 | 8.2 | 250 | .25 | 6.75 |
| 1N1604 | 10 | 200 | .55 | 6.75 |
| 1N1605 | 12 | 170 | .95 | 6.75 |
| 1N1606 | 15 | 140 | 1.5 | 6.75 |
| 1N1607 | 18 | 110 | 2 | 6.75 |
| 1N1608 | 22 | 90 | 3 | 6.75 |
| 1N1609 | 27 | 70 | 4.5 | 6.75 |

Note: Z is measured at standard test current of I.

*Add suffix "A" to JEDEC part no. for 5% tolerance.

10-WATT DIFFUSED ZENER DIODES (FIG. B)

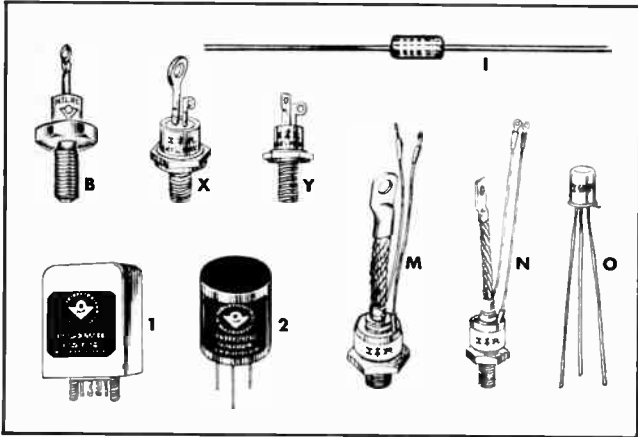
| Type | VzT Volts | IzT MA | Zzt Ohms | Net 1-99 |
|--------|-----------|--------|----------|----------|
| 1N1351 | 10 | 500 | 2 | \$6.95 |
| 1N1352 | 11 | 500 | 2 | 6.95 |
| 1N1353 | 12 | 500 | 2 | 6.95 |
| 1N1354 | 13 | 500 | 2 | 6.95 |
| 1N1355 | 15 | 500 | 2 | 6.95 |
| 1N1356 | 16 | 500 | 3 | 6.95 |
| 1N1357 | 18 | 150 | 3 | 6.95 |
| 1N1358 | 20 | 150 | 3 | 6.95 |
| 1N1359 | 22 | 150 | 3 | 6.95 |
| 1N1360 | 24 | 150 | 3 | 6.95 |
| 1N1361 | 27 | 150 | 3 | 6.95 |
| 1N1362 | 30 | 150 | 4 | 6.95 |
| 1N1363 | 33 | 150 | 4 | 6.56 |

| Type | VzT Volts | IzT MA | Zzt Ohms | Net 1-99 |
|--------|-----------|--------|----------|----------|
| 1N1364 | 36 | 150 | 5 | \$6.56 |
| 1N1365 | 39 | 150 | 5 | 6.56 |
| 1N1366 | 43 | 150 | 6 | 6.56 |
| 1N1367 | 47 | 150 | 8 | 6.56 |
| 1N1368 | 51 | 150 | 8 | 6.56 |
| 1N1369 | 56 | 150 | 9 | 6.56 |
| 1N1370 | 62 | 50 | 12 | 6.56 |
| 1N1371 | 68 | 50 | 14 | 6.56 |

INTERNATIONAL RECTIFIER

EXECUTIVE OFFICES, EL SEGUNDO, CALIFORNIA

SEMICONDUCTORS



10-WATT DIFFUSED ZENER DIODES (FIG. B)

| Type | VzT Volts | IzT MA | ZzT Ohms | Net 1-99 | Type | VzT Volts | IzT MA | ZzT Ohms | Net 1-99 |
|--------|-----------|--------|----------|----------|--------|-----------|--------|----------|----------|
| 1N1806 | 7.5 | 1000 | 1 | \$5.60 | 1N2988 | 27 | 95 | 7 | \$5.50 |
| 1N1807 | 8.2 | 1000 | 1 | 5.60 | 1N2989 | 30 | 85 | 8 | 5.50 |
| 1N1808 | 9.1 | 500 | 1 | 5.60 | 1N2990 | 33 | 75 | 9 | 5.50 |
| 1N1809 | 110 | 50 | 47 | 9.20 | 1N2991 | 36 | 70 | 10 | 5.50 |
| 1N1810 | 120 | 50 | 56 | 9.20 | 1N2992 | 39 | 65 | 11 | 5.50 |
| 1N1811 | 130 | 50 | 65 | 9.20 | 1N2993 | 43 | 60 | 12 | 5.50 |
| 1N1812 | 150 | 50 | 82 | 9.20 | 1N2994 | 45 | 55 | 13 | 5.50 |
| 1N1813 | 160 | 50 | 93 | 9.20 | 1N2995 | 47 | 55 | 14 | 5.50 |
| 1N1814 | 180 | 50 | 115 | 9.20 | 1N2996 | 50 | 50 | 15 | 5.50 |
| 1N1815 | 200 | 50 | 140 | 9.20 | 1N2997 | 51 | 50 | 15 | 5.50 |
| 1N2970 | 6.8 | 370 | 1.2 | 5.50 | 1N2998 | 52 | 50 | 15 | 5.50 |
| 1N2971 | 7.5 | 335 | 1.3 | 5.50 | 1N2999 | 56 | 45 | 16 | 5.50 |
| 1N2972 | 8.2 | 305 | 1.5 | 5.50 | 1N3000 | 62 | 40 | 17 | 5.50 |
| 1N2973 | 9.1 | 275 | 2.0 | 5.50 | 1N3001 | 68 | 37 | 18 | 5.50 |
| 1N2974 | 10 | 250 | 3 | 5.50 | 1N3002 | 75 | 33 | 22 | 5.50 |
| 1N2975 | 11 | 230 | 3 | 5.50 | 1N3003 | 82 | 30 | 25 | 5.50 |
| 1N2976 | 12 | 210 | 3 | 5.50 | 1N3004 | 91 | 28 | 35 | 5.50 |
| 1N2977 | 13 | 190 | 3 | 5.50 | 1N3005 | 100 | 25 | 40 | 5.50 |
| 1N2978 | 14 | 180 | 3 | 5.50 | 1N3006 | 105 | 25 | 45 | 6.05 |
| 1N2979 | 15 | 170 | 3 | 5.50 | 1N3007 | 110 | 23 | 55 | 6.05 |
| 1N2980 | 16 | 155 | 4 | 5.50 | 1N3008 | 120 | 20 | 75 | 6.05 |
| 1N2981 | 17 | 145 | 4 | 5.50 | 1N3009 | 130 | 19 | 100 | 6.05 |
| 1N2982 | 18 | 140 | 4 | 5.50 | 1N3010 | 140 | 18 | 125 | 6.05 |
| 1N2983 | 19 | 130 | 4 | 5.50 | 1N3011 | 150 | 17 | 175 | 6.05 |
| 1N2984 | 20 | 125 | 4 | 5.50 | 1N3012 | 160 | 16 | 200 | 6.05 |
| 1N2985 | 22 | 115 | 5 | 5.50 | 1N3013 | 175 | 14 | 250 | 6.05 |
| 1N2986 | 24 | 105 | 5 | 5.50 | 1N3014 | 180 | 14 | 260 | 6.05 |
| 1N2987 | 25 | 100 | 6 | 5.50 | 1N3015 | 200 | 12 | 300 | 6.05 |

"HIGH SPEC" GLASS ZENER DIODES (FIG. I)

| 250 MW TYPES | | | | | 400 MW TYPES | | | | |
|--------------|-----------|--------|----------|----------|--------------|-----------|--------|----------|----------|
| Type | VzT Volts | IzT MA | ZzT Ohms | Net 1-99 | Type | VzT Volts | IzT MA | ZzT Ohms | Net 1-99 |
| QZ3.3T5 | 3.3 | 20 | 22 | \$2.75 | FZ3.3T5 | 3.3 | 20 | 22 | \$3.60 |
| QZ3.6T5 | 3.6 | 20 | 19 | 2.75 | FZ3.6T5 | 3.6 | 20 | 19 | 3.60 |
| QZ3.9T5 | 3.9 | 20 | 18 | 2.75 | FZ3.9T5 | 3.9 | 20 | 18 | 3.60 |
| QZ4.3T5 | 4.3 | 20 | 16 | 2.75 | FZ4.3T5 | 4.3 | 20 | 16 | 3.60 |
| QZ4.7T5 | 4.7 | 20 | 14 | 2.75 | FZ4.7T5 | 4.7 | 20 | 14 | 3.60 |
| QZ5.1T5 | 5.1 | 20 | 10 | 2.75 | FZ5.1T5 | 5.1 | 20 | 10 | 3.60 |
| QZ5.6T5 | 5.6 | 20 | 7 | 2.75 | FZ5.6T5 | 5.6 | 20 | 7 | 3.60 |
| QZ6.2T5 | 6.2 | 20 | 4 | 2.75 | FZ6.2T5 | 6.2 | 20 | 4 | 3.60 |
| QZ6.8T5 | 6.8 | 20 | 4 | 2.75 | FZ6.8T5 | 6.8 | 20 | 4 | 3.60 |
| QZ7.5T5 | 7.5 | 20 | 5 | 2.75 | FZ7.5T5 | 7.5 | 20 | 5 | 3.60 |
| QZ8.2T5 | 8.2 | 20 | 6 | 2.75 | FZ8.2T5 | 8.2 | 20 | 6 | 3.60 |
| QZ9.1T5 | 9.1 | 20 | 7 | 2.75 | FZ9.1T5 | 9.1 | 20 | 7 | 3.60 |
| QZ10T5 | 10 | 20 | 8 | 2.75 | FZ10T5 | 10 | 20 | 8 | 3.60 |
| QZ11T5 | 11 | 5 | 10 | 2.75 | FZ11T5 | 11 | 5 | 10 | 3.60 |
| QZ12T5 | 12 | 5 | 11 | 2.75 | FZ12T5 | 12 | 5 | 11 | 3.60 |
| QZ13T5 | 13 | 5 | 13 | 2.75 | FZ13T5 | 13 | 5 | 13 | 3.60 |
| QZ14T5 | 14 | 5 | 15 | 2.75 | FZ14T5 | 14 | 5 | 15 | 3.60 |
| QZ15T5 | 15 | 5 | 17 | 2.75 | FZ15T5 | 15 | 5 | 17 | 3.60 |
| QZ16T5 | 16 | 5 | 19 | 2.75 | FZ16T5 | 16 | 5 | 19 | 3.60 |
| QZ17T5 | 17 | 5 | 21 | 2.75 | FZ17T5 | 17 | 5 | 21 | 3.60 |
| QZ18T5 | 18 | 5 | 25 | 2.75 | FZ18T5 | 18 | 5 | 25 | 3.60 |
| QZ19T5 | 19 | 5 | 28 | 2.75 | FZ19T5 | 19 | 5 | 28 | 3.60 |
| QZ20T5 | 20 | 5 | 32 | 2.75 | FZ20T5 | 20 | 5 | 32 | 3.60 |
| QZ22T5 | 22 | 5 | 35 | 2.75 | FZ22T5 | 22 | 5 | 35 | 3.60 |
| QZ24T5 | 24 | 5 | 37 | 2.75 | FZ24T5 | 24 | 5 | 37 | 3.60 |
| QZ25T5 | 25 | 5 | 39 | 2.75 | FZ25T5 | 25 | 5 | 39 | 3.60 |
| QZ27T5 | 27 | 5 | 40 | 2.75 | FZ27T5 | 27 | 5 | 40 | 3.60 |
| QZ30T5 | 30 | 5 | 45 | 2.75 | FZ30T5 | 30 | 5 | 45 | 3.60 |

Types listed are ±5% voltage tolerance. For ±10% tolerance types, substitute "T10" in place of "T5" in part number.

SILICON CONTROLLED RECTIFIERS—3 TO 150 AMP. RATED

(FIGS. Y, X, M, N)

3 Junction, Hermetically-sealed Devices. °Gate current values shown required to assure firing of all units.

| Type | Max. Rep. PRV and Min. VBO Volts | Nom. Average Forward Current, Amps | Max. Forward & Reverse Leakage, FCA, ma | Gate Current To Fire, ma | | | Net 1-99 |
|---|----------------------------------|------------------------------------|---|--------------------------|-------|------|----------|
| | | | | Typ. | Max.* | Fig. | |
| 3 Ampere 2N1600—2N1604 JEDEC Types | | | | | | | |
| 2N1600 | 50 | 3 | 0.25 | 4 | 6 | Y | \$7.50 |
| 2N1601 | 100 | 3 | 0.25 | 4 | 6 | Y | 10.50 |
| 2N1602 | 200 | 3 | 0.25 | 4 | 6 | Y | 14.60 |
| 2N1603 | 300 | 3 | 0.25 | 4 | 6 | Y | 20.75 |
| 2N1604 | 400 | 3 | 0.25 | 4 | 6 | Y | 29.00 |

| 5 Ampere 2N1770—2N1777 JEDEC Types | | | | | | | |
|---|-----|-----|-----|---|---|---|-------|
| 2N1770 | 25 | 4.7 | 4.5 | 4 | 8 | Y | 6.15 |
| 2N1771 | 50 | 4.7 | 4.5 | 4 | 8 | Y | 7.65 |
| 2N1772 | 100 | 4.7 | 4.5 | 4 | 8 | Y | 10.70 |
| 2N1773 | 150 | 4.7 | 4.0 | 4 | 8 | Y | 13.20 |
| 2N1774 | 200 | 4.7 | 3.0 | 4 | 8 | Y | 15.00 |
| 2N1775 | 250 | 4.7 | 2.5 | 4 | 8 | Y | 18.00 |
| 2N1776 | 300 | 4.7 | 2.0 | 4 | 8 | Y | 22.00 |
| 2N1777 | 400 | 4.7 | 1.0 | 4 | 8 | Y | 31.00 |

| 10 Ampere 2N1842—2N1849 JEDEC Types | | | | | | | |
|--|-----|----|-----|----|----|---|-------|
| 2N1842 | 25 | 10 | 6.5 | 10 | 25 | X | 9.80 |
| 2N1843 | 50 | 10 | 6.5 | 10 | 25 | X | 10.40 |
| 2N1844 | 100 | 10 | 6.5 | 10 | 25 | X | 11.90 |
| 2N1845 | 150 | 10 | 6.5 | 10 | 25 | X | 14.10 |
| 2N1846 | 200 | 10 | 6.0 | 10 | 25 | X | 15.40 |
| 2N1847 | 250 | 10 | 5.5 | 10 | 25 | X | 20.85 |
| 2N1848 | 300 | 10 | 5.0 | 10 | 25 | X | 24.75 |
| 2N1849 | 400 | 10 | 4.0 | 10 | 25 | X | 33.00 |

| 16 Ampere 2N681—2N688 JEDEC Types | | | | | | | |
|--|-----|----|-----|---|----|---|-------|
| 2N681 | 25 | 16 | 6.5 | 7 | 25 | X | 13.10 |
| 2N682 | 50 | 16 | 6.5 | 7 | 25 | X | 13.90 |
| 2N683 | 100 | 16 | 6.5 | 7 | 25 | X | 15.75 |
| 2N684 | 150 | 16 | 6.5 | 7 | 25 | X | 18.75 |
| 2N685 | 200 | 16 | 6.0 | 7 | 25 | X | 22.50 |
| 2N686 | 250 | 16 | 5.5 | 7 | 25 | X | 27.75 |
| 2N687 | 300 | 16 | 5.0 | 7 | 25 | X | 33.00 |
| 2N688 | 400 | 16 | 4.0 | 7 | 25 | X | 43.50 |

| 70 Ampere 2N1909—2N1916, 70RC50A Types | | | | | | | |
|---|-----|----|-----|----|----|---|--------|
| 2N1909 | 25 | 70 | 6.5 | 25 | 40 | N | 28.70 |
| 2N1910 | 50 | 70 | 6.5 | 25 | 40 | N | 40.00 |
| 2N1911 | 100 | 70 | 6.5 | 25 | 40 | N | 50.00 |
| 2N1912 | 150 | 70 | 6.5 | 25 | 40 | N | 65.00 |
| 2N1913 | 200 | 70 | 6.0 | 25 | 40 | N | 70.00 |
| 2N1914 | 250 | 70 | 5.5 | 25 | 40 | N | 88.00 |
| 2N1915 | 300 | 70 | 5.0 | 25 | 40 | N | 105.00 |
| 2N1916 | 400 | 70 | 4.0 | 25 | 40 | N | 145.00 |
| 70RC50A | 500 | 70 | 3.0 | 25 | 40 | N | 170.00 |

| 150 Ampere 150RC5—150RC50 Types | | | | | | | |
|--|-----|-----|----|----|----|---|--------|
| 150RC5 | 50 | 150 | 10 | 35 | 50 | M | 99.50 |
| 150RC10 | 100 | 150 | 10 | 35 | 50 | M | 123.00 |
| 150RC20 | 200 | 150 | 10 | 35 | 50 | M | 202.00 |
| 150RC30 | 300 | 150 | 10 | 35 | 50 | M | 317.00 |
| 150RC40 | 400 | 150 | 8 | 35 | 50 | M | 440.00 |
| 150RC50 | 500 | 150 | 6 | 35 | 50 | M | 528.00 |

QT1-SCR Trigger MODIFIED TO-18 PACKAGE 0 3.00

HIGH STABILITY VOLTAGE REFERENCE PACKS (FIGS. 1 AND 2)

Operate directly from an unregulated power source. Output voltages of either 8.4 or 16.8 volts dc. Typical Regulation ±0.01%.

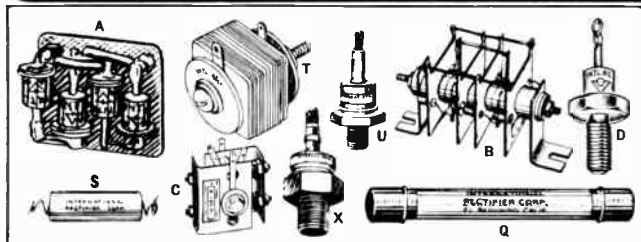
| Model No. | Input | Freq. uency | Output Voltage, Volts DC (±5%) | Dimensions (Inches) | Net |
|-----------|-----------|-------------|--------------------------------|-------------------------|---------|
| RV8* | 28V ±10% | D.C. | 8.4 | 1 x 1 x 1 3/4** | \$52.00 |
| RV8-A | 0.84W | D.C. | 8.4 | (See Fig. 1) | 57.00 |
| 4RV8* | 115V ±10% | 400~ | 8.4 | 1 3/8 x 1 3/8 x 1 3/4** | 75.00 |
| 4RV8-A | 1.25W | 400~ | 8.4 | (See Fig. 1) | 81.00 |
| 6RV8* | 115V ±10% | 60~ | 8.4 | 1 3/8 x 1 3/8 x 2 3/8** | 63.00 |
| 6RV8-A | 1.25W | 60~ | 8.4 | (See Fig. 1) | 69.00 |
| 4RV16* | 115V ±10% | 400~ | 16.8 | 1 3/8 x 1 3/8 x 2 3/8** | 100.00 |
| 4RV16-A | 2.5W | 400~ | 16.8 | (See Fig. 1) | 107.00 |
| 6RV16* | 115V ±10% | 60~ | 16.8 | 1 3/8 x 1 3/8 x 2 3/8** | 98.00 |
| 6RV16-A | 2.5W | 60~ | 16.8 | (See Fig. 1) | 105.00 |
| RV8-PC* | 28V ±10% | D.C. | 8.4 | 1 (dia.) x 1 1/4** | 45.00 |
| RV8PC-A | 0.84W | D.C. | 8.4 | (See Fig. 2) | 49.00 |

NOTE: Types with * have thermal stability of ±0.002%/°C. All others are ±0.001%/°C. Types with ** have temp. range of -55 to +125°C. All others are -55 to +75°C.

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INTERNATIONAL RECTIFIER

EXECUTIVE OFFICES, EL SEGUNDO, CALIFORNIA



SILICON BRIDGE RECTIFIER ASSEMBLIES

Pre-engineered and completely assembled single phase bridge rectifier stacks. The 1/2 and 1.2 amp series are sub-miniature assemblies of diodes on glass melamine board. All others are fin mounted assemblies. All diodes and rectifiers used are hermetically sealed and withstand extremes of temperature and humidity. Dual amp. ratings on B12 and B25 types are without and with fan cooling.

| Part No. | Fig | Input RMS Volt | OUTPUT (DC) Volt* | Amps @ 50°C | Approx. Dim. (inch) | Net 1-99 |
|----------|-----|----------------|-------------------|-------------|------------------------|----------|
| 5SMB5L | A | 35 | 30 | 1/2 | 3/8 x 2 3/16 x 3/4 | \$3.50 |
| 5SMB10L | A | 70 | 62 | 1/2 | 3/8 x 2 3/16 x 3/4 | 3.98 |
| 5SMB20L | A | 140 | 125 | 1/2 | 3/8 x 2 3/16 x 3/4 | 4.54 |
| 12MB10L | A | 70 | 62 | 1.2 | 1 1/4 x 1 x 1 3/16 | 3.18 |
| 12MB20L | A | 140 | 125 | 1.2 | 1 1/4 x 1 x 1 3/16 | 3.94 |
| 1N2725 | B | 70 | 62 | 2.5 | 2 1/2 x 1 1/16 x 3 1/2 | 6.01 |
| 1N2728 | B | 140 | 125 | 2.5 | 2 1/2 x 1 1/16 x 3 1/2 | 6.01 |
| 1N2731 | B | 210 | 188 | 2.5 | 2 1/2 x 1 1/16 x 3 1/2 | 7.31 |
| B12F5 | C | 14 | 9.5 | 14/30 | 3 x 3 3/4 x 2 5/8 | 12.52 |
| B12F10 | C | 25 | 20 | 14/30 | 3 x 3 3/4 x 2 5/8 | 13.40 |
| B12F20 | C | 60 | 43 | 14/30 | 3 x 3 3/4 x 2 5/8 | 18.56 |
| B12F40 | C | 120 | 87 | 14/30 | 3 x 3 3/4 x 2 5/8 | 23.20 |
| B25H5 | C | 14 | 9.5 | 18/42 | 3 x 3 3/4 x 2 5/8 | 15.00 |
| B25H10 | C | 25 | 20 | 18/42 | 3 x 3 3/4 x 2 5/8 | 16.60 |
| B25H20 | C | 60 | 43 | 18/42 | 3 x 3 3/4 x 2 5/8 | 22.60 |
| B25H40 | C | 120 | 87 | 18/42 | 3 x 3 3/4 x 2 5/8 | 39.80 |

*Into resistive or inductive load. Add 10-30% for capacitive load.

KLIP-SEL VOLTAGE SURGE PROTECTORS (FIGS. S & T)

For protection of silicon power rectifiers and silicon controlled rectifiers against voltage transients. Preferred non-polarized types listed.

| Mfr's Type | RMS Oper. Volts (Max.) | Typ. Clamp. Volts | Current at Clamp. Volts (Amp. Peak) | Fig. | Net Each 1-9 |
|------------|------------------------|-------------------|-------------------------------------|------|--------------|
| KV1DPF | 26 | 63 | 0.25 | S | \$1.31 |
| KV2DPF | 52 | 125 | 0.25 | S | 1.46 |
| KV5DPF | 130 | 310 | 0.25 | S | 1.85 |
| KV6DPF | 156 | 375 | 0.25 | S | 1.96 |
| KV10DPF | 260 | 625 | 0.25 | S | 2.52 |
| KZ1DPF | 26 | 63 | 1.0 | S | 1.70 |
| KZ2DPF | 52 | 125 | 1.0 | S | 1.91 |
| KZ5DPF | 130 | 310 | 1.0 | S | 2.41 |
| KZ6DPF | 156 | 375 | 1.0 | S | 2.55 |
| KZ9DPF | 234 | 565 | 1.0 | S | 3.06 |
| KZ10DPF | 260 | 625 | 1.0 | S | 3.26 |
| KZ14DPF | 364 | 890 | 1.0 | S | 4.07 |
| KA1DAF | 26 | 63 | 3.0 | T | 2.21 |
| KA2DAF | 52 | 125 | 3.0 | T | 2.46 |
| KA5DAF | 130 | 310 | 3.0 | T | 3.14 |
| KA6DBF | 156 | 375 | 3.0 | T | 3.90 |
| KA8DBF | 208 | 500 | 3.0 | T | 4.40 |
| KA9DBF | 234 | 565 | 3.0 | T | 4.70 |
| KA10DBF | 260 | 625 | 3.0 | T | 5.00 |
| KA14DAF | 364 | 890 | 3.0 | T | 5.34 |
| KL1DAF | 26 | 63 | 15.0 | T | 5.52 |
| KL2DAF | 52 | 125 | 15.0 | T | 6.17 |
| KL5DAF | 130 | 310 | 15.0 | T | 7.87 |
| KL6DBF | 156 | 375 | 15.0 | T | 8.30 |
| KL8DBF | 208 | 500 | 15.0 | T | 9.35 |
| KL10DBF | 260 | 625 | 15.0 | T | 10.62 |



HIGH VOLTAGE SILICON RECTIFIERS

Hermetically sealed for optimum reliability at elevated and sub-zero temperatures. Ideally suited for radar power supplies, high voltage bias supplies, and airborne or guided missile instrumentation.

| JEDEC Type | Fig | PRV Volts | Max. Input Volts RMS | Max. Rect. DC OutPut, Ma* | Net 1-99 |
|------------|-----|-----------|----------------------|---------------------------|----------|
| IN596 | N | 600 | 420 | 125 | \$ 5.00 |
| IN597 | N | 800 | 560 | 125 | 6.00 |
| IN598 | N | 1000 | 700 | 125 | 8.50 |
| IN1406 | O | 600 | 420 | 100 | 5.00 |
| IN1407 | O | 800 | 560 | 100 | 5.50 |
| IN1408 | O | 1000 | 700 | 100 | 8.00 |
| IN1409 | P | 1200 | 840 | 100 | 8.00 |
| IN1410 | P | 1500 | 1050 | 100 | 9.00 |
| IN1411 | P | 1800 | 1260 | 100 | 11.00 |
| IN1412 | P | 2000 | 1400 | 100 | 13.50 |
| IN1413 | P | 2400 | 1680 | 100 | 15.50 |

*Ratings at 75°C into inductive or resistive load. Derate 25% for capacitive load.

HIGH VOLTAGE CARTRIDGE TYPE SILICON RECTIFIERS (FIG. Q)

Provide high temperature, high efficiency operation to a wide range of high voltage applications; optimum reliability over -55°C to +150°C temperature range. Standard types listed are normal convection cooling. Ratings are absolute maximum at 75°C ambient. Horizontal mounting. Half wave resistive load 60 cps. Hermetically sealed ceramic housing fits 30-amp fuse clips. Ferrule diameter 3/64".

| JEDEC Type | PRV Volts | Max. Rect. DC Output Ma | Fwd. DC Volt Drop* | Length, In. | Net 1-99 |
|------------|-----------|-------------------------|--------------------|-------------|----------|
| IN1133 | 1500 | 75 | 15.0 | 2 1/2 | \$ 7.40 |
| IN1134 | 1500 | 100 | 7.5 | 1 3/16 | 8.10 |
| IN1135 | 1800 | 65 | 18.0 | 2 1/2 | 9.45 |
| IN1136 | 1800 | 85 | 9.0 | 1 3/16 | 9.90 |
| IN1137 | 2400 | 50 | 24.0 | 2 1/2 | 12.85 |
| IN1138 | 2400 | 60 | 12.0 | 1 3/16 | 13.95 |
| IN1139 | 3600 | 65 | 27.0 | 4 3/8 | 20.65 |
| IN1140 | 3600 | 65 | 18.0 | 2 1/2 | 23.55 |
| IN1141 | 4800 | 60 | 36.0 | 4 3/8 | 28.50 |
| IN1142 | 4800 | 50 | 24.0 | 2 1/2 | 30.75 |
| IN1143 | 6000 | 50 | 45.0 | 4 3/8 | 34.30 |
| IN1143A | 6000 | 65 | 30.0 | 4 3/8 | 39.20 |
| IN1144 | 7200 | 50 | 54.0 | 6 1/8 | 40.80 |
| IN1145 | 7200 | 60 | 36.0 | 4 3/8 | 43.10 |
| IN1146 | 8000 | 45 | 60.0 | 6 1/8 | 45.40 |
| IN1147 | 12000 | 45 | 60.0 | 6 1/8 | 64.40 |
| IN1148 | 14000 | 50 | 52.0 | 6 1/8 | 74.75 |
| IN1149 | 16000 | 45 | 60.0 | 6 1/8 | 78.20 |

*At rated DC current.

6 and 12 AMP SILICON RECTIFIERS (FIG. D)

High Reliability Series Commercial Types
Oper. Range -65° to +80°C Temp. Range -20° to +150°C

6-AMP SERIES

| JEDEC* Part Number | PRV Volts | Net 1-99 | INT'L* Part No. | PRV Volts | Net 1-99 |
|--------------------|-----------|----------|-----------------|-----------|----------|
| IN1341 | 50 | \$2.75 | 6F5 | 50 | \$2.23 |
| IN1342 | 100 | 3.00 | 6F10 | 100 | 2.60 |
| IN1343 | 150 | 3.75 | 6F15 | 150 | 3.05 |
| IN1344 | 200 | 4.75 | 6F20 | 200 | 3.60 |
| IN1345 | 300 | 6.15 | 6F30 | 300 | 4.29 |
| IN1346 | 400 | 8.25 | 6F40 | 400 | 6.06 |
| IN1347 | 500 | 9.75 | 6F50 | 500 | 8.67 |

12-AMP SERIES

| JEDEC* Part Number | PRV Volts | Net 1-99 | INT'L* Part No. | PRV Volts | Net 1-99 |
|--------------------|-----------|----------|-----------------|-----------|----------|
| IN1199 | 50 | \$2.80 | 12F5 | 50 | \$ 2.47 |
| IN1200 | 100 | 3.25 | 12F10 | 100 | 2.74 |
| IN1201 | 150 | 4.45 | 12F15 | 150 | 3.62 |
| IN1202 | 200 | 5.25 | 12F20 | 200 | 4.32 |
| IN1203 | 300 | 7.50 | 12F30 | 300 | 6.35 |
| IN1204 | 400 | 10.30 | 12F40 | 400 | 8.34 |
| IN1205 | 500 | 13.85 | 12F50 | 500 | 12.75 |

25 TO 45 AMP* SILICON POWER RECTIFIERS (FIG. U)

| JEDEC Part Number | PRV Volts | RMS Max Volts | Recommended RMS Volts | Net 1-99 |
|-------------------|-----------|---------------|-----------------------|----------|
| IN2128A | 50 | 35 | 12 | \$ 4.25 |
| IN2129A | 100 | 70 | 24 | 5.05 |
| IN2130A | 150 | 105 | 36 | 6.05 |
| IN2131A | 200 | 140 | 48 | 7.10 |
| IN2132A | 250 | 175 | 60 | 8.50 |
| IN2133A | 300 | 210 | 72 | 9.90 |
| IN2134A | 350 | 245 | 84 | 11.80 |
| IN2135A | 400 | 280 | 96 | 13.95 |
| IN2136A | 450 | 310 | 108 | 15.00 |
| IN2137A | 500 | 350 | 120 | 19.25 |

To order reverse polarity types, add the letter "R" to the basic part number (IN2128RA, etc.).

45 TO 150 AMP* SILICON POWER RECTIFIERS (FIG. X)

| JEDEC Part Number | Int'l Part Number | PRV Volts | RATED VOLTAGE | | Net 1-99 |
|-------------------|-------------------|-----------|-----------------------|-----|----------|
| | | Max Volts | Recommended RMS Volts | | |
| IN3085 | 45L5 | 50 | 35 | 12 | \$ 7.75 |
| | 45L10 | 100 | 70 | 24 | 9.55 |
| | 45L15 | 150 | 105 | 36 | 11.70 |
| IN3086 | 45L20 | 200 | 140 | 48 | 14.20 |
| | 45L25 | 250 | 175 | 60 | 16.50 |
| IN3087 | 45L30 | 300 | 210 | 72 | 20.80 |
| | 45L35 | 350 | 245 | 84 | 24.00 |
| IN3088 | 45L40 | 400 | 280 | 96 | 29.80 |
| | 45L45 | 450 | 310 | 108 | 33.50 |
| IN3089 | 45L50 | 500 | 350 | 120 | 37.80 |
| IN3090 | 45L60 | 600 | 420 | 144 | 47.75 |

TO ORDER REVERSE POLARITY TYPE: add the letter "R" to the basic part number. For example: 45LR5, 45PR5, etc.

*Current rating depends on circuit, heat sink and whether or not fan cooled.

ITT Silicon Devices

ZENER VOLTAGE REGULATOR DIODES

3/4 Watt Power Dissipation:

Jedec Types IN1507 thru IN1517 inclusive-10% tolerance • IN1507A thru IN1517A inclusive-5% tolerance

In addition ITT offers 33 voltage ranges in their series "B" Zener Diodes. ITT part numbers ZB3.9 thru ZB100 in tolerances 5%, 10%, and 20%.



1 Watt Power Dissipation:

Jedec Types IN1518 thru IN1528 inclusive • IT1765 thru IN1795 inclusive

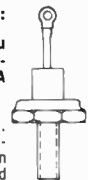
Standard tolerance 10%-Add "A" suffix to Jedec No. for 5% tolerance. ITT part nos. ZT3.9 to ZT100 complements the Jedec series with 33 voltage ranges and three tolerances.



3.5 Watt Power Dissipation:

Jedec Types IN1588 thru IN1598 inclusive-10% tolerance • IN1588A thru IN1598A inclusive-5% tolerance

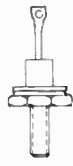
ITT series "G" part nos. ZG3.9 thru ZG100 makes available 33 voltage ranges in tolerances of 5%, 10%, and 20%.



10 Watt Power Dissipation:

Jedec types IN1351R thru IN1375R • IN1599 thru IN1609 • IN1803R thru IN1808R • IN1816R thru IN1836R • IN2041 thru IN2049

All available in standard tolerance of 10% or in 5% tolerances—Add suffix "A" to part number to signify 5%. Series "K" completes ITT 10 watt zener line—part nos. ZK3.9 to ZK100 includes 33 voltage ranges and three tolerances.



Ratings and characteristics are @ 25°C. For complete zener diode information request catalog 900025-361. Also available on request is ITT Zener Regulator Cross Reference Guide listing current zeners by Jedec and non-Jedec designations.

LOW POWER SILICON RECTIFIERS



STUD MOUNTED SERIES (FIG. A)

Superior design meets exacting systems and testing controls. Ratings are conservative. Stud 10-32 threaded.

| JEDEC No. | PIV | Max. DC Amps At 150° C | 1-Cycle Surge Amps | Fwd. Drop At 25° C Volts @ Ma |
|-----------|------|------------------------|--------------------|-------------------------------|
| 1N254 | 200 | .4† | 10 | 2.0 800 |
| 1N255 | 400 | .4† | 10 | 2.0 400 |
| 1N256 | 600 | .2† | 5 | 2.0 400 |
| 1N332 | 400 | .4 | 10 | 2.0 800 |
| 1N333 | 400 | .2 | 5 | 2.0 400 |
| 1N334 | 300 | .4 | 10 | 2.0 800 |
| 1N335 | 300 | .2 | 5 | 2.0 400 |
| 1N336 | 200 | .4 | 10 | 2.0 800 |
| 1N337 | 200 | .2 | 5 | 2.0 400 |
| 1N339 | 100 | .4 | 10 | 2.0 800 |
| 1N340 | 100 | .2 | 5 | 2.0 400 |
| 1N341 | 400 | .4 | 10 | 2.0 800 |
| 1N342 | 400 | .2 | 5 | 2.0 400 |
| 1N343 | 300 | .4 | 10 | 2.0 800 |
| 1N344 | 300 | .2 | 5 | 2.0 400 |
| 1N345 | 200 | .4 | 10 | 2.0 800 |
| 1N346 | 200 | .2 | 5 | 2.0 400 |
| 1N348 | 100 | .4 | 10 | 2.0 800 |
| 1N349 | 100 | .2 | 5 | 2.0 400 |
| 1N550 | 100 | .5‡ | 4 | 1.5 500 |
| 1N551 | 200 | .5‡ | 4 | 1.5 500 |
| 1N552 | 300 | .5‡ | 4 | 1.5 500 |
| 1N553 | 400 | .5‡ | 4 | 1.5 500 |
| 1N554 | 500 | .5‡ | 4 | 1.5 500 |
| 1N555 | 600 | .5‡ | 4 | 1.5 600 |
| 1N562 | 800 | .4† | 15 | 1.75 400 |
| 1N563 | 1000 | .4† | 15 | 1.75 400 |

AXIAL LEAD "TDP HAT" SERIES (FIG. B)

| JEDEC No. | PIV | Max. DC Amps At 25° C | Max. DC Amps At 150° C | 1-Cycle Surge Amps | Fwd. Drop At 25° C Volts @ Ma |
|-----------|------|-----------------------|------------------------|--------------------|-------------------------------|
| 1N440 | 100 | .3 | .3† | 1.5 | 300 |
| 1N440B | 100 | .75‡ | .25 | 1.5 | 750 |
| 1N441 | 200 | .3 | .3† | 1.5 | 300 |
| 1N441B | 200 | .75‡ | .25 | 1.5 | 750 |
| 1N442 | 300 | .3 | .3† | 1.5 | 300 |
| 1N442B | 300 | .75‡ | .25 | 1.5 | 750 |
| 1N443 | 400 | .3 | .3† | 1.5 | 300 |
| 1N443B | 400 | .75‡ | .25 | 1.5 | 750 |
| 1N444 | 500 | .3 | .3† | 1.5 | 300 |
| 1N444B | 500 | .75‡ | .25 | 1.5 | 750 |
| 1N445 | 600 | .3 | .3† | 1.5 | 300 |
| 1N445B | 600 | .75‡ | .25 | 1.5 | 750 |
| 1N530 | 100 | .3 | 2.0 | 300 | 300 |
| 1N531 | 200 | .3 | 2.0 | 300 | 300 |
| 1N532 | 300 | .3 | 2.0 | 300 | 300 |
| 1N533 | 400 | .3 | 2.0 | 300 | 300 |
| 1N534 | 500 | .3 | 2.0 | 300 | 300 |
| 1N535 | 600 | .3 | 2.0 | 300 | 300 |
| 1N537 | 100 | .75‡ | .25 | 1.1 | 500 |
| 1N538 | 200 | .75‡ | .25 | 1.1 | 500 |
| 1N539 | 300 | .75‡ | .25 | 1.1 | 500 |
| 1N540 | 400 | .75‡ | .25 | 1.1 | 500 |
| 1N547 | 600 | .75‡ | .25 | 1.2 | 500 |
| 1N560 | 800 | .5‡ | .25† | 1.3 | 250 |
| 1N561 | 1000 | .5‡ | .25† | 1.3 | 250 |
| 1N599 | 50 | .4 | .3† | 1.5 | 200 |
| 1N600 | 100 | .4 | .3† | 1.5 | 200 |
| 1N600A | 100 | .4 | .3† | 1.5 | 400 |
| 1N601 | 150 | .4 | .3† | 1.5 | 200 |
| 1N602 | 200 | .4 | .3† | 1.5 | 200 |
| 1N602A | 200 | .4 | .3† | 1.5 | 400 |
| 1N603 | 300 | .4 | .3† | 1.5 | 200 |
| 1N604 | 400 | .4 | .3† | 1.5 | 200 |
| 1N604A | 400 | .4 | .3† | 1.5 | 400 |
| 1N605 | 500 | .4 | .3† | 1.5 | 200 |
| 1N605A | 500 | .4 | .3† | 1.5 | 400 |
| 1N606 | 600 | .4 | .3† | 1.5 | 200 |
| 1N1095 | 500 | .05* | .25‡ | 1.1 | 500 |
| 1N1096 | 600 | .05* | 1.1 | 500 | 500 |

†At 135° C. ‡At 100° C. §At 50° C. ¶At 100° C. ††At 135° C. †††Max. Inv. Current (FCA) at 125° C.

MEDIUM POWER SILICON RECTIFIERS

10-32 STUD-MOUNTED SERIES (FIG. C)

Feature low forward voltage drop, high surge current and low reverse current capabilities. Rugged, hermetically sealed package.

| JEDEC No. | PIV | Max. DC Amps 25° C | 1-Cycle Surge Amps | Fwd. Drop At 25° C Volts @ Amps |
|-----------|------|--------------------|--------------------|---------------------------------|
| 1N253 | 100 | 1.0* | 20 | 1.5 1.0 |
| 1N338 | 100 | 1.0* | 20 | 2.0 2.0 |
| 1N347 | 100 | 1.0* | 20 | 2.0 2.0 |
| 1N607 | 50 | 1.0† | 10 | 1.5 0.2 |
| 1N607A | 50 | 1.0‡ | 10 | 1.5 0.2 |
| 1N608 | 100 | 1.0‡ | 10 | 1.5 0.2 |
| 1N608A | 100 | 1.0‡ | 10 | 1.5 0.2 |
| 1N609 | 150 | 1.0‡ | 10 | 1.5 0.2 |
| 1N609A | 150 | 1.0‡ | 10 | 1.5 0.2 |
| 1N610 | 200 | 1.0‡ | 10 | 1.5 0.2 |
| 1N610A | 200 | 1.0‡ | 10 | 1.5 0.2 |
| 1N611 | 300 | 1.0‡ | 10 | 1.5 0.2 |
| 1N611A | 300 | 1.0‡ | 10 | 1.5 0.2 |
| 1N612 | 400 | 1.0‡ | 10 | 1.5 0.2 |
| 1N612A | 400 | 1.0‡ | 10 | 1.5 0.2 |
| 1N613 | 500 | 1.0‡ | 10 | 1.5 0.2 |
| 1N613A | 500 | 1.0‡ | 10 | 1.5 0.2 |
| 1N614 | 600 | 1.0‡ | 10 | 1.5 0.2 |
| 1N614A | 600 | 1.0‡ | 10 | 1.5 0.2 |
| 1N1124 | 200 | 3 | 10 | 1.1 1 |
| 1N1125 | 300 | 3 | 10 | 1.1 1 |
| 1N1126 | 400 | 3 | 10 | 1.1 1 |
| 1N2226 | 1200 | 1.0 | 20 | 1.2 1.0 |
| 1N2226A | 1200 | 1.0 | 20 | 1.2 1.0 |
| 1N2228 | 50 | 5.0 | 100 | 1.2 5.0 |
| 1N2228A | 50 | 5.0 | 100 | 1.2 5.0 |
| 1N2230 | 200 | 5.0 | 100 | 1.2 5.0 |
| 1N2230A | 200 | 5.0 | 100 | 1.2 5.0 |
| 1N2332 | 300 | 5.0 | 100 | 1.2 5.0 |
| 1N2332A | 300 | 5.0 | 100 | 1.2 5.0 |
| 1N2334 | 400 | 5.0 | 100 | 1.2 5.0 |
| 1N2334A | 400 | 5.0 | 100 | 1.2 5.0 |
| 1N2336 | 500 | 5.0 | 100 | 1.2 5.0 |
| 1N2336A | 500 | 5.0 | 100 | 1.2 5.0 |
| 1N2338 | 600 | 5.0 | 100 | 1.2 5.0 |
| 1N2338A | 600 | 5.0 | 100 | 1.2 5.0 |
| 1N2440 | 800 | 5.0 | 100 | 1.2 5.0 |
| 1N2440A | 800 | 5.0 | 100 | 1.2 5.0 |
| 1N2442 | 1000 | 5.0 | 100 | 1.2 5.0 |
| 1N2442A | 1000 | 5.0 | 100 | 1.2 5.0 |
| 1N2444 | 1200 | 5.0 | 100 | 1.2 5.0 |
| 1N2444A | 1200 | 5.0 | 100 | 1.2 5.0 |
| 1N2446 | 50 | 10.0 | 200 | 1.2 10.0 |
| 1N2446A | 50 | 10.0 | 200 | 1.2 10.0 |
| 1N2448 | 100 | 10.0 | 200 | 1.2 10.0 |
| 1N2448A | 100 | 10.0 | 200 | 1.2 10.0 |
| 1N2450 | 200 | 10.0 | 200 | 1.2 10.0 |
| 1N2450A | 200 | 10.0 | 200 | 1.2 10.0 |
| 1N2452 | 300 | 10.0 | 200 | 1.2 10.0 |
| 1N2452A | 300 | 10.0 | 200 | 1.2 10.0 |
| 1N2454 | 400 | 10.0 | 200 | 1.2 10.0 |
| 1N2454A | 400 | 10.0 | 200 | 1.2 10.0 |
| 1N2456 | 500 | 10.0 | 200 | 1.2 10.0 |
| 1N2456A | 500 | 10.0 | 200 | 1.2 10.0 |
| 1N2458 | 600 | 10.0 | 200 | 1.2 10.0 |
| 1N2458A | 600 | 10.0 | 200 | 1.2 10.0 |
| 1N2460 | 800 | 10.0 | 200 | 1.2 10.0 |

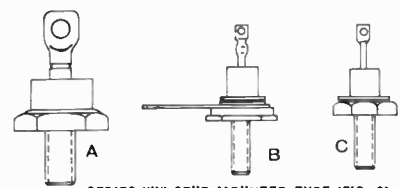
*At 135° C. †At 150° C. ‡At 100° C. §At 140° C. Max. inv. cur. Ma (FCA) at 125° C.

SERIES "K" STUD-MOUNTED TYPES (FIG. C)

Rated 6 amps DC max. at 150° C. Max. single-cycle surge, 75 amps KS602AA through KS602RA; 1N1341 thru 1N1342A, 160 amps; 10-32 stud threaded.

| JEDEC No. | ITT No. | PIV | Fwd. Drop At 25° C Volts @ Amps |
|-----------|---------|-----|---------------------------------|
| 1N2491 | KS602AA | 50 | 1.1 6 |
| 1N2492 | KS602BA | 100 | 1.1 6 |
| | KS602CA | 150 | 1.1 6 |
| 1N2493 | KS602DA | 200 | 1.1 6 |
| | KS602EA | 250 | 1.1 6 |
| 1N2494 | KS602FA | 300 | 1.1 6 |
| | KS602GA | 350 | 1.1 6 |
| 1N2495 | KS602HA | 400 | 1.1 6 |
| 1N2496 | KS602KA | 500 | 1.1 6 |
| 1N2497 | KS602MA | 600 | 1.1 6 |
| | KS602PA | 700 | 1.1 6 |
| | KS602RA | 800 | 1.1 6 |
| 1N1341 | | 50 | 1.1 6 |
| 1N1341A | | 50 | .64 6* |
| 1N1342 | | 100 | 1.1 6 |
| 1N1342A | | 100 | .64 6* |

* Full cycle average, 150° C. stud at full.



SERIES "U" STUD-MOUNTED TYPE (FIG. C)

Rated 12 amps DC max. at 150° C. Max. 1-cycle surge, 200 amps 1N1199 thru 1N1205; 240 amps. 1N1199A thru 1N1204A. Stud, 10-32 threaded.

| JEDEC No. | ITT No. | PIV | Fwd. Drop At 25° C Volts @ Amps |
|-----------|---------|-----|---------------------------------|
| 1N1199 | US123AA | 50 | 1.2 12 |
| 1N1199A | | 50 | .55 12* |
| 1N1200 | US123BA | 100 | 1.2 12 |
| 1N1200A | | 100 | .55 12* |
| 1N1201 | US123CA | 150 | 1.2 12 |
| 1N1201A | | 150 | .55 12* |
| 1N1201 | US123DA | 200 | 1.2 12 |
| 1N1201A | | 200 | .55 12* |
| | US123EA | 250 | 1.2 12 |
| 1N1203 | US123FA | 300 | 1.2 12 |
| 1N1203A | | 300 | .55 12* |
| | US123GA | 350 | 1.2 12 |
| 1N1204 | US123HA | 400 | 1.2 12 |
| 1N1204A | | 400 | .55 12* |
| 1N1205 | US123KA | 500 | 1.2 12 |

*Full cycle average, 150° C. stud at full load.

1/4-28 STUD MOUNT SERIES (FIG. A)

Types 1N248, 1N249, and 1N250 rated 10 amps @ 150° C. All others rated 20 amps 150° C. Max inv. current-FCA @ 150° C, 5 ma. Polarity, cathode to stud—For reverse polarity add suffix "R" to Jedec No. (1N248R).

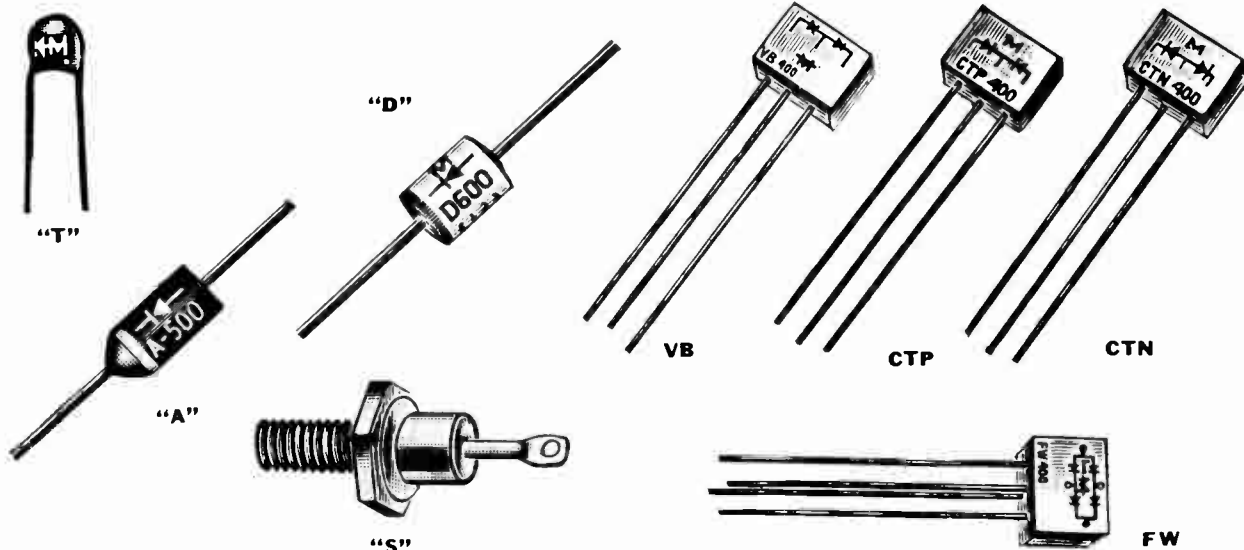
| JEDEC No. | ITT No. | PIV | 1-Cycle Surge Amps | Fwd. Drop At 25° C Volts @ Amps |
|-----------|---------|-----|--------------------|---------------------------------|
| 1N248 | | 50 | 80 | 1.5 25 |
| 1N248A | | 50 | 180 | 1.5 50 |
| 1N249 | | 100 | 80 | 1.5 25 |
| 1N249A | | 100 | 180 | 1.5 50 |
| 1N249B | | 110 | 180 | 1.5 50 |
| 1N250 | | 200 | 80 | 1.5 25 |
| 1N250A | | 200 | 180 | 1.5 50 |
| 1N250B | | 220 | 180 | 1.5 50 |

INSULATED STUD MOUNTED TYPES (FIG. B)

| JEDEC No. | PIV | Max. DC Amps at 25° C | Max. DC Amps at 150° C | 1-Cycle Surge Amps | Rev. Cur., µa |
|-----------|------|-----------------------|------------------------|--------------------|---------------|
| 1N2247A | 50 | 10.0 | 3.0 | 200 | 3.0 |
| 1N2249 | 100 | 10.0 | 3.0 | 200 | 5.0 |
| 1N2249A | 100 | 10.0 | 3.0 | 200 | 3.0 |
| 1N2251 | 200 | 10.0 | 3.0 | 200 | 5.0 |
| 1N2251A | 200 | 10.0 | 3.0 | 200 | 3.0 |
| 1N2253 | 300 | 10.0 | 3.0 | 200 | 5.0 |
| 1N2253A | 300 | 10.0 | 3.0 | 200 | 3.0 |
| 1N2258 | 600 | 10.0 | 3.0 | 200 | 5.0 |
| 1N2259A | 600 | 10.0 | 3.0 | 200 | 3.0 |
| 1N2261 | 800 | 10.0 | 3.0 | 200 | 10.0 |
| 1N2261A | 800 | 10.0 | 3.0 | 200 | 5.0 |
| 1N2263 | 1000 | 10.0 | 3.0 | 200 | 10.0 |
| 1N2263A | 1000 | 10.0 | 3.0 | 200 | 5.0 |
| 1N2265 | 1200 | 10.0 | 3.0 | 200 | 10.0 |
| 1N2290A | 100 | 5.0 | 1.0 | 100 | 3.0 |
| 1N2291 | 200 | 1.5 | .4 | 10 | 3.0 |
| 1N | | | | | |

P. R. MALLORY & CO. Inc.
MALLORY

Semiconductors



DIFFUSED JUNCTION SILICON RECTIFIERS

Mallory silicon rectifiers are manufactured to the most exacting standards and are conservatively rated to provide maximum performance. All Mallory semiconductors are 100% inspected to all specifications. Packaged in bulk or five per plastic box; Type "S" is packaged 10 per carton.

TYPE "T" SILICON RECTIFIERS

Parallel leads for printed circuit applications. "Molloseal" encapsulation. Leads: .032" diameter x 1 1/4" long; .375" spacing. Body Size: 1/8" diameter x 1/4" thick (maximum).

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 85° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|-----------------------------|----------|
| 1N2090 | 1N2090 | 50 | 35 | .500 | 5 | 35 | | \$0.618 |
| 1N2091 | 1N2091 | 100 | 70 | .500 | 5 | 35 | | .712 |
| 1N2092 | 1N2092 | 200 | 140 | .500 | 5 | 35 | | .779 |
| 1N2093 | 1N2093 | 300 | 210 | .500 | 5 | 35 | | .826 |
| 1N2094 | 1N2094 | 400 | 280 | .500 | 5 | 35 | | .865 |
| 1N2095 | 1N2095 | 500 | 350 | .500 | 5 | 35 | | 1.03 |
| 1N2096 | 1N2096 | 600 | 420 | .500 | 5 | 35 | | 1.11 |

TYPE "A" SILICON RECTIFIERS

Axial leads, epoxy case. Case Size: .220" dia. x 3/8" (max.)

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 85° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|-----------------------------|----------|
| A50 | | 50 | 35 | .500 | 5 | 35 | | \$0.618 |
| A100 | | 100 | 70 | .500 | 5 | 35 | | .712 |
| A200 | 1N2069* | 200 | 140 | .500 | 5 | 35 | | .779 |
| A300 | | 300 | 210 | .500 | 5 | 35 | | .826 |
| A400 | 1N2070* | 400 | 280 | .500 | 5 | 35 | | .865 |
| A500 | | 500 | 350 | .500 | 5 | 35 | | 1.03 |
| A600 | 1N2071* | 600 | 420 | .500 | 5 | 35 | | 1.11 |

*Reference only—"A" type exceeds requirements.

TYPE "D" SILICON RECTIFIERS

Axial leads; hermetically sealed metal case. Case Size: .240" diameter x .405" (maximum).

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 125° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|------------------------------|----------|
| D50 | * | 50 | 35 | .500 | 5 | 35 | | \$0.704 |
| D100 | * | 100 | 70 | .500 | 5 | 35 | | .738 |
| D200 | * | 200 | 140 | .500 | 5 | 35 | | .774 |
| D300 | * | 300 | 210 | .500 | 5 | 35 | | .855 |
| D400 | * | 400 | 280 | .500 | 5 | 35 | | .952 |
| D500 | * | 500 | 350 | .500 | 5 | 35 | | 1.02 |
| D600 | * | 600 | 420 | .500 | 5 | 35 | | 1.10 |

*Not assigned.

TYPE "S" SILICON RECTIFIERS

Stud mount; hermetically sealed metal case. Case Size: .270" diameter x 1 1/4" (overall); 1/8" across flats. #10-32 x 3/16" stud; total height, 1 1/8" (maximum).

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 150° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|------------------------------|----------|
| S50 | | 50 | 35 | 1 | 25 | 100 | | \$1.80 |
| S100 | | 100 | 70 | 1 | 25 | 100 | | 2.20 |
| S200 | 1N1124 | 200 | 140 | 1 | 25 | 100 | | 2.73 |
| S300 | 1N1125 | 300 | 210 | 1 | 25 | 100 | | 3.76 |
| S400 | 1N1126 | 400 | 280 | 1 | 25 | 100 | | 4.75 |
| S500 | 1N1127 | 500 | 350 | 1 | 25 | 100 | | 6.60 |
| S600 | 1N1128 | 600 | 420 | 1 | 25 | 100 | | 8.36 |

PRE-PACKAGED SILICON RECTIFIER CIRCUITS

Mallory pre-packaged silicon rectifier circuits are ideal for replacing multi-rectifier circuits. The circuits are made from 100% inspected rectifiers, carefully pre-matched for optimum performance. Reduce inventory, handling costs and installation time. All cases are 1 1/8" high x 1 1/4" long x 1/4" thick. All units are sealed in pre-molded epoxy filled cases. Packaged in bulk or one per plastic box.

TYPE "VB" VOLTAGE DOUBLER

Three parallel leads: Two silicon rectifiers in series.

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 100° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|------------------------------|----------|
| VB50 | * | 50 | 18 | .5 | 5 | 35 | | \$1.34 |
| VB100 | * | 100 | 35 | .5 | 5 | 35 | | 1.39 |
| VB200 | * | 200 | 70 | .5 | 5 | 35 | | 1.48 |
| VB300 | * | 300 | 105 | .5 | 5 | 35 | | 1.65 |
| VB400 | * | 400 | 140 | .5 | 5 | 35 | | 1.67 |
| VB500 | * | 500 | 180 | .5 | 5 | 35 | | 1.87 |
| VB600 | * | 600 | 210 | .5 | 5 | 35 | | 2.01 |

*Not assigned.

TYPE "CTN" FULL-WAVE RECTIFIERS

Three parallel leads: Center tap—negative.

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 100° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|------------------------------|----------|
| CTN50 | * | 50 | 18 | .5 | 5 | 35 | | \$1.34 |
| CTN100 | * | 100 | 35 | .5 | 5 | 35 | | 1.39 |
| CTN200 | * | 200 | 70 | .5 | 5 | 35 | | 1.48 |
| CTN300 | * | 300 | 105 | .5 | 5 | 35 | | 1.65 |
| CTN400 | * | 400 | 140 | .5 | 5 | 35 | | 1.67 |
| CTN500 | * | 500 | 180 | .5 | 5 | 35 | | 1.87 |
| CTN600 | * | 600 | 210 | .5 | 5 | 35 | | 2.01 |

*Not assigned.

TYPE "CTP" FULL-WAVE RECTIFIERS

Three parallel leads: Center tap—positive.

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 100° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|------------------------------|----------|
| CTP50 | * | 50 | 18 | .5 | 5 | 35 | | \$1.34 |
| CTP100 | * | 100 | 35 | .5 | 5 | 35 | | 1.39 |
| CTP200 | * | 200 | 70 | .5 | 5 | 35 | | 1.48 |
| CTP300 | * | 300 | 105 | .5 | 5 | 35 | | 1.65 |
| CTP400 | * | 400 | 140 | .5 | 5 | 35 | | 1.67 |
| CTP500 | * | 500 | 180 | .5 | 5 | 35 | | 1.87 |
| CTP600 | * | 600 | 210 | .5 | 5 | 35 | | 2.01 |

*Not assigned.

TYPE "FW" FULL-WAVE BRIDGE RECTIFIERS

Four parallel leads: Four silicon rectifiers, encapsulated in bridge form.

| Mallory Number | JEDEC No. | Max. PRV | Max. RMS Volts | DC Load | Recur. Peak | 4MS Surge | Max. Current, Amps at 100° C | Net Each |
|----------------|-----------|----------|----------------|---------|-------------|-----------|------------------------------|----------|
| FW50 | * | 50 | 35 | 1.0 | 5 | 35 | | \$2.52 |
| FW100 | * | 100 | 70 | 1.0 | 5 | 35 | | 2.60 |
| FW200 | * | 200 | 140 | 1.0 | 5 | 35 | | 2.84 |
| FW300 | * | 300 | 210 | 1.0 | 5 | 35 | | 3.11 |
| FW400 | * | 400 | 280 | 1.0 | 5 | 35 | | 3.25 |
| FW500 | * | 500 | 350 | 1.0 | 5 | 35 | | 3.51 |
| FW600 | * | 600 | 420 | 1.0 | 5 | 35 | | 3.66 |

*Not assigned.

DIRECTRON

Industrial Selenium Rectifiers,
Transformers, Chokes and
Power Supplies



FULL WAVE BRIDGE RECTIFIERS,
SINGLE PHASE, RESISTIVE-INDUCTIVE LOADS
ALL PRICES SHOWN ARE USER NET PRICES

| Max. Amps. | 18v. in— 14v. out | 36v. in— 28v. out | 54v. in— 42v. out | 130v. in— 100v. out |
|------------|----------------------|----------------------|----------------------|------------------------|
| 1/2 | \$1.05 | \$1.50 | \$2.50 | \$5.00 |
| 1 | 1.20 | 2.20 | 3.20 | 8.00 |
| 2 | 2.10 | 3.00 | 4.50 | 10.00 |
| 3 | 2.70 | 4.00 | 6.00 | 14.00 |
| 4 | 3.60 | 7.50 | 10.00 | 24.00 |
| 6 | 4.50 | 9.00 | 12.00 | 32.00 |
| 10 | 6.60 | 12.00 | 18.00 | 39.00 |
| 12 | 8.20 | 16.00 | 22.00 | 44.00 |
| 15 | 10.50 | 20.00 | 27.00 | 54.00 |
| 20 | 12.50 | 25.00 | 36.00 | 77.00 |
| 24 | 15.00 | 30.00 | 42.00 | 82.00 |
| 30 | 19.10 | 37.00 | 55.00 | |
| 36 | 24.00 | 48.00 | | |



SELENIUM RECTIFIER TRANSFORMERS

Transformers are with 2 — 18 volt center-tapped windings. Connected in series delivers 36 volts as rated. Connected in parallel — delivers 18 volts at twice rated current. (Taps 9, 18, 27, 36 V.)

| User's Net Price | | User's Net Price | |
|------------------|---------|------------------|---------|
| 1 Amp | \$ 5.25 | 12 Amps | \$16.75 |
| 2 Amps | 7.20 | 24 Amps | 35.75 |
| 4 Amps | 8.75 | 30 Amps | 45.00 |
| 8 Amps | 15.00 | 50 Amps | 59.75 |

Primary taps at 100, 105, 110 and 115 volts now available on 12 amp, 24 amp, 30 amp and 50 amp transformers. No extra charge. Custom built transformers — 48 hour service.

With Two 28V Center Tapped Windings—56 Volt:

| | |
|---------|---------|
| 2 Amps | \$ 8.50 |
| 4 Amps | 12.50 |
| 6 Amps | 22.50 |
| 12 Amps | 30.00 |



HIGH CURRENT CHOKES

| | | User's Net Price | |
|----------|----------|------------------|---------|
| 1 Amp | .1 hy | 1.5 ohm | \$ 4.95 |
| 2 Amps | .04 hy | .9 ohm | 6.00 |
| 4 Amps | .07 hy | .6 ohm | 7.95 |
| 8 Amps | .03 hy | .3 ohm | 12.00 |
| 12 Amps | .01 hy | .1 ohm | 14.95 |
| 20 Amps | .004 hy | .05 ohm | 15.00 |
| 24 Amps | .004 hy | .025 ohm | 27.00 |
| 30 Amps | .003 hy | .01 ohm | 36.00 |
| 50 Amps | .001 hy | .001 ohm | 45.00 |
| 100 Amps | .0005 hy | .0005 ohm | 54.00 |



HY-A-SIL

High - Ampere - Silicon

SILICON POWER RECTIFIERS



FEATURES

- High operating temperature, 190°C (Up to 120°C ambient)
- High operating voltage (Up to 600 p.i.v.)
- High efficiency (99% compared to about 75% for selenium)
- Excellent regulation (4% compared to about 15% for selenium)

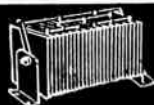
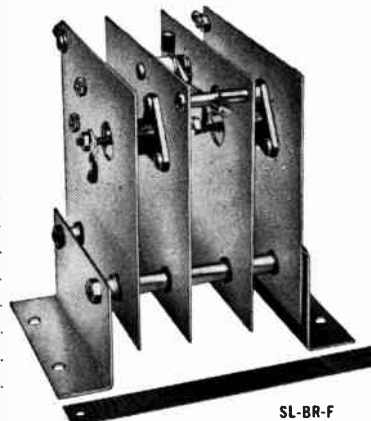
| Stock No. | Type | AC Input Volts up to | DC Output Volts | Max. Amps Self Cooled | Max. Amps fan Cooled | Size and Weight | User Net Price |
|-----------|------------|----------------------|-----------------|-----------------------|----------------------|-----------------|----------------|
| SL-CT-A | Center-Tap | 18-0-18 | 16 | 50 | 100 | B | \$17.50 |
| SL-CT-B | Center-Tap | 36-0-36 | 32 | 50 | 100 | B | 22.50 |
| SL-CT-D | Center-Tap | 72-0-72 | 64 | 50 | 100 | B | 36.00 |
| SL-CT-F | Center-Tap | 140-0-140 | 125 | 50 | 100 | B | 44.00 |
| SK-CT-A | Center-Tap | 18-0-18 | 16 | 100 | 200 | C | 30.00 |
| SK-CT-B | Center-Tap | 36-0-36 | 32 | 100 | 200 | C | 34.00 |
| SK-CT-D | Center-Tap | 72-0-72 | 64 | 100 | 200 | C | 37.00 |
| SK-CT-F | Center-Tap | 140-0-140 | 125 | 100 | 200 | C | 48.00 |
| SM-CT-A | Center-Tap | 18-0-18 | 16 | 200 | 400 | D | 45.00 |
| SM-CT-B | Center-Tap | 36-0-36 | 32 | 200 | 400 | D | 60.00 |
| SM-CT-D | Center-Tap | 72-0-72 | 64 | 200 | 400 | D | 62.00 |
| SM-CT-F | Center-Tap | 140-0-140 | 125 | 200 | 400 | D | 76.00 |
| SO-CT-B | Center-Tap | 36-0-36 | 32 | 400 | 800 | E | 100.00 |
| SA-BR-D | 1φ Bridge | 140 | 125 | 1 | * | — | 9.00 |
| SA-BR-F | 1φ Bridge | 280 | 250 | 1 | * | — | 10.50 |
| SC-BR-D | 1φ Bridge | 140 | 125 | 2 | * | — | 10.50 |
| SC-BR-F | 1φ Bridge | 280 | 250 | 2 | * | — | 12.00 |
| SD-BR-A | 1φ Bridge | 36 | 32 | 6 | 12 | F | 18.00 |
| SD-BR-D | 1φ Bridge | 140 | 125 | 6 | 12 | F | 30.00 |
| SD-BR-F | 1φ Bridge | 280 | 250 | 6 | 12 | F | 39.00 |
| SE-BR-A | 1φ Bridge | 36 | 32 | 10 | 20 | G | 21.00 |
| SE-BR-D | 1φ Bridge | 140 | 125 | 10 | 20 | G | 36.00 |
| SE-BR-F | 1φ Bridge | 280 | 250 | 10 | 20 | G | 44.00 |
| SF-BR-A | 1φ Bridge | 36 | 32 | 20 | 40 | H | 24.00 |
| SF-BR-D | 1φ Bridge | 140 | 125 | 20 | 40 | H | 40.00 |
| SF-BR-F | 1φ Bridge | 280 | 250 | 20 | 40 | H | 48.00 |
| SL-BR-A | 1φ Bridge | 32 | 32 | 50 | 100 | J | 33.00 |
| SL-BR-B | 1φ Bridge | 72 | 64 | 50 | 100 | J | 39.00 |
| SL-BR-D | 1φ Bridge | 140 | 125 | 50 | 100 | J | 70.00 |
| SL-BR-F | 1φ Bridge | 280 | 250 | 50 | 100 | J | 110.00 |
| SG-BR-A | 1φ Bridge | 36 | 32 | 70 | 140 | J | 40.00 |
| SG-BR-B | 1φ Bridge | 72 | 64 | 70 | 140 | J | 50.00 |
| SG-BR-D | 1φ Bridge | 140 | 125 | 70 | 140 | J | 80.00 |
| SG-BR-F | 1φ Bridge | 280 | 250 | 70 | 140 | J | 130.00 |
| SK-BR-A | 1φ Bridge | 36 | 32 | 100 | 200 | K | 60.00 |
| SK-BR-B | 1φ Bridge | 72 | 64 | 100 | 200 | K | 68.00 |
| SK-BR-D | 1φ Bridge | 140 | 125 | 100 | 200 | K | 90.00 |
| SK-BR-F | 1φ Bridge | 280 | 250 | 100 | 200 | K | 150.00 |
| SM-BR-A | 1φ Bridge | 36 | 32 | 200 | 400 | L | 100.00 |
| SM-BR-B | 1φ Bridge | 72 | 64 | 200 | 400 | L | 120.00 |
| SM-BR-D | 1φ Bridge | 140 | 125 | 200 | 400 | L | 180.00 |
| SM-BR-F | 1φ Bridge | 280 | 250 | 200 | 400 | L | 260.00 |
| SO-BR-B | 1φ Bridge | 72 | 64 | 400 | 800 | M | 270.00 |
| SO-BR-F | 1φ Bridge | 280 | 250 | 400 | 800 | M | 570.00 |
| SL-PH-A | 3φ Bridge | 36 | 48 | 75 | 150 | N | 60.00 |
| SL-PH-B | 3φ Bridge | 72 | 96 | 75 | 150 | N | 85.00 |
| SL-PH-C | 3φ Bridge | 105 | 144 | 75 | 150 | N | 120.00 |
| SL-PH-D | 3φ Bridge | 140 | 188 | 75 | 150 | N | 180.00 |

All above ratings based on 30°C ambient. Fan-cooled ratings based on air velocity of 1000 linear ft/minute. For resistive or inductive loads, as rated. For capacitive or battery loads, derate amperage 20%. Doublers, triplers, 3 phase half wave and 3 phase center-tap also available. Custom-built stacks, 24 hour service.

DIMENSIONS WITH BRACKETS

| Size | Length | Height | Width | Weight |
|------|--------|--------|-------|------------|
| B | 3" | 6" | 5" | 12 oz. |
| C | 3" | 6" | 6" | 1 lb. |
| D | 4" | 8" | 7" | 2 lbs. |
| E | 4" | 9" | 8" | 6 lbs. |
| F | 6" | 5" | 5" | 1 1/4 lbs. |
| G | 6" | 6" | 5" | 1 1/2 lbs. |
| H | 6" | 6" | 6" | 2 lbs. |
| J | 6" | 6" | 5" | 1 1/2 lbs. |
| K | 7" | 8" | 7" | 4 lbs. |
| L | 8" | 9" | 8" | 6 lbs. |
| M | 8" | 11" | 10" | 6 lbs. |
| N | 8" | 6" | 5" | 4 lbs. |

*Not suitable for fan-cooling



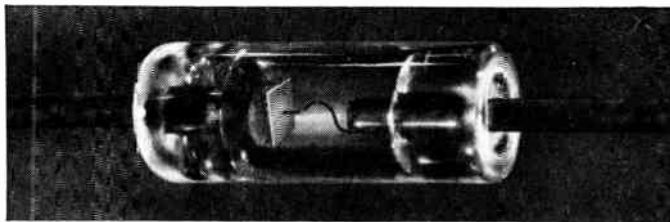
Mfd. by **SANFORD MILLER COMPANY**
BROOKLYN 11, N. Y.

OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes



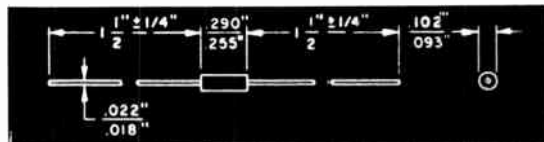
STOCK SUBMINIATURE GERMANIUM DIODES



Ohmite subminiature, gold bonded (gold whisker wire welded to germanium) germanium diodes are hermetically sealed in glass. These advanced diodes feature:

1. Unusual stability built in through temperature cycling, aging, and 100% shock test.
2. Wide operating temperature range: -85°F. through 194°F.

3. The absolute in moisture and gas resistance. All Ohmite diodes are leak tested at 100 psi hydrostatic pressure, subjected to mechanical and temperature shock, and checked for vibration stability through production random sampling. Ohmite diodes have standard EIA color coding, beginning at the cathode (germanium pellet) end. Rating: 80 mw at 68°F. Capacitance: approximately .5 μf. Storage temperature: to 248°F.



| Stock Number | PIV | Max. Rev. μa at 25°C | Min. Fwd. ma at 1 V | Mfrs. Net | | Stock Number | PIV | Max. Rev. μa at 25°C | Min. Fwd. ma at 1 V | Mfrs. Net | |
|--------------|-----|----------------------|---------------------|-----------|---------|--------------|-----|----------------------|---------------------|-----------|---------|
| | | | | 1/99 | 100/999 | | | | | 1/99 | 100/999 |
| 1N34 | 75 | 500 @ 50V | 5 | .27 | .19 | 1N118A | 75 | 100 @ 50V | 40 | .33 | .24 |
| 1N34A | 75 | 500 @ 50V | 5 | .27 | .19 | 1N126 | 75 | 300 @ 50V | 5 | .26 | .19 |
| 1N35Ⓞ | 75 | 500 @ 50V | 5 | 1.30 | .94 | 1N126A | 75 | 300 @ 50V | 5 | .26 | .19 |
| 1N38 | 125 | 500 @ 100V | 5 | .35 | .25 | JAN-1N126A | 75 | 750 @ 50V | 5 | .30 | .22 |
| 1N38A | 125 | 500 @ 100V | 5 | .35 | .25 | 1N127A | 125 | 200 @ 50V | 5 | .32 | .23 |
| 1N38B | 125 | 500 @ 100V | 5 | .35 | .25 | JAN-1N127A | 125 | 200 @ 50V | 5 | .36 | .26 |
| 1N39 | 220 | 600 @ 200V | 5 | 1.40 | 1.01 | 1N128 | 50 | 10 @ 10V | 3 | .35 | .25 |
| 1N39A | 250 | 65 @ 100V | 5 | 1.65 | 1.19 | JAN-1N128 | 50 | 10 @ 10V | 3 | .40 | .29 |
| 1N39B | 200 | 600 @ 200V | 5 | 1.40 | 1.01 | 1N135 | 75 | 850 @ 50V | 5 | .25 | .18 |
| 1N43 | 75 | 800 @ 50V | 5 | .34 | .24 | 1N144 | 50 | 200 @ 20V | 100 | .30 | .22 |
| 1N44 | 145 | 1000 @ 50V | 5 | .30 | .22 | 1N191Ⓞ | 90 | 25 @ 10VⓄ | 5 | .40 | .29 |
| 1N47 | 145 | 500 @ 100V | 5 | .33 | .24 | 1N192Ⓞ | 90 | 250 @ 50VⓄ | 5 | .40 | .29 |
| 1N48 | 85 | 800 @ 50V | 5 | .27 | .19 | 1N198 | 100 | 250 @ 50VⓄ | 5 | .50 | .36 |
| 1N51 | 75 | 1500 @ 50V | 5 | .26 | .19 | JAN-1N198 | 100 | 250 @ 50VⓄ | 5 | .50 | .36 |
| 1N52 | 75 | 100 @ 50V | 5 | .29 | .21 | 1N270 | 100 | 100 @ 50V | 200Ⓞ | .34 | .24 |
| 1N54A | 75 | 100 @ 50V | 5 | .29 | .21 | JAN-1N270 | 100 | 100 @ 50V | 200Ⓞ | .43 | .31 |
| 1N55 | 170 | 500 @ 150V | 5 | .57 | .41 | 1N273 | 40 | 20 @ 20V | 100 | .46 | .33 |
| 1N55A | 170 | 500 @ 150V | 5 | .57 | .41 | 1N276 | 100 | 100 @ 50V | 40 | .37 | .27 |
| 1N56 | 50 | 300 @ 30V | 15 | .25 | .18 | JAN-1N276Ⓞ | 100 | 100 @ 50V | 40 | .46 | .33 |
| 1N56A | 50 | 300 @ 30V | 15 | .25 | .18 | 1N277 | 125 | 250 @ 50VⓄ | 100 | .34 | .24 |
| 1N58 | 125 | 600 @ 100V | 5 | .28 | .20 | JAN-1N277 | 125 | 250 @ 50VⓄ | 100 | .46 | .33 |
| 1N53A | 125 | 600 @ 100V | 5 | .28 | .20 | 1N279 | 50 | 200 @ 20V | 100 | .30 | .22 |
| 1N60Ⓞ | 25 | 20 @ 10V | 5 | .25 | .18 | 1N281 | 75 | 500 @ 50V | 100 | .30 | .22 |
| 1N60AⓄ | 25 | 20 @ 10V | 5 | .25 | .18 | JAN-1N281 | 75 | 500 @ 50V | 100 | .30 | .22 |
| 1N63 | 125 | 50 @ 50V | 5 | .35 | .25 | 1N294 | 75 | 10 @ 10V | 5 | .34 | .24 |
| 1N63A | 125 | 50 @ 50V | 5 | .35 | .25 | 1N295Ⓞ | 25 | 200 @ 10V | 5 | .22 | .16 |
| 1N64Ⓞ | 25 | 25 @ 10V | 50 | .25 | .18 | 1N295AⓄ | 25 | 200 @ 10V | 5 | .22 | .16 |
| 1N64AⓄ | 25 | 25 @ 10V | 50 | .25 | .18 | 1N298 | 90 | 200 @ 40V | 40 | .28 | .20 |
| 1N65 | 110 | 200 @ 50V | 5 | .29 | .21 | 1N298A | 90 | 200 @ 40V | 40 | .28 | .20 |
| 1N66 | 75 | 800 @ 50V | 5 | .22 | .16 | 1N497 | 30 | 20 @ 20V | 120† | .30 | .22 |
| 1N67 | 100 | 50 @ 50V | 5 | .33 | .24 | 1N498 | 50 | 25 @ 40V | 120† | .59 | .42 |
| 1N67A | 100 | 50 @ 50V | 5 | .33 | .24 | 1N616 | 40 | 150 @ 30V | 10 | .22 | .16 |
| 1N68 | 130 | 625 @ 100V | 5 | .45 | .32 | 1N695Ⓞ | 35 | 20 @ 10VⓄ | 100 | .34 | .24 |
| 1N68A | 130 | 625 @ 100V | 5 | .45 | .32 | 1N695AⓄ | 35 | 20 @ 10VⓄ | 100 | .34 | .24 |
| 1N69 | 75 | 500 @ 50V | 5 | .27 | .19 | 1N774 | 75 | 150 @ 50V | 100 | .37 | .27 |
| 1N69A | 75 | 500 @ 50V | 5 | .27 | .19 | OMC15 | 20 | 10 @ 10V | 100 | .34 | .24 |
| 1N70 | 125 | 300 @ 50V | 5 | .30 | .22 | OMC26 | 50 | 150 @ 50V | 200Ⓞ | .31 | .22 |
| 1N70A | 125 | 300 @ 50V | 5 | .30 | .22 | OMC28 | 50 | 25 @ 50V | 200Ⓞ | .37 | .27 |
| 1N87 | 25 | 30 @ 1.5V | .1* | .39 | .28 | OMC37 | 150 | 200 @ 10V | 200Ⓞ | .42 | .30 |
| 1N87A | 25 | 30 @ 1.5V | .1* | .39 | .28 | OMC47 | 75 | 150 @ 50V | 30 | .30 | .22 |
| 1N90 | 75 | 500 @ 50V | 5 | .27 | .19 | OMC55 | 150 | 25 @ 50V | 30 | .48 | .35 |
| 1N95 | 75 | 500 @ 50V | 5 | .27 | .19 | OMC550 | 30 | 100 @ 10V | 500Ⓞ | .25 | .18 |
| 1N96 | 75 | 500 @ 50V | 40 | .28 | .20 | OMC635 | 75 | 4 @ 10V | 100 | .38 | .27 |
| 1N96A | 75 | 500 @ 50V | 40 | .28 | .20 | OMC646 | 150 | 4 @ 10V | 200Ⓞ | .82 | .59 |
| 1N97 | 100 | 100 @ 50V | 20 | .33 | .24 | OMC678 | 75 | 75 @ 50V | 50 | .32 | .23 |
| 1N97A | 100 | 100 @ 50V | 20 | .33 | .24 | OMC688 | 100 | 75 @ 50V | 100 | .36 | .26 |
| 1N98 | 100 | 100 @ 50V | 40 | .33 | .24 | OMC691 | 100 | 25 @ 50V | 100 | .40 | .29 |
| 1N98A | 100 | 100 @ 50V | 40 | .33 | .24 | OMC743 | 150 | 25 @ 50V | 200Ⓞ | .62 | .45 |
| 1N99 | 100 | 50 @ 50V | 20 | .35 | .25 | OMC756Ⓞ | 50 | 75 @ 50V | 100 | .43 | .31 |
| 1N99A | 100 | 50 @ 50V | 20 | .35 | .25 | OMC769Ⓞ | 50 | 25 @ 50V | 200Ⓞ | .64 | .46 |
| 1N100 | 100 | 50 @ 50V | 40 | .36 | .26 | OMC1038Ⓞ | 75 | 10 @ 10V | 100 | .46 | .33 |
| 1N100A | 100 | 50 @ 50V | 40 | .36 | .26 | OMC1133Ⓞ | 150 | 25 @ 50V | 100 | .89 | .64 |
| 1N116 | 75 | 100 @ 50V | 5 | .29 | .21 | OMC1137Ⓞ | 75 | 150 @ 50V | 200Ⓞ | .47 | .34 |
| 1N116A | 75 | 100 @ 50V | 5 | .29 | .21 | OMC1158Ⓞ | 100 | 25 @ 50V | 200Ⓞ | .61 | .44 |
| 1N118 | 75 | 100 @ 50V | 40 | .33 | .24 | | | | | | |

ⓄVideo Detector Test Ⓞ0.2 μsec. Ⓞ0.5 μsec. Ⓞ0.4 μsec. Ⓞ0.3 μsec. Ⓞ75°C ⓄConsists of two matched diodes shipped as a pair with the forward current at 1 volt of the lower resistance diode within 10% of the current of the higher resistance diode. ⓄDuty cycle must be adjusted in testing at these high forward currents so that average power dissipated does not exceed 80 mw. Ⓞ55°C Ⓞ0.6 μsec. *At 0.25 volts †At 0.8 volts

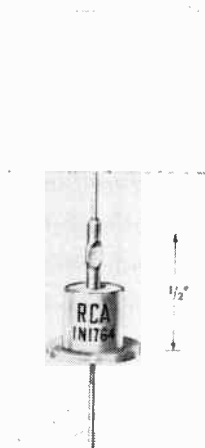
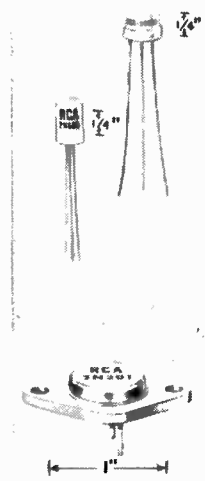
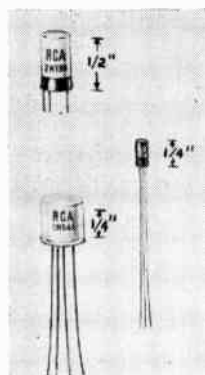


TRANSISTORS AND SILICON RECTIFIERS

June 29, 1962

RCA TRANSISTORS

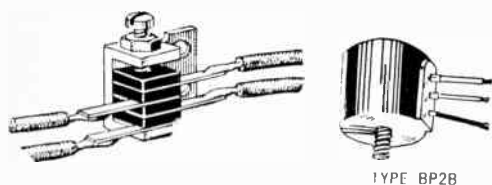
TRANSISTORS • THYRISTORS • GERMANIUM DIODES • TUNNEL DIODES



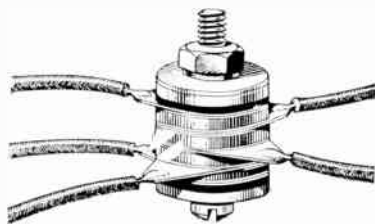
| RCA Type | Optional Distributor Resale Price | | RCA Type | Optional Distributor Resale Price | | RCA Type | Optional Distributor Resale Price | |
|--|-----------------------------------|---------|--|-----------------------------------|---------|------------|-----------------------------------|---------|
| | 1-99 | 100-999 | | 1-99 | 100-999 | | 1-99 | 100-999 |
| TRANSISTORS, THYRISTORS, GERMANIUM DIODES & TUNNEL DIODES | | | | | | | | |
| 1N2326 | .50 | .33 | 2N398 | 1.30 | .87 | 2N796 | 2.89 | 1.93 |
| 1N3128 | 14.26 | 9.50 | 2N398A | 1.30 | .87 | 2N828 | 3.30 | 2.20 |
| 1N3129 | 13.79 | 9.20 | 2N398B | 1.62 | 1.08 | 2N834 | 6.19 | 4.13 |
| 1N3130 | 13.37 | 8.91 | 2N404 | .63 | .42 | 2N914 | 5.78 | 3.85 |
| 1N3138 | 36.30 | 24.20 | USAF2N404 | .63 | .42 | 2N934 | 6.60 | 4.40 |
| 2DG001 | 1.62 | 1.08 | 2N404A | .84 | .56 | 2N955 | 4.79 | 3.19 |
| 3DG001 | 2.34 | 1.56 | 3907/2N404 | 1.24 | .83 | 2N955A | 5.36 | 3.58 |
| 2N104 | 1.65 | 1.10 | 2N405 | .46 | .31 | 2N1010 | 2.89 | 1.93 |
| 2N105 | 2.97 | 1.98 | 2N406 | .46 | .31 | 2N1023 | 2.89 | 1.93 |
| 2N109 | .91 | .61 | 2N407 | .56 | .37 | 2N1066 | 2.89 | 1.93 |
| 2N139 | 1.16 | .77 | 2N408 | .56 | .37 | 2N1067 | 20.95 | 13.95 |
| 2N140 | 1.24 | .83 | 2N409 | .68 | .45 | 2N1068 | 21.95 | 14.65 |
| 2N173 | 4.21 | 2.80 | 2N410 | .68 | .45 | 2N1069 | 49.90 | 33.30 |
| 2N174 | 4.50 | 3.00 | 2N411 | .71 | .47 | 2N1070 | 64.95 | 43.30 |
| JAN2N174 | 10.05 | 6.70 | 2N412 | .71 | .47 | 2N1090 | 1.24 | .83 |
| 2N175 | 1.63 | 1.09 | 2N414 | .83 | .55 | 2N1091 | 1.57 | 1.05 |
| 2N176 | 1.88 | 1.25 | 2N441 | 2.72 | 1.82 | 2N1092 | 10.75 | 7.15 |
| 2N215 | 1.73 | 1.16 | 2N442 | 4.42 | 2.95 | 2N1099 | 6.83 | 4.55 |
| 2N217 | .86 | .57 | 2N443 | 4.42 | 2.95 | 2N1100 | 9.82 | 6.55 |
| 2N218 | 1.16 | .77 | 2N456 | 3.63 | 2.42 | 2N1169 | 1.98 | 1.32 |
| 2N219 | 1.24 | .83 | 2N457 | 5.78 | 3.85 | 2N1170 | 3.71 | 2.48 |
| 2N220 | 1.55 | 1.03 | 2N497 | 4.13 | 2.75 | 2N1177 | 1.20 | .80 |
| JAN2N220 | 4.54 | 3.03 | 2N578 | .99 | .66 | 2N1178 | 1.16 | .77 |
| 2N247 | 3.14 | 2.09 | 2N579 | 1.57 | 1.05 | 2N1179 | 1.16 | .77 |
| (For New Equip. Design, Use Type 2N274) | | | 2N580 | 2.06 | 1.38 | 2N1180 | .84 | .56 |
| 2N269 | 1.98 | 1.32 | 2N581 | .63 | .42 | 2N1183 | 1.82 | 1.21 |
| 2N270 | 1.02 | .68 | 2N582 | .99 | .66 | USA2N1183 | 2.64 | 1.76 |
| 2N274 | 1.49 | .99 | 2N583 | .83 | .55 | 2N1183A | 2.31 | 1.54 |
| USA2N274 | 3.30 | 2.20 | 2N584 | 3.22 | 2.15 | USA2N1183A | 3.30 | 2.20 |
| 2N277 | 3.38 | 2.25 | 2N585 | .99 | .66 | 2N1183B | 2.89 | 1.93 |
| 2N278 | 4.87 | 3.25 | 2N586 | 1.73 | 1.16 | USA2N1183B | 3.88 | 2.59 |
| 2N301 | 1.52 | 1.01 | 2N591 | .66 | .44 | 2N1184 | 3.71 | 2.48 |
| 2N301A | 3.71 | 2.48 | 2N640 | 1.44 | .96 | USA2N1184 | 4.95 | 3.30 |
| 2N307 | 1.49 | .99 | (For New Equip. Design, Use Type 2N1637) | | | 2N1184A | 4.54 | 3.03 |
| 2N331 | 2.06 | 1.38 | 2N641 | 1.37 | .91 | USA2N1184A | 5.78 | 3.85 |
| 2N351 | 2.03 | 1.35 | (For New Equip. Design, Use Type 2N1638) | | | 2N1184B | 6.19 | 4.13 |
| 2N356 | 5.20 | 3.47 | 2N642 | 1.40 | .94 | USA2N1184B | 7.43 | 4.95 |
| 2N357 | 6.53 | 4.36 | (For New Equip. Design, Use Type 2N1639) | | | 2N1213 | 4.54 | 3.03 |
| 2N370 | 1.16 | .77 | 2N643 | 1.40 | .94 | 2N1214 | 4.54 | 3.03 |
| 2N371 | 1.12 | .75 | 2N644 | 1.65 | 1.10 | 2N1215 | 4.54 | 3.03 |
| 2N372 | 1.12 | .75 | 2N645 | 2.64 | 1.76 | 2N1216 | 2.97 | 1.98 |
| 2N373 | 1.24 | .83 | 2N646 | 1.82 | 1.21 | 2N1224 | 1.49 | .99 |
| (For New Equip. Design, Use Type 2N1633 or 2N1634) | | | 2N647 | 1.16 | .77 | 2N1225 | 1.65 | 1.10 |
| 2N374 | 1.32 | .88 | 2N649 | .86 | .57 | 2N1226 | 2.06 | 1.38 |
| (For New Equip. Design, Use Type 2N1635 or 2N1636) | | | 2N656 | 4.95 | 3.30 | 2N1300 | 1.16 | .77 |
| 2N376 | 2.10 | 1.40 | 2N696 | 1.57 | 1.05 | 2N1301 | 1.65 | 1.10 |
| 2N384 | 2.06 | 1.38 | 2N696 (USA) | 1.98 | 1.32 | 2N1302 | .58 | .39 |
| USA2N384 | 4.54 | 3.03 | 2N697 | 2.06 | 1.38 | 2N1303 | .58 | .39 |
| JAN2N384 | 3.71 | 2.48 | 2N697 (USA) | 2.48 | 1.65 | 2N1304 | .76 | .51 |
| 2N388 | 1.50 | 1.00 | 2N699 | 4.95 | 3.30 | 2N1305 | .76 | .51 |
| 2N388A | 2.57 | 1.72 | 2N705 | 1.98 | 1.32 | 2N1306 | 1.11 | .74 |
| 2N395 | .66 | .44 | 2N706 | 1.57 | 1.05 | 2N1307 | 1.11 | .74 |
| 2N396 | .84 | .56 | USA2N706 | 2.23 | 1.49 | 2N1308 | 1.57 | 1.04 |
| 2N396A | .84 | .56 | 2N706A | 1.82 | 1.21 | 2N1309 | 1.57 | 1.04 |
| 2N397 | 1.34 | .89 | 2N708 | 2.89 | 1.93 | 2N1319 | 1.65 | 1.10 |
| | | | 2N710 | 1.73 | 1.16 | 2N1358 | 9.16 | 6.10 |
| | | | 2N711 | 1.16 | .77 | USA2N1358 | 9.16 | 6.10 |
| | | | 2N794 | 1.49 | .99 | 2N1384 | 2.06 | 1.38 |
| | | | 2N795 | 1.98 | 1.32 | 2N1395 | 1.73 | 1.16 |
| | | | | | | 2N1396 | 2.15 | 1.43 |

Prices shown do not include any state or local taxes. All prices are subject to change or withdrawal without notice.

SCHAUER INSTRUMENT RECTIFIERS



TYPE BP2B



TYPE C4A

Schauer copper oxide rectifiers for instrument and other uses are processed and individually tested to meet the requirements of the user. Versatile processing techniques make possible variations in characteristics for special or unusual applications. Each rectifier is rated conservatively for long life and dependable operation. Lead lengths to customer specifications.

"A" SIZE CELLS have good frequency response above the audio range and can be used at higher frequencies. Recommended for meter applications needing 1MA or less for operation. Can be used for other applications requiring up to 5MA.

"B" SIZE CELLS (encapsulated) are for meter, relay and other applications requiring 1MA up to their maximum rating. Recommended for commercial and low audio frequency operation.

"C" SIZE CELLS are for general applications requiring larger output currents, and operation of meters, relays and other apparatus. Special process cells for varistor applications.

Write, wire or telephone for complete information. We welcome your inquiries concerning any special rectification problem. Schauer has been manufacturing high quality, dry-disc rectifiers since 1930.

NOTE: The Schauer Manufacturing Corp. is the exclusive manufacturer of replacement Westinghouse copper oxide rectifiers

| Max. Cont. Rating | | | Circuit Diagram Fig. | Cell Dia. Inches | No. of Cells | Leads | Mounting Screw Size | DIMENSIONS* | | | | | Type |
|-------------------|------------|----------------|----------------------|--------------------|--------------|-------|---------------------|----------------|---------------|---------------|-----------------|----------------|------|
| D.C. M.A. | D.C. Volts | Max. RMS Volts | | | | | | (Dia.) A | B | C | D | E | |
| 3 | 6.0 | | 2 | $\frac{3}{16}$ sq. | 2 | 3 | Hole for 2-56 | | $\frac{3}{8}$ | $\frac{1}{4}$ | $\frac{9}{16}$ | | A2C |
| 5 | 3.0 | 5.0 | 3 | $\frac{3}{16}$ sq. | 4 | 4 | Hole for 2-56 | | $\frac{3}{8}$ | $\frac{1}{4}$ | $\frac{9}{16}$ | | A4A |
| 13 | 3.0 | | 1 | $\frac{7}{16}$ | 1 | 2 | 6-32 | $\frac{1}{16}$ | | | $\frac{7}{16}$ | $\frac{9}{32}$ | BP1C |
| 13 | 6.0 | | 2 | $\frac{7}{16}$ | 2 | 3 | 6-32 | $\frac{1}{16}$ | | | $\frac{1}{2}$ | $\frac{5}{16}$ | BP2B |
| 26 | 1.5 | 2.5 | 4 | $\frac{7}{16}$ | 2 | 3 | 6-32 | $\frac{1}{16}$ | | | $\frac{1}{2}$ | $\frac{5}{16}$ | BP2C |
| 26 | 3.0 | 5.0 | 3 | $\frac{7}{16}$ | 4 | 5 | 6-32 | $\frac{1}{16}$ | | | $\frac{23}{32}$ | $\frac{5}{16}$ | BP4A |
| 32 | 3.0 | | 1 | $\frac{3}{4}$ | 1 | 0 | 10-32 | $\frac{3}{4}$ | | | $\frac{11}{16}$ | $\frac{5}{16}$ | C1C |
| 32 | 6.0 | | 2 | $\frac{3}{4}$ | 2 | 0 | 10-32 | $\frac{3}{4}$ | | | $\frac{3}{4}$ | $\frac{5}{16}$ | C2C |
| 32 | 9.0 | | 1 | $\frac{3}{4}$ | 3 | 0 | 10-32 | $\frac{3}{4}$ | | | $\frac{7}{8}$ | $\frac{1}{4}$ | C3C |
| 64 | 3.0 | 5.0 | 3 | $\frac{3}{4}$ | 4 | 5 | 10-32 | $\frac{3}{4}$ | | | $\frac{31}{32}$ | $\frac{5}{16}$ | C4A |

CIRCUIT DIAGRAMS

FIG. 1 HALF WAVE



FIG. 2 DOUBLER



FIG. 3 FULL WAVE BRIDGE

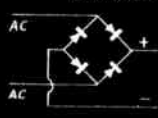
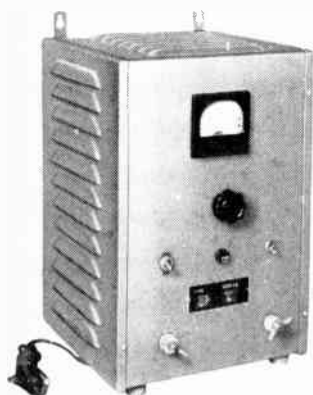
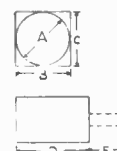


FIG. 4 FULL WAVE CENTER TAP



*Dimensions



MODEL SA-48006



MODEL AR 5612

SCHAUER ADJUSTABLE 6 VOLT and 12 VOLT BATTERY ELIMINATORS

MODEL SA-48006 — 6 volt and 12 volt adjustable battery eliminator for AM and FM 2-way and marine radios. A.C. input: 115 volts, 60 cycle, single-phase. D.C. output: either 6 volts D.C. up to a maximum of 48 amperes; or 12 volts D.C. up to a maximum of 24 amperes. To maintain required voltage output under various load conditions, a dial-type tap switch provides adjustment from less than 1 ampere up to maximum rated output. Case is 10" wide x 9 $\frac{1}{2}$ " deep x 15" high, arranged for either bench or wall mounting.

MODEL AR 5612 — 6 volt and 12 volt adjustable battery eliminator for servicing auto radios. Output adjustable by rugged, silver contact tap switch. Low range output: 7 $\frac{1}{2}$ volts at 12 amps., continuous; 20 amps., intermittent. High range: 15 volts at 6 amps., continuous; 11 amps., intermittent. Housed in sturdy steel case 7 $\frac{1}{2}$ " wide x 9 $\frac{1}{2}$ " deep x 9" high.

Semiconductor Division

SCHAUER MANUFACTURING CORP. • Cincinnati, Ohio

SCHAUER SEMICONDUCTORS

HEAVY DUTY ½ WATT ZENER DIODES

A 10 watt Silicon Junction in a ½ watt package for maximum surge capacity and stability. 25 watt-ms surge from 1.0 to 10ms.

Cool operation for maximum reliability and freedom from temperature drift and thermal fatigue. (Rated for a 100°C. junction temperature at maximum current.)

Mass-produced on automatic equipment for lowest cost and maximum similarity.

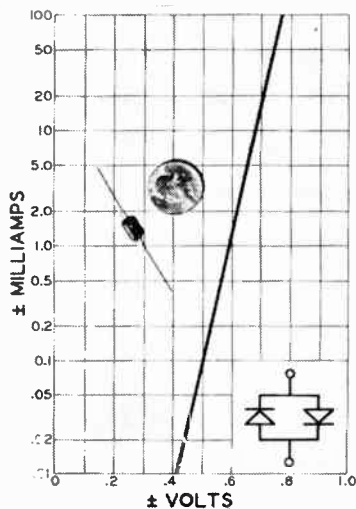
ELECTRICAL CHARACTERISTICS

| Schauer Type No. 10% Tolerance (Note 1) | Nominal Zener Voltage $V_Z @ I_{ZT} = 20 \text{ ma}$ $T_A = 25^\circ\text{C.}$ | Dynamic Impedance $Z_{11} @ I_{ZT} = 20 \text{ ma}$ | | Maximum Recommended Zener Current I_{ZM} | Typical Temperature Coefficient of Voltage %/°C. |
|---|--|--|---------|--|--|
| | | Max. | Typical | | |
| SZ 2.4 | 2.4 Volts | 50 Ohms | 40 Ohms | 210 ma | -.08 |
| SZ 2.7 | 2.7 | 50 | 35 | 185 | -.07 |
| SZ 3.0 | 3.0 | 40 | 32 | 170 | -.07 |
| SZ 3.3 | 3.3 | 40 | 28 | 150 | -.06 |
| SZ 3.6 | 3.6 | 40 | 25 | 140 | -.06 |
| SZ 3.9 | 3.9 | 40 | 22 | 130 | -.05 |
| SZ 4.3 | 4.3 | 30 | 20 | 120 | -.04 |
| SZ 4.7 | 4.7 | 30 | 15 | 110 | -.01 |
| SZ 5.1 | 5.1 | 20 | 10 | 100 | .01 |
| SZ 5.6 | 5.6 | 20 | 4 | 90 | .02 |
| SZ 6.2 | 6.2 | 10 | 1.0 | 80 | .03 |
| SZ 6.8 | 6.8 | 10 | 0.6 | 75 | .04 |
| SZ 7.5 | 7.5 | 10 | 0.9 | 70 | .04 |
| SZ 8.2 | 8.2 | 10 | 2 | 60 | .05 |
| SZ 9.1 | 9.1 | 10 | 4 | 55 | .06 |
| SZ 10.00 | 10.00 | 10 | 6 | 50 | .06 |

NOTE 1. Add suffix "A" for 5% tolerance (i.e., SZ4.7A) for 4.7 ±5% volts.

NOTE 2. Lower voltages available from factory.

NOTE 3. Temperature compensated high voltage assemblies available.



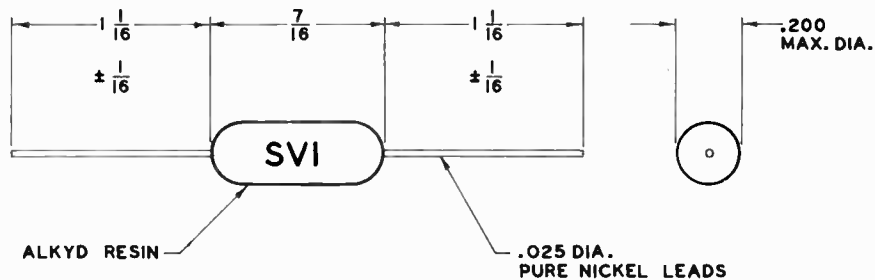
SV1 Silicon Varistor as compared in size to 25¢ piece. Chart shows its I vs E characteristics over four decades.

SCHAUER SV1 SILICON VARISTOR

SV1 Varistor consists of matched silicon junctions connected in parallel and oppositely poled. This voltage variable resistance goes through four decades of current for a half volt change in signal and makes possible its use as a single component to convert linear AC or DC information into logarithmic information following the curve $I_{ma} = e^{26(E-.59)}$ between the range $I = .02 \text{ ma}$ to 200 ma.

ELECTRICAL CHARACTERISTICS — Test limits: 50 microamperes max. at .2V D.C., 225 milliamperes min. at 1.0V D.C. Dissipation: ¾ watt at 25°C, ¼ watt at 100°C. Maximum ½ cycle surge current, 25 amps. peak.

SV1 is encapsulated with an alkyd molding compound. An inner epoxy seal, long leakage paths, and high pressure molding assure reliable performance in all environments.



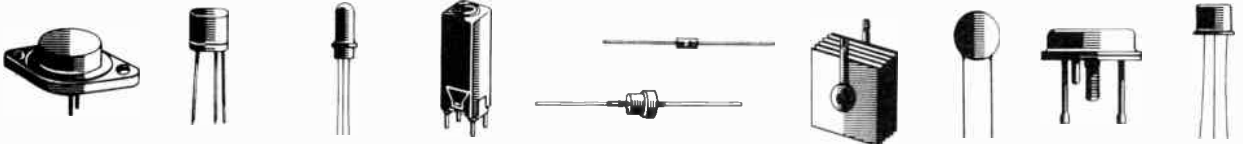
Dimensions of SV1 Varistor. Also applies to Schauer ½ watt Zener Diodes. Zener cathode terminal is marked by red dot.

Semiconductor Division

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SEMITRON

• Semiconductor Products • Germanium • Silicon • Selenium Transistors • Rectifiers • Diodes
• IF Transformers • Ceramic Capacitors



POWER TRANSISTORS TYPE TO-3 CASE

| Semicon | PNP REPLACEMENT* | Net Price |
|---------|---|-----------|
| PT40 | HIGH WATTAGE — 2N155, 2N156, 2N157, 2N157A, 2N176, 2N176B, 2N176C, 2N176H, 2N178, 2N234, 2N234A, 2N235, 2N235A, 2N235B, 2N236, 2N236A, 2N236B, 2N242, 2N250, 2N255, 2N256, 2N257, 2N285, 2N285A, 2N301, 2N301A, 2N307, 2N307A, 2N350, 2N351, 2N352, 2N353, 2N376, 2N378, 2N399, 2N400, 2N401, 2N419, 2N456, 2N554, 2N555, 2N637, 2N638, 2N639, AR5, AR6, AR7, AR8A, AR9, AR10, AR11, AR12, AR13, B1017, CTP1104, CTP1108, CTP1109, CTP1117, CTP1137, TS176, DS503 | \$1.59 |
| PT25 | MEDIUM WATTAGE — 2N155, 2N156, 2N176, 2N178, 2N234, 2N234A, 2N235, 2N235A, 2N242, 2N250, 2N255, 2N256, 2N257, 2N301, 2N301A, 2N307, 2N307A, 2N378, 2N401, 2N554, 2N555, 2N638, 2N639, AR5, AR6, B1017, CTP1104, CTP1108, CTP1109, TS176 | 1.40 |
| PT12 | NORMAL WATTAGE — 2N234, 2N234A, 2N255, 2N256, 2N307, 2N554, B1017, CTP1104, CTP1108, CTP1109 | 1.17 |
| PT6 | EXPERIMENTER HOBBYIST — 2N255, 2N256, B1017, CTP1108, CTP1109 | 1.05 |

AUDIO TRANSISTORS

| Semicon | PNP TYPE | Net Price |
|---------|-----------------|-----------|
| AT 30H | High Gain | \$1.77 |
| AT 30M | Medium Gain | 1.65 |
| AT 30N | Normal Gain | 1.50 |
| AT 20H | High Gain | 1.35 |
| AT 20M | Medium Gain | 1.17 |
| AT 20N | Normal Gain | 1.05 |
| AT 10H | High Gain | .90 |
| AT 10M | Medium Gain | .75 |
| AT 10N | Normal Gain | .59 |
| AT GP | General Purpose | .47 |

SILICON POWER RECTIFIERS TOP HAT AXIAL LEADS

| Type | P. I. V. | RMS* | Forward Current MA | Net Price |
|-------|----------|------|--------------------|-----------|
| SR60 | 600 | 420 | 750 | \$1.40 |
| SR50 | 500 | 350 | 750 | 1.08 |
| SR40 | 400 | 280 | 750 | .90 |
| SR30 | 300 | 210 | 750 | .75 |
| SR20 | 200 | 140 | 750 | .60 |
| SR10 | 100 | 70 | 750 | .51 |
| SR5 | 50 | 35 | 750 | .42 |
| SR605 | 600 | 420 | 500 | 1.35 |
| SR405 | 400 | 280 | 500 | .84 |
| SR205 | 200 | 140 | 500 | .51 |
| SR105 | 100 | 70 | 500 | .42 |

* Inductive or Resistive Load

HIGH WATTAGE POWER TRANSISTORS STUD TYPE TO-36 CASE

| Semicon | PNP REPLACEMENT* | Net Price |
|---------|---|-----------|
| PT501 | HIGH WATTAGE — 2N173, 2N174, 2N277, 2N278, 2N441, 2N442, 2N443, DS501, DS504 | \$3.57 |
| PT515 | High Current Transistor for Replacement in Auto Radios, Amplifiers, and Electronic Converters | 3.37 |

R.F. TRANSISTORS

| Semicon | PNP TYPE | Net Price |
|---------|-------------|-----------|
| HF 20H | High Gain | \$2.37 |
| HF 20M | Medium Gain | 2.25 |
| HF 12H | High Gain | 1.77 |
| HF 12M | Medium Gain | 1.65 |
| HF 8H | High Gain | 1.47 |
| HF 8M | Medium Gain | 1.17 |
| HF 3H | High Gain | 1.05 |
| HF 3M | Medium Gain | .87 |

EPOXY TYPE SILICON RECTIFIERS 750 MA. 100 to 1000 P.I.V.

| Semicon | P. I. V. | RMS* | Forward Current | Net Price |
|---------|----------|------|-----------------|-----------|
| ER 101 | 100 | 70 | 750 MA. | \$.42 |
| ER 201 | 200 | 140 | 750 MA. | .51 |
| ER 301 | 300 | 210 | 750 MA. | .60 |
| ER 401 | 400 | 280 | 750 MA. | .75 |
| ER 501 | 500 | 350 | 750 MA. | .90 |
| ER 601 | 600 | 420 | 750 MA. | 1.08 |
| ER 801 | 800 | 560 | 750 MA. | 1.35 |
| ER 1001 | 1000 | 700 | 750 MA. | 1.77 |

* Inductive or Resistive Load

"POPULAR" POWER TRANSISTORS TYPE TO-3 CASE

| Semicon | Replacement | Net Price | Semicon | Replacement | Net Price |
|---------|-------------|-----------|---------|-------------|-----------|
| PT155 | 2N155 | \$1.77 | PT285A | 2N285A | \$2.37 |
| PT176 | 2N176 | 1.77 | PT301 | 2N301 | 1.77 |
| PT234 | 2N234 | 1.40 | PT301A | 2N301A | 2.37 |
| PT235A | 2N235A | 1.77 | PT307 | 2N307 | 1.17 |
| PT242 | 2N242 | 1.77 | PT307A | 2N307A | 1.40 |
| PT255 | 2N255 | 1.17 | PT554 | 2N554 | 1.17 |
| PT256 | 2N256 | 1.40 | PT555 | 2N555 | 1.40 |

NPN TYPE TRANSISTORS

| Semicon | RECOMMENDED USE | Price |
|---------|-----------------|--------|
| NR 10 | Osc | \$1.47 |
| NR 5 | I. F. | 1.37 |
| NA 20 | Det. Driver | 1.17 |
| NA 30 | Output | 1.37 |

SELENIUM RECTIFIERS FOR USE IN RADIO - TV - ELECTRONICS

| Semicon Type No. | Max. O. C. Output MA. | Max. A. C. Input Volts | Min. Series Resistor (Ohms) | DIMENSIONS | | | Net Price |
|------------------|-----------------------|------------------------|-----------------------------|------------|----------|----------|-----------|
| | | | | A Inches | B Inches | C Inches | |
| RS-151 | 50-75 | 130 | 22 | 11/16 | 11/16 | 11/16 | \$4.27 |
| RS-152 | 100-150 | 130 | 15 | 1 | 1 | 1 | .84 |
| RS-153 | 200-250 | 130 | 5 | 1.3 | 1.3 | 1-1/4 | .87 |
| RS-154 | 300-500 | 130 | 5 | 1.5 | 1.5 | 1-3/8 | .98 |

HIGH CURRENT POWER TRANSISTORS TYPE TO-3 CASE

| Semicon | Collector Current | USE | Net Price |
|---------|-------------------|--|-----------|
| PT30 | 3 Amp | Audio Amplifiers and Low Power Applications | \$1.58 |
| PT50 | 5 Amp | Audio Amplifiers and Medium Power Applications | 2.37 |
| PT150 | 15 Amp | Audio Amplifiers and High Power Applications | 4.17 |

* Equivalent units shown have similar electrical characteristics However they may vary in some specifications.

AMERICAN REPLACEMENT for JAPANESE RADIO TRANSISTORS and DIODES

| Semicon | Use | PNP TYPE | Net Price |
|---------|----------------------------|---|-----------|
| JR30 | Oscillator Mixer Converter | High quality RF unit for replacement of Output Transistors having similar rating | \$1.47 |
| JR30X | Osc., Con. Mixer | In 2 and 3 Band Radios | 1.65 |
| JR10 | IF Amplifier | High quality IF unit for replacement of Intermediate Frequency Transistors having similar rating | 1.35 |
| JR3 | Audio Driver Detector | High Quality Audio Transistor for replacement of Driver or Detector Transistors having similar rating | 1.17 |
| JR15 | Audio Output | High quality Audio Transistor for replacement of Output Transistor having similar rating | 1.47 |
| JD1 | Detector Diode | For replacement as Diode Detector | .30 |
| JD2 | AVC Diode | For replacement as AVC Diode | .30 |
| JP40 | Audio Power | For replacement of Power Transistor in Audio application | 1.77 |

GERMANIUM DIODE PLASTIC CASE

| Type | SIMILAR TYPES | Net Price |
|---------------|---|-----------|
| 1N34 1N34A | 1N34A, 1N43, 1N46, 1N49, 1N60, 1N51, 1N66, 1N69, 1N294, 1N295, 1N126, CK705, 1N109, 1N125, 1N267, 1N268, G1CA, NU34, TP34, TP34A, 400A, 400C, M34, M34A, M95, MN34A, OA71, OA71C, X16 | \$3.33 |
| 1N60 | 1N64, 1N69, 1N295, 1N132, 1N87, 1N87G, 1N296, 1N105, 1N125, CK706, C60, G7F, G7G, CV442, G1NA, | .33 |
| 1N84 | 1N69, 1N109, 1N125, 1N132, 1N148, 1N64A, 1N135 | .33 |
| 1N51 | M51, MN51 | .33 |

GOLD BOND GERMANIUM CRYSTAL DIODE

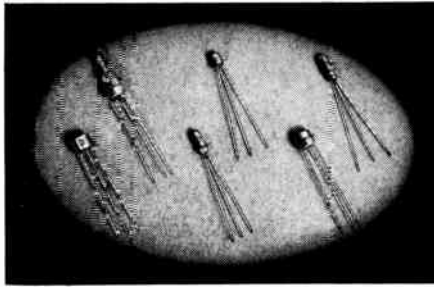
| Type | SIMILAR TYPES | Net Price |
|-----------------------------|---|-----------|
| 1N34 1N34A Black Band | 1N34A, 1N43, 1N46, 1N49, 1N60, 1N51, 1N66, 1N69, 1N294, 1N295, 1N126, CK705, 1N109, 1N125, 1N267, 1N268, G1CA, NU34, TP34, TP34A, 400A, 400C, M34, M34A, M95, MN34A, OA71, OA71C, X16 | \$2.27 |
| 1N80 Blue Band | 1N64, 1N69, 1N295, 1N132, 1N87, 1N87G, 1N296, 1N105, 1N125, CK706, C60, G7F, G7G, CV442, G1NA, | .27 |
| 1N84 Red Band | 1N69, 1N109, 1N125, 1N132, 1N148, 1N64A, 1N135 | .27 |
| 1N51 White Band | M51, MN51 | .27 |

Color Band Denotes Cathode.



NEW YORK, N. Y.

SPRAGUE TRANSISTORS



GERMANIUM AND SILICON TRANSISTORS

- Sprague Transistors are Produced by Advanced Equipment and the Latest Manufacturing Techniques.
- Highest Quality and Outstanding Economy.
- Excellent Design Flexibility and Electrical Properties Meet Rigid Performance and Reliability Standards.
- For Complete Technical Data, Write for Applicable Engineering Bulletin.

| Type No. | Case | -V _{ce} (volts) | -I _c (mA) | P _d @ 25C (mW) | Description | 1-99 (ea.) |
|--|-------|--------------------------|----------------------|---------------------------|--------------------------|------------|
| GERMANIUM ELECTRO-CHEMICAL DIFFUSED COLLECTOR TRANSISTORS (ECDCT) | | | | | | |
| ★2N2096 | TO-31 | 20 | 500 | 750 | High Current Core Driver | \$ 8.85 |
| ★2N2097 | TO-31 | 35 | 500 | 750 | High Current Core Driver | 12.75 |
| ★2N2099 | TO-9 | 20 | 500 | 250 | High Current Core Driver | 7.50 |
| ★2N2100 | TO-9 | 35 | 500 | 250 | High Current Core Driver | 11.40 |

GERMANIUM MICRO-ALLOY TRANSISTORS (MAT®)

| | | | | | | |
|-----------|-------|----|----|-----|---|------|
| 2N393 | TO-24 | 6 | 50 | 25* | High Speed, High-Gain Switch | 4.35 |
| JAN2N393 | TO-24 | 6 | 50 | 25* | High-Speed, High-Gain Switch to MIL-S-19500/77A | 4.70 |
| 2N1122 | TO-24 | 11 | 50 | 25* | High Speed, High-Gain Switch | 5.45 |
| 2N1122A | TO-24 | 14 | 50 | 25* | High Speed, High-Gain Switch | 6.75 |
| USA2N1411 | TO-24 | 5 | 50 | 25* | High Speed, High-Gain Switch to MIL-S-19500/133 (Sig. C.) | 3.70 |
| 2N1427 | TO-24 | 6 | 50 | 25* | High Speed, High-Gain Switch | 4.55 |

GERMANIUM MICRO-ALLOY DIFFUSED BASE TRANSISTORS (MADT®)

| | | | | | | |
|-----------|-------|----|-----|-----|--|------|
| 2N499 | TO-1 | 18 | 50 | 30* | Power Oscillator, Power Amplifier | 3.95 |
| 2N501 | TO-1 | — | 50 | 60 | Ultra-High-Speed Switch | 6.35 |
| 2N501A | TO-1 | — | 50 | 60 | Ultra-High-Speed Switch | 7.35 |
| JAN2N501A | TO-1 | — | 50 | 60 | Ultra-High-Speed Switch to MIL-T-19500/62A | 7.35 |
| 2N504 | TO-1 | 25 | 50 | 30* | 455-KC i-f Amplifier | 3.45 |
| 2N588 | TO-1 | 15 | 50 | 30* | Oscillator, Amplifier | 1.40 |
| 2N788 | TO-18 | — | 100 | 35 | High-Speed Low Level Switch | 5.85 |
| 2N789 | TO-18 | 7 | 100 | 35 | Ultra-High-Speed Switch | 6.75 |
| 2N799A | TO-18 | — | 100 | 60 | High-Speed Switch | 5.60 |
| 2N846A | TO-18 | — | 100 | 60 | High-Speed Switch | 5.40 |
| ★2N979 | TO-18 | — | 100 | 60 | High-Speed Switch | 1.40 |
| ★2N982 | TO-18 | 15 | 100 | 60 | High-Speed Switch | 5.60 |
| ★2N983 | TO-18 | 15 | 100 | 60 | High-Speed Switch | 4.15 |
| ★2N984 | TO-18 | 15 | 100 | 60 | High-Speed Switch | 2.35 |
| 2N1499A | TO-9 | — | 100 | 60 | High-Speed Switch | 1.40 |
| 2N1500 | TO-9 | — | 50 | 60 | High-Speed Switch | 6.35 |
| USA2N1500 | TO-9 | — | 50 | 60 | High-Speed Switch to MIL-S-19500/125 | 7.35 |
| 2N1754 | TO-9 | — | 100 | 50 | High-Speed Switch | 1.35 |
| ★2N2168 | TO-9 | 15 | 100 | 60 | High-Speed Switch | 5.60 |
| ★2N2169 | TO-9 | 15 | 100 | 60 | High-Speed Switch | 4.15 |
| ★2N2170 | TO-9 | 15 | 100 | 60 | High-Speed Switch | 2.35 |

GERMANIUM SURFACE BARRIER TRANSISTORS (SBT)

| | | | | | | |
|----------|-------|-----|----|------|---|------|
| 2N128 | TO-24 | 4.5 | 5 | 25 | High-Speed, High-Gain Communications Type | 6.30 |
| JAN2N128 | TO-24 | 4.5 | 5 | 25 | High-Speed, High-Gain Communications Type to MIL-T-19500/9A | 6.65 |
| 2N240 | TO-24 | 6 | 15 | 30 | High-Speed Switch | 5.60 |
| MIL2N240 | TO-24 | 6 | 15 | 30 | High-Speed Switch to MIL-S-19500/25A (Sig. C.) | 5.90 |
| 2N344 | TO-24 | 5 | 5 | 20** | Medium-Beta, General Purpose | 3.45 |
| 2N345 | TO-24 | 5 | 5 | 20** | High-Beta, General Purpose | 4.35 |
| 2N346 | TO-24 | 5 | 5 | 20** | High-Frequency Oscillator | 5.85 |
| SO-1 | TO-24 | 5 | 5 | 20 | Oscillator Amplifier | 1.12 |

SILICON SURFACE PRECISION ALLOY TRANSISTORS (SPAT®)

| | | | | | | |
|-----------|------|-----|----|-----|--|-------|
| 2N1118 | TO-5 | 25 | 50 | 150 | Amplifier and Switching Service | 11.60 |
| 2N1118A | TO-5 | 25 | 50 | 150 | Amplifier and Oscillator | 15.75 |
| MIL2N1118 | TO-5 | 25 | 50 | 150 | Amplifier and Oscillator to MIL-S-19500/138A (Sig. C.) | 11.60 |
| 2N1119 | TO-5 | 10 | 50 | 150 | High-Speed Switch | 11.60 |
| USA2N1119 | TO-5 | 10 | 50 | 150 | High-Speed Switch to MIL-S-19500/139 (Sig. C.) | 11.60 |
| 2N1429 | TO-5 | 6 | 50 | 150 | General Purpose H-F Amplifier and Switch | 8.75 |
| 2N1676 | TO-5 | 4.5 | 50 | 100 | Low Level Chopper | 11.70 |
| 2N1677 | TO-5 | 4.5 | 50 | 100 | Low Level Chopper | 8.85 |
| ★2N2162 | TO-5 | 30 | 50 | 150 | Low Level Chopper | 13.55 |
| ★2N2163 | TO-5 | 15 | 50 | 150 | Low Level Chopper | 11.50 |
| ★2N2164 | TO-5 | 8 | 50 | 150 | Low Level Chopper | 12.20 |
| ★2N2165 | TO-5 | 30 | 50 | 150 | Low Level Chopper | 11.50 |
| ★2N2166 | TO-5 | 15 | 50 | 150 | Low Level Chopper | 9.45 |
| ★2N2167 | TO-5 | 8 | 50 | 150 | Low Level Chopper | 10.15 |

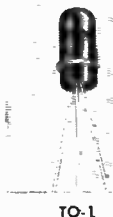
★ Sprague Preferred Type

* @ 45C

** @ 40C

† Trademark of Sprague Electric Company

® Trademark of Philco Corp.



TO-1



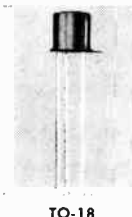
TO-9



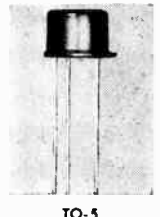
TO-24



TO-31



TO-18



TO-5

TUNG-SOL[®] GERMANIUM TRANSISTORS

HIGH POWER TYPES—JEDEC TO-36 OUTLINE

| Type | Max Ratings | | | h _{FE} | | | | Typical f _{h_{FE}} | | | Max I _{CBO} | |
|--|-----------------------|-----------------------|-----------------------|---------------------|----------------------|-----|-----|-------------------------------------|----------------------|-------|----------------------|----|
| | V _{CEO} V | V _{CES} V | V _{CER} V | I _C A | V _{CE} V | Min | Max | I _C A | V _{CE} V | Kc | V _{CB} V | mA |
| JAN 2N 173 2N 174 2N 174* 2N 174 A* 2N 277 | -60 | -50 | | 5 | -2 | 35 | 70 | 5 | -6 | 10 | -60 | 8 |
| | -80 | -70 | -55 | 1.2 | -2 | 25 | 40 | 5 | -6 | 10 | -80 | 8 |
| | -80 | -70 | -40 | 1.2 | -2 | 40 | 80 | 5 | -6 | 10 | -80 | 15 |
| | -40 | -40 | -40 | 5 | -2 | 35 | 70 | 5 | -6 | 10 | -40 | 8 |
| 2N 278 2N 441 2N 442 2N 443 2N 1099 | -50 | -45 | | 5 | -2 | 35 | 70 | 5 | -6 | 10 | -50 | 8 |
| | -40 | -40 | | 5 | -2 | 20 | 40 | 5 | -6 | 10 | -40 | 8 |
| | -50 | -45 | | 5 | -2 | 20 | 40 | 5 | -6 | 10 | -50 | 8 |
| | -60 | -50 | | 5 | -2 | 20 | 40 | 5 | -6 | 10 | -60 | 8 |
| | -80 | -70 | | 5 | -2 | 35 | 70 | 5 | -6 | 10 | -80 | 8 |
| USA 2N 1100 2N 1358 2N 1358 2N 1412 2N 1970 | -100 | -80 | -65 | 1.2 | -2 | 25 | 50 | 5 | -6 | 10 | -100 | 8 |
| | -80 | -70 | -40 | 5 | -2 | 20 | 40 | 5 | -6 | 10 | -80 | 8 |
| | -80 | -70 | -40 | 5 | -2 | 25 | 50 | 5 | -6 | 10 | -80 | 8 |
| | -100 | -80 | -65 | 5 | -2 | 25 | 50 | 5 | -4 | 10 | -100 | 8 |
| | -100 | -80 | -65 | 5 | -2 | 17 | 40 | 5 | -4 | 5 min | -100 | 4 |
| 2N 1980 2N 1981 2N 1982 | -50 | -40 | -30 | 5 | -2 | 50 | 100 | 2 | -5 | 3 min | -50 | 6 |
| | -70 | -40 | -30 | 5 | -2 | 100 | 100 | 2 | -5 | 3 min | -70 | 6 |
| | -90 | -50 | -30 | 5 | -2 | 50 | 100 | 2 | -5 | 3 min | -90 | 6 |

*JEDEC TO-6 Outline

POWER TYPES—JEDEC TO-3 OUTLINE

| Type | Max Ratings | | | | h _{FE} | | | | Minimum f _{h_{FE}} | | | Max I _{CBO} | |
|--|-----------------------|-----------------------|-----------------------|----------------------|---------------------|----------------------|-----|------|-------------------------------------|----------------------|-----|----------------------|-----|
| | V _{CEO} V | V _{CES} V | V _{CER} V | V _{CB} V | I _C A | V _{CE} V | Min | Max | I _C A | V _{CE} V | Kc | V _{CB} V | mA |
| 2N 242 2N 301 2N 301 A 2N 307 2N 307 A | -45 | | -45 | | 0.5* | -1.5 | 47† | 120† | 0.5 | -12 | 5 | -45 | 5 |
| | -40 | -32 | | | 0.7 | -1.5 | 47† | 120† | 0.5 | -12 | 5 | -40 | 5 |
| | -60 | -32 | | | 0.7 | -1.5 | 47† | 120† | 0.5 | -14 | 3 | -60 | 5 |
| | -35 | | -35 | | 0.2 | -1.5 | 30 | --- | 0.5 | -14 | 3.5 | -25 | 2 |
| 2N 378 2N 379 2N 380 2N 459 2N 1182 | -40 | | | | 2 | -2 | 15 | 40 | 1 | -2 | 5 | -25 | 0.5 |
| | -60 | | | | 2 | -2 | 20 | 70 | 1 | -2 | 5 | -25 | 0.5 |
| | -60 | | | | 2 | -2 | 30 | 70 | 1 | -2 | 5 | -25 | 0.5 |
| | -105 | | | | 2 | -2 | 20 | 70 | 1 | -2 | 5 | -25 | 0.5 |
| | -90 | | | | 0.5 | -12 | 35 | 85 | 0.5 | -12 | 5 | -50 | 0.5 |

* Power Gain: R_S = 10 Ω, V_{CC} = -14 V, R_L = 30 Ω, 30 db min.† h_{FE} @ 1 Kc

MEDIUM POWER AUDIO AND LOW SPEED COMPUTER TYPES—JEDEC TO-5 OUTLINE

| Type | Max Ratings | | | | h _{FE} | | | | Typical f _{h_{FE}} | | | Max I _{CBO} | | |
|---|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|-----|-----|-------------------------------------|----------------------|----|----------------------|-----|----|
| | V _{CEO} V | V _{CES} V | V _{CER} V | V _{CB} V | I _C mA | V _{CE} V | Min | Max | I _C mA | V _{CE} V | Mc | V _{CB} V | μA | |
| 2N 381 2N 382 2N 383 2N 450 2N 461 | -50 | -25 | | | 400 | 20 | -1 | 35 | 65 | 1 | -6 | 3 | -25 | 10 |
| | -50 | -25 | | | 400 | 20 | -1 | 60 | 95 | 1 | -6 | 4 | -25 | 10 |
| | -50 | -25 | | | 400 | 20 | -1 | 75 | 120 | 1 | -6 | 5 | -25 | 10 |
| | -45 | -35 | | | 400 | 1 | -6 | 15† | 35† | 1 | -9 | 1.2 | -45 | 15 |
| USA 2N 461 2N 526 2N 526 2N 527 2N 1705 | -45 | -35 | | | 400 | 20 | -1 | 30† | 65† | 1 | -6 | 2 | -45 | 10 |
| | -45 | -30 | | | 500 | 20 | -1 | 53 | 90 | 1 | -5 | 3 | -30 | 10 |
| | -45 | -30 | | | 400 | 20 | -1 | 53 | 90 | 1 | -5 | 3 | -30 | 10 |
| | -45 | -30 | | | 500 | 20 | -1 | 72 | 121 | 1 | -5 | 3.3 | -30 | 10 |
| | -18 | -12 | | | 400 | 1 | -6 | 70† | 150† | 1 | -6 | 4 | -10 | 10 |
| 2N 1706 2N 1707 2N 2171 TS 601 TS 602 TS 603 TS 604 | -25 | -18 | | | 400 | 20 | -1 | 60 | 120 | 1 | -6 | 3 | -10 | 10 |
| | -30 | -25 | | | 400 | 10 | -5 | 40† | 150† | 1 | -6 | 3 | -25 | 15 |
| | -50 | -25 | | | 400 | 20 | -1 | 110 | 250 | 1 | -6 | 7.5 | -25 | 10 |
| | -12 | -9 | | | 400 | 10 | -1 | 15 | 70 | | | | -9 | 20 |
| | -12 | -9 | | | 400 | 10 | -1 | 60 | | | | | -9 | 20 |
| | -20 | -18 | | | 400 | 10 | -1 | 15 | 70 | | | | -9 | 20 |
| -20 | -18 | | | 400 | 10 | -1 | 60 | | | | | -9 | 20 | |

† h_{FE} @ 1Kc

MEDIUM POWER RF AND COMPUTER TYPES—JEDEC TO-5 OUTLINE

| Type | Max Ratings | | | | h _{FE} | | | | Typical f _{h_{FE}} | | | Max I _{CBO} | | | |
|---|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------------------------|-----|----------------------|----------------------|----|----------------------|----|
| | V _{CEO} V | V _{CES} V | V _{CER} V | V _{CB} V | I _C mA | P _C mW | I _C mA | V _{CE} V | Min | Max | I _C mA | V _{CE} V | Mc | V _{CB} V | μA |
| 2N 396 2N 396 A 2N 413 2N 414 2N 416 | -30 | | | | 200 | 180 | 10 | -1 | 30 | 150 | 1 | -5 | 10 | -20 | 6 |
| | -30 | | | | 200 | 200 | 10 | -1 | 30 | 150 | 1 | -5 | 10 | -20 | 6 |
| | -30 | -20 | | | 200 | 200 | 10 | -1 | 6 | 30 | 1 | -6 | 10 | -12 | 5 |
| | -30 | -18 | | | 400 | 180 | 1 | -6 | 20† | 80† | 1 | -6 | 10 | -12 | 5 |
| 2N 417 2N 425 2N 426 2N 427 2N 428 | -30 | | | | 400 | 180 | 10 | -1 | 6 | 30 | 1 | -6 | 10 | -12 | 5 |
| | -30 | -10 | | | 400 | 180 | 10 | -1 | -0.25 | 20 | 40 | 1 | -5 | 4 | |
| | -30 | -18 | | | 400 | 180 | 10 | -1 | -0.25 | 30 | 60 | 1 | -5 | 6 | |
| | -30 | -15 | | | 400 | 180 | 10 | -1 | -0.25 | 40 | 80 | 1 | -5 | 11 | |
| | -30 | -12 | | | 400 | 180 | 10 | -1 | -0.25 | 60 | 1 | -5 | 17 | -1.5 | 4 |
| JAN 2N 428 2N 1313 2N 1681 TS 605 TS 606 | -30 | | | | 200 | 150 | 60 | -0.25 | 60 | 60 | 1 | -5 | 17 | -1.5 | 4 |
| | -30 | -15 | | | 400 | 180 | 10 | -1 | -0.25 | 40 | 125 | 1 | -6 | 15 | |
| | -30 | -15 | | | 200 | 180 | 10 | -1 | -0.25 | 30 | 120 | 1 | -5 | 10 | |
| | -12 | -9 | | | 400 | 180 | 10 | -1 | 15 | 15 | | | | -9 | 10 |
| | -20 | -18 | | | 400 | 180 | 10 | -1 | 15 | 15 | | | | -9 | 10 |

† h_{FE} @ 1Kc

DYNAQUAD™ — JEDEC TO-5 OUTLINE

| Type | Max Ratings | | | Turn-on Gate Current | | | Turn-off Gate Current | | | Sustaining Current | | Max I _{CBO} | |
|---|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|-----------|-----------------------|-----------------------|---------|-----------------------------------|-----------|----------------------|----|
| | V _{CEO} V | V _{CES} V | V _{CER} V | I _C mA | R _{GE} KΩ | Max mA | I _C mA | R _{GE} KΩ | mA | R _{GE} = 1K Min mA | Max mA | V _{CB} V | μA |
| 2N 1966 2N 1967 2N 1968 2N 2260 2N 2261 | -35 | -35 | -15† | 50 | 1 | 0.5 | 20 | 10 | Max 12 | 20 | 80 | -12 | 15 |
| | -35 | -35 | -15† | 100 | 1 | 0.5 | 20 | 10 | Max 12 | 20 | 80 | -12 | 15 |
| | -35 | -35 | -15†† | 20 | 1 | 0.3 | 20 | 10 | Min 2.5 | 20 | 80 | -12 | 15 |
| | -30 | -30 | -30††† | 10 | 1* | 1.25 | 10 | 1* | Max 5 | 5* | 5* | -12 | 5 |
| 2N 2262 | -30 | -30 | -30††† | 20 | 1* | 1.5 | 20 | 1* | Max 10 | 4.5* | 10* | -12 | 5 |
| 2N 2262 | -30 | -30 | -30††† | 100 | 1* | 5.0 | 100 | 1* | Max 50 | 9.5* | 50* | -12 | 5 |

† V_{CER}, R_{GE} = 10K†† V_{CER}, R_{GE} = 1K††† V_{CES}, R_{GE} = 1K, V_{CC} = +1V* V_{CC} = +1V

Tung-Sol germanium transistors have been designed to meet the reliability and performance standards of critical commercial and military applications. Performance capabilities are evaluated under the severest environmental conditions and electrical limits.



HIGH POWER TYPES

Maximum Collector Dissipation 170 watts
Derating factor 0.5°C/W
T_J max = +110°C
I_C max = 15A

POWER TYPES

Maximum Collector Dissipation 106 watts
Derating Factor 0.8°C/W
T_J max = +110°C
I_C max = 5A

MEDIUM POWER AUDIO AND LOW SPEED COMPUTER TYPES

Maximum Collector Dissipation = 225 mW
T_J max = +100°C

MEDIUM POWER RF AND COMPUTER TYPES

T_J max = +100°C

DYNAQUAD™

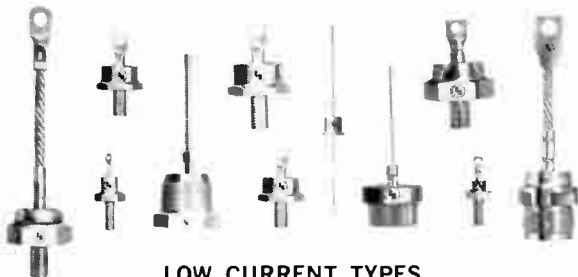
Maximum Collector Dissipation = 150 mW
T_J max = +100°C
I_C max = 200 mA_J

TUNG-SOL[®]
TUNG-SOL ELECTRIC INC., NEWARK 4, N. J.

Full field technical consultation or complete up-to-date listings on all Tung-Sol products are available through: Atlanta, Ga.; Columbus, Ohio; Culver City, Calif.; Dallas, Texas; Denver, Colo.; Detroit, Mich.; Irvington, N.J.; Melrose Park, Ill.; Newark, N.J.; Seattle, Wash. In CANADA: Abbey Electronics, Toronto, Ont.

TUNG-SOL[®] SILICON POWER RECTIFIERS

Tung-Sol silicon power rectifiers offer distinct advantages over similar competitive types. Exclusive design features combine with Tung-Sol's historically rigid quality control to assure designers unmatched operational reliability. Wide interchangeability permits specification of these outstanding components for most commercial and military applications.



LOW CURRENT TYPES JEDEC DO-1 OUTLINE

| Type | PRV V | I_o @ 50°C. amb. mA | I_r μ a | I_{Lr} μ a | i_S A |
|--------|----------|-----------------------------|------------------|---------------------|------------|
| 1N440B | 100 | 750 | 0.3 | | 15 |
| 1N441B | 200 | 750 | 0.75 | | 15 |
| 1N442B | 300 | 750 | 1.0 | | 15 |
| 1N443B | 400 | 750 | 1.5 | | 15 |
| 1N444B | 500 | 650 | 1.75 | | 15 |
| 1N445B | 600 | 650 | 2.0 | | 15 |
| 1N536 | 50 | 750 | | 400 | 15 |
| 1N537 | 100 | 750 | | 400 | 15 |
| 1N538 | 200 | 750 | | 300 | 15 |
| 1N539 | 300 | 750 | | 300 | 15 |
| 1N540 | 400 | 750 | | 300 | 15 |
| 1N547 | 600 | 750 | | 350 | 15 |
| 1N560 | 800 | 500 | 15.0 | | 15 |
| 1N561 | 1000 | 500 | 20.0 | | 15 |
| 1N1692 | 100 | 600 | | 500 | 20 |
| 1N1693 | 200 | 600 | | 500 | 20 |
| 1N1694 | 300 | 600 | | 500 | 20 |
| 1N1695 | 400 | 600 | | 500 | 20 |
| 1N1696 | 500 | 600 | | 500 | 20 |
| 1N1697 | 600 | 600 | | 500 | 20 |
| 1N1763 | 400 | 500 | | 1000 | 20 |
| 1N1764 | 500 | 500 | | 1000 | 20 |

LOW CURRENT TYPES

COLD-WELDED, SUBMINIATURE CASE CONSTRUCTION

| Type | PRV V | I_o @ 50°C. amb. mA | I_r μ a | i_S A |
|--------|----------|-----------------------------|------------------|------------|
| 1N3473 | 200 | 750 | 500 | 20 |
| 1N3474 | 400 | 750 | 500 | 20 |
| 1N3475 | 600 | 750 | 500 | 20 |
| 1N3476 | 800 | 500 | 500 | 20 |

MEDIUM CURRENT TYPES

JEDEC DO-5 OUTLINE

| Type | PRV V | I_o @ 140°C. case A | I_r mA | i_S A |
|--------|----------|-----------------------------|-------------|------------|
| 1N1183 | 50 | 35 | 10 | 500 |
| 1N1184 | 100 | 35 | 10 | 500 |
| 1N1185 | 150 | 35 | 10 | 500 |
| 1N1186 | 200 | 35 | 10 | 500 |

(CONTINUED)

| | | | | |
|--------|-----|----|----|-----|
| 1N1187 | 300 | 35 | 10 | 500 |
| 1N1188 | 400 | 35 | 10 | 500 |
| 1N1189 | 500 | 35 | 10 | 500 |
| 1N1190 | 600 | 35 | 10 | 500 |

MEDIUM CURRENT TYPES

JEDEC DO-5 OUTLINE

| Type | PRV V | I_o @ 150°C. case A | I_r mA | i_S A |
|--------|----------|-----------------------------|-------------|------------|
| 1N1191 | 50 | 20 | 5 | 250 |
| 1N1192 | 100 | 20 | 5 | 250 |
| 1N1193 | 150 | 20 | 5 | 250 |
| 1N1194 | 200 | 20 | 5 | 250 |
| 1N1195 | 300 | 20 | 5 | 250 |
| 1N1196 | 400 | 20 | 5 | 250 |
| 1N1197 | 500 | 20 | 5 | 250 |
| 1N1198 | 600 | 20 | 5 | 250 |
| 1N2154 | 50 | 25 | 5.0 | 350 |
| 1N2155 | 100 | 25 | 4.5 | 350 |
| 1N2156 | 200 | 25 | 4.0 | 350 |
| 1N2157 | 300 | 25 | 3.5 | 350 |
| 1N2158 | 400 | 25 | 3.0 | 350 |
| 1N2159 | 500 | 25 | 2.5 | 350 |
| 1N2160 | 600 | 25 | 2.0 | 350 |
| 1N3208 | 50 | 15 | 10 | 250 |
| 1N3209 | 100 | 15 | 10 | 250 |
| 1N3210 | 200 | 15 | 10 | 250 |
| 1N3211 | 300 | 15 | 10 | 250 |
| 1N3212 | 400 | 15 | 10 | 250 |

MEDIUM CURRENT TYPES

PRESS-FIT CONSTRUCTION

| Type | PRV V | I_o @ 150°C. case A | I_r mA | i_S A |
|------------------|----------|-----------------------------|-------------|------------|
| 1N3491 - 1N3491R | 50 | 18 | 10 | 300 |
| 1N3492 - 1N3492R | 100 | 18 | 10 | 300 |
| 1N3493 - 1N3493R | 200 | 18 | 8 | 300 |
| 1N3494 - 1N3494R | 300 | 18 | 6 | 300 |
| 1N3495 - 1N3495R | 400 | 18 | 4 | 300 |
| 1N3659 - 1N3659R | 50 | 25 | 5 | 400 |
| 1N3660 - 1N3660R | 100 | 25 | 4.5 | 400 |
| 1N3661 - 1N3661R | 200 | 25 | 4.0 | 400 |
| 1N3662 - 1N3662R | 300 | 25 | 3.5 | 400 |
| 1N3663 - 1N3663R | 400 | 25 | 3.0 | 400 |
| 1N3664 - 1N3664R | 500 | 25 | 2.5 | 400 |
| 1N3665 - 1N3665R | 600 | 25 | 2.0 | 400 |

HIGH CURRENT TYPES

DO-8 OUTLINE

| Type | PRV V | I_o @ 150°C. case A | I_r mA | i_S A |
|--------|----------|-----------------------------|-------------|------------|
| 1N1396 | 50 | 70 | 15 | 1500 |
| 1N1397 | 100 | 70 | 15 | 1500 |
| 1N1398 | 150 | 70 | 15 | 1500 |
| 1N1399 | 200 | 70 | 15 | 1500 |
| 1N1400 | 300 | 70 | 15 | 1500 |
| 1N1401 | 400 | 70 | 15 | 1500 |
| 1N1402 | 500 | 70 | 15 | 1500 |

i_S Peak one-cycle surge current, under same conditions as I_o rating. (μ A = Microamperes)

I_o Max. rectified avg. DC output current, resistive or inductive load, 60 cps sine wave input.

I_r Max. reverse current with voltage equal to PRV applied in reverse direction, 25°C. ambient.

I_{Lr} Max. avg. reverse current measured over full sine wave cycle with max. rated reverse voltage and forward current applied.



TUNG-SOL[®]

Full technical consultation or complete up-to-date listings on all Tung-Sol products are available through: Atlanta, Ga.; Columbus, Ohio; Culver City, Calif.; Dallas, Texas; Denver, Colo.; Detroit, Mich.; Irvington, N.J.; Melrose Park, Ill.; Newark, N.J.; Seattle, Wash. IN CANADA: Abbey Electronics, Toronto, Ont.

TUNG-SOL ELECTRIC INC., NEWARK 4, N. J.

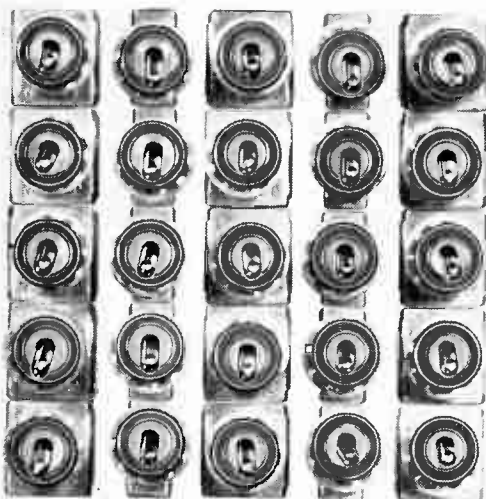
New**ULTRA-MINIATURE "ADJUSTABLE-STOP" SWITCHES****ONLY 1/2" DIAMETER**SWITCH SHOWN
ACTUAL SIZE

- ★ Non-Shorting ★ 36° Spacing ★ Single Deck
★ 1/8" Diameter Shaft ★ Fully Enclosed

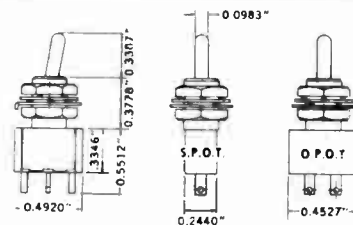
| MODEL | POLES | USEABLE | MAX. POS. | NET |
|-----------|-------|-----------|-----------|--------|
| MRA-1-10* | One | 2-10 Pos. | 10 | \$3.85 |
| MRA-2-5 | Two | 2-5 Pos. | 5 | \$3.85 |
| MRA-3-3 | Three | 2-3 Pos. | 3 | \$3.85 |
| MRA-4-2 | Four | 2 Pos. | 2 | \$3.85 |

*Also usable as continuous rotation

ALL ROTARY SWITCHES ABOVE ARE EQUIPPED WITH KNOB AS SHOWN

FIRST MINIATURE **ADJUSTABLE** STOP SWITCH AVAILABLE**PHYSICAL SPECIFICATIONS**

Insulating Resistance: Over 1000 megohms @ 500 VDC.
Voltage Breakdown: Over 1000 volts @ 60 cycles.
Moisture Resistance: Over 8 megohms after 48 hours at temperatures of 40° C and humidity of 95%.
Heat Resistance: One hour @ 140°C.
Life Cycle: Well over 80,000 on-off actions.
Case Material: Black phenol resin.

ULTRA-MINIATURE TOGGLE SWITCHES25 ALCO SWITCHES
MOUNTED HERE
ACTUAL SIZE

5 AMPS @ 115 VAC — and capable of carrying a 100% overload!

SOLID SILVER — contacts, terminals and moving parts! Not just plated!

MICRO-MINIATURE — (see right) S.P.D.T. is sub-miniaturized to only 1/2" x 3/8" x 1/4"! Extremely compact!

LONG LIFE RATINGS — over 80,000 operations for this tiny switch!

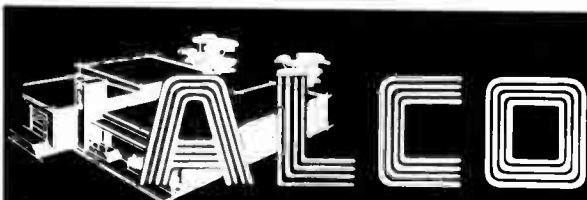
*simultaneous action on D.P.D.T.***QUANTITY PRICES**

AVAILABLE ON REQUEST

| MST | 105D | 205N |
|----------|----------|----------|
| Quantity | S.P.D.T. | D.P.D.T. |
| 1-24 | \$1.65 | \$2.15 |
| 25-99 | 1.12 | 1.43 |
| 100-499 | .99 | 1.29 |
| 500 over | .83 | 1.08 |

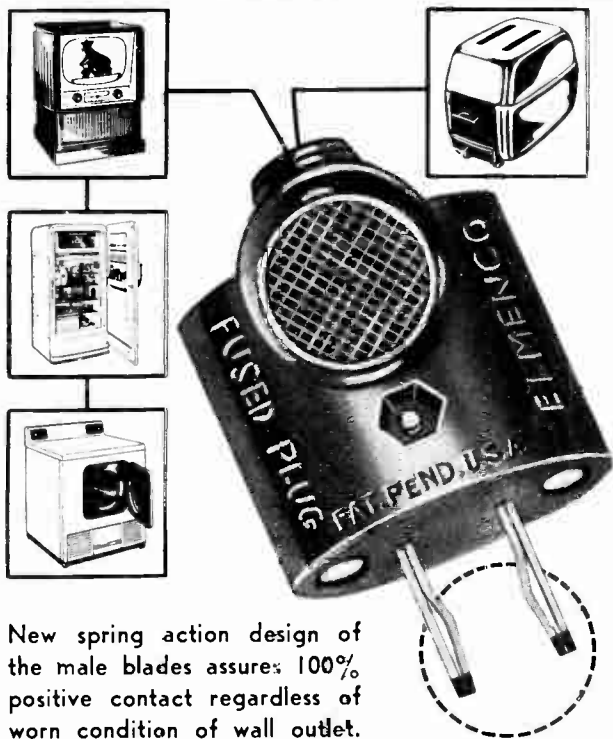
NEW FROM ALCO! MOMENTARY & CENTER-OFF TYPES *

| MODEL | TYPE | UP-Position | Center Position | DOWN-Position | NET |
|-----------|----------|--------------|-----------------|---------------|--------|
| MST-105 E | S.P.D.T. | ON | OFF | ON | \$1.95 |
| MST-105 F | S.P.D.T. | ON | NONE | Momentary ON | \$1.95 |
| MST-105 G | S.P.D.T. | Momentary ON | OFF | Momentary ON | \$1.95 |
| MST-105 H | S.P.D.T. | ON | OFF | Momentary ON | \$1.95 |
| MST-205 P | D.P.D.T. | ON | OFF | ON | \$2.55 |
| MST-205 R | D.P.D.T. | ON | NONE | Momentary ON | \$2.55 |
| MST-205 S | D.P.D.T. | Momentary ON | OFF | Momentary ON | \$2.55 |
| MST-205 T | D.P.D.T. | ON | OFF | Momentary ON | \$2.55 |

**SPECIALISTS IN MINIATURIZATION****ELECTRONIC PRODUCTS, INC.**

Lawrence, Mass.

Announcing an important NEW Feature



New spring action design of the male blades assures 100% positive contact regardless of worn condition of wall outlet.



LIST PRICE **75¢** LESS FUSES

OF THE
ELMENCO
Fused Plug

**Spring
Action**

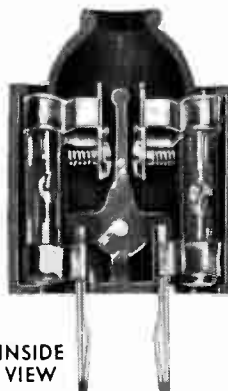
For
POSITIVE CONTACT
plus
Impact Resistant Cover

**OFFERS COMPLETE PROTECTION
AGAINST CURRENT SURGES & SHORT CIRCUITS
PROTECTS ELECTRICAL APPLIANCES!**



Conveniently
Packed
10 to a Box
In Colorful
Self-merchandising
displays.
Easy to handle
for resale

The Elmenco Fused Plug is like any standard plug, is light in weight, but easier to handle because of finger grips. However, it contains 2 small fuses which provide complete protection against damage to the appliance and to the main line. The blown fuse is easy to remove and simple to replace. Fits any standard wall outlet.



**REPLACE
FUSE Instantly!**



Fuses are replaced instantly without need of opening plug. Can be used with standard 3AG and 3AB glass tubular fuses up to 20 amps.

ARCO electronics inc.

NEW YORK, N. Y.

BRANCHES: Dallas 7, Texas, Los Angeles 35, California

Birnbach

CUTLER-HAMMER SWITCHES



Complete Switch Brochure includes up-to-date "MS" specifications, including sealed levers and environment sealed switches.

AIRCRAFT SWITCHES

Made to joint Army and Navy specifications. Spec. Jan-S-23 Superseded by Mil-S-3950. Binding Screw Terminals (ST-40 Series and ST-50 series) Per Spec. AN-3021 and AN 3027. The ST-42 and ST-32 Series have solder lugs. These switches are heavy duty; rugged design; bakelite housing; rated 10 amps-250V AC, 15 amps-125V AC, 3/4 HP 115-230VAC.



1 SINGLE POLE STYLE ST-42—WITH SOLDER LUGS

| Cat. No. | C-H No. | Jan-S-23 No. | Type | Circuit | | | Current Rating |
|----------|---------|--------------|------|-------------|-----------------|---------------|-----------------|
| | | | | Up Position | Center Position | Down Position | |
| 5370 | 8803K6 | ST-42A | SPST | On | None | Off | 15 amps .6 amps |
| 5371 | 8819K5 | ST-42B | SPST | On | None | Mom. Off | 15 amps .6 amps |
| 5372 | 8817K5 | ST-42C | SPST | Off | None | Mom. On | 15 amps .6 amps |
| 5373 | 8816K5 | ST-42D | SPDT | On | None | On | 15 amps .6 amps |
| 5374 | 8802K6 | ST-42E | SPDT | On | Off | On | 15 amps .6 amps |
| 5375 | 8805K5 | ST-42F | SPDT | On | None | Mom. On | 15 amps .6 amps |
| 5376 | 8818K5 | ST-42G | SPDT | Mom. On | Off | Mom. On | 15 amps .6 amps |
| 5377 | 8815K6 | ST-42H | SPDT | On | Off | Mom. On | 15 amps .6 amps |

STANDARD PKG. 25



2 SINGLE POLE STYLE 40—WITH SCREW TERMINALS

| Cat. No. | C-H No. | Jan-S-23 No. | MIL-S-6745 (AN-S-20A) No. | Type | Circuit | | | Current Rating |
|----------|---------|--------------|---------------------------|------|-------------|-----------------|---------------|-----------------|
| | | | | | Up Position | Center Position | Down Position | |
| 5360 | 8801K13 | ST-40A | AN 3021-2 | SPST | On | None | Off | 15 amps .6 amps |
| 5361 | 8813K12 | ST-40B | AN 3021-9 | SPST | On | None | Mom. Off | 15 amps .6 amps |
| 5362 | 8811K12 | ST-40C | AN 3021-8 | SPST | Off | None | Mom. On | 15 amps .6 amps |
| 5363 | 8810K12 | ST-40D | AN 3021-3 | SPDT | On | None | On | 15 amps .6 amps |
| 5364 | 8800K13 | ST-40E | AN 3021-1 | SPDT | On | Off | On | 15 amps .6 amps |
| 5365 | 8804K12 | ST-40F | AN 3021-6 | SPDT | On | None | Mom. On | 15 amps .6 amps |
| 5366 | 8812K13 | ST-40G | AN 3021-7 | SPDT | Mom. On | Off | Mom. On | 15 amps .6 amps |
| 5367 | 8809K13 | ST-40H | AN 3021-5 | SPDT | On | Off | Mom. On | 15 amps .6 amps |

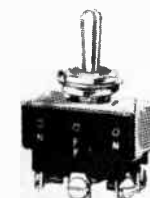
STANDARD PKG. 25



3 DOUBLE POLE STYLE ST-50—WITH SCREW TERMINALS

| Cat. No. | C-H No. | Jan-S-23 No. | MIL-S-6745 (AN-S-20A) No. | Type | Circuit | | | Current Rating |
|----------|---------|--------------|---------------------------|------|-------------|-----------------|---------------|-----------------|
| | | | | | Up Position | Center Position | Down Position | |
| 5380 | 8822K8 | ST-50K | AN-3027-2 | DPST | On | None | Off | 25 amps .9 amps |
| 5381 | 8828K5 | ST-50L | AN-3027-4 | DPST | On | None | Mom. Off | 15 amps .6 amps |
| 5382 | 8826K5 | ST-50M | AN-3027-5 | DPST | Off | None | Mom. On | 15 amps .6 amps |
| 5383 | 8824K8 | ST-50N | AN-3027-3 | DPDT | On | None | On | 25 amps .9 amps |
| 5384 | 8820K10 | ST-50P | AN-3027-1 | DPDT | On | Off | On | 25 amps .9 amps |
| 5385 | 8830K5 | ST-50R | AN-3027-6 | DPDT | On | None | Mom. On | 15 amps .6 amps |
| 5386 | 8834K4 | ST-50S | AN-3027-7 | DPDT | Mom. On | Off | Mom. On | 15 amps .6 amps |
| 5387 | 8832K4 | ST-50T | AN-3027-8 | DPDT | On | Off | Mom. On | 15 amps .6 amps |

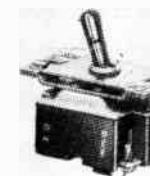
STANDARD PKG. 25



4 DOUBLE POLE STYLE ST-52—WITH SOLDER LUGS

| Cat. No. | C-H No. | Jan-S-23 No. | Type | Circuit | | | Current Rating |
|----------|---------|--------------|------|-------------|-----------------|---------------|-----------------|
| | | | | Up Position | Center Position | Down Position | |
| 5390 | 8823K5 | ST-52K | DPST | On | None | Off | 25 amps .9 amps |
| 5391 | 8829K5 | ST-52L | DPST | On | None | Mom. Off | 15 amps .6 amps |
| 5391A | 8827K5 | ST-52M | DPST | Off | None | Mom. On | 15 amps .6 amps |
| 5392 | 8825K5 | ST-52N | DPDT | On | None | On | 25 amps .9 amps |
| 5393 | 8821K5 | ST-52P | DPDT | On | Off | On | 25 amps .9 amps |
| 5394 | 8831K5 | ST-52R | DPDT | On | None | Mom. On | 15 amps .6 amps |
| 5395 | 8835K3 | ST-52S | DPDT | Mom. On | Off | Mom. On | 15 amps .6 amps |
| 5396 | 8833K3 | ST-52T | DPDT | On | Off | Mom. On | 15 amps .6 amps |

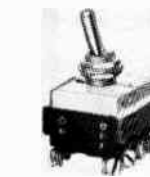
STANDARD PKG. 25



5 THREE POLE—WITH SCREW TERMINALS FLUSH MOUNTING

| Cat. No. | C-H No. | Spec. | Type | Circuit | | | Down Position |
|----------|---------|------------|------|-------------|-----------------|---------------|---------------|
| | | | | Up Position | Center Position | Down Position | |
| 5400 | 8740K9 | MIL-S-6745 | 3PST | On | None | Off | On |
| 5401 | 8744K9 | MIL-S-6745 | 3PDT | On | None | On | On |
| 5402 | 8742K9 | MIL-S-6745 | 3PDT | On | Off | On | On |

CURRENT RATING: 125 VAC 20 AMPS. 30 VDC 25 AMPS. STANDARD PKG. 12

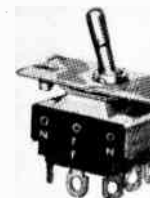


6 FOUR POLE—ONE HOLE MOUNTING

The four pole switches are designed to meet the rigid specifications and requirements of JAN-S-23 and MIL-S-6745 Specs.

| Cat. No. | C-H No. | Type | Circuit | | | Terminals |
|----------|---------|------|-------------|-----------------|---------------|-----------|
| | | | Up Position | Center Position | Down Position | |
| 5420 | 7660K8 | 4PST | On | None | Off | Screw |
| 5421 | 7661K6 | 4PST | On | None | Off | Lug |
| 5422 | 7662K5 | 4PDT | On | Off | On | Screw |
| 5423 | 7663K5 | 4PDT | On | Off | On | Lug |
| 5424 | 7664K3 | 4PDT | On | None | On | Screw |
| 5425 | 7665K4 | 4PDT | On | None | On | Lug |
| 5426 | 7666K6 | 4PST | Off | None | Mom. on | Screw |
| 5427 | 7667K6 | 4PST | Off | None | Mom. on | Lug |
| 5428 | 7668K4 | 4PST | On | None | Mom. off | Screw |
| 5429 | 7669K4 | 4PST | On | None | Mom. off | Lug |
| 5430 | 7670K4 | 4PDT | On | Off | Mom. on | Screw |
| 5431 | 7671K4 | 4PDT | On | Off | Mom. on | Lug |
| 5432 | 7672K4 | 4PDT | Mom. on | Off | Mom. on | Screw |
| 5433 | 7673K4 | 4PDT | Mom. on | Off | Mom. on | Lug |
| 5434 | 7674K4 | 4PDT | On | None | Mom. on | Screw |
| 5435 | 7675K4 | 4PDT | On | None | Mom. on | Lug |

CURRENT RATING: 125 VAC 10 AMPS. 30 VDC 20 AMPS. STD. PKG. 12



7 FOUR POLE—FLUSH MOUNTING

| Cat. No. | C-H No. | Spec. | Type | Circuit | | | Terminals |
|----------|---------|------------|------|-------------|-----------------|---------------|-----------|
| | | | | Up Position | Center Position | Down Position | |
| 5410 | 8882K5 | MIL-S-6745 | 4PST | On | None | Off | Screw |
| 5411 | 8883K5 | MIL-S-6745 | 4PST | On | None | On | Lug |
| 5412 | 8886K5 | MIL-S-6745 | 4PST | On | Off | On | Screw |
| 5413 | 8884K5 | MIL-S-6745 | 4PDT | On | None | On | Screw |
| 5414 | 8885K5 | MIL-S-6745 | 4PDT | On | None | On | Lug |
| 5415 | 8880K5 | MIL-S-6745 | 4PDT | On | Off | On | Screw |
| 5416 | 8881K5 | MIL-S-6745 | 4PDT | On | Off | On | Lug |
| 5417 | 8888K5 | MIL-S-6745 | 4PDT | Mom. on | Off | Mom. on | Screw |
| 5418 | 8887K5 | MIL-S-6745 | 4PDT | On | Off | Mom. on | Screw |

CURRENT RATING: 125 VAC 10 AMPS. 30 VDC 20 AMPS. STD. PKG. 12

Birnbach

CUTLER - HAMMER SWITCHES



Complete line of Cutler-Hammer quality switches available from our warehouse stocks. Includes commercial, industrial, aircraft and Gov't spec.

LIGHT DUTY TOGGLE SWITCHES

1 BACK CONNECTED LUG TERMINALS

Quick make-break; bakelite; small, compact size AC-DC UL approved

| Cat. No. | C-H No. | Descrip. | Shank | Current 125V | Rating 250V |
|----------|---------|----------|---------|--------------|--------------|
| 5300 | 8280K18 | SPST | .15/32" | 3 | amps |
| 5301 | 8381K8 | SPST | .15/32" | 6 | amps, 3 amps |
| 5302 | 8282K14 | SPDT | .15/32" | 3 | amps, 1 amp |
| 5303 | 8284K14 | 2 circ | .15/32" | 3 | amps, 1 amp |
| 5304 | 8360K7 | DPST | .15/32" | 3 | amps |
| 5305 | 8370K7 | DPST | .15/32" | 8 | amps, 3 amps |
| 5306 | 8363K7 | D1'PT | .15/32" | 3 | amps |
| 5307 | 8373K7 | DPDT | .15/32" | 6 | amps, 3 amps |

STD. PKG. 25

2 SIDE CONNECTED SCREW TERMINALS

| Cat. No. | C-H No. | Descrip. | Shank | Current 125V | Rating 250V |
|----------|---------|----------|---------|--------------|--------------|
| 5308 | 8295K8 | SPST | .15/32" | 3 | amps |
| 5309 | 8396K8 | SPST | .15/32" | 6 | amps, 3 amps |
| 5310 | 8297K8 | SPDT | .15/32" | 3 | amps, 1 amp |
| 5311 | 8372K7 | D1'PT | .15/32" | 6 | amps, 3 amps |
| 5312 | 8365K7 | DPDT | .15/32" | 3 | amps |
| 5313 | 8375K7 | DPDT | .15/32" | 6 | amps, 3 amps |

STD. PKG. 25

3 SIX INCH LONG WIRE LEADS

| Cat. No. | C-H No. | Descrip. | Shank | Current 125V | Rating 250V |
|----------|---------|----------|---------|--------------|--------------|
| 5335 | 8290K16 | SPST | .15/32" | 3 | amps |
| 5336 | 8391K8 | SPST | .15/32" | 6 | amps, 3 amps |

STD. PKG. 25

4 PUSH BUTTON MOMENTARY SWITCHES

Door operated switches, used wherever it is desired to control current by opening or closing of refrigerated doors, telephone booths, closets, vaults, etc. AC-DC. UL approved; 15/32" shank; rated at .75 AMF., 125 volts—1.75 AMPS, 250 volts.

| Cat. No. | C-H No. | Description | Terminals |
|----------|---------|-----------------|-----------|
| 5337 | 8411K4 | SP norm. open | lug |
| 5338 | 8411K3 | SP norm. open | screw |
| 5339 | 8411K8 | SP norm. closed | lug |
| 5340 | 8411K7 | SP norm. closed | screw |

STD. PKG. 25

8, 9 HEAVY DUTY TOGGLE SWITCHES

Quick make—quick break; 15/32" shank (No. 8680 11/32" shank); AC-DC, UL approved; bakelite case; screw terminals.

| Cat. No. | C-H No. | Descrip. | Current 125V | Rating 250V |
|----------|----------|----------|--------------|---------------|
| 5341 | @7321K3 | SPST | 12 | amps, 6 amps |
| 5342 | @7320K3 | D1'PT | 12 | amps, 6 amps |
| 5343 | *7361K5 | SPST | 15 | amps, 10 amps |
| 5344 | *7360K8 | D1'PT | 15 | amps, 10 amps |
| 5345 | **7402K4 | D1'PT | 20 | amps |
| 5346 | 8680K1 | DPDT | 10 | amps, 5 amps |
| 5347 | 8690K2 | D1'PT | 15 | amps, 10 amps |

@ 1 HP—125/250V * 1 1/2 HP—125/250V ** 1 1/2 HP—125V, 2 HP—250V

STD. PKG. 12

A MULTI-POLE, MULTI-POSITION, ROTARY SWITCHES

Nos. 7260 thru 7266 and Nos. 7271 thru 7276

B PUSHBUTTON OPERATED AIRCRAFT SWITCHES

Nos. 8911K525, 8874, 8875

STANDARD DUTY TOGGLE SWITCHES

5 BACK CONNECTED LUG TERMINALS

Slow make and break; bakelite; AC rated for longer life, greater capacity. 15 amps. 125 volts—10 amps. 250 volts.

| Cat. No. | C-H No. | Description | Shank |
|----------|---------|-------------|---------|
| 5314 | 7501K13 | SPST | .15/32" |
| 5315 | 7505K4 | SPDT | .15/32" |
| 5316 | 7561K4 | D1'PT | .15/32" |
| 5317 | 7565K5 | DPDT | .15/32" |
| 5318 | 7611K2 | 3PST | .15/32" |
| 5319 | 7615K2 | 3PDT | .15/32" |

STD. PKG. 25

6 BACK CONNECTED SCREW TERMINALS

| Cat. No. | C-H No. | Description | Shank |
|----------|---------|-------------|---------|
| 5320 | 7500K14 | SPST | .15/32" |
| 5321 | 7504K4 | SPDT | .15/32" |
| 5322 | 7560K5 | D1'PT | .15/32" |
| 5323 | 7564K6 | D1'PT | .15/32" |
| 5324 | 7610K2 | 3PST | .15/32" |
| 5325 | 7614K2 | 3PDT | .15/32" |

STD. PKG. 25

4 PUSH BUTTON SWITCHES PUSH TO MAKE—PUSH TO BREAK

Push-push switches; AC-DC. UL approved, bakelite case; rated 6 amps. 125V—3 amps. 250V. Pushing the button once closes the contacts; pushing it again opens the contacts. 11/16" shank.

| Cat. No. | C-H No. | Description | Terminals |
|----------|---------|-------------|-----------|
| 5326 | 7206K4 | SPST | lug |
| 5327 | 7208K4 | SPST | screw |
| 5328 | 7207K4 | SPST | wire |

STD. PKG. 25

5 CENTER OFF STANDARD DUTY TOGGLE SWITCHES BACK CONNECTED LUG TERMINALS

| Cat. No. | C-H No. | Description | Shank |
|----------|---------|-------------|---------|
| 5329 | 7503K13 | SPDT | .15/32" |
| 5330 | 7563K4 | DPDT | .15/32" |
| 5331 | 7613K2 | 3PDT | .15/32" |

STD. PKG. 25

7 BACK CONNECTED SCREW TERMINALS

| Cat. No. | C-H No. | Description | Shank |
|----------|---------|-------------|---------|
| 5332 | 7502K13 | SPDT | .15/32" |
| 5333 | 7562K4 | DPDT | .15/32" |
| 5334 | 7612K2 | 3PDT | .15/32" |

STD. PKG. 12

C MISCELLANEOUS AIRCRAFT SWITCHES

Pistol grip trigger movement switches Nos. 8895, 8896, 8897

D LEVER EXTENSIONS and ATTACHABLE TIPS

To meet requirements for luminous identification on switches and circuit breakers these tips snap over the standard levers and are held in place by a cup shaped spring member. Nos. 24-1939, 24-1939-2, 24-1997, 24-1997-2, 24-1164, 24-1164-2, 24-1164-3.

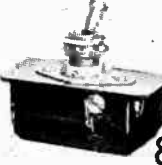
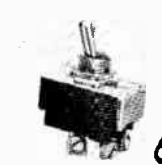
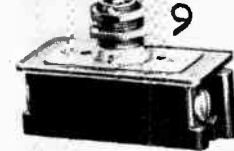
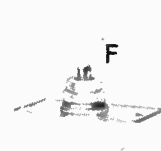
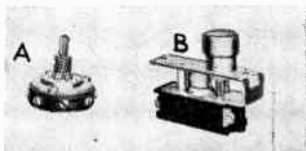
E AIRCRAFT SWITCH GUARDS IT IS USED TO PREVENT INADVERTENT OPERATION OF THE LEVER

BOOTS FOR WATER and DUST RESISTANT APPLICATIONS

Gray silastic flexible designed to obstruct water and dust from entering switch interior. Remains flexible at minus 67°F. with stand exposure to sunlight without deterioration. For all applications. Advise which Specific Switch guard is to be used.

F BUSHING SEAL No. 32-341

ADDITIONAL CUTLER-HAMMER EQUIPMENT AVAILABLE



All Prices Subject to Change or Withdrawal without Notice.

Birnbach

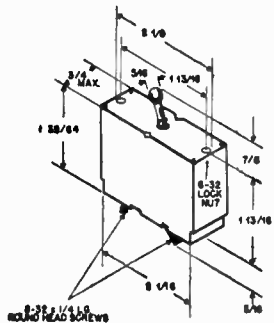
CUTLER-HAMMER SWITCHES MISCELLANEOUS SWITCHES



MANUAL TYPE CIRCUIT BREAKERS

Complete Switch Brochure includes up-to-date "MS" specifications, including sealed levers and environment sealed switches.

Both types combine, in one unit, a standard aircraft type SPST switch and a positive protection device. Molded case, metal strap with locking type mounting nuts.

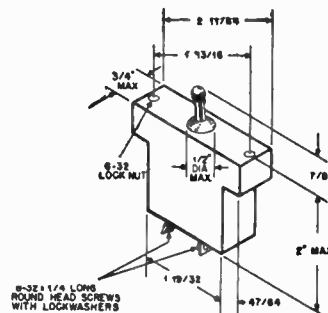


VERRIDE TYPE
NON-TRIP FREE

| NON-TRIP FREE | | | | | |
|---------------|---------|-------|------------|--------|----------|
| CAT. NO. | C-H NO. | SPEC. | TYPE | RATING | 24 VOLTS |
| 5460 | 8750 | K11 | AN-3160-5 | SPST | 5 AMPS |
| 5461 | 8751 | K 8 | AN-3160-10 | SPST | 10 AMPS |
| 5462 | 8752 | K 8 | AN-3160-15 | SPST | 15 AMPS |
| 5463 | 8753 | K 8 | AN-3160-20 | SPST | 20 AMPS |
| 5464 | 8754 | K 8 | AN-3160-25 | SPST | 25 AMPS |
| 5465 | 8755 | K 8 | AN-3160-35 | SPST | 35 AMPS |
| 5466 | 8756 | K 8 | AN-3160-50 | SPST | 50 AMPS |

| TRIP FREE | | | | | |
|-----------|---------|-------|-----------|--------|----------|
| CAT. NO. | C-H NO. | SPEC. | TYPE | RATING | 24 VOLTS |
| 5470 | 8730 | K3 | E-1441-5 | SPST | 5 AMPS |
| 5471 | 8731 | K3 | E-1441-10 | SPST | 10 AMPS |
| 5472 | 8732 | K3 | E-1441-15 | SPST | 15 AMPS |
| 5473 | 8733 | K3 | E-1441-20 | SPST | 20 AMPS |
| 5474 | 8734 | K1 | E-1441-25 | SPST | 25 AMPS |
| 5475 | 8735 | K3 | E-1441-35 | SPST | 35 AMPS |
| 5476 | 8736 | K1 | E-1441-50 | SPST | 50 AMPS |

Std. Pkg. 5

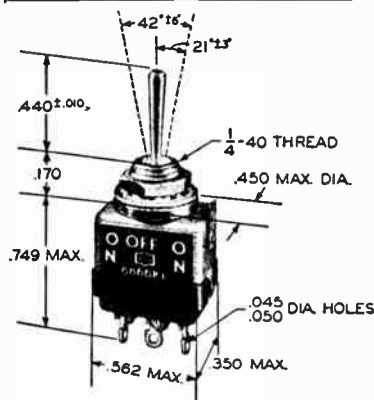


NON-OVERRIDE TYPE
TRIP FREE

In addition to our large inventory listed above we have in stock the special switches manufactured specifically for aircraft—such as:

- DOUGLAS DC-8
- BOEING 707
- CONVAIR 888
- LOCKHEED ELECTRA

Also we have the regular aircraft relays which include the hermetically sealed type.



SINGLE POLE

POSITIVE ACTION MINIATURE MILITARY SWITCHES "AS SMALL AS A DIME"

Especially designed for aircraft, missile and electronic applications.

BUILT TO MIL-S-8834 SPECS.

EXTREMELY COMPACT — highly reliable power or dry circuit switch, usable as a pre-set switch in aircraft recognition systems, for walkie-talkies, electronic instruments and communication systems.

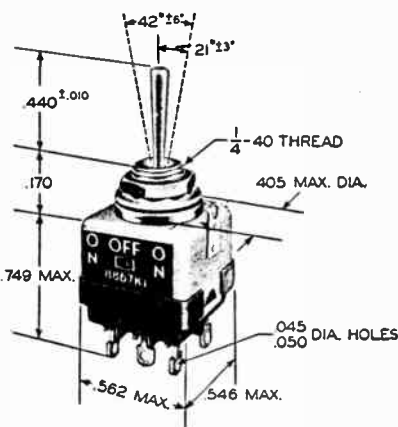
NEW DESIGN — Toggle is linked directly with movable contact member, insuring positive make and break.

NEW TOGGLE LEVER SEAL — Protects switch enclosure under adverse environmental conditions; includes panel bushing seal.

NEW GOLD PLATED CONTACTS — Open and close with wiping action, for good contact even on low energy circuits. Contact bounce is extremely low.

NEW SUPERIOR MATERIAL — In molded parts, provides higher arc-tracking resistance and excellent recovery voltage.

NEW POSITIVE DETENT ACTION — For improved operator "feel."



DOUBLE POLE

| CAT. NO. | C-H NO. | TYPE | CIRCUIT | | | CURRENT RATING | | | | |
|----------|---------|------|-------------|-----------------|---------------|----------------|-------------|--------------|-------|--------|
| | | | UP POSITION | CENTER POSITION | DOWN POSITION | 28 VOLTS DC | 50 VOLTS DC | 115 VOLTS AC | | |
| 5480 | K1 | 8866 | K1 | SPDT | ON | OFF | ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5480 | K2 | 8866 | K2 | SPDT | MOM-ON | OFF | MOM-ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5480 | K3 | 8866 | K3 | SPDT | ON | OFF | MOM-ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5480 | K4 | 8866 | K4 | SPDT | ON | NONE | ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5480 | K5 | 8866 | K5 | SPST | ON | OFF | NONE | 4 AMPS | 1 AMP | 3 AMPS |
| 5480 | K6 | 8866 | K6 | SPST | NONE | OFF | MOM-ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5480 | K7 | 8866 | K7 | SPST | ON | NONE | OFF | 4 AMPS | 1 AMP | 3 AMPS |
| 5481 | K1 | 8867 | K1 | DPDT | ON | OFF | ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5481 | K2 | 8867 | K2 | DPDT | MOM-ON | OFF | MOM-ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5481 | K3 | 8867 | K3 | DPDT | ON | OFF | MOM-ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5481 | K4 | 8867 | K4 | DPDT | ON | NONE | ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5481 | K5 | 8867 | K5 | DPST | ON | OFF | NONE | 4 AMPS | 1 AMP | 3 AMPS |
| 5481 | K6 | 8867 | K6 | DPST | NONE | OFF | MOM-ON | 4 AMPS | 1 AMP | 3 AMPS |
| 5481 | K7 | 8867 | K7 | DPST | ON | NONE | OFF | 4 AMPS | 1 AMP | 3 AMPS |

Std. Pkg. 5

SLIDE LEVER SWITCHES

UL APPROVED



Ideal for phonographs, test instruments, electrical equipment, appliances, etc.
1 1/8" x 1/2" with 1 1/8" mounting centers; mounting holes .140".

| CAT. NO. | DESCRIPTION | CURRENT RATING | PKGE. |
|---------------|-------------|---------------------|-------|
| 6245 | SPST | 4 Amps-125 V AC | 25 |
| 6246 | SPDT | 4 Amps-125 V AC | 25 |
| 6247 | DPST | 50 Amp-125 V AC-DC | 25 |
| 6248 | DPDT | 50 Amp-125 V AC-DC | 25 |
| SPRING RETURN | | | |
| 6245S | SPST | 75 Amp-125 V AC-DC | 25 |
| 6246S | SPDT | 75 Amp-125 V AC-DC | 25 |
| 6239 | | Slide Switch Shield | 25 |

BIRNBACH KNIFE SWITCHES



Made of special nickel plated spring brass on a rugged base. Screw terminals located conveniently for easy connections in circuit. Two mounting holes.

| Cat. No. | Descrip. | Base | Std. Pkg. |
|----------|----------|-------|-----------|
| 6100 | SPST | Por. | 25 |
| 6102 | SPDT | Bake. | 20 |
| 6103 | DPST | Por. | 10 |
| 6104 | DPDT | Bake. | 10 |
| 6105 | TPDT | Por. | 10 |

Birnbach

ARROW H & H SWITCHES

TOGGLE • PUSH BUTTON • ROTARY • KNIFE • POWER • SLIDE



1 MOMENTARY CONTACT PUSH BUTTON
Solder lugs; laminated type. Has 9/16" slotted sleeve, 15/32-32 TPI. Complete with hex and knurled nut; nickel plated; all accept snap on button. Supplied less insulating button.

QUICK MAKE AND BREAK

| Cat. No. | Descrip. | Type | Current Rating 250 V |
|----------|-----------------------------|----------------------|----------------------|
| 6184 | ..SPST.. | Normally Closed (On) | .3 amps |
| 6184A | ..SPST.. | Normally Open (Off) | .3 amps |
| 6185A | ..SPDT.. | Normally Closed (On) | .1 amp |
| 6185 | ..SPDT.. | Normally Open (Off) | .1 amp |
| 6186 | ..2 Circ.. | Normally Closed (On) | .1 amp |
| 6231A | ..DPST.. | Normally Closed (On) | .1 amp |
| 6231 | ..DPST.. | Normally Open (Off) | .1 amp |
| 6231B | ..DPDT.. | Normally Closed (On) | .1 amp |
| 6232 | ..Button only, red or black | | |

SLOW MAKE AND BREAK

| Cat. No. | Descrip. | Type | Current Rating 125 V |
|----------|------------|----------------------|----------------------|
| 6180 | ..SPST.. | Normally Closed (On) | .1 amp |
| 6230 | ..SPST.. | Normally Open (Off) | .1 amp |
| 6224 | ..2 Circ.. | Normally Closed (On) | .1 amp |

3 INTERMEDIATE SIZE TOGGLE-BAT

Molded phenolic base; back connected silver plated solder lug contacts; supplied with hex nut and knurled nut. SPDT rated at 1 amp-250V, 6 amps-125 volts AC-DC; others rated at 3 amps-250V, 6 amps-125V AC-DC.

| Cat. No. | Description | Type | Action |
|----------|-------------|------|-----------|
| 6280 | ..SPST.. | | POSITIVE |
| 6280A | ..SPST.. | MOM. | NORM. OFF |
| 6281 | ..SPDT.. | | POSITIVE |
| 6281A | ..SPDT.. | | MOMENTARY |
| 6284 | ..2 Circ.. | | POSITIVE |
| 6282 | ..DPST.. | | POSITIVE |
| 6282A | ..DPST.. | MOM. | NORM. OFF |
| 6283 | ..DPDT.. | | POSITIVE |
| 6283A | ..DPDT.. | | MOMENTARY |

2 THREE POSITION—CENTER OFF

| Cat. No. | Description | Type |
|----------|-------------|------|
| 6261 | ..SPDT.. | |
| 6262 | ..2 Circ.. | |
| 6263 | ..DPDT.. | |

2 BAKELITE MOLDED MOMENTARY CONTACT SWITCHES

Same as above except momentary. SPST Normally Off. 3 A., 250 V. UL approved. Rated 6 A., 125 V.

| Cat. No. | Description | Length |
|----------|-------------|--------|
| 6241 | ..SPST.. | .32" |
| 6240 | ..SPDT.. | .35" |
| 6242 | ..DPDT.. | .48" |

4 MOMENTARY PUSH BUTTON

Molded momentary, solder lugs. Rated 1 A., 125 V. With 9/16" shank, normally OFF—push to make. Nickel plated. UL approved.

| Cat. No. | Descrip. | Std. Pkg. |
|----------|----------|-----------|
| 6233 | ..SPST.. | 25 |
| 6234 | ..SPDT.. | 25 |
| 6235 | ..DPST.. | 25 |
| 6236 | ..DPDT.. | 25 |

6 MIDGET SIZE TOGGLE POS. ACTION

SPST Rated 3 Amps—250 Volts, 6 amps—125 Volts. Others Rated 1 Amp—250 Volts, 6 amps—125 Volts. Molded Phenolic base. 15/32-32 x 15/32" long slotted sleeve. Nickel finish; solder lugs.

| Cat. No. | Description | Type |
|----------|-------------|-------------|
| 6244 | ..SPST.. | Ball Handle |
| 6244A | ..SPST.. | Bat Handle |
| 6244B | ..SPDT.. | Ball Handle |
| 6244C | ..SPDT.. | Bat Handle |
| 6244D | ..2 Circ.. | Ball Handle |
| 6244E | ..2 Circ.. | Bat Handle |

16 ROTARY SWITCHES CANOPY TYPE—ROTO LOCK

Laminated phenolic sections—solder lugs; sleeve 11/32" diam. 32 threads per inch; nickel finish; Rotary switches supplied with two hex nuts; roto lock key types have 15/32" diam. 32 threads per inch; key removable in off position only on SPST and DPST—key removable in both positions on all others.

SPST rated at 3 amps-250 V AC-DC, others rated at 1 amp-250 V, 3 amps-125 volts AC-DC.

| Cat. No. | Description | Std. Pkg. |
|----------|----------------------|-----------|
| 6110 | ..SPST.. | 12 |
| 6111 | ..SPDT.. | 12 |
| 6112 | ..DPST.. | 12 |
| 6113 | ..DPDT.. | 12 |
| 6114 | ..Key—Rem. Off Pos. | 100 |
| 6115 | ..Key—Rem. Both Pos. | 100 |

Canopy type rotary

| Cat. No. | Description | Std. Pkg. |
|----------|-------------|-----------|
| 6210 | ..SPST.. | 1 1/2" |
| 6211 | ..SPST.. | 2 1/2" |
| 6212 | ..SPDT.. | 1 1/2" |
| 6213 | ..SPDT.. | 2 1/2" |
| 6214 | ..DPST.. | 1 1/2" |
| 6215 | ..DPST.. | 2 1/2" |
| 6216 | ..DPDT.. | 1 1/2" |
| 6217 | ..DPDT.. | 2 1/2" |

BALL HANDLE TOGGLE SWITCHES 10 POSITIVE ACTION

UL approved. Ball lever switches nickel plated; laminated type; ring and mounting nuts.

| Cat. No. | Descrip. | Shank Length | Current Rating 125 V, 250 V |
|----------|------------|--------------|-----------------------------|
| 6200 | ..SPST.. | 15/32" | .3 amps |
| 6201 | ..SPST.. | 3/16" | .3 amps |
| 6202 | ..SPDT.. | 15/32" | .3 amps, .1 amp |
| 6202A | ..2 Circ.. | 15/32" | .3 amps, .1 amp |
| 6203 | ..SPDT.. | 3/16" | .3 amps, .1 amp |
| 6204 | ..DPST.. | 15/32" | .3 amps, .1 amp |
| 6205 | ..DPST.. | 3/16" | .3 amps, .1 amp |
| 6206 | ..DPDT.. | 15/32" | .3 amps, .1 amp |
| 6207 | ..DPDT.. | 3/16" | .3 amps, .1 amp |

BAT HANDLE TOGGLE SWITCHES 11 POSITIVE ACTION

UL approved. Laminated type. Nickel plated finish; supplied with ring and mounting nuts. 15/32" shank.

| Cat. No. | Descrip. | Current Rating 125 V, 250 V |
|----------|------------|-----------------------------|
| 6220 | ..SPST.. | .3 amps |
| 6221 | ..SPDT.. | .3 amps, .1 amp |
| 6221A | ..2 Circ.. | .3 amps, .1 amp |
| 6222 | ..DPST.. | .3 amps, .1 amp |
| 6223 | ..DPDT.. | .3 amps, .1 amp |

BAT HANDLE MOMENTARY ACTION 11

UL approved. Laminated type. Nickel plated finish; supplied with ring and mounting nuts; 15/32" shank; solder terminals; SPST rated at 3 amps 250V AC-DC, others rated at 1 amp 250V, 3 amps 125V AC-DC. Std. Pkg. 25.

| Cat. No. | Description | Type |
|----------|-------------|----------------------|
| 6190 | ..SPST.. | Normally Closed (On) |
| 6191 | ..SPST.. | Normally Open (Off) |
| 6192 | ..SPDT.. | Normally Closed (On) |
| 6193 | ..DPST.. | Normally Closed (On) |
| 6194 | ..DPST.. | Normally Open (Off) |
| 6195 | ..DPDT.. | Normally Closed (On) |

ST TYPE PER SPEC. JAN-S-23 12

Bat handle, back connected, silver plated solder lug contacts; slotted sleeve. Supplied with two hex nuts. Molded phenolic base; 15/32-32 x 15/32" long, nickel finish. They meet, where applicable. All Jan-S-23 and Mil-S-6745 Specs.

| Cat. No. | Aws No. | Description |
|----------|------------|-------------|
| 6250 | ..ST-12A.. | SPST |
| 6251 | ..ST-12B.. | SPDT |
| 6251C | ..ST-12C.. | SPST |
| 6251V | ..ST-12V.. | 2 Circ. |
| 6252 | ..ST-22K.. | DPST |
| 6252M | ..ST-22M.. | DPST |
| 6253 | ..ST-22N.. | DPDT |

| Cat. No. | Description | Type |
|----------|-------------|------|
| 6270* | ..ST-42A.. | SPST |
| 6271* | ..ST-42B.. | SPDT |
| 6249* | ..ST-49E.. | SPDT |
| 6272* | ..ST-52K.. | DPST |
| 6273* | ..ST-52N.. | DPDT |
| 6274** | ..ST-52P.. | DPDT |

STANDARD DUTY MOM. PUSH BUTTON 13

Molded phenolic base; 15/32-32x7/16" long slotted sleeve; nickel finish; screw terminals; complete with two hex nuts. All accept snap on button; supplied less insulating button. Cur. rate 125V 12A, 250V 6A.

| Cat. No. | Description | Type |
|----------|-------------|----------------------|
| 6238 | ..SPST.. | Normally Closed |
| 6238B | ..SPDT.. | Normally Closed (on) |
| 6238C | ..2 Circ.. | Normally Closed (on) |
| 6226 | ..DPST.. | Normally Open (off) |
| 6238D | ..DPST.. | Normally Closed (on) |

STANDARD DUTY TOGGLE SWITCHES 14

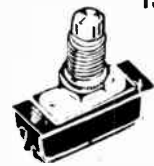
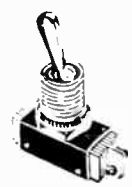
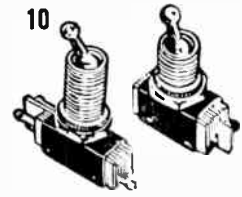
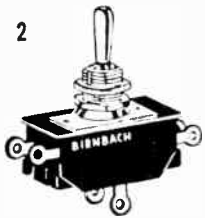
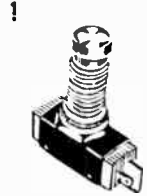
Molded phenolic base; 15/32-32 x 7/16" long slotted sleeve; nickel finish; screw terminals; complete with one hex nut, one knurled nut.

| Cat. No. | Description | Current Rating AC-DC 125 V, 250 V |
|----------|-------------|-----------------------------------|
| 6225A | ..SPST.. | .12 amps, .6 amps |
| 6225B | ..SPDT.. | .12 amps, .6 amps |
| 6225C | ..2 Circ.. | .6 amps, .3 amps |
| 6225 | ..DPST.. | .12 amps, .6 amps |

EXTRA HEAVY DUTY POWER SWITCHES 15 3 POSITION—POSITIVE CENTER OFF

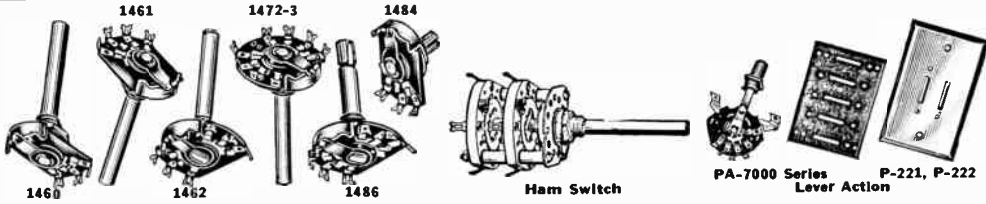
Molded phenolic base; screw terminals; slotted sleeve 3-32; nickel finish; with two hex nuts. Rated at 5 Amps—250 V, 10 Amps—125 V.

| Cat. No. | Description | Circuit |
|----------|-------------|---------------------------------|
| 6227 | ..DPDT.. | 3/4 H.P. 250 V.A.C.-D.C. |
| 6228 | ..DPDT.. | 1/2 H.P. 115/230 V.A.C. 3 phase |
| 6229 | ..DPDT.. | 1/2 H.P. 115/230 V.A.C. 2 phase |



Centralab.

Special Switches



GENERAL PURPOSE AND TONE SWITCHES

These switches are widely used in radio-phonos PA channel selectors, intercoms, momentary line or remote speaker returns, and in dual speaker controls. Insulation is of high quality laminated phenolic. Voltage breakdown, 1000 v. AC rms. All metal parts except clips and contacts are cadmium plated steel. Mounting is single-hole, 3/8"-32 threaded bushing 3/8" lg. except No. 1484, 1/2" lg. Units are rated 1.75 amps at 24 v. DC; 230 ma at 115 v. AC. (Make and break resistive load.) Switches are packaged individually with one mounting nut and lockwasher. No. 1484 also includes one P-401 1/4" split knurled knob.

CRL No. 1460—Single-pole, two-position, shorting contacts, positive index. May be used as SPST or SPDT. For radio-phonos, tone or sensitivity control. Net Each. **\$1.08**

CRL No. 1461—Single-pole, three-position, shorting contacts, positive index. Useful as miniature band change switch, step-type tone control, and PA channel selectors. Size, 1 1/4" w. x 1 1/4" d. back of panel x 1 1/4" shaft length. Net Each. **\$1.08**

CRL No. 1462—Two-pole, two-position, shorting contacts, positive index. May be used as SPST, SPDT, DPST or DPDT. For meter reversing, PA channel, or switching both lines on phonograph control. Size, 1 1/4" w. x 1 1/4" d. back of panel x 1 1/4" shaft length. Net Each. **\$1.08**

CRL No. 1463—Single-pole, two-position, non-shorting contacts, spring-return index. Useful for meter reversing or inexpensive momentary-talk switch on intercom systems. Net Each. **\$1.08**

CRL No. 1464—Two-pole, two-position, non-shorting contacts, spring-return index. Use as a meter switch and momentary line or remote speaker return on intercoms. Size, 1 1/4" w. x 1 1/4" d. back of panel x 1 1/4" shaft length. Net Each. **\$1.08**

CRL No. 1465—Single-pole, four-position (three active) with AC DPST line switch, shorting contacts, positive index. Used as replacement for on-off switch, three-step tone control switch in many AM and FM receivers. Size, 1 1/4" w. x 1 1/4" d. back of panel x 2 1/2" shaft length. Net Each. **\$1.80**

CRL No. 1472—Two-pole, three-position, non-shorting contacts, positive index. An economical change switch for AM, FM, phono selector to amplifier in custom installations. Size, 1 1/4" w. x 1 1/4" d. x 1 1/4" shaft length. Net Each. **\$1.08**

CRL No. 1473—Two-pole, three-position, shorting contacts, positive index. Use as change switch for AM, FM, phono selector to amplifier in custom installations. Net Each. **\$1.08**

CRL No. 1483—Single-pole, three-position, shorting contacts, positive index. Remote speaker switch, or use with dual or auxiliary rear-seat auto radio speakers or monitor-remote speaker switches. Permits operation of either speaker separately or both simultaneously. Size, 1 1/4" w. x 1 1/4" d. back of panel x 1 1/4" lg. shaft. Net Each. **75c**

CRL No. 1484—Single-pole, three-position remote speaker switch almost the same as above unit except with 1/4" bushing and 3/8" split shaft. Split knurled knob supplied (1/4"). Black with chrome center. Size, 1 1/4" w. x 1 1/4" d. back of panel x 3/8" lg. shaft. Net Each. **90c**

CRL No. 1486—Stereo remote speaker switch: two-pole, three-position, shorting contacts. Switches one pair of speakers to a remote pair, or all four speakers. Shaft 1 1/2" lg. with 1/2" split knurl end. With black and chrome push-on knob and **\$1.08** instructions. Net Each. **\$1.08**

SEPARATE SECTIONS

60° SEPARATE SECTION

CRL No. ZZD—Separate section for use with P-273, P-274, P-275 index assemblies. Units are 1-pole, two to six position, non-shorting. Net Each. **\$1.20**

90° SEPARATE SECTION

CRL No. XXD—Separate section for use with P-278, P-279, P-280 index assemblies. Units are 1-pole, two to four position, non-shorting. Net Each. **\$1.20**

SEPARATE INDEX ASSEMBLIES

60° SEPARATE INDEX ASSEMBLIES

CRL No. P-273—Index assembly containing P-273 index, P-120 pointer knob, P-139 tie rods (2 1/2"), P-147 nuts, P-148 lockwashers, P-189 steatite spacers (1/2"), P-192 spacers (1"), P-177 phenolic spacer washers, and P-404 dial plate. Rear shaft 1 1/2" lg. Net Each. **\$1.38**

CRL No. P-274—Index assembly containing P-274 index, P-120 pointer knob, P-143 tie rods (5"), P-189 steatite spacers (1/2"), P-192 steatite spacers (1"), P-147 nuts, P-148 lockwashers, P-177 phenolic spacer washers and P-404 dial plate. Rear shaft 1 1/4" lg. Net Each. **\$1.74**

CRL No. P-275—Index assembly containing P-275 index, P-120 pointer knob, P-145 tie rods (7"), P-147 nuts, P-148 lockwashers, P-187 steatite spacers (3/4"), P-189 steatite spacers (1/2"), P-192 steatite spacers (1"), P-177 phenolic spacer washers, and P-404 dial plate. Rear shaft 1 7/8" lg. Net Each. **\$2.16**

INDEX ASSEMBLIES (CONT'D)

90° SEPARATE INDEX ASSEMBLIES

Ham type, two piece shaft extension, phenolic rear, metal front. Use with No. XXD Deluxe ham type section. For high voltage operation, will pass 2000 v. AC breakdown to ground test.

CRL No. P-278—Index assembly containing P-278 index, P-120 pointer knob, P-139 tie rods (2 1/2"), P-147 nuts, P-148 lockwashers, P-189 steatite spacers (1/2"), P-192 steatite spacers (1"), P-177 phenolic spacer washers, and P-163 dial plate. Rear shaft is 2" lg. Net Each. **\$1.38**

CRL No. P-279—Index assembly containing P-279 index, P-120 pointer knob, P-143 tie rods (5"), P-189 steatite spacers (1/2"), P-192 steatite spacers (1"), P-147 nuts, P-148 lockwashers, P-177 phenolic spacer washers, P-163 dial plate. Rear shaft, 4 1/4" lg. Net Each. **\$1.74**

CRL No. P-280—Index assembly containing P-280 index, P-120 pointer knob, P-145 tie rods (7"), P-147 nuts, P-148 lockwashers, P-187 steatite spacers (3/4"), P-189 steatite spacers (1/2"), P-192 steatite spacers (1"), P-177 phenolic spacer washers, P-163 dial plate. Rear shaft, 7". Net Each. **\$2.16**

60° AND 90° INDEXING HAM SWITCHES

Heavy-duty, deluxe ceramic construction; designed for higher breakdown to ground needed for ham applications. Switch can operate effectively in five hands. Insulation is Centralab Grade L-533 steatite. Dow-Corning 200 Silicone treated to prevent surface moisture. Breakdown between critical parts, 2000 v. AC rms. All metal parts except clips and contacts are cadmium-plated steel. Switches have phenolic shaft through switch sections which provides high voltage breakdown to ground. Rating (make and break), 250 ma at 115 v. AC; 5 ma at 1500 v. AC; 1.75 amps at 24 v. DC. For use with tubes operating at voltages up to 1 kv and inputs up to 150 watts. Index is positive action type; adjustable stop. 60° switches have two to six active positions. 90° switches have two to four active positions. Size, 1 1/4" w. x 1 1/4" lg. shaft. Single-hole mounting; 3/8"-32 threaded bushing; 3/8" lg. shaft, 1/4" dia. full round, 2 1/4" lg. from mounting surface. Packaged singly, including mounting nut, lockwasher, pointer knob and dial plate (P-404) for 60° switches (or P-163 dial plate for 90° switches).

NON-SHORTING HAM SWITCHES

| CRL No. | CRL No. | Poles to Section | No. Sections | No. Poles | Net Each |
|---------|---------|------------------|--------------|-----------|----------|
| 2542 | 2550 | 1 | 1 | 1 | \$2.37 |
| 2543 | 2551 | 1 | 2 | 2 | 3.36 |
| 2544 | 2552 | 1 | 4 | 4 | 4.32 |
| 2545 | 2553 | 1 | 4 | 4 | 5.34 |
| 2546 | 2554 | 1 | 5 | 5 | 6.30 |

LEVER ACTION SWITCHES

Low capacity, coil spring index design switches for use singly or in groups. Cadmium plated steel parts except clips and contacts. Laminated phenolic insulation. Rated 2.75 a., 15 v. DC. 230 ma. 115 v. AC. Size: 1 1/4" w. x 1 1/4" h. x 1 1/4" d. behind panel. Wt., 4 oz. Supplied with knob and mounting hardware.

| CRL No. | No. Poles | Positions | Index | Net Each | |
|---------|-----------|-----------|-------|------------------|--------|
| 1452 | 1454 | 2 | 3 | Positive | \$1.26 |
| 1453 | 1455 | 2 | 3 | Spring Return | 1.26 |
| 1466 | 1467 | 2 | 3 | Pos. & Spr. Ret. | 1.26 |
| 1456 | 1457 | 4 | 2 | Spring Return | 1.44 |
| 1459 | 1458 | 4 | 2 | Positive | 1.44 |
| | 1475* | 1 | 3 | Positive | 1.26 |

*Tube tester replacement switch.

ECONOMY LEVER ACTION SWITCHES

Simplified version of above. Size: 1 1/4" w. x 2" h. x 1 1/4" d. behind panel. Other specifications similar to above.

| PA-7000 | PA-7001 | 2 | 3 | Positive | \$1.05 |
|----------|----------|---|---|------------------|--------|
| PA-7002 | PA-7003 | 2 | 3 | Spring Return | 1.26 |
| PA-7004 | PA-7005 | 2 | 3 | Pos. & Spr. Ret. | 1.26 |
| PA-7006* | PA-7007* | 2 | 4 | Positive | 1.05 |
| PA-7008 | PA-7009 | 4 | 2 | Spring Return | 1.26 |
| PA-7010 | PA-7011 | 4 | 2 | Positive | 1.05 |

*4-pos. sw., requires offset mtg. holes in panel.

LEVER SWITCH MOUNTING PLATES

For vertical mtg. of single and multiple switch groups. Spacing between switches, 3/8". Black wrinkle finish. P-221, P-222 satin chrome, for mtg. on electrical outlet boxes. Shipping Wt., 4 oz.

| CRL No. | No. Sw. | Size, Inches | Net Each | CRL No. | No. Sw. | Size, Inches | Net Each |
|---------|---------|-----------------|----------|---------|---------|-----------------|----------|
| P-1755 | 1 | 1/4" x 2 3/8" | 30c | P-1759 | 5 | 3/4" x 2 3/8" | 30c |
| P-1756 | 2 | 1 1/4" x 2 3/8" | 30c | P-221 | 1 | 2 1/4" x 4 1/2" | 63c |
| P-1757 | 3 | 2 1/4" x 2 3/8" | 30c | P-222 | 2 | 2 1/4" x 4 1/2" | 63c |
| P-1758 | 4 | 3" x 2 3/8" | 30c | | | | |

BUSS Fuses

FUSETRON ^{DUAL-ELEMENT} Fuses and Fuse Holders

for Protection of TV, Radios, Instruments and Electronic Equipment

FAST ACTING FUSES for PROTECTION OF INSTRUMENTS, Etc.

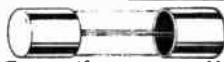


Formerly called 8AG.
Dimension 1/4 x 1 inch, Glass tube.

Provide high speed action necessary to protect sensitive instruments.

Listed by Underwriters' Laboratories Inc.
Test specification—carry 100%, open at 200% in 5 seconds.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|-----------------------|------------|
| 250 or less | AGX | 1/500 | \$1.39 |
| " | AGX | 1/200 | .58 |
| " | AGX | 1/100 | .52 |
| " | AGX | 1/32 | .45 |
| 250 or less | AGX | 1/16 | .28 |
| " | AGX | 1/10, 1/8, 3/16, 1/10 | .21 |
| " | AGX | 1/4, 3/8, 1/2, 3/4 | .14 |
| " | AGX | 1 | .084 |
| " | MKB | 1/16 or 1/8 | .45 |
| 125 or less | AGX | 1 1/2 or 2 | .084 |



Formerly called 8AG.
Dimension 1/4 x 1 inch, Glass tube.

Test specification—carry 110%, open at 135% within 1 hour.
125 volt sizes are listed by Underwriters' Laboratories Inc.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|-----------------|------------|
| 125 or less | AGX | 3, or 4 | \$0.084 |
| " | AGX | 5 | .053 |
| 32 or less | AGX | 8, 10, 15 or 20 | .053 |
| " | AGX | 25 or 30 | .063 |

MJB & MJW FUSES NOW CALLED AGX

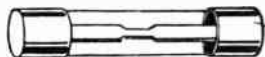
BUSS GLASS TUBE FUSES, 1/4 x 1 1/4 inch



Formerly called 3AG

Test specification—carry 110%, open at 135% within 1 hour.
Listed by Underwriters' Laboratories Inc.

| Voltage | Symbol | Amperes | List Price | Voltage | Symbol | Amperes | List Price |
|-------------|--------|---------|------------|-------------|--------|-----------------|------------|
| 250 or less | AGC | 1/500 | \$1.39 | 250 or less | AGC | 1 7/8, 1000 | \$0.21 |
| " | AGC | 1/200 | .58 | " | AGC | 3/16, 1/10 | .21 |
| " | AGC | 1/100 | .52 | " | AGC | 1/4, 3/10, 3/8 | .14 |
| " | AGC | 1/32 | .45 | " | AGC | 5/100, 1/2, 3/4 | .14 |
| " | AGC | 1/16 | .21 | " | AGC | 1 1/4, 1 1/2, 2 | .084 |
| " | AGC | 1/8 | .21 | " | MGB | 1/16 or 1/8 | .45 |
| " | AGC | 15/100 | .21 | " | AGC | 3 | .074 |
| | | | | " | MTH | 4, 5 or 6 | .105 |



Formerly called 3AG

Test specification—carry 110%, open at 135% within 1 hour.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|--------------------------|------------|
| 125 or less | GLH | 8 or 10 | \$0.16 |
| 32 or less | AGC | 4 | .074 |
| " | AGC | 5, 6, 7 1/2, 8, 10 or 15 | .053 |
| " | AGC | 20 | .047 |
| " | AGC | 25 or 30 | .063 |

20 ampere size is an SFE 20 fuse.
Sizes larger than 30 ampere are not recommended as clips or fuse holders would not permit fuse to carry such high currents. If surges or starting currents make heavier fuse necessary, use MDL Fuse from dual-element fuses.

MBW & MBB FUSES NOW CALLED AGC

BUSS PIG-TAIL FUSES

1/4 x 1 1/4 inch Glass tube fuse with 1 1/2 inch leads of No. 20 tinned copper wire.

Test specifications—carry 110%, open at 135% within 1 hour
Listed by Underwriters' Laboratories Inc.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|----------------------------|------------|
| 250 or less | GJV | 1/16 | \$0.35 |
| " | GJV | 1/8 | .26 |
| " | GJV | 1/4, 3/10, 3/8, 1/2 or 3/4 | .21 |
| " | GJV | 1, 1 1/2, 2 or 3 | .16 |
| " | GJV | 4, 5 or 6 | .17 |



FUSETRON FUSES, 1/4 x 1 1/4 inch



DUAL-ELEMENT SLOW BLOWING TYPE

Stop needless blows from starting currents or surges. Fuse link operates only on very high overloads or short-circuits. Thermal cutout functions on low overloads—cannot operate quickly at any load, so long time-lag is obtained. Yet protection is afforded against short-circuits or continued overloads.

Test specification—carry 110%, open at 135% within 1 hour.
Approximate blowing time: at 200% load MDL 25 sec. MDX 12 sec.
at 300% " " 8 " " 3 "
at 500% " " 3 " " 1/4 "

125 and 250 volt sizes listed by Underwriters' Laboratories Inc.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|---|------------|
| 250 or less | MDL | 1/100 or 1/32 | \$0.39 |
| 250 or less | MDL | 1/16, 1/10, 1/8, 15/100, 17 1/2/1000, 3/16, 1/10, 1/4, 3/10, 3/8, 1/10, 1/2, 3/10, 1/10, 3/4, 1/10 or 1 | .28 |
| " | MDX | 1 1/4, 1 1/2, 1 3/4 or 2 | .32 |
| 125 or less | MDL | 1 1/2, 1 3/4, 1 1/2, 1 3/4 or 2 | .26 |
| " | MDL | 2 1/2 or 2 3/4 | .21 |
| " | MDX | 3, 3 1/2, 4 or 5 | .21 |
| " | MDX | 6 1/4 or 7 | .24 |
| 32 or less | MDL | 3, 3 1/2, 4, 5, 6 1/4, 8, 10, 15, 20, 25 or 30 | .21 |

FUSETRON PIG-TAIL FUSES

Leads are No. 20 tinned wire 1 1/2 inch long. Listed by Underwriters' Laboratories Inc. Test specifications and performance, MDV 1/100 to 2 3/4 amps. same as MDL fuses. 3 to 7 amps. same as MDX fuses.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|---|------------|
| 250 or less | MDV | 1/100 or 1/32 | \$0.47 |
| " | MDV | 1/16, 1/10, 1/8, 15/100, 17 1/2/1000, 3/16, 1/10, 1/4, 3/10, 3/8, 1/10, 1/2, 3/10, 3/4, 1/10 or 1 | .35 |
| 125 or less | MDV | 1 1/4, 1 1/2, 1 3/4 or 2 | .33 |
| " | MDV | 2 1/2, 2 3/4, 3, 3 1/2, 4, 5, 6 1/4 or 7 | .28 |



BUSS INDICATING FUSES, 1/4 x 1 1/4 inch



Fibre Tube. Silverplated indicating pin extends from end of fuse when fuse is blown.

This pin can also be used to actuate a signal by using fuses in BUSS HKA Fuseholders or BUSS Signal Fuse Blocks. GLD fuses in sizes larger than 5 amperes have dual tube construction. They can be used in BUSS Signal Fuse Blocks but not in HKA Fuseholders.

125 volt sizes listed by Underwriters' Laboratories Inc.
Test specifications—carry 110%, open at 135% in one hour or less.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|-----------------|------------|
| 125 or less | GLD | 3/4 | \$0.66 |
| " | GLD | 1, 2, 3, or 5 | .50 |
| 32 or less | GLD | 8, 10, 12 or 15 | .70 |

1 1/32 x 1 1/2 inch INDICATING FUSES

| | | | |
|-------------|-----|----------------------|-----|
| 250 or less | MIC | 1, 2, 3, 5, 10 or 15 | .58 |
| 32 or less | MIC | 20, 25 or 30 | .58 |

250 volt sizes listed by Underwriters' Laboratories Inc.

Fuses made in accordance with Military Specifications.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|----------------------|------------|
| 250 or less | MIN | 1, 2, 3, 5, 10 or 15 | \$0.51 |
| 125 or less | MIN | 20, 25 or 30 | .51 |

BUSSMANN MFG. DIVISION McGraw-Edison Co. St. Louis, Mo.

BUSS Fuses and Fuse Holders

for Protection of TV, Radios, Instruments and Electronic Equipment

FUSETRON FIBRE TUBE FUSES

1³/₃₂ x 1¹/₂ inch



Dual-Element — Slow Blowing Type. Avoid needless blows from starting currents or surges. Have fuse link that operates only on very high overloads or short-circuits, and thermal cutout on low overloads. Thermal cutout cannot operate quickly at any load, hence long time-lag is obtained. Yet protection is provided against short-circuits or continued overloads.

Test specification—carry 110%, open at 135% within 1 hour.
Approximate blowing time: at 200% load 25 seconds.
at 300% load 8 seconds.
at 500% load 5 seconds.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|--|------------|
| 250 or less | FNM | 1 ¹ / ₁₀ , 1 ³ / ₁₀ , 1, 1 ¹ / ₈ , 1 ¹ / ₄ , 1 ³ / ₁₀ , 1 ¹ / ₂ , 1 ¹ / ₁₀ , 1 ¹ / ₈ , 1, 1 ¹ / ₈ , 1 ¹ / ₄ , 1 ³ / ₁₀ , 1 ¹ / ₂ , 1 ¹ / ₁₀ , 1 ¹ / ₈ , 1, 2, 2 ¹ / ₄ , 2 ¹ / ₂ , 2 ³ / ₁₀ , 3 ¹ / ₁₀ , 3 ¹ / ₂ , 4, 4 ¹ / ₂ , 5, 5 ¹ / ₁₀ , 6 ¹ / ₄ , 7, 8, 9 or 10 | \$0.35 |
| 125 or less | FNM | 12 or 15 | .35 |
| 32 or less | FNM | 20, 25 or 30 | .35 |

SIGNAL OR VISUAL INDICATING TYPE

FNA are FNM Fusetron fuses with silverplated indicating pin that extends from fuse when fuse blows. Pin can also be used to actuate a signal by using fuse in BUSS Signal Fuse Block. Fuses in sizes larger than 10 ampere have a dual tube construction. They can be used in BUSS Signal fuse blocks but not in the HPC-C fuseholder.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|--|------------|
| 250 or less | FNA | 1 ¹ / ₁₀ , 1 ³ / ₁₀ , 1, 1 ¹ / ₈ , 1 ¹ / ₄ , 1 ³ / ₁₀ , 1 ¹ / ₂ , 1 ¹ / ₁₀ , 1 ¹ / ₈ , 1, 2, 2 ¹ / ₄ , 2 ¹ / ₂ , 2 ³ / ₁₀ , 3, 3 ¹ / ₁₀ , 3 ¹ / ₂ , 4, 4 ¹ / ₂ , 5, 5 ¹ / ₁₀ , 6, 6 ¹ / ₄ , 7, 8, 10 | \$0.656 |
| 125 or less | FNA | 1, 1 ¹ / ₈ , 1 ¹ / ₄ , 1 ¹ / ₁₀ , 1 ¹ / ₁₀ , 1 ¹ / ₈ , 1, 2, 2 ¹ / ₄ , 2 ¹ / ₂ , 2 ³ / ₁₀ , 3, 3 ¹ / ₁₀ , 3 ¹ / ₂ , 4, 4 ¹ / ₂ , 5, 5 ¹ / ₁₀ , 6, 6 ¹ / ₄ , 7, 8, 10 | .656 |
| " | FNA | 12 or 15 | .722 |
| 32 or less | FNA | 20, 25 or 30 | .722 |

BUSS 600 V. UL Listed FUSES

1³/₃₂ x 1³/₈ inch. Fibre tube. For protection of control circuits or wherever a fuse with "quick-blowing" characteristics is desirable. Listed by Underwriters' Laboratories Inc.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|--|------------|
| 600 or less | BBS | 1 ¹ / ₁₀ , 3 ¹ / ₁₀ or 3 ¹ / ₈ | \$0.23 |
| 600 or less | BBS | 1, 2, 3, 4 or 5 | 0.21 |

Fuseholder for BBS fuses. Use HPC-L fuseholder or No. 3845 single pole, side barrier porcelain fuse block. Only BBS fuses (or others with exact same dimensions) will fit these holders. This assures replacement of proper size fuse.

Buss LIMITRON Fuses

For Protection of Semi-Conductor Rectifiers

These fuses furnished with type of terminals needed to meet requirements for easy mounting.

Available in three voltage ranges. Type KAA and type KAH for 130 volts or less. Type KAB for 250 volts or less. Type KAC and type KAJ for 600 volts or less.

Tell us your requirements.

HIGH INTERRUPTING CAPACITY FUSES



1³/₃₂ x 1¹/₂ inch

Glass fibre melamine tube with sand filler surrounding a silver fuse element. For use on circuits capable of delivering currents as high as 68,000 amperes at voltages of 500 or less AC or DC.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|--|------------|
| 500 or less | KTK | 1 ¹ / ₁₀ , 1 ³ / ₁₀ , 1, 1 ¹ / ₈ , 1 ¹ / ₄ , 1 ³ / ₁₀ , 1 ¹ / ₂ , 1 ¹ / ₁₀ , 1 ¹ / ₈ , 1, 1 ¹ / ₈ , 1 ¹ / ₄ , 2, 3, 4, 5, 6, 8, 10, 15, 20, 25 or 30 | \$1.33 |

BUSS GLASS TUBE FUSES

9¹/₃₂ x 1¹/₄ inch



Formerly called 4 AG.

Test specifications — carry 110%, open at 135% within 1 hour except 35 and 40 ampere which open at 300% in 2 to 4 seconds when tested in a standard 30 ampere test circuit.

| Voltage | Symbol | Amperes | List Price |
|-------------|--------|--|------------|
| 250 or less | AGS | 1 ¹ / ₁₆ | \$0.44 |
| | AGS | 1 ¹ / ₈ | .30 |
| | AGS | 1 ¹ / ₄ , or 1 ¹ / ₂ | .15 |
| | AGS | 1, 2, 2 ¹ / ₂ or 3 | .14 |
| 32 or less | AGS | 5, 10, 15, 20, 25, 30 | .12 |
| | AGS | 35, 40 or 50 | .14 |

BUSS HIGH VOLTAGE FUSES



HVA and HVB



HVJ and HVL

Designed for protection of circuits up to 20 KW on DC and 30 KVA on AC.

Test specification—carry 110%, open at 135% within 1 hour.

| Voltage | Symbol | Amperes | Diameter of caps | Length inches | List Price |
|---------------|--------|---|--------------------------------|-------------------------------|------------|
| 1000 or less | HVA | 3 ¹ / ₈ , 1 ¹ / ₂ , 2, 3, 4, 1, 1 ¹ / ₂ , 2 | 1 ³ / ₃₂ | 3 | \$0.29 |
| 2500 or less | HVB | 1 ¹ / ₂ , 2, 3, 4, 1, 1 ¹ / ₂ or 2 | 1 ³ / ₃₂ | 4 ¹ / ₂ | 0.38 |
| 5000 or less | HVJ | 1 ¹ / ₁₆ , 1 ¹ / ₈ , 1 ¹ / ₄ , 3 ¹ / ₈ , 1 ¹ / ₂ , 2, 3, 4, 1, 1 ¹ / ₂ or 2 | 1 ³ / ₁₆ | 5 | 0.70 |
| 10000 or less | HVL | 1 ¹ / ₁₆ , 1 ¹ / ₈ , 1 ¹ / ₄ , 3 ¹ / ₈ , 1 ¹ / ₂ , 2, 3, 4, 1, 1 ¹ / ₂ or 2 | 1 ³ / ₁₆ | 10 | 1.40 |

BUSS TWIN-CLIPS for 1/4" FUSES



Make it easy to replace blown pigtail fuses without cutting or unsoldering pigtails.

Just snap Twin-Clips on blown fuse and insert ordinary or Fusetron fuse of same amperage as blown fuse.

Strong spring clip pressure assures good contact.

No. 4121 BUSS Twin Clips One pair \$0.20

BUSS FUSE TV Service Kit Assortment

Contains 101 of the most popular fuses — 20 slide-cover metal boxes — and five pair of BUSS No. 4121 Twin Clips for use in replacing blown pigtail fuses. All packed in a clear plastic box.

Symbol, TV-STD

List Price \$19.25



BUSS ELECTRONIC FUSE ASSORTMENTS

... with handy inventory feature



Helps serviceman have fuse he needs right in front of him... no delay in work to find a fuse. Keeps all the fuse stock normally needed for complete servicing of TV sets in smallest possible space.

Each 5-in metal box has its own shelf... Size and type of fuse shown on label at back of shelf... when shelf is empty label shows what fuses need to be immediately reordered.

| Symbol | Description | List Price |
|---------|--|------------|
| No. 255 | Full-Service Electronic Fuse Assortment (255 fuses — 30 different sizes) | \$38.74 |
| No. 130 | Special Electronic Fuse Assortment (130 fuses — 26 different sizes) | \$19.67 |

BUSSMANN MFG. DIVISION McGraw-Edison Co. St. Louis 7, Mo.

BUSS Fuses

FUSETRON DUAL-ELEMENT Fuses and Fuse Holders

for Protection of TV, Radios, Instruments and Electronic Equipment

GMW Fuse and HWA Fuseholder

Sub-miniature fuse-holder combination



Body size only .270 x .250 inches
Offering a light weight, space-saving protective device for space-tight applications in multiple circuit apparatus. GMW fuse has transparent window for visual inspection of element. Fuse may be used alone for mounting into printed circuit boards.

HWA holder can be panel mounted easily — or soldered on printed circuit boards.

AF knob for holder makes holder water-proof from front of panel.

Test specifications — carry 100%, open at 200% within 10 seconds or less.

Interrupting rating — 300 ampere at 125 volts

| Symbol | Ampere | List Price |
|--------|---|------------|
| GMW | 1/200, 1/100, 1/61, 1/32 and 1/16 | \$1.05 |
| GMW | 1/10, 2/10, 1/4, 3/10, 1/10, 1/2, 6/10, 3/4, 1, 1 1/2, 2, 3, 4, and 5 | .81 |
| HWA | fuseholder takes all sizes of GMW fuses | |
| AF | knob for HWA fuseholder | |

BUSS GRASSHOPPER FUSES

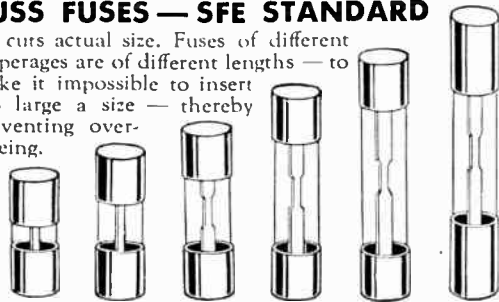
Give a visible signal or activate an alarm circuit when blown. Color coded to indicate type and amperage.



| Symbol | Amps | Volts | Color Code | List Price |
|--------|--------|-------------|------------|------------|
| 35A | 1 1/3 | 90 or less | White | \$0.34 |
| 35B | 1 1/3 | 90 or less | White | .34 |
| 35B | 2 | 90 or less | Orange | .34 |
| 35C | 2 | 90 or less | Orange | .34 |
| 35D | 1 1/3 | 90 or less | White | .69 |
| 35E | 3 | 90 or less | White | .38 |
| 35F | 1 1/2 | 90 or less | Red | .34 |
| 35G | 3 | 90 or less | Blue | .34 |
| 35H | 5 | 90 or less | Green | .34 |
| 35R | 18/100 | 90 or less | Yellow | .44 |
| 35T | 6/100 | 90 or less | Tan | .50 |
| 35J | 1 1/2 | 160 or less | Red | .50 |
| 35K | 1 1/3 | 160 or less | White | .69 |
| 35L | 2 | 160 or less | Orange | .69 |
| 35M | 3 | 160 or less | Blue | .63 |
| 35N | 5 | 160 or less | Green | .63 |
| 35P | 3/4 | 160 or less | Tan | .44 |
| 35S | 1/4 | 160 or less | Pink | .50 |

BUSS FUSES — SFE STANDARD

All cuts actual size. Fuses of different amperages are of different lengths — to make it impossible to insert too large a size — thereby preventing over-fusing.



SFE 4 SFE 6 SFE 7 1/2 & SFE 9 SFE 14 SFE 20 SFE 30

Glass tube — diameter 1/4 inch. Length as per table below
Test specification—carry 100%, open at 125% within 1/2 hour.
Listed by Underwriters' Laboratories Inc.
Made according to specifications of Society of Automotive Engineers.

| Voltage | Symbol & Amperes | Length inches | Pounds per 100 | List Price |
|------------|------------------|---------------|----------------|------------|
| 32 or less | SFE 4 | 5/8 | .73 | \$0.058 |
| " | SFE 6 | 3/4 | .75 | .058 |
| " | SFE 7 1/2 | 7/8 | .80 | .053 |
| " | SFE 9 | 7/8 | .80 | .053 |
| " | SFE 14 | 1 1/16 | .82 | .047 |
| " | SFE 20 | 1 1/4 | .87 | .047 |
| " | SFE 30 | 1 7/16 | 1.60 | .063 |

PANEL MOUNTED HOLDERS for 1 3/32 x 1 1/2 inch Fuses



Screw type knob. Molded phenolic body. Holder attached to panel by screws or rivets. Strong coil spring provides contact pressure on ends of fuse. Normal current carrying capacity 30 amperes. Listed by Underwriters' Laboratories for 15

ampere rating for any voltage up to 250.

HPC (for FNM and KTK fuses) List Price \$0.80

HPC-C (Same as above, but has transparent knob) List Price \$1.00

HPC-L Holder for 1 3/32 x 1 3/8 inch Fuses.

Like HPC Holder. Has Underwriters' Laboratories approved listing for 5 ampere rating and any voltage up to 600.

HPC-L (for BBS fuses) List Price \$0.80

PANEL MOUNTED HOLDERS for 1/4 inch Fuses



Can be used on panels up to 3/16 inch thick.



Bayonet type knob. No

screw driver is needed.

Side terminal is held mechanically as well as by solder. Heat of soldering wire to it will not cause it to loosen.

Vibration will not cause failure of terminals as they are designed to stand severe service.

Neoprene washer and steel locking nut furnished with each holder.

Wire hole in terminals; .115 inch.

Normal current carrying capacity; 30 amperes.

Listed by Underwriters' Laboratories Inc.

List Price

HJM for 1/4 x 1 inch fuses (AGX, SFE 14) \$0.52

HJM-CC (Same as HJM but projects shorter distance behind panel)52

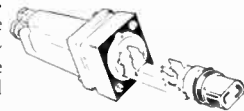
HKP for 1/4 x 1 1/4 inch fuses (ABC, AGC, SFE20, MDL, MDX, MTH)52

HKP-CC (Same as HKP but projects shorter distance behind panel)52

PANEL MOUNTED, LAMP INDICATING FUSEHOLDERS for 1/4 x 1 1/4 and 1 3/32 x 1 1/2 inch fuses

Made to Military Specifications.

Available as single or two pole units. Transparent knob permits neon indicating light to be readily seen. Body of molded alkyd.



| Type | Pole | Fuse Size Inches | Circuit Voltage | Max. Amp. Rating | List Prices |
|-------|--------|------------------|-----------------|------------------|-------------|
| HGB-C | Single | 1/4 x 1 1/4 | 100 to 250 | 30 | Prices |
| HGA-C | Two | 1/4 x 1 1/4 | 100 to 250 | 30 | on |
| HGC | Single | 1 3/32 x 1 1/2 | 200 to 500 | 30 | Request |

LAMP INDICATING FUSEHOLDERS



For panel mounting 1/4 x 1 and 1/4 x 1 1/4 inch fuses. Bayonet type knob. Molded phenolic body. Strong coil spring provides contact pressure at ends of fuse. Transparent knob permits indicating light to be readily seen.

| Type | Fuse Size Inches | Circuit Voltage | Max. Amp. Rating | Lamp Type | List Price |
|-------|------------------|-----------------|------------------|-----------|------------|
| HKL | 1/4 x 1 1/4 | 100 to 250 | 20 | Neon | \$2.15 |
| HKL-X | 1/4 x 1 1/4 | 100 to 250 | 20 | Neon | 2.15 |
| HKR | 1/4 x 1 1/4 | 24 to 32 | 20 | Incand. | 3.50 |
| HKX | 1/4 x 1 1/4 | 24 to 32 | 20 | Incand. | 3.50 |
| HKT | 1/4 x 1 1/4 | 10 to 14 | 20 | Incand. | 3.50 |
| HKU | 1/4 x 1 1/4 | 4 to 6 | 20 | Incand. | 3.50 |
| HJL | 1/4 x 1 | 100 to 250 | 20 | Neon | 2.15 |

BUSSMANN MFG. DIVISION McGraw-Edison Co. St. Louis 7, Mo.

BUSS Fuses

FUSETRON DUAL-ELEMENT Fuses and Fuse Holders

for Protection of TV, Radios, Instruments and Electronic Equipment

TRON PIGTAIL FUSES

Sub-miniature — hermetically sealed

Tron fuses are so small they can easily be used as an integral part of circuit — to protect miniaturized devices — or gigantic multi-circuit electronic devices — without sacrifice of space.

Fuse element hermetically sealed

Tron fuses may be potted or encapsulated without danger of sealing material affecting operation. Not affected by atmospheric or surrounding conditions. Designed for installation in high shock and vibration ambients.

They are self-protecting and operate without exterior flash or venting, so they can be installed anywhere in the circuit. Likewise, they may be teamed in one capsule or replaceable unit with such components as resistors or condensers.

Available in ratings from 1/20 to 5 amperes — for use on circuits of 125 volts or less where available fault current is not over 50 amperes.

Color coding indicates ampere rating and assists in final inspection of fused circuits.

Made with 1½ inch axial pigtailed that are adapted to feed through automatic wire forming machines — or with 1 inch right angle pigtailed conveniently spaced for assembly on printed circuit chassis. Leads are of No. 24 tinned copper wire.

Test specifications —

Characteristic A — Carry 100% load, open within 10 seconds at 200% load.

Characteristic B — Carry 100% load, open within 10 seconds at 150% load.

GFA TRON Fuses



Body size only .145 x .300 inches

| Symbol & Amperes | Test Specification | Color Code One End Other End | *Approximate Resistance in Ohms |
|------------------|--------------------|------------------------------|---------------------------------|
| GFA 1/20 | A | Yellow - Yellow | 20.0 |
| GFA 1/16 | A | Brown - Brown | 9.0 |
| GFA 1/10 | A | Red - Red | 4.0 |
| GFA 1/8 | A | Orange - Orange | 3.0 |
| GFA 1 1/2 100 | B | Red - Yellow | 2.1 |
| GFA 2 10 | B | Red - Blue | 1.8 |
| GFA 1/4 | B | Red - Purple | 0.9 |
| GFA 3 10 | A | Green - Green | 0.7 |
| GFA 1 1/2 10 | A | Blue - Blue | 0.48 |
| GFA 1/2 | B | Orange - Green | 0.35 |
| GFA 5 10 | B | Orange - Blue | 0.25 |
| GFA 3 4 | B | Orange - Purple | 0.22 |
| GFA 1 | B | Yellow - Green | 0.17 |
| GFA 1 1/2 | B | Yellow - Purple | 0.12 |
| GFA 2 | B | Green - Blue | 0.07 |
| GFA 3 | B | Blue - Purple | 0.05 |
| GFA 4 | B | Purple - Brown | 0.040 |
| GFA 5 | B | Brown - Black | 0.035 |

Prices on Request

*Cold resistance obtained on Wheatstone Bridge. Other ratings are available with a nominal test charge. Approximate Unit weight 0.33 grams. Shipping weight 0.116 lbs. per 100.

GLN and GLX TRON Fuses



Body size only .140 x .300 inches

| Symbol & Amperes | Test Specification | Color Code One End Other End | *Approximate Resistance in Ohms |
|------------------|--------------------|------------------------------|---------------------------------|
| GLN 1/20 | A | Yellow - Yellow | 20.0 |
| GLN 1/16 | A | Brown - Brown | 9.0 |
| GLN 1/10 | A | Red - Red | 4.0 |
| GLN 1/8 | A | Orange - Orange | 3.0 |
| GLN 3 10 | A | Green - Green | 0.7 |
| GLN 2 10 | A | Blue - Blue | 0.48 |
| GLX 1 1/2 100 | B | Red - Yellow | 2.1 |
| GLX 2 10 | B | Red - Blue | 1.8 |
| GLX 1/4 | B | Red - Purple | 0.9 |
| GLX 1/2 | B | Orange - Green | 0.35 |
| GLX 5 10 | B | Orange - Blue | 0.25 |
| GLX 3 4 | B | Orange - Purple | 0.22 |
| GLX 1 | B | Yellow - Green | 0.17 |
| GLX 1 1/2 | B | Yellow - Purple | 0.12 |
| GLX 2 | B | Green - Blue | 0.07 |
| GLX 3 | B | Blue - Purple | 0.05 |
| GLX 4 | B | Purple - Brown | 0.040 |
| GLX 5 | B | Brown - Black | 0.035 |

Prices on Request

BUSS GMT Fuses — HLT Fuseholders

Signal Indicating

Alarm Activating

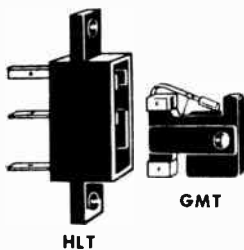
For multiple circuit apparatus where space is at a premium

GMT fuses and HLT fuseholders permit multiple mounting of fuses in limited space, for protection of communication equipment, business machines, computers, control circuits or any equipment operating at 300 volts or less.

Holders take panel mounting space of only ¼ inch horizontal by 1½ inches vertical.

Fuses give visual indication when blown by release of a spring indicator. The spring carries a colored plastic flag, in a different color for each fuse ampere rating.

The indicator spring when released makes contact with an alarm terminal in the fuseholder, which can be connected to activate a signal circuit.



HLT

GMT

Blown fuses are readily replaced without use of insulated tools. When mounted on minimum centers, removal of fuse is easy by use of a wire hook.

Buss GMT Fuses

Available Ratings and Color Code

300 volts or less

Test specification — carry 100% for 10 minutes; open at 150% within 5 minutes.

| Symbol & Amperes | Color of Indicator | Symbol & Amperes | Color of Indicator |
|------------------|--------------------|------------------|--------------------|
| GMT 1 1/2 100 | YELLOW | GMT 1 1/3 | WHITE |
| GMT 1/4 | VIOLET | GMT 2 | ORANGE |
| GMT 1/2 | RED | GMT 3 | BLUE |
| GMT 6 5 100 | BLACK | GMT 5 | GREEN |
| GMT 3 4 | BROWN | GMT 7 1/2 | BLACK-WHITE |
| GMT 1 | GRAY | GMT 10 | RED-WHITE |

Symbol GMT (All Sizes)

List Price \$0.62

Buss HLT Fuseholders

Buss HLT fuseholders take all sizes of GMT fuses.

HLT

List Price \$0.66

BUSSMANN MFG. DIVISION McGraw-Edison Co. St. Louis, Mo.

BUSS Fuses

FUSETRON DUAL-ELEMENT Fuses and Fuse Holders

for Protection of TV, Radios, Instruments and Electronic Equipment

BUSS MINIATURE GLASS TUBE FUSES

5 mm x 20 mm (.197 x .769 inches)



Made to International Standards for Electrical Equipment. Designed for protection of miniaturized circuits or equipment.

Test specifications — Carry 100% load indefinitely.
Open at 150% load within 10 seconds.

| Voltage | Symbol | Amperes | List Price |
|---|--------|------------------------|------------|
| 125 volts or less if available fault current is not over 50 amps. | GMA | 1/8 | \$0.43 |
| | GMA | 1/4, 1/2, or 3/10 | .32 |
| | GMA | 1, 1 1/10, 1 1/2, or 2 | .26 |
| | GMA | 3, 4, 5, 6, or 10 | .27 |

GJF fuses now called GMA.



HKA SERIES

Lamp Indicating, Signal Activating holders for 1/4 x 1 1/4 inch BUSS type GLD fuses

Used on circuits of 125 volts or less. Flashes a light, rings a bell, trips a relay or gives other signals to tell you when and where a fuse blows.

| Symbol | List Price |
|--|------------|
| HKA for 1/4 x 1 1/4 inch GLD fuses, 3/4 to 5 amps. | \$4.70 |

GLD fuses listed under Indicating fuses.

IN-THE-LINE HOLDERS for 1/4 inch fuses

For mounting fuse in wire. Holders consist of body and bayonet type knob — two contacts ready to be staked on ends of wire — and a contact pressure spring.



Holders can also be mounted in panel up to 5/16 inch thick by means of a No. 9969 Spring nut (Nut not furnished). Flat area on holder permits locking against rotation.

Normal current carrying capacity: 15 amperes. Maximum Voltage: 250.

Contacts designed to take different size wire. For 18 to 22 wire add "-A" to symbol. For 14 to 16 wire add "-B" to symbol. (Example HHJ-A).

| Symbol | Fuse Size Inches | List Price |
|--------|-------------------|------------|
| HHJ | 1/4 x 1 1/4 | \$0.25 |
| HHI | 1/4 x 1 or 1 1/16 | .25 |
| HHH | 1/4 x 7/8 | .25 |
| HIG | 1/4 x 3/4 | .25 |
| HIF | 1/4 x 5/8 | .25 |

SERIES HD and HA

These holders are the same in all details and dimensions as the HH and HI series — EXCEPT that the holding ears in the bayonet knob are of molded phenolic instead of being of metal.

| Symbol | Fuse Size Inches | List Price |
|--------|-------------------|------------|
| HDJ | 1/4 x 1 1/4 | \$0.20 |
| HDI | 1/4 x 1 or 1 1/16 | .20 |
| HDH | 1/4 x 7/8 | .20 |
| HAG | 1/4 x 3/4 | .20 |
| HAF | 1/4 x 5/8 | .20 |

No. 9969 Spring nut for panel mounting above holders .033

FUSETRON and BUSS MATCHED FUSES and FUSEHOLDERS



Safeguard against use of wrong size and type of fuse. FUSETRON Type N are "slow-blowing" fuses for use where harmless surges or starting currents might cause ordinary fuses to open needlessly. Use in Type HN fuseholder.

BUSS Type C are "quick-blowing" fuses for fast interruption of fault current. Use in Type HC fuseholder. Listed by Underwriters' Laboratories Inc.

| FUSETRON FUSE | | FUSEHOLDER | | | |
|------------------|------------|-----------------------|------------|-------------------|-----|
| Symbol & Amperes | List Price | Symbol & Range | List Price | | |
| N 1/100 | \$0.41 | HN 0 to 3/10 | \$0.21 | | |
| N 1/32 | .41 | | | | |
| N 1/16 | .295 | | | | |
| N 1/10 | .295 | | | | |
| N 1 5/100 | .295 | | | | |
| N 2/10 | .295 | | | | |
| N 1/4 | .295 | | | | |
| N 3/10 | .295 | | | | |
| N 4/10 | .295 | | | HN 3/10 to 1/2 | .21 |
| N 1/2 | .295 | | | | |
| N 6/10 | .295 | HN 1/2 to 3/4 | .21 | | |
| N 7/10 | .295 | | | | |
| N 3/4 | .295 | | | | |
| N 8/10 | .295 | HN 3/4 to 1 1/4 | .21 | | |
| N 1 | .295 | | | | |
| N 1 1/4 | .27 | | | | |
| N 1 6/10 | .27 | HN 1 3/10 to 1 3/4 | .21 | | |
| N 1 3/4 | .27 | | | | |
| N 2 | .27 | HN 1 3/4 to 2 1/2 | .21 | | |
| N 2 1/2 | .25 | | | | |
| N 2 8/10 | .25 | HN 2 1/2 to 3 1/2 | .21 | | |
| N 3 2/10 | .25 | | | | |
| N 3 1/2 | .25 | | | | |
| N 4 | .25 | HN 3 1/2 to 5 | .21 | | |
| N 5 | .25 | | | | |
| N 6 1/4 | .25 | HN 5 to 7 | .21 | | |
| N 7 | .25 | | | | |

BUSS FUSE

FUSEHOLDER

| Symbol & Amperes | List Price | Symbol & Range | List Price | | |
|------------------|------------|----------------------|------------|-------------------|-----|
| C 1/32 | \$0.44 | HC 0 to 3/10 | \$0.21 | | |
| C 1/16 | .28 | | | | |
| C 1/8 | .22 | | | | |
| C 3/16 | .22 | | | | |
| C 1/4 | .17 | | | | |
| C 3/10 | .17 | | | | |
| C 3/8 | .17 | | | HC 3/10 to 1/2 | .21 |
| C 1/2 | .17 | | | | |
| C 3/4 | .17 | | | HC 1/2 to 3/4 | .21 |
| C 1 | .095 | | | | |
| C 1 1/4 | .095 | HC 3/4 to 1 1/4 | .21 | | |
| C 1 1/2 | .095 | | | | |
| C 1 3/4 | .095 | | | | |
| C 2 | .095 | HC 1 3/4 to 2 1/2 | .21 | | |
| C 2 1/2 | .095 | | | | |
| C 3 | .095 | HC 2 1/2 to 3 1/2 | .21 | | |
| C 3 1/2 | .125 | | | | |
| C 4 | .125 | HC 3 1/2 to 5 | .21 | | |
| C 5 | .125 | | | | |
| C 6 | .125 | HC 5 to 7 | .21 | | |
| C 7 | .125 | | | | |
| C 8 | .18 | HC 7 to 10 | .21 | | |
| C 10 | .19 | | | | |

BUSSMANN MFG. DIVISION McGraw-Edison Co. St. Louis, Mo.

BUSS Fuses

FUSETRON DUAL-ELEMENT Fuses and Fuse Holders

for Protection of TV, Radios, Instruments and Electronic Equipment

BUSS In-the-Line or Panel Mounted FUSE & HOLDER COMBINATIONS

Non-Indicating
For voltages up to 300

In these two fuse and holder combinations the fuse and knob of fuse-holder are in one piece. When fuse blows, the entire fuse-knob assembly is replaced.



This gives added safety to the circuit because neither the HLR or the HLQ holder will take an ordinary type fuse. Thus a blown fuse must be replaced with the type of fuse originally installed.

Fuseholders can be mounted in-the-line — or panel mounted.

For panel mounting a snap-in steel clip is available that makes it easy to mount fuseholders.

Test specifications for GLR, GLQ, GMF, GMQ fuses
Carry 110%; open at 135% within one hour.
Listed by Underwriters' Laboratories, Inc.
Shipping wt. per 100: GLR and GLQ 1.5 lbs.,
GMF and GMQ 1.4 lbs.

HLR and HLQ Fuseholders

Recognized under the components program of Underwriters' Laboratories, Inc.
Shipping wt. HLR and HLQ holders 3.13 lbs. per 100.

Lead-in-Wires — Unless otherwise specified, HLR and HLQ holders are furnished with 6 inch leads of No. 18 solid copper wire with high temperature insulation. The bottom wire carries a clip to prevent it from sliding into holder. Leads of other types of wire can be furnished to your specification at slight additional cost.

Mounting Clip No. 6374 — BUSS Snap-in Steel Clip is available for mounting HLR and HLQ holders on any panel 1/32 to 1/16 inch thick. To mount holder, insert clip into mounting hole **BEFORE INSERTING HOLDER**. Then push holder into position in panel.

Packing — Fuses and holders are normally packed separately. Carton quantity: Fuses 5, Holders 10.

For production use, holders and fuses can be obtained packed separately, 100 to a carton.

Fuses assembled in holders also are available for a small additional charge.


HLR HOLDER SAFEGUARDS AGAINST USE OF WRONG TYPE OF FUSE

HLR fuseholders make it simple to protect a wide variety of devices or equipment from damaging fault currents because it is designed to take only GLR or GMF fuses.

HLR Fuseholder

Symbol **HLR** takes all sizes GLR and GMF Fuses List Price \$0.22


GLR Buss Glass Tube Fuses

Single-Element Quick-Blowing Type 

GLR BUSS fuses are "quick-blowing" type for use where delay in the fuse opening might cause damage.

| | | | |
|-------------|---|---------|------------|
| Voltage | Symbol | Amperes | List Price |
| 300 or less | GLR 1, 1 1/2, 1 5/10, 2, 2 1/2, 3, 4, 5, or 6 | | \$0.12 |
| 300 or less | GLR 7, 8, 9, or 10 | | .13 |

GMF Fusetron Glass Tube Fuses

Dual-Element Time-Delay Type 

GMF FUSETRON fuses are "slow-blowing" type for use where harmless surges or starting currents might cause ordinary fuses to open needlessly.

| | | | |
|-------------|--|---------|------------|
| Voltage | Symbol | Amperes | List Price |
| 300 or less | GMF { 1/2, 5/10, 5/10, 1, 1 1/4 } { 1 5/10, 2, 2 1/2, or 2 3/10 } | | \$0.36 |
| 300 or less | GMF 3 2/10, 4, 5, or 6 1/4 | | .36 |

HLQ HOLDER PREVENTS TOO LARGE A FUSE BEING USED

GLQ BUSS fuses or GMQ FUSETRON fuses used in HLQ fuseholders give a size limiting combination.

Each type of fuse is available in 13 ampere sizes, for voltages of 300 or less.

Over-fusing is prevented because ears on fuses match slots in holder. This prevents use of a fuse of larger ampere size than marked in holder.

This stops anyone from heedlessly replacing a blown fuse with one of a size too large to protect the circuit or equipment.

GLQ Buss Glass Tube Fuses

Single-Element Quick-Blowing Type 

GLQ BUSS fuses are "quick-blowing" type for use where delay in the fuse opening might cause damage.

| | | |
|---|---------|------------|
| Symbol | Amperes | List Price |
| GLQ 1, 1 1/2, 1 5/10, 2, 2 1/2, 3, 4, 5, or 6 | | \$0.12 |
| GLQ 7, 8, 9, 10 | | .13 |

Carry 110%; open at 135% within one hour. Listed by Underwriters' Laboratories, Inc.

GMQ Fusetron Glass Tube Fuses

Dual-Element Time-Delay Type 

GMQ FUSETRON fuses are "slow-burning" type for use where harmless surges or starting currents might cause ordinary fuses to open needlessly.

| | | |
|---|---------|------------|
| Symbol | Amperes | List Price |
| GMQ 1/2, 5/10, 5/10, 1, 1 1/4, 1 5/10, 2, 2 1/2, 2 3/10 | | \$0.36 |
| 3 2/10, 4, 5, 6 1/4 | | |

Carry 110%; open at 135% within one hour. Listed by Underwriters' Laboratories, Inc.

HLQ Fuseholders

HLQ fuseholders take either GLQ or GMQ fuses up to the largest ampere size marked in the holder. They are made in 6 fuse ranges. The top figure of the range indicates the largest fuse that the holder will accept.

| | |
|---------------------------------------|------------|
| Symbol | List Price |
| HLQ takes all sizes GLQ and GMQ Fuses | \$0.25 |

| BUSS GLQ Fuses | FUSETRON GMQ Fuses | HLQ Fuseholders | Fuse Range |
|----------------|--------------------|-----------------|-------------|
| | GMQ 1/2 | HLQ 1/2 | 0 to 1/2 |
| | GMQ 5/10 | | |
| | GMQ 5/10 | HLQ 1 5/10 | 0 to 1 5/10 |
| GLQ 1 | GMQ 1 | | |
| GLQ 1 1/2 | GMQ 1 1/4 | | |
| GLQ 1 5/10 | GMQ 1 5/10 | | |
| GLQ 2 | GMQ 2 | HLQ 3 2/10 | 0 to 3 2/10 |
| GLQ 2 1/2 | GMQ 2 1/2 | | |
| GLQ 3 | GMQ 2 3/10 | | |
| | GMQ 3 2/10 | | |
| GLQ 4 | GMQ 4 | HLQ 5 | 0 to 5 |
| GLQ 5 | GMQ 5 | | |
| GLQ 6 | GMQ 6 1/4 | HLQ 8 | 0 to 8 |
| GLQ 7 | | | |
| GLQ 8 | | | |
| GLQ 9 | | HLQ 10 | 0 to 10 |
| GLQ 10 | | | |






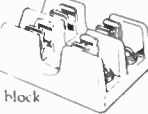
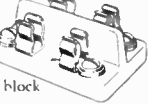
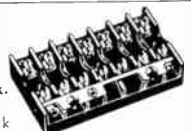
BUSSMANN MFG. DIVISION McGraw-Edison Co. St. Louis, Mo.

BUSS Fuses

FUSETRON DUAL-ELEMENT Fuses and Fuse Holders

for Protection of TV, Radios, Instruments and Electronic Equipment

BUSS FUSE and BUSS SILICON RECTIFIER BLOCKS

| Type of Block | Poles | For $\frac{1}{4}$ x 1 inch Fuses | | For $\frac{1}{4}$ x $1\frac{1}{4}$ inch Fuses | | For $\frac{1}{4}$ x 1-7/16 inch Fuses | | For $9/32$ x $1\frac{1}{4}$ inch Fuses | | For $13/32$ x $1\frac{1}{2}$ inch Fuses | |
|---|--------|----------------------------------|--|---|------------|---------------------------------------|------------|--|------------|---|------------|
| | | No. | List Price | No. | List Price | No. | List Price | No. | List Price | No. | List Price |
|  Small bakelite base, solder terminals. Cut shows 1 pole block | 1 Pole | 4520 | \$0.22 | 4405 | \$0.22 | | | 4413 | \$0.36 | 4421 | \$0.54 |
| | 2 Pole | 4485 | .44 | 4408 | .44 | | | 4416 | .72 | 4424 | 1.08 |
| | 3 Pole | 4403 | .66 | 4411 | .66 | | | 4419 | 1.08 | 4428 | 1.62 |
|  Small bakelite base, screw terminals. Cut shows 1 pole block | 1 Pole | 4399 | \$0.36 | 4407 | \$0.36 | | | 4415 | \$0.59 | 4423 | \$0.59 |
| | 2 Pole | 4402 | .72 | 4410 | .72 | | | 4418 | 1.18 | 4427 | 1.18 |
| | 3 Pole | 4404 | 1.08 | 4412 | 1.08 | | | 4420 | 1.77 | 4429 | 1.77 |
|  Small bakelite base, solder side terminals. Cut shows 2 pole block | 1 Pole | 4398 | \$0.22 | 4406 | \$0.22 | | | 4414 | \$0.36 | 4422 | \$0.54 |
| | 2 Pole | 4401 | .44 | 4409 | .44 | | | 4417 | .72 | 4426 | 1.08 |
|  Full bakelite base, screw terminals. Cut shows 1 pole block | 1 Pole | 4514 | \$0.47 | 4512 | \$0.47 | 4513 | \$0.59 | 4481 | \$0.59 | 4515 | \$0.68 |
| | 2 Pole | 4524 | .94 | 4522 | .94 | 4523 | 1.18 | 4482 | 1.18 | 4525 | 1.37 |
| | 3 Pole | 4534 | 1.41 | 4532 | 1.41 | 4533 | 1.77 | 4483 | 1.77 | 4535 | 2.05 |
|  Spare fuse block. Bakelite base. | 1 Pole | 4393 | \$0.22 | 4574 | \$0.22 | | | | | | |
|  Porcelain base, side barrier, screw terminals. Cut shows 2 pole block | 1 Pole | | | 4396 | \$0.53 | | | | | 3792 | \$0.79 |
| | 2 Pole | | | 4161 | 1.05 | | | | | | |
| | 3 Pole | | | | | | | | | 4439 | 2.36 |
|  Porcelain base center barrier screw terminals. Cut shows 2 pole block | 2 Pole | | | | | | | | | 4575 | \$1.47 |
| | 1 Pole | 3845 | For $13/32$ x $1\frac{3}{8}$ inch Fuses (BUSS BBS) — Price Each \$0.79 | | | | | | | | |
|  Signal Fuse block. Cut shows 7 pole block | 4 Pole | 3839 | For $13/32$ x $1\frac{1}{2}$ inch BUSS FNA fuses—Prices on request | | | | | | | | |
| | 7 Pole | 4178 | For $\frac{1}{4}$ x $1\frac{1}{4}$ BUSS GLD fuses—Prices on request | | | | | | | | |

BUSS SILICON RECTIFIER BLOCKS

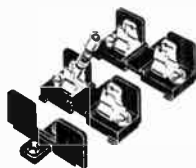
| | | | |
|---|--------|------|--------|
|  Silicon rectifier block. Solder terminals. Cut shows 1 pole block | 1 Pole | 3794 | \$0.22 |
| | 2 Pole | 3795 | .44 |

BUSS Add-On Fuse Blocks for $13/32$ x $1\frac{1}{2}$ inch Fuses

Single-pole fuse blocks and separate end barrier assemble into a unit block of one or more poles. Units lock in position. Assembled block becomes a single unit.

Each fuse can be used as a disconnect. See illustration. Raised fuse identifies open circuit and prevents confusion in getting right fuse back in circuit.

Marking strips so each circuit can be identified available.



No. 3949 Assembly consisting of one No. 3742 End Barrier —plus specified number of No. 3743 One-Pole Blocks

3742 End-Barrier Only \$.30

3743 One-Pole Block Only 1.50

Marking Strip in 50 inch lengths \$0.55 per length

When ordering, be sure to specify number of End Barriers and number of One-Pole Blocks desired. Only ONE End Barrier is required for each assembled fuse block of any number of poles.

Other standard and special fuses, fuse blocks, fuse clips and fuse holders

If the fuses, fuse blocks, fuse clips and holders shown do not fit your requirements ask for information on other types.

Fuses and fuse mountings to meet JAN and Military

specifications also are available.

If you have a special problem in protection send description or sketch giving number of circuits, type of fuse, terminals, etc., desired. We welcome such inquiries.

BUSSMANN MFG. DIVISION McGraw-Edison Co. St. Louis, Mo.

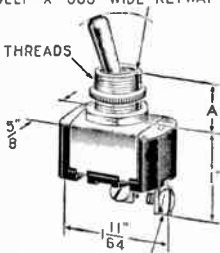
SWITCHES - TOGGLE

*For COLORED PLASTIC Toggles—Inquire

Heavier Duty Types of these
Switches Available — Inquire

D35" DEEP X .068" WIDE KEYWAY

15/32" - 32 THREADS



#6 - 32 X 3/16" LONG
BINING HEAD SCREWS
"F" Series

Single Pole ("F" Series)

| CATALOG NUMBERS | | | | ELECTRICAL CIRCUIT CHARACTERISTICS (NOTE—Keyway Indicates "Down" Position) | | |
|--------------------------|--------------------------|-------------|-----------------|---|-----------------|-----------------|
| NOMINAL RATINGS | | | | UP POSITION | CENTER POSITION | DOWN POSITION |
| 15 Amp—125 V. A.C. | 6 Amp—125 V. A.C. | | | On | None | Off |
| 10 Amp—250 V. A.C. | 3 Amp—250 V. A.C. | | | On | None | Momentarily Off |
| 3/4 H.P.—115-230 V. A.C. | 3/4 H.P.—115-230 V. A.C. | | | Off | None | Momentarily On |
| SOLDER LUGS | SCREW TERMINALS | SOLDER LUGS | SCREW TERMINALS | On | None | On |
| *2FA53 | *2FA54 | 2FA63 | 2FA64 | On | Off | On |
| 6FA57 | 6FA58 | 6FA67 | 6FA68 | On | None | Momentarily On |
| 6FA53 | 6FA54 | 6FA63 | 6FA64 | On | None | Momentarily On |
| 2FB53 | 2FB54 | 2FB63 | 2FB64 | On | None | On |
| 2FC53 | 2FC64 | 2FC63 | 2FC64 | On | Off | On |
| 6FB53 | 6FB54 | 6FB63 | 6FB64 | On | None | Momentarily On |
| 6FC53 | 6FC54 | 6FC63 | 6FC64 | Momentarily On | Off | Momentarily On |
| 6FC57 | 6FC58 | 6FC67 | 6FC68 | On | Off | Momentarily On |

Note: For Cross Connected Reversing, Progressive Circuits, and other multiple circuit applications—Inquire.

Double Pole ("G" Series)

| CATALOG NUMBERS | | | | ELECTRICAL CIRCUIT CHARACTERISTICS (NOTE—Keyway Indicates "Down" Position) | | |
|--------------------------|--------------------------|-------------|-----------------|---|-----------------|-----------------|
| NOMINAL RATINGS | | | | UP POSITION | CENTER POSITION | DOWN POSITION |
| 15 Amp—125 V. A.C. | 6 Amp—125 V. A.C. | | | On | None | Off |
| 10 Amp—250 V. A.C. | 3 Amp—250 V. A.C. | | | On | None | Momentarily Off |
| 3/4 H.P.—115-230 V. A.C. | 3/4 H.P.—115-230 V. A.C. | | | Off | None | Momentarily On |
| SOLDER LUGS | SCREW TERMINALS | SOLDER LUGS | SCREW TERMINALS | On | None | On |
| 2GK53 | 2GK54 | 2GK63 | 2GK64 | On | None | On |
| 6GK57 | 6GK58 | 6GK67 | 6GK68 | On | None | Momentarily On |
| 6GK53 | 6GK54 | 6GK63 | 6GK64 | On | None | Momentarily On |
| 2GL53 | 2GL54 | 2GL63 | 2GL64 | On | None | On |
| 2GM53 | 2GM54 | 2GM63 | 2GM64 | On | Off | On |
| 6GL53 | 6GL54 | 6GL63 | 6GL64 | On | None | Momentarily On |
| 6GM53 | 6GM54 | 6GM63 | 6GM64 | Momentarily On | Off | Momentarily On |
| 6GM57 | 6GM58 | 6GM67 | 6GM68 | On | Off | Momentarily On |



For TAB Terminals as above Add
Suffix — "TAB5"

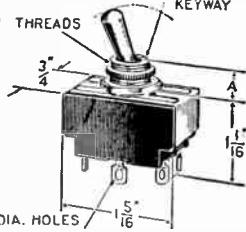
| CATALOG NUMBER SUFFIX FOR TOGGLE and STEM LENGTHS (Bat Toggle Only) | | | | | |
|---|-------------|------------|---------------|------|------------|
| TOGGLE LENGTH | STEM LENGTH | SUFFIX NO. | TOGGLE LENGTH | STEM | SUFFIX NO. |
| 3/8" | 1/8" | -52 | 1" | 3/8" | -A2 |
| 1/2" | 1/8" | -62 | 1 1/4" | 3/8" | -A3 |
| 5/8" | 1/8" | -63 | 1 1/2" | 3/8" | -B3 |
| 3/4" | 1/8" | -72 | 3" | 3/8" | -I3 |
| 7/8" | 1/8" | -73 | | | |

*Note: #2FA53 and
#2FA54 have a higher
rating of 1 H.P.

RATING:
13 Amp.—125 V. A.C.
10 Amp.—250 V. A.C.
1 H.P.—1, 2, 3 Phase
120-240 V. A.C.

.035" DEEP X .068" WIDE
KEYWAY

15/32" - 32 THREADS



1/8" DIA. HOLES
"G" Series (above)

Three Pole ("H" Series)

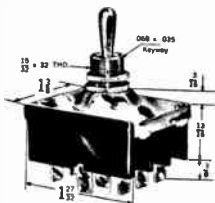
| CATALOG NUMBERS | | | CIRCUIT CHARACTERISTICS WITH POSITION OF TOGGLE | | |
|-----------------|-------|-------|--|--------|-----------------|
| TERMINALS | | | UP | CENTER | DOWN |
| LUG | SCREW | TAB | | | |
| HK233 | HK234 | HK23A | On | None | Off |
| HK633 | HK634 | HK63A | Off | None | Momentarily On |
| HK637 | HK638 | HK63B | On | None | Momentarily Off |
| HL233 | HL234 | HL23A | On | None | On |
| HL633 | HL634 | HL63A | On | None | Momentarily On |
| HM233 | HM234 | HM23A | On | None | On |
| HM633 | HM634 | HM63A | Momentarily On | Off | On |
| HM637 | HM638 | HM63B | On | Off | Momentarily On |

RATING: 15 Amp.—125 V. A.C.
10 Amp.—250 V. A.C.

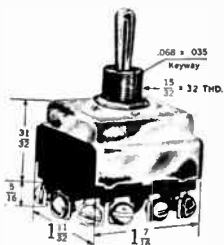
Four Pole ("I" Series)

| CATALOG NUMBERS | | | CIRCUIT CHARACTERISTICS WITH POSITION OF TOGGLE | | |
|-----------------|-------|-------|--|--------|-----------------|
| TERMINALS | | | UP | CENTER | DOWN |
| LUG | SCREW | TAB | | | |
| IK253 | IK254 | IK25A | On | None | Off |
| IK653 | IK654 | IK65A | Off | None | Momentarily On |
| IK657 | IK658 | IK65B | On | None | Momentarily Off |
| IL253 | IL254 | IL25A | On | None | On |
| IL653 | IL654 | IL65A | On | None | Momentarily On |
| IM253 | IM254 | IM25A | On | None | On |
| IM653 | IM654 | IM65A | Momentarily On | Off | On |
| IM657 | IM658 | IM65B | On | Off | Momentarily On |

Note: Keyway is in down position on all switches shown.



"H" SERIES
Illustration is with
Tab type terminals

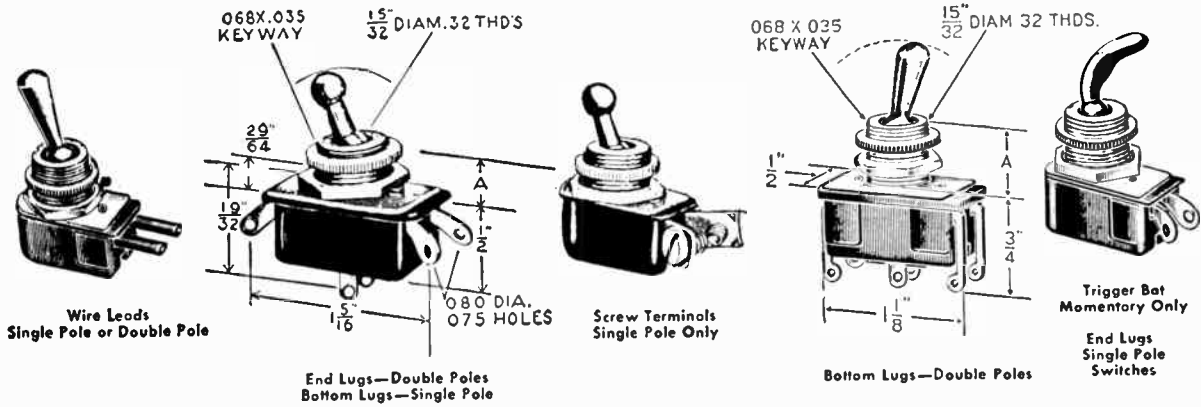


"I" SERIES
Illustration above
shows Screw Terminals

CARLING ELECTRIC, INC. — West Hartford, Conn.

SINGLE POLE DOUBLE POLE SWITCHES—TOGGLE

Maintained (Locking) and Momentary (Non-Locking) Types



IMPORTANT—ADD correct SUFFIX NUMBER to CATALOG NUMBER to receive type TOGGLE and STEM wanted.

| MAINTAINED CONTACTS | | | | MOMENTARY TYPES — Stem Length $1\frac{1}{32}$ " ONLY | | | | | | |
|---|--|-----------------------|---|--|--|--|--|--|-------------------|--|
| CATALOG NUMBER | TYPES OF TERMINALS | POLES-CIRCUIT | NOMINAL RATING AC or DC | NOMINAL RATING AC or DC | POLES-CIRCUIT | TYPES OF TERMINALS | CATALOG NUMBER | | | |
| T-110 T-110-B T-110-S T-111-16 | Lugs—End Lugs—Bottom Screw Wire | S.P.—S.T. | 3 Amp—250 V. 6 Amp—125 V.T. (T Rated) | 6 Amp—125 V. 3 Amp—250 V. | S.P.—S.T. Normally Open (Off) (Momentarily On) | Lugs—End Lugs—Bottom Lugs—2 Ends Screw Wire Wire—2 Ends | 110-M-NO 110-BM-NO 110-M-DNO 110-SM-NO 111-16M-NO 111-16M-DNO | | | |
| 110 110-B 110-D 110-S 111-16 111-D | Lugs—End Lugs—Bottom Lugs—2 Ends Screw Wire Wire—2 Ends | S.P.—S.T. | 3 Amp—250 V. 6 Amp—125 V. | | | S.P.—S.T. Normally Closed (On) (Momentarily Off) | Lugs—End Lugs—Bottom Lugs—2 Ends Screw Wire Wire—2 Ends | 110-M-NC 110-BM-NC 110-M-DNC 110-SM-NC 111-16M-NC 111-16M-DNC | | |
| 112 112-A | Lugs—End Wire | S.P.—D.T. | 1 Amp—250 V. 3 Amp—125 V. | | S.P.—D.T. | | Lugs—End Wire | 112-M 112-M-A | | |
| 216 216-A 216-B | Lugs—End Wire Lugs—Bottom | D.P.—S.T. | | | | D.P.—S.T. Normally Open (Off) (Momentarily On) | Lugs—End Wire | 216-M-NO 216-M-ANO | | |
| 316 316-A 316-B | Lugs Wire Lugs—Bottom | D.P.—D.T. | | | D.P.—S.T. Normally Closed (On) (Momentarily Off) | | Lugs—End Wire | 216-M-NC 216-M-ANC | | |
| 516 516-A 516-B | Lugs—End Wire Lugs—Bottom | Two Circuit | | | | D.P.—D.T. | Lugs—Bottom | 316-M 316-BM | | |
| 28B62 | Lugs—End | S.P.—D.T. | | | Two Circuit (1 On—1 Off) | | Lugs—End Wire Lugs—Bottom Screw | 516-M 516-AM 516-BM 516-SM | | |
| 28K62 | Lugs—End | D.P.—S.T. | | | | | | | | |
| 28L62 28L63 | Lugs—End Lugs—Bottom | D.P.—D.T. | | | | | | | | |
| 160 160-A 160-B 160-S | Lugs—End Wire Lugs—Bottom Screw | S.P.—S.T. | | | 10 Amp—125 V. 5 Amp—250 V. | | | | | |
| | | | | TOGGLE TYPE & LENGTH | BALL $\frac{3}{16}$ " | BAT $\frac{1}{2}$ " | BAT $1\frac{1}{16}$ " | TRIGGER BAT | | |
| | | | | SUFFIX NO. | -23 | -63 | -73 | -93 | | |
| TOGGLE TYPE & LENGTH | | BALL $\frac{3}{16}$ " | BALL— $\frac{3}{16}$ " LONG | | | BAT— $\frac{1}{2}$ " | | BAT— $1\frac{1}{16}$ " | SLOTTED | |
| STEM LENGTH (A) | | $\frac{1}{4}$ " | $\frac{1}{4}$ " | $1\frac{1}{32}$ " | $1\frac{1}{32}$ " | $1\frac{1}{32}$ " | $1\frac{1}{32}$ " | $1\frac{1}{32}$ " | $1\frac{1}{32}$ " | |
| Std. SUFFIX NOS. | | -11 | -21 | -22 | -23 | -25 | -62 | -63 | -73 | |
| *With Neoprene Seal | | | | -57 | | | -67 | -68 | | |
| & Toggle Type & Length | | | | BAT $\frac{3}{8}$ | | | BAT $\frac{1}{2}$ | BAT $\frac{9}{16}$ | | |

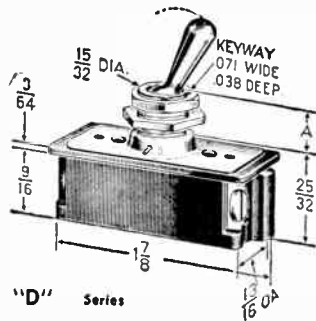
*DUSTPROOF SEAL (Also RAIN RESISTANT)

**MARINE APPLICATIONS
USE PREFIX M-**

Note: Solderless quick disconnect terminals are available on #110 switch above
(See Picture on Cover) Use Add'l Suffix No. — "TAB5"

CARLING ELECTRIC, INC. — West Hartford, Conn.

SWITCHES - TOGGLE - PUSH - SLIDE



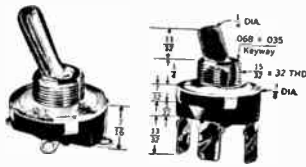
"D" Series

| CATALOG NUMBER | TYPE OF TERMINALS | POLES OR CIRCUIT | NOMINAL RATING A.C. OR D.C. | CATALOG NUMBER SUFFIX FOR TOGGLE & STEM LENGTHS Toggle Length 1 1/8" | | |
|----------------|-------------------|------------------|----------------------------------|--|-------------|------------|
| | | | | TOGGLE TYPE | STEM LENGTH | SUFFIX NO. |
| 2DA25 | Screw | S.P.—S.T. | 12 Amps—125 V. 6 Amps—250 V. | Bat | 3/8" | —72 |
| 2DK25 | Screw | D.P.—S.T. | 1 H.P. 125—250 V. | Ball | 3/8" | —32 |
| EA255 | Screw | S.P.—S.T. | 15 Amps—125 V. 10 Amps—250 V. | Bat | 3/8" | —73 |
| EK255 | Screw | D.P.—S.T. | 1 1/2 H.P. 125—250 V. | Ball | 3/8" | —33 |

Note: Dimensions of "E" Series Switches are 2 1/8" lg x 1" w x 23/32" high.

RATING: 15 Amp — 125 V. A-C
7 1/2 Amp. — 250 V. A-C
1/2 H.P. 115-23 V. A-C

Single Pole



"A" Series Illustrated Above with Solder Lugs and Metal Toggle 1 1/8" Long

"A" Series Illustrated Above with Tab Terminals and Plastic Toggle 1 1/8" Long

| CATALOG NUMBERS | | | CIRCUIT CHARACTERISTICS WITH POSITION OF TOGGLE | | |
|-------------------------------------|-------|-------|---|--------|------|
| TERMINALS | | | UP | CENTER | DOWN |
| LUG | SCREW | TAB | | | |
| AA252 | AA254 | AA25A | On | None | Off |
| AB252 | AB254 | AB25A | On | None | On |
| AC252 | AC254 | AC25A | On | Off | On |
| RATING: 3 Amp. — 125 V. A-C (Below) | | | | | |
| AA232 | AA234 | AA23A | On | None | Off |

Add: Following Suffixes to ABOVE CATALOG NOS.

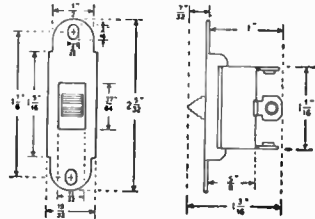
| Metal Toggle Type | Colored Plastic Toggle Types: | | | |
|-------------------|-------------------------------|-------|-----|-------|
| | Black | Brown | —WH | —RD |
| —71 | —BL | —BR | Red | White |



"L" Series

(Also available with ON-OFF Stamped on Slide or Case on Special Order)

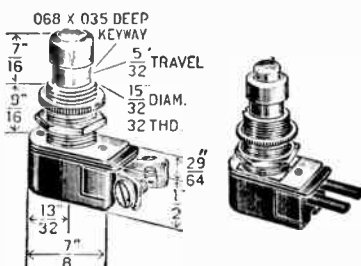
| CATALOG NUMBERS | | | ELECTRICAL CIRCUIT CHARACTERISTICS | | |
|--|-------------|-----------|---|----------|----------|
| NOMINAL RATINGS | | | UP | CENTER | DOWN |
| | | | POSITION | POSITION | POSITION |
| 15 Amp—125 V. A.C. 10 Amp—250 V. A.C. 1/2 H.P.—115-230 V. A.C. | | | 3 Amp—250 V. A.C. 6 Amp—125 V. A.C. 1/4 H.P. | | |
| Solder Lugs | Screw Term. | Tab Term. | Single Pole—Single Throw & Single Pole—Double Throw | | |
| LA453 | LA454 | LA45A | On | None | Off |
| LB453 | LB454 | LB45A | On | None | On |
| LC453 | LC454 | LC45A | On | Off | On |
| For Slide COLOR Add SUFFIX | | | BLACK | RED | GRAY |
| | | | —BL | —RD | —GY |



| MAINTAINED CONTACTS OR MOMENTARY CONTACTS AC—DC | | | | | |
|---|--|--|-------------------------|------------------|--|
| Maintained Contacts | CATALOG NUMBERS | | Type Terminals | Poles Or Circuit | Nominal Rating |
| | MOMENTARY CONTACTS | | | | |
| | Normally Open | Normally Closed | | | |
| 110—P 110—BP 110—SP 111—16P | 110—PM—OFF 110—PBM—OFF 110—SPM—OFF 111—PM—OFF | 110—PM—ON 110—PBM—ON 110—SPM—ON 111—PM—ON | Lug (Bottom) Screw Wire | S.P.—S.T. | 6 Amp—125 V. 3 Amp—250 V. A.C.—D.C. |
| 160—P 160—BP 160—SP 160—AP | None | None | Lug (Bottom) Screw Wire | S.P.—S.T. | 10 Amp—125 V. 5 Amp—250 V. A.C.—D.C. |
| 216—PP 216—PPA | 216—PM—OFF 216—PAM—OFF | 216—PM—ON 216—PAM—ON | Lug Wire | D.P.—S.T. | |
| 112—P 112—PA | | 112—PM 112—PAM | Lug Wire | S.P.—D.T. | 3 Amp—125 V. |
| 316—PP 316—PPA | | 316—PM 316—PAM | Lug Wire | D.P.—D.T. | 1 Amp—250 V. A.C.—D.C. |
| 516—PP 516—PPA | | 516—PM 516—PAM | Lug Wire | 2 circuit | |

Overtravel available for Momentary Switches only—Add CATALOG SUFFIX NO. —OV

TAB (Quick Disconnect) Terminals available on above Switches



CARLING ELECTRIC, INC. — West Hartford, Conn.

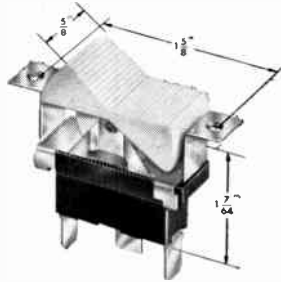
SWITCHES-TIPPETTE-TRIGGER

TIL Series

*Tippette is a Carling Trademark

TIL SERIES

* TIPPETTE



1 5/8" Distance Between Mounting Hole Centers. Mounting Holes Tapped 6-32 NC2. Width of "Tippette" Actuators .660. Length of "Tippette" Actuators 1.230.

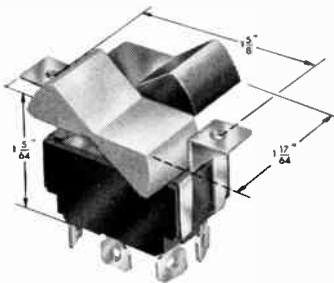
Note: For purposes of terminology "OFF" indicates open circuit, "ON" indicates closed circuit, MOM, ON indicates Momentary Normally OPEN circuit and MOM, OFF indicates Momentary Normally Closed Circuit.

| CATALOG NUMBERS NOMINAL RATINGS | | | | | | OPERATION AND CIRCUIT CHARACTERISTICS | | |
|--|------------------|------------------------|------------------|-------------|------------|--|-------------------------|-------------|
| RATING 6 AMP—125V A.C. | | RATING 3 AMP—250V A.C. | | | | Position #1 | Position #2 (CENTER) | Position #3 |
| SOLDER LUGS | .250 SPADE TERM. | .205 SPADE TERM. | .187 SPADE TERM. | SCREW TERM. | WIRE LEADS | SINGLE POLE SINGLE THROW | | |
| TILA60 | TILA61 | TILA62 | TILA63 | TILA64 | TILA65 | On | None | Off |
| TILA6A | TILA6B | TILA6C | TILA6D | TILA6E | TILA6F | Off | None | Mom. On |
| TILA6L | TILA6M | TILA6Q | TILA6R | TILA6S | TILA6T | On | None | Mom. Off |
| | | | | | | SINGLE POLE DOUBLE THROW | | |
| TILB60 | TILB61 | TILB62 | TILB63 | TILB64 | TILB65 | On | None | On |
| TILB6A | TILB6B | TILB6C | TILB6D | TILB6E | TILB6F | On | None | Mom. On |
| TILC60 | TILC61 | TILC62 | TILC63 | TILC64 | TILC65 | On | Off | On |
| TILC6A | TILC6B | TILC6C | TILC6D | TILC6E | TILC6F | On | Off | Mom. On |
| TILC6L | TILC6M | TILC6Q | TILC6R | TILC6S | TILC6T | Mom. On | Off | Mom. On |
| RATING 15 AMP—125V A.C. ¾ H.P. 125-250V. A.C. | | | | | | OPERATION AND CIRCUIT CHARACTERISTICS | | |
| SOLDER LUGS | .250 SPADE TERM. | .205 SPADE TERM. | .187 SPADE TERM. | SCREW TERM. | WIRE LEADS | Position #1 | Position #2 (CENTER) | Position #3 |
| | | | | | | SINGLE POLE SINGLE THROW | | |
| TILA50 | TILA51 | TILA52 | TILA53 | TILA54 | TILA55 | On | None | Off |
| TILA5A | TILA5B | TILA5C | TILA5D | TILA5E | TILA5F | Off | None | Mom. On |
| TILA5L | TILA5M | TILA5Q | TILA5R | TILA5S | TILA5T | On | None | Mom. Off |
| | | | | | | SINGLE POLE DOUBLE THROW | | |
| TILB50 | TILB51 | TILB52 | TILB53 | TILB54 | TILB55 | On | None | On |
| TILB5A | TILB5B | TILB5C | TILB5D | TILB5E | TILB5F | On | None | Mom. On |
| TILC50 | TILC51 | TILC52 | TILC53 | TILC54 | TILC55 | On | Off | On |
| TILC5A | TILC5B | TILC5C | TILC5D | TILC5E | TILC5F | On | Off | Mom. On |
| TILC5L | TILC5M | TILC5Q | TILC5R | TILC5S | TILC5T | Mom. On | Off | Mom. On |

TIG Series (With ONE Tippette Lever)

TIG SERIES

* TIPPETTE



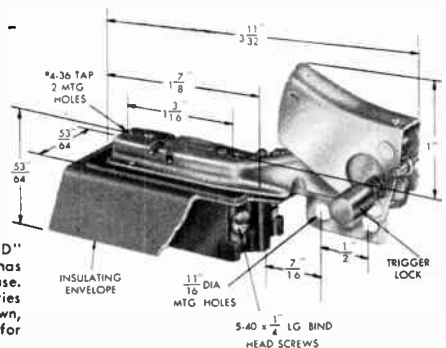
Also this switch can be provided with two "Tippette" levers (see illustration) to operate as two single pole switches in any circuit combination desired and rating shown under our "TIL" Series switches. Specify "TIG" switch and combination desired.

Note: For purposes of terminology "OFF" indicates open circuit, "ON" indicates closed circuit, MOM, ON indicates Momentary Normally OPEN circuit and MOM, OFF indicates Momentary Normally Closed Circuit.

| CATALOG NUMBERS NOMINAL RATINGS | | | | | | OPERATION AND CIRCUIT CHARACTERISTICS | | |
|--|------------------|---|------------------|-------------|------------|--|-------------------------|-------------|
| RATING 6 AMP—125V A.C. | | RATING 3 AMP—250V A.C. ¾ H.P. 125-250V. A.C. | | | | Position #1 | Position #2 (CENTER) | Position #3 |
| SOLDER LUGS | .250 SPADE TERM. | .205 SPADE TERM. | .187 SPADE TERM. | SCREW TERM. | WIRE LEADS | DOUBLE POLE SINGLE THROW | | |
| TIGK60 | TIGK61 | TIGK62 | TIGK63 | TIGK64 | TIGK65 | On | None | Off |
| TIGK6A | TIGK6B | TIGK6C | TIGK6D | TIGK6E | TIGK6F | Off | None | Mom. On |
| TIGK6L | TIGK6M | TIGK6Q | TIGK6R | TIGK6S | TIGK6T | On | None | Mom. Off |
| | | | | | | DOUBLE POLE DOUBLE THROW | | |
| TIGL60 | TIGL61 | TIGL62 | TIGL63 | TIGL64 | TIGL65 | On | None | On |
| TIGL6A | TIGL6B | TIGL6C | TIGL6D | TIGL6E | TIGL6F | On | None | Mom. On |
| TIGM60 | TIGM61 | TIGM62 | TIGM63 | TIGM64 | TIGM65 | On | Off | On |
| TIGM6A | TIGM6B | TIGM6C | TIGM6D | TIGM6E | TIGM6F | On | Off | Mom. On |
| TIGM6L | TIGM6M | TIGM6Q | TIGM6R | TIGM6S | TIGM6T | Mom. On | Off | Mom. On |
| RATING 15 AMP—125V A.C. ¾ H.P. 125-250V. A.C. | | | | | | OPERATION AND CIRCUIT CHARACTERISTICS | | |
| SOLDER LUGS | .250 SPADE TERM. | .205 SPADE TERM. | .187 SPADE TERM. | SCREW TERM. | WIRE LEADS | Position #1 | Position #2 (CENTER) | Position #3 |
| | | | | | | DOUBLE POLE SINGLE THROW | | |
| TIGK50 | TIGK51 | TIGK52 | TIGK53 | TIGK54 | TIGK55 | On | None | Off |
| TIGK5A | TIGK5B | TIGK5C | TIGK5D | TIGK5E | TIGK5F | Off | None | Mom. On |
| TIGK5L | TIGK5M | TIGK5Q | TIGK5R | TIGK5S | TIGK5T | On | None | Mom. Off |
| | | | | | | DOUBLE POLE DOUBLE THROW | | |
| TIGL50 | TIGL51 | TIGL52 | TIGL53 | TIGL54 | TIGL55 | On | None | On |
| TIGL5A | TIGL5B | TIGL5C | TIGL5D | TIGL5E | TIGL5F | On | None | Mom. On |
| TIGM50 | TIGM51 | TIGM52 | TIGM53 | TIGM54 | TIGM55 | On | Off | On |
| TIGM5A | TIGM5B | TIGM5C | TIGM5D | TIGM5E | TIGM5F | On | Off | Mom. On |
| TIGM5L | TIGM5M | TIGM5Q | TIGM5R | TIGM5S | TIGM5T | Mom. On | Off | Mom. On |

| "TRD" Series Rated 12A @ 125V 6A @ 250V ½ H.P. 125-250V A.C. ¾ H.P. 125-250V D.C. | | | |
|--|---------|----------|--------------|
| CATALOG NO. | CIRCUIT | HAS LOCK | HAS ENVELOPE |
| TRDA-00 | SPST | No | No |
| TRDA-01 | SPST | No | Yes |
| TRDA-05 | SPST | Yes | No |
| TRDA-06 | SPST | Yes | Yes |
| TRDK-00 | DPST | No | No |
| TRDK-01 | DPST | No | Yes |
| TRDK-05 | DPST | Yes | No |
| TRDK-06 | DPST | Yes | Yes |
| "TRE" Series Rated 15A @ 125V 10A @ 250V 1 H.P. 125V A.C. 1 ½ H.P. 125V D.C. | | | |
| TREA-00 | SPST | No | No |
| TREA-01 | SPST | No | Yes |
| TREA-05 | SPST | Yes | No |
| TREA-06 | SPST | Yes | Yes |
| TREK-00 | DPST | No | No |
| TREK-01 | DPST | No | Yes |
| TREK-05 | DPST | Yes | No |
| TREK-06 | DPST | Yes | Yes |

* TRD SERIES - TRE SERIES TRIGGER



*Note: Illustration shows "TRD" Series dimensions, "TRE" Series has same dimensions except for base. For base dimensions of "TRE" Series substitute 1 3/4" for 1 1/2" height shown, 1" for 5/8" width shown, and 3/16" for 1/8" dimension shown.

CARLING ELECTRIC, INC. — West Hartford, Conn.

OVER 60,000 OFF-THE-SHELF ANSWERS

ALWAYS AVAILABLE FOR IMMEDIATE DELIVERY

Basic Switches

SUB-SUBMINIATURE T type



Exceptionally high current capacity in tiny case. Only $\frac{1}{2}$ " x $\frac{1}{4}$ " x $\frac{3}{8}$ " yet UL listed at 7.5 amps, 125/250 VAC. Also rated at 7.5 amps, 30 VDC resistive, 3 amps, 30 VDC inductive. Mounts side-by-side, four switches to the inch.

ACTUATORS  ROLLER LEAF  LEAF

DESCRIPTION

SPDT solder terminals
SPDT solder terminals, U.L.
leaf actuator
roller leaf actuator

MODEL NUMBER

T3
T12
A5-71**
A5-73**

LIST PRICES

1.9

2.00
2.00
.20
.50

SUBMINIATURE E4 type



ACTUATORS

TOGGLE 

PUSHBUTTON 

LEAF 

ROLLER LEAF 

Ideal for compact electrical and electronic equipment. Low movement differential and operating force gives precision control in critical applications. Can be stacked and gang mounted. Meets MIL Specs. MS-25085 and is UL listed at 5 amps, 125/250 VAC. Also handles 4 amps, 30 VDC resistive, 2.5 amps, 30 VDC inductive. Size: $\frac{3}{32}$ " x $\frac{1}{4}$ " x $\frac{7}{32}$ ".

SPDT, solder terminals
SPDT, turret terminals
DPDT maintained toggle switch, $\frac{1}{32}$ " bushing
TPDT maintained toggle switch, $\frac{1}{32}$ " bushing
DPDT maintained toggle switch, $\frac{1}{4}$ " bushing
SPDT maintained toggle switch, $\frac{1}{4}$ " bushing
DPDT momentary push-button switch, $\frac{1}{32}$ " bushing
DPDT push-on, push-off, push-button switch, $\frac{1}{32}$ " bushing
leaf actuator
roller leaf actuator

E4-103
E4-110
A3-32-103*
A3-33-103*
A3-41-103*
A3-42-103*
A4-86-103*
A4-87-103*
A5-9**
A5-10**

1.50
1.50
5.70
7.80
5.70
3.49
6.10
7.40
.20
.50

MINIATURE F type



ACTUATORS

LEAF 

ROLLER LEAF 

Low cost precision switch that meets military specs and is UL listed. Rugged design—positive over-travel stop protects mechanism from damaging over-actuation. Easy to mount. Size: $1\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{4}$ ". Rating: 10 amps, 125/250 VAC / 28 VDC resistive, 6 amps, 30 VDC inductive.

SPDT basic switch, screw terminals, U.L. MS-15253-1
roller leaf actuator
leaf actuator

F2-13
A5-47**
A5-49**

1.00
.40
.20

2-CIRCUIT S type



ACTUATORS

ROLLER LEVER 

PUSHBUTTON 

EXTENDED LEAF 

ROLLER LEAF 

Combines high capacity, small size and long life with extreme precision. Rated at 10,000,000 operations at full load; tested to 30,000,000. Good for power circuits as well as precision control applications. Meets military specs. Several models UL listed. Reset model maintains circuit until reset button actuated; can be used as inexpensive two-way limit switch. Size: $1\frac{1}{4}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ ". Rating: 10 amps, 125/250 VAC. 30 VDC inductive.

SPDT, end solder terminals
SPDT, (reset) end solder terminals
SPDT, end screw terminals
SPDT, (reset) end screw terminals
SPDT, side solder terminals
roller lever actuator
push-button switch, solder terminals $\frac{1}{32}$ " bushing
push-button switch, detachable plastic button
red plastic button for A4-25-1
black plastic button for A4-25-1
1" dia. push-button actuator
roller leaf actuator
extended leaf actuator

S1-4
S1-304
S2-4
S2-304
S3-4
A2-2**
A4-1/S1-4* N.P.
A4-25-1/S1-4*
1109-SA11-1*
1109-SA11-2
A4-102**
A5-5**
A5-7**

1.40
1.65
1.50
1.75
1.47
.80
2.40
3.32
.60
.60
3.50
.40
.50

*Designates actuator assembled with switch. **Order these actuators separately. Assemble on switch when mounting.
NOTE: ALL SWITCHES MOMENTARY CONTACT UNLESS OTHERWISE NOTED



ASK FOR CATALOG No. 100 from your distributor. Contains short-form specification details, engineering drawings, descriptions and suggested application data. The above illustrations are only a few of the more popular items in the over 60,000 switches and indicators manufactured by Control Switch Division. For facts on the many others available, ask for Catalog 100.

CONTROLS COMPANY  **OF AMERICA**
CONTROL SWITCH DIVISION
Folcroft, Pa.

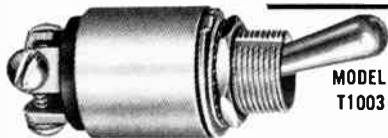
to your switching problems . . . **CONTROLS COMPANY**  **OF AMERICA**
CONTROL SWITCH DIVISION
Folcroft, Pa.

AT YOUR CONTROL SWITCH DISTRIBUTOR

Toggle Switches

*Space-Saving
Cylindrical Types*

Exceptionally rugged, cam-roller Hetherington Toggle Switches positively cannot be teased off contact. Cylindrical anodized aluminum cases reduce size by 25% over conventional rectangular switches. Firmly anchored terminals separated by heavy insulation barrier. All are 2-position, snap-action.



| CIRCUIT | RATINGS (Resistive Loads) | | MTG. HOLE DIA. | SPECIAL FEATURES | LIST PRICES |
|-----------|------------------------------|-------------|----------------|---------------------------------|-------------|
| | 28v. dc. | 115v. ac. | | | |
| SPDT | 20 amps. | 10 amps. | 1/32" | Designed to MIL-S-6745 specs. | 3.22 |
| 2-circuit | 10 amps. | 5 amps. | 1/4" | Designed to JAN-S-23, Amend. 3. | 3.94 |
| DPDT | 1 amp. | 1 amp. | 1/4" | Miniaturized | 5.32 |
| SPDT | 5 amps. | 2 1/2 amps. | 1/4" | Anodized aluminum case | 4.06 |

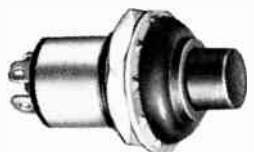
Pushbutton Switches

*Snap-Action,
Momentary Contact*

The exclusive Hetherington snap-action mechanism reduces arcing and contact wear...provides far greater current capacity than the small sizes of these switches would indicate. Mechanism enclosed in dust and moisture-resistant anodized aluminum housings (phenolic in B2001 & B2002). 1-piece terminals and contacts firmly anchored to bases. Many types meet JAN and MIL Specs for aviation and military requirements.

Features and dimensions are subject to change based on engineering refinements. If dimensions or specifications are critical, obtain drawings from Control Switch engineering department.

*Inspected by Underwriters' Laboratories, Inc.



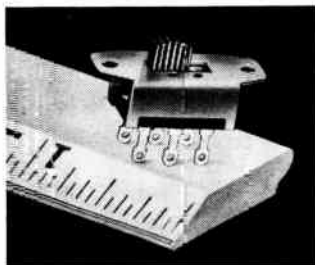
| | | | | | | |
|------------------|-------------|----------|-----------|------|--|------|
| MODEL B2001 | SPST (N.O.) | --- | 8 amps.* | 1/2" | Phenolic body | 2.09 |
| MODEL B2002 | SPST (N.C.) | | | | | |
| MODEL C1006 | SPST (N.O.) | 17 amps. | 15 amps.* | 1/2" | Anodized aluminum cases | 3.01 |
| MODEL C2006 | 2-circuit | 10 amps. | | | | 3.61 |
| MODEL C100U4 | SPST (N.O.) | 17 amps. | 15 amps.* | 3/8" | Anodized aluminum cases & mounting flanges | 3.76 |
| MODEL C200P3 | 2-circuit | 10 amps. | 15 amps.* | 3/8" | Anodized aluminum cases & mounting flanges | 4.36 |
| MODEL MS25089-3C | 2-circuit | 10 amps. | --- | 3/8" | Conforms to MS25089-3C (MIL-S-6743). Black flange. | 3.80 |
| MODEL W103UB6 | 2-circuit | 10 amps. | --- | 3/8" | Black flange. | 5.43 |

More Switches on the Next Page



Slide Switches

There's long life and superior performance behind every C-W Slide Switch —meeting highest quality and reliability standards at a moderate cost.

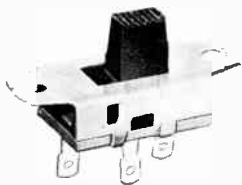


NEW!

C-W
MINIATURE
SWIDGET
type 126

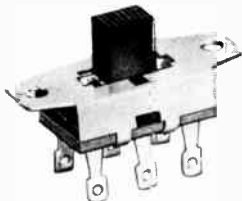
Ideal for all types of "compact" uses—particularly on portable equipment. Occupies $\frac{1}{3}$ cubic content of conventional DPDT Switch; requires $\frac{1}{2}$ of the usual mounting area; clearance (mounting plane to terminal tip) $\frac{1}{3}$ less.

U. L. Listed at .5 amp. AC-DC.



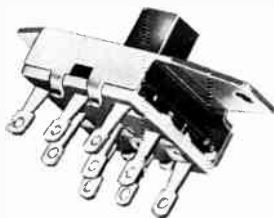
G-24 and G-32

SPDT with detent or spring return — Available also as G-23-ST with detent — with extreme right terminal omitted. (Available also with leads)



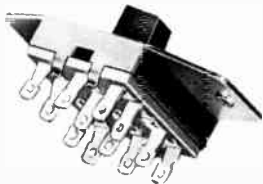
G-26 and G-36

Conventional DPDT with detent or DPDT "Center off."



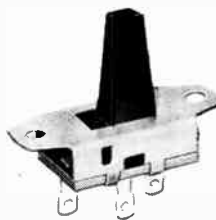
G-69

3 PDT
with
detent.



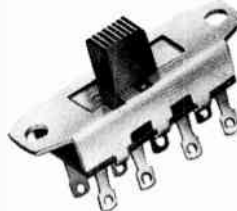
G-42

4 PDT
with
detent.



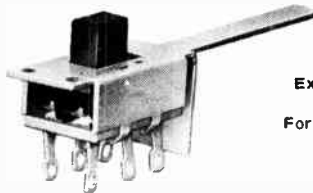
"BAT" KNOB — ($\frac{3}{4}$ ")

Available for selected types — recommended when housing or cover on device is thick.



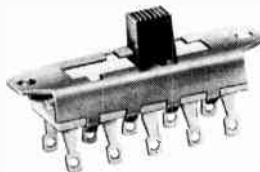
G-28

DP3T
3 position,
with detent.



G-26X

Extension Plunger
Frame Type
For remote push-pull
applications.



G-38

DP4T
4 position,
with detent.

Your C-W Distributor Can Supply All Your Slide Switch Requirements

- Basic Types — 14.
- Poles Available — 1 to 4.
- Positions Available — 2 to 4.

- Action — Detent and spring return.
- Ratings — .5 amp. AC-DC to 6 amps. AC-UL or Factory tested.
- Knob Heights — $\frac{1}{32}$ " - $\frac{29}{64}$ " - $\frac{3}{16}$ " - $\frac{3}{4}$ " (bat).

- Available — Printed circuit terminals — remote actuating level — wire leads on terminals — short terminals.
- Ext. or Tapped Mounting Holes — 6-32 and 4-40 on most types.

ASK FOR C-W BULLETIN 2039



CONTINENTAL-WIRT
ELECTRONICS CORP.

PHILADELPHIA, PA.



CUTLER-HAMMER SWITCHES

See your local C-H representative for prices and accessory information.

"Commercial Application"

ONE HOLE MOUNTING QUICK MAKE, QUICK BREAK A-C, D-C SWITCHES

UTILITY TYPE

This line of C-H small motor switches have been designed for convenient installation on panels, housings, and other flat surfaces. Superior design, quality materials and workmanship, and careful inspection assure long life and reliable performance.

They have a quick make and quick break over center arrangement on the movable contact which permits exceptionally fast contact action minimizing pitting and erosion of the contact surfaces.

Available with screw terminals, solder lug terminals or with 6" lead wires stripped 3/4". Also available with bushing lengths (Dim. A) of 1/4", 1 1/32", 1 5/32", 3/4" and 1" — 3/4" and 1" bushings furnished with ball type lever only.

Parts visible when switch is mounted are bright nickel plated.



Cat. No. 8388



Cat. No. 8396



Cat. Nos. 8364, 8374

| Nominal Ratings (Amps.) | | Poles and Throws | Catalog Numbers | | |
|-------------------------|----------------|------------------|-----------------|----------------------|---------------------|
| 250 V. A-c D-c | 125 V. A-c D-c | | Screw Terminals | Solder Lug Terminals | Wire Lead Terminals |
| 1 | 3 | SPDT (3 Way) | 8297 | 8282 | 8292 |
| 3 | ..... | SPST | 8295 | 8280 | 8290 |
| 3 | ..... | DPST | 8362 | 8360 | 8361 |
| 3 | ..... | DPDT | 8365 | 8363 | 8364 |
| 3 | 6 | SPST | 8396 | 8381 | 8391 |
| 3 | 6 | DPST | 8372 | 8370 | 8371 |
| 3 | 6 | DPDT | 8375 | 8373 | 8374 |

When ordering, specify (1) catalog number and (2) bushing length.

HEAVY DUTY TYPE

This line of C-H switches have all of the features found in the utility type listed above plus extra heavy contacts for high current applications.

Screw terminals or plug-in terminals (connection made by plugging wire into switch body) are available. Plug-in type switches have 3/32" square hole to accept #14, 16 or 18 ga., stranded, tin dipped wire leads skinned 1/32".

Available with 1 1/32" or 1 5/32" bushing length (Dim. "A").



Cat. Nos. 7320, 7321, 7322



Rear view of 7343 showing holes for plug-in wire leads.

| Nominal Ratings (Amperes) | | Max Hp Ratings (250 V.) | | Poles and Throws | Catalog Numbers | |
|---------------------------|----------------|-------------------------|-------|---------------------|-----------------|-------------------|
| 250 V. A-c D-c | 125 V. A-c D-c | A-c | D-c | | Screw Terminals | Plug-in Terminals |
| 5 | ..... | ..... | ..... | DPDT w/o Center Off | 8680 | ..... |
| 5 | 10 | 1/2 | 1/2 | SPST | ..... | 7347 |
| 5 | 10 | 1/2 | 1/2 | DPST | ..... | 7343 |
| 8 | 16 | 1 | 1 | SPST | 7321 | ..... |
| 8 | 16 | 1 | 1 | DPST | 7320 | 7443 |
| 10 | 15 | 1 | 1/2 | DPST | ..... | 7354 |
| 10 | 15 | 1 | 1 1/2 | SPST | 7361 | ..... |
| 10 | 15 | 1 | 1 1/2 | DPST | 7360 | ..... |
| 10 | 15 | ..... | ..... | DPDT w/o Center Off | 8690 | ..... |
| 20 | ..... | 2 | 2 | SPST | 7403 | ..... |
| 20 | ..... | 2 | 2 | DPST | 7402 | ..... |

When ordering, specify (1) catalog number and (2) bushing length.

SLOW MAKE, SLOW BREAK A-C ONLY SWITCHES

3-6, 10-15 AMP. A-c LINE

Low arcing properties of a-c make possible a simpler contact construction, lighter weight and more compact switch than is possible for d-c power. These advantages along with lower cost have been incorporated in C-H a-c only switches.

Features include: heavy duty independent springs for positive contact pressure, solid silver to silver contacts and strong substantial terminal construction.

Bushing length 1 5/32" on all single pole switches Double pole switches available with 1 1/32" or 1 5/32" bushings.

Available with screw, solder lug or spade type terminals.



| Circuit Arrangement | | | | Throws | Catalog Number | |
|---|------|------|-------------|--------|----------------|--|
| A | B | C | Single Pole | | Double Pole | |
| Keyway on "C" Side of Switch | | | | | | |
| 3 AMP. — 250 V. A-C, 6 AMP. — 125 V. A-C | | | | | | |
| ON | OFF | ON | DT | 7581 | 7591 | |
| ON | OFF | ON* | DT | 7586 | 7596 | |
| ON* | OFF | ON* | DT | 7587 | 7597 | |
| ON | NONE | ON | DT | 7582 | 7592 | |
| ON | NONE | ON* | DT | 7585 | 7595 | |
| ON | NONE | OFF | ST | 7580 | 7590 | |
| ON | NONE | OFF* | ST | 7584 | 7594 | |
| OFF | NONE | ON* | ST | 7583 | 7593 | |
| 10 AMP. — 250 V. A-C, 1/2 MAX. H.P. — 250 V. A-C | | | | | | |
| ON | OFF | ON* | DT | 7508 | 7568 | |
| ON* | OFF | ON* | DT | 7509 | 7569 | |
| ON | NONE | ON* | DT | 7510 | 7570 | |
| ON | NONE | OFF* | ST | 7507 | 7567 | |
| OFF | NONE | ON* | ST | 7506 | 7566 | |
| 10 AMP. — 250 V. A-C, 15 AMP. — 125 V. A-C, 1/4 MAX. H.P. — 250 V. A-C | | | | | | |
| ON | OFF | ON | DT | 7502+ | 7562+ | |
| ON | NONE | ON | DT | 7504+ | 7564+ | |
| ON | NONE | OFF | ST | 7500+ | 7560+ | |

*Momentary contact

+Screw terminals. For solder lug or spade type terminals add one (1) to model number. Example: 7502 is screw type — for same switch with solder lugs or spades order 7503.

When ordering, specify (1) catalog number, (2) type of terminals and (3) bushing length.

PROJECTOR TYPE

These switches are the same as those listed above except the internal circuit is designed for a-c projector, air conditioning and room heater applications. They have a special contactor which provides for a full "off" position, then one circuit is made, then the second circuit is made while the first is maintained. In a projector circuit the switch will function as follows:

(A) off, (B) fan on, and (C) fan and lamp on.

The 7575 switch has an extra circuit to control the room lighting in addition to the functions mentioned above. Bushing length — 1 1/32" on 7511 and 7575, 1 5/32" on 7573 and 7574, and 1 1/32" or 1 5/32" on 7571 and 7572. All switches DPDT except 7511 which is SPDT.

| Nominal Ratings | | Circuit Arrangement | | | Catalog Number | | |
|---|-----------------------------|---------------------|----------|----------|-----------------|----------------------|-----------------|
| Max. H.P. 250 V. A-c | Watt Load (Heavy Duty Pole) | A | B | C | Screw Terminals | Solder Lug Terminals | Spade Terminals |
| Keyway on "C" Side of Switch | | | | | | | |
| 3 AMP. — 250 V. A-C, 6 AMP. — 125 V. A-C | | | | | | | |
| ..... | 300 | 2 ON | 1 ON | OFF | ..... | ..... | ..... |
| 10 AMP. — 250 V. A-C, 15 AMP. — 125 V. A-C | | | | | | | |
| Δ | ..... | ON | OFF | ON | 7620 | ..... | ..... |
| ..... | 1000 | 1 ON | 1 & 2 ON | 2 & 3 ON | 7575 | ..... | ..... |
| 1/4 - 3/4 ± | 500 | 2 ON | 1 ON | OFF | 7571 | 7571 | 7571 |
| 1/4 - 3/4 ± | 1000 | 2 ON | 1 ON | OFF | 7572 | 7572 | 7572 |
| 1/4 - 1 1/2 ± | ..... | 2 ON | 1 ON | OFF | ..... | ..... | 7573 |
| ..... | 1000 | OFF | 1 ON | 2 ON | 7511 | 7511 | 7511 |

Δ 1 Hp — 115 V. — 575 V. A-c.

± Dual rated switches for projector circuits.

When ordering, specify (1) catalog number, (2) bushing length if applicable and (3) terminal type if applicable.

See your local C-H representative for prices and accessory information.

CUTLER-HAMMER SWITCHES



"Commercial Application"

ONE HOLE MOUNTING — Cont'd SLOW MAKE, SLOW BREAK—A-C ONLY SWITCHES 10-15 AMP, LINE — THREE OR FOUR POLE

All of the quality features from the a-c only switches listed on the previous page have been built into this line plus extra heavy contact construction for high current applications.



Bushing length — 15/32" (7610 and 7615 also available with 11/32" bushing).

Ratings — Three pole switches — 10 amp. — 250 V. A-c, 15 Amp. — 125 V. A-c, 1 hp poly-phase — 115-575 V. A-c. Four pole switches — 10 Amp. — 250 V. A-c, 1/2 hp — 230 V. A-c.



| Circuit Arrangement | | | Throws | Catalog Number | | | | |
|------------------------------|------|-----|--------|-----------------|----------------------|-----------------|-----------------|----------------------|
| A | B | C | | Three Pole | | | Four Pole | |
| Keyway on "C" Side of Switch | | | | Screw Terminals | Solder Lug Terminals | Spade Terminals | Screw Terminals | Solder Lug Terminals |
| ON | OFF | ON | DT | 7612 | 7613 | 7613 | 7692 | 7693 |
| ON* | OFF | ON | DT | 7617 | 7617 | 7617 | 7697 | 7698 |
| ON | NONE | ON | DT | 7614 | 7615 | 7615 | 7694 | 7695 |
| ON* | NONE | ON | DT | 7618 | .... | 7618 | .... | .... |
| ON | NONE | OFF | ST | 7610 | 7611 | 7611 | 7690 | 7691 |
| ON* | NONE | OFF | ST | 7616 | .... | 7616 | .... | .... |
| OFF | NONE | ON* | ST | .... | .... | .... | 7696 | 7697 |

*Momentary contact. When ordering, specify (1) catalog number, (2) type of terminals and (3) bushing length.

ROCKETTE SWITCHES — AC- ONLY 3-6, 10-15 AMP., A-C LINE

Styled for application on modern appliances. Rockers can be furnished on special order in any color to harmonize with the appliance color. Standard color of rocker is white.



All switches except 8326 and 8329 are 2 screw flush mounting.

Spade terminals available in sizes .250", .205" and .187".



| Circuit Arrangement | | | Poles and Throws | Number of Rockers | Catalog Numbers | |
|---------------------|------|-----|------------------|-------------------|--|--|
| A | B | C | | | 3 Amp. 250 V. A-c 6 Amp. 125 V. A-c | 10 Amp. 250 V. A-c 15 Amp. 125 V. A-c 3/4 Hp. 250 V. A-c |
| ON | OFF | ON | SPDT | One | 8134 | 8144 |
| ON* | OFF | ON* | SPDT | One | 8136 | 8146 |
| ON | NONE | OFF | SPST | One | 8134 | 8144 |
| ON | NONE | OFF | SPST | One | 8326 | 8329△ |
| ON* | NONE | OFF | SPST | One | 8135 | 8145 |
| ON | OFF | ON | DPDT | One | 8132 | 8142 |
| ON* | OFF | ON* | DPDT | Two | 8133 | 8143 |
| ON | OFF | ON | DPDT | One | 8138 | 8148 |
| ON | NONE | OFF | DPST | One | 8132 | 8132 |
| ON | NONE | OFF | DPST | Two | 8133 | 8133 |
| ON* | NONE | OFF | DPST | One | 8137 | 8147 |
| ON | OFF | ON | 4PDT | Two | 8130 | 8140 |
| ON | OFF | ON | 4PDT | Three | 8131 | 8141 |
| ON | NONE | OFF | 4PST | Two | 8130 | 8140 |
| ON | NONE | OFF | 4PST | Three | 8131 | 8141 |

*Momentary contact. △Rated 1/2 hp — 250 V. A-c. Both 8326 and 8329 are nest mounted. When ordering, specify (1) catalog number, (2) width of spade terminals and (3) poles and throws.

PUSHBUTTON SWITCHES ILLUMINATED COMPUTER TYPE

The latest in stylized switches for wet and dry circuit applications. Illuminated face panel and elongated bar type actuator will enhance any control panel.



Switches are of the snap in variety requiring a panel opening of 1 1/8" high by 1 29/64" wide (add 1 1/2" to width per switch for ganged installation). Standard colors are black for the operator bar and gun metal gray for the shroud. Other color combinations available on special order.

Indicating lamp unit (8457K2) is a 10 V. bulb. Other voltage bulbs on special order.



Tap type (.110") terminals for solder or spade connection.

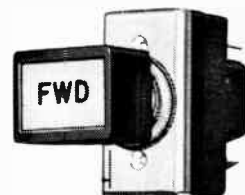
| Nominal Ratings (Amperes) | | Poles and Throws | Operation | Catalog Number | |
|---------------------------|-----------------|------------------|-------------------------|-----------------|----------------------------|
| 250 V. A-c, D-c | 125 V. A-c, D-c | | | Silver Contacts | Gold Pltd. Silver Contacts |
| 3 | 5 | DPDT | Maintained Contact—N.O. | 8455K2 | 8456K2* |
| 3 | 5 | DPDT | Momentary Contact—N.O. | 8455K3 | 8456K3* |
| .... | .... | ..... | Lamp unit only | 8457K2 | .... |

*Switches having gold plated silver contacts are rated at 5 millivolts — 25 microamps on dry circuit applications.

When ordering, specify (1) catalog number.

ILLUMINATED PUSHBUTTON TYPE MOMENTARY OPERATION

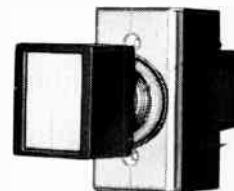
Extremely attractive SPST momentary action switch with illuminated face panel.



Available with removable lamp or with an integral non-removable type lamp. Removable lamp types supplied with 14 V. bulbs. Integral lamp types furnished with 28 V. bulbs. Different voltage bulbs are available on special order.

Furnished with black cap and milk white legend plate. Plate can be hot stamped on special order.

Tap type (.110") terminals for solder or spade connection.



One hole mounting — 1/4" bushing. Rated 3 Amp. — 250 V. A-c, 6 Amp. — 125 V. A-c.

Units with Legend Plate and Cap Assembly.

| Contacts | Removable Lamp Type | Integral Lamp Type | Terminals |
|-----------|---------------------|--------------------|------------------------|
| N. O. | 8452K6 | 8452K4 | .110 tab or solder lug |
| N. C. | 8453K6 | 8453K5 | .110 tab or solder lug |
| Lamp Only | 8454K7 | 8454K5 | .110 tab or solder lug |

When ordering, specify (1) catalog number.

CUTLER-HAMMER, Inc., Milwaukee, Wis.

65 Local Sales Offices and over 150 Distributors across the nation to serve you.

CUTLER-HAMMER SWITCHES

See your local C-H representative for prices and accessory information.

"Military Application"

ONE HOLE MOUNTING

SEALED LEVER

Built to satisfy and exceed military specifications, these switches feature a silicone rubber seal between bushing and lever for sand and dust protection, heavy gauge silver to silver contacts and extra strong terminal construction.



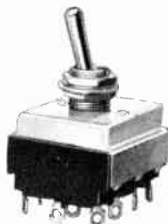
Cat. Nos. 8800, 8804, 8808, 8809, 8810, 8812

Metal parts visible when switch is mounted are dull nickel plated.

Switch guards and attachable tips are available as accessory items.

Rated — 10 Amp. — 115 V. A-c, 20 Amp. — 28 V. D-c. Max. weight 0.081 to 0.14 lb.

Cat. Nos. 7663, 7665, 7671, 7673, 7675



| Circuit Arrangement | | | Throws | Catalog Number | | | | | |
|--|------|------|--------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| A | B | C | | Single Pole | | Double Pole | | Four Pole | |
| Keyway on "C" Side of Switch. Circuit is made on side opposite throw of lever. | | | | Screw Terminal | Solder Lug Terminal | Screw Terminal | Solder Lug Terminal | Screw Terminal | Solder Lug Terminal |
| ON | ON | ON | DT | ..... | ..... | 8860 | ..... | ..... | ..... |
| ON | ON | ON* | DT | ..... | ..... | 8860 | ..... | ..... | ..... |
| ON* | ON | ON* | DT | ..... | ..... | 8860 | ..... | ..... | ..... |
| ON | ON* | NONE | DT | ..... | ..... | †8830 | ..... | ..... | ..... |
| ON | OFF | ON | DT | 8800 | 8802 | 8820 | 8821 | 7662 | 7663 |
| ON | OFF | ON* | DT | *8809 | 8815 | 8832 | 8833 | 7670 | 7671 |
| ON* | OFF | ON* | ST | 8812 | 8818 | 8834 | 8835 | 7672 | 7673 |
| △ON | OFF | NONE | ST | 8801 | 8803 | 8822 | 8823 | 7660 | 7661 |
| △ON | OFF* | NONE | ST | 8813 | 8819 | †8828 | †8829 | 7668 | 7669 |
| ON | NONE | ON | DT | 8810 | 8816 | 8824 | 8825 | 7664 | 7665 |
| ON | NONE | ON* | DT | 8804 | 8805 | †8830 | †8831 | 7674 | 7675 |
| ON | NONE | OFF | ST | 8801 | 8803 | 8822 | 8823 | 7660 | 7661 |
| ON | NONE | OFF* | ST | 8813 | 8819 | †8828 | †8829 | 7668 | 7669 |
| OFF | NONE | ON* | ST | 8811 | 8817 | †8826 | †8827 | 7666 | 7667 |
| NONE | OFF | △ON* | ST | 8811 | 8817 | †8826 | †8827 | 7666 | 7667 |

*Momentary contact.

△Indicates location where terminals are omitted.

*Available with jumper across outside terminals, order Cat. No. 8808.

†Not lever sealed.

When ordering, specify (1) catalog number and (2) circuit arrangement.

LEVER LOCK TYPE

These switches feature the same rugged construction as the standard switches listed above except that in addition they have a lever lock feature which permits the lever to be locked in the desired position. This feature prevents the switch from being tripped accidentally.

In order to operate the lever from a locked position, an upward pull must be exerted on the operating lever to disengage the lever from the milled slot.

Rated 10 Amp. — 115 V. A-c, 20 Amp. — 28 V. D-c.



Cat. No. 8857

Cat. No. 8859



LEVER LOCK TYPE (Cont'd)

| Circuit Arrangement | | | Throws | Catalog Number | | | | | |
|--|--------|------|--------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
| A | B | C | | Single Pole | | Double Pole | | Four Pole | |
| Keyway on "C" side of switch. Circuit is made on side opposite throw of lever. | | | | Screw Terminal | Solder Lug Terminal | Screw Terminal | Solder Lug Terminal | Screw Terminal | Solder Lug Terminal |
| ON | OFF | ←ON | DT | 8867- | 25125- | 8868- | 26126- | 8869- | 26127- |
| ON | ←OFF | ON | DT | K-41 | -3 | K-40 | -3 | K-41 | -3 |
| ON → | ←OFF | ←ON | DT | K-42 | -5 | K-42 | -5 | K-42 | -5 |
| ON → | ←OFF | ←ON | DT | K-43 | -7 | K-43 | -7 | K-43 | -7 |
| ON | ←OFF → | ON | DT | K-40 | -2 | K-40 | -2 | K-40 | -2 |
| ON → | ←OFF → | ←ON | DT | K-39 | -1 | K-39 | -1 | K-39 | -1 |
| ON → | ←OFF | ON* | DT | K-46 | -6 | K-46 | -6 | K-46 | -6 |
| ON | ←OFF → | ON* | DT | K-51 | ... | K-51 | ... | K-51 | ... |
| ON* | ←OFF | ON* | DT | K-52 | ... | K-52 | ... | K-52 | ... |
| ON → | ←OFF | ON* | DT | K-55 | ... | K-55 | ... | K-55 | ... |
| ON | ←OFF → | ON* | DT | K-56 | ... | K-56 | ... | K-56 | ... |
| ON* | ←OFF → | ON* | DT | K-50 | ... | K-50 | ... | K-50 | ... |
| ON | ←OFF | NONE | DT | K-54 | ... | K-54 | ... | K-54 | ... |
| ON → | ←OFF | NONE | DT | K-49 | -9 | K-49 | -9 | K-49 | -9 |
| ON | NONE | ←ON | DT | K-45 | -4 | K-45 | -4 | K-45 | -4 |
| ON → | NONE | ←ON | DT | K-44 | -8 | K-44 | -8 | K-44 | -8 |
| ON | NONE | ←OFF | DT | K-47 | ... | K-47 | ... | K-47 | ... |
| ON | NONE | ←OFF | DT | K-48 | ... | K-48 | ... | K-48 | ... |
| NONE | OFF → | ON* | DT | K-53 | ... | K-53 | ... | K-53 | ... |

→ Indicates direction of movement against which lever is locked.

*Momentary contact.

When ordering, specify (1) catalog number and (2) circuit arrangement.

FLUSH MOUNTING

Two screw, flush mounting switches manufactured to meet current military specifications.

All switches have a formed steel support plate with integral 6-32 lock nuts, silver inlay or movable contact, fixed contacts of coin silver and extra heavy operating spring to insure positive contact pressure.

Attachable tips and switch guards, available as accessory items.

Metal parts visible when switch is mounted are dull nickel plated.

Max. weight — 0.10 - 0.19 lb.

Cat. Nos. 8201, 8211, 8213



Cat. No. 8791

| Circuit Arrangement | | | Throws | Catalog Number | | | | | |
|--|------|------|--------|--------------------------------------|-------|---------------------------------------|-------|--------------------------------------|------|
| A | B | C | | Single Pole | | Double Pole | | Four Pole | |
| C-H Insignia on "A" side of switch. Circuit is made on side opposite throw of lever. | | | | Nominal Ratings (per pole) | | | | | |
| | | | | 15 Amp. 125 V. A-c 25 Amp. 28 V. D-c | | 60 Amp. 115 V. A-c 175 Amp. 28 V. D-c | | 55 Amp. 115 V. A-c 30 Amp. 28 V. D-c | |
| ON | OFF | ON | DT | 8200 | 8783 | 8780 | 8700 | 8700 | 8700 |
| ON | OFF | ON* | DT | 8209 | 8787 | ..... | 8709 | ..... | 8709 |
| ON* | OFF | ON* | DT | 8212 | 8786 | ..... | 8712 | ..... | 8712 |
| △ON | OFF | NONE | ST | ..... | ..... | ..... | 8716 | ..... | 8716 |
| △ON | OFF* | NONE | ST | ..... | ..... | ..... | 8717 | ..... | 8717 |
| ON | NONE | ON | DT | 8210 | 8785 | 8782 | 8710 | ..... | 8710 |
| ON | NONE | ON* | DT | 8215 | ..... | ..... | 8715 | ..... | 8715 |
| ON | NONE | OFF | ST | 8201 | 8784 | 8781 | 8701 | ..... | 8701 |
| ON* | NONE | OFF | ST | 8211 | ..... | ..... | 8711 | ..... | 8711 |
| ON | NONE | OFF* | ST | 8213 | 8789 | ..... | 8713 | ..... | 8713 |
| OFF | NONE | ON | ST | ..... | ..... | ..... | 8711 | ..... | 8711 |
| OFF | NONE | ON* | ST | ..... | ..... | 8788 | ..... | ..... | 8711 |
| NONE | OFF | △ON* | ST | ..... | ..... | ..... | 8718 | ..... | 8718 |
| | | | | Three Pole | | Four Pole | | Six Pole | |
| ON | OFF | ON | DT | 8742 | 8790 | 8880 | 8882 | 8882 | 8882 |
| ON | OFF | ON* | DT | ..... | ..... | 8887 | ..... | ..... | 8887 |
| ON* | OFF | ON* | DT | ..... | ..... | 8888 | ..... | ..... | 8888 |
| ON | OFF | NONE | ST | 8740 | 8792 | 8884 | ..... | ..... | 8884 |
| △ON | OFF | NONE | ST | 8744 | 8792 | 8884 | ..... | ..... | 8884 |
| ON | NONE | ON | DT | 8744 | 8792 | 8884 | ..... | ..... | 8884 |
| ON | NONE | OFF | ST | 8740 | 8791 | 8882 | ..... | ..... | 8882 |
| OFF | NONE | ON* | ST | ..... | ..... | 8886 | ..... | ..... | 8886 |
| NONE | OFF | △ON* | ST | ..... | ..... | 8886 | ..... | ..... | 8886 |

*Momentary contact.

△Indicates location where terminals are omitted.

± Momentary rating. Non-momentary rating — 80 amp. — 28 V. D-c.

When ordering, specify (1) catalog number and (2) circuit arrangement.

See your local C-H representative for prices and accessory information.

CUTLER-HAMMER SWITCHES



"Military Application"

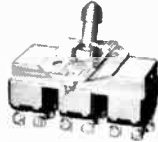
FLUSH MOUNTING—Cont'd LEVER LOCK TYPE

This line of switches is identical to the standard flush mounting types as listed on the previous page except that they have, in addition to the standard features, a lever lock design which permits the lever to be locked into position. The operating lever must be pulled upward before it can be moved from a locked position.

All switches have screw type terminals.
Rated — 10 Amp. — 115 V. A-c, 20 Amp. — 28 V. D-c. Max weight 0.14 - 0.24 lb.



Cat. No. 8271



Cat. No. 8863

| Circuit Arrangement | | | Throw | Catalog Numbers | | |
|--|-------|------|-------|-----------------|-------------|----------|
| A | B | C | | Single Pole | Double Pole | Six Pole |
| C-H Insignia on "A" side of switch. Circuit is made on side opposite throw of lever. | | | | | | |
| ON | ←OFF | ON | DT | 8272 | 8772 | 8863-K-3 |
| ON | OFF | ←ON | DT | 8276 | 8776 | K-7 |
| ON | ←OFF | ON* | DT | 8273 | 8773 | .... |
| ON | ←OFF→ | ON | DT | 8270 | 8770 | K-1 |
| ON → | ←OFF→ | ←ON | DT | .... | 8778 | K-9 |
| ON → | NONE | ←ON | DT | 8275 | 8775 | K-6 |
| ON | NONE | ←OFF | ST | 8271 | 8771 | K-2 |
| ON | NONE | ←OFF | ST | 8277 | 8777 | K-8 |
| ON → | NONE | ←OFF | ST | 8274 | 8774 | K-5 |
| NONE | OFF→ | ON△ | ST | .... | 8771 | .... |

*Momentary contact. △Indicates location where terminals are omitted.
→Indicates direction of movement against which lever is locked.
When ordering, specify (1) catalog number.

ROTARY SELECTOR SWITCH

The C-H single or multi wafer selector switch is designed for applications where a large number of circuits must be controlled in consecutive steps. Switches have an indexing action which gives a positive "feel" as the shaft is rotated. Switches can be furnished with from 1 to 6 wafers with each wafer having 8 positions — 7 "on" and 1 "off". A total of 42 circuits can be controlled by one 6 wafer switch.

Rated — 5 Amp. — 28 V. D-c, 115 V. A-c One hole mounting. Bushing length — 1 1/2". Flatted shaft has 1/2" extension.

| Number of Wafers | Catalog Number | | | |
|------------------|-----------------|---------------|----------------------|---------------|
| | Screw Terminals | Max. Wt.—Lbs. | Solder Lug Terminals | Max. Wt.—Lbs. |
| One | 7260 | 0.28 | .... | 0.16 |
| One | 7261 | 0.16 | 7271 | 0.21 |
| Two | 7262 | 0.26 | 7272 | 0.26 |
| Three | 7263 | 0.32 | 7273 | 0.31 |
| Four | 7264 | 0.38 | 7274 | 0.36 |
| Five | 7265 | 0.45 | 7275 | 0.41 |
| Six | 7266 | 0.51 | 7276 | .... |

When ordering, specify (1) catalog number.



Cat. No. 7271



Cat. No. 53-635



Cat. No. 7266

POSITIVE ACTION ONE HOLE MOUNTING

The operating mechanism employed in the C-H line of "positive action" switches has a direct coupling arrangement between the operating lever and moving contacts which permits positive breaking action and still allows the contacts to move independently of the operating lever. The switching action takes place in less than 1° of movement on the operating lever. Once the contact movement is started, the motion cannot be stopped until the switching is completed.

Switches are available with either the lever seal or environment seal. Both feature a silicone rubber seal bonded to the bushing and operating lever. They also are available in standard



Cat. No. 8836, 8840

Cat. No. 8844, 8847



lever models or lever lock types. The lever lock switches have an integral bushing design which permits the operating lever to be locked into position. In order to move the lever from a locked position it must be pulled upward.
Rated — 25 Amp. — 28 V. D-c, 115 V. A-c on resistive loads. Max. weight 0.1 - 0.2 lb. Bushing length 1 1/2".

| CURRENT RATINGS FOR ALL SWITCHES (Amperes per pole) | | | | | | | | |
|---|-----------|-----------|--------------------|-----------|-----------|-------------------|-----------|-----------|
| 28 Volts D-c | | | 115 V. 400 Cy. A-c | | | 115 V. 60 Cy. A-c | | |
| Lamp Load | Resistive | Inductive | Lamp Load | Resistive | Inductive | Lamp Load | Resistive | Inductive |
| 7 | 25 | 15 | 7 | 25 | 15 | 7 | 20 | 15 |

| Circuit Arrangement | | | Catalog Number | | | | | |
|--|-------|------|--------------------|-------------|-----------|--------------|-------------|-----------|
| A | B | C | Environment Sealed | | | Lever Sealed | | |
| Keyway on "C" side of switch. Circuit is made on side opposite throw of lever. | | | Single Pole | Double Pole | Four Pole | Single Pole | Double Pole | Four Pole |
| ON | OFF | ON | 8836-K-1 | 8837-K-1 | 8838-K-1 | 8840-K-1 | 8841-K-1 | 8842-K-1 |
| ON | OFF | ON* | K-3 | K-3 | K-3 | K-3 | K-3 | K-3 |
| ON* | OFF | ON* | K-2 | K-2 | K-2 | K-2 | K-2 | K-2 |
| ON | OFF | NONE | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| ON | OFF* | NONE | K-8 | K-8 | K-8 | K-8 | K-8 | K-8 |
| ON | NONE | ON | K-4 | K-4 | K-4 | K-4 | K-4 | K-4 |
| ON | NONE | ON* | K-5 | K-5 | K-5 | K-5 | K-5 | K-5 |
| ON | NONE | OFF | K-9 | K-9 | K-9 | K-9 | K-9 | K-9 |
| ON | NONE | OFF* | K-10 | K-10 | K-10 | K-10 | K-10 | K-10 |
| OFF | NONE | ON* | K-11 | K-11 | K-11 | K-11 | K-11 | K-11 |
| NONE | OFF | ON* | K-7 | K-7 | K-7 | K-7 | K-7 | K-7 |
| | | | LEVER LOCK TYPE | | | | | |
| ON → | ←OFF→ | ←ON | 8843-K-1 | 8844-K-1 | 8845-K-1 | 8846-K-1 | 8847-K-1 | 8848-K-1 |
| ON | OFF | ←ON | K-3 | K-3 | K-3 | K-3 | K-3 | K-3 |
| ON | ←OFF | ON | K-4 | K-4 | K-4 | K-4 | K-4 | K-4 |
| ON | ←OFF | ON* | K-8 | K-8 | K-8 | K-8 | K-8 | K-8 |
| ON | ←OFF→ | ON* | K-13 | K-13 | K-13 | K-13 | K-13 | K-13 |
| ON* | ←OFF | ON* | K-14 | K-14 | K-14 | K-14 | K-14 | K-14 |
| ON | ←OFF→ | ON | K-2 | K-2 | K-2 | K-2 | K-2 | K-2 |
| ON | ←OFF→ | ON* | K-18 | K-18 | K-18 | K-18 | K-18 | K-18 |
| ON* | ←OFF→ | ON* | K-12 | K-12 | K-12 | K-12 | K-12 | K-12 |
| ON → | ←OFF | ←ON | K-17 | K-17 | K-17 | K-17 | K-17 | K-17 |
| ON → | OFF | ←ON | K-5 | K-5 | K-5 | K-5 | K-5 | K-5 |
| ON | ←OFF | NONE | K-16 | K-16 | K-16 | K-16 | K-16 | K-16 |
| ON → | OFF* | NONE | K-22 | K-22 | K-22 | K-22 | K-22 | K-22 |
| ON → | ←OFF | NONE | K-11 | K-11 | K-11 | K-11 | K-11 | K-11 |
| ON | NONE | ←ON | K-7 | K-7 | K-7 | K-7 | K-7 | K-7 |
| ON → | NONE | ON* | K-20 | K-20 | K-20 | K-20 | K-20 | K-20 |
| ON → | NONE | ←ON | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| ON | NONE | ←OFF | K-9 | K-9 | K-9 | K-9 | K-9 | K-9 |
| ON → | NONE | OFF* | K-21 | K-21 | K-21 | K-21 | K-21 | K-21 |
| ON → | NONE | ←OFF | K-10 | K-10 | K-10 | K-10 | K-10 | K-10 |
| OFF → | NONE | ON* | K-19 | K-19 | K-19 | K-19 | K-19 | K-19 |
| NONE | OFF→ | ON* | K-15 | K-15 | K-15 | K-15 | K-15 | K-15 |

*Momentary contact. When ordering, specify (1) catalog number.
→Indicates direction of movement against which lever is locked.

MINIATURE

The switches combine all of the construction and operating features of the standard size positive action switches plus ultra miniature size and light weight.

Rating — Wet Circuit, 4 Amp — 28 V. D-c, Dry Circuit, 25 Micro Amp. — 5 Milli V. or less. Total weight — 5.0 - 6.5 grams.

Gold plated solder lug terminals.



Cat. No. 8866 Cat. No. 8868

| Circuit Arrangement | | | Catalog Numbers | | | |
|--|------|------|-----------------|-------------|-------------|-------------|
| A | B | C | Single Pole | | Double Pole | |
| Keyway on "C" side of switch. Circuit is made on side opposite throw of lever. | | | .440" Lever | .687" Lever | .440" Lever | .687" Lever |
| ON | OFF | ON | 8866-K-1 | 8868-K-1 | 8867-K-1 | 8869-K-1 |
| ON | OFF | ON* | K-3 | K-3 | K-3 | K-3 |
| ON* | OFF | ON* | K-2 | K-2 | K-2 | K-2 |
| ON | OFF | NONE | K-5 | K-5 | K-5 | K-5 |
| ON | NONE | ON | K-4 | K-4 | K-4 | K-4 |
| ON | NONE | OFF | K-7 | K-7 | K-7 | K-7 |
| NONE | ON | ON* | K-8 | K-8 | K-8 | K-8 |
| NONE | OFF | ON* | K-6 | K-6 | K-6 | K-6 |

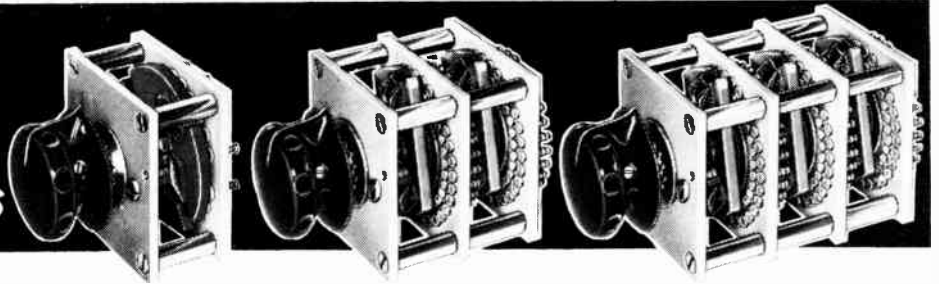
*Momentary contact. When ordering, specify (1) catalog number.

The switches listed on these pages represent only a small fraction of the total number of small motor and appliance switches manufactured by C-H. Contact your local Sales Office or Distributor for more complete listings.

**CUTLER-HAMMER, Inc.,
Milwaukee, Wis.**

DAVEN

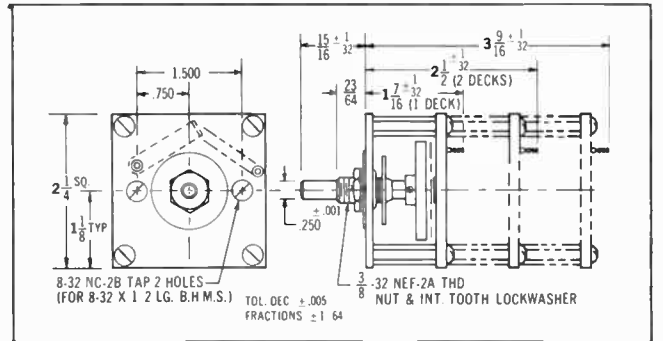
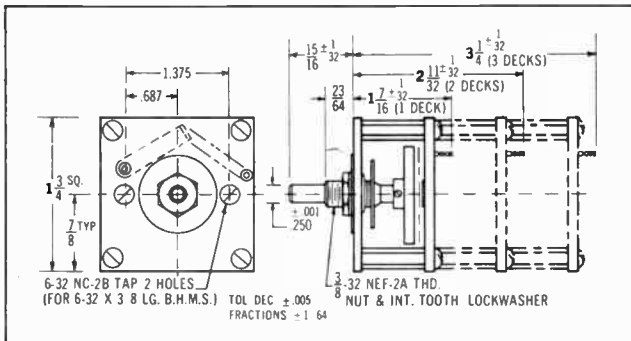
Adjustable Stop Switches



Now, these **87** adjustable stop switches replace **2,001** standard types—and all are available for **off-the-shelf** delivery from your local **DAVEN** distributor!

For maximum flexibility in all types of standard switch applications, circuit experimentation, laboratory work, bread-board setups and in circuitry where the exact number of switch positions might be changed at a later date, Daven has designed 87 adjustable stop switches which meet the same electrical, mechanical and environmental requirements that

apply to all Daven standard rotary type switches. As a result, the equivalent of 2001 standard Daven rotary type switches are stocked by local Daven distributors and available for immediate off-the-shelf delivery. In addition, the cost of the equivalent adjustable stop switch is equal to, or less than, its standard counterpart.



1 1/4" square

2 1/4" square

| 1 Deck | 2 Decks | 3 Decks | Poles/Deck | Max Pos/Pole |
|---------------------------------------|------------|------------|------------|--------------|
| Shorting 15° Between Positions | | | | |
| 111-CM-24A | 211-CM-24A | 311-CM-24A | 1 Pole | 24 Pos. |
| 121-CM-11A | 221-CM-11A | 321-CM-11A | 2 Poles | 11 Pos. |
| 131-CM-7A | 231-CM-7A | 331-CM-7A | 3 Poles | 7 Pos. |
| 141-CM-5A | 241-CM-5A | 341-CM-5A | 4 Poles | 5 Pos. |

| 1 Deck | 2 Decks | 3 Decks | Poles/Deck | Max Pos/Pole |
|---------------------------------------|------------|------------|------------|--------------|
| Shorting 15° Between Positions | | | | |
| 121-DM-24A | 221-DM-24A | 321-DM-24A | 2 Poles | 24 Pos. |
| 131-DM-11A | 231-DM-11A | 331-DM-11A | 3 Poles | 11 Pos. |
| 141-DM-11A | 241-DM-11A | 341-DM-11A | 4 Poles | 11 Pos. |

| Non-Shorting 30° Between Positions | | | | |
|---|------------|------------|---------|---------|
| 111-CB-12A | 211-CB-12A | 311-CB-12A | 1 Pole | 12 Pos. |
| 121-CB-6A | 221-CB-6A | 321-CB-6A | 2 Poles | 6 Pos. |
| 131-CB-4A | 231-CB-4A | 331-CB-4A | 3 Poles | 4 Pos. |
| 141-CB-3A | 241-CB-3A | 341-CB-3A | 4 Poles | 3 Pos. |

| Non-Shorting 15° Between Positions | | | | |
|---|------------|------------|--------|---------|
| 113-DB-24A | 213-DB-24A | 313-DB-24A | 1 Pole | 24 Pos. |

| Shorting 11 1/4° Between Positions | | | | |
|---|------------|------------|---------|---------|
| 112-CM-32A | 212-CM-32A | 312-CM-32A | 1 Pole | 32 Pos. |
| 122-CM-15A | 222-CM-15A | 322-CM-15A | 2 Poles | 15 Pos. |
| 132-CM-10A | 232-CM-10A | 332-CM-10A | 3 Poles | 10 Pos. |
| 142-CM-7A | 242-CM-7A | 342-CM-7A | 4 Poles | 7 Pos. |

| Non-Shorting 30° Between Positions | | | | |
|---|------------|------------|---------|---------|
| 121-DB-12A | 221-DB-12A | 321-DB-12A | 2 Poles | 12 Pos. |
| 131-DB-6A | 231-DB-6A | 331-DB-6A | 3 Poles | 6 Pos. |
| 141-DB-6A | 241-DB-6A | 341-DB-6A | 4 Poles | 6 Pos. |

| Non-Shorting 22 1/2° Between Positions | | | | |
|---|------------|------------|---------|---------|
| 112-CB-16A | 212-CB-16A | 312-CB-16A | 1 Pole | 16 Pos. |
| 122-CB-8A | 222-CB-8A | 322-CB-8A | 2 Poles | 8 Pos. |
| 132-CB-5A | 232-CB-5A | 332-CB-5A | 3 Poles | 5 Pos. |
| 142-CB-4A | 242-CB-4A | 342-CB-4A | 4 Poles | 4 Pos. |

| Shorting 11 1/4° Between Positions | | | | |
|---|------------|------------|---------|---------|
| 122-DM-32A | 222-DM-32A | 322-DM-32A | 2 Poles | 32 Pos. |
| 132-DM-15A | 232-DM-15A | 332-DM-15A | 3 Poles | 15 Pos. |
| 142-DM-15A | 242-DM-15A | 342-DM-15A | 4 Poles | 15 Pos. |

| Non-Shorting 22 1/2° Between Positions | | | | |
|---|------------|------------|---------|---------|
| 122-DB-16A | 222-DB-16A | 322-DB-16A | 2 Poles | 16 Pos. |
| 132-DB-8A | 232-DB-8A | 332-DB-8A | 3 Poles | 8 Pos. |
| 142-DB-8A | 242-DB-8A | 342-DB-8A | 4 Poles | 8 Pos. |

DAVEN

Division of General Mills, Inc.

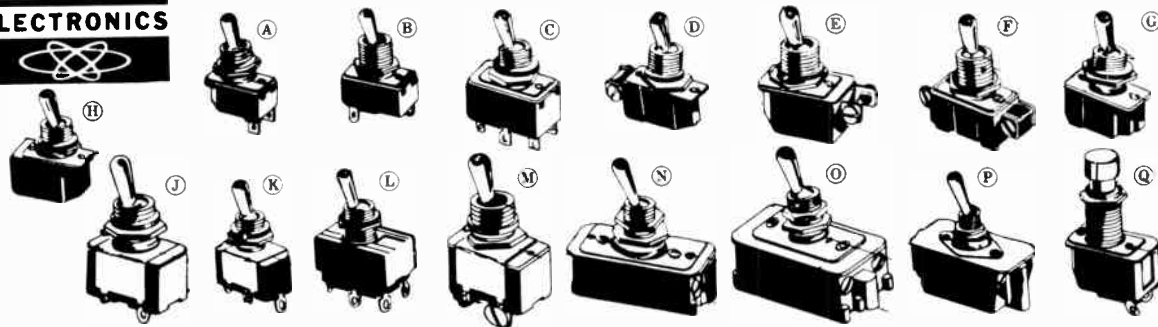


LIVINGSTON,
NEW JERSEY



ELECTROCRAFT COMPONENTS

SWITCHES • CABLE CLAMPS



These switches, made by Cutler Hammer Inc., for GC-Electrocraft, are all single hole mounting, UL Approved and supplied with threaded shank $\frac{1}{2}$ " long. Shanks are milled with keyway to prevent any possible turning when used with a keyed hole in the panel.

(A) LIGHT DUTY, SMALL SIZE TOGGLE SWITCH—rating 3 amps, 250/V.
Cat. No. 34-180 SPST Net \$.72
Cat. No. 34-182 DPST Net 1.28
Cat. No. 34-184 DPDT Net 1.47

(B) "THREE WAY" AND "TWO CIRCUIT" SWITCH—Three way switch handles 2 circuits with common line; 3 terminals, with one terminal "common". Two circuit model 4 terminals, with no connections between circuits.
Cat. No. 34-186 SPDT (3-way) Net \$.90
Cat. No. 34-188 DPST (2-circuit) Net \$1.10

MISCELLANEOUS SMALL SWITCHES

The switches listed below are widely used on electronic equipment, automotive applications and small electrical appliances.



SLIDE SWITCHES—UL approved for 1, $\frac{1}{2}$ amp, 125/V. Mount with 2 screws #6 or rivets $\frac{1}{8}$ " with $\frac{1}{8}$ " spacing.

Cat. No. 34-160 SPDT Net \$.17
Cat. No. 34-162 DPDT Net \$.20



ROTARY CANOPY SWITCH—With wire leads and $\frac{1}{2}$ " shank length. Rating 3 amps, 125/V, 1 amp, 250/V. Mounts in $\frac{3}{8}$ " hole.

Cat. No. 34-166 Net \$.30



CUTLER HAMMER SWITCHES

(C) MEDIUM DUTY TOGGLE SWITCH—solder lug connections; 3 amp, 250/V; 6 amp, 125/V, AC-DC.
Cat. No. 34-190 DPST Net \$1.42
Cat. No. 34-192 DPDT Net \$1.58

(D) LIGHT DUTY TOGGLE SWITCH—screw terminals, rating 3 amp, 250/V AC-DC.
Cat. No. 34-194 SPST Net \$.87
Cat. No. 34-196 DPST (2 pos. no "off") Net \$1.68
Cat. No. 34-198 DPDT (2 pos. w/ off) Net \$2.03

(E) MEDIUM DUTY TOGGLE SWITCH—rating 6 amp, 125/V; 3 amp, 250/V.
Cat. No. 34-200 SPST Net \$.98
Cat. No. 34-202 DPDT (2 pos. w/ "off") Net \$1.92

(F) LIGHT DUTY, 3-WAY SWITCH—rating 1 amp, 250/V; 3 amps, 125/V.
Cat. No. 34-204 SPDT Net \$1.13

(G) LIGHT DUTY, WIRE LEAD SWITCH—rating 3 amps, 250/V, AC-DC.
Cat. No. 34-206 SPST 87

(H) MEDIUM DUTY WIRE LEAD SWITCH—rating 6 amp, 125/V; 3 amp, 250/V.
Cat. No. 34-208 SPST Net \$.98

(J) MEDIUM-HEAVY DUTY TOGGLE SWITCH—rating 10 amp, 250/V, 15 amp, 125/V and $\frac{3}{4}$ HP.
Cat. No. 34-210 SPST Net \$.72
Cat. No. 34-212 DPST (2 pos. on-off) Net \$1.12

(K) MEDIUM-HEAVY DUTY TOGGLE SWITCH—rating 10 amp, 250/V; 15 amp, 125/V and 1 HP.
Cat. No. 34-214 SPDT (2 pos. no "off") Net \$.83

Cat. No. 34-216 3 PST (2 pos. on-off) Net \$2.22
Cat. No. 34-218 3 PDT (no "off" pos.) Net \$2.73

(L) MEDIUM-STD DUTY TOGGLE SWITCH—Designed for applications where rugged bat handle switch is required.
Cat. No. 34-220 DPDT lug (2 pos. w/ "off") Net \$1.28

Cat. No. 34-222 DPST screw (2 pos. on-off) Net \$1.28
Cat. No. 34-224 DPDT screw (2 pos. w/ "off") Net \$1.58

Cat. No. 34-226 DPDT lug (3 pos. center off) Net \$1.28

(M) MEDIUM-HEAVY DUTY TOGGLE SWITCH—Designed for applications where rugged bat handle switch is required.
Cat. No. 34-228 SPST screw (on-off) Net \$.83
Cat. No. 34-230 SPDT screw (no "off pos.") Net \$.98

Cat. No. 34-232 3 PST screw (2 pos. on-off) Net \$2.58

Cat. No. 34-234 3 PDT screw (2 pos. w/ "off") Net \$3.27

Cat. No. 34-236 SPDT (3 pos. center off) Net \$.83

Cat. No. 34-238 3 PDT (3 pos. center off) Net \$2.73

Cat. No. 34-240 3 PDT (3 pos. center off) Net \$3.27

(N) MEDIUM-HEAVY DUTY TOGGLE SWITCH—rating 6 amp, 250/V; 12 amp, 125/V, 1 HP.
Cat. No. 34-242 SPST Net \$1.35
Cat. No. 34-244 DPST Net \$1.35

(O) HEAVY DUTY TOGGLE SWITCH—rating 10 amp, 250/V; 15 amp, 125/V, $\frac{1}{2}$ HP.
Cat. No. 34-246 SPST Net \$2.33
Cat. No. 34-248 DPST Net \$2.33

(P) EXTRA-HEAVY DUTY TOGGLE SWITCH—rating 20 amps, 250/V, $\frac{1}{2}$ HP, 125/250 V.
Cat. No. 34-250 DPST Net \$3.27

(Q) PUSH BUTTON, ON-PUSH-OFF SWITCHES—rating 3 amp, 250/V; 6 amp, 125/V; $\frac{1}{8}$ " shank length, single pole, single throw type.
Cat. No. 34-252 SPST with lug terminal Net \$.98
Cat. No. 34-254 SPST with screw terminal Net \$1.12
Cat. No. 34-256 SPST with wire leads Net \$1.12

PLASTIC CABLE CLAMPS

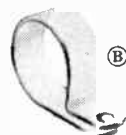


(A) ETHYL CELLULOSE CABLE CLAMPS—made of transparent (light yellowish cast) plastic.

| | | |
|------------------|----------------------|------------|
| Cat. No. 34-300C | $\frac{1}{8}$ " O.D. | Net \$2.33 |
| Cat. No. 34-304C | $\frac{3}{8}$ " O.D. | Net \$2.40 |
| Cat. No. 34-308C | $\frac{1}{4}$ " O.D. | Net \$2.58 |
| Cat. No. 34-312C | $\frac{5}{8}$ " O.D. | Net \$2.85 |
| Cat. No. 34-316C | $\frac{3}{8}$ " O.D. | Net \$3.00 |
| Cat. No. 34-320C | $\frac{7}{8}$ " O.D. | Net \$3.30 |
| Cat. No. 34-324C | $\frac{1}{2}$ " O.D. | Net \$3.60 |
| Cat. No. 34-328C | $\frac{3}{4}$ " O.D. | Net \$4.20 |

ETHYL CELLULOSE CABLE CLAMP:

| | | |
|------------------|-----------------------|------------|
| Cat. No. 34-332C | $\frac{1}{2}$ " O.D. | Net \$4.50 |
| Cat. No. 34-336C | $\frac{5}{8}$ " O.D. | Net \$4.80 |
| Cat. No. 34-340C | $\frac{1}{4}$ " O.D. | Net \$5.10 |
| Cat. No. 34-344C | $\frac{3}{4}$ " O.D. | Net \$5.40 |
| Cat. No. 34-348C | $\frac{7}{8}$ " O.D. | Net \$5.70 |
| Cat. No. 34-352C | 1" O.D. | Net \$6.00 |
| Cat. No. 34-356C | $1\frac{1}{8}$ " O.D. | Net \$6.30 |

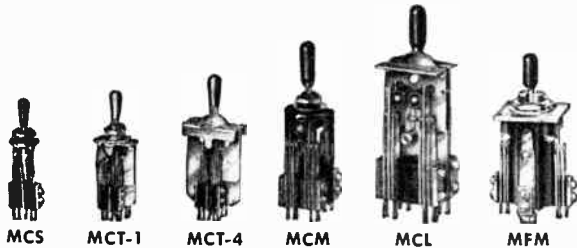


(B) NYLON (ZYTEL) CABLE CLAMPS—Made of natural color (translucent white) Nylon.

| | | |
|------------------|----------------------|-------------|
| Cat. No. 34-370C | $\frac{1}{8}$ " O.D. | Net \$ 3.60 |
| Cat. No. 34-374C | $\frac{3}{8}$ " O.D. | Net \$ 3.93 |
| Cat. No. 34-378C | $\frac{1}{4}$ " O.D. | Net \$ 4.17 |
| Cat. No. 34-382C | $\frac{5}{8}$ " O.D. | Net \$ 4.68 |
| Cat. No. 34-386C | $\frac{3}{8}$ " O.D. | Net \$ 4.83 |
| Cat. No. 34-390C | $\frac{7}{8}$ " O.D. | Net \$ 5.13 |
| Cat. No. 34-394C | $\frac{1}{2}$ " O.D. | Net \$ 5.47 |
| Cat. No. 34-398C | $\frac{3}{4}$ " O.D. | Net \$ 6.72 |
| Cat. No. 34-402C | $\frac{5}{8}$ " O.D. | Net \$ 7.50 |
| Cat. No. 34-406C | $\frac{1}{4}$ " O.D. | Net \$ 7.80 |
| Cat. No. 34-410C | $\frac{3}{4}$ " O.D. | Net \$ 8.40 |
| Cat. No. 34-414C | $\frac{7}{8}$ " O.D. | Net \$ 9.00 |
| Cat. No. 34-418C | 1" O.D. | Net \$10.50 |

SEND FOR FREE 400-PAGE CATALOG ON ALL GC ELECTRONICS PRODUCTS TODAY!

A complete line of LEVER SWITCHES by GENERAL CONTROL COMPANY



| Type | Amps.* | RATINGS | | |
|-------|--------|---------|--------|----------|
| | | High | Wide | Long** |
| MCS | 1 or 3 | 7/8" | 7/8" | 2-1/16" |
| MCT-1 | 1 or 3 | 1 1/4" | 3/4" | 2-5/16" |
| MCT-4 | 1 or 3 | 1 1/2" | 3/4" | 2-17/32" |
| MCM | 5 | 1 1/4" | 1 1/4" | 2-25/32" |
| MCL | 10 | 1 3/4" | 1 3/8" | 3-15/16" |
| MFM | 5 | 1 3/4" | 1 3/8" | 3" |

*125 volts, 60 cycles, non-inductive.
**From back panel to end of terminals.

Write for data Sheet CLRM

MCS Light-weight, miniature switch. Two contact sections. Single-hole mounting. Especially suited for Instruments and communications systems.

MCT Small switch for multiple-circuit control. Four contact sections. Frames available for either single-hole or four-hole screw type mounting.

MCM Widely used switch with multiple-position, ball-bearing detents. Four contact sections. Contact assemblies easily removed for wiring. Single-hole mounting.

MCL Heavy-duty switch for constant use in electrical control. Rugged cam. Four contact sections; easily removed contact assembly. Four-hole mounting.

MFM Versatile five-position switch with four contact sections—one neutral and four switch positions. Single-hole mounting.

| LEVER OPERATION | | | | | | | | | |
|-----------------|-------------------------|-------------------------|----------------|--------------|------------|---------------|------------|-----|--|
| Symbol | Non-lock (Stays put) | Lock (Spring return) | Three Position | Two Position | Half Throw | Five Position | Full Throw | | |
| Designation | MCS | S1 | *S2 | S3 | *S4 | *S5 | | | |
| | MCT | T1 | *T2 | T3 | *T4 | *T5 | | | |
| | MCM | M1 | *M2 | M3 | *M4 | *M5 | M6 | *M7 | |
| | MCL | L1 | *L2 | L3 | *L4 | *L5 | | | |

*Lock and non-lock positions may be reversed. To reverse designate as R52, R54, R55, etc.

M F M

| SPECIAL MCM LEVER | DESCRIPTION | LOCK | NON-LOCK | LOCK-POSITION |
|---|---------------|------|----------|---------------|
| (A) waterproof lever \$4.05 EACH, 1.00 | SYMBOL | | | |
| | OPERATION | | | |
| | OPERATION No. | M8 | M9 | M10 |

CONTACTS

| FRAME TYPES AND PRICES |
|------------------------|
|------------------------|

| CONTACT FORMS | A | B | C | D | E | F | G | H | O |
|------------------------|---------------|--------------------------------------|-------------|-------------|-------------|-------------|--------------|------------|-------------|
| CIRCUIT | | | | | | | | | No Contacts |
| To obtain list price:— | MCS \$ 1.65 | MCS 1 amp. 0.50 MCS 3 amp. .60 | 0.50 .60 | 0.50 .60 | 0.60 .72 | — — | 0.60 .72 | — — | 0.60 .72 |
| add | MCT-4 \$ 1.95 | MCT-4 1 amp. .50 MCT-4 3 amp. .60 | .50 .60 | .50 .60 | .60 .72 | 0.75 .90 | 0.85 1.02 | .60 .72 | .60 .72 |
| contact prices | MCT-1 \$ 2.45 | MCT-1 1 amp. .50 MCT-1 3 amp. .60 | .50 .60 | .50 .60 | .60 .72 | .75 .90 | .85 1.02 | .60 .72 | .60 .72 |
| to frame price. | MCM \$ 3.65 | MCM 5 amp. .75 | .75 | .75 | .90 | 1.15 | 1.45 | .90 | .90 |
| | MFM \$16.80 | MFM 5 amp. .75 | .75 | .75 | .90 | 1.15 | 1.45 | .90 | .90 |
| | MCL \$ 4.90 | MCL 10 amp. 1.15 | 1.15 | 1.15 | 1.30 | 1.60 | 2.45 | 1.30 | 1.30 |

PUSH-BUTTON SWITCHES by GENERAL CONTROL COMPANY

A complete heavy duty push button switch with either 1 amp. or 5 amp. ratings at 110/60 a.c. is available from two to sixteen positions. A right-angle MPB is also available where back-of-panel depth is limited, incorporating all of the operating features of the standard MPB. Three amp.

switches are also available. It is possible to obtain the standard MPB switch stacked and/or intercoupled, providing all of the features of a single switch. Other variations of the standard MPB switch are also obtainable. Contact the factory with your requirements.

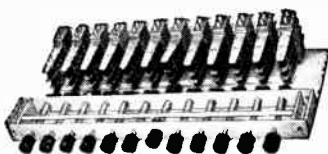
STANDARD and RIGHT-ANGLE FRAME PRICES

| 1 FRAME TYPES | MPB-2 | MPB-3 | MPB-4 | MPB-5 | MPB-6 | MPB-7 | MPB-8 | MPB-9 | MPB-10 | MPB-11 | MPB-12 |
|--------------------|-------|----------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| CONTACT POSITIONS | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| *Accumulative Lock | B-13 | See note | 8.15 | 10.55 | 12.95 | 15.30 | 17.70 | 20.05 | 22.45 | 24.85 | 27.20 |
| No Two Interlock | B-14 | 6.70 | 7.25 | 9.05 | 10.80 | 12.60 | 14.35 | 16.10 | 17.90 | 19.65 | 21.45 |
| Lock Release | B-15 | 6.10 | 6.35 | 7.80 | 9.25 | 10.75 | 12.20 | 13.65 | 15.15 | 16.60 | 18.05 |
| Non-Lock | B-16 | 6.10 | 6.35 | 7.80 | 9.25 | 10.75 | 12.20 | 13.65 | 15.15 | 16.60 | 18.05 |

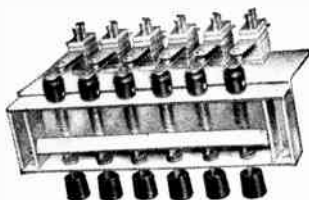
*Reset button requires one position in addition to standard contact positions. Reset button is on right-hand side unless otherwise specified.

*Reset button normally actuates no contacts but can be used to actuate momentary contacts if required.

*For applications over 12 positions, contact the factory.



STANDARD MPB SWITCH



RIGHT-ANGLE MPB SWITCH

CONTACTS

| CONTACT FORMS | A | B | C | D | E | H | O |
|---------------|--------|-----|-----|-----|------|------|-------------|
| 2 Circuit | | | | | | | No Contacts |
| Price | 1 amp. | .50 | .50 | .60 | .75 | .85 | .60 |
| | 3 amp. | .60 | .60 | .72 | .90 | 1.02 | .72 |
| | 5 amp. | .75 | .75 | .90 | 1.15 | 1.45 | .90 |

*Ratings at 125 volts A-C, N.I.

PUSH BUTTON OPERATION

| 3 OPERATION | ACCUMULATIVE LOCK | NO TWO INTERLOCK | LOCK RELEASE | NON-LOCK |
|-------------|---|--|--|--|
| Description | Buttons pushed in remain locked in position until released by pushing reset button. | Only one button can be pushed in at one time, and releases any other button. | Any button pushed in releases any previously pushed in button. | Has no locking action; returns to normal position on release of finger pressure. |
| Designation | B-13 | B-14 | B-15 | B-16 |

Write for data sheet PBRM

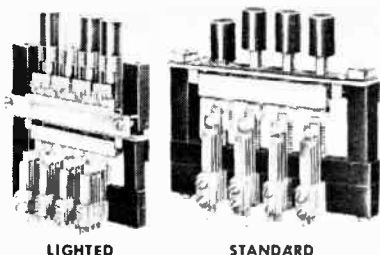
ORDERING INFORMATION

When ordering, specify:
 1 Frame Type Standard MPB-6 Price: \$10.75
 2 Push Button Operation B-15
 3 Contacts C1, C2, C3, etc A-A-A-B-B-C +.75 +.75 +.75 +.75 +.75 +.90
 4 Contact Rating 5-amperes
 5 Panel Thickness 3/8" panel = \$15.40

NOTICE: All prices and specifications subject to change without prior notice.

General Control Company, Boston, Mass.

NEW Standard and Lighted Push Button Switches

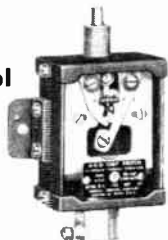


FRAME PRICES

| BUTTONS | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| B11 SPS | 9.35 | 10.00 | 12.80 | 15.80 | 18.50 | 21.40 | 24.10 | 27.10 | 29.75 | 32.70 | 36.30 | 40.15 | 43.75 | 47.60 | 51.20 |
| B11 LPS | 16.80 | 21.65 | 27.15 | 31.55 | 39.35 | 45.95 | 52.75 | 59.60 | 66.20 | 73.05 | 75.90 | 87.65 | 95.50 | 101.55 | 111.35 |
| B14 SPS | 8.40 | 9.10 | 11.30 | 13.55 | 15.75 | 17.95 | 20.15 | 22.40 | 24.60 | 26.80 | 29.90 | 33.00 | 36.10 | 39.25 | 42.35 |
| B14 LPS | 15.85 | 20.75 | 25.65 | 30.50 | 36.60 | 42.70 | 48.80 | 54.90 | 61.00 | 67.10 | 73.20 | 80.55 | 87.85 | 95.20 | 102.50 |
| B15 SPS | 7.65 | 7.95 | 9.75 | 11.60 | 13.40 | 15.25 | 17.10 | 18.90 | 20.75 | 22.60 | 25.30 | 28.05 | 30.80 | 33.55 | 36.30 |
| B15 LPS | 14.65 | 19.55 | 24.40 | 29.30 | 35.40 | 41.50 | 47.60 | 53.70 | 59.80 | 65.90 | 72.00 | 79.30 | 86.65 | 93.95 | 101.30 |
| B16 SPS | 7.00 | 7.32 | 9.15 | 11.00 | 12.80 | 14.65 | 16.45 | 18.30 | 20.15 | 21.95 | 24.70 | 27.45 | 30.20 | 32.95 | 35.70 |
| B16 LPS | 14.05 | 18.90 | 23.80 | 28.70 | 34.80 | 40.25 | 46.35 | 52.45 | 57.95 | 64.05 | 70.15 | 77.50 | 84.80 | 92.15 | 99.45 |

A.C.O. LIMIT SWITCH
A General Control FIRST

- Alternate Contact Operating Switch
- Industrial on-off switch
- Machine tool dependability
- Single 5/8" hole, or bracket mounting
- Overtravel
- Contacts—Gcco du. op switch
- Dimensions: Width: 3 1/2" with mounting brackets
2 5/8" with 5/8" hole
Length: 4 27/32"
Depth: 1 1/2"



Patent No. 2,610,274

CONTACTS

| CONTACT FORMS | A | B | C | H |
|-----------------------|-----|-----|-----|-----|
| 1 amp silver | .60 | .60 | .80 | .80 |
| 3 amps paladium alloy | .75 | .75 | .90 | .90 |
| Direction of Throw | | | | |

Ratings at 125 volts A.C. n.i.

OPERATION

| Operation | Accumulative Lock | No Two Interlock | Lock Release | Non-Lock |
|-------------|---|--|--|--|
| Description | Buttons pushed in remain locked in position until released by pushing reset button. | Only one button can be pushed in at one time, and releases any other button. | Any button pushed in releases any previous pushed in button. | Has no locking action; returns to normal position on release of finger pressure. |
| Designation | B-13 | B-14 | B-15 | B-16 |

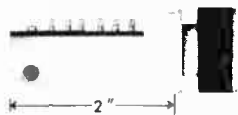
WRITE FOR DATA SHEET SLRM

ORDERING INFORMATION

| | | | | | |
|----------------------------|--------------------|---|--------------------|---------------------------|-----------|
| 1. Frame Type SPS4 \$11.30 | 2. Operation B14 — | 3. Contacts A-C-2A-2C .75+.90+1.50+1.80 | 4. Rating 3 amps — | 5. Panel Thickness 1/8" — | = \$16.25 |
|----------------------------|--------------------|---|--------------------|---------------------------|-----------|

UNDER DEVELOPMENT

Advanced Push Button Switch • Printed Circuit • Modular and tandem design • Same features as LPS/SPS • Unusual flexibility • Illuminated and standard • 4 C contacts are standard • Rated at 10 amps., 110 volts a.c.



"Footrol" FOOT SWITCHES by GENERAL CONTROL COMPANY

FOOTROL[®] GENERAL CONTROL

TYPE MA A new light weight foot switch with an actuating treadle built into its top to permit operation with unusually light foot pressure. A completely enclosed limit switch forms the internal switch action. Especially recommended for fast operation where minimum fatigue is important. Access to the internal limit switch terminals is greatly facilitated by simply removing the front end of the casting.



TYPE MI An ideal treadle-type foot switch, especially convenient for many applications. Inclined, non-slip tread has an adjustable throw and includes a heel rest. Two operating pressures; 5 lbs. and 10 lbs. Mounting ears are provided on each side. A BX connector is mounted in the base, and terminal access is by a removable base plate.



TYPE MC Especially adapted for unusual applications and hard use. Easily operated for foot, knee, hand, or elbow. Non-slip-tread top may be operated at any point of its surface.



Since 1934, General Control Company has been a foremost manufacturer of Foot Switches. These are products of the highest quality; built for rugged industrial and commercial applications such as: bowling alleys, packaging machinery, super-market conveyor belts, drill presses, indexing machines, etc.

Write for data sheet FSRM

| TYPES | | | CONTACT TYPES | CONTACT OPERATION | RATING | WEIGHT (LBS) | | |
|-------------|--------------|---------------|---------------|---|---------|--------------|-------|-------|
| MA-3 \$5.60 | MC-13 \$7.95 | MI-23 \$11.95 | | Double throw Spring return (ONE NORMALLY OPEN, ONE NORMALLY CLOSED) | 20 amps | 1 1/2 | 2 1/2 | 4 1/2 |
| — | — | MI-25 \$13.75 | | First press transfers switch contacts Second press restores switch contacts (ONE NORMALLY OPEN, ONE NORMALLY CLOSED) | 12 amps | 4 1/2 | | |
| — | — | MI-26 \$16.65 | | 1st half-throw closes 1st switch 2nd half-throw closes 2nd switch Spring Return | 20 amps | 4 1/2 | | |
| — | — | MI-27 \$13.90 | | Double pole Double throw Spring return (TWO NORMALLY OPEN, TWO NORMALLY CLOSED) | 20 amps | 4 1/2 | | |

*Available with heavy duty 20 amps rating at 250 V

Standard Foot Switches are available with mounting holes to accommodate special connectors used on shielded cable.

"Promatic" CONTROLS by GENERAL CONTROL COMPANY

SYNCHRONOUS-MOTOR TIMERS

The Series II, Type SY, Synchronous-motor Timers has time ranges from 1 second up to 24 hours, available to match the Type ET Timer. Redesignated to incorporate the latest production and quality improvements. A new patented O-Ring clutch eliminates gears and costly maintenance problems. Time period easily adjusted and continuously indicated on large dial. Prices from \$55.00 each, list.



ELECTRONIC TIMERS

Type ET, Electronic Timers with ranges from .060 seconds to 60 seconds, are available in a variety of frame types, terminal arrangements, and mountings. The enclosed type or chassis model have back plates punched with universal mounting holes. Double pole, double throw auxiliary load contacts are rated at 10 amps., 125 volts a-c, n.i. Prices from \$35.00 each, list.



Write for data sheets SERM

LA GRANGE, ILLINOIS

MINIATURE ROTARY TAP SWITCHES



SERIES 5000

Miniature Tap Switches

Series 5000 serves wide range of applications from automotive, to missile and navigation equipment. 36° indexing. 1 to 10 decks, 2 to 10 positions per deck. Conservatively rated to break 1 ampere, at 115 VAC, resistive, or carry 5 amperes. Life expectancy 100,000 operations.

Also available — Series 12 same as above except terminal soldered to contact rivet for improved contact resistance in corrosive atmospheres.



SERIES 24 and 24800

For Precision Requirements

Series 24 designed for high reliability military and commercial applications. Positive detent action. 36° indexing. One pole per deck with shorting or non-shorting contacts — 1 to 10 decks, 2 to 9 positions with built-in stop, or 10 positions continuous rotation unless otherwise specified. Two poles per deck (non-shorting contacts only) also available. Rating: break 1 ampere, 115 VAC, resistive, or carry 5 amperes.

Series 24800, similar to Series 24, designed and tested to MIL-S-3786A (SR04E36B3HP) and MS16109B.



SERIES 45

Midget Tap Switch

For high reliability military and commercial applications demanding small size. Single deck, single pole only. 2 to 6 positions with stops standard on 2 to 5 positions. 6 positions continuous rotation unless otherwise specified. 60° indexing. Shorting and non-shorting base is molded melamine thermosetting plastic per MIL-M-14, Type CFG. Terminals are solder type brass, lead tin plate and fused. Conservatively rated to break 1 ampere at 115 VAC resistive circuit and to carry 5 amperes. Supplied with mounting nut.



SERIES 36 and 6

Miniature Concentric Shaft Switch

Series 36 fully enclosed tap switch with precision detent, permitting new flexibility, and allowing 2 switches to be mounted in space normally occupied by one. Each shaft controls one or two decks, with two to ten shorting, or non-shorting, positions per deck. Can be furnished in over 6500 combinations of decks and positions. Only 1" in diameter including solder lugs. Two poles per deck also available.

Series 6 similar to Series 36 except commercial detent and one pole per deck only.



Spring Return Rotary Switch

Same as Series 24 except momentary contact, spring return to either side of center position. Available 1 to 3 decks (incl.), one pole per deck, shorting or non-shorting contacts. Also available with up to 4 detent positions plus spring return position to either right or left of detent position.

PRICES ON REQUEST

PUSH BUTTON SWITCHES



LIGHTED PUSH BUTTON SWITCH

Equipped with a NE2 neon bulb, with light circuit independent of switch circuit. Switch rated at 1 amp, 115 VAC with approximate life of 500,000 operations. Normally open. Momentary contact. 3/8-32 threaded bushing, 3/8" max. dia., 1 1/4" behind panel length. Fine silver contacts. Solder type terminals.

No. 40-1 — Normally open \$2.00 ea.



MINIATURE PUSH-PULL SWITCH

No. 30-16. Push-on, pull-off action, SPST. Normally Open. Rating: 1 ampere, 115 VAC, resistive. Life expectancy 100,000 operations. 1/2-32 threaded bushing, 1/2" O.D. 1 1/2" overall length including terminals.

No. 30-16 (Red Button) \$1.15 ea.



MINIATURE PUSH BUTTON SWITCH

No. 30-17. Positive-feel, momentary contact, SPST. Normally Open only. Rating: 1 ampere, 115 VAC, resistive. Life expectancy approximately 200,000 operations. Incorporates .040" overtravel. Mounting hole 1/2" dia., 1/2-32 threaded bushing, 1.289" overall length including solder type terminals, snap-on red or black button cap, .375" dia.

No. 30-17R — Normally open (Red Button Cap) \$1.40 ea.

No. 30-17B — Normally open (Black Button Cap) \$1.40 ea.



SNAP ACTION SWITCH

Series 2201 and 2202 snap action, momentary contact, SPST, push button switch. Normally Open or Normally Closed available. Rating: 10 amperes, 115 VAC, resistive. Life approximately 50,000 operations. 1/2-32 threaded bushing, 3/4" O.D., 1 3/4" overall length including solder type terminals.

No. 7-21 and 7-22 same as above, except equipped with Faston terminals for solderless wiring.

No. 2201 — Normally open (Red Button) \$1.95 ea.

No. 2202 — Normally closed (Black Button) \$1.95 ea.

No. 7-21 — Normally open (Red Button) \$2.20 ea.

No. 7-22 — Normally closed (Black Button) \$2.20 ea.



SILENT ACTION SWITCH

Silent action, momentary contact, SPST, push button switch. Normally Open or Normally Closed available. Rating: 1/2 ampere, 115 VAC, resistive, for approximately 800,000 operations, or 1 ampere for approximately 100,000 operations. 1/2-32 threaded bushing, 3/4" O.D., 1 1/2" overall length including solder type terminals.

No. 4001 — Normally open (Red Button) \$0.70 ea.

No. 4002 — Normally closed (Black Button) \$0.70 ea.



DOUBLE POLE SWITCH

Silent action, Normally Open, momentary contact, DPST, push button switch. Rating: 1/2 ampere, 115 VAC, resistive. Life over 100,000 operations. Button and housing molded phenolic. 3/4" O.D., 1 1/4" overall length including solder terminals.

No. 35-1 (Red Button) \$1.20 ea.



MINIATURE PUSH BUTTON SWITCH

Silent action, momentary contact, Normally Open, SPST, switch rated at 1/2 ampere, 115 VAC, resistive. Life approximately 1/2 million operations. Button and housing molded phenolic. 3/8-32 threaded bushing, 1/2" O.D., 1 1/4" overall length including solder terminals.

No. 23-1 (Red Button) \$0.85 ea.



SUB-MINIATURE SWITCH

Series 30-1 silent action, momentary contact, SPST, push button switch. Normally Open or Normally Closed available. Rated at 1 ampere, 115 VAC, resistive. Life approximately 1,000,000 operations. Button and housing molded phenolic. 1/4-32 threaded bushing, 3/8" O.D., 3/4" overall length including solder terminals.

No. 30-15 same as above, except incorporates .056" overtravel with overall length of 1 1/4".

No. 30-1 — Normally open (Red Button) \$0.95 ea.

No. 30-2 — Normally closed (Black Button) \$0.95 ea.

No. 30-15 — Normally open (Red Button) \$0.95 ea.



ULTRA-MINIATURE SWITCH

Series 39-1 silent action, momentary contact, Normally Open, SPST, push button switch. Rated at 1/2 ampere, 115 VAC, resistive. Life over 1 million operations. Button and base molded phenolic. 1/4" O.D., 1 1/2" overall length including solder terminals.

No. 39-12 same as above, except with .040" overtravel and overall length of 3/4".

No. 39-1 (Red Button) \$1.00 ea.

No. 39-12 (Red Button) \$1.15 ea.

ELECTRIC COUNTERS & ACTUATORS



AUTOMATION CONTROLS DIVISION

GENERAL CONTROLS CO. DES PLAINES, ILLINOIS



CE-600B Panelmount

PIC Electric Counters are actuated by electric impulses (12 to 150 AC or 12 to 220 DC) which may come from any suitable switch, relay, photoelectric unit or other circuit breaking device. Counters rated for 1000 counts per minute (cpm) require .030 second minimum closed period and .030 second minimum open period for each count. Counters rated at 600 cpm require .040 second minimum closed period and .060 second minimum open period for each count. Models are available for 12 to 230 v. AC and DC. Send for literature or write us for prices and deliveries.

Also available in coin counting models.



CE-600A Basemount



CE-800B Panelmount



**CE-800C Standard,
CE-800A Dustproof**

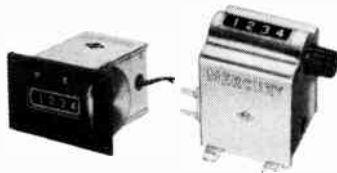
CE-600 COUNTERS TO 999,999, WITH RESET

Count life of 50 million; 1000 cpm (with suitable actuation); seven watts power consumption. Built-in rectification provides reliable operation on all AC voltages to 150 v. Quiet operation; no AC hum when energized. Continuous duty coils and balanced armature. White figures on black wheels are easy to read; die cast, dust resistant enclosure. No. CE600AS602, 1.668" w. x 3.5" d. x 2.5" h.; No. CE600BS602, 4.4375" x 1.875" panel x 2.6875" d.; No. CE600BK602, 5.5" x 2.125" panel x 2.812" d. Models listed are for 115 v. AC, 60 cps.

- CE-600AS602** Basemount with knob reset. Net. **\$21.40**
- CE-600BS602** Panelmount with knob reset. Net. **22.90**
- CE-600BK602** Panelmount with key reset. Net. **33.00**

MERCURY COUNTERS TO 9,999, WITH RESET

For laboratory use and industrial service where duty is moderate. Estimated life six million counts. Counting rate 600 cpm, higher with electronic actuation. Has white figures on black wheels. Coils consume three watts. Tamper-proof metal enclosure has plastic window. Size: Basemount model, 2 1/2" x 1 3/4" x 2 1/4" h.; panelmount model, 2 1/2" x 1 3/4" x 2 1/4" h. For 115 v. AC, 60 cps.



- CE-40AS402**—Basemount. Net. **\$15.25**
- CE-40BS402**—Panelmount. Net. **15.95**

CE-901 PRE-DETERMINING COUNTER

The CE901 Electromagnetic counter is a compact pre-determining counting device capable of maintaining an accurate count of 1000 counts per minute. This unit, designed for industrial applications employs the use of any remote actuator, switch, photoelectric cell, contactor or any other sensing device which operates within the actuator specifications.

Available in models of 2, 3, 4 or 5 digits as standard.

- CE901AA302 3 digit desk mount
 - CE901BA302 3 digit rack mount
- Consult Factory or your local PIC distributor for prices

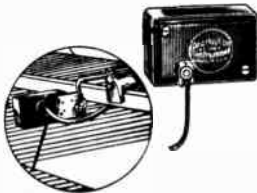
Dimensions Overall:
2 & 3 digit 12" wide x 8" high x 8" deep
4 & 5 digit 19" wide x 8" high x 8" deep



SENSITIVE ACTUATOR ES-41

Widely used on folding machines. Requires only 1/4 in.-oz. torque. Arm motion: 24° min., 59° max. reciprocal; 10° to 45° overthrow. Arm position adjustable, easily shortened or bent. Rated speed, 300 cpm. SPST contacts rated 2 amps, 120 v. AC. Body size, 2 1/2" x 1 1/2" x 1 1/2" d. Furnished with straight spring steel arm 2 3/4" long.

ES-41 — Actuator. Net. **\$7.70**



CE-800 SUPER-WIZARD COUNTER TO 999,999, WITH RESET

Has 200 million count life; 1000 cpm (with suitable actuation); only five watts power consumption. Built-in rectification provides top reliability from all AC voltages to 230 v. Continuous duty coils and balanced armatures for dependability. Large, white-on-black figures are easy to read. Standard enclosure has tamper-proof, die cast aluminum housing with staked window of unbreakable plastic; separate wiring compartment with independent cover is tapped for conduit. Dustproof enclosure has same housing with dustproof gasket seal and cement sealed window. Size: Standard and dustproof models, 3.12" w. x 5.94" l. x 4.69" h.; panelmount model, 5.19" x 3.50" panel x 4.39" d. Models listed are for 115 v. AC, 60 cps.

- CE-800CS602** — Standard enclosure, knob reset. Net. **\$43.00**
- CE-800AS602** — Dustproof enclosure, knob reset. Net. **47.25**
- CE-800BS602** — Panelmount, knob reset. Net. **41.50**

MERCURY COUNTERS TO 99,999, NO RESET

Counts to 99,999 and then repeats. Widely used in vending machines and similar applications where duty is moderate. Estimated life, three million counts. Counting rate, 600 cpm. Coil consumes three watts. Has white figures on black wheels. Tamper-proof metal enclosure with plastic window. Size: Basemount model, 2 1/4" x 1 3/4" x 2 3/4" h.; panelmount model, 1 3/4" x 2 3/4" x 1 1/4" h. For 120 v. AC, 60 cps operation.

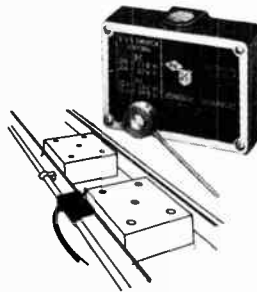


- CE-40AN502** — Basemount. Net. **\$5.15**
- CE-40BN502** — Panelmount. Net. **6.40**

HEAVY DUTY ACTUATOR ES-5

Arm has spring return. For operation by boxes, cans, packages, etc. Minimum torque of 3 oz.-in. Arm motion: 31° min., 65° max., reciprocal; 10° to 42° overthrow. Arm position adjustable. Rated speed 300 cpm. SPST contacts rated 10 amps, 120 v. AC. Size: 3 1/4" x 2 1/4" x 1 1/4". Furnished with lever as shown in upper illustration.

ES-5 — Actuator. Net. . . . **\$9.35**



CE-620 ELECTRIC RESET ELECTRIC COUNTER

Developed to provide remote reset through manually, mechanically, electrically or electronically operated contacts. The CE620 includes a 6 digit CE600 electric counter with electrically operated reset mechanism mounted on a subpanel. Available with push button reset built into panel or with terminals provided for connecting remote contactor furnished by user. Also available in 7 digit and coin counting models.

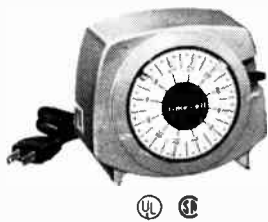
- CE-620BA602** — Remote reset 120v 60 cy. Net. **\$66.20**
 - CE-620BB602** — Pushbutton reset 120v 60 cy. Net. **71.20**
- Dimensions, overall 6" wide, 4" high, by 3/8" deep.



Intermatic®

A COMPLETE LINE OF QUALITY TIME SWITCHES FOR ALL AUTOMATIC CONTROL REQUIREMENTS

PORTABLE PLUG-IN APPLIANCE TIMERS



TIME-ALL—for all-around use in the home, office or store. Converts any radio to a clock radio... provides automatic "on-off" operation of lamps, de-humidifiers, hi-fi, fans, tape recorders, etc. Has manual control with automatic reset. Plug-in receptacle.

TV SHOW CATCHER—Catch favorite radio and TV programs with combination electric clock and signal timer. Positive reminder—pleasant buzzer sound. Plugs in anywhere. Timing periods from 1 to 60 minutes.

MUSIC MINDER—Clock-radio timer with sleep-switch. Go to sleep to a music... awoken to music... all automatically. Ideal bedside clock... also controls any standard radio. Additional buzzer alarm.

| Model No. | Description | Watts | Amps | Volts | List Price |
|-----------|---------------------|-------|-------|-------|------------|
| A221-4 | Standard Time-All | 875 | 7 | 125 | \$10.95 |
| A211-4 | DeLuxe Time-All | 1875 | 15 | 125 | \$11.95 |
| A301-4 | TV Show Catcher | ..... | ..... | 125 | \$ 8.95* |
| A401-4 | Tape Recorder Timer | 1875 | 15 | 125 | \$11.95* |
| A501 | Music Minder | 1875 | 15 | 125 | \$11.95* |

*Subject to Retail Federal Excise Tax

TAPE RECORDER TIMER—Combination clock and appliance timer. The favorite of tape recorder owners who want to hear their favorite show, even though they're away at the time.

RADIO CLOCK TIMERS—UNMOUNTED

Model RC 5321-2

(Rear Set with Alarm)

An unmounted radio clock timer with front switch setting and rear time set. For installation in any model radio or other electrical unit. Radio can be turned "on" automatically, with or without alarm, turned "on" or "off" manually. Has 60 minute sleep switch. Complete with round bezel and crystal.



Model RC 5421-4

(Front Set with Alarm)

Same as RC 5321-2, except has front switch setting and front time set. Also complete with round bezel and crystal.



Model RC 6021-2

(Front Set without Alarm)

Unmounted radio clock timer with front switch setting, front time and "automatic" radio set. Radio can be turned "on" automatically, turned "on" or "off" manually. Complete with round bezel and crystal.



| Model No. | Description | Watts | Amps | Volts | List Price |
|-----------|--------------------|-------|------|-------|------------|
| RC 5321-2 | Rear Set w/Alarm | 1875 | 15 | 125 | \$9.00 |
| RC 5421-4 | Front Set w/Alarm | 1875 | 15 | 125 | \$9.70 |
| RC 6021-2 | Front Set wo/Alarm | 1875 | 15 | 125 | \$8.00 |

STANDARD ON-OFF TIME SWITCHES

Century Series T100

Tungsten-Rated to handle incandescent lighting loads. For ordinary automatic control requirements, with up to 12 on-off operations per day. Minimum on-off time, 1 hour; maximum 23 hours. Manual control with automatic reset.



| Model No. | Switch | Amps | Voltage | List Price |
|-----------|--------|------|---------|------------|
| T101 | SPST | 40 | 125 | \$11.95 |
| T102 | SPST | 40 | 250 | \$12.95 |
| T103 | DPST | 40 | 125 | \$13.95 |
| T104 | DPST | 40 | 250 | \$14.95 |
| T105 | SPDT | 40 | 125 | \$13.95 |
| T106 | SPDT | 40 | 250 | \$14.95 |
| T101B | SPST | 40 | 125 | \$11.95 |
| T102B | SPST | 40 | 250 | \$12.95 |
| P101* | SPST | 10 | 125 | \$13.95 |

*Portable Plug-In: 125 volts, 60 cycle only.

Models also available for 125 volt 50 cycle, 125 volt 25 cycle or 250 volt 50 cycle.

Skippier SERIES TIME SWITCHES

T170—for 7-day Operation

Tungsten-Rated to handle incandescent lighting loads. For use where it is desired to skip operation on selected days. SKIPPier has two dials—a 24 hour time dial and a day dial—day dial advances position one day every 24 hours.



| Model No. | Switch | Amps | Voltage | List Price |
|-----------|--------|------|---------|------------|
| T171 | SPST | 40 | 125 | \$17.95 |
| T172 | SPST | 40 | 250 | \$18.95 |
| T173 | DPST | 40 | 125 | \$19.95 |
| T174 | DPST | 40 | 250 | \$20.95 |
| T175 | SPDT | 40 | 125 | \$19.95 |
| T176 | SPDT | 40 | 250 | \$20.95 |
| T171B | SPST | 40 | 125 | \$17.95 |
| T172B | SPST | 40 | 250 | \$18.95 |
| P171* | SPST | 10 | 125 | \$19.95 |

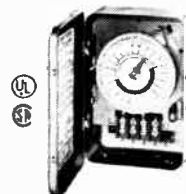
*Portable Plug-In: 125 volts, 60 cycle only.

Models also available for 125 volt-50 cycle, 125 volt-25 cycle or 250 volt-50 cycle.

PROGRAM TIME SWITCH

Supervisor Series T960

For recorded music process timings, fans, and heaters. Permits 1 to 96 on-off operations every 24 hrs. in 15 min. increments. 96 permanently attached trippers easily slide in and out for fast setting. Portable plug-in model available.



| Model No. | Type | Amps per pole | Voltage 60 cycle | List Price |
|-----------|---|---------------|------------------|------------|
| T965 | Can be used 3 ways 1. SPST—Normally open | 20 | 125 | \$37.50 |
| T966 | 2. SPST—Normally closed 3. SPDT—Alternate open & close | 15 | 250 | \$38.50 |
| P961* | Single Pole, Single Throw | 10 | 125 | \$39.50 |

*Portable Plug-In

REPEAT CYCLE TIMERS

C8301—for 12-Minute Repeat Cycle Timing

C8311—for 60-Minute Repeat Cycle Timing

Two "cyclers" switches provide a wide range of fixed repeat cycle operations. The C8301 dial makes a complete revolution every 12 minutes with ON operations from 10 sec. to 11 min., 10 sec.; OFF operations from 50 sec. to 11 min., 50 sec. The C8311 dial makes a revolution every 60 minutes with ON operations from 1 to 55 min.; OFF operations from 5 to 59 min.



| Model No. | Dial Cycle | Switch | Amps | Volts* | List Price |
|-----------|------------|--------|------|--------|------------|
| C8301-S | 12 Min. | SPST | 15 | 125 | \$14.45 |
| C8311-S | 60 Min. | SPST | 15 | 125 | \$14.45 |

*Not available for 250 volt operation.

for complete Time Switch information, request Catalog TS-89

for complete Radio Clock Timer information, request Catalog G-21, G-42 and G-45

INTERNATIONAL REGISTER COMPANY, CHICAGO, ILLINOIS

Jennings VACUUM SWITCHES



R5C



R1G



R6G



RH5G



RH7G

Types R and RH Vacuum Switches

VACUUM SWITCH RATINGS

For RF and DC Transfer Switching

| Jennings Type | R5C | R1 | R1K | R2 | R8 | RH7 |
|--|-----|---------|----------|---------|----------|---------|
| Test Voltage (300 kc dry)—peak kv | 25 | 50 | 40 | 60 | 85 | 100 |
| Operating Voltage—peak kv | 15 | 30 | 20 | 40 | 75 | 85 |
| Continuous Current (rms amp)—dc ^① | 50 | 50, 100 | 100, 200 | 50, 100 | 100, 200 | 50, 400 |
| —300 kc | 30 | 35 | 100 | 35 | 100 | 200 |
| —10 mc | 25 | 25 | 50 | 25 | 50 | 60 |
| —30 mc | | 15 | 25 | 15 | 25 | 25 |
| RF Interrupting Power—kilowatts | 50 | 250 | 500 | 250 | 1000 | 1000 |

①DC continuous currents may be increased as shown by using special connectors.

For DC Switching Under Load or Capacitor Discharging

| Jennings type | R4C | R5C | R1G | R6G ^③ | R2G | R8G | R9G | RH1G | RH4G | RH2G | RH7G | RH5G |
|---|----------------|-----|------|------------------|------|------|------|--------|--------|--------|--------|--------|
| Test voltage (60 cycles dry)—pk kv | 20 | 25 | 50 | 51 | 55 | 60 | 71 | 37 | 37 | 51 | 113 | 71 |
| Max. operating voltage—pk kv | 5 | 15 | 20 | 20 | 30 | 40 | 50 | 20 | 10 | 20 | 70 | 30 |
| Continuous current ^① —DC amp | 50 | 50 | 50 | 100 | 50 | 100 | 100 | 50 | 50 | 50 | 50 | 50 |
| | 100 | 100 | 100 | 250 | 100 | 200 | 200 | 400 | 600 | 600 | 400 | 600 |
| DC interruption ^② —power in kw | 7.5 | 50 | 75 | 100 | 100 | 100 | 200 | 200 | 250 | 250 | 200 | 250 |
| —Current in amp. | 250@ 28 VDC | 15 | 20 | 20 | 20 | 20 | 25 | 25 | 30 | 30 | 25 | 30 |
| Capacitor discharge decaying to 30% in 1 millsec. or less— initial amp. | | | 500 | 1000 | 500 | 1000 | 1500 | 5000 | 10,000 | 20,000 | 5000 | 20,000 |
| 10 micro sec pulse (amps) peak kv | | | 1000 | 2000 | 1000 | 2000 | 3000 | 10,000 | 20,000 | 20,000 | 10,000 | 20,000 |
| | | | 30 | 25 | 40 | 50 | 60 | 30 | 20 | 30 | 70 | 40 |

①DC continuous currents may be increased as shown by using special connectors.

②For DC interruption in continuous operation, neither power nor current rating should be exceeded.

③DC current interruption capabilities will be increased beyond current shown by addition of transient suppression capacitance across switch contacts. They can be multiplied considerably by special application of capacitors after the contacts have parted.

For 60 Cycle Power Switching

| Jennings type | R6G ^③ | R8G | R9G | RH1G | RH4G | RH2G | RH5G | RH7G | RL7G | RL10G |
|---|------------------|---------------|-----------------|--------------|----------------|---------------|---------------|-----------------|-----------------|---------------|
| Recommended max. load voltage for max. operating recovery voltage @ 50 amps-rms kv | 27 | 31 | 35 | 13.5 | 5 | 13.5 | 31 | 38 | 35 | 40 |
| Load break 70% PF to 600 amps (grounded wye) rms kv | 15.5 | 18 | 24.5 | 8.5 | 3.2 | 8.5 | 18 | 33 | 29.5 | 37 |
| Grounded Y capacitor switching at 50 amps-rms kv | 13.5 | 15.5 | 17.5 | 6.75 | 2.5 | 6.75 | 15.5 | 19 | 17.5 | 20 |
| Grounded Y capacitor switching at rated thermal current—rms kv | 10.5 | 12.5 | 14.75 | 4.75 | 1.6 | 4.25 | 9 | 15 | 12 | 17 |
| Thermal current (for 30° C. rise) rms amps | 100, 250 | 200 | 250 | 400 | 600 | 600 | 600 | 400 | 600 | 600 |
| Max. recovery voltage at rated thermal current load—rms kv | 21 | 25.5 | 29.5 | 9.5 | 3.2 | 8.5 | 18 | 30.5 | 24.5 | 34 |
| Overload or fault interrupter circuit breaker 3 phase simultaneous break line to line (present recommended duty) rms kv | | | 15.5 | 5 | 5 | 8.5 | 12 | 21.5 | 15.5 | 34.5 |
| Max. interrupting current (10 times) rms amps. | 1500 @9kv | 1500 @14kv | 2000 @17.5kv | 2000 @6kv | 4000 @2.5kv | 4000 @5kv | 4000 @12kv | 2000 @21.5kv | 4000 @15.5kv | 4000 @18kv |
| Withstand voltage (60 cycle 1 min. dry) rms kv | 36 | 36 | 50 | 26 | 26 | 36 | 50 | 80 | 50 | 80 |
| Impulse voltage (1½ x 40 micro sec. NEMA) pk kv | 75 | 75 | 110 | 60 | 45 | 60 | 95 | 125 | 110 | 150 |
| Short time surge currents NEMA—4 sec. rms amps. NEMA—½ cy + 10 cy. @ 70% rms amps | 2500 5000 | 2000 4000 | 2500 5000 | 2500 5000 | 5000 10000 | 5000 20000 | 5000 20000 | 2500 5000 | 5000 20000 | 5000 20000 |

③Type R9A and R6A modification is available with longer life bellows and lower continuous current ratings of 50, 100 amps.

Relays using Vacuum Switches

Type R and RH Vacuum Switches are available from Jennings mounted as relays for indoor use. They may be mounted with contacts normally open or normally closed or two switches may be mounted in a single pole double throw arrangement. Either ac or dc solenoids may be used. Insulation between the switch and its actuating solenoid is provided by a 2 to 12 inch puller rod providing 40 to 140 kv insulation. CE grade phenolic laminate is recommended for dc or 60 cycle use. Grade G7 silicone glass laminate is recommended for radio frequency applications.

JENNINGS RADIO MANUFACTURING CORPORATION • SAN JOSE, CALIF.



LAMINATED SWITCHES

J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

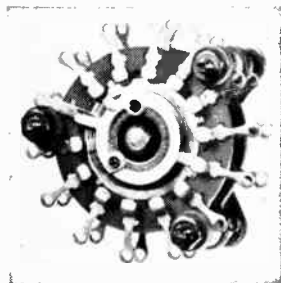
INSTRUMENT AND TESTER-TYPE ROTARY SWITCHES

14- and 20-Position — Single and Multi-Gang — Shorting and Non-Shorting

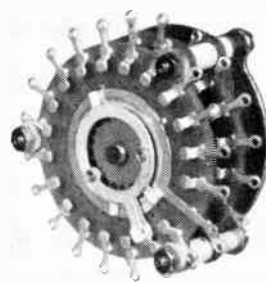
• **USES** — J-B-T Instrument-type Rotary Selector Switches are extensively used in quality test equipment, portable instruments, inspection setups, military or civilian avionics wherever trouble-free, dependable performance is of major importance. Available as a 14- or 20-position in laminated construction shown here or molded types described on opposite page—the design gives extra contacts in minimum space. One to six decks.

• **FEATURES**

Reliability — Rigid, 3-post deck suspension, instead of the usual 2; all current carrying parts are brass or phosphor bronze, silver flashed and then heavily plated with fine silver to meet 100 hour salt spray test; ball bearing action, beryllium-copper balanced spring (SS-14); leaf type (SS-20), and sharp detent assure positive indexing. Springs are replaceable without disturbing soldered connections. Laminated plastic decks and rotors are selected for maximum mechanical and dielectric strength. Insulation resistance above 50,000 megohms.



SS-14-2 Laminated



SS-20-2 Laminated

Low Contact Loss — Double-grip collector arms, and large-area contacts, silver to silver, result in an average contact resistance of .007 ohms or less during the useful life of the switch.

Ample Dielectric (Conservatively Rated) — Carries 1 amp., 125 volts VAC, inductive load; maximum momentary capacity (not make-and-break), 5 amp, AC or DC; maximum voltage between contacts 1500 volts AC, R.M.S.; between decks and ground, 2000 volts AC, R.M.S.

BASIC 14-POSITION (SS-14): 13 circuits and "off" per deck in 2" circle for compactness, angular indexing 25°43'. 1 1/4" Bar Knob (KN-14) supplied only on individually boxed units—not on bulk orders unless specified. **Collector arm** normally placed directly opposite to flat of shaft so that knob pointer points to live contact. **Contact lugs** and common lugs positioned as shown below, 13 contacts per deck. **One to six decks;** for each additional deck (or gang) add 5/16" to depth. **Continuous rotation type** supplied unless otherwise specified. **Adjustable Stop** normally is supplied on standard cataloged switches. **Fixed Stops** can be supplied on quantity orders at moderate cost. **Panel locator** positioned as shown unless otherwise specified on bulk orders.

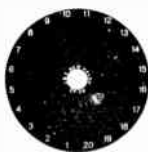
BASIC 20-POSITION (SS-20): 19 Circuits and "off" per deck in 2-23/32" circle for compactness, angular indexing 18°. 2" Bar Knob (KN-16) supplied on individually boxed units—not on bulk orders unless specified. **Collector arm** normally placed directly opposite to flat of shaft so that knob pointer points to live contact. **Contact lugs** and common lugs positioned as shown below, 19 live positions per deck, standard. **One to six decks;** for each additional deck or gang add 5/16" to depth. **Continuous rotation type** supplied unless otherwise specified. **Panel locator** positioned as shown; can be modified on bulk orders.

COMBINATIONS IN SS-14 and SS-20 SERIES: Besides the military and commercial variations listed above, shorting and non-shorting decks can be assembled on the same switch shaft. Reference to the sketch below will be helpful in numbering decks and contacts when ordering non-standard assemblies. Specialized requirements for stainless steel shafts, no flats or double-flats on shaft, longer projections beyond bushing, and other variations can also be supplied, with necessarily longer delivery time and additional cost.

ETCHED DIAL PLATES FOR ROTARY SWITCHES

For SS-14, MS-14, MS-14B, MAS-14, MAS-14B, SS-20, MS-20, or MS-20B Series. Dull black finish with raised bright metal numerals, 2 3/4" diameter.

| | | |
|-------------------|-------|--------|
| EP-13 off thru 13 | ..... | \$0.23 |
| EP-14 1 thru 14 | ..... | .23 |
| EP-19 off thru 19 | ..... | .23 |
| EP-20 1 thru 20 | ..... | .23 |



Military or Commercial Variations — The following are typical of switches supplied on special order at extra cost: (a) laminated plastic, Type PBE-P per Spec. MIL-P-3115B; (b) fungus-proofing by vacuum impregnation of rotors, decks, spacers, and ceramic spacers using approved fungicides; (c) hot tin dip on contact surfaces to be soldered; (d) 14 or 20 live positions, no off (add suffix F, as SS-14-2F or SS-20-1F); (e) common position in non-standard location. For description of SS-14 materials, finishes, and government-quality features, see Print SK-42, Rev. A. for SS-14. and Print SK-116 for SS-20.

Non-Shorting—Break before make. **Shorting**—Make before break.

LAMINATED SWITCHES, SS-14 TYPE

14-POSITION, 25°43' INDEXING

| Pos. Per Circ. | Circ. (Poles) Per Deck | Decks or Gangs | Short Non-Short | Model | Max. Depth Behind Panel | Boxed Incl. Knob |
|----------------|------------------------|----------------|-----------------|-------------|-------------------------|------------------|
| 14 | 1 | 1 | N-S | SS-14-1 | 7/8" | \$2.30 |
| 5† | 2 | 1 | N-S | SS-14-1A* | 7/8" | 2.45 |
| 14 | 1 | 1 | S | SS-14-1S* | 7/8" | 2.35 |
| 14 | 1 | 1 | C-S | SS-14-1CS†* | 7/8" | 2.80 |
| 14 | 1 | 2 | N-S | SS-14-2 | 1-3/16" | 2.90 |
| 5† | 2 | 2 | N-S | SS-14-2A* | 1-3/16" | 3.20 |
| 14 | 1 | 2 | S | SS-14-2S* | 1-3/16" | 3.00 |
| 14 | 1 | 2 | C-S | SS-14-2CS†* | 1-3/16" | 3.95 |
| 14 | 1 | 3 | N-S | SS-14-3 | 1-1/2" | 3.50 |
| 14 | 1 | 3 | S | SS-14-3S* | 1-1/2" | 3.65 |
| 14 | 1 | 4 | N-S | SS-14-4 | 1-13/16" | 4.40 |
| 14 | 1 | 6 | N-S | SS-14-6 | 2-7/16" | 6.30 |

† 5 positions include 4 "live and 1 "off"

* Complete shorting—all contacts shorted except one in use

‡ This dimension applies when adjustable stop rings are used.

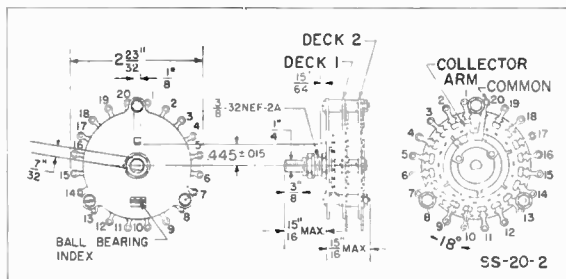
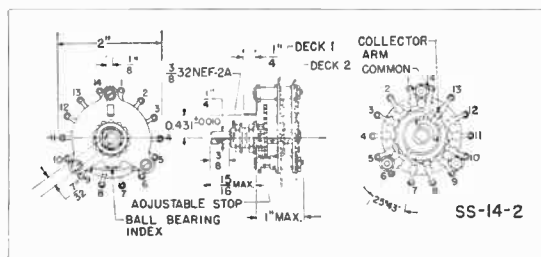
LAMINATED SWITCHES, SS-20 TYPE

20-POSITION, 18° INDEXING

| Pos. Per Circ. | Circ. (Poles) Per Deck | Decks or Gangs | Short Non-Short | Model | Max. Depth Behind Panel | Boxed Incl. Knob |
|----------------|------------------------|----------------|-----------------|-----------|-------------------------|------------------|
| 20 | 1 | 1 | N-S | SS-20-1 | 11/16" | \$4.00 |
| 6‡ | 2 | 1 | N-S | SS-20-1A* | 11/16" | 4.15 |
| 20 | 1 | 1 | S | SS-20-1S* | 11/16" | 4.05 |
| 20 | 1 | 2 | N-S | SS-20-2 | 1" | 4.75 |
| 20 | 1 | 2 | S | SS-20-2S* | 1" | 4.85 |
| 20 | 1 | 3 | N-S | SS-20-3 | 1-5/16" | 5.85 |
| 20 | 1 | 4 | N-S | SS-20-4 | 1-5/8" | 7.10 |
| 20 | 1 | 6 | N-S | SS-20-6 | 2-1/4" | 9.40 |

‡ 6-positions include 5 "live" and 1 "off"

* Standard items, but not regularly stocked; check with your electronic parts distributor.



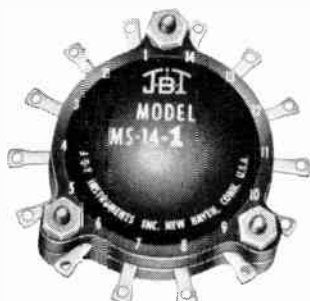
Net Effective Aug. 31, 1962

MOLDED SWITCHES

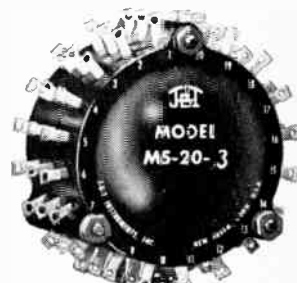


J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

FULLY-ENCLOSED INSTRUMENT AND TESTER-TYPE ROTARY SWITCHES Standard or Bonded Ruggedized Types—14- and 20-Position



MS-14-1



MS-20-3

- All moving contacts enclosed—minimizes dirt and corrosion; 3-post deck suspension for rigidity; double-grip collector arms for positive contact; and rectangular drive shaft for precision indexing.
- Interchangeable, electrically and mechanically, with SS-14 and SS-20 laminated switches.

FEATURES: See opposite page on SS types of laminated switches for current carrying capacity and voltage breakdown, also features such as heavy fine silver plating to meet 100-hour salt-spray testing; compact design; .007 ohm average contact resistance, and insulation resistance above

50 000 megohms. Besides fully enclosing all moving parts, the molded switches differ from the laminated construction in the design of the detent mechanism, but both types provide rigid 3-post construction and the positive indexing which clearly identify the quality of J-B-T switches. Test results are available on request covering certain procedures of MIL-E-5272A on insulation resistance; high and low temperature and temperature shock; humidity; altitude; salt spray; vibration; fungus resistance; rain, sand and dust; explosion; shock; and endurance values. (Ratings for MS-20-6DTS Types differ somewhat.)

BONDED RUGGEDIZED TYPES—As indicated in the tables, all molded rotary switches may be ordered with bonded construction as MS-14B or MS-20B types using cured laminations for ruggedization, shock-proofing and further enclosure. The cost is 35¢ per deck to catalog price of basic switch. Thus, 2-deck switch is MS-14B-2 at \$3.80. Bonding adds approximately 1/64" per deck.

BASIC 14-POSITION MOLDED (MS-14): 13 circuits and "off" per deck in 2-3/32" circle for compactness. Molded end cover regularly supplied. 1 1/2" Bar knob (KN-14) included with individually boxed units—not on bulk orders unless specified. Collector arm placed directly opposite to flat of shaft, so that knob pointer points to live contact. Common or "off" contact lug is rounded and bent down for ready identification. Extra decks add 19/64" per deck (or gang) to depth; for 7 decks and over add 1/2" to depth for shaft support and 1/64" per deck for bonding; if adjustable stop type also add 5/32" to length. Continuous rotation type supplied unless adjustable stop (type MAS) is ordered—r, on quantity orders, pre-set fixed stops (type MPS) are specified. Panel locator is available at extra cost on quantity orders when specified; on MS-14-4 and MS-14-6, extra hex nut and longer screw can be supplied for inverting supporting screw nearest common, thus converting into panel locator. Complete dimensions: for MS-14 switches, 1 to 6 decks, request Print SK-111, Rev. C, for 7 decks and over, SK-112, Rev. B.

BASIC 20-POSITION MOLDED (MS-20): 19 circuits and "off" per deck in 2-5/8" circle for compactness. Molded end cover regularly supplied. 2" Bar knob (KN-16) included with individually boxed units—not on bulk orders unless specified. Collector arm placed directly opposite to flat of shaft so that knob pointer points to live contact. Common or "off" contact lug is rounded and bent down for ready identification. Extra decks add 19/64" per deck to depth and, if 7 decks or more, 1/2" for shaft support and 1/64" per deck for bonding. Continuous rotation type supplied; on quantity order, pre-set fixed stops (type MPS) are available. Panel locator available at extra cost on quantity orders when specified; on MS-20-4 and MS-20-6, extra hex nut and longer screw can be supplied for inverting supporting screw nearest common, thus converting into panel locator. Complete dimensions: for MS-20 switches, 1 to 6 decks, request Print SK-113, Rev. C; for 7 decks and over, SK-114, Rev. B.

MOLDED SWITCHES, MS-14 TYPE 14-POSITION, 25° 43' INDEXING

| Pos. Per Circ. | Circ. (Poles) Per Deck | Decks or Gangs | Shorting Non-Shorting | STANDARD TYPE | | | BONDED-RUGGEDIZED | | |
|----------------|------------------------|----------------|-----------------------|----------------|--------------------|------------------|-------------------|-------------------------|------------------|
| | | | | Standard Model | Depth Behind Panel | Boxed Incl. Knob | Bonded Model | Max. Depth Behind Panel | Boxed Incl. Knob |
| 14 | 1 | 1 | N-S | MS-14-1 | 1 1/8" | \$2.45 | MS-14B-1 | 2 1/2" | \$2.80 |
| 14 | 1 | 1 | S | MS-14-1S | 1 1/8" | 2.50 | MS-14B-1S | 2 1/2" | 2.85 |
| 14 | 1 | 2 | N-S | MS-14-2 | 1 1/8" | 3.10 | MS-14B-2 | 1 3/32" | 3.80 |
| 14 | 1 | 2 | S | MS-14-2S* | 1 1/8" | 3.20 | MS-14B-2S* | 1 3/32" | 3.90 |
| 14 | 1 | 3 | N-S | MS-14-3 | 1 1/8" | 3.75 | MS-14B-3 | 1 1/2" | 4.80 |
| 14 | 1 | 4 | N-S | MS-14-4 | 1 3/8" | 4.85 | MS-14B-4 | 1 13/16" | 6.25 |
| 14 | 1 | 6 | N-S | MS-14-6 | 2 3/8" | 7.05 | MS-14B-6 | 2 1 1/32" | 9.15 |

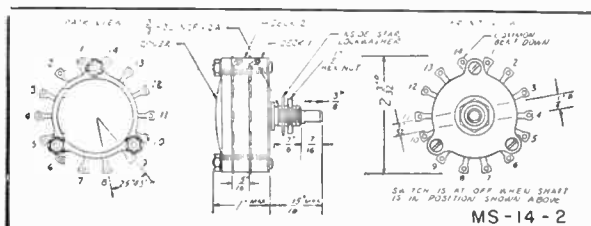
MOLDED SWITCHES, MS-20 TYPE 20-POSITION, 18° INDEXING

| | | | | | | | | | | |
|----|---|---|-----|---------|--------------|--------|----------|---------------|-----------|-------|
| 20 | 1 | 1 | N-S | MS-20-1 | 1 1/8" | \$3.10 | MS-20B-1 | 2 1/2" | 3.45 | |
| 20 | 2 | 6 | 1 | N-S | MS-20-1-6DT | 1 3/8" | 3.90 | MS-20B-1-6DT | 2 1/2" | 4.25 |
| 20 | 2 | 6 | 1 | S | MS-20-1-6DTS | 1 3/8" | 4.00 | MS-20B-1-6DTS | 2 1/2" | 4.35 |
| 20 | 1 | 1 | 1 | S | MS-20-1S | 1 1/8" | 3.15 | MS-20B-1S | 2 1/2" | 3.60 |
| 20 | 1 | 2 | 2 | N-S | MS-20-2 | 1 1/8" | 3.90 | MS-20B-2 | 1 3/32" | 4.60 |
| 20 | 2 | 6 | 2 | N-S | MS-20-2-6DT | 1 1/8" | 5.50 | MS-20B-2-6DT | 1 3/32" | 6.20 |
| 20 | 1 | 1 | 2 | S | MS-20-2S* | 1 1/8" | 4.00 | MS-20B-2S* | 1 3/32" | 4.70 |
| 20 | 1 | 3 | 3 | N-S | MS-20-3 | 1 1/8" | 5.00 | MS-20B-3 | 1 1/2" | 6.05 |
| 20 | 1 | 4 | 4 | N-S | MS-20-4 | 1 3/8" | 6.20 | MS-20B-4 | 1 13/16" | 7.60 |
| 20 | 1 | 6 | 6 | N-S | MS-20-6 | 2 3/8" | 8.60 | MS-20B-6 | 2 3 1/32" | 10.70 |

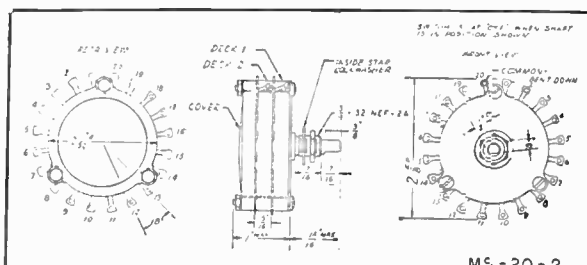
ADJUSTABLE STOP MOLDED SWITCHES, MAS-14 TYPE

| | | | | | | | | | | |
|----|---|---|-----|------------|----------|-----------|-------------|-----------|----------|-------|
| 14 | 1 | 1 | N-S | MAS-14-1 | 2 1/32" | \$3.10 | MAS-14B-1 | 1" | \$3.45 | |
| 14 | 1 | 1 | S | MAS-14-1S | 2 1/32" | 3.20 | MAS-14B-1S | 1" | 3.55 | |
| 14 | 1 | 2 | N-S | MAS-14-2 | 1 9/32" | 3.80 | MAS-14B-2 | 2 3/16" | 4.50 | |
| 14 | 1 | 2 | S | MAS-14-2S* | 1 3/32" | 3.95 | MAS-14B-2S* | 2 3/16" | 4.65 | |
| 14 | 1 | 3 | 3 | N-S | MAS-14-3 | 1 13/32" | 4.60 | MAS-14B-3 | 1 13/32" | 5.65 |
| 14 | 1 | 4 | 4 | N-S | MAS-14-4 | 1 29/32" | 5.70 | MAS-14B-4 | 1 11/16" | 7.10 |
| 14 | 1 | 6 | 6 | N-S | MAS-14-6 | 2 1 1/32" | 8.00 | MAS-14B-6 | 2 5/8" | 10.10 |

IMPORTANT: Enclosed adjustable stop mechanism increases switch length by 5/32" behind panel; decreases effective bushing length by 1/32"; and shortens shaft extending from bushing by 1/16". Rings RI-23 and RI-24 are supplied. For more than 6 decks, request prices. *Standard items, but not regularly stocked; check with your electronic parts distributor. Non-Shorting—Break before make. Shorting—Make before break.



Note: MS Switches now manufactured with deck depth of 19/64" instead of 5/16" as shown.



Net Effective Aug. 28, 1961

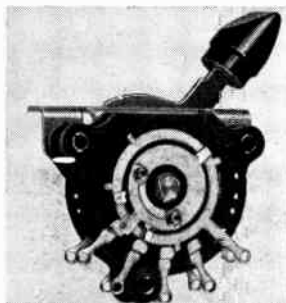


SPECIAL PURPOSE SWITCHES

J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

LEVER ACTION SWITCHES AND UNIQUE MOLDED SWITCHES

6-, 5-, 4-, and 3-Position Lever Switches—6-Pole DT per Deck—Time Saving Ring-Contact Rotaries



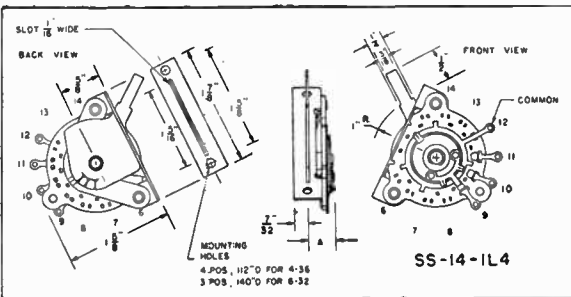
SS-14-IL4F-2
Two-Deck Lever-Action Switch

SINGLE DECK, POSITIVE INDEXING, 3- and 4-POSITION. These lever switches are derived from the J-B-T SS-14 instrument-type rotaries. Specified for tube checkers, inspection equipment, communications systems, control consoles, and other uses where quality is important. 4-position types are interchangeable with 3-position except in length of throw, and provide for an extra circuit. Individually-boxed switches come with mounting hardware and KN-17 knob as illustrated; bulk shipments, without knobs. Spacing between centers: recommended 3/4"; minimum 9/16". For dimensions, see drawing below. **Spring Return Type.** Single deck, 3-position switches may also be ordered with spring return. Lever returns to position 11, giving momentary action at positions 9 and 10.

Two Deck. Same basic construction and packaging as single deck. Spacing between centers: recommended, 15/16"; minimum, 13/16". 3/8" between decks matches TV twinlead wires.

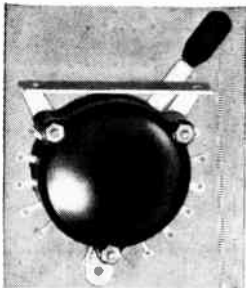
| Positions Per Circuit | Circ. (Poles) Per Deck | Decks or Gangs | Short. Non-Short | Stand. Contact Pos. | Model | Boxed Incl. Knob |
|-----------------------|------------------------|----------------|------------------|---------------------|---------------|------------------|
| 3, no "off" | 1 | 1 | N-S | A | SS-14-IL3 | \$1.00 |
| 3, no "off" | 2 | 1 | N-S | B | SS-14-IL3A | 1 11" |
| 3, no "off" | 1 | 1 | S | A | SS-14-IL3S | 1.05 |
| 3, no "off" | 1 | 1 | N-S | A | SS-14-IL3R† | 1.15 |
| 3, no "off" | 1 | 1 | S | A | SS-14-IL3S-R† | 1.20 |
| 3, no "off" | 1 | 2 | N-S | A | SS-14-IL3-2 | 1.70 |
| 3, & "off" | 1 | 1 | N-S | C | SS-14-IL4 | 1.10 |
| 4, no "off" | 1 | 1 | N-S | D | SS-14-IL4F | 1.10 |
| 4, no "off" | 1 | 2 | N-S | D | SS-14-IL4F-2 | 1.90 |
| 3, & "off" | 1 | 1 | S | C | SS-14-IL4S | 1.15 |

*A—common at 12, contacts at 9, 10, 11; B—common at 9, 10, contacts at 6, 7, 8, 12, 13 14; C—common and off at 12, contacts at 9, 10, 11; D—common at 12, contacts at 8, 9, 10, 11.
†—Spring Return.



Dimensions A = 13/32" on 1-deck Switches; 23/32" on 2-deck. Non-shorting type with standard lever length is shown.

5-Position Lever Switch

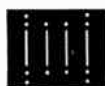


MOLDED 5- and 6-POSITION, POSITIVE-INDEXING. Designers and servicemen now have available 5 or 6 live positions, two circuits per deck, in an enclosed lustrous black molded construction. Both switches are adapted from the MS-20 series and have similar electrical characteristics. Besides sound systems, these models can simplify circuitry for control, inspection, test, experimental, and hobby purposes. Individually-boxed switches come with mounting hardware and KN-20 threaded black molded knob; bulk shipments, without knobs. For mounting data see SK-64 on 5-position and SK-119 on 6-position.

| | |
|---|--------|
| MS-20-IL5A-1 , 5-position, 2-circuit (1 deck) | \$3.25 |
| MS-20-IL6A-1 , 6-position, 2-circuits (1-deck) | 3.50 |



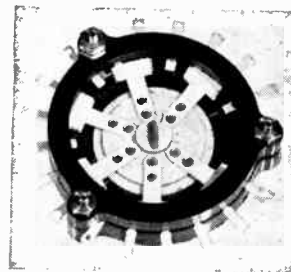
Spare Knobs. Push-on type are:
KN-17, black, pointed design, metal insert regularly supplied \$0.14
KN-18, walnut, same as KN-1906
KN-19, black, round, flat-type, no insert needed06
KN-20, black, threaded type, for molded lever switches14



MOUNTING PLATES. These .035" stamped steel plates in black crackle finish simplify alignment of standard 3-position IL3 single deck models. Spacing between slots, 3/4"; all plates 2 5/8" high.
PL-36, 3/4" wide, for one switch \$0.30
PL-37, 1 1/2" wide, for two switches40
PL-38, 3" wide, for four switches (illustrated)45

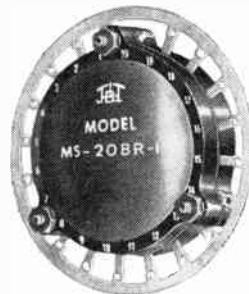
6-POLE DOUBLE-THROW PER DECK — 1 OR 2 DECKS

6-Pole Switches. Double-throw switching of 6 circuits per deck through two 18° positions (36° throw) becomes easy with this unique rotary - type molded switch. It is fully enclosed and similar in appearance to the molded MS-20 switches on page 1291. The illustration at the right shows internal construction with back protective cover cut away. Circuit arrangement is designated on the metal front of the switch. Quality features include .007 ohm average contact resistance; heavy, fine-silver plating for 100-hour salt spray test; double-grip collector arms. Now available in non-shorting (break before make) and shorting (make before break) 2 3/8" maximum diameter, one deck, 13/16" behind panel; two deck, 1 1/8" behind panel. DTS Shorting Types are rated 1500 volts R.M.S. between contacts and ground, 1000 volts R.M.S. between contacts.



| | |
|---|--------|
| MS-20-1-6DT , 6-pole, double-throw (1 deck), non-shorting | \$3.90 |
| MS-20-1-6DTS , 6-pole, double-throw (1 deck), shorting | 4.00 |
| MS-20-2-6DT , 6 pole, double-throw (2 decks), non-shorting | 5.50 |

NEW IDEA: RING-CONTACT SWITCHES



Perfect connections between adjacent switch contacts are assured because this distinctive design needs no soldered jumpers. An integral ring which holds together all the contacts on each deck can be snipped wherever wanted—to save valuable time in development and pilot runs. For production lots, J-B-T can supply various combinations of joined and unjoined contacts to slash the user's assembly costs and build-in quality. The ring-contact adds 7/32" o.d. to the MS-14 or MS-20 types listed on page 1291 (prints SK-88 and SK-89 respectively). The MS-20BR-1 shown here also has

bonded (suffix B) construction. Switches listed below are normally available. Others such as 3-decks, 6-decks, shorting, etc., require substantial lead time.

RING-TYPE MOLDED SWITCH MS-14R

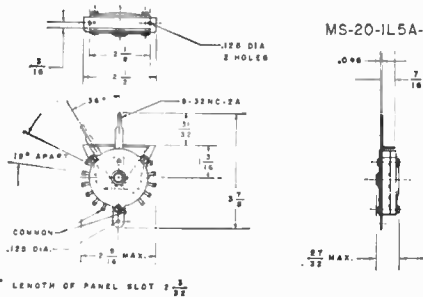
(14-position; angular indexing 25° 43'; o.d. 2-5/16")

| Model | Positions Per Circuit | Circuits Per Deck | Decks or Gangs | Shorting | Depth Behind Panel | Boxed Including Knob |
|----------|-----------------------|-------------------|----------------|----------|--------------------|----------------------|
| MS-14R-1 | 14 | 1 | 1 | N-S | 13/16" | \$2.75 |
| MS-14R-2 | 14 | 1 | 2 | N-S | 1 1/8" | 3.65 |
| MS-14R-4 | 14 | 1 | 4 | N-S | 1 3/4" | 5.90 |

RING-TYPE MOLDED SWITCH MS-20R

(20-positions; angular indexing, 18°; o.d. 2-27/32")

| | | | | | | |
|----------|----|---|---|-----|--------|--------|
| MS-20R-1 | 20 | 1 | 1 | N-S | 13/16" | \$3.40 |
| MS-20R-2 | 20 | 1 | 2 | N-S | 1 1/8" | 4.45 |
| MS-20R-4 | 20 | 1 | 4 | N-S | 1 3/4" | 7.25 |



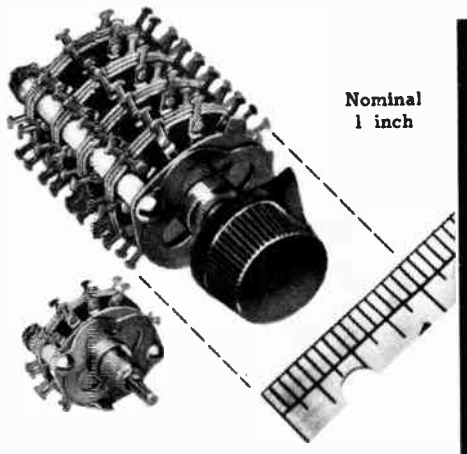
KNOB AND MOUNTING PLATES FOR LEVER SWITCHES

..... SUB-MINIATURE SWITCHES



J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

NEW! HIGH RELIABILITY SR05 TYPES TO MIL-S-3786A — ALSO V- AND X- SERIES
 Versatile 12-Position—Patented Single- and Dual-Duty Deck—Rotary and Lever Types



Nominal
1 inch

- 30° Indexing
- MIL Materials and Construction
- Accelerated Snap-Action Detent
- Unusual Versatility — More Contacts per Deck
- Precision-built for Low Current Usage where Size, Weight, reliability Are Important.

Note: Terminals shown now superseded by terminals with hole for two 0.032" dia. wires.

USE— For test equipment, airborne and transistorized equipment, geophysical apparatus, and other miniaturized electrical and electronic devices.

TYPES — Military Styles SR05 are numbered for specific characteristics stipulated in MIL-S-3786A, such as Temperature-Life C, Shock Type H or M, and Vibration Grade 2. 1/4" shaft and non-turn device mandatory. **V Type Switches** are similar in construction to SR05 but do not undergo full military test procedures and have non-turn device optional. **X Type Switches** use the same materials as V type switches but have 1/8" dia. stainless steel shaft with 1/4" dia. bushing 1/4" long; non-turn device optional.

POSITIONS — Series 7000 in Any of the Above Types: Up to 12 live switching contacts on the rear of the deck, and all pole contacts on the front of the same deck. — Series 5000 in Any of the Above Types: Up to 11 switching contacts and one pole contact on both front and rear of the same dual-duty deck.

DECKS—Series 7000: 1 to 6 decks, standard. Series 5000: 1 to 4 decks, standard.

LEVER SERIES (L Types): Made as V-7000 or V-5000 series, one to four decks.

KNOBS — Supplied with individually boxed switches on X and V types; not supplied on SR05 because separate military specification applies.

SPECIFICATIONS & TEST DATA ON SR05 MILITARY STYLE

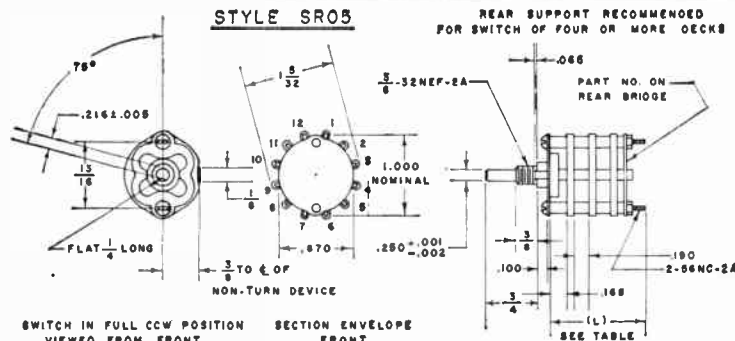
Current carrying capacity: 5 amps at standard ambient conditions.
Current breaking capacity: 750 MA at 30 VDC; 300 MA at 120 VDC; 1 AMP at 115 VAC Non-Inductive.
Initial Contact Resistance: .005 ohms max.
Contact Resistance: Tested in accordance with MIL-STD-202B-Method 307, which require Initial—10 milliohms; After Moisture Resistance Test—15 milliohms; After Life Test— 20 milliohms.
Materials: Terminals (double-wiping): gold plated 90% silver alloy. **Rotor Contact:** 90% Silver Alloy. **Shaft & Frame:** Stainless steel, passivated.
Insulation: Wafer, glass epoxy laminate to MIL-18177C GEB; Rotor, ceramic to MIL-I-10A.
Life Rotational: Temperature-Life Characteristic C of MIL-S-3786A, 25,000 rotational cycles at 10 per minute. Temperature range -65°C to +125°C.; 25,000 cycles at 70,000 feet altitude.
Vibration: Grade 2 of Table III MIL-S-3786A 10 to 500 cps. Tested in accordance with MIL-STD-202B, Method 204, Test Condition A.
Shock: Shock type H, high impact of Table IV of MIL-S-3786A. Tested in accordance with MIL-STD-202, Method 207. Mating contacts did not open for more than 5 milliseconds. Shock type M, medium impact requires separate tests.

| DECKS | Circ. (Poles) per Deck | Pos. per Pole | Shorting, Non-Shorting | SHAFT DIA. | V-TYPE OR X-TYPE | | SR05-TYPE | |
|---------------------|------------------------|---------------|------------------------|------------|------------------|--------|----------------------|--------|
| | | | | | Model | Price | Model | Price |
| ONE DECK | 1 | 12 | N-S | 1/4" | V-71121N | \$4.90 | V-71121N-SR05* | \$5.25 |
| | 1 | 12 | S | 1/4" | V-71121S | 4.90 | V-71121S-SR05* | 5.25 |
| | 1 | 12 | N-S | 1/8" | X-71121N | 4.70 | — | — |
| | 1 | 12 | S | 1/8" | X-71121S | 4.70 | — | — |
| | 2 | 6 | N-S | 1/4" | V-72061N | 5.00 | V-72061N-SR05* | 5.35 |
| | 4 | 3 | N-S | 1/4" | V-74031N | 5.20 | V-74031N-SR05* | 5.50 |
| ONE DUAL DUTY DECK | 2 | 11 | N-S | 1/4" | V-52111N | 5.25 | V-52111N-SR05* | 5.60 |
| | 2 | 11 | S | 1/4" | V-52111S | 5.25 | V-52111S-SR05* | 5.60 |
| | 4 | 5 | N-S | 1/4" | V-54051N | 5.35 | V-54051N-SR05* | 5.70 |
| | 4 | 5 | S | 1/4" | V-54051S | 5.35 | V-54051S-SR05* | 5.70 |
| | 8 | 2 | N-S | 1/4" | V-58021N | 5.55 | V-58021N-SR05* | 5.90 |
| TWO DECKS | 1 | 12 | N-S | 1/4" | V-71122N | 6.75 | V-71122N-SR05* | 7.20 |
| | 1 | 12 | S | 1/4" | V-71122S | 6.75 | V-71122S-SR05* | 7.20 |
| | 1 | 12 | N-S | 1/8" | X-71122N | 6.45 | — | — |
| | 2 | 6 | N-S | 1/4" | V-72062N | 6.95 | V-72062N-SR05* | 7.40 |
| | 4 | 3 | N-S | 1/4" | V-74032N | 7.40 | V-74032N-SR05* | 7.90 |
| TWO DUAL DUTY DECKS | 2 | 11 | N-S | 1/4" | V-52112N | 8.10 | V-52112N-SR05* | 8.65 |
| | 2 | 11 | N-S | 1/8" | X-52112N | 7.75 | — | — |
| | 4 | 5 | N-S | 1/4" | V-54052N | 8.30 | V-54052N-SR05* | 8.85 |
| THREE DECKS | 1 | 12 | N-S | 1/4" | V-71123N | 8.85 | V-71123N-SR05* | 9.45 |
| | 2 | 6 | N-S | 1/4" | V-72063N | 9.15 | V-72063N-SR05* | 9.70 |
| | 4 | 3 | N-S | 1/4" | V-74033N | 9.85 | V-74033N-SR05* | 10.45 |
| FOUR DECKS | 1 | 12 | N-S | 1/4" | V-71124N | 11.95 | V-71124N-SR05* | 12.70 |
| | 1 | 12 | N-S | 1/8" | X-71124N | 11.40 | — | — |
| SIX DECKS | 1 | 12 | N-S | 1/4" | V-71126N | 16.05 | V-71126N-SR05* | 17.10 |
| ONE DECK LEVER | 4 | 3 | N-S | — | VL-74031N | \$5.15 | Levers not in Specs. | |
| | 2 | 3 | N-S | — | VL-72031N | 5.05 | " | " |
| | 8 | 2 | N-S | — | VL-58021N | 5.35 | " | " |

* Typical MIL-S-3786-A complete number is V-71121N-SR05N30C2HP, unless specifically ordered otherwise. Temperature-Life Characteristic C also will meet Characteristic A or B requirements; Vibration Grade Symbol 2 will also meet Symbol 1 requirements. Shock Type H for High Impact does not automatically cover Type M, Medium Impact, which can be supplied when specified. For full specifications and test data, see Bulletin SM-32A, which covers many additional models.

MAXIMUM DEPTH (L) BEHIND PANEL, INCHES

| | 1-Deck | 2-Decks | 3-Decks | 4-Decks | 5-Decks | 6-Decks |
|--------------------|--------|---------|---------|---------|---------|---------|
| Series V-7000-SR05 | 0.640 | 0.918 | 1.196 | 1.720 | 2.000 | 2.276 |
| Series V-5000-SR05 | 0.640 | 0.918 | 1.196 | 1.720 | — | — |



Net Effective Aug. 31, 1962



TOGGLE SWITCHES.....

J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

HEAVY DUTY - SINGLE POLE, DOUBLE POLE AND 4-POLE - GOVERNMENT QUALITY

Designed for MIL-S-3950A, Series MS25068, MS35058 and MS35059, JAN-S-23, DDAX Series and MIL-S-21195A (Ships)

Overload... Tested to make and break at 50% overload for brief periods. To assure performance of these switches with their comparatively heavy current ratings, J-B-T features ample size **solid coin silver contacts** and **rocker arms** instead of clad or brazed construction. Contact resistance is under 0.005 ohms. High dielectric exceeds 1000 volts r.m.s. at 60 cycles at sea level.

Cold and Heat... Specialized aircraft lubricant facilitates mechanical and electrical operation at -85°F to 185°F.

Vibration and Shock... No momentary make or break or mechanical damage during severe shake and 75 G's drop tests.

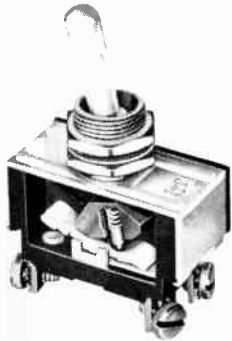
High Humidity... Materials, dull finish on outside metal parts (per Armed Services specifications) and lubricant enable switches to withstand tropical climates.

Salt... Meet 100 hour Salt-Spray Test QQ-M-151a which is twice the required minimum of JAN-S-23.

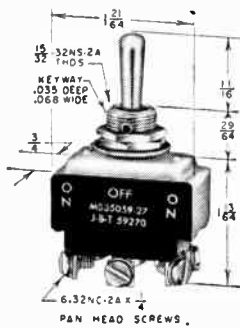
Rugged Service... Generously proportioned and substantially built for extra life. For instance, both screw-type terminals and solder lugs easily withstand a 30 pound pull test. Operating cycles far in excess of minimum specified as acceptable. Quality standards are maintained by in-plant production testing.

20 AMP - HEAVY DUTY - This page covers 130 models of heavy duty toggle switches nominally rated at 20 amp. at 125 VAC, and 10 amp., 250 VAC, and other ratings where specified in MIL-S-3950A. **6 Amp. Medium Duty** are described on next page.

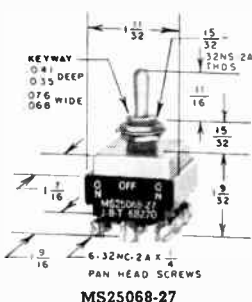
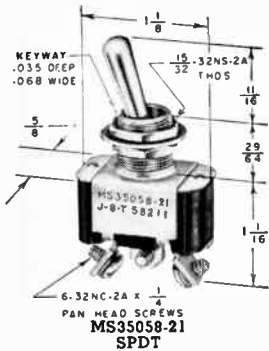
4-POLE CONSTRUCTION - To exceed the rigorous electrical endurance requirements of MIL-S-3950A, J-B-T switch bodies in this MS25068-series are molded of a compound having high arc-resistance and low shrinkage. This superior material is readily identified by its light brown color, printed in silver. The 8 models in this family use single-hole mounting with single-throw or double-throw action as designated in the table below. All have silicone rubber bushing seals. Electrical Characteristics and Current Values are described in Bulletin TS-6D.



*Cut-away view showing J-B-T's use of solid coin silver rocker arms and contacts.



MS35059-26
-27, -31
(DPDT, screw terminals)



MS25068-27
4PDT

For Electrical Characteristics, Current Values, and Full Information, Ask For Bulletin TS-6D. For Typical Prices, See Next Page.

| CIRCUIT DIAGRAM AND TYPE | MODEL NUMBER | | | | | | CIRCUIT ARRANGEMENT | | |
|------------------------------|---|--|---|--|--|--|-------------------------------------|--|---|
| | SCREW TERMINAL | | | SOLDER LUG | | | KEYWAY | | |
| | MIL-S-3950A See Notes A & B | JAN-S-23 & MIL-S- 21195A | MIL-S-6745 See Note A | MIL-S-3950 See Notes A & B | JAN-S-23 & MIL-S-21195A (Ships) | MIL-S-3950 See Note A | A | B | C |
| SPST 2 terminals | MS35058-22 MS35058-29 MS35058-30 MS35058-24 MS35058-28 MS35058-25 | ST40A ST40B ST40C # # # | AN3021-2 AN3021-9 AN3021-8 AN3021-10 AN3021-11 AN3021-12 | # # # MS35058-1 MS35058-2 MS35058-3 | ST42A ST42B ST42C # # # | MS35058-9 MS35058-10 MS35058-11 MS35058-12 MS35058-13 MS35058-14 | On On Off On None On | None None None Off Off Off* | Off On* None None On* None |
| SPDT 3 terminals | MS35058-23 MS35058-21 MS35058-26 MS35058-27 MS35058-31 | ST40D ST40E ST40F ST40G ST40H # | AN3021-3 AN3021-1 # AN3021-7 AN3021-5 AN3021-6† | MS35058-4 MS35058-5 MS35058-6 MS35058-7 MS35058-8 # | ST42D ST42E ST42F ST42G ST42H # | MS35058-15 MS35058-16 MS35058-17 MS35058-18 MS35058-19 # | On On On On* On On | None None None Off Off Off | On On On* On* On* On* |
| DPST 4 terminals | MS35059-22 MS35059-29§ MS35059-30§ MS35059-24 MS35059-28 MS35059-25§ | ST50K ST50L ST50M # # # | AN3027-2 AN3027-4§ AN3027-5§ AN3027-9 AN3027-11 AN3027-10§ | # # # MS35059-1 MS35059-2 MS35059-3§ | ST52K ST52L ST52M # # # | MS35059-9 MS35059-10§ MS35059-11§ MS35059-12 MS35059-13 MS35059-14§ | On On Off On None On | None None None Off Off Off* | Off Off* On* None On* None |
| DPDT 6 terminals | MS35059-23 MS35059-21 MS35059-26§ MS35059-27§ MS35059-31§ | ST50N ST50P ST50R ST50S§ ST50T§ | AN3027-3 AN3027-1 AN3027-6§ AN3027-7§ AN3027-8§ | MS35059-4 MS35059-5 MS35059-6§ M*35059-7§ M*35059-8§ | ST52N ST52P ST52R ST52S§ ST52T§ | MS35059-15 MS35059-16 MS35059-17§ MS35059-18§ MS35059-19§ | On On On On* On | None Off None Off Off | On On On* On* On* |
| 4 PST 8 terminals | MS25068-24 MS25068-25 MS25068-28 | | | | | | On On None | Off Off* Off | None None On* |
| 4 PDT 12 terminals | MS25068-21 MS25068-23 MS25068-26 MS25068-27 MS25068-31 | | | | | | On On On On* On | Off None None Off Off | On On On* On* On* |

#Not included in this specification
†AN3021-6 same as AN3021-5 with jumper
§Same dimensions as MS35059-26, illustrated.

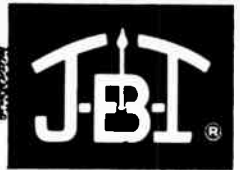
NOTE A: MS and AN types use internal sand and dust toggle seal and other high performance features involving extra cost over ST types. MS types to MIL-S-3950A have internal toggle seal to meet 15 ft. water submersion test. MIL-S-3950 models are superseded by MIL-S-3950A models.

NOTE B: For heavy-duty switches in the MS25068, MS35058 and MS35059 series, MIL-S-3950A calls for SCREW TERMINALS ONLY. These terminals have SOLDERABLE FINISH and may be soldered after removal of screw. For medium-duty switches in the MS25068 and MS-25100 series on the next page, MIL-S-3950A calls for solder terminals only. Future procurement for military use is to be only to MIL-S-3950A, but many parts lists still refer to ST switches to JAN-S-23 and MIL-S-21195A (Ships).

*Momentary position

Net Effective Aug. 31, 1962

TOGGLE SWITCHES



J-B-T INSTRUMENTS, INC., NEW HAVEN 8, CONN.

MEDIUM DUTY — SINGLE & DOUBLE POLE — GOVERNMENT QUALITY

Designed for MIL-S-3950A, Series MS25098 and MS25100; JAN-S-23, DDAX Series and MIL-S-21195A (Ships)

TYPICAL PRICES
JAN & MIL Types Including
Unique J-B-T Reliability

| Model | 1 | 2-9 | 10-29 |
|------------|--------|--------|--------|
| ST12A | \$1.45 | \$.87 | \$.70 |
| ST12B | 1.65 | .99 | .79 |
| ST12C | 1.65 | .99 | .79 |
| ST12D | 1.65 | .99 | .79 |
| ST13A | 1.45 | .87 | .70 |
| ST13D | 1.65 | .99 | .79 |
| ST16A | 1.45 | .87 | .70 |
| ST16B | 1.65 | .99 | .79 |
| ST16C | 1.65 | .99 | .79 |
| ST16D | 1.65 | .99 | .79 |
| ST17A | 1.45 | .87 | .70 |
| ST17D | 1.65 | .99 | .79 |
| ST22K | 2.06 | 1.24 | .99 |
| ST22L | 2.26 | 1.36 | 1.09 |
| ST22M | 2.26 | 1.36 | 1.09 |
| ST22N | 2.26 | 1.36 | 1.09 |
| ST23K | 2.06 | 1.24 | .99 |
| ST23N | 2.26 | 1.36 | 1.09 |
| ST26K | 2.06 | 1.24 | .99 |
| ST26L | 2.26 | 1.36 | 1.09 |
| ST26M | 2.26 | 1.36 | 1.09 |
| ST26N | 2.26 | 1.36 | 1.09 |
| ST27K | 2.06 | 1.24 | .99 |
| ST27N | 2.26 | 1.36 | 1.09 |
| ST40A | 1.68 | 1.34 | 1.01 |
| ST40B | 1.84 | 1.47 | 1.10 |
| ST40C | 1.84 | 1.47 | 1.10 |
| ST40D | 2.02 | 1.62 | 1.21 |
| ST40E | 2.02 | 1.62 | 1.21 |
| ST40F | 2.18 | 1.74 | 1.31 |
| ST40G | 2.18 | 1.74 | 1.31 |
| ST40H | 2.18 | 1.74 | 1.31 |
| ST42A | 1.58 | 1.26 | .95 |
| ST42B | 1.73 | 1.38 | 1.04 |
| ST42C | 1.73 | 1.38 | 1.04 |
| ST42D | 1.87 | 1.50 | 1.12 |
| ST42E | 1.87 | 1.50 | 1.12 |
| ST42F | 2.05 | 1.64 | 1.23 |
| ST42G | 2.05 | 1.64 | 1.23 |
| ST42H | 2.05 | 1.64 | 1.23 |
| ST50K | 2.08 | 1.66 | 1.25 |
| ST50L | 2.44 | 1.95 | 1.46 |
| ST50M | 2.44 | 1.95 | 1.46 |
| ST50N | 2.44 | 1.95 | 1.46 |
| ST50P | 2.44 | 1.95 | 1.46 |
| ST50R | 2.77 | 2.22 | 1.66 |
| ST50S | 2.77 | 2.22 | 1.66 |
| ST50T | 2.77 | 2.22 | 1.66 |
| ST52K | 1.89 | 1.51 | 1.13 |
| ST52L | 2.12 | 1.70 | 1.27 |
| ST52M | 2.12 | 1.70 | 1.27 |
| ST52N | 2.12 | 1.70 | 1.27 |
| ST52P | 2.12 | 1.70 | 1.27 |
| ST52R | 2.46 | 1.97 | 1.48 |
| ST52S | 2.46 | 1.97 | 1.48 |
| ST52T | 2.46 | 1.97 | 1.48 |
| MS25068-21 | 6.10 | 4.88 | 3.66 |
| MS25068-23 | 7.30 | 5.84 | 4.38 |
| MS25068-24 | 5.25 | 4.20 | 3.15 |
| MS25068-25 | 6.00 | 4.80 | 3.60 |
| MS25068-26 | 6.45 | 5.16 | 3.87 |
| MS25068-27 | 6.58 | 5.26 | 3.95 |
| MS25068-28 | 6.00 | 4.80 | 3.60 |
| MS25068-31 | 6.58 | 5.26 | 3.95 |
| MS25098-22 | 2.30 | 1.38 | 1.10 |
| MS25098-23 | 2.64 | 1.58 | 1.27 |
| MS25098-29 | 2.96 | 1.78 | 1.42 |
| MS25098-30 | 2.96 | 1.78 | 1.42 |
| MS25100-22 | 3.30 | 1.98 | 1.58 |
| MS25100-23 | 3.58 | 2.15 | 1.72 |
| MS25100-29 | 3.84 | 2.30 | 1.84 |
| MS25100-30 | 3.84 | 2.30 | 1.84 |
| MS35058-21 | 2.44 | 1.95 | 1.46 |
| MS35058-22 | 2.06 | 1.65 | 1.24 |
| MS35058-23 | 2.44 | 1.95 | 1.46 |
| MS35058-24 | 2.10 | 1.68 | 1.26 |
| MS35058-25 | 2.40 | 1.92 | 1.44 |
| MS35058-26 | 2.58 | 2.06 | 1.55 |
| MS35058-27 | 2.63 | 2.10 | 1.58 |
| MS35058-28 | 2.40 | 1.92 | 1.44 |
| MS35058-29 | 2.30 | 1.84 | 1.38 |
| MS35058-30 | 2.30 | 1.84 | 1.38 |
| MS35058-31 | 2.63 | 2.10 | 1.58 |
| MS35059-21 | 2.99 | 2.39 | 2.09 |
| MS35059-22 | 2.58 | 2.06 | 1.81 |
| MS35059-23 | 2.99 | 2.39 | 2.09 |
| MS35059-24 | 2.94 | 2.35 | 2.06 |
| MS35059-25 | 3.15 | 2.52 | 2.21 |
| MS35059-26 | 3.40 | 2.72 | 2.38 |
| MS35059-27 | 3.40 | 2.72 | 2.38 |
| MS35059-28 | 3.19 | 2.55 | 2.23 |
| MS35059-29 | 3.03 | 2.42 | 2.12 |
| MS35059-30 | 3.03 | 2.42 | 2.12 |
| MS35059-31 | 3.40 | 2.72 | 2.38 |



↑ Cut-away view of self-wiping construction showing outside of double-grip moving contact

Like other J-B-T Switches, this series has quality as its first objective. J-B-T builds-in quality by doing its own design and manufacture, and by a continuous program of in-plant tests of production samples for quality assurance.

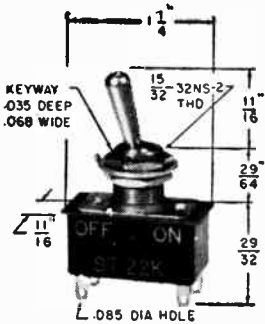
Typical Applications . . . This series is popular in communications circuits, electronic instruments, dry circuits (but with gold plated current carrying parts recommended for extremely low currents and voltages), measuring devices, miniature motor controls, and computers.

Self-Wiping Design . . . Even after long storage, a few flips of this switch bring the contact resistance well under the 0.01 ohm requirement of military specifications. As illustrated, the double-grip moving contact of phosphor bronze heavily silver plated wipes over the stationary contacts of brass, also heavily silver plated.

Sound Electrical Values . . . Tested to meet 50% overload for brief periods. High dielectric exceeds 1000 volts r.m.s., 60 cycles at sea level.

Exceptional Environmental Characteristics . . . Functions well throughout a range of -85°F to 185°F, with materials, plating, lubricant, and mechanical features to withstand tropical climates. Dull finish plating as stipulated in specifications meets 100 hour salt-spray test QQ-M-151a (twice the required minimum). Other plating quoted on request.

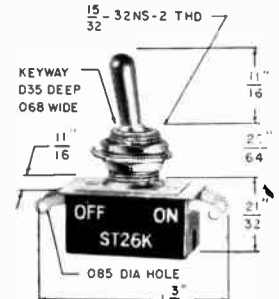
Rugged Construction . . . Solder type hot tin dipped terminals as used throughout this series withstand 5 lb. pull test . . . enclosed molded body has no unused holes for side terminals . . . no momentary make or break or mechanical damage during severe shake tests and 75 G's drop test.



ST13A, D ST12A, B, C, D
ST23K, N ST22K, L, M, N



29/64" Bushing:
ST16A, B, C, D
ST26K, L, M, N



1/4" Bushing:
ST17A, D
ST27K, N

For Electrical Characteristics, Current Values, and Full Information. Ask for Bulletin TS 6D

| CIRCUIT DIAGRAM AND TYPE | TERMINALS | | MODEL NUMBER (Solder Lugs Only) | | | CIRCUIT ARRANGEMENT | | |
|--------------------------|-----------|--------|---|-----------------------------------|------------|---------------------|-------|-----------|
| | SIDE | BOTTOM | MIL-S-3950A | JAN-S-23 and MIL-S-21195A (Ships) | MIL-S-3950 | | | |
| | — | 2 | 29 64" Bushing See Note A & B on page 1294 | MS25098-22 | ST12A | ST13A | | |
| | — | 2 | | MS25098-29 | ST12B | — | | MS25098-1 |
| | — | 2 | | MS25098-30 | ST12C | — | | MS25098-2 |
| | 2 | — | | — | ST16A | ST17A | | — |
| | 2 | — | | — | ST16B | — | | — |
| | 2 | — | | — | ST16C | — | | — |
| | — | 3 | MS25098-23 | ST12D | ST13D | MS25098-4 | | |
| | 2 | 1 | | — | ST16D | | ST17D | — |
| | — | — | | — | — | | — | — |
| | — | 4 | MS25100-22 | ST22K | ST23K | MS25100-1 | | |
| | — | 4 | | MS25100-29 | — | | — | MS25100-2 |
| | — | 4 | | MS25100-30 | ST22M | | — | MS25100-3 |
| | 4 | — | | — | ST26K | | ST27K | — |
| | 4 | — | | — | ST26L | | — | — |
| | 4 | — | | — | ST26M | | — | — |
| | — | 6 | MS25100-23 | ST22N | ST23N | MS25100-4 | | |
| | 4 | 2 | | — | ST26N | | ST27N | — |
| | — | — | | — | — | | — | — |

Net effective Aug. 31, 1962.

J-B-T INSTRUMENTS, INC.
NEW HAVEN 8, CONN.

Electrical Instruments, Testers
and Electronic Components

For other J-B-T Products,
see Sec. 2900

LICON® Precision Switches

LICON TYPE 10 PRECISION BASIC SWITCHES

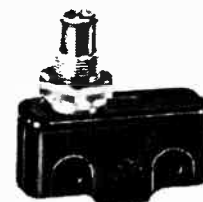
Features extremely sensitive operation plus long life and high electrical rating. Over 10,000,000 actuations by test. Movement differential of .001 on standard types. 15 amp; 125, 250, 460V A.C. Meets government specs. ½ amp; 125V D.C. U.L. Approved.



TYPE 10-122



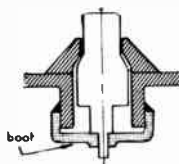
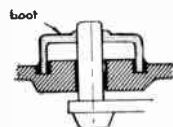
TYPE 10-222



TYPE 10-322

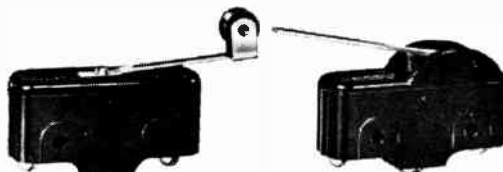


TYPE 10-422

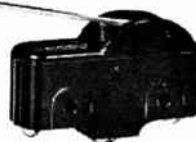


Sealing against moisture, dirt and other harmful elements can be provided by a neoprene boot for most type 10 models without altering switch characteristics. Specify by adding 301 to part number, i.e., 10-122301.

Type 10 switches shown are normally supplied with .020" contact gaps with 15 amp rating. Gaps of .010" to .070" and ratings to 20 amps are also available.



TYPE 10-522



TYPE 10-622



TYPE 10-72237



TYPE 10-922



TYPE 10-822



TYPE 10-722

TYPE 11 ACTUATORS



70-104



70-301

LICON TYPE 11 PRECISION BASIC SWITCHES

Type 11 combines small size, long life, high rating and double break in one reliable package. Government approved. Rated 10 amps, 30V D.C., 125 or 250V A.C. U.L. Approved. Tested over 20,000,000 life cycles.



TYPE 11-104



TYPE 11-204



TYPE 11-304

RESET MODEL AVAILABLE WITH END OR SIDE TERMINALS

TYPE 11 ACTUATORS



70-302



70-201

LICON TYPE 14 HEAVY DUTY SNAP-ACTION SWITCHES



TYPE 14-124

Rugged, dependable Type 14 switches feature 30,000,000 life cycles by test. Rated 20 amps, 250V A.C. Normally supplied with .020" movement differential. Available with .010" to over .040" movement differential, in choice of mounting means and terminal designs. Operating force normally 12 oz. but can be from 100 grams to 2 lbs. Best suited to industrial and machine tool applications.



TYPE 14-12403

BOTH SWITCH TYPES AVAILABLE IN RESET MODELS

LICON® Precision Switches

LICON TYPE 16 SUBMINIATURE SWITCHES

TYPE 16 ACTUATORS



70-2510 OIL TIGHT PUSHBUTTON
Available in round or hex head in aluminum, Red, Yellow, Black, Green, Orange, Blue or Olive Drab. Also available in DPDT as 70-2520.



70-223 PANEL MOUNT PUSHBUTTON
15/32" Bushing—White nylon plunger or specify color in 2, 3 or 4 pole.



70-222 MINIATURE PUSHBUTTON
3/4" .20 threaded bushing, also with 5/32" overtravel as type 70-226.

Type 16 offers extremely long life (over 20,000,000 cycles) and big switch performance in a subminiature unit—rated 10 amps 30 VDC inductive (L/R = .026) yet measures only 1/4" thick and 25/32" long. Offers exceptional shock and vibration resistance—meets MIL-S-6743. Wide variety of actuators and terminal types offer unusual flexibility in application.



TYPE 16-104



TYPE 16-304



TYPE 16-404

Type 104 and 304 also available in reset styles.
Type 404 also available with taper tab terminals.

Type 16 also offers wide engineered flexibility in specials — Licon engineers can adapt the type 16 to suit individual requirements. Especially adaptable to aircraft and guided missile applications where size, vibration resistance, and capacity are critical.

TYPE 16 ACTUATORS.



70-421 TOGGLE ACTUATOR
2 to 5 poles



70-120 PIVOTED ROLLER LEVER
Also available without roller as 70-121.



70-320 SPRING LEAF
Also available with roller actuator as 70-321.

LICON TYPE 30 INDUSTRIAL ENCLOSED LIMIT SWITCH

SEALED SWITCHES

- 30-200 PLUNGER SWITCH
- 30-400 ROLLER ARM SWITCH
- 30-600 PALM BUTTON SWITCH
- 30-700 ROLLER PLUNGER SWITCH

UNSEALED SWITCHES

- 30-100 OVERTRAVEL PLUNGER SWITCH
- 30-300 ROLLER ARM SWITCH
- 30-500 ROLLER PLUNGER SWITCH

ACTUATORS

70-101 LEVER ACTUATOR

Used to convert 30-200, sealed plunger switch to 30-400 sealed roller arm; 30-100 plunger switch to 30-300 roller arm.

70-102 PALM BUTTON ACTUATOR

Used to convert 30-200 Sealed Plunger Switch to 30-600 Sealed Palm Button switch. Also attaches to 30-100.

Type 30 is versatile—3 actuators and 3 housings provide 16 switch types — its effective oil tight sealing is accomplished without boots. Used for industrial control, limit and safety applications. Aluminum diecast housing — adequate wiring room. 1/2"-14 internal tap conduit hub. Excellent mounting means — wide variety of actuators. Actuation is sensitive. Rated 15 amp 125, 250, 460V A.C. 1/2 amp 115V D.C. Tested life 10,000,000 cycles. Types listed are interchangeable with all 16 competitive types.

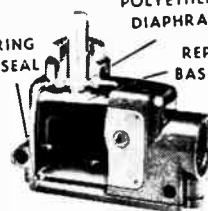


MICROMETER
SCREW
ADJUSTMENT

POLYETHYLENE DIAPHRAGM

"O" RING
BASE SEAL

REPLACEABLE
BASIC SWITCH



Switchpak CONTROL COMPONENTS

Handy plastic kit contains three complete switches, two accessory actuators and optional base mounting plates. Perfect for on-the-job maintenance. Have the right switch at the right time—get Switchpak containing...

Sealed Plunger Switch • Overtravel Plunger Switch • Roller Plunger Switch • Palm Button Actuator • Lever Actuator and three optional base mounting plates



LICON TYPE 22 DOUBLE POLE DOUBLE THROW SWITCHES



TYPE 22-104

Also reset model Type 22-114

Type 22 features DPDT high current interruption, outstanding vibration resistance (over 25 G's @ 2000 cps.), long dependable life (10,000,000 cycles) and a wide variety of circuit combinations offered by four separate circuits. Switch is rated 10 amp 125/250V A.C. and 30V D.C.



TYPE 22-304

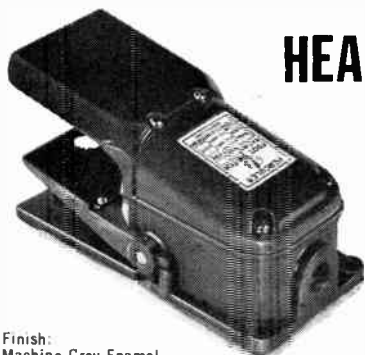
Also reset model Type 22-314

LINEMASTER

AMERICA'S FOOT SWITCH LEADER

LINEMASTER

HERCULES HEAVY DUTY



FOOT SWITCH
LINE

- Rugged
- Cast Iron Enclosure
- Safety-Guarded

Finish:
Machine Grey Enamel
Wt.: 7 lbs. 2 oz.
Size: 8-7/16" x 4 5/16" x 4-1/2"

Interior steel parts are cadmium plated or otherwise treated to resist corrosion. All terminals face up for easy wiring upon unfastening cover guard. Casing has 3/4 inch threaded hole for conduit pipe. Pedal position trip point is minutely adjustable. Two and three stage switches have distinct "FEEL" between stages. Special circuit combinations can be supplied in addition to those listed below.

| Class—Voltage Rating | Contact Type | Single Stage | | | 2-Stage SP DT | 3-Stage SP-DT |
|--|--------------|--------------|--------|--------|---------------|---------------|
| | | SP DT | DP DT | TP DT | | |
| Water Tight NEMA Type 4 125-480 V. AC 20 amps | Maintained | 571-DW | 572-DW | 573-DW | 574-DW | 575-DW |
| | Momentary | 531-SW | 532-SW | 533-SW | 534-SW | 535-SW |

| Explosion-Proof Class I Group C & D Class II Group E, F & G NEMA Type 7 125-480 V. AC-20 amps | Contact Type | Single Stage | | | 2-Stage SP DT | 3-Stage SP-DT |
|---|--------------|--------------|--------|--------|---------------|---------------|
| | | SP DT | DP DT | TP DT | | |
| | Maintained | 581-DX | 582-DX | 583-DX | 584-DX | 585-DX |
| | Momentary | 541-SX | 542-SX | 543-SX | 544-SX | 545-SX |

Tip-Toe Control for Tip-Top Production!

LINEMASTER, Jr. FOOT SWITCH

Lightweight, sensitive... ideal for women workers! Needs only a touch of the toe, while heel remains comfortably on the floor.



#121-S
& #122-S

Aluminum housing, black crackle finish. Weight 1 lb. 5 1/2" long, 3/4" wide, 1 1/4" high. Rated at 15 amps., 115 volts A.C.; 15 amps., 250 volts A.C. Can be wired to operate as single pole, normally open; single pole, normally closed; or single pole double throw. Momentary Contact only. #122-S—Rated at 20 amps., 115-250 volts A.C.

The LINEMASTER

CLIPPER SWITCH

in two models:

1. **Momentary contact**
(press to start—release to stop)
2. **Maintained contact**
(press to start—press to release)



Rugged Momentary Contact Clipper has proved invaluable to product engineers and machine operators. Maintained Contact Clipper is now available for heavy duty applications. Molded nylon actuating cams; rugged cast iron housings, sponge rubber skid pads. Weight: 2 1/2 lbs. Size: 4 1/2" x 3 1/2" x 1 1/2".

#632-S—AC Rating: 20-A, 125-250V, Momentary Contact, Single Pole, Double Throw.

#634-S—AC Rating: 10-A, 125-250V, Momentary Contact, Double Pole, Double Throw.

#632-D—AC Rating: 20-A, 125-250V, Maintained Contact, Single Pole, Double Throw.

#634-D—AC Rating: 10-A, 125-250V, Maintained Contact, Double Pole, Double Throw.

The LINEMASTER

EXECUTIVE

Two Switches in
One • "On-Center"
Mechanical Interlock!

This handsome switch is fool-proof and easy-to-operate! Selective circuits and guaranteed interlock eliminate possibility of accidentally tripping both circuits simultaneously, while low, wide casing saves excessive leg movement—foot pivots easily from one side to the other. Easy to wire—remove only one screw and switch is ready. Either interior (or both) may be wired as normally open or normally closed—single pole—double throw.

Heavy steel housing, baked hammertone grey finish. Wt., 14 oz., 4 3/8" long, 4" wide, 1 1/4" high. Each interior rated at 15 amps at 125-250 volts A.C.

The B-4 S has a DPDT circuit on each side and is rated at 10 amps 125 VAC, 5 amps 250 VAC.



#B-2-S

#B-4-S

The LINEMASTER

CADET

the "little giant" in
foot switches that
operates from any angle



#HB-2

Small only, 1 1/8" high 3 3/8" in diameter . . . Lightweight, just 11 oz. including cordset . . . Rugged, with heavy steel housing and unbreakable plastic actuating cap, the Cadet is an extremely compact foot switch that will give years of service in hundreds of different applications. It is well designed with an attractive grey hammertone effect casing, maroon cap and non-skid sponge rubber base for perfect positioning. The slightest pressure on the actuating cap from any angle puts the switch in operation. The operator has better control of work resulting in better production. Single pole, double throw, momentary contact only. Wired normally open. Rating 5A at 110V and 250V. Furnished with heavy duty 6 ft. 18-25V black rubber cordset, series plug and molded strain relief grommet.

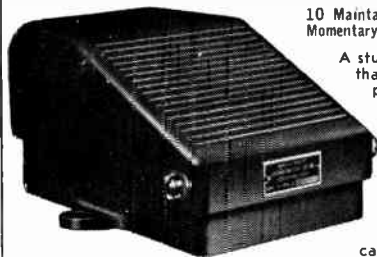
MANY OTHER STANDARD MODELS ARE AVAILABLE—WRITE FOR CATALOG

"When awkward jobs hold you up—a LINEMASTER FOOT SWITCH is your third hand!"

LINEMASTER

PRECISION-BUILT • DEPENDABLE • RUGGED • ECONOMICAL • OVER 1000 APPLICATIONS

LINEMASTER "SENIOR" 4000 SERIES



10 Maintained and Momentary Contact Models

A sturdy industrial-type switch that operates with light pressure from foot or knee, leaving both hands free for work. Economical and built to give years of trouble-free service — fully enclosed and hooded for protection against dirt and chips, with additional heavy spring and cast stop under cover casting, to relieve pressure and strain on spring inside switch proper on spring inside switch proper

Heavy-duty cast iron housing; black crackle finish. 7" long, 4" wide, 3 3/4" high. Weight, 5 1/4 lbs.

MAINTAINED CONTACT MODELS: Press to start—press to stop.
MOMENTARY CONTACT MODELS: Press to start—release to stop.

| ELECTRICAL CHARACTERISTICS | | | | | MAINTAINED CONTACT | MOMENTARY CONTACT |
|----------------------------|------------|----|---------|-----------------|--------------------|-------------------|
| Descrip. | Amperes AC | DC | Volts | Horse-power Ph. | Cat. No. | Cat. No. |
| D-P | 20 | 20 | 125 | 1 | 1 | |
| S-T | 20 | 20 | 250 | 1 | 1 | 4141-D 4141-S |
| D-P | 10 | 10 | 125 | 1/2 | 1 | |
| D-T | 5 | 5 | 250 | 1/2 | 1 | 4142-D 4142-S |
| S-P | 15 | 15 | 125 | 1/2 | 1 | |
| D-T | 10 | 10 | 250 | 1/2 | 1 | 4143-D 4143-S |
| D-P | 15 | | 115 | 1 | 1 | |
| S-T | 15 | | 230 | 2 | 1 | 4151-D 4151-S |
| | 5 | | 575 | 2 | 1 | |
| Three Pole | 15 | | 115-230 | 2 | 3 | |
| | 5 | | 575 | 2 | 3 | 4351-D 4351-S |

Safety guard available for all above models.

The LINEMASTER COMPACT

Amazingly versatile—amazingly low-priced!

Small, lightweight — and instantly responsive to the slightest pressure of foot, finger, knee or elbow! Substantially built to insure long life, with an actuating mechanism superior to any other on the market today.

Available in a wide variety of wiring plans. Strong steel housing, black crackle finish. 2 3/4" long, 2 1/2" wide, 7/8" high. Weight, 6 1/2 ozs. Momentary contact only.



| Cat. No. | DESCRIPTION | RATING |
|------------|--|------------------------------|
| 491-S | Single Pole, Double Throw A.C. only | 10A at 115V 10A at 230V |
| 491-SC | SPDT. Wired N.O. with 6 ft. cord and 2 prong series plug. A.C. only. | 10A at 125V 1/2HP at 115V |
| 491-S Twin | Two 491-S switches mounted on a twin base | 10A at 115V 1/2HP at 115V |
| 492-S | Single Pole, Double Throw A.C. only | 20A at 115V 20A at 230V |
| 493-S | Single Pole, Single Throw A.C. only, double break | 10A at 115V 5A at 230V |
| 494-S | 2 interiors so arranged as to simulate D-P-D-T | 10A at 115V 5A at 230V |
| 496-S | Foto with cord & light, Single Pole, Double Throw A.C. | 20A at 115V 20A at 230V |



The LINEMASTER TREADLITE

Trim, small, lightweight, instantaneous!

MODEL T-51-S — Accurate control in a modern, minute, treadle switch! Single pole, double throw, momentary contact interior, that can be wired open or closed. Rubber base pad and rubber-ribbed treadle, formed steel casing with black crackle finish. Interior rated at 7 amps., 110 volts and 250 volts A.C. Weight 7 ozs.; 3 1/2" long, 2 5/8" wide, 1" high (model T-51-SC is wired with 6' cord and series plugs.)

MODEL T-51-D — Rocker type maintained contact action.

MODEL T-52-S — ONE treadle activates TWO switching operations! A partial downward stroke opens or closes one circuit, added pressure actuates the second circuit. Both interiors, as well as exterior, meet specifications for single-switching Model T-51-S.



LINEMASTER "NAUTILUS" FOOT SWITCH

waterproof • dustproof
oilproof • rustproof

A truly great development by Linemaster. The Nautilus is waterproof, dustproof, oilproof, rustproof. Rugged Aluminum casting for long life. Piston type actuator sealed with "O" ring. Electrical interior "well" sealed with "O" ring.

Size: 8" x 4" x 2 1/4" Wt.: 2 lbs., 8 1/2 ozs.

Cat. No. WP541-S 20 Amp. 125-250 VAC SPDT momentary
Cat. No. WP541-D 12 Amp. 125 VAC SPDT maintained

The LINEMASTER LEKTRO-LOK SWITCH

Small, sensitive, automatically safe

Particularly ideal for transmission equipment!

Mechanical interlock allows only one circuit to function at a time—and you can depend on it! LEKTRO-LOK operates on the feather-totter system, with selective circuits. Pressure on one side actuates one circuit, release of pressure automatically returns switch to normal "off" position. Pressure on the other side is required before second switch is actuated, independent of first. Yet LEKTRO-LOK requires only a single cord—eliminates costly harness assemblies! Rugged stamped metal housing, black crackle finish. Weight, 10 ozs. 5" long, 2 3/4" wide, 1 1/4" high. Single pole, double throw. Rating (A.C. only) 15 amps at 125 volts, 15 amps. at 250 volts.

The L-4-S has a DPDT circuit on each side and is rated at 10 amps 125 VAC, 5 amps 250 VAC.



#L-2-S

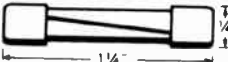

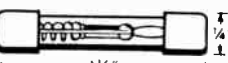


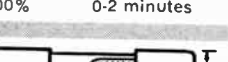
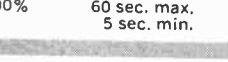
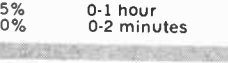
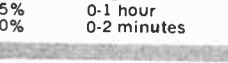
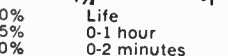
#L-4-S



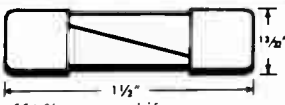

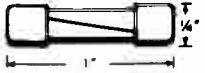
LINEMASTER SWITCH CORPORATION

WOODSTOCK, CONNECTICUT

LITTELFUSE

DES PLAINES, ILLINOIS, U.S.A.



| Percentage of rating | Blow Time | Description | Amperes | Optional Resale Price | |
|---|-----------------------------|---|--|----------------------------------|--|
| | | | | Per Box of 5 Less than Std. Pkg. | Per 100 Fuses Std. Pkg. of 100 Fuses or More |
|  | | | | | |
| 110% | Life | 3AG Fuses (42 volts or less) 311(000) Series Quick to medium blowing fuses. Designed with straight type element positioned to center of fuse. | 4, 5, 7 $\frac{1}{2}$, 10, 15 amp. | .16/5 | 2.65/c |
| 135% | 0-1 hour | | (Note: For 3AG 20 amp. now obsolete, use SFE 20A) | .19/5 | 3.15/c |
| 200% | 0-2 minutes | | 25, 30 amp. | | |
|  | | | | | |
| 110% | Life | 3AG Fuses (250 volts or less) 312(000) Quick acting fuses for low time lag applications. 312(000) Series approved by Underwriters' Laboratories. | $\frac{1}{16}$, $\frac{3}{16}$, $\frac{1}{8}$, $\frac{1}{100}$, 175 amp. | .63/5 | 10.50/c |
| 135% | 0-1 hour | | $\frac{1}{4}$, $\frac{3}{10}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ amp. | .42/5 | 7.00/c |
| 200% | 0-2 minutes | | 1, 1 $\frac{1}{2}$, 2 amp. 3 amp. 4, 5, 6 amp. 8 amp. at 125 volts | .25/c .22/5 .32/5 .45/5 | 4.20/c 3.70/c 5.25/c 7.50/c |
|  | | | | | |
| 110% | Life | 318(000) Series Available under this series with 1 $\frac{1}{2}$ " No. 20 tinned copper leads in comparable amperages as shown. Series approved by Underwriters' Laboratories through 3 amps. | $\frac{1}{16}$ amp. | 1.05/c | 17.50/c |
| 135% | 0-1 hour | | $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ amp. | .78/5 | 13.00/c |
| 200% | 0-2 minutes | | 1, 1 $\frac{1}{2}$, 2, 3 amp. 4, 5, 6 amp. | .63/5 .48/5 .51/5 | 10.50/c 8.00/c 8.50/c |
|  | | | | | |
| 110% | Life | 3AG Sio-Bio Fuses (125 volts or less) 313(000) Slow blow fuses with high time lag to withstand heavy current surges. Blows quickly on shorts. 313(000) series approved by Underwriters' Laboratories through 5 amperes. | $\frac{1}{100}$, $\frac{1}{2}$ amp. | 1.17/5 | 19.50/c |
| 135% | 0-1 hour | | $\frac{1}{16}$, $\frac{1}{10}$, $\frac{1}{8}$, $\frac{1}{100}$, .175, $\frac{3}{16}$, $\frac{1}{10}$, $\frac{1}{4}$, $\frac{3}{10}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{10}$, $\frac{1}{10}$, $\frac{3}{4}$, $\frac{1}{10}$, 1 amp. | .84/5 | 14.00/c |
| 200% | 60 sec. max. 5 sec. min. | | 1 $\frac{1}{2}$, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 1 $\frac{1}{10}$, 2 amp. 2 $\frac{1}{2}$, 3, 3 $\frac{3}{10}$, 4, 5 amp. 6 $\frac{1}{4}$, 8, 10, 15, 20, 25, 30 amps. at 32 volts | .78/5 .63/5 .63/5 | 13.00/c 10.50/c |
|  | | | | | |
| 110% | Life | 315(000) Series Available under this series with 1 $\frac{1}{2}$ " No. 20 tinned copper wire leads in comparable amperages as shown. Series approved by Underwriters' Laboratories through 3.2 amps. | $\frac{1}{100}$, $\frac{1}{2}$ amp. | 1.41/5 | 23.50/c |
| 135% | 0-1 hour | | $\frac{1}{16}$, $\frac{1}{10}$, $\frac{1}{8}$, $\frac{1}{100}$, $\frac{3}{16}$, $\frac{1}{10}$, $\frac{1}{4}$, $\frac{3}{10}$, $\frac{1}{10}$, $\frac{1}{2}$, $\frac{3}{10}$, $\frac{3}{4}$, $\frac{1}{10}$, 1 amp. | 1.05/5 | 17.50/c |
| 200% | 60 sec. max. 5 sec. min. | | 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 1 $\frac{1}{10}$, 2 amp. 2 $\frac{1}{2}$, 3, 3 $\frac{3}{10}$, 4, 5 amp. | .99/5 .84/5 | 16.50/c 14.00/c |
|  | | | | | |
| 110% | Life | 3AB Fuses (250 volts or less) (steatite) 314(000) Series Medium time lag steatite enclosed arc quenching powder filled fuses. Approved by Underwriters' Laboratories through 15 amperes. | 1, 2, 3 | .54/5 | 9.00/c |
| 135% | 0-1 hour | | 5, 6, 8, 10 | .51/5 | 8.50/c |
| 200% | 0-2 minutes | | 12, 15, 20 amp. 30 amp. | .54/5 .63/5 | 9.00/c 10.50/c |
|  | | | | | |
| 110% | Life | 4AG Aircraft Fuses (32 volts or less) (anti-vibration) 411(000) Series Medium to slow fuses especially developed for aircraft use. Designed to withstand vibration, shock, fatigue and repeated off and on circuit operating conditions encountered in aircraft operation. | 5 amp. | .45/5 | 7.50/c |
| 135% | 0-1 hour | | 10, 15, 20, 25, 30 amp. | .45/5 | 7.54/c |
| 200% | 0-2 minutes | | 35 amp. | | |
|  | | | | | |
| 110% | Life | 4AG Aircraft Fuses (250 volts or less) (anti-vibration) 412(000) Series Quick acting fuses—for low time lag applications. Developed for aircraft use. Designed to withstand shock and fatigue and afford maximum protection. | $\frac{1}{4}$, $\frac{1}{2}$ | .45/5 | 7.50/c |
| 135% | 0-1 hour | | 1 | .70/5 | 12.00/c |
| 200% | 0-2 minutes | | 2 2 $\frac{1}{2}$ 3 | .75/5 .70/5 .84/5 | 12.50/c 12.00/c 14.00/c |
|  | | | | | |
| 110% | Life | 4AG Sio-Bio Fuses (250 volts or less) 413(000) Series High time lag fuses for extra protection against sustained overloads. Designed to meet aircraft vibration test requirements. Spring-and-link element construction takes up thermal expansion and contraction and eliminates cyclic fatigue, crystallization and resulting fracture of link. | $\frac{1}{100}$, $\frac{1}{4}$, $\frac{1}{100}$, $\frac{1}{10}$, $\frac{1}{4}$, $\frac{3}{10}$, $\frac{1}{10}$, $\frac{1}{2}$, $\frac{1}{10}$, $\frac{3}{4}$, $\frac{1}{10}$, 1, 1 $\frac{1}{4}$, 1 $\frac{1}{10}$, 2 | 1.11/5 | 18.50/c |
| 135% | 0-1 hour | | 2 $\frac{1}{2}$, 3, 3 $\frac{3}{10}$ | .84/5 | 14.00/c |
| 200% | 60 sec. max. 5 sec. min. | | 4, 5, 6 $\frac{1}{4}$, 8, 10, 15, 20, 25, 30 at 32 volts 35, 40 at 32 volts | .84/5 | 14.00/c |
|  | | | | | |
| 110% | Life | 4AB Fuses (250 volts or less) (steatite) 414(000) Series Medium lag, steatite-enclosed, shatterproof fuses. Spring and link construction under 5 amperes. Mechanical depolarization, non-crystallizing features incorporated into ratings over 5 amperes. | 1, 2, 3 amp. | .84/5 | 14.00/c |
| 135% | 0-1 hour | | 5, 8, 10, 15, 20 at 125 volts | .78/5 | 13.00/c |
| 200% | 0-2 minutes | | 25, 30 at 32 volts 35, 40 at 32 volts | .78/5 .84/5 | 13.00/c 14.00/c |
| | | | | | |
| 110% | Life | 4AG Straight-element Fuses (250 volts or less) 417(000) Series Medium lag fuses for applications where vibration is not an important factor. Designed with diagonally aligned element and Littelfuse exclusive locked cap construction. | 1, 2, 3 amp. | .42/5 | 7.00/c |
| 135% | 0-1 hour | | 5, 10, 15, 20, 25, 30 amp. at 32 volts | .36/5 | 6.00/c |
| 200% | 0-2 minutes | | 35, 40 at 32 volts | .42/5 | 7.00/c |
| | | | | | |
| 110% | Life | SAG Aircraft Fuses (32 volts or less) 511(000) Series Medium to slow fuses for general aircraft applications. Design incorporates anti-vibration type element, twisted to 90° angle and mechanically depolarized construction. | 5, 10, 15, 20, 25, 30, 35, 40, 50, 60 amp. | 1.53/5 | 25.50/c |
| 135% | 0-1 hour | | | | |
| 200% | 0-2 minutes | | | | |

| Percentage of rating | Blow Time | Description | Amperes | Optional Resale Price | |
|---|---|--|--|----------------------------------|-----------------------|
| | | | | Per Box of 5 Less than Std. Pkg. | Per 100 Fuses or More |
|  110% 135% 200% | Life 0-1 hour 60 sec. max. 5 sec. min. | 5AG Slo-Blo Fuses (250 volts or less) 513(000) Series High time lag fuses. Designed to withstand heavy current surges while affording maximum protection against shorts and damaging overloads. | 1, 2 amp | 1.41/5 | 23.50 c |
| | | | 3 amp | 1.11/5 | 18.50/c |
| | | | 5, 10, 15, 20 amp. at 32 volts 25, 30 amp. at 32 volts | 1.11/5 1.26/5 | 18.50/c 21.00/c |
|  110% 135% 200% | Life 0-1 hour 0-2 minutes | 5AB Aircraft Fuses (250 volts or less) 514(000) Series Medium time lag, bakelite enclosed, shatterproof fuses. Spring-link construction under 5 amperes. Mechanical depolarization, non-crystallizing features incorporated in ratings over 5 amperes. Recommended for applications where excessive shock and vibration are encountered. | 1, 2, 3 amps. | .96/5 | 16.00/c |
| | | | 5, 10, 15, 20, 25, 30 amps at 32 volts | .90/5 | 15.00/c |
| | | | 35, 40 amp. at 32 volts | .96/5 | 16.00/c |
|  110% 133% 200% | Life 0-1 hour 0-2 minutes | 5AG Straight-element Fuses (250 volts or less) 517(000) Series Medium time lag fuses for applications where a heavy duty fuse is desirable. Design incorporates diagonally aligned element and locked cap construction. | 1, 2, 3 amp. | .51/5 | 8.50/c |
| | | | 4 amp. at 32 volts | .51/5 | 8.50/c |
| | | | 5, 10, 15, 20, 25, 30 amp. at 32 volts | .48/5 | 8.00/c |
|  100% 150% | Life 0-10 sec. | 8AG Instrument Fuses (250 volts or less) 361(000) Series Designed for high speed action to insure maximum protection of delicate electrical equipment. | $\frac{1}{1000}$ amp. | 4.17/5 | 69.50/c |
| | | | $\frac{1}{500}$ amp. | 1.74/5 | 29.00/c |
| | | | $\frac{1}{100}$ amp. | 1.56/5 | 26.00/c |
|  110% 135% 200% | Life 0-1 hour 0-2 minutes | 8AG Fuses (250 volts or less) 362(000) Series Medium time lag fuses for applications where size is a factor because of space limitation or the need to differentiate physically between two fuses in close proximity. Designed to standard N.E.C. blowing specifications. Approved by Underwriters' Laboratories. | $\frac{1}{2}$ amp. | .48/5 | 8.00/c |
| | | | $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ amp. | .42/5 | 7.00/c |
| | | | 1 amp. | .25/5 | 4.20/c |
| | | | 1 $\frac{1}{2}$, 2, 3 amp. at 125 volts | .25/5 | 4.20/c |
| | | | 5 amp. at 125 volts | .16/5 | 2.65/c |

LIMITED CURRENT FUSES & HOLDERS

A new approach to circuit protection completely eliminating the possibility of overfusing circuits. This has been accomplished by a combination of three different fuse lengths and seven different widths of bayonet locking tabs on the fuse caps.

The Limited Current Fuse Holder is designed to accept only the size, amperage, range and type (regular or slo blo) in its amperage range. The fuse locks into the holder by means of a bayonet lock which permits easy and quick insertion and removal of fuses.

| | | | | | |
|---|---|--|---|--------|---------|
|  110% 135% 200% | Life 0-1 hour 0-2 minutes | Limited Current LC fuses 250V type C 332(000) Series Quick acting—low time lag fuses, incorporating design features which adapt easily to television and similar applications. | $\frac{1}{2}$ amp. | 1.32/5 | 22.00/c |
| | | | $\frac{1}{4}$ amp. | .84/5 | 14.00/c |
| | | | $\frac{1}{8}$, $\frac{3}{16}$ amp. | .66/5 | 11.00/c |
| | | | $\frac{1}{4}$, $\frac{3}{16}$, $\frac{1}{2}$, $\frac{3}{4}$ amp. | .51/5 | 8.50/c |
| | | | 1, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 2, 2 $\frac{1}{2}$, 3 amp. | .29/5 | 4.75/c |
| | | | 3 $\frac{1}{2}$, 4, 5, 6 amp. | .38/5 | 6.25/c |
| | | | 7 amp. at 125 volts | .38/5 | 6.25/c |
| | | | 8 amp. at 125 volts | .54/5 | 9.00/c |
| | | | 10 amp. at 125 volts | .57/5 | 9.50/c |
|  110% 135% 200% | Life 0-1 hour 60 sec. max. 5 sec. min. | Limited current LC Slo Blo fuses 125V type N 333(000) Series Slo Blo fuses for high time lag applications. Construction incorporates design features similar to 332(000) series. | $\frac{1}{100}$, $\frac{1}{32}$ amp. | 1.23/5 | 20.50/c |
| | | | $\frac{1}{8}$, $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{10}$, $\frac{1}{10}$, $\frac{1}{2}$, $\frac{1}{10}$, $\frac{1}{4}$, $\frac{1}{10}$, 1 amp. | .89/5 | 14.75/c |
| | | | 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 2 amp. | .81/5 | 13.50/c |
| | | | 2 $\frac{1}{2}$, 2 $\frac{3}{10}$, 3 $\frac{1}{10}$, 3 $\frac{1}{4}$, | .75/5 | 12.50/c |
| | | | 4, 5, 6 $\frac{1}{2}$, 7 amp. at 32 volts | .75/5 | 12.50/c |

Limited Current Fuse Holders 346(000) Series

| Catalog Number | Type | Amperage Range | Opt. Less Than Std. | Net Price Std. Pkg. of 100 | Catalog Number | Type | Amperage Range | Opt. Less Than Std. | Net Price Std. Pkg. of 100 | |
|----------------|--------|----------------|--|----------------------------|----------------|--------|----------------|--|----------------------------|--|
| | | | | | | | | | |  |
| | 346002 | Regular | (Over C $\frac{3}{16}$ - $\frac{1}{2}$) | .13 | .11 | 346009 | Slo-Blo | (Over N $\frac{3}{16}$ - $\frac{1}{2}$) | .13 | .11 |
| | 346003 | Regular | (Over C $\frac{1}{2}$ - $\frac{3}{4}$) | .13 | .11 | 346010 | Slo-Blo | (Over N $\frac{1}{2}$ - $\frac{3}{4}$) | .13 | .11 |
| | 346004 | Regular | (Over C $\frac{3}{4}$ -1 $\frac{1}{4}$) | .13 | .11 | 346011 | Slo-Blo | (Over N $\frac{3}{4}$ -1 $\frac{1}{4}$) | .13 | .11 |
| | 346005 | Regular | (Over C 1 $\frac{1}{4}$ -1 $\frac{3}{4}$) | .13 | .11 | 346016 | Slo-Blo | (Over N 1 $\frac{1}{4}$ -1 $\frac{3}{4}$) | .13 | .11 |
| | 346006 | Regular | (Over C 1 $\frac{3}{4}$ -2 $\frac{1}{2}$) | .13 | .11 | 346017 | Slo-Blo | (Over N 1 $\frac{3}{4}$ -2 $\frac{1}{2}$) | .13 | .11 |
| | 346007 | Regular | (Over C 2 $\frac{1}{2}$ -3 $\frac{1}{2}$) | .13 | .11 | 346018 | Slo-Blo | (Over N 2 $\frac{1}{2}$ -3 $\frac{1}{2}$) | .13 | .11 |
| | 346012 | Regular | (Over C 3 $\frac{1}{2}$ -5) | .13 | .11 | 346019 | Slo-Blo | (Over N 3 $\frac{1}{2}$ -5) | .13 | .11 |
| | 346013 | Regular | (Over C 5-7) | .13 | .11 | 346020 | Slo-Blo | (Over N 5-7) | .13 | .11 |
| | 346014 | Regular | (Over C 7-10) | .13 | .11 | | | | | |

LITTELFUSE

DES PLAINES, ILLINOIS, U.S.A.

MICROFUSE

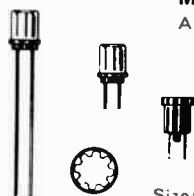
A completely different development in circuit protection for subminiature applications.

The PIGTAIL VARIETY (278000 series) is especially adaptable for soldered connections in minimum space.

The PLUG-IN VARIETY (272000 series) is designed for use with the No. 281001 sub-miniature fuse holder which is easily mounted to chassis or printed circuit board.

The SUB-MINIATURE FUSE HOLDER #281001 allows fast simple fuse replacement, will handle continuous currents up to 5 amps at 125V or less.

Size: $1\frac{3}{16}$ " Dia. x $1\frac{1}{2}$ ". Available from 1/500 amp. through 5 amps. Maximum voltages—125V. Blowing Specifications: Series 272000—278000. 110% Life; 200% 0-10 Seconds.



LITTELFUSE

Amperes

| Amperes | Optional Resale Price Per Box of 5 Less than Std. Pkg. | Per 100 Fuses Std. Pkg. of 100 Fuses or More |
|-----------------------|--|--|
| 0 through .031 amp. | 5.15/5 | 86.00/c |
| .050A through 5 amp. | 4.29/5 | 71.00/c |
| 281001 plug-in holder | .26 each | .22 each |

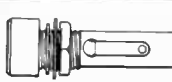


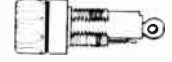


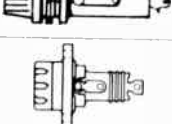
3AG INDICATING FUSE POST



| Catalog Number | Voltage Range | Net Resale Price | |
|----------------|---------------|---------------------|------------------|
| | | Less than Std. Pkg. | Std. Pkg. of 100 |
| 344006 | 2½-7V | \$2.21 ea. | \$1.84 ea. |
| 344012 | 7-16V | 2.21 ea. | 1.84 ea. |
| 344024 | 16-32V | 2.21 ea. | 1.84 ea. |
| 344125 | 100-125V | 1.35 ea. | 1.13 ea. |
| 344250 | 200-250V | 1.35 ea. | 1.13 ea. |

PHYSICAL CHARACTERISTICS

High temperature styrene knob (amber with incandescent bulbs—2½ thru 32 volts—and clear with high degree vacuum neon bulbs 90-250 volts). Maximum current rating 20 amperes. Size: Overall Length 2¾"; front of Panel 1¼"; back of Panel 1½"; mounting hole ¾" Dia.; flat on one side.

| Style | Catalog Number | Fuse Size | Description | Physical Size fuse | Mounting Hole Dia. | Overall Length | Back of Panel | Net Resale Price Less than Std. Pkg. | Std. Pkg. of 100 |
|--|----------------|-----------|--|--------------------|--------------------|----------------|---------------|--------------------------------------|------------------|
|  | 341001 | 3AG | Screwdriver Slot Knob | 1¼ x 1¼ Dia. | .505D | 2¾ | 1¾ | .42 ea. | .35 ea. |
|  | 371001 | 8AG | Screwdriver Slot Knob | 1 x ¼ Dia. | .505D | 2¾ | 1¾ | .42 ea. | .35 ea. |
|  | 342001 | 3AG | Finger Operated Knob | 1¼ x 1¼ Dia. | .505D | 2¾ | 1¾ | .42 ea. | .35 ea. |
|  | 372001 | 8AG | Finger Operated Knob | 1 x ¼ Dia. | .505D | 2¾ | 1¾ | .42 ea. | .35 ea. |
|  | 342014 | | Miniature post with finger operated knob | 1¼ x 1¼ Dia. | .510D | 2¾ | 1½ | .31 ea. | .26 ea. |
|  | 342022 | | Miniature post with finger operated knob | 1¼ x 1¼ Dia. | .510D | 1¾ | 1¼ | .36 ea. | .30 ea. |
|  | 342004 | | Miniature post with finger operated knob | 1¼ x 1¼ Dia. | .510D | 1¾ | 1¼ | .36 ea. | .30 ea. |
|  | 342012 | 3AG | Miniature post with finger operated knob | 1¼ x 1¼ Dia. | .510D | 2¾ | 1½ | .31 ea. | .26 ea. |
|  | 442001 | 4AG | Fuse extractor post | 1¼ x ¾ Dia. | .635D | 2¾ | 2¼ | .84 ea. | .70 ea. |
|  | 570001 | 5AG | Finger operated knob—flange Mount | 1¼ x 1¾ Dia. | .865D | 2¾ | 1½ | 1.07 ea. | .895 ea. |

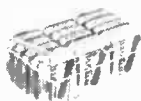
FUSE CADDY Part 094037

LC FUSE CADDY Part 094041

A handy fuse kit for instant accessibility—correct fuse at your fingertips every time. 18 individual compartments. Fuse caddy comes with 75 fuses, 15 different types, plus 3 spare compartments.

| | | |
|--------|-----------|---------|
| 3AG ¼A | 3AG 5A | N ¼ LC |
| 3AG ½A | 3AG ¼A SB | N 1 LC |
| 3AG 1A | 3AG ¼A SB | N 1½ LC |
| 3AG 2A | 8AG ¼ | C 2½ LC |
| 3AG 3A | 8AG ½ | |

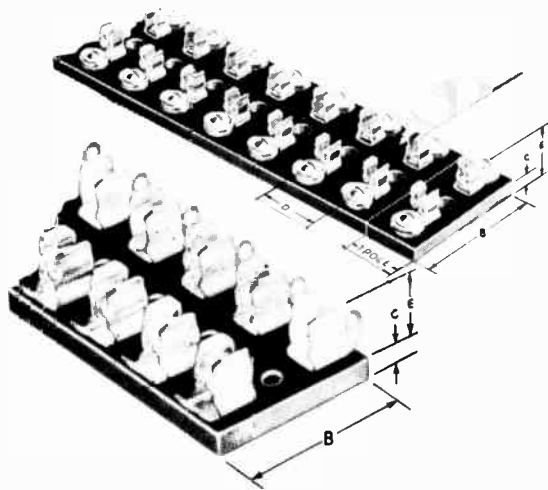
Net Resale Price
\$6.70 ea.



A handy all inclusive LC (Limited Current) Fuse Caddy for servicemen's tube caddy. One call is all. 18 individual compartments. LC Fuse Caddy comes with 75 fuses; 15 different types plus three spare compartments.

Net Resale Price
\$9.00 ea.

FUSE MOUNTING PANELS



MOUNTINGS WITH SOLDER TERMINALS—TYPE "S" Phosphor-Bronze, bright-dipped finish Lug Clips are firmly anchored to black Bakelite base—have non-turning anchors. For 8AG (387000 series) and 3AG (357000 series) fuses.

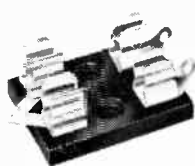
MOUNTINGS WITH SCREW TERMINALS—TYPE "T" Spaced to U/L requirements for equipment circuit protection. Nickel plated brass screw terminals, nickel plated fuse clips. For 3AG(356000 series), 4AG(456000 series) and 5AG(556000 series) fuses.

Open type fuse panels, stocked in 12-pole units as shown—we cut them to 2, 3, 4 or more poles as ordered, or you may cut them in your plant (1/8" allowance for saw cut).

| Cat. No. | Fuse Type | Mtg. Type | Dim. "B" | Dim. "C" | Dim. "D" | Dim. "E" | Each less than 100 | Each over 100 |
|----------|-----------|-----------|----------|----------|----------|----------|--------------------|---------------|
| 387001 | 8AG | S | 1 3/8 | 3/16 | 5/8 | 2 1/2 | .13 | .11 |
| 357001 | 3AG | S | 1 3/8 | 3/16 | 5/8 | 2 1/2 | .13 | .11 |
| 356001 | 3AG | T | 2 3/8 | 1/2 | 2 3/2 | 1 1/4 | .28 | .24 |
| 456001 | 4AG | T | 2 3/8 | 1/2 | 2 3/2 | 1 3/4 | .35 | .30 |
| 556001 | 5AG | T | 2 3/8 | 1/2 | 2 3/2 | 1 1/2 | .41 | .34 |

Note: Above are single pole mountings. Prices and delivery by quotation for multiple pole types.

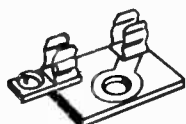
RECTIFIER MOUNTINGS



Mountings custom designed for Sarks Tarzian silicon rectifiers series M500 and L1250. Mountings designed to your specifications are available upon request. Let our engineers assist you.

| Cat. No. | | Each less than 100 | Each over 100 |
|----------|---------|--------------------|---------------|
| 099062 | 1 pole | .14 each | .12 each |
| 099063 | 2 poles | .28 each | .23 each |

METER BACK MOUNTING Cat. No. 383002 (1059)—



Mounts directly on meter binding post. Will not touch other posts on smallest standard meter. Linen bakelite base, 1" x 1 1/2". Length over screw terminal, 1 1/2".

| Net Resale Price | |
|---------------------|-----------------|
| Less than Std. Pkg. | Std. Pkg. of 10 |
| .21 ea. | .175 ea. |

STANDARD FUSE CLIPS

For the exacting performance often required in the electronics communications, radio, television, aircraft and marine equipment industries, we recommend our beryllium copper fuse clip. Beryllium copper clips have lower contact resistance and higher conductivity than ordinary fuse clips. They are silver plated, a finish well suited to fuse applications.

FUSE CLIPS (Phosphor Bronze Bright Nickel Plated)



Ears



Earless



Lug

Net Resale Price Less than Std. Pkg. of 100 ea. Std. Pkg. of 100 ea.

| | | | |
|--------------------------------|--------|-------|-------|
| 3AG Fuse Clip | 101001 | .017 | .014 |
| 3AG Fuse Clip (Earless) | 101002 | .017 | .014 |
| 3AG Solder Terminal Clip | | | |
| Bright dip | 101003 | .024 | .02 |
| 4AG Fuse Clip | 103001 | .0318 | .0265 |
| 4AG Fuse Clip (Earless) | 104002 | .0318 | .0265 |
| 5AG Fuse Clip | 105001 | .0408 | .034 |
| 5AG Fuse Clip (Earless) | 105002 | .0408 | .034 |
| 1/16" Dia. Fuse Clip | 107001 | .066 | .055 |
| 1/16" Dia. Fuse Clip (Earless) | 107002 | .066 | .055 |
| 1/8" Dia Fuse Clip | 109001 | .15 | .125 |
| 1/8" Dia. Fuse Clip (Earless) | 109002 | .15 | .125 |

FUSE CLIPS (Beryllium Copper Silver Plated)

| | | | |
|--------------------------------|--------|-------|------|
| 3AG Fuse Clip | 121001 | .0408 | .034 |
| 3AG Fuse Clip (Earless) | 121002 | .0408 | .034 |
| 3AG Solder Terminal Clip | | | |
| 4AG Fuse Clip | 121004 | .084 | .07 |
| 4AG Fuse Clip (Earless) | 123001 | .06 | .05 |
| 4AG Fuse Clip (Earless) | 123002 | .06 | .05 |
| 5AG Fuse Clip | 125001 | .096 | .08 |
| 5AG Fuse Clip (Earless) | 125002 | .096 | .08 |
| 1/16" Dia. Fuse Clip | 127001 | .186 | .155 |
| 1/16" Dia. Fuse Clip (Earless) | 127002 | .186 | .155 |
| 1/8" Dia. Fuse Clip | 129001 | .462 | .385 |
| 1/8" Dia. Fuse Clip (Earless) | 129002 | .462 | .385 |

SNAP-ON MOUNTINGS



Time saver for pigtail replacement. Snap on blown pigtail, then use regular fuse in other side. No soldering. This Snap-On mounting has a cut out on both sides which makes the fuse accessible for replacement from both sides. They are available in bulk, on display cards of 24, or in handy merchandising plastic boxes of ten.

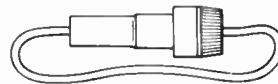
Net Resale Price

| | | Less than Std. Pkg. | Std. Pkg. |
|------------|------------|---------------------|------------|
| Card of 24 | No. 094024 | \$4.32 ea. | \$3.60 ea. |
| Box of 10 | No. 094025 | 1.80 ea. | 1.50 ea. |
| Bulk | No. 350130 | .92/5 | 14.00/c |

IN-LINE FUSE RETAINER Assortment 094020



comes complete with 8-inch loop of wire and fuse inserted under spring tension. Assortment consists of 6 SFE 14 units, 3 SFE 9 and 3 SFE 20.



Net Resale Price \$4.70 ea.

FUSEMASTER 094047

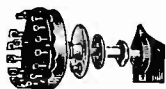


Versatile clear plastic fuse wall rack with 60 individual compartments for 60 different fuse types. Index inventory control card, pressure sensitive blank inventory labels for easy index adjustment; and an assortment of 100 popular fuses are furnished as a package under Fusemaster Assortment 094047.

Net Resale Price \$10.14 ea.

MALLORY Switches

SINGLE SECTION ROTARY SWITCHES



For use in small receivers as tone controls, band selector and antennae switching; also for meter switching in test equipment and other devices where space is a factor. Two sizes available: 1 1/4" dia. 30° indexing and 1 1/2" dia. 20° indexing. Phenolic resin wafer. Breakdown, 500 v. DC or AC; 5 amps, 6 v. AC. Non-breaking current resistive load, 5 amps max. With knob, nut and lockwasher.

| Shorting Mallory No. | Non-Shorting Mallory No. | No. of Circuits | No. of Positions | Dia. of Base | Adjustable Stop | Net Each |
|----------------------|--------------------------|-----------------|------------------|--------------|-----------------|----------|
| 3115J | 3215J | 1 | 5 | 1 1/4" | No | \$1.00 |
| 31112J | 32112J | 1 | 12 | 1 1/4" | No | 1.00 |
| 3122J | 3222J | 2 | 2 | 1 1/4" | No | 1.00 |
| 3123J | 3223J | 2 | 3 | 1 1/4" | No | 1.00 |
| 3126J | 3226J | 2 | 6 | 1 1/4" | No | 1.00 |
| 3134J | 3234J | 3 | 4 | 1 1/4" | No | 1.05 |
| 3142J | 3242J | 4 | 2 | 1 1/4" | No | 1.05 |
| 3143J | 3243J | 4 | 3 | 1 1/4" | No | 1.05 |
| 31117J | 32117J | 1 | 2 to 17 | 1 1/2" | Yes | 1.56 |
| 3129J | 3229J | 2 | 2 to 9 | 1 1/2" | Yes | 1.56 |
| 3136J | 3236J | 3 | 2 to 6 | 1 1/2" | Yes | 1.65 |
| 3163J | 3263J | 6 | 2 to 3 | 1 1/2" | Yes | 1.65 |

MULTI-SECTION ROTARY SWITCHES

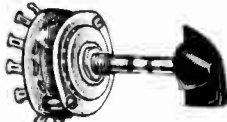
For test equipment, meter switching and low current industrial applications. All contacting members are silver plated, with self-cleaning contact wiping action. Durable alloy index spring. Adjustable stops. Phenolic resin wafer; 1/2" spacing except three and four-section models, 1" spacing. Indexing, 30°. Breakdown, 1000 v. AC or DC. Rated, 6 amp, 300 v. DC; 8 amps, 60 v. DC; 1 amp, 300 v. AC; 10 amps, 6 v. AC. Non-breaking current, resistive load, 10 amps max. With knob, nut and lockwasher.



| Shorting Type Mallory No. | Non-Shorting Type Mallory No. | No. of Circuits Per Section | No. of Circuits Per Switch | No. of Positions | No. of Sections or Gangs | Net Each |
|---------------------------|-------------------------------|-----------------------------|----------------------------|------------------|--------------------------|----------|
| 1211L | 1311L | 1 | 1 | 2 to 11 | 1 | \$2.10 |
| 1215L* | 1315L* | 2 | 2 | 2 to 5 | 1 | 2.10 |
| 1213L* | 1313L* | 3 | 3 | 2 to 3 | 1 | 2.10 |
| 1212L* | 1312L* | 4 | 4 | 2 to 2 | 1 | 2.10 |
| 1221L | 1321L | 1 | 2 | 2 to 11 | 2 | 2.58 |
| 1225L* | 1325L* | 2 | 4 | 2 to 5 | 2 | 2.58 |
| 1223L* | 1323L* | 3 | 6 | 2 to 3 | 2 | 2.58 |
| 1222L* | 1322L* | 4 | 8 | 2 to 2 | 2 | 2.58 |
| 1231L | 1331L | 1 | 3 | 2 to 11 | 3 | 3.24 |
| 1235L* | 1335L* | 2 | 6 | 2 to 5 | 3 | 3.24 |
| 1241L | 1341L | 1 | 4 | 2 to 11 | 4 | 3.81 |
| 1245L* | 1345L* | 2 | 8 | 2 to 5 | 4 | 3.81 |
| 1251L | 1351L | 1 | 5 | 2 to 11 | 5 | 4.11 |
| 1256L | 1356L | 2 | 10 | 2 to 6 | 5 | 4.11 |
| 1261L | 1361L | 1 | 6 | 2 to 11 | 6 | 4.83 |
| 1266L | 1366L | 2 | 12 | 2 to 6 | 6 | 5.52 |

*These switches are provided with an "off" position which is in addition to the number of positions listed in the fifth column.

CERAMIC SECTION SELECTOR SWITCHES



Ideal for highly efficient, critical r-f circuit applications in radio receivers and low-power transmitter circuits. Ceramic insulation minimizes r-f losses and retards moisture absorption. Adjustable stop is feature of index assembly permitting choice of 2 to 11 positions. All types are non-shorting. Two-section switch has 1/2" spacing; three-section units, 1" spacing between sections. Brass bushing 3/4" dia. x 3/8" shaft 1/4" dia. x 2" long, grooved for cutting. Breakdown, 500 v. AC or DC. Rated 5 amps, 300 v. AC-DC; 6 amps, 6 v. AC-DC. Non-breaking current, resistive load, 10 amps max. With knob, nut and lockwasher.

| Mallory No. | Number of Gangs | Number of Circuits Per Gang | Number of Positions | Net Each |
|-------------|-----------------|-----------------------------|---------------------|----------|
| 172C | 1 | 1 | 2 to 11 | \$2.37 |
| 173C* | 1 | 2 | 2 to 5 | 2.37 |
| 174C* | 1 | 3 | 2 to 3 | 2.37 |
| 176C | 2 | 1 | 2 to 11 | 3.39 |
| 177C* | 2 | 2 | 2 to 5 | 3.39 |
| 178C* | 2 | 3 | 2 to 3 | 3.39 |
| 180C | 3 | 1 | 2 to 11 | 4.32 |
| 181C* | 3 | 2 | 2 to 5 | 4.32 |

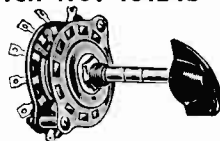
*Has additional "off" switch preceding numbered positions.

CIRCUIT OPENING SWITCH

For meter switching in test sets or where multiple circuits must be opened for insertion of resistors, capacitors, etc. Phenolic resin insulation; 2 to 11 position adjustable stop. Bushing, 3/4" dia. x 3/8" long; shaft 3/4" dia. x 2" long, grooved for cutting. Indexing, 30°. Rated 6 amps, 300 v. DC; 8 amps, 6 v. DC; 1 amp, 300 v. AC; 10 amps, 6 v. AC. Max. resistive load 10 amps non-breaking current. With knob, nut and lockwasher. **\$4.68**
Mallory No. 1400L Circuit Opening Switch—Net Each.

24-POSITION TAP SWITCH NO. 13124L

For test applications which cannot be met with conventional 12-point switch. Accomplished through use of two sections similar in design to 1300L switches. Indexing mechanism has no stops, and is capable of continuous rotation with a 15° indexing action between positions. Furnished with 1/4" dia. x 3/8" long bushing and 2" long, notched shaft. Electrical characteristics similar to 1200L, 1300L series. Each switch is equipped with No. 366 knob, No. 232 nut, No. 227 lock washer and No. 394 dial plate. **\$2.76**
Mallory No. 13124L Switch—Net Each.



LEVER ACTION SWITCHES TYPES 5000 AND 6000



Particularly adapted to centralized radio, sound distribution, public address equipment and intercommunicating systems. Housing and bracket are one integral part, prevents warping or mis-alignment of contacts. Terminals secured by "wrap-around" method to high grade phenolic resin. 5000 series has elongated mounting holes with 2 1/2" centers; 6000 series has round holes spaced 1". May be mounted in multiples with 3/4" between lever arm centers. Breakdown, 500 v. AC or DC. Rated, 125 amp, 300 v. DC; 3 amps, 6 v. DC; 2 amp, 300 v. AC; 5 amps, 6 v. AC. With knob and two 6-32 bolts with nuts.

POSITIVE INDEXING

| Shorting Type Mallory No. | Non-Shorting Type Mallory No. | No. of Poles or Circuits | No. of Positions or Contacts | Net Each |
|---------------------------|-------------------------------|--------------------------|------------------------------|----------|
| 5124 | 5224 | 2 | 4 | \$1.38 |
| 6142 | 6242 | 4 | 2 | 1.20 |
| 6143 | 6243 | 4 | 3 | 1.20 |

MINIATURE PUSH BUTTON SWITCHES

Especially suitable for use in such applications as test panels, meter circuits and labs. Eight different circuit combinations available in non-locking type only, where contact is made when button is depressed. Alloy contact springs, fine silver contacts, cadmium plated steel switch frame, aluminum mounting bushing. Mounts in single hole, 1/8" min. (1011) and 3/8" max. (1018). Voltage breakdown, 500 v. DC. With mounting nut and washer.



| Mallory No. | Circuit Arrangement | Net Each |
|-------------|------------------------|----------|
| 1011 | SPST—Make | \$0.69 |
| 1012 | SPST—Break | .69 |
| 1013 | SPDT | .87 |
| 1014 | DPST—Make 2 | .87 |
| 1015 | DPST—Break 2 | .87 |
| 1016 | DPDT | 1.05 |
| 1017 | DP—Make 2, Break 1 | 1.05 |
| 1018 | DPDT—Make before break | 1.44 |

CAPACITOR AND RESISTOR DECADE SWITCHES

Phenolic insulation. Positions adjustable for use as single decade or combined with other switches for multiple decade. Circuit requires only four resistors or capacitors for full decade. Mounting depth, 1" behind panel; lateral mounting space 2". Rated 500 v. DC or AC breakdown. Shaft, 1/4" dia. x 2" long. With knob, nut and lockwasher. **\$2.70**
Mallory No. 153L Capacitor Decade Switch—Net Each.
Mallory No. 154L Resistor Decade Switch—Net Each. **\$2.94**

ANTENNA SWITCH

For use where two separate antennas are used with a single TV set. Mounts on rear safety panel of cabinet with mounting bracket and two self-tapping screws, supplied. Solder terminals. Shaft 1 1/4" long from mounting surface; switch 1 1/4" dia. With bar knob, bracket and screws. **\$1.31**
Mallory No. 3122TV Antenna Switch—Net Each.

CERAMIC SECTION R F SWITCHES

A special ceramic switch designed for transmitter circuits up to 1000 V. D. C. with power up to 100 watts. Ceramic insulation is employed in both sections and spacers 90° indexing between positions, and capable of continuous rotation. Supplied with 3/8" dia., 3/8" long brass bushing and 2" long shaft grooved for cutting. Bar knob, locknut and washer included. All types non-shorting.



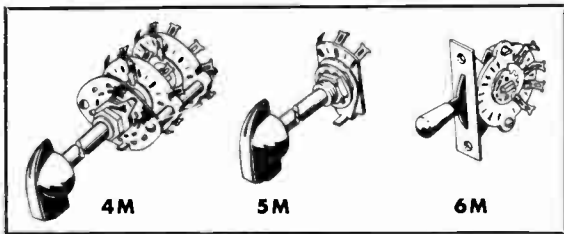
| Mallory No. | No. of Sections | Circuits | Spacing Between Sections | Contacts Per Circuit | Net Each |
|-------------|-----------------|----------|--------------------------|----------------------|----------|
| 161C | 1 | 1 | | 4 | \$2.16 |
| 162C | 2 | 2 | 1 1/8" | 4 | 3.06 |
| 163C | 3 | 3 | 1" | 4 | 3.96 |
| 164C | 4 | 4 | 1" | 4 | 4.86 |
| 165C | 5 | 5 | 1" | 4 | 5.76 |

FIVE-POSITION HAMSWITCH®

Provides a method of using a single meter to measure current or voltages up to five circuits of an amateur transmitter. Same basic design as Series 1200L. Has conservative rating of 1000 volts RMS AC or 1500 volts DC. Indexing 60°. Has adjustable stop feature for maximum of five positions. Bushing is 3/8" dia. x 3/8" long, shaft is 1/4" dia. x 2" long, grooved for easy cutting. Knob, nut and lock washer furnished. **\$2.70**
Mallory No. 151L Hamswitch—Net Each.

P. R. MALLORY & CO. INC.
MALLORY

Mallory-Grigsby Switches



Features exclusive "Wedgelock" method of attaching contacts to the wafers; insures positive contact alignment; and, avoids frame and contact distortion. Radial stator arrangement provides a wide insulating path between contacts and minimum wafer size.

TYPE 4M PHENOLIC AND CERAMIC ROTARY SWITCHES

Commercial equivalents of MIL-S-3786. Phenolic types use Richardson T725 grade phenolic for stators and rotors; have common contact on the same side as the switching contacts. Ceramic types use military grade L-5 steatite treated with Dow-Corning 200; have common contact on the opposite side of the wafer from the other contacts to provide a 12-position switch. Initial contact resistance, .005 ohm, maximum. Breakdown voltage, 1,700 v. rms, 60 cycle, between contacts and contacts and frames. Contact rating, 350 ma at 500 v. rms, resistive load. Supplied with knob, adjustable stop, lockwasher, and nut.

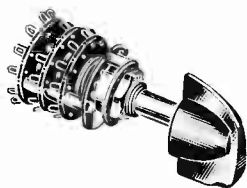
30° INDEXING PHENOLIC WAFER

| Shorting Type Mallory No. | Non-Shorting Type Mallory No. | Circuits Per Section | No. of Sections | No. of Positions | Net Each |
|---------------------------|-------------------------------|----------------------|-----------------|------------------|----------|
| 4M11111 | 4M21111 | 1 | 1 | 11 | \$1.80 |
| 4M1215 | 4M2215 | 2 | 1 | 5 | 1.80 |
| 4M11211 | 4M21211 | 1 | 2 | 11 | 2.58 |
| 4M1313 | 4M2313 | 3 | 1 | 3 | 1.80 |
| 4M11311 | 4M21311 | 1 | 3 | 11 | 3.24 |
| 4M1412 | 4M2412 | 4 | 1 | 2 | 1.80 |
| 4M1225 | 4M2225 | 2 | 2 | 5 | 2.58 |
| 4M11411 | 4M21411 | 1 | 4 | 11 | 3.81 |
| 4M11511 | 4M21511 | 1 | 5 | 11 | 4.47 |
| 4M1323 | 4M2323 | 3 | 2 | 3 | 2.58 |
| 4M1235 | 4M2235 | 2 | 3 | 5 | 3.24 |
| 4M11611 | 4M21611 | 1 | 6 | 11 | 5.04 |
| 4M1422 | 4M2422 | 4 | 2 | 2 | 2.58 |
| 4M1245 | 4M2245 | 2 | 4 | 5 | 3.81 |
| 4M1255 | 4M2255 | 2 | 5 | 5 | 4.47 |
| 4M1432 | 4M2432 | 4 | 3 | 2 | 3.24 |
| 4M1265 | 4M2265 | 2 | 6 | 5 | 5.04 |

30° INDEXING CERAMIC WAFER

| Shorting Type Mallory No. | Non-Shorting Type Mallory No. | Circuits Per Section | No. of Sections | No. of Positions | Net Each |
|---------------------------|-------------------------------|----------------------|-----------------|------------------|----------|
| 4M11112C | 4M21112C | 1 | 1 | 12 | \$2.37 |
| 4M1216C | 4M2216C | 2 | 1 | 6 | 2.37 |
| 4M11212C | 4M21212C | 1 | 2 | 12 | 3.39 |
| 4M1315C | 4M2315C | 3 | 1 | 5 | 2.37 |
| 4M11312C | 4M21312C | 1 | 3 | 12 | 4.32 |
| 4M1226C | 4M2226C | 2 | 2 | 6 | 3.39 |
| 4M11412C | 4M21412C | 1 | 4 | 12 | 5.19 |
| 4M1513C | 4M2513C | 5 | 1 | 3 | 2.37 |
| 4M11512C | 4M21512C | 1 | 5 | 12 | 6.18 |
| 4M1612C | 4M2612C | 6 | 1 | 2 | 2.37 |
| 4M1325C | 4M2325C | 3 | 2 | 5 | 3.39 |
| 4M1236C | 4M2236C | 2 | 3 | 6 | 4.32 |
| 4M11612C | 4M21612C | 1 | 6 | 12 | 7.20 |
| 4M1246C | 4M2246C | 2 | 4 | 6 | 5.19 |
| 4M1335C | 4M2335C | 3 | 3 | 5 | 4.32 |
| 4M1523C | 4M2523C | 5 | 2 | 3 | 3.39 |

MALLORY-GRIGSBY SUBMINIATURE SWITCHES



Series 12M subminiature switches are 30° indexing types with 12 positions and fixed stop. Glass-epoxy wafers, per MIL-P-18177, are only 7/8" in diameter. Spacing between wafers is 3/16"; available in up to three wafers and with four circuits per section. **Electrical Ratings** (resistive load): 150 ma at 125 volts; maximum rated voltage, 225 volts; maximum rated current, 2.5 amperes at 6 volts rms. **Bushing:** 3/32" x 1/8". **Shaft:** 3/8" dia. x 1 1/2" long. Furnished with nut, lockwasher and 366-1 bar knob.

CERAMIC WAFER (CONTINUED)

| Shorting Type Mallory No. | Non-Shorting Type Mallory No. | Circuits Per Section | No. of Sections | No. of Positions | Net Each |
|---------------------------|-------------------------------|----------------------|-----------------|------------------|----------|
| 4M1256C | 4M2256C | 2 | 2 | 6 | \$6.18 |
| 4M1622C | 4M2622C | 6 | 5 | 2 | 3.39 |
| 4M1266C | 4M2266C | 2 | 6 | 6 | 7.20 |
| 4M1533C | 4M2533C | 5 | 3 | 3 | 4.68 |
| 4M1632C | 4M2632C | 6 | 3 | 2 | 4.68 |

TYPE 4M CERAMIC ROTARY RF SWITCHES

Especially designed to be used in applications where high RF signals are to be encountered and use a phenolic shaft in the active switch segments. Suffix **H** indicates 60° indexing; suffix **N** 90° indexing. Made of military grade L-5 steatite treated with Dow-Corning 200; feature rugged contact construction. Dimensions similar to 30° indexing type except mounting plate to first section which is 3/4". Complete with knob, adjustable stop, lockwasher and nut.

60° INDEXING

| Non-Shorting Mallory No. | Circuits per Section | No. of Sections | No. of Positions | Net Each |
|--------------------------|----------------------|-----------------|------------------|----------|
| 4M2116H | 1 | 1 | 6 | \$2.16 |
| 4M2126H | 1 | 2 | 6 | 3.06 |
| 4M2136H | 1 | 3 | 6 | 3.96 |
| 4M2146H | 1 | 4 | 6 | 4.86 |
| 4M2156H | 1 | 5 | 6 | 5.76 |

90° INDEXING

| Non-Shorting Mallory No. | Circuits per Section | No. of Sections | No. of Positions | Net Each |
|--------------------------|----------------------|-----------------|------------------|----------|
| 4M2114N | 1 | 1 | 4 | \$2.16 |
| 4M2124N | 1 | 2 | 4 | 3.06 |
| 4M2134N | 1 | 3 | 4 | 3.96 |
| 4M2144N | 1 | 4 | 4 | 4.86 |
| 4M2154N | 1 | 5 | 4 | 5.76 |

TYPES 4M AND 5M SINGLE SECTION PHENOLIC GENERAL PURPOSE SWITCHES

General purpose switches supplied with knob, lockwasher and nut. Type 4M switches are intended for simple switching applications or where a spring return feature is desired. Type 5M switches are small compact designs for tone control, radio-phonos, etc., similar construction to Type 4M. No. 5M1113K uses knurled shaft; knob not furnished.

| Shorting Type Mallory No. | Non-Shorting Type Mallory No. | Circuits Per Section | No. of Sections | No. of Positions | Net Each |
|---------------------------|-------------------------------|----------------------|-----------------|------------------|----------|
| 4M1114D | | 1 | 1 | 4 | \$1.80 |
| | 4M2412S | 4 | 1 | 2 | 1.44 |
| 5M1112 | | 1 | 1 | 2 | 1.08 |
| 5M1113 | | 1 | 1 | 3 | 1.08 |
| 5M1113K | | 1 | 1 | 3 | .75 |
| 5M1213 | 5M2213 | 2 | 1 | 3 | 1.08 |

TYPE 6M PHENOLIC LEVER ACTION SWITCHES

Feature the same general construction as the 4M types. Wafer diameter is basically the same and incorporates the same "Wedgelock" and radial contact features. Supplied with lever knob. Suffix **S** designates spring return; suffix **U** indicates both positive action and spring return.

| Shorting Type Mallory No. | Non-Shorting Type Mallory No. | Circuits Per Section | No. of Sections | No. of Positions | Net Each |
|---------------------------|-------------------------------|----------------------|-----------------|------------------|----------|
| 6M1213 | 6M2213 | 2 | 1 | 3 | \$1.26 |
| 6M1213S | 6M2213S | 2 | 1 | 3 | 1.26 |
| 6M1213U | 6M2213U | 2 | 1 | 3 | 1.26 |
| 6M1412S | 6M2412S | 4 | 1 | 2 | 1.44 |

30° INDEXING GLASS-EPOXY WAFER

| Mallory Number | | Circuits Per Section | Number of | | Net Each |
|----------------|--------------|----------------------|-----------|-----------|----------|
| Shorting Type | Non-Shorting | | Sections | Positions | |
| 12M11111G | 12M21111G | 1 | 1 | 11 | \$4.52 |
| 12M11211G | 12M21211G | 1 | 2 | 11 | 5.58 |
| 12M1215G | 12M2215G | 2 | 1 | 5 | 4.52 |
| 12M11311G | 12M21311G | 1 | 3 | 11 | 6.54 |
| 12M1313G | 12M2313G | 3 | 1 | 3 | 4.52 |
| 12M1225G | 12M2225G | 2 | 2 | 5 | 5.58 |
| 12M1412G | 12M2412G | 4 | 1 | 2 | 4.52 |
| 12M1235G | 12M2235G | 2 | 3 | 5 | 6.54 |
| 12M1323G | 12M2323G | 3 | 2 | 3 | 5.58 |
| 12M1422G | 12M2422G | 4 | 2 | 2 | 6.54 |
| 12M133G | 12M233G | 3 | 3 | 3 | 6.54 |
| 12M1432G | 12M2432G | 4 | 3 | 2 | 6.54 |

OHMITE

resistors • rheostats • tap switches • relays
variable transformers • tantalum capacitors
germanium diodes • r.f. chokes

POWER TAP SWITCHES NON-SHORTING TYPE



Each switch is a non-shorting, single pole, rotary, multi-position unit, but switches can be ordered assembled 2 or 3 in tandem (2 maximum, for Model 111) to form multipole assemblies. All ceramic insulation, large, solid silver-to-silver contacts, and "slow-break" action especially designed for alternating current use establish new standards of dependability and performance. Switch shafts are electrically "dead"—insulated by strong ceramic hubs. Contacts and mechanism are entirely enclosed and protected (except for the Model 111).

MODEL 111 TAP SWITCH

Alternating Current Rating 10 Amps. 150 Volts — Diameter 1 3/4" — Shaft Diameter 1/4" — Standard Mounting: For 1/4" panel maximum, by means of 3/8"-32 threaded bushing and hex. nut.

| Depth Behind Panel | | Single Unit | | 2 in Tandem | |
|--------------------|----------------|------------------------|----------|------------------------|----------|
| | | 1 1/8" | | 2 3/4" | |
| No. of Taps | Total Rotation | Stock Number | *Net 1-4 | Stock Number | *Net 1-2 |
| 11 | 300° | 111-11 | \$4.78 | 111-11-T2 | \$12.86 |
| 10 | 270° | 111-10 | 4.66 | 111-10-T2 | 12.62 |
| 9 | 240° | 111-9 | 4.54 | 111-9-T2 | 12.38 |
| 8 | 210° | 111-8 | 4.42 | 111-8-T2 | 12.14 |
| 7 | 180° | 111-7 | 4.30 | 111-7-T2 | 11.90 |
| 6 | 150° | 111-6 | 4.18 | 111-6-T2 | 11.66 |
| 5 | 120° | 111-5 | 4.06 | 111-5-T2 | 11.42 |
| 4 | 90° | 111-4 | 3.94 | 111-4-T2 | 11.18 |
| 3 | 60° | 111-3 | 3.82 | 111-3-T2 | 10.94 |
| 2 | 30° | 111-2 | 3.70 | 111-2-T2 | 10.70 |
| Recommended Knobs | | Stock No. 5150 or 5116 | | Stock No. 5109 or 5110 | |

*Without Knob.

MODEL 212 TAP SWITCH

Alternating Current Rating 15 Amps. 150 Volts — Diameter 2 1/4" — Shaft Diameter 1/4" — Standard Mounting: For 1/4" panel maximum, by means of 3/8"-32 threaded bushing and hex. nut. Tandem Mounting: For 1/4" panel maximum, three No. 10-32 flat-head machine screws 3/8" long.

| Depth Behind Panel | | Single Unit | | 2 in Tandem | | 3 in Tandem | |
|--------------------|----------------|------------------------|----------|------------------------|----------|------------------------|-----------|
| | | 1 3/4" | | 4 3/16" | | 6 3/16" | |
| No. of Taps | Total Rotation | Stock No. | *Net 1-4 | Stock No. | *Net 1-2 | Stock No. | *Net Each |
| 12 | 330° | 212-12 | \$ 9.04 | 212-12-T2 | \$21.38 | 212-12-T3 | \$32.12 |
| 11 | 300° | 212-11 | 8.86 | 212-11-T2 | 21.02 | 212-11-T3 | 31.58 |
| 10 | 270° | 212-10 | 8.68 | 212-10-T2 | 20.66 | 212-10-T3 | 31.04 |
| 9 | 240° | 212-9 | 8.50 | 212-9-T2 | 20.30 | 212-9-T3 | 30.50 |
| 8 | 210° | 212-8 | 8.32 | 212-8-T2 | 19.94 | 212-8-T3 | 29.96 |
| 7 | 180° | 212-7 | 8.14 | 212-7-T2 | 19.58 | 212-7-T3 | 29.42 |
| 6 | 150° | 212-6 | 7.96 | 212-6-T2 | 19.22 | 212-6-T3 | 28.88 |
| 5 | 120° | 212-5 | 7.78 | 212-5-T2 | 18.86 | 212-5-T3 | 28.34 |
| 4 | 90° | 212-4 | 7.60 | 212-4-T2 | 18.50 | 212-4-T3 | 27.80 |
| 3 | 60° | 212-3 | 7.42 | 212-3-T2 | 18.14 | 212-3-T3 | 27.26 |
| 2 | 30° | 212-2 | 7.24 | 212-2-T2 | 17.78 | 212-2-T3 | 26.72 |
| Recommended Knobs | | Stock No. 5150 or 5116 | | Stock No. 5111 or 5112 | | Stock No. 5111 or 5112 | |

*Without Knob.

MODEL 312 TAP SWITCH

Alternating Current Rating 25 Amps. 300 Volts, 150 V. A.C. between taps — Diameter 3 1/8" — Shaft Diameter 1/4" — Standard Mounting: For 1/4" panel maximum, three No. 10-32 flat-head machine screws 3/8" long.

| Depth Behind Panel | | Single Unit | | 2 in Tandem | | 3 in Tandem | |
|--------------------|----------------|------------------------|----------|------------------------|----------|------------------------|-----------|
| | | 2 1/4" | | 4 5/8" | | 7" | |
| No. of Taps | Total Rotation | Stock No. | *Net 1-4 | Stock No. | *Net 1-2 | Stock No. | *Net Each |
| 12 | 330° | 312-12 | \$11.62 | 312-12-T2 | \$27.24 | 312-12-T3 | \$41.46 |
| 11 | 300° | 312-11 | 11.44 | 312-11-T2 | 27.28 | 312-11-T3 | 40.92 |
| 10 | 270° | 312-10 | 11.26 | 312-10-T2 | 26.92 | 312-10-T3 | 40.38 |
| 9 | 240° | 312-9 | 11.08 | 312-9-T2 | 26.56 | 312-9-T3 | 39.84 |
| 8 | 210° | 312-8 | 10.90 | 312-8-T2 | 26.20 | 312-8-T3 | 39.30 |
| 7 | 180° | 312-7 | 10.72 | 312-7-T2 | 25.84 | 312-7-T3 | 38.76 |
| 6 | 150° | 312-6 | 10.54 | 312-6-T2 | 25.48 | 312-6-T3 | 38.22 |
| 5 | 120° | 312-5 | 10.36 | 312-5-T2 | 25.12 | 312-5-T3 | 37.68 |
| 4 | 90° | 312-4 | 10.18 | 312-4-T2 | 24.76 | 312-4-T3 | 37.14 |
| 3 | 60° | 312-3 | 10.00 | 312-3-T2 | 24.40 | 312-3-T3 | 36.60 |
| 2 | 30° | 312-2 | 9.82 | 312-2-T2 | 24.04 | 312-2-T3 | 36.06 |
| Recommended Knobs | | Stock No. 5109 or 5110 | | Stock No. 5111 or 5112 | | Stock No. 5111 or 5112 | |

*Without Knob.

MODEL 412 TAP SWITCH

Alternating Current Rating 50 Amps. 300 Volts, 150 V. A.C. between taps — Diameter 4 1/8" — Shaft Diameter 1/4" — Standard Mounting: For 1/4" panel maximum three No. 10-32 flat-head machine screws 3/8" long.

| Depth Behind Panel | | Single Unit | | 2 in Tandem | | 3 in Tandem | |
|--------------------|----------------|------------------------|----------|------------------------|----------|------------------------|-----------|
| | | 2 1/16" | | 5 1/2" | | 7 5/8" | |
| No. of Taps | Total Rotation | Stock No. | *Net 1-4 | Stock No. | *Net 1-2 | Stock No. | *Net Each |
| 12 | 330° | 412-12 | \$15.46 | 412-12-T2 | \$35.32 | 412-12-T3 | \$52.98 |
| 11 | 300° | 412-11 | 15.20 | 412-11-T2 | 34.80 | 412-11-T3 | 52.20 |
| 10 | 270° | 412-10 | 14.94 | 412-10-T2 | 34.28 | 412-10-T3 | 51.42 |
| 9 | 240° | 412-9 | 14.68 | 412-9-T2 | 33.76 | 412-9-T3 | 50.64 |
| 8 | 210° | 412-8 | 14.42 | 412-8-T2 | 33.24 | 412-8-T3 | 49.86 |
| 7 | 180° | 412-7 | 14.16 | 412-7-T2 | 32.72 | 412-7-T3 | 49.08 |
| 6 | 150° | 412-6 | 13.90 | 412-6-T2 | 32.20 | 412-6-T3 | 48.30 |
| 5 | 120° | 412-5 | 13.64 | 412-5-T2 | 31.68 | 412-5-T3 | 47.52 |
| 4 | 90° | 412-4 | 13.38 | 412-4-T2 | 31.16 | 412-4-T3 | 46.74 |
| 3 | 60° | 412-3 | 13.12 | 412-3-T2 | 30.64 | 412-3-T3 | 45.96 |
| 2 | 30° | 412-2 | 12.86 | 412-2-T2 | 30.12 | 412-2-T3 | 45.18 |
| Recommended Knobs | | Stock No. 5111 or 5112 | | Stock No. 5111 or 5112 | | Stock No. 5111 or 5112 | |

*Without Knob.

MODEL 608 TAP SWITCH

Alternating Current Rating 100 Amps. 300 Volts — Diameter 6" — Shaft Diameter 3/8" — Standard Mounting: For 1" panel maximum, three flat-head machine screws 1/4"-20 x 1 1/4".

| Depth Behind Panel | | Single Unit | | 2 in Tandem | | 3 in Tandem | |
|--------------------|----------------|--------------------------------|----------|--------------------------------|----------|----------------|-----------|
| | | 3 5/16" | | 6 13/16" | | 10 5/16" | |
| No. of Taps | Total Rotation | Stock No. | *Net 1-4 | Stock No. | *Net 1-2 | Stock No. | *Net Each |
| 8 | 280° | 608-8 | \$25.54 | 608-8-T2 | \$57.68 | 608-8-T3 | \$85.42 |
| 7 | 240° | 608-7 | 25.20 | 608-7-T2 | 57.00 | 608-7-T3 | 84.40 |
| 6 | 200° | 608-6 | 24.86 | 608-6-T2 | 56.32 | 608-6-T3 | 83.38 |
| 5 | 160° | 608-5 | 24.52 | 608-5-T2 | 55.64 | 608-5-T3 | 82.36 |
| 4 | 120° | 608-4 | 24.18 | 608-4-T2 | 54.96 | 608-4-T3 | 81.34 |
| 3 | 80° | 608-3 | 23.84 | 608-3-T2 | 54.28 | 608-3-T3 | 80.32 |
| 2 | 40° | 608-2 | 23.50 | 608-2-T2 | 53.60 | 608-2-T3 | 79.30 |
| Recommended Knobs | | Stock No. 5104 or 5115 or 5105 | | Stock No. 5104 or 5115 or 5105 | | Stock No. 5115 | |

*Without Knob.

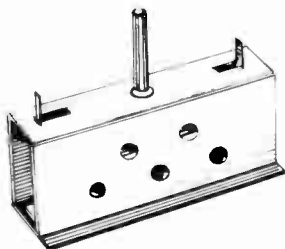
Sightmaster CORPORATION, PROVIDENCE, R. I.

NEW THERMAL OVERLOAD SWITCH FOR TV

A simple, but unique series of thermal overload switches ideally suited for TV receivers. Other intended applications include a wide range of electrical/electronic instruments for industrial, commercial and consumer use.

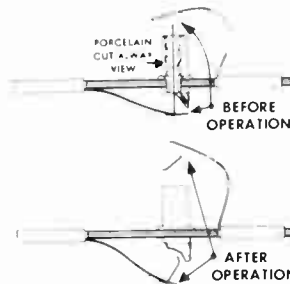
OUTSTANDING FEATURES

- SIMPLE CONSTRUCTION
- LOW COST
- DURABLE—RELIABLE
- ALL CRITICAL PARTS SILVER PLATED
- IMPOSSIBLE TO OVER-RIDE BY FASTENING RE-SET BUTTON



SERIES 35 GRASSHOPPER FUSES

(INDICATOR ALARM TYPE)



| FUSE CAT. NO. | RATED CAPACITY (AMPERE) | OPERATING ON | |
|---------------|-------------------------|------------------------|------|
| | | SUGGESTED MAX. VOLTAGE | AMPS |
| 35A | 1 1/3 | 90 | 2 |
| 35B | 1 1/3 | 90 | 2 |
| 35C | 2 | 90 | 3 |
| 35D | 1 1/3 | 90 | 2 |
| 35E | 3 | 90 | 4 |
| 35F | 1 1/2 | 90 | 3 |
| 35G | 3 | 90 | 4 |
| 35H | 5 | 90 | 6 |
| **35J | 1 1/2 | 160 | 3 |
| **35K | 1 1/3 | 150 | 2 |
| **35L | 2 | 150 | 3 |
| **35M | 3 | 150 | 4 |
| **35N | 5 | 150 | 6 |
| **35P | 3/4 | 160 | 1 |
| 35R | 180 | 90 | 270 |
| **35S | 1/4 | 160 | 3/8 |
| 35T | 65 | 90 | 1 |

* Made with ceramic insulator to protect against arcing
 ** Made with glass insulator to protect against arcing

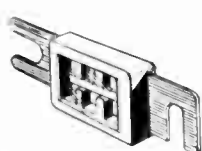
HIGH RELIABILITY AIRCRAFT LIMITERS

"AF" SERIES



Specific use—aircraft electrical circuits. Mechanical plunger identifies blown limiter.

"AFH" SERIES



For aircraft electrical distribution up to 50v. Sizes from 35 to 400 A. Transparent window for fuse link inspection.

"AFS" SERIES



Operates same circuits as "AF" Series. Limiters made for system as well as equipment protection. Glass tube for inspection of blown link.

SERIES "70" INDICATING FUSES

Case Material: Fibre Body Size: 9/32" x 1 1/4"
 Overall Size: 9/32" x 1 7/32"

Designed for use in communications equipment. Spring-loaded, color coded tip extends to give positive visual indication of blown fuse. Can be used in specially designed fuse-holder or is interchangeable with 4AG Series used in open clips. Can be wired to activate alarm system indicating blown fuse. Manufactured in the following amperages:

300V or Less
 180/1000 Amp through 5 Amps

Test Specifications:
 Continuous duty at 100%. Blows within 90 seconds at 150%.



"C" LIMITED CURRENT SERIES

For use when rapid interruption of fault current is required to avoid damage due to delay in opening. Length of fuse is determined by amperage and ear size. Manufactured in the following amperages:

250V OR LESS
 1/16 Amp through 10 Amps

TEST SPECIFICATIONS:
 Continuous duty at 110%.
 Blows within 1 hour at 135%.

CASE MATERIALS: GLASS SIZE: 1/4" DIAMETER

| | Per box of 5 | Per 100 or more |
|-------------------------------------|--------------|-----------------|
| 1/32 | \$1.32 5 | \$22.00 C |
| 1/16 | \$.84 5 | \$14.00 C |
| 1/8 | \$.66 5 | \$11.00 C |
| 3/16, 1/4, 5/16, 3/8, 1/2, 3/4 | \$.51 5 | \$ 8.50 C |
| 1, 1 1/2, 1 1/2, 1 3/4, 2, 2 1/2, 3 | \$.29 5 | \$ 4.75 C |
| 3 1/2, 4, 5, 6, 7 | \$.38 5 | \$ 6.25 C |
| 8 | \$.54 5 | \$ 9.00 C |
| 10 | \$.57 5 | \$ 9.50 C |



"3AG" HIGH VOLTAGE SERIES

Designed for use in Radio, Television and numerous electronic devices. The 3AG High Voltage series blow quickly under overload conditions therefore providing the high speed action necessary to protect electronic apparatus. Manufactured in the following amperages:

250V OR LESS
 1/8 Amp through 6 Amps
 125V OR LESS: 8

TEST SPECIFICATIONS:
 Continuous duty at 110%.
 Blows within 1 hour at 135%.

CASE MATERIALS: GLASS SIZE: 1/4" x 1 1/4"

| | Per box of 5 | Per 100 or more |
|--------------------------------|--------------|-----------------|
| 1/16, 1/8, 1/100, 1/1000, 1/10 | \$.63 5 | \$10.50 C |
| 1/4, 3/10, 3/8, 1/2, 5/10, 3/4 | \$.42 5 | \$ 7.00 C |
| 1, 1 1/2, 2 | \$.25 5 | \$ 4.20 C |
| 3 | \$.22 5 | \$ 3.70 C |
| 4, 5, 6 | \$.32 5 | \$ 5.25 C |



"3AG" HIGH VOLTAGE TIME LAG SERIES

Designed for circuits with equipment having high inductive or capacitive surges and for circuits with heavy starting currents. Manufactured in the following amperages:

250 VOLTS OR LESS
 1/100 Amp through 1 Amp
 125 VOLTS OR LESS
 1 1/4 Amps through 6 1/2 Amps
 32 VOLTS OR LESS
 6 1/2 Amps through 25 Amps

TEST SPECIFICATIONS:
 Continuous duty at 110%. Blows within 1 hour at 135%. Blows within 1 minute, but not less than 5 seconds at 200%.

CASE MATERIALS: GLASS SIZE: 1/4" x 1 1/4"

| | Per box of 5 | Per 100 or more |
|--|--------------|-----------------|
| 1/100, 1/32 | \$1.17 5 | \$19.50 C |
| 1/16, 1/10, 1/8, 1/100, 1/1000, 1/10 | | |
| 1/4, 3/10, 1/2, 5/10, 3/4, 1 | \$.84 5 | \$14.00 C |
| 1 1/4, 1 1/2, 1 3/4, 2 | \$.78 5 | \$13.00 C |
| 2 1/2, 2 3/4, 3, 3 3/4, 4, 5, 6 1/2, 8, 10, 15, 20, 25, 30 | \$.63 5 | \$10.50 C |



"N" LIMITED CURRENT SERIES

Designed with time-lag characteristics to avoid unnecessary opening due to harmless surges or starting currents. Length of fuse is determined by amperage and ear size. Manufactured in the following amperages:

125V OR LESS
 1/100 Amp through 7 Amps

TEST SPECIFICATIONS:
 Continuous duty at 110%. Blows within 1 hour at 135%. Blows in not less than 5 seconds at 200%.

CASE MATERIALS: GLASS SIZE: 1/4" DIAMETER

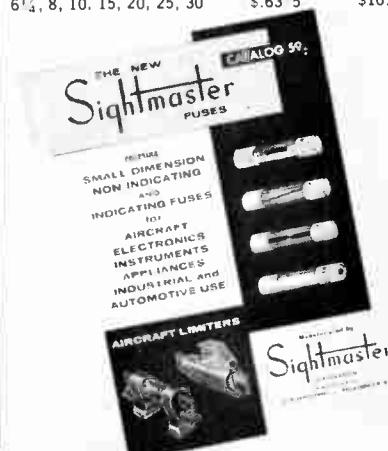
| | Per box of 5 | Per 100 or more |
|--|--------------|-----------------|
| 1/100, 1/32 | \$1.23/5 | \$20.50 C |
| 1/16, 1/10, 1/100, 1/10, 1/4, 3/10, 1/2, 3/4, 5/10, 3/4, 1, 1 1/4, 1 1/2, 1 3/4, 2 | \$.89 5 | \$14.75 C |
| 2 1/2, 2 3/4, 3, 3 1/2, 4, 5, 6 1/4, 7 | \$.75 5 | \$12.50 C |



VULCANIZED FIBRE FUSES

Manufactured with ratings from 1/2 Amp thru 2 Amps, for continuous duty at 110%; blow within 1 hour at 135%

- 1 HV SERIES
1,000 V or less—1 1/32" x 3"
- 2 HV SERIES
2,500 V or less—1 1/32" x 4 1/2"
- 3 HV SERIES
5,000 V or less—1 1/16" x 5"
- 4 HV SERIES
10,000 V or less—1 1/16" x 10"



PLUS... THE MOST COMPLETE LINE OF INDUSTRIAL & SERVICE FUSES IN THE INDUSTRY

SPEMCO H & H SWITCHES

BALL LEVER TOGGLE SWITCHES

Underwriters' approved, 1 amp. 250 V 3 amp. 125 volts. AC/DC. Laminated bakelite base. Nickel plated finish, except 1120 and 1121.

3 Amp.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|-------|-------------|---------|-----------------|---------|---------|-----------|
| | | | L. | W. | H. | |
| *1120 | SPST | 1 3/32" | 1 3/16" | 1/2" | 3 5/64" | .63 ea. |
| 1122 | SPDT | 1 3/32" | 1 3/16" | 1/2" | 3 5/64" | .81 ea. |
| 1124 | DPST | 1 3/32" | 1 3/16" | 2 1/32" | 3 5/64" | 1.11 ea. |
| 1126 | DPDT | 1 3/32" | 1 3/16" | 2 1/32" | 2 9/32" | 1.29 ea. |
| *1121 | SPST | 1" | 1 3/16" | 1/2" | 3 5/64" | .81 ea. |
| 1123 | SPDT | 1" | 1 3/16" | 1/2" | 3 5/64" | .96 ea. |
| 1125 | DPST | 1" | 1 3/16" | 2 1/32" | 3 5/64" | 1.32 ea. |
| 1127 | DPDT | 1" | 1 3/16" | 2 1/32" | 2 9/32" | 1.44 ea. |

Sleeve Diameter—1 3/32"
*3 amp. 250 V AC/DC.

BAT LEVER TOGGLE SWITCHES

3 Amp.

Underwriters' approved, 1 amp. 250 V 3 amp. 125 volts. AC/DC. Laminated bakelite base. Nickel plated finish, except 1135 and 1121B.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|---------|-------------|---------|-----------------|---------|---------|-----------|
| | | | L. | W. | H. | |
| *1135 | SPST | 1 3/32" | 1 3/16" | 1/2" | 3 5/64" | .63 ea. |
| 1136 | SPDT | 1 3/32" | 1 3/16" | 1/2" | 3 5/64" | .81 ea. |
| 1137 | DPST | 1 3/32" | 1 3/16" | 2 1/32" | 3 5/64" | 1.11 ea. |
| 1138 | DPDT | 1 3/32" | 1 3/16" | 2 1/32" | 2 9/32" | 1.29 ea. |
| *1121-B | SPST | 1" | 1 3/16" | 1/2" | 3 5/64" | .81 ea. |
| 1123-B | SPDT | 1" | 1 3/16" | 1/2" | 3 5/64" | .96 ea. |
| 1125-B | DPST | 1" | 1 3/16" | 2 1/32" | 3 5/64" | 1.32 ea. |
| 1127-B | DPDT | 1" | 1 3/16" | 2 1/32" | 2 9/32" | 1.44 ea. |

Sleeve Diameter—1 3/32"
*3 amp. 250 V AC/DC.

NEW "COMPACT" SWITCH



3 Amp.

Ideal for aircraft, missile, and electronic applications. Underwriter's approved 1 amp. 250 v., 3 amp. 125 v., AC-DC. Bakelite base. Bright nickel finish.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|---------|-----------------|---------|---------|-----------|
| | | | L. | W. | H. | |
| 1205 | SPST | 1 3/32" | 1 3/16" | 4 1/64" | 1 3/16" | .84 ea. |
| 1206 | SPDT | 1 3/32" | 1 3/16" | 4 1/64" | 1 3/16" | .99 ea. |
| 1207 | DPST | 1 3/32" | 1 3/16" | 4 1/64" | 1 3/16" | 1.23 ea. |
| 1208 | DPDT | 1 3/32" | 1 3/16" | 4 1/64" | 1 3/16" | 1.41 ea. |

Sleeve Diameter—1 3/32"

MOLDED BAKELITE SWITCH, BAT LEVER

U.L. approved for 6 amp. 125 volts, 3 amp. 250 volts. *Except for 1143 which is rated at 1 amp. 250 volts, 6 amp. 125 volts. All back connected, slotted sleeve.



6 Amp.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|-------|-------------|---------|-----------------|---------|---------|-----------|
| | | | L. | W. | H. | |
| 1142 | SPST | 1 3/32" | 1 1/4" | 1 1/16" | 1 5/16" | .84 ea. |
| *1143 | SPDT | 1 3/32" | 1 1/4" | 1 1/16" | 1 5/16" | .99 ea. |
| 1144 | DPST | 1 3/32" | 1 1/4" | 1 1/16" | 1 5/16" | 1.23 ea. |
| 1145 | DPDT | 1 3/32" | 1 1/4" | 1 1/16" | 1 5/16" | 1.41 ea. |

Sleeve Diameter—1 3/32"

*1 amp. 250 volts, 6 amp. 125 volts

UTILITY SWITCHES—Toggle Type For AC Uses

1185
1186

15 Amp.

1188
1194



Underwriters' approved, 10 amp. 250 volts AC, 15 amp. 125 volts AC, 3/4 H.P. 115V-230V AC.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|---------|-----------------|------|---------|-----------|
| | | | L. | W. | H. | |
| 1185 | SPST | 1 3/32" | 1 1/8" | 5/8" | 1 5/16" | .72 ea. |
| 1186 | SPDT | 1 3/32" | 1 1/8" | 5/8" | 1 5/16" | .87 ea. |
| 1188 | DPST | 1 3/32" | 1 1/8" | 3/4" | 1 1/16" | 1.14 ea. |
| 1194 | DPDT | 1 3/32" | 1 1/8" | 3/4" | 1 1/16" | 1.38 ea. |

Sleeve Diameter—1 3/32"

MOMENTARY BAT LEVER TOGGLE SWITCHES

Underwriters' approved, 3 amp. 125 volts, laminated bakelite base. Nickel plated finish.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|-------|-------------|---------|-----------------|---------|---------|-----------|
| | | | L. | W. | H. | |
| *1166 | SPST | 1 3/32" | 1 3/16" | 1/2" | 3 5/64" | 1.05 ea. |
| 1167 | SPDT | 1 3/32" | 1 3/16" | 1/2" | 3 5/64" | 1.14 ea. |
| *1155 | DPST | 1 3/32" | 1 3/16" | 2 1/32" | 3 5/64" | 1.44 ea. |
| 1150 | DPDT | 1 3/32" | 1 3/16" | 2 1/32" | 2 9/32" | 1.65 ea. |

Sleeve Diameter—1 3/32"
*1166 Normally Off *1155 Normally Off
*3 Amp 250V

15 Amp.



Underwriters' approved, 10 amp. 250 volts AC, 15 amp. 125 volts AC, 3/4 H.P. 115V-230V AC.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|-------|-------------|---------|-----------------|------|---------|-----------|
| | | | L. | W. | H. | |
| *1196 | SPST | 1 3/32" | 1 1/8" | 3/8" | 1 5/16" | .93 ea. |
| *1197 | DPST | 1 3/32" | 1 1/8" | 3/8" | 1 1/16" | 1.50 ea. |

*Normally Off Sleeve Diameter—1 3/32"

NEUTRAL CENTER MOMENTARY BOTH ENDS

15 Amp.



Underwriters' approved, 10 amp. 250 volts AC, 15 amp. 125 volts AC, 3/4 H.P. 115V-230V AC.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|---------|-----------------|------|---------|-----------|
| | | | L. | W. | H. | |
| 1193 | DPDT | 1 3/32" | 1 3/16" | 3/4" | 1 1/16" | 1.80 ea. |
| 1195 | SPDT | 1 3/32" | 1 1/8" | 3/8" | 1 5/16" | 1.11 ea. |

Sleeve Diameter—1 3/32"

NEUTRAL CENTER

15 Amp.



Underwriters' approved, 10 amp. 250 volts AC, 15 amp. 125 volts AC, 3/4 H.P. 115V-230V AC.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|---------|-----------------|------|---------|-----------|
| | | | L. | W. | H. | |
| 1187 | SPDT | 1 3/32" | 1 1/8" | 3/8" | 1 5/16" | .87 ea. |
| 1189 | DPDT | 1 3/32" | 1 3/16" | 3/4" | 1 1/16" | 1.38 ea. |

Sleeve Diameter—1 3/32"

BAT LEVER TOGGLE SWITCH Neutral Center

Underwriters' approved, 6 amp. 125 volts, either AC or DC. A 3 position switch, on-off-on. Black bakelite case.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|---------|-----------------|---------|---------|-----------|
| | | | L. | W. | H. | |
| 1175 | SPDT | 1 3/32" | 1 13/16" | 1 1/16" | 1 1/16" | 1.53 ea. |
| 1176 | DPDT | 1 3/32" | 1 13/16" | 1 1/16" | 1 1/16" | 1.83 ea. |

Sleeve Diameter—1 3/32"

6 Amp.

PUSH BUTTON DOUBLE ACTION SWITCH



Underwriters' approved, 6 amp. 125 volts. Press lever to make contact, press lever to break contact. Nickel plated finish or snap-on plastic button, in red or black.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|---------------|--------|-----------------|------|-------|-----------|
| | | | L. | W. | H. | |
| 1156 | Nickel Plated | 9/16" | 1 1/8" | 1/2" | 9/16" | .90 ea. |
| 1156-A | Red | 9/16" | 1 1/8" | 1/2" | 9/16" | 1.11 ea. |
| 1156-B | Black | 9/16" | 1 1/8" | 1/2" | 9/16" | 1.11 ea. |

Sleeve Diameter—1 3/32"

MIDGET MOMENTARY PUSH BUTTON SWITCHES

3 Amp.

Underwriters' approved, 3 amp. 120 volts, AC. Molded bakelite base, nickel plated finish.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|-----------------|--------|-----------------|-------|---------|-----------|
| | | | L. | W. | H. | |
| 1141 | SP Norm. Closed | 9/16" | 1 3/32" | 9/16" | 2 9/64" | .54 ea. |
| 1141-A | SP Norm. Open | 9/16" | 1 3/32" | 9/16" | 2 9/64" | .54 ea. |

Sleeve Diameter—1 3/32"

3 Amp.

Underwriters' approved, 3 Amp. 120v, AC, Nickel plated finish, Molded bakelite base, Single Pole, slow make and slow break with bakelite snap-On button in red or black.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|--------------|--------|-----------------|-------|---------|-----------|
| | | | L. | W. | H. | |
| 1157-A | Open—Red | 9/16" | 1 3/32" | 9/16" | 2 9/64" | .93 ea. |
| 1157-B | Open—Black | 9/16" | 1 3/32" | 9/16" | 2 9/64" | .93 ea. |
| 1157-C | Closed—Red | 9/16" | 1 3/32" | 9/16" | 2 9/64" | .93 ea. |
| 1157-D | Closed—Black | 9/16" | 1 3/32" | 9/16" | 2 9/64" | .93 ea. |

Sleeve Diameter—1 3/32"

1 Amp.

Two circuit, slow make and slow break, momentary switch. One circuit normally on, the other off, with snap-on plastic button, in red or black. (Pushing the button reverses the contact.) 1 Amp. 125 Volts AC.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|-------------|--------|-----------------|--------|---------|-----------|
| | | | L. | W. | H. | |
| 1158-A | Red | 7/16" | 1 1/8" | 1 1/8" | 1 3/32" | 1.11 ea. |
| 1158-B | Black | 7/16" | 1 1/8" | 1 1/8" | 1 3/32" | 1.11 ea. |

Sleeve Diameter—1 3/32"

ROTARY CANOPY SWITCH With Fixed Plastic Handle

3 Amp.



Underwriters' approved, 3 amp. 125 volts. 1 amp. 250 volts.

| No. | Stem | Wire Lead | Net Price |
|------|-------|-----------|-----------|
| 1179 | 7/16" | 6" | .42 ea. |

SPEMCO H & H SWITCHES

INTERMEDIATE MOMENTARY PUSH SWITCH

U.L. approved for 6 amp. 125 volts, 3 amp. 250 volts. *Except for 1147 which is rated at 1 amp. 250 volts, 6 amp. 125 volts. All back connected, slotted sleeve.

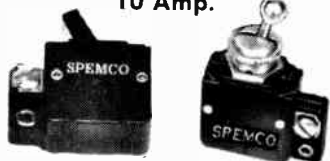


| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|-------|-------------|--------|-----------------|--------|---------|-----------|
| | | | L. | W. | H. | |
| *1146 | SPST | 1/2" | 1 1/8" | 1 1/8" | 1 3/16" | 1.41 ea. |
| *1147 | SPDT | 1/2" | 1 1/8" | 1 1/8" | 1 3/16" | 1.59 ea. |
| *1148 | DPST | 1/2" | 1 1/8" | 1 1/8" | 1 3/16" | 1.83 ea. |
| 1149 | DPDT | 1/2" | 1 1/8" | 1 1/8" | 1 3/16" | 2.01 ea. |

*1 amp. 250 volts, 6 amp 125 volts
**1146 & 1148 Normally off. Sleeve Diameter—1/32"

POWER SWITCHES

10 Amp.

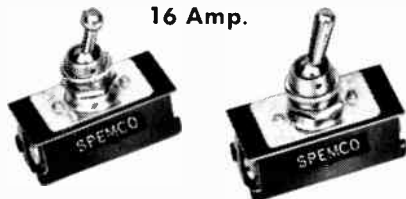


Underwriters' approved, 10 amp. 125 volts, 5 amp. 250 A.C., 3/4 H.P. 250V. A.C. 1/2 H.P. 250V A.C.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|----------------|--------|-----------------|--------|--------|-----------|
| | | | L. | W. | H. | |
| *1133 | SPST | 1 1/2" | 1 3/8" | 1 3/8" | 1 3/8" | 1.08 ea. |
| 1133-B | Bakelite lever | 1 3/8" | 1 3/8" | 1 3/8" | 1 3/8" | .69 ea. |

*1 1/2" sleeve diameter

16 Amp.



Underwriters' approved, 16 amp. 125V., 8 amp. 250V. A.C.-D.C.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|-------------|--------|-----------------|--------|--------|-----------|
| | | | L. | W. | H. | |
| 1159 | DPST | 1 3/2" | 1 3/4" | 1 3/8" | 2 3/2" | 1.23 ea. |
| 1159-B | DPST | 1 3/2" | 1 3/4" | 1 3/8" | 2 3/2" | 1.23 ea. |

1159—Ball Lever 1159-B—Bat Lever
Sleeve Diameter—1 3/2"

20 Amp.



Underwriters' approved, 20 amp. 125V., 10 amp. 250V. A.C.-D.C., 1 1/2 H.P. 125-250V. A.C.-D.C.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|-------------|--------|-----------------|----|------|-----------|
| | | | L. | W. | H. | |
| 1134 | DPST | 1 3/2" | 2" | 1" | 7/8" | 2.07 ea. |
| 1134-B | DPST | 1 3/2" | 2" | 1" | 7/8" | 2.07 ea. |

1134—Ball Lever 1134-B—Bat Lever
Sleeve Diameter—1 3/2"

HARDWARE

for 1 3/2" diameter sleeve.



| No. | Description | Price |
|--------|------------------|----------|
| 1132 | On and Off Plate | .036 ea. |
| 1132-H | Hex Nut | .024 ea. |
| 1132-K | Knurled Nut | .024 ea. |
| 1210 | Lockwasher | 1.80C |
| 1211 | Locking Ring | 2.40C |

POWER SWITCHES

20 Amp.



Fully enclosed tumbler switch, 20 amp. 250V., 1 1/2 H.P. 125V., 2 H.P. 250V.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|--------|-------------|--------|-----------------|--------|--------|-----------|
| | | | L. | W. | H. | |
| 1170-S | DPST | 1 3/2" | 2 1/4" | 1 1/8" | 1 3/2" | 3.00 ea. |

Sleeve Diameter—1/2"

20 Amp.



Fully enclosed tumbler switch, 20 amp. 250V., 1 1/2 H.P. 125., 2 H.P. 250V.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|--------|-----------------|--------|--------|-----------|
| | | | L. | W. | H. | |
| 1170 | DPST | 1 3/2" | 2 1/4" | 1 1/8" | 1 3/2" | 3.00 ea. |

Sleeve Diameter—1 3/2"

MOMENTARY PUSH BUTTON SWITCH, NORMALLY OFF

16 Amp.



Underwriters' approved, 16 amp. 125 V., 8 amp. 250 V., 1 H.P. 125-250 V. AC-DC.

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|--------|-----------------|--------|--------|-----------|
| | | | L. | W. | H. | |
| 1160 | DPST | 1 3/2" | 1 3/4" | 1 3/8" | 2 3/2" | 1.80 ea. |

Sleeve Diameter—1 3/2"

ROTARY SWITCHES

3 Amp.



Underwriters' approved, 1 amp. 250 V., 3 amp. 125 V. AC-DC (Except #1123). Nickel plated finish. Laminated bakelite base.

| No. | Description | Shaft | Sleeve | Base Dimensions | | | Net Price |
|-------|-------------|--------|--------|-----------------|------|---------|-----------|
| | | | | L. | W. | H. | |
| *1128 | SPST | 1 1/8" | 3/8" | 3/8" | 3/4" | 9/16" | .81 ea. |
| 1129 | SPDT | 1 1/8" | 3/8" | 3/8" | 3/4" | 9/16" | .99 ea. |
| 1130 | DPST | 1 1/8" | 3/8" | 3/8" | 3/4" | 1 1/16" | 1.32 ea. |
| 1131 | DPDT | 1 1/8" | 3/8" | 3/8" | 3/4" | 1 1/16" | 1.62 ea. |

*1128 rated 3 amp. 250 V. AC-DC. 1/32" Sleeve Diameter—1 3/2"

MILITARY TYPE TOGGLE SWITCHES

Manufactured of materials and in accordance with specification Mil-S-3950 MS-25098 and MS-35058—Single Pole MS-25100 and MS-35059—Double Pole

| MS Part No. | Up Position | Center Position | Down Position | Keyway Side | Net |
|-------------|-------------|-----------------|---------------|-------------|-----------|
| | | | | | Price |
| MS-25098-22 | On | None | Off | None | \$216.75C |
| MS-25098-23 | On | None | On | None | 233.25C |
| MS-25100-22 | On | None | Off | None | 266.25C |
| MS-25100-23 | On | None | On | None | 283.50C |
| MS-35058-21 | On | Off | On | None | 195.75C |
| MS-35058-22 | On | None | Off | None | 162.75C |
| MS-35058-23 | On | None | On | None | 195.75C |
| MS-35058-24 | On | Off | None | None | 162.75C |
| MS-35058-25 | On | Mom. Off | None | None | 179.25C |
| MS-35058-26 | On | None | Mom. On | None | 212.25C |
| MS-35058-27 | Mom. On | Off | Mom. On | None | 212.25C |
| MS-35058-28 | None | Off | Mom. On | None | 179.25C |
| MS-35058-29 | On | None | Mom. Off | None | 179.25C |
| MS-35058-30 | Off | None | Mom. On | None | 179.25C |
| MS-35058-31 | On | Off | Mom. On | None | 230.25C |
| MS-35059-21 | On | Off | On | None | 261.75C |
| MS-35059-22 | On | None | Off | None | 217.50C |
| MS-35059-23 | On | None | On | None | 261.75C |
| MS-35059-24 | On | Off | None | None | 217.50C |
| MS-35059-25 | On | Mom. Off | None | None | 261.75C |
| MS-35059-26 | On | None | Mom. On | None | 283.50C |
| MS-35059-27 | Mom. On | Off | Mom. On | None | 283.50C |
| MS-35059-28 | None | Off | Mom. On | None | 261.75C |
| MS-35059-29 | On | None | Mom. Off | None | 261.75C |
| MS-35059-30 | Off | None | Mom. On | None | 261.75C |
| MS-35059-31 | On | Off | Mom. On | None | 283.50C |

ROTO-LOCK SWITCH

20 Amp.



Underwriters' approved, 20 amp. 120 volts, 240 volts AC.

1 1/2 H.P.—120 volts AC
2 H.P.—120 volts AC

| No. | Description | Sleeve | Net Price |
|---------|--------------------|--------|-----------|
| 1130-K | DPST (With Key) | 9/16" | 2.64 ea. |
| 1130-KA | Key Only for above | | .27 ea. |

3 Amp. ROTO-LOCK SWITCH

Underwriters' Approved, 3 amp. 250 volts, Except #1129-K & 1131-K



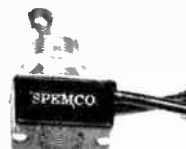
| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|---------|--------------------|--------|-----------------|-------|-------|-----------|
| | | | L. | W. | H. | |
| 1128-K | SPST (With Key) | 1 3/2" | 1 3/8" | 3/4" | 9/16" | 1.44 ea. |
| 1128-KA | Key only for above | | | | | .21 ea. |
| 1128-KE | SPST 1 3/2" | 1 3/8" | 3/4" | 9/16" | | 1.44 ea. |
| | (With Key) | | | | | |
| *1129-K | SPDT 1 3/2" | 1 3/8" | 3/4" | 9/16" | | 1.56 ea. |
| | (With Key) | | | | | |
| *1131-K | DPDT 1 3/2" | 1 3/8" | 3/4" | 9/16" | | 2.07 ea. |
| | (With Key) | | | | | |

(above key removable in off position only)

1128-KEA Key—fits 1128-KE, 1129-K, and 1131-K .21 ea
*1129-K & 1131-K—U.L. approved, 1 amp. 250 V., 3 amp. 125V., AC-DC. Sleeve Diameter—1 3/2"

BALL LEVER TOGGLE SWITCH

6 Amp.



Underwriters' approved 3A 250V, 6A 125V, molded bakelite base. Nickel plated finish. WITH 6" WIRE LEADS

| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|--------|-----------------|------|-------|-----------|
| | | | L. | W. | H. | |
| 1154 | SPST | 3/8" | 7/8" | 1/2" | 9/16" | .87 ea. |

Sleeve Diameter—1 3/2"

SPEMCO H & H SWITCHES

EXTRA HEAVY DUTY SWITCH NEUTRAL CENTER 10 Amp.

Used in heavy current circuits, such as transmitters, power amplifiers, motors, etc. Contacts have fast "break" which reduces the tendency to arc. Rated at 10 amp. 125 volts, 5 amp. 250 volts, 3/4 HP 250 volts.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|---------|-------------|--------|-----------------|---------|----|-----------|
| | | | L. | W. | H. | |
| *1161-A | DPDT | 1 1/2" | 2" | 1 3/16" | 1" | 4.65 ea. |
| 1161 | DPDT | 1 1/2" | 2" | 1 3/16" | 1" | 4.65 ea. |

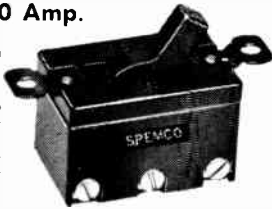
Straight thru, no off-center* Sleeve Diameter—3/4"

20 Amp. & 30 Amp.

3-9/32" mounting centers

*1161-B
10 Amp. 250 Volts
20 Amp. 125 Volts

*1161-C
20 Amp. 250 Volts
30 Amp. 125 Volts
Both AC-DC



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|---------|-------------|--------|-----------------|--------|--------|-----------|
| | | | L. | W. | H. | |
| 1161-B | OPDT | 2 1/2" | 1 1/2" | 1 3/8" | 1 3/8" | 7.05 ea. |
| *1161-C | DPDT | 2 7/8" | 1 3/8" | 2" | 2" | 9.45 ea. |

10 Amp.

Rated 10 amp. 125 volts, 1/2 HP, 115-230 volts AC. 5 amp. 250 volts.



| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|-------------|--------|-----------------|----|--------|-----------|
| | | | L. | W. | H. | |
| 1177 | 3 PDT | 1 3/2" | 2 3/16" | 2" | 1 1/8" | 7.05 ea. |
| 1178 | 4 PDT | 1 3/2" | 2 3/16" | 2" | 1 1/8" | 8.85 ea. |

Sleeve Diameter—3/4"

THREE & FOUR POLE AC UTILITY SWITCHES



15 amp. 125V., 10 amp. 250V. AC., except Nos. 1200 and 1201 which is 10 amp. 250V. AC.

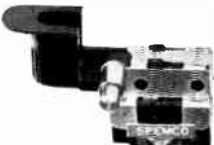
| No. | Description | Sleeve | Base Dimensions | | | Net Price |
|------|---------------------|--------|-----------------|---------|---------|-----------|
| | | | L. | W. | H. | |
| 1198 | 3PST On-None-Off | 1 3/2" | 1 1/16" | 1 3/16" | 1 1/16" | 2.40 ea |
| 1199 | 3PDT On-Off-On | 1 3/2" | 1 1/16" | 1 3/16" | 1 1/16" | 3.00 ea |
| 1200 | 4PST On-None-Off | 1 3/2" | 1 1/16" | 1 3/16" | 1 1/16" | 3.45 ea. |
| 1201 | 4PDT On-Off-On | 1 3/2" | 1 1/16" | 1 3/16" | 1 1/16" | 4.20 ea. |

Sleeve Diameter—1 1/2"

TOOL SWITCH

SPST Momentary Contact, Direct Pull Latch.

2 amp., 250 volts.
4 amp., 125 volts.



BASE DIMENSIONS

| No. | L. | W. | H. | Net Price |
|------|--------|--------|--------|-----------|
| 1169 | 1 3/4" | 2 1/2" | 1 3/4" | 1.14 ea. |

FEED THROUGH CORD SWITCH



10 Amp.

Underwriters' approved, black bakelite case sliding lever, 10 amp. 125 volts, 5 amp. 250 volts. 3/16" cord hole.

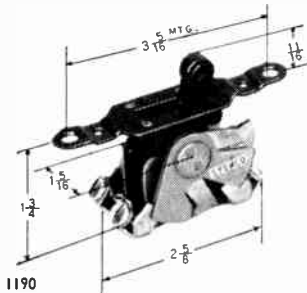
| No. | Description | Net Price |
|------|-------------|-----------|
| 1163 | SP | 1.29 ea. |

HEAVY DUTY SWITCHES Toggle Type

Underwriters' approved, 30 amp. 250 volts, AC DC. 2 H.P., 115V-230V AC; 1 H.P., 460V AC For use on Food Machines, Grinders, Sanders, Machine Tools, Gasoline Pumps, etc.

Roller Type Lever

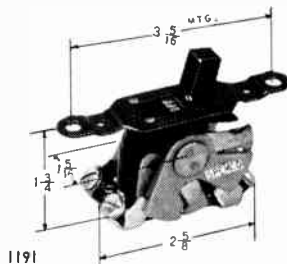
30 Amp.



1190

Square Bakelite Lever

30 Amp.

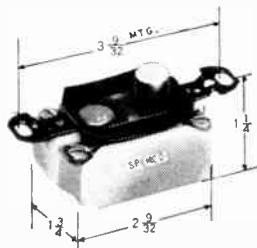


1191

| No. | Description | Net Price |
|------|-------------|-----------|
| 1190 | DPST | 2.85 ea. |
| 1191 | DPST | 2.85 ea. |

METAL PUSH BUTTON TYPE NORMALLY OPEN

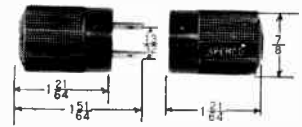
20 Amp.



Underwriters' approved, 20 amp. 250 volts, 2 H.P. 230V AC, 2 H.P. 250V DC. For use on Floor Sander, as a foot switch, etc.

| No. | Description | Net Price |
|------|-------------|-----------|
| 1192 | DPST | 2.85 ea. |

CORD CONNECTORS 10 Amp.



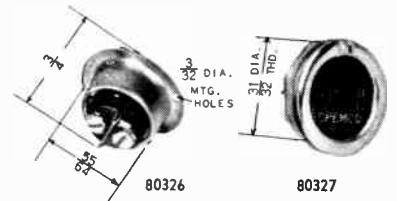
Brown Bakelite Cord Connector Complete, 7/8" O.D. x 2 1/2" long. 10 amps, 250 volts. End opening for wire size up to 3/8" O.D.

| No. | Description | Net Price |
|--------|-------------|-----------|
| 1162 | Complete | 1.86 ea. |
| 1162-F | Female Part | 1.02 ea. |
| 1162-M | Male Part | 1.02 ea. |

RECEPTACLES

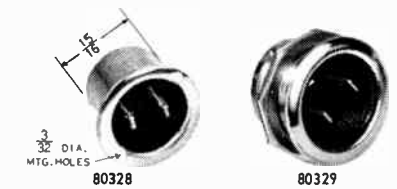
Underwriters' approved, 10 amp. 250 volts AC.

Short Female Flush Receptacle 10 Amp.



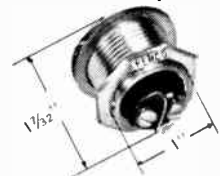
| No. | Description | Net Price |
|-------|-------------------|-----------|
| 80326 | 2 Screw Mounting | 1.14 ea. |
| 80327 | Lock Nut Mounting | 1.86 ea. |

Recessed Male Receptacle 10 Amp.



| No. | Description | Net Price |
|-------|-------------------|-----------|
| 80328 | 2 Screw Mounting | 1.32 ea. |
| 80329 | Lock Nut Mounting | 1.86 ea. |

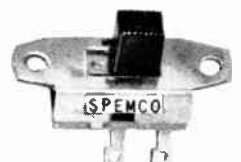
Recessed Female Receptacle 10 Amp.



| No. | Description | Net Price |
|-------|-------------------|-----------|
| 80331 | Lock Nut Mounting | 1.86 ea. |

SLIDE SWITCHES

Housings are made of steel and are cadmium plated 1 1/2" long, 35/64" wide and 1/8" mounting centers.



| No. | Description | Net Price |
|------|----------------------|-----------|
| 1180 | SPST .75A-125V AC-DC | .186 ea. |
| 1181 | SPDT .75A-125V AC-DC | .222 ea. |
| 1182 | DPST .50A-125V AC-DC | .264 ea. |
| 1183 | DPDT .50A-125V AC-DC | .33 ea. |

SPEMCO

H & H PRECISION SWITCHES



GP3-Z1



GP3-W1



GP3-V1



GP3-U1



GP3-Q1



GP3-T1



GP3-Y1



GP3-X1

GENERAL PURPOSE PRECISION SWITCHES SPDT

H & H General Purpose Precision Switches feature high electrical rating combined with very low operating force and long life. SPDT units may be wired normally open or normally closed. UL and CSA approved: 15 amp. 480 V AC, 1/2 amp. 125 V DC, 1/4 amp. 250 V DC.

| SPEMCO NUMBER Solder Lug | NUMBER Screw Term. | *1 ACTUATOR | OPERATING FORCE | PRETRAVEL | OVERTRAVEL | LIST PRICE | |
|-----------------------------|-----------------------|----------------------------|-----------------|------------|----------------|-------------|-------------|
| | | | | | | Solder Lug | Screw Term. |
| GP3-Z1 | GP3-Z2 | Pin Type | 9 to 13 oz. | .015" max. | .005" min. | \$155.00 C. | \$165.00 C. |
| GP3-T1 | GP3-T2 | Flexible Leaf | 5 oz. max. | 5/32" max. | Not over 1/16" | 170.00 C. | 180.00 C. |
| GP3-Q1 | GP3-Q2 | Std. Roller Leaf | 5 oz. max. | 5/32" max. | Not over 1/16" | 215.00 C. | 220.00 C. |
| GP3-Y1 | GP3-Y2 | Rigid Hinge Lever | 2 1/2 oz. | 3/8" max. | .219" min. | 200.00 C. | 205.00 C. |
| GP3-X1 | GP3-X2 | Std. Roller Lever | 3 1/2 oz. max. | 9/32" max. | .156" min. | 250.00 C. | 260.00 C. |
| GP3-W1 | GP3-W2 | Short Roller Lever | 6 oz. max. | 9/64" max. | 3/32" min. | 250.00 C. | 260.00 C. |
| GP3-V1 | GP3-V2 | Short Overtravel Button | 9 to 13 oz. | 1/64" max. | 1/16" min. | 190.00 C. | 195.00 C. |
| GP3-U1 | GP3-U2 | Panel Mounted Plunger | 9 to 13 oz. | 1/64" max. | 7/32" max. | 345.00 C. | 350.00 C. |

*1 Switches are mounted by two .140 inch diameter holes on one inch centers. Discount: 1-9, non; 10-19, 10%; 20-49, 20%; 50-99, 30%.

HEAVY DUTY PRECISION SWITCHES SPDT

H & H Heavy Duty Precision Switches provide high inrush capacity and retain similar performance and actuating characteristics found in the General Purpose units. SPDT switches can be wired normally open or normally closed. UL and CSA approved: 20 amp. 480 V AC, 10 amp. 125 V AC "L" load, 1/2 amp. 125 V DC, 1/4 amp. 250 V DC, 1 H.P. 120 V AC, 2 H.P. 240 V AC.



HD3-T1



HD3-W1



HD3-V1



HD3-Y1



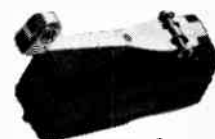
HD3-U1



HD3-Z1



HD3-Q1



HD3-X1

| SPEMCO NUMBER Solder Lug | NUMBER Screw Term. | *1 ACTUATOR | OPERATING FORCE | PRETRAVEL | OVERTRAVEL | LIST PRICE | |
|-----------------------------|-----------------------|----------------------------|-----------------|-------------|----------------|-------------|-------------|
| | | | | | | Solder Lug | Screw Term. |
| HD3-Z1 | HD3-Z2 | Pin Type | 14 to 22 oz. | .050" max. | .010" min. | \$160.00 C. | \$170.00 C. |
| HD3-T1 | HD3-T2 | Flexible Leaf | 9 oz. max. | 11/32" max. | Not over 1/16" | 180.00 C. | 185.00 C. |
| HD3-Q1 | HD3-Q2 | Std. Roller Leaf | 9 oz. max. | 11/32" max. | Not over 1/16" | 225.00 C. | 230.00 C. |
| HD3-Y1 | HD3-Y2 | Rigid Hinge Lever | 2 1/2 oz. max. | 5/8" max. | .078" min. | 205.00 C. | 210.00 C. |
| HD3-X1 | HD3-X2 | Std. Roller Lever | 2 1/2 oz. max. | 15/32" max. | 1/16" min. | 260.00 C. | 265.00 C. |
| HD3-W1 | HD3-W2 | Short Roller Lever | 6 oz. max. | 1/4" max. | 1/32" min. | 260.00 C. | 265.00 C. |
| HD3-V1 | HD3-V2 | Short Overtravel Button | 14 to 22 oz. | .050" max. | .093" min. | 195.00 C. | 200.00 C. |
| HD3-U1 | HD3-U2 | Panel Mounted Plunger | 14 to 22 oz. | .050" max. | .219" min. | 355.00 C. | 360.00 C. |

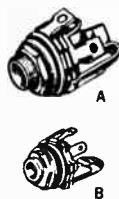
*1 Switches are mounted by two .140 inch diameter holes on one inch centers. Discount: 1-9, non; 10-19, 10%; 20-49, 20%; 50-99, 30%.

SWITCHCRAFT

CHICAGO, ILLINOIS

TELEPHONE JACKS
SHIELDED JACKS
JACK PANELS

"LITTEL-JAX" AND "TINI-JAX"



The "Littel-Jax" (A) features notched insulating washers mechanically interlocking springs and lugs; "V" bend in tip spring firmly "holds" mating plug; minimum space requirements, economical. Mount in single $\frac{3}{32}$ " hole, panels up to $\frac{1}{32}$ " thick, except L-11 and L-12A in panels up to $\frac{1}{4}$ " thick. No. C-11 (JJ-034) and C-12A (JJ-089) mate with No. 440 (PJ-055B) Plug; C-12B (JJ-033), S-12B and S-13B mate with No. 480 (JAN PJ-068 or W.E. No. 309) Plug. No. C-11 and C-12B have locating pins (non-turn devices). No. S-11 similar to No. 11 except .210" I.D. sleeve to mate with S-250 and S-280 Plugs. C-11 (JJ-034), C-12B (JJ-033) and C-12A (JJ-089) per JAN-J-641. All others mate with standard $\frac{1}{4}$ " dia. plugs such as our No. 40, 250, etc.

The "Tini-Jax" (B) a miniature 2-conductor Jack, approximately $\frac{1}{2}$ the size of the "Littel-Jax"; otherwise similar in construction. Mounts in $\frac{1}{2}$ " dia. hole, panels up to $\frac{1}{8}$ " thick. Mate with "Tini-Plugs" No. 750, etc. 43A has a unique spring design that requires a pear shaped tip, such as our No. 750.

| "LITTEL-JAX" | | "TINI-JAX" | | Schematic No. |
|-----------------------|-------------------|------------|-------------------|---------------|
| Part No. | U.S.A. List Price | Part No. | U.S.A. List Price | |
| 11 | \$0.40 | 41 | \$0.40 | I |
| C-11 | \$0.60 | | | |
| L-11 | \$0.50 | | | |
| S-11 | \$0.45 | | | |
| 12A | \$0.45 | 42A | \$0.45 | |
| C-12A | \$0.75 | | | III |
| L-12A | \$0.55 | | | |
| 13 | \$0.90 | | | |
| 13A | \$0.85 | 43A | \$0.70 | V |
| 13E | \$0.90 | | | IX |
| Three Conductor Types | | | | |
| 12B | \$0.55 | | | IV |
| C-12B | \$0.70 | | | |
| S-12B | \$0.65 | | | |
| 13B | \$0.75 | | | |
| S-13B | \$0.95 | | | VII |

For detailed information request Switchcraft Catalog J-101.



"MICRO-JAX"

Precision manufactured Jack for miniaturized applications. Two conductor, single closed circuit. See Schematic Circuit III. Silver plated contacts on special tempered nickel silver springs. Internally keyed nylon insulation interlocks springs and solder lugs to eliminate shorts. Fits .190" dia. hole in panels to $\frac{3}{32}$ " thick. "Micro-Jax" is $\frac{1}{2}$ the size of standard phone jacks. Mates with "Micro-Plug", Series 850, 880.

Part No. TR-2A U.S.A. List Price \$4.45

For detailed information request Switchcraft Catalog J-101.

"LAMP JAX"

Switchboard Panel Type. Lamp completely insulated. Interchangeable with W.E. #47A & 47B. Accepts standard Switchboard Lamps. Ideal for mounting on Jack Panel. Two frame mountings—Vertical add prefix A. Horizontal prefix C.

Part No. LT-47 U.S.A. List \$2.00

For detailed information request Switchcraft Catalog J-101.



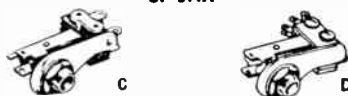
"SHIELDED JAX"

"Shielded Jax" (H) regular "Littel-Jax" (see separate listing) assembled into shield, ideal for high impedance circuits.

| Part No. | U.S.A. List Price | DESCRIPTION |
|----------|-------------------|--------------------------|
| CN-11 | \$0.80 | Open ckt. (see No. 11) |
| CN-12A | \$0.85 | Close ckt. (see No. 12A) |
| CN-12B | \$0.95 | (see No. 12B) |
| CN-13B | \$1.15 | (see No. 13B) |

For detailed information request Switchcraft Catalog J-101.

"SF-JAX"



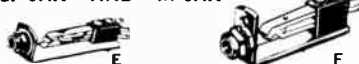
"SF-JAX". Series 20 (C) requires a minimum of panel depth, mounts in single $\frac{3}{32}$ " dia. hole, panels up to $\frac{1}{16}$ " thick. Series 50 (D) similar to Series 20, except solder lug location necessitates more depth but requires less panel space. Mounts in panels up to $\frac{1}{4}$ " thick.

Series C-20 and C-50, MIL types with Military Insulation and finishes, otherwise similar to commercial Series 20 and 50; both will mount in panels up to $\frac{1}{4}$ " thick.

| Series 20 & C-20 | | Series 50 & C-50 | | MIL | Schematic No. |
|------------------|-------------|------------------|-------------|----------|---------------|
| Part No. | U.S.A. List | Part No. | U.S.A. List | Type No. | |
| 21 | \$0.65 | 51 | \$0.65 | | I |
| | | C-51 | \$1.20 | JJ-096 | |
| 22 | \$0.80 | 52 | \$0.80 | | II |
| 22A | \$0.80 | 52A | \$0.80 | | III |
| | | C-52A | \$1.30 | JJ-097 | |
| 22B | \$0.80 | 52B | \$0.80 | | IV |
| | | C-52B | \$1.30 | JJ-103 | |
| 23 | \$0.95 | 53 | \$0.95 | | V |
| C-23 | \$1.35 | | | JJ-099 | |
| 23A | \$0.95 | 53A | \$0.95 | | VI |
| C-23A | \$1.35 | | | JJ-098 | |
| | | C-53A | \$1.55 | JJ-092 | VII |
| 23B | \$0.95 | 53B | \$0.95 | | |
| 23C | \$0.95 | 53C | \$0.95 | | VIII |
| 23E | \$0.95 | 53E | \$0.95 | | |
| C-23E | \$1.35 | | | JJ-102 | IX |
| 24 | \$1.10 | 54 | \$1.10 | | X |
| 24A | \$1.10 | 54A | \$1.10 | | |
| | | C-54A | \$1.60 | JJ-093 | XI |
| 24B | \$1.10 | 54B | \$1.10 | | |
| | | C-54B | \$1.60 | JJ-101 | XII |
| 25 | \$1.30 | 55 | \$1.30 | | |
| | | C-55B | \$1.85 | JJ-095 | XIII |
| 26 | \$1.40 | 56 | \$1.40 | | XIV |

For detailed information request Switchcraft Catalog J-101.

"LF-JAX" AND "M-JAX"



Long Frame Jacks, the "LF-JAX", (E) Series 30, requires minimum panel space, 3" deep. "M-JAX" (F) a heavy frame, often referred to as Navy Jack, 2 1/8" deep. Both types mount in single $\frac{3}{8}$ " hole, in panels up to $\frac{1}{4}$ " thick.

| "LF-JAX" | | "M-JAX" | | MIL | Schematic No. |
|----------|-------------|----------|-------------|----------|---------------|
| Part No. | U.S.A. List | Part No. | U.S.A. List | Type No. | |
| 31 | \$0.75 | M-441 | \$1.50 | | I |
| 32 | \$0.95 | | | | II |
| 32A | \$0.95 | M-442A | \$1.70 | JJ-107 | III |
| 32B | \$0.95 | | | | IV |
| 33 | \$1.05 | | | | V |
| 33A | \$1.05 | M-443A | \$1.95 | JJ-105 | VI |
| 33B | \$1.05 | M-443B | \$2.10 | JJ-106 | VII |
| 33C | \$1.05 | | | | VIII |
| 33E | \$1.05 | | | | IX |
| 34 | \$1.20 | | | | X |
| 34A | \$1.20 | | | | XI |
| 34B | \$1.20 | M-444 | \$2.30 | JJ-083 | XII |
| | | M-444B | \$2.20 | JJ-082 | XII |
| 35 | \$1.45 | M-445 | \$2.75 | JJ-104 | XIII |
| 36 | \$1.70 | M-446 | \$3.50 | JJ-079 | XIV |
| | | M-446A | \$3.90 | JJ-081 | XVI |

*Bushing .2085", to mate with plugs PJ-068 and PJ-309.

For detailed information request Switchcraft Catalog J-101 and J-102.

"T-JAX" AND "MT-JAX"

The "T-JAX" and "MT-JAX" are a long frame, switchboard type. The "T-JAX", commercial quality, for low cost communication equipment where economy is all important.

The "MT-JAX" is recommended for high quality communication and Military equipment, featuring welded crossbar Palladium contacts. Frame design also available with mounting ear rotated 90° from position shown in figure "C"; add prefix "C" to part number. All types listed mate with $\frac{1}{4}$ " dia. plug sleeves unless otherwise indicated.

| "T-JAX" | | "MT-JAX" | | MIL | Schematic No. |
|----------|-------------|----------|-------------|----------|---------------|
| Part No. | U.S.A. List | Part No. | U.S.A. List | Type No. | |
| T-331 | \$1.05 | MT-331 | \$1.50 | JJ-086 | I |
| | | MT-332 | \$1.70 | | II |
| T-332A | \$1.20 | MT-332A | \$1.70 | JJ-024 | III |
| T-332B | \$1.20 | MT-332B | \$1.70 | JJ-022 | IV |
| | | MT-332C | \$1.95 | JJ-016 | XVIII |
| | | MT-333 | \$1.95 | JJ-084 | V |
| | | MT-333B | \$1.95 | | VII |
| | | MT-333E | \$1.95 | | IX |
| T-334A | \$1.50 | MT-334A | \$2.00 | | XI |
| T-334B | \$1.60 | MT-334B | \$2.00 | JJ-042 | XII |
| T-334C | \$1.50 | MT-334C | \$2.00 | JJ-072 | XVII |
| | | MT-334E | \$2.00 | JJ-085 | XXV |
| | | MT-334F | \$2.00 | JJ-035 | XIX |
| | | MT-335 | \$2.25 | | XIII |
| | | MT-335A | \$2.25 | JJ-017 | † |
| | | MT-336 | \$2.25 | JJ-074 | XX |
| | | MT-336A | \$2.75 | JJ-075 | XIV |
| | | MT-336B | \$2.75 | JJ-077 | XXI |
| | | MT-336C | \$2.75 | JJ-073 | XXII |
| | | MT-336E | \$2.75 | | XXIII |
| | | CMT-336E | \$2.75 | JJ-019 | XIII |
| | | MT-337 | \$2.75 | JJ-087 | XXIV |
| | | CMT-337 | \$2.75 | JJ-015 | XXIV |
| | | *MT-342B | \$1.95 | | IV |
| | | *MT-344B | \$2.25 | | XII |

*Bushing .2085" to mate with PJ-068 and PJ-309.

†For detailed information request Switchcraft Catalog J-102.

"JACK PANELS"

Black phenolic strip, reinforced with steel, supports Switchcraft "T-JAX" and "MT-JAX" (see separate listing).

Slotted mounting brackets for standard 19" relay racks. Series 1200, single row for 24 Jacks; strip 1 3/4" wide. Series 2400, double row for 48 Jacks; 2 1/2" wide. Series 2600, double row for 52 Jacks; 1 3/4" wide.

Series 2800, Aluminum Jack Panel. Clear anodized frame, extremely rugged, lightweight. Features a new narrow designation strip with individual "windows".

| Part No. | U.S.A. List | DESCRIPTION |
|----------|-------------|---|
| 1200 | \$18.00 | Single Row Panel, less Jacks. |
| 1232A | \$45.00 | Single Row, 12 pr. closed ckt. T-332A "T-Jax". |
| 1332A | \$55.00 | Single Row, 12 pr. closed ckt. MT-332A "MT-Jax". |
| 2400 | \$20.00 | Double Row Panel, less Jacks. 2 1/2" wide (holds 48 Jacks). |
| 2432A | \$75.00 | Double Row, 24 pr. closed ckt. T-332A "T-Jax". 2 1/2" wide. |
| 2532A | \$95.00 | Double Row, 24 pr. closed ckt. MT-332A "MT-Jax". 2 1/2" wide. |
| 2600 | \$25.00 | Double Row Panel, less Jacks. 1 3/4" wide (holds 52 Jacks). |
| 2632A | \$85.00 | Double Row with 52 No. T-332A "T-Jax". 1 3/4" wide. |
| 2732A | \$110.00 | Double Row with 52 No. MT-332A "MT-Jax". 1 3/4" wide. |
| 2800 | \$40.00 | Double Row Aluminum Panel Less Jacks, 1 3/4" wide. |

For detailed information request Switchcraft Catalog J-102.



The above are strictly electrical schematics and do not necessarily indicate relative solder lug positions.

SWITCHCRAFT

CHICAGO, ILLINOIS

"PHONE PLUGS"



The "Littel-Plug" (A), radically new, fitting standard Jacks; solder lug type features clamp terminal serving as a cable clamp and terminal—perfect for metal braid cable. Screw type terminals—no clamp. Tenite or Metal handles 1 3/8" L., 1/2" dia. Ext. metal nickel Pl.

No.'s S-250 and S-280 have a .206 dia. sleeve; mates with S-11 and S-128 Jacks. No.'s 180 and 288 have wide insulator between sleeve and tip—makes it possible to use a 2-conductor Plug in a 3-conductor Jack.

No.'s. C-240, C-245 and C-270 have an integral cord clamp and screw terminals.

No.'s. S-260 and S-290 have a .206" dia. sleeve; mates with S-12B, S-13B Jacks.

The Standard Plugs (B), conventional design, available both black Bakelite or metal handles 2 1/8" L. x 1 1/16" O.D., except No. 90 and No. 160 have metal handles 1" long. Exterior metal parts bright nickel Pl. No. 170 (E) is similar to No. 70, except 2 piece handle with built-in cable clamp; No. 190A similar to No. 90 except same handle as No. 170. No. 475 same as No. 170 but MIL construction for type PJ-636. No. 385 1 1/2" lg. .206" dia. sleeve and tip-mates with S-11 & S-128.

The "Silent Plug" No.'s. 49 and 169, features a circuit closing device, when removed from Jack.

The "Lug Plug" (C), low-cost two conductor, solder lug term. Exterior metal parts bright Nickel Pl. Red or Black Tenite Handles are 1 3/8" L., 1/2" O.D. No. 380 has metal handle 1" L., bright Nickel Pl.

Plug Adapter (D) used with 2501 F Connector for use with standard Jacks. See separate adapter listing.

| Part No. | U.S.A. List | Plug Type | Type Handle | Description |
|--|-------------|-------------|-------------|-------------|
| 40 | \$0.75 | Standard | Black | 2-cond.* |
| 44 | \$0.50 | Adapter | | 2-cond. |
| 45 | \$0.75 | Standard | Red | 2-cond.* |
| 49 | \$1.50 | Standard | Black | 2-cond.* |
| 60 | \$1.05 | Standard | Black | 3-cond.† |
| 70 | \$1.20 | Standard | Metal | 2-cond.* |
| 90 | \$1.30 | Standard | Metal | 3-cond.† |
| 160 | \$0.90 | Standard | Metal | 2-cond.* |
| 169 | \$1.75 | Standard | Metal | 2-cond.* |
| 170 | \$1.65 | Standard | Metal-2pc | 2-cond.* |
| 180 | \$1.05 | Standard | Metal | 2-cond.* |
| 190 | \$1.50 | Standard | Metal | 3-cond.† |
| 190-A | \$1.95 | Standard | Metal | 3-cond.† |
| 240 | \$0.75 | Littel-Plug | Black | 2-cond.* |
| C-240 | \$0.90 | Littel Plug | Black | 2-cond.* |
| 245 | \$0.75 | Littel-Plug | Red | 2-cond.* |
| C-245 | \$0.90 | Littel Plug | Red | 2-cond.* |
| 250 | \$0.70 | Littel-Plug | Black | 2-cond.† |
| S-250 | \$0.75 | Littel-Plug | Black | 2-cond.† |
| 255 | \$0.70 | Littel-Plug | Red | 2-cond.† |
| 260 | \$1.20 | Littel-Plug | Black | 3-cond.* |
| S-260 | \$1.65 | Littel Plug | Black | 3-cond.* |
| 267 | \$1.05 | Littel-Plug | Black | 3-cond.† |
| 269 | \$1.05 | Littel-Plug | Red | 3-cond.† |
| 270 | \$1.05 | Littel-Plug | Metal | 2-cond.* |
| C-270 | \$1.20 | Littel Plug | Metal | 2-cond.* |
| 280 | \$1.00 | Littel-Plug | Metal | 2-cond.† |
| S-280 | \$1.00 | Littel-Plug | Metal | 2-cond.† |
| R-280 | \$1.25 | Littel-Plug | Metal | 2-cond.† |
| (Short sleeve for Reverse Recorders, mates with No. 126 "Extension Jax") | | | | |
| 288 | \$1.05 | Littel-Plug | Metal | 2-cond.† |
| 290 | \$1.40 | Littel-Plug | Metal | 3-cond.* |
| S-290 | \$1.85 | Littel Plug | Metal | 3-cond.* |
| 297 | \$1.30 | Littel-Plug | Metal | 3-cond.† |
| 350 | \$0.55 | Lug-Plug | Black | 2-cond.† |
| 355 | \$0.55 | Lug-Plug | Red | 2-cond.† |
| 380 | \$0.70 | Lug-Plug | Metal | 2-cond.† |
| 385 | \$1.00 | Lug-Plug | Metal | 2-cond.† |
| 475 | \$1.95 | Standard | Metal | 2-cond.* |

*Screw Terminals. †Clamp-Lug Terminals.
‡Solder-Lug Terminals.

For detailed information request Switchcraft Catalog P-201.



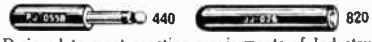
THICK PANEL JAX

Phone jack with long bushing. Mounts in single 1 1/2" dia. hole in panels up to 1 1/2" thick. Ideal for use with microphones; extra shielding virtually eliminates audio hum. No. 151, 2-cond. mates with 240, 245, 250, 255, 270 and 280 Plugs. No. 152B, 3-cond., mates with 260, 267, 269 and 297 Plugs.

| Part No. | U.S.A. List Price | DESCRIPTION |
|----------|-------------------|-----------------------------|
| 151 | \$1.35 | 2-cond. Brass Nickel Plated |
| 152B | \$1.50 | 3-cond. Brass Nickel Plated |

For detailed information request Switchcraft Catalog J-101.

"LITTEL-PLUG" AND "EXTENSION JAX" MILITARY TYPES

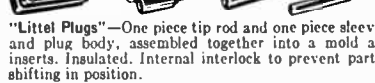


Designed to meet exacting requirements of Industry and the Armed Services. Molded construction provides complete continuity of insulation in plugs Jack per MIL-J-641A. Plugs per MIL-P-642A.

| Part No. | U.S.A. List | DESCRIPTION |
|----------|-------------|--|
| 410 | \$0.60 | 2-cond.—Solder Cup—Type PJ-291 (Old S.C. No. PL-291) Mates with No. 810 (JJ-048) Jack |
| *430 | \$1.40 | 2-cond.—Screw Term. Cable opening 1/4"—Black handle—Type PJ-054B (Old S.C. No. PL-54). |
| *435 | \$1.40 | Same as No. 430, except Red Handle—Type PJ-054R (Old S.C. No. PL-354). |
| 440 | \$1.40 | 2-cond.—Screw Term. Black Handle—Type PJ-055B (Old S.C. No. PL-55). |
| 445 | \$1.40 | 2-cond.—Screw Term Red Handle—Type PJ-055R. |
| *450 | \$1.40 | Same as No. 430, except—Type PJ-540B—Cable Opening 3/32" (1/32" deep) (Old S.C. No. PL-540). Black Handle. |
| *455 | \$1.40 | Same as No. 450, except—Type PJ-540R, Red Handle |
| 470 | \$2.00 | 2-cond.—Screw Term. Shielded Handle—Type PJ-055M (Old S.C. No. PL-125). |
| 475 | \$1.95 | Shielded Handle. MIL Type PJ-636. Similar No. 70, except 2pc handle, built-in Cable Clamp. Handle 1 1/2" long. |
| 480 | \$3.60 | 3-cond.—Screw Term. Black Handle—Type PJ-068 (Old PL-68). |
| 810 | \$0.80 | 2-cond.—Solder Lug—Type JJ-048 (Old S.C. No. JK-48), mates with No. 410 (PJ-291) Plug. |
| 820 | \$2.00 | 2-cond.—Screw Term. Black Handle—Type JJ-026 (Old S.C. No. JK-26). |
| P-1074-1 | \$0.85 | For pkg. of 25 Strain Relief Clamp, Nickel Plate Brass. |

*Mates with No. 820 (JJ-026) "Extension Jax".

"LITTEL-PLUGS"—"TWIN-PLUGS"



"Littel Plugs"—One piece tip rod and one piece sleeve and plug body, assembled together into a mold as inserts. Insulated. Internal interlock to prevent parts shifting in position.

"Twin-Plugs"—Two electrically independent 2-cond. plugs, 3/8" centers, placed into handles to provide a double or "Twin-Plug". Self aligning. Made in same exacting manner as "Littel Plugs" above.

Design and material to NME Spec. MIL-P-642(A).

| Part No. | U.S.A. List | DESCRIPTION |
|-------------------------------------|-------------|---|
| "LITTEL-PLUGS"—MILITARY TYPE | | |
| 420 | \$1.50 | 2-cond. Screw term. Black Handle. Type PJ-047B (Sim. WE 347B). |
| 425 | \$1.50 | 2-cond. Screw term. Red Handle. Type PJ-047R (Sim. WE 347A). |
| 482 | \$4.00 | 3-cond. Screw term. Red handle. Type PJ-051 (Sim. WE 310) |
| "TWIN-PLUGS"—MILITARY TYPE | | |
| 411 | \$4.75 | Two 2-cond. plugs. Black Handle. Type PJ-327. Provision for internal cord clamp (not included). |
| 412 | \$4.50 | Two 2-cond. plugs. Black Handle. (Old MIL Type PJ-289) Sim. WE 289B. External Cord Anchor. |
| 413 | \$4.50 | Three circuit; plug with 2 electrically independent tip circuits. Black Handle. Commercial version of MIL Type PJ-241. Sim. WE-241. |
| S-2674 | \$0.50 | Strain Relief Clamp, Brass. Use only for pkg. of 10 |

For detailed information request Switchcraft Catalog P-201.

"LOCK PLUG" and "LOCK-EXTENSION JAX"



Locking device locks connection after the plug fully inserted into Littel-Jax or Lock-Ext. Jax. Sold. Lug Term. Sleeve terminal has cable clamp. Shielded. Lock Ext. Jax mates standard Phone Plugs where no "lock" requirement exists.

| Part No. | U.S.A. List | DESCRIPTION |
|----------|-------------|----------------------------------|
| 282 | \$1.40 | 2-cond. Plug Sim. No. 280 |
| 298 | \$1.75 | 3-cond. Plug Sim. No. 297 |
| 123 | \$1.75 | 2-cond. Jack Mates with No. 282. |
| 133 | \$2.25 | 3-cond. Jack Mates with No. 298. |

For detailed information request Switchcraft Catalog P-201.

"PHONE PLUGS" "MILITARY TYPE PLUGS" "FLAT PLUGS" "TINI PLUGS" "MICRO-PLUGS" "EXTENSION JAX"



"FLAT PLUGS"
A unique design, removable cover for easy access to either screw or solder terminals; 2- and 3-cond. types. Ideal for equipment where conventional long handle may interfere.

No.'s. S-230 and S-235 have .206" sleeve, mates with S-12B, S-13B, Sim., to MIL Type PJ-068.

| Part No. | U.S.A. List Price | DESCRIPTION |
|----------|-------------------|----------------------------|
| 220 | \$0.90 | 2-cond. Screw term. |
| 227 | \$0.85 | 2-cond. Solder term. |
| 230 | \$1.30 | 2-cond. Screw term. |
| 237 | \$1.25 | 3-cond. Solder term. |
| S-230 | S-235 | \$1.75 3-cond. Screw term. |



"SHIELDED FLAT PLUG"
New shielded flat plug with bright nickel plated steel handle. Ideal for music equipment or where conventional long handled shielded plugs may interfere with equipment design. Unique body design provides built-in cable clamp.

| Part No. | U.S.A. List Price | DESCRIPTION |
|----------|-------------------|----------------------|
| 228 | \$0.95 | 2-cond. Solder term. |
| 238 | \$1.40 | 3-cond. Solder term. |

For detailed information request Switchcraft Catalog P-201.



"TINI-PLUGS"
"Tini-Plugs"—A miniature 2-conductor Phone Plug for the "Tini-Jax"; about 1/4 the size of Switchcraft "Littel Plug"; similar construction. Accepts cable up to 1/8" diameter. Cable clamp terminals for soldering also screw terminal with no clamp.

| Part No. | U.S.A. List | DESCRIPTION |
|---------------------|-------------|-------------|
| 740 | \$0.75 | Screw Term. |
| 750 | \$0.70 | Clamp Term. |
| Metal Handle | | |
| 770 | \$1.05 | Screw Term. |
| 780 | \$1.00 | Clamp Term. |

For detailed information request Switchcraft Catalog P-201.



MICRO-PLUG
Miniature phone plug, only 1 1/4" long; .097" dia. finger; 3/4" dia. body. Mates with "MICRO-JAX". Accepts various cable types and O.D. up to 3/4". Anodized aluminum handle. Solder term., with cable clamp.

| Part No. | U.S.A. List Price | DESCRIPTION |
|----------|-------------------|---------------------------|
| 850 | \$0.75 | 2-cond. Nat. Alum. Handle |
| 855 | \$0.75 | 2-cond. Red Handle |
| 880 | \$0.75 | 2-cond. Black Handle |

For detailed information request Switchcraft Catalog P-201.



"EXTENSION JAX"
Features a clamp type terminal providing a cable anchor. Spring tempered nickel silver springs, designed to properly "hold" mating plug. Exterior metal parts N.P.; Terminals mechanically interlock. High grade insulation. Available in 2 and 3-conductor types, solder lug or screw type terminals. Bakelite or Brightly Nickel Plated Brass handles. Mates with any 7/8 standard plug. S-128 mates with S-250 plug. S-830 and S-1230 210 I.D. bushing to mate with PJ-068 plug. No. 125 is Ext. Jax for Tini Plug. 1 1/2" O.D. Built-in cable clamp is cable support and sleeve terminal.

| Part No. | U.S.A. List | Handle | Description |
|----------|-------------|----------|-------------------------|
| 80 | \$1.15 | Black | 2-cond. Screw Term. |
| 88 | \$1.00 | Black | 2-cond. Lug Term. |
| 120 | \$1.55 | Shielded | 2-cond. Screw Term. |
| 121 | \$1.60 | Shielded | 2-cond. Lug Term. |
| 125 | \$1.25 | Shielded | 2-cond. Lug Term. |
| 126 | \$1.80 | Shielded | 2-cond. for R-280 Plug |
| 128 | \$1.40 | Shielded | 2-cond. Lug Term. |
| 131 | \$2.00 | Shielded | 3-cond. Lug Term. |
| 830 | \$1.55 | Black | 3-cond. Screw Term. |
| S-830 | \$2.00 | Black | 3-cond. Screw Term. |
| 838 | \$1.40 | Black | 3-cond. Lug Term. |
| 1230 | \$1.95 | Shielded | 3-cond. Screw Term. |
| S-1230 | \$2.50 | Shielded | 3-cond. Screw Term. |
| 1238 | \$1.80 | Shielded | 3-cond. Lug Term. |
| S-128 | \$1.50 | Shielded | 2-cond. Spec. Lug Term. |

No.'s. 121 and 131, accepts 3/4" dia. "Littel Plugs"; shell dia. same as Littel Plugs. Features cable clamp.

For detailed information request Switchcraft Catalog P-201.

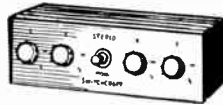
SWITCHCRAFT

INC.
CHICAGO, ILLINOIS

MICROPHONE MIXERS
"MINI-MIX" "MIX AMP"
"CONNECTORS"
"SPEAKER VOLUME CONTROLS"

MICROPHONE MIXERS

Tan finish. Brown knobs with gold metallic inserts. Rubber feet. Shielded. Input Jacks on back, with Phono Jax for output to recorder or amplifier. CAUTION: Do not use in output circuit to directly control the volume of individual speakers. Size: 2" x 3 3/8" x 6".



MIXER, MONAURAL—4-channel, high imp. For mixing up to 4 signals, such as Mics., Phonos, Tuners, etc., into a single output. Inputs 2-cond. Phone Jacks. Output Phono Jax.
PART NO. 301 U.S.A. LIST \$19.50

MIXER, STEREO-MONAURAL—Same as No. 301, except has Lev-R-Switch for use as 4-channel audio mixer for monaural, or as 2 sep. inputs for each of 2 Stereo channels. Jacks accept 2-cond. Phone Plugs; high imp. circuits. Two Phono Jax for output to Amp. or Tape Rec. When used monaurally, output Jax are common.
PART NO. 306 U.S.A. LIST \$22.50

TRANSISTORIZED MIXER—4-channel, high imp., same design features as No. 301, except has built-in transistor amplifier for feeding up to four mics., or combinations of sound sources, into a single "input" of Recorder or Amp. Individual gain adjustment for each channel. Transistor amplifier (powered by 9 volt battery included) overcomes usual loss of resistance type mixer and actually provides a 6 db. gain; permits use up to 30 feet from Recorder or Amp. Accepts input signals up to 1.5 volts. (Use a Switchcraft Molded Cable Assembly with proper connection to fit your equipment—not included.) Low noise level; low distortion. Response 20 to 20,000 cycles.
PART NO. 301TR U.S.A. LIST \$30.00

TRANSISTORIZED STEREO-MONAURAL MIXER—Similar to the No. 306, except has built-in transistor amplifier in each of two Stereo channels. Accepts input signals up to 1.5 volts in either Stereo or Monaural position. (9 volt battery included.) ON-OFF Switch to shut-off amplifiers when not in use. Provides 6 db. gain; permits use up to 30 feet from Recorder or Amp.

For detailed information request Switchcraft Catalog A-401.

For Stereo, requires two cables for attachment to Recorder or Amp.
PART NO. 306TR U.S.A. LIST \$37.50

CABLE ASSEMBLY—A 3-foot long chrome-grey shielded cable with molded Phone Plug on one end, molded Phono Plug other end. Ideal for use with above Mixers where Input of Recorder or Amplifier has a standard two-conductor Phono Jack. (For other terminations, see Cable Assemblies.)
PART NO. 05AF25 U.S.A. LIST \$1.50

"MIX-AMP"—Miniature Transistorized Amplifier designed for use with resistance type MIXERS, such as the Switchcraft "Mini-Mix" and four-channel Microphone Mixers overcoming the usual "losses" in such mixers and actually providing a 3 db. gain. When used with a "Mini-Mix", will accept signals up to 2 volts. Has a "HI-LO" Impedance Switch; in "HI" position, when used as a straight amplifier (without mixer) has a 200,000 ohm input and provides a 6 db. gain and in "LO" position has a 25 db. gain with input impedance of 5,000 ohms. Compact, approximately size of package of cigarettes; completely portable, requires 9 volt battery (included). Has standard 2-cond. Phono Jack Input and 2-cond. Phono Plug Output. Can also be used at a microphone, using cables up to 30 feet long, without serious loss of high frequencies. Frequency response 20 to 20,000 cycles. Also ideal for Phono Pickups (Magnetic and Crystal).
PART NO. 501 U.S.A. LIST \$20.00

"MIX-AMP"—Same as above, but Input and Output have microphone connectors (Switchcraft Series 2500 or Amphenol Series 75).
PART NO. 502 U.S.A. LIST \$20.00

"MICROPHONE CONNECTORS"



Series 2500, standard size Microphone Connector, designed for use with single conductor microphone cable; panel receptacle mounts in .385" hole. Series 3500, phono connector, used for phono connections.

Series 5500, "Mini-Con," a miniature MIC connector, approx. 1/2 the size of series 2500. Accepts cable up to 3/16" dia.; panel receptacle. 5501MP mounts in 3/8" dia. hole, in panels up to 1/4" thick; 5501MF mounts in 3/8" dia. hole with locknut on front of panel.

"MICROPHONE CONNECTORS"—Series 2501

| Part No. | U.S.A. List | Fig. | DESCRIPTION |
|----------|-------------|------|---|
| 2501F | \$0.60 | A | 1-contact, female, coupling ring. |
| 2501M | \$0.45 | | 1-contact, male. |
| 2501MP | \$0.35 | H | Panel Connector, male |
| 2501MPC | \$0.45 | | Panel Connector, closed ckt. male. |
| 44 | \$0.50 | | Plug Adapter. |
| 25Y | \$1.65 | E | Two male to one female. |
| 2501FT | \$0.80 | F | Double female, for connecting 2 cables with male Connectors. |
| 2501MT | \$0.70 | G | Double male, for connecting 2 cables with female Connectors. |
| 2501FL | \$2.25 | N | Straight Conn., 2-screw term., female, 2-pc. handle/built in cable clamp. |
| 2501FS | \$1.65 | O | Straight Conn., same 2501FL, except no cable clamp. |

"MINI-CON" CONNECTORS—Series 5501

| Part No. | U.S.A. List | Fig. | DESCRIPTION |
|----------|-------------|------|---|
| 5501F | \$0.60 | | 1-contact, female, coupling ring. |
| 5501M | \$0.45 | | 1-contact, male. |
| 5501MF | \$0.45 | | Panel Conn., male, mounts front side panel. |
| 5501MP | \$0.35 | | Panel Conn., male, mounts back side. |
| 5501MPC | \$0.45 | | Same as 5501MP, except shorting type. |

For detailed information request Switchcraft Catalog C-501.

"PHONO CONNECTORS"



| Part No. | U.S.A. List | Fig. | DESCRIPTION |
|----------|-------------|------|---|
| 3501F | \$0.15 | B | Phono Jack—2 conductor. |
| 3501M | \$0.10 | C | Phono Plug—2 conductor. |
| 3501MC | \$0.15 | C | Phono Plug—2 conductor (cable clamp type). |
| 3501FP | \$0.35 | P | Phono Jax—1/4" O.D. for back panel mounting. |
| 3501FR | \$0.40 | R | Phono Jax—3/8" O.D. for front of panel mounting. |
| 3502 | \$0.50 | S | Phono Plug Removable handle. Cable clamp. Shielded. N.P. |
| 3503 | \$0.60 | T | Phono Ext. Jax. Removable Handle. Cable clamp. Shielded. N.P. |

"RF-JAX" & "RF-PLUGS"

Nylon insulation. See illus. under "Phono Connectors."

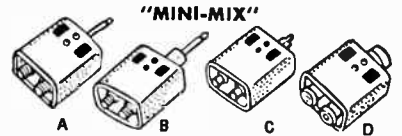
| Part No. | U.S.A. List | DESCRIPTION |
|----------|-------------|--|
| 3504M | \$0.20 | RF-Plug—Similar No. 3501M. |
| 3505F | \$0.60 | RF-Phono Jax—Similar No. 3501FP. |
| 3506 | \$2.00 | Adapter-Connector—COAX Plug to Phono Jack. |
| 3507 | \$0.80 | RF-Plug—Similar to No. 3502. |

For detailed information request Switchcraft Catalog C-501.

STEREO LINE BALANCE CONTROLS

| Part No. | U.S.A. List | DESCRIPTION |
|----------|-------------|---|
| 366 | \$3.95 | "Volume Control Adapter" Single channel, high imp. circuits only (Crystal Mic., Phono, etc.). Phono Jack Input to Phono Plug Output. Shielded. N.P. Use in unbalanced Stereo channels, or in pairs for dual Stereo channel control. |
| 367 | \$7.50 | "Dual Volume Control Adapter" Twin-channel, high imp. circuits only. 2 Phono Jack Inputs and 2 Phono Plug Outputs. Separate volume controls. Shielded. |

For detailed information request Switchcraft Catalog A-401.



Resistance type mixer for tape recorders to mix 2 different sound sources or music with voice. Accommodates 2 high imp. inputs. Loss factor approx. 3 db. Separate volume controls recessed inside housing—in line with each input. Average size 2 1/4" x 1 1/8" x 1 1/8".

| Part No. | U.S.A. List | Fig. No. | DESCRIPTION |
|----------|-------------|----------|---|
| 310 | \$7.95 | A | 2-cond. Phono Jack inputs with 2-cond. Plug output (For equipment where Jack is recessed, use 8266 Cable Assembly Adapter). |
| 311 | \$8.95 | B | 2-cond. plug output. Long plug makes suitable for recorders with Jacks recessed such as latest Wilcox Gay, Webster Electric, V.M., etc. |
| 312 | \$8.95 | B | Sp. size plug and jacks, for use with Am. Geloso Model G-255-S Tape Recorder. |
| 313 | \$8.95 | | 2-cond. special short plug output. Special input jacks to accept short plug as used with Bevere and Wollensak recorders. |
| 315 | \$7.95 | D | 2-cond. Phono Jack Inputs with female Mic. Conn. Output. |
| 316 | \$7.95 | C | 2 Phono Jax Inputs to Phono Plug Output. |
| 320 | \$7.95 | D | Microphone Connector inputs and output mating with standard mic. connectors. |
| 325 | \$9.95 | | For use with recorders using Jones type connectors. Fits Early Webcor Recorders. |
| 326 | \$9.95 | B | 3-cond. Jack Inputs with long 2-cond. Plug Output. For Webcor Recorders Series 2020, 2110, and 2130. |
| 8266 | \$3.75 | | Cable assembly for recessed Jack. Used with 310 Mini-Mix. No. 280 "Littel Plug" one end; No. 128 Ext. Jax other end. |

For detailed information request Switchcraft Catalog A-401.

SPEAKER VOLUME CONTROLS



Brushed brass wall plate mounts on std. outlet box. Constant imp. T-pad volume controls. Control speaker volume of Stereo, Hi-Fi, or P.A. system from remote location. Rated at 4 Watts (15 Watt peak audio). Ivory knob, black-white lettered acetate. Screw term. Mounting screws and instructions furnished.

| Part No. | U.S.A. List | DESCRIPTION |
|----------|-------------|---|
| 651 | \$9.95 | 8 ohm control for single 8 ohm speaker, or two 16 ohm speakers in parallel, or two 4 ohm speakers in series. Screw term. |
| 651S | \$9.95 | Same as 651, except with brushed stainless steel wall plate. |
| 652 | \$9.95 | 16 ohm T-pad control for single 16 ohm speaker, or two 8 ohm speakers connected in series. |
| 652S | \$9.95 | Same as 652, except with brushed stainless steel wall plate. |
| 653 | \$12.00 | Speaker Volume Control with Jack Connection. 8 ohm control for single 8 ohm spkr., or two 16 ohm spkrs. in parallel. Jack input permits use of ext. spkr. or headset. Jack accepts std. 2 cond. phone plug. Brushed Brass Wall Plate. As illustrated above. |
| 654 | \$12.00 | Same as 653, except with 16 ohm control. |
| 655 | \$5.50 | "Multi-Speaker Selector Switch". 7 position switch. Selects any of 3 speakers; all, or any 2 of 3. Also mounts on speaker cabinet. Constant imp., regardless of switch position. |
| 655S | \$5.50 | Same as 655, except with brushed stainless steel wall plate. |
| 656 | \$6.95 | L-pad Volume Control to prevent mismatch to amplifier at different volume settings. When turned all the way counter-clockwise, completely shuts off the speaker. Solder lug terminals. 10 Watts Peak Audio—8 ohm. |
| 656S | \$6.95 | Same as 656, except with brushed stainless steel wall plate. |

For detailed information request Switchcraft Catalogs A-401.



CHICAGO, ILLINOIS

MOLDED CABLE ASSEMBLIES
(Audio Jumpers)
(Interconnecting Cords)

Various Molded Cable Combinations.



| Part No. | U.S.A. List | Conn. or One End | Term. or Other | Length | Cable |
|---|-------------|------------------|----------------|--------|---------|
| Straight 2 Cond. Phone Plug to Various Connections | | | | | |
| 05AC05 | \$1.60 | K | K | 18" | Shield. |
| 05AD05 | \$1.75 | K | K | 24" | Shield. |
| 05AK05 | \$2.60 | K | K | 6' | Shield. |
| 05AN05 | \$3.50 | K | K | 10' | Shield. |
| 05AU05 | \$4.75 | K | K | 25' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|---------|
| 05AK15 | \$2.60 | K | A | 6' | Shield. |
| 05AN15 | \$3.50 | K | A | 10' | Shield. |
| 05AK25 | \$2.00 | K | B | 6' | Shield. |
| 05AN25 | \$2.75 | K | B | 10' | Shield. |
| 05AR25 | \$3.00 | K | B | 15' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|---------|
| 05AK30 | \$2.00 | K | F | 6' | Shield. |
| 05AN30 | \$2.75 | K | F | 10' | Shield. |
| 05AK80 | \$2.60 | K | D | 6' | Shield. |
| 05AN80 | \$3.50 | K | D | 10' | Shield. |
| 05AR80 | \$4.00 | K | D | 15' | Shield. |
| 05AU80 | \$4.75 | K | D | 25' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|---------|
| 05AK82 | \$2.20 | K | C | 6' | Shield. |
| 05AN82 | \$3.00 | K | C | 10' | Shield. |
| 05AR82 | \$3.25 | K | C | 15' | Shield. |
| 05AK87 | \$2.60 | K | E | 6' | Shield. |
| 05AN87 | \$3.50 | K | E | 10' | Shield. |
| 05AU87 | \$4.75 | K | E | 25' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|-----------|
| 05AK84 | \$1.75 | K | G | 6' | Shield. |
| 05AN84 | \$2.25 | K | G | 10' | Shield. |
| 05AR84 | \$2.75 | K | G | 15' | Shield. |
| 05CK84 | \$1.40 | K | G | 6' | Unshield. |
| 05CN84 | \$1.90 | K | G | 10' | Unshield. |

| | | | | | |
|--------|--------|---|---|-----|-----------|
| 05CK85 | \$1.50 | K | H | 6' | Unshield. |
| 05CN85 | \$2.00 | K | H | 10' | Unshield. |
| 05CK86 | \$1.90 | K | J | 6' | Unshield. |
| 05CN86 | \$2.40 | K | J | 10' | Unshield. |
| 05CR86 | \$2.65 | K | J | 15' | Unshield. |
| 05CT86 | \$3.00 | K | J | 20' | Unshield. |

| Straight 3 Cond. Phone Plug to Various Connections | | | | | |
|---|--------|---|---|-----|---------|
| 10BD10 | \$3.25 | K | K | 24" | Shield. |
| 10BK10 | \$4.80 | K | K | 6' | Shield. |
| 10BN10 | \$6.00 | K | K | 10' | Shield. |
| 10BU10 | \$8.75 | K | K | 25' | Shield. |
| 10BK81 | \$4.80 | K | D | 6' | Shield. |
| 10BN81 | \$6.00 | K | D | 10' | Shield. |
| 10BU81 | \$8.75 | K | D | 25' | Shield. |

| Right Angle 2 Cond. Phone Plug to Various Connections | | | | | |
|--|--------|---|---|-----|---------|
| 15AK15 | \$2.60 | A | A | 6' | Shield. |
| 15AN15 | \$3.50 | A | A | 10' | Shield. |
| 15AU15 | \$4.75 | A | A | 25' | Shield. |
| 15AK25 | \$2.00 | A | B | 6' | Shield. |
| 15AN25 | \$2.75 | A | B | 10' | Shield. |
| 15AR25 | \$3.00 | A | B | 15' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|-----------|
| 15AK30 | \$2.00 | A | F | 6' | Shield. |
| 15AN30 | \$2.75 | A | F | 10' | Shield. |
| 15AK80 | \$2.60 | A | D | 6' | Shield. |
| 15AN80 | \$3.50 | A | D | 10' | Shield. |
| 15AU80 | \$4.75 | A | D | 25' | Shield. |
| 15AK82 | \$2.20 | A | C | 6' | Shield. |
| 15AN82 | \$3.00 | A | C | 10' | Shield. |
| 15AK87 | \$2.60 | A | E | 6' | Shield. |
| 15AN87 | \$3.50 | A | E | 10' | Shield. |
| 15AK84 | \$1.75 | A | G | 6' | Shield. |
| 15AN84 | \$2.25 | A | G | 10' | Shield. |
| 15AR84 | \$2.75 | A | G | 15' | Shield. |
| 15CK85 | \$1.50 | A | H | 6' | Unshield. |
| 15CN85 | \$2.00 | A | H | 10' | Unshield. |
| 15CK86 | \$1.90 | A | J | 6' | Unshield. |
| 15CN86 | \$2.40 | A | J | 10' | Unshield. |

| Straight Phono Plug to Various Connections | | | | | |
|---|--------|---|---|-----|---------|
| 25AC25 | \$1.05 | B | B | 18" | Shield. |
| 25AF25 | \$1.20 | B | B | 36" | Shield. |
| 25AH25 | \$1.35 | B | B | 4' | Shield. |
| 25AK25 | \$1.50 | B | B | 6' | Shield. |
| 25AN25 | \$2.00 | B | B | 10' | Shield. |
| 25AR25 | \$2.50 | B | B | 15' | Shield. |
| 25AT25 | \$3.00 | B | B | 20' | Shield. |
| 25AU25 | \$3.50 | B | B | 25' | Shield. |
| 25AC30 | \$1.05 | B | F | 18" | Shield. |
| 25AF30 | \$1.20 | B | F | 36" | Shield. |
| 25AK30 | \$1.50 | B | F | 6' | Shield. |
| 25AN30 | \$2.00 | B | F | 10' | Shield. |
| 25AU30 | \$3.50 | B | F | 25' | Shield. |
| 25AK80 | \$2.00 | B | D | 6' | Shield. |
| 25AN80 | \$2.75 | B | D | 10' | Shield. |
| 25AR80 | \$3.25 | B | D | 15' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|---------|
| 25AC82 | \$1.25 | B | C | 18" | Shield. |
| 25AF82 | \$1.35 | B | C | 36" | Shield. |
| 25AH82 | \$1.60 | B | C | 4' | Shield. |
| 25AK82 | \$1.75 | B | C | 6' | Shield. |
| 25AN82 | \$2.00 | B | C | 10' | Shield. |
| 25AR82 | \$2.50 | B | C | 15' | Shield. |
| 25AT82 | \$3.00 | B | C | 20' | Shield. |
| 25AU82 | \$3.50 | B | C | 25' | Shield. |
| 25AK87 | \$2.45 | B | E | 6' | Shield. |
| 25AN87 | \$3.35 | B | E | 10' | Shield. |
| 25AU87 | \$4.60 | B | E | 25' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|---------|
| 25AC84 | \$0.80 | B | G | 18" | Shield. |
| 25AF84 | \$0.95 | B | G | 36" | Shield. |
| 25AH84 | \$1.00 | B | G | 4' | Shield. |
| 25AK84 | \$1.15 | B | G | 6' | Shield. |
| 25AN84 | \$1.65 | B | G | 10' | Shield. |
| 25AR84 | \$2.25 | B | G | 15' | Shield. |
| 25AT84 | \$2.75 | B | G | 20' | Shield. |
| 25AU84 | \$3.25 | B | G | 25' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|-----------|
| 25CF84 | \$0.75 | B | G | 36" | Unshield. |
| 25CK84 | \$0.90 | B | G | 6' | Unshield. |
| 25CN84 | \$1.40 | B | G | 10' | Unshield. |
| 25CK85 | \$1.00 | B | H | 6' | Unshield. |
| 25CN85 | \$1.50 | B | H | 10' | Unshield. |
| 25CK86 | \$1.75 | B | J | 6' | Unshield. |
| 25CN86 | \$2.25 | B | J | 10' | Unshield. |
| 25CR86 | \$2.35 | B | J | 15' | Unshield. |
| 25CT86 | \$2.60 | B | J | 20' | Unshield. |

| 2 Straight Phono Plugs on Same End to Various Conn. | | | | | |
|--|--------|---|---|-----|---------|
| 25FF25 | \$3.25 | M | M | 36" | Shield. |
| 25FK25 | \$3.75 | M | M | 6' | Shield. |
| 25FN25 | \$4.50 | M | M | 10' | Shield. |
| 25FF84 | \$2.90 | M | N | 36" | Shield. |
| 25FK84 | \$3.25 | M | N | 6' | Shield. |
| 25FN84 | \$3.75 | M | N | 10' | Shield. |

| Straight Phono Plug (Long Handle) to Various Conn. | | | | | |
|---|--------|----|----|-----|---------|
| 26AF26 | \$1.30 | BB | BB | 36" | Shield. |
| 26AK26 | \$1.60 | BB | BB | 6' | Shield. |
| 26AN26 | \$2.10 | BB | BB | 10' | Shield. |
| 26AR26 | \$2.60 | BB | BB | 15' | Shield. |
| 26AK05 | \$2.20 | BB | K | 6' | Shield. |
| 26AN05 | \$2.75 | BB | K | 10' | Shield. |
| 26AF82 | \$1.50 | BB | C | 36" | Shield. |
| 26AK82 | \$1.95 | BB | C | 6' | Shield. |
| 26AN82 | \$2.25 | BB | C | 10' | Shield. |
| 26AR82 | \$2.75 | BB | C | 15' | Shield. |
| 26AF84 | \$1.10 | BB | G | 36" | Shield. |
| 26AK84 | \$1.30 | BB | G | 6' | Shield. |
| 26AN84 | \$1.80 | BB | G | 10' | Shield. |

| Right Angle Phono Plug to Various Connections | | | | | |
|--|--------|---|---|-----|---------|
| 30AC30 | \$1.05 | F | F | 18" | Shield. |
| 30AF30 | \$1.20 | F | F | 36" | Shield. |
| 30AH30 | \$1.35 | F | F | 4' | Shield. |
| 30AK30 | \$1.50 | F | F | 6' | Shield. |
| 30AN30 | \$2.00 | F | F | 10' | Shield. |
| 30AR30 | \$2.50 | F | F | 15' | Shield. |
| 30AT30 | \$3.00 | F | F | 20' | Shield. |
| 30AU30 | \$3.50 | F | F | 25' | Shield. |
| 30AK80 | \$2.00 | F | D | 6' | Shield. |
| 30AN80 | \$2.75 | F | D | 10' | Shield. |
| 30AC82 | \$1.25 | F | C | 18" | Shield. |
| 30AF82 | \$1.35 | F | C | 36" | Shield. |
| 30AK82 | \$1.75 | F | C | 6' | Shield. |
| 30AN82 | \$2.00 | F | C | 10' | Shield. |
| 30AF84 | \$0.95 | F | G | 36" | Shield. |
| 30AK84 | \$1.15 | F | G | 6' | Shield. |
| 30AN84 | \$1.65 | F | G | 10' | Shield. |

| | | | | | |
|--------|--------|---|---|-----|-----------|
| 30CF84 | \$0.75 | F | G | 36" | Unshield. |
| 30CK84 | \$0.90 | F | G | 6' | Unshield. |
| 30CN85 | \$1.50 | F | H | 10' | Unshield. |
| 30CK86 | \$1.75 | F | J | 6' | Unshield. |
| 30CN86 | \$2.25 | F | J | 10' | Unshield. |

| Straight Tini Plug to Various Connections | | | | | |
|--|--------|----|---|-----|---------------------|
| 41EF75 | \$2.00 | KK | L | 36" | 2-cond. Hearing Aid |
| 41EH75 | \$2.25 | KK | L | 4' | 2-cond. Hearing Aid |
| 45AN25 | \$2.75 | KK | B | 10' | Shield. |
| 45AR25 | \$3.25 | KK | B | 15' | Shield. |
| 45AU25 | \$4.25 | KK | B | 25' | Shield. |

| Right Angle Tini Plug to Various Connections | | | | | |
|---|--------|----|---|-----|---------------------|
| 50EF75 | \$2.25 | AA | L | 36" | 2-cond. Hearing Aid |
| 50EH75 | \$2.50 | AA | L | 4' | 2-cond. Hearing Aid |

| Part No. | U.S.A. List | Conn. or One End | Term. or Other | Length | Cable |
|----------------------------|-------------|------------------|----------------|--------|---------|
| Extension Jax Cords | | | | | |
| 82AC82 | \$1.50 | C | C | 18" | Shield. |
| 82AF82 | \$1.65 | C | C | 36" | Shield. |
| 82AK82 | \$1.95 | C | C | 6' | Shield. |
| 83DK05 | \$2.75 | DD | K | 6' | Shield. |

| Cords with Spade Lugs and Alligator Clips | | | | | |
|--|--------|---|---|-----|-----------|
| 85CN85 | \$0.90 | H | H | 10' | Unshield. |
| 85CT85 | \$1.50 | H | H | 20' | Unshield. |
| 85CU85 | \$1.75 | H | H | 25' | Unshield. |
| 86CN86 | \$1.70 | J | J | 10' | Unshield. |
| 86CU86 | \$2.55 | J | J | 25' | Unshield. |

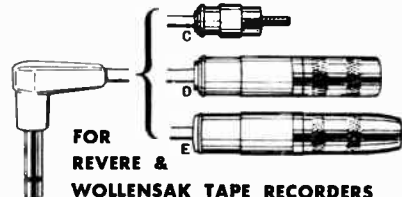
| Microphone Connector to Various Connections | | | | | |
|--|--------|---|---|-----|---------|
| 87AF87 | \$2.00 | E | E | 36" | Shield. |
| 87AK87 | \$2.50 | E | E | 6' | Shield. |
| 87AP87 | \$3.50 | E | E | 12" | Shield. |
| 87AU87 | \$5.00 | E | E | 25' | Shield. |
| 87AK80 | \$2.75 | E | D | 6' | Shield. |
| 87AK82 | \$2.00 | E | C | 6' | Shield. |
| 87AN82 | \$2.75 | E | C | 10' | Shield. |
| 87AU82 | \$4.75 | E | C | 25' | Shield. |
| 87AF84 | \$1.50 | E | G | 36" | Shield. |
| 87AK84 | \$1.75 | E | G | 6' | Shield. |
| 87AN84 | \$2.25 | E | G | 10' | Shield. |
| 87AU84 | \$4.25 | E | G | 25' | Shield. |

SPECIAL PURPOSE INTERCONNECTING CORDS



FOR WEBCOR TAPE RECORDERS

| Part No. | U.S.A. List Price | DESCRIPTION |
|----------|-------------------|---|
| 11AK26 | \$3.25 | Fig. A 3-cond. phone plug with internal resistor to phono plug, 6' shielded cable. (Webcor No. 2925) |
| 11AN26 | \$4.00 | Fig. A Same as 11AK26, except 10'. |
| 11CN86 | \$3.25 | Fig. B 3-cond. phone plug with internal resistor to alligator clips, 10' unshielded cable. (Webcor No. 2934). |



FOR REVERSE & WOLLENSAK TAPE RECORDERS

| Part No. | U.S.A. List Price | DESCRIPTION |
|----------|-------------------|--|
| 12HK25 | \$2.50 | Fig. C Short right angle 2-cond. phone plug to std. 2-cond. phono plug, 6' white shielded cable. |
| 12HR79 | \$5.00 | Fig. D Short right angle 2-cond. phone plug to std. 2-cond. short ext. jack, 15' white shielded cable. |
| 12HU79 | \$5.95 | Fig. D Same as 12HR79, except 25'. |
| 12HD80 | \$3.95 | Fig. E Short right angle 2-cond. phone plug to phone extension jax, 24' white shielded cable. |

SWITCHCRAFT INC.

CHICAGO, ILLINOIS

SWITCHES
STACK SWITCH KITS

"BUTTON SWITCHES"

An unusually small, completely enclosed switch. Series 903 and 913 (A), behind panel mounting, requires single $\frac{1}{32}$ " dia. hole, panels up to $\frac{1}{8}$ ". Series 923 and 933 (B) front of panel mounting, requires $\frac{1}{4}$ " dia. hole, panels up to $\frac{1}{2}$ " thick. Rated 250 mls, non-inductive load. A.C. 30 watts max.

"CORD SWITCHES"—Button Switch assembled into nickel plated brass handle provides ideal switch for attachment to cable.

| Part No. Red Button | Part No. Blk. Button | U.S.A. List Price | Schematic Circuit |
|---------------------|----------------------|-------------------|-------------------|
| 903 | 913 | \$1.50 | |
| 903D | 913D | \$1.50 | |
| 923 | 933 | \$1.75 | |
| 923D | 933D | \$1.75 | |

"CORD SWITCHES"

| Part No. Red Button | Part No. Blk. Button | U.S.A. List Price | Schematic Circuit |
|---------------------|----------------------|-------------------|-------------------|
| E-903 | E-913 | \$2.50 | |
| E-903D | E-913D | \$2.50 | |

"LITTEL" AND "TINY" SWITCHES

The "Littel Switch" (C) available in 3 circuits, red or black 1 pc. Plastic P.B., non-locking only. Integral contacts; recommended for low current circuits only; same switches with suffix letter "S" in part number rated at 3 amps, 300 watts A.C. non inductive load. Mounts $\frac{3}{8}$ " dia. hole in panels up to $\frac{1}{4}$ ".

The "Tiny-Switch" (D) similar in construction but approx. $\frac{1}{2}$ the size of "Littel-Switch". Available integral contacts only. Mounts $\frac{1}{4}$ " dia. hole in panels up to $\frac{1}{8}$ " thick. *Silver Contacts

| Part No. Red Button | Part No. Blk. Button | U.S.A. List Price | Schematic Circuit |
|---------------------|----------------------|-------------------|-------------------|
| 101 | 201 | \$0.90 | I |
| *101-S | *201-S | \$1.05 | |
| 102 | 202 | \$0.90 | II |
| *102-S | *202-S | \$1.05 | |
| 103 | 203 | \$1.00 | III |
| *103-S | *203-S | \$1.20 | |

"TINY-SWITCHES"

| | | | |
|-----|-----|--------|-----|
| 951 | 961 | \$0.90 | I |
| 952 | 962 | \$0.90 | II |
| 953 | 963 | \$1.00 | III |

"FF" AND "NF" SWITCHES

"FF-Switch" (E), Series 1000, 1-pc. black plastic push button; all common circuits. Mounts in single $\frac{3}{8}$ " dia. hole, panels up to $\frac{1}{4}$ " thick. Fine silver contacts rated at 3 amp. 300 Watts max. A.C. non-inductive load. Frame $\frac{3}{4}$ " wide; $1\frac{1}{4}$ " h. o/a.

"NF-Switch" (F) series 4000, same features and rating as "FF-Switch" but smaller. Frame $\frac{1}{2}$ " wide; $1\frac{1}{2}$ " long o/a. mounts in panels up to $\frac{3}{8}$ " thick.

| FF-Switch Part No. | NF-Switch Part No. | U.S.A. List Price | Schematic Circuit |
|--------------------|--------------------|-------------------|-------------------|
| 1001 | 4001 | \$1.05 | I |
| 1002 | 4002 | \$1.05 | II |
| 1003 | 4003 | \$1.20 | III |
| 1004 | 4004 | \$1.30 | IV |
| 1005 | 4005 | \$1.30 | V |
| 1006 | 4006 | \$1.55 | VI |
| 1009 | 4009 | \$2.10 | VII |

For detailed information request Switchcraft Catalog 5-301.



STACK SWITCH KITS
Experimental Kits consisting of the most popular springs, spacers, insulators, tubing, pins, roller assemblies and assorted contacts. Ideal for assembling design samples, field repair and replacement. Kit No. K-101, recommended for the engineer who has not decided which spring design to use. Kits No's. K-102 and K-103 contain springs of one type.

| Part No. | U.S.A. List Price | Description |
|----------|-------------------|---|
| K-101 | \$16.50 | Assorted $\frac{1}{4}$ " and $\frac{3}{8}$ " mtg. ctr. contact springs and parts. |
| K-102 | \$16.50 | Assorted $\frac{1}{4}$ " mtg. ctr. contact springs and parts. |
| K-103 | \$16.50 | Assorted $\frac{3}{8}$ " mtg. ctr. contact springs and parts. |

For detailed information request Switchcraft Catalog 5-304.

"LEV-R-SWITCHES"



Unusually small lever action switch. Ideal for test equipment, intercom systems, model r.r. switch panels, etc. Mount in $\frac{1}{16}$ " dia. hole, panels up to $\frac{1}{4}$ " thick for series 3000, and panels up to $\frac{1}{4}$ " for series 13000. Contacts fine silver, rated at 3 amps., 300 watts max. non-inductive A.C. load. Welded cross bar Palladium contacts special.

Add suffix "L" for locking type.

TWO POSITION TYPE

| Series 3000 | U.S.A. List | Series 13000 | U.S.A. List | Schematic CKT. |
|-------------|-------------|--------------|-------------|----------------|
| Non-Locking | | Non-Locking | | |
| 3001 | \$1.95 | 13001 | \$2.10 | XI |
| 3002 | \$1.95 | 13002 | \$2.10 | XII |
| 3003 | \$2.25 | 13003 | \$2.40 | XIII |
| 3003D | \$2.40 | 13003D | \$2.50 | XIV |
| 3004 | \$2.50 | 13004 | \$2.65 | XV |
| 3005 | \$2.50 | 13005 | \$2.65 | XVI |
| 3006 | \$2.75 | 13006 | \$2.75 | XVII |
| 3006D | \$2.90 | 13006D | \$2.90 | XVIII |
| 3009 | \$3.40 | 13009 | \$3.75 | XIX |

THREE POSITION TYPE

| | | | | |
|-------|--------|--------|--------|-------|
| 3033 | \$2.50 | 13033 | \$2.65 | XX |
| 3034 | \$2.60 | 13034 | \$2.75 | VIII |
| 3035 | \$2.60 | 13035 | \$2.75 | IX |
| 3036 | \$2.90 | 13036 | \$3.10 | X |
| 3036D | \$3.10 | 13036D | \$3.25 | XXI |
| 3037 | \$2.95 | 13037 | \$3.10 | XXII |
| 30312 | \$3.75 | 130312 | \$4.00 | XXIII |
| 30313 | \$3.75 | 130313 | \$4.00 | XXIV |

INTER-COMM. SWITCHES

| | | | | |
|-------|--------|--------|--------|------|
| 3033T | \$2.50 | 13033T | \$2.65 | XX |
| 3037T | \$2.95 | 13037T | \$3.10 | XXII |

SERIES 12000

Requires minimum depth ($\frac{1}{8}$ ") behind panel. Single hole mounting. Springs insulated. Contacts fine silver rated at 3 amp. 120V A.C. non-inductive load, 300 Watts max. std. For detailed information regarding stack heights write for technical sheet. See basic contact forms.

| Series 12000 Locking | Non-Locking | U.S.A. List | Schematic Circuit |
|----------------------|-------------|-------------|-------------------|
|----------------------|-------------|-------------|-------------------|

TWO POSITION TYPE

| | | | |
|---------|--------|--------|-------|
| 12001L | 12001 | \$1.75 | XI |
| 12002L | 12002 | \$1.75 | XII |
| 12003L | 12003 | \$2.00 | XIII |
| 12003DL | 12003D | \$2.25 | XIV |
| 12004L | 12004 | \$2.25 | XV |
| 12005L | 12005 | \$2.25 | XVI |
| 12006L | 12006 | \$2.50 | XVII |
| 12006DL | 12006D | \$2.75 | XVIII |

THREE POSITION TYPE

| | | | |
|---------|--------|--------|------|
| 12033L | 12033 | \$2.25 | XX |
| 12034L | 12034 | \$2.35 | VIII |
| 12035L | 12035 | \$2.35 | IX |
| 12036L | 12036 | \$2.65 | X |
| 12036DL | 12036D | \$2.85 | XXI |
| 12037L | 12037 | \$2.75 | XXII |

3 POS. LOCKING ONE SIDE—NON-LOCKING OTHER SIDE

| | | | |
|--------|--|--------|------|
| 12033T | | \$2.25 | XX |
| 12037T | | \$2.75 | XXII |

For detailed information request Switchcraft Catalog 5-302.

"T-SWITCHES"



Long frame switches. Series 11000 (J), locking and non-locking push button design commonly used on Jack Panels, same mounting as "MT-JAX". $\frac{1}{2}$ " dia. mounting hole $\frac{3}{4}$ " center distance to push button. Requires $2\frac{3}{8}$ " depth behind panel. Welded cross bar Palladium contacts rated 3 amps. A.C. 300 Watts max. non-inductive load.

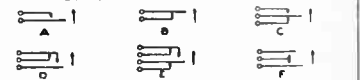
Series 11200 (K), similar to above but turn type operation, locking and non-locking.

Add suffix "L" to part number for locking type.

| "PUSH BUTTONS" SERIES 11000 | | "TURN-BUTTONS" SERIES 11200 | | U.S.A. List | Contact Assembly |
|-----------------------------|------------------|-----------------------------|------------------|-------------|------------------|
| Part No. Non-Locking | Part No. Locking | Part No. Non-Locking | Part No. Locking | | |
| 11001 | 11201 | | | \$3.50 | 1-A |
| 11002 | 11202 | | | \$3.50 | 1-B |
| 11003 | 11203 | | | \$4.00 | 1-C |
| 11003D | 11203D | | | \$4.00 | 1-D |
| 11004 | 11204 | | | \$4.50 | 2-A |
| 11005 | 11205 | | | \$4.50 | 2-B |
| 11006 | 11206 | | | \$5.00 | 2-C |
| 11006D | 11206D | | | \$5.00 | 2-D |
| 11008 | 11208 | | | \$5.60 | 4-A |
| 11009 | 11209 | | | \$6.00 | 3-C |
| 11012 | 11212 | | | \$6.80 | 4-C |

This table refers to Basic Contact Forms under the heading "Contact Assembly"

BASIC CONTACT FORMS



For detailed information on these products request Switchcraft Catalogs 5-301 and 5-302.

"TELEVER SWITCH"



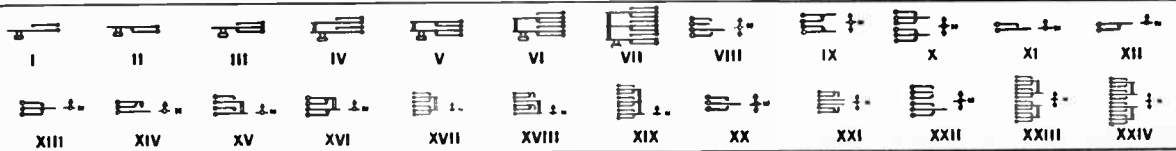
Series 6000, "Telever Switch" (L), rugged telephone type; 3" depth behind panel. Welded cross bar Palladium contacts rated at 3 amps., 300 Watts max. non-inductive A.C. load. Insulated black knob; chrome plated brass actuator. Standard mounting centers $1\frac{1}{2}$ " x $1\frac{1}{16}$ "; usually mounted by four No. 3-48 screws (not furnished); can be assembled to escutcheon plate. Series 16000, "Telever Switch" (M), same design as Series 6000, except features a single hole mounting; requires $1\frac{1}{2}$ " hole in panels up to $\frac{1}{4}$ " thick. Unique feature, "non-locking" type can easily be converted to "locking" by removing "stop plate".

Add suffix "L" to part number for locking type.

| 6000 SERIES | | 16000 SERIES | | Contact Assembly |
|--------------------------|-------------|----------------------|-------------|------------------|
| Part No. Non-Locking | U.S.A. List | Part No. Non-Locking | U.S.A. List | |
| TWO POSITION TYPE | | | | |
| 6006 | \$ 5.00 | 16006 | \$ 5.00 | 2-C |
| 6006D | \$ 5.60 | 16006D | \$ 5.60 | 2-D |
| 6008 | \$ 5.60 | 16008 | \$ 5.60 | 4-A |
| 6009 | \$ 6.00 | 16009 | \$ 6.00 | 3-C |
| 60012 | \$ 6.80 | 160012 | \$ 6.80 | 4-C |
| 60012D | \$ 7.50 | 160012D | \$ 7.50 | 4-D |
| 60024 | \$10.00 | 160024 | \$10.00 | 8-C |

THREE POSITION TYPE

| | | | | Pos. 1 | Pos. 2 |
|--------|---------|--|---------|--------|--------|
| 6036 | \$ 5.00 | 16036 | \$ 5.00 | 1-C | 1-C |
| 6036D | \$ 5.60 | 16036D | \$ 5.60 | 1-D | 1-D |
| 6038 | \$ 5.60 | 16038 | \$ 5.60 | 2-A | 2-A |
| 60312 | \$ 6.80 | 160312 | \$ 6.80 | 2-C | 2-C |
| 60312D | \$ 7.50 | 160312D | \$ 7.50 | 2-D | 2-D |
| 60316 | \$ 8.80 | 160316 | \$ 8.80 | 4-A | 4-A |
| 60324 | \$10.00 | 160324 | \$10.00 | 4-C | 4-C |
| 530 | \$ 0.60 | Escutcheon plate with 4 mounting screws. For series 6000 only. | | | |



SWITCHCRAFT

CHICAGO, ILLINOIS

"MULTI-SWITCH"
"PUSH-PUSH" SWITCH
"TF" SWITCH — "LK" SWITCH
JACK COVERS — TWIN JACK



The versatility of the "Multi-Switch" permits custom designing of push-button switches to meet any requirement. Ideal for use in all types of electronic equipment. Six Frame Series are available: Series 7000, non-illuminated, 5/8" plunger centers; Series 8000, non-illuminated, 3/4" plunger centers; Series 17000, illuminated, 5/8" plunger centers. Includes 6V midge screw base lamp. Buttons have identifying discs. Series 18000, illuminated, 3/4" plunger center. All features of Series 17000 are retained. New, Series 21000, illuminated, 5/8" plunger center. Featuring a new button design and two lamp voltages. 6V, 28V. The miniature lamps are purchased separately. Series 22000, illuminated, same as Series 21000, except with 3/4" plunger centers.

All Series of the "Multi-Switch" may be assembled at the factory or adapted in the field to provide these functions: Interlock—pressing any button or group of buttons will release previously depressed button. Non-Locking—Momentary action (no interaction between buttons). All Lock—Pressing button does not release button previously depressed (order frame with extra button to serve as release button). Interlock and Non-Lock or All-Lock and Non-Lock combinations.

(A) NON-ILLUMINATED PUSH-BUTTON FRAMES

A round brown push-on button is furnished for each station and extra red button for use when switch requires a release.

| Part No.* | U.S.A. List Price** | No. of Stations |
|-----------|---------------------|-----------------|
| 7400 | \$12.00 | 4 |
| 7600 | \$16.00 | 6 |
| 7800 | \$20.00 | 8 |
| 71000 | \$24.00 | 10 |
| 71200 | \$28.00 | 12 |

*Only popular frames listed above, actually available from 1 to 37 stations.
 **Add 10% to above List Prices when ordering Series 8000 Frames with 3/4" plunger centers, available up to 31 stations.

(B) SERIES 17000 ILLUMINATED PUSH-BUTTON FRAMES

Buttons light in "IN" position. If buttons are to light in "OUT" position, prefix Part No. with "M"; or if buttons are to light in "IN" and "OUT" position, prefix Part No. with "N". Supplied with white "push-on" discs, and red disc for release station.

| Part No.* | U.S.A. List Price** | No. of Stations |
|-----------|---------------------|-----------------|
| 17400 | \$24.50 | 4 |
| 17600 | \$34.50 | 6 |
| 17800 | \$45.00 | 8 |
| 171000 | \$55.00 | 10 |
| 171200 | \$65.00 | 12 |

*Only popular Frames listed above, actually available from 1 to 37 stations.
 **Add 10% to above List Prices when ordering Series 18000 Frames with 3/4" plunger centers; available up to 31 stations.

(F) "TF" SWITCHES

Push-button "TF" (Tiny frame switch): (F) requires only 1 1/2" depth behind panel. Mounts in single 3/4" dia. hole. Locking or non-locking action. Integral contacts. Ideal for all low level circuits where contact resistance is unimportant.

| Non-Locking | U.S.A. List Price | Locking | U.S.A. List Price | Schematic Circuits |
|-------------|-------------------|---------|-------------------|--------------------|
| 974 | \$1.30 | 974L | \$1.55 | 2-A |
| 975 | \$1.30 | 975L | \$1.55 | 2-B |
| 976 | \$1.30 | 976L | \$1.55 | 2-C |

For detailed information, request Switchcraft Catalog 102.

"HOOK SWITCH"

Hanging accessory on "hook" actuates switch. Requires minimum of depth behind panel. Soft, easy action. Fine silver contacts rated at 3 amps, 120V. A.C. Palladium contacts and special circuits available (Refer to basic contact forms Page 2. Specify by lettering.)

| Part No. | U.S.A. List Price | Schematic Circuit | Part No. | U.S.A. List Price | Schematic Circuit |
|----------|-------------------|-------------------|----------|-------------------|-------------------|
| 14004 | \$2.75 | | 14006 | \$3.00 | |
| 14005 | \$2.75 | | 14012 | \$3.85 | |

For detailed information, request Switchcraft Catalog 5-303.

"JACK COVERS"

500 Series Cover used with conventional 3/4"-32 threaded bushing type Phone Jacks. Spring loaded cover immediately snaps over Jack opening when plug is removed, providing a moisture seal.

600 Series Cover, similar to above, is used with certain type Tip Jacks. Fit Tip Jacks with 1/4" mounting; height of Tip Jack head 1/4" to 3/8".

Also can be used as covers for "Tini-Jax".

| Part No. | U.S.A. List Price | Description | Part No. | U.S.A. List Price | Description |
|----------|-------------------|-------------|----------|-------------------|-------------|
| 510 | \$1.05 | Olive Drab | 610 | \$0.75 | Olive Drab |
| 512 | \$1.05 | Br. Nkl. | 615 | \$0.75 | Black |
| 515 | \$1.05 | Black | 620 | \$0.75 | Navy Grey |
| 520 | \$1.05 | Navy Grey | | | |

For detailed information, request Switchcraft Catalog J-101.

"MULTI-SWITCHES"—Now, Choose from Six Frame Series.

Featuring:

- Illuminated or Non-Illuminated
- Choice of Functions
- Multiple Circuits Available
- Choice of 2 Plunger Centers — 5/8" and 3/4"

Each complete unit consists of the following components which are ordered separately: Frame with push buttons; Individual switch stacks (which are to be installed on the frame); lock-out bar (optional); and Solenoid release (optional). On Series 21000 and 22000 Illuminated Multi-Switches, the lamps are also ordered separately.

For detailed engineering specifications and special functions on Multi-Switches, request Switchcraft Catalog 5-306.

(C) SERIES 21000 ILLUMINATED PUSH-BUTTON FRAMES

Buttons light in "IN" position. If buttons are to light in "OUT" position prefix Part No. with "M"; or if buttons are to light in "IN" and "OUT" position, prefix Part No. with "N". Standard buttons are supplied with white jewels and diffusers; other colors available on special order.

| Part No.* | U.S.A. List Price** | No. of Stations |
|-----------|---------------------|-----------------|
| 21400 | \$24.50 | 4 |
| 21600 | \$34.50 | 6 |
| 21800 | \$45.00 | 8 |
| 211000 | \$55.00 | 10 |
| 211200 | \$65.00 | 12 |

*Only popular Frames listed above, actually available from 1 to 37 stations.
 **Add 10% to above List Prices when ordering Series 22000, Frames with 3/4" plunger centers; available up to 31 stations.

LAMPS FOR SERIES 21000, 22000 FRAMES

Lamps are not furnished with Illuminated "Multi-Switch" Frames Series 21000, 22000. When ordering these frames determine and specify lamp voltages you will require.

| Part No. | U.S.A. List Price | Description |
|----------|-------------------|------------------------|
| P-1593-2 | \$1.20 | 6V Lamp, Ind. No. 328 |
| P-1593-1 | \$1.50 | 28V Lamp, Ind. No. 327 |

TYPE J SOLENOIDS

Fasten to end of frame.

| Part No. | U.S.A. List Price | Function Used On | Voltage |
|----------|-------------------|------------------|---------|
| J-1 | \$8.50 | Interlock | 115V AC |
| J-3 | \$9.50 | All-Lock | 115V AC |

"RS-SWITCH"



The "RS-SWITCH", locking and non-locking, 2- or 3-position, all common circuits. Mounts in single 3/8" dia. hole, panels up to 1/4" thick. Fine silver contacts rated 3 amperes, 120

volts A.C. (non-inductive).

Add suffix "L" to part number for locking type.

| Part No. | U.S.A. List Price | Schematic CKT. |
|----------|-------------------|----------------|
| 2001 | \$1.25 | XI |
| 2002 | \$1.25 | XII |
| 2003 | \$1.50 | XIII |
| 2004 | \$1.50 | XV |
| 2005 | \$1.50 | XVI |
| 2006 | \$1.95 | XVII |

THREE POSITION TYPES

| | | |
|------|--------|------|
| 2034 | \$1.50 | VIII |
| 2035 | \$1.50 | IX |
| 2036 | \$1.95 | X |

For detailed information, request Switchcraft Catalog 5-303.

TWIN JACK

Twin Jack, similar to "MT-JAX", except frame is doubled. MT-388 mates with 411, 412, 413, 420 and 425 plugs. MT-389, two 3-cond. Jacks interconnected, mates with 482 plug. Twin Jacks have mounting ears on 1 1/2" centers; sleeves are on 5/8" centers.

| Part No. | U.S.A. List Price | Mill Type | Schematic Circuit |
|----------|-------------------|-----------|-------------------|
| MT-388 | \$5.15 | JJ-088 | |
| MT-389 | \$5.65 | | |

For detailed information, request Switchcraft Catalog J-102.

LOCK-OUT BAR

Lock-out bar, Fig. E, prevents operation of more than one button at a time. Mounted at rear of "Multi-Switch."

| Part No. | U.S.A. List Price | No. of Stations |
|----------|-------------------|-----------------|
| K04 | \$3.25 | 4 |
| K06 | \$3.50 | 6 |
| K08 | \$3.75 | 8 |
| K10 | \$4.25 | 10 |
| K12 | \$4.75 | 12 |

STACK SWITCHES*

For all Multi-Switches, Fig. D.

| Series 70 — Silver Contacts | | Series 70P — Palladium Contacts | | Schematic Circuit |
|-----------------------------|-------------------|---------------------------------|-------------------|-------------------|
| Part No. | U.S.A. List Price | Part No. | U.S.A. List Price | |
| 71 | \$1.50 | 71P | \$1.60 | |
| 72 | \$1.50 | 72P | \$1.60 | |
| 73 | \$1.60 | 73P | \$1.80 | |
| 73D | \$1.70 | 73PD | \$1.90 | |

*Listed above are a few of the popular stacks, many others available from stock.

PUSH-PUSH SWITCHES



Unique, new single station push-button switches featuring push-to-lock, push-to-release action. Series 5000L "Push-Push" Switch (H), rugged, non-illuminated type. Welded cross bar Palladium Contacts rated at 3 amps, 300 watts max, non-inductive A.C. load. Square brown button, 1/4" mounting centers; mounted by two 3-48 screws (not furnished). Series 5000, same design as Series 5000L, except momentary type. (Series 5000L can also be converted by user to momentary action.)

Series 15000L "Push-Push" Switch (J), similar to Series 5000L, except illuminated. Two lamp voltages, 6V and 28V are available. Utilizes same lamps and buttons as furnished for Multi-Switches, Series 21000 and 22000. (See listing above.) Standard buttons are furnished with white jewels and diffusers, other colors are available on special order. Button lights in "IN" position. If buttons are to light in "OUT" position, prefix Part No. with "M"; or if buttons are to light in "IN" and "OUT" position, prefix Part No. with "N". Order lamps separately. Series 15000, similar to Series 15000L, except momentary action. (Series 15000L can also be converted by user to momentary action.)

The following numbers cover the most popular Push to Lock, Push to Release Switches, in various switching combinations. Special circuits, or special contacts, can be furnished on production orders.

| Non-Illuminated | | Illuminated | | Schematic Circuit |
|-----------------|-------------------|-------------|-------------------|-------------------|
| Part No. | U.S.A. List Price | Part No. | U.S.A. List Price | |
| 5003L | \$6.00 | 15003L | \$ 8.50 | 1-C |
| 5004L | \$6.50 | 15004L | \$ 9.00 | 2-A |
| 5006L | \$6.75 | 15006L | \$ 9.25 | 2-C |
| 5008L | \$7.60 | 15008L | \$10.00 | 4-A |
| 5009L | \$7.75 | 15009L | \$10.25 | 3-C |
| 5012L | \$9.00 | 15012L | \$11.50 | 4-C |

Delete suffix "L" in part number for momentary action. Order lamps separately for Series 15000 Switches. (See above listings on lamps.)

For detailed information, request Switchcraft Catalog 5-306.

LK SWITCH

Rugged, lever type switch featuring new short frame design. Fine silver contacts rated at 3 amp., 300 watts max., non-inductive A.C. load. Locking and non-locking, 2 or 3 position action. Frame has 2 tapped 3-48 holes for easy mounting.

| TWO POSITION TYPE | | THREE POSITION TYPE | |
|-------------------|-------------------|---------------------|-------------------|
| Part No. | U.S.A. List Price | Part No. | U.S.A. List Price |
| 23201 | \$1.65 | | |
| 23203 | \$1.95 | | |
| 23206 | \$2.25 | | |

Additional circuits available on special order.

THREE POSITION TYPE*

| Part No. | U.S.A. List Price | Pos. 1 | Pos. 2 |
|----------|-------------------|--------|--------|
| 23304 | \$2.10 | 1-A | 1-A |
| 23306 | \$2.25 | 1-C | 1-C |
| 23308 | \$2.50 | 2-A | 2-A |

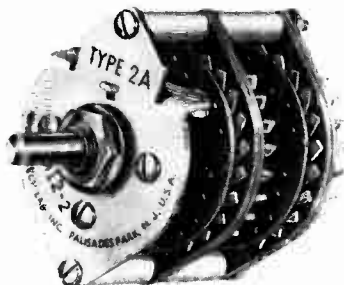
Add suffix "L" to part number for locking type. *Also available with locking action on one side, non-locking action other side.

For detailed information, request Switchcraft Bulletin No. 115.

SWITCH TO TECH LABS for Precision Electrical Resistance Instruments

TECH LAB SWITCHES ARE ON THE QUALIFIED PRODUCTS LIST

TAP SWITCHES



TYPE 2A & 2M

Standard control switch with phenolic or Melamine insulation, 3-5 amp. rating.



\$3.00 List Specifications

Size: 1" diameter, 1 1/4" with terminals. 1 deck, 1 1/2" long, 1/2" for each additional deck.
Weight: 1 deck, 30 grams. 10 grams for each additional deck.
Rating: 1200 volts rms, 2000 VDC, 5 amps. (carrying) 115 V.
Insulating resistance: 100 megohms minimum at 500 volts DC.
Life: 1.5 - 2 million revolutions.
Contact resistance (standard): 6-10 milliohms. (silver): 3-5 milliohms.
Temperature range: -65°C to 100°C.
Mounting: single hole.
Meets MIL-S-3786A.

TYPE 3A MINIATURE TAP SWITCH

Molded from Diallyl Phthalate

CAM SWITCHES



TYPE 8A CAM SWITCH

A new development of great interest. Small size, long life and great flexibility. Have been made with from one to 30 contact springs. Will carry 3 amp. Standard unit has four contact springs and 10 positions, price \$12.50.



TYPE 10A TAP SWITCH

A multi-deck switch of small dimensions, 1 3/8" sq. This is a precision switch designed to meet high requirements in smallest possible space. Up to 24 positions, shorting. Price approx. \$10 per deck, plus frame \$5

The following standard switches are representative of those produced by Tech Laboratories, all of which meet government specifications. Write or teletype for further information.

The Type 2A is the standard control switch for electronic instruments and high quality equipment. It is made in a number of combinations with as many as four poles per deck and 24 positions. Insulation is phenolic. The Type 2M is identical except for Melamine insulation. In the table, Code No. "S" stands for "shorting" and "N" for "non-shorting".

| TYPE | CODE | DIA. | RATING | NO. POS. | NO. DECKS | POLD. | PRICE |
|------|---------|--------|--------|----------|-----------|-------|--------|
| 2A | A1S24 | 1 3/4" | 3A | 24 | 1 | 1 | \$4.50 |
| 2A | A4S5 | 1 3/4" | 3A | 4 | 1 | 4 | \$6.00 |
| 2A | A1N10-2 | 1 3/4" | 3A | 10 | 2 | 1 | \$7.00 |
| 2M | M1S24 | 1 3/4" | 3A | 24 | 1 | 4 | \$5.50 |
| 2M | M4N3 | 1 3/4" | 3A | 3 | 1 | 4 | \$7.00 |

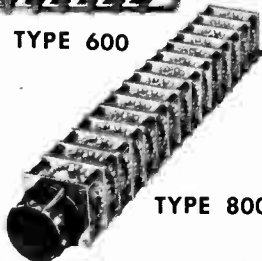
The new Type 3A molded miniature switch for use in all military and commercial applications in which a superior instrument switch is required, can be furnished with as many as eight decks and up to twelve positions per deck, single pole, or six positions double pole. It has adjustable stops for any lower number of steps.

The switch, 1 1/4" in diameter, carries 5 amp and is furnished "Shorting", with "non-shorting" types available on request. It can be supplied solenoid-operated and hermetically sealed. Write for details and prices.

SQUARE SWITCHES



TYPE 600



TYPE 800



TYPE 900

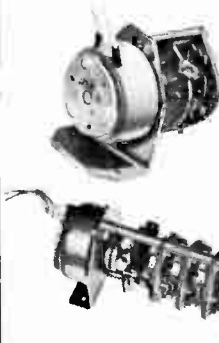
These standard rugged control switches are the standby for equipment calling for dependable switches in a hurry. Will meet all standard government specs. All parts carried in stock. An infinite number of combinations possible. Teletype your specs.

The price of the basic frame is the same for all, viz. \$4.00 each. The type 600 and 800 are priced at \$8.00 per deck plus frame price, and the type 900 switches are \$9.50 per deck plus frame \$4.00.

| Type | Size | Rating | Max. Fos. Short. | Max. Pos. Non-Short. |
|------|------------|--------|------------------|----------------------|
| 600 | 1 3/4" sq. | 5A. | 24 | 12 |
| 800 | 2 1/4" sq. | 5A. | 32 | 16 |
| 900 | 2 3/4" sq. | 10A. | 48 | 24 |

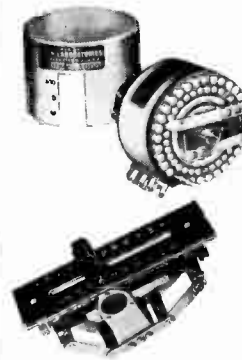
OTHER TECH LAB SWITCHES

STEPPING SWITCHES



TECH LAB switches are now standard equipment in most missiles as well as in ground controls. Furnished sealed to meet all specs. Write for details. Prices on request.

ATTENUATORS



A complete line of audio and r.f. attenuators with both manual and REMOTE CONTROL. We will design components to meet your specific requirements, if standard units are inadequate. Please write for catalogue and send us your specs for estimate.

WRITE FOR INFORMATION ON NEW DIGITAL BINARY SWITCHES

WRITE FOR NEW BULLETINS ON SWITCHES • DECADE RESISTORS • POTENTIOMETERS

TECH LABORATORIES INC. • Palisades Park, New Jersey

American Beauty ELECTRIC SOLDERING IRONS

A soldering iron for every soldering need!

American Beauty Electric Soldering Irons are made in *one* quality only—the *best*—and only *the best* gives you *the most!* No matter what the requirements—there's an American Beauty in the right model, correct tip size, proper watt input, to do any soldering job quickly, properly and efficiently.



Hundreds of thousands of these devices are faithfully doing their jobs every day in the year—on production lines and work benches of industrial plants all over the world. Also widely used in telephone, telegraph, radio and television manufacturing and servicing everywhere.

| Cat. No. | Tip Diameter | Watts | Net Weight | List |
|----------|--------------|-------|------------|---------|
| 3128† | ¼" | 60 | 7½ oz. | \$ 7.90 |
| 3125† | ¼" | 60 | 7½ oz. | 9.00 |
| 3138 | ⅜" | 100 | 16 oz. | 12.10 |
| 3138-X | ⅜" | 175 | 16 oz. | 14.00 |
| 3138-XY | ⅜" | 175 | 16 oz. | 14.00 |
| 3158 | ⅝" | 200 | 28 oz. | 14.50 |
| 3158-X | ⅝" | 250 | 28 oz. | 15.70 |
| 3178 | ⅝" | 300 | 42 oz. | 19.30 |
| 3198 | 1½" | 550 | 60 oz. | 24.20 |

(3138 is made also in 130- and 150-watt input.)

Available in standard voltages and many special voltages.

†Made also in 75-watt input.

BANTAM IRONS



Small, compact, lightweight—designed especially for the electronic industry. They provide ample heat for fine and medium-fine soldering jobs of all kinds. Bantam "X" Series is intended for special applications on *production lines* of radio, television and electronic plants. They should be placed only on Production Lines—where high soldering rates are maintained—or where similar heat-dissipating conditions exist.

| Cat. No. | Tip Diameter | Watts | Net Weight | List |
|------------------|--------------|-------|------------|---------|
| 3114 | ¼" | 60 | 8 oz. | \$10.40 |
| 3118-SC/3118-SCP | ¼" | *30 | 6 oz. | 7.20 |
| 3120-SC/3120-SCP | ⅜" | *30 | 6 oz. | 7.20 |
| 3118 | ⅜" | *30 | 6½ oz. | 7.20 |
| 3120 | ⅜" | *30 | 6½ oz. | 7.20 |
| 3118-X/3118-XP | ⅜" | 50 | 6 oz. | 8.00 |
| 3120-X/3120-XP | ⅜" | 50 | 6 oz. | 8.00 |

(*Optional wattage (40 watts) available without extra cost. SPECIFY.)

Available in standard voltages.

TIPS



American Beauty offers a wide range of nickel-plated copper tips and in addition two lines of premium tips—"Paragon" Quality Clad and "Superior" Quality Clad. Specification sheets covering all lines available on request. American Beauty Tips—both standard and premium clad—fit most other makes of electric soldering irons as well.

MICROMINIATURE IRONS



Wattage: 22½. Voltage: 110-120 (AC-DC). Net Wt. Complete: 3 oz. Ship. Wt. Complete: 6 oz. Overall Length (Less Cord and Tip): 7". Working Distance (From Hand to End of Tip): Approx. 3". Basic Tip Diameter: ⅛". Packaged Individually with 3 Tips as Indicated at Right: 6 to a Case. Case Weight: Approx. 3½ lbs.

INDUSTRIAL USERS DISCOUNT

| List Invoice Value | Discount |
|--------------------|----------|
| to \$199.00 | 30% |
| \$200.00 to 999.00 | 33% |
| Plus \$1000.00 | 40% |

TRANSFORMER TYPE IRONS



The T-12 Series is intended primarily for fine precision soldering on miniature and subminiature electronic components and similar assemblies. The T-30 Series is designed especially for *production line* use; intended for heavy duty, fine, precision soldering requiring extremely high tip-temperatures constantly maintained.

| Cat. No. | Tip Diameter | Watts | Net Weight | List |
|----------|--------------|-------|---------------|---------|
| T-12 | ⅛" | *17 | 1 lb., 3 oz. | \$20.00 |
| T-12 | ¼" | *17 | 1 lb., 3 oz. | 20.00 |
| T-12 | ⅜" | *17 | 1 lb., 3 oz. | 20.00 |
| T-12 | ⅝" | 12 | 1 lb., 2 oz. | 20.50 |
| T-30 | ⅛" | *30 | 1 lb., 12 oz. | 22.00 |
| T-30 | ¼" | *30 | 1 lb., 12 oz. | 22.00 |
| T-30 | ⅜" | *30 | 1 lb., 12 oz. | 22.00 |
| T-30 | ⅝" | 12 | 1 lb., 12 oz. | 22.50 |

*T-12 also available in 20 watts—T-30 also available in 25 watts.



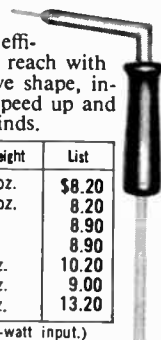
TEMPERATURE REGULATING STANDS

These automatic devices regulate and control the tip-temperature of an electric soldering iron while the iron is connected to current and at idle. The controlled soldering iron is maintained at all times at just the right heat to meet the requirements of the job or the needs of the user. Suffix "SG" after catalog number indicates stand is equipped with safety guard.

| Cat. No. | Watts (Max.) | Net Weight | List |
|----------|--------------|------------|---------|
| 475 | 660 | 1½ lbs. | \$12.00 |
| 475-SG | 660 | 2 lbs. | 13.00 |
| 476 | 660 | 1½ lbs. | 12.00 |
| 476-SG | 660 | 2 lbs. | 13.00 |

ANGLE TYPE IRONS

These models are equipped with angle type casings—providing more efficient operation in places difficult to reach with straight-casing irons. Their distinctive shape, ingenious design and perfect balance speed up and simplify tough soldering jobs of all kinds.



| Cat. No. | Tip Diameter | Watts | Net Weight | List |
|----------|--------------|--------|------------|--------|
| 3118-A | ⅜" | 30* | 6½ oz. | \$8.20 |
| 3120-A | ⅜" | 30* | 6½ oz. | 8.20 |
| 3118-XA | ⅜" | 50 | 6 oz. | 8.90 |
| 3120-XA | ⅜" | 50 | 6 oz. | 8.90 |
| 3125-A | ¼" | 60** | 10 oz. | 10.20 |
| 3128-A | ¼" | 60** | 10 oz. | 9.00 |
| 3138-A | ⅜" | 100*** | 16 oz. | 13.20 |

(*Nos. 3118-A and 3120-A are made also in 40-watt input.)

(**Nos. 3125-A and 3128-A are made also in 75-watt input.)

(***No. 3138-A is made also in 150-watt input.)

COMPLETELY BOXED TYPES

| Catalog Numbers | Description | List Prices |
|-----------------|--|-------------|
| B-2000-L | Contains Soldering Iron with Three (3) Assorted Tips (B-1, B-2, B-3) | \$12.00 |
| B-2000-P | Contains Soldering Iron with Three (3) B-1 Tips (⅛" Chisel) | 12.00 |
| B-2000-PM | Contains Soldering Iron with Three (3) B-2 Tips (¼" Chisel) | 12.00 |
| B-2000-C | Contains Soldering Iron with Three (3) B-3 Tips (⅜" Conical) | 12.00 |
| B-2000-B | Contains Soldering Iron with Three (3) B-4 Tips (Bean Type Conical) | 12.00 |

PARTS

| Catalog Numbers | Description | List Prices |
|-----------------|---|-------------|
| B-218 | Heating Element Assembly Complete, 110 Volts (Only). 22.5 Watts | \$ 7.00 |
| B-230 | Handle Only | 2.50 |
| B-235 | Plastic Box Only | .60 |
| B-240 | Cord Set Only | 2.50 |

TIPS

| Catalog Numbers | Description | List Prices |
|-----------------|--|----------------------|
| B-1 | ⅛" Chisel Point "Superior" Quality Iron Clad | Package of 6 \$ 2.40 |
| B-2 | ¼" Chisel Point "Superior" Quality Iron Clad | Package of 6 2.40 |
| B-3 | ⅜" Conical Tip "Superior" Quality Iron Clad | Package of 6 2.40 |
| B-4 | Bean Type Conical (Nickle Plate Only) | Package of 6 1.20 |
| B-5 | ⅜" Conical, 38° Cut Off, ⅛" x ⅜" Oval Point | Package of 6 2.40 |
| B-6 | ⅜" Conical — Sharp Point | Package of 6 2.40 |

Write for illustrated catalog containing full information on our complete line of electric soldering irons—including their use and care.

AMERICAN ELECTRICAL HEATER COMPANY • DETROIT, MICHIGAN

Also a complete line of resistance soldering units (100 to 2500 Watts) and wire strippers—write for bulletin W-50.



MULTICORE SOLDER

Five separate cores of flux eliminate possibility of no flux in a portion of the wire, which may occur in single cored solder. Guaranteed continuity of the flux stream prevents "dry" joints, i.e., those having high electrical resistance. Although there are five cores of flux in Multicore, the total percentage of flux to solder is less than many single cored solders. Very rapid melting results from the multiple core construction which provides thinner walls of solder than are found in the same gauge single cored solder. Multicore's unique properties make perfect joints possible on difficult metals and alloys, even if oxidized. Ability to thin rapidly produces perfect joints with less solder. Greater coverage per pound.

ERSIN FLUX

Ersin Flux is exclusive to Multicore and will not be found in any other solder. It is a high grade, water white rosin, homogeneously activated. Ersin Flux has a vigorous fluxing action and possesses the non-corrosive and protective features of the original rosin. Soldered joints made with Ersin Flux do not corrode even after prolonged exposure to any degree of humidity. Ersin Flux reduces the surface tension of molten solder, causing it to wet metals rapidly, increasing speed of operation with resultant production economies. Free from objectionable odor. Non-toxic in use. Leaves nothing but pure rosin

on the work after soldering, and may be used wherever plain rosin is specified.

COPPER-LOADED SAVBIT ALLOY

Copper-loaded SAVBIT is one of a number of solder alloys developed for the industry by Multicore, it is entirely different—and, it is patented. SAVBIT alloy contains its own copper, and therefore will not take the copper of the soldering iron tip into the molten solution during soldering. This absorption of copper when any standard alloy is used is a basic reason for the wearing out of the expensive copper tips, and the need for constant refinishing of the tip. Comparative tests with solders having pure tin/lead alloys and the new Ersin Multicore copper-loaded SAVBIT alloy have been made on assembly lines of electronic plants. Results of these tests have proven that startling production efficiencies and economies may be realized when the wear and corrosion of copper soldering iron tips is curbed, using SAVBIT alloy. Equally as important... a higher standard of soldering quality is assured for a much longer period of time. SAVBIT alloy is available in Ersin Multicore 5-Core Solder containing non-corrosive extra fast Ersin flux in 14, 16, and 18 gauge. Its melting point is virtually the same as standard tin/lead alloys.

Alloys and Melting Points

| B. S. Alloy Grade | Multicore Color Code | Melting Temp. | | Recommended Bit Temp. | |
|-------------------|----------------------|---------------|-----|-----------------------|-----|
| | | °C | °F | °C | °F |
| 60/40 | K | 188 | 370 | 228 | 442 |
| 50/50 | F | 212 | 414 | 252 | 476 |
| 45/55 (M) | Crimson/ Buff | 215 | 419 | 255 | 491 |
| 40/60 | G | 234 | 453 | 274 | 525 |

Approximate lengths per pound in feet

| Dia. S.W.G. meter | Dia. M/Ms | 60/40 | | | | 50/50 | | 45/55 | | 40/60 | | | |
|-------------------|-----------|-------|------|----|----|-------|----|-------|------|-------|-----|-----|-----|
| | | 65.7 | 62.6 | 61 | 60 | 102 | 98 | 97 | 94.5 | 182 | 174 | 172 | 167 |
| 14 | .080 | 2,032 | | | | | | | | | | | |
| 16 | .064 | 1,626 | | | | | | | | | | | |
| 18 | .048 | 1,219 | | | | | | | | | | | |
| 20 | 0.36 | 914 | 324 | | | | | | | | | | |
| 22 | 0.28 | 711 | 536 | | | | | | | | | | |

New! **HAND-CRAFTED** *Gold Lion* **Custom Tubes**
Produced by General Electric Co. Ltd. of England.



A completely new series of plug-in replacement tubes, hand-crafted to give higher power, lower distortion and longer life.

In contrast to mass-produced tubes, which often vary widely in their characteristics, new Gold Lion tubes are

made to extremely close tolerances, and individually 100% tested for major characteristics, including operation tests, noise and microphony. For the first time... an individual test report is packed with each tube, certifying measured production characteristics.

CROSS REFERENCE REPLACEMENT CHART

| Replace These Tubes | With These Gold Lion Types | Replace These Tubes | With These Gold Lion Types | Replace These Tubes | With These Gold Lion Types | Replace These Tubes | With These Gold Lion Types | Replace These Tubes | With These Gold Lion Types |
|---------------------|----------------------------|---------------------|----------------------------|---------------------|----------------------------|---------------------|----------------------------|---------------------|----------------------------|
| B309 | B739 | E281 | U709 | 6B24 | U707 | 5721 | B759 | 6201 | B739 |
| D77 | D717 | E290 | U707 | 6CA4 | U709 | 5726 | D717 | 6202 | U707 |
| EAA91 | D717 | E81CC | B739 | 6CA7 | K177 | 5751 | B759 | 6203 | U707 |
| E891 | D717 | G230 | U77 | 6CP8 | Z729 | 5814 | B749 | 6267 | Z729 |
| ECC81 | B739 | G232 | U77 | 6CM5 | K166 | 5921 | U52 | 6350 | KT88 |
| ECC82 | B749 | G233 | U77 | 6L6 | KT66 | 5932 | KT66 | 6663 | D717 |
| ECC83 | B759 | G234 | U77 | 6L6G | KT66 | 58E1 | KT66 | 6679 | B739 |
| EF86 | Z729 | U78 | U707 | 6L6GB | KT77 | 5993 | U707 | 6680 | B749 |
| EL34 | K177 | 5AR4 | U77 | 6L6GC | KT88 | 6057 | B759 | 6681 | B759 |
| EL35 | KT66 | 5T4 | U52 | 6X4 | U707 | 6038 | D717 | 7025 | B759 |
| EL36 | KT66 | 5U4G | U52 | 12A7 | B739 | 6060 | B739 | 7027 | KT66 |
| EL37 | KT66 | 5V4 | U77 | 12AU7 | B749 | 6063 | U707 | 7027A | KT88 |
| EL39 | KT66 | 5Z4 | U77 | 12AX7 | B759 | 6067 | B749 | 7247 | B759 |
| EL84 | N709 | 6AL5 | D717 | 1614 | K166 | 6097 | D717 | 7581 | KT77 |
| | | 6BQ5 | N709 | 1622 | K166 | 6149 | B749 | | |

BRITISH INDUSTRIES CORPORATION - PORT WASHINGTON, N. Y.



DESIGN IN-DUSTRONIC tools are more streamlined, with slender jaws and fine points, to reach into the tight spots and perform the specific work required of the electronics technician.

TEST AND INSPECTION Individually tested for hardness, each tool must maintain highest standards for handle strength and cutting ability. To assure perfect jaw alignment, pliers must cleanly cut single bond paper strips and snip cotton-covered lamp cord without fraying. Each tool is guaranteed against defects in workmanship and materials.

WORKMANSHIP IN-DUSTRONIC tools are hot drop-forged from special analysis alloy steel, machined and finished with the same care and precision which have made world-famous BOKER TREE BRAND Fine Cutlery and surgical instruments for over a century. Individually fitted and adjusted, each is accurately heat-treated by HYDRIZING, which minimizes "carburation" and "decarb". Cutting blades are precision-hardened with electronic controls, and honed by hand for keen edges that retain their sharpness.

Individually Boxed

H. BOKER & CO., INC. • NEW YORK, N. Y.

RADIO AND TV NOSE CUTTING PLIERS

Reaches into tight spots to cut small wires, and to grip at the tips.

| NO. | LIST EA. |
|------------|----------|
| 539-4 1/2" | 3.75 |
| 539-6" | 3.75 |
| 939-4 1/2" | 3.75 |
| 939-6" | 3.75 |



| NO. | LIST EA. |
|------------|----------|
| 639-4 1/2" | 4.05 |
| 639-6" | 4.05 |
| 739-4 1/2" | 4.25 |
| 739-6" | 4.25 |

SIDE TIP NOSE CUTTING PLIERS

Cuts flush at left side of tips. Turn tool over to cut flush at right side.

| NO. | LIST EA. |
|-------------|----------|
| S539-4 1/2" | 4.00 |
| S539-6" | 4.00 |
| S939-4 1/2" | 3.80 |
| S939-6" | 4.00 |



| NO. | LIST EA. |
|-------------|----------|
| S639-4 1/2" | 4.30 |
| S639-6" | 4.30 |
| S739-4 1/2" | 4.50 |
| S739-6" | 4.50 |

TRANSVERSE END CUTTING PLIERS

For clean, flush cutting of small wires where ordinary cutters are too bulky.

| NO. | LIST EA. |
|--------|----------|
| 532-6" | 3.65 |
| 932-6" | 3.65 |



| NO. | LIST EA. |
|--------|----------|
| 632-6" | 3.95 |
| 732-6" | 4.15 |

SHORT JAW, LONG HANDLE NOSE CUTTING PLIERS

Extra long, narrow handles provide maximum reach of the slender jaws to cut and grip.

| NO. | LIST EA. |
|--------|----------|
| 579-8" | 4.15 |
| 979-8" | 4.15 |



| NO. | LIST EA. |
|--------|----------|
| 679-8" | 4.45 |
| 779-8" | 4.65 |

STOCK NUMBER CODE IDENTIFICATION ON PLIERS

First Digit in Pliers Stock No.

- "5"
- "9"
- "6"
- "7"

DESCRIPTION OF FINISH

- Polished Head, Standard Gunmetal Finish Handles — i.e. 51-6"
- Polished Head, Factory molded Red Cushion Grip Plastisol Handles — i.e. 91-6"
- Fully Nickel and Chrome Plated Head and Handles — i.e. 61-6"
- Nickel and Chrome Plated Head, Factory molded Red Cushion Grip Plastisol Handles — i.e. 71-6"

SHORT CHAIN NEEDLE NOSE PLIERS

Sturdy, tapered jaws provide more positive grip. Checker-milled tips.

| WITH SIDE CUTTERS | |
|-------------------|----------|
| NO. | LIST EA. |
| 53-5" | 3.15 |
| 93-5" | 3.15 |

| WITHOUT SIDE CUTTERS | |
|----------------------|----------|
| NO. | LIST EA. |
| 530-5" | 2.65 |
| 930-5" | 2.65 |



| NO. | LIST EA. |
|-------|----------|
| 63-5" | 3.45 |
| 73-5" | 3.65 |

| NO. | LIST EA. |
|--------|----------|
| 630-5" | 2.95 |
| 730-5" | 3.15 |

LONG CHAIN NEEDLE NOSE PLIERS

Slender, checker-milled jaws taper to 1/32" at tips.

| WITH SIDE CUTTERS | |
|-------------------|----------|
| NO. | LIST EA. |
| 53-6" | 3.40 |
| 93-6" | 3.40 |

| WITHOUT SIDE CUTTERS | |
|----------------------|----------|
| NO. | LIST EA. |
| 530-6" | 2.70 |
| 930-6" | 2.70 |



| NO. | LIST EA. |
|-------|----------|
| 63-6" | 3.70 |
| 73-6" | 3.90 |

| NO. | LIST EA. |
|--------|----------|
| 630-6" | 3.00 |
| 730-6" | 3.20 |

EXTRA LONG CHAIN NOSE PLIERS

2 3/4" long jaws add extra reach to checker-milled tips.

| WITH SIDE CUTTERS | |
|-------------------|----------|
| NO. | LIST EA. |
| 53-7" | 4.20 |
| 93-7" | 4.20 |

| WITHOUT SIDE CUTTERS | |
|----------------------|----------|
| NO. | LIST EA. |
| 530-7" | 3.10 |
| 930-7" | 3.10 |



| NO. | LIST EA. |
|-------|----------|
| 63-7" | 4.50 |
| 73-7" | 4.70 |

| NO. | LIST EA. |
|--------|----------|
| 630-7" | 3.40 |
| 730-7" | 3.60 |

HEAVY DUTY DIAGONAL CUTTING PLIERS

| NO. | LIST EA. |
|--------|----------|
| 591-7" | 3.50 |
| 991-7" | 3.50 |



| NO. | LIST EA. |
|--------|----------|
| 691-7" | 3.80 |
| 791-7" | 4.00 |

DIAGONAL CUTTING PLIERS

| NO. | LIST EA. |
|-----------|----------|
| 51-4 1/2" | 2.80 |
| 91-4 1/2" | 2.80 |

| NO. | LIST EA. |
|-------|----------|
| 51-5" | 3.05 |
| 91-5" | 3.05 |

| NO. | LIST EA. |
|-----------|----------|
| 51-5 1/2" | 3.30 |
| 91-5 1/2" | 3.30 |

| NO. | LIST EA. |
|-------|----------|
| 51-6" | 3.45 |
| 91-6" | 3.45 |

| NO. | LIST EA. |
|-----------|----------|
| 51-7 1/2" | 3.80 |
| 91-7 1/2" | 3.80 |



| NO. | LIST EA. |
|-----------|----------|
| 61-4 1/2" | 3.10 |
| 71-4 1/2" | 3.30 |

| NO. | LIST EA. |
|-------|----------|
| 61-5" | 3.35 |
| 71-5" | 3.55 |

| NO. | LIST EA. |
|-----------|----------|
| 61-5 1/2" | 3.60 |
| 71-5 1/2" | 3.80 |

| NO. | LIST EA. |
|-------|----------|
| 61-6" | 3.75 |
| 71-6" | 3.95 |

| NO. | LIST EA. |
|-----------|----------|
| 61-7 1/2" | 4.10 |
| 71-7 1/2" | 4.30 |

WIRE STRIPPING CUTTERS WITH INSULATION CRUSHER

"W" notches slit acetate cellulose and other thin insulations. Notch in blades strips heavier insulation. Grooves in handles crush insulation.

| NO. | LIST EA. |
|------------|----------|
| 517-5 1/2" | 4.00 |
| 917-5 1/2" | 4.00 |
| 617-5 1/2" | 4.30 |
| 717-5 1/2" | 4.50 |



"THROAT-HOLD" DIAGONAL PLIERS

Plastisol inserts back of the blades tightly grip the cut-off end of wire after cut is made, preventing shorts, machine failures, and eye injuries.

| NO. | LIST EA. |
|-------------|----------|
| TH51-4 1/2" | 4.40 |
| TH91-4 1/2" | 4.40 |
| TH51-5" | 4.65 |



| NO. | LIST EA. |
|-------------|----------|
| TH91-5" | 4.65 |
| TH91-5 1/2" | 4.90 |
| TH51-7 1/2" | 5.40 |

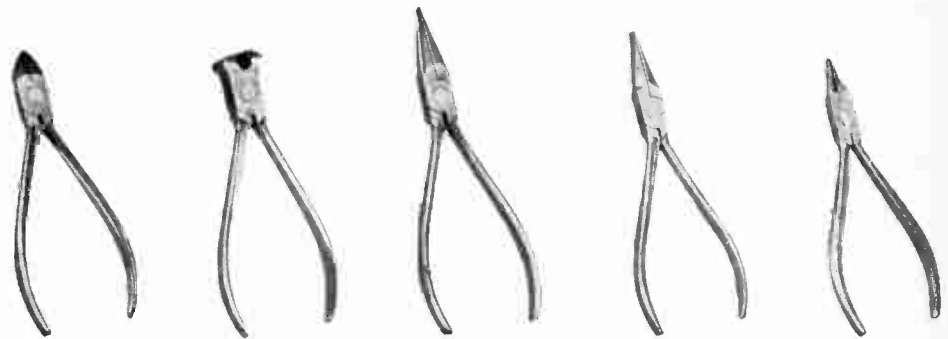
SPECIAL THROAT-HOLD TYPE PLIERS

| NO. | LIST EA. |
|---------------|----------|
| THB981-4 1/2" | 5.20 |
| THC981-4 1/2" | 5.00 |

Bent (offset) Handles
Flush cutting edges



JEWELERS' 4 1/2" PRECISION PLIERS



POLISHED HEAD, GUN METAL HANDLES

POLISHED HEAD, CUSHION-GRIP HANDLES

FULL NICKEL AND CHROME PLATED

NICKEL, CHROME-PLATED CUSHION-GRIP HANDLES

JEWELERS' PLIERS SETS
Crystal Case, 5" x 7", lined to nest 4 1/2" Pliers.

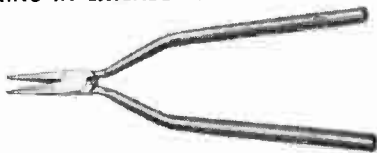
| NO. | CONTENTS | LIST |
|-----|---------------------------------|-------|
| C63 | One ea. 681, 683, 684 | 10.95 |
| C64 | One ea. 681, 683, 684, 6517 | 13.25 |
| C65 | One ea. 681, 682, 683, 684, 685 | 18.05 |
| C73 | One ea. 781, 783, 784 | 11.30 |
| C93 | One ea. 981, 983, 984 | 10.65 |
| C95 | One ea. 981, 982, 983, 984, 985 | 17.55 |

| | Tool No. | List Ea. | Tool No. | List Ea. | Tool No. | List Ea. | Tool No. | List Ea. |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Diagonal Cutting Pliers | 581 | 3.10 | 981 | 3.20 | 681 | 3.30 | 781 | 3.35 |
| End Cutting Nippers | 582 | 3.60 | 982 | 3.80 | 682 | 3.90 | 782 | 3.95 |
| *Needle Nose Pliers | 583 | 2.90 | 983 | 3.10 | 683 | 3.20 | 783 | 3.35 |
| *Flat Nose Pliers | 584 | 2.90 | 984 | 3.10 | 684 | 3.20 | 784 | 3.35 |
| *Round Nose Pliers | 585 | 2.90 | 985 | 3.10 | 685 | 3.20 | 785 | 3.35 |

*Note: Inside jaws are smooth. Supplied with milled jaws at no extra cost.

PRECISION PLIERS WITH SPRING IN EXTENDED HANDLES

Midget jaws, extra long handles, to reach into deep areas normally inaccessible.



| NO. | LIST EA. | DESCRIPTION |
|----------|----------|---|
| L903S-8" | 5.95 | Extra Fine Needle-Nose Pliers (as 903-4 1/2") |
| L981S-8" | 6.05 | Diagonal Cutters |
| L983S-8" | 5.95 | Needle Nose Pliers |
| L984S-8" | 5.95 | Flat-Nose Pliers |
| L781S-8" | 6.20 | Diagonal Cutters |
| L783S-8" | 6.20 | Needle-Nose Pliers |
| L784S-8" | 6.20 | Flat-Nose Pliers |
| L703S-8" | 6.20 | Extra Fine Needle-Nose Pliers (as 703-4 1/2") |

TAPERED JAWS, FLUSH CUTTING DIAGONALS

Midget pliers with sharply tapered jaws and very fine flush cutting edges.



| NO. | LIST EA. |
|-------------|----------|
| A981-4 1/2" | 3.70 |

STANDARD SHAPE JAWS, FLUSH CUTTING DIAGONALS

| NO. | LIST EA. |
|-------------|----------|
| C981-4 1/2" | 3.40 |

SHORT NOSE, FLUSH CUTTING DIAGONALS

| NO. | LIST EA. |
|-------------|----------|
| E981-4 1/2" | 3.60 |

STOCK NUMBER CODE IDENTIFICATION ON PLIERS

First Digit in Pliers Stock No.

- "5"
- "9"
- "6"
- "7"

DESCRIPTION OF FINISH

| | |
|---|-------|
| Polished Head, Standard Gunmetal Finish Handles — i.e. | 51-6" |
| Polished Head, Factory molded Red Cushion Grip Plastisol Handles — i.e. | 91-6" |
| Fully Nickel and Chrome Plated Head and Handles — i.e. | 61-6" |
| Nickel and Chrome Plated Head, Factory molded Red Cushion Grip Plastisol Handles — i.e. | 71-6" |

EXTRA FINE NEEDLE NOSE PLIERS WITH STABILIZED TIPS

Dowel pin in jaw engages hole in other jaw when closed, stabilizing tips and maintaining perfect alignment.



| NO. | LIST EA. | NO. | LIST EA. |
|----------|----------|----------|----------|
| ST903-6" | 3.50 | ST703-6" | 4.00 |

CURVED EXTRA FINE NEEDLE NOSE

| NO. | LIST EA. |
|--------|----------|
| 508-6" | 3.90 |
| 908-6" | 3.90 |
| 608-6" | 4.20 |
| 708-6" | 4.40 |



SHORT JAW, EXTRA FINE NEEDLE NOSE PLIERS

| NO. | LIST EA. |
|------------|----------|
| 503-4 1/2" | 3.10 |
| 903-4 1/2" | 3.10 |
| 603-4 1/2" | 3.40 |
| 703-4 1/2" | 3.35 |



EXTRA FINE NEEDLE NOSE PLIERS

Long, very slim, spring tempered jaws for assembling miniature parts.



| NO. | LIST EA. | NO. | LIST EA. |
|--------|----------|--------|----------|
| 503-6" | 3.10 | 603-6" | 3.40 |
| 903-6" | 3.10 | 703-6" | 3.60 |

LONG NEEDLE NOSE PLIERS

Unusual gripping ability without distortion for such long, slencer jaws. Checker-milled at tips.



| NO. | LIST EA. | NO. | LIST EA. |
|--------|----------|--------|----------|
| 533-6" | 3.15 | 633-6" | 3.45 |
| 933-6" | 3.15 | 733-6" | 3.65 |

CURVED NEEDLE NOSE PLIERS

| NO. | LIST EA. |
|--------|----------|
| 538-6" | 3.50 |
| 938-6" | 3.50 |
| 638-6" | 3.80 |
| 738-6" | 4.00 |



END CUTTERS AND LEAD-IN STRIPPERS

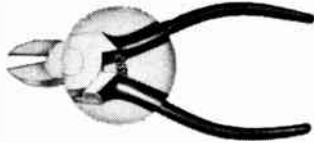
Quickly strips TV transmission cable. Full throat for general purpose cutting.



| NO. | LIST EA. | NO. | LIST EA. |
|--------|----------|--------|----------|
| 902-6" | 3.95 | 702-6" | 4.50 |
| 602-6" | 4.25 | | |

PLIERS WITH SPRING IN HANDLES

Bauer type coil spring keeps pliers in open position, ready-to-work.



Specify "S" as a Suffix to tool number (i.e., 91S-5")
Additional List Ea. .30

HOLDING FORCEPS

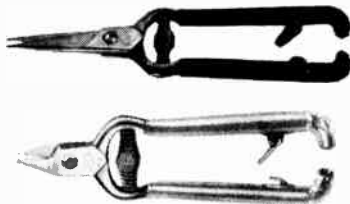
Slender, long-reaching, with ratchet type lock. Acts as third hand, and as heat sink. Box joint, polished stainless spring steel.



| NO. | LIST EA. | |
|------------|----------|------------------|
| HF-5 1/4" | 4.50 | Straight pattern |
| HF-6 1/4" | 4.35 | Straight pattern |
| HFC-6 1/4" | 5.00 | Curved pattern |

ELECTRONIC SNIPS

Pointed, serrated blades cut wire, filament, sheet metal, insulating materials, plastics, fabrics. Spring keeps blades open, ready-to-work.



| NO. | LIST EA. | |
|------------|----------|--------------|
| P4-7 1/8" | 3.60 | Long Blades |
| P4E-6 1/2" | 4.25 | Short Blades |

ELECTRICIANS' SNIPS

Scraper, file on back of blade.

| NO. | LIST EA. |
|--------|----------|
| 709-5" | 2.75 |

Nickel Plated



SHORT JAW, LONG HANDLE, NEEDLE NOSE PLIERS



| NO. | LIST EA. | NO. | LIST EA. |
|--------|----------|--------|----------|
| 573-8" | 3.20 | 673-8" | 3.50 |
| 973-8" | 3.20 | 773-8" | 3.70 |

SHORT JAW, LONG HANDLE DUCKBILL PLIERS

| No. | LIST EA. | No. | LIST EA. |
|--------|----------|--------|----------|
| 574-8" | 3.15 | 974-8" | 3.15 |

ELECTRICIANS' SIDE CUTTING PLIERS



| NO. | LIST EA. | NO. | LIST EA. |
|-------|----------|-------|----------|
| 92-8" | 3.25 | 62-7" | 3.90 |
| 92-7" | 3.65 | 62-8" | 4.25 |
| 92-8" | 4.00 | 72-7" | 4.10 |

LEATHER TOOL HOLSTER

Five pockets of pliable form-fitting Russet leather. Stitched with 7-cord linen hot waxed thread, locked to solid leather back with steel rivets. Handy tape holder is of leather, not chain, an extra safety insulation feature.



| NO. | LIST EA. |
|-----|----------|
| 99 | 4.95 |



MIDGET "GROOVE-GRIP" PLIERS

Slender and wiry, indispensable for gripping small nuts and other objects in tight spots.



| NO. | LIST EA. |
|----------|----------|
| 6517-5" | 2.25 |
| P6517-5" | 2.35 |

Nickel, Chrome Plated
Nickel, Chrome Plated,
Cushion Grips

"GROOVE-GRIP" 5-ADJUSTMENT PLIERS



| NO. | LIST EA. | |
|------------------------|----------|----------------------|
| 6507-6 1/2" | 2.65 | Nickel and Chrome |
| 8507-8" | 2.90 | Plated |
| 8507-10" | 3.25 | |
| P5507-6 1/2" | 2.60 | Polished Head |
| P5507-8" | 2.85 | |
| P5507-10" | 3.20 | Cushion-Grip Handles |
| P5507-14" 7 Adjustment | 4.25 | |

COMBINATION SLIP-JOINT PLIERS



| NO. | LIST EA. | |
|-------------|----------|--------------------------|
| 8041-6 1/2" | 1.40 | Nickel and Chrome Plated |
| 6041-8" | 1.80 | |
| 6041-10" | 2.60 | |

THIN NOSE COMBINATION PLIERS



| NO. | LIST EA. | |
|-------------|----------|-----------------|
| 6042-6 1/2" | 1.60 | Nickel, Chromed |

BENT THIN NOSE COMBINATION PLIERS



| NO. | LIST EA. | |
|-------------|----------|-----------------|
| 6043-8 1/2" | 1.85 | Nickel, Chromed |

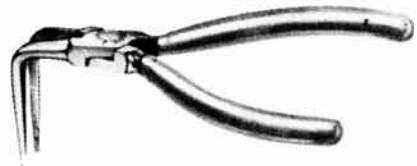
PROFESSIONAL SLIP-JOINT SIDE CUTTERS

Flat, serrated nose for gripping. Curved inner section to grip round shapes. Keen-cutting knives.



| NO. | LIST EA. | |
|-------------|----------|-----------------|
| 6395-7 1/2" | 3.75 | Nickel, Chromed |

BENT EXTRA FINE NEEDLE NOSE PLIERS



| NO. | LIST EA. | NO. | LIST EA. |
|---------|----------|---------|----------|
| 8508-6" | 3.90 | 8608-8" | 4.20 |
| 8908-6" | 3.90 | 8708-6" | 4.40 |

WITH STABILIZED TIPS

| NO. | LIST EA. | NO. | LIST EA. |
|-----------|----------|-----------|----------|
| ST8508-6" | 4.30 | ST8608-8" | 4.60 |
| ST8908-6" | 4.30 | ST8708-6" | 4.80 |



DESIGN IN-DUSTRONIC tools are more streamlined, with slender jaws and fine points, to reach into the tight spots and perform the specific work required of the electronics technician.

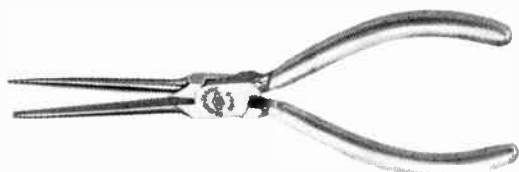
TEST AND INSPECTION Individually tested for hardness, each tool must maintain highest standards for handle strength and cutting ability. To assure perfect jaw alignment, pliers must cleanly cut single bond paper strips and snip cotton-covered lamp cord without fraying. Each tool is guaranteed against defects in workmanship and materials.

WORKMANSHIP IN-DUSTRONIC tools are hot drop-forged from special analysis alloy steel, machined and finished with the same care and precision which have made world-famous BOKER TREE BRAND Fine Cutlery and surgical instruments for over a century. Individually fitted and adjusted, each is accurately heat-treated by HYDRIZING, which minimizes "carburation" and "decarb". Cutting blades are precision-hardened with electronic controls, and honed by hand for keen edges that retain their sharpness.

Individually Boxed

H. BOKER & CO., INC. • NEW YORK, N. Y.

EXTRA FINE FLAT NOSE PLIERS
Flat, very thin, smooth jaws, spring tempered.



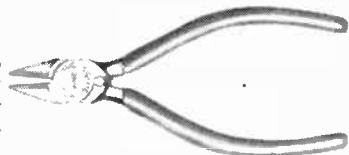
| NO. | LIST EA. | NO. | LIST EA. |
|--------|----------|--------|----------|
| 504-6" | 3.60 | 604-6" | 3.90 |
| 904-6" | 3.60 | 704-6" | 4.00 |

WITH STABILIZED TIPS

| NO. | LIST EA. | NO. | LIST EA. |
|----------|----------|----------|----------|
| ST504-6" | 4.00 | ST604-6" | 4.30 |
| ST904-6" | 4.00 | ST704-6" | 4.40 |

NEEDLE POINT DIAGONAL CUTTING PLIERS

Narrow, pointed nose, semi-flush edges, for close cutting. Lightweight, easy-to-use, in electronics and light assembly. Coil spring keeps jaws open.



| NO. | LIST EA. | NO. | LIST EA. |
|---------|----------|---------|----------|
| 513-5½" | 4.25 | 613-5½" | 4.55 |
| 913-5½" | 4.25 | 713-5½" | 4.75 |

THIN, NARROW, POINTED DIAGONAL CUTTING PLIERS

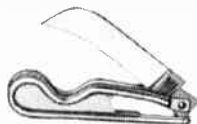
Jaws relief-ground back of blades, to cut in confined areas. Also used for removal of I. F. Cans.



| NO. | LIST EA. | NO. | LIST EA. |
|----------|----------|----------|----------|
| RA51-5½" | 4.50 | RA61-5½" | 4.80 |
| RA91-5½" | 4.50 | RA71-5½" | 4.90 |

WIRE JACK POCKET KNIFE

Rugged construction, unbreakable spring. Chrome Vanadium steel blade.



| NO. | LIST EA. |
|--------|----------|
| 75-3¾" | 1.00 |

ELECTRICIANS' UTILITY KNIFE

One blade and one self-locking Screwdriver and Insulation Scraper.

| NO. | LIST EA. | |
|------|----------|----------|
| 9229 | 2.75 | 3¾" long |



ELECTRONIC DIAGONAL END NIPPERS

Flush-cutting blades, with extremely fine points, set at 22.5° angle. For very fine subminiature work.



| NO. | LIST EA. | NO. | LIST EA. |
|-----------|----------|-----------|----------|
| XA582-4½" | 6.00 | XA682-4½" | 6.30 |
| XA982-4½" | 6.00 | XA782-4½" | 6.50 |

THIN HEAD, FLUSH CUTTING MIDGET DIAGONALS

Head is ground thinner, narrower. Flush edges.



| NO. | LIST EA. | |
|-----------|----------|---|
| XA981-4½" | 4.00 | Pointed jaws |
| XC981-4½" | 3.70 | Standard shape jaws, slightly shortened |

THIN, ALLOY STEEL ADJUSTABLE WRENCHES



| Nickel and Chrome Plated | | Polished Head, Gunmetal Handles | |
|--------------------------|----------|---------------------------------|----------|
| NO. | LIST EA. | NO. | LIST EA. |
| 6W-4" | 2.64 | 5W-4" | 2.10 |
| 6W-6" | 2.64 | 5W-6" | 2.10 |
| 6W-8" | 3.10 | 5W-8" | 2.52 |
| 6W-10" | 3.95 | 5W-10" | 3.12 |
| 6W-12" | 5.75 | 5W-12" | 4.70 |
| 6W-15" | 8.75 | 5W-15" | 7.36 |
| 6W-18" | 14.50 | 5W-18" | 10.95 |

| Nickel, Chrome-Plated, Cushion-Grip Handles | | | |
|---|----------|---------|----------|
| NO. | LIST EA. | NO. | LIST EA. |
| P6W-4" | 2.72 | P6W-10" | 4.35 |
| P6W-6" | 2.72 | P6W-12" | 6.25 |
| P6W-8" | 3.45 | P6W-15" | 9.00 |

LOCKING ADJUSTABLE WRENCHES

| Nickel and Chrome Plated | | Nickel Chrome Plated Cushion-Grip Handles | |
|--------------------------|----------|---|----------|
| NO. | LIST EA. | NO. | LIST EA. |
| L6W-4" | \$2.64 | PL6W-4" | \$2.72 |
| L6W-6" | 2.64 | PL6W-6" | 2.72 |
| L6W-8" | 3.02 | PL6W-8" | 3.45 |
| L6W-10" | 3.80 | PL6W-10" | 4.35 |
| L6W-12" | 5.60 | PL6W-12" | 6.25 |

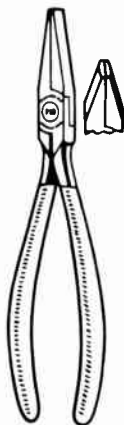
H. BOKER & CO., INC. • New York, N. Y.

Pliers by

CHAN NEL LOCK®

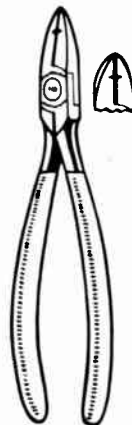
Specially Designed ELECTRONICS PLIERS

You'll do hundreds of jobs easier, faster with these Channellock Pliers because they are **specially designed** for all types of electronics work. You'll like the long reach . . . the precision-matched jaws . . . the hand-honed, specially hardened cutting edges . . . the easy-to-handle "feel" of the blue plastic grips. And you'll appreciate the top quality of Channellock Pliers . . . they're forged from high grade steel, properly heat treated. Best of all, because they are specially designed for fine electronics work, these four pliers will satisfy more than 90% of your Service and Repair needs. Ask your Electronics Equipment Supplier for Channellock Electronics Pliers by name.



**No. 718
FLAT-NOSE
PLIER**

Watchmaker's precision PLUS a bull-dog grip in hard-to-reach places. LIST \$3.10



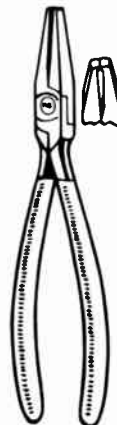
**No. 728
DIAGONAL
CUTTER**

A wire-stripping notch (Patent Pending) that **really works!** LIST \$3.50



**No. 738
ROUND-NOSE
PLIER**

You can pick up a human hair with these precision-machined points. LIST \$3.10



**No. 748
END
CUTTER**

Fine enough to cut a human hair—sturdy enough to cut 12 gauge copper wire. LIST \$3.50

MULTI-PURPOSE PLIER



The handiest and most popular multi-purpose plier ever designed. Five patented, non-slip under-cut channels. Terrific gripping power. Particularly useful on aerial construction jobs. Polished steel finish.

| No. | Size | Capacity | List |
|-----|--------|----------|--------|
| 420 | 9 1/2" | 1 1/2" | \$3.20 |
| 426 | 6 1/2" | 7/8" | \$2.40 |

HEAVY DUTY PLIER



A heavy duty, self-gripping plier . . . actually a combination plier and wrench. Terrific gripping power in tight places you can't reach with a pipe wrench. Length 9 1/2". Four adjustments. Capacity 1 1/8". Polished steel finish. No. 410 . . . LIST \$3.40.

"MIGHTY MIDGET" PLIER



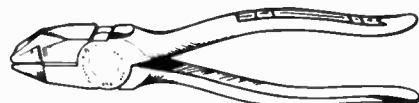
A midget plier that gives you popular Channellock gripping power for a wide number of small, hard-to-get at electronics jobs. Length 4 1/2". Four adjustments. Capacity 1/2". Polished steel finish. No. 424 . . . LIST \$2.30

HEATSORB CLAMP



A specially designed "heat sink" that prevents heat damage to electronic components during soldering. Also a handy, self-gripping "third hand" that holds and retrieves small parts in close work. Length 5". No. 46 . . . LIST \$1.50

LINEMEN'S PLIER—Bevel Nose



Polished steel finish. Knurled grips. Side cutter.

| No. | Size | List |
|----------|--------|--------|
| 3046 | 6" | \$3.50 |
| 3047 | 7" | \$4.00 |
| 3048 1/2 | 8 1/2" | \$5.00 |

LINEMEN'S PLIER—Rounded Nose



Polished steel finish. Knurled grips. Side cutter.

| No. | Size | List |
|---------|--------|--------|
| 346 | 6" | \$3.50 |
| 347 | 7" | \$4.00 |
| 348 1/2 | 8 1/2" | \$5.00 |

CHANNELLOCK PLIERS Are Made Only By Champion DeArment Tool Co., Meadville, Pa.

Pliers by

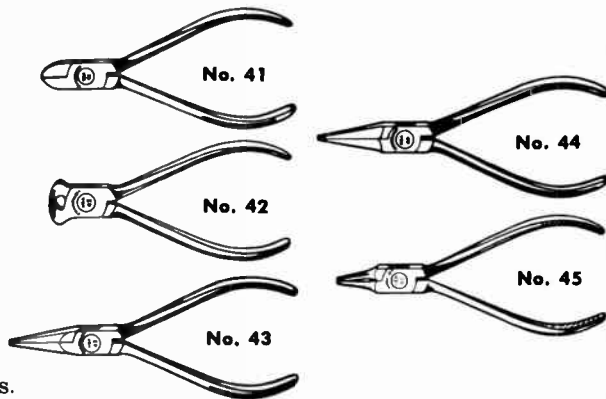
CHANNEL LOCK®

Little Champ PRECISION PLIERS

Highest quality precision pliers for fine bench work in electronics, model making, jewelry and watch repair. Polished steel finish. Also available at no extra cost with blue, dipped plastic, cushion-grip handles.

| No. | Style | Size | List |
|-----|-----------------|------|--------|
| 41 | Diagonal Cutter | 4½" | \$3.14 |
| 42 | End Cutter | 4½" | \$3.60 |
| 43 | Needle Nose | 4½" | \$2.90 |
| 44 | Flat Nose | 4½" | \$3.00 |
| 45 | Round Nose | 4½" | \$3.00 |

Attractive, Velvet-lined case for Little Champ Pliers. No charge when ordered with set of pliers.



LONG-NOSE PLIER



Point ⅜" round. Polished steel finish. Knurled grips.

| No. | Size | Side-Cutter | List |
|-------|------|-------------|--------|
| 317½ | 7½" | With | \$4.10 |
| 3017½ | 7½" | Without | \$3.10 |
| 326 | 6" | With | \$3.50 |
| 3026 | 6" | Without | \$2.76 |

DIAGONAL CUTTING PLIER



Precision-honed cutting edges. Polished steel finish. Knurled grips.

| No. | Size | List |
|-----|------|--------|
| 435 | 5" | \$3.10 |
| 436 | 6" | \$3.50 |
| 437 | 7" | \$3.86 |

"DIPPED" PLASTIC GRIPS FOR PLIERS

All Channellock Pliers can be ordered with blue, dipped-plastic, cushion-grip handles. Our 700 Series Pliers, shown on page 1, are offered only with dipped grips. "Little Champ" Pliers on page 2 are available either with or without dipped grips at no difference in price. On all other Channellock Pliers, dipped grips are optional at slight extra cost.

SLIP-JOINT PLIER—With Cutter



Heavy duty. Polished steel finish. Knurled grips.

| No. | Size | List |
|------|------|--------|
| 546 | 6" | \$2.30 |
| 548 | 8" | \$2.84 |
| 5410 | 10" | \$3.46 |

END CUTTER



Precision-honed cutting edges. Polished steel finish.

| No. | Size | List |
|-----|------|--------|
| 356 | 6" | \$3.50 |
| 357 | 7" | \$4.00 |

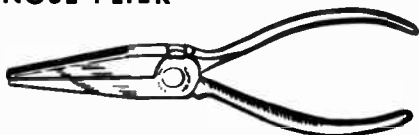
"SUPERIOR" PLASTIC GRIPS



For maximum hand comfort, durable plastic grips. Light blue color for good visibility, reduces plier loss. Easy to install. Order by desired grip size:

| Plier Size | Grip Size | List | Plier Size | Grip Size | List |
|------------|-----------|--------|------------|-----------|---------|
| 6" | Small | 65c pr | 8", 9½" | | |
| 7" | Medium | 70c pr | 10" | Large | 75c pr. |

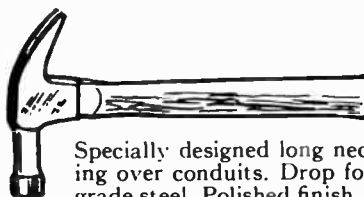
FLAT-NOSE PLIER



Precision-matched jaws. Polished steel finish.

| No. | Size | Side-Cutter | List |
|------|------|-------------|--------|
| 366 | 6" | With | \$3.70 |
| 3066 | 6" | Without | \$2.80 |

ELECTRICIANS' HAMMER




















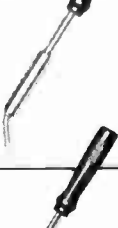
















Specially designed long neck for hammering over conduits. Drop forged from high grade steel. Polished finish. NuRed enamel neck and under claw for good visibility. Best quality hickory handle. No. 88, 18 oz. LIST \$3.76

CHANNELLOCK PLIERS Are Made Only By Champion DeArment Tool Co., Meadville, Pa.

CAIG LABORATORIES INC.

New Hyde Park, L. I., N. Y.

ERSA® SOLDERING TOOLS

| TECHNICAL DESCRIPTION | ERSA IRON COMPLETE CAT. NO. (Add 'D' to No. for ERSADUR) | WATT-AGE | PRICE WITH | | SOLDERING BIT CAT. NO. (Add 'D' to No. for ERSADUR) | BIT FORM | PRICE | | SPARE ELEMENT | |
|--|--|----------|------------|--------------|---|---|----------|------------|----------------------------|--------|
| | | | COPPER BIT | ERSADUR BIT* | | | COP- PER | ERSA- DUR* | CAT. NO. | PRICE |
| ERSA-MICROTYP 6 VOLT 8 WATTS—15 WATTS  Subminiature soldering iron for pinpoint soldering on miniaturized printed circuits and other micromodulation techniques. Provided with ERSADUR long life bit. Good for 100,000 soldering operations. Built-in solid heater element. Weight under 3 ozs. Length of 8 watt unit 6.3", length of 15 watt unit 9.8". Temp. range 240°C to 380°C. For use with 6 volt transformer or battery, 5 foot cable & banana plugs. Temp. can be regulated with Control Transformer ERSR R30. For more details ask for Bulletin #E-500. | 20L/8W (Short Heating Unit) | 8 | | \$9.50 | |  | | | 22L/8W (Element & Bit) | \$5.50 |
| | 20B/8W (Short Heating Unit) | 8 | | \$9.50 | |  | | | 22B/8W (Element & Bit) | \$5.50 |
| | 20K/15W (Extra Long Heating Unit) | 15 | | \$9.90 | |  | | | 22K/15W (Element & Bit) | \$5.90 |
| | 20L/15W (Extra Long Heating Unit) | 15 | | \$9.90 | |  | | | 22L/15 (Element & Bit) | \$5.90 |
| ERSA-MINIATURE 6 VOLT 10 WATTS—20 WATTS—30 WATTS  Miniature soldering iron for modern electronics—exchangeable heater elements—heating up time 40 sec.—weight under 3 ozs. Length 8"—for use with 6 volt transformer or battery, 5 foot cable & banana plugs—push on copper bits, easily exchanged—soldering temperature can be regulated with the Control Transformer ERSR R30. Temp. range 300°C. to 480°C. For more details ask for Bulletin #E-500. | 10/10W | 10 | \$5.00 | \$9.85 | 12/10 |  | \$0.50 | \$4.35 | 11/10W | \$3.60 |
| | 10/20W | 20 | 5.00 | 9.85 | 12/20 |  | 0.50 | 4.35 | 11/20W | 3.60 |
| | 10/30W | 30 | 5.00 | 9.85 | 12/30 |  | 0.50 | 4.35 | 11/30W | 3.60 |
| | | | | | | | | | | |
| ERSA MODEL 30 20 WATTS—30 WATTS—40 WATTS  For radio, television and electronics—heating up time 2 min.—elements and copper bits easily exchangeable. Tip shank dia. 1/8" for all, 3/16" x 3/32" for S-bit. Bit temperatures 340°C—360°C—390°C. 5 foot cable & plug. 110 volts std. (220 volts special). Weight approx. 7 3/4 ozs. Length 7 3/4". Equipped with hex. shield. For more details ask for Bulletin #E-200. | 30K/20W | 20 | \$7.90 | \$12.50 | 32K/20 |  | \$0.50 | \$4.75 | 31/20W | \$3.75 |
| | 30K/30W | 30 | 7.90 | 12.50 | 32K/20 |  | 0.50 | 4.75 | 31/30W | 3.75 |
| | 30J/30W | 30 | 7.90 | 12.50 | 32J/30 |  | 0.50 | 4.75 | 31/40W | 3.75 |
| | 30S/30W | 30 | 7.90 | | 32S/30 |  | 0.50 | | | |
| | 30K/40W | 40 | 7.90 | 12.50 | 32K/40 |  | 0.50 | 4.75 | | |
| | 30J/40W | 40 | 7.90 | 12.50 | 32J/40 |  | 0.50 | 4.75 | | |
| | 30S/40W | 40 | 7.90 | | 32S/40 |  | 0.50 | | | |
| ERSA MODEL 80A 80 WATTS  For assembly line and repair shops. Equipped with a New Type Element with high quality steel core, maximum heat transfer, longer life. Heating up time 2 1/2 minutes. Tip 3/16" O.D. Bit temperature 440°C (824°F). 5 foot cable and plug. 110 volts standard (220 volts special). Weight approx. 1 lb. Length 11". For more details ask for Bulletin #E-300. | 80A/80W | 80 | \$11.35 | \$17.00 | 82J |  | \$0.85 | \$6.45 | 81A/80W | \$4.35 |
| | 80AK/80W | 80 | 11.35 | 17.00 | 82K |  | 0.85 | 6.45 | | |
| | 80AL/80W | 80 | 11.85 | | 82L |  | 1.35 | | | |
| | 80AH/80W | 80 | 11.85 | | 82H |  | 1.35 | | | |
| | 80AS/80W | 80 | 11.85 | | 82S |  | 1.35 | | | |
| | | | | | | | | | | |
| ERSA MODEL 150A 130 WATTS  For assembly line, repair and workshops—equipped with a New Type Element with high quality steel core, maximum heat transfer, longer life. Heating up time 2 1/2 minutes. Tip 3/16" O.D. Bit temperature 470°C (878°F). 5 foot cable and plug. 110 volts standard (220 volts special). Weight approx. 1.2 lbs. Length 11". For more details ask for Bulletin #E-300. | 150AJ/130W | 130 | \$14.10 | \$20.00 | 152J |  | \$1.10 | \$7.10 | 151A/130W | \$5.70 |
| | 150AK/130W | 130 | 14.10 | 20.00 | 152K |  | 1.10 | 7.10 | | |
| | 150AL/130W | 130 | 15.40 | | 152L |  | 2.45 | | | |
| | 150AH/130W | 130 | 15.40 | | 152H |  | 2.45 | | | |
| | 150AS/130W | 130 | 15.40 | | 152S |  | 2.45 | | | |
| | | | | | | | | | | |
| ERSA ISOTYPE SPECIAL SAFETY INSULATED SOLDERING IRONS 65 WATTS and 90 WATTS  For work on Live television and telecommunication installations. Element of non-corrosive special steel, not exchangeable, fixed into housing. Plastic handle. 6 1/2 foot cable—no plug, 110 volts standard (220 volts special). Weight approx. 20 ozs. and 25 ozs. respectively. Length about 11 1/2". | KZ/65W | 65 | \$22.20 | | 62KZ |  | \$1.35 | | | |
| | JZ/65W | 65 | 22.20 | | 62JZ |  | 1.35 | | | |
| | KZ/90W | 90 | 23.75 | | 82KZ |  | 1.90 | | | |
| | JZ/90W | 90 | 23.75 | | 82JZ |  | 1.90 | | | |

ERSA CONTROL TRANSFORMER MODELS R30 AND R10

Both transformer models have a primary voltage regulator for 110, 125, 150, 220 and 240 volts. The secondary voltage is also variable within the range of 5 to 6.5 volts, thus making it possible to select a temperature range between 240 to 480°C. When not in use, the ERSR iron rests on a special nozzle provided on the transformer. This protects against overheating.

Control Transformer R10 was solely made for use with the ERSR-MINIATURE Iron Model 10W. The R30,

with a greater output, permits universal use of all the various ERSR irons with their different capacities.

MODEL R30, rated 30 VA, 5.1# \$25.00
 MODEL R10, rated 10 VA, 3.5# \$15.00

T2 SOLDERING BATH

Rated 240 watts, temp. approx. 600°C. Holds approx. 23 cc, internal dimen. 1 1/2" dia. x 1 1/2". Weight with cord 3 lbs. 5 foot cord and plugs, switch. (Other solder pots available.)

PRICE \$27.00



R30
R10



T2

ERSADUR DURABLE COPPER BITS

Made of pure electrolytic copper with an iron coating. Soldering surface of bit pre-tinned ready for use. Shaft is chromium plated to prevent baking in. ERSADUR bits in normal use last for more than 100,000 solderings. Ask for Bulletin #172E.

AFTER EQUAL SERVICE TIME



TREATED

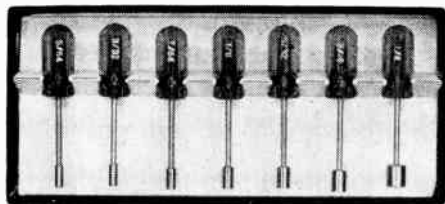
UNTREATED



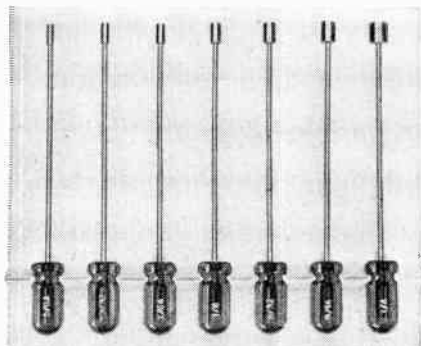
PROPERLY PROPORTIONED MINIATURE TOOLS

For precision instrument and model work use Desco "7" Miniature Nut Drivers. Available with Tenite handles, or for use with jewelers' screw driver handles. Also made with 5 1/2" long shanks for those hard-to-get-to places.

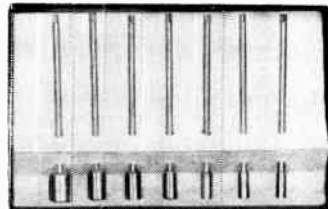
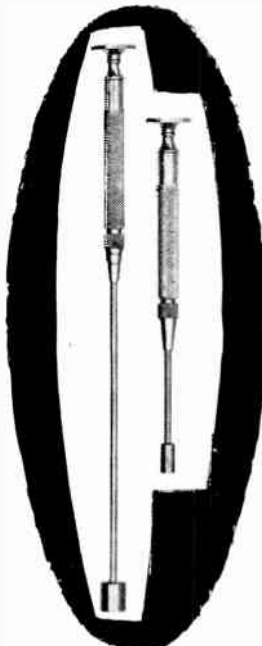
DESCO "7" Sizes across flats
 5/64 3/32 7/64 1/8 5/32 3/16 1/4



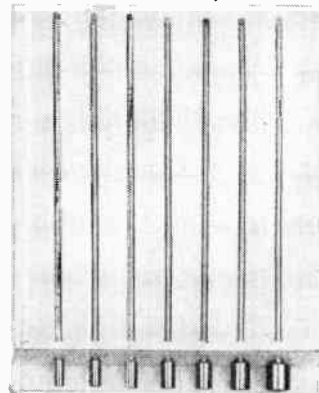
Set HS 7 List \$5.95



Set HL 7 List \$5.95



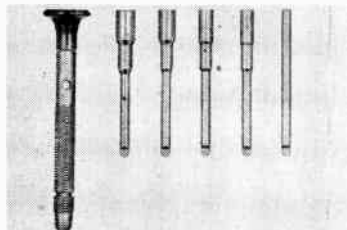
Set JS 7 List \$4.95



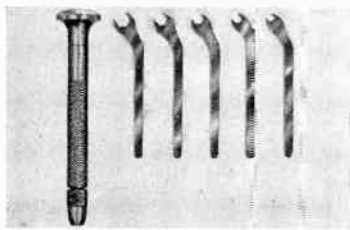
Set JL7 List \$4.95

NON-MAGNETIC NUT DRIVERS available in HL7 and HS 7 series only. Specify "No-Mag" with the code number — same prices.

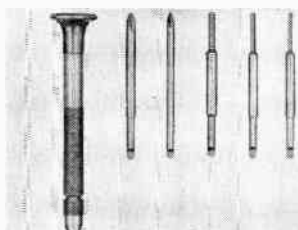
INTRODUCING THE DESCO "5" Series of Miniature Tools



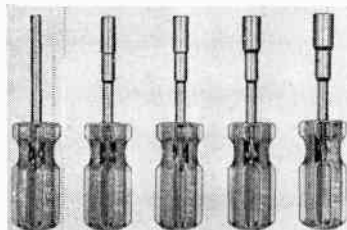
Set JD 5 List \$3.50



Set EW 5 Steel List \$2.50



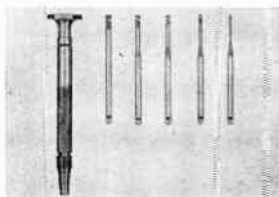
Set PA 5 List \$2.50



Set HD 5 List \$4.50

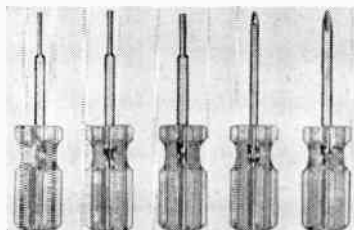
Deeper and more rugged than the "7" Series. Made only in 5/64, 3/32, 7/64, 1/8 and 5/32.

Set EWN 5 Non-Magnetic List \$2.50
 A practical miniature end wrench to fit the smallest nuts made 5/64 3/32 7/64 1/8 5/32.



Set SS 5 List \$1.98

Contains four screw driver blades and a fine scriber.



Set PAH 5 List \$3.50

Includes the two smallest Phillips drivers and the three smallest Allen wrenches.

* T. M.

All of the DESCO "5" and "7" Series are complete as shown.



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When ordering products shown in this book
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- 1. Manufacturer's Catalog Numbers
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MASTER.**

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Thank you!

The
Radio - Electronic
MASTER

Insist on the Finest -- They Last Longer

"There is Nothing Finer Than a DIAMOND"

Depend On
These Trade Marks
of Quality



Narrow tapered nose
... ideal for
confined places

3 Sizes

S54RG - 4 inch

S55RG - 5 inch

S56RG - 6 inch

DIAMALLOY
CUTTING
PLIERS



Diamalloy Electronic Pliers



Diagonal Cutting. Electronically hardened cutting edges. S54 size 4 in. S55 size 5 in. S56 size 6 in.



Long Nose with finely serrated jaws 1 1/4 in. long. Tips 1/16". LN54 size 4 in. LN56 size 6 in. LN57 size 7 in.



Long Nose with side cutter. Same as LN54 except has side cutter in jaw. SN54 size 4 in. SN56 size 6 in. SN57 size 7 in.



DN54-FLAT NOSE with smooth jaws. Size 4 in.



NN56-NEEDLE NOSE with long slender jaws and strong gripping ability. End of jaws diamond scored. Size 6 in. NN57-7 in.



LC56-LONG NOSE SPECIAL with very fine cutter on end of nose for cutting very fine wire in confined places. Size 6 in.



EC54-TRANSVERSE END CUTTER for cutting close to printed circuit boards. Easily resharpened. Size 4 in.



MS54-DIAGONAL CUTTER with extremely sharp cutting edges, 1/2" long for cutting fine wires. Size 4 in.



Curved Needle Nose. Same as LN54 except nose is bent 90°. Ideal for confined places. CN54 size 4 in. CN56 size 6 in.



ST55-WIRE STRIPPER with 3 holes accurately drilled and counter-bored for 18, 20, 22 gauge wire. Size 5 in.

SOLD THROUGH LEADING ELECTRICAL SUPPLY WHOLESALERS AND INDUSTRIAL DISTRIBUTORS

DIAMOND TOOL *and Horseshoe Co.*

DULUTH · MINNESOTA

Established 1908

TORONTO · ONTARIO

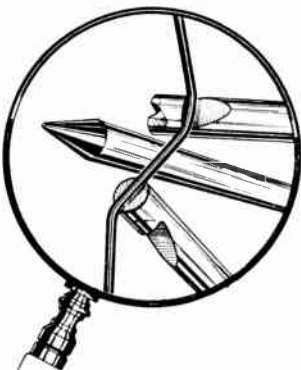


Norseman ELECTRONIC TOOLS

JIGGLE STICKS

Probes of Lucite, 1 end forked for pushing other end pointed for probing, notched on side for pulling wires.

PR 532-6 5/32" dia. .30 net
PR 316-8 3/16" dia. .35 net



NORSEMAN SOLDERING AID KIT



Red Vinyl plastic kit, packed with 4 Norseman Soldering Aids (TN-22, TN-33, TN-44, TN-55) as illustrated.

TNSA-4 complete kit \$4.35 net
Kit with 4 Norseman Soldering Aids with unbreakable aluminum handles (AL-22, AL-33, AL-44 & AL-55).
ALSA-4 complete kit \$4.35 net

NORSEMEN SOLDERING AIDS



Red Handle

TN-22 Tenite II Handle 7 7/8" Long \$.75 net
M2T Tenite II Handle 5 1/4" Long \$.75 net
AL-22 Aluminum Handle 7 7/8" Long \$.75 net



Black Handle

TN-44 Tenite II Handle 7 1/2" Long \$.90 net
AL-44 Aluminum Handle 7 1/2" Long \$.90 net



Green Handle

TN-33 Tenite II Handle 7 7/8" Long \$.75 net
M3T Tenite II Handle 5 1/4" Long \$.75 net
AL-33 Aluminum Handle 7 7/8" Long \$.75 net



Blue Handle

TN-55 Tenite II Handle 6 3/4" Long \$.90 net
AL-55 Aluminum Handle 6 3/4" Long \$.90 net

PLASTIC HANDLES—(TN-22, TN-33, TN-44, TN-55) are of Tenite II, 4" x 3/8" hex and will not roll off the work bench. Shock-proof, practically unbreakable and will stand rough use on industrial production lines.

METAL HANDLES—(AL-22, AL-33, AL-44, AL-55) are aluminum alloy 4" x 3/8" hex and won't roll off the work bench. Being metal, are NOT SHOCK-PROOF and hence not recommended for ordinary radio-TV service work, especially on a 'live' unit. However, these handles are practically unbreakable and were designed to take rough use on industrial assembly lines and can be used as PRY BARS in lining up components.

METAL ENDS—(separated from each other) non-magnetic stainless steel, to which solder won't adhere. Are firmly seated in handles and are twist-proof.

FORKED END—straddles the wire and with a slight twist, grips it for easy unwinding and removal, or guides it into another lug for soldering. Since plastic handles act as insulation, there is no danger of shock when working on sets in operation. 1/8" forks are made especially for use on printed circuits and transistors.

SPADE END—is a reamer to clean lug holes of solder.

CURVED END—can be used as a scribe for marking chassis. As a circuit tracer when looking for loose connections. As a dial cord stringer. Hook can be bent to a 90 degree angle if desired.

KNIFE & SCRAPER—for cutting and repairing printed circuits.

WIRE BRUSH — has approx. 200 bristles of stainless wire .0035 in dia. to which solder will not adhere. For use in cleaning connections before soldering, brushing out splattered solder and in repairing printed circuits.



STAINLESS STEEL WIRE BRUSH
on steel shaft approximately 2" long overall. Can be used in a regular pin vise. **.33 net**

Packed 25 or 50 per box

DIDDLE STICKS

Alignment tools —
Lucite 5/32" dia.

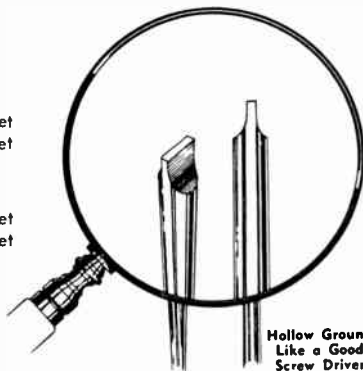
LU-53210 10" long .25 net
LU-53214 14" long .35 net

Rigid Vinyl 3/16" dia.

RV-31610 10" long.....25 net
RV-31614 14" long.....35 net

Fibre Glass 1/8" dia.

FG-1810 10" long.....35 net
FG-1814 14" long.....50 net
FG-1818 18" long.....65 net

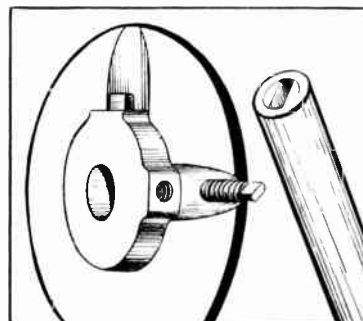


Hollow Ground
Like a Good
Screw Driver

SLAB-HEAD DRIVERS

Drivers for SLAB-HEAD screws as used in Delco auto radios, Zenith & Arvin TV and 1956 models of Webcor recorders.

246-P \$1.80 net



Clutch Head Screw and Driver

ERIKSON SPECIALIZED TOOL COMPANY, PICO RIVERA, CALIF.



Norseman ELECTRONIC TOOLS

STICKLE-BACK DRILSAWS

Made in Germany, this tool will drill holes in wood, plaster board, etc. and saw in any direction.



| | |
|-------------------------|---------------------|
| #0-5 x 5/32" dia. | \$.98 net |
| #1-7 x 3/16" dia. | 1.85 net |
| #2-10 x 1/4" dia. | 2.45 net |
| #3-13 x 5/16" dia. | 2.95 net |
| #4-15 x 3/8" dia. | 3.25 net |
| #5-13 x 1/2" dia. | (saw rasp) 2.25 net |

REVERSIBLE RATCHETS

A rugged ratcheting box wrench. No buttons, no levers — just turn it over to reverse the ratchet.



| | |
|-------------------------------|--------------------------------|
| 1/4" x 5/16" \$2.35 net | 5/8" x 11/16" \$3.90 net |
| 3/8" x 7/16" 2.65 net | 5/8" x 3/4" 3.90 net |
| 1/2" x 9/16" 3.60 net | 3/4" x 7/8" 4.50 net |

DRILL ROUTERS

Another "Stickle-back" tool, similar to the Drillsaw, but for use in electric drills.

| | |
|--------------------------------|------------|
| #318-1 2 3/8" x 1/4" dia. | \$1.40 net |
| #318-2 4 1/2" x 1/4" dia. | 1.60 net |



TIPPY STICKS

Flexible alignment tools of tenite II with a non-magnetic stainless steel tip. Permits snaking around obstructions and still turn screws and slugs.



| | |
|------------------------|---------|
| ST-186 6" long | .40 net |
| ST-1810 10" long | .45 net |
| ST-1814 14" long | .50 net |

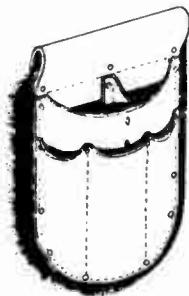
TRI-TAPS

The original 3-in-1 tool with 6/32", 8/32" and 10/32" taps to clean or cut three of the most common threads used in electronic work.

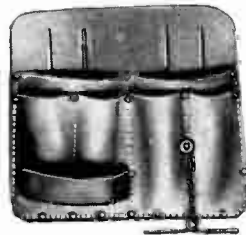


| | |
|----------------------------------|---------------------------------|
| T-3 \$2.25 net | T-4 tap only for HT-24 1.65 net |
| HT-24 with replaceable tap | \$2.85 net |

TOOL POUCHES



#14 Telephone lineman's pouch of chrome-tanned cowhide. One large separated pocket with three smaller ones in front. Riveted and stitched with linen thread. 6" x 9 1/4" \$4.95 net



Electrician's Pouch. Bark-tanned top grain cowhide, riveted and stitched with linen thread. 7 pockets, loop for hammer, T-chain for roll of tape.

#17 10" x 9" \$4.95 net

12 OTHER
POUCHES AVAILABLE



MADE IN ESKILSTUNA, SWEDEN, BY E. A. BERG MFG. CO. LTD. • EST. 1880

Only the best Swedish Charcoal Steel is used in the manufacture of Berg Pliers. Produced under exacting standards of control, they embody the most modern techniques of heat treatment and manufacture. Each plier is carefully engineered and designed to afford the greatest practical utility; lightness and ease of operation; and strength coupled with durability.

Special Electronic Diagonal Cutting Pliers with extra thin cutting edges, pointed nose and BOX JOINT



No. 525 - 5" 4.95

ANGLE NOSE Diagonal Cutting Pliers



No. 2528 6 1/2" 4.25 7 1/2" 4.95

PIANO WIRE Diagonal Cutting Pliers



No. 1528 4 1/2" 2.95 5 1/2" 3.65 6 1/2" 4.15 7 1/2" 4.65

PIANO WIRE Side Cutting Nippers with replaceable blades



No. 1518 9" 6.50 10" 7.50
Extra Blades 9" 2.30 10" 2.55

PIANO WIRE End Cutting Nippers with replaceable blades



No. 1519 - 9" 8.50
Extra Blades 2.90

PIANO WIRE End Cutting Nippers



No. 527 6" 3.50 7" 3.95

Straight Cutting Pliers with extended jaws



No. 1529 - 6 1/2" 3.95

Special Bent Nose Pliers



No. 2533-B - 8" 4.95

Curved Nose Pliers



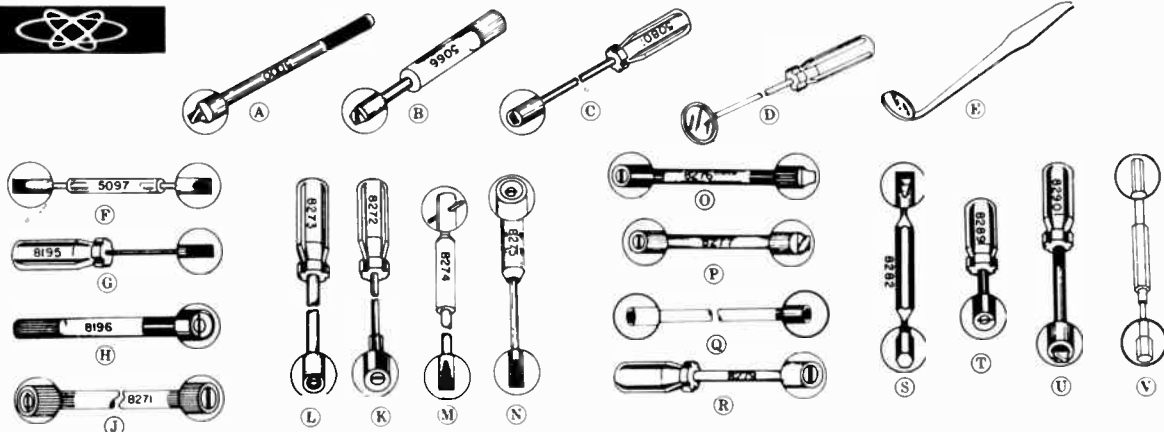
No. 1631 - 5 1/2" 3.85

50 OTHER SIZES AND TYPES AVAILABLE

ERIKSON SPECIALIZED TOOL COMPANY, PICO RIVERA, CALIF.

GC ALIGNMENT TOOLS . . .

ELECTRONICS



(A) G-C ALIGNMENT SCREWDRIVER—Low inductance metal tip screwdriver made of Butyrate material.
Cat. No. 5000 1/4" Diameter x 6" Tool
Net \$.42

(B) G-C TV ALIGNMENT TOOL—Very short, sturdy tool with a fine metal screwdriver blade.
Cat. No. 5066 2 1/2" long, 3/16" Shaft Dia.
Net \$.37

(C) G-C TV ALIGNING WRENCH—New tool with 1/8" square socket wrench, 3/32" shaft with insulated handle.
Cat. No. 5080
Net \$.53

(D) G-C INSPECTION MIRROR—Handy inspection mirror to inspect parts, coils, wiring, etc. Made of metal shaft with glass mirror and a plastic handle.
Cat. No. 5090 7 7/8" Inspection Mirror
Net \$.42

(E) G-C NEW ALL-PLASTIC INSPECTION MIRROR—Use to inspect coils, resistors, sockets, etc. while the chassis is hot. No danger of shorting.
Cat. No. 5090-P 7 7/8" Plastic Mirror Net \$.38

(F) G-C K-TRAN TOOL—Specially designed for K-tran and I.F. transformers. Butyrate material, screwdriver on both ends.
Cat. No. 5097 6" long, 3/32" Delrin Tip, 1/8" metal Tip
Net \$.78

(G) G-C TV CHANNEL TUNING TOOL—Completely insulated, non-metallic tool with long 1/8" narrow blade. Made of bone fibre.
Cat. No. 8195 7 1/4" long, 1/8" shaft dia.
Net \$.72

(H) G-C TV AND FM TUNING TOOL—Special short tool with fine recessed screwdriver top for Tele-

vision and FM adjustments. Made of Butyrate.
Cat. No. 8196 2 1/2" long, 3/32" shaft dia.
Net \$.38

(J) G-C TV CORE ALIGNER—For Motorola and other sets using Stackpole or other stud type cores that are not slotted. Milled steel insert on one end, thin screwdriver blade on other end.
Cat. No. 8271 6" long, 3/32" shaft dia.
Net \$.57

(K) G-C TV I.F. OSCILLATOR ALIGNER—Specially made for I.F. and oscillator adjustments. Will fit all makes of sets—R.C.A., G.E., Philco, Admiral and others.
Cat. No. 8272 6 1/2" long, 1/4" tip dia.
Net \$1.12

(L) G-C TV ALL-PURPOSE ALIGNER—Specially made for TV I.F. adjustments. Very thin spring steel tip is recessed so the tool will guide itself over the screws.
Cat. No. 8273 8" long, 3/32" shaft dia.
Net \$.68

(M) G-C TV LONG REACH ALIGNER—Specially made for Admiral, Zenith, R.C.A. and other sets for adjustments of nested iron cores that are hard to reach.
Cat. No. 8274 9" long, 1/4" shaft dia.
Net \$.83

(N) G-C TV ZENITH UNIVERSAL ALIGNER—Specially designed for Zenith and other sets. Made of bone fibre and plastic handle.
Cat. No. 8275 5" long, 1/4" shaft dia., 1/4" shaft dia.
Net \$.52

(O) G-C TV DUPLER ALIGNER—An all-purpose TV aligner for trimmers and I.F. transformers. Made of Butyrate material with extra thin spring steel tips.
Cat. No. 8276 6" long, 3/32" shaft dia.
Net \$.52

(P) G-C TV "SHORTY" DUPLER ALIGNER—Specially made for trimmer and I.F. transformers where space does not permit the use of a longer tool.
Cat. No. 8277 2 1/2" long, 3/32" shaft dia.
Net \$.52

(Q) G-C TV TUNING WAND—Brass insert on end reduces inductance and iron core on other end increases the inductance.
Cat. No. 8278 6" long, 3/32" shaft dia.
Net \$.53

(R) G-C TV CORE ALIGNER—Tool has a recessed steel milled slot to fit over the Stackpole and other type stud cores that are not slotted.
Cat. No. 8279 7 1/2" long, 3/32" shaft dia.
Net \$.68

(S) G-C NEW ZENITH TV WRENCH & ALIGNER—New nylon plastic molded special tool made specially for Zenith TV sets.
Cat. No. 8282 5 3/4" long, .100 Dia. Hex Wrench, .109 Screw Driver Dia.
Net \$.37

(T) G-C "SHORTY" TV ALIGNMENT SCREW DRIVER—Only 2" long overall to adjust hard-to-get-at places under TV tubes, etc.
Cat. No. 8289 2" long, 3/32" shaft dia.
Net \$.45

(U) G-C UNIVERSAL SCREW DRIVER ALIGNER—Made of unbreakable flexible clear plastic shaft and an amber plastic handle.
Cat. No. 8290 7" long, 3/32" shaft dia.
Net \$.63

(V) G-C ZENITH-ADMIRAL NYLON HEX WRENCH—New nylon hex wrench alignment tool for Zenith, Admiral and other sets.
Cat. No. 8606 5" wrench, 11" long Net \$.48
8606-L 11" wrench, 11" long .63

GC ALIGNMENT TOOL KITS



MASTER DELUXE TOOL KIT—A super-deluxe kit in a superior leatherette roll type case. Contains 25 tools and includes all TV alignment tools except the extra long ones (over 9") which would not fit in the case.
Cat. No. 8283
Net \$14.17

DELUXE ALIGNMENT TOOL KIT—Case is made of durable leatherette that will give long service. The steel tips are all extra thin and are of the best grade hardened spring steel that will give you service. Kit contains one each of 16 tools you need.
Cat. No. 8280
Net \$8.63

G-C ALL-PURPOSE TV ALIGNMENT KIT—A handy, all-purpose TV kit put up in a convenient plastic container. Kit contains four basic essential tools that will service the majority of TV sets.
Cat. No. 8457
Net \$1.95



STANDARD ALIGNMENT TOOL KIT—Made to last and wear—a quality kit. Kit contains 9 essential tools in roll type case.
Cat. No. 8455
Net \$4.77

G-C No. 5040 TOP 12 TOOL KIT—12 most popular TV alignment tools. Plastic roll-up case.
Cat. No. 5040
Net \$7.50



G-C CONTACT BURNISHING TOOL KIT—A complete kit for the servicing of relays, switches, etc. where critical contact points must be kept clean for ideal operation conditions.
Cat. No. 9339
Net \$.75



NEW TINNEMAN NUT REMOVER—The new G-C Tinnerman Nut Remover is a handy dual purpose tool for removing large or small tinnerman nuts with just a twist. Eliminates fumbling with hard-to-remove nuts.
Cat. No. 9355
Net \$.93



G-C ILLUMINATED INSPECTION AND SERVICE MIRROR—A hinge-mounted mirror fastens to a 6" transparent lucite rod which transmits light from a small anodized aluminum flashlight.
Cat. No. 8725 7/8" Mirror, frame O.D. 1 1/4"
Net \$2.02



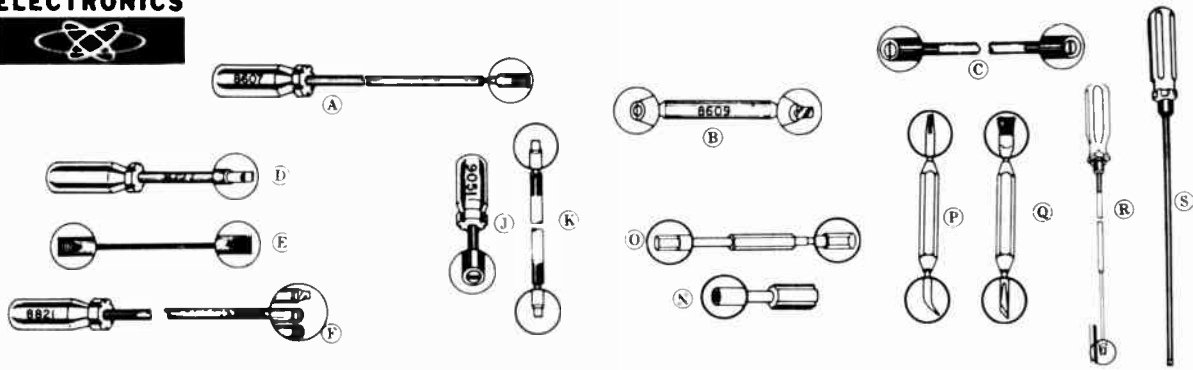
G-C SPEEDEX SLIM-TYPE SOLDER IRON TIPS—A new high-heat, turned-down tip made of one-piece copper. Will fit 3/8" irons. Tips 4 1/2" long.
Cat. No. 8741
Net \$.60



G-C SOLDER IRON TIPS—Bright plated to resist corrosion. These tips are made of best grade hard-drawn copper.
Dia. Long
Cat. No. 724 1/4"x3" Net \$.37
725 5/16"x4 1/2" .45
726 3/8"x4 1/2" .57



ALIGNMENT TOOLS . . .



(A) G-C NEW NYLON TV LONG-REACH ALIGNER—Handy new long-reach TV aligner with insulated metal shaft and nylon tip. 12 $\frac{1}{4}$ " long overall, .195" Shaft Dia.
Cat. No. 8607 TV Tool Net \$1.50

(B) G-C ALIGNMENT TOOL—Handy to align and adjust TV sets, radio sets, etc. Made of clear plastic 5" long x $\frac{3}{8}$ " dia.
Cat. No. 8609 Net \$.63

(C) G-C TV 2-IN-1 LONG-REACH DUPLEX ALIGNER—Made of clear, unbreakable plastic material. Ends colored red and blue for size identification. Tips are made of spring steel recessed for easy location of stud.
Cat. No. 8721 9" long, $\frac{1}{2}$ " Shaft Dia. Net \$.78
8722 7" long, $\frac{1}{2}$ " Shaft Dia. Net \$.67

(D) NEW G-C K-TRAN TELEVISION ALIGNER—Specially made for K-Tran I.F. Transformer tuner slugs. Precision made of bone fibre.
Cat. No. 8727 6 $\frac{1}{4}$ " long, $\frac{5}{32}$ " Tip Dia. Net \$.60

(E) TV LONG REACH ALIGNMENT SCREW DRIVERS—Made of bone fibre, extra thin $\frac{1}{8}$ " diameter screw drivers for adjustment of TV receivers. Screw drivers tip on both ends—can be re-ground and used over.
Cat. No. 8728A $\frac{1}{8}$ "x7" long Net \$.43
8728 $\frac{1}{8}$ "x12" long .53
8729 $\frac{1}{8}$ "x16" long .70

(F) G-C LONG ARM TV TOOL PLASTIC SHAFT—New, extra-long-reach alignment tool for Zenith sets and others where adjustments are had to get at. Tool is 18" long overall, 18" long, $\frac{1}{2}$ " Shaft Dia.
Cat. No. 8821 TV Tool (Type A) Net \$.93
8896 TV Tool (Type B) .93
8897 TV Tool (Type C) .93

(J) NEW ZENITH-RCA ALIGNING TOOL WITH HANDLE—Handle affords a better grip and easier adjustments. Length is 2 $\frac{1}{2}$ " with a 1 $\frac{1}{2}$ " shaft length, $\frac{1}{2}$ " diameter blade with recessed slot in blade end.
Cat. No. 9051 Net \$.48

(K) NEW G-C STANDARD COIL SLUG TUNER ADJUSTING TOOL—A new special slugging tool especially made for adjusting Standard Tuners, etc. Completely insulated, 7 $\frac{1}{2}$ " long, $\frac{1}{4}$ " shaft diameter, shaft ends .170 diameter.
Cat. No. 9087 Net \$.67

(N) G-C ADJUSTABLE SHORTY—Recessed tip TV alignment tool. Adjustable from 1 $\frac{1}{4}$ " to 2" in length, for those hard-to-get-at places.
Cat. No. 9090 Net \$.58

(O) G-C DOUBLE END IRON CORE TOOL—All nylon hex tool made to fit cores with .125 hex opening. One end of tool undercut so it can reach the bottom slug in coils without turning the top slug.

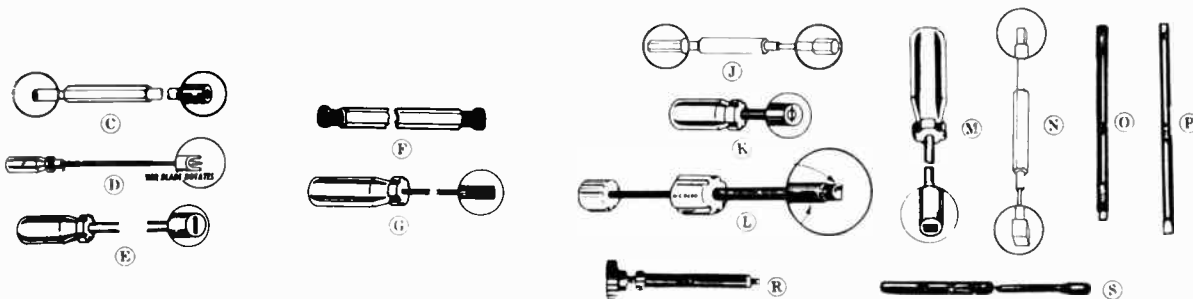
Cat. No. 9091 5" long Net \$.48
9091-L 11" long .63

(P) G-C PRINT-KOTE SOLDER AID PROBE—Handy, fine point probe specially designed to aid in probing and soldering printed circuits.
Cat. No. 9093 8" Length Net \$1.00

(Q) G-C PRINT-KOTE BRUSH AND SCRAPER—Fine Stainless Steel brush and hardened steel scraper are required to scrape and clean the Silicone Resin from printed circuits.
Cat. No. 9094 8" Length Net \$.98

(R) G-C SLUG RETRIEVER TOOL—A precision made tool with hardened steel tips made for removing lost TV tuner slugs in Standard Coil tuners. Ends ground to fit standard coils.
Cat. No. 9096 12" Retriever Net \$2.58
9097 15" Retriever 3.00

(S) G-C MINI-HOLD SCREWDRIVERS—Speeds replacing of phono cartridges. Designed with exclusive "Wedge Action" enabling secure gripping of tiny screws. (Nos. 0, 1, 2, 3 and No. 8 set screws and smaller) Special short length (2 $\frac{7}{8}$ " when in use).
Cat. No. 9346 3 $\frac{1}{4}$ " long, 2 $\frac{7}{8}$ " in use Net \$1.72
9347 7" long, 6 $\frac{3}{4}$ " in use 2.25



(C) G-C RCA TV ALIGNMENT TOOL—Double end nylon tool with a recessed metal tip on one end and a plastic slot on the other end.
Cat. No. 9150 6" Length Net \$.93

(D) G-C SCREW STARTER SCREW DRIVER—A handy screw holding screwdriver that will start screws in hard-to-get-at places. Holds the screw securely while it starts it.
Cat. No. 9148 12" Net \$2.58

(E) G-C TV AND AUTO RADIO WRENCH—Special female slotted wrench to remove screws and stud screws from auto radios and backs of TV sets, etc.
Cat. No. 9211 Net \$1.08

(F) G-C DUAL NUT STARTER—New tool that holds and starts hex nuts or hex head screws in hard-to-get-at places. Fits $\frac{1}{4}$ " and $\frac{3}{16}$ " hex nuts. Pat. 2664021.
Cat. No. 9147 Net \$1.65

(G) G-C FIBREGLASS SCREWDRIVER—Gives full protection on hot chassis when adjusting high potentials. For close-up hard-to-reach places. Cat. No. 9291 7" Net \$.75

(J) G-C NYLON HEX TOOLS—For the adjustment of iron cores inside mounted chassis, and the tuner adjustment of iron and brass

slugs with hex heads. Has .100" hex and $\frac{5}{32}$ " handle.
Cat. No. 9295 11"x.100" Hex Net \$.63
9296 11"x.075" Hex .63
9297 11"x.075" Hex .63

(K) G-C SHORTY ALIGNMENT TOOL—A convenient tool for hard-to-get-at places. Has $\frac{3}{8}$ " shaft, 2" length. Overall length of tool 4".
Cat. No. 9298 Net \$.48

(L) G-C COLOR TV TOOL—Used on convergence controls and others in color sets. The outer sleeve fits into the O.D. adjusting slot and the inner drive penetrates to the inside slot. Cat. No. 9299 Net \$1.33

(M) G-C RCA WRENCH FOR VHF CHANNEL SELECTOR—Tool is made to fit square headed set screws in RCA VHF Channel Selector gear assembly without removing chassis.
Cat. No. 6035 Net \$1.08

(N) G-C NEW TRANSISTOR I.F. CORE ALIGNMENT TOOL—One end square .055, opposite end rectangle nib. .047 x .078 to reach bottom slugs in iron cores.
Cat. No. 9440 11 $\frac{3}{4}$ " long Net \$.63

(O) G-C RCA ALIGNING TOOL—Made of $\frac{1}{2}$ " Butyrate rod, narrow screwdriver on one end

and screw nib inserted on other end.
Cat. No. 5003 Net \$.53

(P) G-C NO-METAL INSULATING ADJUSTMENT SCREW DRIVER—Made of black bone fibre. Indispensable for aligning all-wave sets.
Cat. No. 5004 7" long Net \$.48
LOW-LOSS POLYSTYRENE TYPE—Ideal for U.H.F. Sets.

(R) G-C NEUTRALIZING TOOL—Combination screw driver and $\frac{3}{16}$ " hex wrench. Approved by U. S. Army Signal Corps.
Cat. No. 5027 Net \$2.10

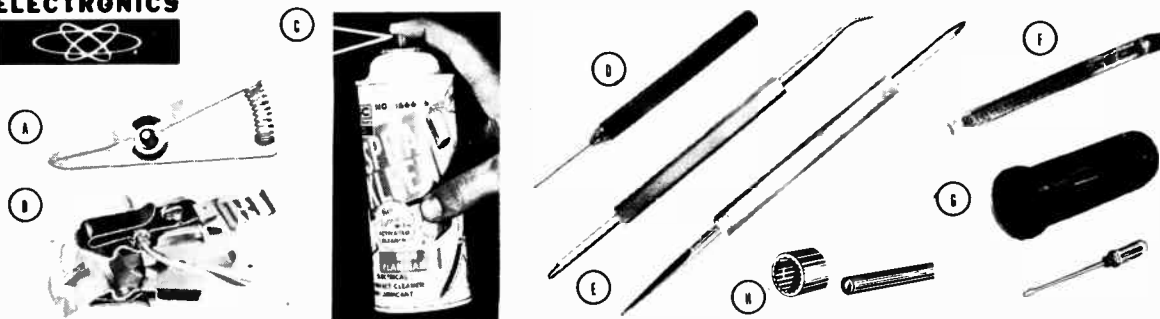
(S) G-C 4-in-1 ALIGNMENT TOOL—Consists of screw driver with metal nib, $\frac{1}{4}$ " hex wrench slotted and $\frac{3}{16}$ " hex wrench on other end.
Cat. No. 5014 Net \$.87

G-C 5-in-1 ALIGNMENT TOOL—Consists of screw driver with metal nib, $\frac{3}{16}$ " hex wrench, $\frac{1}{4}$ " hex wrench slotted, with metal screw driver on one end.
Cat. No. 5015 Net \$1.17

G-C 6-in-1 ALIGNMENT TOOL—Consists of screw driver with metal nib, $\frac{3}{16}$ " hex wrench, $\frac{1}{4}$ " hex side wrench and $\frac{1}{4}$ " hex end wrench slotted.
Cat. No. 5016 Net \$1.20



NEW ALIGNMENT TOOLS and Service Aids



(A) HEAT SINK

Protects Transistors and Diodes when soldering
Lightweight, first quality, firm grip. Aluminum will not stick to solder.

Cat. No. 9077 Net \$.36

(B) "QUICK SNAP" ANTENNA CLIP

For the Serviceman's Bench
Side clips allow fast connecting with antenna lines. A-N-P type, Pin type and Flat Terminal. Fits all leading sets.

Cat. No. 9030 Net \$.49

(C) NEW 16 OZ. SIZE SPRA-KLEEN

Works Up-Side Down, As Well As Right-Side Up!
Now Servicemen can Get to Those Hard-To-Reach Places.
Stops radio and TV control noise.

No need to dismantle the chassis to get at the parts when you use Spra-Kleen. Both cleans and lubricates contacts, controls, relays, switches, and other sliding contact devices in one fast operation.

Cat. No. 8666-16 Net \$1.95

(D) "PIGTAILER"

Makes connections quickly and easily
For lengthening pigtails, repairing broken leads, connections, tuners, printed circuits, to hold a part until solder is applied, or for making solderless connections, for testing and reconnecting, for replacing resistors and condensers. Will wind a "pigtail" that slips over 18-gauge wire. (Used in most Radio and TV work.)

Cat. No. 5077 Net \$1.20

(E) SOLDERING TOOLS

Won't Stick to Solder

Heat-treated tool steel, chrome-plated, won't stick to solder. Wraps or disconnect wire-wrapped soldered joints quickly. Double ended to ream solder from lug holes as well as for holding or prying parts to be soldered.

Cat. No. 9075 Straight Net \$.70

Cat. No. 9076 Angled Net \$.70

(F) HI-VOLTAGE GAUGE

Measures TV Voltage Pulse

No current drain during operation. Snaps directly to plate cap of any listed tubes. Push plunger in slowly till neon light glows. Voltage read on calibrated rod.

Cat. No. 8840 Net \$1.98

(G) TWISTMASTER

Twice the Leverage of the Bare Hand

Slips easily on any standard screw driver. Insulates against shock, prevents blisters.

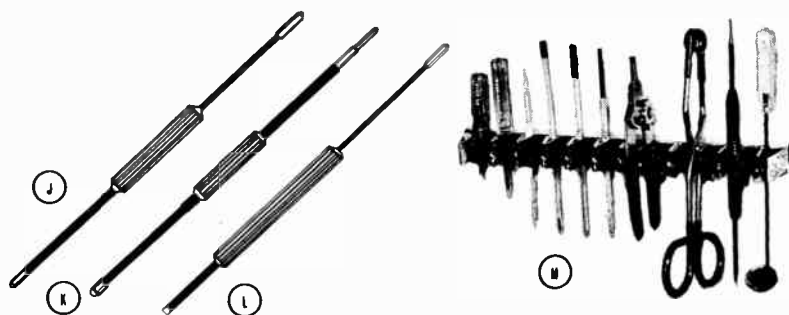
Cat. No. 9320 Net \$.29

(H) SHAFT EXTENSION INSULATOR

Standard TV Control — 21 Sure-Grip Ribs

Fits all shafts. Cut off worn ends, or to desired length.

Cat. No. 5150 Net \$.36



ALIGNMENT TOOLS

(J) DOUBLE END HEX CORE ALIGNER

Adjusts Coil Slugs
General purpose alignment tool as well as a coil slug adjuster. Both ends are .075" Hex, with one end undercut.

Cat. No. 9300 Net \$.48

(K) 3 IN 1 HEX CORE ALIGNER

Adjusts Coil Slugs
For Magnavox sets and others. Hex ends, one .100" with undercut shaft; other end is .075" and .100".

Cat. No. 9302 Net \$.48

(L) DOUBLE END ALIGNER

Adjusts Coil Slugs
For Coil slugs on Webcor and other sets. One end .075" Hex shaped with undercut shaft; other is a handy screwdriver.

Cat. No. 9304 Net \$.48

(M) TOP TEN TOOL KITS

10 most often used service shop tools plus an indispensable Tool Kaddy. Tool Kaddy protects tools.

Cat. No. 9525-X Net \$10.42



**SEND FOR FREE
GIANT CATALOG
OF THE COMPLETE
LINE OF GC TOOLS,
COMPONENTS, HARDWARE
CHEMICALS, SERVICE AIDS**

GC ELECTRONICS CO.
DIVISION OF
TEXTRON ELECTRONICS, INC.

ROCKFORD, ILLINOIS, U.S.A.



SERVICE AIDS



(A) DEGAUSSING COIL—For Color TV receivers. The G-C Degaussing Coil serves to demagnetize the magnetic fields set up in the color CRT due to the sensitivity of the tube.
Cat. No. 9317 Net \$17.97

(B) NEW G-C COLOR TV VIEWER—Has three transparent optical filters sealed in permanent plastic. Simplifies phase and matrix adjustments on color TV sets using a saturated color for signal. Makes adjustments possible in the home.
Cat. No. 9309 Net \$1.50

(C) G-C COLOR TV TEST BOX—Test color tubes with black-and-white test equipment. Extra long leads allow test box to be placed in front or rear of set.
Cat. No. 9318 Net \$5.10

(D) G-C COLOR TV CHEATER—A safety device for color TV receiver work. Used when applying Hi-voltage Probe through cheater.
Cat. No. 9650 Net \$.60

(E) COLOR TV TOOL—Used on convergence controls and others in color sets. The outer sleeve fits into the O.D. adjusting slot and the inner-drive penetrates to the inside slot.
Cat. No. 9293 Net \$1.33

(F) G-C HEXAGON KEY WRENCHES KITS and ASSORTMENTS
Cat. No. H1600-F Plastic Box of 4 Net \$.80
5029 Kit 5 Assorted Wrenches in Leatherette Case. \$1.05

(G) SPLINE KEY WRENCHES KITS and ASSORTMENTS
Cat. No. H1602-F Plastic Box of 4 Net \$.37
5070 Kit of 6 Assorted Wrenches in Leatherette Case .80

INDIVIDUAL WRENCHES
Cat. No. 5071 No. 4 Set Screw Net \$.12
5071-A No. 5 Set Screw .12
5072 No. 6 Set Screw .12
5073 No. 8 Set Screw, No. 4 Cap Screw .12
5074 No. 10 Set Screw, No. 5-6 Cap Screw .13

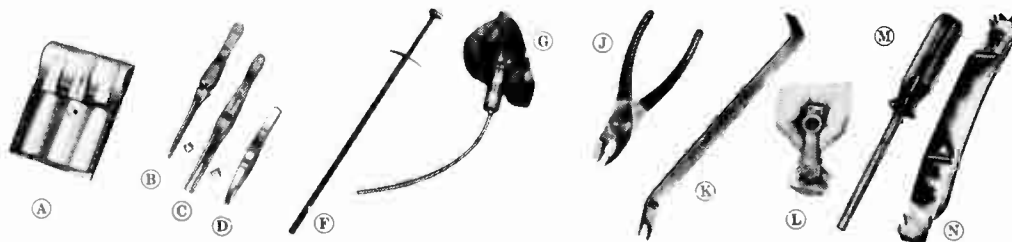
(H) G-C HEX-KEY AND SPLINE WRENCH KIT—A complete wrench kit for both hex and spline type screws. Twelve wrenches in an attractive leatherette case.
Cat. No. 5028 Net \$1.35

(J) G-C POCKET HEX KEY WRENCH SET—Seven popular size wrenches. .050 to 3/8" fitted in a steel case-like pocket knife blades.
Cat. No. 9124 Net \$1.83

(L) G-C PLASTIC BOXES—Clear plastic boxes for stocking small parts, screws, nuts, bolts, condensers, resistors, etc.
Cat. No. 8022 4"x4"x2 1/2" deep Net \$.40
8023 4"x4"x8" deep Net \$.77

(M) G-C LONG NOSE CLAMP PLIERS—Like an extra hand. Spring tension keeps the jaws closed unless handles are squeezed.
Cat. No. 5192 Straight Nose Pliers Net \$.75
5193 Curved Nose Pliers Net \$.82

(N) G-C TV-RADIO KNOB PULLER—Simply slip the G-C Puller behind the knob and pull it off. Saves time, the cabinet and the knob.
Cat. No. 23-954 Net \$.30



(A) G-C TWEEZER KIT—For the shop or laboratory to pick up and examine small parts, start screws and nuts, etc.
Cat. No. 7950 Net \$2.28

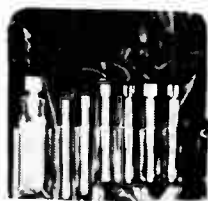
(B) G-C TWEEZERS
Cat. No. 7946 6 1/2" Self-closing tweezer opens when squeezed; serrated, blunt points. Net \$.78

(C) G-C TWEEZERS
Cat. No. 7947 6 1/2" Heavy-duty type, with slide lock feature; holds wires or parts tight like an extra finger; serrated, blunt points.
Net \$.90

(D) G-C TWEEZERS
Cat. No. 7948 4 1/4" Precision tweezer, narrow pointed ends for delicate work.
Net \$.52

(F) G-C HANDY PICK-UP TOOL—One of the handiest tools you can have in your home, shop, office or farm. Tool is 15 inches long.
Cat. No. 5089 Net \$.98

1. G-C TV 3-WAY ANTENNA KLIP—Buy them by the bag and have clips ready to sell and ready to install on TV sets.
Cat. No. 9015-X Bag of 10 Net \$1.43



2. G-C INTERCHANGEABLE HEX NUT DRIVER KIT—6 assorted nut drivers in a handy plastic case. Handle is non-inflammable amber plastic with a quick change chuck.
Cat. No. 9206 Net \$3.30

(G) G-C LONG-REACH TV AND RADIO LUBRICATOR—For radio and TV controls, bearings, phono motors, etc. Buy them by the pair—one for grease and one for light oil.
Cat. No. 8690 Net \$.53

(J) G-C NO-JOLT TOOL GRIPS—Modernizes old tools with new safety grip handles. Grease and oil resistant.
Cat. No. 5647 Small No-Jolt Plastic Tool Grips (1 pair) Net \$.23
5648 Medium No-Jolt Plastic Tool Grips (1 pair) .27
5649 Large No-Jolt Plastic Tool Grips (1 pair) .33

(K) G-C PRY-UP TUBE LIFTER—Handy tool for removing tight tubes. Saves the fingers and the tubes.
Cat. No. 9213 Net \$.30

(L) G-C 4-In-1 TUBE GADGET—Four tools in one. Pure rubber, will not break.
Cat. No. 9130 Net \$.92
(M) G-C NEW TV AND AUTO RADIO WRENCH—Special female slotted wrench to remove screws and stud screws from auto radios and backs of TV sets, etc.
Cat. No. 9211 Net \$1.08
(N) G-C NEW LOW LOSS TV LINE KLIP—A new all plastic clip with metal ends only. The best for UHF or fringe areas. Made of genuine polyethylene.
Cat. No. 9055 Net \$.15
9055-X Bag of 10 1.47

6. G-C DUAL SHEET METAL PUNCH—Punches holes for Tube Sockets and Condensers for hand or power operation. Two punches 7/8" and 1 1/2" for one price.
Cat. No. 9260 Net \$4.93
7. G-C DUAL SHEET METAL PUNCH JR.—Punch neat, clean holes in chassis for tube sockets, condensers and for mounting other components.
For 1/2" and 3/4" holes.
Cat. No. 9261 Net \$3.80

8. NEW G-C PRECISION 300-OHM TOOL—This specially designed tool cuts, slots, strips and crimps. Has shock-proof, oil resistant plastic grips.
Cat. No. 9220 Net \$4.05



SERVICE AIDS



G-C 7-PIN MINIATURE TEST SOCKET ADAPTER
Cat. No. 9247
Net \$1.65



G-C 8-PIN DCTAL TEST SOCKET ADAPTER
Cat. No. 9248
Net \$1.57



G-C TEST SOCKET ADAPTER KIT—This handy kit contains all 4 of G-C's Test Socket Adapters.
Cat. No. 9250
Net \$6.98



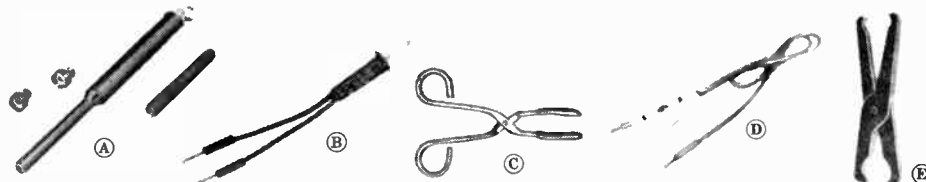
G-C 9-PIN MINIATURE TEST SOCKET ADAPTER
Cat. No. 9249
Net \$1.87



G-C DUD-DECAL TV TUBE TEST SOCKET ADAPTER—Designed for making measurements of voltage, resistance and video from the base of the picture tube. It is inserted between C.R. tube base and its socket.
Cat. No. 9251
Net \$1.95



G-C ANGLE ANODE LEAD—A better anode lead with special "Ozone Proof" rubber. Cat. No. 8637
Net \$4.42



(A) **G-C CONTROL GUN KIT**—Cleans and lubricates noisy volume controls. Constructed of solid aluminum—will not rust. Complete kit includes Gun, Adapter for extra long shanks, Adapter for 1/2-28 thread, and Auto Adapter for 3/8-28 thread.
Cat. No. 9285
Net \$4.50

Uses G-Control Kleener.
Cat. No. 65-16 16 oz. Bottle
65-G 1 Gallon
Net \$1.95
Net \$9.00

G-C CONTROL GUN—Designed to clean and lubricate noisy volume controls in one sure, fast and easy operation. Gun nozzle fits over the control shaft and screws securely over the control base threads.
Cat. No. 9280
Net \$3.75

G-C CONTROL GUN ADAPTERS—Aluminum—won't rust when used with normal electronic chemicals.

Cat. No. 9281 To fit control shafts with 1/2-28 thread, Net \$.50
9283 To fit control shafts with 3/8-28 thread, Net \$.50
9282 For use on controls with extra long shanks
Net \$.50

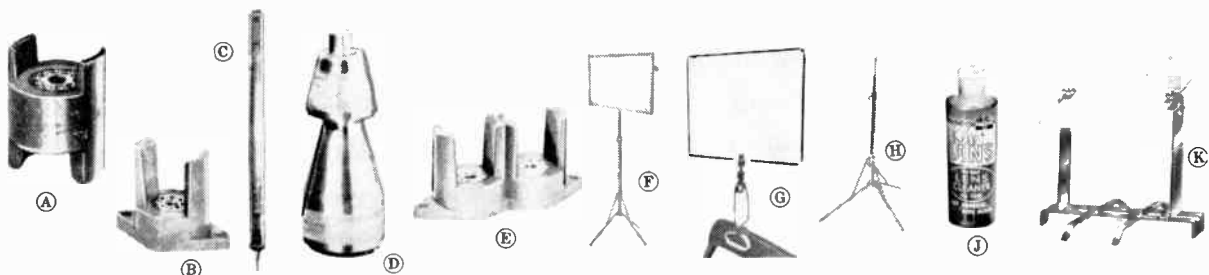
(B) **G-C NE-D-LITE**—A simple, safe, dependable electrical circuit tester—easy to use with a Neon Glow Lamp which varies in light intensity according to voltages. Traces all types of trouble, such as grounded lines, open circuits, short circuits, etc.
Cat. No. 5100
Net \$.45

(C) **G-C TUBE & PARTS EXTRACTOR**—Originally designed by the U. S. Signal Corps, as standard equipment. Skillfully constructed of spring steel, cadmium plated. Has rubber cushion on the prongs.
Cat. No. 5092
Net \$.98

(D) **G-C DANDY LITE TESTER**—Your hand touches the lead to only one side of the line for extra safety. A simple, dependable tester for tracing electrical circuits, grounded lines, shorts, etc.
Cat. No. 8585
Net \$.82

(E) **G-C SPEEDEX FUSE PULLERS**—Inexpensive—non-slip, fuse puller. Safe and handy for cartridge fuses.

Cat. No. 5525 Midget Size—for fuses 1/4" to 1/2" dia. Net \$.60
5526 Pocket Size—for fuses 1/2" to 1 1/2" dia. Voltages to 200 amps at 250 volts and 100 amps at 600 volts
Net \$1.30



(A) **G-C DUAL TUBE PIN STRAIGHTENER**—A handy, miniature pin straightener for 7-pin and 9-pin miniature tubes. Accurately machined metal inserts on either end of the tool body, each made of hardened metal to assure accuracy and long life.
Cat. No. 9092
Net \$1.27

(B) **G-C MINIATURE TUBE PIN STRAIGHTENER**—Precision-constructed steel die, designed for straightening pins on fragile miniature tubes of the 1S5, 6AK5, 9002 variety.
Cat. No. 5191 For 7-pin Min. Tubes Net \$.75
8105 For 9-pin Jumbo Tubes (red base) Net \$.75
8105 For 9-pin Jumbo Tubes (blue base) Net \$.75

(C) **G-C TV "HIGH-VOLT" SAFETY PROBE & TESTER**—A new handy tester for quickly checking TV high voltage circuits. Tester will glow when high voltage is okay.
Cat. No. 8836
Net \$2.13

(D) **G-C AMO MINIATURE TUBE PULLER**—AMO makes it possible to easily remove or insert miniature tubes such as 6AG5, 50B5, etc. It works on the suction and vacuum principle.
Cat. No. 5093 For 7-Pin Tubes Net \$1.30
8106 For 9-Pin Tubes Net \$1.30

(E) **G-C DUPLEX TUBE PIN STRAIGHTENER**—The handiest tube pin straightener for both miniature and jumbo miniature tubes of the 7- and 9-pin types.
Cat. No. 8655
Net \$1.50

(F) **G-C THIRD EYE DELUXE GLASS TV MIRROR**—Here's a deluxe TV service mirror for adjusting and servicing TV sets. It is made with an adjustable and collapsible telescoping stand and 12" x 10" glass mirror that avoids distortion of the image.
Cat. No. 8390 Third Eye Mirror, Stand
Net \$5.25

8391 Glass Mirror Only 2.97
8199 Soft Bag for Mirror 1.05

(G) **G-C TV PORTO MIRROR**—TV service mirror for adjusting rear controls and settings of TV sets. Supplied with a rubber lined spring clamp.
Cat. No. 8198 TV Metal Mirror, Spring Clamp
Net \$2.70

8199 Soft Bag for Mirror Net \$1.05

(H) **G-C TELEVISION MIRROR & EXTENSION LAMP COLLAPSIBLE STAND**—Handy metal collapsible and adjustable stand for No. 8391 mirror or for clamping on metal mirrors or extension lamps.
Cat. No. 8392
Net \$3.30

(I) **G-C KLEER LENS**—A superior lens cleaning fluid packaged in a handy plastic spray type container. This cleaner will make the transparent protection shield in front of the picture tube crystal clear.
Cat. No. 9081 6-oz.
Net \$.75

(K) **G-C "QUICK-RIG" RADIO-PHONO CHASSIS REPAIR CRADLE**—Complete 360° rotation to lock

chassis at best working angle. Clamps securely, makeshift setups, all metal.
Cat. No. 5212
Net \$7.50



G-C PHONO TURN-TABLE STAND—Stand raises the turntable about 15 inches above the bench so you can easily look under the mechanism to check it while in operation. Easily adjusted to all sizes and types of phono turntables. Sturdily made of steel.
Cat. No. 5205
Net \$4.95

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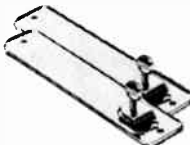


SERVICE AIDS ... COMPONENTS

G-C TV CHASSIS SERVICE HANDLES. Here's a safe way of carrying TV Chassis. Handles made of smooth tubular steel simply lock on to chassis as chassis is lifted. Handles will not slip off until released.
Cat. No. 9023 Per Pair



Net \$2.13



Cat. No. 9176 Per Pair

G-C TV CHASSIS SUPPORT. Prop chassis to easy working position on your bench or in the home. Simply slip it on the flange of chassis, tighten thumb screws and tilt chassis to position desired.

Net \$1.80

SPEEDEX STANDARD WIRE STRIPPER. This is the popular inexpensive Speedex model that will work on 90% for all stripping jobs. Blades are inter-changeable, hardened and precision ground to razor sharp edges.

| No. | For Sizes Listed Below |
|-------|--|
| 733 | 12 to 20 Wire |
| 733-A | 14 to 30 Wire |
| 733-B | 10 to 18 Wire |
| 733-C | 8 to 10 Wire |
| 733-D | 16, 18, 20, 22 Wires |
| 733-E | 14, 16, 18 Wires |
| 733-F | 10, 12, 14 Wires |
| 733-G | For No. 18 POSJ or Parallel Wire |
| 733-H | For 300 ohm TV and FM twin transmission line |
| 733-I | 10, 12, 14, 16, 18, 20, 22 Wire |
| 733-M | 10 to 20 Wire |
| 733-N | Straight Cutter Blades |

Cat. No. 733 Net \$4.77

SPEEDEX AUTOMATIC WIRE STRIPPER. Equipped with "Trig-O-Matic" Stay-Open feature. Stay-Open features keeps wires from being crushed.

| No. | For Sizes Listed Below |
|-------|--|
| 744 | 12 to 20 Wire |
| 744-A | 14 to 30 Wire |
| 744-B | 10 to 18 Wire |
| 744-C | 8 to 10 Wire |
| 744-D | 16, 18, 20, 22 Wire |
| 744-E | 14, 16, 18 Wire |
| 744-F | 10, 12, 14 Wire |
| 744-G | For No. 18 POSJ or Parallel Wire |
| 744-H | For 300 ohm TV and FM twin transmission line |
| 744-I | 10, 12, 14, 16, 18, 20, 22 Wire |
| 744-M | 10 to 20 Wire |
| 744-N | Straight Cutter Blades |

Cat. No. 744 Net \$5.93



SPEEDEX SPEED-O-MATIC WIRE STRIPPER. Fully automatic delayed return action to prevent crushing fine wires. The Speed-O-Matic combines the features of all Speedex Wire Strippers.

| No. | For Sizes Listed Below |
|-------|--|
| 766 | 12 to 20 Wire |
| 766-A | 14 to 30 Wire |
| 766-B | 10 to 18 Wire |
| 766-C | 8 to 10 Wire |
| 766-D | 16, 18, 20, 22 Wire |
| 766-E | 14, 16, 18 Wire |
| 766-F | 10, 12, 14 Wire |
| 766-G | For No. 18 POSJ or Parallel Wire |
| 766-H | For 300 ohm TV and FM twin transmission line |
| 766-I | 10, 12, 14, 16, 18, 20, 22 Wire |

| | |
|-------|------------------------|
| 766-M | 10 to 20 Wire |
| 766-N | Straight Cutter Blades |

Cat. No. 766 Net \$5.93

SPEEDEX WHIZ WIRE STRIPPER. All new economy model—a perfect all round general use wire stripper. Precision milled, hardened steel cutters.

| | |
|-------|---------------------------------|
| 788 | 3 Hole Blade, Gauges 12 thru 22 |
| 788-B | 3 Hole Blade, Gauges 10 thru 16 |
| 788-D | 4 Hole Blade, Gauges 14 thru 24 |
| 788-H | 300 ohm Blade for T win Lead-In |

Cat. No. 788 Net \$3.97

SPEEDEX WIRE STRIPPER KITS. Kits complete with Wire Strippers and seven different size blades neatly put up in a special permanent plastic box. Very handy kit for the tool box, home workshop, maintenance and production.

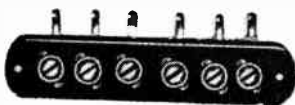
Cat. No. 733-K Standard Stripper Kit Net \$ 9.57

744-K Automatic Stripper Kit Net \$11.97

766-K Speed-O-Matic Stripper Kit Net \$11.97



ELECTRONIC COMPONENTS



(B) G-C SCREW TYPE TERMINAL STRIPS. Mounted on laminated bakelite strips, rigidly constructed, terminals will not turn and short.

| Contacts | | |
|-------------------|---|------------|
| Cat. No. 1772 | 2 | Net \$.08 |
| 1772-C (100-1772) | | 8.10 |
| 1773 | 3 | .12 |
| 1773-C (100-1773) | | 10.05 |
| 1774 | 4 | .15 |
| 1774-C (100-1774) | | 13.20 |
| 1775 | 5 | .17 |
| 1775-C (100-1775) | | 16.05 |
| 1776 | 6 | .22 |
| 1776-C (100-1776) | | 19.05 |
| 1777 | 7 | .25 |
| 1777-C (100-1777) | | 23.85 |
| 1778 | 8 | .30 |



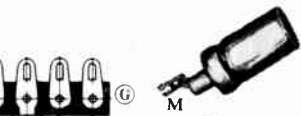
G-C STANDARD TERMINAL STRIPS.
Insulation 1/16" Thick, 3/8" Spacing.

| | | |
|-------------------|---------|------------|
| (C) Cat. No. 1781 | 1 Lug | Net \$.03 |
| 1781-C | 100 No. | 2.70 |
| (D) Cat. No. 1782 | 2 lugs | Net \$.03 |
| 1782-C | 100 No. | 2.70 |
| (E) Cat. No. 1783 | 3 lugs | Net \$.05 |
| 1783-C | 100 No. | 2.85 |
| (F) Cat. No. 1784 | 4 lugs | Net \$.05 |
| 1784-C | 100 No. | 3.90 |
| (G) Cat. No. 1785 | 5 lugs | Net \$.07 |
| 1785-C | 100 No. | 4.50 |



(M) G-C EXTENSION JACK & CONNECTOR. Special jack used in extending radio antenna cables and phonograph attachments.
Cat. No. 1744 Net \$.10
1744-C 100 \$8.93

(N) G-C HIGH VOLTAGE ANTI-CORONA TV SOCKETS. Eight-prong octal and nine-pin miniature sockets for use in high voltage circuits using the 1B3, 1AX2, 1AX2A, etc.



Cat. No. 9070 8-prong octal Net \$.53
9071 9-pin miniature .53

(O) G-C 9-PIN MINIATURE WAFER SOCKET. High quality plastic wafer socket, 9-pin type with phosphor bronze contacts. Standard 1/8" mounting centers.
Cat. No. 1543 9-pin Wafer Sockets Net \$.12
1544 9-pin Wafer Socket with Grounding Strap Net \$.13

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SOLDERING IRONS

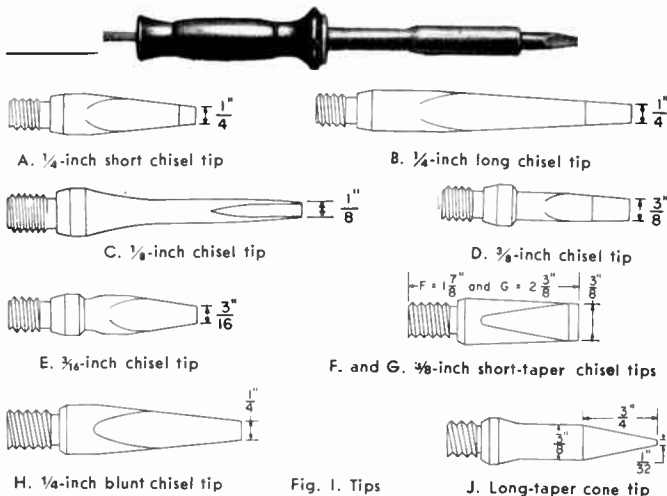
Equipped with Quick, Long-Life Calrod® Heaters
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ASK YOUR GENERAL ELECTRIC DISTRIBUTOR FOR A COPY OF BULLETIN GEC-1545.

HEAVY-PRODUCTION SOLDERING IRONS

(Listed by Underwriters' Laboratories)

6A160 Series — 75 to 140 Watts



| Soldering Iron, Less Tip | | | | | | Renewal Heater† | |
|--------------------------|-------|---------|--|------------------|------------------|-----------------|------------------|
| Cat. No. | Volts | Rating* | | List Price Each‡ | Standard Package | Cat. No. | List Price Each‡ |
| | | Watts | | | | | |
| 6A161 | 115 | 75 | | \$14.95 | 5 | 6A31 | \$4.50 |
| 6A162 | 115 | 100 | | 14.95 | 5 | 6A32 | 4.50 |
| 6A162G6 | 115 | 110 | | 14.95 | 5 | 7C342 | 4.50 |
| 6A162G3 | 115 | 125 | | 14.95 | 5 | 8A88 | 4.50 |
| 6A162G12 | 115 | 140 | | 14.95 | 5 | 7C474 | 4.50 |

* Also available for 230-volt operation. † Renewal heaters standard package is 5.

| Tips | | | | |
|-------------|--------------------|-----------|------------------|--------------------|
| Cat. No. | Tip Width (Fig. 1) | Type | List Price Each‡ | Standard Pkg. Qty. |
| 6808345AAP2 | A | Calorized | \$1.05 | 10 |
| 6851775P21 | A | Ironclad | 1.85 | 10 |
| 6808345AAP3 | B | Calorized | 1.75 | 10 |
| 6851775P22 | B | Ironclad | 3.55 | 10 |
| 111A4195P2 | C | Ironclad | 1.75 | 10 |
| 6851732P21 | D | Calorized | 1.05 | 10 |
| 6851732P22 | D | Ironclad | 1.85 | 10 |
| 9817171P22 | E | Ironclad | 1.85 | 10 |
| 111A4196P1 | F | Ironclad | 2.30 | 10 |
| 111A4196P2 | G | Ironclad | 2.75 | 10 |
| 40A100466P2 | H | Ironclad | 2.20 | 10 |
| 125A8448P1 | J | Ironclad | 1.80 | 10 |

Note: All of the interchangeable tips listed above will fit any iron in the 6A161 and 6A162 series.

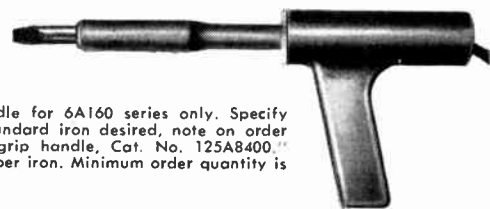
High efficiency and reserve-heat capacity make these General Electric soldering irons well-suited for continuous-production soldering as well as intermittent duty.

Quick, dependable heating provided by General Electric Calrod cartridge heating elements.

Ironclad tips for high-speed repetitive soldering last up to ten times as long as plain copper tips. Ironclad construction combines the fast heat transfer of copper and long wearing qualities of iron.

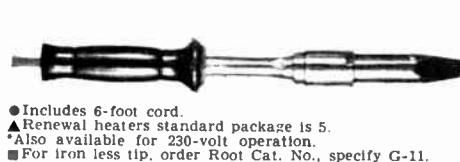
Calorized copper tips—For ordinary soldering requirements, these tips will last much longer than plain copper tips.

All copper parts are Calorized—Calorized surfaces retard the harmful effects of high temperature on copper.



Pistol-grip handle for 6A160 series only. Specify Cat. No. of standard iron desired, note on order "Except pistol-grip handle, Cat. No. 125A8400." Add \$1.30 List per iron. Minimum order quantity is six.

6A200 Series — 100 to 300 Watts

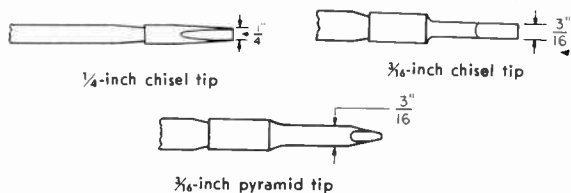


● Includes 6-foot cord.
▲ Renewal heaters standard package is 5.
* Also available for 230-volt operation.
■ For iron less tip, order Root Cat. No., specify G-11.

| Tip Size and Type | Soldering Iron, Including Tip■ | | | | | Renewal Heaters▲ | | Renewal Tips | | | |
|---------------------|--------------------------------|--------|---------|-----------|--------------------|------------------|----------|--------------|------------|--------------------|-----------|
| | Rating | Volts* | Watts | Cat. No.● | List Price Each, ‡ | Std. Pkg. | Cat. No. | List Price | Cat. No. | List Price Each, ‡ | Std. Pkg. |
| 3/4-in.—Calorized | 115 | 100 | 6A200 | | \$18.60 | 5 | 6A32 | \$4.50 | 6827994P21 | \$2.75 | 5 |
| 3/4-in.—Ironclad | 115 | 100 | 6A200G7 | | 21.75 | 5 | 6A32 | 4.50 | 8381902P21 | 5.00 | 5 |
| 1-in.—Calorized | 115 | 200 | 6A201 | | 21.85 | 5 | 9A77 | 6.15 | 6827994P22 | 4.00 | 3 |
| 1-in.—Ironclad | 115 | 200 | 6A201G7 | | 24.90 | 5 | 9A77 | 6.15 | 8381902P22 | 5.70 | 3 |
| 1 1/4-in.—Calorized | 115 | 300 | 6A202 | | 27.09 | 5 | 9A78 | 7.00 | 6827994P23 | 6.00 | 3 |
| 1 1/4-in.—Ironclad | 115 | 300 | 6A202G7 | | 29.70 | 5 | 9A78 | 7.00 | 8381902P23 | 7.70 | 3 |

MEDIUM-PRODUCTION SOLDERING IRONS

(Listed by Underwriters' Laboratories)



Solders easily in tight places because the thin, 3/16-inch diameter shank gets the 1/4-inch tip into places a regular iron can't reach. Reduces operator fatigue—Iron weighs only 8 1/2 ounces, is well balanced and has comfortable handle.

Produces uniformly strong soldered joints because iron's quick heat recovery produces enough heat for hard, continual use. Saves on maintenance—Fewer interruptions in production result because iron's sturdy construction and long-life ironclad tip eliminates need for frequent repairs.

Tip renewal is easy and inexpensive—Unscrow shank from handle and replace with new, low-cost assembly in seconds. New tips can be brazed to heater assembly if desired.

‡ Manufacturer's suggested resale price.



SOLDERING IRON (Complete)* 120 V, 60 W

| Cat. No. | Tip Dia. in Inches (All Ironclad Copper) | List Price Each‡ | Standard Package Quantity |
|----------|--|------------------|---------------------------|
| 6A273 | 1/4" Chisel | \$14.20 | 5 |
| 6A283 | 3/16" Pyramid | 14.20 | 5 |
| 6A283G23 | 3/16" Chisel | 14.20 | 5 |

* Lightweight industrial irons have Ironclad tips only. Price includes 6-foot Type SJ cord.

RENEWAL TIP AND HEATER

| Cat. No. | Tip Dia. in Inches (All Ironclad Copper) | List Price Each‡ | Standard Package Quantity |
|----------|--|------------------|---------------------------|
| 6A300 | 1/4" Chisel | \$6.95 | 5 |
| 6A301 | 3/16" Pyramid | 6.95 | 5 |
| 6A301G4 | 3/16" Chisel | 6.95 | 5 |

TIP ONLY

| Cat. No. | Tip Dia. in Inches (All Ironclad Copper) | List Price Each‡ | Standard Package Quantity |
|------------|--|------------------|---------------------------|
| 326A964P21 | 3/16" Chisel | \$1.80 | 10 |
| 326A964P22 | 3/16" Pyramid | 1.80 | 10 |
| 166V707P21 | 3/16" Chisel | 1.80 | 10 |

LIGHT TO MEDIUM-PRODUCTION MIDGET SOLDERING IRONS

(Listed by Underwriters' Laboratories)



6 volts; 25 and 45 watts (nominal rating)

Improves operator efficiency—Handles like a pencil, weighs only 1 3/4 oz.

Cuts maintenance costs—Ironclad tips last up to ten times longer than conventional tips.

Increases production—Heater is built into tip for quick heat recovery, fast heat transfer.

Tip renewal is easy, fast—Complete tip and heater assembly can be changed in five seconds.

IRONS WITH INTEGRAL TIP AND HEATER (Ironclad Tips)

| Handle and Cord Set | | | Tip and Heater Assemblies | | |
|------------------------------------|-------------|-------------------|---------------------------|----------|-------------------|
| Description | Cat. No. | List Price Each † | Description | Cat. No. | List Price Each † |
| For 2- and 4-tap transformers | 6D200 | \$3.65 | 1/4" chisel | 6D211 | \$4.05 |
| For transformer with 3-heat switch | 40B200435G2 | 4.15 | 1/4" cone | 6D213 | 4.05 |
| | | | 3/16" pyramid | 6D215 | 4.05 |
| | | | 3/16" chisel | 6D217 | 4.05 |

Note: Order tip and heater assembly and handle assembly separately.

IRONS WITH THREADED TIP HOLDER AND INTERCHANGEABLE TIPS

| Handle and Cord Set | | | Heater Assembly for threaded tips | | |
|-------------------------------|----------|-------------------|-----------------------------------|----------|-------------------|
| Description | Cat. No. | List Price Each † | Description | Cat. No. | List Price Each † |
| For 2- and 4-tap transformers | 6D200 | \$3.65 | 3" long | 6D219 | \$3.95 |
| | | | 4 1/4" long | 6D219G2 | 3.95 |

Note: Order heater assembly and handle assembly separately.

Heater Asm for Screw-on Tips*

| Cat. No. | List Price Each |
|----------|-----------------|
| 6D221 | \$4.05 |

*Uses same screw-on tips as Penline—120 heater assembly, Cat. No. 6D413. See table at bottom of page for descriptions and prices of interchangeable tips.

THREADED TIPS FOR 6A219 SERIES

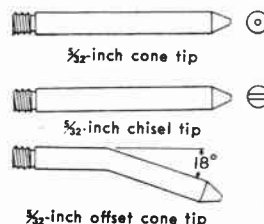
| Cat. No. | Tip Size (Inches) | List Price Each † |
|-------------|-------------------|-------------------|
| 40A100139P1 | 5/32 Cone | \$0.60 |
| 40A100139P2 | 5/32 Chisel | .60 |
| 40A100139P3 | 5/32 Offset Cone | .60 |

Material is nickel-plated copper 5/32-inch diameter.

45-WATT TIP AND HEATER

| Cat. No. | Tip Size (Inches) | List Price Each † |
|----------|-------------------|-------------------|
| 6A211G31 | 3/8 Chisel | \$4.60 |

Designed especially for users of Midget Irons who have some applications which require greater heat reserve or a higher repetitive soldering rate than can be supported by the standard tip and heater assemblies. Fits standard Midget handle.



TRANSFORMERS

Three transformer types are available for use with the General Electric Midget irons. The single-heat type provides 35 watts for ordinary requirements. The four-heat type permits a range of heats from 26, 28, 32 and 35 watts by changing the tap connections. The low position on the transformer with switch provides temperature (18 watts) suitable for printed circuits and idling, while the medium and high position provide 28 and 35 watts respectively.

| Description | Primary Voltage | Cat. No. | List Price Each † | Std Pkg Quantity |
|------------------------|-----------------|----------|-------------------|------------------|
| Single-heat tap | 115 | 6A362G2 | \$ 6.90 | 5 |
| Four-heat tap | 115 | 6A364G2 | 9.20 | 5 |
| Three-heat with switch | 115 | 6A434 | 17.00 | 5 |

*Single- and four-tap transformers are available with 230-volt primary in quantities of 24 or more. Specify catalog number desired and note on order "except with 230-volt primary."

Use of this transformer requires special cord set with plug. Order catalog number 9218864G8 for handle and cord set. List Price Each, \$4.15. In addition order tip and heater assembly desired.

SOLDERING IRON 6 V, 12 W

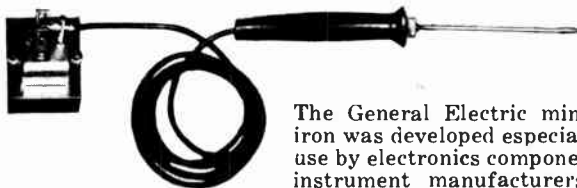
| Cat. No. | Description | Tip & Heater Dia. (In.) | Shank Length (In.) | List Price Each † | Std. Pkg. Qty. |
|----------|--|-------------------------|--------------------|-------------------|----------------|
| 6A428G3 | Complete iron including tip and heater assembly, 6-ft cord and transformer. | 1/8 Chisel | 3 | \$15 | 5 |
| 6A428G4 | | 1/8 Chisel | 6 | 15 | 5 |
| 6A428G7 | | 1/8 Pyramid | 3 | 15 | 5 |
| 6A428G8 | | 1/8 Pyramid | 6 | 15 | 5 |
| 6A428G5 | Complete iron, less transformer (includes tip, heater assembly, and 6-ft cord set with terminals). | 1/8 Chisel | 3 | 9 | 5 |
| 6A428G6 | | 1/8 Chisel | 6 | 9 | 5 |

RENEWAL TRANSFORMERS*

| Cat. No. | List Price Each † | Std. Pkg. Qty. |
|----------|-------------------|----------------|
| 6A430 | \$7.80 | 5 |

* Includes 6-foot integral cord set.

MINIATURE SOLDERING IRONS



The General Electric miniature iron was developed especially for use by electronics component and instrument manufacturers who are required to do production-line soldering of subminiature equipment, printed circuits, and instruments.

RENEWAL TIP AND HEATER ASSEMBLY

| Cat. No. | Tip Diameter (Inches) | Shank Length (Inches) | List Price Each † | Std. Package Quantity |
|----------|-----------------------|-----------------------|-------------------|-----------------------|
| 6A429G3 | 1/8 Chisel | 3 | \$5.50 | 5 |
| 6A429G4 | 1/8 Chisel | 6 | 5.50 | 5 |
| 6A429G5 | 1/8 Pyramid | 3 | 5.50 | 5 |
| 6A429G6 | 1/8 Pyramid | 6 | 5.50 | 5 |

PENLINE-120 SOLDERING IRONS

The rugged construction, long life, efficiency, and mobility of these irons—comparable in size to the Midget—make them ideally suited to continuous production line operation, intermittent operation, or maintenance work.



120 volts; 30, 40, and 45 watts

IRONS WITH INTEGRAL TIP AND HEATER (Ironclad tips)

| Handle and Cord Set | | | Tip and Heater Assemblies | | |
|--------------------------------|----------|-------------------|---------------------------|----------|-------------------|
| Description | Cat. No. | List Price Each † | Description | Cat. No. | List Price Each † |
| 2-conductor | 6D400 | \$3.00 | 30-watt 3/16" chisel | 6D410 | \$4.70 |
| 3-conductor with NEMA std plug | 6D400G2 | 4.00 | 30-watt 9/32" chisel | 6D411 | 4.80 |
| | | | 45-watt 3/8" chisel | 6D412 | 4.90 |

Note: Order tip and heater assembly and handle assembly separately.

IRONS WITH HEATER ASSEMBLY FOR SCREW-ON TIPS

| Handle and Cord Set | | | Heater Assembly for Screw-on-Tips | | |
|--------------------------------|----------|-------------------|-----------------------------------|----------|-------------------|
| Description | Cat. No. | List Price Each † | Description | Cat. No. | List Price Each † |
| 2-conductor | 6D400 | \$3.00 | 40-watt | 6D413 | \$4.00 |
| 3-conductor with NEMA std plug | 6D400G2 | 4.00 | | | |

Note: Order heater assembly and handle assembly separately.

SCREW-ON TIPS FOR HEATER ASSEMBLY 6D413

| Description | Cat. No. | List Price Each † | Description | Cat. No. | List Price Each † |
|----------------|-------------|-------------------|----------------|-------------|-------------------|
| Spade Tips | | | Long Chisel | | |
| 1/16" copper | 40A103350P1 | \$0.50 | 3/16" copper | 40A103357P1 | \$0.55 |
| 1/16" ironclad | 40A103350P2 | 1.40 | 3/16" ironclad | 40A103357P2 | 1.50 |
| 1/8" copper | 40A103352P1 | .50 | Pyramid Tips | | |
| 1/8" ironclad | 40A103352P2 | 1.40 | 1/8" copper | 40A103354P1 | .50 |
| Chisel Tips | | | 1/8" ironclad | 40A103354P2 | 1.40 |
| 1/16" copper | 40A103351P1 | .50 | 3/8" copper | 40A103359P1 | .50 |
| 1/16" ironclad | 40A103351P2 | 1.40 | 3/8" ironclad | 40A103359P2 | 1.40 |
| 1/8" copper | 40A103353P1 | .50 | Cone Tips | | |
| 1/8" ironclad | 40A103353P2 | 1.40 | 1/8" copper | 40A103355P1 | .50 |
| 3/16" copper | 40A103356P1 | .50 | 1/8" ironclad | 40A103355P2 | 1.40 |
| 3/16" ironclad | 40A103356P2 | 1.40 | | | |
| 3/8" copper | 40A103358P1 | .50 | | | |
| 3/8" ironclad | 40A103358P2 | 1.40 | | | |

ACCESSORIES (Minimum Order Quantity is 6)

3-Conductor Cord Set for 6A160 and 6A200—6 ft. length with NEMA standard plug. Specify Cat. No. of standard iron desired, note on order "Except with 3-cond. cord set with NEMA standard plug." Add \$1.20 List per iron.

Coiled Cord Set for 6A160, 6A200 and Medium-production Irons—6 ft. extended length, 2-conductor with standard plug. Specify Cat. No. of standard iron desired, note on order "Except with coiled cord set." Add \$1.35 List per iron.

† Manufacturer's suggested resale price.



CHASSIS PUNCHES

ROUND, SQUARE, "KEY," AND "D" TYPES

Greenlee Tool Co., Rockford, Illinois



NO. 730 ROUND PUNCH

Swiftly cuts clean, accurate holes in radio chassis for sockets, switches, controls and other equipment. Operates simply with an ordinary wrench for drive power . . . just insert in a small drilled hole and turn drive screw. No reaming or filing . . . hole is smooth, perfect. 27 sizes from 1/2" to 3" diameter. New Ball-Bearing Drive available for even easier, speedier operation.



NO. 731 SQUARE PUNCH

Cuts square or oblong openings as desired. Available in five sizes for making 1/2", 5/8", 3/4", 7/8", and 1" square holes. Drive screw fits into 1/2" hole, which can be drilled or made with 1/2" No. 730 GREENLEE Round Punch. Operates with an ordinary wrench for drive power. Individually packed.



NO. 732 "KEY" PUNCH

Quickly, easily cuts holes for keyed radio sockets. Operates on same principle as other GREENLEE Radio Chassis Punches . . . an ordinary wrench supplies the drive power. In five sizes to make openings of 15/32", 15/16", 11/64", 117/64", 121/64". Drive screw fits into 1/2" hole. Individually packed.



NO. 733 "D" PUNCH

Simplifies and speeds the work of making "D"-shaped openings for high-frequency, miniature tube sockets and other equipment using this type opening. Available in 1/2" and 3/8" sizes. Operates on same principle as other GREENLEE Radio Chassis Punches with an ordinary wrench supplying the drive power. Drive screw fits into 3/8" drilled hole. Individually packed.



NO. 734 DOUBLE "D" PUNCH

Quickly makes standard electrical receptacle openings. Cuts standard hole 1 3/8" dia. across parallel sides, 1 3/8" dia. across rounded ends. Simply insert into a 1/2" hole and turn with an ordinary wrench. Does the work in less than five minutes . . . eliminates all tedious hand filing . . . gives a smooth, perfect opening.

PRICES . . . Nos. 730, 731, 732, 733, 734

No. 730 ROUND PUNCH

| Size | Price | Size | Price |
|---------|--------|--|--------|
| 1/2" | \$2.60 | 1 3/4" | \$5.50 |
| 9/16" | 2.60 | 1 7/8" | 6.85 |
| 5/8" | 2.60 | 2" | 7.40 |
| 1 1/16" | 2.60 | 2 1/8" | 11.00 |
| 3/4" | 2.60 | 2 1/4" | 7.95 |
| 13/16" | 2.60 | 2 1/2" | 13.00 |
| 7/8" | 2.60 | 2 3/4" | 18.00 |
| 15/16" | 2.85 | 2 5/8" | 12.50 |
| 1" | 2.85 | 3" | 25.00 |
| 1 1/16" | 3.00 | Following sizes also available with larger drive screw for cutting thicker metals (No. 730X) | |
| 1 1/8" | 3.00 | | |
| 1 5/32" | 3.00 | | |
| 1 3/16" | 3.00 | | |
| 1 7/32" | 5.50 | | |
| 1 1/4" | 3.00 | | |
| 1 3/8" | 3.60 | | |
| 1 1/2" | 4.10 | | |
| 1 5/8" | 4.85 | | |
| 1 3/4" | 5.50 | | |

No. 731 SQUARE PUNCH

| Size | Price | Size | Price |
|------|-------|------|--------|
| 1/2" | 4.85 | 7/8" | \$6.55 |
| 5/8" | 5.00 | 1" | 6.80 |
| 3/4" | 5.70 | | |

No. 732 "KEY" PUNCH

| Size | Price | Size | Price |
|---------|-------|----------|--------|
| 15/32" | 5.00 | 1 1/64" | \$6.55 |
| 15/16" | 5.00 | 1 21/64" | 6.90 |
| 1 1/64" | 5.80 | | |

No. 733 "D" PUNCH

| Size | Price | Size | Price |
|------|-------|------|--------|
| 1/2" | 4.50 | 5/8" | \$4.75 |

No. 734 DOUBLE "D" PUNCH

| Size | Price |
|-----------------|---------|
| 1 1/8" x 1 3/8" | \$32.00 |

TOOLS FOR CRAFTSMEN
GREENLEE KNOCKOUT PUNCHES AND DRIVERS

Greenlee Tool Co., Rockford, Illinois



No. 735 KNOCKOUT PUNCH SET \$11.60

Designed primarily for the electrical trade to permit fast, easy enlarging of knockouts and cutting of holes for conduit in metal boxes and cabinets. Also excellent for automobile work where holes are needed for heater pipes and other accessories. Simply insert the tool in a knockout or small drilled hole and give the screw a few turns with an ordinary wrench. No. 735 set has four punches for cutting $\frac{7}{8}$, $1\frac{1}{32}$, $1\frac{11}{32}$, $1\frac{11}{16}$ -inch holes for $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$ -inch conduit. Set is neatly packed in leather case illustrated. Weight, $2\frac{1}{2}$ lb.

Heavy-Duty Drive for $\frac{1}{2}$ " punch \$1.40

To increase length of service of the $\frac{1}{2}$ -inch Knockout Punch in cutting $\frac{7}{8}$ -inch holes in heavier gauge sheet metals, the No. KR5 Drive Screw with No. KR4 Drive Nut illustrated is recommended. Weight, $\frac{1}{4}$ lb.



No. 737 KNOCKOUT PUNCH SET \$12.50

Similar to the No. 735 set, but consists of only two punches for cutting holes to accommodate $1\frac{1}{2}$ " and 2" conduit. Packed in leather case. Weight, $3\frac{1}{2}$ lb.



KNOCKOUT PUNCHES
No. 738 for $2\frac{1}{2}$ " conduit \$16.25
No. 739 for 3" conduit . . \$22.00

For cutting holes to accommodate $2\frac{1}{2}$ " and 3" conduit. Design is similar to that of smaller GREENLEE Knockout Punches: insert in a knockout or drilled hole and turn drive nut with an ordinary wrench. Packed and sold individually. Weight, No. 738, $4\frac{1}{2}$ lb. No. 739 $6\frac{1}{2}$ lb.

KNOCKOUT PUNCHES

- No. 741 for $3\frac{1}{2}$ " conduit . . \$43.00**
- No. 742 for 4" conduit . . . \$53.00**
- No. 743 for 5" conduit . . . \$80.00**



For quickly making smooth openings for $3\frac{1}{2}$ ", 4" and 5" conduit. Hole is clean, no filing of burrs necessary. Operation is similar to that of other GREENLEE Knockout Punches. Simply insert in hole for 1" conduit and turn drive nut with an ordinary wrench. Weights, No. 741, $10\frac{3}{8}$ lb; No. 742, $12\frac{1}{8}$ lb; No. 743, $17\frac{3}{8}$ lb.

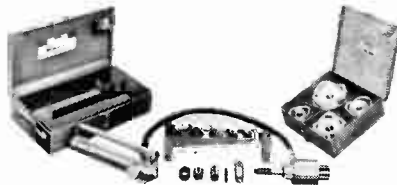
HYDRAULIC PUNCH DRIVER AND SETS



Just a few easy strokes on the handle of the GREENLEE No. 7646A Hydraulic Knockout Punch Driver and the punch slices cleanly through 10-gauge metal. Handy driver develops 11 tons of ram force. Use it with all GREENLEE Knockout Punches for conduit $\frac{1}{2}$ " to 5". Comes complete with hydraulic pump, 3-foot hose, one ram, adapter screws, die sleeves, and metal carrying box.

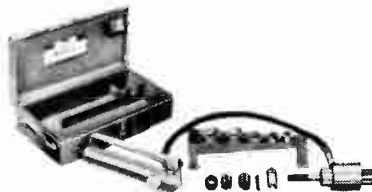


No. 7646 A
HYDRAULIC KNOCKOUT PUNCH DRIVER . . . \$100.00



SET No. 7310
\$233.50

Hydraulic hand pump, hose, complete drive, and ten punches and dies for $\frac{1}{2}$ " through 4" conduit, plus two metal carrying cases.



SET No. 7306
\$123.50

Hydraulic pump, six punches and dies for $\frac{1}{2}$ " to 2" conduit, plus metal carrying case.



SET No. 7304 . . . \$110.00
 Four knockout punches and dies for $2\frac{1}{2}$ ", 3", $3\frac{1}{2}$ ", and 4" conduit in metal carrying case.



ELECTRIC SOLDERING IRONS



VOLTAGE RANGE: 6 to 250 OPERATES IDENTICALLY ON A.C. OR D.C., ANY CYCLE
STANDARD VOLTAGES 110/120, 121/130, 220/250 SPECIFY VOLTAGE ON ORDER

Equipped with flexible 6-ft. approved Neoprene rubber heater cord, which is water-proof, kink-free, and resistant to oil, abrasion and heat. Nickel-chromium replaceable heating elements, insulated with finest mica, protected by rugged outer housing. Replaceable tips.

PLUG-TIP IRONS



| No. | Watts | Tip Dia. | Ship. Wt. |
|------|-------|----------|-----------|
| P70 | 80 | 3/8" | 1 1/8 lb. |
| P100 | 100 | 3/8" | 1 3/8 lb. |
| P125 | 130 | 3/8" | 1 5/8 lb. |
| P150 | 150 | 3/8" | 1 7/8 lb. |
| P153 | 175 | 3/8" | 1 7/8 lb. |
| P151 | 175 | 1/2" | 1 9/8 lb. |
| P200 | 200 | 5/8" | 2 3/8 lb. |
| P250 | 250 | 5/8" | 2 3/8 lb. |



| | | | |
|-------|-----|--------|-----------|
| P-300 | 300 | 7/8" | 3 LB. |
| P-550 | 550 | 1 1/8" | 4 3/8 LB. |

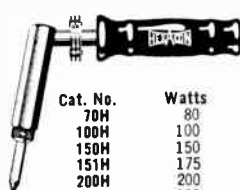
SUPER-POWERED IRONS

HIGHER SPEED SMALLER TIPS



| No. | Watts | Tip Dia. | Ship. Wt. |
|------|-------|----------|-----------|
| P114 | 100 | 1/4" | 1 3/8 lb. |
| P154 | 150 | 1/4" | 1 1/2 lb. |
| P214 | 200 | 1/4" | 2 1/8 lb. |
| P238 | 200 | 3/8" | 2 1/4 lb. |
| P212 | 200 | 1/2" | 2 1/4 lb. |
| P338 | 300 | 3/8" | 2 3/4 lb. |

HATCHET TYPE IRONS



Perfect Balance
Less Fatigue
See What You
Solder

| Cat. No. | Watts | Tip Dia. | Ship Wt. |
|----------|-------|----------|------------|
| 70H | 80 | 3/8" | 1 3/8 lbs. |
| 100H | 100 | 3/8" | 1 1/2 lbs. |
| 150H | 150 | 3/8" | 1 5/8 lbs. |
| 151H | 175 | 1/2" | 1 5/8 lbs. |
| 200H | 200 | 5/8" | 2 1/4 lbs. |
| 300H | 300 | 7/8" | 3 lbs. |

SCREW TIP IRONS



| Cat. No. | Watts | Tip Dia. | Ship Wt. |
|----------|-------|----------|----------|
| 50 | 50 | 1/8" | 1 LB. |



| | | | |
|-----|-----|------|-----------|
| 60 | 60 | 1/2" | 1 1/8 LB. |
| 85 | 90 | 1/2" | 1 1/8 LB. |
| 120 | 120 | 5/8" | 1 3/8 LB. |
| 130 | 130 | 7/8" | 1 1/2 LB. |
| 170 | 175 | 1" | 2 1/4 LB. |



| | | | |
|-----|-----|--------|-----------|
| 225 | 250 | 1 1/8" | 2 3/4 LB. |
| 350 | 500 | 1 5/8" | 4 3/8 LB. |
| 500 | 350 | 1 3/8" | 3 1/2 LB. |
| 700 | 700 | 1 3/4" | 5 5/8 LB. |

SUPER-PENCIL IRONS

HOT TIP

Weights only 2 oz.



COOL HANDLE

Short Reach 3"

All the advantages of a Soldering Pencil, but a full-fledged industrial soldering iron with nickel-chromium mica-wound element. Tiny tips outperform irons with larger tips and higher wattages.

| Cat. No. | Watts | Tip Dia. | Ship. Wt. |
|----------|-------|----------|-----------|
| 25S | 25 | 1/4" | 1/2 lb. |
| 25S20 | 20 | 1/8" | 1/2 lb. |
| 25S30 | 30 | 1/8" | 1/2 lb. |
| 25S35 | 35 | 1/8" | 1/2 lb. |
| 25S50 | 50 | 1/8" | 1/2 lb. |
| 26S | 30 | 3/16" | 1/2 lb. |
| 26S35 | 35 | 3/16" | 1/2 lb. |
| 26S40 | 40 | 3/16" | 1/2 lb. |
| 26S50 | 50 | 3/16" | 1/2 lb. |

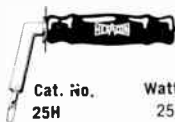
FASTEST AND MOST DURABLE PENCIL IRON. Weighs but 2 oz.

| | | | |
|--------|----|------|---------|
| 24S* | 50 | 1/4" | 1/2 lb. |
| 24S* | 40 | 1/4" | 1/2 lb. |
| 24S60* | 60 | 1/4" | 1/2 lb. |

*Standard equipment XTRAOUR LONG-LIFE TIP

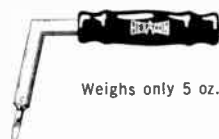
BANTAM HATCHET IRONS

PERFECT BALANCE FOR INACCESSIBLE PLACES



Weights only 3 oz.

| Cat. No. | Watts | Tip Dia. | Ship. Wt. |
|----------|-------|----------|-----------|
| 25H | 25 | 1/8" | 1/2 lb. |
| 25H35 | 35 | 1/8" | 1/2 lb. |
| 25H50 | 50 | 1/8" | 1/2 lb. |
| 26H | 30 | 3/16" | 1/2 lb. |
| 26H35 | 35 | 3/16" | 1/2 lb. |
| 26H50 | 50 | 3/16" | 1/2 lb. |
| 24H | 50 | 1/4" | 1/2 lb. |
| 24H40 | 40 | 1/4" | 1/2 lb. |
| 24H60 | 60 | 1/4" | 1/2 lb. |



Weights only 5 oz.

| Cat. No. | Watts | Tip Dia. | Ship. Wt. |
|----------|-------|----------|-----------|
| 30H** | 60 | 1/4" | 1/2 lb. |
| 30H40** | 40 | 1/4" | 1/2 lb. |
| 30H50** | 50 | 1/4" | 1/2 lb. |
| 30H70** | 70 | 1/4" | 1/2 lb. |
| 30H75** | 75 | 1/4" | 1/2 lb. |

**Extra 1/8" tip furnished with each iron.

HEXACON HORNET Model H10



WORLD'S SMALLEST INDUSTRIAL SOLDERING IRON For Micro-Electronic Soldering

Cat. No. H10K Kit (Iron with 2 tips and TIP CLEANING SPONGE)
NOTE: The addition of Tip Cleaning Sponge is provided without any increase in cost.
Cat. No. H10 Iron less tip
Iron with 3-wire cord & NEMA plug available.
Cat. No. 91—Package of 12 Tip Cleaning Sponges in container for H10 Miniature Iron.

- Smallest Iron — Only 5 7/8"
- Smallest Tip Diameter — 1/32"
- Shortest Distance from Work — 1 1/8"
- Lowest Wattage — 12 Watts
- Hot Tip Gets In and Out Fast
- No Damage to Insulation
- Fastest Working Temperature
- Lightweight

DUROTHERM Non-Freezing Long-Life Tips 1/32", 1/16", 1/8"

Gets into tight places. Plastic handle, cooled thru ventilated design and concave stainless steel which reflects heat away from hand.

PINPOINT SOLDERING IRONS



FOR PINPOINT ACCURACY ON PRECISION SOLDERING

Long Reach 4 1/2" (Weigh Only 3 oz.)

| Cat. No. | Watts | Tip Dia. | Ship. Wt. |
|----------|-------|----------|-----------|
| P25 | 25 | 1/16" | 1/2 lb. |
| P2530 | 30 | 1/8" | 1/2 lb. |
| P2535 | 35 | 1/8" | 1/2 lb. |
| P2550 | 50 | 1/8" | 1/2 lb. |

| | | | |
|-------|----|-------|---------|
| P26 | 30 | 3/16" | 1/2 lb. |
| P2635 | 35 | 3/16" | 1/2 lb. |
| P2640 | 40 | 3/16" | 1/2 lb. |
| P2650 | 50 | 3/16" | 1/2 lb. |

| | | | |
|-------|----|------|---------|
| P24 | 50 | 1/4" | 1/2 lb. |
| P2440 | 40 | 1/4" | 1/2 lb. |
| P2460 | 60 | 1/4" | 1/2 lb. |

| | | | |
|---------|----|------|---------|
| P30** | 60 | 1/4" | 1/2 lb. |
| P3040** | 40 | 1/4" | 1/2 lb. |
| P3050** | 50 | 1/4" | 1/2 lb. |
| P3070** | 70 | 1/4" | 1/2 lb. |
| P3075** | 75 | 1/4" | 1/2 lb. |

**Extra 1/8" tip furnished with each iron.

INSTANT SOLDER GUNS

Solders in seconds. Weight only 8 oz., because it has no heavy, bulky transformer. Heat right in sturdy lifetime tip, which cannot bend or wear. Ideal for intermittent soldering. 120 volts, AC-DC, any cycle.

Model G14 150 watts has 1/4" tip.

Model G148 150 watts has 1/8" tip.

Model G14K Kit has Model G14 solder gun, cutting tip, smoothing tip, core solder, sandpaper.



3-CONDUCTOR CORD (with ground wire) Safe For Transistor Circuits

Ground wire contact screw standard equipment on all HEXACON irons. facilitates a change-over to 3-conductor grounded cord at any time without returning irons to factory.

All irons are available factory equipped with 3-wire cord and 3-wire plug; or less plug with ends stripped ready for assembly to your own plug.

Also 3-wire cords with or without plug may be ordered separately for installation by user.

Unless otherwise specified 3-wire cord sets with moulded on plug will be furnished.

All standard 3-wire plugs available, to be attached to cord.



LONG-LIFE SOLDERING TIPS

OUTLAST COPPER TIPS UP TO 20 TO 1



THE WORLD'S LEADING PRODUCER
OVER 1,000 SIZES AND SHAPES

MOST MODERN TIP COATING PLANT
400,000 TIPS CARRIED IN STOCK

ADVANTAGES No filing or costly tip changes because there is no pitting or erosion. Original shape is maintained. Tips always perform "like new"—deliver the same heat consistently for more uniform joints. Overall cost is greatly reduced.

IRON COATED

HEXCLAD—LAST UP TO 10 TIMES LONGER THAN COPPER TIPS

A heavy durable coating of Iron Alloy over copper base on all exposed surfaces. Inserted part also has a protective coating which is sufficiently thin so that good heat transfer to the tip is maintained.

IRON COATED AND IMMUNIZED

XTRADUR—LAST UP TO 20 TIMES LONGER THAN COPPER TIPS

Multi-coated for extra long wear by a new exclusive process which immunizes shank of tip from solder, thus preventing adhering of solder, except on working surface at end of tip—prevents creeping of solder into tip hole and spilling of solder on components.

IRON COATED AND IMMUNIZED

DUROTHERM (PAT. PENDING)
Non-Freezing Tips

For HI-TEMPERATURE Irons. Anti-corrosion design absolutely prevents tips from sticking. The most wear-resistant yet developed. No need to remove tips daily to prevent sticking. Minimum heat delivery loss. Have XTRADUR multi-coated, immunized features.

BASIC TIP SHAPES—YOUR SPECIAL TIPS QUOTED ON REQUEST—FIT ALL MAKES



HEXCLAD, XTRADUR AND DUROTHERM TIPS AVAILABLE IN ALL CATALOG NUMBERS LISTED BELOW

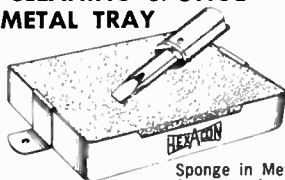
| DIMENSIONS | STYLE OF POINT | TIP NO. | DIMENSIONS | STYLE OF POINT | TIP NO. | DIMENSIONS | STYLE OF POINT | TIP NO. | DIMENSIONS | STYLE OF POINT | TIP NO. | | | | | |
|---|----------------------|---------------------|--|---------------------|---------|---|---|-----------------|---|--|---------------------------------|---|---|--|-----------------|--------|
| 1/8" x 2 1/4" Fit Iron Nos. 25S, P25, 25H | Pyramid | HT2480 | 1/4" x 2 3/4" Fit Iron Nos. P30, 30H | Pyramid | HT2520 | 3/8" x 4 9/16" Fit Iron Nos. P100, P150, P238, P338, 100H, 150H | Pyramid | HT2550 | 5/8" x 4" Fit Iron Nos. P125, P200, 200H, P250 | Pyramid | HT2570 | | | | | |
| | Chisel, short | HT2490 | | Chisel, short | HT2530 | | Chisel, short | HT4870 | | Chisel, short, blunt | HT2630 | | | | | |
| | Chisel, long | HT3760 | | S-chisel, Wide | HT2540 | | Chisel, long | HT1510 | | Semi-chisel, N | HT3230 | | | | | |
| | Semi-chisel | HT5600 | | S-chisel, N | HT4260 | | Semi-chisel, W | HT2330 | | Semi-chisel, thin | HT1830 | | | | | |
| | Conical, blunt | HT2220 | | Conical, sharp | HT1310 | | Conical, sharp | HT2630 | | S-chis, Lg. Taper | HT4440 | | | | | |
| | Conical, sharp | HT3310 | | Pyramid, TT 1/4" | HT2640 | | Conical, blunt, Sm | HT1140 | | Conical, blunt | HT2030 | | | | | |
| | Round, bevel | HT6380 | | Chisel, Sh, TT 1/2" | HT2640 | | Conical, blunt, M | HT2400 | | S-chis, Lg, Taper | HT4460 | | | | | |
| | Chisel, TT 1/4" | HT3610 | | Chisel, M, TT 1/4" | HT3580 | | Conical, blunt, L | HT2450 | | S-chis, N, TT 3/8" | HT4120 | | | | | |
| | R. B., TT 1/4" | HT8930 | | Chisel, Lg, TT 1/2" | HT6850 | | Semi-chisel, W | HT2450 | | S-chis, N, TT 3/8" | HT4120 | | | | | |
| | R. B., TT 3/32 | HT1040 | | Conical, TT 1/4" | HT4520 | | Pyramid, TT 1/4" | HT2650 | | Chisel, Sh, TT 1/4" | HT2680 | | | | | |
| Conical, bent | HT2210 | Conical, TT 3/8" | HT5800 | Chisel, Lg, TT 1/4" | HT3350 | Chisel, Lg, TT 1/4" | HT3350 | | | | | | | | | |
| RB, groove | HT5580 | Round, bevel | HT4730 | S-chis, W, TT 1/4" | HT1770 | S-chis, N, TT 1/4" | HT3730 | | | | | | | | | |
| 3/16" x 2 1/4" Fit Iron Nos. 26S, P26, 26H | Pyramid | HT2510 | 1/4" x 3" Extra long for P30, 30H Also for competitive makes | Semi-chisel, W | HT4680 | 3/8" x 4" Fit Iron Nos. P100, P150, P238, P338, 100H, 150H; Also other makes | Chisel, Lg, TT 1/4" | HT1450 | 7/8" x 4 3/4" Fit Iron Nos. P300, 300H | Pyramid | HT2600 | | | | | |
| | Chisel, short | HT2940 | | Semi-chisel, N | HT2990 | | S-chis, Sh, M | HT9180 | | Chisel, short | HT2610 | | | | | |
| | Chisel, long | HT1930 | | S-chisel, N, Lg | HT3280 | | Semi-chisel, thin | HT3650 | | Semi-chisel, W | HT1790 | | | | | |
| | Semi-chisel, N | HT2070 | | Conical, bevel | HT4530 | | S-chis, Lg, N | HT3700 | | Conical, blunt | HT2090 | | | | | |
| | Conical, sharp | HT1900 | | Chisel, Lg, TT 3/2" | HT2340 | | Round, bevel | HT4300 | | S-chis, TT 3/8" | HT8020 | | | | | |
| | Conical, blunt | HT2140 | | Chisel, Lg, TT 1/8" | HT4870 | | S-chis, N, TT 1/4" | HT3190 | | Pyramid | HT7680 | | | | | |
| | Conical, sharp | HT2810 | | Chisel, Lg, TT 1/8" | HT5190 | | Chisel, N, Sh, TT 1/4" | HT4810 | | Chisel, TT 3/8" | HT5390 | | | | | |
| | Pyramid, TT 1/4" | HT2880 | | Conical groove | HT3620 | | 1/4" x 4 1/2" Fit Irons P114, P154, P214 | Pyramid, long | | HT5660 | 1 1/8" x 5 1/4" Fits No. 500 | Chisel | HT262X | | | |
| | Chisel, TT 1/4" | HT2900 | | Pyramid, long | HT5630 | | | Chisel, long | | HT4960 | | Semi-chisel | HT229X | | | |
| | S-Chisel, N, TT 1/4" | HT2900 | | Semi-chisel, W | HT1880 | | | Semi-chisel, N | | HT4940 | | Pyramid | HT233X | | | |
| Conical, TT 1/4" | HT4780 | Conical, blunt | HT3620 | Chisel, Lg, TT 3/8" | HT4950 | | | | | | | | | | | |
| R.B., TT 1/4" | HT2200 | Pyramid, TT 1/4" | HT4140 | Chisel, Lg, TT 1/4" | HT2770 | | | | | | | | | | | |
| 1/4" x 2 1/4" Fit Iron Nos. 24S, P24, 24H | Pyramid | HT3250 | 1/4" x 3 3/4" Extra long for P30, 30H; also for competitive makes | Conical, sharp | HT6260 | 3/8" x 3 3/4" Fit Iron Nos. P70, 70H; Also fit other makes | | Pyramid | HT2540 | 1/2" 1/2" 3/8" 1/2" 1" 1 1/8" 1 1/4" 1 1/2" 1 3/4" 1 1/2" | | 1/4-20 1/4-18 3/16-18 1/2-13 1/2-13 3/8-11 1/2-11 3/8-11 1/2-11 3/8-11 | 50 60 and 85 120 130 130 175 220 350 500 700 | HT267X HT268X HT269X HT270X HT271X HT272X HT273X HT274X HT275X | | |
| | Chisel, short | HT5530 | | Conical, long | HT6260 | | | Chisel, short | HT4880 | | | | | | Chisel, short | HT4880 |
| | Semi-chisel, W | HT3130 | | Semi-chisel, W | HT6260 | | | Conical, blunt | HT3090 | | | | | | Semi-chisel, W | HT5100 |
| | Semi-chisel, M | HT3970 | | Pyramid, TT 1/4" | HT6260 | | | Conical, S-chis | HT4580 | | | | | | Conical, sharp | HT3090 |
| | Semi-chisel, N | HT4170 | | S-chis, TT 1/2" | HT6980 | | | Ball Point | HT5290 | | | | | | Conical, S-chis | HT4580 |
| | Conical, blunt | HT4180 | | Chisel, Lg, TT 1/4" | HT6030 | | S-chis, N, TT 1/4" | HT3900 | S-chis, N, TT 1/4" | | HT3900 | | | | | |
| | Round, bevel | HT1020 | | Chisel, Lg, TT 3/8" | HT3910 | | Chisel, N, Sh, TT 1/4" | HT4810 | Chisel, Sh, TT 1/4" | | HT5810 | | | | | |
| | Conical, S-chisel | HT5880 | | Chisel, Lg, TT 1/2" | HT6030 | | Chisel, Lg, TT 1/4" | HT4980 | Chisel, Lg, TT 1/4" | | HT4980 | | | | | |
| | Chisel, TT 1/4" | HT6910 | | Conical, bevel | HT2770 | | S-chis, W, TT 1/4" | HT2910 | S-chis, W, TT 1/4" | | HT2910 | | | | | |
| | S-chis, Lg, TT 1/8" | HT4510 | | Pyramid | HT2580 | | Chisel, short | HT2590 | Chisel, Lg, TT 3/8" | | HT4970 | | | | | |
| Chisel, L, TT 1/2" | HT3240 | Semi-chisel, W | HT2300 | Conical, bevel | HT4600 | | | | | | | | | | | |
| Chisel, S, TT 1/2" | HT5130 | Chisel, Lg, TT 1/4" | HT2770 | | | | | | | | | | | | | |
| Conical, TT 1/4" | HT4630 | | | | | | | | | | | | | | | |
| Chisel, L, TT 3/16" | HT8410 | | | | | | | | | | | | | | | |
| S-chis, N, TT 1/2" | HT6920 | | | | | | | | | | | | | | | |
| Chisel, L, TT 1/8" | HT5520 | | | | | | | | | | | | | | | |
| S-chis, 3/8" Shank | | | | | | | | | | | | | | | | |

CATALOG NOS. shown are for DUROTHERM. For HEXCLAD drop "D"; for XTRADUR substitute "X" for "D".

ABBREVIATIONS: TT, Turned to; S-chis, Semi-chisel; W, Wide; N, Narrow; Lg, Long; Sh, Short; L, Large; M, Medium; Sm, Small; RB, Round Bevel.

SAMPLE TIPS for your evaluation. Ask for new Tip Sketch Catalog with detailed sketches of 180 Standard Coated Tips.

TIP CLEANING SPONGE IN METAL TRAY



Sponge in Metal Tray #810
Sponge only #8101
Tray only #8102

Insures reliability of soldered joints and extends tip life. Eliminates contamination caused by wiping rags. Pure cellulose sponge contains no harmful acids.

FIBRE SOLDER AID No. 800P



For inspecting, probing, unsoldering and assembly of printed circuits and other components. Non-conductive. Eliminates scratched circuit boards and broken wire strands.

SOLDERING ACCESSORIES

ANTI-WICKING TWEEZERS Copper Tipped for Wires



Gauge 17 #817 16-17-18
Gauge 21 #821 20-21-22
Gauge 25 #825 24-25-26
Gauge 30 #830 28-29-30

Prevents harmful effects of excess capillary action of solder along stranded wire beneath insulation. Order tool number by wire size being used.

HEAT SINKS

Copper Tipped Clips



No. 34A 1 1/8" Long No. 60A 2 1/2" long No. 30A 1 1/2" long

Protect heat sensitive components such as transistors and diodes from thermal damage.

SCREW TIPS FOR HORNET IRON No. H10 3/8" Long

DUROTHERM TIPS

| Point Style | Point | Dia. | Tip No. |
|-------------|-----------|------|---------|
| Round bevel | 1/2 | 1/2 | HT866D |
| Ball point | 1/2 | 1/2 | HT867D |
| Round bevel | 3/8 | 3/8 | HT868D |
| Chisel | 3/8 x 1/4 | 3/8 | HT869D |

XTRADUR TIPS

| Point Style | Point | Dia. | Tip No. |
|-------------|-----------|------|---------|
| Round bevel | 1/8 | 1/8 | HT864X |
| Semi-chisel | 1/8 x 1/2 | 1/8 | HT870X |
| Chisel | 1/8 x 1/2 | 1/8 | HT871X |
| Conical | 1/2 | 1/8 | HT873X |

PART OF AMERICA'S MOST COMPLETE LINE

DIAGONAL CUTTING

4 1/2", 5", 6"



A96-4 1/2 FULL POLISH—List \$4.64
A96-5 FULL POLISH—List 4.84
A96-6 FULL POLISH—List 5.44

LONG CHAIN NOSE W/CUTTER

6", 7"



A61-6 FULL POLISH—List \$5.96
A61-7 FULL POLISH—List 5.96

LONG CHAIN NOSE

6 1/2"



A8 FULL POLISH—List \$4.60

RADIO AND IGNITION

6 1/2"



A2 FULL POLISH—List \$6.32

TRANSVERSE FLUSH END-CUTTING WITH LEAF SPRING

6 1/2"



A7L FULL POLISH—List \$6.32

LONG REACH FLAT NOSE

6 1/2"



A9 FULL POLISH—List \$4.48

DIAGONAL CUTTER



Stock #A87-4 1/2—List \$6.20

CHAIN NOSE



Stock #A17-4 1/2—List \$3.38

ROUND NOSE



Stock #A16-4 1/2—List \$3.90

FLAT NOSE



Stock #A15-4 1/2—List \$3.38

SPECIALTY NUMBERS!!!

"SMITTY" FOLDING SOCKETHEAD WRENCH SETS
IP6—Small set 050-5/32" 6 Blades, List \$1.55
IP5—Medium Set 3/32" - 7/32" 5 Blades, List \$1.55
IP7—List \$1.60



HEX DRIVERS

| Stock # | Size | List |
|---------|--------|--------|
| S | — 050 | \$.72 |
| SA | — 1/16 | .72 |
| SB | — 5/64 | .76 |
| SC | — 3/32 | .88 |
| SD | — 1/8 | .92 |

K5N—All of the above kit—\$5.80



HOT TUBE PULLERS

| Stock # | Angle | List |
|---------|------------|--------|
| S7A | — 90° | \$2.00 |
| S7 | — Straight | 1.90 |



"TRI-TAP"

Three Popular Size Taps in One Tool

47A — List \$2.50
6/32, 8/32, 10/32



PANAVISE

Height 6 1/2", Width 5 1/2", Jaw Width 2 1/2", Opening 2"
62 —List \$19.96



SUB-MINIATURE TOOLS



OFFSET OPEN END WRENCHES
5/64 - 3/32 - 7/64
1/8 - 5/32

In New "Pop-Out" Kit
Stock # K24 List \$2.50

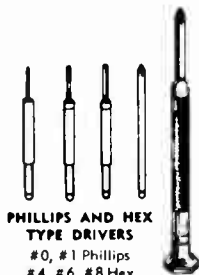


ALL SUB-TOOLS PACKAGED IN THIS NEW "POP-OUT" KIT



Individual Carded Screwdrivers

| Stock # | List |
|-----------|--------|
| SMALL 24N | \$.84 |
| FINE 24P | .84 |



PHILLIPS AND HEX TYPE DRIVERS
#0, #1 Phillips
#4, #6, #8 Hex

In New "Pop Out" Kit
Stock # K24A List \$2.50

SCREWDRIVERS



005, 070, 080, 100
4 Blades and 1 Handle
Stock # List Above in
K24B \$1.98 Pop-up Kits

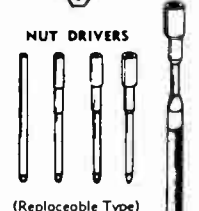
NUT DRIVERS WITH HANDLES



| Stock # | Size | Stock # | Size |
|---------|------|---------|------|
| 24C | 5/64 | 24F | 1/8 |
| 24D | 3/32 | 24G | 5/32 |
| 24E | 7/64 | 24H | Set |

Card of one complete set—24H—List \$4.50

NUT DRIVERS



(Replaceable Type)
5/64, 3/32, 7/64
1/8, 5/32

Stock # List Above in
K24I—\$3.50 Pop-up Kits

TENSION-TWEEZIE

Permanent tension.
S6 —Tweezie Only List \$.50
S6A—Tweezie with Handle List .88



SOLDER-AID TOOLS FORK AND BRUSH

S1A—List \$1.20—Shown.
S1 —List \$1.20—Same as above only small curved hook in place of brush.



IDEAL WIRE STRIPPERS

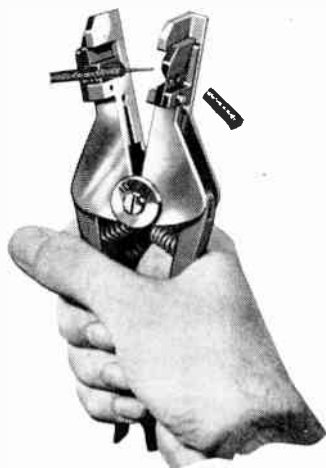
FOR ALL TYPES OF THERMO-PLASTIC INSULATIONS . . . EVEN TOUGH TEFLON*



2 SECOND "ONE SQUEEZE"

OPERATION

Unexcelled for fast assembly work, this 10 oz. stripper can be used all day without fatigue. Exclusive "automatic" feature holds jaws open after stripping to permit removal of wire and to prevent crushing. No nicking, fraying, or cutting of wire ends possible. 7 models for all wire gauges from 8 to 30.



MODELS FOR ALL WIRE GAUGES — FROM 8 TO 30

| Catalog No. | Wire Gauge | No. of Holes | List Price | Suggested Resale |
|-------------|--------------------|--------------|------------|------------------|
| 45-090 | 8 to 12 | 3 | \$9.60 | \$5.75 |
| 45-091 | 10 to 18 | 4 | 9.60 | 5.75 |
| 45-092 | 10 to 22 | 6 | 9.60 | 5.75 |
| 45-093 | 14 to 22 | 4 | 9.60 | 5.75 |
| *45-095 | 16 or 18, and POSJ | - | 9.60 | 5.75 |
| 45-097 | 16 to 26 | 6 | 9.60 | 5.75 |
| 45-098 | 20 to 30 | 6 | 9.60 | 5.75 |

*Also strips 2 and 3-conductor low-voltage wire used in G.E. and Touchplate remote control wiring systems.

New THERMO-STRIP • CANNOT HARM WIRE



Damage-Free Removal of All Thermo-Plastic Insulation—Even Teflon*

For critical stripping where no wire damage is permissible. Melts and removes insulation without nicking, cutting or scraping wire. Choice of tools: pincer-type Pincer Tool for all normal production use; probe-type Single Loop Tool for miniaturized or crowded assemblies. Heavy-duty power unit can be run continuously, has infinitely variable heat control, heats elements immediately.

| Cat. No. | Item | List Price | Sugg. Resale |
|----------|-------------------------------|------------|--------------|
| 45-130 | Pincer Tool & Power Unit | \$112.00 | \$67.20 |
| 45-131 | Single Loop Tool & Power Unit | 93.35 | 56.00 |
| 45-133 | Power Unit Only | 75.75 | 45.45 |
| 45-140 | Pincer Tool Only | 36.15 | 21.70 |
| 45-141 | Single Loop Tool Only | 17.50 | 10.50 |

IDEAL Wire Strippers, both hand and production models, are engineered with unique design features that speed up and simplify the stripping of most types of insulation.



FOR PRECISION WIRE STRIPPING

Removes Teflon® and other hard-to-strip insulation. New "concentric hole" stripping blades and special design of jaws prevent damage to insulation and wires. Matched sets of blades are precision drilled on watchmaker's equipment to exact wire sizes. Chucking action on insulation guides conductor through stripping hole, preventing nicks and scrapes. 3 models, wire sizes from 10 to 30.

EXTRA FEATURES (optional)

"SHORT-STOP" LATCH

protects wire by limiting stroke to 5/32" — disengages without removal for full 7/8" strip.

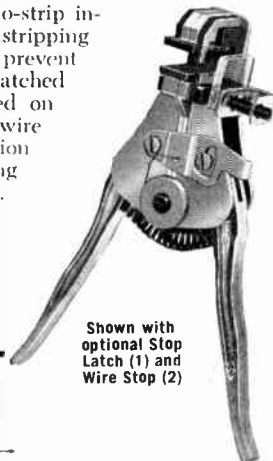
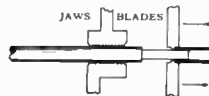


"SEE-THRU" WIRE STOP

assures uniform lengths by adjusting to strip length desired.



Counterbored stripping hole "chucks" insulation



Shown with optional Stop Latch (1) and Wire Stop (2)

FOR GENERAL PURPOSE STRIPPING OF PLASTIC, FIBRE GLASS AND OTHER HARD-TO-STRIP INSULATIONS

| WIRE GAUGE | NO. OF HOLES | CATALOG NO. (without stop latch and wire-stop) | CATALOG NO. (with stop latch and wire-stop) |
|------------|--------------|--|---|
| | | List \$28.25 Suggested Resale \$16.95 | List \$34.60 Suggested Resale \$20.75 |
| 10 to 14 | 3 | 45-170 | 45-180 |
| 16 to 26 | 6 | 45-171 | 45-181 |
| 26 to 30 | 3 | 45-172 | 45-182 |

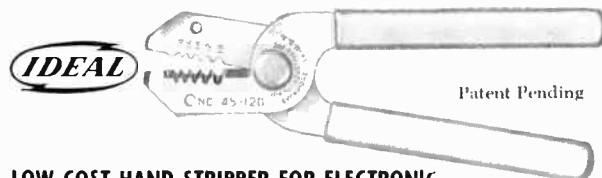
FOR TYPE EE — 1000 VOLT TEFLON* WIRE

| | | | |
|----------|---|--------|--------|
| 10 to 14 | 3 | 45-173 | 45-183 |
| 16 to 26 | 6 | 45-174 | 45-184 |
| 26 to 30 | 3 | 45-175 | 45-185 |

FOR TYPE E — 600 VOLT TEFLON* WIRE

| | | | |
|----------|---|--------|--------|
| 10 to 14 | 3 | 45-176 | 45-186 |
| 16 to 26 | 6 | 45-177 | 45-187 |
| 26 to 30 | 3 | 45-178 | 45-188 |

*Reg. Trademark of DuPont



Patent Pending

LOW COST HAND STRIPPER FOR ELECTRONIC AND APPLIANCE PRODUCTION STRIPPING

For quick, easy, clean stripping of wires used in electronic instruments and appliances. Sturdy, compact, constructed of hardened steel for rugged duty and long service. Comfortable plastic grips for sure handling and safety.

| | Cat. No. | List | Sugg. Resale |
|---|----------|--------|--------------|
| T-5 MODEL, strips 10, 12, 14, 16 and 18 gauge wires | 45-120 | \$3.25 | \$1.95 |
| T-6 MODEL, strips 16, 18, 20, 22, 24 and 26 gauge wires | 45-121 | \$3.25 | \$1.95 |

IDEAL INDUSTRIES Inc.,

Sycamore, Illinois

RESISTANCE SOLDERING TOOLS **IDEAL**

COMPLETE THERMO-TIP ATTACHMENTS AND POWER UNITS



"Pencil" Type attachment with double metal electrodes. "Feed-thru" electrodes, adjustable for length.

Cat. No. 12-167 with double metal electrodes. List Price \$18.35 ♦ Suggested Resale \$11.00.



DOUBLE CARBON ATTACHMENTS

Carbons provide more heat than metal tips. Available in two sizes — 1/8" for small work, 3/16" for larger work.

Cat. No. 12-166 Pencil Grip with 1/8" carbons. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. 12-165, Pencil Grip with 3/16" carbons. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. 12-176 Pistol Grip with 1/8" carbons. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. 12-175 Pistol Grip with 3/16" carbons. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. L-4866 3/16" dia. replacement carbons for 12-165 and 12-175, six per pkg. Shipping wt., 2 oz. List Price \$2.10 ♦ Suggested Resale \$1.25.

Cat. No. L-4848 1/8" dia. replacement carbons for 12-166 and 12-176, six per pkg. Shipping wt., 2 oz. List Price \$1.15 ♦ Suggested Resale \$.70.



SINGLE CARBON ATTACHMENTS

Collet chuck holds feed-thru carbon. Permits adjustment. Complete with ground-clamp and lead assembly for jig-soldering.

Cat. No. 12-168 Pencil grip. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. 12-178 Pistol grip. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. L-5202 Replacement Carbons 1/8"x3" for 12-168 and 12-178, packaged 6 per tube. Shipping wt., 2 oz. List Price \$3.90 ♦ Suggested Resale \$2.35.



FOOT SWITCH Cat. No. 12-146

List Price \$11.90 ♦ Suggested Resale \$7.15
Used to eliminate arcing at point of electrode contact. Also permits the use of electrodes to position or hold work after heat has been applied. Small and convenient to use (3 3/8" dia. x 1 1/2" high). Wired normally open (with series plug). Rated 5 amps., 115V. Shipping Wt., 12 oz.

CHISEL TIP IRONS



Cat. No. 12-151 Handle and Lead Assembly. List Price \$7.75 ♦ Suggested Resale \$4.65.



Cat. No. 12-144 1/4" Chisel-Tip. List Price \$12.75 ♦ Suggested Resale \$7.65.



Cat. No. 12-143 — 1/8" Chisel-Tip. List Price \$12.75 ♦ Suggested Resale \$7.65.

Rapid heating characteristics and corrosion-resistant special plating provide long life. Irons are locked into handle with set screws. Resistance element in the iron provides continuous, controlled heat.

NOTE: Handle assembly and Irons are sold separately.

Lightweight, Resistance Soldering Tools especially designed for faster, positive production soldering of miniature and subminiature parts. All attachments available with either "Pencil" or "Pistol-Grip" type handles. Complete with 5' cord. Soldering Irons with "Pencil" type handle only.



"Pistol-Grip" attachment. Double metal electrodes are feed-thru type, adjustable for length.

Cat. No. 12-177 with double metal electrodes. List Price \$23.65 ♦ Suggested Resale \$14.20.

SINGLE METAL ATTACHMENT

Collet chuck holds feed-thru electrode. For smallest work. Complete with ground clamp and lead assembly for jig-soldering.

Cat. No. 12-169 Pencil grip. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. 12-179 Pistol grip. List Price \$18.35 ♦ Suggested Resale \$11.00.

Cat. No. L-5241 Replacement Electrodes for 12-169 and 12-179, packaged 6 per tube. Shipping wt., 2 oz. List Price \$.90 ♦ Suggested Resale \$.55.

REPLACEMENT CARBON HOLDERS



Cat. No. L-5246 — 3/16" Dia. List Price \$1.15 ♦ Suggested Resale \$.70.



Cat. No. L-5247 — 1/8" Dia. List Price \$.60 ♦ Suggested Resale \$.35.

Provides easy replacement of only part attacked by corrosive fluxes. Holders can be used interchangeably with either the 12-165, 12-166, 12-175 or 12-176, depending on diameter of carbons desired.

POWER UNITS



125-Watt Power Unit. Cat. No. 12-124 List Price \$31.85 ♦ Sug. Resale \$19.10

For light production and intermittent work. Selector switch for choice of three heats. Complete with power cord and clip for holding pencil style attachments. 115V — 60 cy.



250-Watt Power Unit. Cat. No. 12-123 List Price \$46.15 ♦ Sug. Resale \$27.70

For heavier production work. Faster. Handles larger components than 12-124. Choice of two heats through "high" and "low" secondary connections. Complete with power cord. 115V — 60 cy.



500-Watt Power Unit

Cat. No. 12-163

List Price \$76.00

Suggested Resale \$45.60

For continuous production work. Widest selection of heats — nine choices through 3-position selector switch plus "high", "medium" and "low" secondary terminals. Complete with power cord and pilot light. 115V — 60 cy.

IDEAL INDUSTRIES, Inc. Sycamore, Illinois



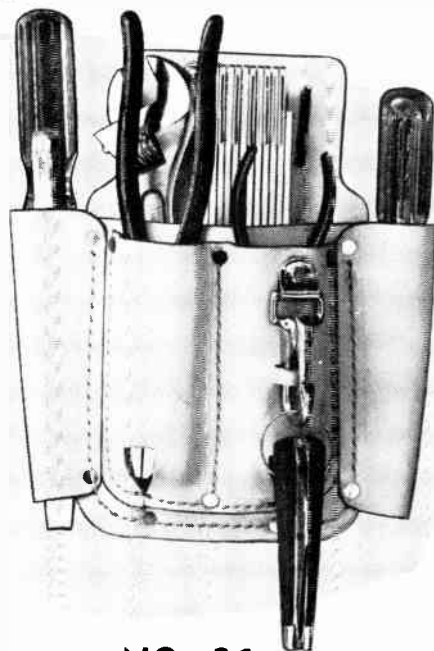
NO. 25 ELECTRICIAN HOLSTERS

5 POCKETS

Stitched with seven cord top quality linen hot wax thread, locked to solid leather back with steel rivets. Pockets made of pliable form fitting Russet Leather.

Special designed snap allows knife to be removed by use of a one hand upward motion. Overall dimensions are: 8 x 9 inches.

No. 25 (Without Tools) List Price \$5.00 each



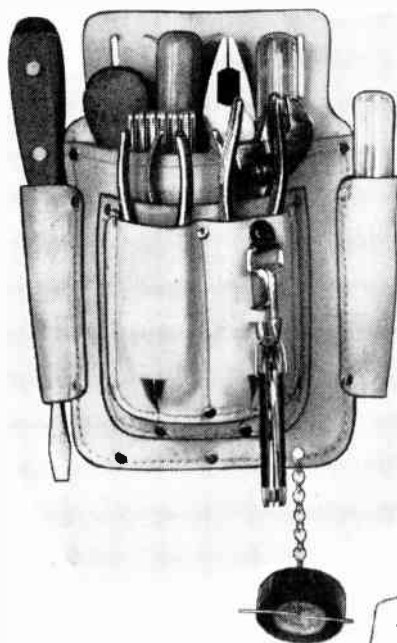
NO. 26

EXTRA LARGE TOOL HOLSTER

Carry all your tools in one . . . 6 pockets, reinforced at 20 points, with steel rivets. Specially Tanned Top Grain Russet Leather, Weighs Only 14 ounces.

Special designed knife snap. Stitched with top quality seven cord, hot wax linen lock-stitch thread. Six pockets.

No. 26 (Without Tools) List Price \$7.50 each

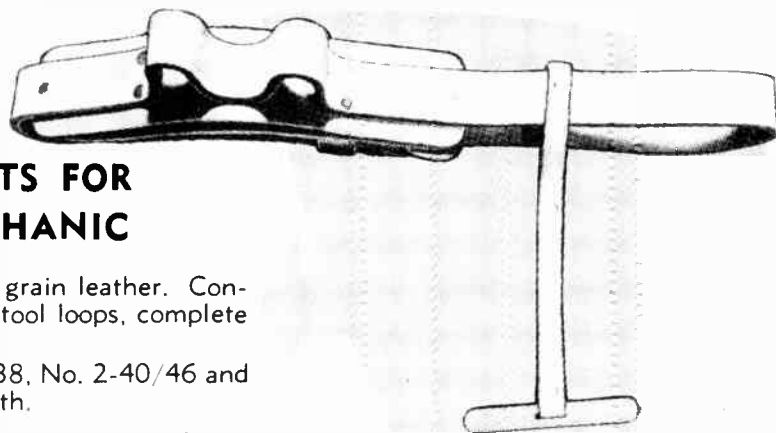


NO. 175 TOOL BELTS FOR ELECTRICIAN - MECHANIC

Made of extra heavy superb grade full grain leather. Consists of body pad for comfort, and two tool loops, complete with tape holder.

Belt available in three sizes: No. 1-30/38, No. 2-40/46 and No. 3-46/52. Body belt is 1 1/4" width.

No. 175 List Price \$3.50





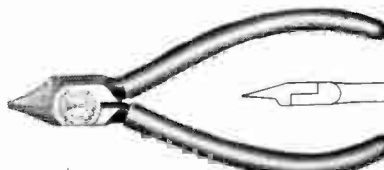
INCORPORATED

OBLIQUE CUTTING PLIER
 Lightweight Pointed Nose
 Flush Cutting



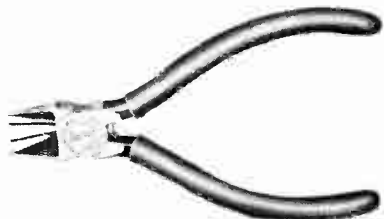
No. D209-4 Handles red plastisol covered
 No. D209-4 Size 4³/₁₆ in.
 No. 209-5 Size 5 in.
 Available with coil spring

OBLIQUE CUTTING PLIER
 Flush Cutting
 Handles red plastisol covered



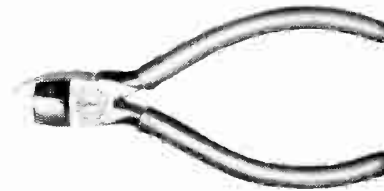
No. D219-4 Size 4³/₁₆ in.
 No. D219-5 Size 5 in.
 Available with coil spring

WIRE GRIPPING OBLIQUE CUTTER
 Flush Cutting
 Pat. No. 2,938,266
 Handles red plastisol covered



No. D229-4C Size 4³/₁₆ in.
 No. D229-5C Size 5 in.
 Supplied with coil spring

OBLIQUE SHEAR CUTTING PLIER
 Pat. No. 2,848,810
 Handles red plastisol covered



No. D207-5C Size 5¹/₂ in.
 077-K Replacement Blade
 Supplied with coil spring

OBLIQUE CUTTING PLIER
 Flush Cutting



No. 210-5 Size 5¹/₂ in.
 No. 210-6 Size 6¹/₁₆ in.
 Available with coil spring

OBLIQUE CUTTING PLIER



No. 245-5 Size 5 in.
 Available with coil spring

LONG NOSE PLIER



No. 301-5 Size 5¹/₁₆ in.
 No. 301-6 Size 6³/₁₆ in.
 No. 301-7 Size 7¹/₈ in.
 Available with coil spring

LONG NOSE SIDE CUTTING PLIER



No. 203-5 Size 5¹/₁₆ in.
 No. 203-6 Size 6³/₁₆ in.
 No. 203-7 Size 7¹/₈ in.
 Available with coil spring

SLIM LONG NOSE PLIER
 Handles yellow plastisol covered



No. D307-5¹/₂ Size 5¹/₁₆ in.
 Available with coil spring
 No. D221-5¹/₂C with side cutting
 knives (1/32" point) Size 5¹/₁₆ in.
 Supplied with coil spring.

SLIM LONG NOSE PLIER
 Handles yellow plastisol covered



No. D310-6 Size 6³/₁₆ in.
 Available with coil spring

LONG NEEDLE NOSE PLIER
 Handles yellow plastisol covered



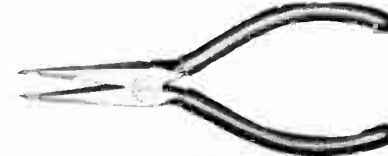
No. D318-5¹/₂ Size 5²⁵/₃₂ in.
 Available with coil spring.

LONG NOSE PLIER, KNIFE AT POINT
 Handles yellow plastisol covered



No. D301-6P Size 6³/₁₆ in.
 No. D317-6P Size 6 in.
 Available with coil spring

END CUTTING TRIMMER PLIER
 Handles green plastisol covered



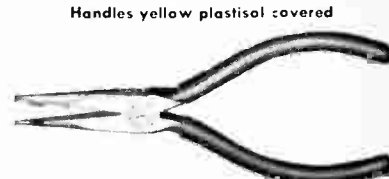
Cutting edges at tip
 set at 45° angle.
 Supplied with coil spring
 No. D211-6C Size 6¹/₂ in.

TRANSVERSE END CUTTING PLIER



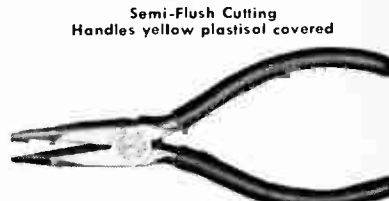
No. 204-6 Size 6¹/₄ in.
 Available with coil spring

LONG NOSE SHEAR CUTTING PLIER
 Pat. No. 2,848,724



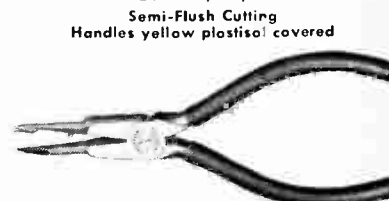
Handles yellow plastisol covered
 No. D208-6PC Size 6³/₁₆ in.
 Supplied with coil spring

ALL-PURPOSE ELECTRONIC PLIER
 Pat. No. 2,903,790



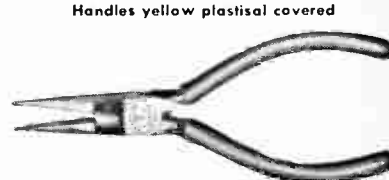
Semi-Flush Cutting
 Handles yellow plastisol covered
 No. D260-6C Size 6³/₁₆ in.
 Supplied with coil spring

NEEDLE NOSE ELECTRONIC PLIER
 Pat. No. 2,903,790



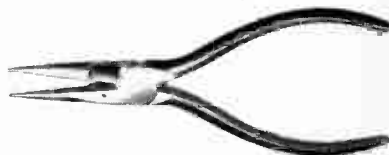
Semi-Flush Cutting
 Handles yellow plastisol covered
 No. D261-6C Size 6³/₁₆ in.
 Supplied with coil spring

LONG NOSE SHEAR CUTTING PLIER
 Pat. No. 2,848,810



Handles yellow plastisol covered
 No. D208-6C Size 6³/₁₆ in.
 078-K Replacement Blade
 Supplied with coil spring

LONG NOSE SHEAR CUTTING PLIER
 Pat. No. 2,848,724

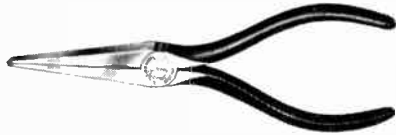


Handles yellow plastisol covered
 No. 208-6NC Size 6³/₁₆ in.
 078-K Replacement Blade
 Supplied with coil spring



INCORPORATED

DUCK BILL PLIER
 Inside jaws smooth



No. 304-6 Size 6½ in.
 No. 205-6 with side cutting knives Size 6½ in.

CHAIN NOSE PLIER



No. 317-6 Size 5½ in.
 No. 217-6 with side cutting knives Size 5½ in.

CHAIN NOSE PLIER
 Handles yellow plastisol covered



No. D317-5 Size 5¼ in.
 Available with coil spring

CURVED NOSE PLIER



No. 302-6 Size 6¼ in.

RELAY SPRING ADJUSTING PLIER
 Inside jaws smooth
 Handles yellow plastisol covered



No. D325-5 Size 5¼ in.

8-INCH LONG NOSE PLIER



No. 314-8 with knurl Size 8 in.

8-INCH DUCK BILL PLIER



No. 315-8 with knurl Size 8 in.
 No. 312-8 without knurl Size 8 in.

SPECIAL SKINNING PLIER
 Handles red plastisol covered



No. D317-5P Size 5¼ in.

SIDE CUTTING PLIER
 NE Type (Streamlined)



No. 201-5NE Size 5 in.
 No. 201-6NE Size 6 in.
 No. 201-7NE Size 7 in.
 No. 201-8NE Size 8 in.
 No. 201-9NE Size 9 in.

KLEIN KUT* HIGH LEVERAGE PLIER
 Pat. No. 2,746,145



No. 213-9NE Size 9¼ in.

OBLIQUE CUTTING PLIER
 Narrow Nose
 Available with coil spring



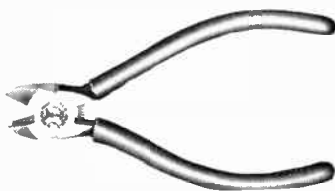
No. 202-5 Size 5½ in.
 No. 202-6 Size 6¼ in.

HIGH LEVERAGE OBLIQUE CUTTING PLIER



No. 228-8 Size 8 in.

PRINTED CIRCUIT PLIER
 Handles red plastisol covered



No. D052-C Size 5½ in.
 Supplied with coil spring

*Trade-Mark

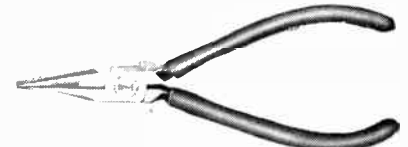
MIDGET ELECTRONIC PLIERS
 Long Nose Plier



No. D321-4½ Handles yellow plastisol covered
 No. D322-4½ Handles blue plastisol covered
 No. D321-4½ Size 4¾ in.
 No. D322-4½ (without knurl) Size 4¾ in.
 Available with coil spring

FLAT NOSE PLIER

Inside jaws smooth
 Handles yellow plastisol covered



No. D323-4½ Size 4¾ in.
 Available with coil spring

OBLIQUE CUTTING PLIER

Handles red plastisol covered



No. D257-4 Size 4¾ in.
 Available with coil spring

TRANSVERSE END CUTTING PLIER

Semi-Flush Cutting
 Handles green plastisol covered



No. D224-4½ Size 4¾ in.
 Available with coil spring

COIL SPRING PLIERS

Pliers listed below are supplied
 with coil spring



| Oblique Cutters | Long Nose | |
|-----------------|------------|----------|
| D209-4C | 204-6C | D321-4½C |
| • 209-5C | D260-6C | D322-4½C |
| D219-4C | D261-6C | D323-4½C |
| D219-5C | D318-5½C | D310-6C |
| • 202-5C | • 203-5C | D301-5C |
| 202-6C | • 203-6C | D301-6C |
| • 210-5C | • 203-7C | D301-7C |
| • 210-6C | D221-5½C | D301-6PC |
| • 245-5C | (½" point) | D317-6PC |
| D257-4C | D307-5½C | D317-5C |

Mathias **KLEIN** & Sons
Established 1857 Chicago, Ill., U.S.A.

CHICAGO 45, ILLINOIS

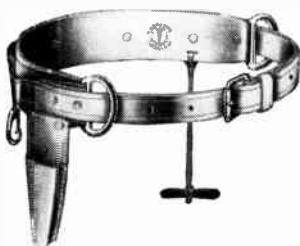


INCORPORATED

"KLEIN-KORD" NYLON SAFETY STRAP

A strong high-quality safety strap made of nylon possessing excellent dielectric characteristics. Klein Red Center for safety.

| Cat. No. | Size | Av. Wgt. Per Doz. |
|-------------------|---------------|-------------------|
| Standard Snaps | | |
| 5294 | 1 3/4" x 5'8" | 34 lb. |
| 5294-7 | 1 3/4" x 7' | 38 lb. |
| "Klein-Lok" Snaps | | |
| KL-5294 | 1 3/4" x 5'8" | 34 lb. |
| KL-5294-7 | 1 3/4" x 7' | 38 lb. |

LEATHER TOOL BELTS

Finest-quality harness leather "D" rings, solid drop forgings. All rivets solid copper.

| Cat. No. | Width | Av. Wgt. Per Doz. |
|----------|--------|-------------------|
| 5204-DE | 3 1/2" | 34 lb. |

Be sure to specify size
One of a complete line of Klein tool belts.

KLEIN ELECTRICIANS' WAIST BELTS

Lightweight belt of heavy web belting. Leather tool loops. Friction buckle.

| No. | Size |
|--------|--------------|
| 5227-M | 32 to 40 in. |
| 5227-L | 40 to 48 in. |

SLIP-ON HANDLES

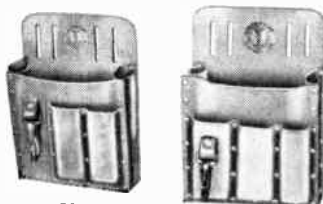
Plastic handles available in the following colors — Red, Yellow, Green and Blue.

Easy to slip on to plier handles providing a comfortable grip.

| No. | To fit |
|-----|----------------------------------|
| 34 | To fit 4 in. - 4 1/2 in. pliers |
| 35 | To fit 5 in. - 5 1/2 in. pliers |
| 36 | To fit 6 in. - 6 1/2 in. pliers |
| 46 | 36 pr. assorted sizes and colors |

DIPPED HANDLES

Dipped plastic coating provides comfortable handles. See Klein catalog for colors and prices.

KLEIN COMBINATION TOOL POCKETS

5126

5127

Two of the many leather tool pockets available in the Klein line. See Klein catalog for other pockets.

No. 5126 Leather Size 8 1/2 in. high, 6 1/2 in. wide
5127 Leather 10 in. high, 7 in. wide

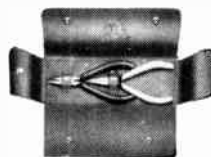
KLEIN UTILITY TOOL POCKETS

5190

5141

No. 5190 is made of high-grade leather with ten separate compartments. No. 5141 is of polyvinyl chloride.

No. 5190 Size 8 1/2 in. x 6 in.
5141 Plastic 10 in. high, 8 in. wide

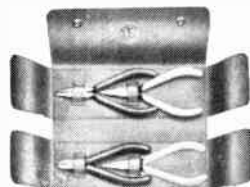
KLEIN POCKET TOOL KIT

Holds two pliers.

1 D321-4 1/2 Long Nose Plier

1 D257-4 Oblique Cutting Plier

No. 1305-5 Size 7 x 2 1/2 x 1/2

KLEIN POCKET TOOL KIT

A handy kit that holds four midget pliers. Case is of top leatherette with two snaps. Contains following tools:

1 No. D257-4 Oblique Cutting Plier

1 No. D224-4 1/2 End Cutting Plier

1 No. D321-4 1/2 Long Nose Plier

1 No. D323-4 1/2 Duck Bill Plier

No. 1305-4 Size 7 x 2 3/4 x 1

KLEIN "XELA" ELECTRICIAN'S KNIFE

Has utility blade and screwdriver blade. Made of finest cutlery steel. Handle special plastic.

No. 1550-2 Length Closed 4 in.

KLEIN "XELA" LINEMAN'S KNIFE

Single 3-in. blade of finest cutlery steel. Handle special plastic.

No. 1550-4 Length Closed 4 in.

KLEIN "XELA" SKINNING KNIFE

Particularly useful in telephone work. Hardwood handle.

No. 1550-5 Length Closed 3 1/2 in.

"XELA" 3-BLADE KNIFE

Spearpoint blade, sheepsfoot blade and screwdriver blade. Handle special plastic.

No. 1550-6 Length Closed 3 3/4 in.

"XELA" ELECTRICIAN'S SCISSORS

Made of high-grade steel corefully tempered. Screw hinge allows for adjustment.

Cat. No. 2100-5 Size 5 in.

5100 Pocket for scissors, not illustrated



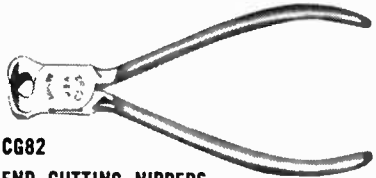
kraeuter

TOOLS FOR TECHNICIANS

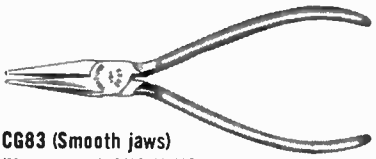
**FOR 100 YEARS
THE FINEST IN
HAND TOOLS—
1860-1960**



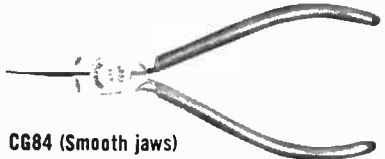
CG81
DIAGONAL CUTTING PLIERS
4½" R List ea. 3.60



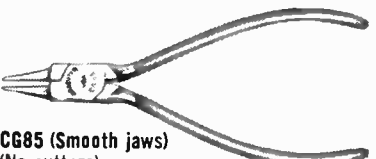
CG82
END CUTTING NIPPERS
4½" G List ea. 4.24



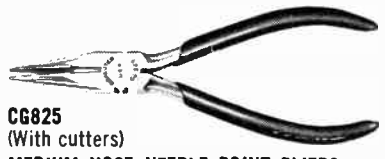
CG83 (Smooth jaws)
(No cutters) CHAIN NOSE PLIERS
4½" R List ea. 3.40



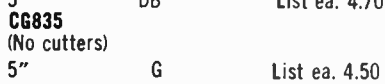
CG84 (Smooth jaws)
(No cutters) FLAT NOSE PLIERS
4½" DB List ea. 3.40



CG85 (Smooth jaws)
(No cutters)
ROUND NOSE ROUND JAW PLIERS
4½" G List ea. 3.40
No. 83-84-85 supplied with milled jaws
when specified.



CG825
(With cutters)
MEDIUM NOSE NEEDLE POINT PLIERS
Needle points 1/32" x 1/32"
5" DB List ea. 4.70



CG835
(No cutters)
5" G List ea. 4.50

KRAEUTER PRECISION AND PROFESSIONAL PLIERS FULL POLISHED FINISH

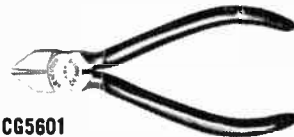
Extra fine pliers designed for exacting work. Drop forged from selected tool steel, accurately machined and carefully heat treated. In the hands of skilled radio and electronics technicians, these tools may be depended upon for exceptional service. Precision and Professional Pliers illustrated show vinyl cushion grips (prefix "CG" with stock number) which are furnished at NO extra cost (factory bonded). Color: G-Green; O-Orange; R-Red; LB-Light Blue; DB-Dark Blue.

KRAEUTER VINYL CUSHION GRIP "CG" HANDLES AT NO EXTRA COST

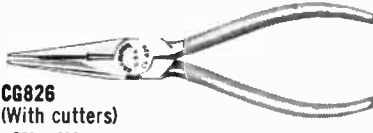
All the "CG" Kraeuter tools listed on these pages have the Cushion Grips bonded on at the factory... actually become part of the tool. Won't crack, peel or chip. They're brightly colored to help you find them when you need them... easier to hold, easier to use... cushion your hand so you do the job with less effort. Cushion Grips give pliers the "feel" of comfortable, more accurate control. And they come to you at no extra cost.



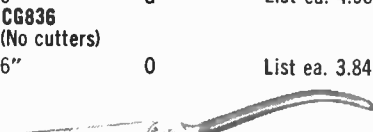
**BETTER FEEL!
BETTER GRIP!**



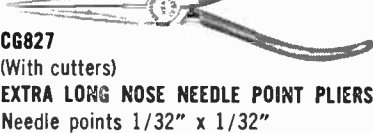
CG5601
NEEDLE POINT DIAGONAL CUTTING PLIERS
4½" R List ea. 4.00
5" DB List ea. 4.25
6" G List ea. 5.00



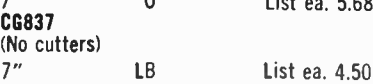
CG826
(With cutters)
LONG NOSE NEEDLE POINT PLIERS
Needle points 1/32" x 1/32"
6" G List ea. 4.90



CG836
(No cutters)
6" O List ea. 3.84



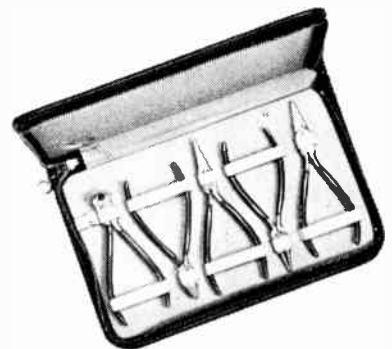
CG827
(With cutters)
EXTRA LONG NOSE NEEDLE POINT PLIERS
Needle points 1/32" x 1/32"
7" O List ea. 5.68



CG837
(No cutters)
7" LB List ea. 4.50



CG5612
NEEDLE POINT DIAGONAL CUTTING PLIERS
Wire stripping notch, spring return handles.
6½" O List ea. 5.00



CG90
PLIER SET
Five pliers in black zipper case. Size 5-3/4" x 9-1/4" when closed. One each Nos. CG81, CG82, CG83, CG84 and CG85.
List ea. 20.00

THIS IS ONLY A PARTIAL LISTING OF KRAEUTER TOOLS... SEND FOR CATALOG



kraeuter

TOOLS FOR TECHNICIANS

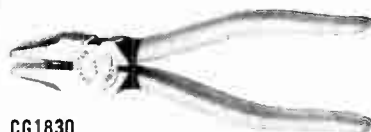
**FOR 100 YEARS
THE FINEST IN
HAND TOOLS—
1860-1960**

**KRAEUTER INDUSTRIAL PLIERS
FULL POLISHED HEADS—
VINYL CUSHION GRIP HANDLES**

Designed for use in the Radio and Electronics fields. Hammer forged from high grade tool steel, individually fitted, tempered, adjusted and tested. Furnished with Cushion Grips (factory bonded) at no extra cost. Colors: G-Green; O-Orange; R-Red; DB-Dark Blue; LB-Light Blue.



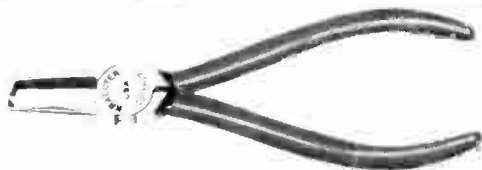
CG71
(With cutters)
SHORT JAW NOSE-CUTTING PLIERS
Extra long, narrow handles, cutters at tip of jaws.
8" DB List ea. 4.98



CG1830
ELECTRICIANS' SIDE CUTTING PLIERS
For electric wiring and repair work.
List ea.
4" R 3.00
5" DB 3.50
6½" O 3.50
7" LB 4.00
8" DB 4.50

CG6627
**END CUTTING
RESISTOR PLIERS**

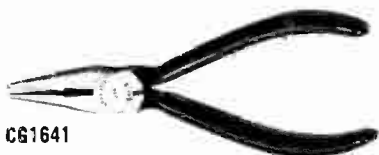
Resistor terminal cutters for cutting the terminal ends of packaged assembly type resistors. Pliers sever terminal wires which are inaccessible except from over the resistor.



5½" R List ea. 4.95

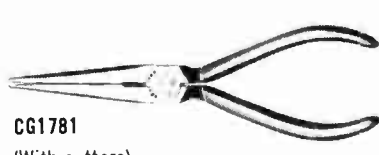


CG2612
WIRE STRIPPING DIAGONAL CUTTING PLIERS
Strips fine wire. Spring return handles.
6½" LB List ea. 4.98



CG1641
(With cutters)
SHORT CHAIN NEEDLE NOSE PLIERS
Short nose, extra leverage, for open wiring.
5" R List ea. 3.60

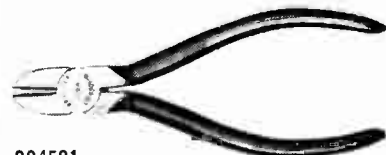
CG1643
(No cutters)
5" DB List ea. 3.58



CG1781
(With cutters)
EXTRA LONG CHAIN NOSE PLIERS
Jaw length reaches 2-3/4", narrow pointed nose.
7" O List ea. 4.80

C-CG1781
(Cross Coil Spring)
7" O List ea. 5.10

CG1771
(No cutters)
7" LB List ea. 3.60



CG4501
DIAGONAL "OBLIQUE" CUTTING PLIERS
For close cutting in radio, TV, telephone work.

List ea.
4½" DB 3.24
5" O 3.50
6" R 4.00

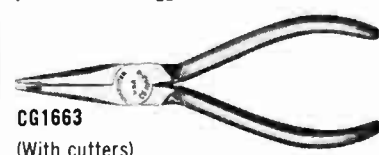
C-CG4501
(Cross coil spring)
4½" DB 3.54
5" O 3.80
6" R 4.30



CG1661
(With cutters)
LONG CHAIN NEEDLE NOSE PLIERS
Radio and TV's most extensively used pliers.
6" DB List ea. 4.00

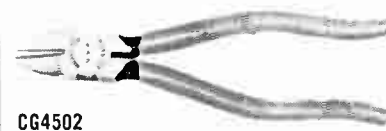
C-CG1661
(Cross Coil Spring)
6" DB List ea. 4.30

CG1671
(No cutters)
6" G List ea. 3.00



CG1663
(With cutters)
RADIO AND IGNITION NOSE-CUTTING PLIERS
Grips at tip of nose, cutters 1/4" back.
6" O List ea. 4.85

C-CG1663
(Cross Coil Spring)
6" O List ea. 5.15



CG4502
7-IN. DIAGONAL CUTTING PLIERS WITH FULL-FASHIONED HANDLES
High leverage and comfort for continuous cutting.
7" DB List ea. 4.60

THIS IS ONLY A PARTIAL LISTING OF KRAEUTER TOOLS... SEND FOR CATALOG



Kraeuter

TOOLS FOR TECHNICIANS

**FOR 100 YEARS
THE FINEST IN
HAND TOOLS—
1860-1960**

INDUSTRIAL PLIERS



CG461D

HEAVY DUTY DIAGONAL CUTTING PLIERS

Added leverage for easier cutting.

- | | |
|-------------|---------------|
| 5" LB | List ea. 4.00 |
| 7" G | List ea. 4.00 |



C-CG4625

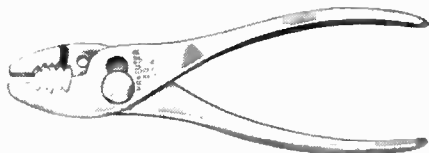
NEEDLE POINT DIAGONAL CUTTING PLIERS

Narrow tapered nose for close cutting. Cross Coil Spring in handle.

- | | |
|------------|---------------|
| 5" R | List ea. 4.98 |
|------------|---------------|

COMBINATION PLIERS

Drop forged from special analysis steel, KRAEUTER slip joint pliers have sharp, milled teeth and notches for better gripping and wire cutting. Knurled handles are shaped to fit the hand comfortably and provide maximum leverage. Studs and nuts are machined from solid bar steel and carefully hardened for longer wear.



KRAEUTER "BRITE" LINE

Fine quality slip joint pliers in 2 different finishes.

- | | | |
|----------------|----------------------------------|----------|
| | | List ea. |
| 056 —6" | Satin Chrome Plated Finish | .98 |
| 8" | Satin Chrome Plated Finish | 1.24 |
| 156 —6" | Chrome Plated Finish | 1.40 |
| 8" | Chrome Plated Finish | 1.75 |
| 10" | Chrome Plated Finish | 2.15 |

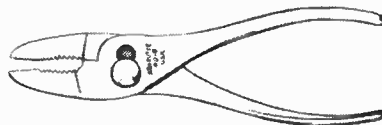


GRIP TITE COMBINATION PLIERS

NICKEL PLATED — "CG" VINYL CUSHION GRIP HANDLES

Designed for heavy duty service.

- | | | |
|-------------------|---|----------|
| | | List ea. |
| CG356 —5½" | 2 position slip joint adjustments | 2.80 |
| CG356 —6" | 2 position slip joint adjustments | 2.80 |
| CG356 —8" | 3 position slip joint adjustments | 3.59 |
| CG356 —10" | 3 position slip joint adjustments | 4.55 |



THIN NOSE COMBINATION PLIERS

Tapered thin jaws for confined areas.

- | | |
|---------------------------|---------------|
| 40—6" Nickel Plated | List ea. 2.20 |
|---------------------------|---------------|



TONGUE-N-GROOVE JOINT PLIERS POLISHED FACES — "CG" VINYL CUSHION GRIP HANDLES

Parallel adjustments make these pliers extremely versatile with maximum utility, leverage and strength. Furnished with Cushion Grip handles.

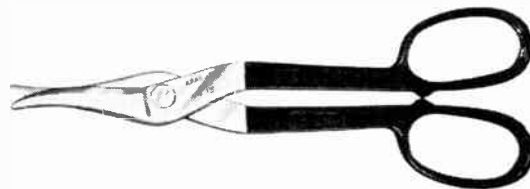
- | | | |
|----------------------|------------------------------------|----------|
| | | List ea. |
| CG707 —6-1/2" | G Max. Jaw Capacity 1" | 3.00 |
| CG710 —10" | R Max. Jaw Capacity 1-1/2" | 3.74 |
| CG714 —14" | O Max. Jaw Capacity 2-13/16" | 4.50 |



ALLOY STEEL ADJUSTABLE WRENCH THIN PATTERN—SMOOTH ACTION—CHROME PLATED

With "CG" VINYL Cushion Grip.

- | | | |
|------------------|----------|----------|
| | | List ea. |
| CG31 —4" | R | 2.84 |
| CG31 —6" | DB | 2.84 |
| CG31 —8" | O | 3.70 |
| CG31 —10" | G | 4.64 |
| CG31 —12" | LB | 6.50 |
| CG31 —15" | R | 9.50 |



COMBINATION PATTERN SNIP

Cuts straight, curved shapes in metal, etc. Polished Blades, Hard Black Enamelled Handles.

- | | |
|--|---------------|
| K13 —7" Pocket Size, Cut 2" | List ea. 2.50 |
|--|---------------|

THIS IS ONLY A PARTIAL LISTING OF KRAEUTER TOOLS... SEND FOR CATALOG



kraeuter

TOOLS FOR TECHNICIANS

**FOR 100 YEARS
THE FINEST IN
HAND TOOLS—
1860-1960**



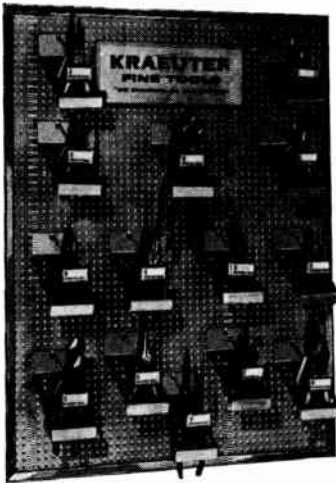
CG1650
(Electronics)
TRANSVERSE END-CUTTING PLIERS
Long jaws reach confined areas, cut wires at tips. Leaf Spring in handle.
6" 0 List ea. 5.00



CG1621
(No Cutters)
LONG NEEDLE OR SNIPE NOSE PLIERS
Slender milled jaws; inside length 2-3/32"
tapering to 1/16" at points.
6" LB List ea. 3.64



CG1631
(No Cutters)
CURVED NEEDLE OR SNIPE NOSE PLIERS
Slender milled jaws tapering to 1/16"
at point, curved to reach inaccessible
areas.
5-1/2" G List ea. 4.18



**RADIO AND ELECTRONIC BRACKET
K1-2E ASSORTMENT**

Includes 2 each of 14 popular pliers, permanent peg-board display and 14 Kraeuter metal tool brackets. Shipping weight—25 lbs.

List ea. 115.86



**K-5
5-PLIER ASSORTMENT WITH FREE DISPLAY
BRACKET AND GIFT BOX**

Set includes:
1—CG1830-6 1/2" Electrician's Side Cutter
1—CG4610-7" Heavy Duty Diagonal
1—CG4501-6" All Around Diagonal
1—CG1661-6" Needle Nose with Cutter
1—CG83-4 1/2" Chain Nose "Hobby"
1 to 5-plier bracket (no charge)
Shipping weight—2 lbs. 5 oz. List ea. 18.90



**P-35
5-PLIER ASSORTMENT WITH FREE DISPLAY
BRACKET AND REVERSIBLE POINT-OF-SALE
DISPLAY CARD**

Set includes:
1—CG81 Diagonal Cutting Pliers
1—CG82 End Cutting Nipper
1—CG83 Chain Nose Pliers
1—CG84 Flat Nose Pliers
1—CG85 Round Nose, Round Jaw Pliers
Shipping weight 1 lb. List ea. 16.96



**C-CG101—4-1/2"
PRECISION NEEDLE
POINT DIAGONAL CUTTING
PLIERS (ELECTRONICS) "FOR
SOFT WIRE ONLY"**

Needle point designed specifically for fine, exact tip cutting. Flush edge for close square cut. Specially designed cutting edge to facilitate re-sharpening and maintaining of tip cutting alignment. Furnished only with cross coil spring in handle.

4-1/2" LB List ea. 5.00



**C-CG140—6"
LONG NOSE PLIERS 1/32" TIP
(Electronics)**

Fine milled jaws, inside length 2" — tapering to 1/32" at the tip, reach areas inaccessible to other pliers. Furnished only with cross coil spring in handle.

6" LB List ea. 4.50



**C-CG160—7"
EXTRA FINE LONG NOSE PLIERS
1/16" POINT (Electronics)**

Extra fine long nose pliers, milled jaws, inside length 2-5/8" tapering to 1/16" at the point. Fine point designed to reach areas inaccessible to other pliers. Furnished only with cross coil spring in handle.

7" LB List ea. 3.80

NEW ELECTRONIC COMPONENT ASSEMBLY PLIERS

THIS IS ONLY A PARTIAL LISTING OF KRAEUTER TOOLS... SEND FOR CATALOG

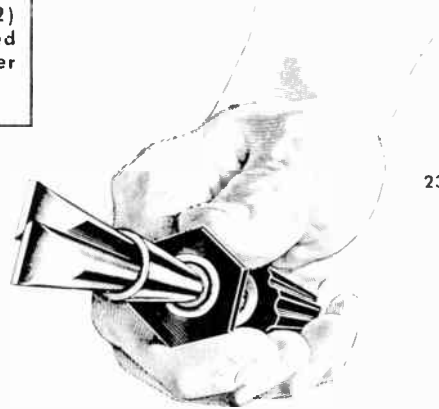
Quick-Wedge SCREW-HOLDING Screwdrivers

14 DIFFERENT SIZES — A SIZE FOR EVERY JOB!
Holds — Starts — Drives the Screw — America's Handiest!

ELECTRICAL SIZES

Any of the 14 sizes (except No. 1732) available with shockproof, plastic covered tubing at a cost of 15¢ additional per screwdriver.

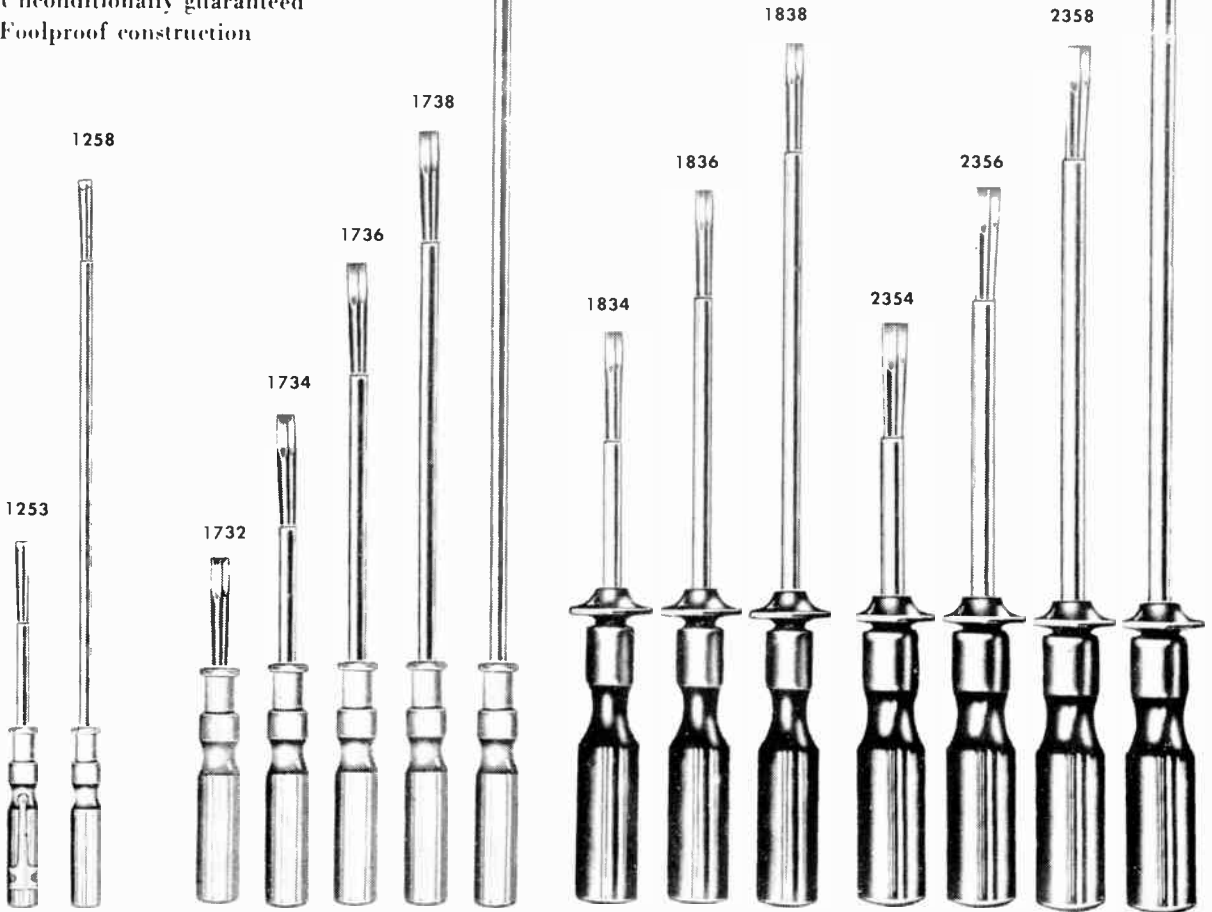
One screwdriver drives many sizes of screws
 Shockproof, unbreakable Tenite II handle
 Hollow-ground bit fits any slotted screw
 Use instead of conventional screwdriver
 Strong as conventional screwdriver
 Tough, durable spring steel blades
 Positively will not mar screw slot
 Fast, positive action — easy to use
 No spring clip to slip off screws
 No pressure wedge to wear out
 Unconditionally guaranteed
 Foolproof construction



23514

17312

Blade length is indicated by last digit of model number. "17312" has a 12" blade — "23514" has a 14" blade.



MIDGET SIZES

SMALL SIZES

MEDIUM SIZES

HEAVY DUTY SIZES

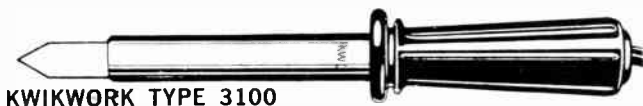
KEDMAN COMPANY

Salt Lake City, Utah

Other Kedman Products--The Famous Huntsman Welding Shields

KWIKHEAT SOLDERING IRONS

TEMPERATURE CONTROLLED MODEL

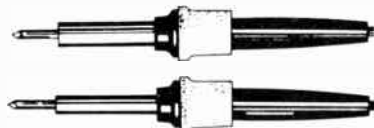


KWIKWORK TYPE 3100

A rugged, lightweight, general purpose iron for continuous production, or intermittent soldering. One piece shell and heating element are attached to air cooled plastic handle by 2 screws for fast, easy replacement. Temperature permits wattage increase as demand increases. Core made of forged tellurium copper. Screw type tips easily changed or replaced.

PENCIL MODELS

KWIKIE TYPE 4000



(Non-Thermostatic)

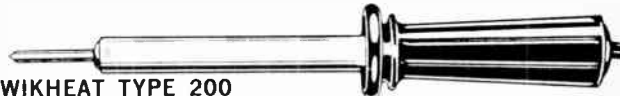
Kwikie Pencil Soldering Irons are designed for precision soldering of miniature components. Lightweight and finely balanced, their superior construction and compact heating element results in an iron small enough for work in densely packed circuits with capacity for high speed production use.

Only 7½ inches long... less than 3 oz. in weight... these small irons are ideal for general precision work. Heat insulated handles. Combination of wattage and tip size gives proper temperature for any job.

THERMOSTATIC MODELS with built-in Vanatta Automatic Thermostat



KWIKHEAT TYPE 300



KWIKHEAT TYPE 200

DEPENDABLE PRODUCTION IRONS

Kwikheat No. 200 (lightweight) and No. 300 (heavy duty) irons dependable, rugged production tools for high speed soldering. Interchangeable tips are easily replaced.

CONTROLLED TEMPERATURE

No. 200 and No. 300 irons are preset to 700 F for intermittent standby work or 800 F for constant high speed soldering. They can be preset to any temperature between 275° and 875 F at additional charge of \$1.00 for 1 to 49 irons or 50¢ each for 50 to 99. No extra charge for 100 or more. Alloys used reduce temperature creep.

CORROSION RESISTANT

Tips, core assemblies, and outer shells are made of stainless steel, or plated forged tellurium copper alloy to assure minimum corrosion and dependable long service life.

HOT IN 90 SECONDS

Very high watt density, with less heat radiation under complete control of precise built-in thermostat, gives fast heating and uniform operating temperature.

SPECIFICATIONS

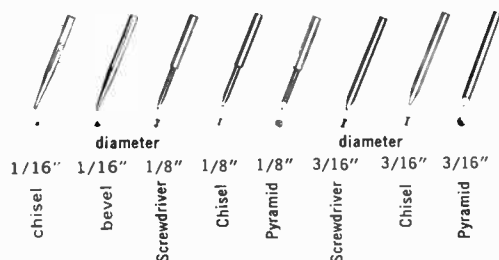
| | Model 200 | Model 300 | Model 3100 | Model 4100 | Model 4150 | Model 4200 | Model 4250 | Model 4300 | Model 4350 | Model 4400 | Model 4450 | Model 4500 |
|------------------------|-------------|------------|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Wattage | 150 | 225 | 225-75 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| Voltage | 115-230 AC | 115-230 AC | 115 AC-DC | 100-125 AC-DC | 100-125 AC-DC | 100-125 AC-DC | 100-125 AC-DC | 100-125 AC-DC | 100-125 AC-DC | 100-125 AC-DC | 100-125 AC-DC | 100-125 AC-DC |
| Tip Temperature (Max.) | 875° F. | 875° F. | 850 F. | 450 F. | 550° F. | 650° F. | 750° F. | 850° F. | 850° F. | 900° F. | 950 F. | 1000° F. |
| Heating Time (Max.) | 90 sec. | 90 sec. | 100 sec. | 70 sec. | 70 sec. | 70 sec. | 70 sec. | 70 sec. | 80 sec. | 80 sec. | 80 sec. | 80 sec. |
| Weight (with tip) | 7½ oz. | 14 oz. | 8 oz. | 1¾ oz. | 1¾ oz. | 1¾ oz. | 1¾ oz. | 1¾ oz. | 2¼ oz. | 2¼ oz. | 2¼ oz. | 2¼ oz. |
| Length (with tip) | 12¾" | 13" | 12¾" | 7½" | 7½" | 7½" | 7½" | 7½" | 7½" | 7½" | 7½" | 7½" |
| Ship. Weight | 1 lb. 2 oz. | 1½ lbs. | 1½ lbs. | 6 oz. | 6 oz. | 6 oz. | 6 oz. | 6 oz. | 6 oz. | 6 oz. | 6 oz. | 6 oz. |
| Heater Cord Length | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. | 6 ft. |

LIST PRICES

| | | | | | | | | | | | | |
|---------------------------|---------------|------------------|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Complete Iron with Tip | \$9.95 | \$14.95 | \$8.50 | \$6.00 | \$6.00 | \$6.00 | \$6.00 | \$6.00 | \$7.00 | \$7.00 | \$7.00 | \$7.00 |
| Replacement Element | 6.95 | 10.85 | 4.50 | 3.15 | 3.15 | 3.15 | 3.15 | 3.15 | 3.60 | 3.60 | 3.60 | 3.60 |
| 3-Conductor Cord, extra | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Tips (according to style) | 80¢ to \$1.10 | \$1.80 to \$2.70 | \$1.80 to \$2.70 | 33¢ to 65¢ | 33¢ to 65¢ | 33¢ to 65¢ | 33¢ to 65¢ | 33¢ to 65¢ | 33¢ to 65¢ | 33¢ to 65¢ | 33¢ to 65¢ | 33¢ to 65¢ |

Iron Clad Tips — All Types Available — Prices on Request

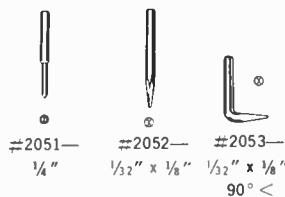
Kwikie INTERCHANGEABLE TIPS



1/16" diameter, 1/16" diameter, 1/8" diameter, 1/8" diameter, 1/8" diameter, 3/16" diameter, 3/16" diameter, 3/16" diameter

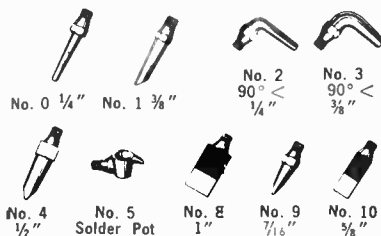
All tips available with 30°, 60° or 90° bends

TYPE 200 TIPS



#2051 — ¼", #2052 — ½" x ⅛", #2053 — ½" x ⅛" 90° <

TYPE 300 AND TYPE 3100 INTERCHANGEABLE SCREW TIPS



No. 0 ¼", No. 1 ⅜", No. 2 90° < ¼", No. 3 90° < ⅜", No. 4 ½", No. 5 Solder Pot, No. 8 1", No. 9 7/16", No. 10 ⅝"

#20 ANTIFREEZE COMPOUND

A lubricant for all soldering iron tips. Prevents sticking, increases conductivity between tip and core.

PLEASE CONTACT YOUR JOBBER FOR TRADE DISCOUNTS

MANUFACTURED BY **KWIKHEAT MANUFACTURING CO.** GLENDALE, CALIF.

**whatever electronic products
you require...**



**...you'll find it
faster in
this catalog...**

**...the world's largest catalog
of electronic
products
sold through
distributors**

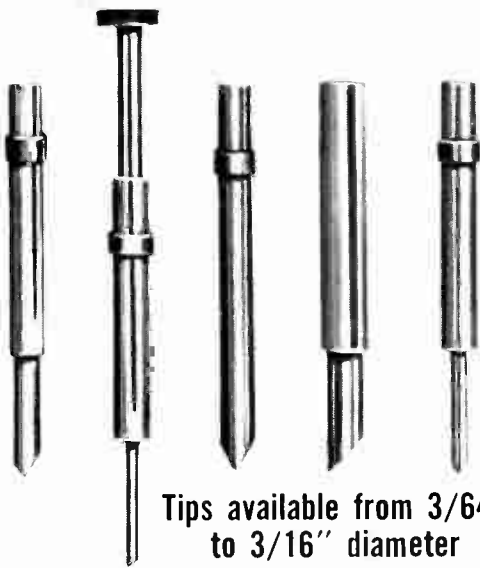
The
Radio - Electronic
MASTER

The Best Miniature Soldering Iron
in the World...

Precision

ANTEX-*Precision* MINIATURE SOLDERING IRON!

ACTUAL
SIZE
Model C-115



Tips available from 3/64"
to 3/16" diameter

Weighs one ounce . . . operates on 110-120 volts. No transformer. Longest lasting sealed element made . . . maintains constant temperature around 626°F. without oxidation.

- Ultra-flexible 3-wire cord . . . grounded . . . 50 megohms between element and tip protects components and operator.
- Bright "safety" yellow handle remains cool — stands more than 1000°F.
- Easy slide-on tips . . . stay hot under production speeds — made of tungsten-copper alloy; nickel or iron plated.
- 45-second heat-up time — cools off in 3 minutes.

Irons furnished less plugs: heavy duty 2 or 3-pronged plugs available. All parts replaceable at low cost.

\$4³⁵ Each

In lots of 6 — Tips extra

M. M. NEWMAN CORPORATION

Marblehead, Massachusetts

ORYX

PRECISION SOLDERING INSTRUMENTS

LOW-VOLTAGE PRODUCTION SOLDERING IRONS

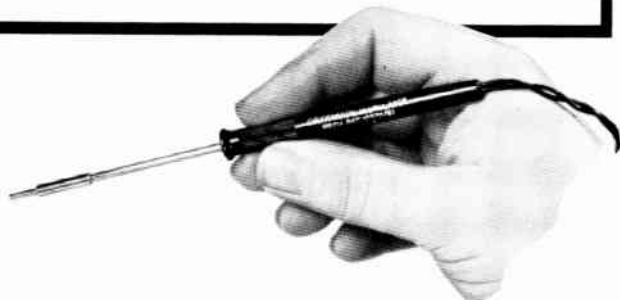
World's smallest, lightest instruments for close-quarter precision soldering of printed circuits, miniature component parts, semiconductors, and fine assemblies. Feather weights of $\frac{1}{4}$ to 1 ounce virtually eliminate hand fatigue. High efficiency, quick heat recovery, and cool handles are achieved by generating all heat within the tips. Manufactured by the Oryx Electrical Laboratories, Ltd. of England (protected by U.S. patents).

OTHER POPULAR LOW-VOLTAGE IRONS:

MODEL 6—The most precise Oryx soldering tool. Fixed $\frac{1}{16}$ " solid nickel tip. Solders hair-spring movements, semiconductors, rf coils, fine assemblies. Nominal temperature 625° F. Weighs only $\frac{1}{4}$ oz. 6-volts, 6-watts Net \$5.45 ea. (12 or more \$4.95 ea.)

MODEL 9-6—Similar to model 6A, but greater heat capacity. Weighs $\frac{1}{4}$ ounce. Nominal temperature 750° F. Furnished with $\frac{3}{32}$ " A tip. Also takes B tip. 6-volts, 8.3 watts. Also available for 12 volts (model 9-12) and 24 volts (model 9-24). Net \$5.45 ea. (12 or more \$4.95 ea.)

MODEL 11-6—Special model for high-temperature solders. Temperature 820° F. Weighs $\frac{1}{4}$ oz. Furnished with $\frac{3}{32}$ " solid nickel D tip. Also takes new $\frac{3}{32}$ " E tip. Nickel tips provide long life at high temperatures. 6-volts, 10-watts Net \$6.95 ea. (12 or more \$6.45 ea.)



MODEL 6A—(shown above). The most popular Oryx soldering iron. Designed for printed circuit soldering. Weighs only $\frac{1}{4}$ oz. Nominal temperature 690° F. Furnished with $\frac{3}{32}$ " removable B tip. Also takes A tip, and new $\frac{1}{16}$ " P tip (with shorter tip life). 6-volts, 6-watts Net \$5.45 ea. (12 or more \$4.95 ea.)



MODEL 12-6—Standard model for production soldering of radio, TV, radar, telephone, and switchboard assemblies. Weighs $\frac{1}{2}$ oz. Nominal temperature 700° F. Furnished with $\frac{3}{16}$ " C tip. 6-volts, 12-watts. Also available for 12 volts (model 12-12) and 24 volts (model 12-24) Net \$5.45 ea. (12 or more \$4.95 ea.)



MODEL 18-6—A heavy-duty production iron equal in performance to conventional 80 watt irons. Weighs $\frac{3}{4}$ oz. Nominal temperature 675° F. Furnished with $\frac{3}{16}$ " F tip. Also takes new $\frac{3}{32}$ " M tip. 6-volts, 18-watts Net \$7.50 ea. (12 or more \$7.05 ea.)



MODEL 25-12—Heavy-duty, high-temperature iron for large loads. Weighs 1 oz. Develops nominal tip temperature of 1000° F. Furnished with $\frac{3}{16}$ " G tip with solid nickel end. Also takes H tip. 12-volts, 25-watts Net \$8.00 ea. (12 or more \$7.55 ea.)



REPLACEMENT TIPS for low-voltage soldering irons. All tips nickel plated.

| Type | Material | Diameter | Use with | Net ea. |
|------|--------------|------------------|----------|---------|
| A | Copper alloy | $\frac{3}{32}$ " | 9-6, 6A | \$.50 |
| B | Copper alloy | $\frac{3}{32}$ " | 6A, 9-6 | .50 |
| C | Copper alloy | $\frac{3}{16}$ " | 12-6 | .50 |
| D | Solid nickel | $\frac{3}{32}$ " | 11-6 | 1.80 |
| E | Solid nickel | $\frac{3}{32}$ " | 11-6 | 1.80 |

| Type | Material | Diameter | Use with | Net ea. |
|------|------------------|------------------|----------|---------|
| F | Copper alloy | $\frac{3}{16}$ " | 18-6 | \$1.25 |
| G | Solid nickel end | $\frac{3}{16}$ " | 25-12 | 1.85 |
| H | Copper alloy | $\frac{1}{4}$ " | 25-12 | 2.35 |
| M | Solid nickel end | $\frac{3}{32}$ " | 18-6 | 1.85 |
| P | Copper alloy | $\frac{1}{16}$ " | 6A | .60 |

THERMAL WIRE STRIPPER

Reaches those hard-to-get-at spots. Ideal for repair and prototype work where a bench stripper is unsuitable. Miniature tweezer design.

• **STRIPS** Nylon, rubber, PVC, Kel-F, Polystyrene, and similar medium-temperature insulations to $\frac{1}{8}$ " diameter.

• **STAINLESS STEEL** stripping heads are abrasive-tumbled to eliminate sharp edges which might damage conductors. Operating temperature 400° F.

• **LOW COST**—brings thermal strippers within the reach of more employees.

Furnished with 4 $\frac{1}{2}$ ' cord. For 6-volts, AC or DC, 12-watts.



Net
\$14.95
ea.

(12 or more,
\$14.45 ea.)

MODEL
ST-6

SOLDERING TWEEZERS

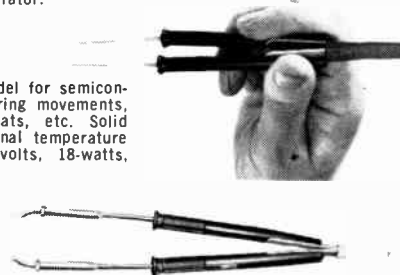
Unique tools with heating elements in each arm. Speed soldering time by heating both sides of joint. Tweezer action conducts heat quickly into joint. Low-voltage operation assures safety to circuitry and to operator.

MODEL TW-6—Precision model for semiconductors, solid state, hairspring movements, miniature relays, thermostats, etc. Solid nickel $\frac{3}{32}$ " fixed tips. Nominal temperature 550° F. Weighs 1 oz. 6-volts, 18-watts, AC or DC.

MODEL TW-12
Heavy duty model for regular production-line soldering of radio, TV, radar, telephone, and switchboard assemblies. Furnished with replaceable $\frac{1}{4}$ " N tips. Nominal temperature 625° F. Weighs 2 oz. 12-volts, 25-watts, AC or DC.

Either model, complete with 4 $\frac{1}{2}$ ' cord Net \$14.95 ea. (12 or more \$14.45 ea.)

Spare tip N for model TW-12 Net \$1.25 ea.



ACCESSORIES

TW-6E REPLACEMENT ASSEMBLY—Includes element, tip, and bushing (for one TW-6 tweezer arm only) Net \$5.30 ea.

ST-6E REPLACEMENT ASSEMBLY—Includes element, blade, and bushing (for one ST-6 stripper arm only) Net \$5.30 ea.

S-1 SOLDERING IRON STAND Net \$1.50 ea.

6-VOLT TRANSFORMER—Model 54203-6V. Output 6-volts, 18-watts. For use with all 6-volt Oryx tools. Operates on 115 V. AC. With 4 $\frac{1}{2}$ ' cord set — ready to plug in. Clip-holder on top for iron Net \$5.50 ea.

12-VOLT TRANSFORMER—Model 5420-12V. Output 12-volts, 25-watts. For all 12-volt Oryx tools. Operates on 115 V. AC. With 4 $\frac{1}{2}$ ' cord set—ready to plug in. Net \$6.45 ea.

PLUG-IN 115 V. MINIATURE IRONS



- **NO TRANSFORMER.** Standard models furnished with U/L approved 4½' cord set. Ready to plug in!
- **COMPACT DESIGN** for light production, laboratory, and service use. Irons weigh only 1 oz., plus cord.
- **HEAT QUICKLY** (about 1 minute) to 675° F. (10 W.) and 725° F. (15 W.)
- **REPLACEABLE TIPS.** 10 W. model furnished with 3/32" J tip (also takes K tip). 15 W. model furnished with 3/16" K tip (also takes L, Q, and R tips and solder cups listed below).

| | | |
|---|----------------|-------------------------|
| MODEL 115-10J*—Complete with J tip and cord set. Ready to plug in | Net \$6.95 ea. | (12 or more \$6.45 ea.) |
| MODEL 115-15K*—Complete with K tip and cord set. Ready to plug in | Net \$6.95 ea. | (12 or more \$6.45 ea.) |
| MODEL 115-10X (no tip)—Complete with cord set. Ready to plug in. Less tip | Net \$5.50 ea. | (12 or more \$5.00 ea.) |
| MODEL 115-15X (no tip)—Complete with cord set. Ready to plug in. Less tip | Net \$5.50 ea. | (12 or more \$5.00 ea.) |
| MODEL 115-10J-3—Complete with J tip and 3-wire grounding-type cord. Less plug | Net \$6.95 ea. | (12 or more \$6.45 ea.) |
| MODEL 115-15K-3—Complete with K tip and 3-wire grounding-type cord. Less plug | Net \$6.95 ea. | (12 or more \$6.45 ea.) |
| MODEL 115-10X-3 (no tip)—With 3-wire grounding-type cord. Less plug and tip | Net \$5.50 ea. | (12 or more \$5.00 ea.) |
| MODEL 115-15X-3 (no tip)—With 3-wire grounding-type cord. Less plug and tip | Net \$5.50 ea. | (12 or more \$5.00 ea.) |

*Approved by Department of Building and Safety, City of Los Angeles.

REPLACEMENT TIPS AND ELEMENTS for 115 V. irons. All tips are nickel plated.

| Type | Material | Diameter | Use with | Net ea. | Type | Material | Diameter | Use with | Net ea. |
|------|------------------|----------|----------------|---------|---------|--------------------------------------|----------|----------|---------|
| J | Copper alloy | 3/32" | 115-10 | \$1.55 | R | Solid nickel end | 3/16" | 115-15 | \$1.85 |
| K | Copper alloy | 3/16" | 115-10, 115-15 | 1.70 | 115-10E | Replacement element for model 115-10 | | | 3.60 |
| L | Copper alloy | 1/4" | 115-15 | 2.25 | 115-15E | Replacement element for model 115-15 | | | 3.60 |
| Q | Solid nickel end | 3/32" | 115-15 | 1.85 | | | | | |

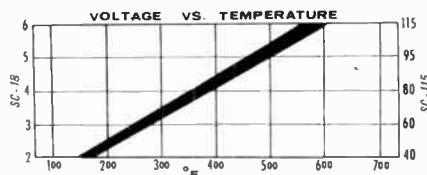
NEW! MINIATURE SOLDER CUPS

An inexpensive, fast way to melt small quantities of solder for tinning wires and component leads. Equally useful in the laboratory or on the production line. Melts a full solder load in just 5 minutes. Can also be used for heating potting compounds, waxes, and shellacs.

Cups are used with Oryx type 18-6 or 115-15 soldering irons, and can be attached or removed in a few seconds. Cup capacity is 2½ cc. Pouring lips are provided for lading purposes (such as pouring solder into a lug).

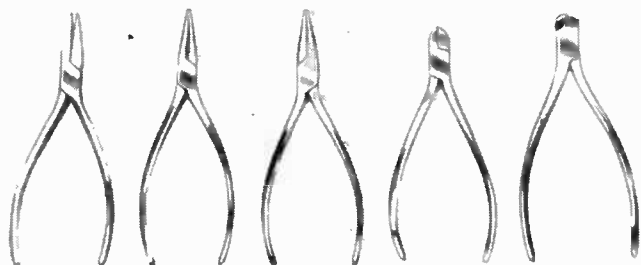
Operating temperature is 550-600° F. By varying voltage applied to soldering iron, continuous control of temperature is available. Covered cups can be used as microminiature ovens.

- SC-18 SOLOER CUPS (use with Oryx model 18-6 soldering iron) Net \$2.25 ea.
- SC-115 SOLOER CUPS (use with Oryx model 115-15 soldering iron) Net \$2.25 ea.



High-quality 60/40 solder slugs for use in Oryx cups. Weigh 1 oz. each. Sold in lots of 10 Net \$3.00 ea.

TELVAC miniature ELECTRONIC ASSEMBLY PLIERS



Precision tools for delicate electronic work. Featuring box joints and unusually small, fine heads. Each pair of pliers is accurately adjusted for the most intricate assembly operations. Five styles and three finishes are available. Standard finish is overall polished tool steel. Type A is bright nickel plate. Type B has polished heads and vinyl cushion handle grips. Made in West Germany to Oryx Co. specifications. Length 4¼" to 4¾". Individually packaged in VPI envelopes to MIL-I-3420A.

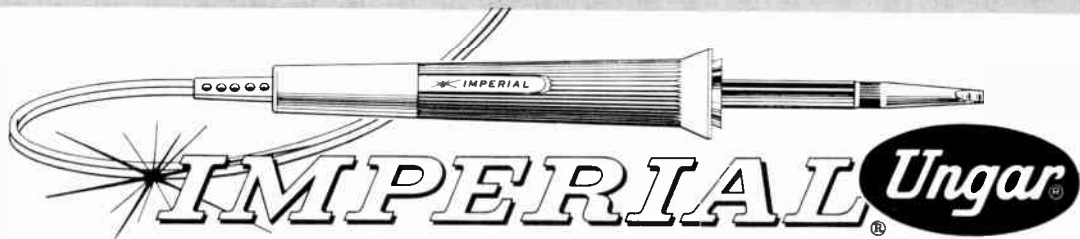
| Cat. No. | Style | Finish | Net ea. | 10 or More |
|----------|------------------|---------------|---------|------------|
| 10 | Flat nose | Polished | \$2.85 | \$2.60 |
| 10A | Flat nose | Nickel plate | 3.10 | 2.80 |
| 10B | Flat nose | Vinyl handles | 3.10 | 2.80 |
| 20 | Round nose | Polished | 2.85 | 2.60 |
| 20A | Round nose | Nickel plate | 3.10 | 2.80 |
| 20B | Round nose | Vinyl handles | 3.10 | 2.80 |
| 30 | Chain nose | Polished | 2.85 | 2.60 |
| 30A | Chain nose | Nickel plate | 3.10 | 2.80 |
| 30B | Chain nose | Vinyl handles | 3.10 | 2.80 |
| 40 | Diagonal cutter | Polished | 3.85 | 3.50 |
| 40A | Diagonal cutter | Nickel plate | 4.18 | 3.80 |
| 40B | Diagonal cutter | Vinyl handles | 4.18 | 3.80 |
| 50 | Flush end cutter | Polished | 3.85 | 3.50 |
| 50A | Flush end cutter | Nickel plate | 4.18 | 3.80 |
| 50B | Flush end cutter | Vinyl handles | 4.18 | 3.80 |

Also available in standard 5" to 5½" sizes. Information and prices furnished on request.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

THE ORYX COMPANY National Sales Agency, Sherman Oaks, California

MOST VERSATILE SOLDERING IRON EVER INVENTED



COOL, LIGHTWEIGHT, EASY-HANDLING

Ungar... developers of the industry's first miniature, low wattage, high temperature, pencil type iron... now brings you the ultimate in time-saving, money-saving soldering irons.



PERMA COOL COLORED HANDLES



#6100 Turquoise, Beige, Ivory* 1.28 ea.

INTERCHANGEABLE CORD SETS

2-wire or grounded 3-wire



#6102 2-wire. 1.28 ea.
#6103 Grounded NEMA. 2.08 ea.
#6104 Grounded stripped ends. 1.92 ea.

INTERCHANGEABLE "LONG LIFE" HEAT CARTRIDGES: 25, 30, 40 WATT



#6202 25 Watt (600-800°F Temperature range) 3.12 ea.
#6201 30 Watt (650-850°F Temperature range) 3.12 ea.
#6200 40 Watt (750-950°F Temperature range) 3.12 ea.

*NOTE: Designate color for handles and cord sets by adding suffix (-1 for Turquoise; -2 for Beige; -3 for Ivory).

44

IMPERIAL MINI-TIP®

Thread-on soldering tips

All easy-thread tips are completely interchangeable.



#6304 Iron Clad, Gold Plated (24 kt.) 3/64 x 1/2—Micro-Chisel. .80 ea.



#6305 Same As Above—Iron Clad, Gold Plated (24 kt.) Micro-Spade. .80 ea.



#6482 Iron Clad, Gold Plated (24 kt.) 3/64 x 1-1/16—Micro-Spade. .80 ea.



#6312 Tellurium Copper, 1/8 x 3/4—Pencil. .28 ea.



#6313 Same As Above—Iron Clad, Gold Plated (24 kt.) .80 ea.



#6315 Tellurium, 1/8 x 3/4—Pencil Offset. .28 ea.



#6316 Same As Above—Iron Clad, Gold Plated (24 kt.) .80 ea.



#6318 Tellurium Copper, 1/8 x 3/4—Long Taper Chisel. .28 ea.



#6319 Same As Above—Iron Clad, Gold Plated (24 kt.) .80 ea.



#6481 Iron Clad, Gold Plated (24 kt.) 3/4 x 3/32—Tapered Screwdriver. .80 ea.



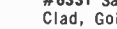
#6324 Tellurium Copper, 1/8 x 3/4—Long Taper Pyramid. .28 ea.



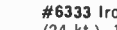
#6325 Same As Above—Iron Clad, Gold Plated (24 kt.) .80 ea.



#6330 Tellurium Copper, 1/8 x 3/4—Screwdriver. .28 ea.



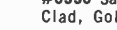
#6331 Same As Above—Iron Clad, Gold Plated (24 kt.) .80 ea.



#6333 Iron Clad, Gold Plated (24 kt.)—1/8 x 3/4—Needle. .80 ea.



#6335 Tellurium Copper, 1/8 x 3/4—Spade. .28 ea.



#6336 Same As Above—Iron Clad, Gold Plated (24 kt.) .80 ea.



#6365 Tellurium Copper, 3/16 x 3/4—Long Taper Chisel. .28 ea.



#6366 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6368 Tellurium Copper, 3/16 x 3/4—Long Taper Pyramid. .28 ea.



#6369 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6371 Tellurium Copper, 3/16 x 3/4—Screwdriver. .28 ea.



#6372 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6373 Mallory-3 Copper, 3/8x3/4—Long Taper Chisel. .28 ea.



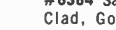
#6381 Tellurium Copper, 3/16 x 1-1/2—Long Taper Chisel. .28 ea.



#6382 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6383 Tellurium Copper, 3/16 x 1-1/2—Long Taper Chisel Offset. .28 ea.



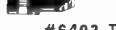
#6384 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6389 Tellurium Copper, 3/16 x 1-1/2—Screwdriver. .28 ea.



#6390 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6403 Tellurium Copper, 1/4x3/8—Short Taper Chisel. .28 ea.



#6406 Same As Above—Solid Armco Iron, Silver Plated. .80 ea.



#6407 Tellurium Copper, 1/4 x 3/8—Short Taper Pyramid. .28 ea.



#6410 Same As Above—Solid Armco Iron, Silver Plated. .80 ea.



#6423 Tellurium Copper, 1/4 x 3/4—Long Taper Chisel. .28 ea.



#6424 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6427 Tellurium Copper, 1/4 x 3/4—Long Taper Pyramid. .28 ea.



#6428 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6473 Tellurium Copper, 3/8x3/4—Long Taper Chisel. .28 ea.



#6474 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6476 Same As Above—Solid Armco Iron, Silver Plated. .80 ea.



#6477 Tellurium Copper, 3/8 x 3/4—Long Taper Pyramid. .28 ea.



#6478 Same As Above—Iron Clad, Gold Plated (24 kt.) 1.00 ea.



#6480 Same As Above—Solid Armco Iron, Silver Plated. .80 ea.

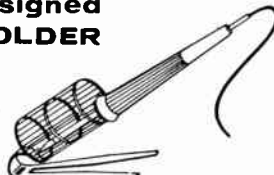
HEAT SEAL



Heat Seal on threads of heat cartridges and tips assures maximum heat transfer, reduces oxidation, reduces oxidation. Convenient 3-oz. can. #6801, .80 ea.

Specially Designed IMPERIAL HOLDER

Rugged holder, built especially for the IMPERIAL, protects iron, keeps it safely out of the way. Black with gold cage guard and heat sink. #6800, 1.60 ea.



KLEEN-TIP SPONGE

Removes oxidation, doubles life of tips. #400 with tray. 1.00

#455 refill sponges (2). .40



All Prices Shown On This Page Are USER NET • Write for Complete Imperial Catalog



STANDARD LINE SOLDERING IRON

New UNGAR HEATING UNITS AND THREAD-ON TIPS for Hi-Speed Repeat Soldering

Ungar's exclusive new development provides these important advantages...

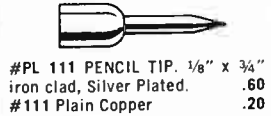
- New thread-on copper tips, iron clad, silver plated or plain cooper.

- 100% increase in heat recovery rate.
- 4 times greater heat transfer.
- Positive seal between heating unit and tip.
- New passivated plating reduces barrel oxidation and surface flaking of heating units.



#4037 Hi-Speed Heating Unit—850°-900°F. 47½ Watts. \$2.40
#1237 Hi-Speed Heating Unit—750°-800°F. 37½ Watts. \$1.20

All electrical components are for use on 115 v. AC-DC.



#PL 111 PENCIL TIP. 1/8" x 3/4" iron clad, Silver Plated. .60
#111 Plain Copper .20

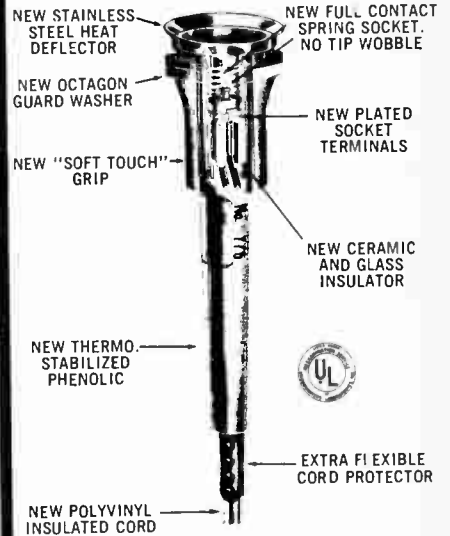


#PL 113 CHISEL TIP. 1/8" x 3/4" iron clad, Silver Plated. .60
#113 Plain Copper .20



#8001 ANTI-SEIZE. 2 oz. can .55 each
 New Ungar Anti-Seize guards against "freezing," protects against corrosion and aids heat transfer to tip.

Improved #776 handle with 9 great improvements



NEW STAINLESS STEEL HEAT DEFLECTOR
 NEW OCTAGON GUARD WASHER
 NEW "SOFT TOUCH" GRIP
 NEW THERMO-STABILIZED PHENOLIC
 NEW POLYVINYL INSULATED CORD

NEW FULL CONTACT SPRING SOCKET. NO TIP WOBBLE

NEW PLATED SOCKET TERMINALS

NEW CERAMIC AND GLASS INSULATOR



EXTRA FLEXIBLE CORD PROTECTOR

All these plus features... still only \$1.20

UNGAR fast, safe De-Soldering Tips

Helps remove components 70% faster. Melts solder on all terminals at once. For use with #4045 Heating Unit. .60 each

#856 5/8" Cup Tip

#855 3/4" Cup Tip

#854 1" Cup Tip

#858 Bar Tip

New #862 Offset Slotted Tip

#857 Slotted Tip

New #863 Cube Tip

New #861 Triangle Tip



#270 UNGAR De-Soldering Kit. Complete, 7 pieces including handle, Heating Unit #4045 and five De-Soldering Tips in metal case. \$5.35

UNGAR TIPLET® Soldering Tips for Heating Units shown below



#PL 340 Micro-Needle. 3/4" x 3/4", for microscopic soldering, iron clad, Silver Plated—Actual size. .48



#PL 331 Pencil Tip. 1/8" x 1", iron clad, Silver Plated. .48
#331 Plain Copper .16



#PL 332 Pencil Offset. 1/8" x 1", iron clad, Silver Plated. .48
#332 Plain Copper .16



#PL 333 Chisel, Long Taper. 1/8" x 1", iron clad, Silver Plated. .48
#333 Plain Copper .16



#PL 338 Tapered Needle. 1/8" x 1 3/4", iron clad, Silver Plated. .48



#PL 833 Chisel, Long Taper. 3/8" x 1 3/4", iron clad, Silver Plated. .80



#PL 834 Chisel, Long Taper, Offset. 3/8" x 1 3/4", iron clad, Silver Plated. .80



#PL 823 Pyramid, 3/8" x 1", iron clad, Silver Plated. .48
#823 Plain Copper .16



#PL 824 Chisel, Long Taper. 3/8" x 1", iron clad, Silver Plated. .48
#824 Plain Copper .16

800 Series TIPLETS fits Ungar #4045 heating unit only.

#8000 Soldering Iron Holder

Exclusive Ungar double safety guard design protects operator against accidental burns and 2) protects iron against breakage. Individually boxed \$1.60 ea.



KLEEN-TIP SPONGE

Removes oxidation, doubles life of tips. #400 with tray. \$1.00 ea
 #455 refill sponges (2). .40



Ungar Interchangeable Tips... the right tip at the right temperature.

| TIP TEMPERATURES | CHISEL TIP LONG TAPER | PYRAMID TIP | CHISEL TIP SHORT TAPER | THREAD-IN HEATING UNITS For use with Tipleets shown below |
|--|--|---|--|---|
| 850° to 1000° F. #4000 Super Hi-Heat Series 47-1/2 Watt | #4033 Tip 1-5/8" long, 1/4" wide. UC; copper, iron clad, silver plated. \$2.40 | #4036 Tip 1-1/8" long, 3/8" diameter. UC; copper, iron clad, silver plated. \$2.40 | #4039 Tip 1-1/8" long, 3/8" diameter. UC; copper, iron clad, silver plated. \$2.40 | #4035 Steel body, nickel plated. 1/8" tap for use with 300 Series Tipleets. #4045 5/16" tap for use with 800 Series Tipleets. \$2.40 each |
| 750° to 800° F. #1200 Hi-Heat Series 37-1/2 Watt | #1233 Tip 1-5/8" long, 1/4" wide. UC; copper, unplated. \$1.20 | #1236 Tip 1-1/8" long, 5/16" diameter. Pure solid Armco iron, silver plated. \$1.20 | #1239 Tip 1-1/8" long, 3/8" diameter. Pure solid Armco iron, silver plated. \$1.20 | #1235 Steel body, nickel plated. 1/8" tap. \$1.20 |
| 650° to 750° F. #500 Standard Series 23-1/2 Watt | #533 Tip 1-5/8" long, 3/16" wide. UC; copper, unplated. \$1.00 | #536 Tip 1-1/8" long, 5/16" diameter. UC; copper, unplated. \$1.00 | #539 Tip 1-1/8" long, 5/16" diameter. UC; copper, unplated. \$1.00 | #535 Steel body, nickel plated. 1/8" tap. \$1.00 |

See UNGAR's revolutionary new IMPERIAL® soldering iron on preceding page!

All Prices Shown On This Page are USER NET

UTICA

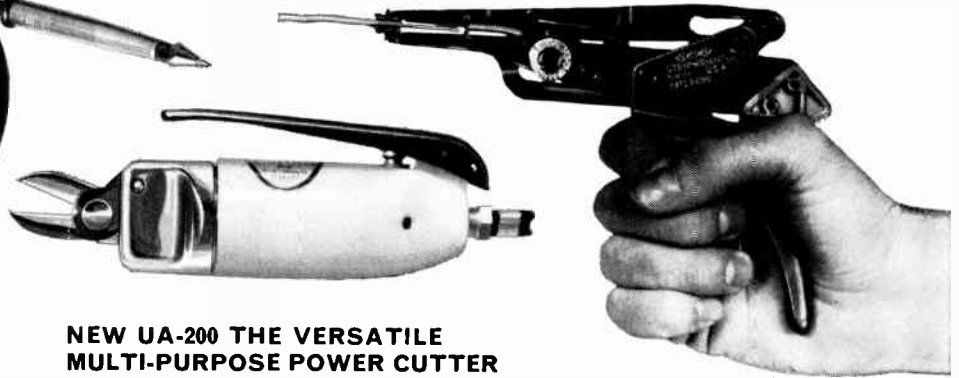
TOOL DIVISION • KELSEY-HAYES CO., UTICA NEW YORK



WORLD'S MOST COMPLETE LINE OF
STANDARD AND SPECIAL ELECTRONIC PLIERS!

**NEW UA-300 POWER WRITER**

Just as the name implies, the UA-300 Power Writer is a power writing tool. It's a pencil styled, air-activated tool for inscribing, coding, labeling or marking all types of materials such as hard and soft metals, plastics, ceramics and glass.



**NEW UA-200 THE VERSATILE
MULTI-PURPOSE POWER CUTTER
With Interchangeable Cutting Heads**

This latest and most versatile addition to the Utica line of production tools is available with four optional, interchangeable cutting heads. Each head is designed for a specific cutting purpose and all have electronically induction hardened jaws.

**A REVOLUTIONARY
NEW WIRE STRIPPER**

Strip fast and clean! Eliminate nicking! Reduce insulation marking! Handle any wire size from #12 to #26 . . . and do it all with Stripwright® . . . Utica's revolutionary new wire stripper.



31

No. 31 DUCK BILL WIRING PLIERS

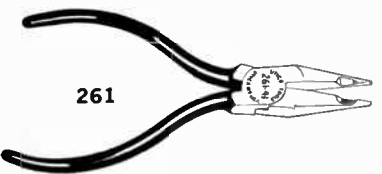
Long reach duck bill pliers. Serrated jaws. Size: 8".



896

No. 896 RADIO AND IGNITION CUTTING PLIERS

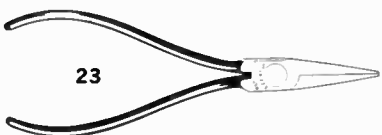
For cutting and forming wire. Center cutter near tip of jaws. Size: 6".



261

No. 261 SPECIAL SHORT CHAIN NOSE CUTTING PLIERS

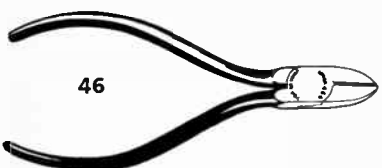
Flush cutter near tip of jaws for close cuts. Size: 4½" (formerly custom tool No. B801).



23

No. 23 NEW MIDGET SHORT CHAIN NOSE PLIERS

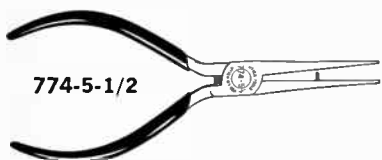
Very thin nose for delicate electronic subminiature assembly. Sizes: 4", 4½", 5".



46

No. 46 MIDGET DIAGONAL PLIERS

Small, light, sturdy diagonal for work on small electronic assemblies. Size: 4".



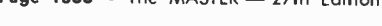
774-5-1/2

No. 774-5-1/2 PICK-UP AND WIRING PLIERS

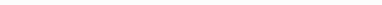
Ideal for looping, twisting, bending and picking up finest wires.

**No. 1033 LONG CHAIN NOSE PLIERS**

For general wiring. ½" nose and deep serrated jaws. Sizes: 6", 7".

**No. 25-5 BENT CHAIN NOSE PLIERS**

Finely serrated jaws for sensitive circuit wiring. Size: 5".

**No. 777 LONG NEEDLE NOSE PLIERS**

Long, spring tempered jaws for very fine work in assembling small electronic apparatus. Size: 6".

No. 776 CURVED LONG NEEDLE NOSE PLIERS

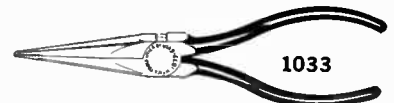
Fine, spring tempered pliers with bent nose for offset work. Size: 6".

No. 265-5 WIRING PLIERS

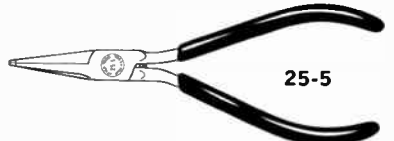
Cutter designed to snap-cut, loop or twist. Size: 5".

No. 47 MIDGET DIAGONAL PLIERS

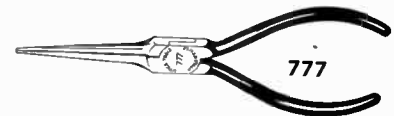
Fine tapered nose for delicate work in confined areas. Flush jaws for close cutting. Size: 4".



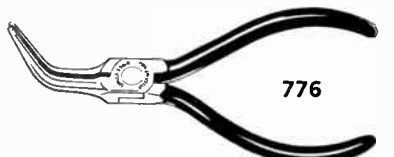
1033



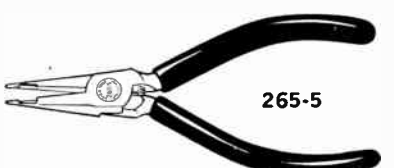
25-5



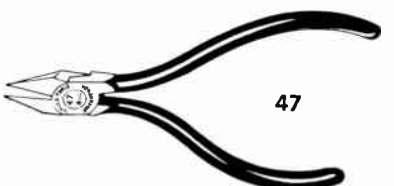
777



776



265-5



47

VULCAN ELECTRIC SOLDERING TOOLS

- High powered Soldering Tools, designed for fast soldering with low operating cost • Tips are of finest forged copper • The "Hang" or balance good mechanics appreciate, plus light weight • Cool handles of selected birch, shaped to fit the hand • 6 ft heater cord, with unbreakable rubber plug • Fireproof terminals
- Heating elements easily replaced • Operate equally well on AC or DC

Pygmy PENCIL TYPE



A very efficient tool for fine soldering of instruments, meters, gauges, small radios, etc. or any spots where space is cramped or there is little clearance. The cool, tapering wood handle permits "writing grip." Flexible coil also assures coolness. Equipped with approved cord and unbreakable rubber plug. Standard tip is 1/4" but 3/16" or 1/8" tips are available, as well as special tips, bent to any angle or in various shapes.

| Cat. No. | Watts | Tip | Weight | Length | List |
|----------|-------|------|--------|--------|--------|
| Pygmy | 25 | 1/4" | 7 oz. | 8 1/4" | \$5.10 |

SOLDERING TOOL HOLDER



Holds and guards the Soldering Tool and keeps the tip at soldering temperature as long as it remains in the holder. Has a cord and attached plug cap for connection to current and a receptacle for plugging in the Tool. A convenient adjusting screw sets the Holder thermostat to maintain proper temperature. AC only

| | | |
|-----------|--------------------|--------|
| No. 2100 | without thermostat | \$4.95 |
| No. 2100T | with thermostat | \$8.00 |

"DUREVER" Soldering Tips are pure forged copper, shaped to your favorite style, with a special metal coating that will preserve the original shape of the tip by protecting the copper from corrosion and oxidation. Will outlast copper tips, cannot amalgamate with solder, do away with the necessity for dressing or filing. Can be readily tinned without filing and hold their original shape. Circular on request.



NEW "HIGH-SPEED" SOLDERING IRONS



for continuous, precision, high production work. Only 12 3/8" O.A. including tips.

| Cat. No. | Watts | Tip | List |
|----------|-------|------|-------|
| 450 | 150 | 3/8" | 11.50 |
| 450S | 175 | 3/8" | 11.50 |
| 455 | 150 | 1/2" | 11.50 |
| 550 | 200 | 5/8" | 13.00 |
| 553 | 200 | 3/8" | 13.00 |
| 555 | 200 | 1/2" | 13.00 |



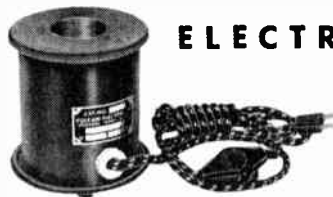
DART Industrial Soldering Pencils for rapid, continuous production, only 3 oz. wgt., cool handle, high power, heavy duty.

| Cat. No. | Watts | Tip | List |
|----------|-------|------|------|
| P314 | 40 | 1/4" | 5.80 |
| P318 | 40 | 1/8" | 5.85 |
| RAP314 | 40 | 1/4" | 6.75 |

PLUG TIP — All parts replaceable

| CAT No. | WATTS | TIP | LIST |
|---------|-------|------|--------|
| * 25 | 50 | 1/4" | \$6.55 |
| 35 | 100 | 3/8" | 10.30 |
| 453 | 150 | 3/8" | 11.20 |
| 45 | 150 | 1/2" | 11.70 |
| 55 | 200 | 3/8" | 12.10 |
| * 75 | 300 | 7/8" | 15.80 |

*Heating element replaceable at Factory only.



ELECTRIC SOLDER POTS

Both single and three-temperature Pots in a variety of sizes and wattages, all with cord and plug approved at Underwriters' Laboratories.

| CAT. No. | WATTS | | | CAPACITY SOLDER APPROXIMATE | LIST |
|----------|-------|-------------|-----|-----------------------------|---------|
| | HIGH | MEDIUM | LOW | | |
| 1700 | 200 | 120 | 80 | 1 1/4 lbs. | \$28.60 |
| 1702 | 250 | 150 | 100 | 5 lbs. | 32.85 |
| 1704 | 500 | 250 | 125 | 10 lbs. | 41.25 |
| 1600 | 150 | Single Heat | | 14 oz. | 9.90 |
| 1606 | 350 | Single Heat | | 3 lbs. | 11.55 |
| 1701 | 250 | Single Heat | | 4 lbs. | 21.10 |
| 1703 | 200 | Single Heat | | 1 1/2 lbs. | 16.10 |

Other sizes up to 6000 watts, single heat.

VULCAN "EVEN DIP" SOLDER POTS

DESIGNED AND DEVELOPED BY SPECIALISTS FOR PRINTED CIRCUIT SOLDER OPERATIONS



- 16 Crucible Sizes
- High Fidelity thermostat control — Adjustable 150-600°F
- Surface Temperature does not vary beyond ±2°F
- Localized "hot spots" completely eliminated
- Replaceable heavy-duty heating elements.

Send for free, detailed specifications.

ELECTRIC COMPANY

DANVERS, MASS.

ELECTRIC SOLDERING TOOLS • SOLDER POTS • GLUE POTS • BRANDING IRONS • HEATING UNITS



Screw Drivers Nut Drivers

The Industry's Finest and Most Complete Line

1/8" Cabinet Style—Round Blades

| Stock Number | Blade Diameter and Length | Price |
|--------------|---------------------------|-------|
| A 216-4 | 1/8"x4" | \$.70 |
| A 216-6 | 1/8"x6" | .72 |
| A 216-8 | 1/8"x8" | .78 |
| A 216-10 | 1/8"x10" | .86 |

3/16" Cabinet Style—Round Blades

| | | |
|----------|-----------|------|
| A 316-4 | 3/16"x4" | .92 |
| A 316-5 | 3/16"x5" | .98 |
| A 316-6 | 3/16"x6" | 1.02 |
| A 316-8 | 3/16"x8" | 1.08 |
| A 316-10 | 3/16"x10" | 1.18 |

1/4" General Service—Round Blades

| | | |
|----------|----------|------|
| A 416-4 | 1/4"x4" | 1.12 |
| A 416-5 | 1/4"x5" | 1.14 |
| A 416-6 | 1/4"x6" | 1.18 |
| A 416-8 | 1/4"x8" | 1.24 |
| A 416-10 | 1/4"x10" | 1.36 |

5/16" Heavy Duty—Round Blades

| | | |
|----------|-----------|------|
| A 516-6 | 5/16"x6" | 1.50 |
| A 516-8 | 5/16"x8" | 1.58 |
| A 516-10 | 5/16"x10" | 1.78 |

Stubbys

| | | |
|-------|--------------|------|
| A 132 | 1/4"x1-1/4" | .84 |
| A 135 | 5/16"x1-3/4" | 1.10 |

Phillips Drivers

| Stock Number | Point No. | Blade Diam. and Length | Price |
|--------------------|-----------|------------------------|-------|
| P 01 | 0 | 1/8"x2-1/2" | \$.74 |
| P 1 | 1 | 3/16"x3" | 1.00 |
| P 2 | 2 | 1/4"x4" | 1.26 |
| P 3 | 3 | 5/16"x6" | 1.72 |
| P 5 (Stub) | 2 | 1/4"x1-3/4" | 1.10 |
| P 6 (Stub) | 1 | 3/16"x1-1/4" | 1.00 |
| P 12 (Pocket Clip) | 1 | 1/8"x2-1/2" | .76 |

Clutch Head Drivers

| Stock Number | Bit Point Diameter and Blade Length | Price |
|--------------|-------------------------------------|-------|
| CH 43 | 1/8"x3" | 1.30 |
| CH 54 | 5/32"x4-1/4" | 1.30 |
| CH 64 | 3/16"x4-1/4" | 1.30 |
| CH 86 | 1/4"x6" | 1.72 |
| CH 106 | 5/16"x6" | 2.22 |

Stub Styles

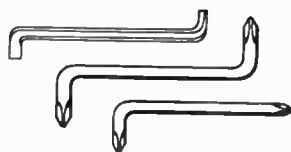
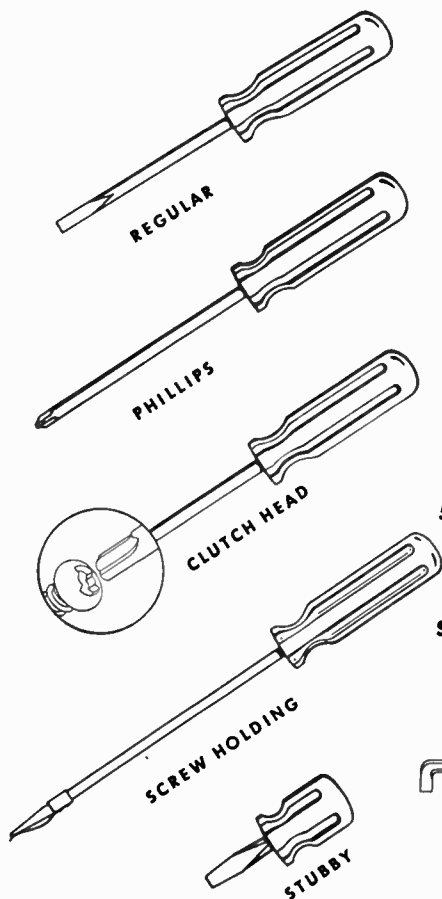
| | | |
|-------|--------------|------|
| CH 51 | 5/32"x1-1/2" | 1.16 |
| CH 61 | 3/16"x1-1/2" | 1.16 |

Screw Holding Drivers

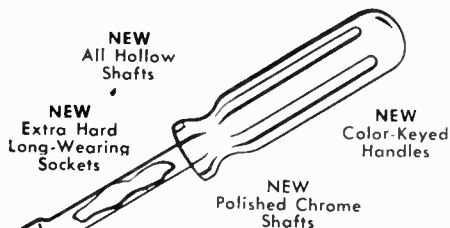
| Stock Number | Blade Diam. & Length | Price |
|--------------|----------------------|-------|
| OK 23 | 1/8"x3" | .98 |
| OK 24 | 1/8"x4" | 1.02 |
| OK 26 | 1/8"x6" | 1.08 |
| OK 28 | 1/8"x8" | 1.12 |
| OK 34 | 3/16"x4" | 1.30 |
| OK 36 | 3/16"x6" | 1.36 |
| OK 38 | 3/16"x8" | 1.42 |

Offset Screw Drivers

| Stock No. | Type | Blade | Price |
|-----------|----------|---|-------|
| VO 1 | Regular | 5/32"x3" | \$.48 |
| VO 2 | Regular | 1/4"x4" | .78 |
| P 120 | Phillips | #1 point one end, #2 point other end | .68 |
| P 111 | Phillips | #1 point both ends | .54 |
| P 222 | Phillips | #2 point both ends | .60 |



VACO® NEW DESIGN NUT DRIVERS—With All Hollow Shafts

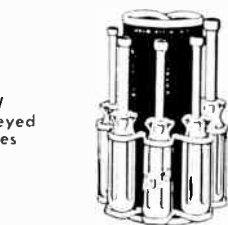


Standard (3") Lengths

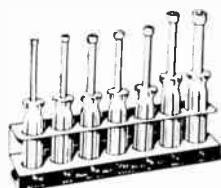
| Stock No. | Hex Size | Overall Length | Color Key | Price |
|-----------|----------|----------------|-----------|-------|
| S 6 | 3/16" | 6 5/8" | Black | \$.96 |
| S 8 | 1/4" | 6 5/8" | Red | .96 |
| S 10 | 5/16" | 6 5/8" | Yellow | .96 |
| S 11 | 11/32" | 6 5/8" | Green | .96 |
| S 12 | 3/8" | 6 5/8" | Blue | .96 |
| S 14 | 7/16" | 7" | Brown | 1.18 |
| S 16 | 1/2" | 7" | Orange | 1.18 |

ALSO AVAILABLE

Stubby sizes 1/4", 5/16", 3/8"
Odd sizes 7/32", 9/32"
Extra Large sizes 9/16", 5/8"



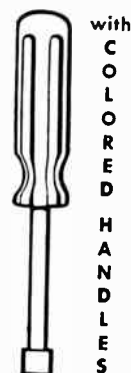
K-7 Self-Standing Kit \$8.60
Includes 7 nut drivers (3" lengths) each in own holder marked for size and color.



S 700 Bench Stand \$8.00
All metal for permanent attachment to bench or wall. 7 drivers.

VACO Nut Drivers Feature 4-STAR DESIGN

- ★ Extra Large Colored-for-Size Handles
- ★ Beautiful Polished Chrome Finish
- ★ All Hollow Shafts
- ★ Extra Hard Tempered Sockets



Available in 24 types and sizes

Beryllium Copper Drivers



Round Blade, Non-Spark, Non-Magnetic

| Stock Number | Blade Diameter and Length | Price |
|--------------|---------------------------|--------|
| VB 26 | 1/8"x6" | \$1.34 |
| VB 210 | 1/8"x10" | 1.48 |
| VB 38 | 3/16"x8" | 2.36 |
| VB 46 | 1/4"x6" | 2.94 |
| VB 48 | 1/4"x8" | 3.24 |

Insulated Blade Screw Drivers



| | | |
|--------|----------|------|
| VR 241 | 1/8"x4" | .84 |
| VR 261 | 1/8"x6" | .96 |
| VR 281 | 1/8"x8" | 1.00 |
| VR 361 | 3/16"x6" | 1.12 |
| VR 381 | 3/16"x8" | 1.16 |

Non-Metallic Radio and TV Aligners



Bone Fiber Blade

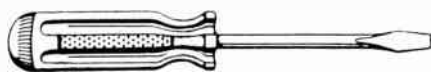
| | | |
|--------|-----------|-----|
| AT 55 | 5/32"x5" | .74 |
| AT 510 | 5/32"x10" | .86 |

Non-Magnetic Metal Tip Radio and TV Aligner



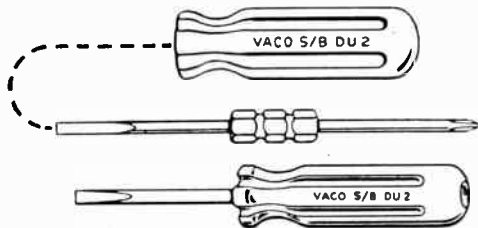
| Stock Number | Body Size | Bit Diameter | Capacitance | Price |
|--------------|-------------|--------------|-------------|--------|
| AT 45 | 3/8"x5-1/2" | 3/16" | Slight | \$.60 |

Neon Light Screw Drivers



| Stock Number | Blade Diameter and Length | Price |
|--------------------|---------------------------|--------|
| AN 44 | 1/4"x4" | \$1.78 |
| AN 2 (Pocket Clip) | 1/8"x3" | 1.08 |

Duplex "Reversible" Drivers



| Stock Number | Blade Size and Type | Price |
|--------------|--|--------|
| DU 2 | No. 1 Phillips, One End 3/16" Regular, Other End | \$1.46 |
| DUH 4 | No. 2 Phillips, One End 1/4" Regular, Other End | 1.76 |
| DUP 12 | No. 1 Phillips, One End No. 2 Phillips, Other End | 1.94 |

VACO RADIO and TV KITS



ZBX 51

ZBX 51 Screw Driver Kit.....\$5.22
A fine, all-purpose kit of interchangeable regular and Phillips blades that fit same handle. 6" extension makes 10 combinations possible. In durable leatherette bag.



ZSX 61

ZSX 61 Nut Driver Kit.....\$6.30
A most versatile and complete hexagon wrench kit for radio, television or any other work requiring speedy nut setting. All sockets are super hard for maximum utility and long life. 6" extension makes 10 blade lengths possible. In handy leatherette tool roll.



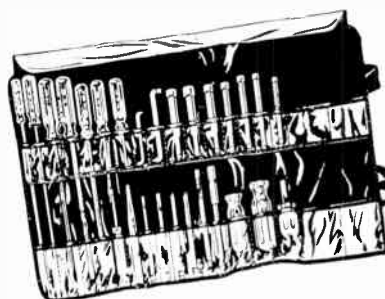
ZA 70

ZA 70 Allen Driver Kit.....\$5.12
This useful kit consists of 6 hexagon drivers, handle and bag. Will service hexagon recessed opening screws Nos. 4, 5, 6, 8, 10, 1/4", 5/16" and 3/8". Each bit is extra long and may ground back as wear occurs.



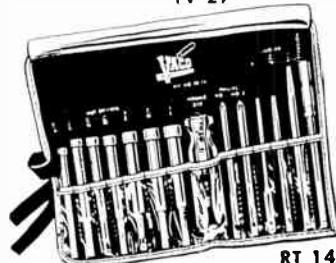
ZU 75

ZU 75 Universal Driver Kit.....\$5.22
Here is a kit that is universal in its applications since it will serve all three types of the most popular screws in use today—regular slotted, Phillips, and clutch head. All popular size blades are included—3/16" and 1/4" for regular slotted screws; No. 1 and No. 2 Phillips; 5/32" x 3/16" clutch head.



TV 27

27-Piece TV and Radio Kit.....\$26.42
NO. TV 27 KIT—Contains practically every hand tool necessary for television and radio work, plus extra pockets for pliers and other personal tools according to individual preferences. Contains one each of the following: ZH 1 medium duty handle; ZH 2 heavy duty handle; ZX 56 extension; A 132 1/4" stub; 1/4", 3/16", 1/8" regular bits; No. 1 Phillips and No. 2 Phillips bits; 3/16", 1/4", 5/16", 11/32", 3/8", 7/16" and 1/2" hex. wrenches; AT 45 metal tip aligner; A 116-2 3/32" pocket clip; P 01 #0 Phillips thin blade; OK 24 1/8" screw holding; VR 261 1/8" insulated blade; OK 38 3/16" screw holding; VR 381 3/16" insulated blade; VB 210 1/8" x 10" non-magnetic adjuster; AT 510 5/32" fiber aligner; VO 2 medium offset; VO 1 small offset.



RT 14

14-Piece TV and Radio Kit \$11.98
NO. RT 14 KIT—Here's a handy, convenient kit for radio and TV service men. Contains nut drivers, Phillips and regular drivers, plus ZH 2 heavy duty handle and famous Vaco 6" extension which doubles the usefulness of each driver. In durable leatherette tool roll.

VACO PRODUCTS CO., Chicago 11, Illinois
In Canada: Vaco-Lynn Products (of Canada) Ltd.

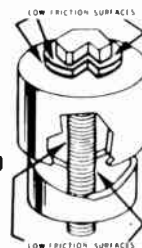


CHASSIS PUNCHES

NEW *"LT" (LOW TORQUE) CHASSIS PUNCHES

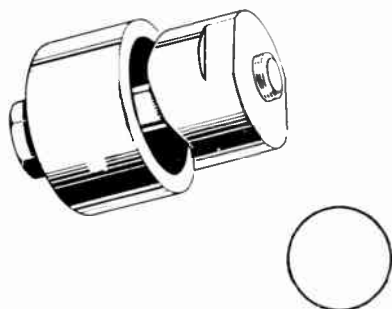
A brand-new electro-coating process (which can't wear off) reduces friction, thus lowers torque. You get a much cleaner hole with much less effort. The Walsco "L.T." Chassis Punch requires no lubrication of any kind and will give perfect service almost indefinitely.

50% LESS
EFFORT REQUIRED
THAN
COMPETITIVE
PUNCHES



ROUND CHASSIS PUNCHES

Made of hardened, precision-ground, tool steel. Quick and easy to operate. Saves hours of hard work.

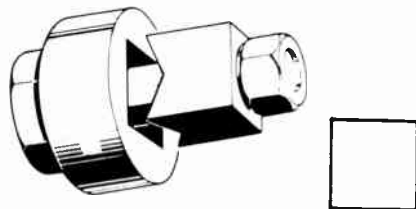


| Cat. No. | Punch Size | Pilot Bolt Size | Pilot Hole Drill Size | Dealer Net |
|----------|------------|-----------------|-----------------------|------------|
| 3050-R | 1/2" | 1/4 | 3/16" | \$2.60 |
| 3062-R | 5/8" | 3/8 | 3/8" | 2.63 |
| 3069-R | 1 1/16" | 3/8 | 3/8" | 2.60 |
| 3075-R | 3/4" | 3/8 | 3/8" | 2.60 |
| 3087-R | 7/8" | 3/8 | 3/8" | 2.60 |
| 3100-R | 1" | 3/8 | 3/8" | 2.85 |
| 3106-R | 1 1/16" | 3/8 | 3/8" | 3.00 |
| 3112-R | 1 1/8" | 3/8 | 3/8" | 3.00 |
| 3116-R | 1 1/2" | 3/8 | 3/8" | 3.00 |
| 3117-R | 1 1/8" | 3/8 | 3/8" | 3.00 |
| 3119-R | 1 3/4" | 3/8 | 3/8" | 3.00 |
| 3125-R | 1 1/4" | 3/8 | 3/8" | 3.00 |
| 3137-R | 1 3/8" | 1/2 | 3/8" | 4.17 |
| 3150-R | 1 1/2" | 1/2 | 3/8" | 4.92 |
| 3225-R | 2 1/4" | 3/4 | 7/8" | 9.92 |

* LOW TORQUE

SQUARE CHASSIS PUNCHES

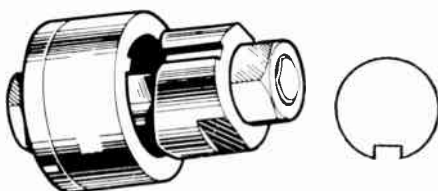
Very handy for mounting I.F. transformers, or for "nibbling" larger square holes such as may be required for power transformers, tuning condensers, etc. Finest quality steel.



| Cat. No. | Punch Size | Pilot Bolt Size | Pilot Hole Drill Size | Dealer Net |
|----------|------------|-----------------|-----------------------|------------|
| 3062-S | 5/8" | 3/8 | 1/2" | \$5.42 |
| 3069-S | 1 1/16" | 3/8 | 1/2" | 5.85 |
| 3075-S | 3/4" | 3/8 | 1/2" | 5.92 |
| 3087-S | 7/8" | 3/8 | 1/2" | 6.55 |
| 3100-S | 1" | 3/8 | 1/2" | 7.50 |

* LOW TORQUE

KEY AND "D" CHASSIS PUNCHES

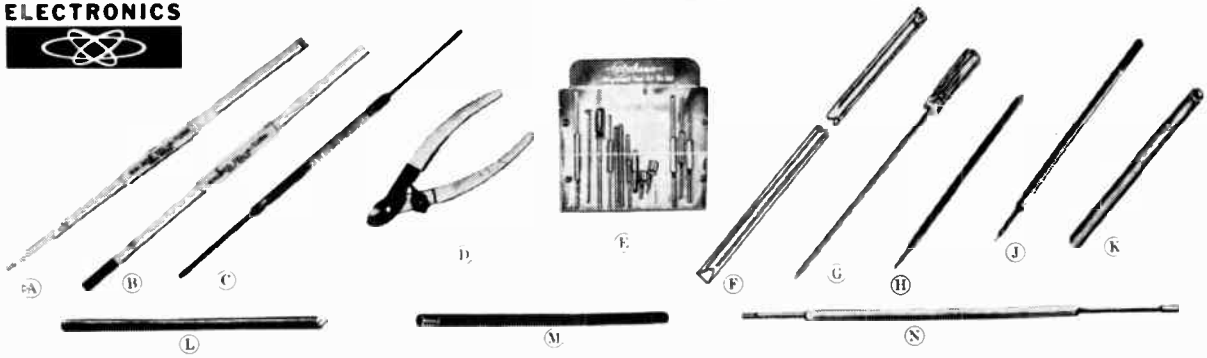


| | | | | |
|------------|----------|------|-------|------|
| KEY 3117-K | 1-11/64" | 1/2" | 9/16" | 6.08 |
|------------|----------|------|-------|------|

Cuts a special keyed hole for key-type sockets and other components where turning or twisting is not desired.



ALIGNMENT AND SPECIAL TOOLS



(A) I.F. Aligner and also double-ended. One end fits a #4 stud, the other end fits a #6 stud.
Cat. No. 2586 Tel-A-Turn Tool
Net \$.98

(B) An alignment screwdriver with a standard metal tip at one end. The other end has a very thin $\frac{1}{8}$ " wire metal blade for small can openings.
Cat. No. 2587 Tel-A-Turn Tool
Net \$.98

(C) A double ended Hex Aligner that turns both top and bottom slugs. One end has .100" hex, the other end is .125" hex.
Cat. No. 2588 Tel-A-Turn Tool
Net \$.98

(D) WALSCO STRIP-ER-CLIP. A brand new precision tool with an exclusive safeguard that prevents accidental nicking or cutting while wires are being stripped. Strips and clips all wires ranging from 14 to 26 gauge.
Cat. No. 595-X
Net \$1.38

(E) "LUCKY 13" ALIGNMENT TOOL KIT. Carefully selected as the most needed tools, for the Service-Technician in Electronics, TV, Hi-Fi and Printed Circuit Work.
Cat. No. 582
Net \$8.73

(F) NEW "SLIM-FIBREGLASS STICKS." New precision made Walsco Slim-Sticks are made of durable fiberglass. Completely non-metallic.
Cat. No. 2531-X $\frac{1}{8}$ " Dia. x 12" Long
Net \$.42

2532-X $\frac{1}{8}$ " Dia x 16" Long .57

2534-X $\frac{1}{2}$ " Dia. x 12" Long .48

2535-X $\frac{1}{2}$ " Dia. x 16" Long .72

(G) WALSCO "GLAS-STICKS." Precision made machined fiberglass reinforced polyester alignment screwdriver.
Cat. No. 2537 $\frac{1}{2}$ " Dia., 7" blade
Net \$.72

2538 $\frac{1}{2}$ " Dia., 14" blade 1.05

(H) DUPLEX ALIGNMENT SCREWDRIVER. Large end is $\frac{1}{2}$ " wide; small end, $\frac{3}{32}$ " wide. Tip thickness conforms to standard slot dimensions, 7" long.
Cat. No. 2520
Net \$.62

(J) ALIGNMENT TOOL FOR WESTINGHOUSE, ETC. Especially designed to fit Westinghouse and other sets. Very thin tip for small can openings.
Cat. No. 2541 $5\frac{3}{4}$ " long
Net \$.57

(K) HEX I.O. NEUTRALIZING WRENCH. Made of tough, flexible, Lo-loss plastic. If corners wear round, just trim back, $7\frac{1}{2}$ " long, $\frac{3}{8}$ " round O.D.
Cat. No. 2503
Net \$.37

(L) METAL TIP ALIGNMENT SCREWDRIVER. Combines low capacitance desirable in alignment tool with mechanical strength of metal screw-

driver. Plastic handle, $\frac{3}{32}$ " diameter, 6" long over all.
Cat. No. 2525
Net \$.42

(M) WALSCO TUNING WAND. Rod with one end made of brass, the other loaded with powdered iron— for checking coils.
Cat. No. 2540
Net \$.53

(N) DOUBLE END NYLON HEX IRON CORE TOOLS—For .075", .100" and .125" Cores. Turn both top and bottom coil slugs with this one handy tool. One end under cut for turning bottom slug separately.
Cat. No. 2542 125" Hex, 5" long, Hex Handle Net \$.48

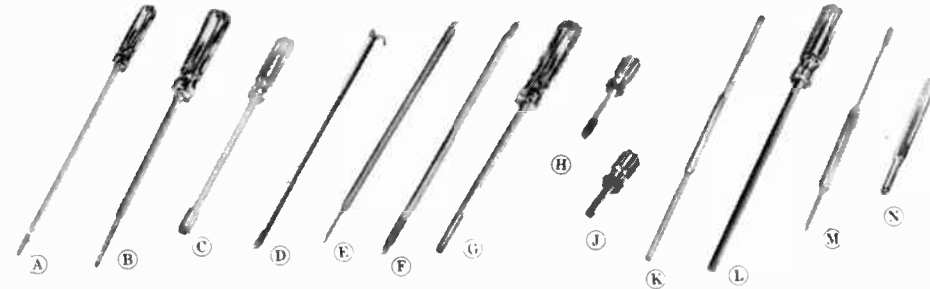
2543 .100" Hex, 5" long, Hex Handle .48

2544 .100" Hex, 11" long, knurled $\frac{1}{4}$ " Handle .63

2545 .100" Hex, 11" long, thin, $\frac{3}{32}$ " Handle .63

2546 .075" Hex, 11" long, knurled $\frac{1}{4}$ " Handle .63

2547 .075" Hex, 11" long, thin, $\frac{3}{32}$ " Handle .63



(A) "THE LONG RANGER." A full 12", slim, completely insulated tuner alignment tool. Features tough, replaceable, molded nylon tip.
Cat. No. 2523
Net \$1.50

(B) TURRET TUNER TOOL. A tool for adjusting all sets using "Standard Coil" and similar turret-type tuners.
Cat. No. 2522
Net \$.92

(C) PHILCO TUNER TOOL. A special tool for 1946-48 front-end tuners.
Cat. No. 2518
Net \$1.12

(D) WIRE DRESSING & ALIGNMENT TOOL. A handy dual-purpose tool with a thin $\frac{1}{2}$ " Butyrate handle. One end is a special tool for dressing wires in hard-to-reach places. Other end with a low capacitance metal

screwdriver tip.
Cat. No. 2512
Net \$.45

(E) K-TRAN ALIGNMENT TOOL. This tough, double-use tool is machined at one end to fit the slots on all K-Tran miniature I.F. transformers.
Cat. No. 2515
Net \$.60

(F) "SLUG SAVER" TUNER TOOL. New patented tool for aligning "Standard Coil" front ends. Prevents "loosing" slugs, thru ingenious "step" design.
Cat. No. 2528 $7\frac{1}{2}$ " long
Net \$.67

(G) SLOTTED STUD DRIVER. An $8\frac{1}{4}$ " long precision screwdriver with blade to fit No. 6 studs.
Cat. No. 2516
Net \$.92

(H) I.F. ALIGNER. $2\frac{1}{2}$ " long molded high-impact styrene . . . for RCA,

Zenith and others.
Cat. No. 2527
Net \$.58

(J) STUBBY STUD DRIVER. The only screwdriver only 2" long overall. Fits No. 6 studs.
Cat. No. 2517
Net \$.58

(K) STANDARD ALIGNMENT TOOL. Screwdriver blades are made with extra-thin tempered Swedish steel and are recessed so that they will slide easily over a stud and will not slip off.
Cat. No. 2519
Net \$.67

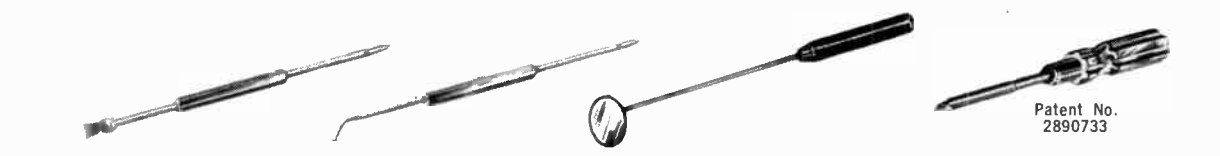
(L) SLOTTED SCREWDRIVER. Instead of a blade, this tool has a slot to fit No. 6 studs. For many of the older TV sets.
Cat. No. 2524
Net \$.87

(M) DOUBLE ENOER. A $5\frac{1}{2}$ " long, molded-nylon tool, with one end to fit hex studs, the other end being a very small screwdriver.
Cat. No. 2526
Net \$.37

(N) I.F. ALIGNER TOOL. Designed for I.F. Alignment of Zenith, RCA and other similar types. Made of molded nylon, $5\frac{1}{2}$ " long.
Cat. No. 2521
Net \$.48

(O) WALSCO TV-FM ALIGNMENT TOOL KIT. Kit contains 12 tools. These are all standard Walsco tools and come in a handy leatherette case or wall rack for mounting above work bench.
Cat. No. 580 Leatherette case.
Net \$7.20

581 in wall rack 7.50



SOLDER-AID TOOL. Wire brush makes removing of solder a cinch. Forked tool end and brush made of special stainless steel to which solder will not stick.
Cat. No. 2529 8" long plastic handle
Net \$1.00

SOLDER-AID TOOL. Similar to #2529 but has very thin curved hook in place of brush. Designed for use in delicate printed circuit work.
Cat. No. 2530 8" long plastic handle
Net \$1.00

INSPECTION MIRROR. High-visibility

polished glass reflection mirror is protected against breakage by a heavy gauge plated metal backing. Has plastic, insulated grip.
Cat. No. 554
Net \$.42

MINI-HOLD SCREWDRIVERS. Designed primarily to speed replacing

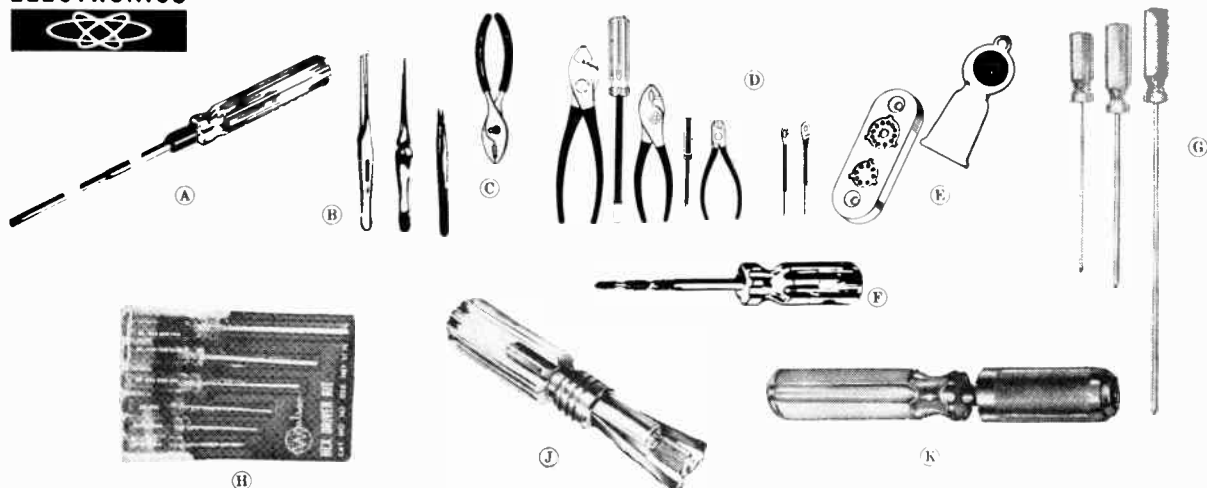
phono cartridges. Exclusive "wedge-action" securely grips extremely small screws (#1 to #4) "Mini-hold" measures just $2\frac{7}{8}$ " when in use.
Cat. No. 2568 $2\frac{7}{8}$ " long, "Open" length $3\frac{1}{4}$ "
2569 7" long
Net \$1.72
2.25

WALSCO SPECIAL TOOLS

Patent No. 2890733



ALIGNMENT AND SPECIAL TOOLS



(A) **WALSCO SLUG RETRIEVING & SCREW HOLDING TOOL** — Especially designed for removing "lost" TV Tuner slugs in Standard Coil Tuners. Excellent screw holding tool. End is precision-ground of hardened steel. Cat. No. 2565 11" Lgh. Net \$2.58 ea. Cat. No. 2566 15" Lgh. Net \$3.00 ea. Cat. No. 2567 19" Lgh. Net \$3.75 ea.

(B) **WALSCO SERVICE TWEEZERS** — For handling small parts in crowded spaces. Walsco Tweezers are indispensable. They are made of forged steel, polished nickel-plated. Cat. No. 570 Self-Closing Tweezer with cross-over action, 6½" long, serrated, blunt points. Net \$.78

Cat. No. 571 Heavy-Duty Tweezer with slide-lock feature. 6½" length, serrated, blunt points. Net \$.90

Cat. No. 572 Precision Tweezer with narrow, pointed ends especially suitable for delicate work. Over-all length 4½". Net \$.52

Cat. No. 575 Tweezer Kit, made of durable leatherette, containing one each of the above listed tweezers. Net \$2.28

(C) **EASY-ON TOOL GRIP** — Designed for pliers, cutters, diagonals, wire, snippers, etc. Made of flexible, elastic plastic. Gives superior insulation and protection against electrical shock. Cat. No. 521 Small Net \$.23 per pr. Cat. No. 522 Med. Net \$.27 per pr. Cat. No. 523 Large Net \$.33 per pr.

(D) **WALSCO PROTECTO TUBE** — Insulate the handles of your pliers, wire cutters, screwdriver shanks neatly and effectively with Walsco Protecto Tube. Cat. No. 18K Net \$1.20

(E) **WALSCO STRAIGHT'N PULL TUBE PIN STRAIGHTENER AND PULLER** — Compact tube pin straightener for seven and nine pin miniature tubes combined with an ingenious tube puller. Cat. No. 565 Net \$1.08

(F) **3-STEP TAP** — Eliminates the need for carrying 3 separate taps and handle. Designed for reaming

holes, tapping new holes, etc. Sizes are 6/32, 8/32 and 10/32. Cat. No. 2574 Net \$3.50

(G) **NON-MAGNETIC BERYLLIUM SCREWDRIVERS** — Ideal for making adjustments near magnetic fields such as in focalizers of TV sets. Does not affect TV picture as a steel tool would. Cat. No. 2560 ¼" Dia., 9" Overall Length Net \$.83

Cat. No. 2561 ⅜" Dia., 13" Overall Length Net \$.90

Cat. No. 2562 ½" Dia., 9" Overall Length Net \$1.48

Cat. No. 2564 ¾" Dia., 13" Overall Length Net \$1.65

(H) **HEX DRIVERS** — Blades are made of high torque, heat treated, alloy steel and are permanently embedded in shock and chip-proof plastic handles.

| Cat. No. | Size of Hex across flat | Overall Length | Net |
|----------|-------------------------|----------------|--------|
| 562-01 | .050" | 3¾" | \$.30 |
| 562-02 | ¼" | 3⅝" | .30 |
| 562-03 | ⅜" | 4¾" | .30 |
| 562-04 | ½" | 5⅞" | .35 |
| 562-05 | ⅝" | 5¾" | .35 |
| 562-06 | ¾" | 6½" | .45 |

COMPLETE KIT containing all six above drivers in attractive plastic case. Cat. No. 563 Net \$2.97

(J) **TWISTO WIRE STRIPPER** — A low-cost, pocket-size, precision stripper. Operating on an entirely new principle, the Walsco Twisto Wire Stripper permits stripping insulation right up next to a soldered connection, plug or socket. Cat. No. 592-00 Net \$2.70

Cat. No. 592-03 Replacement Blades \$.60 per set

(K) **WALSCO KNURL-TITE WRENCH** — Tighten or loosen knurled finish nuts quickly and easily. The knurled nut is slipped into the collet-type pressure jaws. A quarter turn of the handle results in a positive vise-like grip. Cat. No. 2581 ¾" Dia. nut Net \$4.83

Cat. No. 2582 ½" Dia. nut Net \$4.83

Ca. No. 2583 ⅝" Dia. nut Net \$4.83



FREE CATALOG

Send for the Big New Catalog of the Complete Walsco Line

Walsco Electronics Co.
Div. GC-Textran Electronics, Inc.
400 So. Wymen St., Rockford, Ill., U.S.A.



SPEED-O-MATIC WIRE STRIPPERS—With fully automatic—delayed-action return that prevents the crushing of fine stranded wires. Completes the stripping operation with one simple squeeze of the handles. Strips all types of wire insulation from #10 to #30 wires by easy exchange of cutter blades.

| | |
|--------------------------------|------------|
| Cat. No. 594-01 For #8 to #22 | Net \$5.93 |
| Cat. No. 594-02 For #10 to #18 | 5.93 |
| Cat. No. 594-03 For #14 to #30 | 5.93 |
| Cat. No. 594-04 For #16 to #22 | 5.93 |
| Extra Blades for Above | set 1.43 |



TRIG-O-MATIC WIRE STRIPPERS — Similar to 594 but has a Trig-O-Matic action that holds jaws open until released. Especially desirable for stripping of fine stranded wire.

| | |
|--------------------------------|------------|
| Cat. No. 593-01 For #10 to #22 | Net \$5.93 |
| Cat. No. 593-02 For #10 to #18 | 5.93 |
| Cat. No. 593-03 For #14 to #30 | 5.93 |
| Cat. No. 593-04 For #16 to #22 | 5.93 |
| Extra Blades for Above | set 1.35 |



NEW WALSCO VIBRA-PULL — The quickest, easiest safest way to pull auto radio vibrators. Exclusive design offers absolute protection against damage to vibrator prongs, sockets and adjacent electronic components. Cat. No. 566 Net \$1.60



WALSCO OILETTE — Filled with high grade Walsco oil. Dispenses accurately one drop at a time. For use on electronic and electrical devices, clocks, office machines, sporting goods, etc. Cat. No. 986 Net \$.83

Cat. No. 986-22 Refill for Oilette Net \$.33

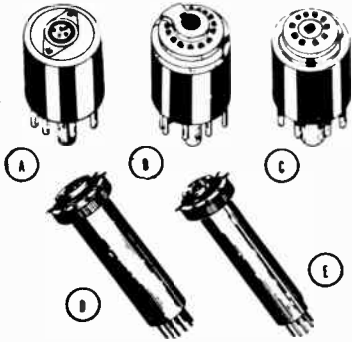


NEW WALSCO CHEM-O-JECTOR — A new type applicator for lubricants, greases, certain adhesives and many cleaning fluids used in electronics. Uses the "hypodermic" plunger principle, which makes it possible to reach "hard-to-get-at" places. Cat. No. 987 Net \$.30



NEW ALIGNMENT TOOLS and Service Aids

TEST SOCKET ADAPTORS



(A) NUUVISTOR TEST SOCKET ADAPTER
Designed for testing RCA 6C W4 5-Pin Nuuvistor Triode Tubes. Used with any standard EMISSION TYPE TESTER. Complete instructions included.

Cat. No. 1960 Net \$1.95

(B) COMPACTRON ADAPTER
Use your present Emission Type Tube Tester in testing the new triple triode tube (12 pin) 6C10, 6K11, 6D10 and 6Q11. Simply plug into designated octal socket and use in sequence the test equipment for 6SN7 (2 setups*) and the 6SQ7 (1 setup). These setups allow you to test each section of the triple triode tubes.

*Some testers combine these 2 sections into one test.

Cat. No. 1981 Net \$2.25

(C) DUOTETRODE 10 PIN ADAPTER
For testing Sylvania 6C9 and 17C9 "Duotetrode" 10 pin tubes. This adapter is to be used with all standard emission type tube testers.

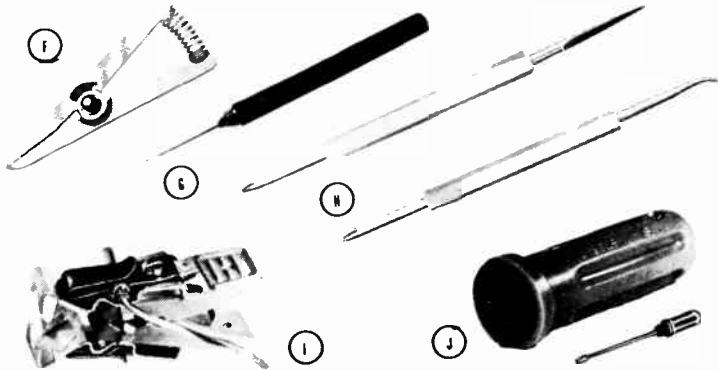
Cat. No. 1950 Net \$1.80

TEST SOCKET ADAPTORS FOR TV TUNERS

Tall, slim features of new adapters eliminates removing tube shields or tuner covers to test tube pins for voltage or resistance. Test tabs on the adapters clear the tops of tube shields. Two sizes available: No. 1949-12: 9 pin, .75" dia. and 1949-10: 7 pin, .65" dia.

(D) Cat. No. 1949-12 Net \$1.95

(E) Cat. No. 1949-10 Net \$1.85



(F) HEAT SINK
Protects Transistors and Diodes when soldering.

Lightweight, first quality, firm grip. Aluminum will not stick to solder.

Cat. No. 2577 Net \$.36

(G) "PIGTAILER"
Makes connections quickly and easily.

For lengthening pigtails, repairing broken leads, connections, tuners, printed circuits, to hold a part until solder is applied, or for making solderless connections, for testing and reconnecting, for replacing resistors and condensers. Will wind a "pigtail" that slips over 18-gauge wire. (Used in most Radio and TV work.)

Cat. No. 2557 Net \$1.20

(H) SOLDERING TOOLS
Won't Stick to Solder
Heat-treated tool steel, chrome-plated,

won't stick to solder. Wraps or disconnect wire-wrapped soldered joints quickly. Double ended to ream solder from lug holes as well as for holding or prying parts to be soldered.

Cat. No. 2570 Straight Net \$.70

Cat. No. 2571 Angled Net \$.70

(I) "QUICK SNAP" ANTENNA CLIP
For the Serviceman's Bench

Side clips allow fast connecting with antenna lines. A-N-P type, Pin type and Flat Terminal. Fits all leading sets.

Cat. No. 1530 Net \$.49

(J) TWISTMASTER
Twice the Leverage of the Bare Hand
Slips easily on any standard screw driver. Insulates against shock, prevents blisters.

Cat. No. 524 Net \$.29

(K) DOUBLE END HEX CORE ALIGNER
Adjusts Coil Slugs

General purpose alignment tool as well as a coil slug adjuster. Both ends are .075" Hex, with one end undercut.

Cat. No. 2510 Net \$.48

(L) 3 IN 1 CORE ALIGNER
Adjusts Coil Slugs

For Magnavox sets and others. Hex ends, one .100" with undercut shaft; other end is .075" and .100".

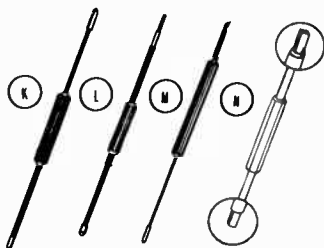
Cat. No. 2511 Net \$.48



SEND FOR FREE CATALOG

OF THE COMPLETE
LINE OF WALSCO
ALIGNMENT TOOLS
AND SERVICE AIDS

WALSCO Electronics Co.
Div. GC-Textron Electronics, Inc.
400 SOUTH WYMAN STREET
ROCKFORD, ILLINOIS, U.S.A.



(M) DOUBLE END ALIGNER
Adjusts Coil Slugs

For Coil Slugs on Webcor and other sets. One end .075" Hex shaped with undercut shaft; other is a handy screwdriver.

Cat. No. 2513 Net \$.48

(N) ALIGNMENT TOOL
Walco New Transistor I.F. Core Alignment Tool

Delrin alignment tool for Regency, Arvin, Silvertone and others. One end square .058", opposite end rectangle .039" x .072" to reach bottom slugs in iron cores.

Cat. No. 2501 Net \$.63

SINGLE AND DUAL HEAT

Weller® SOLDERING GUNS AND KITS

DUAL HEAT SOLDERING GUN

Weller Dual Heat feature saves time and money, and increases tip life

2 trigger positions give 2 soldering temperatures. Switch instantly to the heat best suited for the job—100 or 140 watts. Use high heat only when necessary. This prolongs tip life, protects adjacent components and saves current. Tip made of copper for superior heat transfer and iron-plated for long life. Spotlight. Cleaning brush, soldering aid and solder included.



MODEL
8200K

\$5⁹⁵
net



EXPERT SOLDERING KIT

with dual heat gun and plastic utility case

Features a 100/140 watt Weller soldering gun. Break-proof plastic utility case. 3 soldering tips, tip-changing wrench, flux brush, soldering aid and solder included.

MODEL
8200PK **\$7⁴⁶**
net



HEAVY DUTY SOLDERING KIT

with 275-watt gun, plastic utility case and accessories

Professional 275-watt gun. Also included: break-proof plastic case, soldering tip, smoothing tip, cutting tip, tip-changing wrench, solder, instruction booklet.

MODEL
8250AK **\$11²¹**
net



SINGLE HEAT
120 watts

Tip heats instantly. Pistol grip with fingertip on-off control. Spotlight. Superior long-life tip.

MODEL
8100B **\$4⁸³**
net



SINGLE HEAT
275 watts

General purpose, heavy-duty model. Instant heat. Twin spotlights. Long-life tip with long reach.

MODEL
8250A **\$9⁷¹**
net



DUAL HEAT
145/210
watts

Professional gun with Triggermatic control. Switches instantly to 145 or 210 watt heat. Twin spotlights.

MODEL
D440 **\$9⁷¹**
net



DUAL HEAT
240/325
watts

Heavy duty gun with Triggermatic control. Switches instantly to 240 or 325 watt heat. Twin spotlights.

MODEL
D550 **\$11⁹⁵**
net

Accessory tips available for cutting, smoothing, heat-sealing, etc.

Temperature control is in the TIP. Wide variety of tips in three different controlled temperature ranges eliminates need for extra soldering irons.

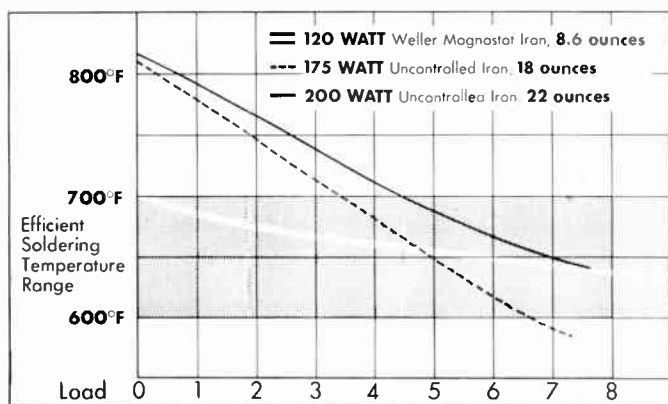


Weller[®] MAGNASTAT

CONTROLLED TEMPERATURE SOLDERING IRONS

With only half the weight, Weller Magnastat Irons do the work of uncontrolled irons of much higher wattage

COMPARATIVE SOLDERING IRON PERFORMANCE
—temperature vs. load



White line—Weller TC1202 Magnastat Iron temperature stability compared with two typical uncontrolled irons.

STANDARD WELLER MAGNASTAT IRONS

| MODEL NO. | WATTS | TIP | NET PRICE |
|------------|-------|--------------|-----------|
| TC552 STD | 55 | 5-CIN-750°F | 6.75 |
| TC602 STD | 75 | 6-EIN-750°F | 7.50 |
| TC1202 STD | 120 | 12-G4N-750°F | 8.63 |

Furnished with standard two wire cord and Tip Number designated.

Other Combinations and Specifications

| MODEL NO. | COMBINATION | WATTS | NET WEIGHT | NET PRICE |
|------------|-----------------|-------|------------|-----------|
| TC552 | No cord | 55 | 3 oz. | 5.43 |
| TC552-2 | 2-wire cord | 55 | 6¾ oz. | 6.19 |
| TC552-3 | 3-wire cord | 55 | 7½ oz. | 6.94 |
| TC552-TL3 | Twist-lock cord | 55 | 9½ oz. | 7.69 |
| TC602 | No cord | 75 | 3½ oz. | 5.63 |
| TC602-2 | 2-wire cord | 75 | 7¼ oz. | 6.38 |
| TC602-3 | 3-wire cord | 75 | 8½ oz. | 7.13 |
| TC602-TL3 | Twist-lock cord | 75 | 10½ oz. | 7.88 |
| TC1202 | No cord | 120 | 6 oz. | 6.38 |
| TC1202-2 | 2-wire cord | 120 | 9¾ oz. | 7.13 |
| TC1202-3 | 3-wire cord | 120 | 10½ oz. | 7.88 |
| TC1202-TL3 | Twist-lock cord | 120 | 12½ oz. | 8.63 |

Above prices do not include tips.

Here are the only soldering irons with temperature control in the tip. One Magnastat iron with 3 different controlled temperature tips does the work of 3 different irons. And it maintains proper temperature for secure, reliable soldered connections.

- Tip temperature will not vary more than $\pm 3\%$ when idling.
- Efficient soldering temperature under load and excellent recovery.
- Choice of 3 different controlled temperatures by interchanging tips.
- Light weight reduces operator fatigue. Handle remains cool.

Over 90 different Magnastat Wellertips . . . premium plated for long life

Available in popular configurations and in 3 temperature ranges for all Magnastat iron models. There are short, normal and bent screw-driver types. Also various pyramid and cone types. Each tip houses the Magnastat sensing device. Made of copper and premium iron-plated for long life. Tips are available in 3 series:

| SERIES | FOR MODEL | TEMPERATURE | NET PRICE |
|--------|-----------|-----------------------|-----------|
| 5 | TC552 | 600°F, 700°F or 750°F | .57 |
| 6 | TC602 | 600°F, 700°F or 750°F | 1.14 |
| 12 | TC1202 | 600°F, 700°F or 750°F | 1.52 |

WEN

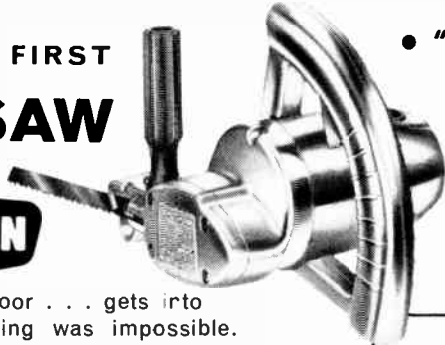
... Tools you will sell the most

PROMOTED THE YEAR 'ROUND

Reader's Digest—Life, Saturday Evening Post—Esquire, Popular Mechanics, Popular Science, Mechanix Illustrated

WORLD'S FIRST
ZIPP SAW

Exclusively from **WEN**



Makes wall cuts flush with floor . . . gets into corners where powered cutting was impossible. Handles like a keyhole saw with many times the power of a crosscut. Perfectly balanced for one-hand use. Great on the job for virtually every type of cutting . . . metal up to 1/2", steel or wood up to 6" x 6", fine scroll work. 3200 1" strokes per minute. Heavy duty roller & oilite bearings. 3 wire cord.

- "Free Hand" cutting saw
- Most versatile ever made
- Cuts anything anywhere—fast
- 1/3 HP Motor—UL Industrially Rated

MODEL 920 **\$44.95** COMPLETE WITH 7 BLADES
LIST



Makes horizontal wall base cuts dead flush with floor.



Corner cuts are easy—flush to either wall. The Zipp Saw is actually the first power saw to solve the problem of close corner work due to its uniquely designed miniature base plate.



STRAIGHT-LINE VIBRATOR SANDERS

Model 202—\$13.95

Small, light, quiet. Strong black plastic case. 14,400 strokes per minute. In display carton with 6 abrasive sheets, 2 polishing pads.

Model 303—\$16.95

General utility model in red plastic. 14,400 strokes per minute. In gold metal Kit Box with 12 abrasive sheets, 2 polishing pads.

Model 404—\$19.95

Heavy duty with special motor for amazing power. 14,400 strokes per minute. Ebony plastic in metal Kit Box with 15 abrasive sheets, 2 polishing pads, instruction book



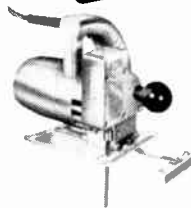
Belt Sander Model 910
\$44.95 LIST

Cool-running 4 1/4 amp. motor turns belt at 850 surface ft. per min. Gear driven with permanently lubricated precision needle and oversize sleeve bearings. Unique tension device enables quick change of belts. Exclusive casting design causes dust accumulation at rear—keeps work clean, easy to see. Balanced weight, contour grip handle minimize fatigue. Die cast polished aluminum housing. Total weight 7 lbs. Comes with 3 belts: coarse, medium, fine.



\$29.95 LIST
3/8" 2-Speed Power Drill Model 808

A 2-speed 3/8" Power Drill by Wen—and only Wen. Here in one tool is everything needed in an electric drill. Easy to change speeds. 1000 RPM to 3000 RPM. Husky, powerful, but streamlined design. Genuine 3/8" Geared Chuck. Universal 2 amp. Motor. Size 12 1/4" x 4 3/4" x 2 1/2". Weight 4 1/2 lbs.



WEN All Saw...Cuts 4 x 4 At 45°... 6" Log Fine Scroll Work... with complete safety.

Does Everything a Pattern Saw Will Do. More Than A Circular Saw Does! Does many things a band saw or nibbler will do—and many things that, until now, only a chain saw could. No other portable electric-saw can cut a 6" board or a 6" log, yet cut any pattern, too!

Cuts 2 x 4, 4 x 4, 6 x 6—all metals, including steel thin gauge to 1/2"—pipe and thin wall up to 2" in diam. Cuts curves, circles, straight cuts, fine pattern work in Masonite, Bakelite, wood, metals, tiles, Formica, wallboard, Plexiglas, plaster board, asbestos. Knife blade cuts all materials cut with knife.

Curved foot plate enables inside cut anywhere; cutting blade in line of sight; air stream clears dust from line of cut; powerful 1/2 H.P. motor; 3 wire 8 cord with adaptor; heavy duty hardened gears; heavy duty roller and oilite bearings.

1/2 h.p.

Complete with 7 blades, rip guide, circle cutter, 45 tilting base plate. Universal Motor. AC-DC, 3400 1" strokes per minute. Length 8", Width 7", Height 7 1/2". Wt. 6 1/2 lbs.

\$44.95 only
UL listed under Industrial Classification

"Quick Hot" Soldering Guns . . . 8 standard and special tips

Promotionally Priced



\$7.95 LIST
Model 199

General purpose gun. Heats 2 1/2 seconds. Weighs 1 1/2 lbs. Has long, durable tips, spotlight, sturdy red plastic case. Kit includes gun, extra tips for hot-cutting, smoothing, rosin core solder, all in strong metal box.



\$9.95 LIST
Model 199K



\$9.95 LIST
Model 288

Heats in 5 seconds, far beyond 200 watt rating. Light (2 1/4 lbs.) Has long reach, long life tips, spotlight, strong shatterproof handle and case.



\$12.95 LIST
Model 250

Famous WEN 250 Watt Heavy Duty Model. 567 hours continuous operation. Heats in 5 seconds. Spotlights work. With special rip cuts plastic tile. Strong black plastic case. Comes in attractive Self-Display Carton. Also available in kit form (250K) with metal carrying case.



\$5.95 LIST
Model 100

Feather-light (19 oz.) Slim-line (1 1/4" cross section) 100 Watts power. Heats 2 1/2 seconds. Built-in spotlight focused on work. Long reach, long life tips, replaceable and interchangeable with special purpose tips. Lustrous black plastic housing.

WEN

PRODUCTS, INC.

Chicago, Ill.

precision hand tools

The line of tools that "fit-the-job" to save you time and money

x-acto "Refill-Blade" KNIVES

Always Sharp... Safe To Use! Wherever a Sharp Knife is Used

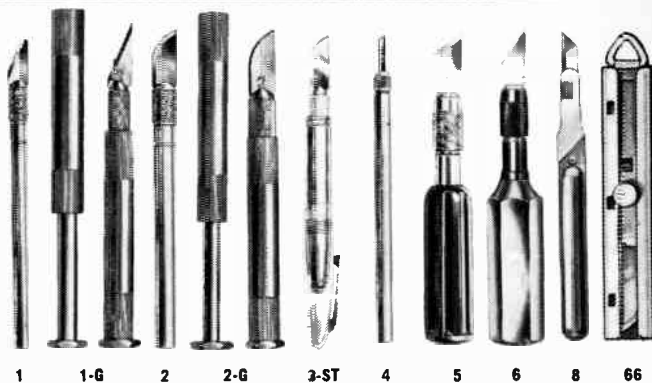
- Famous X-acto "Interchangeable Blade" Knife Feature! Just "twist the chuck" and insert new blade.
- Versatility! X-acto knife handles accommodate more than 28 different style of Blades, Gouges, Routers and Punches.
- So Safe! Fingers are never near the cutting edge.



No. 83

KNIFE SETS

- No. 83 DeLuxe Knife Chest: Nos. 1, 2, & 6 Knives plus 18 ass't Blades in wood chest.....\$6.00
- No. 82 Knife Chest: Nos. 1, 2, & 5 Knives plus 9 ass't Blades in wood chest.....\$4.50
- No. 81 Knife Set: Nos. 1, 2, & 5 Knives plus 10 ass't Blades in plastic case.....\$3.75
- No. 62 Knife Set: Nos. 1 & 2 Knives plus 10 ass't Blades in plastic case.....\$2.75
- No. 52: No. 2 Knife plus 5 ass't Blades.....\$1.35
- No. 51: No. 1 Knife plus 5 ass't Blades.....\$1.20



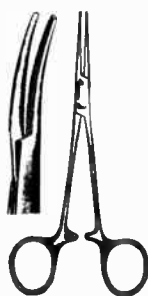
- No. 1 KNIFE—Aluminum Handle. For Light to Medium work with #11 Blade.....60¢
- No. 1-G KNIFE (Pat.)—Aluminum Construction. Ideal for depth gauge cutting. For Light to Medium work. With #11 Blade.....\$1.20
- No. 2 KNIFE—Aluminum Handle. For Medium to Heavy Work. With #22 Blade.....75¢
- No. 2-G KNIFE (Pat.)—Same as #1-G knife except is for Medium to Heavy work. With #22 Blade.....\$1.50
- No. 3-ST PENKNIFE—For Light to Medium work. With #10 Blade.....\$1.00
- No. 4 STENCIL KNIFE—Metal Handle with detachable blade.....30¢
- No. 5 KNIFE—Plastic Handle, metal blade lock. With #19 Blade.....\$1.20
- No. 6 KNIFE—For Heavy Work. With #24 Blade.....\$1.80
- No. 8 UTILITY KNIFE—Steel Handle, reversible blade. With #8 Blade.....29¢
- No. 66 POCKET KNIFE—Push button operation. With #122 Blade.....59¢



No. 348 Soldering Aid Kit—Contains five tools and a universal, double-chuck handle—all in an always-handly, see-thru carrying case. Tools are hard chrome-plated steel, to which solder will not adhere. Individual tools are replaceable.
No. 348\$3.00

RETRIEVER CLAMPS

Multi-purpose tools with scores of uses in soldering, wiring & small parts assembly. Made of Swedish Steel. Box Lock assures perfect alignment.



- 5 1/2" Length
- No. 810-S\$5.75
- Straight Nose
- No. 810-C\$5.90
- Curved Nose
- 6 1/4" Length
- No. 813-S\$6.75
- Straight Nose
- No. 813-C\$6.90
- Curved Nose



(Pat. No. 2,766,646)

The "third hand" for small assemblies. Serves as a Heat Sink, Plier, Vise, Stripper, Crimper, Tweezer, Wrench.
No. 800\$3.50



SWISS NEEDLE FILES

No. 60S—Swiss Needle File Set: Complete Set of 12 assorted styles\$3.95



RAZOR SAWS

- No. 53—Razor Saw Set: No. 5 Handle with #34 and #35 Razor Saw Blades.....\$1.75
- No. 34—3/4" Razor Saw Blade.....40¢
- No. 35—1" Razor Saw Blade.....45¢



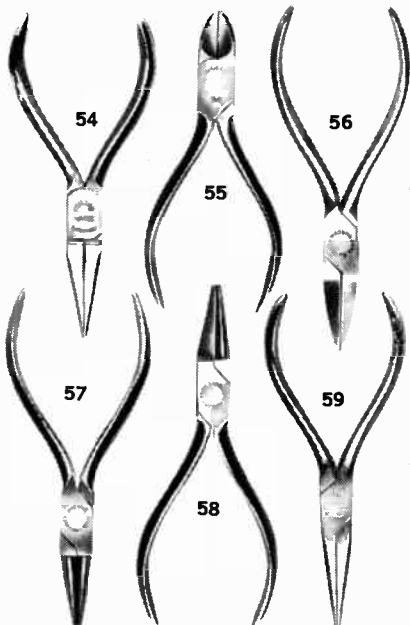
JEWELER'S SCREW DRIVERS

No. 70—Screw Driver Set: Aluminum handle with positive locking chuck and 5 assorted "interchangeable" steel blades\$1.75



SCRAPERS and PROBES

No. 61—Scraper Set: 2 handles, 6 ass't'd scraper points, 2 straight edge cutting blades in plastic case\$2.75 (Scraper points and handles also available separately)



Royal Swedish PLIERS

Tempered Swedish Steel. Box-joint assures perfect jaw alignment. Scientifically hardened and tempered in all three key areas (1) Jaws, (2) Box Joint, (3) Handles. Also available with non-slip insulated handles.

- No. 54—Long nose, side cutting. Length 4 1/2"\$4.50
- No. 55—Diagonal cutting. Length 4"\$4.00
- No. 555—5" Length\$5.00
- No. 56—Flat nose. Length 4 1/2"\$3.50
- No. 57—Snipe-nose. Length 4 1/2"\$3.50
- No. 58—Combination nose. Length 4 1/2"\$3.50
- No. 59—Long-nose. Length 4 1/2"\$4.00
- No. 596—6" Length\$5.00

HAND DRILLS — PIN VISES



All-Aluminum handles with swivel knobs. Precision-tooled English Model Chucks.

- No. 1D\$1.25 (for #80 to #60 drill bits)
- No. 2D\$1.25 (for #63 to #50 drill bits)
- No. 3D\$1.50 (for #53 to #44 drill bits)
- No. 21D\$1.00 (with double end chuck)
- No. 321D\$2.75 (Precision chuck set for drill bits #44 to #80 and Pin Vise with interchangeable Standard Handle.)

DRILL CHUCK ADAPTERS

Precision-tooled English Models (1 3/8" long). Fit standard hand drills, power drills and lathes.

- No. 22A75¢ (for #80 to #50 drill bits)
- No. 22B75¢ (for #63 to #50 drill bits)
- No. 22C75¢ (for #53 to #44 drill bits)

TWEEZERS



- No. 36—Plain Pointed (4 3/4" long).....50¢
- No. 37—Cross-action, self locking, pointed (4 3/4" long).....65¢
- No. 38—Cross-action, self locking, blunt (6 1/2" long).....70¢ (Other specialized tweezers also available)

HEAT SINKS



(also ideal for use as cross-action clamp and tweezer)
No. 349 ST60¢ card of 3 3 1/2" long all-aluminum

Write for complete catalog of X-acto Precision Hand Tools

X-ACTO PRECISION TOOLS, INC.,

Long Island City, New York

Nearly a Half-Century experience in precision manufacturing

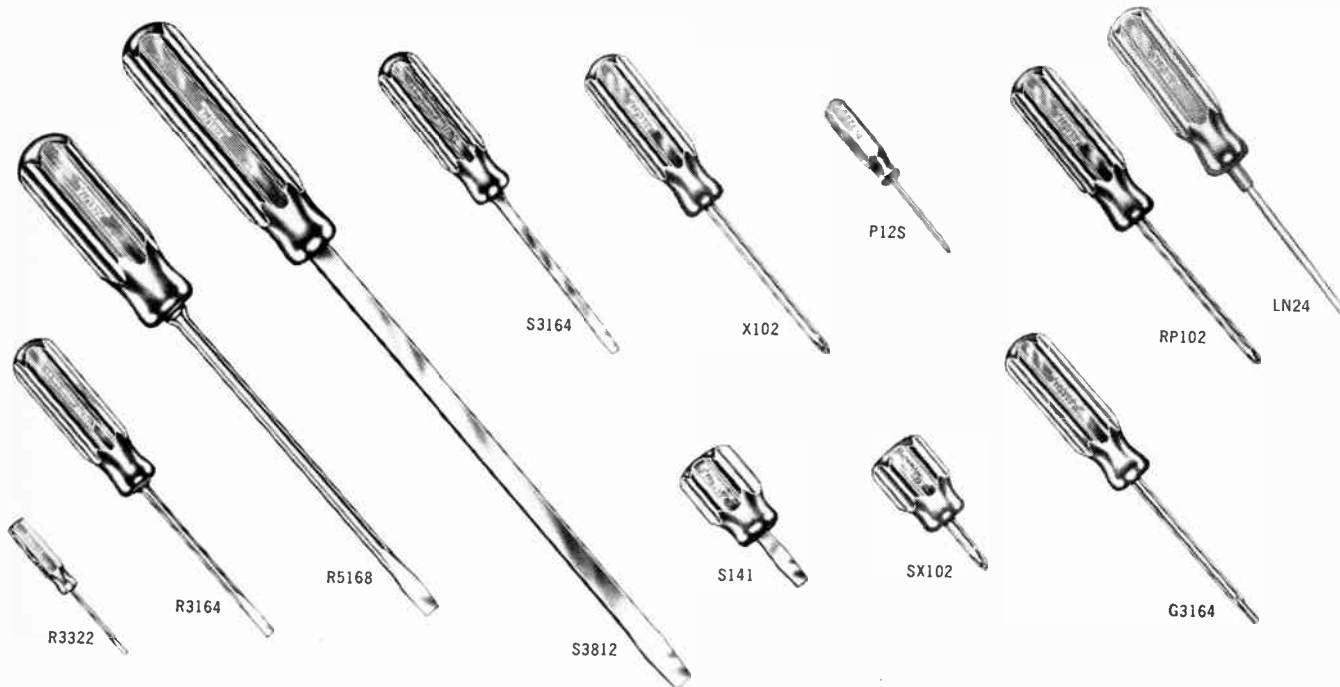




QUALITY PROFESSIONAL TOOLS

SCREWDRIVERS

SAE 6150 chrome vanadium steel blades. Shockproof, breakproof, plastic (UL) handles.



| ROUND BLADE | | |
|--------------------------|-------------|--------|
| Number | Size Blade | List |
| Regular | | |
| R182 | 1/8" x 2" | \$.55 |
| R184 | 1/8" x 4" | .65 |
| R186 | 1/8" x 6" | .70 |
| R188 | 1/8" x 8" | .90 |
| R1810 | 1/8" x 10" | 1.00 |
| R5323 | 5/32" x 3" | .75 |
| R5324 | 5/32" x 4" | .75 |
| R5325 | 5/32" x 5" | .75 |
| R5328 | 5/32" x 8" | 1.00 |
| R3163 | 3/16" x 3" | .95 |
| R3164 | 3/16" x 4" | 1.05 |
| R3166 | 3/16" x 6" | 1.20 |
| R3168 | 3/16" x 8" | 1.40 |
| R31610 | 3/16" x 10" | 1.50 |
| R142 | 1/4" x 2" | 1.15 |
| R144 | 1/4" x 4" | 1.30 |
| R146 | 1/4" x 6" | 1.40 |
| R148 | 1/4" x 8" | 1.50 |
| R1410 | 1/4" x 10" | 1.60 |
| R5164 | 5/16" x 4" | 1.45 |
| R5166 | 5/16" x 6" | 1.65 |
| R5168 | 5/16" x 8" | 1.80 |
| Pocket Clip Style | | |
| R3322 | 3/32" x 2" | .40 |
| R3323 | 3/32" x 3" | .45 |
| R3324 | 3/32" x 4" | .45 |
| R181 | 1/8" x 2" | .40 |
| R183 | 1/8" x 3" | .45 |
| R184 1/2 | 1/8" x 4" | .45 |

| SQUARE BLADE | | |
|----------------|-------------|--------|
| Number | Size Blade | List |
| Regular | | |
| S3163 | 3/16" x 3" | \$1.10 |
| S3164 | 3/16" x 4" | 1.15 |
| S3166 | 3/16" x 6" | 1.35 |
| S3168 | 3/16" x 8" | 1.50 |
| S31610 | 3/16" x 10" | 1.65 |
| S142 | 1/4" x 2" | 1.25 |
| S144 | 1/4" x 4" | 1.45 |
| S146 | 1/4" x 6" | 1.55 |
| S148 | 1/4" x 8" | 1.70 |
| S5162 | 5/16" x 2" | 1.35 |
| S5164 | 5/16" x 4" | 1.65 |
| S5166 | 5/16" x 6" | 1.75 |
| S5168 | 5/16" x 8" | 1.90 |
| S51610 | 5/16" x 10" | 2.10 |
| S51612 | 5/16" x 12" | 2.30 |
| S388 | 3/8" x 8" | 2.30 |
| S3812 | 3/8" x 12" | 3.30 |
| S3818 | 3/8" x 18" | 3.55 |
| S7166 | 7/16" x 6" | 2.70 |
| S71612 | 7/16" x 12" | 3.30 |
| S71618 | 7/16" x 18" | 3.55 |
| S1424 | 1/4" x 24" | 3.00 |
| Stubby | | |
| S3161 | 3/16" x 1" | .75 |
| S141 | 1/4" x 1" | .85 |
| S5161 | 5/16" x 1" | .85 |

| PHILLIPS | | | |
|--------------------------|------------|----------------|--------|
| Number | Point Size | Size Blade | List |
| Extra Long | | | |
| X1010 | 1 | 3/16" x 10" | \$1.75 |
| X1020 | 2 | 1/4" x 10" | 1.95 |
| Regular | | | |
| X100 | 0 | 1/8" x 2" | .75 |
| X101 | 1 | 3/16" x 3" | 1.15 |
| X108 | 1 | 3/16" x 6" | 1.25 |
| X102 | 2 | 1/4" x 4" | 1.45 |
| X103 | 3 | 3/16" x 6" | 1.95 |
| X104 | 4 | 3/8" x 8" | 2.45 |
| Stubby | | | |
| SX101 | 1 | 3/16" x 1 3/8" | 1.05 |
| SX102 | 2 | 1/4" x 1 3/8" | 1.15 |
| Pocket Clip Style | | | |
| P12S | 0 | 1/8" x 2" | .65 |
| ALLEN HEX | | | |
| Number | Hex Size | Blade Length | List |
| LN20 | .050" | 4" | \$1.00 |
| LN21 | 1/16" | 4" | 1.00 |
| LN22 | 3/64" | 4" | 1.00 |
| LN23 | 3/32" | 4" | 1.00 |
| LN24 | 1/8" | 4" | 1.15 |
| LN25 | 3/32" | 6" | 1.15 |
| LN26 | 1/16" | 6" | 1.15 |
| LN27 | 7/32" | 6" | 1.30 |
| LN28 | 1/4" | 6" | 1.30 |

| REED & PRINCE | | | |
|---------------|------------|------------|--------|
| Number | Point Size | Size Blade | List |
| RP101 | 1 | 3/16" x 3" | \$1.10 |
| RP102 | 2 | 1/4" x 4" | 1.40 |
| RP103 | 3 | 3/16" x 6" | 1.85 |
| RP104 | 4 | 3/8" x 8" | 2.35 |

| CLUTCH HEAD | | | |
|-------------|------------|------------|--------|
| Type G No. | Point Size | Size Blade | List |
| G3324 | 3/32" | 1/8" x 4" | \$1.20 |
| G183 | 1/8" | 3/16" x 3" | 1.20 |
| G5324 | 5/32" | 1/4" x 4" | 1.35 |
| G3164 | 3/16" | 1/4" x 4" | 1.35 |
| G146 | 1/4" | 5/16" x 6" | 1.75 |
| G5166 | 5/16" | 3/8" x 6" | 2.15 |

| BERYLLIUM-COPPER | | | |
|--|--------------------|--------|--|
| Non-sparking. Non-magnetic. Higher fatigue resistance than steel. | | | |
| Number | Size Blade Regular | List | |
| BR186 | 1/8" x 6" | \$1.25 | |
| BR1810 | 1/8" x 10" | 1.35 | |
| BR3168 | 3/16" x 8" | 2.20 | |
| BR146 | 1/4" x 6" | 2.75 | |
| BR148 | 1/4" x 8" | 2.95 | |
| Pocket-Clip Style | | | |
| BR181 | 1/8" x 2" | .50 | |

SUBJECT TO CHANGE WITHOUT NOTICE • TRADE DISCOUNT APPLIES TO LIST PRICES ONLY



QUALITY PROFESSIONAL TOOLS

COMBINATION-REVERSIBLE SCREWDRIVERS

SAE 6150 chrome vanadium steel blades. Shockproof, breakproof, plastic (UL) handles.
Patented spring holds blades securely. 3/16" hex opening doubles as a nutdriver.

COMPLETE UNITS

| Regular Type | List |
|-------------------------------|--------|
| CR1—No. 25 handle & RB1 blade | \$2.30 |
| CR2—No. 25 handle & RB2 blade | 2.30 |
| CR3—No. 25 handle & RB3 blade | 2.30 |
| Stubby Type | |
| CS1—No. 26 handle & SB1 blade | 2.05 |
| CS2—No. 26 handle & SB2 blade | 2.05 |

HANDLES ONLY

| | |
|------------|------|
| 25—Regular | 1.00 |
| 26—Stubby | .90 |

BLADES ONLY

| Regular Type | List |
|--------------------------------------|------|
| RB1 — No. 1 Phillips & 3/16" Slotted | 1.30 |
| RB2 — No. 2 Phillips & 1/4" Slotted | 1.30 |
| RB3 — No. 3 Phillips & 5/16" Slotted | 1.30 |
| RB12—No. 1 & No. 2 Phillips | 1.45 |

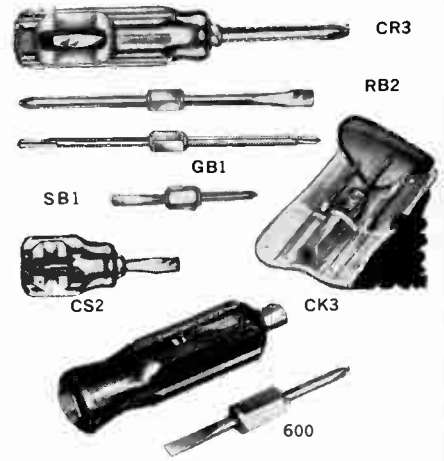
| GB1—3/16"G & 3/32"G Clutch | \$1.45 |
|------------------------------------|--------|
| GB2—5/16"G & 1/4"G Clutch | 1.45 |
| Stubby Type | |
| SB1—No. 1 Phillips & 3/16" Slotted | 1.15 |
| SB2—No. 2 Phillips & 1/4" Slotted | 1.15 |
| GS1—3/16"G & 3/32"G Clutch | 1.28 |

ROLL KIT COMBINATIONS

| | List |
|--|--------|
| CK2 with No. 25 combination handle and RB1 and RB2 reversible blades | \$4.50 |
| CK3 Same as CK2, plus RB3 blade | 5.80 |
| CK5 Same as CK2, plus RB3, GB1, and GB2 blades | 8.70 |

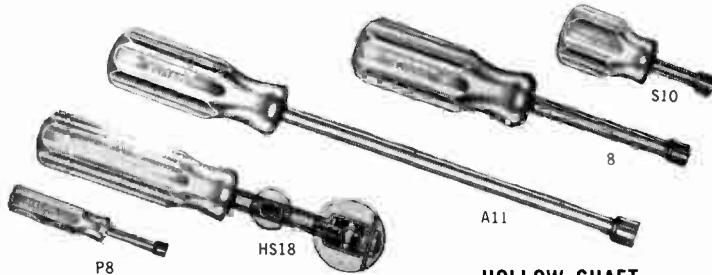
COMBINATION SCREW AND NUTDRIVER TOOL

| | |
|--|-------------|
| 600—Handy 4-way tool with pocket clip. 1/4" and 3/16" hex openings. Reversible SB1 blade | List \$2.30 |
|--|-------------|



NUTDRIVERS (Color-Coded Handles)

Polished-plated, High Carbon Steel shafts. Shockproof, breakproof, plastic (UL) handles. Precision, cold drawn, case hardened sockets.



HOLLOW SHAFT

| REGULAR (6" Overall Length) | | | |
|-----------------------------|--------------|-------------|--------|
| Number | Handle Color | Hex Opening | List |
| 5 | Amber | 5/32" | \$1.25 |
| 6 | Black | 3/16" | 1.25 |
| 7 | Brown | 7/32" | 1.25 |
| 8 | Red | 1/4" | 1.25 |
| 9 | Orange | 9/32" | 1.25 |
| 10 | Amber | 5/16" | 1.25 |
| 11 | Green | 11/32" | 1.25 |
| 12 | Blue | 3/8" | 1.25 |
| 14 | Brown | 7/16" | 1.60 |
| 16 | Red | 1/2" | 1.60 |

| EXTRA LONG (9" Overall Length) | | | |
|--------------------------------|--------------|-------------|--------|
| Number | Handle Color | Hex Opening | List |
| A6 | Black | 3/16" | \$1.45 |
| A7 | Brown | 7/32" | 1.45 |
| A8 | Red | 1/4" | 1.45 |
| A9 | Orange | 9/32" | 1.45 |
| A10 | Amber | 5/16" | 1.45 |
| A11 | Green | 11/32" | 1.45 |
| A12 | Blue | 3/8" | 1.45 |

| STUBBY (3 1/4" Overall Length) | | | |
|--------------------------------|--------------|-------------|--------|
| Number | Handle Color | Hex Opening | List |
| S6 | Black | 3/16" | \$1.05 |
| S8 | Red | 1/4" | 1.05 |
| S10 | Amber | 5/16" | 1.05 |
| S11 | Green | 11/32" | 1.05 |
| S12 | Blue | 3/8" | 1.05 |

| Number | Handle Color | Hex Opening | List |
|--------|--------------|-------------|--------|
| HS6 | Black | 3/16" | \$1.55 |
| HS7 | Brown | 7/32" | 1.55 |
| HS8 | Red | 1/4" | 1.55 |
| HS9 | Orange | 9/32" | 1.55 |
| HS10 | Amber | 5/16" | 1.55 |
| HS11 | Green | 11/32" | 1.55 |
| HS12 | Blue | 3/8" | 1.55 |
| HS13 | Amber | 13/32" | 1.75 |
| HS14 | Brown | 7/16" | 1.75 |
| HS15 | Amber | 15/32" | 1.80 |
| HS16 | Red | 1/2" | 1.80 |
| HS17 | Amber | 17/32" | 1.90 |
| HS18 | Orange | 9/16" | 1.90 |
| HS19 | Amber | 19/32" | 2.10 |
| HS20 | Amber | 5/8" | 2.10 |
| HS22 | Amber | 11/16" | 2.65 |
| HS24 | Amber | 3/4" | 2.65 |

POCKET CLIP STYLE

| | | | |
|-----|--------|--------|--------|
| P3 | Amber | 3/32" | \$.80 |
| P4 | Red | 1/8" | .80 |
| P5 | Amber | 5/32" | .80 |
| P6 | Black | 3/16" | .80 |
| P7 | Brown | 7/32" | .80 |
| P8 | Red | 1/4" | .80 |
| P9 | Orange | 9/32" | .80 |
| P10 | Amber | 5/16" | .80 |
| P11 | Green | 11/32" | .80 |
| P12 | Blue | 3/8" | .80 |

NUTDRIVER SETS

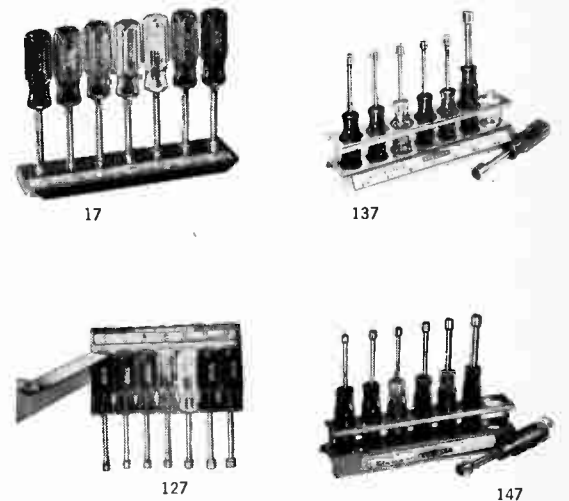
Choice of heavy gage steel stands and racks with large readable size indexes. Color-coded, shockproof, breakproof, plastic (UL) handles. Polished-plated shafts.

No. 17 BENCH STAND TYPE List \$10.50
Contains Nos. 6, 7, 8, 9, 10, 11, and 12 color-coded nutdrivers.

No. 137 BENCH STAND TYPE List \$11.95
Contains Nos. 6, 8, 10, 11, 12, HS16 and HS18 color-coded nutdrivers.

No. 127 LOCKABLE WALL RACK TYPE List \$10.75
Contains Nos. 6, 7, 8, 9, 10, 11, and 12 color-coded nutdrivers.

No. 147 BENCH STAND TYPE (Hollow Shaft) List \$13.30
Contains Nos. HS8, HS9, HS10, HS11, HS12, HS14, and HS16 hollow shaft, color-coded nutdrivers.

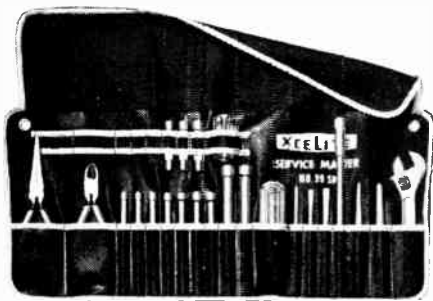


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QUALITY PROFESSIONAL TOOLS

SERIES "99" SERVICE KITS, BLADES, AND HANDLES



No. 99SM SERVICE MASTER List \$38.15

Contains 52CG long nose cushion grip plier, 55CG 5" diagonal cushion grip plier, 99-3 handle (Stubby) with three nutdrivers (1/4", 5/16", 3/8"), 46C adjustable wrench, 99-1 handle (Regular) with nine interchangeable nutdrivers (99-6 thru 99-16), one Phillips and two slotted screwdrivers, 99-X10 extension shaft, and two chrome-plated reamers.

99SMK, Kit only List \$3.20

No. 99PR ROLL KIT List \$14.45

Contains nine nutdrivers (99-5 thru 99-16), 99-81 (Slotted) and 99-82 (Phillips) reversible screwdriver blades, 99-1 handle (Regular).

99K, Kit only List \$1.60

No. 99JR ROLL KIT List \$12.50

Contains seven nutdrivers (99-6 thru 99-12) four screwdriver blades 99-811 and 99-812 (slotted), and 99-821 and 99-822 (Phillips), 99-2 handle (Junior).

99KJR, Kit only List \$1.60



No. 99LN ROLL KIT List \$7.45

Contains six Allen hex screwdriver blades (99-21 thru 99-26) and 99-1 handle (Regular).

No. 99-30 CLEAR PLASTIC POUCH List \$5.40

Heat sealed plastic snap case with size numbers on pockets for convenient selecting and storing. Contains six Allen hex screwdriver blades (99-21 thru 99-26).



99-1 (1 1/8" x 4 1/8") Regular Handle (for all blades, single-end and reversible).....\$1.15



99-2 (1" x 3 1/8") Junior Handle (for single-end blades only) 1.00



99-3 (1 1/8" x 2") Stubby Handle (for single-end blades only)90



Nutdriver Blades: 99-6 (3/16"), 99-7 (7/32"), 99-8 (1/4"), 99-9 (9/32"), 99-10 (5/16"), 99-11 (1/2"), 99-12 (3/8")90
99-14 (7/16"), 99-16 (1/2") 1.20



Allen Hex Screwdriver Blades: 99-21 (1/16"), 99-22 (5/64"), 99-23 (3/32"), 99-24 (1/8"), 99-25 (3/32"), 99-26 (3/16")90



99-81 Slotted Screwdriver Reversible Blade (3/16" & 5/32") 1.50



99-82 Phillips Screwdriver Reversible Blade (#1 & #2) 1.50
99-83 Reed & Prince Screwdriver Reversible Blade (3/16" & 5/32") 1.50



99-84 Clutch "G" Screwdriver Reversible Blade (3/16" & 5/32")... 1.50



Slotted Screwdriver Blades: 99-811 (3/16"), 99-812 (5/32")90



Phillips Screwdriver Blades: 99-821 (#1), 99-822 (#2)90



Reamers: 99-38 (1/8"-3/8") 2.20
99-39 (1/4"-1/2") 2.75



99-X10 Extension Shaft. Adds 7" reach to single-end blades..... 1.45



Stubby Nutdriver Blades: 99-S8, 99-S10, 99-S1280

TERMINAL WRENCHES

Removes spanner nut on external antenna and earphone jacks of transistor radios. Convenient pocket clip.

No. TW32 (.086" guide pin for 1/4" O.D. spanner nut)List \$.80

No. TW140 (.140" guide pin for 5/16" O.D. spanner nut)List \$.80

TW32



TW140

CARBURETOR AND DISTRIBUTOR TOOLS

No. 110 POCKET CLIP STYLE

For adjustment and replacement of Delco distributor points. Nutdriver end turns 1/2" hex nut on lead wire from coil. Prorged end engages slot in circular nut to release or adjust points.

List \$1.65

No. 112 FLEXIBLE SHAFT

Hooded screwdriver bit permits "hairline" adjustment of carburetor idle. Allen bit quickly adjusts Delco Remy distributors. Length including bits, 14 3/8"List \$3.95



110

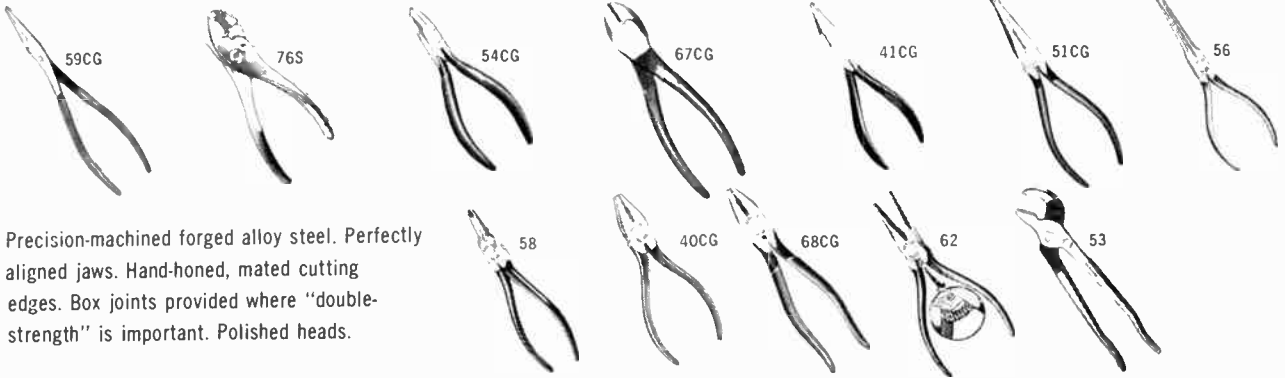
112

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QUALITY PROFESSIONAL TOOLS

PLIERS

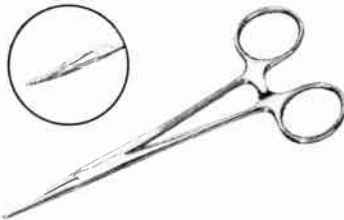


Precision-machined forged alloy steel. Perfectly aligned jaws. Hand-honed, mated cutting edges. Box joints provided where "double-strength" is important. Polished heads.

| | List | | List |
|---|--------|--|--------|
| 59CG—CHAIN NOSE ELECTRICIANS PLIER (8")—Cushion Grip..... | \$4.40 | 51 —LONG NOSE PLIER (6")—With Side Cutters | \$3.90 |
| 75C —COMBINATION SLIP JOINT PLIER (5")—Chrome-Plated..... | 1.62 | 51CG—Cushion Grip | 4.40 |
| 76C —COMBINATION SLIP JOINT PLIER (6")—Chrome-Plated..... | 1.62 | 56 —NEEDLE NOSE PLIER (6") | 3.60 |
| 76S—Satin Finish | .94 | 56CG—Cushion Grip | 4.00 |
| 78C —COMBINATION SLIP JOINT PLIER (8")—Chrome-Plated..... | 2.16 | 58 —RADIO AND TV PLIER (6") | 4.50 |
| 54 —DIAGONAL PLIER (Midget 4")..... | 3.70 | 58CG—Cushion Grip | 4.90 |
| 54CG—Cushion Grip | 4.10 | 40CG—SIDE CUTTING PLIER (Midget 4")—Cushion Grip | 3.50 |
| 55 —DIAGONAL PLIER (5") | 3.40 | 60 —SIDE CUTTING PLIER (6") | 3.60 |
| 55CG—Cushion Grip | 3.90 | 60CG—Cushion Grip | 4.10 |
| 66 —DIAGONAL PLIER (6") | 3.90 | 68 —SIDE CUTTING PLIER (8") | 4.40 |
| 66CG—Cushion Grip | 4.40 | 68CG—Cushion Grip | 4.90 |
| 67 —DIAGONAL PLIER (7") | 4.00 | 62 —TRAVERSE CUTTING PLIER (6") | 4.40 |
| 67CG—Cushion Grip | 4.70 | 62CG—Cushion Grip | 4.90 |
| 41CG—LONG NOSE PLIER (Midget 4")—Without Side Cutters— | | 53 —UTILITY PLIER (6")—Forged Rib-Lock | 2.60 |
| Cushion Grip | 3.70 | 53CG—Cushion Grip | 3.00 |
| 52 —LONG NOSE PLIER (6")—Without Side Cutters | 3.10 | 63 —UTILITY PLIER (10")—Forged Rib-Lock | 3.40 |
| 52CG—Cushion Grip | 3.50 | 63CG—Cushion Grip | 4.32 |

SEIZER

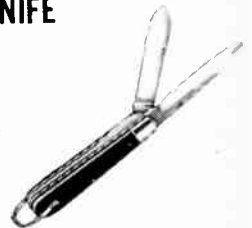
Outreaches, outholds needle nose pliers. Clamps tightly. Holds wires for soldering. retrieves small parts from hard-to-reach places. It's a heat sink. Two-position snap-lock. Stainless steel, box-joint construction. 6" length. Precision machined and tempered.



- 42H Straight Nose List \$5.70
- 43H Curved Nose List 5.90

No. K22 ELECTRICIAN'S KNIFE

Two blades. One is combination insulation-scraper and screwdriver. Has positive lock when open List \$3.35



ADJUSTABLE WRENCHES

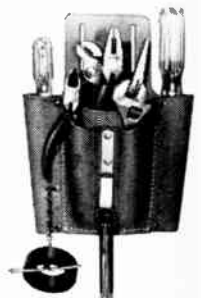
Thin-pattern permits access to close-quarter work. Chrome-plated forged alloy steel. Polished heads.

| No. | Size | List |
|--------|------|--------|
| 44C | 4" | \$2.88 |
| 46C | 6" | 2.88 |
| 48C | 8" | 3.30 |
| 40-10C | 10" | 4.20 |
| 40-12C | 12" | 6.20 |



No. 150 TOOL HOLSTER

Has tape holder, knife clip, and 5 tool pockets. Durably made of pliable saddle leather with natural cowhide finish. Features comfortable hip-contoured back, hot-waxed stitching, and brass rivets List \$5.25



adam electronics

AMERICAN MADE
MINIATURE TRANSISTOR TRANSFORMERS

A complete line of quality transistor transformers available in 2 sizes. 100 series measures 1 x 3/4 x 3/4, 200 series 3/4 x 5/8 x 5/8. Units feature molded nylon bobbins, with mylar insulation. Provided with color-coded leads and optional channel frames.



CHANNEL

"100 SERIES" 1" x 3/4" x 3/4" OVERALL

| PART NO. | TYPE | IMPEDANCE | | UNBALANCED CURRENT PR DC MA | POWER M.W. | D.C. RESISTANCE | | USERS NET |
|-----------------------------|--------|-----------|----------|-----------------------------------|---------------|-----------------|----------|--------------|
| | | PRI OHM | SEC OHM | | | PRI OHMS | SEC OHMS | |
| AD-172 | OUTPUT | 48 CT | 8 or 3.2 | 15. | 350 | 2.3 | .6/.3 | \$2.67 |
| AD-174 | OUTPUT | 125 CT | 3.2 | 8. | 350 | 6 | .3 | 2.35 |
| AD-176 | OUTPUT | 125 CT | 8 | 8. | 350 | 4 | .7 | 2.35 |
| AD-170 | OUTPUT | 160 CT | 8 or 3.2 | 8. | 350 | 10 | .6/.3 | 2.67 |
| AD-123 | INPUT | 200 | 2,000 CT | 2. | 150 | 11 | 50 | 2.35 |
| AD-122 | OUTPUT | 250 CT | 3.2 | 2. | 150 | 11 | .3 | 2.35 |
| AD-139 | OUTPUT | 250 CT | 8 | 2. | 250 | 15 | .7 | 2.35 |
| AD-162 | OUTPUT | 500 CT | 500 CT | 5. | 350 | 18 | 18 | 2.67 |
| AD-138 | OUTPUT | 1,000 CT | 3.2 | 4. | 250 | 120 | .3 | 2.35 |
| AD-137 | OUTPUT | 1,000 CT | 8 | 4. | 250 | 120 | .9 | 2.35 |
| AD-136 | OUTPUT | 1,000 CT | 100 | 4. | 250 | 120 | 10 | 2.35 |
| AD-175 | DRIVER | 2,000 | 1,500 CT | 2. | 350 | 150 | 60 | 2.35 |
| AD-116 | OUTPUT | 2,000 | 200 | 4. | 250 | 120 | 20 | 2.12 |
| AD-115 | INPUT | 2,000 CT | 8,000 CT | 2. | 150 | 150 | 660 | 2.67 |
| AD-112 | OUTPUT | 3,500 | 200 | 1. | 150 | 120 | 25 | 2.12 |
| AD-135 | OUTPUT | 4,000 CT | 3.2 | 4. | 250 | 150 | .3 | 2.35 |
| AD-134 | OUTPUT | 4,000 CT | 8 | 4. | 250 | 150 | .8 | 2.35 |
| AD-173 | DRIVER | 5,000 | 3,000 CT | 2. | 350 | 200 | 90 | 2.35 |
| AD-107 | DRIVER | 15,000 | 200 | 1.5 | 250 | 1000 | 20 | 2.31 |
| AD-105 | DRIVER | 20,000 | 400 | 1. | 100 | 600 | 30 | 2.31 |
| AD-103 | DRIVER | 20,000 | 2,000 CT | 1. | 100 | 400 | 50 | 2.55 |
| AD-129 | INPUT | 50,000 | 1,000 | 2. | 100 | 2500 | 20 | 2.31 |
| AD-128 | INPUT | 50,000 | 1,500 CT | 2. | 100 | 3000 | 50 | 2.55 |
| AD-127 | INPUT | 50,000 | 3,000 CT | 1. | 100 | 2000 | 50 | 2.35 |
| AD-146 | INPUT | 100 K | 50 | .5 | 350 | 3000 | 1.6 | 2.31 |
| AD-102 | INPUT | 100 K | 1,500 CT | .5 | 100 | 3600 | 40 | 2.35 |
| AD-145 | INPUT | 100 K | 2,000 CT | .5 | 350 | 3000 | 50 | 2.55 |
| AD-101 | INPUT | 100 K | 3,000 CT | .5 | 100 | 3600 | 60 | 2.55 |
| AD-126 | INPUT | 150 K | 1,500 CT | 2. | 100 | 3700 | 55 | 2.55 |
| AD-100 | INPUT | 200 K | 1,000 | .5 | 100 | 3600 | 90 | 2.31 |
| AD-144 | INPUT | 200 K | 1,500 CT | .5 | 350 | 3000 | 65 | 2.55 |
| AD-143 | INPUT | 250 K | 200 CT | .5 | 350 | 3500 | 20 | 2.55 |
| AD-142 | INPUT | 500 K | 200 CT | .3 | 350 | 3500 | 20 | 2.55 |
| AD-141 | INPUT | 500 K | 1,500 CT | .3 | 350 | 3500 | 60 | 2.55 |
| 100C CHANNEL FOR 100 SERIES | | | | | | | | |

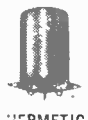
"200 SERIES" 3/4" x 5/8" x 5/8" OVERALL

| | | | | | | | | |
|-----------------------------|--------|----------|----------|-----|-----|-------|-------|--------|
| AD-225 | INPUT | 3 | 4,000 | 15. | 250 | 14 | 50 | \$2.12 |
| AD-271 | OUTPUT | 100 CT | 10 CT | 10. | 175 | 4 | 0.8 | 2.67 |
| AD-240 | OUTPUT | 200 CT | 3.2 | 2. | 100 | 10 | .3 | 2.35 |
| AD-269 | OUTPUT | 200 CT | 8 or 3.2 | 7. | 175 | 9 | .6/.3 | 2.67 |
| AD-224 | OUTPUT | 200 CT | 16 | 2. | 250 | 20 | 1.3 | 2.35 |
| AD-221 | OUTPUT | 300 CT | 3.2 | 6. | 150 | 20 | .25 | 2.35 |
| AD-268 | OUTPUT | 300 CT | 16 | 6. | 175 | 12 | 1.4 | 2.35 |
| AD-267 | OUTPUT | 400 CT | 8 or 3.2 | 5. | 175 | 16 | .6/.3 | 2.67 |
| AD-220 | OUTPUT | 400 CT | 11 | 1. | 150 | 20 | .9 | 2.35 |
| AD-266 | OUTPUT | 400 CT | 16 | 5. | 175 | 16 | 1.3 | 2.67 |
| AD-219 | OUTPUT | 500 CT | 3.2 | 5. | 100 | 20 | .3 | 2.35 |
| AD-264 | OUTPUT | 500 CT | 8 | 5. | 175 | 18 | .8 | 2.35 |
| AD-218 | OUTPUT | 500 CT | 16 | 5. | 100 | 20 | 1.5 | 2.35 |
| AD-217 | OUTPUT | 500 CT | 30 | 5. | 100 | 20 | 1.5 | 2.35 |
| AD-265 | OUTPUT | 500 CT | 50 | 5. | 175 | 18 | .4 | 2.35 |
| AD-263 | OUTPUT | 500 CT | 150 CT | 5. | 175 | 18 | 8 | 2.67 |
| AD-261 | OUTPUT | 650 CT | 16 | 5. | 175 | 27 | 1.3 | 2.35 |
| AD-260 | OUTPUT | 800 CT | 3.2 | 5. | 175 | 40 | .3 | 2.35 |
| AD-259 | DRIVER | 1,500 | 500 CT | 4. | 175 | 100 | 20 | 2.35 |
| AD-214 | OUTPUT | 2,500 | 11 | 10. | 150 | 50 | 1.1 | 2.12 |
| AD-213 | DRIVER | 3,000 CT | 1,000 | 9. | 150 | 100 | 60 | 2.35 |
| AD-211 | OUTPUT | 5,000 | 100 | 1. | 100 | 600 | 10 | 2.12 |
| AD-254 | INPUT | 5,000 CT | 7,500 CT | 2. | 175 | 150 | 400 | 2.67 |
| AD-255 | INPUT | 5,000 | 10,000 | 2. | 175 | 150 | 450 | 2.31 |
| AD-256 | INPUT | 5,000 | 30,000 | 2. | 175 | 150 | 1300 | 2.31 |
| AD-257 | INPUT | 5,000 | 45,000 | 2. | 175 | 250 | 1600 | 2.31 |
| AD-258 | INPUT | 5,000 CT | 80,000 | 2. | 175 | 350 | 1800 | 2.55 |
| AD-233 | OUTPUT | 10,000 | 3.2 | 1. | 100 | 600 | .3 | 2.31 |
| AD-232 | OUTPUT | 10,000 | 8 | 1. | 100 | 600 | .6 | 2.31 |
| AD-210 | OUTPUT | 10,000 | 16 | 2. | 150 | 600 | 2.5 | 2.31 |
| AD-253 | DRIVER | 10,000 | 200 CT | 2. | 175 | 400 | 10 | 2.35 |
| AD-209 | DRIVER | 10,000 | 2,000 CT | 1.5 | 100 | 500 | 50 | 2.55 |
| AD-208 | DRIVER | 10,000 | 3,000 CT | 1.5 | 100 | 200 | 100 | 2.55 |
| AD-252 | DRIVER | 15 K | 200 CT | 1.5 | 175 | 550 | 10 | 2.55 |
| AD-206 | DRIVER | 16 K | 4,000 | 1. | 100 | 620 | 350 | 2.31 |
| AD-231 | OUTPUT | 20 K | 3.2 | .5 | 100 | 400 | .3 | 2.31 |
| AD-230 | OUTPUT | 20 K | 8 | .5 | 100 | 400 | .6 | 2.31 |
| AD-251 | DRIVER | 20 K | 800 CT | 1.5 | 175 | 600 | 60 | 2.55 |
| AD-204 | DRIVER | 20 K | 1,000 | 1. | 100 | 400 | 50 | 2.31 |
| AD-250 | INPUT | 40 K | 100 | 1. | 175 | 850 | 6 | 2.31 |
| AD-247 | INPUT | 50 K | 30 CT | 1. | 175 | 1,300 | 1.5 | 2.55 |
| AD-249 | INPUT | 50 K | 200 CT | 1. | 175 | 1,300 | 10 | 2.55 |
| AD-248 | INPUT | 50 K | 500 CT | 1. | 175 | 1,300 | 20 | 2.55 |
| 200C CHANNEL FOR 200 SERIES | | | | | | | | |

Units can be provided hermetically sealed with compression sealed glass headers. Add suffix H, e.g. AD 209 H. 100 can size 1" dia. x 1 1/8" high, 200 series 1" dia. x 1 1/4" high. Units also available encapsulated add suffix E, e.g. AD 209 E. Overall dimensions increase by 1/8". For hermetically sealed units double net price. For encapsulated units add 75% to net price.



ENCAPSULATED



HERMETIC

adam electronics

BROOKLYN, NEW YORK



ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

POWER TRANSFORMERS FOR MILITARY AND INDUSTRIAL APPLICATIONS

Reliability, minimum size and long life under rugged environmental conditions are prime requisites in today's military electronic equipment. To meet these modern standards, ADC offers a complete line of hermetically sealed power transformers. Designed to meet MIL-T-27A specifications and utilizing MIL cases and mounting dimensions, these units offer our customers a ready source for prototype and produc-

tion applications. All military contractors and commercial electronic engineers with stringent environmental conditions will find these carefully rated units ideally suited. For those applications where hermetic sealing is not necessary, we offer the conservative transformer designs of our hermetically sealed line, in drawn steel cases of MIL size and mounting dimensions with phenolic terminal plates and solder lug terminals.

POWER TRANSFORMERS—60 Cycle

ADC offers these standard power transformer designs to cover a wide range of requirements for electronic circuit application. They are available in standard MIL case sizes, hermetically sealed to meet all requirements of MIL-T-27A. Grade 4, Class R, life expectancy X. Maximum operating altitude is 10,000 feet.

The same electrical ratings are also available as commercial grade fully enclosed units for non-military applications in the same MIL case sizes. This version is furnished with a phenolic terminal board and heavy duty solder lug terminals. Mounting screws and tapped inserts provide the same mounting centers as MIL-T-27A versions.



COMBINATION PLATE AND FILAMENT TRANSFORMERS

PRIMARY: 105/115/125 V., 50-60 CPS

| Catalog No. Comm'l Case | Hermetic Seal | AC Volts | Plate Winding DC Input | DC Ma | DC Volts | Filament Windings Volts/Amps | MIL Case |
|-------------------------|---------------|-----------|------------------------|-------|----------|------------------------------|----------|
| 522A | 523A | 250-0-250 | C Input | 20 | 300 | 6.3 CT 5.2 | FA |
| 522B | 523B | 300-0-300 | C Input | 60 | 310 | 5 6.3 CT 2 | HA |
| 522C | 523C | 350-0-350 | C Input | 110 | 355 | 5 6.3 CT 2 | JA |
| | | | L Input | | 265 | 6.3 CT 4 | |
| 522D | 523D | 375-0-375 | C Input | 150 | 380 | 5 6.3 CT 5 | LA |
| | | | L Input | | 280 | 6.3 CT 5 | |
| 522E | 523E | 385-0-385 | C Input | 200 | 360 | 5 6.3 CT 5 | MA |
| | | | L Input | | 280 | 6.3 CT 5 | |
| 522F | 523F | 500-0-500 | L Input | 300 | 400 | 6.3 5 6.3 CT 6 | NA |

FILAMENT TRANSFORMERS

PRIMARY: 105/115/125 V., 50-60 CPS

| Catalog No. Commercial Case | Hermetic Seal | Sec. Volts | Sec. Amps. | Insulation Volts RMS | MIL Case |
|-----------------------------|---------------|------------|------------|----------------------|----------|
| 522FA | 523FA | 2.5 CT | 5.5 | 3,500 | FA |
| 522FB | 523FB | 2.5 CT | 10.0 | 7,500 | GA |
| 522FC | 523FC | 2.5 CT | 15.0 | 10,000 | JA |
| 522FD | 523FD | 5.0 CT | 4 | 3,500 | GA |
| 522FE | 523FE | 5.0 CT | 10 | 5,000 | HA |
| 522FF | 523FF | 5.0 CT | 20 | 10,000 | MA |
| 522FG | 523FG | 6.3 CT | 3.0 | 2,500 | FA |
| 522FH | 523FH | 6.3 CT | 5.5 | 2,500 | GA |
| 522FJ | 523FJ | 6.3 CT | 10 | 2,500 | JB |
| 522FK | 523FK | 6.3 CT | 20 | 2,500 | KA |
| 522FL | 523FL | 12.6 CT | 2 | 2,500 | GA |

POWER TRANSFORMERS—400 Cycle

These items are especially designed for maximum performance in 380 to 1500 CPS applications, with maximum altitude ratings of 50,000 feet. They are hermetically sealed to meet all requirements of MIL-T-27A, Grade 4, Class R. Standard MIL case sizes and construction are used.

COMBINATION PLATE AND FILAMENT TRANSFORMERS

PRIMARY: 115 V., 380-1500 CPS

| Catalog No. Comm'l Case | Hermetic Seal | Plate Winding AC Volts | Filament Windings DC Ma | Volts / Amps | MIL Case |
|-------------------------|---------------|------------------------|-------------------------|-----------------------|----------|
| 512A | 513A | 240-0-240 | C Input | 20 6.3 CT 1.5 | AJ |
| 512B | 513B | 250-0-250 | C Input | 40 6.3 CT 2.5 | EA |
| 512C | 513C | 300-0-300 | C Input | 80 6.3 CT 5 6.3 5V 2 | GA |
| 512D | 513D | 350-0-350 | C Input | 150 6.3 CT 4 6.3 5V 3 | HA |
| 512E | 513E | 450-0-450 | C Input | 200 6.3 CT 8 6.3/5V 3 | JA |

FILAMENT TRANSFORMERS

PRIMARY: 115 V., 380-1500 CPS

| Catalog No. Commercial Case | Hermetic Seal | Sec. Volts | Sec. Amps | Insulation Volts RMS | MIL Case |
|-----------------------------|---------------|------------|-----------|----------------------|----------|
| 512FA | 513FA | 6.3 CT | 1 | 1,500 | AH |
| 512FB | 513FB | 6.3 CT | 3 | 1,500 | AJ |
| 512FC | 513FC | 6.3 CT | 5.5 | 2,500 | EA |
| 512FD | 513FD | 6.3 CT | 10 | 2,500 | FA |
| 512FE | 513FE | 6.3 CT | 20 | 2,500 | GA |
| 512FF | 513FF | 26 CT | 1 | 2,500 | EA |
| 512FG | 513FG | 26 CT | 3 | 2,500 | FA |

MILITARY STANDARD TRANSFORMERS

These Military Standard transformers have been specified by ASES and are established by the three Military Services and the transformer industry as standards for Military transformer applications. Each item is available as either Grade 1 or Grade 4 (ruggedized) as requested. Tests have been conducted in ADC's environmental laboratory which indicate that these units will meet the requirements of MIL-T-27A, Grade 4, Class R operating temperature; life expectancy X 10,000 hours minimum).



MILITARY STANDARD POWER TRANSFORMERS

| Military Part No. | Catalog No. | Type Designation | Secondary AC Volts | #1 DC Ma | DC Volts | Sec #2 Volts/Amps | Sec #3 Volts/Amps |
|-------------------|-------------|------------------|--------------------|----------|----------|-------------------|-------------------|
| MS-90026 | 521A | TF 4RX 03HA001 | 200-100-0-100-200 | 70 | 140 | 6.3/5 2 | 6.3 3 |
| MS-90027 | 521B | TF 4RX 03JB002 | 325-0-325 | 70 | 250 | 6.3/5 2 | 6.3 4 |
| MS-90028 | 521C | TF 4RX 03KB006 | 325-0-325 | 150 | 240 | 6.3 | 5 5 3 |
| MS-90029 | 521D | TF 4RX 03LB003 | 400-0-400 | 175 | 290 | 5 | 3 6.3 8 |
| MS-90030 | 521E | TF 4RX 03MB004 | 450-0-450 | 250 | 320 | 5 | 3 6.3 8 |
| MS-90031 | 521F | TF 4RX 02KB001 | 350-0-350 | 250 | 250 | .. | .. .. |
| MS-90032 | 521G | TF 4RX 02LB002 | 550-0-550 | 250 | 400 | .. | .. .. |
| MS-90036 | 521H | TF 4RX 02NB003 | 800-0-800 | 250 | 575 | .. | .. .. |

- NOTE: 1. Primaries 105 115 125V., 54-66 CPS.
 2. Secondary #1 DC voltage based upon inductive input filter.
 3. Max. operating altitude 10,000 ft.
 4. These items are also available as Grade 1 components.

MILITARY STANDARD FILAMENT TRANSFORMERS

| Military Part No. | Catalog No. | Type Designation | Secondary Volts | Amps | Insulation Volts RMS |
|-------------------|-------------|------------------|-----------------|------|----------------------|
| MS-90016 | 521M | TF 4RX 01EB002 | 2.5 | 3.0 | 2500 |
| MS-90017 | 521N | TF 4RX 01GB003 | 2.5 | 10 | 2500 |
| MS-90018 | 521P | TF 4RX 01FB004 | 5.0 | 3.0 | 2500 |
| MS-90019 | 521Q | TF 4RX 01HB005 | 5.0 | 10 | 2500 |
| MS-90020 | 521R | TF 4RX 01FB006 | 6.3 | 2.0 | 2500 |
| MS-90021 | 521S | TF 4RX 01GB007 | 6.3 | 5.0 | 2500 |
| MS-90022 | 521T | TF 4RX 01JB008 | 6.3 | 10 | 2500 |
| MS-90023 | 521U | TF 4RX 01KB009 | 6.3 | 20 | 2500 |
| MS-90024 | 521V | TF 4RX 01JB012 | 2.5 | 10 | 10000 |
| MS-90025 | 521W | TF 4RX 01KB013 | 5.0 | 10 | 10000 |

- NOTE: 1. Primaries 105 115/125 V., 54-66 CPS.
 2. Max. operating altitude 10,000 ft.
 3. These items are also available as Grade 1 components.



ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

INDUCTORS FOR MILITARY AND INDUSTRIAL APPLICATIONS

ADC's line of inductors are circuit running mates to ADC's power transformers. They are available hermetically sealed, to meet MIL-T-27A requirements Grade 4, Class R, life expectancy X. For commercial applications, where hermetic

sealing is not necessary, these same ratings are available in MIL cases and mounting dimensions, but with phenolic terminal board and solder lug terminals.

FOR 50-60 CYCLE POWER SUPPLIES

| Catalog No. | Inductance | DC | DC | Insulation | MIL | |
|-----------------|---------------|---------|------------|-----------------|-----------|------|
| Commercial Case | Hermetic Seal | Henries | Current MA | Resistance Ohms | Volts RMS | Case |
| 422A | 423A | 15 | 20 | 700 | 1000 | AJ |
| 422B | 423B | 20 | 40 | 475 | 2500 | EB |
| 422C | 423C | 15 | 60 | 230 | 2500 | FA |
| 422D | 423D | 12 | 80 | 175 | 2500 | FA |
| 422E | 423E | 10 | 110 | 175 | 2500 | GA |
| 422F | 423F | 8 | 150 | 100 | 2500 | IIA |
| 422G | 423G | 8 | 200 | 85 | 2500 | JA |
| 422H | 423H | 8 | 250 | 85 | 2500 | KB |
| 422J | 423J | 8 | 325 | 55 | 2500 | LA |
| 422K | 423K | 4 | 500 | 30 | 2500 | LA |
| 422L | 423L | 5/25 | 250/25 | 160 | 2500 | KB |
| 422M | 423M | 5/25 | 325/30 | 110 | 2500 | LA |



FOR 380-1500 CYCLE POWER SUPPLIES

| Catalog No. | Inductance | DC | DC | Insulation | MIL | |
|-----------------|---------------|---------|------------|-----------------|-----------|------|
| Commercial Case | Hermetic Seal | Henries | Current Ma | Resistance Ohms | Volts RMS | Case |
| 422V | 423V | 2.5 | 50 | 17.5 | 2500 | AH |
| 422W | 423W | 5 | 50 | 350 | 2500 | AJ |
| 422X | 423X | 2 | 80 | 250 | 2500 | AJ |
| 422Y | 423Y | 2 | 150 | 100 | 2500 | EB |
| 422Z | 423Z | 2 | 200 | 100 | 2500 | EA |

MILITARY STANDARD INDUCTORS (power)

These Military Standard inductors have been specified by ASEA and are established by the three military services and the transformer industry as standards for military inductor applications. They are hermetically sealed to meet all MIL-T-27A requirements Grade 1, Class R, life expectancy X.

| Military Part No. | Catalog No. | Type Designation | Inductance Series | Parallel | DC Resistance Ohms | Insulation Volts RMS |
|-------------------|-------------|------------------|-------------------|---------------|--------------------|----------------------|
| MS90009 | 421A | TF 1RX 04FA001 | 16 hy .08 a | 4 hy .16 a | 1-2 295 | 2400 350 |
| MS90010 | 421B | TF 1RX 04GA002 | 25 hy .08 a | 6.25 hy .16 a | 1-2 300 | 2400 370 |
| MS90011 | 421C | TF 1RX 04HA003 | 40 hy .08 a | 10 hy .16 a | 1-2 450 | 2400 570 |
| MS90013 | 421D | TF 1RX 04HA005 | 16 hy .125 a | 4 hy .25 a | 1-2 145 | 3800 185 |
| MS90014 | 421E | TF 1RX 04JB006 | 25 hy .125 a | 6.25 hy .25 a | 1-2 225 | 3800 235 |
| MS90037 | 421F | TF 1RX 04KA007 | 40 hy .125 a | 10 hy .25 a | 1-2 240 | 5700 295 |
| MS75000 | 421G | TF 1RX 04LA009 | 16 hy .20 a | 4 hy .40 a | 1-2 90 | 5800 100 |
| MS75001 | 421H | TF 1RX 04MA010 | 25 hy .20 a | 6.25 hy .40 a | 1-2 90 | 5800 120 |
| MS75002 | 421J | TF 1RX 04NA012 | 16 hy .315 a | 4 hy .63 a | 1-2 45 | 5900 60 |
| MS75003 | 421K | TF 1RX 04YY013 | 25 hy .315 a | 6.25 hy .63 a | 1-2 70 | 5900 80 |

ADC TOROIDS

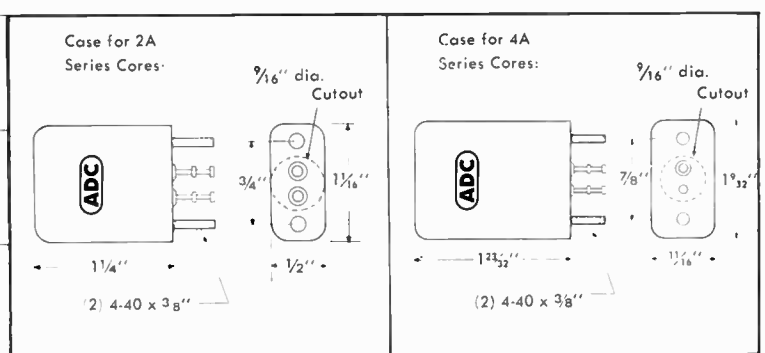
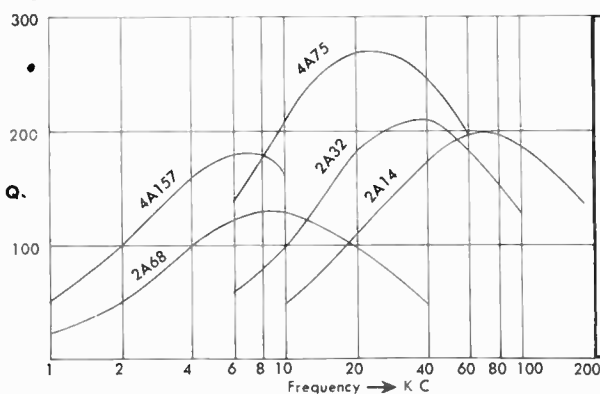
These toroids are readily available in the standard inductance ratings and sizes shown below. Typical characteristics are shown in the curves for each style of core. High inductance values will show an apparent decrease in Q at higher frequencies due to distributed capacitance.

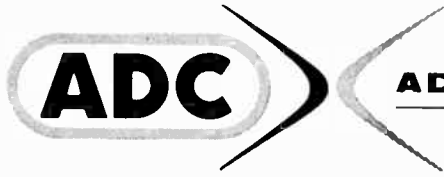
These are hermetically sealed to meet Military specifications in the drawn steel cases shown.

| | |
|--|------------|
| Available on 2A68 core: DCR—200 ohms/hy. Max DC (ma) for 5% drop in L (mh). Available in .005 to 5.0 hy. | 400 ✓ L |
| Available on 2A32 core: DCR—430 ohms/hy. Max DC (ma) for 5% drop in L (mh). Available in .002 to 1.0 hy. | 570 ✓ L |
| Available on 2A14 core: DCR—1000 ohms/hy. Max DC (ma) for 5% drop in L (mh). Available in .001 to .5 hy. | 850 ✓ L |
| Available on 4A157 core: DCR—100 ohms/hy. Max DC (ma) for 5% drop in L (mh). Available in .005 to 15 hy. | 570 ✓ L |
| Available on 4A75 core: DCR—220 ohm/hy. Max DC (ma) for 5% drop in L (mh). Available in .005 to 5 hy. | 790 ✓ L |

TABLE OF STOCKED INDUCTANCE VALUES (±1%) IN HENRIES

| Inductance (henries) | 2A68 | 2A32 | Core Types 2A14 | 4A157 | 4A75 |
|----------------------|-------|-------|-----------------|-------|-------|
| .0010 | | | 419EA | | |
| .0015 | | | 419EC | | |
| .0022 | | 419CE | 419EE | | |
| .0033 | | | 419EG | | |
| .0047 | | | 419EJ | | |
| .0068 | 419AL | 419CL | 419EL | 419GL | 419KL |
| .010 | 419AN | 419CN | 419EN | 419GN | 419KN |
| .015 | 419AQ | 419CQ | 419EQ | 419GQ | 419KQ |
| .022 | 419AS | 419CS | 419ES | 419GS | 419KS |
| .033 | 419AU | 419CU | 419EU | 419GU | 419KU |
| .047 | 419AW | 419CW | 419EW | 419GW | 419KW |
| .068 | 419AY | 419CY | 419EY | 419GY | 419KY |
| .10 | 419BA | 419DA | 419FA | 419HA | 419LA |
| .15 | 419BC | 419DC | 419FC | 419HC | 419LC |
| .22 | 419BE | 419DE | 419FE | 419HE | 419LE |
| .33 | 419BG | 419DG | 419FG | 419HG | 419LG |
| .47 | 419BJ | 419DJ | 419FJ | 419HJ | 419LJ |
| .68 | 419BL | 419DL | | 419HL | 419LL |
| 1.0 | | 419BN | | 419HN | 419LN |
| 1.5 | | 419BQ | | 419HQ | 419LQ |
| 2.2 | | 419BS | | 419HS | 419LS |
| 3.3 | | 419BU | | 419HU | 419LU |
| 4.7 | | 419BW | | 419HW | 419LW |
| 6.8 | | | | 419HY | |





ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

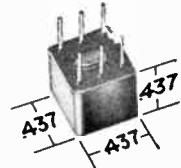
A Division of Magnetic Controls Company

"BLUE CHIP" TRANSISTOR TRANSFORMERS for Printed Circuit Applications

Five different sizes, from .08 to 1.2 cubic inches with a total of 62 new ratings are listed below to indicate the available power levels for both voice frequency range and extended frequency operation. These ratings take into account not only power handling capacities at minimum frequencies, but also total harmonic distortion under stated conditions. Within the

limits shown on the rating charts, variations in both power and distortion levels are possible depending upon the minimum operating frequency.

These units are designed and built to meet MIL-T-27A Grade 5, Class S requirements.

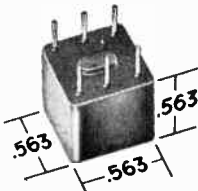


PIN LAYOUT



Pin Diameter: .030"
Pin Length: 1/2"
Weight: 0.15 oz.

RESPONSE: ±2 DB 300 to 100,000 CPS.
DISTORTION: 10% at 30 MW, 300 to 100,000 CPS, except as noted.

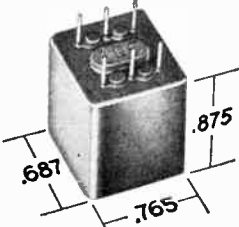


PIN LAYOUT



Pin Diameter: .030"
Pin Length: 1/2"
Weight: 0.4 oz.

RESPONSE: ±1 DB 200 to 50,000 CPS.
DISTORTION: 10% at 150 MW, 200 to 50,000 CPS.

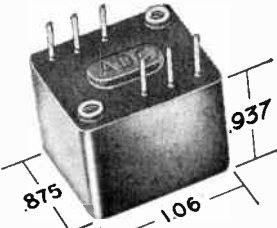


PIN LAYOUT



Pin Diameter: .030"
Pin Length: 1/2"
Weight: 0.9 oz.

RESPONSE: ±1 DB 200 to 20,000 CPS.
DISTORTION: 1.5% at 20 MW, 60 to 30,000 CPS, or 10% at 500 MW, 200 to 30,000 CPS, except as noted.

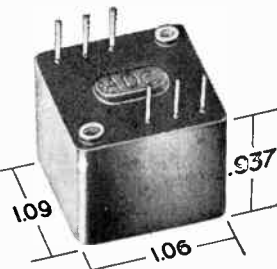


PIN LAYOUT



Pin Diameter: .030"
Pin Length: 1/2"
Weight: 1.5 oz.
Mounting: 2-4x40 inserts, 0.6"x0.8"

RESPONSE: ±1 DB 100 to 10,000 CPS.
DISTORTION: 1.5% at 60 MW, 100 to 10,000 CPS, or 10% at 3.5 W, 200 to 10,000 CPS, except as noted.



PIN LAYOUT



Pin Diameter: .030"
Pin Length: 1/2"
Weight: 2.5 oz.
Mounting: 2-4x40 inserts, 0.8"x0.8"

RESPONSE: ±1 DB 60 to 10,000 CPS.
DISTORTION: 1% at 250 MW, 60 to 10,000 CPS, or 10% at 7.5W, 200 to 10,000 CPS, except as noted.

| Catalog Number | Primary Impedance—Ohms | Secondary Impedance—Ohms | Primary-Secondary DC Resistance—Ohms | Max. DC in Primary—MA. |
|----------------|------------------------|--------------------------|--------------------------------------|------------------------|
| 324-6A | ★ 100K-CT | 1000-CT | 3300 | 0 |
| 324-6B | 25K-CT | 1000-CT | 2800 | 0 |
| 124-6C | 10K-CT | 10K-CT | 1100 | 1 |
| 324-6D | 10K-CT | 1500-CT | 1100 | 1 |
| 324-6E | 10K-CT | 600-CT | 1100 | 1 |
| 224-6F | 4000-CT | 10K-CT | 440 | 1.5 |
| 324-6G | 1000-CT | 600-CT | 110 | 3 |
| 324-6H | 1000-CT | 4 | 75 | 3 |
| 224-6J | 600-CT | 25K-CT | 110 | 0.5 |
| 124-6K | 600-CT | 600-CT | 65 | 3500 |
| 324-6L | 600-CT | 600-CT | 65 | 75 |
| 324-6M | 600-CT | 600-CT | 65 | 7 |
| | | | 65 | 0.5 |

★Max. power level: 10 mw at 300 cps.

| | | | | | |
|--------|---------|---------|------|------|-----|
| 324-5A | 100K-CT | 1000-CT | 6000 | 60 | 0 |
| 324-5B | 25K-CT | 1000-CT | 2800 | 120 | 0 |
| 124-5C | 10K-CT | 10K-CT | 1100 | 1200 | 1 |
| 324-5D | 10K-CT | 1500-CT | 1100 | 200 | 1 |
| 324-5E | 10K-CT | 600-CT | 1100 | 75 | 1 |
| 224-5F | 4000-CT | 10K-CT | 440 | 1200 | 1.5 |
| 324-5G | 1000-CT | 600-CT | 100 | 60 | 3 |
| 324-5H | 1000-CT | 4 | 100 | 0.4 | 3 |
| 224-5J | 600-CT | 25K-CT | 65 | 3500 | 4 |
| 124-5K | 600-CT | 600-CT | 65 | 75 | 4 |
| 324-5L | 600-CT | 600-CT | 65 | 7 | 4 |
| 324-5M | 600-CT | 600-CT | 65 | 0.5 | 4 |

| | | | | | |
|--------|---------|---------|------|------|-----|
| 324-4B | 25K-CT | 1000-CT | 2800 | 120 | 0 |
| 124-4C | 10K-CT | 10K-CT | 1100 | 1200 | 1 |
| 324-4D | 10K-CT | 1500-CT | 1100 | 180 | 1 |
| 324-4E | 10K-CT | 600-CT | 1100 | 75 | 1 |
| 324-4F | 10K-CT | 4 | 1100 | 0.5 | 1 |
| 224-4G | 4000-CT | 10K-CT | 440 | 1200 | 1.5 |
| 324-4H | 1500-CT | 15 | 165 | 2 | 2.5 |
| 324-4J | 1000-CT | 600-CT | 110 | 75 | 3 |
| 324-4K | 1000-CT | 4 | 110 | 0.5 | 3 |
| 224-4L | 600-CT | 25K-CT | 65 | 3000 | 4 |
| 124-4M | 600-CT | 600-CT | 65 | 75 | 4 |
| 324-4N | 600-CT | 600-CT | 65 | 7 | 4 |
| 324-4P | 600-CT | 15 | 65 | 2 | 4 |
| 324-4Q | 600-CT | 4 | 65 | 0.5 | 4 |
| 224-4R | 250 | 600-CT | 30 | 75 | 7 |

| | | | | | |
|--------|----------|--------|-----|------|-----|
| 124-3A | 10K-CT | 10K-CT | 800 | 1100 | 1 |
| 324-3B | 10K-CT | 600-CT | 800 | 65 | 1 |
| 324-3C | 10K-CT | 4 | 800 | 0.5 | 1 |
| 324-3D | 1500-CT | 15 | 110 | 1.6 | 2.5 |
| 324-3E | 1000-CT | 600-CT | 75 | 65 | 3 |
| 324-3F | 1000-CT | 4 | 75 | 0.5 | 3 |
| 224-3G | ★ 600-CT | 25K-CT | 45 | 2800 | 4 |
| 124-3H | 600-CT | 600-CT | 45 | 65 | 4 |
| 324-3J | 600-CT | 600-CT | 60 | 45 | 7 |
| 324-3K | 600-CT | 15 | 45 | 1.6 | 4 |
| 324-3L | 600-CT | 4 | 45 | 0.5 | 4 |
| 224-3M | 250 | 600-CT | 20 | 65 | 7 |

★Max. power level: 2.5 w.

| | | | | | |
|--------|----------|--------|-----|-----|-----|
| 124-2A | ★ 10K-CT | 10K-CT | 700 | 900 | 1 |
| 324-2B | ★ 10K-CT | 600-CT | 700 | 55 | 1 |
| 324-2C | ★ 10K-CT | 4 | 700 | 0.4 | 1 |
| 324-2D | 1500-CT | 15 | 100 | 1.5 | 2.5 |
| 324-2E | 1000-CT | 600-CT | 65 | 55 | 3 |
| 324-2F | 1000-CT | 4 | 65 | 0.4 | 3 |
| 124-2H | 600-CT | 600-CT | 40 | 55 | 4 |
| 324-2J | 600-CT | 60 | 40 | 1.5 | 4 |
| 324-2K | 600-CT | 15 | 40 | 0.4 | 4 |
| 324-2L | 600-CT | 4 | 40 | 0.4 | 4 |
| 224-2M | 250 | 600-CT | 15 | 55 | 7 |

★Max. power level: 6 w.

Tolerance on outline dimensions +.020 -.010

ALL RATINGS BASED UPON MAXIMUM UNBALANCED DC IN PRIMARY AS LISTED



ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

AUDIO TRANSFORMERS FOR MILITARY AND COMMERCIAL APPLICATIONS

ADC offers the following designs to cover a wide range of standard audio applications, from low power transistors through heavy duty output circuits. They are conservatively rated at $\pm 1/2$ db from 30 to 15,000 cycles at the maximum rated power. Each is designed for minimum insertion loss, is fully impregnated before potting and rated for dependable continuous duty operation.

These audio transformers are available in standard MIL cases, hermetically sealed to meet all requirements of MIL-T-27A. THE SAME RATINGS ARE ALSO AVAILABLE AS COMMERCIAL GRADE COMPONENTS, featuring the lower cost construction of a phenolic terminal board with solder lug terminals in the same drawn MIL cases.



INPUT TRANSFORMERS Response $\pm 1/2$ db, 30-15,000 cps

| Catalog No. Com-Hermetic Case Seal | Application | Primary Impedance Rating (Ohms) | Secondary Impedance Rating (Ohms) | Max. Level | Hum Reduction | Case Size |
|------------------------------------|---|---------------------------------|-----------------------------------|------------|---------------|-----------|
| 222A 223A | Line to Single or Push Pull Grids. | 600 ¹ | 60,000 ¹ Split | + 10 dbm | -65 db | AJ |
| 222B 223B | Low Impedance Line to Grid. | 12.5/50/200 | 80,000 | + 10 dbm | -65 db | AJ |
| 222C 223C | Line and Bridging to Single or Push Pull Grids. 3-4 | 150/600/15,000 | 60,000 ¹ Split | + 10 dbm | -65 db | AJ |
| 222D 223D | High Impedance Pickup or Plate to Push Pull Grids. | 10,000 (10MA DC) | 80,000 ¹ Split | + 22 dbm | -35 db | EA |
| 222E 223E | Push Pull Plates to Push Pull Grids. | 20,000 ¹ Split | 90,000 ¹ Split | + 24 dbm | -35 db | EA |

IMPEDANCE TRANSFORMERS Response $\pm 1/2$ db, 30-15,000 cps

| Cat. No. | Type | Application | Primary Impedance (Ohms) | Secondary Impedance (Ohms) | Max. Level | Hum Reduction | Case Size |
|-----------|---|-------------|--|--|-----------------|---------------|-----------|
| 122A 123A | Line to Line | | 600 ¹ /250 ¹ (150/62.5) | 600 ¹ 250 ¹ (150/62.5) | + 15 dbm | -65 db | AJ |
| 122B 123B | Bridging and Line to Line. ³ | | 10,000 ¹ 600 ¹ (2500/150) | 600 ¹ 250 ¹ (150/62.5) | + 15 dbm | -65 db | AJ |
| 122C 123C | Line to Line | | 600 ¹ /150 ¹ (150/37.5) | 600 150 (150/37.5) | + 15 dbm | -65 db | AJ |
| 122D 123D | Line to Voice Coil | | Impedances 3000/2500/2000/1000/500/250 ohm to 16/8/4 | | + 40 dbm (10 W) | | FA |
| 122E 123E | Line to Voice Coil | | 3000 2500 2000 1000/500 250 ohm to 16/8/4 | | + 45 dbm (30 W) | | JA |
| 122F 123F | Auto Matching | | 600 500 440 400/333 250 220 140/75 50 43 37/22/16/10/8/6/3/2/1 | | + 43 dbm (20 W) | | GA |
| 122G | Hybrid bal. | -50 db | 600 to 600 (300 Ohm Amp.) | | + 10 dbm | -35 db | EA |

INTERSTAGE TRANSFORMERS Response $\pm 1/2$ db, 30-15,000 cps

| Cat. No. | Type | Application | Primary Impedance (Ohms) | Secondary Impedance (Ohms) | Max. Level | Hum Reduction | Case Size |
|-----------|--------------------------|-------------|--|------------------------------|------------|---------------|-----------|
| 222F 223F | Transistor to Transistor | | 500/100CT Split ² (25 MA DC) | 200 300CT Split ² | + 15 dbm | -15 db | AJ |
| 222G 223G | Transistor to Transistor | | 1000/250CT Split ² (10 MA DC) | 500 200CT Split ² | + 15 dbm | -15 db | AJ |

NOTES:
¹Balanced Center Tap
²Bifilar Wound
³All bridging transformers have built-in primary resistors, balanced to 0.1% or better, making the bridging impedance twice the primary impedance.
⁴For single grid input, response is ± 1 db, 30-15,000 cps.

OUTPUT TRANSFORMERS Response $\pm 1/2$ db, 30-15,000 cps (Power Response at Rated Output)

| Catalog No. Com-Hermetic Case Seal | Application | Primary Impedance Rating (Ohms) | Secondary Impedance Rating (Ohms) | Max. Level | Case Size |
|-------------------------------------|---|---------------------------------|-----------------------------------|-----------------|-----------|
| 322A 323A* | Plate to Line | 15,000 (10 MA DC) | 600 250 (150/62.5) ² | + 20 dbm (1 W) | EB |
| 322B ⁵ 323B ⁵ | Plate to Voice Coil | 5,000 (40 MA DC) | 16/8/4 | + 37 dbm (5 W) | FA |
| 322C 323C | Push Pull Plates to Line | 20,000 CT | 600/250 (150/62.5) ² | + 30 dbm (1 W) | EB |
| 322D 323D | Push Pull Plates to Line and Voice Coil | 10,000 CT | 600 (150) ² 16/8/4 | + 40 dbm (10 W) | GA |
| 322E 323E ¹ | Push Pull Plates to Voice Coil ⁴ | 9,000 2,250 Split ² | 16/8/4 | + 40 dbm (10 W) | GA |
| 322F 323F ¹ | Push Pull Plates to Voice Coil ² | 10,000 Split ² | 16/8/4 | + 43 dbm (20 W) | JA |
| 322G 323G ¹ | Push Pull Plates to Voice Coil ⁴ | 8,000/1,600 Split ² | 16/8/4 | + 42 dbm (15 W) | JB |
| 322H 323H ¹ | Push Pull Plates to Voice Coil ⁴ | 5,000 3,000 Split ² | 16/8/4 | + 43 dbm (20 W) | JA |
| 322J 323J ¹ | Push Pull Plates to Voice Coil ⁴ | 6,600 1,650 Split ² | 16/8/4 | + 45 dbm (30 W) | KA |
| 322K 323K ¹ | Push Pull Plates to Voice Coil ⁴ | 3,500/700 Split ² | 16/8/4 | + 48 dbm (70 W) | LA |
| 322L 323L ¹ | Push Pull Par Plates to Voice Coil | 2,500 1,500 Split ² | 16/8/4 | + 49 dbm (80 W) | MA |
| 322M 323M ¹ | Push Pull Class A Transistors to Voice Coil | 48 16/8 Split ² | 16/8/4 | + 47 dbm (50 W) | KA |
| 322N 323N ¹ | Class A Transistor to Voice Coil | 10 (1.25a. DC) | 16/8/4 | + 38 dbm (10 W) | JB |
| 322P 323P ¹ | Push Pull Transistors to Voice Coil | 48 32 CT | 16/8/4 | + 40 dbm (10 W) | GA |

NOTES:
¹These items are not normally carried in stock.
²"Split" indicates 2 separate, symmetrical windings. Impedances shown are for series connection. Where impedances are shown in parenthesis, they indicate the impedances resulting when windings are connected in parallel.
³Balanced, for Williamson type circuit operation.
⁴Has primary taps suitable for Screen loading
⁵Power response $\pm 1/2$ db, 50-15,000 cps.
⁶Response is ± 1 db, 30-15,000 cps.

MINIATURE AUDIO TRANSFORMERS

These transformers offer a variety of special design features on a catalog basis for particular circuit and chassis applications. They are available for plug-in and printed circuit applications as well as standard installations. The special cases shown allow the maximum of electrical performance for each type as well as variety and flexibility in mechanical arrangement. All electrical ratings are shown for continuous duty at full specified power levels. Dia. $7/8"$, Ht. $1 1/8"$, 2-56 Mtg. screws on $11/16"$ centers.



MINIATURE SERIES

| Cat. No. | Type | Application | Primary Impedance (Ohms) | Secondary Impedance (Ohms) | Max. Level | Response |
|----------|------------|--------------------------------------|---|----------------------------|------------|-----------------------|
| 108A | Impedance | Line to Line | 50/250/600 | 50/250/600 | + 8 dbm | ± 1 db 30-15,000 |
| 208A | Input | Line to Single Grid | 50/250/600 | 80,000 | + 10 dbm | ± 1 db 30-15,000 |
| 208B | Input | Line to Push Pull Grids | 50/250/600 | 80,000CT | + 10 dbm | ± 1 db 30-15,000 |
| 208C | Input | Low Impedance to Grid | 7.5/30 | 80,000 | + 8 dbm | ± 1 db 30-15,000 |
| 208D | Interstage | Plate (0 DC) to Push Pull Grids | 15,000 | 60,000CT | + 10 dbm | ± 1 db 30-10,000 |
| 208E | Interstage | Plate (3MA DC) to Push Pull Grids | 15,000 | 60,000CT | + 10 dbm | ± 2 db 200-10,000 |
| 208F | Input | Line to Single Grid | 50/250/600 | 500,000 | + 10 dbm | ± 3 db 200-3000 |
| 208G | Interstage | Transistor to Transistors (20 MA DC) | 10,000 (2500) Split | 4000/1000CT | + 10 dbm | ± 2 db 100-10,000 |
| 308E | Output | Plate to Line (0 DC) | 15,000 | 50/250/600 | + 10 dbm | ± 1 db 40-15,000 |
| 308F | Output | Plate to Line (3MA DC) | 15,000 | 50/250/600 | + 10 dbm | ± 2 db 100-15,000 |
| 308G | Output | Push Pull Plates to Line | 30,000CT | 50/250/6600 | + 10 dbm | ± 1 db 30-15,000 |
| 308H | Output | Class B Transistors to Voice Coil | 2000/500CT | 16/8/4 | + 23 dbm | ± 1 db 100-10,000 |
| 408D | Inductor | | 200 Hy @ 0 DC; 100 Hy @ 2MA DC; 50 Hy @ 4MA DC; 16 Hy @ 10MA DC; 6000 Ohms Resistance | | | |

NOTE: These items are also available, on special request, as plug-in transformers with:
 1. Mumetal case $15/16"$ dia. by $1-5/16"$ high 35 db shielding.
 2. Mumetal case plus 1 Mumetal shield $1-1/16"$ dia. by $1 1/2"$ high. 65 db shielding.





ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

AUDIO TRANSFORMERS

SUB-MINIATURE FOR COMMERCIAL APPLICATION

LISTED BELOW: are 18 typical sub-miniature transformers and chokes available as stock items in production quantities. Others may be designed to specifications for general audio and carrier frequency equipment. Power level for voice range without unbalanced DC, up to 3-5 watts, or for single tube output, up to 1 watt. All listed units in mumetal cases except 320Y and 320Z.

INPUT TRANSFORMERS

| Cat. No. | Primary Impedance ¹ | | Secondary Impedance ¹ | Primary Inductance (±5% at 10 mv 50 cps.) |
|----------|--------------------------------|----|----------------------------------|---|
| 220A | 500 (125) ohms | to | 150,000 ohms CT | 8.5 hy. |
| 220B | 60 (15) ohms | to | 150,000 ohms CT | 1.0 hy. |
| 220C | 500 (125) ohms | to | 300,000 ohms CT | 8.5 hy. |
| 220D | 60 (15) ohms | to | 300,000 ohms CT | 1.0 hy. |

OUTPUT TRANSFORMERS

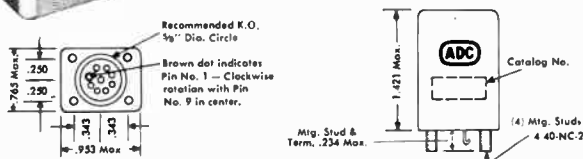
| | | | | |
|-------------------|------------------------|----|--|----------------------|
| 320A | 20,000 ohms CT | to | 16 8/4/2 ohms | 50 cps. 310 hy. |
| 320B | 20,000 ohms CT | to | 16 8 4 2 ohms | 1200 hy. |
| 320C | 20,000 ohms CT | to | 16 8 4 2 ohms | 1750 hy. |
| 320D | 20,000 ohms CT | to | 500 (125) ohms | 1750 hy. |
| 320E | 20,000 ohms CT | to | 50/25/12 ^{1/2} / _{6.25} ohms | 1200 hy. |
| 320F | 20,000 ohms CT | to | 50/25/12 ^{1/2} / _{6.25} ohms | 1750 hy. |
| 320Y | 15,000 ohms CT | to | 600 (150) ohms 2 watts | 1 db—250—15,000 cps. |
| 320Z ² | 10,000 ohms (10 MA DC) | to | 600 (150) ohms 1/2 watt | 1 db—300—10,000 cps. |

INDUCTORS



| | Inductance | Percentag Taps | Q at 0.1 V 50 cps. |
|------|--------------------------|----------------|--------------------------|
| 420A | 1050 800 550/400 280 hy. | None | 1050 hy. -11; 280 hy. -8 |
| 420D | 1500 hy. | 3 — 2% | 12 |
| 420E | 1000 hy. | 3 — 2% | 12 |
| 420F | 850 hy. | 3 — 2% | 12 |
| 420G | 600 hy. | 3 — 2% | 12 |
| 420H | 500 hy. | 3 — 2% | 12 |

NOTES:
 Inductance of middle tap is nominal ±2% at 0.1 volt, 50 cps.
¹Impedance in parenthesis indicates parallel connected windings.
²Single plate, all other transformers push-pull.



MILITARY STANDARD AUDIO TRANSFORMERS

These Military Standard audio transformers have been specified by ASESAs and are established by the three Military Services and the transformer industry as standards for Military transformer applications. Tests have been conducted in ADC's environmental laboratory which indicate that these units will meet the requirements of MIL-T-27A, Grade 1, Class R operating temperature, life expectancy X (10,000 hours minimum).

| Cat-alog No. | MIL-T-27A Classification | MIL-T-27A Part No. | Application | Impedance (Ohms) | Oper-ating Level | Pri Bal. | DCMA Unbal. |
|--------------|--------------------------|--------------------|-------------------------------------|---|------------------|----------|-------------|
| 221A | TF 1RX 15AJ001 | MS-90000 | Push Pull Plates to Push Pull Grids | Pri. 10,000 CT Sec. 90,000 CT 22,500 CT | 15 dbm | -- | 10 |
| 121A | TF 1RX 16AJ002 | MS-90001 | Line to Voice Coil | Pri. 600 CT (150) Sec. 4/8/16 | 2 W | -- | -- |
| 221B | TF 1RX 10AJ001 | MS-90002 | Line to Push Pull Grids | Pri. 600 CT (150) Sec. 135,000 CT | 15 dbm | -- | -- |
| 121B | TF 1RX 16AJ001 | MS-90003 | Line to Line | Pri. 600 CT (150) Sec. 600 CT (150) | 15 dbm | -- | -- |
| 321A | TF 1RX 13AJ001 | MS-90004 | Plate to Line | Pri. 7600 4800 Sec. 600 CT (150) | 2 W | -- | 40 |
| 321B | TF 1RX 13AJ002 | MS-90005 | Plate to Voice Coil | Pri. 7600/4800 Sec. 4/8/16 | 2 W | -- | 40 |
| 321C | TF 1RX 13AJ003 | MS-90006 | Push Pull Plates to Line | Pri. 15,000 CT Sec. 600 CT (150) | 2 W | -- | 10 |
| 321D | TF 1RX 13AJ004 | MS-90007 | Push Pull Plates to Line | Pri. 24,000 CT Sec. 600 CT (150) | 1 W | 20 | 1 |
| 321E | TF 1RX 13AJ005 | MS-90008 | Push Pull Plates to Line | Pri. 60,000 CT Sec. 600 CT (150) | .5 W | 20 | 1 |

QUALITY PLUS TRANSFORMERS

For many years ADC has offered these carefully chosen audio transformers which have gained wide acceptance in many quality performance applications. The very conservative ratings are based upon full power operation at 30 cycles, with response from 30 to 15,000 cycles within 1/2 db. Each is designed for low insertion loss and minimum hum pickup, with hum bucking construction used on all impedance, output and bridging types. To remain consistent with the many units already in widespread use, these designs are again offered in the standard ADC type 14 case. This features fully enclosed construction in steel or cast cases, with heavy duty silver plated terminals on a phenolic terminal board. Detailed dimensions are shown below.

STANDARD LINE IMPEDANCES

Impedance values shown within parentheses following a higher value, as "600 (150) ohms," indicate the effect of connecting windings in parallel. In either case windings are well balanced, but center tap is available only when both windings are connected in series.

IMPEDANCE MATCHING TRANSFORMERS

| Cat. No. | Primary Impedance | Secondary Impedance | Description | Max. Level DBM | Case | Weight Lbs. |
|----------|-----------------------|---------------------|---|----------------|------|-------------|
| 114A | 600/250 (150/62.5) | 600/250 (150/62.5) | 2 mumetal shields | + 16 | 14A | 1 1/2 |
| 114B | 600/250 (150/62.5) | 600/250 (150/62.5) | Cast case only | + 20 | 14AD | 2 1/4 |
| 114C | 10,000/600 (2500/150) | 600/250 (150/62.5) | Bridging and line to line 2 mumetal shields | + 16 | 14A | 1 1/2 |
| 114E | 10,000 (2500) | 600/150 (150/37.5) | Bridging to line 2 mumetal shields | + 16 | 14A | 1 1/2 |
| 114F | 600 150 (150/37.5) | 600/150 (150/37.5) | 2 mumetal shields | + 16 | 14A | 1 3/4 |
| 114G | 600/150 (150/37.5) | 600/150 (150/37.5) | Cast case only | + 20 | 14AD | 2 1/4 |

INPUT TRANSFORMERS

| Cat. No. | Primary Impedance | Secondary Impedance | Description | Max. DC Unbalance In Pri-mary | Max. Level DBM | Case | Weight Lbs. |
|----------|--------------------|---------------------|------------------------------------|-------------------------------|----------------|------|-------------|
| 214A | 600 250 (150/62.5) | 80,000 | Line to 1 grid 2 mumetal shields | 0 | + 20 | 14A | 1 1/2 |
| 214B | 600 250 (150/62.5) | 80,000 | Line to 1 grid. Cast case | 0 | + 20 | 13AC | 2 1/2 |
| 214C | 600/250 (150/62.5) | 60,000 (15,000) | Line to PP grids 3 mumetal shields | 0 | + 20 | 14A | 2 1/2 |

INTERSTAGE TRANSFORMERS

| Cat. No. | Primary Impedance | Secondary Impedance | Description | Max. DC Unbalance In Pri-mary | Max. Level DBM | Case | Weight Lbs. |
|----------|-------------------|---------------------|--|-------------------------------|----------------|------|-------------|
| 214H | 10,000 | 80,000 (20,000) | Single plate to PP grids. Hum-bucking. Cast case | 0 | + 26 | 14AC | 1 1/4 |
| 214J | 20,000 (5000) | 80,000 (20,000) | PP plates to PP grids. Hum-bucking. Cast case | 1 MA | + 30 | 14AC | 2 1/4 |
| 214L | 20,000 (5000) | 20,000 (5000) | PP plates to PP grids. Hum-bucking. Cast case | 1 MA | + 30 | 14AC | 2 1/4 |

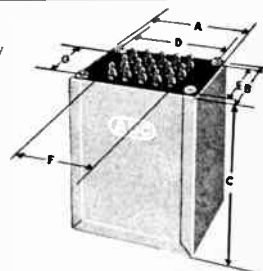
PLATE TO LINE, PRE-AMPLIFIER

| Cat. No. | Primary Impedance | Secondary Impedance | Description | Max. DC Unbalance In Pri-mary | Max. Level DBM | Case | Weight Lbs. |
|----------|-------------------|---------------------|--------------|-------------------------------|----------------|------|-------------|
| 314A | 15,000 | 600/250 (150/62.5) | 1 6J5, etc. | 8 | + 23 | 14AD | 2 1/2 |
| 314B | 20,000 | 600/250 (150/62.5) | PP 6J5, etc. | 1 | + 27 | 14AD | 2 1/4 |

TYPE 14 TRANSFORMER CASE DIMENSIONS

| Type | Mounting Dimensions (6/32 Mounting Screws—Top or Bottom) | | | | Chassis Knock-Out for Max. No. of Terminals | | |
|-------|--|---|-----|-------|---|---|-------|
| | A | B | C | D | E | F | G |
| 14AC* | 2.375 | 2 | 3 | 1.875 | 1.5 | 2 | 1.125 |
| 14AD* | 2.375 | 2 | 3.5 | 1.875 | 1.5 | 2 | 1.125 |
| 14A | 2.375 | 2 | 3 | 1.875 | 1.5 | 2 | 1.125 |

*Heavy annealed cast iron for low shielding.
 1 All bridging transformers have built-in primary resistors, balanced to 0.1% or better, making the bridging impedance twice the primary impedance.





ADC PRODUCTS

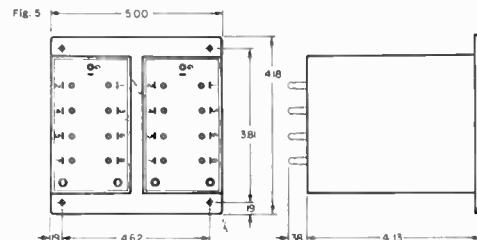
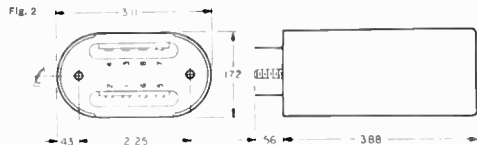
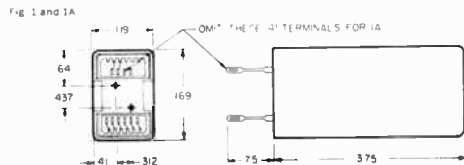
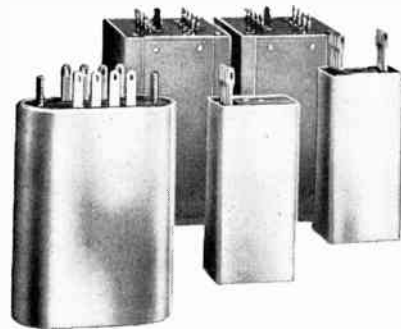
MINNEAPOLIS, MINNESOTA

A Division of Magnetic Controls Company

TELEPHONE COILS

For many years, ADC has been a dependable source of transformers and filters for the telephone and telegraph industry. Recently, we have designed and tooled for additional items in a series of "coils" which are electrically and physically interchangeable with similar components made by Western Electric. These items are listed below with the equivalent Western Electric number. All items in this series can be supplied in MIL cases if desired.

| ADC Inductors | W.E. Indr. or Ret. | Fig. | ADC Imped. Trans. | W.E. Repeat Coil | Fig. | ADC Imped. Trans. | W.E. Repeat Coil | Fig. |
|-------------------|--------------------|------|--------------------|------------------|------|-------------------|------------------|------|
| 409BB | 149B | 2 | 118A | 67E | ° | 119C | 177C | ° |
| 409BC | 149C | 2 | 113A | 91A | 5 | 119D | 177D | ° |
| 409BD | 149D | 2 | 113A | 93A | 5 | 112G | 189A | 1 |
| 409E | 149E | 2 | 113B | 93B | 5 | 112B | 189D | 1A |
| 409G | 149G | 2 | 113F | 93F | 5 | 112C | 189E | 1A |
| 409H | 149H | 2 | 113G | 93G | 5 | | | |
| 409J | 149J | 2 | 113H | 93H | 5 | | | |
| 409K | 149K | 2 | 113J | 93J | 5 | | | |
| 409M | 149M | 2 | 109S ¹ | 94E | 2 | ADC Imped. Trans. | W.E. Auto Trans. | Fig. |
| 409N | 149N | 2 | 109T | 94F | 2 | 109A | 23A | ° |
| 409P | 149P | 2 | 109J | 94G | 2 | 112A ¹ | 181B | 1 |
| 409R | 149R | 2 | 109K ¹ | 93H | 2 | 112E | 181C | 1 |
| 405A | 152B | ° | 109V | 94K | 2 | 112H | D166840 | 1A |
| 405H | 225A | ° | 109W | 94L | 2 | | | |
| 405E | 250C | ° | 109Y | 94N | 2 | | | |
| 412AC | 274C | 1A | 109Z | 94P | 2 | | | |
| 412AD | 274D | 1A | 109BB | 94S | 2 | | | |
| 412AG | 274G | 1A | 109BC | 94T | 2 | | | |
| 412AH | 274H | 1A | 109BD | 94U | 2 | | | |
| 412AJ | 274J | 1A | 109BE | 94W | 2 | | | |
| 412AL | 274L | 1A | 109BF | 94Y | 2 | | | |
| 412AR | 274R | 1A | 109BC ¹ | 94AA | 2 | | | |
| 412AS | 274S | 1A | 118F | 106A | ° | | | |
| 412BB | 274AB | 1A | 118S | 119C | ° | | | |
| 412T | 307B | 1A | 118U | 119E | ° | | | |
| 412C | 307C | 1A | 109B ¹ | 120C | 2 | | | |
| 412F | 307F | 1A | 109C ¹ | 120D | 2 | | | |
| 412G | 307G | 1A | 109D ¹ | 120E | 2 | | | |
| 412H | 307H | 1A | 109E ¹ | 120F | 2 | | | |
| 412J | 307J | 1A | 109F ¹ | 120H | 2 | | | |
| 412K | 307K | 1A | 109G ¹ | 120J | 2 | | | |
| 412L | 307L | 1A | 109H ¹ | 120K | 2 | | | |
| 412M | 307M | 1A | 109P ¹ | 120L | 2 | | | |
| 412B | 307N | 1A | 109L | 146A | ° | | | |
| 412A ¹ | 307P | 1A | 109M | 146U | ° | | | |
| 412R | 307R | 1A | 119P | 170A | ° | | | |

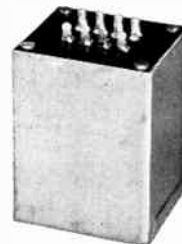


¹These represent most commonly used items and are normally carried in stock.
 °Space did not permit outline drawings for all types. Dimensions will be sent on your request.

ADC REPEATING COILS

104A—Cord Circuit. This repeating coil is designed to have good transmission efficiency for voice frequencies. Low frequency ringing currents are attenuated and circuit will not ring through. Case is heavy steel to eliminate all cross-talk. Core will not saturate at maximum normal current.

104B—Phantom. The 104B Repeating Coil is a 4-winding coil, for use in phantom circuits. The phantom winding (5-6-7-8) is parallel wound. Heavy Formvar wire is used for maximum surge voltage or lightning protection. This coil has good transmission efficiency at both ringing and voice frequencies.



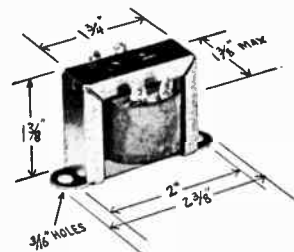
| Type | PRI. DCR | | SEC. DCR | | Case | Screw | Mounting Centers |
|------|----------|------|----------|------|---------------|----------|------------------|
| | 1-2 | 3-4 | 5-6 | 7-8 | | | |
| 104A | 10.3 | 16.5 | 12.5 | 14.5 | 2½x1¼x3½ high | (4) 6-32 | 1¾x1¾ |
| 104B | 16.5 | 20 | 24 | 24 | 2½x2¾x3½ high | (4) 8-32 | 1¾x2¼ |

INDUCTION COILS

103A—Induction Coil is a 2-winding coil for local battery telephones.

103B—Anti-Sidetone Induction Coil is similar to 103A, but with an additional winding for anti-sidetone connection.

103C—Anti-Sidetone Induction Coil is designed for common battery telephone use.





ADC PRODUCTS

MINNEAPOLIS, MINNESOTA

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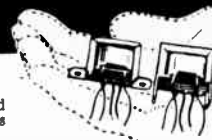
NET PRICE LIST

Prices subject to change without notice

| CATALOG NO. | NET PRICE | CATALOG NO. | NET PRICE | CATALOG NO. | NET PRICE | CATALOG NO. | NET PRICE |
|-------------|-----------|-------------|-----------|---------------|-----------|-------------|-----------|
| 108A | 8.25 | 224-5J | 7.80 | 419AL thru AW | 6.75 | 512A | 11.70 |
| 103A | 3.15 | 224-6F | 6.60 | 419AY thru BE | 7.50 | 512B | 12.60 |
| 103B | 3.39 | 224-6J | 7.20 | 419BC thru BN | 8.25 | 512C | 17.10 |
| 103C | 3.30 | 308E, F | 7.50 | 419BQ thru BS | 9.00 | 512D | 18.90 |
| 104A | 8.70 | 308C, H | 9.00 | 419BU | 9.75 | 512E | 20.55 |
| 104B | 9.54 | 314A | 20.40 | 419BW | 10.50 | 512FA | 9.00 |
| 114A | 23.85 | 314B | 18.00 | 419CE thru CS | 8.25 | 512FB | 9.60 |
| 114B | 19.80 | 320A thru F | 20.85 | 419CU thru DA | 8.70 | 512FC | 10.35 |
| 114C | 23.85 | 320Y, Z | 20.85 | 419DC thru DG | 9.00 | 512FD | 10.80 |
| 114E | 23.85 | 321A thru E | 12.90 | 419DJ | 9.75 | 512FE | 12.90 |
| 114F | 23.85 | 322A | 11.70 | 419DL | 10.50 | 512FF | 10.65 |
| 114G | 18.00 | 322B | 16.80 | 419EA thru EN | 6.75 | 512FG | 11.25 |
| 121A | 14.40 | 322C | 15.90 | 419EQ thru EY | 7.50 | 513A | 12.60 |
| 121B | 14.40 | 322D | 17.40 | 419FA thru FC | 8.25 | 513B | 14.25 |
| 122A | 24.30 | 322E | 17.40 | 419FE | 8.70 | 513C | 21.45 |
| 122B | 25.20 | 322F | 19.80 | 419FG | 9.00 | 513D | 23.70 |
| 122C | 24.30 | 322G | 21.00 | 419FH | 9.75 | 513E | 25.65 |
| 122D | 16.80 | 322H | 20.40 | 419GL thru GY | 7.50 | 513FA | 11.25 |
| 122E | 19.80 | 322I | 22.80 | 419HA thru HG | 8.25 | 513FB | 12.15 |
| 122F | 15.90 | 322J | 31.50 | 419HJ thru HN | 8.70 | 513FC | 12.90 |
| 122G | 22.20 | 322K | 31.50 | 419HQ thru HS | 9.00 | 513FD | 13.50 |
| 123A | 26.40 | 322L | 33.90 | 419HU | 9.75 | 513FE | 16.20 |
| 123B | 27.30 | 322M | 23.70 | 419HW | 10.50 | 513FF | 13.20 |
| 123C | 26.40 | 322N | 21.60 | 419HY | 11.25 | 513FG | 13.80 |
| 123D | 17.40 | 322P | 17.10 | 419KL thru LC | 9.75 | 521A | 22.20 |
| 123E | 21.30 | 323A | 13.50 | 419LE thru LJ | 10.50 | 521B | 21.30 |
| 123F | 16.80 | 323B | 20.70 | 419LL thru LN | 11.25 | 521C | 23.70 |
| 124-2A | 8.10 | 323C | 17.40 | 419LQ thru LS | 12.00 | 521D | 26.70 |
| 124-2H | 7.20 | 323D | 21.60 | 419LU | 12.45 | 521E | 30.90 |
| 124-3A | 7.80 | 324-2B | 7.80 | 419LW | 12.90 | 521F | 19.80 |
| 124-3H | 6.90 | 324-2C | 7.20 | 420A thru H | 17.64 | 521G | 24.90 |
| 124-4C | 7.20 | 324-2D | 6.60 | 421A | 11.10 | 521H | 29.70 |
| 124-4M | 6.60 | 324-2E | 7.20 | 421B | 12.30 | 521M | 13.80 |
| 124-5C | 6.90 | 324-2F | 6.60 | 421C | 13.20 | 521N | 14.10 |
| 124-5K | 6.90 | 324-2G | 6.60 | 421D | 14.10 | 521P | 12.90 |
| 124-6C | 6.60 | 324-2H | 6.60 | 421E | 14.70 | 521Q | 15.60 |
| 124-6K | 6.00 | 324-2J | 6.60 | 421F | 20.10 | 521R | 13.20 |
| 208A thru F | 7.50 | 324-2K | 6.60 | 421G | 21.30 | 521S | 15.60 |
| 208G | 9.00 | 324-2L | 6.60 | 421H | 24.90 | 521T | 18.00 |
| 214A | 23.70 | 324-3B | 7.50 | 421J | 36.90 | 521U | 22.05 |
| 214B | 16.20 | 324-3C | 6.90 | 421K | 30.00 | 521V | 21.30 |
| 214C | 23.70 | 324-3D | 6.30 | 422A | 5.40 | 521W | 22.20 |
| 214E | 15.45 | 324-3E | 6.90 | 422B | 6.00 | 522A | 13.50 |
| 214J | 16.80 | 324-3F | 6.30 | 422C | 6.45 | 522B | 15.00 |
| 214L | 16.80 | 324-3G | 6.30 | 422D | 6.45 | 522C | 17.40 |
| 220A thru D | 20.85 | 324-3H | 6.30 | 422E | 6.90 | 522D | 18.30 |
| 221A | 15.45 | 324-3I | 6.30 | 422F | 7.95 | 522E | 26.70 |
| 221B | 13.20 | 324-3J | 6.30 | 422G | 9.60 | 522F | 26.70 |
| 222A | 22.50 | 324-3K | 6.30 | 422H | 10.20 | 522FA | 10.80 |
| 222B | 22.50 | 324-3L | 6.30 | 422I | 12.90 | 522FB | 13.20 |
| 222C | 25.20 | 324-4B | 7.80 | 422J | 12.90 | 522FC | 14.40 |
| 222D | 19.80 | 324-4D | 7.20 | 422K | 12.00 | 522FD | 11.70 |
| 222E | 19.80 | 324-4E | 7.20 | 422L | 10.20 | 522FE | 12.90 |
| 222F | 17.40 | 324-4F | 6.60 | 422M | 12.90 | 522FF | 21.30 |
| 222G | 17.40 | 324-4H | 6.00 | 422V | 7.05 | 522FG | 10.80 |
| 223A | 24.90 | 324-4J | 6.60 | 422W | 6.00 | 522FH | 11.70 |
| 223B | 24.90 | 324-4K | 6.00 | 422X | 6.00 | 522FI | 14.10 |
| 223C | 28.20 | 324-4N | 6.00 | 422Y | 6.90 | 522FK | 18.30 |
| 223D | 21.60 | 324-4P | 6.00 | 422Z | 7.20 | 522FL | 11.70 |
| 223E | 21.60 | 324-5A | 8.70 | 423A | 6.60 | 523A | 15.90 |
| 223F | 18.30 | 324-5B | 7.80 | 423B | 7.65 | 523B | 19.80 |
| 223G | 18.30 | 324-5D | 6.90 | 423C | 8.10 | 523C | 21.00 |
| 224-2M | 6.60 | 324-5E | 6.90 | 423D | 8.10 | 523D | 21.60 |
| 224-3G | 7.80 | 324-5G | 6.90 | 423E | 9.15 | 523E | 32.80 |
| 224-3M | 6.30 | 324-5H | 5.70 | 423F | 10.20 | 523F | 32.80 |
| 224-4C | 7.20 | 324-5L | 5.70 | 423G | 12.00 | 523FA | 12.90 |
| 224-4L | 7.80 | 324-5M | 5.70 | 423H | 12.90 | 523FB | 16.20 |
| 224-4R | 6.00 | 324-6A | 7.50 | 423I | 15.90 | 523FC | 20.10 |
| 224-5F | 6.90 | 324-6B | 7.20 | 423J | 14.70 | 523FD | 14.70 |
| | | 324-6D | 6.60 | 423K | 14.70 | 523FE | 15.90 |
| | | 324-6E | 6.60 | 423L | 12.90 | 523FF | 27.60 |
| | | 324-6G | 6.00 | 423M | 15.90 | 523FG | 12.60 |
| | | 324-6H | 5.40 | 423V | 7.80 | 523FH | 14.70 |
| | | 324-6L | 5.40 | 423W | 7.50 | 523FI | 17.10 |
| | | 324-6M | 5.40 | 423X | 7.50 | 523FJ | 21.30 |
| | | 408D | 6.75 | 423Y | 8.70 | 523FK | 14.70 |
| | | | | 423Z | 9.00 | 523FL | 14.70 |

Argonne® TRANSISTOR TRANSFORMERS

LIST PRICE 5.00 ANY TYPE



THE ONLY COMPLETE LINE OF QUALITY TRANSISTOR TRANSFORMERS MADE IN U.S.A.

• NICKEL-STEEL LAMINATIONS • WOUND ON NYLON BOBBINS • MYLAR OUTER WRAP • COLOR CODED LEADS
Efficiently designed to meet the needs of miniaturization and engineered to provide more power handling capacity and improved frequency response with minimum distortion. All are nickel-steel laminations. Applications under "TYPE" column shows typical use. Many units may be used for other applications as well. Average net weight 1 1/4 oz.; average shp. wt., 4 oz.

| ARGONNE NUMBER | TYPE | IMPEDANCE | | UNBALANCED CURRENT PRI. D.C. MA | POWER MILLI-WATTS | D.C. RESISTANCE | | OVERALL SIZE |
|----------------|--------|--------------|----------------|---------------------------------|-------------------|-----------------|-----------|--------------------|
| | | PRIMARY OHMS | SECONDARY OHMS | | | PRI. OHMS | SEC. OHMS | |
| AR-141 | Input | 500,000 | 1,500 CT | .3 | 350 | 3500 | 60 | 1" x 3/4" x 3/4" |
| AR-142 | Input | 500,000 | 200 CT | .3 | 350 | 3500 | 20 | 1" x 3/4" x 3/4" |
| AR-143 | Input | 250,000 | 200 CT | .5 | 350 | 3500 | 20 | 1" x 3/4" x 3/4" |
| AR-144 | Input | 200,000 | 1,500 CT | .5 | 350 | 3000 | 65 | 1" x 3/4" x 3/4" |
| AR-100 | Input | 200,000 | 1,000 | .5 | 100 | 3600 | 90 | 1" x 3/4" x 3/4" |
| AR-126 | Input | 150,000 | 1,500 CT | 2. | 100 | 3700 | 55 | 1" x 3/4" x 3/4" |
| AR-101 | Input | 100,000 | 3,000 CT | .5 | 100 | 3600 | 60 | 1" x 3/4" x 3/4" |
| AR-145 | Input | 100,000 | 2,000 CT | .5 | 350 | 3000 | 50 | 1" x 3/4" x 3/4" |
| AR-102 | Input | 100,000 | 1,500 CT | .5 | 100 | 3600 | 40 | 1" x 3/4" x 3/4" |
| AR-146 | Input | 100,000 | 50 | .5 | 350 | 3000 | 1.6 | 1" x 3/4" x 3/4" |
| AR-127 | Input | 50,000 | 3,000 CT | 1. | 100 | 2000 | 50 | 1" x 3/4" x 3/4" |
| AR-128 | Input | 50,000 | 1,500 CT | 2. | 100 | 3000 | 50 | 1" x 3/4" x 3/4" |
| AR-129 | Input | 50,000 | 1,000 | 2. | 100 | 2500 | 20 | 1" x 3/4" x 3/4" |
| AR-148 | Input | 50,000 | 500 CT | 1. | 175 | 1300 | 20 | 3/4" x 5/8" x 5/8" |
| AR-149 | Input | 50,000 | 200 CT | 1. | 175 | 1300 | 10 | 3/4" x 5/8" x 5/8" |
| AR-147 | Input | 50,000 | 30 CT | 1. | 175 | 1300 | 1.5 | 3/4" x 5/8" x 5/8" |
| AR-150 | Input | 40,000 | 100 | 1. | 175 | 850 | 6 | 3/4" x 5/8" x 5/8" |
| AR-103 | Driver | 20,000 | 2,000 CT | 1. | 100 | 400 | 50 | 1" x 3/4" x 3/4" |
| AR-104 | Driver | 20,000 | 1,000 | 1 | 100 | 400 | 50 | 3/4" x 5/8" x 5/8" |
| AR-151 | Driver | 20,000 | 800 CT | 1.5 | 175 | 600 | 60 | 3/4" x 5/8" x 5/8" |
| AR-105 | Driver | 20,000 | 400 | 1. | 100 | 600 | 30 | 1" x 3/4" x 3/4" |
| AR-130 | Output | 20,000 | 8 | .5 | 100 | 400 | 0.6 | 3/4" x 5/8" x 5/8" |
| AR-131 | Output | 20,000 | 3.2 | .5 | 100 | 400 | 0.3 | 3/4" x 5/8" x 5/8" |
| AR-106 | Driver | 16,000 | 4,000 | 1. | 100 | 620 | 350 | 3/4" x 5/8" x 5/8" |
| AR-152 | Driver | 15,000 | 200 CT | 1.5 | 175 | 550 | 10 | 3/4" x 5/8" x 5/8" |
| AR-107 | Driver | 15,000 | 200 | 1.5 | 250 | 1000 | 20 | 1" x 3/4" x 3/4" |
| AR-108 | Driver | 10,000 | 3,000 CT | 1.5 | 100 | 200 | 100 | 3/4" x 5/8" x 5/8" |
| AR-109 | Driver | 10,000 | 2,000 CT | 1.5 | 100 | 500 | 50 | 3/4" x 5/8" x 5/8" |
| AR-153 | Driver | 10,000 | 200 CT | 2. | 175 | 400 | 10 | 3/4" x 5/8" x 5/8" |
| AR-110 | Output | 10,000 | 16 | 2. | 150 | 600 | 2.5 | 3/4" x 5/8" x 5/8" |
| AR-132 | Output | 10,000 | 8 | 1. | 100 | 600 | .6 | 3/4" x 5/8" x 5/8" |
| AR-133 | Output | 10,000 | 3.2 | 1. | 100 | 600 | .3 | 3/4" x 5/8" x 5/8" |
| AR-158 | Input | 5,000 CT | 80,000 | 2. | 175 | 350 | 1800 | 3/4" x 5/8" x 5/8" |
| AR-157 | Input | 5,000 | 45,000 | 2. | 175 | 250 | 1600 | 3/4" x 5/8" x 5/8" |
| AR-156 | Input | 5,000 | 30,000 | 2. | 175 | 150 | 1300 | 3/4" x 5/8" x 5/8" |
| AR-155 | Input | 5,000 | 10,000 | 2. | 175 | 150 | 450 | 3/4" x 5/8" x 5/8" |
| AR-154 | Input | 5,000 CT | 7,500 CT | 2. | 175 | 150 | 400 | 3/4" x 5/8" x 5/8" |
| AR-173 | Driver | 5,000 | 3,000 CT | 2. | 350 | 200 | 90 | 1" x 3/4" x 3/4" |
| AR-111 | Output | 5,000 | 100 | 1. | 100 | 600 | 10 | 3/4" x 5/8" x 5/8" |
| AR-134 | Output | 4,000 CT | 8 | 4. | 250 | 150 | .8 | 1" x 3/4" x 3/4" |
| AR-135 | Output | 4,000 CT | 3.2 | 4. | 250 | 150 | .3 | 1" x 3/4" x 3/4" |
| AR-112 | Output | 3,500 | 200 | 1. | 150 | 120 | 25 | 1" x 3/4" x 3/4" |
| AR-113 | Driver | 3,000 CT | 1,000 | 9. | 150 | 100 | 60 | 3/4" x 5/8" x 5/8" |
| AR-114 | Output | 2,500 | 11 | 10 | 150 | 50 | 1.1 | 3/4" x 5/8" x 5/8" |
| AR-115 | Input | 2,000 CT | 8,000 CT | 2 | 150 | 150 | 660 | 1" x 3/4" x 3/4" |
| AR-116 | Output | 2,000 | 200 | 4. | 250 | 120 | 20 | 1" x 3/4" x 3/4" |
| AR-175 | Driver | 2,000 | 1,500 CT | 2. | 350 | 150 | 60 | 1" x 3/4" x 3/4" |
| AR-159 | Driver | 1,500 | 500 CT | 4. | 175 | 100 | 20 | 3/4" x 5/8" x 5/8" |
| AR-136 | Output | 1,000 CT | 100 | 4. | 250 | 120 | 10 | 1" x 3/4" x 3/4" |
| AR-137 | Output | 1,000 CT | 8 | 4. | 250 | 120 | .9 | 1" x 3/4" x 3/4" |
| AR-138 | Output | 1,000 CT | 3.2 | 4. | 250 | 120 | .3 | 1" x 3/4" x 3/4" |
| AR-160 | Output | 800 CT | 3.2 | 5. | 175 | 40 | .3 | 3/4" x 5/8" x 5/8" |
| AR-161 | Output | 650 CT | 16 | 5. | 175 | 27 | 1.3 | 3/4" x 5/8" x 5/8" |
| AR-162 | Output | 500 CT | 500 CT | 5. | 350 | 18 | 18 | 1" x 3/4" x 3/4" |
| AR-163 | Output | 500 CT | 150 CT | 5. | 175 | 18 | 8 | 3/4" x 5/8" x 5/8" |
| AR-165 | Output | 500 CT | 50 | 5. | 175 | 18 | 4 | 3/4" x 5/8" x 5/8" |
| AR-117 | Output | 500 CT | 30 | 5. | 100 | 20 | 1.5 | 3/4" x 5/8" x 5/8" |
| AR-118 | Output | 500 CT | 16 | 5. | 100 | 20 | 1.5 | 3/4" x 5/8" x 5/8" |
| AR-164 | Output | 500 CT | 8 | 5. | 175 | 18 | .8 | 3/4" x 5/8" x 5/8" |
| AR-119 | Output | 500 CT | 3.2 | 5. | 100 | 20 | .3 | 3/4" x 5/8" x 5/8" |
| AR-166 | Output | 400 CT | 16 | 5. | 175 | 16 | 1.3 | 3/4" x 5/8" x 5/8" |
| AR-120 | Output | 400 CT | 11 | 1. | 150 | 20 | .9 | 3/4" x 5/8" x 5/8" |
| AR-167 | Output | 400 CT | 8 or 3.2 | 5. | 175 | 16 | .6/.3 | 3/4" x 5/8" x 5/8" |
| AR-168 | Output | 300 CT | 16 | 6. | 175 | 12 | 1.4 | 3/4" x 5/8" x 5/8" |
| AR-121 | Output | 300 CT | 3.2 | 6 | 150 | 20 | .25 | 3/4" x 5/8" x 5/8" |
| AR-139 | Output | 250 CT | 8 | 2. | 250 | 15 | .7 | 1" x 3/4" x 3/4" |
| AR-122 | Output | 250 CT | 3.2 | 2 | 150 | 11 | .3 | 1" x 3/4" x 3/4" |
| AR-123 | Input | 200 | 2,000 CT | 2. | 150 | 11 | 50 | 1" x 3/4" x 3/4" |
| AR-124 | Output | 200 CT | 16 | 2 | 250 | 20 | 1.3 | 3/4" x 5/8" x 5/8" |
| AR-169 | Output | 200 CT | 8 or 3.2 | 7. | 175 | 9 | .6/.3 | 3/4" x 5/8" x 5/8" |
| AR-140 | Output | 200 CT | 3.2 | 2. | 100 | 10 | .3 | 3/4" x 5/8" x 5/8" |
| AR-170 | Output | 160 CT | 8 or 3.2 | 8. | 350 | 10 | .6/.3 | 1" x 3/4" x 3/4" |
| AR-176 | Output | 125 CT | 8 | 8. | 350 | 4 | .7 | 1" x 3/4" x 3/4" |
| AR-174 | Output | 125 CT | 3.2 | 8. | 350 | 6 | .3 | 1" x 3/4" x 3/4" |
| AR-171 | Output | 100 CT | 10 CT | 10. | 175 | 4 | .8 | 3/4" x 5/8" x 5/8" |
| AR-172 | Output | 48 CT | 8 or 3.2 | 15. | 350 | 2.3 | .6/.3 | 1" x 3/4" x 3/4" |
| AR-125 | Input | 3 | 4,000 | 15. | 250 | 14 | 50 | 3/4" x 5/8" x 5/8" |

HIGH FIDELITY TRANSISTOR TRANSFORMERS

Driver and output transformers, completely encased. Response 20-20,000 cps ± 0.25 db. Output transformer 1.5 watts or 20-20,000 cps ± 2 db. Size 1-5/16" x 1-5/16" x 1 1/4". Shpg. wt., 9 oz.

MODEL AR-500 DRIVER TRANSFORMER: 5000 ohm primary, 3000 ohm CT secondary; dc resistance of primary 50 ohms, secondary 75 ohms; unbalanced primary dc current 20 ma. List Price 9.60

MODEL AR-501 OUTPUT TRANSFORMER: Primary 125 ohms CT, secondary 8 ohms; primary dc resistance 4 ohms, secondary 0.8; unbalanced primary current 50 ma. dc. List Price 5.00

HIGH POWER TRANSISTOR AUDIOS

For the new high-output transistors

MODEL AR-503 OUTPUT TRANSFORMER: 6 watts. 70-20,000 cps ± 2 db. Primary 48 ohms CT, secondary 3.2 ohms; primary dc resistance 1.1 ohms, secondary 0.3; unbalanced primary current 200 ma. dc. Size 1-9/16" x 1 1/8" x 1-9/16". Shpg. wt., 1 lb. List Price 2.95



MODEL AR-504 INPUT TRANSFORMER: 2 watts. 70-20,000 cps ± 2 db. Primary 100 ohms, secondary 200 ohms CT. Primary dc resistance 1.8 ohms, secondary 2.7; unbalanced primary current 200 ma. dc. List Price 2.50

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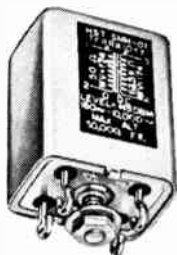
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HST
TRANSFORMERS

TYPES
SMH, MH

Hermetically Sealed AUDIO TRANSFORMERS



Type SMH MIL-T-27A

The SMH series of HST Transformers offers the ultimate in miniaturized metal cased, hermetically sealed, iron core components. Glass-to-metal seals are used to insure reliability. Mounting is provided for by a single stud on the header surface. All units are furnished in attractive grey with schematic diagrams permanently and legibly marked on all cases.

| Type No. | Mil Type | Application | Pri. Imp. Ohms | Pri. OC Unbal. | Sec. Imp. Ohms | Response ± 2 db | Max. Level | |
|----------|-----------|------------------------------------|--|----------------|----------------|---------------------|--------------|--|
| SMH-01 | TF4RX10YY | Input to Grid | 50 | 0 | 62,500 | 150-10,000 | ± 13 dbm | |
| SMH-02 | TF4RX10YY | Plate to Grid | 10,000 | 0 | 90,000 | 300-10,000 | 20MW | |
| SMH-03 | TF4RX13YY | Plate to Line | 10,000 25,000 | 3MA 1.5MA | 200 500 | 300-10,000 | 20MW | |
| SMH-04 | TF4RX13YY | Plate to Low Imp. | 30,000 | 1MA | 50 | 300-10,000 | 30MW | |
| SMH-05 | TF4RX20YY | Reactor | 100HYS @ 0 DC, 50HYS @ 1 MADC, 4400 Ohms | | | | | |
| SMH-06 | TF4RX13YY | Transistor Interstage | 25,000 (DCR 800) | .5MA | 1000 (DCR 110) | 300-10,000 | 10MW | |
| SMH-07 | TF4RX17YY | Transistor Output | 500CT (DCR 50) | 3.5MA | 50 (DCR 5) | 300-10,000 | 30MW | |
| SMH-08 | TF4RX13YY | Transistor Interstage | 10,000CT (DCR 600) | 2MA | 1200CT | 300-10,000 | 30MW | |
| SMH-09 | TF4RX13YY | Transistor Interstage | 10,000CT (DCR 600) | 2MA | 2000CT | 300-10,000 | 30MW | |
| SMH-10 | TF4RX17YY | Transistor Output | 500CT (DCR 26) | 10MA | 600CT | 300-10,000 | 30MW | |
| SMH-11 | TF4RX13YY | Transistor Output | 1500CT (DCR 71) | 7MA | 600CT | 300-10,000 | 30MW | |
| SMH-12 | TF4RX13YY | Isolation or Transistor Interstage | 10,000CT | 1MA | 10,000CT | 300-10,000 | 100MW | |



Type MH MIL-T-27A

The "MH" transformers illustrated and described on these pages have excellent application in the fields of military electronics, communications, public address systems and anywhere that quality audio components are necessary. The "MH" series transformers and reactors are enclosed in a compact, easy mounting case with glass-to-metal seals to insure reliability of operation. High permeability cores result in excellent frequency response for such small units. All units are furnished in attractive grey finish with schematic diagrams permanently and legibly marked on case.

| Type No. | Mil Type | Application | Pri. Imp. Ohms | Pri. OC Unbal. | Sec. Imp. Ohms | Response ± 2 db | Max. Level | |
|----------|-----------|------------------------|--|----------------|----------------|---------------------|------------|--|
| MH-01 | TF4RX10YY | Mike. Line to Grid | 50,200CT, 500CT* | 0 | 50,000 | 50-10,000 | + 5dbm | |
| MH-02 | TF4RX11YY | Mike to Grid | 82 | 50MA | 135,000 | 250-8000 | + 18dbm | |
| MH-03 | TF4RX10YY | Plate to Grid | 15,000 | 0 | 60,000 | 50-10,000 | 4MW | |
| MH-04 | TF4RX15YY | Plate to Grid | 15,000 | 4MA | 60,000 | 200-10,000 | 25MW | |
| MH-05 | TF4RX10YY | Plate to PP Grids | 15,000 | 0 | 95,000CT | 50-10,000 | 3MW | |
| MH-06 | TF4RX15YY | Plate to PP Grids | 15,000 | 4MA | 95,000 split | 200-10,000 | 12MW | |
| MH-07 | TF4RX13YY | Plate or PP to Line | 20,000CT | 4MA | 600/150 | 200-10,000 | 125MW | |
| MH-08 | TF4RX16YY | Mixing or Matching | 600/150 | 0 | 600CT | 50-10,000 | + 8dbm | |
| MH-09 | TF4RX10YY | Input to Grid | 600/150 | 0 | 1 Megohm | ± 4 db 200-3000 | + 10dbm | |
| MH-10 | TF4RX10YY | Plate to Grid | 10,000 | 0 | 1 Megohm | ± 4 db 200-3000 | 10MW | |
| MH-11 | TF4RX20YY | Reactor | 300 HYS @ 0 DC; 50 HYS @ 3 MADC; 6000 Ohms | | | | | |
| MH-12 | TF4RX10YY | Mike. Line to PP Grids | 50,200CT, 500CT* | 0 | 50,000CT | 50-10,000 | + 5dbm | |
| MH-13 | TF4RX13YY | Transistor Interstage | 10K/2.5K split | 4MA | 2K/500 split | 100-10,000 | 100MW | |
| MH-14 | TF4RX13YY | Transistor Interstage | 10K/2.5K split | 4MA | 4K/1K split | 100-10,000 | 100MW | |
| MH-15† | TF4RX10YY | Mike or V.C. to Grid | 30/12/4 | 0 | 50,000 | 50-12,000 | 0dbm | |
| MH-16† | TF4RX16YY | Plate to Line | 15,000 | 0 | 600/250/50 | 50-15,000 | + 10dbm | |
| MH-17† | TF4RX13YY | Plate to Line | 15,000 | 3MA | 600/250/50 | 300-7000 | + 10dbm | |
| MH18† | TF4RX16YY | Line to Line | 600/250/50 | 0 | 600/250/50 | 50-15,000 | + 10dbm | |

* 200 ohm termination can be used for 150 or 200 ohms, 500 ohm termination for 600 ohms.

† Layer wound coils in a MU-metal case.

• Electrostatic shield between windings.

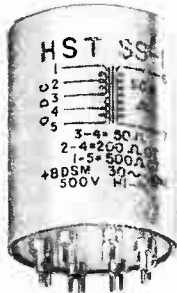


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HST TRANSFORMERS

**TYPE
SS**

Space Savers AUDIO TRANSFORMERS



Type SS

SS series Components fill the need for economical, compact, quality transformers. These units, which weigh one ounce, are fully impregnated and sealed in a drawn aluminum housing $\frac{7}{8}$ " in diameter . . . mounting opposite terminal board. SS series items are ideal for portable broadcast, aircraft, mobile service, and similar applications. Additional magnetic shielding (25 db) available by use of SS-17 mu-metal shield. (See photo at middle left.) High-fidelity characteristics are provided, uniform within approximately 1 db from 30 to 20,000 cycles, except for SS-14, SS-15 and units carrying DC which are intended for voice frequencies. All units are furnished in an attractive anodized finish with schematic permanently and legibly marked on the case. (For MIL-T-27A Styles, see HST Type "MH").

| | Type No. | Application | Pri. Imp. Ohms | DCMA Unbal. | Sec. Imp. Ohms | Pri. Res. | Response ± 1 db | Max. Level | |
|-------------------------------|--------------------------|---|---------------------|---------------|----------------------|------------|---------------------|------------|--|
| INPUT AND MIXING TRANSFORMERS | SS-1 | Low Imp. to Grid | 50,000/250, 500/600 | 0 | 50,000 | 52 | 30-15,000 | +8dbM | |
| | SS-2 | Low Imp. to PP Grids | 50,200/250, 500/600 | 0 | 50,000CT | 52 | 30-15,000 | +8dbM | |
| | SS-3 | Low Imp. to Grid | 7.5/30 | 0 | 50,000 | 4.5 | 30-15,000 | +8dbM | |
| | SS-11 | Crystal to Line | 50,000 | 0 | 50,200/250, 500/600 | 3900 | 30-15,000 | +8dbM | |
| | SS-12 | Mixing, Matching | 50,200/250 | 0 | 50,200/250, 500/600 | 12 | 30-20,000 | +8dbM | |
| | SS-14 | Low Imp. to Grid | 200 | 0 | $\frac{1}{2}$ Megohm | 10 | 200-3000 | +8dbM | |
| INTERSTAGE TRANSFORMERS | SS-16 | Low Imp. to Grid | 250CT | 0 | 50,000 | 40 | 30-15,000 | +8dbM | |
| | | This Transformer provides very low Hum Pick-up . . . Employs two heavy gauge Mu-Metal shields, plus orientable mounting. Primary CT is balanced to 1%. Can be used for 150, 200, 250, 500 or 600 ohm sources . . . 200:1 impedance ratio. (See photo upper left.) | | | | | | | |
| | SS-25 | Transistor Input | 600/150 split | 0 | 2000/500 split | 70 | 60-15,000 | +15dbM | |
| | SS-4 | Plate to Grid | 15,000 | 0 | 60,000 | 710 | 50-20,000 | 6.3MW | |
| | SS-5 | Plate to Grid | 15,000 | 4 | 60,000 | 710 | 200-10,000 | 6.3MW | |
| | SS-6 | Plate to PP Grid | 15,000 | 0 | 95,000CT | 690 | 40-15,000 | 6.3MW | |
| | SS-7 | Plate to PP Grid | 15,000 | 4 | 95,000CT | 690 | 300-10,000 | 6.3MW | |
| | SS-15 | Plate to Grid | 15,000 | 0 | 1 Megohm | 330 | 150-3000 | 6.3MW | |
| | SS-18 | Transistor Interstage | 10K/2.5K split | 4 | 2000/500 split | 800 | 150-20,000 | 100MW | |
| | SS-19 | Transistor Interstage | 10K/2.5K split | 4 | 4K/1K split | 800 | 150-20,000 | 100MW | |
| | SS-26 | Transistor Interstage | 10,000CT | 4 | 10,000CT | 700 | 150-15,000 | 100MW | |
| | SS-27 | Transistor Interstage | 10,000CT | 4 | 500/125 split | 750 | 150-20,000 | 100MW | |
| | SS-28 | Transistor Interstage | 50,000CT | 2 | 500/125 split | 3200 | 150-20,000 | 100MW | |
| SS-29 | Trans. Inter. or Chopper | 100,000CT | 1 | 500/125 split | 3200 | 200-20,000 | 100MW | | |
| OUTPUT TRANSFORMERS | SS-30 | Transistor Interstage | 500/125 split | 20 | 500/125 split | 37 | 150-15,000 | 1W* | |
| | SS-31 | Transistor Interstage | 500/125 split | 20 | 150/37.5 split | 35 | 150-15,000 | 1W* | |
| | SS-32 | Transistor Interstage | 500/125 split | 20 | 50/12.5 split | 37 | 150-15,000 | 1W* | |
| | SS-33 | Transistor Interstage | 100/25 split | 40 | 4G/10 split | 9 | 150-15,000 | 1W* | |
| | SS-8 | Plate to Line | 15,000 | 0 | 50,200/250, 500/600 | 950 | 30-15,000 | 6.3MW | |
| | SS-9 | Plate to Line | 15,000 | 4 | 50,200/250, 500/600 | 950 | 200-10,000 | 6.3MW | |
| REACTORS | SS-10 | PP to Line | 30,000CT | 0 | 50,200/250, 500/600 | 2000 | 40-20,000 | 6.3MW | |
| | SS-20 | Transistor to Line | 1500CT | 8 | 500/125 split | 100 | 150-20,000 | 100MW | |
| | SS-21 | Transistor to Voice Coil | 2000CT 4000CT | 4 | 8 16 | 200 | 150-20,000 | 100MW | |
| | SS-22 | Transistor to Voice Coil | 400CT 500CT | 20 | 3.2 4 | 35 | 150-15,000 | 1W* | |
| SS-13 | Reactor | 300 HYS . . . 0 DC; 50 HYS . . . 3 MADC; 6000 Ohms | | | | | | | |
| SS-23 | Reactor | 7 HYS . . . 3 MADC; 3.5 HYS . . . 10 MADC; 230 Ohms | | | | | | | |
| SS-24 | Reactor | 1.6 HYS . . . 3 MADC; .8 HY . . . 10 MADC; 25 Ohms | | | | | | | |
| SS-17 | Mu-Metal Shield | Slip Fit Over Space Saver. Provides 25db Shielding. | | | | | | | |

* At 200 CPS, $\frac{1}{4}$ watt at 150 CPS.

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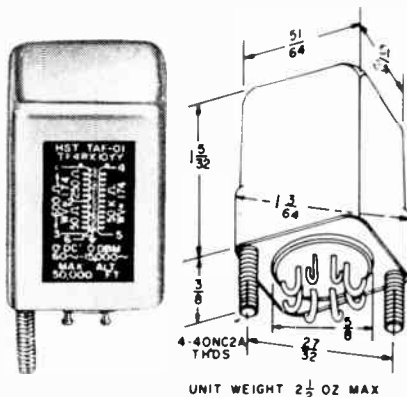
HST
TRANSFORMERS

TYPE
TAF

Hermetically Sealed AUDIO TRANSFORMERS

Type TAF

To MIL-T-27A SPECIFICATIONS



The HST series TAF Transformers and Reactors are all housed in deep drawn mu-metal cases offering maximum magnetic shielding obtainable in a single enclosure. All units are vacuum impregnated and potted with high quality compounds. Excellent frequency response is obtained by use of high nickel content laminations and special winding techniques. Glass-to-metal seals are used to insure positive hermetic sealing. All units furnished in attractive grey finish with schematics permanently and legibly marked on cases.

| Type No. | Mil Type | Application | Pri. Imp. Ohms | Pri. DC Unbal. | Sec. Imp. Ohms | Approx. DCR | | Response | Max. Level |
|----------|-----------|----------------------|-------------------|----------------|----------------|-------------|------|-----------|------------|
| | | | | | | Pri. | Sec. | | |
| TAF-01* | TF4RX10YY | Line to Grid | 600/250/50 | 0 | 50,000 | 100 | 3200 | 60-15,000 | 0dbm |
| TAF-02* | TF4RX10YY | Line to Grid | 600/250/50 | 0 | 250,000 | 48 | 3600 | 150-7000 | 0dbm |
| TAF-03 | TF4RX10YY | Line to PP Grids | 600/250/50 | 0 | 60,000CT | 125 | 3600 | 60-15,000 | 0dbm |
| TAF-04* | TF4RX10YY | Mike or V.C. to Grid | 30/12/4 | 0 | 50,000 | 10 | 4100 | 60-12,000 | 0dbm |
| TAF-05 | TF4RX10YY | Plate to Grid | 15,000 | 0 | 50,000 | 1100 | 2860 | 60-15,000 | +10dbm |
| TAF-06 | TF4RX10YY | Plate to PP Grids | 15,000 | 0 | 60,000CT | 1350 | 2700 | 60-15,000 | +10dbm |
| TAF-07 | TF4RX15YY | Plate to PP Grids | 15,000 | 3MA | 95,000CT | 1450 | 3050 | 350-7000 | +10dbm |
| TAF-08* | TF4RX10YY | Line to Grid | 200 | 0 | 500,000 | 100 | 4900 | 350-5000 | 0dbm |
| TAF-09 | TF4RX10YY | Plate to Grid | 15,000 | 0 | 1 Megohm | 550 | 4450 | 350-5000 | +10dbm |
| TAF-10 | TF4RX16YY | Plate to Line | 15,000 | 0 | 600/250/50 | 1330 | 58 | 60-15,000 | +10dbm |
| TAF-11 | TF4RX13YY | Plate to Line | 15,000 | 3MA | 600/250/50 | 1330 | 58 | 350-7000 | +10dbm |
| TAF-12 | TF4RX16YY | PP Plates to Line | 20,000CT | 0 | 600/250/50 | 2600 | 84 | 60-15,000 | +10dbm |
| TAF-13* | TF4RX16YY | Line to Line | 600/250/50 | 0 | 600/250/50 | 80 | 85 | 60-15,000 | +10dbm |
| TAF-14* | TF4RX21YY | HI-Imp. Line to Line | 5000CT | 0 | 5000CT | 2150 | 2190 | 60-15,000 | +10dbm |
| TAF-15 | TF4RX20YY | Reactor | 50 HYS @ .75 MADC | | | 4800 | | | |

* Electrostatic shield between windings.



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HST
TRANSFORMERS

TYPE
SMO

SUB-SUB MINIATURE TRANSFORMERS



Type SMO

The SMO series transformers and reactors have been engineered for highest efficiency along with minimum size. Special high nickel content lamination and compact winding techniques insure excellent frequency response and low distortion. These units are moisture-proofed by treatment with high quality varnish. All units are supplied with a black finish. All units have #26 flexible color-coded lead wires, four inches minimum in length. As normally supplied, no mounting brackets are furnished; however, channel brackets are available.

| Type No. | Application | Pri. Imp. Ohms | Pri. D.C. Unbal. | Sec. Imp. Ohms | Approx. DCR Pri. | Approx. DCR Sec. | Max. Level |
|----------|-------------------------|--|------------------|------------------------|------------------|------------------|------------|
| SMO-1 | Input | 200 50 | 0 | 250K 62.5K | 13.5 | 3600 | +7dbM |
| SMO-2 | Interstage/3:1 | 10K | 0.25 | 90K | 710 | 3150 | 30MW |
| SMO-3 | Plate to Line | 10K 25K | 3MA 1.5MA | 200 500 | 2500 | 34 | 100MW |
| SMO-4 | Output | 30K | 1MA | 50 | 2875 | 50 | 100MW |
| SMO-5 | Reactor | 50 HYS. @ 1 MADC | | 4400 Ohms D.C.R. | | | |
| SMO-6 | Output | 100K | .5MA | 60 | 3500 | 3.3 | 100MW |
| SMO-7 | Transistor Interstage | 20K 30K | .5MA .5MA | 800 1200 | 800 | 110 | 100MW |
| SMO-8 | Transistor to P.P. Sec. | 10K | 1MA | 200CT | 1200 | 45 | 100MW |
| SMO-9 | Transistor to V.C. | 10K | 2MA | 16 | 800 | 2.7 | 100MW |
| SMO-10 | Transistor to V.C. | 10K | 2MA | 3.2 | 800 | .65 | 100MW |
| SMO-11 | Transistor Output | 500 600 | 3.5MA 3.5MA | 50 60 | 50 | 5 | 100MW |
| SMO-12 | Transistor Output | 1000 1200 | 3MA 3MA | 50 60 | 90 | 5 | 100MW |
| SMO-13 | Crystal to Transistor | 200K | 0 | 1000 | 4000 | 190 | +7dbM |
| SMO-14 | Transistor Interstage | 10KCT 25KCT | 2MA 1MA | 200CT 500CT | 650 | 22 | 100MW |
| SMO-15 | Transistor Interstage | 20KCT 30KCT | 1MA 1MA | 800CT 1200CT | 800 | 110 | 100MW |
| SMO-16 | Output | 1200 1500 | 3MA 3MA | 3.2 4 | 70 | .45 | 100MW |
| SMO-17 | Output or Driver | 10K 12.5K | 2MA 2MA | 500CT 600CT | 800 | 95 | 100MW |
| SMO-18 | Single or PP Output | 7.5KCT 9.4KCT | 4MA 4MA | 3.2 4 | 770 | .73 | 100MW |
| SMO-19 | Output or Matching | 500CT | 10MA | 600CT | 26 | 70 | 100MW |
| SMO-20 | Output | 1.5KCT | 7MA | 600CT | 70 | 65 | 100MW |
| SMO-21 | Crystal/Chopper | 200KCT | 0 | 1000CT | 4000 | 200 | +7dbM |
| SMO-22 | Interstage | 10KCT 12KCT | 4MA 4MA | 1500CT 1800CT | 800 | 300 | 100MW |
| SMO-23 | Reactor | 8 HYS @ 2 MADC, 4 HYS @ 5 MADC | | 650 Ohms DCR | | | |
| SMO-24 | Reactor | 3.5 HYS @ 2 MADC, 1.5 HYS @ 5 MADC | | 160 Ohms DCR | | | |
| SMO-25 | Transistor Interstage | 10KCT 12KCT | 1MA 1MA | 10KCT 12KCT | 560 | 650 | 100MW |
| SMO-26 | Transistor Interstage | 40KCT 50KCT | .5MA .5MA | 400 split 500 split | 1900 | 43 | 100MW |
| SMO-CH | Channel Frame | Mounting Frame for any of above SMO Units. | | | | | |

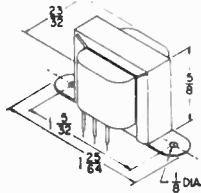
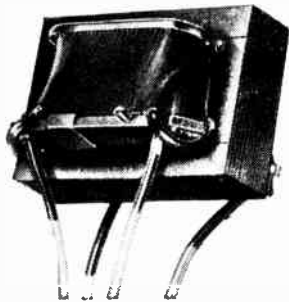


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HST TRANSFORMERS

**TYPES
SSM, RM**

Sub-Miniature TRANSFORMERS



Type SSM

The SSM series transformers and reactors have been engineered for highest efficiency along with minimum size. Special high nickel content lamination and compact winding techniques insure excellent frequency response and low distortion. These units are moisture-proofed by treatment with high quality varnish. All units are supplied with a black finish. All units have #26 flexible color-coded lead wires, four inches minimum in length. As normally supplied, no mounting brackets are furnished; however, channel brackets are available (HST type SSM-CH) as shown in sketch at left.

| Type No. | Application | Pri. Imp. Ohms | Pri. D.C. Unbal. | Sec. Imp. Ohms | Approx. DCR | | Max. Level |
|----------|-------------------------|--|------------------|------------------------|-------------|------|------------|
| | | | | | Pri. | Sec. | |
| SSM-1* | Input | 200 50 | 0 0 | 250K 62.5K | 16 | 2500 | +10dbM |
| SSM-2 | Interstage/3:1 | 10K | 0.25 | 90K | 215 | 1850 | 100MW |
| SSM-3* | Plate to Line | 10K 25K | 3MA 1.5MA | 200 500 | 1225 | 30 | 200MW |
| SSM-4 | Output | 30K | 1MA | 50 | 1850 | 3.8 | 200MW |
| SSM-5 | Reactor | 50 HYS @ 1 MADC | | 2675 Ohms DCR | | | |
| SSM-6 | Output | 100K | .5MA | 60 | 3400 | 3.7 | 200MW |
| SSM-7* | Transistor Interstage | 20K 30K | .5MA .5MA | 800 1200 | 450 | 32 | 200MW |
| SSM-8 | Transistor to P.P. Sec. | 10K | 1MA | 2000CT | 1000 | 40 | 200MW |
| SSM-9 | P.P. Transistor to V.C. | 500CT | 0 | 3.2 | 15 | .35 | 250MW |
| SSM-10* | P.P. Transistor to V.C. | 2000CT 4000CT | 4MA 2MA | 8 16 | 290 | 2 | 250MW |
| SSM-11 | Transistor Interstage | 400CT 500CT | 8MA 8MA | 400 split 500 split | 20 | 45 | 250MW |
| SSM-12 | Transistor Interstage | 400CT 500CT | 8MA 8MA | 120 split 150 split | 20 | 12.6 | 250MW |
| SSM-13 | Transistor Interstage | 400CT 500CT | 8MA 8MA | 40 Split 50 split | 20 | 4.5 | 250MW |
| SSM-14 | Transistor Interstage | 80CT 100CT | 16MA 16MA | 32 split 40 split | 4.9 | 3.2 | 250MW |
| SSM-CH | Channel Frame | Mounting Frame for any of above SSM Units. | | | | | |

* Impedance ratio is fixed. Any impedance between values shown may be employed.

Sub-Miniature TOROIDS

Printed Circuit Design

MIL-T-27A

RM TYPES



Type RM

| Type No. | Ind. (0 Dc) | Dc Ma Max |
|----------|-------------|-----------|
| RM-1 | 3.0 Mhy | 50 |
| RM-2 | 5.0 Mhy | 40 |
| RM-3 | 8.0 Mhy | 30 |
| RM-4 | 12.5 Mhy | 25 |
| RM-5 | 20.0 Mhy | 20 |
| RM-6 | 30.0 Mhy | 16 |
| RM-7 | 60.0 Mhy | 11 |
| RM-8 | 120.0 Mhy | 8 |
| RM-9 | 0.6 Mhy | 90 |
| RM-10 | 1.5 Mhy | 57 |
| RM-11 | 2.5 Mhy | 44 |
| RM-12 | 6.0 Mhy | 28 |
| RM-13 | 10.0 Mhy | 22 |
| RM-14 | 15.0 Mhy | 18 |
| RM-15 | 25.0 Mhy | 14 |
| RM-16 | 40.0 Mhy | 11 |

HST sub-miniature toroids, type "RM", are specifically designed for printed circuit applications in transistor circuits. These units are ideal companion design components for use with HST type "TT" transformers.

Proper choice of core types and winding techniques insures maximum "Q" performance. See curves below for further pertinent data. All inductance values shown are adjusted to a tolerance of $\pm 2\%$. All units are marked with inductance values. The "RM" series are epoxy molded.



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HST
TRANSFORMERS

TYPE
PX, PY, RS

ISOLATION TRANSFORMERS

MIL-T-27A, CLASS R, GRADE 4

IMMEDIATE DELIVERY FROM AUTHORIZED HST DISTRIBUTOR STOCKS



The HST isolation transformers listed below are designed to offer maximum utility to the user in requirements for electrical isolation. All units have electrostatic shields.

Vacuum impregnation and potting is employed in all units.

The PX series is for use in the frequency range of 380 to 1000 cycles.

The PY series is for use in the frequency range of 50 to 60 cycles. All enclosures are MIL-T-27A, standard sizes of deep drawn steel.

All units are finished in an attractive grey with schematic diagrams permanently and legibly marked on the case.

ISOLATION TRANSFORMERS

Primaries 115 Volts 380 to 1000 Cycles

| Type No. | Secondary | | Insulation Test Volts RMS | *Case Size | Approx. Wt. Lbs. |
|----------|-----------|------|---------------------------|------------|------------------|
| | Volts | Amps | | | |
| PX-60 | 26 | 0.2 | 500 | AH | 0.15 |
| PX-100 | 26 | 1.0 | 2500 | FA | 1.5 |
| PX-200 | 26 | 2.0 | 2500 | GB | 1.75 |
| PX-300 | 26 | 4.0 | 2500 | GA | 2.0 |
| PX-320 | 26 | 6.5 | 1000 | JA | 6.0 |
| PX-360 | 115 | 0.3 | 2000 | EA | 0.75 |
| PX-400 | 115 | 1.0 | 2500 | GA | 2.0 |
| PX-500 | 115 | 2.0 | 2500 | JA | 6.0 |

ISOLATION TRANSFORMERS

Primary 115 Volts 50, 60 Cycles

| Catalog No. | Secondary | | Insulation Test Volts RMS | *Case Size | Approx. Wt. Lbs. |
|-------------|-----------|------|---------------------------|------------|------------------|
| | Volts | Amps | | | |
| PY-100 | 115 | 0.2 | 2000 | GA | 2.0 |
| PY-200 | 115 | 0.5 | 2000 | HA | 3.5 |
| PY-300 | 115 | 1.0 | 2000 | KA | 8.5 |
| PY-400 | 115 | 2.5 | 2000 | MA | 13.0 |
| PY-500 | 26 | 1.0 | 2000 | GA | 2.0 |
| PY-600 | 26 | 2.0 | 2000 | HA | 3.5 |
| PY-700 | 26 | 4.0 | 2000 | KA | 8.5 |

FILTER REACTORS

MIL-T-27A

CLASS R, GRADE 4



The 4RS series HST reactors have been designed specifically for use in 400 cycle circuits. Their small size versus ratings are ideal for 800 cycle ripple reduction.

The RS series of HST reactors offers a wide selection of inductance values, DC resistance

ranges and current ratings.

All units are housed in deep drawn steel cases, MIL-T-27A standard sizes. All units are vacuum impregnated and potted with the finest materials obtainable.

Cases are finished in an attractive grey with schematic diagrams permanently and legibly marked on all units.

FILTER REACTORS — 400 Cycle Application

| Type No. | Inductance Henries | Current D.C. Ma. | D.C. Resistance (Ohms) | Insulation Test Volts RMS | *Case Size | Approx. Wt. Lbs. |
|----------|--------------------|------------------|------------------------|---------------------------|------------|------------------|
| 4RS-100 | 2 | 55 | 210 | 2500 | AH | 0.15 |
| 4RS-200 | 2 | 70 | 240 | 2500 | AJ | 0.25 |
| 4RS-300 | 2 | 120 | 105 | 2500 | EA | 0.75 |
| 4RS-400 | 2 | 165 | 80 | 2500 | FB | 1.0 |
| 4RS-500 | 2 | 240 | 77 | 2500 | FA | 1.5 |

FILTER REACTORS — General Application

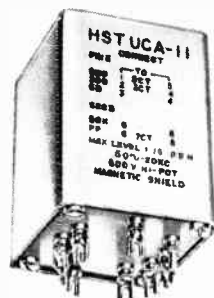
| Catalog No. | Inductance (Henries) | Current D.C. (Max.) | D.C. Resistance (Max. Ohms) | Insulation Test Volts RMS | *Case Size | Approx. Wt. Lbs. |
|-------------|----------------------|---------------------|-----------------------------|---------------------------|------------|------------------|
| RS-100 | 15 | 10 | 700 | 1000 | AJ | .25 |
| RS-200 | 15 | 20 | 700 | 1000 | AJ | .25 |
| RS-300 | 15 | 40 | 450 | 2500 | EA | .75 |
| RS-400 | 25 | 50 | 1400 | 2500 | GA | 2.0 |
| RS-500 | 10 | 50 | 230 | 2500 | FA | 1.5 |
| RS-600 | 30 | 60 | 900 | 2500 | HA | 3.5 |
| RS-700 | 10 | 85 | 195 | 2500 | FA | 1.5 |
| RS-800 | 8 | 105 | 100 | 2500 | GA | 2.0 |
| RS-900 | 8 | 150 | 100 | 2500 | HA | 3.5 |
| RS-1000 | 10 | 150 | 150 | 2500 | JA | 6.0 |
| RS-2000 | 8 | 200 | 90 | 2500 | KB | 6.5 |
| RS-3000 | 5 | 250 | 220 | 2500 | JA | 6.0 |
| RS-4000 | 8 | 250 | 95 | 3000 | LA | 11.0 |
| RS-5000 | 8 | 300 | 55 | 3500 | MA | 13.0 |
| RS-6000 | 4 | 600 | 20 | 3500 | MA | 13.0 |
| RS-7000 | 0.5 | 1200 | 6 | 3500 | MA | 13.0 |

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HST
TRANSFORMERS

TYPE
UCA

COMMERCIAL GRADE COMPONENTS



Type UCA

INPUT TRANSFORMERS

| Type No. | Application | Primary Imp. Ohms | Unbal. D.C. | Secondary Imp. Ohms | Response ± 2 db | Pri. Res. Ohms | Max. Level |
|----------|--------------------------|---------------------------------|-------------|---------------------------------|----------------------------|----------------|------------|
| UCA-10 | Low Imp. to Grid | 50,125/150,200/250, 333,500/600 | 0 | 50,000 split | 20-20,000 | 59 | +15dbM |
| UCA-11* | Low Imp. to 1 or 2 Grids | 50,200,500 | 0 | 50,000CT | 20-20,000 | 52 | +5dbM |
| UCA-12 | Low Imp. to PP Grids | 50,125/150,200/250, 333,500/600 | 0 | 80,000 split | 20-20,000 | 60 | +15dbM |
| UCA-20† | Mixing, Matching | 50,125/150,200/250, 333,500/600 | 0 | 50,125/150,200/250, 333,500/600 | 10-50,000 | 64 | +15dbM |
| UCA-21*† | Mixing, Matching | 50,200/250,500/600 | 0 | 50,200/250,500/600 | 40-30,000 | 28 | +15dbM |
| UCA-27 | Xtal/HI. Imp. to Line | 100,000 split | 0 | 50,125/150,200/250, 333,500/600 | 30-20,000 with res. source | 3700 | +15dbM |
| UCA-39* | Line to Transistors | 600/150 split | 0 | 2000/500 split | 20-20,000 | 70 | +10dbM |

* Multiple alloy shield for extremely low hum pickup.

† High electrostatic shielding.

The HST commercial grade UCA Series has been designed and manufactured to the same exacting quality standards as the HST Military line. The excellent frequency response and low distortion inherent with these units makes them ideally suited for high-fidelity application, portable broadcast and other uses. Check the advantages listed below:

1. Rugged die-cast cases providing mounting from both ends. See photo above.
2. Excellent Frequency Response.
3. Hum-bucking coil construction on all units except those with DC in primary.
4. Additional magnetic shielding (20 db) available by use of UCA-33 mu-metal shield. See photo above.
5. Vacuum impregnated and sealed with high quality potting compound.
6. Schematic diagrams permanently marked on all units.
7. Attractive grey finish offering maximum eye-appeal in equipment.

INTERSTAGE AND OUTPUT TRANSFORMERS

| | | | | | | | |
|--------|---------------------------------|-------------------|-------------|---------------------------------|-----------|------|---------|
| UCA-15 | Transistor Interstage | 10,000/2500 split | 8MA | 2000/500 split | 40-20,000 | 600 | 1 Watt |
| UCA-16 | Plate to Grid | 15,000 | 0 | 60,000 | 20-20,000 | 800 | 30MW |
| UCA-17 | Plate to Grid | 15,000 | 8MA | 60,000 | 40-20,000 | 3340 | 30MW |
| UCA-18 | Single or PP Plates to PP Grids | 15,000 split | 0 | 80,000 split | 20-15,000 | 1040 | 30MW |
| UCA-19 | Plate to PP Grids | 15,000 | 8MA | 80,000 split | 40-15,000 | 2900 | 30MW |
| UCA-22 | Transistor Interstage or Output | 500CT | 20MA | 500/125 split | 40-20,000 | 36 | 1 Watt |
| UCA-23 | Transistor Interstage or Output | 500CT | 20MA | 16/4 split | 40-20,000 | 36 | 1 Watt |
| UCA-24 | Single or PP Plates to Line | 15,000 split | 0 | 50,125/150,200/250, 333,500/600 | 20-40,000 | 1430 | 30MW |
| UCA-25 | Plate to Line | 15,000 | 8MA | 50,125/150,200/250, 333,500/600 | 40-20,000 | 1580 | 30MW |
| UCA-26 | Single or PP Plates to Line | 30,000 split | 0 | 50,125/150,200/250, 333,500/600 | 20-40,000 | 2520 | 30MW |
| UCA-28 | Transistor to V.C. | 48CT | 750 MA Bal. | 16 split 8, 4 | 40-20,000 | 5 | 5 Watts |
| UCA-34 | Transistor Interstage | 25,000/6250 split | 3MA | 500/125 split | 30-20,000 | 1620 | 1 Watt |
| UCA-35 | Transistor Interstage | 10,000/2500 split | 8MA | 500/125 split | 30-20,000 | 610 | 1 Watt |
| UCA-36 | Transistor Interstage | 500/125 split | 20MA | 150/37.5 split | 40-20,000 | 36 | 1 Watt |
| UCA-37 | Transistor Interstage | 500/125 split | 20MA | 50/12.5 split | 40-20,000 | 36 | 1 Watt |
| UCA-38 | Transistor Interstage | 100/25 split | 40MA | 40/10 split | 40-20,000 | 6.2 | 1 Watt |

REACTORS AND FILAMENT/TRANSISTOR SUPPLY TRANSFORMERS

| Type No. | Application | |
|----------|-------------------|---|
| UCA-30 | Audio Choke | 450 HYS @ 0 MA, 250 HYS @ 5 MA—6000 Ohms; 65 HYS @ 10 MA—1500 Ohms. |
| UCA-32 | Filter Choke | 60 HYS @ 15 MA—2000 Ohms; 15 HYS @ 30 MA—500 Ohms. |
| UCA-41 | Filter Choke | 240 MHY. @ .2A—6 Ohms; 60 MHY. @ .4A—1.5 Ohms. |
| UCA-40 | Power Transformer | 115 V 60 CPS to Two 6.3 VCT @ .2A Secondaries. |
| UCA-33 | Mu-Metal Shield | Slip Fit Over UCA Case, Provides Approximately 20db Shielding. |



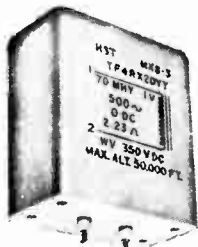
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HST TRANSFORMERS

TYPES
MXA, TXA
MXB, MXC

ADVANCED "MX" SERIES OF HIGH "Q" TOROIDS

MIL-T-27A



| MXA and TXA: | MXB: | MXC: |
|-----------------------------|--------------------------------|---------------------------|
| Length 1 3/32 | Length 2 1/16 | Length 1 1/16 |
| Width 1 1/16 | Width 1 3/16 | Width 1/2 |
| Height 1 21/32 | Height 2 13/16 | Height 1 3/32 |
| Mounting 7/8 x 3/32 | Mounting 2 1/16 x 1 1/16 | Mounting 3/4 |
| Screws (two) 4-40 | Screws (four) 6-32 | Screws (two) 4-40 |
| Cutout-MXA 5/16 x 1/2 | Cutout 7/8 x 1/2 | Cutout 5/16 x 1/2 |
| Cutout-TXA 5/16 x 3/4 | Unit Weight 14 oz. | Unit Weight 1.5 oz. |
| Unit Weight 4 oz. | | |

The new advanced "MX" series of HST standard toroids provides the highest "Q" factors, inductance stability and linearity obtainable in the industry. Permalloy dust cores are used in all units; core types selected for maximum efficiency at specified frequency ranges. All units are individually adjusted to ±1% tolerance. Enclosures are made of high permeability steel for magnetic shielding.

The TXA series toroids are center tapped for use in "capacitor multiplying tuned circuits," oscillator circuits," etc.

All units are furnished in an attractive grey finish with schematics permanently and legibly marked on cases.

MXA and TXA TYPES

| Type No. | Ind. (0 DC) | Dc Ma Max. | Center Tapped Type No. |
|----------|-------------|------------|------------------------|
| MXA-1 | 7.0 Mhy | 250 | TXA-1 |
| MXA-2 | 12.0 Mhy | 200 | TXA-2 |
| MXA-3 | 20.0 Mhy | 150 | TXA-3 |
| MXA-4 | 30.0 Mhy | 125 | TXA-4 |
| MXA-5 | 50.0 Mhy | 100 | TXA-5 |
| MXA-6 | 70.0 Mhy | 80 | TXA-6 |
| MXA-7 | 120.0 Mhy | 60 | TXA-7 |
| MXA-8 | 0.2 Hy | 50 | TXA-8 |
| MXA-9 | 0.3 Hy | 40 | TXA-9 |
| MXA-10 | 0.5 Hy | 30 | TXA-10 |
| MXA-11 | .07 Hy | 25 | TXA-11 |
| MXA-12 | 1.0 Hy | 20 | TXA-12 |
| MXA-13 | 1.5 Hy | 17 | TXA-13 |
| MXA-14 | 2.5 Hy | 13 | TXA-14 |
| MXA-15 | 4.0 Hy | 10 | TXA-15 |
| MXA-16 | 6.0 Hy | 9 | TXA-16 |
| MXA-17 | 10.0 Hy | 7 | TXA-17 |
| MXA-18 | 15.0 Hy | 5 | TXA-18 |
| MXA-19 | 22.0 Hy | 4 | TXA-19 |
| MXA-20 | 35.0 Hy | 3 | TXA-20 |

MXB TYPES

| Type No. | Ind. (0 Dc) | Dc Ma Max |
|----------|-------------|-----------|
| MXB-1 | 10.0 Mhy | 400 |
| MXB-2 | 30.0 Mhy | 250 |
| MXB-3 | 70.0 Mhy | 170 |
| MXB-4 | 120.0 Mhy | 120 |
| MXB-5 | 0.5 Hy | 60 |
| MXB-6 | 1.0 Hy | 40 |
| MXB-7 | 2.0 Hy | 30 |
| MXB-8 | 3.5 Hy | 22 |
| MXB-9 | 7.5 Hy | 16 |
| MXB-10 | 12.0 Hy | 11 |
| MXB-11 | 18.0 Hy | 9 |
| MXB-12 | 25.0 Hy | 8 |
| MXB-13 | 40.0 Hy | 6 |
| MXB-14 | 60.0 Hy | 4 |

MXC TYPES

| Type No. | Ind. (0 Dc) | Dc Ma Max |
|----------|-------------|-----------|
| MXC-0 | 4.0 Mhy | 160 |
| MXC-1 | 7.0 Mhy | 135 |
| MXC-2 | 12.0 Mhy | 100 |
| MXC-3 | 20.0 Mhy | 80 |
| MXC-4 | 30.0 Mhy | 65 |
| MXC-5 | 50.0 Mhy | 50 |
| MXC-6 | 70.0 Mhy | 40 |
| MXC-7 | 100.0 Mhy | 35 |
| MXC-8 | 150.0 Mhy | 30 |
| MXC-9 | 0.25 Hy | 22 |
| MXC-10 | 0.4 Hy | 17 |
| MXC-11 | 0.6 Hy | 14 |
| MXC-12 | 0.9 Hy | 12 |
| MXC-13 | 1.5 Hy | 9 |
| MXC-14 | 2.0 Hy | 8 |
| MXC-15 | 2.8 Hy | 7.2 |
| MXC-16 | 4.0 Hy | 5 |



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HST
TRANSFORMERS

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NET PRICE
LIST

(All prices subject to change without notice)

"SS" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| SS-1 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-2 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-3 | 7.51 | 6.38 | 6.01 | 5.01 |
| SS-4 | 6.60 | 5.61 | 5.28 | 4.40 |
| SS-5 | 6.60 | 5.61 | 5.28 | 4.40 |
| SS-6 | 7.51 | 6.38 | 6.01 | 5.01 |
| SS-7 | 7.51 | 6.38 | 6.01 | 5.01 |
| SS-8 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-9 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-10 | 8.40 | 7.14 | 6.72 | 5.60 |
| SS-11 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-12 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-13 | 6.31 | 5.36 | 5.05 | 4.21 |
| SS-14 | 7.51 | 6.38 | 6.01 | 5.01 |
| SS-15 | 7.51 | 6.38 | 6.01 | 5.01 |
| SS-16 | 10.20 | 8.67 | 8.16 | 6.80 |
| SS-17 | 1.51 | 1.28 | 1.21 | 1.01 |
| SS-18 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-19 | 7.80 | 6.63 | 6.24 | 5.20 |
| SS-20 | 6.31 | 5.36 | 5.05 | 4.21 |
| SS-21 | 5.40 | 4.59 | 4.32 | 3.60 |
| SS-22 | 5.40 | 4.59 | 4.32 | 3.60 |
| SS-23 | 5.11 | 4.34 | 4.09 | 3.41 |
| SS-24 | 5.11 | 4.34 | 4.09 | 3.41 |
| SS-25 | 8.11 | 6.89 | 6.49 | 5.41 |
| SS-26 | 8.11 | 6.89 | 6.49 | 5.41 |
| SS-27 | 8.40 | 7.14 | 6.72 | 5.60 |
| SS-28 | 8.40 | 7.14 | 6.72 | 5.60 |
| SS-29 | 8.71 | 7.40 | 6.97 | 5.81 |
| SS-30 | 8.11 | 6.89 | 6.49 | 5.41 |
| SS-31 | 8.11 | 6.89 | 6.49 | 5.41 |
| SS-32 | 8.11 | 6.89 | 6.49 | 5.41 |
| SS-33 | 8.11 | 6.89 | 6.49 | 5.41 |

"SSM" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| SSM-1 | 3.60 | 3.06 | 2.88 | 2.40 |
| SSM-2 | 3.31 | 2.81 | 2.65 | 2.21 |
| SSM-3 | 3.31 | 2.81 | 2.65 | 2.21 |
| SSM-4 | 3.31 | 2.81 | 2.65 | 2.21 |
| SSM-5 | 3.00 | 2.55 | 2.40 | 2.00 |
| SSM-6 | 3.91 | 3.32 | 3.13 | 2.61 |
| SSM-7 | 3.00 | 2.55 | 2.40 | 2.00 |
| SSM-8 | 3.60 | 3.06 | 2.88 | 2.40 |
| SSM-9 | 3.60 | 3.06 | 2.88 | 2.40 |
| SSM-10 | 3.60 | 3.06 | 2.88 | 2.40 |
| SSM-11 | 4.20 | 3.57 | 3.36 | 2.80 |
| SSM-12 | 4.20 | 3.57 | 3.36 | 2.80 |
| SSM-13 | 4.20 | 3.57 | 3.36 | 2.80 |
| SSM-14 | 4.20 | 3.57 | 3.36 | 2.80 |

"PY" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| PY-100 | 17.90 | 15.22 | 14.32 | 11.94 |
| PY-200 | 15.35 | 13.05 | 12.28 | 10.24 |
| PY-300 | 22.00 | 18.70 | 17.60 | 14.67 |
| PY-400 | 22.50 | 19.13 | 18.00 | 15.01 |
| PY-500 | 15.80 | 13.43 | 12.64 | 10.54 |
| PY-600 | 16.90 | 14.37 | 13.52 | 11.27 |
| PY-700 | 24.00 | 20.40 | 19.20 | 16.01 |

"TT" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| TT-001 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-002 | 5.40 | 4.59 | 4.32 | 3.60 |
| TT-003 | 5.40 | 4.59 | 4.32 | 3.60 |
| TT-004 | 5.40 | 4.59 | 4.32 | 3.60 |
| TT-005 | 5.40 | 4.59 | 4.32 | 3.60 |
| TT-006 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-007 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-008 | 4.80 | 4.08 | 3.84 | 3.20 |
| TT-009 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-010 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-011 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-012 | 5.70 | 4.85 | 4.56 | 3.80 |
| TT-013 | 5.70 | 4.85 | 4.56 | 3.80 |
| TT-014 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-015 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-016 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-017 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-018 | 6.30 | 5.36 | 5.04 | 4.20 |
| TT-019 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-020 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-021 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-022 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-023 | 6.90 | 5.87 | 5.52 | 4.60 |
| TT-024 | 7.50 | 6.38 | 6.00 | 5.00 |
| TT-025 | 7.20 | 6.12 | 5.76 | 4.80 |
| TT-026 | 5.70 | 4.85 | 4.56 | 3.80 |
| TT-027 | 4.80 | 4.08 | 3.84 | 3.20 |
| TT-028 | 4.80 | 4.08 | 3.84 | 3.20 |
| TT-029 | 5.70 | 4.85 | 4.56 | 3.80 |
| TT-030 | 5.70 | 4.85 | 4.56 | 3.80 |
| TT-031 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-032 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-033 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-034 | 6.00 | 5.10 | 4.80 | 4.00 |
| TT-035 | 6.30 | 5.36 | 5.04 | 4.20 |
| TT-036 | 7.50 | 6.38 | 6.00 | 5.00 |
| TT-037 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-038 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-039 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-040 | 6.60 | 5.61 | 5.28 | 4.40 |
| TT-041 | 5.40 | 4.59 | 4.32 | 3.60 |
| TT-042 | 5.70 | 4.85 | 4.56 | 3.80 |
| TT-043 | 4.95 | 4.21 | 3.96 | 3.30 |
| TT-044 | 4.95 | 4.21 | 3.96 | 3.30 |
| TT-045 | 4.95 | 4.21 | 3.96 | 3.30 |
| TT-046 | 5.25 | 4.46 | 4.20 | 3.50 |
| TT-047 | 5.25 | 4.46 | 4.20 | 3.50 |
| TT-048 | 7.80 | 6.63 | 6.24 | 5.20 |
| TT-049 | 7.80 | 6.63 | 6.24 | 5.20 |
| TT-050 | 7.80 | 6.63 | 6.24 | 5.20 |
| TT-051 | 8.40 | 7.14 | 6.72 | 5.60 |
| TT-052 | 7.50 | 6.38 | 6.00 | 5.00 |
| TT-053 | 7.50 | 6.38 | 6.00 | 5.00 |
| TT-054 | 7.50 | 6.38 | 6.00 | 5.00 |
| TT-055 | 7.50 | 6.38 | 6.00 | 5.00 |
| TT-101 | .90 | .77 | .73 | .60 |

"4RS" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| 4RS-100 | 7.80 | 6.63 | 6.24 | 5.20 |
| 4RS-200 | 8.45 | 7.18 | 6.76 | 5.64 |
| 4RS-300 | 9.55 | 8.12 | 7.64 | 6.37 |
| 4RS-400 | 10.45 | 8.88 | 8.36 | 6.97 |
| 4RS-500 | 12.20 | 10.37 | 9.76 | 8.14 |

"TAF" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| TAF-01 | 13.20 | 11.22 | 10.56 | 8.80 |
| TAF-02 | 13.73 | 11.67 | 10.98 | 9.16 |
| TAF-03 | 13.73 | 11.67 | 10.98 | 9.16 |
| TAF-04 | 13.73 | 11.67 | 10.98 | 9.16 |
| TAF-05 | 12.84 | 10.91 | 10.27 | 8.56 |
| TAF-06 | 13.20 | 11.22 | 10.56 | 8.80 |
| TAF-07 | 13.73 | 11.67 | 10.98 | 9.16 |
| TAF-08 | 13.73 | 11.67 | 10.98 | 9.16 |
| TAF-09 | 13.73 | 11.67 | 10.98 | 9.16 |
| TAF-10 | 13.20 | 11.22 | 10.56 | 8.80 |
| TAF-11 | 13.20 | 11.22 | 10.56 | 8.80 |
| TAF-12 | 13.73 | 11.67 | 10.98 | 9.16 |
| TAF-13 | 14.15 | 12.03 | 11.32 | 9.44 |
| TAF-14 | 14.15 | 12.03 | 11.32 | 9.44 |
| TAF-15 | 12.60 | 10.71 | 10.08 | 8.40 |

"UCA" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| UCA-10 | 12.75 | 10.84 | 10.20 | 8.50 |
| UCA-11 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-12 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-15 | 9.91 | 8.42 | 7.93 | 6.61 |
| UCA-16 | 9.91 | 8.42 | 7.93 | 6.61 |
| UCA-17 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-18 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-19 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-20 | 14.40 | 12.24 | 11.52 | 9.60 |
| UCA-21 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-22 | 9.91 | 8.42 | 7.93 | 6.61 |
| UCA-23 | 9.91 | 8.42 | 7.93 | 6.61 |
| UCA-24 | 12.91 | 10.97 | 10.33 | 8.61 |
| UCA-25 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-26 | 12.75 | 10.84 | 10.20 | 8.50 |
| UCA-27 | 12.00 | 10.20 | 9.60 | 8.00 |
| UCA-28 | 10.20 | 8.67 | 8.16 | 6.80 |
| UCA-30 | 10.20 | 8.67 | 8.16 | 6.80 |
| UCA-32 | 6.60 | 5.61 | 5.28 | 4.40 |
| UCA-33 | 2.71 | 2.30 | 2.17 | 1.81 |
| UCA-34 | 10.20 | 8.67 | 8.16 | 6.80 |
| UCA-35 | 9.91 | 8.42 | 7.93 | 6.61 |
| UCA-36 | 9.60 | 8.16 | 7.68 | 6.40 |
| UCA-37 | 9.60 | 8.16 | 7.68 | 6.40 |
| UCA-38 | 9.29 | 7.90 | 7.43 | 6.20 |
| UCA-39 | 11.11 | 9.44 | 8.89 | 7.41 |
| UCA-40 | 10.13 | 8.61 | 8.10 | 6.76 |
| UCA-41 | 6.13 | 5.21 | 4.90 | 4.09 |

"SMH" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| SMH-1 | 8.40 | 7.14 | 6.72 | 5.60 |
| SMH-2 | 8.40 | 7.14 | 6.72 | 5.60 |
| SMH-3 | 8.40 | 7.14 | 6.72 | 5.60 |
| SMH-4 | 8.40 | 7.14 | 6.72 | 5.60 |
| SMH-5 | 6.91 | 5.87 | 5.53 | 4.61 |
| SMH-6 | 7.51 | 6.38 | 6.01 | 5.01 |
| SMH-7 | 7.51 | 6.38 | 6.01 | 5.01 |
| SMH-8 | 7.51 | 6.38 | 6.01 | 5.01 |
| SMH-9 | 7.51 | 6.38 | 6.01 | 5.01 |
| SMH-10 | 7.51 | 6.38 | 6.01 | 5.01 |
| SMH-11 | 7.51 | 6.38 | 6.01 | 5.01 |
| SMH-12 | 9.60 | 8.16 | 7.68 | 6.40 |

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"MH" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| MH-01 | 9.00 | 7.65 | 7.20 | 6.00 |
| MH-02 | 9.91 | 8.42 | 7.93 | 6.61 |
| MH-03 | 7.80 | 6.63 | 6.24 | 5.20 |
| MH-04 | 7.80 | 6.63 | 6.24 | 5.20 |
| MH-05 | 8.40 | 7.14 | 6.72 | 5.60 |
| MH-06 | 10.20 | 8.67 | 8.16 | 6.80 |
| MH-07 | 9.60 | 8.16 | 7.68 | 6.40 |
| MH-08 | 9.00 | 7.65 | 7.20 | 6.00 |
| MH-09 | 9.00 | 7.65 | 7.20 | 6.00 |
| MH-10 | 8.40 | 7.14 | 6.72 | 5.60 |
| MH-11 | 7.51 | 6.38 | 6.01 | 5.01 |
| MH-12 | 9.60 | 8.16 | 7.68 | 6.40 |
| MH-13 | 9.00 | 7.65 | 7.20 | 6.00 |
| MH-14 | 9.00 | 7.65 | 7.20 | 6.00 |
| MH-15 | 13.91 | 11.82 | 11.13 | 9.28 |
| MH-16 | 13.73 | 11.67 | 10.98 | 9.16 |
| MH-17 | 13.73 | 11.67 | 10.98 | 9.16 |
| MH-18 | 13.73 | 11.67 | 10.98 | 9.16 |

"MXA" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| MXA-1 | 7.50 | 6.38 | 6.00 | 5.00 |
| MXA-2 | 7.80 | 6.63 | 6.24 | 5.20 |
| MXA-3 | 8.10 | 6.89 | 6.48 | 5.40 |
| MXA-4 | 8.40 | 7.14 | 6.72 | 5.60 |
| MXA-5 | 8.70 | 7.40 | 6.96 | 5.80 |
| MXA-6 | 9.00 | 7.65 | 7.20 | 6.00 |
| MXA-7 | 9.30 | 7.91 | 7.44 | 6.20 |
| MXA-8 | 9.60 | 8.16 | 7.68 | 6.40 |
| MXA-9 | 9.90 | 8.42 | 7.92 | 6.60 |
| MXA-10 | 10.20 | 8.67 | 8.16 | 6.80 |
| MXA-11 | 10.50 | 8.93 | 8.40 | 7.00 |
| MXA-12 | 10.80 | 9.18 | 8.64 | 7.20 |
| MXA-13 | 11.10 | 9.44 | 8.88 | 7.40 |
| MXA-14 | 11.40 | 9.69 | 9.12 | 7.60 |
| MXA-15 | 12.00 | 10.20 | 9.60 | 8.00 |
| MXA-16 | 12.90 | 10.97 | 10.32 | 8.60 |
| MXA-17 | 13.80 | 11.73 | 11.04 | 9.20 |
| MXA-18 | 15.00 | 12.75 | 12.00 | 10.00 |
| MXA-19 | 18.00 | 15.30 | 14.40 | 12.00 |
| MXA-20 | 20.70 | 17.60 | 16.56 | 13.80 |

"MXB" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| MXB-1 | 12.90 | 10.97 | 10.32 | 8.60 |
| MXB-2 | 13.20 | 11.22 | 10.56 | 8.80 |
| MXB-3 | 13.50 | 11.48 | 10.80 | 9.00 |
| MXB-4 | 13.80 | 11.73 | 11.04 | 9.20 |
| MXB-5 | 14.10 | 11.99 | 11.28 | 9.40 |
| MXB-6 | 14.40 | 12.24 | 11.52 | 9.60 |
| MXB-7 | 14.70 | 12.49 | 11.76 | 9.80 |
| MXB-8 | 15.00 | 12.75 | 12.00 | 10.00 |
| MXB-9 | 15.90 | 13.52 | 12.72 | 10.60 |
| MXB-10 | 16.80 | 14.28 | 13.44 | 11.20 |
| MXB-11 | 18.00 | 15.30 | 14.40 | 12.00 |
| MXB-12 | 19.20 | 16.32 | 15.36 | 12.80 |
| MXB-13 | 21.00 | 17.85 | 16.80 | 14.00 |
| MXB-14 | 24.00 | 20.40 | 19.20 | 16.00 |

"MXC" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| MXC-0 | 6.90 | 5.87 | 5.52 | 4.60 |
| MXC-1 | 7.20 | 6.12 | 5.76 | 4.80 |
| MXC-2 | 7.50 | 6.38 | 6.00 | 5.00 |
| MXC-3 | 7.80 | 6.63 | 6.24 | 5.20 |
| MXC-4 | 7.80 | 6.63 | 6.24 | 5.20 |
| MXC-5 | 8.10 | 6.86 | 6.48 | 5.40 |
| MXC-6 | 8.40 | 7.14 | 6.72 | 5.60 |
| MXC-7 | 8.40 | 7.14 | 6.72 | 5.60 |
| MXC-8 | 8.70 | 7.40 | 6.96 | 5.80 |
| MXC-9 | 8.70 | 7.40 | 6.96 | 5.80 |
| MXC-10 | 9.00 | 7.65 | 7.20 | 6.00 |
| MXC-11 | 9.00 | 7.65 | 7.20 | 6.00 |
| MXC-12 | 9.30 | 7.91 | 7.44 | 6.20 |
| MXC-13 | 9.90 | 8.42 | 7.92 | 6.60 |
| MXC-14 | 10.80 | 9.18 | 8.64 | 7.20 |
| MXC-15 | 12.00 | 10.20 | 9.60 | 8.00 |
| MXC-16 | 13.50 | 11.48 | 10.80 | 9.00 |

"RM" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| RM-1 | 7.50 | 6.38 | 6.00 | 5.00 |
| RM-2 | 7.50 | 6.38 | 6.00 | 5.00 |
| RM-3 | 7.80 | 6.63 | 6.24 | 5.20 |
| RM-4 | 7.80 | 6.63 | 6.24 | 5.20 |
| RM-5 | 8.10 | 6.89 | 6.48 | 5.40 |
| RM-6 | 8.10 | 6.89 | 6.48 | 5.40 |
| RM-7 | 8.40 | 7.14 | 6.72 | 5.60 |
| RM-8 | 8.40 | 7.14 | 6.72 | 5.60 |
| RM-9 | 8.10 | 6.89 | 6.48 | 5.40 |
| RM-10 | 8.10 | 6.89 | 6.48 | 5.40 |
| RM-11 | 8.40 | 7.14 | 6.72 | 5.60 |
| RM-12 | 8.40 | 7.14 | 6.72 | 5.60 |
| RM-13 | 8.70 | 7.40 | 6.96 | 5.80 |
| RM-14 | 8.70 | 7.40 | 6.96 | 5.80 |
| RM-15 | 9.00 | 7.65 | 7.20 | 6.00 |
| RM-16 | 9.00 | 7.65 | 7.20 | 6.00 |

"TXA" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| TXA-1 | 9.00 | 7.65 | 7.20 | 6.00 |
| TXA-2 | 9.30 | 7.91 | 7.44 | 6.20 |
| TXA-3 | 9.60 | 8.16 | 7.68 | 6.40 |
| TXA-4 | 9.90 | 8.42 | 7.92 | 6.60 |
| TXA-5 | 10.20 | 8.67 | 8.16 | 6.80 |
| TXA-6 | 10.50 | 8.93 | 8.40 | 7.00 |
| TXA-7 | 10.80 | 9.18 | 8.64 | 7.20 |
| TXA-8 | 11.10 | 9.44 | 8.88 | 7.40 |
| TXA-9 | 11.40 | 9.69 | 9.12 | 7.60 |
| TXA-10 | 11.70 | 9.95 | 9.36 | 7.80 |
| TXA-11 | 12.00 | 10.20 | 9.60 | 8.00 |
| TXA-12 | 12.30 | 10.46 | 9.84 | 8.20 |
| TXA-13 | 12.60 | 10.71 | 10.08 | 8.40 |
| TXA-14 | 12.90 | 10.97 | 10.32 | 8.60 |
| TXA-15 | 13.50 | 11.48 | 10.80 | 9.00 |
| TXA-16 | 14.70 | 12.50 | 11.76 | 9.80 |
| TXA-17 | 15.90 | 13.52 | 12.72 | 10.60 |
| TXA-18 | 17.40 | 14.79 | 13.92 | 11.60 |
| TXA-19 | 21.00 | 17.85 | 16.80 | 14.00 |
| TXA-20 | 23.40 | 19.89 | 18.72 | 15.60 |

"RS" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| RS-100 | 8.35 | 7.10 | 6.68 | 5.57 |
| RS-200 | 8.90 | 7.57 | 7.12 | 5.94 |
| RS-300 | 10.00 | 8.50 | 8.00 | 6.67 |
| RS-400 | 10.35 | 8.80 | 8.28 | 6.90 |
| RS-500 | 12.35 | 10.50 | 9.88 | 8.24 |
| RS-600 | 14.45 | 12.28 | 11.56 | 9.64 |
| RS-700 | 13.80 | 11.73 | 11.04 | 9.20 |
| RS-800 | 18.50 | 15.73 | 14.80 | 12.34 |
| RS-900 | 16.20 | 13.77 | 12.96 | 10.81 |
| RS-1000 | 18.00 | 15.30 | 14.40 | 12.01 |
| RS-2000 | 18.65 | 15.85 | 14.92 | 12.44 |
| RS-3000 | 19.60 | 16.66 | 15.68 | 13.07 |
| RS-4000 | 19.70 | 16.75 | 15.76 | 13.14 |
| RS-5000 | 35.60 | 30.26 | 28.48 | 23.75 |
| RS-6000 | 34.95 | 29.71 | 27.96 | 23.31 |
| RS-7000 | 33.70 | 28.65 | 26.96 | 22.48 |

"PX" Series

| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| PX-60 | 11.10 | 9.44 | 8.88 | 7.40 |
| PX-100 | 13.10 | 11.14 | 10.48 | 8.74 |
| PX-200 | 13.90 | 11.82 | 11.12 | 9.27 |
| PX-300 | 16.70 | 14.20 | 13.36 | 11.14 |
| PX-320 | 20.00 | 17.00 | 16.00 | 13.34 |
| PX-360 | 13.50 | 11.48 | 10.80 | 9.00 |
| PX-400 | 17.00 | 14.45 | 13.60 | 11.34 |
| PX-500 | 25.00 | 21.25 | 20.00 | 16.68 |

"SMO" Series

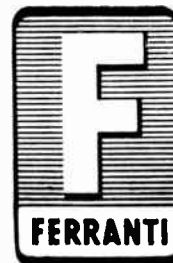
| Type No. | 1 to 9 | 10 to 49 | 50 to 99 | 100 to 249 |
|----------|--------|----------|----------|------------|
| SMO-1 | 4.51 | 3.83 | 3.61 | 3.01 |
| SMO-2 | 4.80 | 4.08 | 3.84 | 3.20 |
| SMO-3 | 4.20 | 3.57 | 3.36 | 2.80 |
| SMO-4 | 3.91 | 3.32 | 3.13 | 2.61 |
| SMO-5 | 3.91 | 3.32 | 3.13 | 2.61 |
| SMO-6 | 4.20 | 3.57 | 3.36 | 2.80 |
| SMO-7 | 3.31 | 2.81 | 2.65 | 2.21 |
| SMO-8 | 3.91 | 3.32 | 3.13 | 2.61 |
| SMO-9 | 3.00 | 2.55 | 2.40 | 2.00 |
| SMO-10 | 3.00 | 2.55 | 2.40 | 2.00 |
| SMO-11 | 3.00 | 2.55 | 2.40 | 2.00 |
| SMO-12 | 3.00 | 2.55 | 2.40 | 2.00 |
| SMO-13 | 4.51 | 3.83 | 3.61 | 3.01 |
| SMO-14 | 4.20 | 3.57 | 3.36 | 2.80 |
| SMO-15 | 4.20 | 3.57 | 3.36 | 2.80 |
| SMO-16 | 3.00 | 2.55 | 2.40 | 2.00 |
| SMO-17 | 3.31 | 2.81 | 2.65 | 2.21 |
| SMO-18 | 3.31 | 2.81 | 2.65 | 2.21 |
| SMO-19 | 3.31 | 2.81 | 2.65 | 2.21 |
| SMO-20 | 3.31 | 2.81 | 2.65 | 2.21 |
| SMO-21 | 4.80 | 4.08 | 3.84 | 3.20 |
| SMO-22 | 3.91 | 3.32 | 3.13 | 2.61 |
| SMO-23 | 3.00 | 2.55 | 2.40 | 2.00 |
| SMO-24 | 3.00 | 2.55 | 2.40 | 2.00 |
| SMO-25 | 5.11 | 4.34 | 4.09 | 3.41 |
| SMO-26 | 5.11 | 4.34 | 4.09 | 3.41 |



TRANSFORMERS

This group of transformers and filter reactors are designed to meet the full requirements of MIL-T-27A specifications, and are hermetically sealed in standard MIL-T-27A case sizes. They provide the highest standard of quality necessary for military and professional requirements.

The range includes the specific types standardized by the Armed Services Standards Agency as well as a group of standard types for 400 cycle power supplies.



Transformers and reactors meeting MIL-T-27A specifications Grade 1 through 6, Class Q, S, T, or U can be supplied on special order.

A wide range of transformers and reactors of all varieties are regularly manufactured, including the more economical types for commercial use.

If the ratings you require are not listed, we can offer prompt competitive quotations on designs to your specifications.

All manufacturing, testing and inspection in accordance with applicable requirements of Military Specifications.

MILITARY STANDARD FILAMENT TRANSFORMERS Input 105/115/125 Volts 60 Cycles \pm 10%

| Cat. No. | MIL Types | Military Standards No. | Sec. Volts | Sec. Amps | Test Volts | Case | Wt. Lbs. | List Price |
|----------|------------------------------|------------------------|------------|-----------|------------|------|----------|------------|
| FMF 20 | TF1RX01EB002 or TF4RX01EB002 | MS90016-1 or 2 | 2.5 | 3 | 2500 | EB | 1 | \$16.80 |
| FMF 21 | TF1RX01GB003 or TF4RX01GB003 | MS90017-1 or 2 | 2.5 | 10 | 2500 | GB | 2.125 | 22.60 |
| FMF 22 | TF1RX01FB004 or TF4RX01FB004 | MS90018-1 or 2 | 5.0 | 3 | 2500 | FB | 1.5 | 18.50 |
| FMF 23 | TF1RX01HB005 or TF4RX01HB005 | MS90019-1 or 2 | 5.0 | 10 | 2500 | HB | 3.125 | 24.60 |
| FMF 24 | TF1RX01FB006 or TF4RX01FB006 | MS90020-1 or 2 | 6.3 | 2 | 2500 | FB | 1.25 | 18.50 |
| FMF 25 | TF1RX01GB007 or TF4RX01GB007 | MS90021-1 or 2 | 6.3 | 5 | 2500 | GB | 2.125 | 21.00 |
| FMF 26 | TF1RX01JB008 or TF4RX01JB008 | MS90022-1 or 2 | 6.3 | 10 | 2500 | JB | 5 | 29.00 |
| FMF 27 | TF1RX01KB009 or TF4RX01KB009 | MS90023-1 or 2 | 6.3 | 20 | 2500 | KB | 7.75 | 35.00 |
| FMF 28 | TF1RX01JB012 or TF4RX01JB012 | MS90024-1 or 2 | 2.5 | 10 | 10,000 | JB | 4.25 | 27.00 |
| FMF 29 | TF1RX01KB013 or TF4RX01KB013 | MS90025-1 or 2 | 5.0 | 10 | 10,000 | KB | 6 | 34.00 |

MILITARY STANDARD PLATE AND FILAMENT TRANSFORMERS

Input 105/115/125 Volts 60 Cycles \pm 10%. Choke Input Filter

| Cat. No. | MIL Types | Military Standards No. | FIL 1 | FIL 2 | Plate (RMS) | Current | Case | Wt. Lbs. | List Price |
|----------|------------------------------|------------------------|-----------|---------|-------------------|----------|------|----------|------------|
| FMP 30 | TF1RX03HA001 or TF4RX03HA001 | MS90026-1 or 2 | 6.3/5v 2a | 6.3v 3a | 200-100-0-100-200 | .07A.DC | HA | 3.75 | \$33.00 |
| FMP 31 | TF1RX03JB002 or TF4RX03JB002 | MS90027-1 or 2 | 6.3/5v 2a | 6.3v 4a | 325-0-325 | .07A.DC | JB | 5.125 | 29.00 |
| FMP 32 | TF1RX03KB006 or TF4RX03KB006 | MS90028-1 or 2 | 5v 3a | 6.3v 5a | 325-0-325 | .150A.DC | KB | 7.25 | 34.00 |
| FMP 33 | TF1RX03LB003 or TF4RX03LB003 | MS90029-1 or 2 | 5v 3a | 6.3v 8a | 400-0-400 | .175A.DC | LB | 9.5 | 40.00 |
| FMP 34 | TF1RX03MB004 or TF4RX03MB004 | MS90030-1 or 2 | 5v 3a | 6.3v 8a | 450-0-450 | .250A.DC | MB | 12.125 | 46.00 |
| FMP 35 | TF1RX02KB001 or TF4RX02KB001 | MS90031-1 or 2 | | | 350-0-350 | .250A.DC | KB | 7.125 | 31.00 |
| FMP 36 | TF1RX02LB002 or TF4RX02LB002 | MS90032-1 or 2 | | | 550-0-550 | .250A.DC | LB | 9.5 | 36.00 |
| FMP 37 | TF1RX02NB003 or TF4RX02NB003 | MS90036-1 or 2 | | | 800-0-800 | .250A.DC | NB | 14.75 | 48.00 |

400 Cycle Transformers

FILAMENT TRANSFORMERS

Input 115 Volts 380-1200 Cycles

| Cat. No. | Sec. Volts | Sec. Amps | Test Volts | Case | Wt. Lbs. | List Price |
|----------|------------|-----------|------------|------|----------|------------|
| FF 440 | 6.3 ct | 2 | 1500 | AJ | .625 | \$16.20 |
| FF 41 | 6.3 ct | 5 | 1500 | EA | 1 | 19.60 |
| FF 42 | 6.3 ct | 5 | 2500 | FA | 2 | 22.00 |
| | 6.3 | 5 | 2500 | | | |
| FF 43 | 5/6.3 | 3 | 2500 | EB | .95 | 19.00 |
| FF 44 | 5 ct | 6 | 2500 | EA | 1 | 19.60 |
| FF 45 | 2.5 ct | 10 | 5000 | HB | 2.75 | 25.60 |

PLATE AND FILAMENT TRANSFORMERS

Input 115 Volts 380-1200 Cycles. Choke Input Filter

| Cat. No. | Plate RMS | DC Amps | Filaments | Case | Wt. Lbs. | List Price |
|----------|-----------|---------|------------------------|------|----------|------------|
| FP 40 | 250-0-250 | .070 | 5/6.3V 2A 6.3Vct 3A | GB | 1.875 | \$27.50 |
| FP 41 | 325-0-325 | .120 | 5V 3A | JB | 4.625 | 33.00 |
| | | | 6.3 ct 5A | | | |
| FP 42 | 400-0-400 | .200 | 5V 3A 6.3Vct 6A | KB | 6.625 | 37.50 |
| FP 43 | 350-0-350 | .250 | — | JB | 4.625 | 27.50 |
| FP 44 | 500-0-500 | .250 | — | KB | 6.25 | 30.00 |

FERRANTI ELECTRIC, INC.

TRANSFORMER DIVISION
INDUSTRIAL PARK
PLAINVIEW, N. Y.



TRANSFORMERS

MILITARY STANDARD AUDIO TRANSFORMERS

Frequency Response 300-10,000 c.p.s. \pm 2DB

Weight — 0.72 Lbs. Max.

Altitude — 50,000 Ft. Max.

All units are hermetically sealed in MIL-T-27A case size AJ and are designed to meet the full requirements of the MIL-T-27A specification. All manufacturing, testing and inspection in accordance with applicable requirements of Military Specifications.



| Cat. No. | Function | Type Designation | Military Standards No. | IMPEDANCE LEVEL (in ohms) | | Max. Power Level | Pri. D.C. Per Side in MA | Max. D.C. Unbalance | List Price |
|----------|---|------------------|------------------------|---------------------------|---------------------|------------------|--------------------------|---------------------|------------|
| | | | | Primary | Secondary | | | | |
| FMA 550 | Interstage, Single or P.P. plates to single or P.P. grids | TF1RX15AJ001 | MS 90000 | 10,000 CT | 90,000 split and CT | +15 DBM | 10 | 10 | \$20.80 |
| FMA 551 | Matching, 600 ohm line to voice coil | TF1RX16AJ002 | MS 90001 | 600 split | 4, 8, 16 | 2 watt | 0 | 0 | 20.30 |
| FMA 552 | Input, 600 ohm line to single or P.P. grids | TF1RX10AJ001 | MS 90002 | 600 split | 135,000 CT | +15 DBM | 0 | 0 | 20.80 |
| FMA 553 | Matching, 600 ohm line to 600 ohm line | TF1RX16AJ001 | MS 90003 | 600 split | 600 split | +15 DBM | 0 | 0 | 20.30 |
| FMA 554 | Output, single plate 7600 ohm or 4800 ohm to 600 ohm line | TF1RX13AJ001 | MS 90004 | 7600 tap @ 4800 | 600 split | 2 watt | 40 | 40 | 19.80 |
| FMA 555 | Output, single plate 7600 ohm or 4800 ohm to voice coil | TF1RX13AJ002 | MS 90005 | 7600 tap @ 4800 | 4, 8, 16 | 2 watt | 40 | 40 | 19.80 |
| FMA 556 | Output, single or P.P. plates to 600 ohm line | TF1RX13AJ003 | MS 90006 | 15,000 CT | 600 split | 2 watt | 10 | 10 | 19.80 |
| FMA 557 | Output, P.P. plates to 600 ohm line | TF1RX13AJ004 | MS 90007 | 24,000 CT | 600 split | 1 watt | 10 | 1 | 20.30 |
| FMA 558 | Output, P.P. plates to 600 ohm line | TF1RX13AJ005 | MS 90008 | 60,000 CT | 600 split | 0.5 watt | 10 | 1 | 20.30 |

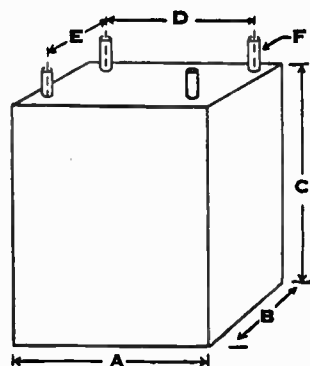
FILTER REACTORS

FOR 60 CYCLE POWER SUPPLIES

| Cat. No. | DC Amps | Induct. Henries | Resist. Ohms | Test Volts | Case | Wt. Lbs. | List Price |
|----------|---------|-----------------|--------------|------------|------|----------|------------|
| FC 410 | .020 | 30 | 930 | 1500 | AJ | .625 | \$14.50 |
| FC 11 | .070 | 15 | 260 | 2500 | GB | 2.25 | 14.00 |
| FC 12 | .150 | 10 | 110 | 2500 | JB | 4.75 | 20.00 |
| FC 13 | .200 | 8 | 90 | 2500 | KB | 6.25 | 21.00 |
| FC 14 | .300 | 10 | 95 | 2500 | LB | 9.625 | 28.50 |

FOR 400 CYCLE POWER SUPPLIES

| Cat. No. | DC Amps | Induct. Henries | Resist. Ohms | Test Volts | Case | Wt. Lbs. | List Price |
|----------|---------|-----------------|--------------|------------|------|----------|------------|
| FC 440 | .070 | 3 | 225 | 1500 | AJ | .625 | \$14.00 |
| FC 41 | .120 | 3 | 145 | 2000 | EB | 1 | 15.00 |
| FC 42 | .200 | 3 | 115 | 2000 | FB | 1.5 | 15.50 |
| FC 43 | .250 | 3 | 65 | 2000 | GB | 2.25 | 17.50 |



MIL-T-27A CASE AND MOUNTING DIMENSIONS

| Case | A | B | C | D | E | F |
|------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| AJ | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 2 $\frac{3}{8}$ " | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 6-32 |
| EA | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 2 $\frac{3}{8}$ " | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 6-32 |
| EB | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 2 $\frac{3}{8}$ " | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 6-32 |
| FA | 2 $\frac{1}{8}$ " | 2 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 6-32 |
| FB | 2 $\frac{1}{8}$ " | 2 $\frac{1}{8}$ " | 2 $\frac{1}{2}$ " | 1 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 6-32 |
| GB | 2 $\frac{3}{8}$ " | 2 $\frac{3}{8}$ " | 2 $\frac{1}{2}$ " | 2 $\frac{1}{8}$ " | 1 $\frac{1}{8}$ " | 6-32 |
| HA | 3 $\frac{1}{8}$ " | 2 $\frac{3}{8}$ " | 4 $\frac{1}{4}$ " | 2 $\frac{1}{8}$ " | 1 $\frac{5}{8}$ " | 8-32 |
| HB | 3 $\frac{1}{8}$ " | 2 $\frac{3}{8}$ " | 3 $\frac{1}{8}$ " | 2 $\frac{1}{8}$ " | 1 $\frac{5}{8}$ " | 8-32 |
| JB | 3 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | 2 $\frac{1}{8}$ " | 2 $\frac{1}{8}$ " | 8-32 |
| KB | 3 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | 4 $\frac{1}{8}$ " | 3 | 2 $\frac{1}{8}$ " | 10-32 |
| LB | 4 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | 4 $\frac{1}{2}$ " | 3 $\frac{1}{8}$ " | 2 $\frac{1}{8}$ " | 10-32 |
| MB | 4 $\frac{1}{8}$ " | 4 $\frac{1}{8}$ " | 4 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | $\frac{1}{4}$ -20 |
| NB | 5 $\frac{1}{8}$ " | 4 $\frac{1}{8}$ " | 5 $\frac{1}{2}$ " | 4 $\frac{1}{8}$ " | 3 $\frac{1}{8}$ " | $\frac{1}{4}$ -20 |

FERRANTI ELECTRIC, INC.

TRANSFORMER DIVISION
INDUSTRIAL PARK
PLAINVIEW, N. Y.

FREED TRANSFORMER COMPANY, INC.

BROADCAST QUALITY COMPONENTS

INPUT TRANSFORMERS

Frequency Response 20-20,000 C.P.S. ± 1.0 DB

CASE DIMENSIONS

DC-2B CASE



Height: $3\frac{1}{2}$ "
 Width: $2\frac{5}{8}$ "
 Depth: $2\frac{1}{4}$ "
 Mtg. Cen.: $2" \times 1\frac{3}{4}"$
 Studs: 4 8-32
 Knockout: $1\frac{1}{2}$ " dia.

| Catalog No. | Application | Impedance Level Ohms | | Maximum Power Level DBM | Ratio | Equivalent Shielding D.B. | Maximum Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|---|----------------------|---------------|-------------------------|--------|---------------------------|--------------------------------|--------------------|-------------|
| | | Primary | Secondary | | | | | | |
| QGA 1 | Universal 500 ohm line to push-pull grids | U-500 | 100,000 split | +10 | 1:14.1 | 70 | 0 | 0 | DC-2B |
| QGA 2 | Universal 500 ohm line to push-pull grids | U-500 | 100,000 split | +10 | 1:14.1 | 90 | 0 | 0 | DC-2B |
| QGA 3 | Universal 500 ohm line to single or push-pull grids | U-500 | 60,000 split | +10 | 1:11 | 70 | 0 | 0 | DC-2B |
| QGA 4 | Universal 500 ohm line to single or push-pull grids | U-500 | 60,000 split | +10 | 1:11 | 90 | 0 | 0 | DC-2B |
| QGA 5 | Universal low impedance microphone, pickup or line to single or push-pull grids | U-60 | 60,000 split | +10 | 1:31.6 | 70 | 0 | 0 | DC-2B |
| QGA 6 | Universal low impedance microphone, pickup or line to single or push-pull grids | U-60 | 60,000 split | +10 | 1:31.6 | 90 | 0 | 0 | DC-2B |

U-60 IMPEDANCES IN OHMS:
2.5, 5, 10, 15, 20, 30, 40, 60

U-500 IMPEDANCES IN OHMS:
50, 125, 200 CT, 250, 330, 500 CT.
125 and 500 ohms can be used for 150 and 600 ohms.

HYBRID AND REPEAT COILS

Frequency Response 20-20,000 C.P.S. ± 1.0 DB

| Catalog No. | Application | Impedance Level Ohms | | Maximum Power Level D.B.M. | Ratio | Equivalent Shielding D.B. | Maximum Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|--|---|---------------------------|----------------------------|--------|---------------------------|--------------------------------|--------------------|-------------|
| | | Primary | Secondary | | | | | | |
| QGA 7 | Hybrid. Unbalanced 500/600 ohm lines to 600 ohms. | Total Pri 1200/1000 split 300/250 | 600/150 or 500/125 split | +10 | 1.41:1 | 70 | 0 | 0 | DC-2B |
| QGA 8 | Hybrid. Balanced 500/600 ohm lines to 600 ohms. Longitudinal balance 70 DB | Total Pri 1200/1000 split 300/250 C.T. 300/250 C.T. | 600/150 or 500/125 split | +10 | 1.41:1 | 70 | 0 | 0 | DC-2B |
| QGA 9 | Hybrid. Unbalanced 500/600 ohm lines to triode plate. No. D.C. in secondary. | Total Pri 1200/1000 split 300/250 300/250 | 15,000 or 12,500 | +10 | 1:3.54 | 70 | 0 | 0 | DC-2B |
| QGA 10 | Hybrid. Balanced 500/600 ohm lines to triode plate. No. D.C. in secondary. Longitudinal balance 70 DB. | Total Pri 1200/1000 split 300/250 C.T. 300/250 C.T. | 15,000 or 12,500 | +10 | 1:3.54 | 70 | 0 | 0 | DC-2B |
| QGA 11 | Repeat coil for low frequency ringing. Longitudinal balance 70 DB. | 600/500 split | 600/500 split Balanced | | 1:1 | 90 | 0 | 0 | DC-4A |

INTERSTAGE TRANSFORMERS

Frequency Response 20-20,000 C.P.S. ± 1.0 D.B.
 *50-20,000 C.P.S. ± 1.0 D.B.

Height: $3\frac{3}{4}$ "
 Width: $3\frac{1}{8}$ "
 Depth: 3"
 Mtg. Cen.: $2\frac{1}{2}" \times 2\frac{1}{2}"$
 Studs: 4 8-32
 Knockout: 2" dia.

| Catalog No. | Application | Impedance Level Ohms | | Maximum Power Level D.B.M. | Ratio | Equivalent Shielding D.B. | Maximum Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|---|----------------------|--------------|----------------------------|--------|---------------------------|--------------------------------|--------------------|-------------|
| | | Primary | Secondary | | | | | | |
| QGA 12 | Bridging line to single or push-pull grids. | 10,000 | 60,000 split | +10 | 1:2.45 | 70 | 0 | 0 | DC-2B |
| QGA 13 | Single 6C4, 6J5 $\frac{1}{2}$ 6SN7 triode to push-pull grids. Shunt feed. | 15,000 | 60,000 split | +18 | 1:2 | 45 | 0 | 0 | DC-2B |
| QGA 14* | Single 6C4, 6J5, $\frac{1}{2}$ 6SN7 triode to push-pull grids. | 15,000 | 60,000 split | +18 | 1:2 | 45 | 8 | 8 | DC-2B |
| QGA 15 | Push-pull triode plates to push-pull class A grids. | 20,000 split | 45,000 split | +25 | 1:1.5 | 30 | 8 | 0.5 | DC-4A |

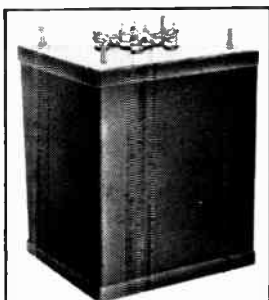
FREED TRANSFORMER COMPANY, INC.

BROADCAST QUALITY COMPONENTS

LOW LEVEL OUTPUT, MIXING, MATCHING TRANSFORMERS

Frequency Response 20-20,000 C.P.S. ± 1.0 DB
*50-20,000 C.P.S. ± 1.0 DB

CASE DIMENSIONS



DC-2B CASE

Height: 3 1/2"
Width: 2 5/8"
Depth: 2 1/4"
Mtg. Cen.: 2" x 1 3/4"
Studs: 4 8-32
Knockout: 1 1/2" dia.

DC-4A CASE

Height: 3 3/4"
Width: 3 1/8"
Depth: 3"
Mtg. Cen.: 2 1/2" x 2 1/2"
Studs: 4 8-32
Knockout: 2" dia.

DC-5B CASE

Height: 4 1/2"
Width: 4 1/8"
Depth: 3 1/2"
Mtg. Cen.: 3 1/8" x 2 5/8"
Studs: 4 10-32
Knockout: 2 1/2" dia.

DC-6A CASE

Height: 4 7/8"
Width: 5"
Depth: 4 1/8"
Mtg. Cen.: 3 3/4" x 3"
Studs: 4 10-32
Knockout: 3" dia.

DC-6B CASE

Height: 6"
Width: 5"
Depth: 4 1/8"
Mtg. Cen.: 3 3/4" x 3"
Studs: 4 10-32
Knockout: 3" dia.

DC-7 CASE

Height: 5 3/8"
Width: 5 1/2"
Depth: 5"
Mtg. Cen.: 4 3/8" x 3 3/4"
Studs: 4 1/4"-20
Knockout: 3" dia.

| Catalog No. | Application | Impedance Level Ohms | | Maximum Power Level D.B.M. | Ratio | Equivalent Shielding D.B. | Max. Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|--|----------------------|-----------|----------------------------|--------|---------------------------|-----------------------------|--------------------|-------------|
| | | Primary | Secondary | | | | | | |
| QGA 16 | Single plate or bridging line to Universal 500 ohm line. Shunt feed. | 15,000 | U-500 | +18 | 5.5:1 | 70 | 0 | 0 | DC-2B |
| QGA 17* | Single plate to Universal 500 ohm line. | 15,000 | U-500 | +18 | 5.5:1 | 70 | 8 | 8 | DC-2B |
| QGA 18 | Push-pull triode plates to Universal 500 ohm line. | 20,000 C.T. | U-500 | +25 | 6.3:1 | 70 | 8 | 0.5 | DC-2B |
| QGA 19 | Mixing, low impedance microphone or line to Universal 500 ohm line. | U-500 | U-500 | +12 | 1:1 | 70 | 0 | 0 | DC-2B |
| QGA 20 | Line level mixing and matching. | U-500 | U-500 | +30 | 1:1 | 70 | 0 | 0 | DC-2B |
| QGA 21 | High mu triode photo-cell to Universal 500 ohm line. | 100,000 | U-500 | +12 | 14.1:1 | 70 | 0 | 0 | DC-2B |

DRIVER TRANSFORMERS

Frequency Response 20-20,000 C.P.S. ± 1.0 DB

| Catalog No. | Application | Primary Impedance Ohms | Maximum Power Level D.B.M. | Turn Ratio Pri.: 1/2 Sec. | Max. Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|---|------------------------|----------------------------|---------------------------|-----------------------------|--------------------|-------------|
| QGA 22 | Universal 500 ohm line to Class B grids. | U-500 | +40 | 1:1 | 0 | 0 | DC-4A |
| QGA 23 | Push-pull 6J5, etc. to push-pull 2A3's, 6L6's, etc. | 20,000 C.T. | +30 | 3.2:1 | 8 | 0.5 | DC-2B |
| QGA 24 | Push-pull 2A3, 6B4 to push-pull 809, T2-40, 4/125A. | 5,000 C.T. | +40 | 3.1:1 | 50 | 5 | DC-4A |

HIGH LEVEL OUTPUT TRANSFORMERS

Frequency Response 20-30,000 C.P.S. ± 0.5 DB

| Catalog No. | Application | Impedance Level Ohms | | Maximum Power Level | | Ratio | Max. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|--|----------------------|-----------|---------------------|-------|--------|------------------------|--------------------|-------------|
| | | Primary | Secondary | DBM | Watts | | | | |
| QGA 25 | PP 58B1, 6B4, 6L6, 300A, 275A to Universal 500 ohm line. | 5,000 split | U-500 | +42 | 15 | 3.16:1 | 70 | 7 | DC-5B |
| QGA 26 | As above to Universal voice coil. | 5,000 split | U-16 | +42 | 15 | 17.7:1 | 70 | 7 | DC-5B |
| QGA 27 | Push-pull 6V6, 6AQ5, 7C5, 6N7 to Universal 500 ohm line. | 8,000 split | U-500 | +42 | 15 | 4:1 | 50 | 5 | DC-5B |
| QGA 28 | As above to Universal voice coil. | 8,000 split | U-16 | +42 | 15 | 22.4:1 | 50 | 5 | DC-5B |
| QGA 29 | P.P. 6F6, 6V6, 6AQ5, 7C5, 7B5, 6AR5, 6K6, 6L6 to Universal 500 ohm line. | 10,000 split | U-500 | +42 | 15 | 4.47:1 | 40 | 4 | DC-5B |
| QGA 30 | As above to Universal voice coil. | 10,000 split | U-16 | +42 | 15 | 25:1 | 40 | 4 | DC-5B |
| QGA 31 | PP. 807, 1614, KT-66, (Williamson Amplifier) to Universal 500 ohm line. | 10,000 split | U-500 | +45.5 | 36 | 4.47:1 | 60 | 6 | DC-6A |
| QGA 32 | As above to Universal voice coil. | 10,000 split | U-16 | +45.5 | 36 | 25:1 | 60 | 6 | DC-6A |
| QGA 33 | P.P. Parallel, 6A5G, 300A to Universal 500 ohm line. | 2,500 split | U-500 | +45.5 | 36 | 2.24:1 | 100 | 10 | DC-6A |
| QGA 34 | As above to Universal voice coil. | 2,500 split | U-16 | +45.5 | 36 | 12.5:1 | 100 | 10 | DC-6A |
| QGA 35 | P.P. 6L6 or P.P. Parallel 6L6 to Universal 500 ohm line. | 3,800 split | U-500 | +47 | 50 | 2.75:1 | 140 | 14 | DC-6B |
| QGA 36 | As above to Universal voice coil. | 3,800 split | U-16 | +47 | 50 | 15.4:1 | 140 | 14 | DC-6B |
| QGA 37 | High level multiple line to Universal voice coil. | U-500 | U-16 | +42 | 15 | 5.6:1 | 0 | 0 | DC-5B |
| QGA 38 | High level multiple line to Universal voice coil. | U-500 | U-16 | +47 | 50 | 5.6:1 | 0 | 0 | DC-6B |
| QGA 39* | 58B1 or 6146 Class AB1 to Universal 500 ohm line. | 6,600 split | U-500 | +45.5 | 36 | 3.64:1 | 70 | 7 | DC-6A |
| QGA 40* | 58B1 or 6146 Class AB1 to Universal voice coil. | 6,600 split | U-16 | +45.5 | 36 | 20:1 | 70 | 7 | DC-6A |
| QGA 41 | 6550 AB1 or 6146 AB2 to Universal 500 ohm line. | 5,000 split | U-500 | +50 | 100 | 3.16:1 | 140 | 14 | DC-7 |
| QGA 42 | 6550 AB1 or 6146 AB2 to Universal voice coil. | 5,000 split | U-16 | +50 | 100 | 17.7:1 | 140 | 14 | DC-7 |

*These units supplied with taps for applying screen feedback.

U-500 IMPEDANCES IN OHMS. 50, 125, 200 C.T., 250, 330, 500 C.T.

U-16 IMPEDANCES IN OHMS: 2, 4, 8, 12, 16.

125 and 500 ohms can be used for 150 and 600 ohms.

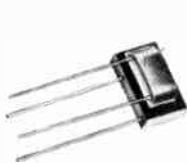
FREED TRANSFORMER COMPANY, INC.

CONDENSED LISTING

MINIATURE TRANSISTOR AUDIO TRANSFORMERS

| TYPE | | | TUA | | | TSA | | | TNA | | | TPA | | | TTA | | | |
|----------------------|----------|--------|---|--------------|------|--|--------------|------|--|--------------|------|--|--------------|------|---|--------------|------|------|
| MAX. POWER | | | 500 MW | | | 500 MW | | | 1 W | | | 3 W | | | 5 W | | | |
| FREQ. RESPONSE | | | .4 — 15 KC ± 2 DB | | | .3 — 15 KC ± 2 DB | | | .2 — 15 KC ± 2 DB | | | .15 — 15 KC ± 2 DB | | | .15 — 15 KC ± 2 DB | | | |
| UNCASED | | | 1 ¹ / ₂ D. x 1 ¹ / ₂ H. | | | 1 ⁷ / ₁₆ D. x 1 ¹⁵ / ₃₂ H. | | | 3 ⁹ / ₁₆ D. x 2 ²⁵ / ₃₂ H. | | | 7 ¹ / ₁₆ x 1 ¹³ / ₃₂ x 3 ³ / ₄ | | | 1 ¹ / ₁₆ x 1 ¹³ / ₁₆ x 1 ¹³ / ₁₆ | | | |
| CASED MIL-T-27A-4RX | | | 1 ¹ / ₂ D. x 1 ¹ / ₂ H. | | | 1 ⁷ / ₁₆ D. x 1 ¹⁵ / ₃₂ H. | | | 3 ⁹ / ₁₆ D. x 2 ²⁵ / ₃₂ H. | | | 1 ¹⁵ / ₁₆ D. x 1 ¹³ / ₁₆ H. | | | 1 ¹⁵ / ₁₆ D. x 1 ¹³ / ₁₆ H. | | | |
| MOLDED MIL-T-27A-5RX | | | 1 ¹ / ₂ D. x 1 ¹ / ₂ H. | | | 1 ⁷ / ₁₆ D. x 1 ¹⁵ / ₃₂ H. | | | 3 ⁹ / ₁₆ D. x 2 ²⁵ / ₃₂ H. | | | 7 ¹ / ₁₆ x 1 ¹³ / ₃₂ x 1 ³ / ₂ | | | 1 ¹⁵ / ₁₆ x 1 ¹³ / ₁₆ x 1 ¹³ / ₁₆ | | | |
| MATCHING IMP. | | | Turns Ratio | Cat. No. TUA | Pri. | Sec. | Cat. No. TSA | Pri. | Sec. | Cat. No. TNA | Pri. | Sec. | Cat. No. TPA | Pri. | Sec. | Cat. No. TTA | Pri. | Sec. |
| Pri. | Sec. | | | | | | | | | | | | | | | | | |
| 150/37.5 | 3.2 | 6.85/1 | 16 | CT | | 28 | CT | | 28 | CT | | 30 | CT | | 15 | CT | | |
| 150/37.5 | 12 | 3.54/1 | 17 | CT | | 29 | CT | | 29 | CT | | 31 | CT | | 17 | CT | | |
| 150/37.5 | 50 | 1.73/1 | 21 | CT | | 30 | CT | | 30 | CT | | 32 | CT | | 18 | CT | | |
| 300/75 | 3.2 | 9.68/1 | 20 | CT | | 31 | CT | | 31 | CT | | 33 | CT | | 20 | CT | | |
| 300/75 | 12 | 5/1 | 19 | CT | | 32 | CT | | 32 | CT | | 34 | CT | | 21 | CT | | |
| 300/75 | 50 | 2.45/1 | 22 | CT | | 33 | CT | | 33 | CT | | 35 | CT | | 22 | CT | | |
| 500/125 | 500 | 1/1 | 23 | CT | | 34 | CT | | 34 | CT | | 36 | CT | | 1 | CT | | |
| 600/150 | 3.2 | 13.7/1 | 1 | CT | | 1 | SP | | 1 | SP | | 1 | SP | | 23 | SP | | |
| 600/150 | 12 | 7.07/1 | 2 | CT | | 2 | SP | | 2 | SP | | 2 | SP | | 24 | SP | | |
| 600/150 | 50 | 3.47/1 | 13 | CT | | 35 | SP | | 35 | SP | | 3 | SP | | 25 | SP | | |
| 600/150 | 600-150 | 1/1 | 3 | CT | | 3 | SP | SP | 3 | SP | SP | 4 | SP | SP | 26 | SP | SP | |
| 600/150 | 1.2K-300 | 1/1.41 | 24 | CT | | 22 | SP | CT | 22 | SP | CT | 37 | SP | CT | 7 | SP | CT | |
| 1K/250 | 3.2 | 17.7/1 | 4 | CT | | 36 | CT | | 36 | CT | | 38 | CT | | 19 | CT | | |
| 1K/250 | 12 | 9.13/1 | 25 | CT | | 37 | CT | | 37 | CT | | 39 | CT | | 27 | CT | | |
| 1K/250 | 50 | 4.47/1 | 14 | CT | | 26 | CT | | 26 | CT | | 40 | CT | | 13 | CT | | |
| 1.2K/300 | 3.2 | 19.3/1 | 26 | CT | | 4 | SP | | 4 | SP | | 5 | SP | | 28 | SP | | |
| 1.2K/300 | 12 | 10/1 | 5 | CT | | 5 | SP | | 5 | SP | | 6 | SP | | 29 | SP | | |
| 1.2K/300 | 50 | 4.9/1 | 27 | CT | | 38 | SP | | 38 | SP | | 7 | SP | | 30 | SP | | |
| 1.2K/300 | 600-150 | 1.41/1 | 6 | CT | | 6 | SP | SP | 6 | SP | SP | 8 | SP | SP | 31 | SP | SP | |
| 2K/500 | 3.2 | 25/1 | 28 | CT | | 7 | SP | | 7 | SP | | 9 | SP | | 10 | SP | | |
| 2K/500 | 12 | 12.9/1 | 29 | CT | | 8 | SP | | 8 | SP | | 10 | SP | | 32 | SP | | |
| 2K/500 | 600 | 1.83/1 | 30 | CT | | 9 | SP | SP | 9 | SP | SP | 11 | SP | SP | 33 | SP | SP | |
| 4K/1000 | 3.2 | 35.4/1 | 8 | CT | | 10 | SP | | 10 | SP | | 12 | SP | | 11 | SP | | |
| 4K/1000 | 12 | 18.2/1 | 9 | CT | | 11 | SP | | 11 | SP | | 13 | SP | | 34 | SP | | |
| 4K/1000 | 600-150 | 2.58/1 | 10 | CT | | 12 | SP | SP | 12 | SP | SP | 14 | SP | SP | 9 | SP | SP | |
| 10K/2.5K | 3.2 | 56/1 | 7 | CT | | 13 | SP | | 13 | SP | | 15 | SP | | 35 | SP | | |
| 10K/2.5K | 12 | 29/1 | 11 | CT | | 14 | SP | | 14 | SP | | 16 | SP | | 36 | SP | | |
| 10K/2.5K | 50 | 14.1/1 | 12 | CT | | 39 | CT | | 39 | CT | | 17 | CT | | 37 | CT | | |
| 10K/2.5K | 600-150 | 4.1/1 | 15 | CT | | 15 | SP | SP | 15 | SP | SP | 18 | SP | SP | 38 | SP | SP | |
| 10K/2.5K | 1K | 3.17/1 | 18 | CT | | 40 | | | 40 | | | 19 | | | 39 | | | |
| 10K/2.5K | 10K-2.5K | 1/1 | 31 | CT | CT | 16 | | SP | 16 | | SP | 20 | | SP | 40 | | SP | |
| 20K/5K | 50 | 20/1 | 32 | CT | | 25 | CT | | 25 | CT | | 21 | CT | | 12 | CT | | |
| 20K/5K | 600/150 | 5.78/1 | 33 | CT | CT | 41 | CT | CT | 41 | CT | CT | 22 | CT | CT | 16 | CT | CT | |
| 25K/6.2K | 600/150 | 6.45/1 | 34 | CT | CT | 23 | CT | CT | 23 | CT | CT | 23 | CT | CT | 8 | CT | CT | |
| 25K/6.2K | 1.2K/300 | 4.55/1 | 35 | CT | CT | 21 | CT | CT | 21 | CT | CT | 24 | CT | CT | 5 | CT | CT | |
| 50K/12.5K | 6/1.5 | 91.5/1 | 36 | CT | CT | 18 | CT | CT | 18 | CT | CT | 25 | CT | CT | 3 | CT | CT | |
| 50K/12.5K | 500/125 | 10/1 | 37 | CT | CT | 17 | CT | CT | 17 | CT | CT | 26 | CT | CT | 2 | CT | CT | |
| 50K/12.5K | 1.2K/300 | 6.45/1 | 38 | CT | CT | 20 | CT | CT | 20 | CT | CT | 27 | CT | CT | 6 | CT | CT | |
| 100K/25K | 1K/250 | 10/1 | | | | 27 | CT | CT | 27 | CT | CT | 28 | CT | CT | 14 | CT | CT | |
| 100K/25K | 1.2K/300 | 9.15/1 | | | | 19 | CT | CT | 19 | CT | CT | 29 | CT | CT | 4 | CT | CT | |

CT—Center Tap SP—Split Winding



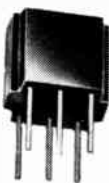
TPA UNCASED



TPA MOLDED



TUA, TSA, TNA CASED
TSA MOLDED



TNA MOLDED



TTA MOLDED



TTA, TPA CASED

FREED TRANSFORMER COMPANY, INC.

MINIATURE TRANSISTOR AUDIO TRANSFORMERS

These high quality miniature transformers are high efficiency audio components featuring hermetic sealing for maximum protection against electrolysis and subsequent corrosion of fine wires caused by moisture penetration. The units are constructed in accordance with MIL-T-27A Specifications. Transistor transformers can also be supplied in an open or encapsulated type of construction.

| TYPE | | TSA | | | TNA | | | TPA | | | TTA | | |
|----------------|----------------------|-------------------------------|------------------------|-------------------------------|---|------------------------|-------------------------------|---------------------------------------|------------------------|-------------------------------|---|------------------------|-------------------------------|
| MAX. POWER | | 500 MW | | | 1 W | | | 3 W | | | 5 W | | |
| FREQ. RESPONSE | | .3 — 15 KC ± 2 DB | | | .2 — 15 KC ± 2 DB | | | .15 — 15 KC ± 2 DB | | | .15 — 15 KC ± 2 DB | | |
| SIZE | UNCASED | | | | | | | $7_{16} \times 19_{32} \times 3_{16}$ | | | $17_{16} \times 13_{16} \times 13_{16}$ | | |
| | CASED MIL-T-27A-4RX | $7_{16} D. \times 13_{32} H.$ | | | $9_{16} D. \times 21_{32} H.$ | | | $15_{16} D. \times 11_{16} H.$ | | | $15_{16} D. \times 19_{16} H.$ | | |
| | MOLDED MIL-T-27A-5RX | $1/2 D. \times 1/2 H.$ | | | $19_{32} \times 17_{32} \times 17_{32}$ | | | $7_8 \times 23_{32} \times 17_{32}$ | | | $1 1/2 \times 1 \times 31_{32}$ | | |
| MATCHING IMP. | | Cat. No. | Max. I (MA) Total Pri. | Max. Idc (MA) Unbal. 1/2 Pri. | Cat. No. | Max. I (MA) Total Pri. | Max. Idc (MA) Unbal. 1/2 Pri. | Cat. No. | Max. I (MA) Total Pri. | Max. Idc (MA) Unbal. 1/2 Pri. | Cat. No. | Max. I (MA) Total Pri. | Max. Idc (MA) Unbal. 1/2 Pri. |
| Pri. | Sec. | | | | | | | | | | | | |
| 150 (CT) | 3.2 | 28 | 35 | 12 | 28 | 40 | 16 | 30 | 45 | 20 | 15 | 130 | 50 |
| 150 (CT) | 12 | 29 | 35 | 12 | 29 | 40 | 16 | 31 | 45 | 20 | 17 | 130 | 50 |
| 150 (CT) | 50 | 30 | 35 | 12 | 30 | 40 | 16 | 32 | 45 | 20 | 18 | 130 | 50 |
| 300 (CT) | 3.2 | 31 | 30 | 8 | 31 | 32 | 14 | 33 | 35 | 16 | 20 | 100 | 35 |
| 300 (CT) | 12 | 32 | 30 | 8 | 32 | 32 | 14 | 34 | 35 | 16 | 21 | 100 | 35 |
| 300 (CT) | 50 | 33 | 30 | 8 | 33 | 32 | 14 | 35 | 35 | 16 | 22 | 100 | 35 |
| 500 (CT) | 500 | 34 | 20 | 6 | 34 | 22 | 10 | 36 | 25 | 12 | 1 | 80 | 25 |
| 600 (SP) | 3.2 | 1 | 16 | 6 | 1 | 18 | 8 | 1 | 20 | 10 | 23 | 65 | 25 |
| 600 (SP) | 12 | 2 | 16 | 6 | 2 | 18 | 8 | 2 | 20 | 10 | 24 | 65 | 25 |
| 600 (SP) | 50 | 35 | 16 | 6 | 35 | 18 | 8 | 3 | 20 | 10 | 25 | 65 | 25 |
| 600 (SP) | 600 (SP) | 3 | 16 | 6 | 3 | 18 | 8 | 4 | 20 | 10 | 26 | 65 | 25 |
| 600 (SP) | 1.2K (CT) | 22 | 16 | 6 | 22 | 18 | 8 | 37 | 20 | 10 | 7 | 65 | 25 |
| 1K (CT) | 3.2 | 36 | 14 | 4 | 36 | 15 | 6 | 38 | 16 | 8 | 19 | 50 | 20 |
| 1K (CT) | 12 | 37 | 14 | 4 | 37 | 15 | 6 | 39 | 16 | 8 | 27 | 50 | 20 |
| 1K (CT) | 50 | 26 | 14 | 4 | 26 | 15 | 6 | 40 | 16 | 8 | 13 | 50 | 20 |
| 1.2K (SP) | 3.2 | 4 | 12 | 4 | 4 | 14 | 6 | 5 | 16 | 8 | 28 | 40 | 15 |
| 1.2K (SP) | 12 | 5 | 12 | 4 | 5 | 14 | 6 | 6 | 16 | 8 | 29 | 40 | 15 |
| 1.2K (SP) | 50 | 38 | 12 | 4 | 38 | 14 | 6 | 7 | 16 | 8 | 30 | 40 | 15 |
| 1.2K (SP) | 600 (SP) | 6 | 12 | 4 | 6 | 14 | 6 | 8 | 16 | 8 | 31 | 40 | 15 |
| 2K (SP) | 3.2 | 7 | 9 | 3 | 7 | 10 | 5 | 9 | 14 | 6 | 10 | 25 | 12 |
| 2K (SP) | 12 | 8 | 9 | 3 | 8 | 10 | 5 | 10 | 14 | 6 | 32 | 25 | 12 |
| 2K (SP) | 600 (SP) | 9 | 9 | 3 | 9 | 10 | 5 | 11 | 14 | 6 | 33 | 25 | 12 |
| 4K (SP) | 3.2 | 10 | 6.5 | 2 | 10 | 8 | 3 | 12 | 9 | 4 | 11 | 20 | 10 |
| 4K (SP) | 12 | 11 | 6.5 | 2 | 11 | 8 | 3 | 13 | 9 | 4 | 34 | 20 | 10 |
| 4K (SP) | 600 (SP) | 12 | 6.5 | 2 | 12 | 8 | 3 | 14 | 9 | 4 | 9 | 20 | 10 |
| 10K (SP) | 3.2 | 13 | 5 | 1 | 13 | 6 | 2 | 15 | 7 | 3 | 35 | 15 | 9 |
| 10K (SP) | 12 | 14 | 5 | 1 | 14 | 6 | 2 | 16 | 7 | 3 | 36 | 15 | 9 |
| 10K (CT) | 50 | 39 | 5 | 1 | 39 | 6 | 2 | 17 | 7 | 3 | 37 | 15 | 9 |
| 10K (SP) | 600 (SP) | 15 | 5 | 1 | 15 | 6 | 2 | 18 | 7 | 3 | 38 | 15 | 9 |
| 10K | 1K | 40 | 5 | 1 | 40 | 6 | 1.5 | 19 | 7 | 3 | 39 | 15 | 9 |
| 10K | 10K (SP) | 16 | 5 | 1 | 16 | 6 | 1.5 | 20 | 7 | 3 | 40 | 15 | 9 |
| 20K (CT) | 50 | 25 | 2.5 | .8 | 25 | 3 | 1 | 21 | 5 | 2 | 12 | 6 | 6 |
| 20K (CT) | 600 (CT) | 41 | 2.5 | .8 | 41 | 3 | 1 | 22 | 5 | 2 | 16 | 8 | 6 |
| 25K (CT) | 600 (CT) | 23 | 2.5 | .8 | 23 | 3 | 1 | 23 | 5 | 2 | 5 | 6 | 4 |
| 25K (CT) | 1.2K (CT) | 21 | 2.5 | .8 | 21 | 3 | 1 | 24 | 5 | 2 | 5 | 6 | 4 |
| 50K (CT) | 6 (CT) | 18 | 2 | .6 | 18 | 2.5 | 1 | 25 | 3.5 | 1 | 3 | 5 | 3 |
| 50K (CT) | 500 (CT) | 17 | 2 | .6 | 17 | 2.5 | 1 | 26 | 3.5 | 1 | 2 | 5 | 3 |
| 100K (CT) | 1.2K (CT) | 20 | 2 | .6 | 20 | 2.5 | 1 | 27 | 3.5 | 1 | 6 | 5 | 3 |
| 100K (CT) | 1K (CT) | 27 | 2 | .4 | 27 | 2 | .8 | 28 | 2 | 1 | 14 | 4 | 2 |
| 100K (CT) | 1.2K (CT) | 19 | 2 | .4 | 19 | 2 | .8 | 29 | 2 | 1 | 4 | 4 | 2 |

| TYPE | | TUA | | | TYPE | | TUA | | |
|----------------|---------------------|----------------------------|------------------------|-------------------------------|----------------|---------------------|----------------------------|------------------------|-------------------------------|
| MAX. POWER | | 500 MW | | | MAX. POWER | | 500 MW | | |
| FREQ. RESPONSE | | .4 — 15 KC ± 2 DB | | | FREQ. RESPONSE | | .4 — 15 KC ± 2 DB | | |
| SIZE | UNCASED | | | | SIZE | UNCASED | | | |
| | CASED MIL-T-27A-4RX | $11_{32} D. \times 1/2 H.$ | | | | CASED MIL-T-27A-4RX | $11_{32} D. \times 1/2 H.$ | | |
| | MOLDED | | | | | MOLDED | | | |
| MATCHING IMP. | | Cat. No. | Max. I (MA) Total Pri. | Max. Idc (MA) Unbal. 1/2 Pri. | MATCHING IMP. | | Cat. No. | Max. I (MA) Total Pri. | Max. Idc (MA) Unbal. 1/2 Pri. |
| Pri. | Sec. | | | | Pri. | Sec. | | | |
| 150 (CT) | 3.2 | 16 | 15 | 10 | 2K (CT) | 3.2 | 28 | 3.5 | 2.5 |
| 150 (CT) | 12 | 17 | 15 | 10 | 2K (CT) | 12 | 29 | 3.5 | 2.5 |
| 150 (CT) | 50 | 21 | 15 | 10 | 2K (CT) | 600 | 30 | 3.5 | 2.5 |
| 300 (CT) | 3.2 | 20 | 9 | 7 | 4K (CT) | 3.2 | 8 | 3.5 | 1.5 |
| 300 (CT) | 12 | 19 | 9 | 7 | 4K (CT) | 12 | 9 | 3.5 | 1.5 |
| 300 (CT) | 50 | 22 | 9 | 7 | 4K (CT) | 600 | 10 | 3.5 | 1.5 |
| 500 (CT) | 500 | 23 | 7 | 5 | 10K (CT) | 3.2 | 7 | 2 | 1 |
| 600 (CT) | 3.2 | 1 | 7 | 5 | 10K (CT) | 12 | 11 | 2 | 1 |
| 600 (CT) | 12 | 2 | 7 | 5 | 10K (CT) | 50 | 12 | 1 | 1 |
| 600 (CT) | 50 | 13 | 7 | 5 | 10K (CT) | 600 | 15 | 1 | 1 |
| 600 (CT) | 600 | 3 | 7 | 5 | 10K (CT) | 1K | 18 | 1 | 1 |
| 600 (CT) | 1.2K | 24 | 6 | 5 | 10K (CT) | 1.2K (CT) | 31 | 1 | 1 |
| 1K (CT) | 3.2 | 4 | 6 | 3.5 | 90K (CT) | 50 | 32 | 0 | .8 |
| 1K (CT) | 12 | 25 | 6 | 3.5 | 90K (CT) | 600 (CT) | 33 | 0 | .8 |
| 1K (CT) | 50 | 14 | 6 | 3.5 | 95K (CT) | 600 (CT) | 34 | 0 | .8 |
| 1.2K (CT) | 3.2 | 26 | 6 | 3.5 | 95K (CT) | 1.2K (CT) | 35 | 0 | .8 |
| 1.2K (CT) | 12 | 5 | 6 | 3.5 | 50K (CT) | 6 (CT) | 36 | 0 | .6 |
| 1.2K (CT) | 50 | 27 | 6 | 3.5 | 50K (CT) | 500 (CT) | 37 | 0 | .5 |
| 1.2K (CT) | 600 | 6 | 6 | 3.5 | 50K (CT) | 1.2K (CT) | 38 | 0 | .5 |

CT = Center Tap. SP = Split Winding.

FREED TRANSFORMER COMPANY, INC.

MINIATURE AUDIO TRANSFORMERS

These high quality, miniature transformers feature hermetically sealing for maximum protection from moisture penetration with subsequent electrolysis and corrosion of fine wires. While primarily intended for non-military equipment, these units are constructed in accordance with MIL-T-27A Specifications.

Frequency response: ± 2 DB 30-20,000 CPS.

* ± 2 DB 200-10,000 CPS.

CASE DIMENSIONS

DM-20 CASE



Height: $1\frac{1}{16}$ "
 Dia.: $\frac{15}{16}$ "
 Mtg. Cen.: $1\frac{1}{8}$ " to $1\frac{1}{32}$ "
 Mtg. 2 holes: .166 x .120
 Flange Lgth.: $1\frac{13}{32}$ "
 Flange D.: .975"

| Catalog No. | Application | MIL Type | Impedance Level Ohms | | Max. Power Level DBM | Ratio | Equivalent Shielding D.B. | Max. Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number | |
|-------------|---|-----------|---|--------------|----------------------|--------|---------------------------|-----------------------------|--------------------|-------------|-------|
| | | | Primary | Secondary | | | | | | | |
| PMA 1 | Line or microphone to single or push-pull grids. | TF4RX10YY | 50/200/500 | 60,000 C.T. | +8 | 1:1.1 | | 0 | 0 | DM-20 | |
| PMA 2 | Dynamic microphone or speaker voice coil to single or P.P. grid. | TF4RX10YY | 4/8 | 60,000 C.T. | +8 | 1:86.6 | | 0 | 0 | DM-20 | |
| PMA 3 | Line or microphone to single or push-pull grids. Magnetically shielded. | TF4RX10YY | 50/200/500 | 60,000 C.T. | +8 | 1:1.1 | 30 | 0 | 0 | DM-20 | |
| PMA 4 | Single triode plate to single or push-pull grids. | TF4RX10YY | 15,000 | 60,000 C.T. | +8 | 1:2 | | 0 | 0 | DM-20 | |
| PMA 5* | Single triode plate to push-pull grids. | TF4RX12YY | 15,000 | 60,000 C.T. | +8 | 1:2 | | 2 | 2 | DM-20 | |
| PMA 6 | Single triode plate to multiple line. | TF4RX16YY | 15,000 | 50/200/500 | +8 | 5.48:1 | | 0 | 0 | DM-20 | |
| PMA 7* | Single triode plate to multiple line. | TF4RX12YY | 15,000 | 50/200/500 | +8 | 5.48:1 | | 2 | 2 | DM-20 | |
| PMA 8 | Push-pull triode plates to multiple line. | TF4RX12YY | 30,000 C.T. | 50/200/500 | +8 | 7.75:1 | | 2 | 0.25 | DM-20 | |
| PMA 9 | Crystal mike or pickup to multiple line. | TF4RX16YY | 60,000 C.T. | 50/200/500 | +8 | 11:1 | | 0 | 0 | DM-20 | |
| PMA 10 | Mixing or matching. | TF4RX16YY | 50/200 | 50/200/500 | +8 | 1:1.50 | | 0 | 0 | DM-20 | |
| PMA 11 | Parallel Feed Reactor. | TF4RX20YY | 40 hy, 3 ma dc, 3500 ohms d. c. resistance. | | | | | | | | DM-20 |
| PMA 12 | Microphone or line to grid. | TF4RX10YY | 50/200/500 C.T. | 60,000 C.T. | +5 | 1.11 | | 0 | 0 | DM-20 | |
| PMA 13 | Mixing and matching. | TF4RX16YY | 150/600 | 600 C.T. | +8 | 1.1 | | 0 | 0 | DM-20 | |
| PMA 14 | Single triode plate to push-pull grids. | TF4RX15YY | 15,000 | 95,000 Split | +5 | 1:2.5 | | 0 | 0 | DM-20 | |
| PMA 15* | Single triode plate to push-pull grids. | TF4RX15YY | 15,000 | 94,000 Split | 15 | 1:2.4 | | 4 | 4 | DM-20 | |

FREED TRANSFORMER COMPANY, INC.

PROFESSIONAL GRADE COMPONENTS

This group of components has been designed for use in high fidelity and professional equipment and for public address service. Freed has developed this series of units employing the latest design techniques and the best commercially available materials. Except for units carrying unbalanced direct current the frequency response is ± 1 DB from 30 to 15,000 cps. All units feature excellent performance characteristics combined with minimum size and weight.

All units are vacuum varnished and then potted in compound to insure long life and trouble free performance.

Professional Grade components are supplied cased. Upon request these units can be supplied open or in shell type construction.

All cased Professional Grade Components supplied with terminals meet "EIA" standards.

Transformers PGA 1 through PGA 10 are supplied in hermetically sealed cases.

INPUT TRANSFORMERS

Frequency Response 30-15,000 C.P.S. ± 1.0 DB

CASE DIMENSIONS



DM-01B CASE

Height: $2\frac{1}{4}$ "
 Width: $1\frac{1}{2}$ "
 Depth: $1\frac{1}{2}$ "
 Mtg. Cen.: $1\frac{1}{16}$ " x $1\frac{1}{16}$ "
 Studs: 2 6-32
 Knockout: $1\frac{3}{8}$ " dia.

| Catalog No. | Application | Impedance Level Ohms | | Maximum Power Level DBM | Ratio | Equivalent Shielding D.B. | Max. Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|--|----------------------|-------------------|-------------------------|--------|---------------------------|-----------------------------|--------------------|-------------|
| | | Primary | Secondary | | | | | | |
| PGA 1 | Universal 500 ohm line to single grid. | U-500 | 50,000 | +12 | 1:10 | 50 | 0 | 0 | DM-01A |
| PGA 2 | Universal 500 ohm line to push-pull grids. | U-500 | 60,000 split | +12 | 1:11 | 50 | 0 | 0 | DM-01B |
| PGA 3 | Universal 500 ohm line to push-pull grids. | U-500 | 100,000 split | +12 | 1:14.1 | 50 | 0 | 0 | DM-01C |
| PGA 4 | Bridging line to single grid. | 10,000 | 60,000 | +12 | 1:2.45 | 50 | 0 | 0 | DM-01C |
| PGA 5 | Bridging line to push-pull grids. | 10,000 | 60,000 center tap | +12 | 1:2.45 | 50 | 0 | 0 | DM-01C |
| PGA 6 | Low level line matching. | U-500 | U-500 | +18 | 1:1 | 50 | 0 | 0 | DM-01C |

LOW LEVEL OUTPUT AND MIXING TRANSFORMERS

Frequency Response 30-15 000 C.P.S. ± 1.0 DB

| Catalog No. | Application | Impedance Level Ohms | | Maximum Power Level DBM | Ratio | Max. Pri. D.C. Per Side Ma. | D.C. Unbalance Ma. | Case Number |
|-------------|--|----------------------|-----------|-------------------------|--------|-----------------------------|--------------------|-------------|
| | | Primary | Secondary | | | | | |
| PGA 7 | Single triode plate to Universal 500 ohm line. Shunt feed. | 15,000 | U500 | +18 | 5.48:1 | 0 | 0 | DM-01A |
| PGA 8 | Single triode plate to Universal 500 ohm line. | 15,000 | U500 | +18 | 5.48:1 | 8 | 8 | DM-01A |
| PGA 9 | Push-pull triode plates to Universal 500 ohm | 20,000 CT | U500 | +30 | 6.32:1 | 8 | 0.5 | DM-01A |
| PGA 10 | Low level line matching. | U500 | U500 | +18 | 1.1 | 0 | 0 | DM-01A |

U-500 IMPEDANCES IN OHMS: 50, 125, 200 CT, 250, 330, 500 CT. 125 and 500 ohms can be used for 150 and 600 ohms.

DRIVER TRANSFORMERS

Frequency Response 30-15,000 C.P.S. ± 1.0 DB

| Catalog No. | Application | Primary Impedance Ohms | Turn Ratio Pri: $\frac{1}{2}$ Sec. | Max. Level DBM | Max. Pri. D.C. Per Side Ma. | Max. D.C. Unbalance Ma. | Case Number |
|-------------|--|------------------------|------------------------------------|----------------|-----------------------------|-------------------------|-------------|
| PGA 11 | Universal 500 ohm line to push-pull grids. | U500 | 1:1 | +40 | 0 | 0 | DC-2A |
| PGA 12 | Push-pull 6C4, 6SN7 triodes to push-pull 2A3, 6L6 grids. | 20,000 C.T. | 3.0:1 | +30 | 10 | 1 | DC-1A |
| PGA 13 | Push-pull 2A3, 6B4, 6A5G to push-pull 809, TZ-40, 4/125A | 5,000 C.T. | 3.2:1 | +40 | 50 | 5 | DC-2A |

All units supplied with leads.

FREED TRANSFORMER COMPANY, INC.

PROFESSIONAL GRADE COMPONENTS

HIGH LEVEL OUTPUT TRANSFORMERS

Frequency Response 30-15,000 C.P.S. ±1.0 DB

CASE DIMENSIONS



DC-1A CASE

Height: 2 1/2"
Width: 2 1/16"
Depth: 1 3/16"
Mtg. Cen.: 1 1/2" x 1 1/4"
Studs: 4 8-32
Knockout: 1 1/4" dia.

DC-2A CASE

Height: 3"
Width: 2 5/8"
Depth: 2 1/4"
Mtg. Cen.: 2" x 1 3/4"
Studs: 4 8-32
Knockout: 1 1/2" x 1 3/8"

DC-2B CASE

Height: 3 1/2"
Width: 2 5/8"
Depth: 2 1/4"
Mtg. Cen.: 2" x 1 3/4"
Studs: 4 8-32
Knockout: 1 1/2" x 1 3/8"

DC-4A CASE

Height: 3 3/4"
Width: 3 1/8"
Depth: 3"
Mtg. Cen.: 2 1/2" x 2 1/2"
Studs: 4 10-32
Knockout: 2" x 1 3/4"

DC-5A CASE

Height: 3 7/8"
Width: 4 1/8"
Depth: 3 1/2"
Mtg. Cen.: 3 1/8" x 2 5/8"
Studs: 4 10-32
Knockout: 2 1/2" x 2"

DC-6A CASE

Height: 4 7/8"
Width: 5"
Depth: 4 1/8"
Mtg. Cen.: 3 3/4" x 3"
Studs: 4 10-32
Knockout: 3" x 2 1/2"

| Catalog No. | Application | Impedance Level | | Maximum Power Level | | Ratio | Max. Pri. D.C. Per Side Ma | DC Unbalance Ma | Case Number |
|-------------|--|-----------------|-----------|---------------------|-------|--------|----------------------------|-----------------|-------------|
| | | Primary Ohms | Secondary | DBM | Watts | | | | |
| PGA 14 | P.P. 6K6, 6AR5, 7B5 Class A to Universal voice coil. | 12,000 C.T. | U16 | +40 | 10 | 27.4:1 | 40 | 4 | DC-2B |
| PGA 15 | P.P. 6F6 Cl. AB ₂ , P.P. 6V6, 6AQ5, 7C5, Cl. AB ₁ , 6L6 or 5881 Triode to Universal voice coil. | 10,000 C.T. | U16 | +43 | 20 | 25:1 | 50 | 5 | DC-4A |
| PGA 16 | P.P. 6L6 Cl. AB ₂ , self bias to Universal 500 ohm line. | 9,000 | U500 | +44.8 | 30 | 4.23:1 | 50 | 5 | DC-4A |
| PGA 17 | As above to Universal voice coil. | 9,000 | U16 | +44.8 | 30 | 23.7:1 | 50 | 5 | DC-4A |
| PGA 18 | P.P. 6N7 Cl. B, P.P. 6V6, 6AQ5, 7C5, Cl. AB ₁ to Universal voice coil. | 8,000 C.T. | U16 | +41.8 | 15 | 22.3:1 | 45 | 5 | DC-4A |
| PGA 19* | P.P. 6L6, fixed bias, Cl. AB ₁ , to Universal 500 ohm line. | 6,600 C.T. | U500 | +44.8 | 30 | 3.63:1 | 70 | 7 | DC-4A |
| PGA 20 | As above to Universal voice coil. | 6,600 C.T. | U16 | +44.8 | 30 | 20.3:1 | 70 | 7 | DC-4A |
| PGA 21 | P.P. 6L6 Cl. A, P.P. 2A3, 6A5G, 6B4 self bias P.P. Par. 6V6 Cl. AB ₁ to Universal voice coil. | 5,000 C.T. | U16 | +43 | 20 | 17.7:1 | 80 | 8 | DC-4A |
| PGA 22 | P.P. Par 6L6 Cl. AB ₁ , self bias P. P. 6L6 Cl. AB ₂ fixed bias PP807 Cl. AB ₂ to Universal 500 ohm line. | 4000 C.T. | U500 | +47 | 50 | 2.83:1 | 100 | 10 | DC-5A |
| PGA 23 | As above to Universal voice coil. | 4000 C.T. | U16 | +47 | 50 | 15.8:1 | 100 | 10 | DC-5A |
| PGA 24 | P.P. 6A5G, 6B4, 2A3, fixed bias Universal voice coil. | 3000 C.T. | U16 | +41.8 | 15 | 13.7:1 | 75 | 7.5 | DC-4A |
| PGA 25 | P.P. Par. 807 Cl. AB ₂ to Universal 500 ohm line. | 2100 C.T. | U500 | +51.8 | 150 | 2.05:1 | 240 | 12 | DC-6A |
| PGA 26 | P.P. Par 2A3, 6A5G, fixed bias 6B4, 300A Cl. AB ₁ , P.P. Par 6L6 Cl. A to Universal 500 ohm line. | 1500 C.T. | U500 | +44.8 | 30 | 1.73:1 | 180 | 15 | DC-4A |
| PGA 27 | As above to Universal voice coil. | 1500 C.T. | U16 | +44.8 | 30 | 9.7:1 | 150 | 15 | DC-4A |
| PGA 28 | Matching line to Universal voice coil. | U500 | U16 | +44.8 | 30 | 5.6:1 | 0 | 0 | DC-4A |
| PGA 29 | Matching line to Universal voice coil. | U500 | U16 | +47 | 50 | 5.6:1 | 0 | 0 | DC-5A |
| PGA 30 | Matching line to Universal voice coil. | U500 | U16 | +50 | 100 | 5.6:1 | 0 | 0 | DC-6A |

*Available with taps to apply screen feedback.

U-16 IMPEDANCES IN OHMS:
2, 4, 8, 12, 16

U-500 IMPEDANCES IN OHMS:

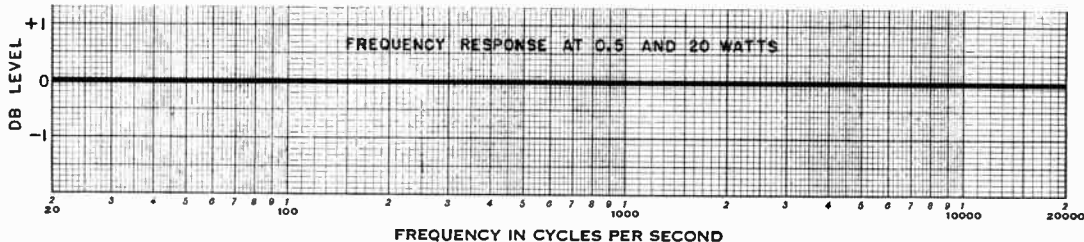
50, 125, 200 C.T., 250, 330, 500 C.T., 125 and 500 ohms can be used for 150 and 600 ohms.

*PGA 28, 29 & 30 supplied with terminals, all other units with leads.

A 70 volts level can be obtained for the following impedances:

500 ohms — 10 watts + 40 DBM
330 ohms — 15 watts + 42 DBM
250 ohms — 20 watts + 43 DBM
200 ohms — 25 watts + 44 DBM
125 ohms — 40 watts + 46 DBM
50 ohms — 100 watts + 50 DBM

NEW CIRCUIT REVISES WILLIAMSON HI-FIDELITY AMPLIFIER FOR IMPROVED PERFORMANCE



FREED supplies the following parts from stock.

- Frequency response: .1DB from 20 to 30,000 cps. at 20W.
- Harmonic distortion: 0.4% from 20 to 30,000 cps. at 20W.
- Two section L-C filter for improved stable performance.
- 20 Watt output connected as Williamson amplifier.
- 10 Watt output connected as ultra linear amplifier.

| Catalog No. | Application | Rating | Case No. |
|-------------|----------------|--|----------|
| KA-10 | output transf. | Prim: 10,000 Ω ct. Sec. 16/8 Ω | VS-506 |
| KC-10 | filter reactor | 12Hy at 165MA, RDC 180 Ω | VS-304 |
| KC-11 | filter reactor | 20Hy at 30MA, RDC 1,250 Ω | CH-40 |
| KP-10 | power transf. | Pri: 115V 60cps; Sec. 1: 1100 Vct at 150MA, Sec. 2: 6.3Vct at 4A; Sec. 3: 5V at 3A. | VS-606 |

FREED TRANSFORMER COMPANY, INC.

CASE DIMENSIONS

DM-01 CASE



Height: 2"
Width: 4 1/2"
Depth: 1 1/8"
Mtg. Cen.: 1 1/16" x 1 1/16"
Studs: 4 6-32

DC CASE STYLE



DC-1A
Height: 2 1/2"
Width: 2 1/16"
Depth: 1 1/16"
Mtg. Cen.: 1 1/2" x 1 1/4"
Studs: 4 8-32

DC-2A
Height: 3"
Width: 2 5/8"
Depth: 2 1/4"
Mtg. Cen.: 2" x 1 3/4"
Studs: 4 8-32

DC-2B
Height: 3 1/2"
Width: 2 5/8"
Depth: 2 1/4"
Mtg. Cen.: 2" x 1 3/4"
Studs: 4 8-32

DC-4A
Height: 3 3/4"
Width: 3 1/8"
Depth: 3"
Mtg. Cen.: 2 1/8" x 2 1/2"
Studs: 4 8-32

DC-5A CASE
Height: 3 7/8"
Width: 4 1/4"
Depth: 3 1/2"
Mtg. Cen.: 3 3/8" x 2 5/8"
Studs: 4 10-32

DC-5B
Height: 4 1/2"
Width: 4 1/8"
Depth: 3 1/2"
Mtg. Cen.: 3 3/8" x 2 5/8"
Studs: 4 10-32

DC-6A CASE
Height: 4 7/8"
Width: 5"
Depth: 4 1/8"
Mtg. Cen.: 3 3/4" x 3"
Studs: 4 10-32

DC-7B CASE
Height: 6 3/4"
Width: 5 1/2"
Depth: 5"
Mtg. Cen.: 4 3/8" x 3 3/4"
Studs: 4 14-20

PROFESSIONAL GRADE COMPONENTS

FILTER REACTORS

Inductance measured at 50V, 60 cycles with rated direct current in the winding.

| Catalog No. | Inductance in Henries | Rated Current D.C. Ma. | D.C. Resistance Ohms | Dielectric Test Voltage VRMS | Case Number |
|-------------|-----------------------|------------------------|----------------------|------------------------------|-------------|
| PGC 1 | 40 | 15 | 2000 | 1000 | DM-01 |
| PGC 2 | 12 | 40 | 400 | 1000 | DC-1A |
| PGC 3 | 8 | 50 | 300 | 1000 | DC-1A |
| PGC 4 | 20 | 50 | 425 | 2500 | DC-2A |
| PGC 5 | 10 | 70 | 250 | 2500 | DC-2A |
| PGC 6 | 6 | 100 | 160 | 2500 | DC-2A |
| PGC 7 | 6 | 150 | 115 | 2500 | DC-2B |
| PGC 8 | 10 | 150 | 160 | 2500 | DC-4A |
| PGC 9 | 5.5 | 200 | 95 | 2500 | DC-4A |
| PGC 10 | 10 | 200 | 150 | 2500 | DC-4A |
| PGC 11 | 10 | 250 | 135 | 2500 | DC-5B |
| PGC 12 | 8 | 300 | 95 | 2500 | DC-5B |
| PGC 13 | 7 | 400 | 60 | 2500 | DC-5B |
| | | PARALLEL FEED | AUDIO CHOKES | | |
| PGC 14 | 100 | 10 | 3500 | 1000 | DM-01 |
| PGC 15 | 30 | 50 | 650 | 1500 | DC-2A |
| PGC 16 | 400 | 1 | 6000 | 1000 | DM-01 |

SWINGING INPUT REACTORS

| Catalog No. | Inductance in Henries * | Rated Current D.C. Ma. | D.C. Resistance Ohms | Dielectric Test Voltage VRMS | Case Number |
|-------------|-------------------------|------------------------|----------------------|------------------------------|-------------|
| PGC 17 | 5-20 | 150 | 160 | 1500 | DC-4A |
| PGC 18 | 5-20 | 250 | 135 | 1500 | DC-5B |
| PGC 19 | 3-15 | 300 | 95 | 1500 | DC-5B |
| PGC 20 | 3-15 | 400 | 60 | 1500 | DC-5B |

* Inductance values for 100% and 10% of rated Direct Current.

POWER TRANSFORMERS

ALL PRIMARIES ARE FOR 115V., 50/60 c.p.s.

Temperature rises range from 45° to 50°C.

| Catalog No. | Py | V _p | Hi Volt | Choke Input D.C.V. D.C. Ma | Cond. Input D.C.V. D.C. Ma. | Bias Tap. | Rectifier | Fil. No. 1 | Fil. No. 2 | Fil. No. 3 | Case No. |
|-------------|-----|----------------|------------|---|-----------------------------|-----------|------------|-------------|-------------|-------------|----------|
| PGP 1 | 15 | | 440V C.T. | Low flux density, hum-bucking. For Pre-amplifier service. | 270 15 | | 6X4 | 6.3VCT@0.6A | 6.3V @ 0.3A | | DC-2B |
| PGP 2 | 30 | | 550V C.T. | Low flux density, hum-bucking. For Pre-amplifier service. | 310 35 | | 6X4 | 6.3VCT@0.6A | 6.3VCT@0.9A | | DC-4A |
| PGP 3 | 45 | | 500V C.T. | | 270 40 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 2A | | DC-4A |
| PGP 4 | 57 | | 600V C.T. | | 330 50 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 2.5A | | DC-4A |
| PGP 5 | 64 | | 650V C.T. | | 370 50 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 3A | | DC-4A |
| PGP 6 | 73 | | 600V C.T. | | 320 70 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 3A | | DC-4A |
| PGP 7 | 110 | | 650V C.T. | 225 140 | 330 100 | | 5Y3, 5U4 | 5V @ 3A | 6.3V @ 5A | | DC-5B |
| PGP 8 | 76 | | 700V C.T. | 260 100 | 385 70 | | 5Y3 | 5V @ 2A | 6.3V @ 2.5A | | DC-5A |
| PGP 9 | 108 | | 700V C.T. | 250 125 | 370 90 | | 5Y3, 5U4 | 5V @ 3A | 6.3V @ 5A | | DC-5B |
| PGP 10 | 127 | | 700V C.T. | 260 170 | 350 120 | | 5U4 | 5V @ 3A | 6.3V @ 5A | | DC-5B |
| PGP 11 | 146 | | 700V C.T. | 260 210 | 350 150 | | 5U4 | 5V @ 3A | 6.3V @ 5A | 6.3V @ 1A | DC-6A |
| PGP 12 | 207 | | 800V C.T. | 295 280 | 400 200 | | 5U4, 2-5Y3 | 5V @ 4A | 6.3V @ 6A | | DC-6A |
| PGP 13 | 225 | | 800V C.T. | 295 280 | 400 200 | 80 | 5U4, 2-5Y3 | 5V @ 4A | 6.3V @ 6A | 5/6.3V @ 2A | DC-6A |
| PGP 14 | 268 | | 840V C.T. | 330 350 | 450 250 | 80 | 2-5U4 | 5V @ 6A | 6.3V @ 6A | 5/6.3V @ 2A | DC-6A |
| PGP 15 | 320 | | 900V C.T. | 340 420 | 490 300 | 80 | 2-5U4 | 5V @ 6A | 6.3V @ 6A | 5/6.3V @ 2A | DC-7B |
| PGP 16 | 127 | | 900V C.T. | 360 150 | | | 5U4 | 5V @ 3A | 6.3V @ 5A | | DC-6A |
| PGP 17 | 150 | | 900V C.T. | 350 200 | | | 5U4 | 5V @ 3A | 6.3V @ 5A | | DC-6A |
| PGP 18 | 203 | | 1100V C.T. | 400 250 | | | 5R4GY | 5V @ 3A | 6.3V @ 5A | | DC-6A |
| PGP 19 | 248 | | 1100V C.T. | 420 300 | | | 2-5R4GY | 5V @ 4A | 6.3V @ 7A | | DC-6A |
| PGP 20 | 310 | | 1280V C.T. | 480 350 | | | 2-5R4GY | 5V @ 4A | 6.3V @ 7A | | DC-7B |


All units supplied with leads.

FREED TRANSFORMER COMPANY, INC.

PQC HIGH Q REACTORS

PQC-Reactors are low-priced High Q components designed for use in selective circuits such as wave filters, wave traps, and noise suppressors.

CASE DIMENSIONS
DM-02 CASE

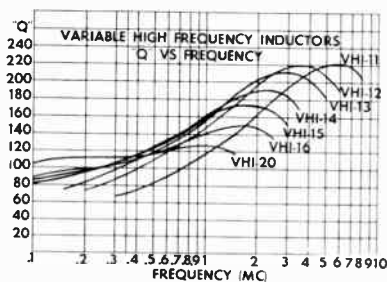
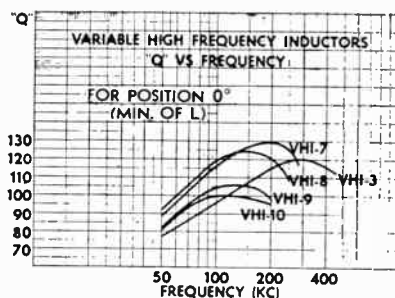
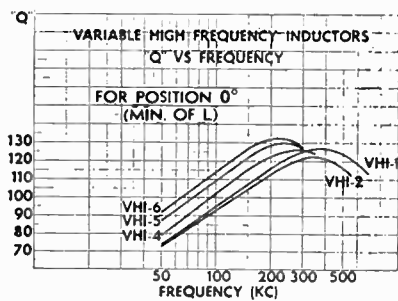


Height: 1 21/32"
Width: 1 21/32"
Depth: 1 13/32"
Flange L: 2 3/8"
Mtg. Cen.: 2"


| Catalog No. | Application | Rated Ind. in Henries | Q | Tuning Capacitor (MF) | Case Size |
|-------------|------------------------------------|-----------------------|-----------|-----------------------|-----------|
| PQC 1 | 60 cps resonant trap | 14.00 | 10 | .5 | DM-02 |
| PQC 2 | 400 cps resonant trap | 1.58 | 15 | .1 | DM-02 |
| PQC 3 | 1000 cps resonant trap | 1.00 | 20 | .025 | DM-02 |
| PQC 4 | Dynamic noise suppression inductor | 2.40 | 20 @ 4 KC | | DM-02 |
| PQC 5 | Dynamic noise suppression inductor | 2.00 | 15 @ 4 KC | | DM-02 |
| PQC 6 | Dynamic noise suppression inductor | 1.30 | 15 @ 4 KC | | DM-02 |
| PQC 7 | Dynamic noise suppression inductor | .80 | 15 @ 4 KC | | DM-02 |
| PQC 8 | Dynamic noise suppression inductor | .60 | 15 @ 4 KC | | DM-02 |
| PQC 9 | Dynamic noise suppression inductor | .40 | 15 @ 4 KC | | DM-02 |

MINIATURE VARIABLE HIGH FREQUENCY INDUCTORS

- Continuous variation of inductance
- Q practically constant over whole range of variation
- Hermetically sealed
- Inductances other than those listed can be supplied to special order



CASE DIMENSIONS
VI-1



Height: 1"
Diameter: 3/4"
2 Studs: 4-40
Mtg. Cen.: 3/8"

| Catalog No. | Test Freq. (MC) | Inductance | | Variations of Q | | RDC (Ω) ± 15% | Self Res. Freq. (MC) @ L Max. | Max. Non Destruct Current (MA) | Case Size |
|-------------|-----------------|------------|----------|-----------------|----------|---------------|-------------------------------|--------------------------------|-----------|
| | | Min. | Max. | @ L Min. | @ L Max. | | | | |
| VHI-1 | .1 | 1.1 MH | 1.75 MH | 93.5 | 100.5 | .75 | 2.2 | 250 | VI-1 |
| VHI-2 | .1 | 1.7 MH | 2.5 MH | 94.5 | 96.5 | 1.1 | 1.9 | 200 | VI-1 |
| VHI-3 | .1 | 2.3 MH | 3.7 MH | 94.5 | 97.2 | 1.4 | 1.6 | 200 | VI-1 |
| VHI-4 | .1 | 3. MH | 4.5 MH | 100.7 | 101.7 | 1.9 | 1.4 | 160 | VI-1 |
| VHI-5 | .1 | 4. MH | 5.7 MH | 107. | 108. | 2.2 | 1.3 | 160 | VI-1 |
| VHI-6 | .1 | 5.5 MH | 7.5 MH | 112. | 119. | 3.1 | 1. | 130 | VI-1 |
| VHI-7 | .1 | 7. MH | 10.5 MH | 116. | 120.5 | 4.5 | .9 | 100 | VI-1 |
| VHI-8 | .1 | 10. MH | 15. MH | 106. | 109. | 6.6 | .85 | 80 | VI-1 |
| VHI-9 | .1 | 14.5 MH | 20.5 MH | 101. | 101.5 | 9.2 | .6 | 60 | VI-1 |
| VHI-10 | .1 | 20. MH | 30. MH | 105. | 115. | 13.7 | .55 | 50 | VI-1 |
| VHI-11 | 1. | 9.50 μH | 11.0 μH | 114. | 104. | .24 | >10 | 150 | VI-1 |
| VHI-12 | 1. | 14.0 μH | 15.6 μH | 127. | 113. | .29 | >10 | 150 | VI-1 |
| VHI-13 | 1. | 24.5 μH | 28.0 μH | 156. | 145. | .37 | >10 | 150 | VI-1 |
| VHI-14 | 1. | 47.0 μH | 52.0 μH | 195. | 178. | .46 | >10 | 150 | VI-1 |
| VHI-15 | .5 | 71.0 μH | 79.5 μH | 168. | 152. | .56 | >10 | 150 | VI-1 |
| VHI-16 | .5 | 94.0 μH | 105.0 μH | 173. | 165. | .64 | >10 | 150 | VI-1 |
| VHI-17 | .5 | 145.0 μH | 165.0 μH | 222. | 200. | .75 | 9.7 | 150 | VI-1 |
| VHI-18 | .5 | 191.0 μH | 218.0 μH | 229. | 204. | .9 | 9.4 | 150 | VI-1 |
| VHI-19 | .5 | 234.0 μH | 265.0 μH | 238. | 216. | 1.0 | 8.3 | 150 | VI-1 |
| VHI-20 | .5 | 279.0 μH | 318.0 μH | 236. | 219. | 1.1 | 7. | 150 | VI-1 |
| VHI-21 | .5 | 38.0 μH | 416.0 μH | 230. | 216. | 1.3 | 6.5 | 150 | VI-1 |
| VHI-22 | .5 | 48.0 μH | 545.0 μH | 237. | 220. | 1.5 | 7. | 150 | VI-1 |

FREED TRANSFORMER COMPANY, INC.

HIGH "Q" REACTORS


QGC — are hermetically sealed, MIL-T-27A, Grade 4, Class R, High Q Reactors for low audio frequency application with an excellent inductance stability with variations of A.C. and D.C. currents, frequencies and temperatures.

SPECIAL REACTORS:

- (1) with a center tap
- (2) with a split winding
- (3) with inductances other than those listed can be supplied.


| Catalog No. | Ind. H ($\pm 2\%$) | Ω/H Max. | Max. Norm DC* | Max. Norm AC** | Self Res. Freq. $\pm 25\%$ | Case |
|-------------|----------------------|-----------------|---------------|----------------|----------------------------|-------|
| QGC-1 | 100 | | | | | |
| QGC-2 | 75 | | | | | |
| QGC-3 | 50 | | | | | |
| QGC-4 | 25 | 20 | 85 | 0.58 | $F_0 = 22/\sqrt{L_H}$ | DC-2A |
| QGC-5 | 10 | | | | | |
| QGC-6 | 5 | | | | | |
| QGC-7 | 1 | | | | | |
| QGC-8 | 75 | | | | | |
| QGC-9 | 50 | | | | | |
| QGC-10 | 25 | | | | | |
| QGC-11 | 10 | 55 | 60 | 0.5 | $F_0 = 7.2/\sqrt{L_H}$ | AJ |
| QGC-12 | 5 | | | | | |
| QGC-13 | 1 | | | | | |
| QGC-14 | 50 | | | | | |
| QGC-15 | 25 | | | | | |
| QGC-16 | 10 | 70 | 40 | 0.25 | $F_0 = 35/\sqrt{L_H}$ | AH |
| QGC-17 | 5 | | | | | |
| QGC-18 | 1 | | | | | |
| QGC-19 | 10 | | | | | |
| QGC-20 | 7.5 | 110 | | 0.15 | $F_0 = 34/\sqrt{L_H}$ | DM-20 |
| QGC-21 | 5 | | 15 | | | |
| QGC-22 | 2.5 | | | | | |
| QGC-23 | 1 | | | | | |
| QGC-24 | .5 | | | | | |
| QGC-25 | 5 | | | | | |
| QGC-26 | 2.5 | | | | | |
| QGC-27 | 1 | | | | | |
| QGC-28 | .75 | | 13 | 0.11 | $F_0 = 35/\sqrt{L_H}$ | DM-30 |
| QGC-29 | .5 | | | | | |
| QGC-30 | .2 | 250 | | | | |
| QGC-31 | .1 | | | | | |
| QGC-32 | 2 | | | | | |
| QGC-33 | 1.5 | | | | | |
| QGC-34 | 1 | | | | | |
| QGC-35 | .75 | | | | | |
| QGC-36 | .5 | | | | | |
| QGC-37 | .25 | 500 | 10 | 0.04 | $F_0 = 45/\sqrt{L_H}$ | DM-40 |
| QGC-38 | .1 | | | | | |
| QGC-39 | .075 | | | | | |
| QGC-40 | .05 | | | | | |
| QGC-41 | .025 | | | | | |
| QGC-42 | .01 | | | | | |

DC - 2A CASE




Height: 3"
 Width: 2 5/8"
 Depth: 2 1/4"
 Mtg. Cen.: 2" x 1 3/4"
 Studs: 4 8-32
 Knockout: 1"

DM - 20 CASE




Height: 1 9/16"
 Diameter: 1 5/16"
 Flange L: 1 13/32"
 Flange D: 0.975"
 Mtg. Cen.: 1 1/8" x 1 7/32"
 2 Holes: .147" wd.
 Knockouts: .875"

AJ CASE




Height: 2 3/8"
 Width: 1 5/8"
 Depth: 1 5/8"
 Mtg. Cen.: 1 1/16" x 1 1/16"
 Studs: 4 6-32

DM - 30 CASE



Height: 2 9/32"
 Diameter: 1 5/16"
 Flange L: 1 13/32"
 Flange D: 0.975"
 Mtg. Cen.: 1 1/8" x 1 7/32"
 2 Holes: .147" wd.
 Knockouts: .875"

AH CASE



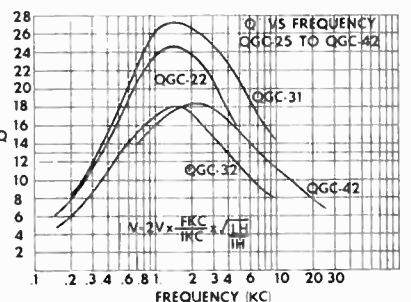
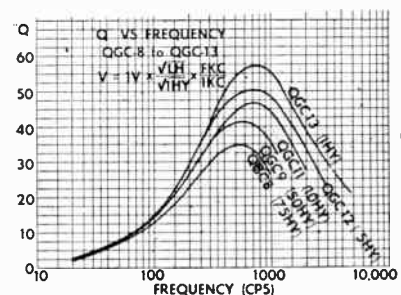
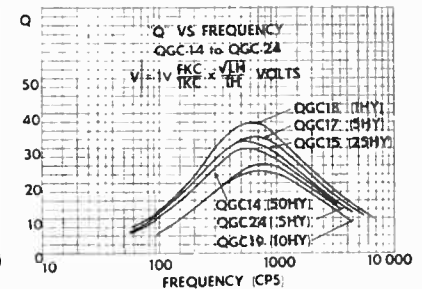
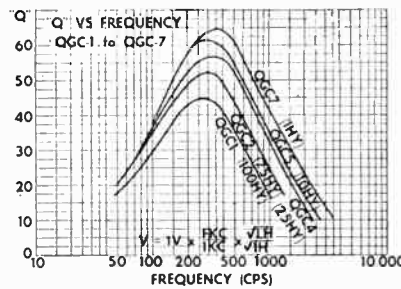
Height: 1 3/4"
 Width: 1 5/16"
 Depth: 1 5/16"
 Mtg. Cen.: 1 1/16" x 1 1/16"
 Studs: 4 6-32

DM - 40 CASE



Height: 2 1/32"
 Diameter: 9/16"
 Pig Tails

*Max. Norm D.C. = I D.C. (MA) $\sqrt{L_H}$ } at which the inductance will decrease by 20%.
 **Max. Norm. A.C. = $\sqrt{V/F} \sim \sqrt{L_H}$



FREED TRANSFORMER COMPANY, INC.

CASE DIMENSIONS



AJ CASE

Height: 2³/₈"
 Width: 1⁵/₈"
 Depth: 1⁵/₈"
 Mtg. Cen.: 1³/₁₆" x 1³/₁₆"
 Studs: 4 6-32
 Cut Out: 1¹/₄" D



EB CASE

Height: 2¹/₁₆"
 Width: 1¹/₁₆"
 Depth: 1¹/₁₆"
 Mtg. Cen.: 1³/₁₆" x 1¹/₄"
 Studs: 4 6-32

FB CASE

Height: 2¹/₁₆"
 Width: 2⁵/₁₆"
 Depth: 2¹/₁₆"
 Mtg. Cen.: 1¹/₁₆" x 1¹/₁₆"
 Studs: 4 6-32

GB CASE

Height: 2¹/₁₆"
 Width: 2³/₄"
 Depth: 2³/₄"
 Mtg. Cen.: 2¹/₈" x 1³/₄"
 Studs: 4 6-32

HA CASE

Height: 4¹/₄"
 Width: 2¹/₁₆"
 Depth: 2⁵/₈"
 Mtg. Cen.: 2¹/₆₄" x 1⁵/₆₄"
 Studs: 4 8-32

HB CASE

Height: 3³/₁₆"
 Width: 3¹/₁₆"
 Depth: 2⁵/₈"
 Mtg. Cen.: 2¹/₆₄" x 1⁵/₆₄"
 Studs: 4 8-32

JB CASE

Height: 3⁷/₈"
 Width: 3³/₁₆"
 Depth: 3¹/₁₆"
 Mtg. Cen.: 2⁵/₆₄" x 2¹/₈"
 Studs: 4 8-32

KB CASE

Height: 4³/₁₆"
 Width: 3¹/₁₆"
 Depth: 3³/₈"
 Mtg. Cen.: 3³/₁₆" x 2¹/₁₆"
 Studs: 4 10-32

LB CASE

Height: 4¹/₈"
 Width: 4⁵/₁₆"
 Depth: 3¹/₁₆"
 Mtg. Cen.: 3¹/₁₆" x 2¹/₁₆"
 Studs: 4 10-32

MB CASE

Height: 4¹/₁₆"
 Width: 4¹/₁₆"
 Depth: 4"
 Mtg. Cen.: 3¹/₁₆" x 3"
 Studs: 4 1/4-20

NB CASE

Height: 5¹/₂"
 Width: 5¹/₁₆"
 Depth: 4⁵/₁₆"
 Mtg. Cen.: 4¹/₁₆" x 3⁵/₁₆"
 Studs: 4 1/4-20

STANDARD MILITARY TRANSFORMERS

This group comprises audio and power units designed to meet MIL-T-27 A specifications. The functional characteristics of these transformers were established by the Armed Service Standardization Program. These units are supplied in standard MIL cases.

Transformers meeting MIL-T-27A specifications Grade 1 through 6 with temperature characteristics of Class S, T, or U can be supplied on special order.

Encapsulated units using either Epoxy-Resins or Fosterite can be supplied for Grade 2 and 5. Class U components can be supplied molded in special high temperature Freed resin.

STANDARD MILITARY AUDIO TRANSFORMERS

Frequency Response 300-10,000 C.P.S. ± 2 DB

| Catalog No. | Application | Type Designation | Impedance Level in Ohms | | Ratio | Max. Power Level DBM | Pri. D.C. Per Side in Ma | Max. D.C. unbalance | Case |
|-------------|---|------------------|-------------------------|-----------------------|----------------|----------------------|--------------------------|---------------------|------|
| | | | Primary | Secondary | | | | | |
| MGA 1 | Transformer, interstage, single or P.P. plates to single or P.P. grids. | TF4RX15AJ | 10,000 C.T. | 90,000 split and C.T. | 1:3 overall | +15 | 10 | 10 | AJ |
| MGA 2 | Transformer, matching 600 ohm line to voice coil. | TF4RX16AJ | 600 split | 4, 8, 16 | 6.12:1 overall | +33 | 0 | 0 | AJ |
| MGA 3 | Transformer, input, 600 ohm line to single or P.P. grids. | TF4RX10AJ | 600 split | 135,000 C.T. | 1:15 | +15 | 0 | 0 | AJ |
| MGA 4 | Transformer, matching, 600 ohm line to 600 ohm line. | TF4RX16AJ | 600 split | 600 split | 1:1 | +15 | 0 | 0 | AJ |
| MGA 5 | Transformer, output, single plate 7,600 ohm, 4,800 ohm to 600 ohm line. | TF4RX13AJ | 7,600 tap @ 4,800 | 600 split | 3.56:1 | +33 | 40 | 40 | AJ |
| MGA 6 | Transformer, output, single plate 7,600 ohm, 4,800 ohm to voice coil. | TF4RX13AJ | 7,600 tap @ 4,800 | 4, 8, 16 | 21.8:1 | +33 | 40 | 40 | AJ |
| MGA 7 | Transformer, output, single or P.P. plates to 600 ohm line. | TF4RX13AJ | 15,000 C.T. | 600 split | 5:1 | +33 | 10 | 10 | AJ |
| MGA 8 | Transformer, output, P.P. plates to 600 ohm line. | TF4RX13AJ | 24,000 C.T. | 600 split | 6.32:1 | +30 | 10 | 1 | AJ |
| MGA 9 | Transformer, output, P.P. plates to 600 ohm line. | TF4RX13AJ | 60,000 C.T. | 600 split | 10:1 | +27 | 10 | 1 | AJ |

STANDARD MILITARY POWER TRANSFORMERS

Primary 105/115/125V 60~

SINGLE PHASE 400 CPS, AND THREE PHASE 60 AND 400 CPS TRANSFORMERS CAN BE SUPPLIED ON SPECIAL ORDER.

| Catalog No. | MIL-T-27 Type Designation | Hi Volt. | D.C. Volts | D.C. Amps. | File No. 1 | File No. 2 | Case |
|-------------|---------------------------|-------------------|------------|------------|-------------|------------|------|
| MGP 1 | TF4RX03HA001 | 200/100/0/100/200 | 185 | .070 | 5/6.3V @ 2A | 6.3V @ 3A | HA |
| MGP 2 | TF4RX03JB002 | 650 C.T. | 260 | .070 | 5/6.3V @ 2A | 6.3V @ 4A | JB |
| MGP 3 | TF4RX03KB006 | 650 C.T. | 245 | .150 | 6.3V @ 5A | 5V @ 3A | KB |
| MGP 4 | TF4RX03LB003 | 800 C.T. | 318 | .175 | 5V @ 3A | 6.3V @ 8A | LB |
| MGP 5 | TF4RX03MB004 | 900 C.T. | 345 | .250 | 5V @ 3A | 6.3V @ 8A | MB |
| MGP 6 | TF4RX02KB001 | 700 C.T. | 255 | .250 | | | KB |
| MGP 7 | TF4RX02LB002 | 1100 C.T. | 419 | .250 | | | LB |
| MGP 8 | TF4RX02NB003 | 1600 C.T. | 640 | .250 | | | NB |

STANDARD MILITARY FILAMENT TRANSFORMERS

Primary 105/115/125V 60~

SINGLE PHASE 400 CPS, AND THREE PHASE 60 AND 400 CPS TRANSFORMERS CAN BE SUPPLIED ON SPECIAL ORDER

| Catalog No. | MIL-T-27 Type Designation | Secondary Volts | Secondary Current Amps | Secondary Test Volts RMS | Case |
|-------------|---------------------------|-----------------|------------------------|--------------------------|------|
| MGF 1 | TF4RX01EB002 | 2.5 | 3.0 | 2,500 | EB |
| MGF 2 | TF4RX01GB003 | 2.5 | 10.0 | 2,500 | GB |
| MGF 3 | TF4RX01FB004 | 5.0 | 3.0 | 2,500 | FB |
| MGF 4 | TF4RX01HB005 | 5.0 | 10.0 | 2,500 | HB |
| MGF 5 | TF4RX01FB006 | 6.3 | 2.0 | 2,500 | FB |
| MGF 6 | TF4RX01GB007 | 6.3 | 5.0 | 2,500 | GB |
| MGF 7 | TF4RX01JB008 | 6.3 | 10.0 | 2,500 | JB |
| MGF 8 | TF4RX01KB009 | 6.3 | 20.0 | 2,500 | KB |
| MGF 9 | TF4RX01JB012 | 2.5 | 10.0 | 10,000 | JB |
| MGF 10 | TF4RX01KB013 | 5.0 | 10.0 | 10,000 | KB |

*Standard Military Filament and Power Transformers are also available in Grade 4.

FREED TRANSFORMER COMPANY, INC.

CASE DIMENSIONS



DM-8 CASE

Height: 1 1/2"
Width: 1 3/8"
Flange D.: 1 1/4"



DM-01 CASE

Height: 2"
Width: 1 1/2"
Depth: 1 1/2"
Mtg. Cen.: 1 1/16" x 1 1/16"
Studs: 4 6-32
Knockout: 1 1/4" dia.



DM-20 CASE

Height: 1 9/16"
Diameter: 1 1/8"
Flange L.: 1 13/32"
Flange D.: 0.975"
Mtg. Cen.: 1 1/8" to 1 1/32"
2 Holes: .147 wide
Knockout: .875



DM-18 CASE

Height: 1"
Width: 2 1/4"
Depth: 1 1/8"
Mtg. Cen.: 9/16"
Studs: 2 6-32

MM-1

Length: 3/4"
Diameter: 1/2"

MM-2

Length: 23/32"
Width: 23/32"
Height: 1/2"

MM-3

Length: 1 1/4"
Width: 1 1/4"
Height: 1 1/2"
Mtg. Cen.: 1 1/2"
Mtg. Flange: 1 11/16"

MM-4

Length: 1 13/16"
Depth: 1 1/4"
Height: 1 1/2"
Mtg. Cen.: 2 1/8"
Mtg. Flange: 2 1/2"

MOLDED DIMENSIONS

MMO-1

Diameter: 1 1/8"
Thickness: 23/64"

MMO-2

Diameter: 1 1/8"
Thickness: 19/32"

HERMETICALLY SEALED PULSE TRANSFORMERS

Hermetically sealed Pulse Transformers for use in blocking oscillator, low level interstage coupling, and modulator output circuits. These components meet MIL-T-27 A specifications. The pulse transformers are designed for maximum power, efficiency, and optimum pulse performance. Balanced coil structures permit series or parallel connection of windings for turn ratios other than unity. Pulse characteristics, voltages and impedance levels will depend upon the interconnections made.

PULSE TRANSFORMERS

| Catalog No. | MIL Type | Blocking Osc. | Inter-stage Coupling | Low Power Output | Pulse Voltage Kilovolts | Pulse Duration Micro-seconds | Duty Rate | No. of Windings | Test Voltage KV, RMS | Characteristic Impedance Ohms | Case No. |
|-------------|-----------|---------------|----------------------|------------------|-------------------------|------------------------------|-----------|-----------------|----------------------|-------------------------------|----------|
| MPT-1 | TF4RX35YY | ✓ | ✓ | | 0.25/0.25/0.25 | 0.2-1.0 | .004 | 3 | 0.7 | 250 | DM-20 |
| MPT-2 | TF4RX35YY | ✓ | ✓ | | 0.25/0.25 | 0.2-1.0 | .004 | 2 | 0.7 | 250 | DM-20 |
| MPT-3 | TF4RX35YY | ✓ | ✓ | | 0.5/0.5/0.5 | 0.2-1.5 | .002 | 3 | 1.0 | 250 | DM-18 |
| MPT-4 | TF4RX35YY | ✓ | ✓ | | 0.5/0.5 | 0.2-1.5 | .002 | 2 | 1.0 | 250 | DM-18 |
| MPT-5 | TF4RX35YY | ✓ | ✓ | | 0.5/0.5/0.5 | 0.5-2.0 | .002 | 3 | 1.0 | 500 | DM-20 |
| MPT-6 | TF4RX35YY | ✓ | ✓ | | 0.5/0.5 | 0.5-2.0 | .002 | 2 | 1.0 | 500 | DM-20 |
| MPT-7 | TF4RX35YY | ✓ | ✓ | ✓ | 0.7/0.7/0.7 | 0.5-1.5 | .002 | 3 | 1.5 | 200 | DM-18 |
| MPT-8 | TF4RX35YY | ✓ | ✓ | ✓ | 0.7/0.7 | 0.5-1.5 | .002 | 2 | 1.5 | 200 | DM-18 |
| MPT-9 | TF4RX35YY | ✓ | ✓ | ✓ | 1.0/1.0/1.0 | 0.7-3.5 | .002 | 3 | 2.0 | 200 | DM-18 |
| MPT-10 | TF4RX35YY | ✓ | ✓ | ✓ | 1.0/1.0 | 0.7-3.5 | .002 | 2 | 2.0 | 200 | DM-18 |
| MPT-11 | TF4RX35YY | ✓ | ✓ | ✓ | 1.0/1.0/1.0 | 1.0-5.0 | .002 | 3 | 2.0 | 500 | DM-01 |
| MPT-12 | TF4RX35YY | ✓ | ✓ | ✓ | 0.15/0.15/0.3/0.3 | 0.2-1.0 | .004 | 4 | 0.7 | 700 | DM-8 |

ULTRA MINIATURE PULSE TRANSFORMERS

- Meet all requirements of MIL-T-27 A.
- Exceedingly small size.
- Negligible weight.
- Encapsulated or hermetically sealed.



MM-1



MM-2



MM-3
MM-4



MMO-1
MMO-2

| Catalog No. | MIL Type | Application | Pulse Vclts | Pulse Width usec | Rise time usec | Inductance | | PPS, Mcs | Turns Ratio | Zo ohms | Case Des. |
|-------------|-----------|------------------------------|-----------------|------------------|----------------|------------|-------------|----------|-------------|---------|-----------|
| | | | | | | Prim. uhy | Leakage uhy | | | | |
| EPT-1 | TF4RX31YY | Impedance matching | 20 | .07 | .03 | 125 | 12 | 2 | 1:1 | 200 | MM-1 |
| EPT-2 | TF4RX31YY | | 20 | .07 | .03 | 150 | 15 | 2 | 2:1 | 200 | MM-1 |
| EPT-3 | TF4RX31YY | | 20 | .07 | .03 | 160 | 15 | 2 | 3:1 | 100 | MM-1 |
| EPT-4 | TF4RX31YY | | 20 | .07 | .03 | 200 | 20 | 2 | 4:1 | 100 | MM-1 |
| EPT-5 | TF4RX31YY | Interstage coupling | 17 | .10 | .04 | 200 | 6 | 2 | 4:1 | 100 | MM-1 |
| EPT-6 | TF4RX31YY | | 15 | .10 | .04 | 200 | 5 | 2 | 5:1 | 100 | MM-1 |
| EPT-7 | TF4RX31YY | | 25 | .50 | .05 | 1,200 | 20 | 1 | 7:1:1 | | MM-1 |
| EPT-8 | TF4RX31YY | | 10 | 10 | .04 | 12,000 | 70 | .01 | 5:1 | | MM-2 |
| EPT-9 | TF4RX31YY | Blocking oscillator | 10 | 5 | .04 | 7,500 | 22 | .01 | 3:1 | 100 | MM-2 |
| EPT-11 | TF4RX35YY | | 100 | .25 | .02 | 200 | 2 | .012 | 1:1 | | MM-1 |
| EPT-12 | TF4RX35YY | | 50 | .33 | .07 | 240 | 2 | .002 | 1:1 | | MM-1 |
| EPT-13 | TF4RX35YY | | 40 | .5 | .07 | 6,000 | 15 | | 2:1 | | MM-2 |
| EPT-14 | TF4RX35YY | Memory core & Current driver | 15 | 6 | .1 | 16,000 | 15 | .0004 | 1:1.4 | | MM-2 |
| EPT-15 | TF4RX36YY | | 5 | 1.5 | .25 | 4,000 | 300 | | 5.5:1PP | 10 | MM-4 |
| EPT-16 | TF4RX36YY | | 2.5 | 2.4 | .2 | 2,800 | 200 | | 3.3:3.3:1PP | 6 | MM-4 |
| EPT-17 | TF4RX32YY | | 21 | 1.4 | .22 | 18,000 | 800 | .250 | 6:1 | 200 | MM-3 |
| EPT-18 | TF4RX32YY | Current transformer | 10 | 6 | .2 | 90,000 | 200 | .05 | 11:1 | 75 | MM-3 |
| EPT-19 | TF4RX36YY | | Pulse inversion | 22 | 1.7 | .25 | 55,000 | 300 | .05 | 6:1:1 | 400 | MM-3 |

When ordering encapsulated units add "M" to the catalog number.

FREED TRANSFORMER COMPANY, INC.

HERMETICALLY SEALED FILTER REACTORS

MEET MIL-T-27A SPECIFICATIONS



| Case | Height | Depth | Width | Mtg. Centers | Studs |
|------|--------|--------|--------|-----------------|-----------|
| AJ | 2 3/8" | 1 3/8" | 1 3/8" | 1 1/8" x 1 1/8" | 4 6-32 |
| EB | 2 3/8" | 1 3/8" | 1 1/4" | 1 3/8" x 1 3/8" | 4 6-32 |
| FA | 3 1/8" | 2 3/8" | 2 3/8" | 1 3/8" x 1 3/8" | 4 6-32 |
| GA | 3 3/8" | 2 3/8" | 2 3/8" | 2 3/8" x 1 3/8" | 4 6-32 |
| HB | 3 1/8" | 3 1/8" | 2 3/8" | 2 3/8" x 1 3/8" | 4 8-32 |
| JA | 3 3/8" | 3 3/8" | 4 3/8" | 2 3/8" x 2 3/8" | 4 8-32 |
| JB | 3 3/8" | 3 3/8" | 3 3/8" | 2 3/8" x 2 3/8" | 4 8-32 |
| KB | 4 3/8" | 3 3/8" | 3 1/4" | 3 x 2 3/8" | 4 10-32 |
| LA | 5 3/8" | 3 3/8" | 4 3/8" | 3 3/8" x 2 3/8" | 4 10-32 |
| LB | 4 3/8" | 3 3/8" | 4 3/8" | 3 3/8" x 2 3/8" | 4 10-32 |
| MB | 4 1/4" | 4 | 4 3/8" | 3 3/8" x 3 | 4 1/4"-20 |

| Catalog No. | MIL Type | Inductance Henry | Rel. Current DC Ma. | DC Res. Ohms | Test Volt Kilovolts | Case No. |
|-------------|-----------|------------------|---------------------|--------------|---------------------|----------|
| MGC 1 | TF4RX04AJ | 100 | 10 | 3,500 | 1. | AJ |
| MGC 2 | TF4RX04AJ | 4 | 50 | 230 | 1. | AJ |
| MGC 3 | TF4RX04EB | 10 | 50 | 325 | 1. | EB |
| MGC 4 | TF4RX04FA | 20 | 50 | 475 | 1.5 | FA |
| MGC 5 | TF4RX04FA | 30 | 50 | 650 | 1.5 | FA |
| MGC 6 | TF4RX04AJ | 3 | 75 | 175 | 1. | AJ |
| MGC 7 | TF4RX04EB | 6 | 75 | 235 | 1.5 | EB |
| MGC 8 | TF4RX04FA | 12 | 75 | 265 | 1.5 | FA |
| MGC 9 | TF4RX04EB | 3.5 | 100 | 145 | 1. | EB |
| MGC 10 | TF4RX04FA | 8 | 100 | 180 | 1.5 | FA |
| MGC 11 | TF4RX04GA | 12 | 100 | 190 | 2. | GA |
| MGC 12 | TF4RX04EB | 2 | 150 | 92 | 1.5 | EB |
| MGC 13 | TF4RX04FA | 4 | 150 | 115 | 1.5 | FA |
| MGC 14 | TF4RX04GA | 8 | 150 | 125 | 2. | GA |
| MGC 15 | TF4RX04JB | 11 | 150 | 120 | 2.5 | JB |
| MGC 16 | TF4RX04FA | 2.5 | 200 | 70 | 1.5 | FA |
| MGC 17 | TF4RX04GA | 4 | 200 | 80 | 2. | GA |
| MGC 18 | TF4RX04HB | 7 | 200 | 135 | 2. | HB |
| MGC 19 | TF4RX04JA | 10 | 200 | 125 | 2.5 | JA |
| MGC 20 | TF4RX04GA | 2.5 | 300 | 50 | 2. | GA |
| MGC 21* | TF4RX04HB | 4 | 300 | 62 | 2.5 | HB |
| MGC 22 | TF4RX04JB | 6 | 300 | 85 | 2.5 | JB |
| MGC 23* | TF4RX04KB | 8 | 300 | 65 | 2.5 | KB |
| MGC 24 | TF4RX04LA | 10 | 300 | 100 | 2.5 | LA |
| MGC 25* | TF4RX04HB | 2 | 400 | 37 | 2.5 | HB |
| MGC 26 | TF4RX04KB | 6 | 400 | 60 | 2.5 | KB |
| MGC 27* | TF4RX04JA | 2 | 500 | 35 | 2.5 | JA |
| MGC 28 | TF4RX04KB | 4 | 500 | 45 | 2.5 | KB |
| MGC 29* | TF4RX04MB | 7 | 500 | 50 | 2.5 | MB |
| MGC 30* | TF4RX04LB | 2 | 700 | 20 | 2.5 | LB |
| MGC 31* | TF4RX04MB | 1.75 | 1,000 | 12.5 | 2.5 | MB |

*Not stocked, available on short delivery. Above units available in Grade 4.



MC-10 CASE

Height: 1 5/16"
 Width: 1 1/4"
 Depth: 1 5/16"
 Mtg. Cen.: 9/16" x 3/8"
 Studs: 2 4-40 threaded inserts

HERMETICALLY SEALED, MIL-T-27A, GRADE 5, CLASS S FILTER REACTORS

These reactors have a split winding for series or parallel connections.

| Catalog No. | Min. Inductance (or Idc (Series Connection)) | | | | Max. Rdc | Test Voltage | Case No. |
|-------------|--|---------------------|--------------------|--------------------|----------|--------------|----------|
| | 3.2 H (or Odc) | 2.1 H (or 25 MA) | 1.70 H (or 35 MA) | 1.4 H (or 25 MA) | | | |
| MGC-32 | 3.2 H (or Odc) | 2.1 H (or 25 MA) | 1.70 H (or 35 MA) | 1.4 H (or 25 MA) | 220 Ohms | 1000 V | MC-10 |
| MGC-33 | 1.3 H (or Odc) | 1.1 H (or 50 MA) | 0.8 H (or 70 MA) | 0.5 H (or 90 MA) | 100 Ohms | 1000 V | MC-10 |
| MGC-34 | 400 MH (or Odc) | 300 MH (or 100 MA) | 240 MH (or 130 MA) | 190 MH (or 160 MA) | 35 Ohms | 1000 V | MC-10 |
| MGC-35 | 105 MH (or Odc) | 100 MH (or 200 MA) | 80 MH (or 250 MA) | 500 MH (or 300 MA) | 10 Ohms | 1000 V | MC-10 |
| MGC-36 | 25 MH (or Odc) | 23.5 MH (or 400 MA) | 15 MH (or 500 MA) | 11 MH (or 600 MA) | 2 Ohms | 1000 V | MC-10 |
| MGC-37 | 5.7 MH (or Odc) | 4.5 MH (or 0.8 A) | 3.9 MH (or 1 A) | 3 MH (or 1.2 A) | 0.5 Ohms | 1000 V | MC-10 |

When using two sections in parallel, double the Idc. Both inductance and resistance are divided by 4.

FREED TRANSFORMER COMPANY, INC.

TOROIDAL INDUCTORS

Using the latest developments in the field of magnetic materials and new impregnation and molding techniques the Freed Transformer Co. makes available to the industry the most extensive line of toroidal inductors.

Freed toroids are available in three types of constructions. Open units coated with a special high temperature extremely low loss compound, hermetically sealed in metal cases or molded in special **Freed Epoxy Resin**. Both hermetically sealed and molded units meet the latest military specification MIL-T-27A (graded 1 or 4 and 2 or 5 respectively). Freed toroidal inductors are supplied with either molypermalloy or carbonyl iron powder cores.

1. Temperature Stabilization:

The molypermalloy and carbonyl iron powder cores have a temperature coefficient of inductance. Depending on the degree of temperature stabilization the cores have different temperature coefficients. The degree of stabilization is denoted by a two-letter code.

- SF Non-stabilized cores, $\pm 5\%$ inductance variations from -55°C to $+85^{\circ}\text{C}$.
- SN Non-stabilized cores, $\pm 2\%$ inductance variations from -55°C to $+85^{\circ}\text{C}$.
- SE Temperature stabilized cores, $+1\%$ to -0.4% inductance variations from -1.5°C to $+54^{\circ}\text{C}$.
- SB Temperature stabilized cores, $\pm 0.1\%$ inductance variations from $+13^{\circ}\text{C}$ to $+35^{\circ}\text{C}$.
- SD Temperature stabilized cores, $\pm 0.1\%$ inductance variations from -1.5°C to $+54^{\circ}\text{C}$.
- SW Temperature stabilized cores, $\pm 0.25\%$ inductance variations from -54°C to $+85^{\circ}\text{C}$.
- SP Temperature stable carbonyl iron cores, $\pm 0.3\%$ inductance variations from -55°C to $+85^{\circ}\text{C}$.

The temperature (stabilization) coefficient of an inductor will depend upon the nominal inductance value, operating frequency and A.C. voltage across the coil. Under some unfavorable working conditions the temperature coefficient of inductance corresponding to a given stability characteristic may be exceeded.

2. Nominal and Apparent Inductance:

All toroidal inductors are adjusted at a frequency well below the self resonant frequency "F₀". Since all toroids have a voltage coefficient of inductance they are adjusted with a low A.C. voltage in the region of the initial permeability of the core material.

The apparent inductance at any frequency F is given by the expression

$$L_{\text{app}} = \frac{L}{1 - \left(\frac{F}{F_0}\right)^2} = \frac{L}{1 - \frac{C_d}{C_0}}$$

where L = Nominal inductance

C_d = Distributed capacity

$$C_0 = \frac{1}{(2\pi F_0)^2 L}$$

3. Variation of Inductance vs. Normalized A.C. Voltage and Normalized A.C. and D.C. Currents:

$$\text{Normalized } V_{AC} = \frac{V}{F} \frac{1}{\sqrt{LH}}$$

$$\text{Normalized } I_{AC} = I_{AC} \sqrt{LH}$$

$$\text{Normalized } I_{DC} = I_{DC} \sqrt{LH}$$

where F — operating frequency in cycles

LH — inductance in henries

I_{ac} — A.C. current in MA

I_{dc} — D.C. current in MA

V — A.C. voltage across the core

These normalized expressions for a 20% decrease in inductance are listed on "Q" charts.

Toroids with special requirements such as tapped toroids, toroidal transformers, molded and cased units with dimensions other than standard sizes and high temperature toroids can be supplied on request. Our engineering and laboratory facilities are available for consultation, research and development.

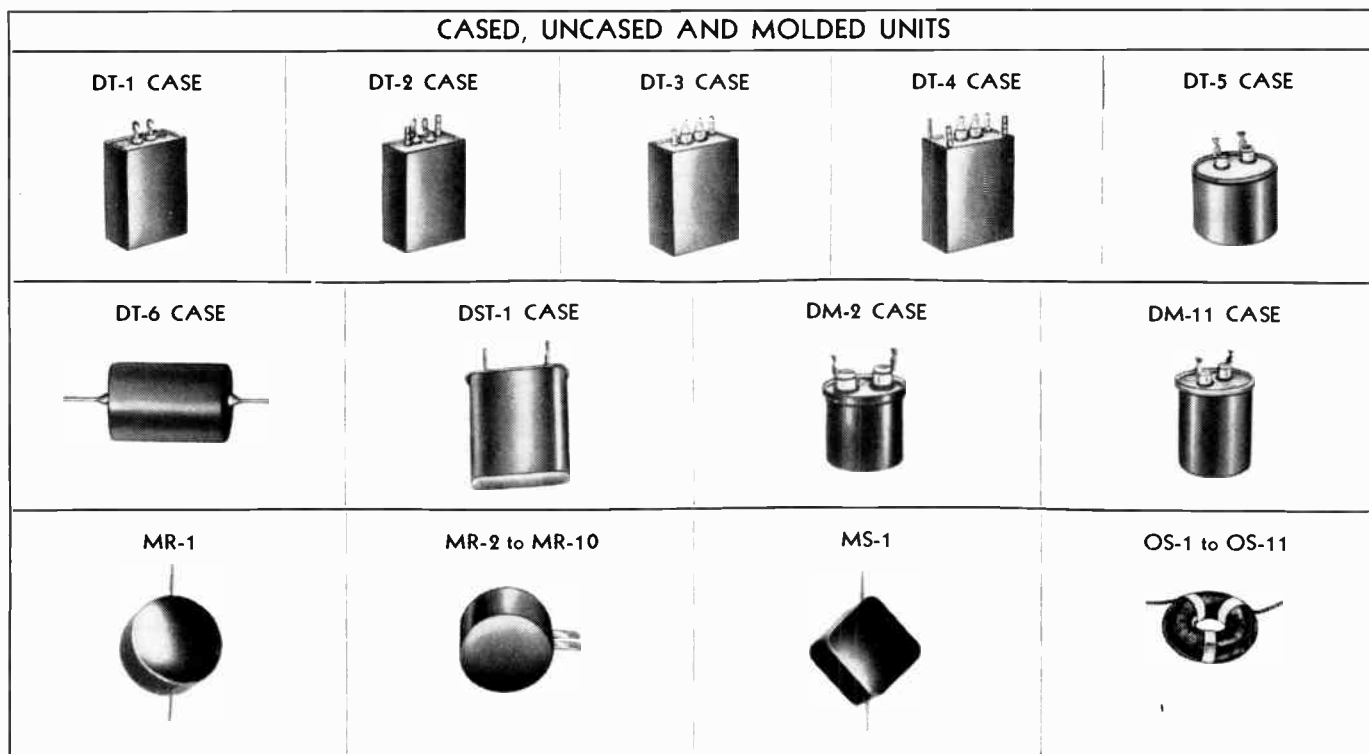
FREED TRANSFORMER COMPANY, INC.

TORODIAL INDUCTORS

| Type | % H | Max. Norm. Idc | Max. Norm. Iac | Max. Norm. Vac | Type | % H | Max. Norm. Idc | Max. Norm. Iac | Max. Norm. Vac |
|--------|-------|----------------|----------------|----------------|-------|-------|----------------|----------------|----------------|
| TI- 1 | 70 | 55 | 73.5 | 0.46 | TI-19 | 4,500 | 25 | 29 | 0.18 |
| TI- 1A | 68 | 75 | 90.5 | 0.57 | TI-20 | 2,750 | 100 | * | * |
| TI- 2 | 160 | 90 | 135 | 0.85 | TI-21 | 1,200 | 350 | * | * |
| TI- 3 | 600 | 100 | 67 | 0.42 | TI-22 | 5,600 | 210 | * | * |
| TI- 3A | 310 | 150 | 240 | 1.5 | TI-23 | 7,000 | 250 | * | * |
| TI- 4 | 110 | 55 | 67 | 0.42 | TI-24 | 330 | 15 | 18 | 0.11 |
| TI- 5 | 260 | 28 | 35 | 0.22 | TI-25 | 200 | 20 | 24 | 0.15 |
| TI- 6 | 230 | 75 | 125 | 0.80 | TI-26 | 150 | 25 | 32 | 0.20 |
| TI- 7 | 480 | 40 | 53 | 0.33 | TI-27 | 76.5 | 50 | 62 | 0.39 |
| TI- 8 | 1,500 | 50 | 80 | 0.5 | TI-28 | 48.5 | 50 | 64 | 0.40 |
| TI- 9 | 150 | 200 | 240 | 1.5 | TI-29 | 33.5 | 70 | 88 | 0.55 |
| TI-10 | 430 | 125 | 270 | 1.7 | TI-30 | 28 | 100 | 135 | 0.84 |
| TI-11 | 30 | 120 | 190 | 1.2 | TI-31 | 19.5 | 100 | 136 | 0.85 |
| TI-12 | 45 | 100 | 160 | 1 | TI-32 | 48.5 | 6 | 14.5 | 0.09 |
| TI-13 | 55 | 140 | 175 | 1.1 | TI-33 | 2,150 | 8 | 13 | 0.08 |
| TI-14 | 580 | 150 | — | — | TI-34 | 1,700 | 8 | 9.5 | 0.06 |
| TI-15 | 900 | 100 | — | — | TI-35 | 4,100 | 10 | 18 | 0.11 |
| TI-16 | 600 | 16 | 21 | 0.13 | TI-36 | 3,950 | 10 | 11 | 0.07 |
| TI-17 | 1,200 | 20 | 23 | 0.18 | TI-37 | 235 | 10 | 3.2 | 0.20 |
| TI-18 | 2,600 | 30 | 40 | 0.25 | TI-38 | 100 | 4 | 9.5 | 0.06 |

*TI-20 through TI-23 have a very low voltage coefficient and inductance will change very little with voltage. Because of high frequency application, the maximum voltage is limited rather by breakdown than by saturation.

CASED, UNCASED AND MOLDED UNITS

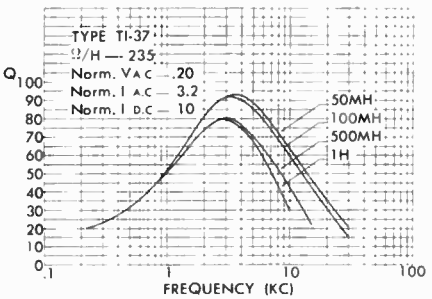
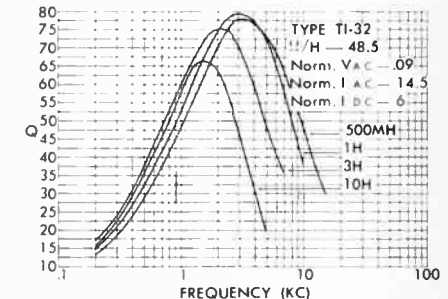
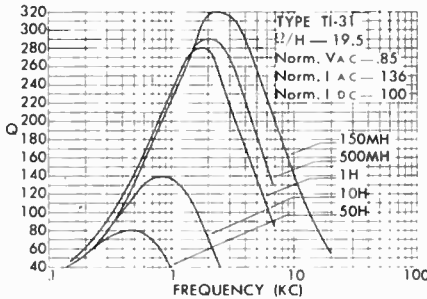
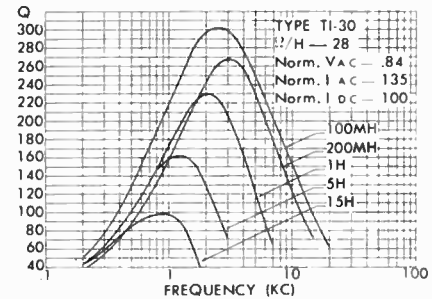
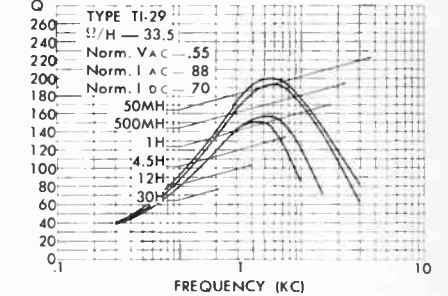
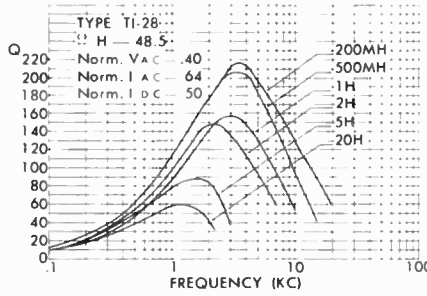
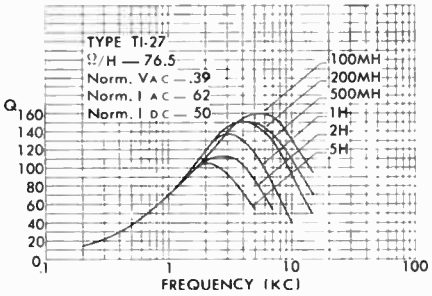
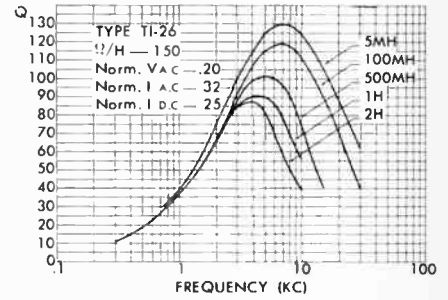
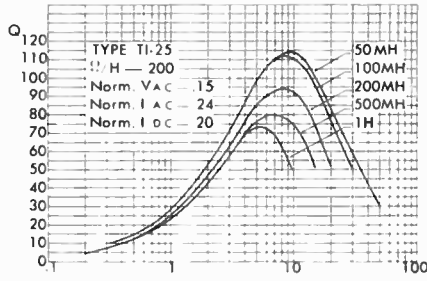
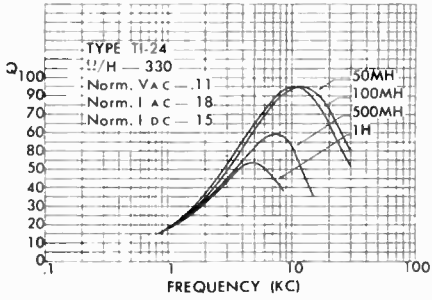


FREED TRANSFORMER COMPANY, INC.

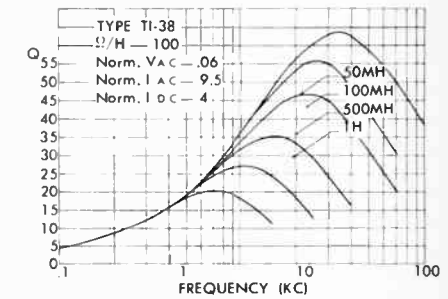
LOW FREQUENCY TOROIDAL INDUCTORS

| Freq. Range | | 100 ~ to 10 KC | | | | | | 200 ~ to 12 KC | | | | | | Freq. Range | |
|-----------------|--------------------|-------------------|------------------|-------------------|-------------------|--------------|------------------|-------------------|------------------|-------------|-------------|---------------|-----------------|--------------------|--|
| TYPE | | TI-38 | TI-32 | TI-37 | TI-24 | TI-25 | TI-26 | TI-27 | TI-28 | TI-29 | TI-30 | TI-31 | TYPE | | |
| Temp. Stability | | SF | SF | SF | SN | SN | SN | SN | SN | SN | SN | SN | Temp. Stability | | |
| Size | Uncased Case Mold | OS1 DST1 MR1, MS1 | OS3 DT1, DM2 MR3 | OS5 DT2, DM11 MR4 | OS1 DST1 MR1, MS2 | OS12 DT1 MR2 | OS3 DT1, DM2 MR3 | OS5 DT2, DM11 MR4 | OS8 DT3, DT5 MR6 | OS9 DT4 MR7 | OS9 DT4 MR8 | OS11 DT4 MR10 | Size | Uncased Case Mold | |
| | Nominal Inductance | Catalog Number | | | | | | | | | | | | Nominal Inductance | |
| 1 | MH | | | | F2400 | F2450 | F2500 | F2550 | F2600 | F2650 | F2700 | F2750 | 1 | MH | |
| 2 | MH | | | | F2401 | F2451 | F2501 | F2551 | F2601 | F2651 | F2701 | F2751 | 2 | MH | |
| 3 | MH | | | | F2402 | F2452 | F2502 | F2552 | F2602 | F2652 | F2702 | F2752 | 3 | MH | |
| 5 | MH | F3550 | | | F2403 | F2453 | F2503 | F2553 | F2603 | F2653 | F2703 | F2753 | 5 | MH | |
| 7.5 | MH | F3551 | | | F2404 | F2454 | F2504 | F2554 | F2604 | F2654 | F2704 | F2754 | 7.5 | MH | |
| 10 | MH | F3552 | | | F2405 | F2455 | F2505 | F2555 | F2605 | F2655 | F2705 | F2755 | 10 | MH | |
| 15 | MH | F3553 | | | F2406 | F2456 | F2506 | F2556 | F2606 | F2656 | F2706 | F2756 | 15 | MH | |
| 20 | MH | F3554 | | | F2407 | F2457 | F2507 | F2557 | F2607 | F2657 | F2707 | F2757 | 20 | MH | |
| 30 | MH | F3555 | | | F2408 | F2458 | F2508 | F2558 | F2608 | F2658 | F2708 | F2758 | 30 | MH | |
| 50 | MH | F3556 | F2800 | F4000 | F2409 | F2459 | F2509 | F2559 | F2609 | F2659 | F2709 | F2759 | 50 | MH | |
| 75 | MH | F3557 | F2801 | F4001 | F2410 | F2460 | F2510 | F2560 | F2610 | F2660 | F2710 | F2760 | 75 | MH | |
| 100 | MH | F3558 | F2802 | F4002 | F2411 | F2461 | F2511 | F2561 | F2611 | F2661 | F2711 | F2761 | 100 | MH | |
| 150 | MH | F3559 | F2803 | F4003 | F2412 | F2462 | F2512 | F2562 | F2612 | F2662 | F2712 | F2762 | 150 | MH | |
| 200 | MH | F3560 | F2804 | F4004 | F2413 | F2463 | F2513 | F2563 | F2613 | F2663 | F2713 | F2763 | 200 | MH | |
| 300 | MH | F3561 | F2805 | F4005 | F2414 | F2464 | F2514 | F2564 | F2614 | F2664 | F2714 | F2764 | 300 | MH | |
| 400 | MH | F3562 | F2806 | F4006 | F2415 | F2465 | F2515 | F2565 | F2615 | F2665 | F2715 | F2765 | 400 | MH | |
| 500 | MH | F3563 | F2807 | F4007 | F2416 | F2466 | F2516 | F2566 | F2616 | F2666 | F2716 | F2766 | 500 | MH | |
| 750 | MH | F3564 | F2808 | F4008 | F2417 | F2467 | F2517 | F2567 | F2617 | F2667 | F2717 | F2767 | 750 | MH | |
| 1 | H | F3565 | F2809 | F4009 | F2418 | F2468 | F2518 | F2568 | F2618 | F2668 | F2718 | F2768 | 1 | H | |
| 1.25 | H | F3566 | F2810 | F4010 | F2419 | F2469 | F2519 | F2569 | F2619 | F2669 | F2719 | F2769 | 1.25 | H | |
| 1.5 | H | F3567 | F2811 | F4011 | F2420 | F2470 | F2520 | F2570 | F2620 | F2670 | F2720 | F2770 | 1.5 | H | |
| 1.75 | H | F3568 | F2812 | F4012 | F2421 | F2471 | F2521 | F2571 | F2621 | F2671 | F2721 | F2771 | 1.75 | H | |
| 2 | H | F3569 | F2813 | F4013 | F2422 | F2472 | F2522 | F2572 | F2622 | F2672 | F2722 | F2772 | 2 | H | |
| 2.25 | H | F3570 | F2814 | F4014 | | F2473 | F2523 | F2573 | F2623 | F2673 | F2723 | F2773 | 2.25 | H | |
| 2.5 | H | F3571 | F2815 | F4015 | | F2474 | F2524 | F2574 | F2624 | F2674 | F2724 | F2774 | 2.5 | H | |
| 3 | H | F3572 | F2816 | F4016 | | F2475 | F2525 | F2575 | F2625 | F2675 | F2725 | F2775 | 3 | H | |
| 3.5 | H | F3573 | F2817 | F4017 | | F2476 | F2526 | F2576 | F2626 | F2676 | F2726 | F2776 | 3.5 | H | |
| 4 | H | F3574 | F2818 | F4018 | | F2477 | F2527 | F2577 | F2627 | F2677 | F2727 | F2777 | 4 | H | |
| 4.5 | H | F3575 | F2819 | F4019 | | F2478 | F2528 | F2578 | F2628 | F2678 | F2728 | F2778 | 4.5 | H | |
| 5 | H | F3576 | F2820 | F4020 | | F2479 | F2529 | F2579 | F2629 | F2679 | F2729 | F2779 | 5 | H | |
| 7.5 | H | F3577 | F2821 | F4021 | | F2480 | F2530 | F2580 | F2630 | F2680 | F2730 | F2780 | 7.5 | H | |
| 10 | H | F3578 | F2822 | F4022 | | F2481 | F2531 | F2581 | F2631 | F2681 | F2731 | F2781 | 10 | H | |
| 15 | H | | F2823 | F4023 | | | F2532 | F2582 | F2632 | F2682 | F2732 | F2782 | 15 | H | |
| 20 | H | | F2824 | F4024 | | | F2533 | F2583 | F2633 | F2683 | F2733 | F2783 | 20 | H | |
| 25 | H | | | F4025 | | | | | | | | | 25 | H | |
| 30 | H | | | | | | | | | F2684 | F2734 | F2784 | 30 | H | |
| 40 | H | | | | | | | | | F2685 | F2735 | F2785 | 40 | H | |
| 50 | H | | | | | | | | | F2686 | F2736 | F2786 | 50 | H | |
| 75 | H | | | | | | | | | | | F2787 | 75 | H | |
| 100 | H | | | | | | | | | | | F2788 | 100 | H | |

FREED TRANSFORMER COMPANY, INC.



| UNCASED | | |
|---------|---------|---------|
| Type | O.D. | Hi. |
| OS-1 | 5/8" | 5/16" |
| OS-3 | 1" | 3/4" |
| OS-5 | 1 5/16" | 5/8" |
| OS-8 | 1 7/8" | 1 1/16" |
| OS-9 | 2 1/4" | 1 1/2" |
| OS-11 | 2 5/8" | 1 1/2" |
| OS-12 | 1 3/16" | 3/4" |



| CASE | | | | | | |
|-------|---------|----------|----------|---------|----------------|------------------------------|
| Type | Hi. | Dia. | Length | Width | Mtg. | Mtg. Cen. |
| DT-1 | 1 7/32" | | 1 1/16" | 1 1/2" | 2 4-40 inserts | 3/8" |
| DT-2 | 1 3/4" | | 1 7/16" | 1 3/16" | 2 6-32 studs | 7/4" x 9/32" |
| DT-3 | 2" | | 1 15/32" | 7/8" | 2 6-32 studs | 1 1/4" x 3/8" |
| DT-4 | 3 3/8" | | 1 1/4" | 1 5/16" | 4 8-32 studs | 2 1/16" x 1 1/16" |
| DT-5 | 1 5/16" | 1 13/16" | | | 2 6-32 studs | 1 1/8" |
| DM-2 | 1" | 1 1/8" | | | 2 4-40 inserts | 5/8" |
| DM-11 | 1 1/2" | 1 3/8" | | | 2 6-32 inserts | 7/8" |
| DST-1 | 2 5/32" | | 3/4" | 1 1/32" | 1/4" long pins | To fit 1 1/2" crystal socket |

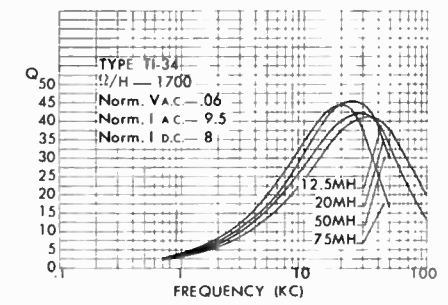
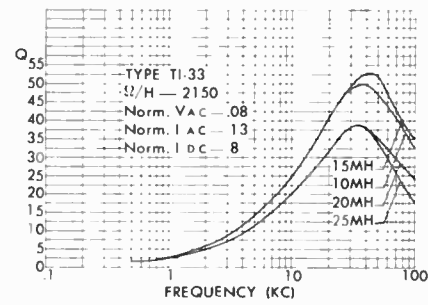
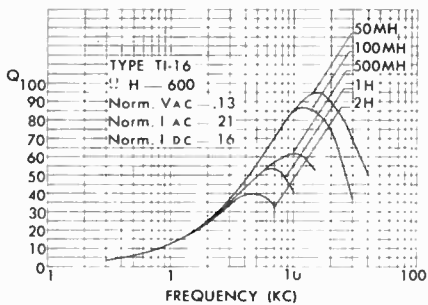
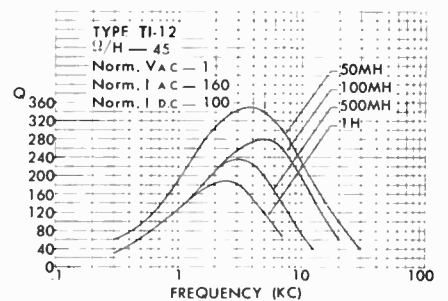
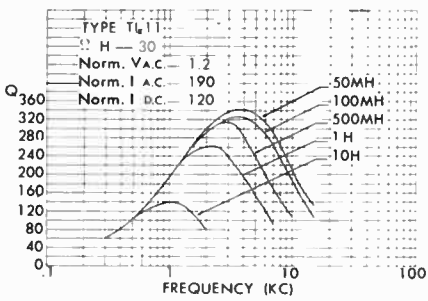
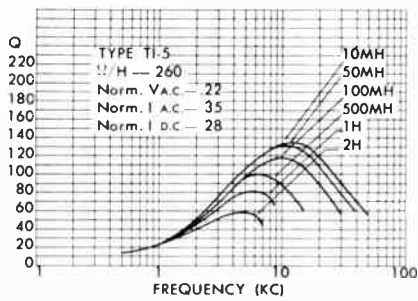
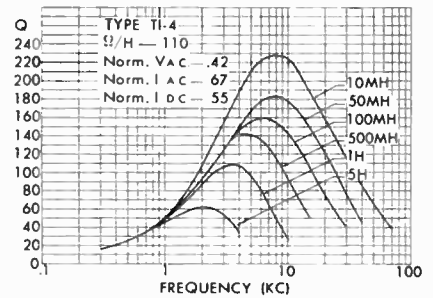
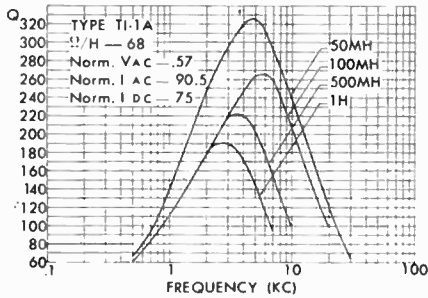
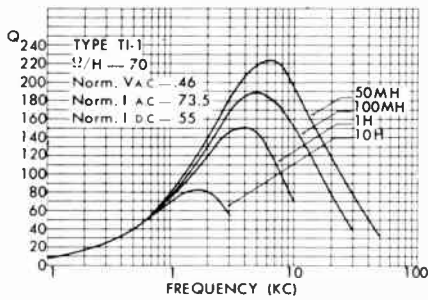
| MOLD | | | |
|-------|-------------------|---------|-------------------------|
| Type | O.D. | Hi. | Clearance Hole Mounting |
| MR-1 | 7/8" | 1 1/32" | Pig Tails |
| MR-2 | 1 1/16" | 1 1/2" | No. 4 |
| MR-3 | 1 5/16" | 1 1/2" | No. 6 |
| MR-4 | 1 1/2" | 3/4" | No. 8 |
| MR-6 | 2 1/5" | 7/8" | No. 8 |
| MR-7 | 2 3/8" | 1 5/16" | No. 10 |
| MR-8 | 2 1/4" | 1 3/8" | No. 10 |
| MR-10 | 2 7/8" | 1 3/8" | No. 10 |
| MS-1 | 2 5/32" x 2 5/32" | 1 3/32" | Pig Tails |

FREED TRANSFORMER COMPANY, INC.

LOW FREQUENCY TOROIDAL INDUCTORS

| Freq. Range | | 1 KC to 15 KC | | | | | | | | | Temp. Stability | Temp. Stability |
|--------------------|-------------------|----------------|---------------|-------------------|-------------------|-------------------|-------------------|-------------|-------------|---------------|--------------------|-------------------|
| TYPE | | TI-33 | TI-34 | TI-16 | TI-5 | TI-4 | TI-1 | TI-1A | TI-12 | TI-11 | TYPE | |
| Temp. Stability | | SN | SN | SN | SN, SE, SD | SN, SD, SW | SN | SN, SD, SW | SN, SD, SW | SN, SD, SW | Temp. Stability | |
| Size | Uncased Case Mold | OS13 DT6 MR11 | OS14 DT6 MR11 | OS1 DST1 MR1, MS1 | OS3 DT1, DM2, MR3 | OS5 DT2, DM1, MR4 | OS8 DT3, DT5, MR6 | OS9 DT4 MR7 | OS9 DT4 MR8 | OS11 DT4 MR10 | Size | Uncased Case Mold |
| Nominal Inductance | | Catalog Number | | | | | | | | | Nominal Inductance | |
| .25 MH | | F2850 | F2900 | | | | | | | | .25 MH | |
| .5 MH | | F2851 | F2901 | | | | | | | | .5 MH | |
| .75 MH | | F2852 | F2902 | | | | | | | | .75 MH | |
| 1 MH | | F2853 | F2903 | F2050 | | | | F1500 | F1655 | F1747 | 1 MH | |
| 1.5 MH | | F2854 | F2904 | | | | | | | | 1.5 MH | |
| 2 MH | | F2855 | F2905 | | | | | F1501 | F1656 | F1748 | 2 MH | |
| 2.5 MH | | F2856 | F2906 | | | | | | | | 2.5 MH | |
| 3 MH | | F2857 | F2907 | F2051 | | | | F1502 | F1657 | F1749 | 3 MH | |
| 4 MH | | F2858 | F2908 | | | | | F1503 | F1658 | F1750 | 4 MH | |
| 5 MH | | F2859 | F2909 | F2052 | F1700 | F850 | F800 | F1504 | F1659 | F1751 | 5 MH | |
| 7.5 MH | | F2860 | F2910 | | | | | F1505 | F1660 | | 7.5 MH | |
| 10 MH | | F2861 | F2911 | F2053 | F1701 | F851 | F801 | F1506 | F1661 | F1752 | 10 MH | |
| 12.5 MH | | F2862 | F2912 | | | | | | | | 12.5 MH | |
| 15 MH | | F2863 | F2913 | F2054 | F1702 | F852 | F802 | F1507 | F1662 | F1753 | 15 MH | |
| 17.5 MH | | F2864 | F2914 | | | | | | | | 17.5 MH | |
| 20 MH | | F2865 | F2915 | | | | | | | | 20 MH | |
| 25 MH | | F2866 | F2916 | | | | | | | | 25 MH | |
| 30 MH | | F2867 | F2917 | F2055 | F1703 | F853 | F803 | F1508 | F1663 | F1754 | 30 MH | |
| 50 MH | | | F2918 | F2056 | F1704 | F854 | F804 | F1509 | F1664 | F1755 | 50 MH | |
| 75 MH | | | F2919 | F2057 | F1705 | F855 | F805 | F1510 | F1665 | F1756 | 75 MH | |
| 100 MH | | | F2920 | F2058 | F1706 | F856 | F806 | F1511 | F1666 | F1757 | 100 MH | |
| 150 MH | | | | F2059 | F1707 | F857 | F807 | F1512 | F1667 | F1758 | 150 MH | |
| 200 MH | | | | F2060 | F1708 | F858 | F808 | F1513 | F1668 | F1759 | 200 MH | |
| 300 MH | | | | F2061 | F1709 | F859 | | F1514 | F1669 | F1760 | 300 MH | |
| 400 MH | | | | F2062 | F1710 | F860 | | F1515 | F1670 | F1761 | 400 MH | |
| 500 MH | | | | F2063 | F1711 | F861 | F809 | F1516 | F1671 | F1762 | 500 MH | |
| 600 MH | | | | | F1712 | F862 | | F1517 | F1672 | | 600 MH | |
| 700 MH | | | | | F1713 | F863 | | | | | 700 MH | |
| 750 MH | | | | F2064 | | | F810 | F1518 | F1673 | F1763 | 750 MH | |
| 800 MH | | | | | F1714 | F864 | | | | | 800 MH | |
| 900 MH | | | | | F1715 | F865 | | | | | 900 MH | |
| 1.0 HY | | | | F2065 | F1716 | F866 | F811 | F1519 | F1674 | F1764 | 1.0 HY | |
| 1.25 HY | | | | F2066 | F1717 | F867 | F812 | | | | 1.25 HY | |
| 1.5 HY | | | | F2067 | F1718 | F868 | F813 | F1520 | F1675 | F1765 | 1.5 HY | |
| 1.75 HY | | | | F2068 | F1719 | F869 | F814 | | | | 1.75 HY | |
| 2 HY | | | | F2069 | F1720 | F870 | F815 | F1521 | F1676 | F1766 | 2 HY | |
| 2.25 HY | | | | | | F871 | F816 | | | | 2.25 HY | |
| 2.5 HY | | | | | | F872 | F817 | F1522 | F1677 | F1767 | 2.5 HY | |
| 2.75 HY | | | | | | F873 | F818 | | | | 2.75 HY | |
| 3 HY | | | | | | F874 | F819 | F1523 | F1678 | F1768 | 3 HY | |
| 3.5 HY | | | | | | F875 | F820 | F1524 | F1679 | F1769 | 3.5 HY | |
| 4 HY | | | | | | F876 | F821 | F1525 | F1680 | F1770 | 4 HY | |
| 4.5 HY | | | | | | F877 | F822 | F1526 | F1681 | F1771 | 4.5 HY | |
| 5 HY | | | | | | F878 | F823 | F1527 | F1682 | F1772 | 5 HY | |
| 6 HY | | | | | | | F824 | F1528 | F1683 | | 6 HY | |
| 7 HY | | | | | | | F825 | F1529 | F1684 | | 7 HY | |
| 7.5 HY | | | | | | | | | | F1773 | 7.5 HY | |
| 8 HY | | | | | | | F826 | F1530 | F1685 | | 8 HY | |
| 9 HY | | | | | | | F827 | F1531 | F1686 | | 9 HY | |
| 10 HY | | | | | | | F828 | F1532 | F1687 | F1774 | 10 HY | |
| 12 HY | | | | | | | | F1533 | F1688 | | 12 HY | |
| 15 HY | | | | | | | | F1534 | F1689 | F1775 | 15 HY | |
| 17 HY | | | | | | | | F1535 | F1690 | | 17 HY | |
| 20 HY | | | | | | | F830 | F1536 | F1691 | F1776 | 20 HY | |
| 25 HY | | | | | | | | F1537 | F1692 | F1777 | 25 HY | |
| 30 HY | | | | | | | | F1538 | F1693 | F1778 | 30 HY | |
| 40 HY | | | | | | | | | | F1779 | 40 HY | |
| 50 HY | | | | | | | | | | F1780 | 50 HY | |

FREED TRANSFORMER COMPANY, INC.



| UNCASED | | |
|---------|---------|---------|
| Type | O.D. | Hi. |
| OS-1 | 5/8" | 5 5/16" |
| OS-3 | 1" | 3 3/8" |
| OS-5 | 1 5/16" | 5 3/8" |
| OS-8 | 1 7/8" | 11 1/8" |
| OS-9 | 2 1/4" | 11 1/8" |
| OS-11 | 2 5/8" | 11 1/8" |
| OS-13 | 3 3/8" | 1 1/4" |
| OS-14 | 7 1/16" | 7 1/2" |

| CASE | | | | | | | |
|-------|---------|----------|----------|--------|------------------|------------------------------|------------------|
| Type | Hi. | Dia. | Length | Width | Mtg. | Mtg. Cen. | Cutout |
| DT-1 | 1 7/32" | | 1 1/16" | 1 1/2" | 2 4.40 inserts | 3/8" | 5 1/16" x 1 1/2" |
| DT-2 | 1 3/4" | | 1 7/16" | 1 1/8" | 2 6.32 studs | 7 8" x 9 3/32" | 3 3/8" x 1 1/16" |
| DT-3 | 2" | | 1 25/32" | 7/8" | 2 6.32 studs | 1 1/4" x 3 3/8" | 3 3/8" x 3 3/8" |
| DT-4 | 3 1/4" | | 2 3/4" | 1 1/8" | 4 8.32 studs | 2 1/16" x 11 1/16" | 3 3/8" x 3 3/8" |
| DT-5 | 1 5/16" | 1 15/16" | | | 2 6.32 studs | 1 1/4" | 3 3/8" x 1" |
| DT-6 | 3/8" | 1 1/2" | | | Pig Tails | | |
| DM-2 | 1" | 1 1/8" | | | 2 4.40 inserts | 5/8" | 3 3/8" x 7 3/8" |
| DM-11 | 1 1/2" | 1 3/8" | | | 2 6.32 inserts | 7/8" | 3 3/8" x 7 3/8" |
| DST-1 | 2 5/32" | | 3/4" | 1 1/2" | 1 1/4" long pins | To fit 1 1/2" crystal socket | |

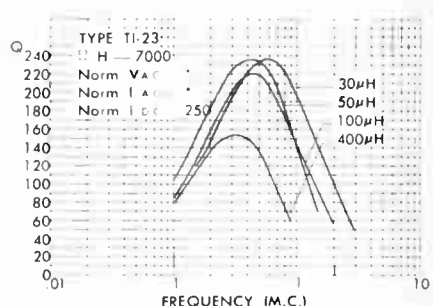
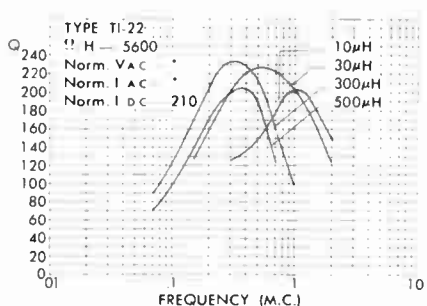
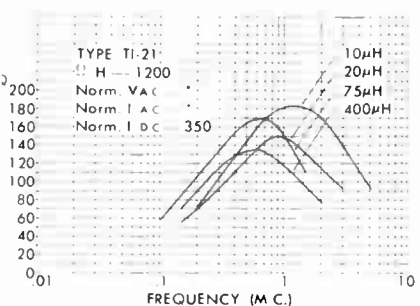
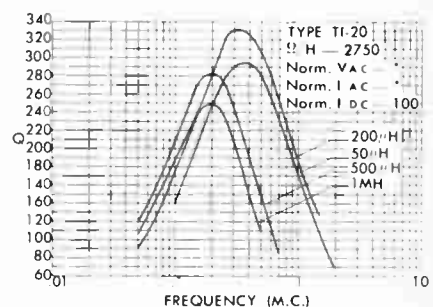
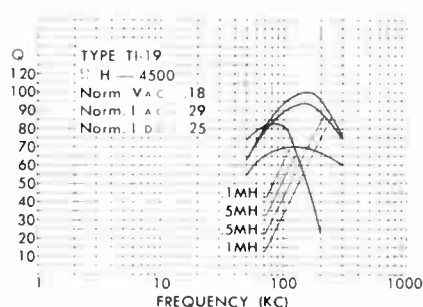
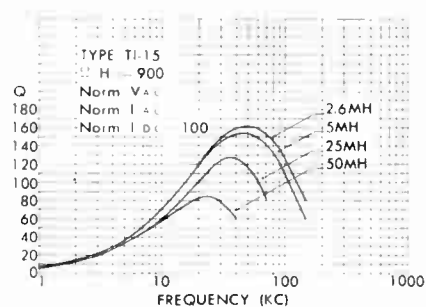
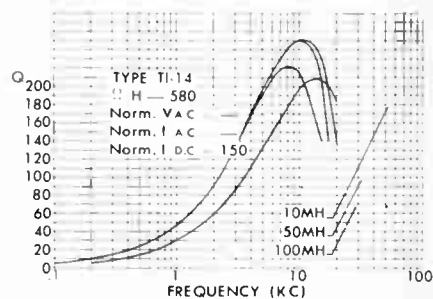
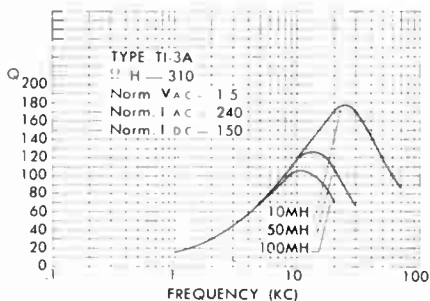
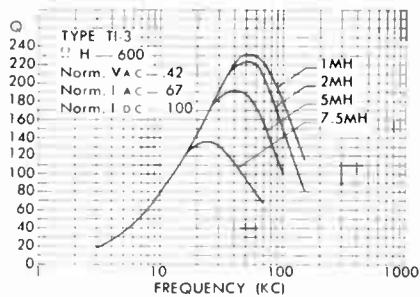
| MOLD | | | |
|-------|--------------------|----------|-------------------------|
| Type | O.D. | Hi. | Clearance Hole Mounting |
| MR-1 | 7/8" | 13 3/32" | Pig Tails |
| MR-3 | 1 3/16" | 1 1/2" | No. 6 |
| MR-4 | 1 1/2" | 3/4" | No. 8 |
| MR-6 | 2 3/8" | 3/8" | No. 8 |
| MR-7 | 2 3/8" | 1 3/16" | No. 10 |
| MR-8 | 2 1/2" | 1 3/8" | No. 10 |
| MR-10 | 2 3/8" | 1 3/8" | No. 10 |
| MR-11 | 7/16" | 1/4" | Pig Tails |
| MS-1 | 2 5/32" x 25 3/32" | 1 3/32" | Pig Tails |

FREED TRANSFORMER COMPANY, INC.

MEDIUM FREQUENCY TOROIDAL INDUCTORS

| Freq. Range | | 10 KC to 50 KC | | | | | | | 30 KC to 75 KC | | | | Freq. Range | |
|-----------------|--------------------|---------------------|---------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------|-------------------------|------------------------|------------------------|--------------------|-----------------|--------------------|
| TYPE | | TI-35 | TI-36 | TI-17 | TI-7 | TI-6 | TI-2 | TI-13 | TI-18 | TI-8 | TI-10 | TI-9 | TYPE | |
| Temp. Stability | | SN | SN | SN | SN | SN, SD SW | SD | SN | SN | SN, SD | SB | SB | Temp. Stability | |
| Size | Uncased Case Mold | OS13 DT6 MR11 | OS14 DT6 MR11 | OS1 DST1 MR1, MS1 | OS3 DT1, DM2 MR3 | OS5 DT2, DM11 MR4 | OS6 DT3, DT5 MR5 | OS9 DT4 MR8 | OS1 DST1 MR1, MS1 | OS3 DT1, DM2 MR3 | OS7 DT3, DT5 MR5 | OS10 DT4 MR9 | Size | Uncased Case Mold |
| | Nominal Inductance | Catalog Number | | | | | | | | | | | | Nominal Inductance |
| .1 MH | | | | F2100 | | | | | F2140 | F1821 | | | .1 MH | |
| .2 MH | | | | F2101 | | | | | F2141 | F1822 | | | .2 MH | |
| .25 MH | F2950 | F3000 | | | | | | | | | | | .25 MH | |
| .3 MH | | | | F2102 | | | | | F2142 | F1823 | | | .3 MH | |
| .4 MH | | | | F2103 | | | | | F2143 | F1824 | | | .4 MH | |
| .5 MH | F2951 | F3001 | | F2104 | F1781 | | | | F2144 | F1825 | | | .5 MH | |
| .75 MH | F2952 | F3002 | | | | | | | | | | | .75 MH | |
| 1 MH | F2953 | F3003 | | F2105 | F1782 | F1726 | F1800 | F1629 | F2145 | F1826 | F1579 | F1554 | 1 MH | |
| 1.5 MH | F2954 | F3004 | | | | | | | | | | | 1.5 MH | |
| 2 MH | F2955 | F3005 | | F2106 | F1783 | F1727 | F1801 | F1630 | F2146 | F1827 | F1580 | F1555 | 2 MH | |
| 2.5 MH | F2956 | F3006 | | | | | | | | | | | 2.5 MH | |
| 3 MH | F2957 | F3007 | | F2107 | F1784 | F1728 | F1802 | F1631 | F2147 | F1828 | F1581 | F1556 | 3 MH | |
| 4 MH | F2958 | F3008 | | F2108 | | F1729 | F1803 | F1632 | F2148 | F1829 | F1582 | F1557 | 4 MH | |
| 5 MH | F2959 | F3009 | | F2109 | F1785 | F1730 | F1804 | F1633 | F2149 | F1830 | F1583 | F1558 | 5 MH | |
| 7.5 MH | F2960 | F3010 | | F2110 | F1786 | F1731 | | F1634 | F2150 | F1831 | F1584 | F1559 | 7.5 MH | |
| 10 MH | F2961 | F3011 | | F2111 | F1787 | F1732 | F1905 | F1635 | F2151 | F1832 | F1585 | F1560 | 10 MH | |
| 12.5 MH | F2962 | F3012 | | | | | | | | | | | 12.5 MH | |
| 15 MH | F2963 | F3013 | | F2112 | F1788 | F1733 | F1806 | F1636 | F2152 | F1833 | F1586 | F1561 | 15 MH | |
| 17.5 MH | | F3014 | | | | | | | | | | | 17.5 MH | |
| 20 MH | | F3015 | | F2113 | F1789 | F1734 | | | F2153 | F1834 | | | 20 MH | |
| 25 MH | | F3016 | | | F1790 | | | | | F1835 | | | 25 MH | |
| 30 MH | | F3017 | | F2114 | F1791 | F1735 | F1807 | F1637 | F2154 | F1836 | F1587 | F1562 | 30 MH | |
| 40 MH | | | | | F1792 | | | | | F1837 | | | 40 MH | |
| 50 MH | | | | F2115 | F1793 | F1736 | F1808 | F1638 | F2155 | F1838 | F1588 | F1563 | 50 MH | |
| 75 MH | | | | F2116 | F1794 | F1737 | F1809 | F1639 | F2156 | F1839 | F1589 | F1564 | 75 MH | |
| 100 MH | | | | F2117 | F1795 | F1738 | F1810 | F1640 | F2157 | F1840 | F1590 | F1565 | 100 MH | |
| 150 MH | | | | | F1796 | F1739 | F1811 | F1641 | | | F1591 | F1566 | 150 MH | |
| 200 MH | | | | | F1797 | F1740 | F1812 | F1642 | | | F1592 | F1567 | 200 MH | |
| 250 MH | | | | | | F1741 | | | | | | | 250 MH | |
| 300 MH | | | | | | F1742 | F1813 | F1643 | | | | F1568 | 300 MH | |
| 400 MH | | | | | | | | F1644 | | | | F1569 | 400 MH | |
| 500 MH | | | | | | F1743 | F1815 | F1645 | | | | F1570 | 500 MH | |

FREED TRANSFORMER COMPANY, INC.



| UNCASED | | |
|---------|---------|--------|
| Type | O.D. | Hi. |
| OS-1 | 5/8" | 5/16" |
| OS-2 | 7/8" | 3/8" |
| OS-3 | 1" | 3/8" |
| OS-4 | 1" | 9/16" |
| OS-5 | 1 1/16" | 5/8" |
| OS-6 | 1 3/8" | 7/8" |
| OS-10 | 2 3/4" | 1 1/4" |

| CASE | | | | | | | | |
|-------|---------|----------|----------|---------|----------------|------------------------------|----------------|--|
| Type | Hi. | Dia. | Length | Width | Mtg. | Mtg. Cen. | Cutout | |
| DT-1 | 1 7/32" | | 1 1/16" | 1/2" | 2 4-40 inserts | 3/4" | 5/16" x 1 1/2" | |
| DT-2 | 1 3/4" | | 1 7/16" | 1 1/16" | 2 6-32 studs | 7/8" x 9/32" | 3/8" x 1 1/16" | |
| DT-3 | 2" | | 1 23/32" | 7/8" | 2 6-32 studs | 1 1/4" x 3/8" | 3/8" x 3/4" | |
| DT-4 | 3 7/16" | | 2 3/4" | 1 5/16" | 4 8-32 studs | 2 1/16" x 1 1/16" | 3/4" x 3/8" | |
| DT-5 | 1 3/16" | 1 13/16" | | | 2 6-32 studs | 1 1/8" | 3/8" x 1" | |
| DT-6 | 5/8" | 1 1/2" | | | Pig Tails | | | |
| DM-2 | 1" | 1 1/8" | | | 2 4-40 inserts | 5/8" | 3/8" x 7/8" | |
| DM-11 | 1 1/2" | 1 3/8" | | | 2 6-32 inserts | 7/8" | 3/8" x 7/8" | |
| DST-1 | 25/32" | | 3/4" | 1 1/16" | 1/4" long pins | To fit 1 1/2" crystal socket | | |

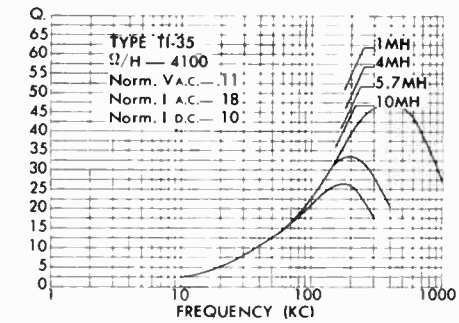
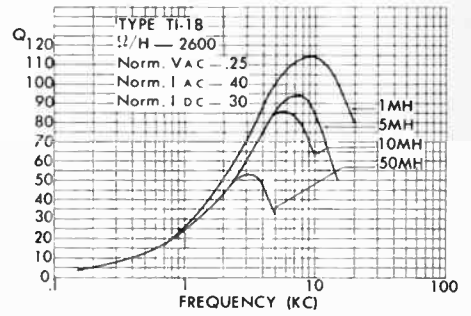
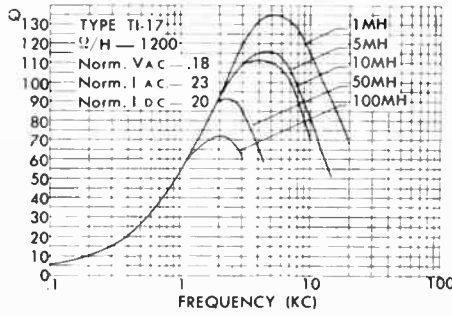
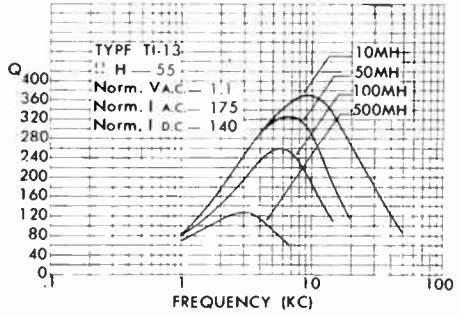
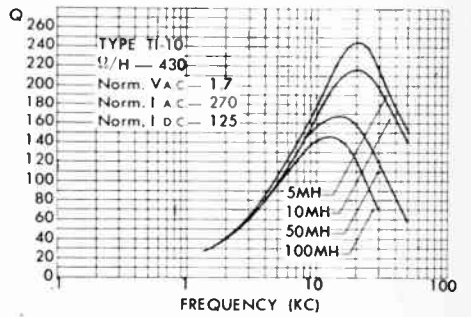
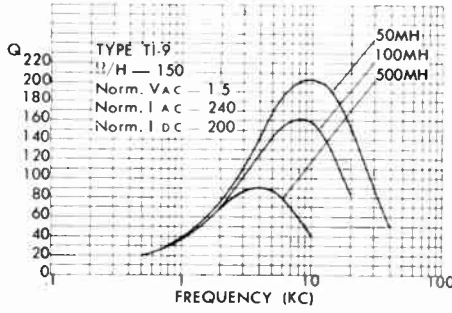
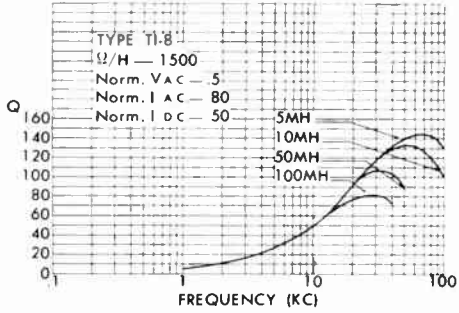
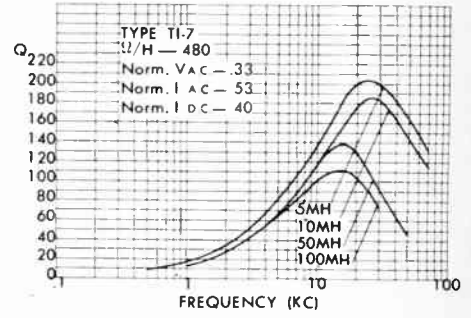
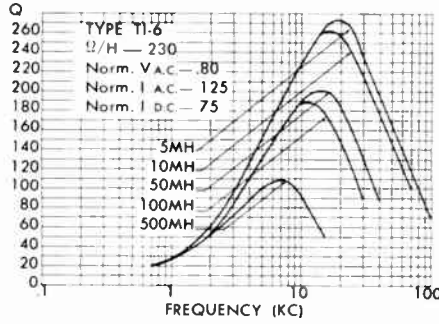
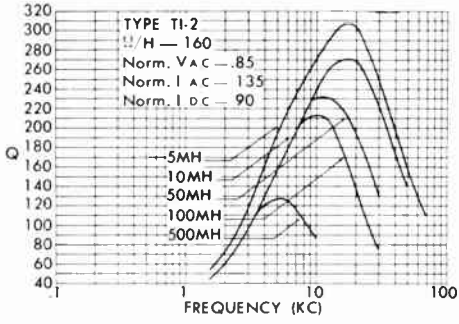
| MOLD | | | |
|-------|-----------------|---------|-------------------------|
| Type | Dia. | Hi. | Clearance Hole Mounting |
| MR-1 | 7/8" | 1 1/2" | Pig Tails |
| MR-2 | 1 1/16" | 1 1/2" | No. 4 |
| MR-3 | 1 3/16" | 1 1/2" | No. 6 |
| MR-3A | 1 3/16" | 1 1/16" | No. 6 |
| MR-4 | 1 1/2" | 3/4" | No. 8 |
| MR-5 | 1 7/8" | 1" | No. 8 |
| MR-8 | 2 1/2" | 1 3/8" | No. 10 |
| MS-1 | 1 1/4" x 2 1/4" | 1 1/2" | Pig Tails |

FREED TRANSFORMER COMPANY, INC.

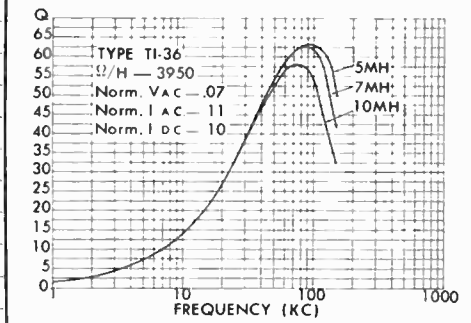
HIGH FREQUENCY TOROIDAL INDUCTORS

| Freq. Range | | 10 KC to 100 KC | | 50 KC to 200 KC | | | 20KC to 2 MC | 50 KC to 5 MC | | 100 KC to 10 MC | Freq. Range | |
|--------------------|-------------------|------------------|-------------------|--------------------|------------------|--------------|--------------|---------------|-------------|------------------|--------------------|-------------------|
| TYPE | | TI-15 | TI-14 | TI-19 | TI-3 | TI-3A | TI-20 | TI-22 | TI-23 | TI-21 | TYPE | |
| Temp. Stability | | SN | SN | SN | SD | SB | SP | SP | SP | SP | Temp. Stability | |
| Size | Uncased Case Mold | OS3 DT1, DM2 MR3 | OS5 DT2, DM11 MR4 | OS1 DST 1 MR1, MS1 | OS6 DT3, DT5 MR5 | OS10 DT4 MR8 | OS4 DT2 MR3A | OS2 DT1 MR2 | OS2 DT1 MR2 | OS1 DT1 MR1, MS1 | Size | Uncased Case Mold |
| Nominal Inductance | | Catalog Number | | | | | | | | | Nominal Inductance | |
| .010 MH | | | | | | | | F2270 | F2301 | F2240 | .010 MH | |
| .015 MH | | | | | | | | F2271 | F2302 | F2241 | .015 MH | |
| .020 MH | | | | | | | | F2272 | F2303 | F2242 | .020 MH | |
| .030 MH | | | | | | | | F2273 | F2304 | F2243 | .030 MH | |
| .040 MH | | | | | | | | F2274 | F2305 | F2244 | .040 MH | |
| .050 MH | | | | | | | F2201 | F2275 | F2306 | F2245 | .050 MH | |
| .075 MH | | | | | | | | F2276 | F2307 | F2246 | .075 MH | |
| .100 MH | F1870 | | | F2180 | F1846 | | F2202 | F2277 | F2308 | F2247 | .100 MH | |
| .125 MH | | | | | | | | | | F2248 | .125 MH | |
| .150 MH | | | | | | | | F2278 | F2309 | F2249 | .150 MH | |
| .200 MH | F1871 | | | F2181 | F1847 | | F2203 | F2279 | F2310 | | .200 MH | |
| .300 MH | F1872 | | | F2182 | F1848 | | F2204 | F2280 | F2311 | | .300 MH | |
| .400 MH | F1873 | | | F2183 | F1849 | | | F2281 | F2312 | | .400 MH | |
| .500 MH | F1874 | | | F2184 | F1850 | | F2205 | F2282 | F2313 | | .500 MH | |
| .600 MH | | | | F2185 | | | | F2283 | | | .600 MH | |
| .700 MH | | | | F2186 | | | F2206 | F2284 | | | .700 MH | |
| .750 MH | | | | | | | | | | | .750 MH | |
| .800 MH | | | | F2187 | | | | | | | .800 MH | |
| .900 MH | | | | F2188 | | | | | | | .900 MH | |
| 1 MH | F1875 | F1920 | | F2189 | F1851 | | F2207 | | | | 1 MH | |
| 1.5 MH | | | | | | | F2208 | | | | 1.5 MH | |
| 2 MH | F1876 | F1921 | | F2190 | F1852 | | F2209 | | | | 2 MH | |
| 2.5 MH | | | | | | | F2210 | | | | 2.5 MH | |
| 3 MH | F1877 | F1922 | | F2191 | F1853 | | F2211 | | | | 3 MH | |
| 3.5 MH | | | | | | | F2212 | | | | 3.5 MH | |
| 4 MH | F1878 | F1923 | | F2192 | F1854 | | F2213 | | | | 4 MH | |
| 4.5 MH | | | | | | | F2214 | | | | 4.5 MH | |
| 5 MH | F1879 | F1924 | | F2193 | F1855 | | F2215 | | | | 5 MH | |
| 7.5 MH | F1880 | F1925 | | | F1845 | | | | | | 7.5 MH | |
| 10 MH | F1881 | F1926 | | | F1844 | F1856 | | | | | 10 MH | |
| 15 MH | F1882 | F1927 | | | | F1857 | | | | | 15 MH | |
| 20 MH | F1883 | F1928 | | | | F1858 | | | | | 20 MH | |
| 25 MH | F1884 | | | | | | | | | | 25 MH | |
| 30 MH | F1885 | F1929 | | | | F1859 | | | | | 30 MH | |
| 40 MH | F1886 | | | | | F1860 | | | | | 40 MH | |
| 50 MH | F1887 | F1930 | | | | F1861 | | | | | 50 MH | |
| 75 MH | F1888 | F1931 | | | | F1862 | | | | | 75 MH | |
| 100 MH | F1889 | F1932 | | | | F1863 | | | | | 100 MH | |
| 150 MH | | F1933 | | | | | | | | | 150 MH | |
| 200 MH | | F1934 | | | | | | | | | 200 MH | |
| 250 MH | | F1935 | | | | | | | | | 250 MH | |
| 300 MH | | F1936 | | | | | | | | | 300 MH | |

FREED TRANSFORMER COMPANY, INC.



| UNCASED | | |
|---------|----------|--------|
| Type | OD | HI |
| OS-1 | 5/8" | 3/16" |
| OS-3 | 1" | 3/8" |
| OS-5 | 1 1/16" | 5/8" |
| OS-6 | 1 5/8" | 7/8" |
| OS-7 | 1 11/16" | 5/8" |
| OS-9 | 2 1/4" | 1 1/4" |
| OS-10 | 2 3/8" | 1 1/4" |
| OS-13 | 3/8" | 1/4" |
| OS-14 | 7/16" | 7/32" |



| CASE | | | | | | | |
|-------|---------|----------|----------|---------|----------------|-------------------|----------------------------|
| Type | Hi. | Dia. | Length | Width | Mtg. | Mtg. Cen. | Cutout |
| DT-1 | 1 1/16" | | 1 1/16" | 1 1/2" | 2 4-40 inserts | 3/4" | 5/16" x 1 1/2" |
| DT-2 | 1 3/4" | | 1 7/16" | 1 3/16" | 2 6-32 studs | 7/8" x 3/32" | 3/8" x 1 1/16" |
| DT-3 | 2" | | 1 25/32" | 7/8" | 2 6-32 studs | 1 1/4" x 3/8" | 3/8" x 3/8" |
| DT-4 | 3 1/8" | | 2 3/4" | 1 5/16" | 4 8-32 studs | 2 1/16" x 1 1/16" | 3/4" x 3/8" |
| DT-5 | 1 5/16" | 1 13/16" | | | 2 6-32 studs | 1 1/8" | 3/8" x 1" |
| DT-6 | 5/8" | 1/2" | | | Pig Tails | | |
| DM-2 | 1" | 1 1/8" | | | 2 4-40 inserts | 5/8" | 3/8" x 7/8" |
| DM-11 | 1 1/2" | 1 3/8" | | | 2 6-32 inserts | 7/8" | 3/8" x 7/8" |
| DST-1 | 25/32" | | 3/4" | 1 1/2" | 1/4" long pins | | To fit 1/2" crystal socket |

| MOLD | | | |
|-------|-----------------|---------|-------------------------|
| Type | O.D. | Hi. | Clearance Hole Mounting |
| MR-1 | 3/8" | 13/32" | Pig Tails |
| MR-3 | 1 1/16" | 1/2" | No. 6 |
| MR-3A | 1 3/16" | 1 1/16" | No. 6 |
| MR-4 | 1 1/8" | 3/4" | No. 8 |
| MR-5 | 1 3/8" | 1" | No. 8 |
| MR-8 | 2 1/2" | 1 3/8" | No. 10 |
| MR-9 | 2 5/8" | 1 7/16" | No. 10 |
| MR-11 | 7/16" | 1/4" | Pig Tails |
| MS-1 | 25/32" x 25/64" | 13/64" | Pig Tails |

FREED TRANSFORMER COMPANY, INC.

MAGNETIC AMPLIFIERS AND SATURABLE TRANSFORMERS

The ever increasing demand for reliability, ruggedness, miniaturization and high performance has made the magnetic amplifier an indispensable component of many military and industrial automatic control and servo systems. Recent advances in materials and techniques permit an even greater utilization of the well-known inherent advantages of magnetic amplifiers such as direct operation from line voltage, no warm-up time, long-life components, ease of signal mixing and hermetic sealing.

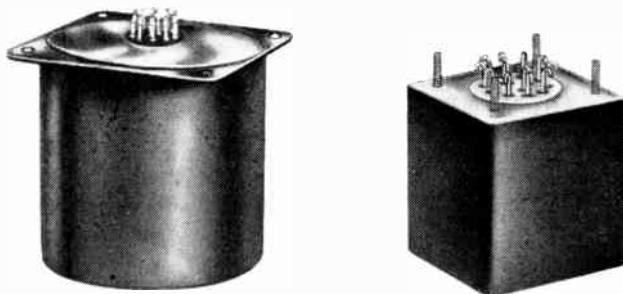
Freed Transformer Co. manufactures an extensive line of magnetic amplifiers, ranging from saturable transformers to half-wave type, fast-response servo amplifiers. Choice of catalog amplifiers assures standardization, lowest possible cost and rapid delivery.

All standard units are designed for continuous operation and will operate in an ambient temperature range of -55°C to $+75^{\circ}\text{C}$.

Vacuum tube and transistor preamplifiers can be supplied if very high impedance inputs are required.

In addition to standard items, Freed Transformer Co. has extensive facilities for the design and production of special amplifiers, saturable reactors and magnetic components.

ALL ITEMS LISTED ARE AVAILABLE FROM STOCK.

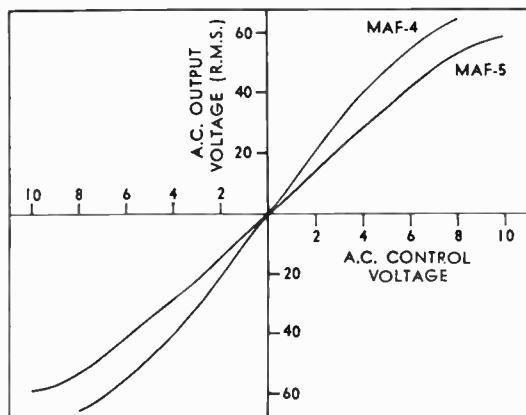
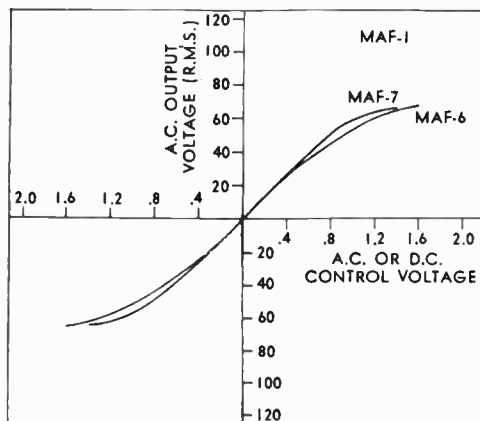


FAST RESPONSE MAGNETIC AMPLIFIERS

THE MAF TYPE OF FAST RESPONSE MAGNETIC AMPLIFIERS COMBINES HIGH POWER GAIN, RUGGEDNESS, AND RELIABILITY WITH A MAXIMUM 2 CYCLE RESPONSE. ALL MAF UNITS ARE PHASE-REVERSIBLE.

| Freed No. | MAF-4 | MAF-5 | MAF-6 | MAF-7 |
|---------------------------------------|------------------------------------|---------------------------|--|---|
| Power Supply | 115V 400 cps | 115V 400 cps | 115V 400 cps | 115V 400 cps |
| Maximum Output Wattage | 10 | 15 | 10 | 15 |
| Output Voltage | 57.5V RMS | 57.5V RMS | 57.5V RMS | 57.5V RMS |
| Typical Load | Kearfott R110-2 Kearfott R111-2 | Kearfott R112-2 | Kearfott R110-2 Kearfott R111-2 | Kearfott R111-2 Kearfott R112-2 |
| Input Signal Required for Full Output | 8V AC | 8V AC | R110-2 10K 1K 1.2V .4V R111-2 10K 1K 1.6V .6V | R111-2 10K 1K 1.2V .6V R112-2 10K 1K 2.5V 1.0V |
| Control Winding Resistance | 60 Ohms CT 150 Ohms CT | 60 Ohms CT 150 Ohms CT | AC or DC 10,000 Ohms Min. 1,000 Ohms Min. | AC or DC 10,000 Ohms Min. 1,000 Ohms Min. |
| Physical Dimensions | 2 3/16" O.D. x 2 3/8" H | 2 1/2" O.D. x 2 1/2" H | 4 3/8" x 4 1/4" x 2 7/8" H | 4 3/8" x 4 1/4" x 2 7/8" H |
| Weight | 13 oz. | 18 oz. | 4 1/2 lbs. | 4 1/2 lbs. |

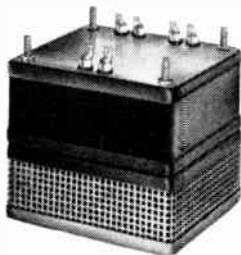
TRANSFER CHARACTERISTIC CURVES



FREED TRANSFORMER COMPANY, INC.

PUSH-PULL MAGNETIC AMPLIFIERS

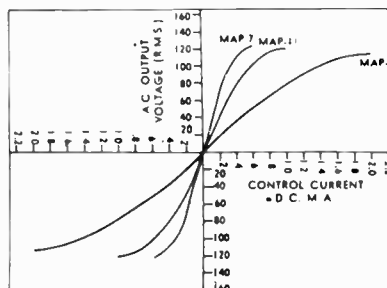
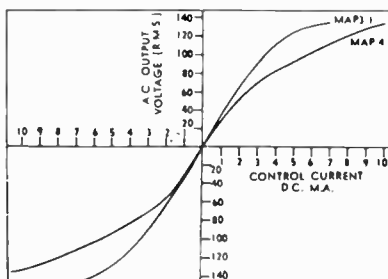
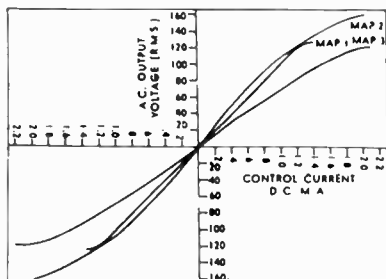
The map line of push-pull magnetic amplifiers features high gain, polarity-sensitive amplification and a phase-reversible output.



| Freed No. | MAP-1 | MAP-2 | MAP-3 | MAP-3-1 |
|---------------------------------------|--|--|--|--|
| Power Supply | 115 V.A.C. 60 Cycles (To MAPT-1) | 115 V.A.C. 60 Cycles (To MAPT-2) | 115 V.A.C. 60 Cycles (To MAPT-3) | 115 V.A.C. 60 Cycles (To MAPT-3-1) |
| Maximum Output Wattage | 2.8 Watts | 15 Watts | 50 Watts | 50 Watts |
| Voltage | 140 V | 150 V | 120 V | 140 V |
| Typical Load | Kollsman 951-0160 | Diehl FPE 25-11 | Diehl FPF 49-9 | Diehl FPF 49-9 |
| Input Signal Required for Full Output | 1.2 ma. | 1 ma. | 2 ma. | 4.5 ma. |
| Resp. Time | ON OFF 15 cycles 60 | ON OFF 5 cycles 38 | ON OFF 3 cycles 15 | ON OFF 5 cycles 20 |
| Control Winding Resistance | 620 ohms each | 1230 ohms each | 250 ohms each | 1700 ohms each |
| Physical Dimensions | 3 3/8" x 3 1/4" x 5 7/8" H.M.A. 2 5/8" x 2 1/4" x 3" H.T. | 3 7/8" x 4 5/8" x 7" H.M.A. 2 1/2" x 2 3/4" x 3 3/4" H.T. | 5 1/8" x 6 7/8" x 8" H.M.A. 3 1/2" x 3 3/8" x 4 1/4" H.T. | 5 1/2" x 5" x 8" H.M.A. 3 5/8" x 4 1/4" x 3 3/8" H.T. |
| Weight | 6 lbs. M.A. 3 lbs. T. | 11 lbs. M.A. 3 1/2 lbs. T. | 26 1/2 lbs. M.A. 8 lbs. T. | 20 lbs. M.A. 8 lbs. T. |

| Freed No. | MAP-4 | MAP-7 | MAP-8 | MAP-11 |
|---------------------------------------|--|--------------------------|--|----------------------------|
| Power Supply | 115 V.A.C. 60 Cycles (To MAPT-4) | 115 V.A.C. 400 Cycles | 115 V.A.C. 400 Cycles (To MAPT-8) | 115 V.A.C. 400 Cycles |
| Maximum Output Wattage | 175 Watts | 15 Watts | 50 Watts | 10 Watts |
| Voltage | 130 V | 125 V | 115 V | 115 V |
| Typical Load | Diehl FPF 85-18-1 | Kearfott R112-2A | Bendix CK-3000-1-A | Kearfott R111-2A |
| Input Signal Required for Full Output | 8 ma. | .5 ma. | 1.8 ma. | .9 ma. |
| Resp. Time | ON OFF 17 cycles 66 | ON OFF 5 cycles 15 | ON OFF 45 cycles 60 | ON OFF 4 cycles 75 |
| Control Winding Resistance | 3000 ohms each | 4,400 ohms each | 320 ohms each | 3300 ohms each |
| Physical Dimensions | 7 1/4" x 5" x 7 7/8" H.M.A. 4" x 4 3/4" x 5 5/8" H.T. | 3 1/4" x 3 5/8" x 7" H | 3 3/8" x 3 7/8" x 7 7/8" H.M.A. 2 1/2" x 2 3/4" x 3 3/4" H.T. | 4 1/8" x 3 1/2" x 5 1/4" H |
| Weight | 35 lbs. M.A. 12 lbs. T. | 7 lbs. | 7 1/2 lbs. M.A. 4 lbs. T. | 5 lbs. |

TRANSFER CHARACTERISTIC CURVES

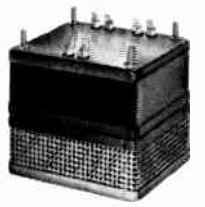


FREED TRANSFORMER COMPANY, INC.

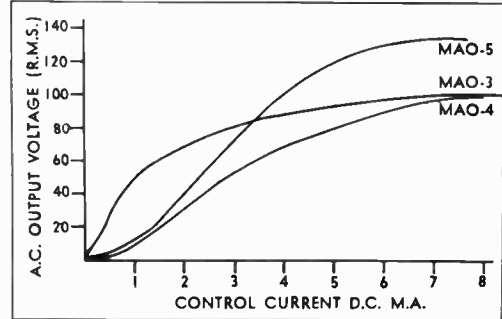
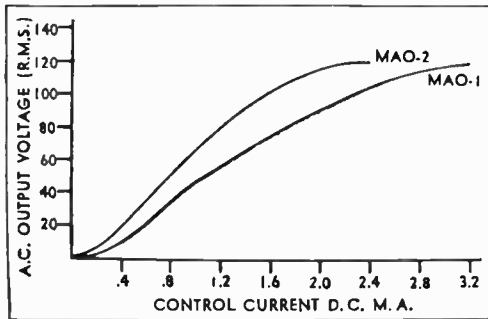
SINGLE ENDED MAGNETIC AMPLIFIERS

THE MAO LINE OF SINGLE-ENDED MAGNETIC AMPLIFIERS PROVIDES A SINGLE STAGE OF DC CONTROLLED AMPLIFICATION, UTILIZING POSITIVE FEEDBACK TO OBTAIN MUCH HIGHER GAIN THAN THAT OF A SATURABLE REACTOR.

| Freed No. | MAO-1 | MAO-2 | MAO-3 | MAO-4 | MAO-5 |
|-----------------------------------|-------------------------|----------------------------|----------------------------|-------------------------|--|
| Power Supply | 115 V.A.C. 60 Cycles | 115 V.A.C. 60 Cycles | 115 V.A.C. 60 Cycles | 115 V.A.C. 60 Cycles | 115 V.A.C. to the MAO-T-5 Transformer 60 Cycles |
| Maximum Output Wattage | 4 watts | 20 watts | 100 watts | 400 watts | 575 watts |
| Voltage | 120V | 120V | 100V | 100V | 135V |
| Typical Load | 4000 ohms | 700 ohms | 100 ohms | 25 ohms | 25 ohms |
| Input Signal Req. for Full Output | 3 ma. | 1.8 ma. | 9 ma. | 9 ma. | 6 ma. |
| Control Winding Resistance | 300 ohms each | 700 ohms each | 5600 ohms each | 4500 ohms each | 4,500 ohms |
| Physical Dimensions | 3 3/4" x 4" x 3 1/2" H | 4 1/4" x 3 5/8" x 6 3/8" H | 3 1/4" x 5 1/2" x 4 1/2" H | 5" x 7 1/2" x 6" H | 5" x 7 1/2" x 6" H Transf. 3 7/8" x 3 1/8" x 3 3/4" H 21 lbs. Trans. 7 1/4 lbs. |
| Weight | 4 lbs. | 7 lbs. | 8 1/2 lbs. | 21 lbs. | |



TRANSFER CHARACTERISTIC CURVES



TRANSISTOR CONVERTERS

THE FREED LINE OF HERMETICALLY SEALED DC TO AC AND DC TO DC TRANSISTOR CONVERTERS PROVIDE A HIGH EFFICIENCY VOLTAGE CONVERSION FROM BATTERY SOURCES TO AN AC LINE VOLTAGE OR HIGH DC VOLTAGE WITHOUT THE USE OF MOVING PARTS.

Freed Transformer Co. maintains a stock line of reliable, highly efficient static DC to DC and DC to AC converters. DC to DC converters in hermetically sealed cans. RF filters included inside case.

The MAC Line of Static DC to DC and DC to AC Converters provide a highly efficient voltage conversion from battery sources to AC or DC voltage without the use of moving parts.

The output voltage and/or frequency is directly proportional to source voltage variation.

Special regulators can be supplied to compensate for this variation.

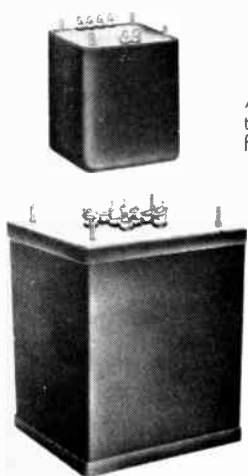
- RUGGED, QUIET, MAINTENANCE FREE, LONG LIFE OPERATION.
- HIGH POWER TO WEIGHT RATIO, ARC-FREE OPERATION.

DC TO DC CONVERTERS

All TDC units are Hermetically Sealed, Oil Filled. Mtg. base plate must be mounted on a sink of sufficient area to maintain a base temperature of 70 C. Maximum output regulation 5% from half load to full load. Ripple frequency 4 to 5 KC; Ripple content 0.1%.

UNREGULATED TDC STOCK UNITS

| Type No. | NOM. V in | V out | MAX 1 out MA | Case Size |
|--------------|-----------|-------|--------------|-----------------------|
| TDC 12-30-15 | 12v | 300 | 150 | 2 5/8 x 2 1/4 x 3 1/2 |
| TDC 12-25-12 | 12v | 250 | 120 | 2 5/8 x 2 1/4 x 3 1/2 |
| TDC 12-30-05 | 12v | 300 | 50 | 2 x 2 1/4 x 3 1/2 |
| TDC 12-20-05 | 12v | 200 | 50 | 2 x 2 1/4 x 3 1/8 |
| TDC 28-30-15 | 28v | 300 | 150 | 2 5/8 x 2 1/4 x 3 1/2 |
| TDC 28-25-12 | 28v | 250 | 120 | 2 5/8 x 2 1/4 x 3 1/2 |
| TDC 28-30-05 | 28v | 300 | 50 | 2 x 2 1/4 x 3 1/8 |
| TDC 28-20-05 | 28v | 200 | 50 | 2 x 2 1/4 x 3 1/8 |



FREED TRANSFORMER COMPANY, INC.

DC TO AC TRANSISTOR CONVERTERS

Input Voltage — 12 VDC
Output Frequency — 60 CPS. — Square Wave

| Freud No. | Output Voltage | Power | Type of Case | Dimensions |
|-------------|----------------|--------|--------------|---|
| MAC 12-3-60 | 115 VRMS | 30 VA | Open | 7 $\frac{1}{4}$ " x 3 $\frac{1}{8}$ " x 4 $\frac{3}{8}$ " |
| MAC 12-10-1 | 115 VRMS | 100 VA | Open | 7 $\frac{1}{4}$ " x 4" x 5" |
| MAC 12-10-2 | 115 VRMS | 100 VA | Sealed | 7 $\frac{1}{4}$ " x 4 $\frac{1}{8}$ " x 4 $\frac{11}{16}$ " |
| MAC 12-20-1 | 115 VRMS | 180 VA | Open | 6" x 4 $\frac{1}{8}$ " x 6" |
| MAC 12-20-2 | 115 VRMS | 180 VA | Sealed | 6" x 4 $\frac{1}{8}$ " x 6" |
| MAC 12-30-1 | 115 VRMS | 250 VA | Open | 5 $\frac{7}{8}$ " x 6 $\frac{1}{8}$ " x 7 $\frac{1}{16}$ " |
| MAC 12-30-2 | 115 VRMS | 250 VA | Sealed | 5 $\frac{7}{8}$ " x 6 $\frac{1}{8}$ " x 7 $\frac{1}{16}$ " |



OPEN CASE



SEALED CASE

DC TO AC TRANSISTOR CONVERTER

- Output Waveform — Square Wave
- Output Frequency — 60 cps (Adjustment Control)
- Frequency Stability $\pm 3\%$
- Hermetically Sealed
- Maximum Ambient Temperature 50° C
- Temperature of Base Mounting Plate must not exceed 70° C
- Output Voltage Variation — Varies Directly with Input Voltage

| | Nominal Input V.D.C. | Output (at 115 V) VA | Case | |
|------------|----------------------|----------------------|---|---|
| | | | Unregistered | Registered* |
| TAC-12-50 | 12 | 50 | 4 $\frac{1}{8}$ " x 3 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " H | ----- |
| TAC-12-90 | 12 | 90 | 4 $\frac{1}{8}$ " x 3 $\frac{1}{2}$ " x 4 $\frac{7}{8}$ " H | ----- |
| TAC-12-175 | 12 | 175 | 5" x 4 $\frac{1}{8}$ " x 6" H | ----- |
| TAC-28-50 | 28 | 50 | 4 $\frac{1}{8}$ " x 3 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " H | 4 $\frac{1}{8}$ " x 3 $\frac{1}{2}$ " x 4 $\frac{7}{8}$ " H |
| TAC-28-100 | 28 | 100 | 4 $\frac{1}{8}$ " x 3 $\frac{1}{2}$ " x 4 $\frac{7}{8}$ " H | 5" x 4 $\frac{1}{8}$ " x 6" H |
| TAC-28-175 | 28 | 175 | 5" x 4 $\frac{1}{8}$ " x 6" H | ----- |
| TAC-28-250 | 28 | 250 | 5 $\frac{1}{2}$ " x 5" x 6 $\frac{3}{4}$ " H | ----- |

*Add "R" (Suffix) to regulated units.



DC TO AC INVERTERS WITH SINE WAVE OUTPUTS ARE AVAILABLE IN TYPES LISTED BELOW

Input Voltage — 5 Volts Output Voltage — 5 Volts $\pm 5\%$ (NOM)

| Freud No. | Frequency | Distortion | Power |
|-------------|-----------|------------|-------|
| MAC 5-2-F-1 | 600 cps. | 4% Max. | .5 VA |
| MAC 5-1-F-2 | 1200 cps. | 4% Max. | .5 VA |
| MAC 5-3-F-2 | 2400 cps. | 4% Max. | .5 VA |
| MAC 5-4-F | 4800 cps. | 4% Max. | .5 VA |



These units will operate in an ambient of 20 degrees C to 50 degrees C with the nominal output voltage constant within $\pm 15\%$ over the temperature range.

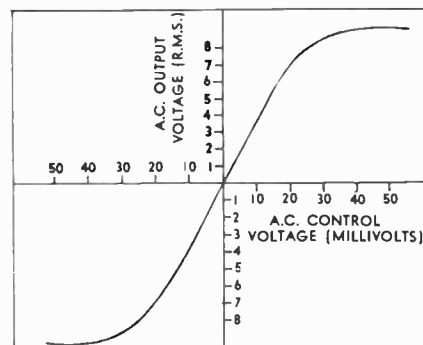
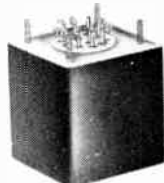
Case size is 1 $\frac{7}{8}$ " x 2" x 5" high. Connections are brought out to an octal plug.

MINIATURIZED SILICON TRANSISTOR PREAMPLIFIER

THE MAT TYPE OF TRANSISTOR PREAMPLIFIER COMBINES LOW POWER CONSUMPTION, HIGH POWER GAIN AND SMALL SIZE AND WEIGHT.

TRANSFER CHARACTERISTIC CURVES

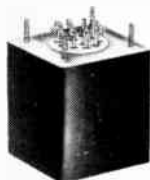
| | |
|---------------------------------------|---|
| Freud No. | MAT-1-1 |
| Power Supply | 115V 400 ~ |
| Voltage Gain | 400 |
| Maximum Output Voltage | 10V (RL = 1.5K) |
| Typical Load | Freud MAF-4 and MAF-5 Magnetic Amplifiers |
| Input Signal Required for Full Output | 50MV |
| Input Impedance | >10,000 OHMS |
| Physical Dimensions | 1 $\frac{3}{4}$ " x 1 $\frac{7}{8}$ " x 2 $\frac{5}{8}$ " H |
| Weight | 10 oz. |



FREED TRANSFORMER COMPANY, INC.

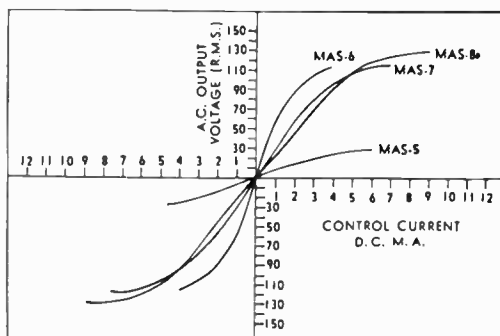
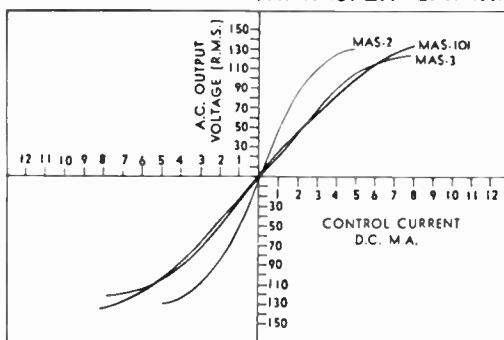
FREED SATURABLE TRANSFORMERS

The MAS line of saturable transformers, commonly controlled by dual-triodes or transistors, emphasizes low cost, small size, extreme reliability (no rectifiers) and phase-reversible output.



| Freed No. | MAS-1 | MAS-2 | MAS-3 | MAS-4 | MAS-5 | MAS-6 | MAS-7 | MAS-8 | MAS-101 |
|---------------------------------------|-------------------------------|---------------------------------|-------------------------------|-------------------------|-------------------------------|---------------------------|----------------------------|-------------------------------|-------------------------------|
| Power Supply | 115 V.A.C. 60 Cycles | 115 V.A.C. 400 Cycles | 115 V.A.C. 60 Cycles | 115 V.A.C. 60 Cycles | 115 V.A.C. 400 Cycles | 115 V.A.C. 400 Cycles | 115 V.A.C. 400 Cycles | 115 V.A.C. 400 Cycles | 115 V.A.C. 60 Cycles |
| Maximum Output | 15 watts | 6 watts | 30 watts | 60 watts | 2.7 watts | 30 watts | 40 watts | 10 watts | 15 watts |
| Wattage Voltage | 130V | 120V | 120V | 120V | 26V | 120V | 115V | 125V | 120V |
| Typical Load | Diehl FPE 25-11 | Kearfott R-110 | Diehl FPE 49-7 | 250 ohms | Kearfott R-118 | Diehl FPE 49-13-1 | Bendix CK-3000-1A | Kearfott R-110, R-111 | Diehl FPE 25-11 |
| Input Signal Required for Full Output | 6 ma. | 3 ma. | 8 ma. | 20 ma. | 4 ma. | 4 ma. | 6 ma. | 11 ma. | 9 ma. |
| Resp. Time | ON OFF 2 cycles 5 | ON OFF 3 cycles 6 | ON OFF 3 cycles 30 | ON OFF 5 cycles 35 | ON OFF 10 cycles 35 | ON OFF 12 cycles 9 | ON OFF 12 cycles 9 | ON OFF 6 cycles 3 | ON OFF 3 cycles 6 |
| Control Winding Resistance | 14 K ohms each | 2000 ohms each | 6800 ohms each | 2000 ohms each | 1500 ohms each | 4000 ohms each | 4000 ohms each | 7000 ohms each | 3200 ohms each |
| Physical Dimensions | 3 1/2" x 4 1/8" x 5 1/2" H | 1 3/4" x 2 3/16" x 2 1/16" H | 4 3/4" x 5 7/8" x 5 1/2" H | 7" x 5 1/4" x 7" H | 2 1/4" x 2 1/8" x 2 1/4" H | 3 3/4" x 3 1/4" x 4" H | 3 1/16" x 3 1/4" x 4" H | 1 5/8" x 2 3/8" x 3 1/8" H | 3 1/2" x 4 1/8" x 5 1/2" H |
| Weight | 9 lbs. | 2 lbs. | 18.5 lbs. | 29 lbs. | 1.25 lbs. | 6 lbs. | 6 lbs. | 21 oz. | 9.75 lbs. |

TRANSFER CHARACTERISTIC CURVES

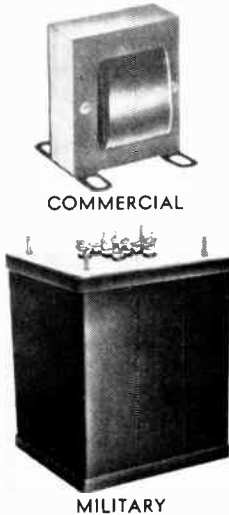


CONSTANT VOLTAGE TRANSFORMERS

The MCV line of constant voltage transformers provides accurate regulation against line and/or load variations, without the use of tubes or moving parts.

- MILITARY SPECIFICATIONS
- COMMERCIAL
- ACCURATE REGULATIONS
- FULLY AUTOMATIC
- NO TUBES
- NO MOVING PARTS
- FAST RESPONSE

Rated output within $\pm 2\%$ of nominal value. Regulation automatically maintained within $\pm 1\%$. Regulation from 20% to full load $\pm 2\%$.



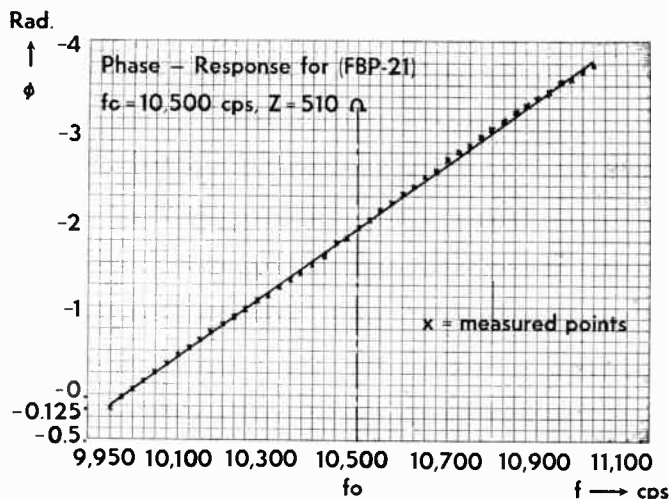
| Reg. Output in R.M.S. Volts | Input Range in R.M.S. Volts | Output in V.A. P.F.-1 | CATALOG NUMBERS | | | |
|-----------------------------|-----------------------------|-----------------------|-----------------|------------|------------|------------|
| | | | 60 Cycles | | 400 Cycles | |
| | | | Comm. | Military* | Comm.* | Military* |
| 115 | 95-130 | 5 | MCV65LC | MCV65LM | MCV45LC | MCV45LM |
| 115 | 95-130 | 25 | MCV625LC | MCV625LM | MCV425LC | MCV425LM |
| 115 | 95-130 | 75 | MCV675LC | MCV675LM | MCV475LC | MCV475LM |
| 115 | 95-130 | 125 | MCV6125LC | MCV6125LM | MCV4125LC | MCV4125LM |
| 115 | 95-130 | 175 | MCV6175LC | MCV6175LM | MCV4175LC | MCV4175LM |
| 115 | 95-130 | 250 | MCV6250LC | MCV6250LM | MCV4250LC | MCV4250LM |
| 115 | 95-130 | 375 | MCV6375LC | MCV6375LM | MCV4375LC | MCV4375LM |
| 115 | 95-130 | 500 | MCV6500LC | MCV6500LM | MCV4500LC | MCV4500LM |
| 115 | 95-130 | 750 | MCV6750LC | MCV6750LM | MCV4750LC | MCV4750LM |
| 115 | 95-130 | 1000 | MCV61000LC | MCV61000LM | MCV41000LC | MCV41000LM |
| 26 | 95-130 | 5 | MCV6-5-4FC | MCV6-5-4FM | MCV454FC | MCV454FM |
| 26 | 95-130 | 25 | MCV6254FC | MCV6254FM | MCV4254FC | MCV4254FM |
| 26 | 95-130 | 75 | MCV6754FC | MCV6754FM | MCV4754FC | MCV4754FM |
| 26 | 95-130 | 125 | MCV61254FC | MCV61254FM | MCV41254FC | MCV41254FM |
| 6.4 | 95-130 | 5 | MCV6-5FM | MCV6-5FM | MCV45FM | MCV45FM |
| 6.4 | 95-130 | 25 | MCV625FM | MCV625FM | MCV425FM | MCV425FM |
| 6.4 | 95-130 | 75 | MCV675FM | MCV675FM | MCV475FM | MCV475FM |
| 6.4 | 95-130 | 125 | MCV6125FM | MCV6125FM | MCV4125FM | MCV4125FM |

*Condensers are not provided with units. Where condensers are provided they are external to units.

FREED TRANSFORMER COMPANY, INC.

TELEMETERING COMPONENTS

A complete line of Band Pass Filters, Low Pass Filters and Discriminators is available for multi-channel telemetering applications. These components cover the frequency range from 400 cps to 70,000 cps. The filters feature **exceptional phase linearity**, excellent selectivity characteristics and plug-in construction. The Discriminators, either fixed or slug tuned, have exceptional linearity, high amplification, and utmost stability.



CASE DIMENSIONS

FA-5 CASE



Height: $4\frac{1}{2}''$
 Width: $3\frac{1}{2}''$
 Depth: $2\frac{1}{8}''$
 Mtg. Cen.: $2\frac{1}{16}'' \times 1\frac{1}{16}''$
 Studs: 5-8-32x $\frac{1}{2}''$
 Octal Header

FA-10 CASE



Height: $4\frac{1}{2}''$
 Width: $3\frac{1}{2}''$
 Depth: $2\frac{1}{8}''$
 Mtg. Cen.: $1\frac{1}{16}'' \times 1\frac{1}{16}''$
 Studs: 4-8-32x $\frac{1}{2}''$
 Knockout: $1\frac{1}{2}''$ dia.

FA-15 CASE

Height: $4\frac{1}{2}''$
 Width: $2\frac{7}{8}''$
 Depth: $2\frac{1}{8}''$
 Mtg. Cen.: $1\frac{1}{16}'' \times 1\frac{1}{16}''$
 Studs: 4-8-32x $\frac{1}{2}''$
 Knockout: $1\frac{1}{2}''$ dia.

TELEMETERING BAND PASS FILTERS

Hermetically sealed to MIL-T-27A and MIL-F-18327

These filters cover the frequencies from 400 c.p.s. to 70KC. Narrow frequency B.P.F. have a band width of $\pm 9\frac{3}{4}\%$ of center frequency and 45 DB (minimum) points at $\pm 7\frac{1}{2}\%$ of center frequency of higher or lower adjacent channels. Wide frequency B.P.F. have a band width of $\pm 19\frac{1}{2}\%$ of center frequency and 50 D.B. points at $\pm 15\%$ of center frequencies of higher or lower second adjacent channels.

| Characteristic Impedance 500 Ω | | | | Characteristic Impedance 2,500 Ω | | | |
|---------------------------------------|-------------------------|---------------------------|----------|---|-------------------------|---------------------------|----------|
| Catalog No. | Center Frequency c.p.s. | 3 DB Band Width % of C.F. | Case No. | Catalog No. | Center Frequency c.p.s. | 3 DB Band Width % of C.F. | Case No. |
| FBP-10 | 400 | $\pm 9\frac{3}{4}$ | FA-10 | FBP-34 | 400 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-11 | 560 | $\pm 9\frac{3}{4}$ | FA-10 | FBP-35 | 560 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-12 | 730 | $\pm 9\frac{3}{4}$ | FA-10 | FBP-36 | 730 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-13 | 960 | $\pm 9\frac{3}{4}$ | FA-10 | FBP-37 | 960 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-14 | 1,300 | $\pm 9\frac{3}{4}$ | FA-10 | FBP-38 | 1,300 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-15 | 1,700 | $\pm 9\frac{3}{4}$ | FA-10 | FBP-39 | 1,700 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-16 | 2,300 | $\pm 9\frac{3}{4}$ | FA-10 | FBP-40 | 2,300 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-17 | 3,000 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-41 | 3,000 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-18 | 3,900 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-42 | 3,900 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-19 | 5,400 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-43 | 5,400 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-20 | 7,350 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-44 | 7,350 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-21 | 10,500 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-45 | 10,500 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-22 | 12,300 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-46 | 12,300 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-23 | 14,500 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-47 | 14,500 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-24 | 22,000 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-48 | 22,000 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-25 | 22,000 | $\pm 19\frac{1}{2}$ | FA-15 | FBP-49 | 22,000 | $\pm 19\frac{1}{2}$ | FA-5 |
| FBP-26 | 30,000 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-50 | 30,000 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-27 | 30,000 | $\pm 19\frac{1}{2}$ | FA-15 | FBP-51 | 30,000 | $\pm 19\frac{1}{2}$ | FA-5 |
| FBP-28 | 40,000 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-52 | 40,000 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-29 | 40,000 | $\pm 19\frac{1}{2}$ | FA-15 | FBP-53 | 40,000 | $\pm 19\frac{1}{2}$ | FA-5 |
| FBP-30 | 52,500 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-54 | 52,500 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-31 | 52,500 | $\pm 19\frac{1}{2}$ | FA-15 | FBP-55 | 52,500 | $\pm 19\frac{1}{2}$ | FA-5 |
| FBP-32 | 70,000 | $\pm 9\frac{3}{4}$ | FA-15 | FBP-56 | 70,000 | $\pm 9\frac{3}{4}$ | FA-5 |
| FBP-33 | 70,000 | $\pm 19\frac{1}{2}$ | FA-15 | FBP-57 | 70,000 | $\pm 19\frac{1}{2}$ | FA-5 |

FREED TRANSFORMER COMPANY, INC.

DISCRIMINATOR INPUT LOW PASS FILTER
HERMETICALLY SEALED TO MIL-T-27A AND MIL-F-18327 SPECIFICATIONS

CASE DIMENSIONS

FA-1 CASE



Height: 4 1/2"
Width: 1 1/2"
Depth: 1 1/2"
Mtg. Cen.: 3/32" sq.
4 Inserts: 6-32
Knockout: 1"

FA-185 CASE



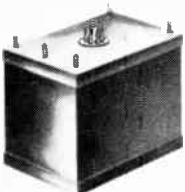
Height: 4 1/2"
Width: 1 7/8"
Depth: 1 5/8"
Mtg. Cen.: 1 1/64" x 1 1/16"
4 Inserts: 6-32
Knockout: 1 1/2"

FA-190 CASE



Height: 4 1/2"
Width: 2 1/4"
Depth: 1 5/8"
Mtg. Cen.: 1 1/32" x 1 1/16"
4 Inserts: 6-32
Knockout: 1 1/2"

FA-410 CASE



Height: 4 1/2"
Width: 6"
Depth: 4"
Mtg. Cen.: 5 1/4" x 3 1/4"
5 Studs: 10-32
Octal Header

| Catalog No. | Fo Center Freq. in c.p.s. | Characteristic Impedance Ohms | Case No. |
|-------------|---------------------------|-------------------------------|----------|
| LPI-10 | 400 | 30,000 | FA-1 |
| LPI-11 | 560 | 30,000 | FA-1 |
| LPI-12 | 730 | 30,000 | FA-1 |
| LPI-13 | 960 | 30,000 | FA-1 |
| LPI-14 | 1,300 | 30,000 | FA-1 |
| LPI-15 | 1,700 | 30,000 | FA-1 |
| LPI-16 | 2,300 | 30,000 | FA-1 |
| LPI-17 | 3,000 | 30,000 | FA-1 |
| LPI-18 | 3,900 | 30,000 | FA-1 |

| Catalog No. | Fo Center Freq. in c.p.s. | Characteristic Impedance Ohms | Case No. |
|-------------|---------------------------|-------------------------------|----------|
| LPI-19 | 5,400 | 30,000 | FA-1 |
| LPI-20 | 7,350 | 30,000 | FA-1 |
| LPI-21 | 10,500 | 30,000 | FA-1 |
| LPI-22 | 12,300 | 30,000 | FA-1 |
| LPI-23 | 14,500 | 30,000 | FA-1 |
| LPI-24 | 22,000 | 5,100 | FA-1 |
| LPI-25 | 30,000 | 5,100 | FA-1 |
| LPI-26 | 40,000 | 5,100 | FA-1 |
| LPI-27 | 52,500 | 5,100 | FA-1 |
| LPI-28 | 70,000 | 5,100 | FA-1 |

Band Pass Attenuation: 0.05 DB ± 9% of Center Frequency
30 DB at second harmonic of Pass Band Frequencies
50 DB at third harmonic of Pass Band Frequencies
40 DB above third harmonic of Pass Band Frequencies

Band Pass Attenuation: 0.05 DB ± 15% of Center Frequency
30 DB at second harmonic of Pass Band Frequencies
50 DB at third harmonic of Pass Band Frequencies
40 DB above third harmonic of Pass Band Frequencies

DISCRIMINATOR OUTPUT LOW PASS FILTER
HERMETICALLY SEALED TO MIL-T-27A AND MIL-F-18327 SPECIFICATIONS

| Catalog No. | Fo c. p. s. | Characteristic Impedance Ohms | Case No. |
|-------------|-------------|-------------------------------|----------|
| LPO-10 | 6 | 330 | FA-410 |
| LPO-11 | 8 | 330 | FA-410 |
| LPO-12 | 11 | 330 | FA-410 |
| LPO-13 | 14 | 330 | FA-410 |
| LPO-14 | 20 | 330 | FA-410 |
| LPO-15 | 25 | 330 | FA-410 |
| LPO-16 | 35 | 330 | FA-410 |
| LPO-17 | 45 | 330 | FA-410 |
| LPO-18 | 60 | 330 | FA-410 |
| LPO-19 | 81 | 330 | FA-410 |
| LPO-20 | 110 | 330 | FA-410 |
| LPO-21 | 160 | 330 | FA-410 |
| LPO-22 | 185 | 330 | FA-410 |

| Catalog No. | Fo c. p. s. | Characteristic Impedance Ohms | Case No. |
|-------------|-------------|-------------------------------|----------|
| LPO-23 | 220 | 330 | FA-410 |
| LPO-24 | 330 | 330 | FA-410 |
| LPO-25 | 450 | 330 | FA-410 |
| LPO-26 | 600 | 330 | FA-410 |
| LPO-27 | 660 | 330 | FA-410 |
| LPO-28 | 790 | 330 | FA-410 |
| LPO-29 | 900 | 330 | FA-410 |
| LPO-30 | 1,050 | 330 | FA-410 |
| LPO-31 | 1,200 | 330 | FA-410 |
| LPO-32 | 1,600 | 330 | FA-410 |
| LPO-33 | 2,100 | 330 | FA-410 |
| LPO-34 | 7,200 | 330 | FA-410 |
| LPO-35 | 10,000 | 330 | FA-410 |

Attenuation: < 0.2 DB up to 0.5 times Fo
< 0.7 DB from 0.5 to 1. times Fo
> 20 DB at 2 Fo to 2.5 Fo
> 30 DB from 2.5 times Fo to 100 Kc.

SLUG TUNED DISCRIMINATORS

| Catalog No. | Center Frequency (Kc.) | % Deviation of Fo | Linearity | D.C. Output Volts | Case No. |
|-------------|------------------------|-------------------|-----------|-------------------|----------|
| DST-17 | 3.0 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-18 | 3.9 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-19 | 5.4 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-20 | 7.35 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-21 | 10.5 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-22 | 12.3 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-23 | 14.5 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-24 | 22.0 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-25 | 30.0 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |

| Catalog No. | Center Frequency (Kc.) | % Deviation of Fo | Linearity | D.C. Output Volts | Case No. |
|-------------|------------------------|-------------------|-----------|-------------------|----------|
| DST-26 | 40.0 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-27 | 52.5 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-28 | 70.0 | ± 8 1/2 | ± 0.5% | 32.5 | FA-190 |
| DST-29 | 22.0 | ± 15 | ± 1.0% | 26.0 | FA-190 |
| DST-30 | 30.0 | ± 15 | ± 1.0% | 26.0 | FA-190 |
| DST-31 | 40.0 | ± 15 | ± 1.0% | 26.0 | FA-190 |
| DST-32 | 52.5 | ± 15 | ± 1.0% | 26.0 | FA-190 |
| DST-33 | 70.0 | ± 15 | ± 1.0% | 26.0 | FA-190 |

FIXED DISCRIMINATORS
HERMETICALLY SEALED TO MIL-T-27A AND MIL-F-18327 SPECIFICATIONS

| Catalog No. | Center Frequency (cps) | % Deviation of Fo | Linearity | D.C. Output Volts | Case No. |
|-------------|------------------------|-------------------|-----------|-------------------|----------|
| DST-10 | 400 | ± 8 1/2 | ± 0.5% | 32.5 | FA-185 |
| DST-11 | 560 | ± 8 1/2 | ± 0.5% | 32.5 | FA-185 |
| DST-12 | 730 | ± 8 1/2 | ± 0.5% | 32.5 | FA-185 |
| DST-13 | 960 | ± 8 1/2 | ± 0.5% | 32.5 | FA-185 |

| Catalog No. | Center Frequency (cps) | % Deviation of Fo | Linearity | D.C. Output Volts | Case No. |
|-------------|------------------------|-------------------|-----------|-------------------|----------|
| DST-14 | 1,300 | ± 8 1/2 | ± 0.5% | 32.5 | FA-185 |
| DST-15 | 1,700 | ± 8 1/2 | ± 0.5% | 32.5 | FA-185 |
| DST-16 | 2,300 | ± 8 1/2 | ± 0.5% | 32.5 | FA-185 |

FREED TRANSFORMER COMPANY, INC.

FREED FILTERS

To MIL-T-27A and MIL-F-18327

Freed Standard Filters are **Hermetically Sealed Miniature** high performance components designed for both production and laboratory applications in the Communications and Electronic industry. In order to achieve attenuation requirements not obtainable with one single filter, one can combine several standard filters of different transmission characteristics. Wide Band Pass characteristics are obtainable by combining low and high Pass Units. The astatic construction of inductive components together with special shielding reduces the hum pick-up of the standard filters.

The standard filters are available in Low Pass, High Pass and Band Pass Filters.

Low Pass Filters: The attenuation characteristics of Low Pass Filters are 6db or less at cut-off frequency, 35db or more at 1.5 cut-off frequency and 40 db or more at 2 cut-off frequency.

ILP Interstage Low Pass Filter. Characteristic impedance 10,000 ohms, in and out.

LLP Line Low Pass Filter. Characteristic Impedance 500 to 600 Ω , in and out.

High Pass Filters: The attenuation characteristics of High Pass Filters are 6db or less at cut-off frequency, 35db and 40db or more at 0.67 and 0.5 cut-off frequency.

IHP Interstage High Pass Filter. Characteristic Impedance 10,000 ohms, in and out.

LHP Line High Pass Filter. Characteristic Impedance 500 to 600 Ω , in and out.

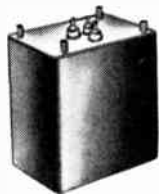
Band Pass Filters: The attenuation characteristics of Band Pass Filters are 2db or less at plus or minus 3% of center frequency 40db or more at 0.5 and 2 center frequency.

IBP Interstage Band Pass Filter. Nominal input impedance — 10,000 ohms. Nominal output impedance 5 megohms or grid of vacuum tube. Effective voltage step-up 2:1. (Output voltage to source voltage.)

LBP Line Band Pass Filter. Nominal input impedance 500 to 600 ohms. Nominal output impedance 5 megohms or grid of vacuum tube. Effective voltage step-up 9:1. (Output voltage to source voltage.)

CASE DIMENSIONS

DF-1 CASE



Height: $2\frac{1}{2}''$
 Width: $1\frac{11}{16}''$
 Depth: $1\frac{3}{16}''$
 Mtg. Cen.: $1\frac{1}{4}'' \times \frac{3}{4}''$
 Studs: 4—6-32 \times $\frac{3}{8}''$
 Knockout: $\frac{7}{8}''$ dia.

| Catalog No. | Cut-off Frequency c.p.s. |
|-------------|--------------------------|
| ILP- 100 | 100 |
| ILP- 200 | 200 |
| ILP- 300 | 300 |
| ILP- 500 | 500 |
| ILP- 750 | 750 |
| ILP- 1,000 | 1,000 |
| ILP- 1,500 | 1,500 |
| ILP- 2,000 | 2,000 |
| ILP- 2,500 | 2,500 |
| ILP- 3,000 | 3,000 |
| ILP- 5,000 | 5,000 |
| ILP- 7,000 | 7,000 |
| ILP- 10,000 | 10,000 |
| ILP- 15,000 | 15,000 |
| ILP- 20,000 | 20,000 |
| ILP- 23,000 | 23,000 |
| ILP- 25,000 | 25,000 |
| ILP- 32,000 | 32,000 |
| ILP-130,000 | 130,000 |
| ILP-150,000 | 150,000 |

| Catalog No. | Cut-off Frequency c.p.s. |
|-------------|--------------------------|
| LLP- 500 | 500 |
| LLP- 1,000 | 1,000 |
| LLP- 1,500 | 1,500 |
| LLP- 1,600 | 1,600 |
| LLP- 2,000 | 2,000 |
| LLP- 2,500 | 2,500 |
| LLP- 3,000 | 3,000 |
| LLP-16,000 | 16,000 |
| LLP-20,000 | 20,000 |
| LLP-70,000 | 70,000 |
| LLP-80,000 | 80,000 |
| | |
| IHP- 200 | 200 |
| IHP- 250 | 250 |
| IHP- 300 | 300 |
| IHP- 400 | 400 |
| IHP- 500 | 500 |
| IHP- 1,000 | 1,000 |
| IHP- 2,000 | 2,000 |
| IHP- 3,000 | 3,000 |
| IHP-10,000 | 10,000 |
| IHP-15,000 | 15,000 |
| | |
| LHP- 200 | 200 |
| LHP- 300 | 300 |
| LHP- 400 | 400 |
| LHP- 500 | 500 |
| LHP- 800 | 800 |
| LHP- 1,000 | 1,000 |
| LHP- 2,000 | 2,000 |
| LHP- 6,000 | 6,000 |
| LHP-10,000 | 10,000 |

| Catalog No. | Cut-off Frequency c.p.s. |
|-------------|--------------------------|
| IBP - 100 | 100 |
| IBP - 200 | 200 |
| IBP - 250 | 250 |
| IBP - 400 | 400 |
| IBP - 500 | 500 |
| IBP - 700 | 700 |
| IBP - 800 | 800 |
| IBP - 900 | 900 |
| IBP - 1,000 | 1,000 |
| IBP - 1,500 | 1,500 |
| IBP - 2,000 | 2,000 |
| IBP - 3,000 | 3,000 |
| IBP - 5,000 | 5,000 |
| IBP - 7,200 | 7,200 |
| IBP -10,000 | 10,000 |
| IBP -12,000 | 12,000 |
| IBP -15,000 | 15,000 |
| IBP -30,000 | 30,000 |
| IBP -57,600 | 57,600 |
| | |
| LBP- 200 | 100 |
| LBP- 300 | 300 |
| LBP- 400 | 400 |
| LBP- 600 | 600 |
| LBP- 800 | 800 |
| LBP- 1,000 | 1,000 |
| LBP- 1,500 | 1,500 |
| LBP- 2,000 | 2,000 |
| LBP- 3,000 | 3,000 |
| LBP- 7,200 | 7,200 |
| LBP-10,000 | 10,000 |
| LBP-14,400 | 14,400 |
| LBP-20,000 | 20,000 |
| LBP-28,800 | 28,800 |

Special filters in all six types
 are available for any frequency
 from 200 to 20,000 cycles.

FREED TRANSFORMER COMPANY, INC.

HERMETICALLY SEALED SUB-MINIATURE FILTERS

The standard filters are available in Low Pass, High Pass and Band Pass Filters.

Low Pass Filters: The attenuation characteristics of Low Pass Filters are 6db or less at cut-off frequency, 35db or more at 1.5 cut-off frequency and 40 db or more at 2 cut-off frequency.

ILM Interstage Low Pass Filter. Characteristic impedance 10,000 ohms, in and out.

LLM Line Low Pass Filter. Characteristic Impedance 500 to 600 L, in and out.

High Pass Filters: The attenuation characteristics of High Pass Filters are 6db or less at cut-off frequency, 35db and 40db or more at 0.67 and 0.5 cut-off frequency.

IHM Interstage High Pass Filter. Characteristic Impedance 10,000 ohms, in and out.

LHM Line High Pass Filter. Characteristic Impedance 500 to 600 L, in and out.

Band Pass Filters: The attenuation characteristics of Band Pass Filters are 2db or less at plus or minus 3% of center frequency 40db or more at 0.5 and 2 center frequency.

IBM Interstage Band Pass Filter. Nominal input impedance — 10,000 ohms. Nominal output impedance 5 megohms or grid of vacuum tube. Effective voltage step-up 2:1. (Output voltage to source voltage.)

LBM Line Band Pass Filter. Nominal input impedance 500 to 600 ohms. Nominal output impedance 5 megohms or grid of vacuum tube. Effective voltage step-up 9:1. (Output voltage to source voltage.)

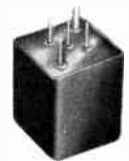
Special filters in all six types are available for any frequency from 200 to 20,000 cycles.

| Catalog No. | Cut-off Freq. c.p.s. |
|--------------|-------------------------|
| IBM - 400 | 400 |
| IBM - 500 | 500 |
| IBM - 700 | 700 |
| IBM - 800 | 800 |
| IBM - 900 | 900 |
| IBM - 1,000 | 1,000 |
| IBM - 1,500 | 1,500 |
| IBM - 2,000 | 2,000 |
| IBM - 3,000 | 3,000 |
| IBM - 5,000 | 5,000 |
| IBM - 7,200 | 7,200 |
| IBM - 10,000 | 10,000 |
| IBM - 12,000 | 12,000 |
| IBM - 15,000 | 15,000 |
| IBM - 30,000 | 30,000 |
| IBM - 57,600 | 57,600 |
| IHM - 300 | 300 |
| IHM - 400 | 400 |
| IHM - 500 | 500 |
| IHM - 1,000 | 1,000 |
| IHM - 2,000 | 2,000 |
| IHM - 3,000 | 3,000 |
| IHM - 10,000 | 10,000 |
| IHM - 15,000 | 15,000 |

| Catalog No. | Cut-off Freq. c.p.s. |
|---------------|-------------------------|
| ILM - 300 | 300 |
| ILM - 500 | 500 |
| ILM - 750 | 750 |
| ILM - 1,000 | 1,000 |
| ILM - 1,500 | 1,500 |
| ILM - 2,000 | 2,000 |
| ILM - 2,500 | 2,500 |
| ILM - 3,000 | 3,000 |
| ILM - 5,000 | 5,000 |
| ILM - 7,000 | 7,000 |
| ILM - 10,000 | 10,000 |
| ILM - 15,000 | 15,000 |
| ILM - 20,000 | 20,000 |
| ILM - 23,000 | 23,000 |
| ILM - 25,000 | 25,000 |
| ILM - 32,000 | 32,000 |
| ILM - 150,000 | 150,000 |
| ILM - 150,000 | 150,000 |
| LHM - 300 | 300 |
| LHM - 400 | 400 |
| LHM - 500 | 500 |
| LHM - 800 | 800 |
| LHM - 1,000 | 1,000 |
| LHM - 2,000 | 2,000 |
| LHM - 6,000 | 6,000 |
| LHM - 10,000 | 10,000 |

| Catalog No. | Cut-off Freq. c.p.s. |
|--------------|-------------------------|
| LBM - 300 | 300 |
| LBM - 400 | 400 |
| LBM - 600 | 600 |
| LBM - 800 | 800 |
| LBM - 1,000 | 1,000 |
| LBM - 1,500 | 1,500 |
| LBM - 2,000 | 2,000 |
| LBM - 3,000 | 3,000 |
| LBM - 7,000 | 7,200 |
| LBM - 10,000 | 10,000 |
| LBM - 14,400 | 14,000 |
| LBM - 20,000 | 20,000 |
| LBM - 28,800 | 28,800 |
| LLM - 500 | 500 |
| LLM - 1,000 | 1,000 |
| LLM - 1,500 | 1,500 |
| LLM - 1,600 | 1,600 |
| LLM - 2,000 | 2,000 |
| LLM - 2,500 | 2,500 |
| LLM - 3,000 | 3,000 |
| LLM - 16,000 | 16,000 |
| LLM - 20,000 | 20,000 |
| LLM - 70,000 | 70,000 |
| LLM - 80,000 | 80,000 |

CASE DIMENSIONS



FILTER CASE

Height: 1 $\frac{3}{8}$ "
Width: 1"
Depth: 1"

SERIES 1950 NULL "T" FILTERS

The Freed Series 1950 Null T networks consist of two resistance capacitance networks, whose outputs completely cancel each other at the balance frequency. They may be used as rejection networks particularly at low frequencies where LC filters become excessively large and unstable.

Standard models are available for 30, 60 and 120 cycles in a wide range of impedances. Each network will give a minimum of 50 db attenuation at the null frequency.

The null frequency is adjusted to a tolerance of $\pm 2\%$.

All Null T Filters are hermetically sealed.

Prices on request.

| Catalog No. | Frequency |
|-------------|-----------|
| NTF- 30 | 30 cps |
| NTF- 60 | 60 cps |
| NTF-120 | 120 cps |



FREED TRANSFORMER COMPANY, INC.

TELEGRAPH TONE CHANNEL FILTERS

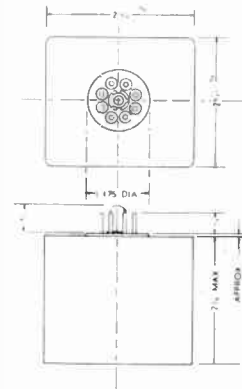
HERMETICALLY SEALED TO MIL-T-27A AND MIL-F-18327 SPECIFICATIONS

Freed Band Pass Filters are extensively used in multiplex frequency shift transmitting and receiving. Stock filters cover all narrow and wide band channels. All units are built with a standard octal socket.

FBT Transmitting Filters are built for a 600 ohm in and out characteristic impedance. Filter configuration allows paralleling of channel outputs. 10db adjacent channel crossover attenuation.

TRANSMITTING FILTERS

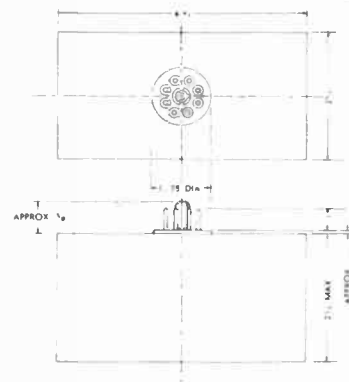
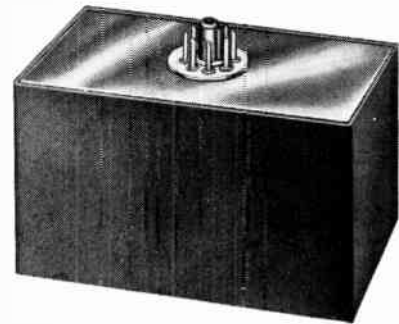
| Catalog No. Case FA-955 | Center Frequency (c.p.s.) Insertion Loss 5db | Pass Band (c.p.s.) Attenuation 2db | Stop Band (c.p.s.) Attenuation 20db |
|----------------------------|---|---------------------------------------|--|
| FBT-10 | 425 | ±42.5 | ±130 |
| FBT-11 | 595 | ±42.5 | ±130 |
| FBT-12 | 765 | ±42.5 | ±130 |
| FBT-13 | 935 | ±42.5 | ±130 |
| FBT-14 | 1,105 | ±42.5 | ±130 |
| FBT-15 | 1,275 | ±42.5 | ±130 |
| FBT-16 | 1,445 | ±42.5 | ±130 |
| FBT-17 | 1,615 | ±42.5 | ±130 |
| FBT-18 | 1,785 | ±42.5 | ±130 |
| FBT-19 | 1,955 | ±42.5 | ±130 |
| FBT-20 | 2,125 | ±42.5 | ±130 |
| FBT-21 | 2,295 | ±42.5 | ±130 |
| FBT-22 | 2,465 | ±42.5 | ±130 |
| FBT-23 | 2,635 | ±42.5 | ±130 |
| FBT-24 | 2,805 | ±42.5 | ±130 |
| FBT-25 | 2,975 | ±42.5 | ±130 |
| FBT-26 | 1,955 | ±85 | ±260 |
| FBT-27 | 2,380 | ±85 | ±260 |
| FBT-28 | 2,805 | ±85 | ±260 |
| FBT-29 | 3,230 | ±85 | ±260 |



FBR Receiving Filters are designed for a characteristic impedance of 600 ohms in and out. Filter configuration permits paralleling of channel inputs. 20db adjacent channel crossover attenuation.

RECEIVING FILTERS

| Catalog No. Case FA-950 | Center Frequency (c.p.s.) Insertion loss 6db | Pass Band (c.p.s.) Attenuation 2db | Stop Band (c.p.s.) Attenuation 20db |
|----------------------------|---|---------------------------------------|--|
| FBR-10 | 425 | ±42.5 | ±130 |
| FBR-11 | 595 | ±42.5 | ±130 |
| FBR-12 | 765 | ±42.5 | ±130 |
| FBR-13 | 935 | ±42.5 | ±130 |
| FBR-14 | 1,105 | ±42.5 | ±130 |
| FBR-15 | 1,275 | ±42.5 | ±130 |
| FBR-16 | 1,445 | ±42.5 | ±130 |
| FBR-17 | 1,615 | ±42.5 | ±130 |
| FBR-18 | 1,785 | ±42.5 | ±130 |
| FBR-19 | 1,955 | ±42.5 | ±130 |
| FBR-20 | 2,125 | ±42.5 | ±130 |
| FBR-21 | 2,295 | ±42.5 | ±130 |
| FBR-22 | 2,465 | ±42.5 | ±130 |
| FBR-23 | 2,635 | ±42.5 | ±130 |
| FBR-24 | 2,805 | ±42.5 | ±130 |
| FBR-25 | 2,975 | ±42.5 | ±130 |
| FBR-26 | 1,955 | ±85 | ±260 |
| FBR-27 | 2,380 | ±85 | ±260 |
| FBR-28 | 2,805 | ±85 | ±260 |
| FBR-29 | 3,230 | ±85 | ±260 |



FREED TRANSFORMER COMPANY, INC.

CASE DIMENSIONS

DC-4 CASE



Height: 4 $\frac{3}{4}$ "
 Width: 3 $\frac{1}{8}$ "
 Length: 3 $\frac{7}{8}$ "
 Mounting: 4 8-32 Studs
 Mtg. Cen.: 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ "
 Cutout: (2) 1 $\frac{3}{8}$ " x 5 $\frac{7}{8}$ "

DC-6B CASE



Height: 6"
 Width: 5"
 Length: 4 $\frac{1}{8}$ "
 Mounting: 4 10-32 Studs
 Mtg. Cen.: 3 $\frac{3}{4}$ " x 3"
 Cutout: 3" Dia.

OL-MA-2 CASE



Height: 4"
 Width: 4 $\frac{5}{8}$ "
 Length: 3 $\frac{15}{16}$ "
 Mounting: 4 10-32 Studs
 Mtg. Cen.: 2 $\frac{1}{2}$ " x 3 $\frac{3}{4}$ "
 Cutout: (2) 2 $\frac{1}{4}$ " x 3 $\frac{1}{4}$ "

OL-112-1 CASE

Height: 6"
 Width: 5 $\frac{7}{8}$ "
 Length: 4 $\frac{3}{4}$ "
 Mounting: 4 1/4-20 Studs
 Mtg. Cen.: 4 $\frac{3}{4}$ " x 3 $\frac{5}{8}$ "
 Cutout: 3" dia.

EA CASE



Height: 2 $\frac{11}{16}$ "
 Width: 1 $\frac{7}{8}$ "
 Length: 1 $\frac{3}{4}$ "
 Mounting: 4 6-32 Studs
 Mtg. Cen.: 1 $\frac{3}{8}$ " x 1 $\frac{1}{4}$ "
 Cutout: 1 $\frac{3}{16}$ "

DM-03 CASE



Height: 2 $\frac{1}{2}$ "
 Width: 1 $\frac{1}{2}$ "
 Length: 1 $\frac{1}{2}$ "
 Mounting: 4 6-32 Studs
 Mtg. Cen.: 1 $\frac{1}{16}$ " x 1 $\frac{1}{16}$ "
 Cutout: 1 $\frac{1}{4}$ " Dia.

ULTRASONICS

New developments and applications of ultrasonics for industrial cleaning, soldering, welding and mixing have created a demand for generators and components specifically designed for ultrasonic applications.

Using the latest developments in the field of special magnetic materials the FREED ultrasonic transformers are designed for greatest efficiency and maximum reliability. They feature small size excellent performance and long life under continuous duty operation.

Transformers with an extended frequency range (frequencies up to 2 MC) can be supplied upon request.

ULTRASONIC DRIVER AND INPUT TRANSFORMERS

Frequency response: \pm 1 DB 10 KC to 60 KC.

| Catalog No. | Application | Primary Impedance Ohms | Ratio | Maximum Power Watts | Maximum Primary D.C. per Side Ma. | Case Size |
|-------------|------------------------|------------------------|--------|---------------------|-----------------------------------|-----------|
| ULI-20 | Transducer to PP 811 A | 1, 2, 4 | 1:17.3 | 5 | | DM-03 |
| ULD-20 | PP 6CM6 to PP 811 A | 10,000 | 4.4:1 | 5 | 50 | DM-03 |
| ULD-50 | PP 5881 to PP 8000 | 7,200 | 1.7:1 | 25 | 90 | FH-EA |

ULTRASONIC OUTPUT TRANSFORMERS

Frequency response: \pm 1 DB 20 KC to 60 KC.

| Catalog No. | Application | Impedance in Ohms | | Maximum Power Watts | Maximum Primary D.C. per Side Ma. | Case Size |
|-------------|-----------------------------|-------------------|-------------|---------------------|-----------------------------------|-----------|
| | | Primary | Secondary | | | |
| ULO-10 | PP 6083 to transducer | 7,600 | 1/4 | 100 | 120 | DC-4B |
| ULO-11 | Same | 7,600 | 2/8 | 100 | 120 | DC-4B |
| ULO-12 | Same | 7,600 | 4/16 | 100 | 120 | DC-4B |
| ULO-13 | Same | 7,600 | 7.5/30 | 100 | 120 | DC-4B |
| ULO-30 | PP 811 A to transducer | 12,400 | 1/4 | 300 | 170 | DC-4B |
| ULO-31 | Same | 12,400 | 2/8 | 300 | 170 | DC-4B |
| ULO-32 | Same | 12,400 | 4/16 | 300 | 170 | DC-4B |
| ULO-33 | Same | 12,400 | 7.5/30 | 300 | 170 | DC-4B |
| ULO-34 | Same | 12,400 | 25 | 300 | 170 | DC-4B |
| ULO-35 | Same | 12,400 | 125/500 | 300 | 170 | DC-4B |
| ULO-36 | Same | 12,400 | 250/1000 | 300 | 170 | DC-4B |
| ULO-37 | Same | 12,400 | 75/300 | 300 | 170 | DC-4B |
| ULO-52 | PP 8000 to transducer | 10,800 | 4/16 | 500 | 230 | OL-MA-2 |
| ULO-53 | Same | 10,800 | 7.5/30 | 500 | 230 | OL-MA-2 |
| ULO-54 | Same | 10,800 | 25/100 | 500 | 230 | OL-MA-2 |
| ULO-55 | Same | 10,800 | 125/500 | 500 | 230 | OL-MA-2 |
| ULO-56 | Same | 10,800 | 250/1000 | 500 | 230 | OL-MA-2 |
| ULO-101 | PP. Par. 8000 to transducer | 5,400 | 25/100 | 1000 | 430 | DC-6B |
| ULO-104 | Same | 5,400 | 75/300 | 1000 | 430 | DC-6B |
| ULO-110 | PP 4-250A to transducer | 10,900 | 18.8/75/300 | 800 | 250 | OL-112-1 |

FREED TRANSFORMER COMPANY, INC.

CASE DIMENSIONS



| Case No. | Height | Width | Depth | Mts. Centers | Mts. Studs |
|----------|--------|-------|-------|---------------|----------------|
| HS300 | 2 1/4 | 3 | 2 1/2 | 2 1/2 x 2 | (4) 1/8 x 3/8 |
| HS303 | 2 1/4 | 3 | 2 1/2 | 2 1/2 x 2 | (4) " |
| HS306 | 3 1/4 | 3 | 2 1/2 | 2 1/2 x 2 | (4) " |
| HS307 | 3 3/8 | 3 | 2 1/2 | 2 1/2 x 2 | (4) " |
| HS503 | 3 1/2 | 3 3/4 | 3 1/8 | 3 1/8 x 2 1/2 | (4) " |
| HS505 | 3 3/4 | 3 3/4 | 3 1/8 | 3 1/8 x 2 1/2 | (4) " |
| HS603 | 3 3/4 | 4 1/2 | 3 1/8 | 3 1/8 x 3 | (4) " |
| HS605 | 4 | 4 1/2 | 3 1/8 | 3 1/8 x 3 | (4) " |
| HS606 | 4 1/8 | 4 1/2 | 3 1/8 | 3 1/8 x 3 | (4) " |
| HS610 | 4 1/8 | 4 1/2 | 3 1/8 | 3 1/8 x 3 | (4) " |
| HS612 | 4 1/8 | 4 1/2 | 3 1/8 | 3 1/8 x 3 | (4) " |
| HS708 | 5 1/2 | 5 1/4 | 4 3/8 | 4 3/8 x 3 1/2 | (4) 5/16 x 3/8 |
| HS709 | 6 | 5 1/4 | 4 3/8 | 4 3/8 x 3 1/2 | (4) " |



| Case No. | Height | Width | Depth | Mts. Centers | Mts. Holes |
|----------|--------|-------|-------|---------------|----------------|
| VS300 | 3 3/8 | 2 5/8 | 2 3/4 | 2 x 1 1/8 | (4) 1/8 x 3/8 |
| VS303 | 3 3/8 | 2 5/8 | 3 | 2 x 1 1/8 | (4) " |
| VS304 | 3 3/8 | 4 1/8 | 3 3/4 | 2 1/2 x 3 | (4) " |
| VS306 | 3 3/8 | 2 5/8 | 3 3/8 | 2 x 2 1/8 | (4) " |
| VS307 | 3 3/8 | 2 5/8 | 3 1/2 | 2 x 2 1/8 | (4) " |
| VS503 | 3 3/8 | 3 3/4 | 3 3/8 | 2 1/2 x 2 1/8 | (4) " |
| VS505 | 3 3/8 | 3 3/4 | 3 3/8 | 2 1/2 x 2 1/8 | (4) " |
| VS506 | 3 3/8 | 3 1/4 | 4 1/4 | 2 1/4 x 3 | 3/16 x 3/8 |
| VS508 | 3 3/8 | 2 5/8 | 3 1/8 | 2 x 2 1/8 | (4) " |
| VS603 | 4 1/8 | 3 3/8 | 3 3/8 | 3 x 2 1/8 | (4) " |
| VS605 | 4 1/8 | 3 3/8 | 4 3/8 | 3 x 2 1/8 | (4) " |
| VS606 | 4 1/8 | 3 3/8 | 4 1/4 | 3 x 3 1/8 | (4) " |
| VS610 | 4 1/8 | 3 3/8 | 4 3/8 | 3 x 3 1/8 | (4) " |
| VS612 | 4 1/8 | 3 3/8 | 5 | 3 x 3 3/8 | (4) " |
| VS708 | 5 1/2 | 4 3/8 | 5 3/8 | 3 1/2 x 4 | (4) 5/16 x 3/8 |
| VS709 | 5 1/2 | 4 3/8 | 5 3/8 | 3 1/2 x 4 3/8 | (4) " |

COMMERCIAL GRADE COMPONENTS

These components are designed to meet the demand for low-cost replacement parts for commercial electronic equipment.

The best commercially available materials have been utilized in the design of these units, to insure reliability and excellent performance characteristics. Vacuum impregnation with a non-hygroscopic varnish to prevent penetration of humidity are employed to give these units long life and trouble-free performance.

230-115 V, 50-60 C. P. S. Stepdown Transformers rated from 25 V A up to 5,000 V A Rating and line booster transformers are included in this series.

All units, with only a few exceptions, are uncased or of shell-type construction.

Isolation transformers and Stepdown transformers are equipped with line cord and receptacle.

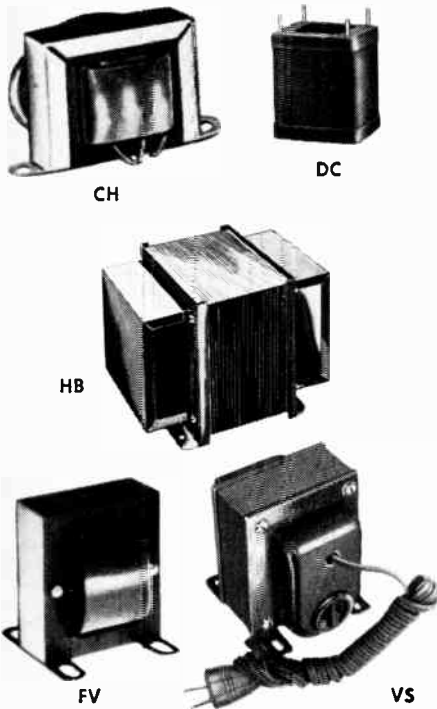
POWER TRANSFORMERS

All primaries designed for 115-volt, 50-60 cycle operation.

| Catalog No. | Py | Va | Hi Volt | Choke Input | | Cond. Input | | Bias Tap | Rectifier | Fil. No. 1 | Fil. No. 2 | Fil. No. 3 | Case No. |
|-------------|-----|----|----------|-------------|---------|-------------|---------|----------|------------|-------------|-------------|-------------|----------|
| | | | | D.C.V. | D.C.Me. | D.C.V. | D.C.Me. | | | | | | |
| RGP 1 | 45 | | 500V CT | | | 270 | 40 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 2A | | VS300 |
| RGP 2 | | | | | | | | | | | | | HS300 |
| RGP 3 | 57 | | 600V CT | | | 330 | 50 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 2.5A | | VS303 |
| RGP 4 | | | | | | | | | | | | | HS303 |
| RGP 5 | 64 | | 650V CT | | | 370 | 50 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 3A | | VS303 |
| RGP 6 | | | | | | | | | | | | | HS303 |
| RGP 7 | 73 | | 600V CT | | | 320 | 70 | | 6X4, 5Y3 | 5/6.3V @ 2A | 6.3V @ 3A | | VS306 |
| RGP 8 | | | | | | | | | | | | | HS306 |
| RGP 9 | 110 | | 650V CT | 225 | 140 | 330 | 100 | | 5Y3, 5U4 | 5V @ 3A | 6.3V @ 5A | | VS503 |
| RGP 10 | | | | | | | | | | | | | HS503 |
| RGP 11 | 76 | | 700V CT | 260 | 100 | 385 | 70 | | 5Y3 | 5V @ 2A | 6.3V @ 2.5A | | VS307 |
| RGP 12 | | | | | | | | | | | | | HS307 |
| RGP 13 | 108 | | 700V CT | 250 | 125 | 370 | 90 | | 5Y3, 5U4 | 5V @ 3A | 6.3V @ 5A | | VS503 |
| RGP 14 | | | | | | | | | | | | | HS503 |
| RGP 15 | 127 | | 700V CT | 260 | 170 | 350 | 120 | | 5U4 | 5V @ 3A | 6.3V @ 5A | | VS505 |
| RGP 16 | | | | | | | | | | | | | HS505 |
| RGP 17 | 146 | | 700V CT | 260 | 210 | 350 | 150 | | 5U4 | 5V @ 3A | 6.3V @ 5A | 6.3V @ 1A | VS603 |
| RGP 18 | | | | | | | | | | | | | HS603 |
| RGP 19 | 207 | | 800V CT | 295 | 280 | 400 | 200 | | 5U4, 2-5Y3 | 5V @ 4A | 6.3V @ 6A | | VS606 |
| RGP 20 | | | | | | | | | | | | | HS606 |
| RGP 21 | 225 | | 800V CT | 295 | 280 | 400 | 200 | 80 | 5U4, 2-5Y3 | 5V @ 4A | 6.3V @ 6A | 5/6.3V @ 2A | VS606 |
| RGP 22 | | | | | | | | | | | | | HS606 |
| RGP 23 | 268 | | 840V CT | 330 | 350 | 450 | 250 | 80 | 2-5U4 | 5V @ 6A | 6.3V @ 6A | 5/6.3V @ 2A | VS612 |
| RGP 24 | | | | | | | | | | | | | HS612 |
| RGP 25 | 320 | | 900V CT | 340 | 420 | 490 | 300 | 80 | 2-5U4 | 5V @ 6A | 6.3V @ 6A | 5/6.3V @ 2A | VS708 |
| RGP 26 | | | | | | | | | | | | | HS708 |
| RGP 27 | 127 | | 900V CT | 360 | 150 | | | | 5U4 | 5V @ 3A | 6.3V @ 5A | | VS603 |
| RGP 28 | | | | | | | | | | | | | HS603 |
| RGP 29 | 150 | | 900V CT | 350 | 200 | | | | 5U4 | 5V @ 3A | 6.3V @ 5A | | VS605 |
| RGP 30 | | | | | | | | | | | | | HS605 |
| RGP 31 | 203 | | 1100V CT | 400 | 250 | | | | 5R4GY | 5V @ 3A | 6.3V @ 5A | | VS610 |
| RGP 32 | | | | | | | | | | | | | HS610 |
| RGP 33 | 248 | | 1100V CT | 420 | 300 | | | | 2-5R4GY | 5V @ 4A | 6.3V @ 7A | | VS612 |
| RGP 34 | | | | | | | | | | | | | HS612 |
| RGP 35 | 310 | | 1280V CT | 480 | 350 | | | | 2-5R4GY | 5V @ 4A | 6.3V @ 7A | | VS709 |
| RGP 36 | | | | | | | | | | | | | HS709 |

FREED TRANSFORMER COMPANY, INC.

CASE DIMENSIONS



COMMERCIAL GRADE COMPONENTS

FILAMENT TRANSFORMERS

All primaries are for 115V, 50/60 c.p.s.

| Catalog No. | Secondary Voltage | Secondary Current Amps. | Secondary Test Voltage RMS | Case Size |
|-------------|--|-------------------------|----------------------------|-----------|
| TF 1 | 2.5 (C.T.) | 7.5 | 1500 | CH60 |
| TF 2 | 2.5 (C.T.) | 10 | 1500 | CH70 |
| TF 3 | 2.5 (C.T.) | 5 | 7500 | DC2B |
| TF 4 | 2.5 (C.T.) | 10 | 7500 | DC4A |
| TF 5 | 5.0 (C.T.) | 4 | 1500 | CH60 |
| TF 6 | 5.0 (C.T.) | 6 | 1500 | CH70 |
| TF 7 | 5.0 (C.T.) | 10 | 1500 | CH80 |
| TF 8 | 5.0 (C.T.) | 10 | 1500 | FV10 |
| TF 9 | 5.0 (C.T.) | 20 | 2500 | FV30 |
| TF 10 | 5.0 (C.T.) | 20 | 10,000 | DC6A |
| TF 11 | 6.3 (C.T.) | 1.35 | 1500 | CH50 |
| TF 12 | 6.3 (C.T.) | 3 | 1500 | CH60 |
| TF 13 | 6.3 (C.T.) | 5 | 1500 | CH70 |
| TF 14 | 6.3 (C.T.) | 7 | 1500 | FV12 |
| TF 15 | 6.3 (C.T.) | 10 | 1500 | FV22 |
| TF 16 | 10 (C.T.) | 5 | 2500 | CH80 |
| TF 17 | 10 (C.T.) | 5 | 2500 | FV10 |
| TF 18 | 10 (C.T.) or 11 (C.T.) (tapped primary) | 12 or 11 | 7500 | DC-5C |
| TF 19 | 12.6 (C.T.) | 2 | 1500 | CH62 |

TF 3, 4 & 10 supplied with terminals. All others with leads.

AUTO TRANSFORMERS

To be used as step-down transformer. Equipped with standard receptacle and line cord.

| Case No. | Height | Width | Depth | Mtg. Centers | Mtg. Studs |
|----------|--------|---------|--------|---------------|-------------------|
| DC2B | 3 1/2 | 2 3/4 | 2 1/4 | 2 x 1 1/4 | (4) 8-32 |
| DC4A | 3 3/4 | 3 1/2 | 3 | 2 1/2 x 2 1/2 | (4) 8-32 |
| DC5C | 4 3/8 | 4 1/8 | 3 1/2 | 3 1/2 x 2 3/8 | (4) 10-32 |
| DC6A | 4 3/8 | 5 | 4 3/8 | 3 3/4 x 3 | (4) 10-32 |
| CH50 | 1 1/2 | 2 1/2 | 1 3/4 | 2 3/4 | (2) 1/4 |
| CH60 | 2 | 3 1/4 | 1 3/4 | 2 1/2 | (2) 1/4 |
| CH62 | 2 | 3 1/4 | 2 1/8 | 2 1/2 | (2) 1/4 |
| CH70 | 2 1/2 | 3 1 1/2 | 2 1/4 | 3 1/2 | (2) 1/4 |
| CH80 | 2 1/2 | 4 | 2 1/4 | 3 3/8 | (2) 1/4 |
| FV10 | 3 1/2 | 2 1/2 | 2 1/2 | 2 x 2 | (4) 1 1/4 x 3 1/4 |
| FV12 | 3 1/2 | 2 1/2 | 2 1/2 | 2 x 2 1/2 | (4) 1 1/4 x 3 1/4 |
| FV22 | 3 3/8 | 2 1/2 | 2 1/2 | 2 1/4 x 2 1/4 | (4) 1 1/4 x 3 1/8 |
| FV30 | 4 1/2 | 3 1/8 | 3 | 2 1/2 x 2 1/4 | (4) 1 1/4 x 3 1/4 |
| HB718 | 6 1/2 | 6 1/2 | 8 1/2 | 4 3/4 x 4 1/2 | (4) 1/2 x 3/8 |
| HB728 | 6 1/2 | 6 1/2 | 9 3/4 | 4 3/4 x 5 3/4 | (4) 1/2 x 3/8 |
| HB828 | 6 5/8 | 7 3/8 | 9 3/8 | 5 3/8 x 5 3/8 | (4) 1/2 x 3/8 |
| HB920 | 6 5/8 | 7 3/8 | 10 1/4 | 6 1/2 x 7 3/8 | (4) 1/2 x 3/8 |
| VS300 | 3 1/2 | 2 3/8 | 3 | 2 x 2 | (4) 1/16 x 3/8 |
| VS401 | 3 3/8 | 2 3/8 | 3 1/4 | 2 1/4 x 1 1/2 | (4) 1/16 x 3/8 |
| VS501 | 3 3/4 | 3 1/4 | 3 3/8 | 2 1/2 x 2 1/2 | (4) 1/16 x 3/8 |
| VS503 | 3 3/4 | 3 1/4 | 3 3/8 | 2 1/2 x 2 1/2 | (4) 1/16 x 3/8 |
| VS601 | 4 1/2 | 3 3/8 | 3 3/8 | 3 x 2 3/8 | (4) 1/16 x 3/8 |
| VS604 | 4 1/2 | 3 3/8 | 4 | 3 x 2 3/8 | (4) 1/16 x 3/8 |
| VS611 | 4 1/2 | 3 3/8 | 4 1/2 | 3 x 2 3/8 | (4) 1/16 x 3/8 |
| VS612 | 4 1/2 | 3 3/8 | 5 | 3 x 3 3/8 | (4) 1/16 x 3/8 |
| VS700 | 5 1/2 | 3 3/8 | 5 | 3 1/2 x 3 1/4 | (4) 1/16 x 3/8 |
| VS706 | 5 1/2 | 4 | 5 1/2 | 3 1/2 x 3 3/4 | (4) 1/16 x 3/8 |
| VS714 | 5 1/2 | 4 | 6 1/2 | 3 1/2 x 4 3/4 | (4) 1/16 x 3/8 |
| VS718 | 5 1/2 | 4 | 7 | 3 1/2 x 5 1/4 | (4) 1/2 x 3/8 |
| VS728 | 5 1/2 | 4 | 8 1/4 | 3 1/2 x 6 1/4 | (4) 1/2 x 3/8 |

| Catalog No. | Transformation | VA Rating | Weight (lbs.) | Case Size |
|-------------|-------------------------|-----------|---------------|-----------|
| SDT 1* | 230/115 V. 50/60 c.p.s. | 25 | 1 | CH-60 |
| SDT 2* | 230/115 V. 50/60 c.p.s. | 50 | 1 1/4 | CH-62 |
| SDT 3 | 230/115 V. 50/60 c.p.s. | 50 | 2 1/2 | VS-300 |
| SDT 4 | 230/115 V. 50/60 c.p.s. | 100 | 3 | VS-401 |
| SDT 5 | 230/115 V. 50/60 c.p.s. | 200 | 5 | VS-501 |
| SDT 6 | 230/115 V. 50/60 c.p.s. | 300 | 6 1/2 | VS-601 |
| SDT 7 | 230/115 V. 50/60 c.p.s. | 400 | 8 | VS-604 |
| SDT 8 | 230/115 V. 50/60 c.p.s. | 500 | 11 | VS-611 |
| SDT 9 | 230/115 V. 50/60 c.p.s. | 750 | 15 | VS-706 |
| SDT 10 | 230/115 V. 50/60 c.p.s. | 1000 | 23 | VS-718 |
| SDT 11 | 230/115 V. 50/60 c.p.s. | 1500 | 29 1/2 | VS-728 |
| SDT 12* | 230/115 V. 50/60 c.p.s. | 2000 | 37 | HB-718 |
| SDT 13* | 230/115 V. 50/60 c.p.s. | 2500 | 47 | HB-728 |
| SDT 14* | 230/115 V. 50/60 c.p.s. | 3000 | 58 | HB-828 |
| SDT 15* | 230/115 V. 50/60 c.p.s. | 5000 | 72 | HB-920 |

*Supplied with leads without line cord and receptacle.

ISOLATION TRANSFORMERS

Electrostatic shield between primary and secondary. Equipped with standard receptacle and line cord

| Catalog Number | Primary Voltage 50/60 c.p.s. | Secondary Voltage | VA Rating | Case Size |
|----------------|------------------------------|-------------------|-----------|-----------|
| IT 1 | 115 | 115 | 50 | VS-401 |
| IT 2 | 115 | 115 | 100 | VS-503 |
| IT 3 | 115 | 115 | 300 | VS-700 |
| IT 4 | 115 | 115 | 500 | VS-714 |
| IT 5* | 220/440 | 110/220 | 250 | VS-612 |
| IT 6* | 220/440 | 110/220 | 500 | VS-714 |

*Supplied with leads without line cords and receptacle.

LINE BOOSTER TRANSFORMERS

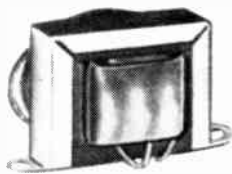
Operates from 90 to 110 volts input to provide 10% step-up.

| Catalog Number | Primary Voltage | Secondary Voltage | VA Rating | Case Size |
|----------------|-----------------|-------------------|-----------|-----------|
| LB-1 | 90-110 | 1.1 x input | 350 | VS-300 |
| LB-2 | 90-110 | 1.1 x Input | 2000 | VS-611 |

COMMERCIAL GRADE COMPONENTS

AUDIO TRANSFORMERS

CASE DIMENSIONS



CH-40 CASE

Height: 1 1/16"
Width: 2 3/8"
Depth: 1 3/16"
Mtg. Cen.: 2"

CH-50 CASE

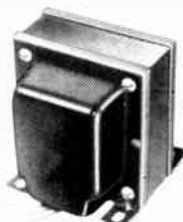
Height: 1 1/16"
Width: 2 13/16"
Depth: 1 3/4"
Mtg. Cen.: 2 3/8"

CH-60 CASE

Height: 2"
Width: 3 1/4"
Depth: 1 3/8"
Mtg. Cen.: 2 13/16"

CH-80 CASE

Height: 2 5/8"
Width: 4"
Depth: 2 5/8"
Mtg. Cen.: 3 9/16"



VS-100 CASE

Height: 2 11/32"
Width: 1 7/8"
Depth: 2 1/4"
Mtg. Cen.: 1 1/2" x 1 1/16"

VS-300 CASE

Height: 3 3/32"
Width: 2 5/8"
Depth: 2 3/4"
Mtg. Cen.: 2" x 1 11/16"

VS-303 CASE

Height: 3 3/32"
Width: 2 5/8"
Depth: 3"
Mtg. Cen.: 2 x 1 15/16"
Mtg. Hole: (4) 3/16 x 3/8

VS-306 CASE

Height: 3 3/32"
Width: 2 5/8"
Depth: 3 3/8"
Mtg. Cen.: 2 x 2 5/16"
Mtg. Hole: (4) 3/16 x 3/8

VS-308 CASE

Height: 3 33/64"
Width: 2 21/32"
Depth: 3 3/8"
Mtg. Cen.: 2" x 2 9/16"

| Catalog No. | Application | Impedance Level Ohms | | Max. Power Level DBM or Power in Watts | Ratio | Max. Pri. D.C. per Side Ma. | D.C. Unbalance Ma. | Freq. Response C.P.S. | Case No. |
|-------------|--|--|--|--|--------|-----------------------------|--------------------|-----------------------|----------|
| | | Primary | Secondary | | | | | | |
| RGA 1 | Input; multiple line or double button mike to single or push-pull grids. | 500 CT 200 CT | 100.000 CT | +20 | 1:14.1 | 50 | 5 | ±2DB 200-5000 | CH-40 |
| RGA 2 | Input; single button mike to single or push-pull grids. | 100 | 100.000 CT | +20 | 1:31.6 | 50 | | ±2DB 200-5000 | CH-40 |
| RGA 3 | Input; voice coil to grid. Intercom | 3.2 | 100,000 | +20 | 1:179 | | | ±2DB 200-5000 | CH-40 |
| RGA 4 | Mixing and matching line to line. | 600 CT 500 CT 200 CT 150/125/50 | 600 CT 500 CT 200 CT 150/125/50 | +20 | 1:1 | | | ±2DB 100-5000 | CH-40 |
| RGA 5 | Interstage; single triode plate to single or P.P. grids. | 10,000 | 90,000 CT | +30 | 1:3 | 10 | | ±2DB 200-5000 | CH-40 |
| RGA 6 | Output; single plate to line or mixer. | 10,000 | 600 CT 500 CT 200 CT 150/125/50 | +30 | 4.8:1 | 10 | | ±2DB 200-5000 | CH-40 |
| RGA 7 | Output; Push-pull plate to line or mixer. | 20,000 CT | 600 CT 500 CT 200 CT 150/125/50 | +30 | 6.32:1 | 10 | 1 | ±2DB 200-5000 | CH-40 |
| RGA 8 | Output; plate to V.C. 6AL6, 6L6, 6Y6, 25B6, 25C6, 35A5, 35B5, 35C5, 50B5, 50C5, 50C6, 50L6, 117N7. | 2500 | 3.2 | 5W | | 70 | | ±3DB 200-10000 | CH-40 |
| RGA 9 | Output; plate to V.C. 6V6, 6AQ5, 6AS5, 7C5. | 5000 | 3.2 | 5W | | 50 | | ±3DB 200-10000 | CH-40 |
| RGA 10 | Output; plate to V.C. 6AR5, 6K6, 6V6, 7B5, 14A5, 3S4, 3U4, 3Q4, 3Q5, 3C5, 3A4. | 10,000 or 7500 | 3.2 | 5W | | 30 | | ±3DB 200-10000 | CH-40 |
| RGA 11 | Output; P.P. plates to V.C. P.P. 6V6, PP6K6. | 12,000 CT or 8000 CT | 3.2 | 15W | | 50 | 5 | ±2DB 200-8000 | CH-60 |
| RGA 12 | Output; TP to V.C. 6V6, 6AQ5, 7C5, C1AB. | 10,000CT | 3.2 | 10W | 5.6:1 | 40 | 4 | ±3DB 200-10000 | CH-60 |

COMMERCIAL GRADE CHOKES

| Catalog No. | Inductance in Henries | Rated Current D.C. Ma. | D.C. Resistance | Dielectric Test Voltage | Case Number |
|-------------|-----------------------|------------------------|-----------------|-------------------------|-------------|
| RGC 17 | 40 | 15 | 2000 | 1000 | CH-40 |
| RGC 1 | 4 | 40 | 200 | 1000 | CH-40 |
| RGC 2 | 9 | 40 | 400 | 1000 | CH-40 |
| RGC 3 | 6 | 50 | 400 | 1000 | CH-40 |
| RGC 18 | 20 | 50 | 425 | 1500 | CH-60 |
| RGC 4 | 10 | 55 | 400 | 1500 | CH-50 |
| RGC 19 | 3 | 75 | 200 | 1500 | CH-40 |
| RGC 5 | 10 | 75 | 250 | 1500 | CH-60 |
| RGC 6 | 10 | 75 | 250 | 1500 | VS-100 |
| RGC 7 | 6 | 100 | 150 | 1500 | CH-60 |
| RGC 8 | 6 | 100 | 150 | 1500 | VS-100 |
| RGC 9 | 3.5 | 150 | 100 | 1500 | CH-60 |
| RGC 10 | 3.5 | 150 | 100 | 1500 | VS-100 |
| RGC 20 | 12 | 160 | 180 | 2500 | VS-306 |
| RGC 11 | 2 | 200 | 60 | 1500 | CH-60 |
| RGC 12 | 2 | 200 | 60 | 1500 | VS-100 |
| RGC 13 | 3.7 | 200 | 65 | 1500 | CH-80 |
| RGC 21 | 7 | 200 | 100 | 2500 | VS-303 |
| RGC 14 | 3.7 | 200 | 65 | 1500 | VS-300 |
| RGC 15 | 2.8 | 300 | 65 | 1500 | CH-80 |
| RGC 16 | 2.8 | 300 | 65 | 1500 | VS-300 |
| RGC 22 | 5 | 300 | 65 | 2500 | VS-308 |

FREED TRANSFORMER COMPANY, INC.

| Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price | Catalog No. | Net Price |
|-------------------------|-----------|--------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|
| F-1809 | 14.65 | Type TI-17 | | TYPE TI-24 | | F-2566 | 9.30 | F-221 | 15.50 | F-2906 | 5.80 |
| F-1810 | 14.65 | F-2100 | 7.90 | F-2400 | 5.90 | F-2567 | 9.50 | F-2722 | 15.70 | F-2907 | 6.00 |
| F-1811 | 14.90 | F-2101 | 7.90 | F-2401 | 5.90 | F-2568 | 9.90 | F-2723 | 15.80 | F-2908 | 6.00 |
| F-1812 | 14.90 | F-2102 | 7.90 | F-2402 | 5.90 | F-2569 | 10.50 | F-2724 | 15.95 | F-2909 | 6.00 |
| F-1813 | 14.90 | F-2103 | 7.90 | F-2403 | 5.90 | F-2570 | 10.70 | F-2725 | 16.05 | F-2910 | 6.30 |
| F-1814 | 14.90 | F-2104 | 7.90 | F-2404 | 6.05 | F-2571 | 10.90 | F-2726 | 16.20 | F-2911 | 6.50 |
| F-1815 | 14.90 | F-2105 | 7.90 | F-2405 | 6.05 | F-2572 | 11.40 | F-2727 | 16.50 | F-2912 | 6.50 |
| Type TI-8 and 8s | | F-2106 | 7.90 | F-2406 | 6.05 | F-2573 | 11.60 | F-2728 | 16.70 | F-2913 | 7.30 |
| F-1821 | 8.65 | F-2107 | 7.90 | F-2407 | 6.05 | F-2574 | 12.10 | F-2729 | 17.00 | F-2914 | 8.30 |
| F-1822 | 8.65 | F-2108 | 7.90 | F-2408 | 6.30 | F-2575 | 12.40 | F-2730 | 17.50 | F-2915 | 8.30 |
| F-1823 | 8.65 | F-2109 | 7.90 | F-2409 | 6.30 | F-2576 | 12.90 | F-2731 | 17.95 | F-2916 | 8.40 |
| F-1824 | 8.65 | F-2110 | 7.90 | F-2410 | 6.80 | F-2577 | 13.40 | F-2732 | 18.90 | F-2917 | 8.60 |
| F-1825 | 8.65 | F-2111 | 8.05 | F-2411 | 7.05 | F-2578 | 13.70 | F-2733 | 19.45 | F-2918 | 8.80 |
| F-1826 | 8.65 | F-2112 | 8.05 | F-2412 | 7.25 | F-2579 | 13.90 | F-2734 | 20.40 | F-2919 | 8.80 |
| F-1827 | 8.65 | F-2113 | 8.25 | F-2413 | 7.35 | F-2580 | 14.20 | F-2735 | 21.85 | F-2920 | 8.90 |
| F-1828 | 8.65 | F-2114 | 8.25 | F-2414 | 7.70 | F-2581 | 14.20 | F-2736 | 22.50 | | |
| F-1829 | 8.65 | F-2115 | 8.65 | F-2415 | 8.00 | F-2582 | 14.50 | | | | |
| F-1830 | 8.65 | F-2116 | 8.65 | F-2416 | 8.20 | F-2583 | 14.50 | | | | |
| F-1831 | 8.65 | F-2117 | 9.05 | F-2417 | 8.45 | | | | | | |
| F-1832 | 8.75 | | | F-2418 | 9.75 | | | | | | |
| F-1833 | 8.85 | Type TI-18 | | F-2419 | 10.50 | Type TI-28 | | F-2750 | 14.40 | TYPE TI-35 | |
| F-1834 | 9.00 | F-2140 | 8.65 | F-2420 | 10.80 | F-2600 | 6.75 | F-2751 | 14.80 | F-2950 | 5.60 |
| F-1835 | 9.00 | F-2141 | 8.65 | F-2421 | 11.00 | F-2601 | 6.85 | F-2752 | 14.90 | F-2951 | 6.90 |
| F-1836 | 9.00 | F-2142 | 8.65 | F-2422 | 11.40 | F-2602 | 6.90 | F-2753 | 14.90 | F-2952 | 7.20 |
| F-1837 | 9.10 | F-2143 | 8.65 | | | F-2603 | 6.95 | F-2754 | 14.90 | F-2953 | 7.40 |
| F-1838 | 9.40 | F-2144 | 8.65 | | | F-2604 | 7.05 | F-2755 | 14.90 | F-2954 | 7.60 |
| F-1839 | 9.50 | F-2145 | 8.65 | TYPE TI-25 | | F-2605 | 7.10 | F-2756 | 14.90 | F-2955 | 7.80 |
| F-1840 | 9.90 | F-2146 | 8.65 | F-2450 | 7.90 | F-2606 | 7.30 | F-2757 | 14.90 | F-2956 | 8.00 |
| | | F-2147 | 8.65 | F-2451 | 7.90 | F-2607 | 7.40 | F-2758 | 14.90 | F-2957 | 8.10 |
| Type TI-3s | | F-2148 | 8.65 | F-2452 | 7.90 | F-2608 | 7.60 | F-2759 | 15.05 | F-2958 | 8.30 |
| F-1844 | 14.25 | F-2149 | 8.65 | F-2453 | 7.90 | F-2609 | 7.80 | F-2760 | 15.10 | F-2959 | 8.50 |
| F-1845 | 14.25 | F-2150 | 8.65 | F-2454 | 7.90 | F-2610 | 7.20 | F-2761 | 15.20 | F-2960 | 8.70 |
| F-1846 | 14.25 | F-2151 | 8.75 | F-2455 | 7.70 | F-2611 | 7.60 | F-2762 | 15.20 | F-2961 | 8.90 |
| F-1847 | 14.25 | F-2152 | 8.85 | F-2456 | 7.50 | F-2612 | 7.60 | F-2763 | 14.50 | F-2962 | 9.05 |
| F-1848 | 14.25 | F-2153 | 9.00 | F-2457 | 7.50 | F-2613 | 8.40 | F-2764 | 14.80 | F-2963 | 9.20 |
| F-1849 | 14.25 | F-2154 | 9.00 | F-2458 | 7.30 | F-2614 | 8.50 | F-2765 | 15.10 | | |
| F-1850 | 14.25 | F-2155 | 9.20 | F-2459 | 7.30 | F-2615 | 8.70 | F-2766 | 15.50 | | |
| F-1851 | 14.25 | F-2156 | 9.50 | F-2460 | 7.20 | F-2616 | 9.20 | F-2767 | 16.05 | | |
| F-1852 | 14.25 | F-2157 | 9.70 | F-2461 | 7.10 | F-2617 | 9.55 | F-2768 | 16.10 | TYPE TI-36 | |
| F-1853 | 14.25 | | | F-2462 | 7.10 | F-2618 | 9.70 | F-2769 | 16.20 | F-3000 | 5.90 |
| F-1854 | 14.25 | Type TI-19 | | F-2463 | 7.05 | F-2619 | 9.90 | F-2770 | 16.40 | F-3001 | 5.90 |
| F-1855 | 14.25 | F-2180 | 7.90 | F-2464 | 7.00 | F-2620 | 10.05 | F-2771 | 16.60 | F-3002 | 5.90 |
| | | F-2181 | 7.90 | F-2465 | 7.00 | F-2621 | 10.10 | F-2772 | 16.80 | F-3003 | 6.00 |
| Type TI-3As | | F-2182 | 7.90 | F-2466 | 7.05 | F-2622 | 10.20 | F-2773 | 17.00 | F-3004 | 6.00 |
| F-1856 | 20.00 | F-2183 | 7.90 | F-2467 | 7.10 | F-2623 | 10.30 | F-2774 | 17.10 | F-3005 | 6.15 |
| F-1857 | 20.50 | F-2184 | 7.90 | F-2468 | 7.20 | F-2624 | 10.50 | F-2775 | 17.40 | F-3006 | 6.30 |
| F-1858 | 20.50 | F-2185 | 7.90 | F-2469 | 7.20 | F-2625 | 10.80 | F-2776 | 17.60 | F-3007 | 6.30 |
| F-1859 | 22.30 | F-2186 | 7.90 | F-2470 | 7.40 | F-2626 | 11.80 | F-2777 | 17.90 | F-3008 | 6.60 |
| F-1860 | 22.80 | F-2187 | 7.90 | F-2471 | 7.40 | F-2627 | 12.20 | F-2778 | 18.05 | F-3009 | 6.60 |
| F-1861 | 22.80 | F-2188 | 7.90 | F-2472 | 7.60 | F-2628 | 12.35 | F-2779 | 18.45 | F-3010 | 6.80 |
| F-1862 | 23.30 | F-2189 | 7.90 | F-2473 | 7.80 | F-2629 | 12.65 | F-2780 | 19.00 | F-3011 | 7.20 |
| F-1863 | 23.30 | F-2190 | 7.90 | F-2474 | 8.00 | F-2630 | 13.30 | F-2781 | 19.50 | F-3012 | 7.40 |
| | | F-2191 | 7.90 | F-2475 | 8.40 | F-2631 | 14.65 | F-2782 | 19.95 | F-3013 | 7.70 |
| Type TI-15 | | F-2192 | 7.90 | F-2476 | 8.80 | F-2632 | 15.20 | F-2783 | 20.90 | F-3014 | 8.20 |
| F-1870 | 7.25 | F-2193 | 7.90 | F-2477 | 9.50 | F-2633 | 16.15 | F-2784 | 21.80 | F-3015 | 8.50 |
| F-1871 | 7.25 | | | F-2478 | 9.80 | | | F-2785 | 22.80 | F-3016 | 8.80 |
| F-1872 | 7.25 | Type TI-20s | | F-2479 | 9.95 | TYPE TI-29 | | F-2786 | 23.80 | F-3017 | 8.90 |
| F-1873 | 7.25 | F-2201 | 6.40 | F-2480 | 10.20 | F-2650 | 8.05 | F-2787 | 24.70 | | |
| F-1874 | 7.25 | F-2202 | 6.40 | F-2481 | 10.50 | F-2651 | 8.10 | F-2788 | 27.50 | | |
| F-1875 | 7.25 | F-2203 | 6.95 | | | F-2652 | 8.20 | | | TYPE TI-37 | |
| F-1876 | 7.25 | F-2204 | 6.95 | TYPE TI-26 | | F-2653 | 8.20 | F-2800 | 7.40 | F-3550 | 7.50 |
| F-1877 | 7.25 | F-2205 | 6.95 | F-2500 | 5.70 | F-2654 | 8.20 | F-2801 | 7.60 | F-3551 | 7.50 |
| F-1878 | 7.25 | F-2206 | 7.15 | F-2501 | 5.70 | F-2655 | 8.20 | F-2802 | 7.80 | F-3552 | 7.50 |
| F-1879 | 7.25 | F-2207 | 7.45 | F-2502 | 5.70 | F-2656 | 8.20 | F-2803 | 8.40 | F-3553 | 7.45 |
| F-1880 | 7.25 | F-2208 | 8.10 | F-2503 | 5.70 | F-2657 | 8.30 | F-2804 | 8.60 | F-3554 | 7.40 |
| F-1881 | 7.45 | F-2209 | 8.10 | F-2504 | 5.70 | F-2658 | 8.10 | F-2805 | 8.70 | F-3555 | 7.35 |
| F-1882 | 7.45 | F-2210 | 8.10 | F-2505 | 5.70 | F-2659 | 8.10 | F-2806 | 8.60 | F-3556 | 7.30 |
| F-1883 | 7.65 | F-2211 | 8.10 | F-2506 | 5.70 | F-2660 | 7.90 | F-2807 | 8.70 | F-3557 | 7.25 |
| F-1884 | 7.65 | F-2212 | 8.10 | F-2507 | 5.70 | F-2661 | 7.60 | F-2808 | 8.80 | F-3558 | 7.75 |
| F-1885 | 7.85 | F-2213 | 8.10 | F-2508 | 5.70 | F-2662 | 7.70 | F-2809 | 9.60 | F-3559 | 8.00 |
| F-1886 | 8.05 | F-2214 | 8.10 | F-2509 | 6.05 | F-2663 | 7.80 | F-2810 | 9.80 | F-3560 | 8.25 |
| F-1887 | 8.05 | F-2215 | 8.10 | F-2510 | 6.20 | F-2664 | 7.90 | F-2811 | 10.20 | F-3561 | 8.50 |
| F-1888 | 8.05 | | | F-2511 | 6.60 | F-2665 | 7.90 | F-2812 | 10.40 | F-3562 | 8.65 |
| F-1889 | 8.45 | | | F-2512 | 6.80 | F-2666 | 8.00 | F-2813 | 10.60 | F-3563 | 8.85 |
| Type TI-14 | | F-2240 | 6.00 | F-2513 | 7.10 | F-2667 | 8.00 | F-2814 | 10.80 | F-3564 | 9.00 |
| F-1920 | 7.40 | F-2241 | 6.00 | F-2514 | 7.35 | F-2668 | 8.10 | F-2815 | 11.05 | F-3565 | 9.10 |
| F-1921 | 7.40 | F-2242 | 6.00 | F-2515 | 7.60 | F-2669 | 8.10 | F-2816 | 11.20 | F-3566 | 9.60 |
| F-1922 | 7.40 | F-2243 | 6.00 | F-2516 | 7.80 | F-2670 | 8.20 | F-2817 | 11.40 | F-3567 | 9.80 |
| F-1923 | 7.40 | F-2244 | 6.00 | F-2517 | 8.05 | F-2671 | 8.15 | F-2818 | 11.65 | F-3568 | 10.20 |
| F-1924 | 7.40 | F-2245 | 6.00 | F-2518 | 8.30 | F-2672 | 8.20 | F-2819 | 11.80 | F-3569 | 10.50 |
| F-1925 | 7.40 | F-2246 | 6.40 | F-2519 | 8.50 | F-2673 | 8.25 | F-2820 | 12.10 | F-3570 | 10.60 |
| F-1926 | 7.85 | F-2247 | 6.40 | F-2520 | 8.70 | F-2674 | 8.30 | F-2821 | 12.30 | F-3571 | 10.90 |
| F-1927 | 7.85 | F-2248 | 6.40 | F-2521 | 8.90 | F-2675 | 8.35 | F-2822 | 12.50 | F-3572 | 11.15 |
| F-1928 | 7.95 | F-2249 | 6.40 | F-2522 | 9.20 | F-2676 | 8.40 | F-2823 | 12.70 | F-3573 | 11.50 |
| F-1929 | 7.95 | | | F-2523 | 9.50 | F-2677 | 8.50 | F-2824 | 13.00 | F-3574 | 11.90 |
| F-1930 | 7.95 | Type TI-22s | | F-2524 | 9.90 | F-2678 | 8.60 | | | F-3575 | 12.30 |
| F-1931 | 8.40 | F-2270 | 6.00 | F-2525 | 10.30 | F-2679 | 8.75 | | | F-3576 | 12.70 |
| F-1932 | 8.75 | F-2271 | 6.00 | F-2526 | 10.80 | F-2680 | 8.75 | | | F-3577 | 13.10 |
| F-1933 | 8.75 | F-2272 | 6.00 | F-2527 | 11.05 | F-2681 | 9.25 | | | F-3578 | 13.50 |
| F-1934 | 9.00 | F-2273 | 6.00 | F-2528 | 11.30 | F-2682 | 9.50 | TYPE TI-32 | | | |
| F-1935 | 9.25 | F-2274 | 6.00 | F-2529 | 11.50 | F-2683 | 10.75 | F-2800 | 7.40 | | |
| F-1936 | 9.75 | F-2275 | 6.00 | F-2530 | 11.90 | F-2684 | 11.75 | F-2801 | 7.60 | | |
| | | F-2276 | 6.40 | F-2531 | 12.20 | F-2685 | 12.75 | F-2802 | 7.80 | | |
| | | F-2277 | 6.40 | F-2532 | 12.60 | F-2686 | 13.60 | F-2803 | 8.40 | | |
| | | F-2278 | | | | | | | | | |

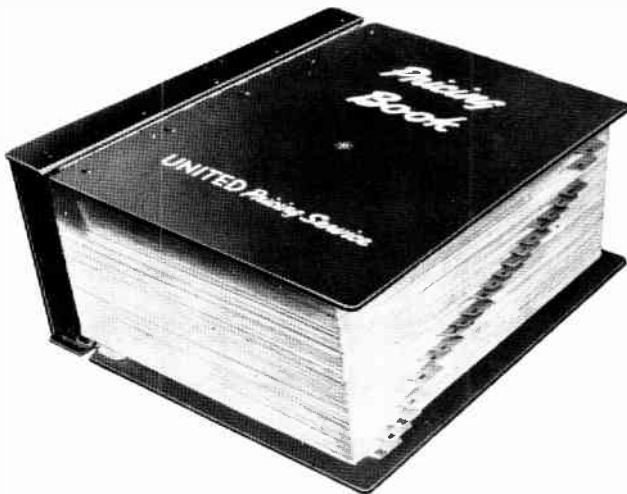
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GATES

**TRANSFORMERS
CHOKES
CAPACITORS
RECTIFIERS**

TRANSFORMERS

| 36, 38 and 40 VOLTS* | | | 36 V. CENTER TAPPED** | | | 56 V. CENTER TAPPED*** | | |
|----------------------|------|-------|-----------------------|------|-------|------------------------|------|-------|
| MODEL NO. | AMPS | PRICE | MODEL NO. | AMPS | PRICE | MODEL NO. | AMPS | PRICE |
| GT 36-2 | 2 | 6.00 | XF 36-1 | 1 | 4.75 | AH 56-2 | 2 | 7.50 |
| GT 36-5 | 5 | 7.60 | XF 36-2 | 2 | 6.45 | AH 56-4 | 4 | 11.50 |
| GT 36-8 | 8 | 13.00 | XF 36-4 | 4 | 7.75 | AH 56-6 | 6 | 21.50 |
| GT 36-10 | 10 | 14.75 | XF 36-8 | 8 | 14.10 | AH 56-12 | 12 | 29.00 |
| GT 36-12 | 12 | 15.00 | XF 36-12 | 12 | 15.50 | | | |
| GT 36-15 | 15 | 21.50 | XF 36-24 | 24 | 34.05 | | | |
| GT 36-20 | 20 | 28.50 | XF 36-30 | 30 | 42.50 | | | |
| GT 36-30 | 30 | 41.00 | XF 36-50 | 50 | 56.75 | | | |
| GT 36-50 | 50 | 55.00 | | | | | | |

* Primary 115 vac 60C, tapped to deliver 36, 38 and 40 vac. ** Provide two 18V secondary windings. Secondaries connected in series gives 36 V as rated; in parallel gives 18 V at twice rated current (taps 9, 18, 27, 36 V.) Primary is tapped for 100, 105, 110, and 115 V on 12, 24, 30, and 50 amp models. ***Center tapped secondary.

CHOKES

| MODEL NO. | AMPS | HY | OHMS | PRICE | MODEL NO. | AMPS | HY | OHMS | PRICE |
|-----------|------|------|------|-------|-----------|------|-------|------|-------|
| GH-1 | 1 | .1 | 1.5 | 4.75 | GH-15 | 15 | .006 | .01 | 14.75 |
| GH-2 | 2 | .04 | .9 | 5.50 | GH-20 | 20 | .004 | .05 | 15.00 |
| GH-4 | 4 | .07 | .6 | 6.45 | GH-24 | 24 | .004 | .025 | 25.00 |
| GH-5 | 5 | .03 | .02 | 6.60 | GH-30 | 30 | .003 | .01 | 35.00 |
| GH-8 | 8 | .03 | .3 | 11.00 | GH-50 | 50 | .001 | .001 | 43.00 |
| GH-10 | 10 | .015 | .05 | 12.50 | GH-100 | 100 | .0005 | .005 | 53.00 |
| GH-12 | 12 | .01 | .1 | 14.20 | | | | | |

SELENIUM RECTIFIERS

| MAX. AMPS | 0-26 VAC 0-20 VDC | 0-52 VAC 20-40 VDC | 0-78 VAC 40-60 VDC | 0-130 VAC 60-100 VDC | 0-156 VAC 100-120 VDC |
|-----------|----------------------|-----------------------|-----------------------|-------------------------|--------------------------|
| 0.6 | 1.50 | 2.50 | 3.25 | 4.50 | 6.25 |
| 1.5 | 2.30 | 3.25 | 4.75 | 8.25 | 10.00 |
| 2.2 | 3.20 | 5.00 | 5.75 | 11.25 | 13.25 |
| 3.4 | 4.15 | 6.00 | 8.25 | 14.00 | 16.50 |
| 4 | 7.00 | 11.00 | 15.00 | 24.00 | 27.00 |
| 6.6 | 8.00 | 12.00 | 18.00 | 32.00 | 35.00 |
| 10 | 12.00 | 19.00 | 25.00 | 41.00 | 48.00 |
| 12 | 15.00 | 21.00 | 29.00 | 44.00 | 51.00 |
| 15 | 18.00 | 28.00 | 38.00 | 53.00 | 63.00 |
| 20 | 22.00 | 35.00 | 46.00 | 75.00 | 88.00 |
| 24 | 30.00 | 42.00 | 53.00 | 83.00 | 93.00 |
| 30 | 34.00 | 53.00 | 70.00 | 115.00 | 133.00 |
| 36 | 45.00 | 65.00 | 84.00 | 140.00 | 185.00 |

SILICON RECTIFIERS

| STOCK No. | A.C. INPUT UP TO | D.C. OUTPUT UP TO | MAX. AMPS SELF COOLED | MAX. AMPS FAN COOLED | NET PRICE |
|-----------|------------------|-------------------|-----------------------|----------------------|-----------|
| G6S6 | 420 | 390 | 1.5 | — | \$ 4.66 |
| G1-32-3 | 36 | 32 | 10 | — | 19.00 |
| G2-125-3 | 140 | 125 | 10 | — | 28.00 |
| G3-250-3 | 280 | 250 | 10 | — | 40.00 |
| G1-32-5 | 36 | 32 | 40 | 80 | 30.00 |
| G2-64-5 | 72 | 64 | 40 | 80 | 45.00 |
| G3-95-5 | 105 | 95 | 40 | 80 | 85.00 |
| G4-125-5 | 140 | 125 | 40 | 80 | 100.00 |
| G1-32-5 | 36 | 32 | 50 | 100 | 32.00 |
| G2-250-5 | 280 | 250 | 50 | 100 | 85.00 |
| G1-32-6 | 36 | 32 | 75 | 100 | 58.00 |
| G2-64-7 | 72 | 64 | 150 | 150 | 133.00 |
| G3-95-6 | 105 | 95 | 75 | 150 | 155.00 |

DURALYTIC CAPACITORS

| MFD. | WVDC | PRICE | MFD. | WVDC | PRICE |
|--------|------|---------|-------|------|---------|
| 2,000 | 50 | \$ 3.75 | 1,000 | 200 | \$14.25 |
| 4,000 | 50 | 4.68 | 2,000 | 200 | 18.75 |
| 10,000 | 50 | 12.44 | 250 | 300 | \$12.25 |
| 1,000 | 75 | \$ 9.80 | 500 | 300 | 14.75 |
| 2,000 | 75 | 10.50 | 750 | 300 | 16.75 |
| 7,000 | 75 | 16.25 | 1,000 | 300 | 17.75 |
| 2,000 | 100 | \$12.90 | 250 | 350 | \$13.25 |
| 4,000 | 100 | 15.50 | 500 | 350 | 14.75 |
| | | | 1,000 | 350 | 19.00 |

POWER SUPPLIES

SEE OUR PAGES ON POWER SUPPLIES
IN SECTION 4000

GATES
ELECTRONIC COMPANY, BRONX, N. Y.



NORTH HILLS WIDE BAND TRANSFORMERS

- Antenna Matching
- Interstage Coupling
- Impedance Matching
- Computer Drive Circuits
- Signal Distribution
- Pulse Applications
- Voltage Step-Up
- DC Isolation
- Phase Detectors
- Balanced Modulators

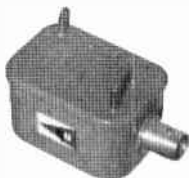
AA
Epoxy
Encapsulated
1½x1½x1½



BA
Hermetically
Sealed
1½x1½x1½



BB
Hermetically
Sealed
1½x1½x1½



| Type Number | Impedance Ratio | Type Number | Impedance Ratio |
|-------------|-----------------|-------------|-----------------|
| 1100 | 75 Unb/75 Bal | 0300 | 50 Unb/100 Bal |
| 1300 | 75 Unb/100 Bal | 0400 | 50 Unb/150 Bal |
| 1400 | 75 Unb/150 Bal | 0500 | 50 Unb/200 Bal |
| 1500 | 75 Unb/200 Bal | 0501 | 50 Unb/300 Bal |
| 1501 | 75 Unb/300 Bal | 0600 | 50 Unb/450 Bal |
| 1600 | 75 Unb/450 Bal | 0700 | 50 Unb/600 Bal |
| 1700 | 75 Unb/600 Bal | 0800 | 50 Unb/800 Bal |
| 1800 | 75 Unb/800 Bal | 0900 | 50 Unb/1200 Bal |
| 1900 | 75 Unb/1200 Bal | | |

Frequency range on some of these units is as wide as 100 kc to 100 mc. Data sheets with individual curves are available upon request.

North Hills wideband transformers have been designed for low insertion loss (less than 1 db) and good matching characteristics over wide frequency ranges. Balanced windings feature extremely low unbalanced voltages and have a center tap. Complete specifications are available upon request.

Three case styles are offered. Series AA models are potted in metal cases with a terminal board on the bottom and two 6-32 spade mounting bolts. Series BA are hermetically sealed with glass terminals at the case ends and two 4-40 studs on the bottom for mounting. Series BB is similar to BA except that the unbalanced connection is provided by a BNC connector.

A great variety of different requirements is being met by special designs. Your specifications for custom wideband transformers may be submitted for quotation.

NORTH HILLS HI-Q RF TOROIDS

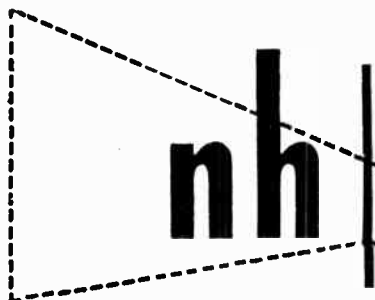
1218
Hermetically
Sealed
2½ O.D.x¾



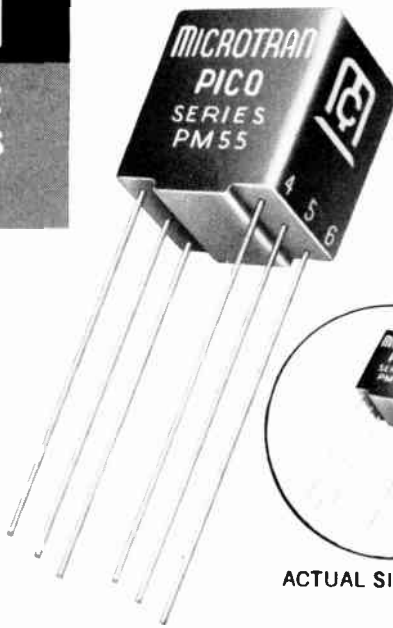
| Type | L(μH) | Q | F(mc) |
|--------|-------|-----|-------|
| 1218-1 | 1.5 | 180 | 12 |
| 1218-2 | 2.8 | 180 | 8 |
| 1218-3 | 5.4 | 170 | 7 |
| 1218-4 | 10.2 | 170 | 5 |
| 1218-5 | 15.0 | 150 | 3.5 |
| 1218-6 | 18.7 | 150 | 3 |

These high Q toroids are hermetically sealed and shielded in a metal case which is nickel plated. There are two teflon terminals ¼" high and one mounting stud 6-32x¾.

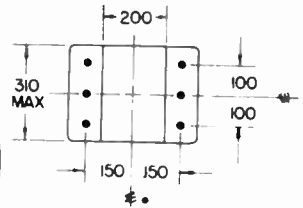
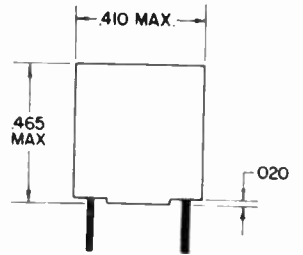
See Section 1800 for line of adjustable inductors.



NORTH HILLS
ELECTRONICS, INCORPORATED
GLEN COVE, LONG ISLAND, N. Y.



ACTUAL SIZE



MOLDED PM-M

Epoxy molded finish. Weight .1 oz. Supplied with gold plated leads .020 x 3/4". To order add -M to part number, i.e. PM12-M, PM29-M.

MIL DESIGNATION TF5RX † † ZZ
 † † See family designation in chart.

Microtran Pico Miniature Transformer Series is designed for use in miniaturized printed circuit board applications where space is of the essence. Electrical characteristics are designed to match the latest transistor circuitry. Gold plated high strength nickel alloy leads permit both reliable soldered joints and high-density welded lead packaging. Epoxy molded for long life and suitability for printed circuit applications.

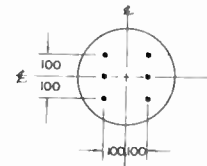
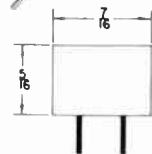
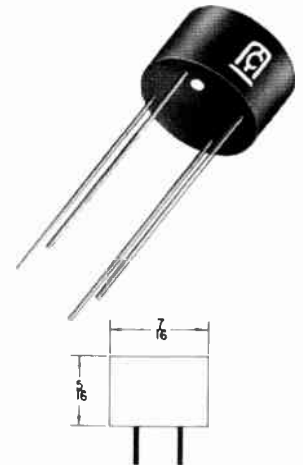
PICO MINIATURE TRANSFORMERS — PM Series

Frequency Response ± 2 db 300 Cycles to 100KC †

| Part No. | Application | Primary Secondary | | Unbal. Pri. DC Ma | Pri. D.C.R. | Sec. D.C.R. | Power Level MW. | Family |
|----------|-------------|-------------------|----------------|-------------------|-------------|-------------|-----------------|--------|
| | | Impedance | Impedance | | | | | |
| PM3-(*) | Input | 200,000 C.T. | 1,000 C.T. | 0 | 5300 | 110 | 10 | 16 |
| PM5-(*) | Input | 200,000 | 1,000 | 0 | 5300 | 110 | 10 | 16 |
| PM7-(*) | Interstage | 50,000 C.T. | 1,000 C.T. | 0 | 3300 | 75 | 10 | 16 |
| PM9-(*) | Interstage | 50,000 | 1000/250 Split | 0 | 3300 | 75 | 10 | 16 |
| PM11-(*) | Interstage | 25,000 C.T. | 1,000 C.T. | 0.5 | 1700 | 110 | 40 | 12 |
| PM13-(*) | Interstage | 25,000 | 1000/250 Split | 0.25 | 1700 | 110 | 40 | 12 |
| PM15-(*) | Interstage | 25,000 | 1,000 | 0.25 | 1700 | 110 | 40 | 12 |
| PM17-(*) | Isolation | 10,000 C.T. | 10,000 C.T. | 1 | 1000 | 1300 | 50 | 12 |
| PM19-(*) | Driver | 10,000 C.T. | 2,000 C.T. | 1 | 1000 | 300 | 50 | 12 |
| PM21-(*) | Driver | 10,000 | 2000/500 Split | 0.5 | 1000 | 300 | 50 | 12 |
| PM23-(*) | Driver | 10,000 C.T. | 1,200 C.T. | 1 | 1050 | 280 | 50 | 12 |
| PM25-(*) | Driver | 10,000 | 1200/300 Split | 0.5 | 1050 | 280 | 50 | 12 |
| PM27-(*) | Driver | 10,000 | 1,200 | 0.5 | 1050 | 280 | 50 | 12 |
| PM29-(*) | Driver | 10,000 C.T. | 500 C.T. | 1 | 1050 | 80 | 50 | 12 |
| PM31-(*) | Isolation | 2,500 | 2,500 C.T. | 1 | 250 | 325 | 50 | 12 |
| PM33-(*) | Output | 1,500 C.T. | 600 | 3 | 170 | 95 | 50 | 12 |
| PM35-(*) | Output | 500 | 50 | 3 | 60 | 8 | 50 | 17 |
| PM37-(*) | Output | 120 C.T. | 3.2 | 10 | 16 | 0.75 | 50 | 17 |
| PM39-(*) | Audio choke | 6 Hy. | | 2 | 1800 | | | 20 |
| PM41-(*) | Audio choke | .3 Hy. | | 4 | 43 | | | 20 |

*Add either -M or -L to Part No. (-L on special order only). See photos figures PM-M and PM-L. Power levels shown are for 15% † † max. distortion. Frequency response measured at stated power level above.

† † PM35 - 20%, PM37 - 25% † † PM3 & PM5 - 45KC

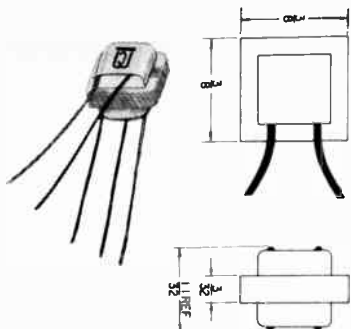


MOLDED LOW-HEIGHT Type PM-L

Not Stocked—On Special Order Only
 For applications requiring extremely low height. Weight .1 oz. Gold plated leads .020 x 3/4". To order add -L to part number, i.e. PM12-L, PM29-L. Price and delivery on quotation basis only.

MIL DESIGNATION TF5RX † † ZZ
 † † See Family Designation in Chart

SECTION 5600

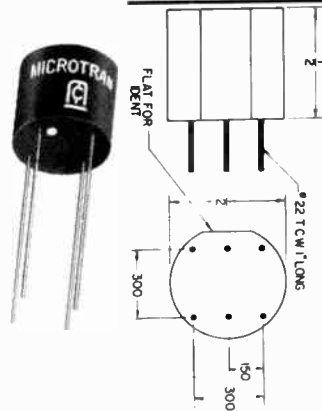


OPEN FRAME UM-F
ULTRA MINIATURE SIZE

To order add -F to Part Number.
i.e. UM-22-F Weight .08 oz.

MIL DESIGNATION TF6RX † † ZZ

† † See Family Designation in Chart



MOLDED UM-M
ULTRA MINIATURE SIZE

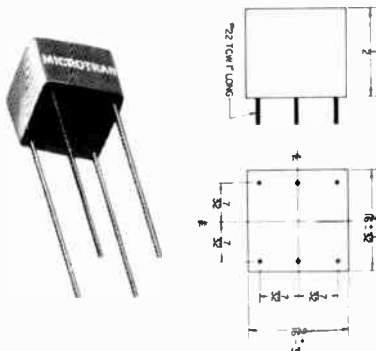
To order add -M to Part Number.
i.e. UM-22-M Weight .14 oz.

MIL DESIGNATION TF5RX † † ZZ

† † See Family Designation in Chart



On this page are listed units designed for the extremes in miniaturization. The 4 inch #27 color coded leads supplied are suitable for dip soldering in printed circuits. Thorough baking and resin impregnation assure reliable life. Insulating materials used are compatible for later epoxy potting of complete assemblies. Highest efficiency—space factor obtained by use of high permeability Nickel-Alloy Cores, Nylon Bobbins, Formvar Wire. Available from stock.



MOLDED VM-M
VERI-MINIATURE SIZE

Designed for plug-in printed circuit applications. Cast Epoxy resin provides highest resistance to extremes of ambient. Wt. .25 oz.

To order add -M to Part Number.
i.e. VM2-M, VM9-M

MIL DESIGNATION TF5RX † † ZZ

† † See Family Designation in Chart

ULTRA-MINIATURE TRANSISTOR TRANSFORMERS -UM Series

Frequency Response ± 2 db 300 to 10,000 Cycles,
Measured at level stated for 300 Cy.

| Part No. | Application | Primary Impedance | Secondary Impedance | Unbal. Pri. DC Ma | Pri. D.C.R. | Sec. D.C.R. | Level @ 300 cy | Level @ 1 kc | † † Family |
|----------|-------------|-------------------|---------------------|-------------------|-------------|-------------|----------------|--------------|------------|
| UM21-(*) | Input | 100,000 | 1,000 | 0 | 1900 | 135 | 5mw | 70mw | 16 |
| UM22-(*) | Driver | 20,000 | 1,000 | 0.5 | 1100 | 100 | 5mw | 300mw | 13 |
| UM23-(*) | Driver | 20,000 | 1,200 C.T. | 0.5 | 1100 | 110 | 5mw | 300mw | 13 |
| UM24-(*) | Output | 1,000 | 5 Ω | 3 | 65 | 10 | 5mw | 500mw | 17 |
| UM25-(*) | Output | 400 | 5 Ω | 3 | 35 | 5 | 15mw | 500mw | 17 |
| UM26-(*) | Output | 400 | 1 Ω | 3 | 35 | 1.5 | 15mw | 500mw | 17 |
| UM27-(*) | Output | 400 C.T. | 1 Ω | 6 | 35 | 1.5 | 15mw | 500mw | 17 |
| UM28-(*) | Choke | 10 hy (0 dc) | | 8hy (0.5ma) | 650 | | | | 20 |
| UM29-(*) | Interstage | 600 C.T. | 600 C.T. | 7 | 45 | 60 | 5mw | 400mw | 21 |
| UM30-(*) | Choke | 1.5 hy (0 dc) | | 0.7hy (2ma) | 100 | | | | 20 |
| UM31-(*) | Interstage | 10,000 C.T. | 1,200 C.T. | 2 | 850 | 120 | 5mw | 500mw | 21 |
| UM32-(*) | Output | 1,500 C.T. | 600 | 5 | 135 | 65 | 5mw | 500mw | 17 |
| UM33-(*) | Output | 1,000 C.T. | 600 | 6 | 80 | 65 | 5mw | 500mw | 17 |
| UM34-(*) | Driver | 10,000 C.T. | 600 C.T. | 2 | 850 | 40 | 5mw | 500mw | 13 |
| UM35-(*) | Isolation | 15,000 C.T. | 15,000 C.T. | 1 | 930 | 1210 | 5mw | 300mw | 15 |

*Add either -F, or -M to Part No. to designate construction. See Photos.
Power levels shown are for 7 1/2% maximum distortion.

VERI-MINIATURE TRANSISTOR TRANSFORMERS — VM Series

Frequency Response ± 2 db. 200 to 10,000 Cycles

| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C.R. | Sec. D.C.R. | Level MW | † † Family |
|----------|---------------------|-------------------|---------------------|-------------|-------------|----------|------------|
| VM1-(*) | Input | 50 | 600 (1.5ma) | 7 | 90 | 15 | 21 |
| VM2-(*) | Input or Interstage | 200,000 | 600 (1.0ma) | 3000 | 110 | 5 | 21 |
| VM3-(*) | Interstage | 25,000 | 600 (1ma) | 720 | 45 | 5 | 21 |
| VM4-(*) | Input or Interstage | 200,000 | 1200 (.72ma) | 3100 | 165 | 5 | 21 |
| VM5-(*) | Interstage | 50,000 | 600 (1.0ma) | 830 | 55 | 5 | 21 |
| VM6-(*) | Interstage | 100,000 | 1,200 C.T. (.72ma) | 2000 | 150 | 5 | 21 |
| VM7-(*) | Output | 500 (3.5ma) | 3.4 | 50 | .5 | 15 | 21 |
| VM8-(*) | Output | 1250 (2.0ma) | 3.4 | 135 | .5 | 15 | 21 |
| VM9-(*) | Output | 1250 (2.0ma) | 50 | 135 | 5.5 | 15 | 21 |
| VM10-(*) | Interstage | 2,500 (1 5ma) | 2,500 C.T. | 225 | 215 | 3 | 21 |
| VM11-(*) | Choke | 20 hy. (0ma) | 12 hy. (.5ma) | 1000 | — | — | 21 |
| VM12-(*) | Interstage | 20,000 | 1,000 (.75ma) | 625 | 85 | 5 | 21 |
| VM13-(*) | Interstage | 20,000 | 1,000 C.T. (.75ma) | 625 | 85 | 5 | 21 |
| VM14-(*) | Interstage | 600 C.T (7ma) | 600 C.T. | 50 | 65 | 15 | 17 |
| VM15-(*) | Isolation | 50,000 C.T. | 50,000 C.T. | 2000 | 2600 | 5 | 15 |
| VM16-(*) | Driver | 500 C.T. (7.5ma) | 250 C.T. | 40 | 13 | 15 | 17 |

*Add either -FPB, or -M to Part No. to designate construction. See Photos.

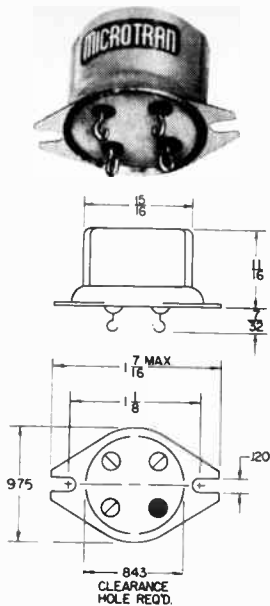
Power levels shown are for 7 1/2% maximum distortion.

PLUG-IN TAB MOUNTED CHANNEL VM-FPB
VERI-MINIATURE SIZE

To order add -FPB to Part Number.
i.e. VM2-FPB Weight .2 oz.

MIL DESIGNATION TF6RX † † ZZ

† † See Family Designation in Chart
NOTE: Available without channel on special order only, as VM-F, 3/16" x 3/16" x 1/2". Wt. .16 oz.

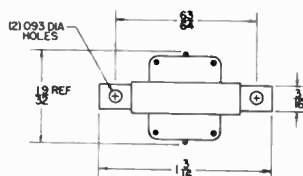
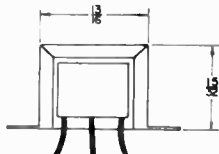
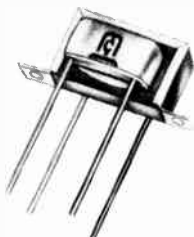
**HERMETIC MM-H**

Grey Enamel Finish. High Compression Glass Terminals. Weight $\frac{3}{4}$ oz.

To order add -H to Part Number. i.e. MM2-H, MMT3-H.

MIL DESIGNATION TF4RX †† YY

†† See Family Designation in Chart

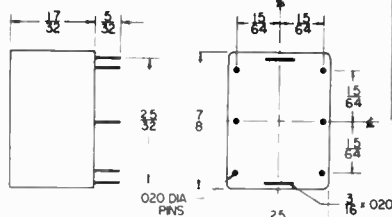
**OPEN FRAME WITH CHANNEL MM-FB**

To order add -FB to Part No. i.e. MMT3-FB, MM1-FB.

Available with plug-in tab mounted channel as type MM-FPB, 25/32 mounting centers. On Special Order only. Available without channel as type MM-F $\frac{3}{4} \times \frac{1}{16} \times \frac{1}{32}$. Wt. .38 oz. On Special Order only.

MIL DESIGNATION TF6RX †† ZZ

†† See Family Designation in Chart

**MOLDED MM-M**

Designed for plug-in printed circuit applications. Cast Epoxy resin provides highest resistance to extremes of ambient. Weight $\frac{1}{2}$ oz.

To order add -M to Part Number. i.e. MM2-M, MMT2-M.

MIL DESIGNATION TF5RX †† ZZ

†† See Family Designation in Chart

MICROTRAN

MICRO MINIATURE TRANSFORMERS

MM and MMT SERIES

The units shown on this page are suitable for rigid sub-miniaturization applications where the highest resistance to extremes of ambients must still be maintained. Available from stock for immediate delivery.

MICRO-MINIATURE AUDIO TRANSFORMERS — MM Series

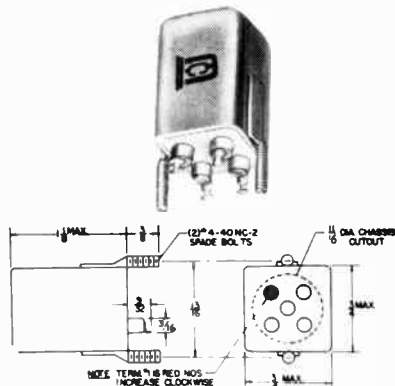
| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbalance Ma. | Dper. Level DBM | Freq. Response ± 2 db. | †† Family |
|----------|------------------------------|----------------------|---------------------|-------------------------|-----------------|----------------------------|-----------|
| MM1-(*) | Input | 200/50 | 250,000/62,500 | 0 | 4 | 200-10,000 | 10 |
| MM2-(*) | Interstage 3:1 | 10,000 | 90,000 | 0 | 4 | 150-10,000 | 10 |
| MM3-(*) | Plate to line | 10,000 | 200 | 3 | 20 | 150-10,000 | 13 |
| MM4-(*) | Output | 30,000 | 50 | 1 | 20 | 150-10,000 | 13 |
| MM5-(*) | Reactor 50 HY at 1 MIL. D.C. | 4,700 ohms D.C. Res. | | | | | 20 |
| MM6-(*) | Output | 100,000 | 60 | 0.5 | 20 | 250-10,000 | 13 |
| MM7-(*) | Output | 30,000 | 1,200 | 0.5 | 20 | 200-10,000 | 13 |

MICRO-MINIATURE TRANSISTOR SERIES — MMT Series

| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbalance Ma. | Dper. Level DBM | Freq. Response ± 2 db. | †† Family |
|-----------|---------------------------------|-------------------|---------------------|-------------------------|-----------------|----------------------------|-----------|
| MMT1-(*) | Line to Base | 600 | 600 | 8 | 22 | 200-15,000 | 17 |
| MMT3-(*) | Coll. to Base or line | 50,000 | 600 | 0.7 | 20 | 200-15,000 | 13 |
| MMT4-(*) | P.P. coll. to P.P. Base | 50,000 C.T. | 600 C.T. | 1.4 | 20 | 200-15,000 | 13 |
| MMT5-(*) | Collector to speaker | 50,000 | 6 | 1 | 20 | 200-15,000 | 13 |
| MMT7-(*) | Coll. to P.P. Base | 25,000 | 1,200 C.T. | 1 | 20 | 200-15,000 | 13 |
| MMT8-(*) | P.P. coll. to P.P. Base | 50,000 C.T. | 1,200 C.T. | 1.4 | 20 | 200-15,000 | 13 |
| MMT9-(*) | Line to P.P. Base | 600 C.T. | 1,200 C.T. | 16 | 22 | 200-15,000 | 17 |
| MMT10-(*) | Collector to Base | 25,000 | 600 | 1 | 20 | 200-15,000 | 13 |
| MMT11-(*) | P.P. coll. to P.P. Base or line | 4,000 C.T. | 600 C.T. | 5 | 28 | 200-15,000 | 12 |
| MMT12-(*) | Coll. to Spkr. | 2,000 | 3.4 | 5 | 28 | 200-15,000 | 13 |
| MMT13-(*) | Output P.P. coll. to spkr. | 4,000 C.T. | 3.4 | 5 | 28 | 200-15,000 | 13 |
| MMT16-(*) | Coll. to P.P. Base | 10,000 | 1,500 C.T. | 1 | 20 | 200-15,000 | 13 |
| MMT17-(*) | P.P. Coll. to P.P. Base | 10,000 C.T. | 200 C.T. | 6 | 20 | 200-15,000 | 13 |
| MMT18-(*) | P.P. Coll. to P.P. Base | 25,000 C.T. | 1,200 C.T. | 2 | 20 | 200-15,000 | 13 |
| MMT19-(*) | Coll. to P.P. Base | 2,500 | 2,500 C.T. | 2 | 23 | 200-15,000 | 13 |
| MMT21-(*) | P.P. Coll. to P.P. Base | 4,000 C.T. | 600/150 split | 5 | 28 | 200-15,000 | 13 |
| MMT25-(*) | P.P. Coll. to P.P. Base | 7,500 C.T. | 600 C.T. | 4 | 22 | 200-15,000 | 13 |
| MMT26-(*) | Line to Base | 600 C.T. | 600 C.T. | 16 | 22 | 200-15,000 | 17 |
| MMT27-(*) | P.P. Coll. to P.P. Base | 25,000 C.T. | 600 C.T. | 2 | 20 | 200-15,000 | 13 |
| MMT28-(*) | P.P. Coll. to P.P. Base | 10,000 C.T. | 1,500 C.T. | 2 | 20 | 200-15,000 | 13 |
| MMT29-(*) | Driver/Isolation | 10,000 C.T. | 10,000 C.T. | 2 | 20 | 200-15,000 | 13 |
| MMT30-(*) | P.P. Coll. to P.P. Base | 7,500 C.T. | 1,200 C.T. | 4 | 22 | 200-15,000 | 13 |
| MMT31-(*) | P.P. Coll. to P.P. Base | 2,000 C.T. | 500 C.T. | 10 | 28 | 200-15,000 | 13 |
| MMT32-(*) | Line to P.P. Base | 600 C.T. | 1200/300 split | 16 | 22 | 200-15,000 | 17 |

*Add either -H, -M, or -FB to Part No. to designate construction. See Photos.

MICROTRAN PAGE 3



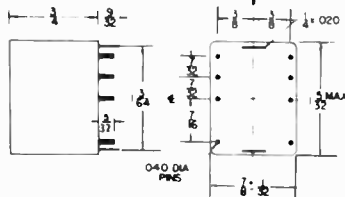
MIL CASE SM-AF

Gray Enamel Finish. Weight 1 1/8 oz. Supplied with compression sealed ceramic terminals in MIL-T-27A-AF modified case.

To order add -AF to Part Number. i.e. SM2-AF, SMT3-AF.

MIL DESIGNATION TF4RX †† YY

†† See Family Designation in Chart



MOLDED SM-M

Designed for plug-in printed circuit applications. Cast Epoxy resin provides highest resistance to extremes of ambient. Weight 1 1/2 oz.

To order add -M to Part Number. i.e. SM5-M, SMT5-M

MIL DESIGNATION TF5RX †† ZZ

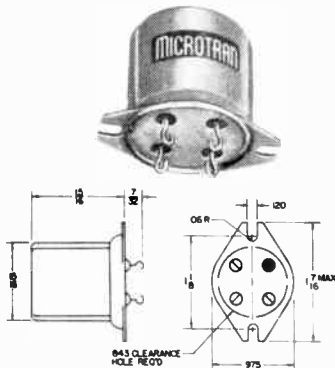
†† See Family Designation in Chart

MICROTRAN

SUB MINIATURE TRANSFORMERS

SM AND SMT SERIES

The units shown on this page are suitable for rigid sub-miniaturization applications where the highest resistance to extremes of ambients must still be maintained. Available from stock for immediate delivery.

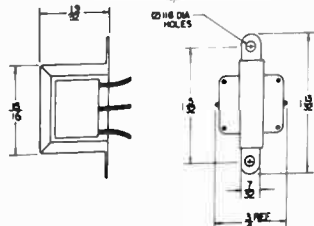
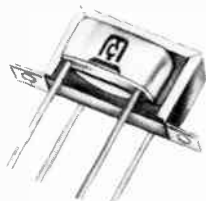


HERMETIC SM-H

Grey Enamel Finish. Weight 1 oz. High Compression Glass Terminals. To order add -H to Part Number. i.e. SM2-H, SMT3-H

MIL DESIGNATION TF4RX †† YY

†† See Family Designation in Chart



OPEN FRAME WITH CHANNEL SM-FB

To order add -FB to Part Number. i.e. SMT3-FB, SM1-FB. Weight .710 oz. Available with plug-in tab mounted channel as type SM-FPB 29/32 mtg. centers on Special Order only.

Available without channel as type SM-F 7/16x7/8x3/4. Weight .67 oz. on Special Order only.

MIL DESIGNATION TF6RX †† ZZ
†† See Family Designation in Chart

SUB-MINIATURE AUDIO TRANSFORMERS — SM Series

| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbalance Ma. | Operating Level DBM | Freq. Response ±2 db. | †† Family |
|----------|------------------------------|----------------------|---------------------|-------------------------|---------------------|-----------------------|-----------|
| SM1-(*) | Input | 200/50 | 250,000/62,500 | 0 | 6 | 80-10,000 | 10 |
| SM2-(*) | Interstage 3:1 | 10,000 | 90,000 | 0 | 8 | 100-10,000 | 10 |
| SM3-(*) | Plate to line | 10,000 | 200 | 3 | 21 | 150-10,000 | 13 |
| SM4-(*) | Output | 30,000 | 50 | 1 | 21 | 150-10,000 | 13 |
| SM5-(*) | Reactor 50 HY at 1 MIL. D.C. | 3,000 ohms D.C. Res. | | | | | 20 |
| SM6-(*) | Output | 100,000 | 60 | 0.5 | 21 | 150-10,000 | 13 |

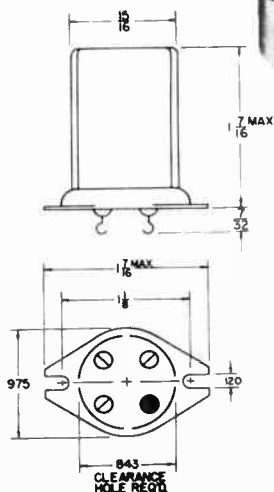
SUB-MINIATURE TRANSISTOR TRANSFORMERS — SMT Series

| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbalance Ma. | Operating Level DBM | Freq. Response ±2 db. | †† Family |
|------------|---------------------------|-------------------|---------------------|-------------------------|---------------------|-----------------------|-----------|
| SMT1-(*) | Line to Base | 600 | 600 | 9 | 23 | 200-15,000 | 17 |
| SMT3-(*) | Coll. to Base or line | 50,000 | 600 | 1 | 20 | 300-15,000 | 13 |
| •SMT4-(*) | P.P. Coll. to P.P. Base | 50,000 C.T. | 600 C.T. | 2 | 20 | 200-15,000 | 13 |
| SMT5-(*) | Coll. to speaker | 50,000 | 6 | 1 | 20 | 300-15,000 | 13 |
| SMT7-(*) | Coll. to P.P. Base | 25,000 | 1,200 C.T. | 1.5 | 20 | 200-15,000 | 13 |
| •SMT8-(*) | P.P. Coll. to P.P. Base | 50,000 C.T. | 1,200 C.T. | 2 | 20 | 200-15,000 | 13 |
| •SMT9-(*) | Line to P.P. Base | 600 C.T. | 1,200 C.T. | 18 | 23 | 200-15,000 | 17 |
| SMT10-(*) | Collector to Base | 25,000 | 600 | 2 | 20 | 200-15,000 | 13 |
| SMT12-(*) | Output coll. to spkr. | 2,000 | 3.4 | 5 | 30 | 200-15,000 | 13 |
| SMT13-(*) | Output P.P. coll to spkr. | 4,000 C.T. | 3.4 | 5 | 30 | 200-15,000 | 13 |
| SMT16-(*) | Coll. to P.P. Base | 10,000 | 1,500 C.T. | 1 | 23 | 200-15,000 | 13 |
| •SMT17-(*) | P.P. Coll. to P.P. Base | 10,000 C.T. | 200 C.T. | 6 | 20 | 200-15,000 | 13 |
| •SMT18-(*) | P.P. Coll. to P.P. Base | 25,000 C.T. | 1,200 C.T. | 3 | 20 | 200-15,000 | 13 |
| SMT19-(*) | Coll. to P.P. Base | 2,500 | 2,500 C.T. | 2.5 | 26 | 200-15,000 | 13 |
| •SMT26-(*) | Line to Base | 600 C.T. | 600 C.T. | 18 | 23 | 200-15,000 | 17 |

* Add either -AF, -H, -M, or -FB to Part No. to designate construction. See photos.
• These items not available in -AF case.



All items shown in charts below are available in any of the mechanical packages shown on pages 5 & 6.



HERMETIC M-H

Grey Enamel Finish. Weight 1 1/4 oz. High Compression Glass Terminals. .120 holes instead of slots, available on Special Order.

To order add -H to Part Number. i.e. M2-H, MT3-H

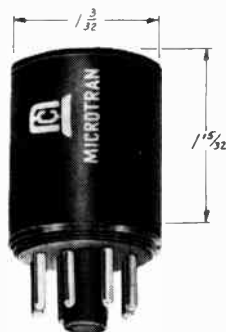
MIL DESIGNATION TF4RX †† YY

†† See Family Designation in Chart

MINIATURE TRANSISTOR TRANSFORMERS — MT Series

| Part No.* | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbalance Ma. | Operating Level DBM | Frequency Response ±2 db. | †† Family |
|-----------|---------------------------|-------------------|---------------------|-------------------------|---------------------|---------------------------|-----------|
| MT1-(*) | Line to Base | 600 | 600 | 10 | 23 | 200-15,000 | 17 |
| MT2-(*) | Coll. to P.P. Base 2N57 | 100 | 10 C.T./40 C.T. | 100 | 27 | 200-20,000 | 17 |
| MT3-(*) | Collector to Base or line | 50,000 | 600 | 3 | 20 | 300-15,000 | 13 |
| MT5-(*) | Collector to speaker | 50,000 | 6 | 3 | 20 | 300-15,000 | 13 |
| MT6-(*) | Collector to P.P. Base | 100,000 | 1,200 C.T. | 1.4 | 17 | 200-15,000 | 13 |
| MT7-(*) | Collector to P.P. Base | 25,000 | 1,200 C.T. | 3 | 22 | 200-15,000 | 13 |
| MT8-(*) | P.P. Coll. to P.P. Base | 50,000 C.T. | 1,200 C.T. | 3 | 20 | 300-15,000 | 13 |
| MT9-(*) | Line to P.P. Base | 600 C.T. | 1,200 C.T. | 4 | 23 | 200-15,000 | 17 |
| MT10-(*) | Collector to Base | 25,000 | 600 | 3 | 22 | 200-15,000 | 13 |
| MT11-(*) | P.P. Coll. to P.P. Base | 4,000 C.T. | 600 C.T. | 3 | 32 | 200-15,000 | 13 |
| MT12-(*) | Output Coll. to speaker | 2,000 | 3.4 | 10 | 32 | 200-15,000 | 13 |
| MT13-(*) | P.P. Coll. to speaker | 4,000 C.T. | 3.4 | 3 | 32 | 200-15,000 | 13 |
| MT14-(*) | Coll. to Spkr. 2N179 | 400 | 10 | 50 | 25 | 200-20,000 | 13 |
| MT15-(*) | P.P. Servo Output 2N57 | 500 C.T. | 210 | 30 | 27 | 300-20,000 | 17 |
| MT18-(*) | P.P. Coll. to P.P. Base | 25,000 C.T. | 1,200 C.T. | 6 | 22 | 200-15,000 | 13 |
| MT20-(*) | P.P. Coll. to P.P. Base | 50,000 C.T. | 1200/300 Split | 3 | 20 | 300-15,000 | 13 |
| MT21-(*) | P.P. Coll. to P.P. Base | 4,000 C.T. | 600/150 Split | 3 | 32 | 200-15,000 | 13 |
| MT22-(*) | Line to P.P. Base | 600/150 Split | 1,200 C.T. | 4 | 23 | 200-15,000 | 17 |
| MT23-(*) | P.P. Coll. to Servo | 250 C.T. | 1000 | 10 | 30 | 200-15,000 | 17 |
| MT24-(*) | Coll. to P.P. Base | 2,500 | 600 C.T. | 10 | 32 | 200-15,000 | 17 |
| MT25-(*) | P.P. Coll. to P.P. Base | 7,500 C.T. | 600 C.T. | 8 | 32 | 200-15,000 | 12 |
| MT26-(*) | Line to P.P. Base | 600 C.T. | 600 C.T. | 20 | 23 | 200-15,000 | 17 |
| MT29-(*) | P.P. Coll. to Servo | 1600 C.T. | 450 | 15 | 30 | 200-15,000 | 17 |
| MT30-(*) | P.P. Coll. to Servo | 250 C.T. | 500 | 10 | 30 | 200-15,000 | 17 |

*Add either -AG, -H, -M, -P, -A, or -FB to Part No. to designate construction. See photos.



OCTAL PLUG-IN M-P

Sealed Plastic Housing. Weight 2 oz. To order add -P to Part No. i.e. MT3-P, M1-P

MIL DESIGNATION TF6RX †† ZZ

†† See Family Designation in Chart

MINIATURE AUDIO TRANSFORMERS — M Series

| Part No.* | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbalance Ma. | Operating Level DBM | Frequency Response ±2 db. | †† Family |
|-----------|--------------------------|-------------------|---------------------|-------------------------|---------------------|---------------------------|-----------|
| M1-(*) | Mike or line to 1 grid | 50/250/600 C.T. | 50,000 | 0 | 5 | 20-20,000 | 10 |
| M2-(*) | Mike or line to 2 grids | 50/250/600 C.T. | 50,000 C.T. | 0 | 5 | 20-20,000 | 10 |
| M3-(*) | Dynamic mike to 1 grid | 7.5/30 | 50,000 | 0 | 5 | 20-20,000 | 10 |
| M4-(*) | Single plate to 1 grid | 15,000 | 60,000 | 0 | 6 | 20-15,000 | 10 |
| M5-(*) | Single plate to 1 grid | 15,000 | 60,000 | 4 | 14 | 200-20,000 | 15 |
| M6-(*) | Single plate to 2 grids | 15,000 | 95,000 C.T. | 0 | 5 | 20-15,000 | 10 |
| M7-(*) | Single plate to 2 grids | 15,000 | 95,000 C.T. | 4 | 11 | 200-20,000 | 15 |
| M8-(*) | Single plate to line | 15,000 | 50/250/600 C.T. | 0 | 8 | 20-20,000 | 16 |
| M9-(*) | Single plate to line | 15,000 | 50/250/600 C.T. | 4 | 21 | 150-20,000 | 13 |
| M10-(*) | Push pull plates to line | 30,000 P.P. | 50/250/600 C.T. | 0 | 8 | 30-50,000 | 16 |
| M11-(*) | Crystal mike to line | 50,000 | 50/250/600 C.T. | 0 | 5 | 20-20,000 | 16 |
| M12-(*) | Mixing and matching | 50/250 C.T. | 50/250/600 C.T. | 0 | 8 | 20-20,000 | 16 |
| M13-(*) | Reactor | 300 hy. 0 d.c. | 50 hy. @ 3 ma. | | | 6000 Ω D.C.R. | 20 |
| M14-(*) | 50: 1 mike to grid | 200 | 1/2 Megohm | 0 | 9 | 80-3,000 | 10 |
| M15-(*) | 10: 1 plate to grid | 10,000 | 1 Megohm | 0 | 11 | 100-2,500 | 10 |

*Add either -AG, -H, -M, -P, -A, or -FB to Part No. to designate construction. See photos.



On this page are hermetically sealed and cased transformers designed for transistor and tube servo and audio applications. In the initial design of these units, impedance ratings were selected to enable the user to match the latest transistors.

Input transformers permit connection of low level chopper, microphone, pickup or tape heads to amplifier. These units are magnetically shielded to improve signal to noise ratio.

Driver and Output Transformers were designed specifically for Servo and Audio applications and are of MIL-T-27A constructions.

TRANSISTOR DRIVER AND OUTPUT TRANSFORMERS

Mil Designation: TF4RX††xx

| Part No. | Application | Pri. Imp. | Sec. Imp. | Pri. D.C. Unbal. Ma. | Level Watts | Frequency Response ± 2Db. | Mil Case xx | Family †† |
|----------|------------------------|------------|------------|----------------------|-------------|---------------------------|-------------|-----------|
| M8002* | Collector to P.P. Base | 560 | 400 C.T. | 18 | .15 | 200-20,000 | AJ | 17 |
| M8003* | Collector to P.P. Base | 625 C.T. | 100 C.T. | 20 | 1.5 | 200-20,000 | AJ | 17 |
| M8004 | Collector to P.P. Base | 5,400 | 600 C.T. | 15 | .075 | 200-15,000 | AH | 13 |
| M8005 | Collector to P.P. Base | 7,000 | 320 C.T. | 7 | .040 | 70-15,000 | AH | 13 |
| M8006 | Collector to P.P. Base | 10,000 | 6,500 C.T. | .75 | .005 | 200-15,000 | YY** | 13 |
| M8008 | Collector to Spkr. | 25 | 3-4 | 600 | 3 | 200-20,000 | AJ | 17 |
| M8007* | P.P. Auto Transformer | 30 C.T. | 3-4 | 200 | 2 | 100-20,000 | AJ | 17 |
| M8009 | P.P. Output to Spkr. | 48 C.T. | 3.2/8 | 50 | 5 | 200-20,000 | AJ | 17 |
| M8010 | P.P. Col. to Servo | 120 C.T. | 1,000 | 40 | 6 | 300-15,000 | AJ | 17 |
| M8011 | P.P. Output to Spkr. | 125 C.T. | 3-4 | 20 | 1.5 | 200-15,000 | AH | 17 |
| M8012* | P.P. Col. to Servo | 140 C.T. | 500 | 50 | 6 | 300-15,000 | AJ | 17 |
| M8013* | P.P. Output to Spkr. | 250 C.T. | 3-4 | 20 | .4 | 70-15,000 | AH | 17 |
| M8014 | P.P. Output to Spkr. | 400 C.T. | 11 | 2 | .25 | 300-15,000 | YY** | 17 |
| M8015 | P.P. Col. to Servo | 1,600 C.T. | 800 | 5 | 2.5 | 150-20,000 | AJ | 17 |
| M8016 | P.P. Output to Spkr. | 2,500 C.T. | 12 | 4 | .10 | 300-15,000 | YY** | 17 |
| M8054 | P.P. Output to Servo | 250 C.T. | 130 | 20 | 3 | 200-15,000 | AH | 17 |

* Bi-Filar wound to minimize switching transients.

** See Type AF on Page 30 for dimensions.

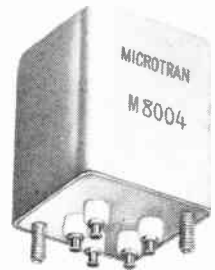


Fig. A.

HERMETICALLY SEALED to MIL-T-27A

MIL Designation: TF4RX ††xx

See Page 10 for MIL Case Dimensions.

LOW LEVEL CHOPPER INPUT TRANSFORMERS

Efficiently transfers 30 to 500 cps. Transducer or Thermocouple signals to instrument amplifiers. Signal level range from .5μV. to .5 volts. Resin impregnated to minimize mechanical vibration noise signal. Low hum pick up assured by 3 mu-metal and 2 copper shields. Accurate center taps and external electrostatic shield connection improve low-level operation.

| Part Number | Turn Ratio | | Ind. of Full Pri. @ .5V. 60 cy. | Imped. of Full Pri. @ .5V. 60 cy. | D.C. Resistance | | Magnetic Shielding | Height | Dia. | Wt. Oz. |
|-------------|------------------------|-----------------------|---------------------------------|-----------------------------------|-----------------|------|--------------------|--------|----------|---------|
| | Full Pri. To Full Sec. | 1/2 Pri. To Full Sec. | | | Full Pri. | Sec. | | | | |
| M8025 | 1:7.7 | 1:15.4 | 17.5 | 6,600 | 365 | 4140 | 90 db. | 1 3/8 | 1 3/8 D. | 4.5 |
| M8026 | 1:3.2 | 1:6.4 | 60 HY. | 22,500 | 455 | 3500 | 90 db. | 1 3/8 | 1 3/8 D. | 4.5 |
| M8052 | 1:4.53 | 1:9.06 | 90 | 34,000 | 760 | 5220 | 90 db. | 1 3/8 | 1 3/8 D. | 4.5 |
| M8053 | 1:1 | 1:0.5 | 140 | 53,000 | 920 | 653 | 90 db. | 1 3/8 | 1 3/8 D. | 4.5 |



Fig. B.

TRIPLE MU-METAL CASE, two internal copper shields. 6-32x3/8" mounting studs on 1 1/2" centers.

PLUG-IN INPUT TRANSFORMERS

These Broadcast fidelity input transformers are double mu-metal shielded. Plug-in feature permits simple installation.

| Part Number | Pri. Imp. | Sec. Imp. | Magnetic Shielding | Level DBM | Frequency Resp. ± 2db. | Height | Diameter | Weight Oz. |
|-------------|--------------|-----------|--------------------|-----------|------------------------|--------|----------|------------|
| M8030* | 200/50 C.T. | 50,000 | 65 | +5 | 20-20,000 | 2 1/8 | 1 1/8 D. | 6 |
| M8031 | 600 C.T./150 | 50,000 | 65 | +5 | 30-20,000 | 2 1/8 | 1 1/8 D. | 6 |
| M8032† | 250 C.T. | 50,000 | 65 | +5 | 20-20,000 | 2 1/8 | 1 1/8 D. | 6 |
| M8033† | 50 C.T. | 50,000 | 65 | +5 | 20-20,000 | 2 1/8 | 1 1/8 D. | 6 |

M8030 is designed as a replacement for Ampex No. 1733-1.

M8032 and M8033 mates with sockets on many RCA amplifiers.



Fig. C.

MIKE INPUT — Octal Type Plug-in Base. M8030-1 have 8 pins. M8032-3 have 9 pins. Matches many amplifiers.

Designed specifically for Transistor and other low voltage applications. All units shown are Hermetically sealed per MIL-T-27A and are available from stock. On special order certain units may be obtained in alternate constructions such as Epoxy molded, or open frame. Also available with modified electrical specifications.

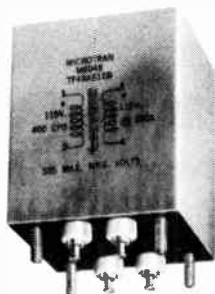


Fig. A

HERMETICALLY SEALED

Per MIL-T-27A
MIL Designation: TF4RX01XX
SEE PAGE 10 FOR DIMENSIONS



Fig. B

HERMETIC

Round steel can 1 5/16" Dia. 1 1/8" mounting centers. High compression glass terminals. M8063 and M8069 see fig. MM-H Page 3 for detailed information. M8047 and M8058 see fig. M-H Page 6 for detailed information. MIL Designation: TF4RX01YY



Fig. C

EPOXY MOLDED

On special order only. Inserts, studs or tabs for mounting. .040 pins for printed circuit applications. MIL Designation TF5RX01ZZ

400 CYCLE POWER SUPPLY TRANSFORMERS
FOR SILICON RECTIFIER CIRCUITRY AND FILAMENT APPLICATIONS
Primary 105/115/125 Volts MIL Designation: TF4RX01xx

| Part No. | Secondary | | Rectifier Circuit | | Fig. A Mil Case XX |
|----------|-------------------|--------------|-----------------------------|--------------------------|--------------------|
| | A.C. Volts | RMS Amperes | C.T. Full Wave D.C. Volts** | F.W. Bridge D.C. Volts** | |
| M8063† | 2.85 2.85 | .045 .045 | 1.5 | 3 | YY (Fig. B) |
| M8064† | 6.3 C.T. | .6 | 1.9 | 3.8 | AH |
| M8039 | 12.6 12.6 C.T. | .8 .8 | 10.5 | 21 | AJ |
| M8018 | 18.5 C.T. | 1 | 7 | 14 | EA |
| M8019 | 18.5 C.T. | 3 | 7 | 14 | FA |
| M8065 | 26 C.T. | 1.5 | 10.7 | 21.5 | EA |
| M8066 | 26 C.T. | 3 | 10.7 | 21.5 | FA |
| M8067 | 30 C.T. | .5 | 12.5 | 25 | FB |
| M8020 | 35 C.T. | 3 | 14.5 | 29 | GA |
| M8068 | 40 C.T. | .2 | 17 | 34 | AJ |
| M8041† | 50 C.T. | .25 | 21.5 | 43 | AH |
| M8069† | 60 C.T. | .003 | 26 | 52 | YY (Fig. B) |
| M8070† | 65 C.T. | .170 | 28.4 | 56.8 | AH |
| M8021 | 70 C.T. | 1 | 30 | 60 | FA |
| M8071 | 80 C.T. | .90 | 35.2 | 70.4 | FA |

**DC Output v. for resistive or inductive rect. loads. Output v. based on approx. 1 v. drop per rect. †Primary 115 volts only.

60 CYCLE POWER SUPPLY TRANSFORMERS
FOR SILICON RECTIFIER CIRCUITRY, AND FILAMENT APPLICATIONS
Primary 105/115/125 Volts MIL Designation: TF4RX01xx

| Part No. | Secondary | | Rectifier Circuit | | Fig. A Mil Case XX |
|----------|------------------------|-------------|-----------------------------|--------------------------|--------------------|
| | A.C. Volts | RMS Amperes | C.T. Full Wave D.C. Volts** | F.W. Bridge D.C. Volts** | |
| M8042 | 6.3 C.T. | .6 | 1.9 | 3.8 | AJ |
| M8043 | 6.3 C.T. | 2 | 1.9 | 3.8 | FB |
| M8044 | 12.6 C.T. 12.6 C.T. | 2 2 | 10.5 | 21 | JB |
| M8022 | 18.5 C.T. | 3 | 7 | 14 | JB |
| M8045 | 28 C.T. | .6 | 11.7 | 23.4 | FA |
| M8055 | 30 C.T. | 2.5 | 12.5 | 25 | JA |
| M8023 | 35 C.T. | 3 | 14.5 | 29 | KA |
| M8046 | 49 C.T. | 2.5 | 21 | 42 | LA |
| M8024 | 70 C.T. | 1 | 30 | 60 | JA |
| M8056 | 80 C.T. | .6 | 35 | 70.5 | HA |
| M8057 | 115 C.T. | .9 | 51 | 102 | KA |

**DC Output volts for resistive or inductive loads. Output volts based on approx. 1 v. drop per rectifier.

400 CYCLE ISOLATION TRANSFORMERS
CENTER TAP PERMITS USE IN EITHER F.W. BRIDGE OR F.W.C.T. CIRCUITRY
Electrostatic Shielding MIL Designation: TF4RX01xx

| Part No. | Input Voltage | Output Voltage | Current RMS Amps | V.A. Rating | Fig. A Mil Case XX |
|----------|---------------|----------------|------------------|-------------|--------------------|
| M8047†† | 115 | 115 | .017 | 2 | YY (Fig. B) |
| M8058 | 115 | 115 C.T. | .017 | 2 | YY (Fig. B) |
| M8048†† | 115 | 115 | .35 | 40 | EB |
| M8059 | 115 | 115 C.T. | .35 | 40 | EB |
| M8049†† | 115 | 115 | 1.3 | 150 | GA |
| M8060 | 115 | 115 C.T. | 1.3 | 150 | GA |
| M8061* | 115 | 115 C.T. | 2.6 | 300 | JA |
| M8062* | 115 | 115 C.T. | 4.4 | 500 | KA |

††Discontinued item, available until stock is depleted.

*Primary 105/115/125 volts.

TRANSISTOR TRANSFORMER SELECTOR KIT - model 400K



29⁵⁰ user net
Available off-the-shelf from franchised distributors.

A Short-cut to:

- "BREAD BOARD CIRCUITRY"
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FULL DESIGN DATA ENCLOSED

- Nomographs and circuitry for determining correct transformer impedances for class A and B transistor amplifiers
- Power versus DBM chart
- Terminal connection sheet
- Guide to MIL-T-27A
- Cross Reference index
- Outline drawings furnished enables later selection of stock items with these same electrical ratings in many other mechanical constructions

NOW AVAILABLE FOR THE FIRST TIME

- Set of 9 transformers covers impedance range of 150 through 200,000 ohms
- Matches most new transistor impedance ratings
- Sizes from 3/8" cube to 3/4" x 3/4" x 1"
- Vacuum resin impregnated to provide long reliable life and protection from rough handling
- 4" color coded leads
- Transformers individually boxed in transparent case

TRANSISTOR TRANSFORMER SELECTOR KIT SPECIFICATIONS

| Part No. | Primary | | Secondary | | Unbal. Pri. D.C. MA. | Power Level MW. | Frequency Response ±2 db. |
|----------|-------------|------|---------------|-------|----------------------|-----------------|---------------------------|
| | Impedance* | DCR | Impedance* | DCR | | | |
| MMT9-FB | 600 C.T. | 45 | 1200 C.T. | 100 | 16 | 150 | 200-15,000 |
| MT24-FB | 2,500 | 230 | 600 C.T. | 55 | 10 | 1500 | 200-15,000 |
| MMT21-FB | 4,000 C.T. | 300 | 600/150 Split | 30/30 | 5 | 600 | 200-15,000 |
| MMT17-FB | 10,000 C.T. | 2400 | 200 C.T. | 35 | 6 | 100 | 200-15,000 |
| UM31-F | 10,000 C.T. | 850 | 1200 C.T. | 120 | 2 | 5(.5W@1Kc) | 300-10,000 |
| UM22-F | 20,000 | 1100 | 1000 | 100 | .5 | 5(.3W@1Kc) | 300-10,000 |
| SMT18-FB | 25,000 C.T. | 2000 | 1200 C.T. | 110 | 3 | 100 | 200-15,000 |
| VM2-FBP | 200,000 | 2650 | 600 | 80 | 1 (Sec.) | 5 | 200-10,000 |
| UM28-F | 10 hy (0dc) | 650 | 8 hy (.5ma) | — | — | — | Reactor |

* Primary and secondary may be interchanged but impedance will be slightly different.

SPECIAL PACKAGING OF STOCK ITEMS

The following types are available on special order, with the same electrical ratings but packaged specially to suit customer requirements. These are just some of the various mechanical constructions that may be had on special order.

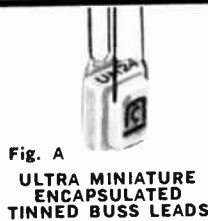


Fig. A
ULTRA MINIATURE ENCAPSULATED TINNED BUSS LEADS



Fig. B
VERI MINIATURE HERMETICALLY SEALED



Fig. C
HERMETIC FLAT BRACKET

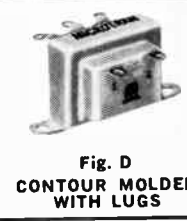


Fig. D
CONTOUR MOLDED WITH LUGS



Fig. E
PLUG-IN MU CAN



Fig. F
MOLDED WITH INSERTS

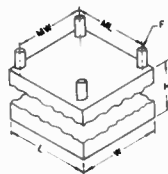


Fig. G
HERMETICALLY SEALED STUDS OPPOSITE TERMINALS



Fig. H
MU CAN WITH STUDS

STANDARD MIL-T-27A CASES



YY—All metal cases not included above or with non-standard mounting centers. ZZ—Open type & encapsulated units.

1. Tolerances on dimensions L and W are +0 to -1/16 for cases AF, AG, AH and AJ; +0 to -1/8 for all other cases.
2. Tolerances on dimension H are +0 to -1/8 for cases AF, AG, AH, and AJ; +0 to -1/16 for all other cases.
3. Tolerances on dimensions ML and MW are ±1/16 for cases AJ to JB inclusive; ±1/32 for cases KA to LB, inclusive; and ±1/16 for cases MA to OA, inclusive. When mounting studs or holes for inserts are used, they shall be symmetrically located.
4. Screw-stud lengths are from mounting surface and have a length tolerance of ±1/16 on studs 1/2" long or less & ±1/8 on studs over 1/2" L.

| Case Symbol | —Case Dimensions— | | | —Mounting Dimensions— | | |
|-------------|-------------------|---------|-------|-----------------------|---------|-------------|
| | L | W | H | ML | MW | F |
| AF | 3/4 | 3/4 | 1 1/8 | *1 1/16 | — | 4-40x3/8 |
| AG | 1 | 1 | 1 3/8 | *1 1/8 | — | 6-32x3/8 |
| AH | 1 3/8 | 1 3/8 | 1 3/4 | S:1 1/4 | — | 6-32x3/8 |
| AJ | 1 5/8 | 1 5/8 | 2 3/8 | 1 3/8 | 1 3/8 | 6-32x3/8 |
| EA | 1 15/16 | 1 13/16 | 2 3/4 | 1 3/8 | 1 1/4 | 6-32x3/8 |
| EB | 1 13/16 | 1 13/16 | 2 1/2 | 1 3/8 | 1 1/4 | 6-32x3/8 |
| FA | 2 1/8 | 2 1/8 | 3 1/8 | 1 1/8 | 1 3/8 | 6-32x3/8 |
| FB | 2 3/8 | 2 1/8 | 2 1/2 | 1 1/4 | 1 1/4 | 6-32x3/8 |
| GA | 2 3/8 | 2 3/8 | 3 1/4 | 2 1/8 | 1 3/4 | 6-32x3/8 |
| GB | 2 3/4 | 2 3/8 | 2 1/8 | 2 1/8 | 1 3/4 | 6-32x3/8 |
| HA | 3 1/16 | 2 5/8 | 4 1/4 | 2 1/16 | 1 5/8 | 8-32x3/4 |
| HB | 3 1/16 | 2 5/8 | 3 3/8 | 2 1/16 | 1 5/8 | 8-32x3/4 |
| JA | 3 1/8 | 3 1/8 | 4 7/8 | 2 5/8 | 2 1/8 | 8-32x3/4 |
| JB | 3 1/8 | 3 1/8 | 3 7/8 | 2 5/8 | 2 1/8 | 8-32x3/4 |
| KA | 3 15/16 | 3 3/8 | 5 1/4 | 3 | 2 1/8 | 10-32x1 1/2 |
| KB | 3 15/16 | 3 3/8 | 4 3/8 | 3 | 2 1/8 | 10-32x1 1/2 |
| LA | 4 3/8 | 3 11/16 | 5 1/8 | 3 3/8 | 2 11/16 | 10-32x1 1/2 |
| LB | 4 3/8 | 3 11/16 | 4 1/2 | 3 3/8 | 2 11/16 | 10-32x1 1/2 |
| MA | 4 11/16 | 4 | 6 | 3 11/16 | 3 | 1/4-20x5/8 |
| MB | 4 11/16 | 4 | 4 1/8 | 3 11/16 | 3 | 1/4-20x5/8 |
| NA | 5 1/8 | 4 3/8 | 6 1/8 | 4 1/8 | 3 3/8 | 1/4-20x5/8 |
| NB | 5 1/8 | 4 3/8 | 5 1/2 | 4 1/8 | 3 3/8 | 1/4-20x5/8 |

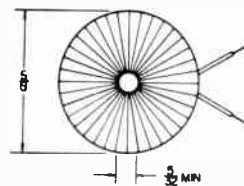
S: Two studs in a diagonal. *Not in conformance with MIL-T-27A



MICROTRAN

MICRO-MINIATURE TOROIDAL INDUCTOR
QGL and QGM SERIES

The QGL and QGM Series are sometimes referred to as the "Cheerio" size. This series is used in extreme miniaturized missile-type applications and provides an optimum combination of small size and high "Q." Both series are available on special order with $\pm 1\%$ or better inductance tolerances. QGL Series available on special order with stabilized cores and with specific inductance values from 1.0 Mh through 4.0 Hy. QGM Series available to 500 Mh on special order.




OPEN FRAME QG-F

Microcrystalline wax dipped. Supplied with 4" #27 plastic leads.


To order add -F to part number, i.e. QGL10-F, QGM25-F



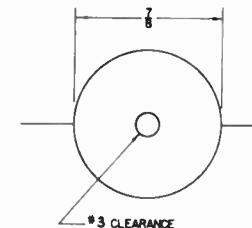
AVAILABLE ON SPECIAL ORDER



Hermetically Sealed,
 $\frac{1}{16}$ D. x $\frac{1}{32}$ hi. Mounting tabs $\frac{3}{32}$ wide x $\frac{3}{16}$. Leads .031x2".
To order add -H to pt. no., i.e. QGL10-H



Hermetic Crystal Can,
 $\frac{3}{32}$ x $\frac{1}{32}$ x $\frac{4}{64}$ hi. Leads .031.
To order add -HC to part number, i.e. QGL10-HC, QGM25-HC



MOLDED QG-M

Molded in High Temperature Epoxy Resin. Pigtail leads may be bent down for plug-in printed circuit applications. Leads .020"x2" gold plated nickel alloy.

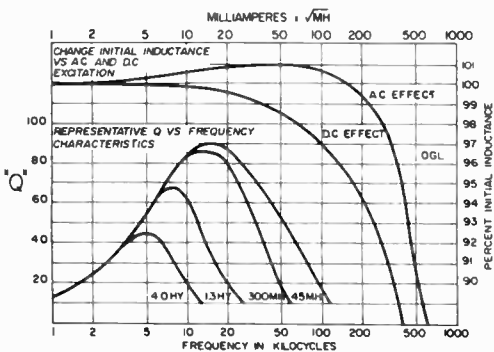
To order add -M to part number, i.e. QGL10-M, QGM25-M

TOROIDAL INDUCTOR — QGL SERIES

Frequency Range to 20KC — Accuracy $\pm 2\%$

| Part No. | Inductance | Typical DCR Ω | Typical Distributed Capacity $\mu\mu\text{F}$ |
|--------------|------------|----------------------|---|
| QGL5-(*) | 5 Mhy. | 2.5 | 30 |
| QGL10-(*) | 10 | 5 | 33 |
| QGL15-(*) | 15 | 8 | 34 |
| ● QGL30-(*) | 30 | 17 | 37 |
| QGL50-(*) | 50 | 28 | 40 |
| QGL100-(*) | 100 | 50 | 42 |
| ● QGL250-(*) | 250 | 130 | 46 |
| QGL500-(*) | 500 | 290 | 48 |
| QGL1000-(*) | 1.00 Hy. | 530 | 51 |
| QGL1500-(*) | 1.50 | 825 | 53 |

*Add either -M or -F to Part No. to designate construction. See Photos.



TOROIDAL INDUCTOR — QGM SERIES

Frequency Range 2KC to 100KC — Accuracy $\pm 2\%$

| Part No. | Inductance | Typical DCR Ω | Typical Distributed Capacity $\mu\mu\text{F}$ |
|--------------|------------|----------------------|---|
| QGM1-(*) | 1 Mhy. | 1.4 | 22 |
| ● QGM2-(*) | 2 | 2.5 | 25 |
| QGM5-(*) | 5 | 6 | 28 |
| QGM10-(*) | 10 | 12 | 31 |
| QGM15-(*) | 15 | 18 | 32 |
| QGM25-(*) | 25 | 30 | 35 |
| QGM50-(*) | 50 | 52 | 37 |
| ● QGM100-(*) | 100 | 115 | 39 |

*Add either -M or -F to Part No. to designate construction. See Photos.

● **NORMALLY NOT CARRIED IN STOCK.**
MICROTRAN PAGE 11



MICROTRAN

SUB-MINIATURE TOROIDAL INDUCTOR QIL SERIES

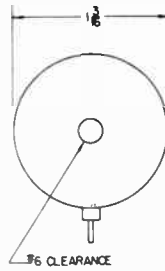


MOLDED QI-M

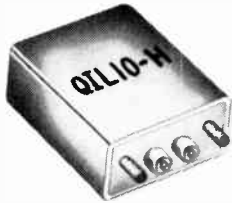
Molded in high temperature Epoxy. Silver plated turret lugs.

To order add -M to part number, i.e. QIL10-M, QIL25-H

On special order threaded insert is available in place of clearance hole.



The QIL Series is sometimes known as the "Wedding Ring" size. The excellent "Q" characteristics of this series make it ideal for the size and weight requirements of portable airborne equipment. Available from stock in three constructional types for maximum prototype and production flexibility. This series is available on special order with $\pm 1\%$ or better inductance tolerances and stabilized cores. Available on special order with specific inductance values through 7.0 Hy.

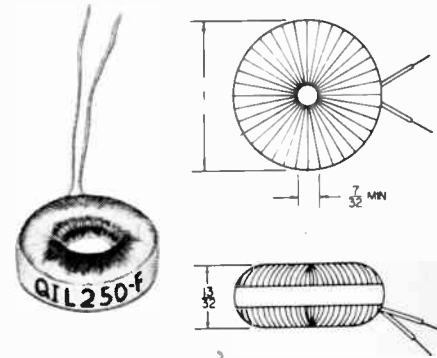
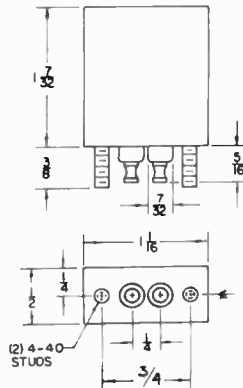


HERMETIC QI-H

Hermetically sealed in metal case. Teflon terminals assure permanent seal at temperature extremes.

To order add -H to part number, i.e. QIL10-H, QIL25-H.

On special order available with inserts in place of studs, ref. page 16.



OPEN FRAME QI-F

Microcrystalline wax dipped. Supplied with 4" #27 plastic leads.

To order add -F to part number, i.e. QIL250-F

TOROIDAL INDUCTOR—QIL SERIES

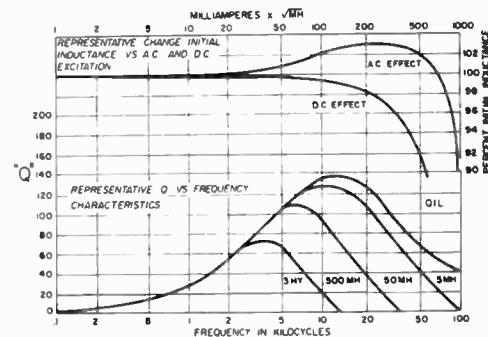
Frequency Range to 20KC — Accuracy $\pm 2\%$

| Part No. | Inductance | Typical DCR Ω | Typical Distributed Capacity $\mu\mu\text{F}$ |
|---------------|------------|----------------------|---|
| ● QIL3-(*) | 3 Mhy. | .73 | 36 |
| QIL5-(*) | 5 | 1.1 | 38 |
| QIL10-(*) | 10 | 2.1 | 40 |
| ● QIL15-(*) | 15 | 3.3 | 42 |
| QIL25-(*) | 25 | 5.3 | 45 |
| QIL50-(*) | 50 | 11 | 47 |
| QIL100-(*) | 100 | 22 | 49 |
| ● QIL150-(*) | 150 | 34 | 50 |
| QIL250-(*) | 250 | 55 | 53 |
| QIL500-(*) | 500 | 95 | 55 |
| QIL1000-(*) | 1.00 Hy. | 210 | 57 |
| ● QIL1500-(*) | 1.50 | 335 | 59 |
| QIL2500-(*) | 2.50 | 550 | 61 |

*Add either -M, -H, or -F to Part No. to designate construction. See Photos.

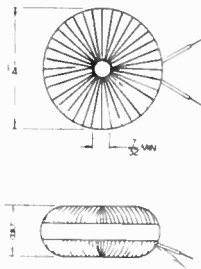
● NORMALLY NOT CARRIED IN STOCK.

MICROTRAN PAGE 12

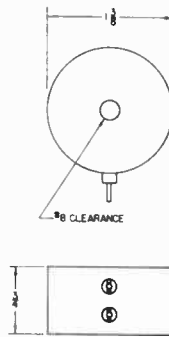




The QKL and QKM Series are one of the industry's most popular. Their characteristics permit high "Q", power level, and stability in a unit with reasonable size and weight. Available from stock in three constructional types for maximum prototype and production flexibility. Both series available on special order with $\pm 1\%$ or better inductance tolerances and stabilized cores. QKL series available on special order with specific inductance values to 17.5 Hy. QKM Series available on special order with specific inductance values to 750 Mh.



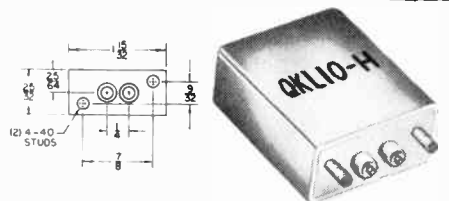
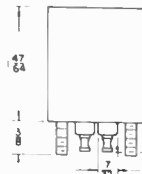
OPEN FRAME QK-F
Microcrystalline wax dipped. Supplied with 4" #27 plastic leads. To order add -F to part number, i.e. QKL10-F, QKM25-F



MOLDED QK-M
Molded in high temperature epoxy resin. Silver plated turret lugs. To order add -M to part number, i.e. QKL10-M, QKM25-M
On special order threaded insert is available in place of clearance hole.

TOROIDAL INDUCTOR — QKL SERIES

Frequency Range to 10KC — Accuracy $\pm 2\%$



HERMETIC QK-H
Hermetically sealed in metal case. Teflon terminals assure permanent seal at temperature extremes. To order add -H to part number, i.e. QKL10-H, QKM25-H
On special order available with inserts in place of studs, ref. page 16.

| Part No. | Inductance | Typical DCR Ω | Typical Distributed Capacity $\mu\mu\text{F}$ |
|---------------|------------|----------------------|---|
| ●QKL5-(*) | 5 Mhy. | .62 | 60 |
| QKL10-(*) | 10 | 1.1 | 66 |
| ●QKL15-(*) | 15 | 1.7 | 68 |
| QKL25-(*) | 25 | 2.8 | 72 |
| QKL50-(*) | 50 | 6 | 76 |
| QKL100-(*) | 100 | 11 | 81 |
| ●QKL150-(*) | 150 | 17 | 83 |
| QKL250-(*) | 250 | 28 | 87 |
| QKL500-(*) | 500 | 63 | 91 |
| QKL1000-(*) | 1.00 Hy. | 110 | 96 |
| ●QKL1500-(*) | 1.50 | 175 | 98 |
| ●QKL2500-(*) | 2.50 | 275 | 103 |
| QKL5000-(*) | 5.00 | 645 | 106 |
| QKL10,000-(*) | 10.00 | 1175 | 112 |

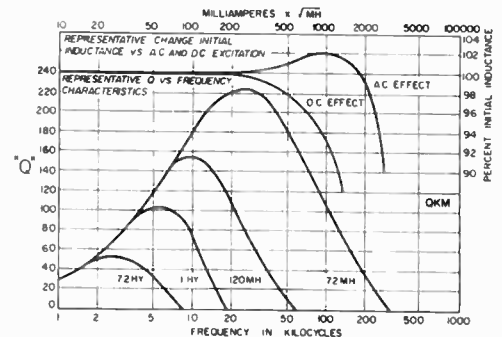
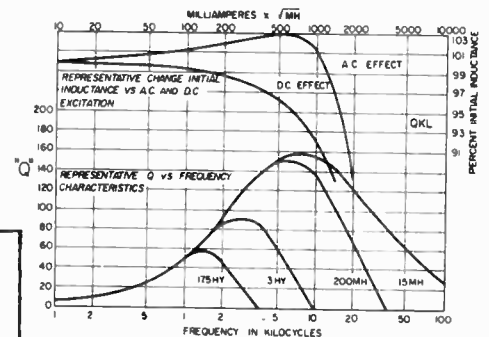
*Add either -M, -H, or -F to Part No. to designate construction. See Photos.

TOROIDAL INDUCTOR — QKM SERIES

Frequency Range 5 to 50KC — Accuracy $\pm 2\%$

| Part No. | Inductance | Typical DCR Ω | Typical Distributed Capacity $\mu\mu\text{F}$ |
|--------------|------------|----------------------|---|
| QKM2-(*) | 2 Mhy. | .45 | 52 |
| QKM5-(*) | 5 | 1.1 | 58 |
| QKM10-(*) | 10 | 2.5 | 62 |
| QKM25-(*) | 25 | 6.5 | 70 |
| QKM50-(*) | 50 | 11 | 74 |
| ●QKM100-(*) | 100 | 25 | 79 |
| ●QKM250-(*) | 250 | 65 | 87 |
| ●QKM500-(*) | 500 | 115 | 92 |
| ●QKM1000-(*) | 1.00 Hy. | 250 | 97 |

*Add either -M, -H, or -F to Part No. to designate construction. See Photos.

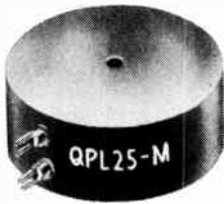


● NORMALLY NOT CARRIED IN STOCK



MICROTRAN

HIGH-Q TOROIDAL INDUCTORS
QPL SERIES

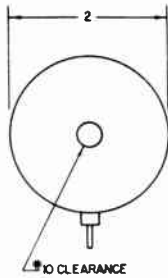


MOLDED QPL-M

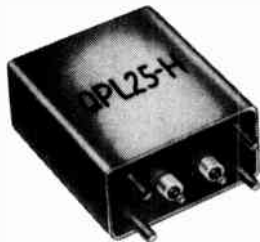
Molded in high temperature epoxy resin. Silver plated turret lugs.

To order add -M to part number, i.e. QPL25-M.

On special order threaded insert is available in place of clearance hole.



The exceptional "Q" of the QPL Series makes it ideal for tuned transformers, critical filters and oscillators. Permits construction of filters with high power ratings and sharp frequency characteristics. Available from stock in three constructional types for maximum prototype and production flexibility. This series is available on special order with $\pm 1\%$ or better inductance tolerances and stabilized cores. Available on special order with specific inductance values to 50 Hy.

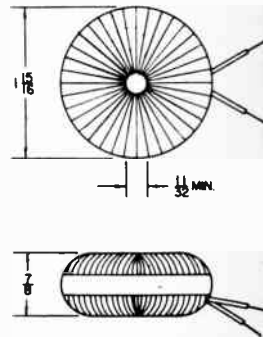
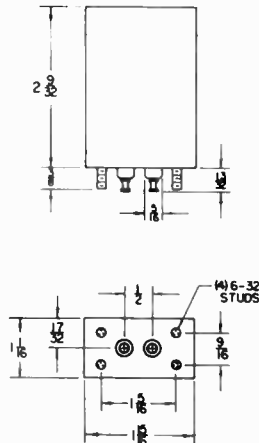


HERMETIC QPL-H

Hermetically sealed in metal case. Teflon terminals assure permanent seal at temperature extremes.

To order add -H to part number, i.e. QPL25-H.

On special order available with inserts in place of studs, ref. page 16.



TOROIDAL INDUCTOR — QPL Series

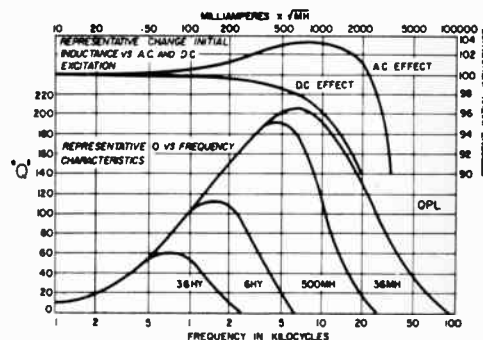
Frequency Range to 10KC — Accuracy $\pm 2\%$

| Part No. | Inductance | Typical DCR Ω | Typical Distributed Capacity $\mu\mu\text{F}$ |
|------------------|------------|----------------------|---|
| QPL25-(*) | 25 Mhy. | 1.5 | 100 |
| QPL50-(*) | 50 | 2.5 | 105 |
| QPL100-(*) | 100 | 6 | 110 |
| ● QPL250-(*) | 250 | 15 | 115 |
| QPL500-(*) | 500 | 25 | 120 |
| QPL1000-(*) | 1.00 Hy. | 60 | 125 |
| ● QPL1500-(*) | 1.50 | 90 | 130 |
| ● QPL2500-(*) | 2.50 | 150 | 133 |
| QPL5000-(*) | 5.00 | 350 | 138 |
| ● QPL7500-(*) | 7.50 | 525 | 140 |
| QPL10,000-(*) | 10.00 | 600 | 142 |
| ● QPL15,000-(*) | 15.00 | 900 | 146 |
| QPL25,000-(*) | 25.00 | 1500 | 150 |

Add -M, or -H, or -F to Part No. to designate construction. See Photos.

OPEN FRAME QPL-F

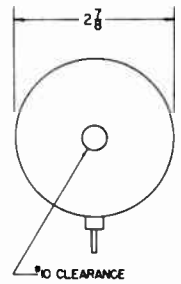
Microcrystalline wax dipped, 4" #24 Leads. To order add -F to part number, i.e. QPL25-F.



● NORMALLY NOT CARRIED IN STOCK.



The QTL Series is most widely used in low audio frequency applications where the highest possible "Q" is required. It is designed for use in high operating level networks and should be employed where inductance stability over a wide operating voltage is required. Available from stock in three constructional types for maximum prototype and production flexibility. This series is available on special order with $\pm 1\%$ or better inductance tolerances. Available on special order with specific inductance values to 75 Hy.

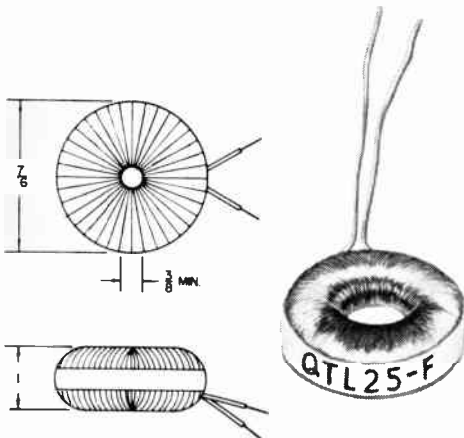
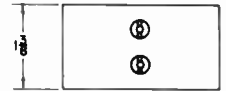


MOLDED QTL-M

Molded in high temperature epoxy resin. Silver plated turret lugs.

To order add -M to part number, i.e. QTL25-M

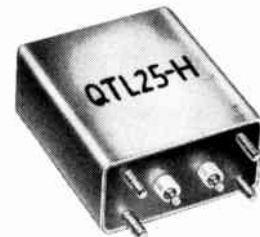
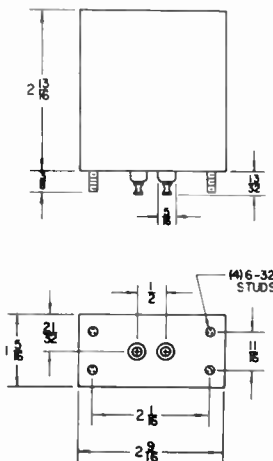
On Special Order threaded insert is available in place of clearance hole.



OPEN FRAME QTL-F

Microcrystalline wax dipped, 4" #24 Leads

To order add -F to part number, i.e. QTL25-F



HERMETIC QTL-H

Hermetically sealed in metal case. Teflon terminals assure permanent seal at temperature extremes.

To order add -H to part number, i.e. QTL25-H

On Special Order available with inserts in place of studs, ref. page 16.

TOROIDAL INDUCTOR — QTL Series

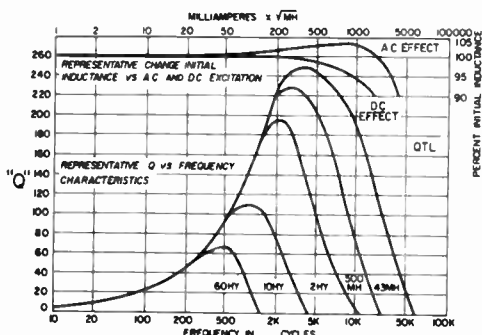
Frequency Range to 15KC — Accuracy $\pm 2\%$

| Part No. | Inductance | Typical DCR Ω | Typical Distributed Capacity $\mu\mu\text{F}$ |
|----------------|------------|----------------------|---|
| ●QTL25-(*) | 25 Mhy. | .85 | 127 |
| QTL50-(*) | 50 | 1.5 | 136 |
| QTL100-(*) | 100 | 2.8 | 144 |
| ●QTL150-(*) | 150 | 3.9 | 149 |
| ●QTL250-(*) | 250 | 7 | 156 |
| QTL500-(*) | 500 | 15 | 164 |
| QTL1000-(*) | 1.00 Hy. | 27 | 173 |
| ●QTL1500-(*) | 1.50 | 40 | 177 |
| QTL2500-(*) | 2.50 | 70 | 184 |
| QTL5000-(*) | 5.00 | 140 | 192 |
| QTL10,000-(*) | 10.00 | 270 | 200 |
| ●QTL15,000-(*) | 15.00 | 430 | 205 |
| QTL25,000-(*) | 25.00 | 850 | 212 |
| QTL50,000-(*) | 50.00 | 1500 | 221 |

Add -M, -H or -F to Part No. to designate construction. See Photos.

● **NORMALLY NOT CARRIED IN STOCK.**

MICROTRAN PAGE 15



PROTOTYPES • SHORT RUNS • PRODUCTION RUNS SOLICITED



Figure E
Encapsulated
Channel Mtd.



Figure Q
Hermetic
with Inserts

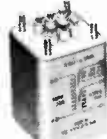


Figure MIL
Hermetic
MIL-T-27A Case



Figure R
Encapsulated
Hipersil



Figure H
Miniature
Hermetic



Figure V
Cylindrical with
rectangular
flange



Figure X
Hipersil with
terminal board

Separate sampling Department for quick delivery. Immediate service assured by large stocks of high temperature insulation and other specialized materials.

IN-PLANT TESTING assures full compliance with military requirements and often saves weeks on contract completion. Units can be supplied to meet MIL-T-27A, MIL-T-9219, AN-E-19, CAA-R-9786, MIL-E-5400, MIL-E-16400, MIL-E-4158, MIL-E-8189A, MCREE-553, MIL-T-9454.

NOT STOCK, CUSTOM BUILT TO ORDER ONLY

400 CYCLE POWER SUPPLY TRANSFORMER PRIMARY 115 VOLTS

| Part No. | Secondary | | Test Volts R.M.S. | Figure |
|----------|------------|------------|----------------------|--------|
| | A.C. Volts | R.M.S. Ma. | | |
| M2954 | 24.2 | 10 A | 1,500 | MIL-KA |
| M2821 | 30 | 500 | 500 | MIL-FB |
| M2880 | 32 | 5.5 A | 500 | MIL-KA |
| M2845 | 60 C.T. | 166 | 500 | MIL-AH |
| M2835 | 112 C.T. | 500 | 500 | MIL |

400 CYCLE FILAMENT TRANSFORMER PRIMARY 115 VOLTS

| Part No. | Filament | | Test Volts R.M.S. | Figure |
|----------|-----------|------|----------------------|--------|
| | Volts | Amps | | |
| M2655 | 6.3 | 1.5 | 1,500 | MIL |
| M2810 | 6.3 | 1.5 | 1,000 | MIL-EA |
| | 6.3 C.T. | 2.0 | | |
| M2611 | 6.3 C.T. | 2.0 | 1,000 | Q |
| | 6.3 C.T. | 2.0 | | |
| M2724 | 12.6 C.T. | 3.0 | 1,000 | MIL |
| | 6.3 | 1.2 | | |
| M2829 | 12.6 | 0.3 | 500 | MIL-AJ |
| | 12.6 | 0.3 | | |
| | 12.6 | 0.3 | | |
| M2830 | 12.6 C.T. | 5.0 | 500 | MIL-JA |
| | 12.6 C.T. | 5.0 | | |
| M2812 | 26.0 | 1.0 | 1,000 | MIL-EA |

60 CYCLE POWER TRANSFORMERS PRIMARY 115 VOLTS

| Part No. | Plate Supply A.C. Volts | D.C. Ma. | Rectifier Filament | | Filament No. 2 | | Figure |
|----------|----------------------------|-------------|-----------------------|------|-------------------|------|--------|
| | | | Volts | Amps | Volts | Amps | |
| M2571 | 550 C.T. | 55 | 5.0 | 2.0 | 6.3 C.T. | 3.0 | MIL-JB |
| M2558 | 386 C.T. | 70 | 6.3 | 2.5 | | | MIL-HA |
| M2192 | 800 C.T. | 250 | 6.3 | 5.0 | 5.0 | 3.0 | MIL |
| M2442 | 330 | 300 FWB | 6.3 C.T. | 10.0 | 6.3 | 3.0 | MIL-M8 |

60 CYCLE POWER SUPPLY TRANSFORMERS PRIMARY 115 VOLTS

| Part No. | Secondary | | Test Volts R.M.S. | Figure |
|----------|------------|------------|----------------------|--------|
| | A.C. Volts | R.M.S. Ma. | | |
| M1606 | 2.5 | 10 | 500 | H |
| M2530 | 25.0 | 230 | 1,000 | MIL-GB |
| M2552 | 26.5 C.T. | 600 | 3,000 | MIL-GA |
| M2808 | 34.0 | 15A | 500 | MIL |
| M2531 | 40.0 | 400 | 1,000 | MIL-HB |
| | 40.0 | 400 | | |
| M2244 | 600 | 300 | 1,500 | MIL-MA |
| M2242 | 600 | 500 | 1,500 | MIL-NB |
| M2170 | 980 C.T. | 225 | 2,500 | MIL-MA |

60 CYCLE FILAMENT TRANSFORMER PRIMARY 117 VOLTS

| Part No. | Filament | | Test Insulation Volts R.M.S. | Figure |
|----------|----------|------|---------------------------------|--------|
| | Volts | Amps | | |
| M1070 | 5.0 C.T. | 4.0 | 1,500 | MIL-FA |
| M2245 | 5.0 C.T. | 6.0 | 6,600 | MIL-JA |
| | 6.3 C.T. | 0.6 | | |
| M2166 | 6.3 C.T. | 0.6 | 3,500 | MIL-JB |
| | 6.3 | 4.0 | | |
| M1631 | 5.0 C.T. | 4.0 | 3,500 | MIL-JA |
| | 6.3 C.T. | 1.0 | | |
| | 6.3 C.T. | 1.5 | | |
| M1191 | 6.3 C.T. | 4.5 | 1,500 | MIL-GA |
| | 7.5 | 3.0 | | |
| M2228 | 12.6 | 65.0 | 1,500 | Q |
| M1395 | 24.0 | 1.0 | 1,500 | MIL-GA |

400 CYCLE SERVO DRIVER AND OUTPUT TRANSFORMERS

| Part No. | Primary Impedance | Pri. Unbal. D.C. Ma. | Secondary Impedance | Power Level | Figure |
|----------|----------------------|-------------------------|------------------------|----------------|--------|
| | | | | | |
| M1378 | 6,000 | 38. | 180 | 1.3 Watts | H |
| M2472 | 2,500 C.T. | 2 | 300 | 1.5 Watts | H |
| M2848 | 200 C.T. | 20. | 1,640 C.T. | 5.6 Watts | MIL-AJ |
| M2769 | 10,000 C.T. | 9 | 500 | 7 Watts | E |
| M2849 | 62 C.T. | 75 | 510 C.T. | 16 Watts | MIL-FB |

MICROTRAN
company, inc.

VALLEY STREAM, N. Y.



INDUSTRIAL — O.E.M.
NET PRICE LIST
Effective June 1, 1962

NOTE:

1. Price of -FPB items is same as equivalent -FB items. (i.e. MT1-FPB is same price as MT1-FB).
2. Price of -F item (i.e. MT1-F) is price of -FB item (i.e. MT1-FB) less the following amounts: Quantity 1-9 \$.30; 10-49 \$.27; 50-99 \$.25; 100-249 \$.20.
3. Items may not be combined to obtain quantity discount.

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|---|---------|-----------|-----------|-------------|
| PICO-MINIATURE TRANSFORMERS (PAGE 1) | | | | |
| PM3-M | 7.65 | 6.89 | 6.38 | 5.10 |
| PM3-L† | 7.80* | 7.02* | 6.50 | 5.20 |
| PM5-M | 6.60 | 5.94 | 5.50 | 4.40 |
| PM5-L† | 6.75* | 6.08* | 5.63 | 4.50 |
| PM7-M | 7.50 | 6.75 | 6.25 | 5.00 |
| PM7-L† | 7.65* | 6.89* | 6.38 | 5.10 |
| PM9-M | 8.10 | 7.29 | 6.75 | 5.40 |
| PM9-L† | 8.10* | 7.29* | 6.75 | 5.40 |
| PM11-M | 7.05 | 6.35 | 5.88 | 4.70 |
| PM11-L† | 7.20* | 6.48* | 6.00 | 4.80 |
| PM13-M | 7.65 | 6.89 | 6.38 | 5.10 |
| PM13-L† | 7.65* | 6.89* | 6.38 | 5.10 |
| PM15-M | 6.15 | 5.54 | 5.13 | 4.10 |
| PM15-L† | 6.30* | 5.67* | 5.25 | 4.20 |
| PM17-M | 7.65 | 6.89 | 6.38 | 5.10 |
| PM17-L† | 7.80* | 7.02* | 6.50 | 5.20 |
| PM19-M | 6.75 | 6.08 | 5.63 | 4.50 |
| PM19-L† | 6.90* | 6.21* | 5.75 | 4.60 |
| PM21-M | 7.35 | 6.62 | 6.13 | 4.90 |
| PM21-L† | 7.35* | 6.62* | 6.13 | 4.90 |
| PM23-M | 6.75 | 6.08 | 5.63 | 4.50 |
| PM23-L† | 6.90* | 6.21* | 5.75 | 4.60 |
| PM25-M | 7.20 | 6.48 | 6.00 | 4.80 |
| PM25-L† | 7.20* | 6.48* | 6.00 | 4.80 |
| PM27-M | 6.00 | 5.40 | 5.00 | 4.00 |
| PM27-L† | 6.15* | 5.54* | 5.13 | 4.10 |
| PM29-M | 6.75 | 6.08 | 5.63 | 4.50 |
| PM29-L† | 6.90* | 6.21* | 5.75 | 4.60 |
| PM31-M | 6.30 | 5.67 | 5.25 | 4.20 |
| PM31-L† | 6.45* | 5.81* | 5.38 | 4.30 |
| PM33-M | 6.15 | 5.54 | 5.13 | 4.10 |
| PM33-L† | 6.30* | 5.67* | 5.25 | 4.20 |
| PM35-M | 5.40 | 4.86 | 4.50 | 3.60 |
| PM35-L† | 5.70* | 5.13* | 4.75 | 3.80 |
| PM37-M | 5.70 | 5.13 | 4.75 | 3.80 |
| PM37-L† | 5.85* | 5.27* | 4.88 | 3.90 |
| PM39-M | 5.40 | 4.86 | 4.50 | 3.60 |
| PM39-L† | 5.70* | 5.13* | 4.75 | 3.80 |
| PM41-M | 4.65 | 4.19 | 3.88 | 3.10 |
| PM41-L† | 4.80* | 4.32* | 4.00 | 3.20 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|--|---------|-----------|-----------|-------------|
| ULTRA-MINIATURE TRANSFORMERS (PAGE 2) | | | | |
| UM21-F | 6.00 | 5.40 | 5.00 | 4.00 |
| UM21-M | 6.60 | 5.94 | 5.50 | 4.40 |
| UM22-F | 4.35 | 3.92 | 3.63 | 2.90 |
| UM22-M | 5.40 | 4.86 | 4.50 | 3.60 |
| JM23-F | 4.65 | 4.19 | 3.88 | 3.10 |
| JM23-M | 6.00 | 5.40 | 5.00 | 4.00 |
| JM24-F | 3.90 | 3.51 | 3.25 | 2.60 |
| JM24-M | 4.95 | 4.46 | 4.13 | 3.30 |
| JM25-F | 3.90 | 3.51 | 3.25 | 2.60 |
| JM25-M | 4.95 | 4.46 | 4.13 | 3.30 |
| JM26-F | 3.90 | 3.51 | 3.25 | 2.60 |
| JM26-M | 4.95 | 4.46 | 4.13 | 3.30 |
| JM27-F | 4.20 | 3.78 | 3.50 | 2.80 |
| JM27-M | 5.25 | 4.73 | 4.38 | 3.50 |
| JM28-F | 3.75 | 3.38 | 3.13 | 2.50 |
| JM28-M | 5.25 | 4.73 | 4.38 | 3.50 |
| JM29-F | 4.65 | 4.19 | 3.88 | 3.10 |
| JM29-M | 5.70 | 5.13 | 4.75 | 3.80 |
| JM30-F | 3.60 | 3.24 | 3.00 | 2.40 |
| JM30-M | 4.50 | 4.05 | 3.75 | 3.00 |
| JM31-F | 4.80 | 4.32 | 4.00 | 3.20 |
| JM31-M | 5.85 | 5.27 | 4.88 | 3.90 |
| JM32-F | 4.35 | 3.92 | 3.63 | 2.90 |
| JM32-M | 5.40 | 4.86 | 4.50 | 3.60 |
| JM33-F | 4.35 | 3.92 | 3.63 | 2.90 |

Not Stocked; Available on Short Order.

Not Stocked; Available on Short Order; In qty. 1-49 add \$12.50 lot set-up charge.

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|---|---------|-----------|-----------|-------------|
| ULTRA-MINIATURE (Cont'd) | | | | |
| UM33-M | 5.40 | 4.86 | 4.50 | 3.60 |
| UM34-F | 4.50 | 4.05 | 3.75 | 3.00 |
| UM34-M | 5.55 | 5.00 | 4.63 | 3.70 |
| UM35-F | 4.95 | 4.46 | 4.13 | 3.30 |
| UM35-M | 6.15 | 5.54 | 5.13 | 4.10 |
| VERI-MINIATURE TRANSFORMERS (PAGE 2) | | | | |
| VM1-FPB | 4.20 | 3.78 | 3.50 | 2.80 |
| VM1-M | 5.55 | 5.00 | 4.63 | 3.70 |
| VM2-FPB | 5.70 | 5.13 | 4.75 | 3.80 |
| VM2-M | 7.20 | 6.48 | 6.00 | 4.80 |
| VM3-FPB | 4.50 | 4.05 | 3.75 | 3.00 |
| VM3-M | 6.30 | 5.67 | 5.25 | 4.20 |
| VM4-FPB | 5.70 | 5.13 | 4.75 | 3.80 |
| VM4-M | 7.20 | 6.48 | 6.00 | 4.80 |
| VM5-FPB | 4.65 | 4.19 | 3.88 | 3.10 |
| VM5-M | 6.60 | 5.94 | 5.50 | 4.40 |
| VM6-FPB | 5.85 | 5.27 | 4.88 | 3.90 |
| VM6-M | 7.35 | 6.62 | 6.13 | 4.90 |
| VM7-FPB | 4.20 | 3.78 | 3.50 | 2.80 |
| VM7-M | 5.55 | 5.00 | 4.63 | 3.70 |
| VM8-FPB | 4.35 | 3.92 | 3.63 | 2.90 |
| VM8-M | 5.70 | 5.13 | 4.75 | 3.80 |
| VM9-FPB | 4.35 | 3.92 | 3.63 | 2.90 |
| VM9-M | 5.70 | 5.13 | 4.75 | 3.80 |
| VM10-FPB | 4.65 | 4.19 | 3.88 | 3.10 |
| VM10-M | 6.90 | 6.21 | 5.75 | 4.60 |
| VM11-FPB | 4.05 | 3.65 | 3.38 | 2.70 |
| VM11-M | 5.10 | 4.59 | 4.25 | 3.40 |
| VM12-FPB | 4.50 | 4.05 | 3.75 | 3.00 |
| VM12-M | 6.30 | 5.67 | 5.25 | 4.20 |
| VM13-FPB | 4.65 | 4.19 | 3.88 | 3.10 |
| VM13-M | 6.90 | 6.21 | 5.75 | 4.60 |
| VM14-FPB | 4.50 | 4.05 | 3.75 | 3.00 |
| VM14-M | 6.75 | 6.08 | 5.63 | 4.50 |
| VM15-FPB | 6.00 | 5.40 | 5.00 | 4.00 |
| VM15-M | 8.40 | 7.56 | 7.00 | 5.60 |
| VM16-FPB | 4.50 | 4.05 | 3.75 | 3.00 |
| VM16-M | 6.75 | 6.08 | 5.63 | 4.50 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|--|---------|-----------|-----------|-------------|
| MICRO-MINIATURE TRANSFORMERS (PAGE 3) | | | | |
| MM1-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| MM1-H | 7.35 | 6.61 | 6.13 | 4.90 |
| MM1-M | 8.55 | 7.69 | 7.13 | 5.70 |
| MM2-FB | 4.80 | 4.32 | 4.00 | 3.20 |
| MM2-H | 7.50 | 6.75 | 6.25 | 5.00 |
| MM2-M | 8.70 | 7.83 | 7.25 | 5.80 |
| MM3-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MM3-H | 7.20 | 6.48 | 6.00 | 4.80 |
| MM3-M | 8.40 | 7.56 | 7.00 | 5.60 |
| MM4-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| MM4-H | 7.05 | 6.34 | 5.88 | 4.70 |
| MM4-M | 8.25 | 7.42 | 6.88 | 5.50 |
| MM5-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| MM5-H | 6.90 | 6.21 | 5.75 | 4.60 |
| MM5-M | 8.10 | 7.29 | 6.75 | 5.40 |
| MM6-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MM6-H | 7.20 | 6.48 | 6.00 | 4.80 |
| MM6-M | 8.40 | 7.56 | 7.00 | 5.60 |
| MM7-FB | 3.30 | 2.97 | 2.75 | 2.20 |
| MM7-H | 6.45 | 5.80 | 5.38 | 4.30 |
| MM7-M | 7.65 | 6.88 | 6.38 | 5.10 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|---|---------|-----------|-----------|-------------|
| MICRO-MINIATURE TRANSISTOR TRANSFORMERS (PAGE 3) | | | | |
| MMT1-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MMT1-H | 7.35 | 6.61 | 6.13 | 4.90 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|--|---------|-----------|-----------|-------------|
| MICRO-MINIATURE TRANSISTOR (Cont'd) | | | | |
| MMT1-M | 8.55 | 7.69 | 7.13 | 5.70 |
| MMT3-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| MMT3-H | 7.50 | 6.75 | 6.25 | 5.00 |
| MMT3-M | 8.70 | 7.83 | 7.25 | 5.80 |
| MMT4-FB | 4.80 | 4.32 | 4.00 | 3.20 |
| MMT4-H | 8.55 | 7.69 | 7.13 | 5.70 |
| MMT4-M | 9.75 | 8.77 | 8.13 | 6.50 |
| MMT5-FB | 4.35 | 3.91 | 3.63 | 2.90 |
| MMT5-H | 7.95 | 7.15 | 6.63 | 5.30 |
| MMT5-M | 9.15 | 8.23 | 7.63 | 6.10 |
| MMT7-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| MMT7-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MMT7-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MMT8-FB | 4.65 | 4.18 | 3.88 | 3.10 |
| MMT8-H | 8.55 | 7.69 | 7.13 | 5.70 |
| MMT8-M | 9.75 | 8.77 | 8.13 | 6.50 |
| MMT9-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MMT9-H | 7.65 | 6.88 | 6.38 | 5.10 |
| MMT9-M | 8.85 | 7.96 | 7.38 | 5.90 |
| MMT10-FB | 3.45 | 3.10 | 2.88 | 2.30 |
| MMT10-H | 7.20 | 6.48 | 6.00 | 4.80 |
| MMT10-M | 8.40 | 7.56 | 7.00 | 5.60 |
| MMT11-FB | 4.35 | 3.91 | 3.63 | 2.90 |
| MMT11-H | 7.80 | 7.02 | 6.50 | 5.20 |
| MM11-M | 9.00 | 8.10 | 7.50 | 6.00 |
| MMT12-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MMT12-H | 7.35 | 6.61 | 6.13 | 4.90 |
| MMT12-M | 8.55 | 7.69 | 7.13 | 5.70 |
| MMT13-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| MMT13-H | 7.50 | 6.75 | 6.25 | 5.00 |
| MMT13-M | 8.70 | 7.83 | 7.25 | 5.80 |
| MMT16-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| MMT16-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MMT16-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MMT17-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| MMT17-H | 8.10 | 7.29 | 6.75 | 5.40 |
| MMT17-M | 9.30 | 8.37 | 7.75 | 6.20 |
| MMT18-FB | 4.65 | 4.18 | 3.88 | 3.10 |
| MMT18-H | 8.55 | 7.69 | 7.13 | 5.70 |
| MMT18-M | 9.75 | 8.77 | 8.13 | 6.50 |
| MMT19-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| MMT19-H | 7.50 | 6.75 | 6.25 | 5.00 |
| MMT19-M | 8.70 | 7.83 | 7.25 | 5.80 |
| MMT21-FB | 4.65 | 4.19 | 3.88 | 3.10 |
| MMT21-H | 8.55 | 7.70 | 7.13 | 5.70 |
| MMT21-M | 9.75 | 8.78 | 8.13 | 6.50 |
| MMT25-FB | 4.35 | 3.92 | 3.63 | 2.90 |
| MMT25-H | 7.80 | 7.02 | 6.50 | 5.20 |
| MMT25-M | 9.00 | 8.10 | 7.50 | 6.00 |
| MMT26-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MMT26-H | 7.65 | 6.89 | 6.38 | 5.10 |
| MMT26-M | 8.85 | 7.97 | 7.38 | 5.90 |
| MMT27-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| MMT27-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MMT27-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MMT28-FB | 4.65 | 4.18 | 3.88 | 3.10 |
| MMT28-H | 8.55 | 7.69 | 7.13 | 5.70 |
| MMT28-M | 9.75 | 8.77 | 8.13 | 6.50 |
| MMT29-FB | 4.65 | 4.19 | 3.88 | 3.10 |
| MMT29-H | 8.55 | 7.70 | 7.13 | 5.70 |
| MMT29-M | 9.75 | 8.78 | 8.13 | 6.50 |
| MMT30-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| MMT30-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MMT30-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MMT31-FB | 4.35 | 3.92 | 3.63 | 2.90 |
| MMT31-H | 8.25 | 7.43 | 6.88 | 5.50 |
| MMT31-M | 9.45 | 8.51 | 7.88 | 6.30 |
| | | | | |

INDUSTRIAL O.E.M.

PRICE LIST



| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|--|---------|-----------|-----------|-------------|
| SUB-MINIATURE TRANSFORMERS (PAGE 4) | | | | |
| SM1-AF | 9.00 | 8.10 | 7.50 | 6.00 |
| SM1-FB | 4.35 | 3.91 | 3.63 | 2.90 |
| SM1-H | 7.20 | 6.48 | 6.00 | 4.80 |
| SM1-M | 9.00 | 8.10 | 7.50 | 6.00 |
| SM2-AF | 8.70 | 7.83 | 7.25 | 5.80 |
| SM2-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| SM2-H | 6.90 | 6.21 | 5.75 | 4.60 |
| SM2-M | 9.00 | 8.10 | 7.50 | 6.00 |
| SM3-AF | 8.70 | 7.83 | 7.25 | 5.80 |
| SM3-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| SM3-H | 6.90 | 6.21 | 5.75 | 4.60 |
| SM3-M | 9.00 | 8.10 | 7.50 | 6.00 |
| SM4-AF | 8.70 | 7.83 | 7.25 | 5.80 |
| SM4-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| SM4-H | 6.90 | 6.21 | 5.75 | 4.60 |
| SM4-M | 9.00 | 8.10 | 7.50 | 6.00 |
| SM5-AF | 7.20 | 6.48 | 6.00 | 4.80 |
| SM5-FB | 3.30 | 2.97 | 2.75 | 2.20 |
| SM5-H | 6.30 | 5.67 | 5.25 | 4.20 |
| SM5-M | 8.40 | 7.56 | 7.00 | 5.60 |
| SM6-AF | 8.70 | 7.83 | 7.25 | 5.80 |
| SM6-FB | 4.35 | 3.91 | 3.63 | 2.90 |
| SM6-H | 7.05 | 6.34 | 5.88 | 4.70 |
| SM6-M | 9.00 | 8.10 | 7.50 | 6.00 |

SUB-MINIATURE TRANSISTOR TRANSFORMERS (PAGE 4)

| | | | | |
|----------|------|------|------|------|
| SMT1-AF | 6.75 | 6.07 | 5.63 | 4.50 |
| SMT1-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| SMT1-H | 6.00 | 5.40 | 5.00 | 4.00 |
| SMT1-M | 7.20 | 6.48 | 6.00 | 4.80 |
| SMT3-AF | 7.35 | 6.61 | 6.13 | 4.90 |
| SMT3-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| SMT3-H | 6.60 | 5.94 | 5.50 | 4.40 |
| SMT3-M | 7.80 | 7.02 | 6.50 | 5.20 |
| SMT4-FB | 4.95 | 4.45 | 4.13 | 3.30 |
| SMT4-H | 7.05 | 6.34 | 5.88 | 4.70 |
| SMT4-M | 8.25 | 7.42 | 6.88 | 5.50 |
| SMT5-AF | 7.20 | 6.48 | 6.00 | 4.80 |
| SMT5-FB | 4.35 | 3.91 | 3.63 | 2.90 |
| SMT5-H | 6.45 | 5.80 | 5.38 | 4.30 |
| SMT5-M | 7.65 | 6.88 | 6.38 | 5.10 |
| SMT7-AF | 7.50 | 6.75 | 6.25 | 5.00 |
| SMT7-FB | 4.65 | 4.18 | 3.88 | 3.10 |
| SMT7-H | 6.75 | 6.07 | 5.63 | 4.50 |
| SMT7-M | 7.95 | 7.15 | 6.63 | 5.30 |
| SMT8-FB | 4.95 | 4.45 | 4.13 | 3.30 |
| SMT8-H | 7.05 | 6.34 | 5.88 | 4.70 |
| SMT8-M | 8.25 | 7.42 | 6.88 | 5.50 |
| SMT9-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| SMT9-H | 6.30 | 5.67 | 5.25 | 4.20 |
| SMT9-M | 7.50 | 6.75 | 6.25 | 5.00 |
| SMT10-AF | 7.05 | 6.34 | 5.88 | 4.70 |
| SMT10-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| SMT10-H | 6.30 | 5.67 | 5.25 | 4.20 |
| SMT10-M | 7.50 | 6.75 | 6.25 | 5.00 |
| SMT12-AF | 6.75 | 6.07 | 5.63 | 4.50 |
| SMT12-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| SMT12-H | 6.00 | 5.40 | 5.00 | 4.00 |
| SMT12-M | 7.20 | 6.48 | 6.00 | 4.80 |
| SMT13-AF | 6.90 | 6.21 | 5.75 | 4.60 |
| SMT13-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| SMT13-H | 6.15 | 5.53 | 5.13 | 4.10 |
| SMT13-M | 7.35 | 6.61 | 6.13 | 4.90 |
| SMT16-AF | 7.50 | 6.75 | 6.25 | 5.00 |
| SMT16-FB | 4.65 | 4.18 | 3.88 | 3.10 |
| SMT16-H | 6.75 | 6.07 | 5.63 | 4.50 |
| SMT16-M | 7.95 | 7.15 | 6.63 | 5.30 |
| SMT17-FB | 4.80 | 4.32 | 4.00 | 3.20 |
| SMT17-H | 6.90 | 6.21 | 5.75 | 4.60 |
| SMT17-M | 8.10 | 7.29 | 6.75 | 5.40 |
| SMT18-FB | 4.95 | 4.45 | 4.13 | 3.30 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|--|---------|-----------|-----------|-------------|
| SUB-MINIATURE TRANSISTOR (Cont'd) | | | | |
| SMT18-H | 7.05 | 6.34 | 5.88 | 4.70 |
| SMT18-M | 8.25 | 7.42 | 6.88 | 5.50 |
| SMT19-AF | 7.50 | 6.75 | 6.25 | 5.00 |
| SMT19-FB | 4.65 | 4.18 | 3.88 | 3.10 |
| SMT19-H | 6.75 | 6.07 | 5.63 | 4.50 |
| SMT19-M | 7.95 | 7.15 | 6.63 | 5.30 |
| SMT26-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| SMT26-H | 6.60 | 5.94 | 5.50 | 4.40 |
| SMT26-M | 7.80 | 7.02 | 6.50 | 5.20 |

MINIATURE TRANSFORMERS (PAGE 5)

| | | | | |
|--------|-------|------|------|------|
| M-A-Sh | 1.35 | 1.22 | 1.13 | .90 |
| M1-A | 7.50 | 6.75 | 6.25 | 5.00 |
| M1-AG | 9.90 | 8.91 | 8.25 | 6.60 |
| M1-FB | 4.05 | 3.65 | 3.38 | 2.70 |
| M1-H | 9.00 | 8.10 | 7.50 | 6.00 |
| M1-M | 9.90 | 8.91 | 8.25 | 6.60 |
| M1-P | 8.85 | 7.97 | 7.38 | 5.90 |
| M2-A | 7.65 | 6.89 | 6.38 | 5.10 |
| M2-AG | 10.35 | 9.32 | 8.63 | 6.90 |
| M2-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| M2-H | 9.45 | 8.51 | 7.88 | 6.30 |
| M2-M | 10.20 | 9.18 | 8.50 | 6.80 |
| M2-P | 8.85 | 7.97 | 7.38 | 5.90 |
| M3-A | 7.50 | 6.75 | 6.25 | 5.00 |
| M3-AG | 9.90 | 8.91 | 8.25 | 6.60 |
| M3-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| M3-H | 9.00 | 8.10 | 7.50 | 6.00 |
| M3-M | 9.75 | 8.78 | 8.13 | 6.50 |
| M3-P | 8.40 | 7.56 | 7.00 | 5.60 |
| M4-A | 6.45 | 5.81 | 5.38 | 4.30 |
| M4-AG | 8.55 | 7.70 | 7.13 | 5.70 |
| M4-FB | 3.45 | 3.10 | 2.87 | 2.30 |
| M4-H | 7.65 | 6.89 | 6.38 | 5.10 |
| M4-M | 8.55 | 7.70 | 7.13 | 5.70 |
| M4-P | 7.50 | 6.75 | 6.25 | 5.00 |
| M5-A | 6.45 | 5.81 | 5.38 | 4.30 |
| M5-AG | 8.55 | 7.70 | 7.13 | 5.70 |
| M5-FB | 3.45 | 3.10 | 2.87 | 2.30 |
| M5-H | 7.65 | 6.89 | 6.38 | 5.10 |
| M5-M | 8.55 | 7.70 | 7.13 | 5.70 |
| M5-P | 7.50 | 6.75 | 6.25 | 5.00 |
| M6-A | 7.35 | 6.62 | 6.13 | 4.90 |
| M6-AG | 9.45 | 8.51 | 7.88 | 6.30 |
| M6-FB | 3.60 | 3.24 | 3.00 | 2.40 |
| M6-H | 8.55 | 7.70 | 7.13 | 5.70 |
| M6-M | 9.45 | 8.51 | 7.88 | 6.30 |
| M6-P | 8.25 | 7.43 | 6.88 | 5.50 |
| M7-A | 7.35 | 6.62 | 6.13 | 4.90 |
| M7-AG | 9.75 | 8.78 | 8.13 | 6.50 |
| M7-FB | 3.75 | 3.38 | 3.13 | 2.50 |
| M7-H | 8.85 | 7.97 | 7.38 | 5.90 |
| M7-M | 9.75 | 8.78 | 8.13 | 6.50 |
| M7-P | 8.25 | 7.43 | 6.88 | 5.50 |
| M8-A | 7.65 | 6.89 | 6.38 | 5.10 |
| M8-AG | 10.50 | 9.45 | 8.75 | 7.00 |
| M8-FB | 3.75 | 3.38 | 3.13 | 2.50 |
| M8-H | 9.60 | 8.64 | 8.00 | 6.40 |
| M8-M | 10.50 | 9.45 | 8.75 | 7.00 |
| M8-P | 8.85 | 7.97 | 7.38 | 5.90 |
| M9-A | 7.65 | 6.89 | 6.38 | 5.10 |
| M9-AG | 10.50 | 9.45 | 8.75 | 7.00 |
| M9-FB | 3.75 | 3.38 | 3.13 | 2.50 |
| M9-H | 9.60 | 8.64 | 8.00 | 6.40 |
| M9-M | 10.50 | 9.45 | 8.75 | 7.00 |
| M9-P | 8.85 | 7.97 | 7.38 | 5.90 |
| M10-A | 8.25 | 7.43 | 6.88 | 5.50 |
| M10-AG | 10.80 | 9.72 | 9.00 | 7.20 |
| M10-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| M10-H | 9.60 | 8.64 | 8.00 | 6.40 |
| M10-M | 10.80 | 9.72 | 9.00 | 7.20 |
| M10-P | 9.00 | 8.10 | 7.50 | 6.00 |
| M11-A | 7.65 | 6.89 | 6.38 | 5.10 |
| M11-AG | 10.50 | 9.45 | 8.75 | 7.00 |
| M11-FB | 3.75 | 3.38 | 3.13 | 2.50 |
| M11-H | 9.30 | 8.37 | 7.75 | 6.20 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|---------------------------|---------|-----------|-----------|-------------|
| MINIATURE (Cont'd) | | | | |
| M11-M | 10.50 | 9.45 | 8.75 | 7.00 |
| M11-P | 8.85 | 7.97 | 7.38 | 5.90 |
| M12-A | 7.50 | 6.75 | 6.25 | 5.00 |
| M12-AG | 10.50 | 9.45 | 8.75 | 7.00 |
| M12-FB | 3.75 | 3.38 | 3.13 | 2.50 |
| M12-H | 9.30 | 8.37 | 7.75 | 6.20 |
| M12-M | 10.50 | 9.45 | 8.75 | 7.00 |
| M12-P | 9.00 | 8.10 | 7.50 | 6.00 |
| M13-A | 6.15 | 5.54 | 5.13 | 4.10 |
| M13-AG | 8.25 | 7.43 | 6.88 | 5.50 |
| M13-FB | 3.30 | 2.97 | 2.75 | 2.20 |
| M13-H | 7.35 | 6.62 | 6.13 | 4.90 |
| M13-M | 8.25 | 7.43 | 6.88 | 5.50 |
| M13-P | 7.50 | 6.75 | 6.25 | 5.00 |
| M14-A | 7.35 | 6.62 | 6.13 | 4.90 |
| M14-AG | 9.90 | 8.91 | 8.25 | 6.60 |
| M14-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| M14-H | 9.00 | 8.10 | 7.50 | 6.00 |
| M14-M | 10.20 | 9.18 | 8.50 | 6.80 |
| M14-P | 8.85 | 7.97 | 7.38 | 5.90 |
| M15-A | 7.35 | 6.62 | 6.13 | 4.90 |
| M15-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| M15-FB | 3.60 | 3.24 | 3.00 | 2.40 |
| M15-H | 8.40 | 7.56 | 7.00 | 5.60 |
| M15-M | 9.30 | 8.37 | 7.75 | 6.20 |
| M15-P | 8.85 | 7.97 | 7.38 | 5.90 |
| MT1-A | 7.20 | 6.48 | 6.00 | 4.80 |
| MT1-AG | 8.70 | 7.83 | 7.25 | 5.80 |
| MT1-FB | 3.60 | 3.24 | 3.00 | 2.40 |
| MT1-H | 7.80 | 7.02 | 6.50 | 5.20 |
| MT1-M | 9.00 | 8.10 | 7.50 | 6.00 |
| MT1-P | 7.35 | 6.61 | 6.13 | 4.90 |
| MT2-A | 8.10 | 7.29 | 6.75 | 5.40 |
| MT2-AG | 9.60 | 8.64 | 8.00 | 6.40 |
| MT2-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MT2-H | 8.70 | 7.83 | 7.25 | 5.80 |
| MT2-M | 9.90 | 8.91 | 8.25 | 6.60 |
| MT2-P | 8.25 | 7.42 | 6.88 | 5.50 |
| MT3-A | 7.80 | 7.02 | 6.50 | 5.20 |
| MT3-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT3-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT3-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT3-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT3-P | 7.95 | 7.15 | 6.63 | 5.30 |
| MT5-A | 7.80 | 7.02 | 6.50 | 5.20 |
| MT5-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT5-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT5-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT5-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT5-P | 7.95 | 7.15 | 6.63 | 5.30 |
| MT6-A | 7.95 | 7.15 | 6.63 | 5.30 |
| MT6-AG | 9.45 | 8.50 | 7.88 | 6.30 |
| MT6-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| MT6-H | 8.55 | 7.69 | 7.13 | 5.70 |
| MT6-M | 9.75 | 8.77 | 8.13 | 6.50 |
| MT6-P | 8.10 | 7.29 | 6.75 | 5.40 |
| MT7-A | 7.95 | 7.15 | 6.63 | 5.30 |
| MT7-AG | 9.45 | 8.50 | 7.88 | 6.30 |
| MT7-FB | 4.05 | 3.64 | 3.38 | 2.70 |
| MT7-H | 8.55 | 7.69 | 7.13 | 5.70 |
| MT7-M | 9.75 | 8.77 | 8.13 | 6.50 |
| MT7-P | 8.10 | 7.29 | 6.75 | 5.40 |
| MT8-A | 8.10 | 7.29 | | |

INDUSTRIAL O.E.M.

PRICE LIST



| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|----------|---------|-----------|-----------|-------------|
|----------|---------|-----------|-----------|-------------|

MINIATURE (Cont'd)

| | | | | |
|---------|------|------|------|------|
| MT10-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT10-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT10-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT10-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT10-P | 7.95 | 7.15 | 6.63 | 5.30 |

| | | | | |
|---------|------|------|------|------|
| MT11-A | 8.10 | 7.29 | 6.75 | 5.40 |
| MT11-AG | 9.60 | 8.64 | 8.00 | 6.40 |
| MT11-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MT11-H | 8.70 | 7.83 | 7.25 | 5.80 |
| MT11-M | 9.90 | 8.91 | 8.25 | 6.60 |

| | | | | |
|---------|------|------|------|------|
| MT11-P | 8.25 | 7.42 | 6.88 | 5.50 |
| MT12-A | 7.80 | 7.02 | 6.50 | 5.20 |
| MT12-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT12-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT12-H | 8.40 | 7.56 | 7.00 | 5.60 |

| | | | | |
|---------|------|------|------|------|
| MT12-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT12-P | 7.95 | 7.15 | 6.63 | 5.30 |
| MT13-A | 7.95 | 7.15 | 6.63 | 5.30 |
| MT13-AG | 9.45 | 8.50 | 7.88 | 6.30 |
| MT13-FB | 4.05 | 3.64 | 3.38 | 2.70 |

| | | | | |
|---------|------|------|------|------|
| MT13-H | 8.55 | 7.69 | 7.13 | 5.70 |
| MT13-M | 9.75 | 8.77 | 8.13 | 6.50 |
| MT13-P | 8.10 | 7.29 | 6.75 | 5.40 |
| MT14-A | 7.20 | 6.48 | 6.00 | 4.80 |
| MT14-AG | 8.70 | 7.83 | 7.25 | 5.80 |

| | | | | |
|---------|------|------|------|------|
| MT14-FB | 3.60 | 3.24 | 3.00 | 2.40 |
| MT14-H | 7.80 | 7.02 | 6.50 | 5.20 |
| MT14-M | 9.00 | 8.10 | 7.50 | 6.00 |
| MT14-P | 7.35 | 6.61 | 6.13 | 4.90 |
| MT15-A | 7.80 | 7.02 | 6.50 | 5.20 |

| | | | | |
|---------|------|------|------|------|
| MT15-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT15-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT15-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT15-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT15-P | 7.95 | 7.15 | 6.63 | 5.30 |

| | | | | |
|---------|------|------|------|------|
| MT18-A | 8.10 | 7.29 | 6.75 | 5.40 |
| MT18-AG | 9.60 | 8.64 | 8.00 | 6.40 |
| MT18-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MT18-H | 8.70 | 7.83 | 7.25 | 5.80 |
| MT18-M | 9.90 | 8.91 | 8.25 | 6.60 |

| | | | | |
|---------|------|------|------|------|
| MT18-P | 8.25 | 7.42 | 6.88 | 5.50 |
| MT20-A | 8.40 | 7.56 | 7.00 | 5.60 |
| MT20-AG | 9.90 | 8.91 | 8.25 | 6.60 |
| MT20-FB | 4.50 | 4.05 | 3.75 | 3.00 |
| MT20-H | 9.00 | 8.10 | 7.50 | 6.00 |

| | | | | |
|---------|-------|------|------|------|
| MT20-M | 10.20 | 9.18 | 8.50 | 6.80 |
| MT20-P | 8.55 | 7.69 | 7.13 | 5.70 |
| MT21-A | 8.25 | 7.42 | 6.88 | 5.50 |
| MT21-AG | 9.75 | 8.77 | 8.13 | 6.50 |
| MT21-FB | 4.35 | 3.91 | 3.63 | 2.90 |

| | | | | |
|---------|-------|------|------|------|
| MT21-H | 8.85 | 7.96 | 7.38 | 5.90 |
| MT21-M | 10.05 | 9.04 | 8.38 | 6.70 |
| MT21-P | 8.40 | 7.56 | 7.00 | 5.60 |
| MT22-A | 8.25 | 7.42 | 6.88 | 5.50 |
| MT22-AG | 9.75 | 8.77 | 8.13 | 6.50 |

| | | | | |
|---------|-------|------|------|------|
| MT22-FB | 4.35 | 3.91 | 3.63 | 2.90 |
| MT22-H | 8.85 | 7.96 | 7.38 | 5.90 |
| MT22-M | 10.05 | 9.04 | 8.38 | 6.70 |
| MT22-P | 8.40 | 7.56 | 7.00 | 5.60 |
| MT23-A | 7.80 | 7.02 | 6.50 | 5.20 |

| | | | | |
|---------|------|------|------|------|
| MT23-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT23-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT23-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT23-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT23-P | 7.95 | 7.15 | 6.63 | 5.30 |

| | | | | |
|---------|------|------|------|------|
| MT24-A | 7.80 | 7.02 | 6.50 | 5.20 |
| MT24-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT24-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT24-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT24-M | 9.60 | 8.64 | 8.00 | 6.40 |

| | | | | |
|---------|------|------|------|------|
| MT24-P | 7.95 | 7.16 | 6.63 | 5.30 |
| MT25-A | 8.10 | 7.29 | 6.75 | 5.40 |
| MT25-AG | 9.60 | 8.64 | 8.00 | 6.40 |
| MT25-FB | 4.20 | 3.78 | 3.50 | 2.80 |
| MT25-H | 8.70 | 7.83 | 7.25 | 5.80 |

**Not Stocked; Available on Short Order; Request Price on Qty. 1-9.
††Discontinued item, available until stock is depleted.

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|----------|---------|-----------|-----------|-------------|
|----------|---------|-----------|-----------|-------------|

MINIATURE (Cont'd)

| | | | | |
|---------|------|------|------|------|
| MT25-M | 9.90 | 8.91 | 8.25 | 6.60 |
| MT25-P | 8.25 | 7.43 | 6.88 | 5.50 |
| MT26-A | 7.95 | 7.16 | 6.63 | 5.30 |
| MT26-AG | 9.45 | 8.51 | 7.88 | 6.30 |
| MT26-FB | 4.05 | 3.65 | 3.38 | 2.70 |

| | | | | |
|---------|------|------|------|------|
| MT26-H | 8.55 | 7.70 | 7.13 | 5.70 |
| MT26-M | 9.75 | 8.78 | 8.13 | 6.50 |
| MT26-P | 8.10 | 7.29 | 6.75 | 5.40 |
| MT29-A | 7.80 | 7.02 | 6.50 | 5.20 |
| MT29-AG | 9.30 | 8.37 | 7.75 | 6.20 |

| | | | | |
|---------|------|------|------|------|
| MT29-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT29-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT29-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT29-P | 7.95 | 7.16 | 6.63 | 5.30 |
| MT30-A | 7.80 | 7.02 | 6.50 | 5.20 |

| | | | | |
|---------|------|------|------|------|
| MT30-AG | 9.30 | 8.37 | 7.75 | 6.20 |
| MT30-FB | 3.90 | 3.51 | 3.25 | 2.60 |
| MT30-H | 8.40 | 7.56 | 7.00 | 5.60 |
| MT30-M | 9.60 | 8.64 | 8.00 | 6.40 |
| MT30-P | 7.95 | 7.16 | 6.63 | 5.30 |

TRANSISTOR DRIVER & OUTPUT TRANSFORMERS (PAGE 7)

| | | | | |
|-------|-------|-------|-------|------|
| M8002 | 11.25 | 10.12 | 9.38 | 7.50 |
| M8003 | 12.30 | 11.07 | 10.25 | 8.20 |
| M8004 | 14.85 | 13.36 | 12.38 | 9.90 |
| M8005 | 14.85 | 13.36 | 12.38 | 9.90 |
| M8006 | 9.45 | 8.51 | 7.88 | 6.30 |

| | | | | |
|-------|-------|-------|-------|------|
| M8007 | 11.40 | 10.26 | 9.50 | 7.60 |
| M8008 | 11.10 | 9.99 | 9.25 | 7.40 |
| M8009 | 11.70 | 10.53 | 9.75 | 7.80 |
| M8010 | 11.55 | 10.39 | 9.63 | 7.70 |
| M8011 | 14.55 | 13.09 | 12.13 | 9.70 |

| | | | | |
|-------|-------|-------|-------|------|
| M8012 | 11.25 | 10.12 | 9.38 | 7.50 |
| M8013 | 14.55 | 13.09 | 12.13 | 9.70 |
| M8014 | 9.15 | 8.24 | 7.63 | 6.10 |
| M8015 | 12.00 | 10.80 | 10.00 | 8.00 |
| M8016 | 9.30 | 8.37 | 7.75 | 6.20 |
| M8054 | 14.55 | 13.09 | 12.13 | 9.70 |

INPUT TRANSFORMERS (PAGE 7)

| | | | | |
|-------|-------|-------|-------|------|
| M8030 | 13.50 | 12.15 | 11.25 | 9.00 |
| M8031 | 13.35 | 12.01 | 11.13 | 8.90 |
| M8032 | 13.05 | 11.74 | 10.88 | 8.70 |
| M8033 | 13.05 | 11.74 | 10.88 | 8.70 |

CHOPPER TRANSFORMERS (PAGE 7)

| | | | | |
|-------|-------|-------|-------|------|
| M8025 | 13.80 | 12.42 | 11.50 | 9.20 |
| M8026 | 13.80 | 12.42 | 11.50 | 9.20 |
| M8052 | 14.25 | 12.82 | 11.88 | 9.50 |
| M8053 | 13.65 | 12.28 | 11.38 | 9.10 |

SELECTOR KIT (PAGE 10)

| | | | | |
|------|--------|--------|--------|--------|
| 400K | 29.50† | 29.50† | 29.50† | 29.50† |
|------|--------|--------|--------|--------|

†Standard Discounts do not apply.

DC TO DC CONVERTER TRANSFORMERS (PAGE 9)

| | | | | |
|-------|-------|-------|-------|-------|
| M8034 | 26.70 | 24.03 | 22.25 | 17.80 |
| M8035 | 26.70 | 24.03 | 22.25 | 17.80 |
| M8036 | 24.90 | 22.41 | 20.75 | 16.60 |
| M8050 | 5.55 | 4.99 | 4.63 | 3.70 |
| M8051 | 11.85 | 10.66 | 9.88 | 7.90 |
| M8072 | 5.40 | 4.86 | 4.50 | 3.60 |
| M8073 | 5.25 | 4.73 | 4.38 | 3.50 |
| M8074 | 5.10 | 4.59 | 4.25 | 3.40 |

60 ~ POWER SUPPLY TRANSFORMERS (PAGE 8)

| | | | | |
|-------|-------|-------|-------|-------|
| M8022 | 20.25 | 18.22 | 16.87 | 13.50 |
| M8023 | 26.10 | 23.49 | 21.75 | 17.40 |
| M8024 | 25.65 | 23.09 | 21.38 | 17.10 |
| M8042 | 10.20 | 9.18 | 8.50 | 6.80 |
| M8043 | 12.00 | 10.80 | 10.00 | 8.00 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|----------|---------|-----------|-----------|-------------|
|----------|---------|-----------|-----------|-------------|

60 ~ POWER SUPPLY (Cont'd)

| | | | | |
|-------|-------|-------|-------|-------|
| M8044 | 21.60 | 19.44 | 18.00 | 14.40 |
| M8045 | 16.35 | 14.71 | 13.63 | 10.90 |
| M8046 | 28.20 | 25.38 | 23.50 | 18.80 |
| M8055 | 25.65 | 23.09 | 21.38 | 17.10 |
| M8056 | 16.65 | 14.98 | 13.88 | 11.10 |
| M8057 | 25.35 | 22.81 | 21.12 | 16.90 |

400 ~ ISOLATION TRANSFORMERS (PAGE 8)

| | | | | |
|---------|-------|-------|-------|-------|
| M8047†† | 9.30 | 8.37 | 7.75 | 6.20 |
| M8048†† | 14.25 | 12.82 | 11.88 | 9.50 |
| M8049†† | 17.10 | 15.39 | 14.25 | 11.40 |
| M8058 | 9.60 | 8.64 | 8.00 | 6.40 |
| M8059 | 14.70 | 13.23 | 12.25 | 9.80 |
| M8060 | 18.45 | 16.60 | 15.37 | 12.30 |
| M8061 | 24.90 | 22.41 | 20.75 | 16.60 |
| M8062 | 26.85 | 24.16 | 22.38 | 17.90 |

400 ~ POWER SUPPLY TRANSFORMERS (PAGE 8)

| | | | | |
|-------|-------|-------|-------|-------|
| M8018 | 15.30 | 13.77 | 12.75 | 10.20 |
| M8019 | 15.90 | 14.31 | 13.25 | 10.60 |
| M8020 | 18.00 | 16.20 | 15.00 | 12.00 |
| M8021 | 16.05 | 14.44 | 13.38 | 10.70 |
| M8039 | 15.15 | 13.63 | 12.63 | 10.10 |

| | | | | |
|-------|-------|-------|-------|-------|
| M8041 | 11.10 | 9.99 | 9.25 | 7.40 |
| M8063 | 10.50 | 9.45 | 8.75 | 7.00 |
| M8064 | 11.10 | 9.99 | 9.25 | 7.40 |
| M8065 | 15.60 | 14.04 | 13.00 | 10.40 |
| M8066 | 16.05 | 14.44 | 13.38 | 10.70 |

| | | | | |
|-------|-------|-------|-------|-------|
| M8067 | 15.00 | 13.50 | 12.50 | 10.00 |
| M8068 | 13.20 | 11.88 | 11.00 | 8.80 |
| M8069 | 9.75 | 8.78 | 8.13 | 6.50 |
| M8070 | 11.25 | 10.12 | 9.38 | 7.50 |
| M8071 | 16.20 | 14.58 | 13.50 | 10.80 |

TOROID SERIES QGL (PAGE 11)

| | | | | |
|----------|------|------|------|------|
| QGL5-F | 4.35 | 3.92 | 3.63 | 2.90 |
| QGL5-H† | ** | 6.75 | 6.25 | 5.00 |
| QGL5-HC† | ** | 6.75 | 6.25 | 5.00 |
| QGL5-M | 5.70 | 5.13 | 4.75 | 3.80 |
| QGL10-F | 4.35 | 3.92 | 3.63 | 2.90 |

| | | | | |
|-----------|------|------|------|------|
| QGL10-H† | ** | 6.75 | 6.25 | 5.00 |
| QGL10-HC† | ** | 6.75 | 6.25 | 5.00 |
| QGL10-M | 5.70 | 5.13 | 4.75 | 3.80 |
| QGL15-F | 4.50 | 4.05 | 3.75 | 3.00 |
| QGL15-H† | ** | 6.89 | 6.38 | 5.10 |

| | | | | |
|-----------|------|------|------|------|
| QGL15-HC† | ** | 6.89 | 6.38 | 5.10 |
| QGL15-M | 5.85 | 5.27 | 4.88 | 3.90 |
| QGL30-F† | 4.65 | 4.19 | 3.88 | 3.10 |
| QGL30-H† | ** | 7.02 | 6.50 | 5.20 |
| QGL30-HC† | ** | 7.02 | 6.50 | 5.20 |

| | | | | |
|-----------|------|------|------|------|
| QGL30-M† | 6.15 | 5.54 | 5.13 | 4.10 |
| QGL50-F | 4.80 | 4.32 | 4.00 | 3.20 |
| QGL50-H† | ** | 7.16 | 6.63 | 5.30 |
| QGL50-HC† | ** | 7.16 | 6.63 | 5.30 |
| QGL50-M | 6.30 | 5.67 | 5.25 | 4.20 |

| | | | | |
|------------|------|------|------|------|
| QGL100-F | 4.95 | 4.46 | 4.13 | 3.30 |
| QGL100-H† | ** | 7.29 | 6.75 | 5.40 |
| QGL100-HC† | ** | 7.29 | 6.75 | 5.40 |
| QGL100-M | 6.45 | 5.81 | 5.38 | 4.30 |
| QGL25 | | | | |

INDUSTRIAL O.E.M. PRICE LIST



| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|----------|---------|-----------|-----------|-------------|
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TOROID SERIES QGM (PAGE 11)

| | | | | |
|------------|------|------|------|------|
| QGM1-F | 4.80 | 4.32 | 4.00 | 3.20 |
| QGM1-H† | ** | 7.29 | 6.75 | 5.40 |
| QGM1-HC† | ** | 7.29 | 6.75 | 5.40 |
| QGM1-M | 6.45 | 5.81 | 5.38 | 4.30 |
| QGM2-F† | 4.80 | 4.32 | 4.00 | 3.20 |
| QGM2-H† | ** | 7.29 | 6.75 | 5.40 |
| QGM2-HC† | ** | 7.29 | 6.75 | 5.40 |
| QGM2-M | 6.45 | 5.81 | 5.38 | 4.30 |
| QGM5-F | 5.10 | 4.59 | 4.25 | 3.40 |
| QGM5-H† | ** | 7.43 | 6.88 | 5.50 |
| QGM5-HC† | ** | 7.43 | 6.88 | 5.50 |
| QGM5-M | 6.60 | 5.94 | 5.50 | 4.40 |
| QGM10-F | 5.25 | 4.73 | 4.38 | 3.50 |
| QGM10-H† | ** | 7.43 | 6.88 | 5.50 |
| QGM10-HC† | ** | 7.43 | 6.88 | 5.50 |
| QGM10-M | 6.75 | 6.08 | 5.63 | 4.50 |
| QGM15-F† | 5.40 | 4.86 | 4.50 | 3.60 |
| QGM15-H† | ** | 7.56 | 7.00 | 5.60 |
| QGM15-HC† | ** | 7.56 | 7.00 | 5.60 |
| QGM15-M† | 6.90 | 6.21 | 5.75 | 4.60 |
| QGM25-F | 5.70 | 5.13 | 4.75 | 3.80 |
| QGM25-H† | ** | 7.70 | 7.13 | 5.70 |
| QGM25-HC† | ** | 7.70 | 7.13 | 5.70 |
| QGM25-M | 7.05 | 6.35 | 5.88 | 4.70 |
| QGM50-F | 6.30 | 5.67 | 5.25 | 4.20 |
| QGM50-H† | ** | 8.64 | 8.00 | 6.40 |
| QGM50-HC† | ** | 8.64 | 8.00 | 6.40 |
| QGM50-M | 7.35 | 6.62 | 6.13 | 4.90 |
| QGM100-F† | 6.45 | 5.81 | 5.38 | 4.30 |
| QGM100-H† | ** | 8.91 | 8.25 | 6.60 |
| QGM100-HC† | ** | 8.91 | 8.25 | 6.60 |
| QGM100-M† | 7.95 | 7.16 | 6.63 | 5.30 |

TOROID SERIES QIL (PAGE 12)

| | | | | |
|------------|-------|------|------|------|
| QIL3-F† | 3.90 | 3.51 | 3.25 | 2.60 |
| QIL3-H† | 6.75 | 6.08 | 5.63 | 4.50 |
| QIL3-M† | 5.25 | 4.73 | 4.38 | 3.50 |
| QIL5-F | 3.90 | 3.51 | 3.25 | 2.60 |
| QIL5-H | 6.75 | 6.08 | 5.63 | 4.50 |
| QIL5-M | 5.25 | 4.73 | 4.38 | 3.50 |
| QIL10-F | 3.90 | 3.51 | 3.25 | 2.60 |
| QIL10-H | 6.75 | 6.08 | 5.63 | 4.50 |
| QIL10-M | 5.25 | 4.73 | 4.38 | 3.50 |
| QIL15-F† | 3.90 | 3.51 | 3.25 | 2.60 |
| QIL15-H† | 6.75 | 6.08 | 5.63 | 4.50 |
| QIL15-M† | 5.40 | 4.86 | 4.50 | 3.60 |
| QIL25-F | 4.05 | 3.65 | 3.38 | 2.70 |
| QIL25-H | 7.20 | 6.48 | 6.00 | 4.80 |
| QIL25-M | 5.40 | 4.86 | 4.50 | 3.60 |
| QIL50-F | 4.05 | 3.65 | 3.38 | 2.70 |
| QIL50-H | 7.20 | 6.48 | 6.00 | 4.80 |
| QIL50-M | 5.40 | 4.86 | 4.50 | 3.60 |
| QIL100-F | 4.20 | 3.78 | 3.50 | 2.80 |
| QIL100-H | 7.65 | 6.89 | 6.38 | 5.10 |
| QIL100-M | 5.70 | 5.13 | 4.75 | 3.80 |
| QIL150-F† | 4.35 | 3.92 | 3.63 | 2.90 |
| QIL150-H† | 7.80 | 7.02 | 6.50 | 5.20 |
| QIL150-M† | 5.85 | 5.27 | 4.88 | 3.90 |
| QIL250-F | 4.50 | 4.05 | 3.75 | 3.00 |
| QIL250-H | 8.25 | 7.43 | 6.88 | 5.50 |
| QIL250-M | 6.00 | 5.40 | 5.00 | 4.00 |
| QIL500-F | 4.80 | 4.32 | 4.00 | 3.20 |
| QIL500-H | 8.55 | 7.70 | 7.13 | 5.70 |
| QIL500-M | 6.30 | 5.67 | 5.25 | 4.20 |
| QIL1000-F | 5.10 | 4.59 | 4.25 | 3.40 |
| QIL1000-H | 9.00 | 8.10 | 7.50 | 6.00 |
| QIL1000-M | 6.75 | 6.08 | 5.63 | 4.50 |
| QIL1500-F† | 5.85 | 5.27 | 4.88 | 3.90 |
| QIL1500-H† | 9.45 | 8.51 | 7.88 | 6.30 |
| QIL1500-M† | 7.35 | 6.62 | 6.13 | 4.90 |
| QIL2500-F | 6.75 | 6.08 | 5.63 | 4.50 |
| QIL2500-H | 10.80 | 9.72 | 9.00 | 7.20 |
| QIL2500-M | 8.70 | 7.83 | 7.25 | 5.80 |

TOROID SERIES QKL & QKM (PAGE 13)

| | | | | |
|---------|------|------|------|------|
| QKL5-F† | 4.35 | 3.92 | 3.63 | 2.90 |
| QKL5-H† | 7.05 | 6.35 | 5.88 | 4.70 |
| QKL5-M† | 6.15 | 5.54 | 5.13 | 4.10 |
| QKL10-F | 4.50 | 4.05 | 3.75 | 3.00 |
| QKL10-H | 7.20 | 6.48 | 6.00 | 4.80 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
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TOROID SERIES QKL, QKM (Cont'd)

| | | | | |
|------------|-------|-------|-------|------|
| QKL10-M | 6.15 | 5.54 | 5.13 | 4.10 |
| QKL15-F† | 4.50 | 4.05 | 3.75 | 3.00 |
| QKL15-H† | 7.35 | 6.62 | 6.13 | 4.90 |
| QKL15-M† | 6.15 | 5.54 | 5.13 | 4.10 |
| QKL25-F | 4.65 | 4.19 | 3.88 | 3.10 |
| QKL25-H | 7.50 | 6.75 | 6.25 | 5.00 |
| QKL25-M | 6.15 | 5.54 | 5.13 | 4.10 |
| QKL50-F | 4.65 | 4.19 | 3.88 | 3.10 |
| QKL50-H | 7.80 | 7.02 | 6.50 | 5.20 |
| QKL50-M | 6.15 | 5.54 | 5.13 | 4.10 |
| QKL100-F | 4.80 | 4.32 | 4.00 | 3.20 |
| QKL100-H | 8.40 | 7.56 | 7.00 | 5.60 |
| QKL100-M | 6.60 | 5.94 | 5.50 | 4.40 |
| QKL150-F† | 4.95 | 4.46 | 4.13 | 3.30 |
| QKL150-H† | 8.55 | 7.70 | 7.13 | 5.70 |
| QKL150-M† | 6.60 | 5.94 | 5.50 | 4.40 |
| QKL250-F | 4.95 | 4.46 | 4.13 | 3.30 |
| QKL250-H | 8.85 | 7.97 | 7.38 | 5.90 |
| QKL250-M | 6.75 | 6.08 | 5.63 | 4.50 |
| QKL500-F | 5.10 | 4.59 | 4.25 | 3.40 |
| QKL500-H | 9.15 | 8.24 | 7.63 | 6.10 |
| QKL500-M | 6.90 | 6.21 | 5.75 | 4.60 |
| QKL1000-F | 5.25 | 4.73 | 4.38 | 3.50 |
| QKL1000-H | 9.60 | 8.64 | 8.00 | 6.40 |
| QKL1000-M | 7.20 | 6.48 | 6.00 | 4.80 |
| QKL1500-F† | 5.40 | 4.86 | 4.50 | 3.60 |
| QKL1500-H† | 9.75 | 8.78 | 8.13 | 6.50 |
| QKL1500-M† | 7.35 | 6.62 | 6.13 | 4.90 |
| QKL2500-F† | 6.00 | 5.40 | 5.00 | 4.00 |
| QKL2500-H† | 10.05 | 9.05 | 8.38 | 6.70 |
| QKL2500-M† | 7.50 | 6.75 | 6.25 | 5.00 |
| QKL5000-F | 6.75 | 6.08 | 5.63 | 4.50 |
| QKL5000-H | 11.10 | 9.99 | 9.25 | 7.40 |
| QKL5000-M | 8.40 | 7.56 | 7.00 | 5.60 |
| QKL10000-F | 7.50 | 6.75 | 6.25 | 5.00 |
| QKL10000-H | 12.45 | 11.20 | 10.38 | 8.30 |
| QKL10000-M | 9.60 | 8.64 | 8.00 | 6.40 |
| QKM2-F | 5.10 | 4.59 | 4.25 | 3.40 |
| QKM2-H | 8.25 | 7.43 | 6.88 | 5.50 |
| QKM2-M | 6.30 | 5.67 | 5.25 | 4.20 |
| QKM5-F | 5.25 | 4.73 | 4.38 | 3.50 |
| QKM5-H | 8.40 | 7.56 | 7.00 | 5.60 |
| QKM5-M | 6.45 | 5.81 | 5.38 | 4.30 |
| QKM10-F | 5.25 | 4.73 | 4.38 | 3.50 |
| QKM10-H | 8.55 | 7.70 | 7.13 | 5.70 |
| QKM10-M | 6.60 | 5.94 | 5.50 | 4.40 |
| QKM25-F | 5.40 | 4.86 | 4.50 | 3.60 |
| QKM25-H | 8.85 | 7.97 | 7.38 | 5.90 |
| QKM25-M | 6.75 | 6.08 | 5.63 | 4.50 |
| QKM50-F | 5.55 | 5.00 | 4.63 | 3.70 |
| QKM50-H | 9.00 | 8.10 | 7.50 | 6.00 |
| QKM50-M | 6.90 | 6.21 | 5.75 | 4.60 |
| QKM100-F† | 5.70 | 5.13 | 4.75 | 3.80 |
| QKM100-H† | 9.00 | 8.10 | 7.50 | 6.00 |
| QKM100-M† | 7.05 | 6.35 | 5.88 | 4.70 |
| QKM250-F† | 5.85 | 5.27 | 4.88 | 3.90 |
| QKM250-H† | 9.30 | 8.37 | 7.75 | 6.20 |
| QKM250-M† | 7.35 | 6.62 | 6.13 | 4.90 |
| QKM500-F† | 6.15 | 5.54 | 5.13 | 4.10 |
| QKM500-H† | 9.60 | 8.64 | 8.00 | 6.40 |
| QKM500-M† | 7.65 | 6.89 | 6.38 | 5.10 |
| QKM1000-F† | 6.45 | 5.81 | 5.38 | 4.30 |
| QKM1000-H† | 10.65 | 9.58 | 8.88 | 7.10 |
| QKM1000-M† | 8.25 | 7.43 | 6.88 | 5.50 |

TOROID SERIES QPL (PAGE 14)

| | | | | |
|-----------|-------|------|------|------|
| QPL25-F | 6.90 | 6.21 | 5.75 | 4.60 |
| QPL25-H | 10.35 | 9.32 | 8.63 | 6.90 |
| QPL25-M | 8.55 | 7.70 | 7.13 | 5.70 |
| QPL50-F | 7.05 | 6.35 | 5.88 | 4.70 |
| QPL50-H | 10.50 | 9.45 | 8.75 | 7.00 |
| QPL50-M | 8.70 | 7.83 | 7.25 | 5.80 |
| QPL100-F | 7.20 | 6.48 | 6.00 | 4.80 |
| QPL100-H | 10.65 | 9.58 | 8.88 | 7.10 |
| QPL100-M | 8.85 | 7.97 | 7.38 | 5.90 |
| QPL250-F† | 7.35 | 6.62 | 6.13 | 4.90 |

| Part No. | 1 -9 | 10 -49 | 50 -99 | 100 -249 |
|----------|---------|-----------|-----------|-------------|
|----------|---------|-----------|-----------|-------------|

TOROID SERIES QPL (Cont'd)

| | | | | |
|-------------|-------|-------|-------|-------|
| QPL250-H† | 10.80 | 9.72 | 9.00 | 7.20 |
| QPL250-M† | 9.15 | 8.24 | 7.63 | 6.10 |
| QPL500-F | 7.50 | 6.75 | 6.25 | 5.00 |
| QPL500-H | 10.95 | 9.85 | 9.13 | 7.30 |
| QPL500-M | 9.60 | 8.64 | 8.00 | 6.40 |
| QPL1000-F | 7.80 | 7.02 | 6.50 | 5.20 |
| QPL1000-H | 11.40 | 10.26 | 9.50 | 7.60 |
| QPL1000-M | 9.90 | 8.91 | 8.25 | 6.60 |
| QPL1500-F† | 8.10 | 7.29 | 6.75 | 5.40 |
| QPL1500-H† | 11.70 | 10.53 | 9.75 | 7.80 |
| QPL1500-M† | 10.20 | 9.18 | 8.50 | 6.80 |
| QPL2500-F† | 8.70 | 7.83 | 7.25 | 5.80 |
| QPL2500-H† | 12.30 | 11.07 | 10.25 | 8.20 |
| QPL2500-M† | 10.50 | 9.45 | 8.75 | 7.00 |
| QPL5000-F | 9.45 | 8.51 | 7.88 | 6.30 |
| QPL5000-H | 13.20 | 11.88 | 11.00 | 8.80 |
| QPL5000-M | 11.10 | 9.99 | 9.25 | 7.40 |
| QPL7500-F† | 10.05 | 9.05 | 8.38 | 6.70 |
| QPL7500-H† | 14.10 | 12.69 | 11.75 | 9.40 |
| QPL7500-M† | 12.00 | 10.80 | 10.00 | 8.00 |
| QPL10000-F | 11.10 | 9.99 | 9.25 | 7.40 |
| QPL10000-H | 15.00 | 13.50 | 12.50 | 10.00 |
| QPL10000-M | 12.90 | 11.61 | 10.75 | 8.60 |
| QPL15000-F† | 12.00 | 10.80 | 10.00 | 8.00 |
| QPL15000-H† | 15.75 | 14.17 | 13.13 | 10.50 |
| QPL15000-M† | 13.80 | 12.42 | 11.50 | 9.20 |
| QPL25000-F | 13.05 | 11.74 | 10.88 | 8.70 |
| QPL25000-H | 17.55 | 15.80 | 14.63 | 11.70 |
| QPL25000-M | 15.45 | 13.90 | 12.88 | 10.30 |

TOROID SERIES QTL (PAGE 15)

| | | | | |
|-------------|-------|-------|-------|-------|
| QTL25-F† | 10.80 | 9.72 | 9.00 | 7.20 |
| QTL25-H† | 13.50 | 12.15 | 11.25 | 9.00 |
| QTL25-M† | 12.60 | 11.34 | 10.50 | 8.40 |
| QTL50-F | 10.95 | 9.85 | 9.13 | 7.30 |
| QTL50-H | 13.65 | 12.28 | 11.38 | 9.10 |
| QTL50-M | 12.75 | 11.47 | 10.63 | 8.50 |
| QTL100-F | 11.25 | 10.12 | 9.38 | 7.50 |
| QTL100-H | 13.95 | 12.55 | 11.63 | 9.30 |
| QTL100-M | 13.05 | 11.74 | 10.88 | 8.70 |
| QTL150-F† | 11.70 | 10.53 | 9.75 | 7.80 |
| QTL150-H† | 14.25 | 12.82 | 11.88 | 9.50 |
| QTL150-M† | 13.65 | 12.28 | 11.38 | 9.10 |
| QTL250-F† | 12.00 | 10.80 | 10.00 | 8.00 |
| QTL250-H† | 14.55 | 13.09 | 12.13 | 9.70 |
| QTL250-M† | 13.95 | 12.55 | 11.63 | 9.30 |
| QTL500-F | 11.85 | 10.66 | 9.88 | 7.90 |
| QTL500-H | 14.85 | 13.36 | 12.38 | 9.90 |
| QTL500-M | 13.05 | 11.74 | 10.88 | 8.70 |
| QTL1000-F | 12.15 | 10.93 | 10.13 | 8.10 |
| QTL1000-H | 15.15 | 13.63 | 12.63 | 10.10 |
| QTL1000-M | 13.95 | 12.55 | 11.63 | 9.30 |
| QTL1500-F† | 12.45 | 11.20 | 10.38 | 8.30 |
| QTL1500-H† | 15.45 | 13.90 | 12.88 | 10.30 |
| QTL1500-M† | 14.25 | 12.82 | 11.88 | 9.50 |
| QTL2500-F | 13.05 | 11.74 | 10.88 | 8.70 |
| QTL2500-H | 16.05 | 14.44 | 13.38 | 10.70 |
| QTL2500-M | 14.85 | 13.36 | 12.38 | 9.90 |
| QTL5000-F | 13.05 | 11.74 | 10.88 | 8.70 |
| QTL5000-H | 16.65 | 14.98 | 13.88 | 11.10 |
| QTL5000-M | 15.00 | 13.50 | 12.50 | 10.00 |
| QTL10000-F | 14.25 | 12.82 | 11.88 | 9.50 |
| QTL10000-H | 17.25 | 15.53 | 14.38 | 11.50 |
| QTL10000-M | 16.20 | 14.58 | 13.50 | 10.80 |
| QTL15000-F† | 15.30 | 13.77 | 12.75 | 10.20 |
| QTL15000-H† | 18.30 | 16.47 | 15.25 | 12.20 |
| Q | | | | |

SNC QUALITY TRANSFORMERS Give OUTSTANDING PERFORMANCE!

Style AL Mtg. Style CL Mtg. Style BL Mtg.
Style DL Mtg. Style ET Mtg. Style FL Mtg.

Skilful Engineering, latest production techniques and highest quality materials . . . backed by careful workmanship, exacting step-by-step inspection and rigorous final testing . . . are combined in every SNC transformer to provide a quality product that gives MORE in dollar value.

AUDIO TRANSFORMERS — THE "ONE" SERIES

AUDIO INPUT

| Type Number | Application | Impedance | | Pri. Turns (D.C.) | Max. Turns Ratio | Frequency Characteristics—c. p. s. | | | | | Mtg. Style | Dimensions | | | | Net Wt. | List Price |
|-------------|---|-------------|--------------|-------------------|------------------|------------------------------------|------|----|------|------|------------|------------|--------|---------|---------|---------|------------|
| | | Primary | Secondary | | | 50 | 200 | 1M | 5M | 10M | | A | B | C | C | | |
| 1P121 | P.M. Speaker to Grid | 4 | 100,000 | 0 | 1:58 | -4.0 | -1.0 | 0 | 0 | 0 | BL | 1-7/8 | 1-9/16 | 1-1/2 | 2 | .5 | 3.85 |
| 1P124 | S.B. Mic. to Sgl. or P.P. Grids | 100 | 400,000 C.T. | 50 | 1:63 | -6.0 | -6.0 | 0 | -2.0 | -6.0 | BL | 1-7/8 | 1-9/16 | 1-1/2 | 2 | .5 | 4.05 |
| 1P125 | Low Z to Sgl. or P.P. Grids | 50 | 100,000 C.T. | 0 | 1:45 | -3.0 | 0 | 0 | 0 | 0 | BL | 1-7/8 | 1-9/16 | 1-1/2 | 2 | .5 | 3.75 |
| 1P128 | Sgl. or D.B. Mic. or Line to Sgl. or P.P. Grids | 200*/50 | 100,000 C.T. | 50 | 1:45 | -2.0 | -0.3 | 0 | -0.7 | -2.0 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.3 | 5.95 |
| 1P138 | Line to Sgl. or P.P. Grids | 500*/125 | 100,000 C.T. | 0 | 1:28 | -3.0 | -0.4 | 0 | -0.4 | -1.5 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.4 | 5.95 |
| 1P145 | Sgl. or P.P. Plates to Line | 20,000 C.T. | 500*/125 | 8 | 12:6:1 | -3.5 | -1.0 | 0 | 0 | 0 | DL | 2-1/4 | 1-7/8 | 1-13/16 | 2-3/8 | .9 | 4.90 |
| 1P182 | Sgl. or P.P. Plates to Line | 20,000 C.T. | 200*/50 | 8 | 20:1 | -4.0 | -1.0 | 0 | 0 | 0 | DL | 2-1/4 | 1-7/8 | 1-13/16 | 2-3/8 | .9 | 4.90 |
| 1P181 | Line to Line | 500 | 500*/125 | 0 | 2:1 | -0.4 | -0.1 | 0 | -0.4 | -1.0 | DL | 2-1/4 | 1-7/8 | 1-13/16 | 2-3/8 | .9 | 5.30 |

*Indicates Balanced Center Tap

AUDIO INTERSTAGE

| Type Number | Application | Primary Impedance | Secondary Impedance | Pri. Turns (D.C.) | Max. Turns Ratio | 50 | 200 | 1M | 5M | 10M | Mtg. Style | A | B | C | C | Net Wt. | List Price |
|-------------|--|-------------------|---------------------|-------------------|------------------|------|------|----|------|------|------------|-------|--------|---------|---------|---------|------------|
| 1P323 | Sgl. Plate to Sgl. Grid | 10,000 | 90,000 | 8 | 1:3 | -5.0 | -1.5 | 0 | 0 | 0 | BL | 1-7/8 | 1-9/16 | 1-1/2 | 2 | .5 | 3.65 |
| 1P331 | Sgl. Plate to P.P. Grids | 10,000 | 90,000 C.T. | 8 | 1:3 | -6.0 | -2.0 | 0 | 0 | -1.0 | BL | 1-7/8 | 1-1/16 | 1-1/2 | 2 | .5 | 3.65 |
| 1P339 | Sgl. Plate to P.P. Grids | 10,000 | 90,000 C.T. | 8 | 1:3 | -3.0 | -0.5 | 0 | ±0.1 | +0.5 | BL | 2-1/4 | 1-7/8 | 1-13/16 | 2-3/8 | .9 | 4.30 |
| 1P342 | Sgl. Plate to P.P. Grids | 10,000 | 90,000 C.T. | 8 | 1:3 | -2.5 | -0.5 | 0 | 0 | 0 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 5.55 |
| 1P346 | P.P. Plates to P.P. Grids | 20,000 C.T. | 45,000 C.T. | 10 | 1:1.5 | -1.0 | -0.2 | 0 | 0 | 0 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 5.70 |
| 1P351 | Universal | | | 8 | 1:3 | -2.0 | -0.4 | 0 | 0 | 0 | BL | 2-1/4 | 1-7/8 | 1-13/16 | 2-3/8 | .9 | 4.55 |
| 3P363 | Sgl. Type 30 to 19, 1J5 or P.P. 30 Class B | 10,000 | 7,000 C.T. | 8 | 2:4:1 | -0.5 | 0 | 0 | -0.2 | -1.0 | BL | 1-7/8 | 1-9/16 | 1-1/2 | 2 | .5 | 3.10 |

TELEVISION REPLACEMENT (VERTICAL BLOCKING OSCILLATOR)

| Type Number | Primary Inductance | Leakage Inductance | Turns Ratio | Mounting Style | Mounting | Dimensions | | | | Net Wt. | List Price |
|-------------|--------------------|--------------------|-------------|-------------------|----------|------------|--------|--------|---------|---------|------------|
| | | | | | | H | W | D | Ctrs. | | |
| 1P412 | 1.15 Hy. ±20% | .008 Hy. ±25-15% | 1:42 | Comp. Filled Case | Flange | 1-7/8 | 2-5/16 | 1-1/2 | 1-15/16 | .5 | 4.00 |
| 1P416 | 1.15 Hy. ±20% | .008 Hy. ±25-15% | 1:42 | Comp. Filled Case | Studs | 1-5/8 | 1-3/16 | 1-3/16 | 1-13/64 | .4 | 3.70 |

CHOKES AND REACTORS — THE "TWO" SERIES

AUDIO REACTORS

| Type Number | D.C. Mills | | Inductance | | | | Insul. Test Voltage | O.C. Res. | Mtg. Style | Dimensions | | | | Net Weight | List Price |
|-------------|------------|------|------------|---------------|-----------|-----------|---------------------|-----------|------------|------------|-------|-------|---------|------------|------------|
| | Nom. | Max. | O-D.C. | 50% Nom. D.C. | Nom. D.C. | Max. D.C. | | | | A | B | C | D |  |  | E |
| 2P123 | 5-0.5 | 15 | 550 | — | 300-500 | 80 | 2000 | 5500 | AL | 1-7/8 | 2-1/4 | 1-5/8 | 2-13/16 | .9 | 3.85 |
| 2P124 | 5-0.5 | 15 | 550 | — | 300-500 | 80 | 2000 | 5500 | CL | 1-7/8 | 2-1/4 | 1-3/4 | 2-13/16 | .9 | 4.30 |
| 2P126 | 35-15 | 45 | 65 | — | 25-35 | 20 | 2000 | 800 | AL | 1-7/8 | 2-1/4 | 1-5/8 | 2-13/16 | .9 | 3.05 |
| 2P127 | 35-15 | 45 | 65 | — | 25-35 | 20 | 2000 | 800 | CL | 1-7/8 | 2-1/4 | 1-3/4 | 2-13/16 | .9 | 3.60 |

FILTER AND SWINGING CHOKES

| Type Number | Primary Inductance | Leakage Inductance | Turns Ratio | Insul. Test Voltage | O.C. Res. | Mtg. Style | A | B | C | D | E | Net Weight | List Price | | | |
|-------------|--------------------|--------------------|-------------|---------------------|-----------|------------|------|-----|----|--------|--------|------------|------------|---------|------|-------|
| 2P132 | 40 | 50 | 22 | 13 | 8 | 6 | 2000 | 450 | AL | 1-5/16 | 1-5/8 | 1-1/8 | 2 | .3 | 2.00 | |
| 2P135 | 65 | 80 | 18 | 11 | 8 | 7 | 2000 | 300 | AL | 1-9/16 | 1-7/8 | 1-3/8 | 2-3/8 | .5 | 2.35 | |
| 2P136 | 85 | 100 | 30 | 16 | 8 | 7 | 2000 | 350 | AL | 1-7/8 | 2-1/4 | 1-7/8 | 2-13/16 | 1.2 | 3.00 | |
| 2P141 | 110 | 135 | 20 | 10.5 | 8 | 7 | 2000 | 200 | BL | 2-5/8 | 2-3/16 | 1-7/8 | 2-13/16 | 1.5 | 4.30 | |
| 2P142 | 110 | 135 | 20 | 10.5 | 8 | 7 | 2000 | 200 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 4.30 | |
| 2P144 | 150 | 180 | 26 | 13 | 8 | 5.5 | 2000 | 190 | BL | 3-1/8 | 2-1/2 | 2-1/8 | 3-1/8 | 2.1 | 4.05 | |
| 2P145 | 150 | 180 | 26 | 13 | 8 | 5.5 | 2000 | 190 | GL | 3-1/8 | 2-1/2 | 2-1/8 | 3-1/8 | 2.2 | 5.55 | |
| 2P147 | 200 | 250 | 16 | 10 | 8 | 6.5 | 3500 | 110 | GL | 3-1/2 | 2-7/8 | 3-1/8 | 2-1/4 | 2 | 3.2 | 7.15 |
| 2P148 | 200-20 | — | — | — | 3-15 | — | 3500 | 110 | GL | 3-1/2 | 2-7/8 | 3-1/8 | 2-1/4 | 2 | 3.2 | 7.15 |
| 2P151 | 300 | 350 | 18 | 11 | 8 | 7 | 5000 | 75 | GL | 4-5/8 | 3-3/4 | 3-7/8 | 3 | 2-13/16 | 7.5 | 12.20 |
| 2P152 | 300-30 | — | — | — | 3-15 | — | 5000 | 75 | GL | 4-5/8 | 3-3/4 | 3-7/8 | 3 | 2-13/16 | 7.5 | 12.20 |
| 2P155 | 500 | 600 | 16 | 10 | 8 | 5.5 | 5000 | 55 | HT | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 22.8 | 34.30 |
| 2P156 | 500-50 | — | — | — | 3-15 | — | 5000 | 55 | HT | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 22.8 | 34.30 |

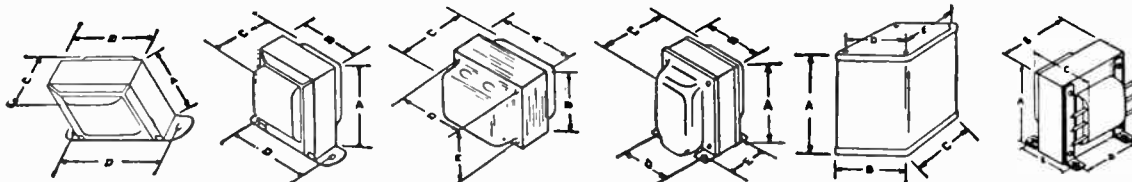
DRIVER TRANSFORMERS — THE "THREE" SERIES

| Type Number | Primary Impedance | Watts | Ratio, Pri. to 1/2 Sec. or Sec. Z | Pri. D.C. Mills | Frequency Characteristics—c. p. s. | | | | | Mtg. Style | Dimensions | | | | Net Wt. | List Price | |
|-------------|---------------------------|-------|-----------------------------------|-----------------|------------------------------------|------|----|------|------|------------|------------|--------|-------|---|---------|------------|-------|
| | | | | | 50 | 200 | 1M | 5M | 10M | | A | B | C | D | | | E |
| 3P323 | 6,000 C.T. to 10,000 C.T. | 25 | 6, 5.5, 5:1 | 60 | -0.5 | 0 | 0 | 0 | -0.3 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.45 |
| 3P328 | 3,000 C.T. to 5,000 C.T. | 25 | 6, 5.5, 5:1 | 60 | -0.4 | 0 | 0 | 0 | -0.1 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.45 |
| 3P334 | 6,000 C.T. to 10,000 C.T. | 25 | 4.5, 4, 3.5:1 | 60 | -1.0 | -0.3 | 0 | +0.1 | +0.6 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.25 |
| 3P338 | 3,000 C.T. to 5,000 C.T. | 25 | 4.5, 4, 3.5:1 | 60 | -1.7 | -0.5 | 0 | 0 | 0 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.50 |
| 3P342 | 6,000 C.T. to 10,000 C.T. | 25 | 3, 2, 1:1 | 60 | -0.7 | -0.1 | 0 | +0.1 | +0.4 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.95 |
| 3P347 | 3,000 C.T. to 5,000 C.T. | 25 | 3, 2, 1:1 | 60 | -0.8 | 0 | 0 | 0 | -0.8 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.75 |
| 3P353 | 6,000 C.T. to 10,000 C.T. | 25 | 500 Dhms | 60 | -1.1 | -0.3 | 0 | 0 | +0.3 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.55 |
| 3P358 | 3,000 C.T. to 5,000 C.T. | 25 | 500 Dhms | 60 | -0.9 | -0.1 | 0 | -0.4 | -1.0 | GL | 3-1/8 | 2-1/2 | 2-5/8 | 2 | 1-11/16 | 2.3 | 12.55 |
| 3P363 | 10,000 | 5 | 2:4:1 | 10 | -0.5 | 0 | 0 | -0.2 | -1.0 | BL | 1-7/8 | 1-9/16 | 1-1/2 | 2 | .5 | 3.10 | |

SNC QUALITY TRANSFORMERS Give OUTSTANDING PERFORMANCE!

Style AL Mtg. Style CL Mtg. Style BL Mtg.
Style DL Mtg. Style ET Mtg. Style FL Mtg.

DIMENSIONAL ILLUSTRATIONS



OUTPUT TRANSFORMERS — THE "SIX" SERIES

SPECIFIC DUTY REPLACEMENT TYPES—TUBE TO VOICE COIL

| Type Number | Primary Imp.—Ohms | Pri. O.C. Mils | Sec. Z—Ohms | Watts | Mtg. Style | Dimensions | | | | Net Wt. | List Price |
|-------------|------------------------------|----------------|-------------|-------|------------|------------|-------|-------|---|---------|------------|
| | | | | | | A | B | C | D | | |
| 6P300 | Single 2,000 Plate | 50 | 3-6 | 6 | AL | 1-5/16 | 1-5/8 | 1-1/2 | 2 | .3 | 2.00 |
| 6P306 | Single 4,000 Plate | 35 | 3-6 | 6 | AL | 1-5/16 | 1-5/8 | 1-1/2 | 2 | .3 | 2.00 |
| 6P312 | Single or P.P. 7,500 Plates | 35 | 3-6 | 6 | AL | 1-5/16 | 1-5/8 | 1-1/2 | 2 | .3 | 2.65 |
| 6P316 | Single or P.P. 10,000 Plates | 35 | 3-6 | 6 | AL | 1-5/16 | 1-5/8 | 1-1/2 | 2 | .3 | 2.65 |
| 6P319 | Push-Pull 15,000 Plates | 35 | 3-6 | 6 | AL | 1-5/16 | 1-5/8 | 1-1/2 | 2 | .3 | 2.70 |
| 6P321 | Push-Pull 20,000 Plates | 30 | 3-6 | 6 | AL | 1-5/16 | 1-5/8 | 1-1/2 | 2 | .3 | 2.70 |
| 6P325 | Push-Pull 25,000 Plates | 20 | 3-6 | 6 | AL | 1-5/16 | 1-5/8 | 1-1/2 | 2 | .3 | 2.70 |

UNIVERSAL REPLACEMENT TYPES—TUBE TO VOICE COIL—TUBE TO LINE—LINE TO VOICE COIL

| Type Number | Primary Imp.—Ohms | Pri. O.C. Mils | Sec. Z—Ohms | Watts | Mtg. Style | Dimensions | | | | Net Wt. | List Price |
|-------------|---------------------------------|----------------|-------------|-------|------------|------------|--------|-------|---------|---------|------------|
| | | | | | | A | B | C | D | | |
| 6P165 | Sgl. or P.P. 4M to 14M Plates | 40 | 1.1 to 14 | 4 | ATL | 1-5/16 | 1-5/8 | 1-3/8 | 2 | .3 | 4.10 |
| 6P166 | Sgl. or P.P. 4M to 14M Plates | 50 | 1.1 to 14 | 8 | ATL | 1-9/16 | 1-7/8 | 1-5/8 | 2-3/8 | .5 | 3.10 |
| 6P167 | Sgl. or P.P. 3M to 10M Plates | 50 | 1.2 to 13 | 15 | BTL | 1-7/8 | 1-9/16 | 1-3/4 | 2 | .5 | 3.85 |
| 6P168 | Sgl. 1500 to 7M Plate | 55 | .8 to 19 | 10 | ATL | 1-9/16 | 1-7/8 | 1-5/8 | 2-3/8 | .5 | 3.10 |
| 6P172 | P.P. 3500 to 12M Plates | 60 | 1.3 to 14 | 20 | BTL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 5.60 |
| 6P701 | Single 2500 to 7.00 Plate | 45 | 165 to 1500 | 10 | BTL | 2-1/4 | 1-7/8 | 1-7/8 | 2-3/8 | .9 | 4.90 |
| 6P710 | P.P. 7500 to 15M Plates | 45 | 250 to 1000 | 10 | BTL | 2-1/4 | 1-7/8 | 1-7/8 | 2-3/8 | .9 | 5.55 |
| 6P714 | Sgl. or P.P. 2500 to 12M Plates | 45 | 150 to 2400 | 10 | BTL | 2-1/4 | 1-7/8 | 1-7/8 | 2-3/8 | .9 | 5.85 |
| 6P717 | 125 to 500 Line | 0 | 1 to 32 | 35 | BTL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 5.95 |
| 6P722 | 500 to 3M Line in 500-Ohm Steps | 0 | 1.3 to 48 | 10 | BTL | 2-1/4 | 1-7/8 | 1-7/8 | 2-3/8 | .9 | 5.60 |

AMPLIFIER AND EQUIPMENT TYPES—TUBE TO LINE AND VOICE COIL

| Type Number | Primary Imp.—Ohms | Pri. D.C. Mils | Secondary Imp.—Ohms | Watts | Frequency Characteristics—c. p. s. | | | | | Mtg. Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|--------------------------|----------------|---------------------|-------|------------------------------------|------|----|------|------|------------|------------|--------|--------|---------|--------|---------|------------|
| | | | | | 50 | 200 | 1M | 5M | 10M | | A | B | C | D | E | | |
| | | | | | 3-3/4 | 0 | 0 | +0.1 | +0.5 | | GL | 3-3/4 | 3-1/16 | 3-3/8 | 2-1/2 |  |  | 2-3/16 |
| 6P726 | P.P. 3300 or 3800 Plat-s | 90 | 4-8-16-250-500 | 60 | -0.3 | 0 | 0 | +0.1 | +0.5 | GL | 3-3/4 | 3-1/16 | 3-3/8 | 2-1/2 | 2-3/16 | 4.4 | 11.75 |
| 6P731 | P.P. 4500 or 6800 Plat-s | 90 | 4-8-16-250-500 | 60 | -0.3 | 0 | 0 | +0.2 | 0 | GL | 3-3/4 | 3-1/16 | 3-3/8 | 2-1/2 | 2-3/16 | 4.4 | 11.75 |
| 6P736 | P.P. 5000 Plat-s | 70 | 4-8-16-250-500 | 25 | -0.9 | -0.2 | 0 | +0.2 | -0.5 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 7.90 | |
| 6P740 | P.P. 4300 Plat-s | 70 | 4-8-16-250-500 | 25 | -0.9 | -0.3 | 0 | +0.3 | -0.5 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 7.90 | |
| 6P743 | P.P. 6600 Plat-s | 70 | 4-8-16-250-500 | 25 | -0.7 | -0.1 | 0 | +0.2 | +0.5 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 7.90 | |
| 6P746 | P.P. 8000 Plat-s | 70 | 4-8-16-250-500 | 25 | -0.7 | -0.1 | 0 | +0.1 | +0.3 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 7.90 | |
| 6P749 | P.P. 10,000 Plates | 60 | 4-8-16-250-500 | 25 | -0.4 | -0.1 | 0 | +0.2 | +0.3 | DL | 2-5/8 | 2-3/16 | 2-1/8 | 2-13/16 | 1.5 | 8.30 | |
| 6P752 | Sgl. 2500 Plat-s | 60 | 4-8-16-250-500 | 10 | -3.0 | -0.4 | 0 | -0.3 | -0.5 | DL | 2-1/4 | 1-7/8 | 1-7/8 | 2-3/8 | 1.0 | 6.25 | |

TELEVISION REPLACEMENT (VERTICAL DEFLECTION)

| Type Number | Ratio Pri. to Sec. | Primary Imp.—Ohms | Leakage Inductance | Mounting Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|--------------------|-------------------|--------------------|----------------|------------|-------|--------|---------|---|---------|------------|
| | | | | | A | B | C | D | E | | |
| 6P860 | 10:1 | 19,000 Min. | 0.33 Hy. Max. | E x L | 3-3/16 | 2-3/4 | 2-9/16 | 1-19/32 | 2 | 2.2 | 7.35 |

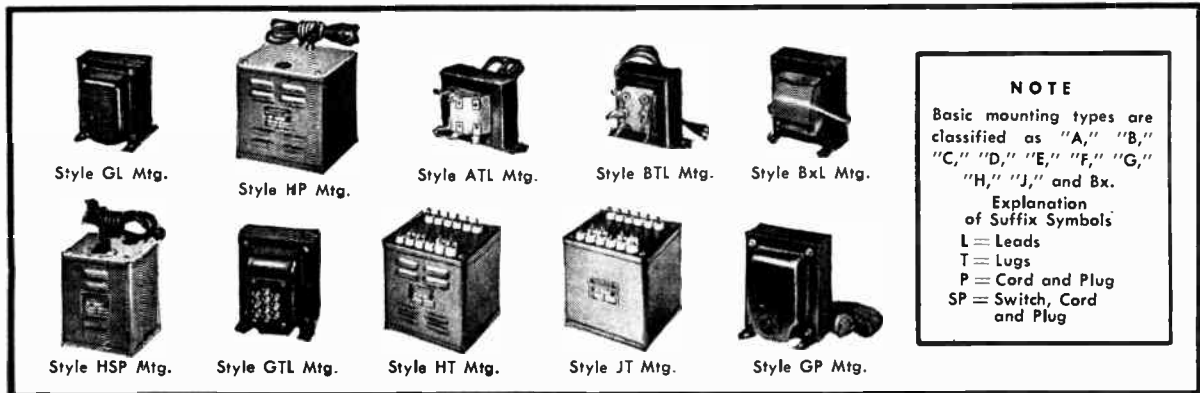
MODULATION TRANSFORMERS — THE "FIVE" SERIES

SNC universal modulation transformers are specifically designed to provide maximum application possibilities per type. All units are provided with two identical secondary windings, permitting series or parallel operation. Changes in the ratio can be readily accomplished, when desired, without removing the unit from the chassis. Most units available in either air cooled or compound filled cases.

UNIVERSAL TYPES

| Type Number | Watts | Primary Current Mils | Secondary Characteristics | | | | Primary Imp.—Ohms | Mtg. Style | Dimensions | | | | | Net Weight | List Price |
|-------------|-------|----------------------|---------------------------|-------|---------------|-------|-------------------|------------|------------|--------|---------|---------|---------|------------|------------|
| | | | Series Sec. | | Parallel Sec. | | | | A | B | C | D | E | | |
| | | | Impedance | Mils. | Impedance | Mils. | | | | | | | | | |
| 5P341 | 15 | 60 | 3M to 8M | 50 | 1000 to 5000 | 100 | 3M to 8M | DL | 2-5/8 | 2-3/16 | 2-3/8 | 2-13/16 | | 1.5 | 9.90 |
| 5P346 | 50 | 80 | 2M to 18M | 75 | 500 to 4500 | 150 | 3M to 15M | GTL | 3-7/8 | 3-1/8 | 3-3/8 | 2-1/2 | 2-3/16 | 4 | 15.50 |
| 5P352 | 100 | 120 | 2M to 18M | 100 | 500 to 4500 | 200 | 3M to 15M | GTL | 4-5/8 | 3-3/4 | 3-7/8 | 3 | 2-13/16 | 9.7 | 24.75 |
| 5P354 | | | | | | | | HT | | | | | | 24 | 56.75 |
| 5P355 | 200 | 200 | 2M to 18M | 150 | 500 to 4500 | 300 | 3M to 15M | JT | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 32 | 62.05 |
| 5P357 | | | | | | | | HT | | | | | | 33 | 68.65 |
| 5P358 | 300 | 250 | 2M to 18M | 250 | 500 to 4500 | 500 | 3M to 15M | JT | 7-1/8 | 6-1/2 | 7-1/4 | 5-3/8 | 6-1/8 | 41 | 73.90 |
| 5P363 | | | | | | | | HT | | | | | | 51 | 138.60 |
| 5P364 | 500 | 300 | 2M to 18M | 300 | 500 to 4500 | 600 | 3M to 15M | JT | 10-3/4 | 6-1/2 | 7-1/4 | 5-3/8 | 6-1/8 | 64 | 151.60 |

SECTION 5600



POWER TRANSFORMERS — THE "EIGHT" SERIES

All units conservatively rated for operation on either 50 or 60 cycles and contain an electrostatic shield between primary and all other windings.

REPLACEMENT TYPES (6.3 Volt Heater Winding)

| Type Number | Primary Voltage | R.M.S.—High Volt. Secondary | Sec. D.C. Mils | Rectifier Filament | Heater Winding Center Tapped | Mtg. Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|-----------------|-----------------------------|----------------|--------------------|------------------------------|------------|------------|-------|-------|-------|---|---------|------------|
| | | | | | | | A | B | C | D | E | | |
| BP040 | 117 | 265-0-265 | 40 | 5V. @ 2A. | 6.3V. @ 2A. | FL | 3 | 2-1/2 | 2-3/4 | 2-1/2 | 2 | 2.3 | 5.95 |
| BP055 | 117 | 300-0-300 | 55 | 5V. @ 2A. | 6.3A. @ 2.5A. | FL | 3 | 2-1/2 | 3-1/8 | 2-1/2 | 2 | 2.8 | 8.00 |
| BP070 | 117 | 325-0-325 | 70 | 5V. @ 2A. | 6.3V. @ 3A. | FL | 3 | 2-1/2 | 3-1/2 | 2-1/2 | 2 | 3.2 | 7.60 |

HEAVY DUTY REPLACEMENT AND NEW EQUIPMENT TYPES (6.3 Volt Heater Winding)

| Type Number | Primary Voltage | R.M.S.—High Volt. Secondary | Sec. D.C. Mils | Rectifier Filament | Heater Winding Center Tapped | Mtg. Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|-----------------|-----------------------------|----------------|--------------------|------------------------------|------------|------------|---------|---------|---------|---------|---------|------------|
| | | | | | | | A | B | C | D | E | | |
| BP180 | 117 | 265-0-265 | 40 | 5V. @ 2A. | 6.3V. @ 2A. | FL | 3 | 2-1/2 | 3-1/4 | 2-1/2 | 2 | 3.2 | 8.15 |
| BP180G | 117 | 265-0-265 | 40 | 5V. @ 2A. | 6.3V. @ 2A. | GL | 3-1/16 | 2-7/32 | 3-1/8 | 2 | 2-3/16 | | |
| BP183 | 117 | 300-0-300 | 50 | 5V. @ 2A. | 6.3V. @ 2A. | FL | 3-3/8 | 2-13/16 | 3-7/16 | 2-13/16 | 2-1/4 | 3.5 | 8.60 |
| BP183G | 117 | 300-0-300 | 50 | 5V. @ 2A. | 6.3V. @ 2A. | GL | 3-7/16 | 2-27/32 | 3-1/4 | 2-1/4 | 2-1/8 | | |
| BP186 | 117 | 325-0-325 | 60 | 5V. @ 2A. | 6.3V. @ 3A. | FL | 3-3/8 | 2-13/16 | 3-11/16 | 2-13/16 | 2-1/4 | 4.0 | 9.00 |
| BP186G | 117 | 325-0-325 | 60 | 5V. @ 2A. | 6.3V. @ 3A. | GL | 3-7/16 | 2-27/32 | 3-1/2 | 2-1/4 | 2-3/8 | | |
| BP189 | 117 | 350-0-350 | 70 | 5V. @ 3A. | 6.3V. @ 3.5A. | FL | 3-3/4 | 3-1/8 | 3-3/4 | 3-1/8 | 2-1/2 | 5.0 | 9.90 |
| BP189G | 117 | 350-0-350 | 70 | 5V. @ 3A. | 6.3V. @ 3.5A. | GL | 3-13/16 | 3-5/32 | 3-5/8 | 2-1/2 | 2-7/16 | | |
| BP192 | 117 | 350-0-350 | 90 | 5V. @ 3A. | 6.3A. @ 4A. | FL | 3-3/4 | 3-1/8 | 4 | 3-1/8 | 2-1/2 | 5.7 | 10.90 |
| BP192G | 117 | 350-0-350 | 90 | 5V. @ 3A. | 6.3A. @ 4A. | GL | 3-13/16 | 3-5/32 | 3-7/8 | 2-1/2 | 2-11/16 | | |
| BP194 | 117 | 375-0-375 | 110 | 5V. @ 3A. | 6.3A. @ 4A. | FL | 3-3/4 | 3-1/8 | 4-1/8 | 3-1/8 | 2-1/2 | 6.0 | 12.20 |
| BP194G | 117 | 375-0-375 | 110 | 5V. @ 3A. | 6.3A. @ 4A. | GL | 3-13/16 | 3-5/32 | 4 | 2-1/2 | 2-13/16 | | |
| BP196 | 117 | 350-0-350 | 150 | 5V. @ 3A. | 6.3V. @ 4.8A. | FL | 4-1/8 | 3-7/16 | 4-3/8 | 3-7/16 | 2-3/4 | 7.7 | 12.85 |
| BP196G | 117 | 350-0-350 | 150 | 5V. @ 3A. | 6.3V. @ 4.8A. | GL | 4-3/16 | 3-15/32 | 4-3/8 | 2-3/4 | 3-5/16 | | |
| BP199 | 117 | 400-0-400 | 70 | 5V. @ 3A. | 6.3V. @ 3.5A. | FL | 3-3/4 | 3-1/8 | 4 | 3-1/8 | 2-1/2 | 5.8 | 11.55 |
| BP199G | 117 | 400-0-400 | 70 | 5V. @ 3A. | 6.3V. @ 3.5A. | GL | 3-13/16 | 3-5/32 | 3-7/8 | 2-1/2 | 2-11/16 | | |
| BP202 | 117 | 450-0-450 | 200 | 5V. @ 3A. | 6.3V. @ 5A. | FL | 4-1/2 | 3-3/4 | 4-3/4 | 3-3/4 | 3 | 10.7 | 16.50 |
| BP202G | 117 | 450-0-450 | 200 | 5V. @ 3A. | 6.3V. @ 5A. | GL | 4-9/16 | 3-25/32 | 4-3/8 | 3 | 3-11/16 | | |
| BP205 | 117 | 450-0-450 | 325 | 5V. @ 6A. | 6.3V. @ 8A. | HT | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 22.3 | 44.90 |
| BP208 | 117 | 550-0-550 | 275 | 5V. @ 6A. | 6.3V. @ 6A. | HT | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 23.3 | 44.90 |

REPLACEMENT TYPES (2.5 Volt Heater Winding)

| | | | | | | | | | | | | | |
|-------|-----|-----------|-----|-----------|--------------|----|-------|--------|-------|--------|-------|-----|-------|
| BP287 | 117 | 350-0-350 | 70 | 5V. @ 3A. | 2.5V. @ 6A. | FL | 3-3/4 | 3-1/8 | 3-3/4 | 3-1/8 | 2-1/2 | 5.0 | 8.90 |
| BP293 | 117 | 350-0-350 | 90 | 5V. @ 3A. | 2.5V. @ 8A. | FL | 3-3/4 | 3-1/8 | 4 | 3-1/8 | 2-1/2 | 5.6 | 10.60 |
| BP295 | 117 | 350-0-350 | 150 | 5V. @ 3A. | 2.5V. @ 12A. | FL | 4-1/8 | 3-7/16 | 4-3/8 | 3-7/16 | 2-3/4 | 7.3 | 12.85 |

REPLACEMENT TYPES (Two 2.5 Volt Heater Windings)

| | | | | | | | | | | | | | |
|--------|-----|-----------|-----|-----------|---|----|---------|--------|-------|-------|---------|-----|-------|
| BP487 | 117 | 350-0-350 | 70 | 5V. @ 3A. | No. 1=2.5V. @ 3.5A. No. 2=2.5V. @ 8A. | FL | 3-3/4 | 3-1/8 | 4 | 3-1/8 | 2-1/2 | 5.8 | 11.00 |
| BP487G | 117 | 350-0-350 | 70 | 5V. @ 3A. | No. 1=2.5V. @ 3.5A. No. 2=2.5V. @ 8A. | GL | 3-13/16 | 3-5/32 | 3-7/8 | 2-1/2 | 2-11/16 | | |
| BP494 | 117 | 375-0-375 | 110 | 5V. @ 3A. | No. 1=2.5V. @ 3.5A. No. 2=2.5V. @ 10A. | FL | 3-3/4 | 3-1/8 | 4-1/4 | 3-1/8 | 2-1/2 | 6.2 | 13.00 |
| BP494G | 117 | 375-0-375 | 110 | 5V. @ 3A. | No. 1=2.5V. @ 3.5A. No. 2=2.5V. @ 10A. | GL | 3-13/16 | 3-5/32 | 4-1/8 | 2-1/2 | 2-15/16 | | |

GENERAL PURPOSE TYPES WITH CONVENIENT LUG TERMINALS (6.3 Volt Heater Winding)

| Type Number | Primary Voltage | R.M.S.—High Volt. Secondary | Sec. D.C. Mils | Rectifier Filament | Heater Winding Center Tapped | Mtg. Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|-----------------|-----------------------------|----------------|--------------------|------------------------------|------------|------------|---------|---------|---------|-------|---------|------------|
| | | | | | | | A | B | C | D | E | | |
| BP382 | 117 | 300-0-300 | 50 | 5V. @ 2A. | 6.3V. @ 2A. | ET | 3-3/8 | 2-13/16 | 3-7/16 | 2-13/16 | 2-1/4 | 3.2 | 7.80 |
| BP385 | 117 | 325-0-325 | 60 | 5V. @ 2A. | 6.3V. @ 3A. | ET | 3-3/8 | 2-13/16 | 3-11/16 | 2-13/16 | 2-1/4 | 4.0 | 8.35 |
| BP388 | 117 | 350-0-350 | 70 | 5V. @ 3A. | 6.3V. @ 3.5A. | ET | 3-3/4 | 3-1/8 | 3-3/4 | 3-1/8 | 2-1/2 | 4.7 | 9.15 |

BIAS TYPES

| | | | | | | | | | | | | | |
|-------|-----|------------------|----|-----------|--|----|--------|--------|-------|---------|---------|-----|------|
| BP510 | 117 | 40-0-40 | 25 | 5V. @ 2A. | | CL | 1-7/8 | 2-1/4 | 1-3/4 | 2-13/16 | | 1.0 | 4.95 |
| BP511 | 117 | 0-90-150-200-250 | 50 | 5V. @ 2A. | | GL | 3-1/16 | 2-7/32 | 2-5/8 | 2 | 1-11/16 | 2.0 | 7.20 |

VIBRATOR TYPES

| | | | | | | | | | | | | | |
|-------|---|-----------|----|--|--|----|--------|---------|--------|-------|--------|-----|------|
| BP610 | 6 | 225-0-225 | 40 | | | AL | 2-3/16 | 2-5/8 | 2 | 3-1/8 | | 1.3 | 5.60 |
| BP611 | 6 | 320-0-320 | 40 | | | GL | 3-1/16 | 2-7/32 | 2-1/2 | 2 | 1-9/16 | 2.1 | 6.70 |
| BP612 | 6 | 390-0-390 | 60 | | | GL | 3-7/16 | 2-27/32 | 3-5/16 | 2-1/4 | 2-3/16 | 3.7 | 7.60 |

TELEVISION REPLACEMENT TYPES

| | | | | | | | | | | | | | |
|-------|-----|-----------|-----|-----------|---------------------------------------|----|---------|---------|-------|---------|--------|------|-------|
| BP803 | 117 | 375-0-375 | 210 | 5V. @ 3A. | No. 1=5V. @ 2A. No. 2=6.3V. @ 5.6A | FL | 4-1/2 | 3-3/4 | 4-3/4 | 3-3/4 | 3 | 10.7 | 19.55 |
| BP805 | 117 | 235-0-235 | 90 | 5V. @ 2A. | 6.3V. @ 5.5A. | FL | 3-3/8 | 2-13/16 | 4 | 2-13/16 | 2-1/4 | 5.1 | 11.20 |
| BP807 | 117 | 365-0-365 | 300 | 5V. @ 6A. | No. 1=12.6V. @ 5A No. 2=5V. @ 2A | FL | 4-23/32 | 3-27/32 | 6-3/4 | 4-1/16 | 3-3/16 | 16.0 | 33.95 |

SECTION 5600

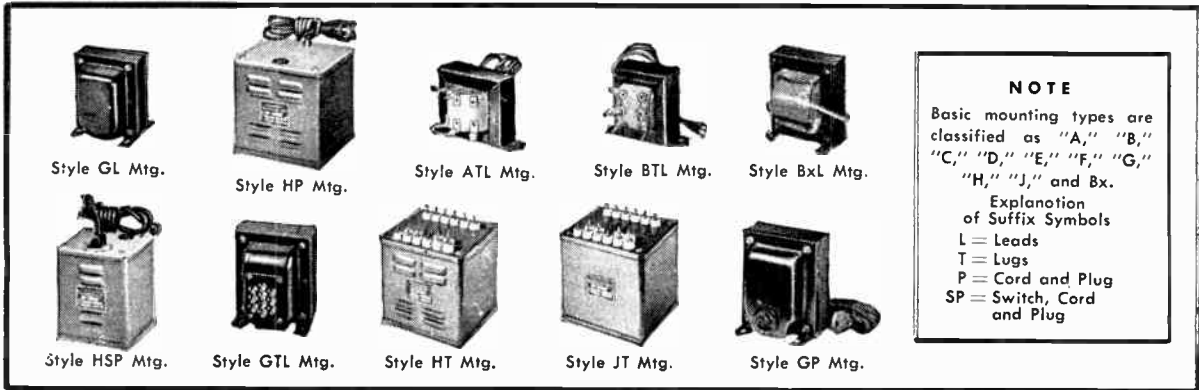


PLATE TRANSFORMERS — THE "SEVEN" SERIES

All SNC plate transformers have dual secondary ratings. Most units available in either air cooled or compound filled cases. All units electrostatic shields between primary and high voltage windings. 50/60 Cycle Operation

| Type Number | Primary Voltage | Pri. V.A. | Secondary R.M.S. Voltage | O.C. Voltage From Filter* | D.C. Current | Mtg. Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|-----------------|-----------|-------------------------------|---------------------------|--------------|------------|------------|-------|---------|-------|---------|-----------|------------------|
| | | | | | | | A | B | C | D | E | | |
| 7P530 | 115-230 | 220 | 920-0-920 or 740-0-740 | 750 or 600 | 200MA | GL | 4-3/4 | 3-3/4 | 5-1/8 | 3 | 4-1/16 | 12 | 19.80 |
| 7P535 | 115-230 | 320 | 930-0-930 or 750-0-750 | 750 or 600 | 300MA | HT JT | 7-1/8 | 5-1 2 | 5-15/16 | 4-3/8 | 4-13/16 | 22 30 | 46.20 52.80 |
| 7P542 | 115-230 | 530 | 1470-0-1470 or 1220-0-1220 | 1250 or 1000 | 300MA | HT JT | 7-1/8 | 6-1/2 | 7-1/4 | 5-3/8 | 6-1/8 | 33 41 | 55.45 60.70 |
| 7P551 | 115-230 | 750 | 2050-0-2050 or 1740-0-1740 | 1750 or 1500 | 300MA | HT JT | 7-1/8 | 6-1/2 | 7-1/4 | 5-3/8 | 6-1/8 | 43 51 | 59.40 72.60 |
| 7P557 | 115-230 | 1060 | 2880-0-2880 or 2350-0-2350 | 2500 or 2000 | 300MA | HT JT | 10-3/4 | 6-1/2 | 7-1/4 | 5-3/8 | 6-1/8 | 53 69 | 81.85 88.45 |
| 7P563 | 115-230 | 1760 | 2900-0-2900 or 2370-0-2370 | 2500 or 2000 | 500MA | HT JT | 10-3/4 | 9 | 7-1/4 | 7 | 5-13/16 | 96 126 | 118.80 165.00 |

*All units may be operated with simultaneous loads—provided the total D.C. Current of the two loads does not exceed the rating listed.

FILAMENT TRANSFORMERS — THE "FOUR" SERIES

Most SNC Filament Transformers are constructed to provide two identical center tapped secondary windings and offer a minimum of three applications. They provide three-fold the number of possible applications of ordinary filament types. A few are single secondary units and are so designed. All have 117 V. 50/60 cycle primary.

| Type Number | Applications | | | Test Voltages | Mtg. Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|----------------------|---------------------|-----------------------------------|---------------|------------|------------|---------|-------|---------|-------|---------|------------|
| | Parallel Secondaries | Series Secondaries | Independent Identical Secondaries | | | A | B | C | D | E | | |
| 4P222 | 2.5V. C.T. @ 5 A. | 5 V. C.T. @ 2.5 A. | Two of 2.5V. C.T. @ 2.5 A. | 2000 | BL | 2-1/4 | 1-7/8 | 1-2/4 | 2-3/8 | | 1.0 | 3.90 |
| 4P226* | 2.5V. C.T. @ 10 A.* | | | 7500 | BL | 3 | 2-1/2 | 2-3/8 | 3-1/8 | | 2.0 | 6.05 |
| 4P227 | 2.5V. C.T. @ 10 A. | 5 V. C.T. @ 5 A. | Two of 2.5V. C.T. @ 5 A. | 2000 | BL | 2-5/8 | 2-3/16 | 2 | 2-13/16 | | 1.5 | 5.30 |
| 4P234 | 2.5V. C.T. @ 15 A. | 5 V. C.T. @ 7.5 A. | Two of 2.5V. C.T. @ 7.5 A. | 2000 | BL | 3 | 2-1/2 | 2-1/4 | 3-1/8 | | 2.2 | 6.25 |
| 4P239 | 5 V. C.T. @ 6.5A. | 10 V. C.T. @ 3.25A. | Two of 5 V. C.T. @ 3.25A. | 2000 | BL | 3 | 2-1/2 | 2-1/4 | 3-1/8 | | 2.2 | 5.60 |
| 4P242* | 5 V. C.T. @ 20 A.* | | | 10000 | BxL | 4-1/8 | 3-7/16 | 2-1/4 | 2-3/4 | 2-1/8 | 4.6 | 11.20 |
| 4P243 | 5 V. C.T. @ 20 A. | 10 V. C.T. @ 10 A. | Two of 5 V. C.T. @ 10 A. | 2000 | BxL | 3-3/4 | 3-1/8 | 2-1/4 | 2-1/2 | 2-1/4 | 4.3 | 9.90 |
| 4P244* | 6.3V. C.T. @ 0.6A.* | | | 2000 | BL | 1-7/8 | 1-9/16 | 1-1/2 | 2 | | .6 | 3.85 |
| 4P245* | 6.3V. C.T. @ 1.2A.* | | | 2000 | BL | 1-7/8 | 1-9/16 | 1-5/8 | 2 | | .7 | 4.20 |
| 4P246 | 6.3A. C.T. @ 2 A. | 12.6V. C.T. @ 1 A. | Two of 6.3V. C.T. @ 1 A. | 2000 | BL | 2-1/4 | 1-7/8 | 1-1/4 | 2-3/8 | | 1.0 | 4.60 |
| 4P251 | 6.3V. C.T. @ 6 A. | 12.6V. C.T. @ 1 A. | Two of 6.3V. C.T. @ 3 A. | 2000 | BL | 3 | 2-1/2 | 2-1/4 | 3-1/8 | | 2.0 | 5.35 |
| 4P256 | 6.3V. C.T. @ 10 A. | 12.6V. C.T. @ 5 A. | Two of 6.3V. C.T. @ 5 A. | 2000 | BxL | 3-3/8 | 2-13/16 | 2-1/2 | 2-1/4 | 2-1/8 | 2.9 | 6.95 |
| 4P260 | 7.5V. C.T. @ 3 A. | 15 V. C.T. @ 1.5 A. | Two of 7.5V. C.T. @ 1.5 A. | 2000 | BL | 2-5/8 | 2-3/16 | 2 | 2-13/16 | | 1.5 | 5.60 |
| 4P267 | 7.5V. C.T. @ 4.5A. | 15 V. C.T. @ 2.3 A. | Two of 7.5V. C.T. @ 2.3 A. | 2000 | BL | 3 | 2-1/2 | 2-1/4 | 3-1/8 | | 2.0 | 6.95 |
| 4P272 | 11 V. C.T. @ 10 A. | 22 V. C.T. @ 5 A. | Two of 11 V. C.T. @ 5 A. | 2000 | BxL | 3-3/4 | 3-1/8 | 2-3/4 | 2-1/2 | 2-1/4 | 4.1 | 9.90 |

*Single Secondary Units.

VOLTAGE CHANGER AND ISOLATION — THE "NINE" SERIES

All Units Have Primary Cord and Secondary Plug and Are For 50/60 Cycle Operation.

VOLTAGE CHANGER (ISOLATION)

| Type Number | Primary Voltage | Secondary Voltage | Capacity in V. A. | Mtg. Style | Dimensions | | | | | Net Wt. | List Price |
|-------------|-----------------|-------------------|-------------------|------------|------------|---------|---------|-------|---------|---------|------------|
| | | | | | A | B | C | D | E | | |
| 9P707 | 220-250 | 110-125 | 75 | GP | 3-13/16 | 3-5/32 | 3-1/8 | 2-1/2 | 1-15/16 | 3.9 | 10.25 |
| 9P713 | 220-250 | 110-125 | 150 | GP | 4-9/16 | 3-25/32 | 3-7/8 | 3 | 2-13/16 | 8.0 | 15.20 |
| 9P718 | 220-250 | 110-125 | 360 | HP | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 23.3 | 39.60 |

ISOLATION TYPES

| | | | | | | | | | | | |
|-------|---------|---------|-----|----|--------|---------|---------|-------|---------|------|-------|
| 9P721 | 110-250 | 110-250 | 150 | GP | 4-9/16 | 3-25/32 | 4-5/8 | 3 | 3-9/16 | 12.1 | 19.80 |
| 9P725 | 110-250 | 110-250 | 250 | HP | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 23.3 | 32.35 |
| 9P728 | 110-250 | 110-250 | 500 | HP | 7-1/8 | 6-1/2 | 7-1/4 | 5-3/8 | 6-1/8 | 34.8 | 45.55 |

VOLTAGE ADJUSTMENT TYPES WITH TAP CHANGE SWITCH

| | | | | | | | | | | | |
|-------|---------------------|-----|-----|-----|-------|-------|---------|-------|---------|------|-------|
| 9P732 | 95-130 in 5V. Steps | 115 | 150 | HSP | 4-7/8 | 3-7/8 | 3-7/8 | 3-1/8 | 3-1/8 | 4.7 | 28.40 |
| 9P737 | 95-130 in 5V. Steps | 115 | 250 | HSP | 5-3/8 | 4-3/8 | 4-1/4 | 3-5/8 | 3-1/2 | 8.0 | 36.30 |
| 9P739 | 80-130 in 5V. Steps | 115 | 500 | HSP | 7-1/8 | 5-1/2 | 5-15/16 | 4-3/8 | 4-13/16 | 23.3 | 54.10 |

All list prices given are subject to regular trade discounts and may be changed without notice.

S N C MANUFACTURING CO., INC., OSHKOSH, WISCONSIN

MOST COMPLETE LINE IN THE INDUSTRY

HIGH CURRENT TRANSFORMERS & CHOKES

• RECTIFIER CIRCUITS

• DC-DC CONVERTERS

• HIGH CURRENT CHOKES

• CONSTANT VOLTAGE TRANSFORMERS

HIGH CURRENT RECTIFIER TRANSFORMERS

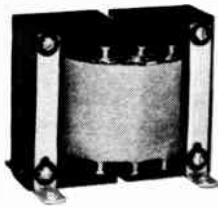
| PART NO. | PRIMARY* | SECONDARY VOLTS | | SECONDARY AMPS | | APPROX. DIMENSIONS | | | | | APX. LBS. | NET PRICE |
|---|---------------|-------------------------|----------|----------------|----------|--------------------|----|----|----|-----|-----------|-----------|
| | | SERIES | PARALLEL | SERIES | PARALLEL | L | W | H | ML | MW | | |
| 24 VOLTS SERIES | | | | | | | | | | | | |
| 0-6-12-18-24 V 24 V C.T. or Parallel 12 V C.T. @ 2 x current | | | | | | | | | | | | |
| 24-1 | 115V | 0-6 12-18-24 | 0-6-12 | 1 | 2 | 3 | 2½ | 2¾ | 2½ | 2 | 2.2 | 4.65 |
| 24-2 | 115 | " | " | 2 | 4 | 3 | 2¾ | 2¾ | 2½ | 2¾ | 3 | 5.90 |
| 24-4 | 115 | " | " | 4 | 8 | 3¾ | 2¾ | 3¼ | 3¼ | 2¼ | 4.2 | 7.20 |
| 24-6 | 115 | " | " | 6 | 12 | 4½ | 2¾ | 3¼ | 3¼ | 2¾ | 5.2 | 8.45 |
| 24-8 | 115 | " | " | 8 | 16 | 4½ | 3¾ | 3¼ | 3¼ | 3 | 7.6 | 12.00 |
| 24-12 | 105, 115, 125 | " | " | 12 | 24 | 4½ | 4¾ | 4 | 3¾ | 3¾ | 11.7 | 15.00 |
| 24-20 | 105, 115, 125 | " | " | 20 | 40 | 5¼ | 4¾ | 4¾ | 4¾ | 3¾ | 15 | 18.00 |
| 24-25 | 105, 115, 125 | " | " | 25 | 50 | 5¼ | 5½ | 4¾ | 4¾ | 4¾ | 18 | 24.00 |
| 24-50 | 105, 115, 125 | " | " | 50 | 100 | 6¾ | 6¾ | 5¾ | 5¾ | 4¾ | 32 | 36.00 |
| 24-100 | 115/230 | " | " | 100 | 200 | 7 | 9½ | 5 | 6½ | 5½ | 37 | 52.00 |
| 36 VOLTS | | | | | | | | | | | | |
| 0-9-18-27-36 V 36 V C.T. or Parallel 18 V C.T. @ 2 x current | | | | | | | | | | | | |
| 36-1 | 115 V | 0-9 18-27-36 | 0-9-18 | 1 | 2 | 3 | 2¾ | 2¾ | 2½ | 2¼ | 2.5 | \$ 5.20 |
| 36-2 | 115 | " | " | 2 | 4 | 3½ | 3 | 3¼ | 2¾ | 2¾ | 3.8 | 6.90 |
| 36-4 | 115 | " | " | 4 | 8 | 4½ | 3½ | 3¾ | 3¼ | 2¾ | 6.5 | 8.45 |
| 36-6 | 115 | " | " | 6 | 12 | 4½ | 3¾ | 4 | 3¾ | 2¾ | 8.6 | 12.75 |
| 36-8 | 115 | " | " | 8 | 16 | 4½ | 4½ | 4 | 3¾ | 3¾ | 11 | 14.50 |
| 36-12 | 105, 115, 125 | " | " | 12 | 24 | 5¼ | 4½ | 4¾ | 4¾ | 3¾ | 14.5 | 16.25 |
| 36-20 | 105, 115, 125 | " | " | 20 | 40 | 6¾ | 5 | 5¾ | 5¾ | 3¾ | 22 | 27.60 |
| 36-25 | 105, 115, 125 | " | " | 25 | 50 | 6¾ | 5½ | 5¾ | 5¾ | 3¾ | 25 | 29.75 |
| 36-30 | 105, 115, 125 | " | " | 30 | 60 | 6¾ | 6 | 5¾ | 5¾ | 4¾ | 32 | 36.00 |
| 36-50 | 115/230 | " | " | 50 | 100 | 6¾ | 7 | 5¾ | 5¾ | 5½ | 38 | 43.00 |
| 36-100 | 115/230 | " | " | 100 | 200 | 7 | 12 | 5 | 6½ | 7¾ | 60 | 85.00 |
| 56 VOLTS | | | | | | | | | | | | |
| 0-14-28-42-56 V 56 V C.T. or Parallel 28 V C.T. @ 2 x current | | | | | | | | | | | | |
| 56-1 | 115 | 0-14 28-42-56 | 0-14-28 | 1 | 2 | 3½ | 3 | 3¼ | 2¾ | 2¼ | 3.8 | 7.25 |
| 56-2 | 115 | " | " | 2 | 4 | 3¾ | 3¼ | 3¾ | 3¼ | 2½ | 5 | 8.80 |
| 56-4 | 115 | " | " | 4 | 8 | 4½ | 4 | 3¾ | 3¾ | 3 | 8 | 12.50 |
| 56-6 | 115 | " | " | 6 | 12 | 5¼ | 4¼ | 4¾ | 4¾ | 2¾ | 13 | 18.00 |
| 56-8 | 105, 115, 125 | " | " | 8 | 16 | 5¼ | 4¾ | 4¾ | 4¾ | 3¾ | 16 | 22.00 |
| 56-12 | 105, 115, 125 | " | " | 12 | 24 | 6¾ | 5 | 5¾ | 5¾ | 3¾ | 22 | 27.00 |
| 56-25 | 105, 115, 125 | " | " | 25 | 50 | 6¾ | 6½ | 5¾ | 5¾ | 5½ | 35 | 45.00 |
| 56-50 | 115/230 | " | " | 50 | 100 | 7 | 11 | 5 | 6½ | 6¾ | 50 | 85.00 |
| 80 VOLTS | | | | | | | | | | | | |
| 0-20-40-60-80 V 80 V C.T. or Parallel 40 V C.T. @ 2 x current | | | | | | | | | | | | |
| 80-5 | 115 | 0-20 40-60-80 | 0-40-80 | 0.5 | 1 | 3 | 2¾ | 2¾ | 2½ | 2¼ | 3.7 | 4.80 |
| 80-1 | 115 | " | " | 1 | 2 | 3¾ | 3½ | 3¼ | 2¾ | 2½ | 4.2 | 7.00 |
| 80-2 | 115 | " | " | 2 | 4 | 4½ | 3½ | 3¾ | 3¾ | 2¾ | 6.4 | 10.50 |
| 80-4 | 115 | " | " | 4 | 8 | 5¼ | 4½ | 4¾ | 4¾ | 2¾ | 10.8 | 18.00 |
| 80-6 | 105, 115, 125 | " | " | 6 | 12 | 5¼ | 5½ | 4¾ | 4¾ | 3¾ | 17 | 23.00 |
| 80-8 | 105, 115, 125 | " | " | 8 | 16 | 6¾ | 5 | 5¾ | 5¾ | 3¼ | 19 | 26.00 |
| 80-12 | 105, 115, 125 | " | " | 12 | 24 | 6¾ | 6 | 5¾ | 5¾ | 4½ | 27 | 34.00 |
| MULTI-VOLT | | | | | | | | | | | | |
| 1 to 54 VOLTS in 1 VOLT STEPS | | | | | | | | | | | | |
| MV-2 | 115 | 1 to 54 in 1-Volt Steps | | 2 | 4½ | 3½ | 3¼ | 3½ | 2¾ | 5 | 12.00 | |
| MV-4 | 115 | 1 to 54 in 1-Volt Steps | | 4 | 5¼ | 3¾ | 4 | 3¾ | 2½ | 7.5 | 16.00 | |

Primary ratings are at 57-440 cps. Units available for 47-440 cps operation in same physical size, add suffix -5 to Signal No., e.g., 36-1-5. Add 20% to net price shown.

Resin Encapsulated units are available for extreme environments. Add ¼ inch to overall dimensions and prefix "E" to part no., e.g., E-36-1. Add 25% to net price shown.

A 56 volt transformer with a rating of 12 amps, to operate at 47-440 cps, and to be encapsulated would be designated as E-56-12-5. A 12 amp choke to match this item would be described as ECH-12.

HIGH CURRENT CHOKES



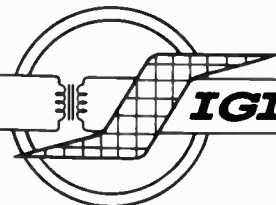
OPEN FRAME

| PART NO. | INDUCTANCE (milli-hy.) | CURRENT (amps) | RESIS. (ohms) | DIMENSIONS | | | | | APPR. WT. | NET PRICE |
|----------|------------------------|----------------|---------------|------------|----|----|----|----|-----------|-----------|
| | | | | L | W | H | ML | MW | | |
| CH-1 | 100 | 1 | 1.5 | 3 | 2½ | 2¾ | 2½ | 2 | 2 | \$4.80 |
| CH-2 | 40 | 2 | 0.9 | 3¾ | 2¾ | 3¼ | 2¾ | 2¾ | 3.2 | 5.83 |
| CH-4 | 70 | 4 | 0.6 | 3¾ | 3¼ | 3¾ | 3¾ | 2½ | 5 | 7.80 |
| CH-6 | 40 | 6 | 0.4 | 3¾ | 3¾ | 3¾ | 3¾ | 3 | 6.8 | 9.20 |
| CH-8 | 30 | 8 | 0.3 | 4½ | 4 | 3¾ | 3¾ | 3 | 8 | 11.70 |
| CH-12 | 10 | 12 | 0.1 | 5¼ | 4¼ | 4¾ | 4¾ | 3¾ | 13 | 14.70 |
| CH-20 | 4 | 20 | 0.05 | 5¼ | 4¼ | 4¾ | 4¾ | 3¾ | 13 | 14.90 |
| CH-25 | 4 | 25 | 0.025 | 5¼ | 5 | 4¾ | 4¾ | 3¾ | 18 | 22.00 |
| CH-30 | 3 | 30 | 0.01 | 6¾ | 5 | 5¾ | 5¾ | 3¾ | 22 | 27.00 |
| CH-50 | 1 | 50 | 0.01 | 6¾ | 5½ | 5¾ | 5¾ | 3¾ | 25 | 30.00 |
| CH-100 | 0.5 | 100 | 0.005 | 6¾ | 6½ | 5¾ | 5¾ | 4½ | 32 | 34.00 |



ENCAPSULATED

LIGHT WEIGHT HIGHER FREQUENCY (360-2000 CPS) versions of the above are available on special order, both encapsulated and hermetically sealed.



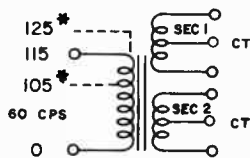
SIGNAL TRANSFORMER CO., INC

BROOKLYN, NEW YORK

MOST COMPLETE LINE IN THE INDUSTRY HIGH CURRENT TRANSFORMERS & CHOKES

ALL ITEMS AVAILABLE IMMEDIATELY FROM STOCK

ELECTRICAL DATA (24, 36, 56, 80 VOLT SERIES)

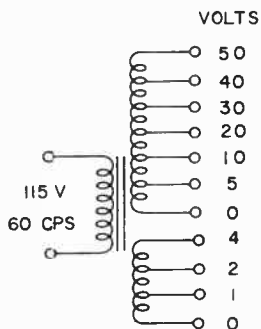


*Taps are standard on higher current units, consult chart.

Secondaries may be series connected at rated current for 1/4-1/2-3/4 or full voltage output, for full wave c.t. or bridge connection. Secondaries may be paralleled to obtain twice rated current.

NOTE: Current ratings are for AC load, full wave bridge resistive-inductive load, or F.W.C.T. capacitive load. For bridge circuit capacitive load use transformer current rating equal to 1.8 times the D.C. current. For F.W.C.T. inductive load use transformer current rating equal to 0.7 times the D.C. current.

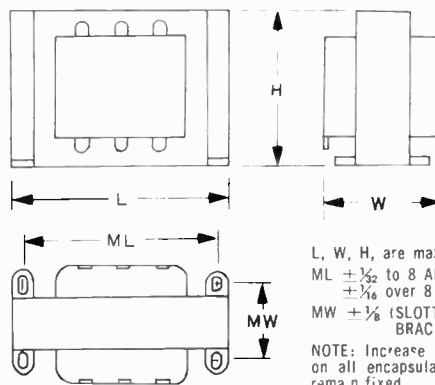
ELECTRICAL DATA MV SERIES



MV (multi-voltage) secondaries may be series connected for any output from 1 to 54 volts, in 1 volt steps, at rated current.

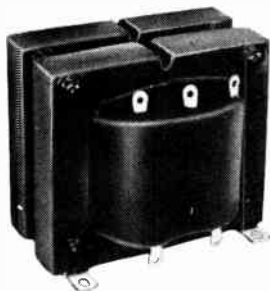
Ideal for determining proper transformer output voltage in bread-board setups.

MECHANICAL DATA



L, W, H, are maximum dimensions
ML $\pm \frac{1}{32}$ to 8 AMP
 $\pm \frac{1}{4}$ over 8 AMP
MW $\pm \frac{1}{8}$ (SLOTTED HOLE IN BRACKET)

NOTE: Increase L, W, H by 1/4 inch on all encapsulated units. ML, MW remain fixed.



THESE UNITS PROVIDE THE FOLLOWING FEATURES:
• **Constant output voltage** practically independent of line variations shown. Excellent load regulation.
• **Current limiting action**—short circuit proof—protects rectifiers and transformers.

• **No current spikes**—protects rectifier elements.
• **Output approximates a square wave**—ideal for rectifier circuits, less ripple, easier filtering.
• **DC output voltage** obtained from silicon bridge using input capacitor approx. 1,000 MFD. per amp.

We specialize in rapid service on custom designed constant voltage transformers. Variations of output voltage and current combinations for above VA ratings available at nominal cost in one week. New items being added continuously to our line.

CONSTANT VOLTAGE TYPE

(supplied with matched capacitor)

| PART NO. | INPUT VOLTS | LINE FREQUENCY | DC OUTPUT* VOLTS | DC RATED AMPS | NET PRICE |
|-----------|-------------|----------------|------------------|---------------|-----------|
| CV-28-3.5 | 95-130 | 60 cps | 28 | 3.5 | \$27.00 |
| CV-28-7 | 95-130 | 60 cps | 28 | 7.0 | 36.00 |
| CV-36-3 | 95-130 | 60 cps | 36 | 3.0 | 27.00 |
| CV-36-5.5 | 95-130 | 60 cps | 36 | 5.5 | 36.00 |
| CV-24-10 | 95-130 | 60 cps | 24 | 10 | 36.00 |
| CV-28-2 | 95-130 | 60 cps | 28 | 2 | 20.00 |
| CV-56-1 | 95-130 | 60 cps | 56 | 1 | 25.00 |
| CV-56-2 | 95-130 | 60 cps | 56 | 2 | 27.00 |
| CV-56-4 | 95-130 | 60 cps | 56 | 4 | 36.00 |

DC to DC TRANSISTOR CONVERTER TRANSFORMERS

| PART NO. | DC INPUT VOLTS | *TOTAL VA OUT | TYPICAL TRANSISTORS | DC OUTPUT | | NET PRICE | | |
|----------|----------------|---------------|---------------------|-----------------|--------------|-----------|-----|-------|
| | | | | FW BRIDGE VOLTS | FW CT. VOLTS | | | |
| TC-1 | 6 | 50 | Delco 2N 441 | 250 | 200 | \$12.50 | | |
| TC-2 | 12 | 100 | Delco 2N 442 | 500 | 200 | 250 | 400 | 12.50 |
| TC-4 | 12 | 100 | Delco 2N 442 | 600 | 160 | 300 | 320 | 12.50 |

*Total va may be drawn from bridge or ct. loads simultaneously, however, total va should not be exceeded.

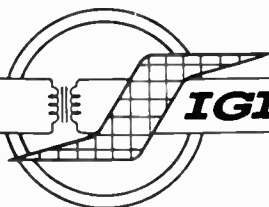
A high reliability line utilizing tape-wound grain-oriented "C" cores with layer wound coils. Resin impregnation and encapsulation ensures a full measure of protection from extreme environmental conditions.

All units in same package size 2 1/4 lg. x 3 wide x 2 high. Mounts on 1 1/4 x 1 1/2 centers. Weight approx. 3/4 lb. Full circuit details provided with each transformer.



CUSTOM SERVICE

Signal has many years of design and manufacture experience in custom designed rectifier transformers and reactors to the exacting specifications of leading power supply manufacturers. Consult us for your special needs.



SIGNAL TRANSFORMER CO., INC

BROOKLYN, NEW YORK

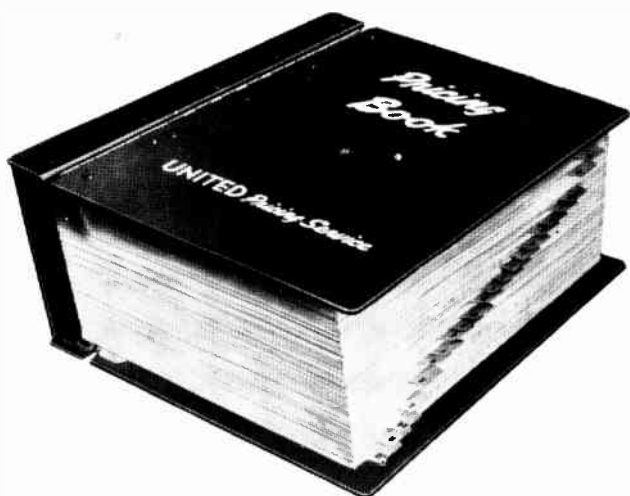
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Delivery is often dependent on availability of raw materials. Check with your distributor for delivery information at the time you place your order.

SPRAGUE

PULSE TRANSFORMERS AND DECADE INDUCTORS

TYPE 850W PRECISION DECADE INDUCTORS



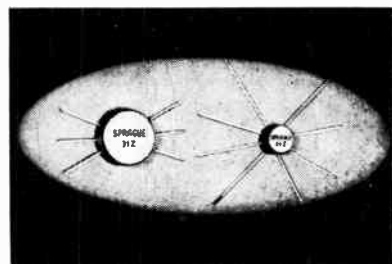
- Indispensable For Design and Experimental Work on Audio Filters, Equalizers, and Tuned Circuits. Frequency Range is 150 to 20,000 Cycles per Second
- Excellent Stability With Respect to Current and Ambient Temperature Changes
- All Four Decade Inductors May Be Connected in Series to Provide 11,110 Steps of Inductance
- Housed in Gray Aluminum Case with Rubber Feet. Measures 5 1/4" long, 3" Wide, 2 1/4" High. Fitted With Five-way Binding Posts.

| Cat. No. | Inductance Steps | Optimum Freq. Range in cps | Average Q Factor | | Max. Milliamperes | | Net Each |
|----------|------------------|----------------------------|------------------|-------------|-------------------|-----|----------|
| | | | at 1000 cps | at 4500 cps | D-C | A-C | |
| 850WA1 | 10 x 0.001H | 400 to 20,000 | 40 | 75 | 250 | 700 | \$31.90 |
| 850WA2 | 10 x 0.01H | 400 to 20,000 | 60 | 125 | 79 | 220 | 31.90 |
| 850WA3 | 10 x 0.1H | 400 to 20,000 | 60 | 125 | 25 | 70 | 31.90 |
| 850WA4 | 10 x 1.0H | 400 to 5,000 | 60 | 125 | 8 | 22 | 31.90 |

TYPE 31Z 'PANCAKE' PULSE TRANSFORMERS

- Miniature Units with Transformer Section Embedded in Epoxy Resin Inside a Pre-molded Outer Shell.
- "Pancake" Design is Excellent for Mounting on Printed Wiring Boards as Well as On Conventional Chassis.
- For Complete Technical Data, Refer to Latest Issue of Engineering Bulletin 40,230.

- 31Z382 Is Recommended for Pulse Voltages up to 200 Volts at Average Power Rating of 1.0 Watt. Maximum Suggested Volt-microsecond Product is 1200.
- 31Z204 and 31Z286 Are Recommended for Pulse Voltages up to 100 Volts at Average Power Rating of 0.5 Watt. Maximum Suggested Volt-microsecond Product is 340.



| Cat. No. | Turns Ratio | I.p (mH) | Ll (μH) | Cl (μμF) | Cc (μμF) | Typical Pulse Width Range and Impedance Level for 10% Droop | | | Net, ea. |
|----------|-------------|----------|---------|----------|----------|---|----------------------|----------------------|----------|
| | | | | | | Width at 100Ω (μsec) | Width at 250Ω (μsec) | Width at 500Ω (μsec) | |
| 31Z204 | 1:1 | 6.0 | 10.0 | 14 | 29 | 13.0 | 4.80 | 2.6 | \$4.60 |
| 31Z286 | 1:1:1 | 5.0 | 10.0 | 14 | 29 | 13.0 | 4.80 | 2.6 | 5.70 |
| 31Z382 | 1:1:1 | 15 | 25 | 24 | 49 | 33 | 12 | 6.4 | 5.70 |

PULSE TRANSFORMER ASSORTMENT No. 100Z41



- A Special Selection of Pulse Transformers for Low-Power High-speed Computer Circuitry
- Covers a Wide Range of Turns Ratios and Primary Inductance Combinations
- Ideal for Experimental Circuit Design on Transistorized or Electron Tube Circuits.
- MIL-T-27A and MIL-T-21038 Quality — Transformer Cores and Windings are Potted in Pre-Molded Epoxy Cases for Mechanical and Moisture Protection
- Can Be Mounted Flush on Printed Wiring Boards or Used in Conventional Point-to-Point Wiring
- Packed in Clear, Hinged-Lid Reusable Plastic Case

Cat. No. 100Z41.....Net, \$65.00

STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

STANCOR TRANSFORMERS



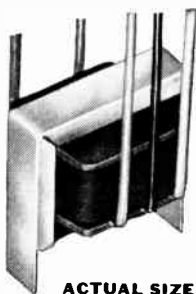
AND RELATED COMPONENTS

INDEX on STANCOR Page 2

TRANSISTOR AUDIO TRANSFORMERS

| Part No. | Applica-tion | Imp. in Ohms Pri. | Imp. in Ohms Sec. | Max. Pri. DC Ma. | DC Res. in Ohms Pri. | DC Res. in Ohms Sec. | Power in Watts | Ht. | Base Area | Mtg. Ctrs. | Mtg. Type | Shpg. Wt. | Net Price |
|----------|--------------|--------------------------|-------------------|------------------|----------------------|----------------------|---------------------------------|----------------------------------|---|--|-----------|-----------------------------------|--------------|
| TA-1 | Input | 600 C.T. | 10 | 20 | 42 | .8 | .05 | 1 ³ / ₁₆ | 1 ⁹ / ₁₆ x1 ¹⁵ / ₁₆ | 1 ⁵ / ₁₆ | A | 1 oz. | 51.93 |
| TA-2 | Interstage | 100 C.T. | 10 C.T. | 100 | 4.3 | .8 | .25 | 1 ¹ / ₁₆ | 2 ¹ / ₈ x1 ³ / ₈ | 1 ¹⁵ / ₁₆ | A | 3 oz. | 1.93 |
| TA-3 | Interstage | 100 | 1000 C.T. | 100 | 5.8 | 45 | .25 | 1 ³ / ₈ | 2 ⁷ / ₁₆ x1 ³ / ₈ | 2 | A | 3 oz. | 1.93 |
| TA-4 | Interstage | 500 C.T. | 5000 C.T. | 12 | 37 | 250 | .03 | 1 ³ / ₈ | 2 ⁷ / ₁₆ x1 ³ / ₈ | 2 | A | 3 oz. | 2.53 |
| TA-5 | Driver | 1000 | 200 C.T. | 10 | 400 | 115 | .05 | 5/8 | 1 ¹ / ₄ x1 ³ / ₂ | 1 ¹ / ₁₆ | A | 2 oz. | 4.80 |
| TA-6 | Driver | 2000 | 200 C.T. | 5 | 720 | 115 | .05 | 5/8 | 1 ¹ / ₄ x1 ³ / ₂ | 1 ¹ / ₁₆ | A | 2 oz. | 5.43 |
| TA-7 | Driver | 100 | 100 C.T. | 100 | 12 | 12 | .5 | 1 ³ / ₈ | 1 ¹⁵ / ₁₆ x1 ³ / ₈ | 2 ³ / ₈ | A | 5 oz. | 1.93 |
| TA-8 | Output | 9800 | 15 | 2 | 640 | 2 | .05 | 1 ³ / ₈ | 2 ⁷ / ₁₆ x1 ³ / ₈ | 2 | A | 2 oz. | 4.33 |
| TA-9 | Output | 1000 | 4/8/16 | 10 | 180 | 3.5 | .2 | 3/4 | 1 ⁹ / ₁₆ x3/4 | 1 ³ / ₈ | A | 1 oz. | 4.96 |
| TA-10 | Output | 2000 C.T. | 4/8/16 | — | 250 | 4 | .2 | 3/4 | 1 ⁹ / ₁₆ x3/4 | 1 ³ / ₈ | A | 1 oz. | 5.43 |
| TA-11 | Output | 48 C.T. | 8/16 | 275 | 5 | 1.5 | 5 | 2 | 3 ⁵ / ₈ x2 ¹ / ₂ | 2 ³ / ₈ | A | 1 lb. | 3.72 |
| TA-12 | Output | 20 C.T. | 8 | 500 | .55 | .35 | 10 | 1 ³ / ₈ | 1 ⁷ / ₁₆ x1 ¹ / ₂ | 2 | A | 4 oz. | 1.93 |
| TA-13 | Driver | 200 C.T. | 400 C.T. | 10 | — | — | .6 | 3 | 2 ¹¹ / ₁₆ x2 ¹ / ₂ | 2 ³ / ₈ x1 ¹ / ₂ | TD | 1 ¹ / ₂ lb. | 4.10 |
| TA-14 | Output | 24 C.T. | 16/4 C.T.† | 200 | — | — | — | 4 ¹ / ₄ | 4 ³ / ₈ x3 ⁹ / ₁₆ | 3 ⁷ / ₈ x2 ³ / ₄ | TD | 6 ¹ / ₄ lb. | 10.27 |
| TA-15 | Input | 50 to 100 | 10 | 50 | — | — | 5MW | 1 ³ / ₁₆ | 1 ⁹ / ₁₆ x1 ¹⁵ / ₁₆ | 1 ¹⁵ / ₁₆ | A | 5 ¹ / ₂ oz. | 1.50 |
| TA-16 | Driver | 20 | 36 C.T. | 400 | — | — | 1W | 1 ³ / ₁₆ | 2 ¹ / ₁₆ x1 ¹ / ₈ | 1 ³ / ₄ | A | 2 oz. | 1.73 |
| TA-17 | Modulation | 8 C.T. | 7500/5000 | 120 | — | — | 35 | 3 ¹ / ₈ | 3x2 ¹ / ₂ | 1 ¹⁵ / ₁₆ x2 | C | 3 lbs. | 6.49 |
| TA-56 | Output | 48 C.T. | 3.2/8/16 | 550 | 3.6 | 1.4 | 10 | 2 ⁵ / ₈ " | 2 ⁷ / ₈ x 2" | 2 ³ / ₈ " | J | 1 lb. | 3.10 |
| TA-57 | Output | 100 C.T. | 3.2/8/16 | 500 | 6.6 | 1.5 | 10 | 2 ⁵ / ₁₆ " | 2 ⁷ / ₈ x 2" | 2 ³ / ₈ " | S | 1 lb. | 3.05 |
| TA-58 | Driver | 100 | 200 C.T. | 200 | 6.5 | 15.5 | .5 | 1 ¹ / ₄ " | 2 ¹ / ₈ " x 1" | 1 ³ / ₄ " | A | 1 ¹ / ₂ lb. | 2.17 |
| TA-59 | Driver | 500 C.T. | 200 C.T. | 50 | 36.5 | 15.5 | .5 | 1 ¹ / ₄ " | 2 ¹ / ₈ " x 1" | 1 ³ / ₄ " | A | 1 ¹ / ₂ lb. | 2.42 |
| TA-60 | Hi-Fi Out.‡ | 125 C.T. | 8 | 50# | 7.5 | 0.9 | 1.5 | 1 ³ / ₈ " | 1 ¹ / ₄ " x 1 ¹ / ₄ " | 1 ¹ / ₄ " | TS | 3/4 lb. | 4.19 |
| TA-61 | Driver | Turns Ratio Pri. to Sec. | 1/2 | 400 | 1:1 D.C. Res. | 1.8 ohms per winding | 1 ¹⁵ / ₁₆ | 1 ³ / ₈ " | 2 ¹ / ₈ "x1 ¹ / ₂ " | 2" | S | 3/4 lb. | 2.60 |
| TA-62 | Output | 25 | 4 | 400 | 1.5 | 0.4 | 4 | 1 ³ / ₈ " | 2 ¹ / ₁₆ "x1 ¹ / ₂ " | 2 ³ / ₈ " | A | 3/4 lb. | 1.87 |

‡Freq. Resp. ±1/2 db, 20-20,000 cps. #Unbalanced Primary Current.



ACTUAL SIZE

.150 WATT GROUP

Dimensions:

H x W x D: 2¹/₂" x 1¹/₁₆" x 5⁵/₈"

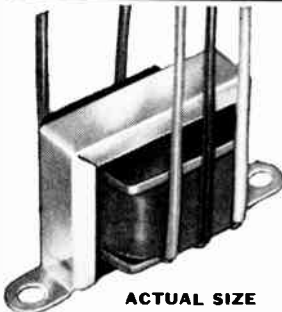
Mounting Tabs Centers:
2³/₁₆"—3¹/₁₆" W

Weight..... .65 oz.

Net Price..... **\$3.72**

For other transistor transformers see:

STANCOR PAGE 16—Hermetically sealed units
STANCOR PAGE 12, 18—Ultra-miniature units
STANCOR PAGE 18—Transverter power supply transistor transformers



ACTUAL SIZE

.300 WATT GROUP

Dimensions:

H x W x D: 1³/₁₆" x 1⁵/₈" x 3³/₄"

Mounting Centers:
1³/₈"

Weight..... 1.2 oz.

Net Price **\$3.72**

| Part No. | Application | Turns Ratio Pri. to Sec. | Impedance in Ohms Pri. | Impedance in Ohms Sec. | D.C. Res. in Ohms Pri. | D.C. Res. in Ohms Sec. |
|----------|-------------|--------------------------|------------------------|------------------------|------------------------|------------------------|
| TA-18 | Input | 1.00:45.5 | 30 C.T. | 50,000 | 14.7 | 4060 |
| TA-19 | Interstage | 3.08:1 | 100 C.T. | 10 C.T. | 19 | 1.27 |
| TA-20 | Output | 5.22:1 | 350 C.T. | 4, 12 | 38 | 1.45 |
| TA-21 | Output | 5.53:1 | 500 C.T. | 4, 8, 16 | 75.3 | 3.55 |
| TA-22 | Interstage | 3.16:1 | 500 C.T. | 50 | 59.7 | 7.9 |
| TA-23 | Output | 5.65:1 | 600 C.T. | 4, 8, 16 | 73.2 | 3.2 |
| TA-24 | Interstage | 10.0:1 | 500 C.T. | 50,000 | 76.8 | 5135 |
| TA-25 | Output | 6.75:1 | 825 C.T. | 4, 8, 16 | 74 | 2.7 |
| TA-26 | Output | 9.80:1 | 1,250 | 4, 12 | 132.5 | 1.4 |
| TA-27 | Interstage | 4.08:1 | 1,200 | 20,000 C.T. | 142 | 1860 |
| TA-28 | Interstage | 1.65:1 | 1,500 | 500 C.T. | 104 | 46.5 |
| TA-29 | Output | 11.8:1 | 2,500 | 4, 16 | 370 | 2.3 |
| TA-30 | Interstage | 1.00:1.22 | 5,000 C.T. | 7,500 C.T. | 650 | 790 |
| TA-31 | Interstage | 1.00:1.41 | 5,000 C.T. | 10,000 C.T. | 635 | 1100 |
| TA-32 | Interstage | 1.00:4 | 5,000 C.T. | 80,000 C.T. | 573 | 5740 |
| TA-33 | Output | 24.6:1 | 10,000 C.T. | 4, 8, 16 | 1174 | 2.6 |
| TA-34 | Interstage | 14.0:1 | 10,000 | 200 C.T. | 1200 | 33.4 |
| TA-35 | Interstage | 2.24:1 | 10,000 | 2,000 C.T. | 1200 | 257 |
| TA-36 | Interstage | 1.83:1 | 10,000 | 3,000 C.T. | 1200 | 385 |
| TA-37 | Output | 5.55:1 | 400 C.T. | 11 | 71.5 | 1.5 |
| TA-38 | Interstage | 3.44:1 | 500 C.T. | 150 C.T. | 62 | 21.2 |
| TA-53 | Input‡ | 3:1 | 5000 C.T. | 45,000 | 310 | 1400 |
| TA-54 | Input‡ | 5:1 | 20,000 | 800 C.T. | 1350 | 95 |
| TA-39 | Output | 3.08:1 | 100 C.T. | 4, 8, 16 | 10.9 | 1.45 |
| TA-40 | Output | 3.27:1 | 160 | 4, 8, 16 | 18.7 | 1.4 |
| TA-41 | Output | 5.00:1 | 400 C.T. | 4, 8, 16 | 34 | 1.5 |
| TA-42 | Output | 5.60:1 | 500 C.T. | 4, 8, 16 | 47 | .85 |
| TA-43 | Output | 6.63:1 | 700 C.T. | 4, 8, 16 | 77 | 1.15 |
| TA-44 | Output | 12.5:1 | 2,500 | 4, 8, 16 | 172 | 1.15 |
| TA-45 | Output | 13.7:1 | 3,000 | 4, 8, 16 | 192 | 1.2 |
| TA-46 | Interstage | 8.17:1 | 100,000 | 1,500 C.T. | 3250 | 143 |
| TA-47 | Input | 1.00:14.1 | 1,000 C.T. | 200,000 C.T. | 123 | 1815 |
| TA-52 | Driver‡ | 100:1 | 500 C.T. | 500 C.T. | 40 | 55 |
| TA-55 | Input | 50:1 | 500,000 | 200 C.T. | 7,000 | 8.5 |
| TA-63 | Driver | 3.17:1 | 20,000 C.T. | 2,000 C.T. | 2140 | 325 |

TRANSISTOR POWER TRANSFORMERS—Primary 117 volts, 60 cycle operation

| Part No. | Plate Supply AC Volts | No. 1 DC Ma | Plate Supply AC Volts | No. 2 DC Ma | Height | Base Area | Mtg. Type | Shpg. Wt. | Net Price |
|----------|-----------------------|-------------|-----------------------|-------------|--------------------------------|---|-----------|-------------------------------|--------------|
| *TP-1 | 13 or 18 | 900 | 13 or 18 | 900 | 3" | 3x2 ¹ / ₂ | C | 2 ³ / ₄ | 54.96 |
| P-8196 | 80 CT | 1200 | — | — | 3 ¹ / ₂ | 2 ⁷ / ₈ x3 ¹ / ₂ | C | 4.5 | 6.55 |
| TP-2** | 10/20 CT/40 CT | 100 | — | — | 1 ⁵ / ₈ | 2 ¹ / ₁₆ x1 ⁵ / ₈ | A | 0.7 | 4.00 |
| TP-3** | 10/20 CT/40 CT | 300 | — | — | 2 ¹ / ₄ | 3 ³ / ₄ x2 | A | 1.5 | 5.20 |
| TP-4** | 10/20 CT/40 CT | 1000 | — | — | 3 ¹ / ₁₆ | 2 ⁵ / ₈ x3 | C | 3.25 | 8.50 |

* For bridge rectifier systems.

† 2 secondaries 16 ohm series, 4 ohms parallel.

‡ Also Interstage.

Also driver and interstage.

• New Part Number.

** Tapped primary to obtain Lower Secondary Voltages.

STANCOR PAGE 1

DRIVER TRANSFORMERS



STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

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| Tube to Line Output | | 5 | | | |
| Universal Output | | 6 | | | |
| POWERS | | | CHOKES | | |
| Automation Control Transformers | | 7 | Audio Chokes | | 8 |
| Auto Transformers | | 11 | Filter Chokes | | 8, 13, 17, 19 |
| Bias Supply | | 10 | High "Q" Chokes | | 15 |
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TELEVISION COMPONENTS

Almost 1000 TV replacement transformers and related components, the most complete line in the industry, are available from Chicago Standard. These include almost 200 exact replacement flybacks and over 70 power transformers, 45 yokes, as well as vertical outputs, width and linearity coils

and many other popular TV replacement units. . . . Including 450 exact replacement coils. Ask your distributor for a free copy of the latest edition of the Stancor TV Transformer Catalog and Replacement Guide listing these units and replacement data on thousands of television sets.

SINGLE PLATE TO PUSH-PULL GRIDS

| Part No. | Pri. Impedance in Ohms | Pri./½ Sec. Ratio | Core | Max. Pri. D.C. | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|------------------------|-------------------|---------|----------------|------|-----------------------------------|--|-------------------|---------------|
| A-4713 | 10,000 | 2:1 | ½" x ½" | 30 ma. | A | 1½" | 2⅞" x 1½" | 0.7 | \$2.12 |
| A-4752 | 10,000 | 2/1.5/1:1 | ¾" x ¾" | 40 ma. | A | 2" | 3¼" x 1¾" | 1.2 | 2.93 |
| A-4722 | 10,000 | 2:1 | ¾" x 1" | 30 ma. | TD | 2 ¹¹ / ₁₆ " | 2¾" x 2 ³ / ₁₆ " | 1.7 | 4.33 |
| A-4292 | 10,000 | 2.5:1 | ½" x ½" | 20 ma. | A | 1½" | 2⅞" x 1½" | 0.7 | 2.27 |
| A-4723 | 10,000 | 3:1 | ½" x ½" | 30 ma. | A | 1½" | 2⅞" x 1½" | 0.7 | 2.15 |
| A-4210 | 1,500 to 5,000 | 3:1 | 1" x 1" | 40 ma. | C | 3 ³ / ₁₆ " | 2⅞" x 2⅞" | 2.4 | 4.96 |
| A-4702 | 1,500 to 5,000 | 5:1 | 1" x 1" | 80 ma. | C | 3 ³ / ₁₆ " | 2⅞" x 2⅞" | 2.5 | 4.90 |

PUSH-PULL PLATES TO PUSH-PULL GRIDS

| Part No. | Pri. Imp. (P.P.) in Ohms | Pri./½ Sec. Ratio | Core | Max. Pri. D.C. | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------------|--------------------------|-------------------|-----------|----------------|------|----------------------------------|-----------|-------------------|---------------|
| A-4208# | 20,000 to 30,000 | 2.8:1 | 1" x 1" | 15 ma. | C | 3 ³ / ₁₆ " | 2⅞" x 2⅞" | 2.5 | \$5.67 |
| A-4701# | 20,000 | 8:1 | 1" x 1" | 25 ma. | C | 3 ³ / ₁₆ " | 2⅞" x 2⅞" | 2.7 | 6.40 |
| A-4212 | 1,500 to 5,000 | 3.2:1 | 1" x 1" | 50 ma. | C | 3 ³ / ₁₆ " | 2⅞" x 2⅞" | 2.5 | 5.20 |
| A-4703# | 3,000 to 10,000 | 5:1 | 1½" x 1½" | 95 ma. | C | 3⅝" | 3" x 3⅝" | 3.7 | 6.44 |

#Split secondaries for individual bias adjustment and/or use of inverse feedback.

POLY-PEDANCE DRIVER MULTI-TAPPED UNITS FOR USE IN CIRCUITS WHERE THE OPTIMUM RATIO CANNOT BE PREDETERMINED.

| Part No. | Application and Ratio Pri./½ Sec. | Max. D.C. | Audio Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|--|----------------------------|-------------|------|----------------------------------|-----------|-------------------|----------------|
| A-4761 | Driver to Class "B" Grids 1.25:1/ 1.4:1/ 1.6:1/ 1.8:1/ 2:1/ 2.2:1/ 2.4:1 | Pri—150 ma. Sec—100 ma. | 15 | CD | 3 ³ / ₁₆ " | 2⅞" x 3⅝" | 3.4 | \$11.10 |
| A-4762 | Driver to Class "B" Grids 2.6:1/ 3:1/ 3.2:1/ 3.4:1/ 4:1/ 4.5:1/ 5:1 | Pri—150 ma. Sec—180 ma. | 15 | CD | 3 ³ / ₁₆ " | 2⅞" x 3⅝" | 2.7 | 10.46 |
| A-4763 | Driver to Class "B" Grids 1.25:1/ 1.5:1/ 1.75:1/ 2:1/ 2.25:1/ 3.2:1 | Pri—225 ma. Sec—280 ma. | 30 | CD | 3⅝" | 3" x 4" | 4.3 | 12.96 |

POLY-PEDANCE LINE DRIVER MULTI-TAPPED UNIT TO MATCH ALL COMMON LINE IMPEDANCES TO GRID CIRCUIT OF MODULATOR OR CLASS "B" AMPLIFIER.

| Part No. | Application and Ratio Pri./½ Sec. | Max. D.C. | Audio Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|---|----------------------------|-------------|------|----------------|-----------|-------------------|----------------|
| A-4765 | Line to Grid 1:0.75/ 1:0.85/ 1:1/ 1:1.25/ 1:1.45/ 1:1.75/ 1:2/ 1:2.25/ 1:2.5/ 1:2.75/ 1:3.15 | Pri—180 ma. Sec—100 ma. | 15 | CD | 3⅝" | 2⅞" x 3⅝" | 3.2 | \$11.50 |



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INPUT-INTERSTAGE

STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

MICROPHONE OR LINE TO LINE

| Part No. | Impedance In Ohms | Mtg. | Height Overall | Base Area | Shpg. Wt. In Lbs. | Net Price |
|----------|--|------|----------------|-----------|-------------------|-----------|
| A-4350# | Pri—500/333/200/125/50 Sec—500/333/200/125/50 | Q | 2" | 3¼" x 1¼" | 1.0 | \$ 4.33 |
| A-4407#† | Pri—500/333/200/125/50 Sec—500/333/200/125/50 | D | 3⅝" | 2⅝" x 3¼" | 2.4 | 8.99 |

MICROPHONE PICKUP OR LINE TO GRID

| Part No. | Application | Impedance in Ohms | Turns Ratio | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|--|--|-------------|------|----------------|-----------|-------------------|-----------|
| A-4705 | S. B. Mic. to S. Grid | Pri—200/70 Sec—80,000 | 1:20 | A | 1⅝" | 2⅝" x 1⅝" | 0.4 | \$2.97 |
| A-4706 | S. B. Mic. to S. Grid | Pri—100 Sec—60,000 | 1:24.5 | A | 1⅝" | 2⅝" x 1⅝" | 0.5 | 2.17 |
| A-4708 | D. B. Mic. to S. Grid | Pri—200 C.T. Sec—57,000 | 1:17 | J | 2" | 2⅝" x 1⅝" | 0.7 | 2.93 |
| A-4742 | S. B. Mic. to P.P. Grids | Pri—100 Sec—400,000 C.T. | 1:64 | S | 2⅝" | 2⅝" x 1¼" | 1.2 | 3.13 |
| A-4747 | S. B. Mic. or Low Imp. Line to S. Grid | Pri—70 Sec—1,300,000 | 1:137 | VE | 1⅝" | 1⅝" x 1¼" | 1½" 0.5 | 3.15 |
| A-4351# | Mic. or Line to S. Grid | Pri—500/333/200/125/50 Sec—89,000 | 1:13.3 | TD | 2⅝" | 2⅝" x 2⅝" | 1.4 | 4.63 |
| A-4352# | Mic. or Line to S. Grid | Pri—500/333/200/125/50 Sec—89,000 | 1:13.3 | Q | 2" | 3¼" x 1¼" | 1.0 | 4.80 |
| A-4709 | Dynamic Mic. or Pickup to S. Grid | Pri—30/15/8/4 Sec—106,000 | 1:60 | TD | 2⅝" | 2⅝" x 2⅝" | 1.7 | 5.20 |
| A-4778 | Line to Grid | Pri.—500/600 C.T. Sec.—240,000 | 1:20 | C | 2⅝" | 2⅝" x 1⅝" | — | 3.97 |
| A-4779 | Line to S. or P. P. Grids | Pri.—500/600 C.T. Sec.—60,000 C.T. | 1:10 | A | 2" | 2⅝" x 1¼" | — | 2.30 |
| A-4780 | Line to P. P. Grids | Pri.—500/600 C.T. Sec.—240,000 C.T. | 1:20 | A | 2⅝" | 3⅝" x 1¼" | — | 4.02 |

INTERCOMMUNICATOR AND TRANSCEIVER

| Part No. | Application | Impedance Primary | Impedance Secondary | Max. Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|---|-------------------|---------------------|------------|------|----------------|-----------|-------------------|-----------|
| A-4744 | Intercom. input | 4 | 25,000 | | VE | 1⅝" | 2⅝" x 1¼" | 0.5 | \$2.02 |
| A-4748 | Intercom. input | 45 or 50 | 50,000 | | A | 1⅝" | 2⅝" x 1¼" | 1¼" 0.4 | 3.00 |
| A-4749 | Telephone Patch Circuit | 10,000 | 2-500 each | | TD | 1⅝" | 1⅝" x 2¼" | 1.0 | 4.85 |
| A-8090 | Line to Voice Coil | 45 or 50 | 3-4, 6-8 | 3 | QL | 1⅝" | 2⅝" x 1⅝" | 0.5 | 1.77 |
| A-8091 | Line to Voice Coil | 45 or 50 | 3-4, 6-8 | 8 | QL | 1⅝" | 2⅝" x 1⅝" | 0.7 | 2.10 |
| A-3833 | Transceiver Input Mic. and Plate to Grid | 200 and 5,000 | 60,000 | 5 | A | 1⅝" | 2⅝" x 1¼" | 0.7 | 2.87 |
| A-3836 | Transceiver Output. Plate to Low or High impedance phones | 10,000 | 50 at 2,000 | 5 | A | 1⅝" | 2⅝" x 1¼" | 0.7 | 2.80 |
| A-3817 | Transceiver modulation and output (Autoformer) | 5,000 at 50 ma | 6750 at 40 ma | 10 | A | 1⅝" | 1½" x 2⅝" | 0.7 | 3.00 |

SINGLE PLATE TO SINGLE GRID—FOR 7,000-20,000 OHM PLATE IMPEDANCES

| Part No. | Turns Ratio | Core | Max. Pri. D.C. | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|-------------|-----------|----------------|------|----------------|-----------|-------------------|-----------|
| A-53 | 1:3 | 1½" x 1½" | 10 ma. | A | 1⅝" | 2⅝" x 1¼" | 0.5 | \$2.02 |

SINGLE PLATE TO PUSH-PULL GRIDS—FOR 7,000-15,000 OHM PLATE IMPEDANCES

| | | | | | | | | |
|---|-----|-------------|--------|----|-----|-----------|-----|--------|
| A-52-C | 1:2 | 1½" x 1½" | 10 ma. | A | 1⅝" | 2⅝" x 1¼" | 0.4 | \$2.25 |
| A-62-C | 1:2 | 5⁄8" x 5⁄8" | 10 ma. | A | 1⅝" | 2⅝" x 1¼" | 0.7 | 2.33 |
| A-4745 | 1:2 | 1½" x 1" | 10 ma. | TD | 2⅝" | 2⅝" x 2⅝" | 1.7 | 5.66 |
| Recommended for use in super-regenerative circuits. Has a static shield between pri. and sec. windings. | | | | | | | | |
| A-53-C | 1:3 | 1½" x 1½" | 10 ma. | A | 1⅝" | 2⅝" x 1¼" | 0.5 | 2.40 |
| A-63-C | 1:3 | 5⁄8" x 5⁄8" | 10 ma. | A | 1⅝" | 2⅝" x 1¼" | 0.7 | 2.70 |
| A-73-C | 1:3 | 3⁄4" x 3⁄4" | 10 ma. | A | 2" | 3⅝" x 1¼" | 1.0 | 3.15 |
| A-4719 | 1:3 | 3⁄4" x 1" | 10 ma. | TD | 2⅝" | 2⅝" x 2⅝" | 1.7 | 4.96 |
| A-64-C | 1:4 | 5⁄8" x 5⁄8" | 10 ma. | A | 2" | 2⅝" x 1¼" | 0.7 | 2.43 |
| A-4420 | | | | S2 | 1⅝" | 1⅝" x 1¼" | 0.5 | 2.01 |
| Exact Repl. United Motors (Delco) 6061 18,000 Ω Plate to P-P Grids, Autoformer | | | | | | | | |

MULTI-PURPOSE INTERSTAGE—SPLIT SECONDARIES

May be used as a single plate to single grid, single plate to push-pull grid, or push-pull plate to push-pull grid interstate transformers. Overall ratios are 3:1, however, primaries are center-tapped and secondaries have split windings, thus providing ratios of 1:1, 3:1 and 6:1 in either step-up or step-down applications. † Has split secondary.

| | | | | | | | | |
|--------|-----|-------------|--------|----|-----|-----------|-----|--------|
| A-4774 | 1:3 | 3⁄4" x 3⁄4" | 10 ma. | S | 2⅝" | 2⅝" x 1¼" | 1.2 | \$3.25 |
| A-4773 | 1:3 | 3⁄4" x 1" | 10 ma. | TD | 2⅝" | 2⅝" x 2⅝" | 1.7 | 5.20 |

PUSH-PULL PLATES TO PUSH-PULL GRIDS—FOR 7,000-15,000 OHM PLATE IMPEDANCES

| | | | | | | | | |
|--------|-----|-------------|--------|---|-----|-----------|-----|--------|
| A-4711 | 1:1 | 5⁄8" x 5⁄8" | 10 ma. | A | 1⅝" | 2⅝" x 1¼" | 0.7 | \$3.15 |
|--------|-----|-------------|--------|---|-----|-----------|-----|--------|

PUSH-PULL PLATES TO PARALLEL OR PUSH-PULL GRIDS—FOR 7,000-20,000 OHM PLATE IMPEDANCES

| | | | | | | | | |
|--------|-------|---------|--------|---|-----|-----------|-----|--------|
| A-4208 | 1:1.4 | 1" x 1" | 15 ma. | C | 3⅝" | 2⅝" x 2⅝" | 2.5 | \$5.67 |
|--------|-------|---------|--------|---|-----|-----------|-----|--------|

#Has a dual primary—when properly connected the 500 and 200 ohm sections are center tapped. †Has split secondary.
‡Has a static shield between primary and secondary windings. †Designates part numbers to be removed from next catalog.



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STANCOR PAGE 3

OUTPUT TRANSFORMERS



STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

SINGLE PLATE TO VOICE COIL

| Part No. | Application | Max. Pri. D.C. | Typical Output Tubes | Class | Audio Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|--|----------------|--|-------|-------------|------|----------------|-----------------|-------------------|-----------|
| A-3332 | 2,000 ohms to 3.2 ohms | 50 ma. | 25B5, 25B6, 25L6, 35A5, 35L6, 50L6 | A | 3 | A | 1 3/8" | 2 3/8" x 1" | 0.4 | \$1.39 |
| A-3876 | 2,000 ohms to 4 ohms | 60 ma. | 2A3, 6A3, 6B4, 6W6, 6Y6, 25AC6, 25B5, 25B6, 25L6, 35A5, 35L6, 50L6 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.48 |
| A-3328 | 4,000 ohms to 3.5 ohms | 10 ma. | 1S4, 3S4 | A | 3 | A | 1 3/8" | 2 3/8" x 1" | 0.4 | 1.37 |
| A-2203 | 4,000 ohms to 8 ohms | 40 ma. | 43, 45, 48, 12A5, 25A6 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.7 | 2.47 |
| A-3877 | 5,000 ohms to 4 ohms | 40 ma. | 43, 59, 6V6, 7C5, 25A5 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.48 |
| A-3310 | 5,000 ohms to 500/15/8/4 ohms | 55 ma. | 45, 6L6, 6V6, 25A6, 25A7 | A | 20 | C | 3 3/8" | 2 3/8" x 2 3/8" | 2.5 | 5.70 |
| A-3878 | 7,000 ohms to 4 ohms | 30 ma. | 20, 31, 33, 42, 2A5, 6AC5, 6B5, 6F6, 6K6, 6N6, 7B5 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.52 |
| A-2313 | 7,000 ohms to 8 ohms | 40 ma. | 33, 41, 42, 47, 59, 89, 2A5, 6AC5, 6F6, 6K6, 6N6, 7B5 | A | 10 | A | 2" | 3 1/4" x 1 3/8" | 1.0 | 2.55 |
| A-8114 | 7,600 ohms to 3.2 ohms | 32 ma. | 33, 41, 42, 47, 59, 89, 2A5, 6AC5, 6F6, 6K6, 6N6, 7B5 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.77 |
| A-3329 | 8,000 ohms to 3.5 ohms | 10 ma. | 1C5-GT, 1G5-G, 1Q5-GT/G, 1S4, 3S4 | A | 3 | A | 1 3/8" | 2 3/8" x 1" | 0.4 | 1.37 |
| A-3879 | 10,000 ohms to 4 ohms | 30 ma. | 1J6, 3C5, 6A4, 6G6, 6N7 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.48 |
| A-3881 | 15,000 ohms to 4 ohms | 10 ma. | 1D8, 1E7, 1F4, 1F5, 1J5, 1T5, 6V7, 6Y7, 12A7 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.63 |
| A-3327 | 25,000 ohms to 4 ohms | 5 ma. | 1A5, 1D8-GT, 1F4, 1F5-G, 1LA4, 1LB4, 1N6-G | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.84 |
| A-4431 | Exact Repl. United Motors (Delco) 6062, 6,000 ohms to 3-4 ohms | | | | 5 | A2 | 1 3/8" | 1 1/8" x 1 3/8" | 0.8 | 1.86 |

PUSH-PULL PLATES TO VOICE COIL

| | | | | | | | | | | |
|---------|--|---------|---|----------|---------|---------|-----------------|-----------------|-----|---------|
| A-3802 | 3,800/3,300 to 500/250/8/4 ohms | 250 ma. | 45, 6L6, Par. 6L6 | AB2, AB1 | 75 | C | 4 3/8" | 4" x 3 1/2" | 7.9 | \$12.01 |
| A-3851§ | 4,400 ohms to 500/250/15/8/4 ohms | 70 ma. | 6L6 | AB1 | 30 | C | 3 5/8" | 3" x 3 1/2" | 3.6 | 7.40 |
| A-3872 | 5,000 ohms to 15/8/4 ohms | 75 ma. | 45, 2A3, 6A3, 6L6 | AB | 18 | TD | 2 1/16" | 2 3/4" x 2 3/8" | 1.7 | 4.66 |
| A-3800 | 5,000 ohms to 500/250/15/8/4 ohms | 80 ma. | 45, 2A3, 6A3, 6L6 | AB | 30 | C | 3 3/8" | 3" x 3 3/8" | 3.7 | 6.87 |
| A-3307 | 6,000 ohms to 500/15/8/4 ohms | 100 ma. | 46, 59, 42, 2A5, 6F6, Par. 53, 6A6, 6N7 | B, AB2 | 30 | C | 3 5/8" | 3" x 3 3/8" | 3.5 | 7.92 |
| A-3801 | 6,600 ohms to 500/250/15/8/4 ohms | 150 ma. | 6L6 | AB1 | 35 | C | 4" | 3 1/4" x 3 3/8" | 5.8 | 8.76 |
| A-3885 | 9,000 ohms to 500/250/15/8/4 ohms | 150 ma. | 6L6 | AB1 | 35 | C | 4" | 3 1/4" x 3 3/8" | 4.5 | 8.68 |
| A-3304 | 10,000/7,000 ohms to 500/15/8/4 ohms | 60 ma. | 45, 6V6, 6AC5 | AB | 25 | C | 3 3/8" | 2 5/8" x 2 5/8" | 2.7 | 6.43 |
| A-3311 | 10,000 ohms to 500/15/8/4 ohms | 70 ma. | 6F6, 6V6, 6AC5 | AB | 25 | C | 3 5/8" | 3" x 3 1/8" | 3.5 | 6.91 |
| A-3831 | 10,000 ohms to 8/4/2 ohms | 40 ma. | 30, 49 | AB | 5 | A | 1 3/8" | 2" x 1 1/2" | 0.7 | 2.70 |
| A-3335 | 10,000 ohms to 6-8/3.2-4 ohms | 40 ma. | 10 | S | 2 3/16" | 2 1/16" | 1 3/8" x 2 3/8" | | 1.0 | 3.15 |
| A-2312 | 14,000 ohms to 4 ohms | 40 ma. | 33, 41, 42, 47, 49, 2A5, 6F6, 6K6, 7B5 | AB | 10 | A | 2" | 3 1/4" x 1 3/8" | 1.0 | 2.85 |
| A-3496 | 14,000 ohms to 4 ohms | 25 ma. | 33, 41, 42, 47, 49, 2A5, 6F6, 6K6, 7B5 | AB | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 2.70 |
| A-3303 | 14,000 ohms to 500/15/8/4 ohms | 55 ma. | 41, 42, 47, 59, 89, 2A5, 6F6, 6K6, 7B5 | AB | 20 | C | 3 1/8" | 2 5/8" x 2 5/8" | 2.7 | 6.53 |
| A-3857 | 25,000 ohms to 4 ohms | 10 ma. | 1F4, 1F5, 1J5, 1T5, 6G6, 12A7, 950 | A | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 2.40 |
| A-4430 | Exact Repl. United Motors (Delco) 7269231, 7269116, 7266997, 9,000 ohms CT to 3.2 ohms | | | | 5 | A2 | 1 1/8" | 2 3/8" x 1 3/8" | 1.0 | 2.28 |
| A-4432 | Exact Repl. United Motors (Delco) 6063 10,000 ohms CT to 4 ohms | | | | 10 | S2 | 2 3/8" | 2" x 1 5/8" | 1.0 | 2.46 |

HUM-REDUCING TRANSFORMERS, Single Plate to Voice Coil

| | | | | | | | | | | | |
|--------|-------------------------|--------|--|--|---|---|--------|-----------------|---|-----|--------|
| A-3330 | ±2,000 ohms to 3.5 ohms | 60 ma. | | | 5 | A | 1 3/8" | 2 3/8" x 1 3/8" | 2 | 0.4 | \$1.98 |
| A-3336 | ±2,500 ohms to 3.5 ohms | 50 ma. | | | 5 | A | 1 3/8" | 2 1/8" x 1 3/8" | 2 | 0.4 | 1.99 |

HIGH FIDELITY OUTPUT TRANSFORMERS, Better than ±1 db from 20 to 20,000 cps.

All units have Type C mounting. Shipping weight 6.5 lbs., except A-8098, shipping weight 3.2 lbs.

| Part No. | Pri. Imp. (P-P) in Ohms | Sec. Imp.* in Ohms | Max. Pri. D.C. Per Slide | Audio Watts | Height Overall | Base Area | Net Price |
|----------|-------------------------|--------------------|--------------------------|-------------|----------------|-----------------|-----------|
| A-8050 | 1500 | 8, 16 | 200 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | \$13.63 |
| A-8098 | 2000 C.T. | 8, 16, 32 | 140 | 15 | 3 3/8" | 2 5/8" x 3 3/8" | 8.14 |
| A-8051 | 2500 | 8, 16 | 160 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8052 | 3000 | 8, 16 | 175 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8053 | 5000 | 8, 16 | 160 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8054 | 8000 | 8, 16 | 100 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8055 | 6600 | 8, 16 | 125 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8060 | 1500 | 500 | 200 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8061 | 2500 | 500 | 150 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8062 | 3000 | 500 | 175 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8063 | 5000 | 500 | 160 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8064 | 9000 | 500 | 100 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |
| A-8072** | 7600 | 4, 8, 16 | 100 | 25 | 4 1/4" | 3 1/4" x 4 1/4" | 16.60 |
| A-8066 | 6600 | 500 | 125 | 50 | 4 1/4" | 3 1/4" x 4 1/4" | 13.63 |

*Where more than one secondary impedance is shown, only one value is to be used at any time.

**Primary provided with seven taps for Ultra-Linear application.

†Has tapped primary for use in hum-reducing circuit.

‡This unit has a tertiary winding to provide 10% inverse feedback

§Designates part number to be removed from next catalog.

†Has a 4.5% primary tap.





OUTPUT TRANSFORMERS

STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

UNIVERSAL OUTPUT

| Part No. | Application | Max. Pri. D.C. | Audio Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|---|----------------|-------------|------|----------------|------------------|-------------------|-----------|
| A-3856 | Single or Push-pull plates (4,000 to 14,000 ohms) to voice coil | 35 ma. | 4 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | \$2.90 |
| A-3822 | Single plate (7,000 to 10,000 ohms) to voice coil | 35 ma. | 4 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 1.95 |
| A-3848 | Single plate (7,000 to 16,000 ohms) to voice coil | 10 ma. | 5 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | 2.60 |
| A-3823 | Single or Push-pull plates (4,000 to 14,000 ohms) to voice coil | 40 ma. | 8 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 0.7 | 3.37 |
| A-3850 | Single or Push-pull plates (4,000 to 14,000 ohms) to voice coil | 40 ma. | 8 | J | 2" | 2 3/8" x 1 3/8" | 0.7 | 3.32 |
| A-3825 | Single plate (1,500 to 4,500 ohms) to voice coil | 75 ma. | 8 | Q | 2" | 3 1/4" x 1 5/8" | 0.9 | 2.63 |
| A-3824 | Single or Push-pull plates (6,000 to 10,000 ohms) to voice coil | 75 ma. | 8 | Q | 2" | 3 1/4" x 2" | 1.4 | 3.30 |
| A-3849 | Single plate (1,500 to 10,000 ohms) to voice coil | 55 ma. | 10 | Q | 1 5/8" | 2 7/8" x 1 1/2" | 0.7 | 3.37 |
| A-3880 | Push-pull plates (4,000 to 14,000 ohms) to voice coil | 40 ma. ea. 1/2 | 15 | Q | 2 1/4" | 3 3/8" x 2 3/8" | 1.7 | 4.39 |
| A-2855 | Push-pull plates (4,000 to 14,000 ohms) to voice coil | 50 ma. ea. 1/2 | 15 | L | 2 1/4" | 2 5/8" x 1 3/4" | 1.0 | 3.76 |
| A-3890 | Push-pull plates (1,000 to 14,000 ohms) to voice coil | 50 ma. ea. 1/2 | 15 | TD | 2 1/16" | 2 3/4" x 2 1/16" | 1.5 | 5.43 |
| A-3852 | Push-pull plates (4,000 to 14,000 ohms) to voice coil | 40 ma. ea. 1/2 | 18 | J | 2 5/16" | 2 5/8" x 2" | 1.3 | 4.07 |
| A-3870 | Push-pull plates (4,000 to 14,000 ohms) to voice coil | 50 ma. ea. 1/2 | 18 | Q | 2" | 3 1/4" x 2" | 1.3 | 4.15 |
| A-3830 | Push-pull plates (3,000 to 10,000 ohms) to voice coil | 60 ma. ea. 1/2 | 20 | J | 2 1/16" | 3 5/16" x 2 3/4" | 1.8 | 4.50 |

*Secondary impedance 0.7, 1, 1.4, 2, 2.8, 4 ohms.

§Secondary impedance, 1, 2, 4 ohms.

SINGLE AND/OR PUSH-PULL PLATES TO LINE

| Part No. | Application | Impedance in Ohms | Max. Pri. D.C. | Audio Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|--|---|----------------|-------------|------|----------------|------------------|-------------------|-----------|
| A-3841 | Single plate to line | Pri—7,000/6,000/5,000/4,000/2,500; Sec—500 | 60 ma. | 10 | J | 2 1/16" | 3 5/16" x 2 3/8" | 1.5 | \$5.00 |
| A-3842 | Push-pull plates to line | Pri—14,000/12,000/10,000/8,000 CT; Sec—500 | 55 ma. | 10 | J | 2 1/16" | 3 5/16" x 2 3/8" | 1.7 | 5.70 |
| A-4770 | Single plate to line | Pri—7,000/6,000/5,000/4,000/2,500; Sec—500 | 60 ma. | 20 | J | 3 3/8" | 3 3/8" x 2 3/8" | 2.4 | 5.26 |
| A-3250 | Single plate or Push-pull plates to line | Pri—20,000/10,000/5,000 Pri—20,000 CT Sec—500/333/200/125/50 | 15 ma. | — | Q | 2" | 3 1/4" x 1 3/4" | 1.0 | 4.19 |
| A-3315 | Single plate or Push-pull plates to line | Pri—20,000/10,000/5,000 Pri—20,000 CT; Sec—500/333/200/125/50 | 35 ma. | — | D | 3 3/8" | 2 5/8" x 2 5/8" | 2.7 | 8.42 |

LINE TO VOICE COIL

| Part No. | Impedance in Ohms | Audio Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|---|-------------|------|----------------|-------------------|-------------------|-----------|
| A-8101 | Pri—500 Sec—3.2/6/8 | 5 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 0.4 | \$1.77 |
| A-3883 | Pri—500 Sec—15/8/6/4 | 25 | J | 2 5/16" | 2 5/8" x 1 3/4" | 1.1 | 3.45 |
| A-3882 | Pri—500/333/250 Sec—15/8/4 | 25 | D | 3 3/16" | 2 5/8" x 3 1/2" | 2.4 | 8.51 |
| A-3838 | 500/250/175/150/140/125/100/85/45/14/4/0.7 This Unit is designed to operate one or more speakers in series across a 500 ohm line or to match unequal lines. | 30 | B | 3 3/8" | 2 1/2" x 2 1/4" | 2.3 | 5.30 |
| A-3818 | Pri—1,500/1,000/500 Sec—15/8/4 | 25 | J | 3 3/8" | 3 5/8" x 2 3/8" | 2.2 | 4.92 |
| A-7947 | Pri—2,000/1,500/1,000/500 Sec—6 ohms | 8 | Q | 1 5/8" | 2 1/16" x 1 1/16" | 0.7 | 2.93 |
| A-7949 | Pri—2,000/1,500/1,000/500 Sec—6-8 ohms | 12 | J | 2 5/16" | 2 7/8" x 1 13/16" | 1.1 | 3.44 |
| A-3820 | Pri—2,000/1,500/1,000/500 Sec—15/8/4 | 40 | D | 4 5/8" | 3 5/8" x 4 1/2" | 5.0 | 10.73 |
| A-8104 | Pri—3,000/2,000/1,500/1,000/500 Sec—16/8/4 | 10 | J | 2 5/16" | 2 1/16" x 1 3/4" | 1.5 | 4.07 |
| A-3837 | Line to Line or V. C. (Autoformer) Pri—500 Sec—8/4/2.65/2.35/ 2/1.5/0.7/0.5/0.3/0.2/0.1/0.05 This Unit is designed to operate one or more speakers in parallel across a 500 ohm line. | 15 | J | 2 5/16" | 2 5/8" x 2" | 1.4 | 4.01 |

70.7 VOLT LINE TO VOICE COIL

| Part No. | Power Steps in Watts | Impedance in Ohms | Mtg. Type | Height Overall | Base Area | Mtg. Ctrs. | Shpg. Wt. in Lbs. | Net Price |
|----------|----------------------|---|-----------|----------------|------------------|------------|-------------------|-----------|
| A-8080 | 5/4/3/2/1 | Pri—1000/1250/1667/2500/500 Sec—8/16 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 2" | 0.4 | \$2.91 |
| A-8081 | 10/9/8/7/6 | Pri—500/555/625/715/833 Sec—8/16 | J | 2" | 2 1/16" x 1 5/8" | 2" | 0.7 | 3.16 |
| A-8082 | 15/14/13/12/11 | Pri—333/357/384/417/455 Sec—8/16 | J | 2 5/16" | 2 7/8" x 1 3/4" | 2 3/8" | 1.2 | 3.66 |
| A-8102 | 8/4/2/1/0.5 | Pri—625/1,250/2,500/5,000/10,000 Sec—4/8/16 | J | 2 5/16" | 1 5/8" x 2 7/8" | 2 3/8" | 0.7 | 3.50 |
| A-8103 | 16/8/4/2/1/0.5 | Pri—312.5/625/1,250/2,500/5,000/10,000 Sec—4/8/16 | J | 2 3/8" | 2 1/4" x 3 3/4" | 2 13/16" | 1.5 | 4.95 |
| A-8105 | 5/2.5/1.25/0.62/0.31 | Pri—1,000/2,000/4,000/8,000/16,000 Sec—4/8 | J | 1 3/8" | 2 3/8" x 1 3/8" | 2" | 0.4 | 2.84 |
| A-8109 | 2/1/0.5 | Pri—2500/5000/10,000 Sec—4/8 | Q | 1 1/4" | 2 1/8" x 1 3/4" | 1 3/8" | 0.3 | 2.50 |

140 VOLT LINE TO VOICE COIL

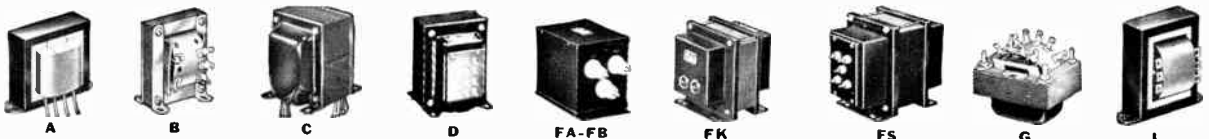
| Part No. | Power Steps in Watts | Impedance in Ohms | Mtg. Type | Height Overall | Base Area | Mtg. Ctrs. | Shpg. Wt. in Lbs. | Net Price |
|----------|----------------------|--|-----------|----------------|------------------|------------|-------------------|-----------|
| A-8106 | 1/2/4/8 | Pri—2,500/5,000/10,000/20,000 Sec—4/8/16 | J | 2 | 1 5/8" x 2 1/16" | 2 | 0.7 | \$3.00 |
| A-8107 | 1/2/4/8/16 | Pri—1,250/2,500/5,000/10,000/20,000 Sec—4/8/16 | J | 2 | 3 5/16" x 2" | 2 13/16" | 1.8 | 4.74 |
| A-8108 | 0.625/1.25/2.5/5.0 | Pri—4,000/8,000/16,000/32,000 Sec—4/8 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 2 | 0.4 | 2.72 |

25 VOLT LINE TO VOICE COIL

| Part No. | Power Steps in Watts | Impedance in Ohms | Mtg. Type | Height Overall | Base Area | Mtg. Ctrs. | Shpg. Wt. in Lbs. | Net Price |
|----------|----------------------|--|-----------|----------------|------------------|------------|-------------------|-----------|
| A-8095 | 5/2.5/1.25/0.62/0.31 | Pri—125/250/500/1,000/2,000 Sec—4/8 | Q | 1 3/8" | 2 3/8" x 1 3/8" | 2" | 0.4 | \$2.69 |
| A-8096 | 8/4/2/1/0.5 | Pri—78/156/312.5/625/1,250 Sec—4/8/16 | J | 2" | 1 5/8" x 2 1/16" | 2" | 0.65 | 3.60 |
| A-8097 | 16/8/4/2/1/0.5 | Pri—39/78/156/312.5/625/1,250 Sec—4/8/16 | J | 2 13/16" | 2 1/4" x 3 1/8" | 2 13/16" | 1.6 | 4.32 |
| A-8099 | 2/1/0.5 | Pri—312.5/625/1250 Sec—4/8 | Q | 1 3/4" | 2 1/8" x 1 3/4" | 1 3/8" | 0.3 | 2.50 |

CRYSTAL RECORDER OUTPUT

| Part No. | Application | Max. Pri. D.C. | Audio Watts | Core Size | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|--|----------------|-------------|-------------|------|----------------|-----------------|-------------------|-----------|
| A-3859 | Push-pull 10,000 ohm plates to 70,000 ohm crystal cutter OR 4 ohm voice coil | 30 ma. ea. 1/2 | 5 | 3/4" x 3/4" | A | 2" | 3 1/4" x 1 3/4" | 1.0 | \$4.26 |



STANCOR PAGE 5

POWER TRANSFORMERS



COMBINATION PLATE AND FILAMENT SUPPLY

POWER TRANSFORMERS TO PROVIDE APPROXIMATELY 260 VOLTS D.C. TO CONDENSER INPUT FILTER

| Type and Part No. | Plate Supply A.C. Volts | D.C. Ma. | Rectifier Volts | Fil. Amps. | Other Volts | Windings Amps. | Base Area | Overall Height | Mtg. Centers | Shpg. Wt. in Lbs. | Net Price |
|-------------------|-------------------------|----------|-----------------|------------|-------------|----------------|-----------------|----------------|-------------------|-------------------|-----------|
| PC8401 | 235-0-235 | 40 | 5.0 | 2.0 | 6.3 CT | 2.0 | 2 5/8" x 2 5/8" | 3 1/16" | 2" x 1 3/16" | 2.2 | \$ 5.53 |
| PM8401 | | | | | | | 2 1/2" x 3" | 2 5/8" | 2" x 2 1/2" | | 5.77 |
| PC8402 | 240-0-240 | 55 | 5.0 | 2.0 | 6.3 CT | 2.0 | 2 5/8" x 2 3/4" | 3 1/16" | 2" x 1 11/16" | 2.4 | 5.49 |
| PM8402 | | | | | | | 2 1/2" x 3" | 2 3/4" | 2" x 2 1/2" | | 5.64 |
| PC8403 | 250-0-250 | 70 | 5.0 | 2.0 | 6.3 CT | 2.5 | 2 5/8" x 3 1/8" | 3 1/16" | 2" x 2 1/16" | 3.2 | 6.36 |
| PM8403 | | | | | | | 2 1/2" x 3" | 3 1/8" | 2" x 2 1/2" | | 6.36 |
| PC8404 | 260-0-260 | 90 | 5.0 | 2.0 | 6.3 CT | 3.0 | 3" x 3 1/2" | 3 5/8" | 2 1/4" x 2 1/4" | 4.0 | 7.05 |
| PM8404 | | | | | | | 2 7/8" x 3 3/8" | 3 5/8" | 2 1/2" x 2 13/16" | | 7.05 |
| PC8405 | 270-0-270 | 120 | 5.0 | 3.0 | 6.3 CT | 3.5 | 3 1/4" x 3 1/2" | 4" | 2 1/2" x 2 13/16" | 4.9 | 9.19 |
| PM8405 | | | | | | | 3 1/8" x 3 3/4" | 3 1/2" | 2 1/2" x 3 1/8" | | 9.19 |

FOR USE WITH CHOKE INPUT FILTER, OR HIGHER VOLTAGE WITH CONDENSER INPUT FILTER

| Type and Part No. | Plate Supply A.C. Volts | D.C. Ma. | Rectifier Volts | Fil. Amps. | Other Volts | Windings Amps. | Base Area | Overall Height | Mtg. Centers | Shpg. Wt. in Lbs. | Net Price |
|-------------------|-------------------------|----------|-----------------|------------|-------------|----------------|-------------------|----------------|-------------------|-------------------|-----------|
| PM8423 | 300-0-300 | 90 | 5.0 | 2.0 | 6.3 CT | 3.5 | 2 15/16" x 3 3/8" | 3 1/4" | 2 1/4" x 2 7/8" | 3.0 | \$ 8.13 |
| PC8406 | 325-0-325 | 40 | 5.0 | 2.0 | 6.3 CT | 2.0 | 2 5/8" x 2 3/4" | 3 1/16" | 2" x 1 11/16" | 2.4 | 5.76 |
| PM8406 | | | | | | | 2 1/2" x 3" | 2 3/4" | 2" x 2 1/2" | | 5.76 |
| PC8407 | 325-0-325 | 55 | 5.0 | 2.0 | 6.3 CT | 2.0 | 2 5/8" x 3 1/8" | 3 1/16" | 2" x 2 1/16" | 3.2 | 6.00 |
| PM8407 | | | | | | | 2 1/2" x 3" | 3 1/8" | 2" x 2 1/2" | | 6.00 |
| PC8422 | 325-0-325 | 50 | 5.0 | 3.0 | 6.3 CT | 5.0 | 3 1/4" x 3 7/8" | 4" | 2 1/2" x 2 1/16" | 5.8 | 9.59 |
| PM8422 | | | | | | | 3 1/8" x 3 3/4" | 3 3/4" | 2 1/2" x 3 1/8" | | 9.61 |
| PC8408 | 340-0-340 | 70 | 5.0 | 2.0 | 6.3 CT | 2.5 | 3" x 3 3/8" | 3 5/8" | 2 1/4" x 2 1/8" | 3.8 | 7.50 |
| PM8408 | | | | | | | 2 7/8" x 3 3/8" | 3 1/2" | 2 1/4" x 2 13/16" | | 7.50 |
| PC8409 | 350-0-350 | 90 | 5.0 | 2.0 | 6.3 CT | 3.0 | 3" x 3 5/8" | 3 5/8" | 2 1/4" x 2 5/8" | 4.5 | 7.92 |
| PM8409 | | | | | | | 2 7/8" x 3 3/8" | 3 3/4" | 2 1/4" x 2 13/16" | | 7.92 |
| PC8410 | 360-0-360 | 120 | 5.0 | 3.0 | 6.3 CT | 3.5 | 3 1/4" x 3 3/4" | 4" | 2 1/2" x 2 1/16" | 5.5 | 8.99 |
| PM8410 | | | | | | | 3 1/8" x 3 3/4" | 3 3/4" | 2 1/2" x 3 1/8" | | 9.36 |
| PC8411 | 375-0-375 | 150 | 5.0 | 3.0 | 6.3 CT | 4.5 | 3 5/8" x 4" | 4 1/16" | 2 3/4" x 2 13/16" | 5.8 | 12.03 |
| PM8411 | | | | | | | 3 1/2" x 4 1/2" | 3 3/8" | 2 3/4" x 3 1/16" | | 12.55 |
| PC8412 | 400-0-400 | 200 | 5.0 | 3.0 | 6.3 CT | 5.0 | 4" x 4" | 4 3/4" | 3" x 2 13/16" | 8.2 | 12.55 |
| PM8412 | | | | | | | 3 3/4" x 4 1/2" | 3 7/8" | 3" x 3 3/4" | | 12.58 |
| PC8413 | 400-0-400 | 250 | 5.0 | 4.0 | 6.3 CT | 5.0 | 4" x 4 1/2" | 4 3/4" | 3" x 3 1/16" | 10.0 | 14.35 |
| PC8414 | 600-0-600 | 200 | 5.0 | 3.0 | 6.3 | 3.0 | 4" x 4" | 4 3/4" | 3" x 2 13/16" | 8.3 | 14.76 |

POWER TRANSFORMERS FOR USE WITH 6AX5, 6X4, 6X5, OR SELENIUM RECTIFIERS

| Type and Part No. | Plate Supply A.C. Volts | D.C. Ma. | Rectifier Volts | Fil. Amps. | Other Volts | Windings Amps. | Base Area | Overall Height | Mtg. Centers | Shpg. Wt. in Lbs. | Net Price |
|-------------------|-------------------------|----------|-----------------|------------|-------------|----------------|-----------------|----------------|-------------------|-------------------|-----------|
| PS8415 | 125 1/2-wave | 15 | ... | ... | 6.3 | 0.6 | 2 3/8" x 1 3/4" | 2" | 2" | 0.7 | \$ 2.37 |
| PS8416 | 125-0-125 | 25 | ... | ... | 6.3 | 1.0 | 2 7/8" x 1 3/4" | 2 1/16" | 2 3/8" | 1.0 | 2.85 |
| *PA8421 | 125 1/2-wave | 50 | --- | --- | 6.3 | 2.0 | 3 3/4" x 2 1/2" | 2 1/4" | 3 1/8" | 1.5 | 3.84 |
| PC8417 | 220-0-220 | 50 | 6.3 | 0.6 | 25.2 | 0.5 | 2 5/8" x 2 5/8" | 3 1/16" | 2" x 1 3/16" | 2.2 | 6.41 |
| PC8418 | 230-0-230 | 50 | ... | ... | 6.3 | 2.5 | 2 5/8" x 2 5/8" | 3 1/16" | 2" x 1 3/16" | 2.2 | 4.80 |
| PM8418 | | | | | | | 2 1/2" x 3" | 2 5/8" | 2" x 2 1/2" | | 4.80 |
| PC8419 | 240-0-240 | 70 | ... | ... | 6.3 | 3.0 | 2 5/8" x 2 7/8" | 3 1/16" | 2" x 1 13/16" | 2.6 | 5.52 |
| PM8419 | | | | | | | 2 1/2" x 3" | 2 7/8" | 2" x 2 1/2" | | 5.52 |
| PC8420 | 260-0-260 | 90 | ... | ... | 6.3 | 4.0 | 3" x 3 1/2" | 3 1/2" | 2" x 2 1/4" | 3.5 | 6.42 |
| PM8420 | | | | | | | 2 7/8" x 3 3/4" | 3 1/2" | 2 1/4" x 2 13/16" | | 6.69 |

POWER TRANSFORMER (MISC.) #Primary for 117/107 Volts.

| Part No. | Plate Supply A.C. Volts | D.C. Ma. | Rectifier Filament Volts—Amperes | Other Windings Volts—Amperes | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|-------------------------|-----------|----------------------------------|-----------------------------------|------|----------------|--------------------|-------------------|-----------|
| P-8359 | 190/160-0-160/190 | 70 | --- | 6.3-0.6 | C | 3 1/8" | 2 1/2" x 2 5/8" | 2.8 | 7.55 |
| P-8173 | 250-0-250 | 10 | --- | 6.3-0.6 6.3-1.2 | C | 2 1/4" | 2 7/8" x 2 1/8" | 1.0 | \$ 4.66 |
| P-8174 | 250-0-250 | 20 | --- | 6.3-0.6 6.3-1.2 | C | 2 5/8" | 3 1/16" x 2 1/4" | 1.5 | 4.83 |
| P-6001 | 325-0-325 | 40 | 5.0 CT-2.0 | 2.5 CT-4.0 | M | 2 1/2" | 2 1/2" x 3" | 2.5 | 6.80 |
| P-6348 | 240-0-240 | 60 | --- | 6.3 CT-2.75 | M | 2 3/4" | 2 1/16" x 2 11/16" | 2.3 | 5.58 |
| P-6358 | 300-0-300 | 65 | --- | 6.3 CT-2.7 | C | 3 1/8" | 2 5/8" x 2 5/8" | 2.8 | 5.96 |
| P-4047 | 350-0-350 | 70 | 5.0-3.0 | 2.5 CT-9.0 6.3-3.0 | C | 4" | 3 1/4" x 3" | 3.8 | 8.46 |
| P-8175 | 300-0-300 | 70 | 5.0-3.0 | 6.3 CT-3.0 | C | 3 1/2" | 2 7/8" x 3 1/2" | 4.0 | 7.85 |
| P-6007 | 400-0-400 | 110 | 5.0 CT-3.0 | 2.5 CT-15.0 2.5 CT-3.5 | M | 3 3/8" | 3 1/8" x 3 3/4" | 5.4 | 11.38 |
| P-8176 | 350-0-350 | 110 | 5.0-2.0 | 6.3 CT-3.0 6.3 CT-3.0 | C | 3 7/8" | 3 1/16" x 3 7/8" | 5.5 | 10.56 |
| P-8177 | 300-0-300 | 120 | 5.0-3.0 | 6.3 CT-5.0 | C | 3 7/8" | 3 1/16" x 3 3/4" | 5.8 | 9.59 |
| P-6008 | 375-0-375 | 180 | 5.0 CT-3.0 | 2.5 CT-6.0 6.3 CT-3.3 | M | 3 3/8" | 3 1/2" x 4 1/2" | 6.2 | 11.87 |
| P-8360 | 437.5-0-437.5 | 185 | 5.0-3.0 | 6.3-3.0 6.3-4.0 | C | 4 3/4" | 4" x 4 1/2" | 9.5 | 16.00 |
| P-6143 | 410-0-440 | 130 | 5.0-3.0 | 6.3 CT-3.5 | C | 4 1/16" | 3 5/8" x 3 7/8" | 7.0 | 11.29 |
| P-4004# | 400-0-400 80 v. Bias | 175 | 5.0 CT-3.0 | 2.5-1.75 6.3 CT-2.5 6.3 CT-2.5 | C | 4 3/4" | 4" x 3 7/8" | 8.3 | 14.53 |
| P-5059# | 337.5-0-337.5 | 200 | 5.0 CT-3.0 | 6.3 CT-5.0 | C | 4 3/4" | 4" x 4 1/2" | 9.6 | 13.33 |
| P-6315 | 370-0-370 | 275 | 5.0 CT-3.0 | 6.3 CT-7.0 | M | 4 1/4" | 3 3/4" x 4 1/2" | 9.3 | 13.96 |
| P-8307 | 870-0-870 410-0-410 | 150 60 | 5.0-2.0 | 6.3-3.5 | TD | 4 1/4" | 3 1/16" x 4 7/16" | 5.9 | 12.40 |



PC



KA



L



PM



N



Q



P5



TD



VE



POWER-MODULATION

SELENIUM RECTIFIER TRANSFORMERS (117 volt, 50-60 cycle input)

| Part No. | Rectifier Circuit | Range of Applied A.C. Volts Under Load (Approx.) | Output Resistive or Inductive Load Max. D.C. | | Output Capacitive Load* Max. D.C. | | Mtg. Type | Overall Dimensions | | | Shpg. Wt. (lbs.) | Net Price |
|----------------|-------------------|--|--|-------|-----------------------------------|-------|-----------|--------------------|---------|--------|------------------|----------------|
| | | | Volts | Amps. | Volts | Amps. | | H | W | D | | |
| RT-201 | C. T. Bridge | 11.7 to 29.4 | 11.2 | 2.0 | 13.8 ¹ | 2.0 | B | 3 1/8" | 2 1/2" | 3 3/8" | 2.5 | \$ 5.07 |
| | | 11.1 to 28.5 | 23.0 | 1.25 | 30.0 ² | 1.25 | B | 3 1/8" | 2 1/2" | 3 3/8" | 2.5 | |
| RT-202 | C. T. Bridge | 12.0 to 29.8 | 11.1 | 4.0 | 14.7 ³ | 4.0 | B | 3 3/8" | 2 7/8" | 3 1/2" | 3.8 | 6.89 |
| | | 12.0 to 29.8 | 24.3 | 2.0 | 33.0 ¹ | 2.0 | B | 3 3/8" | 2 7/8" | 3 1/2" | 3.8 | |
| RT-204 | C. T. Bridge | 11.7 to 29.2 | 12.0 | 8.0 | 14.5 ⁴ | 8.0 | B | 4" | 3 1/4" | 4 1/8" | 6.1 | 8.91 |
| | | 11.6 to 29.2 | 24.0 | 4.0 | 32.4 ³ | 4.0 | B | 4" | 3 1/4" | 4 1/8" | 6.1 | |
| RT-206 | C. T. Bridge | 12.0 to 29.7 | 11.5 | 12.0 | 14.4 ⁵ | 12.0 | B | 4 1/4" | 3 7/16" | 5 1/8" | 9.1 | 12.11 |
| | | 12.0 to 29.7 | 24.0 | 6.0 | 32.0 ⁸ | 6.0 | B | 4 1/4" | 3 7/16" | 5 1/8" | 9.1 | |
| RT-208 | C. T. Bridge | 12.1 to 29.2 | 11.4 | 15.0 | 14.8 ⁷ | 15.0 | B | 4 3/8" | 3 3/4" | 5 1/4" | 12.6 | 15.26 |
| | | 12.1 to 29.2 | 23.7 | 8.0 | 32.5 ⁴ | 8.0 | B | 4 3/8" | 3 3/4" | 5 1/4" | 12.6 | |
| RT-2012 | C. T. Bridge | 12.0 to 29.0 | 11.4 | 22.5 | 14.3 ⁸ | 22.5 | B | 5 3/8" | 4 1/4" | 6 3/8" | 20.5 | 22.50 |
| | | 12.0 to 29.0 | 23.5 | 12.0 | 33.0 ⁶ | 12.0 | B | 5 3/8" | 4 1/4" | 6 3/8" | 20.5 | |
| RT-408 | Bridge | 25.0 to 53.5 | 44.0 | 8.0 | 63.0 ⁴ | 8.0 | B | 5 3/8" | 4 1/4" | 7 1/2" | 26.5 | 33.28 |
| RT-4012 | Bridge | 25.0 to 53.0 | 43.5 | 12.0 | 60.0 ⁶ | 12.0 | B | 7 1/8" | 5 5/8" | 6 1/4" | 33.5 | |

SILICON RECTIFIER TRANSFORMERS (117 v., 50-60 cycle input)

| Catalog No. | Secondary No. 1 Volts | Secondary No. 1 DCMA† | Secondary No. 2 Volts | Secondary No. 2 Amps | Secondary No. 3 Volts | Secondary No. 3 Amps | Mtg. Type | Height | Base Area | Mtg. Ctrs. | Net Wt. in Lbs. | Net Price |
|----------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------|--------|-----------------|------------------|-----------------|----------------|
| RP-400 | 400 CT | 400 | 6.3 | 3.0 | 6.3 | 3.0 | C | 4 1/8" | 3 5/8" x 4 5/8" | 2 3/4" x 3 1/16" | 7.1 | \$13.38 |
| RP-600 | 300 CT | 600 | 6.3 | 2.5 | 6.3 | 2.5 | C | 4 1/8" | 3 5/8" x 4 5/8" | 2 3/4" x 3 1/16" | 7.1 | 13.35 |
| RP-800 | 200 CT | 800 | 6.3 | 2.0 | 6.3 | 2.0 | C | 4 1/8" | 3 5/8" x 4 5/8" | 2 3/4" x 3 1/16" | 6.9 | 13.31 |
| RP-1600 | 100 CT | 1600 | 6.3 | 1.5 | 6.3 | 1.5 | C | 4 1/8" | 3 5/8" x 4 5/8" | 2 3/4" x 3 1/16" | 6.0 | 11.82 |
| RP-2000 | 80 CT | 2000 | 6.3 | 1.5 | 6.3 | 1.5 | C | 4 1/8" | 3 5/8" x 4 5/8" | 2 3/4" x 3 1/16" | 6.5 | 12.87 |
| RP-2500 | 60 CT | 2500 | 6.3 | 1.5 | 6.3 | 1.5 | C | 4 1/8" | 3 5/8" x 4 5/8" | 2 3/4" x 3 1/16" | 6.0 | 12.91 |

Note: For MIL-T-27A equivalents, See Stancor page 14.

RECTIFIER TRANSFORMERS (Primary 117 volt, 60 cycle)

| Part No. | Secondary | Rectified Circuit | | Mtg. Type | Mtg. Ctrs. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|-----------------------------|-------------------|-----------------|-----------|-----------------|----------------|-----------------|-------------------|----------------|
| | | 1/2 Wave | Full-wave Brdg. | | | | | | |
| P-8193 | 17-18 V. A.C. at 3A. R.M.S. | 6-7 V. D.C. | 13-14 V. D.C. | BV | 2 1/2" x 2 5/8" | 3 3/4" | 3 1/8" x 3 5/8" | 5 1/2" | \$ 8.61 |
| P-8194 | 36 V. A.C. at 3A. R.M.S. | 13 V. D.C. | 26 V. D.C. | BV | 3" x 3" | 4 1/2" | 3 3/4" x 4" | 9 1/2" | 14.64 |

AUTOMATION CONTROL TRANSFORMERS (Primary 115-230 volts, 50-60 cycle)

| Part No. | Secondary | | V. A. Rating | Mtg. Type | Mtg. Ctrs. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|----------------|---------------|--------------|-----------|-----------------|----------------|-----------------|-------------------|----------------|
| | Parallel | Series | | | | | | | |
| P-6375 | 6 V. at 2 A. | 12 V. at 1 A. | 12 | J | 2 3/8" | 2 3/8" | 2 7/8" x 2" | 3/4" | \$ 3.34 |
| P-6376 | 6 V. at 4 A. | 12 V. at 2 A. | 24 | J | 2 7/8" | 3 5/8" | 3 3/4" x 2 1/2" | 1 1/2" | 3.79 |
| P-6377 | 12 V. at 4 A. | 24 V. at 2 A. | 48 | J | 3 1/8" | 3 1/8" | 3 5/8" x 2 3/8" | 2" | 4.79 |
| P-6378 | 12 V. at 8 A. | 24 V. at 4 A. | 96 | BV | 2 3/8" x 2 1/4" | 3 3/8" | 3 7/8" x 3" | 3 1/2" | 7.72 |
| P-6379 | 12 V. at 16 A. | 24 V. at 8 A. | 192 | BV | 2 7/8" x 2 3/4" | 4 1/8" | 3 1/2" x 3 1/2" | 8" | 13.33 |

*Transformers and Rectifiers will have a higher temperature rise when operating with a capacitive load as compared to a resistive or inductive load for a given load current. If this is undesirable extra ventilation should be provided or else the output current from the rectifier should be derated by approximately 20% from the values shown.

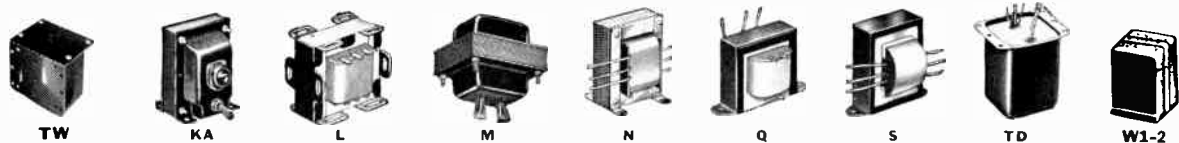
RT Footnotes: MFD. Filter Capacitor: 1. 1,000 2. 500 3. 2,000 4. 4,000 5. 6,000 6. 3,000 7. 7,500 8. 12,000.

PLATE MODULATION

| Part No. | Impedance in Ohms | Max. Ma. D.C./Tube Pri. Sec. | | Typical Output Tubes | Class | Audio Watts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|---|------------------------------|------|--|-------------|-------------|------|----------------|------------------|-------------------|---------------|
| | | Pri. | Sec. | | | | | | | | |
| A-3812 | Pri—10,000 CT Sec—4,000 | 32 | 50 | Sgl.—37, 38, 41, 1G5, 6K6 Sgl.—19, 1G6, 1J6, 6E6, 6G6, 6Z7 | A B | 5 | A | 1 5/8" | 2 3/8" x 1 1/2" | 0.7 | \$2.43 |
| A-3871 | Pri—4,500 Sec—8,500 #Secondary used as primary. | 60 | 50 | P.P.—30, 49, 1H4 Sgl.—6L6, HY69 #Sgl.—6B5, 6F6, 6N6 | B A A | 10 | TD | 2 1/16" | 2 3/4" x 2 3/16" | 1.4 | 4.43 |
| A-3845 | Pri—10,000 CT Sec—8,000/6,500/5,000/3,000 | 100 | 100 | Sgl. 53, 79, 6A6, 6N7, 6Y7 P.P.—42, 2A5, 6F6, 6V6 | B AB2 | 25 | C | 3 1/8" | 2 5/8" x 2 3/4" | 2.8 | 5.84 |
| A-3808 | Pri—3,800/3,300 CT Sec—10,000/7,500/5,000/4,000 | 260 | 170 | P.P.—6L6, 807, HY61, RK41 P.P. Par—6L6 | AB2 AB1 | 60 | D | 4 3/4" | 4" x 2 7/8" | 7.7 | 15.12 |
| A-3829 | Pri—9,000/6,900 CT Sec—6,250/5,000/4,000/3,300 | 250 | 300 | P.P.—RK12, HY25, 35T, HY40Z, T40, TZ40, 100TL, HK354, 756, 809, 830B | B | 175 | D | 4 3/4" | 4" x 6 1/8" | 11.4 | 16.82 |

POLY-PEDANCE MODULATION MULTI-TAPPED UNITS TO PROPERLY MATCH THE OUTPUT OF THE MODULATOR STAGE TO THE MODULATED LOAD. WILL MATCH ALL COMMON IMPEDANCES OF CLASS "B" MODULATOR (2,000 to 20,000 OHMS) TO CLASS "C" LOAD IMPEDANCES OF 2,000 TO 20,000 OHMS.

| Part No. | Max. Watts | Max. D.C. | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|------------|----------------------------|------|----------------|------------------|-------------------|----------------|
| A-3891 | 15 | Pri—100 ma. Sec—100 ma. | D | 3 1/8" | 2 5/8" x 2 3/8" | 2.5 | \$ 9.60 |
| A-3892 | 30 | Pri—150 ma. Sec—150 ma. | D | 4" | 3 1/4" x 3 5/8" | 4.3 | 12.16 |
| A-3893 | 60 | Pri—180 ma. Sec—180 ma. | D | 4" | 3 1/4" x 4 1/8" | 6.2 | 13.16 |
| A-3894 | 125 | Pri—225 ma. Sec—225 ma. | D | 4 3/4" | 4" x 4 5/8" | 9.4 | 16.58 |
| A-3898 | 300 | Pri—260 ma. Sec—260 ma. | FS | 8 1/8" | 5 3/4" x 7 5/8" | 37.9 | 97.65 |
| A-3899 | 600 | Pri—500 ma. Sec—500 ma. | FS | 9 1/2" | 7 1/4" x 10 1/4" | 70.0 | 119.20 |



FILAMENT TRANSFORMERS



STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

FILAMENT TRANSFORMERS WITH SINGLE SECONDARY

| Part No. | Volts | Secondary Amperes | R.M.S. V. Insul. | Primary Volts* | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|----------------------------|-------------------|------------------|----------------|------|----------------|-------------------|-------------------|-----------|
| P-4026 | 2.5 | 1.5 | 2,500 | 117 | A | 1 5/8" | 2 7/8" x 1 1/2" | 0.7 | \$2.76 |
| P-4082 | 2.5 CT | 2.5 | 2,500 | 117/107 | TD | 2 1/16" | 2 3/4" x 2 3/16" | 1.5 | 4.83 |
| P-6133 | 2.5 CT | 5.0 | 7,500 | 117 | S | 2 1/16" | 3 1/16" x 2 1/2" | 1.5 | 3.80 |
| P-4083 | 2.5 CT | 6.0 | 2,500 | 117/107 | C | 3 3/16" | 2 5/8" x 2 3/8" | 2.2 | 5.06 |
| P-3024 | 2.5 CT | 10.0 | 2,500 | 117/107 | C | 3 3/16" | 2 5/8" x 2 5/8" | 2.5 | 5.00 |
| P-6454 | 2.5 CT | 10.0 | 7,500 | 107 117 | S | 3 1/4" | 3 3/4" x 2 1/2" | 2.5 | 4.00 |
| P-3060 | 2.5 CT | 10.0 | 10,000 | 117 | B | 3 1/2" | 2 7/8" x 2 1/2" | 2.5 | 6.72 |
| P-3026 | 5.0 CT | 3.0 | 2,500 | 117/107 | C | 3 3/16" | 2 5/8" x 2 5/8" | 2.4 | 5.00 |
| P-4088 | 5.0 CT | 3.0 | 2,500 | 117 | B | 3 1/8" | 2 1/2" x 2 1/2" | 1.8 | 4.25 |
| P-6467 | 5.0 CT | 3.0 | 2,500 | 117 | A | 2 | 3 5/16" x 2" | 1.4 | 3.20 |
| P-6455 | 5.0 CT | 6.0 | 2,000 | 107 117 | S | 2 5/8" | 3 1/16" x 2 1/4" | 2.0 | 4.33 |
| P-3062 | 5.0 CT | 6.0 | 2,500 | 117 | B | 3 1/8" | 2 1/2" x 2 1/2" | 2.3 | 5.14 |
| P-5000 | 5.0 CT | 6.0 | 2,500 | 117/107 | C | 3 1/16" | 2 5/8" x 2 7/8" | 3.1 | 5.80 |
| P-6135 | 5.0 CT | 10.0 | 2,500 | 117 | N | 3 1/2" | 2 1/2" x 2 1/2" | 3.0 | 5.60 |
| P-4086 | 5.0 CT | 14.0 | 10,000 | 117/107 | FA | 5 1/8" | 4 1/4" x 8 1/2" | 12.3 | 22.88 |
| P-6432 | 5.0 CT | 21.0 | 2500 | 117* | BV | 3 5/8" | 2 3/4" x 2 5/8" | 5.0 | 8.33 |
| P-6433 | 5.0 CT | 15.0 | 2500 | 117* | BV | 3 1/2" | 2 1/2" x 2 3/8" | 3 1/2 | 7.15 |
| P-6302 | 5.0 CT | 22.0 | 10,000 | 117/107 | FA | 5 1/8" | 4 1/4" x 8 1/2" | 13.5 | 32.12 |
| P-6492 | 5.0 CT | 30.0 | 2,500 | 117 | C | 4 3/4" | 3 3/4" x 3 7/8" | 7.5 | 10.94 |
| P-6468 | 5.0 CT | 30.0 | 2,500 | 117/107 | D | 4 5/16" | 3 5/16" x 3 7/8" | 4.3 | 12.79 |
| P-6305 | 5.0 CT | 30.0 | 10,000 | 117/107 | FB | 5 1/8" | 4 1/4" x 10" | 18.3 | 30.96 |
| P-6137 | 5.25 CT | 13.0 | 2,500 | 117 | N | 3 7/8" | 3 1/8" x 3 1/4" | 5.2 | 8.19 |
| P-6463 | †6.0 CT, 6.5 CT, or 7.0 CT | 13.0 | 2,000 | 117 | B | 3 3/8" | 2 13/16" x 3 3/8" | 4.5 | 7.85 |
| P-6465 | 6.3 CT | 0.6 | 1,500 | 117 | A | 1 3/8" | 2 3/8" x 1 3/8" | 0.5 | 1.98 |
| P-6134 | 6.3 CT | 1.2 | 3,000 | 117 | A | 1 5/8" | 2 7/8" x 1 5/8" | 0.8 | 2.10 |
| P-8190 | 6.3 | 1.2 | 5,000 | 117 | A | 2 | 3 1/4" x 1 3/4" | 1.0 | 2.76 |
| P-8191 | 6.3 | 1.2 | 5,000 | 6.3 | A | 2 | 3 1/4" x 1 3/4" | 1.0 | 2.97 |
| P-5014 | 6.3 CT | 3.0 | 2,500 | 117 | B | 3 1/8" | 2 1/2" x 2 1/2" | 2.0 | 4.67 |
| P-6466 | 6.3 CT | 3.0 | 2,500 | 117 | A | 2 | 3 5/16" x 2" | 1.4 | 3.39 |
| P-6462 | 6.3 | 3.0 | 7,000 | 107/117 | A | 2 5/8" | 4" x 2 5/8" | 2.0 | 5.60 |
| P-4019 | 6.3 CT | 4.0 | 2,500 | 117/107 | C | 3 3/16" | 2 5/8" x 2 5/8" | 2.7 | 5.04 |
| P-6456 | 6.3 CT | 6.0 | 2,000 | 107/117 | A | 2 1/4" | 3 3/4" x 2 1/2" | 2.0 | 3.82 |
| P-3064 | 6.3 CT | 6.0 | 2,500 | 117 | B | 3 3/8" | 2 1/2" x 2 1/4" | 2.4 | 5.42 |
| P-4089 | 6.3 CT | 6.0 | 2,500 | 117/107 | C | 3 5/8" | 3" x 3 1/8" | 3.5 | 6.62 |
| P-6308 | 6.3 CT | 10.0 | 2,500 | 117/107 | N | 3 1/2" | 2 7/8" x 2 3/4" | 3.4 | 6.59 |
| P-6464 | 6.3 CT | 10.0 | 1,500 | 117 | C | 3 9/16" | 3" x 3 1/4" | 3.5 | 6.94 |
| P-6309 | 6.3 CT | 20.0 | 2,500 | 117/107 | N | 4 5/8" | 3 3/4" x 3" | 6.7 | 10.21 |
| P-5015 | 7.5 CT | 4.0 | 2,500 | 117 | B | 3 1/8" | 2 1/2" x 2 7/8" | 2.7 | 4.75 |
| P-6457 | 7.5 CT | 5.0 | 2,000 | 107/117 | C | 4 1/2" | 3 3/4" x 4" | 6.0 | 12.69 |
| P-4091 | 7.5 CT | 5.0 | 2,500 | 117/107 | C | 3 5/8" | 3" x 3" | 3.4 | 6.70 |
| P-6138 | 7.5 CT | 8.0 | 2,500 | 117 | N | 3 7/8" | 3 1/8" x 2 7/8" | 4.7 | 7.39 |
| P-5016 | 10.0 CT | 4.0 | 2,500 | 117 | B | 3 1/2" | 2 7/8" x 2 5/8" | 3.3 | 6.05 |
| P-6458 | 10.0 CT | 5.0 | 2,000 | 107 117 | N | 3 1/16" | 2 1/2" x 2 7/8" | 3.0 | 4.70 |
| P-4096 | 10.0 CT | 5.0 | 2,500 | 117/107 | C | 4" | 3 1/4" x 3 1/8" | 4.0 | 7.22 |
| P-6139 | 10.0 CT | 8.0 | 2,500 | 117 | N | 3 7/8" | 3 1/2" x 3 1/8" | 4.9 | 7.50 |
| P-4097 | 10.0 CT | 8.0 | 2,500 | 117/107 | C | 4" | 3 1/4" x 3 5/8" | 5.2 | 7.82 |
| P-6461 | 10.0 CT | 10.0 | 2,000 | 117* | C | 3 7/8" | 3 1/2" x 3 5/8" | 5.0 | 8.79 |
| P-5002 | 10.0 CT | 12.0 | 7,500 | 117/107 | FA | 5 1/8" | 4 1/4" x 8 1/2" | 14.7 | 24.85 |
| P-3020 | 11.0 CT | 10.0 | 2,500 | 117/107 | C | 4 3/4" | 4" x 3 1/2" | 7.7 | 9.96 |
| P-8130 | 12.6 CT | 2.0 | 1,500 | 117 | A | 2" | 3 1/4" x 2" | 1.4 | 3.43 |
| P-8358 | 12.6 CT | 3.0 | 1,500 | 117 | A | 2 1/4" | 3 5/8" x 2 1/8" | 1.6 | 4.15 |
| P-6469 | 25.2 | 1.0 | 1,500 | 117 | A | 2" | 3 1/4" x 2" | 1.4 | 3.27 |
| P-8357 | 25.2 CT | 3.0 | 1,500 | 117 | A | 2 5/8" | 4" x 2 1/4" | 3 9/16" | 5.10 |

FILAMENT TRANSFORMERS WITH MULTIPLE SECONDARY

| | | | | | | | | | |
|--------|---|--|--|---------|---|--------|-----------------|-----|--------|
| P-6144 | 2.5 VCT at 3.5 A; 5.0 VCT at 3.0 A; 2,500 6.3 VCT at 3.0 A | | | 117 | C | 3 5/8" | 3" x 3 1/8" | 3.7 | \$7.80 |
| P-6338 | 2.5 V at 3.0 A; 5.0 V at 3.0 A; 2,500 5.0 VCT at 2.0 A; 6.3 VCT at 3.0 A | | | 117 | N | 3 1/2" | 2 7/8" x 2 3/4" | 3.4 | 7.59 |
| P-5009 | 5.0 VCT at 3.0 A; 6.3 VCT at 6.0 A 2,500 | | | 117 107 | C | 4" | 3 1/4" x 3 1/4" | 4.5 | 8.90 |
| P-5008 | 5.0 VCT at 4.0 A; 6.3 VCT at 3.6 A 2,500 | | | 117/107 | C | 3 5/8" | 3" x 3 1/4" | 3.8 | 7.83 |
| P-4022 | 5.0 VCT at 6.0 A; 6.3 VCT at 6.0 A 2,500 | | | 117 107 | C | 4" | 3 1/4" x 3 3/8" | 4.8 | 8.46 |
| P-6333 | 5.0 V at 3.0 A; 5.0 V at 3.0 A; 2,500 6.3 VCT at 4.0 A; 7.5 V 6.3 VCT at 3.0 A | | | 117 | B | 3 1/2" | 2 7/8" x 3 7/8" | 4.7 | 9.43 |
| P-6428 | 6.3 V at 1.75 A; 6.3 V at 1.75 A; 2,500 6.3 V at 1.75 A; 6.3 VCT at 1.75 A | | | 117 | C | 3 1/8" | 2 1/2" x 3" | 3.0 | 6.20 |
| P-6429 | 6.3 V at 3.5 A; 6.3 V at 3.5 A; 2,500 6.3 V at 3.5 A; 6.3 VCT at 3.5 A | | | 117 | C | 3 7/8" | 3 1/8" x 3 1/2" | 4.8 | 8.43 |
| P-6430 | 6.3 VCT at 3.0 A; 6.3 VCT at 3.0 A 2,500 | | | 117 | C | 3 1/8" | 2 1/2" x 3 7/8" | 2.8 | 5.50 |
| P-6431 | 6.3 VCT at 6.0 A; 6.3 VCT at 6.0 A 2,500 | | | 117 | C | 3 7/8" | 3 1/4" x 3 1/2" | 4.8 | 8.34 |

‡All primary windings for 60 cycle operation.

*Primary 50 60 cycles.

†By means of primary tap: For Eimac 4CX1000A tube.

STANCOR PAGE 9



PLATE TRANSFORMERS

STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

PLATE TRANSFORMERS

| Part No. | D.C. Volts | Sec. A.C. Volts at Plate | D.C. CCS | Ma. ICAS | Pri. Volts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|------------------|--------------------------|----------|----------|------------|------|--------------------|--|-------------------|----------------|
| P-8040 | 400 40 | 500/40-0-500 | 300 | 375 | 115 | C | 4 $\frac{3}{4}$ " | 4" x 4 $\frac{1}{2}$ " | 9.8 | \$13.49 |
| P-8041 | 500 400 40 | 615/520/40-0-520/615 | 250 | 310 | 115 | C | 4 $\frac{3}{4}$ " | 4" x 5 $\frac{1}{8}$ " | 13.6 | 16.02 |
| P-8042 | 600 400 40 | 770/510/40-0-510/770 | 300 | 375 | 115 | C | 4 $\frac{3}{4}$ " | 4" x 6 $\frac{3}{8}$ " | 18.0 | 21.49 |
| P-8043 | 750 600 40 | 950/750/40-0-750/950 | 300 | 375 | 115 | FS | 7 $\frac{7}{8}$ " | 6 $\frac{1}{8}$ " x 8 $\frac{1}{2}$ " | 29.0 | 79.18 |
| P-8025 | 1000 750 | 1230/940-0-940/1230 | 400 | 500 | 115 | FS | 7 $\frac{7}{8}$ " | 6 $\frac{1}{8}$ " x 9 $\frac{1}{2}$ " | 35.0 | 89.14 |
| P-8026 | 1250 1000 | 1475/1175-0-1175/1475 | 300 | 375 | 115 | FS | 7 $\frac{3}{4}$ " | 7 $\frac{3}{8}$ " x 8 $\frac{1}{4}$ " | 36.5 | 73.89 |
| P-8027 | 1250 1000 | 1510/1210-0-1210/1510 | 500 | 625 | 115 | FS | 8" | 5 $\frac{5}{8}$ " x 8 $\frac{1}{4}$ " | 45.2 | 75.89 |
| P-8028 | 1500 1250 | 1740/1460-0-1460/1740 | 300 | 375 | 115 | FS | 8 $\frac{1}{8}$ " | 5 $\frac{5}{8}$ " x 7 $\frac{3}{8}$ " | 38.7 | 82.62 |
| P-8029 | 1500 1250 | 1775/1500-0-1500/1775 | 500 | 625 | 115-230 | FS | 9 $\frac{1}{4}$ " | 7 $\frac{1}{4}$ " x 8 $\frac{3}{8}$ " | 65.0 | 90.58 |
| P-8030 | 1750 1500 | 2100/1800-0-1800/2100 | 300 | 375 | 115 | FS | 7 $\frac{3}{4}$ " | 7 $\frac{3}{8}$ " x 9" | 45.8 | 71.20 |
| P-8031 | 1750 1500 | 2075/1775-0-1775/2075 | 500 | 625 | 115-230 | FS | 10 $\frac{1}{2}$ " | 7 $\frac{1}{4}$ " x 8 $\frac{3}{8}$ " | 65.5 | 86.63 |
| P-8032 | 2000 1750 | 2400/2100-0-2100/2400 | 300 | 375 | 115 | FS | 7 $\frac{3}{4}$ " | 7 $\frac{3}{8}$ " x 9 $\frac{1}{4}$ " | 46.0 | 79.59 |
| P-8033 | 2000 1750 | 2375/2065-0-2065/2375 | 500 | 625 | 115-230 | FS | 11 $\frac{1}{4}$ " | 7 $\frac{3}{8}$ " x 9 $\frac{1}{2}$ " | 77.0 | 103.85 |
| P-8034 | 2500 2000 | 2900/2385-0-2385/2900 | 300 | 375 | 115-230 | FS | 11 $\frac{1}{4}$ " | 7 $\frac{3}{8}$ " x 8 $\frac{3}{4}$ " | 62.8 | 102.17 |
| P-8035 | 2500 2000 | 2950/2375-0-2375/2950 | 500 | 575 | 115-230 | FS | 11 $\frac{1}{4}$ " | 7 $\frac{3}{8}$ " x 10 $\frac{1}{4}$ " | 80.0 | 155.37 |

PLATE TRANSFORMERS

No exposed terminals. Insulated leads provide protected routing to circuits. Simplified design offers ease of mounting and neat, convenient circuit wiring. No difficult cutouts needed.

Each of these units is "all transformer," taking a minimum of chassis space. No bulky casing or protruding, "hot" terminals to increase mounting area.

D.C. output rated CCS at load terminals of single-section reactor-input filter, ICAS with single-section capacitor-input filter. Primaries for 117 volts, 60 cycles.

| Type Part No. | Secondary A.C. Volts | D.C. Output Volts | Ma. | Type Filter | Rectifier | Net Price |
|----------------|----------------------|-------------------|-----|-----------------|-----------|----------------|
| PC8301 | 415-0-415 | 300 | 200 | Reactor Input | 5U4G | \$ 8.03 |
| | | 425 | 160 | Capacitor Input | 5U4G | |
| PC8302 | 515-0-515 | 385 | 235 | Reactor Input | 5U4G | 10.52 |
| | | 500 | 200 | Capacitor Input | 5R4GY | |
| PC8303 | 665-0-665 | 500 | 250 | Reactor Input | 5R4GY | 13.36 |
| | | 750 | 200 | Capacitor Input | 5R4GY | |
| PC8304 | 750-0-750 | 600 | 265 | Reactor Input | 2-5R4GY | 15.05 |
| | | 850 | 200 | Capacitor Input | 5R4GY | |
| PC8305 | 920-0-920 | 750 | 250 | Reactor Input | 2-5R4GY | 15.66 |
| | | 1000 | 200 | Capacitor Input | 5R4GY | |
| PC8306* | 920-0-920 | 750 | 150 | Reactor Input | 5R4GY | 15.46 |
| | | 1100 | 125 | Capacitor Input | 5R4GY | |
| | 500-0-500 | 380 | 150 | Reactor Input | 5U4G | 15.46 |
| | | 550 | 125 | Capacitor Input | 5U4G | |

D.C. output rated at load terminals of single-section, reactor-input filter with full-wave mercury-vapor rectification. Primaries for 117 volts, 60 cycles

| Type and Part No. | Secondary A.C. Volts | D.C. Volts | CCS | D.C. Ma. | ICAS | Net Price |
|-------------------|----------------------|------------|-----|----------|----------------|-----------|
| PT8311 | 1200-0-1200 | 1000 | 225 | 280 | \$17.05 | |
| PT8312 | 1200-0-1200 | 1000 | 325 | 405 | 29.83 | |
| PT8313 | 1475-0-1475 | 1250 | 250 | 310 | 26.62 | |
| PT8314 | 1790-0-1790 | 1500 | 225 | 280 | 30.72 | |
| PT8315 | 2065-0-2065 | 1750 | 200 | 250 | 30.99 | |

*Tapped for use with dual rectifier-filter systems to deliver two rated outputs simultaneously.

BIAS SUPPLY TRANSFORMERS

| Part No. | High Voltage Supply A.C. Volts at D.C. Milliamps. | Rectifier Fil. Volts—Amperes | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|---------------|---|------------------------------|------|--------------------|---------------------------------------|-------------------|----------------|
| P-6317 | 200/170/130/90/0/90/130/170/200 @ 200 ma. | 5.0 3.0 | CD | 4" | 3 $\frac{1}{4}$ " x 3 $\frac{3}{8}$ " | 4.9 | \$11.46 |
| P-6318 | 450/400/350/250/0/250/350/400/450 @ 200 ma. | 5.0 3.0 | CD | 4 $\frac{1}{16}$ " | 3 $\frac{5}{8}$ " x 4 $\frac{1}{4}$ " | 7.0 | 13.64 |

TUBE CHECKER MULTI-TAPPED FILAMENT TRANSFORMER

| Part No. | Secondary Volts | Primary Volts | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|-----------------|---|---------------|------|-------------------|-----------|-------------------|----------------|
| P-1834-3 | 1.1/ 1.4/ 1.5/ 2.0/ 2.5/ 3.0/ 3.3/ 5.0/ 6.3/ 7.0/ 7.5/ 12/ 25/ 30/ 35/ 50/ 70/ 85/ 110/ 117 | 125/115/105 | A | 2 $\frac{5}{8}$ " | 4" x 2" | 2.4 | \$10.12 |

All Primary Windings for 60 cycle operation. †Designates part number to be removed from next catalog.
‡Output changed by means of tap on primary winding. Rating is for a single section choke input filter using a 6 mfd. condenser.

STANCOR PAGE 10

ISOLATION AND AUTOFORMERS

STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

STRAIGHT ISOLATION—125/115/105 VOLTS TO 115 VOLTS.†

| Part No. | Wattage | Primary# | Secondary | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|---------|-------------|-----------|------|----------------|------------------|-------------------|-----------|
| P-6160 | 100 | 125/115/105 | 115 | KA | 4 3/8" | 4" x 3 3/8" | 7.0 | \$14.48 |
| P-6371 | 175 | 117 | 117 | TE | 5 1/16" | 4 9/16" x 5 1/2" | 9.0 | 19.34 |
| P-6161 | 250 | 125/115/105 | 115 | KA | 4 3/8" | 4" x 5 3/8" | 14.2 | 21.40 |
| P-6298 | 500 | 125/115/105 | 115 | FK | 7 3/8" | 6 1/8" x 7 1/2" | 28.0 | 43.13 |
| P-6125 | 1000 | 125/115/105 | 115 | FK | 7 3/8" | 5 3/8" x 7 3/8" | 34.8 | 60.99 |
| P-6123 | 1500 | 125/115/105 | 115 | FK | 7 3/8" | 5 3/8" x 9" | 49.8 | 73.59 |

STEP-DOWN ISOLATION—250/230/210 VOLTS TO 115 VOLTS.†

| Part No. | Wattage | Primary# | Secondary | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|---------|-------------|-----------|------|----------------|-----------------|-------------------|-----------|
| P-6383 | 100 | 250/230/210 | 115 | KA | 4 3/8" | 4" x 3 3/8" | 7.3 | \$14.63 |
| P-6385 | 250 | 250/230/210 | 115 | KA | 4 3/8" | 4" x 5 3/8" | 14.2 | 23.82 |
| P-6387 | 500 | 250/230/210 | 115 | FK | 7 3/8" | 6 1/8" x 7 1/2" | 29.5 | 45.39 |
| P-6389 | 1000 | 250/230/210 | 115 | FK | 7 3/8" | 5 3/8" x 8" | 33.8 | 57.63 |
| P-6390 | 1500 | 250/230/210 | 115 | FK | 7 3/8" | 5 3/8" x 9 3/8" | 50.3 | 75.14 |

†Built-in electrostatic shields are grounded to core internally.

ISOLATION TESTING TRANSFORMER

| Part No. | Wattage | Primary# | Secondary | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|---------|----------|-------------|------|----------------|-----------------|-------------------|-----------|
| P-6415 | 350 | 117 | 105/115/125 | KC | 5 3/8" | 4 1/2" x 5 3/4" | 17.0 | \$23.52 |

Large enough to handle almost any television or radio receiver on test. 115 and 125, with 117 volts, A.C., from the line for testing purposes or for correction of high or low line voltage. Has electrostatic shield. Has three standard receptacles, providing output voltages of 105,

AUTOFORMERS

| Part No. | Wattage | Primary# | Secondary | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|---------|--------------------------------|-----------|------|----------------|-----------------|-------------------|-----------|
| P-6287 | 40 | 230 | 115 | — | 4 1/2" | 3" Diam. can | 2.7 | \$6.49 |
| P-5062 | 80 | 230 | 115 | K | 3 3/8" | 3" x 3 1/4" | 3.8 | 7.94 |
| P-5063 | 100 | 230 | 115 | K | 4" | 3 1/4" x 3 1/4" | 4.5 | 8.42 |
| P-5064 | 150 | 230 | 115 | K | 4 1/16" | 3 3/8" x 3 3/8" | 5.2 | 9.92 |
| P-5065 | 300 | 230 | 115 | K | 4 3/8" | 4" x 4 1/8" | 8.8 | 13.78 |
| P-6141 | 500 | 230 | 115 | K | 4 3/8" | 4" x 5 1/8" | 13.7 | 18.12 |
| P-6124 | 1000 | 230 | 115 | FK | 7 1/8" | 5 3/8" x 6 1/2" | 24.5 | 38.40 |
| P-6299 | 150 | 115 150/140/130/120/110/100/90 | 115 | KA | 4" | 3 1/4" x 4 3/4" | 6.0 | 12.69 |

Testing Autoformer—Incorporates a convenient tap switch to permit variable voltages from 90 to 150 volts. Primary equipped with 6 ft. approved cord and plug. Secondary connected to female receptacle.

LINE ADJUSTING AUTOFORMERS

| Type and Part No. | Va.* | Input Voltage 50-60 Cycle | Output Voltage | Height | Base Area | Shpg. Wt. in Lbs. | Net Price |
|-------------------|------|---------------------------|----------------|--------|-----------------|-------------------|-----------|
| PV-6441 | 150 | 65/75/90/100/115/130/145 | 115 | 5 1/2" | 3 1/8" x 5 3/8" | 6.4 | \$19.80 |
| PV-6442 | 350 | 65/75/90/100/115/130/145 | 115 | 5 1/2" | 3 1/8" x 6 1/8" | 10.5 | 22.80 |
| PV-6443 | 500 | 65/75/90/100/115/130/145 | 115 | 5 1/2" | 3 1/8" x 6 1/8" | 15.0 | 25.20 |
| PV-6444 | 750 | 65/75/90/100/115/130/145 | 115 | 6 1/8" | 4 1/2" x 8 1/8" | 19.0 | 38.64 |

*Watts to pure resistive load. To other types of loads, multiply rating of line adjuster by power factor of load for actual wattage.

AIR CONDITIONER AUTO-TRANSFORMERS—230 VOLTS TO 208 VOLTS

| Part No. | Rating KVA | Motor Size | Input Voltage | Output Voltage | Mtg. | Height | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|------------|------------|---------------|----------------|------|--------|-----------------|-------------------|-----------|
| PSU-2000 | 2.3 | 1/2-1 hp. | 208/230 | 230/208 | PSU | 3 1/2" | 3 3/8" x 6 1/2" | 9 | \$16.72 |
| PSU-3000 | 3.0 | 1-2 hp. | 208/230 | 230/208 | PSU | 4" | 4 1/2" x 6" | 10 | 20.08 |

CATHODE RAY TUBE POWER TRANSFORMERS

For use with type 2X2 rectifier tubes in a conventional half-wave voltage supply.

| Part No. | Plate Supply A.C. Volts D.C. Milliampers | Rectifier Filament Volts—Amperes | Other Windings Volts—Amperes | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|--|----------------------------------|------------------------------|------|----------------|------------------|-------------------|-----------|
| P-8150 | 1,550 half-wave 1.5 | 2.5 1.75 | ... | TD | 3 1/16" | 3" x 2 1/2" | 1.8 | \$9.00 |
| P-8179* | 1,600 half-wave 3.0 | ... | 2.5/5/6.3 2.5/5/6.3 3.0 | M | 3 3/4" | 3" x 2 1/2" | 3.5 | 10.30 |
| P-8151 | 2,400 half-wave 5.0 | 2.5 2.0 | 2.5 2.0 | C | 4 3/8" | 3 9/16" x 3 7/8" | 6.4 | 11.86 |
| P-8178 | 1,800 half-wave 2.0 | 2.5 1.8 | 2.5 2.2 or 6.3 0.8 | C | 3 7/8" | 2 1/2" x 2 1/2" | 5 | 9.21 |

PHOTOFLASH POWER TRANSFORMER

| Part No. | Application | Pri | Sec. | Mtg. Type | Height Overall | Base Area | Mtg. Ctrs. | Shpg. Wt. in Lbs. | Net Price |
|----------|---|----------------------|---|-----------|----------------|-------------|------------|-------------------|-----------|
| P-6425 | For use in Sprague electronic flash circuits. See Sprague Electronic Flash Handbook C-703 | 105/115/125V. 60 cy. | Charges up to 1050 mfd. to 450 Volts D.C. | S | 2 3/4" | 2 1/8" x 2" | 2 3/8" | 1.4 | \$3.50 |
| P-6426 | Trigger coil for use with 450V. flash tube. Replaces G.E. 86G41 | | | | 3/8" | 1/8" diam. | | 0.2 | 1.67 |

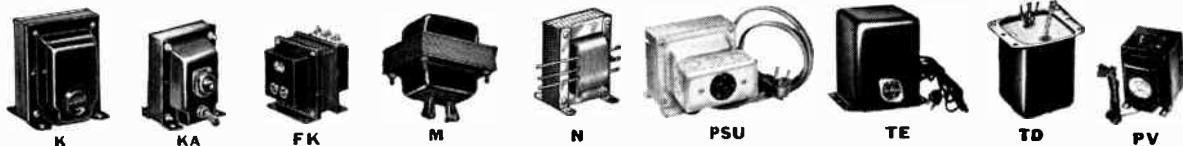
SPEAKER FIELD SUPPLY TRANSFORMER

| Part No. | Plate Supply A.C. Volts D.C. Milliampers | Rectifier Filament Volts—Amperes | Mtg. | Height Overall | Base Area | Shpg. Wt. in Lbs. | Net Price |
|----------|--|----------------------------------|------|----------------|-----------------|-------------------|-----------|
| P-6146 | 120-0-120 250 | 5.0 3.0 | C | 4" | 3 1/4" x 3 1/2" | 4.2 | \$7.83 |

CONDENSER TESTER POWER TRANSFORMER

| Part No. | Plate Supply A.C. Volts D.C.-M.A. | Fil. Wdgs. Volts Amps. | Overall Dimensions L W D | Mtg. Type | Shpg. Wt. in Lbs. | Net Price |
|----------|-----------------------------------|------------------------|--------------------------|---------------|-------------------|-----------|
| P-6459 | 550 55 30 60 | 6.3 0.9 6.3 0.6 | 2 5/8" 2 3/8" 2 1/4" | Coil and Iron | 1.4 | \$5.46 |

#All Primary Windings for 117 V-60 cycle operation unless otherwise indicated. *Secondary insul. 4200 VRMS test.



STANCOR PAGE 11

CHICAGO**MILITARY AND NEW EQUIPMENT
TRANSISTOR TRANSFORMERS
PULSE TRANSFORMERS****STANCOR ELECTRONICS INC.**

(formerly Chicago Standard Transformer Corporation)

**POLYCHROMATRANS—Function Color-Coded Transistor Transformers**

Specifically designed for printed circuit boards. Measures only .405" x .305" x .460". Weight 0.102. Beveled end leads are .020" diameter, .563" long, gold plated to MIL-G-45204. Magnetic alloy shield available, SPCT-10, net price \$.84.

| Catalog No. | MIL Type No. | Power Level in M.W. | Application | Case Color | Matching Primary | Impedance Secondary | Max. M.A. D.C. Unbal. in Pri. | D.C. Resistance Primary | Resistance Secondary | Overall Turns Ratio | RMS Test Volts | Net Price |
|-------------|--------------|---------------------|------------------|------------|------------------|---------------------|-------------------------------|-------------------------|----------------------|---------------------|----------------|-----------|
| •PCT-14 | TF58X16ZZ | 15 | Input | Brown | 200,000 CT | 1,000 CT | 0 | 6300 | 130 | 14.1:1 | 500 | \$7.80 |
| •PCT-15 | TF58X16ZZ | 35 | Input | Brown | 50,000 CT | 1,000 CT | 0 | 4600 | 90 | 7.1:1 | 500 | 7.65 |
| •PCT-17 | TF58X16ZZ | 15 | Input | Brown | 200,000 | 1,000 | 0 | 6300 | 130 | 14.1:1 | 500 | 6.75 |
| •PCT-21 | TF58X13ZZ | 55 | Interstage | Red | 25,000 | -1,000 | .5 | 2000 | 140 | 5:1 | 500 | 6.30 |
| •PCT-23 | TF58X13ZZ | 55 | Interstage | Red | 25,000 CT | 1,000 CT | .5 | 2000 | 140 | 5:1 | 500 | 7.20 |
| •PCT-25 | TF58X13ZZ | 75 | Interstage | Red | 10,000 CT | 1,500 CT | 1 | 1250 | 360 | 2.57:1 | 500 | 7.20 |
| •PCT-30 | TF58X13ZZ | 75 | Driver | Orange | 10,000 CT | 1,200 CT | 1 | 1250 | 240 | 2.88:1 | 500 | 6.90 |
| •PCT-31 | TF58X13ZZ | 75 | Driver | Orange | 10,000 CT | 2,000 CT | 1 | 1250 | 400 | 2.24:1 | 500 | 6.90 |
| •PCT-39 | TF58X13ZZ | 75 | Driver | Orange | 10,000 CT | 500 CT | 1 | 1250 | 100 | 4.47:1 | 500 | 6.90 |
| •PCT-43 | TF58X17ZZ | 75 | Output | Yellow | 1,000 | 50 | 3 | 175 | 9.5 | 4.4:1 | 500 | 5.85 |
| •PCT-54 | TF58X17ZZ | 75 | Output | Yellow | 600 CT | 12 | 4.5 | 92 | 3.6 | 7.06:1 | 500 | 6.00 |
| •PCT-60 | TF58X17ZZ | 75 | Output | Yellow | 500 CT | 600 | 3 | 80 | 118 | 1.1:1 | 500 | 6.00 |
| •PCT-61 | TF58X17ZZ | 75 | Output | Yellow | 900 CT | 600 | 4 | 125 | 115 | 1.22:1 | 500 | 6.15 |
| •PCT-62 | TF58X13ZZ | 75 | Output | Yellow | 1,500 CT | 600 | 3 | 200 | 110 | 1.58:1 | 500 | 6.3 |
| •PCT-70 | TF58X17ZZ | 75 | Output | Yellow | 320 CT | 3.2 | 6 | 52 | .9 | 10:1 | 500 | 5.85 |
| •PCT-71 | TF58X17ZZ | 75 | Output | Yellow | 600 CT | 3.2 | 4.5 | 84 | 1 | 13.6:1 | 500 | 6.00 |
| •PCT-76 | TF58X13ZZ | 75 | Output-Isolation | Green | 10,000 CT | 10,000 CT | 1 | 1440 | 1500 | 1:1 | 500 | 7.80 |
| •PCT-77 | TF58X17ZZ | 75 | Output-Isolation | Green | 600 CT | 600 CT | 3 | 85 | 110 | 1:1 | 500 | 7.20 |
| •PCT-116 | TF58X20ZZ | — | Choke | Blue | 6 HYS. | — | 2 | 1800 | — | — | 500 | 5.70 |
| •PCT-117 | TF58X20ZZ | — | Choke | Blue | 1.25 HYS. | — | 2 | 200 | — | — | 500 | 4.80 |
| •PCT-118 | TF58X20ZZ | — | Choke | Blue | 3.5 HYS. | — | 2 | 1200 | — | — | 500 | 4.80 |
| •PCT-128 | TF58X20ZZ | — | Choke | Blue | .3 HYS. | — | 4 | 50 | — | — | 500 | 4.80 |

ULTRA MINIATURE ENCAPSULATED TRANSISTOR TRANSFORMERS

The 27 transformers in the UME series are characterized by high power ratings, low distortion, high efficiency and excellent frequency response. Designed and built in accordance with MIL-T-27A specifications, their ratings match those of most popular transistors. They are ideally suited for printed circuit applications. Dimensions: .312" x .400" x .426". Weight is approximately 1/8 ounce.



ACTUAL SIZE

| CHICAGO Part No. | Application | Pri. Res. | Pri. Impedance in Ohms | D.C. M.A. in Pri. | Sec. Impedance in Ohms | Sec. Res. | Net Price |
|------------------|---------------------|-----------|------------------------|-------------------|------------------------|-----------|-----------|
| UME-12 | output | 120 | 500 600 | 3 | 50 60 | 13 | \$5.40 |
| UME-13 | output | 250 | 1000 1200 | 3 | 50 60 | 17 | 5.40 |
| UME-14 | output | 70 | 600 | 3 | 3.2 | .7 | 5.40 |
| UME-15 | output | 170 | 1200 | 2 | 3.2 | .75 | 5.40 |
| UME-16 | output | 1200 | 10,000 | 1 | 3.2 | .7 | 5.50 |
| UME-18 | reactor | 1000 | 3 hy at 2 Madc | 2 | — | — | 4.80 |
| UME-19 | output or driver | 1100 | 10,000 CT 12,500 CT | 1 | 500 CT 600 CT | 45 | 5.50 |
| UME-20 | driver | 1000 | 10,000 12,500 | 1 | 1200 CT 1500 CT | 100 | 6.10 |
| UME-21 | driver | 1100 | 10,000 12,500 | 1 | 2000 CT 2500 CT | 160 | 6.10 |
| UME-22 | single or PP output | 25 | 150 CT 200 CT | 10 | 12 16 | 3 | 5.45 |
| UME-23 | single or PP output | 35 | 300 CT 400 CT | 7 | 12 16 | 2.5 | 5.45 |
| UME-24 | single or PP output | 75 | 600 CT 800 CT | 5 | 12 16 | 2 | 5.50 |
| UME-25 | single or PP output | 85 | 800 CT 1070 CT | 4 | 12 16 | 2 | 5.50 |
| UME-26 | single or PP output | 120 | 1000 CT 1380 CT | 3.5 | 12 16 | 2 | 5.50 |
| UME-27 | single or PP output | 225 | 1500 CT 2000 CT | 3 | 12 16 | 2.5 | 5.50 |
| UME-28 | single or PP output | 750 | 7500 CT 10,000 CT | 1 | 12 16 | 2.5 | 6.00 |
| UME-29 | output | 35 | 300 CT | 7 | 600 | 110 | 5.50 |
| UME-30 | output | 60 | 500 CT | 5.5 | 600 | 110 | 5.50 |
| UME-31 | output | 105 | 900 CT | 4 | 600 | 110 | 5.50 |
| UME-32 | output | 200 | 1500 CT | 3 | 600 | 120 | 5.50 |
| UME-33 | interstage. | 1500 | 20,000 CT 30,000 CT | .5 | 800 CT 1200 CT | 175 | 6.50 |
| UME-34 | input | 6500 | 200,000 CT | 0 | 1000 CT | 250 | 7.00 |
| UME-35 | interstage | 1000 | 10,000 CT 12,000 CT | 1 | 1500 CT 1800 CT | 115 | 6.50 |
| UME-36 | reactor | 2600 | 6 hy at 2 Madc | 2 | — | — | 5.45 |
| UME-37 | reactor | 190 | 1 hy at 2 Madc | 2 | — | — | 4.80 |
| UME-38 | reactor | 1800 | 12 hy at 0 dc | 0 | — | — | 4.80 |
| UME-39 | reactor | 2700 | 20 hy at 0 dc | 0 | — | — | 5.50 |

PULSE TRANSFORMERS

ACTUAL SIZE

MIL-T-27A hermetically encapsulated 3-winding units. See Chicago Bulletin CT-45 for pulse and other data based on N.B.S. preferred circuit No. 46. Weight 0.16 ounce.

| CHICAGO Part No. | Nominal Pulse Width Microseconds | Rise Time Microseconds | Height | Width | Depth | Net Price |
|------------------|----------------------------------|------------------------|--------|--------|-------|-----------|
| PE-50 | 0.5 | .07 | 9/16" | 9/16" | 9/16" | \$9.92 |
| PE-75 | 0.75 | .07 | 9/16" | 9/16" | 9/16" | 9.98 |
| PE-100 | 1 | .06 | 9/16" | 9/16" | 9/16" | 10.02 |
| PE-200 | 2 | .05 | 11/16" | 11/16" | 9/16" | 10.92 |
| PE-500 | 2 | .07 | 11/16" | 11/16" | 9/16" | 10.72 |
| PE-700 | 7 | .1 | 11/16" | 11/16" | 9/16" | 12.03 |

STANCOR PAGE 12

CHICAGO

MILITARY AND NEW EQUIPMENT POWER TRANSFORMERS FILTER REACTORS

STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)



POWER TRANSFORMERS—PLATE AND FILAMENT SUPPLY—TF4RX03YY

For CAPACITOR INPUT SYSTEMS—Primary 117 Volts, 50-60 Cycles

| High Voltage Secondary Volts A-C- | Ma. Output D-C V.D-C | Filaments | | | | Wt. Lbs. | YY Case Mounting | | | S-Type Mounting | | | C-Type Mounting | | |
|---|-------------------------|--------------------|-------|-----------------|-------|-------------|------------------|-------------|--------------|-----------------|-------------|--------------|-----------------|-------------|--------------|
| | | Rectifier Volts | Amps. | Others Volts | Amps. | | Cat. No. | Case No. | Net Price | Cat. No. | Case No. | Net Price | Cat. No. | Case No. | Net Price |
| 250-0-250 | 10 320 | 6.3 | 1.2 | 6.3 | 0.6 | 1 1/4 | PHC-10 | 14 | \$17.22 | | | | | | |
| 250-0-250 | 20 300 | 6.3 | 1.2 | 6.3 | 0.6 | 1 1/4 | PHC-20 | 15 | 16.35 | | | | | | |
| 225-0-225 | 40 210 | 5 | 2 | 6.3CT | 2 | 3 1/4 | PHC-40 | 17 | 18.72 | PSC-40 | 17 | \$15.07 | PCC-40 | 16 | \$9.92 |
| 270-0-270 | 55 260 | 5 | 2 | 6.3CT | 2 | 3 1/2 | PHC-55 | 17 | 19.82 | PSC-55 | 17 | 15.42 | PCC-55 | 16 | 10.62 |
| 300-0-300 | 60 285 | 5 | 2 | 6.3CT | 3 | 4 1/2 | PHC-60 | 19 | 20.32 | PSC-60 | 19 | 17.88 | PCC-60 | 18 | 11.83 |
| 335-0-335 | 70 320 | 5 | 2 | 6.3CT | 3 | 4 1/2 | PHC-70 | 19 | 21.12 | PSC-70 | 19 | 17.48 | PCC-70 | 18 | 12.22 |
| 330-0-330 | 85 320 | 5 | 2 | 6.3CT | 3 | 6 | PHC-85 | 20 | 22.58 | PSC-85 | 20 | 18.28 | PCC-85 | 20 | 13.27 |
| 345-0-345 | 105 320 | 5 | 2 | 6.3CT | 3.5 | 6 1/2 | PHC-105 | 21 | 24.88 | PSC-105 | 21 | 19.68 | PCC-105 | 20 | 13.78 |
| 375-0-375 | 120 380 | 5 | 3 | 6.3CT | 4 | 9 1/2 | PHC-120 | 21 | 25.73 | PSC-120 | 22 | 22.82 | PCC-120 | 22 | 16.35 |
| 370-0-370 | 150 390 | 5 | 3 | 6.3CT | 4 | 11 1/2 | PHC-150 | 22 | 31.14 | PSC-150 | 22 | 26.98 | PCC-150 | 22 | 20.92 |
| 385-0-385 | 200 390 | 5 | 3 | 6.3CT | 4.5 | 12 1/4 | PHC-200 | 22 | 33.35 | PSC-200 | 22 | 27.78 | PCC-200 | 22 | 21.28 |
| 400-80-0- 80-400 | 250 410 | 5 | 6 | 6.3CT | 7 | 15 | PHC-250 | 24 | 42.25 | PSC-250 | 24 | 37.77 | PCC-250 | 24 | 26.25 |
| 625-0-625 | 300 685 | 5 | 4 | 6.3 | 8 | | | | | | | | | | |



**MEETS
MIL-T-27A
SPECS**

YY Case. Steel base cover deep-seal soldered into case. Terminals hermetically sealed. Ceramic bushings. Stud-mounted unit.

For REACTOR INPUT SYSTEMS—Primary 117 Volts, 50-60 Cycles

| High Voltage Secondary Volts A-C | Ma. Output D-C V.D-C | Rectifier Volts | Amps. | Others Volts | Amps. | Wt. Lbs. | YY Case Mounting | H-Type Mounting | S-Type Mounting | | | | | | |
|--|-------------------------|--------------------|-------|-----------------|-------|-------------|------------------|-----------------|-----------------|---------|----|---------|---------|----|---------|
| | | | | | | | Cat. No. | Case No. | Net Price | | | | | | |
| 350-0-350 | 55 260 | 5 | 2 | 6.3CT | 2 | 3 1/4 | PHR-55 | 17 | \$20.00 | PSR-55 | 17 | \$16.38 | PCR-55 | 16 | \$11.45 |
| 425-0-425 | 70 320 | 5 | 2 | 6.3CT | 3 | 4 1/2 | PHR-70 | 19 | 20.67 | PSR-70 | 19 | 17.98 | PCR-70 | 18 | 12.82 |
| 440-0-440 | 85 325 | 5 | 2 | 6.3CT | 3 | 6 | PHR-85 | 20 | 24.23 | PSR-85 | 20 | 19.72 | PCR-85 | 20 | 13.33 |
| 450-0-450 | 105 320 | 5 | 2 | 6.3CT | 3.5 | 6 1/2 | PHR-105 | 21 | 23.60 | PSR-105 | 21 | 19.27 | PCR-105 | 20 | 13.88 |
| 500-0-500 | 120 390 | 5 | 3 | 6.3CT | 4 | 9 1/2 | PHR-120 | 21 | 24.18 | PSR-120 | 22 | 24.15 | PCR-120 | 22 | 17.88 |
| 510-0-510 | 150 395 | 5 | 3 | 6.3CT | 4 | 11 1/2 | PHR-150 | 22 | 34.63 | PSR-150 | 22 | 30.23 | PCR-150 | 22 | 24.05 |
| 520-0-520 | 200 390 | 5 | 3 | 6.3CT | 4.5 | 12 1/4 | PHR-200 | 22 | 35.18 | PSR-200 | 22 | 31.97 | PCR-200 | 22 | 22.52 |
| 550-370-75- 0-75-370-550 | 300 420 | 5 | 6 | 6.3CT | 1 | 17 1/2 | PHR-300 | 24 | 45.28 | PSR-300 | 24 | 39.73 | PCR-300 | 24 | 30.08 |



For REGULATED POWER SUPPLIES, CAPACITOR INPUT—Primary 117 Volts, 50-60 Cycles

| High Voltage Secondary Volts A-C | Ma. Output D-C V.D-C | Filaments | | | | Wt. Lbs. | H-Type Mounting | | | S-Type Mounting | | |
|--|-------------------------|--------------------|-------|-----------------|-------|-------------|-----------------|----------|-----------|-----------------|----------|-----------|
| | | Rectifier Volts | Amps. | Others Volts | Amps. | | Cat. No. | Case No. | Net Price | Cat. No. | Case No. | Net Price |
| 440-0-440 | 165 430 | 5 | 3 | 6.3 | 7.5 | 12 | PHC-165 | 22 | \$38.02 | PSC-165 | 22 | \$33.40 |
| 450-0-450 | 200 442 | 5 | 2 | 6.3 | 0.6 | 12 | PHC-200A | 22 | 34.18 | PSC-205 | 22 | 32.43 |

S-Type. Steel base cover fitted with phenolic terminal board. Convenient numbered solder lug terminals. Flange-mounted unit.

FILTER REACTORS—TF4RX01YY

| Inductance in Henries | Max. Current Ma. D-C | D-C Resistance in Ohms | Insulation Test Volts | Wt. Lbs. | YY Case Mounting | S-Type Mounting | C-Type Mounting |
|--------------------------|----------------------------|------------------------------|--------------------------|-------------|------------------|-----------------|-----------------|
| | | | | | Cat. No. | Case No. | Net Price |
| 15 | 10 | 680 | 1,000 | 1 | RH-1510 | 8 | \$9.08 |
| 15 | 20 | 680 | 1,000 | 1 | RH-1520 | 8 | 7.30 |
| 15 | 40 | 475 | 2,500 | 1 1/2 | RH-1540 | 12 | 8.95 |
| 15 | 55 | 420 | 2,500 | 2 | RH-1555 | 13 | 8.98 |
| 15 | 85 | 285 | 2,500 | 2 1/4 | RH-1585 | 14 | 9.95 |
| 12 | 105 | 170 | 2,500 | 4 | RH-12105 | 17 | 11.98 |
| 12 | 150 | 150 | 2,500 | 5 1/2 | RH-12150 | 19 | 13.75 |
| 12 | 200 | 140 | 2,500 | 7 | RH-12200 | 20 | 15.88 |
| 10 | 55 | 230 | 2,500 | 1 3/4 | RH-1055 | 13 | 8.90 |
| 10 | 85 | 175 | 2,500 | 2 1/2 | RH-1085 | 14 | 9.78 |
| 8 | 105 | 100 | 2,500 | 3 3/4 | RH-8105 | 17 | 12.12 |
| 8 | 150 | 100 | 2,500 | 5 1/4 | RH-8150 | 18 | 13.25 |
| 8 | 200 | 85 | 2,500 | 7 | RH-8200 | 20 | 15.73 |
| 8 | 250 | 90 | 2,500 | 10 1/2 | RH-8250 | 22 | 18.12 |
| 8 | 300 | 55 | 3,500 | 12 1/2 | RH-8300 | 22 | 22.87 |
| | | | | | RS-1540 | 12 | \$ 7.35 |
| | | | | | RS-1555 | 13 | 7.67 |
| | | | | | RS-1585 | 15 | 8.85 |
| | | | | | RS-12105 | 17 | 10.57 |
| | | | | | RS-12150 | 19 | 11.90 |
| | | | | | RS-12200 | 21 | 13.97 |
| | | | | | RS-1055 | 13 | 7.62 |
| | | | | | RS-1085 | 15 | 8.45 |
| | | | | | RC-1540 | 12 | \$ 5.25 |
| | | | | | RC-1555 | 13 | 6.00 |
| | | | | | RC-1585 | 14 | 6.92 |
| | | | | | RC-12105 | 16 | 10.57 |
| | | | | | RC-12150 | 18 | 9.28 |
| | | | | | RC-12200 | 20 | 11.32 |
| | | | | | RC-1055 | 12 | 5.52 |
| | | | | | RC-1085 | 14 | 6.28 |
| | | | | | RC-8105 | 16 | 8.13 |
| | | | | | RC-8150 | 18 | 9.77 |
| | | | | | RC-8200 | 20 | 11.05 |
| | | | | | RC-8250 | 22 | 14.27 |
| | | | | | RC-8300 | 22 | 14.77 |



C-Type. With 10" color-coded stripped and tinned leads brought out through fibre board base cover. Flange-mounted unit.

FILAMENT TRANSFORMERS—Primary 115-230 Volts, 50-60 Cycles—TF4RX01YY

| Secondary Volts | Amps. | Insulation Test Volts | Wt. Lbs. | YY Case Mounting | S-Type Mounting | |
|--------------------|-------|--------------------------|-------------|------------------|-----------------|-----------|
| | | | | Cat. No. | Case No. | Net Price |
| 2.5CT | 5.25 | 3,500 | 2 | FH-25 | 15 | \$15.67 |
| 2.5CT | 10.0 | 5,000 | 3 | FH-210 | 15 | 16.82 |
| 2.5CT | 10.0 | 9,000 | 4 | FH-210H | 19 | 27.40 |
| 2.5CT | 15.0 | 9,000 | 6 | FH-215H | 21 | 25.07 |
| 5CT | 4.0 | 2,500 | 2 1/4 | FH-54 | 15 | 15.67 |
| 5CT | 10.0 | 2,500 | 3 1/2 | FH-58 | 17 | 18.23 |
| 5CT | 10 | 8,000 | 6 | FH-510H | 21 | 25.68 |
| 5CT | 20.0 | 2,500 | 6 1/2 | FH-520HB | 22 | 36.78 |
| 5CT | 20 | 10,000 | 13 | | | |
| 5CT | 30 | 2,500 | 10 1/2 | | | |
| 5CT | 30 | 2,500 | 10 1/2 | | | |
| 6.3CT | 1.5 | 2,500 | 1 | FH-615 | 12 | 14.03 |
| 6.3CT | 3 | 2,500 | 2 | FH-63 | 14 | 14.45 |
| 6.3CT | 5.5 | 2,500 | 3 | FH-65 | 16 | 15.98 |
| 6.3CT | 10.0 | 2,500 | 5 | FH-610 | 19 | 17.49 |
| 7.5CT | 12 | 2,500 | 6 1/2 | | | |
| 7.5CT | 25.0 | 2,500 | 12 | | | |
| 7.5CT | 51 | 2,500 | 29 | | | |
| 10CT | 4.0 | 2,500 | 3 1/4 | FH-104 | 17 | 16.92 |
| 10CT | 6.5 | 2,500 | 5 | | | |
| 10CT | 10.0 | 2,500 | 6 1/2 | | | |
| | | | | F-25 | 14 | \$13.65 |
| | | | | F-210 | 17 | 10.83 |
| | | | | F-210H | 19 | 13.16 |
| | | | | F-215H | 20 | 26.73 |
| | | | | F-54 | 15 | 7.23 |
| | | | | F-58 | 17 | 15.02 |
| | | | | F-510H | 21 | 26.66 |
| | | | | F-516 | 21 | 18.98 |
| | | | | F-520HB | 22 | 18.82 |
| | | | | F-530 | 22 | 24.35 |
| | | | | F-530BX* | 22 | 41.58 |
| | | | | F-615 | 12 | 11.93 |
| | | | | F-63 | 14 | 7.00 |
| | | | | F-65 | 17 | 12.47 |
| | | | | F-610 | 19 | 16.78 |
| | | | | F-712 | 21 | 20.53 |
| | | | | F-725 | 22 | 26.95 |
| | | | | F-751 | 26 | 51.93 |
| | | | | F-104 | 17 | 12.33 |
| | | | | F-106 | 19 | 18.33 |
| | | | | F-1010 | 21 | 16.33 |

*BX mounting, see page 1350 for illustration and dimensions.

S-TYPE & C-TYPE

CASE DIMENSIONS

YY Case Dimensions on STANCOR PAGE 15

| Case No. | Depth | Width | Height |
|----------|---------|---------|--------|
| 12 | 2 1/4 | 2 1/8 | 2 1/16 |
| 13 | 2 1/4 | 2 1/8 | 2 1/16 |
| 14 | 2 1/2 | 2 3/8 | 3 1/16 |
| 15 | 2 1/2 | 2 3/8 | 3 1/16 |
| 16 | 2 7/8 | 2 11/16 | 3 1/2 |
| 17 | 2 7/8 | 2 11/16 | 3 3/4 |
| 18 | 3 1/4 | 3 | 3 7/8 |
| 19 | 3 1/4 | 3 | 4 1/4 |
| 20 | 3 11/16 | 3 1/8 | 4 1/2 |
| 21 | 3 11/16 | 3 1/8 | 4 1/2 |
| 22 | 4 1/8 | 4 1/8 | 5 1/8 |
| 24 | 5 1/8 | 4 1/8 | 6 1/8 |

CHICAGO

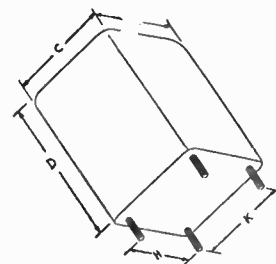
**MILITARY STANDARD
POWER AND FILAMENT TRANSFORMERS
MOLDED TOROIDAL INDUCTORS**
STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)



MS (MILITARY STANDARD) POWER AND FILAMENT TRANSFORMERS



| Case Type | Dimensions In Inches | | | | | Stud Size |
|-----------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------|-----------|
| | A | C | D | H | K | |
| EB | 1 ¹⁵ / ₁₆ | 1 ¹⁵ / ₁₆ | 2 ⁷ / ₁₆ | 1 ³ / ₈ | 1 ¹ / ₄ | 6-32 |
| FB | 2 ⁵ / ₁₆ | 2 ¹ / ₂ | 2 ¹ / ₂ | 1 ¹¹ / ₁₆ | 1 ³ / ₄ | 6-32 |
| GA | 2 ³ / ₄ | 2 ³ / ₈ | 3 ¹ / ₁₆ | 2 ⁵ / ₁₆ | 1 ³ / ₄ | 6-32 |
| GB | 2 ³ / ₄ | 2 ³ / ₈ | 2 ¹ / ₁₆ | 2 ¹ / ₈ | 1 ³ / ₄ | 6-32 |
| HB | 3 ¹ / ₁₆ | 2 ⁵ / ₁₆ | 3 ¹ / ₁₆ | 2 ¹⁹ / ₆₄ | 1 ³ / ₄ | 8-32 |
| HA | 3 ¹ / ₁₆ | 2 ⁵ / ₁₆ | 4 ¹ / ₄ | 2 ¹⁹ / ₆₄ | 1 ³ / ₄ | 8-32 |
| JB | 3 ³ / ₁₆ | 3 ¹ / ₈ | 3 ¹ / ₈ | 2 ⁵ / ₁₆ | 2 ¹ / ₁₆ | 8-32 |
| KA | 3 ¹⁵ / ₁₆ | 3 ³ / ₈ | 5 ¹ / ₄ | 3 | 2 ¹ / ₁₆ | 10-32 |
| KB | 3 ¹⁵ / ₁₆ | 3 ³ / ₈ | 4 ⁵ / ₁₆ | 3 | 2 ¹ / ₁₆ | 10-32 |
| LB | 4 ⁵ / ₁₆ | 3 ¹¹ / ₁₆ | 4 ⁵ / ₁₆ | 3 ³ / ₁₆ | 2 ¹ / ₁₆ | 10-32 |
| MB | 4 ¹¹ / ₁₆ | 4 | 4 ¹⁵ / ₁₆ | 3 ¹ / ₁₆ | 3 | 1/4-20 |
| NB | 5 ¹ / ₁₆ | 4 ⁵ / ₁₆ | 5 ¹ / ₂ | 4 ¹ / ₁₆ | 3 ³ / ₁₆ | 1/4-20 |



POWER TRANSFORMERS—Primary, 105/115/125 V.—Frequency, 54-66 Cycles

| MIL-T-27 Classification | MIL-T-27 Part No. | High Voltage Secondary | | D-C V Output | Rect. Fil. | | Fil. No. 2 | | Wt. Lbs. | Case Size | Catalog Number | Net Price |
|-------------------------|-------------------|------------------------|---------|--------------|------------|------|------------|------|--------------------------------|-----------|----------------|-----------|
| | | A-C Volts | D-C Ma. | | Volts | Amps | Volts | Amps | | | | |
| TF4RX03HA001 | MS-90026 | 204-100-0-100-200 | 70 | 385 | 6.3/5 | 2 | 6.3 | 3 | 4 | HA | PMS-70 | \$25.37 |
| TF4RX03JB002 | MS-90027 | 325-0-325 | 70 | 260 | 6.3/5 | 2 | 6.3 | 4 | 5 | JB | PMS-70A | 24.85 |
| TF4RX03KB006 | MS-90028 | 325-0-325 | 150 | 245 | 6.3 | 5 | 5 | 3 | 7 ¹ / ₂ | KB | PMS-150 | 26.87 |
| TF4RX03LB003 | MS-90029 | 400-0-400 | 175 | 318 | 5 | 3 | 6.3 | 8 | 10 | LB | PMS-175 | 32.15 |
| TF4RX03MB004 | MS-90030 | 400-0-400 | 250 | 345 | 5 | 3 | 6.3 | 8 | 13 | MB | PMS-250 | 38.50 |
| TF4RX03MB004 | MS-90030 | 450-0-450 | 250 | 255 | | | | | 7 ¹ / ₂ | KB | PMS-350 | 23.43 |
| TF4RX02KB001 | MS-90031 | 350-0-350 | 250 | 419 | | | | | 11 | LB | PMS-550 | 29.07 |
| TF4RX02LB002 | MS-90032 | 550-0-550 | 250 | 640 | | | | | 16 ¹ / ₂ | NB | PMS-800 | 42.02 |
| TF4RX02NB003 | MS-90036 | 800-0-800 | 250 | | | | | | | | | |

FILAMENT TRANSFORMERS—Primary, 105/115/125 V.—Frequency, 54-66 Cycles

| MIL-T-27 Classification No. | MIL-T-27 Part No. | Secondary | | Insulation Volts RMS | Wt. Lbs. | Case Size | Catalog Number | Net Price |
|-----------------------------|-------------------|-----------|------|----------------------|-------------------------------|-----------|----------------|-----------|
| | | Volts | Amps | | | | | |
| TF4RX01EB002 | MS-90D16 | 2.5 | 3.0 | 2500 | 1 ¹ / ₂ | EB | FMS-23 | \$15.47 |
| TF4RX01GB003 | MS-90D17 | 2.5 | 10 | 2500 | 2 ¹ / ₂ | GB | FMS-210 | 15.50 |
| TF4RX01FB004 | MS-90D18 | 5.0 | 3.0 | 2500 | 1 ¹ / ₂ | FB | FMS-53 | 13.62 |
| TF4RX01HB005 | MS-90D19 | 5.0 | 10 | 2500 | 4 | HB | FMS-510 | 18.55 |
| TF4RX01FB005 | MS-90D20 | 6.3 | 2.0 | 2500 | 1 ¹ / ₂ | FB | FMS-62 | 13.97 |
| TF4RX01FB005 | MS-90D21 | 6.3 | 5.0 | 2500 | 2 ¹ / ₂ | HB | FMS-65 | 15.88 |
| TF4RX01GB007 | MS-90D22 | 6.3 | 10 | 2500 | 5 | JB | FMS-610 | 19.66 |
| TF4RX01JB008 | MS-90D23 | 6.3 | 20 | 2500 | 8 | KB | FMS-620 | 24.08 |
| TF4RX01KB009 | MS-90D24 | 2.5 | 10 | 10000 | 4 ³ / ₄ | JB | FMS-210H | 23.95 |
| TF4RX01JB012 | MS-90D25 | 5.0 | 10 | 10000 | 7 | KB | FMS-510H | 27.27 |

MULTIPLE FILAMENT TRANSFORMERS (TR4RX01—) Primary, 105/115/125 V., Frequency, 50/60 cycles

Designed and built in accordance with MIL-T-27A, Grade 4, Class R operating temperature; life expectancy X (10,000 hours minimum). Maximum operating altitude 10,000 feet. Also available in type S, Sealed-in-Steel cases (catalog Numbers F-1 through F-8, listed below). Dimensions on page 1342.



| Sec. No. 1 | Sec. No. 2 | Sec. No. 3 | Insul. Test | Case Size † | Wt. Lbs. | Catalog No. | Net Price | Catalog No. | Case Size | Net Price |
|--------------|------------------|--------------|-------------|-------------|-------------------------------|-------------|-----------|-------------|-----------|-----------|
| 5 V. 2A | 6.3 V. CT 2.5 A | — | 2500 V. | GA | 2 ¹ / ₂ | FMS-1 | \$19.82 | F-1 | 15 | \$17.97 |
| 5 V. 2A | 16.6 V. CT 1.25A | — | 2500 V. | GA | 3 ¹ / ₂ | FMS-2 | 18.78 | F-2 | 15 | 15.33 |
| 5 V. 3A | 6.3 V. CT 5A | — | 2500 V. | HA | 4 | FMS-3 | 21.80 | F-3 | 17 | 18.28 |
| 5 V. 3A | 6.3 V. CT 3A | 6.3 V. CT 3A | 2500 V. | JB | 4 ³ / ₄ | FMS-4 | 29.15 | F-4 | 18 | 21.02 |
| | 12.6 V. CT 3A | — | | | | | | | | |
| 5 V. 3A | 6.3 V. CT 1A | 6.3 V. CT 5A | 2500 V. | JB | 4 ³ / ₄ | FMS-5 | 30.93 | F-5 | 18 | 22.50 |
| 6.3 V. CT 3A | 6.3 V. CT 3A | — | 2500 V. | HA | 4 | FMS-6 | 20.03 | F-6 | 17 | 18.50 |
| | 12.6 V. CT 3A | — | | | | | | | | |
| 6.3 V. CT 6A | 6.3 V. CT. 6A | — | 2500 V. | KA | 6 ¹ / ₂ | FMS-7 | 26.57 | F-7 | 21 | 20.75 |
| | 12.6 V. CT 6A | — | | | | | | | | |
| 5 V. CT 3A | 5 V. CT 3A | 5 V. CT 6A | 5000 V. | KA | 7 | FMS-8 | 38.55 | F-8 | 21 | 25.60 |

†Refer to case size. All secondary A.C. voltages ± 3%.

SILICON RECTIFIER POWER TRANSFORMERS—TF4RX03LA

| Catalog No. | Secondary No. 1 | | Secondary No. 2 | | Secondary No. 3 | | Case Size | Wt. Lbs. | Net Price |
|-------------|-----------------|------|-----------------|------|-----------------|------|-----------|----------|-----------|
| | Volts | DCMA | Volts | Amps | Volts | Amps | | | |
| HRP-400 | 400 CT | 400 | 6.3 | 3.0 | 6.3 | 3.0 | LA | 10.5 | \$29.73 |
| HRP-600 | 300 CT | 600 | 6.3 | 2.5 | 6.3 | 2.5 | LA | 10.5 | 29.64 |
| HRP-800 | 200 CT | 800 | 6.3 | 2.0 | 6.3 | 2.0 | LA | 10.0 | 29.64 |
| HRP-1600 | 100 CT | 1600 | 6.3 | 1.5 | 6.3 | 1.5 | LA | 10.5 | 29.64 |
| HRP-2000 | 80 CT | 2000 | 6.3 | 1.5 | 6.3 | 1.5 | LA | 9.6 | 28.64 |
| HRP-2500 | 60 CT | 2500 | 6.3 | 1.5 | 6.3 | 1.5 | LA | 9.0 | 28.73 |

Note: See page 13 for recommended circuits and commercial grade equivalents.

MOLDED TOROIDAL INDUCTORS

1¹/₁₆" diameter, 1/2" high, with 90° spacing of terminals and mounting hole for 4-40 screw.

- Features:
- High Q over wide frequency ranges
 - Minimum pickup from external magnetic fields
 - Close tolerance of plus, minus 1%
 - High stability over temperature range of -55° to plus 85° centigrade
 - Not affected by high humidity
 - Resist shock and vibration
 - Small sized, uniform, easily stacked



| Catalog No. | Inductance (m.h.) | D.C. Res. (ohms) | Net Price | Catalog No. | Inductance (m.h.) | D.C. Res. (ohms) | Net Price |
|-------------|-------------------|------------------|-----------|-------------|-------------------|------------------|-----------|
| TM-1A | 1 | .32 | \$6.28 | TM-80 A | 80 | 29.5 | \$7.02 |
| TM-2 A | 2 | .72 | 4.00 | TM-100 A | 100 | 32.5 | 4.00 |
| TM-5 A | 5 | 1.85 | 4.00 | TM-200 A | 200 | 71.5 | 4.37 |
| TM-8 A | 8 | 2.25 | 4.00 | TM-500 A | 500 | 185 | 5.00 |
| TM-10 A | 10 | 3.25 | 4.00 | TM-800A | 800 | 300 | 9.78 |
| TM-20 A | 20 | 7.0 | 4.00 | TM-1000 A | 1000 | 340 | 5.00 |
| TM-50 A | 50 | 19.5 | 4.00 | | | | |

CHICAGO

MILITARY AND NEW EQUIPMENT AUDIO TRANSFORMERS

STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)



FULL FREQUENCY RANGE AUDIO TRANSFORMERS

Frequency Response within $\pm 1/2$ db, 30 to 15,000 Cycles

INPUT TRANSFORMERS—TF4RX—YY††

YY Case (Cat. No. BIH) and B-Type (Cat. No. BI) Mountings



B-TYPE MOUNTING



YY CASE

| Application | Impedance | | Max. Power Level | Hum Shielding, dbm | Case Size | Family Wt. Lbs. | Cat. No. | Net Price |
|---|---------------------------|----------------------|------------------|--------------------|-----------|-----------------|----------|-----------|
| | Primary | Secondary | | | | | | |
| Line to Single or P-P Grids | *Pri: 600/150 ohms CT | *Sec: 50,000 ohms CT | +15 dbm. | -70 | 13 | 10 1 1/2 | BIH-1 | \$29.07 |
| | | | | | | | BI-1 | 30.12 |
| Line to Single or P-P Grids | *Pri: 600/150 ohms CT | *Sec: 50,000 ohms CT | +15 dbm. | -90 | 13 | 1 1/2 | BI-2 | 37.00 |
| Line bridging to P-P Grids | *Pri: 8,000/6,000 ohms CT | *Sec: 50,000 ohms CT | +15 dbm. | -70 | 13 | 1 1/2 | BI-3 | 33.25 |
| Line to Line | Pri: 600/150 ohms CT | Sec: 600/150 ohms CT | +15 dbm. | -70 | 13 | 16 1 1/2 | BIH-4 | 29.33 |
| Line to Line | *Sec: 600/150 ohms CT | | +30 dbm. | -90 | 18 | 3 1/2 | BI-5 | 59.33 |
| Interstage: P-P Plates to Sgl. or P-P Grids | *Pri: 20,000 ohms CT | *Sec: 50,000 ohms CT | +15 dbm. | -70 | 13 | 15 1 1/2 | BIH-6 | 33.70 |
| | | | | | | | BI-6 | 29.78 |
| Low Imped. Mike, Pickup, or Multiple Line to Grid | Pri: 50/150/250/600 | *Sec: 50,000 ohms CT | +15 dbm. | -70 | 13 | 10 1 1/2 | BIH-7 | 30.72 |
| | | | | | | | BI-7 | 31.55 |
| Single Plate to Push-Pull Grids | Pri: 10,000 ohms | *Sec: 50,000 ohms CT | +15 dbm. | -70 | 13 | 10 1 1/2 | BIH-8 | 25.10 |
| | | | | | | | BI-8 | |

††Refer to family.

OUTPUT TRANSFORMERS—TR4RX13YY

YY Case (Cat. No. BOH) and B-Type (Cat. No. BO) Mountings

| Application | Impedance | | Max. Power Level | Case Size | Wt. Lbs. | Cat. No. | Net Price |
|---|-------------------------|---------------------------------------|----------------------|-----------|----------|----------|-----------|
| | Primary | Secondary | | | | | |
| Single Plate to Line | †Pri: 15,000 ohms | *Sec: 600/150 ohms CT | +15 dbm. (22 mw) | 14 | 2 1/4 | BOH-1 | 17.13 |
| | | | | | | BO-1 | 15.85 |
| P-P Plates to Line | *Pri: 20,000 ohms CT | *Sec: 600/150 ohms CT | +30 dbm. (1 watt) | 16 | 3 | BOH-2 | 19.73 |
| | | | | | | BO-2 | 19.15 |
| P-P Plates to Line | Pri: 7,500 ohms CT | *Sec: 600/150 ohms CT † | +43 dbm. (20 watts) | 20 | 6 | BOH-4 | 25.50 |
| P-P Plates to Line or Voice Coil | *Pri: 10,000 ohms CT | *Sec: 600/16/8 ohms CT and 150/4 ohms | +37 dbm. (5 watts) | 18 | 4 | BOH-5 | 24.85 |
| | | | | | | BO-5 | 22.68 |
| P-P Plates to Voice Coil | Pri: 7,500 ohms CT | Sec: 8/20 ohms † | +43 dbm. (20 watts) | 20 | 6 | BO-6 | 29.42 |
| P-P Plates to Line or Voice Coil | *Pri: 5000/3000 ohms CT | *Sec: 600/16/8 ohms CT and 150/4 ohms | +42 dbm. (15 watts) | 20 | 6 | BOH-9 | 35.63 |
| | | | | | | BO-9 | 30.75 |
| P-P Low Level Plates to Line | Pri: 20,000 ohms CT | *Sec: 600/150 ohms CT | +15 dbm. (22 mw) | 13 | 1 1/2 | BO-10 | 34.88 |
| P-P Plates to Line or Voice Coil | *Pri: 3000/2500 ohms CT | *Sec: 600/16/8 ohms CT and 150/4 ohms | +46 dbm. (40 watts) | 22 | 9 1/2 | BO-11 | 40.32 |
| P-P Plates to Line or Voice Coil | Pri: 10,000 ohms CT | Sec: 600/16/8 ohms | +40 dbm. (10 watts) | 22 | 9 | BO-12 | 34.48 |
| P-P Plates to Voice Coil | Pri: 10,000 ohms | Sec: 16 8 4 ohms | +43 dbm. (20 watts) | 21 | 7 | BO-13 | 29.63 |
| P-P Plates to VC, pentode, triode or Ult.-Lin. Circuits | Pri: 5000 ohms CT | Sec: 16 8 ohms: 70.7 volts | +50 dbm. (100 watts) | 24 | 24 | BO-14 | 45.42 |

*Split and balanced windings. † to 10 ma. D.C. ††Has tertiary winding to provide 15% inverse feedback. **Has D.C. in primary; frequency response ± 2 db, 30-15,000 cycles.

LOW PASS FILTER LPF-2—Hermetically sealed unit for attenuating frequencies above 3,000 cycles in low level speech amplifiers, 50,000 ohm plate to 50,000 ohm grid. Insertion loss 0.8 db. Height 2 1/8", width 1 1/8", depth 1 1/8", mtg. ctrs. 1 1/8". Shpg. wt. 1/2 lb. Net Price \$35.10.

DETAILS OF NEW EQUIPMENT LINE MOUNTINGS

YY CASE MOUNTING—Hermetic sealing meets all MIL-T-27A specifications. Steel base cover is bonded into the case by deep-seal soldering. Terminals are hermetically sealed by unique rubber gasket—ceramic bushing construction. Units are stud mounted.

C-TYPE MOUNTING—Moisture-resistant compound surrounds coil and core. Ten-inch E.I.A. color-coded leads, ends stripped and tinned for easy soldering. Flange-mounted drawn steel cases.

S-TYPE MOUNTING—Precision-fitted steel base-covers and terminal boards, plus compound filling, keep moisture out. Solder-jug terminals are clearly identified, easy to use. Drawn steel cases are flange-mounted.

B-TYPE MOUNTING—Steel bases are bonded into the drawn steel cases by deep-seal soldering to make units completely moisture proof. Stud-mounted cases take minimum chassis space. Convenient, compact, pin-type terminals.

BIAS TRANSFORMERS—Combination Plate and Filament—Primary 50-60 Cycles

| Primary Volts | High Voltage Secondary | | Rect. Volts | Fila. Amps. | YY Case Mounting* Cat. No. | Case Net Price | S-Type Mounting | | C-Type Mounting | | | | |
|---------------|------------------------|-------------|-------------|-------------|----------------------------|----------------|-----------------|----------------|-----------------|----------------|---------|----|---------|
| | AC | Volts CT DC | | | | | Cat. No. | Case Net Price | Cat. No. | Case Net Price | | | |
| 115 | 180-160-140-120 | 150 | 5.0 | 3.0 | 1BH-150 | 19 | \$23.08 | 1BS-150 | 19 | \$19.03 | 1BC-150 | 18 | \$12.63 |
| 230 | 180-160-140-120 | 150 | 5.0 | 3.0 | | | | 2BS-150 | 19 | 21.43 | 2BC-150 | 18 | 13.72 |

*TF4RX03YY.

STANCOR PAGE 15

(S-Type and C-Type Case Dimensions on STANCOR PAGE 13.)

HIGH Q CHOKES

For Dynamic Noise Suppression Circuits (S-Type Mounting)



Two efficient reactors, inductance values .8 and 2.4 henrys respectively, are designed for noise suppression circuits, but can be used in any tuned circuit requiring the given inductances. Inductance values accurate within -5% with up to 15 ma. d-c. Minimum Q of 20. Mounted in drawn steel cases, 1 1/2" x 1 1/2" x 1 1/2" high.

| Cat. No. | Inductance | Net Price |
|----------|------------|-----------|
| NSI-1 | .8 hy. | \$12.15 |
| NSI-2 | 2.4 hy. | 13.43 |

CHICAGO

**MILITARY STANDARD AUDIOS
MS TRANSISTOR AUDIOS
MIL-T-27A SATURABLE TRANSFORMERS
STANCOR ELECTRONICS INC.**
(formerly Chicago Standard Transformer Corporation)

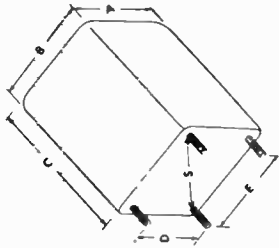


MILITARY STANDARD AUDIO TRANSFORMERS

Designed and built in accordance with MIL-T-27A, Grade A Class R; Life Expectancy X (10,000 hrs. min)
Maximum Operating Altitude 50,000 ft. Frequency Response ± 2 db 300 - 10,000 cps, AJ Case Size—Max. Wt., 6 lbs.



| MIL-T-27A Classification | MIL-T-27A Part No. | Application | Impedance | Operating Level | Pri. DCMA | Catalog No. | Net Price |
|--------------------------|--------------------|----------------------------|--|-----------------|-----------|-------------|-----------|
| TF 1RX 15AJ001 | MS-90000 | P-P Plates to P-P Grids | Pri: 10,000 ohms CT Sec: 90,000 ohms CT 22,500 ohms CT | 15 dbm. | 10 | AMS-1 | \$22.52 |
| TF 1RX 16AJ002 | MS-90001 | Line to Voice Coil | Pri: 600 ohms CT 150 ohms | 2W | — | AMS-2 | 16.32 |
| TF 1RX 10AJ001 | MS-90002 | Line to P-P Grids | Sec: 4/8/16 ohms Pri: 600 ohms CT 150 ohms | 15 dbm. | — | AMS-3 | 18.98 |
| TF 1RX 16AJ001 | MS-90003 | Line to Line | Sec: 135,000 ohms CT Pri: 600 ohms CT 150 ohms | 15 dbm. | — | AMS-4 | 18.55 |
| TF 1RX 13AJ001 | MS-90004 | Single Plate to Line | Pri: 7600/4800 ohms Sec: 600 ohms CT/150 ohms | 2W | 40 | AMS-5 | 13.35 |
| TF 1RX 13AJ002 | MS-90005 | Single Plate to Voice Coil | Pri: 7600/4800 ohms Sec: 4/8/16 ohms | 2W | 40 | AMS-6 | 12.95 |
| TF 1RX 13AJ003 | MS-90006 | P-P Plates to Line | Pri: 15,000 ohms CT Sec: 600 ohms CT/150 ohms | 2W | 10 | AMS-7 | 14.77 |
| TF 1RX 13AJ004 | MS-90007 | P-P Plates to Line | Pri: 24,000 ohms CT Sec: 600 ohms CT/150 ohms | 1W | 20 | AMS-8 | 15.33 |
| TF 1RX 13AJ005 | MS-90008 | P-P Plates to Line | Pri: 60,000 ohms CT Sec: 600 ohms CT/150 ohms | 5W | 20 | AMS-9 | 15.07 |



TRANSISTOR AUDIO TRANSFORMERS—TF4RX— — — †

Designed and built in accordance with MIL-T-27A, Grade 4, Class R operating temperature; Life Expectancy X (10,000 hrs. min.). Maximum Operating Altitude 50,000 ft.

| Application | Impedance in Ohms | | Max. Pri. D.C. Ma. | DC Res. in Ohms | | Power in Watts | Case Size | Family† | Wt. Lbs. | Catalog No. | Net Price |
|-------------|-------------------|---------|--------------------|-----------------|------|----------------|-----------|---------|-----------|-------------|-----------|
| | Pri. | Sec. | | Pri. | Sec. | | | | | | |
| Input | 600 CT | 10 | 20 | 42 | .8 | .05 | AG | 17 | 2 1/2 oz. | TAMS-1 | \$14.50 |
| Interstage | 100 CT | 10 CT | 100 | 4.3 | .8 | .25 | AH | 17 | 5 oz. | TAMS-2 | 14.97 |
| Interstage | 100 | 1000 CT | 100 | 5.8 | .45 | .25 | AJ | 17 | 11 oz. | TAMS-3 | 12.43 |
| Interstage | 500 CT | 5000 CT | 12 | 37 | 250 | .03 | AJ | 17 | 11 oz. | TAMS-4 | 15.98 |
| Driver | 1000 | 200 CT | 10 | 400 | 115 | .05 | AG | 17 | 2 oz. | TAMS-5 | 15.88 |
| Driver | 2000 | 200 CT | 5 | 720 | 115 | .05 | AG | 12 | 2 oz. | TAMS-6 | 12.95 |
| Driver | 100 | 100 CT | 100 | 12 | 12 | .5 | EB | 17 | 1 lb. | TAMS-7 | 15.43 |
| Output | 9800 | 15 | 2 | 640 | 2 | .05 | AG | 12 | 2 oz. | TAMS-8 | 14.62 |
| Output | 1000 | 4/8/16 | 10 | 180 | 3.5 | .2 | AG | 17 | 2 1/2 oz. | TAMS-9 | 17.63 |
| Output | 2000 CT | 4/8/16 | — | 250 | 4 | .2 | AG | 12 | 2 1/2 oz. | TAMS-10 | 19.37 |
| Output | 48 CT | 8/16 | 275 | 5 | 1.5 | 5 | FA | 17 | 1 1/2 lb. | TAMS-11 | 15.98 |
| Output | 20 CT | 8 | 500 | .55 | .35 | 10 | AJ | 17 | 12 oz. | TAMS-12 | 14.40 |

†Refer to Family and Case Size.

CASE DIMENSIONS

| Case Size | Dimensions in inches | | | | | |
|-----------|----------------------|-------|-------|--------|--------|-------|
| | A | B | C | D | E | S |
| AG | 1 | 1 | 1 3/8 | — | — | 3/4 |
| AH | 1 1/8 | 1 1/8 | 1 1/8 | — | — | 1 1/4 |
| AJ | 1 1/8 | 1 1/8 | 2 1/8 | 1 3/16 | 1 3/16 | — |
| EA | 1 1/8 | 1 1/8 | 2 1/8 | 1 3/8 | 1 3/8 | — |
| EB | 1 1/8 | 1 1/8 | 2 1/8 | 1 3/8 | 1 3/8 | — |
| FA | 2 1/8 | 2 1/8 | 3 1/8 | 1 1/4 | 1 1/4 | — |

MIL-T-27A SATURABLE TRANSFORMERS (Magnetic Amplifiers)

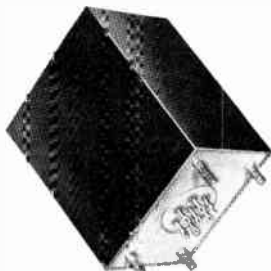
Application: For use with 2 phase 115v. 400 cycle Servo-Motors.

Saturable Transformer Ratings Maximum Altitude 50,000 ft. All Primaries 115v., 400 cycles: TF4RX40YY

| Catalog No. | STH-3 | | STH-5 | | STH-10 | | STH-18 | |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Power Output in watts | Voltage Output, volts | Power Output in watts | Voltage Output, volts | Power Output in watts | Voltage Output, volts | Power Output in watts | Voltage Output, volts |
| | 2.7 | 115 | 5 | 115 | 10 | 115 | 18 | 115 |
| | 26 | 3800 | 2640 | 1320 | 775 | 1.0 | .35 | .8 |
| Load Resistance in ohms | 250 | .19 | .4 | .24 | .8 | .8 | .8 | .8 |
| Tuning Capacitor, MFD | .28 | .1 | .13 | .24 | .8 | .8 | .8 | .8 |
| Primary Current in amps | .085 | .1 | .13 | .24 | .8 | .8 | .8 | .8 |
| Control Current, MA | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Control Coil | 2900 | 2900 | 3100 | 4200 | 5600 | | | |
| Res. (Per Coil) in ohms | | | | | | | | |
| Control Coil By pass | .1 | .1 | .1 | .1 | .1 | | | |
| Capacitors, MFD | | | | | | | | |
| Base Area, Dimensions, in: | 1 1/8 x 1 1/8 | 1 1/2 x 2 1/2 | 1 3/4 x 2 1/2 | 2 1/4 x 3 1/4 | 2 1/4 x 3 1/4 | | | |
| Height, in. | 2 1/8 | 2 1/4 | 2 1/4 | 3 3/8 | 3 3/8 | | | |
| Mtg. Ctrs., in. | 3/4 x 1 1/8 | 1 x 1 1/8 | 1 1/2 x 1 1/8 | 1 1/2 x 2 1/2 | 1 1/2 x 2 1/2 | | | |
| Actual Wt., Lbs. | 3/4 | 1 | 1 1/2 | 2 1/2 | 2 1/2 | | | |
| Typical Servo-Motor Load: | | | | | | | | |
| Kearfott | R-118 | R-119-2 | R-110-2 | R-111-2 | R-112-2 | | | |
| G. M. Labs. | — | 665-54-19 | 665-54-47 | 665-53-40 | 665-53-44 | | | |
| | | 665-52-48 | 665-52-48 | 665-53-41 | 665-53-45 | | | |
| Net Price | \$27.00 | \$30.00 | \$36.00 | \$39.00 | \$39.00 | | | |

SATURABLE TRANSFORMERS

are designed and built in accordance with MIL-T-27A; Grade 4, Class R operating temperature and life expectancy X (10,000 hrs. min.).



400 CYCLE STEP-DOWN TRANSFORMER—TF1RX01YY

Y-Y connected, HP3-140 is identical to CHICAGO Specification No. 9926A in size and construction, but is rated at 140 va. instead of 88 va. Primary is 115 volts per phase, 3-phase, 400 cycles. Designed primarily for aircraft applications.

| Catalog No. | Volts | Secondary Va. Cap. | Case Size | Terminal Type | Weight Lbs. | Net Price |
|-------------|-------|--------------------|-----------|---------------|-------------|-----------|
| HP3-140 | 24.5 | 140 | 17 | R | 3 | \$36.73 |

All secondary A.C. voltages $\pm 3\%$

ISOLATION TRANSFORMERS—TF4RX01 — — † All Primaries 115 V., 380-1000 cycles.

| Catalog No. | Volts | Secondary Amps. | V.A. | Insul. Test Volts RMS | Case Size† | Wt. Lbs. | Net Price |
|-------------|-------|-----------------|------|-----------------------|------------|----------|-----------|
| 41MS-40 | 115 | 0.35 | 40 | 1,500 | EA | 1.5 | \$13.65 |
| 41MS-160 | 115 | 1.39 | 160 | 1,500 | GA | 3.1 | 18.50 |

†Refer to Case Size.

CHICAGO

MILITARY STANDARD AND MIL-T-27A 400 CYCLE TRANSFORMERS AND REACTORS STANCOR ELECTRONICS INC.

(formerly Chicago Standard Transformer Corporation)



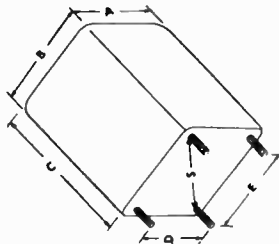
MILITARY STANDARD CASES

Designed and built in accordance with MIL-T-27A, Grade 4, Class S* operating temperature and life expectancy X (10,000 hours minimum). Maximum operating altitude 70,000 feet. The complete line is housed in Chicago's one piece drawn-steel cases. Outside case dimensions and mounting dimensions are within the tolerance of the Military Standard Specifications. *High Temperature Operation 85° C. ambient, 45° C. rise.



MS CASE DIMENSIONS

| Case Size | Dimensions in Inches | | | | | |
|-----------|----------------------|---------|---------|--------|-------|-------|
| | A | B | C | D | E | S |
| AH | 1 5/16 | 1 3/16 | 1 3/8 | — | — | 1 1/4 |
| AJ | 1 5/8 | 1 5/8 | 2 3/8 | 1 1/16 | 1 1/4 | — |
| EA | 1 15/16 | 1 15/16 | 2 3/8 | 1 3/8 | 1 1/4 | — |
| EB | 1 15/16 | 1 15/16 | 2 3/8 | 1 3/8 | 1 1/4 | — |
| FA | 2 3/8 | 2 1/8 | 3 1/8 | 1 1/16 | 1 1/4 | — |
| GA | 2 3/8 | 2 3/8 | 3 1/8 | 1 1/16 | 1 1/4 | — |
| GB | 2 3/8 | 2 3/8 | 2 15/16 | 2 3/8 | 1 3/4 | — |
| HA | 3 1/8 | 2 3/8 | 4 3/8 | 2 3/8 | 1 5/8 | — |
| JB | 3 1/8 | 3 1/8 | 4 3/8 | 2 3/8 | 1 5/8 | — |
| KA | 3 15/16 | 3 3/8 | 5 1/8 | 3 | 2 1/8 | — |
| KB | 3 15/16 | 3 3/8 | 4 1/2 | 3 | 2 1/8 | — |



POWER TRANSFORMERS—TF4SX03— — † (Cap. Input. All pri. 105/115/125 V., 380-1000 c.

| High Voltage Secondary | | Rectifier Filament | | Other Filaments | | Case † Size | Wt. Lbs. | Catalog Number | Net Price |
|------------------------|----------|--------------------|-------|-----------------|-------|-------------|----------|----------------|-----------|
| A.C. Volts | D.C. Ma. | Volts | Amps. | Volts | Amps. | | | | |
| 255-0-255 | 40 | 5.0 | 2.0 | 6.3 CT | 2.0 | GB | 1 1/2 | 4PMS-40 | \$28.62 |
| 270-0-270 | 55 | 5.0 | 2.0 | 6.3 CT | 2 | GB | 1 3/4 | 4PMS-55 | 25.55 |
| 335-0-335 | 70 | 5.0 | 2 | 6.3 CT | 3 | GB | 1 3/4 | 4PMS-70 | 30.78 |
| 330-0-330 | 85 | 5.0 | 2.0 | 6.3 CT | 3.0 | GA | 2 1/2 | 4PMS-85 | 31.80 |
| 345-0-345 | 105 | 5.0 | 2.0 | 6.3 CT | 3.5 | GA | 2 1/2 | 4PMS-105 | 34.32 |
| 375-0-375 | 120 | 5.0 | 3 | 6.3 CT | 4 | GA | 3 | 4PMS-120 | 37.57 |
| 370-0-370 | 160 | 5.0 | 3.0 | 6.3 CT | 4.0 | JB | 4 1/4 | 4PMS-150 | 44.30 |
| 440-0-440 | 165 | 5.0 | 3 | 6.3 | 7.5 | KB | 6 1/2 | 4PMS-165 | 58.12 |
| | | | | 6.3 | 3 | — | — | | |
| | | | | 6.3 | 3 | — | — | | |
| | | | | 6.3 | 0.6 | — | — | | |
| | | | | 6.3 | 4 | — | — | | |
| 450-0-450 | 200 | 5.0 | 2 | 6.3 | 4 | KB | 6 1/4 | 4PMS-200A | 56.83 |
| | | | | 6.3 | 4 | — | — | | |
| | | | | 6.3 | 0.6 | — | — | | |
| 550-370-75-0 | 300 | 5.0 | 6 | 6.3 CT | 5 | — | — | — | — |
| | | | | 6.3 CT | 1 | KA | 7 1/2 | 4PMS-300 † § | 79.95 |

FILTER REACTORS—TF4SX04— — †

| Inductance (henries) | Maximum D.C. Ma. | D.C. Resistance (ohms) | Insulation Volts RMS | Case † Size | Wt. Lbs. | Catalog Number | Net Price |
|----------------------|------------------|------------------------|----------------------|-------------|----------|----------------|-----------|
| 2.0 | 40 | 190 | 2,500 | AH | 1/4 | 4RMS-240 | \$10.33 |
| 2.0 | 55 | 160 | 2,500 | AH | 1/4 | 4RMS-255 | 10.12 |
| 2.0 | 70 | 165 | 2,500 | AJ | 3/8 | 4RMS-270 | 9.60 |
| 2.0 | 85 | 125 | 2,500 | AH | 1/4 | 4RMS-285 | 9.07 |
| 2.0 | 105 | 110 | 2,500 | EB | 1/2 | 4RMS-2105 | 9.88 |
| 2.0 | 120 | 100 | 2,500 | EB | 1 | 4RMS-2120 | 11.50 |
| 3.0 | 120 | 150 | 1,500 | EB | 1.2 | 4RMS-3120 | 11.40 |
| 2.0 | 150 | 95 | 2,500 | EB | 1 | 4RMS-2150 | 10.62 |
| 2.0 | 165 | 90 | 2,500 | EB | 1 | 4RMS-2165 | 10.65 |
| 2.0 | 200 | 73 | 2,500 | FA | 2 | 4RMS-2200 | 12.42 |
| 2.0 | 300 | 47 | 2,500 | HA | 4 | 4RMS-2300 § | 14.53 |

FILAMENT TRANSFORMERS—TF4SX01— — † (All Prim. 105/115/125 V., 380-1000 cys.

| Sec. Volts | Sec. Amps. | Insulation Volts RMS | Case Size | Wt. Lbs. | Catalog No. | Net Price |
|------------|------------|----------------------|-----------|----------|-------------|-----------|
| 6.3 CT | 3 | 2,500 | EB | 1 | 4FMS-63 | \$18.55 |
| 6.3 CT | 5.5 | 2,500 | EA | 1 1/4 | 4FMS-65 | 18.68 |
| 6.3 CT | 10 | 2,500 | FA | 2 | 4FMS-610 | 21.99 |
| 6.3 CT | 20 | 2,500 | GA | 2 1/2 | 4FMS-620 | 26.67 |

†Reactor Input. †Refer to Case Size. All secondary A.C. voltages ±3% §Max. operating Alt. 50,000 ft For additional 400 cycle filament transformers, TF4RX01-series, see Rtanor page 19.

400 CYCLE TRANSFORMERS AND REACTORS (YY ALTERNATE CASES) (Max. Alt. 10,000 ft.)

POWER TRANSFORMERS (All Primaries 105/115/125 V., 380-1000 Cycles)—TF4SX03YY

| High Voltage Secondary | | Rect. Fil. | | Other Fil. | | Case Size | Wt. Lbs. | Catalog Number | Net Price |
|------------------------|----------|------------|-------|------------|-------|-----------|----------|----------------|-----------|
| A. C. Volts | D.C. Ma. | Volts | Amps. | Volts | Amps. | | | | |
| 270-0-270 | 55 | 5.0 | 2 | 6.3 CT | 2 | 13 | 1 1/2 | 4PHC-55 | \$23.35 |
| 335-0-335 | 70 | 5.0 | 2 | 6.3 CT | 3 | 13 | 1 1/4 | 4PHC-70 | 27.30 |
| 375-0-375 | 120 | 5.0 | 3 | 6.3 CT | 4 | 17 | 2 1/2 | 4PHC-120 | 33.48 |
| 440-0-440 | 165 | 5.0 | 3 | 6.3 | 7.5 | — | — | — | — |
| | | | | 6.3 | 3 | — | — | | |
| | | | | 6.3 | 3 | — | — | | |
| | | | | 6.3 | 0.6 | 20 | 6 | 4PHC-165 | 56.62 |
| | | | | 6.3 | 4 | — | — | | |
| 450-0-450 | 200 | 5.0 | 2 | 6.3 | 0.6 | 20 | 6 | 4PHC-165 | 56.62 |
| | | | | 6.3 | 4 | — | — | | |
| | | | | 6.3 | 4 | — | — | | |
| 550-370-75-0 | 300 | 5.0 | 6 | 6.3 | 0.6 | 20 | 5 1/4 | 4PHC-200A | 55.53 |
| | | | | 6.3 CT | 5 | — | — | | |
| 75-370-550 | — | — | — | 6.3 CT | 1 | 21 | 6 1/2 | 4-PHR-300 | 80.92 |

FILTER REACTORS—TF4SX04YY

| Inductance (henries) | Maximum D.C. Ma. | D.C. Resistance (Ohms) | Insulation Volts RMS | Case Size | Wt. Lbs. | Catalog Number | Net Price |
|----------------------|------------------|------------------------|----------------------|-----------|----------|----------------|-----------|
| 2.0 | 55 | 160 | 2,500 | 3 | 1/4 | 4RH-255 | \$7.18 |
| 2.0 | 70 | 165 | 2,500 | 7 | 1/2 | 4RH-270 | 7.22 |
| 2.0 | 120 | 100 | 2,500 | 11 | 1 | 4RH-2120 | 8.55 |
| 2.0 | 165 | 90 | 2,500 | 11 | 1 1/2 | 4RH-2165 | 8.58 |
| 2.0 | 200 | 73 | 2,500 | 13 | 1 1/2 | 4RH-2200 | 10.58 |
| 2.0 | 300 | 47 | 2,500 | 16 | 3 1/2 | 4RH-2300 | 12.57 |

FILAMENT TRANSFORMERS (All Prim. 105/115/125 V., 380-1000 cycles)—TF4SX04YY

| Sec. Volts | Sec. Amps. | Insulation Volts RMS | Case Size | Wt. Lbs. | Catalog Number | Net Price |
|------------|------------|----------------------|-----------|----------|----------------|-----------|
| 6.3 CT | 3 | 2,500 | 10 | 3/4 | 4FH-83 | \$18.25 |
| 6.3 CT | 5.5 | 2,500 | 11 | 1 | 4FH-85 | 17.73 |
| 6.3 CT | 10 | 2,500 | 13 | 1 1/4 | 4FH-610 | 19.66 |
| 6.3 CT | 20 | 2,500 | 15 | 2 1/2 | 4FH-620 | 24.68 |

400 CYCLE STEP-DOWN AND ISOLATION TRANSFORMERS (See Stancor Page 16)

STANCOR PAGE 17



CASE DIMENSIONS

| Case Size | Dimensions in Inches | | | | |
|-----------|----------------------|--------|--------|-------|---------|
| | A | C | D | H | K |
| 3 | 1 1/16 | 1 3/16 | 2 | 1 3/8 | 2 Studs |
| 7 | 1 3/8 | 1 5/8 | 2 | 1 3/8 | 2 Studs |
| 10 | 1 7/8 | 1 5/8 | 2 1/16 | 1 3/8 | 1 1/16 |
| 11 | 1 7/8 | 1 5/8 | 2 1/16 | 1 3/8 | 1 1/16 |
| 12 | 2 1/4 | 2 1/8 | 2 1/16 | 1 3/8 | 1 1/16 |
| 13 | 2 1/4 | 2 1/8 | 2 1/16 | 1 3/8 | 1 1/16 |
| 15 | 2 1/2 | 2 3/8 | 3 1/8 | 1 1/2 | 1 1/16 |
| 16 | 2 1/2 | 2 1/8 | 3 1/2 | 2 | 1 1/8 |
| 17 | 2 7/8 | 2 1/16 | 3 3/4 | 2 | 1 7/8 |
| 20 | 3 1/16 | 3 3/16 | 4 5/16 | 2 3/8 | 2 3/8 |
| 21 | 3 1/16 | 3 3/16 | 4 1/16 | 2 3/8 | 2 3/8 |

CHICAGO**NEW EQUIPMENT
AUDIO
TRANSFORMERS****STANCOR ELECTRONICS INC.**

(formerly Chicago Standard Transformer Corporation)

**TRANSISTOR AUDIO TRANSFORMERS**

Here are the smallest iron core audio transformers ever built. They weigh less than 1/10 ounce and are no larger than the transistors they power. Write for Bulletin 462 showing typical circuit application.

| Part No. | Application | Pri. Imp. | Sec. Imp. | Pri. DC Res. | Sec. DC Res. | Dimensions (±.015") | Weight in ounces | Net Price |
|---------------|----------------------|-----------|-----------|--------------|--------------|---------------------|------------------|---------------|
| UM-110 | Interstage | 20,000 | 1,000 | 1675 | 285 | 1/4" x 3/8" x 3/8" | 0.07 | \$5.70 |
| UM-111 | Output or matching | 1,000 | 50/60 | 120 | 9.0 | 3/8" x 3/8" x 3/8" | 0.10 | 3.90 |
| UM-112 | High imp. mic. input | 200,000 | 1,000 | 4000 | 195 | 3/8" x 3/8" x 3/8" | 0.10 | 6.30 |
| UM-113 | Interstage | 20,000 | 1,000 | 1350 | 205 | 3/8" x 3/8" x 3/8" | 0.10 | 4.35 |
| UM-114 | Output or matching | 500 | 50/60 | 70 | 9.0 | 3/8" x 3/8" x 3/8" | 0.10 | 3.90 |

TRANSISTOR TRANSVERTER TRANSFORMERS

For converting 12 V. battery voltage to plate supply voltage. See Chicago Bulletin CT-43 for schematics and parts lists.

| Part No. | Application | Mtg. Type | Dimensions | Weight | Net Price |
|--------------|---|-----------|-----------------------------|----------|----------------|
| DCT-1 | Converts 12 VDC to 275 VDC at 125 DCMA | C | 1 7/8" x 2 1/16" x 2 5/16" | 14 oz. | \$14.68 |
| DCT-2 | Converts 12 VDC to 250 VDC at 275 DCMA or 500 VDC at 165 DCMA | C | 2 1/4" x 2 1/16" x 2 11/16" | 1.5 lbs. | 16.63 |

MINIATURE HIGH FIDELITY AUDIO TRANSFORMERS

Chicago-Stancor Tinytrans are miniature transformers made with nickel steel laminations. They have an exceptional frequency response for units of this size; ±1 db. 30-15,000 cps, Maximum level 0 db. Write for Bulletin 463 showing frequency response curves on these transformers.

These units are sealed and potted in 7/8" square, anodized aluminum cases with phenolic terminal boards. Total height, including terminals, is 1 1/4". The case has two 2-56 threaded inserts, 1/16" centers, for easy chassis mounting. The entire transformer weighs only 1.3 ounces.

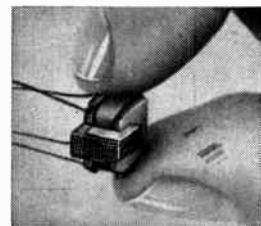


| Part No. | Application | Primary Impedance | Secondary Impedance | Net Price |
|--------------|--|----------------------------|---------------------|----------------|
| TT-11 | Mic. pickup or line to single grid | 50, 200/250, 500/600 | 50,000 | \$13.43 |
| TT-12 | Mic. pickup or line to push-pull grids | 50, 200/250, 500/600 | 50,000 | 14.27 |
| TT-13 | Dynamic mic. to single grid | 7.5/30 | 50,000 | 8.52 |
| TT-14 | Single plate to single grid | 15,000* (No DC in primary) | 60,000 | 8.03 |

PUBLIC ADDRESS RANGE TRANSFORMERS**Frequency Response within ±1 db, 50 to 10,000 Cycles**

Driver and output transformers in this CHICAGO series are designed for three general power levels to fit a wide range of application. Up-to-date secondary impedances match 600 or 150-ohm lines, 16, 8, and 4-ohm speakers.

(16/8/4-ohm taps also suitable for 20/6/3.2-ohm speakers.) Output transformers have tertiary windings for 10% inverse feedback that minimizes distortion and provides extra audio watts without loss of fidelity.

**DRIVERS** H-Type—TF4RX12YY (Cat. No. PHD), S-Type (Cat. No. PSD) and C-Type (Cat. No. PCD) Mountings

| Application | Primary Impedance | Max. D.C. Pri. | Ratio. Pri. to 1/2 Sec. | Case Size | Wt. Lbs. | Cat. No. | Net Price |
|-------------------------|-----------------------------|----------------|-------------------------|-----------|----------|----------|-----------|
| P-P Plates to P-P Grids | 20,000 ohms (Pri. CT) | 10 ma. | 3:1 | 14 | 2 1/4 | PHD-10 | \$16.13 |
| | | | | | | PSD-10 | 15.15 |
| | | | | | | PCD-10 | 12.38 |
| P-P Plates to P-P Grids | 20,000 ohms (Pri. CT) | 25 ma. | 3:1 | 15 | 2 1/4 | PHD-25 | 15.25 |
| | | | | | | PSD-25 | 15.68 |
| | | | | | | PCD-25 | 7.97 |
| P-P Plates to P-P Grids | 5,000/10,000 ohms (Pri. CT) | 100 ma. | 5:1 | 18 | 4 1/2 | PHD-100 | 29.55 |

TYPE UM**YY CASE MOUNTING****S-TYPE MOUNTING****OUTPUTS** H-Type—TF4RX13YY (Cat. No. PHO), S-Type (Cat. No. PSO) and C-Type (Cat. No. PCO) Mountings

| Application | Impedances | Typical Output Tubes | Class | Max. Audio Watts | Max. D.C. Pri. CT | Case Size Wt. | Cat. No. | Net Price |
|----------------------------------|---|-----------------------------------|----------------------|------------------|-------------------|----------------|----------|-----------|
| P-P Plates to Line or Voice Coil | Primary: 5,000 ohms, CT Secondary: * 600/150/16/8/4 ohms | 6B4G, 6L6, 6V6, etc. | A ₁ AB | 20 | 120 ma. | 20: 6 1/2 lbs. | PHO-80 | \$37.73 |
| | | | | | | | PSO-80 | 31.62 |
| | | | | | | | PCO-80 | 19.13 |
| P-P Plates to Line or Voice Coil | Primary: 10,000 ohms, CT Secondary: * 600/150/16/8/4 ohms | 6V6, 6F6, 6K6, etc. | AB, AB ₁ | 15 | 200 ma. | 19: 5 lbs. | PSO-150 | 21.67 |
| | | | | | | | PCO-150 | 13.43 |
| | | | | | | | | |
| P-P Plates to Line or Voice Coil | Primary: 6,000 ohms, CT Secondary: * 600/150/16/8/4 ohms | Two 6L6's, Four 6V6's, or similar | B, AB ₂ † | 30 | 250 ma. | 22: 9 lbs. | PSO-200 | 27.40 |
| | | | | | | | PCO-200 | 13.75 |

*Has tertiary winding to provide 10% inverse feedback.

†For low distortion, use fixed bias.

See Page 1422 For Mounting Dimensions

C-TYPE MOUNTING**STANCOR PAGE 18**

CHICAGO

NEW EQUIPMENT TRANSFORMERS AND REACTORS

for Broadcast, Amateur and Industrial Application

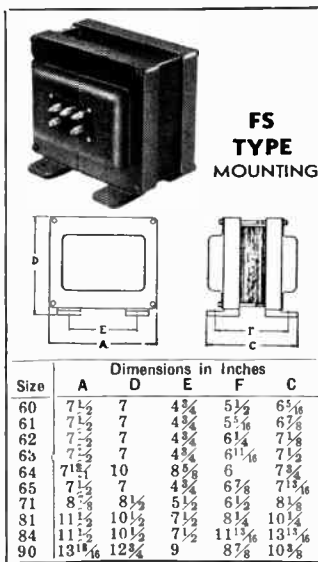
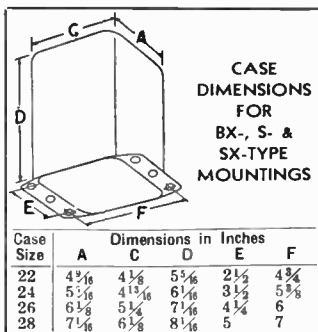


STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

LARGE CAPACITY TRANSFORMERS AND REACTORS For Broadcast, Communications and Industrial Use



SX-TYPE MOUNTING



Overall Case Dimensions:
H—31 1/2" W—26 1/2" D—23 1/2"

| In: | Recommended Application: Tubes: | Ratio Pri./1/2 Sec. | Mtg. Type | Case Size | Wt. Lbs. | Cat. No. | Net Price |
|----------------------|---|------------------------|-----------|-----------|----------|----------|-----------|
| 250-Watt Transmitter | From two 2A3's, 6B4's, or similar P-P Plates to Class B 838's, 805's, 203-A's, etc. | 3.5:1 | B* | 20 | 6 1/2 | BD-1 | \$31.42 |
| 1-KW Transmitter | From four 2A3's, 6B4's, or similar P-P Plates to two 833-A's or similar P-P Grids | 3:1 | † | 24 | 12 1/4 | BD-2 | 34.80 |

†Similar to SX-Type mounting, but with screw terminals on a terminal board.
*B-Type mounting, but with screw terminals.

| Recommended Application In: | Recommended Application With: | Impedances (Pri. Plate to Plate) | Modulator Tubes | Mtg. Type | Case Size | Wt. Lbs. | Cat. No. | Net Price |
|-----------------------------|-------------------------------|-------------------------------------|----------------------|-----------|-----------|----------|----------|-----------|
| 250-Watt Transmitter | Driver Transformer #BD-1 | Pri: 7500 ohms CT Sec: 5000 ohms | 203-A, 838 805, etc. | BX | 26 | 25 | BM-1 | \$56.58 |

| Recommended Application In: | Recommended Application With: | Inductance | D.C. Ma. | Mtg. Type | Case Size | Wt. Lbs. | Cat. No. | Net Price |
|-----------------------------|-------------------------------|------------|----------|-----------|-----------|----------|----------|-----------|
| 250-Watt Transmitter | Mod. Transformer #BM-1 | 65 hy. | 250 | BX | 28 | 41 | BR-1 | \$ 79.50 |

| Primary: Volts | Max. VA. | Secondary: A.C. Load Volts | | D.C. Volts after Filter | D.C. Ma. | Mtg. Size | Mtg. Type | Wt. Lbs. | Cat. No. | Net Price |
|-------------------|----------|-------------------------------|-------------|-------------------------|----------|-----------|-----------|----------|----------|-----------|
| | | | | | | | | | | |
| 115-230 | 185 | 675-0-675 | 575-0-575 | 500 | | 22 | S | 12 | P-45 | \$26.62 |
| | | 900-0-900 | 735-0-735 | 750 | 250 | | | | | |
| 115-230 | 310 | 1150-0-1150 | 870-0-870 | 1000 | | 60 | FS | 37 | P-107 | 95.23 |
| | | 1425-0-1425* | 600-0-600 | 1250 | 150 | | | | | |
| 115-230 | 360 | 1710-0-1710 | 1430-0-1430 | 750 | 250 | 24 | S | 26 | P-1240 | 41.35 |
| | | 2900-0-2900 | 2320-0-2320 | 400 | 200 | | | | | |
| 115-230 | 550 | 1710-0-1710 | 1430-0-1430 | 1500 | | 63 | FS | 43 | P-1512 | 105.77 |
| | | 2820-0-2820 | 2260-0-2260 | 2500 | 300 | | | | | |
| 115-230 | 915 | 2900-0-2900 | 2320-0-2320 | 2000 | 300 | 71 | FS | 71 | P-2520 | 126.95 |
| | | 4600-0-4600 | 3400-0-3400 | 2600 | 500 | | | | | |
| 115-230 | 1600 | 4600-0-4600 | 3400-0-3400 | 2100 | 500 | 64 | FS | 95 | P-2126 | 177.42 |
| | | 4050-0-4050 | 3000 | 600 | 90 | | | | | |
| 115-230 | 3050 | 4600-0-4600 | 3400-0-3400 | 4000 | | 90 | FS | 150 | P-4353 | 363.82 |
| | | 4050-0-4050 | 3000 | 600 | | | | | | |

*Both secondaries may be rectified simultaneously.

| Inductance in Henrys | Max. D.C. Ma. | D.C. Resistance, Ohms | Insulation Test Volts | Mtg. Type | Mtg. Size | Wt. Lbs. | Cat. No. | Net Price |
|----------------------|---------------|-----------------------|-----------------------|-----------|-----------|----------|----------|-----------|
| 10 | 500 | 40 | 9,000 | FS | 62 | 35 | R-105 | \$69.38 |
| 10 | 300 | 40 | 7,500 | SX | 26 | 22 | R-103 | 40.38 |
| 6 | 700 | 35 | 10,000 | FS | 61 | 35 | R-67 | 79.03 |
| 6 | 500 | 35 | 9,000 | FS | 60 | 35 | R-65 | 65.80 |
| 6 | 300 | 35 | 7,500 | SX | 24 | 16 1/2 | R-63 | 38.18 |

Splatter Chokes for High Level "Clipper" Filters

Can withstand high peak voltages. Has tapped windings to cover an inductance from .02 to 1.5 henries at relatively constant Q. Eliminates splatter, caused by heavy modulation; limits band width to 3,000 cycles, effectively increases "get through" ability of phone signals, and prevents negative peak clipping.

| Type | D.C. Ma. | Insulation Volts | Inductance in Henrys | Mounting | | Net Price |
|--------|----------|------------------|----------------------|----------|------|-----------|
| | | | | Type | Size | |
| SR-300 | 300 | 7,500 | .02 to 1.5 Hy | BX | 22 | \$38.28 |
| SR-500 | 500 | 10,000 | .02 to 1.5 Hy | BX | 24 | 42.42 |

Low Pass Filter No. LPF-1

For attenuating frequencies above 3,000 cycles in low level speech amplifiers. Operates out of a 15,000 ohm source, e.g., the plate of 6C5, 6J5, etc. when its 60,000 ohm secondary is connected to an equal impedance output. Operates at signal levels up to -8 db. Complete with operating instructions. S type mtg. Case size 13. (Stancor Page 13).

Net Price.....\$34.07

FILAMENT TRANSFORMERS—TF4RX01— — †

All primaries 105/115 125 V., 380-1000 cycles.

| Catalog Number | Sec. Volts | Sec. Amps. | Insul. Test Volts RMS | Case Size† | Wt. Lbs. | Net Price |
|----------------|------------|------------|-----------------------|------------|----------|-----------|
| 4FMS-2415 | 24 CT | 1.5 | 1,500 | FA | 1.2 | \$16.30 |
| 4FMS-1208 | 12.6 CT | 0.8 | 1,500 | AJ | 0.8 | 16.00 |
| | 12.6 | 0.8 | 1,500 | | | |
| 4FMS-122 | 12.6 CT | 2.0 | 1,500 | FA | 1.3 | 19.00 |
| | 12.6 | 2.0 | 1,500 | | | |

CHICAGO

**NEW EQUIPMENT
AUDIO
TRANSFORMERS**



STANCOR ELECTRONICS INC.
(formerly Chicago Standard Transformer Corporation)

COMMUNICATIONS RANGE AUDIO TRANSFORMERS

Frequency Response within ± 1 db, 200 to 3,500 Cycles

These transformers are specifically designed for use in receiving and transmitting equipment such as amateur, police, railroad, and aircraft types, where clear voice reproduction is desired.

INPUTS H-Type-TF4RX--YY† (Cat. No. CIH), S-Type (Cat. No. CIS) and C-Type (Cat. No. CIC) Mountings*

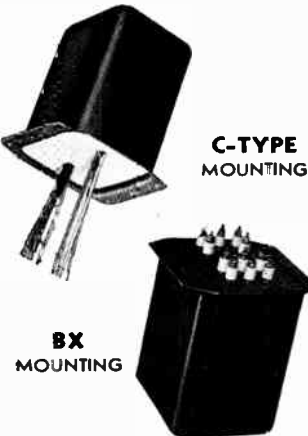


| Application | Impedances: Primary—Secondary | Case Size | Wt. Lbs. | Cat. No. | Family | Net Price |
|--|--|-----------|----------|--|--------|---------------------------|
| Low Level Line to Single or Push-Pull Grids | Pri.: 600/150 ohms CT *Sec: 100,000 ohms CT | 9 | ¾ | CIH-1 CIS-1 CIC-1 | 10 | \$22.38 20.32 16.70 |
| Low Level S. B. or D. B. Mike to Sgl. or P-P Grids | Pri.: 125/50 ohms @ 80 ma. Sec. 125,000 ohms CT | 9 | ¾ | CIH-2 CIS-2 CIC-2 | 11 | 11.66 10.72 7.43 |

**Split and balanced windings: may be used singly or push-pull.

†Refer to family.

OUTPUTS H-Type-TF4RX13YY (Cat. No. COH), S-Type (Cat. No. COS) and C-Type (Cat. No. COC) Mountings*



| Application | Impedances: Pri.—Sec. | Typical Audio Pri. Tubes Class | Max. Case Watts | Max. Pri. D.C. | Case Size | Wt. Lbs. | Cat. No. | Net Price |
|-----------------------------|---|--------------------------------|-----------------|----------------|-----------|----------|--|--------------------------|
| Sgl. P. to Line or Speaker | Pri.: 5000 ohms Sec. ohms: 600/150/16/8/4 | 6L6, 6V6, 25A6 A | 5 | 55 ma. | 14 | 2¼ | COH-1 COS-1 COC-1 | \$15.20 13.72 8.45 |
| Sgl. Pl. to Line or Speaker | Pri.: 8000 ohms Sec. ohms: 600/150/16/8/4 | 6F6, 6V6, 6K6 A | 5 | 55 ma. | 14 | 2¼ | COH-2 COS-2 COC-2 | 16.87 12.50 10.12 |

DRIVER H-Type (Cat. No. CDH), S-Type (Cat. No. CDS) and C-Type (Cat. No. CDC) Mountings*

| Application | Primary Impedance | Max. D.C. Pri. CT | Ratio, Pri. to ½ Sec. | Case Size | Wt. Lbs. | Cat. No. | Net Price |
|---------------------------------------|----------------------|-------------------|-----------------------|-----------|----------|------------------------------|-----------------|
| P-P Plates (2A3's, etc.) to P-P Grids | 5,000 ohms (Pri. CT) | 100 ma. | 3:1 | 17 | 3½ | CDS-1 CDC-1 | \$17.10 5.56 |

*Mounting Dimensions on Page 1428.

MODULATION TRANSFORMERS—Class B Plates to Class C Load



| Catalog No. | Typical Mod. Tubes | Impedances Primary-Secondary | D.C. Pri. | Ma. Sec. | Power Level | Mounting Type | Size | Wt. Lbs. | Net Price |
|-------------|-------------------------------|---|-----------|----------|---------------|---------------|------|----------|-----------|
| CMS-1 | 203A's, 805's, 75TL's, 203Z's | Pri.: 9000/6700 ohms CT Sec: 8000/6000/4000 ohms | 350 | 350 | 250-350 watts | X | 26 | 22 | \$66.07 |
| CMS-3 | 810's, 822's, 4-250A's, etc. | Pri.: 18,000/12,000 ohms CT Sec: 6250 ohms | 500 | 500 | 500-750 watts | FS† | 4† | 43 | 116.62 |

†Mounting Dimensions and Illustration on Page 1360.

STEP-DOWN TRANSFORMERS—Primary, 50/60 cycles

CHICAGO step-down autotransformers solve the problem of operating standard 117-volt radios, amplifiers, and various electrical appliances from 220-volt power sources. They are particularly well adapted to use in Central and South American countries, where 220-volt lines are frequently found, and where the **Sealed-in-Steel** construction protects them against corrosion caused by excessive humidity. Input side is equipped with 8-foot, rubber-covered cord and plug. Output side has standard female receptacle.

| Catalog No. | Input Voltage | Output Voltage | Rating, Continuous Duty | Case Size | Wt. Lbs. | Net Price |
|----------------|---------------|----------------|-------------------------|-----------|----------|-----------|
| SD-50 | 220-250 | 110-125 | 50 watts | 16 | 2 ¾ | \$ 6.08 |
| SD-100 | 220-250 | 110-125 | 100 watts | 20 | 4 ¼ | 7.62 |
| SD-150 | 220-250 | 110-125 | 150 watts | 22 | 7 | 9.65 |
| SD-250 | 220-250 | 110-125 | 250 watts | 22 | 8 ¾ | 11.45 |
| SD-500 | 220-250 | 110-125 | 500 watts | 24 | 14 ½ | 17.28 |
| SD-1000 | 220-250 | 110-125 | 1000 watts | 26 | 22 ½ | 24.53 |

ISOLATION TRANSFORMERS—Primary, 50/60 cycles

A rotary switch on each CHICAGO isolation transformer adjusts to either of three primary voltages, 125/115/105 volts. With the unit operating on a 115-volt line, the three switch positions also provide varying secondary voltages, 105/115/125 volts isolated from line. Eight-foot, rubber-covered cord and plug on primary, standard female receptacle on secondary.

| Catalog No. | Input Voltage | Output Voltage | Rating, Continuous Duty | Case Size | Wt. Lbs. | Net Price |
|---------------|---------------|----------------|-------------------------|-----------|----------|-----------|
| IS-50 | 105/115/125 | 125/115/105* | 50 watts | 21 | 5 | \$11.42 |
| IS-100 | 105/115/125 | 125/115/105* | 100 watts | 22 | 8 ½ | 14.97 |
| IS-150 | 105/115/125 | 125/115/105* | 150 watts | 24 | 12 ½ | 17.62 |
| IS-250 | 105/115/125 | 125/115/105* | 250 watts | 24 | 18 ¾ | 23.87 |

*With 115-volt primary.

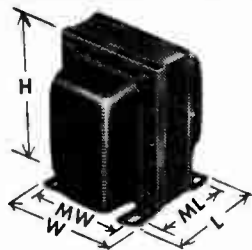
DIMENSIONS for S, SX, STEP-DOWN and ISOLATION TRANSFORMERS

| Case Size* | Dimensions in Inches | | | | | |
|------------|----------------------|-------|---------|-------|-------|-------|
| | A | B | C | D | E | F |
| 16 | 2 7/8 | 3 1/2 | 2 11/16 | 3 1/2 | 2 | 3 3/8 |
| 20 | 3 11/16 | 4 1/8 | 3 3/16 | 4 3/8 | 2 3/4 | 3 7/8 |
| 21 | 3 11/16 | 4 1/8 | 3 3/16 | 4 1/8 | 2 3/4 | 3 7/8 |
| 22 | 4 3/16 | 5 1/4 | 4 3/8 | 5 1/8 | 2 1/2 | 4 3/8 |
| 24 | 5 1/16 | 5 7/8 | 4 13/16 | 6 1/8 | 5 1/2 | 5 1/8 |
| 26 | 6 1/8 | 6 3/4 | 5 1/4 | 7 1/8 | 4 3/4 | 6 |

STERLING—THE MARK OF QUALITY

STERLING
TRANSFORMER
CORPORATION

Brooklyn 11, N. Y.



TRANSFORMERS for Electronically Regulated Power Supplies

- ONE UNIT PROVIDES PLATE AND FILAMENT POWER FOR ENTIRE SUPPLY.
- RATINGS BASED ON D.C. OUTPUT OF SUPPLY.
- APPLICATION BULLETIN WITH EACH UNIT.

2K SERIES

| PLATE AND FILAMENT TRANSFORMERS | Cat. No. | Supply Rating | High Voltage Secondary AC Volts | DC MA | Rectifier Fil. | | Pass Tube Fil. | | Regulator Fil. | | Auxiliary Fil. | | Overall | | | Mtg. Dim. | | Rec. Mtg. Screw | Weight Lbs. | Net Price 1-9 pcs. |
|---------------------------------|--|-----------------------|---------------------------------|-------|----------------|-----|----------------|-----|----------------|-------|----------------|-------|---------|-------|-------|-----------|-------|-----------------|-------------|--------------------|
| | | | | | V | A | V | A | V | A | V | A | L | W | H | ML | MW | | | |
| 2K6 | 300/250VDC 400MADC | 550-480-0 480-550V | 440 | | Use with 2K20 | | Use with 2K20 | | Use with 2K20 | | Use with 2K20 | | 6 | 4 1/4 | 5 1/2 | 4 1/2 | 3 1/2 | #10 | 19 | \$18.48 |
| 2K8 | 300/250VDC 300MADC | 540-475-0 475-540V | 340 | 5 | 6 | 6.3 | 6 | 6.3 | 1.2 | 6.3CT | 6 | 6 1/4 | 4 1/4 | 5 1/2 | 4 1/4 | 3 1/2 | #10 | 20 | 21.62 | |
| 2K10 | 300/250VDC 200MADC | 500-440-0 440-500V | 240 | 5 | 3 | 6.3 | 3 | 6.3 | 1.2 | 6.3CT | 6 | 5 | 4 1/4 | 5 1/2 | 3 1/2 | 3 1/2 | #10 | 14 | 17.66 | |
| 2K12 | 300/250VDC 100MADC | 540-465-0 465-540V | 140 | 5 | 3 | 6.3 | 3 | 6.3 | 1.2 | 6.3CT | 3 | 4 1/4 | 4 1/4 | 5 1/2 | 3 1/4 | 3 1/2 | #10 | 12 | 15.18 | |
| 2K13 | 150/100VDC 400MADC | 370-310-0 310-370V | 440 | | Use with 2K20 | | Use with 2K20 | | Use with 2K20 | | Use with 2K20 | | 4 1/4 | 4 1/4 | 5 1/2 | 3 1/4 | 3 1/2 | #10 | 12 | 15.18 |
| 2K14 | 150/100VDC 300MADC | 375-320-0 320-375V | 340 | 5 | 6 | 6.3 | 6 | 6.3 | 1.2 | 6.3CT | 6 | 5 1/2 | 4 1/4 | 5 1/2 | 4 | 3 1/2 | #10 | 16 | 17.82 | |
| 2K15 | 150/100VDC 200MADC | 355-300-0 300-355V | 240 | 5 | 3 | 6.3 | 3 | 6.3 | 1.2 | 6.3CT | 6 | 4 1/4 | 4 1/4 | 5 1/2 | 3 1/4 | 3 1/2 | #10 | 12 | 15.18 | |
| 2K16 | 150/100VDC 100MADC | 350-310-0 310-350V | 140 | 5 | 3 | 6.3 | 3 | 6.3 | 1.2 | 6.3CT | 3 | 4 1/4 | 3 3/4 | 4 1/4 | 3 1/4 | 3 | #8 | 10 | 13.20 | |
| 2K17 | 300/250VDC 600MADC | 565-500-0 500-565V | 640 | | Use with 2K20 | | Use with 2K20 | | Use with 2K20 | | Use with 2K20 | | 6 1/4 | 4 1/2 | 6 | 4 1/2 | 3 1/4 | #10 | 22 | 27.19 |
| 2K18 | 300/250VDC 800MADC | 580-520-0 520-580V | 840 | | Use with 2K21 | | Use with 2K21 | | Use with 2K21 | | Use with 2K21 | | 6 | 6 1/4 | 7 1/4 | 4 | 4 1/2 | 1/4 | 33 | 35.64 |
| 2K19 | 300/250VDC 1.0 Amp. | 590-525-0 525-590V | 1040 | | Use with 2K21 | | Use with 2K21 | | Use with 2K21 | | Use with 2K21 | | 7 1/2 | 6 1/4 | 7 1/4 | 5 1/2 | 4 1/2 | 1/4 | 48 | 50.16 |
| 2K20 | (Filament Transformer for 400MA and 600MA Supplies) | | | | 5 | 6 | 6.3 | 6 | 6.3 | 1.2 | 6.3CT | 6 | 3 1/4 | 3 1/4 | 4 1/4 | 2 1/4 | 3 | #8 | 7.5 | 11.22 |
| 2K21 | (Filament Transformer for 800MA and 1 Amp. Supplies) | | | | 5 | 10 | 6.3 | 10 | 6.3 | 2 | 6.3CT | 10 | 4 1/4 | 3 1/4 | 4 1/4 | 3 1/4 | 3 | #8 | 12 | 15.51 |

Standard Color Code

Primary: Black
High Voltage: Center Top: Red-Yellow
High Voltage: High Top: Red
High Voltage: Low Top: Blue

Rectifier Filaments: Yellow
Pass Tube Filaments: Brown
Regulator Filaments: Green
Auxiliary Filaments: Slate

NOTES

- All Primaries 115 Volts 50/60 Cps.
- Ratings Based On Capacitor Input Filters
- Dielectric Test Voltages: Primaries: 1500 V. RMS All Secondaries: 2500 V. RMS

CHOKES

| Cat. No. | Inductance | Rated Current MADC | DC Resist. | Dielectric Test Volt. | L | Overall W | H | Mtg. Dim. ML | MW | Rec. Mtg. Screw | Weight Lbs. | Net Price 1-9 pcs. |
|----------|-------------|--------------------|------------|-----------------------|-------|-----------|-------|--------------|-------|-----------------|-------------|--------------------|
| 2K5 | 4 hys. min. | 440 | 50 | 2500V RMS | 3 1/4 | 3 1/4 | 4 1/4 | 2 3/8 | 2 1/4 | #8 | 6 | \$ 7.66 |
| 2K7 | 4 hys. min. | 340 | 60 | 2500V RMS | 3 1/4 | 2 1/4 | 3 1/2 | 2 | 2 1/4 | #8 | 3.3 | 5.15 |
| 2K9 | 4 hys. min. | 240 | 90 | 2500V RMS | 2 1/4 | 2 1/4 | 3 1/4 | 1 1/4 | 2 | #8 | 2.3 | 3.89 |
| 2K11 | 4 hys. min. | 140 | 185 | 2500V RMS | 3 1/4 | 2 1/4 | 2 1/4 | 3 1/4 | Chan. | #8 | 1.5 | 2.64 |
| 2K22 | 4 hys. min. | .64A | 52 | 2500V RMS | 4 1/4 | 4 1/4 | 5 1/2 | 3 1/4 | 3 1/2 | #10 | 12 | 13.20 |
| 2K23 | 4 hys. min. | .84A | 25 | 2500V RMS | 5 1/2 | 4 1/4 | 5 1/2 | 4 | 3 1/2 | #10 | 17 | 16.96 |
| 2K24 | 4 hys. min. | 1.04A | 20 | 2500V RMS | 7 | 4 1/4 | 5 1/2 | 5 1/2 | 3 1/2 | #10 | 25 | 23.56 |

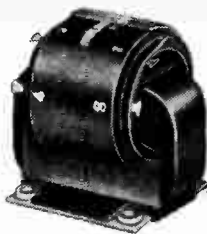
SPECIALS

| Cat. No. | Secondary Volts | Secondary Amperes | RMS Volts Insulation | Primary Volts | Overall Dim. | | | Mtg. Dim. | | Rec. Mtg. Screw | Weight Lbs. | Net Price 1-9 pcs. |
|----------|-----------------|-------------------|----------------------|---------------|--------------|-------|-------|-----------|-------|-----------------|-------------|--------------------|
| | | | | | L | W | H | ML | MW | | | |
| 6K1 | 6.3 | 4 | 1000 | 115/230 | 3 1/4 | 2 1/2 | 2 1/4 | 3 1/4 | Chan. | 8 | 1 3/4 | \$ 5.61 |
| 6K2 | 6.3 | 12 | 1500 | 115/230 | 3 3/4 | 3 1/4 | 4 | 2 1/4 | 2 1/2 | 8 | 6 | 10.30 |
| 6K3 | 6.3 CT | 16 | 3000 | 115 | 3 3/4 | 3 1/4 | 4 | 2 1/4 | 2 1/2 | 8 | 6 1/2 | 10.96 |
| 6K4 | 5 | 3 | 2000 | 115/230 | 3 1/2 | 3 1/4 | 4 | 1 3/4 | 2 1/2 | 8 | 5 | 10.89 |
| | 6.3 CT | 4 | 2000 | | | | | | | | | |
| | 6.3 CT | 4 | 2000 | | | | | | | | | |
| 6K5 | 6.3 | 1.5 | 1000 | 115/230 | 4 | 2 1/2 | 2 1/4 | 3 1/4 | Chan. | 8 | 2 1/4 | 6.14 |
| | 6.3 | 1.5 | 1000 | | | | | | | | | |
| 6K6 | 800 CT | .036 DC | 4000 | 115/230 | 3 1/2 | 2 1/4 | 3 3/4 | 2 1/4 | 2 | 8 | 4 | 6.93 |
| 6K7 | 28 CT | 7 DC | 1000 | 115 | 4 1/4 | 3 1/4 | 4 | 2 1/4 | 2 1/2 | 8 | 8 | 10.43 |
| 6K8 | 660 CT | .25 DC | 1500 | 115/230 | 3 3/4 | 3 3/4 | 4 1/4 | 2 1/4 | 3 | 8 | 8 | 12.67 |
| | 5 | 4.5 | 1500 | | | | | | | | | |
| 6K9 | 1130 CT | .062 DC | 3300 | 115/230 | 3 3/4 | 3 3/4 | 4 1/4 | 2 1/4 | 3 | 8 | 8 | 12.67 |
| | 5 | 2 | 3300 | | | | | | | | | |

STERLING—THE MARK OF QUALITY

STERLING
TRANSFORMER
CORPORATION

Brooklyn 11, N. Y.



ENCAPSULATED
**400 CPS TRANSFORMERS
CLIPPER SERIES**

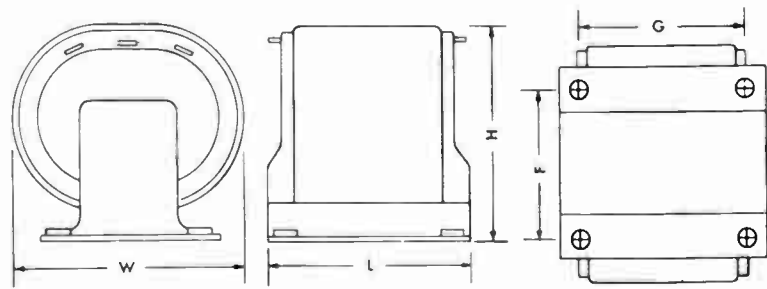
- FOR MINIMUM SIZE & MINIMUM WEIGHT
- CONTOUR MOLDED
- HIPERSIL CORES

| | Cat. No. | Secondary Volts | Secondary Amps. | Rms. V Insulation | Primary Volts | Mold Size | Maximum Operating Ambient | Net Price 1-9 pcs. | |
|-----------------|----------|-------------------|---------------------|----------------------|---------------|-----------|---------------------------|--------------------|--|
| FILAMENT | 4C1 | 6.3 CT | .8 | 1500 | 115 | SM3 | 100°C | 10.89 | Built to pass MIL-T-27A specifications, including Grade 2 humidity tests, and to operate continuously at 150° C. Result: Savings up to 50% in space and weight without sacrifice in performance. |
| | 4C2 | 6.3 CT | 1.2 | 1500 | 115 | SM2 | 100°C | 10.89 | |
| | 4C3 | 6.3 CT | 6.75 | 1500 | 110/115/120 | 2 | 100°C | 17.49 | |
| | 4C4 | 6.3 6.3 | 4.9 2.7 | 1500 1500 | 115 | 3 | 90°C | 15.64 | |
| | 4C5 | 6.3 CT | 7.2 | 1500 | 115 | 35 | 120°C | 18.15 | |
| | 4C6 | 6.3 6.3 6.3 | 7 7 1.5 | 1500 1500 1500 | 120 | 35 | 80°C | 17.69 | |
| | 4C7 | 6.3 CT 6.3 CT | 7 7 | 1500 1500 | 120 | 4 | 100°C | 21.05 | |
| | 4C8 | 6.3 6.3 6.3 | 13.7 2.93 0.3 | 1500 1500 1500 | 115 | 4 | 90°C | 21.05 | |
| | 4C9 | 6.3 CT | 12.3 | 1500 | 115 | 5 | 100°C | 19.47 | |
| | 4C10 | 20 CT | 0.6 | 1500 | 115 | SM1 | 100°C | 13.86 | |
| | 4C11 | 6.3 6.3 6.3 | 2.4 2.5 2.7 | 1500 1500 1500 | 115 | 3 | 100°C | 19.47 | |
| POWER | 4C26 | 6.3 CT | 2 | 1500 | 115 | SM1 | 100°C | 13.86 | HIGH SHOCK EXTREME ENVIRONMENT CONDITIONS LIGHT WEIGHT FOR AIRBORNE USE 10,000 HOUR PLUS-LIFE SERVO APPLICATIONS ISOLATION POWER SUPPLIES AIRBORNE CONTROL CIRCUITS MISSILE CIRCUITS |
| | 4C27 | 6.3 CT | 3 | 1500 | 115 | 1A | 100°C | 14.39 | |
| | 4C28 | 6.3 CT | 5 | 1500 | 115 | 2 | 100°C | 14.92 | |
| | 4C29 | 5.0 CT | 3 | 2500 | 115 | SM1 | 100°C | 13.86 | |
| | 4C30 | 5.0 CT | 6 | 2500 | 115 | 2 | 100°C | 14.92 | |
| | 4C12 | 14.1 | 3 | 1500 | 115 | 3 | 100°C | 14.85 | |
| | 4C13 | 21 | 9 | 1500 | 115 | 4 | 65°C | 16.50 | |
| | 4C14 | 26 | 0.5 | 1500 | 115 | SM1 | 55°C | 13.53 | |
| | 4C15 | 26 CT | 1.5 | 1500 | 115 | 3 | 65°C | 13.99 | |
| | 4C16 | 28 CT 6.3 CT | 0.75 7A | 1500 1500 | 115 | 2 | 65°C | 20.99 | |
| | 4C17 | 52 CT | .192 | 1500 | 115 | SM1 | 100°C | 15.02 | |
| | 4C18 | 90 CT | 4.5 | 1500 | 115 | 9 | 100°C | 28.38 | |
| | 4C19 | 115 | .05 | 1500 | 115 | SM2 | 100°C | 11.09 | |
| | 4C20 | 105/115/125 | 0.4 | 1500 | 105/115/125 | 2 | 90°C | 16.04 | |
| 4C21 | 115 | 2.83 | 1500 | 115 | 8 | 100°C | 23.10 | | |
| 4C22 | 334 | .025 | 1500 | 115 | SM1 | 120°C | 12.74 | | |
| 4C23 | 26 CT | 3 | 1500 | 115 | 4 | 100°C | 16.83 | | |
| 4C24 | 26 CT | 5 | 1500 | 115 | 6 | 100°C | 19.40 | | |
| 4C25 | 52 CT | 2 | 1500 | 115 | 5 | 100°C | 18.55 | | |

| MCLD NO. | OVERALL DIMENSIONS | | | MTG. DIMENSIONS | | APP. WT. (LBS.) | MTG. METH. |
|----------|--------------------|---------|---------|-----------------|---------|-----------------|------------|
| | L | W | H | F | G | | |
| SM3 | 1 | 1-1/4 | 1-3/16 | 1 | Note 1 | 0.06 | Note 1 |
| SM2 | 1-1/2 | 1-1/4 | 1-11/16 | 1 | Note 1 | 0.10 | Note 1 |
| SM1 | 1-1/2 | 1-1/2 | 1-11/16 | 1-1/8 | Note 1 | 0.16 | Note 1 |
| 1 | 1-3/16 | 1-7/8 | 1-13/16 | 1-1/4 | 1-7/16 | 0.25 | Note 2 |
| 1A | 1-11/16 | 1-17/32 | 1-13/16 | 1-5/32 | 1-1/8 | 0.25 | Note 2 |
| 2 | 2 | 1-15/16 | 2-1/8 | 1-9/32 | 1-1/4 | 0.40 | Note 2 |
| 3 | 2-5/16 | 1-13/16 | 2-1/8 | 1-9/32 | 1-7/16 | 0.45 | Note 2 |
| 3S | 2-1/16 | 2-3/8 | 2-3/16 | 1-17/32 | 1-11/16 | 0.70 | Note 2 |
| 4 | 2-5/16 | 2-3/8 | 2-9/16 | 1-17/32 | 1-11/16 | 0.90 | Note 2 |
| 5 | 2-3/4 | 2-3/8 | 2-7/8 | 1-17/32 | 1-3/16 | 1.20 | Note 2 |
| 6 | 2-3/4 | 2-5/8 | 3-1/8 | 1-17/32 | 2-3/16 | 1.50 | Note 2 |
| 7 | 3 | 2-7/8 | 3-3/8 | 1-25/32 | 2-1/2 | 2.00 | Note 2 |
| 8 | 3-3/8 | 2-7/8 | 3-3/8 | 1-25/32 | 2-1/2 | 2.50 | Note 2 |
| 83 | 3-3/4 | 3-1/4 | 3-3/8 | 2-1/4 | 3 | 3.25 | Note 3 |
| 86 | 3-3/4 | 3-3/4 | 3-3/8 | 2-3/4 | 3-1/8 | 4.25 | Note 3 |
| 9 | 4-1/16 | 3-3/8 | 3-7/8 | 2-3/16 | 3-1/2 | 5.00 | Note 3 |
| 10 | 4-1/2 | 3-15/16 | 3-15/16 | 2-3/4 | 3-1/8 | 6.00 | Note 3 |

Note 1—SM series are two hole mounting with holes on center line. #4-40 Pem nuts are fastened to the bracket.
 Note 2—#6-32 Pem nuts on bracket are standard.
 Note 3—#8-32 Pem nuts on bracket are standard.

- All primaries 380-1000 cps
- Dielectric test voltages: PRIMARIES 1000 Volts RMS
SECONDARIES 1500 Volts RMS
- Epoxy resin used as encapsulant
- Prices subject to change without notice



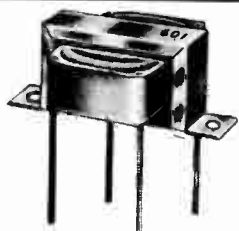
STERLING—THE MARK OF QUALITY

STERLING
TRANSFORMER
CORPORATION

Brooklyn 11, N. Y.

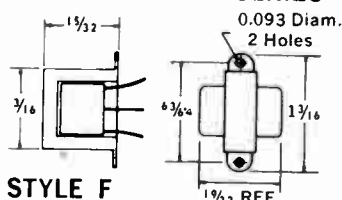
TRANSFORMERS

for TRANSISTOR APPLICATIONS

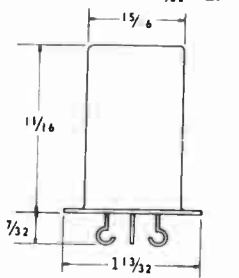


Subminiature transformers for high efficiency circuits.

MICROSPEC 600 SERIES



STYLE F



STYLE H

Clearance Hole Required

Military style encapsulated versions of these units are available.

MICROSPEC TRANSISTOR TRANSFORMERS—600 SERIES

| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbal. Ma. | Oper. Lev. DBM | Freq. Response ±2 db. | Net Price 1-9 pcs. F H |
|----------|---------------------------------|-------------------|---------------------|----------------------|----------------|-----------------------|------------------------|
| 601 | Line to Base | 600 | 600 | 8 | 22 | 200-15,000 | \$3.90 \$7.35 |
| 602 | Coll. to Base or line | 50,000 | 600 | 0.7 | 20 | 200-15,000 | 4.05 7.50 |
| 603 | P.P. coll. to P.P. Base | 50,000 C.T. | 600 C.T. | 1.4 | 20 | 200-15,000 | 4.80 8.55 |
| 604 | Collector to speaker | 50,000 | 6 | 1 | 20 | 200-15,000 | 4.35 7.95 |
| 605 | Coll. to P.P. Base | 25,000 | 1,200 C.T. | 1 | 20 | 200-15,000 | 4.50 8.40 |
| 606 | P.P. coll. to P.P. Base | 50,000 C.T. | 1,200 C.T. | 1.4 | 20 | 200-15,000 | 4.65 8.55 |
| 607 | Line to P.P. Base | 600 C.T. | 1,200 C.T. | 16 | 22 | 200-15,000 | 4.20 7.65 |
| 608 | Collector to Base | 25,000 | 600 | 1 | 20 | 200-15,000 | 3.45 7.20 |
| 609 | P.P. coll. to P.P. Base or line | 4,000 C.T. | 600 C.T. | 5 | 28 | 200-15,000 | 4.35 7.80 |
| 610 | Coll. to Spkr. | 2,000 | 3.4 | 5 | 28 | 200-15,000 | 3.90 7.35 |
| 611 | Output P.P. coll. to spkr | 4,000 C.T. | 3.4 | 5 | 28 | 200-15,000 | 4.05 7.50 |
| 612 | Coll. to P.P. Base | 10,000 | 1,500 C.T. | 1 | 20 | 200-15,000 | 4.50 8.40 |
| 613 | P.P. Coll. to P.P. Base | 10,000 C.T. | 200 C.T. | 6 | 20 | 200-15,000 | 4.50 8.10 |
| 614 | P.P. coll. to P.P. Base | 25,000 C.T. | 1,200 C.T. | 2 | 20 | 200-15,000 | 4.65 8.55 |
| 615 | Coll. to P.P. Base | 2,500 | 2,500 C.T. | 2 | 23 | 200-15,000 | 4.05 7.50 |
| 616 | P.P. Coll. to P.P. Base | 4,000 C.T. | 600/150 split | 5 | 28 | 200-15,000 | 4.65 8.55 |
| 617 | P.P. Coll. to P.P. Base | 7,500 C.T. | 600 C.T. | 4 | 22 | 200-15,000 | 4.35 7.80 |
| 618 | Line to Base | 600 C.T. | 600 C.T. | 16 | 22 | 200-15,000 | 4.20 7.65 |
| 619 | P.P. Coll. to P.P. Base | 25,000 C.T. | 600 C.T. | 2 | 20 | 200-15,000 | 4.50 8.40 |
| 620 | P.P. Coll. to P.P. Base | 10,000 C.T. | 1,500 C.T. | 2 | 20 | 200-15,000 | 4.65 8.55 |
| 621 | Driver/Isolation | 10,000 C.T. | 10,000 C.T. | 2 | 20 | 200-15,000 | 4.65 8.55 |
| 622 | P.P. Coll. to P.P. Base | 7,500 C.T. | 1,200 C.T. | 4 | 22 | 200-15,000 | 4.50 8.40 |
| 623 | P.P. Coll. to P.P. Base | 2,000 C.T. | 500 C.T. | 10 | 28 | 200-15,000 | 4.35 8.25 |
| 624 | Line to P.P. Base | 600 C.T. | 1200/300 split | 16 | 22 | 200-15,000 | 4.65 8.55 |

MICROSPEC AUDIO TRANSFORMERS—600 SERIES

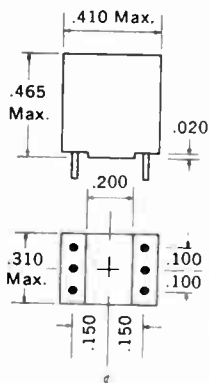
| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Unbal. Ma. | Oper. Lev. DBM | Freq. Response ±2 db. | Net Price 1-9 pcs. F H |
|----------|------------------------|-------------------|---------------------|----------------------|----------------|-----------------------|------------------------|
| 675 | Input | 200/50 | 250,000/62,500 | 0 | 4 | 200-10,000 | \$4.50 \$7.35 |
| 676 | Interstage 3:1 | 10,000 | 90,000 | 0 | 4 | 150-10,000 | 4.80 7.50 |
| 677 | Plate to line | 10,000 | 200 | 3 | 20 | 150-10,000 | 4.20 7.20 |
| 678 | Output | 30,000 | 50 | 1 | 20 | 150-10,000 | 4.05 7.05 |
| 679 | Reactor 50 HY at 1 mdc | | | | | 4700 ohms DCR | 4.05 6.90 |
| 680 | Output | 100,000 | 60 | 0.5 | 20 | 250-10,000 | 4.20 7.20 |
| 681 | Output | 30,000 | 1,200 | 0.5 | 20 | 200-10,000 | 3.30 6.45 |

NANOSPEC TRANSISTOR TRANSFORMERS—900 SERIES

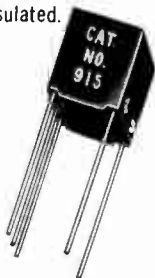
Frequency Response ± 2 db 300 Cycles to 90 KC

| Part No. | Application | Primary Impedance | Secondary Impedance | Unbal. Pri. DC Ma. | Power Level MW. | Net Price 1-9 pcs. |
|----------|-------------|-------------------|---------------------|--------------------|-----------------|--------------------|
| 901 | Input | 200,000 C.T. | 1,000 C.T. | 0 | 10 | \$7.65 |
| 902 | Input | 200,000 | 1,000 | 0 | 10 | 6.60 |
| 903 | Interstage | 50,000 C.T. | 1,000 C.T. | 0 | 10 | 7.50 |
| 904 | Interstage | 50,000 | 1000/250 Split | 0 | 10 | 8.10 |
| 905 | Interstage | 25,000 C.T. | 1,000 C.T. | 0.5 | 40 | 7.05 |
| 906 | Interstage | 25,000 | 1000/250 Split | 0.25 | 40 | 7.65 |
| 907 | Interstage | 25,000 | 1,000 | 0.25 | 40 | 6.50 |
| 908 | Isolation | 10,000 C.T. | 10,000 C.T. | 1 | 50 | 7.65 |
| 909 | Driver | 10,000 C.T. | 2,000 C.T. | 1 | 50 | 6.75 |
| 910 | Driver | 10,000 | 2000/500 Split | 0.5 | 50 | 7.35 |
| 911 | Driver | 10,000 C.T. | 1,200 C.T. | 1 | 50 | 6.75 |
| 912 | Driver | 10,000 | 1200/300 Split | 0.5 | 50 | 7.20 |
| 913 | Driver | 10,000 | 1,200 | 0.5 | 50 | 6.00 |
| 914 | Driver | 10,000 C.T. | 500 C.T. | 1 | 50 | 6.75 |
| 915 | Isolation | 2,500 | 2,500 C.T. | 1 | 50 | 6.30 |
| 916 | Output | 1,500 C.T. | 600 | 3 | 50 | 6.15 |
| 917 | Output | 500 | 50 | 3 | 50 | 5.40 |
| 918 | Output | 120 C.T. | 3.2 | 10 | 50 | 5.70 |
| 919 | Audio choke | 6 Hy. | DCR 1800 ohms | 2 | | 5.40 |
| 920 | Audio choke | .3 Hy. | DCR 45 ohms | 4 | | 4.65 |

Designed for printed circuit transistor use in high component density applications. Nickel alloy leads on 0.1 inch centers and stepped mounting face to insure ease of installation. Epoxy resin encapsulated.



NANOSPEC 900 SERIES



TRANSFORMERS

for TRANSISTOR APPLICATIONS

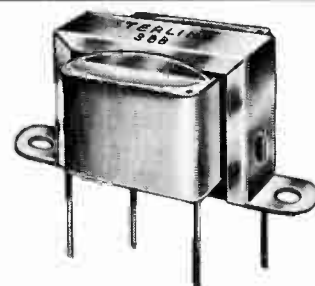
STERLING—THE MARK OF QUALITY



Brooklyn 11, N. Y.

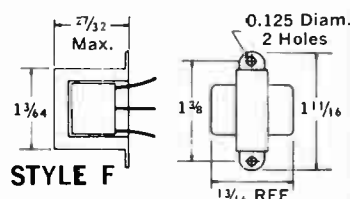
MINISPEC TRANSISTOR TRANSFORMERS—300 SERIES

| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Un-bal. Ma. | Oper. Lev. DBM | Freq. Response ±2 db. | Net Price | |
|----------|-------------------------|-------------------|---------------------|-----------------------|----------------|-----------------------|-----------|--------|
| | | | | | | | 1-9 pcs. | F H |
| 300 | Line to Base | 600 | 600 | 10 | 23 | 200-15,000 | \$3.60 | \$7.80 |
| 301 | Coll. to P.P. Base | 100 | 10 C.T./40 C.T. | 100 | 27 | 200-20,000 | 4.20 | 8.70 |
| 302 | Coll. to Base or line | 50,000 | 600 | 3 | 20 | 300-15,000 | 3.90 | 8.40 |
| 303 | Collector to speaker | 50,000 | 6 | 3 | 20 | 300-15,000 | 3.90 | 8.40 |
| 304 | Coll. to P.P. Base | 100,000 | 1,200 C.T. | 1.4 | 17 | 200-15,000 | 4.05 | 8.55 |
| 305 | Coll. to P.P. Base | 25,000 | 1,200 C.T. | 3 | 22 | 200-15,000 | 4.05 | 8.55 |
| 306 | P.P. Coll. to P.P. Base | 50,000 C.T. | 1,200 C.T. | 3 | 20 | 300-15,000 | 4.20 | 8.70 |
| 307 | Line to P.P. Base | 600 C.T. | 1,200 C.T. | 4 | 23 | 200-15,000 | 4.20 | 8.70 |
| 308 | Collector to Base | 25,000 | 600 | 3 | 22 | 200-15,000 | 3.90 | 8.40 |
| 309 | P.P. Coll. to P.P. Base | 4,000 C.T. | 600 C.T. | 3 | 32 | 200-15,000 | 4.20 | 8.70 |
| 310 | Output Coll. to speaker | 2,000 | 3.4 | 10 | 32 | 200-15,000 | 3.90 | 8.40 |
| 311 | P.P. Coll. to speaker | 4,000 C.T. | 3.4 | 3 | 32 | 200-15,000 | 4.05 | 8.55 |
| 312 | Coll. to Speaker | 400 | 10 | 50 | 25 | 200-20,000 | 3.60 | 7.80 |
| 313 | P.P. Servo Output | 500 C.T. | 210 | 30 | 27 | 300-20,000 | 3.90 | 8.40 |
| 314 | P.P. Coll. to P.P. Base | 25,000 C.T. | 1,200 C.T. | 6 | 22 | 200-15,000 | 4.20 | 8.70 |
| 315 | P.P. Coll. to P.P. Base | 50,000 C.T. | 1200/300 Split | 3 | 20 | 300-15,000 | 4.50 | 9.00 |
| 316 | P.P. Coll. to P.P. Base | 4,000 C.T. | 600/150 Split | 3 | 32 | 200-15,000 | 4.35 | 8.85 |
| 317 | Line to P.P. Base | 600/150 Split | 1,200 C.T. | 4 | 23 | 200-15,000 | 4.35 | 8.85 |
| 318 | P.P. Coll. to Servo | 250 C.T. | 1,000 | 10 | 30 | 200-15,000 | 3.90 | 8.40 |
| 319 | Coll. to P.P. Base | 2,500 | 600 C.T. | 10 | 32 | 200-15,000 | 3.90 | 8.40 |
| 320 | P.P. Coll. to P.P. Base | 7,500 C.T. | 600 C.T. | 8 | 32 | 200-15,000 | 4.20 | 8.70 |
| 321 | Line to P.P. Base | 600 C.T. | 600 C.T. | 20 | 23 | 200-15,000 | 4.05 | 8.55 |
| 322 | P.P. Coll. to Servo | 1,600 C.T. | 450 | 15 | 30 | 200-15,000 | 3.90 | 8.40 |
| 323 | P.P. Coll. to Servo | 250 C.T. | 500 | 10 | 30 | 200-15,000 | 3.90 | 8.40 |



Highest efficiency miniature transformer for transistor and audio circuit applications.

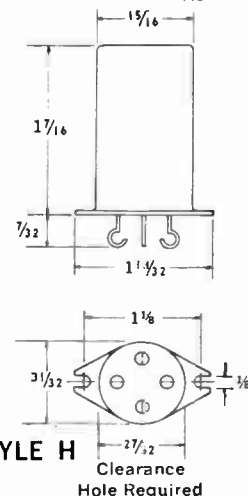
MINISPEC 300 SERIES



STYLE F

MINISPEC AUDIO TRANSFORMERS—300 SERIES

| Part No. | Application | Primary Impedance | Secondary Impedance | Pri. D.C. Un-bal. Ma. | Oper. Lev. DBM | Freq. Response ±2 db. | Net Price | |
|----------|--------------------------|-------------------|---------------------|-----------------------|----------------|-----------------------|-----------|--------|
| | | | | | | | 1-9 pcs. | F H |
| 375 | Mike or line to 1 grid | 50/250/600 C.T. | 50,000 | 0 | 5 | 20-20,000 | \$4.05 | \$9.00 |
| 376 | Mike or line to 2 grids | 50/250/600 C.T. | 50,000 C.T. | 0 | 5 | 20-20,000 | 4.20 | 9.45 |
| 377 | Dynamic mike to 1 grid | 7.5/30 | 50,000 | 0 | 5 | 20-20,000 | 3.90 | 9.00 |
| 378 | Single plate to 1 grid | 15,000 | 60,000 | 0 | 6 | 20-15,000 | 3.45 | 7.65 |
| 379 | Single plate to 1 grid | 15,000 | 60,000 | 4 | 14 | 200-20,000 | 3.45 | 7.65 |
| 380 | Single plate to 2 grids | 15,000 | 95,000 C.T. | 0 | 5 | 20-15,000 | 3.60 | 8.55 |
| 381 | Single plate to 2 grids | 15,000 | 95,000 C.T. | 4 | 11 | 200-20,000 | 3.75 | 8.85 |
| 382 | Single plate to line | 15,000 | 50/250/600 C.T. | 0 | 8 | 20-20,000 | 3.75 | 9.60 |
| 383 | Single plate to line | 15,000 | 50/250/600 C.T. | 4 | 21 | 150-20,000 | 3.75 | 9.60 |
| 384 | Push pull plates to line | 30,000 C.T. | 50/250/600 C.T. | 0 | 8 | 30-50,000 | 3.90 | 9.60 |
| 385 | Crystal mike to line | 50,000 | 50/250/600 C.T. | 0 | 5 | 20-20,000 | 3.75 | 9.30 |
| 386 | Mixing and matching | 50/250 C.T. | 50/250/600 C.T. | 0 | 8 | 20-20,000 | 3.75 | 9.30 |
| 387 | Reactor | 300 hy. d.c. | 50 hy. @ 3 ma. | 0 | | DCR 6,000 | 3.70 | 7.35 |
| 388 | 50:1 mike to grid | 200 | 1/2 Megohm | 0 | 9 | 80-3,000 | 3.90 | 9.00 |
| 389 | 10:1 plate to grid | 10,000 | 1 Megohm | 0 | 11 | 100-2,500 | 3.60 | 8.40 |



STYLE H

Clearance Hole Required

Military style encapsulated versions of these units are available.

TRANSISTOR POWER MODULE TRANSFORMERS—7K SERIES

| Type No. | RATING RANGE | | HERM. SEALED MIL STYLE H | | OPEN STYLE TYPE F OR L | | |
|----------|--------------------|---------------------------|--------------------------|-----------|------------------------|--------------------|-------|
| | MIL Rated DC Range | Commercial Rated DC Amps. | Case Size | Net Price | Style | Net Price 1-9 pcs. | |
| 7K1 | 6v-.065A | to 53v-.02A | .085 to .025 | AH | 11.70 | F | 7.15 |
| 7K2 | 6v-.22A | to 53v-.07A | .28 to .085 | AJ | 12.90 | F | 8.35 |
| 7K3 | 6v-1.2A | to 53v-.4A | 1.5 to .48 | FA | 14.40 | F | 7.40 |
| 7K4 | 6v-3A | to 53v-1A | 3.8 to 1.2 | HA | 19.80 | L | 12.15 |
| 7K5 | 6v-7.5A | to 53v-2.5A | 9 to 3 | KA | 28.80 | L | 20.55 |
| 7K6 | 6v-18A | to 53v-6A | 23 to 7.5 | OA | 48.00 | L | 36.15 |
| 7K7 | 12v-1.5A | to 106v-.5A | 1.9 to .6 | HA | 20.40 | L | 12.75 |
| 7K8 | 8v-.43A | to 26v-.2A | .5 to .24 | EB | 10.20 | F | 5.15 |
| 7K9 | 9v-.85A | to 26v-.4A | 1 to .48 | EA | 12.90 | F | 7.85 |
| 7K10 | 14v-3A | to 56v-1A | 3.5 to 1.2 | HA | 18.60 | L | 12.15 |
| 7K11 | 14v-8A | to 56v-2.5A | 9.5 to 3 | LA | 30.00 | L | 21.45 |
| 7K12 | 14v-18A | to 56v-6A | 21 to 7 | 4x6x7H | 45.90 | L | 33.70 |
| 7K13 | 28v-9A | to 110v-3A | 10.5 to 3.5 | 4x6x7H | 45.90 | L | 33.70 |
| 7K14 | 8.2v-20A | to 10v-13A | 24 to 15 | KA | 27.00 | L | 20.85 |



STYLE H

STYLE L

Universal transistor power supply module transformers with output voltage selection by varied secondary connections. Designed for silicon rectifier application with choke or capacitor input filters

STYLE F



TRIAD DISTRIBUTOR DIVISION

A DIVISION OF LITTON INDUSTRIES



MINIATURES

†† JAF SERIES — Hermetically Sealed

| Type No. | Primary Impedance | Secondary Impedance | Max. Level-DBM | Freq. Resp. | ** MTG. |
|----------|---------------------------|---------------------|----------------|-------------|---------|
| JAF-1 | 600/250/50 | 50000 | 0 | 60-15000 | AF |
| JAF-2 | 600/250/50 | 250000 | 0 | 100-15000 | AF |
| JAF-3 | 600/250/50 | 60000 CT. | 0 | 60-15000 | AF |
| JAF-5 | 30/12/4 | 50000 | 0 | 50-15,000 | AF |
| JAF-11 | 15000 | 50000 | 10 | 60-15000 | AF |
| JAF-12 | 15000 | 60000 CT. | 10 | 60-15000 | AF |
| JAF-13 | 15000 (3 Ma.) | 95000 CT. | 10 | 350-7000 | AF |
| JAF-14 | 200 | 1/2 megohm | 10 | 300-3000 | AF |
| JAF-15 | 15000 | 1 megohm | 10 | 350-5000 | AF |
| JAF-21 | 15000 | 600/250/50 | 10 | 60-15,000 | AF |
| JAF-22 | 15000 (3 Ma.) | 600/250/50 | 10 | 350-7000 | AF |
| JAF-23 | 20000 CT. | 600/250/50 | 10 | 60-15000 | AF |
| ●JAF-24 | 10,000CT. | 2000 CT. | 10 | 50-20000 | AF |
| ●JAF-25 | 15,000 CT. | 600 CT./150 | 12 | 50-15000 | AF |
| ●JAF-26 | 50,000 CT. | 600 CT./150 | 10 | 100-15000 | AF |
| JAF-31 | 600/250/50 | 600/250/50 | 10 | 60-15000 | AF |
| ●JAF-32 | 1500 CT. | 600 CT./150 | 14 | 50-15000 | AF |
| JAF-33 | 5000 CT. | 5000 CT. | 10 | 60-15000 | AF |
| ●JAF-34 | 500 CT. | 500 CT./125 | 14 | 50-20000 | AF |
| ●JAF-35 | 600 CT. | 2000 CT./500 | 14 | 50-20000 | AF |
| JAF-101 | 50 h.-.75 Ma. | | | | AF |
| JAF-102 | 8 HY.—3 MA. or 2 HY.—6Ma. | | | | |



JZ



TZ

SUB-MINIATURE AUDIO — Hermetically Sealed

| Type No. | Primary Impedance | Secondary Impedance | DC Res. Ohms (Approx.) | | ** Case |
|----------|-------------------|---------------------|------------------------|------|---------|
| | | | Pri. | Sec. | |
| JZ-1 | 600/250/50 | 60000 | 350 | 4100 | JZ |
| JZ-5 | 30/12/4 | 50000 | 11.5 | 3800 | JZ |
| JZ-7 | 30/12/4 | 1000 | 5 | 480 | JZ |
| JZ-13 | 15000 (1 Ma.) | 135000 CT. | 985 | 4400 | JZ |
| JZ-15 | 20000 (.5 Ma.) | 1200/600/100 | 2700 | 350 | JZ |
| JZ-25 | 10000 (1 Ma.) | 200 | 1500 | 120 | JZ |
| JZ-26 | 1000 (5 Ma.) | 50 | 355 | 20 | JZ |

SUB-MINIATURE AUDIO — Open Frame

| Type No. | Primary Impedance | Secondary Impedance | DC Res. Ohms (Approx.) | | ** Case |
|-----------|-------------------|---------------------|------------------------|---------|---------|
| | | | Pri. | Sec. | |
| TZ-1 | 600/250/50 | 60000 | 350 | 4100 | |
| ●TZ-2XT | 200 CT | 200,000 | 35(t) | 5000(t) | |
| TZ-5 | 30/12/14 | 50000 | 11.5 | 3800 | |
| TZ-7 | 30/12/4 | 1000 | 5 | 480 | |
| TZ-13 | 15000 (1 Ma.) | 135000 CT. | 985 | 4400 | |
| TZ-15 | 20000 (.5 Ma.) | 1200/600/100 | 2700 | 350 | |
| ●TZ-24XT | 25,000 CT | 500 CT | 2000(t) | 60(t) | |
| ●TZ-17XT | 10,000 CT | 2000 CT | 1000(t) | 250(t) | |
| ●TZ-29XT | 10,000 CT | 10,000 CT | 1100(t) | 1400(t) | |
| TZ-25 | 10000 (1 Ma.) | 200 | 1500 | 120 | |
| ●TZ-32XT | 1500 CT | 600 CT/150 | 160(t) | 65(t) | |
| TZ-26 | 1000 (5 Ma.) | 50 | 355 | 20 | |
| TZ-28 | 600 | 50 | 95 | 11 | |
| ●TZ-103XT | 4 Hy. or 1 Hy. | — | 400(t) | — | |
| T-41X | 1000 (10 Ma.) | 200 CT. | 430 | 130 | |
| T-42X | 9800 (2 Ma.) | 16 | 855 | 1.7 | |
| TY-44X | 1000 (10 Ma.) | 16/8/4 | 180 | 3.8 | |
| TY-47X | 2000 CT | 16/8/4 | 260 | 4 | |

●New Item. (t) Tentative Data.

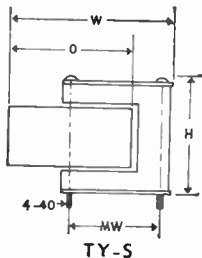
TRANSFORMERS FOR TRANSISTOR POWER SUPPLIES

| Type No. | O.C. Volts Out of Rect. | O.C. Ma. Max. | Dimensions—Inches | | | MW |
|----------|-------------------------|---------------|-------------------|-------|---------|-------|
| | | | H | W | O | |
| *TY-68S | 250 | 65 | 1-3/4 | 1-3/4 | 1-11/32 | 1-1/2 |
| *TY-69S | 300 | 100 | 1-7/8 | 2-3/8 | 1-7/8 | 1-1/2 |
| *TY-70S | 325 | 150 | 2 | 2-3/8 | 2-7/16 | 1-1/2 |
| *TY-71S | 375 | 200 | 2 | 2-3/8 | 2-7/16 | 1-1/2 |
| *TY-74S | 600 | 200 | 2 | 4-1/8 | 3 | 3-3/4 |

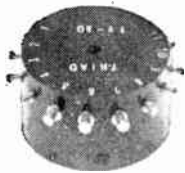
*Discontinued items. Available until supply exhausted.

EPOXY MOLDED TOROIDAL TYPE

| Type No. | O.C. Source Volts | O.C. Volts Out Of Rectifier | O.C. Ma. Max. | Dimension—Inches | | Wt. Lbs. |
|----------|-------------------|-----------------------------|---------------|------------------|-------|----------|
| | | | | Dia. | Ht. | |
| TY-78 | 12.6 | 250/125 | 100 | 1 3/4 | 1 1/8 | .35 |
| TY-79 | 12.6 | 300/150 | 200 | 1 3/4 | 1 | .35 |
| TY-80 | 12.6 | 325/162.5 | 150 | 1 3/4 | 1 | .35 |
| TY-81 | 12.6 | 375/187.5 | 200 | 2 | 1 | .50 |



TY-S



TY-MOLDED

| | | | | | | |
|--------|------|-----------|-----|-------|-------|------|
| TY-82 | 12.6 | 450/225 | 150 | 2 | 1 | .50 |
| TY-83 | 12.6 | 500/250 | 250 | 2 3/4 | 1 3/8 | .85 |
| TY-84 | 12.6 | 600/300 | 200 | 2 3/4 | 1 3/8 | 1.00 |
| TY-88 | 28 | 250/125 | 80 | 1 3/8 | 3/8 | .25 |
| TY-89 | 28 | 300/150 | 100 | 1 3/4 | 1 1/8 | .35 |
| TY-90 | 28 | 325/162.5 | 200 | 1 3/4 | 1 | .35 |
| TY-91 | 28 | 375/187.5 | 200 | 2 | 1 | .50 |
| TY-92 | 28 | 450/225 | 200 | 2 | 1 | .50 |
| TY-93 | 28 | 500/250 | 250 | 2 3/4 | 1 3/8 | .85 |
| TY-94 | 28 | 600/300 | 200 | 2 3/4 | 1 3/8 | 1.00 |
| TY-99 | 6.3 | 300/150 | 100 | 1 3/4 | 1 | .35 |
| TY-100 | 6.3 | 325/162.5 | 150 | 2 | 1 | .50 |
| TY-101 | 6.3 | 375/187.5 | 200 | 2 3/4 | 1 3/8 | 1.00 |
| TY-102 | 6.3 | 450/225 | 150 | 2 3/4 | 1 3/8 | 1.00 |

†† MINIATURE AUDIO — "Trijets"

| Type No. | Primary Impedance | Secondary Impedance | Max. Level-DBM | Freq. Resp. |
|----------|----------------------------|---------------------|----------------|-------------|
| T-1X† | 600/250/50 | 50000 | 0 | 60-15000 |
| T-2X† | 600/250/50 | 250000 | 0 | 100-5000 |
| T-3X | 600/250/50 | 60000 CT. | 0 | 60-15000 |
| T-5X† | 30/12/4 | 50000 | 0 | 60-15000 |
| T-11X | 15000 | 50000 | 10 | 60-15000 |
| T-12X | 15000 | 60000 CT. | 10 | 60-15000 |
| T-13X | 15000 | 95000 CT. | 10 | 350-7000 |
| ●T-14X† | 200 | 500000 | 10 | 200-10000 |
| ●T-15X | 15000 | 1 Megohm | 10 | 150-15000 |
| T-20X | 15000 | 600/250/50 | 10 | 60-15000 |
| T-21X | 30000 | 50 | 10 | 60-15000 |
| T-22X | 15000 | 600/250/50 | 10 | 350-7000 |
| T-23X | 20000 CT. | 600/250/50 | 10 | 50-16000 |
| ●T-24X | 10000 CT. | 2000 CT. | 10 | 50-20000 |
| ●T-25X | 12000 CT. | 600 CT./150 | 10 | 50-10000 |
| ●T-26X | 50000 CT. | 600 CT./150 | 10 | 100-15000 |
| T-31† | 600/250/50 | 600/250/50 | 10 | 60-15000 |
| ●T-32X | 1500 CT. | 600 CT./150 | 13 | 50-15000 |
| T-33X† | 5000 CT. | 5000 CT. | 10 | 60-15000 |
| ●T-34X | 500 CT. | 500 CT./125 | 13 | 50-20000 |
| ●T-35X | 600 CT. | 2000 CT./500 | 13 | 50-20000 |
| T-101X | 50 henries | rr .75 Ma. | | |
| ●T-102X | 8 Hy.-3 Ma. or 2 Hy.-6 Ma. | | | |

●New Item. †Static Shield.

††Low frequency loss will result from DC in windings other than where specified.

**See Case Chart on Triad Page 15

MINIATURES

TRANSISTOR TRANSFORMERS

| Type No. | Primary Matching Impedance | Primary Current MA | Secondary Matching Impedance | Maximum Level |
|----------|----------------------------|--------------------|------------------------------|---------------|
| TY-23X | 50000 | .5 | 500 CT. | 100 MW |
| TY-24X | 50000 | .5 | 3000 CT. | 200 MW |
| TY-25X | 100000 | .5 | 200 CT. | 200 MW |
| TY-26X | 100000 | .5 | 3000 CT. | 200 MW |
| TY-27XT | 500 CT. | 2 | 500 CT. | 10 MW |
| TY-28XT | 500 CT. | 2 | 200 CT. | 10 MW |
| TY-29X | 24 CT. | 500 | 8/4 | 8W |
| TY-30X | 100 CT. | 100 | 8/4 | 2W |
| TY-31X | 200 CT. | 60 | 8/4 | 2W |
| TY-32X | 200 CT. | 2 | 2000 CT. | 200 MW |
| TY-33X | 400 CT. | 5 | 16/8/4 | 200 MW |
| TY-34X | 400 CT. | 5 | 2000 CT. | 200 MW |
| TY-35X | 500 CT. | 2 | 150 CT. | 100 MW |
| TY-36X | 2000 | 2 | 1500 CT. | 200 MW |
| TY-37X | 2000 CT. | 4 | 8000 CT. | 200 MW |
| TY-38X | 3000 CT. | 4 | 1000 CT. | 200 MW |
| TY-39X | 4000 CT. | 4 | 16/8/4 | 200 MW |
| TY-40X | 5000 | 1 | 200 CT. | 100 MW |
| TY-41X | 16000 | 1 | 4000 | 100 MW |
| TY-42X | 20000 | .5 | 8/4 | 100 MW |
| TY-43X | 20000 | .5 | 800 CT. | 100 MW |
| TY-44X | 1000 | 10 | 16/8/4 | 200 MW |

Continued on TRIAO Page 2

TRIAD DISTRIBUTOR DIVISION



A DIVISION OF LITTON INDUSTRIES



MINIATURES (Continued)

| Type No. | Primary Matching Impedance | Primary Current MA | Secondary Matching Impedance | Maximum Level |
|----------|----------------------------|--------------------|------------------------------|---------------|
| TY-45X | 500 CT. | 5 | 16/8/4 | 200 MW |
| TY-46X | 100 | 100 | 1000 CT. | 250 MW |
| TY-47X | 2000 CT. | 10 | 16/8/4 | 200 MW |
| TY-48X | 100 CT. | 40 | 16/8/4 | .5W |
| TY-49X | 500 CT. | 12 | 5000 CT. | 300 MW |
| TY-50X | 125000 | 0 | 2000 CT. | 40 MW |
| TY-51X | 2000 CT. | 10 | 200 CT. | 50 MW |
| TY-52X | 20000 CT. | 1 | 2000 CT. | 100 MW |
| TY-53X | 200 CT. | 10 | 400 CT. | .6W |
| TY-54X | 15000 | 1.5 | 200 CT. | 100 MW |
| TY-55X | 2000 CT. | 2 | 500 CT. | 200 MW |
| TY-56X | 10000 | 1 | 2000 CT. | 50 MW |
| TY-57X | 250 CT. | 10 | 16/8/4 | 200 MW |
| TY-58X | 125 CT. | 15 | 8/4 | 200 MW |
| TY-59X | 5000 CT. | 1 | 50000 CT. | 200 MW |
| TY-60X | 200000 | 0 | 1000 | -10 DBM |
| TY-61X | 100 | 100 | 100 CT. | .5W |
| TY-62X | 10000 | 2 | 4 | 100 MW |
| TY-63X | 48 CT. | 550 | 16/8 | 5W |
| TY-64X | 32 CT. | 575 | 16/8/4 | 10W |
| TY-65Z | 32 CT. | 575 | 6K/4K/3K | 10W |
| TY-66A | 6 CT. | 5A | 6K/4K/3K | 40W |
| TY-67A | 6 CT. | 5A | 16/8/4 | 40W |

†† JO SERIES — Hermetically Sealed

| Type No. | Primary Impedance | Secondary Impedance | Max. Level-DBM | Freq. Resp. | Case |
|----------|-------------------|---------------------|----------------|-------------|------|
| JO-1 | 600/250/50 | 50000 | 0 | 50-15000 | JOA |
| JO-2 | 600/250/50 | 250000 | 0 | 10-15000 | JOA |
| JO-3 | 600/250/50 | 60000 CT. | 0 | 50-15000 | JOA |
| JO-5 | 30/12/4 | 50000 | 0 | 50-12000 | JOA |
| JO-11 | 15000 | 60000 | 10 | 50-15000 | JOB |
| JO-12 | 15000 | 60000 CT. | 10 | 50-15000 | JOB |
| JO-13 | 15000-3 Ma. | 95000 CT. | 10 | 100-7000 | JOB |
| JO-21 | 15000 | 600/250/50 | 10 | 50-15000 | JOB |
| JO-22 | 15000-3 Ma. | 600/250/50 | 10 | 300-7000 | JOB |
| JO-23 | 20000 CT. | 600/250/50 | 10 | 50-15000 | JOB |
| JO-31 | 600/250/50 | 600/250/50 | 10 | 50-15000 | JOB |
| JO-101 | 50 h.-2 Ma. | | | | JOB |

††Low frequency loss will result from DC in windings other than where specified.

DC TO AC TRANSISTOR TRANSFORMERS

| Type | Primary | Secondary |
|---------|---------|----------------------|
| TY-75A | 12v | 115v 60cps 120 watts |
| TY-76A | 12v | 115v 60cps 60 watts |
| TY-468 | 28v | 115v 400cps 60 watts |
| ●TY-462 | 12v | 115v 400cps 60 watts |

●New Item.

POWER COMPONENTS HERMETICALLY SEALED

Combined PLATE and FILAMENT Transformers Primary 115V — 50/60 cycle

| Type No. | Plate AC Volts | Supply DC Ma. | Filaments | F Dim. (Min.) Inches | Case |
|----------|-------------------------------|---------------|-------------------------------------|----------------------|------|
| HSM-200 | 120 | 100 | 6.3 CT.-1.6A. | 1 3/8 | FA |
| †HSM-201 | 500 CT. | 20 | 6.3 CT.-2A. | 1 3/8 | GA |
| HSM-203 | 600 CT. | 50 | 6.3 CT.-2.5A. 5 -2A. | 1 3/8 | JB |
| HSM-205 | 700 CT. | 70 | 6.3 CT.-3A. 5 -3A. | 1 3/8 | JA |
| HSM-207 | 700 CT. | 120 | 6.3 CT.-5A. 5 -3A. | 1 3/8 | KA |
| HSM-241 | 700 CT.- 70V. bias tap. | 150 | 6.3 CT.-6A. 6.3-V.-2A. 5 -3A. | 1 3/8 | LA |

| | | | | | |
|---------|--|--------------------------------|---------------------------------------|-------|-------|
| HSM-212 | 1000/ 800 CT. | 150 (ch. in.) 117 (cd. in.) | 6.3/5-4A. 6.3 CT.-4A. 6.3-V-4A. | 1 3/8 | LA |
| HSM-245 | 800/ 700 CT. 70 V. bias tap. | 200 | 6.3 CT.-6A. 6.3-V.-4A. 5 -6A. | 1 3/8 | MA |
| HSM-216 | 1000/ 800 CT. | 200 (ch. in.) 157 (cd. in.) | 6.3/5-4A. 6.3 CT.-5A. 6.3-5A. | 1 3/8 | MA |
| HS-247 | 800/ 700 CT. 70 V. bias tap. | 300 | 6.3 CT.-8A. 6.3-V.-4A. 5 -6A. | 1 3/8 | GP-15 |
| HSM-218 | 1000 800 CT. | 300 (ch. in.) 235 (cd. in.) | 6.3/5-6A. 6.3 CT.-6A. 6.3-6A | 1 3/8 | GP-15 |
| HSM-219 | (115/ 230 pri.) 760/ 1600 CT. | 40/230 (ch. input) | | Spcl. | GP-15 |

† Low flux density—for pre-amplifier service. All types electrostatically shielded.
GP-15 dimens. 4 3/4" x 5 7/8" x 6 5/8" high. Wt. approx. 22 lbs.
Mtg. centers 3 3/4" x 4 7/8".

Combined PLATE and FILAMENT Transformers

Primary 115V—400 cycle to operate 380 to 1500 cycles

| Type No. | Plate AC Volts | Supply DC Ma. | Filaments | Insul. Test Volt. | F Dim. (Min.) Inches | Case |
|----------|-----------------|---------------|--|-------------------|----------------------|------|
| HS-402 | 475 CT. | 20 | 6.3 CT.-1.5A. | 1500 | 2 3/16 | AJ |
| HS-401 | 500 CT. | 40 | 6.3 CT.-1A. 6.3-1A | 1500 | 7/8 | EB |
| HS-405 | 600 CT. | 70 | 6.3 CT.-2A. 6.3-2A. *6.3-2A. | 1500 | 1 3/8 | GA |
| HS-407 | 600 CT. | 120 | 6.3 CT.-3.5A. 6.3-3.5A. *6.3/5-3A. | 1500 | 1 3/8 | JB |
| HS-409 | 700 CT. | 150 | 6.3 CT.-4A. *6.3/5-3A. | 1500 | 1 3/8 | HA |
| HS-413 | 450 CT. | 200 | 6.3 CT.-6A. 6.3 -6A. *6.3/5-4A. | 1500 | 1 3/8 | JA |
| HS-415 | 800/ 600 CT. | 200 | 6.3 CT.-6A. 6.3-6A. 6.3/5-6A. | 2500 | 1 3/8 | KB |
| HS-417 | 800 600 CT. | 300 | 6.3 CT.-6A. 6.3-6A. 6.3/5-6A. | 2500 | 1 3/8 | LA |

* Tapped for 5 volt rectifier use. All types electrostatically shielded.

AUDIO INTERSTAGE Transformers

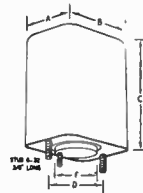
| Type No. | Primary Imped. | Turn Ratio | Freq. Resp. | Max. Level Pri. Volts | Shielding | Case |
|----------|------------------|----------------|-------------|-----------------------|-----------|------|
| HS-23 | 15000 | 1:2.7 | 20-20000 | 15 | P-3 | GP-4 |
| HS-25 | 15000 | 1:2.72 overall | 20-20000 | 25 | P-1 | GP-4 |
| HS-35 | 15000 | 1:2.72 overall | 20-20000 | 20 | P-1 | GP-2 |
| HS-27 | 20000/ 5000 | 1:1.72 overall | 20-20000 | 50 | P-1 | GP-4 |
| HS-29 | 20000/ 5000 | 1:2 overall | 20-20000 | 20 | P-5 | GP-4 |
| HSM-31 | 20000/ 5000 | 1:1 or 2:1 | 20-20000 | 240 | | FA |
| HS-32 | 15000 (6 Ma.) | 1:2 overall | 20-15000 | 20 | P-1 | GP-5 |

Low frequency loss will result from use of unbalanced DC in windings other than where specified.

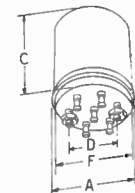
See Triad Page 15 for shielding data.



HS Series



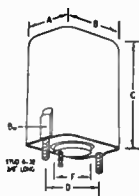
JO Series



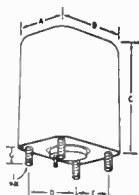
TRIAD DISTRIBUTOR DIVISION



A DIVISION OF LITTON INDUSTRIES



GP 1, 2, 3



MIL-T-27A CASE



Case A



PL-4

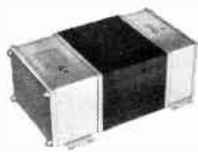
PL-5



PL-6



Case X



Case SC

POWER OUTPUT to Line and VC. Hermetically Sealed

| Type No. | Primary Impedance | Secondary | Max. Level-Watts | Freq. Resp. | ** Case |
|----------|-------------------------|----------------|------------------|-------------|---------|
| HS-71 | 10000 (10 Ma.) | 600/150 | 2 | 150-15000 | AH-2 |
| HS-73 | 5000 (40 Ma.) | 500/250/16/8/4 | 5 | 150-15000 | AJ-2 |
| HS-75 | 10000 CT. (50 Ma. bal.) | 500/250/16/8/4 | 10 | 150-15000 | EB |
| HS-77 | 9000 CT. (120 Ma. bal.) | 500/250/16/8/4 | 25 | 150-15000 | GA |

LOW LEVEL AUDIO

AUDIO INPUT TRANSFORMERS Hermetically Sealed

| Type No. | Primary Imped. | Turn Ratio | Freq. Resp. | Max. Level DBM | Shielding | ** Case |
|----------|-----------------------------|--------------|-------------|----------------|-----------|---------|
| HS-1 | 600*/250*/150/62.5 | 1:11.3 | 20-20000 | 10 | P-5 | GP-4 |
| HS-11 | Same as above | | | | P-1 | GP-2 |
| HS-3 | 600*/250*/150/62.5 | 1:14 overall | 20-20000 | 10 | P-5 | GP-5 |
| HS-4 | Same as above | | | | P-3 | GP-4 |
| HS-14 | Same as above | | | | P-1 | GP-3 |
| HS-15 | 600*/250*/150/62.5 (10 Ma.) | 1:8 overall | 30-20000 | 20 | P-3 | GP-5 |
| HS-5 | 30-50 | 1:65.7 | 50-10000 | 0 | P-5 | GP-4 |
| HS-8 | 600*/250*/150/62.5 | 1:14 overall | 20-20000 | 20 | P-1 | GP-4 |

*Balanced center tap.

Low frequency loss will result from use of unbalanced DC in windings other than where specified. (See table on Triad Page 15 for shielding data.)

OUTPUT, MIXING, MATCHING, BRIDGING

| Type No. | Primary Imped. | Secondary Impedance | Freq. Resp. | Max. Level DBM | Shielding | ** Case |
|----------|--------------------|---------------------|-------------|----------------|-----------|---------|
| HS-50 | 15000 | 600*/250*/150/62.5 | 20-20000 | 26 | P-3 | GP-4 |
| HS-60 | 15000 | 600*/250*/150/62.5 | 20-20000 | 10 | P-1 | GP-2 |
| HS-61 | 15000 (5 Ma.) | 600*/250*/150/62.5 | 50-15000 | 20 | P-1 | GP-5 |
| HS-52 | 20000/5000 | 600*/250*/150/62.5 | 20-20000 | 26 | P-1 | GP-4 |
| HS-54 | 20000/5000 | 600*/250*/150/62.5 | 20-20000 | 10 | P-5 | GP-4 |
| HS-56 | 600*/250*/150/62.5 | 600*/250*/150/62.5 | 10-30000 | 20 | P-3 | GP-4 |
| HS-66 | 600*/250*/150/62.5 | 600*/250*/150/62.5 | 10-30000 | 20 | P-1 | GP-3 |
| HS-58 | 600*/250*/150/62.5 | 600*/250*/150/62.5 | 20-30000 | 15 | P-3H | GP-5 |

* Balanced center tap.

Low frequency loss will result from use of unbalanced DC in windings other than where specified. See table on Triad Page 15 for shielding data.

POWER COMPONENTS

| Type No. | Primary Volts | Secondary Volts | Secondary Amperes | Insulation Test Voltage | ** Case |
|----------|---------------|-----------------|-------------------|-------------------------|---------|
| HSM-223 | 115 | 6.3 | 0.6 | 1500 | AJ-2 |
| HSM-225 | 105-115-125 | 6.3 CT. | 2 | 1500 | EA |
| HSM-226 | 105-115-125 | 6.3 CT. | 3.6 | 1500 | FA |
| ●HSM-224 | 105-115-125 | 6.3 CT. | 5.5 | 2000 | HB |
| HSM-234 | 105-115-125 | +6.3 CT. 6.3 | 10 | 2500 | KA |
| HSM-227 | 105-115-125 | +6.3 CT. 6.3 | 3 | 2500 | GA |
| HSM-229 | 105-115-125 | 6.3 CT. | 8 | 2500 | JB |
| ●HSM-233 | 105-115-125 | 12.6 CT. | .8 | 1500 | EA |
| ●HSM-237 | 105-115-125 | 12.6 CT. | 2 | 2000 | FA |
| HSM-230 | 105-115-125 | 24 CT. | 0.8 | 1500 | FA |
| ●HSM-239 | 105-115-125 | 24 CT. | 1.5 | 1500 | GA |
| ●HSM-240 | 115/230 | +12.6 CT. 12.6 | 1.5 | 1500 | GA |
| HSM-236 | 105-115-125 | +12.6 CT. 12.6 | 2 | 2500 | JB |
| HSM-228 | 105-115-125 | +6.3 CT. 6.3 | 6 | 2500 | JA |
| HSM-231 | 105-115-125 | 6.3 CT. 5 CT. | 5 | 2500 | JB |

† Series or parallel connections. ** See case chart Triad Page 15.

● New Item.

TRIAD PAGE 3

POWER COMPONENTS (cont.)

| | | | | | |
|----------|-------------|----------------|----|------|----|
| HSM-235 | 105-115-125 | 2.5 CT. 10 CT. | 10 | 7500 | MA |
| ●HSM-238 | 105-115-125 | +26 CT. 126 | 2 | 2000 | JA |

FILAMENT Transformers, 380/1500 cycle

| Type No. | Primary Volts | Secondary Volts | Secondary Amperes | Insulation Test Voltage | ** Case |
|----------|---------------------------------|-----------------|-------------------|-------------------------|---------|
| HS-436 | 115 | 6.3 CT. | 1 | 1500 | AH |
| HS-425 | 105-115-125 | 6.3 CT. | 2 | 1500 | AJ-2 |
| HS-427 | 105-115-125 | 6.3 CT. | 5 | 1500 | EA |
| ●HS-445 | 105-115-125 | 12.6 CT. | 2.5 | 2000 | EA |
| HS-438 | 105-115-125 | 24 CT. | 1.5 | 1500 | EA |
| HS-433 | 105-115-125 | *6.3 CT. 5 | 5 | 2500 | FA |
| HS-435 | 105-115-125 | *6.3 CT. 5 | 3.5 | 2000 | FA |
| HS-441 | 105-115-125 | *5 CT. 10 | 10 | 2000 | HA |
| HS-443 | 105-115-125 | *12.6 CT. 0.8 | 0.8 | 1500 | AJ-2 |
| HS-442△ | 57.5-99.7-115-120 Single phase. | *12.6 CT. 2 | 2 | 1500 | EA |
| ●HS-444△ | 57.5-99.7-115-120 | *26 CT. 2 | 2 | 2000 | FA |

△ Two Units can be used, 115 volt 3 phase to 26 volt 2 phase, Scott-connected. * Series or parallel connection. † 5 volt tap for filament type rectifiers. ** See case chart on Triad Page 15. ● New Item.

HIGH FIDELITY OUTPUT

HIGH LEVEL OUTPUT — Hermetically Sealed

| Type No. | Primary Impedance | Secondary Impedance | Freq. Resp. | Max. Level Watts | F Di. Min. In. | ** Case |
|----------|-------------------------------------|----------------------|-------------|------------------|----------------|---------|
| HSM-79 | 20000 CT. (20 Ma.) or 5000 (40 Ma.) | 16/8/4 | 50-25000 | 5 | 1 1/2 | FA |
| HSM-80 | 20000 CT. (20 Ma.) or 5000 (40 Ma.) | 500/250 CT. 125/62.5 | 50-25000 | 5 | 1 1/2 | FA |
| HSM-81 | 8000 CT. Split primary. | 16/8/4 | 15-30000 | 15 | 1 1/2 | JB |
| HSM-82 | 8000 CT. | 500/250/125 | 15-30000 | 15 | 1 1/2 | JB |
| †HSM-181 | 8000/2000 CT. Split primary. | 16/8/4 | 15-30000 | 15 | 1 1/2 | JB |
| †HSM-182 | 8000/2000 CT. Split primary. | 500/250/125 | 15-30000 | 15 | 1 1/2 | JB |
| HSM-84 | 5000 CT. | 16/8/4 | 15-30000 | 20 | 1 1/2 | JB |
| HSM-184 | 8000/2000 Split primary | 16/8/4 | 10-50000 | 25 | 1 1/2 | KB |
| †HSM-189 | 10000/2500 CT. Split primary. | 16/8/4 | 15-30000 | 25 | 1 1/2 | KB |
| †HSM-190 | 10000/2500 CT. Split primary. | 500/250/125 | 15-30000 | 25 | 1 1/2 | KB |
| †HSM-186 | 6600 CT. Split primary. | 16/8/4 | 10-50000 | 25 | 1 1/2 | KB |
| †HSM-187 | 6600 CT. Split primary. | 500/250/125 | 10-50000 | 25 | 1 1/2 | KB |

(Continued on next page.)

TRIAD DISTRIBUTOR DIVISION



A DIVISION OF LITTON INDUSTRIES



| | | | | | | |
|----------|-------------------------|-------------|----------|----|----|----|
| HSM-94 | 4500 CT. | 16/8/4 | 15-30000 | 55 | 1½ | LA |
| †HSM-192 | 4000 CT. Split primary. | 16/8/4 | 15-30000 | 65 | 1½ | LA |
| †HSM-193 | 4000 CT. Split primary. | 500/250/125 | 15-30000 | 65 | 1½ | LA |

† Williamson type circuit. Proper taps on primary for screen operation.

HIGH LEVEL OUTPUT

| Type No. | Primary Impedance | Secondary Impedance | Output Watts |
|----------|--------------------|---------------------|--------------|
| S-34X | 4000 CT. | 32/16/8 | 7.5 |
| S-31A | 8000 CT. | 16/8/4 | 15 |
| S-32A | 8000 CT. | 500/250/125 | 15 |
| †S-142A | 8000 CT. | 16/8/4 | 15 |
| S-35A | 5000 CT. | 16/8/4 | 20 |
| S-36A | 5000 CT. | 500/250/125 | 20 |
| †S-144A | 8000 CT. | 16/8/4 | 25 |
| †S-146A | 6600 CT. | 16/8/4 | 25 |
| †S-148A | 10000 CT. | 16/8/4 | 25 |
| S-42A | 4500 CT. | 16/8/4 | 50 |
| †S-152A | 4000 CT. | 16/8/4 | 65 |
| SR-45Z* | 4000/2000/1000/500 | 16/8/4 | 10 |
| S-46A | 2000/1000/500/250 | 16/8/4 | 20 |

† Williamson type circuit. Proper taps on primary for screen operation, leads out both end bells.

* Replaces S-45Z.

LINE POWER

ISOLATION Transformers, 50/60 cycles

(See page 1429 for 380/1500 cycle isolation transformers)

| Type No. | V. A. Output | Input Volts | Output Volts |
|--|--------------|--------------------------|--------------|
| N-51X | 35 | 115 | 115 |
| N-68X | 50 | 230/115 | 115 |
| N-53M | 85 | 115 | 115 |
| N-54M | 150 | 115 | 115 |
| N-67A | 150 | 230/115 | 115 |
| N-55M | 250 | 115 | 115 |
| N-66A | 250 | 230/115 | 115 |
| N-57M | 500 | 115 | 115 |
| N-59M | 1000 | 115 | 115 |
| †N-52M | 350 | 95 to 130 (in 5V steps) | 115 |
| †N-56M | 150 | 95 to 130 (in 5V. steps) | 115 |
| †With switch and meter for primary voltage control. Detachable cord. | | | |
| N-469A | 50 | 460/230 | 115 |
| N-470A | 150 | 460/230 | 115 |
| N-471A | 300 | 460/230 | 115 |

STEPDOWN Autoformers, 50/60 cycles

| Type No. | V. A. Output | Input Volts | Output Volts |
|----------|--------------|--------------------------|--------------|
| N-1X | 50 | 230 | 115 |
| N-3M | 85 | 230 | 115 |
| N-4M | 150 | 230 | 115 |
| N-5M | 250 | 230 | 115 |
| N-7M | 600 | 230 | 115 |
| N-9M | 1250 | 230 | 115 |
| N-11M | 2000 | 230 | 115 |
| N-34X | 150 | 95/105/115/125/135 | 115 |
| †N-35M | 250 | 95 to 130 (in 5V. steps) | 115 |
| †N-50M | 500 | 95 to 130 (in 5V. steps) | 115 |

With switch and meter.

† M case with switch for primary voltage control and detachable cord.

Note: Last letter of Type No. denotes case style.

FILTER REACTORS

| Type No. | Current DC Ma. | Inductance *Henries | Resistance Ohms | Insulation Test Voltage |
|----------|----------------|---------------------|-----------------|-------------------------|
| HSM-301 | 20 | 30 | 1000 | 1500 |
| HSM-302 | 20 | 14 | 550 | 1500 |
| HS-331 | 40 | 4 | 375 | 1500 |
| HS-303 | 50 | 12 | 385 | 1500 |
| HS-333 | 70 | 3 | 225 | 1500 |
| HSM-305 | 70 | 15 | 300 | 2500 |
| HS-335 | 120 | 3 | 150 | 1500 |
| HSM-307 | 120 | 15 | 185 | 2500 |
| HSM-309 | 150 | 9 | 115 | 2500 |
| HS-339 | 200 | 3 | 105 | 2000 |
| HSM-315 | 200 | 10 | 100 | 2500 |
| HS-341 | 300 | 2 | 48 | 2000 |
| HSM-319 | 300 | 10 | 85 | 2500 |

* Minimum Inductance—20%

PULSE TRANSFORMERS BLOCKING OSCILLATOR TYPE

| Type No. | Pulse Voltage per Winding | Pulse Duration—us | Load Impedance—Ohms |
|----------|---------------------------|-------------------|---------------------|
| PL-4 | 100-100 | .54 to .66 | 500* |
| PL-5 | 100-100-100 | .36 to .54 | 2000* |
| PL-6 | 100-100-100 | .36 to .54 | 2000* |

* As blocking oscillator in Triad circuit. Can be used with lower impedances and higher peak power at lower duty cycle.

HIGH SPEED FERRITE TOROIDAL CORE LOW POWER

| Type No. | Turns Ratio | Pulse Width μ Sec. | Rise Time μ Sec. | Repetition Rate | Suggested Load Ohms |
|----------------------------|-------------|------------------------|----------------------|-----------------|---------------------|
| PL-80E PL-80H PL-80P | 1-1 | .07 | .03 | 1-2 Mc | 200 15 |
| PL-81E PL-81H PL-81P | 2-1 | .07 | .03 | 1-2 Mc | 200 20 |
| PL-82E PL-82H PL-82P | 3-1 | .08 | .03 | 1-2 Mc | 100 15 |
| PL-83E PL-83H PL-83P | 4-1 | .08 | .03 | 1-2 Mc | 100 15 |
| PL-84E PL-84H PL-84P | 5-1 | .08 | .03 | 1-2 Mc | 100 15 |

The letter "H" indicates Hermetically Sealed, the letter "P" indicates Miniature Plug-in and the letter "E" indicates Epoxy Molded.

SLOW SPEED SILICON CORE LOW POWER

| Type No. | Pulse Voltage per Winding | Pulse Duration— μ Sec. | Load Impedance—Ohms |
|-------------------------------|---------------------------|----------------------------|---------------------|
| PL-124E PL-124H | 300-300-300 | .6 to 5 | 150 |
| PL-140E PL-140H PL-140M | 100-400-100 | .6 to 5 | 175 |
| PL-139E PL-139H PL-139M | 100-100 | .3 to 1.5 | 250 |
| PL-146E PL-146H PL-146M | 300-300 | .6 to 5 | 250 |

Letter "M" indicates MIL type case. For pulse types only.

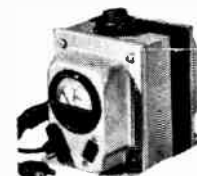
TRIAD PAGE 4



Case B



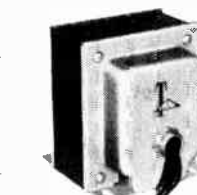
Case M



Case M with Meter



Case C



Case AC



A DIVISION OF LITTON INDUSTRIES



TRIAD DISTRIBUTOR DIVISION

Instrument POWER SUPPLY Transformers

For PREAMPLIFIERS, VTVM, etc.

Primary 115 volts — 60 cycles

| Type No. | Plate Supply | | Filament Windings Volts and Amperes |
|----------|--------------|--------|--|
| | AC Volts | DC Ma. | |
| R-68A | 800 CT. | 30 | 5V.-2A, 6.3V.-1.2A, 6.3V.-1.2A. |
| R-2C | 135 | 15 | 6.3V.-.9A. |
| R-23B | 250 CT. | 22 | 6.3.-.8A, 15.5/12.6V.-.6A. |
| R-3A | 500 CT. | 20 | 6.3V CT.-.2A. |
| R-29A | 230 CT. | 40 | 6.3V.CT.-1.5A. |
| R-30X | 135 | 50 | 6.3V.-1.5A. |
| R-54X | 115 | 15 | 6.3V.-.6A. |
| R-56A | 130 | 20 | 0/15/22.5/30V-6A. |
| R-73B | 135 | 200 | 6.3V CT.-5.5A. |

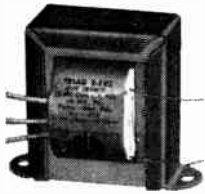


Case U

For CATHODE RAY Tubes

Primary 115 volts — 60 cycles

| Type No. | Plate Supply | | Filament Windings Volts and Amperes |
|----------|---------------------|--------|--|
| | AC Volts | DC Ma. | |
| R-41C | 440-0- 440-1250. | 125/5 | *6.3V.-.6A, †2.5V.-1.75A, 5V.-.3A. |
| R-45C | 400-0- 400-800. | 30/5 | *6.3V.-.6A, 6.3 CT.-.3A, +5V.-.2A |
| R-43C | 1600 | 3 | *6.3/5 /2.5V.-1A, †6.3 /5 2.5V.-.3A. |



Case Z

* Static shielded and insulated for full plate voltage.
† Insulated for full plate voltage.

For REGULATED POWER SUPPLIES

Primary 115 volts — 60 cycles

| Type No. | Plate Supply | | Filament Windings Volts and Amperes | |
|---|-----------------------------------|-----------------------|--|--------------------------------------|
| | AC Volts | DC Ma. Choke Input | | |
| R-70A | 880 CT. | 75 | 6.3V.-.6A, 6.3V.-.3A. | 6.3V.-.9A, 6.3V.-.3A. |
| R-26A | 880-720 CT. | 200 | 6.3 CT.-.8A, 6.3V.-1A. | 6.3V.-.3A, 5V.-.3A. |
| R-28A | 1250 CT. | 300 | 6.3 CT.-.8A, 6.3V.-.3A. | 6.3V.-.3A 5V.-.6A. |
| R-46A | 1250 CT. 130 (Bias winding) | 350 50 | 5V.-.4A. | 6.3V.-.4A, 6.3V.-1A, 6.3V.-1A. |
| R-46A will supply 550 V. D.C. using 2 5R4G rectifier tubes, choke input. Will also supply 130 V. for bias using Selenium rectifier. Sufficient filament windings to regulate screen voltages. | | | | |
| R-27A | 1500 CT. | 400 | 5V.-.6A. | 6.3V.-.3A, 6.3V.-.8A. |



Case AL

UNIVERSAL

Isolation, Autoformer, Voltage Control 50/60CPS

| Type No. | V.A. (Isolation) | V.A. (Autoformer) |
|----------|---------------------|----------------------|
| N-64AC | 500 | 1000 |
| N-62AC | 1000 | 2000 |
| N-60SC | 2000 | 4000 |



Case X

SELENIUM RECTIFIER Transformers

Primary 60 cycles

These transformers are for use with Selenium rectifiers. Rectifiers not included.

| Type No. | Primary Volts | Secondary Amperes | | Half Wave Volts DC | Full Wave Volts DC |
|----------|--------------------------|---|--------------------------|-----------------------|-----------------------|
| | | AC Volts | RMS | | |
| F-47U | 115 | 17-18 | 3 | 6-7 | 13-14 |
| F-48U | 115 | 17-18 | 6 | 6-7 | 13-14 |
| F-49U | 115 | 36 36 | 3 3 | 13 | 26 |
| F-60U | 115 | 6.5-13- 19.5-26 | 3 (int.) | 9 | 18 |
| F-61U | 115 | 24-27-30 33-36 | 3 | 13 | 26 |
| F-67U | 110-120 | 24-27-30- 33-36 | 8 | 13 | 26 |
| F-63U | 115 | 8-9 8-9 | 2 2 | | 6-7 |
| F-64U | 115 | 7-8-9 | 7 | | 6-7 |
| F-62U | 105-115- 125 | 9-9-9-9 | 10 ea. wdg. | | 6-7 ea. wdg. |
| F-68U | 115 | 9 CT. 9 9 9 | 3.5 3.5 3.5 3.5 | | 6-7 ea. wdg. |
| F-65U | 110-120 | 140-150-160 | .75 | 60 | 115 |
| F-66U | 110-120 | 140-150-160 | 2.5 | 60 | 115 |
| *F-79U | 115 | 24-26-28-30 | 15 | — | 22.8 |
| F-80U | tapped for mult. sec. | 12 to 18 or 24 to 36CT | 40 20 | | |
| F-84AC | 230-115 | 24CT or 12CT | 10 20 | | |
| F-90X | 115 tapped | 40CT-20CT-10 | 100ma | | |
| F-91X | 115 tapped | 40CT-20CT-10 | 300ma | | |
| F-92A | 115 tapped | 40CT-20CT-10 | 1 amp | | |
| R-93A | 115 | 6.3CT (voltage doubler circuit) 150-160-170 | 6 (500ma) | | |
| F-93X | 115V tapped | 40CT-20CT-10 | 750ma | | |
| F-94X | 115X tapped | 40CT-20CT-10 | 35ma | | |

* Replaces F-69U

FILAMENT Transformers, Single Secondary

Primary 115 volts — 60 cycles

| Type No. | Secondary Volts | Secondary Amperes | Test Volts |
|----------|-----------------|-------------------|------------|
| F-1X | 2.5 CT. | 3 | 1500 |
| F-72Z | 2.5 CT. | 5 | 7500 |
| F-6X | 2.5 CT. | 6 | 2500 |
| F-3X | 2.5 CT. | 10 | 3000 |
| F-5U | 2.5 CT. | 10 | 7500 |
| F-71U | 2.5 CT. | 10 | 10000 |
| F-7X | 5 CT. | 3 | 1500 |
| F-8X | 5 CT. | 6 | 1500 |
| F-12X | 5 CT. | 8 | 2500 |
| F-9A | 5.2 CT. | 13 | 1500 |
| F-10U | 5 CT. | 14 | 10000 |
| F-9U | 5.2 CT. | 13 | 1500 |
| F-15U | 5 CT. | 15 | 3000 |
| F-11U | 5.2 CT. | 24 | 1500 |
| F-13X | 6.3 | .6 | 1500 |
| F-14X | 6.3 CT. | 1.2 | 2500 |
| +F-52X | 6.3 | 1.2 | 5000 |
| +F-51X | 6.3/5 | 2 | 5000 |
| +F-53X | 6.3 | 4 | 5000 |
| F-16X | 6.3 CT. | 3 | 2500 |
| F-18X | 6.3 CT. | 6 | 1500 |
| F-18A | 6.3 CT. | 6 | 1500 |
| F-19X | 6.3 6 CT. | 6 | 2000 |
| F-21A | 6.3 CT. | 10 | 1500 |
| F-20U | 6.3 6 CT. | 11 | 3000 |
| F-22A | 6.3 CT. | 20 | 2000 |
| F-24U | 7.5 6.3 CT. | 8 | 3000 |
| F-28U | 7.5 6.3 CT. | 25 | 3000 |
| F-23U | 10 CT. | 7 | 1500 |
| F-29U | 12 11 10 CT. | 11 | 3000 |
| F-25X | 12.6 CT. | 1.5 | 1500 |

(Continued on next page.)

TRIAD DISTRIBUTOR DIVISION



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| | | | |
|-------|--|-----|------|
| F-44X | 12.6 CT. | 2 | 1500 |
| F-26X | 12.6 CT. | 2.5 | 1500 |
| F-45X | 24 CT | 1 | 1500 |
| F-41X | 25.2 CT. | 2 | 1500 |
| F-40X | 26.8 CT | 1 | 1500 |
| F-50X | Filament line transformer Pri. 6.3V/5V Sec. 6.3/5V 2A | | 5000 |
| F-83A | 12.6 CT. | 5 | 1500 |
| | 12.6 CT. | 5 | |

† Low capacity—High voltage for damper tube operation.

CHOKES

SWINGING FILTER REACTORS

| Type No. | Inductance Henries | Current Ma. | Resistance Ohms | Test Volts RMS |
|----------|--------------------|-------------|-----------------|----------------|
| C-31A | 25/5 | 20/200 | 150 | 2500 |
| C-33A | 25/5 | 30/300 | 105 | 3000 |
| C-32AL | 20/4 | 35/350 | 105 | 5000 |
| C-35A | 20/4 | 40/400 | 60 | 3000 |
| C-39A | 25/5 | 50/500 | 65 | 3000 |
| C-38AL | 25/5 | 50/500 | 65 | 5000 |

SMOOTHING FILTER REACTORS

| Type No. | Inductance Henries | Current Ma. | Resistance Ohms | Test Volts RMS |
|----------|--------------------|-------------|-----------------|----------------|
| C-30X | 50 | 15 | 3500 | 1500 |
| C-2X | 2 | 15 | 70 | 1500 |
| C-1X | 15 | 20 | 1000 | 1500 |
| C-3X | 10 | 50 | 500 | 1500 |
| C-4X | 4 | 50 | 360 | 1500 |
| C-6X | 5 | 65 | 330 | 1500 |
| C-5X | 12 | 75 | 390 | 1500 |
| C-8X | 7 | 75 | 240 | 1500 |
| C-7X | 10 | 90 | 270 | 1500 |
| C-9X | 4 | 90 | 100 | 1500 |
| C-11X | 6 | 110 | 160 | 1500 |
| C-10X | 9 | 125 | 250 | 1500 |
| C-12X | 6 | 160 | 165 | 1500 |
| C-12A | 6 | 160 | 165 | 1500 |
| C-13X | 3 | 160 | 75 | 1500 |
| C-14X | 6 | 200 | 150 | 1500 |
| C-14A | 6 | 200 | 150 | 1500 |
| C-16A | 10 | 200 | 150 | 2500 |
| C-21X | 1.5 | 225 | 65 | 1500 |
| C-15X | 4 | 250 | 100 | 1500 |
| C-15A | 4 | 250 | 100 | 1500 |
| C-23X | 1.2 | 260 | 45 | 1500 |
| C-24X | 1 | 240 | 50 | 1500 |
| C-27X | .7 | 290 | 25 | 1500 |
| C-36X | .5 | 300 | 30 | 1500 |
| C-17X | 1.5 | 300 | 40 | 1500 |
| C-18A | 8 | 300 | 90 | 2500 |
| C-19A | 10 | 300 | 105 | 3000 |
| C-25A | 2.6 | 310 | 60 | 1500 |
| C-42AL | 8 | 350 | 105 | 5000 |
| C-20A | 6 | 400 | 60 | 3000 |
| C-22A | 10 | 500 | 65 | 3000 |
| C-45AL | 10 | 500 | 65 | 5000 |
| C-40X | .32 | 600 | 10 | 1500 |
| C-47U | .3-.075 | 1A-2A | 3-.75 | 1500 |
| C-48U | .08-.02 | 2.5A-5A | .57-.143 | 1500 |
| C-49U | .032-.008 | 5A-10A | .19-.05 | 1500 |
| C-80U | .024-.006 | 20A-40A | .096-.024 | 1500 |

ISOLATION Transformers

Primary 115V—400 cycle to operate 380 to 1500 cycles

| Type No. | Secondary Volts | Amp. | V. A. | F Dim. (Min.) Inches | Case |
|----------|-----------------|------|-------|----------------------|------|
| HS-470 | 115 | .35 | 40 | 1 1/8 | EA |
| HS-471 | 115 | .7 | 80 | 1 1/8 | FA |
| HS-472 | 115 | 1.4 | 160 | 1 1/8 | GA |
| HS-474 | 115 | 2.6 | 300 | 1 1/8 | JA |
| HS-475 | 115 | 4.4 | 500 | 1 1/8 | KA |

60 cycle — hermetically sealed

| Type No. | secondary volts | amp. | V.A. (Min.) inches | F dim. (Min.) inches | Case |
|----------|-----------------|------|--------------------|----------------------|------|
| HSM-270 | 105-115-125 | .4 | 50 | 1 | JB |
| HSM-271 | 105-115-125 | 1 | 125 | 1 | KA |
| HSM-272 | 105-115-125 | 2 | 250 | 1 3/8 | NB |

All isolation transformers electrostatically shielded.

FILAMENT Transformers, Multiple Secondary

Primary 115 volts — 60 cycles

| Type No. | Secondary Volts and Amperes | | Test Volts RMS |
|----------|-------------------------------------|------------------------------|----------------|
| F-27U | 10 CT.-10A. | 2.5 CT.-10A. | 1500 7500 |
| F-30A | 5 CT.-3A. | 6.3 CT.-8A. | 1500 |
| F-32A | 6.3 CT.-3A. | 6.3 CT.-3A. | 1500 |
| F-34A | 6.3 CT.-1.75A. 6.3V.-1.75A. | 6.3V.-1.75A. 6.3V.-1.75A. | 1500 |
| F-36A | 6.3 CT.-3.5A. 6.3V.-3.5A. | 6.3V.-3.5A. 6.3V.-3.5A. | 1500 |
| F-38A | 6.3 CT.-5A. 6.3V.-1A. 5V.-4A. | 6.3V.-5A. 5 CT.-2A. | 1500 |
| F-42A | 12.6 CT.-2.5A. | 12.6-2.5A. | 1500 |

AUDIO INPUT TRANSFORMERS

Low Level Input

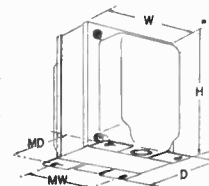
| Type No. | Application | Frequency Response | Primary Impedance | Turn Ratio |
|----------|---|--|---------------------------------------|------------|
| A-9J | line or mike to grid | 30-15000 | 600/250/50 | 12 |
| A-10J | line to grid | 30-15000 | 600/150 split wdgs. | 10.5 |
| A-11J | line or mike to grid 60-80DB shielding | 30-15000 | 600/250/50 | 10 |
| A-12J | same as A-11J | 30-15000 | 600 CT./150 split windings | 10 |
| A-13J | line to transistor or line to line (70 db Shldg) | 30-15000 | 600/300/200 CT./110/50 split windings | 1 |
| A-40J | par. fed 6J5 or 6SN7 plate to P.P. grids | 30-15000 | 15000 | 2.76 |
| A-41J | same as A-40J 8ma DC in primary | | | 2.3 |
| A-50J | pp plates to voice coil | 30-15000 | 10000 CT. | 35.3 |
| A-52J | line or transistor to line or transistor | 30-15000 | 500 CT./125 20 MA. D.C. Split Winding | 2 |
| A-55J | par. fed 6J5 or 6SN7 to line | 30-15000 | 15000 | 5 |
| A-56J | lin or transistor to Voice Coil | 30-15000 | 500 CT./125 20 MA. D.C. Split Winding | 5.6 |
| A-57J | line to line | 30-15000 | 600/250/50 | 1 |
| A-58J | pp plates or transistors to line or transistors | 30-15000 | 10000 CT./2500 Split Winding | 2.24 |
| A-64J | line or transistor to transistor | 30-15000 | 100 CT.*25 30 MA. D.C. Split Winding | 1.58 |
| A-65J | par. fed 6J5 or 6SN7 to line | 30-15000 | 15000 CT. | 5 |
| A-66J | same as A-65J—5 ma DC in primary | 40-15000 | 15000 | 5 |
| A-67J | line to line | 30-15000 | 600 CT./150 split windings | 1 |
| A-68J | pp plate to line 4 ma DC in primary | 30-15000 | 15000 CT. | 5 |
| A-69J | pp plates or bridging to line 3 MA. D.C. in Primary | 30-15000 | 25,000 CT./6250 Split Winding | 7.1 |
| A-70J | line or transistor to line or transistor | 30-15000 | 500 CT./125 15 MA. D.C. Split Winding | 2.24 |
| A-77J | Audio choke — dual winding | 250 henries - 5 ma DC 62.5 henries - 10 ma DC | | |
| A-78J | output pp transistors to line | 30-15000 | 2000CT | 1.82 |
| A-79J | Transistor inter-stage 10ma in primary | 40-15000 | 1000 | 2.2 |

Line or Microphone to Grid

| Type No. | Application | Frequency Response | Primary Impedance | Turn Ratio |
|----------|---|--------------------|-------------------|------------|
| A-1X | Line or single button mike to grid. | 300-3000 | 100 | 31.4 |
| A-3X | Line or D.B. mike to grid. | 300-3000 | 400 CT. | 22.1 |
| A-4X | Line to grid. | 300-3000 | 500/200/67.5 CT. | 12 |
| A-5X | Single button mike to p.p. grids—Hi-gain. | 300-3000 | 100 | 84 |
| A-6X | Speaker V.C. to grid. | 300-3000 | 8/3.2 | 79 |
| A-7J | Voice coil to grid | 300-3000 | 3.2 | 124 |



Case A



Case A

Triad J Series offers flexibility enabling your amplifiers to exceed broadcast standards. Although economy in construction has cut costs, these transformers approach and closely approximate performance characteristics found in more costly hermetically sealed parts. Single hole mounting provides for rotation for maximum reduction of hum... alloy shielding gives you 40-60 db hum reduction (60-80 db in Types A-11J & A-12J)... you can obtain wide frequency ranges... flexible leads facilitate ease in mounting... input units are electrostatically and magnetically shielded... light weight and encased in Triad's satin smooth baked gray enamel cases, 1 3/8" diameter, 1 1/4" above chassis... legible circuit diagrams are permanently affixed to every case.



A DIVISION OF LITTON INDUSTRIES



TRIAD DISTRIBUTOR DIVISION

AUDIO OUTPUT TRANSFORMERS Line to Voice Coil

| Type No. | Primary Impedance | Output Imped. | Output Watts | Freq. Resp. |
|----------|-------------------------|---------------|--------------|-------------|
| S-23X | 50 (autoformer). | 3.2 | 1 | 300-3000 |
| S-26X | 500/50 (autoformer). | 3.2 | 4 | 300-3000 |
| S-65X | 500 | 8/4 | 5 | 300-7000 |
| S-66X | 500 (autoformer). | 16/8/4 | 3 | 100-5000 |
| S-76Z | 250/125/62.5/31 | 16/8/4 | 10 | 40-15000 |
| S-77U | 500 CT./125 split wdgs. | 32/16/8/4/2 | 30 | 40-15000 |

POWER

Combined PLATE and FILAMENT Transformers Primary 115 volts — 60 cycles

| Type No. | Plate Supply | | Rect. Fil. | | Other Fil. | |
|----------|--------------|--------|------------|------|------------|------|
| | AC Volts | DC Ma. | Volts | Amp. | Volts | Amp. |
| R-22A | 380/320 CT. | 70 | 6.3 | .6 | 6.3 CT. | 3 |
| R-22B | 380/320 CT. | 70 | 6.3 | .6 | 6.3 CT. | 3 |
| R-4A | 500 CT. | 40 | | | 6.3 CT. | 2 |
| R-4B | 500 CT. | 40 | | | 6.3 CT. | 2 |
| R-5A | 600 CT. | 65 | | | 6.3 CT. | 2.7 |
| R-5B | 600 CT. | 65 | | | 6.3 CT. | 2.7 |
| R-6A | 480 CT. | 50 | 5 | 2 | 6.3 CT. | 2 |
| R-6B | 480 CT. | 50 | 5 | 2 | 6.3 CT. | 2 |
| R-7A | 600 CT. | 50 | 5 | 2 | 6.3 CT. | 2 |
| R-7B | 600 CT. | 50 | 5 | 2 | 6.3 CT. | 2 |
| R-8A | 500 CT. | 75 | 5 | 2 | 6.3 CT. | 2.5 |
| R-8B | 500 CT. | 75 | 5 | 2 | 6.3 CT. | 2.5 |
| R-9A | 600 CT. | 75 | 5 | 2 | 6.3 CT. | 3 |

| | | | | | | |
|-------|-------------------|------------|-------------------|---|--------------------|--------|
| R-9B | 600 CT. | 75 | 5 | 2 | 6.3 CT. | 3 |
| R-10A | 525 CT. | 90 | 5 | 2 | 6.3 CT. | 5 |
| R-10B | 525 CT. | 90 | 5 | 2 | 6.3 CT. | 5 |
| R-11A | 700 CT. | 90 | 5 | 2 | 6.3 CT. | 3.5 |
| R-11B | 700 CT. | 90 | 5 | 2 | 6.3 CT. | 3.5 |
| R-12A | 550 CT. | 110 | 5 | 2 | 6.3 CT. | 5 |
| R-12B | 550 CT. | 110 | 5 | 2 | 6.3 CT. | 5 |
| R-14A | 700 CT. | 125 | 5 | 3 | 6.3 CT. | 4.5 |
| R-14B | 700 CT. | 125 | 5 | 3 | 6.3 CT. | 4.5 |
| R-16A | 700 CT. | 160 | 5 | 3 | 6.3 CT. | 5 |
| R-16B | 700 CT. | 160 | 5 | 3 | 6.3 CT. | 5 |
| R-17A | 750 CT. 80 Tap | 160 | 5 | 3 | 6.3 CT. 2.5 CT. | 5 |
| R-18A | 750 CT. | 175 | 5 | 3 | 6.3 CT. | 8 |
| R-18B | 750 CT. | 175 | 5 | 3 | 6.3 CT. | 8 |
| R-19A | 750 CT. 80 Tap | 200 | 5 | 3 | 6.3 CT. 2.5 CT. | 10 |
| R-20A | 700 CT. | 200 | 5 | 3 | 6.3 CT. | 8 |
| R-20B | 700 CT. | 200 | 5 | 3 | 6.3 CT. | 8 |
| R-72A | 800 CT. | 140 | 5 | 3 | 6.3 CT. | 4 |
| R-21A | 800 CT. | 200 | 5 | 3 | 6.3 CT. | 6 |
| R-21B | 800 CT. | 200 | 5 | 3 | 6.3 CT. | 6 |
| R-24A | 800 CT. | 300 | 5 | 6 | 6.3 CT. | 6 |
| R-24B | 800 CT. | 300 | 5 | 6 | 6.3 CT. | 6 |
| R-25A | 800 CT. | 500 | 5 | 6 | 6.3 6.3 CT. | 3 7 |
| R-58A | 875 CT. | 185 | 5 | 3 | 6.3 6.3 | 4 3 |
| R-71A | 900 CT. | 250 | 5 CT. | 4 | 6.3 CT. 6.3 | 2 4 |
| R-93A | 150-160-170 | 500 250 | Silicon Rectifier | | 6.3 CT. | 6 |

Combined PLATE and FILAMENT Transformers "100" Series

Never have the outstanding features of Triad Combined Plate and Filament Power Transformers been available at such realistic costs. No quality or performance requirement has been overlooked... specify Triad and be certain. Shielding, impregnation, chatter freedom... to Triad's demanding quality control standards.

PRIMARY 115 VOLTS 60 CYCLES

| Type No. | Plate Supply | | Rect. Filaments Volts | Filaments Amp. | Other Filaments Volts | Amp. | Case Dim. | | | Mtg. Dim. | | Wt. Lbs. |
|----------|--------------|--------|-----------------------|----------------|-----------------------|------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------|
| | AC Volts | DC Ma. | | | | | H | W | D | MW | MD | |
| R-104A | 500 C.T. | 40 | | | 6.3 V.C.T. | 2 | 2 ³ / ₈ | 2 ³ / ₈ | 2 ¹ / ₄ | 1 ³ / ₈ | 1 ¹ / ₂ | 1.55 |
| R-104B | 500 C.T. | 40 | | | 6.3 V.C.T. | 2 | 1 ⁵ / ₈ | 2 ³ / ₈ | 2 ¹ / ₄ | 2 ³ / ₈ | 1 ³ / ₈ | 1.55 |
| R-105A | 600 C.T. | 65 | | | 6.3 V.C.T. | 2.7 | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ¹ / ₂ | 2 | 1 ³ / ₈ | 2 |
| R-105B | 600 C.T. | 65 | | | 6.3 V.C.T. | 2.7 | 1 ³ / ₄ | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ¹ / ₂ | 2 | 2 |
| R-106A | 480 C.T. | 50 | 5 | 2 | 6.3 V.C.T. | 2 | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ³ / ₈ | 2 | 1 ⁵ / ₈ | 2.05 |
| R-106B | 480 C.T. | 50 | 5 | 2 | 6.3 V.C.T. | 2 | 1 ⁵ / ₈ | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ¹ / ₂ | 2 | 2.05 |
| R-107A | 600 C.T. | 50 | 5 | 2 | 6.3 V.C.T. | 2 | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ¹ / ₂ | 2 | 1 ³ / ₄ | 2.35 |
| R-107B | 600 C.T. | 50 | 5 | 2 | 6.3 V.C.T. | 2 | 1 ³ / ₄ | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ¹ / ₂ | 2 | 2.35 |
| R-108A | 500 C.T. | 75 | 5 | 2 | 6.3 V.C.T. | 2.5 | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ⁵ / ₈ | 2 | 1 ⁷ / ₈ | 2.4 |
| R-108B | 500 C.T. | 75 | 5 | 2 | 6.3 V.C.T. | 2.5 | 1 ⁷ / ₈ | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ¹ / ₂ | 2 | 2.4 |
| R-109A | 600 C.T. | 75 | 5 | 2 | 6.3 V.C.T. | 3 | 3 ¹ / ₂ | 3 | 2 ⁷ / ₈ | 2 ¹ / ₄ | 1 ³ / ₄ | 2.9 |
| R-109B | 600 C.T. | 75 | 5 | 2 | 6.3 V.C.T. | 3 | 1 ³ / ₄ | 3 ¹ / ₈ | 2 ⁷ / ₈ | 2 ¹ / ₈ | 2 ¹ / ₄ | 2.9 |
| R-110A | 525 C.T. | 90 | 5 | 2 | 6.3 V.C.T. | 5 | 3 ¹ / ₂ | 3 | 3 ¹ / ₄ | 2 ¹ / ₄ | 2 | 3.25 |
| R-110B | 525 C.T. | 90 | 5 | 2 | 6.3 V.C.T. | 5 | 2 | 3 ¹ / ₈ | 2 ⁷ / ₈ | 2 ¹ / ₈ | 2 ¹ / ₄ | 3.25 |
| R-111A | 700 C.T. | 90 | 5 | 2 | 6.3 V.C.T. | 3.5 | 3 ¹ / ₂ | 3 | 3 ¹ / ₄ | 2 ¹ / ₄ | 2 | 3.55 |
| R-111B | 700 C.T. | 90 | 5 | 2 | 6.3 V.C.T. | 3.5 | 2 | 3 ¹ / ₈ | 2 ⁷ / ₈ | 2 ¹ / ₈ | 2 ¹ / ₄ | 3.55 |
| R-112A | 550 C.T. | 110 | 5 | 2 | 6.3 V.C.T. | 5 | 3 ¹ / ₂ | 3 | 3 ³ / ₈ | 2 ¹ / ₄ | 2 ¹ / ₈ | 3.7 |
| R-112B | 550 C.T. | 110 | 5 | 2 | 6.3 V.C.T. | 5 | 2 ¹ / ₈ | 3 ¹ / ₈ | 2 ⁷ / ₈ | 2 ¹ / ₈ | 2 ¹ / ₄ | 3.7 |
| R-113A | 650 C.T. | 40 | 5 | 2 | 6.3 V.C.T. | 2 | 3 ¹ / ₈ | 2 ⁵ / ₈ | 2 ³ / ₄ | 2 | 1 ³ / ₄ | 2.3 |
| R-113B | 650 C.T. | 40 | 5 | 2 | 6.3 V.C.T. | 2 | 2 | 3 | 2 ¹ / ₂ | 2 | 2 | 2.3 |
| R-114A | 700 C.T. | 125 | 5 | 3 | 6.3 V.C.T. | 4.5 | 3 ⁷ / ₈ | 3 ¹ / ₄ | 3 ¹ / ₄ | 2 ¹ / ₂ | 2 ³ / ₈ | 4.7 |
| R-114B | 700 C.T. | 125 | 5 | 3 | 6.3 V.C.T. | 4.5 | 2 ¹ / ₂ | 3 ³ / ₈ | 3 ¹ / ₈ | 3 ¹ / ₈ | 2 ¹ / ₂ | 4.7 |
| R-115A | 680 C.T. | 70 | 5 | 2 | 6.3 V.C.T. | 2.5 | 3 ⁵ / ₈ | 3 | 3 ³ / ₈ | 2 ¹ / ₄ | 2 ¹ / ₈ | 3.5 |
| R-115B | 680 C.T. | 70 | 5 | 2 | 6.3 V.C.T. | 2.5 | 2 | 3 ¹ / ₈ | 2 ⁷ / ₈ | 2 ¹ / ₈ | 2 ¹ / ₄ | 3.5 |
| R-116A | 700 C.T. | 160 | 5 | 3 | 6.3 V.C.T. | 5 | 3 ⁷ / ₈ | 3 ¹ / ₄ | 3 ⁵ / ₈ | 2 ¹ / ₂ | 2 ⁵ / ₈ | 5.65 |
| R-116B | 700 C.T. | 160 | 5 | 3 | 6.3 V.C.T. | 5 | 2 ⁵ / ₈ | 3 ³ / ₈ | 3 ¹ / ₈ | 3 ¹ / ₈ | 2 ¹ / ₂ | 5.65 |
| R-118A | 750 C.T. | 175 | 5 | 3 | 6.3 V.C.T. | 8 | 4 ¹ / ₄ | 3 ⁵ / ₈ | 4 | 2 ³ / ₄ | 2 ⁷ / ₈ | 7.45 |
| R-118B | 750 C.T. | 175 | 5 | 3 | 6.3 V.C.T. | 8 | 2 ⁷ / ₈ | 4 ¹ / ₈ | 3 ¹ / ₂ | 3 ¹ / ₈ | 2 ³ / ₄ | 7.45 |
| R-120A | 700 C.T. | 200 | 5 | 3 | 6.3 V.C.T. | 8 | 4 ¹ / ₄ | 3 ⁵ / ₈ | 4 ¹ / ₈ | 2 ³ / ₄ | 2 ⁷ / ₈ | 8.25 |
| R-120B | 700 C.T. | 200 | 5 | 3 | 6.3 V.C.T. | 8 | 3 | 4 ¹ / ₈ | 3 ¹ / ₂ | 3 ¹ / ₈ | 2 ³ / ₄ | 8.25 |
| R-121A | 800 C.T. | 200 | 5 | 3 | 6.3 V.C.T. | 6 | 4 ¹ / ₄ | 3 ⁵ / ₈ | 4 ³ / ₈ | 2 ³ / ₄ | 3 ¹ / ₄ | 8.25 |
| R-121B | 800 C.T. | 200 | 5 | 3 | 6.3 V.C.T. | 6 | 3 ¹ / ₄ | 4 ¹ / ₈ | 3 ¹ / ₂ | 3 ¹ / ₈ | 2 ³ / ₄ | 8.25 |

TRIAD DISTRIBUTOR DIVISION



A DIVISION OF LITTON INDUSTRIES



PLATE POWER Transformers Primary 115 volts — 60 cycles

| Type No. | Secondary Volts | | Sec. D.C. Ma. | | Rect. Fil. |
|------------|-----------------|---------|---------------|------|------------|
| | AC | DC | CCS | ICAS | |
| P-1A | 440/220 CT. | 180/90 | 160 | 190 | 5V-3A |
| P-3A | 600/300 CT. | 250/125 | 300 | 360 | 5V-4A |
| P-5A | 1100 CT. | 400 | 250 | 310 | 5V-4A |
| P-7A | 1235 CT. | 500 | 250 | 310 | 5V-4A |
| P-9A | 1235 CT. | 500 | 500 | 600 | 5V-6A |
| P-11A | 1455 CT. | 600 | 250 | 310 | |
| •P-213AL*† | 1780 CT. | 750 | 250 | 310 | |
| §P-14A | 1780 CT. | 750/600 | 250 | 310 | |
| •P-215AL*† | 2340 CT. | 1000 | 250 | 310 | |
| •P-216AL*† | 2430 CT. | 1000 | 500 | 600 | |
| •P-217AL*† | 2880 CT. | 1250 | 250 | 310 | |
| •P-218AL*† | 2880 CT. | 1250 | 500 | 600 | |
| •P-220AL*† | 3300 CT. | 1500 | 350 | 425 | |
| *PR-21AL | 3300 CT. | 1500 | 500 | 600 | |

† Plate leads out side of case for 866 rectifiers.

§ Tapped Pri. to produce the lower D.C. voltage.

*New Item

*Pri. Is 230/115V.

TELEVISION COMPONENTS

Replacement POWER Transformers, Combined Plate and Filament

Electrostatically shielded. Primary 115 volts 60 cycles.

| Type No. | Plate Supply | | Filaments — | |
|----------|---------------------------|--------|---|---|
| | AC Volts | DC Ma. | Volts | and Amperes |
| R-37BC | 735 V.C.T. | 275 | 5V.—6A. | 6.3V.—8.5A. 6.3V./5V.—2A.* |
| R-38A | 750 V.C.T. | 225 | 5V.—3A. | 6.3V.—10A. 6.3V.—1.2A.* 6.3V.—2.5A. |
| R-38BC | | | | |
| R-39BC | 640 V.C.T. | 225 | 5V.—3A. | 6.3V.—10A. 6.3V.—1.2A.* |
| R-40BC | 780/440 V.C.T. | 300 | 5V.—3A. 5V.—3A. 5V.—2A. | 6.3V.—8.5A. 6.3V.—3.5A. |
| R-42BC | 675 V.C.T. | 185 | 5V.—3A. | 6.3V.—7A. 6.3V.—2A.* |
| R-49BS | 650 V.C.T. | 240 | 5V.—3A. | 6.3V.—9A. 6.3V.—0.9A. 6.3V.—1.2A.* |
| R-49BC | | | | |
| R-50A | 790/650 V.C.T. | 310 | 5V.—3A. 5V.—3A. 5V.—2A. | 6.3V.—5A. 6.3V.—5A. 6.3V.—2.6A. |
| R-50BC | | | | |
| R-51BC | 505 V.C.T. | 320 | 5V.—6A. | 6.3V.—5A. 6.3V.—5A. 6.3V.—1.2A.* |
| R-52BC | 600 V.C.T. | 270 | 5V.—3A. | 6.3V.—5A. 6.3V.—5A. 6.3V.—1.2A.* |
| R-60BC | 460 V.C.T. | 300 | 5V.—6A. | 6.3V.—10A. 6.3V.—1.2A.* 6.3V.—2.5A. |
| R-61BC | 560 V.C.T. | 275 | 5V.—6A. | 6.3V.—6A. 6.3V.—6A. 6.3V.—1.2A.* |
| R-62BC | 680 V.C.T. | 290 | 5V.—6A. | 6.3V.—10A. 6.3V.—1.5A. 6.3V.—1.2A.* |
| R-64BC | 520 V.C.T. | 270 | 5V.—3A. | 6.3V.—10A. |
| R-65BC | 550 V.C.T. | 270 | 5V.—3A. | 6.3V.—10A. |
| R-66BC | 580 V.C.T. | 270 | 5V.—3A. | 6.3V.—10A. |
| R-67BC | 600 V.C.T. | 250 | 5V.—3A. | 6.3V.—9A. |
| R-69BC | 550 V.C.T. | 270 | 5V.—3A. | 6.3V.—10A. |
| R-74BC | 680 V.C.T. | 190 | 6.3V.—7.8A. 6.3V.—1.2A. (damper wdg) | 5V.—3A. |
| R-75BA | 560 .C.T. | 280 | 5V.—3A. | 6.3V.—9.5A. |
| R-79BA | 127V. | 1000 | 6.3V.—2A 6.3V.—10A. | 12.6V.—2A 12.6V.CT.—2A. |
| R-80BA | 500V.CT. | 300 | 5V.—6A 6.3V.—2.0A | 6.3V.—8A 6.3V.—5A |
| R-86BA | 117/129*141 multi-purpose | 1000 | 6.3V.—6A | 12.6V.CT.—2A 6.3V.—6A |

* Less than 100 m.m.f.d. capacity to ground and insulated for high voltage damper tube.
Height of transformers in BC cases is measured from chassis line to top of case. Copper shading ring on all BC cases to reduce external magnetic field.

Note: Last letter of Type No. denotes case style.

AUDIO

Triad Replacement Output Transformers furnish a wide range of size and mounting characteristics... specifically engineered for mounting in precise location in chassis. Climatite treated... manufactured to exacting quality standards of more costly types... progressively designed for advanced circuitry and audio tubes... total complete coverage over impedance and wattage ranges... Triad units provide finest response in minimum space... and outlive all others.

REPLACEMENT OUTPUT TRANSFORMERS

Single Tube To Standard Voice Coil 3-4 Ohms

| Type No. | Primary Impedance | D.C. Ma | Audio Watt |
|----------|-------------------|---------|------------|
| S-20X | 2000 | 50 | 2-3 |
| S-20Z | 2000 | 50 | 2-3 |
| S-2X | 2000 | 55 | 3-5 |
| S-12X | 2500 | 50 | 2-3 |
| S-12Z | 2500 | 50 | 2-3 |
| S-1X | 2500 | 60 | 3-5 |
| S-16X | 3000 5% Tap | 50 | 2-3 |
| S-30X | 3000 | 60 | 3-5 |
| S-67X | 3200 | 60 | 4-6 |
| S-4X | 3000 | 70 | 5-8 |
| S-14Z | 4000 | 50 | 2-3 |
| S-41X | 4000 | 50 | 3-5 |
| S-41Z | 4000 | 50 | 3-5 |
| S-6X | 5000 | 35 | 2-3 |
| S-6Z | 5000 | 35 | 2-3 |
| S-3X | 5000 | 40 | 3-5 |
| S-5X | 5000 | 50 | 5-8 |
| S-5Z | 5000 | 50 | 5-8 |
| S-48X | 6500 | 35 | 2-3 |
| S-48Z | 6500 | 35 | 2-3 |
| S-49X | 6500 | 35 | 3-5 |
| S-7X | 7500 | 30 | 3-5 |
| S-9X | 7500 | 50 | 5-8 |
| S-9Z | 7500 | 50 | 5-8 |
| S-8X | 8000 | 30 | 2-3 |
| S-8Z | 8000 | 30 | 2-3 |
| S18X | 8000 | 45 | 4-6 |
| S-18Z | 8000 | 45 | 4-6 |
| S-11X | 10000 | 30 | 2-3 |
| S-11Z | 10000 | 30 | 2-3 |
| S-17X | 10000 | 30 | 3-5 |
| S-10X | 10000 | 45 | 4-6 |
| S-40X | 14000 | 5.5 | 1/4 |
| S-38X | 16000 | 15 | 2-3 |
| S-38Z | 16000 | 15 | 2-3 |
| S-37X | 25000 | 4.0 | 1/4 |
| S-13X | 25000 | 10 | 2-3 |
| S-13Z | 25000 | 10 | 2-3 |

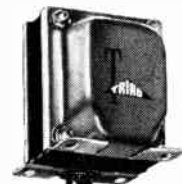
REPLACEMENT PUSH-PULL OUTPUT TRANSFORMERS

Push-Pull Tubes To Voice Coil 3-4 Ohms

| Type No. | Impedance | D.C. MA. Each Side | Audio Watts |
|----------|---------------|--------------------|-------------|
| S-39X | 12000 CT. | 30 | 3-4 |
| S-64X | 6000 CT. | 40 | 4-6 |
| S-15X | 10000 CT. | 35 | 7-10 |
| S-19Z | 10000 CT. | 50 | 10-14 |
| S-68Z | 3000/3800 CT. | 90 | 15-18 |
| S-69Z | 5000 CT. | 60 | 15-18 |
| S-21A | 8000 CT. | 55 | 15-18 |
| S-21Z | 8000 CT. | 55 | 15-18 |



Case Z



Case A



Case X



A DIVISION OF LITTON INDUSTRIES

TRIAD DISTRIBUTOR DIVISION



AUDIO

LOW LEVEL OUTPUT Transformers

| Type No. | Application | Freq. Resp. | Pri. Imped. | Second. Imped. |
|----------|---|-------------|----------------|------------------------------------|
| A-51X | Tube to line. | 300-3000 | 7000 | 50 |
| A-53X | Single or p.p. tubes to line. | 70-7000 | 18000 CT. | 600/250/50 |
| A-54X | P.P. Tubes to V.C. | 150-30000 | 7700 CT. | 8/4 |
| A-55J | Parallel-fed 6J5 or 6SN7 to line. 45 db. shielding | 30-15000 | 15000 | 600/250/50 |
| A-65J | Parallel-fed 6J5 or 6SN7 to line. 45 db. shielding. | 30-15000 | 15000 | 600/150 Split winding |
| S-58X | Line to line. | 300-3000 | 600/150 150 | 600/150 150 —Split windings— |
| A-67J | Line to line. 45 db. shielding. | 30-15000 | 600/150 150 | 600/150 150 —Split windings— |



Case X

SPLATTER Chokes

| Type No. | Inductance Henries | Current Ma. | Res. Ohms | Wt. Lbs. |
|----------|--------------------|-------------|-----------|----------|
| C-26X | Tapped .2 to 1.5 | 100 | 95 | 1 1/4 |
| C-43X | Tapped .05 to 1 | 300 | 40 | 2 |



Case J

UNIVERSAL OUTPUT Transformers Single Or Push-Pull Tubes To Voice Coil

| Type No. | Application | Impedance | DC MA | Audio Watts |
|----------|-----------------------|------------|-------|-------------|
| S-62X | Single or P.p. plates | 2000-10000 | 30 | 2 |
| S-52X | Single or p.p. plates | 4000-24000 | 30 | 4 |
| S-51X | Single or p.p. plates | 4000-14000 | 35 | 5 |
| S-63X | Single or p.p. plates | 1500- 7000 | 50 | 6 |
| S-54X | Single | 1500- 5000 | 70 | 8 |
| S-53X | Single or p.p. plates | 4000-14000 | 40 | 8 |
| S-55X | P.p. plates | 4000-14000 | 40 | 10 |
| S-55Z | P.p. plates | 4000-14000 | 40 | 10 |
| S-56Z | Single | 1500- 6000 | 85 | 12 |
| S-59Z | P.p. plates | 1500- 4000 | 65 | 15 |
| S-57Z | P.p. plates | 4000-14000 | 55 | 15 |
| S-61Z | P.p. plates | 4000-10000 | 60 | 20 |



Case P

PLUG-IN INPUT Transformers

| Type No. | Application | Pri. Imped. | Second Imped. | Freq. Resp. | Shld'g |
|----------|-----------------------|--------------|---------------|-------------|--------|
| A-200P | Line or mike to grid. | 200/50 CT. Δ | 36,000 | 30-20000 | 70 db. |
| A-202P | Same as above. | 200/50 CT. Δ | 36,000 | 20-20000 | 90 db. |
| HS-273P | Same as above. | 200/50 CT. Δ | 80,000 | 30-30000 | 70 db. |
| A-210P | Stereo Isolation | 1:1 ratio | 30,000 | 20-20000 | 45 db. |

Δ Split Winding

INTERSTAGE Transformers Plate to Grid

| Type No. | Application | Freq. Resp. | Pri. Imped. | Second Imped. | Ratio |
|----------|--|-------------|-------------|--------------------|---------------------------|
| A-31X | Plate to single or p.p. grids | 300-3000 | 10000 | 90000CT | 1 : 3 |
| A-33X | Plate to single or p.p. grids | 70-7000 | 10000 | 90000CT | 1 : 3 |
| A-42Z | Multi-ratio single or p.p. plates to single or p.p. grids. | 70-7000 | 15000 CT. | 135000CT. or 33750 | 1 : 1.5 1 : 3 1 : 6 |
| A-35A | Plate to single or p.p. grids | 50-10000 | 10000 | 90000CT | 1 : 3 |
| A-39A | P.p. plates to p.p. grids | 50-10000 | 20000 | 45000CT | 1 : 1.5 |
| A-40J | Parallel-fed 6J5 or 6SN7. Plate to p.p. grid 45 db. shielding. | 30-15000 | 15000 | 115000CT | 1 : 2.76 |

MODULATION Transformers Tube to RF Load

| Type No. | Primary | Freq. Resp. | Secondary Impedance | Ma. | Aud. Wtts. |
|----------|-------------------------------------|-------------|---------------------|-------------|------------|
| TY-65Z | 32 CT. (575 Ma.) (Transistor use) | 70-15000 | 3000-4000-6000 | 100 | 10 |
| M-4Z | 5000 (Auto-former). | 300-3000 | 6750 4 | 100 (total) | 10 |
| M-5Z | 5000 (Auto-former). | 300-3000 | 6750 4 | 165 (total) | 20 |
| M-1X | 10000 CT. for 6N7, 6N7, 6A6, etc. | 300-3000 | 5000-8000-10000 | 50 | 5 |
| M-3X | 10000 CT. for 6N7, 6A6, 6F6's, etc. | 300-3000 | 3000-5000-8000 | 100 | 20 |
| TY-66A | 6 CT. (5A) (Transistor use) | 300-3000 | 3000-4000-6000 | 200 | 40 |
| †M-7AL | 4250 CT. for 807's | 300-3000 | 3000-5000-8000 | 200 | 60 |
| M-15A | Multi-match | 300-3000 | 4000 to 20000 | 150 | 30 |
| †M-12AL | Multi-match | 300-3000 | 4000 to 20000 | 300 | 125 |

DRIVER Transformers

| Type No. | Driver Tubes | Output Tubes | Frequency Response | Ratio Primary 1/2 Sec. | Primary D.C. Ma. |
|----------|--|---|--------------------|------------------------|------------------|
| A-81X | 30, 1H4, etc. | 19, 30's, 1J6, etc. | 200-20,000 | 2.66:1 | 15 |
| A-83X | 6F6, 42, 45, etc. | 6L6, 6F6, 6V6, 807, etc. | 70-7000 | 1.33:1 | 40 |
| A-85X | 6F6, 42, 45, etc. | 6L6, 6F6, 6V6, 807, etc. | 50-10000 | 2.66:1 | 40 |
| A-89A | P.p. plates to class B or AB grids— Universal 15 watt. | Any class B or AB tubes. 100-500 watts output | 50-10000 | 3.1 or 1.8:1 | 100 per side |
| TY-61X | Transistor use | | 70-10000 | 1:0.5 | 100 |

†Plate leads out side



Case AL

TRIAD DISTRIBUTOR DIVISION



A DIVISION OF LITTON INDUSTRIES



OUTPUT Transformers

Tube to Voice Coil and Line

| Type No. | Tubes | Pri. Imped. | Sec. Imped. | DC Pri. | Audio Watts |
|----------|---|-------------|----------------|------------|-------------|
| S-27A | 2A3, 6A3, 6B4, 6L6, 6U6, 6Y6, 12A5, 25B6, 35B5, 50A5. | 2500 | 500/16/8/4 | 80 | 8 |
| S-28X | 2A5, 6AC5, 6B5, 6F6, 6K6, 7B5, 14A5, 25AC5. | 7500 | 500/16/8/4 | 40 | 5 |
| S-29X | 6AQ5, 6AS5, 6V6, 7C5, 25A6, 25B5, 25L6, 25N6, 35A5, 35L6. | 5000 | 500/16/8/4 | 45 | 5 |
| S-22A | P.p. 2A3, 6B4, 6A5, 6L6, etc. | 5000 CT. | 500/16/8/4 | 100 (bal.) | 15 |
| S-24A | P.p. 6V6, 7C5, 6K6, 6F6, etc. | 8000 CT. | 500/16/8/4 | 80 (bal.) | 15 |
| S-60A | P.p. 6L6, 5881, 807, etc. | 6600 CT. | 500/250/16/8/4 | 120 (bal.) | 35 |

70.7 volt Line to Voice Coil (Cont.)

| Type No. | Primary Impedance | Sec. Imped. | Output Watts | Freq. Resp. |
|----------|--|-------------|--------------|-------------|
| S-46A | Autoformer 2000/1000/500/250. | 16/8/4 | 20 | 20-20000 |
| S-75K | Weatherproof autoformer 2000/1000/500/250. | 16/8/4 | 20 | 20-20000 |
| S-78Z | Isolation 4000/2000/1000/500. | 16/8/4 | 10 | 40-20000 |
| S-79Z | Isolation 2000/1000/500/250. | 16/8/4 | 20 | 40-20000 |
| S-47Z | 10K, 5K/2.5K/1250/625 | 16/8/4 | 8 | 20-20000 |
| S-73X | Isolation 16K/8K/4K/2K/1K | 16/8/4 | 5 | 40-15000 |

25 VOLT LINE TRANSFORMERS

| Type No. | Primary Matching Impedance | Secondary Load Impedance | Output Watts |
|----------|----------------------------|--------------------------|--------------|
| S-131X | 1250/625/312 | 8/4 | 2 |
| S-132X | 1000/500/250/125 | 16/8/4 | 5 |
| S-133Z | 500/250/125/62.5 | 16/8/4 | 10 |

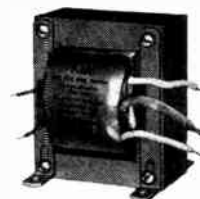
MATCHING TRANSFORMERS

FOR 25 OR 70.7 VOLT LINE

| | | | |
|--------|---|----|----------|
| S-129Z | 70.7V line to 25V line or, 25V line to 70.7V line | 30 | 20-15000 |
| S-130Z | 70.7V line to 25V line or, 25V line to 70.7V line | 10 | 20-15000 |

Special TRANSCEIVER Transformers (Voice Frequencies)

| Type No. | Application | Primary Impedance | Secondary Impedance |
|----------|--|-------------------|---------------------|
| A-21X | S.B. mike or plate to grid (2 primaries) | 100 10000 | 100000 |
| A-23X | Tube to line and hi-impedance phones. | 10000 | 50 and 2000 |



Case U

INSTRUMENTATION GEOFORMERS

LOW FREQUENCY TRANSISTOR TRANSFORMERS

| Type No. | Impedance Ohms | | Turns Ratio | Min. pri. Ind. @ 100MV-60 cy. With No Unbalanced D.C. Current | D. C. Resistance (Ohms) | Frequency Response in Cycles Primary Signal of 1 Volt Unbalanced D.C. Secondary Current of 3 Ma. | | | | | | | | Shielding | Case Mtg. | Wt. | |
|----------|----------------|-------------|-------------|---|-------------------------|--|------------|------------|------------|------------|------------|------------|------------|-------------|-----------|-------|-----------|
| | Pri. | Sec. | | | | 1 Ma. | | 2 Ma. | | 5 Ma. | | | | | | | |
| | | | | | | -3DB | -1DB | -3DB | -1DB | -3DB | -1DB | -3DB | -1DB | | | | |
| G-18 | 1000 or 250 | 125 or 31 | 2:83:1 | 60. | 500 | 44 | 5 to 20000 | 8 to 7000 | 5 to 20000 | 8 to 7000 | 6 to 20000 | 9 to 7000 | 7 to 20000 | 10 to 7000 | P1-H | GP-1F | 3.2 oz. |
| G-19 | 1000 or 250 | 1000 or 250 | 1:1 | 65. | 540 | 230 | 12 to 7000 | 15 to 3800 | 12 to 7000 | 15 to 3800 | 12 to 7000 | 15 to 3800 | 20 to 7000 | 40 to 3800 | P1-H | GP-2L | 5 1/4 oz. |
| G-30 | 1000 CT. | 2500 CT. | 1:1.58 | 20. | 350 | 1800 | 20 to 8000 | 40 to 4200 | 22 to 8000 | 45 to 4200 | 40 to 8000 | 75 to 4200 | 70 to 8000 | 160 to 4200 | P1 | GP-1F | 3.2 oz. |

CHOPPER INPUT TRANSFORMERS

Triad Chopper Input Transformers provide exceedingly close balance between the two halves of the primary winding . . . minimum noise in microvolt ranges of input signals is assured with Triad's special core treatment techniques. For demanding transistor and tube applications, Triad's special design capabilities have an outstanding record. For special applications, consult Triad.

| Type No. | Turns Ratio | Minimum Primary Inductance @ 1V-60 | Maximum Primary Volts @ 60 | Primary Matching Impedance In Ohms | Secondary Matching Impedance In Ohms | D.C. Resistance | | Stray Fields Shield | Case and Mounting | Weight |
|------------------|-------------|--|----------------------------|------------------------------------|--------------------------------------|-----------------|-----------|---------------------|-------------------|------------------------|
| | | | | | | Primary | Secondary | | | |
| | | | | | | In Ohms | In Ohms | | | |
| G-20‡ G-20H‡ | 1:8 | 120 h. | 25 | 10,000 CT or 2500 | 640,000 CT | 370 | 21,000 | P5-H P1-H | GP-4T GP-2L | 1 1/2 oz. 5 1/4 oz. |
| G-21‡ G-21TS‡ | 4:1 | 1200 h. | 84 | 20,000 CT | 12,500 CT | 4000 | 1300 | P1-H P5-H | GP-2L GP-4T | 5 1/4 oz. 1 1/2 oz. |
| G-22H‡ G-22‡ | 1:4 | 1000 h. | 90 | 50,000 CT | 800,000 CT | 2200 | 19,000 | P1-H P5-H | GP-3R GP-5W | 7 3/4 oz. 1 lb. |
| G-23‡ G-23TS‡ | 6.32:1 | 1000 h. | 75 | 40,000 CT | 1000 CT | 4400 | 160 | P1-H P5-H | GP-2L GP-4T | 5 1/4 oz. 1 1/2 oz. |
| G-24‡ | 1:1 | 400 h. Low capacity coupling less than .02 μF between windings. | 19.5 | 40,000 CT | 40,000 CT | 1625 | 1625 | P5 | GP-5S | 1 lb. |
| G-25‡ G-25TS‡ | 2:1 | 800 h. | 70 | 40,000 CT or 10,000 CT | 10,000 CT | 3200 | 2200 | P1-H P5-H | GP-2L GP-4T | 5 1/4 oz. 1 1/2 oz. |

‡Static Shield

TRIAD PAGE 10

TRIAD DISTRIBUTOR DIVISION

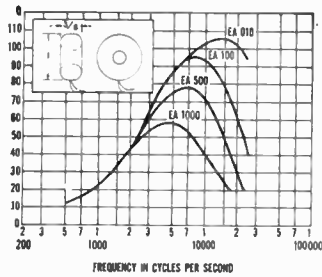
TOROIDS



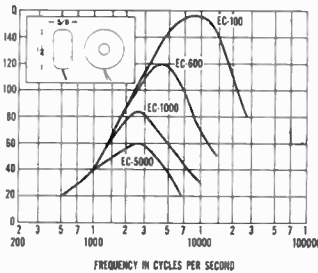
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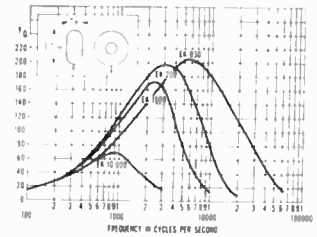
EA SERIES



EC SERIES



EK SERIES



A

TOROIDS



| Type No. | Ind. | Res-Ohms Average | D.C.-Ma. for 5% Ind. drop |
|----------|---------|------------------|---------------------------|
| EA-001 | 1 mh | .40 | 270 |
| EA-002 | 2 mh | .58 | 192 |
| EA-003 | 3 mh | .73 | 157 |
| EA-004 | 4 mh | .85 | 135 |
| EA-005 | 5 mh | 1.20 | 121 |
| EA-007 | 7 mh | 1.42 | 102 |
| EA-010 | 10 mh | 2.20 | 86 |
| EA-015 | 15 mh | 3.40 | 70 |
| EA-020 | 20 mh | 5.05 | 60 |
| EA-025 | 25 mh | 5.80 | 54 |
| EA-030 | 30 mh | 7.90 | 50 |
| EA-040 | 40 mh | 11.40 | 43 |
| EA-050 | 50 mh | 12.80 | 38 |
| EA-070 | 70 mh | 19.00 | 32 |
| EA-100 | 100 mh | 30.00 | 27 |
| EA-150 | 150 mh | 46.00 | 22 |
| EA-200 | 200 mh | 52.00 | 19 |
| EA-250 | 250 mh | 73.00 | 17 |
| EA-300 | 300 mh | 80.00 | 16 |
| EA-400 | 400 mh | 115.00 | 14 |
| EA-500 | 500 mh | 126.00 | 12 |
| EA-600 | 600 mh | 178.00 | 11 |
| EA-700 | 700 mh | 193.00 | 10 |
| EA-1000 | 1000 mh | 297.00 | 8.6 |

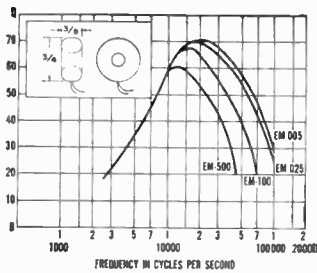
| Type No. | Ind. | Res-Ohms Average | D.C.-Ma. for 5% Ind. drop |
|----------|----------|------------------|---------------------------|
| EC-001 | 1 mh | .40 | 520 |
| EC-002 | 2 mh | .56 | 368 |
| EC-003 | 3 mh | .70 | 300 |
| EC-004 | 4 mh | .82 | 260 |
| EC-005 | 5 mh | .92 | 233 |
| EC-007 | 7 mh | 1.05 | 195 |
| EC-010 | 10 mh | 1.30 | 165 |
| EC-015 | 15 mh | 1.60 | 134 |
| EC-020 | 20 mh | 1.85 | 116 |
| EC-030 | 30 mh | 2.85 | 95 |
| EC-040 | 40 mh | 4.20 | 82 |
| EC-050 | 50 mh | 4.60 | 74 |
| EC-070 | 70 mh | 7.00 | 62 |
| EC-100 | 100 mh | 8.00 | 52 |
| EC-200 | 200 mh | 25.00 | 37 |
| EC-250 | 250 mh | 28.00 | 33 |
| EC-300 | 300 mh | 38.20 | 30 |
| EC-400 | 400 mh | 44.00 | 26 |
| EC-500 | 500 mh | 63.50 | 23 |
| EC-600 | 600 mh | 71.00 | 21 |
| EC-700 | 700 mh | 80.00 | 19.5 |
| EC-1000 | 1000 mh | 113.00 | 16.5 |
| EC-1500 | 1500 mh | 175.00 | 13.5 |
| EC-2000 | 2000 mh | 243.00 | 11.6 |
| EC-3000 | 3000 mh | 370.00 | 9.5 |
| EC-4000 | 4000 mh | 435.00 | 8.2 |
| EC-5000 | 5000 mh | 645.00 | 7.4 |
| EC-7000 | 7000 mh | 780.00 | 6.2 |
| EC-10000 | 10000 mh | 1190.00 | 5.2 |

| Type No. | Ind. | Res-Ohms Average | D.C.-Ma. for 5% Ind. drop |
|----------|----------|------------------|---------------------------|
| EK-010 | 10 mh | .92 | 262 |
| EK-020 | 20 mh | 1.30 | 184 |
| EK-030 | 30 mh | 1.65 | 150 |
| EK-040 | 40 mh | 1.90 | 130 |
| EK-050 | 50 mh | 3.50 | 116 |
| EK-060 | 60 mh | 4.00 | 106 |
| EK-080 | 80 mh | 4.60 | 92 |
| EK-100 | 100 mh | 5.20 | 82 |
| EK-120 | 120 mh | 5.50 | 75 |
| EK-150 | 150 mh | 6.20 | 67 |
| EK-200 | 200 mh | 7.50 | 58 |
| EK-250 | 250 mh | 10.30 | 52 |
| EK-300 | 300 mh | 12.00 | 47 |
| EK-400 | 400 mh | 16.50 | 41 |
| EK-500 | 500 mh | 23.60 | 37 |
| EK-700 | 700 mh | 30.00 | 31 |
| EK-1000 | 1000 mh | 45.00 | 26 |
| EK-2000 | 2000 mh | 100.00 | 18.4 |
| EK-3000 | 3000 mh | 151 | 15 |
| EK-4000 | 4000 mh | 175 | 13 |
| EK-5000 | 5000 mh | 250 | 11.6 |
| EK-7000 | 7000 mh | 380 | 9.8 |
| EK-10000 | 10000 mh | 500 | 8.2 |
| EK-20000 | 20000 mh | 1000 | 5.8 |
| EK-30000 | 30000 mh | 1500 | 4.7 |
| EK-40000 | 40000 mh | 1850 | 4.1 |

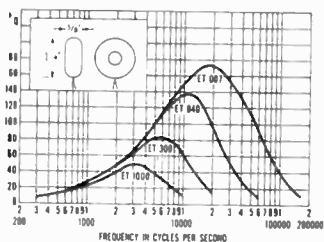


| Type No. | Ind. | Res-Ohms Average | D.C.-Ma. for 5% Ind. drop |
|----------|---------|------------------|---------------------------|
| EM-001 | 1 mh | 2.8 | 150 |
| EM-002 | 2 mh | 4.1 | 108 |
| EM-003 | 3 mh | 5.1 | 87 |
| EM-004 | 4 mh | 6.0 | 76 |
| EM-005 | 5 mh | 6.8 | 68 |
| EM-007 | 7 mh | 8.2 | 57 |
| EM-010 | 10 mh | 10 | 48 |
| EM-015 | 15 mh | 12.5 | 39 |
| EM-020 | 20 mh | 14.5 | 34 |
| EM-025 | 25 mh | 16.5 | 30 |
| EM-030 | 30 mh | 18 | 27.6 |
| EM-040 | 40 mh | 27 | 24 |
| EM-050 | 50 mh | 30 | 22 |
| EM-060 | 60 mh | 40 | 19.5 |
| EM-070 | 70 mh | 43 | 18 |
| EM-100 | 100 mh | 66 | 15 |
| EM-150 | 150 mh | 100 | 12.5 |
| EM-200 | 200 mh | 115 | 11 |
| EM-250 | 250 mh | 167 | 9.6 |
| EM-300 | 300 mh | 180 | 8.8 |
| EM-400 | 400 mh | 265 | 7.6 |
| EM-500 | 500 mh | 295 | 7 |
| EM-700 | 700 mh | 440 | 5.8 |
| EM-1000 | 1000 mh | 650 | 4.8 |

EM SERIES



ET SERIES



| Type No. | Ind. | Res-Ohms Approx. | D.C.-Ma. for 5% Ind. drop |
|----------|---------|------------------|---------------------------|
| ET-001 | 1 mh | .57 | 680 |
| ET-002 | 2 mh | .82 | 480 |
| ET-003 | 3 mh | .98 | 396 |
| ET-004 | 4 mh | 1.10 | 342 |
| ET-005 | 5 mh | 1.35 | 306 |
| ET-007 | 7 mh | 1.50 | 260 |
| ET-010 | 10 mh | 2 | 217 |
| ET-015 | 15 mh | 3 | 177 |
| ET-020 | 20 mh | 4.3 | 153 |
| ET-025 | 25 mh | 4.8 | 137 |
| ET-030 | 30 mh | 6.9 | 125 |
| ET-040 | 40 mh | 7.2 | 108 |
| ET-050 | 50 mh | 8 | 97 |
| ET-060 | 60 mh | 15.5 | 88 |
| ET-070 | 70 mh | 16.8 | 82 |
| ET-100 | 100 mh | 26.0 | 68 |
| ET-150 | 150 mh | 38.5 | 56 |
| ET-200 | 200 mh | 44.5 | 48 |
| ET-250 | 250 mh | 64 | 43 |
| ET-300 | 300 mh | 72 | 40 |
| ET-400 | 400 mh | 103 | 34 |
| ET-500 | 500 mh | 118 | 31 |
| ET-700 | 700 mh | 173 | 26 |
| ET-1000 | 1000 mh | 245 | 22 |

TRIAD DISTRIBUTOR DIVISION



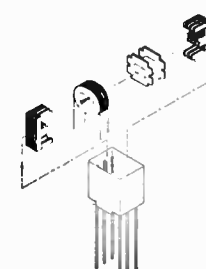
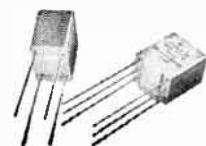
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RED SPEC TRANSISTOR TRANSFORMERS

| Type No. | Application Type | MIL-T-27A Designation | Primary Impedance | D.C. Res. Pri. Ohms | Max. Unbal. Pri. D.C. Ma. | Secondary Impedance | Max. Power MW |
|----------|-------------------------|-----------------------|-------------------|---------------------|---------------------------|---------------------|---------------|
| SP-4 | Input | TF5RX16ZZ | 200000 c.t. | 5300 | 0 | 1000 c.t. | 10 |
| SP-5 | Input | TF5RX16ZZ | 50000 c.t. | 3800 | 0 | 1000 c.t. | 25 |
| SP-7 | Input | TF5RX16ZZ | 200000 | 5300 | 0 | 1000 | 10 |
| SP-11 | Interstage | TF5RX13ZZ | 20000/30000 | 1700 | .5 | 800/1200 | 40 |
| SP-13 | Interstage | TF5RX13ZZ | 20000/30000 c.t. | 1700 | .5 | 800/1200 c.t. | 40 |
| SP-15 | Interstage | TF5RX13ZZ | 10000/12000 c.t. | 1050 | 1 | 1500/1800 c.t. | 50 |
| SP-20 | Driver | TF5RX13ZZ | 10000/12500 c.t. | 1050 | 1 | 1200/1500 c.t. | 50 |
| SP-21 | Driver | TF5RX13ZZ | 10000/12500 c.t. | 1050 | 1 | 2000/2500 c.t. | 50 |
| SP-29 | Driver | TF5RX13ZZ | 10000/12000 c.t. | 1050 | 1 | 500/600 c.t. | 50 |
| SP-32 | Output | TF5RX17ZZ | 500/600 | 60 | 3 | 50/60 | 50 |
| SP-33 | Output | TF5RX17ZZ | 1000/1200 | 145 | 3 | 50/60 | 50 |
| SP-34 | Output | TF5RX17ZZ | 600 | 70 | 3 | 3.2 | 50 |
| SP-35 | Output | TF5RX13ZZ | 1200 | 120 | 2 | 3.2 | 50 |
| SP-36 | Output | TF5RX13ZZ | 10000 | 1160 | 1 | 3.2 | 50 |
| SP-42 | Output | TF5RX17ZZ | 150/200 c.t. | 18 | 10 | 12/16 | 50 |
| SP-43 | Output | TF5RX17ZZ | 300/400 c.t. | 38 | 7 | 12/16 | 50 |
| SP-44 | Output | TF5RX17ZZ | 600/800 c.t. | 75 | 4.5 | 12/16 | 50 |
| SP-46 | Output | TF5RX17ZZ | 1000/1330 c.t. | 120 | 3.5 | 12/16 | 50 |
| SP-47 | Output | TF5RX13ZZ | 1500/2000 c.t. | 180 | 3 | 12/16 | 50 |
| SP-48 | Output | TF5RX13ZZ | 7500/10000 c.t. | 820 | 1 | 12/16 | 50 |
| SP-49 | Output | TF5RX17ZZ | 300 c.t. | 37 | 7 | 600 | 50 |
| SP-50 | Output | TF5RX17ZZ | 500 c.t. | 60 | 3 | 600 | 50 |
| SP-51 | Output | TF5RX17ZZ | 900 c.t. | 100 | 4 | 600 | 50 |
| SP-52 | Output | TF5RX13ZZ | 1500 c.t. | 170 | 3 | 600 | 50 |
| SP-59 | Output | TF5RX17ZZ | 120/150 c.t. | 15 | 10 | 3.2/4 | 50 |
| SP-60 | Output | TF5RX17ZZ | 320/400 c.t. | 40 | 6 | 3.2/4 | 50 |
| SP-61 | Output | TF5RX17ZZ | 600/750 c.t. | 70 | 4.5 | 3.2/4 | 50 |
| SP-62 | Output | TF5RX17ZZ | 800/1000 c.t. | 100 | 4 | 3.2/4 | 50 |
| SP-63 | Output | TF5RX13ZZ | 1200/1500 c.t. | 125 | 3 | 3.2/4 | 50 |
| SP-64 | Output | TF5RX13ZZ | 1600/2000 c.t. | 190 | 2.5 | 3.2/4 | 50 |
| SP-65 | Output | TF5RX13ZZ | 8000/10000 c.t. | 820 | 1 | 3.2/4 | 50 |
| SP-66 | Output Isolation | TF5RX17ZZ | 10000 c.t. | 1000 | 1 | 10000 c.t. | 50 |
| SP-67* | Output Isolation | TF5RX17ZZ | 600 CT. | 73 | 3 | 600 CT. | 50 |
| SP-106 | Choke | TF5RX20ZZ | 6 hy. @ 2 ma. | 1700 | | | |
| SP-107 | Choke | TF5RX20ZZ | 1.25 hy. @ 2 ma. | 180 | | | |
| SP-108 | Choke | TF5RX20ZZ | 3.5 hy. @ 2 ma. | 1100 | | | |
| SP-117* | Choke | TF5RX20ZZ | .9HY | 110 | 2 | — | — |
| SP-118 | Choke | TF5RX20ZZ | .3 hy. @ 4 ma. | 42 | | | |
| SP-128* | Choke | TF5RX20ZZ | .1HY | 15 | 5 | — | — |
| SP-310 | Magnetic shielding case | | | | | | |

* New Item. CT For Center Tap.



PRICE INDEX by Triad Transformer Type Number

Prefix letters indicate transformer type as follows. Suffix letters indicate case type.

A Audio
 C Choke
 E High Q Toroidal Coil
 F Filament
 G Geofomer Instrumentation
 HC Box Shielded Isolation
 HS Hermetically Sealed

HSM Hermetically Sealed
 JAF Trijet/Hermetically Sealed
 JO Trijet/Hermetically Sealed
 JZ Trijet/Hermetically Sealed
 M Modulation
 N Isolation or Stepdown Autoformer
 P Plate Power

PL Pulse
 R Power/Combined Plate and Filament
 S Speaker Coupling or Output
 SP Transistor/Red Spec Microminiature
 T Miniature
 TY Miniature
 TZ Transistor

When you specify TRIAD you are assured of transformers which will give you the exceptional performance you seek. Engineered, developed and manufactured to the most rigid quality control standards, Triad Transformers employ the most advanced techniques of scientific research.

Every Triad Transformer is manufactured under the Signal Corps RIQAP Program providing you with a product which is pre-inspected to meet military specifications.

Triad's sound pricing policy and stable marketing philosophy guarantee the finest transformer products available. Triad transformers are produced by skilled craftsmen... they are constructed of only the finest pre-inspected new materials available from manufacturers within the limits of the United States.

Prices subject to change without notice. Net prices shown for 1-9 quantity. For 1 to 249 pieces, see your stocking Triad Distributor for quantity discount schedule. For 250 or more pieces, contact your Triad Representative or call the factory.

TRIAD PAGE 12



TRIAD DISTRIBUTOR DIVISION

A DIVISION OF LITTON INDUSTRIES



PRICE INDEX BY TYPE NUMBER

| Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | | |
|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|--------|-------|
| A-1X | 2.04 | A-141X | 3.66 | D-59 | 6.42 | D-155 | 7.08 | D-638 | 8.88 | EC-600 | 4.59 | EM-005A | 5.55 | F-1X | 2.61 |
| A-3X | 2.22 | A-142X | 3.51 | D-60R | 6.66 | D-156 | 8.40 | EA-001 | 3.69 | EC-600A | 6.39 | EM-007 | 3.99 | F-3X | 4.02 |
| A-4X | 2.67 | A-143X | 3.90 | D-61 | 5.55 | D-157 | 7.50 | EA-001A | 5.43 | EC-700 | 4.65 | EM-007A | 5.64 | F-5U | 5.67 |
| A-5X | 2.97 | A-144X | 3.87 | D-62 | 5.55 | D-158 | 7.32 | EA-002 | 3.69 | EC-700A | 6.45 | EM-010 | 4.05 | F-6X | 3.42 |
| A-6X | 2.25 | A-200P | 15.00 | D-63 | 5.88 | D-159 | 8.40 | EA-002A | 5.43 | EC-1000 | 4.74 | EM-010A | 5.70 | F-7X | 3.57 |
| A-7J | 5.58 | A-202P | 20.85 | D-64R | 7.50 | D-160 | 6.90 | EA-003 | 3.69 | EC-1000A | 6.54 | EM-015 | 4.14 | F-8X | 4.17 |
| A-9J | 10.05 | A-210P | 10.86 | D-65 | 7.41 | D-161 | 7.50 | EA-003A | 5.43 | EC-1500 | 4.89 | EM-015A | 5.79 | F-9A | 8.22 |
| A-10J | 10.11 | C-1X | 1.56 | D-66 | 7.50 | D-162 | 7.05 | EA-004 | 3.60 | EC-1500A | 6.69 | EM-020 | 4.20 | F-9U | 7.32 |
| A-11J | 11.67 | C-2X | 1.50 | D-67 | 9.30 | D-163 | 6.90 | EA-004A | 5.34 | EC-2000 | 4.95 | EM-020A | 5.85 | F-10U | 9.33 |
| A-12J | 11.67 | C-3X | 2.10 | D-68 | 9.30 | D-164 | 7.05 | EA-005 | 3.60 | EC-2000A | 6.75 | EM-025 | 4.20 | F-11U | 9.39 |
| A-13J | 12.84 | C-4X | 1.77 | D-69 | 7.50 | D-165 | 7.41 | EA-005A | 5.34 | EC-3000 | 5.04 | EM-025A | 5.85 | F-12X | 4.80 |
| A-21X | 2.31 | C-5X | 2.34 | D-70 | 7.92 | D-166 | 7.20 | EA-007 | 3.60 | EC-3000A | 6.84 | EM-030 | 4.26 | F-13X | 2.10 |
| A-23X | 2.61 | C-6X | 2.04 | D-71 | 7.20 | D-167 | 7.20 | EA-007A | 5.34 | EC-4000 | 5.10 | EM-030A | 5.91 | F-14X | 7.41 |
| A-31X | 2.37 | C-7X | 2.67 | D-72 | 7.68 | D-168 | 7.32 | EA-010 | 3.60 | EC-4000A | 6.90 | EM-040 | 4.29 | F-15U | 7.41 |
| A-33X | 3.30 | C-8X | 2.34 | D-73R | 6.96 | D-169 | 8.25 | EA-010A | 5.34 | EC-5000 | 5.28 | EM-040A | 5.94 | F-16X | 3.33 |
| A-35A | 5.94 | C-9X | 2.34 | D-74 | 7.14 | D-170 | 7.50 | EA-015 | 3.69 | EC-5000A | 7.08 | EM-050 | 4.29 | F-17U | 11.60 |
| A-39A | 6.00 | C-10X | 3.21 | D-75 | 7.14 | D-171 | 7.20 | EA-015A | 5.43 | EC-7000 | 5.79 | EM-050A | 5.94 | F-18A | 6.15 |
| A-40J | 10.56 | C-11X | 3.18 | D-76R | 7.20 | D-172 | 7.20 | EA-020 | 3.69 | EC-7000A | 7.59 | EM-060 | 4.38 | F-18X | 4.80 |
| A-41J | 10.56 | C-12A | 4.74 | D-77R | 7.50 | D-173 | 7.17 | EA-020A | 5.43 | EC-10000 | 6.42 | EM-060A | 6.03 | F-19X | 5.25 |
| A-42Z | 3.60 | C-12X | 3.39 | D-78 | 6.96 | D-174 | 8.25 | EA-025 | 3.69 | EC-10000A | 8.22 | EM-070 | 4.38 | F-20U | 7.05 |
| A-50J | 9.30 | C-13X | 3.24 | D-79 | 7.41 | D-175 | 7.50 | EA-025A | 5.43 | EK-010 | 5.85 | EM-070A | 6.03 | F-21A | 7.38 |
| A-51X | 1.92 | C-14A | 5.25 | D-80 | 6.81 | D-176 | 7.95 | EA-030 | 3.75 | EK-010A | 7.71 | EM-100 | 4.44 | F-22A | 10.56 |
| A-52J | 10.80 | C-14X | 3.93 | D-81 | 8.04 | D-177 | 7.50 | EA-030A | 5.49 | EK-020 | 5.94 | EM-100A | 6.09 | F-23U | 7.17 |
| A-53X | 2.82 | C-15A | 5.25 | D-82 | 8.04 | D-178 | 7.20 | EA-040 | 3.75 | EK-020A | 7.80 | EM-150 | 4.44 | F-24U | 7.32 |
| A-54X | 2.73 | C-15X | 3.93 | D-83R | 7.20 | D-179 | 7.50 | EA-040A | 5.49 | EK-030 | 6.00 | EM-150A | 6.09 | F-25X | 3.57 |
| A-55J | 10.17 | C-16A | 7.08 | D-84 | 8.34 | D-180 | 7.50 | EA-050 | 3.75 | EK-030A | 7.86 | EM-200 | 4.50 | F-26X | 4.17 |
| A-56J | 10.43 | C-17X | 3.09 | D-85 | 7.38 | D-181 | 7.65 | EA-050A | 5.49 | EK-040 | 6.00 | EM-200A | 6.15 | F-27U | 9.66 |
| A-57J | 10.59 | C-18A | 9.42 | D-86 | 9.30 | D-182 | 7.20 | EA-070 | 3.84 | EK-040A | 7.86 | EM-250 | 4.50 | F-28U | 14.88 |
| A-58J | 10.80 | C-19A | 10.65 | D-87 | 7.77 | D-183 | 8.40 | EA-070A | 5.58 | EK-050 | 6.12 | EM-250A | 6.15 | F-29U | 9.99 |
| A-64J | 9.12 | C-20A | 12.48 | D-88 | 8.16 | D-184 | 7.50 | EA-100 | 3.84 | EK-050A | 7.98 | EM-300 | 4.65 | F-30A | 9.00 |
| A-65J | 10.80 | C-21X | 2.67 | D-89R | 7.65 | D-185 | 8.70 | EA-100A | 5.58 | EK-060 | 6.18 | EM-300A | 6.30 | F-32A | 7.05 |
| A-66J | 9.75 | C-22A | 21.66 | D-90 | 9.45 | D-186 | 7.80 | EA-150 | 3.84 | EK-060A | 8.04 | EM-400 | 4.74 | F-34A | 9.00 |
| A-67J | 10.80 | C-23X | 2.67 | D-91 | 6.99 | D-187 | 7.50 | EA-150A | 5.58 | EK-080 | 6.27 | EM-400A | 6.39 | F-36A | 10.41 |
| A-68J | 10.29 | C-24X | 2.25 | D-92 | 7.20 | D-188 | 8.70 | EA-200 | 3.93 | EK-080A | 8.13 | EM-500 | 4.89 | F-38A | 10.98 |
| A-69J | 10.80 | C-25A | 6.66 | D-93 | 7.20 | D-189 | 8.40 | EA-200A | 5.67 | EK-100 | 6.36 | EM-500A | 6.54 | F-40X | 3.39 |
| A-70J | 10.55 | C-26X | 4.50 | D-94R | 7.50 | D-190 | 7.20 | EA-250 | 3.99 | EK-100A | 8.22 | EM-700 | 5.19 | F-41X | 5.16 |
| A-75J | 11.67 | C-27X | 2.10 | D-95 | 7.20 | D-191 | 7.50 | EA-250A | 5.73 | EK-120 | 6.36 | EM-700A | 6.84 | F-42A | 7.95 |
| A-77J | 9.78 | C-28X | 2.73 | D-96 | 7.50 | D-192 | 8.16 | EA-300 | 3.99 | EK-120A | 8.22 | EM-1000 | 5.79 | F-43X | 3.84 |
| A-78J | 10.50 | C-29X | 3.09 | D-97R | 8.40 | D-193 | 7.68 | EA-300A | 5.73 | EK-150 | 6.36 | EM-1000A | 7.44 | F-44X | 3.66 |
| A-79J | 9.99 | C-30X | 2.10 | D-98R | 9.30 | D-194 | 7.20 | EA-400 | 4.08 | EK-150A | 8.22 | ET-001 | 3.84 | F-45X | 3.39 |
| A-81X | 2.13 | C-31A | 7.26 | D-99 | 6.30 | D-195 | 8.64 | EA-400A | 5.82 | EK-200 | 6.42 | ET-001A | 5.58 | F-47U | 6.30 |
| A-83X | 2.58 | C-32AL | 12.57 | D-100 | 6.60 | D-196 | 7.20 | EA-500 | 4.29 | EK-200A | 8.28 | ET-002 | 3.84 | F-48U | 9.15 |
| A-85X | 3.06 | C-33A | 10.65 | D-101 | 6.60 | D-197 | 7.35 | EA-500A | 6.03 | EK-250 | 6.51 | ET-002A | 5.58 | F-49U | 14.10 |
| A-89A | 7.02 | C-34X | 2.25 | D-102 | 7.50 | D-198 | 7.92 | EA-600 | 4.38 | EK-250A | 8.37 | ET-003 | 3.84 | F-50X | 3.33 |
| A-91A | 9.42 | C-35A | 13.08 | D-103 | 6.30 | D-200 | 7.80 | EA-600A | 6.12 | EK-300 | 6.57 | ET-003A | 5.58 | F-51X | 3.57 |
| A-95X | 2.28 | C-36X | 2.04 | D-104 | 6.90 | D-201 | 8.04 | EA-700 | 4.50 | EK-300A | 8.43 | ET-004 | 3.84 | F-52X | 3.09 |
| A-96X | 3.00 | C-38AL | 21.84 | D-105 | 6.60 | D-202 | 8.40 | EA-700A | 6.24 | EK-400 | 6.75 | ET-004A | 5.58 | F-53X | 4.50 |
| A-97X | 3.27 | C-39A | 21.24 | D-106 | 6.60 | D-203 | 7.68 | EA-1000 | 4.65 | EK-400A | 8.61 | ET-005 | 3.90 | F-56U | 7.59 |
| A-97X | 2.16 | C-40X | 2.67 | D-107 | 7.35 | D-204 | 8.40 | EA-1000A | 6.39 | EK-500 | 6.90 | ET-005A | 5.64 | F-61U | 10.20 |
| A-97Y | 3.36 | C-42AL | 12.90 | D-108 | 7.17 | D-205 | 7.92 | EK-001 | 3.99 | EK-500A | 8.76 | ET-007 | 3.99 | F-62U | 19.50 |
| A-97Z | 2.16 | C-43X | 6.00 | D-109 | 7.20 | D-206 | 7.65 | EK-001A | 5.79 | EK-700 | 7.05 | ET-007A | 5.73 | F-63U | 6.27 |
| A-98K | 3.33 | C-45AL | 21.96 | D-110 | 7.44 | D-207 | 7.92 | EK-002 | 3.99 | EK-700A | 8.91 | ET-010 | 3.99 | F-64U | 7.50 |
| A-98X | 2.16 | C-47U | 8.25 | D-111 | 7.11 | D-208 | 8.16 | EK-002A | 5.79 | EK-1000 | 7.20 | ET-010A | 5.73 | F-65U | 11.19 |
| A-99X | 3.75 | C-48U | 9.84 | D-112 | 7.20 | D-209 | 7.65 | EK-003 | 3.99 | EK-1000A | 9.06 | ET-015 | 3.99 | F-66U | 27.60 |
| A-101U | 5.16 | C-49U | 11.67 | D-113 | 7.20 | D-210 | 8.10 | EK-003A | 5.79 | EK-1500 | 7.20 | ET-015A | 5.73 | F-67U | 15.96 |
| A-102X | 3.09 | C-80U | 38.70 | D-114 | 7.20 | D-211 | 7.20 | EK-004 | 3.99 | EK-1500A | 9.06 | ET-020 | 4.20 | F-68U | 10.56 |
| A-103X | 3.45 | CL-1 | .60 | D-115R | 8.16 | D-212 | 7.41 | EK-004A | 5.79 | EK-2000 | 7.44 | ET-020A | 5.94 | F-71U | 6.51 |
| A-104X | 3.87 | D-2 | 6.90 | D-116 | 8.25 | D-212 | 7.20 | EK-005 | 3.99 | EK-2000A | 9.30 | ET-025 | 4.20 | F-72Z | 4.20 |
| A-105X | 3.93 | D-11 | 7.80 | D-117 | 6.45 | D-601 | 7.80 | EK-005A | 5.79 | EK-2500 | 7.44 | ET-025A | 5.94 | F-79U | 24.00 |
| A-107X | 4.74 | D-14R | 7.47 | D-118R | 7.50 | D-602 | 7.74 | EK-007 | 4.08 | EK-2500A | 9.30 | ET-030 | 4.29 | F-80U | 45.00 |
| A-108X | 3.72 | D-19 | 7.47 | D-119 | 7.20 | D-603 | 7.65 | EK-007A | 5.88 | EK-3000 | 7.62 | ET-030A | 6.03 | F-83A | 11.70 |
| A-109X | 4.05 | DA-20 | 5.67 | D-120 | 7.20 | D-604 | 7.80 | EK-010 | 4.14 | EK-3000A | 9.48 | ET-040 | 4.29 | F-84AC | 19.32 |
| A-110X | 3.72 | D-22 | 7.80 | D-121 | 6.90 | D-605 | 9.60 | EK-010A | 5.94 | EK-4000 | 7.86 | ET-040A | 6.03 | F-90X | 4.05 |
| A-111X | 3.15 | D-26 | 7.35 | D-122 | 6.84 | D-606 | 7.65 | EK-015 | 4.14 | EK-4000A | 9.48 | ET-050 | 4.29 | F-91X | 5.22 |
| A-112X | 4.17 | D-27 | 7.14 | D-123 | 6.60 | D-607 | 8.28 | EK-015A | 5.94 | EK-5000 | 7.92 | ET-050A | 6.03 | F-92A | 8.55 |
| A-113X | 3.69 | D-28 | 7.14 | D-124 | 7.05 | D-608 | 7.50 | EC-020 | 4.20 | EK-5000A | 9.78 | ET-060 | 4.38 | F-93X | 5.73 |
| A-113Z | 3.69 | D-33 | 7.14 | D-125 | 6.60 | D-609 | 7.80 | EC-020A | 6.00 | EK-7000 | 8.31 | ET-060A | 6.12 | F-94 | 3.48 |
| A-114X | 3.90 | D-35 | 8.40 | D-126 | 7.80 | D-610 | 7.80 | EC-030 | 4.20 | EK-7000A | 10.17 | ET-070 | 4.38 | F-102X | 6.90 |
| A-115X | 3.78 | DA-36 | 2.49 | D-127 | 7.44 | D-611 | 7.50 | EC-030A | 6.00 | EK-10000 | 8.70 | ET-070A | 6.12 | F-104U | 9.15 |
| A-115Z | 3.78 | DA-37 | 2.49 | D-128 | 2.85 | D-612 | 7.80 | EC-040 | 4.29 | EK-10000A | 10.56 | ET-100 | 4.38 | G-1 | 19.60 |
| A-116X | 4.05 | D-40 | 7.71 | D-129 | 6.45 | D-613 | 7.50 | EC-040A | 6.09 | EK-20000 | 9.00 | ET-100A | 6.12 | G-2 | 24.53 |
| A-117X | 3.00 | D-41 | 8.10 | D-130R | 6.90 | D-614 | 7.44 | EC-050 | 4.29 | EK-20000A | 10.86 | ET-150 | 4.44 | G-2H3 | 23.65 |
| A-118X | 3.90 | D-42 | 7.71 | D-131 | 7.80 | D-615 | 7.20 | EC-050A | 6.09 | EK-25000 | 9.30 | ET-150A | 6.18 | G-4 | 24.53 |
| A-119X | 3.78 | D-43 | 7.50 | D-132 | 6.90 | D-616 | 8.10 | EC-070 | 4.38 | EK-25000A | 11.16 | ET-200 | 4.44 | G-4H3 | 23.65 |
| A-120X | 2.40 | D-44 | 7.32 | D-133 | 7.50 | D-617 | 8.40 | EC-070A | 6.18 | EK-30000 | 9.66 | ET-200A | 6.18 | G-5 | 21.20 |
| A-120Z | 2.40 | D-45R | 8.10 | D-134 | 7.50 | D-618 | 8.40 | EC-100 | 4.38 | EK-40000 | 11.52 | ET-250 | 4.50 | G-5TS | 28.90 |
| A-122X | 2.16 | D-46 | 8.10 | D-135 | 2.58 | D-619 | 7.80 | EC-100A | 6.18 | EK-40000A | 10.35 | ET-250A | 6.24 | G-7 | 21.20 |
| A-122Z | 2.16 | D-47 | 7.50 | D-136 | 7.80 | D-620 | 7.65 | EC-200 | 4.44 | EM-001 | | | | | |

TRIAD DISTRIBUTOR DIVISION



A DIVISION OF LITTON INDUSTRIES

PRICE INDEX BY TYPE NUMBER



| Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | | |
|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|---------|-------|
| G-18TS | 24.40 | G-388 | 19.30 | HSM-208 | 27.90 | HS-474 | 22.86 | N-50M | 23.94 | PL-10 | 1.17 | R-28A | 25.26 | R-105A | 5.94 |
| G-19 | 20.00 | G-389 | 19.30 | HSM-212 | 34.56 | HS-475 | 25.62 | N-51X | 4.74 | PL-80E | 11.25 | R-29A | 5.85 | R-105B | 5.85 |
| G-19TS | 24.53 | G-391 | 18.91 | HSM-216 | 40.50 | JAF-1 | 13.21 | N-52M | 31.65 | PL-80H | 12.48 | R-30X | 4.89 | R-106A | 6.06 |
| G-20 | 28.90 | G-394 | 18.91 | HSM-218 | 54.60 | JAF-2 | 13.74 | N-53M | 10.41 | PL-80P | 11.85 | R-33BC | 19.02 | R-106B | 5.97 |
| G-20H | 23.65 | G-401 | 19.60 | HSM-219 | 49.95 | JAF-3 | 13.74 | N-54M | 12.30 | PL-81E | 11.79 | R-35A | 17.70 | R-107A | 6.69 |
| G-21 | 23.65 | G-435 | 19.60 | HSM-223 | 11.61 | JAF-5 | 13.74 | N-55M | 19.32 | PL-81H | 12.60 | R-36A | 19.02 | R-107B | 6.57 |
| G-21TS | 28.90 | G-435TS | 25.85 | HSM-224 | 18.32 | JAF-11 | 12.84 | N-56M | 25.50 | PL-81P | 12.00 | R-37BC | 20.64 | R-108A | 6.75 |
| G-22 | 31.22 | G-437 | 19.60 | HSM-225 | 14.28 | JAF-12 | 13.21 | N-57M | 36.00 | PL-82E | 11.70 | R-38A | 18.18 | R-108B | 6.63 |
| G-22H | 25.85 | G-437TS | 25.85 | HSM-226 | 16.32 | JAF-13 | 13.74 | N-59M | 52.80 | PL-82H | 13.05 | R-38BC | 19.26 | R-109A | 7.26 |
| G-23 | 23.65 | G-455 | 19.60 | HSM-227 | 19.44 | JAF-14 | 13.74 | N-60SC | 114.00 | PL-82P | 12.36 | R-39BC | 18.78 | R-109B | 7.17 |
| G-23TS | 28.90 | G-475 | 20.32 | HSM-228 | 23.19 | JAF-15 | 13.74 | N-62AC | 54.30 | PL-83E | 12.51 | R-40A | 21.06 | R-110A | 7.89 |
| G-24 | 37.83 | G-493 | 17.65 | HSM-229 | 21.96 | JAF-21 | 13.21 | N-64AC | 31.20 | PL-83H | 13.29 | R-40BC | 22.56 | R-110B | 7.77 |
| G-25 | 23.65 | HC-25 | 21.25 | HSM-230 | 15.72 | JAF-22 | 13.21 | N-66A | 18.66 | PL-83P | 12.63 | R-41C | 16.86 | R-111A | 8.01 |
| G-25TS | 28.90 | HC-115 | 29.25 | HSM-231 | 20.64 | JAF-23 | 13.74 | N-67A | 12.36 | PL-84E | 12.15 | R-42BC | 16.26 | R-111B | 7.89 |
| G-30 | 17.98 | HC-300 | 38.10 | HSM-232 | 22.41 | JAF-24 | 14.30 | N-68X | 5.67 | PL-84H | 13.44 | R-43C | 10.32 | R-112A | 8.19 |
| G-30TS | 24.40 | HS-1 | 28.58 | HSM-233 | 14.00 | JAF-25 | 14.15 | N-73A | 12.15 | PL-84P | 12.78 | R-44BS | 16.50 | R-112B | 8.07 |
| G-31 | 19.60 | HS-3 | 31.1C | HSM-234 | 25.80 | JAF-26 | 14.30 | N-74A | 12.15 | PL-124E | 11.70 | R-45C | 14.34 | R-113A | 6.54 |
| G-32 | 24.53 | HS-4 | 28.40 | HSM-235 | 33.30 | JAF-31 | 14.18 | N-469A | 7.50 | PL-124H | 13.14 | R-46A | 26.67 | R-113B | 6.42 |
| G-33 | 21.20 | HS-5 | 27.55 | HSM-236 | 21.54 | JAF-32 | 14.10 | N-470A | 10.41 | PL-139E | 10.08 | R-47BS | 19.80 | R-114A | 9.42 |
| G-34 | 27.89 | HS-8 | 28.54 | HSM-237 | 16.49 | JAF-33 | 14.18 | N-471A | 15.00 | PL-139H | 11.13 | R-49BC | 19.20 | R-114B | 9.30 |
| G-36 | 16.81 | HS-11 | 21.64 | HSM-238 | 24.58 | JAF-34 | 14.10 | NW-1 | .60 | PL-139M | 12.09 | R-49BS | 20.40 | R-115A | 7.80 |
| G-36TS | 25.85 | HS-14 | 22.54 | HSM-239 | 18.00 | JAF-35 | 14.10 | NW-2 | .60 | PL-140E | 11.70 | R-50A | 22.98 | R-115B | 7.68 |
| G-40 | 21.20 | HS-15 | 26.65 | HSM-240 | 19.44 | JAF-101 | 12.61 | NW-3 | .60 | PL-140H | 13.14 | R-50BC | 23.58 | R-116A | 9.75 |
| G-40TS | 26.89 | HS-23 | 21.73 | HSM-241 | 33.00 | JAF-102 | 12.70 | NW-4 | .60 | PL-140M | 14.25 | R-51BC | 17.34 | R-116B | 9.63 |
| G-48 | 16.39 | HS-25 | 21.73 | HSM-245 | 39.90 | JO-1 | 13.38 | NW-5 | .60 | PL-146E | 11.70 | R-52BC | 17.34 | R-118A | 11.07 |
| G-48TS | 25.85 | HS-27 | 19.70 | HS-247 | 45.99 | JO-2 | 13.92 | NW-6 | .60 | PL-146H | 13.08 | R-54X | 3.63 | R-118B | 10.95 |
| G-51 | 19.60 | HS-29 | 27.50 | HSM-270 | 20.52 | JO-3 | 14.04 | NW-7 | .60 | PL-146M | 14.22 | R-56A | 6.90 | R-120A | 12.30 |
| G-51A | 19.60 | HSM-31 | 21.08 | HSM-271 | 26.10 | JO-5 | 13.92 | NW-8 | .60 | R-2C | 4.05 | R-58A | 16.02 | R-120B | 12.18 |
| G-52 | 20.80 | HS-32 | 27.50 | HSM-272 | 36.96 | JO-11 | 13.32 | NW-9 | .60 | R-3A | 6.00 | R-60BC | 18.30 | R-121A | 12.90 |
| G-53 | 20.80 | HS-35 | 19.51 | HS-273P | 17.10 | JO-12 | 13.74 | NW-10 | .60 | R-4A | 6.15 | R-61BC | 20.16 | R-121B | 12.75 |
| G-53A | 20.80 | HS-50 | 23.23 | HSM-301 | 11.82 | JO-13 | 13.74 | NW-11 | .60 | R-4B | 6.00 | R-62BC | 22.98 | R-122A | 15.60 |
| G-54 | 20.80 | HS-52 | 24.02 | HSM-302 | 11.04 | JO-21 | 13.74 | NW-12 | .60 | R-5A | 6.90 | R-63BC | 17.01 | R-123HA | 13.80 |
| G-57 | 16.81 | HS-54 | 28.58 | HS-303 | 11.34 | JO-22 | 13.74 | NW-13 | .60 | R-5B | 6.75 | R-64BC | 14.58 | R-124BC | 14.10 |
| G-58 | 25.85 | HS-56 | 25.82 | HSM-305 | 12.24 | JO-23 | 13.92 | NW-14 | .60 | R-6A | 7.32 | R-65BC | 15.42 | R-125BC | 15.15 |
| G-64 | 16.39 | HS-58 | 30.32 | HSM-307 | 15.15 | JO-31 | 13.98 | NW-15 | .60 | R-6B | 7.20 | R-66BC | 15.66 | R-126A | 14.94 |
| G-65 | 16.39 | HS-60 | 19.51 | HSM-309 | 16.32 | JO-101 | 12.60 | NW-16 | .60 | R-7A | 7.38 | R-67BC | 14.67 | R-127A | 15.36 |
| G-72 | 21.20 | HS-61 | 20.65 | HSM-315 | 18.84 | JZ-1 | 11.79 | NW-17 | .60 | R-7B | 7.26 | R-68A | 10.32 | R-128BC | 15.15 |
| G-80 | 24.58 | HS-66 | 23.18 | HSM-319 | 26.01 | JZ-5 | 12.13 | NW-18 | .60 | R-8A | 7.68 | R-69BC | 15.06 | R-129BC | 15.66 |
| G-84 | 21.20 | HS-71 | 14.41 | HS-331 | 8.16 | JZ-7 | 11.79 | NW-19 | .60 | R-8B | 7.56 | R-70A | 12.30 | R-130HA | 15.54 |
| G-85 | 21.20 | HS-73 | 15.43 | HS-333 | 9.09 | JZ-13 | 11.79 | NW-20 | .60 | R-9A | 8.49 | R-71A | 17.01 | R-131A | 15.45 |
| G-92 | 22.06 | HS-75 | 18.19 | HS-335 | 11.49 | JZ-15 | 11.79 | NW-21 | .60 | R-9B | 8.40 | R-72A | 11.91 | R-132BC | 15.27 |
| G-101 | 19.60 | HS-77 | 21.20 | HS-339 | 12.48 | JZ-25 | 11.47 | NW-22 | .60 | R-10A | 8.91 | R-73B | 8.67 | R-133A | 15.06 |
| G-101TS | 23.65 | HSM-79 | 19.51 | HS-341 | 13.32 | JZ-26 | 11.47 | NW-23 | .60 | R-10B | 8.79 | R-74BC | 21.00 | R-134A | 15.48 |
| G-135 | 19.60 | HSM-80 | 21.31 | HS-400 | 13.31 | K-20 | 4.50 | NW-24 | .60 | R-11A | 9.27 | R-75BA | 13.80 | R-135BC | 15.60 |
| G-150 | 19.60 | HSM-81 | 23.60 | HS-401 | 17.64 | M-1X | 2.97 | NW-25 | .60 | R-11B | 9.15 | R-76BC | 20.52 | R-136BC | 15.84 |
| G-155 | 19.60 | HSM-82 | 23.60 | HS-402 | 15.96 | M-3X | 4.95 | P-1A | 9.24 | R-12A | 9.33 | R-77BC | 19.74 | R-137HA | 16.14 |
| G-183 | 24.92 | HSM-84 | 23.60 | HS-404 | 21.00 | M-4Z | 3.09 | P-3A | 11.16 | R-12B | 9.21 | R-77BS | 20.82 | R-138A | 15.48 |
| G-201 | 19.60 | HSM-85 | 23.60 | HS-405 | 21.90 | M-5Z | 4.11 | P-5A | 13.92 | R-14A | 10.41 | R-78BC | 17.34 | R-139A | 15.30 |
| G-202 | 20.00 | HSM-91 | 35.33 | HS-407 | 26.34 | M-6X | 5.58 | P-7A | 14.16 | R-14B | 10.29 | R-79BA | 13.50 | R-675A | 17.25 |
| G-235 | 19.60 | HSM-94 | 43.65 | HS-409 | 22.38 | M-7AL | 13.50 | P-9A | 24.75 | R-16A | 11.67 | R-80BA, BC | 18.84 | S-1X | 1.74 |
| G-250 | 19.60 | HSM-95 | 43.65 | HS-413 | 27.30 | M-8AL | 17.10 | P-11A | 15.36 | R-16B | 11.52 | R-81BC | 20.25 | S-2X | 1.80 |
| G-255 | 19.60 | HS-97 | 37.26 | HS-415 | 34.20 | M-12AL | 20.34 | P-14A | 20.67 | R-17A | 12.12 | R-81BS | 21.42 | S-3X | 1.80 |
| G-266 | 20.50 | HSM-181 | 33.60 | HS-417 | 37.44 | M-15A | 11.67 | P-15AL | 22.98 | R-18A | 12.66 | R-83A | 14.40 | S-4X | 2.43 |
| G-274 | 20.41 | HSM-182 | 33.60 | HS-425 | 13.32 | M-16AL | 13.68 | P-16AL | 45.60 | R-18B | 12.54 | R-84K | 6.66 | S-5X | 2.46 |
| G-275 | 20.50 | HSM-184 | 30.02 | HS-427 | 16.02 | MB-10 | .45 | P-17AL | 28.80 | R-19A | 15.12 | R-85A | 18.90 | S-Z | 2.46 |
| G-276 | 20.50 | HSM-186 | 30.02 | HS-433 | 17.76 | MB-20 | .72 | P-18AL | 52.20 | R-20A | 13.80 | R-86BA | 12.48 | S-6X | 1.62 |
| G-283 | 24.92 | HSM-187 | 30.02 | HS-435 | 19.86 | MB-21 | .72 | P-20AL | 51.75 | R-20B | 13.65 | R-87BC | 15.00 | S-6Z | 1.62 |
| G-284 | 20.00 | HSM-189 | 30.02 | HS-436 | 11.40 | MB-31 | .45 | PR-21AL | 50.67 | R-21A | 14.31 | R-88A | 15.15 | S-7X | 1.74 |
| G-285 | 20.00 | HSM-190 | 30.02 | HS-438 | 16.38 | N-1X | 4.02 | P-213AL | 19.50 | R-21B | 14.04 | R-89BC | 15.60 | S-8X | 1.59 |
| G-301 | 19.30 | HSM-192 | 45.04 | HS-441 | 27.15 | N-3M | 8.16 | P-215AL | 21.65 | R-22A | 7.59 | R-90BC | 15.00 | S-8Z | 1.59 |
| G-306 | 19.30 | HSM-193 | 45.04 | HS-442 | 19.08 | N-4M | 9.99 | P-216AL | 43.32 | R-22B | 7.44 | R-91HA | 15.45 | S-9X | 2.49 |
| G-313 | 19.30 | HSM-200 | 16.98 | HS-443 | 16.08 | N-5M | 11.76 | P-217AL | 26.82 | R-23B | 6.51 | R-92A | 14.94 | S-9Z | 2.49 |
| G-315 | 19.30 | HSM-201 | 21.66 | HS-444 | 26.70 | N-7M | 17.01 | P-218AL | 48.30 | R-24A | 16.35 | R-93A | 15.00 | S-10X | 2.13 |
| G-335 | 18.91 | HSM-202 | 14.75 | HS-445 | 16.22 | N-9M | 36.33 | P-220AL | 47.82 | R-24B | 16.23 | R-94H | 29.75 | S-11X | 1.71 |
| G-336 | 18.91 | HSM-203 | 22.86 | HS-470 | 13.74 | N-11M | 52.20 | PL-4 | 10.32 | R-25A | 25.92 | R-104A | 5.16 | S-11Z | 1.71 |
| G-350 | 18.91 | HSM-205 | 24.42 | HS-471 | 14.82 | N-34X | 5.91 | PL-5 | 12.48 | R-26A | 18.78 | R-104B | 5.07 | S-12X | 1.65 |
| G-355 | 18.91 | HSM-207 | 26.40 | HS-472 | 18.60 | N-35M | 13.50 | PL-6 | 12.48 | R-27A | 33.60 | | | | |

Prices subject to change without notice. Net prices shown for 1-9 quantity. For 1 to 249 pieces, see your stocking Triad Distributor for quantity discount schedule. For 250 or more pieces, contact your Triad Representative or call the factory.



TRIAD DISTRIBUTOR DIVISION

A DIVISION OF LITTON INDUSTRIES



PRICE INDEX BY TYPE NUMBER

| Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price | Type No. | Net Price |
|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| S-12Z | 1.65 | S-50X | 2.13 | S-152A | 25.02 | SP-128 | 4.80 | TY-38X | 3.99 | TY-83 | 14.91 | WLC-4 | 1.17 | Y-28 | 6.78 |
| S-13X | 1.80 | S-51X | 2.67 | S-154A | 29.16 | SP-310 | .84 | TY-39X | 4.05 | TY-84 | 15.90 | WLC-5 | 1.17 | Y-28-3 | 7.38 |
| S-13Z | 1.80 | S-52X | 2.67 | S-156A | 19.17 | T-1X | 4.32 | TY-40X | 3.75 | TY-88 | 11.10 | WLC-6 | 1.17 | Y-40 | 7.68 |
| S-14Z | 1.59 | S-53X | 3.15 | S-158A | 37.50 | T-2X | 4.32 | TY-41X | 3.84 | TY-89 | 12.21 | WLC-7 | 1.47 | Y-40-3 | 8.28 |
| S-15X | 2.73 | S-54X | 3.09 | SP-4 | 7.80 | T-3X | 4.32 | TY-42X | 3.75 | TY-90 | 12.60 | WLC-8 | 1.80 | Y-41 | 7.68 |
| S-16X | 1.89 | S-55X | 3.84 | SP-5 | 7.65 | T-5X | 4.32 | TY-43X | 3.84 | TY-91 | 12.60 | WLC-8A | 1.80 | Y-41-3 | 8.28 |
| S-17X | 1.98 | S-55Z | 3.84 | SP-7 | 6.75 | T-11X | 4.01 | TY-44X | 3.87 | TY-92 | 13.20 | WLC-9 | 1.80 | Y-42-2 | 8.73 |
| S-18X | 2.13 | S-56Z | 4.08 | SP-11 | 6.30 | T-12X | 4.32 | TY-45X | 3.87 | TY-93 | 15.24 | WLC-10 | 1.59 | Y-43 | 7.68 |
| S-18Z | 2.13 | S-57Z | 4.59 | SP-13 | 7.20 | T-13X | 3.97 | TY-46X | 2.64 | TY-94 | 15.96 | WLC-11 | 1.59 | Y-43-1 | 8.28 |
| S-19Z | 3.54 | S-58X | 3.00 | SP-15 | 7.20 | T-14X | 4.11 | TY-47X | 4.08 | TY-99 | 12.45 | WLC-12 | 1.17 | Y-44 | 7.68 |
| S-20X | 1.62 | S-59Z | 4.50 | SP-20 | 6.90 | T-15X | 4.11 | TY-48X | 4.08 | TY-100 | 12.60 | WLC-17 | 1.41 | Y-44-1 | 8.28 |
| S-20Z | 1.62 | S-60A | 9.66 | SP-21 | 6.90 | T-20X | 4.05 | TY-49X | 2.94 | TY-101 | 14.40 | WLC-21 | 1.05 | Y-45 | 7.68 |
| S-21A | 5.67 | S-61Z | 4.74 | SP-29 | 6.90 | T-21X | 3.86 | TY-50X | 4.80 | TY-102 | 14.70 | WLC-23 | 1.05 | Y-45-2 | 8.91 |
| S-21Z | 4.32 | S-62X | 2.58 | SP-32 | 5.70 | T-22X | 3.86 | TY-51X | 4.14 | TY-462 | 9.51 | WLC-25 | 1.92 | Y-46 | 7.68 |
| S-22A | 6.99 | S-63X | 2.67 | SP-33 | 5.85 | T-23X | 4.01 | TY-52X | 4.47 | TY-468 | 9.51 | WLC-26 | 2.01 | Y-46-3 | 8.28 |
| S-23X | 1.92 | S-64X | 2.40 | SP-34 | 5.55 | T-24X | 4.05 | TY-53X | 3.42 | TZ-1 | 3.68 | WLC-29 | 2.04 | Y-47 | 7.68 |
| S-24A | 6.99 | S-65X | 1.98 | SP-35 | 5.55 | T-25X | 3.99 | TY-54X | 4.26 | TZ-2XT | 3.93 | WLC-30 | 2.04 | Y-48 | 7.68 |
| S-25Z | 4.20 | S-66X | 1.92 | SP-36 | 6.15 | T-26X | 4.05 | TY-55X | 4.32 | TZ-5 | 3.68 | WLC-31 | 1.59 | Y-48-3 | 8.28 |
| S-26X | 1.92 | S-67X | 2.13 | SP-42 | 5.85 | T-31X | 4.01 | TY-56X | 4.32 | TZ-7 | 3.26 | Y-12 | 6.78 | Y-49 | 7.68 |
| S-27A | 6.33 | S-68Z | 4.59 | SP-43 | 5.85 | T-32X | 3.99 | TY-57X | 3.69 | TZ-13 | 3.83 | Y-12-1 | 7.38 | Y-49-1 | 8.28 |
| S-28X | 3.90 | S-69Z | 4.41 | SP-44 | 6.00 | T-33X | 4.01 | TY-58X | 3.69 | TZ-15 | 3.83 | Y-12-3 | 7.38 | Y-50 | 12.87 |
| S-29X | 3.75 | S-70Z | 3.09 | SP-46 | 6.15 | T-34X | 3.96 | TY-59X | 4.74 | TY-101 | 3.99 | Y-17 | 6.78 | Y-50-3 | 13.56 |
| S-30X | 1.74 | S-71Z | 3.33 | SP-47 | 6.30 | T-35X | 3.96 | TY-60X | 4.50 | TY-24XT | 3.99 | Y-17-1 | 7.38 | Y-60 | 10.80 |
| S-31A | 9.00 | S-72Z | 4.20 | SP-48 | 6.75 | T-41X | 3.90 | TY-61X | 3.06 | TZ-25 | 3.11 | Y-17-3 | 7.38 | Y-60-1 | 11.55 |
| S-32A | 9.00 | S-73X | 3.18 | SP-49 | 6.00 | T-42X | 3.90 | TY-62X | 3.63 | TZ-26 | 3.11 | Y-19 | 6.78 | Y-60-2 | 11.85 |
| S-34X | 4.98 | SR-74K | 9.33 | SP-50 | 6.00 | T-101X | 3.34 | TY-63X | 4.17 | TZ-28 | 3.11 | Y-19-1 | 7.38 | Y-62 | 11.91 |
| S-35A | 9.30 | S-75X | 13.20 | SP-51 | 6.15 | T-102X | 3.42 | TY-64X | 3.81 | TY-29XT | 4.02 | Y-19-3 | 7.38 | Y-62-1 | 12.51 |
| S-36A | 9.66 | S-76Z | 5.04 | SP-52 | 6.30 | TY-23X | 3.90 | TY-65Z | 3.81 | TZ-32XT | 3.90 | Y-20 | 6.78 | Y-64 | 11.49 |
| S-37X | 2.52 | S-77U | 9.15 | SP-59 | 5.85 | TY-24X | 4.53 | TY-66A | 9.42 | TZ-103XT | 3.00 | Y-20-2 | 7.68 | Y-64-1 | 12.09 |
| S-38X | 1.74 | S-78Z | 3.66 | SP-60 | 5.85 | TY-25X | 4.62 | TY-67A | 9.75 | V-21 | 4.20 | Y-20-3 | 7.38 | Y-66-1 | 12.51 |
| S-38Z | 1.74 | S-79Z | 4.35 | SP-61 | 6.00 | TY-26X | 4.65 | TY-68S | 6.48 | V-21B | 4.80 | Y-21 | 6.78 | Y-70 | 11.40 |
| S-39X | 2.40 | S-128Z | 5.70 | SP-62 | 6.15 | TY-27XT | 3.87 | TY-69S | 8.31 | V-21K | 6.33 | Y-21-1 | 7.38 | Y-70-1 | 12.00 |
| S-40X | 2.52 | S-129Z | 5.34 | SP-63 | 6.15 | TY-28XT | 3.87 | TY-70S | 8.49 | V-21Z | 4.29 | Y-21-3 | 7.38 | Y-72 | 11.49 |
| S-41X | 1.80 | S-130Z | 3.69 | SP-64 | 6.30 | TY-29X | 4.26 | TY-71S | 10.35 | V-23 | 4.92 | Y-22 | 6.78 | Y-72-1 | 12.09 |
| S-41Z | 1.80 | S-131X | 2.82 | SP-65 | 6.75 | TY-30X | 3.33 | TY-74S | 10.92 | V-23B | 6.00 | Y-22-1 | 7.38 | Y-81-3 | 11.55 |
| S-42A | 16.20 | S-132X | 3.51 | SP-66 | 7.80 | TY-31X | 3.33 | TY-75A | 12.00 | V-23K | 7.26 | Y-22-3 | 7.38 | Y-82-1 | 9.00 |
| SR-45Z | 5.58 | S-133Z | 4.41 | SP-67 | 7.20 | TY-32X | 3.90 | TY-76A | 8.25 | V-23Z | 4.98 | Y-24 | 6.78 | Y-83-1 | 12.60 |
| S-46A | 9.24 | S-142A | 12.00 | SP-106 | 5.70 | TY-33X | 3.90 | TY-78 | 11.25 | VR-30Z | 4.71 | Y-24-3 | 7.38 | YC-1 | .60 |
| S-47Z | 3.84 | S-144A | 17.49 | SP-107 | 4.80 | TY-34X | 3.90 | TY-79 | 12.21 | V-31 | 4.47 | Y-25 | 6.78 | YC-110 | .75 |
| S-48X | 1.65 | S-146A | 16.68 | SP-108 | 4.80 | TY-35X | 3.75 | TY-80 | 12.33 | V-31K | 6.96 | Y-25-1 | 7.38 | YC-111 | .75 |
| S-48Z | 1.65 | S-148A | 16.68 | SP-117 | 4.80 | TY-36X | 3.90 | TY-81 | 12.51 | WC-13 | 1.14 | Y-25-3 | 7.38 | YC-112 | .75 |
| S-49Z | 1.74 | S-149A | 28.80 | SP-118 | 4.80 | TY-37X | 3.99 | TY-82 | 12.90 | WLC-3 | 1.26 | Y-26-2 | 7.68 | YP-8 | 66.72 |

TRIAD CASES

| GB | HA | HB | JA | JB | KA | KB | LA | LB | MA | MB | NA | NB | AH | AJ | EA | EB | FA | FB | GA | |
|----|---------|---------|---------|-------|-------|-------|---------|---------|---------|---------|--------|--------|----|-------|-------|-------|-------|---------|---------|-------|
| A | 2 3/8 | 2 5/8 | 2 7/8 | 3 1/8 | 3 3/8 | 3 5/8 | 3 1 1/4 | 3 1 1/4 | 4 | 4 | 4 3/8 | 4 5/8 | A | 1 3/8 | 1 5/8 | 1 7/8 | 1 7/8 | 2 1/8 | 2 1/8 | 2 3/8 |
| B | 2 3/4 | 3 1/8 | 3 1/4 | 3 3/4 | 3 5/4 | 3 7/4 | 4 1/8 | 4 1/8 | 4 1/8 | 4 1/8 | 5 1/8 | 5 1/8 | B | 1 3/4 | 1 5/4 | 1 7/4 | 1 7/4 | 2 1/4 | 2 1/4 | 2 3/4 |
| C | 2 13/16 | 4 1/4 | 3 3/4 | 4 7/8 | 3 7/8 | 5 1/4 | 4 1/2 | 6 | 4 1/2 | 6 1/2 | 5 1/2 | 5 1/2 | C | 1 3/4 | 2 3/4 | 2 3/4 | 3 1/8 | 2 1/2 | 3 1/8 | 3 1/8 |
| D | 2 1/8 | 2 1 3/4 | 2 1 3/4 | 2 5/8 | 2 5/8 | 3 | 3 3/4 | 3 3/4 | 3 1 1/4 | 3 1 1/4 | 4 1/8 | 4 1/8 | D | 1 1/4 | 1 3/4 | 1 3/4 | 1 3/4 | 1 1 1/4 | 1 1 1/4 | 1 1/4 |
| E | 1 3/4 | 1 5/8 | 1 5/8 | 2 1/8 | 2 1/8 | 2 1/8 | 2 1 1/4 | 2 1 1/4 | 3 | 3 | 3 3/8 | 3 3/8 | E | 1 3/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 1 3/4 |
| G | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 1/2 | 1/2 | 1/2 | 5/8 | 5/8 | 5/8 | 5/8 | G | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| I | 6-32 | 8-32 | 8-32 | 8-32 | 8-32 | 10-32 | 10-32 | 10-32 | 1/4-20 | 1/4-20 | 1/4-20 | 1/4-20 | I | 6-32 | 6-32 | 6-32 | 6-32 | 6-32 | 6-32 | 6-32 |

| Wt. (avg.) lbs. | AF | AG | AH-2 | AJ-2 | JZ**† |
|-----------------|--------|---------|----------|--------|-----------|
| A | 3/4 | 1 | 1-5/16 | 1-5/8 | 9/16 dia. |
| B | 3/4 | 1 | 1-5/16 | 1-5/8 | Round |
| *† Bw | 1-3/64 | 1-3/32 | 1-11/32 | | |
| C | 1-1/8 | 1-3/8 | 1-3/4 | 2-3/8 | 25/32 |
| D | *27/32 | *1-1/32 | *1-11/32 | *1-5/8 | |
| F | 5/8 | 3/4 | -7/8 | 7/8 | |
| I | 4/40 | 6/32 | 6/32 | 6/32 | |
| Unit | 1-1/4 | 2-1/2 | 5-1/4 | 11 | .5 |
| Wt. | oz. | oz. | oz. | oz. | oz. |

| Wt. (avg.) lbs. | GP-1 | GP-2 | GP-3 | GP-4 | GP-5 |
|-----------------|-------|-----------|---------|--------|--------|
| A | 7/8 | 1 1/8 | 1 1/4 | 1 3/8 | 1 5/8 |
| B | 1 1/8 | 1 1/4 | 1 1/2 | 1 3/4 | 2 |
| Bw | 1 1/8 | 1 1 1/2 | 1 3/4 | | |
| C | 1 1/8 | 2 1/4 | 2 3/8 | 2 1/2 | 2 3/4 |
| D | 1 3/2 | 1 3/4 | 1 1 1/2 | 1 1/2 | 1 1/2 |
| F | 3/4 | 3/4 | 1 1/8 | 1 1/8 | 1 3/8 |
| Wt. | 3 oz. | 5 1/2 oz. | 8 oz. | 12 oz. | 17 oz. |

| Wt. (avg.) lbs. | JOA | JOB |
|-----------------|------------|------------|
| A | 1 3/8 dia. | 1 3/8 dia. |
| B | Round | Round |
| C | 1 1 1/2 | 1 1 1/2 |
| D | 3/4 | 3/4 |
| F | 7/8 | 7/8 |
| Unit Wt. | 2 oz. | 2 1/2 oz. |

* Not in conformance with MIL-T-27A.
† Not in conformance with MIL-T-27

SHIELDING

- P-1—One nickel alloy high permeability shield — 45db. reduction in pickup.
- P-3—Two nickel alloy shields interleaved with one heavy copper shading ring — 70db. reduction in pickup.
- P-5—Three nickel alloy shields interleaved with two heavy copper shading rings— 95 db. reduction in pickup.

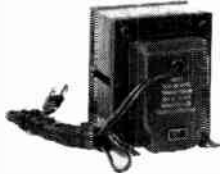
Prices subject to change without notice. Net prices shown for 1-9 quantity. For 1 to 249 pieces, see your stocking Triad Distributor for quantity discount schedule. For 250 or more pieces, contact your Triad Representative or call the factory.

TODD ELECTRIC Co., Inc.

STEP-DOWN, STEP-UP AUTO TRANSFORMERS FOR EVERY 50 OR 60 CYCLE APPLICATION

Todd's precision designed Auto Transformers are specially constructed to resist corrosion caused by excessive humidity and will withstand abnormal loading. The input side is

equipped with 6 ft. U.L. approved line cord with American wall plug. British or Continental wall plugs available at extra cost.



HEAVY DUTY MODEL

220/240 - 110/120 volts

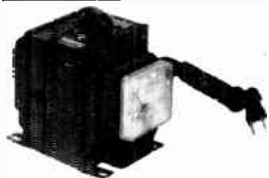
| Catalog Number | Rating Watts | Weight Lbs. | Dimension Inches | | | List Price |
|----------------|--------------|-------------|------------------|-------|---------|------------|
| | | | H | W | D | |
| SD-15 | 75 | 2 1/4 | 3 3/16 | 2 3/4 | 3 3/16 | \$ 7.90 |
| SD-16 | 100 | 2 1/2 | 3 3/16 | 2 3/4 | 3 3/16 | 8.10 |
| SD-17 | 150 | 3 2/3 | 3 3/16 | 2 3/4 | 3 15/16 | 9.60 |
| SD-12 | 250 | 6 | 4 5/8 | 3 7/8 | 3 5/8 | 13.20 |
| SD-18 | 350 | 6 3/4 | 4 5/8 | 3 7/8 | 3 3/4 | 14.25 |
| SD-11 | 500 | 10 2/3 | 4 5/8 | 3 7/8 | 4 7/8 | 17.10 |
| SD-19 | 750 | 12 | 4 5/8 | 3 7/8 | 5 1/2 | 21.80 |
| SD-13 | 1000 | 15 2/3 | 4 5/8 | 3 7/8 | 6 1/8 | 28.50 |
| SD-14 | 1500 | 20 | 4 5/8 | 3 7/8 | 7 1/8 | 37.20 |
| SD-20 | 2000 | 24 | 6 | 4 1/2 | 6 5/8 | 70.00 |



NORMAL DUTY MODEL

220/240 - 110/120 volts

| Catalog Number | Rating Watts | Weight Lbs. | Dimension Inches | | | List Price |
|----------------|--------------|-------------|------------------|-------|-------|------------|
| | | | H | W | D | |
| SD-24 | 50 | 1 1/2 | 2 5/8 | 3 3/4 | 2 1/4 | \$4.90 |
| SD-21 | 65 | 1 3/4 | 2 5/8 | 3 3/4 | 2 1/4 | 5.15 |
| SD-25 | 80 | 1 3/4 | 2 5/8 | 3 3/4 | 2 1/4 | 5.40 |
| SD-23 | 100 | 1 3/4 | 2 5/8 | 3 3/4 | 2 3/8 | 5.70 |
| SD-26 | 125 | 2 | 2 9/16 | 4 | 2 5/8 | 6.35 |
| SD-27 | 150 | 2 1/4 | 2 9/16 | 4 | 2 5/8 | 6.90 |



HEAVY DUTY VOLTAGE REGULATOR

| Type | input Taps | | | | | | | | Sec. |
|------|------------|-----|-----|-----|-----|-----|-----|-----|------|
| | 84 | 92 | 100 | 108 | 115 | 122 | 130 | 138 | |
| 11 | 84 | 92 | 100 | 108 | 115 | 122 | 130 | 138 | 115 |
| 12 | 84 | 92 | 100 | 108 | 115 | 122 | 130 | 138 | 230 |
| 21 | 170 | 185 | 200 | 215 | 230 | 245 | 260 | 275 | 115 |
| 22 | 170 | 185 | 200 | 215 | 230 | 245 | 260 | 275 | 230 |

| Catalog Number | Type | Rating Watts | Weight Lbs. | Dimension Inches | | | List Price |
|----------------|----------|--------------|-------------|------------------|---------|-------|------------|
| | | | | H | W | D | |
| TC-17 | 11 or 22 | 150 | 6 | 5 13/32 | 3 25/32 | 5 | \$ 25.20 |
| TC-18 | 11 or 22 | 350 | 7 | 5 13/32 | 3 25/32 | 5 3/8 | 35.60 |
| TC-11 | 11 or 22 | 500 | 11 | 5 13/32 | 3 25/32 | 5 3/4 | 41.00 |
| TC-19 | 11 or 22 | 750 | 15 | 5 13/32 | 3 25/32 | 6 3/8 | 51.30 |
| TC-13 | 11 or 22 | 1000 | 20 | 5 13/32 | 3 25/32 | 7 1/8 | 62.25 |
| TC-14 | 11 or 22 | 1500 | 25 | 5 13/32 | 3 25/32 | 8 1/8 | 81.50 |
| TC-20 | 11 or 22 | 2000 | 30 | 6 21/32 | 4 9/32 | 8 3/4 | 155.00 |
| TC-17 | 12 or 21 | 150 | 6 | 5 13/32 | 3 25/32 | 5 1/4 | 29.50 |
| TC-18 | 12 or 21 | 350 | 7 | 5 13/32 | 3 25/32 | 5 3/4 | 41.15 |
| TC-11 | 12 or 21 | 500 | 11 | 5 13/32 | 3 25/32 | 6 | 47.30 |
| TC-19 | 12 or 21 | 750 | 15 | 5 13/32 | 3 25/32 | 6 3/4 | 60.50 |
| TC-13 | 12 or 21 | 1000 | 20 | 6 21/32 | 4 9/32 | 7 3/4 | 75.00 |
| TC-14 | 12 or 21 | 1500 | 25 | 6 21/32 | 4 9/32 | 8 3/4 | 92.25 |
| TC-20 | 12 or 21 | 2000 | 30 | 6 21/32 | 4 9/32 | 9 3/4 | 178.00 |



PANEL MOUNTED VOLTAGE REGULATOR

| Type | input Taps | | | | | | | | Sec. |
|------|------------|-----|-----|-----|-----|-----|-----|-----|------|
| | 84 | 92 | 100 | 108 | 115 | 122 | 130 | 138 | |
| 11 | 84 | 92 | 100 | 108 | 115 | 122 | 130 | 138 | 115 |
| 12 | 84 | 92 | 100 | 108 | 115 | 122 | 130 | 138 | 230 |
| 21 | 170 | 185 | 200 | 215 | 230 | 245 | 260 | 275 | 115 |
| 22 | 170 | 185 | 200 | 215 | 230 | 245 | 260 | 275 | 230 |

| Catalog Number | Type | Rating Watts | Weight Lbs. | Dimension Inches | | | List Price |
|----------------|----------|--------------|-------------|------------------|-------|--------|------------|
| | | | | H | W | D | |
| TA-20 | 11 or 22 | 2000 | 40 | 6 7/8 | 7 1/2 | 17 3/8 | \$182.00 |
| TA-28 | 11 or 22 | 3000 | 50 | 6 7/8 | 7 1/2 | 17 3/8 | 208.00 |
| TA-29 | 11 or 22 | 4000 | 60 | 6 7/8 | 7 1/2 | 17 3/8 | 253.00 |
| TA-22 | 11 or 22 | 5000 | 70 | 6 7/8 | 7 1/2 | 17 3/8 | 293.00 |
| TA-30 | 11 or 22 | 6000 | 85 | 6 7/8 | 7 1/2 | 17 3/8 | 348.00 |
| TA-20 | 12 or 21 | 2000 | 40 | 6 7/8 | 7 1/2 | 17 3/8 | 198.00 |
| TA-28 | 12 or 21 | 3000 | 50 | 6 7/8 | 7 1/2 | 17 3/8 | 222.00 |
| TA-29 | 12 or 21 | 4000 | 60 | 6 7/8 | 7 1/2 | 17 3/8 | 270.00 |
| TA-22 | 12 or 21 | 5000 | 70 | 6 7/8 | 7 1/2 | 17 3/8 | 313.00 |
| TA-30 | 12 or 21 | 6000 | 85 | 6 7/8 | 7 1/2 | 17 3/8 | 370.00 |

INDUSTRIAL PANEL MODEL

220/240 - 110/120 volts
Step-up or Step-down



| Catalog Number | Rating Watts | Weight Lbs. | Dimension Inches | | | List Price |
|----------------|--------------|-------------|------------------|-------|--------|------------|
| | | | H | W | D | |
| SD-28TA | 3000 | 50 | 6 7/8 | 7 1/2 | 17 3/8 | \$198.00 |
| SD-29TA | 4000 | 60 | 6 7/8 | 7 1/2 | 17 3/8 | 229.00 |
| SD-22TA | 5000 | 72 | 6 7/8 | 7 1/2 | 17 3/8 | 265.00 |
| SD-30TA | 6000 | 85 | 6 7/8 | 7 1/2 | 17 3/8 | 316.00 |

Todd is a step-down, step-up specialist. Consult us for modifications including fusing, metering, non-standard voltage, specialized mountings, Mil-T-27A applications, hermetic sealing and other custom requirements.

TODD ELECTRIC CO., INC.
YONKERS, N.Y.

ALL IN STOCK... SAME DAY SHIPMENT!
INDUSTRIAL DISCOUNT 40% INQUIRE FOR QUANTITY DISCOUNT



NEW PRODUCTS

DI-T200 SERIES TRANSISTOR TRANSFORMERS

These revolutionary transistor transformers embody the same rugged reliable construction afforded by the unique winding techniques and physical construction found in the DO-T & DI-T transformers (see pg. 3). DI-T200 series differ by having

straight pin, 1" long, .017 d. Dumet wire, gold plated leads. To MIL-T-27A, size 5/16 x 3/8", wt. 1/15 oz.

See UTC page 3 for other DO-T & DI-T units.

| Type No. | Application | Pri. Imped., Ohms | Sec. Imped., Ohms | Net Each |
|----------|------------------------------------|----------------------|-----------------------------|----------|
| DI-T225 | Interstage | 80 CT 100 CT | 32 Split 40 Split | \$8.40 |
| DI-T230 | Output or Matching | 300 CT | 600 Split | 7.20 |
| DI-T235 | Interstage | 400 CT 500 CT | 40 Split 50 Split | 8.40 |
| DI-T240 | Interstage or Output (Ratio 2:1:1) | 400 CT 500 CT | 400 Split 500 Split | 8.40 |
| DI-T245 | Output or Matching | 500 CT 600 CT | 50 CT 60 CT | 6.90 |
| DI-T250 | Output or Mixing | 500 CT | 600 CT | 7.20 |
| DI-T255 | Output or Matching | 1,000 CT 1,200 CT | 50 CT 60 CT | 6.90 |
| DI-T260 | Output | 1,500 CT | 600 CT | 7.20 |
| DI-T265 | Isolation or Interstage | 2,000 CT 2,500 CT | 8,000 Split 10,000 Split | 8.70 |

| Type No. | Application | Pri. Imped., Ohms | Sec. Imped., Ohms | Net Each |
|----------|-------------------------|---|----------------------------|----------|
| DI-T270 | Output or Driver | 10,000 CT 12,000 CT | 500 CT 600 CT | 7.80 |
| DI-T273 | Output or Driver | 10,000 CT 12,500 CT | 1,200 CT 1,500 CT | 7.80 |
| DI-T276 | Interstage or Driver | 10,000 CT 12,000 CT | 2,000 CT 2,400 CT | 7.80 |
| DI-T278 | Interstage or Driver | 10,000 CT 12,500 CT | 2,000 Split 2,500 Split | 8.70 |
| DI-T283 | Isolation or Interstage | 10,000 CT 12,000 CT | 10,000 CT 12,000 CT | 8.40 |
| DI-T288 | Interstage or Driver | 20,000 CT 30,000 CT | 800 CT 1,200 CT | 8.10 |
| DI-T204 | Split Inductor (2 wdg) | Series: .1 hy @ 4 ma DC, 25Ω Parallel: .025 hy @ 8 ma DC, 6Ω | | 6.00 |
| DI-T208 | Split Inductor (2 wdg) | Series: .9 hy @ 2 ma DC, 105Ω Parallel: .2 hy @ 4 ma DC, 26Ω | | 6.00 |
| DI-T212 | Split Inductor (2 wdg) | Series: 2.5 hy @ 2 ma DC, 630Ω Parallel: .6 hy @ 4 ma DC, 157Ω | | 6.00 |
| DI-T216 | Split Inductor (2 wdg) | Series: 4.5 hy @ 2 ma DC, 2300Ω Parallel: 1.1 hy @ 4 ma DC, 575Ω | | 6.90 |



LOW FREQUENCY HIGH Q COILS

Designed for high Q at low frequencies. Structure provides exceptional stability, adjusted to 2% at 1V, 60 cycles. Inductance variation less than 2% from -55°C to +130°C. Made to MIL-T-27A, MIL type TF45X20YY. Size: 1 1/8" d. x 1 1/8" h., cutout: 1" d., wt: 5 oz.



| Type No. | Series Hy (0 DC) | Parallel Hy (0 DC) | Series DCR Ω ±20% | Net Each |
|----------|------------------|--------------------|-------------------|----------|
| MQM-2 | 2 | .5 | 21 | \$12.60 |
| MQM-16 | 16 | 4 | 143 | 12.60 |
| MQM-40 | 40 | 10 | 368 | 12.60 |
| MQM-300 | 300 | 75 | 3700 | 13.50 |
| MQM-600 | 600 | 150 | 5720 | 13.50 |

MINIATURE BAND PASS FILTERS

These two new stock filters are in drawn hermetically sealed cases shielded to reduce hum pick up. Manufactured and guaranteed to MIL-F-18327A. MIL type FR4RX22AF. Attenuation is less than 3 db ±5% from center frequency, and 40 db per octave. Source and load 500 ohms. Size: 3/4 x 3/4 x 1 1/8", wt: 1 oz.

| UTC Type No. | Center Frequency |
|--------------|------------------|
| BPH-50000 | 50,000 |
| BPH-100000 | 100,000 |



See UTC page 4 for complete series.

FULL WAVE BRIDGE & CENTER TAP PLATE TRANSFORMERS

These units are designed for both full wave center tap and full wave bridge applications.

MILITARY TYPE: Hermetically sealed to MIL-T-27A. MIL type TF4RX02 in MIL cases. Center tapped high voltage winding provides either of two secondaries. Primary 105/115/210/220 V. 50/60 cycles. Ratings are choke input. Bold type listing is industrial rating—light type listing are military ratings. Physically similar to units without "W" suffix, see UTC page 5.



| Type No. | HV Sec. CT | Approx. Volts DC | MA DC | MA DC | MIL Case MB | Net Each |
|----------|------------|------------------|-------|-------|-------------|----------|
| H-110W | 1050 | 730 | 210 | 280 | | \$29.70 |
| | 1200 | 860 | 190 | 265 | | |
| H-111W | 1050 | 830 | 350 | 420 | NA | 36.00 |
| | 1200 | 960 | 310 | 380 | | |
| H-112W | 1500 | 1230 | 220 | 270 | NA | 39.60 |
| | 1900 | 1580 | 190 | 230 | | |

See complete series on UTC page 5.

COMMERCIAL TYPES: Primaries for 105/115/220/230 V. 50/60 cycles. For reduced power, secondaries can be halved using 220V. Pri. on 110 volts, then may be used on 25 to 43 cycles. Physically similar to units without "W" suffix, see UTC page 9.



| UTC Type | High Voltage | DC MA | DC Volts | Net Each |
|----------|-------------------------------|---------|---------------|----------|
| CG-300W | 625-515-0-515-625 | 140 | 1000/800 | \$17.70 |
| CG-301W | 580-530-300-0-300-530-580 | 290 | 950/850/500 | 26.40 |
| CG-302W | 950-750-0-750-950 | 250 | 1520/1220 | 33.00 |
| CG-303W | 1500-1235-400-0-400-1235-1500 | 180/210 | 2500/2000/600 | 39.60 |
| CG-304W | 1500-1235-0-1235-1500 | 550 | 2500/2000 | 156.00 |
| CG-305W | 2400-1750-0-1750-2400 | 210 | 4000/3000 | 69.00 |
| CG-306W | 2400-1750-0-1750-2400 | 350 | 4000/3000 | 165.00 |
| CG-311W | 1500-1235-0-1235-1500 | 350 | 2500/2000 | 69.00 |

See UTC page 9 for complete listing.

SUBMINIATURE AUDIO TRANSFORMERS & INDUCTORS

Lightweight, miniaturized units proved for ruggedness and reliability. Provided in hermetically sealed flat steel cases to MIL-T-27A, Grade 4, Class R, Life X. Units have straight pin terminals and mounting studs. Size: 7/8 x 2 1/2 x 1/8", wt: 0.8 oz.



| Type No. | Application | Pri. Imp. Ω | Sec. Imp. Ω | Net Each |
|-----------------|--|---------------------|--------------------|----------|
| FHA-15 | Tr. Interstage | 10 KCT/2.5K (Split) | 200 CT/50 (Split) | \$8.10 |
| FHA-25 | Tr. Interstage | 20 KCT/5K (Split) | 800 CT/200 (Split) | 8.10 |
| SPLIT INDUCTORS | | | | |
| FHI-3 | Series Con: 60 Mhys-32 ma DC, 6Ω Parallel Con: 15 Mhys-64 ma DC, 1.5Ω | | | 6.00 |
| FHI-7 | Series Con: 1 Hy-8 ma DC, 100Ω Parallel Con: .25 Hy-16 ma DC, 25Ω | | | 6.00 |
| FHI-11 | Series Con: 2.4 Hys-2 ma DC, 160Ω Parallel Con: 6 Hy-4 ma DC, 40Ω | | | 6.00 |

See UTC page 5 for similar hermetic audio units.

PIP SERIES TRANSISTOR PULSE TRANSFORMERS

UTC's PIP series of subminiature transistor type pulse transformers is designed to give a maximum of component density in equipments, their configuration being especially compatible with transistors. The design is based on the UTC DO-T and DI-T series to impart exceptional reliability. PIP-1 through PIP-9 have a ratio of 4:4:1, PIP-10 through PIP-12 have a ratio of 5:3:1. All units are checked and adjusted in a transistor test circuit to give the required pulse width.

Hermetically sealed, manufactured & guaranteed to MIL-T-20138B by full environmental testing... all units, completely METAL CASED, MIL type TP6RX4410CZ.

All Units Individually Adjusted to Parameters Shown in Table

5/16" Dia. x 3/16" high
Weight 1/20 oz.



| Type No. | APPROX. DCR, OHMS | | | BLOCKING OSCILLATOR PULSE | | | | COUPLING CIRCUIT CHARACTERISTICS | | | | | | | Net Each | |
|----------|---|-------------|-------------|---------------------------|-----------|--------------|--------|----------------------------------|---------------|----------|-----------|--------------|--------|------------|----------|---------------|
| | 1-Brd 2-Rd | 3-Org 4-Yel | 5-Grn 6-Blu | Width μSec. | Rise Time | % Over Shoot | Drop % | % Back Swing | P Width μSec. | Volt Out | Rise Time | % Over Shoot | Drop % | Back Swing | | Imp. in, out, |
| PIP-1 | .18 | .20 | .07 | .05 | .02 | 0 | 0 | 37 | .05 | 9 | .018 | 0 | 0 | 12 | 50 | \$6.00 |
| PIP-2 | .47 | .56 | .17 | .1 | .025 | 0 | 0 | 25 | .1 | 8 | .02 | 0 | 0 | 5 | 50 | 6.00 |
| PIP-3 | 1.01 | 1.25 | .37 | .2 | .030 | 2 | 0 | 15 | .2 | 7 | .035 | 0 | 0 | 5 | 100 | 6.00 |
| PIP-4 | 1.5 | 1.85 | .54 | .5 | .05 | 0 | 0 | 15 | .5 | 7 | .06 | 0 | 0 | 0 | 100 | 6.00 |
| PIP-5 | 2.45 | 3.1 | .9 | 1 | .08 | 0 | 0 | 14 | 1 | 7 | .06 | 0 | 0 | 0 | 100 | 6.00 |
| PIP-6 | 3.0 | 3.7 | 1.1 | 2 | .10 | 0 | 0 | 15 | 2 | 6.8 | .15 | 0 | 0 | 5 | 100 | 6.00 |
| PIP-7 | 4.9 | 6.05 | 1.8 | 3 | .20 | 0 | 0 | 14 | 3 | 6.8 | .20 | 0 | 2 | 10 | 100 | 6.00 |
| PIP-8 | 8.0 | 9.7 | 2.9 | 5 | .30 | 0 | 0 | 3 | 5 | 7.9 | .22 | 0 | 13 | 25 | 200 | 6.00 |
| PIP-9 | 13.1 | 15.9 | 4.7 | 10 | .35 | 0 | 5 | 12 | 10 | 6.5 | .4 | 0 | 15 | 20 | 200 | 6.00 |
| PIP-10 | .55 | .41 | .15 | .1 | .01 | 0 | 0 | 20 | .1 | 8 | .01 | 0 | 0 | 5 | 140/50 | 6.00 |
| PIP-11 | 2.9 | 2.2 | .82 | 1 | .02 | 4 | 4 | 6 | 1 | 6.6 | .05 | 0 | 6 | 12 | 280/100 | 6.00 |
| PIP-12 | 9.4 | 7.1 | 2.6 | 5 | .05 | 0 | 12 | 12 | 5 | 8 | .09 | 2 | 12 | 25 | 560/200 | 6.00 |
| PIP-100 | Transistor pulse transformer kit, consisting of PIP-1 thru PIP-9 in plastic case. | | | | | | | | | | | | | | | \$1.00 |



NEW PRODUCTS

1 NEW LOW FREQUENCY LOW PASS FILTER

For Transistor & Tube Applications
Metal Cased, Hermetically Sealed to MIL-F-18327A

| UTC Type | Frequency Cycles | Net Each |
|----------|------------------|----------|
| LLP-10 | 10 | \$60.00 |

See UTC page 4 for complete stock filter listings.



11 NEW MINIATURE FILTERS (MINIFILTERS)

For Transistor & Tube Applications
Metal Cased, Hermetically Sealed to MIL-F-18327A

| UTC Type | Frequency Cycles | Net Each |
|------------------|------------------|----------|
| BAND PASS | | |
| BPM-800 | 800 | \$27.00 |
| BPM-1200 | 1200 | 27.00 |
| BPM-4800 | 4800 | 27.00 |
| HIGH PASS | | |
| HPM-1500 | 1500 | 30.00 |
| HPM-4000 | 4000 | 30.00 |
| LOW PASS | | |
| LPM-1500 | 1500 | 30.00 |
| LPM-6000 | 6000 | 30.00 |
| LPM-10000 | 10000 | 30.00 |
| LPM-15000 | 15000 | 30.00 |

See UTC page 1 for BPH types.
See UTC page 4 for complete series.

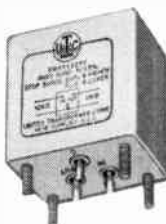


10 NEW STANDARD FILTERS

For Transistor & Tube Application
Metal Cased, Hermetically Sealed to MIL-F-18327A

| UTC Type | Frequency Cycles | Net Each |
|------------------|------------------|----------|
| BAND PASS | | |
| BMI-30 | 30 | \$36.00 |
| BMI-50 | 50 | 30.00 |
| BMI-90 | 90 | 30.00 |
| BMI-150 | 150 | 30.00 |
| BMI-200 | 200 | 30.00 |
| BMI-240 | 240 | 30.00 |
| HIGH PASS | | |
| HMI-100 | 100 | 31.50 |
| HMI-300 | 300 | 31.50 |
| LOW PASS | | |
| LMI-100 | 100 | 31.50 |
| LMI-3000 | 3000 | 31.50 |

See UTC page 4 for complete series.



1 NEW MAGNETIC AMPLIFIER TRANSFORMER (60 CYCLE TYPE)

Metal Cased, Hermetically Sealed to MIL-T-27A
MIL TYPE TF45X02FA

| | | |
|--------|--|------------------|
| MAT-65 | 115V. 60 cyc. to 8.5 VCT @ 500 ma & 63 VCT @ 300 ma. | Net \$12.60 Each |
|--------|--|------------------|

See UTC page 6 for complete series.



7 NEW MINIATURE PULSE TRANSFORMERS

Both Transistor & Tube Types
Hermetically Sealed to MIL-T-21038B
RATIO 5:3:1

Coupling circuit characteristic shown; may be used for blocking oscillator pulse.

| UTC Type | P Width μSec. | Volts | Rise Time | % Over Shoot | % Droop | % Back Swing | Imp. in, ohms | Net Each |
|----------|---------------|-------|-----------|--------------|---------|--------------|---------------|----------|
| H-461 | .1 | 19 | .02 | 3 | 5 | 20 | 700/250 | \$6.75 |
| H-501 | 2 | 27 | .06 | 12 | 15 | 35 | 1400/500 | 6.00 |
| H-531 | 7 | 24 | .23 | 12 | 10 | 40 | 2800/1000 | 6.00 |
| H-561 | 20 | 23 | .7 | 5 | 10 | 10 | 2800/1000 | 6.30 |
| H-611 | .1 | 8.2 | .02 | 0 | 0 | 30 | 140/50 | 6.60 |
| H-641 | 1 | 7 | .07 | 0 | 20 | 30 | 280/100 | 6.60 |
| H-671 | 5 | 8 | .2 | 0 | 25 | 30 | 560/200 | 7.50 |

See UTC page 6 for complete series & parameters.



6 NEW TRANSISTOR TRANSFORMERS

DO-T & DI-T SERIES
Hermetically Sealed to MIL-T-27A

| UTC Type | Application | Pri. Imped. Ohms | Sec. Imped. Ohms | Net Each |
|----------|----------------|---|----------------------|----------|
| DI-T43 | Interstage | 400 CT 8 ma 500 CT 6 ma | 40 Split 50 Split | 7.50 |
| DI-T44 | Interstage | 80 CT 12 ma 100 CT 10 ma | 32 Split 40 Split | 7.50 |
| DO-T47 | Isolation | 9K/10K CT 1 ma | 9K/10K CT | \$8.10 |
| DO-T48 | Interstage | 8K/10K CT 1 ma | 1.2K/1.5K CT | 7.80 |
| DO-T49 | Split Inductor | Series: 20 hy-1 ma, 5100Ω Parallel: 5 hy-2 ma, 1275Ω | | 7.80 |
| DO-T50 | Split Inductor | Series: .075 hy-10 ma, 10.5Ω Parallel: .018 hy-20 ma, 2.6Ω | | 5.70 |

See UTC page 3 for complete series.



4 NEW FILTER INDUCTORS

Transistor & Tube Applications
Hermetically Sealed to MIL-T-27A

| UTC Type | Ind Mhy | @ ma DC | Res Ohms | Test V RMS | Net Each |
|----------|---------|---------|----------|------------|----------|
| H-164 | 45 | 35 | 1.2 | 500 | \$6.60 |
| | 11.25 | 70 | .295 | | |
| H-166 | 125 | 50 | 1.2 | 500 | 7.50 |
| | 31 | 100 | .3 | | |
| H-168 | 68 | 100 | .8 | 750 | 8.40 |
| | 17 | 200 | .2 | | |
| H-300 | 1000 | 5 | 40 | 500 | 6.30 |
| | 1250 | 10 | 10 | | |

See UTC page 5 for complete series.



5 NEW HERMETIC AUDIO UNITS

For Transistor & Tube Applications
Metal Cased, Hermetically Sealed to MIL-T-27A

| UTC Type | Application | Net Each |
|----------|--------------------|---|
| H-222 | Split Inductor | Series: 60 Mhy-80 ma, 4 ohms Parallel: 15 Mhy-160 ma, 1 ohm |
| H-224 | Split Inductor | Series: 1 Hy-20 ma, 60 ohms Parallel: .25 Hy-40 ma, 15 ohms |
| H-283 | Mixing or Matching | Pri. & Sec. Imped. Series: 50, 125/150, 200/250, 333, 500/600 |
| H-284 | Split Inductor | Series: 4 Hys-50 ma, 100 ohms Parallel: 1 Hy-100 ma, 25 ohms |
| H-286 | Split Inductor | Series: 40 Hys-15 ma, 1000 ohms Parallel: 10 Hys-30 ma, 250 ohms |

See UTC page 5 for complete series.



5 NEW SUBOUNCER & SUB-SUBOUNCER AUDIO UNITS

Printed Circuit — Transistor & Tube Applications
Hermetically Sealed, Molded to MIL Grade 5

| UTC Type | Application | Pri. Imped. Ohms | Sec. Imped. Ohms | Net Each |
|----------|-----------------------|------------------|----------------------|----------|
| SO-14P | Transistor Interstage | 80 CT 100 CT | 32 Split 40 Split | \$8.10 |
| SSO-8P | Transistor to PP Sec | 10K | 2000 CT | 8.10 |
| SSO-14P | Transistor Interstage | 10K CT 25K CT | 200 CT 500 CT | 8.40 |
| SSO-15P | Transistor Interstage | 20K CT 30K CT | 800 CT 1200 CT | 8.40 |
| SSO-20P | Output | 1.5K CT | 600 CT | 8.10 |

See UTC page 10 for complete series.



2 NEW OUNCER AUDIO UNITS

| UTC Type | Application | Net Each |
|----------|----------------|--|
| 0-34 | Split Inductor | Series: 60 Mhy-80 ma, 4 ohms Parallel: 15 Mhy-160 ma, 1 ohm |
| 0-34 | Split Inductor | Series: 1 hy-20 ma, 60 ohms Parallel: .25 hy-40 ma, 15 ohms |

See UTC page 10 for complete series.



2 NEW ULTRA COMPACT AUDIO UNITS

For Transistor & Tube Applications

| UTC Type | Application | Net Each |
|----------|--------------------------------|--|
| A-42 | Split Filter | Series: 4 hys 50 ma DC, 100Ω Parallel: 1 hy-100 ma DC, 25Ω |
| A-43 | To 2 simult. lines or transis. | Pri. Imp. Ohms 600/150 (Split) Sec. Imp. Ohms 2, ea. 600/150 (Sp) |

See UTC page 8 for complete series.



1 NEW LINEAR STANDARD TRANSFORMER

| UTC Type | Application | Pri. Imp. Ohms | Sec. Imp. Ohms | Level dbm | Net Each |
|----------|---------------------------------------|-----------------|----------------------|-----------|----------|
| LS-68 | Matching to 2 Simult. lines or trans. | 600/150 (Split) | 2, each 600/150 (Sp) | +15 | \$24.00 |

See UTC page 8 for complete series.



TRANSISTOR TRANSFORMERS Hermetically sealed to MIL-T-27A



DO-T AND DI-T TRANSISTOR TRANSFORMERS



DO-T (Actual Size) DI-T

| DO-T Type | DI-T Type | Net Each | Applica-tion | Pri. Imped., Ohms | Sec. Imped., Ohms |
|-----------|-----------|----------|--------------|--|-------------------|
| DO-T1 | DI-T1 | \$6.00 | a | 20K/30K, 0.5 ma | 800/1200 |
| DO-T2 | DI-T2 | 5.40 | b | 500/600, 3 ma | 50/60 |
| DO-T3 | DI-T3 | 5.40 | b | 1K/1.2K, 3 ma | 50/60 |
| DO-T4 | DI-T4 | 5.40 | b | 600, 3 ma | 3.2 |
| DO-T5 | DI-T5 | 5.40 | b | 1.2K, 2 ma | 3.2 |
| DO-T6 | DI-T6 | 4.00 | b | 10K, 1 ma | 3.2 |
| DO-T7 | DI-T7 | 6.60 | c | 200K | 1K |
| DO-T8 | DI-T8 | 4.80 | d* | 3.5 hys. @ 2 ma | 2.5 hys.±± |
| DO-T9 | DI-T9 | 6.60 | e | 10K/12K, 1 ma | 500/600 CT |
| DO-T10 | DI-T10 | 6.60 | f | 10K/12.5K, 1 ma | 1.2K-1.5K CT |
| DO-T11 | DI-T11 | 6.60 | f | 10K/12.5K, 1 ma | 2K/2.5K CT |
| DO-T12 | DI-T12 | 5.70 | b | 150/200 CT, 10 ma | 12/16 |
| DO-T13 | DI-T13 | 5.70 | b | 300/400 CT, 7 ma | 12/16 |
| DO-T14 | DI-T14 | 6.00 | b | 600/800 CT, 5 ma | 12/16 |
| DO-T15 | DI-T15 | 6.00 | b | 800/1070 CT, 4 ma | 12/16 |
| DO-T16 | DI-T16 | 6.00 | b | 1K/1330 CT, 3.5 ma | 12/16 |
| DO-T17 | DI-T17 | 6.00 | b | 1.5K/2K CT, 3 ma | 12/16 |
| DO-T18 | DI-T18 | 6.30 | b | 7.5K/10K CT, 1 ma | 12/16 |
| DO-T19 | DI-T19 | 6.00 | b | 300 CT, 7 ma | 600 |
| DO-T20 | DI-T20 | 6.00 | b | 500 CT, 5.5 ma | 600 |
| DO-T21 | DI-T21 | 6.00 | b | 900 CT, 4 ma | 600 |
| DO-T22 | DI-T22 | 6.00 | b | 1500 CT, 5 ma | 600 |
| DO-T23 | DI-T23 | 6.90 | a | 20K/30K CT, .5 ma | 0.8K/1.2K CT |
| DO-T24 | DI-T24 | 7.50 | a | 200K CT | 1K CT |
| DO-T25 | DI-T25 | 7.20 | a | 10K/12K CT, 1 ma | 1.5K/1.8K CT |
| DO-T26 | DI-T26 | 5.70 | dt | 6 hys. @ 2 ma | 4.5 hys.±± |
| DO-T27 | DI-T27 | 4.80 | dt | 1.25 hys. @ 2 ma | 0.9 hy.±± |
| DO-T28 | DI-T28 | 4.80 | ds | 0.3 hy. @ 4 ma | 0.1 hy.±± |
| DO-T29 | DI-T29 | 5.70 | b | 120/150 CT, 10 ma | 3.2/4 |
| DO-T30 | DI-T30 | 5.70 | b | 320/400 CT, 7 ma | 3.2/4 |
| DO-T31 | DI-T31 | 6.00 | b | 640/800 CT, 5 ma | 3.2/4 |
| DO-T32 | DI-T32 | 6.00 | b | 800/1K CT, 4 ma | 3.2/4 |
| DO-T33 | DI-T33 | 6.00 | b | 1060/1330 CT, 3.5 ma | 3.2/4 |
| DO-T34 | DI-T34 | 6.00 | b | 1.6K/2K CT, 3 ma | 3.2/4 |
| DO-T35 | DI-T35 | 6.30 | b | 8K/10K CT, 1 ma | 3.2/4 |
| DO-T36 | DI-T36 | 7.50 | a | 10K/12K CT, 1 ma | 10K/12K CT |
| DO-T37 | DI-T37 | 7.80 | a | 2K/2.5K CT, 3 ma | 8K/10K Split |
| DO-T38 | DI-T38 | 7.80 | a | 10K/12K CT, 1 ma | 2K/2.4 Split |
| DO-T39 | DI-T39 | 7.80 | a | 20K/30K CT, .5 ma | 1K/1.5K Split |
| DO-T40 | DI-T40 | 8.40 | a | 40K/50K CT, .25 ma | 400/500 Split |
| DO-T41 | DI-T41 | 7.50 | a | 400/500 CT, 8/6 ma | 400/500 Split |
| DO-T42 | DI-T42 | 7.50 | a | 400/500 CT, 8/6 ma | 120/150 Split |
| DO-T43 | DI-T43 | 7.50 | a | 80/100 CT, 12/10 ma | 40/50 Split |
| DO-T44 | DI-T44 | 7.50 | a | 80/100 CT, 12/10 ma | 32/40 Split |
| DO-T45 | DI-T45 | 7.80 | a | 1K/1.25K CT, 3.5 ma | 16K/20K Split |
| DO-T46 | DI-T46 | 8.40 | c | 100K CT | 500 CT |
| DO-T47 | DI-T47 | 8.10 | a | 9K/10K, 1 ma | 9K/10K CT |
| DO-T48 | DI-T48 | 7.80 | a | 8K/10K, 1 ma | 1.2K/1.5K CT |
| DO-T49 | DI-T49 | 7.80 | d55 | Series—.075 hys @ 10 ma, 10.5Ω | 500 CT |
| DO-T50 | DI-T50 | 5.70 | d55 | Parallel—.018 hys @ 20 ma, 2.6Ω | 500 CT |
| DO-T51 | DI-T51 | 6.60 | i | Series—20 hys @ 1 ma, 5100Ω | 500 CT |
| DO-T52 | DI-T52 | 6.60 | i | Parallel—5 hys @ 2 ma, 1275Ω | 500 CT |
| DO-T53 | DI-T53 | 9.00 | i | Pri. 28V, 380-1Kcu, sec. 6.3V @ 60 ma. | 500 CT |
| DO-T54 | DI-T54 | 9.00 | i | High mu shield and cover; 25 db | 500 CT |

*630 ohms, †2100 ohms, ‡100 ohms, §25 ohms.
 ±±DI-T primary impedance, §52 ohms.
 *—Interstage; b—Output; c—Input; d—Inductor; e—Driver or Output; f—Driver; g—matching; i—Power Unit.

UNIVERSAL TRANSISTOR SUPPLY TRANSFORMERS

Low Voltage DC Supply Telephone Supply Bias Supply Battery Chargers Plating Rectifiers

UTC universal transistor supply transformers are high reliability units in drawn MIL cases. Primary types can modify nom. AC voltages by -6%, +6%, and +12%. The capacitor following the rectifier affects the DC voltage.

| Type No. | MIL DC Range | Indust. DC Range | MIL CASE | Net Each |
|----------|----------------------|-----------------------|----------|----------|
| H-915 | 6V-.065A to 53V-.02A | 6V-.085A to 53V-.025A | AH | \$11.70 |
| H-925 | 6V-.22A to 53V-.07A | 6V-.28A to 53V-.085A | AJ | 12.90 |
| H-935 | 6V-1.2A to 53V-4A | 6V-1.52A to 53V-.48A | FA | 14.40 |
| H-94 | 6V-3A to 53V-1A | 6V-3.8A to 53V-1.2A | HA | 19.80 |
| H-95 | 6V-7.5A to 53V-2.5A | 6V-9A to 53V-3A | KA | 28.80 |
| H-96 | 6V-18A to 53V-6A | 6V-23A to 53V-7.5A | OA | 48.00 |

| Type No. | MIL DC Range | Indust. DC Range | MIL CASE | Net Each |
|----------|----------------------|----------------------|----------|----------|
| H-965 | 12V-1.5A to 106V-.5A | 12V-1.9A to 106V-.6A | HA | 20.40 |

TRANSISTOR SUPPLY TRANSFORMERS



Primary 115V. 50/60 cycles (tapped on H-143 thru H-146 for dual secondary voltages). DC ratings are approximate, based on silicon bridge rectifier (except H-141, H-142 also shown F.W.C.T.). Choke input DCV is based on 10% voltage drop in choke. Condenser value, C, is in 1000 mfd. H-141, H-142, H-147 listing under "Secs in parallel" is single winding. All units MIL type TF4RX02.

| Type No. | Sec. V | Sec. A | Choke DCV | Sec. in Parallel Input DCA | Cond. DVC | Input DCA | Input C | Choke DCV | Sec. in Series Input DCA | Cond. DVC | Input DCA | Input C | MIL Case | Net Each |
|----------|---------|--------|-----------|----------------------------|-----------|-----------|---------|-----------|--------------------------|-----------|-----------|---------|----------|----------|
| H-141 | 20 CT | .3 | 16.5 | .3 | 26 | .2 | .2 | | | | | | EB | \$10.20 |
| H-142 | 20 CT | .6 | 16.5 | .6 | 26 | .4 | .4 | | | | | | EA | 12.90 |
| H-143 | 17/21.5 | 1.5 | 14/17.5 | 3 | 18.5/25 | 2 | 1 | 28/35 | 1.5 | 43/56 | 1 | .5 | HA | 18.60 |
| H-144 | 17/21.5 | 4 | 14/17.5 | 8 | 18.5/25 | 5 | 2 | 28/35 | 4 | 43/56 | 2.5 | 1 | LA | 30.00 |
| H-145 | 17/21.5 | 9 | 14/17.5 | 18 | 18.5/25 | 12 | 6 | 28/35 | 9 | 43/56 | 6 | 4 | RC-175 | 45.90 |
| H-146 | 34/43 | 4.5 | 28/35 | 9 | 43/56 | 6 | 4 | 56/70 | 4.5 | 85/110 | 3 | 1 | UTC | 45.90 |
| H-147 | 10 | 20 | 8.2 | 20 | 10 | 13 | 12 | | | | | | KA | 27.00 |

HERMETIC SEALED TRANSISTOR/FILAMENT SUPPLY TRANSF.

Primary: 105/115/210/220 volts, 50/60 cycles, except H-130, H-137, H-138, H-104 (115v.) and H-131 (115/220v.) Suited to 400/100 cycle service. H-128: 6 1/2" x 5 1/2" x 7 3/4" h. (wt. 34 lbs.) H-129: 6 1/2" x 5 1/2" x 7 3/4" h. (wt. 28 lbs.)

METAL CASED TF4 TYPE



MIL-T-27A RATINGS IN REGULAR TYPE, INDUSTRIAL RATINGS IN BOLD TYPE

| Type No. | MIL Type | Sec. Volts | Amps. (MIL) | Amps. (Indust.) | Sec. Test V. RMS | MIL Case | Net Each |
|----------|-----------|------------|-------------|-----------------|------------------|----------|----------|
| H-119 | TF4RX01AH | 6.3CT | .3 | .38 | 1500 | AH | \$ 8.40 |
| H-120 | TF4RX01GB | 2.5 | 10 | 12 | 4000 | GB | 13.80 |
| H-121 | TF4RX01JB | 2.5 | 10 | 12 | 10000 | JB | 18.00 |
| H-122 | TF4RX01KB | 2.5 | 20 | 26 | 10000 | KB | 21.00 |
| H-123 | TF4RX01NB | 2.5 | 5 | 7.5 | 10000 | NB | 36.00 |
| H-124 | TF4RX01FB | 5 | 3 | 3 | 2000 | FB | 12.00 |
| H-125 | TF4RX01KB | 5 | 10 | 12 | 10000 | KB | 21.00 |
| H-126 | TF4RX01LA | 5 | 20 | 25 | 10000 | LA | 27.00 |
| H-127 | TF4RX01NA | 5 | 20 | 30 | 21000 | NA | 45.00 |
| H-128 | TF4RX01YY | 5 | 60 | 75 | 21000 | | 81.00 |
| H-129 | TF4RX01YY | 5 | 10 | 12 | 21000 | | 90.00 |
| H-130 | TF4RX01AJ | 6.3CT | .6 | .75 | 1500 | AJ | 9.00 |
| H-131 | TF4RX01FB | 6.3CT | 2 | 2.5 | 2500 | FB | 12.00 |
| H-132 | TF4RX01JA | 6.3CT | 6 | 7 | 2500 | JA | 19.20 |
| H-133 | TF4RX01HB | 6.3CT | 7 | 8 | 2500 | HB | 15.00 |
| H-134 | TF4RX01HA | 6.3CT | 10 | 12 | 2500 | HA | 16.80 |
| H-135 | TF4RX01JB | 10 | 10 | 13 | 2500 | JB | 21.00 |
| H-136 | TF4RX01LA | 14, 12, 10 | 14 | 14 | 2500 | LA | 27.00 |
| H-137 | TF4RX01EB | 6.3 | .6 | .75 | 1500 | EB | 12.00 |
| H-138 | TF4RX01GA | 12.6 | 2 | 2.5 | 1500 | GA | 19.50 |
| H-139* | TF4RX01FA | 12.6CT | 2 | 2.5 | 1500 | FA | 18.00 |
| H-140 | TF4RX01YY | 6.3 | 6 | .75 | 500RC-25 | | 7.80 |

*Two H-139's Scott connected provide 26 volt two phase from 115V. three phase 400 cycle input.

400 CYCLE MOLDED TYPES

| Type No. | Sec. Amp. | L In. | W In. | H In. | Wt. Lbs. | Net Each |
|----------|-----------|--------|--------|-------|----------|----------|
| H-101 | 3.5 | 1 7/32 | 1 7/32 | 2 | .3 | \$14.10 |
| H-102 | 5.5 | 1 5/4 | 2 | 2 1/4 | .44 | 15.00 |
| H-103 | 10 | 2 1/8 | 2 1/8 | 2 1/2 | .8 | 17.40 |
| H-104 | 25 | 2 7/8 | 2 1/2 | 3 1/2 | 1.5 | 21.90 |
| H-118 | .3 | | | | | 9.00 |

TRANSISTOR INVERTER TRANSFORMERS

High reliability (layer insulated) types providing high efficiency in small size. Units are in drawn MIL cases. Circuit details supplied with transformer. With 6 V. input instead of 12 V., output voltage is halved, current rating remains the same.

FOR 12/14 OR 24/48 VOLT BATTERY



| Type No. | DC output, when used in circuit shown | MIL Case | Net Each |
|----------|---------------------------------------|----------|----------|
| H-97 | 250V-.60MA | AH | \$14.70 |
| H-98 | 375V-.100MA | AJ | 15.90 |
| H-99 | 425V-.175MA | FA | 20.40 |
| H-100 | 550V-.200MA | GB | 21.00 |

IMMEDIATE DELIVERY
ON ALL ITEMS FROM STOCK



ELECTRIC WAVE FILTERS Hermetically sealed to MIL-T-27A and Transistor Transformers (Commercial Type)

INTERSTAGE AND LINE FILTERS

Available in stock frequencies listed below (numerical part of type number is cutoff frequency in cps). Compact shielded cases hermetically sealed to MIL-T-27A specs. BML, LMI, BML cases: 1 1/2" x 1 1/2" x 1 1/2" h.; wt., 6 oz. HMI, HMI, LMI cases: 1 1/2" x 1 1/2" x 2 1/2" h.; wt., 9 oz. The BML filters are band pass interstage units designed to operate between a vacuum tube plate (or 10,000 ohms) and a grid. They provide a gain of 2 at center frequency. BTI units are same as BML, but 10,000 ohms output.

BML band pass filters, similarly, work into a grid, but have an input impedance of 500/600 ohms. They provide a gain of 9.

HMI filters are high pass interstage units.

LMI filters are low pass interstage units.

HML filter are high pass with input and output impedance of 500/600 ohms.

LML filters are low pass filters with input and output impedance of 500/600 ohms.

LLP low frequency low pass filter, loss of less than 40 db at 20 cycles. Source & load 100K ohms.

| UTC Type | Net Ea. | UTC Type | Net Ea. | UTC Type | Net Ea. |
|-----------|---------|-----------|---------|-----------|---------|
| BMI-30 | \$36.00 | LMI-200 | \$31.50 | HMI-1000 | \$31.50 |
| BMI-50 | 30.00 | LMI-400 | 31.50 | HMI-2000 | 31.50 |
| BMI-60 | 30.00 | LMI-500 | 31.50 | HMI-3000 | 31.50 |
| BMI-90 | 30.00 | LMI-800 | 31.50 | BML-400 | 30.00 |
| BMI-100 | 30.00 | LMI-1000 | 31.50 | BML-1000 | 30.00 |
| BMI-120 | 30.00 | LMI-1500 | 31.50 | HML-200 | 39.00 |
| BMI-150 | 30.00 | LMI-2000 | 31.50 | HML-300 | 39.00 |
| BMI-200 | 30.00 | LMI-2500 | 31.50 | HML-500 | 39.00 |
| BMI-240 | 30.00 | LMI-3000 | 31.50 | HML-1000 | 39.00 |
| BMI-400 | 30.00 | LMI-4000 | 31.50 | LML-1000 | 31.50 |
| BMI-500 | 30.00 | LMI-5000 | 31.50 | LML-1500 | 31.50 |
| BMI-750 | 30.00 | LMI-10000 | 31.50 | LML-2000 | 31.50 |
| BMI-800 | 30.00 | BTI-60 | 36.00 | LML-2500 | 31.50 |
| BMI-1000 | 30.00 | BTI-100 | 36.00 | LML-3000 | 31.50 |
| BMI-1500 | 30.00 | BTI-120 | 36.00 | LML-4000 | 31.50 |
| BMI-2000 | 30.00 | HMI-100 | 31.50 | LML-8000 | 31.50 |
| BMI-3000 | 30.00 | HMI-200 | 31.50 | LML-10000 | 31.50 |
| BMI-4000 | 30.00 | HMI-300 | 31.50 | LML-12000 | 31.50 |
| BMI-5000 | 30.00 | HMI-400 | 31.50 | LLP-10 | 60.00 |
| BMI-10000 | 30.00 | HMI-500 | 31.50 | | |
| LMI-100 | 31.50 | HMI-800 | 31.50 | | |



BPM



HPM & LPM



BM & LM Series



HM Series

MINIFILTERS

These units provide almost the same characteristics as the standard interstage units listed to the left, although extremely miniaturized. Hermetically sealed to MIL-T-27A specs. B type case: 3/4" x 3/4" x 1 1/4" h.; wt., 1 oz. H and L cases: 1" x 1" x 1 3/8" h.; wt., 2 1/4 oz. Cutoff frequencies in cps indicated by type number.

BPM units (BAND PASS) have 2:1 gain. Attenuation is approximately 2 db ± 3% from center frequency, and 35 db per octave as shown. Input 10,000 ohms, output to grid, tapped for 10,000 ohms to provide for transistor circuits. For tube circuits continuity is on grid side, for transistor use continuity is on input side.

BPH units (BAND PASS) attenuation less than 3 db ± 5% from center frequency, and 40 db per octave. Source and load 500 ohms.

HPM units (HIGH PASS) are down less than 6 db at cutoff frequency, and more than 30 db at .67 cutoff frequency, 40 db at .6 cutoff frequency. Input and output 10,000 ohms.

LPM units (LOW PASS) are down less than 6 db at cutoff frequency, and more than 30 db at 1.5 cutoff frequency, 40 db at 1.65 cutoff frequency. Input and output 10,000 ohms.

| UTC Type | Net Ea. | UTC Type | Net Ea. | UTC Type | Net Ea. |
|------------|---------|-----------|---------|-----------|---------|
| BPH-50000 | \$27.00 | BPM-2000 | \$27.00 | LPM-200 | \$30.00 |
| BPH-100000 | 27.00 | BPM-3000 | 27.00 | LPM-500 | 30.00 |
| BPM-400 | 27.00 | BPM-4000 | 27.00 | LPM-1000 | 30.00 |
| BPM-440 | 27.00 | BPM-4800 | 27.00 | LPM-1500 | 30.00 |
| BPM-500 | 27.00 | BPM-5000 | 27.00 | LPM-2000 | 30.00 |
| BPM-600 | 27.00 | BPM-10000 | 27.00 | LPM-3000 | 30.00 |
| BPM-750 | 27.00 | HPM-500 | 30.00 | LPM-5000 | 30.00 |
| BPM-800 | 27.00 | HPM-1000 | 30.00 | LPM-6000 | 30.00 |
| BPM-1000 | 27.00 | HPM-1500 | 30.00 | LPM-10000 | 30.00 |
| BPM-1200 | 27.00 | HPM-4000 | 30.00 | LPM-15000 | 30.00 |
| BPM-1500 | 27.00 | | | | |

TELEMETERING BAND PASS FILTERS

Both TMN and TMW types are designed for 100 K input and output impedance and have an insertion loss of less than 6 db. Four pin hermetic header matches small Winchester socket.

TMN filters are down less than 3 db at ± 7.5% of center frequency. They are down more than 18 db at ± 25% of center frequency. Attenuation is greater than 40 db beyond 1.75 Fc and .58 Fc.

TMW filters are down less than 3 db at TMN-1.7 MNF-5.4 ± 15% of center frequency. They are 1 1/2" x 1 1/2" x 2" 1 1/2" Sq. x down more than 20 db at ± 50% of Weight 3.5 oz 1/2" high center frequency. Attenuation is greater than 2.3 thru Weight 1 oz. than 40 db beyond 2.5 Fc and .4 Fc.

TMW-70 MNF-7.35 thru MNF and MWF (Minifilter) provide 3 1/2" x 3 1/2" x 1 3/8" MWF-70 same performance as filters described. Weight 1.2 oz. 2 1/2" Sq. x above but are extremely miniaturized. 1/2" high Slanted toward use with transistors. Weight 1/2 oz. Pin terminals ideally suited for printed circuits.

| UTC Type | Net Each | Center Frequency KC | Band Width % | UTC Type | Net Each |
|----------|----------|---------------------|--------------|----------|----------|
| TMN-4 | \$39.00 | 4 | 7 1/2% | MNF-4 | \$39.00 |
| TMN-56 | 39.00 | 56 | 7 1/2% | MNF-56 | 39.00 |
| TMN-73 | 39.00 | 73 | 7 1/2% | MNF-73 | 39.00 |
| TMN-96 | 39.00 | 96 | 7 1/2% | MNF-96 | 39.00 |
| TMN-1.3 | 39.00 | 1.3 | 7 1/2% | MNF-1.3 | 39.00 |
| TMN-1.7 | 39.00 | 1.7 | 7 1/2% | MNF-1.7 | 39.00 |
| TMN-2.3 | 39.00 | 2.3 | 7 1/2% | MNF-2.3 | 39.00 |
| TMN-3.0 | 39.00 | 3.0 | 7 1/2% | MNF-3.0 | 39.00 |
| TMN-3.9 | 39.00 | 3.9 | 7 1/2% | MNF-3.9 | 39.00 |
| TMN-5.4 | 39.00 | 5.4 | 7 1/2% | MNF-5.4 | 39.00 |
| TMN-7.35 | 39.00 | 7.35 | 7 1/2% | MNF-7.35 | 39.00 |
| TMN-10.5 | 42.00 | 10.5 | 7 1/2% | MNF-10.5 | 42.00 |
| TMN-14.5 | 42.00 | 14.5 | 7 1/2% | MNF-14.5 | 42.00 |
| TMN-22 | 42.00 | 22 | 7 1/2% | MNF-22 | 42.00 |
| TMN-30 | 42.00 | 30 | 7 1/2% | MNF-30 | 42.00 |
| TMN-40 | 42.00 | 40 | 7 1/2% | MNF-40 | 42.00 |
| TMN-52.5 | 42.00 | 52.5 | 7 1/2% | MNF-52.5 | 42.00 |
| TMN-70 | 42.00 | 70 | 7 1/2% | MNF-70 | 42.00 |
| TMW-22 | 42.00 | 22 | 15% | MWF-22 | 42.00 |
| TMW-30 | 42.00 | 30 | 15% | MWF-30 | 42.00 |
| TMW-40 | 42.00 | 40 | 15% | MWF-40 | 42.00 |
| TMW-52.5 | 42.00 | 52.5 | 15% | MWF-52.5 | 42.00 |
| TMW-70 | 42.00 | 70 | 15% | MWF-70 | 42.00 |

TELEGRAPH TONE CHANNEL FILTERS

UTC band pass filters for multiplex transmitting and receiving provide maximum stability in miniature sizes. Stack filters cover all standard transmit and receive bands. All units employ 7 terminal header matching subminiature 7 pin socket.

TGR (receiving) & TGT (transmitting) filters are 600 ohms in and out. They are down less than 3 db at ± 42.5 cycles from center frequency.

TGR units are down more than 30 db at ± 170 cycles. Attenuation is greater than 15 db at adjacent channel crossover.

TGT units are down more than 16 db at ± 170 cycles. Attenuation is greater than 7.5 db at adjacent channel crossover.

All units are MIL type FR4RX-22YY.



TGT CASE
1 1/2 x 1 1/2 x 2 1/2
Mtg 1 1/8 x 1 1/8
Screws 6-32
Weight 8 oz.



TGR CASE
1 1/2 x 1 1/2 x 4 1/4
Mtg 1 1/8 x 1 1/8
Screws 6-32
Weight 15 oz.

IMMEDIATE DELIVERY ON ALL ITEMS

| UTC Type | Net Each | Center Frequency (Cyc.) | UTC Type | Net Each |
|----------|----------|-------------------------|----------|----------|
| TGT-425 | \$42.00 | 425 | TGR-425 | \$72.00 |
| TGT-595 | 42.00 | 595 | TGR-595 | 72.00 |
| TGT-765 | 42.00 | 765 | TGR-765 | 72.00 |
| TGT-935 | 42.00 | 935 | TGR-935 | 72.00 |
| TGT-1105 | 36.00 | 1105 | TGR-1105 | 63.00 |
| TGT-1275 | 36.00 | 1275 | TGR-1275 | 63.00 |
| TGT-1445 | 36.00 | 1445 | TGR-1445 | 63.00 |
| TGT-1615 | 36.00 | 1615 | TGR-1615 | 63.00 |
| TGT-1785 | 33.00 | 1785 | TGR-1785 | 60.00 |
| TGT-1955 | 33.00 | 1955 | TGR-1955 | 60.00 |
| TGT-2125 | 33.00 | 2125 | TGR-2125 | 60.00 |
| TGT-2295 | 33.00 | 2295 | TGR-2295 | 60.00 |
| TGT-2465 | 30.00 | 2465 | TGR-2465 | 57.00 |
| TGT-2635 | 30.00 | 2635 | TGR-2635 | 57.00 |
| TGT-2805 | 30.00 | 2805 | TGR-2805 | 57.00 |
| TGT-2975 | 30.00 | 2975 | TGR-2975 | 57.00 |
| TGT-3145 | 30.00 | 3145 | TGR-3145 | 57.00 |
| TGT-3315 | 30.00 | 3315 | TGR-3315 | 57.00 |

TRANSISTOR TRANSFORMERS (Commercial Type)

CHANNEL FRAME FILAMENT/TRANSISTOR TRANSFORMERS
Pri. 115 V. 50/60 Cycles—Test Volts RMS: 1500

| Type No. | Secondary | W | D | H | M | Lbs. | Net Each |
|----------|--------------------------|-------|-------|-------|-------|-------|----------|
| FT-1 | 2.5 VCT-3A | 27/8 | 1 1/8 | 1 1/8 | 2 3/8 | 3/4 | \$2.85 |
| FT-2 | 6.3 VCT-1.2A | 27/8 | 1 1/8 | 1 1/8 | 2 3/8 | 3/4 | 3.15 |
| FT-3 | 2.5 VCT-6A | 3 3/4 | 1 7/8 | 2 | 2 1/2 | 1 | 3.45 |
| FT-4 | 5.3 VCT-3A | 3 3/4 | 1 7/8 | 2 | 2 1/2 | 1 | 3.45 |
| FT-5 | 2.5 VCT-10A | 3 3/4 | 2 1/8 | 2 1/2 | 3 1/8 | 1 1/2 | 3.90 |
| FT-6 | 5 VCT-3A | 3 3/4 | 2 1/8 | 2 1/2 | 3 1/8 | 1 1/2 | 4.05 |
| FT-7 | 7.5 VCT-3A | 3 3/4 | 2 1/8 | 2 1/2 | 3 1/8 | 1 1/2 | 4.05 |
| FT-8 | 6.3 VCT-8A | 4 | 2 1/2 | 2 3/4 | 3 3/4 | 2 1/2 | 4.80 |
| FT-10 | 24 VCT-2A or 12V-4A | 4 | 2 3/4 | 2 1/2 | 3 3/8 | 2 1/2 | 5.10 |
| FT-11 | 24 VCT-1A or 12 V-2A | 3 3/4 | 2 1/8 | 2 3/4 | 3 1/8 | 1 1/2 | 4.50 |
| FT-12 | 36 VCT-1.3A or 18 V-2.6A | 4 | 2 3/4 | 2 3/4 | 3 3/4 | 2 1/2 | 5.10 |

Taps on pri. of FT-13 & FT-14 to modify sec. nominal V, -6% +6%, +12%

| | | | | | | | |
|-------|-------------|-------|-------|-------|-------|-----|--------|
| FT-13 | 26 VCT-0.4A | 2 1/4 | 1 3/4 | 1 1/4 | 1 3/4 | 1/2 | \$3.30 |
| FT-14 | 26 VCT-2.5A | 2 1/4 | 1 3/4 | 1 1/4 | 2 1/4 | 3/4 | 3.75 |

TRANSISTOR/FILAMENT TRANSFORMERS

Pri. 115 x 50/60 Cycles; Bridge Rectifier 5-77 & 5-78 Tapped For Dual Secondary Voltages

| UTC Type | DCV | DCA | Case No. See Page 11 | Net Each |
|----------|--------|-------|----------------------|----------|
| 5-75 | 5.2/14 | 1.2/4 | G-1 | 6.00 |
| 5-76 | 10/26 | 4/14 | G-4 | 9.00 |
| 5-77 | 14/56 | 3/1 | G-5 | 10.20 |
| 5-78 | 28/110 | 9/3 | G-10 | 30.00 |

TRANSISTOR/FILAMENT SUPPLY TRANSFORMERS

Primary 115 volts 50/60 cycles

| Type No. | Sec. V RMS | Sec. A | In Parallel | | | In Series | | | Case No. | Net Each | |
|----------|------------|--------|-------------|-----|----------|-----------|-------|----------|----------|----------|---------------|
| | | | DCV | DCV | C in DCA | DCV | DCV | C in DCA | | | |
| CG-30 | 17/21.5 | 1.5 | 14/17.5 | 3 | 18.5/25 | 2 | 28/35 | 1.5 | 43/56 | 1 | RC-112\$18.90 |
| | | | 17/21.5 | 1.5 | | | | | | | |
| CG-31 | 34/43 | 4.5 | 28/35 | 9 | 43/56 | 6 | 56/70 | 4.5 | 85/110 | 3 | RC-175 42.00 |
| | 34/43 | 4.5 | | | | | | | | | |
| CG-32 | 6.3VCT | 1.2 | | | | | | | | | RC-62 10.50 |

FILAMENT/TRANSISTOR SUPPLY TRANSFORMERS

Primary 105, 115, 210, 220, 230 volts, 50/60 cycles, except CG-34 . . . 105, 115, 220, 230. These transformers may be used on 25 to 43 cycles if 220 volt primary is used on 110 volts. Secondary voltage is simultaneously reduced to half.

| Type No | Sec. C. T. | Volts | Working Amps. | Sec. Test Volts | Case No. See Page 9 | Net Each |
|---------|------------|-------|---------------|-----------------|---------------------|----------|
| CG-33 | 6.3 | 4 | 500 | 2000 | RC-75 | \$ 9.00 |
| CG-34 | 2.5 | 10 | 2500 | 6000 | RC-112 | 10.20 |
| CG-120 | 2.5 | 10 | 5000 | 11000 | RC-125 | 15.00 |
| CG-121 | 5 | 25 | 5000 | 11000 | RC-150 | 18.00 |
| CG-122 | 7.5/6.3 | 10 | 1500 | 4000 | RC-125 | 15.00 |
| CG-124 | 10 | 10 | 1500 | 4000 | RC-150 | 15.00 |
| CG-125 | 14/12/11 | 10 | 1500 | 4000 | RC-150 | 18.00 |
| CG-126 | 14/11/10 | 10 | 1500 | 4000 | RC-152 | 24.00 |
| | 14/11/10 | 10 | | | | |



RC CASE See Pg. 9

HERMETIC COMPONENTS Hermetically sealed to MIL-T-27A

HERMETIC AUDIO UNITS



RC-25



RC-50



FH



SM

These extremely compact units are proved to specifications of MIL-T-27A. Response & level ratings: RC-25: Similar to Oncoers for case (1 1/2" x 1 1/4" x 1 1/4", h. 1.5 oz.). RC-50: Similar to ultra compact units for case (1 1/2" x 1 1/2" x 2 1/4", h. 8 oz.). SM: Similar to SSO units for case (1 1/4" x 1 1/2" x 2 1/2", h. 0.8 oz.). FH: 2 1/2" x 2 1/2" x 3/16", h. .8 oz.

| UTC Type | Application | Pril. Imped., Ohms | Sec. Imped., Ohms | # | Net Each |
|----------|--------------------|---|------------------------------------|---|----------|
| H-1 | Line to grid | 50, 200 CT, 500 CT | 50K | a | \$9.00 |
| H-2 | Mike to grid | 82, 50 ma | 135K | a | 9.90 |
| H-3 | Pl. to grid | 15K | 60K | a | 7.40 |
| H-4 | Pl. to grid | 15K, 4 ma | 60K | a | 12.00 |
| H-5 | Pl. to p-p | 15K | 95K CT | a | 8.00 |
| H-6 | Pl. to p-p | 15K, 4 ma | 95K split | a | 10.20 |
| H-7 | Pl. to line | 20K CT, 4 ma | 150/600 | a | 9.40 |
| H-8 | Mixing | 150/600 | 600 CT | a | 9.00 |
| H-9 | Input | 150/600 | 1 meg. | a | 9.00 |
| H-10 | Pl. to grid | 10K | 1 meg. | a | 8.40 |
| H-11 | Reactor: 300 hys. | 50 hys @ 3 ma, 400 ohms | | a | 12.50 |
| H-12 | Line to p-p | 50, 200 CT, 500 CT | 50K CT | a | 9.40 |
| H-13 | Interstage | 10K/2.5K split | 2K/.5K split | a | 9.00 |
| H-14 | Interstage | 10K/2.5K split | 4K/1K split | a | 9.00 |
| H-15 | Tr. to line | 1.5K CT | 500/125 split | a | 9.00 |
| H-16 | Tr. to V.C. | 2K/4K CT | 8/16 | a | 9.00 |
| H-17 | Tr. input | 600/150 split | 2K/500 split | a | 8.70 |
| H-18 | Tr. Interstage | 10K CT | 500/125 split | a | 8.70 |
| H-19A | Input* | 250 CT/500 CT | 50K/100 CT | b | 14.50 |
| H-19B | Interstage | 15K split | 80K split | b | 15.00 |
| H-20 | Pl. to p-p | 15K, 8 ma | 80K split | b | 18.00 |
| H-21 | Tr. Interstage | 500 CT | 500/125 split | a | 9.00 |
| H-22 | Tr. Interstage | 15K, 8 ma | 50/200, 125/500 | a | 15.00 |
| H-23 | Tr. Interstage | 500/125 split | 500/125 split | a | 8.70 |
| H-24 | Tr. Interstage | 500/125 split | 150/37.5 split | a | 8.70 |
| H-221 | Split Inductor: | Series: 40 Mhy-80 ma, 4 ohms Parallel: 15 Mhy-160 ma, 1 ohm | | a | 6.00 |
| H-224 | Split Inductor: | Series: 1 Hy-20 ma, 60 ohms Parallel: 25 Hy-40 ma, 15 ohms | | b | 14.20 |
| H-23 | P-p to line | 30K split | 300/700, 125/500 | b | 10.80 |
| H-24 | Inductor: 250 hys. | @ 5 mat, 65 hys, @ 10 mat | | b | 10.80 |
| H-25 | Mixing | 500 CT | 125/500 | b | 15.00 |
| H-26 | Interstage | 10K/2.5K split | 2K/500 split | b | 15.00 |
| H-27 | Tr. to V.C. | 500 CT | 16/4 split | b | 15.00 |
| H-28 | Interstage | 200 CT | 400 split | b | 12.00 |
| H-281 | Tr. to V.C.† | 48 CT | 16, 8, 4 | b | 12.00 |
| H-282 | Tr. to V.C.†† | 20 CT | 16, 8, 4 | b | 12.00 |
| H-283 | Mixing/Matching | 50, 125/150, 200/250, 333, 500/600 | 50, 125/150, 200/250, 333, 500/600 | b | 17.40 |
| H-284 | Split Inductor: | Series: 4 Hys-50 ma, 100 ohms Parallel: 1 Hy-100 ma, 25 ohms | | b | 7.20 |
| H-284 | Split Inductor: | Series: 40 Hys-15 ma, 1000 ohms Parallel: 10 Hys-30 ma, 250 ohms | | b | 7.50 |
| H-290 | Shld. chopper | 2500 e. s. | 100K | b | 19.80 |
| H-291 | Max. shld. chop. | 2000/500 e. s. | 312K | c | 28.80 |
| H-30 | Input | 10K | 62,500 | d | 8.40 |
| H-31 | Pl. to grid | 50 | 90K | d | 8.40 |
| H-32 | Pl. to line | 10K, 3 ma | 200 | d | 8.40 |
| H-33 | Output | 30K, 1 ma | 50 | d | 8.40 |
| H-35 | Inductor: 100 hys. | 30 hys, @ 1 ma, 4000 ohms | | d | 6.90 |
| H-36 | Interstage | 2K, 0.5 ma | 500 CT | d | 8.00 |
| H-37A | Tr. output | 500 CT | 1K | d | 7.50 |
| H-38 | Interstage | 10K CT, 2 ma | 1.2K CT | d | 7.50 |
| H-39 | Interstage | 10K CT, 2 ma | 1.2K CT | d | 7.50 |
| H-40A | Tr. output | 500 CT | 600 CT | d | 7.50 |
| H-41A | Tr. output | 1500 CT | 600 CT | d | 7.50 |
| H-42A | Isol./Tr. Inter. | 10K CT | 10K CT | d | 7.50 |
| H-42B | Tr. Interstage | 10K CT/2.5K split | 200 CT/50 split | e | 8.10 |
| FNA-25 | Tr. Interstage | 20K CT/5K split | 800 CT/200 split | e | 8.10 |
| FMI-3 | Split Inductor: | Series: 60 Mhy-32 ma, 6 ohms Parallel: 15 Mhy-64 ma, 1.5 ohms | | e | 6.00 |
| FMI-7 | Split Inductor: | Series: 1 Hy-8 ma, 100 ohms Parallel: 25 Hy-16 ma, 25 ohms | | e | 6.00 |
| FMI-11 | Split Inductor: | Series: 2.4 Hys-2 ma, 160 ohms Parallel: .6 Hys-4 ma, 40 ohms | | e | 6.00 |

*Has 75 db shielding, 16000 ohms, 11500 ohms, 65 watts, 1110 watts.
†Case: a-RC-25, b-RC-50, c-RC-52, d-SM, e-FH. (See above & pg. 9)

HERMETIC SEALED FILTER INDUCTORS TUBE AND TRANSISTOR TYPE



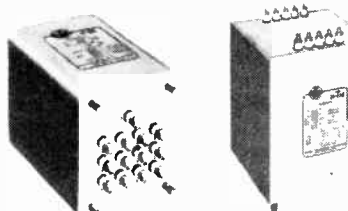
METAL CASED TUBE TYPE H-70 thru H-79, H-164 thru H-173
MOLDED MIL TYPE TF55X04ZZ H-105 thru H-109 & H-300

The multiple ratings for the "H" series of filter chokes suit these units for the complete gamut of military and industrial applications. Transistor supply units are swinging type to enhance regulation. H-79 terminals opposite mounting. *Relates to ripple voltage, in input filter circuits only.

| Type No. | Ind. Hys. | @ DC MA | Res. Ohms | Max. DCV* Ch. Input | Test V. RMS | MIL Case | Net Each |
|----------|--------------|---------|-----------|---------------------|-------------|----------|-----------|
| H-70 | 20 | 20 | 925 | 350 | 1000 | AH | \$ 7.20 |
| H-71 | 20 | 40 | 350 | 500 | 2500 | FB | 8.40 |
| H-72 | 13 | 70 | 215 | 500 | 2500 | GB | 9.00 |
| H-73 | 11 | 100 | 150 | 700 | 2500 | HB | 11.40 |
| H-74 | 11 | 150 | 120 | 700 | 2500 | JB | 12.90 |
| H-75 | 11 | 200 | 90 | 700 | 2500 | KB | 17.40 |
| H-76 | 11 | 200 | 85 | 1500 | 4500 | LB | 24.00 |
| H-77 | 7 | 300 | 60 | 2000 | 6000 | MB | 27.00 |
| H-78 | 7 | 400 | 48 | 2500 | 7000 | OA | 34.50 |
| H-79 | 7 | 800 | 20 | 3000 | 9000 | 7x7x8 | 90.00 |
| H-164 | 11 | 30 | 1.2 | 500 | AG | | 6.40 |
| H-165 | 11.25 | 70 | .995 | | | | |
| H-166 | 125 | 50 | 1.2 | 500 | AH | | 7.50 |
| H-167 | 312 | 100 | .3 | | | | |
| H-168 | 485 | 100 | .8 | 750 | AJ | | 8.40 |
| H-170 | 172 | 200 | .2 | | | | |
| H-171 | .18 | 125 | .6 | 1000 | GB | | 10.20 |
| (2 wdg.) | .045 | 250 | .15 | | | | |
| H-172 | .91 | .75A | .03 | 1000 | JA | | 15.00 |
| (2 wdg.) | 2.25 | 1.5A | .0075 | | | | |
| H-173 | .705 | .25A | .22 | 1000 | HA | | 12.40 |
| (2 wdg.) | 17.5 | .5A | .055 | | | | |
| H-173 | .901 | .5A | .15 | 1000 | KA | | 21.00 |
| (2 wdg.) | 22.5 | 1A | .038 | | | | |
| Type No. | Inductance | DCR | Test | | | | |
| | Henries @ DC | MA | Ohms | L | W | H | Wgt. Lbs. |
| H-105 | 2.5 @ 25 MA | 225 | 1000 | 1 1/4 | 1 1/4 | 1 1/4 | 1.1 |
| H-106 | 2.25 @ 60 MA | 110 | 1000 | 1 1/2 | 1 1/2 | 1 1/2 | .28 |
| H-107 | 2 @ 120 MA | 55 | 2500 | 2 1/2 | 1 1/2 | 1 1/2 | .9 |
| H-108 | 2 @ 220 MA | 35 | 2500 | 2 1/2 | 2 1/2 | 2 1/2 | 1.7 |
| H-109† | 2 @ 150 MA | 7 | 2500 | 2 1/2 | 2 1/2 | 2 1/2 | 1.7 |
| (2 wdg.) | .06 @ 250 MA | .15 | | | | | 10.80 |
| H-300 | 1 @ 5 MA | 40 | 500 | 1 | 3/4 | 3/4 | 0.5 |
| (2 wdg.) | .25 @ 10 MA | 10 | | | | | 6.30 |

*Split winding series *Split winding in parallel
†Rated in millihenries

HERMETIC SEALED POWER and PLATE TRANSFORMERS



H-114, H-115, H-117 have terminals opposite mounting.

Power transformers: primary 115V, 60 cycles suited to 50-1000 cycles service. Plate transformers: primary 105/115/210/220 volts, 50/60 cycles. "L" ratings are choke input. "C" ratings are condenser input. H-80 thru H-197 MIL type TF4RX03, H-110 thru H-117 MIL type TF4RX02. The tapped high voltage winding provides either of two secondary voltages for greatest versatility. The power transformer listings indicate DC voltages and permissible currents for both choke and condenser input filters, as well as for military and industrial applications.

"W" suffix units designed for full wave center tap and full wave bridge application. Center tap of secondary may be disconnected from ground.

| MIL-T-27A Ratings in Regular Type | Industrial Ratings in Bold Type | Type No. | | HV Sec. Approx. C. T. | DC Volts | Approx. DC Volts | DC MA | Fil. Wdg. | Fil. Wdg. | MIL Case | Net Each |
|-----------------------------------|---------------------------------|-------------|-----------|---|-------------|------------------|-------|-----------|-----------|----------|----------|
| H-80 | 450 C 240 30 | 6.3VCT-2A | C 215 | 38 | 6.3VCT-2.5A | HA | 18.00 | | | | |
| H-81 | 500 L 170 95 | L 160 110 | C 245 75 | 6.3VCT-3A | HA | 18.00 | | | | | |
| H-81 | 550 L 200 85 | L 180 105 | C 280 65 | 5V-2A | | | | | | | |
| H-81 | 550 L 180 145 | L 160 190 | C 270 115 | 6.3VCT-4A | JB | 20.40 | | | | | |
| H-82 | 600 L 215 135 | L 190 180 | C 315 100 | 5V-2A | | | | | | | |
| H-82 | 600 L 215 165 | L 200 210 | C 280 65 | 6.3V-5A | JA | 21.00 | | | | | |
| H-83 | 670 C 315 100 | C 320 120 | L 230 200 | 6.3V-5A | | | | | | | |
| H-83 | 670 L 250 150 | L 230 200 | C 380 110 | 5V-2A | | | | | | | |
| H-84 | 700 L 245 225 | L 240 255 | C 375 160 | 6.3V-6A | KA | 26.40 | | | | | |
| H-84 | 750 L 275 205 | L 270 230 | C 410 150 | 6.3V-1.5A | | | | | | | |
| H-84 | 750 C 430 125 | C 410 150 | L 230 370 | 5V-4A | | | | | | | |
| H-85 | 700 L 245 300 | L 230 370 | C 355 230 | 6.3V-6A | LA | 30.00 | | | | | |
| H-85 | 750 L 270 280 | L 250 350 | C 395 210 | 6.3V-2A | | | | | | | |
| H-85 | 750 C 425 170 | C 395 210 | L 250 360 | 5V-4A | | | | | | | |
| H-86 | 720 L 270 310 | L 250 360 | C 395 225 | 6.3V-7.5A | M8 | 30.90 | | | | | |
| H-86 | 790 L 295 300 | L 280 350 | C 440 210 | 6.3V-2A | | | | | | | |
| H-86 | 790 C 475 160 | C 440 210 | L 230 515 | 5V-4A | | | | | | | |
| H-87 | 800 L 245 420 | L 230 515 | C 390 300 | 6.3V-6A | NB | 36.00 | | | | | |
| H-87 | 800 C 390 275 | C 390 300 | L 275 480 | 6.3V-2A | | | | | | | |
| H-87 | 800 C 440 250 | C 430 290 | L 275 480 | 5V-6A | | | | | | | |
| H-89 | 850 L 305 430 | L 275 550 | C 445 340 | 6.3V-10A | OA | 49.50 | | | | | |
| H-89 | 1050 L 400 400 | L 370 500 | C 575 320 | 6.3V-5A | | | | | | | |
| H-89 | 1050 C 600 260 | C 575 320 | L 330 220 | 6.3V-6A | | | | | | | |
| H-91 | 900 L 340 200 | L 330 220 | C 385 195 | 6.3V-1.5A | KA | 27.00 | | | | | |
| H-91 | 1000 L 390 190 | L 385 195 | L 330 210 | 6.3V-8A | MB | 33.00 | | | | | |
| H-92 | 900 L 340 265 | L 330 310 | C 395 290 | 6.3V-2A | | | | | | | |
| H-92 | 1050 L 400 240 | L 395 290 | L 330 210 | 5V-4A | | | | | | | |
| H-93 | 1000 L 370 300 | L 340 390 | C 455 350 | 6.3V-10A | OA | 49.50 | | | | | |
| H-93 | 1200 L 465 265 | L 455 350 | L 340 390 | 6.3V-5A | | | | | | | |
| H-194** | 200 L 170 140 | L 160 155 | C 260 95 | 6.3V-3.5A | HA | 21.00 | | | | | |
| H-194** | 235 L 200 125 | L 190 135 | C 310 85 | | | | | | | | |
| H-194** | 235 C 325 75 | C 310 85 | L 175 300 | | | | | | | | |
| H-195** | 215 L 185 285 | L 175 300 | C 285 195 | 6.3V-6A | JA | 24.00 | | | | | |
| H-195** | 265 C 300 180 | C 285 195 | L 220 255 | | | | | | | | |
| H-195** | 265 C 375 150 | C 360 165 | L 190 480 | | | | | | | | |
| H-196** | 230 L 200 445 | L 190 480 | C 300 300 | 6.3V-6A | KA | 30.00 | | | | | |
| H-196** | 285 C 320 280 | C 300 300 | L 240 420 | 6.3V-2A | | | | | | | |
| H-196** | 285 C 400 235 | C 380 260 | L 220 550 | | | | | | | | |
| H-197** | 260 L 230 500 | L 220 550 | C 340 350 | 6.3V-7A | MB | 42.00 | | | | | |
| H-197** | 320 L 280 420 | L 270 470 | C 430 290 | 6.3V-2A | | | | | | | |
| H-197** | 320 C 450 260 | C 430 290 | L 1000 5 | 1.25 V-2A connected to one end of HV winding. | | | | | | | |
| H-198 | 800 | 1000 | 5 | 6.3 V-.6A 5.2 KV RMS test voltage | HA | 27.00 | | | | | |
| Highly shielded | 1600 | 2000 | 5 | | | | | | | | |
| Scope transformer | 2400 | 3000 | 5 | | | | | | | | |
| H-110† | 1050 L 365 300 | L 400 385</ | | | | | | | | | |



HERMETIC COMPONENTS *Hermetically sealed to MIL-T-27A*

MAGNETIC AMPLIFIERS FOR SERVO MOTOR APPLICATIONS

VACUUM TUBE TYPE



The MAT 1-4 Magnetic Amplifiers are exceptionally stable units designed for the control of 2 phase, 115V., 400 cycle servo motors. They are compact... hermetically sealed... magnetically shielded... and meet MIL-T-27A and MIL-E-5400 Specifications. The output is sinusoidal, amplitude variable, and phase reversible. Control is provided by a dual triode such as 12AU7 operating with a plate voltage of 115 volts, 400 cycles, or higher. The signal to the triode grids can be polarity reversible DC or phase reversible 400 cycles with or without suppressed carrier modulation. These units eliminate DC power requirements as well as temperature sensitive dry disc rectifiers. The high input impedance provides minimum loading on sensing elements and high power gain. Ringing at low load level has been reduced to a minimum through high internal damping factors. The power output figures are conservative... power gain of the Magnetic Structure is approximately 40... response time approximately 7.5 milliseconds. The maximum null voltage is 3 volts RMS. For single phase supply voltage the load capacitor should effect 90° phase shift with motor load... for 3 phase, 30° phase shift.

| Type No. | MAT-1 | MAT-2 | MAT-3 | MAT-4 |
|------------------------|---------------|-----------|---------------|---------------|
| 230 Volt Supply | | | | |
| Power output | 4 W. | 8 W. | 11 W. | 18 W. |
| RL, ohms | 3300 | 1600 | 1200 | 720 |
| CL, mfd., approx. | .2 | .3 | .5 | .7 |
| 115 Volt Supply | | | | |
| Power output | 2 W. | 4 W. | 6 W. | 9 W. |
| RL, ohms | 6500 | 3300 | 2200 | 1450 |
| CL, mfd. | .13 | .2 | .3 | .45 |
| Reson. Freq. | 40 cyc. | 35 cyc. | 35 cyc. | 20 cyc. |
| Log-Decr. | .18 | .23 | .03 | .65 |
| Cont. Wdg. Res. | 6200 ohms | 8450 ohms | 4750 ohms | 5650 ohms |
| Case Length, in. | 1 1/4 | 1 1/2 | 1 3/4 | 2 1/8 |
| Width, in. | 1 1/4 | 2 1/8 | 2 1/2 | 3 1/8 |
| Height, in. | 2 3/8 | 2 3/4 | 2 1/2 | 3 3/8 |
| Mtg. Dim., in. | 1 3/8 x 1 1/2 | 1 x 1 5/8 | 1 1/8 x 1 7/8 | 1 1/2 x 2 1/2 |
| Studs, stainless | 4-40 | 6-32 | 8-32 | 8-32 |
| Cutout, in. | 1 | 1 | 1 | 1 |
| Unit Weight, lbs. | .67 | 1.1 | 1.7 | 2.75 |
| Net Each | \$27.00 | \$30.00 | \$36.00 | \$39.00 |

MAT-5 115V.-400 cyc. to 460 VCT; provides 230V. 48 MA DC or 460V. 24 MA DC. RC-37 Case (UTC pg. 9). MIL type TF45Y02YY. Net Each \$10.80

MAT-6 Input... 10,000 ohms pri... 1:15 C.T. ratio... phase shift under 1°... RC-25 case (UTC pg. 5). MIL-type TF4RX10YY. Net Each \$9.00

TRANSISTOR TYPE

UTC transistor MAT units are identical to their vacuum tube counterparts, but designed for low impedance control. The input transformer may be chosen by impedance ratio rather than precise rated impedance.

| Type No. | MAT-7 | MAT-8 | MAT-9 | MAT-10 | MAT-60 |
|------------------|---------------|-----------|---------------|---------------|---------------|
| Power output | 4 W. | 8 W. | 11 W. | 18 W. | 50 W. |
| RL, ohms | 3300 | 1600 | 1200 | 720 | 260 |
| CL, mfd approx. | .2 | .3 | .5 | .7 | .7 |
| Cont. Wind. Res. | 38Ω | 52Ω | 30Ω | 36Ω | 50 |
| Case Length, in. | 2 3/8 | 2 1/2 | 2 3/4 | 2 7/8 | MIL MB |
| Width, in. | 1 1/4 | 2 1/4 | 2 1/2 | 2 7/8 | |
| Height, in. | 1 1/2 | 1 1/4 | 2 | 2 1/4 | |
| Mtg. Dim., in. | 1 3/8 x 1 7/8 | 1 1/8 x 2 | 1 1/8 x 2 1/8 | 2 3/8 x 2 3/8 | 60 cycle type |
| Studs, stainless | 4-40 | 6-32 | 8-32 | 8-32 | |
| Cutout, in. | 1 | 1 | 1 | 1 | |
| Weights, lbs. | .65 | 1.1 | 1.7 | 2.75 | |
| Net Each | \$25.80 | \$28.80 | \$34.50 | \$37.50 | \$54.00 |

MAT-11 115V.-400 cyc. to two 28 Volt .2A windings for 56 VCT-.2A or 28 V-.4 A. RC-37 (UTC pg. 9) case. MIL type. TF45Y02YY. Net Each \$10.05

MAT-65 115V. 60 cyc. to 8.5 VCT @ 500 ma & 63 VCT @ 300 ma. FA case. MIL Type TF45X02FA. Net Each 12.60

ULTRASHIELDED POWER-LINE ISOLATION TRANSFORMERS

Simulates battery operation for critical circuits requiring extreme isolation from power line.

Designed to give the ultimate in isolation, for line-powered equipment, which formerly could only be obtained from battery power. The effective capacity coupling between primary and secondary windings is less than 0.1 MMFD.

For this purpose shields are individually terminated to allow maximum flexibility. Input and output terminals are brought out on opposite sides of a special housing in order to maintain the excellent isolation between line and load.



MIL-T-27A Ratings in Regular Type Industrial Ratings in Bold Type Primary 115 V 50/60 Cycles Secondary 115 V

| Type No. | Power Watts | Power Watts | Case Size | Net Each |
|----------|-------------|-------------|------------------------|----------|
| HIT-1 | 50 | 60 | 4 1/2 x 4 1/2 x 3 1/2" | \$33.00 |
| HIT-15 | 120 | 150 | 5 1/2 x 5 x 3 1/2" | 39.00 |
| HIT-2 | 160 | 200 | 5 1/2 x 5 1/2 x 4 1/2" | 48.00 |
| HIT-3 | 400 | 480 | 8 x 6 1/2 x 5 1/2" | 69.00 |

PRECISION MINIATURE WIDE APPLICATION PULSE TRANSFORMERS

UTC miniature, wound core, pulse transformers are individually precision adjusted in standard test circuits to close tolerances. They are high reliability units, hermetically sealed by vacuum molding and suited for service from -70° C. to +130° C. Wound core structure provides excellent temperature stability (un-

like ferrite). Designs are high inductance type to provide minimum of droop and assure true pulse width. H-45 thru H-57 ratio 1:1:1. H-60 thru H-69 ratio 4:4:1. Others ratio 5:3:1.

See PIP pulse units on UTC page 1

ALL UNITS INDIVIDUALLY ADJUSTED TO PARAMETERS SHOWN IN TABLES

TRANSISTOR PULSE TRANSFORMERS

| Type No. | APPROX. DCR, OHMS | | | BLOCKING OSCILLATOR PULSE | | | | COUPLING CIRCUIT CHARACTERISTICS | | | | | | | Net Each | |
|----------|---|------|------|---------------------------|-----------|--------------|---------|----------------------------------|----------------|-----------|-----------|--------------|---------|---------------|----------|---------|
| | 1-2 | 3-4 | 5-6 | Width μ Sec. | Rise Time | Over Shoot % | Droop % | Back Swing % | P Width μ Sec. | Volts Out | Rise Time | Over Shoot % | Droop % | Back in, ohms | | |
| H-60 | .124 | .14 | .05 | .05 | .016 | 0 | 0 | 30 | .05 | 9.3 | .012 | 0 | 0 | 20 | 50 | \$ 6.60 |
| H-61 | .41 | .48 | .19 | .1 | .016 | 0 | 0 | 30 | .1 | 8.2 | .021 | 0 | 0 | 15 | 50 | 6.60 |
| H-62 | .78 | .94 | .33 | .2 | .022 | 0 | 0 | 18 | .2 | 7.4 | .034 | 0 | 5 | 12 | 100 | 6.60 |
| H-63 | 1.86 | 2.26 | .70 | .5 | .027 | 2 | 10 | 20 | .5 | 7.5 | .045 | 0 | 20 | 25 | 100 | 6.60 |
| H-64 | 3.73 | 4.4 | 1.33 | 1 | .033 | 0 | 12 | 25 | 1 | 7 | .078 | 0 | 15 | 23 | 100 | 6.60 |
| H-65 | 6.2 | 7.3 | 2.22 | 2 | .066 | 0 | 15 | 25 | 2 | 6.6 | .14 | 0 | 10 | 20 | 100 | 7.50 |
| H-66 | 10.2 | 12 | 3.6 | 3 | .087 | 0 | 18 | 30 | 3 | 6.8 | .17 | 0 | 10 | 20 | 100 | 7.50 |
| H-67 | 14.5 | 17.5 | 5.14 | 5 | .097 | 0 | 23 | 28 | 5 | 7.9 | .2 | 0 | 18 | 28 | 200 | 7.50 |
| H-68 | 42.3 | 52.1 | 14.8 | 10 | .14 | 0 | 15 | 28 | 10 | 6.5 | .4 | 0 | 15 | 30 | 200 | 7.50 |
| H-611 | .426 | .32 | .132 | .1 | .018 | 8 | 0 | 12 | .1 | 8.2 | .02 | 0 | 0 | 30 | 140/50 | 6.60 |
| H-641 | 5 | 3.6 | 1.4 | 1 | .04 | 0 | 10 | 10 | 1 | 7 | .07 | 0 | 20 | 30 | 280/100 | 6.60 |
| H-671 | 21 | 16 | 6 | 5 | .08 | 0 | 14 | 12 | 5 | 8 | .2 | 0 | 25 | 30 | 560/200 | 7.50 |
| H-69 | Transistor pulse transformer kit, consists of H-60 thru H-68 in plastic case. | | | | | | | | | | | | | | 60.00 | |

VACUUM TUBE PULSE TRANSFORMERS

| Type No. | APPROX. DCR, OHMS | | | BLOCKING OSCILLATOR PULSE | | | | COUPLING CIRCUIT CHARACTERISTICS | | | | | | | DIMENSIONS | | | | |
|----------|--|-----|-----|---------------------------|-----------|--------------|---------|----------------------------------|----------------|-----------|-----------|--------------|---------|--------------|----------------|-------|-------|-----------|----------|
| | 1-2 | 3-4 | 5-6 | Width μ Sec. | Rise Time | Over Shoot % | Droop % | Back Swing % | P Width μ Sec. | Volts Out | Rise Time | Over Shoot % | Droop % | Back Swing % | Imp. out, ohms | L in. | W in. | Wt. Grams | Net Each |
| H-45 | 3 | 3.5 | 4 | .05 | .022 | 0 | 20 | 10 | .05 | 17 | .01 | 20 | 0 | 35 | 250 | 3/8 | 3/8 | 1 | \$ 6.75 |
| H-46 | 5.5 | 6.5 | 7 | .10 | .024 | 0 | 25 | 10 | .10 | 19 | .01 | 30 | 10 | 50 | 250 | 3/8 | 3/8 | 1 | 6.75 |
| H-47 | 3.7 | 4.0 | 4 | .20 | .026 | 0 | 25 | 8 | .20 | 18 | .01 | 30 | 15 | 65 | 500 | 3/8 | 3/8 | 4 | 6.00 |
| H-48 | 5.5 | 5.8 | 6 | .50 | .03 | 0 | 20 | 5 | .50 | 20 | .01 | 30 | 20 | 65 | 500 | 3/8 | 3/8 | 4 | 6.00 |
| H-49 | 8 | 8.5 | 9 | .1 | .04 | 0 | 20 | 10 | 1 | 24 | .02 | 15 | 15 | 65 | 500 | 3/8 | 3/8 | 4 | 6.00 |
| H-50 | 20 | 21 | 22 | 2 | .05 | 0 | 20 | 10 | 2 | 27 | .05 | 10 | 15 | 35 | 500 | 3/8 | 3/8 | 4 | 6.00 |
| H-51 | 28 | 31 | 33 | 3 | .10 | 1 | 20 | 8 | 3 | 26 | .07 | 10 | 10 | 35 | 500 | 3/8 | 3/8 | 4 | 6.00 |
| H-52 | 36 | 41 | 44 | 5 | .13 | 1 | 25 | 8 | 5 | 23 | .15 | 10 | 10 | 45 | 1000 | 3/8 | 3/8 | 4 | 6.00 |
| H-53 | 37 | 44 | 49 | 7 | .28 | 0 | 25 | 8 | 7 | 24 | .20 | 10 | 10 | 50 | 1000 | 3/8 | 3/8 | 6 | 6.00 |
| H-54 | 50 | 58 | 67 | 10 | .30 | 0 | 20 | 8 | 10 | 24 | .25 | 10 | 10 | 50 | 1000 | 3/8 | 3/8 | 6 | 6.30 |
| H-55 | 78 | 96 | 112 | 16 | .75 | 0 | 20 | 10 | 16 | 23 | .40 | 5 | 15 | 20 | 1000 | 3/8 | 3/8 | 6 | 6.30 |
| H-56 | 93 | 116 | 138 | 20 | 1.25 | 0 | 25 | 10 | 20 | 23 | .6 | 5 | 10 | 10 | 1000 | 3/8 | 3/8 | 6 | 6.30 |
| H-57 | 104 | 135 | 165 | 25 | 2.0 | 0 | 30 | 10 | 25 | 24 | 1.5 | 5 | 10 | 10 | 1000 | 3/8 | 3/8 | 6 | 6.30 |
| H-461 | 9.6 | 6.4 | 2.5 | .1 | .025 | 0 | 0 | 8 | .1 | 19 | .02 | 3 | 5 | 20 | 700/250 | 3/8 | 3/8 | 1 | 6.75 |
| H-501 | 30 | 20 | 7 | 2 | .08 | 0 | 12 | 5 | 2 | 27 | .06 | 12 | 15 | 35 | 1400/500 | 3/8 | 3/8 | 4 | 6.00 |
| H-531 | 66 | 47 | 17 | 7 | .32 | 0 | 12 | 3 | 7 | 24 | .23 | 12 | 10 | 40 | 2800/1000 | 3/8 | 3/8 | 6 | 6.00 |
| H-561 | 180 | 142 | 53 | 20 | 1.75 | 0 | 13 | 5 | 20 | 23 | .7 | 5 | 10 | 10 | 2800/1000 | 3/8 | 3/8 | 6 | 6.30 |
| H-58 | Pulse transformer kit. Consisting of H-45 thru H-57 in a partitioned plastic case. | | | | | | | | | | | | | | | | | 75.00 | |

Size & weight of H-60 thru H-68 same as H-45.



HI-FI & BROADCASTING COMPONENTS

ULTRACOMPACT HI-FI AUDIOS

Small light weight, wide range units. Level +15 dbm except where otherwise noted. Top and bottom mounting. Die cast case, 1 1/2" x 1 1/2" x 2" h. Weight, 1/2 lb.

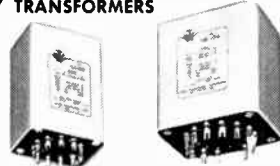


| UTC Type | Application | Primary Impedance, Ohms | Sec. Imped., Ohms | # | Net Each |
|----------|---|---|---------------------|---|----------|
| A-10 | Input | 50, 125/150, 200/250, 333, 500/600 | 50K split | a | \$13.20 |
| A-11 | Shield. Input | 50, 200, 500 | 50K CT | a | 12.00 |
| A-12 | Input | Same as A-10 | 80K split | a | 12.00 |
| A-15 | Interstage* | 10K/2.5K split** | 2K/500 sp. | c | 9.90 |
| A-16 | Pl. to grid | 15K | 60K | a | 9.90 |
| A-17 | Pl. to grid | 15K, 8 ma | 60K | c | 12.00 |
| A-18 | Pl. to p-p | 15K split | 80K split | a | 12.00 |
| A-19 | Pl. to p-p | 15K, 8 ma | 80K split | c | 12.00 |
| A-20 | Mixing | Same as A-10 | Same as pri. | d | 14.40 |
| A-21 | Shield Mixing | 50, 200/250, 500/600 | Same as pri. | e | 12.00 |
| A-22 | Tr. to line* | 500 CT | 500/125 spl. | c | 9.90 |
| A-23 | Tr. to V.C.* | 500 CT | 16/4 split | c | 9.90 |
| A-24 | Pl. to line | 15K split | See A-10 pri. | f | 12.90 |
| A-25 | Pl. to line | 15K, 8 ma | See A-10 pri. | c | 12.00 |
| A-26 | P-p to line | 30K CT | See A-10 pri. | f | 13.20 |
| A-27 | Input | 100K split | See A-10 pri. | b | 12.00 |
| A-28 | Tr. to V.C. | 48 CT, 5 w. | 16 (split), 8, 4 | c | 10.20 |
| A-34 | Transistor | 25K/6250 split | 500/125 split | b | 10.20 |
| A-35 | Interstage | 10K/2.5K split | 500/125 split | b | 9.90 |
| A-36 | Interstage | 500/125 split | 150/37.5 split | c | 9.60 |
| A-37 | Interstage | 500/125 split | 50/12.5 split | c | 9.60 |
| A-38 | Interstage | 100/25 split | 40/10 split | c | 9.30 |
| A-39 | line to transit. | 600/150 split | 2K/500 split | a | 11.10 |
| A-30 | Inductor: 250 hys. @ 5 mat; 65 hys @ 10 mat | | | | 10.20 |
| A-32 | Inductor: 60 hys. @ 15 ma; 15 hys @ 30 mat | | | | 6.60 |
| A-33 | Hipermalloy shield fits A units 20 db | | | | 2.70 |
| A-40 | Power transformer: 115v 60 cycles to two 6.3 CT—2A Secs. Reactor: 240 Mhy. @ .2A, 6 ohms; 60 Mhy. @ .4A, 1.5 ohms | | | | 6.30 |
| A-41 | Split Filter (2-wdgs.) | Series: 4 hys-50 ma, 100 ohms Parallel: 1 hy-100 ma, 25 ohms | | | 6.60 |
| A-43 | Matching to 2 simult. lines or Tr. | 600/150 split | (2) 600/150 split g | | 14.10 |

*+30 dbm. †6K ohms. †1.5K ohms. †2K ohms. †1500 ohms. **8 ma. ‡Frequency response (±2 db), cps: a—20-20,000. b—30-20,000. c—40-20,000. d—10-50,000. e—30-30,000. f—20-40,000. g—20-30,000.

HIPERMALLOY TRANSFORMERS

Hipermalloy audio and power transformers are specifically designed for portable and compact service. High fidelity though light in weight and dependable. The frequency characteristic of the Hipermalloy audio units is uniform from 30 to 20,000 cycles. They incorporate a Hipermalloy nickel iron core and hum balanced coil structure. The rugged die cast case is of high conductivity alloy finished in grey, arranged for mounting with the terminals either up or down. DC in Primary shown is maximum unbalanced.



| TYPE H-2 CASE | | TYPE H-1 CASE | |
|---------------|-------------|---------------|----------------|
| Length | 3 3/8" | Length | 2 3/8" |
| Width | 2 1/8" | Width | 1 1/8" |
| Height | 3 1/2" | Height | 3 1/8" |
| Mounting | 2 x 2 3/4" | Mounting | 1 3/8 x 1 1/4" |
| Screws | 6-32 | Screws | 6-32 |
| Cutout | 2 1/8" dia. | Cutout | 1 1/8" dia. |
| Unit Weight | 5 lbs. | Unit Weight | 2 lbs. |

LOW IMPEDANCE TO GRID AND MIXING TRANSFORMERS
Units Housed in Type H-1 Case

| UTC Type | Application | Primary Imped. Ohms | Sec. Imped. Ohms | Level dbm | Net Each |
|----------|---|-------------------------------------|------------------|-----------|----------|
| HA-100 | Line to grid | 50, 125/150, 200, 250, 333, 500/600 | 60K split | +18 | \$17.40 |
| HA-100X | As above but multiple alloy shields for low hum pick up | | | +16 | 17.40 |
| HA-101 | Lineto grids | Same as HA-100 | 120K split | +18 | 22.20 |
| HA-101X | As above but multiple alloy shields for low hum pickup | | | +16 | 18.00 |
| HA-103A | Mike/mixer to grid | 2.5, 5.5, 10, 15, 22, 30, 38, 60 | 60K split | +18 | 15.00 |
| HA-108* | Mixing | Same as HA-100 | 60K split | +20 | 19.80 |
| HA-108X* | As above but multiple alloy shields for low hum pick up | | | +18 | 19.80 |
| HA-130X | Line to grids. | 30, 50, 200, 250 | 60K Split | +18 | 21.00 |

INTERSTAGE AUDIO TRANSFORMERS
Units Housed in Type H-1 Case, except HA-107: in H-2 Case

| UTC Type | Application | Primary Imped. Ohms | Sec. Imped. Ohms | Level Mw. | Net Each |
|----------|----------------|---------------------|------------------|-----------|----------|
| HA-104 | Pl. to grids | 15K split | 95K | 100 | \$15.00 |
| HA-105 | Pl. to grid | 15K | 60K | 100 | 21.00 |
| HA-106 | Pl. to grids | 15K split | 135K | 100 | 18.90 |
| HA-107 | Pl's. to grids | 30K | 80K | 600 | 27.00 |
| HA-137 | Pl's. to grids | 30K | 68K | 100 | 16.80 |

Continued on next column

LINEAR STANDARD TRANSFORMERS

Guaranteed frequency response of ±1 db 20-20,000 cps, ±1 db 7-50,000 cps on high level units, make these ideal transformers for uniform frequency response and low distortion. High efficiency and dependability through shielding. Top and bottom mounting.



LOW LEVEL TRANSFORMERS
Type LS-1 case, 2 3/8" x 3 1/8" x 3 1/4" h. Suffix X indicates multiple alloy shield. Weight, 3 lbs.

| UTC Type | Application | Pri. Imp., Ohms | Sec. mp., Ohms | Level dbm | Net Each |
|----------|------------------------------------|-------------------------------------|-------------------|-----------|----------|
| LS-10 | Input | 50, 125/150, 200, 250, 333, 500/600 | 60K split | +19 | \$24.00 |
| LS-10X | Input | As above | 50K | +17 | 24.00 |
| LS-12 | Input | As above | 120K split | +19 | 27.00 |
| LS-12X | Input | As above | 80K split | +17 | 24.00 |
| LS-30 | Mixing | As above | Same as pri. | +23 | 24.00 |
| LS-30X | Mixing | As above | Same as pri. | +20 | 27.00 |
| LS-19 | Pl. to grids | 15K | 95K | +20 | 19.50 |
| LS-21 | Pl. to p-p | 15K | 135K split | +20 | 24.00 |
| LS-40 | Pl. to p-p | 15K, 8 ma | 135K split | +20 | 33.00 |
| LS-25 | P-P to p-p | 30K split | 50K split | +23 | 27.00 |
| LS-27 | Pl. to line | 15K, 8 ma | See LS-10 pri. | +23 | 24.00 |
| LS-50 | Pl. to line | 15K | See LS-10 pri. | +23 | 24.00 |
| LS-51 | P-p to line | 30K split | See LS-10 pri. | +24 | 27.00 |
| LS-14X | Lo-Z to grids | 2.5, 5.5, 10, 15, 22, 30, 38, 60 | 50K | +17 | 24.00 |
| LS-26 | Line to grids | 5K | 60K | +23 | 27.00 |
| LS-31 | Line to line | 30, 50, 200, 250 | See LS-10 pri. | +23 | 24.00 |
| LS-32 | Lo-Z to line | Same as LS-14X | See LS-10 pri. | +23 | 33.00 |
| LS-68 | Matching to 2 Simult. lines or Tr. | 600/150 split | (2) 600/150 split | +15 | 24.00 |
| LS-150 | Line to line | 4K | See LS-10 pri. | +23 | 21.00 |
| LS-151 | Line to line | 16K | See LS-10 pri. | +26 | 21.00 |
| LS-140 | 70 db hybrid | 500/600 split | Same as pri. | +18 | 27.00 |
| LS-141 | Hybrid* | 500/600 split | Same as pri. | +18 | 21.00 |

*Has 3 sets of coils.

HIGH LEVEL TRANSFORMERS

Sizes: LS-33, -34, -35, -47, -52, -54, -55, -56, -61, -63, 3 1/2" x 4 7/8" x 4 3/4" h. (Wt., 7 1/2 lbs.). LS-6L1, -6L4, -48, -58, -65, -666, -667, 5" x 5 1/4" x 4 1/4" h. (Wt., 15 lbs.). LS-691, 13" x 15 3/4" x 24" h. (Wt. 370 lbs.). LS-692, 13" x 15 3/4" x 28" h. (Wt. 520 lbs.).

| UTC Type | Application | Pri. Imped., Ohms | Level Watts | Net Each |
|----------|----------------|-------------------------------------|-------------|----------|
| LS-33 | Matching | 50, 125/150, 200, 250, 333, 500/600 | a 20 | \$24.00 |
| LS-34 | Matching | As above | a 40 | 33.00 |
| LS-47 | Driver | 5K | i 20 | 24.00 |
| LS-48 | Driver | 12K | j 40 | 60.00 |
| LS-6L1 | P-p output | 9K | b 30 | 36.00 |
| LS-6L4 | P-p output | 4, 500/3,800 | b 55 | 66.00 |
| LS-58 | P-p output | 2.5K/1.5K | b 40 | 57.00 |
| LS-52 | P-p output | 8000 | b 20 | 24.00 |
| LS-55 | P-p output | 5K/3K split | b 20 | 24.00 |
| LS-61 | P-p output | 10K/6K split | b 20 | 24.00 |
| LS-54 | P-p output | 8000 | c 20 | 21.00 |
| LS-57 | P-p output | 5K/3K split | c 20 | 21.00 |
| LS-63 | P-p output | 10K/6K split | c 20 | 21.00 |
| LS-56 | P-p output | 5K/3K split | d 20 | 27.00 |
| LS-35 | EL-34's* | 5K CT 43% taps | e 35 | 24.00 |
| LS-65 | 6550's* | 3.3K CT 40% taps | e 60 | 42.00 |
| LS-666 | P-p transistor | 8 split | f 50 | 21.00 |
| LS-667 | P-p transistor | 8 split | e 50 | 21.00 |
| LS-691 | Modulation | 10,400 | g 1,000 | 600.00 |
| LS-692 | Modulation | 4,750 | h 2,500 | 930.00 |

*With feedback. †Secondary Impedance: a—1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125/150, 200/250, 333, 500/600 ohms. b—500, 333, 250/200, 125, 50, 30, 20, 10, 7.5, 5, 2.5, 1.2 ohms. c—30, 25, 15, 10, 7.5, 5, 2.5, 1.2 ohms. d—6K, 5K, 4K, 1.8K, 1.5K, 1K, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2 ohms. e—4, 8, 16 ohms. f—500 ohms split. g—4.5K, 4K, 3.5K, 2.75K, 2K. h—2.5K, 2K, 1.75K, 1.5K, 1.25K. i—Pri/1/2 Sec. 3:2:1. j—Pri./1/2 Sec. 5:1:1.

Continued from bottom of previous column

PLATE TO LINE TRANSFORMERS
Units Housed in Type H-1 Case

| UTC Type | Application | Prim. Imped. Ohms | Sec. Imped. Ohms | Level Mw | Net Each |
|----------|--------------------|-------------------|-------------------------------------|----------|----------|
| HA-113 | to multiple line | 15K split | 50, 125/150, 200, 250, 333, 500/600 | 125 | \$18.00 |
| HA-114 | Lo-Z to multi-line | 30K | | 200 | 21.00 |
| HA-133 | to multi-line | 15K split | | 160 | 21.00 |

OUTPUT TRANSFORMERS
Units Housed in Type H-2 Case

| UTC Type | Application | Prim. Imped. Ohms | Sec. Imped. Ohms | Level Watts | Net Each |
|----------|--------------------|-------------------|-------------------------------------|-------------|----------|
| HA-134 | P-p to line | 5K/9.4K | 50, 125/150, 200, 250, 330, 500/600 | 15 | \$16.80 |
| HA-135 | P-p to V.C. | 3K/5K | 30, 20, 15, 10, 7.5, 5, 2.5, 1.2 | 18 | 16.80 |
| HA-136 | 5881's screen-taps | 6.6K | 4, 8, 16 | 20 | 18.00 |

POWER TRANSFORMERS

| Units Housed: HP-122 in Type H-1 Case; HP-123 in Type H-2 Case | | | | | |
|--|------------------|-----------|--------------------|--|----------|
| UTC Type | Application | Psi. Volt | Hi-Volt | Fil. Wind | Net Each |
| HP-122 | Pre-amp | 115 | 220-O-220 | 6.3 V.C.T.—.6A | \$12.00 |
| HP-123 | Pre-amp or Tuner | 115 | 275-O-275 35 Ma | 6.3 V.C.T.—1.2A 6.3 V.C.T.—.6A 6.3 V.C.T.—2A | 12.00 |



COMMERCIAL GRADE COMPONENTS

DIMENSIONS, COMMERCIAL GRADE "RC" CASE



Performance insured during constant usage due to the ruggedness of this vacuum impregnated component with special sealing compound. Case, finished in light gray enamel, is ready for mounting on chassis. (All audio components linear).

| Case No. | Base Dim. (Sq.) | Mounting Dim. (Sq.) | Ht., +1/8, -1/16 | Cutout Dia. | Unit Wt. (Lbs.) |
|----------|-----------------|---------------------|------------------|-------------|-----------------|
| RC-37 | 1 3/8 | 1 1/8 | 1 5/8 | 1 1/4 | .35 |
| RC-50 | 1 3/8 | 1 1/8 | 2 1/4 | 1 1/2 | 1/2 |
| RC-62 | 1 11/16 | 1 1/2 | 2 1/2 | 1 1/2 | 1 |
| RC-75 | 2 1/16 | 1 11/16 | 2 7/8 | 1 7/8 | 1 1/2 |
| RC-87 | 2 3/16 | 2 3/16 | 3 1/4 | 2 | 2 1/2 |
| RC-100 | 3 | 2 3/8 | 3 3/4 | 2 3/8 | 3 1/2 |
| RC-112 | 3 1/16 | 2 11/16 | 4 1/8 | 2 7/8 | 5 |
| RC-125 | 3 3/4 | 3 | 4 1/2 | 3 | 6 1/2 |
| RC-150 | 4 1/2 | 3 11/16 | 5 1/2 | 3 3/4 | 11 |
| RC-152 | 5 1/8 | 4 1/8 | 5 1/2 | 4 | 15 1/2 |
| RC-175 | 5 3/4 | 4 7/8 | 7 | 4 | 22 |

SWINGING INPUT AND FILTER INDUCTORS

| UTC Type | Induct. Henrys | DC MA | DC Res. Ohms | Test Volts | Case No. | Net Each |
|------------------|----------------|-------|--------------|------------|---------------------------------------|----------|
| CG-40 | 10 | 200 | 110 | 1750 | RC-112 | \$ 8.10 |
| CG-44 | 30 | 100 | 400 | 1750 | RC-100 | 6.90 |
| CG-45 | 250 | 15 | 5000 | 1750 | RC-87 | 6.00 |
| CG-48C | 75 | 50 | 2200 | 1750 | RC-87 | 7.50 |
| CG-100 | 12 | 150 | 110 | 2500 | RC-125 | 9.00 |
| CG-102 | 12 | 250 | 100 | 3000 | RC-150 | 13.20 |
| CG-104 | 10 | 350 | 90 | 5000 | RC-152 | 15.00 |
| CG-108 | 10 | 500 | 52 | 7000 | RC-175 | 27.00 |
| CG-15 | 10 | 1000 | 40 | 9000 | 1 1/2 x 4 3/4 x 6 7/8 H. Wt., 40 lbs. | 54.00 |
| CG-101 | 25/5 | 150 | 110 | 2500 | RC-125 | 9.00 |
| CG-103 | 25/5 | 250 | 100 | 3000 | RC-150 | 13.20 |
| CG-105 | 25/5 | 350 | 90 | 5000 | RC-152 | 15.00 |
| CG-109 | 25/5 | 500 | 52 | 7000 | RC-175 | 27.00 |
| CG-111 (2 wdgs.) | 100/10 | 2.5A | .6 | 1500 | RC-87 | 11.40 |
| CG-1C | 25/5 | 1000 | 40 | 9000 | 1 1/2 x 4 3/4 x 6 7/8 H. Wt., 40 lbs. | 54.00 |

PLATE TRANSFORMERS

Primaries for 105, 115, 220, 230 volts; 50/60 cycles. For reduced power, secondary can be cut in half, using 220 v. primary on 110 volts; may be used on 25 to 43 cycles in this case. "W" suffix units designed for full wave center tap and full wave bridge application. Center tap may be disconnected from ground.

| UTC Type | High Voltage | DC Volts | Case No. | Net Each |
|----------|-------------------------------|-------------|----------|----------|
| CG-300 | 625-515-0-515-625 | 500/400 | RC-150 | \$16.20 |
| CG-300W | 625-515-0-515-625 | 1000/800 | RC-150 | 17.70 |
| CG-301 | 580-530-300-0-300-530-580 | 475/425/250 | RC-152 | 24.00 |
| CG-301W | 580-530-300-0-300-530-580 | 950/850/500 | RC-152 | 26.40 |
| CG-302 | 950-750-0-750-950 | 760/610 | RC-175 | 30.00 |
| CG-302W | 950-750-0-750-950 | 1520/1220 | RC-175 | 33.00 |
| CG-303 | 1500-1235-400-0-400-1235-1500 | 1250/1000 | RC-175 | 36.00 |
| CG303W | 1500-1235-400-0-400-1235-1500 | 2500/2000 | RC-175 | 39.60 |

POWER AND BIAS TRANSFORMERS

Primary 115 volts, 50/60 cycles. DCMA is far choke input; reduce 70% for condenser input. Filament 1 is 5 volts, 3 amps., and Filament 2 is 5 volts, 2 amps., except as otherwise noted.

| UTC Type | High Voltage | DC Ma | Filament 3 | Filament 4 | Case No. | Net Each |
|----------|---|-------|-------------------------------|-------------------------------|----------|----------|
| CG-422 | 435-365-0-365-435 | 125 | 6.3 VCT-3A | 2.5 VCT-5A | RC-150 | \$21.00 |
| CG-428 | 500-0-500-80-0-80 | 25 | 6.3 VCT-100 4A | 6.3 VCT-3A, tapped 2.5 VCT-3A | RC-152 | 24.90 |
| CG-429* | 600-525-0-525-600 | 250 | 7.5 VCT-3A, tapped 6.3 VCT-4A | | RC-152 | 24.90 |
| CG-431† | 500-400-0-400-500-80-0-80 | 500 | 6.3 VCT-100 5A | 6.3 VCT-3A | RC-175 | 36.00 |
| CG-315 | Tapped for any DC voltage from 15 to 100 volts within 6%—250 MA | | | | RC-125 | 14.40 |
| CG-316 | Tapped for any DC voltage from 75 to 400 volts within 6%—250 MA | | | | RC-152 | 21.00 |

*Filament 2 is 6.3 VCT-3A. †Filament 1 is 5V-6A.

AUDIO UNITS

| UTC Type | Use † | Pri. Imped., Ohms | Level | Case RC- | Net Each |
|----------|-------|--------------------------|---------|----------|----------|
| CG-131 | a | 15K | +28 dbm | 50 | \$ 9.90 |
| CG-132 | b | 15K | +30 dbm | 62 | 9.90 |
| CG-133 | c | 30K CT | +32 dbm | 75 | 10.50 |
| CG-134 | d | 50, 200, 500 | +30 dbm | 50 | 9.00 |
| CG-135 | e | 50, 200, 500 | +30 dbm | 50 | 9.90 |
| CG-235 | f | 50, 200, 500 | +28 dbm | 75 | 12.00 |
| CG-136 | g | 15K, 50, 200 | +30 dbm | 62 | 13.20 |
| CG-137 | h | 50, 200, 500 | +28 dbm | 50 | 8.40 |
| CG-140 | i | 15K | +30 dbm | 50 | 7.80 |
| CG-141 | j | 30K CT | +32 dbm | 50 | 9.00 |
| CG-233 | k | 30K CT | +35 dbm | 87 | 9.00 |
| CG-333 | k | 30K CT | +35 dbm | 87 | 9.00 |
| CG-433 | k | 5K CT | 10 w. | 100 | 9.90 |
| CG-15 | l | 8K CT | 20 w. | 100 | 12.00 |
| CG-16 | l | 3K/5K CT | 20 w. | 100 | 12.00 |
| CG-19 | l | 6K/10K CT | 20 w. | 100 | 12.00 |
| CG-710 | l | 14K/20K CT | 20 w. | 100 | 12.00 |
| CG-216 | l | 9K CT | 30 w. | 125 | 13.80 |
| CG-20 | m | 5K CT, 43% screen taps | 25 w. | 125 | 15.00 |
| CG-21 | m | 3.3K CT, 40% screen taps | 50 w. | 150 | 24.00 |
| CVP-1 | n | 3K/5K/6K/8K/10K/14K CT | 12 w. | 100 | 13.20 |
| CVP-2 | n | " | 30 w. | 125 | 14.40 |
| CVP-3 | n | " | 60 w. | 150 | 21.00 |
| CVP-4 | n | " | 125 w. | 152 | 24.00 |
| CVP-5 | n | " | 300 w. | 175 | 39.00 |
| CVL-1 | p | 500 | 15 w. | 87 | 9.00 |
| CVL-2 | p | 500 | 40 w. | 125 | 10.50 |
| CVL-3 | p | 500 | 75 w. | 150 | 15.00 |
| CVM-0 | q | Any Class B | 12 w. | 100 | 10.50 |
| CVM-1 | q | " | 30 w. | 125 | 13.80 |
| CVM-2 | q | " | 60 w. | 150 | 18.00 |
| CVM-3 | q | " | 125 w. | 152 | 21.00 |
| CVM-4 | q | " | 300 w. | 175 | 39.00 |
| CVM-5 | q | " | 600 w. | * | 105.00 |
| CG-51AX | r | 15K | 5 w. | 87 | 9.00 |
| CG-53AX | r | 3K/10K CT | 20 w. | 112 | 10.50 |
| CG-59AX | r | 50, 200, 500 | 20 w. | 112 | 10.80 |

*7" x 12" x 9"; Wt., 60 lbs. †a—Pl. to grid. b—Pl. to 2 grids. c—2 pl. to 2 grids. d—Input, humbucking. e—P-p input, humbucking. f—Input, mag. shielded. g—Dual input, humbucking. h—Mixing. i—Pl. to line. j—P-p to line. k—Driver. l—Output. m—Feedback output. n—Universal output. p—Universal matching. q—Universal modulator. r—Universal driver.

END CASTING UNITS

See note on "W" suffix units under plate transformers.

| UCT Type | High Volt | DC Volt | L | W | H | Wt. Lbs. | Net Each |
|----------|---------------------------------|------------|--------|--------|--------|----------|--------------|
| CG-304* | 1500-1235-0-1235-1500 | 1.25K | 1K | 14 3/8 | 8 1/2 | 10 3/8 | 100 \$141.00 |
| CG-304W | 1500-1235-0-1235-1500 | 2.5K | 2K | 14 3/8 | 8 1/2 | 10 3/8 | 100 156.00 |
| CG-305* | 2400-1750-0-1750-2400 | 2K 1.5K | 10 1/2 | 4 3/4 | 6 7/8 | 50 | 63.00 |
| CG-305W | 2400-1750-0-1750-2400 | 4K 3K | 10 1/2 | 4 3/4 | 6 7/8 | 50 | 69.00 |
| CG-306* | as above | 2K 1.5K | 13 7/8 | 8 1/2 | 10 3/8 | 100 | 150.00 |
| CG-306W | as above | 4K 3K | 13 7/8 | 8 1/2 | 10 3/8 | 100 | 165.00 |
| CG-307 | 3500-3000-2400-0-2400-3000-3500 | 3K 2.5K | 13 3/8 | 8 1/2 | 10 3/8 | 90 | 138.00 |
| CG-308 | as CG-307 | 3K 2.5K | 15 1/8 | 8 1/2 | 10 3/8 | 125 | 162.00 |
| CG-309 | as CG-307 | 3K 2.5K | 21 | 10 | 13 1/4 | 253 | 360.00 |
| CG-310 | 4600-4050-3500-0-3500-4050-4600 | 4K 3.5K | 17 1/4 | 10 | 13 1/4 | 150 | 309.00 |
| CG-311* | 1500-1235-0-1235-1500 | 1.25K | 1K | 10 1/2 | 4 3/4 | 6 7/8 | 50 66.00 |
| CG-311W | 1500-1235-0-1235-1500 | 2.5K | 2K | 10 1/2 | 4 3/4 | 6 7/8 | 50 69.00 |
| CG-312 | 1800-1500-0-1500-1800 | 1.5K 1.25K | 10 1/2 | 4 3/4 | 6 7/8 | 38 | 66.00 |

*See page 1 for Full Wave Bridge Rectifier types.

VARIPOWER AUTOFORMERS

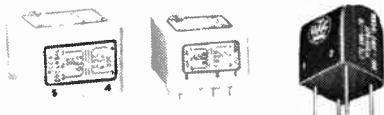
Simultaneous control of filament, plate and line voltage. Filament voltage control within 2 1/2%. Output voltage from 0 to 130 volts, 50/60 cycles. Taps at 25, 55, 75, 95, 100, 105, 110, 115, 120, 125, and 130 volts.

| UTC Type | Watts Output | Case No. | Net Each | UTC Type | Watts Output | Case No. | Net Each |
|----------|--------------|----------|----------|----------|--------------|----------|----------|
| CVA-1 | 150 | RC-112 | \$12.00 | CVA-4 | 1000 | RC-152 | \$21.00 |
| CVA-2 | 250 | RC-125 | 14.10 | CVA-5 | 2000 | RC-175 | 36.00 |
| CVA-3 | 500 | RC-150 | 18.00 | | | | |



MINIATURE, OUNCER, SUBOUNCER & SUB-SUBOUNCER UNITS

SUBOUNCER & SUB-SUBOUNCER AUDIO TRANSFORMERS
TRANSISTOR & TUBE TYPES HERMETICALLY SEALED



UTC SSO-#P and SO-#P units are ideal miniaturized components having high efficiency and wide frequency response. Special nickel iron core materials and winding methods provide exceptional performance and reliability.

SO-#P UNIT Dim. $\frac{3}{4} \times 1 \times \frac{3}{8}$ "
Pin Length $\frac{1}{4}$ "
Wt.05 lb.

SSO-#P UNIT Dim. $\frac{3}{4} \times \frac{7}{8} \times \frac{3}{8}$ "
Pin Length $\frac{1}{4}$ "
Wt.04 lb.

SML-70 $\frac{1}{16} \times \frac{3}{16} \times \frac{3}{16}$ "
Wt. .2 oz.

These units are vacuum molded to MIL Grade 5. They employ 50 mil deeply anchored pin terminals ideally suited for printed circuit and transistor application. Terminals are strong enough to support these light weight units.

The UTC SML-70 is an ultra miniature transformer providing high shielding, extremely low insertion loss with wide band response, 200 cycles to 20 kc. These units are provided with pin terminals (.025 dia.) strong enough to support the unit and are ideal for printed circuits.

PRINTED CIRCUIT AUDIO UNIT — HIPERMALLOY SHIELD CASE

| Type No. | Application | Pri. Imp. ohms | Sec. Imp. ohms | Net Each |
|----------|--------------------------|----------------|----------------|----------|
| SML-70 | Input or Chopper Service | 200K | 1K | \$8.40 |

MIL TYPE: TF5RX16ZZ.

PRINTED CIRCUIT MOLDED TYPES TO MIL GRADE 5

| Type No. | Application | Pri. Imp. ohms | Sec. Imp. ohms | Net Each |
|----------|-----------------------|----------------|----------------|----------|
| SO-2P | Interstage/3:1 | 10K | 90K | \$7.50 |
| SO-3P* | Plate to Line | 10K | 200 | 7.50 |
| | | 25K | 500 | |
| SO-7P* | Transistor Interstage | 20K | 800 | 7.20 |
| | | 30K | 1200 | |
| SO-8P | Transistor to PP Sec. | 10K | 2000 CT | 7.80 |
| SO-9P | PP Transistor to V.C. | 500 CT | 3.2 | 7.80 |
| SO-14P | Transistor Interstage | 80 CT | 32 Split | 8.10 |
| | | 100 CT | 40 Split | |

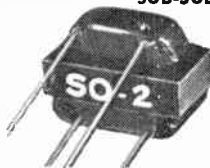
MIL TYPES: SO-2P, TF5RX15ZZ; SO-3P, TF5RX13ZZ; SO-7P, TF5RX13ZZ; SO-8P, TF5RX13ZZ; SO-9P, TF5RX17ZZ; SO-14P, TF5RX17ZZ.

PRINTED CIRCUIT MOLDED TYPES TO MIL GRADE 5

| Type No. | Application | Pri. Imp. ohms | Sec. Imp. ohms | Net Each |
|----------|-----------------------|----------------|----------------|----------|
| SSO-3P | Plate to line | 10K | 200 | \$8.10 |
| | | 25K | | |
| SSO-8P | Transistor to pp sec. | 10K | 2000 CT | 8.10 |
| SSO-14P | Transistor Interstage | 10K CT | 200 CT | 8.40 |
| | | 25K CT | 500 CT | |
| SSO-15P | Transistor Interstage | 20K CT | 800 CT | 8.40 |
| | | 30K CT | 1200 CT | |
| SSO-19P | Output matching | 500 CT | 600 CT | 8.10 |
| SSO-20P | Output | 1.5K CT | 600 CT | 8.10 |
| SSO-21P | Crystal/Chopper | 200K CT | 1000 CT | 8.40 |
| SSO-22P | Interstage | 10K CT | 1500 CT | 7.80 |
| | | 12K CT | 1800 CT | |

MIL TYPES: SSO-3P, TF5RX13ZZ; SSO-8P, TF5RX13ZZ; SSO-14P, TF5RX13ZZ; SSO-15P, TF5RX13ZZ; SSO-19P, TF5RX17ZZ; SSO-20P, TF5RX17ZZ; SSO-21P, TF5RX16ZZ; SSO-22P, TF5RX13ZZ.

SUB-SUBOUNCERS AND SUBOUNCERS



Lead mounted (channel available as separate item) miniature nickel iron core units for transistor or vacuum tube circuits. Plastic mounted leads. SSO Sub-Subouncers: Approx. 2 db, 140-10,000 cps; +20 VU except inputs +7 VU. ($\frac{7}{16}$ " x $\frac{3}{8}$ " x $\frac{3}{16}$ " wt., .02 lb.) SO Subouncers: Approx. 2 db., 100-10,000 cps; +24 VU except inputs +10 VU. ($\frac{1}{32}$ " x $\frac{3}{16}$ " x $\frac{7}{8}$ " wt., .03 lbs.)

| UTC SSO- | Net Each | Application | Pri. Imp., Ohms | Sec. Imp., Ohms | UTC SO- | Net Each |
|----------|----------|-----------------------------------|---------------------------|-----------------|---------|----------|
| 1 | \$4.50 | Input | 50/200 | 62.5K/250K | 1 | \$3.60 |
| 2 | 4.80 | Interstage | 10K, .25 ma | 90K | 2 | 3.30 |
| 3 | 4.20 | Pl. to line | 10K/25K* | 200/500 | 3 | 3.30 |
| 4 | 3.90 | Output | 30K, 1 ma | 50 | 4 | 3.30 |
| 5 | 3.90 | Inductor: | 50 hys. @ 1 ma | 4400 ohms# | 5† | 3.00 |
| 6 | 4.20 | Output | 100K, .5 ma | 60 | 6 | 3.90 |
| 7 | 3.30 | Tr. intrstg. | 20K/30K† | 80/1200 | 7 | 3.00 |
| 8 | 3.90 | Tr. intrstg. | 10K, 1 ma | 2K CT | 8 | 3.60 |
| 9 | 3.00 | Tr. to V.C. | 10K, 2 ma | 16 | | |
| | | Tr. to V.C. | 500 CT | 3.2 | 9 | 3.60 |
| 10 | 3.00 | Tr. to V.C. | 10K, 2 ma | 3.2 | | |
| | | Tr. to V.C. | 2K/4K CT | 8/16 | 10 | 3.60 |
| 11 | 3.00 | Tr. Output | 500/600‡ | 50/60 | | |
| | | Transist. Int. | 400/500 CT | 400/500 Split | 11 | 4.20 |
| 12 | 3.00 | Tr. Output | 1K/1.2K†† | 50/60 | | |
| | | Transist. Int. | 400/500 CT | 120/150 Split | 12 | 4.20 |
| 13 | 4.50 | Input | 200K | 1K | | |
| | | Transist. Int. | 400/500 CT | 40/50 Split | 13 | 4.20 |
| 14 | 4.20 | Tr. intrstg. | 10K/25K CT | 200/500 CT | | |
| | | Transist. Int. | 80/100 CT | 32/40 Split | 14 | 4.20 |
| 15 | 4.20 | Tr. intrstg. | 20K/30K CT | .8K/1.2K CT | | |
| 16 | 3.00 | Tr. Output | 1.2K/1.5K†† | 3.2/4 | | |
| 17 | 3.30 | Tr. Output | 10K/12.5K** | 500/600 CT | | |
| 18 | 3.30 | Output | 7.5K/9.4K CT | 3.2/4 | | |
| 19 | 3.30 | Matching | 500 CT | 600 CT | | |
| 20 | 3.30 | Output | 1.5K CT | 600 CT | | |
| 21 | 4.80 | Chopper | 200K CT | 1K CT | | |
| 22 | 3.90 | Tr. intrstg. | 10K/12K CT | 1.5K/1.8K CT | | |
| 23 | 3.00 | Inductor: | 4hys @ 5 ma, 650 ohms | | | |
| 24 | 3.00 | Inductor: | 1.5 hys. @ 5 ma, 160 ohms | | | |
| 25 | 5.10 | Transist. Int. | 10K/12K CT | 10K, 12K CT | | |
| 26 | 5.10 | Transist. Int. | 40K/50K CT | 400/500 Split | | |
| CH | .30 | Mounting channel for any of above | | | CH | .30 |

*1.5 ma. †0.5 ma. †Resis., 2675 ohms. ‡3.5 ma. ** 2 ma. ††3 ma. ‡DC resis.

OUNCER AUDIO UNITS

Standard and Plug-in Types



UTC ouncer components provide wide range ±1 db, 30 to 20,000 cps (except Nos. 0-14 and 0-15). In compact $\frac{7}{8}$ " dia. case. No. 0-16 has heavy shielding (case $\frac{1}{16}$ " dia.). P-16 has 9 pin plug ($\frac{1}{16}$ " dia.). Wt., 4 oz. max.

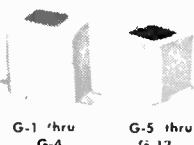
| UTC No. | Net Each | Application | Pri. Imped., Ohms | Sec. Imped., Ohms | UTC Na. | Net Each |
|---------|----------|---|--|--------------------------|---------|----------|
| O-1 | \$7.80 | Input | 50, 200, 500 | 50K | P-1 | \$9.00 |
| O-2 | 7.80 | P-p input | 50, 200, 500 | 50K CT | P-2 | 9.00 |
| O-3 | 7.50 | Input | 7.5/30 | 50K | P-3 | 8.40 |
| O-4 | 6.60 | Pl. to grid | 15K | 60K | | |
| O-5 | 6.60 | Pl. to grid | 15K, 2 ma | 60K | | |
| O-6 | 7.50 | Pl. to p-p | 15K | 95K CT | P-6 | 8.40 |
| O-7 | 7.50 | Pl. to p-p | 15K, 2 ma | 95K CT | P-7 | 8.40 |
| O-8 | 7.80 | Pl. to line | 15K | 50, 200, 500 | P-8 | 9.00 |
| O-9 | 7.80 | Pl. to line | 15K, 2 ma | 50, 200, 500 | P-9 | 9.00 |
| O-10 | 8.40 | P-p to line | 30K CT | 50, 200, 500 | P-10 | 9.00 |
| O-11 | 7.80 | Cryst. out. | 50K | 50, 200, 500 | P-11 | 9.00 |
| O-12 | 7.80 | Mixing | 50, 200, 500 | 50, 200, 500 | P-12 | 9.00 |
| O-13 | 6.30 | Inductor | 300 Hys-0 ma; | 6000 ohms | | |
| O-14 | 7.50 | 50:1 input | 200 | 500K | | |
| O-15 | 7.50 | 10:1 P/G | 15K | 1 meg. | P-15 | 9.00 |
| O-16 | 10.20 | Shld. input | 250 CT | 50K | P-16 | 11.40 |
| O-17 | 1.50 | Hipermailloy shield, 25 db, for Ouncers | | | | |
| O-18 | 7.80 | Tr. intrstg. | 10K split | 2K split | | |
| O-19 | 7.80 | Tr. intrstg. | 10K split | 4K split | | |
| O-20 | 6.30 | Tr. to line | 1.5K CT | 500 split | | |
| O-21 | 5.40 | Tr. to V.C. | 2K/4K CT | 8/16 | | |
| O-22 | 5.40 | Tr. to V.C. | 500/400 CT | 4/3.2 | | |
| O-23 | 5.10 | Inductor 7 Hys-3 ma; | 230 ohms | | | |
| O-24 | 5.10 | Inductor 1.6 Hys-3 ma; | 25 ohms | | | |
| O-25 | 8.10 | Transist. Input | 600/150 split | 2K/500 split | | |
| O-26 | 8.10 | Transist. Int. | 10K CT 4 ma. | 10K CT | | |
| O-27 | 8.40 | Transist. Int. | 10K CT 4 ma. | 500/125 split | | |
| O-28 | 8.40 | Transist. Int. | 50K CT. 2 ma. | 500/125 split | | |
| O-29 | 8.70 | Transist. Int. | 100K CT 1 ma. | 500/125 split or chopper | | |
| O-30 | 8.10 | Transist. Int. | 500/125 split | 500/125 split | | |
| O-31 | 8.10 | Transist. Int. | 500/125 split | 150/37.5 split | | |
| O-32 | 8.10 | Transist. Int. | 500/125 split | 50/12.5 split | | |
| O-33 | 8.10 | Transist. Int. | 100/25 split | 40/10 split | | |
| O-34 | 5.10 | Split Inductor | Series: 60 Mhy-80 ma; 4 ohms Parallel: 15 Mhy-160 ma; 1 ohm | | | |
| O-35 | 5.10 | Split Inductor | Series: 1 Hy-20 ma; 60 ohms Parallel: .25 Hy-40 ma; 15 ohms | | | |

*1.5 ma. †0.5 ma. †Resis., 2675 ohms. ‡3.5 ma. ** 2 ma. ††3 ma. ‡DC resis.



AMATEUR & PUBLIC ADDRESS TRANSFORMERS

DIMENSIONS, SPECIAL SERIES TRANSFORMERS



UTC Special Series transformers are specifically designed for amateur and popular-priced PA service. These units are finished in a rich, commercial type medium gray enamel. A recessed terminal strip is provided, permitting above chassis or bread-board wiring in addition to standard chassis type.

G-CASE SIZES

| Case | Height, In. | Width, In. | Depth, In. | Wt., Lbs. |
|------|-------------|------------|------------|-----------|
| G-1 | 1 7/8 | 2 13/16 | 1 3/4 | 1 |
| G-2 | 2 3/16 | 3 3/8 | 1 15/16 | 1 1/2 |
| G-3 | 2 1/2 | 3 3/4 | 2 3/32 | 2 |
| G-4 | 2 15/16 | 4 1/8 | 2 3/16 | 3 |
| G-5 | 3 3/4 | 3 1/8 | 4 1/2 | 4 1/2 |
| G-7 | 4 5/8 | 4 5/8 | 5 1/2 | 8 |
| G-8 | 4 5/8 | 5 3/8 | 5 3/8 | 12 |
| G-9 | 5 7/8 | 5 3/8 | 6 3/4 | 21 |
| G-10 | 5 7/8 | 6 1/8 | 6 5/8 | 24 |
| G-11 | 5 7/8 | 6 1/2 | 7 3/8 | 31 |
| G-12 | 10 1/4 | 7 3/8 | 9 1/4 | 52 |

INPUT AND DRIVER TRANSFORMERS

| Type | Application | Ratio Pri. to Sec. | Level | Case | Net Each |
|------|-----------------------|---------------------|---------|------|----------|
| S-1 | Plate to grid | 1:3 1/2 | +30 dbm | G-2 | \$4.80 |
| S-2 | Plate to p-p grids | 1:4* | +30 dbm | G-2 | 6.00 |
| S-3 | Pl. ta 1 or 2 grids | 1:4* | +25 dbm | G-1 | 4.50 |
| S-5 | Line to grid, humbkg. | 1:16 | +30 dbm | G-2 | 5.10 |
| S-6 | Line to grid, compact | 1:16 | +25 dbm | G-1 | 4.50 |
| S-8 | Driver pl. to p-p | 2.66:1, 5:1* | 5 w. | G-3 | 6.60 |
| S-9 | Driver p-p to p-p | 2.66:1, 3.6:1, 5:1* | 20 w. | G-4 | 8.70 |
| S-10 | Driver p-p ta p-p | 2.25:1* | 5 w. | G-3 | 6.60 |

*Center tapped.

MATCHING, OUTPUT AND MODULATION UNITS

| UTC Type | Application | Pri. Imped., Ohms | Level, Watts | Case | Net Each |
|----------|--------------|-------------------|--------------|------|----------|
| S-11 | Pl. to line | 15K | a .25 | G-2 | \$5.10 |
| S-12 | Line to V.C. | .5K/2K/4K | b 15 | G-2 | 5.40 |
| S-13 | Line to V.C. | .5K/2K/4K | b 30 | G-4 | 7.80 |
| S-14 | Output | 2.5K/4K/7K/10K | c 10 | G-2 | 6.60 |
| S-15 | PP output | 4K/5K/10K CT | c 12 | G-2 | 7.20 |
| S-16 | PP output | 3K/6K/9/10K CT | c 30 | G-4 | 8.40 |
| S-17 | PP output | 3.8K/4.5/5K CT | c 55 | G-5 | 12.00 |
| S-18 | Univ. modul. | Any Class B | d 12 | G-3 | 7.20 |
| S-19 | Univ. modul. | Any Class B | d 30 | G-4 | 9.30 |
| S-20 | Univ. modul. | Any Class B | d 55 | G-5 | 15.00 |
| S-21 | Univ. modul. | Any Class B | d 110 | G-7 | 21.00 |
| S-22 | Univ. modul. | Any Class B | d 250 | G-9 | 33.00 |

†Secondary Impedance: a—200/500 ohms. b—2, 4, 8, 15 ohms. c—2, 8, 15, 500 ohms. d—Any Class C.

FILTER, SWINGING AND AUDIO INDUCTORS

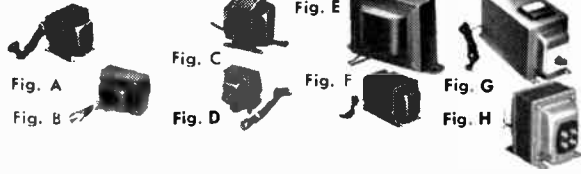
| Type | Henries | Ma. DC | Ohms | Insul. | Case | Net Each |
|---------|------------|--------|------|---------|------|----------|
| S-23* | 300 | 5 | 5000 | 1500 v. | G-2 | \$4.50 |
| S-24† | 500 | 3 | 6000 | 1500 v. | G-2 | 5.10 |
| S-25 | 30 | 30 | 800 | 1500 v. | G-2 | 3.90 |
| S-26 | 12 | 60 | 250 | 1500 v. | G-2 | 3.90 |
| S-27 | 25 | 75 | 350 | 1500 v. | G-4 | 5.10 |
| S-28 | 20 | 100 | 350 | 1500 v. | G-4 | 6.30 |
| S-29 | 6 | 175 | 90 | 1500 v. | G-4 | 5.10 |
| S-30† | 4/20 | 175 | 90 | 1500 v. | G-4 | 5.10 |
| S-31 | 6 | 225 | 100 | 2700 v. | G-5 | 6.90 |
| S-32† | 4/20 | 225 | 100 | 2700 v. | G-5 | 6.90 |
| S-33 | 8 | 300 | 100 | 4000 v. | G-7 | 9.30 |
| S-34† | 4/20 | 300 | 100 | 4000 v. | G-7 | 9.60 |
| S-35 | 8 | 400 | 60 | 5000 v. | G-8 | 12.00 |
| S-36† | 4/20 | 400 | 60 | 5000 v. | G-8 | 12.00 |
| S-37 | 8 | 550 | 60 | 6000 v. | G-8 | 15.00 |
| S-38† | 4/20 | 550 | 60 | 6000 v. | G-8 | 15.00 |
| S-80 | 50, 10 Mhy | 1.75A | .5 | 500 v. | G-1 | 3.90 |
| S-81 | 100/8 Mhy | 2.5A | .6 | 1500 v. | G-3 | 6.00 |
| (2Wdgs) | 25.2 Mhy | 5A | .15 | | | |

*Audio. †P.P. Audio C. T. ‡Swinging.

Information on components in this box listed on UTC page 12.

REPLACEMENT TYPE COMPONENTS

The shells and brackets of these vacuum sealed components are finished in shiny black enamel. A minimum number covers any replacement requirement.



FILAMENT TRANSFORMERS

Primary Tapped 105, 115 Volts, 50-60 Cy.

| UTC Type | Secondary Volts | Secondary Current | Insulation | Case No. | Net Each |
|----------|-------------------------------|-------------------|------------|----------|----------|
| S-53 | 2.5 VCT | 10 Amp | 1500 V | G-3 | \$6.30 |
| S-54 | 5 VCT | 4 Amp | 2500 V | G-3 | 5.70 |
| S-55 | 6.3 VCT | 3 Amp | 1500 V | G-3 | 5.40 |
| S-57 | 2.5 VCT | 10 Amp | 10000 V | G-5 | 9.00 |
| S-58 | 2.5 VCT | 20 Amp | 10000 V | G-5 | 9.90 |
| S-59 | 5 to 5.25 VCT | 13 Amp | 5000 V | G-5 | 9.30 |
| S-60 | 5 to 5.25 VCT | 22 Amp | 10000 V | G-7 | 13.20 |
| S-61 | 7.5 VCT tapped 6.3 VCT | 10 Amp | 3000 V | G-5 | 10.20 |
| S-62 | 10 VCT | 10 Amp | 3000 V | G-5 | 9.30 |
| S-63 | 14 VCT tapped 12 VCT & 11 VCT | 10 Amp | 5000 V | G-7 | 13.20 |

| Type | Filament 1 | Filament 2 | Filament 3 | Case | Net |
|-------|------------|------------|-------------|------|---------|
| S-64 | 2.5 VCT-5A | 2.5 VCT-5A | 5 VCT-6A | G-5 | \$10.80 |
| S-67 | 5 VCT-6A | 6.3 VCT-5A | 6.3 VCT-5A | G-5 | 10.20 |
| S-68 | 5 VCT-3A | 6.3 VCT-4A | 7.5 VCT-5A | G-5 | 10.50 |
| ‡S-70 | 6.3 VCT-5A | 6.3 VCT-5A | ..... | G-5 | 10.20 |
| S-71 | 2.5 VCT 6A | 2.5 VCT-6A | 2.5 VCT-12A | G-7 | 15.00 |
| S-72 | 5 VCT-3A | 5 VCT-3A | 5 VCT-6A | G-5 | 11.40 |

*Insulation 10,000 v. †Insulation 5000 v. ‡Insulation 3000 v.

COMBINED PLATE AND FILAMENT TRANSFORMERS

Primary 115 V., 50-60 Cy.

| UTC Type | DC Voltage | DC V. | Rect. Fil. | Filament No. 1 | Filament No. 2 | Case No. | Net Each |
|----------|------------------|------------|------------|-----------------------|----------------|----------|----------|
| S-39 | 490-400-0-310 | 400/175 ma | 5V-3A | 2.5 VCT-6A | 6.3 VCT-4A | G-7 | \$16.50 |
| S-40 | 525-425-0-310 | 400/250 ma | 5V-3A | 6.3 VCT-3A | 6.3 VCT-3A | G-7 | 18.00 |
| S-41 | 600-0-600-200 ma | 475 | 5 V-3A | 7.5 V tapped 6.3 V-3A | 6.3 VCT-2A | G-7 | 18.00 |
| S-42 | 600-525-0-300 ma | 480/400 | 5 V-6A | 7.5 V tapped 6.3 V-3A | 6.3 VCT-3A | G-7 | 19.50 |

PLATE AND BIAS TRANSFORMERS

Primary 115 V. 50/06 Cycles

| UTC Type | 2.5 VCT-12A High Voltage | DC Voltages* | DC Ma | Case | Net Each |
|----------|--------------------------------------|----------------|-------|------|----------|
| S-44 | 575-525-0-525-575 | 470/430 | 500 | G-9 | \$25.80 |
| S-45 | 900-750-0-750-900 | 750/620 | 200 | G-8 | 21.00 |
| S-46 | 1000-750-0-750-1000 | 825/600 | 300 | G-9 | 24.00 |
| S-47 | 1500-1250-1000-0-1000-1250-1500 | 1275/1050/825 | 300 | G-10 | 33.00 |
| S-48 | 1500-1250-1000-0-1000-1250-1500 | 1300/1075/850 | 500 | G-11 | 39.00 |
| S-49 | 2100-1800-1500-0-1500-1800-2100 | 1815/1540/1275 | 300 | G-11 | 36.00 |
| S-50 | 3000-2500-0-2500-3000 | 2625/2175 | 300 | G-12 | 60.00 |
| S-51 | Any bias voltage from 15 to 100 ± 6% | | 200 | G-5 | 12.00 |
| S-52 | Any bias voltage from 75 to 400 ± 6% | | 200 | G-7 | 15.60 |

*Based on two section filter for 200 ma. and 300 ma. units. Single section filter for 500 ma. units, both choke input.

IMMEDIATE DELIVERY
ON ALL UTC STOCK ITEMS
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TRANSFORMERS FOR INDUSTRY WIDE APPLICATIONS

DOUBLE SHELL POWER TRANSFORMERS (FIG. B SEE PG. 11)
Rectifier filaments 5 volts, 3 amps except R-101, 2 amps.

| UTC Type | High V. | DC Ma. | Amplifier Filament | Overall Height | Wt., Lbs. | Net Each |
|----------|-----------|--------|--------------------|----------------|-----------|----------|
| R-101 | 275-0-275 | 50 | 6.3 v. CT-2.7A | 3" | 2 1/2 | \$7.20 |
| R-102 | 350-0-350 | 70 | 6.3 v. CT-3A | 3 5/8" | 3 1/2 | 7.50 |
| R-103 | 350-0-350 | 90 | 6.3 v. CT-3.5A | 3 1/4" | 4 1/2 | 8.40 |
| R-104 | 350-0-350 | 120 | 6.3 v. CT-5A | 3 7/8" | 5 1/2 | 9.00 |
| R-105 | 385-0-385 | 160 | 6.3 v. CT-5A | 4 3/4" | 7 | 11.40 |

VERTICAL SHELL POWER TRANSFORMERS (FIG. C SEE PG. 11)
Rectifier filaments 5 volts, 3 amps., except R-110, 2 amps.

| UTC Type | High V. | DC Ma. | Amplifier Filament | Overall Height | Wt., Lbs. | Net Each |
|----------|-----------|--------|--------------------|----------------|-----------|----------|
| R-110 | 300-0-300 | 50 | 6.3 v. CT-2.7A | 3 1/4" | 2 1/2 | \$7.20 |
| R-111 | 350-0-350 | 70 | 6.3 v. CT-3A | 3 1/4" | 3 1/2 | 7.50 |
| R-112 | 350-0-350 | 120 | 6.3 v. CT-5A | 4" | 5 1/2 | 9.00 |
| R-113 | 400-0-400 | 200 | 6.3 v. CT-6A | 4 5/8" | 8 | 13.20 |

CHANNEL FRAME FILTER INDUCTORS (FIG. E SEE PG. 11)
Inductance Shown is at Rated D.C.M.A.—Test Volts RMS: 1500

| Type No. | Induct. Hys. | Current | Resist. Ohms | Dimensions, in. | | | Wt. Lbs. | Net Each |
|----------|--------------|--------------|--------------|-----------------|-------|-------|----------|----------|
| | | | | W | D | H | | |
| R-55 | 6 | 40MA | 300 | 2 3/8 | 1 3/8 | 1 3/8 | 2 1/2 | \$1.65 |
| R-14 | 8 | 40MA | 250 | 2 7/8 | 1 1/2 | 1 1/4 | 2 3/8 | 1.95 |
| R-15 | 12 | 30MA | 450 | 2 7/8 | 1 1/2 | 1 1/4 | 2 3/8 | 1.95 |
| R-16 | 15 | 30MA | 630 | 2 7/8 | 1 1/2 | 1 1/4 | 2 3/8 | 1.95 |
| R-17 | 20 | 40MA | 850 | 3 3/4 | 1 5/8 | 2 | 2 1/4 | 2.25 |
| R-18 | 8 | 80MA | 250 | 3 3/4 | 1 5/8 | 2 | 2 1/4 | 2.52 |
| R-19 | 14 | 100MA | 450 | 3 3/4 | 1 7/8 | 2 1/4 | 3 1/8 | 3.00 |
| R-20 | 5 | 200MA | 90 | 4 1/8 | 2 1/4 | 2 3/8 | 3 3/8 | 3.60 |
| R-21 | 15/3 | 200MA | 90 | 4 1/8 | 2 1/4 | 2 3/8 | 3 3/8 | 3.60 |
| R-220 | 100/8 | Mhy. 2.5A | .6 | 3 3/4 | 2 | 2 3/4 | 3 1/8 | 4.20 |
| | | 25/2 Mhy. 5A | .16 | | | | | |

PHOTOFASH TRANSFORMERS STANDARD 982

Can be used for either standard (Anglo type) or trigger (Sylvania type) multiple flash tubes. Circuit details included with transformer.

PF-1 Primary for 115 volts, 50/60 cycles. Secondaries for power supply delivering 2200 volts DC to condenser up to 100 Mfd. Compound sealed in G-3 (Pg.11) case 2 1/8 x 2 3/4 (3 3/4 including flanges) x 2 1/2 inches high. Weight 2 lbs. Net Each \$8.40
PF-3 Trigger Transformer 15 KV peak. 7/8 O.D.x.3 long. Weight 2 oz. Net each: \$6.00



TRANSISTOR TYPE

These are miniaturized light weight units for transistor type photoflash supply.

PF-5 Primary for 115 volts. 50/60 cycles or for 4 1/2 V. battery switched by PF-6 inverter transformer. Output delivers 400 V. DC when used in voltage doubler circuit to charge photoflash capacitor (typically 40 watt-sec.). G-1 case (Pg. 11) Net each: \$8.40

PF-6 Inverter transformer transforms 4 1/2 V. DC from battery to input for PF-5 stepup transformer. Ouncer case (Pg. 11) Net each: \$5.10

PF-7 Trigger transformer. Shorting .25 mfd. capacitor (charged to approx. 225 V. DC) across terminals 1-2 produces 6 KV pulse at terminal 3 for triggering flash tube. 7/8" Dia. x 1 5/16"; Wt. 1/2 oz. Net each: \$3.60

HIGH Q PRECISION INDUCTANCE DECADE

Invaluable instruments for design and experimental work with tuned circuits, wave filters, and equalizers. The low hum pickup toroid coils employ a new permalloy dust core which, combined with special winding methods, provides very high Q, excellent voltage and temperature stability, and high self resonance frequency. The inductance values are laboratory adjusted to better than 1% precision, with calibration noted on base.



DI CASE

Length 4 1/2"
Width 4 3/8"
Height 2 3/8"
Weight 2 lbs.

| Type No. | Induct. Henries | Optimum Range | Max. Q | Max. ACMA | Ins. Test Volts RMS | Net Each |
|----------|-----------------|---------------|--------|-----------|---------------------|----------|
| DI-1 | 10 x .01 | 2-60 KC | 200 | 500 | 500 | \$42.00 |
| DI-2 | 10 x .1 | .25-20 KC | 200 | 150 | 500 | 54.00 |
| DI-3 | 10 x 1 | .25-10 KC | 200 | 50 | 500 | 57.00 |
| DI-4 | 10 x 10 | .2-1.5 KC | 100 | 15 | 500 | 72.00 |

CIRCUIT DEVELOPMENT TRANSFORMERS FOR TRANSISTORS LAB-20 20 Cycles to 20kc Up to 50W Continuous

The UTC Laboratory circuit development transformers aid the designer in selecting optimum impedances for best power and distortion results from his transistor circuit.

Pri. Imp. Ω Sec. Imp. 6, 12, 4, 8, 24, 40, 16, 64 54, 70, Net Each: \$60.00

LAB-10 units in LS-1 case
LAB-20 units in LS-3 case



See UTC page 8 for dimensions
Terminal board as shown above

LAB-10 20 Cycles to 20kc Up to 1W Continuous
Pri. Imp. Ω Pri. to Sec. Ratio Range
1900 Ω to 14,400 Ω 20:1 or 10:1
925 Ω to 7600 Ω 10:1 or 5:1
Sec. Imp. Ω 19 Ω to 36 Ω 37 Ω to 76 Ω
Net Each: \$30.00

STEP-DOWN AUTO-TRANSFORMERS (FIG. A SEE PG. 11)
With 6-ft. cord and female receptacle, except R-64; 220/240 to 110/120 v., 50/60 cps.

| UTC Type | Rating | L | W | H | Size, Inches | Wt., Lbs. | Net Each |
|----------|---------------------|--------|-------|-------|--------------|-----------|----------|
| R-41 | 85 watt capacity | 3 3/4 | 2 5/8 | 3 1/8 | 4 | 4 | \$5.70 |
| R-42 | 125 watt capacity | 3 1/2 | 3 | 3 1/2 | 5 | 5 | 6.00 |
| R-43 | 175 watt capacity | 3 3/4 | 3 1/4 | 3 7/8 | 5 1/2 | 6.90 | |
| R-44 | 250 watt capacity | 4 3/8 | 3 1/4 | 3 7/8 | 6 1/2 | 8.40 | |
| R-45 | 500 watt capacity | 4 5/8 | 3 7/8 | 4 5/8 | 12 | 12.00 | |
| R-46 | 1200 watt capacity | 6 7/8 | 3 7/8 | 4 5/8 | 18 | 24.00 | |
| R-64 | 2500 watts, no cord | 10 1/2 | 4 3/4 | 6 3/4 | 30 | 45.00 | |

ISOLATION TRANSFORMERS (FIG. F SEE PG. 11)
Ideal for isolating line noise. AC-DC sets, etc. Excellent electrostatic shielding 1500 volt breakdown test. Six foot cord and female receptacle, except R-77.

Primary 110-120 volts 50/60 cycles—Secondary 110-120 volts
Except R-97 220 volt Primary—120 volt Sec.

| Type No. | Rating Watts | L | W | H | Mtg. Dim. | Wgt. Lbs. | Net Each |
|----------|--------------|-------|-------|-------|-------------|-----------|----------|
| R-72 | 40 | 3 1/8 | 2 5/8 | 3 1/8 | 2x1 7/8 | 4 | \$ 7.20 |
| R-73 | 100 | 3 3/4 | 3 1/4 | 3 7/8 | 2 1/2x2 3/8 | 6 | 9.00 |
| R-74 | 250 | 4 7/8 | 3 7/8 | 4 5/8 | 3x3 1/2 | 12 | 15.00 |
| R-75 | 600 | 7 3/8 | 3 7/8 | 4 5/8 | 3x5 5/8 | 20 | 24.00 |
| R-76 | 1200 | 8 1/2 | 4 1/2 | 6 1/8 | 3 5/8x6 5/8 | 30 | 42.00 |
| R-77 | 2500 | 12 | 7 | 9 | 6x11 | 70 | 84.00 |
| R-97 | 250 | 4 7/8 | 3 7/8 | 4 5/8 | 3x3 1/2 | 12 | 15.00 |

LINE VOLTAGE ADJUSTERS WITH METER (FIG. G SEE PG. 11)

The perfect answer to abnormal or fluctuating line voltage. Adjust switch so that meter reads at red line and you know that your equipment is working at correct voltage. These units combine a tapped auto-transformer with a switch and meter in a compact, rugged assembly. The nine tap switch provides for line voltage of 60 to 140 volts on 115 volt output models and 160 to 240 volts on 230 volt output model. All units are designed for 50/60 cycles service and come complete with 6 foot input cord and plug and outlet receptacle.

| Type No. | Primary Voltages | Sec. Volts | Watts Ratings | L | W | H | Wgt. Lbs. | Net Each |
|--|------------------|------------|---------------|--------|---|-------|-----------|----------|
| R-78 | ↑ | 115 | 150 | 7 | 4 | 4 3/4 | 6 | \$17.70 |
| R-79 | ↑ | 115 | 300 | 7 | 4 | 4 3/4 | 9 | 18.90 |
| R-80 | ↑ | 115 | 600 | 10 1/4 | 4 | 4 3/4 | 13 | 22.80 |
| R-81 | ↑ | 115 | 1200 | 10 1/4 | 4 | 4 3/4 | 21 | 33.00 |
| R-86 | ↓ | 230 | 1200 | 10 1/4 | 4 | 4 3/4 | 21 | 33.00 |
| ↑ 60, 70, 80, 90, 100, 110, 120, 130, 140 ↓ 160, 170, 180, 190, 200, 210, 220, 230, 240 | | | | | | | | |

EXPORT VOLTAGE ADAPTER (FIG. D SEE PG. 11)

Complete with cord and plug and special locking switch providing for line voltages of 105, 115, 125, 135, 150, 210, 230, 250 volts; 42 to 60 cycles. Output voltage 115.

| Type No. | Rating Watts | L | W | H | Mtg. Dim. | Wgt. Lbs. | Net Each |
|----------|--------------|-------|-------|-------|-------------|-----------|----------|
| R-47 | 85 | 4 5/8 | 3 | 3 1/2 | 2 1/4x2 1/4 | 4 1/2 | \$10.20 |
| R-48 | 150 | 4 3/4 | 3 1/4 | 4 | 2 1/2x2 1/2 | 5 1/2 | 11.70 |

TV VOLTAGE REGULATOR (FIG. D SEE PG. 11)

Complete with cord, plug, and special locking switch. Permits operation of 115 volt 50/60 cycle TV sets on line voltages of 85, 90, 95, 100, 105, 110, 120, 125 V.

| Type No. | Rating Watts | L | W | H | Mtg. Dim. | Wgt. Lbs. | Net Each |
|----------|--------------|---|-------|---|-------------|-----------|----------|
| R-49 | 350 | 5 | 3 1/4 | 4 | 2 1/2x2 3/4 | 5 | \$12.00 |

VARITRAN VOLTAGE ADJUSTERS

Input 115 volts 50/60 cycles. Output continually adjustable from 0-130 Volts through roller contact on exposed autotransformer winding. Regulation and efficiency and excellent, no wave form distortion. Output voltage is independent of load. Complete with line cord, switch, and receptacle . . . for loads up to 570 Watts . . . 5 A.

| Type No. | Rating Watts | L | W | H | Wt. Lbs. | Net Each |
|----------|---------------|-------|-------|-------|----------|----------|
| V-1-M | with meter | 4 7/8 | 9 7/8 | 3 5/8 | 14 | \$20.00 |
| V-1 | without meter | 4 7/8 | 8 | 3 5/8 | 12 | 35.00 |

SIGNALLING AND CONTROL TRANSFORMERS (FIG. H SEE PG. 11)

Primary 110-120 volts, 50/60 cycles—Secondary 4/8/12/16/20/24 volts

High power transformers suitable for operating relays, sirens horns, gongs, etc. from 115 V. 50/60 cycle line. These units have four secondary terminals providing 4, 8, 12, 16, 20 and 24 volt output. The volt ampere rating is based on the 24 volt secondary tap with corresponding reduction at the lower voltages. Underwriters' approved primary leads are employed, and screw-type binding posts.

| Type No. | Rating Watts | L | W | H | Mtg. Dim. | Wgt. Lbs. | Net Each |
|----------|--------------|-------|-------|-------|-------------|-----------|----------|
| SC-3 | 50 | 3 | 3 1/4 | 3 3/8 | 1 3/4x2 1/4 | 3 | \$7.50 |
| SC-4 | 100 | 3 1/4 | 3 3/4 | 4 | 2 1/8x2 1/2 | 5 | 9.00 |
| SC-5 | 250 | 4 | 4 5/8 | 4 3/4 | 3 3/8x3 | 10 | 14.40 |

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SEMICONDUCTORS

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RADIATOR CREDIT FOR FORCED AIR-COOLED TUBES

| Tube Type | Users Allowance |
|------------|-----------------|
| 889RA | \$20.00 |
| 891R, 892R | 30.00 |
| 5604 | 45.00 |
| 5667 | 20.00 |
| 6445 | 30.00 |
| 6447 | 30.00 |
| 6757 | 45.00 |
| 6801 | 45.00 |

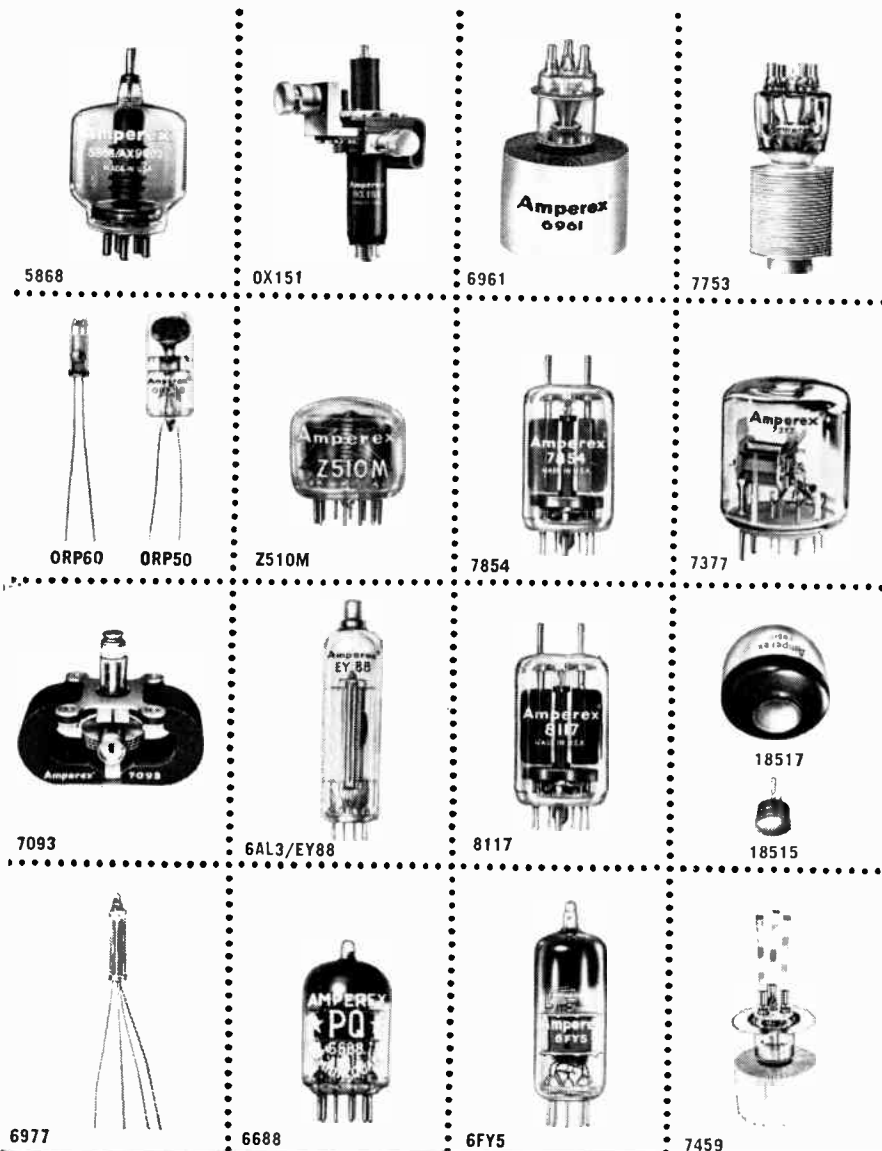
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 HICKSVILLE, L. I., N. Y.

IN CANADA: PHILIPS ELECTRON
 DEVICES LTD., 116 VANDERHOOF
 AVENUE, TORONTO 16, ONTARIO

Suggested Resale Price

BEAM POWER TUBES

| | |
|-------------|---------|
| #6GB5/EL500 | \$ 2.05 |
| 807 | 3.00 |
| 813 | 21.10 |
| 7378 | 45.00 |
| 6146 | 5.00 |
| 6159 | 5.00 |
| 8042 | 9.00 |

BEAM DEFLECTION TUBE

| | |
|-----------|---------|
| 6218/E80T | \$ 8.75 |
|-----------|---------|

COUNTING & INDICATOR TUBES

| | |
|----------|----------|
| 6370/E1T | \$ 16.50 |
| 6977 | 2.50 |

DIODE TUBES

| | |
|-------------|---------|
| #6AL3/EY88 | \$ 1.45 |
| #6R3/EY81 | 1.40 |
| #16AQ3/XY88 | 1.45 |
| 6339 | 44.50 |
| 6923/EA52 | 11.00 |
| EA53 | 12.00 |

TWIN DIODES

| | |
|------------|--------|
| #6AL5 | \$.92 |
| 6AL5W | 1.90 |
| 5726/E91AA | 1.90 |

IGNITRONS

| | |
|-------|----------|
| 5551A | \$ 65.00 |
| 5552A | 99.00 |
| 5553B | 245.00 |
| 5555 | 316.00 |
| 5822A | 116.00 |

MAGNETRONS

| | |
|------|----------|
| 5586 | \$417.00 |
| 7090 | 225.00 |
| 7091 | 405.00 |
| 7292 | 405.00 |

PENTAGRIDS

| | |
|-----------|--------|
| #6BE6 | \$1.10 |
| 6687/E91H | 1.30 |

PENTODES

| | |
|--------------|---------|
| *#3EH7/XF183 | \$ 1.45 |
| *#3EJ7/XF184 | 1.45 |
| *#4EH7/YF183 | 1.45 |
| *#4EJ7/YF184 | 1.45 |
| #6AU6 | 1.05 |
| #6BA6/EF93 | .90 |
| #6BQ5/EL84 | 1.30 |
| #6BX6/EF80 | 1.55 |
| 6CA7/EL34 | 2.90 |
| #6CW5/EL86 | 1.43 |
| #6DA6/EF89 | 1.60 |
| *#6EH7/EF183 | 1.45 |
| *#6EJ7/EF184 | 1.45 |
| #6BQ5/XL84 | 1.30 |
| #45B5/UL84 | 1.43 |
| 828 | 32.95 |
| 5654/6AK5W | 2.85 |
| *5847/E182F | 9.65 |
| *5847(JAN) | 9.65 |
| 6007 | 1.25 |
| 6008 | 1.25 |
| 6083 | 14.25 |
| 6084/E80F | 3.00 |
| 6227/E80L | 3.05 |
| #6267/EF86 | 1.38 |
| 6375/DC70 | 8.40 |
| 6686/E81L | 4.10 |
| *6688/E180F | 6.80 |
| *6688A | 6.86 |
| 6689/E83F | 3.60 |
| #7189 | 1.80 |
| *7534/E130L | 13.85 |
| 7693/E90F | 2.90 |
| 7694/E99F | 2.90 |
| *7737 | 7.80 |
| *7788 | 10.50 |
| EPF60 | 7.50 |
| #EL37 | 2.88 |

TRIODE PENTODES

| | |
|--------------|---------|
| #6BL8/ECF80 | \$ 1.70 |
| #6BM8/ECL82 | 1.60 |
| #6DX8/ECL84 | 1.60 |
| #6GW8/ECL86 | 1.70 |
| *#6HG8/ECF86 | 1.60 |
| #6U8 | 1.65 |
| #50BM8/UCL82 | 1.50 |
| 7643/E80CF | 3.60 |

Suggested Resale Price

PHOTOMULTIPLIERS

| | |
|-----------|----------|
| 50AVP | \$ 62.00 |
| 51UVP | 308.00 |
| 52AVP | 120.00 |
| 53AVP | 80.00 |
| 53AVP-SP | 88.00 |
| 53UVP | 462.00 |
| 54AVP | 158.00 |
| 56AVP | 360.00 |
| 56UVP | 696.00 |
| 57AVP | 850.00 |
| 58AVP | 600.00 |
| 150AVP | 62.00 |
| 150AVP-Q2 | 76.00 |
| 150AVP-SP | 76.00 |
| 150CVP | 84.00 |
| 153AVP | 88.00 |

RADIATION COUNTERS

| | |
|--------------|---------|
| 75N | \$16.50 |
| 75NB3 | 16.50 |
| 90NB3(700V) | 27.00 |
| 90NB3(900V) | 27.00 |
| 90NB4(700V) | 27.00 |
| 90NB4(900V) | 27.00 |
| 100C | 54.00 |
| 100CB | 58.00 |
| 100HB | 54.00 |
| 100N | 43.50 |
| 100NB(700V) | 46.00 |
| 100NB(900V) | 46.00 |
| 120C | 90.00 |
| 120CB | 95.00 |
| 120N(700V) | 90.00 |
| 120N(900V) | 90.00 |
| 120NB(700V) | 95.00 |
| 120NB(900V) | 95.00 |
| 150N(700V) | 61.00 |
| 150N(900V) | 61.00 |
| 150NB | 66.00 |
| 153C | 91.00 |
| 200C | 67.00 |
| 200CB | 71.00 |
| 200HB | 67.00 |
| 200N | 56.00 |
| 200NB(700V) | 58.50 |
| 200NB(900V) | 58.50 |
| 230C | 43.00 |
| 240N | 41.00 |
| 400PC | ** |
| 912NB3(900V) | 53.00 |
| 912NB4(900V) | 53.00 |

RECTIFIERS

| | |
|------------|---------|
| #1S2A/DY87 | \$ 1.38 |
| 3B28 | 6.50 |
| 4B32 | 13.50 |
| #5AR4/GZ34 | 2.10 |
| #5R4GYB | 1.90 |
| #6CA4/EZ81 | 1.05 |
| #6V4/EZ80 | .75 |
| #6X4/EZ90 | .76 |
| 575A | 22.15 |
| 673 | 22.15 |
| 857B | 218.15 |
| 866AX | 2.65 |
| 869B | 138.00 |
| 869BL | 138.00 |
| 872AX | 9.90 |
| 6508 | 80.00 |
| 6693 | 25.00 |
| 7136 | 25.00 |
| 8008AX | 10.65 |
| 8020AX | 24.00 |

TETRODES

| | |
|-----------------|----------|
| 4-65A | \$ 28.00 |
| 4-125A | 36.00 |
| 4-250A | 46.50 |
| 4CX250B | 39.35 |
| 4CX250BA (USAF) | 45.00 |
| 4CX250F | 39.35 |
| 4X150A | 29.35 |
| 4X150D | 29.35 |
| 4X250B | 36.50 |
| 4X250F | 36.50 |
| 4X500A | 128.50 |
| 6075 | 250.00 |
| 6076 | 305.00 |
| 6079 | 60.00 |
| 6155 | 36.00 |
| 6156 | 46.50 |
| 6883 | 5.00 |
| 6979 | 42.50 |

Suggested Resale Price

TETRODES (Con't)

| | |
|----------------------|-------|
| 7527 | 48.00 |
| 7580/4CX250BA (USAF) | 45.00 |
| 7609 | 29.35 |

TWIN TETRODES

| | |
|------------|---------|
| 829B | \$19.00 |
| 832A | 15.90 |
| 5894(COMM) | 25.00 |
| 5894(MIL) | 28.00 |
| 5895 | 13.70 |
| 6252 | 25.00 |
| 6252(USN) | 28.00 |
| 6360(COMM) | 5.15 |
| 6360(MIL) | 5.70 |
| 6907 | 25.00 |
| 6907(USAF) | 28.00 |
| 6939 | 12.00 |
| 7377 | 25.00 |
| *7699 | 13.50 |
| 7854 | 29.00 |
| 7983 | 6.30 |
| 8117 | 29.00 |

THYRATRONS

| | |
|-------------|---------|
| 2D21 | \$ 1.29 |
| 3C23 | 11.98 |
| 632B | 36.00 |
| 5544 | 32.50 |
| 5545 | 29.30 |
| 5557/FG17 | 9.50 |
| 5559 | 23.00 |
| 5560/FG95 | 33.00 |
| 5632/C3J | 15.50 |
| 5684/C3JA | 19.80 |
| 5685/C6JA | 27.80 |
| 5727/E91N | 2.50 |
| 5869 | 25.00 |
| 5870 | 100.00 |
| 6268 | 32.50 |
| 6279 | 45.00 |
| 6786 | 200.00 |
| AX105/FG105 | 53.33 |
| AX260 | 150.00 |

TRIODES

| | |
|--------------|---------|
| *#2ER5 | \$ 1.40 |
| *#2FY5 | 1.40 |
| *#2GK5 | 1.07 |
| *#3ER5 | 1.40 |
| *#3GK5 | 1.07 |
| *#4GK5 | 1.07 |
| #6AT6 | .89 |
| #6AV6 | .80 |
| #6CM4/EC86 | 2.75 |
| *#6DL4/EC88 | 2.75 |
| *#6ER5/EC95 | 1.07 |
| *#6FY5 | 1.40 |
| *#6GK5 | 1.07 |
| #6Q4/EC80 | 3.00 |
| #6R4/EC81 | 2.55 |
| #9AQ8/PCC85 | 1.55 |
| #17EW8/HCC85 | 1.45 |
| 356 | 675.00 |
| 501R | 225.00 |
| 504R | 245.00 |
| 805 | 20.10 |
| 810 | 25.65 |
| 811A | 6.90 |
| 812A | 6.90 |
| 833A | 53.65 |
| 834 | 19.30 |
| 838 | 20.00 |
| 845 | 20.80 |
| 849 | 185.00 |
| 849A | 165.00 |
| 880 | 630.00 |
| 889A | 235.00 |
| 889RA | 370.00 |
| 891 | 275.00 |
| 891R | 430.00 |
| 892 | 270.00 |
| 892R | 425.00 |
| 5604 | 570.00 |
| 5619 | 423.00 |
| 5658 | 595.00 |
| 5666 | 280.00 |
| 5667 | 370.00 |
| 5771 | 675.00 |
| *5842 | 7.45 |
| *5842(JAN) | 7.45 |
| 5866 | 20.00 |
| 5867 | 30.00 |
| 5868 | 60.00 |
| 5923 | 165.00 |

Suggested Resale Price

TRIODES (Con't)

| | |
|------------|--------|
| 5924 | 231.00 |
| 5924A | 275.00 |
| 6333 | 310.00 |
| 6445 | 480.00 |
| 6446 | 305.00 |
| 6447 | 465.00 |
| 6756 | 388.00 |
| 6757 | 535.00 |
| 6758 | 173.00 |
| 6759 | 206.00 |
| 6800 | 395.00 |
| 6801 | 505.00 |
| 6960 | 150.00 |
| 6961 | 210.00 |
| 6961A | 230.00 |
| 7004 | 160.00 |
| 7092 | 125.00 |
| 7237 | 200.00 |
| 7459 | 230.00 |
| 7804 | 440.00 |
| 7805 | 402.00 |
| 7806 | 795.00 |
| 7807 | 584.00 |
| 7900 | 250.00 |
| 8108/EC157 | 135.00 |
| HF200 | 49.50 |
| HF300 | 40.50 |
| TBL2(400) | 250.00 |
| TBL2(500) | 270.00 |
| ZB3200 | 395.00 |

DUO-DIODE TRIODES

| | |
|-------------|--------|
| #6AT6/EBC90 | \$.89 |
| #6AV6/EBC91 | .80 |

TWIN TRIODES

| | |
|---------------|--------|
| *#4ES8/XCC189 | \$2.28 |
| #6AQ8/ECC85 | 1.45 |
| *#6ES8/ECC189 | 2.28 |
| *#6DJ8/ECC88 | 1.89 |
| *#6GM8/ECC86 | 2.28 |
| #6J6/ECC91 | 1.40 |
| #9AQ8 | 1.55 |
| #12AT7/ECC81 | 1.53 |
| #12AU7/ECC82 | 1.23 |
| #12AX7/ECC83 | 1.28 |
| #17EW8 | 1.45 |
| 5920/E90CC | 2.40 |
| 6085/E80CC | 3.00 |
| 6201/E81CC | 2.95 |
| 6211 | 1.66 |
| 6463 | 2.95 |
| *6922(MIL) | 4.75 |
| *6922/E88CC | 4.75 |
| #7025 | 1.45 |
| 7062/E180CC | 2.10 |
| 7119/E182CC | 2.95 |
| *7308 | 5.20 |
| *7308(USN) | 5.20 |
| 7316 | 1.40 |
| E92CC | 2.00 |

TUNING INDICATORS

| | |
|-----------|--------|
| 1M3/DM70 | \$.98 |
| 6BR5/EM80 | 1.23 |
| 6CD7/EM34 | 1.83 |
| 6DA5/EM81 | 1.23 |
| 6FG6/EM84 | 1.48 |
| DM71 | 1.00 |
| EM87 | 1.50 |

VOLTAGE REFERENCE TUBES

| | |
|----------|--------|
| 0E3/85A1 | \$2.50 |
| 0G3/85A2 | 2.30 |
| 5651 | 1.78 |
| ZZ1000 | 2.15 |

VOLTAGE REGULATORS

| | |
|------------|--------|
| 0A2 | \$1.26 |
| 0B2 | 1.32 |
| 90C1 | 2.25 |
| 6354/150B2 | 2.55 |

SPECIAL INDUSTRIAL TUBES

| | |
|------------|---------|
| 5823/Z900T | \$ 3.45 |
| 6779/Z803U | 5.75 |
| 7709/Z70W | 3.30 |
| 7710/Z70U | 1.95 |
| 7711/Z71U | 2.85 |
| 7713/Z804U | 4.80 |
| 7714/Z805U | 3.45 |
| Z303C | 13.10 |
| Z502S | 13.65 |
| Z550M | 14.50 |

For OEM prices, please write directly to the factory.

AUTOMATIC

AMPERITE

REGULATOR

BALLAST TUBE FOR AUTOMATIC REGULATION OF CURRENT AND VOLTAGE



STANDARD



MINIATURE

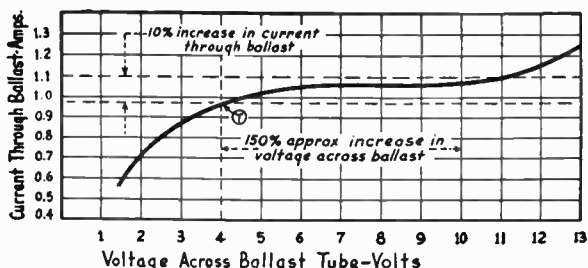
**AUTOMATIC REGULATION
WHAT IT IS**

The **AMPERITE** Ballast-Regulating Tube is an automatic "rheostat" designed to keep the current in a circuit at a definite value, for example, 0.5 amp.

Should the supply voltage increase, the *Amperite* will automatically increase in resistance enough to take up the increase in supply voltage — keeping the voltage on the load constant. It consists of an iron wire hermetically sealed in a bulb containing hydrogen or helium — the two gases with the highest heat conductivity. Its regulating action is based on the high temperature co-efficient of resistance of the iron wire and the rapid cooling of hydrogen or helium gas.

Being a constant current device, the **AMPERITE** Ballast-Regulating Tube can be used only to regulate a constant load—fixed wattage. Thermostatic relays can sometimes be included in these regulators to reduce initial surge.

We strongly recommend that you send us your specifications on special problems, and let us recommend the BALLAST TUBE you need.



Ⓣ = Threshold Current & Voltage

Characteristic curve of a typical *Amperite*. Approximate curve of any other *Amperite* can be obtained by multiplying or dividing the current or voltage scale by any number.

Standard Types of Amperite Ballast Tubes.....Net \$1.80
Amperite NE70V Neon Lamp.....Net \$1.80

| | | | | | | | |
|----------|--------|---------|---------|---------|---------|---------|-------|
| D6-1E | 1H20 | *3T4 | 4A10 | 6-3 | 7-4 | 9-4A | 12-4 |
| *D8T4 | 1H2* | **3T4A | 4-12 | 6-4 | **7TF4 | 9-7 | 12-7 |
| **D8TK7 | **2TK7 | **3TF4A | 4H3 | 6-4A | 7A10 | 9-8 | 12A10 |
| *D8TF10 | 2A10 | **3TF4 | 4H4 | 6-4B | 7-11 | 9A10 | 12-11 |
| **D8TF30 | 2A12 | **3TFV4 | *4H4C | *6T4 | **7HTF2 | 10T1 | 13-4 |
| D7-20 | 2A20 | 3V4 | **4HTF4 | *6TF4 | **7HTF3 | **10TF2 | 15-2 |
| D7H4 | *2HT2 | 3-7 | **4HTF7 | **6TF4 | **7HTF4 | 10-3 | 15-4 |
| *D7HT4 | 2H4 | **3TF7 | 4H10 | 6-7 | 7H4 | 10-4A | 16-4 |
| *D7HT11 | *2HT1 | 3A10 | 4H11 | **6TF7 | 7H4B | 10-4B | 17-3 |
| 1A10 | *2HTF4 | 3-11 | 5E1 | 6-8B | 7H7 | 10-4C | 20-3 |
| *1TF10 | 2H10 | 3H11 | **5TF2 | 6A10 | 7H11 | 10-4D | 20-4 |
| 1-15 | 3-2 | *3T11 | *5TF4 | 6-11 | *8TF2 | 10-4E | 22-4 |
| *1HT2 | *3TF2 | 3TF11 | **3TF4 | 6-12 | 8-3B | 10A10 | 24-3 |
| *1HT4 | *3TK2 | **3TF12 | 5A10 | 6-13 | 8-4 | 10A12 | 34-2 |
| 1H10 | 3-4 | 3-14 | 5-11 | 6A15 | 8A10 | 10-25 | 35-4 |
| *1HTF10 | 3H-1-7 | 3-16 | 5-16 | 6-36 | *9TF2 | 11-3 | 40-6E |
| *1HT11 | 3H4 | 3A20 | 5H3 | 6H4 | 9-3 | 11-4 | 41-7E |
| *1HTF11 | *3HTF4 | 3H-25 | 5H4 | **6HTF4 | 9-4 | 11A10 | 55-1 |
| | | 3-38A | 5H10 | 6H6 | | 11-11 | 55-4 |
| | | 3-50A | 5H11 | | | | |

*T denotes T5½ bulb-7 pin miniature, e.g., 3T4.
**TF denotes T6½ bulb-9 pin miniature, e.g., 3TF4.
Base Wiring: Octal, 7 and 9 pin miniature—prongs 2-7.

**AMPERITE NEON LAMP
TYPE NE70V Net \$1.80**

GENERAL ADVANTAGES:

- Light, compact • No moving parts • Rugged; will withstand vibration of 10G. minimum
- Hermetically sealed; not affected by altitude or humidity changes • Can be changed as easily as a radio tube • Operates equally well on A.C. or D.C. • Inexpensive

CAPACITIES AVAILABLE

Current values of 60 ma. to 5 amps; threshold voltage 0.4 to 40 V. Maximum dissipation per **AMPERITE** 60w per tube (ST19 bulb). Any number of **AMPERITES** with the same voltage range can be operated in parallel. **AMPERITES** should not be used in series.

AGEING

AMPERITE Ballast Tubes may change approximately up to 3% in current if aged for 4 to 8 hours, at maximum voltage. They will change very little thereafter.

LIFE EXPECTANCY

- Average life if operated as recommended **2000 Hours**
- If operated continuously at maximum voltage **1000 Hours**
- If operated continuously at 80% maximum voltage **5000 Hours**
- If filament is operated below glow point **5000 Hours up**

In operation, the *Amperite* filament starts to glow at one point; as the voltage is increased, the glow spreads over the entire filament. Like incandescent lamps, turning *Amperite* on and off reduces its life, especially if operating near its maximum voltage.

TIME LAG CHARACTERISTICS

Time lag encountered in an *Amperite* Ballast Tube depends upon the wattage consumed by the ballast and the size of the bulb. Where the wattage is small for the size of the bulb, the action can be made practically instantaneous — less than 1 second. In such cases the bulb will remain at practically ambient temperature. When the wattage is high enough to heat the bulb to a temperature uncomfortable to the hand (160°F) the lag might be as much as several minutes for final readings—but normally reaches within 90% of final readings within a few seconds.

AMPERITE NUMBERING SYSTEM

In general, the **AMPERITE** number approximately denotes the current—voltage threshold value. For example:

| | | | | | |
|-------------------|-----|------|------|-------|-------|
| Amperite Number | 3-4 | 3H4 | 10-7 | 12-11 | 12H11 |
| Threshold Current | 0.3 | 0.35 | 1.0 | 1.2 | 1.25 |
| Threshold Voltage | 4.0 | 4.0 | 7.0 | 11.0 | 11.0 |

We strongly recommend that you send us your specifications on special problems, and let us recommend the BALLAST TUBE you need.

AUTOMATIC

AMPERITE

REGULATOR

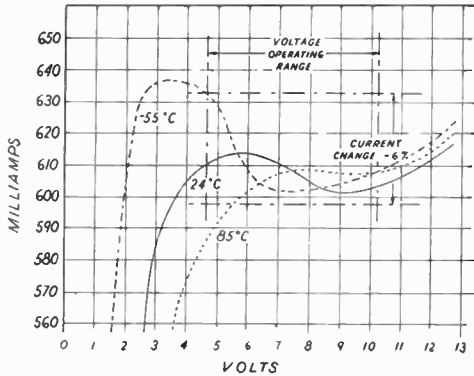
BALLAST TUBE FOR AUTOMATIC REGULATION OF CURRENT AND VOLTAGE



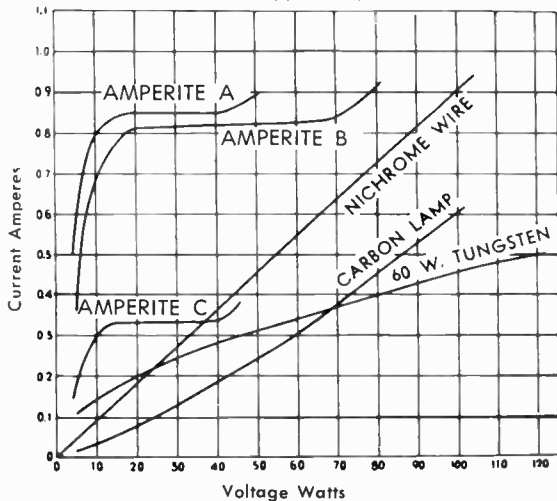
AMBIENT EFFECTS

Ambient temperature variation of -50° to $+70^{\circ}$ C will change the current value of an Amperite approximately 2% on regulating portion of curve as shown directly below. Being hermetically sealed the Amperite is not affected by altitude or humidity changes.

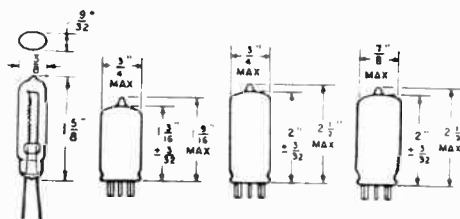
We strongly recommend that you send us your specifications on special problems, and let us recommend the BALLAST TUBE you need.



Amperite Ballast-Type 6-4 current voltage characteristic under ambient conditions of -55° , 24° , and 85° C. The percentage change with ambient is approximately the same with all type Amperite ballasts.



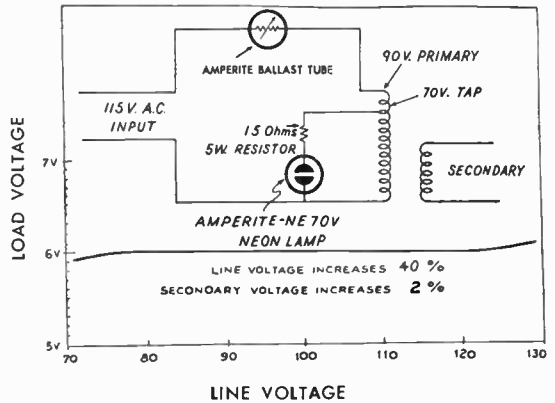
This diagram illustrates far superior regulating characteristics of the Amperite Ballast-Regulating Tube. **STANDARD SIZES** available for various wattage consumption . . . For good regulation, a bulb should not be required to dissipate more than 50% of maximum wattage.



| | | | | |
|--------------|-----------|--------------------|--------------------|--------------------|
| SIZE | SUB MIN L | T5 $\frac{1}{2}$ S | T5 $\frac{1}{2}$ L | T6 $\frac{1}{2}$ L |
| MAX. WATTS | 2 W. | 3 | 5 | 5 |
| WT. PER TUBE | 2 GMS | 7 GMS | 8 GMS. | 8 GMS. |

BATTERY CHARGING AND DISCHARGING

Amperite Ballast Tubes are very successfully used for keeping the current constant in charging and discharging batteries. Any number of Amperites of the same voltage range can be placed in parallel to obtain proper current. The current can be kept to $\pm 1\%$. Advise voltage variation and currents desired.



A light, compact, and inexpensive method of obtaining close regulation is to use an Amperite Ballast Tube with an Amperite Neon Lamp — type NE70V. Base octal-base wiring-prongs 2-5. One NE70V is used for all loads up to 100W.

POWER SUPPLIES

We strongly recommend, for any particular application, to fill in and return one of our special problem sheets (ASP 343) and permit us to recommend the most suitable AMPERITE.

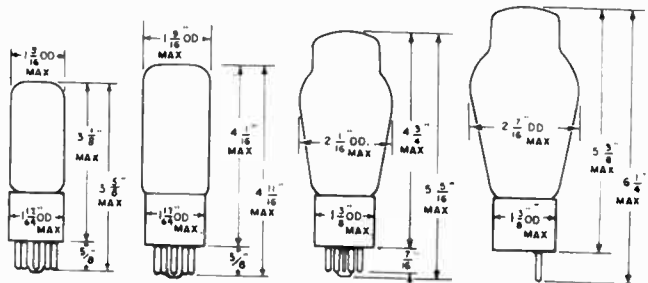
| Power Supply | Dry Cells | 6 Volts | 12 Volts | 26 Volts | 115 Volts |
|----------------------|-----------|----------|------------|------------|-----------|
| Supply Variation | 2.2-3.0V | 5.5-7.5V | 11.4-13.8V | 22.0-30.0V | 105-125V |
| Desired on Load | 1.8-2.0V | 3.9-4.1V | 6.1- 6.4V | 12.4-12.8V | 90- 95V |
| Required on AMPERITE | 0.4-1.0V | 1.6-3.4V | 5.3- 7.4V | 9.6-19.2V | 15- 30V |
| Current Variation | .29-.32a | .29-.32a | .29-.32a | .29-.32a | .29-.32a |

The above chart shows the maximum load voltage for the given supply to obtain $\pm 2\%$ current regulation on load. Better regulation is obtainable by increasing the voltage across the AMPERITE. Up to a point, the higher the percentage of the supply voltage taken up by the AMPERITE, the better the regulation.

Radio tube filament loads — have low cold resistance which causes a high initial surge. For such loads we recommend a bleeder of 20 to 50% prox. of load and the corresponding AMPERITE. e.g.

| FILAMENT LOAD | USE AMPERITE | TOTAL CURRENT |
|---------------|--------------|---------------|
| 0.3a | 4HTF4 | 0.45a |
| 0.6a | 8-4 | 0.8a |
| 0.7a | 9H4 | 0.95a |

On Radio tube filament loads the bleeder will also improve the regulation.



| | | | |
|-------|---------------------|---------------------|---------------------|
| T9 | T-12 | ST-16 | ST-19 |
| 12 | 20 | 30 | 60 |
| 1 oz. | 2 $\frac{1}{2}$ oz. | 2 $\frac{1}{2}$ oz. | 2 $\frac{3}{4}$ oz. |

EL Industrial Control Tubes

A ready reference for reliable, temperature free thyatron and rectifier tubes.

| TYPE | OTHER DESIGNATIONS | DESCRIPTION | MAX. CONTINUOUS AVERAGE DC ANODE CURRENT (AMPS) | OSCILLOGRAPH PEAK ANODE CURRENT CONTINUOUSLY RECURRING (AMPS) | MAX. INSTANTANEOUS PEAK FORWARD VOLTAGE | MAX. INSTANTANEOUS PEAK INVERSE VOLTAGE |
|-------------------|--------------------|--|---|---|---|---|
| RECTIFIERS | | | | | | |
| EL 1C | 3B22 | Full Wave, A4-10 Base, Single End. | 1.0 | 4.0 | | 725 |
| EL 3B | 6013 | Half Wave, A4-10 Base, Anode Cap. | 2.5 | 20 | | 920 |
| EL 3C | 4B24 | Full Wave, A4-81 Base, Single End. | 2.5 | 10 | | 725 |
| EL 3C/L | 6982 | Full Wave, Lug Type Base, Single End. | 2.5 | 10 | | 725 |
| EL 6B | 5892 | Half Wave, A4-81 Base, Anode Cap. | 6.4 | 77 | | 920 |
| EL 6B/L | 6983 | Half Wave, Lug Type Base, Anode Cap. | 6.4 | 77 | | 920 |
| EL 6C | | Full Wave, A4-81 Base, Single End | 6.4 | 25.6 | | 725 |
| EL 6F | 6015 | Half Wave, Panel Mounted, Flexible Leads | 6.4 | 77 | | 920 |
| EL 16F | | Half Wave, Panel Mounted, Flexible Leads | 16 | 96 | | 620 |
| THYRATRONS | | | | | | |
| EL C1B | 3C31 | A4-10 Base, Anode Cap. | 1.0 | 8.0 | 525 | 700 |
| EL C1B/A | 5664 | A4-10 Base, Anode Cap. | 1.0 | 8.0 | 750 | 1250 |
| EL C1K | 6014 | A4-10 Base, Single End | 1.0 | 8.0 | 1000 | 1250 |
| EL C1K/B | 7319 | A4-10 Base, Single End. | 1.0 | 8.0 | 2000 | 2000 |
| EL C3J | 5632 | A4-10 Base, Anode Cap. | 2.5 | 30 | 900 | 1250 |
| EL C3J/A | 5684 | A4-10 Base, Anode Cap. | 2.5 | 30 | 1000 | 1250 |
| EL C3J/L | 7216 | Lug Type Base, Anode Cap. | 2.5 | 30 | 900 | 1250 |
| EL C3J/AL | 7556 | Lug Type Base, Anode Cap. | 2.5 | 30 | 1000 | 1250 |
| EL C4H-1 | | A4-81 Base, Anode Cap. | 4.0 | 50 | 1700 | 1700 |
| EL C4H-2 | | Panel Mounted, Anode Cap. | 4.0 | 50 | 1700 | 1700 |
| EL C4H-3 | | Lug Type Base, Anode Cap. | 4.0 | 50 | 1700 | 1700 |
| EL C4H-4 | | Panel Mounted, Flexible Leads | 4.0 | 50 | 1700 | 1700 |
| EL C4H-5 | | Lug Type Base, Flexible Lead. | 4.0 | 50 | 1700 | 1700 |
| EL C6C | 6987 | #4310 Base, Anode Cap. | 6.4 | 77 | 2000 | 4000 |
| EL C6H-1 | | A4-81 Base, Anode Cap. | 6.4 | 80 | 1700 | 1700 |
| EL C6H-2 | | Panel Mounted, Anode Cap. | 6.4 | 80 | 1700 | 1700 |
| EL C6H-3 | | Lug Type Base, Anode Cap. | 6.4 | 80 | 1700 | 1700 |
| EL C6H-4 | | Panel Mounted, Flexible Leads. | 6.4 | 80 | 1700 | 1700 |
| EL C6H-5 | | Lug Type Base, Flexible Lead. | 6.4 | 80 | 1700 | 1700 |
| EL C6J | 5C21 | A4-81 Base, Anode Cap. | 6.4 | 77 | 750 | 1250 |
| EL C6J/A | 5685 | A4-81 Base, Anode Cap. | 6.4 | 77 | 1000 | 1250 |
| EL C6J/F | 6860 | Panel Mounted, Anode Cap. | 6.4 | 77 | 1000 | 1250 |
| EL C6J/L | 6988 | Lug Type Base, Anode Cap. | 6.4 | 77 | 750 | 1250 |
| EL C6J/K | 6864 | A4-81 Base, Anode Cap. | 6.4 | 77 | 1000 | 1250 |
| EL C6J/KF | 6871 | Panel Mounted, Flexible Leads. | 6.4 | 77 | 1000 | 1250 |
| EL C6J/KL | 6989 | Lug Type Base, Anode Cap. | 6.4 | 77 | 1000 | 1250 |
| EL C16J | 5665 | Panel Mounted, Flexible Leads. | 16.0 | 160 | 1000 | 1250 |
| EL C16H | | Panel Mounted, Flexible Leads. | 16.0 | 160 | 1700 | 1700 |

ELECTRONS, INCORPORATED
NEWARK 3, N.J.



SERVICE-DESIGNED RECEIVING TUBES

ELECTRONICS

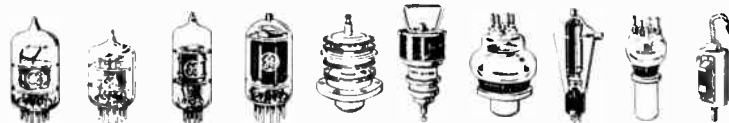
Effective July 6, 1962

| Type | List Price | Type | List Price | Type | List Price | Type | List Price | Type | List Price | Type | List Price | Type | List Price |
|-----------|------------|---------|------------|--------------|------------|------------|------------|-----------|------------|-----------|------------|------------------|------------|
| OZ4 | \$ 2.45 | 5AV8 | \$4.10 | 6BJ7 | \$3.15 | 6ER5 | \$3.50 | 7A7 | \$7.60 | 12DQ6B | \$4.25 | 25W4GT | \$ 2.70 |
| OZ4A* | 2.15 | 5AZ4 | 5.65 | 6BJ8 | 3.50 | 6ES5 | 3.00 | 7A8 | 8.30 | 12DQ7 | 3.45 | 25W6GT | 3.25 |
| OZ4G | 2.60 | 5B8 | 5.30 | 6BK4 | 8.00 | 6ES8 | 5.80 | 7AF7 | 6.00 | 12DS7 | 3.40 | 25Z5 | 4.60 |
| 1A7GT | 5.75 | 5BE8 | 3.35 | 6BK5 | 3.70 | 6ET7 | 4.25 | 7AG7 | 8.40 | 12DT8 | 3.75 | 25Z6GT | 3.05 |
| 1AX2 | 3.05 | 5BK7A | 3.40 | 6BK7B | 3.40 | 6EU7 | 2.70 | 7AU7 | 2.60 | 12DU7 | 4.10 | 27GB5/PL500 | 3.95 |
| 1B3GT | 2.90 | 5BQ7A | 4.00 | 6BLGT | 3.95 | 6EU8 | 3.30 | 7B5 | 8.85 | 12DV8 | 3.55 | 32ET5 | 2.20 |
| 1DN5 | 3.65 | 5BR8 | 3.65 | 6BL8 | 3.95 | 6EV5 | 3.00 | 7B6 | 5.60 | 12DY8 | 4.65 | EL-34/6CA7(N) | 5.20 |
| 1G3GT | 2.90 | 5BT8 | 3.30 | 6BM8 | 3.05 | 6EW6 | 2.30 | 7B7 | 3.90 | 12DZ6 | 2.50 | 34GD5 | 2.10 |
| 1H2 | 3.05 | 5BW8 | 3.40 | 6BN4 | 2.50 | 6EW7 | 3.90 | 7C5 | 3.50 | 12EA6 | 2.65 | 35A5 | 6.00 |
| 1H5GT | 4.15 | 5CG8 | 3.25 | 6BN6 | 3.00 | 6EX6 | 7.25 | 7C6 | 7.75 | 12ED5 | 2.85 | 35B5 | 2.65 |
| 1J3 | 2.90 | 5CL8A | 3.25 | 6BN8 | 3.05 | 6EY6 | 3.40 | 7C7 | 3.60 | 12EG6 | 2.50 | 35C5 | 3.50 |
| 1K3 | 2.90 | 5CM8 | 3.80 | 6BQ5 | 2.40 | 6EZ5 | 3.60 | 7EY6 | 3.20 | 12EK6 | 2.50 | 35DZ8 | 3.45 |
| 1L4* | 2.65 | 5CQ8 | 3.40 | 6BQ6GA | 4.35 | 6EZ8 | 3.80 | 7F7 | 3.80 | 12EM6 | 3.15 | 35EH5 | 2.20 |
| 1L6 | 6.85 | 5CZ5 | 4.35 | 6BQ6GTB | 4.35 | 6F5 | 4.60 | 7F8 | 8.80 | 12EN6 | 3.05 | 35GL6 | 4.50 |
| 1LA6 | 6.20 | 5DH8 | 5.10 | 6BQ7A | 3.95 | 6F6 | 5.90 | 7N7 | 7.55 | 12EQ7 | 2.90 | 35H8B | 2.55 |
| 1LB4 | 8.45 | 5DJA | 2.20 | 6BR8A | 3.65 | 6F6GT | 5.90 | 7S7 | 6.85 | 12EZ6 | 2.30 | 35L6GT | 2.45 |
| 1LH4 | 8.10 | 5EA8 | 3.20 | 6BS8 | 3.75 | 6FD6 | 2.30 | 7X7 | 2.30 | 12F8 | 2.75 | 35W4 | 1.10 |
| 1LN5 | 8.20 | 5E58 | 5.80 | 6BU5 | 5.50 | 6FD7 | 4.65 | 7Y4 | 7.15 | 12FK6 | 2.10 | 35Y4 | 4.80 |
| 1N2A | 4.65 | 5EU8 | 3.35 | 6BU8 | 2.80 | 6FG5 | 5.20 | 7Z4 | 6.90 | 12FM6 | 2.05 | 35Z3 | 5.00 |
| 1S2A | 2.70 | 5F7 | 2.80 | 6BV8 | 3.20 | 6FG6* | 3.25 | 8A8 | 4.10 | 12FQ8* | 3.00 | 35Z5GT | 1.85 |
| 1S4 | 4.35 | 5FV8 | 3.15 | 6BW4 | 2.90 | 6FG7 | 2.75 | 8AW8A | 3.65 | 12FR8 | 4.80 | 36AM3A | 3.60 |
| 1S5 | 2.65 | 5GH8 | 3.95 | 6BW8 | 3.55 | 6FH5 | 2.55 | 8BQ5 | 2.45 | 12FX8 | 3.80 | 42 | 5.15 |
| 1T4 | 2.50 | 5J6 | 2.85 | 6BX7GT | 4.00 | 6FM8 | 3.00 | 8CG7 | 3.00 | 12FX8A | 4.10 | 50A5 | 6.25 |
| 1U4 | 2.50 | 5T8 | 3.40 | 6BY5GA | 5.10 | 6FQ5 | 4.10 | 8CM7 | 2.80 | 12GA6 | 2.55 | 50B5 | 2.80 |
| 1U5 | 2.20 | 5U4GA/B | 2.10 | 6BY6 | 2.55 | 6FS5 | 3.05 | 8CN7 | 2.80 | 12GC6 | 4.20 | 50C5 | 2.15 |
| 1V2 | 2.10 | 5U4GB | 2.10 | 6BY8 | 2.65 | 6FV8 | 3.15 | 8CS7 | 2.95 | 12H6 | 3.95 | 50DC4 | 1.50 |
| 1X2A/B | 3.05 | 5U8 | 3.35 | 6BZ6 | 2.25 | 6FW5 | 4.10 | 8CX8 | 3.90 | 12J5 | 3.65 | 50EH5 | 2.30 |
| 2A3 | 10.50 | 5V3 | 3.85 | 6BZ7 | 4.00 | 6FY5 | 2.80 | 8EB8 | 4.00 | 12J8 | 4.65 | 50FE5 | 3.65 |
| 2AF4A | 4.10 | 5V4GA | 3.50 | 6BZ8 | 4.45 | 6GC5 | 3.20 | 8EM5 | 3.45 | 12K5 | 2.95 | 50HC6 | 2.30 |
| 2AF4B | 4.10 | 5V6GT | 2.45 | 6C4 | 1.85 | 6GH8 | 3.20 | 8ET7 | 4.40 | 12K7GT | 7.05 | 50HK6 | 2.30 |
| 2BN4A | 2.55 | 5X8 | 3.45 | 6C5 | 4.30 | 6GK5 | 4.10 | 8GN8 | 3.80 | 12K8 | 4.80 | 50L6GT | 2.55 |
| 2CY5 | 2.85 | 5Y3GT | 1.75 | 6CA4 | 1.95 | 6GK6 | 2.75 | 9A8/PCF80 | 4.00 | 12L6GT | 2.45 | 50X6 | 6.25 |
| 2EN5 | 2.10 | 5Y4GA | 2.55 | 6CA5 | 3.20 | 6GM6 | 2.40 | 9AU7 | 2.40 | 12R5 | 3.10 | 50Y6GT | 4.80 |
| 2ER5 | 3.55 | 5Y4GT | 2.65 | 6CA7* | 5.20 | 6GN8 | 3.75 | 9BR7 | 3.35 | 12SA7 | 4.30 | 50Y7GT | 4.50 |
| 2FH5 | 3.05 | 5Z3 | 3.30 | 6CB5A | 8.30 | 6GW6 | 4.15 | 9CL8 | 3.15 | 12SC7 | 5.50 | 70A7GT | 3.55 |
| 2FQ5 | 4.05 | 6A7 | 8.55 | 6CB6A | 2.25 | 6GW8 | 3.40 | 9U8A | 3.30 | 12SF5 | 4.10 | 70L7 | 10.15 |
| 2FQ5A | 4.05 | 6A8 | 6.90 | 6CD6GA | 5.80 | 6GX6 | 2.30 | 10C8 | 4.25 | 12SF7 | 6.60 | 60FX5 | 2.50 |
| 2F55 | 3.10 | 6A8GT | 4.80 | 6CE5/6BC5 | 2.35 | 6GY6 | 2.30 | 10E7 | 3.40 | 12SG7 | 4.65 | 75 | 6.80 |
| 2FY5 | 2.80 | 6AB4 | 2.15 | 6CF6 | 2.55 | 6GY8 | 3.80 | 10EG7 | 4.65 | 12SH7 | 5.75 | 80 | 4.25 |
| 2GK5 | 2.65 | 6AC5G | 2.00 | 6CG7 | 2.45 | 6GY8 | 3.80 | 10BW7 | 3.95 | 12SJ7 | 4.15 | 84/6Z4 | 2.60 |
| 3A2 | 4.85 | 6AC5GT | 4.35 | 6CG8A | 3.30 | 6H6 | 3.95 | 10HF8 | 3.75 | 12SK7 | 3.95 | 117L7/M7GT | 10.15 |
| 3A3 | 3.40 | 6AC7 | 5.10 | 6CH8 | 5.20 | 6HB6 | 2.80 | 11CY7 | 3.25 | 12SL7GT | 3.75 | 117N7GT | 13.65 |
| 3AF4A | 4.10 | 6AC7Y | 5.30 | 6CK4 | 3.00 | 6HF8 | 3.70 | 11JE8 | 4.10 | 12SN7GTA | 2.70 | 117Z3 | 4.35 |
| 3AL5 | 1.90 | 6AF3 | 2.90 | 6CL5 | 9.60 | 6HG8 | 2.90 | 12AB5 | 2.45 | 12SQ7 | 3.75 | 117Z6GT | 7.15 |
| 3AU6 | 2.15 | 6AF4 | 4.00 | 6CL6 | 3.75 | 6HJ8 | 3.30 | 12AC6 | 2.20 | 12SR7 | 5.45 | 6973 | 4.50 |
| 3AV6 | 1.75 | 6AF4A | 4.00 | 6CL8A | 3.15 | 6HS8 | 2.80 | 12AD6 | 2.30 | 12V6GT | 2.45 | 70Z5 | 3.00 |
| 3B2 | 10.35 | 6AG5 | 2.75 | 6CM6 | 3.30 | 6HZ8 | 4.35 | 12AE6A | 2.05 | 12W6GT | 3.00 | 7189A | 2.85 |
| 3BC5 | 2.35 | 6AG7 | 5.90 | 6CM7 | 2.90 | 6J5 | 3.65 | 12AE7 | 3.75 | 12XA | 1.95 | 7199 | 3.70 |
| 3BE6 | 2.25 | 6AH4GT | 3.45 | 6CM8 | 4.25 | 6J6 | 2.80 | 12AF3 | 2.80 | 13DE7 | 3.00 | 7247 | 3.05 |
| 3BN4 | 2.55 | 6AH6 | 4.65 | 6CN7 | 2.80 | 6J7 | 5.00 | 12AF6 | 2.95 | 13DR7 | 3.40 | 7355* | 3.05 |
| 3BN6 | 3.05 | 6AJ4 | 9.80 | 6CQ4 | 2.85 | 6JC8 | 3.05 | 12AJ6 | 2.55 | 13EM7 | 5.15 | 7408 | 3.10 |
| 3B8 | 2.85 | 6AK5* | 4.20 | 6CQ8 | 3.35 | 6JE8 | 3.95 | 12AL5 | 1.90 | 13FD7 | 4.85 | 7543 | 2.15 |
| 3BY6 | 2.35 | 6AL3 | 2.95 | 6CR6 | 2.40 | 6JH8 | 4.35 | 12AL8 | 6.60 | 14A7 | 5.95 | 7581* | 3.80 |
| 3BZ6 | 2.30 | 6AL5 | 1.85 | 6CS6 | 2.35 | 6JK8 | 3.55 | 12AQ5 | 2.40 | 14AF7 | 6.05 | 7581A(N) | 4.50 |
| 3CB6 | 2.30 | 6AL7GT* | 5.75 | 6CS7 | 3.00 | 6KG6GT | 2.65 | 12AT6 | 1.90 | 14B6 | 5.60 | 7591 | 3.00 |
| 3CE5/3CB5 | 2.35 | 6AM4 | 5.90 | 6CU5 | 2.35 | 6K7 | 4.95 | 12AT7 | 3.05 | 14G8 | 3.00 | 7695 | 4.40 |
| 3CF6 | 2.55 | 6AM8A | 3.45 | 6CU6 | 4.35 | 6K7* | 7.55 | 12AU6 | 2.15 | 14J8 | 3.00 | ECC85/6AQ8 | 3.20 |
| 3C6 | 2.45 | 6AN4 | 6.55 | 6CU8 | 4.15 | 6L6* | 8.65 | 12AU7; A | ea. 2.45 | 14Q7 | 6.20 | ECF80/6BL8 | 3.95 |
| 3CY5 | 2.85 | 6AN8A | 4.00 | 6CW4 | 4.45 | 6LG6C* | 4.20 | 12AV5GA | 3.85 | 15EA7 | 4.25 | ECL82/6BM8 | 3.05 |
| 3DG4 | 3.40 | 6AQ5A | 2.15 | 6CW5 | 3.60 | 6N7 | 5.00 | 12AV6 | 1.65 | 15EW6 | 2.80 | EF183/6EH7 | 3.80 |
| 3DK6 | 2.40 | 6A06 | 2.60 | 6CX8 | 3.65 | 6Q7 | 5.35 | 12AV7 | 3.55 | 17AV5GA | 2.75 | EF184/6EJ7 | 3.80 |
| 3DT6 | 2.20 | 6A07GT | 4.00 | 6CY5 | 2.80 | 6S4A | 2.50 | 12AW6 | 3.30 | 17AX4GT | 3.70 | EL-34/6CA7 | 5.20 |
| 3EA5 | 2.85 | 6A08 | 3.20 | 6C7 | 3.20 | 6S8GT | 4.45 | 12AX4GTB | 2.70 | 17D4 | 2.75 | EM-81/6DA5* | 2.80 |
| 3ER5 | 3.55 | 6AR5 | 2.60 | 6CZ5 | 4.10 | 6SA7 | 4.30 | 12AX7 | 2.55 | 17DE4 | 2.90 | EM84/6FG6 | 3.25 |
| 3GK5 | 4.15 | 6AR8 | 5.15 | 6DA4 | 2.70 | 6SB7Y | 6.35 | 12AZ7A | 2.75 | 17DQ6A; B | ea. 4.20 | EZ80/6V4 | 1.90 |
| 3LF4 | 6.40 | 6AS5 | 2.40 | 6DA5* | 2.80 | 6SC7 | 4.25 | 12B4A | 2.85 | 17EW8 | 2.80 | EZ-81/6CA4 | 1.65 |
| 3Q4 | 3.55 | 6AS8 | 3.80 | 6DB5 | 5.30 | 6SF5 | 3.75 | 12BA6 | 1.65 | 17GW6 | 4.25 | FM1000 | 9.45 |
| 3Q5GT | 5.70 | 6AT6 | 1.90 | 6DE4 | 6.80 | 6SF7 | 6.30 | 12BA7 | 5.95 | 17H3 | 2.50 | GZ-34/5AR4 | 4.50 |
| 3S4 | 2.65 | 6AT8A | 3.80 | 6DE6 | 2.55 | 6SG7 | 4.65 | 12B06 | 2.45 | 18A5 | 4.10 | HCC85/17EW8 | 2.80 |
| 3V4 | 2.50 | 6AU4GTA | 3.60 | 6DE7 | 3.40 | 6SH7 | 4.50 | 12B06 | 1.75 | 18FW6 | 2.15 | | |
| 4AU6 | 2.20 | 6AU5GT | 4.30 | 6DG6GT | 2.50 | 6SJ7 | 4.15 | 12B6F | 2.20 | 18FX6 | 2.15 | COMPACTRON TYPES | |
| 4BC5 | 2.35 | 6AU6A | 2.10 | 6DJ8 | 5.00 | 6SK7 | 3.95 | 12BH7A | 3.05 | 18FY6 | 1.65 | 1AD2 | 2.75 |
| 4BC8 | 4.10 | 6AU8A | 3.50 | 6DK6 | 2.35 | 6SL7GT | 3.55 | 12BK5 | 4.00 | 19AU4GTA | 3.45 | 2AH2 | 2.90 |
| 4BN6 | 3.75 | 6AV5GA | 4.00 | 6DM4 | 2.75 | 6SN7GTB | 2.60 | 12BL6 | 2.30 | 19L8A | 3.50 | 6AF11 | 4.55 |
| 4BQ7A | 4.00 | 6AV6 | 1.65 | 6DN7 | 3.55 | 6SQ7 | 3.75 | 12BN6 | 3.90 | 19EA8 | 3.45 | 6ALL11 | 4.15 |
| 4BS8 | 3.90 | 6AW8A | 3.75 | 6DQ4 | 2.65 | 6SR7 | 3.90 | 12BQ6GA | 4.50 | 19E28 | 3.80 | 6AR11 | 4.25 |
| 4BU8 | 2.85 | 6AX4GTA | 2.65 | 6DQ5 | 7.70 | 6SS7 | 5.50 | 12BQ6GTB | 4.50 | 19HV8 | 3.80 | 6AS11 | 4.55 |
| 4BZ6 | 2.25 | 6AX4GTB | 2.65 | 6DQ6A; 6DQ6B | 4.15 | 6T4 | 5.45 | 12BR7 | 3.20 | 19J6 | 3.15 | 6AV11 | 3.60 |
| 4BZ7 | 4.05 | 6AX5GT | 2.95 | 6DR7 | 3.40 | 6T8A | 3.40 | 12BV7 | 3.50 | 19JN8 | 3.20 | 6AX3 | 2.45 |
| 4CB6 | 2.30 | 6AX8 | 3.70 | 6DS5 | 3.20 | 6U5/6G5(N) | 5.55 | 12BW4 | 2.90 | 19T8 | 3.35 | 6B10 | 3.20 |
| 4C6 | 2.35 | 6A28 | 5.55 | 6DT5 | 3.25 | 6U8A | 3.30 | 12BY7A | 3.20 | 19X8 | 4.35 | 6BE3 | 2.75 |
| 4CY5 | 2.85 | 6B8 | 7.30 | 6DT6 | 2.15 | 6V3A | 4.55 | 12BZ7 | 4.45 | 21EX6 | 5.70 | 6C10 | 3.60 |
| 4DE6 | 2.65 | 6BA6 | 2.00 | 6DT8 | 3.80 | 6V4 | 1.60 | 12C5 | 2.45 | 22DE4 | 3.10 | 6D10 | 3.75 |
| 4DT6 | 2.20 | 6BA7 | 5.55 | 6DW5 | 4.05 | 6V6 | 6.80 | 12CA5 | 2.50 | 25AV5GA | 4.30 | 6FJ7 | 3.35 |
| 4EH7 | 3.80 | 6BA8A | 3.90 | 6DX8 | 3.25 | 6V6GT | 2.15 | 12CN5 | 2.45 | 25AX4GT | 2.85 | 6G11 | 3.95 |
| 4EJ7 | 3.80 | 6BC5 | 2.35 | 6DZ7 | 8.45 | 6V6GT(N) | 2.85 | 12CR6 | 2.40 | 25BK5 | 3.65 | 6GE5 | 3.80 |
| 4ES8 | 4.65 | 6BC7 | 3.80 | 6E5* | 4.90 | 6W4GT | 2.45 | 12CT8 | 4.30 | 25BQ6GA | 4.60 | 6GF5 | 3.70 |
| 4EW6 | 2.65 | 6BC8 | 4.00 | 6EA7 | 3.50 | 6W4GTA | 2.45 | 12CU5 | 2.45 | 25BQ6GTB | 4.60 | 6J11 | 4.35 |
| 4GZ5 | 2.40 | 6BD6 | 2.45 | 6EA8 | 3.20 | 6W6GT | 2.85 | 12CUG | 4.45 | 25C5 | 2.15 | 6K11 | 3.55 |
| 5AM8 | 3.55 | 6BE6 | 2.20 | 6EB5 | 2.90 | 6X4 | 1.65 | 12CWS | 3.45 | 25CA5 | 3.10 | 11AR11 | 4.25 |
| 5AN8 | 4.00 | 6BF5 | 3.55 | 6EB8 | 4.00 | 6X5GT | 2.10 | 12CX6 | 2.90 | 25CD6GB | 5.85 | 12AL11 | 4.15 |
| 5AQ5 | 2.20 | 6BF6 | 1.80 | 6EH5 | 2.90 | 6X8 | 3.20 | 12D4 | 2.80 | 25DK4 | 1.75 | 12AK3 | 2.50 |
| 5AR4 | 4.50 | 6BF8 | 4.35 | 6EH7/EF183 | 3.20 | 6Y6G | 3.45 | 12D85 | 2.80 | 25DN6 | 5.5 | | |



ELECTRONICS

INDUSTRIAL tubes



FOR BROADCAST, COMMUNICATIONS AND INDUSTRY

| Type | Suggested Dealer Price | Type | Suggested Dealer Price | Type | Suggested Dealer Price | Type | Suggested Dealer Price |
|--------------------------|------------------------|------------------------------|------------------------|-------------------------|------------------------|---------------------------|------------------------|
| OA2 | \$ 1.32 | 5R4GYA | \$ 2.05 | GL-592 | \$ 37.50 | GL-5544 | \$ 32.50 |
| OA3 | 1.55 | 5UP1 | 12.45 | GL-627 | 31.50 | GL-5545 (See GL-6807) | |
| OA4G | 1.90 | 5Y3WGTB★ | 5.75 | GL-672-A | 39.85 | GL-5549 | 653.50 |
| OB2 | 1.45 | FA-6 (See GL-5627) | | GL-673 | 20.15 | GL-5550 | 49.00 |
| OB3 | 2.35 | 6AC7WA★ | 5.70 | GL-678 | 49.50 | GL-5551A | 65.00 |
| OC3 | 1.50 | 6AK5W (See 5654/6AK5W) | | 740 (See GL-6856/740) | | GL-5551A/P | 65.00 |
| OD3 | 1.45 | 6AL5W (See 5726/6AL5W) | | 760 (See GL-6858/760) | | GL-5552A | 103.95 |
| 1AD4 | 2.80 | 6AK6 | 1.40 | 760P (See GL-6859/760P) | | GL-5552A/P | 103.95 |
| 1AG4 | 3.05 | 6AN5 | 3.75 | GL-800 | 11.50 | GL-5553B | 257.25 |
| 1AH4 | 1.35 | 6AS6 | 3.45 | GL-801-A; GL-802 | ea. 13.00 | GL-5553B/P | 257.25 |
| 1AJ5 | 1.55 | 6AS6W (See 5725/6AS6W) | | GL-803 | 49.20 | GL-5554 | 215.00 |
| 1C/3B22 | 10.30 | 6AS7GA | 4.95 | GL-805 | 22.10 | GL-5555 | 316.00 |
| 1D21/SN4 | 7.10 | 6AU6WB (See 6136/6AU6WA/B) | | GL-806 | 34.25 | GL-5556 | 35.00 |
| C1K (See GL-6014/C1K) | | 6BA6W (See 5749/6BA6W) | | 807 | 2.95 | GL-5557 | 9.50 |
| GL-1L21 | 25.00 | 6BE6W (See 5750/6BE6W) | | GL-809 | 7.95 | GL-5558 | 17.50 |
| GL-1L33 | 46.00 | 6C4WA★ | 3.15 | GL-810 | 26.95 | GL-5559 | 23.00 |
| GL-1L36 | 18.50 | 6D4 | 2.85 | GL-811A; GL-812A | ea. 6.90 | GL-5560 | 33.00 |
| GL-1L38 | 33.25 | 6J4 | 4.20 | GL-813 | 23.15 | GL-5561 | 59.00 |
| GL-1P21 | 54.50 | 6SK7WA (See 6137/6SK7WA) | | GL-814; GL-815 | ea. 28.35 | GL-5563A | 50.00 |
| GL-1P29 | 4.90 | 6X4WA (See 6202/6X4WA) | | GL-816 | 2.95 | GL-5564/GL-507 | 740.00 |
| GL-1P39 | 2.45 | GL-7C29 | 189.50 | GL-828 | 32.95 | GL-5575/100 | 250.00 |
| GL-1P40 | 3.75 | GL-7D21 | 625.00 | GL-829-B | 19.00 | GL-5581 | 3.45 |
| 1P41 | 4.00 | PJ-8 (See GL-5556) | | GL-830B | 17.35 | GL-5588 | 190.00 |
| 1Q26A (Price on request) | | GL-8D21 | 1985.00 | GL-832-A | 15.90 | GL-5593 | 270.00 |
| 1V6 | 1.90 | 12A6 | 2.55 | GL-833-A | 53.65 | 5610 | 1.05 |
| 2AP1A | 15.75 | 12AT7WB (See 6201/12AT7WA/B) | | GL-836 | 11.10 | GL-5623 | 25.00 |
| GL-2B22 | 28.00 | 12AY7 | 2.45 | GL-837 | 10.30 | GL-5625 (Use GL-5575/100) | |
| GL-2B23 | 68.20 | FA-13 (See GL-5628) | | GL-838 | 20.00 | GL-5627 | 72.50 |
| 2BP1A | 19.05 | C16J (See 5665/C16J) | | GL-845 | 25.00 | GL-5628 | 56.50 |
| GL-2C39A | 22.50 | FG-17 (See GL-5557) | | GL-851 | 717.00 | GL-5630 | 1900.00 |
| GL-2C39B | 32.15 | PJ-23 (See GL-868) | | GL-857-B | 218.50 | GL-5632/C3J | 13.80 |
| GL-2C39WA | 30.00 | FG-27A | 52.00 | GL-862-A | 1713.25 | 5636★ | 6.10 |
| GL-2C40 | 29.30 | 28D7 | 2.55 | GL-866-A | 2.65 | 5642 | 2.45 |
| GL-2C40A | 34.00 | FG-32 (See GL-5558) | | GL-868 | 3.90 | 5651 | 1.78 |
| GL-2C42 | 27.10 | FG-33 (See GL-5720) | | GL-869-B | 138.00 | 5654★ | 3.05 |
| GL-2C43 | 27.50 | FG-41 (See GL-5830) | | GL-870-A | 1982.00 | 5654/6AK5W★ | 3.05 |
| GL-2C46 | 29.50 | B-47 (See GL-5623) | | GL-872-A | 9.90 | 5662 | 1.45 |
| 2D21 | 1.30 | FG-57 (See GL-5559) | | GL-880 | 595.00 | 5663 | 2.10 |
| 2D21W (See 5727/2D21W) | | FG-67 (See GL-5728) | | 884 | 2.30 | GL-5665/C16J | 56.90 |
| 2E24 | 5.20 | FG-81A | 32.50 | GL-889-A | 235.00 | 5670★ | 2.95 |
| 2E26 | 5.05 | 83 | 1.90 | GL-889-R-A | 370.00 | GL-5674 | 209.00 |
| GL-2H21 | 288.00 | FG-97 | 62.00 | GL-891-R | 460.00 | GL-5675 | 16.05 |
| 2Y2A | 3.05 | FG-98A | 77.00 | GL-892 | 290.00 | GL-5681 | 1990.00 |
| 3AP1A | 24.15 | GL-100TH | 26.00 | GL-892R | 455.00 | 5686★ | 3.40 |
| GL-3B24W | 10.55 | FG-104 (See GL-5561) | | GL-893-AR | 1260.00 | 5697★ | 4.00 |
| GL-3B28 | 6.00 | FG-105 | 59.00 | GL-917 | 6.00 | 5687WA★ | 5.66 |
| 3BP1A | 16.25 | FG-154 | 108.00 | GL-918 | 4.45 | 5691 | 8.75 |
| GL-3C | 11.80 | FG-172 | 122.00 | GL-919 | 6.00 | 5692 | 8.25 |
| GL-3C23 | 11.98 | GL-203/623 | 13.44 | GL-920 | 6.40 | 5693 | 6.60 |
| GL-3CX100A5 | 32.00 | GL-207 | 330.00 | GL-921 | 3.50 | 5696 | 2.05 |
| 3KP1 | 19.00 | GL-217C | 21.20 | GL-922 | 3.10 | 5718★ | 3.65 |
| 3MP1 | 26.30 | FG-238B (See GL-5555) | | GL-923 | 3.40 | 5719★ | 3.15 |
| GL-3X2500A3 | 198.00 | GL-242C | 33.00 | GL-927 | 4.25 | GL-5720 | 34.75 |
| KC-4 (See GL-5575/100) | | FG-259B (See GL-5554) | | GL-929 | 2.35 | 5725 (See 5725/6AS6W) | |
| GL-4-65A | 28.50 | FG-280 | 100.00 | GL-930 | 3.10 | 5725/6AS6W★ | 3.80 |
| GL-4250/5D22 | 46.50 | GL-393A | 13.25 | GL-931-A | 11.15 | 5726/6AL5W★ | 1.55 |
| GL-4-400A | 48.00 | FP-400 | 71.45 | 1612 | 4.60 | 5727★ | 2.90 |
| GL-4-1000A | 135.00 | 407A | 5.90 | 1614 | 5.75 | 5727/2D21W★ | 2.90 |
| GL-4CX5000A | 495.00 | 408A | 4.95 | GL-1616 | 13.90 | GL-5728 | 74.00 |
| GL-4D21/4-125A | 36.00 | GL-411 | 478.75 | 1619 | 4.15 | GL-5736 | 205.00 |
| GL-4X150A | 25.00 | GL-414 | 231.00 | 1620 | 7.00 | GL-5740/FP-54 | 209.00 |
| GL-4X500A | 121.00 | GL-415 (See GL-5550) | | 2050 | 2.40 | 5749 (See 5749/6BA6W) | |
| 5AUP24 | 140.00 | GL-441 | 4.50 | 2050A | 2.25 | 5749/6BA6W★ | 2.20 |
| GL-5C24 | 45.00 | 502A | 2.30 | GL-5513 | 512.00 | 5750 (See 5750/6BE6W) | |
| 5CP1-A | 21.45 | GL-506 (See GL-6228) | | GL-5518 | 915.00 | 5750/6BE6W★ | 3.45 |
| 5QP4A | 67.70 | GL-575A | 20.15 | GL-5528/C6L | 32.00 | | |

★Five Star Type

(continued)

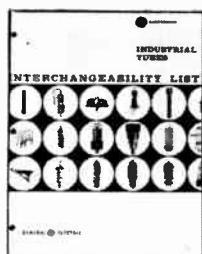
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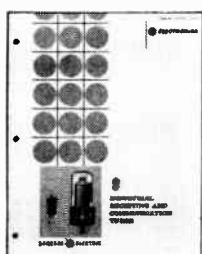
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| GL-5762/7C24 | 230.00 | 6146A | 4.35 | 6669△ | †2.30 | 7266 | 21.50 |
| 5763 | 2.55 | GL-6161 | 125.00 | 6676△ | †2.35 | GL-7289 | 32.15 |
| GL-5779 | 200.00 | GL-6166 | 850.00 | 6677△ | †3.85 | GL-7293 | 1300.00 |
| GL-5788 | 476.25 | GL-6183 (See GL-6942) | | 6678△ | †3.50 | 7296 | 31.00 |
| 5814A★ | 2.34 | 6189/12AU7WA★ | 3.65 | 6679△ | †3.20 | 7355 | †2.70 |
| GL-5819 | 56.50 | 6197 | 3.05 | 6680△ | †2.65 | GL-7391 | 67.00 |
| GL-5820 | 1200.00 | GL-6198A (Use 7038) | | 6681△ | †2.75 | GL-7398 | 770.00 |
| GL-5822A | 121.80 | 6201/12AT7WA/B★ | 2.95 | 6688A★ | 8.75 | 7408 | †2.15 |
| 5823 | 1.75 | 6202★ | 2.85 | GL-6771 | 71.90 | 7427 | 2.90 |
| 5824 | 3.60 | 6203★ | 4.10 | GL-6807 | 29.30 | 7462 | 25.00 |
| GL-5830 | 465.00 | 6205★ | 5.45 | GL-6808 | 29.40 | 7486 | 25.00 |
| 5840★ | 5.30 | 6206★ | 7.25 | GL-6809 | 29.80 | GL-7518 | 15.25 |
| 5844★ | 2.30 | 6211 | 2.15 | 6814★ | 5.05 | 7581 | †3.80 |
| GL-5855 | 75.00 | 6222★ | 7.35 | 6829★ | 6.10 | 7581A | †4.50 |
| 5879 | 1.95 | GL-6228 | 3696-25 | GL-6848 | 1740.00 | 7588 | 55.00 |
| 5881 | 3.10 | GL-6251 | 2300.00 | GL-6856/740 | 20.80 | 7625 | 25.00 |
| GL-5894 | 25.00 | 6265★ | 4.10 | GL-6858/760 | 28.90 | GL-7629 | 1800.00 |
| 5896★ | 3.75 | GL-6283 | 500.00 | GL-6859/760P | 29.40 | GL-7644 | 65.00 |
| 5899★ | 5.50 | GL-6299 | 56.00 | 6883 | 5.55 | GL-7669 | 68.25 |
| 5902★ | 4.80 | GL-6333 | 310.00 | GL-6897 | 32.15 | GL-7670 | 82.95 |
| 5915A | 1.65 | 6336A | 20.10 | GL-6907 | 25.00 | GL-7671 | 103.95 |
| 5963 | 1.50 | GL-6346 | 70.00 | 6919 | 1.35 | GL-7681 | 171.00 |
| 5964 | ea. 1.55 | GL-6347 | 104.00 | GL-6930/635P | 14.40 | 7701 | †3.00 |
| 5965A | 1.90 | GL-6348 | 250.00 | GL-6942 | 855.00 | GL-7703 | 190.00 |
| GL-5973 | 495.00 | 6350 | 1.95 | 6973 | †4.50 | 7716 | †3.65 |
| 6005★ | 3.95 | 6360 | 5.60 | GL-7007 | 1120.00 | 7717/6CY5 | †2.90 |
| 6005/6AQ5W★ | 3.95 | 6386★ | 7.40 | 7025 | †3.00 | 7720 | 25.00 |
| GL-6011/710 | 13.00 | 6397 | 8.30 | 7036 | 1.50 | 7724/14GT8 | †3.10 |
| 6012★ | 7.65 | 6414★ | 3.65 | 7038 | 205.00 | GL-7725 | 13.50 |
| GL-6014/C1K | 12.90 | GL-6427 | 830.00 | 7054 | 1.55 | GL-7726 | 16.30 |
| GL6019 | 751.75 | GL-6442 | 39.25 | 7056 | 1.20 | GL-7735A | 205.00 |
| 6021★ | 4.05 | 6463 | 1.90 | 7057 | 1.95 | 7861★ | 3.50 |
| GL-6039 | 1260.00 | 6485 | 2.05 | 7058 | 1.30 | GL-7985 | 1740.00 |
| 6046 | 1.55 | GL-6511 | 156.90 | 7059 | 1.75 | GL-8000 | 29.15 |
| 6072A★ | 3.90 | GL-6512 | 259.80 | 7061 | 1.30 | GL-8002 | 394.00 |
| 6080★ | 5.35 | GL-6513 | 347.00 | 7077 | 25.00 | GL-8005 | 17.85 |
| 6087★ | 5.75 | GL-6514 | 509.00 | GL-7085/356 | 600.00 | GL-8008 | 9.90 |
| 6100★ | 2.49 | GL-6515 | 806.50 | GL-7151 | 825.00 | GL-8013A | 17.05 |
| 6111★ | 4.30 | 6550 | 4.30 | 7167 | †2.00 | GL-8020 | 24.00 |
| 6112★ | 4.45 | GL-6623 | 205.00 | GL-7171 | 81.50 | GL-8025A | 23.85 |
| 6134★ | 5.70 | 6667△ | †2.20 | 7189-A | †2.65 | 9001 | 5.40 |
| 6135★ | 2.40 | 6661△ | †2.90 | 7199 | †3.70 | 9002 | 3.85 |
| 6136/6AU6WA/B★ | 2.70 | 6662△ | †2.80 | | | 9003 | 5.40 |

★Five-star Type †List Price △Communication Types

NEW G-E INDUSTRIAL TUBE CATALOGS



ETI-719D 25¢
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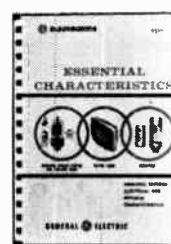
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EIMAC POWER GRID

At Eimac you'll find the most *complete* line of power grid tubes available today: triodes, tetrodes, pulse modulators, diodes, zero-bias tubes, ceramic tubes, glass tubes. And there are more to come! Continuing Eimac projects are ever increasing the scope of power grid tube capabilities.

DIODES AND RECTIFIERS

| | Fila- ment Voltage Volts | Fila- ment Current Amps | Peak Inverse Voltage Volts | Peak Plate Current Amps | Average Plate Current ma | Plate Dissi- pation Watts |
|------------|-----------------------------------|----------------------------------|-------------------------------------|----------------------------------|-----------------------------------|------------------------------------|
| 2-01C | 5.0 | 0.35 | 1,000 | 0.010 | 1 | 0.1 |
| 2-25A | 6.3 | 3.0 | 25,000 | 1.0 | 50 | 15 |
| 2-50A | 5.0 | 4.0 | 30,000 | 1.0 | 75 | 30 |
| 2-150D | 5.0 | 13.0 | 30,000 | 3.0 | 250 | 90 |
| 2-240A | 7.5 | 12.0 | 25,000 | 4.0 | 500 | 150 |
| 2-450A | 7.5 | 26.5 | 30,000 | 8.0 | 1000 | 450 |
| 2-2000A | 10.0 | 25.0 | 75,000 | 12.0 | 750 | 1200 |
| 250R | 5.0 | 10.5 | 60,000 | 2.5 | 250 | 150 |
| 253 | 5.0 | 10.0 | 15,000 | 2.5 | 350 | 100 |
| 8020(100R) | 5.0 | 6.5 | 40,000 | 1.5 | 100 | 60 |
| 2X1000A | 26.5 | 2.2 | 25,000 | 25.0 ^a | 1250 ^a | 1000 |
| 2X3000F | 7.5 | 51.0 | 25,000 | 20.0 | 3000 | 3000 |
| KY21A | 2.5 | 10.0 | 11,000 | 3.0 | 750 | ... |
| RX21A | 2.5 | 10.0 | 11,000 | 3.0 | 750 | ... |
| 322 | 6.3 | 1.0 | 800 | 4.8 ^a | 125 ^a | 100 |

PULSE MODULATORS

| | Plate Dissi- pation Watts | Plate Voltage Volts | Plate Current ma | Grid Dissi- pation Watts | Screen Voltage Volts | Screen Dissi- pation Watts | Filament Voltage Volts | Filament Current Amps | Amplifi- cation Factor |
|-----------|------------------------------------|---------------------------|------------------------|-----------------------------------|----------------------------|-------------------------------------|------------------------------|-----------------------------|------------------------------|
| 4PR60B | 60 | 20,000 | 18,000 ³ | ... | 1500 | 8 | 26.0 | 2.25 | ... |
| 4PR65A | 65 | 15,000 | 1000 ³ | 5 | 2000 | 10 | 6.0 | 3.5 | ... |
| 4PR125A | 125 | 18,000 | 1800 ³ | 5 | 2000 | 20 | 5.0 | 6.5 | ... |
| 4PR250C | 250 | 50,000 | 4000 ³ | 5 | 2000 | 25 | 5.0 | 14.5 | ... |
| 4PR400A | 400 | 20,000 | 4000 ³ | 10 | 2500 | 35 | 5.0 | 14.5 | ... |
| 4PR1000A | 1000 | 30,000 | 8000 ³ | 25 | 2500 | 75 | 7.5 | 21.4 | ... |
| 3CPL500A8 | 500 ⁴ | 120,000 | 5000 ³ | 25 ⁴ | ... | ... | 7.5 | 5.5 | 700 |
| 6C21 | 300 | 30,000 | 15,000 ³ | 50 | ... | ... | 8.2 | 17.00 | 30 |

AIR SYSTEM SOCKETS

| Tube | Screen By-Pass Capacitor uuf | Special Characteristics |
|---------|--|---|
| SK-300 | 4CX5000A | none |
| SK-300A | 4CX5000A; 4CW10,000A; 4CX10,000D | none |
| SK-400 | 4-400A; 4-250A; 4-125A; 4X500F | none |
| SK-410 | 3-400Z; 4-250A; 4-400A; 4PR250C; 4PR400A | none |
| SK-500 | 4-1000A | none |
| SK-510 | 3-1000Z; 4-1000A; 4PR1000A | none |
| SK-600 | 4X150A; 4X150D; 4X250B; 4X250F; 4CX250B; 4W300B | 2700 No terminals grounded. |
| SK-610 | 4X150A; 4X150D; 4X250B; 4X250F; 4CX250B; 4W300B | 2700 Cathode terminals grounded. |
| SK-620A | 4X150A; 4X150D; 4X250B; 4X250F; 4CX250B; 4W300B | 1100 No terminals grounded. Screen by-pass capacitor plastic sealed. |
| SK-630 | 4X150A; 4X150D; 4X250B; 4X250F; 4CX250B; 4W300B | 1100 Cathode terminals grounded. Screen by-pass capacitor plastic sealed. |
| SK-640 | 4X150A; 4X150D; 4X250B; 4X250F; 4CX250B; 4W300B | none No terminals grounded. |
| SK-650 | 4X150A; 4X150D; 4X250B; 4X250F; 4CX250B; 4W300B | none Cathode terminals grounded. |
| SK-655 | (Screen by-pass capacitor for use with SK-650) | 1100 Plastic sealed. |
| SK-700 | 4CX300A | 1100 No terminals grounded. |
| SK-710 | 4CX300A | 1100 Cathode terminals grounded. |
| SK-711 | 4CN15A; 4CX125C; 4CX300A | 1100 Cathode terminals grounded. |
| SK-740 | 4CX300A | none No terminals grounded. |
| SK-760 | 4CX300A | none Integral chimney. No terminals grounded. |
| SK-770 | 4CX300A | none Integral chimney, screen terminals grounded. |
| SK-800A | 4CX1000A, 4CW2000A | 1500 No terminals grounded. |
| SK-810 | 4CX1000A, 4CW2000A | 1500 Cathode terminals grounded. |
| SK-860 | 3CX1000A7 | none No terminals grounded. |
| SK-870 | 3CX1000A7 | none Grid terminals grounded. |
| SK-890 | 4CX1000A, 4CW2000A | 1500 Cathode grounded. Screen isolated. |
| SK-900 | 4X500A | 650 |
| SK-1300 | 3CX10,000A1; 3CX10,000A3; 3CX10,000A7; 3CW20,000A1; 3CW20,000A3; 3CW20,000A7 | none No terminals grounded. |
| SK-1400 | 4CX3000A | 1800 |
| SK-1470 | 4CX3000A | none |
| SK-1500 | 4CX35,000C | none |

CHIMNEYS

| | User Price |
|---------|---------------|
| SK-306 | \$ 6.50 |
| SK-316 | ... |
| SK-406 | 8.50 |
| SK-416 | 6.00 |
| SK-506 | 15.00 |
| SK-516 | 11.00 |
| SK-606 | .75 |
| SK-626 | .75 |
| SK-636A | 7.00 |
| SK-806 | 8.50 |
| SK-816 | ... |
| SK-906 | 11.50 |
| SK-1306 | 6.50 |
| SK-1406 | 6.50 |

TUBES and Accessories

| | MAXIMUM RATINGS | | | | | ELECTRICAL CHARACTERISTICS | | | |
|-------------|-------------------------------|---------------------------|------------------------|------------------------------|----------------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|
| | Plate Dissipation Watts | Plate Voltage Volts | Plate Current ma | Grid Dissipation Watts | Screen Voltage Volts | Screen Dissipation Watts | Filament Voltage Volts | Filament Current Amps | Amplification Factor |
| 2C39A | 100 | 1000 | 125 ⁵ | 2 | .... | .... | 6.3 | 1.0 | 100 |
| 2C39WA | 100 | 1000 | 125 ⁵ | 2 | .... | .... | 6.3 | 1.0 | 100 |
| 3-400Z | 400 | 4000 | 400 | 20 | .... | .... | 5.0 | 14.5 | 200 |
| 3-1000Z | 1000 | 6000 | 800 | 50 | .... | .... | 7.5 | 21.3 | 200 |
| 3C24 | 25 | 2000 | 75 | 7 | .... | .... | 6.3 | 3.0 | 24 |
| 3CPN10A5 | 10 | 3500 ³ | 3000 ³ | 2 | .... | .... | 6.0 | 1.0 | 100 |
| 3CX100A5 | 100 | 1000 | 125 ⁵ | 2 | .... | .... | 6.0 | 1.0 | 100 |
| 7289 | 100 | 1000 | 125 ⁵ | 2 | .... | .... | 6.0 | 1.0 | 100 |
| 3CX100F5 | 100 | 1000 | 125 ⁵ | 2 | .... | .... | 26.5 | 0.22 | 100 |
| 3CX1000A7 | 1000 | 2500 | 1000 | 45 | .... | .... | 5.0 | 34 | 200 |
| 3CW20,000A1 | 20,000 | 7000 | 4000 | 100 | .... | .... | 7.5 | 100.0 | 5.5 |
| 3CW20,000A3 | 20,000 | 7000 | 4000 | 250 | .... | .... | 7.5 | 100.0 | 20 |
| 3CW20,000A7 | 20,000 | 7000 | 4000 | 500 | .... | .... | 7.5 | 100.0 | 200 |
| 3CX10,000A1 | 10,000 | 7000 | 4000 | 100 | .... | .... | 7.5 | 100.0 | 5.5 |
| 3CX10,000A3 | 10,000 | 7000 | 4000 | 250 | .... | .... | 7.5 | 100.0 | 20 |
| 3CX10,000A7 | 10,000 | 7000 | 4000 | 500 | .... | .... | 7.5 | 100.0 | 200 |
| 3W5000A1 | 5000 | 6000 | 2500 | 50 | .... | .... | 7.5 | 51.0 | 5 |
| 3W5000A3 | 5000 | 6000 | 2500 | 150 | .... | .... | 7.5 | 51.0 | 20 |
| 3W5000F1 | 5000 | 6000 | 2500 | 50 | .... | .... | 7.5 | 51.0 | 5 |
| 3W5000F3 | 5000 | 6000 | 2500 | 150 | .... | .... | 7.5 | 51.0 | 20 |
| 3X2500A3 | 2500 | 6000 | 2500 | 150 | .... | .... | 7.5 | 51.0 | 20 |
| 3X2500F3 | 2500 | 6000 | 2500 | 150 | .... | .... | 7.5 | 51.0 | 5 |
| 3X3000A1 | 3000 | 6000 | 2500 | 50 | .... | .... | 7.5 | 51.0 | 5 |
| 3X3000F1 | 3000 | 6000 | 2500 | 50 | .... | .... | 7.5 | 51.0 | 200 |
| 3X3000F7 | 3000 | 5000 | 2500 | 225 | .... | .... | 7.5 | 51.0 | 24 |
| 25T | 25 | 2000 | 75 | 7 | .... | .... | 6.3 | 3.0 | 39 |
| 35T | 50 | 2000 | 150 | 15 | .... | .... | 5.0 | 4.0 | 39 |
| 35TG | 50 | 2000 | 150 | 15 | .... | .... | 5.0 | 4.0 | 39 |
| 75TH | 75 | 3000 | 225 | 16 | .... | .... | 5.0 | 6.25 | 20 |
| 75TL | 75 | 3000 | 225 | 13 | .... | .... | 5.0 | 6.25 | 12 |
| 100TH | 100 | 3000 | 225 | 20 | .... | .... | 5.0 | 6.3 | 38 |
| 100TL | 100 | 3000 | 225 | 15 | .... | .... | 5.0 | 6.3 | 14 |
| 152TH | 150 | 3000 | 450 | 30 | .... | .... | 5 or 10 | 12.5 or 6.25 | 20 |
| 152TL | 150 | 3000 | 450 | 25 | .... | .... | 5 or 10 | 12.5 or 6.25 | 12 |
| 250TH | 250 | 4000 | 350 | 40 | .... | .... | 5.0 | 10.5 | 37 |
| 250TL | 250 | 4000 | 350 | 35 | .... | .... | 5.0 | 10.5 | 14 |
| 304TH | 300 | 3000 | 900 | 60 | .... | .... | 5 or 10 | 25 or 12.5 | 20 |
| 304TL | 300 | 3000 | 900 | 50 | .... | .... | 5 or 10 | 25 or 12.5 | 12 |
| 450TH | 450 | 6000 | 600 | 80 | .... | .... | 7.5 | 12.0 | 38 |
| 450TL | 450 | 6000 | 600 | 65 | .... | .... | 7.5 | 12.0 | 18 |
| 592/3-200A3 | 200 | 3500 | 250 | 25 | .... | .... | 10.0 | 5.0 | 25 |
| 750TL | 750 | 10,000 | 1000 | 100 | .... | .... | 7.5 | 21.0 | 15 |
| 1000T | 1000 | 7500 | 750 | 80 | .... | .... | 7.5 | 15.5 | 35 |
| 1500T | 1500 | 8000 | 1250 | 125 | .... | .... | 7.5 | 24.0 | 24 |
| 2000T | 2000 | 8000 | 1750 | 150 | .... | .... | 10.0 | 23.5 | 23 |

PENTODE 4E27A/5-125B 125 4000 200 5 750 20 5.0 7.50

| | MAXIMUM RATINGS | | | | | ELECTRICAL CHARACTERISTICS | | | |
|------------|-------------------------------|---------------------------|------------------------|------------------------------|----------------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|
| | Plate Dissipation Watts | Plate Voltage Volts | Plate Current ma | Grid Dissipation Watts | Screen Voltage Volts | Screen Dissipation Watts | Filament Voltage Volts | Filament Current Amps | Amplification Factor |
| 4-65A | 65 | 3000 | 150 | 5 | 400 | 10 | 6.0 | 3.5 | .... |
| 4-125A | 125 | 3000 | 225 | 5 | 400 | 20 | 5.0 | 6.5 | .... |
| 4-250A | 250 | 4000 | 350 | 10 | 600 | 35 | 5.0 | 14.5 | .... |
| 4-400A | 400 | 4000 | 350 | 10 | 600 | 35 | 5.0 | 14.5 | .... |
| 4-1000A | 1000 | 6000 | 700 | 25 | 1000 | 75 | 7.5 | 21.0 | .... |
| 4CN15A | 15 | 2500 | .... | 2 | 400 | 12 | 6.0 | 3.0 | .... |
| 4CW2000A | 2000 | 3000 | 1000 | 0 | 400 | 12 | 6.0 | 12.5 | .... |
| 4CW10,000A | 10,000 | 7500 | 3000 | 75 | 1500 | 250 | 7.5 | 75.0 | .... |
| 4CX125C | 125 | 2500 | 250 | 2 | 400 | 12 | 6.0 | 2.7 | .... |
| 4CX250B | 250 | 2000 | 250 | 2 | 400 | 12 | 6.0 | 2.6 | .... |
| 4CX250K | 250 | 2000 | 250 | 2 | 400 | 12 | 6.0 | 2.6 | .... |
| 4CX250F | 250 | 2000 | 250 | 2 | 400 | 12 | 26.5 | 0.56 | .... |
| 4CX250M | 250 | 2000 | 250 | 2 | 400 | 12 | 26.5 | 0.57 | .... |
| 4CX250R | 250 | 2000 | 250 | 2 | 500 | 12 | 6.0 | 2.6 | .... |
| 4CX300A | 300 | 2500 | 250 | 2 | 400 | 12 | 6.0 | 2.7 | .... |
| 4CX1000A | 1000 | 3000 | 1000 | 0 | 400 | 12 | 6.0 | 10.5 | .... |
| 4CX1000K | 1000 | 3000 | 1000 | 0 | 400 | 12 | 6.0 | 10.5 | .... |
| 4CX3000A | 3000 | 7000 | 2000 | 50 | 1000 | 175 | 10.0 | 45 | .... |
| 4CX5000A | 5000 | 7500 | 4000 | 75 | 1500 | 250 | 7.5 | 75.0 | .... |
| 4CX10,000D | 10,000 | 7500 | 4000 | 75 | 1500 | 250 | 7.5 | 75.0 | .... |
| 4CX15,000A | 15,000 | 7500 | 6000 | 200 | 1500 | 450 | 6.3 | 160 | .... |
| 4CX35,000A | 35,000 | 10,000 | 15,000 | 450 | 2500 | 1500 | 10.0 | 300 | .... |
| 4CX35,000C | 35,000 | 15,000 | 15,000 | 450 | 2500 | 1500 | 10.0 | 300 | .... |
| 4W300B | 300 | 2000 | 250 | 2 | 400 | 12 | 6.0 | 2.6 | .... |
| 4W20,000A | 20,000 | 8000 | 15,000 | 60 | 1500 | 200 | 10.0 | 30.0 ⁹ | .... |
| 4X150A | 250 | 2000 | 250 | 2 | 400 | 12 | 6.0 | 2.6 | .... |
| 4X150D | 250 | 2000 | 250 | 2 | 400 | 12 | 26.5 | 0.57 | .... |
| 4X150G | 250 | 2000 | 250 | 2 | 400 | 12 | 2.5 | 7.0 | .... |
| 4X150R | 250 | 2000 | 250 | 2 | 400 | 12 | 6.0 | 2.7 | .... |
| 4X150S | 250 | 2000 | 250 | 2 | 400 | 12 | 26.5 | 0.62 | .... |
| 4X250B | 250 | 2000 | 250 | 2 | 400 | 12 | 6.0 | 2.6 | .... |
| 4X250F | 250 | 2000 | 250 | 2 | 400 | 12 | 26.5 | 0.57 | .... |
| 4X500A | 500 | 4000 | 350 | 10 | 500 | 30 | 5.0 | 13.5 | .... |
| 7580 | 250 | 2000 | 250 | 2 | 500 | 12 | 6.0 | 2.6 | .... |

Specifications subject to change without notice. Write for complete specifications on any tube to:
Power Grid Tube Division, EITEL-McCULLOUGH, INC., San Carlos, California.



NATIONAL[®] Industrial Tube Specialists

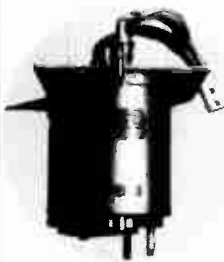
ignitrons...rectifiers...
thyratrons...



NL-1051A



NL-1052A



NL-1064



NL-710/6011

IGNITRONS MAXIMUM RATINGS

| Type Number | Volts | Maximum Demand | Corresp. Current DC Amps | Maximum Current DC Amps | Corresp. Demand | Type Of Cooling | List Price |
|-------------|-----------|----------------|--------------------------|-------------------------|-----------------|-----------------|------------|
| NL-1001 | 250-600 | 150K va | 4.9 | 9.0 | 50 Kva | Convection | \$37.50 |
| NL-1005A | 250-600 | 600K va | 30.2 | 56 | 200 Kva | Forced Air | 65.00 |
| NL-1009A | 250-600 | 1700K va | 120.0 | 220 | 570 Kva | Water | 155.00 |
| NL-1011A | 250-600 | 600K va | 30.2 | 56 | 200 Kva | Water | 65.00 |
| NL-1012A | 250-600 | 1200K va | 75.6 | 140 | 400 Kva | Water | 99.00 |
| NL-1013A | 250-600 | 2400K va | 192. | 355 | 800 Kva | Water | 245.00 |
| NL-1014 | 250-600 | 4800K va | 486 | 900 | 1600 Kva | Water | 750.00 |
| NL-1016A | 250-600 | 1700K va | 120.0 | 220 | 570 Kva | Water | 155.00 |
| NL-1022A | 1500 Peak | 1200 Amps | 16 | 56 | 336 Amps | Water | 116.00 |
| NL-1051A* | 250-600 | 600K va | 30.2 | 56 | 200 Kva | Water | 65.00 |
| NL-1052A* | 250-600 | 1200K va | 75.6 | 140 | 400 Kva | Water | 99.00 |
| NL-1053A | 250-600 | 2400K va | 192 | 355 | 800 Kva | Water | 245.00 |
| NL-1054 | 250-600 | 4800K va | 486 | 900 | 1600 Kva | Water | 750.00 |
| NL-1061* | 250-600 | 600K va | 30.2 | 56 | 200 Kva | Water | 65.00 |
| NL-1062* | 250-600 | 1200K va | 75.6 | 140 | 400 Kva | Water | 99.00 |
| NL-1063 | 250-600 | 2400K va | 192. | 355 | 800 Kva | Water | 245.00 |
| NL-1064 | 250-600 | 4800K va | 486 | 900 | 1600 Kva | Water | 825.00 |
| NL-1066* | 2500 Peak | 2000 Amps | 10 | — | — | Water | 77.20 |
| NL-1068* | 1500 Peak | 1200 Amps | 16 | 56 | 336 Amps | Water | 116.00 |
| NL-1069 | 250-600 | 1700K va | 120 | 220 | 570 Kva | Water | 155.00 |
| NL-5550 | 250-600 | 300K va | 12.1 | 22.4 | 100 Kva | Water Clamp | 49.00 |

THYRATRONS

| Type Number | Gas Filling | DC Output Amps | Peak Rating Amps | Peak Inverse Volts | Filament Volts | Filament Amps | Type Of Cooling | List Price |
|--------------|-------------|----------------|------------------|--------------------|----------------|---------------|-----------------|------------|
| NL-C3J/L | Xenon | 2.5 | 30 | 1250 | 2.5 | 9 | Convection | \$ 15.25 |
| NL-C3J/AL | Xenon | 2.5 | 30 | 1250 | 2.5 | 9 | Convection | 16.00 |
| NL-C3J/AL-Ne | Xenon | 2.5 | 30 | 1250 | 2.5 | 9 | Convection | 18.40 |
| NL-3C23 | Arg & Merc | 1.5 | 6 | 1250 | 2.5 | 7 | Convection | 11.98 |
| NL-C6J+• | Xenon | 6.4 | 80 | 1250 | 2.5 | 21 | Convection | 28.10 |
| NL-C6J/K+ | Xenon | 6.4 | 80 | 1250 | 2.5 | 21 | Convection | 28.30 |
| NL-C6J/K-Ne | Xenon | 6.4 | 80 | 1250 | 2.5 | 21 | Convection | 32.40 |
| NL-KY21A | Mercury | .75 | 3 | 11,000 | 2.5 | 10 | Convection | 26.75 |
| NL-323B | Arg & Merc | 1.5 | 6 | 1250 | 2.5 | 7 | Convection | 13.25 |
| NL-393A | Arg & Merc | 1.5 | 6 | 1250 | 2.5 | 7 | Convection | 13.25 |
| NL-632B | Mercury | 2.5 | 30 | 1500 | 5.0 | 5 | Convection | 33.00 |
| NL-710/6011 | Arg & Merc | 2.5 | 30 | 1500 | 2.5 | 9 | Convection | 13.00 |
| NL-710A/7725 | Arg & Merc | 2.5 | 30 | 2500 | 2.5 | 9 | Convection | 13.50 |
| NL-710AL | Arg & Merc | 2.5 | 30 | 2500 | 2.5 | 9 | Convection | 16.30 |
| NL-710L | Arg & Merc | 2.5 | 30 | 1500 | 2.5 | 9 | Convection | 15.25 |
| NL-714 | Arg & Merc | 1 | 3 | 1250 | 2.5 | 5 | Convection | 9.50 |
| NL-716 | Arg & Merc | 1 | 8 | 1250 | 2.5 | 6.3 | Convection | 12.50 |
| NL-732 | Arg & Merc | 30 | 225 | 1500 | 2.5 | 55 | Convection | 100.00 |
| NL-734/5544 | Xenon | 3.2 | 40 | 1500 | 2.5 | 11.5 | Convection | 22.50 |
| NL-740+• | Arg & Merc | 4 | 50 | 1500 | 2.5 | 16 | Convection | 20.80 |
| NL-760+• | Arg & Merc | 6.4 | 77 | 1500 | 2.5 | 21 | Convection | 28.10 |
| NL-761+• | Mercury | 6.4 | 77 | 5000 | 2.5 | 21 | Convection | 31.80 |
| NL-770L | Xenon-Merc | 10.0 | 120 | 1500 | 2.5 | 25 | Convection | 44.00 |
| NL-2050A | — | — | — | — | — | — | — | 3.10 |

WRITE FOR INDIVIDUAL TUBE DATA SHEETS FOR FULL DETAILS

NATIONAL ELECTRONICS INC.

GENEVA • ILLINOIS • U.S.A.

A Subsidiary of Eitel-McCullough, Inc.

NATIONAL[®]**Industrial Tube Specialists**
ignitrons...rectifiers...
thyratrons...**THYRATRONS (cont'd)**

| Type Number | Gas Filling | DC Output Amps | Peak Rating Amps | Peak Inverse Amps | Filament Volts | Filament Amps | Type Of Cooling | List Price |
|----------------------|-------------|----------------|------------------|-------------------|----------------|---------------|-----------------|------------|
| NL-5557/ FG17/715 | Mercury | 1 | 3 | 5000 | 2.5 | 5 | Convection | \$9.50 |
| NL-5559/ FG57 | Mercury | 2.5 | 15 | 1000 | 5.0 | 4.6 | Convection | 23.00 |
| NL-5560/ FG95 | Mercury | 2.5 | 15 | 1000 | 5.0 | 4.6 | Convection | 33.00 |
| NL-5632/ C3J | Xenon | 2.5 | 30 | 1250 | 2.5 | 9 | Convection | 13.80 |
| NL-5665/ C16J | Xenon | 18.0 | 160 | 1250 | 2.5 | 31 | Convection | 56.90 |
| NL-5684/ C3J/A | Xenon | 2.5 | 30 | 1250 | 2.5 | 9 | Convection | 14.50 |
| NL-5684-Ne | Xenon | 2.5 | 30 | 1250 | 2.5 | 9 | Convection | 16.70 |
| NL-5684A-Ne | Xenon | 2.5 | 30 | 1500 | 2.5 | 9 | Convection | 16.70 |
| NL-6014/ C1K | Xenon | 1 | 8 | 1250 | 2.5 | 6.3 | Convection | 13.10 |
| NL-6989/ C6J/KL | Xenon | 6.4 | 80 | 1250 | 2.5 | 21.0 | Convection | 29.45 |
| NL-6989-Ne | Xenon | 6.4 | 80 | 1250 | 2.5 | 21. | Convection | 33.90 |
| NL-7556A-Ne | Xenon | 2.5 | 30 | 1500 | 2.5 | 9 | Convection | 19.60 |

NL-734/5544



NL-760L

HALF WAVE RECTIFIERS

| Type Number | Gas Filling | DC Output Amps | Peak Rating Amps | Peak Inverse Amps | Filament Volts | Filament Amps | Type Of Cooling | List Price |
|-------------------|-------------|----------------|------------------|-------------------|----------------|---------------|-----------------|------------|
| NL-RX21A | Mercury | .75 | 3 | 11,000 | 2.5 | 10 | Convection | \$25.75 |
| NL-575A | Mercury | 2.5 | 10 | 15,000 | 5.0 | 10.0 | Convection | 20.15 |
| NL-610/7723 | Xenon | 2.5 | 30 | 920 | 2.5 | 9.0 | Convection | 11.40 |
| NL-615 | Mercury | 2.5 | 10 | 2000 | 2.5 | 7 | Convection | 9.75 |
| NL-616● | Arg & Merc | 2.5 | 30 | 1250 | 2.5 | 9.0 | Convection | 10.00 |
| NL-617 | Mercury | 5 | 20 | 1000 | 2 | 12 | Convection | 15.00 |
| NL-619 | Mercury | 6 | 20 | 300 | 2 | 12 | Convection | 10.00 |
| NL-623 | Mercury | 15 | 45 | 500 | 2.5 | 20 | Convection | 13.35 |
| NL-625 | Mercury | 15 | 45 | 900 | 2.5 | 20 | Convection | 29.00 |
| NL-627 | Mercury | 20 | 120 | 1000 | 2.5 | 26 | Convection | 31.50 |
| NL-635/ 7019+● | Xen & Merc | 6.4 | 77 | 1000 | 2.5 | 18 | Convection | 13.00 |
| NL-643 | Mercury | 15 | 90 | 700 | 2.5 | 23 | Convection | 13.50 |
| NL-649/ 5834 | Mercury | 2 | 10 | 900 | 2.5 | 7 | Convection | 9.20 |
| NL-653/ 5835 | Mercury | 3 | 12 | 900 | 2.5 | 10 | Convection | 12.90 |
| NL-660+● | Xenon | 6.4 | 80 | 920 | 2.5 | 21 | Convection | 13.00 |
| NL-664L | Xenon-Merc | 10.0 | 120 | 1000 | 2.5 | 25 | Convection | 26.00 |
| NL-673 | Mercury | 2.5 | 10 | 15,000 | 5.0 | 10 | Convection | 20.15 |
| NL-5558/ FG32 | Mercury | 2.5 | 15 | 5000 | 5 | 4.5 | Convection | 17.50 |
| NL-7723-Ne | Xenon | 2.5 | 30 | 920 | 2.5 | 9 | Convection | 13.10 |
| NL-7786-Ne | Xenon | 6.4 | 80 | 920 | 2.5 | 21 | Convection | 15.50 |

NL-5665/C16J

FULL WAVE RECTIFIERS

| Type Number | Gas Filling | DC Output Amps | Peak Rating Amps | Peak Inverse Volts | Filament Volts | Filament Amps | Type Of Cooling | List Price |
|-------------|-------------|----------------|------------------|--------------------|----------------|---------------|-----------------|------------|
| NL-604● | Arg & Merc | 2.5 | 10 | 900 | 2.5 | 11.5 | Convection | \$11.80 |
| NL-606● | Arg & Merc | 6.4 | 25.6 | 900 | 2.5 | 17 | Convection | 20.80 |

NL-604

NOTES * Plastic coated version available, indicated by the addition of the suffix letter P.
 + Available with bracket base for panel mounting, designated by the addition of suffix letter P.
 ● Available with lug base, designated by the addition of suffix letter L.













WRITE FOR INDIVIDUAL TUBE DATA SHEETS FOR FULL DETAILS

NATIONAL ELECTRONICS INC.

GENEVA • ILLINOIS • U.S.A.



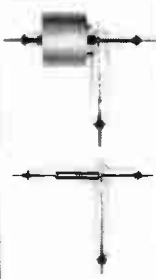





A Subsidiary of Eitel-McCullough, Inc.

PENTA

| | Fil. Volts | Fil. Current Amps. | Plate Diss. Max. W. | Plate Volts Max. | Plate Current Ma., Max. | Screen Volts Max. | Price | | Fil. Volts | Fil. Current Amps. | Plate Diss. Max. W. | Plate Volts Max. | Plate Current Ma., Max. | Screen Volts Max. | Price | | | | |
|------------------------------------|------------|--------------------|---------------------|------------------|-------------------------|-------------------|---------|--|--|---|---------------------|------------------|-------------------------|-------------------|-------|------|---------|---|---|
| PL-8295/PL-172 BEAM PENTODE | 6.0 | 8.2 | 1000 | 3,000 | 1000 | 600 | \$135 |  | 1000-watt beam pentode. Provides high power gain and good efficiency at relatively low plate voltages. Cooled by forced air. Widely used as Class-AB ₁ linear amplifier, delivering over 1500 watts useful power output. Also excellent for Class-AB ₂ , Class-B, and Class-C service. Spec. MIL-E-1/1350 * | PL-4D21 (4-125A) POWER TETRODE | 5.0 | 6.5 | 125 | 3,000 | 225 | 600 | \$36.00 |  | Popular 125-watt power tetrode, especially suited for use as r-f power amplifier. Can be operated at full ratings at frequencies as high as 120 Mc., and with reduced ratings up to 240 Mc. Can also be used as a-f power amplifier and modulator. Spec. MIL-E-1/776 * |
| PL-175A BEAM PENTODE | 5.0 | 14.5 | 400 | 4,000 | 350 | 800 | \$50.00 |  | 400-watt beam pentode incorporating patented Penta vane-type suppressor grid. Replaces 4-400A; 20% to 40% increase in output in Class-AB ₁ linear amplifier applications. Suppressor grid terminates in base shell and is designed to be operated at ground potential. | PL-4D21A POWER TETRODE | 5.0 | 6.5 | 175 | 3,000 | 225 | 600 | \$37.50 |  | Exclusive Penta tetrode similar in all characteristics to PL-4D21, but has plate dissipation rating of 175 watts. Widely used in broadcast and communications transmitters where reliability is desired. |
| PL-177A BEAM PENTODE | 6.0 | 3.2 | 75 | 2,000 | 175 | 600 | \$29.00 |  | Small beam pentode incorporating exclusive Penta vane-type suppressor grid. Maximum ratings apply to 175 Mc. Highly efficient at plate voltages as low as 600 volts. Excellent as low-distortion linear r-f, a-f amplifier. Maximum useful power output, Class-AB ₁ , 220 watts. | PL-5D22 (4-250A) POWER TETRODE | 5.0 | 14.5 | 250 | 4,000 | 350 | 800 | \$46.50 |  | Power tetrode, used in communications and amateur equipment. Can be used at full ratings up to 75 Mc, and with reduced ratings to 120 Mc. Unusually small amount of driving power normally required for specified value of power output. Useful as r-f power amplifier, or a-f amplifier and modulator. Spec. MIL-E-1/812A * |
| PL-177WA BEAM PENTODE | 6.0 | 3.2 | 75 | 2,000 | 175 | 600 | \$33.50 |  | Ruggedized version of PL-177A. Directly interchangeable. May be mounted in any position. Withstands high shock and vibration. Exclusive vane-type suppressor grid permits high power at relatively low plate voltages. | PL-8165/PL-4-65A POWER TETRODE | 6.0 | 3.5 | 65 | 2,000 | 150 | 600 | \$27.00 |  | Small, popular power tetrode, widely used in mobile communications equipment. Can be operated at full input at frequencies up to 150 Mc. For r-f amplifier, oscillator, or a-f amplifier, modulator applications. Spec. MIL-E-1/876/A * |
| PL-6549 BEAM PENTODE | 6.0 | 3.2 | 75 | 2,000 | 175 | 600 | \$29.00 |  | Similar to PL-177A except conventional suppressor grid. Recommended for replacement use only. | PL-4-400A POWER TETRODE | 5.0 | 14.5 | 400 | 4,000 | 350 | 800 | \$48.00 |  | Widely used power tetrode. Excellent as r-f amplifier and a-f amplifier and modulator. Penta unique ribbed-anode construction provides large effective plate radiating area, with minimum plate, screen-grid and control-grid temperatures. Spec. MIL-E-1/887 * |
| PL-4E27A BEAM PENTODE | 5.0 | 7.5 | 125 | 4,000 | 200 | 750 | \$45.00 |  | Popular beam pentode used as amplifier, oscillator, or modulator. Will deliver over 400 watts of usable power output with only two watts driving power in Class-C service; up to 280 watts as Class-AB ₁ linear amplifier. Maximum frequency for full ratings, 75 Mc. Cooled by convection and radiation. | PL-8166/PL-4-1000A POWER TETRODE | 7.5 | 21 | 1000 | 6,000 | 700 | 1000 | \$132 |  | Beam power tetrode suitable for use as r-f amplifier and oscillator, and as a-f amplifier and modulator. Can be used at frequencies up to 110 Mc. Widely used in FM broadcasting, television, and other services. Spec. MIL-E-1/37 * |

HIGH-EFFICIENCY

POWER TUBES

| | Fil. Volts | Fil. Current Amps. | Plate Diss. Max. W. | Plate Volts Max. | Plate Current Ma., Max. | Screen Volts Max. | Price | | Fil. Volts | Fil. Current Amps. | Plate Diss. Max. W. | Plate Volts Max. | Plate Current Ma., Max. | μ | Price | |
|--|------------|--------------------|-------------------------------|------------------|--|-------------------|---|---|-----------------------------|---|---------------------|------------------|-------------------------|-------|---------|---------|
| PL-4X500A POWER TETRODE | 5.0 | 13.5 | 500 | 4,000 | 350 | 500 | \$125.00 |  | PL-254W POWER TRIODE | 5.0 | 7.5 | 100 | 4,000 | 225 | 25 | \$25.00 |
| External-anode tetrode suitable for use as r-f amplifier and oscillator. Can be operated efficiently over a large portion of VHF region because of its small size and low-inductance leads. | | | | | | | | 100-watt plate dissipation radiation-cooled triode. Used as r-f power amplifier, oscillator, frequency multiplier. Will deliver up to 400 watts plate power output as Class-C CW or FM amplifier. Widely used as VHF power amplifier in base-station communications equipment. | | | | | | | | |
| PL-250R RECTIFIER | 5.0 | 10.5 | -- | 60,000 | 250 | -- | \$36.00 |  | PL-6569 POWER TRIODE | 5.0 | 14.5 | 250 | 4,000 | 300 | 45 | \$37.50 |
| High-vacuum diode rectifier. Will deliver 160 milliamperes at 24,000 volts to capacitor-input filter with 21,000 volts single-phase supply. Four PL-250R's will provide 500 milliamperes at 38,000 volts to choke-input filter with 42,000 volt single-phase supply. Cooled by convection and radiation. | | | | | | | | High-mu power triode designed especially for grounded-grid r-f amplifier service. Provides power gains as high as ten in grounded-grid use. Also capable of good performance in other applications. Will deliver up to 800 watts power output as Class-B linear r-f amplifier. Spec. MIL-E-1/1370 (NAVY) | | | | | | | | |
| VACUUM SWITCHES | Type | Voltage, Maximum | Current Max. Amperes AC or DC | Pulse | Coil | Price | | PL-6580 POWER TRIODE | 5.0 | 14.5 | 400 | 4,000 | 350 | 45 | \$45.00 | |
|  | PL-R1 | 21,000 | 6 | 150 | Not supplied; requires 1100 ampere-turns | \$33.00 |  | Same as PL-6569 (above), but with 400-watt plate dissipation rating. Will deliver over 1000 watts of power output in Class-C CW or FM grounded-grid use, over 900 watts in Class-B grounded-grid linear amplifier service. | | | | | | | | |
| | PL-169A | 21,000 | 30 | 500 | Not supplied; requires 1900 ampere-turns | \$40.00 | ACCESSORIES | | | | | | | | | |
| | PL-186 | 21,000 | 6 | — | Not supplied; requires 1000 ampere-turns | \$38.00 | | | | | | | | | | |
| | PL-187 | 21,000 | 30 | 500 | Integral; 28 V, 500 Ma., D-C | \$58.00 | | | | | | | | | | |
| | PL-190 | 21,000 | 6 | 150 | Integral; 28 V, 250 Ma., D-C | \$58.00 | | | | | | | | | | |
| | PL-191 | 21,000 | 6 | — | Not supplied; requires 1000 ampere-turns | \$24.00 | | | | | | | | | | |
| Penta vacuum switches are single-pole, double-throw switches enclosed in evacuated glass envelopes. They are ideal for use wherever compact, fast-acting relays are required to switch high-voltage circuits under a wide range of ambient atmospheric conditions, including explosive atmospheres, and in other applications where exposed-contact relays would be unsuitable. These vacuum switches are operated by external actuating coils, which are excited by direct current and designed so that the soft-iron pole piece and the armature assembly enclosed in the envelope act to complete the magnetic circuit. | | | | | | | |  | PL-C1 | Glass chimney for PL-4-400A, PL-175A, PL-6580. | | | | | \$ 6.00 | |
| | | | | | | | |  | PL-C184 | Plastic chimney, only, for PL-172. Same chimney as used on PL-184 and PL-184A sockets (see below). | | | | | \$ 5.00 | |
| | | | | | | | |  | PL-184 | Socket for PL-172, including chimney, built-in screen-grid and suppressor-grid by-pass capacitors. Includes contact provisions for all base pins and screen-grid and suppressor-grid ring terminals. Provides proper air distribution for correct cooling of PL-172 at full plate dissipation rating. | | | | | \$45.00 | |
| | | | | | | | |  | PL-184A | Socket for PL-172, including chimney. Same as socket PL-184 (above), except that suppressor-grid contacts are grounded. | | | | | \$45.00 | |



PENTA LABORATORIES, INC.

SANTA BARBARA, CALIFORNIA

FIELD ENGINEERING REPRESENTATIVES AND DISTRIBUTORS SERVING MAJOR CITIES

Export Representative: Frazar & Hansen, Ltd., San Francisco 11, Calif.

* JAN branding available



RCA ELECTRON TUBES

ENTERTAINMENT RECEIVING TYPES

RESALE PRICE SCHEDULE • JUNE 27, 1962

| RCA Type | List Price* | RCA Type | List Price* | RCA Type | List Price* | RCA Type | List Price* | RCA Type | List Price* | RCA Type | List Price* | RCA Type | List Price* |
|-----------------------|-------------|--------------|-------------|--------------------|-------------|-----------------|-------------|---------------|-------------|----------------------|-------------|------------------------|-------------|
| 0Z4 | \$2.40 | 5AT8 | \$3.65 | 6BF6 | \$1.80 | 6ER5 | \$ 3.50 | 6X8 | \$3.15 | 12BY7A | \$3.05 | 17DQ6B | \$ 4.20 |
| 0Z4A | 2.15 | 5AU4 | 3.40 | 6BG6G | 6.80 | 6E55 | 3.05 | 6Y6G | 4.30 | 12BZ6 | 3.10 | 17GJ5 | 4.60 |
| 0Z4G | 2.60 | 5AV8 | 4.05 | 6BH3 | 2.95 | 6E58 | 5.80 | 6Y6GA | 4.30 | 12BZ7 | 4.10 | 17GT5 | 4.25 |
| 1A3 | 4.95 | 5AW4 | 2.80 | 6BH6 | 2.70 | 6E7 | 2.60 | 6Z4 | | 12C5 | | 17GW6 | 4.25 |
| 1A5GT | 4.25 | 5AZ4 | 5.65 | 6BH8 | 3.50 | 6E8 | 3.30 | (See 84 6Z4) | | (See 12CU5/12C5) | | 17H3 | 2.50 |
| 1A7GT | 5.75 | 5B8 | 5.30 | 6BJ6 | 2.60 | 6E5V | 3.00 | 7A4 | 7.50 | 12C8 | 9.70 | 18A5 | 4.15 |
| 1AX2 | 3.05 | 5BC3 | 2.30 | 6BJ7 | 3.15 | 6E7 | 2.50 | 7A5 | 6.00 | 12CA5 | 2.50 | 18FW6 | 2.00 |
| 1B3GT | 2.90 | 5BE8 | 3.30 | 6BJ8 | 3.50 | 6E6W | 2.30 | 7A6 | 7.40 | 12CN5 | 3.45 | 18FX6 | 2.15 |
| 1C5GT | 5.30 | 5BK7A | 3.40 | 6BK4 | 8.00 | 6E7 | 3.90 | 7A7 | 7.55 | 12CR6 | 2.40 | 18FY6 | 1.65 |
| 1DN5 | 2.50 | 5BQ7A | 4.05 | 6BK5 | 3.70 | 6E6X | 7.25 | 7A8 | 8.25 | 12CT8 | 2.25 | 18GD6A | 2.15 |
| 1G3GT/1B3GT | 2.90 | 5BR8 | 3.65 | 6BK7B | 3.40 | 6E6Y | 3.15 | 7AF7 | 6.00 | 12C7B | 4.40 | 19A4 | 3.50 |
| 1H5GT | 4.15 | 5BT8 | 3.30 | 6BL7GTA | 3.95 | 6E25 | 3.40 | 7AG7 | 8.40 | 12CU5/12C5 | | 19AU4GTA | 3.45 |
| 1J3 | 2.90 | 5C8 | 3.25 | 6BL8 | 3.95 | 6E28 | 3.80 | 7AH7 | 6.40 | 12C5 | 2.35 | 19B6GA | 6.50 |
| 1K3 | 2.90 | 5CL8A | 3.25 | 6BN4A | 2.50 | 6F5 | 4.60 | 7AU7 | 2.60 | 12CU6 | | 19C18A | 3.15 |
| 1L4 | | 5CM8 | 3.80 | 6BN6 | 3.15 | 6F6,6F6G | 5.85 | 7B4 | 7.20 | (See 12BQ6GTB/12CU6) | | 19E8A | 3.25 |
| (see industrial type) | | 5CQ8 | 3.35 | 6BQ5 | 2.35 | 6F7 | 5.85 | 7B5 | 8.85 | 12CX6 | 2.90 | 19H56 | 2.55 |
| 1L6 | 6.80 | 5CZ5 | 4.35 | 6BQ6GTB/6CU6 | 4.35 | 6F8G | 11.70 | 7B6 | 5.60 | 12D4 | 2.75 | 19J6 | 3.95 |
| 1LA6 | 6.20 | 5DH8 | 4.50 | 6BQ7A | 3.95 | 6FA7 | 8.95 | 7B7 | 8.10 | 12DB5 | 2.75 | 19T8 | 3.40 |
| 1LB4 | 8.65 | 5LJ4 | 2.20 | 6BR8A | 3.65 | 6FA7 | 2.50 | 7B8 | 5.95 | 12DEB | 3.30 | 19X8 | 4.35 |
| 1LC6 | 8.30 | 5EA8 | 3.15 | 6BS8 | 3.75 | 6FB6 | 5.05 | 7C5 | 3.50 | 12DF8 | 2.40 | 20E7Z | 3.65 |
| 1LD5 | 8.40 | 5E8 | 3.35 | 6BS8 | 3.75 | (See EM84,6FG6) | | 7C6 | 7.75 | 12DK6 | 2.90 | 22BH3 | 3.05 |
| 1LE3 | 6.40 | 5EW6 | 2.35 | 6BV8 | 2.80 | 6FG7 | 2.75 | 7C7 | 3.60 | 12DK7 | 2.25 | 22DE4 | 3.10 |
| 1LG5 | 6.20 | 5FG7 | 2.75 | 6BV8 | 3.15 | 6FH5 | 2.55 | 7E7 | 6.70 | 12DL8 | 5.80 | 24A | 6.60 |
| 1LH4 | 8.05 | 5FV8 | 3.15 | 6BW4 | 2.90 | 6FH8 | 3.30 | 7F7 | 3.15 | 12DQ6A* | 4.20 | 25AV5GA | 4.25 |
| 1LN5 | 8.15 | 5GH8 | 3.20 | 6BW8 | 2.90 | 6FM8 | 3.00 | 7F8 | 7.95 | 12DQ6B | 4.20 | 25AX4GT | 2.90 |
| 1N2A | 4.65 | 5GM6 | 2.40 | 6B7GT | 4.00 | 6FQ5A | 4.05 | 7G7 | 8.75 | 12DQ7 | 3.45 | 25BK5 | 3.65 |
| 1N5GT | 5.20 | 5GX6 | 2.35 | 6BY5GA | 5.10 | 6FG7 | 2.30 | 7H7 | 6.40 | 12DS7 | 3.40 | 25BQ6GTB/25CU6 | 4.65 |
| 1R5 | 2.70 | 5J6 | 2.85 | 6BY6 | 2.50 | 6F55 | 3.05 | 7J7 | 7.25 | 12DT5 | 3.05 | 25C5 | 2.15 |
| 1S4 | 4.35 | 5T4 | 12.10 | 6BY8 | 2.65 | 6FV6 | 3.55 | 7K7 | 8.60 | 12DT8 | 3.80 | 25C5A | 2.60 |
| 1S5 | 2.65 | 5T8 | 3.40 | 6BZ6 | 2.25 | 6FV8 | 3.15 | 7N7 | 7.55 | 12DU7 | 4.05 | 25C5A5 | 2.15 |
| 1T4 | 2.50 | 5U4G;GB ea. | 2.10 | 6BZ7 | 4.00 | 6FW5 | 4.10 | 7Q7 | 6.20 | 12DV8 | 3.55 | 25CD6GB | 5.85 |
| 1U4 | 2.50 | 5U8 | 3.30 | 6BZ8 | 4.45 | 6FW8* | 9.20 | 7R7 | 6.05 | 12D8 | 4.60 | 25CU6 | |
| 1U5 | 2.20 | 5V3A | 3.85 | 6C4 | 1.85 | 6GG6 | 7.20 | 7V7 | 4.90 | 12E6 | 2.55 | (See 258Q6GTB/25CU6) | |
| 1V | 5.85 | 5V4GA | 3.50 | 6C5 | 4.25 | 6GC5 | 3.20 | 7W7 | 7.00 | 12EA6 | 2.65 | 25DN6 | 5.55 |
| 1V2 | 2.10 | 5V6GT | 2.20 | 6C6 | 8.30 | 6GH8 | 3.15 | 7X7 | 8.10 | 12EC8 | 3.60 | 25EC6 | 5.70 |
| 1X2A; B ea. | 3.05 | 5X4G | 3.35 | 6C8G | 8.55 | 6GJ5 | 4.55 | 7Y4 | 7.15 | 12ED5 | 2.85 | 25EH5 | 2.30 |
| 2A3 | 10.50 | 5X8 | 3.30 | 6CA4 | 1.95 | 6GK5 | 4.05 | 7Z4 | 6.90 | 12EG6 | 2.55 | 25L6 | 8.85 |
| 2AF4B | 4.05 | 5Y3GT | 1.75 | 6CA5 | 3.15 | 6GK6 | 2.75 | 8A8 | 4.05 | 12EH5 | 2.90 | 25L6GT | 2.35 |
| 2BN4A | 2.55 | 5Y4GA | 2.60 | 6CB5A | 8.25 | 6GM6 | 2.40 | 8AW8A | 3.70 | 12EK6 | 2.55 | 25W4GT | 2.70 |
| 2CW4 | 4.45 | 5Y4GT | 2.65 | 6CB6A | 2.25 | 6GN8 | 3.70 | 8B8A | 3.65 | 12EL6 | 2.00 | 25Z5 | 4.60 |
| 2CY5 | 2.85 | 5Z3 | 3.30 | 6CD6GA | 5.80 | 6GT5 | 4.20 | 8BH8 | 3.55 | 12EN6 | 3.05 | 25Z6GT | 2.90 |
| 2D54 | 4.45 | 5Z4 | 8.35 | 6CE5 | 2.35 | 6GV8 | 3.30 | 8BN8 | 3.25 | 12EQ7 | 2.90 | 27 | 5.40 |
| 2EN5 | 2.10 | 6A7 | 8.50 | 6CF6 | 2.55 | 6GW6 | 4.15 | 8BQ5 | 2.40 | 12F8 | 2.75 | 32E75 | 2.20 |
| 2ER5 | 3.50 | 6A8 | 6.85 | 6CG7 | 2.45 | 6GX6;Y6 ea. | 2.30 | 8C7 | 2.50 | 12FK6 | 2.10 | 34GD5 | 2.10 |
| 2FH5 | 3.05 | 6A8G* | 8.60 | 6CG8A | 3.30 | 6GY8 | 3.80 | 8CM7 | 2.90 | 12FM6 | 2.00 | 34GD5A | 2.10 |
| 2GK5 | 4.05 | 6A8GT | 8.60 | 6CH8 | 5.20 | 6H6 | 4.00 | 8CN7 | 2.80 | 12FQ8 | 2.95 | 35A5 | 6.00 |
| 3A2 | 4.85 | 6AB4 | 2.15 | 6CK4 | 3.00 | 6HB6 | 3.10 | 8CX8 | 3.85 | 12FR8 | 4.35 | 35B5 | 3.40 |
| 3A3 | 3.40 | 6AB5/6N5 | 8.05 | 6CL6 | 3.75 | 6HF8 | 3.70 | 8E5 | 3.75 | 12FV7 | 3.65 | 35C5 | 2.15 |
| 3AF4A | 4.05 | 6AB7 | 8.25 | 6CL8A | 3.15 | 6HJ8 | 3.30 | 8E5 | 3.45 | 12FX8 | 3.80 | 35DZ8 | 3.45 |
| 3AL5 | 1.85 | 6AC5GT | 6.25 | 6CM6 | 3.30 | 6HS6 | 2.50 | 8E7 | 4.40 | 12GA6 | 2.30 | 35EH5 | 2.30 |
| 3AU6 | 1.75 | 6AC7 | 5.10 | 6CM7 | 2.90 | 6HS8 | 2.80 | 8F7 | 2.35 | 12GC6 | 4.20 | 35GL6 | 2.30 |
| 3AV6 | 9.85 | 6AD7G | 9.40 | 6CM8 | 4.25 | 6JS;GT ea. | 3.65 | 8GN8 | 3.75 | 12GJ5 | 4.60 | 35L6GT | 2.40 |
| 3B2 | 2.15 | 6AF3 | 2.90 | 6CN7 | 2.75 | 6J6A | 2.80 | 8KA8 | 3.85 | 12GT5 | 4.25 | 35W4 | 1.05 |
| 3BA6 | 2.35 | 6AF4 | 4.00 | 6CQ4 | 3.00 | 6J7;GT | 4.95 | 9AU7 | 2.80 | 12H6 | 3.95 | 35Y4 | 4.80 |
| 3BC5 | 2.25 | 6AF4A | 4.00 | 6CQ8 | 3.30 | 6JC8 | 2.90 | 9BR7 | 3.35 | 12J5GT | 4.35 | 35Z3 | 5.00 |
| 3BE6 | 2.55 | 6AF6G | 6.20 | 6CR6 | 2.40 | 6JH8 | 4.35 | 9CL8 | 3.15 | 12J7GT | 7.40 | 35Z4GT | 2.70 |
| 3BN4A | 3.05 | 6AG5 | 2.75 | 6CS6 | 2.35 | 6JH8 | 2.95 | 9U8A | 3.55 | 12J8 | 4.60 | 35Z5GT | 1.85 |
| 3BN6 | 2.85 | 6AG7 | 6.20 | 6CS7 | 2.95 | 6K6GT | 2.65 | 10C8 | 4.25 | 12K5 | 2.95 | 36AM3A | 1.50 |
| 3BU8 | 2.35 | 6AH4GT | 3.45 | 6CU5 | 2.35 | 6K7;GT | 4.95 | 10DE7 | 3.40 | 12K7GT | 7.00 | 41 | 5.80 |
| 3BY6 | 2.30 | 6AH6 | 4.70 | (See 6BQ6GTB/6CU6) | | 6K8 | 7.50 | 10DR7 | 2.95 | 12K8 | 8.70 | 42 | 5.15 |
| 3BZ6 | 2.30 | 6AK5 | 4.40 | 6CU8 | 4.15 | 6K11 | 3.50 | 10EG7 | 4.60 | 12L6GT | 2.50 | 43 | 7.60 |
| 3CE5 | 2.35 | 6AL3 | 2.75 | 6CX8 | 3.65 | 6L6 | 3.80 | 10EM7 | 3.70 | 12Q7GT | 5.80 | 47 | 9.15 |
| 3CF6 | 2.55 | 6AL5 | 1.85 | 6CY5 | 2.75 | 6N5 | 7.35 | 10HF8 | 3.75 | 12R5 | 3.10 | 50A5 | 6.25 |
| 3C56 | 3.40 | 6AL7GT | 5.75 | 6CY7 | 3.20 | (See 6A85 6N5) | | 11C7 | 4.20 | 12S7 | 4.30 | 50B5 | 2.95 |
| 3CY5 | 2.40 | 6AM4 | 5.90 | 6CZ5 | 4.10 | 6N7 | 5.00 | 12A8GT | 8.85 | 12SA7GT | 4.30 | 50C5 | 2.15 |
| 3DG4 | 2.20 | 6AM8A | 3.45 | 6D6 | 7.80 | 6N7GT | 5.00 | 12A85 | 2.45 | 12SC7 | 5.50 | 50DC4 | 1.55 |
| 3DK6 | 2.85 | 6AN4 | 6.55 | 6DA4 | 2.70 | 6Q7 | 5.30 | 12AD6 | 2.20 | 12SF5 | 4.10 | 50EH5 | 2.30 |
| 3DT6A | 3.50 | 6AN8A | 4.00 | 6DB5 | 5.30 | 6Q7GT | 5.65 | 12AE6A | 2.05 | 12SG7 | 4.65 | 50FE5 | 3.65 |
| 3EA5 | 4.05 | 6AQ5A | 2.15 | 6DC6 | 3.40 | 6R7 | 5.45 | 12AE7 | 3.75 | 12SH7 | 4.65 | 50FK5 | 2.30 |
| 3ER5 | 2.85 | 6AQ6 | 2.60 | 6DC8 | 3.20 | 6S4A | 2.05 | 12AF3 | 2.90 | 12SJ7 | 4.20 | 50L6GT | 2.55 |
| 3GK5 | 2.85 | 6AQ7GT | 4.00 | 6DE4 | 2.80 | 6S7 | 7.20 | 12AF6 | 2.35 | 12SK7 | 3.95 | 50X6 | 6.20 |
| 3GS8/3BU8 | 6.40 | 6AQ8 | 3.15 | 6DE6 | 2.55 | 6S8GT | 4.40 | 12AH7GT | 5.55 | 12SK7GT | 3.95 | 50Y6GT | 4.60 |
| 3LF4 | 3.55 | 6AR5 | 2.65 | 6DE7 | 3.40 | 6SA7 | 4.30 | 12AJ6 | 2.55 | 12SL7GT | 3.75 | 50Z7GT | 4.50 |
| 3Q5GT | 5.65 | 6AS5 | 2.55 | 6DG6GT | 2.55 | 6SA7GT | 4.30 | 12AL5 | 1.90 | 12SN7GTA | 2.70 | 70L7GT | 10.15 |
| 3S4 | 2.65 | 6AS8 | 3.80 | 6DK6 | 2.35 | 6SB7Y | 6.30 | 12AL8 | 6.55 | 12SQ7 | 3.75 | 75 | 6.80 |
| 3V4 | 2.50 | 6AT6 | 1.90 | 6DN6 | 7.45 | 6SC7 | 4.20 | 12AQ5 | 2.60 | 12SQ7GT | 3.75 | 78 | 7.20 |
| 4AU6 | 2.15 | 6AT8A | 3.80 | 6DN7 | 3.50 | 6SF5 | 3.70 | 12AT6 | 1.85 | 12SR7 | 5.45 | 80 | 4.20 |
| 4AV6 | 1.70 | 6AU4GTA | 3.60 | 6DQ5 | 8.35 | 6SF5GT | 3.20 | 12AT7 | 3.05 | 12T7 | 2.65 | 84/6Z4 | 3.65 |
| 4BC5 | 2.35 | 6AU5GT | 4.30 | 6DQ6A* | 4.15 | 6SF7 | 6.25 | 12AU6 | 2.15 | 12V6GT | 2.15 | 117L7GT' | |
| 4BC8 | 4.05 | 6AU6A | 2.10 | 6DQ6B | 4.15 | 6SG7 | 4.60 | 12AU7A | 2.45 | 12W6GT | 3.00 | 117M7GT | 10.15 |
| 4BL8 | 2.55 | 6AU8A | 3.50 | 6DR7 | 3.40 | 6SH7 | 4.45 | 12AV5GA | 3.85 | 12X4 | 1.90 | 117M7GT | |
| 4BN6 | 3.05 | 6AV5GA | 4.00 | 6DS4 | 4.45 | 6S17 | 4.15 | 12AV6 | 1.65 | 13DE7 | 3.40 | (See 117L7GT'/117M7GT) | |
| 4BQ7A | 4.20 | 6AV6 | 1.65 | 6DS5 | 3.20 | 6S17GT | 4.15 | 12AW6 | 3.30 | 13EM7 | 4.75 | 117N7GT | 13.60 |
| 4B58 | 3.85 | 6AW8A | 3.70 | 6DT5 | 3.25 | 6SK7 | 3.95 | 12AX4GTA* | 2.70 | 13FD7 | 5.35 | 117P7GT | 13.60 |
| 4BU8 | 2.85 | 6AX3 | 2.45 | 6DT6A | 2.15 | 6SK7GT | 3.95 | 12AX4GTB | 2.70 | 14A7 | 5.90 | 117Z3 | 4.35 |
| 4BZ6 | 2.25 | 6AX4GT;B ea. | 2.65 | 6DT8 | 3.80 | 6SL7GT | 3.50 | 12AX7; 7A ea. | 2.55 | 14AF7 | 6.05 | 117Z6GT | 7.10 |
| 4BZ7 | 4.05 | 6AX5GT | 3.10 | 6DW4 | 3.70 | 6SN7GTB | 2.60 | 12AY3 | 5.00 | 14C7 | 6.00 | 5879 | 3.75 |
| 4CB6 | 2.30 | 6AX8 | 3.70 | 6DW5 | 4.05 | 6SQ7 | 3.75 | 12AZ7A | 3.05 | 14F7 | 8.15 | 5881 | 6.40 |
| 4CS6 | 2.35 | 6AY3 | 2.75 | 6DX8 | 3.10 | 6SQ7GT | 3.80 | 12B4A | 2.70 | 14F8 | 6.70 | 6973 | 4.50 |
| 4CY5 | 2.85 | 6AZ8 | 5.55 | 6DZ7 | 5.45 | 6SR7 | 3.90 | 12BA6 | 1.65 | 14GT8 | 3.00 | 7025 | 2.95 |
| 4DE6 | 2.65 | 6B8 | 7.30 | 6E5 | 4.45 | 6S57 | 5.50 | 12BA7 | 5.95 | 14Q7 | 6.20 | 7027A | 6.60 |
| 4DT6A | 2.25 | 6BA3 | 2.75 | 6EA5 | 2.80 | 6T4 | 5.45 | 12BD6 | 2.45 | 14R7 | 7.20 | 7189 | 2.65 |
| 4EH7,4EJ7 ea. | 3.80 | 6BA6 | 2.00 | 6EA7 | 3.45 | 6T8A | 3.40 | 12BE6 | 1.75 | 15HB6 | 3.30 | 7199 | 3.70 |
| 4ES8 | 4.60 | 6BA7 | 5.95 | 6EA8 | 3.15 | | | | | | | | |



RCA PICTURE TUBES

RCA SILVERAMA Black & White Picture Tubes

RCA Silverama Picture Tubes contain the finest new parts and materials plus a reused envelope.

RCA COLORAMA Color Picture Tubes

RCA Colorama Picture Tubes contain used materials which were carefully inspected to meet high quality standards.

RCA SILVERAMA BLACK & WHITE LIST PRICE* SCHEDULE — JUNE 29, 1962

| RCA TYPE | LIST PRICE* | RCA TYPE | LIST PRICE* | RCA TYPE | LIST PRICE* |
|----------|--------------|----------|---------------|-------------|---------------|
| 5TP4 | \$87.00 | 17LP4** | \$36.25 | 21CWP4 | (Use 21CBP4A) |
| 7JP4 | 34.75 | 17LP4A | 36.25 | 21CXP4 | (Use 21DSP4) |
| 8DP4 | 37.50 | 17QP4** | 37.25 | 21CZP4 | (Use 21DEP4A) |
| 10BP4A | 43.00 | 17QP4A | 37.25 | 21DAP4 | (Use 21DEP4A) |
| 10FP4A | 45.75 | 17RP4 | (Use 17HP4B) | 21DEP4 | (Use 21DEP4A) |
| 12KP4A | 44.75 | 17RP4C | (Use 17HP4B) | 21DEP4A | \$49.25 |
| 12LP4A | 44.75 | 17TP4 | 46.50 | 21DFP4 | 49.25 |
| 14ATP4 | 38.25 | 17UP4 | (Use 17QP4A) | 21DLP4 | 45.75 |
| 14BP4 | (Use 14EP4) | 17VP4 | (Use 17LP4A) | 21DMP4 | (Use 21FAP4) |
| 14CP4 | (Use 14EP4) | 17VP4B | (Use 17LP4A) | 21DNP4 | (Use 21CBP4A) |
| 14EP4 | 42.00 | 17YP4 | (Use 17QP4A) | 21DQP4 | (Use 21DLP4) |
| 14HP4 | 40.50 | 19AFP4 | 57.25 | 21DSP4 | 45.75 |
| 14NP4 | (Use 14WP4) | 19AP4B | 46.75 | 21EAP4 | (Use 21FDP4) |
| 14NP4A | (Use 14WP4) | 19AVP4 | 49.50 | 21EMP4 | (Use 21EQP4) |
| 14QP4A | 44.00 | 19AXP4 | (Use 19AYP4) | 21EP4 | (Use 21EP4B) |
| 14RP4** | 44.00 | 19AYP4 | 49.50 | 21EP4A** | 45.75 |
| 14RP4A | (Use 14WP4) | 19XP4 | 49.50 | 21EP4B | 45.75 |
| 14WP4 | 44.00 | 20CP4 | (Use 20DP4C) | 21EQP4 | 49.25 |
| 14ZP4 | (Use 14WP4) | 20CP4A | (Use 20DP4C) | 21ESP4 | (Use 21FAP4) |
| 16AP4A | 41.25 | 20CP4B | (Use 20DP4C) | 21FAP4 | 49.25 |
| 16DP4A | 43.00 | 20CP4C | (Use 20DP4C) | 21FDP4 | 62.00 |
| 16GP4B | 40.50 | 20CP4D | (Use 20DP4C) | 21FLP4 | (Use 21CBP4A) |
| 16KP4 | (Use 16RP4A) | 20DP4 | (Use 20DP4C) | 21FP4 | (Use 21FAP4) |
| 16KP4A | (Use 16RP4A) | 20DP4A | (Use 20DP4C) | 21FP4A**;4C | ea. 45.75 |
| 16LP4A | 47.75 | 20DP4B | (Use 20DP4C) | 21MP4 | 52.50 |
| 16RP4** | 44.00 | 20DP4C | 48.75 | 21WP4** | 47.25 |
| 16RP4A | 44.00 | 20HP4 | (Use 20HP4D) | 21WP4A | 47.25 |
| 16TP4 | 44.00 | 20HP4A** | 48.75 | 21XP4A | 47.25 |
| 16WP4A | 47.75 | 20HP4C | (Use 20HP4D) | 21YP4** | 44.75 |
| 16ZP4 | (Use 16LP4A) | 20HP4D | 48.75 | 21YP4A | 44.75 |
| 17AP4 | (Use 17BP4B) | 20LP4 | (Use 20HP4D) | 21ZP4 | (Use 21ZP4B) |
| 17ATP4 | (Use 17BJP4) | 20MP4 | (Use 20HP4D) | 21ZP4A** | 44.75 |
| 17ATP4A | (Use 17BJP4) | 21ACP4 | (Use 21AMP4A) | 21ZP4B | 44.75 |
| 17AVP4** | 39.25 | 21ACP4A | (Use 21AMP4A) | 23AHP4 | 61.00 |
| 17AVP4A | (Use 17BJP4) | 21AFP4 | (Use 21YP4A) | 23ANP4 | (Use 23BKP4) |
| 17BJP4 | 39.25 | 21ALP4 | (Use 21CBP4A) | 23AWP4 | (Use 23BJP4) |
| 17BP4 | (Use 17BP4B) | 21ALP4A | (Use 21CBP4A) | 23BJP4 | 61.00 |
| 17BP4A** | 37.25 | 21ALP4B | (Use 21CBP4A) | 23BKP4 | 68.75 |
| 17BP4B | 37.25 | 21AMP4 | (Use 21AMP4A) | 23BLP4 | 70.50 |
| 17BP4C | (Use 17BP4B) | 21AMP4A | 45.75 | 23CP4 | 68.75 |
| 17BRP4 | (Use 17DSP4) | 21ANP4 | (Use 21CBP4A) | 23EP4 | 68.75 |
| 17BUP4 | (Use 17BJP4) | 21ANP4A | (Use 21CBP4A) | 23GP4 | (Use 23CP4) |
| 17BVP4 | (Use 17CSP4) | 21AP4 | 49.50 | 23HP4 | (Use 23CP4) |
| 17BWP4 | (Use 17CSP4) | 21AQP4 | (Use 21AMP4A) | 23MP4 | 61.00 |
| 17BZP4 | 44.00 | 21AQP4A | (Use 21AMP4A) | 23XP4 | (Use 23YP4) |
| 17CAP4 | (Use 17DSP4) | 21ATP4 | (Use 21CBP4A) | 23YP4 | 68.75 |
| 17CBP4 | (Use 17BJP4) | 21ATP4A | (Use 21CBP4A) | 24ADP4 | (Use 24CP4A) |
| 17CDP4 | 55.50 | 21ATP4B | (Use 21CBP4A) | 24AEP4 | 65.75 |
| 17CFP4 | 39.25 | 21AUP4 | (Use 21AVP4B) | 24AHP4 | 71.75 |
| 17CKP4 | (Use 17DSP4) | 21AUP4A | (Use 21AVP4B) | 24ALP4 | (Use 24AHP4) |
| 17CLP4 | (Use 17BJP4) | 21AUP4B | (Use 21AVP4B) | 24ANP4 | (Use 24AEP4) |
| 17CP4 | 40.00 | 21AVP4** | 45.75 | 24ATP4 | 84.75 |
| 17CSP4 | 44.75 | 21AVP4A | (Use 21AVP4B) | 24AUP4 | 65.75 |
| 17CWP4 | (Use 17DSP4) | 21AVP4B | 45.75 | 24BAP4 | 90.75 |
| 17CYP4 | 50.75 | 21AWP4 | 45.75 | 24CP4 | (Use 24CP4A) |
| 17DAP4 | 53.25 | 21BAP4 | (Use 21CBP4A) | 24CP4A | 65.75 |
| 17DKP4 | 44.75 | 21BNP4 | (Use 21CBP4A) | 24DP4 | (Use 24AEP4) |
| 17DLP4 | (Use 17DSP4) | 21BSP4 | (Use 21AMP4A) | 24DP4A | (Use 24AEP4) |
| 17DQP4 | 44.00 | 21BTP4 | (Use 21CBP4A) | 24QP4 | (Use 24CP4A) |
| 17DSP4 | 44.00 | 21CBP4 | (Use 21CBP4A) | 24TP4 | (Use 24CP4A) |
| 17DTP4 | (Use 17DKP4) | 21CBP4A | 45.75 | 24VP4 | (Use 24CP4A) |
| 17DXP4 | 44.00 | 21CBP4B | (Use 21CBP4A) | 24VP4A | (Use 24CP4A) |
| 17GP4 | 44.00 | 21CEP4 | (Use 21DFP4) | 24XP4 | (Use 24CP4A) |
| 17HP4** | 37.25 | 21CEP4A | (Use 21DFP4) | 24YP4 | (Use 24AEP4) |
| 17HP4A | (Use 17HP4B) | 21CMP4 | (Use 21CBP4A) | 24ZP4 | (Use 24AEP4) |
| 17HP4B | 37.25 | 21CQP4 | 49.25 | 27EP4 | (Use 27RP4) |
| 17JP4 | (Use 17BP4B) | 21CUP4 | (Use 21AMP4A) | 27MP4 | 114.25 |
| | | 21CVP4 | (Use 21CBP4A) | 27RP4 | 111.50 |

RCA COLORAMA PICTURE TUBES LIST PRICE* SCHEDULE — JUNE 29, 1962

| RCA TYPE | LIST PRICE* | RCA TYPE | LIST PRICE* | RCA TYPE | LIST PRICE* |
|----------|--------------------|----------|-------------|----------|-------------|
| 15GP22 | (Price on Request) | 21AXP22A | \$127.00 | 21FBP22 | \$135.00 |
| 21AXP22 | (Use 21AXP22A) | 21CYP22A | 127.00 | 21FJP22 | 148.00 |

*Optional. Prices include Federal Excise tax where applicable. All prices subject to change or withdrawal without notice. **Sales limited to extent of present inventory.



RCA ELECTRON TUBES

FOR INDUSTRY AND COMMUNICATIONS

RESALE PRICE SCHEDULE • JUNE 1, 1962

POWER/MICROWAVE/PHOTOSENSITIVE/CAMERA/DISPLAY/INDUSTRIAL RECEIVING

| RCA Type | Dist. Resale Price Optional | RCA Type | Dist. Resale Price Optional | RCA Type | Dist. Resale Price Optional | RCA Type | Dist. Resale Price Optional | | |
|--|-----------------------------|--|-----------------------------|--|-----------------------------|----------------------------------|-----------------------------|--|--------|
| RCA POWER TUBES | | | | 7204/4CX250F | \$39.35 | RCA THYRATRONS | | | |
| RCA VACUUM POWER TUBES FOR CW APPLICATIONS | | | | 7212 | 6.75 | TRIODES | | | |
| 2C39A | \$22.50 | 7213 | 465.00 | (Mercury-Vapor Types)— For Control Service (except as noted) | | | | | |
| 2C39WA | 30.00 | 7357 | 6.90 | 3C23 | \$11.98 | 4423 | \$1.80 | | |
| 2C40 | 29.30 | 7457 | 90.00 | 627 | 29.75 | 4425 | 1.90 | | |
| 2C40A | 33.00 | 7580 | 45.05 | 676 | 63.80 | 4442 | 2.15 | | |
| 2C43 | 26.95 | 7650 | 290.00 | 677 | 63.80 | 6694A | 5.40 | | |
| 2E24 | 5.25 | 7801 | 95.00 | 710/6011 | 13.80 | 6957 | 3.20 | | |
| 2E26 | 3.75 | 7842 | 90.00 | 714 7021 | 9.50 | 7163 | 1.65 | | |
| 4-65A | 28.75 | 7843 | 60.00 | 716/6855 | 12.50 | 7412 | 2.10 | | |
| 4-125A/4D21 | 36.00 | 7844 | 60.00 | 760 6858 | 28.10 | 7536 | 2.10 | | |
| 4-250A/5D22 | 46.50 | 7870 | 95.00 | 5557 | 9.50 | RCA PHOTOJUNCTION CELLS | | | |
| 4-400A | 48.00 | 8000 | 29.15 | 5559 | 23.00 | 4420 | 6.40 | | |
| 4-1000A | 132.00 | 8005 | 17.85 | 5563A | 50.00 | 7467 | 8.75 | | |
| 4E27/8001 | 40.00 | 8072 | 18.75 | RCA PHOTOTUBES SINGLE- AND TWIN-UNIT TYPES — Gas Types | | | | | |
| 4E27A/5-1258 | 50.00 | 8121 | 25.90 | TRIODES (Gas Types)— For Control Service (except as noted) | | | | | |
| 4X500A | 128.50 | 8122 | 31.60 | 629 | 18.25 | 1P29 | 4.80 | | |
| 6F4 | 13.10 | RCA VACUUM POWER TUBES FOR RF-PULSE APPLICATIONS | | | | 884 | 2.28 | 1P37 | 3.90 |
| 8D21 | 1,985.00 | 2C40A | 33.00 | 885 | 2.00 | 1P40 | 3.75 | 1P41 | 4.00 |
| 9C21 | 1,465.00 | 2054 | P | 6130/3C45 | 17.80 | 868 | 3.90 | 918 | 4.45 |
| 9C22 | 1,960.00 | 4603 | P | CIK/6014 | 13.10 | 920 | 6.40 | 921 | 3.50 |
| 9C25 | 1,535.00 | 4605V2 | 9,775.00 | C3J 5632 | 13.80 | 923 | 3.40 | 927 | 4.25 |
| 207 | 330.00 | 5946 | 125.00 | C3JA/5684 | 14.50 | 928 | 5.25 | 930 | 3.10 |
| 801A | 13.00 | 6950/2039 | 41,625.00 | C3JL | 15.25 | 4409 | 3.75 | 5581 | 3.45 |
| 805 | 22.10 | 6952 | 9,070.00 | C6J 5C21 | 28.10 | 5582 | 5.40 | 5583 | 4.80 |
| 807 | 3.00 | 7214 | 485.00 | C6JA/5685 | 29.00 | 5584 | 6.15 | 6405/1640 | 7.60 |
| 809 | 7.95 | 7649 | 70.00 | C16J 5665 | 56.90 | 6953 | 3.30 | SINGLE AND TWIN-UNIT TYPES — Vacuum Tubes | |
| 810 | 26.95 | 7651 | 305.00 | TETRODES (Mercury-Vapor Types)— For Control Service (except as noted) | | | | 1P39 | 2.45 |
| 811A | 6.90 | 7835 | 61,050.00 | 105 | 59.00 | 1P42 | 13.95 | 917 | 6.00 |
| 812A | 6.90 | RCA HARD-TUBE MODULATORS | | | | 172 | 122.00 | 919 | 6.00 |
| 813 | 23.15 | 3E29 | 19.00 | 6328 | 33.00 | 922 | 3.10 | 925 | 3.65 |
| 814 | 28.35 | 6293 | 5.95 | 672A | 39.85 | 926 | 3.75 | 929 | 2.35 |
| 815 | 28.35 | 7358 | 8.30 | 5560 | 33.00 | 934 | 4.15 | 935 | 10.95 |
| 827R | 335.00 | RCA VACUUM POWER TUBES FOR SPECIAL APPLICATIONS | | | | 6521 | 645.00 | 936 | 3.75 |
| 828 | 32.95 | 3C33 | 26.15 | RCA MAGNETRONS (For Pulsed-Oscillator Service) | | | | 937 | 2.35 |
| 8298 | 19.00 | 4600A | 245.00 | 7008 | 1,315.00 | 938 | 4.15 | 939 | 6.75 |
| 8308 | 17.35 | RCA RECTIFIERS VACUUM TYPES — Half-Wave Types | | | | 7111 | 1,110.00 | 940 | 6.75 |
| 832A | 15.90 | 2X2A | 3.10 | 6865-A | 1,590.00 | 941 | 2.25 | 942 | 9.00 |
| 833A | 53.65 | 5798 | 20.50 | 4011-A | 1,585.00 | 943 | 6.50 | 944 | 4.40 |
| 834 | 21.25 | 836 | 11.10 | RCA TRAVELING-WAVE TUBES | | | | 945 | 4.40 |
| 838 | 22.05 | 1616 | 13.90 | 4009 | 1,755.00 | RCA MULTIPLIER PHOTOTUBES | | | |
| 845 | 25.00 | 5825 | 22.90 | 4010 | 1,755.00 | 1P21 | 54.50 | 1P22 | 15.80 |
| 860 | 48.10 | 8013A | 17.05 | 4015 | 3,330.00 | 1P28 | 28.10 | 931-A | 11.15 |
| 880 | 595.00 | 8020 | 24.00 | 4017 | 3,000.00 | 2020 | 85.00 | 4438 | 105.00 |
| 889A | 235.00 | MERCURY-VAPOR TYPES — Half-Wave Types (except as noted) | | | | 6861 | 955.00 | 4439 | 105.00 |
| 889RA | 370.00 | 83 | 1.89 | RCA PENCIL TUBES | | | | 4441 | 155.00 |
| 891 | 275.00 | 575A | 20.15 | 4037 | 20.00 | 5819 | 56.50 | 5819 | 52.00 |
| 891R | 430.00 | 604/7014 | 11.80 | 5675 | 16.05 | 6199 | 72.00 | 6217 | 12.65 |
| 892 | 270.00 | 615/7018 | 9.75 | 5876 | 14.95 | 6328 | 60.10 | 6472 | 13.10 |
| 892R | 425.00 | 635/7019 | 13.00 | 5876A | 23.10 | 6342-A | 60.10 | 6655-A | 60.00 |
| 1624 | 6.25 | 673 | 20.15 | 5893 | 20.75 | 6810-A | 225.00 | 6903 | 370.00 |
| 1625 | 4.75 | 816 | 2.95 | 6173 | 15.05 | 7029 | 605.00 | 7046 | 570.00 |
| 2029 | 9,100.00 | 8578 | 218.50 | 6263 | 21.50 | 7102 | 110.00 | 7117 | 12.65 |
| 4602 | P | 866A | 2.65 | 6263A | 21.50 | 7200 | 205.00 | 7264 | 265.00 |
| 4604 | 7.30 | 8698 | 138.00 | 6264A | 21.50 | 7265 | 425.00 | 7326 | 410.00 |
| 5556 | 35.00 | 872A | 9.90 | 6562/5794A | 10.25 | 7746 | 200.00 | 7767 | 115.00 |
| 5588 | 190.00 | 889A | 17.50 | 7533 | 10.75 | 7767 | 135.00 | 7850 | 240.00 |
| 5671 | 1,600.00 | 889B | 59.00 | 7552 | 51.80 | 8053 | 120.00 | 8054 | 125.00 |
| 5713 | 280.00 | 892A | 25.00 | 7554 | 48.10 | 8055 | 195.00 | | |
| 5762/7C24 | 230.00 | 892B | 25.00 | RCA PHOTOSENSITIVE TUBES & DEVICES | | | | | |
| 5762A | 250.00 | 8008 | 9.90 | RCA PHOTOCONDUCTIVE CELLS | | | | | |
| 5770 | 1,135.00 | GAS TYPES — Half-Wave Types | | | | | | | |
| 5771 | 790.00 | 3B25 | 7.75 | | | | | | |
| 5786 | 170.00 | 3B28 | 6.00 | | | | | | |
| 6146 | 4.35 | RCA IGNITRONS | | | | | | | |
| 6155/4-125A | 36.00 | 1051A | 65.00 | | | | | | |
| 6156/4-250A | 46.50 | 1052A | 99.00 | | | | | | |
| 6159 | 4.80 | 5550 | 49.00 | | | | | | |
| 6161 | 125.00 | 5551A | 65.00 | | | | | | |
| 6166 | 850.00 | 5552A | 99.00 | | | | | | |
| 6166A/7007 | 1,020.00 | 5553B | 245.00 | | | | | | |
| 6181 | 1,015.00 | 5555 | 316.00 | | | | | | |
| 6448 | 5,985.00 | | | | | | | | |
| 6524 | 16.15 | | | | | | | | |
| 6806 | 7,355.00 | | | | | | | | |
| 6816 | 60.00 | | | | | | | | |
| 6850 | 16.15 | | | | | | | | |
| 6883 | 4.45 | | | | | | | | |
| 6884 | 60.00 | | | | | | | | |
| 6893 | 4.15 | | | | | | | | |
| 6897 | 32.15 | | | | | | | | |
| 6949 | P | | | | | | | | |
| 7034/4X150A | 25.00 | | | | | | | | |
| 7035/4X150D | 27.90 | | | | | | | | |
| 7094 | 29.30 | | | | | | | | |
| 7203/4CX250B | 39.35 | | | | | | | | |



P—Price and Delivery on Request



RCA ELECTRON TUBES

FOR INDUSTRY AND COMMUNICATIONS

RESALE PRICE SCHEDULE • JUNE 1, 1962

POWER/MICROWAVE/PHOTOSENSITIVE/CAMERA/DISPLAY/INDUSTRIAL RECEIVING

| RCA Type | Dist. Resale Price Optional | RCA Type | Dist. Resale Price Optional | RCA Type | Dist. Resale Price Optional | RCA Type | Dist. Resale Price Optional |
|--|-----------------------------|----------|-----------------------------|-------------------------|-----------------------------|--|-----------------------------|
| RCA CAMERA & DISPLAY TUBES | | | | 082WA | \$3.00 | 5719 | \$3.85 |
| TRANSCRIBER KINESCOPE | | | | OC2 | 1.50 | 6814 | 5.90 |
| 5WP11 | | | | OC3 | 1.50 | Miniature: | |
| RCA IMAGE ORTHICONS | | | | OD3 | 1.44 | 6J4 | 4.19 |
| VIEW-FINDER KINESCOPIES | | | | 1C21 | 4.15 | 6J4WA | 5.60 |
| 5AYP4 | | | | 991 | .87 | 6J6WA | 5.35 |
| 5FP4-A | | | | 5651 | 1.78 | 6664 6A84 | 1.06 |
| MONITOR KINESCOPIES | | | | 5651WA | 4.20 | 9002 | 4.15 |
| 7CP4 | | | | 5823 | 1.75 | Nuvistor: | |
| 7TP4 | | | | 6073 | 3.00 | 7586 | 3.35 |
| 8HP4 | | | | 6073/0A2 | 3.35 | 7895 | 3.35 |
| 10SP4 | | | | 6074 | 3.45 | 8056 | 5.00 |
| PROJECTION KINESCOPIES | | | | 6074/082 | 3.70 | 8058 | 13.25 |
| 5AZP4 | | | | 6626 0A2WA | 4.45 | Acorn: | |
| 7NP4 | | | | Pentodes | | 6F4 | 13.10 |
| 7WP4 | | | | Subminiature: | | 6L4 | 8.40 |
| 52P16 | | | | 5636 | 7.80 | 955 | 7.05 |
| STORAGE TUBES | | | | 5639 | 6.55 | 957 | 8.50 |
| COMPUTER STORAGE TUBE — | | | | 5840 | 6.25 | 958A | 10.90 |
| Primary-Current-Modulation Type | | | | 5899 | 6.55 | Twin Diodes | |
| 6571 | | | | 6205 | 6.40 | 5726 | 1.55 |
| DISPLAY STORAGE TUBES — | | | | 6206 | 8.55 | 5726 6AL5W | 1.55 |
| Direct-View Types | | | | Miniature: | | 5726 6AL5W 6097 | 1.55 |
| 6866 | | | | 1L4 | 1.37 | 5896 | 4.45 |
| 7183 | | | | 3A4 | 1.25 | 6663 6AL5 | .92 |
| 7315 | | | | 6AK6 | 1.40 | 6887 | 1.25 |
| 7448 | | | | 6AS6 | 3.43 | 7055 | 1.00 |
| RADECHON — | | | | 6AU6WA | 2.75 | TWIN PENTODES | |
| Single Beam, Barrier-Grid Type | | | | 6AU6WB | 2.75 | 6939 | 12.00 |
| 6499 | | | | 26A6 | 3.70 | TWIN TRIODES | |
| DISAPPEARANCE TUBES | | | | 5618 | 6.75 | 3A5 | 2.03 |
| 6866 | | | | 5654 | 3.05 | 6A57G | 4.95 |
| 7183 | | | | 5654 6AK5W | 4.35 | 12AT7WA | 2.95 |
| 7315 | | | | 5725 | 3.80 | 12SX7GT | 2.53 |
| 7448 | | | | 5749 | 2.20 | 1635 | 3.82 |
| RADECHON — | | | | 5749 68A6W | 2.20 | 5670 | 3.00 |
| Single Beam, Barrier-Grid Type | | | | 5847 | 13.10 | 5670WA | 3.95 |
| 6499 | | | | 5847/404A | 13.10 | 5687 | 4.05 |
| DISAPPEARANCE TUBES | | | | 6136 | 2.75 | 5691 | 8.75 |
| 6866 | | | | 6186 | 3.86 | 5692 | 8.25 |
| 7183 | | | | 6186 6AG5WA | 3.85 | 5751 | 2.95 |
| 7315 | | | | 6197 | 3.05 | 5751WA | 2.95 |
| 7448 | | | | 6660 68A6 | 1.01 | 5814A | 3.35 |
| RADECHON — | | | | 6661 68H6 | 1.34 | 5814WA | 3.35 |
| Single Beam, Barrier-Grid Type | | | | 6662 68J6 | 1.29 | 5842 417A | 13.00 |
| 6499 | | | | 6676 6C86A | 1.12 | 5963 | 1.50 |
| DISAPPEARANCE TUBES | | | | 6677 6CL6 | 1.85 | 5964 | 1.55 |
| 6866 | | | | 7054 | 1.55 | 5965 | 1.95 |
| 7183 | | | | 7056 | 1.20 | 6021 | 4.80 |
| 7315 | | | | 8077 7054 | 1.55 | 6072 | 3.90 |
| 7448 | | | | 9001 | 5.40 | 6080 | 5.35 |
| RADECHON — | | | | 9003 | 5.40 | 6080WA | 11.40 |
| Scan-Conversion Type | | | | 954 | 11.20 | 6082 | 6.50 |
| 7530 | | | | 956 | 10.85 | 6099 | P |
| RECEIVING TYPE TUBES FOR INDUSTRY AND COMMUNICATIONS | | | | 959 | 12.45 | 6101 | 5.35 |
| Beam Deflection | | | | Acorn: | | 6101 6J6WA | 5.35 |
| 7360 | | | | 954 | 11.20 | 6111 | 5.45 |
| Beam Power | | | | 956 | 10.85 | 6112 | 5.45 |
| Subminiature: | | | | 959 | 12.45 | 6189 12AU7WA | 3.70 |
| 5902 | | | | Other Air-Cooled Types: | | 6201 | 2.95 |
| Miniature: | | | | 6AC7W | 4.20 | 6211 | 2.15 |
| 5686 | | | | 6AG7Y | 2.65 | 6336A | 20.20 |
| 5763 | | | | 65J7Y | 1.80 | 6350 | 1.95 |
| 6005 | | | | 1613 | 3.00 | 6386 | 7.40 |
| 6005 6AQ5W | | | | 1620 | 7.55 | 6679 12AT7 | 1.50 |
| 6005 6AQ5W 6095 | | | | 1621 | 3.50 | 6680 12AU7A | 1.22 |
| 6417 | | | | 5693 | 6.60 | 6681 12AX7 | 1.26 |
| 6669 6AQ5A | | | | Rectifiers | | 6681 12AX7A | 1.26 |
| 7061 | | | | 5R4G | 2.03 | 6922 | 4.75 |
| 7551 | | | | 5R4GY8 | 2.03 | 7044 | 3.20 |
| 7558 | | | | 6X4W | 1.60 | 7057 | 1.95 |
| 7905 | | | | 5642 | 3.85 | 7058 | 1.30 |
| Other Air-Cooled Types: | | | | 5690 | 14.10 | 7898 | 1.35 |
| 12A6 | | | | Tetrodes | | TWIN DIODE TRIODES AND TRIODE PENTODES | |
| 1614 | | | | 7587 | 5.20 | 125W7 | 1.49 |
| 1619 | | | | Nuvistor: | | 26C6 | 3.05 |
| 1622 | | | | Thyratrons | | 6678 6U8A | 1.62 |
| 1631 | | | | Gas: | | 7059 | 1.79 |
| Diodes, Misc. | | | | 2D21 | 1.29 | 7060 | 1.95 |
| 5U1 | | | | 2D21W | 2.90 | MISCELLANEOUS TYPES | |
| 5U7 | | | | 3D22A | 25.50 | 125Y7 | 2.67 |
| 5U1T | | | | 502A | 2.30 | 26D6 | 3.05 |
| 78P7-A | | | | 2050 | 2.37 | 1612 | 5.30 |
| 7MP7 | | | | 2050A | 2.21 | 1629 | 1.90 |
| 7VP1 | | | | 5696 | 2.05 | 5734 | 22.05 |
| 10KP7 | | | | 5727 | 2.90 | 5750 | 3.45 |
| 12DP7-A | | | | 5727 2D21W | 2.90 | 5915 | 1.65 |
| 16ADP7 | | | | 6012 | 7.65 | | |
| 902-A | | | | Triodes | | | |
| | | | | Subminiature: | | | |
| | | | | 5718 | 4.25 | | |

PHOTOSENSITIVE



Multiplier



Phototubes



Photocells

POWER TUBES



Small



Large



Super

*Available in matched sets of three

**Available as matched set of three—two 4415's, one 4416

P—Price and Delivery on Request

SYLVANIA INDUSTRIAL TUBES

| Type | Sugg. User Price | Type | Sugg. User Price | Type | Sugg. User Price | Type | Sugg. User Price | Type | Sugg. User Price |
|--------------|------------------|---------------|------------------|------------------|------------------|-----------------|------------------|------------|------------------|
| C1K/6014 | \$ 12.90 | *6X4W | \$ 1.60 | 1237 | \$ 9.86 | 5822A | \$ 116.00 | 6550 (+) | \$ 4.95 |
| C3J/5632 | 13.80 | *6X4WA | 2.85 | 1247 | 6.00 | *5823 | 1.72 | 6591 | 34.40 |
| C3J/A/5684 | 14.50 | GB-6X4WA | 2.85 | 1614 | 4.10 | *5840 | 5.85 | 6660/6BA6 | 1.05 |
| C6J/5C21 | 28.10 | *6X5WGT | 1.55 | 1616 | 13.90 | *5840A | 5.85 | 6661/6BH6 | 1.35 |
| C6J/A/5685 | 29.00 | GB-6X5WGT | 1.55 | 1620/6J7 | 6.99 | 5845 | 9.95 | 6662/6BJ6 | 1.30 |
| C16J/5665 | 56.90 | *7AK7 | 8.15 | 1622 | 4.05 | 5855 | 75.00 | 6663/6AL5 | .95 |
| *OA2 | 1.46 | GB-7AK7 | 8.15 | 1624 | 6.25 | 5879 | 1.95 | 6669/6AQ5A | 1.05 |
| GB-OA2WA | 3.65 | *7F8W | 7.05 | 2050 | 2.37 | 5881 | 3.50 | 6677/6CL6 | 1.80 |
| OA3 | 1.54 | GB-7F8W | 7.05 | 2050A | 2.21 | 5894 | 25.00 | 6678/6U8A | 1.60 |
| *OA4G | 1.86 | *12AT7WA | 3.05 | TW4002M | 2100.00 | *5896 | 4.15 | 6679/12AT7 | 1.50 |
| OA5 | 6.96 | 12AY7 | 2.45 | SP4019 | 3.09 | *5896A | 4.15 | 6680/12AU7 | 1.20 |
| *OB2 | 1.44 | KY21A | 26.75 | M4164 | 1475.00 | *5899 | 6.05 | 6681/12AX7 | 1.25 |
| *OB2WA | 3.00 | RX21A | 25.75 | 4198 | 862.50 | *5899A | 6.05 | 6788 | 11.95 |
| GB-OB2WA | 3.00 | *28D7 | 4.95 | CT4251 | 11.10 | *5902 | 5.25 | 6799 | 2760.00 |
| *OB3 | 2.35 | S28D7 | 4.95 | TW4260 | 1065.00 | *5902A | 5.25 | 6802 | 11.43 |
| *OC3 | 1.50 | *28D7W | 10.75 | TW4261 | 1065.00 | *5903 | 7.45 | 6807 | 29.40 |
| *OD3 | 1.44 | GB-28D7W | 10.75 | TW4267 | 1065.00 | *5904 | 7.90 | GB-6814 | 5.55 |
| OZ4A | 1.20 | FG-97 | 62.00 | TW4268 | 1065.00 | *5905 | 8.40 | 6846 | 3.90 |
| VG1A | 15.04 | 100TH | 23.60 | TR4271 | 510.00 | *5906 | 8.40 | 6879 | 13.37 |
| 1B35A | 12.28 | 102A | 186.00 | 5530+ | 350.00 | *5907 | 8.40 | 6883 | 5.15 |
| 1B37A | 8.80 | 141 | 117.00 | 5530-H+ | 350.00 | *5908 | 9.80 | 6883A | 5.15 |
| 1B44 | 24.55 | 212E | 245.00 | 5531+ | 660.00 | 5916 | 9.80 | 6887 | 1.25 |
| 1B63A | 30.95 | 241B | 245.00 | 5550/681 | 49.00 | *5931 | 6.80 | GB-6888 | 6.90 |
| 1C/3B22 | 10.85 | 250TH | 38.55 | 5551A/652 | 65.00 | GB-5931 | 6.80 | 6897 | 32.15 |
| 1P21 | 54.50 | 279A | 440.00 | 5552A | 99.00 | *5932 | 11.30 | 6909 | 11.43 |
| 1P39 | 3.90 | 298A | 1585.00 | 5553B/655 | 245.00 | GB-5932 | 11.30 | 6910 | 13.37 |
| 1P40 | 3.75 | 322 | 27.00 | 5555 | 316.00 | *5933 | 12.35 | GB-6922 | 4.95 |
| 1S6 (+) | 1.55 | 342A | 705.00 | 5557: | 9.50 | GB-5933 | 12.35 | 6943 | 12.05 |
| 2-25A | 20.00 | 356: | 660.00 | 5558 | 17.50 | *5933WA | 16.50 | 6944 | 12.05 |
| 2-50A | 23.00 | GB-407A | 5.90 | 5559: | 23.00 | 5934 | 22.00 | 6945 | 12.05 |
| 2-150D | 38.55 | GB-408A | 4.95 | 5560/FG95: | 33.00 | *5963 | 1.34 | 6946 | 12.05 |
| 2-240A | 42.85 | 414 | 188.00 | 5575/100 | 250.00 | GB-5963 | 1.34 | 6947 | 12.05 |
| 2-450A | 113.00 | 450TL | 77.00 | 5576/200 | 280.00 | GB-5964 | 1.54 | 6948 | 12.05 |
| 2-2000A | 228.00 | 481B | 10.90 | 5604+ | 570.00 | GB-5965 | 1.95 | 7006 | 1134.00 |
| *2C36 | 38.72 | 502A | 2.30 | 5606 | 305.00 | 5966 | 42.00 | 7007+ | 1020.00 |
| 2C37 | 39.32 | 575A: | 20.15 | *5636 | 6.75 | *5977 | 6.55 | GB-7044 | 3.20 |
| 2C39A | 22.50 | 579B | 20.50 | *5636A | 6.75 | *5977A | 6.55 | 7054 | 1.45 |
| 2C39B | 32.15 | 604L | 13.00 | *5639 | 6.55 | *5987 | 11.10 | 7055 | 1.00 |
| 2C39WA | 30.00 | 606 | 20.80 | *5639A | 6.55 | 5996+ | 210.00 | 7056 | 1.20 |
| 2C40 | 29.30 | 606L | 21.90 | *5641 | 7.55 | GB-6005 | 3.95 | 7057 | 1.95 |
| 2C41 | 35.00 | 615 | 9.75 | *5641A | 7.55 | *6005/6AQ5W | 3.95 | 7058 | 1.30 |
| 2C43 | 26.95 | 624 | 79.00 | *5643 | 9.05 | 6005/6AQ5W/6095 | 3.95 | 7059 | 1.75 |
| 2C51 | 3.65 | 627 | 29.75 | *5644 | 9.90 | 6009 | 228.00 | 7096 | 1945.25 |
| 2C53 | 9.80 | 628 | 41.00 | *5644A | 9.90 | 6011/710 | 13.80 | 7098 | 1170.00 |
| 2D21 | 1.25 | 629 | 18.25 | *5647 | 8.65 | 6012 | 7.65 | *7137 | 7.10 |
| 2E24 | 5.20 | 632B | 33.00 | *5647A | 8.65 | *6021 | 3.50 | GB-7137 | 7.10 |
| 2E26 | 3.85 | 635 | 13.00 | 5651 | 1.90 | *6021A | 3.50 | 7155 | 13.37 |
| *2J42 | 125.00 | 635L | 13.50 | *5651WA | 4.20 | 6027 | 180.00 | 7258 | 2.75 |
| *2J42H | 158.00 | 642 | 17.00 | GB-5654 | 3.05 | 6027H | 210.00 | 7291 | 375.00 |
| 2X2A | 3.10 | 672A | 39.85 | *5654/6AK5W | 3.05 | *6080 | 5.33 | 7325 | 230.00 |
| 2X1000A | 127.50 | 673 | 22.15 | *5654/6AK5W/6096 | 4.35 | GB-6080 | 5.33 | GB-7327 | 12.45 |
| 2X3000F | 168.00 | 676 | 63.80 | 5658 | 630.00 | GB-6101 | 5.35 | *7503 | 1170.00 |
| 5A4 | 1.25 | 678 | 49.50 | 5666 | 295.00 | GB-6110 | 5.35 | 7619 | 1374.25 |
| 3A5 | 2.03 | 740 | 19.40 | 5667 (889RA)+: | 390.00 | *6110 | 8.05 | 8008 | 10.65 |
| 3B28 | 6.00 | 740L | 21.40 | 5668 | 350.00 | *6111 | 5.05 | 8020: | 24.00 |
| 3C23 | 11.98 | 760 | 28.10 | 5669+ | 515.00 | *6111A | 5.05 | 9001 | 5.40 |
| 3CX100A5 | 32.00 | 760L | 31.70 | 5670 | 3.00 | *6112 | 4.10 | 9002 | 3.85 |
| 3F29 | 19.00 | 801A | 13.00 | GB-5670 | 3.00 | *6112A | 4.10 | 9003 | 5.40 |
| 3W5000F1 | 243.00 | 807: | 3.00 | *5670WA | 3.95 | *6135 | 2.40 | | |
| 3W5000F3 | 231.00 | 810 | 26.95 | 5680+ | 190.00 | GB-6135 | 2.40 | | |
| 4-65A | 28.50 | 811A | 6.90 | 5681+ | 1990.00 | GB-6136 | 2.90 | | |
| 4-125A | 36.00 | 812A | 6.90 | 5687 | 4.00 | GB-6145 | 12.80 | | |
| 4-250A | 46.50 | 813 | 23.15 | 5691 | 8.75 | 6146 | 5.00 | | |
| 4-400A | 48.00 | 815 | 28.35 | *5692 | 8.25 | 6146A | 5.00 | | |
| 4-1000A | 132.00 | 816 | 2.95 | *5692 | 8.25 | 6159 | 4.80 | | |
| 4CX250B | 39.35 | 828 | 32.95 | 5693 | 6.60 | 6159A | 4.80 | | |
| 4CX250F | 39.35 | 829B | 19.00 | 5696 | 2.05 | 6164 | 64.90 | | |
| 4CX250M | 92.50 | 832A | 15.90 | *5718 | 4.00 | GB-6186 | 3.85 | | |
| 4E27A/5-125B | 57.00 | 833A: | 53.65 | *5718A | 4.00 | GB-6189 | 3.70 | | |
| 4W300B | 50.00 | 837 | 10.30 | *5719 | 3.50 | *6189/12AU7WA | 3.70 | | |
| 4X150A | 25.00 | 845 | 25.00 | *5719A | 3.50 | GB-6201 | 2.95 | | |
| 4X150D | 28.00 | 860 | 48.10 | *5722 | 6.60 | *6205 | 5.90 | | |
| 4X250B | 39.35 | 861 | 280.00 | GB-5725 | 3.80 | *6205A | 5.90 | | |
| 5R4GYB | 2.03 | 866A | 2.90 | *5725/6AS6W | 3.80 | *6206 | 8.00 | | |
| *5Y3WGTA | 4.05 | 869B: | 138.00 | GB-5726 | 1.55 | *6206A | 8.00 | | |
| GB-5Y3WGTA | 4.05 | 872A | 10.65 | *5726/6AL5W | 1.55 | GB-6211 | 1.95 | | |
| 6AD4 (+) | 3.70 | 880: | 630.00 | *5726/6AL5W/6097 | 1.55 | 6217 | 72.00 | | |
| *6AJ5 | 3.85 | 884 | 2.28 | GB-5727 | 2.90 | 6256 | 265.00 | | |
| 6AK4 (+) | 3.10 | 891 | 315.00 | *5727/2D21W | 2.90 | *6308 | 8.25 | | |
| *6AN6 | 4.35 | 892: | 310.00 | GB-5749 | 2.20 | GB-6350 | 2.15 | | |
| 6AS6 | 3.43 | 892R+: | 425.00 | *5749/6BA6W | 2.20 | 6366 | 170.00 | | |
| 6AS7G | 4.93 | 893A | 850.00 | GB-5750 | 3.45 | 6367 | 185.00 | | |
| *6AU6WA | 2.95 | 921 | 3.50 | *5751 | 2.95 | 6396 | 12.30 | | |
| *6AU6WB | 2.95 | 922 | 3.10 | GB-5751 | 2.95 | 6399 | 170.00 | | |
| 6AZ5 (+) | 3.85 | 923 | 3.40 | *5751WA | 2.95 | 6400 | 199.00 | | |
| 6BA5 (+) | 4.70 | 927 | 4.25 | 5762/7C24 | 230.00 | 6420 | 390.00 | | |
| *6BF7W | 4.20 | 929 | 2.15 | 5763 | 2.53 | 6421+ | 460.00 | | |
| *6D4 | 2.85 | 930 | 3.10 | 5764 | 39.32 | 6422 | 410.00 | | |
| *6J4 | 4.19 | 931A | 11.15 | *5768 | 32.37 | 6423-F+ | 550.00 | | |
| *6J4WA | 5.60 | TW956L | 2100.00 | 5789 | 914.50 | 6424 | 490.00 | | |
| GB-6J4WA | 5.60 | R1111 | 12.70 | 5790 | 390.00 | 6425-F+ | 640.00 | | |
| *6J6WA | 5.35 | R1111M | 26.00 | 5791 | 180.00 | 6426 | 720.00 | | |
| *6SJ7WGT | 2.70 | GB-1216 | 2.38 | 5796 | 17.25 | 6476 | 13.37 | | |
| GB-6SJ7WGT | 2.70 | GB-1217 | 1.55 | *5814A | 3.35 | 6476A | 14.95 | | |
| *6SL7WGT | 3.15 | 1218 | 4.50 | GB-5814A | 3.35 | 6481 | 38.30 | | |
| GB-6SL7WGT | 3.15 | GB-1219/5670 | 3.70 | *5814WA | 3.35 | 6503 | 65.82 | | |
| *6SN7WGT | 2.35 | GB-1220/5654 | 3.05 | 5820 | 1200.00 | 6545 | 87.00 | | |
| GB-6SN7WGT | 2.35 | *GB-1252/6U8A | 2.00 | | | 6546 | 270.00 | | |
| *6SN7WGTA | 4.90 | 1222A | 2.45 | | | | | | |
| *6V6GT | 1.45 | 1229 | 5.35 | | | | | | |

KLYSTRONS

| | |
|------------|--------|
| SK-113 | 195.00 |
| SK-114 | 195.00 |
| SK-115 | 195.00 |
| SK-220A | 140.00 |
| SK-220B | 140.00 |
| SK-220C | 140.00 |
| SK-220D | 140.00 |
| SK-220E | 140.00 |
| SK-220F | 140.00 |
| SK-220G | 140.00 |
| SK-220Z | 315.00 |
| SK-221A | 160.00 |
| SK-221B-G | 145.00 |
| SK-221K | 160.00 |
| SK-221H | 205.00 |
| SK-222A | 145.00 |
| SK-222B | 145.00 |
| SK-222C | 145.00 |
| SK-222D | 145.00 |
| SK-222E | 145.00 |
| SK-222F | 145.00 |
| SK-222G | 145.00 |
| SK-222Z | 320.00 |
| SK-470 | 195.00 |
| K-524 | 195.00 |
| K-526 | 195.00 |
| K-839B (+) | 195.00 |
| K-840B (+) | 195.00 |
| K-841B (+) | 195.00 |
| K-4008 | 195.00 |
| K-4009 | 195.00 |
| K-4010 | 195.00 |
| K-4011 | 205.00 |
| K-4012 | 195.00 |

SYLVANIA INDUSTRIAL TUBES

| Type | Sugg. User Price | Type | Sugg. User Price | Type | Sugg. User Price | Type | Sugg. User Price | Type | Sugg. User Price |
|-----------|------------------|---------|------------------|---------|------------------|------------|------------------|--------------|------------------|
| K-4013 | \$ 195.00 | 3ASP11 | \$ 32.00 | 5AQP2A | \$ 40.75 | 7AEP1 | \$ 40.75 | 12ABP19 | \$ 68.50 |
| K-4014 | 195.00 | 3BEP1 | 37.00 | 5AQP2B | 40.75 | 7AEP2 | 40.75 | 12ABP19A | 75.60 |
| K-4015 | 195.00 | 3BGP1 | 37.80 | *5AQP7 | 40.00 | *7AEP7 | 43.50 | 10WP19A | 51.25 |
| SK-X101 | 125.00 | 3BGP2 | 37.80 | 5AQP7A | 43.00 | 7AEP11 | 55.75 | *12DP7A | 57.20 |
| *6BL6 | 37.00 | 3BGP7 | 37.80 | 5AQP7B | 43.00 | 7AQP4 | 84.50 | 12DP7C | 67.20 |
| *6BM6 | 42.00 | 3BGP11 | 37.80 | 5AQP11 | 37.75 | 7AQP7 | 84.50 | 12SP7 | 38.50 |
| *6BM6A | 53.00 | 3BMP1 | 47.05 | 5AQP11A | 40.75 | 7AQP16 | 84.50 | 12SP7B | 46.00 |
| *5836 | 69.00 | 3BMP2 | 47.05 | 5AQP11B | 40.75 | 7AQP19 | 84.50 | *12SP7D | 60.00 |
| *5837 | 69.00 | 3BMP7 | 48.75 | 5AUP24 | 140.00 | 7AQP25 | 84.50 | 14BAP4 | 37.80 |
| 6974/K709 | 403.00 | 3BMP11 | 47.05 | 5AXP4 | 19.75 | 7AUP4 | 29.40 | 17DWP4 | 39.00 |
| | | 3BMP12 | 47.05 | 5BCP1 | 60.00 | 7AUP7 | 31.10 | 21EYP4 | 46.20 |
| | | *3BP1A | 16.25 | 5BCP4 | 60.00 | 7BP2A | 42.00 | SC-2558P1 | 135.00 |
| | | *3FP7A | 27.50 | 5BCP7 | 75.00 | *7BP7A | 36.20 | SC-2558P4 | 135.00 |
| | | *3JP1 | 20.50 | 5BCP11 | 75.00 | *7JP1/7VP1 | 29.00 | SC-2558P7 | 135.00 |
| | | *3JP2 | 27.50 | 5BGP1 | 75.00 | 7JP7 | 35.00 | SC-2782 | 420.00 |
| | | *3JP7 | 23.60 | 5BGP2 | 75.00 | 7MP7 | 34.35 | SC-2809 | 920.00 |
| | | *3JP12 | 31.45 | 5BGP5 | 75.00 | 7MP14 | 38.00 | SC-2812P1 | 35.05 |
| | | *3KP1 | 19.50 | 5BGP7 | 75.00 | 7UP7 | 40.00 | SC-2830P1 | 50.50 |
| | | 3KP4 | 19.90 | 5BGP11 | 75.00 | 7UP25 | 40.00 | SC-2854 | 49.00 |
| | | 3KP7 | 19.90 | 5BGP15 | 75.00 | 8CP1 | 40.00 | SC-3016P11 | 58.80 |
| | | 3KP11 | 20.15 | 5BHP1 | 92.50 | 8CP2 | 52.95 | SC-3037P7 | 54.60 |
| | | 3KP16 | 42.20 | 5BHP1A | 92.50 | 8CP4 (+) | 52.95 | SC-3042P1 | 43.68 |
| | | 3MP1 | 21.80 | 5BHP2 | 92.50 | 8CP5 | 52.95 | SC-3061P1 | 504.00 |
| | | *3RP1 | 13.95 | 5BHP2A | 92.50 | 8CP7 | 43.70 | SC-3093 | 378.00 |
| | | 3RP1A | 20.75 | 5BHP5 | 92.50 | 8CP11 | 52.95 | SC-3116P1/ | |
| | | 3RP4 | 20.00 | 5BHP5A | 92.50 | 8DP4 | 25.20 | T65P1/T543P1 | 110.00 |
| | | *3SP1 | 25.20 | 5BHP7 | 92.50 | 8FP4 | 43.15 | SC-3116P2/ | |
| | | 3SP2 | 25.20 | 5BHP7A | 92.50 | 8KP4 | 23.25 | T65P2/T543P2 | 110.00 |
| | | 3SP4 | 25.20 | 5BHP11 | 92.50 | 8XP4 | 22.00 | SC-3116P5/ | |
| | | 3SP5 | 25.20 | 5BHP11A | 92.50 | 8YP4 | 29.50 | T65P5/T543P5 | 110.00 |
| | | 3SP11 | 25.20 | 5BHP15 | 92.50 | *10AKP7 | 46.20 | SC-3116P7/ | |
| | | *3WP1 | 24.70 | 5BHP15A | 92.50 | 10ANP4 | 75.60 | T65P7/T543P7 | 110.00 |
| | | 3WP2 | 27.60 | 5BNP16 | 24.40 | 10ANP7 | 75.60 | SC-3116P11/ | |
| | | 3WP11 | 27.60 | *5BRP1 | 23.30 | 10ANP16 | 75.60 | T65P11/ | |
| | | *4MP1 | 72.25 | 5BRP1A | 42.00 | 10ANP19 | 75.60 | T543P11 | 110.00 |
| | | 5ABP1 | 29.70 | 5BRP4 | 42.00 | 10ANP25 | 75.60 | SC-3116P15/ | |
| | | 5ABP1A | 36.70 | 5BRP7 | 43.70 | *10KP7 | 42.90 | T65P15/ | |
| | | 5ABP4 | 42.85 | 5BRP11 | 43.70 | *10KP7A | 47.80 | T543P15 | 110.00 |
| | | 5ABP4A | 46.20 | *5CP1A | 21.70 | 10KP7B | 52.70 | SC-3179P7 | 420.00 |
| | | 5ABP7 | 42.85 | *5CP1B | 32.65 | 10NP11 | 137.50 | SC-3180P7 | 420.00 |
| | | 5ABP7A | 43.40 | *5CP7A | 30.80 | 10SP4 | 71.50 | SC-3301P1/ | |
| | | 5ABP11 | 36.95 | 5CP11A | 28.00 | 10VP7 | 55.75 | T64P1/T533P1 | 110.00 |
| | | 5ABP11A | 43.95 | *5CP12 | 30.80 | 10VP15 | 55.75 | SC-3301P2/ | |
| | | 5ABP31A | 43.95 | 5CVP1 | 142.80 | *10WP7 | 34.45 | T64P2/T533P2 | 110.00 |
| | | *5ADP1 | 28.30 | 5CVP7 | 142.80 | 10WP7A | 37.80 | SC-3301P5/ | |
| | | 5ADP1A | 37.00 | 5CVP19 | 142.80 | 10WP14 | 51.25 | T64P5/T533P5 | 110.00 |
| | | 5ADP1B | 37.00 | 5DEP1 | 13.65 | 10WP14A | 59.65 | SC-3301P7/ | |
| | | *5ADP2 | 35.00 | 5DEP2 | 24.20 | 10WP19 | 51.25 | T64P7/T533P7 | 110.00 |
| | | 5ADP2A | 42.00 | 5DEP7 | 24.65 | 10WP19A | 51.25 | SC-3301P11/ | |
| | | 5ADP2B | 42.00 | 5DEP11 | 25.20 | 12ABP7 | 60.00 | T64P7/T533P7 | 110.00 |
| | | *5ADP7 | 35.00 | *5DKP4 | 30.25 | 12ABP7A | 47.80 | SC-3301P15/ | |
| | | 5ADP7A | 45.50 | *5DKP11 | 30.25 | 12ABP14 | 58.80 | T64P15/ | |
| | | 5ADP7B | 45.50 | *5DKP15 | 30.25 | 12ABP14A | 68.50 | T533P15 | 110.00 |
| | | 5ADP11 | 38.50 | *5DKP16 | 30.25 | | | | |
| | | 5ADP11A | 45.50 | *5DKP24 | 30.25 | | | | |
| | | 5ADP11B | 45.50 | *5DLP4 | 23.55 | | | | |
| | | 5ADP31A | 45.50 | *5FP4A | 26.20 | | | | |
| | | 5AHP2 | 40.50 | *5FP7A | 21.35 | | | | |
| | | 5AHP2A | 44.75 | 5FP11A | 33.25 | | | | |
| | | *5AHP4A | 44.75 | *5FP14A | 25.80 | | | | |
| | | *5AHP7 | 31.85 | 5RP1A | 130.00 | | | | |
| | | *5AHP7A | 38.65 | 5RP2A | 130.00 | | | | |
| | | 5AHP14 | 31.85 | 5RP4A | 175.00 | | | | |
| | | 5AHP14A | 39.10 | 5RP5A | 175.00 | | | | |
| | | 5AHP19 | 31.85 | 5RP7A | 132.50 | | | | |
| | | 5AHP19A | 44.00 | 5RP11A | 130.00 | | | | |
| | | 5AHP25 | 41.95 | *5UP1 | 12.45 | | | | |
| | | 5AHP25A | 49.65 | 5UP7 | 24.65 | | | | |
| | | 5AMP1 | 44.60 | 5UP11 | 25.20 | | | | |
| | | *5AMP1A | 47.60 | 5WP11 | 101.00 | | | | |
| | | 5AMP2 | 44.60 | 5WP15 | 101.00 | | | | |
| | | *5AMP2A | 47.60 | 5ZP15 | 128.55 | | | | |
| | | 5AMP7 | 47.50 | 5ZP16 | 82.95 | | | | |
| | | *5AMP7A | 60.50 | 5ZP24 | 128.55 | | | | |
| | | 5AMP11 | 49.00 | 7ABP7 | 46.65 | | | | |
| | | 5AMP11A | 60.50 | *7ABP7A | 48.50 | | | | |
| | | 5AQP1 | 37.00 | 7ABP14 | 59.95 | | | | |
| | | 5AQP1A | 40.00 | 7ABP14A | 58.75 | | | | |
| | | 5AQP1B | 40.00 | 7ABP19 | 52.10 | | | | |
| | | 5AQP2 | 37.75 | 7ABP19A | 58.75 | | | | |

NOTE: Other screen phosphors for industrial and Military Cathode Ray Tubes are available upon request.

Types listed in Bold Face are Sylvania Gold Brand Tubes.

GB—Manufactured to Commercial and Industrial Specifications.

+ Indicates Military Type Approval.

(+) Federal Excise Tax included in price.

(‡) These tubes may be of foreign manufacture and in many cases manufactured by the foreign affiliate of Sylvania Electric Products Inc.

(*) Indicates additions to line since last price list.

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| TUBE TYPE | DESCRIPTION | SPECIFICATION MIL-E-1/ | SUGG. LIST |
|------------|------------------------------------|------------------------|------------|
| 6CG7 | Miniature Medium-MU twin triode | 1095 | \$ 2.40 |
| 614 | Miniature UHF amplifier triode | 58 | 3.95 |
| 614WA | Miniature UHF High-MU triode | 619D | 5.35 |
| 616WA | Miniature R-F amplifier | 243B | 5.35 |
| 5636 | Subminiature Sharp-Cutoff pentode | 168E | 8.69 |
| 5639 | Subminiature pentode | 169E | 6.55 |
| 5639WA | Subminiature pentode | 1267 (Tentative) | 12.38 |
| 5702WA | Subminiature Sharp-Cutoff pentode | 82D | 10.50 |
| 5702WB | Subminiature Sharp-Cutoff pentode | 1069C | 15.74 |
| 5703 | Subminiature Medium MU triode | 692A | 3.68 |
| 5703WA | Subminiature Medium MU triode | 293D | 10.50 |
| 5703WB | Subminiature Medium MU triode | 1070B | 14.58 |
| 5718 | Subminiature UHF Medium MU triode | 172D | 4.25 |
| 5719 | Subminiature High-MU triode | 173E | 3.85 |
| 5814A | Miniature Medium MU twin triode | 12D | 4.73 |
| 5840 | Subminiature Sharp-Cutoff pentode | 140D | 6.25 |
| 5899 | Subminiature pentode | 97G | 6.55 |
| 5902 | Subminiature Beam Power pentode | 175E | 5.75 |
| 5977 | Subminiature Medium-MU triode | 187D | 6.55 |
| 6021 | Subminiature Medium-MU twin triode | 188C | 4.80 |
| 6026 | Subminiature Medium-MU triode | No mil spec. | 5.60 |
| 6101/616WA | Miniature R-F amplifier | Spec. MIL-E-1/243A | 5.35 |
| 6111 | Subminiature Medium-MU twin triode | Superseded-order 616WA | 5.45 |
| 6112 | Subminiature High-MU twin triode | 190D | 5.45 |
| 6205 | Subminiature Sharp-Cutoff pentode | 140P | 6.40 |
| 6222 | Subminiature Medium-MU triode | 955A | 11.07 |

All prices include Federal Excise Tax where applicable.

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SONOTONE COMMERCIAL AND HOME ENTERTAINMENT TUBES

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| TUBE TYPE | SUGG. LIST | TUBE TYPE | SUGG. LIST | TUBE TYPE | SUGG. LIST | TUBE TYPE | SUGG. LIST | TUBE TYPE | SUGG. LIST |
|-----------|------------|-------------|------------|-----------|------------|---------------|------------|----------------|------------|
| 0Z4 | \$ 2.40 | 6BM8 | \$ 2.95 | 614 | \$ 3.95 | 6026 | \$ 5.85 | EF80/6BX6 | \$ 3.15 |
| 1A86 | 3.30 | 6BM8 MP | 6.20 | 614WA | 5.35 | 6146 | 10.45 | EF85/6BY7 | 3.15 |
| 1A06 | 3.30 | 6BQ5 | 5.55 | 616 | 2.75 | 7025 | 3.15 | EF86/5928-6267 | 2.65 |
| 1AH5 | 3.10 | 6BQ5 | 2.35 | 616A | 2.35 | 7189 | 2.75 | EF89/6DA6 | 2.80 |
| 1AJ4 | 3.00 | 6BQ5 MP | 5.05 | 616WA | 5.35 | 7189 MP | 5.75 | EF91/6AM6 | 3.25 |
| 1AN5 | 2.70 | 6BQ6GT/6C06 | 4.35 | 6K6GT | 2.35 | 7247 | 2.85 | EF93/6BA6 | 2.00 |
| 1B3GT | 2.90 | 6BQ7A | 3.85 | 6L6GC | 3.95 | DAF91/1S5 | 2.15 | EF94/6AU6 | 2.05 |
| 1G3GT | 2.90 | 6BR5 | 2.70 | 6L6GC MP | 8.20 | DAF96/1AH5 | 3.10 | EF95/6AK5 | 4.20 |
| 1L4 | 2.65 | 6BR8 | 3.45 | 6N8 | 3.00 | DC90 | 2.60 | EF98/6ET6 | 3.20 |
| 1M3 | 2.00 | 6BW7 | 2.90 | 654A | 2.05 | DF91/1T4 | 2.25 | EF183/6EH7 | 3.00 |
| 1S2 | 3.00 | 6BX6 | 3.15 | 6SL7GT | 3.45 | DF92 1L4 | 2.65 | EF184/6E17 | 3.00 |
| 1S4 | 3.86 | 6BY7 | 3.15 | 6SN7GTB | 2.60 | DF96/1AJ4 | 3.00 | EF804 | 3.25 |
| 1S5 | 2.15 | 6BZ6 | 3.95 | 6T8 | 3.25 | DF97/1AN5 | 2.70 | EH90/6CS6 | 2.35 |
| 1T4 | 2.25 | 6BZ7 | 3.85 | 6U8 | 3.20 | DK92/1AC6 | 3.30 | EK90/6BE6 | 2.15 |
| 1U5 | 2.25 | 6C4 | 2.00 | 6V4 | 1.55 | DK96/1AB6 | 3.30 | EL34/6CA7 | 5.05 |
| 1X2B | 3.00 | 6CA4 | 1.90 | 6V6GT | 2.15 | DL92/3S4 | 2.45 | EL34/6CA7 MP | 11.10 |
| 2AF4A | 3.95 | 6CA7 | 5.05 | 6V6GT MP | 4.40 | DL93/3V4 | 2.15 | EL37 | 6.40 |
| 2AF4B | 3.95 | 6CA7 MP | 11.10 | 6W4GT | 2.40 | DL96/3C4 | 2.75 | EL37 MP | 13.50 |
| 2ER5 | 2.90 | 6CB6 | 2.25 | 6X4 | 1.60 | DM70/1M3 | 2.00 | EL38/6CN6 | 7.25 |
| 3AF4A | 3.95 | 6CD6GA | 5.60 | 6X5G | 3.50 | DY30/1B3GT | 2.90 | EL41/6CK5 | 3.10 |
| 3AF4B | 3.95 | 6CD7 | 3.80 | 6X8 | 3.00 | DY80/1X2B | 3.00 | EL81/6CJ6 | 4.25 |
| 3BZ6 | 2.25 | 6CC7 | 2.40 | 7AN7 | 3.65 | DY86/1S2 | 3.00 | EL84/6BQ5 | 2.35 |
| 3C4 | 2.75 | 6CC8A | 3.25 | 9A8 | 4.45 | EA491 | 1.80 | EL84/6BQ5 MP | 5.05 |
| 3K5 | 4.00 | 6CJ5 | 2.85 | 9AQ8 | 3.10 | EAB80/6T8 | 3.25 | EL85/6B85 | 5.55 |
| 3Q4 | 2.90 | 6CJ6 | 4.25 | 9UB/PCF82 | 3.30 | EAF42/6CT7 | 2.80 | EL86/6CW5 | 2.75 |
| 3S4 | 2.45 | 6CK5 | 3.10 | 12AD6 | 2.25 | EB91/6AL5 | 1.80 | EL86/6CW5 MP | 5.70 |
| 3V4 | 2.15 | 6CL6 | 3.65 | 12AH8 | 3.25 | EB041/6CV7 | 2.55 | EL90/6AQ5 | 2.15 |
| 4B07 | 3.95 | 6CL8A | 3.10 | 12AT6 | 1.65 | EB090/6AT6 | 1.85 | EL90/6AQ5 MP | 4.40 |
| 4BZ7 | 4.00 | 6CN6 | 7.25 | 12AT7 | 2.90 | EB091/6AV6 | 1.65 | EL95/6DL5 | 2.45 |
| 5F80 | 4.25 | 6CS6 | 2.35 | 12AU6 | 2.15 | EB096/6N8 | 3.00 | EL95/6DL5 MP | 5.15 |
| 5J6 | 2.80 | 6CT7 | 2.80 | 12AU7 | 2.40 | EBF83/6DR5 | 3.50 | EM34/6CD7 | 3.80 |
| 5U4GB | 2.10 | 6CV7 | 2.55 | 12AU7A | 2.40 | EBF89/6DC8 | 3.10 | EM35 | 2.40 |
| 5V4 | 3.45 | 6CW5 | 2.75 | 12AV6 | 1.65 | EC90/6C4 | 2.00 | EM71 | 5.80 |
| 5Y3GT | 1.75 | 6CW5 MP | 5.70 | 12AX4GT | 2.70 | EC91/6AQ4 | 5.15 | EM80/6BR5 | 2.70 |
| 6AB4 | 2.05 | 6CW7 | 3.70 | 12AX7 | 2.45 | EC92/6AB4 | 2.05 | EM81/6DA5 | 2.70 |
| 6AB8 | 3.25 | 6DA4 | 2.65 | 12AX7A | 2.40 | EC95/6ER5 | 2.40 | EM84/6FG6 | 2.90 |
| 6AF4 | 3.95 | 6DA5 | 2.70 | 12BA6 | 1.65 | EC97/6FY5 | 2.75 | EZ12 | 4.80 |
| 6AF4A | 3.95 | 6DA6 | 2.80 | 12BE6 | 2.15 | ECC33/6SN7GTB | 2.60 | EZ35/6X5G | 3.50 |
| 6AJ8 | 3.10 | 6DC8 | 3.10 | 12BH7A | 3.00 | ECC35/6SL7GT | 3.45 | EZ80/6V4 | 1.55 |
| 6AK5 | 4.20 | 6DJ8 | 4.05 | 12BL6 | 2.25 | EC2C | 4.00 | EZ81/6CA4 | 1.90 |
| 6AL5 | 1.80 | 6DL5 | 2.45 | 12DQ6B | 4.20 | ECC81/12AT7 | 2.90 | EZ90/6X4 | 1.60 |
| 6AM6 | 3.25 | 6DL5 MP | 5.15 | 12SN7GT | 2.70 | ECC82/12AU7 | 2.40 | GZ30/5Y3GT | 1.75 |
| 6AN8 | 3.55 | 6DR5 | 3.50 | 15CW5 | 2.90 | ECC83/12AX7 | 2.45 | GZ34/5AR4 | 4.25 |
| 6AQ4 | 5.15 | 6D06B | 4.05 | 15D05 | 3.95 | ECC84/6CW7 | 3.70 | HBC90/12AT6 | 1.65 |
| 6AQ5 | 2.15 | 6DT6A | 2.15 | 16A8 | 4.35 | ECC85/6AQ8 | 3.70 | HBC91/12AV6 | 1.65 |
| 6AQ5 MP | 4.40 | 6EA8 | 2.70 | 18DZ8 | 3.15 | ECC86/6GM8 | 4.45 | HF93/12BA6 | 1.65 |
| 6A08 | 2.70 | 6EB8 | 3.70 | 19AQ5 | 2.05 | ECC88/6DJ8 | 4.05 | HF94/12AU6 | 2.15 |
| 6AT6 | 1.85 | 6EH7 | 3.00 | 25EH5 | 2.15 | ECC91/6J6 | 2.75 | HK90/12BE6 | 2.15 |
| 6AU5GT | 4.25 | 6EJ7 | 3.00 | 35C5 | 3.85 | ECC180/6BQ7A | 3.85 | HL92/50C5 | 2.15 |
| 6AU6 | 2.05 | 6ER5 | 2.40 | 35DZ8 | 3.00 | ECC189/6ES8 | 4.35 | HY90/35W4 | 1.30 |
| 6AV6 | 1.65 | 6ES8 | 4.35 | 35EH5 | 2.15 | ECCF80/6BL8 | 3.85 | M8081/6J6WA | 5.35 |
| 6AW8A | 3.45 | 6ET6 | 3.20 | 35W4 | 1.30 | ECCF82/6U8 | 3.20 | M8232/614WA | 5.35 |
| 6AX4GT | 2.65 | 6EU7 | 2.50 | 45B5 | 2.80 | ECCF86/6HG8 | 3.15 | PCC84/7AN7 | 3.65 |
| 6BA6 | 2.00 | 6FG6 | 2.90 | 50BM8 | 3.00 | ECCF81/6AJ8 | 3.10 | PCC85/9AQ8 | 3.10 |
| 6BE6 | 2.15 | 6FY5 | 2.75 | 50BM8 MP | 6.25 | ECL80/6AB8 | 3.25 | PCF80/9A8 | 4.45 |
| 6BH6 | 2.65 | 6GK5 | 4.00 | 50C5 | 2.15 | ECL82/6BM8 | 2.95 | PCF82/9U8 | 3.30 |
| 6B16 | 2.60 | 6GM8 | 4.45 | 50EH5 | 2.35 | ECL82/6BM8 MP | 6.20 | PCL82/16A8 | 4.35 |
| 6BG6GA | 6.40 | 6GN8 | 3.70 | 59Z8/6267 | 2.65 | ECL85/6GW8 | 3.10 | PCL84/15D05 | 3.95 |
| 6BL7GA | 3.95 | 6GW8 | 3.10 | 60FX5 | 2.35 | EF40 | 4.35 | PL84/15CW5 | 2.90 |
| 6BL8 | 3.85 | 6HG8 | 3.15 | 5763 | 3.45 | EF41/6CJ5 | 2.85 | UCL82/50BM8 | 3.00 |

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Used in series regulated power supplies and wherever high permeance, high current tubes are needed.

Types available:
5998, 6A57G, 6080, 6080WA, 6080WB, 6082, 6082WA, 6082WB, 6336A, 6394A, 6520, 6528, 6877, 7105, 7236, 7241, 7242, 7802, 7802WA, 7802WB, 8193.



HYDROGEN THYRATRONS

Used in radar modulators and missile tracking beacons. Miniatures in airborne units. Glass and ceramic types available.

Types available:
1257, 1257A, 1258, 5948, 5948A, 5949, 5949A, 6587A, 7190, 7191, 7192, 7240, 8036, 8191, 8192, 8097.



HYDROGEN DIODES

Hydrogen filled tubes for use as high power rectifiers or radar charging diodes. Electrically rugged and temperature free compared to competing devices.

Types available:
7789, 7790, 7791, 7792.



CLIPPER TUBES

Used in radar to protect modulator components and to regulate output pulse. Both gas and vacuum tube versions available.

Types available:
3B29, 576A, 583, 6339, 7454, 7455.



THYRATRONS

Used in power supplies, radio transmitters, motor controllers and spot welders.

Types available:
2A4G, 2D21, 2050, 2050W, 3C23, 323B, 393A, 394A, 395A, 885, 559A, 5643, 5663, 5696, 5727, 6D4, 6012, 6901, 7410.



VOLTAGE REGULATORS

Used in radio and other electronic equipment with regulated power supplies.

Types available:
0A2, 0B2WA, 0B2, 0C3W, 0D3W, 5787, 5787WA, 6074, 6542, 7099.



VOLTAGE REFERENCE TUBES

Used in radio equipment and other electronic gear with regulated power supplies, especially in high-accuracy units.

Types available:
5651, 5651WA, 5783, 5783WA, 0G3.



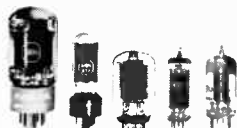
PENTODES

Used in military and other communications equipment.

Types available:
1AD4, 5636, 5639, 5654/6AK5W, 6AH6WA, 5672, 5678, 5702WA, 5702WB, 5725/6A56W, 5749/5875, 6A J5, 6AK5W8, 6A56, 6AU6WA, 5840, 5875, 5902, 6088, 6136, 6205, 6245.



ENTERTAINMENT



Tung-Sol tubes . . . cathode ray, series string, hybrid auto radio, TV, radio, stereo and hi-fi . . . provide an ideal combination of the most sought-after characteristics. Tung-Sol is also packing the popular types of its quality audio tubes in factory-matched pairs. Dynamically-balanced 6550's, 5881's, 6V6GTA's, 6BQ5's bring you the finest in full-life reproduction.



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distributors**

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MIL-W-76B-PLASTIC WIRE

TYPE MW-UNCOVERED PLASTIC

DESCRIPTION: Solid or extra flexible stranded tinned copper, color coded medium wall polyvinylchloride insulation. The stranded conductor has an extra tight lay to prevent springing open when stripped.

CHARACTERISTICS: Temperature rating -40°C to +80°C, Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus.

STRANDED

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|--------|---------------------|--------------|-------------------------------|
| 1550 | MW-C 24(7)U | 24 | 7/32 | .016" | .059" | 1-30 AS LISTED BELOW |
| 1551 | MW-C 22(7)U | 22 | 7/30 | .016" | .064" | |
| 1553 | MW-C 20(10)U | 20 | 10/30 | .016" | .073" | |
| 1555 | MW-C 18(16)U | 18 | 16/30 | .016" | .084" | |
| 1557 | MW-C 16(26)U | 16 | 26/30 | .016" | .095" | |
| 1559 | MW-C 14(41)U | 14 | 41/30 | .016" | .110" | |
| 1560 | MW-C 12(65)U | 12 | 65/30 | .016" | .125" | |

SOLID

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|--------|---------------------|--------------|-------------------------------|
| 1561 | MW-C 24(1)U | 24 | 1 | .016" | .055" | 1-30 AS LISTED BELOW |
| 1561 | MW-C 22(1)U | 22 | 1 | .016" | .060" | |
| 1563 | MW-C 20(1)U | 20 | 1 | .016" | .066" | |
| 1565 | MW-C 18(1)U | 18 | 1 | .016" | .074" | |
| 1567 | MW-C 16(1)U | 16 | 1 | .016" | .083" | |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED



MIL-W-76B-PLASTIC WIRE

TYPE MW-GLASS BRAID

DESCRIPTION: Extra flexible stranded tinned copper, white medium wall polyvinylchloride insulation, color coded flame retardant lacquered glass braid overall. The stranded conductor has an extra tight lay to prevent springing open when stripped.

CHARACTERISTICS: Temperature rating -40°C to +80°C, Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|--------|---------------------|--------------|---------------------------|
| 1590 | MW-C 24(7)B | 24 | 7/32 | .016" | .070" | 1-19 as listed below |
| 1590 | MW-C 22(7)B | 22 | 7/30 | .016" | .080" | 1-19 as listed below |
| 1591 | MW-C 20(10)B | 20 | 10/30 | .016" | .090" | 1-19 as listed below |
| 1592 | MW-C 18(16)B | 18 | 16/30 | .016" | .100" | 1-19 as listed below |
| 1593 | MW-C 16(26)B | 16 | 26/30 | .016" | .115" | 1-19 as listed below |
| 1594 | MW-C 14(41)B | 14 | 41/30 | .016" | .125" | 1 & 11-19 as listed below |
| 1595 | MW-C 12(65)B | 12 | 65/30 | .016" | .140" | 1 & 11-19 as listed below |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

*Other solid colors and striped combinations available to order.



MIL-W-76B-PLASTIC WIRE

TYPE MW-GLASS BRAID-SHIELDED

DESCRIPTION: Extra flexible stranded tinned copper, white medium wall polyvinylchloride insulation, white flame retardant lacquered glass braid with tinned copper shield overall, 80% coverage. The stranded conductor has an extra tight lay to prevent springing open when stripped.

CHARACTERISTICS: Temperature rating -40°C to +80°C, Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | NOMINAL O.D. | * STOCK COLOR |
|-----------|------------------|----------------|--------|---------------------|--------------|---------------|
| 1194 | MW-C 24(7)BS | 24 | 7/32 | .016" | .090" | White |
| 1194 | MW-C 22(7)BS | 22 | 7/30 | .016" | .095" | White |
| 1194 | MW-C 20(10)BS | 20 | 10/30 | .016" | .108" | White |
| 1195 | MW-C 18(16)BS | 18 | 16/30 | .016" | .124" | White |
| 1197 | MW-C 16(26)BS | 16 | 26/30 | .016" | .133" | White |
| 1198 | MW-C 14(41)BS | 14 | 41/30 | .016" | .144" | White |
| 1199 | MW-C 12(65)BS | 12 | 65/30 | .016" | .168" | White |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

*Other solid colors and striped combinations available to order.

1194, 22 to 1199 formerly 1361 to 1365



MIL-W-76B-PLASTIC WIRE

TYPE MW-SHIELDED

DESCRIPTION: Extra flexible stranded tinned copper, color coded medium wall polyvinylchloride insulation, braided tinned copper shield overall, 80% coverage. Stranded conductor has an extra tight lay to prevent springing open when stripped.

CHARACTERISTICS: Temperature rating -40°C to +80°C, Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|--------|---------------------|--------------|-------------------|
| 1350 | MW-C 24(7)S | 24 | 7/32 | .016" | .075" | White, Black, Red |
| 1351 | MW-C 22(7)S | 22 | 7/30 | .016" | .085" | White, Black, Red |
| 1352 | MW-C 20(10)S | 20 | 10/30 | .016" | .095" | White, Black, Red |
| 1353 | MW-C 18(16)S | 18 | 16/30 | .016" | .105" | White, Black, Red |
| 1354 | MW-C 16(26)S | 16 | 26/30 | .016" | .115" | White |
| 1355 | MW-C 14(41)S | 14 | 41/30 | .016" | .130" | White |
| 1356 | MW-C 12(65)S | 12 | 65/30 | .016" | .145" | White |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

*Other solid colors and striped combinations available to order.



MIL-W-76B-PLASTIC WIRE

TYPE MW-NYLON JACKET

DESCRIPTION: Extra flexible stranded tinned copper, color coded medium wall polyvinylchloride insulation, clear nylon (polyamide) jacket overall. Stranded conductor has an extra tight lay to prevent springing open when stripped.

CHARACTERISTICS: Temperature rating -40°C to +90°C, Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | NOM. JKT. THICK. | NOM. O.D. | * STOCK COLORS |
|-----------|------------------|----------------|--------|---------------------|------------------|-----------|----------------------|
| 1503 | MW-C 24(7)J | 24 | 7/32 | .016" | .002" | .065" | 1-19 as listed below |
| 1504 | MW-C 22(7)J | 22 | 7/30 | .016" | .003" | .072" | 1-19 as listed below |
| 1505 | MW-C 20(10)J | 20 | 10/30 | .016" | .003" | .079" | 1-19 as listed below |
| 1506 | MW-C 18(16)J | 18 | 16/30 | .016" | .003" | .090" | 1-19 as listed below |
| 1507 | MW-C 16(26)J | 16 | 26/30 | .016" | .004" | .103" | 1-19 as listed below |
| 1508 | MW-C 14(41)J | 14 | 41/30 | .016" | .004" | .118" | 1-6 as listed below |
| 1509 | MW-C 12(65)J | 12 | 65/30 | .016" | .005" | .135" | 1-3 as listed below |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

*Other solid colors and striped combinations available to order.



MIL-W-76B-PLASTIC WIRE

TYPE MW-SHIELDED-NYLON JACKET

DESCRIPTION: Stranded tinned copper, white medium wall polyvinylchloride insulation, braided tinned copper shield, 80% minimum coverage, clear nylon (polyamide) jacket overall.

CHARACTERISTICS: Temperature rating -40° to +90°C. Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | NOMINAL O.D. | NOMINAL O.D. |
|-----------|------------------|----------------|--------|---------------------|--------------|--------------|
| 1370 | MW-C 24(7)SJ | 24 | 7/32 | .016" | .005" | .091" |
| 1371 | MW-C 22(7)SJ | 22 | 7/30 | .016" | .005" | .100" |
| 1372 | MW-C 20(7)SJ | 20 | 7/28 | .016" | .005" | .105" |
| 1373 | MW-C 18(19)SJ | 18 | 19/30 | .016" | .005" | .115" |
| 1374 | MW-C 16(19)SJ | 16 | 19/29 | .016" | .005" | .125" |
| 1375 | MW-C 14(19)SJ | 14 | 19/27 | .016" | .005" | .138" |

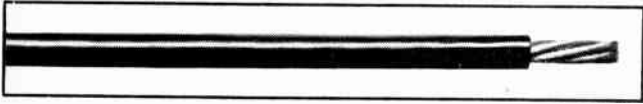
STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

*** STOCK COLORS**

- 1-White
- 7-Brown
- 13-White/Green
- 19-White/Violet
- 25-White/Black/Orange
- 2-Black
- 8-Orange
- 14-White/Yellow
- 20-White/Black/Red
- 26-White/Black/Gray
- 3-Red
- 9-Gray (slate)
- 15-White/Blue
- 21-White/Black/Green
- 27-White/Black/Violet
- 4-Green
- 10-Violet (purple)
- 16-White/Orange
- 22-White/Black/Yellow
- 28-Tan
- 5-Yellow
- 11-White/Black
- 17-White/Orange
- 23-White/Black/White
- 29-Pink
- 6-Light Blue
- 12-White/Red
- 18-White/Gray
- 24-White/Black/Brown
- 30-Dark Blue

*Other striped color combinations available to order.

ALPHA WIRE CORPORATION



MIL-W-76B-PLASTIC WIRE

TYPE HW - UNCOVERED PLASTIC

DESCRIPTION: Stranded tinned copper, color coded heavy wall polyvinylchloride insulation.

CHARACTERISTICS: Temperature rating -40°C to +80°C. Resistant to acids, alkalis, oil, flame, moisture and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRANDS | NOM. WALL THICKNESS | VOLT. RAT. | NOM. O.D. | * STOCK COLORS |
|-----------|------------------|----------------|---------|---------------------|------------|-----------|----------------------|
| 1571 | HW-C 22(7)U | 22 | 7/30 | .032" | 2500 | .103" | 1-10 as listed below |
| 1573 | HW-C 20(10)U | 20 | 10/30 | .032" | 2500 | .108" | 1-10 as listed below |
| 1575 | HW-C 18(16)U | 18 | 16/30 | .032" | 2500 | .120" | 1-10 as listed below |
| 1577 | HW-C 16(26)U | 16 | 26/30 | .032" | 2500 | .134" | White, Black, Red |
| 1579 | HW-C 14(41)U | 14 | 41/30 | .045" | 600 | .170" | White, Black, Red |
| 1651 | HW-C 12(65)U | 12 | 65/30 | .045" | 600 | .190" | White, Black, Red |
| 1653 | HW-C 10(105)U | 10 | 105/30 | .045" | 600 | .215" | White, Black, Red |
| 1655 | HW-C 8(133)U | 8 | 133/29 | .045" | 600 | .265" | White, Black, Red |
| 1657 | HW-C 6(133)U | 6 | 133/27 | .045" | 600 | .310" | White, Black, Red |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED



MIL-W-76B-PLASTIC WIRE

TYPE LW - UNCOVERED PLASTIC

DESCRIPTION: Stranded tinned copper, color coded light wall polyvinylchloride insulation.

CHARACTERISTICS: Temperature rating -40°C. to +80°C. Voltage rating 300 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRANDS | NOM. WALL THICKNESS | NOM. O.D. | * STOCK COLORS |
|-----------|------------------|----------------|---------|---------------------|-----------|------------------------------|
| 1685 | LW-C 30(7)U | 30 | 7/38 | .010" | .033" | 1-White Black 11-White Black |
| 1686 | LW-C 28(7)U | 28 | 7/36 | .010" | .035" | 2-Black 12-White Red |
| 1687 | LW-C 26(7)U | 26 | 7/34 | .010" | .038" | 3-Red 13-White Green |
| 1688 | LW-C 24(7)U | 24 | 7/32 | .010" | .043" | 4-Green 14-White Yellow |
| 1689 | LW-C 22(7)U | 22 | 7/30 | .010" | .049" | 5-Yellow 15-White Blue |
| 1690 | LW-C 20(7)U | 20 | 7/28 | .010" | .060" | 6-Light Blue 16-White Brown |

*Other striped combinations available to order.

STANDARD PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

MIL-W-16878C-PLASTIC WIRE



TYPE B - UNCOVERED PLASTIC
REGULAR TINNED COPPER

DESCRIPTION: Stranded tinned copper, color coded .010" polyvinylchloride insulation.

CHARACTERISTICS: Temperature rating -55°C to +105°C. Voltage rating 600 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents, and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRANDS | NOM. WALL THICKNESS | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|---------|---------------------|--------------|------------------------------|
| 1850 | B-32 | 32 | 7/40 | .010" | .028" | 1-White 10-Violet (purple) |
| 1851 | B-30 | 30 | 7/38 | .010" | .032" | 2-Black 11-White Black |
| 1852 | B-28 | 28 | 7/36 | .010" | .035" | 3-Red 12-White Red |
| 1853 | B-26 | 26 | 7/34 | .010" | .038" | 4-Green 13-White Green |
| 1854 | B-24 | 24 | 7/32 | .010" | .043" | 5-Yellow 14-White Yellow |
| 1855 | B-22 | 22 | 7/30 | .010" | .049" | 6-Light Blue 15-White Blue |
| 1856 | B-20 | 20 | 7/28 | .010" | .060" | 7-Brown 16-White Brown |
| 1857 | B-18 | 18 | 7/26 | .010" | .068" | 8-Orange 17-White Orange |
| 1858 | B-16 | 16 | 19/29 | .010" | .081" | 9-Gray (slate) 18-White Gray |

*Other striped combinations available to order.

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

HEAVY TINNED CONDUCTOR (For Induction Heat Soldering)

DESCRIPTION: Single conductor stranded heavy tinned copper, color coded .010" polyvinylchloride insulation. For use with high frequency generators for induction heat soldering with automatic cutting and stripping equipment.

CHARACTERISTICS: Temperature rating -55°C to 105°C. Voltage rating 600 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus.

| ALPHA NO. | TYPE DESIGN. | CONDUCTOR SIZE | MIN. TINNED COATING THICKNESS | NOM. WALL THICKNESS | NOM. O.D. | * STOCK COLORS |
|-----------|--------------|----------------|-------------------------------|---------------------|-----------|-------------------------|
| 1753 | B-26 | 26 | 7/34 | .00010" | .010" | 1-White 11-White Black |
| 1754 | B-24 | 24 | 7/32 | .00010" | .010" | 2-Black 12-White Red |
| 1755 | B-22 | 22 | 7/30 | .00015" | .010" | 3-Red 13-White Green |
| 1756 | B-20 | 20 | 7/28 | .00015" | .010" | 4-Green 14-White Yellow |
| 1757 | B-18 | 18 | 19/30 | .00015" | .010" | 5-Yellow 15-White Blue |

*Other striped combinations available to order.

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

TYPE B - NYLON JACKET

DESCRIPTION: Stranded tinned copper, color coded .010" polyvinylchloride insulation, clear nylon (polyamide) jacket overall.

CHARACTERISTICS: Temperature rating -55°C to +115°C. Voltage rating 600 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRANDS | NOM. WALL THICKNESS | NOM. JKT. THICK. | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|---------|---------------------|------------------|--------------|------------------------------|
| 1860 | B-32 | 32 | 7/40 | .010" | .002" | .032" | 1-White 10-Violet (purple) |
| 1861 | B-30 | 30 | 7/38 | .010" | .002" | .036" | 2-Black 11-White Black |
| 1862 | B-28 | 28 | 7/36 | .010" | .002" | .039" | 3-Red 12-White Red |
| 1863 | B-26 | 26 | 7/34 | .010" | .002" | .042" | 4-Green 13-White Green |
| 1864 | B-24 | 24 | 7/32 | .010" | .002" | .047" | 5-Yellow 14-White Yellow |
| 1865 | B-22 | 22 | 7/30 | .010" | .002" | .053" | 6-Light Blue 15-White Blue |
| 1866 | B-20 | 20 | 7/28 | .010" | .002" | .065" | 7-Brown 16-White Brown |
| 1867 | B-18 | 18 | 7/26 | .010" | .003" | .075" | 8-Orange 17-White Orange |
| 1868 | B-16 | 16 | 19/29 | .010" | .003" | .087" | 9-Gray (slate) 18-White Gray |

*Other striped combinations available to order.

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

- * STOCK COLORS
- 1-White
 - 2-Black
 - 3-Red
 - 4-Green
 - 5-Yellow
 - 6-Light Blue
 - 7-Brown
 - 8-Orange
 - 9-Gray (slate)
 - 10-Violet (purple)
 - 11-White Black
 - 12-White Red
 - 13-White Green
 - 14-White Yellow
 - 15-White Blue
 - 16-White Brown
 - 17-White Orange
 - 18-White Gray
 - 19-White Violet
- *Other solid and striped combinations available to order.



TYPE C - UNCOVERED PLASTIC

DESCRIPTION: Stranded tinned copper, color coded .016" polyvinylchloride insulation

CHARACTERISTICS: Temperature rating -55°C to +105°C. Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRANDS | NOM. WALL THICKNESS | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|---------|---------------------|--------------|---------------------------|
| 1810 | C-24 | 24 | 16/36 | .016" | .058" | 1-19 as listed below |
| 1830 | C-24 | 24 | 7/32 | .016" | .058" | 1-19 as listed below |
| 1831 | C-22 | 22 | 7/30 | .016" | .064" | 1-19 as listed below |
| 1832 | C-20 | 20 | 7/28 | .016" | .072" | 1-19 as listed below |
| 1833 | C-18 | 18 | 7/26 | .016" | .082" | 1-19 as listed below |
| 1834 | C-16 | 16 | 19/29 | .016" | .091" | 1 & 11-19 as listed below |
| 1835 | C-14 | 14 | 19/27 | .016" | .105" | 1 & 11-19 as listed below |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

TYPE C - NYLON JACKET

DESCRIPTION: Stranded tinned copper, color coded .016" polyvinylchloride insulation, clear nylon (polyamide) jacket overall.

CHARACTERISTICS: Temperature rating -55°C to +115°C. Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRANDS | NOM. WALL THICKNESS | NOM. JKT. THICK. | NOMINAL O.D. | * STOCK COLORS |
|-----------|------------------|----------------|---------|---------------------|------------------|--------------|---------------------------|
| 1840 | C-24 | 24 | 7/32 | .016" | .002" | .065" | 1-19 as listed below |
| 1841 | C-22 | 22 | 7/30 | .016" | .003" | .072" | 1-19 as listed below |
| 1842 | C-20 | 20 | 7/28 | .016" | .003" | .079" | 1-19 as listed below |
| 1843 | C-18 | 18 | 7/26 | .016" | .003" | .090" | 1-19 as listed below |
| 1844 | C-16 | 16 | 19/29 | .016" | .004" | .099" | 1 & 11-19 as listed below |
| 1845 | C-14 | 14 | 19/27 | .016" | .004" | .114" | 1 & 11-19 as listed below |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

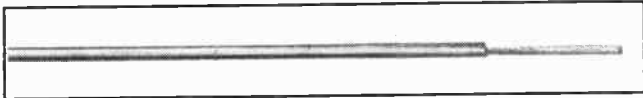
TYPE C - SHIELDED - NYLON JACKET

DESCRIPTION: Stranded tinned copper, white .016" polyvinylchloride insulation, braided tinned copper shield, 90% coverage, clear nylon (polyamide) jacket (which can be stripped to order for color identification) overall.

CHARACTERISTICS: Temperature rating -55°C to +115°C. Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus.

| ALPHA NO. | SIZE | CONDUCTOR STRANDS | NOMINAL WALL THICKNESS | NOMINAL JACKET THICKNESS | NOMINAL O.D. |
|-----------|------|-------------------|------------------------|--------------------------|--------------|
| 1470 | 24 | 7/32 | .016" | .005" | .091" |
| 1471 | 22 | 7/30 | .016" | .005" | .098" |
| 1472 | 20 | 7/28 | .016" | .005" | .105" |
| 1473 | 18 | 19/30 | .016" | .005" | .115" |
| 1474 | 16 | 19/29 | .016" | .005" | .125" |
| 1475 | 14 | 19/27 | .016" | .005" | .138" |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED



MIL-W-16878C-TEFLON† WIRE 260° C
TYPE E-EXTRUDED (600 VOLTS)

DESCRIPTION: Single conductor stranded silver plated copper, .010" TFE Teflon insulation.

CHARACTERISTICS: Temperature rating —65°C. to +260°C. Voltage rating 600 volts. Resistant to acid, alkalis, oil, flame, moisture, solvents and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. O.D. | *STOCK COLORS |
|-----------|------------------|----------------|--------|-----------|-----------------------|
| 2850 | E-32 | 32 | 7/40 | .029" | 1-19 as listed |
| 2851 | E-30 | 30 | 7/38 | .032" | 1-19 as listed |
| 2852 | E-28 | 28 | 7/36 | .036" | 1-19 as listed |
| 2853 | E-26 | 26 | 7/34 | .040" | 1-19 as listed |
| 2854 | E-24 | 24 | 19/36 | .045" | 1-19 as listed |
| 2855 | E-22 | 22 | 19/34 | .051" | 1-19 as listed |
| 2856 | E-20 | 20 | 19/32 | .059" | 1-19 as listed |
| 2857 | E-18 | 18 | 19/30 | .070" | 1-19 as listed |
| 2858 | E-16 | 16 | 19/29 | .083" | 1-19 as listed |
| 2859 | E-14 | 14 | 19/27 | .097" | 1-6 & 11-19 as listed |
| 2859/12 | E-12 | 12 | 19/25 | .113" | 1 & 11-19 as listed |
| 2859/10 | E-10 | 10 | 37/26 | .134" | 1 & 11-19 as listed |

STANDARD SPOOL PUT-UP: 25 FT., 50 FT., 100 FT., 250 FT., 500 FT., 1000 FT. ALSO AVAILABLE TO ORDER CUT AND STRIPPED.

- * STOCK COLORS
- 1—White
 - 5—Yellow
 - 9—Gray (slate)
 - 12—White/Red
 - 16—White/Brown
 - 2—Black
 - 6—Light Blue
 - 10—Violet (purple)
 - 13—White/Green
 - 17—White/Orange
 - 3—Red
 - 7—Brown
 - 11—White/Black
 - 14—White/Yellow
 - 18—White/Gray
 - 4—Green
 - 8—Orange
 - 15—White/Blue
 - 19—White/Violet
- * Other solid colors and striped combinations available to order.

TYPE E—SPIRAL WRAPPED (600 VOLTS)

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. O.D. | * STOCK COLORS |
|-----------|------------------|----------------|--------|-----------|----------------|
| 2861 | E-30 | 30 | 7/38 | .032" | 1—White |
| 2862 | E-28 | 28 | 7/36 | .036" | 2—Black |
| 2863 | E-26 | 26 | 7/34 | .040" | 3—Red |
| 2864 | E-24 | 24 | 19/36 | .045" | 4—Green |
| 2865 | E-22 | 22 | 19/34 | .051" | 5—Yellow |
| 2866 | E-20 | 20 | 19/32 | .059" | 6—Light Blue |
| 2867 | E-18 | 18 | 19/30 | .070" | 7—Brown |
| 2868 | E-16 | 16 | 19/29 | .083" | 8—Orange |
| 2869 | E-14 | 14 | 19/27 | .097" | 9—Gray (slate) |

* Other solid colors and striped combinations available to order.

STANDARD SPOOL PUT-UP: 25 FT., 50 FT., 100 FT., 250 FT., 500 FT., 1000 FT. ALSO AVAILABLE TO ORDER CUT AND STRIPPED.

TYPE EE-EXTRUDED (1000 VOLTS)

DESCRIPTION: Single conductor stranded silver plated copper, .016" TFE extruded Teflon insulation.

CHARACTERISTICS: Temperature rating —60°C. to +260°C. Voltage rating 1000 volts. Resistant to acid, alkalis, oil, flame, moisture, solvents and fungus.

| ALPHA NO. | TYPE DESIGNATION | CONDUCTOR SIZE | STRAND | NOM. O.D. | *STOCK COLORS |
|-----------|------------------|----------------|--------|-----------|-----------------|
| 2874 | EE-24 | 24 | 19/36 | .055" | 1—White |
| 2875 | EE-22 | 22 | 19/34 | .062" | 11—White/Black |
| 2876 | EE-20 | 20 | 19/32 | .070" | 12—White/Red |
| 2877 | EE-18 | 18 | 19/30 | .080" | 13—White/Green |
| 2878 | EE-16 | 16 | 19/29 | .089" | 14—White/Yellow |
| 2879 | EE-14 | 14 | 19/27 | .106" | 15—White/Blue |
| 2879/12 | EE-12 | 12 | 19/25 | .124" | 16—White/Brown |
| 2879/10 | EE-10 | 10 | 37/26 | .145" | 17—White/Orange |
| 2879/B | EE-8 | 8 | 133/29 | .210" | 18—White/Gray |

STANDARD SPOOL PUT-UP: 25 FT., 50 FT., 100 FT., 250 FT., 500 FT., 1000 FT. ALSO AVAILABLE TO ORDER CUT AND STRIPPED.

* Other solid colors and striped combinations available to order.



MIL-W-16878C
SHIELDED TEFLON† CABLES

DESCRIPTION: Each conductor stranded silver plated copper, type E extruded TFE .010" insulation, braided silver plated copper shield over conductor(s), 90% coverage. When covered, either a Teflon impregnated fiberglass braid or a .010" Teflon fused tape jacket overall.

CHARACTERISTICS: Temperature rating —65°C. to +260°C. Voltage rating 600 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus.

NO OUTER COVERING OVER SHIELD

| ALPHA NO. | NO. OF COND. | SIZE | CONDUCTOR | STRAND | NOM. O.D. |
|-----------|--------------|------|-----------|--------|-----------|
| 2809 | 1 | 24 | 19/36 | | .069" |
| 2809/2 | 2 | 24 | 19/36 | | .112" |
| 2809/3 | 3 | 24 | 19/36 | | .120" |
| 2809/4 | 4 | 24 | 19/36 | | .132" |
| 2812 | 1 | 22 | 19/34 | | .075" |
| 2812/2 | 2 | 22 | 19/34 | | .124" |
| 2812/3 | 3 | 22 | 19/34 | | .132" |
| 2812/4 | 4 | 22 | 19/34 | | .146" |
| 2815 | 1 | 20 | 19/32 | | .083" |
| 2815/2 | 2 | 20 | 19/32 | | .142" |
| 2815/3 | 3 | 20 | 19/32 | | .151" |
| 2815/4 | 4 | 20 | 19/32 | | .168" |
| 2818 | 1 | 18 | 19/30 | | .093" |
| 2818/2 | 2 | 18 | 19/30 | | .162" |
| 2818/3 | 3 | 18 | 19/30 | | .172" |
| 2818/4 | 4 | 18 | 19/30 | | .192" |

- COLOR CODE OF CONDUCTORS
- 1—White
 - 3—Red
 - 2—Black
 - 4—Green

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.



TEFLON TAPE WRAP JACKET OVER SHIELD

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | STRAND | NOM. O.D. |
|-----------|--------------|----------------|--------|-----------|
| 2821 | 1 | 24 | 19/36 | .084" |
| 2821/2 | 2 | 24 | 19/36 | .128" |
| 2821/3 | 3 | 24 | 19/36 | .135" |
| 2821/4 | 4 | 24 | 19/36 | .148" |
| 2824 | 1 | 22 | 19/34 | .090" |
| 2824/2 | 2 | 22 | 19/34 | .140" |
| 2824/3 | 3 | 22 | 19/34 | .148" |
| 2824/4 | 4 | 22 | 19/34 | .162" |
| 2827 | 1 | 20 | 19/32 | .099" |
| 2827/2 | 2 | 20 | 19/32 | .158" |
| 2827/3 | 3 | 20 | 19/32 | .167" |
| 2827/4 | 4 | 20 | 19/32 | .184" |
| 2829 | 1 | 18 | 19/30 | .109" |
| 2829/2 | 2 | 18 | 19/30 | .178" |
| 2829/3 | 3 | 18 | 19/30 | .189" |
| 2829/4 | 4 | 18 | 19/30 | .208" |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.



TEFLON IMPREGNATED BRAID OVER SHIELD

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | STRAND | NOM. O.D. |
|-----------|--------------|----------------|--------|-----------|
| 2811 | 1 | 24 | 19/36 | .081" |
| 2811/2 | 2 | 24 | 19/36 | .126" |
| 2811/3 | 3 | 24 | 19/36 | .133" |
| 2811/4 | 4 | 24 | 19/36 | .144" |
| 2814 | 1 | 22 | 19/34 | .088" |
| 2814/2 | 2 | 22 | 19/34 | .137" |
| 2814/3 | 3 | 22 | 19/34 | .144" |
| 2814/4 | 4 | 22 | 19/34 | .158" |
| 2817 | 1 | 20 | 19/32 | .097" |
| 2817/2 | 2 | 20 | 19/32 | .154" |
| 2817/3 | 3 | 20 | 19/32 | .163" |
| 2817/4 | 4 | 20 | 19/32 | .180" |
| 2819 | 1 | 18 | 19/30 | .106" |
| 2819/2 | 2 | 18 | 19/30 | .174" |
| 2819/3 | 3 | 18 | 19/30 | .185" |
| 2819/4 | 4 | 18 | 19/30 | .205" |

- COLOR CODE OF CONDUCTORS
- 1—White
 - 3—Red
 - 2—Black
 - 4—Green

TEFLON† INSULATED MAGNET WIRE

SPECIFICATION MIL-W-19583—TYPE III

APPLICATIONS: For coil winding where high temperature insulation is required.

CHARACTERISTICS: Temperature Rating —90°C. to +260°C.

DESCRIPTION: Single conductor round bare copper covered with a continuous insulating film of single layer TFE Teflon to Mil-W-19583-Type III.

| ALPHA NO. | CONDUCTOR SIZE | NOM. O.D. | PUT-UP (LB.) |
|-----------|----------------|-----------|---------------------|
| ST-44 | 44 | .0022" | ½ Lb., ¼ Lb. |
| ST-43 | 43 | .0025" | ½ Lb., ¼ Lb. |
| ST-42 | 42 | .0028" | ½ Lb., ¼ Lb. |
| ST-41 | 41 | .0031" | ½ Lb., ¼ Lb. |
| ST-40 | 40 | .0035" | ½ Lb., ¼ Lb. |
| ST-39 | 39 | .0039" | ½ Lb., ¼ Lb. |
| ST-38 | 38 | .0045" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-37 | 37 | .0050" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-36 | 36 | .0056" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-35 | 35 | .0062" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-34 | 34 | .0070" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-33 | 33 | .0078" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-32 | 32 | .0088" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-31 | 31 | .0098" | ½ Lb., ¼ Lb., ½ Lb. |
| ST-30 | 30 | .0190" | ½ Lb., ¼ Lb., ½ Lb. |

†T.M. DuPont

ALPHA WIRE CORPORATION

SHIELDED MICROPHONE CABLE
PLASTIC JACKET—STANDARD DUTY

DESCRIPTION

1702-1706: Single conductor, stranded tinned copper, white polyethylene insulation, braided or spiral wrapped tinned copper shield, gray polyvinylchloride jacket overall.
1709-1715: Each conductor stranded tinned copper, color coded polyethylene insulation, cabled with fillers, textile wrap, braided or spiral wrapped tinned copper shield, gray polyvinylchloride jacket overall.

APPLICATIONS

1702-1706: All high impedance microphones, lapel, ribbon, velocity, crystal contact, Hi-Fi interconnecting cables.
1709-1715: All low impedance microphones—carbon, condenser, dynamic.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | * CAPACITY NOM./FT. | TYPE OF SHIELD | NOMINAL JACKET | NOM. O.D. |
|-----------|--------------|----------------|------------------|---------------------|---------------------|----------------|----------------|-----------|
| 1702 | 1 | 26 | 3-34+ 4-34+ | .016" | 38 mmf. | Spiral Wrapped | .020" | .110" |
| 1703 | 1 | 24 | 10/34 | .020" | 35 mmf. | Braided | .030" | .145" |
| 1704 | 1 | 24 | 10/34 | .040" | 23 mmf. | Braided | .030" | .200" |
| 1705 | 1 | 24 | 10/34 | .016" | 45 mmf. | Spiral Wrapped | .020" | .110" |
| 1706 | 1 | 20 | 26/34 | .030" | 36 mmf. | Braided | .030" | .175" |
| 1709 | 2 | 24 | 10/34 | .016" | 38 mmf. | Spiral Wrapped | .030" | .190" |
| 1710 | 2 | 22 | 16/34 | .025" | 31 mmf. | Braided | .030" | .235" |
| 1712 | 2 | 20 | 26/34 | .014" | 45 mmf. | Braided | .030" | .245" |
| 1713 | 3 | 20 | 26/34 | .014" | 45 mmf. | Braided | .035" | .250" |
| 1715 | 4 | 20 | 26/34 | .014" | 45 mmf. | Braided | .035" | .255" |

* Between one conductor and remaining conductors connected to shield.

† Three strands of tinned copper and four strands of tinned copperweld.

1702-1706
COLOR CODE OF CONDUCTOR

1—White

1709-1715
COLOR CODE OF CONDUCTORS

1—White 2—Black 3—Red 4—Green

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

SHIELDED MICROPHONE CABLE
RUBBER JACKET—STANDARD DUTY

DESCRIPTION:

1248-1249/18: Single conductor, stranded tinned copper, black rubber insulation, wrap, braided tinned copper shield, cotton wrap, tough black rubber jacket overall.
1250-1252/18: Each conductor stranded tinned copper, color coded rubber insulation, conductors cabled with fillers, wrap, braided tinned copper shield, cotton wrap, tough black rubber jacket overall. Cables are extremely flexible and especially designed for heavy studio use.

APPLICATIONS:

1248-1249/18: All high impedance microphones. Broadcast and heavy duty studio use.
1250-1252/18: All low impedance microphones. Broadcast and heavy duty studio use. Can also be used for control circuits, video and audio interconnecting cables, and as electronic power cables. Particularly suited for indoor use.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | * CAPACITY NOM./FT. | NOMINAL JACKET | NOM. O.D. |
|-----------|--------------|----------------|------------------|---------------------|---------------------|----------------|-----------|
| 1248† | 1 | 20 | 26/34 | .025" | 40 mmf. | .030" | .175" |
| 1249 | 1 | 20 | 26/34 | .040" | 30 mmf. | .030" | .245" |
| 1249/18 | 1 | 18 | 41/34 | .040" | 45 mmf. | .030" | .250" |
| 1250 | 2 | 20 | 26/34 | .020" | 70 mmf. | .035" | .275" |
| 1250/18 | 2 | 18 | 41/34 | .020" | 75 mmf. | .035" | .305" |
| 1251 | 3 | 20 | 26/34 | .020" | 80 mmf. | .035" | .285" |
| 1251/18 | 3 | 18 | 41/34 | .020" | 85 mmf. | .035" | .325" |
| 1252 | 4 | 20 | 26/34 | .020" | 90 mmf. | .035" | .305" |
| 1252/18 | 4 | 18 | 41/34 | .020" | 64 mmf. | .035" | .335" |

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 250 FT., 500 FT., 1000 FT. 1250-1252/18

* Between one conductor and remaining conductors connected to shield.

† Mylar Wrap Under tinned copper shield.

COLOR CODE OF CONDUCTORS
1—Black 2—White 3—Red 4—Green

SHIELDED MICROPHONE CABLE
NEOPRENE JACKET—HEAVY DUTY

DESCRIPTION: Each conductor stranded tinned copper, color coded rubber insulation, cotton wrap, braided tinned copper shield, cotton wrap, tough black neoprene jacket overall.

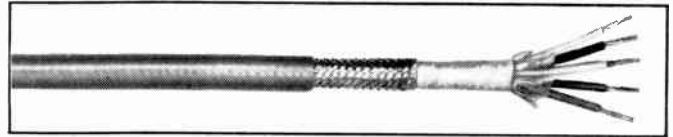
APPLICATIONS: Shielded microphone and electronic power cable. Control circuits. Video and Audio inter-connecting cable. Broadcast and heavy studio use.

CHARACTERISTICS: Oil and acid resistant. Suitable for outdoor use and direct burial. Will resist aging and rough usage.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOM. O.D. |
|-----------|--------------|----------------|------------------|---------------------|----------------|-----------|
| 1449 | 1 | 18 | 41/34 | .040" | .030" | .250" |
| 1450 | 2 | 18 | 41/34 | .020" | .035" | .305" |
| 1451 | 3 | 18 | 41/34 | .020" | .035" | .325" |
| 1452 | 4 | 18 | 41/34 | .020" | .035" | .335" |
| 1450/18 | 2 | 16 | 65/34 | .025" | .035" | .345" |
| 1451/18 | 3 | 16 | 65/34 | .025" | .035" | .365" |
| 1452/18 | 4 | 16 | 65/34 | .025" | .035" | .390" |

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS
1—Black 2—White 3—Red 4—Green



SHIELDED MULTI-CONDUCTOR CABLE
PLASTIC JACKET—HEAVY DUTY

DESCRIPTION: Each conductor stranded tinned copper, color coded polyethylene insulation, cabled with fillers, wrap, braided tinned copper shield, gray polyvinylchloride jacket overall.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. |
|-----------|--------------|----------------|------------------|---------------------|----------------|--------------|
| 1716 | 5 | 20 | 26/34 | .014" | .035" | .275" |
| 1717 | 6 | 20 | 26/34 | .014" | .035" | .300" |
| 1719 | 8 | 20 | 26/34 | .014" | .035" | .330" |
| 1721 | 10 | 20 | 26/34 | .014" | .035" | .375" |

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS

1—Black 2—White 3—Red 4—Green 5—Yellow 6—Blue 7—Brown 8—Orange 9—Purple 10—Slate



SHIELDED MULTI-CONDUCTOR CABLE
RUBBER JACKET—HEAVY DUTY

DESCRIPTION: Each conductor stranded tinned copper, color coded rubber insulation, conductors cabled with fillers, cotton wrap, braided tinned copper shield, cotton wrap, tough black rubber jacket overall. Cables are extremely flexible and especially designed for heavy studio use.

APPLICATIONS: Shielded electronic power cable. Control circuits. Video and audio interconnecting cable. Broadcast and heavy duty studio use.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. |
|-----------|--------------|----------------|------------------|---------------------|----------------|--------------|
| 1253 | 5 | 20 | 26/34 | .020" | .035" | .340" |
| 1254 | 6 | 20 | 26/34 | .020" | .035" | .365" |
| 1254/18 | 6 | 18 | 41/34 | .020" | .035" | .430" |
| 1255 | 7 | 20 | 26/34 | .020" | .035" | .405" |
| 1255/8 | 8 | 20 | 26/34 | .020" | .035" | .415" |
| 1255/10 | 10 | 20 | 26/34 | .020" | .035" | .440" |
| 1255/12 | 12 | 20 | 26/34 | .020" | .065" | .575" |

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS

1—Black 2—White 3—Red 4—Green 5—Yellow 6—Blue 7—Brown 8—Orange 9—Purple 10—Slate 11—Wh./Blk. (Braid) 12—Wh./Red (Braid)



SHIELDED MULTI-CONDUCTOR CABLE
NEOPRENE JACKET—HEAVY DUTY

DESCRIPTION: Each conductor stranded tinned copper, color coded rubber insulation, conductors cabled with fillers, cotton wrap, braided tinned copper shield, cotton wrap, tough black neoprene jacket overall.

CHARACTERISTICS: Resistant to oil and acid. Suitable for outdoor use and direct burial. Will resist aging and rough usage.

APPLICATIONS: Specifically designed for outdoor rough usage as interconnecting cables for electronic equipment, control cables for generator units, video and audio interconnecting cables, and for ground support equipment related to guided missile systems.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. |
|-----------|--------------|----------------|------------------|---------------------|----------------|--------------|
| 1454 | 6 | 18 | 41/34 | .020" | .035" | .430" |
| 1456 | 8 | 18 | 41/34 | .020" | .035" | .465" |
| 1458 | 10 | 18 | 41/34 | .020" | .035" | .545" |
| 1459 | 12 | 18 | 41/34 | .020" | .065" | .625" |

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS

1—Black 2—White 3—Red 4—Green 5—Yellow 6—Blue 7—Brown 8—Orange 9—Purple 10—Slate 11—Wh./Blk. (Braid) 12—Wh./Red (Braid)



SHIELDED PLASTIC JACKETED CABLE BRAIDED COPPER SHIELD

DESCRIPTION: Each conductor tinned copper, color coded polyvinylchloride insulation, conductors twisted, braided copper shield, gray polyvinylchloride jacket overall. Suitable for outdoor installations.

CHARACTERISTICS: A conventional type of braided shield providing approximately 75% coverage is particularly desirable where flexibility is required. The copper shield allows ease of pigtail soldering. Shield construction provides additional cable strength.

APPLICATIONS: For public address and sound systems, ideal for recording studios, amateur radio transmitters, shielded power or electronic circuits, wherever an economical shielded cable is required.

STRANDED

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOMINAL JACKET THICKNESS | NOMINAL O.D. |
|-----------|--------------|----------------|------------------|---------------------|--------------------------|--------------|
| 1736 | 2 | 22 | 7 30 | .016" | .020" | .185" |
| 1737 | 3 | 22 | 7 30 | .016" | .020" | .200" |
| 1741 | 2 | 20 | 10 30 | .016" | .020" | .200" |
| 1742 | 3 | 20 | 10 30 | .016" | .020" | .220" |
| 1746 | 2 | 18 | 16 30 | .016" | .020" | .240" |
| 1747 | 3 | 18 | 16 30 | .016" | .020" | .245" |
| 1748 | 2 | 16 | 26 30 | .016" | .020" | .255" |
| 1750 | 2 | 14 | 41 30 | .020" | .020" | .295" |

SOLID

| | | | | | | |
|-------|---|----|---|-------|-------|-------|
| 1775* | 2 | 22 | 1 | .016" | .020" | .175" |
| 1779 | 2 | 20 | 1 | .016" | .020" | .210" |
| 1783 | 2 | 18 | 1 | .016" | .020" | .220" |

*With 22 AWG solid tinned copper ground wire under braided copper shield.

COLOR CODE OF CONDUCTORS

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT.

1-Black 2-Red 3-White



CONDUCTIVE VINYL AS SHIELD

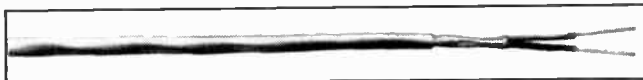
DESCRIPTION: Each conductor stranded tinned copper, color coded polyethylene insulation, #22-7 30 tinned copper drain wire under conductive vinyl and cabled with conductors, .010" extruded conductive vinyl shield, .020" polyvinylchloride jacket overall.

CHARACTERISTICS: Conductive vinyl shields provide 100% coverage with reduced noise pick-up. This type shield eliminates broken ends of copper when flexed. Cables of conductive vinyl shield are lighter in weight and have greater flexibility.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOMINAL INSUL. THICKNESS | NOMINAL CONDUCTIVE VINYL THICKNESS | NOMINAL JACKET THICKNESS | NOMINAL O.D. |
|-----------|--------------|----------------|------------------|--------------------------|------------------------------------|--------------------------|--------------|
| 2280 | 1 | 20 | 10 30 | .016" | .010" | .020" | .160" |
| 2282 | 2 | 20 | 10 30 | .016" | .010" | .020" | .200" |
| 2284 | 3 | 20 | 10 30 | .016" | .010" | .020" | .210" |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS
1-Black 2-Red 3-White



SPIRAL WRAPPED COPPER SHIELD

DESCRIPTION: Each conductor stranded or solid tinned copper, color coded polyvinylchloride insulation, conductors twisted, spiral wrapped copper shield, gray polyvinylchloride jacket overall.

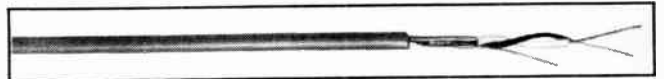
CHARACTERISTICS: Use of spiral shield makes pigtailing off extremely simple and fast. Excellent for production line work. Provides close to 100% shielded coverage for audio and RF frequencies.

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOMINAL JACKET THICKNESS | NOMINAL O.D. |
|-----------|--------------|----------------|------------------|---------------------|--------------------------|--------------|
| 2254 | 2 | 22 | 7 30 | .016" | .020" | .195" |
| 2254 3 | 3 | 22 | 7 30 | .016" | .020" | .190" |
| 2254 4 | 4 | 22 | 7 30 | .016" | .020" | .210" |
| 2255 | 2 | 22 | 1 | .016" | .020" | .170" |
| 2256 1† | 1 | 20 | 10 30 | .016" | .020" | .130" |
| 2256 2 | 2 | 20 | 10 30 | .016" | .020" | .195" |
| 2256 3† | 3 | 20 | 10 30 | .016" | .020" | .210" |
| 2256 4† | 4 | 20 | 10 30 | .016" | .020" | .225" |
| 2258 | 2 | 18 | 16 30 | .016" | .020" | .230" |
| 2258 3 | 3 | 18 | 16 30 | .016" | .020" | .235" |
| 2260 | 2 | 16 | 26 30 | .016" | .020" | .250" |

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS 1-Black 2-Red 3-White 4-Green

†2256 1 formerly 2156
†2256 3 formerly 3256
†2256 4 formerly 4256



SHIELDED PLASTIC JACKETED CABLE

MYLAR SUPPORTED ALUMINUM FOIL SHIELD

DESCRIPTION: Each conductor stranded tinned copper, color coded polyethylene insulation, conductors twisted with a stranded #22-7 30 tinned copper drain wire for maximum contact with aluminum foil shield, mylar tape with aluminum on both sides is applied longitudinally for 100% shielding coverage, gray polyvinylchloride jacket overall.

CHARACTERISTICS: Shielded cable with laminated aluminum foil is lighter in weight and provides 100% shield coverage at audio and radio frequencies.

| ALPHA NO. | NO. OF CONDUCTORS | CONDUCTOR SIZE | CONDUCTOR STRAND | NOMINAL WALL THICKNESS | NOMINAL JACKET THICKNESS | NOMINAL O.D. |
|-----------|-------------------|----------------|------------------|------------------------|--------------------------|--------------|
| 2272 | 2 | 22 | 7 30 | .016" | .020" | .190" |
| 2276 | 2 | 20 | 10 30 | .016" | .020" | .200" |
| 2278 | 2 | 18 | 16 30 | .016" | .020" | .220" |

COLOR CODE OF CONDUCTORS

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.

1-Black 2-Red



SHIELDED AUDIO CABLE 2 CONDUCTOR - NO OUTER JACKET

DESCRIPTION: Each conductor tinned copper, color coded polyvinylchloride insulation, conductors twisted, braided tinned copper shield overall.

APPLICATIONS: For public address and sound systems. Transmission line. Industrial paging and call systems. Recording equipment. Hospital and school sound installations. Broadcast and audio cable. Rack and panel wiring.

STRANDED CONDUCTORS

| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOM. O.D. |
|-----------|--------------|----------------|------------------|---------------------|-----------|
| 1261/26 | 2 | 26 | 7 34 | .010" | .095" |
| 1261 | 2 | 24 | 16 36 | .016" | .125" |
| 1256/22V | 2 | 22 | 7 30 | .016" | .140" |
| 1256V | 2 | 20 | 10 30 | .016" | .155" |
| 1259V* | 2 | 18 | 16 30 | .016" | .170" |
| 1260V | 2 | 16 | 26 30 | .020" | .210" |
| 1260 14 | 2 | 14 | 41 30 | .020" | .225" |
| 1260 12 | 2 | 12 | 65 30 | .025" | .295" |

SOLID CONDUCTORS

| | | | | | |
|----------|---|----------|---|-------|-------|
| 1267/22V | 2 | 22 Solid | 1 | .016" | .135" |
| 1267V | 2 | 20 Solid | 1 | .016" | .145" |
| 1267/18V | 2 | 18 Solid | 1 | .016" | .170" |

* 22 AWG solid tinned copper ground wire under braided copper shield.

COLOR CODE OF CONDUCTORS

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT. 1-Black 2-Red



UNSHIELDED RUBBER CABLE MULTI-CONDUCTOR

DESCRIPTION: Each conductor stranded tinned copper, color coded rubber insulation, conductors twisted, cushioned with fillers, cotton wrap, tough black rubber jacket overall. It is extremely flexible and especially designed for heavy studio use.

APPLICATIONS: Inter-rack connecting cable. Recording studio and broadcast. Remote control circuits. Rough usage electronic power cable. P.A. systems. Multiple speaker cable.

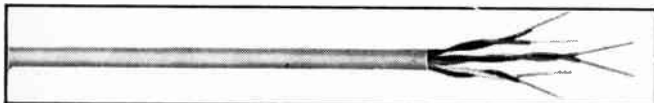
| ALPHA NO. | NO. OF COND. | CONDUCTOR SIZE | CONDUCTOR STRAND | NOM. WALL THICKNESS | NOMINAL JACKET THICKNESS | NOMINAL O.D. |
|-----------|--------------|----------------|------------------|---------------------|--------------------------|--------------|
| 1244 | 2 | 20 | 26 34 | .020" | .035" | .280" |
| 1245 | 3 | 20 | 26 34 | .020" | .035" | .285" |
| 1246 | 4 | 20 | 26 34 | .020" | .035" | .300" |
| 1247 | 5 | 20 | 26 34 | .020" | .035" | .340" |
| 1247 6 | 6 | 20 | 26 34 | .020" | .035" | .360" |
| 1247 7 | 7 | 20 | 26 34 | .020" | .035" | .380" |
| 1247 8 | 8 | 20 | 26 34 | .020" | .035" | .400" |
| 1247 10 | 10 | 20 | 26 34 | .020" | .035" | .440" |
| 1247 12 | 12 | 20 | 26 34 | .020" | .035" | .540" |

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS

1-Black 4-Green 7-Brown 10-Slate
2-White 5-Yellow 8-Orange 11-Wh./Black (Braid)
3-Red 6-Blue 9-Purple 12-Wh./Red (Braid)

ALPHA WIRE CORPORATION



PLASTIC INTERCOM CABLE

DESCRIPTION: Each conductor tinned copper, color coded polyvinylchloride insulation, conductors twisted into pairs, gray polyvinylchloride jacket overall. Suitable for outdoor installations.

APPLICATIONS: Balanced intercom systems, Annunciators, Telephones, Nurses call systems, Control circuit cable, Electronic computer cable, Multiple speaker cable, Signal systems, Alarm systems.

| SOLID CONDUCTORS | | | | | | | |
|------------------|--------------|--------------|------------|--------------|---------------------|----------------|-----------|
| ALPHA NO. | NO. OF PAIRS | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOM. O.D. |
| 1300 | 1 | 2 | 22 Solid | 1 | .010" | .020" | .130" |
| 1302 | 2 | 4 | 22 Solid | 1 | .010" | .020" | .195" |
| 1304 | 3 | 6 | 22 Solid | 1 | .010" | .020" | .220" |
| 1307 | 6 | 12 | 22 Solid | 1 | .010" | .020" | .275" |
| 1307/7 | 7 | 14 | 22 Solid | 1 | .010" | .020" | .285" |
| 1307/9 | 9 | 18 | 22 Solid | 1 | .010" | .020" | .310" |
| 1308/11 | 11 | 22 | 22 Solid | 1 | .010" | .020" | .340" |
| 1309 | 13 | 26 | 22 Solid | 1 | .010" | .025" | .380" |
| 1309/15 | 15 | 30 | 22 Solid | 1 | .010" | .025" | .400" |
| 1310 | 16 | 32 | 22 Solid | 1 | .010" | .025" | .420" |
| 1310 | 27 | 54 | 22 Solid | 1 | .010" | .035" | .510" |
| 1313/31 | 31 | 62 | 22 Solid | 1 | .010" | .035" | .555" |
| 1313/41 | 41 | 82 | 22 Solid | 1 | .010" | .035" | .630" |
| 1314 | 51 | 102 | 22 Solid | 1 | .010" | .045" | .735" |

| STRANDED CONDUCTORS | | | | | | | |
|---------------------|--------------|--------------|------------|--------------|---------------------|----------------|-----------|
| ALPHA NO. | NO. OF PAIRS | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOM. O.D. |
| 1316 | 1 | 2 | 22 | 7/30 | .010" | .020" | .145" |
| 1317 | 2 | 4 | 22 | 7/30 | .010" | .020" | .210" |
| 1318 | 3 | 6 | 22 | 7/30 | .010" | .020" | .225" |
| 1319 | 4 | 8 | 22 | 7/30 | .010" | .020" | .240" |
| 1320 | 5 | 10 | 22 | 7/30 | .010" | .020" | .265" |
| 1322 | 6 | 12 | 22 | 7/30 | .010" | .020" | .290" |
| 1323 | 9 | 18 | 22 | 7/30 | .010" | .020" | .355" |
| 1327 | 15 | 30 | 22 | 7/30 | .010" | .025" | .450" |
| 1329 | 27 | 54 | 22 | 7/30 | .010" | .035" | .570" |

STANDARD SPOOL PUT-UP: 50 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

| PAIR NO. | COLOR COMBINATION |
|----------|------------------------------|
| 1 | Black paired with Red |
| 2 | Black paired with White |
| 3 | Black paired with Green |
| 4 | Black paired with Blue |
| 5 | Black paired with Brown |
| 6 | Black paired with Yellow |
| 7 | Black paired with Orange |
| 8 | Red paired with Green |
| 9 | Red paired with White |
| 10 | Red paired with Blue |
| 11 | Red paired with Yellow |
| 12 | Red paired with Brown |
| 13 | Red paired with Orange |
| 14 | Green paired with Blue |
| 15 | Green paired with White |
| 16 | Green paired with Brown |
| 17 | Green paired with Orange |
| 18 | Green paired with Yellow |
| 19 | White paired with Blue |
| 20 | White paired with Brown |
| 21 | White paired with Orange |
| 22 | White paired with Yellow |
| 23 | Blue paired with Brown |
| 24 | Blue paired with Orange |
| 25 | Blue paired with Yellow |
| 26 | Brown paired with Orange |
| 27 | Brown paired with Yellow |
| 28 | Purple paired with Red |
| 29 | Purple paired with White |
| 30 | Purple paired with Green |
| 31 | Purple paired with Blue |
| 32 | Purple paired with Brown |
| 33 | Purple paired with Yellow |
| 34 | Purple paired with Orange |
| 35 | Purple paired with Slate |
| 36 | Purple paired with Black |
| 37 | Slate paired with Red |
| 38 | Slate paired with White |
| 39 | Slate paired with Green |
| 40 | Slate paired with Blue |
| 41 | Slate paired with Brown |
| 42 | Slate paired with Yellow |
| 43 | Slate paired with Orange |
| 44 | Slate paired with Black |
| 45 | White/Black paired w. Red |
| 46 | White/Black paired w. Green |
| 47 | White/Black paired w. Blue |
| 48 | White/Black paired w. Brown |
| 49 | White/Black paired w. Yellow |
| 50 | White/Black paired w. Orange |
| 51 | White/Black paired w. Purple |



UNSHIELDED AUDIO CABLE
MULTI-CONDUCTOR - PLASTIC JACKET

DESCRIPTION: Each conductor tinned copper, color coded polyvinylchloride insulation, conductors twisted, gray polyvinylchloride jacket overall. Suitable for outdoor installations.

APPLICATIONS: Intercoms, Interconnecting cables, Remote control circuits, Telephones, Telemetering connecting cable, "Baby Sitter" intercom.

| SOLID | | | | | | |
|-----------|--------------|------------|--------------|---------------------|----------------|--------------|
| ALPHA NO. | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. |
| 1793 | 2 | 22 | 1 | .010" | .020" | .130" |
| 1794 | 3 | 22 | 1 | .010" | .020" | .140" |
| 1794 4 | 4 | 22 | 1 | .010" | .020" | .160" |
| 1795 | 2 | 20 | 1 | .016" | .020" | .170" |
| 1796 | 3 | 20 | 1 | .016" | .020" | .180" |
| 1796 4 | 4 | 20 | 1 | .016" | .020" | .200" |
| 1797 | 2 | 18 | 1 | .016" | .020" | .190" |
| 1798 | 3 | 18 | 1 | .016" | .020" | .200" |
| 1798 4 | 4 | 18 | 1 | .016" | .020" | .220" |
| 1798 5 | 5 | 18 | 1 | .016" | .020" | .235" |
| 1798 6 | 6 | 18 | 1 | .016" | .020" | .265" |
| 1799 | 2 | 16 | 1 | .016" | .020" | .215" |
| 1799 3 | 3 | 16 | 1 | .016" | .020" | .230" |
| 1799 4 | 4 | 16 | 1 | .016" | .020" | .250" |

| STRANDED | | | | | | |
|-----------|--------------|------------|--------------|---------------------|----------------|--------------|
| ALPHA NO. | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. |
| 1893 | 2 | 22 | 7/30 | .010" | .020" | .135" |
| 1894 | 3 | 22 | 7/30 | .010" | .020" | .145" |
| 1894 4 | 4 | 22 | 7/30 | .010" | .020" | .170" |
| 1895 | 2 | 20 | 10/30 | .016" | .020" | .180" |
| 1896 | 3 | 20 | 10/30 | .016" | .020" | .190" |
| 1896 4 | 4 | 20 | 10/30 | .016" | .020" | .215" |
| 1897 | 2 | 18 | 16/30 | .016" | .020" | .200" |
| 1898 | 3 | 18 | 16/30 | .016" | .020" | .210" |
| 1898 4 | 4 | 18 | 16/30 | .016" | .020" | .240" |
| 1899 | 2 | 16 | 26/30 | .016" | .020" | .225" |
| 1899 3 | 3 | 16 | 26/30 | .016" | .020" | .245" |
| 1899 4 | 4 | 16 | 26/30 | .016" | .020" | .270" |

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT.
COLOR CODE OF CONDUCTORS 1-Black 2-Red 3-White 4-Green 5-Orange 6-Blue

MULTI-CONDUCTOR - NO OUTER JACKET

DESCRIPTION: Each conductor tinned copper, color coded polyvinylchloride insulation, conductors twisted.

APPLICATIONS: Intercoms, Interconnecting cables, Remote control circuits, Telephones, Telemetering connecting cable, "Baby Sitter" intercom.

| SOLID | | | | | | | STRANDED | | | | | | |
|-----------|--------------|------------|--------------|---------------------|----------------|--------------|-----------|--------------|------------|--------------|---------------------|----------------|--------------|
| ALPHA NO. | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. | ALPHA NO. | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. |
| 1900 | 2 | 22 | 1 | .016" | .100" | | 1915 | 2 | 22 | 7/30 | .016" | .125" | |
| 1901 | 3 | 22 | 1 | .016" | .115" | | 1916 | 3 | 22 | 7/30 | .016" | .140" | |
| 1903 | 2 | 20 | 1 | .016" | .120" | | 1918 | 2 | 20 | 10/30 | .016" | .145" | |
| 1904 | 3 | 20 | 1 | .016" | .135" | | 1919 | 3 | 20 | 10/30 | .016" | .160" | |
| 1906 | 2 | 18 | 1 | .016" | .145" | | 1921 | 2 | 18 | 16/30 | .016" | .165" | |
| 1907 | 3 | 18 | 1 | .016" | .155" | | 1922 | 3 | 18 | 16/30 | .016" | .180" | |
| 1909 | 2 | 16 | 1 | .016" | .175" | | 1924 | 2 | 16 | 26/30 | .016" | .190" | |
| 1910 | 3 | 16 | 1 | .016" | .190" | | 1925 | 3 | 16 | 26/30 | .016" | .210" | |
| | | | | | | | 1927 | 2 | 14 | 41/30 | .016" | .220" | |
| | | | | | | | 1928 | 3 | 14 | 41/30 | .016" | .240" | |

1900 to 1910 formerly 9269 to 9276

1915 to 1928 formerly 9169 to 9176

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT.

COLOR CODE OF CONDUCTORS 1-Brown 2-Tan 3-Gray
The color code of the conductors has been selected to be inconspicuous as possible so as to blend in with the decor of most rooms.



MULTI-CONDUCTOR AUDIO CABLE
OUTER PLASTIC JACKET

DESCRIPTION: Each conductor stranded tinned copper, color coded polyvinylchloride insulation, conductors twisted, gray polyvinylchloride jacket overall. Suitable for outdoor installations.

APPLICATIONS: Unbalanced intercom systems, Low voltage relay control cable, P.A. systems, Electronic computer cable.

| ALPHA NO. | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. |
|-----------|--------------|------------|--------------|---------------------|----------------|--------------|
| 1172 | 2 | 22 | 7/30 | .010" | .020" | .140" |
| 1173 | 3 | 22 | 7/30 | .010" | .020" | .145" |
| 1174 | 4 | 22 | 7/30 | .010" | .020" | .170" |
| 1175 | 5 | 22 | 7/30 | .010" | .020" | .175" |
| 1176 | 6 | 22 | 7/30 | .010" | .020" | .185" |
| 1177 | 7 | 22 | 7/30 | .010" | .020" | .190" |
| 1178 | 8 | 22 | 7/30 | .010" | .020" | .200" |
| 1179 | 9 | 22 | 7/30 | .010" | .020" | .225" |
| 1180 | 10 | 22 | 7/30 | .010" | .020" | .235" |
| 1181 | 12 | 22 | 7/30 | .010" | .020" | .255" |
| 1181/15 | 15 | 22 | 7/30 | .010" | .020" | .280" |
| 1181/20 | 20 | 22 | 7/30 | .010" | .020" | .310" |
| 1181/25 | 25 | 22 | 7/30 | .010" | .020" | .340" |
| 1181/30 | 30 | 22 | 7/30 | .010" | .020" | .365" |

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT.

| COLOR CODE OF CONDUCTORS | | | | | | |
|--------------------------|----------|---------------|-----------------|--------------------|-----------------------|--|
| 1-Black | 6-Blue | 11-Pink | 16-White/Black | 21-White/Brown | 26-White/Black/Green | |
| 2-Red | 7-Brown | 12-Tan | 17-White/Red | 22-White/Orange | 27-White/Black/Yellow | |
| 3-White | 8-Yellow | 13-Red Green | 18-White/Green | 23-White/Gray | 28-White/Black/Blue | |
| 4-Green | 9-Purple | 14-Red/Yellow | 19-White/Yellow | 24-White/Violet | 29-White/Black/Brown | |
| 5-Orange | 10-Slate | 15-Red/Black | 20-White/Blue | 25-White/Black/Red | 30-White/Black/Orange | |

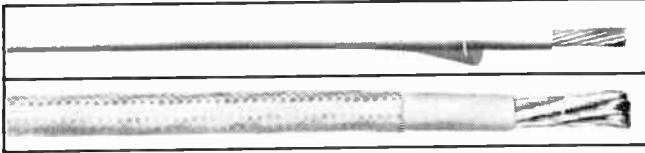


MULTI-CONDUCTOR AUDIO CABLE
OUTER COTTON BRAID

DESCRIPTION: Each conductor stranded tinned copper, color coded polyvinylchloride insulation, conductors twisted, brown cotton braid overall.

| ALPHA NO. | NO. OF COND. | COND. SIZE | COND. STRAND | NOM. WALL THICKNESS | NOMINAL JACKET | NOMINAL O.D. | COLOR CODE OF CONDUCTORS |
|-----------|--------------|------------|--------------|---------------------|----------------|--------------|--------------------------|
| 1182 | 2 | 20 | 10/30 | .016" | .165" | | 1-Black |
| 1183 | 3 | 20 | 10/30 | .016" | .170" | | 2-Red |
| 1184 | 4 | 20 | 10/30 | .016" | .195" | | 3-White |
| 1185 | 5 | 20 | 10/30 | .016" | .220" | | 4-Green |
| 1186 | 6 | 20 | 10/30 | .016" | .230" | | 5-Orange |
| 1187 | 7 | 20 | 10/30 | .016" | .240" | | 6-Blue |
| 1188 | 8 | 20 | 10/30 | .016" | .285" | | 7-Brown |
| 1189 | 9 | 20 | 10/30 | .016" | .295" | | 8-Yellow |
| 1190 | 10 | 20 | 10/30 | .016" | .300" | | 9-Purple |
| 1192 | 12 | 20 | 10/30 | .016" | .315" | | 10-Slate |
| 1192 15 | 15 | 20 | 10/30 | .016" | .330" | | 11-Pink |
| 1192 20 | 20 | 20 | 10/30 | .016" | .370" | | 12-Tan |

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT.



MIL-W-5086A & MIL-C-7078A

AIRCRAFT WIRE FOR ELECTRICAL SYSTEMS

DESCRIPTION:

- MIL-W-5086A—Type I—AN-22 thru AN-12—Single conductor stranded tinned copper, white polyvinylchloride insulation, clear nylon (polyamide) jacket overall.
- MIL-W-5086A—Type II—AN-22 thru AN-12—Single conductor stranded tinned copper, white polyvinylchloride insulation, white glass braid, clear nylon (polyamide) jacket overall.
- MIL-W-5086A—Type II—AN-10 thru AN-00—Single conductor stranded tinned copper, white polyvinylchloride insulation, white glass braid, flame retardant nylon lacquered nylon braid overall.
- MIL-C-7078A—Type I—Single conductor stranded tinned copper, white polyvinylchloride insulation, clear nylon jacket, braided tinned copper shield overall, 85% coverage.

CHARACTERISTICS: Temperature rating: -55°C. to +105°C. Voltage Rating: 600 volts. Resists effects of water, oil, aircraft fuels, hydraulic fluid, skydral, ethyleneglycol, alcohol, dilute acids, alkalis, fungus and abrasion.

UNSHIELDED (MIL-W-5086A) TYPE I

| ALPHA NO. | MIL TYPE DESIGNATION | SIZE | CONDUCTOR | STRAND | NOMINAL O.D. |
|-----------|----------------------|------|-----------|--------|--------------|
| 1381 | AN-22 | 22 | | 19/34 | .068" |
| 1382 | AN-20 | 20 | | 19/32 | .078" |
| 1383 | AN-18 | 18 | | 19/30 | .088" |
| 1384 | AN-16 | 16 | | 19/29 | .098" |
| 1385 | AN-14 | 14 | | 19/27 | .117" |
| 1386 | AN-12 | 12 | | 19/25 | .137" |

UNSHIELDED (MIL-W-5086A) TYPE II

| | | | | | |
|---------|-------|----|--|---------|-------|
| 1341† | AN-22 | 22 | | 19/34 | .075" |
| 1342† | AN-20 | 20 | | 19/32 | .085" |
| 1343† | AN-18 | 18 | | 19/30 | .095" |
| 1344† | AN-16 | 16 | | 19/29 | .105" |
| 1345† | AN-14 | 14 | | 19/27 | .125" |
| 1346† | AN-12 | 12 | | 19/25 | .143" |
| 1387 | AN-10 | 10 | | 49/27 | .189" |
| 1388 | AN-8 | 8 | | 133/29 | .240" |
| 1389 | AN-6 | 6 | | 133/27 | .293" |
| 1389 4 | AN-4 | 4 | | 133/25 | .355" |
| 1389 2 | AN-2 | 2 | | 665/30 | .425" |
| 1389 0 | AN-0 | 0 | | 1045/30 | .525" |
| 1389 00 | AN-00 | 00 | | 1330/30 | .590" |

†1341 to 1346 formerly 2381 to 2386

SHIELDED (MIL-C-7078A) TYPE I

| | | | | | |
|------|-------|----|--|-------|-------|
| 1391 | AN-22 | 22 | | 19/34 | .100" |
| 1392 | AN-20 | 20 | | 19/32 | .110" |
| 1393 | AN-18 | 18 | | 19/30 | .125" |
| 1394 | AN-16 | 16 | | 19/29 | .140" |
| 1395 | AN-14 | 14 | | 19/27 | .155" |
| 1396 | AN-12 | 12 | | 19/25 | .165" |

STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.
ALSO AVAILABLE TO ORDER CUT, STRIPPED AND TINNED

"ALMAG" MAGNET WIRE

SPECIFICATION MIL-W-583B

DESCRIPTION: Plain Enamel—Single conductor round bare copper covered with a continuous insulating film of enamel. Type T per Specification MIL-W-583B, 105 C.

DESCRIPTION: Heavy Formvar—Single conductor round bare copper, baked film insulation from a varnish base on a vinyl acetate resin. Type T2 per Specification MIL-W-583B, 105°C.

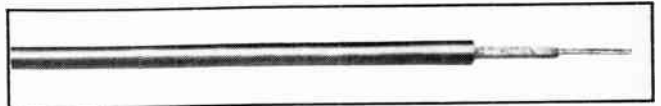
APPLICATIONS: Radio and audio frequency coils; transformers; chokes; speaker field coils; tuners; armatures; short wave coils; etc.

| ALPHA NO. | PLAIN ENAMEL (PE) NOM. O.D. | SIZE |
|-----------|-----------------------------|------|
| PE-44 | .0023" | 44* |
| PE-42 | .0028" | 42* |
| PE-40 | .0034" | 40* |
| PE-38 | .0044" | 38* |
| PE-36 | .0055" | 36: |
| PE-34 | .0069" | 34: |
| PE-32 | .0087" | 32 |
| PE-30 | .0108" | 30 |
| PE-28 | .0135" | 28 |
| PE-26 | .0169" | 26 |
| PE-24 | .0212" | 24 |
| PE-22 | .0265" | 22 |
| PE-20 | .0332" | 20 |
| PE-18 | .0416" | 18 |
| PE-16 | .0522" | 16 |
| PE-14 | .0657" | 14 |
| PE-12 | .0825" | 12 |
| PE-10 | .1037" | 10 |

| ALPHA NO. | HEAVY FORMVAR (HF) NOM. O.D. | SIZE |
|-----------|------------------------------|------|
| HF-44 | .0025" | 44* |
| HF-42 | .0032" | 42* |
| HF-40 | .0038" | 40* |
| HF-38 | .0049" | 38* |
| HF-36 | .0060" | 36: |
| HF-34 | .0075" | 34: |
| HF-32 | .0095" | 32 |
| HF-30 | .0116" | 30 |
| HF-28 | .0144" | 28 |
| HF-26 | .0180" | 26 |
| HF-24 | .0224" | 24 |
| HF-22 | .0277" | 22 |
| HF-20 | .0346" | 20 |
| HF-18 | .0432" | 18 |
| HF-16 | .0539" | 16 |
| HF-14 | .0673" | 14 |
| HF-12 | .0842" | 12 |
| HF-10 | .1056" | 10 |

* Largest available put-up 1 lb.
: Largest available put-up 5 lb.

STANDARD PUT-UP: 1/4 LB., 1/2 LB., 1 LB., 5 LB., 10 LB.



TEST LEAD WIRE

DESCRIPTION: Single conductor, extra flexible stranded tinned soft annealed copper, wrap, color coded rubber insulation, smooth satin finish.

APPLICATIONS: As test leads in analyzers, oscillators, multi-meters, and all other types of testing apparatus or wherever an Extra Flexible insulated wire is required. Heavy Duty type required for television, therapeutic equipment, analyzers, oscillators, etc.

STANDARD TYPE

| ALPHA NO. | CONDUCTOR SIZE | STRAND | NOM. WALL THICKNESS | VOLTAGE BREAKDOWN | NOMINAL O.D. | STOCK COLORS |
|-----------|----------------|--------|---------------------|-------------------|--------------|--------------|
| 1632 | 20 | 41/36 | .040" | 5,000† | .125" | Black, Red |
| 1635 | 20 | 41/36 | .047" | 10,000† | .140" | Black, Red |
| 1636 | 18 | 65/36 | .045" | 12,000† | .140" | Black, Red |

HEAVY DUTY TYPE

| | | | | | | |
|------|----|-------|-------|---------|-------|------------|
| 1638 | 18 | 65/36 | .090" | 22,000† | .230" | Black, Red |
|------|----|-------|-------|---------|-------|------------|

MILITARY TYPE Specification MIL-W-13169B

| | | | | | | |
|------|----|-------|-------|---------|-------|------------------|
| 1639 | 18 | 65/36 | .047" | 12,000† | .150" | Black, Red Green |
|------|----|-------|-------|---------|-------|------------------|

STANDARD SPOOL PUT-UP: 100 FT., 250 FT., 500 FT., 1000 FT.

60 Cycles



SERVICE & POWER CORDS

(UNDERWRITERS APPROVED)

RUBBER & NEOPRENE

DESCRIPTION Each conductor stranded bare copper, cotton separator, color coded rubber 1951-1958 4: insulation, conductors twisted, cushioned with jute fillers, cotton wrap, tough black rubber jacket overall.

DESCRIPTION Same physical construction as above except black neoprene jacket overall. 1931-1938 4:

APPLICATIONS: For amplifiers, sound systems, speakers, vacuum cleaners, electric tools, washing machines, refrigerators, appliances, trouble lights, garage lamps or wherever a rough usage power line is required. Neoprene construction recommended for equipment exposed to oils, acids, etc.

| ALPHA NO. (RUBBER) | U/L TYPE | ALPHA NO. (NEOPRENE) | U/L TYPE | NO. OF COND. | COND. SIZE | CURRENT CARRYING CAPACITY | VOLTAGE RATING | NOM. O.D. |
|--------------------|----------|----------------------|----------|--------------|------------|---------------------------|----------------|-----------|
| 1951 | SV | 1931 | SV0 | 2 | 18 | 7 amps | 300 | .250" |
| 1952 | SJ | 1932 | SJ0 | 2 | 18 | 7 amps | 300 | .310" |
| 1952 3 | SJ | 1932 3 | SJ0 | 3 | 18 | 7 amps | 300 | .330" |
| 1952 4 | SJ | 1932 4 | SJ0 | 4 | 18 | 6 amps | 300 | .360" |
| 1953 | SJ | 1933 | SJ0 | 2 | 16 | 10 amps | 300 | .325" |
| 1953 3 | SJ | 1933 3 | SJ0 | 3 | 16 | 10 amps | 300 | .365" |
| 1953 4 | SJ | 1933 4 | SJ0 | 4 | 16 | 8 amps | 300 | .395" |
| 1954 | S | 1934 | S0 | 2 | 18 | 7 amps | 600 | .390" |
| 1954 3 | S | 1934 3 | S0 | 3 | 18 | 7 amps | 600 | .405" |
| 1954 4 | S | 1934 4 | S0 | 4 | 18 | 5 amps | 600 | .435" |
| 1955 | S | 1935 | S0 | 2 | 16 | 10 amps | 600 | .410" |
| 1955 3 | S | 1935 3 | S0 | 3 | 16 | 10 amps | 600 | .430" |
| 1955 4 | S | 1935 4 | S0 | 4 | 16 | 8 amps | 600 | .485" |
| 1956 | S | 1936 | S0 | 2 | 14 | 15 amps | 600 | .540" |
| 1956 3 | S | 1936 3 | S0 | 3 | 14 | 15 amps | 600 | .560" |
| 1956 4 | S | 1936 4 | S0 | 4 | 14 | 12 amps | 600 | .605" |
| 1957 | S | 1937 | S0 | 2 | 12 | 20 amps | 600 | .608" |
| 1957 3 | S | 1937 3 | S0 | 3 | 12 | 20 amps | 600 | .635" |
| 1957 4 | S | 1937 4 | S0 | 4 | 12 | 16 amps | 600 | .665" |
| 1958 | S | 1938 | S0 | 2 | 10 | 25 amps | 600 | .640" |
| 1958 3 | S | 1938 3 | S0 | 3 | 10 | 25 amps | 600 | .690" |
| 1958 4 | S | 1938 4 | S0 | 4 | 10 | 20 amps | 600 | .745" |

STANDARD SPOOL PUT-UP: 50 FT., 100 FT., 250 FT.

COLOR CODE OF CONDUCTORS

1—White 2—Black 3—Green 4—Red



UNINSULATED TINNED COPPER SOLID WIRE—SOFT DRAWN

DESCRIPTION: Pure electrolytic soft, drawn, solid, copper properly annealed and tinned for quick soldering.

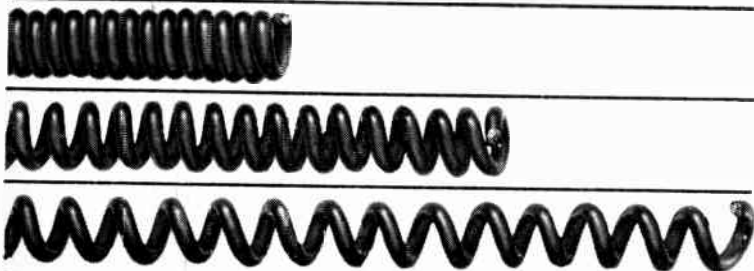
APPLICATIONS: Winding of coils. Antennas. Point to point wiring. Bus-bar. Component leads. Ground wire.

SPECIFICATIONS MIL-W-3861 TYPE S — QQ-W-343 TYPE S — ASTM-B-33

| ALPHA NO. | CONDUCTOR SIZE | CIRCULAR MIL AREA | NOMINAL O.D. |
|-----------|----------------|-------------------|--------------|
| 299 7 | 38 AWG | 15.72 | .004" |
| 299 6 | 36 AWG | 25.00 | .005" |
| 299 5 | 34 AWG | 39.75 | .006" |
| 299 4 | 32 AWG | 63.21 | .008" |
| 299 3 | 30 AWG | 100.5 | .010" |
| 299 2 | 28 AWG | 159.8 | .013" |
| 299 1 | 26 AWG | 254.1 | .016" |
| 299 | 24 AWG | 404.0 | .020" |
| 298 | 22 AWG | 642.4 | .025" |
| 297 | 20 AWG | 1022.0 | .033" |
| 296 | 18 AWG | 1642.0 | .040" |
| 295 | 16 AWG | 2583.0 | .051" |
| 286 | 14 AWG | 4107.0 | .065" |
| 289 | 12 AWG | 6530.0 | .082" |
| 292 | 10 AWG | 10380.0 | .103" |
| 292 8 | 8 AWG | 16510.0 | .129" |
| 292 6 | 6 AWG | 26250.0 | .162" |

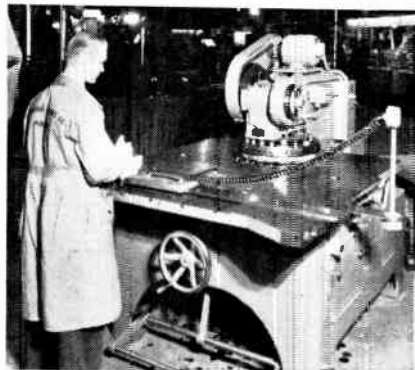
STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.

RETRACTILE COIL CORDS



Alpha quality retractile coil cords are electric cords which are coiled permanently in the shape of a spring. They are constructed with neoprene jackets to withstand the wear and tear less expensive cords cannot endure. The cords are retracted neatly in a condensed length until you need them. When used,

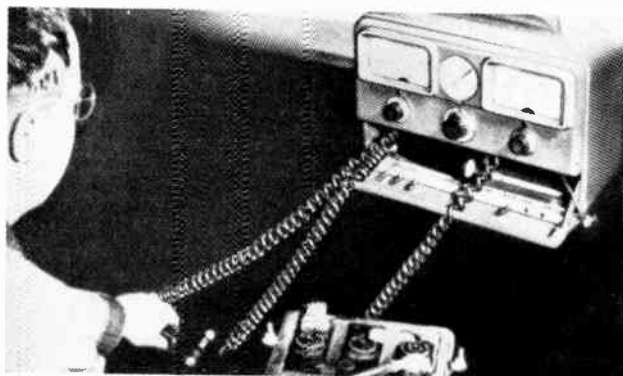
they extend only to the exact length you want—no longer—for easy, neat, trouble-free installation. In the manufacturing process, the coil cord is rewound after vulcanization, reversing the direction of the spiral to insure maximum retractility after repeated usage.



Power Cord



Communication Cord —
Courtesy of Roanwell Corporation.



Test Lead Wire —
Courtesy of Allen Electric and Equipment Co.

POWER CORDS—NEOPRENE JACKET (UL APPROVED)

RETRACTED LENGTHS 2 & 4 FEET—EXTENDED LENGTHS 12 & 25 FEET

DESCRIPTION: Long-lasting service is assured with this quality multi-conductor power cord. Each conductor is stranded copper, with rubber insulation, and a rugged weather and oil resistant neoprene jacket overall.

APPLICATION: Used on electric tools, portable drills, soldering wires, electrical appliances, household appliances, etc., to eliminate loose hanging wires and to prevent wires from tangling and twisting.

| ALPHA NO. | NO. OF CONDS. | CONDUCTOR SIZE | U. L. TYPE | AMP RATING | VOLT RATING | COIL O.D. | NOM. O.D. |
|-----------|---------------|----------------|------------|------------|-------------|-----------|--------------|
| 660/2 | 660/4 | 2 18 | 41/34 | SVO | 7 | 300 | 1" .260" |
| 661/2 | 661/4 | 2 18 | 41/34 | SJO | 7 | 300 | 1 1/4" .320" |
| 662/2 | 662/4 | 3 18 | 41/34 | SJO | 7 | 300 | 1 1/2" .350" |
| *663/2 | *663/4 | 4 18 | 41/34 | SJO | 5,6 | 300 | 1 1/2" .385" |
| 664/2 | 664/4 | 2 16 | 65/34 | SJO | 10 | 300 | 1 1/2" .360" |
| 665/2 | 665/4 | 3 16 | 65/34 | SJO | 10 | 300 | 1 1/2" .390" |
| *666/2 | *666/4 | 4 16 | 65/34 | SJO | 8 | 300 | 1 3/4" .425" |
| 670/2 | 670/4 | 3 16 | 65/34 | SO | 10 | 600 | 1 1/2" .470" |
| *671/2 | *671/4 | 4 16 | 65/34 | SO | 8 | 600 | 1 3/4" .500" |
| 672/2 | 672/4 | 2 14 | 41/30 | SO | 15 | 600 | 2" .540" |
| 673/2 | 673/4 | 3 14 | 41/30 | SO | 15 | 600 | 2 1/4" .560" |
| *674/2 | *674/4 | 4 14 | 41/30 | SO | 12 | 600 | 2 1/2" .605" |
| 675/2 | 675/4 | 2 12 | 65/30 | SO | 20 | 600 | 2 3/4" .635" |
| 676/2 | 676/4 | 3 12 | 65/30 | SO | 20 | 600 | 2 3/4" .675" |
| *677/2 | *677/4 | 4 12 | 65/30 | SO | 16 | 600 | 2 1/2" .678" |

*If all four conductors normally carry current, AMP rating is as shown. If one lead is used as a ground, AMP rating is the same as 2 and 3 conductor cords.

COLOR CODE OF CONDUCTORS
1. White 2. Black 3. Green 4. Red

RETRACTILE POWER CORD SETS (UL APPROVED)

RETRACTED LENGTH 18"—EXTENDED LENGTH 7 1/2 FEET

DESCRIPTION: Coiled power cord with a sturdy molded male plug on one end. On the other end we have removed a portion of the neoprene jacket, exposed the conductors and stripped them for easy termination.

APPLICATION: Same as power cords, but with a plug on one end.

| ALPHA NO. | NO. OF CONDS. | CONDUCTOR SIZE | U. L. TYPE | COIL O.D. | NOM. O.D. |
|-----------|---------------|----------------|------------|-----------|--------------|
| 654 | 2 | 18 | 41/34 | SVO | 1" .260" |
| 655 | 2 | 18 | 41/34 | SJO | 1 1/4" .320" |
| 656 | 3 | 18 | 41/34 | SJO | 1 1/2" .350" |
| 657 | 2 | 16 | 65/34 | SJO | 1 1/2" .360" |
| 658 | 3 | 16 | 65/34 | SJO | 1 1/2" .390" |

COLOR CODE OF CONDUCTORS
1. Black 2. White 3. Green

RETRACTILE COMMUNICATION COIL CORDS

RETRACTED LENGTHS 2 & 4 FEET—EXTENDED LENGTHS 12 & 25 FEET

DESCRIPTION: Multi-conductor communication cord manufactured with extra flexible #23 AWG-21/36 tinned soft cadmium copper for maximum flex life. Insulated with rubber for communication circuits of maximum 120 working volts. The overall jacket is a specially compounded cured neoprene jacket giving long life to the retractile cord.

APPLICATION: Used in communication equipment, such as telephone car carriers, mobile radio equipment, ham operations, head sets, citizen band units and radio transmitter to receiver head sets, communication cords eliminate hazards and inconveniences caused by tangled straight cords.

| ALPHA NO. | NO. OF CONDS. | CONDUCTOR SIZE | STRAND | AMP. | VOLTS | COIL O.D. | CORD O.D. |
|-----------|---------------|----------------|--------|------|-------|-----------|-----------|
| 680/2 | 680/4 | 2 23 | 21/36 | 1 | 120 | 3/4" | .215" |
| 681/2 | 681/4 | 3 23 | 21/36 | 1 | 120 | 3/4" | .220" |
| 682/2 | 682/4 | 4 23 | 21/36 | 1 | 120 | 7/8" | .250" |
| 683/2 | 683/4 | 5 23 | 21/36 | 1 | 120 | 1" | .285" |
| 684/2 | 684/4 | 6 23 | 21/36 | 1 | 120 | 1 1/8" | .305" |
| 685/2 | 685/4 | 7 23 | 21/36 | 1 | 120 | 1 1/4" | .320" |

COLOR CODE OF CONDUCTORS

1. Black 2. White 3. Green 4. Red 5. Brown 6. Yellow 7. Blue

RETRACTILE COMMUNICATION CORD (SHIELDED)

RETRACTED LENGTHS 2 & 4 FEET—EXTENDED LENGTHS 12 & 25 FEET

DESCRIPTION: Same as above, except that shielded conductors are individually shielded with a cadmium copper shield to eliminate external electrical interference. Shield can be pigtailed for direct soldering connections.

APPLICATION: When shielded communication cords are needed.

| ALPHA NO. | NO. OF CONDS. | CONDUCTOR SIZE | STRAND | SHIELDING | COIL O.D. | NOM. O.D. | COLOR CODE OF CONDUCTORS |
|-----------|---------------|----------------|--------|----------------------------------|-----------|-----------|---------------------------|
| 690/2 | 690/4 | 1 24 | 41/40 | Shielded | 3/4" | .160" | White |
| 692/2 | 692/4 | 2 1-23 | 21/36 | Unshielded | 7/8" | .240" | Black White |
| 694/2 | 694/4 | 3 2-23 | 21/36 | Unshielded | 7/8" | .240" | Black & Red White |
| 696/2 | 696/4 | 4 2-23 | 21/36 | Unshielded Individually Shielded | 1" | .270" | Red & Black White & Green |

RETRACTILE TEST LEAD WIRE

RETRACTED LENGTH 12"—EXTENDED LENGTH 6 FEET

DESCRIPTION: A high grade quality rubber insulation for maximum flex life extruded over a single conductor of extra flexible tinned copper which gives long life to this retractile test lead wire. Available in a 12" retracted length with a 6" straight lead on each end, the cord extends to approximately 6 feet.

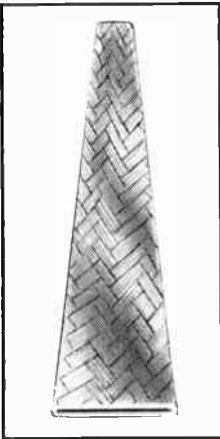
| ALPHA NO. | CONDUCTOR SIZE | CORD STRAND | AMP. RATED | VOLTAGE | COIL O.D. | NOM. O.D. | COLOR CODE |
|-----------|----------------|-------------|------------|---------|-----------|-----------|------------|
| 650 | 20 | 41/36 | 4 | 4,000 | 3/4" | .165" | Black-Red |

SHIELDING & BRAIDING

FLAT BRAID

A woven braid, composed of tinned copper strands, which is rolled flat at time of manufacture to a specific width depending upon construction.

Flat braid is usually employed for its current carrying capacity and its extreme flexibility. It is generally used as a high current conductor at low voltages. Battery grounding is typical of this application. It is also used as a bonding strap in vehicles and aircraft to help eliminate ignition interference. Because of its extreme flexibility it can be used in confined areas or as electrical connections on moving parts.



| ALPHA CAT. # | NOMINAL FLAT WIDTH | THICKNESS | BRAID CONSTRUCTION | | | APPROX. AWG EQUIV. | NOM. CIRCULAR MILLS | *CURRENT CARRIER CAP. | PUT-UP CODE |
|--------------|--------------------|-----------|--------------------|----------|--------------------------|--------------------|---------------------|-----------------------|-------------|
| | | | AWG OF INDIV. ENDS | CARRIERS | TOTAL NO. OF INDIV. ENDS | | | | |
| 1221 | .025 | .015 | #36 | 8 | 8 | 26 | 250 | 4.0 AMPS | 1 thru 5 |
| 1222 | 1/32" | .020 | #36 | 16 | 16 | 24 | 400 | 6.0 " | 1 thru 5 |
| 1223 | 3/64" | .020 | #36 | 24 | 24 | 22 | 640 | 7.0 " | 1 thru 5 |
| 1224 | 3/32" | .020 | #36 | 16 | 48 | 19 | 1290 | 11.0 " | 1 thru 5 |
| 1229 | 1/8" | .020 | #36 | 24 | 72 | 18 | 1620 | 16.0 " | 1 thru 5 |
| 1230 | 3/16" | .020 | #36 | 24 | 120 | 15 | 3260 | 25.0 " | 1 thru 5 |
| 1231 | 1/4" | .030 | #36 | 24 | 168 | 14 | 4100 | 32.0 " | 1 thru 5 |
| 1232 | 3/8" | .030 | #36 | 48 | 288 | 11 | 8230 | 46.0 " | 1 thru 5 |
| 1233/2 | 1/2" | .030 | #36 | 48 | 384 | 10 | 10400 | 53.0 " | 1 thru 5 |
| 1233 | 5/8" | .030 | #36 | 48 | 384 | 10 | 10400 | 53.0 " | 1 thru 5 |
| 1234 | 3/4" | .040 | #36 | 48 | 832 | 7 | 20900 | 85.0 " | 1 thru 5 |
| 1235 | 1" | .045 | #36 | 48 | 832 | 7 | 20900 | 85.0 " | 1 thru 5 |
| 1239 | 1-3/8" | .050 | #36 | 48 | 832 | 7 | 20900 | 85.0 " | 1 thru 5 |
| 1240 | 1-1/2" | .060 | #30 | 48 | 528 | 3 | 52800 | 125.0 " | 1 thru 3 |
| 1241 | 1-3/4" | .080 | #30 | 48 | 1248 | 0 | 108000 | 200.0 " | 1 thru 3 |
| 1242 | 2" | .120 | #30 | 48 | 1536 | 00 | 135000 | 235.0 " | 1 thru 3 |

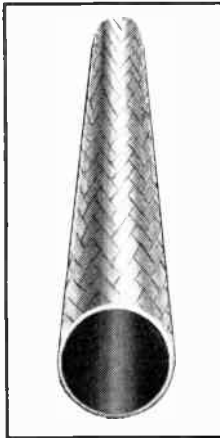
PUT-UP CODE 1—50 Ft. 2—100 Ft. 3—250 Ft. 4—500 Ft. 5—1000 Ft.

*These values based on copper in free air at 65°F

TUBULAR BRAID TO MIL SPEC QQ-B-575

A woven tinned copper braid which is manufactured completely round as outlined in MIL Spec QQ-B-575. This braid construction has self-supporting characteristics which enables it to maintain its round configuration. The percentage of shielding coverage is 95% or more. A high degree of manufacturing tolerances is maintained.

Tubular braid to QQ-B-575 is utilized in military applications involving maximum shielding against electrostatic interference. It is also used as a protective covering against mechanical abrasion and stresses for the wires, cable, and other components which it covers.



| ALPHA CAT. # | I.D. WHEN ROUNDED | BRAID CONSTRUCTION | | | APPROX. AWG EQUIV. | NOM. CIRCULAR MILLS | *CURRENT CARRIER CAP. | PUT-UP CODE |
|--------------|-------------------|--------------------|----------|--------------------------|--------------------|---------------------|-----------------------|-------------|
| | | AWG OF INDIV. ENDS | CARRIERS | TOTAL NO. OF INDIV. ENDS | | | | |
| 2160 | 1/32" | #36 | 24 | 24 | 22 | 640 | 7.0 AMPS | 1 thru 3 |
| 2162 | 1/16" | #36 | 24 | 48 | 19 | 1290 | 11.0 " | 1 thru 3 |
| 2164 | 7/64" | #36 | 24 | 96 | 16 | 1620 | 22.0 " | 1 thru 3 |
| 2166 | 1/8" | #36 | 24 | 120 | 15 | 3260 | 28.0 " | 1 thru 3 |
| 2168 | 11/64" | #36 | 24 | 168 | 14 | 4100 | 32.0 " | 1 thru 3 |
| 2170 | 13/64" | #34 | 24 | 192 | 11 | 7640 | 46.0 " | 1 thru 2 |
| 2172 | 3/8" | #36 | 48 | 384 | 10 | 10400 | 53.0 " | 1 thru 2 |
| 2174 | 1/2" | #36 | 48 | 528 | 9 | 13100 | 70.0 " | 1 thru 2 |
| 2176 | 25/32" | #36 | 48 | 864 | 7 | 20900 | 85.0 " | 1 thru 2 |

PUT-UP CODE 1—50 Ft. 2—100 Ft. 3—250 Ft.

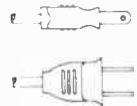
*These values based on copper in free air at 65°F

SPECIAL CONSTRUCTIONS: Constructions other than those tabulated in the above 2 tables are available to order in silver plated copper, bare copper and stainless steel. The above tabulated constructions represent a cross-section of types and sizes which are maintained in inventory. Literally thousands of variations are available to order by changing the various physical elements (carriers, ends, gauge).

CORD SETS

REPLACEMENT CORD SETS (UL & CSA APPROVED)

EXTENSION CORD SETS (UL & CSA APPROVED)



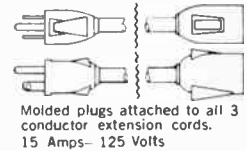
Molded plugs attached to all 2 conductor replacement cords 15 Amps—125 Volts



DESCRIPTION: Constructed so that it will last for years, this open end cord replacement set is manufactured with a flexible 2 conductor quality black rubber cord. One end has a black molded straight plastic plug (see diagram), the other end of the jacket is stripped back 1 1/2", and "a" of the conductors are stripped assuring easy termination into equipment or components. The replacement cord set has a 300 volt rating.

APPLICATION: Replacement Cords for direct termination; for office business machines, small electric hand tools, and home appliances which use fractional horse-power motors.

| ALPHA NO. | COND. SIZE | COND. STRAND | NO. OF CONDS. | U.L. TYPE | NOM. O.D. OF CORD | CORD LENGTH (FT.) |
|-----------|------------|--------------|---------------|-----------|-------------------|-------------------|
| 600 | 18 | 41/34 | 2 | SV | .245" | 6 |
| 602 | 18 | 41/34 | 2 | SV | .245" | 9 |
| 604 | 18 | 41/34 | 2 | SV | .245" | 12 |
| 606 | 18 | 16/30 | 2 | SJ | .300" | 8 |
| 608 | 18 | 16/30 | 2 | SJ | .300" | 10 |
| 610 | 16 | 26/30 | 2 | SJ | .325" | 8 |
| 612 | 16 | 26/30 | 2 | SJ | .325" | 10 |



Molded plugs attached to all 3 conductor extension cords. 15 Amps—125 Volts



Molded plugs attached to all 2 conductor extension cords. 15 Amps—125 Volts

DESCRIPTION: Extension cord sets manufactured for lasting service with a flexible 2 or 3 conductor quality black rubber cord. This rugged cord has a black molded plastic male and female plug on either end to fit conventional sockets and plugs.

APPLICATION: Small business machines, vacuum cleaners, lamps, movie projectors, or any other home appliance. 3 conductor cord used when 1 conductor requires grounding.

| ALPHA NO. | COND. SIZE | COND. STRAND | NO. OF CONDS. | U.L. TYPE | NOM. O.D. | CORD LENGTH (FT.) |
|-----------|------------|--------------|---------------|-----------|-----------|-------------------|
| 620 | 18 | 41/34 | 2 | SV | .245" | 6 |
| 622 | 18 | 41/34 | 2 | SV | .245" | 9 |
| 624 | 18 | 16/30 | 2 | SJ | .300" | 10 |
| 626 | 18 | 16/30 | 2 | SJ | .300" | 25 |
| 628 | 16 | 26/30 | 2 | SJ | .325" | 10 |
| 630 | 16 | 26/30 | 2 | SJ | .325" | 25 |
| 632 | 16 | 26/30 | 2 | SJ | .325" | 50 |
| 634 | 16 | 26/30 | 2 | SJ | .325" | 100 |
| 636 | 18 | 16/30 | 3 | SJ | .365" | 10 |
| 638 | 18 | 16/30 | 3 | SJ | .365" | 25 |

ALPHLEX® TUBING SECTION

PLASTIC TUBING (PVC-105)

DESCRIPTION

PVC-105's exceptional integration of desirable qualities endows it with excellent versatility and durability. Its dielectric strength is high and remains unaffected by increasing temperature throughout its range. It displays high resistance to the agents of heat, oil, chemicals, corrosion, fungi and even abrasion with no loss in tensile strength, non-flammability—or flexibility.

Under all the above adverse conditions, PVC-105 will retain its ability to hug and protect irregular-shaped objects, will "snake" beautifully, and will always be easy to handle.

To achieve this combination of advantages, special care is taken in the making of PVC-105. It is compounded with only first-grade quality non-migratory resinous type plasticizers. From laboratory to production line, from raw material to finished product, strict quality control prevails. Behind it are the same engineering and production know-how that have made the name Alpha famous in the electronics industry.

As with all Alpha and Alphalex items, PVC-105 is "IN STOCK" for immediate delivery, and can be supplied to desired lengths as well as standard spools.

For your special problems, please call on us for consultation and recommendations—no obligation, of course.

| Dielectric Strength | Temp. Rating | Low Temp. Flexibility | Flammability | Tensile Strength | Ultimate Elongation | Insulation Resistance | Fungi Resistance | Oil Resistance | Corrosion & Abrasion Resistance | Applicable Specifications |
|---------------------|--------------|-----------------------|---------------|------------------|---------------------|-----------------------|------------------|-------------------------------|---------------------------------|--------------------------------------|
| 800 V/MIL | 105°C | -30°C | Non-Flammable | 2500 PSI | 300% | Over 1,000,000 Megs. | Yes | Remains Flexible Indefinitely | Excellent | MIL-I-631C ASTM-D876 ASTM-D922 |

| Standard Colors | | Standard Put-Ups | |
|-----------------|---|------------------|-------------------|
| #24 thru #12 | —Clear, Black, Yellow, Red, Blue, Brown, Green, White, Orange | #24 thru #15 | —1,000 ft. spools |
| #11 thru #2 | —Clear, Black, Yellow, Red, Green, White | #14 thru #5 | —500 ft. spools |
| #1 thru 2½" | —Clear, Black | #4 thru ¾" | —250 ft. coils |
| | | ¾" thru ¾" | —100 ft. coils |
| | | ¾" & larger | —50 ft. coils |

APPLICATIONS

Alphalex® PVC-105 Plastic Tubing is designed and manufactured specifically for electronic, aircraft and electrical applications involving temperatures as high as 105°C. It conforms to Specification MIL-I-631C, Type F, Form U, Grade C, Class I, Category I.

| ALPHA NO. | SIZE | NOM. INSIDE DIAMETER | NOM. WALL THICKNESS |
|------------|------|----------------------|---------------------|
| PVC-105/24 | 24 | .022" | .013" |
| PVC-105/22 | 22 | .027" | .012" |
| PVC-105/20 | 20 | .034" | .016" |
| PVC-105/19 | 19 | .038" | .016" |
| PVC-105/18 | 18 | .042" | .016" |
| PVC-105/17 | 17 | .047" | .016" |
| PVC-105/16 | 16 | .053" | .016" |
| PVC-105/15 | 15 | .059" | .016" |
| PVC-105/14 | 14 | .066" | .016" |
| PVC-105/13 | 13 | .076" | .016" |
| PVC-105/12 | 12 | .085" | .016" |
| PVC-105/11 | 11 | .095" | .016" |
| PVC-105/10 | 10 | .106" | .016" |
| PVC-105/9 | 9 | .118" | .020" |
| PVC-105/8 | 8 | .133" | .020" |
| PVC-105/7 | 7 | .148" | .020" |
| PVC-105/6 | 6 | .166" | .020" |
| PVC-105/5 | 5 | .186" | .020" |
| PVC-105/4 | 4 | .208" | .020" |
| PVC-105/3 | 3 | .234" | .020" |

| ALPHA NO. | SIZE | NOM. INSIDE DIAMETER | NOM. WALL THICKNESS |
|-------------|------|----------------------|---------------------|
| PVC-105/2 | 2 | .263" | .020" |
| PVC-105/1 | 1 | .294" | .020" |
| PVC-105/0 | 0 | .330" | .020" |
| PVC-105/¾" | ¾" | .312" | .025" |
| PVC-105/¾" | ¾" | .375" | .025" |
| PVC-105/¾" | ¾" | .438" | .025" |
| PVC-105/½" | ½" | .500" | .025" |
| PVC-105/¾" | ¾" | .562" | .030" |
| PVC-105/¾" | ¾" | .625" | .030" |
| PVC-105/¾" | ¾" | .750" | .035" |
| PVC-105/¾" | ¾" | .875" | .035" |
| PVC-105/1" | 1" | 1.000" | .035" |
| PVC-105/1½" | 1½" | 1.125" | .035" |
| PVC-105/1¾" | 1¾" | 1.250" | .040" |
| PVC-105/1¾" | 1¾" | 1.375" | .040" |
| PVC-105/1½" | 1½" | 1.500" | .045" |
| PVC-105/1¾" | 1¾" | 1.750" | .055" |
| PVC-105/2" | 2" | 2.000" | .060" |
| PVC-105/2¼" | 2¼" | 2.250" | .065" |
| PVC-105/2½" | 2½" | 2.500" | .070" |

NOTE: PVC-105 manufactured under the recognition component section of UL is available to order.

TEFLON® EXTRUDED TUBING (TFT-200) (THIN WALL)

DESCRIPTION

ALPHLEX® THIN WALL TEFLON TUBING, a high temperature insulation (designated by A.I.E.E. for continuous operation at 220°C minimum), while classified as a thermoplastic resin, does not melt and flow as do conventional thermoplastic materials.

APPLICATIONS

Because of its combination of electrical, chemical and mechanical properties, ALPHLEX TEFLON is unmatched by any other type tubing for use in electrical applications at high frequencies and temperatures. As a thin, flexible insulation, it permits miniaturization and compactness of design heretofore impossible.

| Dielectric Strength | Temp. Rating | Low Temp. Flexibility | Flammability | Tensile Strength | Ultimate Elongation | Fungi & Oil Resistance | Corrosion & Abrasion Resistance | Applicable Specifications |
|---------------------|--------------|-----------------------|---------------|------------------|---------------------|------------------------|---------------------------------|---------------------------|
| 500-1000 V/MIL | 250°C | -90°C | Non-Flammable | 1500-3000 PSI | 100-200% | Excellent | Excellent | ASTM |

| ALPHA NO. | SIZE | NOM. INSIDE DIAMETER | NOM. WALL THICKNESS | ALPHA NO. | SIZE | NOM. INSIDE DIAMETER | NOM. WALL THICKNESS |
|------------|------|----------------------|---------------------|------------|------|----------------------|---------------------|
| TFT-200/30 | 30 | .012" | .009" | TFT-200/12 | 12 | .085" | .012" |
| TFT-200/28 | 28 | .015" | .009" | TFT-200/11 | 11 | .095" | .012" |
| TFT-200/26 | 26 | .018" | .010" | TFT-200/10 | 10 | .106" | .012" |
| TFT-200/24 | 24 | .022" | .010" | TFT-200/9 | 9 | .118" | .015" |
| TFT-200/22 | 22 | .027" | .010" | TFT-200/8 | 8 | .133" | .015" |
| TFT-200/20 | 20 | .034" | .012" | TFT-200/7 | 7 | .148" | .015" |
| TFT-200/19 | 19 | .038" | .012" | TFT-200/6 | 6 | .166" | .015" |
| TFT-200/18 | 18 | .042" | .012" | TFT-200/5 | 5 | .186" | .015" |
| TFT-200/17 | 17 | .047" | .012" | TFT-200/4 | 4 | .208" | .015" |
| TFT-200/16 | 16 | .053" | .012" | TFT-200/3 | 3 | .234" | .015" |
| TFT-200/15 | 15 | .059" | .012" | TFT-200/2 | 2 | .263" | .015" |
| TFT-200/14 | 14 | .066" | .012" | TFT-200/1 | 1 | .294" | .015" |
| TFT-200/13 | 13 | .076" | .012" | TFT-200/0 | 0 | .330" | .015" |

| Sizes | Standard Colors | Standard Put-Ups |
|-------------------|-----------------------------|---|
| #30-#15 Inclusive | Natural Yellow Black Red | 1000 ft. Spools or 10-100 ft. Spools per 1000 ft. Box |
| #14-#8 Inclusive | Natural Yellow Black Red | 500 ft. Spools or 5-100 ft. Spools per 500 ft. Box |
| #7-#0 Inclusive | Natural | Random Lengths Packed in 100 ft. Coils or 36" |

ALPHLEX® ZIPPER TUBING

DESCRIPTION Alphlex Zipper Tubing is the all purpose modern way to harness, cover and protect cables. Just zip to close—and zip to reopen. If you wish, it may be permanently sealed with PB-200 Special Compound Liquid Sealer. Alphlex Zipper Tubing is strong, flexible, durable, and offers new freedom in design, production and repair.

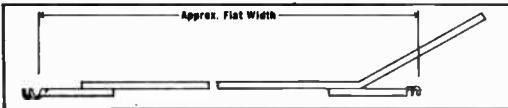
APPLICATIONS To shield, to harness wire, to custom-cable to any length, to enclose, to encase, to identify (such as cable markers), to protect, to replace worn jackets.

TYPES OF ZIPPER TUBING

- Type ZIP-31** —fabricated from .020" polyvinyl sheet made from MIL-I-631C materials. All purpose type for general applications to 105°C. Standard colors: Clear, Black, Yellow.
- Type ZIP-31M**—heavy duty construction. Similar to ZIP-31 type except nominal wall thickness of .040". Standard colors: Clear, Black.
- Type ZIP-44** —polyvinyl sheet made from MIL-I-7444B materials. Extremely flexible; for aircraft and low-temperature uses to -67°C. Standard colors: Clear, Black.
- Type ZIP-44M**—heavy duty construction. Similar to ZIP-44 type except nominal wall thickness of .040". Standard colors: Clear, Black.
- Type ZIP-50** —"sandwich" of aluminum foil laminated between two sheets of polyvinyl. For 100% RF shielding applications to 105°C. Standard color: Silver Grey.
- Type ZIP-90** —polyvinyl bonded to woven fiberglass sheet per MIL-I-3190A. For rough usage, abrasion resistance, and high temperature uses to 130°C. Standard color: Black.

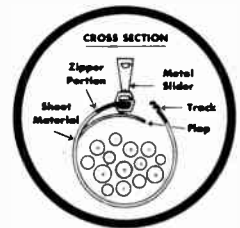
STANDARD SIZES FOR ALL TYPES OF ALPHLEX TUBING

| Zipper Tubing Inside Diameter | Approx. Flat Width (From track to track—excluding flap) | Zipper Tubing Inside Diameter | Approx. Flat Width (From track to track—excluding flap) | Zipper Tubing Inside Diameter | Approx. Flat Width (From track to track—excluding flap) | Zipper Tubing Inside Diameter | Approx. Flat Width (From track to track—excluding flap) |
|-------------------------------|---|-------------------------------|---|-------------------------------|---|-------------------------------|---|
| 1/4" | 1-5/16" | 1" | 3-9/16" | 1-3/4" | 5-5/8" | 3" | 9-5/8" |
| 3/8" | 1-5/8" | 1-1/8" | 3-15/16" | 1-7/8" | 8" | 3-1/4" | 10-3/8" |
| 1/2" | 2" | 1-1/4" | 4-1/8" | 2" | 6-3/8" | 3-1/2" | 11-1/8" |
| 5/8" | 2-3/8" | 1-3/8" | 4-1/2" | 2-1/4" | 7-1/8" | 3-3/4" | 11-7/8" |
| 3/4" | 2-3/4" | 1-1/2" | 4-7/8" | 2-1/2" | 7-7/8" | 4" | 12-5/8" |
| 7/8" | 3-1/8" | 1-5/8" | 5-1/4" | 2-3/4" | 8-3/4" | | |



STANDARD SPOOL PUT-UP:
25 Ft., 50 Ft., 100 Ft.

*Because of small inside diameter, these sizes cannot be closed by using the slider. The tracks must be closed by manual pressure.



ZIPPER SPECIFICATIONS FOR ALL TYPES OF ALPHLEX ZIPPER TUBING

| | | | | | | | |
|-------------------------------|--------------------|------------------------------------|-------|----------------------------------|-------------------------|--|----------------------|
| Material | Polyvinyl Chloride | Dielectric Strength, V/mil | 759 | Cold Brittleness | -86°C | Lateral Pull Strength (permanently sealed) | 59.8 pounds/inch |
| Track Thickness (when closed) | .095" | Tensile Strength P.S.I. | 3810 | Fungus-proof | will not support fungus | Standard Colors | Black, Clear, Yellow |
| | | Ultimate Elongation | 255% | Flammability | self-extinguishing | | |
| | | Operating Temperature, Upper Limit | 106°C | Lateral Pull Strength (unsealed) | 42.7 pounds/inch | | |

Contrasting color combinations of zipper and body are available to order. The zipper portion can be supplied in any of the following colors: Black, Yellow, Clear, Blue, White, Brown, Purple, Red, Orange, Green, Slate.

ALPHLEX® ELECTRONIC LACING CORDS AND TAPES

MIL-T-713A NYLON TWISTED CORD

| ALPHA NO. | CLASS | TYPE | BREAKING STRENGTH | FINISH | NOMINAL DIAMETER | STOCK COLORS | YARDS PER POUND | STANDARD PUT-UP |
|-----------|-------|---------|-------------------|--------|------------------|--------------|-----------------|-----------------|
| LC-113 | I | P Twine | 70 lbs. | MW | .050" | Wh., Bik. | 560 | 8 oz. spls. |
| LC-114 | II | P Twine | 48 lbs. | MW | .035" | Wh., Bik. | 750 | 8 oz. spls. |
| LC-115 | III | P Twine | 32 lbs. | MW | .030" | Wh., Bik. | 1180 | 8 oz. spls. |

MIL-T-713A NYLON FLAT BRAIDED TAPE

| ALPHA NO. | CLASS | TYPE | BREAKING STRENGTH | NOMINAL WIDTH | NOMINAL THICKNESS | FINISH | STOCK COLORS | STANDARD PUT-UP |
|-----------|-------|--------|-------------------|---------------|-------------------|--------|--------------|-----------------|
| LC-136 | II | P Tape | 50 lbs. | .090" (3/32") | .014" | MW | Wh., Bik. | 500 yd. spls. |

NYLON FLAT BRAIDED TAPE

| ALPHA NO. | WIDTH | THICKNESS | TENSILE STRENGTH | FINISH | STOCK COLORS | STANDARD PUT-UP |
|-----------|-------|-----------|------------------|--------|--------------|-----------------|
| LC-132 | 3/32" | .014" | 50 lbs. | GE | Wh., Bik. | 500 yd. tubes |
| LC-134 | 1/16" | .010" | 30 lbs. | MW | Wh., Bik. | 500 yd. spls. |
| LC-136 | 3/32" | .014" | 50 lbs. | MW | Wh., Bik. | 500 yd. spls. |
| LC-140 | 3/32" | .014" | 50 lbs. | SR | Wh., Bik. | 500 yd. spls. |
| LC-143 | 3/32" | .014" | 50 lbs. | AM | Wh., Bik. | 500 yd. spls. |

DACRON FLAT BRAIDED TAPE

| ALPHA NO. | WIDTH | THICKNESS | TENSILE STRENGTH | FINISH | STOCK COLORS | STANDARD PUT-UP |
|-----------|-------|-----------|------------------|--------|--------------|-----------------|
| LC-158 | 3/32" | .014" | 50 lbs. | GE | Wh., Bik. | 500 yd. tubes |
| LC-162 | 3/32" | .014" | 50 lbs. | MW | Wh., Bik. | 500 yd. spls. |

TYPES OF LACING CORD

flat braided tape This construction was developed to prevent the "cold flow" that often is encountered in wire having plastic or rubber insulations. It has been specifically designed to create a wider contact area with the insulation, so that it does not flow away from the contact point. It is considerably more flexible and easier on the user's hands and is recommended for all types of harness work. Flat tapes do not appreciatively increase the diameter of the cable.

round twisted cord Available in various strands and thicknesses to produce different tensile strengths. This type, while it may be used for plastic and rubber insulated wire, is particularly suited for wires having a secondary insulation or those utilizing a textile as an insulating material.

MATERIALS

nylon Synthetic fiber resistant to: fungus, flame, acids, abrasion. Excellent tensile strength, light weight, small size.

dacron A synthetic fiber which retains all the above characteristics of Nylon plus: less elongation, better resistance to acids, no appreciable discoloration.

FINISHES

- ge synthetic rubber-like resin
- mw micro-crystalline wax
- am thermoplastic synthetic resin
- sr fungistatic synthetic rubber

Other materials, finishes and sizes available to order.

ALPHLEX® SHRINKABLE TUBING

- A new all-purpose tubing with controlled shrinkage
- Shrinks in seconds when heated
- Forms a permanent, tight-fitting mechanical bond
- Irradiated polyolefin

DESCRIPTION ALPHLEX SHRINKABLE TUBING, with controlled shrinkage when heated, forms a tight-fitting mechanical bond, even over irregularly shaped materials.

A new concept in extruded tubing that is simple to use and provides a tight mechanical bond, ALPHLEX SHRINKABLE TUBING is an irradiated, flame retardant, thermally stable, modified polyolefin base product. The tubing is supplied in an expanded form and easily slips over the object to be covered. When a temperature of approximately 275°F. (135°C.) is applied ALPHLEX SHRINKABLE TUBING immediately returns to its predetermined size (approximately one-third smaller) and forms a permanent tight-fitting mechanical bond.

HOW TO USE The use of a hot air gun is recommended as being generally the easiest heating method. However, excellent results may be achieved by the use of an oven, radiant heat, dipping in hot liquids, or heating with a soldering iron, burner or the flame of a match.

Controlled shrinkage to the correct predetermined size takes place within seven seconds at 275°F. to 300°F. Shrinkage will begin at 235°F. but at a somewhat slower rate. When using an oven, temperature may range from 235°F. to 300°F. Prolonged exposure to these temperatures will not effect the physical or electrical properties of ALPHLEX SHRINKABLE TUBING.

For a tight-fitting cover, select the tubing whose expanded size is larger than the object to be covered and whose recovered size is smaller.

DIMENSIONS CHART

| ALPHA NO. | SIZE | MIN. I.D. BEFORE SHRINKING | RECOVERED I.D. AFTER SHRINKING | NOM. WALL THICKNESS |
|--------------|-------|----------------------------|--------------------------------|---------------------|
| FIT-275-24 | 24 | .050" | .027" | .012" |
| FIT-275-22 | 22 | .055" | .032" | .012" |
| FIT-275-20 | 20 | .060" | .039" | .016" |
| FIT-275-18 | 18 | .076" | .049" | .016" |
| FIT-275-16 | 16 | .093" | .061" | .016" |
| FIT-275-14 | 14 | .120" | .072" | .016" |
| FIT-275-12 | 12 | .153" | .089" | .016" |
| FIT-275-10 | 10 | .191" | .112" | .016" |
| FIT-275-8 | 8 | .240" | .141" | .020" |
| FIT-275-6 | 6 | .302" | .178" | .020" |
| FIT-275-4 | 4 | .348" | .224" | .020" |
| FIT-275-2 | 2 | .430" | .275" | .020" |
| FIT-275-5/16 | 5/16" | .500" | .334" | .025" |
| FIT-275-3/8 | 3/8" | .600" | .399" | .025" |
| FIT-275-7/16 | 7/16" | .693" | .462" | .025" |
| FIT-275-1/2 | 1/2" | .787" | .524" | .025" |
| FIT-275-5/8 | 5/8" | .982" | .655" | .030" |
| FIT-275-3/4 | 3/4" | 1.180" | .786" | .035" |
| FIT-275-7/8 | 7/8" | 1.365" | .911" | .035" |
| FIT-275-1 | 1" | 1.555" | 1.036" | .035" |

STOCK COLORS—

#24 thru #4—Black, Red, Blue, White, Yellow, Clear
 #2 thru 1"—Black and Clear (other colors available to order)

STANDARD PACKAGE—

#24 thru #4
 100 Feet (25 4-Foot lengths)
 #2 thru 1 inch
 20 Feet (5 4-Foot lengths)

STANDARD PUT-UP—

4-foot lengths

OTHER SIZES, COLORS AND LENGTHS AVAILABLE TO ORDER

PROPERTIES CHART

(Average Values)

| | | | |
|-----------------------------------|-------------------------|----------------------------|--------------------|
| Temperature Rating | 135°C. Continuous | Dielectric Constant | 2.5 |
| Tensile Strength | 1800 PSI* | Power Factor | 0.003 |
| Ultimate Elongation | 250%* | Fungus Resistance | Inert* |
| Brittleness Temperature | -100° F | Fuel and Oil Resistance | Excellent |
| Hardness | 98 Shore A | Hydraulic Fluid Resistance | Excellent |
| Specific Gravity | 1.28 | Solvent Resistance | Good |
| Water Absorption | 0.01%* | Acid and Alkali Resistance | Excellent |
| Dielectric Strength (20 Mil Wall) | 800 Volts/Mil | Flammability | Self Extinguishing |
| Volume Resistivity | 10 ¹⁶ Ohm-Cm | Corrosion Resistance | Non-Corrosive* |

*When tested to Mil-I-7444B †Color Clear is flammable.



EXPANDED • RESTORED



INSULATES



JACKETS



SPLICES



ENCAPSULATES



CABLE MARKERS



WEATHERPROOFS



HEAT GUN



ALPHA WIRE CORPORATION
 NEW YORK 14, NEW YORK
 LOS ANGELES 25, CALIF.

NOW SHRINKABLE TUBING IN HANDY PACKAGED ASSORTMENTS

IN STOCK FOR IMMEDIATE DELIVERY



A complete selection of Alphlex FIT-275 irradiated polyolefin heat shrinkable tubing is now available packaged in small quantity assortments.

Designed to introduce the user to the unique properties of Alphlex Shrinkable Tubing, the assortments are ideal for laboratory, prototype, design, or electronic service applications. All assortments are packaged and labeled for easy handling and storage.

PACKAGED IN 4 FOOT LENGTHS

FIT-275C—Individual Size Per Box—Assorted Colors

Contains 25 four foot lengths of a single size tubing. Each Assortment consists of 40' Black (10 lengths), 20' Red (5 lengths), 20' Yellow (5 lengths), 20' White (5 lengths).

| ALPHLEX PART NO. | TUBING SIZE | FOOTAGE PER BOX | NET PRICE PER BOX |
|------------------|-------------|-----------------|-------------------|
| FIT-275C-24 | 24 | 100 ft. | \$16.00 |
| FIT-275C-22 | 22 | 100-ft. | 16.70 |
| FIT-275C-20 | 20 | 100 ft. | 17.50 |
| FIT-275C-18 | 18 | 100 ft. | 19.15 |
| FIT-275C-16 | 16 | 100 ft. | 20.75 |
| FIT-275C-14 | 14 | 100 ft. | 22.70 |
| FIT-275C-12 | 12 | 100 ft. | 24.90 |
| FIT-275C-10 | 10 | 100 ft. | 27.25 |
| FIT-275C-8 | 8 | 100 ft. | 31.80 |
| FIT-275C-6 | 6 | 100 ft. | 34.30 |
| FIT-275C-4 | 4 | 100 ft. | 37.30 |

FIT-275S—Assorted Sizes Per Box

Contains an assortment of 4 foot lengths of Shrinkable Tubing in various sizes. Every length identified as to size. Supplied in black only.

| ALPHLEX PART NO. | TUBING SIZE RANGE | LENGTHS PER BOX | NET PRICE PER BOX |
|------------------|---------------------------|------------------------------------|-------------------|
| FIT-275S-1 | #24 thru #4 (11 sizes) | 2 lengths per size (22 lengths) | \$24.00 |
| FIT-275S-2 | #2 thru 1/2" (5 sizes) | 1 length per size (5 lengths) | 12.00 |
| FIT-275S-3 | 5/8" thru 1" (4 sizes) | 1 length per size (4 lengths) | 22.00 |

PACKAGED IN 6 INCH LENGTHS

FIT-275M—Individual Size Per Box

Contains 6" lengths of Shrinkable Tubing. Packaged one size per box.

| ALPHLEX PART NO. | TUBING SIZE | LENGTHS PER BOX | NET PRICE PER BOX |
|------------------|-------------|-----------------|-------------------|
| FIT-275M-24 | 24 | 40 | \$3.75 |
| FIT-275M-22 | 22 | 36 | 3.75 |
| FIT-275M-20 | 20 | 34 | 3.75 |
| FIT-275M-18 | 18 | 32 | 3.75 |
| FIT-275M-16 | 16 | 30 | 3.75 |
| FIT-275M-14 | 14 | 28 | 3.75 |
| FIT-275M-12 | 12 | 24 | 3.75 |
| FIT-275M-10 | 10 | 20 | 3.75 |
| FIT-275M-8 | 8 | 18 | 3.75 |
| FIT-275M-6 | 6 | 18 | 3.75 |
| FIT-275M-4 | 4 | 16 | 3.75 |
| FIT-275M-2 | 2 | 12 | 3.75 |
| FIT-275M-3/16 | 3/16" | 10 | 3.75 |
| FIT-275M-3/8 | 3/8" | 10 | 3.75 |
| FIT-275M-1/2 | 1/2" | 8 | 3.75 |
| FIT-275M-5/8 | 5/8" | 6 | 3.75 |

FIT-275MS—Assorted Sizes Per Box

Contains an assortment of 6" lengths of Shrinkable Tubing in various sizes. Every length identified as to size. Supplied in black only.

| ALPHLEX PART NO. | TUBING SIZE RANGE | LENGTHS PER BOX | NET PRICE PER BOX |
|------------------|---------------------------|------------------------------------|-------------------|
| FIT-275MS-1 | #24 thru #10 (8 sizes) | 4 lengths per size (32 lengths) | \$3.75 |
| FIT-275MS-2 | #8 thru 5/8" (9 sizes) | 2 lengths per size (18 lengths) | 7.50 |
| FIT-275MS-3 | 3/4" thru 1" (3 sizes) | 2 lengths per size (6 lengths) | 6.00 |



ALPHA WIRE CORPORATION
NEW YORK 14, NEW YORK
LOS ANGELES 25, CALIF.

SPECIALIZED FACILITIES FOR CUSTOM WIRE AND CABLE PRODUCTS

Engineering capabilities, prompt delivery, modern equipment and 40 years of experience all combine to make Alpha Wire your one source for custom wire products.

We have a complete department devoted exclusively to handling your custom wire requirements. Supervised by experienced engineers, utilizing specially designed modern equipment and taking advantage of our inventory of 6,000 items, we create the wire product to fit your specific application. When you come to us you know that you are saving both time and money. Time

—because your wire is delivered on time and ready for direct assembly into your job. Money—because our department is geared to do the unusual to wire. Our facilities and experience are available to do your job less expensively than you can do it yourself.

Next time you have a design problem think of Alpha as an extension of your own model shop or your production line and remember CUSTOM WIRE PRODUCTS are our specialty.

SHORT RUN CABLE DEPARTMENT

Braiding, Shielding

Braided and spiral shields either bare, tinned or silver plated can be fabricated over the single conductor hook-up wire and multi-conductor cables listed in this catalog. Alpha's textile braided coverings offer a wide variety of color combinations for easy identification, strength, durability, and appearance. Braiding materials such as cotton, rayon, dacron, celanese and glass may be used. In addition bonding and ground straps can be fabricated flat, oval or round to fill your requirements.

Jacketing

Alpha has developed highly engineered techniques by which we provide jackets of polyvinylchloride, polyethylene, neoprene, rubber, teflon and many fabric textile braids, both organic and inorganic, to cover an infinite variety of inner core constructions. Our latest jacketing material, Zipper Tubing, was designed and engineered to meet the ever growing demand for short run cable lots (see page 1563). The use of Zipper Tubing as a jacketing material provides a strong durable outer covering while also being economical and easy to use for short run cable jackets.

Cabling

We produce cables in short runs ranging from 2 to 200 conductors, depending upon the outside diameter of each individual conductor. These cables are designed to withstand the stresses created by maximum flexing, impact, abrasion and torque because of our creative cable engineering techniques. To insure flexibility and roundness we use fillers, serves, and wraps. And all our cables can be produced in minimum length runs.

WIRE PROCESSING

Striping

Spiral color striping of wires permits the creation of an almost unrestricted number of different color combinations—all to Military specifications. Specially compounded inks applied to vinyl, nylon, and teflon insulation resulting in an indelible stripe(s). As many as three different color combinations of spiral stripes can be applied at one time in wire sizes ranging from .375" to .032". This results in over 40,000 possible color combinations.

Cutting, Stripping, Tinning

Automatic cutting, stripping and hot tin dipping of wire to any length is our specialty. Modern high speed precision equipment insures prompt delivery and low unit cost. Alpha's equipment measures to precise tolerance the amount of insulation to be stripped and the exact length of wire to be cut. This guarantees trouble-free installation every time. These cutting, stripping and tinning facilities can be used in conjunction with our marking and numbering department. As a result you can specify the exact length of wire to be cut, stripped, tinned and then mark it for circuit identification.

Marking and Numbering

To guarantee circuit identification, a series of letters and numbers—or a combination of both—can be made a permanent part of the insulation and jacket of our various wire, cable and tubing. This marking and numbering—hot stamped in accordance with Military specifications—can be applied to vinyl, nylon and teflon insulation compounds. A wide variety of type faces and character widths are available for you to choose from. Circuit coding can also be achieved by the use of identification markers—e.g., your trade name shown on the wire and cable you purchase from Alpha.

Jacket Coloring

Alpha has developed a new process to color permanently and indelibly rubber, neoprene, and plastic jackets. We can take any catalog item from our inventory shown with a gray or black jacket and color it to your specification, regardless of the footage you require. The variety is limitless since we offer ten basic colors or any matching color shades. This allows clear circuit identification as well as enabling the cables to blend into the room decor.



ALPHA WIRE PRICE LIST

| Number | Suggested Resale Ea. 1000' | Number | Suggested Resale Ea. 1000' | Number | Suggested Resale Ea. 1000' | Number | Suggested Resale Ea. 1000' | Number | Suggested Resale Ea. 1000' | Number | Suggested Resale Ea. 1000' | Number | Suggested Resale Ea. 1000' |
|---------|----------------------------|----------|----------------------------|---------|----------------------------|---------|----------------------------|-----------|----------------------------|---------|----------------------------|---------------------------------------|----------------------------|
| 286 | \$16.65 | 1184 | 62.25 | 1313 | 247.50 | 1559 | 33.56 | 1840 | 11.90 | 2174** | 21.32 | "ALMAG" MAGNET WIRE LINE PLAIN ENAMEL | |
| 289 | 24.15 | 1185 | 81.00 | 1313/31 | 423.60 | 1560 | 56.12 | 1841 | 13.32 | 2176** | 32.97 | PE-44□ | 12.90 |
| 292 | 45.62 | 1186 | 99.00 | 1313/41 | 572.40 | 1561 | 6.50 | 1842 | 16.65 | 2254/3 | 42.00 | PE-42□ | 8.25 |
| 292/6 | 113.22 | 1187 | 111.00 | 1314 | 870.00 | 1561/24 | 6.00 | 1843 | 20.82 | 2254 | 27.00 | PE-40 | 4.50 |
| 292/8 | 70.77 | 1188 | 123.00 | 1316 | 19.50 | 1563 | 8.82 | 1844 | 26.64 | 2254/4 | 67.50 | PE-38□ | 3.00 |
| 295 | 11.00 | 1189 | 147.00 | 1317 | 42.00 | 1565 | 12.50 | 1845 | 39.96 | 2255 | 22.50 | PE-36§ | 10.88 |
| 296 | 8.16 | 1190 | 162.00 | 1318 | 60.00 | 1567 | 17.99 | 1850 | 10.16 | 2256/1 | 30.75 | PE-34§ | 9.38 |
| 297 | 5.25 | 1192 | 186.00 | 1319 | 69.00 | 1571 | 14.66 | 1851 | 9.33 | 2256/3 | 46.50 | PE-32□ | 17.25 |
| 298 | 3.99 | 1192/15 | 234.00 | 1320 | 72.75 | 1573 | 17.99 | 1852 | 8.91 | 2256/4 | 87.00 | PE-30□ | 16.50 |
| 299 | 3.75 | 1192/20 | 315.00 | 1322 | 75.00 | 1575 | 24.15 | 1853 | 8.99 | 2257 | 40.05 | PE-28# | 15.00 |
| 299/1 | 3.59 | 1194 | 37.47 | 1323 | 108.00 | 1577 | 34.97 | 1854 | 7.74 | 2260 | 81.00 | PE-26# | 14.25 |
| 299/2 | 2.67 | 1194/22 | 34.97 | 1327 | 180.00 | 1579 | 56.94 | 1855 | 8.73 | 2272 | 24.00 | PE-24# | 13.80 |
| 299/3 | 2.51 | 1194/24 | 34.14 | 1329 | 337.50 | 1590 | 16.65 | 1856 | 10.32 | 2276 | 31.50 | PE-22# | 13.50 |
| 299/4 | 2.51 | 1196 | 41.63 | 1341 | 18.32 | 1590/24 | 15.83 | 1857 | 11.33 | 2278 | 36.00 | PE-20# | 12.75 |
| 299/5 | 2.51 | 1197 | 51.95 | 1342 | 19.98 | 1610 | 8.25 | 1860 | 12.32 | 2280 | 39.90 | PE-18# | 12.30 |
| 299/6 | 2.51 | 1198 | 62.45 | 1343 | 25.47 | 1632 | 17.25 | 1861 | 11.66 | 2282 | 57.15 | PE-16# | 12.00 |
| 299/7 | 2.51 | 1199 | 79.10 | 1344 | 27.81 | 1635 | 18.75 | 1862 | 11.00 | 2284 | 65.40 | PE-14# | 11.70 |
| 600△ | .50 | 1221 | 29.97 | 1345 | 39.96 | 1636 | 20.25 | 1863 | 11.57 | 2809 | 163.17 | PE-12# | 11.40 |
| 602• | .60 | 1222 | 30.81 | 1346 | 54.12 | 1638 | 32.70 | 1865 | 11.57 | 2809/2 | 349.65 | PE-10# | 11.40 |
| 604■ | .72 | 1223 | 31.31 | 1350 | 21.65 | 1639 | 33.00 | 1866 | 12.41 | 2809/3 | 509.49 | TEFLON MAGNET WIRE | |
| 606° | .62 | 1224 | 32.81 | 1351 | 22.49 | 1651 | 79.92 | 1867 | 15.57 | 2809/4 | 649.35 | ST-44↓ | 18.75 |
| 608‡ | .71 | 1229 | 35.30 | 1352 | 24.98 | 1653 | 116.55 | 1868 | 19.98 | 2812 | 183.15 | ST-42↓ | 14.93 |
| 610° | .72 | 1230 | 41.96 | 1353 | 30.63 | 1655 | 216.45 | 1883 | 36.63 | 2812/2 | 391.28 | ST-40↓ | 11.03 |
| 612‡ | .83 | 1231 | 57.45 | 1354 | 40.80 | 1657 | 316.35 | 1884 | 42.63 | 2812/3 | 566.10 | ST-38↔ | 14.93 |
| 620△ | .54 | 1232 | 96.57 | 1355 | 49.95 | 1685 | 5.84 | 1885 | 56.94 | 2812/4 | 715.95 | ST-37↓ | 6.15 |
| 622• | .66 | 1233 | 129.87 | 1356 | 62.27 | 1686 | 5.49 | 1886 | 87.24 | 2815/2 | 219.78 | ST-36↓ | 5.03 |
| 624‡ | .81 | 1233/2 | 123.21 | 1370 | 39.96 | 1687 | 6.00 | 1887 | 116.55 | 2815/3 | 666.00 | ST-34↓ | 3.90 |
| 626‡ | 1.88 | 1234 | 294.38 | 1371 | 42.47 | 1688 | 6.50 | 1888 | 236.43 | 2815/4 | 882.45 | ST-32↓ | 3.08 |
| 628‡ | .90 | 1235 | 313.02 | 1372 | 44.13 | 1689 | 6.92 | 1889 | 274.73 | 2818/2 | 266.40 | ST-30↓ | 2.85 |
| 630‡ | 2.63 | 1239 | 349.65 | 1373 | 54.12 | 1690 | 7.50 | 1894/4 | 43.95 | 2818/3 | 765.90 | ALPHLEX PLASTIC TUBING (TYPE PVC-105) | |
| 632*** | 3.68 | 1240†† | 107.40 | 1374 | 63.27 | 1702 | 27.30 | 1895 | 30.15 | 2818/4 | 1032.30 | PVC-105-24 | 13.00 |
| 634** | 6.75 | 1241††† | 210.12 | 1375 | 79.92 | 1703 | 26.70 | 1896 | 43.20 | 2821/2 | 366.30 | PVC-105-22 | 13.10 |
| 636‡ | 1.13 | 1242††† | 258.92 | 1381 | 12.90 | 1704 | 36.00 | 1897 | 57.00 | 2821/3 | 616.05 | PVC-105-20 | 13.50 |
| 638‡ | 2.31 | 1244 | 73.20 | 1382 | 14.66 | 1705 | 29.10 | 1898 | 36.00 | 2821/4 | 856.80 | PVC-105-19 | 13.50 |
| 654†† | 2.93 | 1245 | 84.15 | 1383 | 19.65 | 1706 | 53.70 | 1898/4 | 50.40 | 2824 | 1082.25 | PVC-105-18 | 13.80 |
| 655†† | 3.38 | 1246 | 99.00 | 1384 | 23.15 | 1709 | 63.75 | 1899 | 67.95 | 2824/2 | 416.25 | PVC-105-17 | 14.00 |
| 656†† | 4.95 | 1247 | 121.05 | 1385 | 41.63 | 1710 | 52.50 | 1899/3 | 72.30 | 2824/3 | 999.00 | PVC-105-16 | 14.60 |
| 657†† | 3.68 | 1247/6 | 148.50 | 1386 | 64.44 | 1712 | 66.30 | 1899/4 | 84.90 | 2824/4 | 1298.70 | PVC-105-15 | 14.90 |
| 658†† | 5.48 | 1247/7 | 183.00 | 1387 | 91.58 | 1713 | 67.50 | 1900 | 9.00 | 2827 | 482.85 | PVC-105-14 | 9.95 |
| 660-2* | 3.08 | 1247/8 | 199.35 | 1388 | 166.50 | 1715 | 76.50 | 1901 | 17.25 | 2827/2 | 865.80 | PVC-105-13 | 10.20 |
| 661-2* | 3.38 | 1247/10 | 255.00 | 1389 | 266.40 | 1716 | 91.50 | 1903 | 16.50 | 2827/3 | 1182.15 | PVC-105-12 | 10.70 |
| 662-2* | 4.28 | 1247/12 | 345.00 | 1389/4 | 349.65 | 1717 | 180.00 | 1904 | 27.00 | 2827/4 | 1481.85 | PVC-105-11 | 11.05 |
| 663-2* | 4.80 | 1248 | 60.00 | 1389/2 | 516.15 | 1719 | 225.00 | 1906 | 35.10 | 2829/2 | 579.42 | PVC-105-10 | 11.55 |
| 664-2* | 4.05 | 1249 | 69.00 | 1389/0 | 949.05 | 1721 | 264.00 | 1907 | 35.10 | 2829/3 | 949.05 | PVC-105-9 | 15.70 |
| 665-2* | 5.10 | 1249/18 | 88.50 | 1389/00 | 1098.90 | 1736 | 40.50 | 1909 | 34.50 | 2829/4 | 1265.40 | PVC-105-8 | 16.95 |
| 666-2* | 6.08 | 1250 | 75.75 | 1391 | 46.62 | 1737 | 51.00 | 1910 | 51.00 | 2850 | 71.93 | PVC-105-7 | 18.10 |
| 670-2* | 6.83 | 1250/18 | 100.50 | 1392 | 52.46 | 1741 | 54.00 | 1951††† | 10.35 | 2851 | 76.43 | PVC-105-6 | 19.55 |
| 671-2* | 7.58 | 1251 | 90.00 | 1393 | 56.61 | 1742 | 66.00 | 1952††† | 13.50 | 2852 | 78.26 | PVC-105-5 | 21.15 |
| 672-2* | 7.43 | 1251/18 | 171.90 | 1394 | 74.93 | 1746 | 63.00 | 1952/3††† | 20.25 | 2853 | 79.76 | PVC-105-4††† | 11.45 |
| 673-2* | 8.40 | 1252 | 102.60 | 1395 | 91.58 | 1747 | 81.00 | 1952/4††† | 37.65 | 2854 | 88.74 | PVC-105-3††† | 12.25 |
| 674-2* | 8.85 | 1252/18 | 191.10 | 1396 | 106.56 | 1748 | 90.00 | 1953††† | 16.88 | 2855 | 103.40 | PVC-105-2††† | 13.35 |
| 675-2* | 11.33 | 1253 | 129.00 | 1449 | 106.20 | 1750 | 108.00 | 1953/3††† | 27.15 | 2856 | 132.54 | PVC-105-1††† | 14.43 |
| 676-2* | 14.93 | 1254 | 157.80 | 1450 | 150.00 | 1753 | 10.83 | 1953/4††† | 45.00 | 2857 | 159.51 | PVC-105-0††† | 15.58 |
| 677-2* | 15.75 | 1254/18 | 345.00 | 1450/16 | 195.00 | 1754 | 10.32 | 1954††† | 26.48 | 2858 | 208.13 | PVC-105-5/8††† | 18.60 |
| 680-2* | 2.40 | 1255 | 168.00 | 1451 | 214.05 | 1755 | 11.66 | 1954/3††† | 37.35 | 2859 | 254.75 | PVC-105-3/8††† | 21.48 |
| 681-2* | 2.70 | 1255/8 | 180.00 | 1451/16 | 252.00 | 1756 | 12.99 | 1954/4††† | 52.35 | 2859/10 | 541.13 | PVC-105-1/2*** | 9.65 |
| 682-2* | 3.38 | 1255/10 | 297.90 | 1452 | 243.60 | 1757 | 17.49 | 1955††† | 29.70 | 2859/12 | 369.63 | PVC-105-1/4*** | 10.64 |
| 683-2* | 4.43 | 1255/12 | 418.50 | 1452/16 | 302.40 | 1775 | 36.00 | 1955/3††† | 45.98 | 2874 | 94.91 | PVC-105-3/4*** | 14.17 |
| 684-2* | 5.40 | 1256V | 27.75 | 1454 | 420.00 | 1779 | 48.00 | 1955/4††† | 63.75 | 2875** | 111.56 | PVC-105-1/2*** | 15.30 |
| 685-2* | 6.08 | 1256/22V | 27.00 | 1456 | 540.00 | 1783 | 56.25 | 1956††† | 48.60 | 2876 | 141.20 | PVC-105-1/4*** | 10.56 |
| 690-2* | 3.75 | 1259V | 48.90 | 1458 | 645.00 | 1793 | 18.00 | 1956/3††† | 72.60 | 2877 | 164.84 | PVC-105-3/8*** | 12.12 |
| 692-2* | 5.03 | 1260V | 69.00 | 1459 | 840.00 | 1794 | 27.75 | 1956/4††† | 99.90 | 2878 | 224.78 | PVC-105-1/8*** | 13.27 |
| 694-2* | 7.05 | 1260/12 | 187.50 | 1470 | 41.63 | 1794/4 | 39.60 | 1957††† | 65.25 | 2879 | 275.73 | PVC-105-1/16*** | 17.40 |
| 696-2* | 8.10 | 1260/14 | 109.50 | 1471 | 44.96 | 1795 | 27.45 | 1957/3††† | 87.90 | 2879/8 | 1108.89 | PVC-105-1/4*** | 18.39 |
| 1172 | 16.50 | 1261 | 45.45 | 1472 | 47.46 | 1796 | 40.20 | 1957/4††† | 120.45 | 2879/10 | 606.06 | PVC-105-3/16*** | 19.66 |
| 1173 | 18.75 | 1261/3 | 50.70 | 1473 | 58.28 | 1796/4 | 54.15 | 1958††† | 92.10 | 2879/12 | 391.28 | PVC-105-1/8*** | 23.84 |
| 1174 | 24.75 | 1261/26 | 47.25 | 1474 | 68.27 | 1797 | 33.45 | 1958/3††† | 126.45 | 2881 | 79.92 | PVC-105-1/16*** | 28.84 |
| 1175 | 30.00 | 1261V | 27.00 | 1475 | 86.58 | 1798 | 47.25 | 1958/4††† | 148.65 | 2882 | 83.25 | PVC-105-1/32*** | 29.72 |
| 1176 | 46.50 | 1267/18V | 45.90 | 1503 | 10.41 | 1798/4 | 60.75 | 2160††† | 8.66 | 2883 | 86.58 | PVC-105-1/64*** | 32.84 |
| 1177 | 52.50 | 1267/22V | 21.00 | 1504 | 10.58 | 1798/5 | 78.00 | 2162††† | 10.49 | 2884 | 97.23 | PVC-105-1/128*** | 29.72 |
| 1178 | 58.50 | 1300 | 12.75 | 1505 | 11.99 | 1798/6 | 94.50 | 2164††† | 14.99 | 2885 | 116.55 | PVC-105-2*** | 40.84 |
| 1179 | 64.50 | 1302 | 23.25 | 1506 | 19.98 | 1799 | 64.20 | 2166††† | 17.99 | 2886 | 149.03 | PVC-105-2 1/2*** | 48.55 |
| 1180 | 66.00 | 1304 | 32.25 | 1507 | 24.98 | 1799/3 | 72.60 | 2168††† | 19.98 | 2887 | 177.15 | PVC-105-2 1/4*** | 48.55 |
| 1181 | 70.50 | 1307 | 55.50 | 1508 | 33.80 | 1799/4 | 81.30 | 2170** | 11.33 | 2888** | 233.10 | PVC-105-2 1/8*** | 57.56 |
| 1181/15 | 139.20 | 1307/7 | 76.20 | 1509 | 48.29 | 1830 | 8.33 | 2172** | 14.16 | 2889** | 299.70 | | |
| 1181/20 | 184.50 | 1307/9 | 77.25 | 1550 | 6.99 | 1831 | 9.83 | | | | | | |
| 1181/25 | 225.00 | 1308/11 | 105.00 | 1551 | 8.16 | 1832 | 12.66 | | | | | | |
| 1181/30 | 270.00 | 1309 | 118.50 | 1553 | 10.65 | 1833 | 16.65 | | | | | | |
| 1182 | 36.00 | 1309/15 | 133.50 | 1555 | 15.15 | 1834 | 21.65 | | | | | | |
| 1183 | 49.35 | 1310 | 180.00 | 1557 | 22.23 | 1835 | 34.14 | | | | | | |

All Standard Put-Ups are 1000 feet except as indicated by the following symbols:
 △ 6', • 9', ° 8', ■ 12', † 10', ‡ 25', *** 50', ** 100', * 2', †† 250', °° 500',
 ††18", □ 1 lb., • 1/2 lb., † 1/4 lb., § 5 lb., = 10 lb

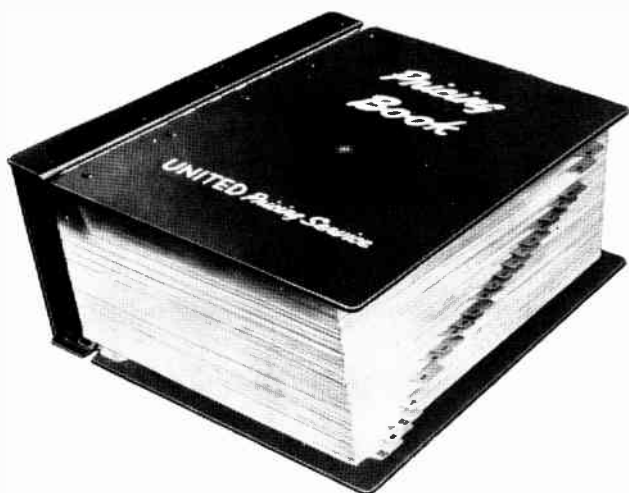
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|---|---------------------------|------------------------------|---------------------------|--|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|
| 8000-50 | .83 | *8216-100(RG-174/U) | 4.15 | 8242-1000 | | 8300-50 † Striped | △ 3.45 | 8308-25 † Striped | △ 2.95 |
| 8000-75 | 1.13 | *8216-500(RG-174/U) | 37.50/M' | (RG-9/U) | 294.00/M' | 8300-100 † Striped | △ 6.15 | 8308-50 † Striped | △ 5.25 |
| 8000-100 | 1.45 | *8216-1000(RG-174/U) | 37.50/M' | 8245-100 | | 8300-250 † Striped | △ 56.25/M' | 8308-100 † Striped | △ 9.90 |
| 8000-1000 | 13.50 | 8222-100 | 1.65 | (RG-55/U) TBO | 7.50 | 8300-500 † Striped | △ 52.50/M' | 8308-250 † Striped | △ 87.75/M' |
| 8002-50 | .60 | 8222-500 | 7.50 | 8245-500 | | 8300-1000 † Striped | △ 51.75/M' | 8308-500 † Striped | △ 84.00/M' |
| 8002-75 | .75 | 8224-100 TBO | 2.05 | (RG-55/U) | 70.50/M' | 8301-25 † Solid | △ 1.90 | 8308-1000 † Striped | △ 83.25/M' |
| 8002-100 | .98 | 8224-500 TBO | 9.00 | 8245-1000 | | 8301-50 † Solid | △ 3.00 | 8309-25 † Solid | △ 3.15 |
| 8002-1000 | 9.00 | 8225-25 | .72 | (RG-55/U) | 70.50/M' | 8301-100 † Solid | △ 5.50 | 8309-50 † Solid | △ 5.85 |
| 8008-100 | 2.55 | 8225-50 | 1.05 | 8254-100 | | 8301-250 † Solid | △ 48.75/M' | 8309-100 † Solid | △ 10.80 |
| 8008-200 | 4.65 | 8225-75 | 1.35 | (RG-62/U) | 6.15 | 8301-500 † Solid | △ 45.00/M' | 8309-250 † Solid | △ 98.25/M' |
| 8008-500 | 10.90 | 8225-100 | 1.65 | 8254-500 | | 8301-1000 † Solid | △ 44.25/M' | 8309-500 † Solid | △ 93.75/M' |
| 8009-100 | 1.73 | 8225-500 | 7.50 | 8254-1000 | | 8301-25 † Striped | △ 2.10 | 8309-1000 † Solid | △ 92.25/M' |
| 8009-200 | 3.30 | 8225-1000 | 14.95 | 8254-500 | | 8301-50 † Striped | △ 3.45 | 8309-25 † Striped | △ 3.55 |
| 8009-500 | 7.35 | 8226-25 | .72 | 8257-100 | | 8301-100 † Striped | △ 6.40 | 8309-50 † Striped | △ 6.30 |
| 8011-100 | 2.10 | 8226-50 | 1.16 | (RG-71/U) TBO | 9.75 | 8301-250 † Striped | △ 57.75/M' | 8309-100 † Striped | △ 11.70 |
| 8011-1000 TBO | 18.00 | 8226-75 | 1.56 | 8257-500 | | 8301-500 † Striped | △ 54.00/M' | 8309-250 † | |
| 8012-100 | 1.50 | 8226-100 | 1.92 | (RG-71/U) | 91.50/M' | 8301-1000 † Striped | △ 53.25/M' | Striped | 107.25/M' |
| 8012-1000 | 12.00 | 8227-100 | 9.00 | 8257-1000 | | 8302-25 † Solid | △ 1.90 | 8309-500 † | |
| 8013-100 | 1.10 | 8227-250 TBO | 21.75 | (RG-71/U) | 91.50/M' | 8302-50 † Solid | △ 3.15 | Striped | 102.75/M' |
| 8013-1000 | 8.25 | 8227-500 | 87.00/M' | 8259-25 | | 8302-100 † Solid | △ 5.55 | 8309-1000 † | |
| 8014-25 | .38 | 8230-25 | .78 | (RG-58A/U) | 1.75 | 8302-250 † Solid | △ 49.50/M' | Striped | 101.25/M' |
| 8014-50 | 2.70 | 8230-50 | 1.23 | 8259-50 | | 8302-500 † Solid | △ 45.75/M' | 8310-25 † Solid | △ 4.15 |
| 8018-50 | .90 | 8230-75 | 1.70 | (RG-58A/U) | 2.70 | 8302-1000 † Solid | △ 45.00/M' | 8310-50 † Solid | △ 7.50 |
| 8018-500 | 7.50 | 8230-100 | 2.13 | 8259-100 | | 8302-25 † Striped | △ 2.10 | 8310-100 † Solid | △ 13.50 |
| 8018-1000 TBO | 14.25 | 8230-500 | 10.20 | (RG-58A/U) | 5.05 | 8302-50 † Striped | △ 3.60 | 8310-250 † Solid | △ 126.00/M' |
| 8019-100 | .75 | 8230-1000 | 19.20 | 8259-500 | | 8302-100 † Striped | △ 6.45 | 8310-500 † Solid | △ 121.50/M' |
| 8019-1000 | 5.25 | 8231-100 TBO | 6.30 | (RG-58A/U) | 43.50/M' | 8302-250 † Striped | △ 58.50/M' | 8310-1000 † Solid | △ 120.00/M' |
| 8020-100 | .60 | 8231-500 TBO | 60.00/M' | 8259-1000 | | 8302-500 † Striped | △ 54.75/M' | 8310-25 † Striped | △ 4.35 |
| 8020-1000 | 4.00 | 8231-1000 TBO | 60.00/M' | (RG-58A/U) | 43.50/M' | 8302-1000 † Striped | △ 54.00/M' | 8310-50 † Striped | △ 7.95 |
| 8021-100 | .53 | 8232-100 TBO | 9.15 | 8260-100 TBO | | 8303-25 † Solid | △ 2.10 | 8310-100 † Striped | △ 14.40 |
| 8021-1000 | 3.40 | 8232-500 | 87.00/M' | (RG-22A/U) | 22.50 | 8303-50 † Solid | △ 3.30 | 8310-250 † | |
| 8022-100 | .51 | 8232-1000 | 87.00/M' | 8260-500 TBO | | 8303-100 † Solid | △ 6.40 | Striped | 135.00/M' |
| 8022-1000 | 3.00 | 8232-2000 | 87.00/M' | (RG-22A/U) | 225.00/M' | 8303-250 † Solid | △ 55.50/M' | 8310-500 † | |
| 8023-100 | .51 | 8233-500 | 168.00/M' | 8260-1000 TBO | | 8303-500 † Solid | △ 52.50/M' | Striped | 130.50/M' |
| 8023-1000 | 2.63 | 8233-1000 | 168.00/M' | 8261-100 | | 8303-1000 † Solid | △ 51.75/M' | 8310-1000 † | |
| 8024-100 | .50 | 8233-1000 TBO | 168.00/M' | (RG-11A/U) | 14.55 | 8303-25 † Striped | △ 2.35 | Striped | 129.00/M' |
| 8024-1000 | 2.40 | 8233-2000 | 168.00/M' | 8261-500 | | 8303-50 † Striped | △ 3.75 | 8320-25 † Solid | △ 2.40 |
| 8025-100 | .50 | 8235-100 | 4.80 | (RG-11A/U) | 132.00/M' | 8303-100 † Striped | △ 7.30 | 8320-50 † Solid | △ 3.90 |
| 8025-1000 | 2.25 | 8235-500 | 21.00 | 8261-1000 | | 8303-250 † Striped | △ 64.50/M' | 8320-100 † Solid | △ 7.50 |
| 8026-100 | .50 | 8237-100 | 12.40 | (RG-11A/U) | 132.00/M' | 8303-500 † Striped | △ 61.50/M' | 8320-250 † Solid | △ 69.00/M' |
| 8026-1000 | 2.25 | 8237-500 | 115.50/M' | 8262-100 | | 8303-1000 † Striped | △ 60.75/M' | 8320-500 † Solid | △ 65.25/M' |
| 8027-100 | .50 | 8237-1000 | 115.50/M' | (RG-58C/U) TBO | 6.00 | 8304-25 † Solid | △ 2.05 | 8320-1000 † Solid | △ 61.50/M' |
| 8027-1000 | 2.25 | 8238-100 | 11.20 | 8262-500 | | 8304-50 † Solid | △ 3.25 | 8320-25 † Striped | △ 2.65 |
| (Trade numbers 8040 thru 8086 — See Magnet Wire on last Page) | | 8238-500 | 103.50/M' | (RG-58C/U) | 51.00/M' | 8304-100 † Solid | △ 6.00 | 8320-50 † Striped | △ 8.40 |
| 8127-10 | .38 | 8238-1000 | 103.50/M' | 8263-100 | | 8304-250 † Solid | △ 53.25/M' | 8320-1000 † Striped | △ 78.00/M' |
| 8127-500 | 5.25 | 8238-500 | 103.50/M' | (RG-59B/U) TBO | 6.75 | 8304-500 † Solid | △ 49.50/M' | 8320-500 † Striped | △ 74.25/M' |
| 8200-100 | 1.65 | 8238-1000 | 103.50/M' | 8263-500 | | 8304-1000 † Solid | △ 48.75/M' | 8320-1000 † Striped | △ 73.50/M' |
| 8200-500 | 6.45 | 8238-500 | 103.50/M' | (RG-59B/U) | 54.00/M' | 8304-25 † Striped | △ 2.25 | 8321-25 † Solid | △ 2.40 |
| 8200-1000 | 12.15 | 8238-1000 | 103.50/M' | 8263-1000 | | 8304-50 † Striped | △ 3.70 | 8321-50 † Solid | △ 3.90 |
| 8204-25 TBO | 1.28 | 8238-500 | 103.50/M' | (RG-59B/U) | 54.00/M' | 8304-100 † Striped | △ 6.90 | 8321-100 † Solid | △ 7.50 |
| 8204-100 TBO | 3.75 | 8238-1000 | 103.50/M' | 8263-500 | | 8304-250 † Striped | △ 62.25/M' | 8321-250 † Solid | △ 64.50/M' |
| 8204-500 TBO | 16.15 | 8238-500 | 103.50/M' | 8263-1000 | | 8304-500 † Striped | △ 58.50/M' | 8321-500 † Solid | △ 60.75/M' |
| 8205-25 | .83 | 8238-1000 | 103.50/M' | (RG-5A/U) TBO | 25.42 | 8304-1000 † Striped | △ 57.75/M' | 8321-1000 † Solid | △ 60.00/M' |
| 8205-100 | 2.50 | 8239-100 | 8.25 | 8264-500 | | 8305-25 † Solid | △ 2.25 | 8321-25 † Striped | △ 2.65 |
| 8205-500 | 9.75 | 8239-500 | 76.50/M' | (RG-5A/U) | 246.00/M' | 8305-50 † Solid | △ 4.00 | 8321-50 † Striped | △ 4.35 |
| 8205-1000 | 19.15/M' | 8239-1000 | 76.50/M' | 8264-1000 | | 8305-100 † Solid | △ 7.50 | 8321-100 † Striped | △ 8.40 |
| 8206-15 | .75 | 8239-500 | 76.50/M' | (RG-5A/U) | 246.00/M' | 8305-250 † Solid | △ 63.00/M' | 8321-250 † Striped | △ 73.50/M' |
| 8206-50 | 2.03 | 8240-25 | 1.80 | 8267-100 | | 8305-500 † Solid | △ 59.25/M' | 8321-500 † Striped | △ 69.75/M' |
| 8206-100 | 3.60 | 8240-50 | 2.85 | (RG-213/U) TBO | 15.45 | 8305-1000 † Solid | △ 58.50/M' | 8322-25 † Striped | △ 2.25 |
| 8206-250 | 7.90 | 8240-100 | 4.95 | 8267-500 | | 8305-50 † Striped | △ 4.45 | 8322-50 † Solid | △ 3.85 |
| 8208-15 | 1.17 | 8240-500 | 43.50/M' | (RG-213/U) | 142.50/M' | 8305-100 † Striped | △ 8.40 | 8322-100 † Solid | △ 7.15 |
| 8208-50 | 25.50 | 8241-25 | 1.95 | 8267-1000 | | 8305-250 † Striped | △ 72.00/M' | 8322-250 † Solid | △ 63.00/M' |
| 8208-100 | 5.95 | 8241-50 | 3.25 | (RG-213/U) | 142.50/M' | 8305-500 † Striped | △ 68.25/M' | 8322-500 † Solid | △ 60.75/M' |
| 8208-500 | 25.50 | 8241-100 | 5.80 | 8275-50 | | 8305-1000 † Striped | △ 67.50/M' | 8322-1000 † Solid | △ 60.00/M' |
| 8208-1000 | 51.00/M' | 8241-500 | 47.00/M' | 8275-75 | 3.45 | 8306-25 † Solid | △ 2.40 | 8322-25 † Striped | △ 2.50 |
| 8209-15 TBO | 1.17 | 8241-1000 | 47.00/M' | 8275-100 | 4.28 | 8306-50 † Solid | △ 4.15 | 8322-50 † Striped | △ 4.30 |
| 8209-50 TBO | 3.25 | 8242-100 | 30.00 | 8275-500 | 21.40 | 8306-100 † Solid | △ 7.50 | 8322-100 † Striped | △ 8.05 |
| 8209-100 TBO | 5.95 | 8242-500 | 294.00/M' | 8275-1000 | 42.00 | 8306-250 † Solid | △ 66.75/M' | 8322-250 † Striped | △ 72.00/M' |
| 8209-500 | 25.50 | 8242-1000 | 294.00/M' | 8280 (to customer's Specified length) § | 600.00/M' | 8306-500 † Solid | △ 63.00/M' | 8322-500 † Striped | △ 69.75/M' |
| 8209-1000 | 51.00/M' | 8242-500 | 294.00/M' | 8281-100 TBO | 16.50 | 8306-1000 † Solid | △ 62.25/M' | 8322-1000 † Striped | △ 69.00/M' |
| 8210-50 TBO | 3.15 | 8242-1000 | 294.00/M' | 8281-500 | 165.00/M' | 8306-25 † Striped | △ 2.65 | 8323-25 † Solid | △ 2.55 |
| 8210-100 | 5.65 | 8242-500 | 294.00/M' | 8281-1000 | 165.00/M' | 8306-50 † Striped | △ 4.80 | 8323-50 † Solid | △ 4.50 |
| 8210-500 | 27.00 | 8242-1000 | 294.00/M' | 8282-50 TBO | 13.50 | 8306-100 † Striped | △ 8.40 | 8323-100 † Solid | △ 8.65 |
| 8211-500 | 48.00/M' | 8242-500 | 294.00/M' | 8282-100 TBO | 27.00 | 8306-250 † Striped | △ 75.75/M' | 8323-250 † Solid | △ 73.15/M' |
| 8211-1000 | 46.50/M' | 8242-1000 | 294.00/M' | 8282-500 | 270.00/M' | 8306-500 † Solid | △ 72.00/M' | 8323-500 † Solid | △ 69.00/M' |
| 8211-2000 | 46.50/M' | 8242-500 | 294.00/M' | 8282-1000 | 270.00/M' | 8306-1000 † Striped | △ 71.25/M' | 8323-1000 † Solid | △ 68.25/M' |
| 8212-100 TBO | 5.35 | 8242-1000 | 294.00/M' | 8283* (to customer's specified length) § | 2,250.00/M' | 8307-25 † Solid | △ 2.65 | 8323-25 † Striped | △ 2.80 |
| 8212-500 | 48.00/M' | 8242-500 | 294.00/M' | 8284 (to customer's specified length) § | 675.00/M' | 8307-50 † Solid | △ 4.80 | 8323-50 † Striped | △ 4.95 |
| 8212-1000 | 46.50/M' | 8242-1000 | 294.00/M' | 8285-50 | 2.85 | 8307-100 † Solid | △ 9.00 | 8323-100 † Striped | △ 9.55 |
| 8212-2000 | 46.50/M' | 8242-500 | 294.00/M' | 8285-75 | 4.20 | 8307-250 † Solid | △ 78.75/M' | 8323-250 † Striped | △ 82.15/M' |
| 8213-500 | 111.00/M' | 8242-1000 | 294.00/M' | 8285-100 | 5.40 | 8307-500 † Solid | △ 75.00/M' | 8323-500 † Striped | △ 78.00/M' |
| 8213-1000 | 111.00/M' | 8242-500 | 294.00/M' | 8285-500 | 25.50 | 8307-1000 † Solid | △ 74.25/M' | 8324-25 † Solid | △ 2.50 |
| 8213-2000 | 111.00/M' | 8242-1000 | 294.00/M' | 8285-1000 | 51.00 | 8307-250 † Striped | △ 2.85 | 8324-50 † Solid | △ 4.50 |
| *8214-100 | 12.00 | 8242-500 | 294.00/M' | 8300-25 † Solid | 1.90 | 8307-500 † Striped | △ 5.25 | 8324-100 † Solid | △ 8.25 |
| *8214-500 | 115.50/M' | 8242-1000 | 294.00/M' | 8300-50 † Solid | 3.00 | 8308-25 † Solid | △ 2.70 | 8324-250 † Striped | △ 2.70 |
| *8214-1000 | 115.50/M' | 8242-500 | 294.00/M' | 8300-100 † Solid | 5.25 | 8308-50 † Solid | △ 4.80 | 8324-50 † Striped | △ 4.95 |
| *8215-100 | 11.25 | 8242-1000 | 294.00/M' | 8300-250 † Solid | 47.25/M' | 830 | | | |

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| Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each |
|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|
| 8325-25 † Solid Δ | 2.65 | 8404-50 TBO | 4.05 | 8429-10 | .68 | *8457-100 | 7.50 | 8502-1000† | Solid Δ 9.30 |
| 8325-50 † Solid Δ | 4.50 | 8404-100 | 7.65 | 8429-25 | 1.08 | *8457-500 | 70.50/M' | 8502-100 † | Striped Δ 1.41 |
| 8325-100 † Solid Δ | 8.65 | 8404-250 | 19.50 | 8429-250 | 7.65 | *8457-1000 | 70.50/M' | *8502-500 † | Striped Δ 5.55 |
| 8325-250 † Solid Δ | 75.75/M' | 8404-500 | 38.25 | 8430-10 | .53 | 8460-100 | 2.25 | 8502-1000† | Striped Δ 10.45 |
| 8325-500 † Solid Δ | 72.75/M' | 8404-1000 | 76.50 | 8430-25 | .68 | 8460-500 | 9.90 | 8503-100 † | Solid Δ 1.16 |
| 8325-1000† | Solid Δ 72.00/M' | 8405-15 TBO | 1.90 | 8430-250 | 4.20 | 8460-1000 | 19.20/M' | *8503-500 † | Solid Δ 4.20 |
| 8325-25 † | Striped Δ 2.85 | 8405-50 TBO | 4.95 | 8431-10 | .53 | 8461-100 | 3.15 | 8503-1000† | Solid Δ 7.85 |
| 8325-50 † | Striped Δ 5.40 | 8405-100 TBO | 10.00 | 8431-15 | .66 | 8461-500 | 13.80 | 8503-100 † | Striped Δ 1.28 |
| 8325-100 † | Striped Δ 9.55 | 8405-250 | 23.25 | 8431-25 | 1.01 | 8461-1000 | 27.00/M' | *8503-500 † | Striped Δ 4.80 |
| 8325-250 † | Striped Δ 84.75/M' | 8405-500 | 45.75 | 8431-100 | 3.25 | 8462-25 † | 1.05 | 8503-1000† | Striped Δ 9.00 |
| 8325-500 † | Striped Δ 81.75/M' | 8405-1000 | 91.50 | 8431-500 | 14.70 | 8462-100 † | 2.96 | 8504-100 † | Solid Δ 1.11 |
| 8325-1000† | Striped Δ 81.00/M' | *8406-100 | 9.30 | 8432-100 TBO | 6.40 | 8462-250 † | 6.75 | *8504-500 † | Solid Δ 3.85 |
| 8326-25 † | Solid Δ 2.80 | *8406-250 | 22.50 | 8432-500 | 29.25 | 8464-50 | 1.60 | 8504-1000† | Solid Δ 7.00 |
| 8326-50 † | Solid Δ 4.95 | *8406-500 | 45.00 | 8432-1000 | 58.50/M' | 8464-75 | 2.35 | 8504-100 † | Striped Δ 1.23 |
| 8326-100 † | Solid Δ 9.55 | 8410-15 | 1.35 | 8433-100 TBO | 7.80 | 8464-100 | 2.95 | *8504-500 † | Striped Δ 4.45 |
| 8326-250 † | Solid Δ 81.90/M' | 8410-25 | 2.10 | 8433-500 TBO | 75.00/M' | 8461-500 | 13.50 | 8504-1000† | Striped Δ 8.10 |
| 8326-500 † | Solid Δ 77.70/M' | 8410-50 | 3.90 | 8434-100 ★ | 4.65 | 8464-1000 | 26.25 | 8505-100 † | Solid Δ 1.15 |
| 8326-1000† | Solid Δ 76.50/M' | 8410-100 | 7.35 | 8434-500 ★ | 22.50 | *8465-100 | 6.00 | *8505-500 † | Solid Δ 4.35 |
| 8326-25 † | Striped Δ 3.00 | 8410-250 | 17.25 | 8434-1000★ | 45.00/M' | *8465-500 | 27.75 | 8505-1000† | Solid Δ 8.10 |
| 8326-50 † | Striped Δ 5.40 | 8410-500 | 34.50 | 8436-100 TBO | 4.75 | *8465-1000 | 55.00/M' | 8505-100 † | Striped Δ 1.28 |
| 8326-100 † | Striped Δ 10.45 | 8411-15 | .71 | 8136-500 | 42.00/M' | *8467-100 | 7.80 | *8505-500 † | Striped Δ 4.95 |
| 8326-250 † | Striped Δ 90.50/M' | 8411-25 | 1.01 | 8436-1000 | 42.00/M' | *8467-500 | 36.75 | 8505-1000† | Striped Δ 9.25 |
| 8326-500 † | Striped Δ 86.70/M' | 8411-50 | 1.75 | 8437-100 TBO | 3.85 | *8469-100 | 10.20 | 8506-100 † | Solid Δ 1.80 |
| 8326-1000† | Striped Δ 85.50/M' | 8411-100 | 3.15 | 8437-500 | 36.00/M' | *8469-500 | 48.75 | 8506-1000† | Solid Δ 12.90 |
| 8327-25 † | Solid Δ 3.15 | 8411-250 | 6.70 | 8437-1000 | 36.00/M' | *8469-1000 | 97.50/M' | 8506-100 † | Striped Δ 1.92 |
| 8327-50 † | Solid Δ 5.40 | 8412-15 | 1.53 | 8440-100 TBO | 4.60 | 8470-100 TBO | 2.85 | 8506-1000† | Striped Δ 14.05 |
| 8327-100 † | Solid Δ 10.50 | 8412-25 | 2.35 | 8440-500 | 42.00/M' | 8470-500 | 24.00/M' | 8507-100 † | Solid Δ 1.43 |
| 8327-250 † | Solid Δ 92.25/M' | 8412-50 | 4.30 | 8440-1000 | 42.00/M' | 8470-1000 | 24.00/M' | 8507-1000† | Striped Δ 1.55 |
| 8327-500 † | Solid Δ 87.75/M' | 8412-100 | 8.25 | 8441-100 | 4.50 | 8471-100 TBO | 4.00 | 8507-100 † | Striped Δ 11.70 |
| 8327-1000† | Solid Δ 87.00/M' | 8412-250 | 19.00 | 8441-500 | 21.30 | 8471-500 | 34.20/M' | 8508-100 † | Solid Δ 1.40 |
| 8327-25 † | Striped Δ 3.40 | 8412-500 | 37.90 | 8441-1000 | 42.00/M' | 8471-1000 | 34.20/M' | 8508-1000† | Solid Δ 10.30 |
| 8327-50 † | Striped Δ 5.85 | 8413-15 | 1.50 | *8442-500 | 16.50/M' | 8472-25 | 1.90 | 8508-100 † | Striped Δ 1.52 |
| 8327-100 † | Striped Δ 11.40 | 8413-25 | 2.25 | *8442-1000 | 16.50/M' | 8472-50 | 3.75 | 8508-1000† | Striped Δ 11.40 |
| 8327-250 † | Striped Δ 101.25/M' | 8413-50 | 4.00 | 8443-25 | .83 | 8472-100 | 7.15 | 8509-100 † | Solid Δ 1.37 |
| 8327-500 † | Striped Δ 96.75/M' | 8413-100 | 7.50 | 8443-100 | 2.48 | 8472-250 | 67.50/M' | 8509-1000† | Solid Δ 10.15 |
| 8327-1000† | Striped Δ 96.00/M' | 8413-250 | 18.00 | 8443-500 | 9.40 | *8473-500 | 55.50/M' | 8509-100 † | Striped Δ 1.49 |
| 8328-25 † | Solid Δ 3.15 | 8413-500 | 36.00 | 8443-1000 | 18.75/M' | *8473-1000 | 55.50/M' | 8509-1000† | Striped Δ 11.25 |
| 8328-50 † | Solid Δ 5.40 | 8414-50 | 4.00 | 8444-25 | .98 | 8474-100 | 9.00 | 8510-100 † | Solid Δ 2.10 |
| 8328-100 † | Solid Δ 10.50 | 8415 | 1.15 | 8444-100 | 3.00 | 8474-250 | 85.50 M' | *8510-500 † | Solid Δ 8.95 |
| 8328-250 † | Solid Δ 92.25/M' | 8418-15 TBO | 2.95 | 8444-500 | 12.40 | 8478-25 | 1.65 | 8510-1000† | Solid Δ 17.20 |
| 8328-500 † | Solid Δ 87.75/M' | 8418-50 TBO | 9.00 | 8444-1000 | 24.75/M' | 8478-50 TBO | 2.95 | 8510-100 † | Striped Δ 2.22 |
| 8328-1000† | Solid Δ 87.00/M' | 8418-100 | 18.00 | 8445-25 | 1.16 | 8478-100 | 5.40 | *8510-500 † | Striped Δ 9.55 |
| 8328-25 † | Striped Δ 3.40 | 8418-250 | 45.00 | 8445-100 | 3.70 | 8478-250 | 13.50 | 8510-1000† | Striped Δ 18.20 |
| 8328-50 † | Striped Δ 5.85 | 8419-10 | .75 | 8445-500 | 15.00 | 8478-500 | 54.00/M' | 8511-100 † | Solid Δ 1.80 |
| 8328-100 † | Striped Δ 11.40 | 8419-25 | 1.28 | 8445-1000 | 30.00/M' | 8481-100 | 1.28 | *8511-500 † | Solid Δ 7.35 |
| 8328-250 † | Striped Δ 101.25/M' | 8419-250 | 9.00 | 8446-15 | 1.05 | 8481-500 | 4.65 | 8511-1000† | Solid Δ 14.05 |
| 8328-500 † | Striped Δ 96.75/M' | 8420-15 | 1.50 | 8446-100 | 5.40 | 8481-1000 | 9.00/M' | 8511-100 † | Striped Δ 1.92 |
| 8328-1000† | Striped Δ 96.00/M' | 8420-25 | 2.25 | 8446-500 | 23.25 | 8482-100 | 1.60/M' | *8511-500 † | Striped Δ 7.95 |
| 8329-25 † | Solid Δ 3.75 | 8420-50 | 3.40 | 8446-1000 | 46.50/M' | 8482-500 | 5.85 | 8511-1000† | Striped Δ 15.15 |
| 8329-50 † | Solid Δ 6.90 | 8420-100 | 6.40 | 8447-15 | 1.15 | 8482-1000 | 11.25/M' | 8512-100 † | Solid Δ 1.50 |
| 8329-100 † | Solid Δ 13.50 | 8420-250 | 16.50 | 8447-100 | 6.15 | 8483-1000 | 1.95 | *8512-500 † | Solid Δ 5.85 |
| 8329-250 † | Solid Δ 118.50/M' | 8420-500 | 30.00 | 8447-500 | 26.25 | 8483-500 | 8.25 | 8512-100 † | Striped Δ 1.62 |
| 8329-500 † | Solid Δ 114.00/M' | 8421-15 | .87 | 8447-1000 | 52.50/M' | 8484-1000 | 16.50/M' | *8512-500 † | Striped Δ 5.85 |
| 8329-1000† | Solid Δ 113.25/M' | 8421-25 | 1.20 | 8448-15 | 1.20 | 8484-500 | 3.15 | 8512-1000† | Striped Δ 12.30 |
| 8329-25 † | Striped Δ 4.00 | 8421-50 | 3.75 | 8448-100 | 6.40 | 8484-1000 | 13.90 | 8513-100 † | Solid Δ 1.43 |
| 8329-50 † | Striped Δ 7.35 | 8421-250 | 8.50 | 8448-500 | 29.25 | 8485-1000 | 27.75/M' | *8513-500 † | Solid Δ 5.55 |
| 8329-100 † | Striped Δ 14.40 | 8421-500 TBO | 18.00 | 8448-1000 | 58.50/M' | 8485-100 | 3.70 | 8513-1000† | Solid Δ 10.45 |
| 8329-250 † | Striped Δ 127.50/M' | 8422-15 | 1.15 | 8449-15 | 1.30 | 8485-500 | 17.00 | 8513-100 † | Striped Δ 1.55 |
| 8329-500 † | Striped Δ 123.00/M' | 8422-25 | 1.75 | 8449-100 | 7.15 | 8485-1000 | 34.00/M' | *8513-500 † | Striped Δ 6.15 |
| 8329-1000† | Striped Δ 122.50/M' | 8422-50 | 3.25 | 8449-500 | 32.25 | 8486-500 TBO | 2.10 | 8513-1000† | Striped Δ 11.55 |
| 8330-25 † | Solid Δ 4.50 | 8422-100 | 5.85 | 8449-1000 | 64.50/M' | 8486-1000 | 18.00/M' | 8514-100 † | Solid Δ 1.32 |
| 8330-50 † | Solid Δ 9.00 | 8422-250 | 13.15 | 8450-100 ★ | 2.55 | 8487-100 | 2.65 | *8514-500 † | Solid Δ 4.95 |
| 8330-100 † | Solid Δ 16.50 | 8422-500 | 26.25 | 8450-500 ★ | 10.50 | 8487-500 | 23.10/M' | 8514-1000† | Solid Δ 9.40 |
| 8330-250 † | Solid Δ 144.75/M' | 8523-15 | 1.80 | 8450-1000★ | 21.00/M' | 8488-1000 | 4.50 | 8514-100 † | Striped Δ 1.44 |
| 8330-500 † | Solid Δ 136.50/M' | 8423-50 | 4.80 | 8451-100 ★ | 3.00 | 8488-500 | 21.00 | *8514-500 † | Striped Δ 5.55 |
| 8330-1000† | Solid Δ 135.00/M' | 8423-100 | 9.30 | 8451-1000★ | 17.80 | 8488-1000 | 40.50/M' | 8515-100 † | Solid Δ 1.41 |
| 8330-25 † | Striped Δ 4.75 | 8423-250 | 22.50 | 8451-500 ★ | 13.80 | 8492-100 † | 1.80 | *8515-500 † | Solid Δ 5.48 |
| 8330-50 † | Striped Δ 9.45 | 8423-500 | 45.00 | 8451-1000★ | 27.00/M' | 8492-500 † | 7.15 | 8515-1000† | Solid Δ 10.45 |
| 8330-100 † | Striped Δ 17.40 | 8423-1000 | 90.00 | 8452-15 | .98 | 8493-1000† | 13.90/M' | 8515-100 † | Striped Δ 1.53 |
| 8330-250 † | Striped Δ 153.75/M' | 8424-15 | 1.95 | 8452-25 | 1.50 | 8493-100 † | 2.25 | *8515-500 † | Striped Δ 6.10 |
| 8330-500 † | Striped Δ 145.50/M' | 8424-50 | 5.65 | 8452-50 | 2.50 | 8493-500 † | 9.90 | 8515-1000† | Striped Δ 11.55 |
| 8330-1000† | Striped Δ 144.00/M' | 8424-100 | 10.60 | 8452-100 | 4.45 | 8493-1000† | 21.00/M' | 8516-100 † | Solid Δ 2.03 |
| 8401-15 | .87 | 8424-250 | 25.65 | 8452-250 | 10.35 | *8494 | 1.19 | 8516-1000† | Solid Δ 15.60 |
| 8401-25 | 1.20 | 8424-500 | 51.30 | 8452-500 | 20.65 | *8495 | 1.01 | 8516-100 † | Striped Δ 2.15 |
| 8401-50 | 2.35 | 8424-1000 | 102.60 | 8452-1000 | 39.75 | *8496 | 1.01 | 8517-100 † | Striped Δ 17.10 |
| 8401-100 | 4.30 | 8425-15 TBO | 2.25 | 8453-15 | 1.20 | *8497 | 1.16 | 8517-1000† | Solid Δ 1.73 |
| 8401-250 | 9.00 | 8425-50 TBO | 6.70 | 8453-100 | 3.15 | *8498 | .72 | 8518-100 † | Striped Δ 13.30 |
| 8401-500 | 18.00 | 8425-100 | 13.20 | 8453-500 | 6.30 | *8499 | .74 | 8518-1000† | Solid Δ 1.85 |
| 8403-15 | 1.45 | 8425-250 | 32.25 | 8453-1000 | 31.50 | 8500-100 † | 1.65 | 8518-100 † | Solid Δ 14.40 |
| 8403-50 | 3.60 | 8426-15 TBO | 2.70 | 8454-15 | 1.45 | *8500-500 † | Solid 6.90 | 8518-1000† | Striped Δ 1.71 |
| 8403-100 | 6.75 | 8426-50 TBO | 8.20 | 8454-50 | 3.75 | 8500-1000† | Solid 13.00 | 8518-100 † | Solid Δ 13.15 |
| 8403-250 | 16.50 | 8426-100 | 15.75 | 8454-100 | 7.20 | 8500-100 † | Striped Δ 1.77 | 8518-1000† | Striped Δ 1.83 |
| 8403-500 | 33.75 | 8426-250 | 39.45 | 8454-500 | 34.50 | *8500-500 † | Striped Δ 7.50 | 8518-1000† | Striped Δ 14.25 |
| 8403-1000 | 67.50 | 8427-15 TBO | 2.95 | 8454-1000 | 69.00/M' | 8500-100 † | Striped Δ 14.10 | 8519-100 † | Solid Δ 1.52 |
| 8404-15 | 1.50 | 8427-50 TBO | 8.85 | 8455-15 TBO | 1.50 | 8501-500 † | Solid 5.40 | 8519-1000† | Solid Δ 11.50 |
| 8404-50 | 3.60 | 8427-100 | 17.25 | 8455-50 TBO | 4.05 | 8501-1000† | Solid 10.20 | 8519-100 † | Striped Δ 1.64 |
| 8404-100 | 6.75 | | | | | | | | |

BELDEN • PRICE LIST

| Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each |
|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|--|---------------------------|
| *8521-1000† Solid | 11.85 | *8537-500 † Solid | 5.50 | *8568-500 † Striped | 3.40 | *8591-500 † Solid | 44.25 | 8734-1000 | 32.25/M' |
| *8521-100 † Striped | 1.70 | *8537-1000† Solid | 9.55 | *8568-1000† Striped | 7.35 | *8591-1000† Solid | 88.50 | 8735-15 | .87 |
| *8521-500 † Striped | 6.70 | *8537-100 † Striped | 1.32 | *8569-100 † Solid | .90 | *8594-100 † Solid | 1.28 | 8735-50 | 2.30 |
| *8521-1000† Striped | 13.00 | *8537-500 † Striped | 6.10 | *8569-500 † Solid | 3.15 | *8594-500 † Solid | 5.95 | 8735-100 | 4.30 |
| 8522-25 † Solid | .48 | *8537-1000† Striped | 10.65 | *8569-1000† Solid | 5.85 | *8594-1000† Solid | 9.90 | 8735-500 | 19.15 |
| 8522-100 † Solid | 1.23 | *8541-10G | 1.65 | *8569-100 † Striped | 1.02 | *8594-100 † Striped | 1.40 | 8735-1000 | 38.25/M' |
| *8522-500 † Solid | 4.80 | *8541-500 | 7.05 | *8569-500 † Striped | 3.75 | *8594-500 † Striped | 6.55 | 8737-100 | 3.40 |
| 8522-1000† Solid | 9.10 | *8541-1000 | 11.65 | *8569-1000† Striped | 7.05 | *8594-1000† Striped | 11.05 | 8737-500 | 13.50 |
| 8522-100 † Striped | 1.35 | *8542-100 | 1.80 | *8570-100 † Solid | .75 | *8595-100 † Solid | 1.35 | 8737-1000 | 27.00/M' |
| *8522-500 † Striped | 5.40 | *8542-500 | 7.80 | *8570-500 † Solid | 3.00 | *8595-500 † Solid | 5.70 | 8738-100 | 2.55 |
| 8522-1000† Striped | 10.20 | *8542-1000 | 13.20 | *8570-1000† Solid | 5.40 | *8595-1000† Solid | 10.50 | 8738-500 | 10.50 |
| 8523-25 † Solid | .48 | *8543-100 | 2.10 | *8570-100 † Striped | .87 | *8596-100 † Solid | 1.38 | 8738-1000 | 21.00/M' |
| 8523-100 † Solid | 1.05 | *8543-500 | 9.60 | *8570-500 † Striped | 3.60 | *8596-500 † Solid | 6.60 | 8739-100 | 2.95 |
| *8523-500 † Solid | 3.90 | *8543-1000 | 17.70 | *8570-1000† Striped | 6.55 | *8596-1000† Solid | 11.10 | 8739-500 | 11.25 |
| 8523-1000† Solid | 7.15 | *8544-100 | 2.40 | *8571-100 † Solid | .71 | *8596-1000† Solid | 11.10 | 8739-1000 | 22.50/M' |
| *8523-100 † Striped | 1.17 | *8544-500 | 11.25 | *8571-500 † Solid | 2.70 | *8597-100 † Solid | 1.05 | 8740-100 | 1.80 |
| *8523-500 † Striped | 4.50 | *8544-1000 | 20.85 | *8571-1000† Solid | 4.95 | *8597-500 † Solid | 4.35 | 8740-500 | 6.60 |
| 8523-1000† Striped | 8.25 | *8545-100 | 4.05 | *8571-100 † Striped | .85 | *8597-1000† Striped | 1.17 | 8740-1000 | 12.75/M' |
| 8524-25 † Solid | .39 | *8545-500 | 19.50 | *8571-500 † Striped | 3.30 | *8597-500 † Striped | 4.95 | 8741-100 | 2.95 |
| 8524-100 † Solid | .93 | *8545-1000 | 37.50 | *8571-1000† Striped | 6.10 | *8597-1000† Striped | 9.00 | 8741-500 | 12.00 |
| *8524-500 † Solid | 3.25 | *8546-100 | 6.30 | *8572-100 † Solid | .75 | *8598-100 † Solid | 1.13 | 8741-1000 | 23.25/M' |
| 8524-1000† Solid | 5.85 | *8546-500 | 29.40 | *8572-500 † Solid | 2.80 | *8598-500 † Solid | 4.65 | 8742-100 | 3.90 |
| 8524-100 † Striped | 1.05 | *8546-1000 | 58.05 | *8572-1000† Solid | 5.25 | *8598-1000† Solid | 8.40 | 8742-500 | 16.50 |
| *8524-500 † Striped | 3.85 | *8547-100 | 105.00 | 8573 (Per Box) | 1.50 | *8599-100 † Solid | 1.20 | 8742-1000 | 32.25/M' |
| 8524-1000† Striped | 7.00 | *8547-500 | 525.00 | *8574-100 † Solid | 1.35 | *8599-500 † Solid | 5.05 | 8743-100 | 6.00 |
| 8525-100 † Solid | .93 | *8547-1000 | 990.00 | *8574-500 † Solid | 5.40 | *8599-1000† Solid | 9.15 | 8743-500 | 27.75 |
| *8525-500 † Solid | 2.95 | *8548-100 | 90.00 | *8574-1000† Solid | 10.35 | 8650-100 | TBO | 8743-1000 | 55.50/M' |
| 8525-1000† Solid | 5.25 | *8548-500 | 427.50 | *8574-100 † Striped | 1.47 | 8651-100 | TBO | 8744-100 | 8.10 |
| *8525-100 † Striped | 1.05 | *8548-1000 | 855.00 | *8574-500 † Striped | 6.00 | 8652-100 | TBO | 8744-500 | 38.65 |
| *8525-500 † Striped | 3.55 | *8549-100 | 49.50 | *8574-1000† Striped | 11.50 | 8656-100 | TBO | 8744-1000 | 77.25/M' |
| 8525-1000† Striped | 6.40 | *8549-500 | 240.00 | *8575-100 † Solid | 1.24 | 8660-10 | 5.25 | 8745-100 | 13.95 |
| 8526-100 † Solid (TBO) | 6.35 | *8549-1000 | 465.00 | *8575-500 † Solid | 4.50 | 8660-50 | 1.50 | 8745-500 | 67.50 |
| 8526-1000† Solid (TBO) | 51.60 | *8550-100 | 33.00 | *8575-1000† Solid | 8.55 | 8660-250 | 6.75 | 8746-1000 | 133.50/M' |
| 8527-100 † Solid | 2.85 | *8550-500 | 161.25 | *8575-500 † Striped | 1.37 | 8661-10 | .68 | 8746 (to customer's specified length)§ | 247.50/M' |
| *8527-500 † Solid | 12.75 | *8550-1000 | 315.00 | *8575-500 † Striped | 5.10 | 8661-50 | 2.35 | 8747-100 | 8.25 |
| 8527-1000† Solid | 24.00 | *8551-100 | 25.50 | *8575-1000† Striped | 3.70 | 8661-250 | 10.50 | 8747-500 | 37.50 |
| *8527-100 † Striped | 2.95 | *8551-500 | 121.50 | *8576-100 † Solid | 1.17 | 8662-10 | 1.58 | 8747-1000 | 75.00/M' |
| *8527-500 † Striped | 13.30 | *8551-1000 | 240.00 | *8576-500 † Solid | 3.90 | 8662-50 | 7.05 | 8748-100 | 37.50 |
| *8527-1000† Striped | 25.15 | *8552-100 | 16.50 | *8576-1000† Solid | 7.30 | 8662-250 | 34.50 | 8748-1000 | 11.40 |
| 8528-100 † Solid | 1.15 | *8552-500 | 82.50 | *8576-100 † Striped | 1.29 | 8663-10 | .60 | 8748-500 | 54.00 |
| *8528-500 † Solid | 4.05 | *8552-1000 | 150.00 | *8576-500 † Striped | 4.50 | 8663-50 | 1.90 | 8748-1000 | 108.00/M' |
| 8528-1000† Solid | 7.50 | *8553-100 | 9.00 | *8576-1000† Striped | 8.40 | 8663-250 | 8.25 | 8749-100 | 19.50 |
| *8528-100 † Striped | 1.25 | *8553-500 | 42.00 | *8577-100 † Solid | .90 | 8666-100 | 5.85 | 8749-500 | 90.00 |
| *8528-500 † Striped | 4.60 | *8553-1000 | 82.50 | *8577-500 † Solid | 3.55 | 8668-10 | .69 | 8749-1000 | 180.00/M' |
| *8528-1000† Striped | 8.65 | *8554-100 | 5.25 | *8577-1000† Solid | 6.70 | 8668-50 | 2.06 | 8750 (to customer's specified length)§ | 337.50/M' |
| 8529-25 † Solid | .44 | *8554-500 | 25.50 | *8577-100 † Striped | 1.02 | 8668-250 | 9.00 | 8751 (to customer's specified length)§ | 735.00/M' |
| 8529-100 † Solid | .96 | *8554-1000 | 48.75 | *8577-500 † Striped | 4.15 | 8669-10 | 1.20 | 8753-100 | 10.95 |
| *8529-500 † Solid | 3.00 | *8555-100 | 3.75 | *8577-1000† Striped | 7.80 | 8669-50 | 5.50 | 8753-500 | 52.50 |
| 8529-1000† Solid | 5.40 | *8555-500 | 19.50 | *8578-100 † Solid | .98 | 8669-250 | 2.40 | 8753-1000 | 105.00/M' |
| 8529-100 † Striped | 1.08 | *8555-1000 | 36.00 | *8578-500 † Solid | 3.70 | *8670-10 | 10.65 | 8754-100 | 12.40 |
| *8529-500 † Striped | 3.60 | *8556-100 | 2.85 | *8578-1000† Solid | 6.85 | *8670-250 | 51.30 | 8754-500 | 59.25 |
| 8529-1000† Striped | 6.55 | *8556-500 | 12.75 | *8578-100 † Striped | .95 | *8671-10 | 2.25 | 8754-1000 | 118.50/M' |
| 8530-25 † Solid | .36 | *8556-1000 | 25.05 | *8578-500 † Striped | 4.30 | *8671-50 | 10.15 | 8755-100 | 19.50 |
| 8530-100 † Solid | .74 | *8557-100 | 2.40 | *8578-1000† Striped | 7.95 | *8671-250 | 48.75 | 8755-1000 | 92.25 |
| *8530-500 † Solid | 2.55 | *8557-500 | 12.00 | *8579-100 † Solid | .98 | *8672-10 | 1.60 | 8755-500 | 92.25 |
| 8530-1000† Solid | 4.50 | *8557-1000 | 22.95 | *8579-500 † Solid | 3.70 | *8672-50 | 6.70 | 8755-1000 | 184.50/M' |
| *8530-500 † Striped | .86 | *8558-100 | 1.95 | *8579-1000† Solid | 7.05 | *8672-250 | 30.75 | 8756-100 | 23.25 |
| *8530-1000† Striped | 3.15 | *8558-500 | 9.15 | *8580-100 † Solid | 24.00 | 8673-100 | 9.30 | 8756-500 | 108.00 |
| *8531-100 † Solid | 1.35 | *8558-1000 | 18.00 | *8580-500 † Solid | 112.50 | 8673-500 | 90.00/M' | 8756-1000 | 216.00/M' |
| *8531-500 † Solid | 5.25 | *8559-100 | 1.90 | *8580-1000† Solid | 225.00 | *8674-10 | 1.56 | 8757-500 | 41.25/M' |
| *8531-1000† Solid | 10.15 | *8559-500 | 9.00 | *8581-100 † Solid | 19.50 | *8674-50 | 3.35 | 8757-1000 | 41.25/M' |
| *8531-100 † Striped | 1.47 | *8559-1000 | 16.50 | *8581-500 † Solid | 90.00 | *8674-250 | 6.00 | 8758-100 | 3.00 |
| *8531-500 † Striped | 5.85 | *8561-100 | 6.75 | *8581-1000† Solid | 180.00 | 8675-100 | 7.45 | 8758-500 | 13.90 |
| *8531-1000† Striped | 11.25 | *8561-500 | 31.50 | *8582-100 † Solid | 8.25 | 8675-500 | 69.00/M' | 8758-1000 | 27.75/M' |
| *8532-100 † Solid | 5.10 | *8561-1000 | 60.00 | *8582-500 † Solid | 37.50 | *8676-10 | .50 | 8759-100 | 3.75 |
| *8532-500 † Solid | 22.50 | *8562-100 | 3.75 | *8582-1000† Solid | 75.00 | *8676-50 | .50 | 8759-500 | 17.25 |
| *8532-1000† Solid | 43.50 | *8562-500 | 18.00 | *8583-100 † Solid | 5.25 | *8676-250 | 4.20 | 8759-1000 | 34.50/M' |
| *8533-100 † Solid | 3.75 | *8562-1000 | 33.00 | *8583-500 † Solid | 22.50 | 8677-100 | 5.70 | 8760-500 ★ | 37.50/M' |
| *8533-500 † Solid | 16.50 | *8563-100 | 3.40 | *8583-1000† Solid | 45.00 | 8677-500 | 54.00/M' | 8760-1000★ | 37.50/M' |
| *8533-1000† Solid | 30.00 | *8563-500 | 14.65 | *8584-100 † Solid | 4.05 | 8680-100 | 14.40 | 8761-500★ | 24.00/M' |
| *8534-100 † Solid | 2.70 | *8563-1000 | 27.75 | *8584-500 † Solid | 16.50 | 8681-100 | 10.35 | 8761-1000★ | 24.00/M' |
| *8534-500 † Solid | 12.00 | *8564-100 | 2.63 | *8584-1000† Solid | 33.00 | 8682-100 | 5.25 | 8762-100 ★ | 3.45 |
| *8534-1000† Solid | 22.50 | *8564-500 | 12.00 | *8585-100 † Solid | 2.70 | 8683-100 | 3.75 | 8762-500 ★ | 15.75 |
| *8534-100 † Striped | 2.85 | *8565-100 | 2.25 | *8585-500 † Solid | 9.75 | 8684-100 | 2.65 | 8762-1000★ | 31.50/M' |
| *8534-500 † Striped | 12.60 | *8565-500 | 9.75 | *8586-100 † Solid | 2.25 | 8685-100 | 2.05 | 8763-100 ★ TBO | 4.45 |
| *8534-1000† Striped | 23.65 | *8565-1000 | 15.00 | *8586-500 † Solid | 7.50 | 8722-100 ★ TBO | 5.25 | 8763-500 ★ | 36.00/M' |
| *8535-100 † Solid | 2.25 | *8566-100 | 1.80 | *8586-1000† Solid | 15.00 | 8722-500★ | 48.00/M' | 8763-1000★ | 36.00/M' |
| *8535-500 † Solid | 9.75 | *8566-500 | 8.10 | *8587-100 † Solid | 1.20 | 8722-1000★ | 48.00/M' | 8764-100 ★ | 18.00 |
| *8535-1000† Solid | 18.00 | *8566-1000 | 15.00 | *8587-500 † Solid | 5.65 | *8723-100 ★ | 4.65 | 8764-500 ★ | 180.00/M' |
| *8535-100 † Striped | 2.37 | *8567-100 † Solid | 1.05 | *8587-1000† Solid | 11.25 | *8723-500★ | 22.50 | 8764-1000★ | 180.00/M' |
| *8535-500 † Striped | 10.35 | *8567-500 † Solid | 4.15 | *8588-100 † Solid | 1.05 | 8731-1000★ | 45.00 | 8765-100 ★ | 20.25 |
| *8535-1000† Striped | 19.15 | *8567-1000† Solid | 6.75 | *8588-500 † Solid | 4.80 | 8731-100 TBO | 3.15 | 8765-500 ★ | 202.50/M' |
| *8536-100 † Solid | 1.35 | *8567-500 † Striped | 1.17 | *8589-100 † Solid | 21.75 | 8731-500 | 28.50/M' | 8766-1000★ | 28.50 |
| *8536-500 † Solid | 6.15 | *8567-1000† Striped | 4.75 | *8589-500 † Solid | 105.00 | 8732-1000 | 42.75/M' | 8766-500 ★ | 285.00/M' |
| *8536-1000† Solid | 10.80 | *8567-1000† Striped | 7.90 | *8589-1000† Solid | 210.00 | 8732-500 | 42.75/M' | 8766-1000★ | 285.00/M' |
| *8536-100 † Striped | 1.47 | *8568-100 † Solid | 1.90 | *8590-100 † Solid | 16.50 | 8732-1000 | 42.75/M' | 8767-100 ★ | 6.60 |
| *8536-500 † Striped | 6.75 | *8568-500 † Solid | 3.40 | *8590-500 † Solid | 78.00 | *8733-100 ★ | 3.75 | 8767-500 ★ | 66.00/M' |
| *8536-1000† Striped | 11.95 | *8568-1000† Solid | 6.25 | | | | | | |

BELDEN • PRICE LIST

| Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each | Trade Number Lgth. in Ft. | Sug. Resale Price Each |
|---|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|
| *8769-100 ★ | 47.25 | *8855-100 | 4.50 | 8899-14 | .60 | *8956-100 † Striped | 3.87 | *8970-1000 † Striped | 24.00 |
| *8769-500 ★ | 472.50/M' | *8855-500 | 21.75 | 8899-25 † | .83 | *8956-500 † Striped | 19.00 | *8971-100 † Solid | 2.10 |
| *8769-1000 ★ | 472.50/M' | *8855-1000 | 42.00 | 8899-100 † | 2.40 | *8956-1000 † Striped | 37.15 | *8971-500 † Solid | 10.50 |
| 8770-500 ★ | 47.25/M' | *8858-100 | 7.50 | 8899-500 † | 10.15 | *8957-100 † Solid | 2.55 | *8971-1000 † Solid | 20.10 |
| 8770-1000 ★ | 47.25/M' | *8858-500 | 36.00 | 8899-1000 † | 20.25 | *8957-500 † Solid | 12.40 | *8971-100 † Striped | 2.22 |
| 8771-500 ★ | 30.00/M' | *8858-1000 | 71.25 | 8916-100 † | 2.80 | *8957-1000 † Solid | 24.00 | *8971-500 † Striped | 11.10 |
| 8771-1000 ★ | 30.00/M' | *8859-100 | 6.00 | 8916-500 † | 11.65 | *8957-100 † Striped | 2.67 | *8971-1000 † Striped | 21.10 |
| 8772-500 ★ | 37.50/M' | *8859-500 | 28.50 | 8917-100 † | 2.10 | *8957-500 † Striped | 13.00 | *8972-100 † Solid | 1.75 |
| 8772-1000 ★ | 37.50/M' | *8859-1000 | 56.25 | 8917-500 † | 8.70 | *8957-1000 † Striped | 25.15 | *8972-500 † Solid | 8.25 |
| *8773 ★ (to customer's specified length) § | 637.50/M' | *8860-100 | 5.25 | 8918-100 † | 1.65 | *8958-100 † Solid | 2.03 | *8972-1000 † Solid | 16.15 |
| 8779-100 TBO | 5.25 | *8860-500 | 24.00 | 8918-1000 † | 12.45 | *8958-500 † Solid | 9.75 | *8972-100 † Striped | 1.85 |
| 8779-500 | 49.50/M' | *8860-1000 | 46.80 | 8919-100 † | 1.34 | *8958-1000 † Solid | 18.75 | *8972-500 † Striped | 8.85 |
| 8779-1000 | 49.50/M' | *8861-100 | 4.50 | 8919-1000 † | 10.35 | *8958-100 † Striped | 2.14 | *8972-1000 † Striped | 17.25 |
| 8780-100 | 5.70 | *8861-500 | 19.50 | 8920-100 † | 1.23 | *8958-500 † Striped | 10.35 | | |
| 8780-500 | 27.00 | *8861-1000 | 37.50 | 8920-1000 † | 9.15 | *8959-100 † Solid | 1.65 | | |
| 8780-1000 | 54.00/M' | *8862-100 | 3.75 | 8933-100 † | 3.45 | *8959-500 † Solid | 7.25 | | |
| 8782-25 | .53 | *8862-500 | 17.25 | 8933-500 † | 15.75 | *8959-1000 † Solid | 15.00 | | |
| 8782-58 | .78 | *8862-1000 | 33.75 | 8934-100 † | 2.25 | *8959-100 † Striped | 1.77 | | |
| 8782-100 | 1.23 | *8863-100 | 3.40 | 8934-500 † | 9.50 | *8959-500 † Striped | 7.75 | | |
| 8782-500 | 9.00/M' | *8863-500 | 16.50 | 8935-100 † | 1.88 | *8959-1000 † Striped | 16.15 | | |
| 8782-1000 | 9.00/M' | *8863-1000 | 31.50 | 8935-1000 † | 15.00 | *8960-100 † Solid | 1.35 | | |
| 8783-100 | 4.50 | 8868-25 | .75 | 8936-100 † | 1.50 | *8960-500 † Solid | 6.40 | | |
| 8783-500 | 42.00/M' | 8868-100 | 1.90 | 8936-1000 † | 11.55 | *8960-1000 † Solid | 12.00 | | |
| 8785-100 TBO | 5.25 | 8868-500 | 9.00 | 8937-100 † | 1.38 | *8960-100 † Striped | 1.47 | | |
| 8785-500 | 49.50/M' | *8869-25 | .68 | 8937-1000 † | 10.35 | *8960-500 † Striped | 7.00 | | |
| 8786-100 | 5.75 | *8869-100 | 1.65 | 8938-100 † | 2.95 | *8960-1000 † Striped | 13.00 | | |
| 8786-500 | 55.50/M' | *8869-500 | 7.50 | 8938-500 † | 12.90 | *8961-100 † Solid | 1.28 | | |
| 8787-100 TBO | 19.20 | 8874 | .54 | 8941-25 † | .63 | *8961-500 † Solid | 5.85 | | |
| 8787-500 | 187.50/M' | 8875 | .41 | 8941-100 † | 1.62 | *8961-1000 † Solid | 10.80 | | |
| 8789-100 TBO | 4.30 | 8878 | 2.25 pr | 8941-1000 † | 12.00 | *8961-100 † Striped | 1.40 | | |
| 8789-500 | 19.35 | 8879 | .98 pr | 8942-100 † | 2.20 | *8961-500 † Striped | 6.45 | | |
| 8789-1000 | 38.70/M' | *8880-100 † | 6.00 | 8942-1000 † | 18.75 | *8961-1000 † Striped | 11.95 | | |
| 8790-100 | 4.45 | *8880-500 † | 29.25 | 8943-25 † | .63 | *8963-100 † Solid | 21.75 | | |
| 8790-500 | 20.00 | *8880-1000 † | 57.00 | 8943-100 † | 1.65 | *8963-500 † Solid | 106.50 | | |
| 8790-1000 | 40.00/M' | *8881-100 † | 4.87 | 8943-1000 † | 12.80 | *8963-1000 † Solid | 210.00 | | |
| 8791-100 | 5.40 | *8881-500 † | 23.25 | 8945-25 † | .60 | *8963-100 † Striped | 21.90 | | |
| 8791-500 | 25.20 | *8882-100 † | 3.00 | 8945-100 † | 1.73 | *8963-500 † Striped | 107.10 | | |
| 8791-1000 | 50.40/M' | *8882-500 † | 14.25 | 8945-1000 † | 14.20 | *8963-1000 † Striped | 211.15 | | |
| *8792-100 | 25.50 | *8882-1000 † | 27.60 | 8947-25 † | .63 | *8964-100 † Solid | 18.75 | | |
| *8792-500 | 255.00/M' | *8883-100 † | 2.25 | 8947-100 † | 1.88 | *8964-500 † Solid | 93.00 | | |
| *8792-1000 | 255.00/M' | *8883-500 † | 10.50 | 8947-1000 † | 15.90 | *8964-1000 † Solid | 184.50 | | |
| *8793 (to customer's specified length) § | 562.50/M' | *8883-1000 † | 20.25 | *8950-100 † Solid | 3.30 | *8964-100 † Striped | 18.90 | | |
| 8799-100 TBO | 4.50 | 8884-100 † | 3.90 | *8950-500 † Solid | 15.75 | *8964-500 † Striped | 93.60 | | |
| 8799-500 | 43.50/M' | 8884-500 † | 18.75 | *8950-1000 † Solid | 30.75 | *8964-1000 † Striped | 185.65 | | |
| 8799-1000 | 43.50/M' | *8884-1000 † | 36.75 | *8950-100 † Striped | 3.45 | | | | |
| 8800 | .83 | 8885-15 | .69 | *8950-500 † Striped | 16.35 | *8965-100 † Solid | 10.15 | | |
| 8817-100 | .30 | 8885-25 | 1.02 | *8951-100 † Solid | 2.18 | *8965-500 † Solid | 49.50 | | |
| 8818 | 5.04 | 8885-100 | 3.15 | *8951-500 † Solid | 10.50 | *8965-1000 † Solid | 97.50 | | |
| 8819 | 8.10 | 8885-500 | 29.25/M' | *8951-1000 † Solid | 19.50 | *8965-100 † Striped | 10.25 | | |
| 8820 | 5.04 | 8886-15 | .66 | *8951-1000 † Striped | 2.30 | *8965-500 † Striped | 50.10 | | |
| 8821 | 8.25 | 8886-25 | .96 | *8951-500 † Striped | 2.30 | *8965-1000 † Striped | 98.65 | | |
| 8822 | 4.40 | 8886-100 | 2.65 | *8951-1000 † Striped | 11.10 | *8966-100 † Solid | 7.20 | | |
| 8823 | 4.80 | *8886-500 † | 12.00 | *8951-1000 † Striped | 20.65 | *8966-500 † Solid | 50.65 | | |
| 8824 | 3.84 | *8887-100 † | 2.25 | *8952-100 † Solid | 1.65 | *8966-1000 † Solid | 70.50 | | |
| 8825 | 7.63 | *8887-500 † | 19.50 | *8952-500 † Solid | 7.90 | *8966-1000 † Striped | 7.32 | | |
| 8826 | 7.48 | *8888-100 † | 22.50 | *8952-1000 † Solid | 15.00 | *8966-500 † Striped | 51.25 | | |
| 8827 | 8.55 | *8887-100 † | 2.25 | *8952-500 † Striped | 1.77 | *8966-1000 † Striped | 71.65 | | |
| 8828 TBO | 19.00 | *8888-25 † | 5.25 | *8952-1000 † Striped | 8.50 | *8967-100 † Solid | 4.95 | | |
| 8829 TBO | 21.00 | *8888-100 † | 2.25 | *8952-500 † Striped | 16.15 | *8967-500 † Solid | 24.40 | | |
| 8830 TBO | 24.00 | *8889-25 † | 8.66 | *8953-100 † Solid | 1.20 | *8967-1000 † Solid | 48.00 | | |
| 8831 TBO | 26.50 | *8889-100 † | 2.25 | *8953-500 † Solid | 5.85 | *8967-500 † Striped | 5.10 | | |
| *8850-100 | 9.90 | *8889-250 † | 5.25 | *8953-1000 † Solid | 11.40 | *8967-1000 † Striped | 25.00 | | |
| *8850-500 | 49.50 | *8892-100 † | 5.25 | *8953-100 † Striped | 1.32 | *8968-100 † Solid | 49.15 | | |
| *8850-1000 | 96.00 | *8892-500 † | 25.50 | *8953-500 † Striped | 6.45 | *8968-500 † Solid | 3.60 | | |
| *8851-100 | 9.00 | *8892-1000 † | 48.75 | *8953-1000 † Striped | 12.55 | *8968-1000 † Solid | 17.25 | | |
| *8851-500 | 42.00 | *8893-100 | 3.40 | *8954-100 † Solid | .98 | *8969-100 † Solid | 3.00 | | |
| *8851-1000 | 82.50 | *8893-500 | 19.50 | *8954-500 † Solid | 4.50 | *8969-500 † Solid | 14.65 | | |
| *8852-100 | 7.50 | *8893-1000 | 38.25 | *8954-1000 † Solid | 8.85 | *8969-1000 † Solid | 28.50 | | |
| *8852-500 | 34.50 | *8894-100 | 6.00 | *8954-1000 † Striped | 1.10 | *8969-100 † Striped | 3.12 | | |
| *8852-1000 | 67.50 | *8894-500 | 29.25 | *8954-500 † Striped | 5.10 | *8969-500 † Striped | 15.25 | | |
| *8853-100 | 5.40 | *8894-1000 | 57.00 | *8954-1000 † Striped | 10.00 | *8969-1000 † Striped | 29.70 | | |
| *8853-500 | 26.25 | *8895-1 | .38 | *8954-1000 † Striped | .90 | *8970-100 † Solid | 2.40 | | |
| *8853-1000 | 51.00 | *8895-100 | .23 | *8955-100 † Solid | 4.15 | *8970-500 † Solid | 11.70 | | |
| *8854-100 | 5.10 | *8895-500 | 4.50 | *8955-500 † Solid | 7.50 | *8970-1000 † Solid | 22.90 | | |
| *8854-500 | 24.00 | *8896-100 | 20.25 | *8955-1000 † Solid | 1.02 | *8970-100 † Striped | 2.52 | | |
| *8854-1000 | 47.25 | *8896-500 | 39.75 | *8955-100 † Striped | 4.75 | *8970-500 † Striped | 12.30 | | |
| | | 8898-10 † | .72 | *8955-500 † Striped | 8.65 | | | | |
| | | 8898-25 † | 1.28 | *8956-100 † Solid | 3.75 | | | | |
| | | 8898-100 † | 3.60 | *8956-500 † Solid | 18.40 | | | | |
| | | 8898-500 † | 16.35 | *8956-1000 † Solid | 36.00 | | | | |
| | | 8899-10 † | .48 | | | | | | |

**BELDENAMEL
(Magnet Wire)**

| Size | Trade Number | Suggested Dealer Price Each |
|-----------------------|--------------|-----------------------------|
| 1/4 LB. SPOOLS | | |
| 28 | 8040 | .54 |
| 30 | 8041 | .57 |
| 32 | 8042 | .59 |
| 34 | 8043 | .60 |
| 36 | 8044 | .69 |
| 38 | 8045 | .90 |
| 40 | 8046 | 1.19 |
| 1/2 LB. SPOOLS | | |
| 14 | 8047 | .68 |
| 16 | 8048 | .68 |
| 18 | 8049 | .68 |
| 20 | 8050 | .68 |
| 22 | 8051 | .72 |
| 24 | 8052 | .74 |
| 26 | 8053 | .81 |
| 28 | 8054 | .87 |
| 30 | 8055 | .95 |
| 32 | 8056 | .99 |
| 34 | 8057 | 1.02 |
| 36 | 8058 | 1.22 |







NYLCLAD (MNC)

| Size | Trade Number | Suggested Dealer Price Each |
|-----------------------|--------------|-----------------------------|
| 1/2 LB. SPOOLS | | |
| 14 | 8059 | .68 |
| 16 | 8060 | .68 |
| 18 | 8061 | .68 |
| 20 | 8062 | .68 |
| 22 | 8063 | .72 |
| 24 | 8064 | .77 |
| 26 | 8065 | .83 |
| 28 | 8066 | .90 |
| 30 | 8067 | 1.04 |
| 32 | 8068 | 1.11 |
| 34 | 8069 | 1.28 |
| 36 | 8070 | 1.58 |
| 38 | 8071 | 1.95 |
| 40 | 8072 | 2.81 |
| 1 LB. SPOOLS | | |
| 14 | 8073 | 1.17 |
| 16 | 8074 | 1.17 |
| 18 | 8075 | 1.20 |
| 20 | 8076 | 1.25 |
| 22 | 8077 | 1.31 |
| 24 | 8078 | 1.38 |
| 26 | 8079 | 1.52 |
| 28 | 8080 | 1.65 |
| 30 | 8081 | 1.88 |
| 32 | 8082 | 2.06 |
| 34 | 8083 | 2.40 |
| 36 | 8084 | 3.00 |
| 38 | 8085 | 3.83 |
| 40 | 8086 | 5.63 |


* New Item † Specify Color TBO To Be Obsolete.
 ALL SPOOLS ARE ONE PIECE UNLESS OTHERWISE INDICATED BY (e).
 e Spools may contain more than one piece, minimum length of any one piece is 25 ft.
 When priced per M ft. length may vary ± 10% from length shown; all other lengths are exact.
 § Cut to Customer's Specified Length subject to available stock lengths — 199 ft. or less, plus 25', minus 0;



rubber microphone and shielded power supply cables

| Description | Trade Number | No. of Cond. | AWG (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Percent Shield Coverage | Suggested Working Voltage | Impedance (Ohms) | *Cap. (mmf/ft) | **Cap. (mmf/ft) | Standard Spool Lengths in ft |
|--|-----------------|--------------|-----------------|-----------------------------|-------------------------|------------------|-------------------------|---------------------------|------------------|----------------|-----------------|---------------------------------|
| SINGLE CONDUCTOR  | 8410 | 1 | 25(7x33) | .063 | .025 | .245 | 78 | 3000 | 52 | 33 | — | 15, 25, 50, 100, 250, 500 |
| 3 strands copper, 4 strands Copperweld† tinned, cellulose yarn braid, rubber insulated, rayon braid, tinned copper braid shield, cotton wrap, black rubber jacket. | | | | | | | | | | | | |
| MINIATURE 2 CONDUCTOR  | 8413 | 2 | 24(45x40) | .015 | .025 | .185 | 100 | 300 | — | 38 | 71 | 15, 25, 50, 100, 250, 500 |
| MINIATURE 3 CONDUCTOR  | NEW 8406 | 3 | 24(45x40) | .015 | .025 | .223 | 100 | 300 | — | 43 | 76 | 100, 250, 500 |
| Tinned cadmium bronze, cotton serve, rubber insulated, cabled with fillers, conductive textile serve, tinned copper braid shield, cotton serve, black rubber jacket. | | | | | | | | | | | | |
| MULTIPLE CONDUCTOR  | 8412 | 2 | 20(26x34) | .020 | .043 | .268 | 85 | 600 | — | 42 | 68 | 15, 25, 50, 100, 250, 500 |
| | 8423 | 3 | 20(26x34) | .020 | .040 | .277 | 84 | 600 | — | 50 | 85 | 15, 25, 50, 100, 250, 500, 1000 |
| | 8424 | 4 | 20(26x34) | .020 | .040 | .295 | 81 | 600 | — | 55 | 95 | 15, 25, 50, 100, 250, 500, 1000 |
| | 8425 | 5 | 20(26x34) | .020 | .040 | .323 | 76 | 600 | — | 44 | 80 | 100, 250 |
| | 8426 | 6 | 20(26x34) | .020 | .040 | .349 | 91 | 600 | — | 40 | 78 | 100, 250 |
| | 8427 | 7 | 20(26x34) | .020 | .043 | .360 | 91 | 600 | — | 40 | 75 | 100, 250 |
| | 8418 | 8 | 20(26x34) | .020 | .043 | .386 | 89 | 600 | — | 42 | 75 | 100, 250 |
| Tinned copper, cotton wrap, rubber insulated, cabled, rayon braid, tinned copper braid shield, cotton wrap, black rubber jacket. | | | | | | | | | | | | |
| NEOPRENE HEAVY DUTY  | 8428 | 2 | 18(41x34) | .022 | .038 | .295 | 91 | 600 | — | 47 | 80 | 100, 500 |
| Tinned copper, cotton wrap, rubber insulated, cabled, rayon braid, tinned copper braid shield, cotton wrap, black NEOPRENE jacket. | | | | | | | | | | | | |
| EXTRA LIMP  | 8414 | 2 | 20(26x34) | .020 | .043 | .256 | 100 | 600 | — | 45 | 80 | 50, 500 |
| Tinned copper, cotton wrap, rubber insulated, cabled, conductive textile wrapped shield, stranded ground wire, black rubber jacket. | | | | | | | | | | | | |

NEOPRENE RETRACTILE (COILED) MICROPHONE CABLES

| Description | Trade Number | No. of Cond. | AWG (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Percent Shield Coverage | ***Cap. (mmf/cord) | Retracted Length | Extended Length | Standard Put Up |
|---|-----------------|------------------------|-----------------|-----------------------------|-------------------------|------------------|-------------------------|--------------------|------------------|-----------------|-----------------|
| COILED  | 8415 | 4 unshielded | 23(21x36) | .015 | .055 | .250 | No shield | — | 11½" | 6' | 1 |
| | NEW 8499 | 1 shielded | 24(45x40) | .019 | .043 | .160 | 80% | 285 | 7½" | 4' | 1 |
| | NEW 8497 | 3 white cond. shielded | 23(21x36) | .020 | .046 | .250 | 81% | 480 | 11½" | 6' | 1 |

Tinned Cadmium bronze, rubber insulated, paper tape wrap, black Neoprene jacket. 8499 has a spiral tinned copper braid shield. 8497 has a BELDFOIL braid shield.

COLOR CODING OF INDIVIDUAL CONDUCTORS FOR CABLES ON THIS PAGE & PAGE 3

| No. of Conductors | Color Coding | | | | | | | |
|-------------------|--------------|-------|-----|-------|------|-------|--------|--------|
| | White | Black | Red | Green | Blue | Brown | Yellow | Orange |
| 1 | x | | | | | | | |
| 2 | x | x | | | | | | |
| 3 | x | x | x | | | | | |
| 4 | x | x | x | x | | | | |
| 5 | x | x | x | x | x | | | |
| 6 | x | x | x | x | x | x | | |
| 7 | x | x | x | x | x | x | x | |
| 8 | x | x | x | x | x | x | x | x |

*Capacitance between conductors (8401, 8410, 8411 between conductor and shield).

†Trademark of Copperweld Steel Company.

RUBBER—PLASTIC—NEOPRENE

PLASTIC CABLES RECOMMENDED FOR: Lower capacitance, lower loss, greater ozone and oil resistance, lighter weight, smaller diameter.

RUBBER CABLES RECOMMENDED FOR: Greater abrasion and impact resistance, and extra limpness so cable will lie flat on stage or studio floor.

NEOPRENE CABLES RECOMMENDED FOR: Outside use. Resistant to effects of sun, oil, and ozone.





**Capacitance between 1 conductor and remaining conductors connected to shield.

***Capacitance of shielded conductor

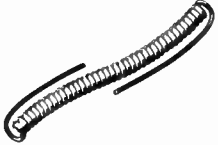
COPYRIGHT 1961, BELDEN MANUFACTURING COMPANY.




vinyl microphone and shielded power supply cables

| Description | Trade Number | No. of Cond. | AWG (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Percent Shield Coverage | Suggested Working Voltage | Impedance (Ohms) | *Cap. (mmf/ft) | **Cap. (mmf/ft) | Standard Spool Lengths in ft |
|---|--|--------------|---------------------------------------|-----------------------------|-------------------------|------------------|-------------------------|---------------------------|------------------|----------------|-----------------|------------------------------|
|  <p>SINGLE CONDUCTOR</p> | 8411 | 1 | 25(7x33) | .020 | .020 | .144 | 72 | 3500 | 52 | 34 | — | 15, 25, 50, 100, 250, 500 |
| | 8401 | 1 | 25(7x33) | .043 | .025 | .200 | 74 | 5000 | 57 | 25 | — | 15, 25, 50, 100, 250, 500 |
| 3 strands copper, 4 strands Copperweld†, tinned, cellulose yarn braid, polyethylene insulated, tinned copper braid shield, chrome vinyl jacket. | | | | | | | | | | | | |
|  <p>MINIATURE 2 CONDUCTOR</p> | 8420 | 2 | 24(45x40) | .015 | .025 | .178 | 77 | 500 | — | 20 | 35 | 15, 25, 50, 100, 250, 500 |
| | Tinned cadmium bronze, polyethylene insulated, cabled with fillers, rayon braid, tinned copper braid shield, chrome vinyl jacket. | | | | | | | | | | | |
|  <p>MULTIPLE CONDUCTOR</p> <p>Tinned copper, polyethylene insulated, cabled, rayon braid, tinned copper braid shield, chrome vinyl jacket.</p> | 8422 | 2 | 22(16x34) | .023 | .023 | .231 | 87 | 1000 | — | 18 | 32 | 15, 25, 50, 100, 250, 500 |
| | 8403 | 3 | 20(26x34) | .015 | .033 | .245 | 94 | 600 | — | 25 | 45 | 15, 50, 100, 250, 500, 1000 |
| | 8404 | 4 | 20(26x34) | .015 | .033 | .255 | 89 | 600 | — | 25 | 45 | 15, 100, 250, 500, 1000 |
| | 8405 | 5 | 20(26x34) | .015 | .035 | .275 | 84 | 600 | — | 25 | 45 | 250, 500, 1000 |
| | 8434 | 4 | 25(7x33) 3 copper 4 copper-weld | .013 | .020 | .169 | 100 | 400 | — | 25 | 40 | 100, 500, 1000 |
|  <p>STRAIN GAUGE CABLE</p> | NEW 8723 | 4 | 22(7x30) copper | .008 | .019 | .165 | 100 | 400 | — | 35 | 62 | 100, 500, 1000 |
| | Tinned conductors, polyethylene insulated, black and red conductors under BELDFOIL ¹ aluminum-Mylar shield, stranded ground wire, green and white conductors under over-all BELDFOIL aluminum-Mylar ¹ shield, chrome vinyl jacket. | | | | | | | | | | | |
| Tinned conductors, polypropylene insulated black and red under a BELDFOIL Shield, green and white BELDFOIL Shield (each pair separate) chrome vinyl jacket. | | | | | | | | | | | | |

VINYL RETRACTILE (COILED) MICROPHONE CABLES

| Description | Trade Number | No. of Cond. | AWG (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Percent Shield Coverage | ***Cap. (mmf/cord) | Retracted Length | Extended Length | Standard Put up |
|---|-----------------|------------------------|-----------------|-----------------------------|-------------------------|------------------|-------------------------|--------------------|------------------|-----------------|-----------------|
|  <p>COILED</p> | NEW 8498 | 1 shielded | 24(45x40) | .019 | .053 | .180 | 80% | 285 | 7½" | 4' | 1 |
| | NEW 8496 | 3 white cond. shielded | 23(21x36) | .020 | .046 | .250 | 81% | 480 | 11½" | 6' | 1 |
| Tinned cadmium bronze, rubber insulated, over-all vinyl jacket. 8498 has a spiral tinned copper braid shield. 8496 has a BELDFOIL braid shield. | | | | | | | | | | | |

VINYL RETRACTILE (COILED) TELEPHONE CORDS

| Description | Trade Number | No. of Cond. | AWG (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Retracted Length | Extended Length | Standard put-up |
|--|-----------------|--------------|-----------------|-----------------------------|-------------------------|------------------|------------------|-----------------|-----------------|
|  <p>COILED</p> | NEW 8495 | 3 | 23(21x36) | .020 | .041 | .220 | 10" | 4½' | 1 |
| | NEW 8494 | 4 | 23(21x36) | .020 | .043 | .245 | 10" | 4½' | 1 |
| Bare cadmium bronze, vinyl insulated, cabled, paper wrapped, black vinyl jacket. One end stripped 7¾", spade terminals attached and hook strain relief clamped over jacket. Other end stripped 6¼" and spade terminals attached. | | | | | | | | | |

* Capacitance between conductors (8401, 8411 between conductor and shield).
 **Capacitance between 1 conductor and remaining conductors connected to shield.
 ***Capacitance of shielded conductor.

†Trademark of Copperweld Steel Company
 ‡Dupont trademark
 1 Belden trademark



tv camera cables and 75 ohm video cable

TV CAMERA CABLES

Preferred by TV camera operators requiring dependable service under all conditions in which lighter weight, lower coefficient of friction, greater flexibility, and easier termination are essential.

Correct electronic characteristics are assured at every stage from design engineering through final inspection.

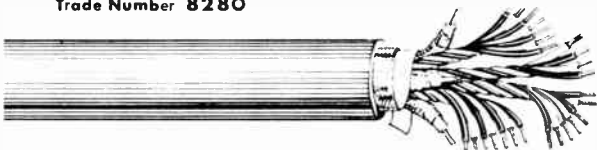
Trade Number 8283



82 Conductor TV Color Camera Cable

4-14 AWG (19x27) tinned copper, vinyl plastic insulated, color coded
 3-16 AWG (26x30) tinned copper, vinyl plastic insulated, color coded
 BELDFOIL aluminum-Mylar wrapped shield around the above 7 conductors cabled with stranded linned copper drain wire
 8 coaxial cables. Nom. impedance 53.5 ohms, color coded
 67-22 AWG (7x30) tinned copper, vinyl plastic insulated, color coded, 7 under conductive textile shield with stranded ground wire
 Tinned copper braid shield
 Chrome vinyl plastic jacket. 1.22" Nom. O.D.
 Specified Length 199' or less, plus 25', minus 0.
 Specified Length 200' or over, plus 50', minus 0.

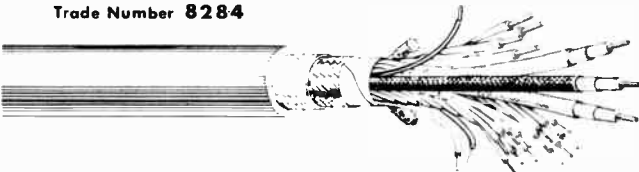
Trade Number 8280



28 Conductor TV Camera Cable

4-18 AWG (16x30) tinned copper, vinyl insulated, color coded
 21-22 AWG (7x30) tinned copper, vinyl insulated, cabled in 3 groups of 7, color coded
 3 coaxial cables. Nom. impedance 51 ohms, color coded
 Tinned copper braid shield
 Chrome vinyl jacket. .750" Nom. O.D.
 Specified Length 199' or less, plus 25', minus 0.
 Specified Length 200' or over, plus 50', minus 0.

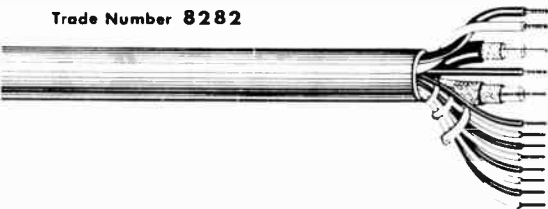
Trade Number 8284



24 Conductor TV Camera Cable

17-22 AWG (7x30) tinned copper, vinyl insulated, color coded
 4-16 AWG (26x30) tinned copper, vinyl insulated, color coded
 3 coaxial cables. Nom. impedance 53.5 ohms, color coded
 Tinned copper braid shield
 Heavy cotton braid
 Chrome vinyl plastic jacket. .800" Nom. O.D.
 Specified Length 199' or less, plus 25', minus 0.
 Specified Length 200' or over, plus 50', minus 0.

Trade Number 8282



13 Conductor TV Eye Cable

9-22 AWG (7x30) tinned copper, vinyl insulated, color coded
 2-18 AWG (16x30) tinned stranded copper conductor vinyl insulated. Black and Red
 1-RG-58A/U cable 50-ohm coax
 1-72-ohm coax, stranded conductor, Mylar tape wrapped
 Chrome vinyl jacket. .470" Nom. O.D.
 Standard spool lengths 500', 1000'.

75 OHM VIDEO CABLE

TYPICAL APPLICATIONS: Video signal transmission in color and monochrome TV studios. Provides high quality carrier of video signal with superior picture definition and eliminates problems of periodicity. Cable is manufactured with rigid control of concentricity and all dimensional tolerances. The black polyethylene jacket is manufactured with a non-contaminating, non-migratory compound. 100% SWEEP TESTED.

Conductor, polyethylene insulated, tinned copper double braid shield, black polyethylene jacket.

| Description | Trade Number | AWG & (Stranding) Material | Nom. O.D. (Inch) | Percent Shield Coverage | Nom. Impedance (Ohms) | Nom. Velocity of Propagation | Nom. Cap (mmf/ft) | Nom. Attenuation | | Standard Spool Lengths in ft |
|-------------|--------------|----------------------------|------------------|-------------------------|-----------------------|------------------------------|-------------------|------------------|-----|------------------------------|
| | | | | | | | | mc | db | |
| | 8281 | 20(Solid) copper | .304 | 93.5 | 75 | 65.2% | 20.7 | 5 | .55 | 500, 1000 |
| | | | | | | | | 10 | .8 | |
| | | | | | | | | 20 | 1.3 | |
| | | | | | | | | 100 | 2.7 | |
| | | | | | | | | 300 | 5.1 | |
| | | | | | | | | 500 | 6.8 | |
| | | | | | | | | 700 | 8.4 | |

Conductor, polyethylene insulated, tinned copper double braid shield, black polyethylene jacket.

As a service to users of 8281 video cable, we can furnish, without charge, adapters for use with the PL259 plug.






broadcast audio cables and portable cordage

BROADCAST AUDIO CABLES


Spiral wrapped copper shields plus drain wire plus shield isolation eliminate current loops so often found troublesome in this service.

Free stripping jackets, fast shield termination, and small diameters cut installation time and costs.

| Description | Trade Number | AWG & (Stranding) Inc. Drain Wire | Nom. O.D. (Inch) | Cond. Color Coding | Percent Shield Coverage | Suggested Working Voltage | Between Cond. (mmf/ft) | Nominal Capacitance Between one Cond. & other Cond. Tied to Shield (mmf/ft) | Standard Spool Lengths in ft |
|--|--------------|-----------------------------------|------------------|--------------------|-------------------------|---------------------------|------------------------|---|------------------------------|
|  ABC TYPE Tinned copper, Celanese 2 wrap, Celanese braid lacquered, conductors cabled, tinned copper drain wire, tinned copper spiral wrapped shield, black vinyl jacket. | 8436 | 22(Solid) | .180 | Blk, Red | 90 | 100 | 31 | 52 | 500, 1000 |
| | 8437 | 22(Solid) | .200 | Blk, Red | 88 | 200 | 48 | 85 | 500, 1000 |
|  CBS TYPE Tinned copper, vinyl insulated, conductors cabled, tinned copper drain wire, tinned copper braid shield, black vinyl jacket. | 8441 | 22(16x34) | .210 | Blk, Red | 88 | 200 | 49 | 86 | 100, 500, 1000 |
| | 8440 | 22(Solid) | .185 | Blk, Red | 90 | 100 | 50 | 90 | 500, 1000 |
|  STANDARD Tinned copper, enameled, cotton wrap, cotton braid, conductors cabled, tinned copper drain wire, tinned copper spiral wrapped shield, chrome vinyl jacket. | 8440 | 22(Solid) | .185 | Blk, Red | 90 | 100 | 50 | 90 | 500, 1000 |

(2) Trademark of Celanese Corp.



MINIATURE BROADCAST AUDIO CABLES

| Description | Trade Number | AWG & (Stranding) Inc. Drain Wire | Nom. O.D. (Inch) | Cond. Color Coding | Percent Shield Coverage | Suggested Working Voltage | Between Cond. (mmf/ft) | Nominal Capacitance Between one Cond. & other Cond. Tied to Shield (mmf/ft) | Standard Spool Lengths in ft |
|---|--------------|-----------------------------------|------------------|--------------------|-------------------------|---------------------------|------------------------|---|------------------------------|
|  Tinned copper, Polypropylene insulated, conductors cabled, tinned copper drain wire, spiral wrap BELDFOIL shield, BLACK or CHROME VINYL JACKET. | 8450 | 22(Solid) | .118 | Blk, Red | 100 | 200 | 40 | 76 | 100, 500, 1000 |
| | 8451 | 22(7x30) | .135 | Blk, Red | 100 | 200 | 56 | 110 | 100, 500, 1000 |

The new Belden miniature type Broadcast Audio Cables have 100% shield coverage against Electrostatic fields. The folded BELDFOIL Shield gives high cable reliability together with easy termination

by means of the drain wire. A most important feature of these cables is that they occupy only one third to one half the space required for a Standard Broadcast Audio Cable.

RUBBER-VINYL MULTI-CONDUCTOR PORTABLE CORDAGE—300V-60C

| Description | Trade Number | U.L. Type | Insulation | No. of Conductors | AWG & Stranding | Insulation Thickness (Inch) | Conductor Coding | Jacket Thickness (Inch) | Nominal O.D. (Inch) | Color | Standard Spool Lengths in ft |
|---|--------------|-----------|------------|--|-------------------|-----------------------------|--------------------|-------------------------|---------------------|---------------------------|---------------------------------|
|  Two conductors, stranded copper, parallel, insulated with one conductor polarity ribbed | 8462 | SP-1 | Rubber | 2 | 18 (41x34) | .031 | Polarity Ribbed | — | .123 x .223 | Brown or Ivory | 25, 100, 250 |
| | 8888 | SPT-1 | Vinyl | 2 | 18 (41x34) | .031 | Polarity Ribbed | — | .110 x .207 | Brn, Ivory or Silver Gray | 25, 100, 250 |
|  Stranded copper, rubber insulated, cabled with fillers, rubber jacket | 8452 | SV | Rubber | 2 | 18 (41x34) | .016 | Blk, Wht | .031 | .245 | Black | 15, 25, 50, 100, 250, 500, 1000 |
| | 8478 | SJ | Rubber | 2 | 18 (41x34) | .031 | Blk, Wht | .031 | .299 | Black | 25, 100, 250, 1000 |
| | 8472 | SJ | Rubber | 2 | 16 (65x34) | .031 | Blk, Wht | .031 | .325 | Black | 25, 50, 100, 250 |
| | 8474 | — | Rubber | 2 | 14 (41x30) | .031 | Blk, Wht | .035 | .360 | Black | 100, 250 |
| | 8453 | SV | Rubber | 3 | 18 (41x34) Tinned | .016 | Blk, Wht Green | .031 | .265 | Black | 15, 50, 100, 500 |
| | 8454 | — | Rubber | 4 | 18 (41x34) Tinned | .016 | Blk, Wht, Brn, Red | .031 | .265 | Black | 15, 50, 100, 500, 1000 |
| 8455 | — | Rubber | 5 | 3—20 (26x34) Tinned 2—18 (41x34) Tinned | .015 .015 | Brn, Grn, White Blk, Red | .031 | .280 | Black | 100, 250 | |



two and three conductor shielded cables




| TWISTED PAIRS #22 thru #16 Gauge | Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Cond. Color Coding | Per cent Shield Coverage | Nom. *Cap. (mmf/ft) | Nom. **Cap. (mmf/ft) | Suggested Working Voltage | Standard Spool Lengths in ft |
|---|-----------------|----------------------|-----------------------------------|-------------------------------|------------------------|--------------------------|--------------------------------|---------------------------|----------------------------|---------------------------------|------------------------------------|
| | 8739 | 22 (Solid) | .015 | .025 | .160 | Blk, Red | 90 | 38 | 66 | 350 | 100, 500, 1000 |
| | 8737 | 22 (7x30) | .015 | .025 | .170 | Blk, Red | 90 | 40 | 70 | 350 | 100, 500, 1000 |
| | 8759 | 20 (7x28) | .015 | .025 | .195 | Blk, Red | 90 | 47 | 79 | 350 | 100, 500, 1000 |
| | 8790 | 18 (7x26) | .020 | .028 | .231 | Red, Wht | 90 | 53 | 92 | 450 | 100, 500, 1000 |
| | 8780 | 16 (19x29) | .023 | .030 | .266 | Blk, Wht | 90 | 57 | 98 | 450 | 100, 500, 1000 |
| <i>Tinned copper, vinyl insulated, tinned copper spiral wrapped shield, chrome vinyl jacket.</i> | | | | | | | | | | | |
| | 8761 | 22 (7x30) | .014 | .025 | .167 | Blk, Wht | 100 | 24 | 47 | 350 | 500, 1000 |
| | 8762 | 20 (7x28) | .014 | .028 | .184 | Blk, Wht | 100 | 27 | 49 | 350 | 100, 500, 1000 |
| | 8760 | 18 (16x30) | .018 | .028 | .222 | Blk, Wht | 100 | 24 | 44 | 450 | 500, 1000 |
| <i>Tinned copper, polyethylene insulated, BELDFOIL aluminum-Mylar wrapped shield, stranded tinned copper ground wire, chrome vinyl jacket.</i> | | | | | | | | | | | |
| | 8208 | 18 (16x30) | .020 | .025 | .270 | Red, Wht | 69 | 46 | 77 | 200 | 500, 1000 |
| <i>Tinned copper, rubber insulated, braided tinned copper shield, chrome vinyl jacket.</i> | | | | | | | | | | | |
| | 8209 | 18 (16x30) | .020 | — | .258 | Red, Wht | 69 | 51 | 89 | 200 | 50, 100, 500, 1000 |
| <i>Tinned copper, rubber insulated, braided tinned copper shield, white cotton braid, treated for weather resistance.</i> | | | | | | | | | | | |
| | 8738 | 22 (Solid) | .015 | — | .130 | Blk, Red | 72 | 35 | 61 | 350 | 100, 500, 1000 |
| | 8758 | 20 (7x28) | .015 | — | .165 | Blk, Red | 63 | 42 | 72 | 350 | 100, 500, 1000 |
| | 8789 | 18 (7x26) | .020 | — | .205 | Blk, Wht | 74 | 50 | 89 | 450 | 500, 1000 |
| | 8779 | 16 (19x29) | .023 | — | .225 | Blk, Wht | 83 | 63 | 112 | 600 | 500, 1000 |
| <i>Tinned copper, vinyl insulated, braided tinned copper shield.</i> | | | | | | | | | | | |
| | 8432 | 20 (10x30) | .016 | — | .225 | Blk, Red | 90 | 46 | 86 | 150 | 500, 1000 |
| <i>Tinned copper, rubber insulated, cotton braid, lacquered, cabled, braided tinned copper shield.</i> | | | | | | | | | | | |
| | 8799 | 18 (Solid) | — | — | .165 | Blk, Wht | 78 | 30 | 50 | 100 | 500, 1000 |
| <i>Enameled copper, cotton wrap, cotton braid, cabled, braided tinned copper shield.</i> | | | | | | | | | | | |
| <i>See Broadcast Audio Cables for additional 2 conductor shielded cables—Belden page 4.</i> | | | | | | | | | | | |
| | 8731 | 22 (Solid) | .015 | .025 | .178 | Blk, Red, Wht | 90 | 36 | 63 | 350 | 500, 1000 |
| | 8791 | 18 (7x26) | .020 | .028 | .236 | Blk, Red, Wht | 90 | 47 | 84 | 450 | 100, 500, 1000 |
| <i>Tinned copper, vinyl insulated, conductors cabled, tinned copper spiral wrapped shield, chrome vinyl jacket.</i> | | | | | | | | | | | |
| | 8735 | 22 (7x30) | .015 | .025 | .199 | Blk, Red, Wht | 70 | 34 | 60 | 350 | 15, 50, 100, 500, 1000 |
| <i>Tinned copper, vinyl insulated, conductors cabled, tinned copper braid shield, chrome vinyl jacket.</i> | | | | | | | | | | | |
| | 8771 | 22 (7x30) | .014 | .025 | .175 | Blk, Red, Wht | 100 | 23 | 41 | 350 | 500, 1000 |
| | 8772 | 20 (7x28) | .014 | .028 | .200 | Blk, Red, Wht | 100 | 27 | 51 | 350 | 500, 1000 |
| | 8770 | 18 (16x30) | .018 | .028 | .236 | Blk, Red, Wht | 100 | 24 | 48 | 450 | 500, 1000 |
| <i>Tinned copper, polyethylene insulated, conductors cabled, BELDFOIL aluminum-Mylar wrapped shield, stranded tinned copper ground wire (22 AWG for 8771, and 20 AWG for 8770 and 8772), chrome vinyl jacket.</i> | | | | | | | | | | | |

*Capacitance between conductors.
**Capacitance between 1 conductor and other conductor connected to shield.



two and three conductor unshielded cables



TWO CONDUCTOR—TWISTED PAIR

| Twisted Pairs 22 through 14 AWG | Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Conductor Color Coding | Nominal O.D. (Inch) | Suggested Working Voltage | Standard Spool Lengths in ft |
|--|-----------------|---|-----------------------------------|-------------------------------|---------------------------|---------------------------|---------------------------------|------------------------------------|
|  WITHOUT JACKET | 8481 | 22 (Solid) | .015 | — | Brn, Tan | .112 | 350 | 100, 500, 1000 |
| | 8482 | 19 (Solid) | .015 | — | Brn, Tan | .115 | 350 | 100, 500, 1000 |
| | 8492 | 19 (Solid) Available Brown and White | .025 | — | 1 cond. tinned copper | .170 | 600 | 100, 500, 1000 |
| | 8460 | 18 (7x26) tinned | .020 | — | Blk, Wht | .175 | 450 | 100, 500, 1000 |
|  WITH JACKET  WITH COTTON BRAID | 8470 | 16 (19x29) tinned | .023 | — | Blk, Wht | .195 | 600 | 500, 1000 |
| | 8740 | 22 (Solid) tinned | .015 | .025 | Blk, Red | .150 | 200 | 100, 500, 1000 |
| | NEW 8442 | 22 (7x30) tinned | .015 | .025 | Blk, Red | .165 | 350 | 500, 1000 |
| | 8205 | 20 (10x30) tinned | .018 | .025 | Blk, Red | .190 | 350 | 25, 100, 500, 1000 |
| | 8486 | 19 (Solid) | .015 | .025 | Brn, Tan | .162 | 350 | 500, 1000 |
| | 8461 | 18 (7x26) tinned | .020 | .028 | Blk, Wht | .226 | 450 | 100, 500, 1000 |
| Copper, vinyl insulated, twisted Copper, vinyl insulated, cabled, chrome vinyl jacket | 8471 | 16 (19x29) tinned | .023 | .030 | Blk, Wht | .256 | 600 | 500, 1000 |
| | NEW 8473 | 14 (19x29) tinned | .031 | .035 | Blk, Wht | .332 | 600 | 500, 1000 |
| | 8204 | 18 (16x30) | .020 | — | Red, Wht | .220 | 200 | 25, 100, 500, 1000 |

Tinned copper, rubber insulated, cabled, white cotton braid, treated for weather resistance.

For additional 2 conductor cables see PORTABLE CORDAGE pages 2 and 3 and COIN OPERATED PHONOGRAPH CABLE page 11.

THREE CONDUCTOR—UNSHIELDED CABLES

| Description | Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Conductor Color Coding | Nominal O.D. (Inch) | Suggested Working Voltage | Standard Spool Lengths in ft |
|---|-----------------|----------------------|-----------------------------------|-------------------------------|---|---------------------------|---------------------------------|------------------------------------|
|  WITHOUT JACKET | 8483 | 19 (Solid) | .015 | — | Brn, Gray, Tan | .132 | 350 | 100, 500, 1000 |
| | 8493 | 19 (Solid) | .025 | — | Brn, 1 cond. tinned, 1 cond. insul. is ribbed | .170 | 600 | 1000 |
|  WITH JACKET | 8443 | 22 (7x30) tinned | .010 | .025 | Blk, Grn, Red | .150 | 200 | 25, 100, 500, 1000 |
| | 8487 | 19 (Solid) Bare | .015 | .025 | Brn, Gray, Tan | .180 | 350 | 500, 1000 |

For additional 3 conductor cables see PORTABLE CORDAGE pages 2 and 3 and COIN OPERATED PHONOGRAPH CABLE page 11.

CONTROL CABLES

Through the wide coverage of cables shown in this catalog, Belden is a principal supplier of Control Cables for sound systems, business systems, machinery control or automation.


Control Cables are a Belden specialty. Where shielding is required, BELDFOIL shielding is particularly adaptable for complex cables.

Belden multiple pair unshielded intercom cable

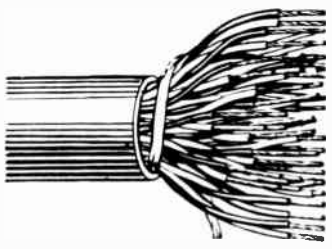
TYPICAL APPLICATIONS: Balanced line intercom systems.

Made with 80C vinyl plastic compounds for high dielectric strength and the best physical properties, such as free stripping, small diam-

eter, and tear resistance. It also resists the effects of water, sun, oil, grease, and ozone. The conductors are paired with a short-loy twist for conductor balance, providing a quiet circuit, free from crosstalk.

| 1 to 27 Pairs | Trade Number | No. of Pairs | Stranding | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Standard Spool Lengths in ft. |
|--|--------------|--------------|-----------|-----------------------------|-------------------------|-----------------------------------|-----------------------------------|
|  | 8740 | 1 | Solid | .015 | .025 | .150 | 100, 500, 1000 |
| | 8741 | 2 | Solid | .015 | .028 | .201 | 100, 500, 1000 |
| | 8742 | 3 | Solid | .015 | .030 | .240 | 100, 500, 1000 |
| | 8757 | 4 | Solid | .015 | .030 | .255 | 500, 1000 |
| | 8743 | 6 | Solid | .010 | .035 | .305 | 100, 500, 1000 |
| | 8747 | 6 | 7x30 | .010 | .035 | .340 | 100, 500, 1000 |
| | 8744 | 9 | Solid | .010 | .037 | .354 | 100, 500, 1000 |
| | 8748 | 9 | 7x30 | .010 | .037 | .389 | 100, 500, 1000 |
| | 8753 | 11 | Solid | .010 | .037 | .384 | 100, 500, 1000 |
| | 8754 | 13 | Solid | .010 | .037 | .409 | 100, 500, 1000 |
| | 8745 | 15 | Solid | .010 | .040 | .420 | 100, 500, 1000 |
| | 8749 | 15 | 7x30 | .010 | .040 | .425 | 100, 500, 1000 |
| | 8755 | 19 | Solid | .010 | .040 | .480 | 100, 500, 1000 |
| | 8756 | 23 | Solid | .010 | .040 | .510 | 100, 500, 1000 |
| | 8746 | 27 | Solid | .010 | .045 | .550 | To customer's specified length. § |
| 8750 | 27 | 7x30 | .010 | .045 | .595 | To customer's specified length. § | |

#22 Tinned copper, vinyl insulated, cabled in pairs, chrome vinyl jacket. 200 Volts suggested working voltage.




§ Specified Length 199' or less, plus 25', minus 0.
Specified Length 200' or less, plus 50', minus 0.

COLOR CODING FOR PAIRED INTERCOM CABLES

This color code chart applies to multiple pair unshielded and shielded intercom cables shown above and on page 9. It does not apply to 8751.

| Pair Number | Color Combination | Pair Number | Color Combination | Pair Number | Color Combination |
|-------------|--------------------------|-------------|--------------------------|-------------|--------------------------|
| 1 | Black paired with Red | 10 | Red paired with Blue | 19 | White paired with Blue |
| 2 | Black paired with White | 11 | Red paired with Yellow | 20 | White paired with Yellow |
| 3 | Black paired with Green | 12 | Red paired with Brown | 21 | White paired with Brown |
| 4 | Black paired with Blue | 13 | Red paired with Orange | 22 | White paired with Orange |
| 5 | Black paired with Yellow | 14 | Green paired with White | 23 | Blue paired with Yellow |
| 6 | Black paired with Brown | 15 | Green paired with Blue | 24 | Blue paired with Brown |
| 7 | Black paired with Orange | 16 | Green paired with Yellow | 25 | Blue paired with Orange |
| 8 | Red paired with White | 17 | Green paired with Brown | 26 | Brown paired with Yellow |
| 9 | Red paired with Green | 18 | Green paired with Orange | 27 | Brown paired with Orange |

51 PAIR CABLE



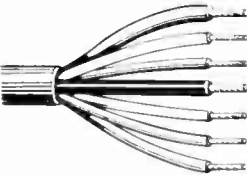
| Description | Trade Number | No. of Pairs | Conductors | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Standard Spool Lengths in ft. |
|--|--------------|--------------|---------------------|-----------------------------|-------------------------|------------------|--------------------------------|
|  | 8751 | 51 | Solid Tinned Copper | .010 | .060 | .745 | To customers' specified length |

#22 tinned copper, vinyl insulated, cabled in pairs, BELDFOIL Aluminum-Mylar wrapped shield over cabled pairs, with foil side out, #22(7 x 30) stranded drain wire running under jacket and over foil, chrome vinyl jacket. 200 Volts suggested working voltage. Color coding available on request.
§ Specified Length 199' or less, plus 25', minus 0.
Specified Length 200' or over, plus 25', minus 0.



multiple conductor and individually shielded pairs-intercom cable

MULTIPLE CONDUCTOR INTERCOM CABLES (NOT PAIRED)

| Description and Gauge | Trade Number | No. of Cond. | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|---|-----------------|--------------|-----------------------------|-----------------------------|-------------------------|------------------|------------------------------|
| 22 GAUGE  Tinned copper, vinyl plastic insulated, cabled, vinyl jacket. 200 Volts suggested working voltage. | 8443 | 3 | 22 (7x30) | .010 | .025 | .150 | 25, 100, 500, 1000 |
| | 8444 | 4 | 22 (7x30) | .010 | .025 | .168 | 25, 100, 500, 1000 |
| | 8445 | 5 | 22 (7x30) | .010 | .025 | .180 | 25, 100, 500, 1000 |
| | NEW 8456 | 10 | 22 (7x30) | .010 | .030 | .260 | 100, 500, 1000 |
| | NEW 8457 | 12 | 22 (7x30) | .010 | .030 | .260 | 100, 500, 1000 |
| COMBINATION GAUGES 18 & 22  | 8446 | 6 | 4-22 (7x30) 2-18 (16x30) | .010 .018 | .025 | .222 | 15, 100, 500, 1000 |
| | 8447 | 7 | 5-22 (7x30) 2-18 (16x30) | .010 .018 | .028 | .246 | 15, 100, 500, 1000 |
| | 8448 | 8 | 6-22 (7x30) 2-18 (16x30) | .010 .018 | .028 | .251 | 15, 100, 500, 1000 |
| | 8449 | 9 | 7-22 (7x30) 2-18 (16x30) | .010 .018 | .028 | .261 | 15, 100, 500, 1000 |
| 18 GAUGE  | NEW 8465 | 5 | 18 (16x30) | .018 | .030 | .272 | 100, 500, 1000 |
| | NEW 8467 | 7 | 18 (16x30) | .018 | .035 | .320 | 100, 500, 1000 |
| | NEW 8469 | 9 | 18 (16x30) | .018 | .035 | .375 | 100, 500, 1000 |

COLOR CODING OF INDIVIDUAL CONDUCTORS FOR CABLES 8443 THROUGH 8469

| Conductor | Color | Conductor | Color | Conductor | Color |
|-----------|-------|-----------|--------|-----------|--------|
| 1st | Black | 5th | Brown | 9th | Purple |
| 2nd | Red | 6th | Blue | 10th | Gray |
| 3rd | Green | 7th | Orange | 11th | Pink |
| 4th | White | 8th | Yellow | 12th | Tan |

18 Gauge conductors in cables 8446 through 8449 are Black and Red.

MULTIPLE PAIR INDIVIDUALLY SHIELDED INTERCOM CABLE

| Description | Trade Number | No. of Pairs | Stranding | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Nom. *Cap. (mmf/ft) | Nom. **Cap. (mmf/ft) | Standard Spool Lengths in ft |
|---|-----------------|--------------|-----------|-----------------------------|-------------------------|------------------|---------------------|----------------------|-------------------------------------|
| 22 GAUGE  | 8767 | 3 | Solid | .013 | .030 | .298 | 40 | 77 | 100, 500, 1000 |
| | 8768 | 6 | Solid | .013 | .037 | .394 | 40 | 77 | 100, 500, 1000 |
| | 8764 | 9 | Solid | .013 | .040 | .425 | 40 | 77 | 100, 500, 1000 |
| | 8765 | 11 | Solid | .013 | .040 | .485 | 40 | 77 | 100, 500, 1000 |
| | 8766 | 15 | Solid | .013 | .045 | .510 | 40 | 77 | 100, 500, 1000 |
| | NEW 8769 | 19 | 7x30 | .015 | .055 | .678 | 39 | 67 | 100, 500, 1000 |
| | NEW 8773 | 27 | 7x30 | .015 | .070 | .860 | 39 | 67 | §Cut to customers specified lengths |

#22 tinned copper, vinyl insulated, cabled in pairs, each pair and its ground wire under BELDFOIL aluminum-Mylar shield, over-all chrome vinyl jacket. 300 Volts suggested working voltage.

Insulation resistance between shields 1000 megohms M'
 Capacitance between adjacent shields 115 mmf/ft
 Voltage breakdown between adjacent shields 1500 volts
 Working voltage between adjacent shields 50 volts

*Capacitance between conductors. **Capacitance between 1 conductor and other conductor connected to shield.

§ Specified Length 199' or less, plus 25', minus 0.
 § Specified Length 200' or over, plus 50', minus 0.



special intercom and sound cables

TELEPHONE CABLES-CONDUCTORS IN TRIPLETS

| Description | Trade Number | Number of Triplets | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|-------------|-----------------|--------------------|-------------------|-----------------------------|-------------------------|------------------|----------------------------------|
| | NEW 8792 | 13 | Solid | .012 | .045 | .540 | 100, 500, 1000 |
| | NEW 8793 | 27 | Solid | .012 | .060 | .770 | §To customer's specified lengths |

No. 22 bare copper solid, vinyl insulated, cabled in triplets, chrome vinyl jacket, 200 volts suggested working voltage. Each set of three conductors (triplets) are color coded Red, Green and Yellow. The identification of each set of triplets is indicated by consecutive printed numbers on the yellow conductor of each group.

SPECIAL INTERCOM AND SOUND CABLES

| Description | Trade Number | No. of Cond. | AWG & (Stranding) | Cond. Color Coding | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Percent Shield Coverage | Suggested Working Voltage | *Cap. (mmf/ft) | **Cap. (mmf/ft) | Standard Spool Lengths in ft |
|-------------|--------------|----------------------------|------------------------|--------------------|-----------------------------|-------------------------|------------------|-------------------------|---------------------------|----------------|-----------------|------------------------------|
| | 8734 | 1 shielded 2 unshielded | 22 (7x30) 22 (7x30) | Wht Blk, Red | .015 .015 | .025 | .194 | 82 | 350 | — | 79 | 100, 500, 1000 |

Tinned copper, vinyl insulated, tinned copper braid shield over 1 conductor, 3 conductors cabled, chrome vinyl jacket.

| | | | | | | | | | | | | |
|--|-------------|----------------------------|------------------------|-----------------|--------------|------|------|-----|-----|----|----|-----------|
| | 8763 | 2 shielded 1 unshielded | 20 (7x28) 20 (7x28) | Blk, Red Wht | .014 .014 | .028 | .210 | 100 | 350 | 26 | 48 | 500, 1000 |
|--|-------------|----------------------------|------------------------|-----------------|--------------|------|------|-----|-----|----|----|-----------|

Tinned copper, polyethylene insulated, BELDFOIL aluminum-Mylar wrapped shield over 2 conductors, #20 stranded tinned copper ground wire, chrome vinyl jacket.

| | | | | | | | | | | | | |
|--|-------------|----------------------------|------------------------|----------------------|--------------|------|---------------|----|-----|----|----|----------------|
| | 8732 | 2 shielded 2 unshielded | 22 (7x30) 22 (7x30) | Blk, Wht Blk, Wht | .015 .015 | .030 | .188x .296 | 62 | 350 | 21 | 37 | 100, 500, 1000 |
|--|-------------|----------------------------|------------------------|----------------------|--------------|------|---------------|----|-----|----|----|----------------|

Tinned copper, polyethylene insulated, tinned copper braid shield over 2 conductors, chrome vinyl jacket.

| | | | | | | | | | | | | |
|--|-------------|----------------------------|------------------------|----------------------|--------------|------|------|-----|-----|----|----|-----------|
| | 8722 | 2 shielded 2 unshielded | 20 (7x28) 20 (7x28) | Blk, Red Grn, Wht | .015 .015 | .028 | .260 | 100 | 350 | 60 | 99 | 500, 1000 |
|--|-------------|----------------------------|------------------------|----------------------|--------------|------|------|-----|-----|----|----|-----------|

Tinned copper, vinyl insulated, BELDFOIL aluminum-Mylar wrapped shield over 2 conductors, #22 stranded tinned ground wire, chrome vinyl jacket.

| | | | | | | | | | | | | |
|--|-----------------|------------|-----------|--------------------|------|------|------|-----|-----|---|----|----------------|
| | NEW 8733 | 3 shielded | 22 (7x30) | Blk, Red, White | .014 | .030 | .225 | 100 | 350 | — | 39 | 100, 500, 1000 |
|--|-----------------|------------|-----------|--------------------|------|------|------|-----|-----|---|----|----------------|

Each conductor separately BELDFOIL shielded. Ground wire for each conductor is tinned cadmium bronze ribbon under BELDFOIL Z fold.

BELDEN STRAPLOCKS (NYLON CABLE CLAMPS)

| | Trade Number | Number per Box |
|--|--------------|--|
| | 8573 | 25 Straplocks plus one installation tool in plastic box. |

For tying down wires or cables in the quickest possible time. Straplocks require only a 1/4" stamped, punched or drilled mounting hole for installation. Eliminate bundling or lacing.

See COIN OPERATED PHONOGRAPH CABLES for additional special constructions.





* Capacitance between conductors

**Capacitance between 1 conductor and other conductor connected to shield

§Specified Length 199' or less, plus 25', minus 0.
Specified Length 200' or less, plus 50', minus 0.

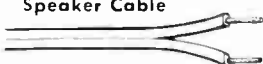




Belden hi-fi, stereo and phonograph cables

HI-FI AND STEREO CABLES

| Description | Trade Number | No. of Cond. | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Cond. Color Coding | Nom. Cap. between condrs. (mmf/ft) | Nom. Cap. to other cond. & shield (mmf/ft) | Standard Spool Lengths in ft | |
|---|--------------|--------------|--|--|-------------------------|------------------|--------------------|------------------------------------|--|------------------------------|-------------|
|  Tinned copper, vinyl insulated, twisted pair | 8430 | 2 | 32 (7x40) | .009 | — | .050 | Blk, Red | 21 | — | 10, 25, 250 | |
| | | 4 | use two 8430s for maximum channel isolation, one for each channel. | | | | | | | | |
|  Tinned copper, vinyl insulated, twisted pair, tinned copper braid shield. | 8429 | 2 | 32 (7x40) | .009 | — | .057 | Blk, Red | 22 | 38 | 10, 25, 250 | |
| | | 8419 | 3 | 32 (7x40) | .009 | — | .063 | Blk, Red Wht | 30 | 50 | 10, 25, 250 |
| | | | 4 | use two 8429s for maximum channel isolation, one for each channel. | | | | | | | |
|  Tinned copper, rubber insulated, tinned copper braid shield, brown cotton braid. | 8431 | 1 | 24 (16x36) | .015 | — | .095 | — | 96 | — | 10, 15, 25, 100, 500 | |
| | | | | | | | | | | | |
|  Hi-Fi Connecting Cable | 8421 | 1 | 25 (7x33) | .052 | .025 | .180 | — | 18 | — | 15, 25, 50, 100, 250 | |

3 strands tinned copper and 4 tinned Copperweld, cellular polyethylene insulated, tinned copper, spiral wrapped shield, chrome vinyl jacket.







COIN OPERATED PHONOGRAPH CABLES

| Description | Trade Number | No. of Cond. | AWG & (Stranding) | Cond. Color Coding | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Suggested Working Voltage | Standard Spool Lengths in ft |
|--|--------------|---------------------|------------------------------|-----------------------|-----------------------------|-------------------------|------------------|---------------------------|------------------------------|
|  Speaker Cable Copper conductors parallel, chrome vinyl insulated. | 8782 | 2 | 24 (7x32) | 1 Conductor tinned | .017 | — | .058x .115 | 300 | 25, 50, 100, 500, 1000 |
| | | | | | | | | | |
|  Control Cables Tinned copper, vinyl insulated, conductors cabled, chrome vinyl jacket. | 8783 | 3 | 1—20 (10x30) 2—16 (26x30) | Blue, Grn, Org | .020 .020 | .025 | .250 | 450 | 100, 500 |
| | | | | | | | | | |
|  Tinned copper, vinyl insulated, 3 conductors twisted under tinned copper braid shield, 2 conductors twisted unshielded, chrome vinyl jacket. | 8785 | 5 (2 unshielded) | 22 (7x30) | Blue, Yel | .015 | .028 | .211x .316 | 350 | 500 |
| | | (3 shielded) | 22 (7x30) | Blk, Grn, Red | .015 | | | | |
|  Tinned copper, vinyl insulated, 4 conductors twisted under tinned copper braid shield, 2 conductors twisted unshielded, chrome vinyl jacket. | 8786 | 6 (2 unshielded) | 22 (7x30) | Blu, Wht | .015 | .028 | .211x .316 | 350 | 100, 500 |
| | | (4 shielded) | 24 (7x32) | Blk, Grn, Red, Yel | .015 | | | | |
|  Tinned copper, polyethylene insulated, nylon covered; cabled in 2 quads individually tinned copper braid shielded, plus 2 unshielded conductors; paper tape; chrome vinyl jacket. | 8787 | 10 (4 shielded) | 24 (7x32) | Gry, Wht, Blu, Grn | .012 | .027 | .330 | 350 | 500 |
| | | (4 shielded) | 24 (7x32) | Red, Brn, Yel, Org | .012 | | | | |
| | | (2 unshielded) | 22 (7x30) | Wht, Blu | .012 | | | | |

Belden

300 ohm transmission line cables

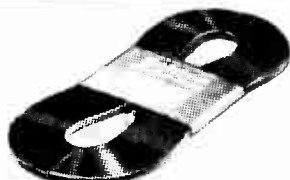
TWIN LEAD WIRES

| Description & Trade Number | AWG & (Stranding) | Color | Nom. O.D. (Inch) | Nom. Velocity of Propagation | Nom. Capacitance (mmf/ft) | Nom. Attenuation per 100' | | Standard Package Lengths in ft |
|---|-------------------|-------|-------------------|------------------------------|---------------------------|---------------------------|------|---|
| | | | | | | mc | db | |
|  <p>Permohm* 8285</p> <p>Copperweld, 2 conductors parallel, orange polyethylene insulation and web between conductors, cellular polyethylene oval jacket.</p> | 22 (7x30) | Brown | .255 x .468 | 73.3% | 5.3 | 100 | 1.4 | 50, 75, 100 coils in counter dispenser 500, 1000 spools |
| | | | | | | 300 | 2.8 | |
| | | | | | | 500 | 3.8 | |
| | | | | | | 700 | 4.8 | |
| | | | | | | 900 | 5.6 | |
| <p>PERMOHM* Encapsulated twin lead for strong, clear signals on all channels despite salt spray, industrial contamination, rain, ice and fringe area reception. An excellent color, UHF or VHF cable.</p> | | | | | | | | |
|  <p>Celluline* 8275</p> <p>Copperweld; 2 conductors parallel, polyethylene jacket with inert gas filled unicellular polyethylene core.</p> | 20 (7x28) | Brown | .300 x .400 | 80% | 4.6 | 100 | 1.05 | 50, 75, 100 coils in counter dispenser 500, 1000 spools |
| | | | | | | 200 | 1.64 | |
| | | | | | | 300 | 2.12 | |
| | | | | | | 400 | 2.5 | |
| | | | | | | 500 | 2.98 | |
| <p>CELLULINE* Maintains uniform electrical characteristics by eliminating all possible moisture between conductors. Installation is easier as no end-sealing is necessary. Losses are lower because of its lower dielectric constant (1.5). The thick outer wall of brown polyethylene protects the cable from abrasion and sun damage, and the round shape offers less wind resistance. The result is a longer lasting, more efficient line which helps maintain a strong UHF or VHF picture.</p> | | | | | | | | |
|  <p>8235</p> <p>Bare copper, 2 conductors parallel, polyethylene insulated.</p> | 18 (7x26) | Brown | .185 x .520 | 77% | 5.0 | 100 | .85 | 100, 500 spools |
| | | | | | | 200 | 1.35 | |
| | | | | | | 300 | 1.80 | |
| | | | | | | 400 | 2.20 | |
| | | | | | | 500 | 2.60 | |
| <p>Amateur transmitting and receiving twin lead—1 KW(RF) rated.</p> | | | | | | | | |
|  <p>Weldohm® 8230</p> <p>Copperweld; 2 conductors parallel, polyethylene insulated.</p> | 20 (7x28) | Brown | .072 x .400 | 80% | 4.4 | 100 | 1.1 | 25, 50, 75, 100 pancake coils in a sleeve 500, 1000 spools |
| | | | | | | 200 | 1.7 | |
| | | | | | | 300 | 2.2 | |
| | | | | | | 400 | 2.7 | |
| | | | | | | 500 | 3.1 | |
| <p>WELDOHM® This cable is 1½ times stronger and 2½ times more flexible than the equivalent twin lead with all copper conductors, without changing the RF electrical characteristics. Tests prove its superior resistance to the pulling, whipping, and twisting that is so important to a long lasting installation.</p> | | | | | | | | |
|  <p>8225</p> <p>Bare copper, 2 conductors parallel, polyethylene insulated.</p> | 20 (7x28) | Brown | .058 x .400 | 80% | 4.4 | 100 | 1.1 | 25, 50, 75, 100 pancake coils in a sleeve 500, 1000 spools |
| | | | | | | 200 | 1.7 | |
| | | | | | | 300 | 2.2 | |
| | | | | | | 400 | 2.7 | |
| | | | | | | 500 | 3.1 | |
| <p>Brown polyethylene for the best weathering.</p> | | | | | | | | |
|  <p>8226</p> <p>Bare copper, 2 conductors parallel, polyethylene insulated.</p> | 20 (7x28) | Ivory | .058 x .400 | 80% | 4.4 | Same as 8225 | | 25, 50, 75, 100 pancake coils in a sleeve |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| <p>Recommended for indoor use.</p> | | | | | | | | |

® Belden Trademark, Reg. U.S. Pat. off.

* Belden Trademark, Reg. U.S. Pat. off. and Belden Patents—U.S. 2,782,251 and 2,814,666.

BELDEN MERCHANDISERS



10 Pancake Coils per Box

300 ohm Line Package Coils

8225**8226** (New Indoor Ivory)**8230** (Weldohm)

Put-ups 25', 50', 75', 100'

Antenna Rotor Cable

8464 (4 conductor, flat)

Put-ups 50', 75', 100'



300 ohm Line Coils

8275 (Celluline)**8285** (Permohm)



Put-ups 50', 75', 100'

10 Coils per box



transmission line cables and antenna rotor cables


150 AND 72 OHM TRANSMISSION LINE CABLES

| Description | Trade Number | AWG & (Stranding) | Nom. O.D. (Inch) | Nom. Velocity of Propagation | Nom. Capacitance (mmf/ft) | Nom. Attenuation per 100' | | Standard Spool Lengths in ft |
|--|--------------|-------------------|-------------------|------------------------------|---------------------------|---------------------------|------|------------------------------|
| | | | | | | mc | db | |
|  150 OHM LINE | 8224 | 20 (7x28) | .075 x .182 | 76% | 9.5 | 100 | 2.8 | 100 |
| | | | | | | 200 | 4.2 | |
| | | | | | | 300 | 5.4 | |
| | | | | | | 400 | 6.4 | |
| 72 OHM LINE | 8222 | 20 (7x28) | .075 x .128 | 69% | 20.3 | 100 | 7.7 | 100, 500 |
| | | | | | | 200 | 11.0 | |
| | | | | | | 300 | 13.6 | |
| | | | | | | 400 | 15.9 | |
|  72 OHM 1 KW (RF) RATED | 8210 | 13 (7x21) | .166 x .278 | 68% | 21.0 | 100 | 3.8 | 100, 500 |
| | | | | | | 200 | 6.0 | |
| | | | | | | 300 | 7.8 | |
| | | | | | | 400 | 9.3 | |
| | | | | | | 500 | 11.0 | |
| | | | | | | 700 | 13.7 | |
| 900 | 16.0 | | | | | | | |

Bare copper, 2 conductors parallel, brown polyethylene insulated.



Bare copper, 2 conductors parallel, brown polyethylene insulated.

SHIELDED 100 OHM IMPEDANCE LINE

| Description | Trade Number | AWG & (Stranding) | Nom. O.D. (Inch) | Nom. Velocity of Propagation | Percent Shield Coverage | Nom. Capacitance (mmf/ft) | Nom. Attenuation Per 100' | | Standard Spool Lengths in ft |
|---|--------------|-------------------|------------------|------------------------------|-------------------------|---------------------------|---------------------------|------|------------------------------|
| | | | | | | | mc | db | |
|  | 8227 | 20 (7x28) | .325 | 62% | 83 | 15.5 | 100 | 4.1 | 100, 500 |
| | | | | | | | 200 | 6.4 | |
| | | | | | | | 300 | 8.4 | |
| | | | | | | | 400 | 10.2 | |

One conductor tinned, one bare copper, polyethylene insulated, cabled, polyethylene jacket, tinned copper braid shield, black vinyl jacket.


ANTENNA ROTOR CABLE

| Description | Trade Number | No. of Cond. | AWG & (Stranding) | Cond. Coding | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Suggested Working Voltage | Standard Package Lengths in ft |
|---|--------------|--------------|-------------------|--|-----------------------------|-------------------------|--|---------------------------|---|
|  | 8464 | 4 | 20 (7x28) | 1 cond. tinned and insulation ribbed | --- | --- | .070 x .390 | 200 | 50, 75, 100 pancake coils 500, 1000 spools |
| | | | | | | | Bare copper, parallel, chrome vinyl insulated. | | |
|  | 8484 | 4 | 20 (7x28) | Blk, Grn, Red, Wht | .010 | .020 | .180 | 200 | 100, 500, 1000 spools |
| | 8485 | 5 | 20 (7x28) | Blk, Grn, Red, Wht, Yel | .010 | .020 | .190 | 200 | 100, 500, 1000 spools |
| | 8488 | 8 | 22 (7x30) | Blk, Blu, Brn, Grn, Org, Red, Wht, Yel | .010 | .020 | .205 | 200 | 100, 500, 1000 spools |



Bare copper, vinyl insulated, cabled, chrome vinyl jacket.

ALUMINUM GROUND WIRE

Packaged in counter dispensers of 10-50' connected coils, or spools of 500 ft. Wire on spools is marked every 100' for easy measuring.

| Description | Trade Number | Nom. O.D. (Inch) | Standard Package Lengths in ft |
|---|--------------|------------------|--|
|  8 AWG solid, soft annealed aluminum. | 8018 | .128 | 500 in 10-50 connected coils 500 spools |









TV AND CHEATER CORDS

| Description | Trade Number | Length in ft. | Standard Package |
|--|--------------|---------------|--|
| CHEATER CORDS  | 8874 | 6 | 1 in polyethylene bag with description. SP-1 brown rubber parallel cord with male plug and TV connector. |
| | NEW 8895 | 6 | 1 in polyethylene bag with description. SPT-1 brown plastic parallel cord with male plug and TV connector. |
| CHEATER EXTENSION CORDS  | 8875 | 6 | 1 in polyethylene bag with description. SPT-1 red plastic parallel cord with male and female TV connectors. |

Belden

transmission line cables






RG/U CABLES

| Description | Trade Number | RG No. | AWG & (Stranding) Material | Insulation | No. of Shields & Material | Jacket | Nom. O.D. (Inch) | Nom. Imp. (Ohms) | Nom. Vel. of Prop. | Nom. Cap. (mmf/ft.) | Nom. Attenuation per 100 | | Standard Spool Lengths in ft. |
|--|--------------------------|------------------------|---------------------------------|--------------|--|-------------------------------|------------------|------------------|--------------------|---------------------|-----------------------------------|---------------------------------|-------------------------------|
| | | | | | | | | | | | mc | db | |
|  | 8264 JAN-C-17A | 5A U | 16 (Solid) silver coated copper | Polyethylene | 2 silver-coated copper | Gray non-contaminating vinyl | .328 | 50 | 66% | 28.5 | 100 2.40 200 3.50 400 5.25 | 500 1000 | |
|  | 8237 JAN-C-17A | 8 U | 13 (7x21) bore copper | Polyethylene | 1 bore copper | Block vinyl | .405 | 52 | 66% | 29.5 | 100 2.10 200 3.30 400 4.50 | 100 250, 500 1000 | |
| | 8267 MIL-C-17B | 213 U formerly 8A U | 13 (7x21) bore copper | Polyethylene | 1 bore copper | Block non-contaminating vinyl | .405 | 50 | 66% | 28.5 | 100 2.10 200 3.30 400 4.50 | 500 1000 | |
|  | 8242 JAN-C-17A | 9 U | 13 (7x21) silver coated copper | Polyethylene | 2 inner-silver-coated copper outer-bore copper | Gray non-contaminating vinyl | .420 | 51 | 66% | 30.0 | 100 2.10 200 3.30 400 4.50 | 100 1000 | |
|  | 8238 JAN-C-17A | 11 U | 18 (7x26) tinned copper | Polyethylene | 1 bore copper | Block vinyl | .405 | 75 | 66% | 20.5 | 100 1.90 200 2.85 400 4.35 | 100 250, 500 1000, 1500 | |
| | 8261 MIL-C-17B | 11A U | 18 (7x26) tinned copper | Polyethylene | 1 bore copper | Block non-contaminating vinyl | .405 | 75 | 66% | 20.5 | 100 1.90 200 2.85 400 4.35 | 100 500 1000 | |
|  | 8239 JAN-C-17A | 54A U | 18(7x.0152) bore copper | Polyethylene | 1 tinned copper | Clear polyethylene | .245 | 58 | 66% | 26.5 | 100 3.10 200 4.40 400 6.70 | 500 1000 | |
|  | 8245 JAN-C-17A | 55/U | 20 (Solid) bore copper | Polyethylene | 2 tinned copper | Clear polyethylene | .201 | 53.5 | 66% | 28.5 | 100 4.10 200 6.20 400 9.50 | 500 1000 | |
|  | 8259 JAN-C-17A | 58A U | 20(19x.0071) tinned copper | Polyethylene | 1 tinned copper | Block vinyl | .195 | 50 | 66% | 28.5 | 100 5.30 200 8.20 400 12.60 | 25, 50 100, 500 1000 | |
|  | 8240 JAN-C-17A | 58 U | 20 (Solid) bore copper | Polyethylene | 1 tinned copper | Block vinyl | .195 | 53.5 | 66% | 28.5 | 100 4.10 200 6.20 400 9.50 | 25, 50, 100 250, 500 1000 | |
| | 8262 MIL-C-17B | 58C U | 20(19x.0071) tinned copper | Polyethylene | 1 tinned copper | Block non-contaminating vinyl | .195 | 50 | 66% | 28.5 | 100 5.30 200 8.20 400 12.60 | 500 1000 | |

Belden


transmission line cables and test prod wire

RG/U CABLES

| Description | Trade Number | R.G. No. | AWG & (Stranding) Material | Insulation | No. of Shields & Material | Jacket | Nom. O.D. (Inch) | Nom. Impedance (Ohms) | Nom. Velocity of Propagation | Nam. Cap. (mmf/ft) | Nom. Attenuation per 100' mc db | Standard Spool Length in ft. |
|---|--------------------------|----------|----------------------------|-------------------------|---------------------------|-------------------------------|------------------|-----------------------|------------------------------|--------------------|----------------------------------|---------------------------------|
|  | 8241 JAN-C-17A | 59 U | 22 bare Copperweld | Polyethylene | 1 bare copper | Black vinyl | .242 | 73 | 66% | 21.0 | 100 3.75 200 5.60 400 8.30 | 25, 50, 100 250, 500 1000 |
|  | 8263 MIL-C-17B | 59B U | .023 bore Copperweld | Polyethylene | 1 bare copper | Black non-contaminating vinyl | .242 | 75 | 66% | 20.5 | 100 3.75 200 5.60 400 8.30 | 500 1000 |
|  | 8254 JAN-C-17A | 62 U | 22 bare Copperweld | Semi-solid Polyethylene | 1 bare copper | Black vinyl | .242 | 93 | 84% | 13.5 | 100 3.10 200 4.40 400 6.30 | 100 500 1000 |
|  | 8257 JAN-C-17A | 71 U | 22 bore Copperweld | Semi-solid Polyethylene | 2 tinned copper | Clear Polyethylene | .245 | 93 | 84% | 13.5 | 100 3.10 200 4.40 400 6.30 | 500 1000 |
|  | NEW 8216 | 174 U | 7x34 bare Copperweld | Polyethylene | 1 tinned copper | Black vinyl | .100 | 50 | 65.5% | 30.4 | 100 8.8 200 13.0 400 20.0 | 100, 500 1000 |

Production quantities of other RG U types quoted on request.


FOAM CORE RG-8/U TYPE TRANSMISSION LINE

| Description | Trade Number | AWG & (Stranding) Material | Percent Shield Coverage | Nom. O.D. (Inch) | Nom. Impedance (Ohms) | Nom. Velocity of Propagation | Nom. Cap. (mmf/ft) | Nom. Attenuation per 100' mc db | Standard Spool Lengths in ft |
|--|-----------------|----------------------------|-------------------------|------------------|-----------------------|------------------------------|--------------------|---|------------------------------|
|  | NEW 8214 | 11 (7x19) | 96.8% | .405 | 50 | 78% | 26 | 50 1.20 100 1.80 200 2.60 300 3.30 400 3.80 | 100 500 1000 |

Conductor cellular polyethylene insulated bare copper braid shield black polyethylene jacket.



Foam core RG-8 U type—for use in citizens' band and amateur radio as a 50 Ohm antenna cable.

TEST PROD WIRE

| Description | Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Breakdown Voltage | Suggested Working Voltage | Standard Spool Lengths in ft |
|--|--------------|-------------------|-----------------------------|------------------|-------------------|---------------------------|---|
|  | 8899 | 18 (65x36) | .045 | .144 | 20,000 | 5,000 | 10, 14', 25, 100, 500, 1000 7' of red and 7' of black. |
| | 8898 | 18 (65x36) | .088 | .230 | 29,000 | 10,000 | 10, 25, 100, 500 |

Tinned copper, separator, rubber insulated, red or black. Extreme limpness and flexibility combined with high dielectric strength.




COILED TEST PROD WIRE

| Description | Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Breakdown Voltage | Suggested Working Voltage | Standard Package |
|---|--------------|-------------------|-----------------------------|------------------|-------------------|---------------------------|----------------------|
|  With Prods | 8878 | 20 (42x36) | .063 | .170 | 20,000 | 5,000 | 1 pair Red and Black |
| Tinned copper, rubber insulated, red or black 7' 9" of cable. Retracted length 8". Stretches to 5'. | | | | | | | |
|  Without Prods | 8879 | 20 (42x36) | .063 | .170 | 20,000 | 5,000 | 1 pair Red and Black |
| Tinned copper, rubber insulated, red or black 7' 9" of cable. Retracted length 8". Stretches to 5'. | | | | | | | |



community tv antenna cables and cathode ray tube lead cable

ALL CABLES IN THIS GROUP ARE SWEEP TESTED

| Description | Trade Number | AWG & (Stranding) Material | Percent Shield Coverage | Nom. O.D. (Inch) | Nom. Impedance (Ohms) | Nom. Velocity of Propagation | Nom. Cap. (mmf/ft) | Nom. Attenuation per 100' | | Standard Spool Lengths in ft | | | | | |
|---|-----------------|---|-------------------------|-----------------------|-----------------------|------------------------------|--------------------------------|---------------------------------|--------------------------------------|------------------------------|--------------------------------|---------------------------------|-----------------|---------------------------------|-----------------|
| | | | | | | | | mc | db | | | | | | |
|  Conductor, cellular polyethylene insulated, bare copper braid shield, black polyethylene jacket. | 8211 | 22 (Solid) Copperweld | 94.6 | .242 | 80 | 78% | 16.3 | 50 100 200 300 400 | 2.4 3.4 4.8 5.8 6.7 | 500, 1000, 2000 | | | | | |
| | | Fits the same connectors as RG-59/U Foam core RG-59/U type | | | | | | | | | | | | | |
| | | 20 (Solid) Copperweld | 93.8 | .242 | 75 | 78% | 17.3 | 50 100 200 300 400 | 2.3 3.2 4.5 5.5 6.3 | | 500, 1000, 2000 | | | | |
| Foam core RG-59/U type | | | | | | | | | | | | | | | |
| 14 (Solid) copper | | 96.8 | .405 | 75 | 78% | 17.3 | 50 100 200 300 400 | 1.0 1.5 2.3 2.9 3.4 | 500, 1000, 2000 | | | | | | |
| Foam core RG-11/U type | | | | | | | | | | | | | | | |
|  Conductor, polyethylene insulated, two bare copper braid shields, black polyethylene jacket. | NEW 8215 | 21 (Solid) Copperweld | 96.6 (inner shield) | .332 | 75 | 66% | 20.5 | 50 100 200 300 400 | 2.05 2.90 4.30 5.40 6.50 | 100, 500, 1000 | | | | | |
| | | RG-6A/U type | | | | | | | | | | | | | |
| | |  Conductor, cellular polyethylene insulated, bare copper braid shield, polyethylene insulated, bare copper braid shield, black polyethylene jacket. | 8232 | 20 (Solid) Copperweld | 93.8 (inner shield) | .315 | 75 | 78% | 17.3 | | 50 100 200 300 400 | 2.3 3.2 4.5 5.5 6.3 | 500, 1000, 2000 | | |
| | | | | 8233 | 14 (Solid) copper | 92.5 (inner shield) | .475 | 75 | 78% | | 17.3 | 50 100 200 300 400 | | 1.0 1.5 2.3 2.9 3.4 | 500, 1000, 2000 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |


SWEEP TESTING

For satisfactory transmission of a signal through a cable at any frequency, Belden Sweep Tests every length of its Community TV Cables at all channels in the VHF Frequency range on an oscilloscope.

Sweep Testing, performed by trained technicians using the most modern equipment, prevents unsatisfactory program reception due to imperfections in the cable acting as "Filter Traps" at some frequencies.

The Black Polyethylene Jackets on Belden numbers 8211, 8212, 8213, 8215, 8232, and 8233 are manufactured with a noncontaminating, non-migratory compound specially formulated for superior weather resistance.

HIGH VOLTAGE CATHODE-RAY TUBE LEAD

| Description | Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Jacket Color | Break-down Voltage | Suggested Working Voltage | Standard Spool Lengths in ft |
|---|-----------------|-------------------|-----------------------------|-------------------------|------------------|--------------|--------------------|---------------------------|------------------------------|
|  | 8868 | 22 (7x30) | .045 | .015 | .150 | Red | 50,000 | 25,000 | 25, 100, 500 |
| | NEW 8869 | 22 (7x30) | .030 | .015 | .120 | Blk | 35,000 | 17,000 | 25, 100, 500 |

Tinned copper, conductive polyethylene, polyethylene insulated, vinyl jacket. The new construction greatly improves working and breakdown voltage, reduces corona, and adds service life.

*For use with non-conductive ceramic flyback cores.



mil-W-76B-plastic wire

TYPE MW-VINYL—1000V—80C

Formerly Type SRIR JAN-C-76

Tinned copper, vinyl insulated, Medium wall. The extruded vinyl insulation is flame and ozone resistant and is inert to most chemicals, oils, and solvents.



STRANDED CONDUCTOR

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|--------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-----------|--------------|
| | | | | | 25' | 100' | 500 or 1000' |
| 8525 | MW-C-24-(7)-U | 24(7x32) | .017 | .058 | — | 1 thru 30 | 1 thru 30 |
| 8524 | MW-C-22-(7)-U | 22(7x30) | .017 | .064 | 1 thru 13 | 1 thru 30 | 1 thru 30 |
| 8523 | MW-C-20-(10)-U | 20(10x30) | .017 | .070 | 1 thru 13 | 1 thru 30 | 1 thru 30 |
| 8522 | MW-C-18-(16)-U | 18(16x30) | .017 | .080 | 1 thru 13 | 1 thru 22 | 1 thru 30 |
| 8521 | MW-C-16-(26)-U | 16(26x30) | .019 | .098 | — | 1 thru 10 | 1 thru 30 |
| 8520 | MW-C-14-(41)-U | 14(41x30) | .020 | .111 | — | 1 thru 30 | 1 thru 30 |
| 8527 | MW-C-12-65-U | 12(65x30) | .020 | .130 | — | 1 thru 30 | 1 thru 30 |

Color Combinations

Stock colors. First color in stripe combination is body color and second or third colors are stripes (White Black Red).

| Code Color No. | Combination | Code Color No. | Combination |
|----------------|-----------------|----------------|--------------------|
| 1 | Brown | 16 | White/Green |
| 2 | Red | 17 | White/Yellow |
| 3 | Orange | 18 | White/Blue |
| 4 | Yellow | 19 | White/Brown |
| 5 | Green | 20 | White/Orange |
| 6 | Light Blue | 21 | White/Gray |
| 7 | Violet (purple) | 22 | White/Violet |
| 8 | Gray (slate) | 23 | White/Black/Red |
| 9 | White | 24 | White/Black/Green |
| 10 | Black | 25 | White/Black/Yellow |
| 11 | Tan | 26 | White/Black/Blue |
| 12 | Pink | 27 | White/Black/Brown |
| 13 | Dark Blue | 28 | White/Black/Orange |
| 14 | White/Black | 29 | White/Black/Gray |
| 15 | White/Red | 30 | White/Black/Violet |

SOLID CONDUCTOR

| | | | | | | | |
|----------|---------------|------------|------|------|-----------|-----------|-----------|
| 8530 | MW-C-22-(1)-U | 22 (Solid) | .017 | .059 | 1 thru 13 | 1 thru 30 | 1 thru 30 |
| 8529 | MW-C-20-(1)-U | 20 (Solid) | .017 | .066 | 1 thru 13 | 1 thru 30 | 1 thru 30 |
| 8528 | MW-C-18-(1)-U | 18 (Solid) | .017 | .074 | — | 1 thru 30 | 1 thru 30 |
| NEW 8531 | MW-C-16-(1)-U | 16 (Solid) | .017 | .085 | 1 thru 30 | 1 thru 30 | 1 thru 30 |

TYPE MW-SHIELDED—1000V—80C



Tinned copper, vinyl insulation. Medium wall. Tinned copper shield overall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|--------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-----------|-----------|
| | | | | | 100' | 500' | 1000' |
| NEW 8887 | MW-C-24-(7)-S | 24(7x32) | .017 | .082 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8883 | MW-C-22-(7)-S | 22(7x30) | .017 | .088 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8886 | MW-C-20-(10)-S | 20(10x30) | .017 | .094 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8882 | MW-C-18-(16)-S | 18(16x30) | .017 | .104 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8884 | MW-C-16-(26)-S | 16(26x30) | .019 | .122 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8881 | MW-C-14-(41)-S | 14(41x30) | .020 | .135 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |
| NEW 8880 | MW-C-12-(65)-S | 12(65x30) | .020 | .154 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |

Color Coding

| Code Color No. | Combination | Code Color No. | Combination |
|----------------|-------------|----------------|-----------------|
| 1 | Brown | 6 | Light Blue |
| 2 | Red | 7 | Violet (purple) |
| 3 | Orange | 8 | Gray (slate) |
| 4 | Yellow | 9 | White |
| 5 | Green | 10 | Black |

TYPE MW-SHIELDED—NYLON JACKET—1000V—80C



Tinned copper, vinyl insulation. Medium wall. Tinned copper shield, nylon jacket.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|--------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|------|-------|
| | | | | | 100' | 500' | 1000' |
| NEW 8893 | MW-C-22-(7)-SJ | 22(7x30) | .017 | .095 | 9 | 9 | 9 |
| NEW 8896 | MW-C-20-(10)-SJ | 20(10x30) | .017 | .101 | 9 | 9 | 9 |
| NEW 8892 | MW-C-18-(16)-SJ | 18(16x30) | .017 | .112 | 9 | 9 | 9 |
| NEW 8894 | MW-C-16-(26)-SJ | 16(26x30) | .019 | .131 | 9 | 9 | 9 |

Color Coding

Vinyl insulation, White only. (9)



mil-W-76B plastic wire

TYPE MW-GLASS BRAID—1000V—80C



Tinned copper, vinyl insulated. Medium wall, lacquered glass braid overall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|---------------------------|---------------------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8566 | MW-C-22(7)-B | 22(7x30) | .017 | .076 | 1 thru 10 24 thru 132 | 1 thru 10 124 thru 132 | 1 thru 10 124 thru 132 |
| NEW 8565 | MW-C-20(10)-B | 20(10x30) | .017 | .084 | 1 thru 10 124 thru 132 | 1 thru 10 124 thru 132 | 1 thru 10 124 thru 132 |
| NEW 8564 | MW-C-18(16)-B | 18(16x30) | .017 | .094 | 1 thru 10 124 thru 132 | 1 thru 10 124 thru 132 | 1 thru 10 124 thru 132 |
| NEW 8563 | MW-C-16(26)-B | 16(26x30) | .019 | .112 | 1 thru 10 124 thru 132 | 1 thru 10 124 thru 132 | 1 thru 10 124 thru 132 |
| NEW 8562 | MW-C-14(41)-B | 14(41x30) | .020 | .125 | 9, 124 thru 132 | 9, 124 thru 132 | 9, 124 thru 132 |
| NEW 8561 | MW-C-12(65)-B | 12(65x30) | .020 | .144 | 9, 125, 132 | 9, 125, 132 | 9, 125, 132 |

Color Coding

| Code No. | Color Combination | Code No. | Color Combination |
|----------|-------------------|----------|-------------------|
| 1 | Brown | 135 | White/Black |
| 2 | Red | 125 | White/Red |
| 3 | Orange | 128 | White/Green |
| 4 | Yellow | 127 | White/Yellow |
| 5 | Green | 129 | White/Blue |
| 6 | Light Blue | 124 | White/Brown |
| 7 | Violet (Purple) | 126 | White/Orange |
| 8 | Gray (Slate) | 131 | White/Gray |
| 9 | White | 130 | White/Violet |
| 10 | Black | | |

TYPE MW-GLASS BRAID-SHIELDED—1000V—80C



Tinned copper, vinyl insulated. Medium wall, lacquered glass braid, tinned copper shield overall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|------|-------|
| | | | | | 100' | 500' | 1000' |
| NEW 8863 | MW-C-22(7)-BS | 22(7x30) | .017 | .102 | 9 | 9 | 9 |
| NEW 8862 | MW-C-20(10)-BS | 20(10x30) | .017 | .108 | 9 | 9 | 9 |
| NEW 8861 | MW-C-18(16)-BS | 18(16x30) | .017 | .118 | 9 | 9 | 9 |
| NEW 8860 | MW-C-16(26)-BS | 16(26x30) | .019 | .136 | 9 | 9 | 9 |
| NEW 8859 | MW-C-14(41)-BS | 14(41x30) | .020 | .149 | 9 | 9 | 9 |
| NEW 8858 | MW-C-12(65)-BS | 12(65x30) | .020 | .168 | 9 | 9 | 9 |

Color Coding

Vinyl insulation. White only. (9)

TYPE MW-NYLON JACKET—1000V—90C



Tinned copper, vinyl insulated. Medium wall, clear nylon jacket overall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-------------------------|-------------------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8537 | MW-C-22(7)-J | 22(7x30) | .017 | .069 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8536 | MW-C-20(10)-J | 20(10x30) | .017 | .075 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8535 | MW-C-18(16)-J | 18(16x30) | .017 | .086 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8534 | MW-C-16(26)-J | 16(26x30) | .019 | .106 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8533 | MW-C-14(41)-J | 14(41x30) | .020 | .119 | 1, 3 thru 5, 9, 10 | 1, 3 thru 5, 9, 10 | 1, 3 thru 5, 9, 10 |
| NEW 8532 | MW-C-12(65)-J | 12(65x30) | .020 | .139 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |

Color Coding

| Code No. | Color Combination | Code No. | Color Combination |
|----------|-------------------|----------|-------------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (Purple) | 20 | White/Orange |
| 8 | Gray (Slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |



mil-W-76B—plastic wire

TYPE HW—VINYL—Gauges 16-22 2500V, Gauges 6-14 600—80C



Tinned copper, vinyl insulated. Heavy wall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-----------|-----------|
| | | | | | 100' | 500' | 1000' |
| NEW 8588 | HW-C-22(7)-U | 22(7x30) | .034 | .098 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8587 | HW-C-20-(10)-U | 20(10x30) | .034 | .104 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8586 | HW-C-18(16)-U | 18(16x30) | .034 | .114 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8585 | HW-C-16-(26)-U | 16(26x30) | .034 | .128 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |
| NEW 8584 | HW-C-14-(41)-U | 14(41x30) | .048 | .171 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |
| NEW 8583 | HW-C-12-(65)-U | 12(65x30) | .048 | .191 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |
| NEW 8582 | HW-C-10-(105)-U | 10(105x30) | .048 | .214 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |
| NEW 8581 | HW-C-8-(133)-U | 8(133x29) | .048 | .261 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |
| NEW 8580 | HW-C-6-(133)-U | 6(133x27) | .048 | .296 | 2, 9, 10 | 2, 9, 10 | 2, 9, 10 |

Color Coding

| Code Color No. | Combination | Code Color No. | Combination |
|----------------|-------------|----------------|-----------------|
| 1 | Brown | 6 | Light Blue |
| 2 | Red | 7 | Violet (purple) |
| 3 | Orange | 8 | Gray (slate) |
| 4 | Yellow | 9 | White |
| 5 | Green | 10 | Black |

TYPE HW—GLASS BRAID—600V—80C



Tinned copper, vinyl insulated. Heavy wall, lacquered glass braid.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-------------|-------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8591 | HW-C-10-(105)-B | 10(105x30) | .048 | .232 | 9, 125, 132 | 9, 125, 132 | 9, 125, 132 |
| NEW 8590 | HW-C-8-(133)-B | 8(133x29) | .048 | .279 | 9, 125, 132 | 9, 125, 132 | 9, 125, 132 |
| NEW 8589 | HW-C-6-(133)-B | 6(133x27) | .048 | .314 | 9, 125, 132 | 9, 125, 132 | 9, 125, 132 |

Color Coding

| Code Color No. | Combination |
|----------------|-------------|
| 9 | White |
| 132 | White/Black |
| 125 | White/Red |

TYPE LW—VINYL—300V—80C



Tinned copper, vinyl insulated. Light wall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|------------|------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8572 | LW-C-30-(7)-U | 30(7x38) | .011 | .034 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8571 | LW-C-28(7)-U | 28(7x36) | .011 | .037 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8570 | LW-C-26(7)-U | 26(7x34) | .011 | .041 | 14 thru 22 | 14 thru 22 | 14 thru 22 |
| NEW 8569 | LW-C-24(7)-U | 24(7x32) | .011 | .046 | 1 thru 19 | 1 thru 19 | 1 thru 19 |
| NEW 8568 | LW-C-22(7)-U | 22(7x30) | .012 | .054 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8567 | LW-C-22-(10)-J | 20(10x30) | .012 | .060 | 14 thru 22 | 14 thru 22 | 14 thru 22 |

Color Coding

| Code Color No. | Combination | Code Color No. | Combination |
|----------------|-----------------|----------------|--------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (purple) | 20 | White/Orange |
| 8 | Gray (slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |

TYPE LW—NYLON JACKET—300V—90C



Tinned copper, vinyl insulated. Light wall, clear nylon jacket overall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|------------|------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8579 | LW-C-30-(7)-J | 30(7x38) | .011 | .039 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8578 | LW-C-28(7)-J | 28(7x36) | .011 | .042 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8577 | LW-C-26(7)-J | 26(7x34) | .011 | .046 | 14 thru 22 | 14 thru 22 | 14 thru 22 |
| NEW 8576 | LW-C-24(7)-J | 24(7x32) | .011 | .051 | 1 thru 19 | 1 thru 19 | 1 thru 19 |
| NEW 8575 | LW-C-24(7)-J | 22(7x30) | .012 | .059 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8574 | LW-C-22-(10)-J | 20(10x30) | .012 | .065 | 14 thru 22 | 14 thru 22 | 14 thru 22 |

Color Coding

| Code Color No. | Combination | Code Color No. | Combination |
|----------------|-----------------|----------------|--------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (purple) | 20 | White/Orange |
| 8 | Gray (slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |



mil-W-16878D plastic wire

TYPE B—VINYL—600V—105C



Tinned copper, vinyl insulated.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-------------------------|-------------------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8599 | B-32 | 32(7x40) | .010 | .029 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8598 | B-30 | 30(7x38) | .010 | .032 | " | " | " |
| NEW 8597 | B-28 | 28(7x36) | .010 | .035 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8505 | B-26 | 26(7x34) | .010 | .039 | " | " | " |
| 8509 | B-24 | 24(19x36) | .010 | .045 | 9, 14-22 | — | 9, 14-22 |
| 8504 | B-24 | 24(7x32) | .010 | .044 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8508 | B-22 | 22(19x34) | .010 | .051 | 9, 14-22 | — | 9, 14-22 |
| 8503 | B-22 | 22(7x30) | .010 | .050 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8507 | B-20 | 20(19x32) | .010 | .059 | 9, 14-22 | — | 9, 14-22 |
| 8502 | B-20 | 20(7x28) | .010 | .058 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8506 | B-18 | 18(19x30) | .010 | .069 | 9, 14-22 | — | 9, 14-22 |
| 8501 | B-18 | 18(7x26) | .010 | .068 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8500 | B-16 | 16(19x29) | .010 | .077 | " | " | " |

Color Coding

| Code No. | Color Combination | Code No. | Color Combination |
|----------|-------------------|----------|-------------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (Purple) | 20 | White/Orange |
| 8 | Gray (Slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |

TYPE B—VINYL-NYLON JACKET—600V—115C



Tinned copper, vinyl insulated, nylon jacket overall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-------------------------|-------------------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8596 | B-32 | 32(7x40) | .010 | .035 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| NEW 8595 | B-30 | 30(7x38) | .010 | .038 | " | " | " |
| NEW 8594 | B-28 | 28(7x36) | .010 | .041 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8515 | B-26 | 26(7x34) | .010 | .045 | " | " | " |
| 8519 | B-24 | 24(19x36) | .010 | .051 | " | — | " |
| 8514 | B-24 | 24(7x32) | .010 | .050 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8518 | B-22 | 22(19x34) | .010 | .057 | " | — | " |
| 8513 | B-22 | 22(7x30) | .010 | .056 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8517 | B-20 | 20(19x32) | .010 | .065 | " | — | " |
| 8512 | B-20 | 20(7x28) | .010 | .064 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8516 | B-18 | 18(19x30) | .010 | .075 | 9, 14-22 | — | 9, 14-22 |
| 8511 | B-18 | 18(7x26) | .010 | .074 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| 8510 | B-16 | 16(19x29) | .010 | .083 | " | " | " |

Color Coding

| Code No. | Color Combination | Code No. | Color Combination |
|----------|-------------------|----------|-------------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (Purple) | 20 | White/Orange |
| 8 | Gray (Slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |



mil-W-16878D plastic wire

TYPE C VINYL—1000V—105C



Tinned copper, vinyl insulated

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-------------------------|-------------------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8955 | C-24 | 24(7x32) | .018 | .060 | 9, 14 thru 22 | 9, 14 thru 22 | 9, 14 thru 22 |
| NEW 8954 | C-22 | 22(7x30) | .018 | .066 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8953 | C-20 | 20(7x28) | .018 | .074 | " | " | " |
| NEW 8952 | C-18 | 18(7x26) | .018 | .084 | " | " | " |
| NEW 8951 | C-16 | 16(19x29) | .018 | .093 | 9, 14 thru 22 | 9, 14 thru 22 | 9, 14 thru 22 |
| NEW 8950 | C-14 | 14(19x27) | .018 | .107 | " | " | " |

Color Coding

| Code Color No. | Color Combination | Code Color No. | Color Combination |
|----------------|-------------------|----------------|-------------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (purple) | 20 | White/Orange |
| 8 | Gray (slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |

TYPE C—VINYL-NYLON JACKET—1000V—115C



Tinned copper, vinyl insulated, Nylon jacket overall.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-------------------------|-------------------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8961 | C-24 | 24(7x32) | .018 | .066 | 9, 14 thru 22 | 9, 14 thru 22 | 9, 14 thru 22 |
| NEW 8960 | C-22 | 22(7x30) | .018 | .072 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8959 | C-20 | 20(7x28) | .018 | .080 | " | " | " |
| NEW 8958 | C-18 | 18(7x26) | .018 | .091 | " | " | " |
| NEW 8957 | C-16 | 16(19x29) | .018 | .100 | 9, 14 thru 22 | 9, 14 thru 22 | 9, 14 thru 22 |
| NEW 8956 | C-14 | 14(19x27) | .018 | .114 | " | " | " |

Color Coding

| Code Color No. | Color Combination | Code Color No. | Color Combination |
|----------------|-------------------|----------------|-------------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (purple) | 20 | White/Orange |
| 8 | Gray (slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |

TYPE D-VINYL—3000V—105C



Tinned copper, vinyl insulated.

| Trade Number | Type Designation | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | |
|-----------------|------------------|-------------------|-----------------------------|------------------|---------------------------------|-------------------------|-------------------------|
| | | | | | 100' | 500' | 1000' |
| NEW 8972 | D-24 | 24(7x32) | .030 | .084 | 9, 14 thru 22 | 9, 14 thru 22 | 9, 14 thru 22 |
| NEW 8971 | D-22 | 22(7x30) | .030 | .090 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8970 | D-20 | 20(7x28) | .030 | .098 | " | " | " |
| NEW 8969 | D-18 | 18(7x26) | .030 | .108 | " | " | " |
| NEW 8968 | D-16 | 16(19x29) | .030 | .117 | 9, 14 thru 22 | 9, 14 thru 22 | 9, 14 thru 22 |
| NEW 8967 | D-14 | 14(19x27) | .030 | .131 | " | " | " |
| NEW 8966 | D-12 | 12(19x25) | .035 | .160 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 | 1 thru 10 14 thru 22 |
| NEW 8965 | D-10 | 10(37x26) | .035 | .181 | " | " | " |
| NEW 8964 | D-8 | 8(133x29) | .040 | .245 | " | " | " |
| NEW 8963 | D-6 | 6(133x27) | .040 | .290 | " | " | " |

Color Coding

| Code Color No. | Color Combination | Code Color No. | Color Combination |
|----------------|-------------------|----------------|-------------------|
| 1 | Brown | 14 | White/Black |
| 2 | Red | 15 | White/Red |
| 3 | Orange | 16 | White/Green |
| 4 | Yellow | 17 | White/Yellow |
| 5 | Green | 18 | White/Blue |
| 6 | Light Blue | 19 | White/Brown |
| 7 | Violet (purple) | 20 | White/Orange |
| 8 | Gray (slate) | 21 | White/Gray |
| 9 | White | 22 | White/Violet |
| 10 | Black | | |



mil-W-16878D

TYPE E—TFE TEFLON*—600V—200C



Concentrically stranded silver coated copper conductor, extruded TFE Teflon insulated

| Trade Number | Type Designation | AWG & (Stranding) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | | |
|--------------|------------------|-------------------|------------------|---------------------------------|------------|-----------|-----------|
| | | | | 25', 50' | 100', 250' | 500' | 1000' |
| 8300 | E-30 | 30(7x38) | .032 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8301 | E-28 | 28(7x36) | .035 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8302 | E-26 | 26(7x34) | .039 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8303 | E-24 | 24(19x36) | .044 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8304 | E-24 | 24(7x32) | .044 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8305 | E-22 | 22(7x30) | .050 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8306 | E-22 | 22(19x34) | .050 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8307 | E-20 | 20(19x32) | .058 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8308 | E-20 | 20(7x28) | .058 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8309 | E-18 | 18(19x30) | .069 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8310 | E-16 | 16(19x29) | .080 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |

Color Coding

| | | | |
|----------------|-------------|----------------|-----------------|
| Code Color No. | Combination | Code Color No. | Combination |
| 1 | Brown | 6 | Light Blue |
| 2 | Red | 7 | Violet (purple) |
| 3 | Orange | 8 | Gray (slate) |
| 4 | Yellow | 9 | White |
| 5 | Green | 10 | Black |
| | | 13 | Dark Blue |

*TEFLON: Du Pont trade name for Tetrafluorethylene Resin.

TYPE EE—TFE TEFLON—1000V—200C



Concentrically stranded silver coated copper conductor, extruded TFE Teflon insulated

| Trade Number | Type Designation | AWG & (Stranding) | Nom. O.D. (Inch) | Stock Colors on Standard Spools | | | |
|--------------|------------------|-------------------|------------------|---------------------------------|------------|-----------|-----------|
| | | | | 25', 50' | 100', 250' | 500' | 1000' |
| 8320 | EE-30 | 30(7x38) | .042 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8321 | EE-28 | 28(7x36) | .045 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8322 | EE-26 | 26(7x34) | .049 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8323 | EE-24 | 24(19x36) | .054 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8324 | EE-24 | 24(7x32) | .054 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8325 | EE-22 | 22(7x30) | .060 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8326 | EE-22 | 22(19x34) | .060 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8327 | EE-20 | 20(19x32) | .068 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8328 | EE-20 | 20(7x28) | .068 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8329 | EE-18 | 18(19x30) | .079 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |
| 8330 | EE-16 | 16(19x29) | .089 | 1 thru 10 | 1 thru 10 | 1 thru 10 | 1 thru 10 |

Color Coding

| | | | |
|----------------|-------------|----------------|-----------------|
| Code Color No. | Combination | Code Color No. | Combination |
| 1 | Brown | 6 | Light Blue |
| 2 | Red | 7 | Violet (purple) |
| 3 | Orange | 8 | Gray (slate) |
| 4 | Yellow | 9 | White |
| 5 | Green | 10 | Black |
| | | 13 | Dark Blue |

*TEFLON: Du Pont trade name for Tetrafluorethylene Resin.

UL TYPE HOOK-UP AND LEAD WIRES

UL-600V-90C



Tinned copper, vinyl insulated, cotton braid, lacquered

| Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors | Standard Spool Lengths in ft |
|--------------|-------------------|-----------------------------|------------------|--------------------------|------------------------------|
| 8937* | 22(7x30) | .016 | .091 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 1000 |
| 8936* | 20(10x30) | .017 | .098 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 1000 |
| 8935* | 18(16x30) | .017 | .113 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 1000 |
| 8934* | 16(26x30) | .017 | .126 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 500 |
| 8933 | 14(41x30) | .031 | .177 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 500 |

*UL rated 600V for electronic circuits only—300V for other applications.

UL-600V-105C (CSA 600V-90C)



Tinned copper, vinyl insulated.

| Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Stock Colors | Standard Spool Lengths in ft. |
|--------------|-------------------|-----------------------------|------------------|--------------------------|-------------------------------|
| 8920 | 22(7x30) | .031 | .095 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 1000 |
| 8919 | 20(10x30) | .031 | .102 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 1000 |
| 8918 | 18(16x30) | .031 | .112 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 1000 |
| 8917 | 16(26x30) | .031 | .126 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 500 |
| 8916 | 14(41x30) | .031 | .141 | 1, 2, 3, 4, 5, 9, 10, 13 | 100, 500 |

See above chart for color coding.



mil-W-5086A & mil-C-7078A aircraft power & lighting cables

MIL-W-5086A—TYPES 1 & 2—600V



Unshielded

| Trade Number | MIL Type Designation | AWG & (Stranding) | Nom. O.D. | Spec. Type | Stock Colors on Standard Spools | | |
|--------------|----------------------|-------------------|-----------|------------|---------------------------------|------|-------|
| | | | | | 100' | 500' | 1000' |
| NEW 8541 | AN-22 | 22(19x34) | .068 | No. 1 | 9 | 9 | 9 |
| NEW 8542 | AN-20 | 20(19x32) | .078 | No. 1 | 9 | 9 | 9 |
| NEW 8543 | AN-18 | 18(19x30) | .088 | No. 1 | 9 | 9 | 9 |
| NEW 8544 | AN-16 | 16(19x29) | .098 | No. 1 | 9 | 9 | 9 |
| NEW 8545 | AN-14 | 14(19x27) | .117 | No. 1 | 9 | 9 | 9 |
| NEW 8546 | AN-12 | 12(19x25) | .137 | No. 1 | 9 | 9 | 9 |
| NEW 8559 | AN-22 | 22(19x34) | .075 | No. 2 | 9 | 9 | 9 |
| NEW 8558 | AN-20 | 20(19x32) | .085 | No. 2 | 9 | 9 | 9 |
| NEW 8557 | AN-18 | 18(19x30) | .095 | No. 2 | 9 | 9 | 9 |
| NEW 8556 | AN-16 | 16(19x29) | .105 | No. 2 | 9 | 9 | 9 |
| NEW 8555 | AN-14 | 14(19x27) | .125 | No. 2 | 9 | 9 | 9 |
| NEW 8554 | AN-12 | 12(19x25) | .143 | No. 2 | 9 | 9 | 9 |
| NEW 8553 | AN-10 | 10(49x27) | .189 | No. 2 | 9 | 9 | 9 |
| NEW 8552 | AN-8 | 8(133x29) | .240 | No. 2 | 9 | 9 | 9 |
| NEW 8551 | AN-6 | 6(133x27) | .293 | No. 2 | 9 | 9 | 9 |
| NEW 8550 | AN-4 | 4(133x25) | .355 | No. 2 | 9 | 9 | 9 |
| NEW 8549 | AN-2 | 2(665x30) | .425 | No. 2 | 9 | 9 | 9 |
| NEW 8548 | AN-0 | 0(1045x30) | .525 | No. 2 | 9 | 9 | 9 |
| NEW 8547 | AN-00 | 00(1330x30) | .590 | No. 2 | 9 | 9 | 9 |

Color Coding

White only

Additional Description

MIL-W-5086A-Type I
AN-22 thru AN-12.
Stranded tinned copper,
white vinyl, clear nylon jacket
insulation.

MIL-W-5086A-Type II
AN-22 thru AN-12
Stranded tinned copper,
white vinyl insulation,
saturated glass braid,
clear nylon jacket.

MIL-W-5086A-Type II
AN-10 thru AN-00
Stranded tinned copper,
white vinyl insulation,
saturated glass braid,
nylon braid, nylon lacquer.

MIL-C-7078A—TYPE 1—600 VOLT

(MIL-W-5086A Type I Conductor Braided Tinned Copper Shield)



Shielded

| Trade Number | MIL Type Designation | AWG & (Stranding) | Nom. O.D. | Spec. Type | Stock Colors on Standard Spools | | |
|--------------|----------------------|-------------------|-----------|------------|---------------------------------|------|-------|
| | | | | | 100' | 500' | 1000' |
| NEW 8855 | AN-22 | 22(19x34) | .092 | No. 1 | 9 | 9 | 9 |
| NEW 8854 | AN-20 | 20(19x32) | .102 | No. 1 | 9 | 9 | 9 |
| NEW 8853 | AN-18 | 18(19x30) | .112 | No. 1 | 9 | 9 | 9 |
| NEW 8852 | AN-16 | 16(19x29) | .122 | No. 1 | 9 | 9 | 9 |
| NEW 8851 | AN-14 | 14(19x27) | .141 | No. 1 | 9 | 9 | 9 |
| NEW 8850 | AN-12 | 12(19x25) | .161 | No. 1 | 9 | 9 | 9 |

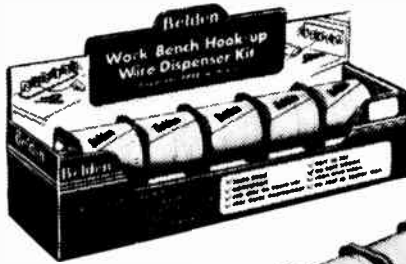
Color Coding

White only

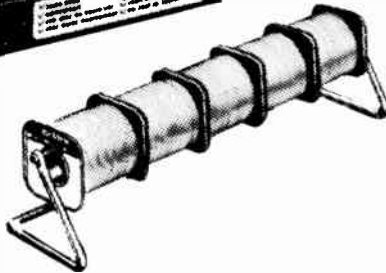
Additional Description
Stranded tinned copper,
white vinyl insulation
nylon jacket, braided
tinned copper shield

Belden kits-general purpose hook up wire

KITS—HOOK-UP WIRE ON RACKS



R and D Labs
Engineers . . .
Servicemen . . .
Hobbyists . . .



Specify Trade
Number 8800
for Rack only

Each kit contains an assortment of Hook-Up Wire colors and types plus a portable metal dispenser rack for workbench or wall mounting. The dispenser rack provides a complete, compact, and convenient wire department for every working area.

| Trade Number | No. of Spools | Spool Lengths | Type of Wire | Colors in Kit |
|--------------|---------------|---------------|--|-------------------------------|
| 8818 | 8 | 25' | 20 solid, cellulose acetate (8941-25) | 1, 2, 3, 4, 5, 6, 9, 10 |
| 8819 | 5 | 100' | 20 solid, cellulose acetate (8941-100) | 2, 5, 6, 9, 10 |
| 8820 | 8 | 25' | 20 stranded, cellulose acetate (8943-25) | 1, 2, 3, 4, 5, 6, 9, 10 |
| 8821 | 5 | 100' | 20 stranded, cellulose acetate (8943-100) | 2, 5, 6, 9, 10 |
| 8822 | 10 | 25' | 20 solid, Type MW vinyl (8529-25) | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |
| 8823 | 5 | 100' | 20 solid, Type MW vinyl (8529-100) | 2, 5, 6, 9, 10 |
| 8824 | 8 | 25' | 20 stranded, Type MW vinyl (8523-25) | 1, 2, 3, 4, 5, 6, 9, 10 |
| 8825 | 5 | 100' | 20 stranded, MIL-W-16878D vinyl (8507-100) | 9, 14, 15, 16, 17 |
| 8826 | 5 | 100' | 22 stranded, MIL-W-16878D vinyl (8508-100) | 9, 14, 15, 16, 17 |
| 8827 | 5 | 100' | 22 stranded, MIL-W-16878D vinyl-nylon (8518-100) | 2, 5, 6, 9, 10 |

GENERAL-PURPOSE HOOK-UP WIRES

Tinned copper, cellulose acetate wrap, cellulose acetate braid lacquered.

Nom. d-c Insulation Resistance—200 megohms/ft. Nom. Breakdown Voltage—1000.

| Trade Number | AWG & Stranding | Nom. O.D. (Inch) | Stock Colors | Standard Spool Lengths in ft. |
|--------------|-----------------|------------------|-------------------------|-------------------------------|
| 8941 | 20(Solid) | .072 | 1, 2, 3, 4, 5, 6, 9, 10 | 25, 100, 1000 |
| 8943 | 20(10x30) | .076 | 1, 2, 3, 4, 5, 6, 9, 10 | 25, 100, 1000 |
| 8945 | 18(Solid) | .080 | 2, 4, 5, 6, 9, 10 | 25, 100, 1000 |
| 8947 | 18(16x30) | .087 | 2, 4, 5, 6, 9, 10 | 25, 100, 1000 |
| 8942 | 16(26x30) | .099 | 2, 5, 10 | 100, 1000 |
| 8938 | 14(41x30) | .115 | 2, 10 | 100, 500 |

INDOOR ANTENNA WIRE

Tinned copper, chrome vinyl insulated.


| Trade Number | AWG & Stranding | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Standard Spool Lengths in ft. |
|--------------|-----------------|-----------------------------|------------------|-------------------------------|
| 8014 | 25(13x36) | .010 | .044 | 25, 500 |

COLOR CODING

Stock Colors. First color in stripe combination is body color and second or third colors are stripes (White/Black/Red)

| Code No. | Color Combination | Code No. | Color Combination |
|----------|-------------------|----------|--------------------|
| 1 | Brown | 16 | White/Green |
| 2 | Red | 17 | White/Yellow |
| 3 | Orange | 18 | White/Blue |
| 4 | Yellow | 19 | White/Brown |
| 5 | Green | 20 | White/Orange |
| 6 | Light Blue | 21 | White/Gray |
| 7 | Violet (purple) | 22 | White/Violet |
| 8 | Gray (slate) | 23 | White/Black/Red |
| 9 | White | 24 | White/Black/Green |
| 10 | Black | 25 | White/Black/Yellow |
| 11 | Tan | 26 | White/Black/Blue |
| 12 | Pink | 27 | White/Black/Brown |
| 13 | Dark Blue | 28 | White/Black/Orange |
| 14 | White/Black | 29 | White/Black/Gray |
| 15 | White/Red | 30 | White/Black/Violet |

SHIELDED HOOK-UP and GRID WIRES

| Description | Trade Number | AWG & Stranding | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Suggested Working Voltage | Breakdown Voltage | Insulation Resistance megohms per 1000 feet | Cap. (mmf/ft) | Standard Spool Lengths in ft |
|---|--------------|-----------------|-----------------------------|------------------|---------------------------|-------------------|---|---------------|------------------------------|
|  | 8885 | 20(10x30) | .015 | .117 | 1500 | 4000 | 300 | 80 | 15, 25, 100, 500 |

Tinned copper, rubber insulated, cellulose acetate braid, lacquered, tinned copper braid shield.

| | | | | | | | | | |
|---|------|----------|------|------|--|--|--|--|------------------|
|  | 8206 | 18(7x27) | .040 | .156 | | | | | 15, 50, 100, 250 |
|---|------|----------|------|------|--|--|--|--|------------------|

Tinned copper, rubber insulated, tinned copper braid shield.

For additional shielded hook-up wires see Military Specification Types on Pages 17, 18 & 23.



shielding, bus bar and accessory wires

SHIELDING AND BONDING CABLES



Braided tin copper.

| Trade Number | Stranding | Approx. Cir. Mil. Area | Nom. I.D. (Inch) | Standard Spool Lengths in ft |
|-----------------|-----------|------------------------|------------------|------------------------------|
| NEW 8676 | 16x36 | 400 | 1/32 | 10, 50, 250 |
| NEW 8674 | 24x36 | 600 | 3/64 | 10, 50, 250 |
| 8660 | 96x34 | 3,800 | 1/8 | 10, 50, 250 |
| 8668 | 120x34 | 4,700 | 1 1/64 | 10, 50, 250 |
| 8663 | 160x34 | 6,300 | 1/4 | 10, 50, 250 |
| 8661 | 192x34 | 7,600 | 3/8 | 10, 50, 250 |
| 8669 | 336x34 | 13,300 | 1/2 | 10, 50, 250 |
| NEW 8672 | 528x36 | 13,200 | 3/8 | 10, 50, 250 |
| 8662 | 576x34 | 22,900 | 2 5/32 | 10, 50, 250 |
| NEW 8670 | 480x30 | 48,000 | 3/4 | 10, 50, 250 |
| NEW 8671 | 832x36 | 20,800 | 1 | 10, 50, 250 |

For additional sizes, see current BRAIDED AND STRANDED COPPER CABLE CATALOG.

LEAD-IN WIRE



Tinned copper, black rubber insulated.

| Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|--------------|-------------------|-----------------------------|------------------|------------------------------|
| 8200 | 18 (7x27) | .040 | .126 | 100, 500, 1000 |

DUPLEX PRIMARY WIRE



Tinned copper, vinyl insulated, conductors parallel, chrome vinyl jacket.

Standard Spools: 100 and 500 feet

| Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Jacket Thickness (Inch) | Nom. O.D. (Inch) | Color Coding |
|--------------|-------------------|-----------------------------|-------------------------|------------------|--------------|
| 8677 | 16 (19x29) | .032 | .022 | 164 x .276 | Brn, Red |
| 8675 | 14 (19x27) | .037 | .022 | 189 x .326 | Brn, Red |
| 8673 | 12 (19x25) | .040 | .022 | 213 x .384 | Brn, Red |

BUS BAR WIRE



Solid Tinned Copper

| Trade Number | AWG | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|--------------|-----|------------------|------------------------------|
| 8027 | 34 | .006 | 100, 1000 |
| 8026 | 32 | .008 | 100, 1000 |
| 8025 | 30 | .010 | 100, 1000 |
| 8024 | 28 | .012 | 100, 1000 |
| 8023 | 26 | .016 | 100, 1000 |
| 8022 | 24 | .020 | 100, 1000 |
| 8021 | 22 | .025 | 100, 1000 |
| 8020 | 20 | .032 | 100, 1000 |
| 8019 | 18 | .040 | 100, 1000 |
| 8013 | 16 | .050 | 100, 1000 |
| 8012 | 14 | .064 | 100, 1000 |
| 8011 | 12 | .080 | 100 |

PRIMARY WIRE—MARINE AND AUTO S.A.E. TYPE G.P.T.



Bare copper, vinyl insulated.

| Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Color | Standard Spool |
|--------------|-------------------|-----------------------------|------------------|--------|----------------|
| 8685 | 16 (19x29) | .023 | .102 | Black | 100 |
| 8684 | 14 (19x27) | .023 | .117 | Green | 100 |
| 8683 | 12 (19x25) | .026 | .142 | Red | 100 |
| 8682 | 10 (19x23) | .031 | .175 | White | 100 |
| 8681 | 8 (19x21) | .037 | .219 | Chrome | 100 |
| 8680 | 6 (37x21) | .043 | .290 | Chrome | 100 |

7 MM IGNITION WIRE



Tinned Copperweld, POLYSIL* clear plastic insulation. *Belden Trademark

Standard Spool: 100 feet

| Trade Number | AWG & (Stranding) | Insulation Thickness (Inch) | Nom. O.D. (Inch) | Color Coding |
|--------------|-------------------|-----------------------------|------------------|--------------|
| 8666 | 20 (7x28) | .121 | .274 | Clear |

Belden magnet wire



Nylclod magnet wire combines the most desirable features of Formvar with the well-known toughness and solvent resistance of Nylon enamel. For difficult and exacting windings, these plus values may represent the difference between low and high rejections. Nylclod will out-perform all other A.I.E.E., Class A, film-coated wires with respect to: (1) ability to withstand winding abuse and forming operations; (2) resistance to the solvent action of insulating varnishes and all types of thinners; (3) resistance to softening at elevated temperatures; (4) solvent crazing; (5) windability.

| BELDENAMEL* (E) | | | | | | |
|-----------------|---------------|-----------------------|---------------|-----------------------|-----------------------|-----------------------|
| Size | ¼ Pound Spool | | ½ Pound Spool | | Turns per Linear Inch | Turns per Square Inch |
| | Trade Number | Approx. Length (Feet) | Trade Number | Approx. Length (Feet) | | |
| 14 | | | 8047 | 40 | 15.2 | 231 |
| 16 | | | 8048 | 63 | 19.1 | 365 |
| 18 | | | 8049 | 100 | 23.9 | 571 |
| 20 | | | 8050 | 160 | 29.9 | 894 |
| 22 | | | 8051 | 254 | 37.4 | 1399 |
| 24 | | | 8052 | 404 | 46.9 | 2200 |
| 26 | | | 8053 | 645 | 59.0 | 3481 |
| 28 | 8040 | 510 | 8054 | 1020 | 73.8 | 5446 |
| 30 | 8041 | 807 | 8055 | 1615 | 92.2 | 8501 |
| 32 | 8042 | 1257 | 8056 | 2515 | 114.0 | 12996 |
| 34 | 8043 | 2030 | 8057 | 4060 | 144.0 | 20736 |
| 36 | 8044 | 3200 | 8058 | 6400 | 180.0 | 32400 |
| 38 | 8045 | 5070 | | | 225.0 | 50625 |
| 40 | 8046 | 8050 | | | 290.0 | 84100 |

| NYLCLAD* (HNC) | | | | | | |
|----------------|---------------|-----------------------|---------------|-----------------------|-----------------------|-----------------------|
| Size | ½ Pound Spool | | 1 Pound Spool | | Turns per Linear Inch | Turns per Square Inch |
| | Trade Number | Approx. Length (Feet) | Trade Number | Approx. Length (Feet) | | |
| 14 | 8059 | 40 | 8073 | 80 | 14.9 | 222 |
| 16 | 8060 | 63 | 8074 | 126 | 18.6 | 346 |
| 18 | 8061 | 100 | 8075 | 199 | 23.2 | 538 |
| 20 | 8062 | 157 | 8076 | 315 | 28.9 | 835 |
| 22 | 8063 | 250 | 8077 | 501 | 36.0 | 1296 |
| 24 | 8064 | 396 | 8078 | 793 | 44.7 | 1998 |
| 26 | 8065 | 630 | 8079 | 1260 | 55.7 | 3102 |
| 28 | 8066 | 995 | 8080 | 1990 | 69.4 | 4816 |
| 30 | 8067 | 1570 | 8081 | 3140 | 86.2 | 7430 |
| 32 | 8068 | 2440 | 8082 | 4880 | 106.0 | 11236 |
| 34 | 8069 | 3930 | 8083 | 7860 | 133.0 | 17689 |
| 36 | 8070 | 6200 | 8084 | 12400 | 167.0 | 27889 |
| 38 | 8071 | 9700 | 8085 | 19400 | 206.0 | 42436 |
| 40 | 8072 | 16050 | 8086 | 32100 | 263.0 | 69169 |

SOLID FORMVAR ANTENNA WIRE



Copper, HF Formvar insulated.

| Trade Number | AWG & (Stranding) | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|--------------|-------------------|------------------|------------------------------|
| 8009 | 14 (Solid) | .067 | 100, 200, 500 |
| 8008 | 12 (Solid) | .084 | 100, 200, 500 |

STRANDED BARE ANTENNA WIRE



Stranded bare copper.

| Trade Number | AWG & (Stranding) | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|--------------|-------------------|------------------|------------------------------|
| 8002 | 16 (7x24) | .060 | 50, 75, 100, 1000 |
| 8000 | 14 (7x22) | .076 | 50, 75, 100, 1000 |

LITZ WIRE



Copper, Celenamel* insulated, nylon wrap.

| Trade Number | Stranding | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|--------------|-----------|------------------|------------------------------|
| 8817 | 5x44 | .008 | 100 |

VOICE COIL LEAD WIRE



Braided bare copper wire.

| Trade Number | AWG & (Stranding) | Nom. O.D. (Inch) | Standard Spool Lengths in ft |
|--------------|-------------------|------------------|------------------------------|
| 8127 | 25 (32x40) | .024 | 10, 500 |

*Belden Trademark Reg. U. S. Pat. Off.

**It's so easy to order
from this catalog . . .**

When ordering products shown in this book
or writing for additional information, please
be sure to specify:

- 1. Manufacturer's Catalog Numbers
and Page Numbers.**
- 2. The Year and Edition of This
MASTER.**

This will avoid confusion and expedite delivery.

Thank you!

The
Radio - Electronic
MASTER

Birnbach

INSULATING TUBING & SLEEVING

BIRACO, BIRFLEX, VINYL COATED FIBERGLASS



BIRACO PLASTIC TUBING

UL APPROVED FOR 105° C. OPERATION — MEETS MIL-I-631C SPECS.



A quality plastic Vinyl tubing designed for electronic and electrical insulation work. Has high dielectric strength, extreme flexibility, non-flammability, abrasion resistance, impervious to oil, water, alkalies, alcohol, solvents, etc., high heat stability and resistance to aging. Meets all A.S.T.M. specifications, Mil. Spec. (Type F, Form U, Grades A and C, Class 2, Category 1).

IN STOCK

The Birnbach line of insulated sleeving and tubing is the basic quality line designed for the rigid performance requirements of the Aircraft, Electrical and Electronic Industries.
Meets or exceeds the required MIL Specifications and ASTM and NEMA standards. We invite your inquiries on special problems and requirements.

BIRACO TUBING

Put up on convenient 100' Spools or Coils.

LONGER LENGTHS AVAILABLE

| Cat. No. | B & S Gauge | Approx. I.D. | Lgth. Spool |
|----------|-------------|--------------|-------------|
| 308BC.. | 24 | .022" | 100' |
| 311BC.. | 22 | .027" | 100' |
| 313BC.. | 20 | .034" | 100' |
| 314BC.. | 18 | .042" | 100' |
| 315BC.. | 16 | .053" | 100' |
| 316BC.. | 14 | .066" | 100' |
| 317BC.. | 12 | .085" | 100' |
| 325BC.. | 10 | .108" | 100' |
| 318BC.. | 8 | .135" | 100' |
| 326BC.. | 6 | .166" | 100' |
| 319BC.. | 4 | .208" | 100' |
| 320BC.. | 2 | .263" | 100' |
| 321BC.. | 1/2" | .3125" | 100' |
| 322BC.. | 3/8" | .375" | 100' |
| 323BC.. | 1/4" | .500" | 100' |
| 324BC.. | 3/16" | .625" | 100' |
| *327BC.. | 5/16" | .3125" | 100' |
| *328BC.. | 3/8" | .375" | 100' |
| *329BC.. | 1/2" | .500" | 100' |
| *329BC.. | 3/4" | .750" | 100' |
| *360BC.. | 1/2" | .750" | 100' |
| *361BC.. | 1" | 1.000" | 100' |
| *362BC.. | 1 1/4" | 1.250" | 50' |
| *363BC.. | 1 1/2" | 1.500" | 50' |
| *328BC.. | 1 1/4" | 1.750" | 100' |
| *329BC.. | 2" | 2.000" | 50' |
| *364BC.. | 2 1/4" | 2.250" | 100' |
| *365BC.. | 2 1/2" | 2.500" | 100' |

SPECIAL SPOOLS BIRACO TUBING

| Cat. No.'s | B & S Gauge | Spec. Size | Approx. Lgth. |
|------------|-------------|------------|---------------|
| 36" | | | |
| 308B.. | 24 | .022" | 25' |
| 311B.. | 22 | .027" | 25' |
| 313B.. | 20 | .034" | 25' |
| 314B.. | 18 | .042" | 25' |
| 315B.. | 16 | .053" | 25' |
| 316B.. | 14 | .066" | 25' |
| 317B.. | 12 | .085" | 25' |
| 325B.. | 10 | .108" | 15' |
| 318B.. | 8 | .135" | 15' |
| 326B.. | 6 | .166" | 15' |
| 319B.. | 4 | .208" | 10' |
| 320B.. | 2 | .263" | 10' |
| 321.. | 1/2" | .3125" | — |
| 322.. | 3/8" | .375" | — |
| 323.. | 1/4" | .500" | — |
| 324.. | 3/16" | .625" | — |

Standard package 36" lengths 25 each color:

In addition to Spools and Coils noted above the standard packaging is as follows on stock colors.

- #24 Thru #15 1,000' Soft Wound Spools
- #14 Thru #8 500' Soft Wound Spools
- #7 Thru #2 250'
- #1 and larger 100' coils

COLORS AVAILABLE FROM STOCK:
Black, Red, Green, White, Yellow, Blue, Brown, Orange, Clear.

*Cat. Nos. 360BC, 361BC, 362BC, 363BC, 364BC, 328BC, 329BC, 365BC available in Black, White and Clear from stock.

DIMENSIONAL TOLERANCES OF BIRACO

| Approx. I.D. | ASTM Tolerances | Wall Thickness Inches |
|--------------|-----------------|-----------------------|
| 24 | .022 - .020 | .027 ± .002 |
| 22 | .027 - .025 | .032 ± .002 |
| 20 | .034 - .032 | .039 ± .003 |
| 19 | .038 - .044 | .036 ± .003 |
| 18 | .042 - .040 | .049 ± .003 |
| 17 | .047 - .054 | .045 ± .003 |
| 16 | .053 - .051 | .061 ± .003 |
| 15 | .059 - .067 | .057 ± .003 |
| 14 | .066 - .064 | .072 ± .003 |
| 13 | .076 - .080 | .072 ± .003 |
| 12 | .085 - .081 | .089 ± .003 |
| 11 | .095 - .101 | .091 ± .003 |
| 10 | .106 - .102 | .112 ± .003 |
| 9 | .118 - .124 | .114 ± .003 |
| 8 | .133 - .129 | .141 ± .003 |
| 7 | .148 - .158 | .144 ± .003 |
| 6 | .166 - .162 | .178 ± .003 |
| 5 | .186 - .198 | .182 ± .003 |
| 4 | .208 - .204 | .224 ± .003 |
| 3 | .234 - .249 | .229 ± .003 |
| 2 | .263 - .258 | .278 ± .003 |
| 1 | .294 - .311 | .289 ± .003 |
| 0 | .330 - .347 | .325 ± .003 |
| 3/8" | .315 - .3125 | .334 ± .003 |
| 3/8" | .375 - .375 | .399 ± .003 |
| 3/8" | .438 - .462 | .438 ± .003 |
| 3/2" | .500 - .500 | .524 ± .003 |
| 3/16" | .562 - .592 | .582 ± .003 |
| 5/8" | .625 - .625 | .655 ± .003 |
| 3/4" | .750 - .750 | .786 ± .003 |
| 7/8" | .875 - .875 | .911 ± .003 |
| 1" | 1.000 - 1.000 | 1.036 ± .003 |
| 1 1/4" | 1.250 - 1.250 | 1.286 ± .003 |
| 1 1/2" | 1.500 - 1.500 | 1.536 ± .003 |
| 1 3/4" | 1.750 - 1.812 | 1.750 ± .003 |
| 2" | 2.000 - 2.000 | 2.070 ± .003 |
| 2 1/4" | 2.250 - 2.250 | 2.330 ± .003 |
| 2 1/2" | 2.500 - 2.500 | 2.590 ± .003 |

TABLE OF PHYSICAL & ELECTRICAL PROPERTIES



BIRACO TUBING

Tensile Strength—2500 Psi (Minimum Average)

Flammability—Non-Flammable

Ultimate Elongation—340%

Recommended for Temperatures to—105° C

Cold Bend—40° C.

Dielectric Strength .020" Wall—800 V/Mil

Varnish Baking—Good

Water Absorption

Weight Increase (1 Week)—0.1%

Fungi Resistance—Yes

Oil Resistance—Indefinitely flexible when immersed in oil

Insulation Resistance—over 1,000,000 megohms.

ALL THE ABOVE TUBING CAN BE ORDERED CUT AND MARKED TO YOUR SPECIFICATIONS

BIRFLEX VINYL COATED FIBERGLASS TUBING

(ASTM, NEMA Grade B-B-1) MEETS MIL-I-3190 B SPECS.

Quality Electronic and Electrical Tubing. It is Class B Insulation that combines the best features of the inorganic fiberglass base sleeving with heat resistant, flexible plastic insulation. The plastic compound provides the highest electrical properties, heat stability (130° C.), flexibility and toughness. Meets performance requirements of specs. MIL-I-3190 B, NEMA VSI, ASTM D 372.

PHYSICAL & ELECTRICAL PROPERTIES BIRFLEX VINYL COATED FIBERGLASS

Class B
Grade B-1

Dielectric Strength.....4000 V.
Temperature Rating.....130° C.
Low Temp. Flexibility.....-30° C.
Non-Flammable
Ins. Resistance.....Over 1,000,000 MEGS.
Corrosion Resistance.....Excellent
Oil Resistance.....Good

In addition to Spools and Coils noted above the standard packaging is as follows on stock colors.
#24 Thru #15 1,000' Soft Wound Spools
#14 Thru #8 500' Soft Wound Spools
#7 Thru #2 250'
#1 and larger 100' coils

COLORS:
Black, Red, White, Yellow, Brown, Orange, Green, Blue, Gray, Purple

Additional Sizes Available
Other types of Biraco, Birflex, Birflex Tubing and sleeving available. Write for new Comprehensive Catalog on Tubing and Sleeving.



*VINYL COATED FIBERGLASS

30" Lengths

| Cat. No. | B & S Gauge | Approx. I.D. |
|----------|-------------|--------------|
| 291 | 20 | .034 |
| 293 | 18 | .042 |
| 294 | 16 | .053 |
| 295 | 14 | .066 |
| 300 | 12 | .085 |
| 307 | 10 | .106 |
| 301 | 8 | .135 |
| 302 | 6 | .166 |
| 297 | 3/16" | .208 |
| 298 | 1/4" | .263 |

36" Lengths

| | | |
|------|-------|-------|
| *303 | 5/16" | .3125 |
| *304 | 3/8" | .375 |
| *299 | 1/2" | .500 |
| *296 | 5/8" | .625 |



*VINYL COATED FIBERGLASS

Put up on convenient 100' Spools or Coils.

| Cat. No. | B & S Gauge | Approx. Lgth. |
|----------|-------------|---------------|
| 289VC | 24 | .022 100' |
| 290VC | 22 | .027 100' |
| 291VC | 20 | .034 100' |
| 293VC | 18 | .042 100' |
| 294VC | 16 | .053 100' |
| 295VC | 14 | .066 100' |
| 300VC | 12 | .085 100' |
| 307VC | 10 | .106 100' |
| 301VC | 8 | .135 100' |
| 302VC | 6 | .166 100' |
| 305VC | 4 | .208 100' |
| 306VC | 2 | .263 100' |
| *303VC | 3/8" | .3125 100' |
| *304VC | 1/2" | .375 100' |
| *299VC | 3/4" | .500 100' |
| *296VC | 5/8" | .625 100' |

DIMENSIONAL TOLERANCES OF VINYL COATED FIBERGLASS

| Size | Approx. I.D. | N.E.M.A. Tolerances Inches |
|------|--------------|----------------------------|
| 24 | .022 | .020-.027 |
| 22 | .027 | .025-.032 |
| 20 | .034 | .032-.039 |
| 18 | .042 | .040-.049 |
| 16 | .053 | .051-.061 |
| 14 | .066 | .064-.072 |
| 12 | .085 | .081-.089 |
| 10 | .106 | .102-.112 |
| 8 | .133 | .129-.141 |
| 6 | .166 | .162-.178 |
| 4 | .208 | .204-.224 |
| 3/4" | .263 | .258-.278 |
| 5/8" | .3125 | .312-.328 |
| 3/8" | .375 | .375-.399 |
| 1/2" | .500 | .500-.524 |
| 5/8" | .625 | .625-.655 |

ALL THE ABOVE TUBING CAN BE ORDERED CUT AND MARKED TO YOUR SPECIFICATIONS



**NEW THIN WALL BIRFLON T-500
TEFLON* SPAGHETTI TUBING**



Birflon T-500 Tubing is extruded from DuPont Tetrafluoroethylene Resin. Used in electronic and electrical equipment for connection of components. Its flexibility, ease of handling has established it as the best and most popular insulation sheathing. This high temperature Class C insulation does not melt and flow as the conventional thermoplastic materials. Birflon T-500 Teflon has unique electrical, chemical and mechanical properties unmatched by any other type tubing for use in applications requiring high frequencies and high temperatures. Because of Teflon's continuous service temperature of 250° C., which is more than 100° C. above other materials, the soldering technique is simplified since "Teflon" is not harmed by the hot barrel of the soldering iron — therefore, the assembly of aircraft, missile and electronic communication equipment is greatly speeded up. Thin Wall flexible Teflon Tubing can be processed easily into flexible and rigid printed circuits. As a thin, flexible insulation, it permits miniaturization and compactness of design never before possible.

TABLE OF PROPERTIES

| Test | ASTM Method | Result |
|--|-------------|-----------------------------|
| Tensile Strength, 73°F. | D638-52T | 1500-3000 Lb./Sq. In. |
| Elongation, 73°F. | D638-52T | 100-200% |
| Deformation Under Load—122°F. 1200 Lb./Sq. In., 24 Hrs. | D621-51 | 4-8% |
| 2000 Lb./Sq. In., 24 Hrs. | D621-51 | 25% |
| Hardness Durometer | D676-49T | D50-D65 |
| Heat Distortion Temp., 66 Lb./Sq. In. | D648B-45T | 250°F. |
| Dielectric Strength, .080" | D149-44 | 400-500 V/MIL |
| Surface Arc-Resistance | D495-48T | Sec. |
| Volume Resistivity | D257-52T | 10 ¹⁵ Ohm-CM |
| Surface Resistivity, 100% R.H. | D257-52T | 3.6x10 ⁸ Megohms |
| Dielectric Constant, 60 to 10 ⁶ Cycles | D150-54T | 2.00 |
| Power Factor, 60 to 10 ⁶ Cycles | D150-54T | 0.0003 |
| Specific Gravity | D792-50 | 2.1-2.2 |

Thin Wall Birflon T-500 Teflon* Tubing Dimensional Specifications

| AWG Size | Nom. O.D. | Nom. I.D. | Nom. Wall Thickness | AWG Size | Nom. O.D. | Nom. I.D. | Nom. Wall Thickness |
|----------|-----------|-----------|---------------------|----------|-----------|-----------|---------------------|
| 32 | .028" | .011" | .0085" | 7 | .178" | .148" | .015" |
| 30 | .030" | .012" | .009" | 6 | .196" | .166" | .015" |
| 28 | .033" | .015" | .009" | 5 | .216" | .186" | .015" |
| 26 | .038" | .018" | .010" | 4 | .238" | .208" | .015" |
| 24 | .042" | .022" | .010" | 3 | .264" | .234" | .015" |
| 22 | .047" | .027" | .010" | 2 | .293" | .263" | .015" |
| 20 | .058" | .034" | .012" | 1 | .324" | .294" | .015" |
| 19 | .062" | .038" | .012" | 0 | .360" | .330" | .015" |
| 18 | .066" | .042" | .012" | 3/8" | .430" | .390" | .020" |
| 17 | .071" | .047" | .012" | 7/16" | .493" | .453" | .020" |
| 16 | .077" | .053" | .012" | 1/2" | .565" | .515" | .025" |
| 15 | .083" | .059" | .012" | 9/16" | .633" | .583" | .025" |
| 14 | .090" | .066" | .012" | 5/8" | .700" | .640" | .030" |
| 13 | .100" | .076" | .012" | 3/4" | .825" | .765" | .030" |
| 12 | .109" | .085" | .012" | 7/8" | .950" | .895" | .030" |
| 11 | .119" | .095" | .012" | 1" | 1.085" | 1.025" | .030" |
| 10 | .130" | .106" | .012" | 1 1/8" | 1.210" | 1.150" | .030" |
| 9 | .148" | .118" | .015" | 1 1/4" | 1.335" | 1.275" | .030" |
| 8 | .163" | .133" | .015" | | | | |

Tolerance — Nos. 32 thru 0 — ± .003" on Wall
Tolerance — Nos. 3/8" thru 1 1/4" — .020" on I.D., .006" on Wall

ADDITIONAL ADVANTAGES OF BIRFLON T-500 TEFLON*

- **ELECTRICAL:** Low power factor, low dielectric constant, high volume and surface resistivity, good dielectric strength (500 to 1000 volts/MIL) constant over wide ranges of temperatures and frequencies. Dielectric constant of 2.0 and dissipation factor of 0.0002 are lowest of any solid dielectric.
- **THERMAL:** No change of electrical properties with temperature (25°C. to 250°C.) or frequency (60 CPS to 100 MC). Class C insulation — capable of continuous service at temperatures to 250° C. Has color stability.
- **TOUGHNESS AND FLEXIBILITY:** Has high impact strength. Is tough and flexible over the broad temperature range of —90° C. to 250° C. Service range —320°F. to 500° F.
- **CHEMICAL INERTNESS:** Completely inert to all chemicals and solvents except molten alkali metals and fluorine at elevated temperatures and pressures. Non-corrosive to all metals.
- **MOISTURE ABSORPTION:** Zero moisture absorption. Completely sun and weather resistant.
- **NON-FLAMMABLE** ● **LOWEST COEFFICIENT OF FRICTION**
- **FUNGI RESISTANCE:** Inert to all fungi growths.
- **SIZES:** Birflon T-500 Teflon Tubing available in sizes to fit B & S gauge wires. Thin wall available from stock, in sizes No. 32 thru 1 1/4" I.D. Additional sizes and wall thicknesses made to order.

Birflon T-500 is made from high molecular weight virgin "Teflon" and meets AMS 3651B, 3653B, 3654, 3655, MIL-C-17B and MIL-I-22129B.

NOTE: When cutting Teflon Tubing, use single edge razor blade for clean unpinched cut.

"Teflon"™ DuPont Trade Name for Tetrafluoroethylene Resin

**NO EXTRA CHARGE FOR SOLID COLORS
SMALL PIECE CUTTING AVAILABLE TO ORDER**

STOCK COLORS: Natural, Red, Black, Blue, Brown, Green, Orange, Yellow, Gray, Violet, White.
Nos. 8020 thru 8029 available in Natural. Additional Colors, Sizes Made To Order

Teflon Tubing can be ordered cut to your specifications.

Tracer Colors Available
We invite Your Inquiries For Your Special Requirements
WIRE — CABLE — TUBING DIVISION

NEW THIN WALL BIRFLON T-500 TEFLON* SPAGHETTI TUBING

| Cat. No. | Spool B & S or Coil Size Put-Up No. | Nom. I.D. | Cat. No. | Spool B & S or Coil Size Put-Up No. | Nom. I.D. | Cat. No. | Spool B & S or Coil Size Put-Up No. | Nom. I.D. | Cat. No. | Spool B & S or Coil Size Put-Up No. | Nom. I.D. |
|----------|-------------------------------------|-----------|----------|-------------------------------------|-----------|----------|-------------------------------------|-----------|----------|-------------------------------------|-----------|
| 8013 | *1000' 32 | | 8003 | *1000' 18 | | 8009 | 1000' 6 | | 8023 | 1000' 9/16" | |
| 8013 | 500' 32 | | 8003 | 500' 18 | | 8009 | * 500' 6 | | 8023 | 500' 9/16" | |
| 8013 | 100' 32 | | 8003 | 100' 18 | | 8009 | 100' 6 | | 8023 | * 100' 9/16" | |
| 8014 | *1000' 30 | | 8003 | 50' 18 | | 8009 | 50' 6 | | 8023 | 50' 9/16" | |
| 8014 | 500' 30 | | 8003 | 25' 18 | | 8009 | 25' 6 | | 8023 | 25' 9/16" | |
| 8014 | 100' 30 | | 8004 | *1000' 16 | | 8010 | 1000' 4 | | 8024 | 1000' 5/8" | |
| 8015 | *1000' 28 | | 8004 | 500' 16 | | 8010 | 500' 4 | | 8024 | 500' 5/8" | |
| 8015 | 500' 28 | | 8004 | 100' 16 | | 8010 | * 100' 4 | | 8024 | * 100' 5/8" | |
| 8015 | 100' 28 | | 8004 | 50' 16 | | 8010 | 50' 4 | | 8024 | 50' 5/8" | |
| 8016 | *1000' 26 | | 8004 | 25' 16 | | 8010 | 25' 4 | | 8024 | 25' 5/8" | |
| 8016 | 500' 26 | | 8005 | 1000' 14 | | 8011 | 1000' 2 | | 8025 | 1000' 3/4" | |
| 8016 | 100' 26 | | 8005 | * 500' 14 | | 8011 | 500' 2 | | 8025 | 500' 3/4" | |
| 8000 | *1000' 24 | | 8005 | 100' 14 | | 8011 | * 100' 2 | | 8025 | * 100' 3/4" | |
| 8000 | 500' 24 | | 8005 | 50' 14 | | 8011 | 50' 2 | | 8025 | 50' 3/4" | |
| 8000 | 100' 24 | | 8005 | 25' 14 | | 8011 | 25' 2 | | 8025 | 25' 3/4" | |
| 8000 | 50' 24 | | 8006 | 1000' 12 | | 8012 | 1000' 0 | | 8026 | 1000' 7/8" | |
| 8000 | 25' 24 | | 8006 | * 500' 12 | | 8012 | 500' 0 | | 8026 | 500' 7/8" | |
| 8001 | *1000' 22 | | 8006 | 100' 12 | | 8012 | * 100' 0 | | 8026 | * 100' 7/8" | |
| 8001 | 500' 22 | | 8006 | 50' 12 | | 8012 | 50' 0 | | 8026 | 50' 7/8" | |
| 8001 | 100' 22 | | 8006 | 25' 12 | | 8012 | * 100' 0 | | 8026 | * 50' 7/8" | |
| 8001 | 50' 22 | | 8007 | 1000' 10 | | 8020 | 1000' 3/8" | | 8027 | 1000' 1" | |
| 8001 | 25' 22 | | 8007 | * 500' 10 | | 8020 | 500' 3/8" | | 8027 | 500' 1" | |
| 8002 | *1000' 20 | | 8007 | 100' 10 | | 8020 | * 100' 3/8" | | 8027 | * 100' 1" | |
| 8002 | 500' 20 | | 8007 | 50' 10 | | 8020 | 50' 3/8" | | 8027 | 50' 1" | |
| 8002 | 100' 20 | | 8007 | 25' 10 | | 8020 | 25' 3/8" | | 8027 | 25' 1" | |
| 8002 | 50' 20 | | 8008 | 1000' 8 | | 8021 | 1000' 7/16" | | 8028 | 1000' 1 1/8" | |
| 8002 | 25' 20 | | 8008 | * 500' 8 | | 8021 | 500' 7/16" | | 8028 | 500' 1 1/8" | |
| | | | 8008 | 100' 8 | | 8021 | * 100' 7/16" | | 8028 | * 100' 1 1/8" | |
| | | | 8008 | 50' 8 | | 8021 | 50' 7/16" | | 8028 | 50' 1 1/8" | |
| | | | 8008 | 25' 8 | | 8021 | * 50' 7/16" | | 8028 | * 25' 1 1/8" | |
| | | | | | | 8022 | 1000' 1/2" | | 8029 | 1000' 1 1/4" | |
| | | | | | | 8022 | 500' 1/2" | | 8029 | 500' 1 1/4" | |
| | | | | | | 8022 | * 100' 1/2" | | 8029 | * 100' 1 1/4" | |
| | | | | | | 8022 | 50' 1/2" | | 8029 | 50' 1 1/4" | |
| | | | | | | 8022 | 25' 1/2" | | 8029 | 25' 1 1/4" | |

*PREFERRED PUT-UP

Extruded virgin Teflon rod sizes 1/8" thru 3 1/8" diam. available. Also "O" rings, washers, balls, etc.

Birnbach

BIRACO - BIRFLON HEAT SHRINKABLE PLASTIC TUBINGS



NEW FROM BIRNBACH

This Series of Birnbach Shrink Plastic Tubings are expanded materials which facilitate the fitting of tubing over regular contoured or irregular shapes and then, on application of heat, provide a snug fitting protective cover with outstanding heat stability, chemical resistance and electrical characteristics. Shrinking temperatures vary with the type of tubing used. No special training is required to apply these tubings. Long exposure to shrinking temperatures (5 to 7 times normal time-temperature cycle) does not impair their properties.

PROPERTIES CHART

| | PO SERIES Shrinkable Polyethylene | TE SERIES Shrinkable "Teflon" |
|-----------------------------------|---|----------------------------------|
| DIELECTRIC STRENGTH (20 Mil Wall) | 800 Volts/Mil | 850 Volts/Mil |
| DIELECTRIC CONSTANT | 2.5 | 2.2 |
| POWER FACTOR | 0.003 | .00 |
| VOLUME RESISTIVITY | 10 ¹⁶ Ohms/CM | 10 ¹⁷ Ohms/CM |
| FUNGUS RESISTANCE | Inert | Inert |
| FLAMMABILITY | Self-Extinguishing Will | Not Support Combustion |
| FUEL and OIL RESISTANCE | Excellent | Superior |
| HYDRAULIC FLUID RESISTANCE | Excellent | Superior |
| SOLVENT RESISTANCE | Good | Superior |
| ACID and ALKALI RESISTANCE | Excellent | Superior |
| CORROSION RESISTANCE | Non-Corrosive | Excellent |
| TENSILE STRENGTH | 1800 PSI | 5000-7500 PSI |
| ULTIMATE ELONGATION | 250% | 300-500% |
| WATER ABSORPTION | 0.01% | Nil |
| LOW TEMPERATURE BRITTLE POINT | -100°F | -66°F |
| HARDNESS | 98 SHORE A | 98 Shore A |
| SPECIFIC GRAVITY | 1.28 | 2.2 |

HAG-11 Hot Air Gun For PO Series HAG-12 Hot Air Gun For TE Series



The quickest and most versatile method for applying heat is the hot air gun noted herein. Also, use of an oven, radiant heat, dipping in hot liquids, or using a soldering iron or the flame of a match.

SHRINK SERIES PO TUBING HEAT SHRINKABLE POLYETHYLENE TUBING



Biraco Shrink Series PO Tubing is an irradiated, thermally stable Class B material. Simple to use, it insulates, jackets, splices, encapsulates, weatherproofs. It shrinks with application of heat approximately 275°F (135°C) and returns immediately to its predetermined size (approximately one-third smaller) to form a permanent tight-fitting mechanical bond even over irregularly shaped materials. The Biraco Shrink Series PO is an irradiated, flame retarded, thermally stable, modified polyolefin base product which permits controlled shrinkage with the result that there is less than 10% longitudinal contraction; no cracks; a definite wall thickness is achieved. It possesses hi-dielectricity and mechanical strength and resistance to chemicals; is tough and abrasion resistant; retains form stability at ambient temperatures. Controlled shrinking takes approximately seven seconds at 275°F to 300°F. Shrinkage starts at 235°F but at a slower rate. For a tight-fit, select the expanded size tubing which is larger than the object to be covered and whose recovered size is smaller.

BIRFLON SHRINK SERIES TE TUBING HEAT SHRINKABLE TEFLON* TUBING



Is a Class C material modified from polytetrafluoroethylene. The tubing will shrink when heated to 621 F. (It should be heated until it turns semi-transparent, then the heating process immediately stopped. Overheating can cause splitting, therefore trial and error testing is recommended to establish the proper time and temperature for each application.) Correct procedure will result in a snug-fitting insulating wrap possessing hi-heat resistance, superior chemical resistance, and excellent electrical characteristics. The tubing is available in a full range of colors.

* Dupont Polytetrafluoroethe.ene

DIMENSION CHART BIRACO SHRINK SERIES PO TUBING

| Birnbach No. | Size | Minimum I.D. Prior to Shrinking | Recovered I.D. After Shrinking | Nom. Wall Thickness |
|--------------|-------|---------------------------------|--------------------------------|---------------------|
| SK-275-24 | 24 | .050" | .027" | .012" |
| SK-275-22 | 22 | .055" | .032" | .012" |
| SK-275-20 | 20 | .060" | .038" | .016" |
| SK-275-18 | 18 | .076" | .049" | .016" |
| SK-275-16 | 16 | .093" | .061" | .016" |
| SK-275-14 | 14 | .120" | .072" | .016" |
| SK-275-12 | 12 | .153" | .089" | .016" |
| SK-275-10 | 10 | .191" | .112" | .016" |
| SK-275-8 | 8 | .240" | .141" | .020" |
| SK-275-6 | 6 | .302" | .178" | .020" |
| SK-275-4 | 4 | .348" | .224" | .020" |
| SK-275-2 | 2 | .430" | .275" | .020" |
| SK-275-5/16 | 5/16" | .500" | .334" | .025" |
| SK-275-3/8 | 3/8" | .600" | .399" | .025" |
| SK-275-1/2 | 1/2" | .693" | .462" | .025" |
| SK-275-5/8 | 5/8" | .787" | .524" | .025" |
| SK-275-3/4 | 3/4" | .982" | .655" | .030" |
| SK-275-7/8 | 7/8" | 1.180" | .786" | .035" |
| SK-275-1 | 1" | 1.365" | .911" | .035" |
| SK-275-1 | 1" | 1.555" | 1.036" | .035" |

Standard Put-Up —
4 Foot Lengths

Standard Colors —
#24 thru #4 Black,
Red, Yellow, White
#2 thru 1"—Black
Other colors available
to order

Standard package
#24 thru #4—100 Feet
(25-4 Ft. Lengths)
#2 thru 1"—20 Feet
(5-4 Ft. Lengths)

1 1/4" thru 2" now available Your inquiries invited.

DIMENSIONS—BIRFLON SHRINK SERIES TE TUBING

| Birnbach No. | Nominal Tubing Size | Minimum Expanded ID | Recovered Dimensions Maximum ID (1) | Wall Thickness (2) |
|--------------|---------------------|---------------------|-------------------------------------|--------------------|
| SK-621-26 | 26 | .046" | .022" | .009" |
| SK-621-24 | 24* | .050" | .027" | .010" |
| SK-621-22 | 22* | .055" | .032" | .010" |
| SK-621-20 | 20* | .060" | .039" | .012" |
| SK-621-19 | 19 | .065" | .043" | .012" |
| SK-621-18 | 18* | .076" | .049" | .012" |
| SK-621-17 | 17 | .085" | .054" | .012" |
| SK-621-16 | 16* | .093" | .061" | .012" |
| SK-621-15 | 15 | .110" | .067" | .012" |
| SK-621-14 | 14* | .120" | .072" | .012" |
| SK-621-13 | 13 | .140" | .080" | .012" |
| SK-621-12 | 12* | .150" | .089" | .012" |
| SK-621-11 | 11 | .170" | .101" | .012" |
| SK-621-10 | 10* | .191" | .112" | .012" |
| SK-621-9 | 9 | .205" | .124" | .015" |
| SK-621-8 | 8* | .240" | .141" | .015" |
| SK-621-7 | 7 | .270" | .158" | .015" |
| SK-621-6 | 6* | .302" | .178" | .015" |
| SK-621-5 | 5 | .320" | .198" | .015" |
| SK-621-4 | 4* | .348" | .224" | .015" |
| SK-621-3 | 3 | .360" | .249" | .015" |
| SK-621-2 | 2* | .375" | .278" | .015" |
| SK-621-1 | 1 | .385" | .311" | .015" |
| SK-621-0 | 0* | .400" | .347" | .015" |
| SK-621-3/4 | 3/4" | .560" | .399" | .020" |
| SK-621-1/2 | 1/2" | .655" | .462" | .020" |
| SK-621-1/2 | 1/2" | .750" | .524" | .020" |

Standard Package—100 Feet

Standard Put-up—36" Straight Lengths—One Foot Minimums

Wall Tolerances: 26 thru 22 ± .002
20 thru 10 ± .003
9 thru 0 ± .004

(1) Tubings made to Military Standards for American Wire Gages will return with the tolerances for that gage number.

(2) Nominal wall thickness after heating. Expanded wall thickness will be 20% to 30% less.

(*) Stock Sizes

Birnbach

COPPERWELD ENAMEL, TINNED AND BARE COPPER BUS BAR, BRAIDED TINNED COPPER SHIELDING



TINNED COPPER WIRE — BUS BAR

Pure Electrolytic, Copper, annealed, tinned for quick soldering

MIL—W—3861 type S, ASTM—B—33 specifications, QQ—W—343 type S

| Cat. No. | Put-Up | Size AWG | Area Circular Mills | O.D. |
|----------|-------------|----------|---------------------|-------|
| 1433/4 | 100' Coll | 4 | 41,740 | .204" |
| 1433/6 | 100' Coll | 6 | 26,250 | .162" |
| 1432 | 100' Coll | 8 | 16,510 | .129" |
| 1402 | 100' Coll | 10 | 10,380 | .103" |
| 1403 | 1000' Spool | 10 | 10,380 | .103" |
| 1406 | 100' Coll | 12 | 6,530 | .082" |
| 1407 | 1000' Spool | 12 | 6,530 | .082" |
| 1410 | 100' Coll | 14 | 4,107 | .065" |
| 1411 | 1000' Spool | 14 | 4,107 | .065" |
| 1414 | 100' Coll | 16 | 2,583 | .051" |
| 1415 | 1000' Spool | 16 | 2,583 | .051" |
| 1418 | 100' Coll | 18 | 1,624 | .040" |
| 1419 | 1000' Spool | 18 | 1,624 | .040" |
| 1422 | 100' Coll | 20 | 1,022 | .033" |
| 1423 | 1000' Spool | 20 | 1,022 | .033" |
| 1434 | 1000' Spool | 22 | 624.4 | .025" |
| 1424 | 1000' Spool | 24 | 404.0 | .020" |
| 1420 | 1000' Spool | 26 | 254.1 | .016" |
| 1428 | 1000' Spool | 28 | 159.8 | .013" |
| 1430 | 1000' Spool | 30 | 100.5 | .010" |
| 1430/32 | 1000' Spool | 32 | 63.21 | .008" |
| 1430/34 | 1000' Spool | 34 | 39.75 | .006" |
| 1430/36 | 1000' Spool | 36 | 25.00 | .005" |
| 1430/38 | 1000' Spool | 38 | 15.72 | .004" |

See Magnet Wire Section For Additional Sizes



BUS BAR WIRE (Hard Drawn)

MIL—W—3861 type S, ASTM—B—33, ASTM—B—246—51 specifications

For hooking up all types of transmitters, especially ultra short wave equipment. All bus wire is made of hard drawn copper, tinned, straightened, and cut in 2 ft. lengths.

| Cat. No. | No. | Round Tinned | Circular Mills Area |
|----------|-----|--------------|---------------------|
| 2010 | 10 | Round Tinned | 10,380 |
| 2012 | 12 | Round Tinned | 6,530 |
| 2013 | 12 | Round Tinned | 6,530 |
| 2014 | 14 | Round Tinned | 4,107 |
| 2015 | 14 | Round Tinned | 4,107 |
| 2016 | 16 | Round Tinned | 2,583 |
| 2018 | 18 | Round Tinned | 1,624 |
| 2020 | 20 | Round Tinned | 1,022 |
| 2022 | 22 | Round Tinned | 642 |

(100 to Std. Package)

TINNED COPPER SHIELDING

Used for shielding and bonding on aircraft, marine and auto radio wires and cables. Shields speaker leads, lead-ins, amplifier wires. Extremely flexible, slides over wires and cables.



EXTREMELY FLEXIBLE SHIELDING PER QQ—B—575 AVAILABLE TO ORDER

DESCRIPTION:

No. 853 thru 856/7—Composed of extremely flexible fine soft annealed copper tinned wires closely woven, braided and Rolled Flat.

No. 860—Composed of extremely flexible fine soft annealed copper wires closely woven, braided and Rolled Flat.

TINNED

| Cat. No. | Size & No. of Wires | Inside Diam. Flattened | Approx. O.D. Flattened | Spool |
|----------|---------------------|------------------------|------------------------|-------|
| 853 | 12 x 2/36 | 1/32" | 3/64" | 1000' |
| 854 | 12 x 2/36 | 3/64" | 1/16" | 1000' |
| 855 | 16 x 3/36 | 1/16" | 5/64" | 50' |
| 858 | 24 x 5/36 | 1/8" | 5/32" | 50' |
| 859 | 24 x 5/36 | 3/16" | 7/32" | 50' |
| 863 | 24 x 7/36 | 1/4" | 9/32" | 50' |
| 864 | 48 x 4/36 | 3/8" | 15/32" | 50' |
| 868 | 48 x 7/36 | 1/2" | 19/32" | 50' |
| 865 | 48 x 8/36 | 5/8" | 23/32" | 50' |
| 865/1 | 48 x 11/36 | 3/4" | 13/16" | 50' |
| 857 | 48 x 19/36 | 25/32" | 27/32" | 50' |
| 856 | 48 x 19/36 | 1" | 1-1/16" | 50' |
| 856/1 | 48 x 19/36 | 1-3/8" | 1-7/16" | 50' |
| 856/2 | 48 x 19/36 | 1-1/2" | 1-9/16" | 50' |
| 856/3 | 48 x 27/30 | 1-3/4" | 1-7/8" | 50' |
| 856/4 | 48 x 32/30 | 2" | 2-1/4" | 50' |
| 856/6 | 48 x 45/30 | 2-1/2" | 2-3/4" | 50' |
| 856/7 | 48 x 64/30 | 3" | 3-1/4" | 50' |

BARE

860.....24 x 10/36..... 1/4"..... 50'

For longer lengths and alternate put-ups—Specify.

COPPER WIRE—SOLID—STRANDED

STRANDED TINNED COPPER WIRE

| Cat. No. | Put-Up | Size AWG | Strand | O.D. |
|----------|-------------|----------|--------|-------|
| 495 | 100' Coll | 12 | 7/20 | .102" |
| 1671 | 100' Coll | 14 | 7/22 | .076" |
| 1638 | 1000' Spool | 14 | 7/22 | .076" |
| 1674 | 100' Coll | 15 | 7/23 | .069" |
| 1633 | 1000' Spool | 15 | 7/23 | .069" |
| 1628 | 1000' Spool | 16 | 7/24 | .062" |

#1671 meets H4.4—1940 type W—1

COIL LEAD, JUMPER CABLE

PURE ELECTROLYTIC, COPPER, annealed, tinned for quick soldering MIL—W—3861 Type B, ASTM—B—33 Specifications

| Cat. No. | Class Description | Put-Up | Size AWG | Strand | D.D. |
|----------|-------------------|-------------|----------|--------|-------|
| 1622 | K | 1000' Spool | 22 | 7/30 | .030" |
| 1620 | K | 1000' Spool | 20 | 10/30 | .037" |
| 1618 | K | 1060' Spool | 18 | 16/30 | .015" |
| 1616 | K | 1000' Spool | 16 | 26/30 | .039" |
| 1614 | K | 1000' Spool | 14 | 41/30 | .073" |
| 1612 | K | 1000' Spool | 12 | 65/30 | .091" |

BARE COPPER WIRE (Soft Drawn)

QQ—W—341A specifications

| Cat. No. | Put-Up | Size AWG | Area Circular Mills | O.D. |
|----------|-------------|----------|---------------------|--------|
| 1560 | 100' Coll | 8 | 16,510 | .1285" |
| 1562 | 100' Coll | 10 | 10,380 | .102" |
| 1583 | 1000' Spool | 10 | 10,380 | .102" |
| 1568 | 100' Coll | 12 | 6,530 | .081" |
| 1567 | 1000' Spool | 12 | 6,530 | .081" |
| 1570 | 100' Coll | 14 | 4,107 | .064" |
| 1571 | 1000' Spool | 14 | 4,107 | .064" |
| 1574 | 100' Coll | 16 | 2,583 | .051" |
| 1575 | 1000' Spool | 16 | 2,583 | .051" |

SILICON BRONZE AERIAL WIRE

Especially designed for ships, airports, short wave and transmitting antennas where high tensile strength and resistance to elements are important.

| Cat. No. | Put-Up | Size AWG | Strand | Breaking Strength | O.D. |
|----------|--------|----------|--------|-------------------|-------|
| 529* | 100' | 4 | 7/12 | 3670 lbs. | .240" |
| 528* | 100' | 6 | 7/14 | 2140 lbs. | .190" |
| 527 | 100' | 8 | 7/16 | 1600 lbs. | .150" |
| 499 | 100' | 10 | 7/18 | 1000 lbs. | .122" |
| 524 | 100' | 12 | 7/20 | 650 lbs. | .100" |
| 526 | 100' | 14 | 7/22 | 420 lbs. | .075" |

#528 and #499 meets MIL—W—13074; #524 meets MIL—W—13276

For longer lengths and alternate put-ups—Specify.

* 1000 feet on deposit reels



COPPERWELD ENAMEL ANTENNA WIRE

Used where high tensile strength is required as for short wave and transmitting aerials. Has low R.F. resistance and is ideal for transmitting doublet and directional antennas. Will maintain frequency characteristics because of its stretchless qualities.

| Cat. No. | Put-Up | Size AWG | Tensile Strength | O.D. |
|----------|-------------|----------|------------------|-------|
| 710-100 | 100' Spool | 10 | 1130 lbs. | .103" |
| 710-250 | 250' Spool | 10 | 1130 lbs. | .103" |
| 710-500 | 500' Spool | 10 | 1130 lbs. | .103" |
| 710-1000 | 1000' Spool | 10 | 1130 lbs. | .103" |
| 710-2500 | 2500' Spool | 10 | 1130 lbs. | .103" |
| 712-100 | 100' Coll | 12 | 720 lbs. | .082" |
| 712-250 | 250' Coll | 12 | 720 lbs. | .082" |
| 712-500 | 500' Spool | 12 | 720 lbs. | .082" |
| 712-1000 | 1000' Spool | 12 | 720 lbs. | .082" |
| 712-2500 | 2500' Spool | 12 | 720 lbs. | .082" |
| 714-100 | 100' Coll | 14 | 400 lbs. | .065" |
| 714-250 | 250' Spool | 14 | 400 lbs. | .065" |
| 714-500 | 500' Spool | 14 | 400 lbs. | .065" |
| 714-1000 | 1000' Spool | 14 | 400 lbs. | .065" |
| 714-2500 | 2500' Spool | 14 | 400 lbs. | .065" |

SOLID ENAMEL COPPER WIRE

| Cat. No. | Put-Up | Size AWG | O.D. |
|----------|-------------|----------|-------|
| 497 | 100' Coll | 10 | .103" |
| 1497 | 1000' Spool | 10 | .103" |
| 492 | 100' Coll | 12 | .083" |
| 492A | 150' Coll | 12 | .083" |
| 492B | 200' Coll | 12 | .083" |
| 1492 | 1000' Spool | 12 | .083" |
| 490 | 100' Coll | 14 | .066" |
| 490A | 150' Coll | 14 | .066" |
| 490B | 200' Coll | 14 | .066" |
| 1490 | 1000' Spool | 14 | .066" |

STRANDED BARE COPPER WIRE

| Cat. No. | Put-Up | Size AWG | Strand | O.D. |
|----------|-------------|----------|--------|-------|
| 493 | 100' Coll | 12 | 7/20 | .100" |
| 1670 | 100' Coll | 14 | 7/22 | .075" |
| 1639 | 1000' Spool | 14 | 7/22 | .075" |
| 1673 | 100' Spool | 15 | 7/23 | .068" |
| 1634 | 1000' Spool | 15 | 7/23 | .068" |
| 1680 | 100' Coll | 16 | 7/24 | .060" |
| 1647 | 1000' Spool | 16 | 7/24 | .060" |
| 681 | 100' Coll | 18 | 7/26 | .050" |
| 1648 | 1000' Spool | 18 | 7/26 | .050" |
| 700 | 100' Coll | 19 | 7/27 | .041" |
| 1741 | 1000' Spool | 19 | 7/27 | .041" |

Birnbach

GOV'T. SPEC. HOOK-UP WIRE

SPEC. MIL-W-16878D TEFLON*



BIRFLON EXTRUDED & SPIRAL WRAPPED TEFLON* HOOK-UP WIRE

SPECIFICATION MIL-W-16878D

TYPE E—600 VOLT

HIGH TEMPERATURE RATING —90° TO +250°C (TYPE EE-1000V AVAILABLE)

Chemically inert, non-flammable, excellent flexibility, easy stripping, high dielectric strength, unaffected by fungus. Exceeds Class H insulation requirements. Unaffected by high or low temperature. Outstanding for its dependability and long life under all operating conditions indoors or outdoors. Teflon permits miniaturization and compactness in electronic designs of sub-miniature components, computers, UHF equip., slip ring assemblies, leads to hermetically sealed and potted components, telemetering equip. and guided missiles.

Description: single conductor silver plated copper wire concentrically stranded and insulated with extruded or Spiral Wrapped Teflon insulation.

| Cat. Nos. | | Spool | Size AWG | Mil Type Designation | Strand | Nom. Insul. | Volt Rating | Diameter Over Insulation Max. |
|-----------|---------|--------------|----------|----------------------|--------|-------------|-------------|-------------------------------|
| Extruded | Wrapped | | | | | | | |
| 8532 | 8552 | 1000' | 32 | E-32 | 7/40 | 010" | 600 | 033" |
| 8532-1 | 8552-1 | 100' | 32 | E-32 | 7/40 | 010" | 600 | 033" |
| 8530 | 8550 | 1000' | 30 | E-30 | 7/38 | 010" | 600 | 036" |
| 8530-1 | 8550-1 | 100' | 30 | E-30 | 7/38 | 010" | 600 | 036" |
| 8528 | 8548 | 1000' | 28 | E-28 | 7/36 | 010" | 600 | 039" |
| 8528-1 | 8548-1 | 100' | 28 | E-28 | 7/36 | 010" | 600 | 039" |
| 8526 | 8546 | 1000' | 26 | E-26 | 7/34 | 010" | 600 | 043" |
| 8526-1 | 8546-1 | 100' | 26 | E-26 | 7/34 | 010" | 600 | 043" |
| 8524 | 8544 | 1000' | 24 | E-24 | 19/36 | 010" | 600 | 048" |
| 8524-1 | 8544-1 | 100' | 24 | E-24 | 19/36 | 010" | 600 | 048" |
| 8522 | 8542 | 1000' | 22 | E-22 | 19/34 | 010" | 600 | 054" |
| 8522-1 | 8542-1 | 100' | 22 | E-22 | 19/34 | 010" | 600 | 054" |
| 8520 | 8540 | 1000' | 20 | E-20 | 19/32 | 010" | 600 | 062" |
| 8520-1 | 8540-1 | 100' | 20 | E-20 | 19/32 | 010" | 600 | 062" |
| 8518 | 8538 | 1000' | 18 | E-18 | 19/30 | 010" | 600 | 074" |
| 8518-1 | 8538-1 | 100' | 18 | E-18 | 19/30 | 010" | 600 | 074" |
| 8516 | 8536 | 1000' | 16 | E-16 | 19/29 | 010" | 600 | 087" |
| 8516-1 | 8536-1 | 100' | 16 | E-16 | 19/29 | 010" | 600 | 087" |
| 8514 | 8534 | 1000' | 14 | E-14 | 19/27 | 010" | 600 | 097" |
| 8514-1 | 8534-1 | 100' | 14 | E-14 | 19/27 | 010" | 600 | 097" |
| 8512 | | 1000' | 12 | E-12 | 19/25 | 010" | 600 | 120" |
| 8512-1 | | 100' | 12 | E-12 | 19/25 | 010" | 600 | 120" |
| 8510 | | (100'-1000') | 10 | E-10 | 37/26 | 010" | 600 | 139" |

*Duponts Tetrafluoroethylene Resin. Cat. No's 8534 thru 8552 available Per MIL-W-7139A TEFLON AIRCRAFT SPEC./Per MIL-W-27300A (USAF), also NAS-703 Cable conforming to MIL-C-27500 SPEC.

Colors: Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White. Additional special custom constructions available to order. Wrapped extruded with or without shielding, glass braid, nylon braid, silicone and in miniature multi-conductors. Price and delivery on request.

TEFLON* CABLES—Shielded and Unshielded

DESCRIPTION: One or more conductors, each conductor stranded silver plated concentrically stranded copper, type E extruded or spiral wrapped insulation. When shielded, a closely woven silver plated copper shield is braided over conductor(s). When braided, a Teflon* impregnated fiberglass is woven over the conductor(s) or shield. MIL-W-16878D spec.

Additional variations and gauges are available to order. Multi-conductor color code:

- 1—White
- 2—Black
- 3—Red



| BIRNBACH CAT NUMBERS | | | | | Size and Stranding | Outer Covering |
|----------------------|---------|---------|---------|---------|--------------------|----------------------|
| 1 Cond. | 2 Cond. | 3 Cond. | 4 Cond. | 5 Cond. | | |
| 8704 | 8704/2 | 8704/3 | 8704/4 | 8704/5 | #24 | 19/36 Shield |
| 8705 | 8705/2 | 8705/3 | 8705/4 | 8705/5 | #24 | 19/36 Braid |
| 8706 | 8706/2 | 8706/3 | 8706/4 | 8706/5 | #24 | 19/36 Shield & Braid |
| 8707 | 8707/2 | 8707/3 | 8707/4 | 8707/5 | #22 | 19/34 Shield |
| 8708 | 8708/2 | 8708/3 | 8708/4 | 8708/5 | #22 | 19/34 Braid |
| 8709 | 8709/2 | 8709/3 | 8709/4 | 8709/5 | #22 | 19/34 Shield & Braid |
| 8710 | 8710/2 | 8710/3 | 8710/4 | 8710/5 | #20 | 19/32 Shield |
| 8711 | 8711/2 | 8711/3 | 8711/4 | 8711/5 | #20 | 19/32 Braid |
| 8712 | 8712/2 | 8712/3 | 8712/4 | 8712/5 | #20 | 19/32 Shield & Braid |
| 8713 | 8713/2 | 8713/3 | 8713/4 | 8713/5 | #18 | 19/30 Shield |
| 8714 | 8714/2 | 8714/3 | 8714/4 | 8714/5 | #18 | 19/30 Braid |
| 8715 | 8715/2 | 8715/3 | 8715/4 | 8715/5 | #18 | 19/30 Shield & Braid |

TEFLON* CABLES • TEFLON* TAPE WRAP JACKET OVER SHIELD

DESCRIPTION: One or more conductors, each conductor stranded silver plated concentrically stranded copper. Type E extruded Teflon* TFE .010" insulation, braided silver plated copper shield over conductor(s), 90% coverage; .010" fused, double reversed wrapped Teflon* tape jacket.

Fused, double reversed Teflon tape jacket

| Cat. No. | Conds. | Awg | Strand | All Per MIL-W-16878D | Nom O.D. |
|----------|--------|-----|--------|----------------------|----------|
| 8521 | 1 | 24 | 19/36 | | .084" |
| 8521/2 | 2 | 24 | 19/36 | | .128" |
| 8521/3 | 3 | 24 | 19/36 | | .135" |
| 8521/4 | 4 | 24 | 19/36 | | .148" |
| 8521/5 | 5 | 24 | 19/36 | | .162" |
| 8523 | 1 | 22 | 19/34 | | .090" |
| 8523/2 | 2 | 22 | 19/34 | | .140" |
| 8523/3 | 3 | 22 | 19/34 | | .148" |
| 8523/4 | 4 | 22 | 19/34 | | .162" |
| 8523/5 | 5 | 22 | 19/34 | | .183" |
| 8525 | 1 | 20 | 19/32 | | .099" |
| 8525/2 | 2 | 20 | 19/32 | | .158" |
| 8525/3 | 3 | 20 | 19/32 | | .167" |
| 8525/4 | 4 | 20 | 19/32 | | .184" |
| 8525/5 | 5 | 20 | 19/32 | | .204" |
| 8527 | 1 | 18 | 19/30 | | .109" |
| 8527/2 | 2 | 18 | 19/30 | | .178" |
| 8527/3 | 3 | 18 | 19/30 | | .189" |
| 8527/4 | 4 | 18 | 19/30 | | .208" |
| 8527/5 | 5 | 18 | 19/30 | | .230" |

MULTI-CONDUCTOR COLOR CODE: 1—White; 2—Black; 3—Red; 4—Green; 5—Yellow.

*TEFLON—Dupont Reg TM for Tetrafluoroethylene.

Birnbach

SHIELDED PLASTIC HOOK-UP WIRE MIL-W-76B •
SHIELDED • NYLON VINYL JACKETS • AIRCRAFT
PLASTIC HOOK-UP WIRE MIL-W-5086A, MIL-C-7078A



SHIELDED PLASTIC HOOK-UP WIRE

SPECIFICATION MIL-W-76B TEMPERATURE RATING: -40°C TO +80°C **TYPE MW (Medium Wall) — SHIELDED**

(Supersedes Jan-C-76 Type SRIR Shielded)

DESCR.: One conductor stranded tinned copper with thermoplastic insulation and tinned copper shielded braid overall.

| Cat. No. | Spool | Size AWG | MIL-W-76B Type Designation | Minimum Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|----------------|-----------|-------------|-----------|
| 7074 | 1000' | 24 | MW-C 24(16)S | 16/36 | .015" | 1000 | .074" |
| 7074-1 | 100' | 24 | MW-C 24(16)S | 16/36 | .015" | 1000 | .074" |
| 7072 | 1000' | 22 | MW-C 22(7)S | 7/30 | .017" | 1000 | .084" |
| 7072-1 | 100' | 22 | MW-C 22(7)S | 7/30 | .017" | 1000 | .084" |
| 7070 | 1000' | 20 | MW-C 20(10)S | 10/30 | .017" | 1000 | .094" |
| 7070-1 | 100' | 20 | MW-C 20(10)S | 10/30 | .017" | 1000 | .094" |
| 7068 | 1000' | 18 | MW-C 18(16)S | 16/30 | .017" | 1000 | .106" |
| 7068-1 | 100' | 18 | MW-C 18(16)S | 16/30 | .017" | 1000 | .106" |
| 7067 | 1000' | 16 | MW-C 16(26)S | 26/30 | .017" | 1000 | .121" |
| 7067-1 | 100' | 16 | MW-C 16(26)S | 26/30 | .017" | 1000 | .121" |
| *7066 | 1000' | 14 | MW-C 14(41)S | 41/30 | .017" | 1000 | .137" |
| *7065 | 1000' | 12 | MW-C 12(65)S | 65/30 | .017" | 1000 | .155" |

STOCK COLORS: (Underneath Shield) Black, White, Red, Yellow, Brown, Green, Blue, Gray *Nos. 7066, 7065, available from stock in Black, White or Red. ALL WIRES ON THIS PAGE CAN BE ORDERED CUT AND STRIPPED TO YOUR SPECIFICATIONS. Also multiconductor can be formed to order twisted shielded, with or without plastic jacket overall.

SHIELDED PLASTIC HOOK-UP WIRE

SPECIFICATION MIL-W-76B TYPE MW—SHIELDED—NYLON JACKET

DESCRIPTION: One conductor stranded tinned copper, white medium wall polyvinyl chloride insulation, shielded tinned copper braid, minimum 80% coverage, clear nylon (polymide) jacket overall. Temperature rating -40° to +90°C. Resistant to acids, alkalis, oil, flame, moisture, fungus.

| Cat. No. | Spool | Size AWG | MIL-W-76A Type Designation | Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|--------|-----------|-------------|-----------|
| 7074J | 1000' | 24 | MW-C24(16)SJ | 16/36 | .015" | 1000 | .091" |
| 7072J | 1000' | 22 | MW-C22(7)SJ | 7/30 | .017" | 1000 | .100" |
| 7070J | 1000' | 20 | MW-C20(10)SJ | 10/30 | .017" | 1000 | .105" |
| 7068J | 1000' | 18 | MW-C18(16)SJ | 16/30 | .017" | 1000 | .115" |
| 7067J | 1000' | 16 | MW-C16(26)SJ | 26/30 | .017" | 1000 | .125" |
| 7066J | 1000' | 14 | MW-C14(41)SJ | 41/30 | .017" | 1000 | .138" |
| 7065J | 1000' | 12 | MW-C12(65)SJ | 65/30 | .017" | 1000 | .160" |

Additional colors available to order.

SPECIFICATION MIL-W-76B TYPE MW—SHIELDED—VINYL JACKET

DESCRIPTION: One conductor stranded tinned copper, white medium wall polyvinyl chloride insulation, shielded tinned copper braid, minimum 80% coverage, black PVC (polyvinylchloride) jacket overall. Temperature rating -40° to +90°C. Resistant to acids, alkalis, oil, flame, moisture, fungus.

| Cat. No. | Spool | Size AWG | MIL-W-76A Type Designation | Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|--------|-----------|-------------|-----------|
| 7074VJ | 1000' | 24 | MW-C24(16)SJ | 16/36 | .015" | 1000 | .095" |
| 7072VJ | 1000' | 22 | MW-C22(7)SJ | 7/30 | .017" | 1000 | .105" |
| 7070VJ | 1000' | 20 | MW-C20(10)SJ | 10/30 | .017" | 1000 | .112" |
| 7068VJ | 1000' | 18 | MW-C18(16)SJ | 16/30 | .017" | 1000 | .120" |
| 7067VJ | 1000' | 16 | MW-C16(26)SJ | 26/30 | .017" | 1000 | .133" |
| 7066VJ | 1000' | 14 | MW-C14(41)SJ | 41/30 | .017" | 1000 | .148" |
| 7065VJ | 1000' | 12 | MW-C12(65)SJ | 65/30 | .017" | 1000 | .170" |

Additional colors available to order.

AIRCRAFT PLASTIC HOOK-UP WIRE

SPECIFICATIONS MIL-W-5086A and MIL-C-7078A (105°C Rating)

NYLON JACKET

Used where a single conductor, 600 volt insulated wire, is required. This aircraft electrical wire is resistant to effects of salt water, oils, aircraft engine fuels, alcohol, fungus, heat, cold, salt water, abrasion, meets -65°F temperature test.

DESCRIPTION: Type 1 MIL-W-5086A One conductor stranded tinned copper with plastic insulation, nylon jacket overall. Type 2 MIL-W-5086A—one conductor stranded tinned copper, plastic insulation, nylon lacquered glass braid. Color: White.



No. 7351



No. 7371

MIL-W-5086A UNSHIELDED (Supersedes AN-J-C-48A)

600 Volt Rating

| Cat. No. | Size AWG | Mil. Type | Type | Cond. Strand. | Nom. O.D. | Cat. No. | Size AWG | Mil. Type | Type | Cond. Strand. | Nom. O.D. |
|----------|----------|-----------|-------|---------------|-----------|----------|----------|-----------|-------|---------------|-----------|
| 7351 | 22 | AN-22 | No. 1 | 19/34 | 070" | 7365/2 | 2 | AN-2 | No. 2 | 665/30 | 412" |
| 7353 | 20 | AN-20 | No. 1 | 19/32 | 080" | 7365/0 | 0 | AN-0 | No. 2 | 1045/30 | 518" |
| 7355 | 18 | AN-18 | No. 1 | 19/30 | 090" | 7365/00 | 00 | AN-00 | No. 2 | 1330/30 | 588" |
| 7357 | 16 | AN-16 | No. 1 | 19/29 | 100" | 7351 NB | 22 | AN-22 | No. 2 | 19/34 | 068" |
| 7359 | 14 | AN-14 | No. 1 | 19/27 | 125" | 7353 NB | 20 | AN-20 | No. 2 | 19/32 | 078" |
| 7361 | 12 | AN-12 | No. 1 | 19/25 | 140" | 7355 NB | 18 | AN-18 | No. 2 | 19/30 | 088" |
| 7363 | 8 | AN-8 | No. 2 | 133/29 | 240" | 7357 NB | 16 | AN-16 | No. 2 | 19/29 | 098" |
| 7364 | 6 | AN-6 | No. 2 | 133/27 | 297" | 7359 NB | 14 | AN-14 | No. 2 | 19/27 | 117" |
| 7365 | 4 | AN-4 | No. 2 | 133/25 | 355" | 7361 NB | 12 | AN-12 | No. 2 | 19/25 | 137" |
| | | | | | | 7362 NB | 10 | AN-10 | No. 2 | 49/27 | 189" |

MIL-C-7078A SHIELDED (Supersedes An-C-168)

| Cat. No. | Size AWG | Mil. Type | Type | Cond. Strand. | Nom. O.D. | Cat. No. | Size AWG | Mil. Type | Type | Cond. Strand. | Nom. O.D. |
|----------|----------|-----------|-------|---------------|-----------|----------|----------|-----------|-------|---------------|-----------|
| 7371 | 22 | AN-22 | No. 1 | 19/34 | 100" | 7374 | 16 | AN-16 | No. 1 | 19/29 | 139" |
| 7372 | 20 | AN-20 | No. 1 | 19/32 | 110" | 7375 | 14 | AN-14 | No. 1 | 19/27 | 158" |
| 7373 | 18 | AN-18 | No. 1 | 19/30 | 124" | 7376 | 12 | AN-12 | No. 1 | 19/25 | 177" |

DESCRIPTION: One conductor stranded tinned copper with plastic insulation, nylon jacket with tinned copper shielded braid overall. Color: White under shield 1,000' Spools. Additional types to order.

ALL WIRE ON THIS PAGE CAN BE CUT AND STRIPPED TO YOUR SPECIFICATION



GOV'T SPEC. HOOK-UP WIRE
 TYPES GLASS BRAID
 SPECIFICATION MIL-W-16878 C NYLON JACKET SHIELDED



PLASTIC HOOK-UP WIRE

SPECIFICATION MIL-W-16878D

TYPE B — HIGH TEMPERATURE — VINYL

Suitable for general purpose wiring for miniature high temperature hook-ups in aircraft, electronic instruments, devices, etc., where excellent resistance to moisture and solvents may be required.

DESCRIPTION: One conductor stranded tinned copper with rated -55°C to +105°C high temperature thermoplastic light wall insulation.

The letter "N" after Catalog Number designates clear Nylon Jacket overall. 115° C.

| Cat. No. | Spool | Size AWG | Mil-W-16878D Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|-------------------------------|------------------|-----------|-------------|-----------|
| 7190 | 1000' | 32 | B-32 | 7/40 | .010" | 600 | .028" |
| 7191 | 1000' | 30 | B-30 | 7/38 | .010" | 600 | .030" |
| 7192 | 1000' | 28 | B-28 | 7/36 | .010" | 600 | .033" |
| 7193 | 1000' | 26 | B-26 | 7/34 | .010" | 600 | .037" |
| 7194 | 1000' | 24 | B-24 | 7/32 | .010" | 600 | .043" |
| 7195 | 1000' | 22 | B-22 | 7/30 | .010" | 600 | .048" |
| 7196 | 1000' | 20 | B-20 | 7/28 | .010" | 600 | .057" |
| 7197 | 1000' | 18 | B-18 | 7/26 | .010" | 600 | .067" |
| 7198 | 1000' | 16 | B-16 | 19/29 | .010" | 600 | .077" |

TYPE B

NYLON JACKET THICKNESS: 32-20 .002, 18-16 .003

NYLON JACKET

| | | | | | | | |
|-------|-------|----|------|-------|-------|-----|-------|
| 7190N | 1000' | 32 | B-32 | 7/40 | .010" | 600 | .032" |
| 7191N | 1000' | 30 | B-30 | 7/38 | .010" | 600 | .036" |
| 7192N | 1000' | 28 | B-28 | 7/36 | .010" | 600 | .039" |
| 7193N | 1000' | 26 | B-26 | 7/34 | .010" | 600 | .042" |
| 7194N | 1000' | 24 | B-24 | 7/32 | .010" | 600 | .047" |
| 7195N | 1000' | 22 | B-22 | 7/30 | .010" | 600 | .053" |
| 7196N | 1000' | 20 | B-20 | 7/28 | .010" | 600 | .065" |
| 7197N | 1000' | 18 | B-18 | 7/26 | .010" | 600 | .075" |
| 7198N | 1000' | 16 | B-16 | 19/29 | .010" | 600 | .085" |

STOCK COLORS: Black, Red, Brown, Blue, Orange, White, Yellow, Green, Gray, Purple

White/Black
White/Red

White/Green
White/Yellow

White/Blue
White/Brown

White/Orange
White/Gray

White/Violet

SPECIFICATION MIL-W-16878D

TYPE C — HIGH TEMPERATURE — VINYL JACKET

DESCRIPTION: One Conductor Similar To Type B—Heavier Wall Hi-Temp Thermoplastic Insulation

| Cat. No. | Spool | Size AWG | Mil-W-16878C Type Designation | Minimum Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|-------------------------------|----------------|-----------|-------------|-----------|
| 7170 | 1000' | 24 | C-24 | 7/32 | .016" | 1000 | .058" |
| 7171 | 1000' | 22 | C-22 | 7/30 | .016" | 1000 | .064" |
| 7172 | 1000' | 20 | C-20 | 7/28 | .016" | 1000 | .073" |
| 7173 | 1000' | 18 | C-18 | 7/26 | .016" | 1000 | .085" |
| 7174 | 1000' | 16 | C-16 | 19/29 | .016" | 1000 | .095" |
| 7175 | 1000' | 14 | C-14 | 19/27 | .016" | 1000 | .109" |

TYPE C

NYLON JACKET THICKNESS: 24 .002, 22, 20, 18 .003, 16-14 .004

NYLON JACKET

| | | | | | | | |
|-------|-------|----|------|-------|-------|------|-------|
| 7170N | 1000' | 24 | C-24 | 7/32 | .016" | 1000 | .065" |
| 7171N | 1000' | 22 | C-22 | 7/30 | .016" | 1000 | .072" |
| 7172N | 1000' | 20 | C-20 | 7/28 | .016" | 1000 | .079" |
| 7173N | 1000' | 18 | C-18 | 7/26 | .016" | 1000 | .090" |
| 7174N | 1000' | 16 | C-16 | 19/29 | .016" | 1000 | .099" |
| 7175N | 1000' | 14 | C-14 | 19/27 | .016" | 1000 | .114" |

STOCK COLORS: Black, Red, Brown, Blue, Orange, White, Yellow, Green, Gray, Purple. Also available in tracer colors. Additional types available to order.

SPECIFICATION MIL-W-16878D

TYPE D — HIGH TEMPERATURE — VINYL

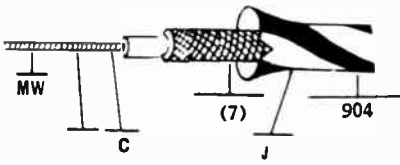
DESCRIPTION: One Conductor Stranded Similar To Type C—Heavier Wall Hi-Temp Thermoplastic Insulation.

| Cat. No. | Spool | Size AWG | Mil-W-16878D Type Designation | Cond. Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|-------------------------------|--------------|-----------|-------------|-----------|
| 7180 | 1000' | 24 | D-24 | 7/32 | .032" | 3000 | .084" |
| 7181 | 1000' | 22 | D-22 | 7/30 | .032" | 3000 | .089" |
| 7182 | 1000' | 20 | D-20 | 10/30 | .032" | 3000 | .097" |
| 7183 | 1000' | 18 | D-18 | 16/30 | .032" | 3000 | .107" |
| 7184 | 1000' | 16 | D-16 | 26/30 | .032" | 3000 | .116" |
| 7185 | 1000' | 14 | D-14 | 41/30 | .032" | 3000 | .130" |
| 7186 | 1000' | 12 | D-12 | 65/30 | .040" | 3000 | .163" |
| 7187 | 1000' | 10 | D-10 | 105/30 | .040" | 3000 | .182" |
| 7188 | 1000' | 8 | D-8 | 133/29 | .040" | 3000 | .247" |
| 7189 | 1000' | 6 | D-6 | 133/27 | .040" | 3000 | .291" |

MIL-W-16878B Type D Available with Nylon Jacket.

Birnbach

GOV'T SPEC. HOOK-UP WIRE
SPECIFICATION MIL-W-76B TYPES MW, LW, HW, GLASS BRAID



- 904 COLORS:**
- | | |
|----------|----------|
| 0 BLACK | 4 YELLOW |
| 1 BROWN | 5 GREEN |
| 2 RED | 6 BLUE |
| 3 ORANGE | 7 VIOLET |
| | 8 GRAY |
| | 9 WHITE |

| MW | | C | 22 | (7) | J |
|--------------------------|--------------------|----------------------|---------------------------|--------------|---------------------------------|
| TYPE OF WIRE | CONDUCTOR MATERIAL | CONDUCTOR SIZE (AWG) | STRANDING | CONSTRUCTION | |
| LW 300 Volt Light Wall | TINNED COPPER | 30 thru 20 | MINIMUM NUMBER OF STRANDS | SYMBOL | COVERING OVER INSULATED WIRE |
| MW 1000 Volt Medium Wall | TINNED COPPER | 24 thru 12 | | U | None |
| HW 2500 Volt Heavy Wall | TINNED COPPER | 22 thru 12 | | J | Jacket |
| HW 600 Volt Heavy Wall | TINNED COPPER | 10 thru 6 | | B | Braid |
| | | | | S | Shield |
| | | | | JS | Jacket and Shield |
| | | | | BS | Braid and Shield |
| | | | | SJ | Shield & Outer Jacket |
| | | | | JSJ | Jacket, Shield and Outer Jacket |
| | | | | BSJ | Braid, Shield and Outer Jacket |

SPECIFICATION MIL-W-76B TYPE MW (MEDIUM WALL) PLASTIC HOOK-UP WIRE
TYPE MW 1000 VOLTS (FUNGUS PROOF) SUPERSEDES JAN-C-76 TYPE SRIR

STRANDED TEMP. RATING: -40°C TO +80°C

| Cat. No. | Spool | Size AWG | Mil-W-76B Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|--------------|-------|----------|----------------------------|------------------|-----------|-------------|-----------|
| 7024 | 1000' | 24 | MW-C 24(16)U | 16/36 | .015" | 1000 | .055" |
| 7024-1 | 100' | 24 | MW-C 24(16)U | 16/36 | .015" | 1000 | .055" |
| 7024-S | 1000' | 24 | MW-C 24(16)U | 16/36 | .015" | 1000 | .055" |
| 7024-IS | 1000' | 24 | MW-C 24(16)U | 16/36 | .015" | 1000 | .055" |
| 7001 | 1000' | 22 | MW-C 22(7)U | 7/30 | .017" | 1000 | .066" |
| 7001-1 | 1000' | 22 | MW-C 22(7)U | 7/30 | .017" | 1000 | .066" |
| *7001-S | 1000' | 22 | MW-C 22(7)U | 7/30 | .017" | 1000 | .066" |
| *7001-IS | 1000' | 22 | MW-C 22(7)U | 7/30 | .017" | 1000 | .066" |
| 7003 | 1000' | 20 | MW-C 20(10)U | 10/30 | .017" | 1000 | .074" |
| 7003-1 | 1000' | 20 | MW-C 20(10)U | 10/30 | .017" | 1000 | .074" |
| *7003-S | 1000' | 20 | MW-C 20(10)U | 10/30 | .017" | 1000 | .074" |
| *7003-IS | 1000' | 20 | MW-C 20(10)U | 10/30 | .017" | 1000 | .074" |
| 7005 | 1000' | 18 | MW-C 18(16)U | 16/30 | .017" | 1000 | .085" |
| 7005-1 | 1000' | 18 | MW-C 18(16)U | 16/30 | .017" | 1000 | .085" |
| *7005-S | 1000' | 18 | MW-C 18(16)U | 16/30 | .017" | 1000 | .085" |
| *7005-IS | 1000' | 18 | MW-C 18(16)U | 16/30 | .017" | 1000 | .085" |
| 7007 | 1000' | 16 | MW-C 16(26)U | 26/30 | .017" | 1000 | .098" |
| 7007-1 | 1000' | 16 | MW-C 16(26)U | 26/30 | .017" | 1000 | .098" |
| 7009 | 1000' | 14 | MW-C 14(41)U | 41/30 | .017" | 1000 | .114" |
| 7009-1 | 1000' | 14 | MW-C 14(41)U | 41/30 | .017" | 1000 | .114" |
| 7011 | 1000' | 12 | MW-C 12(65)U | 65/30 | .017" | 1000 | .132" |
| 7011-1 | 1000' | 12 | MW-C 12(65)U | 65/30 | .017" | 1000 | .132" |
| SOLID | | | | | | | |
| 7000 | 1000' | 22 | MW-C 22(1)U | 1 | .017" | 1000 | .061" |
| 7000-1 | 1000' | 22 | MW-C 22(1)U | 1 | .017" | 1000 | .061" |
| 7002 | 1000' | 20 | MW-C 20(1)U | 1 | .017" | 1000 | .068" |
| 7002-1 | 1000' | 20 | MW-C 20(1)U | 1 | .017" | 1000 | .068" |
| 7004 | 1000' | 18 | MW-C 18(1)U | 1 | .017" | 1000 | .075" |
| 7004-1 | 1000' | 18 | MW-C 18(1)U | 1 | .017" | 1000 | .075" |

STOCK COLORS: White, Yellow, Lt. Blue, Black, Violet (purple), Blue, Brown, Lt. Green, Pink, Red, Green, Tan, Orange, Gray (slate).

*SINGLE SPIRAL TRACER COLORS AVAILABLE:

- | | | |
|-------------|--------------|--------------|
| White/Black | White/Orange | White/Blue |
| White/Brown | White/Yellow | White/Purple |
| White/Red | White/Green | White/Gray |

†DOUBLE SPIRAL TRACER COLORS AVAILABLE:

- | | | |
|--------------------|--------------------|--------------------|
| White/Black/Red | White/Black/Blue | White/Black/Gray |
| White/Black/Green | White/Black/Brown | White/Black/Purple |
| White/Black/Yellow | White/Black/Orange | |

Additional spiral tracer combination available, to order, for all numbers.

SPECIFICATION MIL-W-76B TYPE MW (Medium Wall)—NYLON JACKET
1000 VOLT (Fungus Proof) (Supersedes Jan-C-76 Types SRIR and WL Nylon Jacket)

DESCRIPTION: One conductor stranded tinned copper with thermoplastic insulation and extruded nylon jacket overall.

TEMP. RATING: -40°C TO +90°C



| Cat. No. | Spool | Size AWG | Mil-W-76B Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|------------------|-----------|-------------|-----------|
| 7224 | 1000' | 24 | MW-C 24(16)J | 16/36 | .015" | 1000 | .068" |
| 7224-1 | 100' | 24 | MW-C 24(16)J | 16/36 | .015" | 1000 | .068" |
| *7222 | 1000' | 22 | MW-C 22(7)J | 7/30 | .017" | 1000 | .075" |
| *7222-1 | 100' | 22 | MW-C 22(7)J | 7/30 | .017" | 1000 | .075" |
| *7220 | 1000' | 20 | MW-C 20(10)J | 10/30 | .017" | 1000 | .087" |
| *7220-1 | 100' | 20 | MW-C 20(10)J | 10/30 | .017" | 1000 | .087" |
| *7218 | 1000' | 18 | MW-C 18(16)J | 16/30 | .017" | 1000 | .100" |
| *7218-1 | 100' | 18 | MW-C 18(16)J | 16/30 | .017" | 1000 | .100" |
| 7216 | 1000' | 16 | MW-C 16(26)J | 26/30 | .017" | 1000 | .112" |
| 7216-1 | 1000' | 16 | MW-C 16(26)J | 26/30 | .017" | 1000 | .112" |
| 7214 | 1000' | 14 | MW-C 14(41)J | 41/30 | .017" | 1000 | .122" |
| 7214-1 | 1000' | 14 | MW-C 14(41)J | 41/30 | .017" | 1000 | .122" |
| 7212 | 1000' | 12 | MW-C 12(65)J | 65/30 | .017" | 1000 | .140" |
| 7212-1 | 1000' | 12 | MW-C 12(65)J | 65/30 | .017" | 1000 | .140" |
| 7210 | 1000' | 10 | HW-C 10(105)J | 105/30 | .045" | 600 | .240" |
| 7210-1 | 1000' | 10 | HW-C 10(105)J | 105/30 | .045" | 600 | .240" |

NYLON JACKET THICKNESS: #24 .002; 22, 20, 18 .003; 16, 14 .004; 12 .005; 10 .007.

STOCK COLORS: White, Orange, Purple, Black, Yellow, Gray, Brown, Green, Red, Blue

- | | | | | | | | |
|-------------|--------------|--------------|--------------|-----------------|--------------------|--------------------|-------------------|
| White/Black | White/Red | White/Yellow | White/Blue | White/Gray | White/Black/Yellow | White/Black/Green | White/Black/Brown |
| White/Brown | White/Orange | White/Green | White/Purple | White/Black/Red | White/Black/Blue | White/Black/Orange | White/Black/Gray |

*In addition Nos. 7218, 7220, 7222, available in Red/Black and Black/White. Nos. 7212, 7210 available solid colors only.

ALL WIRES ON THIS PAGE CAN BE ORDERED CUT & STRIPPED TO YOUR SPECIFICATIONS.

Also multi-conductors can be formed to order twisted, shielded with or without plastic jacket overall.

Birnbach

GOV'T SPEC. HOOK-UP WIRE
SPECIFICATION MIL-W-76B TYPES MW, LW, HW, GLASS BRAID



PLASTIC HOOK-UP WIRE

SPECIFICATION MIL-W-76B

TYPE LW (Light Wall)

TYPE LW — 300 VOLTS

DESCRIPTION: One conductor stranded tinned copper with light wall of primary thermoplastic insulation.

TEMP. RATING: -40°C TO +80°C

| Cat. No. | Spool | Size AWG | MIL-W-76B Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|------------------|-----------|-------------|-----------|
| 7330 | 1000' | 30 | LW-C 30(7)U | 7/38 | .010" | 300 | .033" |
| 7330-1 | 100' | 30 | LW-C 30(7)U | 7/38 | .010" | 300 | .033" |
| 7328 | 100' | 28 | LW-C 28(7)U | 7/36 | .010" | 300 | .035" |
| 7328-1 | 1000' | 28 | LW-C 28(7)U | 7/36 | .010" | 300 | .035" |
| 7326 | 1000' | 26 | LW-C 26(10)U | 10/36 | .010" | 300 | .040" |
| 7326-1 | 100' | 26 | LW-C 26(10)U | 10/36 | .010" | 300 | .040" |
| 7324 | 1000' | 24 | LW-C 24(7)U | 7/32 | .010" | 300 | .044" |
| 7324/22 | 1000' | 22 | LW-C 22(7)U | 7/30 | .010" | 300 | .050" |
| 7324/20 | 1000' | 20 | LW-C 20(7)U | 7/28 | .010" | 300 | .060" |

SPECIFICATION MIL-W-76B

TEMP. RATING: -40°C TO +90°C

TYPE LW—NYLON JACKET

Description: Same as above except clear NYLON JACKET overall.

| Cat. No. | Spool | Size AWG | MIL-W-76B Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|------------------|-----------|-------------|-----------|
| 7330N | 1000' | 30 | LW-C 30(7)J | 7/38 | .010" | 300 | .036" |
| 7328N | 1000' | 28 | LW-C 28(7)J | 7/36 | .010" | 300 | .039" |
| 7326N | 1000' | 26 | LW-C 26(7)J | 7/34 | .010" | 300 | .042" |
| 7324N | 1000' | 24 | LW-C 24(7)J | 7/32 | .010" | 300 | .047" |
| 7324/20N | 1000' | 20 | LW-C 22(7)U | 7/30 | .010" | 300 | .053" |
| 7324/22N | 1000' | 22 | LW-C 20(7)U | 7/28 | .010" | 300 | .065" |

STOCK COLORS: Black, Brown, Red, White, Green, Orange, Yellow, Gray, Blue, Purple. Additional sizes, colors available to order.

SPECIFICATION MIL-W-76B TYPE HW (Heavy Wall) — 2500 VOLTS (Fungus Proof)
(SUPERSEDES Jan-C-76 Type SRHV) TEMP. RATING: -40°C TO 80°C

DESCRIPTION: Similar to type MW. One conductor stranded tinned copper with larger wall of primary thermoplastic insulation to take 2500 V RMS.

| Cat. No. | Spool | Size AWG | MIL-W-76B Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|------------------|-----------|-------------|-----------|
| 7322 | 1000' | 22 | HW-C 22(7)U | 7/80 | .033" | 2500 | .105" |
| 7322-1 | 100' | 22 | HW-C 22(7)U | 7/80 | .033" | 2500 | .105" |
| 7320 | 1000' | 20 | HW-C 20(10)U | 10/30 | .033" | 2500 | .112" |
| 7320-1 | 100' | 20 | HW-C 20(10)U | 10/30 | .033" | 2500 | .112" |
| 7318 | 1000' | 18 | HW-C 18(16)U | 16/30 | .033" | 2500 | .122" |
| 7318-1 | 100' | 18 | HW-C 18(16)U | 16/30 | .033" | 2500 | .122" |
| 7316 | 1000' | 16 | HW-C 16(26)U | 26/30 | .033" | 2500 | .135" |
| 7316-1 | 100' | 16 | HW-C 16(26)U | 26/30 | .033" | 2500 | .135" |
| 7314 | 1000' | 14 | HW-C 14(41)U | 41/30 | .045" | 600 | .175" |
| 7314-1 | 100' | 14 | HW-C 14(41)U | 41/30 | .045" | 600 | .175" |
| 7312 | 1000' | 12 | HW-C 12(65)U | 65/30 | .045" | 600 | .195" |
| 7312-1 | 100' | 12 | HW-C 12(65)U | 65/30 | .045" | 600 | .195" |
| *7013 | 1000' | 10 | HW-C 10(105)U | 105/30 | .045" | 600 | .217" |
| *7013-1 | 100' | 10 | HW-C 10(105)U | 105/30 | .045" | 600 | .217" |
| *7015 | 1000' | 8 | HW-C 8(133)U | 133/29 | .045" | 600 | .268" |
| *7015-1 | 100' | 8 | HW-C 8(133)U | 133/29 | .045" | 600 | .268" |
| *7017 | 1000' | 6 | HW-C 6(133)U | 133/27 | .045" | 600 | .315" |
| *7017-1 | 100' | 6 | HW-C 6(133)U | 133/27 | .045" | 600 | .315" |

STOCK COLORS: White, Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray. Additional sizes, colors available to order.

SPECIFICATION MIL-W-76B TYPE MW (Medium Wall) — GLASS BRAID 1000 VOLTS
(Supersedes Jan-C-76 Types SRIR and WL Glass Braid)

DESCRIPTION: One conductor stranded tinned copper with thermoplastic insulation and lacquered glass braid overall.

TEMP. RATING: -40°C TO +80°C

| Cat. No. | Spool | Size AWG | MIL-W-76B Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|------------------|-----------|-------------|-----------|
| 7022 | 1000' | 22 | MW-C 22(7)B | 7/80 | .017" | 1000 | .079" |
| 7022-1 | 100' | 22 | MW-C 22(7)B | 7/80 | .017" | 1000 | .079" |
| 7020 | 1000' | 20 | MW-C 20(10)B | 10/30 | .017" | 1000 | .084" |
| 7020-1 | 100' | 20 | MW-C 20(10)B | 10/30 | .017" | 1000 | .084" |
| 7018 | 1000' | 18 | MW-C 18(16)B | 16/30 | .017" | 1000 | .100" |
| 7018-1 | 100' | 18 | MW-C 18(16)B | 16/30 | .017" | 1000 | .100" |
| 7016 | 1000' | 16 | MW-C 16(26)B | 26/30 | .017" | 1000 | .116" |
| 7016-1 | 100' | 16 | MW-C 16(26)B | 26/30 | .017" | 1000 | .116" |
| *7014 | 1000' | 14 | MW-C 14(41)B | 41/30 | .017" | 1000 | .129" |
| *7014-1 | 100' | 14 | MW-C 14(41)B | 41/30 | .017" | 1000 | .129" |
| *7012 | 1000' | 12 | MW-C 12(65)B | 65/30 | .017" | 1000 | .149" |
| *7012-1 | 100' | 12 | MW-C 12(65)B | 65/30 | .017" | 1000 | .149" |

STOCK COLORS: White, Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White/Brown, White/Black, White/Orange, White/Yellow, White/Green, White/Blue, White/Red, White/Gray, White/Purple, White/Black/Red, White/Black/Yellow, White/Black/Blue, White/Black/Green, White/Black/Orange, White/Black/Brown, White/Black/Gray. * Nos. 7014, 7012, available stock in solid colors.

TYPE HW (Heavy Wall) — GLASS BRAID
(Supersedes Jan-C-76 Type SRHV — Glass Braid)

| Cat. No. | Spool | Size AWG | MIL-W-76B Type Designation | Conductor Strand | Nom. Wall | Volt Rating | Nom. O.D. |
|----------|-------|----------|----------------------------|------------------|-----------|-------------|-----------|
| 7010 | 1000' | 10 | HW-C 10(105)B | 105/30 | .045" | 600 | .237" |
| 7010-1 | 100' | 10 | HW-C 10(105)B | 105/30 | .045" | 600 | .237" |
| 7008 | 1000' | 8 | HW-C 8(133)B | 133/29 | .045" | 600 | .293" |
| 7008-1 | 100' | 8 | HW-C 8(133)B | 133/29 | .045" | 600 | .293" |
| 7006 | 1000' | 6 | HW-C 6(133)B | 133/27 | .045" | 600 | .340" |
| 7006-1 | 100' | 6 | HW-C 6(133)B | 133/27 | .045" | 600 | .340" |

STOCK COLORS: White, Black. Also multi-conductors can be formed to order twisted, shielded with or without plastic jacket overall. ALL WIRES ON THIS PAGE CAN BE ORDERED CUT AND STRIPPED TO YOUR SPECIFICATIONS

Birnbach

HIGH VOLTAGE, SILICONE HOOK-UP WIRE KEL-F HOOK-UP, CATHODE RAY, 105° UL



200° C. BIRSIL SILICONE RUBBER HOOK-UP LEAD WIRE 600 VOLT

This Birsil Silicone Rubber Hook up lead wire withstands extreme temperature range and flexibility from -104° C. to +400° F. with retention of physical properties and is highly resistant to flex cracking at temperature extremes; fungus resistant; corona resistant; engineered for high heat and hi-frequency applications; low power factor; acid-alkali-oil resistant; low dielectric constant; insulation approaching mica. Approved by U. L. but consumer must apply for Underwriter's Laboratories approval for individual product.

| Cat. No. | Spool | Size AWG | Strand | Nom. Ins. Wall | Volt Rating | Breakdown Voltage AC | Nom. O.D. |
|----------|-------|----------|--------|----------------|-------------|----------------------|-----------|
| 7622 | 1000' | 22 | 7/30 | 1/32" | 600 | 11,500 | .105" |
| 7622-1 | 100' | 22 | 7/30 | 1/32" | 600 | 11,500 | .105" |
| 7620 | 1000' | 20 | 10/30 | 1/32" | 600 | 18,000 | .121" |
| 7620-1 | 100' | 20 | 10/30 | 1/32" | 600 | 18,000 | .121" |
| 7618 | 1000' | 18 | 16/30 | 1/32" | 600 | 21,000 | .128" |
| 7618-1 | 100' | 18 | 16/30 | 1/32" | 600 | 21,000 | .128" |
| 7616 | 1000' | 16 | 26/30 | 1/32" | 600 | 20,000 | .144" |
| 7616-1 | 100' | 16 | 26/30 | 1/32" | 600 | 20,000 | .144" |
| 7614 | 1000' | 14 | 41/30 | 1/32" | 600 | 15,500 | .165" |
| 7614-1 | 100' | 14 | 41/30 | 1/32" | 600 | 15,500 | .165" |
| 7612 | 1000' | 12 | 65/30 | 1/32" | 600 | 14,500 | .185" |
| 7612-1 | 100' | 12 | 65/30 | 1/32" | 600 | 14,500 | .185" |
| 7610 | 1000' | 10 | 65/28 | 3/64" | 600 | 20,000 | .210" |
| 7610-1 | 100' | 10 | 65/28 | 3/64" | 600 | 20,000 | .210" |

DESCRIPTION:

One conductor, tinned copper strands, silicone rubber insulation, glass braid, lacquered. Color: White.



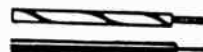
Additional sizes and colors available to order. Types F and FF per MIL-W-16878D available to order.

BIRFLENE* KEL-F HOOK-UP WIRE -125° C. to +175° C. MEETS MIL-W-12349-SPEC

PERFORMANCE SPECIFICATIONS:

Continuous: -60° to +175° C. Operating Voltage: 1000 volts RMS. Spark Test: 7500 volts. Dielectric Strength: 5000 volts at 60° C. for 1 minute. Insulation Resistance: Greater than 5000 Meg Ohms/1000 Ft. at 60° C. Moisture Absorption: Nil. Flammability: Non-flammable. Resistance to Chemicals: All solvents and acids. Aging: Outdoor, 1 year; no detectable change.

| Cat. No. | Spool | Size AWG | Strand | Nom. Ins. Wall | Nom. O.D. |
|----------|-------|----------|--------|----------------|-----------|
| 7130 | 1000' | 30 | 7/38 | .006" | .029" |
| 7130-1 | 100' | 30 | 7/38 | .006" | .029" |
| 7128 | 1000' | 28 | 7/36 | .006" | .032" |
| 7128-1 | 100' | 28 | 7/36 | .006" | .032" |
| 7126 | 1000' | 26 | 7/34 | .008" | .037" |
| 7126-1 | 100' | 26 | 7/34 | .008" | .037" |
| 7124 | 1000' | 24 | 7/32 | .008" | .043" |
| 7124-1 | 100' | 24 | 7/32 | .008" | .043" |
| 7122 | 1000' | 22 | 7/30 | .008" | .050" |
| 7122-1 | 100' | 22 | 7/30 | .008" | .050" |
| 7120 | 1000' | 20 | 7/28 | .010" | .060" |
| 7120-1 | 100' | 20 | 7/28 | .010" | .060" |
| 7118 | 1000' | 18 | 16/30 | .010" | .070" |
| 7118-1 | 100' | 18 | 16/30 | .010" | .070" |
| 7116 | 1000' | 16 | 19/29 | .010" | .079" |
| 7116-1 | 100' | 16 | 19/29 | .010" | .079" |



DESCRIPTION:

One conductor silver plated copper stranded, insulation — Monochlorotrifluoroethylene (Birfene Kel-F).

COLORS: White, Red, Green, Gray, Black, Orange, Dk. Blue, Lt. Blue, Brown, Yellow, Purple

Available in Spiral Tracers.

*Made with Kellogg Co. Kel-F or Bakelite Co. Fluoroethene.

HI-VOLTAGE and CATHODE RAY CABLE

Used for 10,000, 20,000, 40,000, 60,000 volt applications as for cathode ray tubes in TV receivers, oscilloscopes and other electronic devices. Has dielectric constant of 2.7 and power factor of .002. Shielded Hi-Voltage type used to shield RF radiation in X-Ray, diathermy, medical equipment, and in transmitters.

UNSHIELDED

| Cat. No. | Spool | Size AWG | Strand | Nom. Ins. Wall | Suggested Working Voltage | Nom. O.D. |
|-----------------|-------|----------|--------|----------------|---------------------------|-----------|
| 7402 | 1000' | 20 | 10/30 | .047" | 10,000 | .125" |
| 7402-1 | 100' | 20 | 10/30 | .047" | 10,000 | .125" |
| 7412 | 1000' | 20 | 10/30 | .068" | 20,000 | .169" |
| 7412-1 | 100' | 20 | 10/30 | .068" | 20,000 | .169" |
| 7418 | 1000' | 18 | 16/30 | .047" | 10,000 | .135" |
| 7418-1 | 100' | 18 | 16/30 | .047" | 10,000 | .135" |
| 7428 | 1000' | 18 | 16/30 | .069" | 20,000 | .179" |
| 7428-1 | 100' | 18 | 16/30 | .069" | 20,000 | .179" |
| 7448 | 1000' | 18 | 16/30 | .095" | 40,000 | .231" |
| 7448-1 | 100' | 18 | 16/30 | .095" | 40,000 | .231" |
| 7449 | 1000' | 18 | 16/30 | .123" | 60,000 | .285" |
| 7449-1 | 100' | 18 | 16/30 | .123" | 60,000 | .285" |
| SHIELDED | | | | | | |
| 7458 | 1000' | 18 | 16/30 | .095" | 40,000 | .256" |
| 7458-1 | 100' | 18 | 16/30 | .095" | 40,000 | .256" |



DESCRIPTION:

One conductor stranded copper tinned rulan (flame retarding type) polyethylene insulation. Available white/red tracer. Temp. Rating: 105°C

Shielded: Same as above with tinned copper braided shield overall.

Special constructions available to order.

PLASTIC INSULATED HOOK-UP WIRE

Designed for the chassis, sub-chassis wiring of radio and television receivers and transmitters inside or outside the chassis. UL approved for 105° C. (221° F.) operating temperature.

105° C. — 600 VOLT RATING UL APPROVED (CSA 600V-90°C)

| Cat. No. | Spool | AWG | Stranding | Nom. Wall | Volt. Breakdown | DC Ins. Res. Megs./Ft. | Max. O.D. |
|----------|-------|-----|-----------|-----------|-----------------|------------------------|-----------|
| 7201 | 1000' | 22 | 7/30 | .032" | 18000 | 5000 | .100" |
| 7201-1 | 100' | 22 | 7/30 | .032" | 18000 | 5000 | .100" |
| 7203 | 1000' | 20 | 10/30 | .032" | 18000 | 5000 | .104" |
| 7203-1 | 100' | 20 | 10/30 | .032" | 18000 | 5000 | .104" |
| 7205 | 1000' | 18 | 16/30 | .032" | 18000 | 5000 | .112" |
| 7205-1 | 100' | 18 | 16/30 | .032" | 18000 | 5000 | .112" |
| 7207 | 1000' | 16 | 26/30 | .032" | 18000 | 5000 | .129" |
| 7207-1 | 100' | 16 | 26/30 | .032" | 18000 | 5000 | .129" |
| 7202 | 1000' | 22 | Solid | .032" | 18000 | 5000 | .095" |
| 7202-1 | 100' | 22 | Solid | .032" | 18000 | 5000 | .095" |
| 7204 | 1000' | 20 | Solid | .032" | 18000 | 5000 | .102" |
| 7204-1 | 100' | 20 | Solid | .032" | 18000 | 5000 | .102" |

COLORS: Black, Red, Green, Yellow, Blue, Brown, White, Orange, Gray, Purple

ALL WIRES ON THIS PAGE CAN BE ORDERED CUT & STRIPPED TO YOUR SPECIFICATIONS.

Also multi-conductors can be formed to order twisted, shielded with or without plastic jacket overall.



DESCRIPTION:

One Conductor stranded annealed copper tinned, plastic insulation.

Birnbach

**MINIATURE, SUBMINIATURE, HIGH TEMP.
SHIELDED & MULTICONDUCTOR**



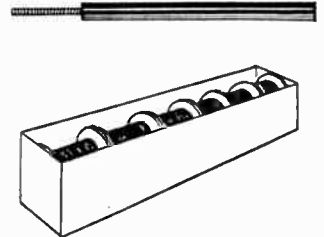
MINIATURIZATION HOOK-UP WIRE and CABLE

HIGH TEMPERATURE 105°C.

UNSHIELDED — ONE CONDUCTOR

Used in miniaturized equipment Phono-pickup lead computers transistor circuits, electro-medical and electro therapeutic apparatus, instrumentation projects, miniaturization programs, where fine sizes are required with high operating temperature.
For "Lab" requirements Miniaturization Hook-Up Wire and Cable assortments—WRITE for information.

| Cat. No | Spool | No. of Cond. | Size AWG | Conductor Strand | Nom. Wall | Nom. O.D. |
|----------|-------|--------------|----------|------------------|-----------|-----------|
| 7534 | 1000' | 1 | 34 | 4/40 | .010" | .027" |
| 7534-500 | 500' | 1 | 34 | 4/40 | .010" | .027" |
| 7532 | 1000' | 1 | 32 | 7/40 | .010" | .029" |
| 7532-500 | 500' | 1 | 32 | 7/40 | .010" | .029" |
| 7530 | 1000' | 1 | 30 | 7/38 | .010" | .030" |
| 7530-500 | 500' | 1 | 30 | 7/38 | .010" | .030" |
| 7529 | 1000' | 1 | 29 | 5/36 | .010" | .030" |
| 7529-500 | 500' | 1 | 29 | 5/36 | .010" | .030" |
| 7528 | 1000' | 1 | 28 | 7/36 | .010" | .035" |
| 7528-500 | 500' | 1 | 28 | 7/36 | .010" | .035" |
| 7527 | 1000' | 1 | 27 | 7/35 | .010" | .037" |
| 7527-500 | 500' | 1 | 27 | 7/35 | .010" | .037" |
| 7526 | 1000' | 1 | 26 | 10/36 | .010" | .038" |
| 7526-500 | 500' | 1 | 26 | 10/36 | .010" | .038" |
| 7524 | 1000' | 1 | 24 | 16/36 | .015" | .055" |
| 7524-500 | 500' | 1 | 24 | 16/36 | .015" | .055" |



DESCRIPTION:

One conductor stranded tinned copper with 105°C. high temperature thermoplastic insulation overall.

STOCK COLORS: Black, Red, Green, Yellow, Blue, Brown, White, Orange, Gray, Purple

SUB-MINIATURE

MULTI-CONDUCTOR CABLE

(Super Flexible)



DESCRIPTION: Multi-Cond. tinned copper stranded 105° C high temperature P.V.C. thermoplastic insulation. When jacketed clear P.V.C. thermoplastic used over cabled wire.



NO OUTER JACKET

CLEAR VINYL JACKET OVERALL

| Cat. No. | Spool | No. of Cond. | Size AWG | Cond. Strand | Nom. Wall | Nom. O.D. |
|----------|-------|--------------|----------|--------------|-----------|-----------|
| 7652 | 1000' | 2 | 30 | 7/38 | .010" | .059" |
| 7652 | 500' | 2 | 30 | 7/38 | .010" | .059" |
| 7653 | 1000' | 3 | 30 | 7/38 | .010" | .065" |
| 7653 | 500' | 3 | 30 | 7/38 | .010" | .065" |
| 7654 | 1000' | 4 | 30 | 7/38 | .010" | .072" |
| 7654 | 500' | 4 | 30 | 7/38 | .010" | .072" |

| Cat. No. | Spool | No. of Cond. | Size AWG | Cond. Strand | Nom. Wall Jacket | Nom. O.D. |
|----------|-------|--------------|----------|--------------|------------------|-----------|
| 7668 | 1000' | 2 | 28 | 7/36 | .010" | .079" |
| 7668 | 500' | 2 | 28 | 7/36 | .010" | .079" |
| 7669 | 1000' | 3 | 28 | 7/36 | .010" | .086" |
| 7669 | 500' | 3 | 28 | 7/36 | .010" | .086" |
| 7670 | 1000' | 4 | 28 | 7/36 | .010" | .095" |
| 7670 | 500' | 4 | 28 | 7/36 | .010" | .095" |

CONDUCTOR COLOR CODE CHART:
1 Black, 2 White, 3 Red, 4 Green

CONDUCTOR COLOR CODE CHART:
1 Black, 2 White, 3 Red, 4 Green

SUB-MINIATURE

SHIELDED HOOK-UP WIRE

(Super Flexible)

| Cat. No | Spool | No. of Cond. | Size AWG | Conductor Strand | Nom. Wall | Nom. O.D. |
|---------|-------|--------------|----------|------------------|-----------|-----------|
| 7538 | 1000' | 1 | 30 | 7/38 | .010" | .053" |
| 7538 | 500' | 1 | 30 | 7/38 | .010" | .053" |
| 7535 | 1000' | 1 | 28 | 7/36 | .010" | .058" |
| 7535 | 500' | 1 | 28 | 7/36 | .010" | .058" |
| 7537 | 1000' | 1 | 26 | 10/36 | .010" | .061" |
| 7537 | 500' | 1 | 26 | 10/36 | .010" | .061" |
| 7536 | 1000' | 1 | 24 | 16/36 | .015" | .075" |
| 7536 | 500' | 1 | 24 | 16/36 | .015" | .075" |



DESCRIPTION:

One or multi-conductor stranded tinned copper with 105°C. high temperature thermoplastic insulation and tinned copper shielded braid overall.

STOCK COLOR: White (under shield)

SUB-MINIATURE

MULTI-CONDUCTOR CABLE SHIELDED

(Super Flexible)



DESCRIPTION: Multi-conductor, tinned copper stranded 105° C high temperature P.V.C. thermoplastic insulation, tinned copper shield. When jacketed clear P.V.C. Thermoplastic jacket used over tinned copper shield.



NO OUTER JACKET

CLEAR VINYL JACKET OVERALL

| Cat. No. | Spool | No. of Cond. | Size AWG | Cond. Strand | Nom. Wall | Nom. O.D. |
|----------|-------|--------------|----------|--------------|-----------|-----------|
| 7542 | 1000' | 2 | 24 | 16/36 | .015" | .114" |
| 7542/3 | 1000' | 3 | 24 | 16/36 | .015" | .123" |
| 7542/4 | 1000' | 4 | 24 | 16/36 | .015" | .144" |

| Cat. No. | Spool | No. of Cond. | Size AWG | Cond. Strand | Nom. Wall Jacket | Nom. O.D. |
|----------|-------|--------------|----------|--------------|------------------|-----------|
| 7552 | 1000' | 2 | 28 | 7/36 | .010" | .137" |
| 7552/3 | 1000' | 3 | 28 | 7/36 | .010" | .145" |
| 7552/4 | 1000' | 4 | 28 | 7/36 | .010" | .163" |

CONDUCTOR COLOR CODE CHART:
1 Black, 2 White, 3 Red, 4 Green

CONDUCTOR COLOR CODE CHART:
1 Black, 2 White, 3 Red, 4 Green

ALL WIRES ON THIS PAGE CAN BE ORDERED CUT & STRIPPED TO YOUR SPECIFICATIONS.
Also multi-conductors can be formed to order twisted, shielded with or without plastic jacket overall.

Birnbach

**PLASTIC and RUBBER MICROPHONE CABLE
MULTI-CONDUCTOR — ARMORED CABLE**



Microphone Cables with Birnbach's NEW

• "VI-CON" SHIELD

HI-FLEXIBILITY • LONG FLEX LIFE • EASY WORKING

This series of cable is Birnbach's new outstanding shield in combination with vinyl plastic that is conductive thereby providing 100% shield coverage. Easy handling; lighter in weight than comparative types; extremely flexible; #24 Stranded Bare Tinned Wire is used for grounding termination; this is in continuous contact with the "Vi-Con" Shield.

| Cat. No. | Spool | Cond. | Size No. AWG | Stranding | Nom. O.D. |
|----------|-------|-------|--------------|-----------|-----------|
| 1800 | 500' | 1 | 25 | 7/33 | .125" |
| 1801 | 500' | 1 | 25 | 7/33 | .160" |
| 1802 | 500' | 2 | 22 | 16/34 | .225" |

PLASTIC MICROPHONE CABLE

Designed to stand up under physical abuse and is resistant to oil, moisture and aging for long life. These cables have low capacitance, high insulation resistance and low attenuation at audio frequencies. Will not stain or mark.

#1839 is used for high impedance microphone, lapel, contact, crystal, ribbon, velocity and Hi-Fi interconnecting cable.

#1840 is used for high impedance label microphones.

#1841 is used for crystal, ribbon and other impedance microphones.

Above recommended for Hi-Fi installations because of low loss and low capacitance.

PLASTIC — ONE-CONDUCTOR MICROPHONE CABLE

DESCRIPTION:

Single Conductor Stranded

3 strands #33 copper tinned, and 4 strands #33 (steel-tinned 1840 and 1841) cellulose yarn braid, Polyethylene insulation, tinned copper shielded braid, with chrome vinyl plastic jacket overall.

| Cat. No. | Spool | Cond. | Size No. AWG | Stranding | Nom. Cap./Ft. | Nom. O.D. |
|----------|-------|-------|--------------|-----------|---------------|-----------|
| 1839 | 500' | 1 | 20 | 26/34 | 39MMF | .175" |
| 1840 | 500' | 1 | 25 | 7/33* | 34MMF | .144" |
| 1841 | 500' | 1 | 25 | 7/33* | 25MMF | .200" |

*3X33 Copper, 4X33 Steel (All tinned)

SPIRAL SHIELDED MICROPHONE CABLE

Constructed with tinned copper spiral wrapped concentric shield. Extremely flexible, smaller size.

| Cat. No. | Spool | Cond. | Size No. AWG | Stranding | Nom. Cap./Ft. | Nom. O.D. |
|----------|-------|-------|--------------|-----------|---------------|-----------|
| 1835 | 500' | 1 | 25 | 7/33 | 25MMF | .159" |
| 1836 | 500' | 1 | 25 | 7/33 | 33MMF | .125" |

PLASTIC — MULTI-CONDUCTOR MICROPHONE CABLE

Used with carbon and all low impedance microphones.

DESCRIPTION: Each conductor tinned copper. Polyethylene insulation color coded. Multi conductors are cushioned with filler, cotton wrapped under tinned copper shield, chrome vinyl jacket overall.

| Cat. No. | Spool | Cond. | Size No. AWG | Stranding | Nom. Cap./Ft. | Nom. O.D. |
|----------|-------|-------|--------------|-----------|---------------|-----------|
| 1842 | 500' | 2 | 22 | 16/34 | 31MMF | .231" |
| 1843 | 500' | 3 | 20 | 26/34 | 39MMF | .250" |
| 1844 | 500' | 4 | 20 | 26/34 | 43MMF | .255" |
| 1845 | 500' | 5 | 20 | 26/34 | 48MMF | .275" |
| 1846 | 500' | 6 | 20 | 26/34 | 54MMF | .300" |
| 1846/8 | 500' | 8 | 20 | 26/34 | 67MMF | .330" |
| 1846/10 | 500' | 10 | 20 | 26/30 | 60MMF | .375" |

CONDUCTOR COLOR CODE: 1-White, 2-Black, 3-Red, 4-Green, 5-Yellow, 6-Blue, 7-Brown, 8-Orange, 9-Purple, 10-Slate

2 CONDUCTOR SHIELDED

(Twisted Pair)

Used for transmission line, P. A. and sound systems, school, hospital sound installations, industrial paging systems, broadcast and audio cable, paging and rack panel wiring.

DESCRIPTION:

Each conductor copper tinned, plastic insulation, color coded twisted, tinned copper shield overall.

| Cat. No. | Spool | Conds. | Size AWG | Strand | Insul. | NOM O.D. |
|----------|-------|--------|----------|--------|--------|----------|
| 826/30 | 500' | 2 | 30 | 7/38 | .010" | .085" |
| 826/28 | 500' | 2 | 28 | 7/38 | .010" | .090" |
| 826/26 | 500' | 2 | 26 | 7/34 | .010" | .100" |
| 826 | 500' | 2 | 24 | 19/36 | .015" | .120" |
| 825 | 500' | 2 | 22 | 7/30 | .017" | .140" |
| 9725 | 500' | 2 | 20 | 19/30 | .017" | .155" |
| 827 | 500' | 2 | 18 | 19/30 | .017" | .180" |
| 828 | 500' | 2 | 16 | 29/30 | .020" | .210" |
| 829 | 500' | 2 | 14 | 41/30 | .020" | .235" |
| 830 | 500' | 2 | 12 | 65/30 | .025" | .295" |
| 830/10 | 500' | 2 | 10 | 105/30 | .025" | .375" |

3 CONDUCTOR SHIELDED

| | | | | | | |
|---|------|---|----|-------|-------|-------|
| 9735 | 500' | 3 | 20 | 19/30 | .017" | .192" |
| 2 CONDUCTOR SHIELDED WAXED COTTON BRAID OVER SHIELD | | | | | | |
| 972B | 500' | 2 | 20 | 19/30 | .017" | .180" |

SOLID CONDUCTORS

| | | | | | | |
|------|------|---|----------|---|-------|-------|
| 1701 | 500' | 2 | 22 Solid | 1 | .017" | .135" |
| 1702 | 500' | 2 | 20 Solid | 1 | .017" | .145" |
| 1703 | 500' | 2 | 18 Solid | 1 | .017" | .170" |

CONDUCTOR COLOR CODE: 1-Black, 2-Red, 3-White

RUBBER MICROPHONE CABLE

Especially Designed for Heavy Studio Use

RUBBER CRYSTAL MICROPHONE CABLE

Designed for long service life and low loss. Use with crystal, ribbon, dynamic and velocity microphones and photoelectric cells. Birnbach #1870 is used widely for lapel microphones and phono pick ups.

DESCRIPTION:

Single Conductor, 26 Strands

#34 extra flexible tinned copper, special low loss rubber compound, tinned copper braid shield, cotton wrap, tough black rubber jacket overall.



| Cat. No. | Spool | Cond. | Size No. AWG | Stranding | Nom. Cap./Ft. | Nom. O.D. |
|----------|-------|-------|--------------|-----------|---------------|-----------|
| 870 | 100' | 1 | 20 | 26/34 | 40 Mmf | .175" |
| 1870 | 250' | 1 | 20 | 26/34 | 40 Mmf | .175" |
| 872 | 100' | 1 | 20 | 26/34 | 30 Mmf | .245" |
| 1872 | 250' | 1 | 20 | 26/34 | 30 Mmf | .245" |

RUBBER OR NEOPRENE MICROPHONE CABLE

DESCRIPTION:

Each Conductor, extra flexible stranded tinned copper, insulated with a .022" wall special low capacity rubber, color coded, conductors twisted, jute filler cotton wrap, tinned copper braided shield, cotton wrap with tough weatherproof black rubber or neoprene jacket overall.



Used for indoor and outdoor crystal, carbon and condenser microphones and for public address systems.

RUBBER JACKET

| Cat. No. | Spool | Cond. | Size AWG | Strand. | Nom. Cap. 1-Cond. & Shield | Nom. Cap. 1-Cond. & Others Connected to Shield | Nom. Cap. 1-Cond. & Others | Nom. O.D. |
|----------|-------|-------|----------|---------|----------------------------|--|----------------------------|-----------|
| 772 | 100' | 2 | 20 | 26/34 | .65 Mmf | .68 Mmf | .43 Mmf | .280" |
| 1772 | 250' | 2 | 20 | 26/34 | .65 Mmf | .68 Mmf | .43 Mmf | .280" |
| 772/18 | 100' | 2 | 18 | 41/34 | .70 Mmf | .73 Mmf | .48 Mmf | .300" |
| 773 | 100' | 3 | 20 | 26/34 | .68 Mmf | .72 Mmf | .55 Mmf | .290" |
| 1773 | 250' | 3 | 20 | 26/34 | .68 Mmf | .72 Mmf | .55 Mmf | .290" |
| 773/18 | 100' | 3 | 18 | 41/34 | .68 Mmf | .72 Mmf | .55 Mmf | .350" |
| 774 | 100' | 4 | 20 | 26/34 | .68 Mmf | .74 Mmf | .57 Mmf | .300" |
| 1774 | 250' | 4 | 20 | 26/34 | .68 Mmf | .74 Mmf | .57 Mmf | .300" |
| 774/18 | 250' | 4 | 18 | 41/34 | .68 Mmf | .74 Mmf | .57 Mmf | .335" |
| 775 | 100' | 5 | 20 | 26/34 | .70 Mmf | .76 Mmf | .58 Mmf | .330" |
| 1775 | 250' | 5 | 20 | 26/34 | .70 Mmf | .76 Mmf | .58 Mmf | .330" |
| 776 | 100' | 6 | 20 | 26/34 | .71 Mmf | .80 Mmf | .60 Mmf | .350" |
| 1776 | 250' | 6 | 20 | 26/34 | .71 Mmf | .80 Mmf | .60 Mmf | .350" |
| 777 | 100' | 7 | 20 | 26/34 | .72 Mmf | .85 Mmf | .62 Mmf | .365" |
| 1777 | 250' | 7 | 20 | 26/34 | .72 Mmf | .85 Mmf | .62 Mmf | .365" |
| 778 | 100' | 8 | 20 | 26/34 | .74 Mmf | .90 Mmf | .65 Mmf | .390" |
| 778/10 | 100' | 10 | 20 | 26/34 | .75 Mmf | .92 Mmf | .67 Mmf | .440" |
| 778/12 | 250' | 12 | 20 | 26/34 | .77 Mmf | .93 Mmf | .69 Mmf | .575" |

For longer lengths and alternate put-ups—Specify.

NEOPRENE JACKET

| No. | Spool | Cond. | Size AWG | Strand. | Wall Thickness | Nom. Jacket | Nom. O.D. |
|------|-------|-------|----------|---------|----------------|-------------|-----------|
| 1781 | 500' | 1 | 18 | 41/34 | .040" | .030" | .250" |
| 1782 | 500' | 2 | 18 | 41/34 | .020" | .035" | .305" |
| 1783 | 500' | 3 | 18 | 41/34 | .020" | .035" | .325" |
| 1784 | 500' | 4 | 18 | 41/34 | .020" | .035" | .335" |
| 1786 | 500' | 6 | 18 | 41/34 | .020" | .035" | .430" |

MICROPHONE CABLE COLOR CODE CHART

- 1-Black
- 2-White
- 3-Red
- 4-Green
- 5-Yellow
- 6-Blue
- 7-Brown
- 8-Orange
- 9-Purple
- 10-Slate
- 11-White/Bk. (Braid)
- 12-White/Red (Braid)

ARMORED INDUSTRIAL CABLE

Used for P.A. systems on speaker extensions, oil burner installations, auto wiring, etc.

Two Conductors Parallel #18 16/30 Stranded Tinned Copper, rubber insulation, lacquered cotton braid color coded, spiral galvanized steel armor overall.



| Cat. No. | Spool | Size AWG | Strand | Nom. O.D. |
|----------|-------|----------|--------|---------------|
| 1111 | 250' | 18 | 16/30 | .155" x .240" |
| 1112 | 500' | 18 | 16/30 | .155" x .240" |
| 1113 | 1000' | 18 | 16/30 | .155" x .240" |

FOR LONGER LENGTHS AND ALTERNATE PUT-UPS—SPECIFY.

Birnbach

**BROADCAST AUDIO — FLEXIBLE TWISTED PAIR
INTER-COM—MULTI-COND.**

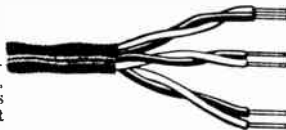


PLASTIC INTERCOMMUNICATING CABLES TWISTED PAIRS—SOLID CONDUCTORS

Used in connecting Intercommunicating and Sound Systems, Telephones, Annunciators, Nurses Hospital Call Systems, Electronic Computers, Guided Missiles.

DESCRIPTION:

Each Conductor #22 Solid Copper Tinned, .010" Wall Vinyl Plastic Insulation, conductors color coded, twisted pairs cabled, tubed gray Vinyl plastic jacket overall. Suitable for outdoor installations.



No. 4701 to 4729

| Cat. No. | Spool | Pairs | Cond. | Size No. AWG | Nom. Jkt. | Nom. O.D. |
|-----------|-------|-------|-------|--------------|-----------|-----------|
| 4701 | 500' | 1 | 2 | 22 Solid | .020" | .145" |
| 4702 | 500' | 2 | 4 | 22 Solid | .020" | .205" |
| 4703 | 500' | 3 | 6 | 22 Solid | .020" | .215" |
| 4706 | 500' | 6 | 12 | 22 Solid | .020" | .250" |
| 4709 | 500' | 9 | 18 | 22 Solid | .020" | .310" |
| 4711 | 500' | 11 | 22 | 22 Solid | .020" | .350" |
| 4711/13 | 500' | 13 | 26 | 22 Solid | .025" | .385" |
| 4715 | 500' | 15 | 30 | 22 Solid | .025" | .390" |
| 4716 | 500' | 16 | 32 | 22 Solid | .025" | .405" |
| 4727 | 500' | 27 | 54 | 22 Solid | .035" | .495" |
| 4727/31 | 500' | 31 | 62 | 22 Solid | .035" | .555" |
| 4727/41 | 500' | 41 | 82 | 22 Solid | .035" | .630" |
| 4729 | 500' | 51 | 102 | 22 Solid | .045" | .750" |
| 4729/76* | 500' | 76 | 152 | 22 Solid | .070" | .970" |
| 4729/101* | 500' | 101 | 202 | 22 Solid | .080" | 1.140" |

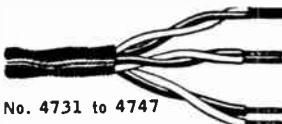
* Bare copper conductors.

For longer lengths and alternate put-ups—Specify.

TWISTED PAIRS—STRANDED CONDUCTORS

DESCRIPTION:

Each Conductor #22 7/30 Stranded Tinned Copper, .010" Vinyl plastic insulation, twisted pairs cabled, conductors color coded, tubed gray Vinyl plastic jacket overall.



No. 4731 to 4747

| Cat. No. | Spool | Pairs | Cond. | Size No. AWG | Strand | Nom. O.D. |
|----------|-------|-------|-------|--------------|--------|-----------|
| 4731 | 500' | 1 | 2 | 22 | 7/30 | .145" |
| 4732 | 500' | 2 | 4 | 22 | 7/30 | .210" |
| 4733 | 500' | 3 | 6 | 22 | 7/30 | .225" |
| 4734 | 500' | 4 | 8 | 22 | 7/30 | .235" |
| 4735 | 500' | 5 | 10 | 22 | 7/30 | .245" |
| 4736 | 500' | 6 | 12 | 22 | 7/30 | .255" |
| 4739 | 500' | 9 | 18 | 22 | 7/30 | .325" |
| 4745 | 500' | 15 | 30 | 22 | 7/30 | .455" |
| 4747 | 500' | 27 | 54 | 22 | 7/30 | .570" |

For longer lengths and alternate put-ups—Specify.

For Conductor Color Code Chart for Paired Intercom Cables. See Page 1558

SHIELDED MULTI-CONDUCTOR CABLE

Used indoors for permanent or portable work to prevent interference pickup on P.A. systems, recording equipment, photo electric circuits, etc

TINNED COPPER SHIELD OVERALL

DESCRIPTION:

Each Conductor #20 10/30 Stranded Tinned Copper, 1/64" pvc wall, waxed cotton braid color coded, twisted conductors, tinned copper shield overall. No. 1972 with cotton braid overall.



Nos. 972 to 978

| Cat. No. | Spool | Conds. | Size AWG | Strand | Insul. | Cap./Ft. Bet. Cond. & Shield | Cap./Ft. Bet. Conds. | Nom. O.D. |
|----------|-------|--------|----------|--------|--------|------------------------------|----------------------|-----------|
| 972 | 100' | 2 | 20 | 10/30 | .1/64 | .65 Mmf. | .43 Mmf. | .215" |
| 973 | 100' | 3 | 20 | 10/30 | .1/64 | .68 Mmf. | .55 Mmf. | .220" |
| 974 | 100' | 4 | 20 | 10/30 | .1/64 | .69 Mmf. | .57 Mmf. | .250" |
| 975 | 100' | 5 | 20 | 10/30 | .1/64 | .70 Mmf. | .58 Mmf. | .280" |
| 976 | 100' | 6 | 20 | 10/30 | .1/64 | .71 Mmf. | .60 Mmf. | .290" |
| 977 | 100' | 7 | 20 | 10/30 | .1/64 | .72 Mmf. | .62 Mmf. | .315" |
| 978 | 100' | 8 | 20 | 10/30 | .1/64 | .74 Mmf. | .65 Mmf. | .350" |
| 1972 | 100' | 2 | 20 | 10/30 | .1/64 | .65 Mmf. | .43 Mmf. | .225" |

CONDUCTOR COLOR CODE: 1—Black, 2—Red, 3—White, 4—Green, 5—Brown, 6—Yellow, 7—Blue, 8—Orange

SHIELDED TWO WIRE SPEAKER CABLE

For master control sound systems, photo electric circuits, P.A. systems, etc.



TINNED COPPER SHIELD, PAPER WRAP OVERALL No. 972A

| Cat. No. | Spool | Strand | Insul. | Cap./Ft. Bet. Cond. & Shield | Cap./Ft. Bet. Conds. | O. D. |
|----------|-------|--------|--------|------------------------------|----------------------|-------|
| 972A | 500' | 16/30 | 1/32 | .65 | .43 | .250" |

WAXED COTTON BRAID OVER SHIELD

| Cat. No. | Spool | Strand | Insul. | Cap./Ft. Bet. Cond. & Shield | Cap./Ft. Bet. Conds. | O. D. |
|----------|-------|--------|--------|------------------------------|----------------------|-------|
| 1972A | 500' | 16/30 | 1/32 | .65 | .43 | .275" |

CONDUCTOR COLOR CODE: Black and Red
For longer lengths and alternate put-ups—Specify.

SPIRAL WRAPPED SHIELDED AUDIO and MULTI-CONDUCTOR CABLE

Plastic Jacketed—with Spiral wrapped copper shield

Designed for P. A. and sound systems, installations in schools, hospitals, and institutions, recording studios, transmitters, paging and call systems.



DESCRIPTION:

Each conductor copper tinned, 1/64 plastic insulation, color coded, twisted, spiral wrapped tinned copper shield, gray plastic jacket overall.

| Cat. No. | Spool | Conds. | Size AWG | Strand | Nom. Insul. | Nom. Jacket | O. D. |
|----------|-------|--------|----------|--------|-------------|-------------|-------|
| 941 | 500' | 2 | 22 | 7/30 | .017" | .020" | .171" |
| 941/1 | 500' | 1 | 22 | 7/30 | .017" | .020" | .120" |
| 941/3 | 500' | 3 | 22 | 7/30 | .017" | .020" | .190" |
| 941/4 | 500' | 4 | 22 | 7/30 | .017" | .020" | .205" |
| 950 | 500' | 2 | 22 | 1 | .017" | .020" | .169" |
| 942 | 500' | 2 | 20 | 10/30 | .017" | .020" | .190" |
| 942/1 | 500' | 1 | 20 | 10/30 | .017" | .020" | .129" |
| 943 | 500' | 3 | 20 | 10/30 | .017" | .020" | .208" |
| 944 | 500' | 4 | 20 | 10/30 | .017" | .020" | .222" |
| 947 | 500' | 2 | 18 | 16/30 | .017" | .020" | .230" |
| 947/3 | 500' | 3 | 18 | 16/30 | .017" | .020" | .228" |
| 948 | 500' | 2 | 16 | 26/30 | .017" | .020" | .250" |

CONDUCTOR COLOR CODE: 1—Black, 2—Red, 3—White, 4—Green

PLASTIC INTER-COM CABLE

4 CONDUCTORS (2 Shielded — 2 Unshielded)

Widely used for wiring from station to station where a shielded twisted pair is indicated in order to eliminate cross talk.

DESCRIPTION:

No. 925 — 4 conductors #22 7/30 stranded tinned copper, vinyl plastic insulation color coded, tinned copper shield over one pair (2 cond.) One pair (2 cond.) unshielded. Tubed gray vinyl jacket overall.



CONDUCTOR COLOR CODE: Black/white shielded, Black/red unshielded

| Cat. No. | Spool | Conds. | Size AWG | Strand | Nom. Insul. | Nom. Jacket | O. D. |
|----------|-------|--------|----------|--------|-------------|-------------|-------|
| 925 | 500' | 4 | 22 | 7/30 | .016" | .020" | .310" |

3 CONDUCTORS (1 Shielded — 2 Unshielded)

Widely used for wiring from station to station where a single shielded conductor is indicated in order to eliminate cross talk.

DESCRIPTION:

No. 924 — 3 conductors #22 7/30 stranded tinned copper, vinyl plastic insulation color coded, tinned copper shield over one conductor, tubed gray vinyl jacket overall.



| Cat. No. | Spool | Conds. | Size AWG | Strand | Nom. Insul. | Nom. Jacket | O. D. |
|----------|-------|--------|----------|--------|-------------|-------------|-------|
| 924 | 500' | 3 | 22 | 7/30 | .016" | .020" | .205" |

CONDUCTOR COLOR CODE: Black/red unshielded White shielded

SHIELDED BROADCAST AUDIO CABLE

Designed to provide maximum performance on all equipment. Conductors twisted correctly assures quiet, clear operation which eliminates interference and cross talk. Used by Broadcast studios, for P. A. and sound systems, rack wiring, etc.

DESCRIPTION:

#938—#22 Solid Tinned Copper Conductor, enameled, heavy cellulose acetate yarn wrap, cotton braid waxed; cabled with #22 AWG solid tinned copper wire laid parallel to twisted pair under tinned copper braid shield; tubed-on Vinyl plastic jacket overall.



No. 938
CBS, ABC TYPE

#939—#22-7/30 Stranded Tinned Copper, plastic insulation, color coded, twisted, copper braid shield, tubed-on Vinyl plastic jacket overall.



No. 939

#940—2 Conductors #22 solid plastic insulation, color coded, twisted with #22 AWG solid tinned copper ground wire under tinned copper shield with vinyl plastic jacket overall.



No. 940

#940/1 same construction as #940 however with tinned copper spiral wrapped shield.

#822 and #824 have solid enameled copper wire, cotton wrap, cotton braid waxed twisted pair, bare copper braid overall.



Nos. 822 and 824

| No. Cat. | Spool | Conds. | AWG Size No. | Strand | O. D. Nom. |
|----------|-------|--------|--------------|--------|------------|
| 938 | 500' | 2 | 22 | Solid | 210" |
| 939 | 500' | 2 | 22 | 7/30 | 170" |
| 940 | 500' | 2 | 22 | Solid | 160" |
| 940/1 | 500' | 2 | 22 | Solid | 160" |
| 822 | 500' | 2 | 22 | Solid | 125" |
| 824 | 500' | 2 | 19 | Solid | 145" |
| 927 | 500' | 2 | 20 | Solid | 210" |
| 928 | 500' | 2 | 20 | Solid | 220" |

CONDUCTOR COLOR CODE: Black and Red

For larger lengths and alternate put-ups—Specify.

Birnbach

RUBBER JACKETED CABLE — JUKE BOX CABLE, SERVICE CORDS ANTENNA, COAXIAL, TV, DIATHERMY.

RUBBER JACKETED MULTI-CONDUCTOR CABLE (NOT SHIELDED)

Used for permanent or portable P.A. systems, sound recording, indoor or outdoor speakers, interconnecting cable for all electronic uses.

DESCRIPTION:

Each conductor, extra flexible stranded tinned copper, insulated with a .022" wall special low capacity rubber, color coded. Conductors twisted, jute filler, cotton wrap with tough weatherproof black rubber jacket overall.



CONDUCTOR COLOR CODE CHART

| | | |
|---------|----------|-----------------------|
| 1—Black | 5—Yellow | 9—Purple |
| 2—White | 6—Blue | 10—State |
| 3—Red | 7—Brown | 11—White/Blk. (Braid) |
| 4—Green | 8—Orange | 12—White/Red (Braid) |

| Cat. No. | Spool | Cond. | Size No. AWG | Strand | Cap. Bet. 1 Cond. & Others | Nom. O.D. |
|----------|-------|-------|--------------|--------|----------------------------|-----------|
| 788 | 100' | 2 | 20 | 26/34 | 40 Mmf | .275" |
| 789 | 250' | 2 | 20 | 26/34 | 40 Mmf | .275" |
| 790 | 100' | 3 | 20 | 26/34 | 50 Mmf | .285" |
| 791 | 250' | 3 | 20 | 26/34 | 50 Mmf | .285" |
| 792 | 100' | 4 | 20 | 26/34 | 53 Mmf | .305" |
| 793 | 250' | 4 | 20 | 26/34 | 53 Mmf | .305" |
| 794 | 100' | 5 | 20 | 26/34 | 56 Mmf | .335" |
| 795 | 250' | 5 | 20 | 26/34 | 56 Mmf | .335" |
| 796 | 100' | 6 | 20 | 26/34 | 58 Mmf | .355" |
| 797 | 250' | 6 | 20 | 26/34 | 58 Mmf | .355" |
| 798 | 100' | 7 | 20 | 26/34 | 60 Mmf | .370" |
| 799 | 250' | 7 | 20 | 26/34 | 60 Mmf | .370" |
| 799/10 | 100' | 8 | 20 | 26/34 | 63 Mmf | .395" |
| 799/12 | 100' | 12 | 20 | 26/34 | 65 Mmf | .435" |
| | | | | | 67 Mmf | .540" |

RIP-STRIP LAMP CORD

TYPE SP-1 (POSJ-64) — TYPE SPT-1 (POT) — UL APPROVED

All purpose approved cords SP-1 (rubber) SPT-1 (Plastic) for line cord on lamps, radios, clocks, small electronic instruments and appliances.

DESCRIPTION:

Two Conductors Parallel, #18—41/34 Extra Flexible Copper, rubber or plastic jacket slit for easy separation.



| Cat. No. | Spool | Cond. | Size AWG | Insul. Type | UL Type | Nom. O.D. |
|----------|-------|-------|----------|---------------|-------------|---------------|
| 570 | 100' | 2 | 18 | 41/34 Rubber | SP-1 (POSJ) | .130" x .235" |
| 572 | 250' | 2 | 18 | 41/34 Rubber | SP-1 (POSJ) | .130" x .235" |
| 573 | 500' | 2 | 18 | 41/34 Rubber | SP-1 (POSJ) | .130" x .235" |
| 569 | 500' | 2 | 18 | 41/34 Plastic | SPT-1 (POT) | .130" x .235" |

Colors: (Rubber) Brown, Black, White, (Plastic) Brown, Black, Ivory, Gray, Pink, Light Blue, Yellow, Green.

HEAVY DUTY SERVICE CORD

CSA APPROVED — (HEAVY DUTY) — UL APPROVED

Used for heavy duty replacement on refrigerators, washing machines, machinery, tools and electronic devices.

DESCRIPTION:

Two and Three Conductors, Stranded Bare Copper, cotton serse, rubber insulation, jute filler, cotton wrap, tough rubber jacket overall, molded rubber plug one end, free end stripped and tinned for easy attachment—Hanked.



| Cat. No. | Length Ft. | Conds. | Size AWG | Type | Strand | O.D. | Std. Pkg. |
|----------|------------|--------|----------|------|--------|-------|-----------|
| 348 | 8 | 2 | 16 | S.J. | 65/34 | .325" | 25 |
| 346 | 8 | 3 | 16 | S.J. | 65/34 | .355" | 25 |
| 347 | 8 | 3 | 18 | S.J. | 41/34 | .330" | 25 |
| 309 | 9 | 2 | 18 | S.V. | 41/34 | .250" | 25 |
| 312 | 12 | 2 | 18 | S.V. | 41/34 | .250" | 25 |
| 309/3 | 9 | 3 | 18 | S.V. | 41/34 | .265" | 25 |
| 312 | 12 | 2 | 18 | S.V. | 41/34 | .250" | 25 |

TV POWER SUPPLY CORD—UL APPROVED

Used extensively as replacement of damaged or worn out TV cords.

DESCRIPTION:

Six Foot Rip Strip TV U.L. Approved Safety Cord. 2-cond. No. 18 SP-1 (POSJ) brown rubber cord with molded male plug and TV molded-on connector on other end.



| Cat. No. | Length Ft. | Conds. | Size AWG | Type | Strand | O.D. | Std. Pkg. |
|----------|------------|--------|----------|-------|--------------|------|-----------|
| 815 | 6 | 2 | 18 | 41/34 | 130" x .235" | 100 | |
| 817 | 7 1/2 | 2 | 18 | 41/34 | 130" x .235" | 100 | |
| 819 | 10 | 2 | 18 | 41/34 | 130" x .235" | 50 | |

SERVICE LINE CORDS—UL APPROVED

An all purpose approved power supply cord for radios, record players, lamps, and small appliances.

DESCRIPTION:

Two Conductors Rubber Parallel SP-1 (POSJ) with Molded-on Male Plug, double brass blades, conductor end stripped and tinned, hanked. Available in Black and Brown.



| Cat. No. | Lgth. Ft. | Conds. | Size AWG | Strand | Nom. O.D. | Std. Pkg. |
|----------|-----------|--------|----------|--------|--------------|-----------|
| 816 | 6 | 2 | 18 | 41/34 | 130" x .235" | 100 |
| 817 | 7 1/2 | 2 | 18 | 41/34 | 130" x .235" | 100 |
| 819 | 10 | 2 | 18 | 41/34 | 130" x .235" | 50 |

RUBBER & NEOPRENE SERVICE CORD (HEAVY DUTY) — UL APPROVED

For power line requirement where rough usage is indicated as for amplifiers, sound systems, speakers, vacuum cleaners, washing machines, trouble lights, refrigerators, etc. Color coded. Underwriters approved. Neoprene construction recommended for equipment exposed to oil, acids, outdoor use, direct sunlight, etc.

DESCRIPTION:

Each conductor, copper conductor, paper separator, color coded, rubber insulation, filler, separator, tough rubber or neoprene jacket.



| Cat. No. | U/L Type | Cat. No. | U/L Type | Std. Put-ups | Size No. Conds. AWG | Strand | Amp Rating | Volt | Nom. O.D. |
|----------|----------|----------|----------|--------------|---------------------|--------|------------|-------|-----------|
| 701 | SV | 690 | SVO | 250' | 2...18...41/34 | 7 | 300 | .250" | |
| *701/3 | SV | 690/3 | SVO | 250' | 3...18...41/34 | 7 | 300 | .265" | |
| 574 | SJ | 691 | SJO | 250' | 2...18...41/34 | 7 | 300 | .300" | |
| 575 | SJ | 692 | SJO | 250' | 3...18...41/34 | 7 | 300 | .330" | |
| 575/4 | SJ | 692/4 | SJO | 250' | 4...18...41/34 | 7 | 300 | .360" | |
| 578 | SJ | 693 | SJO | 250' | 2...16...65/34 | 10 | 300 | .325" | |
| 578/3 | SJ | 693/3 | SJO | 250' | 3...16...65/34 | 10 | 300 | .365" | |
| 578/4 | SJ | 693/4 | SJO | 250' | 4...16...65/34 | 10 | 300 | .395" | |
| 702 | S | 694 | SO | 250' | 2...18...16/30 | 7 | 600 | .390" | |
| 702/3 | S | 694/3 | SO | 250' | 3...18...16/30 | 7 | 600 | .405" | |
| 702/4 | S | 694/4 | SO | 250' | 4...18...16/30 | 7 | 600 | .435" | |
| 703 | S | 695 | SO | 250' | 2...16...26/30 | 10 | 600 | .410" | |
| 703/3 | S | 695/3 | SO | 250' | 3...16...26/30 | 10 | 600 | .430" | |
| 703/4 | S | 695/4 | SO | 250' | 4...16...26/30 | 10 | 600 | .485" | |
| 704 | S | 696 | SO | 250' | 2...14...41/30 | 15 | 600 | .540" | |
| 704/3 | S | 696/3 | SO | 250' | 3...14...41/30 | 15 | 600 | .560" | |
| 704/4 | S | 696/4 | SO | 250' | 4...14...41/30 | 15 | 600 | .605" | |
| 705 | S | 697 | SO | 250' | 2...12...65/30 | 20 | 600 | .605" | |
| 705/3 | S | 697/3 | SO | 250' | 3...12...65/30 | 20 | 600 | .635" | |
| 705/4 | S | 697/4 | SO | 250' | 4...12...65/30 | 20 | 600 | .665" | |
| 706 | S | 698 | SO | 250' | 2...10...103/30 | 25 | 600 | .640" | |
| 706/3 | S | 698/3 | SO | 250' | 3...10...103/30 | 25 | 600 | .690" | |
| 706/4 | S | 698/4 | SO | 250' | 4...10...103/30 | 25 | 600 | .745" | |

* 701/3 has tinned copper wire
Additional Conductors Available
CONDUCTOR COLOR CODE: 1—White, 2—Black, 3—Green, 4—Red

SERVICE CORD PER MIL-C-3432B SPEC

WITH CERTIFICATION — INSPECTION AVAILABLE



| Cat. No. | MIL Type | Spec. Designation | Avg. Size Conds. | Spec. No. | Nom. OD |
|----------|----------|-------------------|------------------|-------------|---------|
| M-218 | CO-02 | MGF | 2 18 | MIL-C-3432A | .300" |
| H-218 | CO-02 | HGF | 2 18 | MIL-C-3432A | .380" |
| L-218 | CO-02 | LGF | 2 18 | MIL-C-3432A | .250" |
| H-216 | CO-02 | HGF | 2 16 | MIL-C-3432A | .405" |
| M-216 | CO-02 | MGF | 2 16 | MIL-C-3432A | .338" |
| M-214 | CO-02 | MGF | 2 14 | MIL-C-3432A | .400" |
| H-214 | CO-02 | HGF | 2 14 | MIL-C-3432A | .535" |
| M-318 | CO-03 | MGF | 3 18 | MIL-C-3432A | .330" |
| M-316 | CO-03 | MGF | 3 16 | MIL-C-3432A | .375" |
| H-312 | CO-03 | HOE | 3 12 | MIL-C-3432A | .635" |

ADDITIONAL NUMBERS AVAILABLE — YOUR INQUIRIES INVITED

RG/U COAXIAL TRANSMISSION CABLE

DESCRIPTION: One and Two Conductor, Polyethylene plastic insulation, copper braid shield, plastic jacket overall.

| Cat. No. | Spool | Type | Nom. Imped. | Nom. Mmfd./ Ft. | Size AWG | Strand | Nom. O.D. |
|----------|-------|-----------|-------------|-----------------|----------|------------------|-----------|
| 901 | 500' | RG-8/U | 52 | 29.5 | 13 | 7/21 Bare | .405" |
| 902 | 500' | RG-9/U | 51 | 30 | 13 | 7/21S | .420" |
| 903 | 500' | RG-11/U | 75 | 20.5 | 18 | 7/26 Tinned | .405" |
| 904F | 500' | RG-11/U | 75 | 16.5 | 15 | Solid | .405" |
| 904DS | 500' | RG-11/U | 75 | 20.5 | 18 | 7/26 T | .470" |
| 904DSF | 500' | RG-11/U | 75 | 16.5 | 15 | Solid | .470" |
| 912 | 500' | RG-22/U | 95.0 | 16.0 | 18 | 2 Cond. 7/0152 | .405" |
| 907 | 1000' | RG-29/U | 53.5 | 28.5 | 20 | Solid | .174" |
| 909 | 1000' | RG-54A/U | 58 | 26.5 | 18 | 7/0152 | .250" |
| 905 | 1000' | RG-58A/U | 50 | 29.0 | 20 | 19/0068 Tinned | .195" |
| 906 | 1000' | RG-58/U | 53.5 | 28.5 | 20 | Solid | .195" |
| 910 | 1000' | RG-59/U | 73 | 21.0 | 22 | Solid Copperweld | .242" |
| 914 | 1000' | RG-62/U | 93 | 13.5 | 22 | Solid | .242" |
| 916 | 1000' | RG-108A/U | 78 | 23.5 | 20 | 2 Cond. 7/28T | .235" |

Additional RG numbers available including double shields, non-contaminating jackets—all conforming to MIL-C-17B specifications. Also, "TEFLON" dielectrics available for hi. temp. miniaturization. No. 904F is RG-11/U with Poly-cell foam; No. 904 DSF has double shield Poly-cell dielectric constant of 1.50 solid Polyethylene 2.25.

DIATHERMY CABLE



| Cat. No. | Spool | Size AWG | Strand | Ins. | Nom. O.D. |
|----------|-------|----------|--------|-------|-----------|
| 756 | 100' | 14 | 104/34 | 3/64" | .300" |
| 757 | 1000' | 14 | 104/34 | 3/64" | .300" |

Birnbach

SHIELDED — MULTI — TWO WIRE SPEAKER CABLE TWISTED PAIR CABLES

Multiple Pair Individually Shielded Intercom Cable

Useful where several mikes are operated from a single cable. This series is helpful in reducing the bulk of required cables.
DESCRIPTION: Multi-pairs #22 solid tinned copper, vinyl insulated .013" cabled in pairs. Each pair and ground wire is under aluminum foil mylar shield overall grey vinyl jacket; Nom. Cap. between Conds. 40Mmft./ft.; Nom. Cap. between 1 Cond. and others connected to shield—77Mmft./ft.
 Additional Variations in construction available to order.

| Cat. No. | Spool | Pairs | Cond. | Nom. Jkt. | Nom. O.D. |
|----------|-------|-------|-------|-----------|-----------|
| 4800/3 | 500' | 3 | 6 | .030 | .298 |
| 4800/6 | 500' | 6 | 12 | .037 | .394 |
| 4800/9 | 500' | 9 | 18 | .040 | .425 |
| 4800/11 | 500' | 11 | 22 | .040 | .485 |
| 4800/15 | 500' | 15 | 30 | .045 | .510 |
| 4800/19 | 500' | 19 | 38 | .055 | .678 |
| 4800/27 | 500' | 27 | 54 | .070 | .860 |

4800/19 and 4800/27 is #22 strand 7/30 with .015 wall.

Multi-Conductor Industrial Cable PLASTIC JACKET OVERALL

DESCRIPTION: #18 solid tinned copper plastic insulation, color coded, twisted conductors. Gray vinyl jacket overall. Used for inter-com systems, speaker cable, alarm, signal, P. A. systems, thermostata, remote control circuits. Suitable for outdoor installations.

| Cat. No. | Spool | Conds. | Size AWG | Insul. | Jacket | O.D. |
|----------|-------|--------|----------|--------|--------|-------|
| 4752 | 500' | 2 | 18 solid | .017" | .020" | .185" |
| 4753 | 500' | 3 | 18 solid | .017" | .020" | .190" |
| 4754 | 500' | 4 | 18 solid | .017" | .020" | .235" |
| 4755 | 500' | 5 | 18 solid | .017" | .020" | .240" |
| 4756 | 500' | 6 | 18 solid | .017" | .020" | .275" |

CONDUCTOR COLOR CODE:

1—Black, 2—Red, 3—White, 4—Green, 5—Orange, 6—Blue

Unshielded Audio Cable Stranded and Solid Cond. (2 & 3)

Widely used for connecting sound and inter-com systems, audio hookups, indoors—outdoors. Telephones, telemetering connections. For Baby Sitter Intercoms.

FOR INDOOR USE Without Outer Jacket

DESCRIPTION: Stranded & Solid Tinned Copper Conductors, vinyl plastic insulation, color coded, conductors twisted.

| Cat. No. | Spool | Conds. | Size AWG | Nom. Insul. | Nom. O.D. | |
|----------|-------|--------|-------------|-------------|-----------|-------|
| 931 | 1000' | 2 | 22 Solid | .016" | .100" | |
| 933 | 1000' | 3 | 22 Solid | .016" | .115" | |
| 981 | 1000' | 2 | 20 Solid | .016" | .120" | |
| 983 | 1000' | 3 | 20 Solid | .016" | .140" | |
| 985 | 1000' | 2 | 18 Solid | .016" | .145" | |
| 987 | 1000' | 3 | 18 Solid | .016" | .155" | |
| 989 | 1000' | 2 | 16 Solid | .016" | .175" | |
| 989/3 | 1000' | 3 | 16 Solid | .016" | .190" | |
| 990 | 1000' | 2 | 22 Stranded | 7/30 | .016" | .125" |
| 990/3 | 1000' | 3 | 22 Stranded | 7/30 | .016" | .140" |
| 991 | 1000' | 2 | 20 Stranded | 10/30 | .016" | .145" |
| 991/3 | 1000' | 3 | 20 Stranded | 10/30 | .016" | .160" |
| 992 | 1000' | 2 | 18 Stranded | 16/30 | .016" | .165" |
| 992/3 | 1000' | 3 | 18 Stranded | 16/30 | .016" | .180" |
| 993 | 1000' | 2 | 16 Stranded | 26/30 | .016" | .190" |
| 993/3 | 1000' | 3 | 16 Stranded | 26/30 | .016" | .210" |
| 994 | 1000' | 2 | 14 Stranded | 41/30 | .016" | .220" |
| 994/3 | 1000' | 3 | 14 Stranded | 41/30 | .016" | .240" |
| 995 | 1000' | 2 | 12 Stranded | 65/30 | .016" | .250" |
| 995/3 | 1000' | 3 | 12 Stranded | 65/30 | .016" | .275" |

COLOR CODE: 1—Brown 2—Tan 3—Gray

FOR OUTDOOR USE With Plastic Jacket Overall

DESCRIPTION: Solid and Stranded Tinned Copper Conductors, vinyl plastic insulation, color coded, conductors twisted with weatherproof plastic jacket overall.

| Cat. No. | Spool | Conds. | Size AWG | Insul. | Jacket | O.D. |
|----------|-------|--------|-------------|--------|--------|-------|
| 932 | 1000' | 2 | 22 solid | .010" | .020" | .125" |
| 934 | 1000' | 3 | 22 solid | .010" | .020" | .130" |
| 982 | 1000' | 2 | 20 solid | .016" | .020" | .170" |
| 984 | 1000' | 3 | 20 solid | .016" | .020" | .180" |
| 986 | 1000' | 2 | 18 solid | .016" | .020" | .185" |
| 988 | 1000' | 3 | 18 solid | .016" | .020" | .190" |
| 921 | 1000' | 2 | 22 Stranded | 7/30 | .010" | .130" |
| 921/3 | 1000' | 3 | 22 Stranded | 7/30 | .010" | .140" |
| 922 | 1000' | 2 | 20 Stranded | 10/30 | .016" | .175" |
| 922/3 | 1000' | 3 | 20 Stranded | 10/30 | .016" | .185" |
| 923 | 1000' | 2 | 18 Stranded | 16/30 | .016" | .195" |
| 923/3 | 1000' | 3 | 18 Stranded | 16/30 | .016" | .205" |

For longer lengths and alternate put-ups—Specify.

COLOR CODE: 1-Black, 2-Red, 3-White

Multi-Conductor Flexible Cable RUBBER INSULATED — Cotton Braid Overall

DESCRIPTION: Each Conductor, #20 — 10/30 Tinned Copper Stranded, 1/64" low capacity rubber, cotton braid color coded, conductors twisted, closely woven brown cotton braid overall.
 Used for multiple circuit hookups, connecting speakers, remote control units, analyzers, etc.

| Cat. No. | Spool | Conds. | Size AWG | Strand | Ins. | Nom. O.D. |
|----------|-------|--------|----------|--------|-------|-----------|
| 172 | 100' | 2 | 20 | 10/30 | 1/64" | .205" |
| 173 | 100' | 3 | 20 | 10/30 | 1/64" | .245" |
| 174 | 100' | 4 | 20 | 10/30 | 1/64" | .265" |
| 175 | 100' | 5 | 20 | 10/30 | 1/64" | .290" |
| 176 | 100' | 6 | 20 | 10/30 | 1/64" | .310" |
| 177 | 100' | 7 | 20 | 10/30 | 1/64" | .325" |
| 178 | 100' | 8 | 20 | 10/30 | 1/64" | .360" |
| 179 | 100' | 9 | 20 | 10/30 | 1/64" | .395" |
| 180 | 100' | 10 | 20 | 10/30 | 1/64" | .425" |
| 182 | 100' | 12 | 20 | 10/30 | 1/64" | .440" |

CONDUCTOR COLOR CODE:

1—Black 2—White 3—Red 4—Green 5—Orange 6—Blue 7—Brown 8—Yellow 9—White/Black Tracer 10—Red/Black Tracer 11—Green/Black Tracer 12—Orange/Black Tracer

MULTI-CONDUCTOR FLEXIBLE CABLE Plastic Jacket Overall

DESCRIPTION: Each conductor #22 7/30 tinned copper stranded 1/64" thermoplastic insulation, color coded, conductors twisted, gray vinyl plastic jacket overall. Used for signal, P.A. systems. Electronic computer cable, suitable for outdoor use.

| Cat. No. | Spool | Conds. | Size AWG | Strand | Nom. Insul. | Nom. Jacket | Nom. O.D. |
|----------|-------|--------|----------|--------|-------------|-------------|-----------|
| 156 | 500' | 2 | 22 | 7/30 | .010" | .020" | .140" |
| 157 | 500' | 3 | 22 | 7/30 | .010" | .020" | .145" |
| 158 | 500' | 4 | 22 | 7/30 | .010" | .020" | .170" |
| 159 | 500' | 5 | 22 | 7/30 | .010" | .020" | .175" |
| 160 | 500' | 6 | 22 | 7/30 | .010" | .020" | .185" |
| 161 | 500' | 7 | 22 | 7/30 | .010" | .020" | .190" |
| 162 | 250' | 8 | 22 | 7/30 | .010" | .020" | .200" |
| 163 | 250' | 9 | 22 | 7/30 | .010" | .020" | .225" |
| 164 | 250' | 10 | 22 | 7/30 | .010" | .020" | .235" |
| 165 | 250' | 12 | 22 | 7/30 | .010" | .020" | .255" |
| 165/15 | 250' | 15 | 22 | 7/30 | .010" | .020" | .280" |

For longer lengths and alternate put-ups—Specify.

CONDUCTOR COLOR CODE:

1—Black 2—Red 3—White 4—Green 5—Orange 6—Blue 7—Brown 8—Yellow 9—Violet 10—Slate 11—Pink 12—Tan 13—Red/Green 14—Red/Yellow 15—Red/Black

THERMO-PLASTIC INSULATED — Cotton Braid Overall

Each Conductor #22 — 7/30 Tinned Copper Stranded, 1/64" Thermoplastic insulation, color coded, conductors twisted, closely woven brown cotton braid overall.

| Cat. No. | Spool | Conds. | Size AWG | Strand | Ins. | Nom. O.D. |
|----------|-------|--------|----------|--------|-------|-----------|
| 263 | 100' | 3 | 22 | 7/30 | 1/64" | .160" |
| 264 | 100' | 4 | 22 | 7/30 | 1/64" | .170" |
| 265 | 100' | 5 | 22 | 7/30 | 1/64" | .195" |
| 266 | 100' | 6 | 22 | 7/30 | 1/64" | .210" |
| 267 | 100' | 7 | 22 | 7/30 | 1/64" | .230" |
| 268 | 100' | 8 | 22 | 7/30 | 1/64" | .245" |
| 269 | 100' | 9 | 22 | 7/30 | 1/64" | .260" |
| 270 | 100' | 10 | 22 | 7/30 | 1/64" | .295" |
| 272 | 100' | 12 | 22 | 7/30 | 1/64" | .325" |

For longer lengths and alternate put-ups—Specify.

CONDUCTOR COLOR CODE: 1—Black, 2—White, 3—Red, 4—Green, 5—Orange, 6—Blue, 7—Brown, 8—Yellow, 9—Purple, 10—Pink, 11—Gray, 12—Dk. Blue

Twisted Pair Transmission Cable WEATHERPROOF BRAID

DESCRIPTION: No. 952—Two Conductors, #22-7/30 Tinned Copper Stranded, special low loss rubber insulation, color coded, twisted conductors, cotton braid overall with rugged weatherproof finish.
 No. 919, 920—Two Conductors, #18-16/30 Tinned Copper Stranded, same construction as above.

Used for low loss transmission coupling between antenna and receiver as double twisted lead-in wire for inter-com. setup.

| Cat. No. | Spool | Size AWG | Strand | Insul. | Nom. O.D. |
|----------|-------|----------|--------|--------|-----------|
| 952 | 500' | 22 | 7/32 | 1/32" | .180" |
| 919 | 500' | 18 | 16/30 | 1/32" | .195" |
| 920 | 1000' | 18 | 16/30 | 1/32" | .195" |

For longer lengths and alternate put-ups—Specify.

Birnbach


KINKLESS TEST LEAD WIRE — SHIELDED CABLE
PHONO PICKUP WIRE — SERVICE and POWER CORDS



KINKLESS TEST LEAD WIRE

Used with portable test equipment; as tested, leads in analyzers, oscillators, instruments; wherever extreme flexibility and limpness is required. Has excellent dielectric properties.

DESCRIPTION:

Nos. 61, 62—#20—41/36 extra flexible annealed tinned copper, stranded.  COLORS: Red, Black


Nos. 66, 67—#18—65/36 extra flexible annealed tinned copper stranded; paper serve; 3/64" special low capacity rubber, wax finish.

| Cat. No. | Spool | Size AWG | Strand | Ins. | Puncture Voltage | Nom. O.D. |
|----------|-------|----------|--------|-------|------------------|-----------|
| 61 | 100' | 20 | 41/36 | 3/64" | 20,000 Volts | .137" |
| 62 | 500' | 20 | 41/36 | 3/64" | 20,000 Volts | .137" |
| 66 | 100' | 18 | 65/36 | 3/64" | 22,000 Volts | .145" |
| 67 | 500' | 18 | 65/36 | 3/64" | 22,000 Volts | .145" |

Types WS-16/U Black, WS-17/U Red, per MIL-W-13169 Specification available same construction as Birnbach #67 except compound per specification.

HEAVY DUTY HI-VOLTAGE TYPE

DESCRIPTION:

Nos. 68, 69—#18—65/36 extra flexible annealed tinned copper; stranded; paper serve; 5/64" special low capacity rubber, wax finish. 

Used for oscillators, analyzers, TV, therapeutic instruments, etc.; wherever an extremely flexible high voltage lead is indicated.


| Cat. No. | Spool | Size AWG | Strand | Ins. | Puncture Voltage | Nom. O.D. |
|----------|-------|----------|--------|-------|------------------|-----------|
| 68 | 100' | 18 | 65/36 | 5/64" | 29,000 Volts | .210" |
| 69 | 500' | 18 | 65/36 | 5/64" | 29,000 Volts | .210" |

For longer lengths and alternate put-ups—Specify.

SHIELDED PHONO WIRE

Used where small diameter, limpness and extreme flexibility is necessary as for phono pickup arms and grid wire.

DESCRIPTION:

#1822—Single Conductor #22-7/30 Tinned Copper Strands, Vinyl plastic insulation, close tinned copper shield overall. 

#1824—Single Conductor #24-16/36 Extremely Flexible Tinned Copper Strands, special plastic insulation, close tinned copper shield braided overall.

#1825—Same construction as #1824 except with fine cotton braid overall.

See Page 11 for miniature and subminiature shielded wires suitable for wiring phono arm from cartridge to amplifier.

TINNED COPPER SHIELD OVERALL

| Cat. No. | Spool | Strand | Cond. | Size AWG | Insul. | Nom. O.D. |
|----------|-------|--------|-------|----------|--------|-----------|
| 1824 | 500' | 1 | 24 | 16/36 | .010" | .080" |
| 1824M | 1000' | 1 | 24 | 16/36 | .010" | .080" |
| 1822 | 100' | 1 | 22 | 7/30 | .010" | .080" |
| 1822B | 500' | 1 | 22 | 7/30 | .015" | .090" |
| 1822C | 1000' | 1 | 22 | 7/30 | .015" | .090" |

COTTON BRAID OVER SHIELD


| Cat. No. | Spool | Strand | Cond. | Size AWG | Insul. | Nom. O.D. |
|----------|-------|--------|-------|----------|--------|-----------|
| 1825 | 500' | 1 | 24 | 16/36 | .010" | .095" |
| 1825M | 1000' | 1 | 24 | 16/36 | .010" | .095" |

For longer lengths and alternate put-ups—Specify.

SHIELDED GRID LEAD WIRE

Used to reduce loss in grid lead use, also to reduce interference caused by motors, high tension wires, X-ray machines, etc.

DESCRIPTION:

#820—Single Conductor #20—10/30, #818—16/30 Stranded Tinned Copper, low loss rubber insulation, cotton braid lacquered, closely woven tinned copper shield overall. 


| Cat. No. | Spool | Size AWG | Strand | Ins. Under Shield | Cap./Ft. Mmf. | Nom. O.D. |
|----------|-------|----------|--------|-------------------|---------------|-----------|
| 820 | 100' | 20 | 10/30 | .085" | 70 | .140" |
| 818 | 100' | 18 | 16/30 | .085" | 75 | .150" |

For longer lengths and alternate put-ups—Specify.


7MM HIGH TENSION CABLE

Used as hi voltage leads in electronic equipment and instruments, photo electric cell leads, automotive, etc.

DESCRIPTION:

#1600 — Unshielded One Conductor #16-19/29 stranded tinned copper wire, rubber insulation, cotton braid highly lacquered.  No. 1600


DESCRIPTION:

#781 — Shielded Same construction as #1600 plus a closely woven tinned copper shield overall.  No. 781

| Cat. No. | Spool | Size AWG | Strand | Insul. | Nom. O.D. |
|----------|-------|----------|--------|--------|-----------|
| 1600 | 100' | 16 | 19/29 | 3/32" | .275" |
| 781 | 100' | 16 | 19/29 | 3/32" | .295" |

Used for auto and aircraft ignition systems where grounding is required for elimination of interference. For longer lengths and alternate put-ups—specify.

New Plastic Kinkless Test Lead Wire

New formulation vinyl compound insulation allows maximum flexibility; rough treatment; extreme variation in climatic conditions; excellent abrasion resistance; greater temperature stability from -80°C to +115°C; fungus resistant; self extinguish-ing-flame proof; smooth surface. Resists exposure to gasoline and oil. DESCRIPTION: one conductor tinned copper stranded, special formulation vinyl insulation. COLORS: Black, Red, Yellow, Green, White, Blue. 

| Cat. No. | Spool | Size AWG | Strand. | Ins. | Nom. O.D. |
|----------|-------|----------|---------|------|-----------|
| 1922 | 22 | 26/36 | .032" | 100" | |
| 1920 | 20 | 26/34 | .032" | 104" | |
| 1918 | 18 | 65/36 | .032" | 112" | |
| 1916 | 16 | 65/34 | .032" | 129" | |


Standard Package: 100', 500', 1000' spools.

For portable test equipment: as test leads for instrumentation exceeds the requirements for MIL-I-3930A type JP(PVC). It is superior to synthetic rubber spec MIL-R-6855 Class II Grade 60.

HI VOLTAGE LACQUERED WIRE

Used as primary wiring as for automobiles, tail, dashboard, horn, etc instrument leads, high voltage and primary voltage requirements

DESCRIPTION:

One Conductor tinned copper annealed stranded, rubber insulation, highly lacquered braid, oil, heat, and moisture resistant. 

| Cat. No. | Spool | Size AWG | Strand | Ins. | Puncture V. | Nom. O.D. |
|----------|-------|----------|--------|-------|-------------|-----------|
| 2818 | 100' | 18 | 16/30 | .022" | 9500 | .117" |
| 2816 | 100' | 16 | 19/29 | .022" | 9500 | .127" |
| 2814 | 100' | 14 | 19/27 | .022" | 9500 | .148" |
| 2812 | 100' | 12 | 19/25 | .027" | 9500 | .171" |
| 2810 | 100' | 10 | 19/23 | .031" | 9500 | .202" |

For longer lengths and alternate put-ups—Specify.

LACQUERED HOOK-UP WIRE

Used in transformers, amplifiers, hook-ups, leads, etc. Strips easily for soldering.

DESCRIPTION:

No. 3462—#20-10/30 Single Conductor stranded tinned copper, low loss free stripping rubber insulation, cotton braid highly lacquered. 

No. 3600—#18-16/30 Single Conductor stranded tinned copper, 1/32" low loss free stripping rubber insulation, rayon braid highly lacquered.

| Cat. No. | Spool | Size AWG | Strand | Insul. | Punct. Volt. | DC Ins. Res./Ft. Meg. | Nom. O.D. |
|----------|-------|----------|--------|--------|--------------|-----------------------|-----------|
| 3461 | 100' | 20 | 10/30 | 1/64" | 7000 | 390 | .090" |
| 3462 | 500' | 20 | 10/30 | 1/64" | 7000 | 390 | .090" |
| 3460 | 100' | 18 | 16/30 | 1/32" | 9000 | 460 | .125" |
| 3600 | 500' | 18 | 16/30 | 1/32" | 9000 | 460 | .125" |

COLORS: Black, Red, Green, Yellow, Brown, Blue, White, Orange, Grey, Purple. For longer lengths and alternate put-ups—Specify.

SHIELDED HOOK-UP & LEAD-IN WIRE


Used to prevent and reduce interference caused by motors, hi-tension cables, X-ray machines and various units radiating electrical impulses. Useful in grid circuits.

TINNED COPPER SHIELD OVER RUBBER INSULATION

DESCRIPTION: Single Conductor, Tinned Copper Stranded, low loss rubber insulation, closely woven tinned copper shield overall. 

| Cat. No. | Spool | Size AWG | Strand | Ins. | Cap./Ft. Mmf. | Nom. O.D. |
|----------|-------|----------|--------|-------|---------------|-----------|
| 810 | 500' | 20 | 10/30 | .015" | 105 | .095" |
| 803 | 250' | 18 | 16/30 | .015" | 125 | .125" |
| 802 | 250' | 16 | 26/30 | .031" | 90 | .145" |

TINNED COPPER SHIELD OVER LACQUERED BRAID

DESCRIPTION: Single Conductor, Tinned Copper Stranded, low loss Vinyl Insulation, highly lacquered glass braid, closely woven tinned copper shield overall. 

| Cat. No. | Spool | Size AWG | Strand. | Wall Thickness | Nom. O.D. |
|----------|-------|----------|---------|----------------|-----------|
| 831 | 1000' | 22 | 7/30 | .016" | .095" |
| 832 | 1000' | 20 | 10/30 | .016" | .105" |
| 833 | 1000' | 18 | 16/30 | .016" | .125" |
| 834 | 1000' | 16 | 26/30 | .016" | .135" |
| 835 | 1000' | 14 | 41/30 | .016" | .155" |
| 835/12 | 1000' | 12 | 65/30 | .016" | .175" |
| 835/10 | 1000' | 10 | 105/30 | .025" | .200" |

For longer lengths and alternate put-ups—Specify.

**PUSHBACK — HEAVY FORMVAR — MAGNET WIRE
PLAIN ENAMEL — DCC — DNC — SOLID TINNED**



**ALL BIRNBACH
MAGNET WIRES
PER MIL-W-583A
SPECIFICATIONS.
MIL-W-19583
AVAILABLE.**

**HEAVY FORMVAR, PLAIN ENAMEL, DOUBLE
COTTON, DOUBLE NYLON, SOLID TINNED MAGNET WIRE**

Has new tough abrasion resisting film. Replaces enamel and fabric insulations for certain applications requiring exceptional abrasion resistance. Stable under heat. High dielectric strength. Infinite resistance to water and moisture. Does not fail after two hours at 105°C. Takes up less winding space. **Symbol HF Type T2**

ALL MAGNET WIRE AVAILABLE IN LARGER PUT-UPS

| 1/4 lb. SPOOL | | 1/2 lb. SPOOL | | 1 lb. SPOOL | |
|---------------|-------|---------------|-------|-------------|-------|
| Size B&S | Ft. | Size B&S | Ft. | Size B&S | Ft. |
| 10 | 8 | 10 | 16 | 10 | 32 |
| 12 | 12 | 12 | 25 | 12 | 50 |
| 14 | 20 | 14 | 39 | 14 | 78 |
| 16 | 31 | 16 | 62 | 16 | 124 |
| 18 | 49 | 18 | 98 | 18 | 198 |
| 20 | 78 | 20 | 156 | 20 | 313 |
| 22 | 125 | 22 | 250 | 22 | 501 |
| 24 | 200 | 24 | 399 | 24 | 798 |
| 26 | 300 | 26 | 600 | 26 | 1200 |
| 28 | 500 | 28 | 1000 | 28 | 1999 |
| 30 | 800 | 30 | 1600 | 30 | 3200 |
| 32 | 1225 | 32 | 2450 | 32 | 4900 |
| 34 | 1988 | 34 | 3975 | 34 | 7950 |
| 36 | 3200 | 36 | 6400 | 36 | 12800 |
| 38 | 5050 | 38 | 10100 | 38 | 20200 |
| 40 | 7975 | 40 | 15850 | 40 | 31700 |
| 42 | 12375 | 42 | 24750 | 42 | 49500 |
| 44 | 14500 | 44 | 29000 | 44 | 58000 |

PLAIN ENAMEL Symbol PE Type T1

| 1/4 lb. SPOOL | | 1/2 lb. SPOOL | | 1 lb. SPOOL | |
|---------------|-------|---------------|-------|-------------|-------|
| Size B&S | Ft. | Size B&S | Ft. | Size B&S | Ft. |
| 10 | 8 | 10 | 16 | 10 | 32 |
| 12 | 12 | 12 | 25 | 12 | 50 |
| 14 | 20 | 14 | 40 | 14 | 80 |
| 16 | 32 | 16 | 63 | 16 | 126 |
| 18 | 50 | 18 | 100 | 18 | 201 |
| 20 | 80 | 20 | 160 | 20 | 320 |
| 22 | 127 | 22 | 254 | 22 | 508 |
| 24 | 201 | 24 | 403 | 24 | 806 |
| 26 | 320 | 26 | 640 | 26 | 1280 |
| 28 | 507 | 28 | 1015 | 28 | 2030 |
| 30 | 805 | 30 | 1610 | 30 | 3220 |
| 32 | 1282 | 32 | 2564 | 32 | 5128 |
| 34 | 2037 | 34 | 4075 | 34 | 8150 |
| 36 | 3221 | 36 | 6443 | 36 | 12887 |
| 38 | 5132 | 38 | 10246 | 38 | 20492 |
| 40 | 8143 | 40 | 16286 | 40 | 32573 |
| 42 | 12803 | 42 | 25605 | 42 | 51211 |
| 44 | 20455 | 44 | 40910 | 44 | 81819 |

DOUBLE NYLON

| 1/4 lb. SPOOL | | 1/2 lb. SPOOL | | Symbol DN 1 lb. SPOOL | |
|---------------|------|---------------|-------|--------------------------|-------|
| Size B&S | Ft. | Size B&S | Ft. | Size B&S | Ft. |
| 12 | 12 | 12 | 24 | 12 | 49 |
| 14 | 19 | 14 | 39 | 14 | 78 |
| 16 | 31 | 16 | 62 | 16 | 125 |
| 18 | 49 | 18 | 99 | 18 | 198 |
| 20 | 78 | 20 | 157 | 20 | 314 |
| 22 | 123 | 22 | 247 | 22 | 495 |
| 24 | 195 | 24 | 390 | 24 | 781 |
| 26 | 303 | 26 | 606 | 26 | 1212 |
| 28 | 478 | 28 | 956 | 28 | 1912 |
| 30 | 739 | 30 | 1479 | 30 | 2958 |
| 32 | 1136 | 32 | 2272 | 32 | 4545 |
| 34 | 1712 | 34 | 3424 | 34 | 6849 |
| 36 | 2551 | 36 | 5102 | 36 | 10204 |
| 38 | 3770 | 38 | 7541 | 38 | 15082 |
| 40 | 5040 | 40 | 10080 | 40 | 20161 |

DOUBLE COTTON

| 1/4 lb. SPOOL | | 1/2 lb. SPOOL | | Symbol DC 1 lb. SPOOL | |
|---------------|------|---------------|------|--------------------------|-------|
| Size B&S | Ft. | Size B&S | Ft. | Size B&S | Ft. |
| 10 | 8 | 10 | 16 | 10 | 31 |
| 12 | 12 | 12 | 24 | 12 | 49 |
| 14 | 19 | 14 | 39 | 14 | 78 |
| 16 | 31 | 16 | 62 | 16 | 123 |
| 18 | 48 | 18 | 97 | 18 | 194 |
| 20 | 78 | 20 | 157 | 20 | 304 |
| 22 | 119 | 22 | 238 | 22 | 477 |
| 24 | 134 | 24 | 269 | 24 | 538 |
| 26 | 284 | 26 | 568 | 26 | 1136 |
| 28 | 435 | 28 | 871 | 28 | 1742 |
| 30 | 641 | 30 | 1284 | 30 | 2569 |
| 32 | 976 | 32 | 1953 | 32 | 3906 |
| 34 | 1365 | 34 | 2735 | 34 | 5470 |
| 36 | 1827 | 36 | 3654 | 36 | 7309 |
| 38 | 2738 | 38 | 5476 | 38 | 10952 |
| 40 | 3405 | 40 | 6811 | 40 | 13623 |

SOLID TINNED (Soft Drawn) Symbol TC

| 1/4 lb. SPOOL | | 1/2 lb. SPOOL | | 1 lb. SPOOL | |
|---------------|------|---------------|-------|-------------|-------|
| Size B&S | Ft. | Size B&S | Ft. | Size B&S | Ft. |
| 10 | 8 | 10 | 16 | 10 | 32 |
| 12 | 12 | 12 | 25 | 12 | 50 |
| 14 | 20 | 14 | 40 | 14 | 80 |
| 16 | 32 | 16 | 63 | 16 | 126 |
| 18 | 50 | 18 | 100 | 18 | 201 |
| 20 | 80 | 20 | 160 | 20 | 320 |
| 22 | 127 | 22 | 254 | 22 | 508 |
| 24 | 201 | 24 | 403 | 24 | 806 |
| 26 | 320 | 26 | 640 | 26 | 1280 |
| 28 | 507 | 28 | 1015 | 28 | 2030 |
| 30 | 805 | 30 | 1610 | 30 | 3220 |
| 32 | 1282 | 32 | 2564 | 32 | 5128 |
| 34 | 2037 | 34 | 4075 | 34 | 8150 |
| 36 | 3221 | 36 | 6443 | 36 | 12887 |
| 38 | 5132 | 38 | 10246 | 38 | 20492 |
| 40 | 8143 | 40 | 16286 | 40 | 32573 |

**ALL SOLID TINNED COPPER AVAILABLE IN 1000 FT. SPOOLS
BARE COPPER — SOFT DRAWN AVAILABLE FROM STOCK**



BIRNBACH DOUBLE BRAID SLIPBACK HOOK-UP WIRE

Has a double cotton braid over the conductor, brightly color coded, saturated with paraffin. This construction will not cause the cotton insulation to fray or bunch up when pushed back. Has high dielectric strength and will withstand all climatic changes without breakdown.

COLORS: Black, Red, Blue, Yellow, Green, White, Brown, Orange.

SOLID

| Cat. No. | Put-Up | Size | Strands | Puncture V. 60-cy. AC | O.D. |
|----------|-------------|------|---------|-----------------------|-------|
| 380 | 100' Spool | 20 | Solid | 2000 | .090" |
| 382 | 100' Spool | 18 | Solid | 2100 | .098" |
| 384 | 100' Spool | 16 | Solid | 2100 | .108" |
| 386 | 100' Spool | 14 | Solid | 2100 | .122" |
| 388 | 100' Spool | 12 | Solid | 2200 | .135" |
| 580 | 1000' Spool | 20 | Solid | 2000 | .090" |
| 582 | 1000' Spool | 18 | Solid | 2100 | .098" |
| 584 | 1000' Spool | 16 | Solid | 2100 | .108" |
| 586 | 1000' Spool | 14 | Solid | 2100 | .122" |
| 588 | 1000' Spool | 12 | Solid | 2200 | .135" |

STRANDED

| Cat. No. | Put-Up | Size | Strands | Puncture V. 60-cy. AC | O.D. |
|----------|-------------|------|---------|-----------------------|-------|
| 381 | 100' Spool | 20 | 10/30 | 2100 | .093" |
| 383 | 100' Spool | 18 | 16/30 | 2200 | .103" |
| 385 | 100' Spool | 16 | 26/30 | 2200 | .118" |
| 387 | 100' Spool | 14 | 41/30 | 2200 | .135" |
| 389 | 100' Spool | 12 | 65/30 | 2300 | .155" |
| 581 | 1000' Spool | 20 | 10/30 | 2100 | .093" |
| 583 | 1000' Spool | 18 | 16/30 | 2200 | .103" |
| 585 | 1000' Spool | 16 | 26/30 | 2200 | .118" |
| 587 | 1000' Spool | 14 | 41/30 | 2200 | .135" |
| 589 | 1000' Spool | 12 | 65/30 | 2300 | .155" |

BIRNBACH BIRNTEX SLIPBACK WIRE

This wire is constructed of quality materials and carefully insulated with a cotton wrap over which a cotton braid is closely woven, and then saturated with paraffin. Pushes back easily.

SOLID

| Cat. No. | Put-Up | Size | Strands | Puncture V. 60-cy. AC | O.D. |
|----------|-------------|------|---------|-----------------------|-------|
| 72 | 100' Spool | 22 | Solid | 1500 | .060" |
| 76 | 1000' Spool | 22 | Solid | 1500 | .060" |
| 84 | 100' Spool | 20 | Solid | 1500 | .065" |
| 86 | 100' Spool | 18 | Solid | 1500 | .075" |
| 92 | 1000' Spool | 20 | Solid | 1500 | .065" |
| 94 | 1000' Spool | 18 | Solid | 1500 | .075" |

STRANDED

| Cat. No. | Put-Up | Size | Strands | Puncture V. 60-cy. AC | O.D. |
|----------|-------------|------|---------|-----------------------|-------|
| 73 | 100' Spool | 22 | 7/30 | 1500 | .065" |
| 77 | 1000' Spool | 22 | 7/30 | 1500 | .065" |
| 85 | 100' Spool | 20 | 10/30 | 1500 | .070" |
| 87 | 100' Spool | 18 | 16/30 | 1500 | .080" |
| 93 | 1000' Spool | 20 | 10/30 | 1500 | .070" |
| 95 | 1000' Spool | 18 | 16/30 | 1500 | .080" |

Birnbach

RETRACTILE KINKLESS CORD SETS



BIRNBACH COILED RETRACTILE (KINKLESS) CORD AND CORD SETS RETRACTILE TEST LEAD WIRE



This series of Birnbach Coiled Kinkless Retractable Cords are permanently coiled into a spring-like shape without the use of metal springs or elastic bands. They have inherent "Recovery" properties. These Retractable cords extend approximately six times its retracted length, returning to its exact original shape and length when released. Always as long as you need them and no longer, they will not kink, tangle, trail, knot or dangle on the floor or bench and cause accidents.

Stretch coiled kinkless test lead wire description. 12" coil—stretches to approx. 6 feet. One conductor #20 stranded copper rubber insulation .165 OD. Colors: Red, Black. Coil O.D. 3/4".

| | |
|-------------------------------|-------------|
| Cat. No. | Std. Pkge. |
| 64 .12" Retracted—Approx. 6' | Extended .6 |
| 65 .21" Retracted—Approx. 12' | Extended .6 |

RETRACTILE (KINKLESS) POWER CORD RUBBER, NEOPRENE AND PLASTIC



DESCRIPTION 2, 3, 4 conductor UL approved, retractile (kinkless) power cords supplied in 36" long mandrel lengths, which customer cuts to desired length.

Std. Pkg. 5

Additional conductors and sizes available.

| Cat. No. | Retracted Length | Approx. Len. Ext. | Conds. | Size AWG | UL Type | Strand | Amp. Rating | Volt Rating | Coil O.D. | Nom. D.D. |
|----------|------------------|-------------------|--------|----------|---------|--------|-------------|-------------|-----------|-----------|
| 886 | 36" | 18 FT. | 2 | 18 | SVO | 41/34 | 7 | 300 | 1" | .250" |
| 887 | 36" | 18 FT. | 2 | 18 | SVT | 41/34 | 7 | 300 | 1" | .250" |
| 889 | 36" | 18 FT. | 2 | 18 | SJO | 41/34 | 7 | 300 | 1 1/4" | .310" |
| 889/3 | 36" | 18 FT. | 3 | 18 | SJO | 41/34 | 7 | 300 | 1 1/2" | .330" |
| 889/4 | 36" | 18 FT. | 4 | 18 | SJO | 41/34 | 7 | 300 | 1 1/2" | .360" |
| 890 | 36" | 18 FT. | 2 | 18 | SJT | 41/34 | 7 | 300 | 1 1/4" | .310" |
| 891 | 36" | 18 FT. | 2 | 16 | SJO | 65/34 | 10 | 300 | 1 1/4" | .330" |
| 891/3 | 36" | 18 FT. | 3 | 16 | SJO | 65/34 | 10 | 300 | 1 1/2" | .365" |
| 891/4 | 36" | 18 FT. | 4 | 16 | SJO | 65/34 | 10 | 300 | 1 5/8" | .395" |
| 893 | 36" | 18 FT. | 2 | 14 | SO | 41/30 | 15 | 600 | 2" | .535" |
| 893/3 | 36" | 18 FT. | 3 | 14 | SO | 41/30 | 15 | 600 | 2 1/4" | .560" |
| 893/4 | 36" | 18 FT. | 4 | 14 | SO | 41/30 | 15 | 600 | 2 1/4" | .605" |
| 894 | 36" | 18 FT. | 2 | 12 | SO | 65/30 | 20 | 600 | 2 1/2" | .635" |
| 894/3 | 36" | 18 FT. | 3 | 12 | SO | 65/30 | 20 | 600 | 2 3/4" | .665" |
| 894/4 | 36" | 18 FT. | 4 | 12 | SO | 65/30 | 20 | 600 | 2 1/2" | .665" |

CONDUCTOR COLOR CODING: 1-Black, 2-White, 3-Green, 4-Red

RETRACTILE (KINKLESS) POWER CORD SETS

Excellent for portable use. All mobile equipment and office equipment wherever the device application is synonymous with repetitive movement. The "Answer" to most tough hazard problems.

2 and 3 conductors SVO and SJO Retractable Kinkless Neoprene Service Cord Sets with Molded Male Plug one end, other end stripped and tinned ready for application.



Standard Package—10

| Cat. No. | Retracted Length | Approx. Length Extended | Conds. | Size AWG | UL Type | Strand | O.D. Coil |
|----------|------------------|-------------------------|--------|----------|---------|--------|-----------|
| 880 | 18" | 9 FT. | 2 | 18 | SVO | 41/34 | 1" |
| 881 | 18" | 9 FT. | 2 | 18 | SJO | 41/34 | 1 1/4" |
| 881/3 | 18" | 9 FT. | 3 | 18 | SJO | 41/34 | 1 1/2" |
| 882 | 18" | 9 FT. | 2 | 16 | SJO | 65/34 | 1 1/2" |
| 882/3 | 18" | 9 FT. | 3 | 16 | SJO | 65/34 | 1 1/2" |

CONDUCTOR COLOR CODING: 1-Black, 2-White, 3-Green

RETRACTILE COILED COMMUNICATION CORD

Multi-conductors stranded communication cord No. 23 AWG. Tinned copper wire neoprene jacketed. Long lengths can be cut to exact requirement. Nom. cond. resistance .022 ohms per linear foot. Maximum working voltage 120 volts. Current carrying capacity 1 ampere.



Standard package — 10

| Cat. No. | Retracted Length | Approx. Length Extended | Conds. | Size AWG | Strand | Coil O.D. | D.D. |
|----------|------------------|-------------------------|--------|----------|--------|-----------|-------|
| 875 | 36" | 18 FT. | 2 | 23 | 21/36 | 3/4" | .200" |
| 876 | 36" | 18 FT. | 3 | 23 | 21/36 | 3/4" | .210" |
| 877 | 36" | 18 FT. | 4 | 23 | 21/36 | 3/4" | .240" |
| 878 | 36" | 18 FT. | 5 | 23 | 21/36 | 1" | .285" |
| 878/6 | 36" | 18 FT. | 6 | 23 | 21/36 | 1 1/4" | .305" |
| 878/7 | 36" | 18 FT. | 7 | 23 | 21/36 | 1 1/2" | .320" |
| 878/8 | 48" | 25 FT. | 8 | 23 | 21/36 | 1 3/4" | .360" |
| 878/10 | 48" | 25 FT. | 10 | 23 | 21/36 | 1 3/4" | .380" |
| 878/12 | 48" | 25 FT. | 12 | 23 | 21/36 | 1 3/4" | .410" |
| 878/15 | 48" | 25 FT. | 15 | 23 | 21/36 | 1 3/4" | .470" |

CONDUCTOR COLOR CODING: 1-Black, 2-White, 3-Red, 4-Green, 5-Blue, 6-Yellow, 7-Brown, 8-Orange, 9-White/Black Tracer, 10-White/Red Tracer, 11-White/Green Tracer, 12-White/Blue Tracer, 13-White/Yellow Tracer, 14-White/Brown Tracer, 15-White/Orange Tracer.

RETRACTILE (KINKLESS) COILED SHIELDED MICROPHONE CABLES



DESCRIPTION: Single and multi-conductor shielded microphone cable neoprene jacketed. This cable remains neat and compact with no danger of tripping or of the wire becoming entangled in equipment. Also suitable for stereo and additional speaker extensions. Shield can be pigtailed for soldering. No. 21 AWG Str. is 41/40 tinned soft cad. copper; No. 23 has 21/36 tinned soft cad. copper. Each conductor individually shielded with cad. cop shield.

| Cat. No. | Retracted Length | Approx. Length Extended | Cond. | Size AWG | Coil D.D. | Nom. D.D. | Std. Pkg. |
|----------|------------------|-------------------------|-------|-------------------------------|-----------|-----------|-----------|
| 895 | 48" | 25' | 1 | No. 21 Shielded | 5/8" | .160" | 10 |
| 895A | 12" | 6' | 1 | No. 24 Shielded | 5/8" | .160" | 10 |
| 895B | 6" | 3' | 1 | No. 24 Shielded | 5/8" | .160" | 10 |
| 896 | 48" | 25' | 2 | 1-No. 23 1-No. 21 Shielded | 3/4" | .200" | 10 |
| 896A | 12" | 6' | 2 | 1-No. 23 1-No. 21 Shielded | 3/4" | .200" | 10 |
| 897 | 48" | 25' | 3 | 2-No. 23 1-No. 24 Shielded | 3/4" | .240" | 10 |
| 897A | 12" | 6' | 3 | 2-No. 23 1-No. 24 Shielded | 3/4" | .210" | 10 |
| 899 | 48" | 25' | 2 | 2-No. 24 Shielded | 3/4" | .210" | 10 |
| 899A | 12" | 6' | 2 | 2-No. 24 Shielded | 3/4" | .210" | 10 |
| 898 | 48" | 25' | 4 | 2-No. 23 2-No. 21 Shielded | 1" | .270" | 10 |
| 898A | 12" | 6' | 1 | 2-No. 23 2-No. 24 Shielded | 1" | .270" | 10 |

Additional conductors and sizes available.

CONDUCTORS ARE COLOR CODED.



LACING CORD AND TAPES
1000°F HOOK-UP WIRE



**BIRNBACH
BB-1000
HOOK-UP WIRE**

Continuous Service at
1000°F

This superior insulation is unharmed at temperatures which cause glass to melt and asbestos to pulverize.

This combination of inorganic material offers good abrasion resistance; can be handled without special precautions; does not become carbonaceous, conducting or embrittled at elevated temperatures; offers continuous service at 1000°F, intermittent service up to 1800°F (depending on application), braid and fibrous insulation withstands 2000°F without decomposing or melting.

CABLE IS NOT ADVERSELY AFFECTED BY HIGH INTENSITY NUCLEAR RADIATION.

DESCRIPTION: Each conductor stranded stainless steel clad copper, wall of "Refrasil" fused quartz, color coded (solid colors) available.

| Cat. No. | Put- Ups | Size Awg | Strand | Nom. O.D. |
|----------|----------|----------|--------|-----------|
| 7710 | 1000' | 10 | 105/30 | .208" |
| 7710 | 250' | 10 | 105/30 | .208" |
| 7712 | 1000' | 12 | 65/30 | .172" |
| 7712 | 250' | 12 | 65/30 | .172" |
| 7714 | 1000' | 14 | 41/30 | .152" |
| 7714 | 250' | 14 | 41/30 | .152" |
| 7716 | 1000' | 16 | 26/30 | .128" |
| 7716 | 250' | 16 | 26/30 | .128" |
| 7718 | 1000' | 18 | 19/30 | .123" |
| 7718 | 250' | 18 | 19/30 | .123" |
| 7720 | 1000' | 20 | 10/30 | .105" |
| 7720 | 250' | 20 | 10/30 | .105" |
| 7722 | 1000' | 22 | 7/30 | .096" |
| 7722 | 250' | 22 | 7/30 | .096" |
| 7724 | 1000' | 24 | 4/30 | .088" |
| 7724 | 250' | 24 | 4/30 | .088" |

ADDITIONAL DATA— Weight: 17 lbs./1000 ft.
Dielectric Strength: 9000 Volts
After 5 hrs. at 1600°F.: 3500 Volts

FLAT BRAIDED LACING TAPE

Flat braided Hi-Tenacity Nylon Fiber impregnated with (MW) microcrystalline fungicidal wax Engineered to stay flat. Distributes stress evenly over a wide area. Resistant to fungus, flame, abrasion, acids. Will not cut or damage insulation. Has strength, toughness and stability.

Put up on 500 yards per tube.

NYLON



| Cat. No. | Class | Width | Thickness | Test Lbs. | Yard/Lb |
|----------|---------------|-------|-----------|-----------|---------|
| 1035 | Natural White | 200" | .014" | 150 | 250 |
| 1035B | Black | 200" | .014" | 150 | 250 |
| 1036 | Natural White | 120" | .014" | 80 | 550 |
| 1036B | Black | 120" | .014" | 80 | 550 |
| 1037 | Natural White | 090" | .014" | 50 | 750 |
| 1037B | Black | 090" | .014" | 50 | 750 |
| 1038 | Natural White | 082" | .010" | 30 | 1500 |
| 1038B | Black | 082" | .010" | 30 | 1500 |
| 1039 | Natural White | 048" | .010" | 15 | 2400 |
| 1039B | Black | 048" | .010" | 15 | 2400 |

DACRON



Flat Braided Hi-Tenacity Dacron Fiber impregnated with special non-slip fungicidal finish Will not cut or damage insulation. Engineered to stay flat—for strength, toughness, stability Will not cut insulation.

Put up on 500 yards per tube.

| Cat. No. | Width | Thickness | Test Lbs. | Yard/Lb. | |
|----------|---------------|-----------|-----------|----------|------|
| 1041 | Natural White | .120" | .014" | 80 | 450 |
| 1041B | Black | .120" | .014" | 80 | 450 |
| 1042 | Natural White | .090" | .014" | 48 | 600 |
| 1042B | Black | .090" | .014" | 48 | 600 |
| 1043 | Natural White | .080" | .010" | 35 | 850 |
| 1043B | Black | .080" | .010" | 35 | 850 |
| 1044 | Natural White | .048" | .010" | 25 | 1100 |
| 1044B | Black | .048" | .010" | 25 | 1100 |

TEFLON-FIBERGLASS

Flat Braided Fiberglass, teflon coated and bonded for hi-temperature applications (550°F). Engineered to stay flat—for strength, toughness and stability. Teflon finish increases tensile strength and abrasion resistant surface. Will not cut or damage insulation. Color White.

Put up on 500 yards per spool.



| Cat. No. | Width | Thickness | Test Lbs. | Yard/Lb. |
|----------|-------|-----------|-----------|----------|
| 1045 | .170" | .025" | 150 | 200 |
| 1046 | .120" | .020" | 90 | 200 |
| 1047 | .080" | .020" | 70 | 280 |

TEFLON*

Flat Braided Teflon for hi-temperature applications (550°F.) Engineered to stay flat. Will not cut or damage insulation. Color: Brown.

Put up on 500 yards per spool.



| Cat. No. | Width | Thickness | Test Lbs. | Yard/Lb. |
|----------|-------|-----------|-----------|----------|
| 1048 | .100" | .018" | 35 | 325 |
| 1049 | .075" | .010" | 15 | 700 |

ROUND NYLON LACING CORDS

This nylon lacing cord manufactured to meet Spec. MIL-T-713A Type P, Composition P, Classes 3, 2, 1. Wax finished—compounded with a fungicide to resist mildew.

Put up on 1 lb. Tubes.



| Class | Cat. Nos. Color | | Yds. | Diam. | Breaking Strength |
|---------|-----------------|---------|------|-------|-------------------|
| | Natural | Black | | | |
| Class 1 | 1070 | 1070B | 600 | .039" | 70 Lbs. |
| Class 2 | 1071 | 1071B | 800 | .029" | 48 Lbs. |
| Class 3 | 1072 | 1072B | 1140 | .025" | 32 Lbs. |
| Class 4 | 1072/1 | 1072/1B | 2400 | .020" | 20 Lbs. |



ROUND LINEN LACING CORDS

This linen lacing cord is made from pure flax treated with microcrystalline wax compounded with fungicide to resist mildew. The twelve, eight and six ply cord meet Spec. MIL-T-713A Type N, Classes 1, 2 and 3 respectively. Color: Natural. Also available in Black in 1 lb. Tubes.

1 lb. Tubes.

| 4 oz. Tube | | 8 oz. Tube | | Cat. No. Natural | Cat. No. Black | Yds. | Class | Ply | Diam. | Lb. Test |
|------------|------|------------|------|------------------|----------------|------|-------|-----|-------|----------|
| Cat. No. | Yds. | Cat. No. | Yds. | | | | | | | |
| 1073 | 210 | 1074 | 425 | 1075 | 1075B | 850 | — | 4 | .036" | 22 |
| 1076 | 150 | 1077 | 300 | 1078 | 1078B | 600 | 3 | 6 | .044" | 33 |
| 1082 | 115 | 1083 | 235 | 1084 | 1084B | 470 | 2 | 8 | .051" | 50 |
| 1079 | 100 | 1080 | 200 | 1081 | 1081B | 400 | — | 9 | .054" | 56 |
| 1085 | 75 | 1086 | 150 | 1087 | 1087B | 300 | 1 | 12 | .063" | 72 |



STEREO MONAURAL WIRE AND CABLE



NEW STEREO MONAURAL WIRE AND CABLE



The following items were specifically developed for use in recording and playback equipment including all stereo cartridges; ceramic, magnetic, crystal and tone arms. Designed for extremely low hum and noise pickup. Individual conductors are #32 AWG, 7 strands #40 AWG tinned copper, .010" wall. Special formulation PVC +80° C to -40° C operation allowing ease of stripping and soldering. When shielded #40 AWG tinned copper, 30% coverage for maximum flexibility, minimum weight and diameter and for quick pushback.

TWISTED — UNSHIELDED

| CAT NO. | SPOOL | COND. | SIZE AWG | STRAND | NOM. WALL | NOM. O. D. |
|---------|-------|-------|----------|--------|-----------|------------|
| 7571 | 1000' | 1 | 32 | 7/40 | .010" | .028" |
| 7571 | 500' | 1 | 32 | 7/40 | .010" | .028" |
| 7572 | 1000' | 2 | 32 | 7/40 | .010" | .047" |
| 7572 | 500' | 2 | 32 | 7/40 | .010" | .047" |
| 7573 | 1000' | 3 | 32 | 7/40 | .010" | .053" |
| 7573 | 500' | 3 | 32 | 7/40 | .010" | .053" |
| 7574 | 1000' | 4 | 32 | 7/40 | .010" | .061" |
| 7574 | 500' | 4 | 32 | 7/40 | .010" | .061" |
| 7575 | 1000' | 5 | 32 | 7/40 | .010" | .069" |
| 7575 | 500' | 5 | 32 | 7/40 | .010" | .069" |



TWISTED — SHIELDED

| | | | | | | |
|------|-------|---|--------------------|------|-------|-------|
| 7581 | 1000' | 1 | 32 | 7/40 | .010" | .040" |
| 7581 | 500' | 1 | 32 | 7/40 | .010" | .040" |
| 7582 | 1000' | 2 | 32 | 7/40 | .010" | .067" |
| 7582 | 500' | 2 | 32 | 7/40 | .010" | .067" |
| 7583 | 1000' | 3 | 32 | 7/40 | .010" | .072" |
| 7583 | 500' | 3 | 32 | 7/40 | .010" | .072" |
| 7584 | 1000' | 4 | 32 | 7/40 | .010" | .080" |
| 7584 | 500' | 4 | 32 | 7/40 | .010" | .080" |
| 7585 | 1000' | 5 | 32 | 7/40 | .010" | .089" |
| 7585 | 500' | 5 | 32 | 7/40 | .010" | .089" |
| 7580 | 1000' | 2 | 32 (Ind. Shielded) | 7/40 | .010" | .080" |

CONDUCTOR COLOR CODE: 1-WHITE, 2-RED, 3-BLACK, 4-GREEN, 5-YELLOW.



NEW Sound Cable with "VI-CON" Shield

"VI-CON" Shield is the new Birnbach conductive vinyl plastic shield that provides:

- HI-FLEXIBILITY • LONG FLEX LIFE • EASY WORKING
- 100% SHIELDING COVERAGE

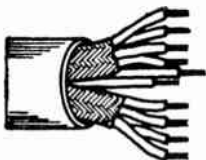
No. 24 Solid Tinned ground wire used for ground termination

| Cat. No. | Spool | Conds. | Size No. | Strand | Nom. O.D. |
|----------|-------|--------|----------|--------|-----------|
| 1812 | 500' | 2 | 22 | 7/30 | .160 |
| 1313 | 500' | 2 | 20 | 7/28 | .190 |
| 1814 | 500' | 2 | 18 | 16/30 | .220 |

STEREO VOLUME CONTROL CABLE

ESPECIALLY DESIGNED FOR STEREO COIN OPERATED MACHINES

Description: Ten conductors containing 2 quads individually shielded with tinned copper braid; 2 conductors not shielded; chrome vinyl jacket overall.



- 4 Shielded #24 (7 x 32)
- 4 Shielded #24 (7 x 32)
- 2 Unshielded #22 (7 x 30)

| Cat. No. | Spool | Nom. Jacket | Nom. O.D. |
|----------|-------|-------------|-----------|
| 4520 | 500' | .025" | .325" |

CONDUCTOR COLOR CODE: GRAY, WHITE, BLUE, GREEN (SHIELDED), RED, BROWN, YELLOW, ORANGE (SHIELDED), WHITE, BLUE (UNSHIELDED)

JUKE BOX SPEAKER CABLE

Small, compact diamter. Useful. Practical. Ideal for rear auto speaker extension cable



DESCRIPTION:

Composed of 7 strand #32-1 Bare—copper conductor, 1 tinned copper conductor, 2 conductors parallel chrome vinyl plastic insulation.

| Cat. No. | Spool | Conds. | Size AWG | Strand | Nom. Insul. | Nom. O.D. |
|----------|-------|--------|----------|--------|-------------|---------------|
| 4500 | 1000' | 2 | 24 | 7/32 | .015" | .058" x .115" |

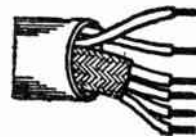
Additional colors available to order.

SHIELDED JUKE BOX CONTROL CABLE

DESCRIPTION.

5 Conductor cable. Three cond. twisted color coded, black, green red with tinned copper shielded braid overall. Two conductor twisted color coded blue, yellow and chrome vinyl jacket overall.

6 Conductor Cable: 4 cond. twisted tinned copper shielded braid, conductor color code black, green, red, yellow; 2 cond. unshielded color code white, blue.



| Cat. No. | Spool | Conds. | Size AWG | Strand | Nom. Insul. | Nom. Jacket | Nom. O.D. |
|----------|-------|--------|--|--------|-------------|-------------|-------------|
| 4515 | 500' | 5 | 3 (shielded) 2 (unshielded) | 7/30 | .015" | .020" | 200" x 300" |
| 4516 | 500' | 6 | 2 unshielded #22 (7 x 30) 4 shielded #24 (7 x 32) | | .015" | .025" | 205" x 310" |

JUKE BOX CONTROL CABLE

Used as replacement cable in Juke Boxes.

DESCRIPTION:

Two Conductors #16 stranded vinyl insulation tinned copper, color coded green-orange. One conductor #20 stranded tinned copper, vinyl insulation. Color coded Blue; 3 conductors cable with .020" chrome vinyl plastic jacket overall.

| Cat. No. | Spool | Conds. | Size AWG | Strand | Nom. Insul. | Nom. Jacket | Nom. O.D. |
|----------|-------|--------|----------------|----------------|-------------|-------------|-----------|
| 4510 | 500' | 3 | 2—#16 1—#20 | 28/30 10/30 | .020" | .020" | 240" |

Birnbach

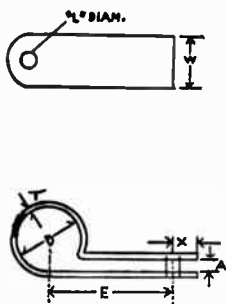
NYLON CABLE • TUBING CLAMPS • PLASTIC CABLE
ALUMINUM CABLE • PUSH BUTTON WIRE TIES
ANTENNA CONTROL ROTOR CABLE



NYLON CABLE AND TUBING CLAMPS

MEETS MIL-P-26093

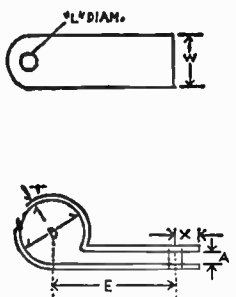
MADE OF DUPONT NYLON FORMULA FM 10001



Used as a clamp, strain relief, clip hanger, fastener, strap, these nylon cable clamps are light and tough. Have smooth, non-abrasive surfaces, rounded edges will not chafe conductors or cause shorts or grounds in cable. Insoluble in solvents, oils, gasoline, alcohol, hydraulic fluids, alkalies, acids. Temperature resistant from -60°F to +300°F. Do not support combustion. Moisture and heat resistant. Inside matte finish surfaces prevent slippage under vibration and are self aligning when tightened by screw. Snaps onto cable. Meets MIL-P-26093 specs. Fungus resistant.

| CAT. NO. | PUT-UP | TO FIT SIZE | D | E | W | T | L | X | A |
|----------|--------|-------------|-------|-------|-----|------|------|------|------|
| 725 | 100 | 1/8" | .125 | .316 | 3/8 | .050 | .177 | .227 | .062 |
| 726 | 100 | 3/16" | .187 | .378 | 3/8 | .050 | .177 | .277 | .062 |
| 727 | 100 | 1/4" | .250 | .409 | 3/8 | .050 | .177 | .227 | .062 |
| 728 | 100 | 5/16" | .312 | .441 | 3/8 | .050 | .177 | .277 | .062 |
| 729 | 100 | 3/8" | .375 | .471 | 3/8 | .050 | .177 | .277 | .062 |
| 730 | 100 | 7/16" | .437 | .519 | 3/8 | .050 | .177 | .277 | .062 |
| 731 | 100 | 1/2" | .500 | .550 | 3/8 | .050 | .177 | .277 | .062 |
| 731A | 100 | 9/16" | .563 | .625 | 1/2 | .060 | .177 | .227 | .062 |
| 732 | 100 | 5/8" | .625 | .634 | 1/2 | .060 | .177 | .227 | .062 |
| 732A | 100 | 11/16" | .687 | .752 | 1/2 | .060 | .177 | .227 | .062 |
| 733 | 100 | 3/4" | .750 | .718 | 1/2 | .060 | .177 | .227 | .062 |
| 734 | 100 | 7/8" | .875 | .760 | 1/2 | .060 | .177 | .227 | .062 |
| 735 | 100 | 1" | 1.000 | .802 | 1/2 | .060 | .177 | .227 | .062 |
| 736 | 100 | 1 1/8" | 1.125 | .968 | 1/2 | .062 | .204 | .250 | .125 |
| 737 | 100 | 1 1/4" | 1.250 | 1.156 | 1/2 | .062 | .204 | .250 | .125 |
| 738 | 100 | 1 1/2" | 1.500 | 1.188 | 5/8 | .070 | .204 | .250 | .125 |

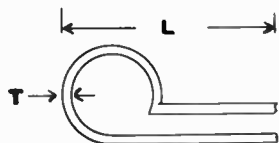
ETHYL CELLULOSE PLASTIC CABLE AND TUBING CLAMPS



Recommended for general use. They withstand age, shock and vibration. Moisture and corrosion. This tough, lightweight and durable clamp withstands temperatures from -60° to +175° F. Approved 7-21-44 Army-Navy aeronautical AN-742. Approved for inside-outside, hi-tension, primary and secondary. Standard pkg. 100, 1000.

| CAT. NO. | TO FIT SIZE | D | E | W | T | L | X | A |
|----------|-------------|-------|--------|-----|------|------|------|------|
| 715 | 3/8" | .125 | .325 | 1/2 | .080 | .204 | 7/32 | .062 |
| 715A | 3/16" | .188 | .390 | 1/2 | .060 | .204 | 7/32 | .062 |
| 715B | 1/4" | .250 | .421 | 1/2 | .080 | .204 | 7/32 | .062 |
| 715C | 5/16" | .313 | .457 | 1/2 | .060 | .204 | 7/32 | .062 |
| 715D | 3/8" | .375 | .483 | 1/2 | .060 | .204 | 7/32 | .062 |
| 715E | 7/16" | .438 | .531 | 1/2 | .060 | .204 | 7/32 | .062 |
| 716 | 1/2" | .500 | .582 | 1/2 | .060 | .204 | 7/32 | .062 |
| 716A | 9/16" | .563 | .825 | 1/2 | .060 | .204 | 7/32 | .062 |
| 716B | 5/8" | .625 | .810 | 1/2 | .060 | .204 | 7/32 | .062 |
| 716C | 11/16" | .688 | .866 | 1/2 | .060 | .204 | 7/32 | .062 |
| 716D | 3/4" | .750 | .766 | 1/2 | .060 | .204 | 7/32 | .062 |
| 716E | 7/8" | .875 | .813 | 1/2 | .060 | .204 | 7/32 | .062 |
| 717 | 1" | 1.000 | .906 | 1/2 | .080 | .204 | 7/32 | .062 |
| 717A | 1 1/8" | 1.125 | .969 | 1/2 | .080 | .204 | 7/32 | .062 |
| 717B | 1 1/4" | 1.250 | 1.156 | 1/2 | .060 | .204 | 7/32 | .062 |
| 717C | 1 1/2" | 1.5 | 1.0625 | 5/8 | .070 | .204 | 7/32 | .062 |
| 717D | 2" | 2.0 | 1.313 | 5/8 | .070 | .204 | 7/32 | .062 |
| 717E | 2 1/2" | 2.5 | 1.563 | 5/8 | .070 | .204 | 7/32 | .062 |

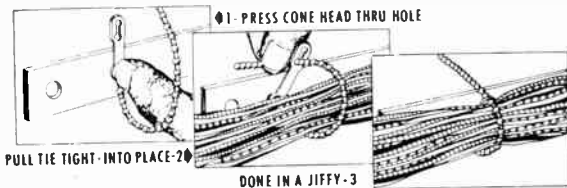
BIRNBACH ALUMINUM CABLE AND TUBING CLAMPS



These Tube Clamps are made of hard drawn aluminum and are found to be extremely desirable when mounting resonant lines, or elements of directive beam antennas. The 1/8" thru 3/8" clamps have a clearance for No. 10 Screw. The 3/4" to the 1 1/4" clamps have a clearance for 1/4" bolts.

| Cat. No. | To Fit Tube | Width "W" | Length "L" | Thickness "T" | Std. Pkg. |
|----------|-------------|-----------|------------|---------------|-----------|
| 51A | 1/8" | 1/2" | 1 1/8" | .050" | 100 |
| 51 | 1/4" | 1/2" | 7/8" | .050" | 100 |
| 52 | 3/8" | 1/2" | 1 1/8" | .050" | 100 |
| 53 | 1/2" | 1/2" | 1" | .050" | 100 |
| 54 | 3/4" | 1/2" | 1 1/8" | .050" | 100 |
| 54A | 5/8" | 1/2" | 1 1/8" | .050" | 50 |
| 55 | 3/4" | 3/4" | 1 1/8" | .090" | 50 |
| 57 | 7/8" | 3/4" | 1 5/8" | .090" | 50 |
| 56 | 1" | 3/4" | 1 3/4" | .090" | 50 |
| 56A | 1 1/8" | 3/4" | 1 7/8" | .090" | 50 |
| 56B | 1 1/4" | 3/4" | 2" | .090" | 50 |

PUSH BUTTON WIRE TIES (PAT. PENDING)



Push Button Wire Ties useful for harnessing wires fast; saves labor; eliminates screws and usual time required for string tying. Measures 4 1/2" in length and is adjustable to 30 different diameters. Insert the tie in the hole for anchoring; wires can be replaced or added by loosening the tie and pulling tight again. Constructed of tough Polyethylene; chemically inert, heat resistant; breaking point 45 to 95 lbs. Push button ties are designed to fit a .250"-.265" hole in a .031 to .140 thick panel.

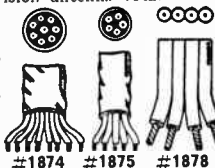
| Cat. No. | Color (Specify) | Std Pkg |
|----------|-------------------|-----------|
| PBT-4 | Red, Blue, Yellow | 100, 1000 |

MATERIAL CONFORMS TO SPEC. LP 590

ANTENNA CONTROL ROTOR CABLE

Developed for remote control of television antenna rotators

DESCRIPTION:
 #1874—4 Conductors flat parallel polyethylene plastic insulation. One outer conductor tinned, balance bare copper.
 #1875—5 Conductors twisted, color coded. Vinyl plastic jacket overall.
 #1878—8 Conductors twisted, color coded. Vinyl plastic jacket overall.



| Cat. No. | Spool | Cond. | Size AWG | Strand. | Nom. O.D. |
|----------|-------|-------|----------|---------|---------------|
| 1874 | 1000' | 4 | 20 | 7/28 | .072" x .890" |
| 1874A | 500' | 4 | 20 | 7/28 | .072" x .890" |
| 1875 | 1000' | 5 | 20 | 7/28 | .180" |
| 1875A | 500' | 5 | 20 | 7/28 | .180" |
| 1878 | 1000' | 8 | 22 | 7/30 | .205" |
| 1878A | 500' | 8 | 22 | 7/30 | .205" |

CONDUCTOR COLOR CODE CHART FOR #1875, #1878

| | | | |
|---------|---------|----------|----------|
| 1—Black | 3—Red | 5—Yellow | 7—Brown |
| 2—White | 4—Green | 6—Blue | 8—Orange |

Birnbach PRICE LIST

| Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price |
|----------|-------------------|--------------|-------------------|--------------|-------------------|------------|-------------------|----------|-------------------|-------------|-------------------|
| 00-C | \$ 11.10/C | 91-E | \$11.61/Ea. | 204 | \$.39/Ea. | 302 | \$.27/Ea. | 365-BC-C | \$82.80/Ea. | 443 | \$14.40/C |
| 1-50 | .40/Ea. | 92-M | 15.99/Ea. | 204-A; 204-H | 2.25/Ea. | 302-V 10' | .93/Ea. | 366 | 10.20/C | 443-A | 14.40/C |
| 1-C | .79/Ea. | 93-M | 17.85/Ea. | 205 | .39/Ea. | 302-VC-C | 7.92/Ea. | 367 | 13.20/C | 444 | 12.60/C |
| 1-M | 6.44/M | 94-M | 19.47/Ea. | 205-H | 2.25/Ea. | 303 | .45/Ea. | 368 | 1.50/C | 444-A | 15.00/C |
| 2-50 | .40/Ea. | 95-M | 21.78/Ea. | 206 | .39/Ea. | 303-VC-C | 15.00/Ea. | 369 | 1.50/C | 444-B | 15.00/C |
| 2-C | .79/Ea. | 96-40 | .40/Ea. | 206-A | 2.25/Ea. | 304 | .54/Ea. | 370 | 3.00/C | 444-C | 18.00/C |
| 2-M | 6.44/M | 96-C | .79/Ea. | 206-H | 2.25/Ea. | 304-VC-C | 18.00/Ea. | 371 | 1.80/C | 445 | 12.60/C |
| 3-50 | .40/Ea. | 96-M | 7.10/M | 207 | .39/Ea. | 305-V 10' | 1.05/Ea. | 372 | 1.50/C | 445-A | 15.00/C |
| 3-C | .79/Ea. | 97-40 | .40/Ea. | 207-H | 2.25/Ea. | 305-VC-C | 8.55/Ea. | 373 | 3.90/C | 445-B | 18.30/C |
| 3-M | 6.44/M | 97-C | .79/Ea. | 208 | .39/Ea. | 306-V 10' | 1.11/Ea. | 377 | .29/Ea. | 445-C | 18.00/C |
| 3A-M | 6.44/Ea. | 97-M | 7.10/M | 208-H | 2.25/Ea. | 306-VC-C | 10.95/Ea. | 378 | .38/Ea. | 445-D | 20.40/C |
| 4-M | 24.75/M | 98-35 | .40/Ea. | 209 | .39/Ea. | 307 | .18/Ea. | 379 | .41/Ea. | 445-E | 23.40/C |
| 5-M | 33.00/M | 98-C | .99/Ea. | 209-H | 2.25/Ea. | 307-V 20' | 1.11/Ea. | 380-C | 2.08/Ea. | 445-F | 27.60/C |
| 6-C | 7.92/C | 98-M | 8.25/M | 212-A | 2.25/Ea. | 307-VC-C | 5.40/Ea. | 381-C | 2.31/Ea. | 445-G | 32.40/C |
| 8 | 8.25/C | 99-35 | .40/Ea. | 220 | 4.80/Ea. | 308-B 25' | .45/Ea. | 382-C | 2.31/Ea. | 446 | 15.60/C |
| 10 | 8.25/C | 99-C | .92/Ea. | 220-A | 4.05/Ea. | 308-BC-C | 1.65/Ea. | 383-C | 2.55/Ea. | 446-A | 14.25/C |
| 11 | 11.55/C | 99-M | 8.25/M | 221 | 1.08/Ea. | 309 | 1.02/Ea. | 384-C | 2.85/Ea. | 446-B | 23.40/C |
| 15 | 4.62/C | 100-20 | 4.40/Ea. | 221-A | .84/Ea. | 310 | 10.80/C | 385-C | 3.15/Ea. | 446-C | 27.60/C |
| 16 | 16.50/C | 100-C | 1.48/Ea. | 226 | 2.40/Ea. | 310-B | 21.00/C | 386-C | 3.84/Ea. | 447 | 14.25/C |
| 17 | 36.00/C | 100-M | 13.20/M | 231-MC | 21.00/C | 310-C | 13.80/C | 387-C | 4.56/Ea. | 447-B | 38.40/C |
| 18 | 60.00/C | 102 | .54/Ea. | 232-FC | 31.80/C | 310-S | 11.40/C | 388-C | 6.18/Ea. | 447-D | 47.40/C |
| 19 | .27/Ea. | 103 | .54/Ea. | 233-C | 22.80/C | 311-B 25' | .45/Ea. | 389-C | 6.54/Ea. | 447-E | 53.40/C |
| 20 | .54/Ea. | 104 | .90/Ea. | 234-CLC | 36.00/C | 311-BC-C | 1.65/Ea. | 391 | 15.00/C | 448 | 20.01/C |
| 20-A | .45/Ea. | 105 | .90/Ea. | 239-FC2 | 3.72/Ea. | 312 | 1.20/Ea. | 392 | 46.20/C | 449 | 33.00/C |
| 21-35 | .40/Ea. | 106 | .54/Ea. | 245-MFC | 3.72/Ea. | 313 | .10/Ea. | 392-A | 33.00/C | 450 | .35/Ea. |
| 21-C | .99/C | 107 | .30/Ea. | 246 | 24.00/C | 313-B 25' | .45/Ea. | 392-B | 66.00/C | 450-J | .43/Ea. |
| 21-M | 8.25/M | 108 | 1.23/Ea. | 248 | 4.80/C | 313-BC-C | 1.65/Ea. | 393 | 42.00/C | 451 | .43/Ea. |
| 22-15 | .40/Ea. | 109 | 1.65/Ea. | 248-S | 4.40/C | 314 | .10/Ea. | 393-A | 42.00/C | 451-J | .46/Ea. |
| 22-C | 2.11/C | 110 | 2.25/Ea. | 249 | 6.60/C | 314-B 25' | .45/Ea. | 394 | 30.00/C | 452 | .46/Ea. |
| 22-M | 19.47/M | 113 | 75.00/C | 251 | 48.00/C | 314-BC-C | 1.65/Ea. | 395 | 30.00/C | 452-J | .60/Ea. |
| 23 | 9.60/C | 114 | 6.60/C | 252 | 72.00/C | 315 | .11/Ea. | 396 | 30.00/C | 453 | .82/Ea. |
| 24 | 10.20/C | 115 | 7.20/C | 253 | 66.00/C | 315-B 25' | .45/Ea. | 396-B | 54.00/C | 453-J | .95/Ea. |
| 26 | 10.20/C | 116 | 7.80/C | 257 | 30.00/C | 315-BC-C | 1.65/Ea. | 397 | 33.00/C | 454 | 1.08/Ea. |
| 27 | 6.60/C | 117 | 16.50/C | 258 | 34.20/C | 316 10' | .11/Ea. | 397-B | 57.00/C | 454-J | 1.28/Ea. |
| 27-C | 12.60/C | 118 | 15.00/C | 259 | 36.00/C | 316-B 25' | .48/Ea. | 398 | 30.00/C | 455 | 18.00/C |
| 27-R | 11.70/C | 119 | 13.20/C | 260 | 45.00/C | 316-BC-C | 1.80/Ea. | 398-B | 51.00/C | 455-BC | 24.00/C |
| 28 | 6.60/C | 120 | 1.65/Ea. | 263-C | 5.40/Ea. | 317 | .11/Ea. | 399 | 30.00/C | 457 | .45/Ea. |
| 29 | 10.20/C | 121 | .36/Ea. | 263-E | 26.70/Ea. | 317-B 25' | .48/Ea. | 399-A | 33.00/C | 458 | .19/Ea. |
| 30 | 21.69/C | 122 | .54/Ea. | 263-M | 53.40/Ea. | 317-BC-C | 1.80/Ea. | 400 | 15.00/C | 462 | .16/Ea. |
| 31 | 9.00/C | 123 | .60/Ea. | 264-C | 6.96/Ea. | 318 10' | .24/Ea. | 400-A | 15.00/C | 463 | .30/Ea. |
| 31-C | 12.60/C | 124 | .69/Ea. | 264-E | 34.50/Ea. | 318-B 15' | .45/Ea. | 400-B | 24.00/C | 464 | .24/Ea. |
| 31-MB | 6.60/C | 125 | 1.65/Ea. | 264-M | 69.00/Ea. | 318-BC-C | 2.82/Ea. | 401 | 15.00/C | 465 | 18.00/C |
| 31-MC | 9.00/C | 126 | 1.38/Ea. | 265-C | 8.40/Ea. | 319 | .27/Ea. | 401-B | 24.00/C | 465-B | 30.00/C |
| 31-MS | 8.40/C | 127 | 1.65/Ea. | 265-E | 41.70/Ea. | 319-B 10' | .45/Ea. | 402 | 2.64/C | 466 | 18.00/C |
| 31-R | 6.60/C | 128 | 2.01/Ea. | 265-M | 83.40/Ea. | 319-BC-C | 4.05/Ea. | 402-A | 3.30/C | 466-A | 24.00/C |
| 31-S | 9.60/C | 130 | .42/Ea. | 266-C | 9.78/Ea. | 320 | .30/Ea. | 402-B | 6.90/C | 467 | 30.00/C |
| 32 | 1.80/C | 131 | .51/Ea. | 266-E | 48.60/Ea. | 320-B 10' | .45/Ea. | 403 | 10.20/C | 467-B | 42.00/C |
| 32-A | 1.35/C | 132 | .24/Ea. | 266-M | 97.20/Ea. | 320-BC-C | 4.05/Ea. | 404 | 21.00/C | 468 | .33/Ea. |
| 33 | 8.40/C | 133 | .27/Ea. | 267-C | 11.10/Ea. | 321 | .36/Ea. | 404-A | 18.00/C | 469 | .36/Ea. |
| 34 | .84/Ea. | 134 | .36/Ea. | 267-E | 54.60/Ea. | 321-BC-C | 5.10/Ea. | 404-B | 27.00/C | 470 | .60/Ea. |
| 35 | .84/Ea. | 135 | .27/Ea. | 267-M | 109.20/Ea. | 322 | .39/Ea. | 404-BC | 36.00/C | 471 | .84/Ea. |
| 36 | .84/Ea. | 136 | .21/Ea. | 268-C | 12.30/Ea. | 322-BC-C | 8.40/Ea. | 404-BC | 30.00/C | 472 | .27/Ea. |
| 37 | .84/Ea. | 149 | 4.05/Ea. | 268-E | 61.20/Ea. | 323 | .60/Ea. | 404-S | 18.00/C | 473 | .14/Ea. |
| 38 | .84/Ea. | 151 | .36/Ea. | 268-M | 122.40/Ea. | 323-BC-C | 13.50/Ea. | 405 | .099 | 474 | .12/Ea. |
| 39 | .84/Ea. | 155-H | 27.00/Ea. | 269-C | 14.25/Ea. | 324 | .66/Ea. | 406 | 13.20/C | 475 | .88/Ea. |
| 40 | .84/Ea. | 156-E | 10.80/Ea. | 269-E | 70.95/Ea. | 324-BC-C | 16.50/Ea. | 407 | 13.20/C | 476 | .66/Ea. |
| 41 | .84/Ea. | 157-E | 15.00/Ea. | 269-M | 141.90/Ea. | 325 | .21/Ea. | 408 | 1.89/Ea. | 478 | .27/Ea. |
| 42 | 4.20/C | 158-E | 19.50/Ea. | 270-C | 15.75/Ea. | 325-B 15' | .45/Ea. | 409 | 15.00/C | 478-J | .32/Ea. |
| 43 | 4.80/C | 159-E | 24.75/Ea. | 270-E | 78.45/Ea. | 325-BC-C | 2.64/Ea. | 410 | .33/Ea. | 479 | .47/Ea. |
| 44 | 6.00/C | 160-E | 30.00/Ea. | 270-M | 156.90/Ea. | 326 | .24/Ea. | 411 | .79/Ea. | 479-J | .57/Ea. |
| 45 | .84/Ea. | 161-E | 33.00/Ea. | 272-C | 19.53/Ea. | 326-B 15' | .45/Ea. | 412 | 19.80/C | 480-E | 10.23/Ea. |
| 46 | 8.40/C | 162-D | 18.00/Ea. | 272-E | 97.35/Ea. | 326-BC-C | 3.00/Ea. | 413 | 1.05/Ea. | 481-E | 11.49/Ea. |
| 47 | .84/Ea. | 163-D | 21.00/Ea. | 272-M | 194.70/Ea. | 327-BC-C | 17.40/Ea. | 414 | 15.00/C | 482-E | 11.49/Ea. |
| 48 | 20.10/C | 164-D | 24.00/Ea. | 274 | 36.00/C | 328-BC-C | 48.00/Ea. | 415 | 15.00/C | 483-E | 12.72/Ea. |
| 49 | .84/Ea. | 165-D | 28.50/Ea. | 275 | 42.00/C | 329-BC-C | 64.95/Ea. | 416 | 13.20/C | 484-E | 14.19/Ea. |
| 51 | 10.30/C | 165-15 | 36.00/Ea. | 276 | 42.00/C | 330 | 15.00/C | 417 | .33/Ea. | 485-E | 15.60/Ea. |
| 51-A | 10.50/C | 166 | 1.20/Ea. | 278 | 24.00/C | 330-A | 13.20/C | 418 | .36/Ea. | 486-E | 17.43/Ea. |
| 52 | 10.50/C | 172-C | 5.10/Ea. | 279 | 18.00/C | 331 | 15.00/C | 419 | 24.00/C | 487-E | 18.15/Ea. |
| 53 | 10.50/C | 172-E | 25.50/Ea. | 280-25' | .48/Ea. | 331-A | 10.20/C | 420 | .87/Ea. | 488-E | 29.04/Ea. |
| 54 | 10.50/C | 172-M | 51.00/Ea. | 281-25' | .54/Ea. | 332 | 10.80/C | 420-A | 13.20/C | 489-E | 32.01/Ea. |
| 54-A | 10.80/C | 173-C | 7.05/Ea. | 282-25' | .54/Ea. | 332-A | 1.20/C | 421 | .87/Ea. | 490-C | 3.00/Ea. |
| 55 | 12.00/C | 173-E | 35.25/Ea. | 283-25' | .60/Ea. | 333 | 16.20/C | 422 | .87/Ea. | 490-M | 18.90/Ea. |
| 56 | 13.50/C | 173-M | 70.50/Ea. | 287 | .29/Ea. | 334 | 33.00/C | 423 | .87/Ea. | 490-A-C 50' | 2.83/Ea. |
| 56-A | 18.00/C | 174-C | 9.60/Ea. | 288 | 7.35/Ea. | 335 | 39.00/C | 426 | 16.20/C | 490-B-CC | 3.78/Ea. |
| 56-B | 19.50/C | 174-E | 48.00/Ea. | 289-VC-C | 3.60/Ea. | 336 | 39.00/C | 426-A | 16.20/C | 492-C | 2.76/Ea. |
| 57 | 13.50/C | 174-M | 96.00/Ea. | 290-VC-C | 3.60/Ea. | 337 | 42.00/C | 430 | .22/Ea. | 492-M | 27.60/Ea. |
| 58 | .90/Ea. | 175-C | 11.25/Ea. | 291 | .13/Ea. | 340 | 6.60/C | 431 | .26/Ea. | 492-A-C 50' | 4.14/Ea. |
| 59 | 1.08/Ea. | 175-E | 56.25/Ea. | 291-V 25' | 1.14/Ea. | 341 | 39.00/C | 431-J | .38/Ea. | 492-B-CC | 5.52/Ea. |
| 61-C | 2.40/Ea. | 175-M | 112.50/Ea. | 291-VC-C | 3.96/Ea. | 341-B | 60.00/C | 432 | .48/Ea. | 493-C | 2.70/Ea. |
| 62-E | 10.50/Ea. | 176-C | 12.60/Ea. | 293 | .13/Ea. | 342 | 285.00/C | 432-J | .75/Ea. | 493-M | 27.00/Ea. |
| 62-M | 21.00/Ea. | 176-E | 63.00/Ea. | 293-V 25' | 1.17/Ea. | 342-B | 315.00/C | 433 | .94/Ea. | 495-C | 3.00/Ea. |
| 64 | .84/Ea. | 176-M | 126.00/Ea. | 293-VC-C | 4.23/Ea. | 343 | .36/Ea. | 433-J | 1.35/Ea. | 495-M | 30.00/Ea. |
| 65 | 1.50/Ea. | 177-C | 13.90/Ea. | 294 | .13/Ea. | 343-A | 12.00/C | 434 | 2.10/Ea. | 497-C | 4.74/Ea. |
| 66-C | 3.30/Ea. | 178-C | 19.50/Ea. | 294-V 25' | 1.20/Ea. | 344 | .33/Ea. | 435 | 1.59/Ea. | 497-M | 47.40/Ea. |
| 67-E | 15.30/Ea. | 179-C | 22.50/Ea. | 294-VC-C | 4.50/Ea. | 345 | .36/Ea. | 436 | .36/Ea. | 499-C | 8.76/Ea. |
| 67-M | 30.60/Ea. | 180-C | 24.00/Ea. | 295 | .13/Ea. | 345-A | 15.00/C | 437 | .39/Ea. | 499-M | 83.40/Ea. |
| 68-C | 4.50/Ea. | 182-C | 28.80/Ea. | 295-V 25' | 1.23/Ea. | 346 | 1.80/Ea. | 438 | .45/Ea. | 501 | 2.52/Ea. |
| 69-E | 21.00/Ea. | 184 | 16.20/C | 295-VC-C | 4.65/Ea. | 347 | 2.16/Ea. | 439 | .24/Ea. | 503 | 2.34/Ea. |
| 69-M | 42.00/Ea. | 185 | 13.80/C | 296 | 1.26/Ea. | 348 | 1.20/Ea. | 440 | 15.00/C | 505 | 2.01/Ea. |
| 72-C | 1.56/Ea. | 186 | 15.00/C | 296-VC-C | 36.00/Ea. | 350 | 1.20/Ea. | 440-A | 17.40/C | 506 | .23/Ea. |
| 73-C | 1.83/Ea. | 193 | 3.00/M | 297 | .29/Ea. | 351 | 1.20/Ea. | 440-B | 20.40/C | 507 | .24/Ea. |
| 76-M | 14.19/Ea. | 194; 195 | 9.00/M Ea. | 298 | .33/Ea. | 352 | 1.20/Ea. | 440-C | 23.40/C | 508 | .25/Ea. |
| 77-M | 16.02/Ea. | 196; 197 | 10.80/M Ea. | 299 | 1.05/Ea. | 353 | 1.20/Ea. | 440-D | 25.20/C | 510 | 5.00 |
| 84-C | 1.83/Ea. | 200 | 6.00/M | 299-VC-C | 30.00/Ea. | 354 | 6.00/Ea. | 440-E | 27.60/C | 511 | .24/Ea. |
| 85-C | 2.01/Ea. | 201-35 | .40/Ea. | 300 | .13/Ea. | 359 | 1.20/Ea. | 440-F | 29.40/C | 512 | .24/Ea. |
| 86-C | 2.19/Ea. | 201-100 | .92/Ea. | 300-V 25' | 1.29/Ea. | 360-BC-C | 19.50/Ea. | 441 | 10.35/C | 514 | .23/Ea. |
| 87-C | 2.40/Ea. | 201-1000 | 8.25/M | 300-VC-C | 5.01/Ea. | 361-BC-C | 21.00/Ea. | 441-A | 10.35/C | 515 | .23/Ea. |
| 88-E | 9.09/Ea. | 202 | 5.10/M | 301 | .24/Ea. | 362-BC-C | 13.50/Ea. | 441-B | 10.35/C | 516 | .25/Ea. |
| 89-E | 10.23/Ea. | 203 | .39/Ea. | 301-V 15' | 1.17/Ea. | 363-BC 50' | 18.00/Ea. | 442 | 12.60/C | 518 | .24/Ea. |
| 90-E | 10.38/Ea. | 203-A; 203-H | 2.25/Ea. | 301-VC-C | 6.60/Ea. | 364-BC-C | 76.50/Ea. | 442-A | 13.20/C | 519 | .25/Ea. |

Birnback PRICE LIST

| Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price |
|----------|-------------------|----------|-------------------|----------|-------------------|----------|-------------------|-----------|-------------------|----------|-------------------|
| 520 | \$.29/Ea. | 632 | \$15.00/C | 716-C | \$ 4.80/C | 774-C | \$12.60/Ea. | 833-M | \$52.50/Ea. | 881/3 | \$ 5.49/Ea. |
| 521 | .30/Ea. | 633 | 15.00/C | 716-C | 42.60/M | 774-D | 29.70/Ea. | 834-C | 6.60/Ea. | 882 | 4.05/Ea. |
| 522 | .34/Ea. | 634 | 15.00/C | 716-D | 5.10/C | 774-E | 58.50/Ea. | 834-E | 31.50/Ea. | 882/3 | 6.06/Ea. |
| 523 | .45/Ea. | 635 | 15.00/C | 716-D | 44.40/M | 774-M | 117.00/Ea. | 834-M | 63.00/Ea. | 885 | 3.30/Ea. |
| 524-C | 6.00/Ea. | 636 | 15.00/C | 716-E | 5.40/C | 774-18-C | 20.70/Ea. | 835-C | 8.40/Ea. | 886 | 3.75/Ea. |
| 524-M | 56.10/Ea. | 647 | .84/Ea. | 716-E | 48.00/M | 774-18-D | 51.00/Ea. | 835-E | 39.60/Ea. | 887; 888 | 4.35/Ea. |
| 526-C | 4.50/Ea. | 650 | .30/Ea. | 717 | 5.70/C | 774-18-E | 102.00/Ea. | 835-M | 78.00/Ea. | 889 | 5.40/Ea. |
| 526-M | 40.95/Ea. | 653-8 | .87/Ea. | 717 | 51.60/M | 774-18-M | 202.80/Ea. | 853-C | 3.15/Ea. | 889/3 | 6.90/Ea. |
| 527-C | 13.05/Ea. | 653-12 | .93/Ea. | 717-A | 6.00/C | 775-C | 15.60/Ea. | 853-E | 15.00/Ea. | 889/4 | 8.16/Ea. |
| 527-M | 126.75/Ea. | 653-24 | .99/Ea. | 717-A | 54.60/M | 775-D | 36.00/Ea. | 853-M | 29.10/Ea. | 890 | 5.70/Ea. |
| 528-C | 19.50/Ea. | 653-36 | 1.05/Ea. | 717-B | 6.30/C | 775-E | 72.00/Ea. | 854-C | 3.15/Ea. | 891 | 5.01/Ea. |
| 528-M | 191.40/Ea. | 655-8 | .90/Ea. | 717-B | 58.20/M | 775-M | 144.00/Ea. | 854-E | 15.00/Ea. | 891/3 | 8.70/Ea. |
| 529-C | 30.96/Ea. | 655-12 | .90/Ea. | 717-C | 13.50/C | 776-C | 18.60/Ea. | 854-M | 29.10/Ea. | 891/4 | 8.85/Ea. |
| 529-M | 293.40/Ea. | 655-24 | .96/Ea. | 717-C | 108.00/M | 776-D | 43.80/Ea. | 855-50' | 1.74/Ea. | 893 | 15.00/Ea. |
| 531 | 16.20/C | 655-36 | 1.02/Ea. | 717-D | 14.70/C | 776-E | 87.00/Ea. | 855-C | 3.30/Ea. | 893/3 | 16.20/Ea. |
| 531-A | 24.00/C | 663 | 13.68/Ea. | 717-D | 120.00/M | 776-M | 174.00/Ea. | 855-E | 15.39/Ea. | 893/4 | 18.60/Ea. |
| 532; 533 | 16.20/C | 664 | 11.70/Ea. | 717-E | 16.80/C | 777-C | 20.40/Ea. | 855-M | 30.00/Ea. | 894 | 19.20/Ea. |
| 534 | 16.20/C | 666 | 11.10/C | 717-E | 144.00/M | 777-D | 48.30/Ea. | 856 50' | 15.00/Ea. | 894/3 | 21.60/Ea. |
| 535 | 16.20/C | 667 | 27.00/Ea. | 725-C | 3.90/Ea. | 777-E | 95.70/Ea. | 856-C | 29.10/Ea. | 894/4 | 24.60/Ea. |
| 536 | 16.20/C | 668 | .21/Ea. | 725-E | 17.55/Ea. | 777-M | 191.40/Ea. | 856-E | 144.60/Ea. | 895 | 7.65/Ea. |
| 537 | 16.20/C | 669 | 10.80/C | 725-M | 34.80/Ea. | 778-C | 24.00/Ea. | 856-M | 297.10/Ea. | 895-A | 2.10/Ea. |
| 538 | 19.80/C | 675 | 57.00/C | 726-C | 4.50/Ea. | 778-D | 58.50/Ea. | 856/1 50' | 16.80/Ea. | 895-B | 1.20/Ea. |
| 538-A | 18.00/C | 676 | 63.00/C | 726-E | 20.25/Ea. | 778-E | 117.00/Ea. | 856/1-C | 32.40/Ea. | 896 | 15.90/Ea. |
| 539 | 19.80/C | 677 | 72.00/C | 726-M | 40.20/Ea. | 778-M | 231.00/Ea. | 856/1-E | 159.00/Ea. | 896-A | 4.50/Ea. |
| 540 | .20/Ea. | 678 | 81.00/C | 727-C | 5.70/Ea. | 778-10-C | 33.00/Ea. | 856/1-M | 315.00/Ea. | 897 | 16.65/Ea. |
| 541 | .40/Ea. | 681-C | .87/Ea. | 727-E | 22.95/Ea. | 778-10-D | 84.00/Ea. | 856/2 50' | 28.20/Ea. | 897-A | 4.65/Ea. |
| 542 | .30/Ea. | 690-D | 16.26/Ea. | 727-M | 45.60/Ea. | 778-10-E | 165.00/Ea. | 856/2-C | 54.30/Ea. | 898 | 17.10/Ea. |
| 543 | .15/Ea. | 690/3-D | 25.20/Ea. | 728-C | 5.37/Ea. | 778-10-M | 327.00/Ea. | 856/2-E | 216.00/Ea. | 898-A | 5.22/Ea. |
| 544 | .30/Ea. | 691-D | 19.50/Ea. | 728-E | 24.15/Ea. | 781-C | 14.10/Ea. | 856/2-M | 426.00/Ea. | 899 | 16.95/Ea. |
| 545 | .36/Ea. | 692-D | 27.00/Ea. | 728-M | 48.00/Ea. | 786 | 18.00/Ea. | 856/3 50' | 42.30/Ea. | 899-A | 6.75/Ea. |
| 546 | 24.00/Ea. | 692/4-D | 41.70/Ea. | 729-C | 5.61/Ea. | 787 | 25.80/Ea. | 856/3-C | 84.15/Ea. | 901-E | 81.00/Ea. |
| 546-A | .24/Ea. | 693-D | 25.05/Ea. | 729-E | 25.20/Ea. | 788-C | 7.50/Ea. | 856/3-D | 210.00/Ea. | 902-E | 120.00/Ea. |
| 547 | 33.00/Ea. | 693/3-D | 31.50/Ea. | 729-M | 50.40/Ea. | 788-D | 18.30/Ea. | 856/3-E | 420.00/Ea. | 903-E | 75.00/Ea. |
| 550 | .15/Ea. | 693/4-D | 49.20/Ea. | 730-C | 5.34/Ea. | 788-E | 36.00/Ea. | 856/3-M | 880.00/Ea. | 904-DS | 120.00/Ea. |
| 550-A | .15/Ea. | 694-D | 31.50/Ea. | 730-E | 27.00/Ea. | 788-M | 72.00/Ea. | 856/4 50' | 51.90/Ea. | 904-DSF | 126.00/Ea. |
| 550-B | .18/Ea. | 694/3-D | 37.50/Ea. | 730-M | 54.00/Ea. | 789-D | 18.30/Ea. | 856/4-C | 103.65/Ea. | 904-F-E | 78.00/Ea. |
| 550-C | .18/Ea. | 694/4-D | 57.00/Ea. | 731-C | 6.30/Ea. | 790-C | 8.55/Ea. | 856/4-D | 258.90/Ea. | 905-M | 58.35/Ea. |
| 551 | .33/Ea. | 695-D | 35.40/Ea. | 731-E | 28.50/Ea. | 790-D | 21.15/Ea. | 856/4-E | 517.20/Ea. | 906-M | 58.20/Ea. |
| 552 | .39/Ea. | 695/3-D | 45.54/Ea. | 731-M | 57.00/Ea. | 790-E | 41.40/Ea. | 856/4-M | 1034.10/Ea. | 907-M | 66.00/Ea. |
| 553 | .45/Ea. | 695/4-D | 68.40/Ea. | 731A-C | 7.80/Ea. | 790-M | 82.80/Ea. | 856/6 50' | 79.20/Ea. | 909-M | 100.50/Ea. |
| 554 | .60/Ea. | 696-D | 51.00/Ea. | 732-C | 8.40/Ea. | 791-D | 21.15/Ea. | 856/6-C | 156.00/Ea. | 910-M | 58.20/Ea. |
| 555 | 1.50/Ea. | 696/3-D | 73.20/Ea. | 732-E | 37.80/Ea. | 792-C | 10.40/Ea. | 856/7 50' | 128.40/Ea. | 912-E | 126.00/Ea. |
| 556 | 1.17/Ea. | 696/4-D | 104.10/Ea. | 732-M | 75.00/Ea. | 792-D | 25.50/Ea. | 856/7-C | 234.00/Ea. | 914-M | 90.00/Ea. |
| 557 | 1.50/Ea. | 697-D | 73.50/Ea. | 732A-C | 3.00/Ea. | 792-E | 50.10/Ea. | 857 50' | 14.40/Ea. | 916-M | 127.60/Ea. |
| 558 | .57/Ea. | 697/3-D | 91.50/Ea. | 733-C | 9.00/Ea. | 792-M | 100.20/Ea. | 857-C | 28.20/Ea. | 919-E | 25.50/Ea. |
| 559 | .87/Ea. | 697/4-D | 132.00/Ea. | 733-E | 40.50/Ea. | 793-D | 25.50/Ea. | 857-E | 139.00/Ea. | 920-M | 51.00/Ea. |
| 559-A | .48/Ea. | 698-D | 97.50/Ea. | 733-M | 81.00/Ea. | 794-C | 12.39/Ea. | 857-M | 277.80/Ea. | 921-M | 26.10/Ea. |
| 560 | 1.50/Ea. | 698/3-D | 136.50/Ea. | 734-C | 9.60/Ea. | 794-D | 30.39/Ea. | 858 50' | 1.95/Ea. | 921/3-M | 40.20/Ea. |
| 561 | 1.50/Ea. | 698/4-D | 167.40/Ea. | 734-E | 43.20/Ea. | 794-E | 60.00/Ea. | 858-C | 3.90/Ea. | 922-M | 35.70/Ea. |
| 562 | 3.96/Ea. | 700-C | .75/Ea. | 734-M | 86.40/Ea. | 794-M | 120.00/Ea. | 858-E | 18.30/Ea. | 922/3-M | 53.10/Ea. |
| 564 | 2.91/Ea. | 701-D | 12.60/Ea. | 735-C | 10.50/Ea. | 795-D | 30.39/Ea. | 858-M | 36.60/Ea. | 923-C | 5.70/Ea. |
| 569-E | 12.60/Ea. | 701/3-D | 20.70/Ea. | 735-E | 47.25/Ea. | 796-C | 15.90/Ea. | 859 50' | 2.10/Ea. | 923-E | 27.00/Ea. |
| 570-C | 3.36/Ea. | 702-D | 26.40/Ea. | 735-M | 94.50/Ea. | 796-D | 37.20/Ea. | 859-C | 4.05/Ea. | 923-M | 46.50/Ea. |
| 572-D | 7.80/Ea. | 702/3-D | 37.20/Ea. | 736-C | 12.00/Ea. | 796-E | 75.00/Ea. | 859-E | 19.80/Ea. | 923/3-M | 72.00/Ea. |
| 573-E | 15.00/Ea. | 702/4-D | 51.00/Ea. | 736-E | 54.00/Ea. | 796-M | 149.10/Ea. | 859-M | 38.70/Ea. | 923-Q | 1.95/Ea. |
| 574-D | 15.15/Ea. | 703-D | 30.00/Ea. | 736-M | 108.00/Ea. | 797-D | 37.20/Ea. | 860 50' | 2.67/Ea. | 924-C | 5.10/Ea. |
| 575-D | 21.60/Ea. | 703/3-D | 45.00/Ea. | 737-C | 13.80/Ea. | 798-C | 19.50/Ea. | 860-C | 5.34/Ea. | 924-E | 24.00/Ea. |
| 574/4-D | 32.22/Ea. | 703/4-D | 60.00/Ea. | 737-E | 60.00/Ea. | 798-D | 47.64/Ea. | 860-E | 26.55/Ea. | 924-M | 47.40/Ea. |
| 578-D | 20.40/Ea. | 704-D | 47.70/Ea. | 737-M | 120.00/Ea. | 798-E | 93.75/Ea. | 860-M | 53.10/Ea. | 924-Q | 1.95/Ea. |
| 578/3-D | 27.90/Ea. | 704/3-D | 70.50/Ea. | 738-C | 28.80/Ea. | 798-M | 187.50/Ea. | 863 50' | 3.15/Ea. | 925-C | 6.75/Ea. |
| 578/4-D | 44.10/Ea. | 704/4-D | 102.00/Ea. | 738-E | 129.00/Ea. | 799-C | 12.00/Ea. | 863-C | 6.30/Ea. | 925-E | 31.80/Ea. |
| 580-M | 19.20/Ea. | 705-D | 67.50/Ea. | 738-M | 300.00/Ea. | 800-C | 16.50/Ea. | 863-E | 30.00/Ea. | 925-M | 63.00/Ea. |
| 581-M | 21.12/Ea. | 705/3-D | 96.00/Ea. | 740-C | .66/Ea. | 802-D | 15.84/Ea. | 863-M | 60.00/Ea. | 925-Q | 2.19/Ea. |
| 582-M | 22.20/Ea. | 705/4-D | 120.00/Ea. | 749-C | 20.70/Ea. | 803-D | 13.20/Ea. | 864 50' | 4.95/Ea. | 931-E | 6.60/Ea. |
| 583-M | 23.76/Ea. | 706-D | 94.80/Ea. | 749-E | 99.00/Ea. | 810-E | 23.40/Ea. | 864-C | 9.90/Ea. | 931-M | 12.60/Ea. |
| 584-M | 25.41/Ea. | 706/3-D | 126.00/Ea. | 749-M | 198.00/Ea. | 811 | 1.35/Ea. | 864-E | 48.00/Ea. | 931-C | 2.25/Ea. |
| 585-M | 32.01/Ea. | 706/4-D | 147.00/Ea. | 749 10-C | 33.00/Ea. | 812 | 45.00/C | 864-M | 96.00/Ea. | 932-E | 10.50/Ea. |
| 586-M | 32.01/Ea. | 710-C | 7.80/Ea. | 749 10-E | 122.10/Ea. | 813 | 10.05/C | 865 50' | 6.90/Ea. | 932-M | 21.00/Ea. |
| 587-M | 36.30/Ea. | 710-D | 19.20/Ea. | 749 10-M | 243.00/Ea. | 814 | 9.00/C | 865-C | 13.80/Ea. | 933-E | 11.25/Ea. |
| 588-M | 57.60/Ea. | 710-E | 38.40/Ea. | 756-C | 13.50/Ea. | 814T | .54/Ea. | 865-E | 66.00/Ea. | 933-M | 22.50/Ea. |
| 589-M | 63.90/Ea. | 710-M | 73.20/Ea. | 756-E | 60.00/Ea. | 815 | .50/C | 865-M | 132.00/Ea. | 933-C | 2.37/Ea. |
| 590 | 18.00/C | 710-F | 180.00/Ea. | 757-M | 126.00/Ea. | 816 | .34/Fa. | 865/1 50' | 14.40/Ea. | 934-E | 14.10/Ea. |
| 591 | 21.00/C | 712-C | 5.10/Ea. | 762 | 12.00/C | 817 | .43/Ea. | 865/1-C | 26.10/Ea. | 934-M | 28.20/Ea. |
| 592 | 18.00/C | 712-D | 12.00/Ea. | 763-3 | 18.00/Ea. | 818-C | 8.76/Ea. | 865/1-E | 138.00/Ea. | 935-E | 9.00/Ea. |
| 593 | .90/C | 712-E | 24.00/Ea. | 763-5 | 22.80/Ea. | 818-E | 43.80/Ea. | 865/1-M | 274.80/Ea. | 935-M | 18.00/Ea. |
| 595 | 15.00/C | 712-M | 46.80/Ea. | 763-7 | 51.00/Ea. | 818-M | 87.69/Ea. | 866 | .159/Ea. | 936-E | 9.00/Ea. |
| 597 | 7.20/C | 712-F | 116.25/Ea. | 764 | .21/Ea. | 819 | .45/Ea. | 866-J | .21/Ea. | 936-M | 18.00/Ea. |
| 598 | 6.60/C | 714-C | 3.06/Ea. | 765 | .54/Ea. | 820-C | 7.59/Ea. | 866-SJ | .49/Ea. | 938-C | 6.90/Ea. |
| 600 | 13.20/C | 714-D | 7.50/Ea. | 766 | .35/Ea. | 820-E | 37.95/Fa. | 867 | .25/Ea. | 938-E | 29.28/Ea. |
| 601 | 30.00/C | 714-E | 15.00/Ea. | 766-J | .53/Ea. | 820-M | 75.90/Ea. | 867-J | .32/Ea. | 938-M | 58.41/Ea. |
| 603 | 24.60/C | 714-M | 29.10/Ea. | 768 | .42/Ea. | 822-E | 26.40/Ea. | 868 50' | 6.00/Ea. | 938-Q | 1.65/Ea. |
| 604 | 18.00/C | 714-F | 71.10/Ea. | 769 | .84/Ea. | 824-E | 31.35/Ea. | 868-C | 11.85/Ea. | 939-C | 5.55/Ea. |
| 605 | 24.00/C | 715 | 2.34/C | 770 | 1.50/Ea. | 825-E | 18.96/Ea. | 868-E | 57.60/Ea. | 939-E | 25.50/Ea. |
| 606 | 18.00/C | 715 | 19.20/M | 771 | 10.05/Ea. | 826-M | 45.00/Ea. | 868-M | 115.20/Ea. | 939-M | 52.50/Ea. |
| 607 | 54.00/C | 715-A | 2.40/C | 772-C | 8.85/Ea. | 826/26-E | 24.00/Ea. | 870-C | 6.60/Ea. | 939-Q | 1.77/Ea. |
| 608 | 60.00/C | 715-A | 19.80/M | 772-D | 21.45/Ea. | 826 28-E | 25.50/Ea. | 870-D | 15.90/Ea. | 940-C | 26.70/Ea. |
| 609 | 66.00/C | 715-B | 2.58/C | 772-E | 42.75/Ea. | 826/30-E | 26.40/Ea. | 870-E | 31.50/Ea. | 940/1-E | 21.00/Ea. |
| 610 | 72.00/C | 715-B | 21.60/M | 772-M | 85.50/Ea. | 827-E | 30.00/Ea. | 870-M | 61.80/Ea. | 941-E | 21.00/Ea. |
| 611 | 13.50/C | 715-C | 2.85/C | 772-18-C | 12.00/Ea. | 828-E | 44.40/Ea. | 872-C | 8.10/Ea. | 941/1-E | 17.70/Ea. |
| 613 | 9.00/C | 715-C | 24.00/M | 772/18-D | 27.40/Ea. | 829-E | 54.60/Ea. | 872-D | 19.50/Ea. | 942-E | 21.90/Ea. |
| 616 | .84/Ea. | 715-D | 3.00/C | 772/18-E | 57.00/Ea. | 830-E | 96.00/Ea. | 872-E | 38.28/Ea. | 943-E | 30.90/Ea. |
| 617 | 18.00/C | 715-D | 25.20/M | 772/18-M | 114.00/Ea. | 830/10-E | 87.00/Ea. | 872-M | 76.20/Ea. | 944-E | 46.20/Ea. |
| 618 | 1.35/Ea. | 715-E | 3.30/C | 773-C | 10.20/Ea. | 831-C | 4.95/Ea. | 875 | 2.70/Ea. | 947-E | 31.50/Ea. |
| 619 | .27/Ea. | 715-E | 27.60/M | 773-D | 25.50/Ea. | 831-E | 21.00/Ea. | 876</ | | | |

Birnbach PRICE LIST

| Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price |
|----------|-------------------|-------------|-------------------|--------------|-------------------|----------|-------------------|--------------|-------------------|------------|-------------------|
| 967 | \$27.00 C | 1079 (4) | \$ 1.77/Ea. | 1354-A | \$ 4.14/C | 1697 | \$ 1.19/Ea. | 2051-C | \$ 2.70/Ea. | 4709-M | \$120.00/Ea. |
| 972-C | 9.30/Ea. | 1080 (2) | 2.85 Ea. | 1354-B | 4.50/C | 1701-E | 16.95/Ea. | 2052-M | 16.80/Ea. | 4711-C | 15.85/Ea. |
| 972-A-C | 10.50 Ea. | 1081 (2) | 5.40/Ea. | 1355-1355-A | 5.25 C | 1702-E | 19.80 Ea. | 2100 | .99/Ea. | 4711-E | 75.00/Ea. |
| 972-A-E | 45.60 Ea. | 1081-B | 6.00 Lb. | 1355-B | 5.70/C | 1703-E | 25.20/Ea. | 2125 | .27/Ea. | 4711-M | 141.00/Ea. |
| 972-A-M | 90.00/Ea. | 1082 (4) | 1.77 Ea. | 1356 | 6.00 C | 1716 | 25.20/Ea. | 2318-E | 10.80/Ea. | 4711-13-E | 75.75/Ea. |
| 972-B-C | 9.15 Ea. | 1083 (2) | 2.85 Ea. | 1356-A | 6.16/C | 1741-M | 7.50 Ea. | 2320-E | 7.20 Ea. | 4715-C | 18.00/Ea. |
| 972-B-E | 45.30 Ea. | 1084 (2) | 5.40/Ea. | 1356-B; 1357 | 6.60/C | 1772-D | 21.45/Ea. | 2321-E | 7.56/Ea. | 4715-E | 87.00/Ea. |
| 972-B-M | 90.00/Ea. | 1084-B | 6.00/Lb. | 1358 | 6.60/C | 1773-D | 25.50/Ea. | 2500-E | 4.50/Ea. | 4715-M | 174.00/Ea. |
| 972-S-C | 7.50 Ea. | 1085 (4) | 1.77/Ea. | 1359 | 7.80/C | 1774-D | 29.70/Ea. | 2611 | 27.00/C | 4716-C | 19.24/Ea. |
| 972-S-E | 33.00 Ea. | 1086 (2) | 2.85/Ea. | 1360 | 8.10/C | 1775-D | 36.00/Ea. | 2617 | 36.00/C | 4716-E | 96.00/Ea. |
| 972-S-M | 66.00 Ea. | 1087 | 5.40/Ea. | 1372 | 7.80/C | 1776-D | 43.80/Ea. | 2650 | .34/Ea. | 4716-M | 192.00/Ea. |
| 972-S-Q | 1.95/Ea. | 1087-B | 6.00/Lb. | 1373 | 10.80/C | 1777-D | 48.00/Ea. | 2810-C | 9.41 Ea. | 4727-C | 31.05/Ea. |
| 973-C | 10.80/Ea. | 1101 | 3.00/Ea. | 1374 | 13.20/C | 1781-E | 58.80/Ea. | 2810-E | 46.95/Ea. | 4727-E | 155.25/Ea. |
| 973-S-C | 8.40 Ea. | 1111-D | 22.50/Ea. | 1375 | 18.00 C | 1782-E | 82.80/Ea. | 2812-C | 6.30 Ea. | 4727-M | 309.00/Ea. |
| 973-S-E | 39.60 Ea. | 1112-E | 45.00/Ea. | 1376 | 21.60/C | 1783-E | 117.30/Ea. | 2812-E | 31.20 Ea. | 4727 31-E | 219.00/Ea. |
| 973-S-M | 79.20/La. | 1113-M | 87.00/Ea. | 1377 | 22.80 C | 1784-E | 134.16/Ea. | 2814-C | 4.38 Ea. | 4727/41-E | 291.00/Ea. |
| 973-S-Q | 2.94/Ea. | 1120 | 3.30 C | 1378 | 25.20 C | 1786-E | 233.70/Ea. | 2814-E | 21.60 Ea. | 4729-E | 414.00/Ea. |
| 974-C | 13.80/Ea. | 1121 | 1.80/C | 1379 | 26.40/C | 1822-C | 4.26/Ea. | 2816-C | 3.63/Ea. | 4729/76-E | 792.00/Ea. |
| 975-C | 18.90/Ea. | 1122 | 3.60 C | 1380 | 28.80 C | 1822-B-E | 18.90/Ea. | 2816-E | 18.00 Ea. | 4729/101-C | 1005.00/Ea. |
| 976-C | 23.70 Ea. | 1123; 1124 | 1.50 C | 1382 | 1.80/C | 1822-C-M | 35.28/Ea. | 2818-C | 3.00/Ea. | 4731-C | 3.00/Ea. |
| 977-C | 24.60 Ea. | 1125 | 3.30/C | 1382-A | 1.95/C | 1824-C | 3.45 Ea. | 2818-E | 14.70 Ea. | 4731-E | 10.65/Ea. |
| 978-C | 27.60/Ea. | 1125T | 3.90/C | 1382-B | 2.34 C | 1824-E | 16.50/Ea. | 3000 to 3024 | .93/Ea. | 4731-M | 21.15/Ea. |
| 981-M | 19.68/Ea. | 1126 | 4.35 C | 1382-C | 3.33 C | 1824-M-M | 32.40/Ea. | 3025 | .81/Ea. | 4732-C | 4.86/Ea. |
| 982-M | 25.50 Ea. | 1126T | 4.95/C | 1383; 1383-A | 2.40/C | 1825-C | 3.60/Ea. | 3050 | 1.50 Ea. | 4732-E | 22.50/Ea. |
| 983-M | 29.70 Ea. | 1127 | 5.28/C | 1384 | 3.30 C | 1825-E | 17.40/Ea. | 3051 | 2.70/Ea. | 4733-M | 45.00/Ea. |
| 984-M | 38.70 Ea. | 1127T | 6.00/C | 1384-A | 3.54 C | 1825-M-M | 33.90/Ea. | 3052 | 16.80 Ea. | 4733-C | 6.36/Ea. |
| 985-M | 25.50/Ea. | 1128 | 6.30/C | 1384-B | 3.66/C | 1825-Q | .98/Ea. | 3460-C | 3.14 Ea. | 4733-E | 30.00/Ea. |
| 986-M | 31.60/Ea. | 1128T; 1129 | 7.20/C | 1385 | 3.75 C | 1835-E | 19.20/Ea. | 3461-C | 2.31/Ea. | 4733-M | 60.00/Ea. |
| 987-M | 38.10/Ea. | 1129T | 8.25/C | 1385-A | 3.90/C | 1836-E | 14.10/Ea. | 3462-E | 10.89 Ea. | 4734-C | 8.10/Ea. |
| 988-M | 44.70/Ea. | 1130 | 3.30 C | 1385-B | 4.25 C | 1839-E | 27.00/Ea. | 3600-E | 14.85/Ea. | 4734-E | 37.50/Ea. |
| 989-M | 40.50 Ea. | 1130T | 3.90/C | 1386 | 4.95 C | 1839-M | 54.00/Ea. | 3618 | 1.41/Ea. | 4734-M | 75.00/Ea. |
| 989/3-M | 53.70/Ea. | 1131 | 4.35/C | 1386-A | 5.40/C | 1840-C | 4.20/Ea. | 3619 | 1.65/Ea. | 4735-C | 9.60/Ea. |
| 990-M | 16.50/Ea. | 1131T | 4.95 C | 1386-B | 6.45 C | 1840-E | 20.04 Ea. | 4025 | .51/Ea. | 4735-E | 45.75/Ea. |
| 990/3-M | 24.60/Ea. | 1132 | 5.28/C | 1387 | 6.45 C | 1840-M | 40.05/Ea. | 4050 | .96/Ea. | 4735-M | 91.50/Ea. |
| 991-M | 21.90/Ea. | 1132T | 6.00/C | 1388 | 5.85/C | 1840-Q | 1.17 Ea. | 4051 | 1.68 Ea. | 4736-E | 12.00/Ea. |
| 991/3-M | 32.10/Ea. | 1133 | 6.30/C | 1389 | 6.45/C | 1841-C | 5.55 Ea. | 4052 | 15.00 Ea. | 4736-M | 54.00/Ea. |
| 992-M | 29.40/Ea. | 1133T; 1134 | 7.20/C | 1390 | 6.57 C | 1841-E | 26.40/Ea. | 4125 | .30/Ea. | 4736-M | 108.00/Ea. |
| 992/3-M | 45.00/Ea. | 1134T | 8.25/C | 1402-C | 4.74/Ea. | 1841-M | 52.80/Ea. | 4125-J | .35/Ea. | 4739-C | 15.60/Ea. |
| 993-M | 43.50/Ea. | 1135 | 5.28/C | 1403-M | 43.50/Ea. | 1841-Q | 1.50 Ea. | 4175 | .69/Ea. | 4739-E | 75.60/Ea. |
| 993/3-M | 66.00/Ea. | 1136 | 6.30/C | 1406-C | 2.50/Ea. | 1842-C | 7.80 Ea. | 4175-J | .99/Ea. | 4739-M | 151.50/Ea. |
| 994-M | 65.40/Ea. | 1137 | 7.20/C | 1407 | 24.00 Ea. | 1842-E | 37.20/Ea. | 4176 | .77/Ea. | 4745-C | 21.60/Ea. |
| 994/3-M | 96.00/Ea. | 1138 | 8.25/C | 1410-C | 1.74 Ea. | 1842-M | 75.60/Ea. | 4176-J | .58/Ea. | 4745-E | 105.00/Ea. |
| 995-M | 93.00/Ea. | 1139 | 9.30/C | 1411-M | 15.75 Ea. | 1842-Q | 2.10 Ea. | 4200-C | .204/Ea. | 4745-M | 210.00/Ea. |
| 995/3-M | 144.00/Ea. | 1140 | 5.28/C | 1414-C | 1.20 Ea. | 1843-C | 10.50/Ea. | 4200-M | .15/Ea. | 4747-C | 43.50/Ea. |
| 1013 | 1.65/Ea. | 1141 | 6.30/C | 1415-M | 10.65/Ea. | 1843-E | 49.50/Ea. | 4201-C | .58 Ea. | 4747-E | 43.50/Ea. |
| 1014 | 3.15/Ea. | 1142 | 7.20/C | 1418-C | .93 Ea. | 1843-M | 99.00/Ea. | 4201-M | .438 Ea. | 4747-M | 210.00/Ea. |
| 1015-C | 6.00/Ea. | 1143 | 8.25/C | 1419-M | 7.95 Ea. | 1844-C | 10.20/Ea. | 4202-C | .96/Ea. | 4752-C | 420.00/Ea. |
| 1017 | .40/Ea. | 1144 | 9.30/C | 1422-C | .66/Ea. | 1844-E | 50.40/Ea. | 4202-M | .715 Ea. | 4752-E | 3.75/Ea. |
| 1017-C | 2.54/Ea. | 1145 | 3.90/C | 1423-M | 4.98/Ea. | 1844-M | 100.20 Ea. | 4203-C | 3.24 Ea. | 4752-M | 16.50/Ea. |
| 1017-M | 23.10/M | 1146 | 4.95/C | 1424-M | 3.60 Ea. | 1845-E | 66.00/Ea. | 4204-C | .174/Ea. | 4753-C | 33.00/Ea. |
| 1025 | .81/Ea. | 1147 | 6.00/C | 1426-M | 3.48/Ea. | 1845-M | 129.00/Ea. | 4204-E | .132/Ea. | 4753-E | 23.10/Ea. |
| 1035 | 33.00/Ea. | 1148 | 7.20/C | 1428-M | 3.36/Ea. | 1846-E | 90.00/Ea. | 4205-C | .195/Ea. | 4753-M | 46.20/Ea. |
| 1035-B | 36.00/Ea. | 1149 | 3.90/C | 1430-M | 3.15/Ea. | 1846-M | 180.00/Ea. | 4205-M | .15/Ea. | 4754-C | 6.45 Ea. |
| 1036 | 15.00/Ea. | 1150 | 4.95/C | 1433-C | 7.20/Ea. | 1851-C | 6.30 Ea. | 4206-C | .174/Ea. | 4754-E | 30.60/Ea. |
| 1036-B | 18.00/Ea. | 1151 | 6.00/C | 1433-M | 67.50/Ea. | 1870-D | 19.90 Ea. | 4206-M | .132 Ea. | 4754-M | 60.00/Ea. |
| 1037 | 10.50/Ea. | 1152 | 7.20/C | 1433 4-M | 174.00/Ea. | 1872-D | 19.59/Ea. | 4207-C | .27/Ea. | 4755-C | 8.10/Ea. |
| 1037-B | 13.50/Ea. | 1153 | .90/C | 1433 4-C | 18.00 Ea. | 1874-M | 41.40 Ea. | 4207-M | .203 Ea. | 4755-E | 39.00/Ea. |
| 1038 | 10.50/Ea. | 1154 | 1.08/C | 1433 6-C | 11.40 Ea. | 1874-A-E | 21.66/Ea. | 4208-C | .78/Ea. | 4755-M | 78.00/Ea. |
| 1048-B | 13.50 Ea. | 1155 | 1.20/C | 1433 6-M | 111.00/Ea. | 1875-M | 51.66 Ea. | 4208-M | .575 Ea. | 4756-C | 9.60/Ea. |
| 1039 | 10.50 Ea. | 1156 | 1.35/C | 1434-M | 3.75 Ea. | 1875-A-E | 27.00/Ea. | 4209-C | 2.76/Ea. | 4756-E | 45.60/Ea. |
| 1039-B | 13.50/Ea. | 1157 | 1.50/C | 1490-M | 18.90 Ea. | 1878-M | 66.00/Ea. | 4215-M | .072/Ea. | 4756-M | 91.20/Ea. |
| 1041 | 19.50/Ea. | 1160 | .21/Ea. | 1492-M | 27.60/Ea. | 1878-A-E | 35.01/Ea. | 4215-C | .055/Ea. | 5000 | .99 Ea. |
| 1041-B | 22.50/Ea. | 1161 | .24/Ea. | 1497-M | 47.40/Ea. | 1916-C | 5.55 Ea. | 4233 | .69/Ea. | 5002 | 1.06/Ea. |
| 1042 | 13.69/Ea. | 1162 | .27/Ea. | 1516 | 17.10 Ea. | 1916-E | 25.35 Ea. | 4234 | .75/Ea. | 5003 | 1.44/Ea. |
| 1042-B | 16.89/Ea. | 1163 | .30/Ea. | 1560-C | 8.91/Ea. | 1916-M | 49.50/Ea. | 4235 | 1.77/Ea. | 5004 | .45 Ea. |
| 1043 | 13.89/Ea. | 1164 | .21/Ea. | 1560-M | 89.10 Ea. | 1918-C | 3.60 Ea. | 4236 | 1.95/Ea. | 5005 | .51 Ea. |
| 1043-B | 16.89/Ea. | 1165 | .24 Ea. | 1562-C | 4.59/Ea. | 1918-E | 16.65 Ea. | 4237 | 2.07/Ea. | 5006 | .90 Ea. |
| 1044 | 13.89/Ea. | 1166 | .27/Ea. | 1563-M | 42.00 Ea. | 1918-M | 32.10 Ea. | 4238 | 2.70/Ea. | 5007 | .54 Ea. |
| 1044B | 16.89/Ea. | 1167 | .30/Ea. | 1566-C | 2.91/Ea. | 1920-C | 3.15 Ea. | 4275 | .42/Ea. | 5008 | .75 Ea. |
| 1045 | 120.00/Ea. | 1168 | .18 Ea. | 1567-M | 27.60 Ea. | 1920-E | 14.95 Ea. | 4275-J | .70 Ea. | 5009 | .90 Ea. |
| 1046 | 90.00/Ea. | 1169 | .15/Ea. | 1570-C | 1.98 Ea. | 1920-M | 28.50 Ea. | 4276 | .90/Ea. | 5010 | 2.55/Ea. |
| 1047 | 63.00/Ea. | 1170 | .168/Ea. | 1571-M | 18.00/Ea. | 1922-C | 2.55/Ea. | 4276-J | 1.05 Ea. | 5011 | 2.55/Ea. |
| 1048 | 162.00 Ea. | 1171 | .168/Ea. | 1574-C | 1.29 Ea. | 1922-E | 11.85 Ea. | 4450 | .83 Ea. | 5012 | 3.60/Ea. |
| 1049 | 90.00/Ea. | 1172 | .18/Ea. | 1575-M | 11.58/Ea. | 1922-M | 22.50/Ea. | 4450-J | 1.08/Ea. | 5013 | 3.60 Ea. |
| 1050 | 1.50/Ea. | 1173 | .21 Ea. | 1600-C | 8.85/Ea. | 1963 | 3.66/C | 4451 | .70 Ea. | 5040 | .14/Ea. |
| 1051-C | 2.70 Ea. | 1174 | .24 C | 1600-M | 88.20/Ea. | 1964 | 6.00 C | 4451-J | .93/Ea. | 5041 | .14/Ea. |
| 1052-M | 21.00/Ea. | 1175 | .27/Ea. | 1618-M | 9.45/Ea. | 1965 | 6.00 C | 4452 | 1.29/Ea. | 5042 | .14/Ea. |
| 1053 | .45 Ea. | 1177 | .252/Ea. | 1620-M | 6.24/Ea. | 1967 | 12.90/C | 4452-J | 1.50/Ea. | 5043 | .14/Ea. |
| 1054 | .84 Ea. | 1179 | 36.00/C | 1622-M | 4.95/Ea. | 1968 | 6.00 C | 4500-M | 12.60/Ea. | 5044 | .14/Ea. |
| 1055-C | 1.65 Ea. | 1180 | 30.00/C | 1627-M | 15.84/Ea. | 1972-C | 12.00 Ea. | 4510-E | 30.00/Ea. | 5045 | .14/Ea. |
| 1056-M | 12.60/Ea. | 1182 | 36.00/C | 1628-M | 12.90/Ea. | 1972-D | 29.40/Ea. | 4515-E | 33.60 Ea. | 5046 | .14/Ea. |
| 1057 | .87/Ea. | 1184 | 33.00/C | 1633-M | 16.20/Ea. | 1972-E | 58.35 Ea. | 4516-E | 37.50/Ea. | 5047 | .14/Ea. |
| 1058 | 1.74/Ea. | 1190 | 39.00/C | 1634-M | 13.50 Ea. | 1972-M | 116.70 Ea. | 4520-E | 129.00/Ea. | 5050 | .21/Ea. |
| 1059-C | 3.00/Ea. | 1192 | 54.00/C | 1638-M | 20.10/Ea. | 1972-A-C | 13.20 Ea. | 4701-C | 2.40 Ea. | 5051 | .33/Ea. |
| 1060-M | 24.00 Ea. | 1194 | 42.00 C | 1639-M | 16.35/Ea. | 1972-A-E | 64.20/Ea. | 4701-E | 10.30 Ea. | 5052 | .36/Ea. |
| 1070 (2) | 9.00 Ea. | 1220 | 9.60/Ea. | 1640 | 1.44/Ea. | 1972-M | 128.10/Ea. | 4701-M | 19.50/Ea. | 5053 | .30/Ea. |
| 1070-B | 10.80/Lb. | 1220-A | 7.50/Ea. | 1641 | 1.44 Ea. | 1973-C | 15.00 Ea. | 4701-Q | .78/Ea. | 5070 | .30/Ea. |
| 1071 (2) | 9.00/Ea. | 1260; 1261 | 15.60/C | 1643 | 1.19/Ea. | 1974-C | 18.00/Ea. | 4702-C | 3.60/Ea. | 5071 | .30/Ea. |
| 1071-B | 11.10/Lb. | 1262 | 15.00/C | 1644 | 1.33/Ea. | 1975-C | 21.00/Ea. | 4702-E | 15.00/Ea. | 5075 | .18/Ea. |
| 1072 (2) | 9.60/Ea. | 1263 | 26.40/C | 1646 | .97/Ea. | 1976-C | 24.00/Ea. | 4702-M | 30.00/Ea. | 5076 | .18/Ea. |
| 1072 1B | 11.85/Lb. | 1264 | 30.00 C | 1647-M | 10.29 Ea. | 2000-M | 9.06 Ea. | 4702-Q | 1.26/Ea. | 5080 | .30/Ea. |
| 1072-B | 11.40/Lb. | 1265 | 36.00/C | 1648-M | 9.15/Ea. | 2010 | 9.18 Ea. | 4703-C | 4.80 Ea. | 5081 | .30/Ea. |
| 1073 (4) | 1.77/Ea. | 1266 | 41.40/C | 1670-C | 1.80/Ea. | 2012 | 7.62/Ea. | 4703-E | 21.00/Ea. | 5085 | .30/Ea. |
| 1074 (2) | 3.09/Ea. | 1352 | 2.40 C | 1671-C | 2.16 Ea. | 2013 | 6.54 Ea. | 4703-M | 42.00/Ea. | 5086 | .30/Ea. |
| 1075 (2) | 5.85/Ea. | 1352-A | | | | | | | | | |

Birnbach PRICE LIST

| Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price |
|----------|-------------------|----------|-------------------|----------|-------------------|----------|-------------------|------------|-------------------|----------|-------------------|
| 5110 | \$.36/Ea. | 5392 | \$1.68/Ea. | 6215 | \$1.74/Ea. | 6324 | \$4.80/M | 6476 | \$2.40/Gr. | 6569 | \$31.20/M |
| 5111 | .36/Ea. | 5393 | 1.68/Ea. | 6216 | 1.62/Ea. | 6325 | 5.19/Gr. | 6477 | 1.98/Gr. | 6570 | 18.60/C |
| 5130 | .12/Ea. | 5394 | 1.95/Ea. | 6217 | 1.98/Ea. | 6326 | 5.58/M | 6478 | 1.98/Gr. | 6570 | 177.00/M |
| 5131 | .12/Ea. | 5395 | 1.95/Ea. | 6220 | .69/Ea. | 6327 | 6.60/M | 6479 | 2.88/M | 6571 | 18.60/C |
| 5132 | .15/Ea. | 5396 | 1.95/Ea. | 6221 | .87/Ea. | 6328 | 6.90/M | 6480 | 3.30/M | 6571 | 177.00/M |
| 5133 | .15/Ea. | 5400 | 3.87/Ea. | 6221-A | .93/Ea. | 6329 | 9.90/M | 6480-A | 2.88/M | 6572 | 3.60/C |
| 5134 | .15/Ea. | 5401 | 4.62/Ea. | 6222 | 1.26/Ea. | 6330 | 5.40/M | 6481 | 3.60/M | 6572 | 30.00/M |
| 5140 | .15/Ea. | 5402 | 4.62/Ea. | 6223 | 1.44/Ea. | 6331 | 5.40/M | 6482 | 5.46/M | 6572-A | 3.60/C |
| 5141 | .24/Ea. | 5410 | 4.98/Ea. | 6224 | .96/Ea. | 6332 | 5.16/M | 6483 | 9.00/M | 6572-A | 30.00/M |
| 5142 | .15/Ea. | 5411 | 4.44/Ea. | 6225 | 1.32/Ea. | 6333 | 5.28/M | 6484 | 2.97/M | 6572-B | 3.60/C |
| 5143 | .36/Ea. | 5412 | 6.69/Ea. | 6225-A | 1.32/Ea. | 6334 | 5.82/M | 6485 | 2.79/M | 6572-B | 30.00/M |
| 5160 | .14/Ea. | 5413 | 6.24/Ea. | 6225-B | 1.32/Ea. | 6335 | 6.90/M | 6486 | 3.12/M | 6573 | 24.60/C |
| 5161 | .15/Ea. | 5414 | 5.67/Ea. | 6225-C | 1.32/Ea. | 6336 | 12.00/M | 6487 | 3.12/M | 6573 | 222.00/M |
| 5165 | .18/Ea. | 5415 | 6.24/Ea. | 6226 | 1.98/Ea. | 6337 | 16.50/M | 6488 | 4.50/M | 6573-A | 24.60/C |
| 5166 | .18/Ea. | 5416 | 5.67/Ea. | 6227 | 4.89/Ea. | 6337-A | 12.00/M | 6490 | 3.30/M | 6573-A | 222.00/M |
| 5170 | .30/Ea. | 5417 | 7.47/Ea. | 6228 | 7.53/Ea. | 6338 | 21.00/M | 6491 | 3.30/M | 6574 | 13.50/C |
| 5171 | .18/Ea. | 5418 | 7.47/Ea. | 6229 | 10.05/Ea. | 6339 | 30.00/M | 6492 | 3.60/M | 6574 | 117.90/M |
| 5180 | .33/Ea. | 5420 | 4.95/Ea. | 6230 | 1.53/Ea. | 6350 | 6.00/M | 6493 | 4.65/M | 6575 | 16.20/C |
| 5181 | .33/Ea. | 5421 | 4.56/Ea. | 6231 | 1.86/Ea. | 6350-A | 6.00/M | 6494 | 7.80/M | 6575 | 147.00/M |
| 5185 | .18/Ea. | 5422 | 6.18/Ea. | 6231-A | 1.86/Ea. | 6351 | 6.00/M | 6494/1 | 7.80/M | 6576 | 16.20/C |
| 5190 | .10/Ea. | 5423 | 5.61/Ea. | 6231-B | 2.07/Ea. | 6351-A | 6.00/M | 6494/2 | 7.80/M | 6576 | 147.00/M |
| 5191 | .10/Ea. | 5424 | 6.18/Ea. | 6232 | .24/Ea. | 6352 | 6.00/M | 6500 | 1.20/Gr. | 6577 | 16.35/C |
| 5195 | .33/Ea. | 5425 | 5.61/Ea. | 6233 | .77/Ea. | 6352-A | 6.00/M | 6501 | 1.50/Gr. | 6577 | 143.40/M |
| 5200 | .33/Ea. | 5426 | 6.69/Ea. | 6234 | .83/Ea. | 6353 | 6.60/M | 6502 | 1.65/Gr. | 6578 | 21.00/C |
| 5201 | .33/Ea. | 5427 | 6.33/Ea. | 6235 | 1.07/Ea. | 6353-A | 6.60/M | 6503 | 1.83/Gr. | 6578 | 195.00/M |
| 5300 | .69/Ea. | 5428 | 6.69/Ea. | 6236 | 1.43/Ea. | 6354 | 8.10/M | 6504 | 2.01/Gr. | 6579 | 21.00/C |
| 5301 | .81/Ea. | 5429 | 6.33/Ea. | 6238 | 1.98/Ea. | 6354-A | 8.10/M | 6505 | 2.16/Gr. | 6579 | 195.00/M |
| 5302 | .87/Ea. | 5430 | 7.44/Ea. | 6238-B | 2.10/Ea. | 6355 | 4.95/M | 6506 | 2.34/Gr. | 6585 | 7.50/C |
| 5303 | .93/Ea. | 5431 | 6.90/Ea. | 6238-C | 2.10/Ea. | 6356 | 4.62/M | 6507 | 2.55/Gr. | 6585 | 60.00/M |
| 5304 | 1.26/Ea. | 5432 | 7.44/Ea. | 6238-D | 1.98/Ea. | 6357 | 4.62/M | 6510 | 1.65/Gr. | 6586 | 7.50/C |
| 5305 | 1.38/Ea. | 5433 | 6.90/Ea. | 6239 | 6.00/C | 6358 | 3.30/M | 6511 | 1.68/Gr. | 6586 | 60.00/M |
| 5306 | 1.44/Ea. | 5434 | 7.44/Ea. | 6240 | 1.50/Ea. | 6359 | 3.30/M | 6512 | 1.92/Gr. | 6587 | 7.50/C |
| 5307 | 1.56/Ea. | 5435 | 6.90/Ea. | 6241 | 1.32/Ea. | 6360 | 3.45/M | 6513 | 1.92/Gr. | 6587 | 60.00/M |
| 5308 | .84/Ea. | 5460 | 9.45/Ea. | 6242 | 2.07/Ea. | 6361 | 3.60/M | 6514 | 1.92/Gr. | 6588 | 7.20/C |
| 5309 | .96/Ea. | 5461 | 9.45/Ea. | 6244 | .78/Ea. | 6362 | 4.65/M | 6515 | 2.01/Gr. | 6588 | 57.00/M |
| 5310 | 1.11/Ea. | 5462 | 9.45/Ea. | 6244-A | .78/Ea. | 6363 | 7.80/M | 6516 | 2.10/Gr. | 6589 | 7.50/C |
| 5311 | 1.65/Ea. | 5463 | 9.45/Ea. | 6244-B | .99/Ea. | 6400 | 6.00/M | 6517 | 2.16/Gr. | 6589 | 60.00/M |
| 5312 | 1.89/Ea. | 5464 | 9.45/Ea. | 6244-C | .99/Ea. | 6401 | 7.20/M | 6518 | 1.92/Gr. | 6590 | 7.65/C |
| 5313 | 2.01/Ea. | 5465 | 9.45/Ea. | 6244-D | 1.02/Ea. | 6402 | 7.95/M | 6519 | 2.34/Gr. | 6590 | 63.00/M |
| 5314 | .69/Ea. | 5466 | 9.45/Ea. | 6244-E | 1.02/Ea. | 6403 | 9.60/M | 6525; 6526 | .93/Gr. | 6592 | 1.80/C |
| 5315 | .81/Ea. | 5470 | 12.90/Ea. | 6245 | .15/Ea. | 6404 | 11.70/M | 6527 | .93/Gr. | 6592 | 15.00/M |
| 5316 | 1.05/Ea. | 5471 | 12.90/Ea. | 6245-S | 24.00/C | 6405 | 8.40/M | 6528 | .93/Gr. | 6593 | 1.80/C |
| 5317 | 1.23/Ea. | 5472 | 12.90/Ea. | 6246 | .15/Ea. | 6406 | 8.40/M | 6529; 6530 | .93/Gr. | 6593 | 15.00/M |
| 5318 | 2.19/Ea. | 5473 | 12.90/Ea. | 6246-S | 28.80/C | 6407 | 9.00/M | 6531 | .93/Gr. | 6594 | 1.86/C |
| 5319 | 2.70/Ea. | 5474 | 12.90/Ea. | 6247 | .22/Ea. | 6408 | 9.90/M | 6532; 6533 | .93/Gr. | 6594 | 15.60/M |
| 5320 | .81/Ea. | 5475 | 12.90/Ea. | 6248 | .22/Ea. | 6409 | 11.40/M | 6534 | 2.01/Gr. | 6595 | 2.04/C |
| 5321 | .96/Ea. | 5476 | 12.90/Ea. | 6249 | 1.47/Ea. | 6410 | 15.84/M | 6540 | 1.83/Gr. | 6595 | 16.80/M |
| 5322 | 1.26/Ea. | 5480 K1 | 6.06/Ea. | 6250 | 1.23/Ea. | 6410-A | 17.70/M | 6541 | 1.59/Gr. | 6596 | 2.22/C |
| 5323 | 1.56/Ea. | 5480 K2 | 6.84/Ea. | 6251 | 1.40/Ea. | 6411 | 18.00/M | 6542 | 2.25/Gr. | 6596 | 18.00/M |
| 5324 | 2.55/Ea. | 5480 K3 | 6.84/Ea. | 6251-C | 1.62/Ea. | 6412 | 20.10/M | 6543 | 2.34/Gr. | 6597 | 3.00/C |
| 5325 | 3.24/Ea. | 5480 K4 | 6.06/Ea. | 6251-C | 1.44/Ea. | 6413 | 11.70/M | 6549 | 21.00/M | 6597 | 26.40/M |
| 5326 | .96/Ea. | 5480 K5 | 6.06/Ea. | 6252 | 1.77/Ea. | 6414 | 12.90/M | 6549-A | 21.00/M | 6600 | 3.60/M |
| 5327 | 1.08/Ea. | 5480 K6 | 6.84/Ea. | 6252-M | 2.13/Ea. | 6415 | 15.00/M | 6549-B | 22.20/M | 6601 | 4.20/M |
| 5328 | 1.08/Ea. | 5480 K7 | 6.06/Ea. | 6253 | 1.92/Ea. | 6416 | 17.10/M | 6549-C | 24.00/M | 6602 | 4.80/M |
| 5329 | .81/Ea. | 5481 K1 | 7.56/Ea. | 6261 | 1.68/Ea. | 6417 | 21.00/M | 6549-D | 27.00/M | 6603 | 5.85/M |
| 5330 | 1.26/Ea. | 5481 K2 | 8.82/Ea. | 6262 | 1.89/Ea. | 6418 | 21.60/M | 6550 | 3.78/C | 6604 | 4.80/M |
| 5331 | 2.70/Ea. | 5481 K3 | 8.82/Ea. | 6263 | 2.07/Ea. | 6420 | 4.05/M | 6550 | 33.90/M | 6605 | 5.85/M |
| 5332 | .96/Ea. | 5481 K4 | 7.56/Ea. | 6270 | 1.26/Ea. | 6421 | 4.38/M | 6551 | 3.78/C | 6606 | 6.15/M |
| 5333 | 1.56/Ea. | 5481 K5 | 7.56/Ea. | 6271 | 1.47/Ea. | 6422 | 4.65/M | 6551 | 33.90/M | 6607 | 7.35/M |
| 5334 | 3.24/Ea. | 5481 K6 | 8.82/Ea. | 6272 | 1.50/Ea. | 6423 | 4.95/M | 6551-A | 3.78/C | 6608 | 5.85/M |
| 5335 | .84/Ea. | 5481 K7 | 7.56/Ea. | 6273 | 1.68/Ea. | 6424 | 5.25/M | 6551-A | 33.90/M | 6609 | 6.15/M |
| 5336 | .96/Ea. | 6100 | .39/Ea. | 6274 | 1.68/Ea. | 6425 | 6.00/M | 6552 | 3.45/C | 6610 | 7.20/M |
| 5337 | .48/Ea. | 6102 | .42/Ea. | 6280 | .93/Ea. | 6426 | 5.01/M | 6552 | 31.20/M | 6611 | 7.20/M |
| 5338 | .54/Ea. | 6103 | .50/Ea. | 6280-A | 1.32/Ea. | 6427 | 4.96/M | 6552-A | 3.45/C | 6611-A | 8.20/M |
| 5339 | .36/Ea. | 6104 | .53/Ea. | 6281 | 1.11/Ea. | 6428 | 5.76/M | 6552-A | 31.20/M | 6612 | 6.60/M |
| 5340 | .39/Ea. | 6105 | 1.86/Ea. | 6281-A | 1.50/Ea. | 6429 | 6.00/M | 6552-B | 3.45/C | 6613 | 6.60/M |
| 5341 | 1.32/Ea. | 6110 | 1.32/Ea. | 6282 | 1.35/Ea. | 6430 | 6.69/M | 6552-B | 31.20/M | 6614 | 7.20/M |
| 5342 | 1.32/Ea. | 6111 | 1.50/Ea. | 6282-A | 1.89/Ea. | 6431 | 7.59/M | 6553 | 3.36/C | 6614 | 3.60/C |
| 5343 | 2.31/Ea. | 6112 | 1.89/Ea. | 6283 | 1.56/Ea. | 6432 | 9.90/M | 6553 | 30.60/M | 6640 | 32.40/M |
| 5344 | 2.31/Ea. | 6113 | 2.07/Ea. | 6283-A | 2.07/Ea. | 6433 | 5.76/M | 6554 | 3.36/C | 6640-A | 3.60/C |
| 5345 | 3.24/Ea. | 6114 | .21/Ea. | 6284 | 1.14/Ea. | 6434 | 6.00/M | 6554 | 30.60/M | 6640-A | 32.40/M |
| 5346 | 4.29/Ea. | 6115 | .21/Ea. | 6300 | 3.75/M | 6435 | 6.72/M | 6555 | 3.36/C | 6640-B | 3.60/C |
| 5347 | 5.16/Ea. | 6180 | 1.53/Ea. | 6301 | 4.05/M | 6436 | 7.50/M | 6555 | 30.60/M | 6640-B | 32.40/M |
| 5360 | 1.68/Ea. | 6184 | 1.35/Ea. | 6302 | 4.20/M | 6437 | 7.95/M | 6556 | 3.36/C | 6641 | 3.75/C |
| 5361 | 1.86/Ea. | 6184-A | 1.35/Ea. | 6303 | 4.86/M | 6438 | 9.00/M | 6556 | 30.60/M | 6641 | 33.30/M |
| 5362 | 1.86/Ea. | 6185 | 1.56/Ea. | 6304 | 4.20/M | 6439 | 11.40/M | 6557 | 3.45/C | 6641-A | 3.75/C |
| 5363 | 2.04/Ea. | 6185-A | 1.56/Ea. | 6305 | 4.50/M | 6440 | 6.18/M | 6557 | 31.20/M | 6641-A | 33.30/M |
| 5364 | 2.04/Ea. | 6186 | 1.86/Ea. | 6306 | 5.10/M | 6441 | 7.20/M | 6558 | 3.45/C | 6641-B | 3.75/C |
| 5365 | 2.19/Ea. | 6190 | 1.11/Ea. | 6307 | 4.44/M | 6442 | 6.18/M | 6558 | 31.20/M | 6641-B | 33.30/M |
| 5366 | 2.19/Ea. | 6191 | 1.11/Ea. | 6308 | 4.44/M | 6443 | 9.90/M | 6559 | 3.45/C | 6643 | 3.30/C |
| 5367 | 2.19/Ea. | 6192 | 1.29/Ea. | 6309 | 5.04/M | 6444 | 11.10/M | 6559 | 31.20/M | 6643 | 30.00/M |
| 5370 | 1.26/Ea. | 6193 | 1.68/Ea. | 6310 | 19.20/M | 6445 | 9.54/M | 6560 | 3.45/C | 6643-A | 3.30/C |
| 5371 | 1.38/Ea. | 6194 | 1.68/Ea. | 6311 | 39.00/M | 6446 | 12.60/M | 6560 | 31.20/M | 6643-A | 30.00/M |
| 5372 | 1.38/Ea. | 6195 | 1.86/Ea. | 6312 | 6.30/M | 6447 | 16.50/M | 6561 | 19.20/C | 6643-B | 3.30/C |
| 5373 | 1.47/Ea. | 6200 | .69/Ea. | 6313 | 6.45/M | 6448 | 5.25/M | 6561 | 177.60/M | 6643-B | 30.00/M |
| 5374 | 1.47/Ea. | 6201 | .84/Ea. | 6314 | 6.90/M | 6449 | 5.55/M | 6562 | 3.45/C | 6644 | 3.36/C |
| 5375 | 1.62/Ea. | 6202 | .87/Ea. | 6315 | 8.70/M | 6450 | 5.70/M | 6562 | 31.20/M | 6644 | 30.60/M |
| 5376 | 1.62/Ea. | 6202-A | .93/Ea. | 6316 | 15.60/M | 6460 | 2.22/Gr. | 6563 | 3.45/C | 6644-A | 3.36/C |
| 5377 | 1.62/Ea. | 6203 | 1.08/Ea. | 6317 | 17.40/M | 6461 | 2.38/Gr. | 6563 | 31.20/M | 6644-A | 30.60/M |
| 5380 | 2.25/Ea. | 6204 | 1.26/Ea. | 6318 | 19.20/M | 6462 | 2.94/Gr. | 6564 | 3.45/C | 6644-B | 3.36/C |
| 5381 | 2.70/Ea. | 6205 | 1.44/Ea. | 6318-A | 22.95/M | 6463 | 3.30/Gr. | 6564 | 31.20/M | 6644-B | 30.60/M |
| 5382 | 2.70/Ea. | 6206 | 1.44/Ea. | 6319 | 23.10/M | 6464 | 4.59/Gr. | 6565 | 3.45/C | 6646 | 3.36/C |
| 5383 | 2.70/Ea. | 6207 | 1.59/Ea. | 6319-A | 43.80/M | 6465 | 5.13/Gr. | 6565 | 31.20/M | 6646 | 30.60/M |
| 5384 | 2.70/Ea. | 6208 | .05/Ea. | 6320 | 31.20/M | 6466 | 5.64/Gr. | 6566 | 3.45/C | 6646-A | 3.36/C |
| 5385 | 2.94/Ea. | 6208-A | .05/Ea. | 6320-A | 57.00/M | 6470 | 1.38/Gr. | 6566 | 31.20/M | 6646-A | 30.60/M |
| 5386 | 2.94/Ea. | 6210 | .87/Ea. | 6320-B | 72.00/M | 6471 | 1.50/Gr. | 6567 | 3.45/C | 6646-B | 3.36/C |
| 5387 | 2.94/Ea. | 6211 | 1.17/Ea. | 6320-C | 81.60/M | 6472 | 1.56/Gr. | 6567 | 31.20/M | 6646-B | 30.60/M |
| 5390 | 1.50/Ea. | 6212 | 1.05/Ea. | 6321 | 3.75/M | 6473 | 1.32/Gr. | 6568 | 3.45/C | 6648 | 3.57/C |
| 5391 | 1.68/Ea. | 6213 | 1.38/Ea. | 6322 | 4.05/M | | | | | | |

Birnbach PRICE LIST

| Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price |
|------------|-------------------|----------|-------------------|-----------|-------------------|----------|-------------------|----------|-------------------|----------|-------------------|
| 6648-A | \$31.80/M | 7066-M | \$69.00/Ea. | 7202-1-C | \$ 1.65 Ea. | 7412-Q | \$ 1.08/Ea. | 8000-C | \$ 9.60/Ea. | 8025-C | \$492.00/Ea. |
| 6648-B | 3.57 C | 7066-1-C | 6.93 Ea. | 7203-M | 18.15/Ea. | 7418-M | 36.30 Ea. | 8000 50' | 6.00/Ea. | 8025 50' | 252.00/Ea. |
| 6650 | 31.80 M | 7067-M | 51.00/Ea. | 7203-1-C | 2.19 Ea. | 7418-1-C | 4.62 Ea. | 8000 25' | 3.60/Ea. | 8025 25' | 126.90/Ea. |
| 6650 | 3.36 C | 7067-1-C | 5.34 Ea. | 7204-M | 16.05/Ea. | 7428-M | 56.10 Ea. | 8001-M | 102.80/Ea. | 8026-M | 5205.00/Ea. |
| 6650-A | 30.60 M | 7068-M | 42.00 Ea. | 7204-1-C | 1.89 Ea. | 7428-1-C | 5.94 Ea. | 8001-E | 55.80/Ea. | 8026-E | 2602.50/Ea. |
| 6650-A | 3.36 C | 7068-1-C | 4.14 Ea. | 7205-M | 23.55/Ea. | 7448-M | 67.50/Ea. | 8001-C | 12.00/Ea. | 8026-C | 526.00/Ea. |
| 6650-A | 30.60 M | 7070-M | 35.10/Ea. | 7205-1-C | 2.76 Ea. | 7448-C | 6.90/Ea. | 8001 50' | 6.60/Ea. | 8026 50' | 269.25/Ea. |
| 6650-B | 3.36 C | 7070-1-C | 3.99 Ea. | 7207-M | 31.65/Ea. | 7449-M | 81.00/Ea. | 8001 25' | 3.90/Ea. | 8026 25' | 135.30/Ea. |
| 6650-B | 30.60 M | 7072-M | 30.00/Ea. | 7207-1-C | 3.60/Ea. | 7449-1-C | 10.50/Ea. | 8002-M | 159.00/Ea. | 8027-M | 6750.00/Ea. |
| 7000-M | 6.36/Ea. | 7072-1-C | 3.60/Ea. | 7210-M | 105.00/Ea. | 7458-M | 126.00/Ea. | 8002-E | 81.90/Ea. | 8027-E | 3375.00/Ea. |
| 7000-1-C | .80/Ea. | 7074-M | 29.70/Ea. | 7210-1-C | 12.30 Ea. | 7458-1-C | 13.20/Ea. | 8002-C | 17.10/Ea. | 8027-C | 681.30/Ea. |
| 7001-M | 7.98 Ea. | 7074-1-C | 3.30 Ea. | 7212-M | 70.20/Ea. | 7524-E | 4.50/Ea. | 8002 50' | 9.00/Ea. | 8027 50' | 346.65/Ea. |
| 7001-C | .96 Ea. | 7080 | 1.01/Ea. | 7212-1-C | 7.26 Ea. | 7524-M | 8.70/Ea. | 8002 25' | 4.80/Ea. | 8027 25' | 174.00/Ea. |
| 7001-S-M | 9.09/Ea. | 7081 | 1.01/Ea. | 7214-M | 44.10 Ea. | 7526-E | 4.20 Ea. | 8003-M | 195.00/Ea. | 8028-M | 6990.00/Ea. |
| 7001-1S-C | 1.03 Ea. | 7082 | 1.26 Ea. | 7214-1-C | 4.80/Ea. | 7526-M | 8.10/Ea. | 8003-E | 99.00/Ea. | 8028-E | 705.00/Ea. |
| 7002-M | 8.49/Ea. | 7083 | 2.85 Ea. | 7216-M | 30.30/Ea. | 7527-E | 4.05 Ea. | 8003-C | 21.45/Ea. | 8028-C | 3495.00/Ea. |
| 7002-1-C | 1.02 Ea. | 7084 | 1.26/Ea. | 7216-1-C | 3.60/Ea. | 7527-M | 7.80/Ea. | 8003 50' | 11.40/Ea. | 8028 50' | 705.00/Ea. |
| 7003-M | 10.38 Ea. | 7086 | 1.26/Ea. | 7218-M | 23.70/Ea. | 7528-E | 3.90/Ea. | 8003 25' | 6.00/Ea. | 8028 25' | 180.00/Ea. |
| 7003-1-C | 1.20 Ea. | 7088 | 1.26/Ea. | 7218-1-C | 2.70/Ea. | 7528-M | 7.50/Ea. | 8004-M | 219.00/Ea. | 8029-M | 7740.00/Ea. |
| 7003-S-M | 11.49/Ea. | 7089 | 2.40 Ea. | 7220-M | 18.00/Ea. | 7529-E | 5.70/Ea. | 8004-E | 115.00/Ea. | 8029-E | 3870.00/Ea. |
| 7003-1S-C | 1.27 Ea. | 7116-M | 168.00 Ea. | 7220-1-C | 2.10/Ea. | 7529-M | 10.80/Ea. | 8004-C | 24.00/Ea. | 8029-C | 780.00/Ea. |
| 7004-M | 12.00/Ea. | 7116-1-C | 18.60/Ea. | 7222-M | 15.00/Ea. | 7530-E | 3.70/Ea. | 8004 50' | 13.20/Ea. | 8029 50' | 396.00/Ea. |
| 7004-C | 1.38 Ea. | 7118-M | 135.00/Ea. | 7222-1-C | 1.65 Ea. | 7530-M | 7.20/Ea. | 8004 25' | 7.80/Ea. | 8029 25' | 198.90/Ea. |
| 7005-M | 14.64 Ea. | 7118-1-C | 15.00 Ea. | 7224-M | 17.40/Ea. | 7532-E | 4.65/Ea. | 8005-M | 244.50 Ea. | 8514-M | 255.00/Ea. |
| 7005-1-C | 1.63 Ea. | 7120-M | 111.00/Ea. | 7224-1-C | 1.95 Ea. | 7532-M | 9.00/Ea. | 8005-E | 125.00/Ea. | 8514-1-C | 30.60/Ea. |
| 7005-S-M | 15.75 Ea. | 7121-1-C | 12.30/Ea. | 7312-M | 70.95 Ea. | 7534-E | 5.70/Ea. | 8005-C | 28.80/Ea. | 8516-M | 209.10/Ea. |
| 7005-1S-C | 1.70 Ea. | 7122-M | 75.00/Ea. | 7312-1-C | 7.59/Ea. | 7534-M | 10.80/7a. | 8005 50' | 16.32/Ea. | 8516-1-C | 25.05/Ea. |
| 7006-M | 294.00/Ea. | 7122-1-C | 8.25/Ea. | 7314-M | 54.00/Ea. | 7535-E | 18.30/Ea. | 8005 25' | 9.30/Ea. | 8518-M | 159.60/Ea. |
| 7006-1-C | 30.00/Ea. | 7124-M | 66.00/Ea. | 7314-1-C | 5.70/Ea. | 7535-M | 36.00/Ea. | 8006-M | 285.00/Ea. | 8518-1-C | 19.14/Ea. |
| 7007-M | 21.48 Ea. | 7124-1-C | 7.26/Ea. | 7316-M | 34.50/Ea. | 7536-E | 19.95/Ea. | 8006-E | 145.00/Ea. | 8520-M | 132.60/Ea. |
| 7007-1-C | 2.31 Ea. | 7126-M | 60.00/Ea. | 7316-1-C | 3.60/Ea. | 7536-M | 39.00/Ea. | 8006-C | 34.20/Ea. | 8520-C | 15.90/Ea. |
| 7008-M | 209.70/Ea. | 7126-1-C | 6.60/Ea. | 7318-M | 24.00/Ea. | 7537-E | 19.20/Ea. | 8006 50' | 19.20/Ea. | 8522-M | 103.50/Ea. |
| 7008-1-C | 21.00 Ea. | 7128-M | 45.00/Ea. | 7318-1-C | 2.61/Ea. | 7537-M | 37.50/Ea. | 8006 25' | 10.80/Ea. | 8522-C | 12.36/Ea. |
| 7009-M | 32.40 Ea. | 7128-1-C | 5.16 Ea. | 7320-M | 18.90/Ea. | 7538-E | 18.00/Ea. | 8007-M | 375.00/Ea. | 8524-M | 88.95/Ea. |
| 7009-1-C | 3.39 Ea. | 7130-M | 44.40/Ea. | 7320-1-C | 2.01/Ea. | 7538-M | 35.40/Ea. | 8007-E | 190.50/Ea. | 8524-1-C | 10.05/Ea. |
| 7010-M | 121.65/Ea. | 7130-1-C | 5.04 Ea. | 7322-M | 15.75/Ea. | 7542-M | 42.00/Ea. | 8007-C | 39.60/Ea. | 8526-M | 79.95/Ea. |
| 7010-1-C | 12.54 Ea. | 7170-M | 8.34 Ea. | 7322-1-C | 1.71/Ea. | 7542/3-M | 52.50/Ea. | 8007 50' | 22.05/Ea. | 8526-1-C | 9.60/Ea. |
| 7011-M | 54.00/Ea. | 7170-1-C | .96 Ea. | 7324-N-M | 10.92/Ea. | 7542/4-M | 63.00/Ea. | 8007 25' | 12.30/Ea. | 8528-M | 78.00/Ea. |
| 7011-C | 5.55/Ea. | 7170-N-M | 11.88/Ea. | 7326-M | 9.15/Ea. | 7552-M | 40.50/Ea. | 8008-M | 627.00/Ea. | 8528-1-C | 9.30/Ea. |
| 7012-M | 79.98/Ea. | 7171-M | 9.60/Ea. | 7326-1-C | 1.32/Ea. | 7552/3-M | 58.50/Ea. | 8008-E | 316.50/Ea. | 8530-M | 75.00/Ea. |
| 7012-1-C | 8.38 Ea. | 7171-1-C | 1.11/Ea. | 7326-N-M | 9.99/Ea. | 7552/4-M | 69.60/Ea. | 8008-C | 63.60/Ea. | 8530-C | 9.00/Ea. |
| 7013-M | 109.35 Ea. | 7171-N-M | 13.50/Ea. | 7328-M | 8.79/Ea. | 7571-E | 5.40/Ea. | 8008 50' | 36.90/Ea. | 8532-M | 76.20/Ea. |
| 7013-1-C | 11.28/Ea. | 7172-M | 12.00/Ea. | 7328-1-C | 1.14 Ea. | 7571-M | 9.45/Ea. | 8008 25' | 19.50/Ea. | 8532-1-C | 9.15/Ea. |
| 7014-M | 51.00/Ea. | 7172-1-C | 1.38 Ea. | 7328-N-M | 10.26/Ea. | 7572-E | 15.00/Ea. | 8009-M | 744.00/Ea. | 8534-M | 360.00/Ea. |
| 7014-C | 5.16 Ea. | 7172-N-M | 16.74 Ea. | 7330-M | 8.55/Ea. | 7572-M | 28.65/Ea. | 8009-E | 375.00/Ea. | 8534-1-C | 39.00/Ea. |
| 7015-M | 192.00/Ea. | 7173-M | 16.65/Ea. | 7330-1-C | 1.05/Ea. | 7573-E | 22.05/Ea. | 8009-C | 75.00/Ea. | 8536-M | 300.00/Ea. |
| 7015-1-C | 19.50/Ea. | 7173-1-C | 1.80/Ea. | 7330-N-M | 10.59/Ea. | 7573-M | 42.60/Ea. | 8009 50' | 44.40/Ea. | 8536-1-C | 33.00/Ea. |
| 7016-M | 33.27/Ea. | 7173-N-M | 21.18 Ea. | 7351-M | 22.05/Ea. | 7574-E | 27.90/Ea. | 8009 25' | 24.00/Ea. | 8538-M | 225.00/Ea. |
| 7016-1-C | 3.45/Ea. | 7174-M | 20.10/Ea. | 7351-1-C | 2.25/Ea. | 7574-M | 54.30/Ea. | 8010-M | 894.00/Ea. | 8538-1-C | 24.00/Ea. |
| 7017-M | 269.40/Ea. | 7174-1-C | 2.19 Ea. | 7351-NB-M | 18.30/Ea. | 7575-E | 43.50/Ea. | 8010-E | 450.00/Ea. | 8540-M | 192.00/Ea. |
| 7017-1-C | 27.00/Ea. | 7174-N-M | 27.00/Ea. | 7353-M | 24.00/Ea. | 7575-M | 78.00/Ea. | 8010-C | 90.00/Ea. | 8540-C | 21.00/Ea. |
| 7018-M | 24.42/Ea. | 7175-M | 31.65/Ea. | 7353-1-C | 2.49 Ea. | 7580-M | 81.60/Ea. | 8010 50' | 53.10/Ea. | 8542-M | 156.00/Ea. |
| 7018-1-C | 2.58 Ea. | 7175-1-C | 3.33 Ea. | 7353-NB-M | 20.29 Ea. | 7581-E | 18.90/Ea. | 8010 25' | 27.90/Ea. | 8542-1-C | 17.10/Ea. |
| 7020-M | 19.32 Ea. | 7175-N-M | 40.74 Ea. | 7355-M | 27.60 Ea. | 7581-M | 36.00/Ea. | 8011-M | 1080.00/Ea. | 8544-M | 135.00/Ea. |
| 7020-1-C | 2.07 Ea. | 7180-M | 12.00/Ea. | 7355-1-C | 2.91 Ea. | 7582-E | 27.75/Ea. | 8011-E | 544.50/Ea. | 8544-1-C | 14.40/Ea. |
| 7022-M | 15.90/Ea. | 7180-1-C | 1.44 Ea. | 7355-NB-M | 25.44 Ea. | 7582-M | 53.40/Ea. | 8011-C | 108.90/Ea. | 8546-M | 105.00/Ea. |
| 7022-1-C | 1.74 Ea. | 7181-M | 14.70 Ea. | 7357-M | 39.00/Ea. | 7583-E | 34.95/Ea. | 8011 50' | 60.90/Ea. | 8546-1-C | 12.30/Ea. |
| 7024-M | 9.00/Ea. | 7181-C | 1.62 Ea. | 7357-1-C | 4.13 Ea. | 7583-M | 66.00/Ea. | 8011 25' | 32.60/Ea. | 8548-M | 93.00/Ea. |
| 7024-1-C | 1.02 Ea. | 7182-M | 17.70/Ea. | 7357-NB-M | 27.90/Ea. | 7584-E | 41.10/Ea. | 8012-M | 1350.00/Ea. | 8548-1-C | 10.80/Ea. |
| 7024-S-M | 10.20 Ea. | 7182-1-C | 1.92 Ea. | 7359-M | 51.00/Ea. | 7584-M | 78.00/Ea. | 8012-E | 678.00/Ea. | 8550-M | 87.00/Ea. |
| 7024-1S | 1.20/Ea. | 7183-M | 21.00/Ea. | 7359-1-C | 5.84 Ea. | 7585-E | 56.40/Ea. | 8012-C | 135.00/Ea. | 8550-1-C | 10.50/Ea. |
| 7028 | 1.80/Ea. | 7183-1-C | 2.40 Ea. | 7359-NB-M | 40.50/Ea. | 7585-M | 107.40/Ea. | 8012 50' | 74.55/Ea. | 8552-M | 87.00/Ea. |
| 7029 | 3.00/Ea. | 7184-M | 25.50 Ea. | 7361-M | 67.50 Ea. | 7610-M | 330.00/Ea. | 8012 25' | 39.00 Ea. | 8552-1-C | 10.50/Ea. |
| 7030 | 27.00/Ea. | 7184-1-C | 2.70 Ea. | 7361-1-C | 6.90 Ea. | 7610-1-C | 36.00/Ea. | 8013-M | 93.30/Ea. | 8604-M | 163.50/Ea. |
| 7032 | .57 Ea. | 7185-M | 38.40 Ea. | 7361-1-M | 96.00 Ea. | 7612-M | 192.00/Ea. | 8013-E | 48.33 Ea. | 8704 2-M | 345.00/Ea. |
| 7033 | 3.57 Ea. | 7185-1-C | 4.14 Ea. | 7361-NB-M | 54.18 Ea. | 7612-1-C | 21.00 Ea. | 8013-C | 10.20/Ea. | 8704 3-M | 495.00/Ea. |
| 7034 | 9.00/C | 7186-M | 58.65 Ea. | 7362-1-C | 10.50 Ea. | 7614-M | 150.00/Ea. | 8014-M | 93.30/Ea. | 8704 4-M | 642.00/Ea. |
| 7036 | 6.00 C | 7187-M | 75.00 Ea. | 7362-NB-M | 102.30 Ea. | 7614-1-C | 16.50 Ea. | 8014-E | 48.33/Ea. | 8704 5-M | 834.00/Ea. |
| 7037 | 6.00 C | 7188-M | 150.00/Ea. | 7363-M | 156.00/Ea. | 7616-M | 117.00/Ea. | 8014-C | 10.20 Ea. | 8705-M | 198.00/Ea. |
| 7038 | 5.40 C | 7189-M | 204.00/Ea. | 7363-1-C | 17.10 Ea. | 7616-1-C | 13.50 Ea. | 8015-M | 98.34/Ea. | 8705 2-M | 360.00/Ea. |
| 7043-1 | 4.50 C | 7190-M | 9.00 Ea. | 7364-M | 240.00 Ea. | 7618-M | 99.00 Ea. | 8015-E | 51.00 Ea. | 8705 3-M | 543.00 Ea. |
| 7043-1-1 2 | 4.65 C | 7190-1-C | 1.05 Ea. | 7365-M | 375.00 Ea. | 7618-1-C | 10.50 Ea. | 8015-C | 10.80 Ea. | 8705 4-M | 708.00 Ea. |
| 7043-2 | 4.80 C | 7190-N-M | 12.30 Ea. | 7365 00-M | 1200.00 Ea. | 7620-M | 85.50 Ea. | 8016-M | 100.50 Ea. | 8705 5-M | 894.00 Ea. |
| 7043-3 | 6.00 C | 7191-M | 8.10 Ea. | 7365 0-M | 900.00 Ea. | 7620-1-C | 9.15 Ea. | 8016-E | 52.50 Ea. | 8706-M | 263.70 Ea. |
| 7049 | .51 Ea. | 7191-1-C | .87 Ea. | 7365 2-M | 600.00 Ea. | 7622-M | 75.00 Ea. | 8016-C | 11.10 Ea. | 8706 2-M | 427.50 Ea. |
| 7049-A | .51 Ea. | 7191-N-M | 11.70 Ea. | 7371-M | 45.00 Ea. | 7622-1-C | 8.10 Ea. | 8020-M | 1800.00 Ea. | 8706 3-M | 657.00 Ea. |
| 7049-B | .51/Ea. | 7192-N-M | 8.10 Ea. | 7371-1-C | 4.98 Ea. | 7652-E | 11.40/Ea. | 8020-E | 900.00 Ea. | 8706 4-M | 756.00 Ea. |
| 7050 | .54 Ea. | 7192-1-C | .87 Ea. | 7372-M | 51.00 Ea. | 7652-M | 22.20 Ea. | 8020-C | 186.00 Ea. | 8706 5-M | 930.00 Ea. |
| 7052-M | 47.10/Ea. | 7192-N-M | 10.95/Ea. | 7372-1-M | 5.40/Fa. | 7653-E | 19.80 Ea. | 8020 50' | 99.00 Ea. | 8707-M | 180.00 Ea. |
| 7052-1-C | 4.74/Ea. | 7193-M | 7.80/Ea. | 7373-M | 55.50 Ea. | 7653-M | 39.00 Ea. | 8021-M | 2100.00/Ea. | 8707 2-M | 378.00/Ea. |
| 7053-M | 49.50/Ea. | 7193-1-C | .90/Ea. | 7373-1-C | 5.70 Ea. | 7654-E | 25.80 Ea. | 8021-C | 1050.00/Ea. | 8707 3-M | 526.50 Ea. |
| 7053-1-C | 5.10/Ea. | 7193-N-M | 10.41 Ea. | 7374-M | 82.34 Ea. | 7654-M | 51.00 Ea. | 8021 50' | 216.00/Ea. | 8707 4-M | 724.80/Ea. |
| 7054-M | 56.70/Ea. | 7194-M | 7.95 Ea. | 7374-1-C | 8.70 Ea. | 7668-E | 10.60 Ea. | 8022-M | 114.00 Ea. | 8707 5-M | 916.50/Ea. |
| 7054-1-C | 5.85 Ea. | 7194-1-C | .96 Ea. | 7375-M | 97.50 Ea. | 7668-M | 21.00 Ea. | 8022-C | 2850.00 Ea. | 8708-M | 213.00/Ea. |
| 7055-M | 69.00/Ea. | 7194-N-M | 9.72 Ea. | 7376-M | 117.00 Ea. | 7669-E | 15.00 7a. | 8022 | 1425.00 Ea. | 8708 2-M | 396.00/Ea. |
| 7055-C | 7.20 Ea. | 7195-M | 8.70/Ea. | 7389 | 117.00 Ea. | 7669-M | 30.00 Ea. | 8022-C | 291.00 Ea. | 8708 3-M | 591.00 Ea. |
| 7056-M | 91.80 Ea. | 7195-1-C | 1.02 Ea. | 7389A | 151.50 Ea. | 7670-E | 18.00 Ea. | 8022 50' | 151.50 Ea. | 8708 4-M | 792.00 Ea. |
| 7056-1-C | 9.30 Ea. | 7195-N-M | 10.80/Ea. | 7390 | 915.00 | | | | | | |

Birnback PRICE LIST

| Cat. No. | Sug. Resale Price | Cat. No. | Sug. Resale Price | Size | Ft. | Sug. Resale Price | Size | Ft. | Sug. Resale Price | Size | Ft. | Sug. Resale Price | Size | Ft. | Sug. Resale Price |
|----------------|-------------------|----------------|-------------------|------|-------|-------------------|------|-------|-------------------|------|------|-------------------|------|------|-------------------|
| 8711/3-M | \$626.00/Ea. | S-1330-CCE (5) | \$ 2.78 | 14 | 39 | \$.88 | 26 | 1280 | \$1.71 | 36 | 2551 | \$6.48 | 20 | 78 | \$.80 |
| 8711/4-M | 912.00/Ea. | S-1330-CCT (5) | 2.78 | 16 | 62 | .90 | 28 | 2030 | 1.80 | 38 | 3770 | 9.00 | 22 | 110 | .90 |
| 8711/5-M | 1119.00/Ea. | S-1330-FHE (5) | 2.57 | 18 | 99 | 1.01 | 30 | 3220 | 1.86 | 40 | 5040 | 15.98 | 24 | 134 | 1.00 |
| 8712-M | 330.00/Ea. | S-1330-FHT (5) | 2.57 | 20 | 156 | 1.07 | 32 | 5128 | 1.98 | | | | 26 | 284 | 1.12 |
| 8712/2-M | 543.00/Ea. | S-1330-SB (5) | 2.85 | 22 | 250 | 1.08 | 34 | 8150 | 2.16 | | | | 28 | 435 | 1.30 |
| 8712/3-M | 840.00/Ea. | S-1333-AB (5) | 2.49 | 24 | 399 | 1.14 | 36 | 12887 | 2.46 | | | | 30 | 641 | 1.58 |
| 8712/4-M | 1054.50/Ea. | S-1333-CCE (5) | 2.99 | 26 | 600 | 1.26 | 38 | 20492 | 2.97 | | | | 32 | 976 | 1.91 |
| 8712/5-M | 1272.00/Ea. | S-1333-CCT (5) | 2.99 | 28 | 1000 | 1.38 | 40 | 32573 | 4.05 | | | | 34 | 1365 | 2.81 |
| C-1001-1 (50) | .12 | S-1333-FHE (5) | 2.81 | 30 | 1600 | 1.44 | 42 | 51211 | 9.00 | | | | 36 | 1827 | 3.28 |
| C-1001-2 (50) | .13 | S-1333-FHT (5) | 2.81 | 32 | 2450 | 1.74 | 44 | 81819 | 13.50 | | | | 38 | 2738 | 5.76 |
| C-1001-3 (50) | .13 | S-1333-SB (5) | 3.12 | 34 | 3975 | 1.95 | | | | | | | 40 | 3405 | 8.28 |
| C-1001-4 (50) | .21 | T-6-C | 12.00 | 36 | 6400 | 2.28 | | | | | | | | | |
| D-50 | 2.97 | T-7 | .30 | 38 | 10100 | 2.84 | | | | | | | | | |
| P-1315-AB (5) | .81 | T-8 | .24 | 40 | 15850 | 3.48 | | | | | | | | | |
| P-1315-CCE (5) | 1.21 | T-10 | 4.80 | 42 | 24750 | 4.62 | | | | | | | | | |
| P-1315-CCT (5) | 1.21 | T-14 | .42 | 44 | 29000 | 7.95 | | | | | | | | | |
| P-1315-FHE (5) | 1.01 | T-14A | .48 | | | | | | | | | | | | |
| P-1315-FHT (5) | 1.01 | T-15 | 15.00 | | | | | | | | | | | | |
| P-1315-SB (5) | 1.21 | T-15A | 24.00 | 10 | 32 | \$1.61 | 10 | 8 | \$.41 | | | | | | |
| P-1318-AB (5) | 1.01 | T-15C | 1.50 | 12 | 50 | 1.61 | 12 | 12 | .41 | | | | | | |
| P-1318-CCE (5) | 1.43 | T-16 | 15.00 | 14 | 78 | 1.62 | 14 | 20 | .42 | | | | | | |
| P-1318-CCT (5) | 1.43 | T-16A | 15.00 | 16 | 124 | 1.65 | 16 | 24 | .43 | | | | | | |
| P-1318-FHE (5) | 1.22 | T-17 | 14.40 | 18 | 198 | 1.80 | 18 | 30 | .43 | | | | | | |
| P-1318-FHT (5) | 1.23 | T-17 | 14.40 | 20 | 313 | 1.89 | 20 | 40 | .43 | | | | | | |
| P-1318-SB (5) | 1.57 | T-18 | 14.40 | 22 | 501 | 2.04 | 22 | 50 | .43 | | | | | | |
| P-1321-AB (5) | 1.26 | T-19-3/4" | 5.70 | 24 | 798 | 2.16 | 24 | 80 | .44 | | | | | | |
| P-1321-CCE (5) | 1.72 | T-19-1/2" | 5.70 | 26 | 1200 | 2.34 | 26 | 127 | .48 | | | | | | |
| P-1321-CCT (5) | 1.72 | T-19-1/4" | 8.10 | 28 | 1999 | 2.55 | 28 | 163 | .77 | | | | | | |
| P-1321-FHE (5) | 1.46 | T-20 | .48 | 30 | 3200 | 2.70 | 30 | 2037 | .60 | | | | | | |
| P-1321-FHT (5) | 1.46 | T-42 | 4.20 | 32 | 4900 | 3.30 | 32 | 3221 | .66 | | | | | | |
| P-1324-AB (5) | 1.77 | T-44 | 10.80 | 34 | 7950 | 3.75 | 34 | 5132 | .78 | | | | | | |
| P-1324-CCE (5) | 1.56 | T-46 | 16.80 | 36 | 13800 | 4.35 | 36 | 12803 | 2.40 | | | | | | |
| P-1324-CCT (5) | 2.00 | T-48 | 28.80 | 38 | 20200 | 5.10 | 38 | 20455 | 3.39 | | | | | | |
| P-1324-FHE (5) | 1.78 | T-100 | 6.00 | 40 | 31700 | 6.75 | 40 | 16 | \$.75 | | | | | | |
| P-1324-FHT (5) | 1.78 | T-101 | 6.00 | 42 | 49500 | 8.70 | 42 | 25 | .76 | | | | | | |
| P-1324-SB (5) | 2.11 | T-102 | 6.00 | 44 | 58000 | 15.15 | 44 | 40 | .77 | | | | | | |
| P-1327-AB (5) | 1.84 | T-105-14 | 13.50 | | | | | | | | | | | | |
| P-1327-CCE (5) | 2.28 | T-105-16 | 13.50 | | | | | | | | | | | | |
| P-1327-CCT (5) | 2.28 | T-105-16R | 13.50 | | | | | | | | | | | | |
| P-1327-FHE (5) | 2.04 | T-105-17 | 13.50 | | | | | | | | | | | | |
| P-1327-FHT (5) | 2.04 | T-105-19R | 16.50 | | | | | | | | | | | | |
| P-1330-AB (5) | 2.10 | T-105-20 | 16.50 | | | | | | | | | | | | |
| P-1330-CCE (5) | 2.62 | T-105-21 | 16.50 | | | | | | | | | | | | |
| P-1330-CCT (5) | 2.62 | T-105-24 | 25.50 | | | | | | | | | | | | |
| P-1330-FHE (5) | 2.42 | T-105-27 | 25.50 | | | | | | | | | | | | |
| P-1330-FHT (5) | 2.42 | T-250 | 9.60 | | | | | | | | | | | | |
| P-1330-SB (5) | 2.70 | T-251 | 12.00 | | | | | | | | | | | | |
| P-1333-AB (5) | 2.38 | T-669 | 10.20 | | | | | | | | | | | | |
| P-1333-CCE (5) | 2.86 | TK-1 | 49.50 | | | | | | | | | | | | |
| P-1333-CCT (5) | 2.86 | TK-2 | 45.50 | | | | | | | | | | | | |
| P-1333-FHE (5) | 2.73 | | | | | | | | | | | | | | |
| P-1333-FHT (5) | 2.73 | | | | | | | | | | | | | | |
| P-1338-AB (5) | 3.36 | | | | | | | | | | | | | | |
| R-100 | .94 | | | | | | | | | | | | | | |
| S-1315-AB (5) | 1.34 | | | | | | | | | | | | | | |
| S-1315-CCE (5) | 1.34 | | | | | | | | | | | | | | |
| S-1315-CCT (5) | 1.34 | | | | | | | | | | | | | | |
| S-1315-FHE (5) | 1.14 | | | | | | | | | | | | | | |
| S-1315-FHT (5) | 1.14 | | | | | | | | | | | | | | |
| S-1318-AB (5) | 1.37 | | | | | | | | | | | | | | |
| S-1318-CCE (5) | 1.56 | | | | | | | | | | | | | | |
| S-1318-CCT (5) | 1.56 | | | | | | | | | | | | | | |
| S-1318-FHE (5) | 1.35 | | | | | | | | | | | | | | |
| S-1318-FHT (5) | 1.35 | | | | | | | | | | | | | | |
| S-1318-SB (5) | 1.64 | | | | | | | | | | | | | | |
| S-1321-AB (5) | 1.40 | | | | | | | | | | | | | | |
| S-1321-CCE (5) | 1.79 | | | | | | | | | | | | | | |
| S-1321-CCT (5) | 1.79 | | | | | | | | | | | | | | |
| S-1321-FHE (5) | 1.58 | | | | | | | | | | | | | | |
| S-1321-FHT (5) | 1.58 | | | | | | | | | | | | | | |
| S-1321-SB (5) | 1.91 | | | | | | | | | | | | | | |
| S-1324-AB (5) | 1.67 | | | | | | | | | | | | | | |
| S-1324-CCE (5) | 2.12 | | | | | | | | | | | | | | |
| S-1324-CCT (5) | 2.12 | | | | | | | | | | | | | | |
| S-1324-FHE (5) | 1.90 | | | | | | | | | | | | | | |
| S-1324-FHT (5) | 1.90 | | | | | | | | | | | | | | |
| S-1324-SB (5) | 2.24 | | | | | | | | | | | | | | |
| S-1327-AB (5) | 1.95 | | | | | | | | | | | | | | |
| S-1327-CCE (5) | 2.39 | | | | | | | | | | | | | | |
| S-1327-CCT (5) | 2.39 | | | | | | | | | | | | | | |
| S-1327-FHE (5) | 2.23 | | | | | | | | | | | | | | |
| S-1327-FHT (5) | 2.23 | | | | | | | | | | | | | | |
| S-1327-SB (5) | 2.51 | | | | | | | | | | | | | | |
| S-1330-AB (5) | 2.26 | | | | | | | | | | | | | | |

CONDUCTOR COLOR CODE CHART FOR PAIRED INTERCOMMUNICATING CABLES ON PAGE 1611

| Pair No. | Color | Pair No. | Color | Pair No. | Color | Pair No. | Color |
|----------|-------------------|----------|-------------------|----------|-------------------|----------|-------------------------|
| 1 | Black with Red | 11 | Red with Yellow | 21 | White with Orange | 31 | Purple with Blue |
| 2 | Black with White | 12 | Red with Brown | 22 | White with Yellow | 32 | Purple with Brown |
| 3 | Black with Green | 13 | Red with Orange | 23 | Blue with Brown | 33 | Purple with Yellow |
| 4 | Black with Blue | 14 | Green with Blue | 24 | Blue with Orange | 34 | Purple with Orange |
| 5 | Black with Brown | 15 | Green with White | 25 | Blue with Yellow | 35 | Purple with Slate |
| 6 | Black with Yellow | 16 | Green with Brown | 26 | Brown with Orange | 36 | Purple with Black |
| 7 | Black with Orange | 17 | Green with Orange | 27 | Brown with Yellow | 37 | Slate with Red |
| 8 | Red with Green | 18 | Green with Yellow | 28 | Purple with Red | 38 | Slate with White |
| 9 | Red with White | 19 | White with Blue | 29 | Purple with White | 39 | Slate with Green |
| 10 | Red with Blue | 20 | White with Brown | 30 | Purple with Green | 40 | Slate with Blue |
| | | | | | | 41 | Slate with Brown |
| | | | | | | 42 | Slate with Yellow |
| | | | | | | 43 | Slate with Orange |
| | | | | | | 44 | Slate with Black |
| | | | | | | 45 | White/Black with Red |
| | | | | | | 46 | White/Black with Green |
| | | | | | | 47 | White/Black with Blue |
| | | | | | | 48 | White/Black with Brown |
| | | | | | | 49 | White/Black with Yellow |
| | | | | | | 50 | White/Black with Orange |
| | | | | | | 51 | White/Black with Purple |

BRADY PERMA-CODE

wire and cable marking sleeves

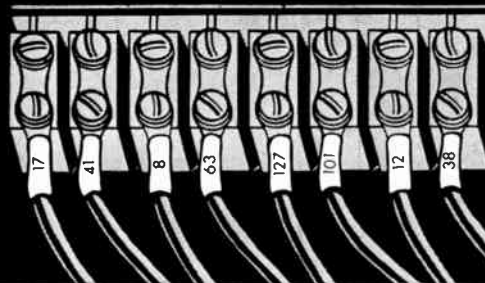
61

127

062907

34

65721348



STOCK PRINTED PERMA-CODE SLEEVES

FURNISHED 50 IDENTICAL SLEEVES
TO STANDARD PACKAGE

Now you can order pre-cut sleeves for insulating and marking wires and cables FROM STOCK . . . Get fast delivery on a wide range of sizes and numerical legends on standard MIL-spec material.

Stock Perma-Code Sleeves are made from Brady Type R B-PVC-10 Polyvinyl Chloride tubing. (See chart below.) Conform to MIL-1-631C and industry specifications. Furnished white sleeve with black printing on sizes through size #2 . . . black sleeve with white printing on 5/16" and 3/8" sizes . Numbers printed on two sides of sleeve. Numerical legends 1 through 127 conform to new IPCEA-NEMA specifications as listed in Table 53, publication UC-30-1961 for identification of control cables. (Numbers provide direct reading from wire list on print . . . conversion to 2 or 3 color code is unnecessary.) Stocked in ten most-used sizes as listed in table at right.

| SLEEVE SIZE | INSIDE DIA. | LENGTH | PRINTING ON MARKERS | BRADY STOCK NOS. | LIST PRICE (See Discount Schedule Below) |
|-------------|-------------|--------|---------------------|--------------------------|--|
| #16 | .053" | 1/2" | 1 thru 127 | PMS-16-1 thru PMS-16-127 | \$0.90/pkg. |
| #14 | .066" | 1/2" | 1 thru 127 | PMS-14-1 thru PMS-14-127 | .90/pkg. |
| #12 | .085" | 1/2" | 1 thru 127 | PMS-12-1 thru PMS-12-127 | .90/pkg. |
| #10 | .106" | 1/2" | 1 thru 127 | PMS-10-1 thru PMS-10-127 | .90/pkg. |
| #8 | .133" | 1/2" | 1 thru 127 | PMS-08-1 thru PMS-08-127 | .95/pkg. |
| #6 | .166" | 1/2" | 1 thru 127 | PMS-06-1 thru PMS-06-127 | .95/pkg. |
| #4 | .208" | 3/4" | 1 thru 127 | PMS-04-1 thru PMS-04-127 | 1.00/pkg. |
| #2 | .263" | 3/4" | 1 thru 127 | PMS-02-1 thru PMS-02-127 | 1.00/pkg. |
| 5/16" | .312" | 3/4" | 1 thru 127 | PMS-31-1 thru PMS-31-127 | 1.10/pkg. |
| 3/8" | .375" | 3/4" | 1 thru 127 | PMS-37-1 thru PMS-37-127 | 1.15/pkg. |

1 to 4 Pkgs. List Price 25 to 49 Pkgs. 30% 100 Pkgs. and Over 40%
5 to 24 Pkgs. 20% 50 to 99 Pkgs. 35%

SPECIAL, MADE-TO-ORDER PERMA-SLEEVES—5 MATERIALS—MEET MIL SPECS

| BRADY MATERIAL DESIGNATION | MATERIAL DESCRIPTION AND APPLICATIONS | TEMP. RANGE | DIELECTRIC STRENGTH | CONFORM TO SPECIFICATIONS | SIZE RANGE |
|----------------------------|---|-------------------|---------------------|--|-----------------|
| B-PVC-10 (TYPE R) | Polyvinyl Chloride tubing for general use. Medium to high temperature rating. High resistance to heat, oil, chemicals, corrosion, fungi and abrasion. Low cost. Recommended for electronic, aircraft and electrical applications within temperature range. | +105°C. -30°C. | 800 Volts per mil | MIL-1-631C ASTM-D876 ASTM-D922 U/L Approved | #24 thru 2 1/2" |
| B-PVC-20 (TYPE R) | Polyvinyl Chloride tubing with highest quality non-migratory resinous type plasticizers. Outstanding flexibility and aging qualities. Non-corrosive. Recommended for extreme low temperature applications. | +70°C. -67°C. | 550 Volts per mil | MIL-1-7444B MIL-1-631C ASTM-D876 ASTM-D922 | #24 thru 2 1/2" |
| B-PFG-30 (TYPE R) | Plastic-impregnated Fiberglass. Sleeving remains stable in continuous operating temperatures to 130° C. . . retains color after prolonged baking cycle. Excellent chemical and abrasion resistance. Highly flexible. Chemically inert. Extremely durable . . . use where high heat resistance is indicated. | +130°C. -30°C. | 8000 Volts | MIL-1-3190B NEMA-VSI ASTM-D372 | #24 thru 1" |
| B-RCF-40 (TYPE R) | Silicone Rubber Fiberglass tubing. Braided, fiberglass base. Treated to retard fraying. Abrasion resistant silicone rubber fused to braid. Shrink, fungus and chemical resistant. Extremely flexible. Will not craze or crack in wide temperature range. Recommended for extreme temperature applications. | +200°C. -90°C. | 7000 Volts | MIL-1-3190B NEMA ASTM | #24 thru 3/4" |
| B-HST-50 (TYPE S/O) | Heat Shrinkable Sleeve Markers. (See description below.) | +150°C. | 800 Volts per mil | | #24 thru 1" |

Write for free testing samples and full information on sizes and colors of Perma-Code Sleeves available.

1274

1274

BRADY TYPE S/O HEAT SHRINKABLE PERMA-CODE SLEEVES

Provide identification, insulation and tight mechanical bond on wires, cables, splices and connections in one piece . . . in one operation. Sleeves printed one or two sides with legend of your choice. Easy to use . . . simply slip over wire and apply heat. Sleeve shrinks to predetermined size within seconds . . . conforms perfectly to irregularly shaped objects.

Made of irradiated Polyolefin. Furnished in expanded form. Shrinks to original size (ap-

proximately 1/3 smaller) in presence of 235° F. to 300° F. temperature. Once sleeve is shrunk, it remains stable in prolonged exposure to these temperatures.

Sleeves are highly resistant to oils, fuels, hydraulic oils and chemicals. Flame retardant, 800 v. per mil dielectric strength. Non-corrosive. Furnished in 20 sizes, #24 thru 1". WRITE FOR BULLETIN NO. 746 FOR FULL INFORMATION AND FREE TESTING SAMPLES.

W. H. **BRADY** CO.
Milwaukee

Manufacturers of: Quality Pressure-Sensitive Industrial Tape Products, Self-Bonding Nameplates, Automatic Machines for Dispensing Labels, Masks and Tape.

Est. 1914

Columbia

PERMALINE TV TRANSMISSION LINES

COLUMBIA is first to offer a television transmission line with an insulation so good that it can be **GUARANTEED IN WRITING** to give a service life far beyond the normal life of brown Polyethylene television lines. PERMALINE is a high molecular weight Polyethylene containing carbon black for maximum resistance to sunlight, which has been proven the chief factor in deterioration of ordinary television lines. The insulation value of 50 Mils of PERMALINE is equal to over 150 Mils of conventional brown Polyethylene.

Electrical characteristics of PERMALINE are very similar to Brown Polyethylene television lines but as there is no deterioration. Attenuation remains constant instead of increasing as is the case with brown Polyethylene, which becomes brittle and cracks. This is truly the first new development in television transmission lines in ten years.

25 YEAR WARRANTY

80 Mil 20 Ga. Str. PERMALINE Television Transmission Line
.080 x .395

CAT. NO.

| | |
|-------|---|
| 5050M | 1,000 Ft. Metal Spool |
| 5050D | 500 Ft. Metal Spool |
| 5050C | 100 Ft. Coil } 12 coils come packed in FREE counter |
| 5050S | 65 Ft. Coil } display |

15 YEAR WARRANTY

50 Mil 20 Ga. Str. PERMALINE Television Transmission Line
.050 x .385

CAT. NO.

| | |
|-------|---|
| 5150M | 1,000 Ft. Metal Spool |
| 5150D | 500 Ft. Metal Spool |
| 5150C | 100 Ft. Coil } 12 coils come packed in FREE counter |
| 5150S | 65 Ft. Coil } display |

Highly resistant to:

- SUNLIGHT
- MOISTURE
- FAR BELOW ZERO TEMP.
- CHEMICAL FUMES
- OIL REFINERY FUMES
- SALT AIR & SALT SPRAY
- ABRASION

Tensile Strength — 2300 lbs. per Sq. In.

Separate Warranty Certificate with every spool or package of Permaline Television Transmission Line.

PERMALINE VHF-UHF TV TRANSMISSION LINE



Since the introduction of this cable in May, 1956 it has been proven beyond any doubt that this cable has no equal for reliability over the entire range of VHF and UHF channels under the most adverse conditions, such as salt spray, sunlight, extremes of heat and cold, stress cracking, chemical fumes, whipping in high winds, etc. In many areas throughout the country where other cables have failed due to salt deposits on transmission lines, this cable has given satisfactory reception at all times. Foam polyethylene tubes provide excellent low loss dielectric and require no sealing. 22 gauge solid copperweld conductors mean high tensile strength so necessary where whipping of cable is a problem. Heavy duty jacket of high molecular weight BLACK PERMALINE POLYETHYLENE is a 'protection against all hazards. We believe this is the finest all-purpose television transmission line available today. Impedance is 270 ohms, nominal attenuation is 3.2 D/B at 500 M/C and 4.6 D/B at 900 M/C. Cable size is approximately .295 x .402.

15 Year Written Guarantee Certificate

CAT. NO.

| | |
|-------|----------------|
| 5684C | 100 Ft. Carton |
| 5684D | 500 Ft. Spool |
| 5684M | 1000 Ft. Spool |

PERMAFOAM LOW LOSS COAXIAL CABLES

PERMAFOAM is a new type of coaxial cable for television systems, communication work, and all other co-ax applications. A foam polyethylene dielectric replaces the conventional solid polyethylene thus providing for lower capacity and attenuation. In fact, attenuation is approximately 25% lower than standard coaxial cables of same type. Overall jacket is our PERMALINE high molecular weight polyethylene. This non-contaminating jacket is unaffected by salt air, chemical fumes, damp rot, fungus, acids, alkalis, etc., and is remarkably resistant to all extreme weather conditions. Moisture resistance is so high that this insulation is now used on submarine cables. Will withstand severe temperature extremes and is immune to the deteriorating effects of sunlight and other ultra violet. Note: In addition to the PERMAFOAM cables listed below, any other RG U cable is available with a foam polyethylene dielectric on special order.

PERMAFOAM 72-75 OHM COAXIAL CABLE



| R.G. No. | Nom. Imp. | Attenuation 100 Ft. | 100 MC | Wire Size | O.D. | Spool Size | Cat. No. |
|----------|-----------|---------------------|--------|------------|------|---------------------|----------------|
| RG 59 U | 73 | 2.95 | DB. | 22 Cp.wld. | .240 | 500 Ft. 1000 Ft. | 5035D 5035M |
| RG 11 U | 75 | 1.50 | DB. | 14 Solid | .405 | 500 Ft. 1000 Ft. | 5025D 5025M |
| RG 17U | 52 | .712 | DB. | 5 Solid | .870 | 100 Ft. 500 Ft. | 5090C 5090D |

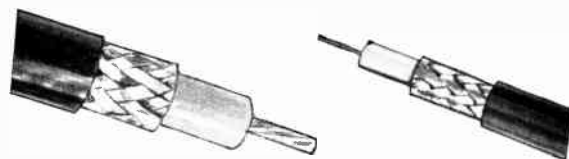
PERMAFOAM 52-53 OHM COAXIAL CABLE



| R.G. No. | Nom. Imp. | Attenuation 100 Ft. | 100 MC | Wire Size | O.D. | Spool Size | Cat. No. |
|----------|-----------|---------------------|--------|-----------|------|--------------------------------|-------------------------|
| RG 58 U | 53 | 3.10 | DB. | 20 Solid | .195 | 100 Ft. 500 Ft. 1000 Ft. | 5045C 5045D 5045M |
| RG 8 U | 52 | 1.50 | DB. | 7/21 | .405 | 100 Ft. 500 Ft. 1000 Ft. | 5015C 5015D 5015M |
| RG 17 U | 52 | .712 | DB. | 5 Solid | .870 | 100 Ft. 500 Ft. 1000 Ft. | 5090C 5090D 5090M |

COLUMBIA STANDARD COAXIAL CABLES

Premium quality standard coaxial cable. Meets all specifications. Black vinyl jacket.



| R.G. No. | Nom. Imp. | Nom. Mmfd. Ft. | Wire Size | Overall Jacket | Spool Size | Cat. No. |
|-----------|-----------|----------------|-----------|--------------------------|--------------------------------|-------------------------|
| RG 59 U | 73.0 | 21.0 | 22 C Weld | Black Vinyl .240 O.D. | 100 Ft. 500 Ft. 1000 Ft. | 1104C 1104D 1104M |
| RG 8 U | 52.0 | 29.5 | 7/21 | Black Vinyl .405 O.D. | 100 Ft. 500 Ft. 1000 Ft. | 1154C 1154D 1154M |
| RG 11 U | 75.0 | 20.5 | 7/26 | Black Vinyl .405 O.D. | 100 Ft. 500 Ft. 1000 Ft. | 1160C 1160D 1160M |
| RG 58 U | 53.5 | 28.5 | 20 Ga. | Black Vinyl .195 O.D. | 100 Ft. 500 Ft. 1000 Ft. | 1166C 1166D 1166M |
| RG 58 A/U | 50.0 | 29.0 | 19/.0068 | Black Vinyl .159 O.D. | 100 Ft. 500 Ft. 1000 Ft. | 1178C 1178D 1178M |

Long Lengths of Any Co-ax Available Upon Request

WRITE TO YOUR LOCAL PARTS DISTRIBUTOR FOR COMPLETELY ILLUSTRATED COLUMBIA WIRE & SUPPLY CO. CATALOG



FLEXFOAM ULTRA LOW CAPACITANCE MICROPHONE CABLES — EXCLUSIVE WITH COLUMBIA

Another Columbia first is a complete line of microphone cables with capacity as much as 35% lower than the best regular microphone cables available today. This drastic lowering of capacity has been made possible by the use of foamed polyethylene as the inner dielectric instead of solid polyethylene as normally used. This low capacitance means that lengths of microphone cable can be increased as much as 50%. These cables are also ideal for Hi-Fi and high quality sound work because of the extremely low attenuation, particularly at the higher audio-frequencies. The use of a special flexible vinyl as an outer jacket provides flexibility practically as good as rubber yet has much greater abrasion resistance. Color—Grey.



Also available in high gloss gleaming white jackets.

FLEXFOAM MIKE CABLE WITH BRAIDED SHIELD

| | | 250 Ft. Spool | 500 Ft. Spool |
|---------------------------|----------------|---------------|---------------|
| Crystal Size (.190" O.D.) | 16 MMF Per Ft. | No. 1399T | 1399D |
| Lapel Size (.140" O.D.) | 19 MMF Per Ft. | No. 1379T | 1379D |

FLEXFOAM MIKE CABLE WITH SPIRAL SHIELD

| | | No. 1389T | 1389D |
|---------------------------|----------------|-----------|-------|
| Crystal Size (.190" O.D.) | 16 MMF Per Ft. | No. 1389T | 1389D |
| Lapel Size (.140" O.D.) | 19 MMF Per Ft. | No. 1369T | 1369D |
| Miniature (.085" O.D.) | 35 MMF Per Ft. | No. 1359T | 1359D |

TWO CONDUCTOR PLASTIC MICROPHONE CABLE — .230 O.D.

| | | | |
|--|--------|-----------------|-------|
| 250 Ft. Spool | 22 Ga. | 16 34 Stranding | 1322T |
| 500 Ft. Spool | 22 Ga. | 16 34 Stranding | 1322D |
| Nominal Capacitance 30 MMF Per Ft. Between 1 Cond. and Remaining Cond. Connected to Shield | | | |

ECONOMY SPIRAL SHIELDED MICROPHONE CABLES

Plastic insulated with wrapped concentric spiral shield for more effective shielding. Cables are more flexible and of smaller size.



CRYSTAL MICROPHONE CABLE .160 O.D. 25 Ga. 7 x 33 Str.

| CAT. NO. | | |
|----------|---------------|-----------------------------|
| 1314T | 250 Ft. Spool | Nominal Cap. 25 MMF Per Ft. |
| 1314D | 500 Ft. Spool | Nominal Cap. 25 MMF Per Ft. |

LAPL MICROPHONE CABLE .125 O.D. 25 Ga. 7 x 33 Str.

| | | |
|-------|---------------|-----------------------------|
| 1366T | 250 Ft. Spool | Nominal Cap. 33 MMF Per Ft. |
| 1366M | 250 Ft. Spool | Nominal Cap. 33 MMF Per Ft. |

HEAVY DUTY MICROPHONE CABLE



Heavy duty studio type plastic insulated microphone cable that will withstand abrasion and rough usage.

18 Ga. Str. 41 x 34 Tinned Copper Conductors.
Jute Fillers T/C Shield
.295 O.D.

| | | CAT. NO. |
|-------------------------------------|-------------|----------|
| 100 Ft. Spool | Color—Black | 3302C |
| 500 Ft. Spool | Color—Black | 3302D |
| Nominal Capacitance 75 MMF. Per Ft. | | |

H'VY GAUGE JUKE BOX-H.F. SPKR CABLE

FOR LONG RUNS—LESS LOSS

This cable is similar to the 24 ga. juke box speaker cable listed in our general catalog, except that the 21 ga. conductors in this cable reduce the line loss to exactly half. Ridge in insulation over one conductor plus one tinned and one bare conductor provide double indication of polarity.

COLORS: Clear, Grey, Brown, White



.180" x .090"

2 COND. 21 GA. STR. 10/31

| | |
|-----------|----------------|
| No. 1360C | 100 Ft. Spool |
| No. 1360D | 500 Ft. Spool |
| No. 1360M | 1000 Ft. Spool |

COLUMBIA SUPER-FLEX

ULTRA FLEXIBLE FOAM COAXIAL CABLE

All Super-Flex Coaxial Cables have extra flexible stranded center conductors and *Flexlife* extra flexible non contaminating jackets—the same jacket as used on Columbia *Flexfoam* microphone cable. The dielectric is foam polyethylene, the same as is used on Columbia *Permafoam* Coaxial Cable. The foam polyethylene in addition to increasing the flexibility of the cable, also reduces the attenuation approximately 25%.

SUPER-FLEX RG 58 A/U



Extra flexibility is obtained by the 19/.0068 tinned copper conductor which combined with our *Flexlife* non contaminating jacket provides a remarkably limp cable. Inner dielectric is foam polyethylene for lower losses.

Impedance 50 OHMS .195 O.D.

| | |
|-----------------------|----------------------|
| No. 1188C—100' Spool | No. 1188D—500' Spool |
| No. 1188M—1000' Spool | |

SUPER-FLEX RG 8/U



An outstanding development is our new Super-Flex RG 8/U cable with much greater flexibility than any other RG 8/U heretofore available. *Flexlife* insulation in addition to being non-contaminating will not become rigid in extreme cold as is the case with ordinary Vinyls. Center conductor is 19/24 copper. Inner dielectric is low loss foam polyethylene. For use with standard RG 8/U connectors. .52 OHM impedance .405 O.D.

| | |
|-----------------------|----------------------|
| No. 1198C—100' Spool | No. 1198D—500' Spool |
| No. 1198M—1000' Spool | |

SUPER-FLEX RG 58 A/U and RG 8/U are ideal for use with citizens band equipment or any other 52 ohm application where super flexibility is desired.

SUPER-FLEX RG 59/U



Center conductor is 7 strands of 31 gauge soft copper. Regular RG 59/U has a solid copperweld conductor. Jacket is silver gray non-contaminating *Flexlife*. Dielectric is low loss foam polyethylene.

| | |
|-----------------------|----------------------|
| No. 1135C—100' Spool | No. 1135D—500' Spool |
| No. 1135M—1000' Spool | |

Available with 22 gauge solid copper weld conductor. Also available in high gloss gleaming black jackets.

WRITE TO YOUR LOCAL PARTS DISTRIBUTOR FOR COMPLETELY ILLUSTRATED COLUMBIA WIRE & SUPPLY CO. CATALOG



RG TYPE COAXIAL CABLES

| Non-Contaminating Low Temp. Black Jacket | | Vinyl & Poly. Jackets | | Armo [†] O.D. | Jacket O.D. | Vinyl Jacket | Shields | | Dielectric O.D. | Center Conductor | V.P. % | Cap. Mmfd. /Ft. | Max. Oper. Volts Rms. | Nom. Imp. Ohms |
|--|----------------|--------------------------|-------------|---------------------------|----------------|-----------------|---------|--------|--------------------|---------------------|-----------|-----------------------|--------------------------------|----------------------|
| Number RG-/U | Cat. Number | No. RG/U | Cat. No. | | | | Outer | Inner | | | | | | |
| | | 5 | 4431 | | .332 | Black | C | C | .185 | 16 | 65.9 | 28.5 | 3000 | 52.5 |
| 5B | 4432 | | | | .332 | Black | S | S | .185 | .053S | 65.9 | 29.5 | 3000 | 50 |
| 6A | 4433 | | | | .332 | Black | C | S | .185 | 21CW | 65.9 | 20. | 2700 | 75 |
| | | 7 | 4434 | | .370 | Black | — | C | .250** | 19 | 84 | 12.5 | 1000 | 97 |
| | | 8 | 4415 | | .405 | Black | — | C | .285 | 7/21 | 65.9 | 29.5 | 4000 | 52 |
| 8A | 4435 | | | | .405 | Black | — | C | .285 | 7/.0296 | 65.9 | 30.5 | 4000 | 50 |
| | | 9 | 4436 | | .420 | Grey | C | S | .280 | 7/21S | 65.9 | 30 | 4000 | 51 |
| 9A | 4437 | | | | .420 | Grey | S | S | .280 | 7/21S | 65.9 | 30 | 4000 | 51 |
| 9B | 4438 | | | | .425 | Black | S | S | .285 | 7/.0296S | 65.9 | 30.5 | 4000 | 50 |
| 10A | 4439 | | | .475 | .405 | Black | — | C | .285 | 7/.0296 | 65.9 | 30.5 | 4000 | 50 |
| | | 11 | 4419 | | .405 | Black | — | C | .285 | 7/26T | 65.9 | 20.5 | 4000 | 75 |
| 11A | 4440 | | | | .405 | Black | — | C | .285 | 7/26T | 65.9 | 20.5 | 4000 | 75 |
| 12A | 4441 | | | .475 | .405 | Black | — | C | .285 | 7/26T | 65.9 | 20.5 | 4000 | 75 |
| | | 13 | 4442 | | .425 | Black | C | C | .285 | 7/26T | 65.9 | 20.5 | 4000 | 75 |
| 13A | 4443 | | | | .425 | Black | C | C | .285 | 7/26T | 65.9 | 20.5 | 4000 | 75 |
| 14A | 4467 | | | | .545 | Grey | C | C | .370 | 10 | 65.9 | 29.5 | 5500 | 52 |
| 14A | 4468 | | | | .545 | Black | C | C | .370 | .105 | 65.9 | 30 | 5500 | 52 |
| 17A | 4482 | | | | .870 | Black | — | C | .680 | .188C | 65.9 | 29.5 | 11000 | 52 |
| 18A | 4483 | | | .945 | .870 | Black | — | C | .680 | .188C | 65.9 | 29.5 | 11000 | 52 |
| | | 21 | 4444 | | .322 | Grey | S | S | .185 | 16N | 65.9 | 29 | 2700 | 53 |
| 21A | 4445 | | | | .332 | Black | S | S | .185 | .053N | 65.9 | 30 | 2700 | 50 |
| | | 22 | 4471 | | .405 | Black | — | T | .285 | Two 7/.0152 | 65.9 | 16 | 1000 | 95 |
| 22B | 4475 | | | | .420 | Black | T | T | .285 | Two 7/.0152 | 65.9 | 16 | 1000 | 95 |
| | | 29 | 4446 | | .184 | Poly | — | T | .116 | 20 | 65.9 | 28.5 | 1900 | 53.5 |
| | | 54A | 4469 | | .250 | Poly | — | T | .178 | 7/.0152 | 65.9 | 26.5 | 3000 | 58 |
| | | 55 | 4447 | | .206 | Poly | T | T | .116 | 20 | 65.9 | 28.5 | 1900 | 53.5 |
| 55A | 4448 | | | | .216 | Black | S | S | .116 | .035S | 65.9 | 29.5 | 1900 | 50 |
| 55B | 4484 | | | | .206 | Black | T | T | .116 | 20S | 65.9 | 28.5 | 1900 | 53.5 |
| | | 58 | 4405 | | .195 | Black | — | T | .116 | 20 | 65.9 | 28.5 | 1900 | 53.5 |
| 58A | 4449 | | | | .195 | Black | — | T | .116 | 19/.0071T | 65.9 | 29.5 | 1900 | 50 |
| 58B | 4474 | | | | .195 | Black | — | T | .116 | 19/.0071T | 65.9 | 29.5 | 1900 | 50 |
| 58C | 4450 | | | | .195 | Black | — | T | .116 | 19/.0071T | 65.9 | 29.5 | 1900 | 50 |
| | | 59 | 4401 | | .242 | Black | — | C | .146 | 22CW | 65.9 | 21 | 2300 | 73 |
| | | 59 | 4402 | | .242 | Grey | — | C | .146 | 22CW | 65.9 | 21 | 2300 | 73 |
| 59A | 4451 | | | | .242 | Black | — | C | .146 | .023CW | 65.9 | 20.5 | 2300 | 75 |
| 59B | 4470 | | | | .242 | Black | — | C | .146 | .023CW | 65.9 | 20.5 | 2300 | 75 |
| | | 62 | 4452 | | .242 | Black | — | C | .146** | 22CW | 84 | 13.5 | 750 | 93 |
| 62A | 4453 | | | | .242 | Black | — | C | .146** | 22CW | 84 | 13.5 | 750 | 93 |
| 62B | 4472 | | | | .242 | Black | — | C | .146 | 22CW | 84 | 13.5 | 750 | 93 |
| | | 63 | 4454 | | .405 | Black | — | C | .285** | 22CW | 84 | 10 | 1000 | 125 |
| 63B | 4455 | | | | .405 | Black | — | C | .285** | 22CW | 84 | 10 | 1000 | 125 |
| 65A | 4473 | | | | .405 | Black | — | C | .340 | 32F | 65 | 44 | 3000 | 950 |
| | | 71 | 4456 | | .250 | Poly | T | T or C | .146** | 22CW | 84 | 13.5 | 750 | 93 |
| 71A | 4466 | | | | .245 | Black | T | T or C | .146** | 22CW | 84 | 13.5 | 750 | 93 |
| 71B | 4485 | | | | .250 | Black | T | C | .146 | 22CW | 84 | 13.5 | 750 | 93 |
| 74A | 4486 | | | .615 | .545 | Black | C | C | .370 | 10C | 65.9 | 29.5 | 7000 | 52 |
| 79B | 4487 | | | .475 | .405 | Black | — | C | .285 | 22CW | 84 | 10 | 1000 | 125 |
| | | 108 | 4464 | | .235 | Black | — | T | .079 ea. | Two 7/28T | 68 | 23.5 | 1000 | 78 |
| 108A | 4465 | | | | .235 | Black | — | T | .079 ea. | Two 7/28T | 65.9 | 23.5 | 1000 | 78 |
| 122 | 4457 | | | | .160 | Black | — | T | .096 | 27/36T | 65.9 | 29.5 | 1900 | 50 |
| 212 | 4488 | | | | .332 | Black | S | S | .185 | .0556S | 65.9 | 29.5 | 3000 | 50 |
| 213 | 4489 | | | | .405 | Black | — | C | .285 | 7X.0296C | 65.9 | 29.5 | 5000 | 50 |
| 214 | 4490 | | | | .425 | Black | S | S | .285 | 7X.0296C | 65.9 | 29.5 | 5000 | 50 |
| 215 | 4497 | | | | .475 | Black | — | C | .285 | 7/.029C | 65.9 | 29.5 | 4000 | 50 |
| 216 | 4491 | | | | .425 | Black | C | C | .285 | 7X26TC | 65.9 | 20.5 | 5000 | 75 |
| 217 | 4492 | | | | .545 | Black | C | C | .370 | .106C | 65.9 | 29.5 | 7000 | 50 |
| 218 | 4493 | | | | .870 | Black | — | C | .680 | .195C | 65.9 | 29.5 | 11000 | 50 |
| 219 | 4494 | | | .945 | .870 | Black | — | C | .680 | .195C | 65.9 | 29.5 | 11000 | 50 |
| 222 | 4495 | | | | .332 | Black | S | S | .185 | .0556N | 65.9 | 29.0 | 2700 | 50 |
| 223 | 4496 | | | | .216 | Black | S | S | .116 | .035S | 65.9 | 29.5 | 1900 | 50 |

**Semi-Solid Dielectric

N—Nichrome

C—Copper

S—Silvered Copper

CW—Copperweld

T—Tinned Copper

F—Formvar

CONSOLIDATED WIRE PAGE 3

CONSOLIDATED WIRE AND ASSOCIATED COMPANIES

SEND FOR COMPLETE CATALOG

CHICAGO, ILLINOIS



MINIATURE COAXIAL CABLE

| Non-Contaminating Low Temp. | | Jacket D.D. | Vinyl Jacket | Shields | | Dielectric D.D. | Center Conductor | V. P. % | Nom. Imp. Ohms |
|-----------------------------|----------|-------------|--------------|---------|-------|-----------------|------------------|---------|----------------|
| No. RG/U | Cat. No. | | | Outer | Inner | | | | |
| 174 | 4459 | .105 | Black | — | — | .060** | 7/.0063CW | 30 | 50 |

FOAM POLYETHYLENE COAXIAL CABLE

| Non-Contaminating Low Temperature Black Jacket | | Jacket D. D. | Vinyl Jacket | Shields | | Dielectric D. D. | Center Conductor | V. P. % | Cap. Mmfd./Ft. | Max. Oper. Volts Rms. | Nom. Imp. Ohms |
|--|----------|--------------|--------------|---------|-------|------------------|------------------|---------|----------------|-----------------------|----------------|
| No. RG/U | Cat. No. | | | Outer | Inner | | | | | | |
| 11 | 4476 | .405 | Poly | — | C | .285FP | 14 | 80 | 16.5 | 3000 | 75 |
| 8 | 4477 | .405 | Black | — | C | .285FP | 7/19 | 80 | 24.5 | 1500 | 50 |
| 59 | 4478 | .195 | Black | — | C | .107FP | 22CW | 80 | 17 | 500 | 72 |
| 62 | 4479 | .242 | Black | — | C | .146FP | .023CW | 80 | 14.5 | 700 | 93 |
| 11TRI | 4480 | .460 | Poly | C | C | .285FP | 14 | 80 | 16.5 | 3000 | 75 |
| 59TRI | 4481 | .242 | Poly | C | C | .107FP | 22CW | 80 | 17 | 500 | 72 |



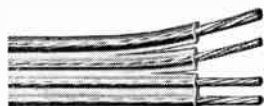
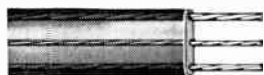
TRIAxIAL CABLE DOUBLE SHIELD DOUBLE JACKET

| Non-Contaminating Low Temp. | | Vinyl & Poly. Jackets | | Vinyl Jacket | Shields | | Dielectric D.D. | Center Conductor | Cap. Mmfd./Ft. | Max. Oper. Volts Rms. | Imp. Ohms |
|-----------------------------|----------|-----------------------|----------|--------------|---------|-------|-----------------|------------------|----------------|-----------------------|-----------|
| No. RG/U | Cat. No. | No. RG/U | Cat. No. | | Outer | Inner | | | | | |
| Triaxial 58A | 4463 | 50 | .285 | Black | T | T | .116 | 19.007IT | 65.9 | 28.5 | 1,900 |
| Triaxial 59 | 4460 | 73 | .325 | Black | C | C | .146 | 22CW | 65.9 | 21.0 | 2,300 |
| Triaxial 11 | 4461 | 75 | .460 | Black | C | C | .285 | 7 26T | 65.9 | 20.5 | 4,000 |
| Triaxial 8 | 4462 | 52 | .490 | Black | C | C | .285 | 7 21C | 65.9 | 29.5 | 4,000 |

TELEVISION CABLE

Nominal Electrical Properties

| No. | Type | Size & Stranding | Specifications and General Applications | Nominal Diameter (in.) | Freq. (mc) | Attenuation Per 100 ft. | Impedance (ohms) | Velocity of Propagation (%) | Capacitance Per Ft. (mmf) |
|------|---------------|------------------|--|------------------------|---------------------------------------|--|------------------|-----------------------------|---------------------------|
| 4500 | 2 cond. | 22 7x30 | USE: Receiving antenna at high frequencies. | .055 x .365 | 50 100 200 300 400 500 | .72 1.1 1.7 2.2 2.7 3.1 | 300 | 85 | 4.6 |
| 4503 | 2 cond. | 20 7x28 | Same as 4500 | .072 x .400 | Same as 4500 | Same as 4500 | 300 | 85 | 4.6 |
| 4504 | 2 cond. | 20 7x28 | Same as 4500 | .080 x .400 | Same as 4500 | Same as 4500 | 300 | 85 | 4.6 |
| 4506 | 2 cond. | 20 7x28 | Same as 4500 | .100 x .400 | Same as 4500 | Same as 4500 | 300 | 85 | 4.6 |
| 4527 | 2 cond. round | 20 7x28 | USE: For UHF and VHF. | .350 | | | 300 | 84 | 5.6 |
| 4507 | 3 cond. | 20 7x28 | USE: Same as 4503. | .072 x .365 | Same as 4500 | Same as 4500 | 300 | 85 | 4.6 |
| 4508 | 4 cond. | 22 7x30 | USE: Rotor Aerials. | .072 x .345 | Same as 4500 | Same as 4500 | 300 | 85 | 4.6 |
| 4509 | 4 cond. | 20 7x28 | Same as 4508 - Except brown vinyl plastic. | .072 x .400 | Same as 4500 | Same as 4500 | 300 | 85 | 4.6 |
| 4510 | 4 cond. | 20 7x28 | Same as 4508 | .072 x .400 | Same as 4500 | Same as 4508 | 300 | 85 | 4.6 |
| 4515 | 4 cond. | 22 7x30 | Color coded with gray jacket over all. USE: Rotor Aerials. | .160 | | | | | |
| 4521 | 8 cond. | 22 7x30 | Same as 4515 | 2.05 | | | | | |











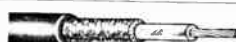


CONSOLIDATED WIRE AND ASSOCIATED COMPANIES

SEND FOR COMPLETE CATALOG

CHICAGO, ILLINOIS

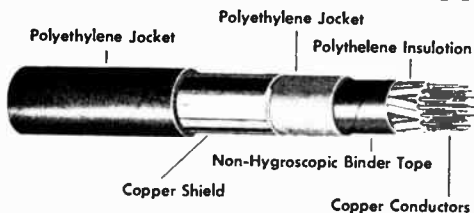
INTERCOMMUNICATING AND SOUND SYSTEM CABLES

STANDARD SPOOL PUT-UP: 10 FT., 25 FT., 50 FT., 100 FT., 500 FT., 1000 FT.

| | NO. | TYPE | Size & Stranding | INSULATION THICKNESS (INCHES) | SPECIFICATION AND GENERAL APPLICATION | NOMINAL DIAMETER (INCHES) |
|--|------|--------------------|------------------|-------------------------------|---|---------------------------|
|  STATION-TO-STATION EXTENSION WIRING SHIELDED | 5501 | 2 Condr. | 22 Solid | .015 | Tinned copper vinyl plastic insulation, wires twisted together—1 condr. red—1 condr. black—closely woven braided tinned copper shield. | .110 |
| | 5506 | 3 Condr. | 22 Solid | .015 | Same as 5504—1 condr. red—1 condr. black—1 condr. blue. | .145 |
| | 5521 | 2 Condr. | 20 Solid | .015 | Tinned copper vinyl plastic insulation, wires twisted together—1 condr. red—1 condr. black—closely woven braided tinned copper shield. | .155 |
|  EXTENSION WIRING SHIELDED—PLASTIC JACKET | 5511 | 2 Condr. | 22 Solid | .015 | Tinned copper vinyl plastic insulation, wires twisted together—1 condr. red—1 condr. black—and a spiral tinned copper shield with .020" tubed gray vinyl plastic jacket. | .170 |
|  PAIRED CABLE—SHIELDED PLASTIC JACKET | 5516 | 2 Pair 4 Condr. | 22 7x30 | .015 | Stranded tinned copper vinyl plastic insulation, 2 pair cabled (4 conductors)—1 pair black & white with braided tinned copper shield—1 pair black & brown unshielded—both pair bunched and .020" gray vinyl plastic jacket overall. | .168x.276 |
|  EXTENSION-SPEAKERS SHIELDED FOR LONG RUNS | 5526 | 2 Condr. | 20 10x30 | .015 | Tinned copper vinyl plastic insulation, wires twisted together—1 condr. red—1 condr. black—closely woven tinned copper shield. | .215 |
| | 5531 | 3 Condr. | 20 10x30 | .015 | Same as 5526—1 condr. red—1 condr. black—1 condr. blue. | .230 |
| | 5536 | 2 Condr. | 18 16x30 | .015 | Stranded tinned copper vinyl plastic insulation, wires twisted together, 1 condr. red—1 condr. white, closely woven braided tinned copper shield. | .235 |
|  EXPANSION-SPEAKERS SHIELDED—PLASTIC JACKET | 5568 | 2 Condr. | 22 7x30 | .015 | Tinned copper vinyl plastic insulation, 2 condrs.—cabled black and red—tinned copper spiral wrapped shield .023" chrome vinyl plastic jacket. | .166 |
| | 5569 | 3 Condr. | 22 7x30 | .015 | Tinned copper vinyl plastic insulation, 3 condrs.—cabled black, red, white—tinned copper spiral shield—chrome vinyl plastic jacket. | .193 |
| | 5538 | 2 Condr. | 18 16x30 | .015 | Stranded tinned copper vinyl plastic insulation, wires twisted together, 1 condr. red, 1 condr. white, spiral tinned copper shield and .020" gray vinyl plastic jacket overall. | .225 |
| | 5543 | 2 Condr. | 20 10x30 | .015 | Same as 5538 1 condr. Red, 1 condr. Black. | .185 |
| | 5541 | 2 Condr. | 18 16x30 | .015 | Stranded tinned copper vinyl plastic insulation, wires twisted together, 1 condr. red—1 condr. white, closely woven braided tinned copper shield and .020" gray vinyl plastic jacket overall. | .260 |
|  JUKE BOX SPEAKER CABLE | 5547 | 2 Condr. | 24 7x32 | .015 | Stranded 1 condr. bare copper—1 condr. tinned copper—2 condrs. parallel gray vinyl plastic insulation. Colors—brown, clear, gray, white. | .058x.115 |
|  HIGH IMPEDANCE LAPEL MICROPHONES | 5551 | 1 Condr. | 24 16x34 | .020 | Stranded (tinned copper polyethylene insulation closely woven braided tinned copper shield with .020" gray vinyl jacket. | .125 |
|  INTER COMMUNICATING SOUND SYSTEM | 5556 | 2 Condr. | 19 Solid | .015 | Bare copper vinyl plastic insulation, wires twisted together—1 condr. brown—1 condr. tan. | .115 |
| | 5561 | 3 Condr. | 19 Solid | .015 | Same as 5556—1 condr. brown—1 condr. tan—1 condr. gray. | .132 |
|  INTER COMMUNICATING WEATHER-PROOF | 5566 | 2 Condr. | 22 Solid | .015 | Bare copper .015 rubber insulation with a black cotton braid weatherproof finish. Conductors coded for easy identification. Ideal for exterior or interior communication installations. | .131x.203 |

TELEPHONE AND COMMUNICATION CABLE DIRECT BURIAL TYPE

FULLY COLOR CODED



SPECIFICATIONS

Solid bare annealed copper 22 Awg. gauge conductors; thin wall, color coded, polyethylene insulation; conductors twisted to form pairs with symmetrically varying lays to minimize cross-talk; cabled (for 6 thru 50 pairs) by stranding pairs in concentric layers, or (for 75 thru 400 pairs) by stranding pairs into concentrically formed units, which are in turn cabled to form the complete assembly; non-hygroscopic binder tape furnishing high dielectric strength between shield and individual conductors; continuous copper shielding tape; high-molecular weight, polyethylene jacket.

| NO. | NO. OF PAIRS | NO. OF COND. | COND. SIZE | NOMINAL JACKET THICKNESS, MILS | | NOMINAL O. D. (Inches) |
|------|--------------|--------------|------------|--------------------------------|-------|------------------------|
| | | | | INNER | OUTER | |
| 6006 | 6 | 12 | 22 Solid | 40 | 40 | .430 |
| 6012 | 12 | 24 | 22 Solid | 40 | 40 | .500 |
| 6018 | 18 | 36 | 22 Solid | 40 | 40 | .560 |
| 6025 | 25 | 50 | 22 Solid | 40 | 40 | .630 |
| 6050 | 50 | 100 | 22 Solid | 40 | 40 | .820 |
| 6075 | 75 | 150 | 22 Solid | 50 | 50 | .990 |
| 6100 | 100 | 200 | 22 Solid | 50 | 50 | 1.20 |
| 6150 | 150 | 300 | 22 Solid | 50 | 50 | 1.30 |
| 6200 | 200 | 400 | 22 Solid | 50 | 50 | 1.50 |
| 6300 | 300 | 600 | 22 Solid | 50 | 60 | 1.80 |
| 6400 | 400 | 800 | 22 Solid | 50 | 60 | 2.00 |

GENERAL APPLICATION AND ADVANTAGE
APPLICATION: Communication and Telephone Cable for use in direct burial installations provides a high quality product similar to that used for aerial and duct systems, but with the addition of protective armoring. This minimizes the possibility of damage to the cable from rodents and insects and, correctly installed, reduces the dangers to the cable from sharp stones and other hazards of underground burial installations.
ADVANTAGE: The lightweight, but rugged construction of direct burial Communication and Telephone Cable permits fast and economical underground installation of communication systems with the assurance of dependable and enduring service. This is made possible through utilization of the same high quality polyethylene compounds that are used in its counterpart for aerial and duct type installations, with the added protection of copper armoring tapes and a durable, high-molecular weight, polyethylene jacket.

CONSOLIDATED WIRE AND ASSOCIATED COMPANIES

SEND FOR COMPLETE CATALOG

CHICAGO, ILLINOIS



PAIRED PLASTIC CONDUCTORS

SPECIFICATIONS AND GENERAL APPLICATIONS Tinned copper conductor .010" vinyl plastic insulation. Cabled .020" gray vinyl plastic Jacket overall

| NO. | TYPE | SIZE AND STRANDING | NOMINAL DIAMETER (Inches) |
|------|------------------|--------------------|---------------------------|
| 5201 | 1 Pr. 2 Condr. | 22 Solid | .145 |
| 5205 | 2 Pr. 4 Condr. | 22 Solid | .190 |
| 5211 | 3 Pr. 6 Condr. | 22 Solid | .230 |
| 5221 | 5 Pr. 10 Condr. | 22 Solid | .250 |
| 5226 | 6 Pr. 12 Condr. | 22 Solid | .265 |
| 5231 | 7 Pr. 14 Condr. | 22 Solid | .280 |
| 5236 | 8 Pr. 16 Condr. | 22 Solid | .300 |
| 5241 | 9 Pr. 18 Condr. | 22 Solid | .320 |
| 5251 | 11 Pr. 22 Condr. | 22 Solid | .360 |
| 5271 | 15 Pr. 30 Condr. | 22 Solid | .390 |
| 5286 | 27 Pr. 54 Condr. | 22 Solid | .510 |



MULTIPLE CONDUCTORS FULLY COLOR CODED

SIZE & STRANDING 22 - 7x30 SPECIFICATION AND GENERAL APPLICATION Tinned copper conductor .010" vinyl plastic insulation. Cabled .020" gray vinyl plastic Jacket overall

| NO. | TYPE | SIZE AND STRANDING | NOMINAL DIAMETER (Inches) |
|------|-----------|--------------------|---------------------------|
| 5400 | 2 Condr. | 22 7x30 | .130 |
| 5401 | 3 Condr. | 22 7x30 | .140 |
| 5406 | 4 Condr. | 22 7x30 | .158 |
| 5411 | 5 Condr. | 22 7x30 | .170 |
| 5416 | 6 Condr. | 22 7x30 | .212 |
| 5421 | 7 Condr. | 22 7x30 | .230 |
| 5426 | 8 Condr. | 22 7x30 | .235 |
| 5431 | 9 Condr. | 22 7x30 | .245 |
| 5434 | 12 Condr. | 22 7x30 | .250 |



STANDARD SPOOL PUT-UP: 100 FT., 500 FT., 1000 FT.

STANDARD SPOOL PUT-UP: 10 FT., 15 FT., 25 FT., 100 FT., 500 FT., 1000 FT.

PHONOGRAPH MULTIPLE CABLE STANDARD SPOOL PUT-UP: 500 FT., 1000 FT.

| TYPE No. | SIZE | SPECIAL USE | SPECIFICATIONS | STRANDING | FINISHED O.D. (Inches) |
|----------|-------------------|--------------|--|------------------------|------------------------|
| 5103 | 3-22 | Same as 5030 | 3 condrs. No. 22 with 1/4" thermoplastic insulation, all individually color coded. All conductors grouped into cable form with a treated cotton braid overall lacquered. | 7 x 30 | .125 |
| 5123 | 2-16 1-18 | Same as 5030 | 2 condrs. No. 16 1/4" thermoplastic insulation. 1 condr. No. 18 1/2" thermoplastic insulation, all individually color coded. All conductors grouped into cable form with gray vinyl plastic jacket. | 2-26 x 30 1-16 x 30 | .215 |
| 5135 | 22 5 condr. | Same as 5030 | 5 condr. No. 22 with 1/4" thermoplastic insulation; 3 condr. twisted together with a braided tinned copper shield; 2 condr. twisted; all condr. grouped into cable form with a brown cotton braid overall. | 5-7 x 30 | .225 |
| 5124 | 4-18 | Same as 5030 | No. 18 solid 4 condr. color coded gray plastic jacket overall. | Solid | .225 |



MICROPHONE CABLE CONDUCTOR COLOR CHART: 1—Black; 2—White; 3—Red; 4—Green; 5—Yellow; 6—Blue; 7—Brown.

STANDARD SPOOL PUT-UP: 9 FT., 10 FT., 25 FT., 50 FT., 100 FT., 250 FT., 500 FT., 1000 FT. SHIELDED; Weatherproof rubber jacket for all microphone or weatherproof extension work. (Longer continuous lengths if desired.)

| No. | TYPE | SIZE | SPECIAL USE | SPECIFICATIONS | STRANDING | FINISHED O.D. (Inches) | NOMINAL CAPACITY per ft. (mmf) |
|------|-------------|------|--|--|--------------------|------------------------|--------------------------------|
| 1461 | 1 conductor | 22 | Lapel microphone | Tinned copper polyethylene insulation with a closely woven tinned copper shield. Grey vinyl plastic jacket. | 16 x 34 | .125 | 34. |
| 1457 | 1 conductor | 22 | Crystal, Ribbon and other high Impedance microphones | Same as 1461 except heavier polyethylene insulation on conductor. | 16 x 34 26 x 34 | .200 .175 | 25. 40. |
| 1458 | 2 conductor | 22 | Low impedance microphones | Tinned copper conductors polyethylene insulation conductors; black and white. Cabled with fillers closely woven tinned copper shield. Gray vinyl plastic jacket. | 16 x 34 | .231 | 32. |
| 1459 | 1 conductor | 20 | Lapel microphone | Tinned Copper Wire, with polyethylene to .087" O.D. with a closely woven tinned copper shielded braid, and a heavy black plastic jacket overall. | 26 x 34 | .240 | 33. |
| 1460 | 1 conductor | 20 | Crystal microphone | Tinned copper, yarn serve; wall of live rubber; tinned copper braid shield; rubber jacket overall. | 26 x 34 | .240 | 68. |
| 1462 | 2 conductor | 20 | Carbon microphones | Same as 1460; color coded | 00 x 00 | .268 | |
| 1456 | 2 conductor | 18 | Heavy duty studio cable | Same as 1460; color coded | 41 x 34 | .295 | 80. |
| 1463 | 3 conductor | 20 | Carbon microphones | Same as 1460; color coded | 26 x 34 | .277 | 85. |
| 1464 | 4 conductor | 20 | Carbon microphones | Same as 1460; color coded | 26 x 34 | .295 | 95. |
| 1465 | 5 conductor | 20 | Carbon microphones | Same as 1460; color coded | 26 x 34 | .323 | |
| 1466 | 6 conductor | 20 | Carbon microphones | Same as 1460; color coded | 26 x 34 | .350 | |
| 1467 | 7 conductor | 20 | Carbon microphones | Same as 1460; color coded | 26 x 34 | .360 | |
| 1455 | 8 conductor | 20 | Same as 1465 | Same as 2460; color coded | 26 x 34 | .386 | |



CONSOLIDATED WIRE AND ASSOCIATED COMPANIES

SEND FOR COMPLETE CATALOG

CHICAGO, ILLINOIS

MAGNET WIRE



Popular, profitable specialty wire packaged for easy selling in radio-electrical, department, specialty and hardware stores. Wide variety of sizes and insulations. Keeps stock in perfect order, always saleable. Supplied on Spool as shown and in Heavier Weights for whatever weight desired. Here is a handy and convenient way to stock small quantities of wire. It prevents wire from matting or tangling.

No. 2000

VARIOUS OTHER INSULATIONS

| Film | Technical Classification | 1/4 lb. | 1/2 lb. | 1 lb. |
|---------------------------|--------------------------|---------|---------|-------|
| ENAMEL | oleoresinous | | | |
| FORMVAR | poly vinyl acetal | | | |
| SODEREZE | polyurethane | | | |
| THERMALEZE | epoxide polyester | | | |
| NYFORM | formvar, nylon sheath | | | |
| NYLON | | | | |
| BONDEZE | | | | |
| GRIPEZE | | | | |
| LECTRON | acrylic | | | |
| ISONSEL | terephthalic polyester | | | |
| ALKANVAR | terephthalic polyester | | | |
| SYLKYD | ENAMELED | | | |
| COTTON AND COMBINATIONS | | | | |
| SILK AND COMBINATIONS | | | | |
| CELANESE AND COMBINATIONS | | | | |
| GLASS AND COMBINATIONS | | | | |
| PAPER AND COMBINATIONS | | | | |

| PLAIN ENAMEL MAGNET WIRE | | | | |
|--------------------------|---------|---------|--------|--|
| Size | 1/4 lb. | 1/2 lb. | 1 lb. | |
| 14 | \$0.45 | \$0.75 | \$1.39 | |
| 15 | .45 | .80 | 1.40 | |
| 16 | .50 | .84 | 1.42 | |
| 17 | .50 | .87 | 1.44 | |
| 18 | .50 | .89 | 1.45 | |
| 19 | .55 | .92 | 1.49 | |
| 20 | .55 | .94 | 1.50 | |
| 21 | .55 | .95 | 1.59 | |
| 22 | .55 | .97 | 1.70 | |
| 23 | .58 | .99 | 1.75 | |
| 24 | .60 | 1.00 | 1.87 | |
| 25 | .65 | 1.10 | 1.95 | |
| 26 | .65 | 1.10 | 2.03 | |
| 27 | .70 | 1.15 | 2.14 | |
| 28 | .73 | 1.20 | 2.25 | |
| 29 | .75 | 1.25 | 2.30 | |
| 30 | .80 | 1.30 | 2.35 | |
| 31 | .89 | 1.35 | 2.45 | |
| 32 | .90 | 1.40 | 2.50 | |
| 33 | .95 | 1.50 | 2.65 | |
| 34 | 1.00 | 1.70 | 2.75 | |
| 35 | 1.09 | 1.84 | 3.14 | |
| 36 | 1.29 | 2.00 | 3.50 | |
| 37 | 1.45 | 2.25 | 4.00 | |
| 38 | 1.70 | 2.50 | 4.50 | |
| 39 | 1.87 | 3.00 | 5.00 | |
| 40 | 2.50 | 3.75 | 6.00 | |
| 41 | 3.00 | 5.63 | 8.48 | |
| 42 | 3.48 | 6.60 | 12.89 | |
| 43 | 4.35 | 8.25 | 15.75 | |
| 44 | 4.88 | 9.38 | 18.45 | |

| SINGLE FORMVAR MAGNET WIRE | | | | |
|----------------------------|---------|---------|--------|--|
| Size | 1/4 lb. | 1/2 lb. | 1 lb. | |
| 14 | \$0.66 | \$1.12 | \$2.07 | |
| 15 | .66 | 1.20 | 2.10 | |
| 16 | .75 | 1.25 | 2.14 | |
| 17 | .75 | 1.30 | 2.15 | |
| 18 | .75 | 1.34 | 2.17 | |
| 19 | .83 | 1.39 | 2.23 | |
| 20 | .83 | 1.40 | 2.25 | |
| 21 | .83 | 1.42 | 2.37 | |
| 22 | .83 | 1.45 | 2.56 | |
| 23 | .89 | 1.49 | 2.62 | |
| 24 | .90 | 1.50 | 2.80 | |
| 25 | .97 | 1.65 | 2.92 | |
| 26 | .99 | 1.65 | 3.05 | |
| 27 | 1.05 | 1.74 | 3.26 | |
| 28 | 1.10 | 1.80 | 3.37 | |
| 29 | 1.14 | 1.87 | 3.46 | |
| 30 | 1.20 | 1.95 | 3.52 | |
| 31 | 1.34 | 2.02 | 3.67 | |
| 32 | 1.35 | 2.10 | 3.75 | |
| 33 | 1.42 | 2.25 | 3.95 | |
| 34 | 1.50 | 2.55 | 4.12 | |
| 35 | 1.64 | 2.81 | 4.70 | |
| 36 | 1.92 | 3.00 | 5.26 | |
| 37 | 2.17 | 3.37 | 6.00 | |
| 38 | 2.55 | 3.75 | 6.76 | |
| 39 | 2.80 | 4.50 | 7.50 | |
| 40 | 3.75 | 5.64 | 9.00 | |
| 41 | 3.75 | 6.75 | 12.60 | |
| 42 | 4.28 | 7.40 | 13.43 | |
| 43 | 5.18 | 7.88 | 14.25 | |
| 44 | 6.60 | 11.70 | 22.58 | |

| HEAVY FORMVAR MAGNET WIRE | | | | |
|---------------------------|---------|---------|--------|--|
| Size | 1/4 lb. | 1/2 lb. | 1 lb. | |
| 14 | \$0.73 | \$1.24 | \$2.27 | |
| 15 | .73 | 1.34 | 2.33 | |
| 16 | .84 | 1.39 | 2.35 | |
| 17 | .84 | 1.44 | 2.37 | |
| 18 | .84 | 1.47 | 2.39 | |
| 19 | .92 | 1.52 | 2.45 | |
| 20 | .92 | 1.54 | 2.51 | |
| 21 | .92 | 1.55 | 2.61 | |
| 22 | .92 | 1.60 | 2.80 | |
| 23 | .97 | 1.64 | 2.87 | |
| 24 | 1.00 | 1.65 | 3.07 | |
| 25 | 1.15 | 1.97 | 3.50 | |
| 26 | 1.19 | 1.98 | 3.64 | |
| 27 | 1.25 | 2.07 | 3.84 | |
| 28 | 1.34 | 2.15 | 4.04 | |
| 29 | 1.37 | 2.24 | 4.14 | |
| 30 | 1.44 | 2.34 | 4.22 | |
| 31 | 1.67 | 2.2 | 4.58 | |
| 32 | 1.69 | 2.63 | 4.67 | |
| 33 | 1.77 | 2.81 | 4.94 | |
| 34 | 1.87 | 3.19 | 5.16 | |
| 35 | 2.04 | 3.46 | 5.88 | |
| 36 | 2.39 | 3.75 | 6.58 | |
| 37 | 2.72 | 4.20 | 7.50 | |
| 38 | 3.17 | 4.69 | 8.45 | |
| 39 | 3.50 | 5.64 | 9.38 | |
| 40 | 4.69 | 7.04 | 11.27 | |
| 41 | 5.18 | 7.59 | 13.65 | |
| 42 | 5.78 | 8.15 | 14.72 | |
| 43 | 6.00 | 8.65 | 15.08 | |
| 44 | 7.43 | 11.40 | 23.33 | |

Larger Quantities At Same Per Pound List

| DOUBLE COTTON COVERED MAGNET WIRE | | | | |
|-----------------------------------|---------|---------|--------|--|
| Size | 1/4 lb. | 1/2 lb. | 1 lb. | |
| 14 | \$0.55 | \$0.95 | \$1.87 | |
| 15 | .58 | .98 | 1.90 | |
| 16 | .60 | 1.00 | 1.95 | |
| 17 | .60 | 1.05 | 2.00 | |
| 18 | .60 | 1.10 | 2.05 | |
| 19 | .65 | 1.15 | 2.28 | |
| 20 | .65 | 1.25 | 2.34 | |
| 21 | .77 | 1.34 | 2.50 | |
| 22 | .82 | 1.39 | 2.64 | |
| 23 | .88 | 1.50 | 2.75 | |
| 24 | .94 | 1.60 | 3.00 | |
| 25 | .95 | 1.65 | 3.14 | |
| 26 | 1.00 | 1.75 | 3.39 | |
| 27 | 1.15 | 1.89 | 3.64 | |
| 28 | 1.20 | 2.14 | 4.00 | |
| 29 | 1.30 | 2.39 | 4.50 | |
| 30 | 1.32 | 2.50 | 4.75 | |
| 31 | 1.50 | 2.75 | 5.00 | |
| 32 | 1.75 | 3.00 | 5.64 | |
| 33 | 1.89 | 3.37 | 6.25 | |
| 34 | 2.14 | 3.89 | 7.00 | |
| 35 | 2.39 | 4.25 | 7.50 | |
| 36 | 2.75 | 4.89 | 8.65 | |
| 37 | 2.25 | 6.25 | 11.40 | |
| 38 | 4.75 | 8.65 | 16.50 | |
| 39 | 6.00 | 11.50 | 20.00 | |
| 40 | 8.00 | 15.00 | 28.15 | |

SPECIAL MAGNET WIRES

In addition to the standard listing shown here, we maintain an extensive stock of all other sizes in round, rectangular and square magnet wire.

| BARE COPPER WIRE | | | | |
|------------------|---------|---------|--------|--|
| Size | 1/4 lb. | 1/2 lb. | 1 lb. | |
| 14 | \$0.53 | \$0.97 | \$1.54 | |
| 15 | .57 | 1.00 | 1.60 | |
| 16 | .60 | 1.10 | 1.83 | |
| 17 | .52 | 1.12 | 1.87 | |
| 18 | .63 | 1.14 | 1.90 | |
| 19 | .65 | 1.17 | 1.95 | |
| 20 | .67 | 1.20 | 2.00 | |
| 21 | .68 | 1.20 | 2.07 | |
| 22 | .70 | 1.24 | 2.14 | |
| 23 | .70 | 1.27 | 2.17 | |
| 24 | .70 | 1.30 | 2.20 | |
| 25 | .72 | 1.30 | 2.20 | |
| 26 | .73 | 1.34 | 2.27 | |
| 27 | .75 | 1.37 | 2.30 | |
| 28 | .77 | 1.40 | 2.40 | |
| 29 | .77 | 1.42 | 2.47 | |
| 30 | .77 | 1.42 | 2.47 | |
| 31 | .77 | 1.44 | 2.53 | |
| 32 | .77 | 1.44 | 2.60 | |
| 33 | .78 | 1.47 | 2.68 | |
| 34 | .80 | 1.50 | 2.77 | |
| 35 | .82 | 1.55 | 2.90 | |
| 36 | .84 | 1.60 | 3.04 | |
| 37 | .92 | 1.75 | 3.22 | |
| 38 | 1.00 | 1.90 | 3.40 | |
| 39 | 1.02 | 1.97 | 3.45 | |
| 40 | 1.04 | 2.04 | 3.50 | |

| TINNED COPPER WIRE | | | | |
|--------------------|---------|---------|--------|--|
| Size | 1/4 lb. | 1/2 lb. | 1 lb. | |
| 14 | \$0.67 | \$1.13 | \$1.73 | |
| 15 | .73 | 1.27 | 1.92 | |
| 16 | .80 | 1.40 | 2.00 | |
| 17 | .84 | 1.44 | 2.03 | |
| 18 | .87 | 1.47 | 2.08 | |
| 19 | .90 | 1.50 | 2.12 | |
| 20 | .94 | 1.53 | 2.17 | |
| 21 | .95 | 1.53 | 2.24 | |
| 22 | .97 | 1.57 | 2.30 | |
| 23 | .98 | 1.58 | 2.34 | |
| 24 | 1.00 | 1.60 | 2.37 | |
| 25 | 1.00 | 1.60 | 2.37 | |
| 26 | 1.00 | 1.60 | 2.37 | |
| 27 | 1.05 | 1.67 | 2.64 | |
| 28 | 1.10 | 1.75 | 2.90 | |
| 29 | 1.13 | 1.84 | 2.94 | |
| 30 | 1.17 | 1.92 | 2.97 | |
| 31 | 1.20 | 2.00 | 3.04 | |
| 32 | 1.24 | 2.09 | 3.10 | |
| 33 | 1.27 | 2.17 | 3.19 | |
| 34 | 1.30 | 2.25 | 3.27 | |
| 35 | 1.32 | 2.30 | 3.40 | |
| 36 | 1.34 | 2.34 | 3.54 | |
| 37 | 1.36 | 2.42 | 3.72 | |
| 38 | 1.38 | 2.50 | 3.90 | |
| 39 | 1.39 | 2.50 | 3.95 | |
| 40 | 1.40 | 2.67 | 4.00 | |

BARE NICKEL CHROMIUM WIRE

No. 2000

Recommended for electrical heating appliances and other devices where the highest quality in performance is required, whose operating temperatures do not exceed 1850° F. Particularly suited for heavy duty rheostats and controls which require compact resistance.

ON PROTECTA-METAL SPOOLS

| Size | 1 Oz. | 1/4 Lb. | 1 Lb. |
|------|--------|---------|--------|
| 14 | ..... | \$1.52 | \$5.56 |
| 15 | ..... | 1.56 | 5.65 |
| 16 | ..... | 1.58 | 5.73 |
| 17 | ..... | 1.63 | 5.80 |
| 18 | ..... | 1.67 | 5.87 |
| 19 | ..... | 1.71 | 6.02 |
| 20 | \$0.67 | 1.76 | 6.17 |
| 21 | .71 | 1.85 | 6.49 |
| 22 | .72 | 1.93 | 6.79 |
| 23 | .74 | 2.08 | 7.44 |
| 24 | .76 | 2.22 | 8.09 |
| 25 | .82 | 2.37 | 8.74 |
| 26 | .87 | 2.53 | 9.39 |
| 27 | .89 | 2.57 | 9.96 |

| Size | 1 Oz. | 1/4 Lb. | 1 Lb. |
|------|--------|---------|---------|
| 28 | \$0.92 | \$2.84 | \$10.53 |
| 29 | 1.00 | 2.98 | 11.18 |
| 30 | 1.09 | 3.11 | 11.83 |
| 31 | 1.14 | 3.28 | 12.28 |
| 32 | 1.18 | 3.43 | 12.73 |
| 33 | 1.31 | 3.79 | 14.73 |
| 34 | 1.44 | 4.16 | 16.73 |
| 35 | 1.58 | 4.55 | 17.71 |
| 36 | 1.71 | 4.94 | 18.69 |
| 37 | 2.22 | 6.50 | 23.86 |
| 38 | 2.74 | 8.05 | 29.03 |
| 39 | 2.86 | 8.39 | 31.62 |
| 40 | 2.98 | 8.95 | 34.20 |

CONSOLIDATED WIRE AND ASSOCIATED COMPANIES

SEND FOR COMPLETE CATALOG

CHICAGO, ILLINOIS



THERMOPLASTIC INSULATED HOOK-UP WIRE
SPECIFICATION MIL-W-76A (SUPERSEDES JAN. C-76)

This specification has been approved by the Departments of the Army, Navy, and Air Force. Insulation possesses high dielectric strength. Impervious to oils, acids, alkalies, moisture and flame. The following types and colors are available for shipment from stock—
*See other sizes, types and covering over insulated wire.

SPECIFICATION MIL-W-76A

TYPE HW
TYPE MW

Single Conductor, Solid or Stranded Conductor as Indicated. Tinned Copper, Thermoplastic Insulation. No further covering. (SUPERSEDED SRUR—SPECIFICATION JAN-C-76). Ins. Nom., .016"; Max. R.M.S. Voltage, 1000; Stand. Spool, 1000 ft.
Single Conductor, Solid or Stranded Conductor as Indicated. Tinned Copper, Thermoplastic Insulation. No further covering. (SUPERSEDED SRHV—SPECIFICATION JAN-C-76). Ins. Nom., .031"; Max. R.M.S. Voltage, 2500 Stand. Spool, 1000 ft.

| CAT. NO. | MIL-W-76A TYPE DESIGNATION | SIZE | STRAND-ING | O.D. | MAX. COLORS |
|----------|----------------------------|------|------------|-------|-------------|
| 707 | MW-C 22(1) U | 22 | Solid | .062" | 1 thru 13 |
| 717 | MW-C 20(1) U | 20 | Solid | .069" | 1 thru 13 |
| 727 | MW-C 18(1) U | 18 | Solid | .077" | 1 thru 13 |
| 737 | MW-C 22(7) U | 22 | 7/.010 | .076" | 1 thru 22 |
| 747 | MW-C 20(7) U | 20 | 7/.021G | .078" | 1 thru 22 |
| 757 | MW-C 18(15) U | 18 | 15/.0092 | .089" | 1 thru 22 |
| 637 | HW-C 22(1) U | 22 | Solid | .098" | 1 thru 13 |
| 642 | HW-C 20(1) U | 20 | Solid | .105" | 1 thru 13 |
| 647 | HW-C 18(1) U | 18 | Solid | .113" | 1 thru 13 |
| 667 | HW-C 22(7) U | 22 | 7/.010 | .106" | 1 thru 22 |
| 672 | HW-C 20(7) U | 20 | 7/.0126 | .114" | 1 thru 22 |
| 677 | HW-C 18(16) U | 18 | 16/.0092 | .125" | 1 thru 22 |

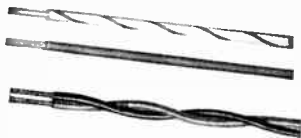
AVAILABLE COLORS—(COLOR CODE)
*COVERING OVER INSULATED WIRE

| Symbol | Type |
|-----------------------|-------------------------|
| 1—Black (0) | 12—Pink |
| 2—Brown (1) | 13—Dark Blue |
| 3—Red (2) | 14—White Black Tr. (90) |
| 4—Orange (3) | 15—White Red (92) |
| 5—Yellow (4) | 16—White/Green (95) |
| 6—Green (5) | 17—White/Yellow (94) |
| 7—Blue (6) | 18—White/Blue (96) |
| 8—Violet (Purple) (7) | 19—White/Brown (91) |
| 9—Gray (Slate) (8) | 20—White/Orange (93) |
| 10—White (9) | 21—White/Gray (98) |
| 11—Tan | |

*Other color combinations and sizes on special production order. *Available on factory order: Spec. MIL-W-76A, Types LW & HF with above coverings. We are also prepared to furnish wires to Military Specifications MIL-W-1687A—Types B, C, D, E, EE, FF, X. Quoted on request. Write for the Rome Cable Corporation TR-5 catalogue, complete with Military Specifications for Electronic Instrumentation and Sub-Miniature Wires, Multi-Conductor and Co-Axial Cables. Underwriter's Laboratory Approved—Rome High Temp—Rome Synthinol—Registered.

Rome Synthinol

A ROME CABLE PRODUCT
THERMOPLASTIC INSULATED HOOK-UP WIRE



Rome Synthinol is a polyvinyl chloride type of thermoplastic insulation impervious to oils, acids, alkalies, moisture and flame, and Approved by Underwriters' Laboratories where exposed to temperatures not exceeding 80° Centigrade.

V/L Voltage Rating — 300 Volts Max.
Single and Two-Conductor Twisted Cable:
Color Coded

Rome Synthinol is specially designed for the chassis and sub chassis wiring of radio and television receivers and transmitters as well as all other types of electronic equipment. It has physical and electrical characteristics of unusual permanency.

Typical Test Results

Breakdown Voltage:
1/64" Synthinolover 10000 volts
1/32" Synthinolover 18000 volts
Insulation Resistance:
1/32" Synthinolover 5000 megohms feet

STANDARD SPOOL PUT-UP: 25 FT., 100 FT., 500 FT., 1000 FT. Colors: Black, Blue, Brown, Green, Orange, Pink, Purple, Red, Slate, White, Yellow.

| CAT. NO. | SIZE AWG. | STRANDING | NOM. INS. THCKNS. | VOLTS | MAX. DIA. INCHES |
|----------|-----------|-------------|-------------------|-------|------------------|
| 801 | 22 | Solid | 1/64 | 300 | .065 |
| 811 | 20 | Solid | 1/64 | 300 | .071 |
| 841 | 18 | Solid | 1/64 | 300 | .080 |
| 821 | 22 | 7 x No. 30 | 1/64 | 300 | .069 |
| 831 | 20 | 10 x No. 30 | 1/64 | 300 | .078 |
| 846 | 18 | 16 x No. 30 | 1/64 | 300 | .085 |
| 851 | 22 | Solid | 1/32 | 600 | .097 |

| CAT. NO. | SIZE AWG. | STRANDING | NOM. INS. THCKNS. | VOLTS | MAX. DIA. INCHES |
|----------|------------|-------------|-------------------|-------|------------------|
| 856 | 20 | Solid | 1/32 | 600 | .104 |
| 861 | 18 | Solid | 1/32 | 600 | .112 |
| 866 | 22 | 7 x No. 30 | 1/32 | 600 | .102 |
| 871 | 20 | 0 x No. 30 | 1/32 | 600 | .110 |
| 876 | 18 | 16 x No. 30 | 1/32 | 600 | .119 |
| 881 | 20—2 cond. | 10 x No. 30 | .025 | 300 | .170 |

Rome Hi-Temp

A ROME CABLE PRODUCT
RUBBER INSULATED HOOK-UP WIRE



The result of extensive laboratory development and proved by a decade of service—Rome Hi-Temp is offered for radio and electronic circuits where resistance to moisture and heat is required.

SPECIFICATIONS

Conductors: Annealed tinned, solid or stranded copper conforming to A.S.T.M. Specification B 33 and/or Underwriters' Standards.

In order to provide maximum flexibility and prevent unraveling of the strands a short lay stranding is used as follows:

- No. 22 Awg. .33 inch max.
- No. 20 Awg. .50 inch max.

Underwriters' approved and labeled for 75°C.—300 volts

Insulation: Rome Hi-Temp—a high quality, free-stripping heat-resistant rubber insulation approved by Underwriters' Laboratories.

Typical Test Results

Breakdown Voltage (1/32" Hi-Temp).....10500 volts
Insulation Resistance.....Over 10000 megohms feet
*Only factory length reels are furnished with V/L's labels.

STANDARD SPOOL PUT-UP:
25 FT., 100 FT., 500 FT., 1000 FT.

| CAT. NO. | SIZE | STRANDING | INSULATION THICKNESS | DIAMETER (INCHES) |
|----------|--------|-------------|----------------------|-------------------|
| 901 | No. 22 | Solid | 1/32" | .075 |
| 911 | No. 20 | Solid | 1/32" | .086 |
| 921 | No. 22 | 7 x No. 30 | 1/32" | .085 |
| 931 | No. 20 | 10 x No. 30 | 1/32" | .090 |



CONSOLIDATED WIRE AND ASSOCIATED COMPANIES

SEND FOR COMPLETE CATALOG

CHICAGO, ILLINOIS

MULTIPLE CONDUCTOR COTTON BRAIDED CABLE

FOR SPEAKERS, TESTERS, BATTERY HOOK-UP, ETC.



SPECIFICATIONS: Tinned flexible copper; colored plastic insulation; bunched individual conductors; heavy brown cotton braid overall; color coded. Size 20; Stranding 10x30; Insulation Thickness $\frac{1}{64}$ "

| TYPE NO. | TYPE | FINISHED O.D. (Inches) | TYPE NO. | TYPE | FINISHED O.D. (Inches) |
|----------|----------|------------------------|----------|-----------|------------------------|
| 1481 | 1 condr. | .150 | 1487 | 7 condr. | .275 |
| 1482 | 2 condr. | .175 | 1488 | 8 condr. | .300 |
| 1483 | 3 condr. | .200 | 1489 | 9 condr. | .310 |
| 1484 | 4 condr. | .275 | 1490 | 10 condr. | .325 |
| 1485 | 5 condr. | .250 | 1494 | 11 condr. | .335 |
| 1486 | 6 condr. | .260 | 1495 | 12 condr. | .350 |

MULTIPLE CONDUCTOR TINNED COPPER SHIELD CABLE



SPECIFICATIONS: Tinned flexible copper, 912E20, Stranding 10x30— $\frac{1}{64}$ " plastic insulation, color coded, Braided tinned copper shield.

| TYPE NO. | TYPE | FINISHED O.D. (Inches) |
|----------|--------------|------------------------|
| 1471 | 1 conductor | .110 |
| 1472 | 2 conductors | .190 |
| 1473 | 3 conductors | .200 |
| 1474 | 4 conductors | .220 |
| 1475 | 5 conductors | .235 |
| 1476 | 6 conductors | .250 |
| 1477 | 7 conductors | .265 |

ANALYZER CABLE

SPECIFICATIONS: Extra flexible tinned copper; plastic insulation; color coded; Brown cotton braid overall.

| TYPE | SIZE | STRAND-ING | INSULATION THICKNESS (Inches) | FINISHED O.D. (Inches) |
|------|----------|------------|-------------------------------|------------------------|
| 1501 | 8 condr. | 2-14 | 41 x 30 | $\frac{1}{64}$.300 |
| | | 6-18 | 16 x 30 | |
| 1502 | 9 condr. | 2-14 | 41 x 30 | $\frac{1}{64}$.320 |
| | | 7-18 | 16 x 30 | |

TEST PROD WIRE



A Specially Constructed High Grade Wire For Use On Laboratory Test Equipment, Bench Analyzers, Etc.

SPECIFICATIONS: Extra flexible tinned copper; cotton wrap; red or black; live rubber insulation.

| | | | | | |
|------|--------------|----|---------|------|------|
| 1001 | 5,000 volts | 20 | 41 x 36 | .043 | .140 |
| 1006 | 10,000 volts | 18 | 65 x 36 | .088 | .230 |



SHIELDING AND BONDING CABLE DESIGNED FOR SHIELDING INSULATED WIRES AND CABLES . . . BONDING AND MANY OTHER USES

STANDARD SPOOL PUT-UP: 50 FT., 100 FT., 250 FT., 1000 FT.

| NO. | APPROX. I. D. | SIZE & NUMBER OF WIRES | APPROX. AWG. | CARRYING CAPACITY IN AMPERES |
|------|-------------------|------------------------|--------------|------------------------------|
| 1386 | $\frac{1}{32}$ " | 24 x 36 | 24 | 7 |
| 1387 | $\frac{3}{64}$ " | 24 x 36 | 23 | 7 |
| 1388 | $\frac{3}{32}$ " | 48 x 36 | 19 | 12 |
| 1389 | $\frac{7}{64}$ " | 72 x 36 | 18 | 14 |
| 1390 | $\frac{1}{8}$ " | 96 x 36 | 18 | 15 |
| 1391 | $\frac{3}{16}$ " | 120 x 36 | 15 | 23 |
| 1392 | $\frac{1}{4}$ " | 168 x 36 | 14 | 30 |
| 1393 | $\frac{3}{8}$ " | 288 x 36 | 11 | 50 |
| 1394 | $\frac{1}{2}$ " | 386 x 36 | 10 | 55 |
| 1395 | $\frac{5}{8}$ " | 396 x 36 | 10 | 61 |
| 1396 | $\frac{3}{4}$ " | 832 x 36 | 7 | 80 |
| 1397 | $\frac{25}{32}$ " | 832 x 36 | 7 | 80 |
| 1398 | 1" | 832 x 36 | 7 | 84 |
| 1399 | $1\frac{3}{8}$ " | 912 x 36 | 7 | 105 |



TINNED COPPER BUS BAR WIRE SOLID SOFT DRAWN COPPER AND BRIGHTLY TINNED FOR ALL TYPES OF SOLDERING CONNECTIONS AND OTHER APPLICATIONS

STANDARD SPOOL PUT-UP: 100 FT., 1000 FT.

| NO. | NOMINAL DIAMETER | SIZE SOLID | CIRCULAR MIL. AREA |
|------|------------------|------------|--------------------|
| 3845 | .129" | 8 | 16510 |
| 3841 | .102" | 10 | 10380 |
| 3831 | .082" | 12 | 6530 |
| 3821 | .064" | 14 | 4110 |
| 3815 | .051" | 16 | 2583 |
| 3816 | .040" | 18 | 1624 |
| 3817 | .032" | 20 | 1022 |
| 3818 | .025" | 22 | 642 |
| 3819 | .020" | 24 | 404 |
| 3846 | .016" | 26 | 254.1 |
| 3847 | .013" | 28 | 159.8 |
| 3848 | .010" | 30 | 100.5 |

LEAD COVERED CABLE



FOR FREEDOM FROM INTERFERENCE, CORROSION AND DAMPNESS.

SPECIFICATIONS: Tinned copper wire; heavy rubber insulation and cotton braid; heavy lead shield.

| | | | | | |
|------|---------|----|-------|----------------|------------|
| 1453 | 2 cond. | 18 | Solid | $\frac{1}{32}$ | 240 x .200 |
| 1454 | 3 cond. | 18 | Solid | $\frac{1}{32}$ | .420 |

CONSOLIDATED WIRE AND ASSOCIATED COMPANIES



SEND FOR COMPLETE CATALOG

CHICAGO, ILLINOIS

ELECTRICAL CORDAGES
UNDERWRITERS APPROVED

SUPPLIED ON ATTRACTIVE TRI-COLOR
LITHOGRAPHED METAL SPOOLS

RUBBER HANDYCORD
CENTERSTRIP



PLASTIC HANDYCORD
CENTERSTRIP



RUBBER SHEATHED
SERVICE CORD
UNDERWRITERS APPROVED



SPECIFICATIONS AND APPLICATION

Extra flexible bare copper cotton served. 1/32" rubber insulation color coded conductors cabled with fillers, cotton wrap and black, tough rubber jacket.

For all electronic equipment, household appliances, garden and power tools.

NEOPRENE SHEATHED
SERVICE CORD
UNDERWRITERS APPROVED



SPECIFICATIONS AND APPLICATION

Same specifications as 4200 Series except black Neoprene jacket.

For all types of equipment exposed to oils, acid and excessive moisture.

HEATER CORD



Colors: Black and White Marker.

STANDARD SPOOL PUT-UP: 25 FT., 50 FT., 100 FT., 250 FT., 500 FT., 1000FF.

| NO. | NO. OF COND. | SIZE AWG. | U. L. TYPE | STRAND-ING | NOM. INS. THICKNESS | NOM. O. D. |
|------|--------------|-----------|--------------|------------|---------------------|-------------|
| 4072 | 2 | 18 | SP(P.O.S.J.) | 41 x 34 | 1/64" | .235 x .130 |
| 4074 | 2 | 16 | SP(P.O.S.J.) | 65 x 34 | 1/32" | .300 x .160 |

Colors: Black, Brown, White, Gray.

STANDARD SPOOL PUT-UP: 25 FT., 50 FT., 100 FT., 250 FT., 500 FT., 1000 FT.

| | | | | | | |
|------|---|----|-------------|---------|-------|-------------|
| 4077 | 2 | 18 | SPT(P.O.T.) | 41 x 34 | 1/64" | .235 x .130 |
| 4079 | 2 | 16 | SPT(P.O.T.) | 65 x 34 | 1/32" | .300 x .160 |

Colors: Black, Brown, White, Gray.

STANDARD PUT-UP: 25 FT., 50 FT., 100 FT., 250 FT.

| NO. | NO. OF COND. | SIZE AWG. | U. L. TYPE | CURRENT CARRYING CAPACITY | VOLTAGE RATING | NOM. O. D. |
|------|--------------|-----------|------------|---------------------------|----------------|------------|
| 4202 | 2 | 18 | SV | 5 Amps. | 300 | .250" |
| 4207 | 2 | 18 | SJ | 5 Amps. | 300 | .310" |
| 4212 | 3 | 18 | SJ | 5 Amps. | 300 | .345" |
| 4214 | 4 | 18 | SJ | 5 Amps. | 300 | .360" |
| 4217 | 2 | 16 | SJ | 7 Amps. | 300 | .340" |
| 4222 | 3 | 16 | SJ | 7 Amps. | 300 | .375" |
| 4224 | 4 | 16 | SJ | 7 Amps. | 600 | .395" |
| 4227 | 2 | 18 | S | 5 Amps. | 600 | .390" |
| 4232 | 3 | 18 | S | 5 Amps. | 600 | .405" |
| 4234 | 4 | 18 | S | 5 Amps. | 600 | .435" |
| 4237 | 2 | 16 | S | 7 Amps. | 600 | .410" |
| 4242 | 3 | 16 | S | 7 Amps. | 600 | .430" |
| 4244 | 4 | 16 | S | 7 Amps. | 600 | .485" |
| 4247 | 2 | 14 | S | 15 Amps. | 600 | .540" |
| 4252 | 3 | 14 | S | 15 Amps. | 600 | .560" |
| 4254 | 4 | 14 | S | 15 Amps. | 600 | .605" |
| 4257 | 2 | 12 | S | | | |
| 4262 | 3 | 12 | S | 20 Amps. | 600 | .635" |
| 4264 | 4 | 12 | S | 20 Amps. | 600 | .665" |
| 4267 | 2 | 10 | S | 25 Amps. | 600 | .640" |
| 4272 | 3 | 10 | S | 25 Amps. | 600 | .690" |
| 4274 | 4 | 10 | S | 25 Amps. | 600 | .745" |

STANDARD PUT-UP: 25 FT., 50 FT., 100 FT., 250 FT.

| | | | | | | |
|------|---|----|-----|----------|-----|-------|
| 4307 | 2 | 18 | SJO | 5 Amps. | 300 | .310" |
| 4312 | 3 | 18 | SJO | 5 Amps. | 300 | .345" |
| 4314 | 4 | 18 | SJO | 5 Amps. | 300 | .360" |
| 4317 | 2 | 16 | SJO | 7 Amps. | 300 | .340" |
| 4322 | 3 | 16 | SJO | 7 Amps. | 300 | .375" |
| 4324 | 4 | 16 | SO | 7 Amps. | 600 | .395" |
| 4327 | 2 | 18 | SO | 5 Amps. | 600 | .390" |
| 4332 | 3 | 18 | SO | 5 Amps. | 600 | .405" |
| 4334 | 4 | 18 | SO | 5 Amps. | 600 | .435" |
| 4337 | 2 | 16 | SO | 7 Amps. | 600 | .410" |
| 4342 | 3 | 16 | SO | 7 Amps. | 600 | .430" |
| 4344 | 4 | 16 | SO | 7 Amps. | 600 | .485" |
| 4347 | 2 | 14 | SO | 15 Amps. | 600 | .540" |
| 4352 | 3 | 14 | SO | 15 Amps. | 600 | .560" |
| 4354 | 4 | 14 | SO | 15 Amps. | 600 | .605" |
| 4357 | 2 | 12 | SO | 20 Amps. | 600 | .605" |
| 4362 | 3 | 12 | SO | 20 Amps. | 600 | .635" |
| 4364 | 4 | 12 | SO | 20 Amps. | 600 | .665" |
| 4367 | 2 | 10 | SO | 25 Amps. | 600 | .640" |
| 4372 | 3 | 10 | SO | 25 Amps. | 600 | .690" |
| 4374 | 4 | 10 | SO | 25 Amps. | 600 | .745" |

STANDARD SPOOL PUT-UP: 100 FT., 250 FT.

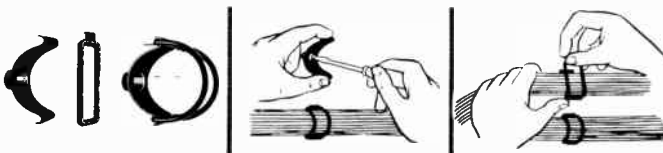
| NO. | NO. OF COND. | SIZE AWG. | U. L. TYPE | STRAND-ING | NOM. INS. THICKNESS | NOM. O. D. |
|------|--------------|-----------|------------|------------|---------------------|------------|
| 4087 | 2 | 16 | HPD | 65 x 34 | 1/32" | .275 |
| 4092 | 2 | 18 | HPD | 41 x 34 | 1/32" | .250 |

CONSOLIDATED WIRE PAGE 10

Insuloid cradleclip®

FOR SUPPORTED WIRING

cradles and clips



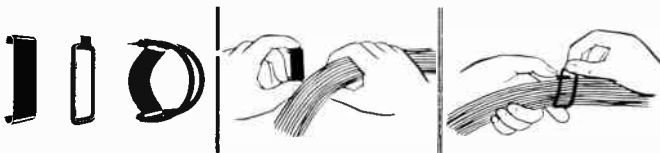
Just screw cradle to panel, position cables in cradle and hook on clip of required size, as shown.

For use in

1. Electrical switchgear, switchboard, instrument and control panels.
2. Electronic equipment — ground, naval, airborne, aerospace (min. weight .012 oz.).
3. Chassis-mounted components and wiring.
4. Cable runs in building and vehicle telecommunications installations.
5. Fuel, lubricant, coolant and hydraulic fluid line installations.
6. Chemical tubing and piping installations.

FOR UNSUPPORTED WIRING

binders and clips



You can expect

- New high-speed, simplified wire, cable or component fixing which substantially reduces costs, saves time, work and money.
- Complete insulation and resistance to all environments within specified temperature range, including corrosive atmospheres.
- Permanent, yet flexible installations. Wiring changes can be made quickly and easily without any waste of material.
- Complete electrical and mechanical security.
- Neater, more compact installations and easier circuit tracing.

CRADLES



C0 NO
Miniature
with
captive clip

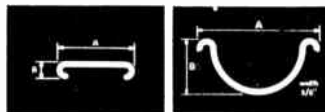
C1, C2, C3

C1-M C2-M
C3 M
molded in
cadmium-plated,
chromate-
treated nut
to take 6/32
thread bolts



B0 NO
Miniature
with
captive
clip

BINDERS



B1

B2, B12

CLIPS



N0
miniature
(for
replacement)

N1, N3,
N5, N7

DIMENSIONS AND WEIGHTS

| TYPE & SIZE | DIMENSIONS (") | | WT/M (1000 pcs) (approx.) |
|----------------|----------------|-------|------------------------------|
| | A | B | |
| Cradles | | | |
| C0 | .500 | .335 | 8.2 oz |
| C1 | .937 | .562 | 3 lbs, 8 oz |
| C1-M | " | " | 8 lbs |
| C2 | 1.375 | .750 | 4 lbs, 5 oz |
| C2-M | 1.1 | " | 9 lbs, 14 oz |
| C3 | 1.875 | 1.000 | 5 lbs, 14 oz |
| C3-M | " | " | 10 lbs, 10 oz |
| Binders | | | |
| B0 | .500 | .250 | 7.2 oz |
| B1 | .875 | .187 | 1 lb, 9 oz |
| B12 | .937 | .400 | 2 lbs, 7 oz |
| B2 | 1.875 | .812 | 4 lbs, 13 oz |
| Clips | | | |
| N0 | .340 | .500 | 3.8 oz |
| N1 | .500 | .937 | 2 lbs, 2 oz |
| N3 | 1.000 | 1.000 | 3 lbs, 13 oz |
| N5 | 1.750 | 1.000 | 5 lbs, 7 oz |
| N7 | 2.562 | 1.000 | 7 lbs, 7 oz |

Standard pack: 500. Packed in polyethylene bags in cardboard cartons.

MATERIALS

Cradles and Binders are molded from special nylon (Zytel 105). Extensible Clips are available in Neoprene, Butyl, Viton and Silicone rubber. NO available in Neoprene only. Temperature range—76°F to +250°F.

RECOMMENDED COMBINATIONS

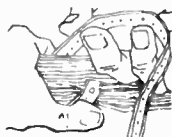
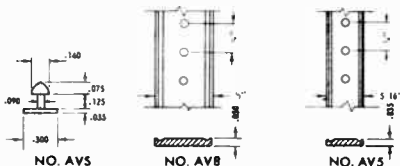
| DIAMETER OF CABLE FORM | SUPPORTED* WIRING | | UNSUPPORTED* WIRING | |
|---------------------------|-------------------|----|---------------------|----|
| | Cradle Clip | | Binder Clip | |
| 1/4" - 5/16" | C0 | N0 | B0 | N0 |
| 1/2" - 5/8" | C1 | N1 | B1 | N1 |
| 1/2" - 11/16" | C1 | N3 | B1 | N5 |
| 11/16" - 15/16" | C2 | N3 | B12 | N3 |
| 15/16" - 1 1/16" | C2 | N5 | B12 | N5 |
| 1" - 1 1/8" | C3 | N3 | B2 | N3 |
| 1 1/8" - 1 1/2" | C3 | N5 | B2 | N5 |
| 1 1/2" - 2" | C3 | N7 | B2 | N7 |

*for Neoprene, Butyl and Viton Clips. Ask for special recommendations for Silicone Clips.



Insuloid® Strapping

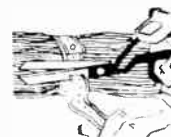
The lowest cost, quality wire and cable typing system available to the electrical and electronics field today!



STRAP!



SNAP!



SNIP!

Insulok cable tie

THE LATEST, SIMPLEST,
MOST ECONOMICAL, YET
MOST EFFECTIVE CABLE
BINDING SYSTEM
AVAILABLE

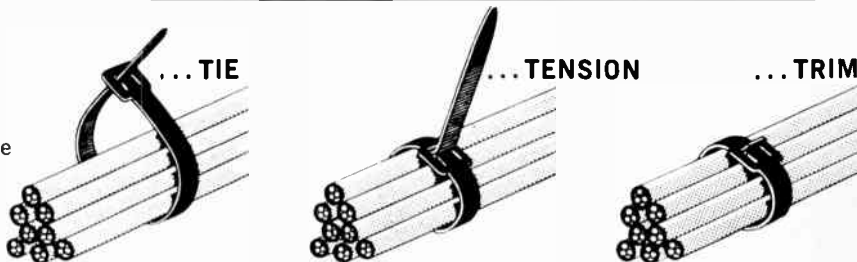


| Ref. | A | B | Thickness | To accommodate Cable Runs | |
|------|---------|-------|-----------|---------------------------|------------|
| | | | | From | To |
| LK1 | 3" | 3/8" | 3/64" | Dia. 3/16" | Dia. 3/16" |
| LK2 | 4 1/16" | 3/16" | 3/64" | 3/16" | 1 1/16" |
| LK3 | 9" | 3/8" | 1/16" | 3/4" | 2 1/4" |

ADVANTAGES

- One component only
- Lighter and stronger than metal straps
- High speed self-locking action
- Made in Nylon to withstand a wide temperature range, -80°C . to $+150^{\circ}\text{C}$ — suitable for all climatic conditions
- Neater — more compact wiring
- Permanent — cannot loosen
- Substantial saving in wiring costs

The Insulok system utilizes one component only — which being moulded from tough, flexible Nylon is immensely strong and virtually indestructible. Although taking only seconds to



fix, the Insulok Tie features a clever non-return cam-action locking device which ensures that once fixed the tie will never come off or slacken.

Beta "Z" markers

PERMANENT • RELIABLE • DURABLE



APPLICATION SPEED

SPECIFICATIONS

| CAT.* | RECOMMENDED FOR WIRES/CABLES OF O.D. | LENGTH | THICKNESS |
|-------|--------------------------------------|--------|-----------|
| 22 | .045"-.065" | .140" | .055" |
| 20 | .066"-.085" | .140" | .050" |
| 18 | .086"-.115" | .140" | .040" |
| 16 | .110"-.135" | .140" | .030" |
| 14 | .130"-.160" | .160" | .040" |
| 12 | .150"-.175" | .160" | .045" |
| 10 | .170"-.195" | .160" | .045" |
| 9 | .190"-.215" | .160" | .050" |
| 8 | .210"-.250" | .190" | .055" |
| 7 | .245"-.295" | .190" | .055" |
| 6 | .290"-.360" | .224" | .060" |
| 4-1 | .355"-.460" | .224" | .060" |

Colors: White with black markings (Standard color). Black with white markings, Blue, Green, Yellow, Red with black markings.

Material: PVC MIL-1-631C, Type F, Form U, Grade a & b, Class 1, Category 1, finish: glossy. Specific gravity: 1.21. Hardness (shore A): 73 av. Tensile Strength: 2600 psi. av. Ultimate Elongation: 350% av. Dielectric Strength (20 mil specimen): 750 volts/mil. Cold Brittle Temp. (50% non-failure): -65°F .

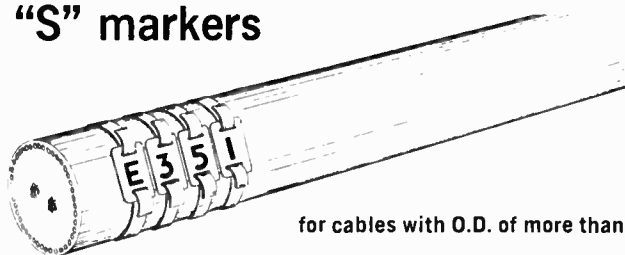
Markings: Single: numerals 0-9, letters A to Z, symbols +, -, ~, ±. Multiple: any 2, 3, 4 or 5 unit combinations of above.

Packing: Coil of 50 single markers, one size, color and character per polyethylene covered cards. Coil of 500, as above, on self-servicing reels. Coil of 500 multiple markers, one color, sizes 22, 20, 18, 16, 14, 12, 10, 9 or 8. Coil of 250 multiple markers, sizes 7, 6 or 4-1.

Min. Quantity: per size, and character: 50 single white, 500 multiple, 500 colored.

Min. Order: 500 markers.

Beta "S" markers



for cables with O.D. of more than .500".

Strap-on-marker: Size: 3/8" x 1/8" x .040", material P.V.C., colors and material same as BETA "Z". Markings: 0-9, A-Z, +, -, ~, ±.

Application Strip: PVC-covered aluminum, 4 mm wide 0.6 mm thick.

Packing: Markers, 50 per indicator card pouch; strips in 165' coils.

Min. Quantity: Per size, color and character: 50 markers.

Min. Order: 500 Markers, 165' coil of strip.

ELECTROVERT INC.

COMPONENTS AND EQUIPMENT DIVISION

New York, N. Y.



ELECTRONIC COMPONENTS



(A) G-C INSULATING CAMBRIC—Dry yellow varnished cambric for field coils, transformers, chokes, resistors, motors, etc.
Cat. No. 549 .010"—Roll over 210 sq. in. Net \$.78

(B) G-C LAMINATED PHENOLIC PLASTIC PANELS—Black laminated panels. 1/8" thick stock. Black color.
Cat. No. 590 6"x6"x1/8" Net \$.42
591 6"x12"x1/8" .82
592 12"x12"x1/8" 1.58

(C) G-C FIBEROID FISH PAPER—Fish paper has many uses around the shops for repair jobs where electrical insulation is required.
Cat. No. 560 .010"—240 sq. in. roll Net \$.45

(D) G-C BATTERY CONNECTOR STRIP—Used for connecting 67 1/2 volt "B" batteries, such as Eveready 455, 466; Burgess XX30, XX45.
Cat. No. 8115 Net \$.18

(E) G-C SHIELDED PHONO PICK-UP WIRE—Handy packages of shielded phono pick-up wire, very handy for new installations or replacements.
Cat. No. 1738-E Envelope Net \$.38

(F) G-C AC-DC INDOOR ANTENNA WIRE—Antenna lead wire for indoor type AC-DC sets. Flexible copper wire covered with brown plastic insulation.
Cat. No. 840 25 Ft. coil Net \$.37

(G) G-C 300-OHM LINE PROTECTIVE TUBING—Clear plastic tubing will fit over 300-ohm flat lines and will protect the line from grounding and rubbing on corners of buildings, eaves, etc. It actually protects and waterproofs the line.
Cat. No. 625 Box of 8 ft. Net \$.75
626 250 ft. coil 15.90
627 1000 ft. 59.33

(H) G-C ALLIGATOR-CLIP INSULATORS—High quality vinyl plastic insulators fit all alligator clips. Positive insulation against grounding and shock.
Cat. No. 9376 Red Net \$.07
9376-C 4.50
9377 Black .07
9377-C 4.50

(J) G-C GENFLEX PLASTIC TUBING—High grade extremely flexible plastic tubing for radio and electronic insulation work. Highly resistant to cold or heat. High dielectric strength, average 8,000 volts. Colors: Black, Red, Green and Clear (Specify Color).
Cat. No. 603 18 B-S Gauge, .042 I.D., 20 ft. Package Net \$.82
605 16 B-S Gauge, .053 I.D., 20 ft. Package Net \$.82
607 14 B-S Gauge, .066 I.D. 20 ft. Package Net \$.82

609 12 B-S Gauge, .085 I.D., 20 ft. Package Net \$.82

611 10 B-S Gauge, .106 I.D., 15 ft. Package Net \$.82

613 8 B-S Gauge, .133 I.D., 15 ft. Package Net \$.82

616 6 B-S Gauge, .166 I.D., 10 ft. Package Net \$.82

617 4 B-S Gauge, .208 I.D., 10 ft. Package Net \$.82

620 2 B-S Gauge, .263 I.D., 10 ft. Package Net \$.82

G-C PLASTIC TUBING KITS—Handy kits of assorted colors and sizes. Ideal for experimenters and servicemen.
Cat. No. 635 Kit of 25 ft. assorted. Sizes 18 to 10 Genflex Tubing. Net \$.82

(L) G-C ASSORTEO SPAGHETTI KIT—An assortment of 7 1/2" lengths of spaghetti sleeving. 26 lengths to the kit. Sizes include from No. 17 wire to 3/8" I.D.

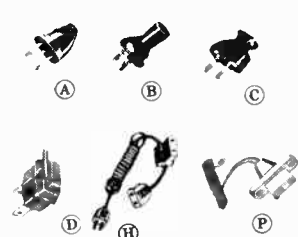
Cat. No. 550 Kit of 26 Lengths. Net \$.40

(M) SPAGHETTI AND SLEEVING ASSORTMENT—A variety of sizes and colors are included of high grade varnish tubing. Put up in attractive box.
Cat. No. 551 Net \$.90

(N) G-C SPAGHETTI IN BOXES—Best grade varnished tubing put in convenient 20-ft. lengths. Will fit wire from No. 12 to No. 18. Colors: Black, Red, Yellow, Green and Blue.
Cat. No. 499 Net \$1.23

(O) G-C RADIO SPAGHETTI—High grade spaghetti for radio-television work. Average dielectric strength 4000 volts. Very flexible. Smoothly coated with best grades of varnish. Material is approved by A. S. T. M. Colors: Black, Brown, Red, Green and Yellow (Specify Color). 30" Lengths.
Cat. No. 500 No. 20, fit 20 wire Net \$.13
503 No. 17, fit 18 wire .15
506 No. 14, fit 14 wire .17
508 No. 12, fit 12 wire .17
512 1/8" I.D. .23
515 3/8" I.D. .23
518 1/4" I.D. .37
521 3/8" I.D. (resist. size) .63

522 3/8" I.D. Red & Black .73
523 1/2" I.D. Red & Black .97



(A) G-C STREAMLINE ATTACHMENT CAP—Made of rubber. Brass blades. Spring type. U.L. approved.
Cat. No. 865 Net \$.23

(B) G-C SPRING ACTION CAP—Heavy-duty type. Made of rubber. Brass blades. U.L. approved.
Cat. No. 861 Net \$.17

(C) G-C SPRING ACTION CAP—Flat plastic type. Brass blades. U.L. approved. Cat. No. 860 Net \$.17

(D) G-C ANGLE PLUG—Plastic angle plug that assembles in a jiffy. It has no screws and requires no soldering.
Cat. No. 8360-E Brown Net \$.30
8361-E Ivory .30

(E) SERVICEMAN'S CHEATER CORD—Special "cheater cord" for extending the standard interlock safety cord supplied with the TV set.
Cat. No. 8948 Net \$.87

(F) INTERLOCK CABLE CORD—Replacement cord for RCA, Philco, G-E, Admiral and others.
Cat. No. 8200 Reg. TV Cord Net \$.48
8201 Spec. Zenith Corc .70

NEW G-C INSULATING TUBING OF TEFLON*



—Exceptionally tough and flexible. Withstands temperatures from 450° below zero F. to 500° above zero F. Will not melt near solder joints. Outstanding dielectric properties—zero moisture absorption. Chemically inert. Completely weatherproof. Wires can be inserted much more easily than in any other tubing.

*Registered trademark Du Pont Co.

| Part No. | Feet Per Spool | Color | I.O. Gauge | (Inches) | Wall Thickness Per Spool | Olr. Net |
|----------|----------------|-------|------------|----------|--------------------------|----------|
| 7980-7 | 10 | Nat | 24 | .022 | .010 | \$ 1.33 |
| 7980-7C | 100 | Nat | 24 | .022 | .010 | 9.75 |
| 7980-1 | 10 | Red | 24 | .022 | .010 | 1.33 |
| 7980-1C | 100 | Red | 24 | .022 | .010 | 9.75 |
| 7980-4 | 10 | Blue | 24 | .022 | .010 | 1.33 |
| 7980-4C | 100 | Blue | 24 | .022 | .010 | 9.75 |
| 7981-7 | 10 | Nat | 22 | .027 | .012 | 1.47 |
| 7981-7C | 100 | Nat | 22 | .027 | .012 | 12.43 |
| 7981-1 | 10 | Red | 22 | .027 | .012 | 1.47 |
| 7981-1C | 100 | Red | 22 | .027 | .012 | 12.43 |
| 7981-4 | 10 | Blue | 22 | .027 | .012 | 1.47 |
| 7981-4C | 100 | Blue | 22 | .027 | .012 | 12.43 |
| 7982-7 | 10 | Nat | 20 | .034 | .012 | 1.83 |
| 7982-7C | 100 | Nat | 20 | .034 | .012 | 18.27 |
| 7982-1 | 10 | Red | 20 | .034 | .012 | 1.83 |
| 7982-1C | 100 | Red | 20 | .034 | .012 | 18.27 |
| 7982-4 | 10 | Nat | 18 | .042 | .012 | 1.83 |
| 7982-4C | 100 | Blue | 20 | .034 | .012 | 18.27 |
| 7983-7 | 10 | Red | 20 | .034 | .012 | 2.23 |
| 7983-7C | 100 | Nat | 18 | .042 | .012 | 20.88 |
| 7983-1 | 10 | Red | 18 | .042 | .012 | 2.23 |
| 7983-1C | 100 | Red | 18 | .042 | .012 | 20.88 |
| 7983-4 | 10 | Blue | 18 | .042 | .012 | 2.23 |
| 7983-4C | 100 | Blue | 18 | .042 | .012 | 20.88 |
| 7984-7 | 10 | Nat | 16 | .053 | .012 | 2.65 |
| 7984-7C | 100 | Nat | 16 | .053 | .012 | 25.02 |
| 7984-1 | 10 | Red | 16 | .053 | .012 | 2.65 |
| 7984-1C | 100 | Red | 16 | .053 | .012 | 25.02 |
| 7984-4 | 10 | Blue | 16 | .053 | .012 | 2.65 |
| 7984-4C | 100 | Blue | 16 | .053 | .012 | 25.02 |
| 7985-7 | 10 | Nat | 14 | .066 | .012 | 2.92 |
| 7985-7C | 100 | Nat | 14 | .066 | .012 | 28.38 |
| 7985-1 | 10 | Red | 14 | .066 | .012 | 2.92 |
| 7985-1C | 100 | Red | 14 | .066 | .012 | 28.38 |
| 7985-4 | 10 | Blue | 14 | .066 | .012 | 2.92 |
| 7985-4C | 100 | Blue | 14 | .066 | .012 | 28.38 |
| 7986-7 | 5 | Nat | 12 | .085 | .014 | 1.83 |
| 7986-7C | 100 | Nat | 12 | .085 | .014 | 34.28 |
| 7986-1 | 5 | Red | 12 | .085 | .014 | 1.83 |
| 7986-1C | 100 | Red | 12 | .085 | .014 | 34.28 |
| 7986-4 | 5 | Blue | 12 | .085 | .014 | 1.83 |
| 7986-4C | 100 | Blue | 12 | .085 | .014 | 34.28 |
| 7987-7 | 5 | Nat | 10 | .106 | .014 | 2.17 |
| 7987-7C | 100 | Nat | 10 | .106 | .014 | 39.53 |
| 7987-1 | 5 | Red | 10 | .106 | .014 | 2.17 |
| 7987-1C | 100 | Red | 10 | .106 | .014 | 39.53 |
| 7987-4 | 5 | Blue | 10 | .106 | .014 | 2.17 |
| 7987-4C | 100 | Blue | 10 | .106 | .014 | 39.53 |

ITT RG Coaxial Cables

ITT Polyethylene Dielectric RG Coaxial Cables are produced to meet rigid military specifications. The superiority and consistent uniformity of these cables are the result of high engineering and quality control standards applied through each step of production—from micrometer gauging of the center conductors to the final outer jacket.

| Type | Nom. O.D. | Nom. Imp. Ohms | RMS Test Volts (X 1000) | Center Cond. # | Type | Nom. O.D. | Nom. Imp. Ohms | RMS Test Volts (X 1000) | Center Cond. # |
|----------------------|-----------|----------------|-------------------------|----------------|-----------|-----------|----------------|-------------------------|----------------|
| COAXIAL CABLE | | | | | | | | | |
| RG-6/U | .335 | 76 | 7 | CW | RG-59/U | .242 | 73 | 7 | CW |
| RG-8/U | .405 | 52 | 10 | C | RG-59A/U | .242 | 75 | 7 | CW |
| RG-8A/U | .405 | 50 | 10 | C | RG-59B/U | .246 | 75 | 7 | CW |
| RG-9A/U | .420 | 51 | 10 | S | RG-62/U | .242 | 93 | 3 | CW |
| RG-9B/U | .425 | 50 | 10 | S | RG-62A/U | .242 | 93 | 3 | CW |
| RG-10/U | .475 | 50 | 10 | C | RG-62B/U | .242 | 93 | 3 | CW |
| RG-10A/U | .475 | 50 | 10 | C | RG-63/U | .405 | 125 | 3 | CW |
| RG-11/U | .405 | 75 | 10 | T | RG-63B/U | .405 | 125 | 3 | CW |
| RG-11A/U | .405 | 75 | 10 | T | RG-65A/U | .405 | 950 | 3 | C |
| RG-12/U | .475 | 75 | 10 | T | RG-71/U | .250 | 93 | 3 | CW |
| RG-12A/U | .475 | 75 | 10 | T | RG-71A/U | .250 | 93 | 3 | CW |
| RG-13A/U | .425 | 75 | 10 | T | RG-71B/U | .250 | 93 | 3 | CW |
| RG-14A/U | .545 | 50 | 12 | C | RG-74A/U | .615 | 50 | 12 | C |
| RG-17/U | .870 | 52 | 22 | C | RG-79B/U | .475 | 125 | 3 | CW |
| RG-17A/U | .870 | 50 | 22 | C | RG-108A/U | .235 | 78 | 2 | T |
| RG-18A/U | .945 | 50 | 22 | C | RG-122/U | .160 | 50 | 5 | T |
| RG-22/U | .405 | 95 | 2 | C | RG-174/U | .100 | 50 | 4.5 | CW |
| RG-55/U | .201 | 53.5 | 5 | S | RG-213/U | .412 | 50 | 10 | C |
| RG-55A/U | .216 | 50 | 5 | S | RG-214/U | .412 | 50 | 10 | S |
| RG-55B/U | .206 | 53.5 | 5 | S | RG-218/U | .870 | 50 | 22 | C |
| RG-58/U | .195 | 53.5 | 5 | C | RG-219/U | .945 | 50 | 22 | C |
| RG-58A/U | .195 | 52 | 5 | T | RG-223/U | .216 | 50 | 5 | S |
| RG-58C/U | .195 | 50 | 5 | T | | | | | |

■—S—Silvered Copper; CW—Copperweld;
C—Copper; T—tinned copper;

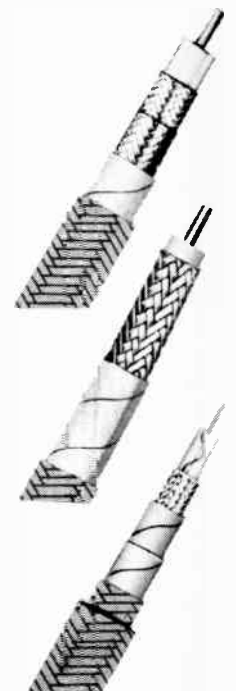


ITT Teflon Coaxial Cables

Teflon dielectric cable exhibits high dielectric strength and low dielectric constant. Teflon's ability to withstand high temperature and exposure to gases and liquids accounts for its use where other cables prove inadequate. Fiberglass or Teflon jackets add to this cable's resistance to abrasion, moisture and temperature.

| MIL Number | Nom. Imp. Ohms | Jacket Dia. | Type Jacket* | Shield | | O.D. of Dielectric† | Center Conductor # | Cap. μmf/ft. | Max. Op. Volts RMS |
|------------|----------------|-------------|--------------|--------|-----|---------------------|--------------------|--------------|--------------------|
| | | | | 1st | 2nd | | | | |
| RG-87A/U | 50 | .440" | V(2) | S | S | .285"TF | 7/20S | 29.5 | 5000 |
| RG-140/U | 75 | .241" | V | S | | .146"TF | .025SCW | 21.0 | 2300 |
| RG-141/U | 50 | .195" | V | S | | .116"TF | .0359SCW | 28.5 | 1900 |
| RG-141A/U | 50 | .195" | V | S | | .116"TF | .039SCW | 28.5 | 1900 |
| RG-142/U | 50 | .206" | V | S | S | .116"TF | .0359SCW | 28.5 | 1900 |
| RG-142A/U | 50 | .206" | V | S | S | .116"TF | .039SCW | 28.5 | 1900 |
| RG-143/U | 50 | .325" | V(2) | S | S | .185"TF | .057SCW | 28.5 | 3000 |
| RG-187/U | 75 | .110" | VII | S | | .063"TF | 7/38SCW | 19.5 | 1200 |
| RG-188/U | 50 | .110" | VII | S | | .060"TF | 7/.0067SCW | 29.0 | 1200 |
| RG-195/U | 95 | .155" | VII | S | | .102"TF | 7/38SCW | 15.0 | 1500 |
| RG-196/U | 50 | .080" | VII | S | | .034"TF | 7/38SCW | 29.0 | 1000 |
| RG-211/U | 50 | .745" | V(2) | C | | .620"TF | .190C | 29.0 | 7000 |
| RG-225/U | 50 | .435" | V(2) | S | S | .285"TT | 7/.0312S | 29.5 | 5000 |

Note: Operating Temperature Limits: Fiberglass, -55° C to +250° C; Teflon, -55° C to +200° C; *V—Fiberglass Braid; VII—Teflon; †TT—Teflon Tape; TF—Teflon. #S—Silver-coated copper; C—Copper; CW—Copperweld; SCW—Silver-coated Copperweld.



ITT DISTRIBUTOR PRODUCTS DIVISION
INTERNATIONAL TELEPHONE & TELEGRAPH CORPORATION

We reserve the right to change specifications without notice.
In inventory at your local ITT Distributor at OEM prices.



POLYSTRIP LOW VOLTAGE WIRING

SPECIFICATIONS FOR POLYSTRIP CABLE

INSULATION—IRC Type SE self-extinguishing, serviceable to 85°C.

CONDUCTOR SIZE—.002" x .062" copper (equivalent to AWG 28).

OVERALL WIDTH—P1003—.330"
P1005—.630"

NOMINAL THICKNESS—.009" - .010"

CURRENT CARRYING CAPACITY—2 amps maximum

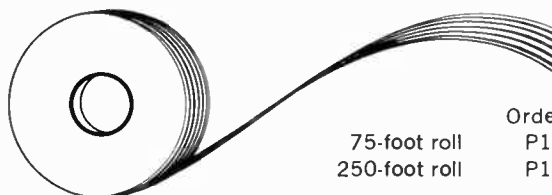
VOLTAGE RATING—28 volts

RESISTANCE—.066 ohms/conductor foot

POLYSTRIP CABLE AND ACCESSORIES

All items in the Dealer Kit can be ordered individually. Savings are possible through quantity orders.

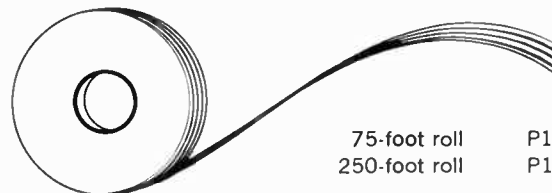
5-CONDUCTOR POLYSTRIP CABLE



75-foot roll
250-foot roll

Order Number
P1005-75
P1005-250

3-CONDUCTOR POLYSTRIP CABLE



75-foot roll
250-foot roll

P1003-75
P1003-250



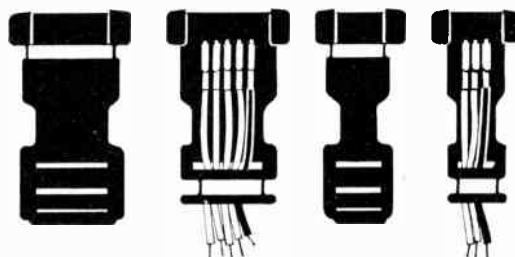
CONNECTORS

5PWR

5PWA

3PWR

3PWA



Specially designed and manufactured to speed installation of POLYSTRIP.

Supplied in packages of 10 and 100.

Dealer Kit #205 . . . everything needed for one or more profit-proving installations.

1—75-foot roll of 5 conductor POLYSTRIP cable

1—75-foot roll of 3-conductor POLYSTRIP cable

6—5PWR (splicing type) connectors for 5-conductor cable

2—5PWA (wirelead type) connectors for 5-conductor cable

6—3PWR connectors for 3-conductor cable

2—3PWA connectors for 3-conductor cable

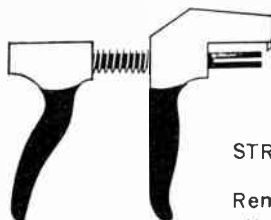
1—50-foot roll of double-backed pressure tape

1—Stripping tool



DOUBLE-BACKED TAPE

For fast neat installations without marring walls. Supplied in 50-foot rolls.



STRIPPING TOOL

Removes insulation quickly for connector attachment.

INSULATION REMOVAL

There are several methods of removing Polystrip insulation utilizing heat, cutting or abrasion techniques.

1. The stripping tool is a fast, convenient insulation cutter.
2. A de-soldering iron is an effective stripping tool which uses the heat technique.
3. A similar heat method requires a 240° F. hot plate.
4. Polystrip insulation may be cut with a sharp knife or razor blade.

SPIRAL WRAP



Illumitronic has the most complete line of **PLASTIC ROD, TUBING and SHEET.**

Also **HARNESSING and CABLING materials:**

Spiral Wrap is spirally cut plastic tubing with many uses. It is ideal for bundling wires into compact and flexible cables. Spiral Wrap is also used to prevent abrasion, to insulate, and to hold wires, cables and tubing, etc. Spiral Wrap is available in 5 types of plastic—each with properties for specific applications. For general purpose applications Polyethylene Spiral Wrap (SWP) is recommended. It will withstand temperatures to 220°F. Nylon Spiral Wrap (SWN) is tough and has excellent abrasion characteristics along with excellent temperature characteristics to 300°F. Rulan Spiral Wrap (SWR) is intended for applications where a flame-retardant material is required. Both Irradiated Polyethylene (SWI) and Teflon Spiral Wrap (SWT) have extremely good temperature characteristics. SWT will stand temperatures to 500°F. Teflon Spiral Wrap also has chemical inertness and is non-burning.

| NEW NO. | OLD NO. | OD | WALL | COLOR | NET/FT | NET/100 FT | |
|--------------------------------|---------|------|------|---------|--------|------------|-------|
| | | | | | 1-99' | 100-999' |  | 1000-UP |
| POLYETHYLENE | | | | | | | |
| SWP-1/8 | 197-2 | 1/8 | .031 | 1 | .05 | 3.60 | 3.00 |
| 3/16 | -3 | 3/16 | .031 | 1 | .07 | 5.30 | 4.95 |
| -1/4 | -4 | 1/4 | .058 | 1,2,3,4 | .08 | 6.00 | 5.55 |
| -1/4XT | -4A | 1/4 | .032 | 1 | .08 | 5.80 | 5.25 |
| -3/8 | -6 | 3/8 | .058 | 1,2,3,4 | .13 | 9.50 | 8.40 |
| -1/2* | -8 | 1/2 | .058 | 1 | .16 | 14.50 | 13.00 |
| NYLON | | | | | | | |
| SWN-1/8 | 193-2 | 1/8 | .016 | 1 | .09 | 7.50 | 6.90 |
| -1/4 | -4 | 1/4 | .030 | 1 | .16 | 15.50 | 14.60 |
| -3/8 | -6 | 3/8 | .030 | 1 | .38 | 36.40 | 35.10 |
| -1/2* | -8 | 1/2 | .030 | 1 | .45 | 44.00 | 43.00 |
| FLAME RETARDANT (RULAN) | | | | | | | |
| SWR-1/4 | 198-4 | 1/4 | .058 | 1,2 | .10 | 9.00 | 7.90 |
| -3/8 | -8 | 3/8 | .058 | 1,2 | .15 | 13.00 | 11.40 |
| IRRADIATED POLYETHYLENE | | | | | | | |
| SWI-1/4 | 196-4 | 1/4 | .058 | 2 | .58 | 54.00 | 44.60 |
| TEFLON** | | | | | | | |
| SWT-1/8 | 199-2 | 1/8 | .030 | 1 | 1.35 | 117.00 | |
| -1/4 | -4 | 1/4 | .030 | 1 | 1.50 | 139.00 | |
| -3/8 | -6 | 3/8 | .030 | 1 | 2.95 | 261.00 | |
| -1/2 | -8 | 1/2 | .030 | 1 | 4.20 | 380.00 | |

AGGREGATION: Sizes, colors and types may be aggregated.

AVAILABLE IN 3' (10/Box)
25' (1/Box)
100' Spool
500' Spool

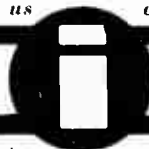
COLOR: 1-Natural (white), 2-Black, 3-Red, 4-Blue.
Black polyethylene is excellent for outdoor use.
Additional colors and sizes available on request.

**Available in 3' and 25' lengths subject to plus or minus 10%

*1/2" o.d. available in 3', 25', 100' and 250' spool.

For specifications, contact us or consult your local distributor.

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california

VINYL SLEEVING



Illumitronic has the most complete line of PLASTIC ROD, TUBING and SHEET.

Also HARNESSING and CABLING materials:

PROPERTIES

Temperature rating 105°C
 Flexibility (low temp.) -30°C
 Dielectric Strength 800 V/Mil
 Flammability non-flammable
 Tensile Strength 2500 PSI

SLV-105 conforms to spec. MIL-1-631C, grade C, ASTM-D876, ASTM-D9222 and is U/L approved.

STANDARD COLORS:

Clear, Black, Red, Yellow, Green, Blue, Brown, White, Orange, Violet.

Sizes #24 thru #1 available in all standard colors
 Sizes 0 thru 2 1/2" available in clear and black.

QUANTITY PRICE
 IF PURCHASED IN LENGTHS
 SHOWN, SIZES MAY BE AGGREGATED

| CAT # SIZE | ID | WALL | SHORT LENGTHS NET PER LENGTH | | | | QUANTITY | NET PER 1000 FT | | |
|--------------|-------|------|---------------------------------|-------|-------|-------|----------|-----------------|-------------|--------------|
| | | | 25' | 50' | 100' | 500' | | LESS THAN 1000' | 1000'-4999' | 5000' & over |
| SLV 105 - 24 | .022 | .012 | | | 1.96 | 8.80 | 1000 | 16.10 | 13.00 | 10.80 |
| - 22 | .027 | .012 | | | 1.97 | 8.85 | 1000 | 16.20 | 13.10 | 10.90 |
| - 20 | .034 | .016 | | | 2.01 | 8.98 | 1000 | 16.60 | 13.40 | 11.10 |
| - 19 | .038 | .016 | | | 2.06 | 9.30 | 1000 | 17.10 | 13.50 | 11.30 |
| - 18 | .042 | .016 | | | 2.08 | 9.40 | 1000 | 17.30 | 13.80 | 11.40 |
| - 17 | .047 | .016 | | | 2.11 | 9.55 | 1000 | 17.60 | 14.00 | 11.50 |
| - 16 | .053 | .016 | | | 2.20 | 9.85 | 1000 | 18.50 | 14.60 | 12.10 |
| - 15 | .059 | .016 | | | 2.27 | 9.90 | 1000 | 19.20 | 14.90 | 12.30 |
| - 14 | .066 | .016 | | | 2.34 | 9.95 | 500 | 19.90 | 15.40 | 12.80 |
| - 13 | .076 | .016 | | 1.37 | 2.39 | 10.20 | 500 | 20.40 | 16.00 | 13.10 |
| - 12 | .085 | .016 | | 1.42 | 2.49 | 10.70 | 500 | 21.40 | 16.60 | 13.80 |
| - 11 | .095 | .016 | | 1.46 | 2.56 | 11.05 | 500 | 22.10 | 17.20 | 14.50 |
| - 10 | .106 | .016 | | 1.51 | 2.66 | 11.55 | 500 | 23.10 | 18.50 | 15.50 |
| - 9 | .118 | .020 | | 1.92 | 3.49 | 15.70 | 500 | 31.40 | 24.60 | 20.80 |
| - 1/8 | .125 | .020 | | 2.00 | 3.65 | 16.85 | 500 | 33.85 | 26.55 | 22.25 |
| - 8 | .133 | .020 | | 2.05 | 3.74 | 16.95 | 500 | 33.90 | 26.60 | 22.30 |
| - 7 | .148 | .020 | | 2.16 | 3.97 | 18.10 | 500 | 36.20 | 28.30 | 23.50 |
| - 6 | .166 | .020 | | 2.31 | 4.26 | 19.55 | 500 | 39.10 | 30.20 | 25.10 |
| - 5 | .186 | .020 | | 2.47 | 4.58 | 21.15 | 200 | 42.30 | 32.30 | 26.80 |
| - 4 | .208 | .020 | | 2.64 | 4.93 | | 200 | 45.80 | 34.70 | 28.40 |
| - 3 | .234 | .020 | | 2.80 | 5.25 | | 200 | 49.00 | 36.90 | 30.40 |
| - 1/4 | .250 | .020 | | 2.95 | 5.55 | | 200 | 53.35 | 39.95 | 33.15 |
| - 2 | .263 | .020 | | 3.02 | 5.69 | | 200 | 53.40 | 40.00 | 33.20 |
| - 1 | .294 | .020 | | 3.24 | 6.12 | | 200 | 57.70 | 43.10 | 35.60 |
| - 5/16 | .312 | .025 | | 4.07 | 7.79 | | 200 | 62.30 | 46.40 | 38.90 |
| - 0 | .330 | .020 | | 3.47 | 6.58 | | 200 | 74.40 | 55.40 | 46.40 |
| - 3/8 | .375 | .025 | 2.40 | 4.65 | 8.59 | | 100 | 85.90 | 64.10 | 54.90 |
| - 7/16" | .438 | .025 | 2.66 | 5.18 | 9.65 | | 100 | 96.50 | 72.50 | 62.00 |
| - 1/2 | .500 | .025 | 2.91 | 5.67 | 10.64 | | 100 | 106.40 | 80.70 | 68.70 |
| - 9/16 | .562 | .030 | 3.79 | 7.44 | | | 50 | 141.70 | 107.70 | 90.70 |
| - 5/8 | .625 | .030 | 4.08 | 8.00 | | | 50 | 153.00 | 117.30 | 98.30 |
| - 3/4 | .750 | .035 | 5.53 | 10.91 | | | 50 | 211.20 | 160.90 | 134.40 |
| - 7/8 | .875 | .035 | 6.19 | 12.22 | | | 50 | 237.40 | 183.80 | 153.10 |
| - 1" | 1.000 | .035 | 6.88 | 13.62 | | | 50 | 265.30 | 205.20 | 170.00 |
| - 1 1/8 | 1.125 | .040 | 8.70 | | | | 25 | 347.90 | 265.10 | 219.70 |
| - 1 1/4 | 1.250 | .040 | 9.20 | | | | 25 | 367.80 | 285.80 | 238.90 |
| - 1 3/8 | 1.375 | .040 | 9.83 | | | | 25 | 393.10 | 302.90 | 253.30 |
| - 1 1/2 | 1.500 | .045 | 11.92 | | | | 25 | 476.70 | 367.80 | 311.10 |
| - 1 3/4 | 1.750 | .055 | 14.86 | | | | 25 | 594.30 | 461.10 | 392.70 |
| - 2" | 2.000 | .060 | 20.42 | | | | 25 | 816.70 | 626.20 | 531.20 |
| - 2 1/4 | 2.250 | .065 | 24.28 | | | | 25 | 971.00 | 738.80 | 628.20 |
| - 2 1/2 | 2.500 | .070 | 28.78 | | | | 25 | 1,151.20 | 873.00 | 740.60 |

SLV 105-S1 25 Assorted 1' Lengths, Assorted colors (up to "0")..... .99

SLV 105-S2 10 Assorted 1' Lengths, Assorted colors (1/4 to 1")..... 1.49

For specifications, contact us or consult your local distributor.

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sunnyvale, california

TEFLON SLEEVING



Illumitronic has the
most complete line
of **PLASTIC ROD,**
TUBING and **SHEET.**

Also **HARNESSING**
and **CABLING**
materials:

Illumitronic Teflon sleeving is used extensively where temperature extremes exist. This material will withstand temperatures of from minus 450° to 500°F. The material is chemically inert—is completely weatherproof—has excellent dielectric strength (480)—extremely low water absorption—is non-burning—and has a low coefficient of friction.

| NO. | ID | WALL* | SHORT LENGTHS | | | MIN. LGTH. TO AGGREGATE ↓ | STANDARD FULL LENGTHS | |
|--------|------|-------|-----------------|-------|--------|------------------------------------|-----------------------|-----------------|
| | | | COST PER LENGTH | | | | NET/100 FT | |
| | | | 10FT | 50FT | 100FT | | 200'- 499' | 500'- & Over |
| SLT-30 | .012 | .009 | 1.24 | 4.95 | 8.25 | 200 | 5.50 | 4.65 |
| -28 | .015 | .009 | 1.31 | 5.22 | 8.70 | 200 | 5.80 | 5.05 |
| -26 | .018 | .009 | 1.31 | 5.22 | 8.70 | 200 | 5.80 | 5.20 |
| -24 | .022 | .012 | 1.31 | 5.22 | 8.70 | 200 | 5.80 | 5.20 |
| -22 | .027 | .012 | 1.67 | 6.66 | 11.10 | 200 | 7.40 | 6.30 |
| -20 | .034 | .012 | 2.45 | 9.81 | 16.35 | 200 | 10.90 | 9.25 |
| -19 | .038 | .012 | 2.68 | 10.67 | 17.78 | 200 | 11.85 | 10.00 |
| -18 | .042 | .012 | 3.01 | 12.02 | 20.03 | 200 | 13.35 | 11.40 |
| -17 | .047 | .012 | 3.25 | 13.01 | 21.68 | 200 | 14.45 | 12.40 |
| -16 | .053 | .012 | 3.58 | 14.31 | 23.85 | 200 | 15.90 | 12.90 |
| -15 | .059 | .012 | 3.66 | 14.63 | 24.38 | 200 | 16.25 | 13.55 |
| -14 | .066 | .012 | 3.93 | 15.71 | 26.18 | 200 | 17.45 | 14.55 |
| -13 | .076 | .012 | 4.29 | 17.15 | 28.58 | 200 | 19.05 | 15.75 |
| -12 | .085 | .012 | 4.61 | 18.45 | 30.75 | 200 | 20.50 | 16.95 |
| -11 | .095 | .012 | 5.11 | 20.43 | 34.05 | 200 | 22.70 | 18.80 |
| -10 | .106 | .012 | 5.32 | 21.29 | 35.48 | 200 | 23.65 | 19.40 |
| -9 | .118 | .015 | 6.41 | 25.65 | 42.75 | 200 | 28.50 | 26.10 |
| -8 | .133 | .015 | 7.08 | 28.31 | 47.18 | 200 | 31.45 | 28.85 |
| -7 | .148 | .015 | 7.70 | 30.78 | 51.30 | 200 | 34.20 | 31.60 |
| -6 | .166 | .015 | 8.33 | 33.30 | 55.50 | 200 | 37.00 | 33.95 |
| -5 | .186 | .015 | 9.15 | 36.59 | 60.98 | 100 | 40.65 | 37.35 |
| -4 | .208 | .015 | 10.01 | 40.05 | 66.75 | 100 | 44.50 | 40.80 |
| -3 | .234 | .015 | 10.93 | 43.70 | 72.83 | 100 | 48.55 | 44.80 |
| -2 | .263 | .015 | 12.41 | 49.64 | 82.73 | 100 | 55.15 | 50.65 |
| -1 | .294 | .015 | 13.86 | 55.44 | 92.40 | 100 | 61.60 | 56.50 |
| -0 | .330 | .015 | 15.35 | 61.38 | 102.30 | 100 | 68.20 | 62.50 |

Aggregation: Sizes may be aggregated if purchased in standard full lengths shown above.

*Tolerances: #30-#22 .002"
#20-#10 .003"
#9-#0 .004"

*For specifications, contact us
or consult your local distributor.*

**May not be continuous

Standard Color: Natural (White) - other colors on request.

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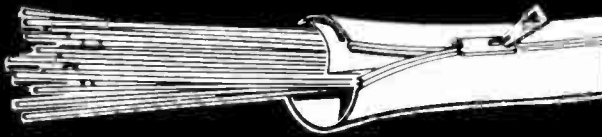


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ZIPPER TUBING



● MAKE YOUR OWN CUSTOM CABLES

As many conductors and types as you want—group them together—zip it up.

No expensive minimums.

You can make exactly what you want!

● MAKE YOUR OWN SHIELDED CABLES

Provides a jacket and a shield for wires in one application.

Gives 100% coverage and provides equal or better than any other type of shielding. Ideal for Hi-Fi shielding.

● CUTS TIME

Applies in seconds.

No pulling — tugging.

available from 3/8" through 4" diameter
in the following types:

Type Z-63 meets MIL-I-631C
available in both 020" wall
and 040" wall

Type Z-74 meets MIL-I-7444
available in both 020" wall
and 040" wall

Type ZVA—a Vinyl Aluminum
Shielded Zipper Tubing

Type ZVG—a Vinylglass
Zipper Tubing

PLASTIC CLAMPS



ETHYL CELLULOSE CLAMPS

The Ethylene Cellulose Clamps are tough and will withstand moisture, age and vibration and eliminate corrosion. They can be used within a temperature range of from -40°F to +185°F.

| NEW # DIA. | OLD# | 100 PAK NET/100 | BULK PAK (NET/1000)* |
|------------------------------|------------|--------------------|-------------------------|
| ETHYL CELLULOSE | | | |
| CLE - 1/8 | 241E - 1/8 | 1.48 | 12.40 |
| - 3/16 | - 3/16 | 1.53 | 12.85 |
| - 1/4 | - 1/4 | 1.63 | 13.70 |
| - 5/16 | - 5/16 | 1.80 | 15.15 |
| - 3/8 | - 3/8 | 1.89 | 15.90 |
| - 7/16 | - 7/16 | 2.07 | 17.45 |
| - 1/2 | - 1/2 | 2.20 | 18.55 |
| - 9/16 | - 9/16 | 2.57 | 21.70 |
| - 5/8 | - 5/8 | 2.67 | 22.55 |
| - 11/16 | - 11/16 | 2.95 | 24.90 |
| - 3/4 | - 3/4 | 3.18 | 26.75 |
| - 7/8 | - 7/8 | 3.32 | 27.95 |
| - 1 | - 1 | 3.58 | 30.20 |
| - 1 1/8 | - 1 1/8 | 3.82 | 32.25 |
| - 1 3/16 | - 1 3/16 | 4.01 | 33.80 |
| - 1 1/4 | - 1 1/4 | 4.09 | 34.45 |
| - 1 5/16 | - 1 5/16 | 4.92 | 41.40 |
| - 1 3/8 | - 1 3/8 | 5.48 | 46.10 |
| - 1 7/16 | - 1 7/16 | 5.68 | 47.65 |
| - 1 1/2 | - 1 1/2 | 6.09 | 50.84 |
| CLE - S1 (Assortment) 50 Pak | | 2.00/Pak | |

NYLON CLAMPS

Molded of DuPont "Zytel" 101 Nylon Resin, the Nylon Clamps will withstand severe temperature and mechanical conditions. The wide temperature range is from -60°F to +300°F, along with strength and toughness and the fact that they do not support combustion, allow Illumitronic Nylon Clamps to meet the most rigid specifications.

| NYLON | | | |
|------------------------------|------------|----------|-------|
| CLN - 1/8 | 241N - 1/8 | 2.24 | 18.75 |
| - 3/16 | - 3/16 | 2.38 | 19.93 |
| - 1/4 | - 1/4 | 2.58 | 21.75 |
| - 5/16 | - 5/16 | 2.85 | 23.90 |
| - 3/8 | - 3/8 | 3.00 | 25.22 |
| - 7/16 | - 7/16 | 3.16 | 26.66 |
| - 1/2 | - 1/2 | 3.36 | 28.36 |
| - 9/16 | - 9/16 | 4.18 | 35.25 |
| - 5/8 | - 5/8 | 4.90 | 41.25 |
| - 11/16 | - 11/16 | 5.26 | 44.30 |
| - 3/4 | - 3/4 | 5.56 | 46.80 |
| - 7/8 | - 7/8 | 6.16 | 51.80 |
| - 1 | - 1 | 6.35 | 53.50 |
| CLN - S1 (Assortment) 50 Pak | | 2.50/Pak | |

*MINIMUM TO AGGREGATE - 500 EA SIZE

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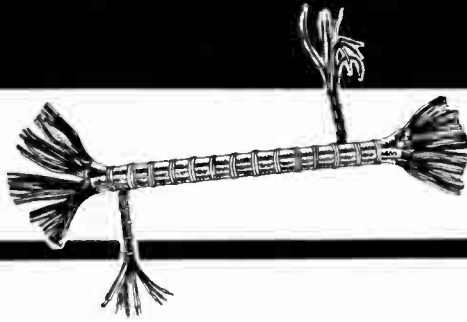


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LACING CORD



Illumitronic has the
most complete line
of **PLASTIC ROD,**
TUBING and **SHEET.**

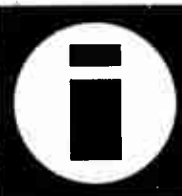
Also **HARNESSING**
and **CABLING**
materials:

| CAT. # | WIDTH | CLASS | TEST | YDS/SPOOL | COST PER THOUSAND YDS. |
|--|-------|-------|------|-----------|---------------------------|
| FLAT NYLON TAPE (500 YD. SPOOLS) | | | | | |
| * LTN-2 WHITE | 3/32 | 2 | 48# | 500 YDS. | 10.86 |
| * LTN-2 BLACK | 3/32 | 2 | 48# | 500 YDS. | 11.86 |
| | DIAM. | CLASS | TEST | YDS/PER # | COST PER ONE POUND SPOOLS |
| ROUND NYLON CORD (1# SPOOLS) | | | | | |
| * LCN-1 WHITE | .050 | 1 | 70# | 550 YDS. | 5.40 |
| * LCN-1 BLACK | .050 | 1 | 70# | 550 YDS. | 6.40 |
| * LCN-2 WHITE | .035 | 2 | 48# | 750 YDS. | 5.40 |
| * LCN-2 BLACK | .035 | 2 | 48# | 750 YDS. | 6.40 |
| * LCN-3 WHITE | .030 | 3 | 32# | 1100 YDS. | 5.40 |
| * LCN-3 BLACK | .030 | 3 | 32# | 1100 YDS. | 6.40 |
| ROUND LINEN CORD (1# SPOOLS) | | | | | |
| * LCL-2 WHITE | .035 | 2 | 48# | 450 YDS. | 3.75 |
| * LCL-2 BLACK | .035 | 2 | 48# | 450 YDS. | 3.95 |
| ROUND VINYL CORD (1# SPOOLS) | | | | | |
| ** LCV BLACK | .060 | - | - | 600 FEET | 3.95 |

* MEETS MIL-T-713A

** ARMY-NAVY APPROVAL UNDER CERT. #ANEESA-13004, SPEC. 1-1-57

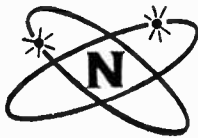
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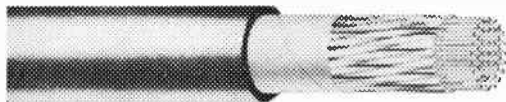
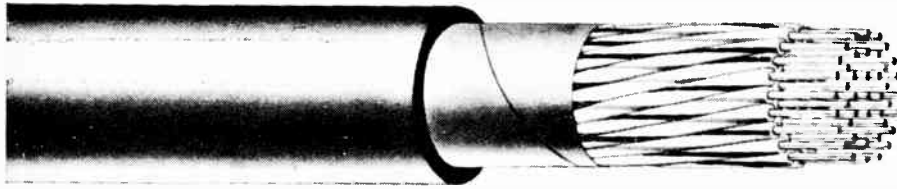
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NATIONAL LOS ANGELES, CALIF.

WIRE & CABLE CORPORATION

See "File-O-Motic"
for
our complete line



Multiple Conductor Control Cables... UNLIMITED

TO MILITARY SPECIFICATIONS

UNSHIELDED

National Wire & Cable Corporation manufactures a complete line of multiple conductor control cables. Conductors are of tinned copper strand with primary insulation of 105°C Military Specification MIL-W-16878 Type C. Insulated for 1000 volts working voltage. Conductors are color coded using 10 standard basic colors plus spiral tracers on white. All conductors are planetary cabled and contra-helically laid with 50% overlapped Mylar wrap. The overall jacket is a 105°C black Thermo-

plastic or may be Neoprene to MIL-R-6855 Class 2 Grade 60 specification.

SHIELDED CABLES

National Multiple Conductor SHIELDED CABLES are to the same specifications as above with the addition of tinned copper braided shield over cable complex with 85-90% coverage to MIL-C-7078A. STANDARD PUT-UPS: 500 ft. and 1000 ft. No deposit reels.

MULTI-CONDUCTOR CABLES IN STOCK

Conductor sizes 22, 20, 18 and 16 gauge.

Other sizes to order

| Part No. | No. of Conductors | Thermoplastic Jacket Thickness | Cable O.D. | Weight Per M-Ft. |
|----------|-------------------|--------------------------------|------------|------------------|
|----------|-------------------|--------------------------------|------------|------------------|

MULTI-CONDUCTOR CABLES

| Conductor Size | 22 Gauge (Stranding 7 Strands of 30 Gauge) | | | |
|----------------|--|------|------|----------|
| NW-722 J | 7 | .040 | .295 | 40 Lbs. |
| NW-1222J | 12 | .050 | .390 | 70 Lbs. |
| NW-1922J | 19 | .060 | .460 | 110 Lbs. |
| NW-2722J | 27 | .060 | .530 | 160 Lbs. |
| NW-3722J | 37 | .060 | .600 | 200 Lbs. |
| NW-4822J | 48 | .060 | .670 | 245 Lbs. |
| NW-6022J | 60 | .060 | .730 | 300 Lbs. |

MULTI-CONDUCTOR CABLES

| Conductor Size | 18 Gauge (Stranding 19 Strands of 30 Gauge) | | | |
|----------------|---|------|------|----------|
| NW-718 J | 7 | .040 | .350 | 75 Lbs. |
| NW-1218J | 12 | .050 | .460 | 135 Lbs. |
| NW-1918J | 19 | .060 | .560 | 225 Lbs. |
| NW-2718J | 27 | .060 | .650 | 300 Lbs. |
| NW-3718J | 37 | .060 | .730 | 390 Lbs. |
| NW-4818J | 48 | .060 | .820 | 510 Lbs. |

MULTI-CONDUCTOR CABLES

| Conductor Size | 16 Gauge (Stranding 19 Strands of 29 Gauge) | | | |
|----------------|---|------|------|----------|
| NW-716 J | 7 | .040 | .370 | 95 Lbs. |
| NW-1216J | 12 | .050 | .500 | 155 Lbs. |
| NW-1916J | 19 | .060 | .600 | 230 Lbs. |
| NW-2716J | 27 | .060 | .700 | 320 Lbs. |
| NW-3716J | 37 | .060 | .785 | 430 Lbs. |

| Part No. | No. of Conductors | Tinned Copper Shield | PVC Jacket Thickness | Cable O.D. | Weight Per M-Ft. |
|----------|-------------------|----------------------|----------------------|------------|------------------|
|----------|-------------------|----------------------|----------------------|------------|------------------|

SHIELDED MULTI-CONDUCTOR CABLES

| | | | | | |
|-----------|----|--------|------|------|----------|
| NW-722 SJ | 7 | No. 36 | .040 | .320 | 55 Lbs. |
| NW-1222SJ | 12 | No. 34 | .050 | .420 | 90 Lbs. |
| NW-1922SJ | 19 | No. 34 | .060 | .490 | 145 Lbs. |
| NW-2722SJ | 27 | No. 34 | .060 | .560 | 200 Lbs. |
| NW-3722SJ | 37 | No. 34 | .060 | .630 | 245 Lbs. |
| NW-4822SJ | 48 | No. 34 | .060 | .700 | 300 Lbs. |
| NW-6022SJ | 60 | No. 34 | .060 | .760 | 355 Lbs. |

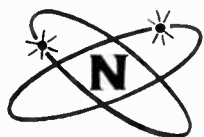
SHIELDED MULTI-CONDUCTOR CABLES

| | | | | | |
|-----------|----|--------|------|------|----------|
| NW-718 SJ | 7 | No. 34 | .040 | .380 | 95 Lbs. |
| NW-1218SJ | 12 | No. 34 | .050 | .490 | 170 Lbs. |
| NW-1918SJ | 19 | No. 34 | .060 | .590 | 265 Lbs. |
| NW-2718SJ | 27 | No. 34 | .060 | .680 | 350 Lbs. |
| NW-3718SJ | 37 | No. 34 | .060 | .760 | 445 Lbs. |
| NW-4818SJ | 48 | No. 34 | .060 | .850 | 575 Lbs. |

SHIELDED MULTI-CONDUCTOR CABLES

| | | | | | |
|-----------|----|--------|------|------|----------|
| NW-716 SJ | 7 | No. 34 | .040 | .400 | 125 Lbs. |
| NW-1216SJ | 12 | No. 34 | .050 | .535 | 195 Lbs. |
| NW-1916SJ | 19 | No. 34 | .060 | .635 | 275 Lbs. |
| NW-2716SJ | 27 | No. 34 | .060 | .735 | 375 Lbs. |
| NW-3716SJ | 37 | No. 34 | .060 | .820 | 500 Lbs. |

For Complete Information and Prices, See Your National Representative or phone, write or wire direct.



NATIONAL

LOS ANGELES, CALIF.

WIRE & CABLE CORPORATION

IMMEDIATE SOURCE FOR ALL YOUR WIRE & CABLE NEEDS— LARGE OR SMALL!

In the field of wire and cable, National sets a standard unparalleled to any other manufacturer of this type. National has the largest electronic and aircraft wire and cable inventory west of Chicago. This coupled with fast efficient service exemplifies the National trade mark of excellence.

Special color coded, shielded and jacketed combinations of hook-up wire and multi-conductor cables are made to your specifications. National is also an immediate source for "Mil & Jan Spec" wires, co-axial cables and vinyl sleeving.

Contact your National representative or phone, write or wire direct.

Immediate source for "MIL and Jan-Spec" wires!

MIL-W-16878



TYPE B



TYPE B-NYLON



TYPE C



TYPE C-NYLON



TYPE D



TYPE D-NYLON

TEFLON



TYPE E

TYPE EE

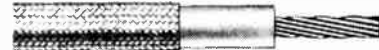
MIL-W-7078 & 7078A Type I & II

MIL-W-5086 Type I, II, III

MIL-W-76



TYPE MW (Medium Wall)



TYPE MW-B (Medium Wall—Braided)



TYPE MW-S (Medium Wall—Shielded)



TYPE MW-J (Medium Wall—Nylon Jacket)



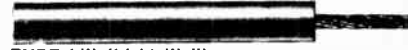
TYPE MW-JS (Medium Wall—Jacketed & Shielded)



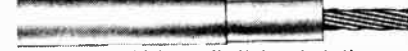
TYPE HW (Heavy Wall)



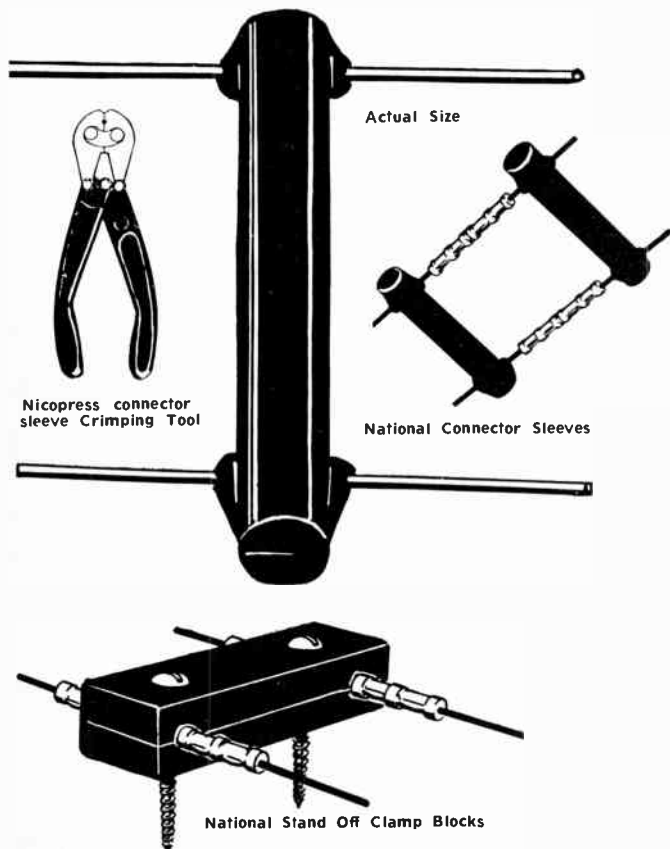
TYPE HW-J (Heavy Wall—Nylon Jacket)



TYPE LW (Light Wall)



TYPE LW-J (Light Wall—Nylon Jacket)



Actual Size

Nicopress connector
sleeve Crimping Tool

National Connector Sleeves

National Stand Off Clamp Blocks

NATIONAL OPENLINE

DESIGNED FOR COMMERCIAL TV DISTRIBUTION SYSTEMS AND
RF POWER TRANSMISSION

Specifications: two inch spacing between conductors ... 12 ga. copperweld ... 470 ohm impedance ... attenuation: 150 mc 0.25 DB PER 100 FEET, AT 30 mc 0.1 DB per 100 FEET. Velocity factor 0.975 ... copperweld steel for maximum strength and electrical stability, and to insure permanent uniform performance ... Spreaders are brown polystyrene, spaced at average five foot intervals, staggered slightly to avoid spurious resonances.

CATALOG #N-470-2.

CATALOG #N-470-300: TAPERED LINE impedance matching transformer for 2 inch OPENLINE. Matches 470 ohm line to 300 ohms. (Not Shown)

NATIONAL OPENLINE DOMESTIC TELEVISION LEAD-IN

SOLID COPPER, FORMVAR COATED

CATALOG #N-470-1

1 inch spacing between conductors ... Spreaders at 6 inch intervals ... Impedance 470 ohms ... Standard put-up 250 feet reels, 12 reels per carton. Shipping weight 50 lbs.

CATALOG #N-300½

½ inch spacing between conductors ... Spreaders at 6 inch intervals ... Impedance 300 ohms (approx.) ... Standard put-up 250 foot reels, 20 reels per carton. Shipping weight 75 lbs.

NATIONAL 1 inch and ½ inch OPENLINE is available on 100, 75, 60 and 50 foot reels and is also available in Copperweld.

SEND FOR COMPLETE INFORMATION AND PRICES ON OPEN LINE ACCESSORIES

**whatever electronic products
you require...**



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faster in
this catalog...**

**...the world's largest catalog
of electronic
products
sold through
distributors**

The
Radio - Electronic
MASTER

Hook-up Wire

PLASTIC TYPE

PLASTIC INSULATION

STRANDED OR SOLID TINNED CONDUCTOR*

SOLID CONDUCTOR

| SAXTON NUMBER | CONDUCTOR SIZE | CONDUCTOR STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|----------------|---------------------|----------------------|--------------|------------------|
| 1AD22 | 22 | Solid | .016" | .061" | \$5.48 |
| 1AD20 | 20 | Solid | .016" | .064" | 6.90 |
| 1AD18 | 18 | Solid | .016" | .072" | 9.15 |

STRANDED CONDUCTOR

| SAXTON NUMBER | CONDUCTOR SIZE | CONDUCTOR STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|----------------|---------------------|----------------------|--------------|------------------|
| 1A24 | 24 | 7 x 32 | .016" | .056" | \$5.25 |
| 1A22 | 22 | 7 x 30 | .016" | .062" | 5.93 |
| 1A20 | 20 | 10 x 30 | .016" | .067" | 7.43 |
| 1A18 | 18 | 16 x 30 | .016" | .077" | 9.89 |
| 1A16 | 16 | 26 x 30 | .016" | .092" | 16.50 |
| 1A14 | 14 | 41 x 30 | .016" | .106" | 21.00 |

Shielded Hook-up Wire

PLASTIC TYPE

TINNED COPPER SHIELD

PLASTIC INSULATION

STRANDED OR SOLID TINNED COPPER CONDUCTOR*

STRANDED CONDUCTOR

| SAXTON NUMBER | SIZE | CONDUCTOR STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|------|---------------------|----------------------|--------------|------------------|
| 1AS22 | 22 | 7 x 30 | .016" | .090" | \$27.75 |
| 1AS20 | 20 | 10 x 30 | .016" | .100" | 30.00 |
| 1AS18 | 18 | 16 x 30 | .016" | .120" | 33.75 |
| 1AS16 | 16 | 26 x 30 | .016" | .130" | 39.00 |
| 1AS14 | 14 | 41 x 30 | .016" | .150" | 54.75 |
| 1AS12 | 12 | 65 x 30 | .016" | .170" | 87.75 |
| 1AS10 | 10 | 105 x 30 | .025" | .195" | 157.50 |

Unshielded Audio Cable

2 AND 3 CONDUCTOR
NO OUTER JACKET

PLASTIC INSULATION

SOLID OR STRANDED CONDUCTOR*

SOLID CONDUCTOR

| SAXTON NUMBER | NO. | CONDUCTOR SIZE | CONDUCTOR STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|-----|----------------|---------------------|----------------------|--------------|------------------|
| 2AD22 | 2 | 22 | Solid | .016" | .100" | \$11.25 |
| 3AD22 | 3 | 22 | Solid | .016" | .115" | 15.75 |
| 2AD20 | 2 | 20 | Solid | .016" | .120" | 17.78 |
| 3AD20 | 3 | 20 | Solid | .016" | .135" | 25.80 |
| 2AD18 | 2 | 18 | Solid | .016" | .145" | 21.38 |
| 3AD18 | 3 | 18 | Solid | .016" | .160" | 33.75 |
| 2AD16 | 2 | 16 | Solid | .016" | .175" | 35.25 |
| 3AD16 | 3 | 16 | Solid | .016" | .190" | 50.10 |

STRANDED CONDUCTOR

| SAXTON NUMBER | NO. | CONDUCTOR SIZE | CONDUCTOR STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|-----|----------------|---------------------|----------------------|--------------|------------------|
| 2A22 | 2 | 22 | 7 x 30 | .016" | .125" | \$14.03 |
| 3A22 | 3 | 22 | 7 x 30 | .016" | .140" | 20.63 |
| 2A20 | 2 | 20 | 10 x 30 | .016" | .145" | 19.13 |
| 3A20 | 3 | 20 | 10 x 30 | .016" | .160" | 27.90 |
| 2A18 | 2 | 18 | 16 x 30 | .016" | .165" | 21.90 |
| 3A18 | 3 | 18 | 16 x 30 | .016" | .180" | 39.00 |
| 2A16 | 2 | 16 | 26 x 30 | .016" | .190" | 37.35 |
| 3A16 | 3 | 16 | 26 x 30 | .016" | .210" | 54.75 |

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NEW YORK, N. Y.

*Bare conductors available.

Multi-Conductor Jacketed Cable

PLASTIC JACKET
.020" Wall Thickness



SOLID CONDUCTOR

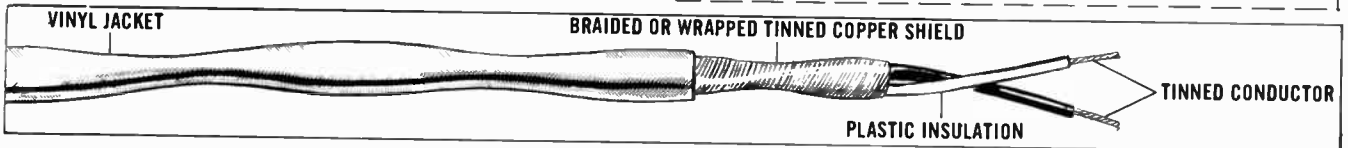
STRANDED CONDUCTOR

| SAXTON NUMBER | CONDUCTOR NUMBER | AWG | STRANDING | INSULATION THICKNESS | NOMINAL O.O. | PRICE Per M' |
|---------------|------------------|-----|-----------|----------------------|--------------|--------------|
| 2JD22 | 2 | 22 | Solid | .015" | .140" | \$16.13 |
| 3JD22 | 3 | 22 | Solid | .015" | .150" | 23.25 |
| 4JD22 | 4 | 22 | Solid | .015" | .170" | 27.00 |
| 5JD22 | 5 | 22 | Solid | .015" | .185" | 32.40 |
| 6JD22 | 6 | 22 | Solid | .015" | .190" | 45.75 |
| 7JD22 | 7 | 22 | Solid | .015" | .200" | 52.50 |
| 8JD22 | 8 | 22 | Solid | .015" | .210" | 58.13 |
| 9JD22 | 9 | 22 | Solid | .015" | .240" | 64.13 |
| 10JD22 | 10 | 22 | Solid | .015" | .250" | 79.13 |
| 12JD22 | 12 | 22 | Solid | .015" | .270" | 101.63 |
| 15JD22 | 15 | 22 | Solid | .015" | .300" | 127.13 |
| 2JD20 | 2 | 20 | Solid | .015" | .155" | 21.75 |
| 3JD20 | 3 | 20 | Solid | .015" | .165" | 38.25 |
| 4JD20 | 4 | 20 | Solid | .015" | .195" | 47.25 |
| 5JD20 | 5 | 20 | Solid | .015" | .220" | 56.25 |
| 6JD20 | 6 | 20 | Solid | .015" | .230" | 74.25 |
| 7JD20 | 7 | 20 | Solid | .015" | .240" | 92.25 |
| 8JD20 | 8 | 20 | Solid | .015" | .285" | 110.25 |
| 9JD20 | 9 | 20 | Solid | .015" | .300" | 124.25 |
| 10JD20 | 10 | 20 | Solid | .015" | .315" | 142.50 |
| 12JD20 | 20 | 20 | Solid | .015" | .330" | 165.00 |
| 15JD20 | 15 | 20 | Solid | .015" | .345" | 210.00 |
| 20JD20 | 20 | 20 | Solid | .015" | .400" | 280.88 |
| 2JD18 | 2 | 18 | Solid | .015" | .188" | 27.75 |
| 3JD18 | 3 | 18 | Solid | .015" | .208" | 42.00 |
| 4JD18 | 4 | 18 | Solid | .015" | .223" | 59.40 |
| 5JD18 | 5 | 18 | Solid | .015" | .233" | 76.28 |
| 6JD18 | 6 | 18 | Solid | .015" | .263" | 92.78 |

| SAXTON NUMBER | CONDUCTOR NUMBER | AWG | STRANDING | INSULATION THICKNESS | NOMINAL O.O. | PRICE Per M' |
|---------------|------------------|-----|-----------|----------------------|--------------|--------------|
| 2I22 | 2 | 22 | 7 x 30 | .015" | .145" | \$19.13 |
| 3I22 | 3 | 22 | 7 x 30 | .015" | .160" | 23.40 |
| 4I22 | 4 | 22 | 7 x 30 | .015" | .185" | 27.45 |
| 5I22 | 5 | 22 | 7 x 30 | .015" | .190" | 32.05 |
| 6I22 | 6 | 22 | 7 x 30 | .015" | .195" | 49.88 |
| 7I22 | 7 | 22 | 7 x 30 | .015" | .215" | 56.25 |
| 8I22 | 8 | 22 | 7 x 30 | .015" | .225" | 59.25 |
| 9I22 | 9 | 22 | 7 x 30 | .015" | .245" | 64.50 |
| 10I22 | 10 | 22 | 7 x 30 | .015" | .260" | 81.00 |
| 12I22 | 12 | 22 | 7 x 30 | .015" | .285" | 105.00 |
| 15I22 | 15 | 22 | 7 x 30 | .015" | .340" | 130.80 |
| 2I20 | 2 | 20 | 10 x 30 | .015" | .175" | 22.13 |
| 3I20 | 3 | 20 | 10 x 30 | .015" | .185" | 39.00 |
| 4I20 | 4 | 20 | 10 x 30 | .015" | .205" | 48.75 |
| 5I20 | 5 | 20 | 10 x 30 | .015" | .230" | 58.88 |
| 6I20 | 6 | 20 | 10 x 30 | .015" | .250" | 78.00 |
| 7I20 | 7 | 20 | 10 x 30 | .015" | .260" | 96.00 |
| 8I20 | 8 | 20 | 10 x 30 | .015" | .305" | 114.00 |
| 9I20 | 9 | 20 | 10 x 30 | .015" | .320" | 125.00 |
| 10I20 | 10 | 20 | 10 x 30 | .015" | .325" | 142.63 |
| 12I20 | 12 | 20 | 10 x 30 | .015" | .345" | 165.75 |
| 15I20 | 15 | 20 | 10 x 30 | .015" | .365" | 213.75 |
| 20I20 | 20 | 20 | 10 x 30 | .015" | .420" | 285.00 |
| 2I18 | 2 | 18 | 16 x 30 | .015" | .210" | 28.50 |
| 3I18 | 3 | 18 | 16 x 30 | .015" | .230" | 48.38 |
| 4I18 | 4 | 18 | 16 x 30 | .015" | .245" | 60.00 |
| 5I18 | 5 | 18 | 16 x 30 | .015" | .260" | 78.75 |
| 6I18 | 6 | 18 | 16 x 30 | .015" | .275" | 96.00 |

Multi-Conductor Shielded Cable*

PLASTIC JACKET
.020" Wall Thickness



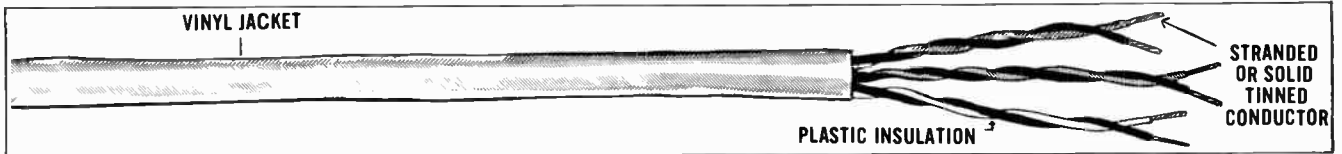
| SAXTON NUMBER | TYPE SHIELD | CONDUCTORS | | | INSULATION THICKNESS | JACKET THICKNESS | NOMINAL O.O. | NET PRICE Per M' |
|---------------|-------------|------------|-----|-----------|----------------------|------------------|--------------|------------------|
| | | NUMBER | AWG | STRANDING | | | | |
| 1SSJ22 | Wrap | 1 | 22 | 7 x 30 | .016" | .020" | .135" | \$27.63 |
| 2SSJ22 | Wrap | 2 | 22 | 7 x 30 | .016" | .020" | .175" | 33.00 |
| 2SSJD22 | Wrap | 2 | 22 | Solid | .016" | .020" | .170" | 28.88 |
| 2SSJ20 | Wrap | 2 | 20 | 10 x 30 | .016" | .020" | .195" | 37.50 |
| 3SSJ20 | Wrap | 3 | 20 | 10 x 30 | .016" | .020" | .210" | 54.00 |
| 4SSJ20 | Wrap | 4 | 20 | 10 x 30 | .016" | .020" | .225" | 83.00 |
| 2SSJ18 | Wrap | 2 | 18 | 16 x 30 | .016" | .020" | .230" | 45.38 |
| 2SSJ16 | Wrap | 2 | 16 | 26 x 30 | .016" | .020" | .250" | 75.00 |
| 2SJ22 | Braid | 2 | 22 | 7 x 30 | .016" | .020" | .183" | 38.63 |
| 2SJ20 | Braid | 2 | 20 | 10 x 30 | .016" | .020" | .195" | 48.75 |
| 2SJ18 | Braid | 2 | 18 | 16 x 30 | .016" | .020" | .235" | 56.25 |

*Bare conductors available. For additional constructions see page 4

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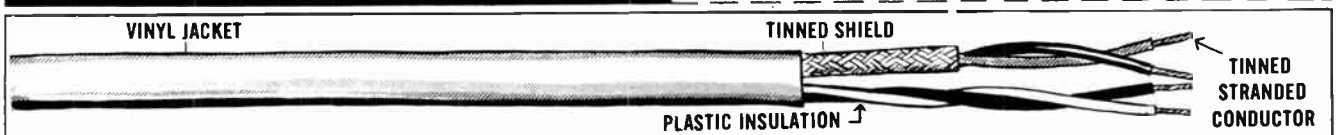
NEW YORK, N. Y.

Intercom Cable**TWISTED PAIRS
WITH PLASTIC JACKET****SOLID**

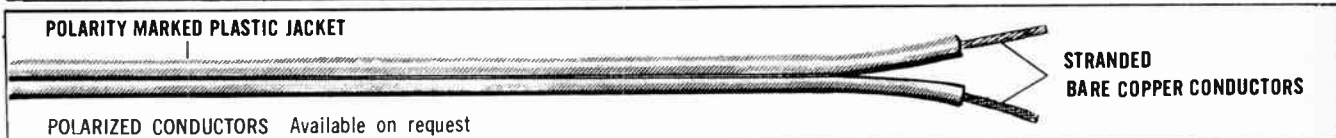
| SAXTON NUMBER | NUMBER PAIRS | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | JACKET THICKNESS | NOMINAL O.D. | PRICE Per M' |
|---------------|--------------|--------|----------------|-----------|----------------------|------------------|--------------|--------------|
| 2PD22 | 1 | 2 | 22 | Solid | .015" | .020" | .128" | \$13.65 |
| 4PD22 | 2 | 4 | 22 | Solid | .015" | .020" | .205" | 25.13 |
| 6PD22 | 3 | 6 | 22 | Solid | .015" | .020" | .230" | 34.73 |
| 12PD22 | 6 | 12 | 22 | Solid | .015" | .020" | .330" | 56.25 |
| 14PD22 | 7 | 14 | 22 | Solid | .015" | .020" | .345" | 74.25 |
| 18PD22 | 9 | 18 | 22 | Solid | .015" | .020" | .370" | 77.70 |
| 22PD22 | 11 | 22 | 22 | Solid | .015" | .020" | .385" | 109.50 |
| 26PD22 | 13 | 26 | 22 | Solid | .015" | .025" | .415" | 108.75 |
| 30PD22 | 15 | 30 | 22 | Solid | .015" | .025" | .450" | 140.25 |
| 32PD22 | 16 | 32 | 22 | Solid | .015" | .025" | .470" | 175.50 |
| 54PD22 | 27 | 54 | 22 | Solid | .015" | .035" | .605" | 255.00 |
| 62PD22 | 31 | 62 | 22 | Solid | .015" | .035" | .630" | 423.00 |
| 82PD22 | 41 | 82 | 22 | Solid | .015" | .035" | .710" | 570.00 |
| 102PD22 | 51 | 102 | 22 | Solid | .015" | .045" | .845" | 897.00 |

STRANDED

| SAXTON NUMBER | NUMBER PAIRS | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | JACKET THICKNESS | NOMINAL O.D. | PRICE Per M' |
|---------------|--------------|--------|----------------|-----------|----------------------|------------------|--------------|--------------|
| 2P22 | 1 | 2 | 22 | 7 x 30 | .015" | .020" | .155" | \$22.13 |
| 4P22 | 2 | 4 | 22 | 7 x 30 | .015" | .020" | .220" | 35.85 |
| 6P22 | 3 | 6 | 22 | 7 x 30 | .015" | .020" | .245" | 52.50 |
| 8P22 | 4 | 8 | 22 | 7 x 30 | .015" | .020" | .275" | 68.63 |
| 10P22 | 5 | 10 | 22 | 7 x 30 | .015" | .020" | .320" | 73.65 |
| 12P22 | 6 | 12 | 22 | 7 x 30 | .015" | .020" | .340" | 79.13 |
| 18P22 | 9 | 18 | 22 | 7 x 30 | .015" | .020" | .375" | 113.10 |
| 22P22 | 11 | 22 | 22 | 7 x 30 | .015" | .020" | .415" | 146.25 |
| 30P22 | 15 | 30 | 22 | 7 x 30 | .015" | .025" | .485" | 182.55 |
| 54P22 | 27 | 54 | 22 | 7 x 30 | .015" | .035" | .645" | 345.00 |

Audio Cable**COMBINATION
SHIELDED & JACKETED**

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | JACKET THICKNESS | NOMINAL O.D. | PRICE Per M' |
|---------------|---|----------------|-----------|----------------------|------------------|--------------|--------------|
| 4SJ22 | 4 (2 Conductors Shielded ... 2 Unshielded) | 22 | 7 x 30 | .016" | .020" | .315" | \$50.25 |
| 3SJ22 | 3 (1 Conductor Shielded ... 2 Unshielded) | 22 | 7 x 30 | .016" | .020" | .200" | 37.35 |

Unshielded Speaker Wire**PLASTIC TYPE**

| SAXTON NUMBER | NO. | CONDUCTORS AWG | STRANDING | WALL THICKNESS | NOMINAL O.D. | PRICE Per M' |
|---------------|-----|----------------|-----------|----------------|---------------|--------------|
| 2F24 * | 2 | 24 | 7 x 32 | .016" | .061" x .137" | See Below |
| 2F20 ** | 2 | 20 | 10 x 30 | .016" | .105" x .210" | See Below |
| 2F18 | 2 | 18 | 41 x 34 | .016" | .130" x .215" | 18.90 |
| 2F18A | 2 | 18 | 16 x 30 | .016" | .130" x .215" | 19.13 |
| 2F18B | 2 | 18 | 41 x 34 | .032" | .150" x .285" | 30.75 |
| 3F18 | 3 | 18 | 41 x 34 | .032" | .120" x .330" | 36.40 |
| 2F16 | 2 | 16 | 65 x 34 | .032" | .160" x .300" | 43.50 |

SAXTON PAGE 3

* 2F24—Clear—\$10.35 Colors—\$ 9.53
** 2F20—Clear—\$18.00 Colors—\$14.63

Phono Wire**1 AND 2 CONDUCTOR
SHIELDED - UNJACKETED**

TINNED COPPER SHIELD

PLASTIC INSULATION



STRANDED TINNED COPPER CONDUCTOR

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|--------|----------------|-----------|----------------------|--------------|------------------|
| 1S24 | 1 | 24 | 16 x 36 | .016 | .080 | \$27.00 |
| 2S24 | 2 | 24 | 16 x 36 | .016 | .125 | 32.63 |

Audio Cable**2 CONDUCTOR
SHIELDED - UNJACKETED**

TINNED COPPER BRAID SHIELD

PLASTIC INSULATION

STRANDED OR SOLID
TINNED CONDUCTOR**SOLID**

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|--------|----------------|-----------|----------------------|--------------|------------------|
| 2SD22 | 2 | 22 | Solid | .016" | .132" | \$28.88 |
| 2SD20 | 2 | 20 | Solid | .016" | .148" | 32.18 |
| 2SD18 | 2 | 18 | Solid | .016" | .175" | 43.13 |

STRANDED

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|--------|----------------|-----------|----------------------|--------------|------------------|
| 2S24 | 2 | 24 | 16 x 36 | .016" | .125" | \$32.63 |
| 2S22 | 2 | 22 | 7 x 30 | .016" | .140" | 33.75 |
| 2S20 | 2 | 20 | 10 x 30 | .016" | .155" | 36.75 |
| 2S18 | 2 | 18 | 16 x 30 | .016" | .170" | 47.25 |
| 2S16 | 2 | 16 | 26 x 30 | .020" | .210" | 71.50 |
| 2S14 | 2 | 14 | 41 x 30 | .020" | .225" | 102.00 |
| 2S12 | 2 | 12 | 65 x 30 | .025" | .295" | 173.35 |

Audio Cable**2 CONDUCTOR
SHIELDED & JACKETED**

VINYL JACKET



TINNED COPPER BRAID SHIELD

PLASTIC INSULATION

SOLID OR STRANDED
CONDUCTOR**SOLID**

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | JACKET THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|--------|----------------|-----------|----------------------|------------------|--------------|------------------|
| 2SDJ22 | 2 | 22 | Solid | .016" | .020" | .172" | \$33.75 |
| 2SDJ20 | 2 | 20 | Solid | .016" | .020" | .208" | 36.00 |
| 2SDJ18 | 2 | 18 | Solid | .016" | .020" | .218" | 45.90 |

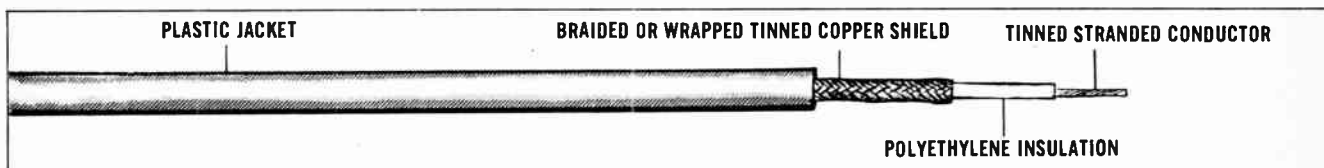
STRANDED

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION THICKNESS | JACKET THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|--------|----------------|-----------|----------------------|------------------|--------------|------------------|
| 2SJ22 | 2 | 22 | 7 x 30 | .016" | .020" | .183" | \$37.88 |
| 2SJ20 | 2 | 20 | 10 x 30 | .016" | .020" | .195" | 48.38 |
| 2SJ18 | 2 | 18 | 16 x 30 | .016" | .020" | .235" | 54.60 |

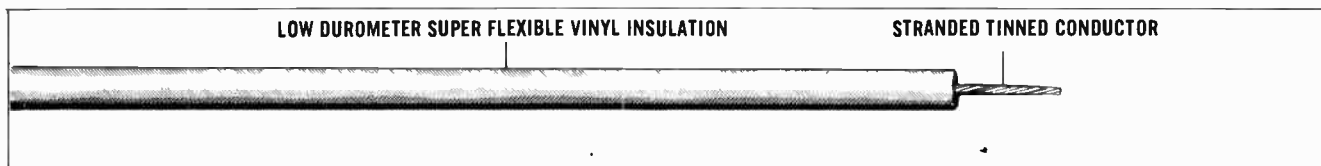
saxton
wire and cable division



NEW YORK, N. Y.

Audio Cable**LOW LOSS -
MICROPHONE AND INPUT CABLE**

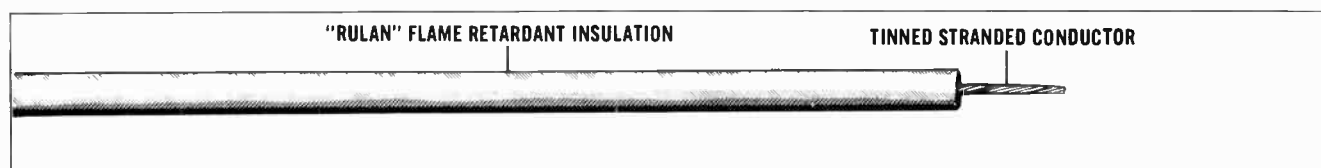
| SAXTON NUMBER | NOMINAL CAPACITANCE/FT. | SHIELD TYPE | CONDUCTORS | | | INSULATION THICKNESS | JACKET THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|-------------------------|-------------|------------|-----|-------------------|----------------------|------------------|--------------|------------------|
| | | | NUMBER | AWG | STRANDING | | | | |
| 1SSJC26 | 38 mmf. | Wrap | 1 | 26 | 7 x 34 Copperweld | .016" | .020" | .125" | \$26.63 |
| 1SJC24 | 35 mmf. | Braid | 1 | 24 | 10 x 34 | .016" | .030" | .145" | 27.08 |
| 1SJC24A | 23 mmf. | Braid | 1 | 24 | 10 x 34 | .040" | .030" | .200" | 35.85 |
| 1SJC20 | 36 mmf. | Braid | 1 | 20 | 26 x 34 | .030" | .030" | .175" | 49.50 |
| 2SJC20 | 31 mmf. | Braid | 2 | 22 | 16 x 34 | .025" | .030" | .230" | 51.90 |
| 3SJC20 | 34 mmf. | Braid | 3 | 20 | 26 x 34 | .025" | .035" | .290" | 66.00 |
| 4SJC20 | 36 mmf. | Braid | 4 | 20 | 26 x 34 | .025" | .035" | .315" | 84.00 |
| 5SJC20 | 45 mmf. | Braid | 5 | 20 | 26 x 34 | .025" | .035" | .340" | 99.00 |
| 6SJC20 | 51 mmf. | Braid | 6 | 20 | 26 x 34 | .025" | .035" | .365" | 156.00 |

Test Lead Wire**SUPER FLEXIBLE
VINYL INSULATION ***

| SAXTON NUMBER | TYPE | CONDUCTORS | | WALL THICKNESS | BREAKDOWN VOLTAGE | NOMINAL O.D. | NET PRICE Per M' |
|---------------|------------|------------|-----------|----------------|-------------------|--------------|------------------|
| | | AWG | STRANDING | | | | |
| 1C2D | Standard | 20 | 41 x 36 | .040 | 5,000 V. | .120 | \$14.33 |
| 1C20A | Standard | 20 | 41 x 36 | .044 | 8,500 V. | .130 | 14.70 |
| 1C20B | Standard | 20 | 41 x 36 | .047 | 10,000 V. | .135 | 16.50 |
| 1C18 | Standard | 18 | 41 x 34 | .047 | 12,000 V. | .140 | 19.88 |
| 1C18A | Heavy Duty | 18 | 41 x 34 | .109 | 22,000 V. | .245 | 29.40 |
| 1C20R* | Standard | 20 | 41 x 36 | .040 | 5,000 V. | .120 | 16.88 |
| 1C18R* | Standard | 18 | 41 x 34 | .045 | 5,000 V. | .138 | 20.25 |

* In stock and available in rubber—red, black, or green—18 or 20 gauge—to mil spec.

Specify Color—Red or Black—Other Colors usually available

Hi Voltage Wire**FLAME RETARDANT
RULAN INSULATION**

| SAXTON NUMBER | TYPE | CONDUCTORS | | WALL THICKNESS | BREAKDOWN VOLTAGE | NOMINAL O.D. | NET PRICE Per M' |
|---------------|------------|------------|-----------|----------------|-------------------|--------------|------------------|
| | | AWG | STRANDING | | | | |
| 1R20 | Unshielded | 20 | 10 x 30 | .047 | 10,000 V. | .120 | \$19.13 |
| 1R20A | Unshielded | 20 | 10 x 30 | .063 | 20,000 V. | .170 | 29.63 |
| 1R18 | Unshielded | 18 | 16 x 30 | .095 | 40,000 V. | .240 | 57.00 |
| 1R18I | Shielded | 18 | 16 x 30 | .075 | 20,000 V. | .243 | 93.75 |

E-Z Zip Cord**2 AND 3 CONDUCTOR**

POLARITY MARKED PLASTIC JACKET

POLARIZED CONDUCTORS (1 bare, 1 tinned)

STRANDED
BAR COPPER CONDUCTORS

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | WALL THICKNESS | U/L TYPE | NOMINAL O.D. | NET PRICE Per M' |
|---------------|--------|----------------|-----------|----------------|----------|--------------|------------------|
| 2F24* | 2 | 24 | 7 x 32 | .016 | — | .061 x .137 | See Below |
| 2F20** | 2 | 20 | 10 x 30 | .016 | — | .105 x .210 | See Below |
| 2F18 | 2 | 18 | 41 x 34 | .016 | SPT-1 | .130 x .215 | 18.90 |
| 2F18A | 2 | 18 | 16 x 30 | .016 | | .130 x .215 | 19.13 |
| 2F18B | 2 | 18 | 41 x 34 | .032 | SPT-2 | .150 x .285 | 30.75 |
| 2F16 | 2 | 16 | 65 x 34 | .032 | SPT-2 | .160 x .300 | 43.50 |

Rotor Cable**LOW LOSS FLAT TYPE**
ROUND CONSTRUCTION ALSO AVAILABLE

VINYL OR POLYETHYLENE INSULATION

ONE TINNED LEG
FOR POLARITY IDENTIFICATION

| SAXTON NUMBER | NUMBER | CONDUCTORS AWG | STRANDING | INSULATION MATERIAL | NOMINAL O.D. | NET PRICE Per M' |
|---------------|--------|----------------|-----------|---------------------|--------------|------------------|
| 4FC2 | 4 | 22 | 7 x 30 | Polyethylene | .085 x .360" | \$17.48 |
| 4FC2A | 4 | 22 | 7 x 30 | Polyvinyl Chloride | .090 x .430" | 18.75 |
| 4FC3 | 4 | 20 | 10 x 30 | Polyethylene | .085 x .360" | 20.18 |
| 4FC3A | 4 | 20 | 10 x 30 | Polyvinyl Chloride | .090 x .430" | 22.28 |

MIL-C-3432
MIL-C-3884**WITH CERTIFICATION**

| SAXTON NUMBER | SPECIFICATION DESIGNATION | CONSTRUCTION | SPECIFICATION No. | NOMINAL O.D. |
|---------------|---------------------------|---------------------|-------------------|--------------|
| 2M18 | CO-02 MGF | 2/18 SJO (Shielded) | MIL-C-3432A | 0.375 |
| 2M18A | CO-02 MGF | 2/18 | MIL-C-3432A | 0.300 |
| 2M18B | CO-02 HGF | 2/18 | MIL-C-3432A | 0.380 |
| 2M18C | CO-02 LGF | 2/18 | MIL-C-3432A | 0.250 |
| 2M16 | CO-02 HGF | 2/16 | MIL-C-3432A | 0.405 |
| 2M16A | CO-02 MGF | 2/16 | MIL-C-3432A | 0.338 |
| 2M14 | CO-02 MGF | 2/14 | MIL-C-3432A | 0.400 |
| 2M14A | CO-02 HGF | 2/14 | MIL-C-3432A | 0.535 |
| 3M18 | CO-03 MGF | 3/18 | MIL-C-3432A | 0.330 |
| 3M16 | CO-03 MGF | 3/16 SJO (Shielded) | MIL-C-3432A | 0.360 |
| 3M16A | CO-03 MGF | 3/16 | MIL-C-3432A | 0.375 |
| 3M12 | CO-03 HOE | 3/12 | MIL-C-3432A | 0.635 |
| 5M20 | CO-05 MGF | 5/20 | MIL-C-3432A | 0.400 |
| 2M18D | COS | 2/18 | MIL-C-3884 | 0.290 |
| 3M18A | COS | 3/18 | MIL-C-3884 | 0.290 |
| 2M20 | COS | 2/20 | MIL-C-3884 | 0.280 |
| 3M20 | COS | 3/20 | MIL-C-3884 | 0.280 |

† All Prices on Request. * 2F24 Clear—\$10.35 Colors—\$9.53. **2F20 Clear—\$18.00 Colors—\$14.63

We carry — in stock — one of the most comprehensive inventories of MIL-C-3432A and MIL-3884 on the Eastern Seaboard. It is impossible to list all but the popular types. Your inquiries will receive prompt attention and service.

saxton
wire and cable division



NEW YORK, N. Y.

SAXTON PAGE 6

MIL-W-76B**WITH CERTIFICATION**

PLASTIC INSULATION

STRANDED OR SOLID TINNED CONDUCTOR.

TYPE MW - UNCOVERED PLASTIC - MEDIUM WALL - 1000V. RATING**SOLID**

| SAXTON NUMBER | SPECIFICATION DESIGNATION | AWG No. | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|---------------------------|---------|----------------------|--------------|------------------|
| 1MD22 | MW-C 22(1)U | 22 | .016" | .061" | \$5.63 |
| 1MD20 | MW-C 20(1)U | 20 | .016" | .064" | 7.95 |
| 1MD18 | MW-C 18(1)U | 18 | .016" | .072" | 10.80 |
| 1MD16 | MW-C 16(1)U | 16 | .016" | .083" | 15.75 |

STRANDED

| SAXTON NUMBER | SPECIFICATION DESIGNATION | AWG No. | STRAND-ING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|---------------------------|---------|------------|----------------------|--------------|------------------|
| 1M24 | MW-C 24(7)U | 24 | 7 x 32 | .016" | .056" | \$6.15 |
| 1M22 | MW-C 22(7)U | 22 | 7 x 30 | .016" | .062" | 7.13 |
| 1M20 | MW-C 20(10)U | 20 | 10 x 30 | .016" | .067" | 9.53 |
| 1M18 | MW-C 18(16)U | 18 | 16 x 30 | .016" | .077" | 13.28 |
| 1M16 | MW-C 16(26)U | 16 | 26 x 30 | .016" | .092" | 19.65 |
| 1M14 | MW-C 14(41)U | 14 | 41 x 30 | .016" | .106" | 29.55 |
| 1M12 | MW-C 12(65)U | 12 | 65 x 30 | .016" | .127" | 49.50 |

TYPE HW - UNCOVERED PLASTIC - HEAVY WALL

| SAXTON NUMBER | SPECIFICATION DESIGNATION | CONDUCTOR | | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|---------------------------|-----------|-----------|----------------------|--------------|------------------|
| | | AWG | STRANDING | | | |
| 1M22A | HW-C 22(7)U | 22 | 7 x 30 | .032" | .094" | \$14.63 |
| 1M20A | HW-C 20(10)U | 20 | 10 x 30 | .032" | .099" | 18.00 |
| 1M18A | HW-C 18(16)U | 18 | 16 x 30 | .032" | .109" | 24.00 |
| 1M16A | HW-C 16(26)U | 16 | 26 x 30 | .032" | .122" | 34.88 |
| 1M14A | HW-C 14(41)U | 14 | 41 x 30 | .045" | .165" | 56.25 |
| 1M12A | HW-C 12(65)U | 12 | 65 x 30 | .045" | .185" | 76.50 |

MIL-W-16878C**WITH CERTIFICATION**

PLASTIC INSULATION

STRANDED TINNED CONDUCTOR

TYPE C UNCOVERED PLASTIC—1000 VOLT RATING

| SAXTON NUMBER | SPEC DES | AWG No. | STRAND-ING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|----------|---------|------------|----------------------|--------------|------------------|
| 1M22C | C-22 | 22 | 7 x 30 | .016" | .065" | \$9.75 |
| 1M20C | C-20 | 20 | 7 x 28 | .016" | .073" | 12.73 |
| 1M18C | C-18 | 18 | 7 x 26 | .016" | .081" | 16.80 |
| 1M16C | C-16 | 16 | 19 x 29 | .016" | .092" | 21.53 |
| 1M14C | C-14 | 14 | 19 x 27 | .016" | .103" | 33.98 |

TYPE D UNCOVERED PLASTIC—3000 VOLT RATING

| SAXTON NUMBER | SPEC DES | AWG | CONDUCTOR STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|----------|-----|---------------------|----------------------|--------------|------------------|
| 1M22D | D-22 | 22 | 7 x 30 | .032" | .097" | \$16.05 |
| 1M20D | D-20 | 20 | 7 x 28 | .032" | .105" | 19.50 |
| 1M18D | D-18 | 18 | 7 x 26 | .032" | .113" | 24.38 |
| 1M16D | D-16 | 16 | 19 x 29 | .032" | .124" | 28.88 |
| 1M14D | D-14 | 14 | 19 x 27 | .032" | .135" | 42.75 |

EXTRUDED TEFLON INSULATION

SILVER PLATED STRANDED CONDUCTOR

TYPE E EXTRUDED TEFLON—600 VOLT RATING

| SAXTON NUMBER | SPEC DES | AWG | CONDUCTOR STRANDING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|----------|-----|---------------------|----------------------|--------------|------------------|
| 1M30E | E-30 | 30 | 7 x 38 | .010" | .033" | \$52.13 |
| 1M28E | E-28 | 28 | 7 x 36 | .010" | .036" | 50.25 |
| 1M26E | E-26 | 26 | 7 x 34 | .010" | .041" | 48.75 |
| 1M24E | E-24 | 24 | 19 x 36 | .010" | .046" | 52.88 |
| 1M22E | E-22 | 22 | 19 x 34 | .010" | .052" | 63.00 |
| 1M20E | E-20 | 20 | 19 x 32 | .010" | .060" | 75.75 |
| 1M18E | E-18 | 18 | 19 x 30 | .010" | .072" | 95.00 |
| 1M16E | E-16 | 16 | 19 x 29 | .010" | .084" | 135.00 |
| 1M14E | E-14 | 14 | 19 x 27 | .010" | .098" | 207.75 |

TYPE EE EXTRUDED TEFLON—1000 VOLT RATING

| SAXTON NUMBER | SPEC DES | AWG No. | STRAND-ING | INSULATION THICKNESS | NOMINAL O.D. | NET PRICE Per M' |
|---------------|----------|---------|------------|----------------------|--------------|------------------|
| 1M30EE | EE-30 | 30 | 7 x 38 | .015" | .043" | \$61.50 |
| 1M28EE | EE-28 | 28 | 7 x 36 | .015" | .046" | 66.00 |
| 1M26EE | EE-26 | 26 | 7 x 34 | .015" | .050" | 58.50 |
| 1M24EE | EE-24 | 24 | 19 x 36 | .015" | .056" | 68.25 |
| 1M22EE | EE-22 | 22 | 19 x 34 | .015" | .062" | 72.30 |
| 1M20EE | EE-20 | 20 | 19 x 32 | .015" | .070" | 93.75 |
| 1M18EE | EE-18 | 18 | 19 x 30 | .015" | .081" | 114.75 |
| 1M16EE | EE-16 | 16 | 19 x 29 | .015" | .090" | 163.88 |
| 1M14EE | EE-14 | 14 | 19 x 27 | .015" | .104" | 231.00 |

300 Ohm Twin Lead**VHF-UHF TRANSMISSION LINE****

| | CATALOG NO. | NAME | STRANDING | NOMINAL SIZE WEB - WIDTH | NET PRICE PER M' |
|--|-------------|------------------------|-----------|-----------------------------|---------------------|
| | TL-40 | Economy | 7 | 0.040 x 0.0375 | \$8.18* |
| | TL-55 | Signal Sender | 7 | 0.055 x 0.385 | 8.93* |
| | TL-80 | Trophy Line | 10 | 0.080 x 0.385 | 10.43* |
| | TL-100 | Crusader | 10 | 0.093 x 0.355 | 10.43* |
| | TL-1000L | Top Notch | 10 | 0.095 x 0.383 | 11.18* |
| | TL-100EZ | E-Z Strip | 10 | 0.080 x 0.370 | 11.25* |
| | TL-100SDL | Double Ten | 20 | 0.100 x 0.400 | 15.38* |
| | TL-125 | Classic | 41 | 0.125 x 0.415 | 23.63* |
| | TL-150 | Hi-Fidelity | 20 | 0.150 x 0.385 | 19.13* |
| | OTL | Oval Twin Lead | 10 | 0.160 x 0.445 | 16.88* |
| | 1016 | Saxton Spongee | 7x28 | 0.230 x 0.365 | 31.30* |
| | INS-500 | Insulated Open Wire | 41 | 0.075 x 0.975 | 39.75* |

**For tubular wire (TTL), shielded twin lead (1118), or Sea Coaster Marine Type (1017), please see Saxton page 12 & 13.

For clear Silver, or Gold, Add \$1.67 Per M' to Net Price.
Hanks—banded with open spade lugs at one end only:

50'—Add \$2.50 Per M' to Net.

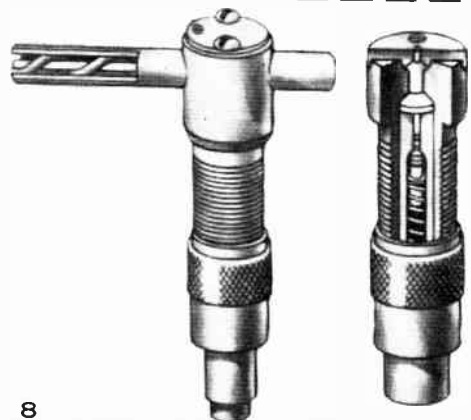
75'—Add \$2.09 Per M' to Net.

100'—Add \$1.67 Per M' to Net.

**Tee-Tap Co-Axial
Cable Connector**

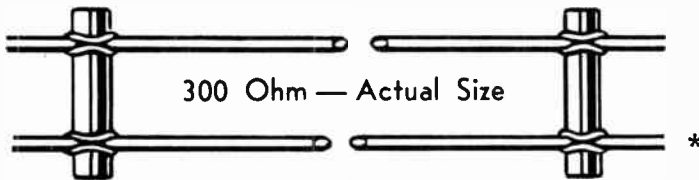
The Saxton Tee Tap allows quick, electrically perfect connections to coaxial cables without cutting the distribution lines and without necessity for re-insulation.

| SAXTON NUMBER | DESCRIPTION | NET PRICES PER M' |
|------------------|-------------------------|----------------------|
| 59T59 | From RG-59 U to RG-59 U | \$3.53 |
| 11T59 | From RG-11 U to RG-59 U | 3.53 |



Open Wire Transmission Line

LOW LOSS AIR DIELECTRIC



| SAXTON NUMBER | CONDUCTOR | CONDUCTOR SPACING | IMPEDANCE | AWG No. | INSULATOR SPACING | NET PRICE PER M' |
|---------------|----------------------|-------------------|-----------|---------|-------------------|------------------|
| 2500 | 40% Copper Weld | 1" | 450 Ohm | 18 | 6" | \$25.13* |
| 2501 | 40% Copper Weld | 1" | 450 Ohm | 18 | 12" | 21.14* |
| 2502 | 40% Copper Weld | 7/16" | 300 Ohm | 18 | 6" | 25.13* |
| 2507 | Solid Copper | 1" | 450 Ohm | 18 | 6" | 31.50* |
| 2515 | Solid Copper Formvar | 1" | 450 Ohm | 18 | 6" | 33.38* |
| 2517 | Solid Copper Formvar | 7/16" | 300 Ohm | 18 | 6" | 33.38* |
| 2520 | Solid Copper Formvar | 1" | 450 Ohm | 16 | 6" | 42.75* |
| 2525 | 40% Copper Weld | Two Inch | 475 Ohm | 14 | Random Spaced | 60.98* |
| 2526 | 40% Copper Weld | Two Inch | 450 Ohm | 12 | Random Spaced | 73.88* |

* 500' spool used as standard in pricing — 100' & 250' slightly higher.

Open Line Accessories

STANDOFFS & STRESS INSULATORS

No. 6001
No. 6002
No. 6003
No. 6004
No. 6005
No. 6006

No. 6000

No. 6010

No. 6011

"TAPPEE" STANDOFF INSULATOR

A Standoff which is especially designed for use with open line transmission wire installations. To take up slack in line, tighten screws in slots after pulling taut. For use as ordinary spacer—partially tighten set screws (see illustrations). This will permit free movement of wire in the slots, thereby doing away with potential wire breaks due to backward and forward motion caused by wind. Ideal also for use as anchor point or spacer for "Fence Wire" installations. For use in 600 Ohm installations, use outside two slots. Particularly good for community installations, where random spacing of open line is desirable to avoid tuned circuits created by regular spacing. Permits inexpensive, time saving, trouble free installations. For use with gauges from No. 12 to No. 18. Block is high impact polystyrene; hardware is double dip galvanized steel.

| | Net Price ea. |
|--|---------------|
| Saxton No. 6001 5 1/2" Nail Type | \$.12 3/4 |
| Saxton No. 6003 5" Wood Screw Type | .13 1/2 |
| Saxton No. 6004 7 1/2" Wood Screw Type | .15 |
| Saxton No. 6005 5" Pole Clamp Type | .16 1/2 |
| Saxton No. 6006 7 1/2" Pole Clamp Type | .18 |
| Saxton No. 6007 INS-500 Type | .29 |
| "TAPPEE"— Heads | Net Price |
| Saxton No. 6000 | .11 1/2 |

Blocks only without drive in hardware. Complete with two Parker Kalon plated screws for use as spacer block in making your own Open Line installations.

HEAVY DUTY OPEN LINE STRESS INSULATORS

| | Net Price |
|--|-----------|
| Saxton No. 6010 | .60 |
| Plastic blocks, slotted on either one or two inch centers complete with plated screw. For taking up slack and for use as anchor points in Open Line installations. | |
| | Net Price |
| Saxton No. 6011 | .87 |
| Same as above—Heavy duty. 2" spacing to accommodate # 12 AWG wires. | |

* Note:—Insulated open wire on page 8.

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wire and cable division



NEW YORK, N. Y.

Antenna Accessories

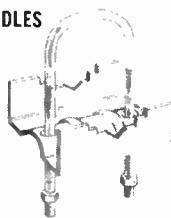
SPECIAL HARDWARE

GROUND RODS



No. 1064
4 Foot Overall length
Net Price .52½

"U" BOLTS AND SADDLES



No. 1103
Net Price .23

GROUND MAST CLAMP



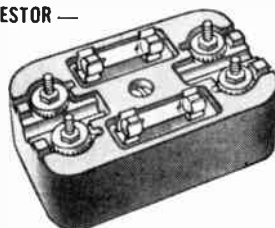
No. 1100
Net Price .42

GROUND ROD CLAMP



No. 1102
Net Price .18

LIGHTNING ARRESTOR — EXTERNALLY FUSED



No. 1098
Net Price 1.73

ANTENNA STRAIN INSULATORS



No. 1154
Net Price .085

ANTENNA WINDOW STRAP



No. 1126
Net Price .20

Uninsulated Tinned Copper



SOLID CONDUCTOR

| NO. | AWG NO. | M' PRICE | NO. | AWG NO. | M' PRICE | NO. | AWG NO. | M' PRICE |
|-------|---------|----------|-------|---------|----------|-------|---------|----------|
| ADT38 | 38 | \$ 2.63 | ADT26 | 26 | \$ 3.23 | ADT14 | 14 | \$ 13.28 |
| ADT36 | 36 | 2.75 | ADT24 | 24 | 3.38 | ADT12 | 12 | 19.65 |
| ADT34 | 34 | 3.08 | ADT22 | 22 | 3.75 | ADT10 | 10 | 45.00 |
| ADT32 | 32 | 3.12 | ADT20 | 20 | 4.47 | ADT8 | 8 | 67.50 |
| ADT30 | 30 | 3.15 | ADT18 | 18 | 6.23 | ADT6 | 6 | 109.65 |
| ADT28 | 28 | 3.20 | ADT16 | 16 | 9.38 | | | |

STRANDED CONDUCTOR

| NO. | AWG NO. | STRAND. | M' PRICE |
|------|---------|---------|----------|
| AT24 | 24 | 7 x 32 | \$ 3.98 |
| AT22 | 22 | 7 x 30 | 4.65 |
| AT20 | 20 | 10 x 30 | 5.93 |
| AT18 | 18 | 16 x 30 | 8.63 |
| AT16 | 16 | 26 x 30 | 13.50 |
| AT14 | 14 | 41 x 30 | 18.75 |
| AT12 | 12 | 65 x 30 | 26.25 |

Co-Axial Cable

All below are "Commercial Types" — Quotations on cables to MIL-C-17B upon request. RG-8/U and RG-11/U with 15 AWG solid copperweld conductor upon request.



TYPE A

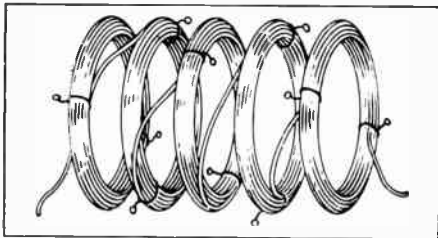
TYPE B

TYPE C

| SAXTON NUMBER | TYPE DESIGNATION | ILLUSTRATION | INSULATION | NOM. IMP. OHMS | NOMINAL O.D. | JACKET | DESCRIPTION | NET PRICE |
|---------------|------------------|--------------|------------|----------------|--------------|------------------------|--------------------------------|-----------|
| 1X14 | K-14 | A | Regular | 72 | .870 | Non Cont. PVC | Community TV Cable | \$488.00 |
| 1X8 | RG-8/U | A | Regular | 52 | .405 | Black Polyeth | General Purpose | 121.41 |
| 1X8A | RG-8/U | A | Foam | 52 | .405 | Black PVC | | 124.13 |
| 1X8B | RG-8A/U | A | Regular | 50 | .405 | Non Cont. Polyeth | | 135.75 |
| 1X11 | RG-11/U | A | Regular | 75 | .405 | Black PVC | Video & Communications | 108.00 |
| 1X11A | RG-11/U | A | Foam | 75 | .405 | Black PVC | | 108.75 |
| 1X11B | RG-11A/U | A | Regular | 75 | .405 | Non Cont. Polyeth. | | 121.50 |
| 1X11C | RG-11/UDS | B | Regular | 75 | .465 | Black PVC | Double Shielded | 175.50 |
| 1X58 | RG-58/U | A | Regular | 53.5 | .195 | Black PVC | 20 AWG Solid B.C. | 47.03 |
| 1X58A | RG-58A/U | A | Regular | 52 | .195 | Black PVC | 19/.0071 TC | 47.83 |
| 1X58B | RG-58C/U | A | Regular | 50 | .195 | Non Cont. Blk Polyeth. | 19/.0071 TC | 54.00 |
| 1X59 | RG-59/U | A | Regular | 73 | .242 | Black PVC | Video Cable | 46.50 |
| 1X59A | RG-59/UDS | B | Regular | 73 | .285 | Black PVC | Double Shielded | 84.75 |
| 1X59B | RG-59/U | A | Foam | 73 | .242 | Black PVC | Video Cable | 47.25 |
| 1X59C | RG-59/U | A | Regular | 50 | .170 | Black PVC | Miniature "59/U" | 38.25 |
| 1X59D | RG-59A/U | A | Regular | 75 | .242 | Non Cont. Blk Polyeth. | .023 Copperweld | 48.75 |
| 1X62 | RG-62/U | C | Regular | 93 | .242 | Black PVC | Small Size— Low Capacitance | 54.75 |

Copperweld-Uninsulated

40% COPPERWELD



| SAXTON NUMBER | AWG | CONDUCTOR | NOMINAL O.D. | NET PRICE 1M FT SPOOLS |
|---------------|----------|----------------|--------------|------------------------|
| 5300 | 18 Solid | 40% Copperweld | .0403 | \$4.80 |
| 5301 | 16 Solid | 40% Copperweld | .0508 | 11.40 |
| 5302 | 14 Solid | 40% Copperweld | .0641 | 18.23 |
| 5303 | 12 Solid | 40% Copperweld | .0808 | 24.38 |
| 5304 | 10 Solid | 40% Copperweld | .1019 | 29.25 |
| 5305 | 8 Solid | 40% Copperweld | .1285 | 48.75 |
| 5306 | 6 Solid | 40% Copperweld | .1620 | 80.63 |

Saxton Copperweld available on 1,000 ft. spools. 5300 to 5303 also in 50 ft. & 100 ft. interconnected coils of 1,000 ft. total.

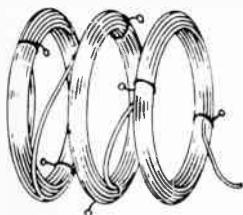
Guy Wire and Messenger Cables

HEAVY GALVANIZED STEEL, ALUMINUM, AND COPPERWELD

| SAXTON NUMBER | SPECIFICATION DESIGNATION | STRANDING | MATERIAL | STRENGTH TEST—p.s.i. | STRENGTH YIELD PER C FT. | NET PRICE 1M FT SPOOLS |
|---------------|---------------------------|---------------------------------|-------------------------------------|----------------------|--------------------------|------------------------|
| 5100 | GW-4/20 | 4 x 20 | Heavy Galvanized Steel | 215 | 4% | \$4.88 |
| 5101 | GW-6/20 | 6 x 20 | Heavy Galvanized Steel | 335 | 3.6% | 6.23 |
| 5102 | GW-7/20 | 7 x 20 | Heavy Galvanized Steel | 418 | 2.8% | 7.28 |
| 5103 | GW-6/18 | 6 x 18 | Heavy Galvanized Steel | 515 | 3% | 9.38 |
| 5104 | GW-7/18 | 7 x 18 | Heavy Galvanized Steel | 585 | 3% | 10.88 |
| 5105 | AL-7/18 | 7 x 18 | EC Quality Aluminum—Aircraft Temper | 370 | 4.5% | 20.25 |
| 5106 | ASL-7/18 | 6 x 18 Aluminum 1 x 18 Steel | EC Quality Aluminum—Aircraft Temper | 410 | 3.5% | 20.03 |
| 5107* | CO-6/20 | 6 x 20 | 30% Copperweld | 600 | 2.7% | 26.63 |
| 5109* | CO-8/18 | 8 x 18 | 30% Copperweld | 1450 | 1.8% | 57.38 |
| 5110* | CO-3/18 | 3 x 18 | 30% Copperweld | 550 | 2.5% | 18.83 |
| 5111 | GW-12/20 | 12 x 20 | Heavy Galvanized Steel | 655 | — | 18.53 |
| 5112 | Tiller Cable | 7 x 7 (49 Strands) | 3/32" Cable—Vinyl Jacket 3/16" OD | 2100 | — | 71.25 |

* Normally wound in 50' or 100' interconnected coils. Available in 500' or 1000' spools.

Antenna Wire



| SAXTON NUMBER | STRANDING | MATERIAL | PACKING | NET PRICE PER M' |
|----------------------|-----------|----------------------------------|--|------------------|
| 1275 | Solid | No. 12 AWG Enameled Solid Copper | 1000' Interconnected coils of 100' ea. | \$25.50 |
| 1280 | Solid | No. 14 AWG Enameled Solid Copper | 1000' Interconnected coils of 100' ea. | 17.25 |
| 1286 | 7 x 22 | Bare Copper | 1000' Interconnected coils of 50' ea. | 15.10 |
| 1286 | 7 x 22 | Bare Copper | 1000' Interconnected coils of 100' ea. | 14.50 |
| 1288 | 7 x 24 | Bare Copper | 1000' Interconnected coils of 50' ea. | 12.40 |
| 1288 | 7 x 24 | Bare Copper | 1000' Interconnected coils of 100' ea. | 11.20 |
| 1289 | 7 x 26 | Bare Copper | 1000' Interconnected coils of 50' ea. | 11.40 |
| ALUMINUM GROUND WIRE | | | | NET PRICE PER M' |
| No. 1240 | No. 8 AWG | Solid Dead Soft Aluminum | 1000 Ft. Spool | \$13.28 |
| No. 1240 | No. 8 AWG | Solid Dead Soft Aluminum | 1M' Interconnected coils of 50' ea. | 14.60 |
| No. 1240 | No. 8 AWG | Solid Dead Soft Aluminum | 1M' Interconnected coils of 100' ea. | 14.00 |
| No. 1255 | No. 6 AWG | Solid Dead Soft Aluminum | 1000 Ft. Spool | 25.35 |
| No. 1255 | No. 6 AWG | Solid Dead Soft Aluminum | 1M' Interconnected coils of 50' ea. | 27.00 |
| No. 1255 | No. 6 AWG | Solid Dead Soft Aluminum | 1M' Interconnected coils of 100' ea. | 25.50 |

WE STOCK OR FABRICATE CABLES

under the following Mil Specs:

Mil C 3432 (CO-0 constructions)
 Mil C 5756B
 Mil C 3884
 Mil S 2486
 Mil C 10392

Mil B 10255
 Mil W 13169
 Mil W 7139A
 Mil C 13077
 Mil W 5086A

Mil W 16878C
 Mil W 76B
 Mil W 16878C Teflon
 Open Wire Transmission Line †
 —Plus many other types—

† Extra Low Loss

Special Service on Small or Large Orders



WIRE SUPERMARKET

BY SAXTON PRODUCTS, INC.

LIFELINE TWIN LEAD

Heavy duty — full size — deluxe twin lead. Made of finest materials and chemically protected against deterioration. **GUARANTEE PERFECT RECEPTION FOR THE LIFE OF YOUR ANTENNA.**

LTL 100 ft.....\$1.98

LIFELINE 100' ROTOR CABLE

Extra heavy duty 4 Conductor "Lifeline" type rotor cable. SUPER DELUXE in every respect. 1 leg polarized for easy reference — sold in exclusive Magic Dispenser carton.

L4FC 100 feet.....\$2.49



Special Dispenser Package

- Dustproof
- Tangle Free
- Economical

ECONOMY TWIN LEAD

TWIN LEAD of good quality at an excellent price. 55 mil with 7 strands (22 gauge) copper.

100' coil — TL-55\$1.15
 1000' spool — TL-55 8.93
 100' Dispenser Package 1.25



1118 SHIELDED 300 OHM TWIN LEAD

Reduces Noise in FM Multiplex Reception!

300 ohm — noise resistant — shielded — twin lead wire. Each conductor 20 gauge — heavy — abrasion proof vinyl jacket. Delivers noise free signal on FM, TV, or FM Multiplex Reception.
 100' coil\$ 9.95
 1 M' spool 86.93

HEAVY DUTY SHIELDED IGNITION WIRE



Ham or CB installation 1\$98
 Reduces noise, 15' coil.....\$1.25

TW-199 TELEPHONE WIRE



For indoor or outdoor use

Telephone Wire
 100' coil
 2 conductor stranded.
 \$2.09

FM INDOOR ANTENNA B-106



99¢

300 Ohm Folded Dipole with 42" lugged lead in. Center tap protected in lasting, molded plastic. For use on your FM or TV receiver. Easily concealed.

STEREO HARNESS B-107

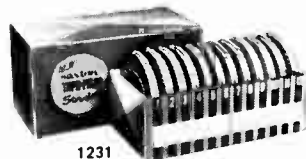


\$149

Two 20 foot polarized leads—complete with adjustable mounting block and polarized lug attaching arrangement. Allows 40 feet of separation for efficient hook up of stereo speaker systems.

STORAGE CHEST FOR FILM & RECORDING TAPE

1230 Complete with Self-Loading Dust Proof Tape Storage Cans.



1231

Individual cans available at \$.49 ea.

Insures moisture and dust free storage of valuable tape and film reproductions in home or industrial libraries. Attractive indexed storage chest holds twelve high impact styrene containers. Cans have a swivel and twist lock arrangement. Accommodates all 5" and 7" recording tape as well as the popular 8 MM home movie film.....\$4.98

PLASTIC "JERRY" CANS

Ideal for lawn mower, boat, car, picnic — will not rust, corrode or break. Complete with handle and built in spout — free pouring air vent.

PJ-100 — 1 Gal. Shipping Wt. — 1½ Lbs.....\$1.59 ea.
 PJ-300 — 3 Gal. Shipping Wt. — 2½ Lbs.....\$2.69 ea.



159

FERRITE ANTENNA LOOP No. 1122



Ferrite Antenna loop replaces flat loop or rod antenna. Efficient, tunable ferrite core plus progressive universal winding, provides wide range hi Q large signal pick-up. When external insulated hank is extended, additional omni-directional pick-up is obtained. Broadcast band only—535 to 1700 KC for use in all types of amplitude modulated radio receiving equipment. Complete with instructions and mounting bracket. Individually bagged, 36 on attractive display card\$.49

FERRITE ROD ANTENNA No. 1123



Ferrite Rod Antenna with adjustable inductive section. Extra large ferrite rod provides enormous pick-up. Particularly good for reception in bad signal areas. Easily mounted and connected. Individually bagged, 24 bags per attractive display card.....\$.59

SPECIAL PURPOSE TRANSMISSION LINES

SAXTON-ENGINEERED TO MEET THE TOUGHEST OPERATING NEEDS



SOLVES CORROSIVE AND CHEMICAL PROBLEMS



SAXTON "SEACOASTER"

#1017

300 Ohm—20 gauge (7/28) copper conductors encased in low loss foam polyethylene. Tough, brown, outer jacket designed to resist air-borne corrosives and chemical reactions.

100' coil \$ 4.49
1 M' spool 44.63

POPULAR COAXIAL CABLE TYPES



MADE TO MIL SPEC

| Saxton No. | Impedance | Mil Type | 100' coil | 1 M' spool |
|------------|-----------|----------|-----------|------------|
| 1X58 | 52 ohms | RG58U | \$ 4.75 | \$ 47.03 |
| 1X58B | | RG58AU | 4.85 | 47.83 |
| 1X59 | 73 ohms | RG59U | 4.65 | 46.50 |
| 1X59B | | RG59AU | 4.75 | 47.25 |
| 1X11 | 75 ohms | RG11U | 10.95 | 108.00 |
| 1X11B | | RG11AU | 12.19 | 121.50 |
| 1X8 | 52 ohms | RG8U | 12.95 | 121.41 |
| 1X8B | | RG8AU | 13.95 | 135.75 |

Low loss polyethylene foam dielectric—add 10%

FOR U.H.F. USE

SAXTON LOW-LOSS TUBULAR TWIN LEAD TYPE TTL



Heavy duty—brown polyethylene recommended for UHF applications.

100' coil \$ 1.99
1 M' spool 18.38

STRIP BRAID COAXIAL CABLE

FB-460



70 ohm — polyethylene foam dielectric, solid 12 gauge center conductor (.081).

Exceptional low loss and low radiation characteristics, along with improved attenuation.

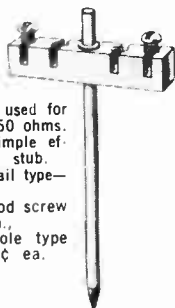
Shipping weight per 1000 feet — approximately 90 lbs. Diameter .458.

FB460/100 15c Ft.
FB460/1000 135.00 M'

OPEN WIRE STANDOFFS

Specifically designed for open wire.

Takes up slack, used for either 300 or 450 ohms. Use to make simple efficient matching stub.
#6000 — 5" Nail type—11½¢ ea.,
#6003 — 5" wood screw type—13½¢ ea.,
#6005 — 5" pole type W/clamp—16½¢ ea.



OPEN WIRE TRANSMISSION LINE



LOWEST LOSS OF ALL LINES—air dielectric — styrene spacers — hilly areas—long runs.

| | |
|--------------------------|--------|
| #2500—Copperweld—450 Ohm | |
| 100' spool | \$2.55 |
| 250' spool | 6.38 |
| 500' spool | 12.56 |
| #2502—Copperweld—300 Ohm | |
| 100' spool | 2.55 |
| 250' spool | 6.38 |
| 500' spool | 12.56 |

SAXTON "SPONGEE" LOW-LOSS TWIN LEAD

#1016



SPECIALLY DESIGNED FOR UHF TRANSMISSION

300 ohm 20 gauge stranded copper conductors encased in porous, low loss, polyethylene foam—stronger signals on VHF—excellent for UHF.

100' coil \$ 3.29
1 M' spool 31.50

SAXTON ZIP CORD—IDEAL FOR ELECTRICAL LEADS



ZIP CORD 100 PACKS

Convenient 100' rolls of parallel cord. Speaker extension, lamp cord, etc. Colors—black, brown, white.

100' 20 gauge designate color #1055HP 1.50
100' 18 gauge designate color #1555HP 1.95
75' 20 gauge CLEAR—Polarized—
#1055HC 1.50
75' 18 gauge CLEAR—Polarized—
#155HC 1.95



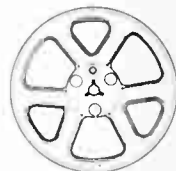
SAXTON MINIATURE ZIP CORD

Polarized—7 colors—brown, black, blue, green, white, grey, clear. Super flexible—24 gauge. Low voltage application—SPEAKER CORD.

2F24—500' roll clear 5.25
2F24—1000' roll clear 10.35
2F24—designate color 500' 4.95
2F24—designate color 1M' 9.75
1159-HP—On convenient 80 ft. mini spools 1.29

NEW ADDITION TO OUR TAPE-FILM STORAGE CAN

TAPE REELS



WARP PROOF CLEAR POLYSTYRENE

TR-5 5" 39c ea.
TR-7 7" 49c ea.
Individually Boxed

WIRE SUPERMARKET

BY SAXTON PRODUCTS, INC.



6/20 STEEL GUY WIRE
S-128 **99¢**
100 feet — 6 strands — 20 gauge — Bright galvanized.

ALUMINUM GUY WIRE
S-127
40 feet—7 strand—each 18 gauge—flexible—rust free—long lasting.

RG58U—COAXIAL CABLE
S-138 **99¢**
20 feet—52 ohm—citizens band, ham usage.

RG59U—COAXIAL CABLE
S-139
20 feet—72 ohm — ham — community system—apt. house antenna, etc.

INTERCOM WIRE
2 con. No jacket—S-102 **99¢**
60 feet—color coded—twisted—sturdy—pliable—easily stripped.

INTERCOM WIRE
2 cond. W. jacket—S-103
35 feet twisted pair—overall jacket—color coded.

INTERCOM WIRE **99¢**
Twisted easily stripped—sturdy, pliable color coded.
S-104—3 conductor—no jacket 40 ft.
S-105—3 conductor—With jacket 28 ft.

TEST PROD WIRE
Multi strand flexible cable with extra pliable jacket. **99¢**
S-122—25 feet—red on spool
S-123—25 feet—black on spool

Doublet type antenna insulator — white glaze. Large tensile strength — excellent electrical characteristics — 4 1/2" x 2 3/4".
1155 Each \$.32

Airplane type "Egg" insulator. Low air resistance — large tensile strength — white glaze porcelain — 2".
1156 Each \$.10

Transposition block — porcelain glaze finish — for many types of doublet antenna.
1157 Each \$.32

MINIATURE PARALLEL CABLE
S-100 **99¢**
53 feet — SPEAKER EXTENSIONS — hi fi leads—juke box wiring—low voltage applications. 24 gauge—7 colors—clear, black, white, blue, green, gray, brown. Polarized.

AERIAL WIRE **99¢**
7 strand — closely twisted — pre-stretched copper.
7/22—50' coil S-124
7/24—60' coil S-125
7/26—70' coil S-126
Heavy Duty Lead-in Wire 50 ft. S-99

GROUND WIRE—Aluminum dead soft
S-130 **99¢**
40 feet — #8 annealed — grounding systems of all kinds—excellent rust free laundry line.

AUDIO CABLE—WRAP SHIELD
S-108 **99¢**
2s feet—easily pigtailed, extra pliable, vinyl jacket.

CABLEMASTER CARBALLOY CUTTING TOOL
CMT
Cuts copperweld, steel wire, tiller cable, other difficult to cut wire constructions effortlessly. No frayed ends — a miraculous tool.
\$4.98 ea.

"LAZYBONES" LB-15 REMOTE APPLIANCE CORD PLUG AND SWITCH
15 feet of 18 ga. heavy duty cordage with heavy duty on-off switch. Save steps. Turn appliances, TV, and other electrically operated devices on or off from a remote point. Quickly installed — easily operated.
\$1.09 ea.

ZIP CORD—VINYL—18 GA.
S-107 **99¢**
30 feet — Black-white-brown many applications.

LAPEL MICROPHONE CABLE
S-101 **99¢**
22 feet — Single flexible conductor — braid shield — smooth plastic jacket.

HI VOLTAGE WIRE - 20 KV rating
S-113 **99¢**
21 feet—flame retardant polyethylene insulated, cathode ray—power supply leads.

SHIELDED GRID OR PHONO WIRE
S-112 **99¢**
30 feet — Braid shield — flexible — tinned copper.

PHONO PICKUP WIRE
Extra flexible **99¢**
S-145—Single cond. shield—no jacket 20 ft.
S-146—Single cond. shield—jacket 22 ft.
S-147—Two cond. twisted—no jacket—no shield 25 ft.
S-148—Three cond. twisted—no shield 20 ft.
S-151—4 cond. twisted—no shield 15 ft.
S-149—3 cond. twisted—w. shield 18 ft.

HOO K UP WIRE
Plastic — P.V.C. — easily stripped — assorted colors—tinned copper **99¢**
No. S-115—18 gauge, solid 60 ft.
No. S-115A—18 gauge, stranded 57 ft.
No. S-116—20 gauge, stranded 75 ft.
No. S-116A—20 gauge, solid 80 ft.
No. S-117—22 gauge, solid 100 ft.
No. S-117A—22 gauge, stranded 90 ft.
Heavy Duty
No. S-92—12 gauge, solid TC 17 ft.
No. S-92A—12 gauge, stranded TC 15 ft.
No. S-93—14 gauge, solid TC 20 ft.
No. S-93A—14 gauge, stranded TC 17 ft.
No. S-94—16 gauge, solid TC 26 ft.
No. S-94A—16 gauge, stranded TC 23 ft.

BELL WIRE—18 GA.
S-118 **99¢**
63 feet—solid—plastic insulated. Low voltage applications.

MAGNET WIRE **99¢**
Copper wire enameled—enough for hundreds of projects.
S-109 22 gauge; S-109A, 24 gauge; S-109B, 26 gauge; S-109C, 28 gauge.
Experimental work — coilwinding — school science projects, etc.

HI TEMP—nylon Hookup wire
S-114 **99¢**
55 feet—will not deteriorate—used extensively by military.

COPPERWELD WIRE **99¢**
Hard drawn and shiny—hi conductivity copper over steel—unlimited application — will not stretch — electric fences, antennas, etc.
S-135—18 gauge 100 feet
S-136—12 gauge 40 feet
S-137—14 gauge 50 feet

TINNED "BUS WIRE"
Pure copper **99¢**
S-152—22 ga. 150 ft.
S-153—20 ga. 120 ft.
S-154—18 ga. 90 ft.
S-155—16 ga. 60 ft.
S-158—12 ga. 30 ft.

IGNITION WIRE
S-95 **99¢**
Ignition Wire for automobile & boat use. Unshielded 20'.

SHIELDED WIRE
S-96
S-97
2 Conductor—22 Gauge **99¢**
Tinned Copper
2 wire shielded—with jacket 16 ft.
2 wire shielded—no jacket 19 ft.



**ACCIDENTS IN THE DARK
IN THE HOME
ON THE FARM
AND IN INDUSTRY**



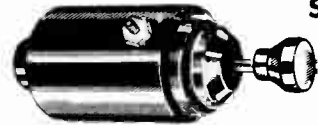
**DELAYED ACTION SAFETY
SWITCH — HOUSE TYPE**

THE LIGHTS GO OUT — 60 seconds later. Get where you're going SAFELY — before they go out. Replaces ANY wall switch in seconds. Use in house, barn, porch — ANYWHERE. U.L. approved — fully guaranteed.

S560 IVORY \$2.98
S561 BROWN 2.98



**DELAYED ACTION AUTO OR BOAT
SWITCH**



Install in minutes in car or boat. Complete with directions and hardware. Keeps lights on for safe departure AFTER switch has been turned off. Shuts lights off, 60 seconds later — AUTOMATICALLY. Full guaranteed. S563..... \$2.98

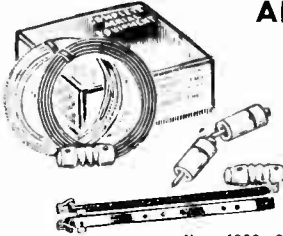
TV ANTENNA MATCHING BALUN COILS
1121



Per pair **99¢**

Efficiently match 72 to 150 ohms—72 to 450 ohms—150 to 300 ohms—150 to 450 ohms—300 to 450 ohms—75 to 300 ohms—Eliminates standing waves—use as set coupler—impedance transformer, line matching, etc. Directions included.

**STANDARD, DELUXE and SHORT WAVE
ANTENNA KITS**



No. 1128—Standard Kit includes 50' stranded 7/28 copper wire. 1 coil 25' insulated lead wire. 2 nail knobs. 1 lead strap. 2 insulators. **\$123**

No. 1127—Deluxe Kit includes 75' 7/22 heavy antenna wire, 1 coil 50' heavy duty lead wire. 2 nail knobs. 1 lead strap. 2 insulators. **\$278**

No. 4300—Short Wave Kit includes 66'—heavy antenna wire. 1 transposition block. 50' heavy duty twisted lead cable 2 insulators, 2 window straps, 2 nail knobs. **\$443**

All kits include complete directions.



**PATIO
SPEAKER
BAFFLE**

B-1265

Made of unbreakable hi-impact styrene — mahogany — complete with hardware and mounting instructions.

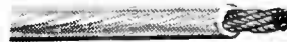
For use with 6 x 9 speaker. Ideal for paging and monitoring, patio and stereo extensions, or wherever an extension speaker can be used.

Less speaker **\$298**

\$498 6 x 9 speaker, volume control and control knob—complete directions—complete kit, including cabinet.

B-1206

**HEAVY DUTY SUPER GUY
WIRE & MESSENGER CABLE**
#5112



Super flexible — (49 strand wire rope) steel galvanized wire — super strength 2100 lbs. breaking strength — with overall clear vinyl jacket — Ideal tiller or rudder cable on boats.

100' coil **\$725**

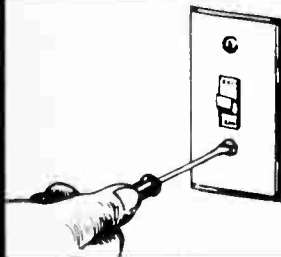
**NON STRETCH, HARD
DRAWN COPPERWELD**



75' or 150' coils—12 and 14 gauge. Ham antennas, commercial installations, rhombics, electric fences.

#5303
1 1/2 ga—75' \$1.89
1 1/2 ga—100' 2.50
1 1/2 ga—1 M' 24.38
#5302
1 1/2 ga—75' \$1.49
1 1/2 ga—100' 1.89
1 1/2 ga—1 M' 18.23

**DIM-A-LIGHT,
DIMMER SWITCH**



(Incandescent lamps only) 300 watts — replaces existing wall switches. 3 position — bright — dim — off. Changes from brilliant white light to warm candle glow.

\$2.98 ea.

HEAVY DUTY EXTENSION CORDS

For use with power tools — mowers, electrical devices of all kinds. 2 and 3 conductors, 16 gauge. 3 conductor cords have 3 prong plug.



| No. | Description | Price |
|-------|------------------------|--------|
| EX105 | 25' 2 Wire 1 1/4 Lb. | \$1.69 |
| EX106 | 50' 2 Wire 2 Lbs. | 2.89 |
| EX107 | 100' 2 Wire 3 Lbs. | 4.79 |
| EX108 | 25' 3 Wire 1 1/4 Lbs. | 2.29 |
| EX109 | 50' 3 Wire 2 1/4 Lbs. | 3.69 |
| EX110 | 100' 3 Wire 3 1/2 Lbs. | 6.69 |

FLOATING GUY RING



74¢

#1099 Cast aluminum — 2 piece Floating Guy Ring—fits masts up to 1 1/2" in diameter. Individually packed, complete with hardware in individual plastic bags.

FIBRE GLASS GUY WIRE
#7000



Non-radiating non-absorptive, hi strength "wireless" guy wire. Vinyl jacket — 500 lb breaking strength.

100' coil **\$1.99**



INSULATING TUBING

WALSCO INSULATING TUBING OF TEFLON

TEFLON "spaghetti" has unsurpassed electrical and mechanical qualities. Withstands temperatures from 450° below zero F. to 500° above zero F. Will not melt near solder joints. Outstanding dielectric properties—zero moisture absorption. Chemically inert. Completely weatherproof. A big feature is the low co-efficient of friction.



| Part No. | Feet Per Spool* | Color | Gauge | I.D. (Inches) | Wall Thickness | Dir. Net Per Spool | Part No. | Feet Per Spool* | Color | Gauge | I.D. (Inches) | Wall Thickness | Dir. Net Per Spool |
|----------|-----------------|-------|-------|---------------|----------------|--------------------|----------|-----------------|-------|-------|---------------|----------------|--------------------|
| 690-1 | 10 | Nat | 24 | .022 | .010 | \$ 1.33 | 694-1C | 100 | Nat | 16 | .053 | .012 | 25.02 |
| 690-1C | 100 | Nat | 24 | .022 | .010 | 9.75 | 694-4 | 10 | Red | 16 | .053 | .012 | 2.65 |
| 690-4 | 10 | Red | 24 | .022 | .010 | 1.33 | 694-4C | 100 | Red | 16 | .053 | .012 | 25.02 |
| 690-4C | 100 | Red | 24 | .022 | .010 | 9.75 | 694-5 | 10 | Blue | 16 | .053 | .012 | 2.65 |
| 690-5 | 10 | Blue | 24 | .022 | .010 | 1.33 | 694-5C | 100 | Blue | 16 | .053 | .012 | 25.02 |
| 690-5C | 100 | Blue | 24 | .022 | .010 | 9.75 | 695-1 | 10 | Nat. | 14 | .066 | .012 | 2.92 |
| 691-1 | 10 | Nat | 22 | .027 | 0.12 | 1.47 | 695-1C | 100 | Nat | 14 | .066 | .012 | 28.38 |
| 691-1C | 100 | Nat | 22 | .027 | .012 | 12.43 | 695-4 | 10 | Red | 14 | .066 | .012 | 2.92 |
| 691-4 | 10 | Red | 22 | .027 | .012 | 1.47 | 695-4C | 100 | Red | 14 | .066 | .012 | 28.38 |
| 691-4C | 100 | Red | 22 | .027 | .012 | 12.43 | 695-5 | 10 | Blue | 14 | .066 | .012 | 2.92 |
| 691-5 | 10 | Blue | 22 | .027 | .012 | 1.47 | 695-5C | 100 | Blue | 14 | .066 | .012 | 28.38 |
| 691-5C | 100 | Blue | 22 | .027 | .012 | 12.43 | 696-1 | 5 | Nat | 12 | .085 | .014 | 1.83 |
| 692-1 | 10 | Nat | 20 | .034 | .012 | 1.83 | 696-1C | 100 | Nat | 12 | .085 | .014 | 34.28 |
| 692-1C | 100 | Nat | 20 | .034 | .012 | 18.27 | 696-4 | 5 | Red | 12 | .085 | .014 | 1.83 |
| 692-4 | 10 | Red | 20 | .034 | .012 | 1.83 | 696-4C | 100 | Red | 12 | .085 | .014 | 34.28 |
| 692-4C | 100 | Red | 20 | .034 | .012 | 18.27 | 696-5 | 5 | Blue | 12 | .085 | .014 | 1.83 |
| 692-5 | 10 | Blue | 20 | .034 | .012 | 1.83 | 696-5C | 100 | Blue | 12 | .085 | .014 | 34.28 |
| 692-5C | 10 | Blue | 20 | .034 | .012 | 18.27 | 697-1 | 5 | Nat | 10 | .106 | .014 | 2.17 |
| 693-1 | 10 | Nat | 18 | .042 | .012 | 2.23 | 697-1C | 100 | Nat | 10 | .106 | .014 | 39.53 |
| 693-1C | 100 | Blue | 18 | .042 | .012 | 20.88 | 697-4 | 5 | Red | 10 | .106 | .014 | 2.17 |
| 693-4 | 10 | Red | 18 | .042 | .012 | 2.23 | 697-4C | 100 | Red | 10 | .106 | .014 | 39.53 |
| 693-4C | 100 | Red | 18 | .042 | .012 | 20.88 | 697-5 | 5 | Blue | 10 | .106 | .014 | 2.17 |
| 693-5 | 10 | Blue | 18 | .042 | .012 | 2.23 | 697-5C | 100 | Blue | 10 | .106 | .014 | 39.53 |
| 693-5C | 100 | Blue | 18 | .042 | .012 | 20.88 | | | | | | | |
| 694-1 | 10 | Nat | 16 | .053 | .012 | 2.65 | | | | | | | |

Std. Pack 10' and 5' Spools: 12 * BULK PRICES QUOTED ON REQUEST
Std. Pack 100' Spools: 1

WALSCO RAYOFLEX

For the serviceman and industrial user of insulated tubing. Rayoflex combines the mechanical strength of fiberglass with the protective properties of synthetic lacquer to produce a tough, rugged insulating tubing. Rayoflex is more flexible and less affected by aging than conventional varnished tubing. Rayoflex is smooth inside and out making the insertion of wires, etc., very easy. Has a dielectric strength of 4,000 to 5,000 volts. Meets MIL-I-3190. Sizes up to #6 are packed on a handy spool.



Net per spool \$.82

| Cat. No. | Size B&S | Approx. I.D. | | Quantity Per Spool |
|-------------|-----------|--------------|-----|--------------------|
| | Gauge No. | Inches | mm | |
| 630-(color) | 18 | .042 | 1 | 10 ft. |
| 631-(color) | 15 | .059 | 1.5 | 8 ft. |
| 632-(color) | 12 | .085 | 2 | 8 ft. |
| 633-(color) | 9 | .118 | 3 | 5 ft. |
| 334-(color) | 6 | .166 | 4 | 5 ft. |

AVAILABLE IN BLACK, RED, BLUE and YELLOW COLORS. To specify COLOR add suffix to above catalog number as follows: -R3 for Black, -R4 for Red, -R5 for Blue, -R6 for Yellow. Example: — 630-R3 is 18 gauge, Black.

WALSCO FLEXITUBE

Walsco Flexitube is the ideal supplemental insulation for most electronic and electrical applications. Flexitube is impervious to water, oil, alcohol, most acids and alkalies. Has an outstanding dielectric strength of 15,000 volts (average) before breakdown. Is not affected by temperature extremes.



Net per spool \$.82

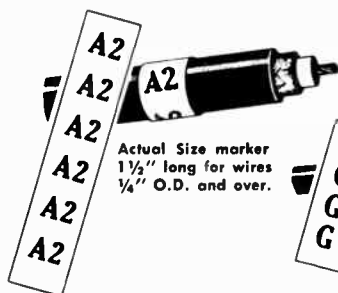
| Cat. No. | Size B&S | Approx. I.D. | | Quantity Per Spool |
|-------------|-----------|--------------|-----|--------------------|
| | Gauge No. | Inches | mm | |
| 600-(color) | 18 | .042 | 1 | 20 ft. |
| 601-(color) | 16 | .053 | 1.4 | 20 ft. |
| 602-(color) | 14 | .066 | 1.6 | 18 ft. |
| 603-(color) | 12 | .085 | 2 | 16 ft. |
| 604-(color) | 10 | .106 | 2.7 | 14 ft. |
| 605-(color) | 8 | .133 | 3.5 | 12 ft. |
| 606-(color) | 6 | .166 | 4 | 10 ft. |
| 607-(color) | 4 | .208 | 5 | 6 ft. |
| 608-(color) | 2 | .263 | 6.5 | 6 ft. |

AVAILABLE IN CLEAR, GREEN, BLACK and RED COLORS. To specify COLOR add suffix to above catalog number as follows: -01 for Clear, -02 for Green, -03 for Black and -04 for Red. Example: 600-01 for 18 gauge, Clear.

E-Z-CODE[®] self-adhering WIRE MARKERS

IDENTIFY WIRE AND CABLES OF ANY SIZE

Identification applied around-the-wire without ever touching adhesive side of marker . . . "with E-Z-Codes you grab the tab—not the adhesive" . . . Available in popular Vari-Temp cloth listed below, Aluminum-foil, Vinyl-plastic, Polyester-film. Ask for complete Westline stock list (form EZ8-1) of thousands of markers . . . specials available too.



Actual Size marker
1 1/2" long for wires
1/4" O.D. and over.



Actual Size Marker
3/4" long for wires
5/32" to 1/4" O.D.

VARI-TEMP CLOTH MARKERS (WBC)

| PRINTING ON MARKER | MARKERS PER CARD | PRINTING ON MARKER | MARKERS PER CARD | PRINTING ON MARKER | MARKERS PER CARD | |
|----------------------|----------------------|--------------------------------|------------------|------------------------------|------------------|--------|
| | 3/4" | 1 1/2" | 3/4" | 1 1/2" | 3/4" | 1 1/2" |
| NUMBERS ALL THE SAME | | NUMBERS IN SEQUENCE | | cant'd. | | |
| 0 | 72 36 | 1-33 | 66 33 | 1-8 | 64 32 | |
| 1 | 72 36 | 34-66 | 66 33 | 1-9 | 72 36 | |
| 2 | 72 36 | 67-99 | 66 33 | 1-10 | 66 33 | |
| 98 | and so on thru 72 36 | 225-249 | 50 25 | 1-12 | 64 32 | |
| 99 | 72 36 | 250-274 | 50 25 | 1-18 | 72 36 | |
| 100 | 52 26 | 275-299 | 50 25 | 19-36 | 72 36 | |
| 598 | and so on thru 52 26 | and so on thru 1975-1999 50 25 | | LETTERS IN REPEATED SEQUENCE | | |
| 599 | 52 26 | | | A-Z | 72 36 | |
| 600 | 52 26 | NUMBERS IN REPEATED SEQUENCE | | plus A-J | 72 36 | |
| CAPITAL LETTERS | | 0-9 | 60 30 | A-E | 70 35 | |
| A | 72 36 | 0-10 | 66 33 | F-J | 70 35 | |
| B | 72 36 | 1-3 | 72 36 | K-O | 70 35 | |
| and so on thru | 72 36 | 1-4 | 72 36 | P-T | 70 35 | |
| Y | 72 36 | 1-5 | 70 35 | U-Z | 72 36 | |
| Z | 72 36 | 1-6 | 72 36 | | | |

NET PRICES

| QUANTITY | VARI-TEMP (WBC) CLOTH |
|-----------------|-----------------------|
| 30-99 cards | \$20.00/c |
| 100-499 cards | 16.00/c |
| 500-999 cards | 14.00/c |
| 1000-2499 cards | 13.00/c |
| 2500-4999 cards | 12.50/c |
| 5000-9999 cards | 12.00/c |

over 10,000 write for quotation
Specify 1 1/2" or 3/4" marker length

Also available: Numbers repeated, Letters in Sequence, lower case letters, Color Codes, Colors with numbers, Symbol, phase & cycle markers, etc.



Actual Size Marker

1/2" long stack marker for miniature wires under 5/32" O.D.

Legend appears five times for maximum "around-the-wire" visibility.

MINI-MARKERS (Miniature) WBC

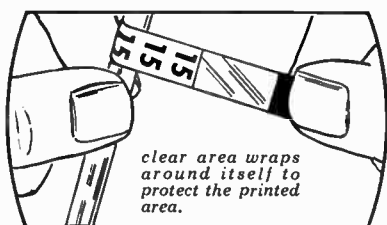
| NUMBERS ALL THE SAME | MARKERS PER CARD | NUMBERS IN SEQUENCE | MARKERS PER CARD |
|----------------------|----------------------|--|----------------------|
| 0 | 100 markers per card | 0-49 | 100 markers per card |
| 1 | 100 markers per card | 50-99 | 100 markers per card |
| and so on thru 99 | 100 markers per card | 100-132 | 66 markers per card |
| 100 | 66 markers per card | 133-165 | 66 markers per card |
| and so on thru 250 | 66 markers per card | 166-198 | 66 markers per card |
| | | 199-231 | 66 markers per card |
| | | 232-264 | 66 markers per card |
| | | 265-297 | 66 markers per card |
| LETTERS ALL THE SAME | | COMBINATION CARD | |
| A | 100 markers per card | Two rows: Each row consisting of one marker A thru Z and 0 thru 15 and FIL, GRD, B+, PRI, SEC, PLA. (96 markers per card). | |
| B | 100 markers per card | | |
| and so on thru Z | 100 markers per card | | |

NET PRICES

| QUANTITY | MINI-MARKERS (WBC) |
|-----------------|--------------------|
| 30-99 cards | \$18.00/c |
| 100-499 cards | 14.40/c |
| 500-999 cards | 12.60/c |
| 1000-2499 cards | 11.70/c |
| 2500-4999 cards | 11.25/c |
| 5000-9999 cards | 10.80/c |

over 10,000 write for quote
1/2" long marker

Also available: Sub-Miniature Markers from stock—write for form #EZ8-1.

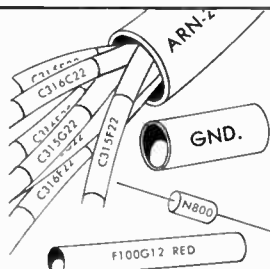


clear area wraps around itself to protect the printed area.

SELF-LAMINATING Wire Markers

Designed to resist oils, grease, chemicals, fluids, foreign matter. Available in variety of printed and blank "write-on" type markers.

Free samples, literature write for Form #SL4-6

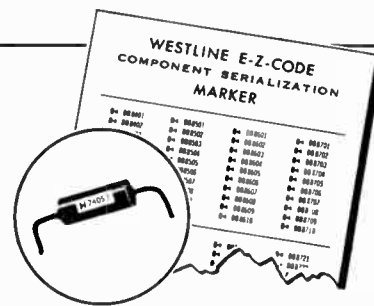


SHUR-CODE

Pre-printed Sleeving

Printed insulation sleeving that is slipped over wires, cables, harnesses for permanent identification. Standard and Special materials meet mil spec.

Free samples, literature write for Form #051258



COMPONENT SERIALIZATION Micro-miniature Markers

Designed to identify miniature components. Available in any combination of codes. Self-adhering markers are ready for application. Meets mil spec.

Free samples, literature write for Form #CS1060

WESTLINE E-Z CODE DIVISION, Los Angeles • NORTHERN INDUSTRIAL PRODUCTS, LTD., Toronto

— Distributorships Available —

- Over 1300 foreign tube types listed numerically
- Cross-referenced to European/American and American types, where available
- Instantly shows who makes what type
- Includes virtually all European-made tubes imported into the U.S.

American Elite
(Telefunken)

Amperex

Amperex (Valvo)

British Industries
(Genalex)

Fisher

International Electronics
(Mullard)

Sonotone (A E I)

State Labs (Ericsson,
Brown-Boveri)

Electronic Components
(Tungsram)

1963 Foreign Tube Interchangeability Guide



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